

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX083019\  
 Data File : VX011934.D  
 Acq On : 31 Aug 2019 04:40  
 Operator : SY/SP  
 Sample : K4493-08  
 Misc : 5.15g/5.0mL/MSVOA\_X/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 T9-12-13-J-(0)

Quant Time: Aug 31 05:14:11 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082919S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 30 01:59:05 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 427700   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 575482   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 511694   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 273283   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |       |     |          |       |        |      |
|---------------------------|-------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05  | 65  | 182488   | 44.53 | ug/l   | 0.00 |
| Spiked Amount             |       |     |          |       |        |      |
|                           |       |     | Recovery | =     | 89.06% |      |
| 35) Dibromofluoromethane  | 5.48  | 113 | 167197   | 45.31 | ug/l   | 0.00 |
| Spiked Amount             |       |     |          |       |        |      |
|                           |       |     | Recovery | =     | 90.62% |      |
| 50) Toluene-d8            | 8.71  | 98  | 657168   | 49.82 | ug/l   | 0.00 |
| Spiked Amount             |       |     |          |       |        |      |
|                           |       |     | Recovery | =     | 99.64% |      |
| 62) 4-Bromofluorobenzene  | 11.14 | 95  | 245538   | 42.43 | ug/l   | 0.00 |
| Spiked Amount             |       |     |          |       |        |      |
|                           |       |     | Recovery | =     | 84.86% |      |

## Target Compounds

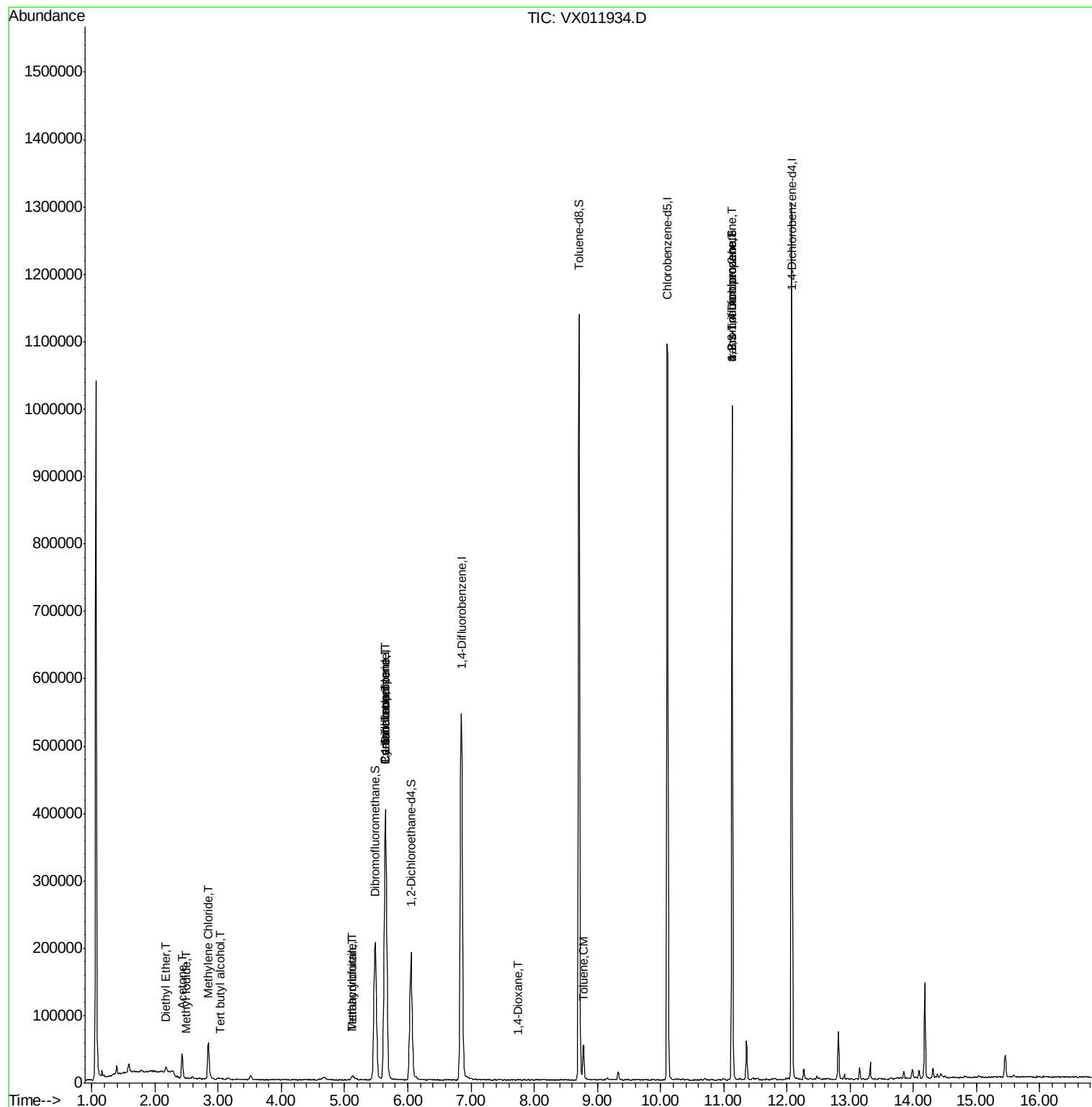
|                                | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 8) Diethyl Ether               | 2.17  | 74   | 2310     | 1.354   | ug/l   | 97     |
| 10) Methyl Iodide              | 2.50  | 142  | 179      | 3.723   | ug/l # | 61     |
| 11) Tert butyl alcohol         | 3.02  | 59   | 2649     | 6.719   | ug/l   | 95     |
| 16) Acetone                    | 2.43  | 43   | 39192    | 44.452  | ug/l   | 97     |
| 20) Methylene Chloride         | 2.84  | 84   | 26308    | 2.309   | ug/l   | 99     |
| 29) Tetrahydrofuran            | 5.12  | 42   | 5975     | 7.455   | ug/l   | 99     |
| 31) Cyclohexane                | 5.65  | 56   | 7250     | 1.417   | ug/l # | 14     |
| 36) 1,1-Dichloropropene        | 5.64  | 75   | 25999    | 5.703   | ug/l # | 50     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 37078    | 7.012   | ug/l # | 16     |
| 41) Methacrylonitrile          | 5.12  | 41   | 3119     | 1.963   | ug/l # | 55     |
| 49) 1,4-Dioxane                | 7.75  | 88   | 61       | 1.666   | ug/l # | 1      |
| 52) Toluene                    | 8.78  | 92   | 19291    | 2.143   | ug/l   | 98     |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 121699   | 45.270  | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 121699   | 113.726 | ug/l # | 11     |

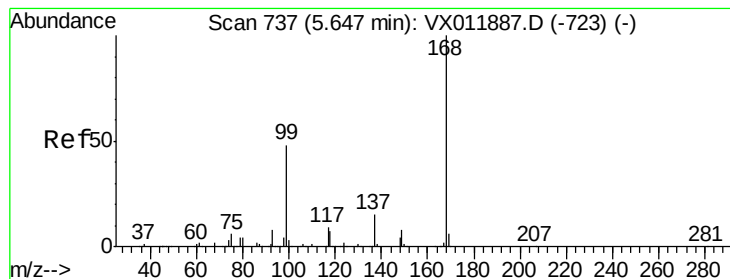
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_X\DATA\VX083019\  
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Sample : K4493-08  
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ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
T9-12-13-J-(0)

Quant Time: Aug 31 05:14:11 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X082919S.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 30 01:59:05 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.65 min Scan# 781

Delta R.T. 0.00 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

Instrument :

MSVOA\_X

ClientSampleId :

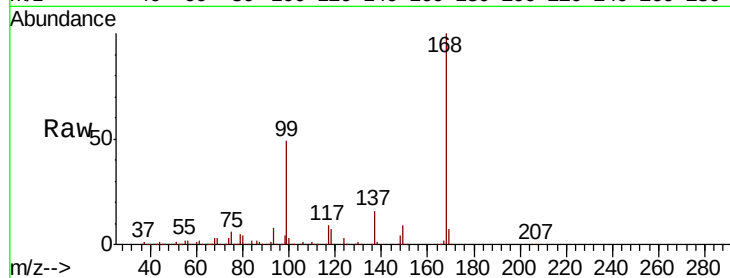
T9-12-13-J(0)

Tgt Ion:168 Resp: 427700

Ion Ratio Lower Upper

168 100

99 48.9 38.4 57.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

150000

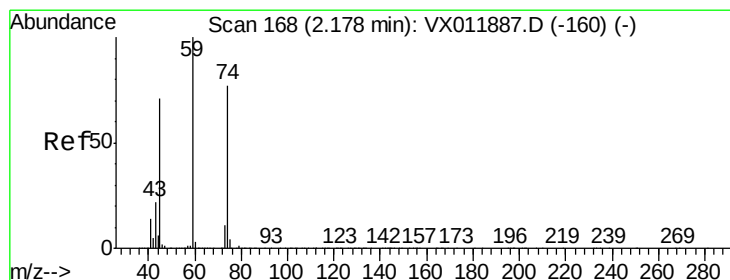
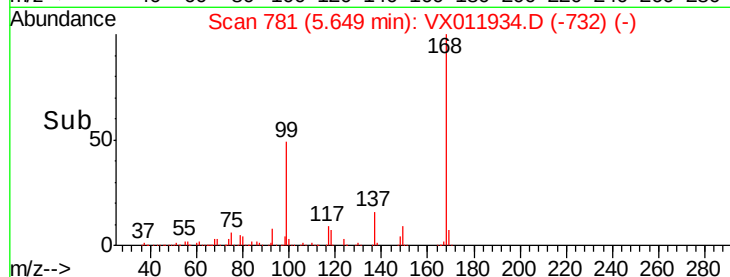
100000

50000

0

5.50 5.60 5.70 5.80

Time-->



#8

Diethyl Ether

Concen: 1.354 ug/l

RT: 2.17 min Scan# 211

Delta R.T. -0.00 min

Lab File: VX011934.D

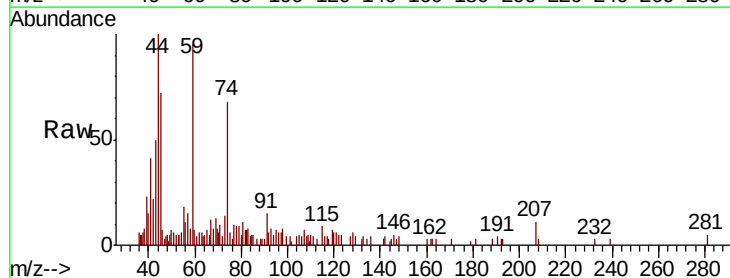
Acq: 31 Aug 2019 04:40

Tgt Ion: 74 Resp: 2310

Ion Ratio Lower Upper

74 100

45 96.3 46.7 140.1



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0

1500

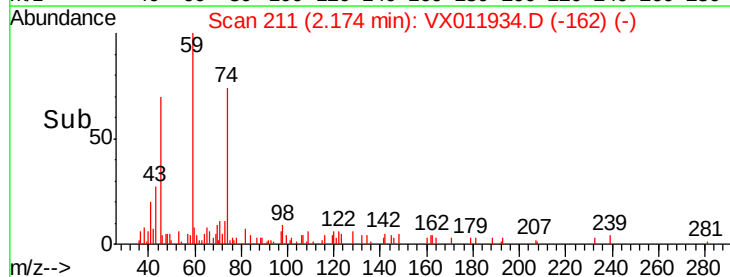
1000

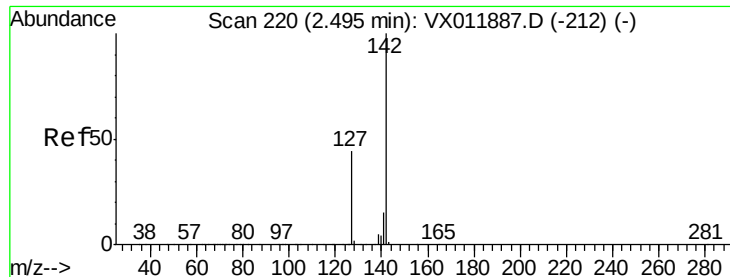
500

0

2.10 2.15 2.20

Time-->

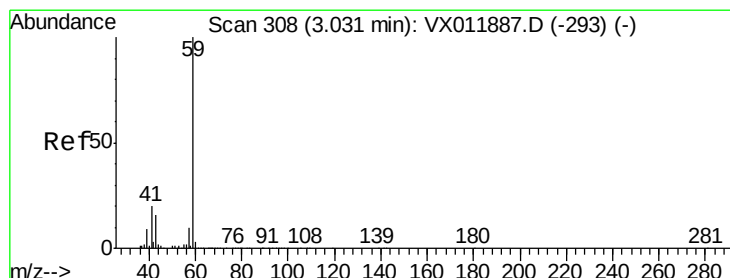
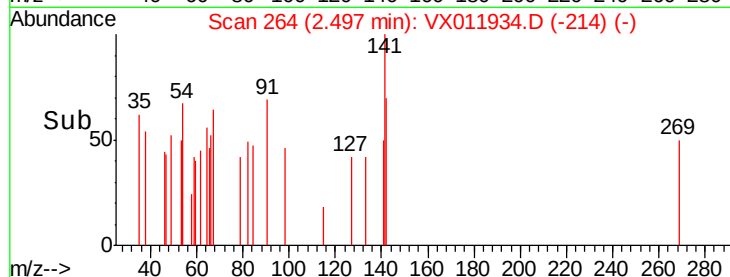
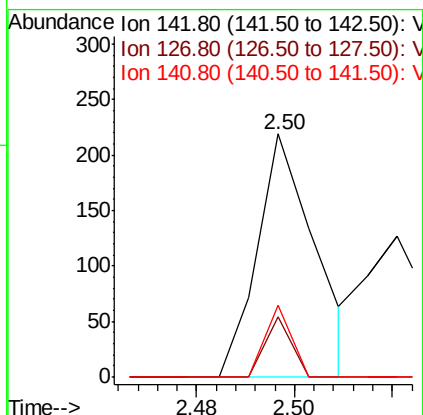
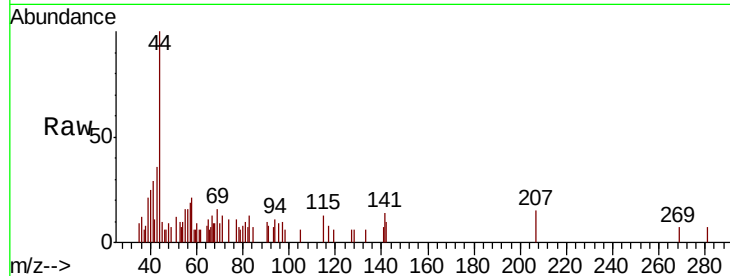




#10  
Methyl Iodide  
Concen: 3.723 ug/l  
RT: 2.50 min Scan# 264  
Delta R.T. 0.00 min  
Lab File: VX011934.D  
Acq: 31 Aug 2019 04:40

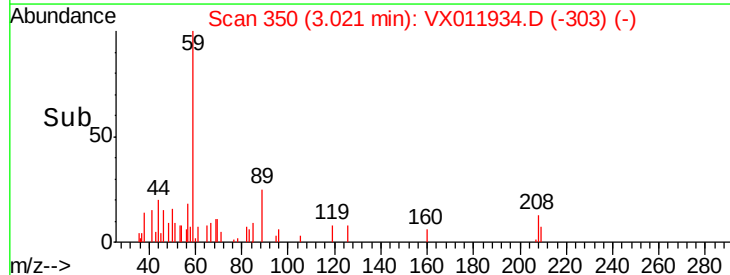
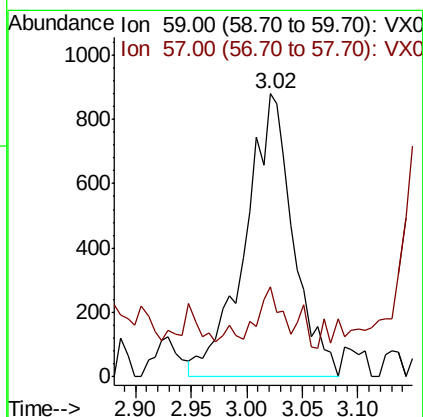
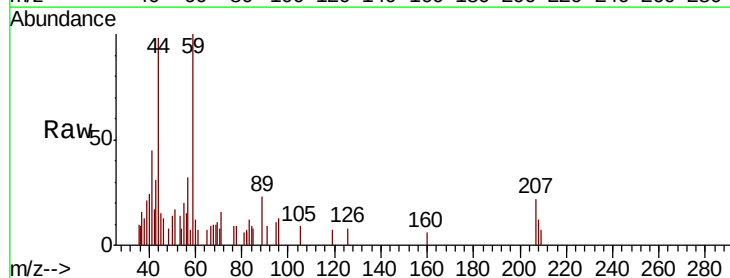
Instrument :  
MSVOA\_X  
ClientSampleId :  
T9-12-13-J(0)

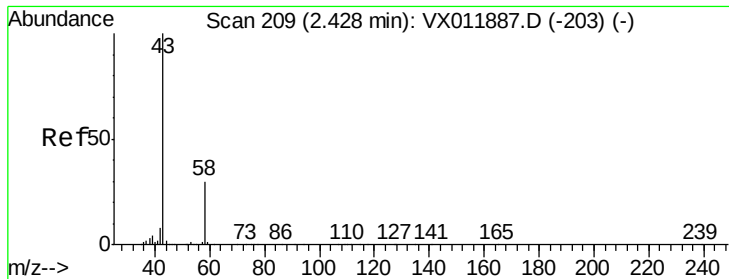
Tgt Ion:142 Resp: 179  
Ion Ratio Lower Upper  
142 100  
127 11.2 35.7 53.5#  
141 13.4 11.8 17.6



#11  
Tert butyl alcohol  
Concen: 6.719 ug/l  
RT: 3.02 min Scan# 350  
Delta R.T. -0.01 min  
Lab File: VX011934.D  
Acq: 31 Aug 2019 04:40

Tgt Ion: 59 Resp: 2649  
Ion Ratio Lower Upper  
59 100  
57 8.8 8.6 12.8





#16

Acetone

Concen: 44.452 ug/l

RT: 2.43 min Scan# 253

Delta R.T. 0.00 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

Instrument :

MSVOA\_X

ClientSampleId :

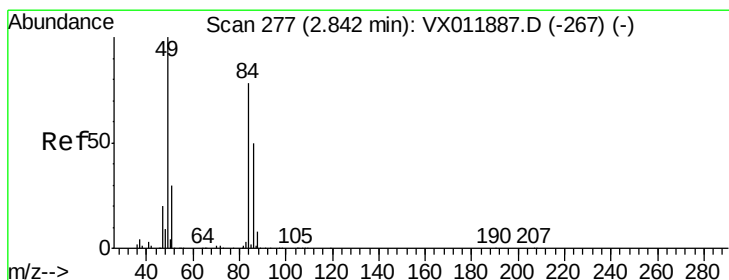
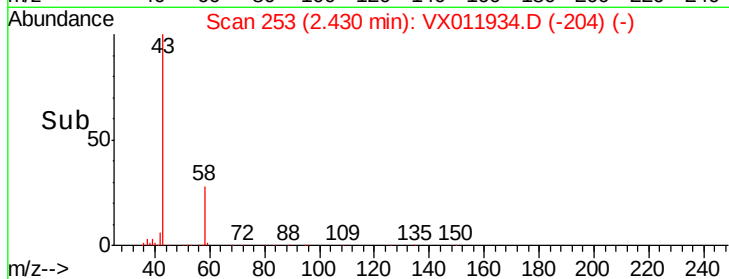
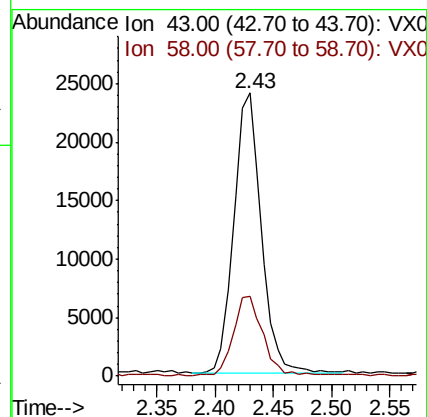
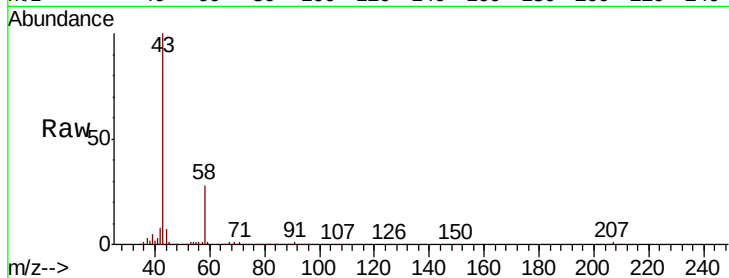
T9-12-13-J-(0)

Tgt Ion: 43 Resp: 39192

Ion Ratio Lower Upper

43 100

58 28.4 23.8 35.8



#20

Methylene Chloride

Concen: 2.309 ug/l

RT: 2.84 min Scan# 321

Delta R.T. 0.00 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

Tgt Ion: 84 Resp: 26308

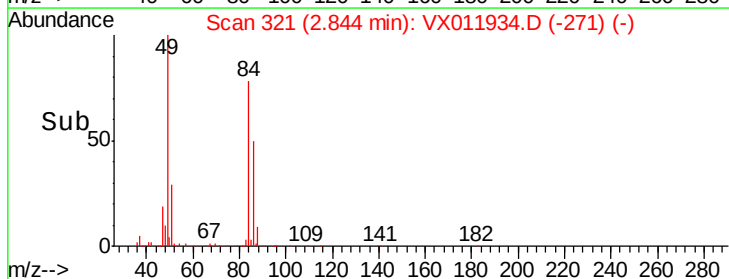
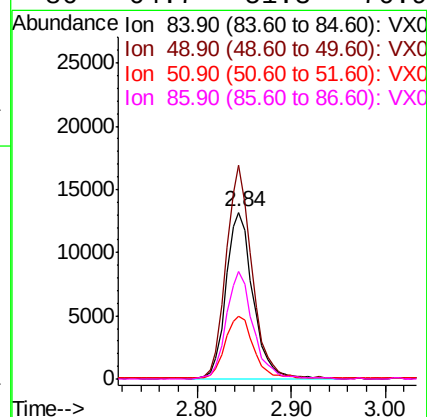
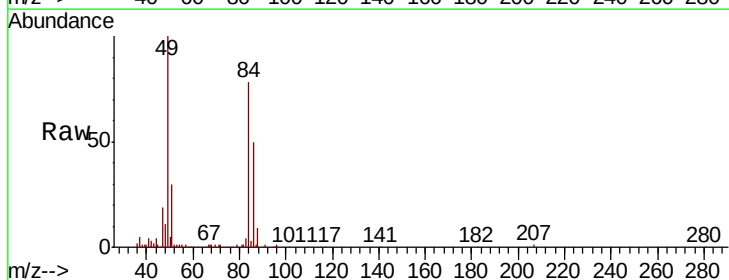
Ion Ratio Lower Upper

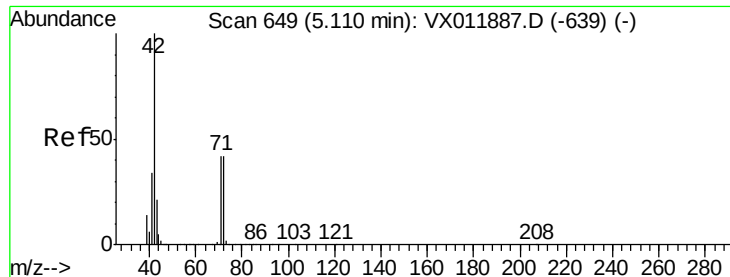
84 100

49 128.3 103.0 154.4

51 37.2 30.8 46.2

86 64.7 51.3 76.9





#29

Tetrahydrofuran

Concen: 7.455 ug/l

RT: 5.12 min Scan# 694

Delta R.T. 0.01 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

Instrument :

MSVOA\_X

ClientSampleId :

T9-12-13-J-(0)

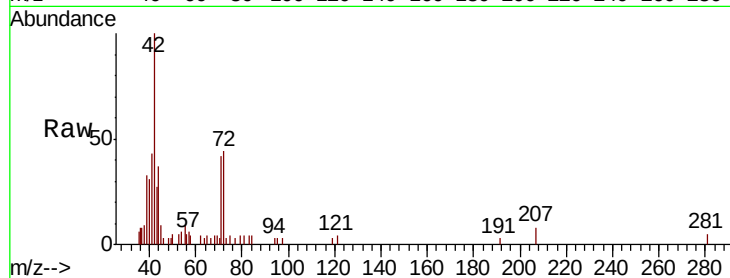
Tgt Ion: 42 Resp: 5975

Ion Ratio Lower Upper

42 100

72 45.3 36.2 54.4

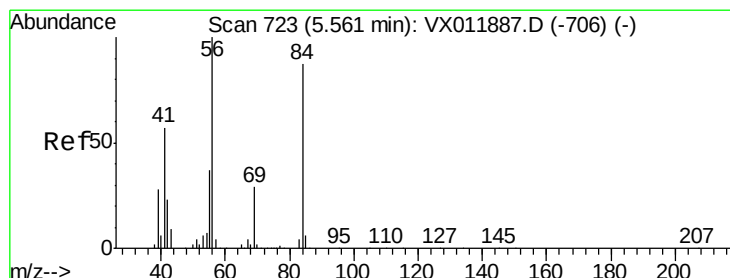
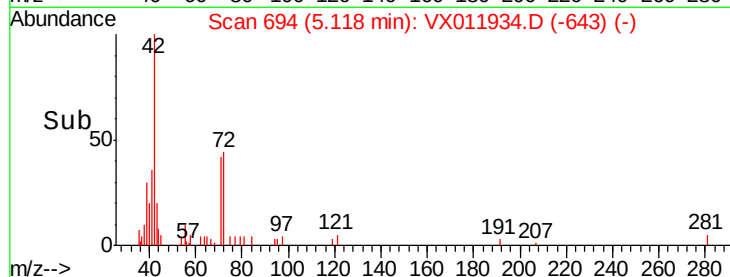
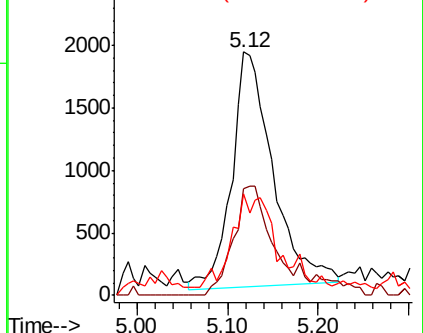
71 42.5 33.1 49.7



Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0



#31

Cyclohexane

Concen: 1.417 ug/l

RT: 5.65 min Scan# 781

Delta R.T. 0.09 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

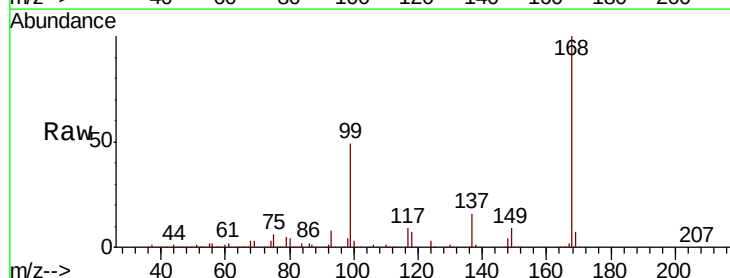
Tgt Ion: 56 Resp: 7250

Ion Ratio Lower Upper

56 100

69 155.1 23.1 34.7#

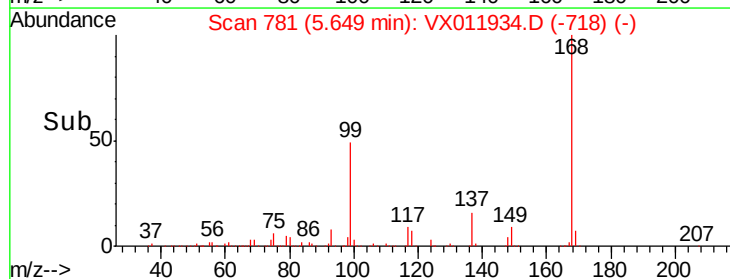
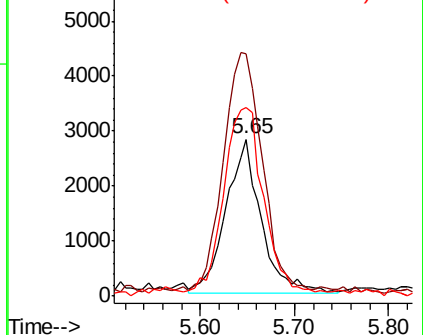
84 120.4 69.6 104.4#

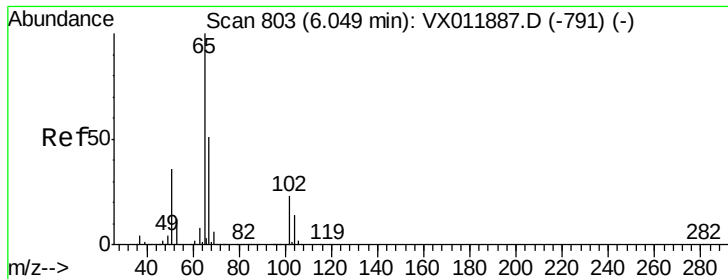


Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 84.00 (83.70 to 84.70): VX0

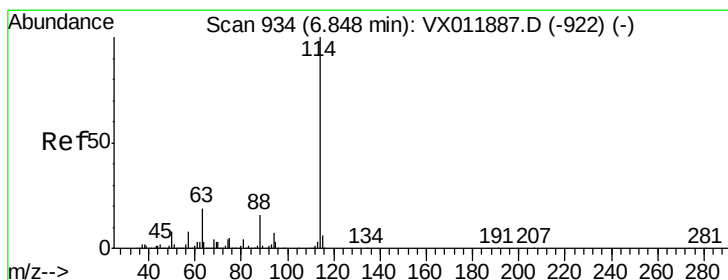
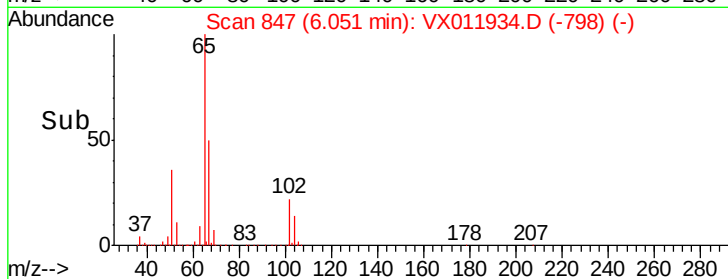
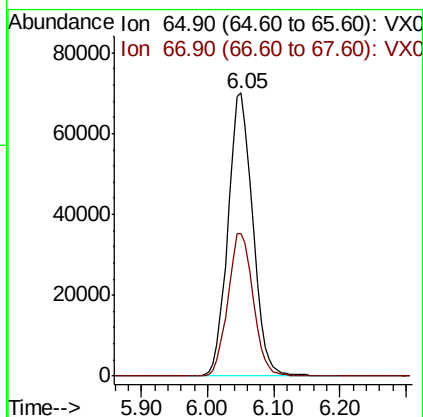
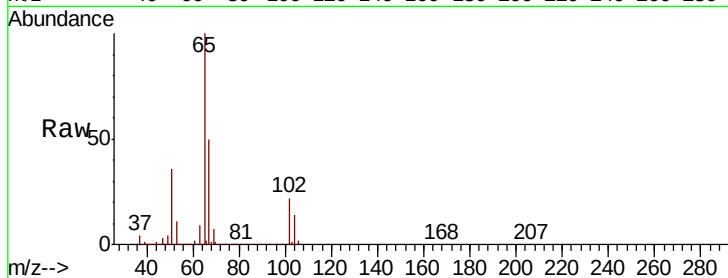




#33  
 1,2-Dichloroethane-d4  
 Concen: 44.533 ug/l  
 RT: 6.05 min Scan# 847  
 Delta R.T. 0.00 min  
 Lab File: VX011934.D  
 Acq: 31 Aug 2019 04:40

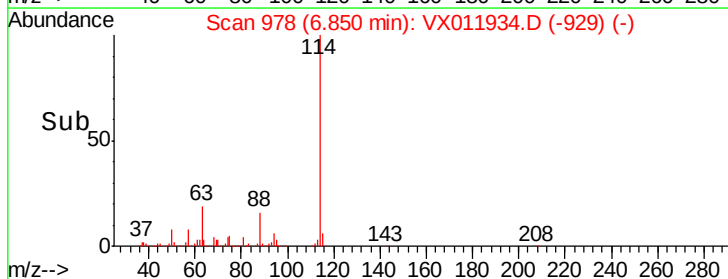
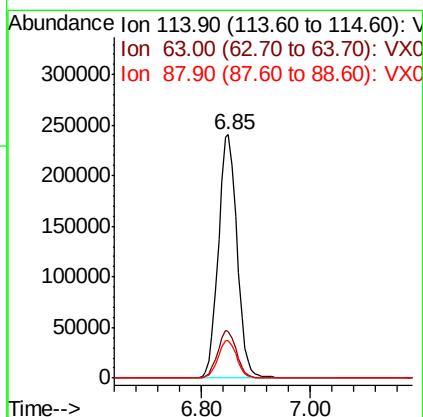
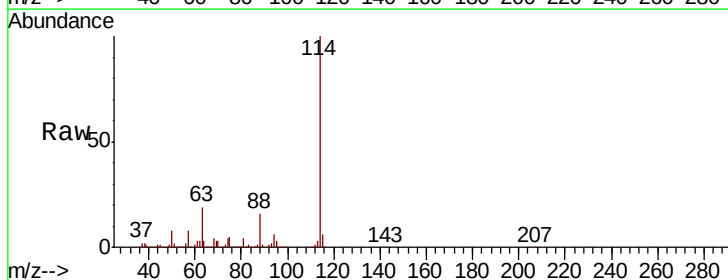
Instrument :  
 MSVOA\_X  
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 T9-12-13-J-(0)

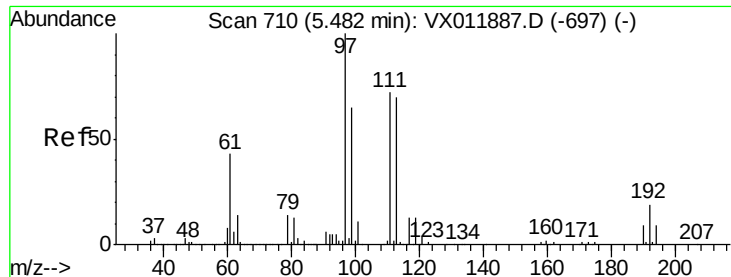
Tgt Ion: 65 Resp: 182488  
 Ion Ratio Lower Upper  
 65 100  
 67 50.8 0.0 102.2



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.85 min Scan# 978  
 Delta R.T. 0.00 min  
 Lab File: VX011934.D  
 Acq: 31 Aug 2019 04:40

Tgt Ion: 114 Resp: 575482  
 Ion Ratio Lower Upper  
 114 100  
 63 19.3 0.0 38.8  
 88 15.5 0.0 31.2

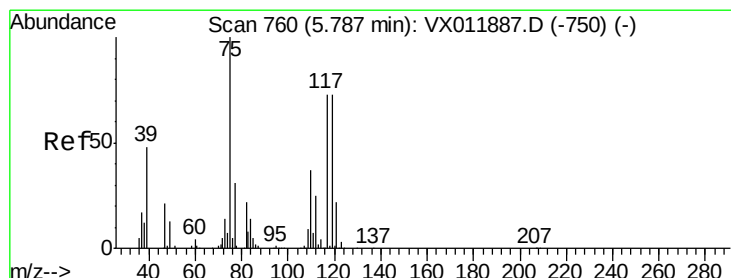
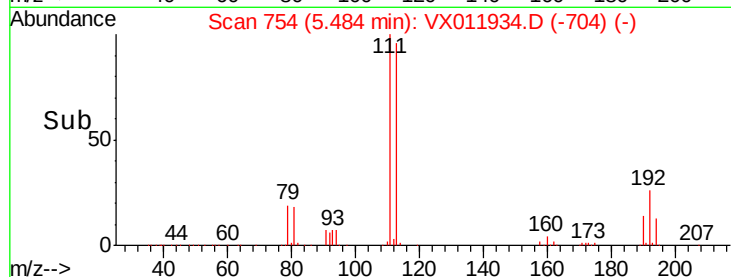
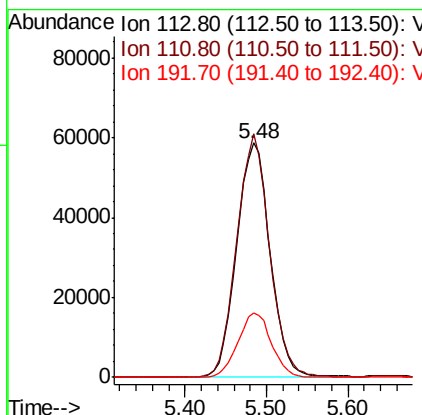
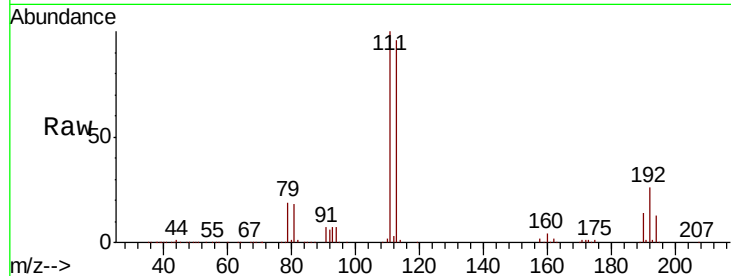




#35  
 Dibromofluoromethane  
 Concen: 45.308 ug/l  
 RT: 5.48 min Scan# 754  
 Delta R.T. 0.00 min  
 Lab File: VX011934.D  
 Acq: 31 Aug 2019 04:40

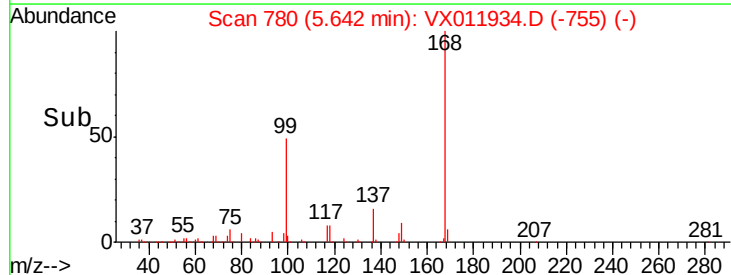
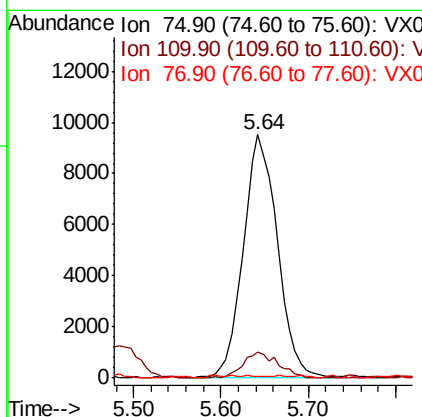
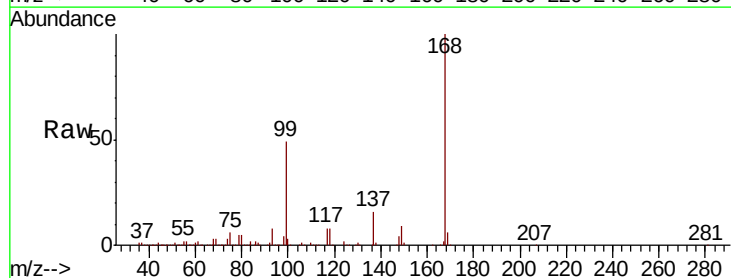
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 T9-12-13-J-(0)

Tgt Ion:113 Resp: 167197  
 Ion Ratio Lower Upper  
 113 100  
 111 101.8 82.1 123.1  
 192 27.4 21.5 32.3

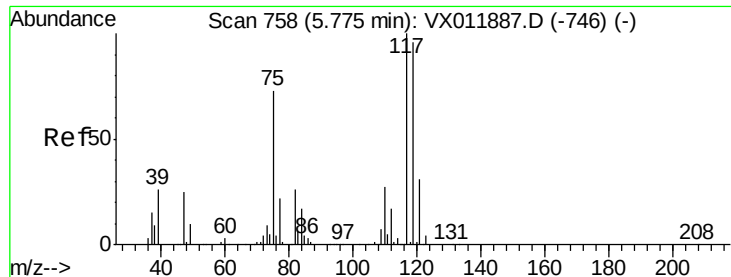


#36  
 1,1-Dichloropropene  
 Concen: 5.703 ug/l  
 RT: 5.64 min Scan# 780  
 Delta R.T. -0.14 min  
 Lab File: VX011934.D  
 Acq: 31 Aug 2019 04:40

Tgt Ion: 75 Resp: 25999  
 Ion Ratio Lower Upper  
 75 100  
 110 10.7 19.1 57.3#  
 77 0.0 24.4 36.6#







#38

Carbon Tetrachloride

Concen: 7.012 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.13 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

Instrument :

MSVOA\_X

ClientSampleId :

T9-12-13-J-(0)

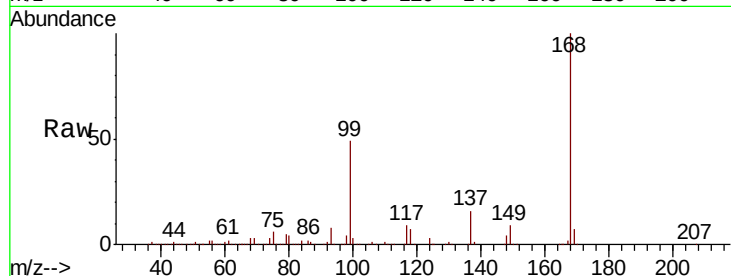
Tgt Ion:117 Resp: 37078

Ion Ratio Lower Upper

117 100

119 4.5 76.6 114.8#

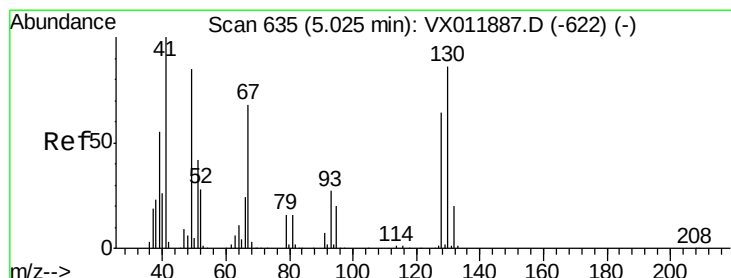
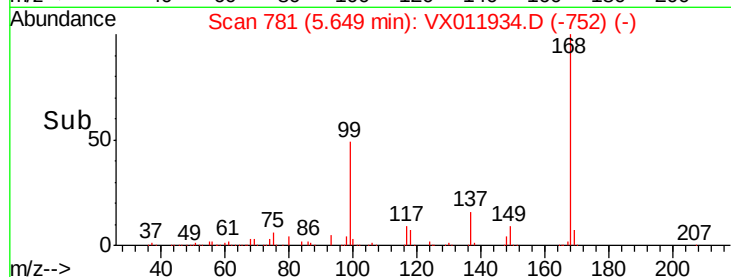
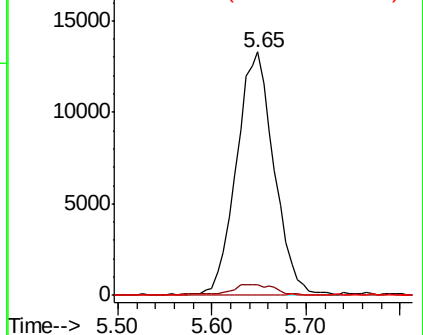
121 0.0 24.7 37.1#



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: 1.963 ug/l

RT: 5.12 min Scan# 695

Delta R.T. 0.10 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

Tgt Ion: 41 Resp: 3119

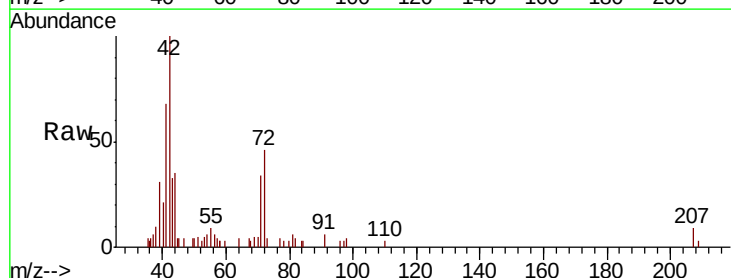
Ion Ratio Lower Upper

41 100

39 57.3 45.0 67.6

67 6.7 55.0 82.4#

52 0.7 24.1 36.1#

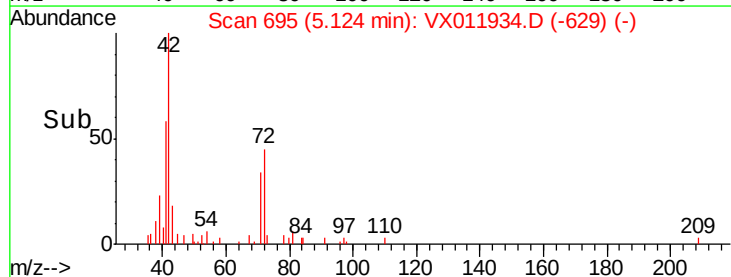
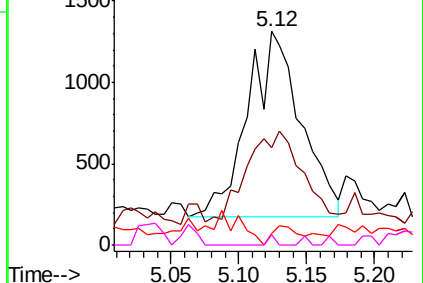


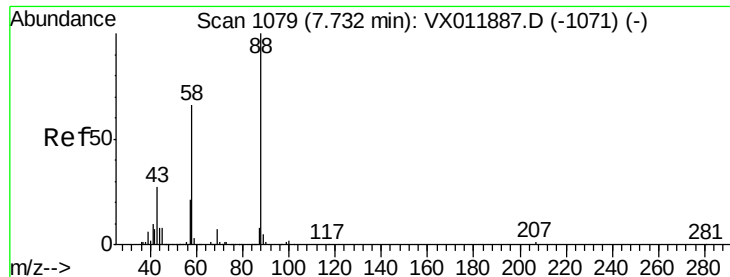
Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 39.00 (38.70 to 39.70): VX0

Ion 67.00 (66.70 to 67.70): VX0

Ion 52.00 (51.70 to 52.70): VX0

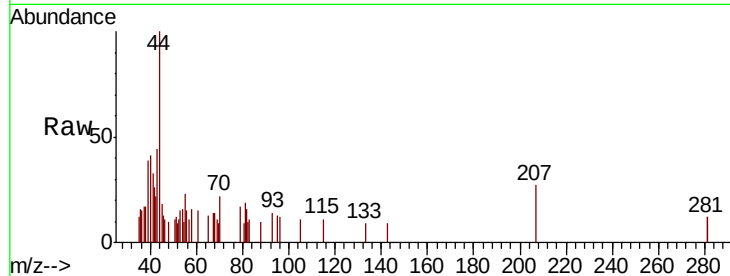




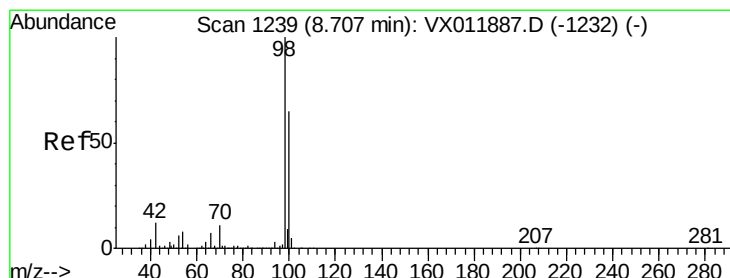
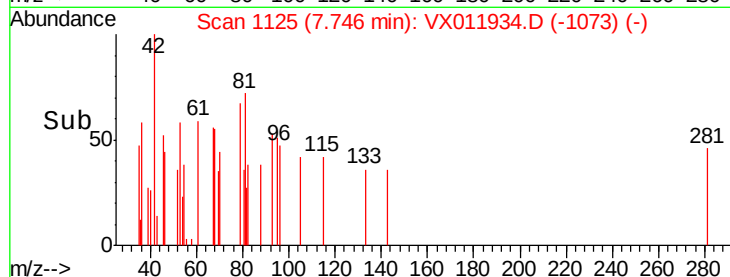
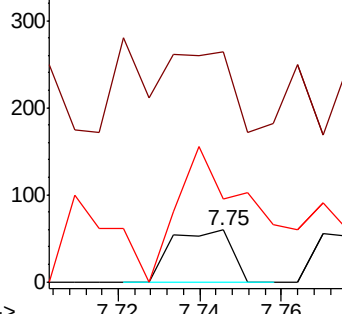
#49  
1,4-Dioxane  
Concen: 1.666 ug/l  
RT: 7.75 min Scan# 1125  
Delta R.T. 0.01 min  
Lab File: VX011934.D  
Acq: 31 Aug 2019 04:40

Instrument :  
MSVOA\_X  
ClientSampleId :  
T9-12-13-J-(0)

Tgt Ion: 88 Resp: 61  
Ion Ratio Lower Upper  
88 100  
43 0.0 27.3 40.9#  
58 336.1 53.9 80.9#

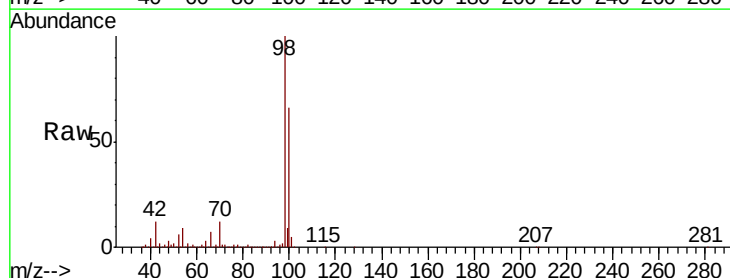


Abundance Ion 88.00 (87.70 to 88.70): VX0  
Ion 43.00 (42.70 to 43.70): VX0  
Ion 58.00 (57.70 to 58.70): VX0

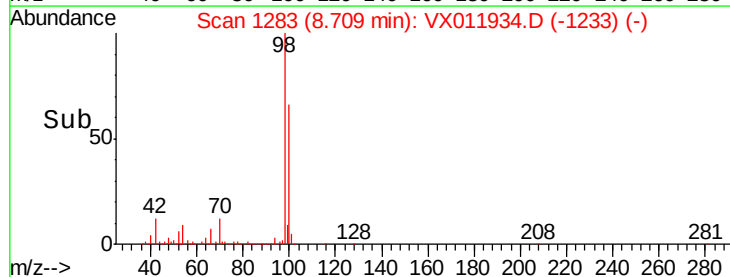
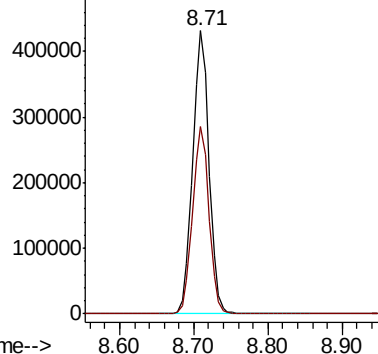


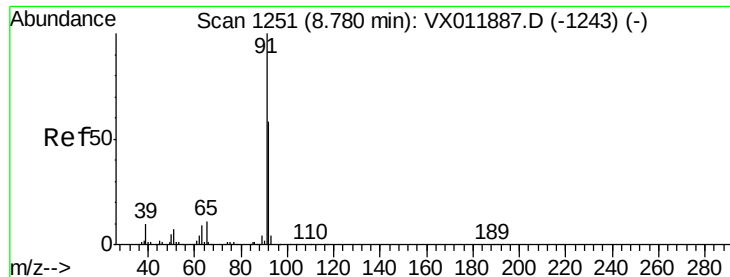
#50  
Toluene-d8  
Concen: 49.818 ug/l  
RT: 8.71 min Scan# 1283  
Delta R.T. 0.00 min  
Lab File: VX011934.D  
Acq: 31 Aug 2019 04:40

Tgt Ion: 98 Resp: 657168  
Ion Ratio Lower Upper  
98 100  
100 66.5 53.0 79.6



Abundance Ion 98.00 (97.70 to 98.70): VX0  
Ion 100.00 (99.70 to 100.70): VX0





#52

Toluene

Concen: 2.143 ug/l

RT: 8.78 min Scan# 1295

Delta R.T. 0.00 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

Instrument :

MSVOA\_X

ClientSampleId :

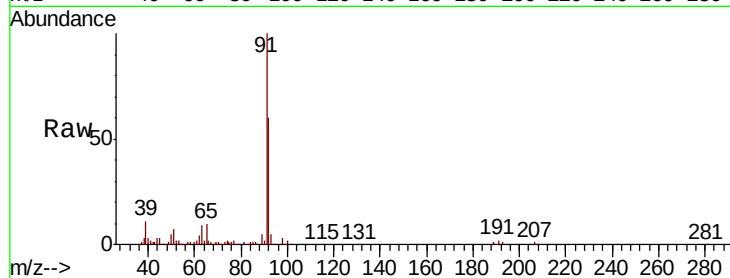
T9-12-13-J-(0)

Tgt Ion: 92 Resp: 19291

Ion Ratio Lower Upper

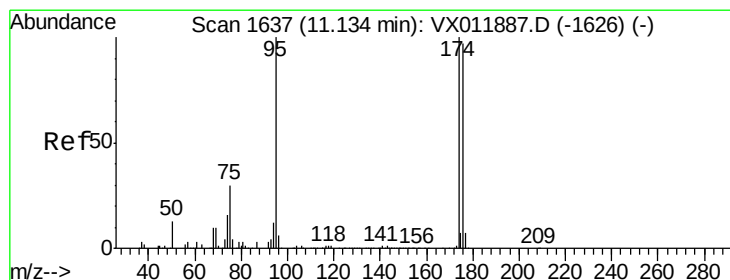
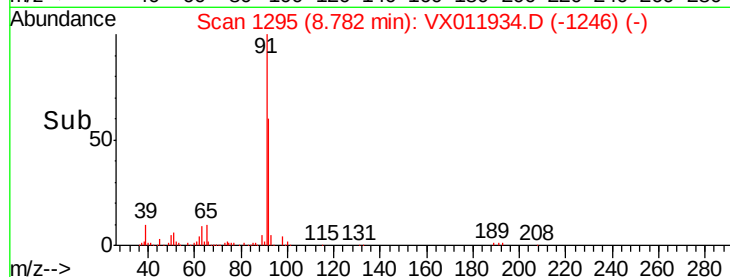
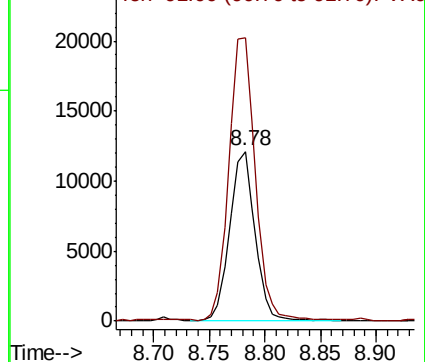
92 100

91 174.1 136.8 205.2



Abundance Ion 92.00 (91.70 to 92.70): VX0

Ion 91.00 (90.70 to 91.70): VX0



#62

4-Bromofluorobenzene

Concen: 42.432 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.00 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

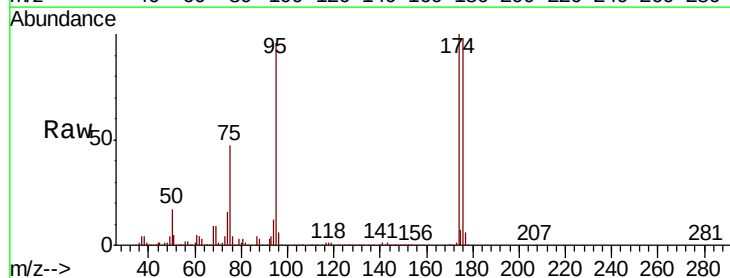
Tgt Ion: 95 Resp: 245538

Ion Ratio Lower Upper

95 100

174 98.6 0.0 196.0

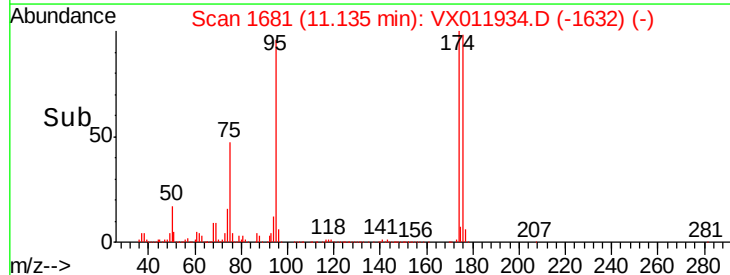
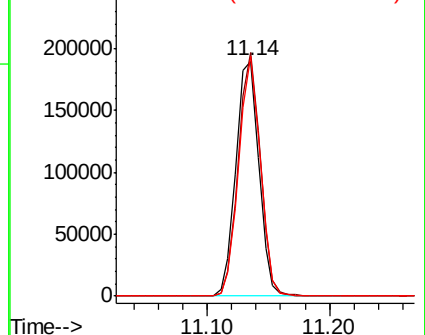
176 95.9 0.0 191.4

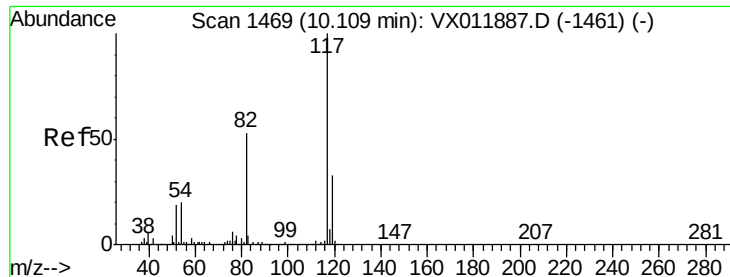


Abundance Ion 94.90 (94.60 to 95.60): VX0

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V

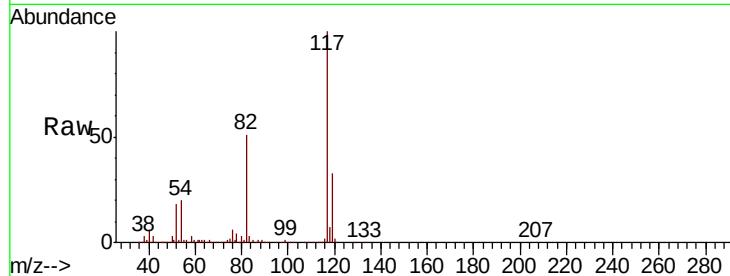




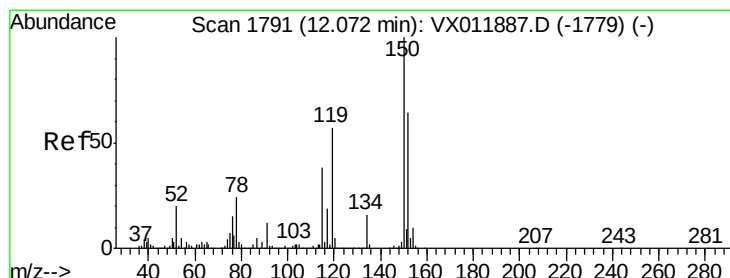
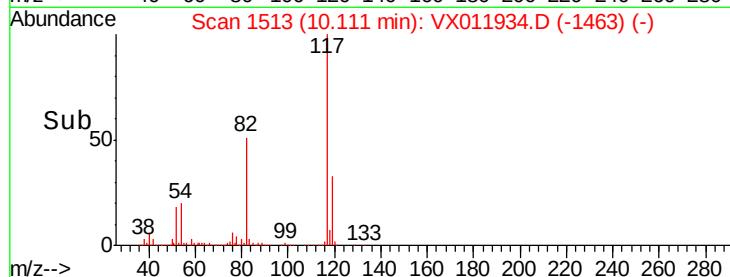
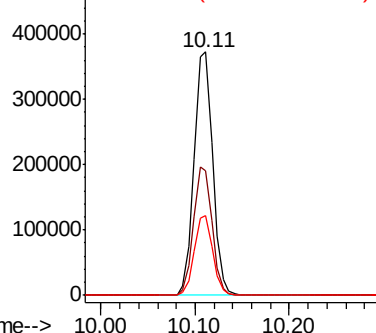
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX011934.D  
Acq: 31 Aug 2019 04:40

Instrument :  
MSVOA\_X  
ClientSampleId :  
T9-12-13-J-(0)

Tgt Ion:117 Resp: 511694  
Ion Ratio Lower Upper  
117 100  
82 51.3 42.0 63.0  
119 33.0 26.2 39.4

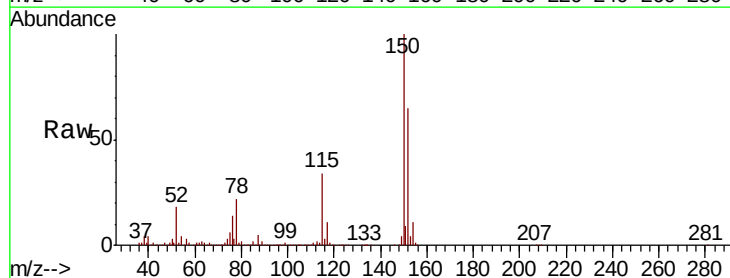


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): VX0  
Ion 118.90 (118.60 to 119.60): V

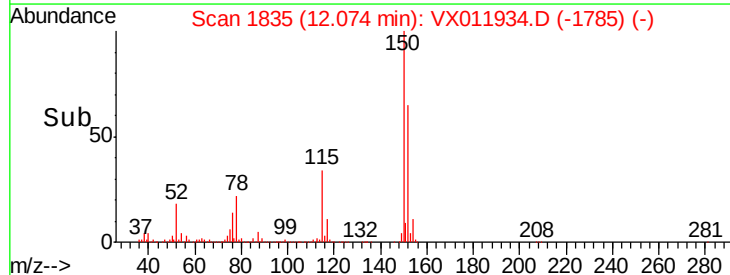
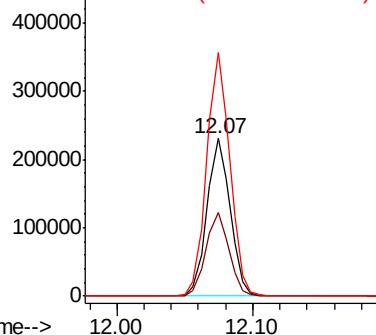


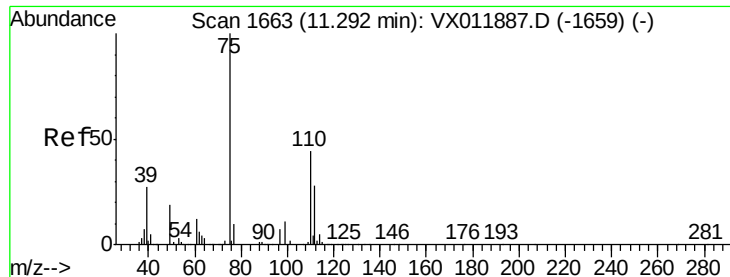
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. 0.00 min  
Lab File: VX011934.D  
Acq: 31 Aug 2019 04:40

Tgt Ion:152 Resp: 273283  
Ion Ratio Lower Upper  
152 100  
115 53.1 37.1 111.3  
150 154.5 0.0 339.6



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: 45.270 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. -0.16 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

Instrument :

MSVOA\_X

ClientSampleId :

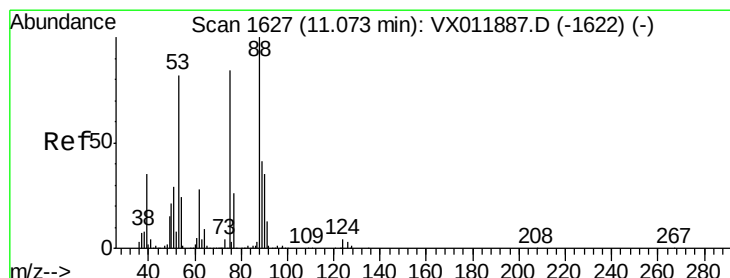
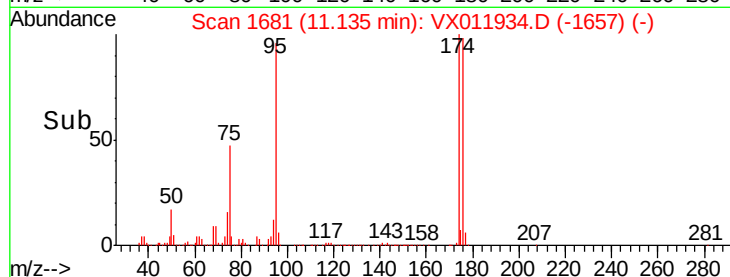
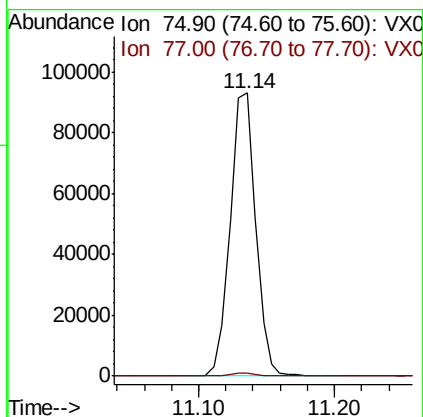
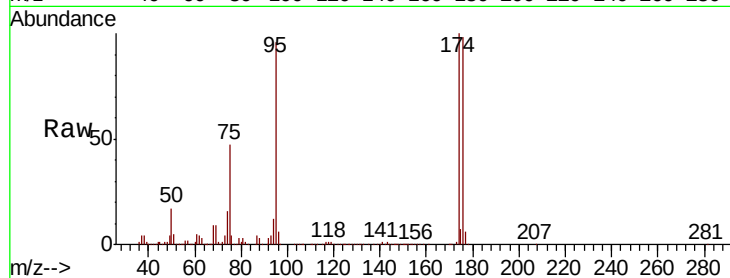
T9-12-13-J-(0)

Tgt Ion: 75 Resp: 121699

Ion Ratio Lower Upper

75 100

77 1.1 20.9 62.7#



#81

trans-1,4-Dichloro-2-butene

Concen: 113.726 ug/l

RT: 11.14 min Scan# 1681

Delta R.T. 0.06 min

Lab File: VX011934.D

Acq: 31 Aug 2019 04:40

Tgt Ion: 75 Resp: 121699

Ion Ratio Lower Upper

75 100

53 0.1 77.1 115.7#

89 0.1 38.2 57.2#

