

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX083019\  
 Data File : VX011937.D  
 Acq On : 31 Aug 2019 06:04  
 Operator : SY/SP  
 Sample : K4493-12  
 Misc : 5.21g/5.0mL/MSVOA\_X/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 T9-12-13-K2-(0)

Quant Time: Aug 31 06:26:30 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  | 195986   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 249747   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 209456   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 101521   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 6.05  | 65   | 76849    | 40.93 | ug/l   | 0.00     |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 81.86% |          |
| 35) Dibromofluoromethane    | 5.48  | 113  | 71425    | 44.60 | ug/l   | 0.00     |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 89.20% |          |
| 50) Toluene-d8              | 8.71  | 98   | 279188   | 48.77 | ug/l   | 0.00     |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 97.54% |          |
| 62) 4-Bromofluorobenzene    | 11.14 | 95   | 96831    | 38.56 | ug/l   | 0.00     |
| Spiked Amount               |       |      |          |       |        |          |
|                             |       |      | Recovery | =     | 77.12% |          |

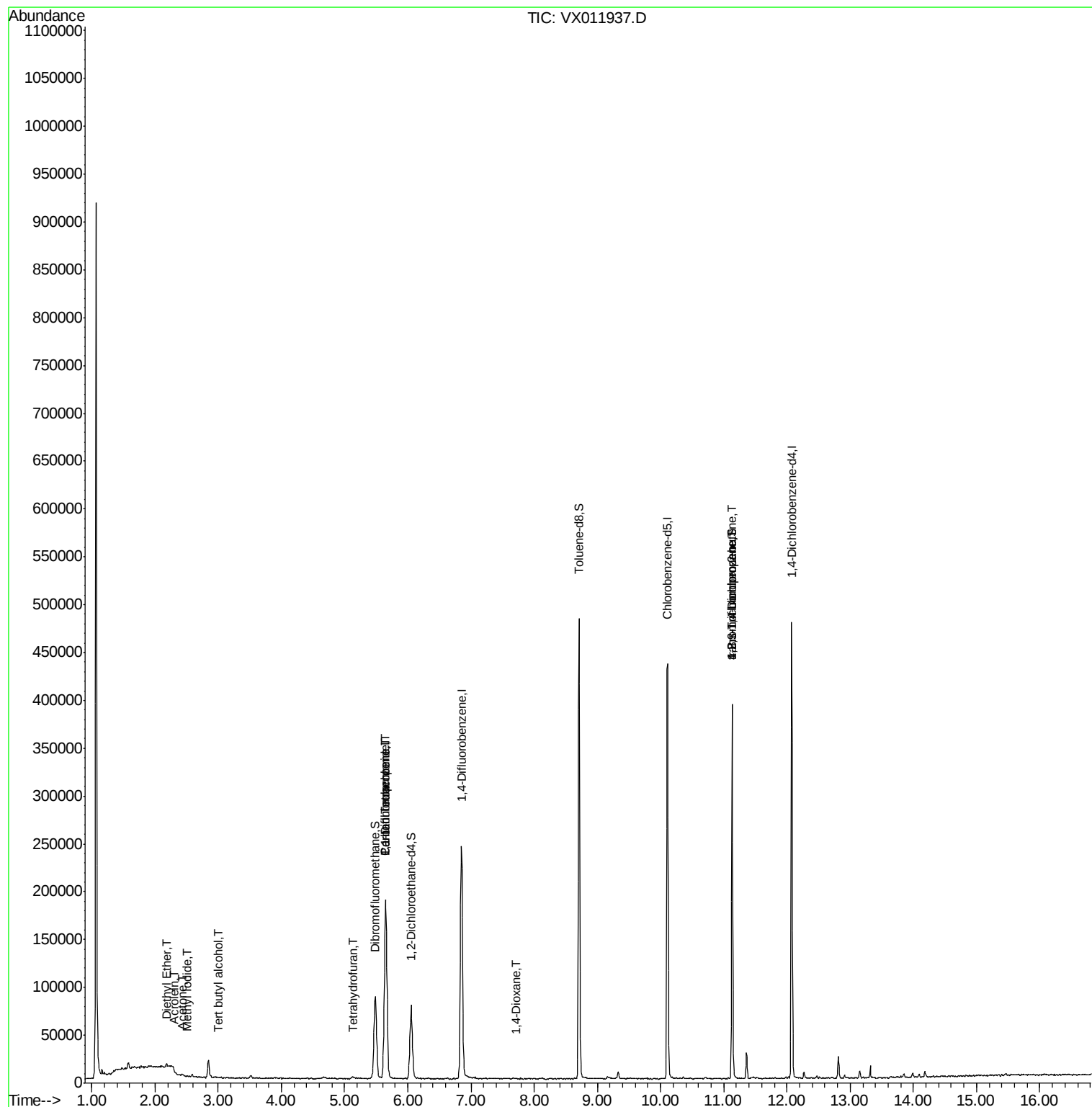
| Target Compounds               | R.T.  | QIon | Response | Conc    | Units  | Qvalue |
|--------------------------------|-------|------|----------|---------|--------|--------|
| 8) Diethyl Ether               | 2.18  | 74   | 1137     | 1.455   | ug/l   | 92     |
| 10) Methyl Iodide              | 2.51  | 142  | 293      | 3.844   | ug/l # | 45     |
| 11) Tert butyl alcohol         | 3.01  | 59   | 1112     | 6.156   | ug/l # | 94     |
| 13) Acrolein                   | 2.30  | 56   | 361      | 4.015   | ug/l # | 13     |
| 16) Acetone                    | 2.43  | 43   | 1950     | 4.827   | ug/l   | 94     |
| 29) Tetrahydrofuran            | 5.13  | 42   | 1761     | 4.795   | ug/l # | 75     |
| 36) 1,1-Dichloropropene        | 5.65  | 75   | 12081    | 6.106   | ug/l # | 53     |
| 38) Carbon Tetrachloride       | 5.65  | 117  | 16791    | 7.317   | ug/l # | 16     |
| 49) 1,4-Dioxane                | 7.71  | 88   | 19       | 1.196   | ug/l # | 1      |
| 76) 1,2,3-Trichloropropane     | 11.14 | 75   | 48454    | 48.519  | ug/l # | 36     |
| 81) trans-1,4-Dichloro-2-buten | 11.14 | 75   | 48454    | 121.888 | 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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Operator : SY/SP  
Sample : K4493-12  
Misc : 5.21g/5.0mL/MSVOA\_X/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
T9-12-13-K2-(0)

Quant Time: Aug 31 06:26:30 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: VX011937.D

Acq: 31 Aug 2019 06:04

Instrument :

MSVOA\_X

ClientSampleId :

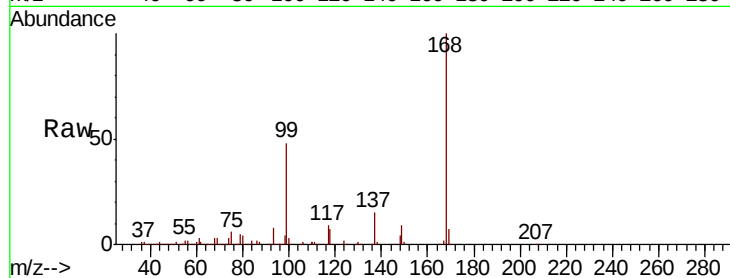
T9-12-13-K2-(0)

Tgt Ion:168 Resp: 195986

Ion Ratio Lower Upper

168 100

99 47.6 38.4 57.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.65

80000

60000

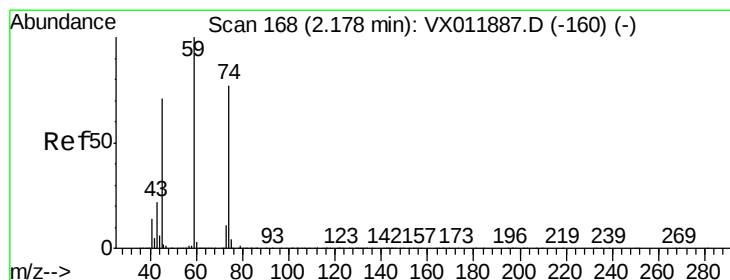
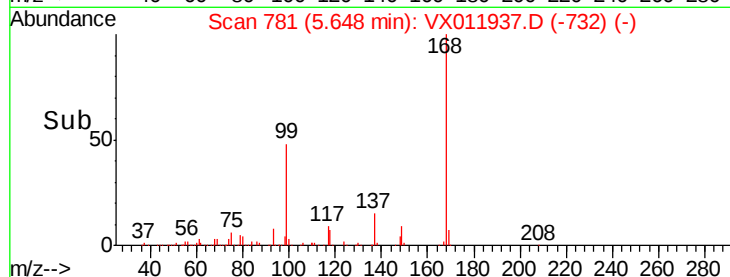
40000

20000

0

Time-->

5.50 5.60 5.70 5.80



#8

Diethyl Ether

Concen: 1.455 ug/l

RT: 2.18 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX011937.D

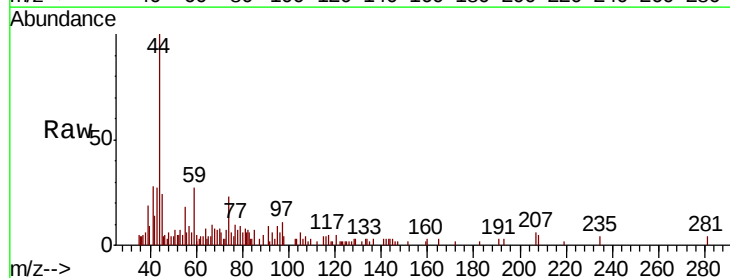
Acq: 31 Aug 2019 06:04

Tgt Ion: 74 Resp: 1137

Ion Ratio Lower Upper

74 100

45 100.9 46.7 140.1



Abundance Ion 74.00 (73.70 to 74.70): VX0

Ion 45.00 (44.70 to 45.70): VX0

2.18

800

600

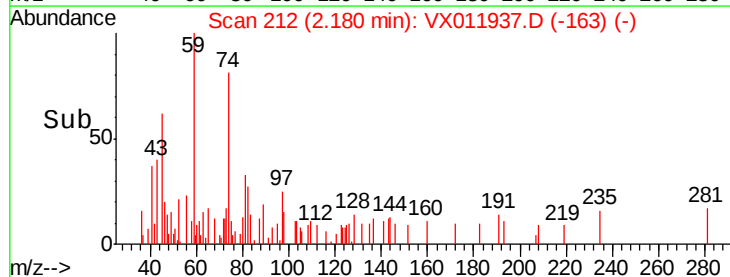
400

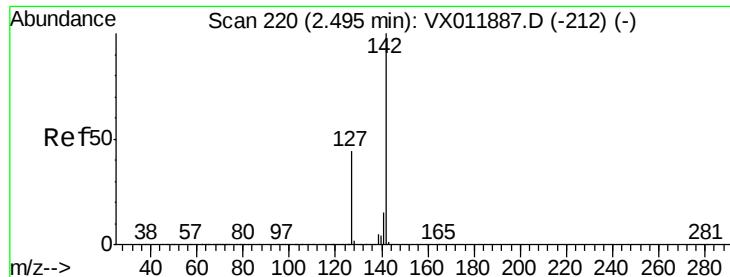
200

0

Time-->

2.10 2.15 2.20 2.25

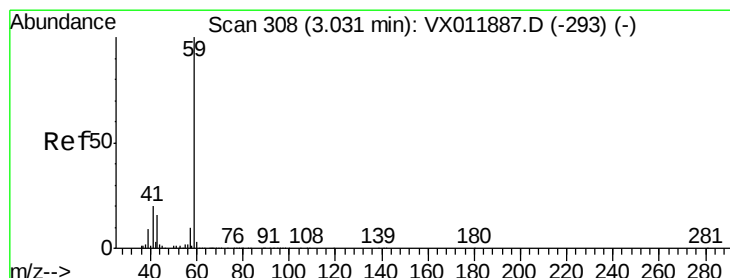
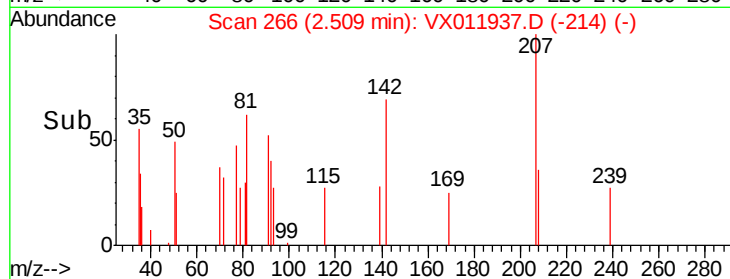
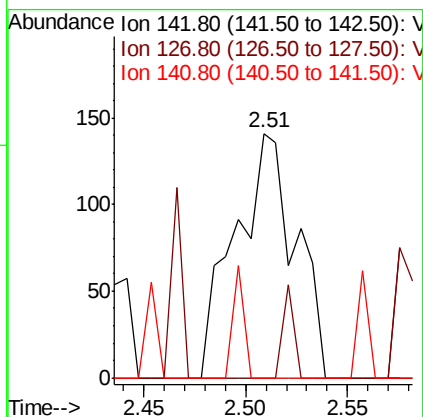
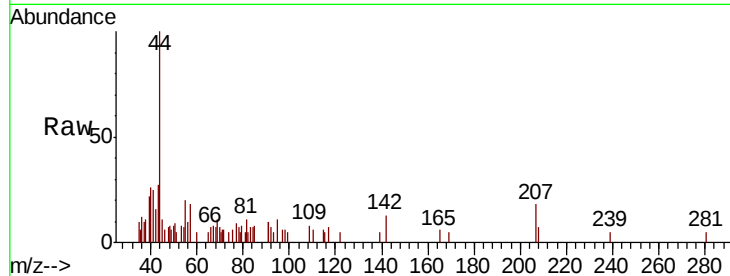




#10  
Methyl Iodide  
Concen: 3.844 ug/l  
RT: 2.51 min Scan# 266  
Delta R.T. 0.01 min  
Lab File: VX011937.D  
Acq: 31 Aug 2019 06:04

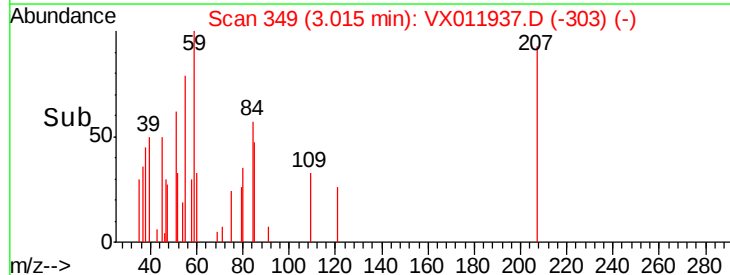
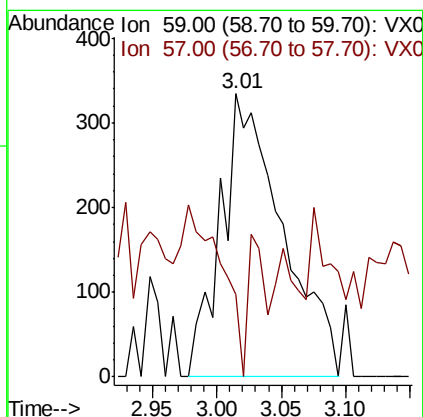
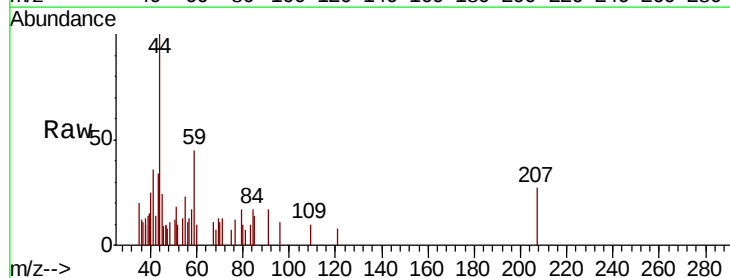
Instrument :  
MSVOA\_X  
ClientSampleId :  
T9-12-13-K2-(0)

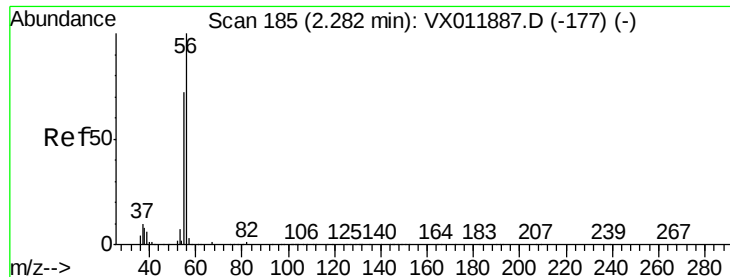
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 142     | 100   |       |       |
| 127     | 0.0   | 35.7  | 53.5# |
| 141     | 8.2   | 11.8  | 17.6# |



#11  
Tert butyl alcohol  
Concen: 6.156 ug/l  
RT: 3.01 min Scan# 349  
Delta R.T. -0.02 min  
Lab File: VX011937.D  
Acq: 31 Aug 2019 06:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 12.9  | 8.6   | 12.8# |





#13

Acrolein

Concen: 4.015 ug/l

RT: 2.30 min Scan# 232

Delta R.T. 0.02 min

Lab File: VX011937.D

Acq: 31 Aug 2019 06:04

Instrument :

MSVOA\_X

ClientSampled :

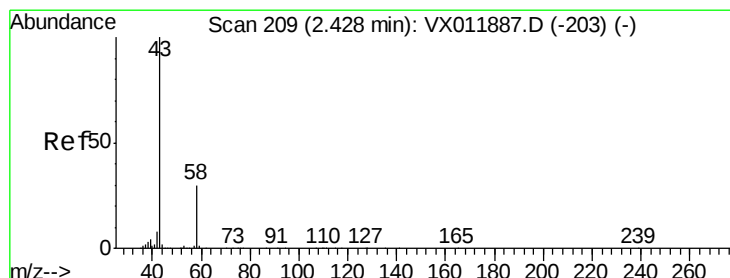
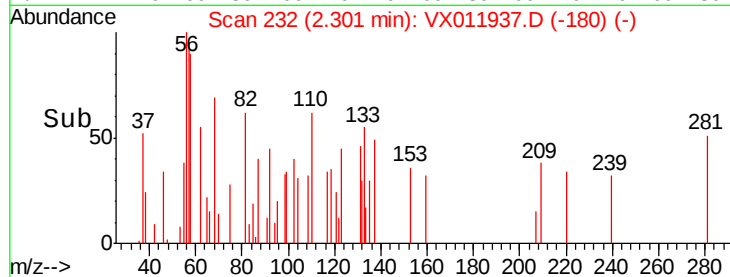
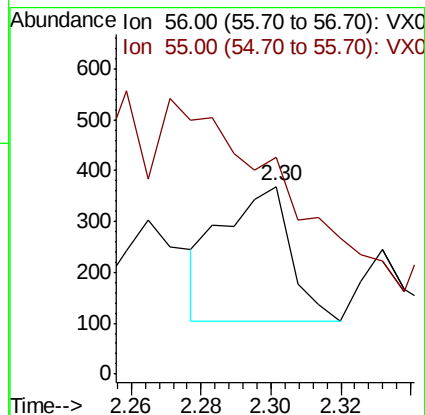
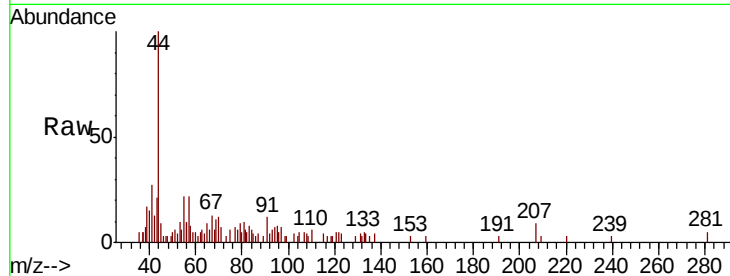
T9-12-13-K2-(0)

Tgt Ion: 56 Resp: 361

Ion Ratio Lower Upper

56 100

55 0.0 58.6 88.0#



#16

Acetone

Concen: 4.827 ug/l

RT: 2.43 min Scan# 253

Delta R.T. 0.00 min

Lab File: VX011937.D

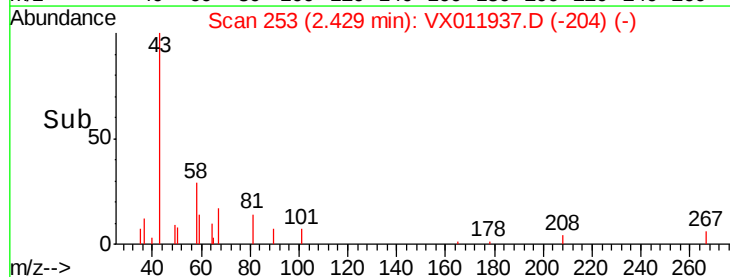
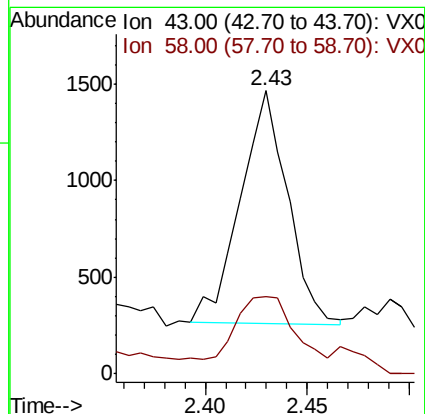
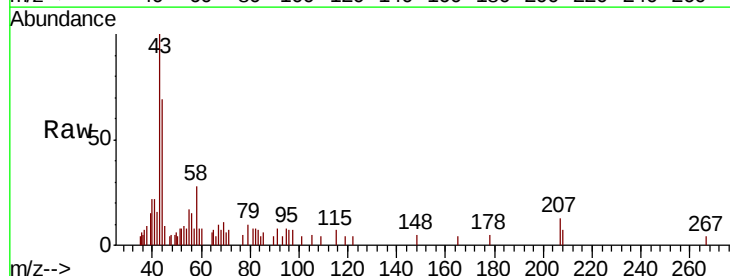
Acq: 31 Aug 2019 06:04

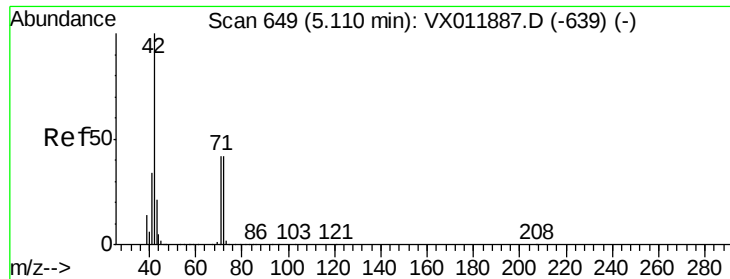
Tgt Ion: 43 Resp: 1950

Ion Ratio Lower Upper

43 100

58 26.5 23.8 35.8

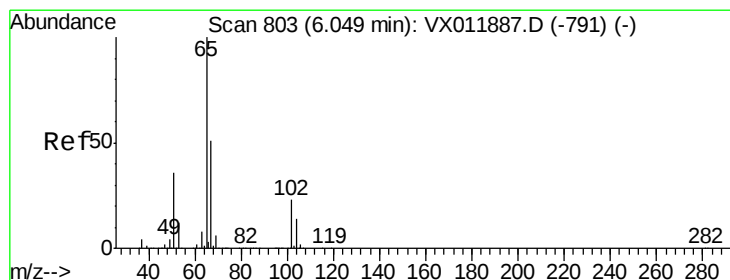
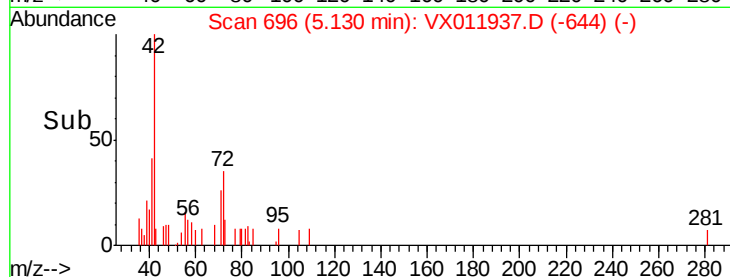
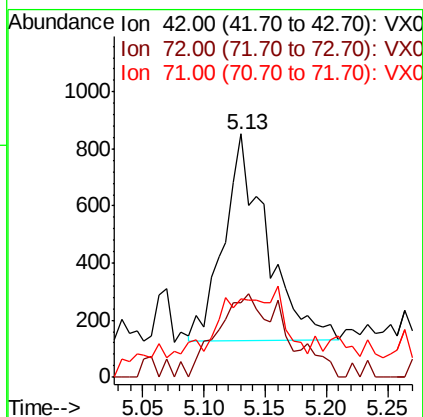
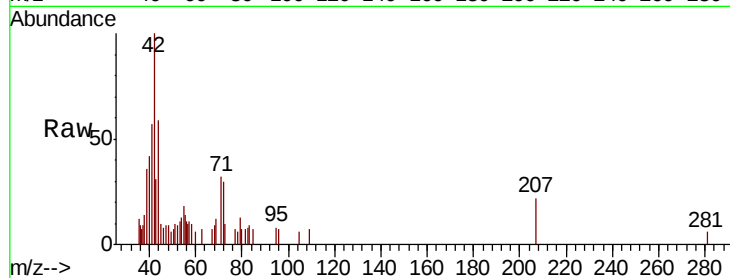




#29  
Tetrahydrofuran  
Concen: 4.795 ug/l  
RT: 5.13 min Scan# 696  
Delta R.T. 0.02 min  
Lab File: VX011937.D  
Acq: 31 Aug 2019 06:04

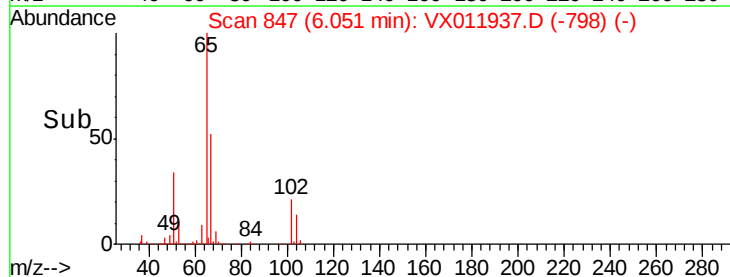
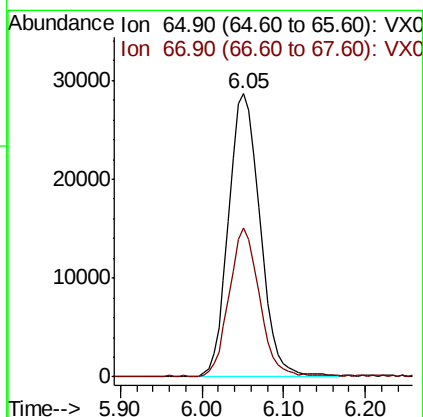
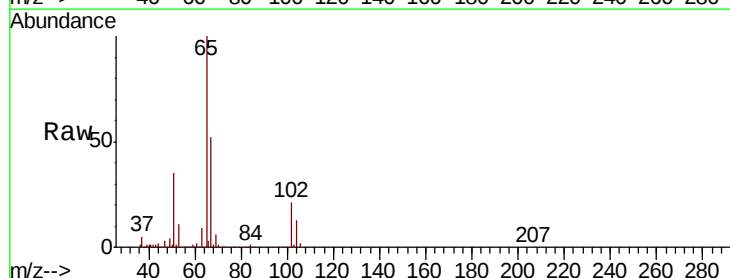
Instrument :  
MSVOA\_X  
ClientSampleId :  
T9-12-13-K2-(0)

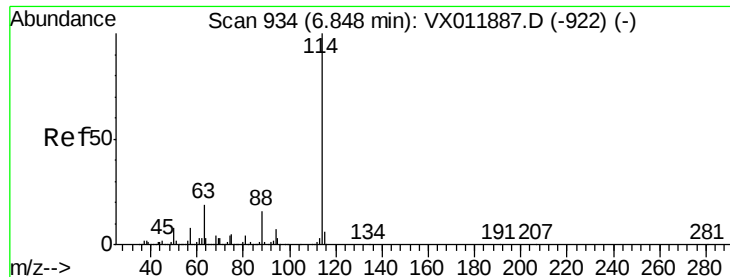
Tgt Ion: 42 Resp: 1761  
Ion Ratio Lower Upper  
42 100  
72 63.6 36.2 54.4#  
71 28.2 33.1 49.7#



#33  
1,2-Dichloroethane-d4  
Concen: 40.926 ug/l  
RT: 6.05 min Scan# 847  
Delta R.T. 0.00 min  
Lab File: VX011937.D  
Acq: 31 Aug 2019 06:04

Tgt Ion: 65 Resp: 76849  
Ion Ratio Lower Upper  
65 100  
67 50.2 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: VX011937.D

Acq: 31 Aug 2019 06:04

Instrument :

MSVOA\_X

ClientSampleId :

T9-12-13-K2-(0)

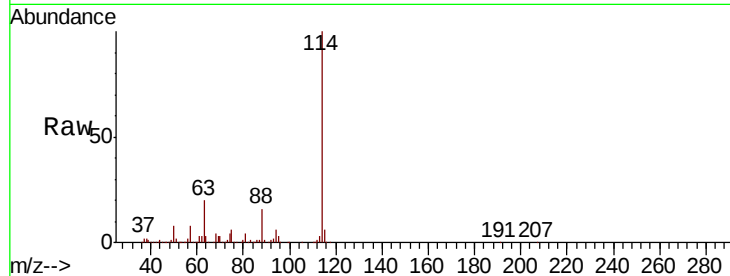
Tgt Ion:114 Resp: 249747

Ion Ratio Lower Upper

114 100

63 19.7 0.0 38.8

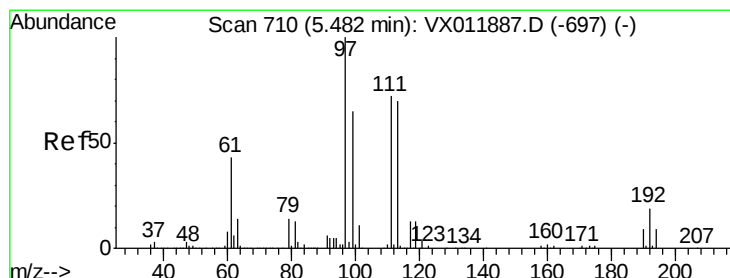
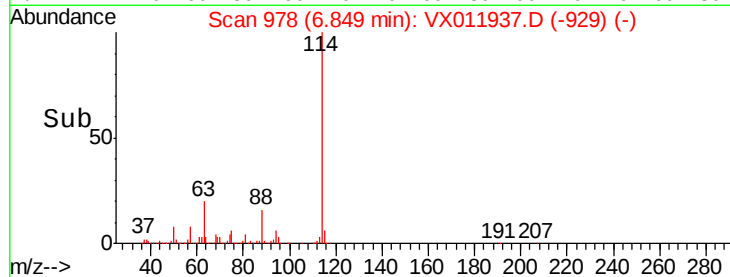
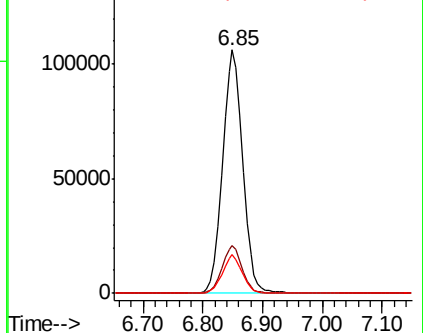
88 15.7 0.0 31.2



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: 44.599 ug/l

RT: 5.48 min Scan# 754

Delta R.T. 0.00 min

Lab File: VX011937.D

Acq: 31 Aug 2019 06:04

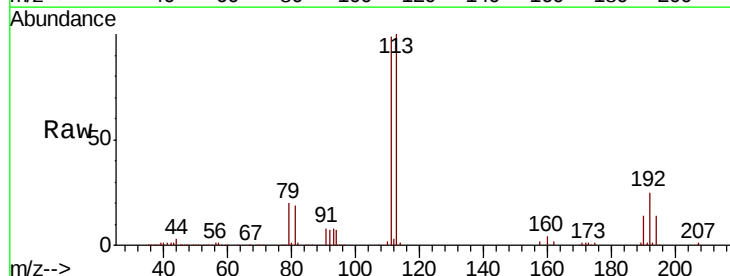
Tgt Ion:113 Resp: 71425

Ion Ratio Lower Upper

113 100

111 102.9 82.1 123.1

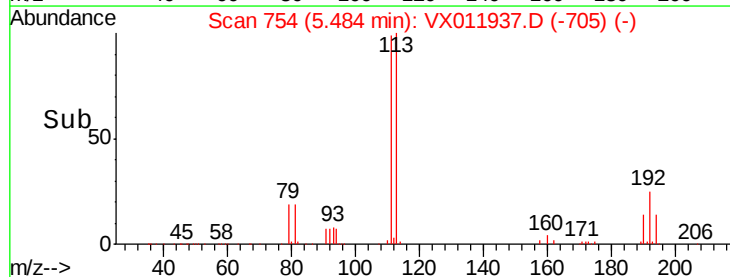
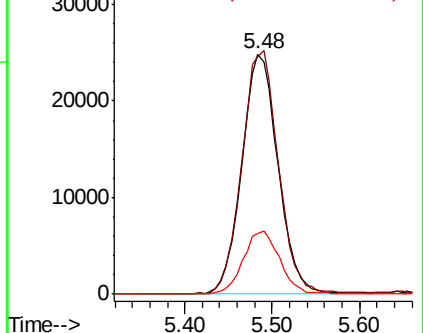
192 26.4 21.5 32.3

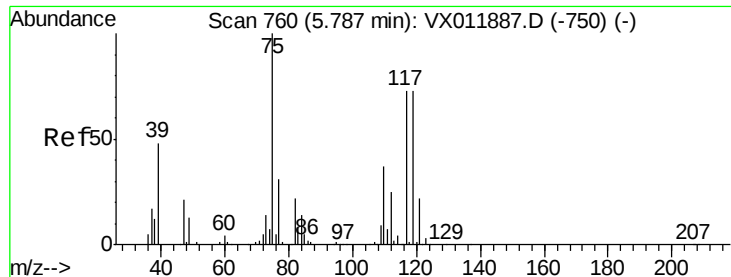


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 6.106 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.14 min

Lab File: VX011937.D

Acq: 31 Aug 2019 06:04

Instrument :

MSVOA\_X

ClientSampleId :

T9-12-13-K2-(0)

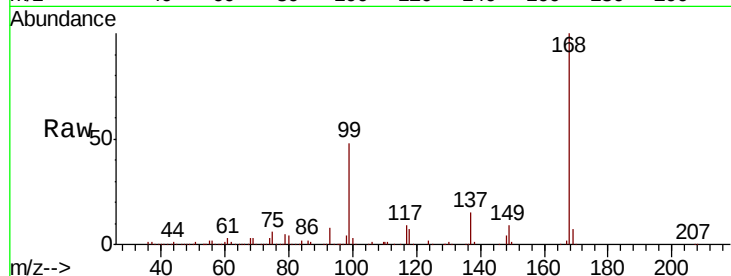
Tgt Ion: 75 Resp: 12081

Ion Ratio Lower Upper

75 100

110 13.7 19.1 57.3#

77 0.8 24.4 36.6#

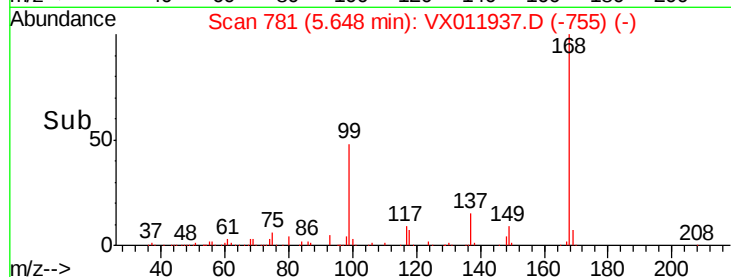


Abundance Ion 74.90 (74.60 to 75.60): VX011887.D (-750) (-)

Ion 109.90 (109.60 to 110.60): VX011887.D (-750) (-)

Ion 76.90 (76.60 to 77.60): VX011887.D (-750) (-)

Time-->

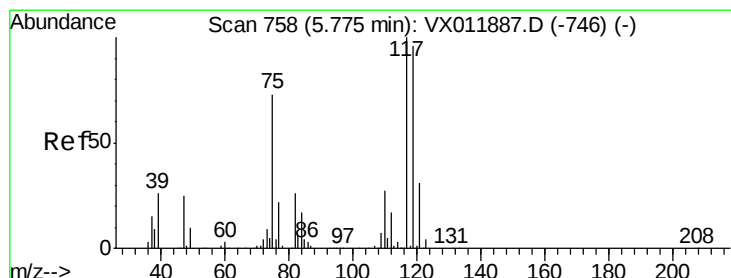


Abundance Ion 74.90 (74.60 to 75.60): VX011887.D (-750) (-)

Ion 109.90 (109.60 to 110.60): VX011887.D (-750) (-)

Ion 76.90 (76.60 to 77.60): VX011887.D (-750) (-)

Time-->



#38

Carbon Tetrachloride

Concen: 7.317 ug/l

RT: 5.65 min Scan# 781

Delta R.T. -0.13 min

Lab File: VX011937.D

Acq: 31 Aug 2019 06:04

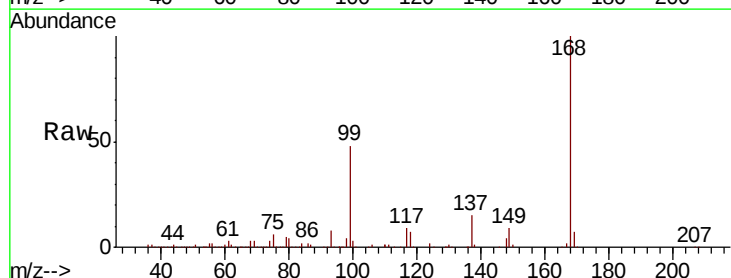
Tgt Ion: 117 Resp: 16791

Ion Ratio Lower Upper

117 100

119 5.4 76.6 114.8#

121 0.0 24.7 37.1#

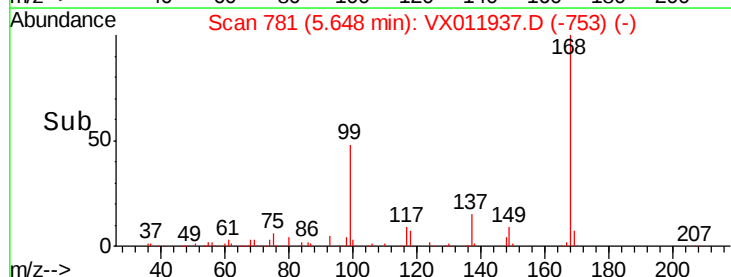


Abundance Ion 116.80 (116.50 to 117.50): VX011887.D (-746) (-)

Ion 118.80 (118.50 to 119.50): VX011887.D (-746) (-)

Ion 120.80 (120.50 to 121.50): VX011887.D (-746) (-)

Time-->

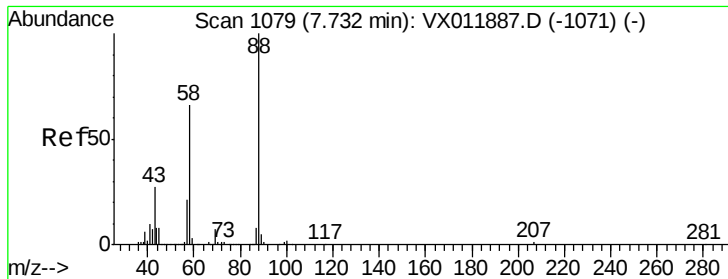


Abundance Ion 116.80 (116.50 to 117.50): VX011887.D (-746) (-)

Ion 118.80 (118.50 to 119.50): VX011887.D (-746) (-)

Ion 120.80 (120.50 to 121.50): VX011887.D (-746) (-)

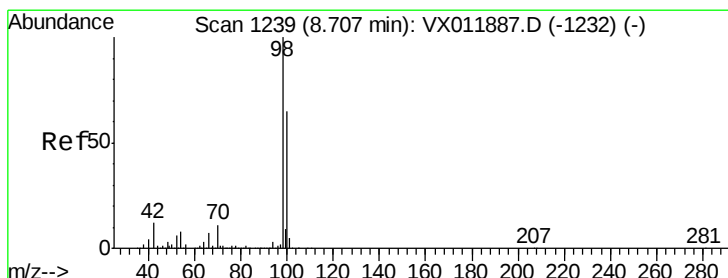
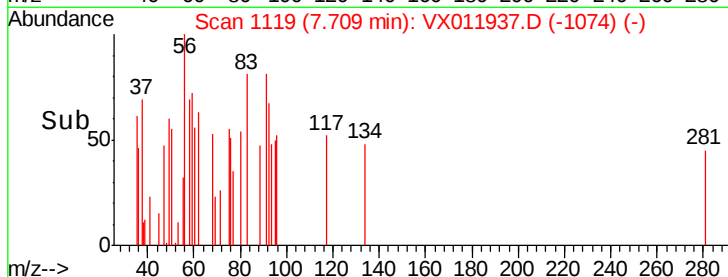
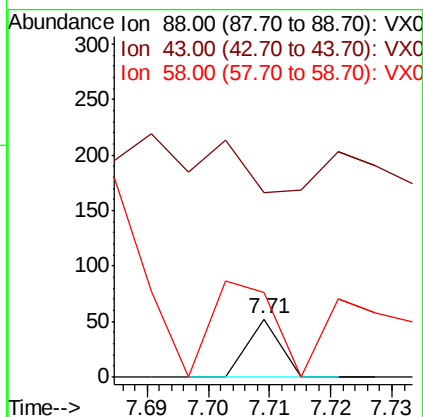
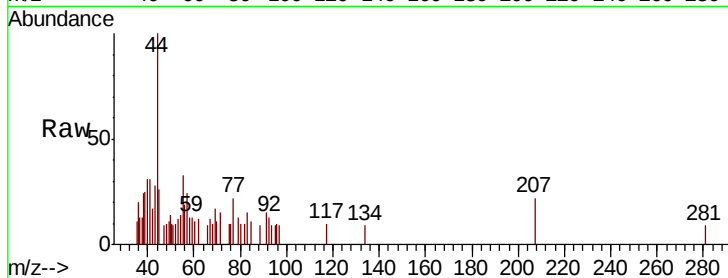
Time-->



#49  
 1,4-Dioxane  
 Concen: 1.196 ug/l  
 RT: 7.71 min Scan# 1119  
 Delta R.T. -0.02 min  
 Lab File: VX011937.D  
 Acq: 31 Aug 2019 06:04

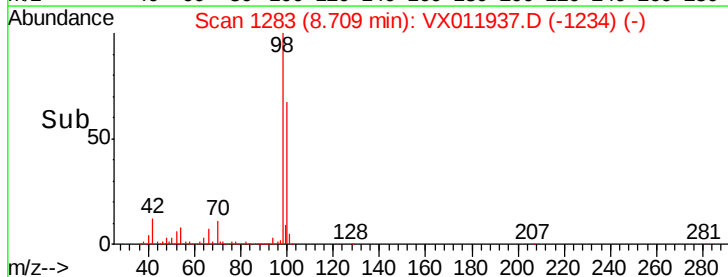
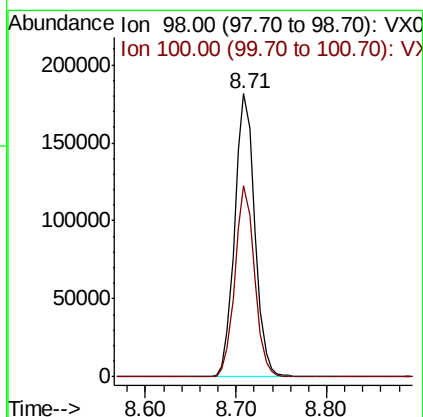
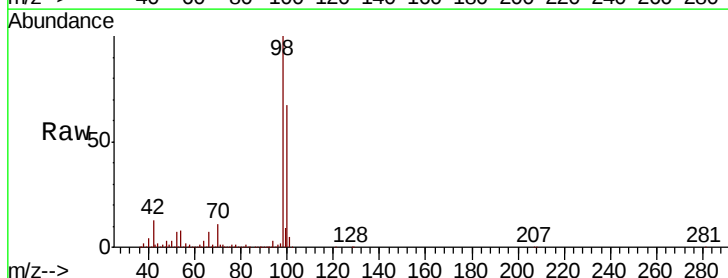
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 T9-12-13-K2-(0)

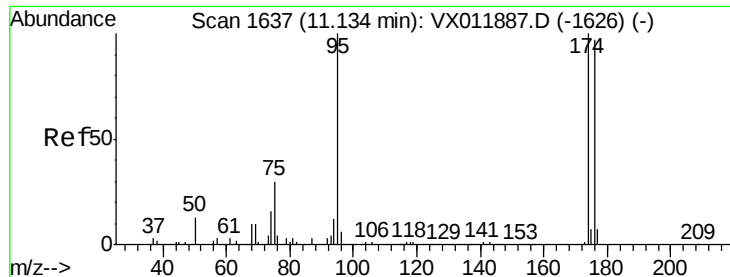
Tgt Ion: 88 Resp: 19  
 Ion Ratio Lower Upper  
 88 100  
 43 0.0 27.3 40.9#  
 58 315.8 53.9 80.9#



#50  
 Toluene-d8  
 Concen: 48.768 ug/l  
 RT: 8.71 min Scan# 1283  
 Delta R.T. 0.00 min  
 Lab File: VX011937.D  
 Acq: 31 Aug 2019 06:04

Tgt Ion: 98 Resp: 279188  
 Ion Ratio Lower Upper  
 98 100  
 100 65.7 53.0 79.6

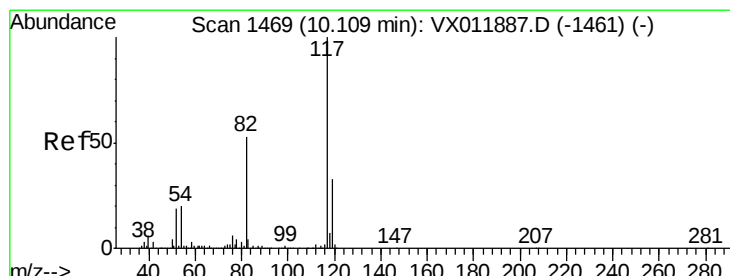
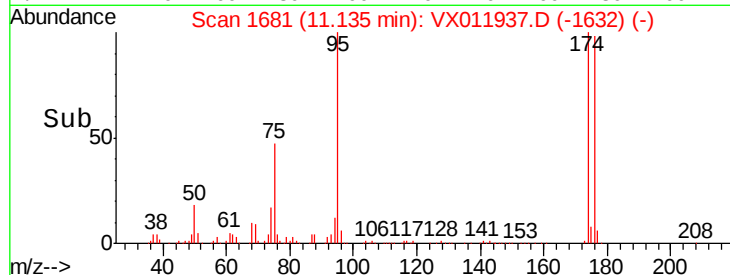
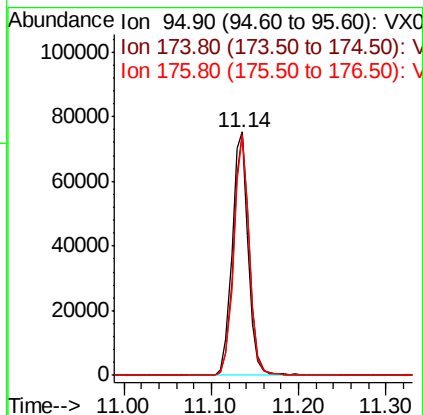
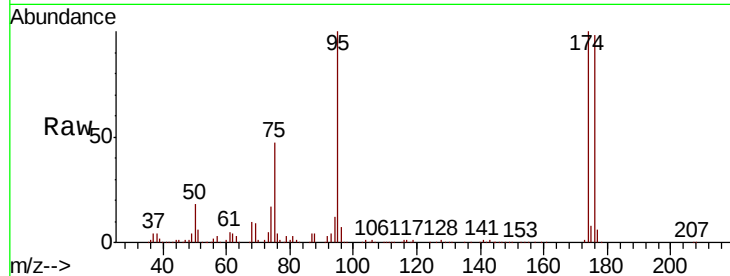




#62  
4-Bromofluorobenzene  
Concen: 38.559 ug/l  
RT: 11.14 min Scan# 1681  
Delta R.T. 0.00 min  
Lab File: VX011937.D  
Acq: 31 Aug 2019 06:04

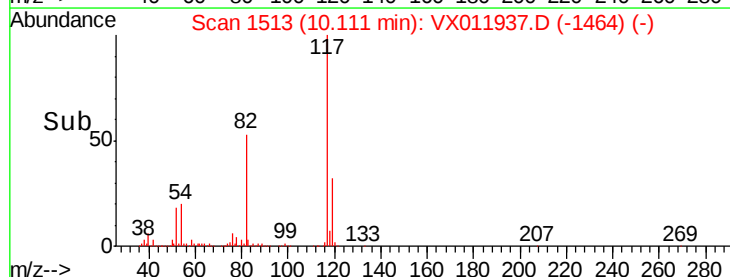
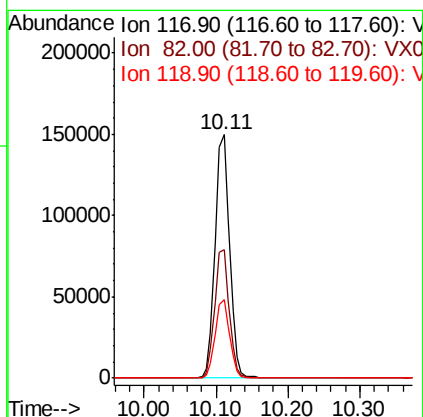
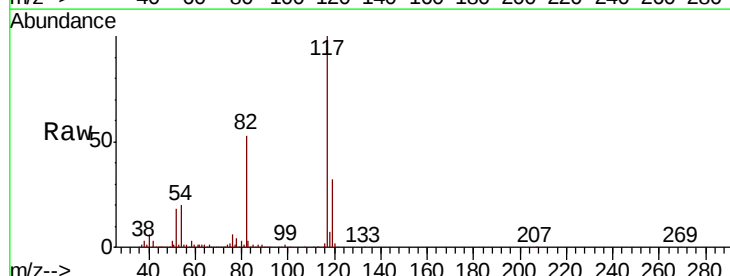
Instrument :  
MSVOA\_X  
ClientSampleId :  
T9-12-13-K2-(0)

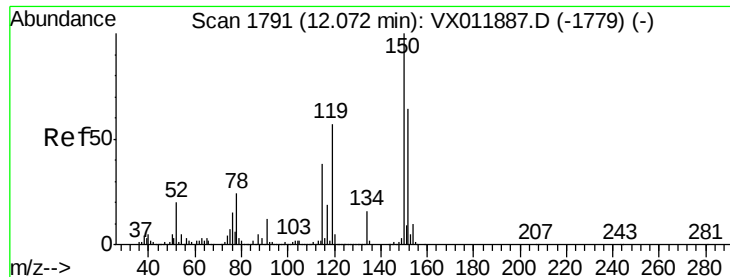
Tgt Ion: 95 Resp: 96831  
Ion Ratio Lower Upper  
95 100  
174 97.4 0.0 196.0  
176 95.0 0.0 191.4



#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 10.11 min Scan# 1513  
Delta R.T. 0.00 min  
Lab File: VX011937.D  
Acq: 31 Aug 2019 06:04

Tgt Ion: 117 Resp: 209456  
Ion Ratio Lower Upper  
117 100  
82 52.6 42.0 63.0  
119 32.1 26.2 39.4



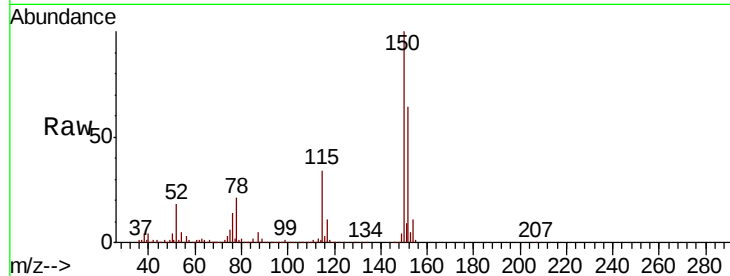


#72

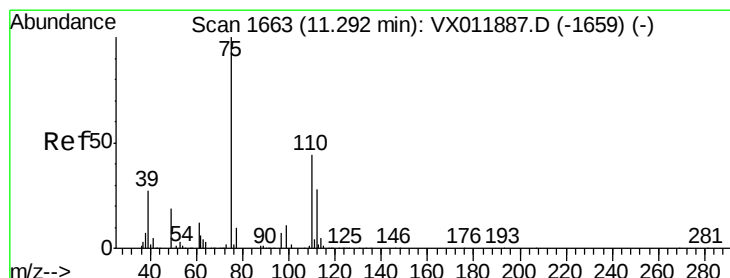
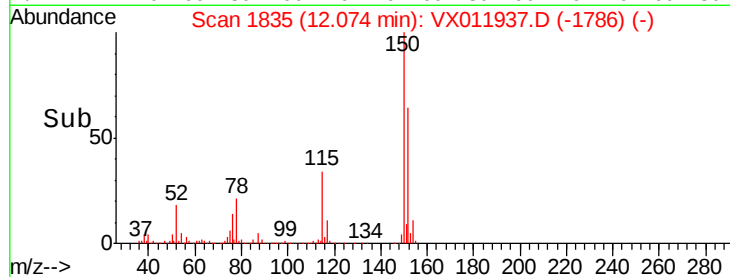
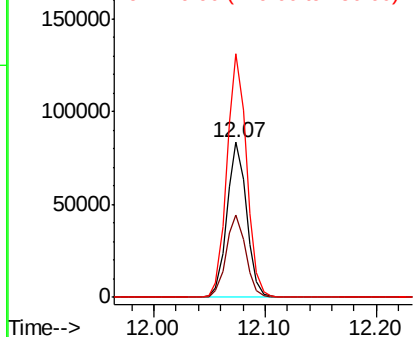
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.07 min Scan# 1835  
Delta R.T. 0.00 min  
Lab File: VX011937.D  
Acq: 31 Aug 2019 06:04

Instrument :  
MSVOA\_X  
ClientSampleId :  
T9-12-13-K2-(0)

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 152     | 100   |       |       |
| 115     | 53.3  | 37.1  | 111.3 |
| 150     | 157.8 | 0.0   | 339.6 |



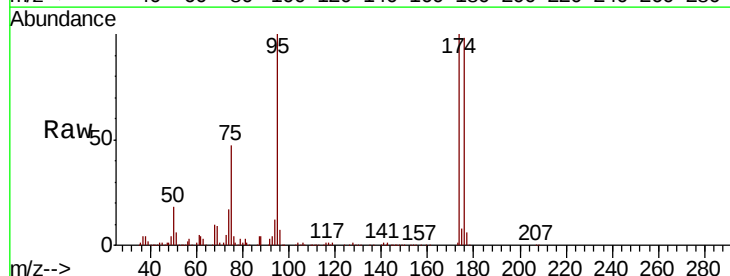
Abundance Ion 151.90 (151.60 to 152.60): V  
Ion 114.90 (114.60 to 115.60): V  
Ion 149.90 (149.60 to 150.60): V



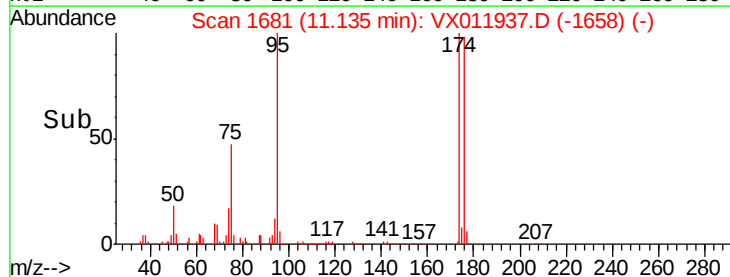
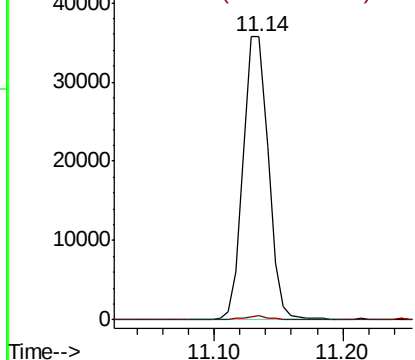
#76

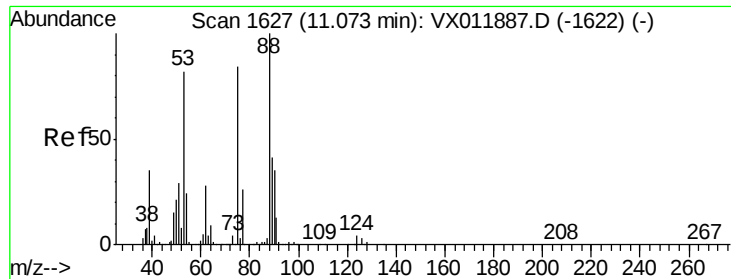
1,2,3-Trichloropropane  
Concen: 48.519 ug/l  
RT: 11.14 min Scan# 1681  
Delta R.T. -0.16 min  
Lab File: VX011937.D  
Acq: 31 Aug 2019 06:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 75      | 100   |       |       |
| 77      | 1.7   | 20.9  | 62.7# |



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: 121.888 ug/l  
 RT: 11.14 min Scan# 1681  
 Delta R.T. 0.06 min  
 Lab File: VX011937.D  
 Acq: 31 Aug 2019 06:04

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 T9-12-13-K2-(0)

Tgt Ion: 75 Resp: 48454  
 Ion Ratio Lower Upper  
 75 100  
 53 0.5 77.1 115.7#  
 89 0.0 38.2 57.2#

