

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX122419\  
 Data File : VX014241.D  
 Acq On : 24 Dec 2019 13:42  
 Operator : JC/SP  
 Sample : K6401-05  
 Misc : 4.53g/10mL/100uL/5.00mL/MSVOA\_X/MEOH  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 C0B39

Quant Time: Dec 25 05:40:05 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 17 03:01:07 2019  
 Response via : Initial Calibration

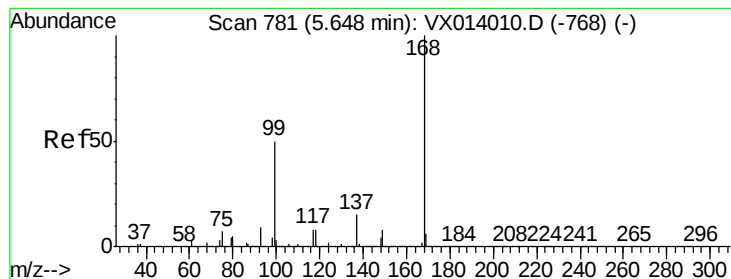
| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 524588   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 810276   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 725929   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 346510   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 6.06   | 65  | 291987   | 49.11 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 98.22%  |      |
| 35) Dibromofluoromethane    | 5.50   | 113 | 228828   | 46.46 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 92.92%  |      |
| 50) Toluene-d8              | 8.71   | 98  | 966075   | 50.38 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 100.76% |      |
| 62) 4-Bromofluorobenzene    | 11.14  | 95  | 334941   | 47.78 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 95.56%  |      |

| Target Compounds               |       |     |        |        |        | Qvalue |
|--------------------------------|-------|-----|--------|--------|--------|--------|
| 5) Bromomethane                | 1.63  | 94  | 3948   | 0.837  | ug/l # | 79     |
| 6) Chloroethane                | 1.63  | 64  | 4330   | 1.056  | ug/l # | 67     |
| 10) Methyl Iodide              | 2.49  | 142 | 622    | 2.711  | ug/l # | 44     |
| 11) Tert butyl alcohol         | 3.01  | 59  | 10876  | 8.466  | ug/l # | 78     |
| 13) Acrolein                   | 2.26  | 56  | 183    | 0.249  | ug/l # | 14     |
| 15) Acrylonitrile              | 3.14  | 53  | 871    | 0.290  | ug/l # | 65     |
| 17) Carbon Disulfide           | 2.53  | 76  | 1491   | 0.855  | ug/l # | 42     |
| 18) Methyl Acetate             | 2.80  | 43  | 2771   | 0.362  | ug/l # | 51     |
| 20) Methylene Chloride         | 2.83  | 84  | 3723   | 0.613  | ug/l # | 78     |
| 27) cis-1,2-Dichloroethene     | 4.59  | 96  | 1416   | 0.225  | ug/l   | 44     |
| 28) Bromochloromethane         | 5.01  | 49  | 306    | 0.533  | ug/l # | 49     |
| 29) Tetrahydrofuran            | 5.12  | 42  | 787    | 0.296  | ug/l # | 65     |
| 36) 1,1-Dichloropropene        | 5.64  | 75  | 36113  | 4.857  | ug/l # | 51     |
| 38) Carbon Tetrachloride       | 5.64  | 117 | 45412  | 6.705  | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.74  | 88  | 116    | 0.857  | ug/l # | 1      |
| 51) 4-Methyl-2-Pentanone       | 8.67  | 43  | 1875   | 0.220  | ug/l # | 35     |
| 67) Ethyl Benzene              | 10.25 | 91  | 7913   | 0.298  | ug/l   | 93     |
| 68) m/p-Xylenes                | 10.35 | 106 | 6094   | 0.597  | ug/l   | 93     |
| 69) o-Xylene                   | 10.70 | 106 | 4366   | 0.436  | ug/l   | 78     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75  | 161459 | 21.463 | ug/l # | 39     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75  | 161459 | 60.580 | ug/l # | 12     |

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





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 781

Delta R.T. 0.00 min

Lab File: VX014241.D

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MSVOA\_X

ClientSampleId :

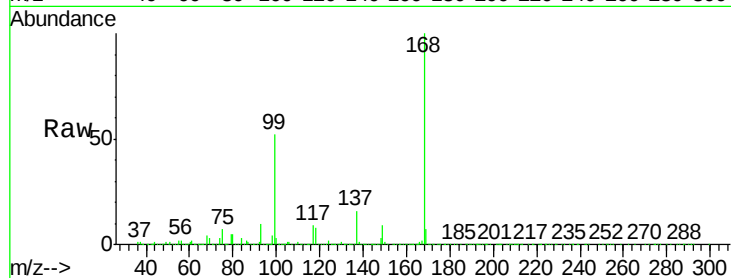
C0B39

Tgt Ion:168 Resp: 524588

Ion Ratio Lower Upper

168 100

99 52.4 40.3 60.5



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

200000

150000

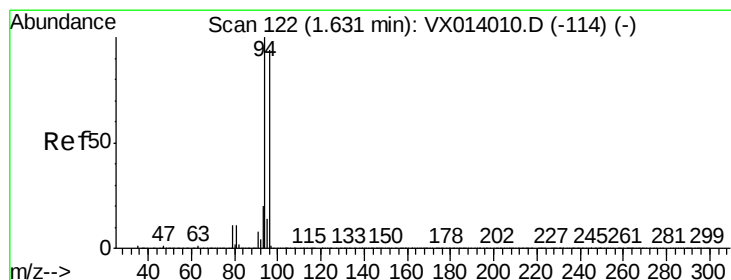
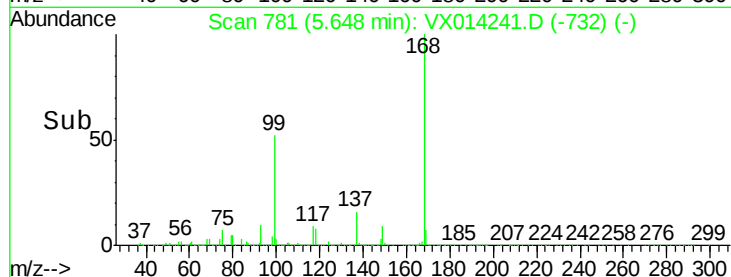
100000

50000

0

Time-->

5.50 5.60 5.70 5.80



#5

Bromomethane

Concen: 0.837 ug/l

RT: 1.63 min Scan# 122

Delta R.T. 0.00 min

Lab File: VX014241.D

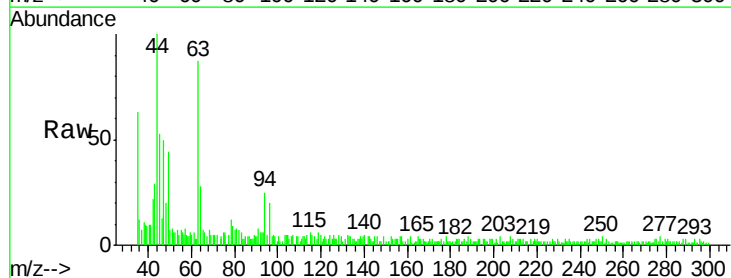
Acq: 24 Dec 2019 13:42

Tgt Ion: 94 Resp: 3948

Ion Ratio Lower Upper

94 100

96 73.8 75.2 112.8#



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

2000

1500

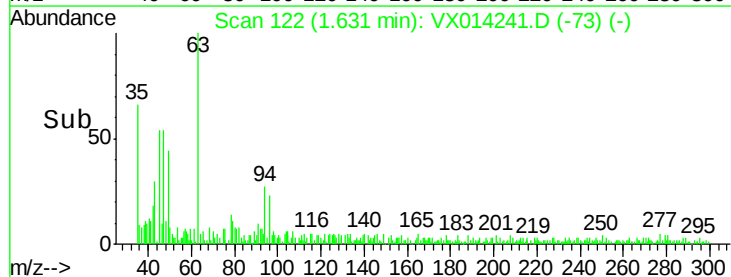
1000

500

0

Time-->

1.50 1.55 1.60 1.65





#6

Chloroethane

Concen: 1.056 ug/l

RT: 1.63 min Scan# 122

Delta R.T. -0.07 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

Instrument :

MSVOA\_X

ClientSampled :

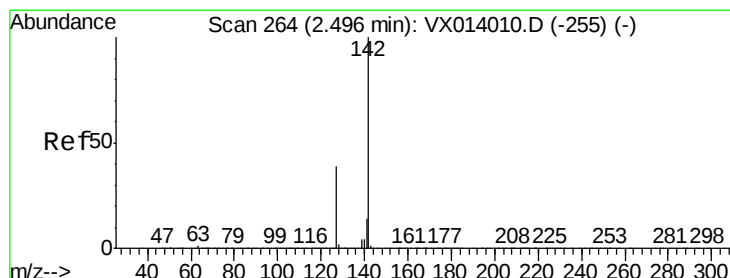
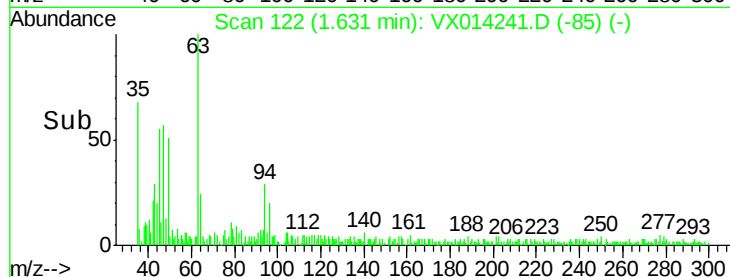
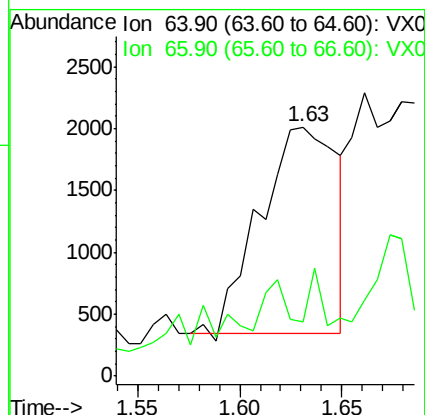
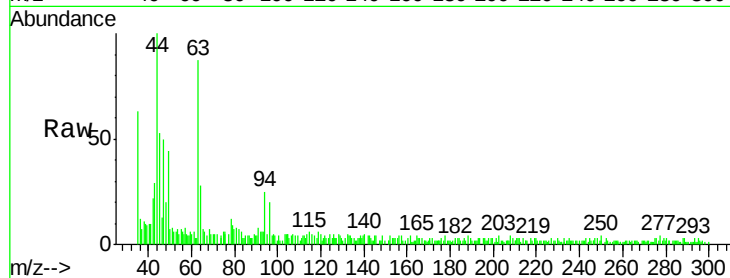
C0B39

Tgt Ion: 64 Resp: 4330

Ion Ratio Lower Upper

64 100

66 11.7 23.4 35.2#



#10

Methyl Iodide

Concen: 2.711 ug/l

RT: 2.49 min Scan# 263

Delta R.T. -0.01 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

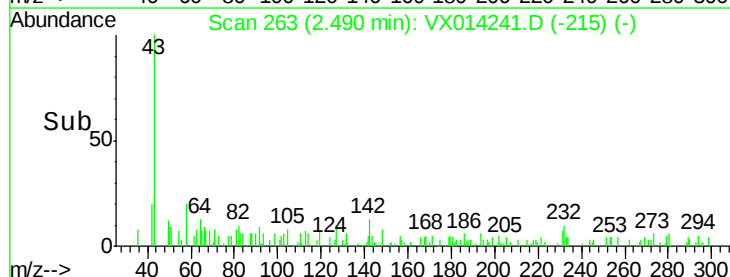
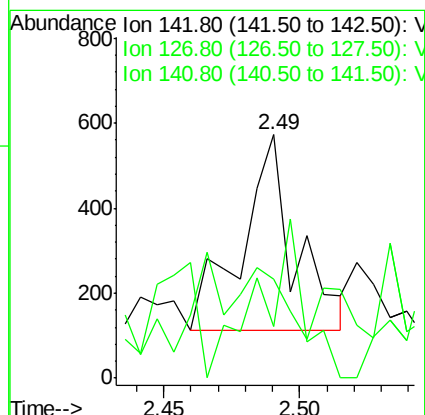
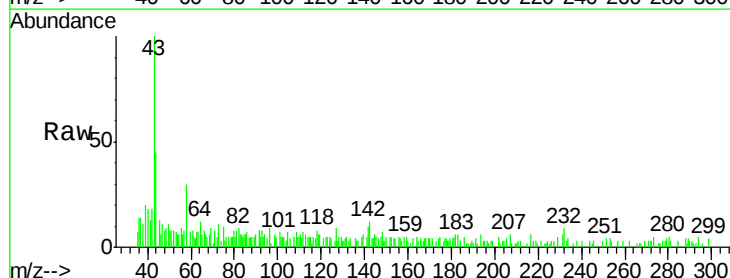
Tgt Ion: 142 Resp: 622

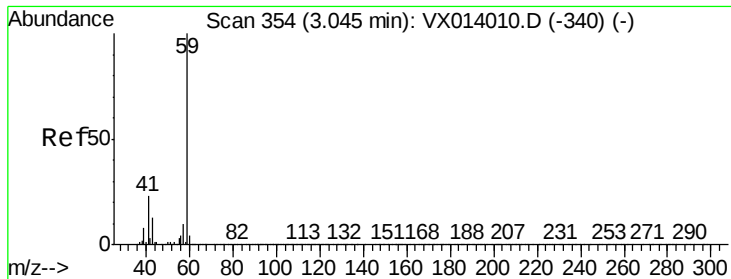
Ion Ratio Lower Upper

142 100

127 22.2 31.6 47.4#

141 68.6 11.6 17.4#



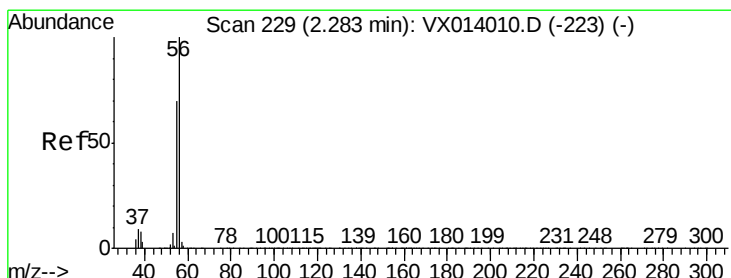
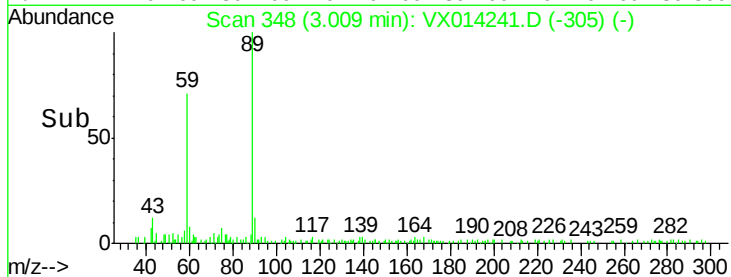
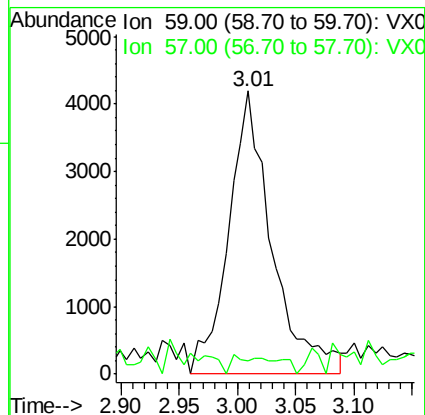
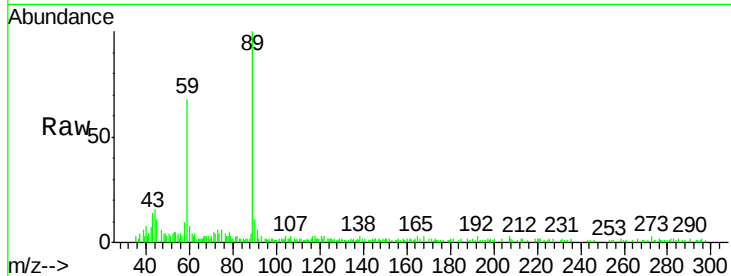


#11

Tert butyl alcohol  
 Concen: 8.466 ug/l  
 RT: 3.01 min Scan# 348  
 Delta R.T. -0.04 min  
 Lab File: VX014241.D  
 Acq: 24 Dec 2019 13:42

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 C0B39

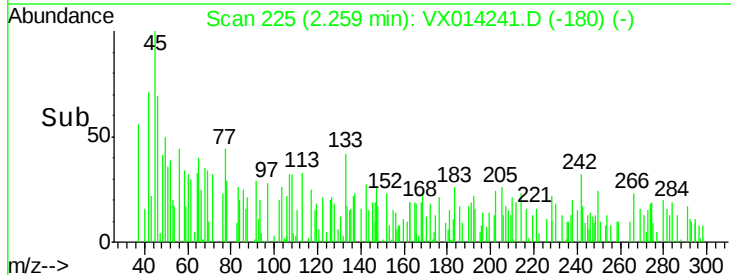
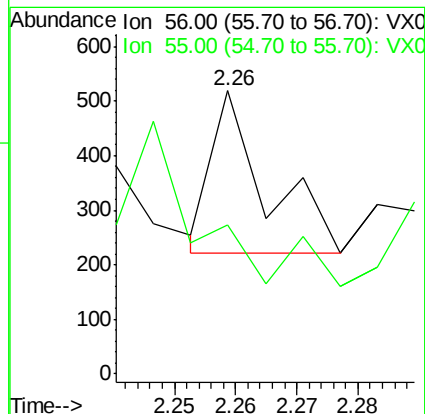
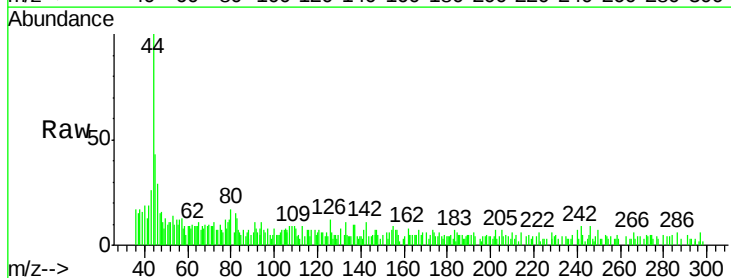
Tgt Ion: 59 Resp: 10876  
 Ion Ratio Lower Upper  
 59 100  
 57 2.4 8.4 12.6#

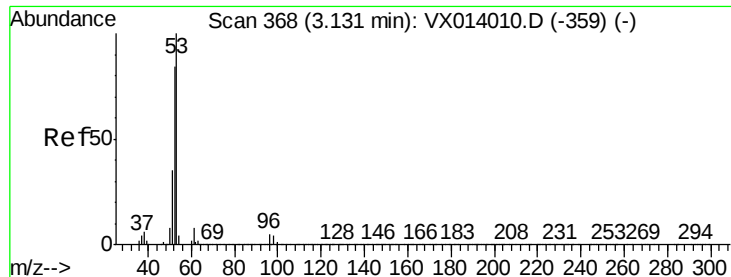


#13

Acrolein  
 Concen: 0.249 ug/l  
 RT: 2.26 min Scan# 225  
 Delta R.T. -0.02 min  
 Lab File: VX014241.D  
 Acq: 24 Dec 2019 13:42

Tgt Ion: 56 Resp: 183  
 Ion Ratio Lower Upper  
 56 100  
 55 0.0 56.9 85.3#





#15

Acrylonitrile

Concen: 0.290 ug/l

RT: 3.14 min Scan# 370

Delta R.T. 0.01 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

Instrument :

MSVOA\_X

ClientSampled :

C0B39

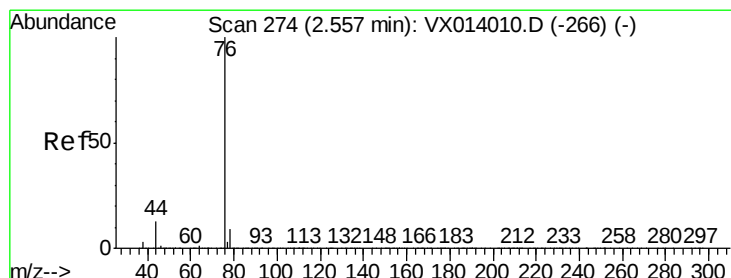
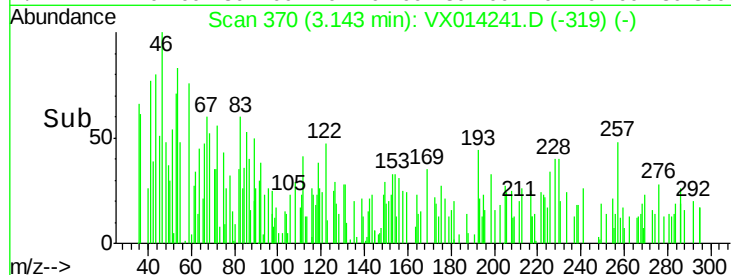
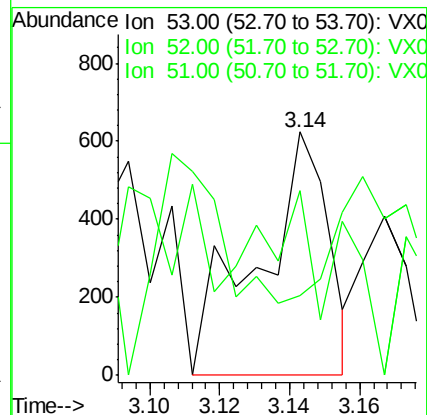
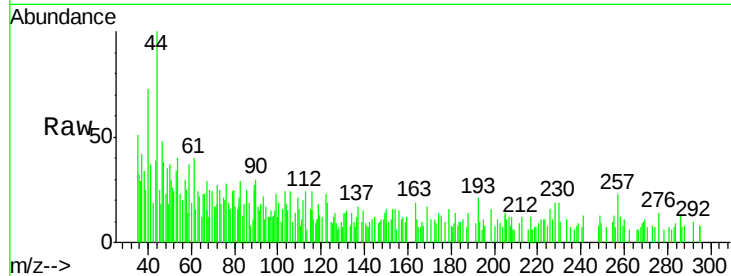
Tgt Ion: 53 Resp: 871

Ion Ratio Lower Upper

53 100

52 95.9 66.5 99.7

51 83.5 28.1 42.1#



#17

Carbon Disulfide

Concen: 0.855 ug/l

RT: 2.53 min Scan# 270

Delta R.T. -0.02 min

Lab File: VX014241.D

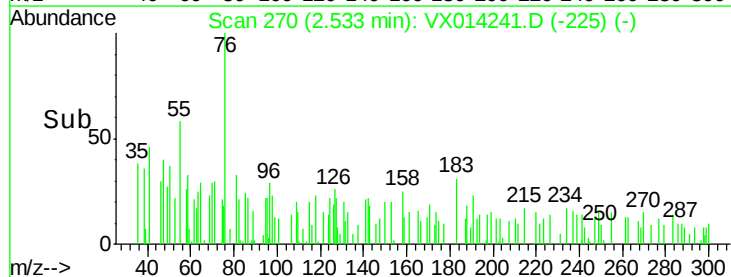
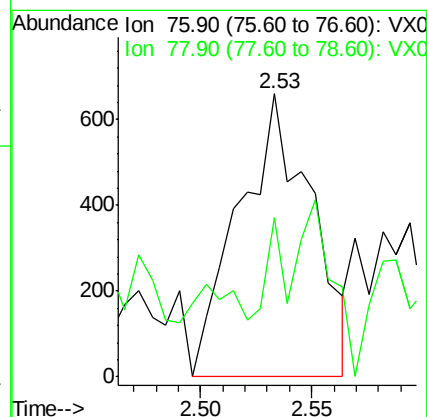
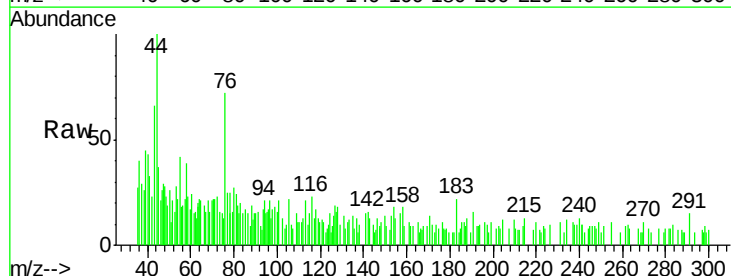
Acq: 24 Dec 2019 13:42

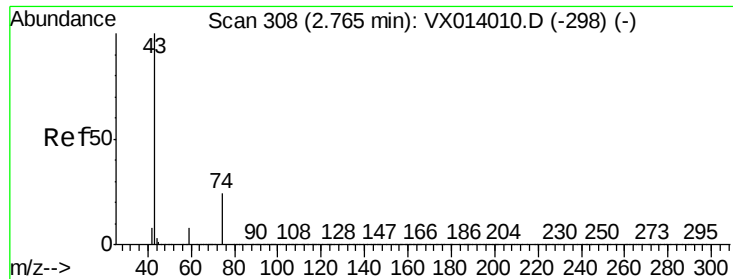
Tgt Ion: 76 Resp: 1491

Ion Ratio Lower Upper

76 100

78 30.0 7.2 10.8#

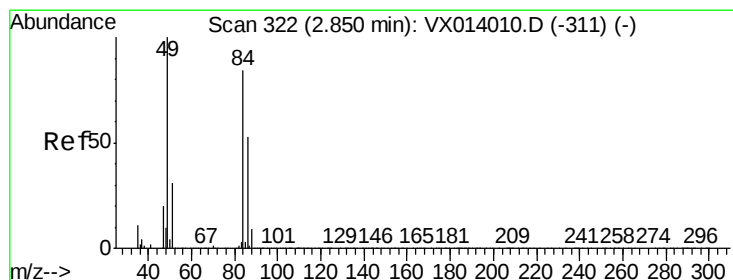
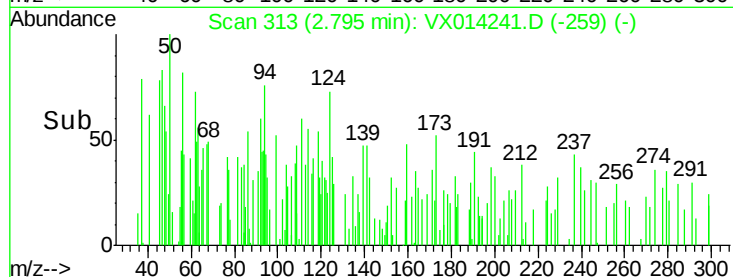
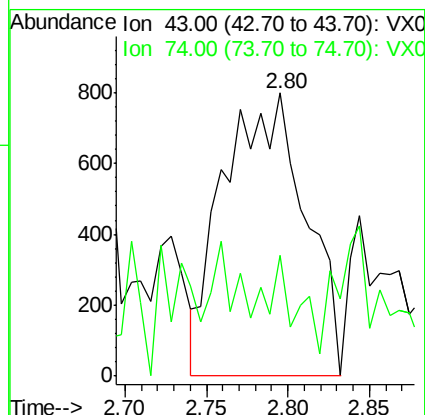
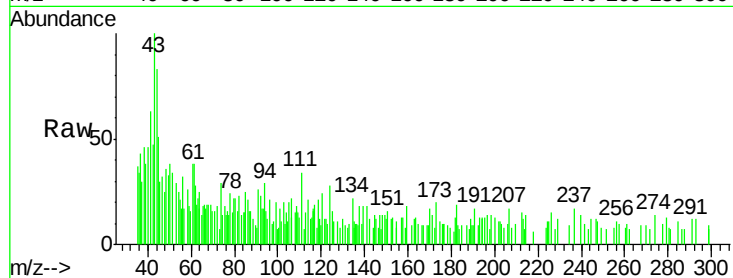




#18  
Methyl Acetate  
Concen: 0.362 ug/l  
RT: 2.80 min Scan# 313  
Delta R.T. 0.03 min  
Lab File: VX014241.D  
Acq: 24 Dec 2019 13:42

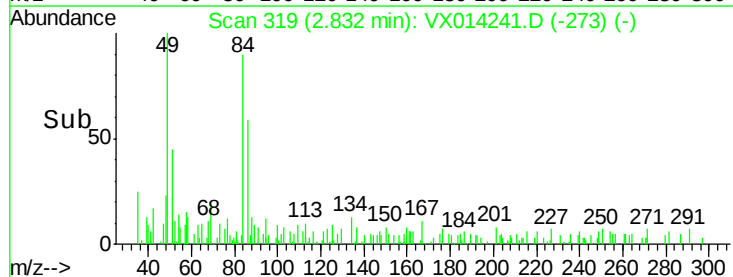
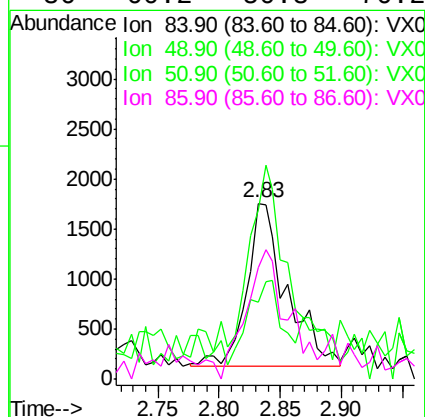
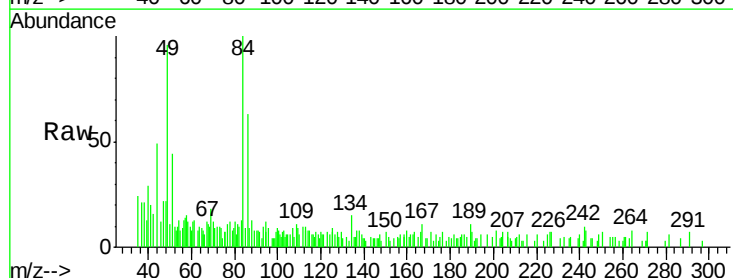
Instrument :  
MSVOA\_X  
ClientSampleId :  
C0B39

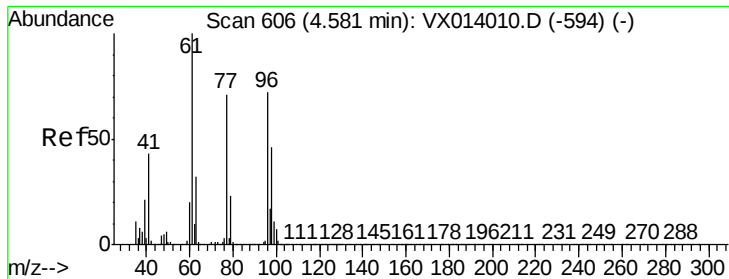
Tgt Ion: 43 Resp: 2771  
Ion Ratio Lower Upper  
43 100  
74 0.0 19.5 29.3#



#20  
Methylene Chloride  
Concen: 0.613 ug/l  
RT: 2.83 min Scan# 319  
Delta R.T. -0.02 min  
Lab File: VX014241.D  
Acq: 24 Dec 2019 13:42

Tgt Ion: 84 Resp: 3723  
Ion Ratio Lower Upper  
84 100  
49 78.0 95.8 143.6#  
51 36.8 29.8 44.8  
86 60.2 50.8 76.2



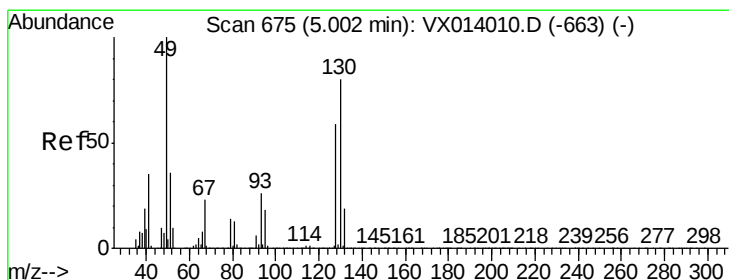
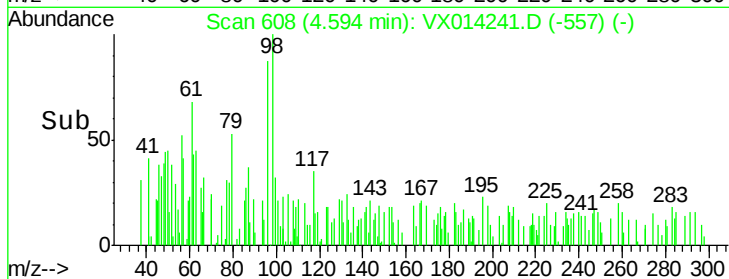
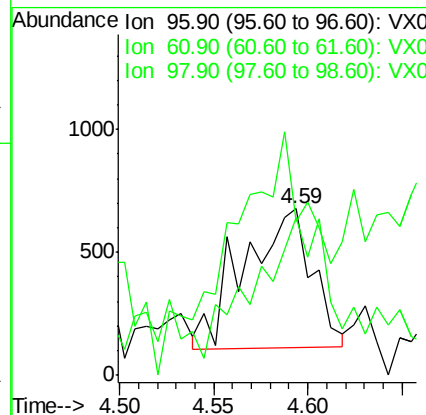
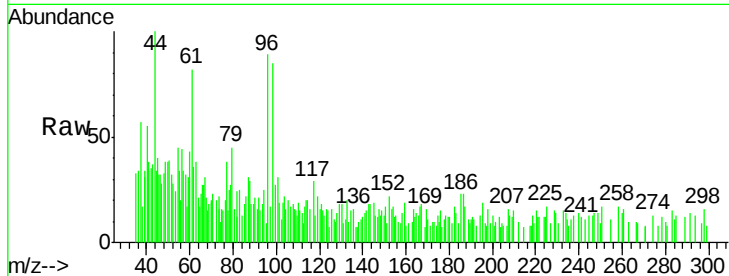


#27

cis-1,2-Dichloroethene  
 Concen: 0.225 ug/l  
 RT: 4.59 min Scan# 608  
 Delta R.T. 0.01 min  
 Lab File: VX014241.D  
 Acq: 24 Dec 2019 13:42

Instrument :  
 MSVOA\_X  
 ClientSampled :  
 C0B39

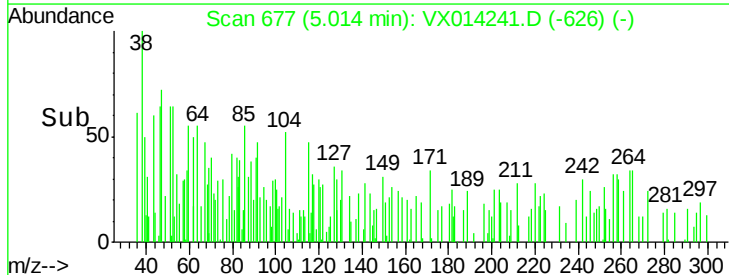
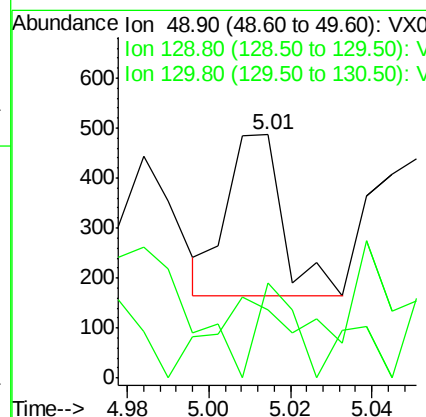
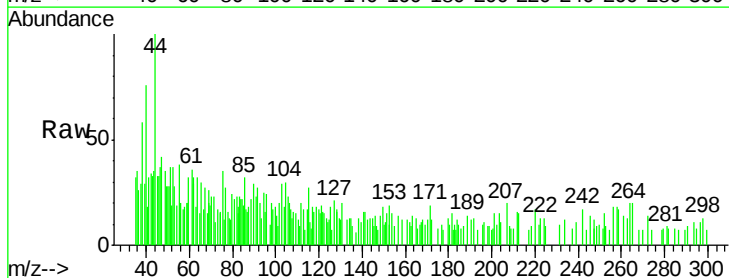
Tgt Ion: 96 Resp: 1416  
 Ion Ratio Lower Upper  
 96 100  
 61 212.4 0.0 288.4  
 98 109.3 0.0 129.6

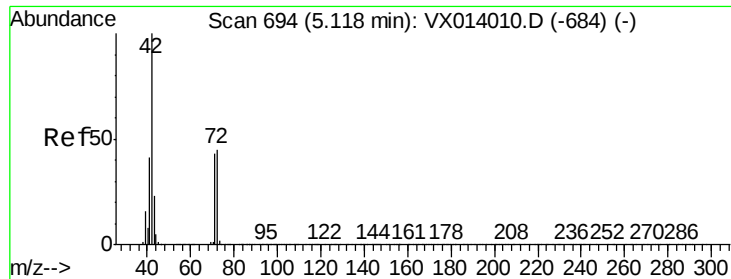


#28

Bromochloromethane  
 Concen: 0.533 ug/l  
 RT: 5.01 min Scan# 677  
 Delta R.T. 0.01 min  
 Lab File: VX014241.D  
 Acq: 24 Dec 2019 13:42

Tgt Ion: 49 Resp: 306  
 Ion Ratio Lower Upper  
 49 100  
 129 66.7 0.0 5.0#  
 130 38.9 64.6 97.0#





#29

Tetrahydrofuran

Concen: 0.296 ug/l

RT: 5.12 min Scan# 694

Delta R.T. 0.00 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

Instrument :

MSVOA\_X

ClientSampleID :

C0B39

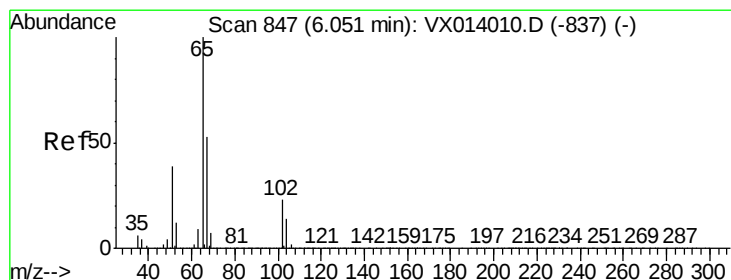
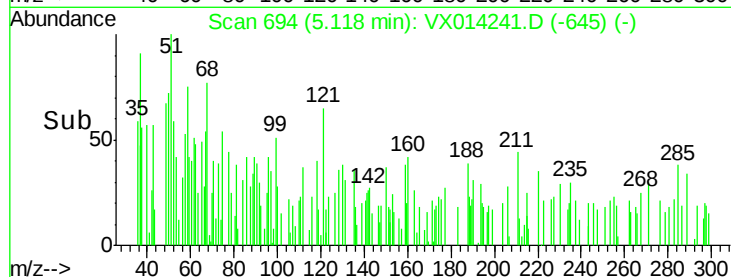
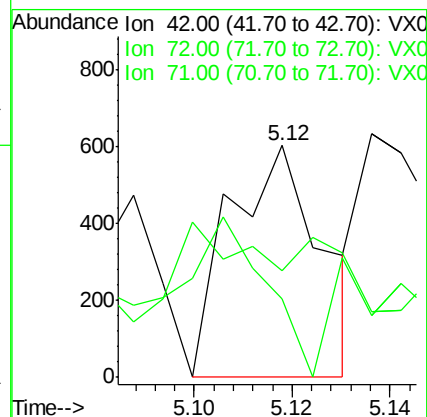
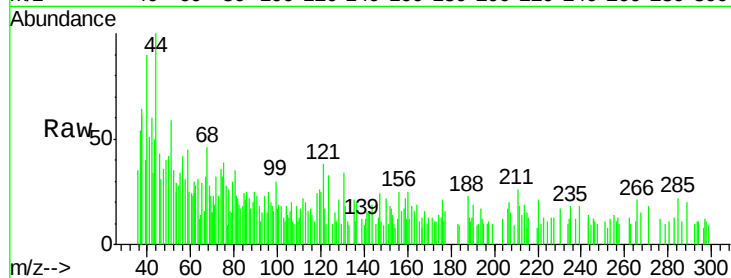
Tgt Ion: 42 Resp: 787

Ion Ratio Lower Upper

42 100

72 41.6 35.8 53.8

71 0.0 33.6 50.4#



#33

1,2-Dichloroethane-d4

Concen: 49.111 ug/l

RT: 6.06 min Scan# 848

Delta R.T. 0.01 min

Lab File: VX014241.D

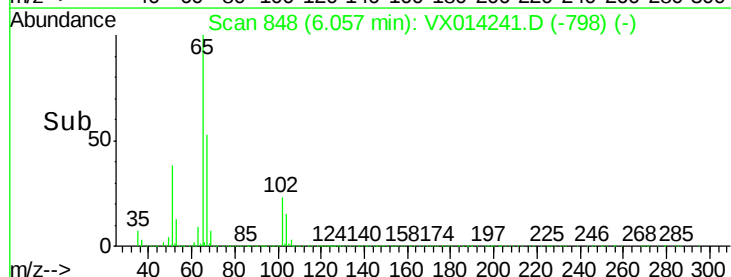
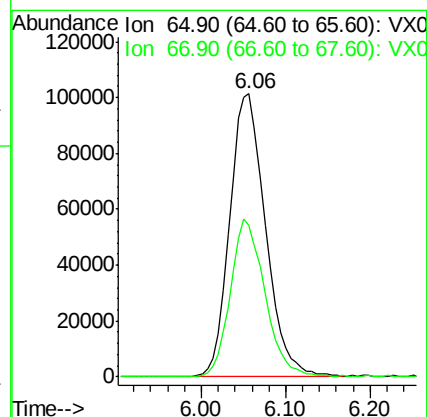
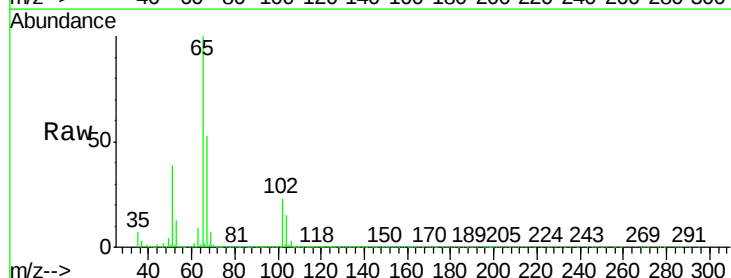
Acq: 24 Dec 2019 13:42

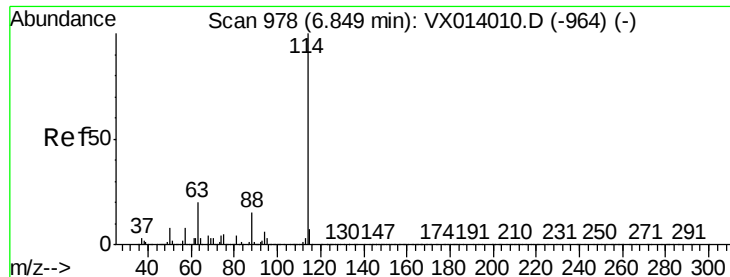
Tgt Ion: 65 Resp: 291987

Ion Ratio Lower Upper

65 100

67 54.0 0.0 106.4





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 978

Delta R.T. 0.00 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

Instrument :

MSVOA\_X

ClientSampleId :

C0B39

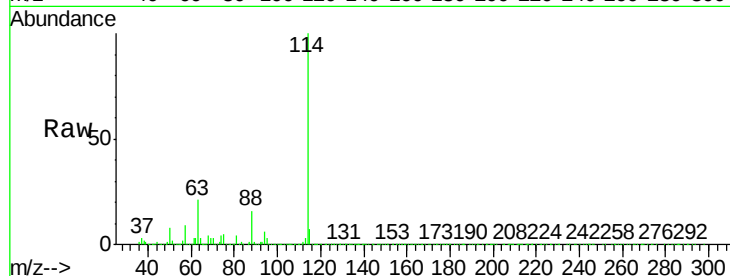
Tgt Ion:114 Resp: 810276

Ion Ratio Lower Upper

114 100

63 20.6 0.0 40.8

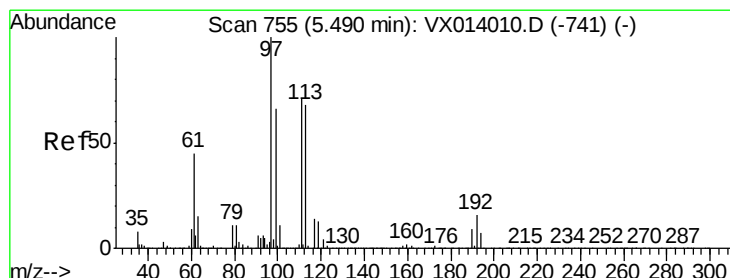
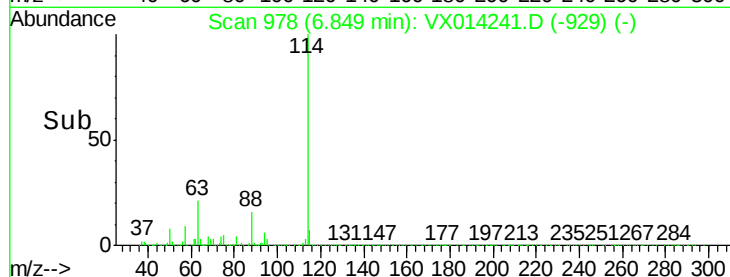
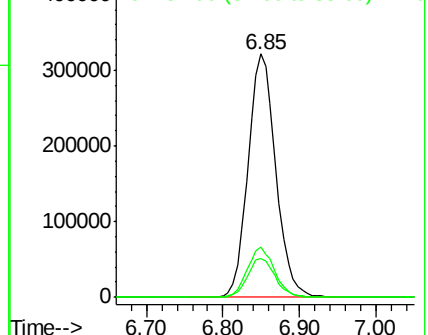
88 16.0 0.0 30.4



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 87.90 (87.60 to 88.60): VX0



#35

Dibromofluoromethane

Concen: 46.457 ug/l

RT: 5.50 min Scan# 756

Delta R.T. 0.01 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

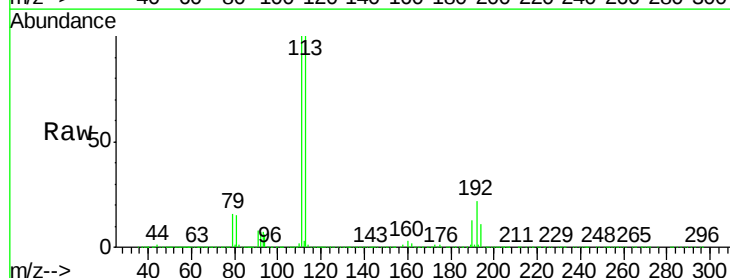
Tgt Ion:113 Resp: 228828

Ion Ratio Lower Upper

113 100

111 104.2 82.0 123.0

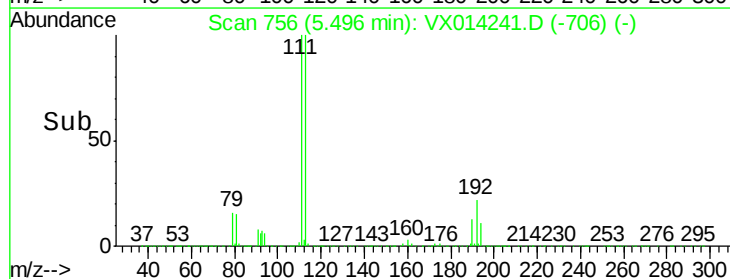
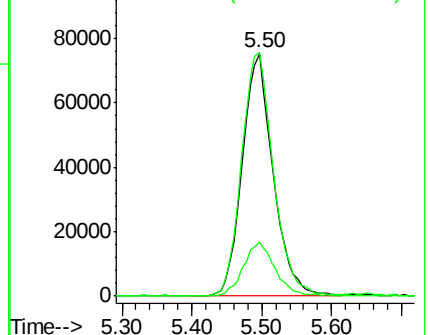
192 23.1 19.3 28.9

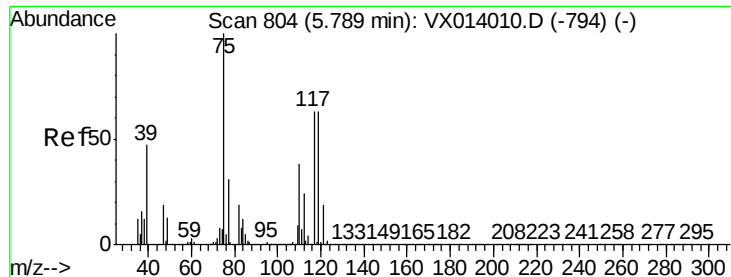


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 4.857 ug/l

RT: 5.64 min Scan# 780

Delta R.T. -0.15 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

Instrument :

MSVOA\_X

ClientSampleId :

C0B39

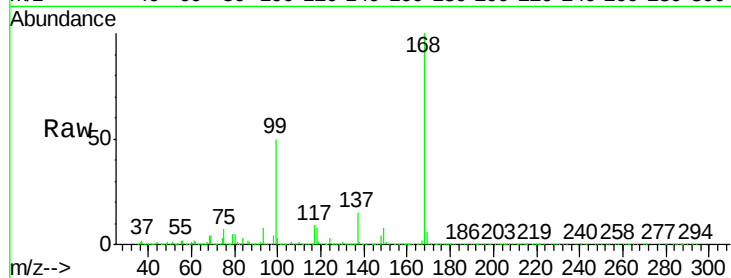
Tgt Ion: 75 Resp: 36113

Ion Ratio Lower Upper

75 100

110 9.6 18.3 54.9#

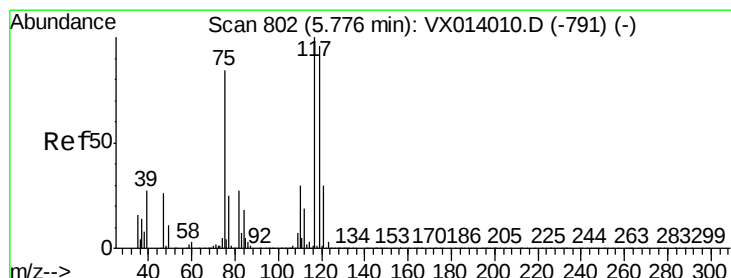
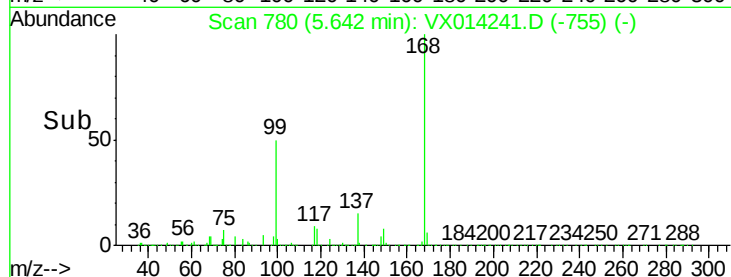
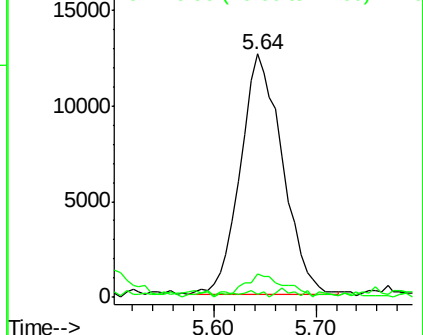
77 1.7 24.8 37.2#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 109.90 (109.60 to 110.60): V

Ion 76.90 (76.60 to 77.60): VX0



#38

Carbon Tetrachloride

Concen: 6.705 ug/l

RT: 5.64 min Scan# 780

Delta R.T. -0.13 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

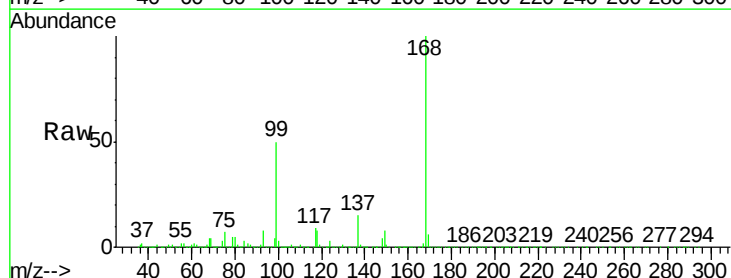
Tgt Ion: 117 Resp: 45412

Ion Ratio Lower Upper

117 100

119 5.1 76.2 114.4#

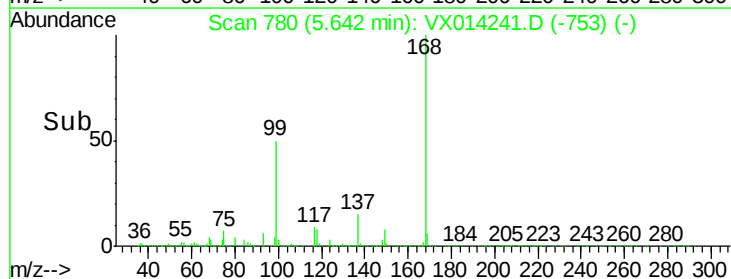
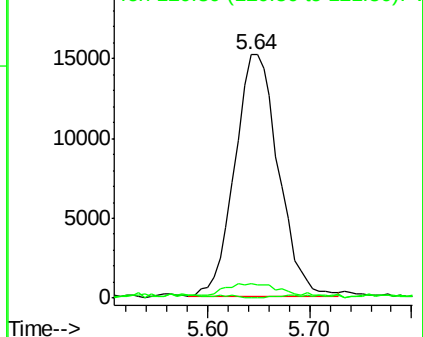
121 0.0 23.6 35.4#

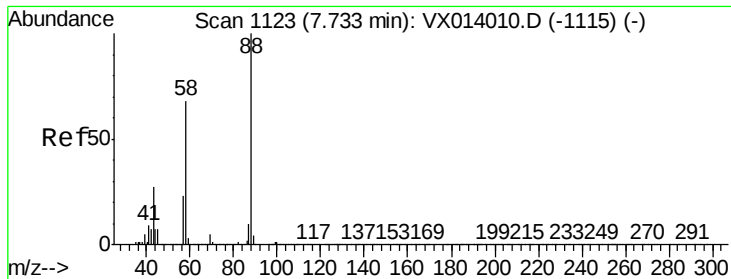


Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V

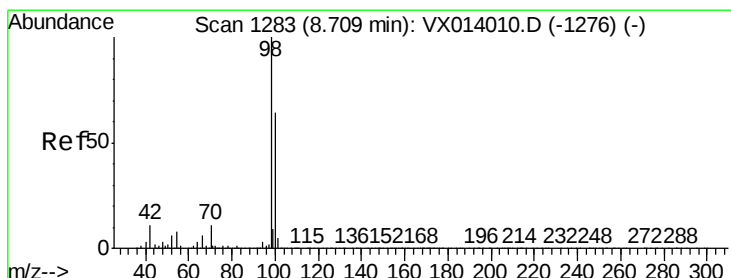
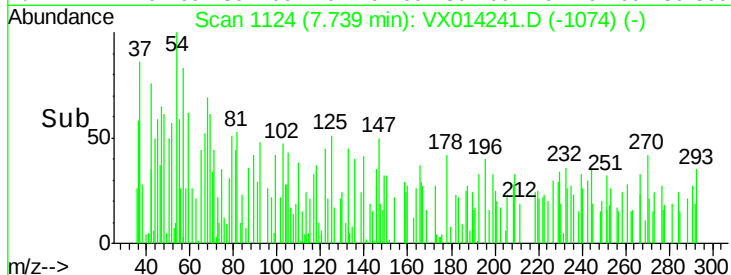
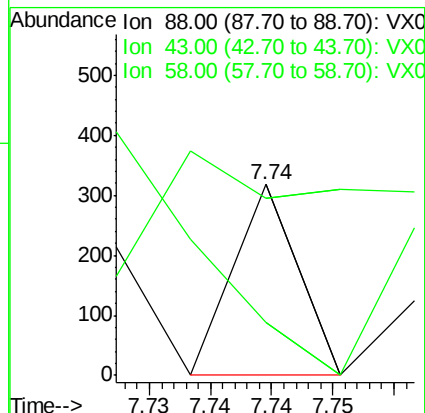
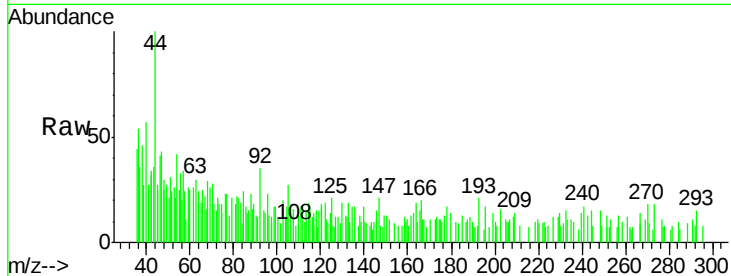




#49  
1,4-Dioxane  
Concen: 0.857 ug/l  
RT: 7.74 min Scan# 1124  
Delta R.T. 0.01 min  
Lab File: VX014241.D  
Acq: 24 Dec 2019 13:42

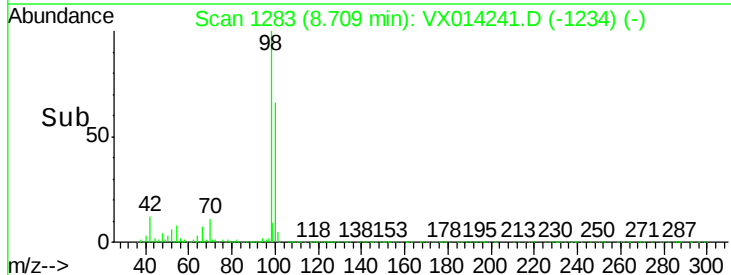
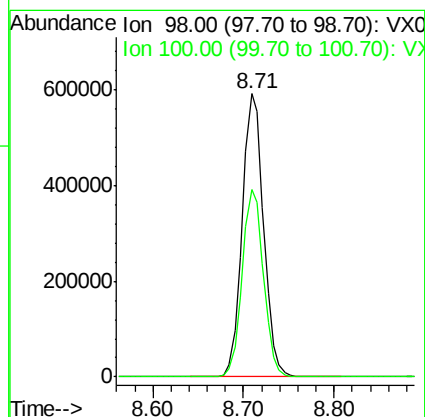
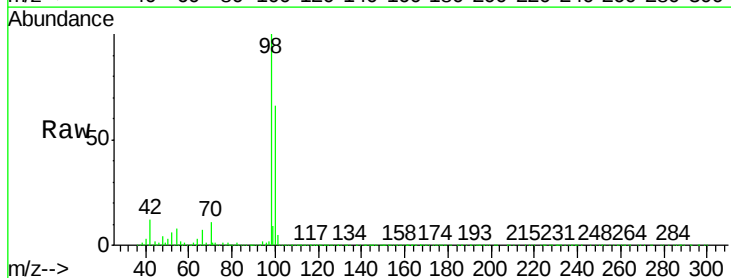
Instrument :  
MSVOA\_X  
ClientSampleId :  
C0B39

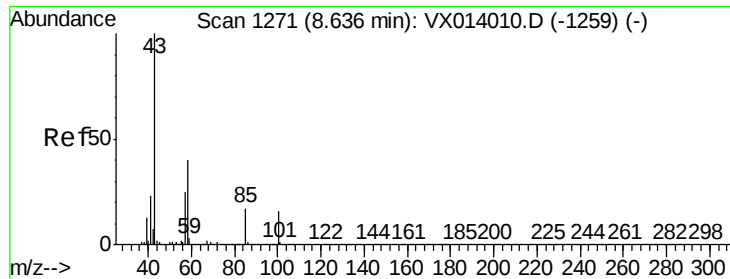
Tgt Ion: 88 Resp: 116  
Ion Ratio Lower Upper  
88 100  
43 383.6 26.5 39.7#  
58 0.0 56.8 85.2#



#50  
Toluene-d8  
Concen: 50.378 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.00 min  
Lab File: VX014241.D  
Acq: 24 Dec 2019 13:42

Tgt Ion: 98 Resp: 966075  
Ion Ratio Lower Upper  
98 100  
100 66.0 52.9 79.3

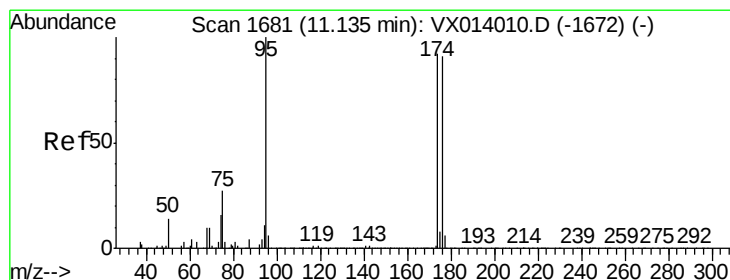
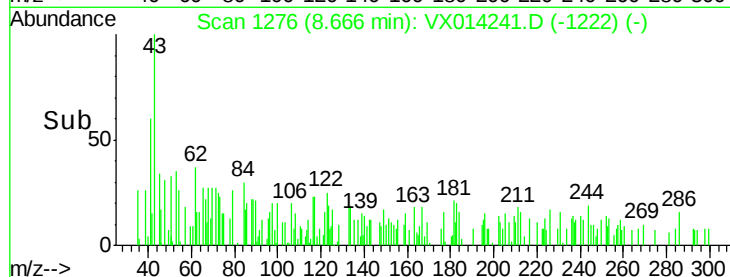
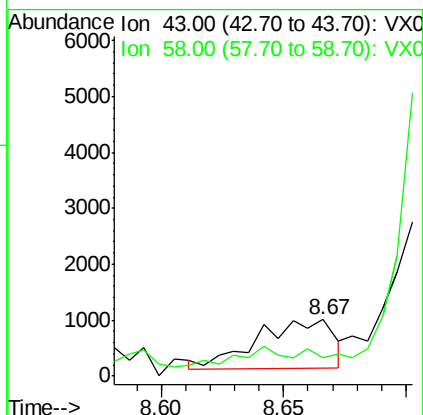
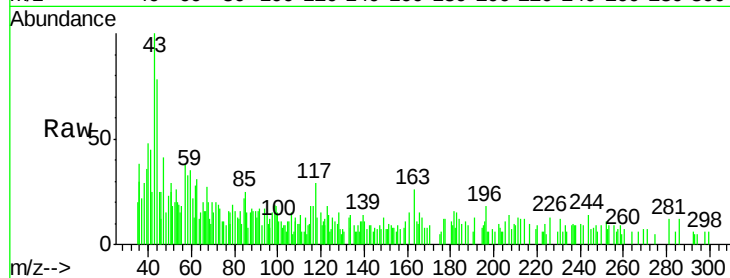




#51  
 4-Methyl-2-Pentanone  
 Concen: 0.220 ug/l  
 RT: 8.67 min Scan# 1276  
 Delta R.T. 0.03 min  
 Lab File: VX014241.D  
 Acq: 24 Dec 2019 13:42

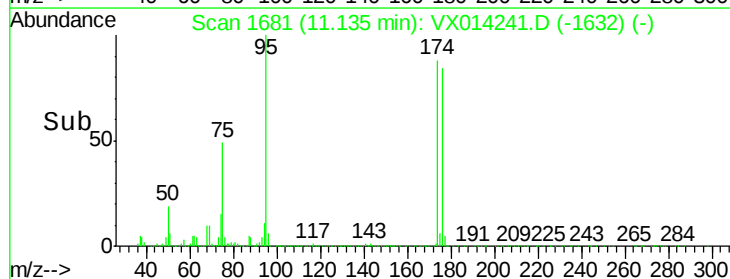
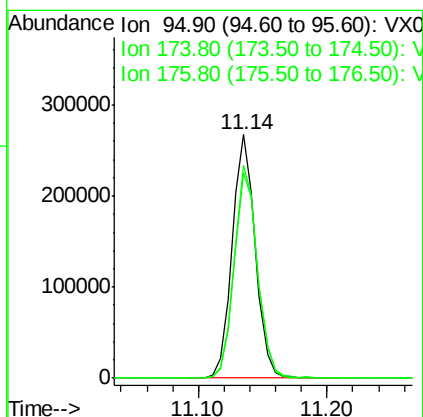
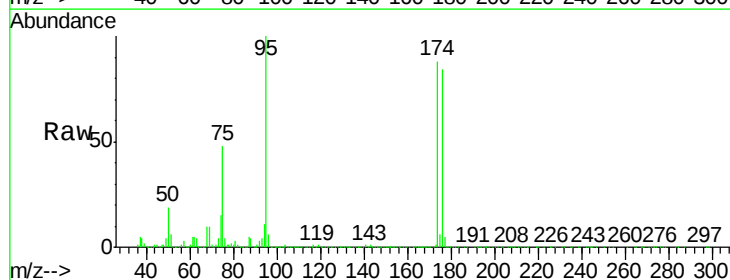
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 C0B39

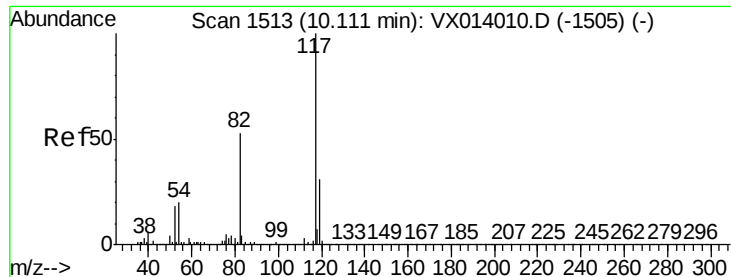
Tgt Ion: 43 Resp: 1875  
 Ion Ratio Lower Upper  
 43 100  
 58 0.0 32.2 48.2#



#62  
 4-Bromofluorobenzene  
 Concen: 47.781 ug/l  
 RT: 11.14 min Scan# 1681  
 Delta R.T. 0.00 min  
 Lab File: VX014241.D  
 Acq: 24 Dec 2019 13:42

Tgt Ion: 95 Resp: 334941  
 Ion Ratio Lower Upper  
 95 100  
 174 88.2 0.0 175.8  
 176 85.8 0.0 173.0

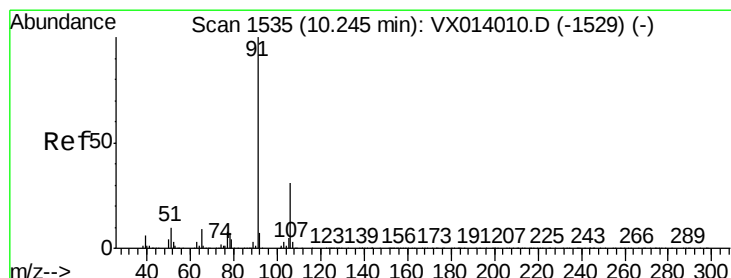
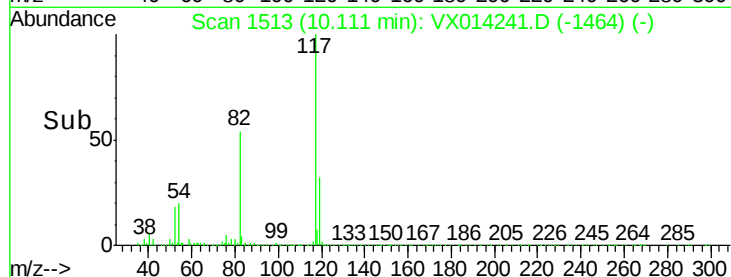
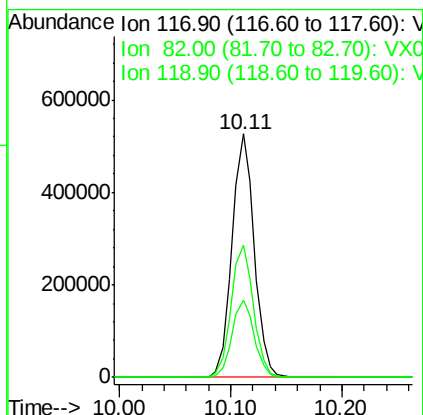
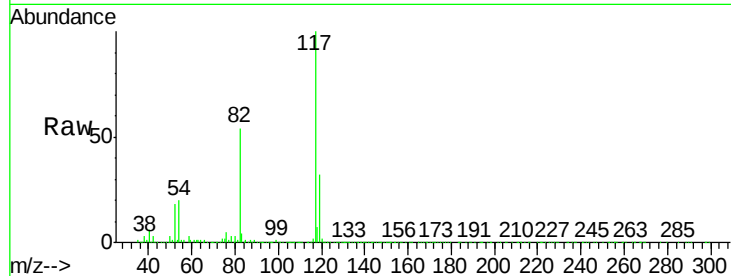




#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX014241.D  
Acq: 24 Dec 2019 13:42

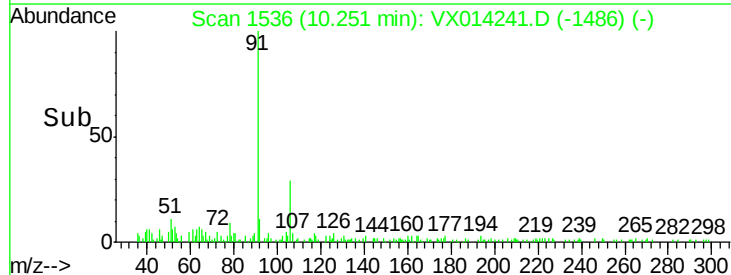
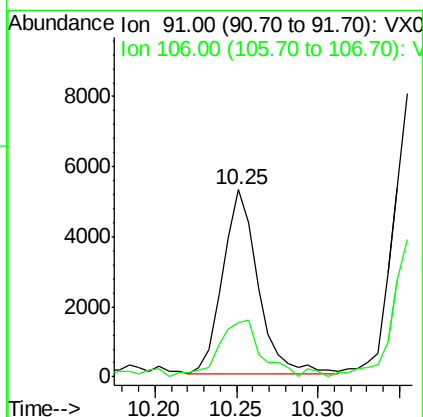
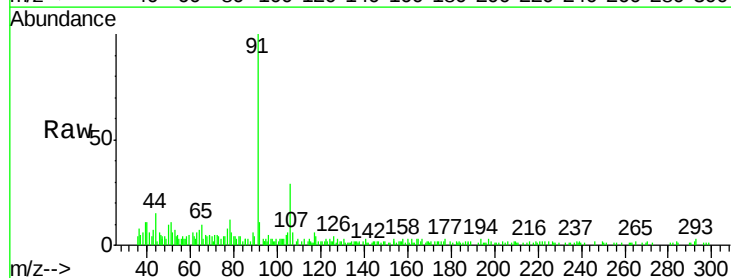
Instrument :  
MSVOA\_X  
ClientSampleId :  
C0B39

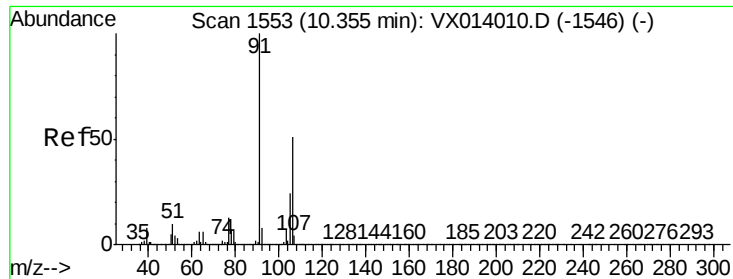
Tgt Ion: 117 Resp: 725929  
Ion Ratio Lower Upper  
117 100  
82 54.3 42.2 63.4  
119 31.8 25.1 37.7



#67  
Ethyl Benzene  
Concen: 0.298 ug/l  
RT: 10.25 min Scan# 1536  
Delta R.T. 0.01 min  
Lab File: VX014241.D  
Acq: 24 Dec 2019 13:42

Tgt Ion: 91 Resp: 7913  
Ion Ratio Lower Upper  
91 100  
106 27.4 25.0 37.6





#68

m/p-Xylenes

Concen: 0.597 ug/l

RT: 10.35 min Scan# 1553

Delta R.T. 0.00 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

Instrument :

MSVOA\_X

ClientSampleId :

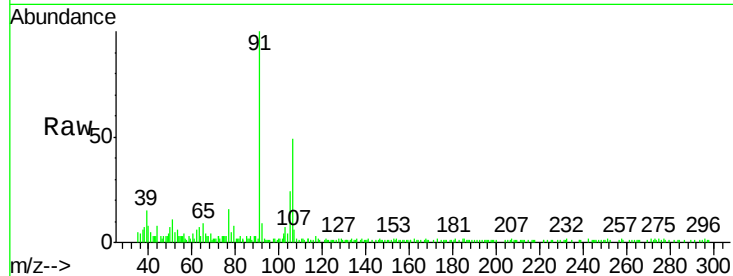
C0B39

Tgt Ion:106 Resp: 6094

Ion Ratio Lower Upper

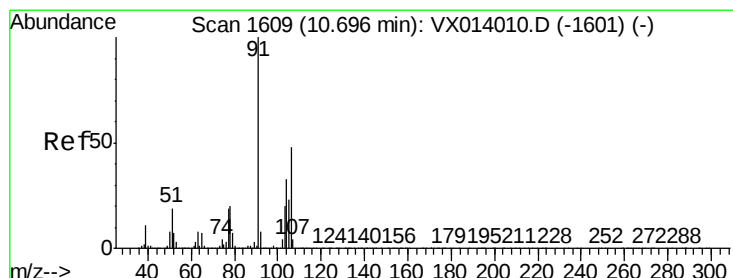
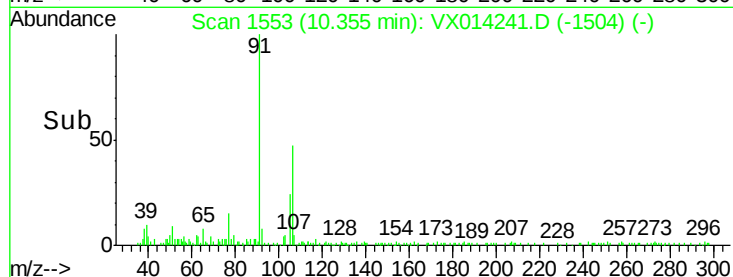
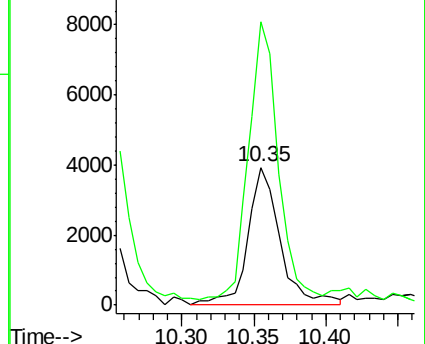
106 100

91 187.3 158.6 238.0



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0



#69

o-Xylene

Concen: 0.436 ug/l

RT: 10.70 min Scan# 1609

Delta R.T. 0.00 min

Lab File: VX014241.D

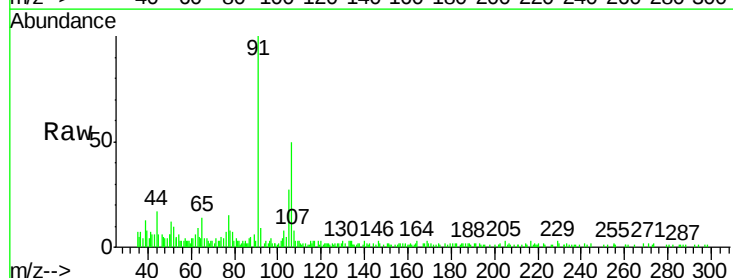
Acq: 24 Dec 2019 13:42

Tgt Ion:106 Resp: 4366

Ion Ratio Lower Upper

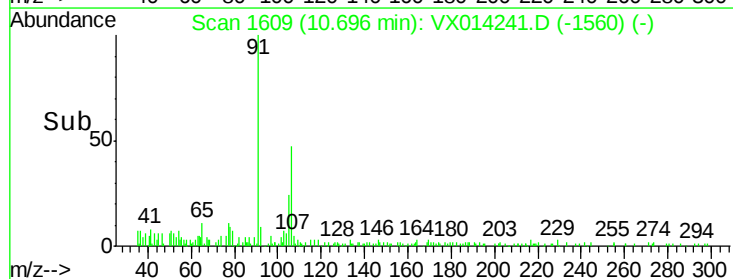
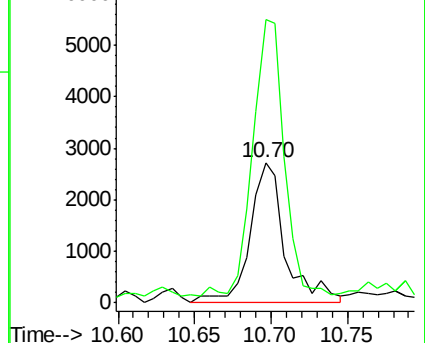
106 100

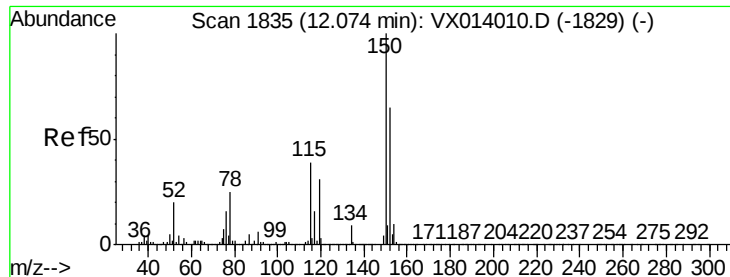
91 174.8 104.2 312.6



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 12.07 min Scan# 1835

Delta R.T. 0.00 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

Instrument :

MSVOA\_X

ClientSampleId :

C0B39

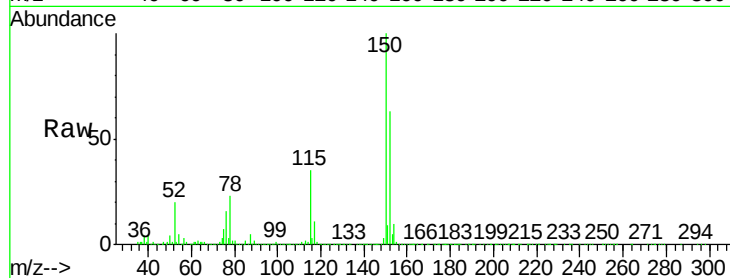
Tgt Ion: 152 Resp: 346510

Ion Ratio Lower Upper

152 100

115 55.4 38.3 114.9

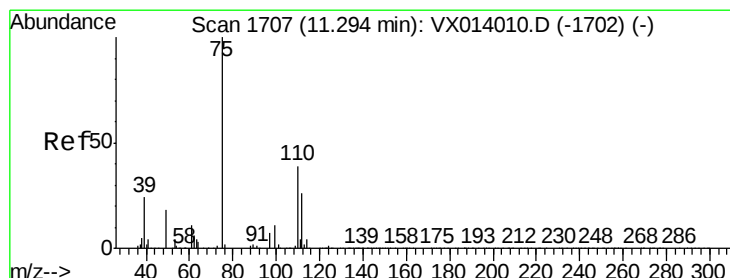
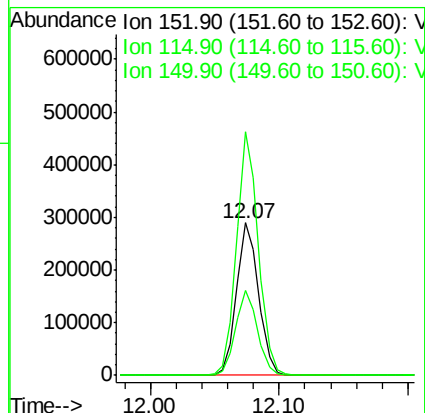
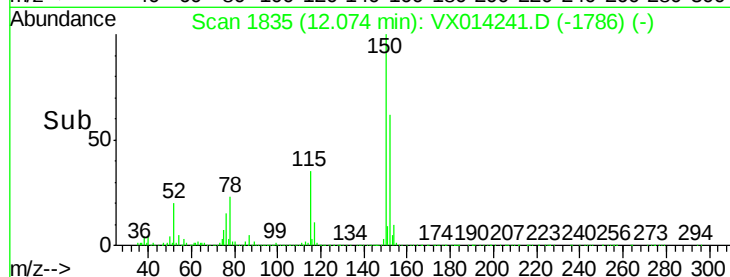
150 157.4 0.0 345.4



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: 21.463 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.16 min

Lab File: VX014241.D

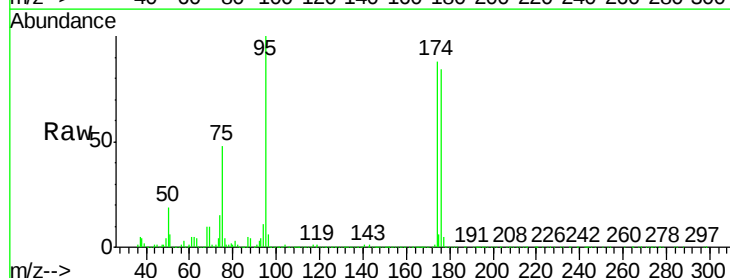
Acq: 24 Dec 2019 13:42

Tgt Ion: 75 Resp: 161459

Ion Ratio Lower Upper

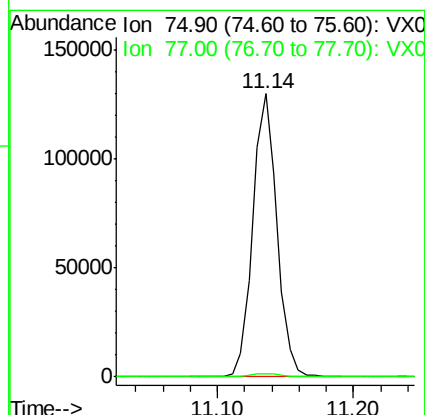
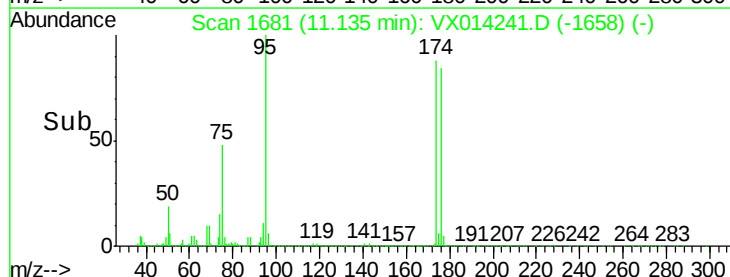
75 100

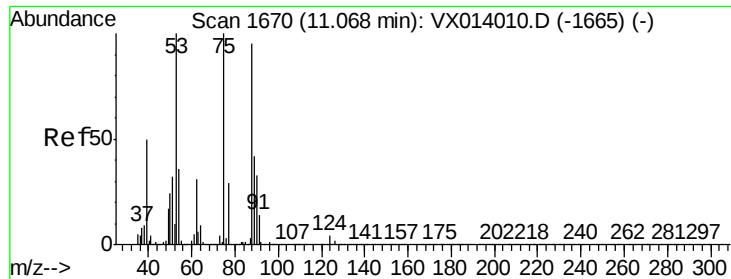
77 1.6 19.3 57.8#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 60.580 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.07 min

Lab File: VX014241.D

Acq: 24 Dec 2019 13:42

Instrument :

MSVOA\_X

ClientSampleId :

C0B39

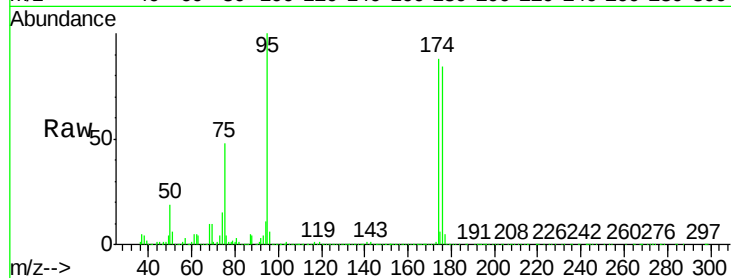
Tgt Ion: 75 Resp: 161459

Ion Ratio Lower Upper

75 100

53 0.1 76.7 115.1#

89 0.1 34.6 51.8#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

