

Data File : VX019600.D  
Acq On : 24 Nov 2020 13:12  
Operator : JC/MD  
Sample : L4841-02 50X  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
16855

Quant Time: Nov 25 04:01:14 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112120W.M  
Quant Title : SW846 8260  
QLast Update : Sat Nov 21 01:57:45 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.62  | 168  | 314776   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.82  | 114  | 522513   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 466480   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 199346   | 50.00 | ug/l  | 0.00     |

#### System Monitoring Compounds

|                           |                |     |            |        |      |      |
|---------------------------|----------------|-----|------------|--------|------|------|
| 33) 1,2-Dichloroethane-d4 | 6.03           | 65  | 195649     | 47.94  | ug/l | 0.00 |
| Spiked Amount 50.000      | Range 61 - 141 |     | Recovery = | 95.88% |      |      |
| 35) Dibromofluoromethane  | 5.46           | 113 | 153608     | 46.83  | ug/l | 0.00 |
| Spiked Amount 50.000      | Range 69 - 133 |     | Recovery = | 93.66% |      |      |
| 50) Toluene-d8            | 8.70           | 98  | 627108     | 49.20  | ug/l | 0.00 |
| Spiked Amount 50.000      | Range 65 - 126 |     | Recovery = | 98.40% |      |      |
| 62) 4-Bromofluorobenzene  | 11.12          | 95  | 214230     | 46.72  | ug/l | 0.00 |
| Spiked Amount 50.000      | Range 58 - 135 |     | Recovery = | 93.44% |      |      |

#### Target Compounds

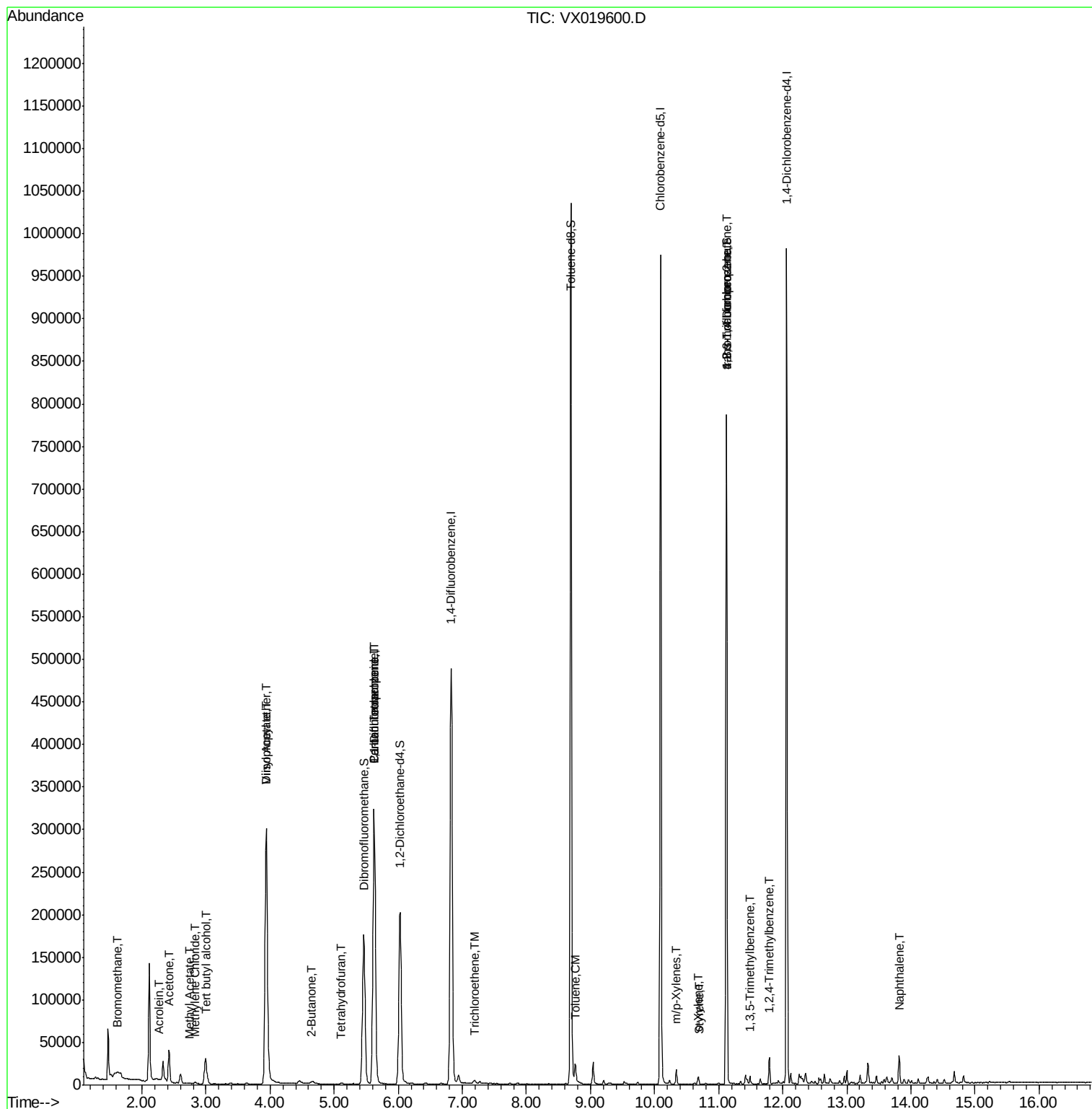
|                                |       |     |        |           | Qvalue |     |
|--------------------------------|-------|-----|--------|-----------|--------|-----|
| 5) Bromomethane                | 1.62  | 94  | 583    | 0.407     | ug/l   | 88  |
| 6) Chloroethane                | 1.68  | 64  | 233    | Below Cal | #      | 70  |
| 11) Tert butyl alcohol         | 3.00  | 59  | 19748  | 25.567    | ug/l # | 77  |
| 13) Acrolein                   | 2.28  | 56  | 208    | 0.401     | ug/l # | 1   |
| 16) Acetone                    | 2.42  | 43  | 39632  | 25.110    | ug/l   | 99  |
| 18) Methyl Acetate             | 2.75  | 43  | 461    | 0.752     | ug/l # | 89  |
| 20) Methylene Chloride         | 2.83  | 84  | 1059   | 0.268     | ug/l   | 91  |
| 22) Diisopropyl ether          | 3.94  | 45  | 21214  | 2.095     | ug/l # | 1   |
| 23) Vinyl Acetate              | 3.94  | 43  | 49649  | 5.845     | ug/l # | 68  |
| 25) 2-Butanone                 | 4.65  | 43  | 2823   | 1.191     | ug/l   | 90  |
| 29) Tetrahydrofuran            | 5.10  | 42  | 508    | 0.336     | ug/l # | 33  |
| 36) 1,1-Dichloropropene        | 5.63  | 75  | 24387  | 4.978     | ug/l # | 50  |
| 38) Carbon Tetrachloride       | 5.62  | 117 | 31138  | 6.567     | ug/l # | 16  |
| 44) Trichloroethene            | 7.18  | 130 | 982    | 0.249     | ug/l   | 81  |
| 52) Toluene                    | 8.76  | 92  | 7222   | 0.784     | ug/l   | 100 |
| 68) m/p-Xylenes                | 10.34 | 106 | 4179   | 0.668     | ug/l   | 98  |
| 69) o-Xylene                   | 10.68 | 106 | 1967   | 0.329     | ug/l   | 95  |
| 70) Styrene                    | 10.70 | 104 | 527    | 1.692     | ug/l # | 69  |
| 76) 1,2,3-Trichloropropane     | 11.12 | 75  | 105863 | 24.334    | ug/l # | 37  |
| 80) 1,3,5-Trimethylbenzene     | 11.49 | 105 | 3857   | 0.333     | ug/l   | 100 |
| 81) trans-1,4-Dichloro-2-buten | 11.12 | 75  | 105863 | 64.393    | ug/l # | 12  |
| 84) 1,2,4-Trimethylbenzene     | 11.79 | 105 | 13411  | 1.146     | ug/l   | 99  |
| 95) Naphthalene                | 13.82 | 128 | 20649  | 3.521     | ug/l   | 100 |

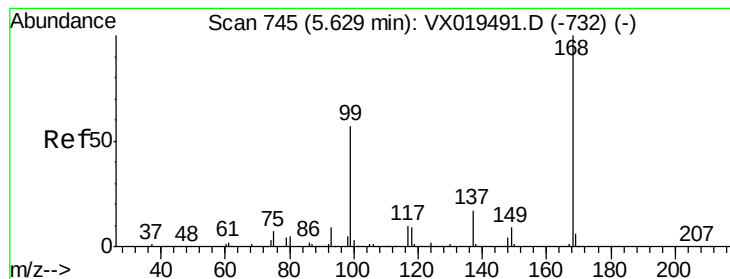
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Sat Nov 21 01:57:45 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.62 min Scan# 744

Delta R.T. -0.01 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampleId :

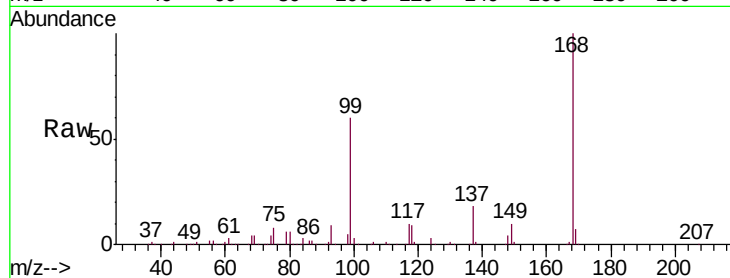
16855

Tgt Ion:168 Resp: 314776

Ion Ratio Lower Upper

168 100

99 60.4 45.8 68.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.62

120000

100000

80000

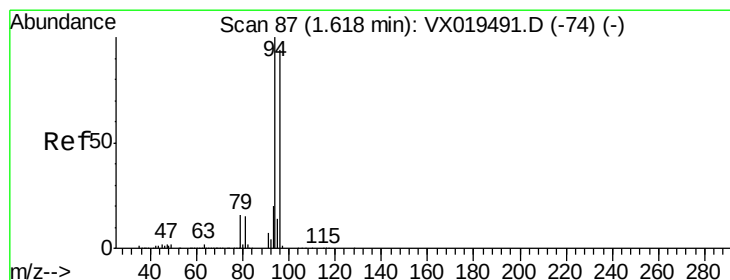
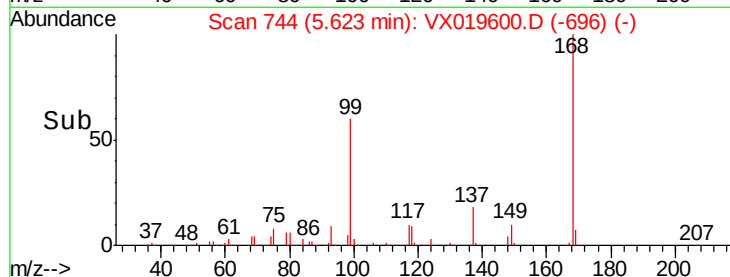
60000

40000

20000

0

Time-->



#5

Bromomethane

Concen: 0.407 ug/l

RT: 1.62 min Scan# 88

Delta R.T. 0.01 min

Lab File: VX019600.D

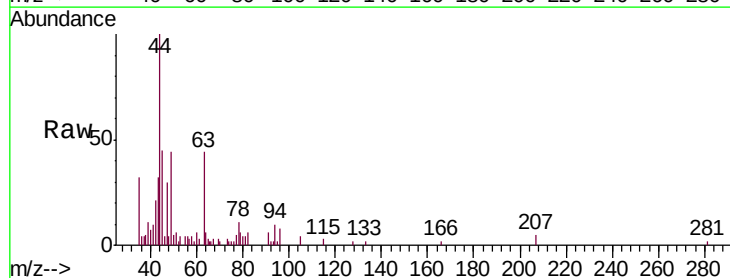
Acq: 24 Nov 2020 13:12

Tgt Ion: 94 Resp: 583

Ion Ratio Lower Upper

94 100

96 83.3 75.6 113.4



Abundance Ion 93.90 (93.60 to 94.60): VX0

Ion 95.90 (95.60 to 96.60): VX0

1.62

300

250

200

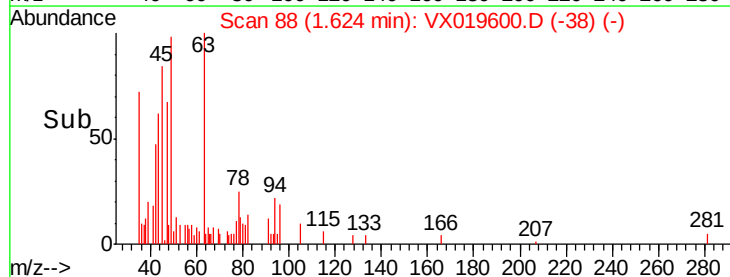
150

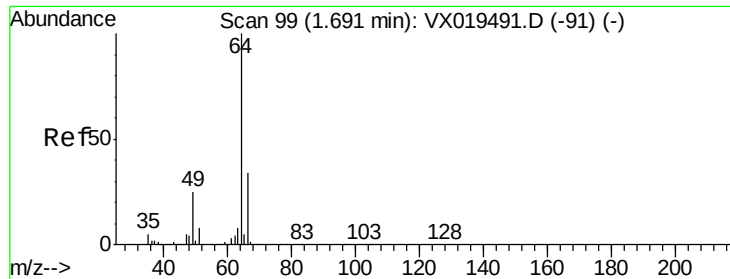
100

50

0

Time-->





#6

Chloroethane

Concen: Below Cal

RT: 1.68 min Scan# 98

Delta R.T. -0.01 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampled :

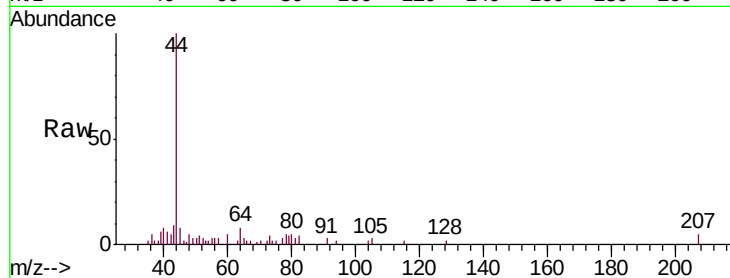
16855

Tgt Ion: 64 Resp: 233

Ion Ratio Lower Upper

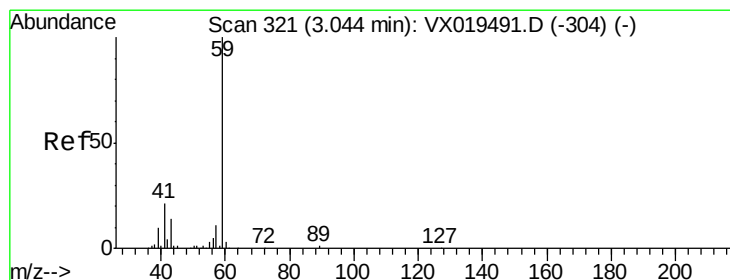
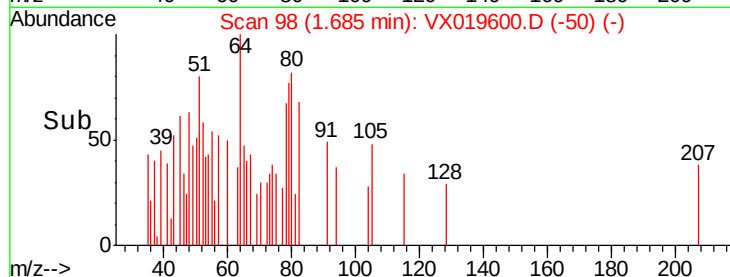
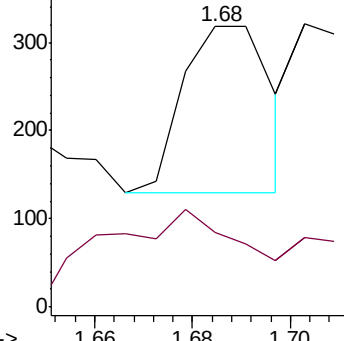
64 100

66 16.5 27.1 40.7#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



#11

Tert butyl alcohol

Concen: 25.567 ug/l

RT: 3.00 min Scan# 313

Delta R.T. -0.05 min

Lab File: VX019600.D

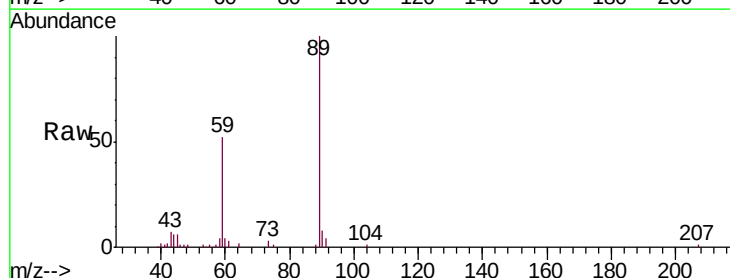
Acq: 24 Nov 2020 13:12

Tgt Ion: 59 Resp: 19748

Ion Ratio Lower Upper

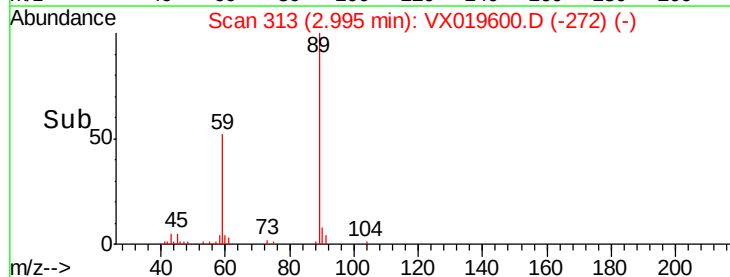
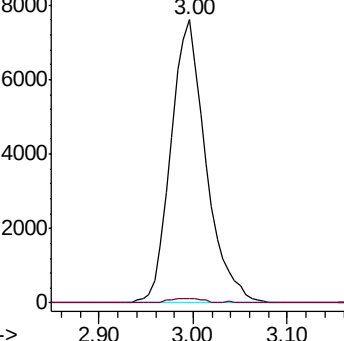
59 100

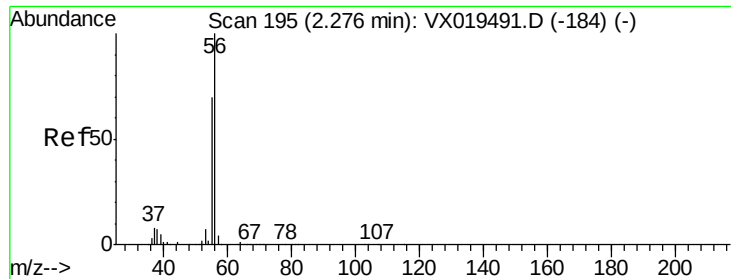
57 1.4 7.9 11.9#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#13

Acrolein

Concen: 0.401 ug/l

RT: 2.28 min Scan# 195

Delta R.T. -0.00 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampled :

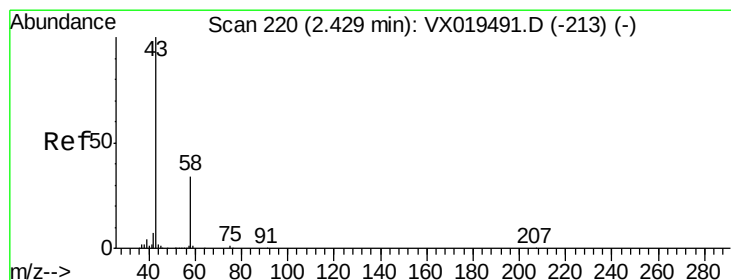
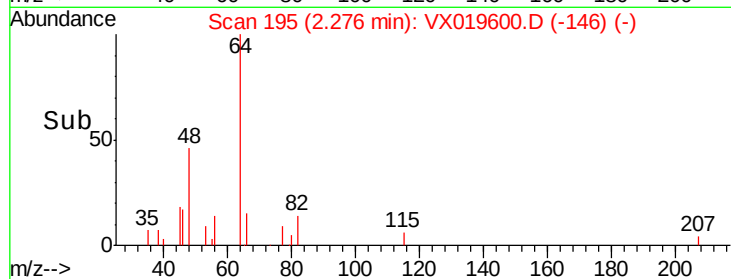
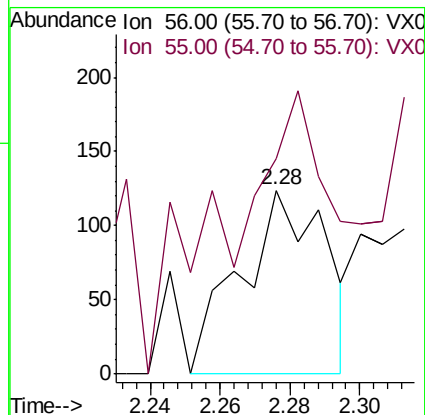
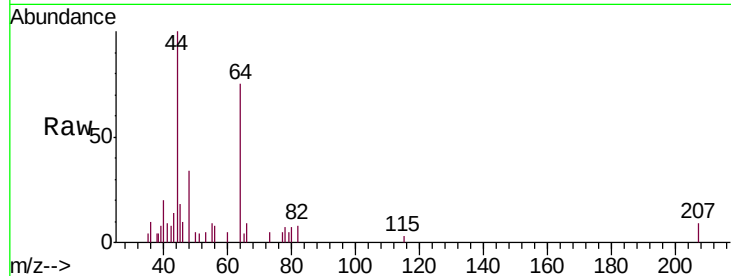
16855

Tgt Ion: 56 Resp: 208

Ion Ratio Lower Upper

56 100

55 206.3 55.5 83.3#



#16

Acetone

Concen: 25.110 ug/l

RT: 2.42 min Scan# 219

Delta R.T. -0.01 min

Lab File: VX019600.D

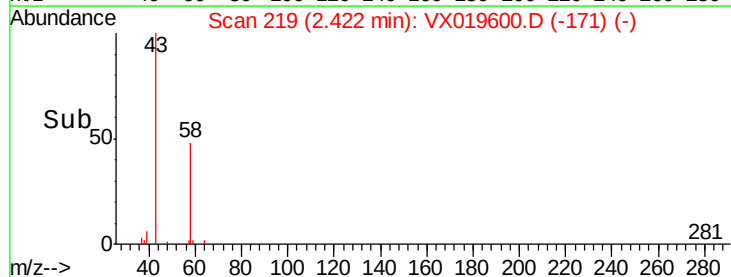
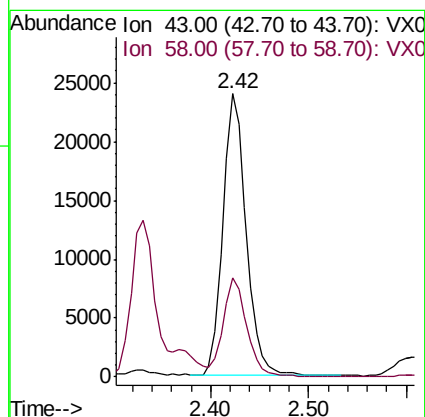
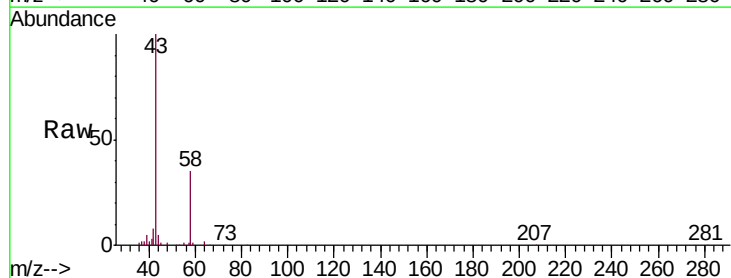
Acq: 24 Nov 2020 13:12

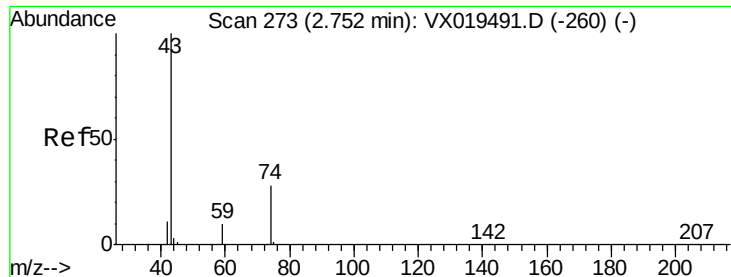
Tgt Ion: 43 Resp: 39632

Ion Ratio Lower Upper

43 100

58 35.1 27.4 41.2





#18

Methyl Acetate

Concen: 0.752 ug/l

RT: 2.75 min Scan# 273

Delta R.T. 0.00 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampleId :

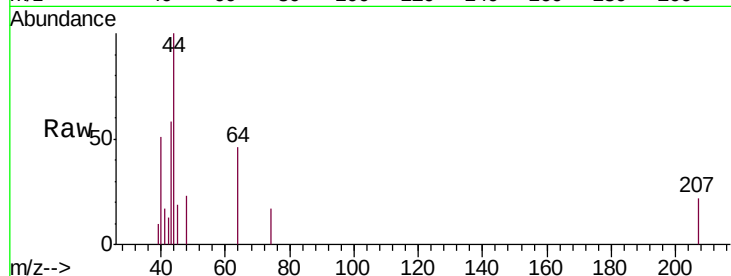
16855

Tgt Ion: 43 Resp: 461

Ion Ratio Lower Upper

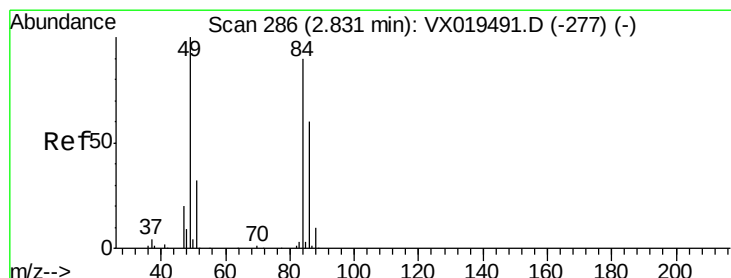
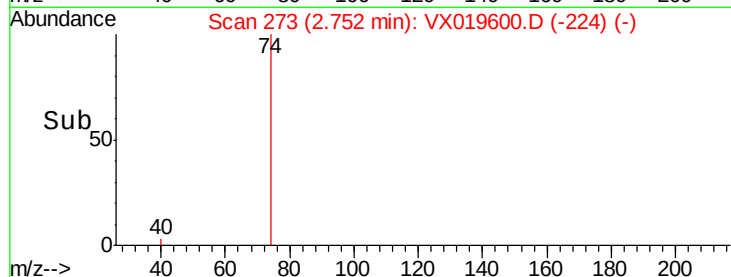
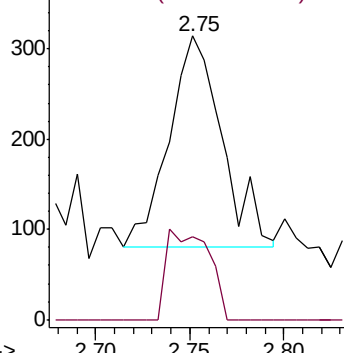
43 100

74 33.6 22.2 33.4#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 74.00 (73.70 to 74.70): VX0



#20

Methylene Chloride

Concen: 0.268 ug/l

RT: 2.83 min Scan# 286

Delta R.T. -0.00 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Tgt Ion: 84 Resp: 1059

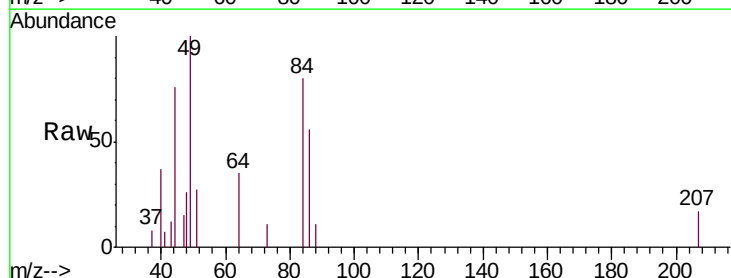
Ion Ratio Lower Upper

84 100

49 125.4 88.5 132.7

51 34.2 28.0 42.0

86 70.2 53.0 79.4

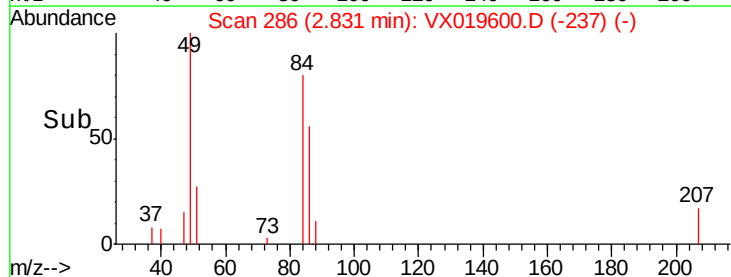
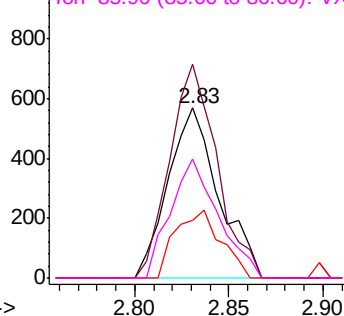


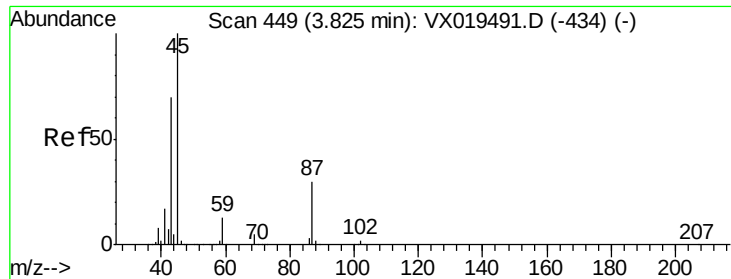
Abundance Ion 83.90 (83.60 to 84.60): VX0

Ion 48.90 (48.60 to 49.60): VX0

Ion 50.90 (50.60 to 51.60): VX0

Ion 85.90 (85.60 to 86.60): VX0





#22

Diisopropyl ether

Concen: 2.095 ug/l

RT: 3.94 min Scan# 468

Delta R.T. 0.12 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampled :

16855

Tgt Ion: 45 Resp: 21214

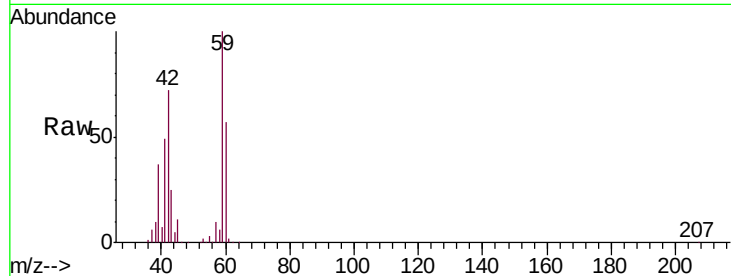
Ion Ratio Lower Upper

45 100

43 231.6 56.1 84.1#

87 0.0 24.2 36.2#

59 936.8 10.2 15.2#

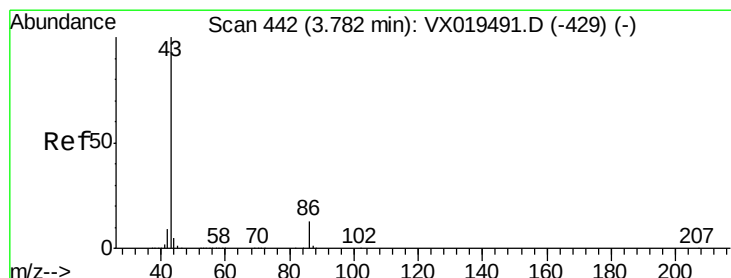
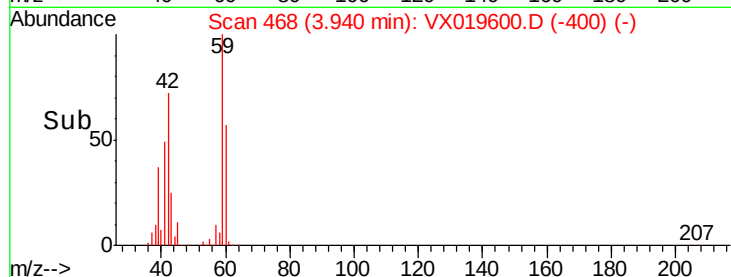
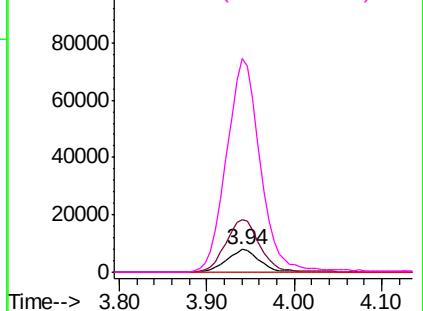


Abundance Ion 45.00 (44.70 to 45.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 87.00 (86.70 to 87.70): VX0

Ion 59.00 (58.70 to 59.70): VX0



#23

Vinyl Acetate

Concen: 5.845 ug/l

RT: 3.94 min Scan# 468

Delta R.T. 0.16 min

Lab File: VX019600.D

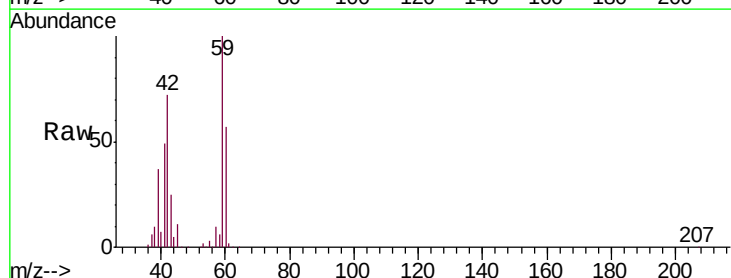
Acq: 24 Nov 2020 13:12

Tgt Ion: 43 Resp: 49649

Ion Ratio Lower Upper

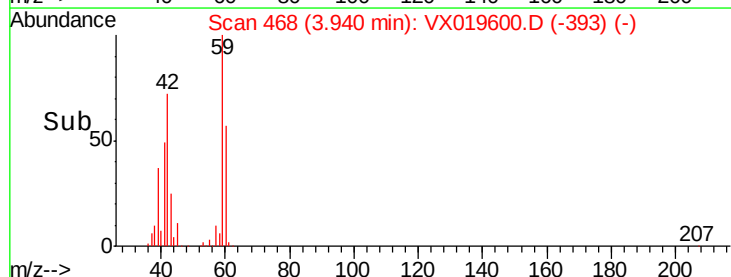
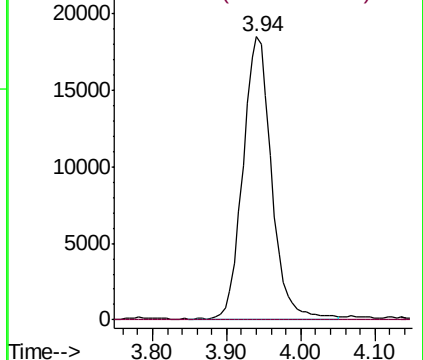
43 100

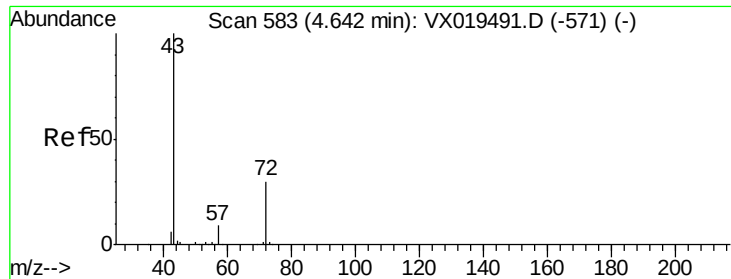
86 0.0 10.2 15.2#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 86.00 (85.70 to 86.70): VX0





#25

2-Butanone

Concen: 1.191 ug/l

RT: 4.65 min Scan# 584

Delta R.T. 0.01 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampleId :

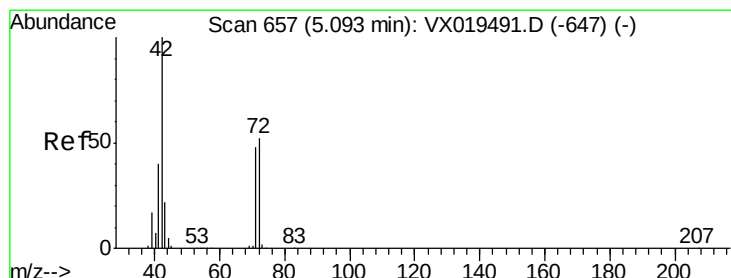
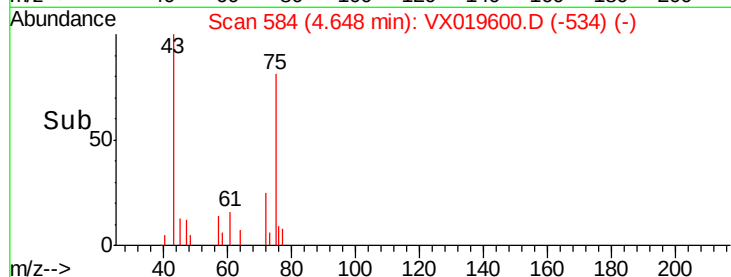
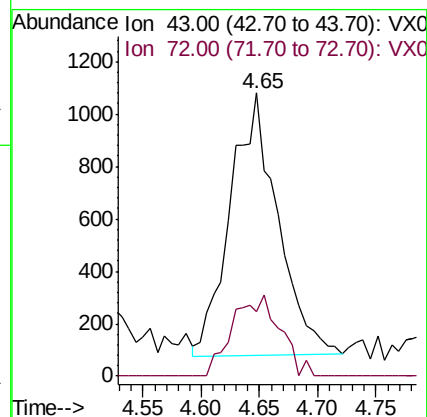
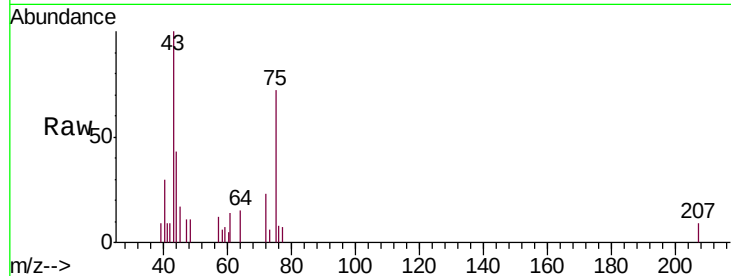
16855

Tgt Ion: 43 Resp: 2823

Ion Ratio Lower Upper

43 100

72 24.7 24.0 36.0



#29

Tetrahydrofuran

Concen: 0.336 ug/l

RT: 5.10 min Scan# 659

Delta R.T. 0.01 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

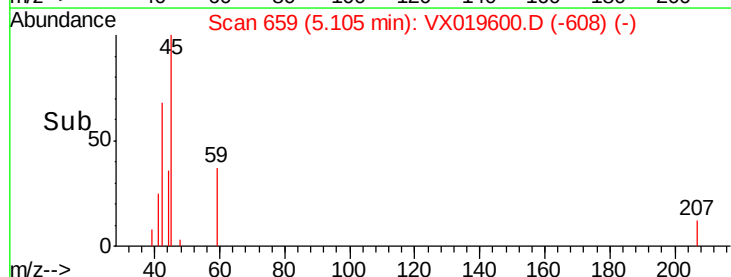
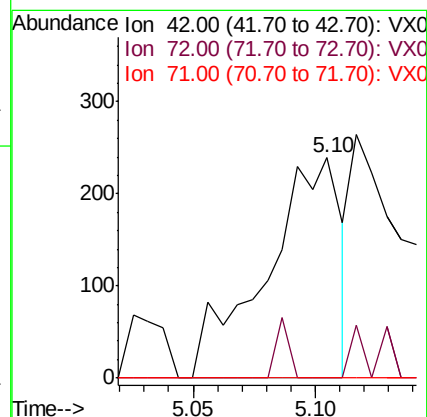
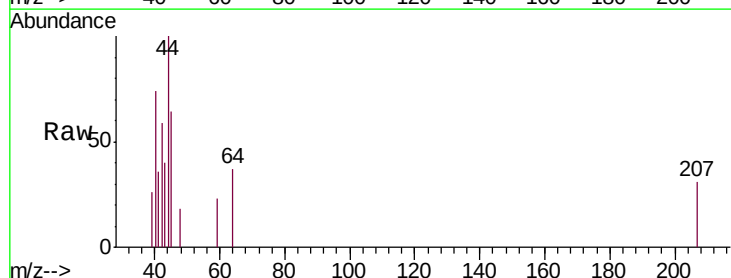
Tgt Ion: 42 Resp: 508

Ion Ratio Lower Upper

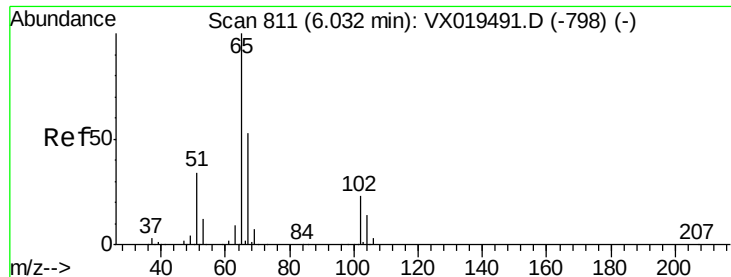
42 100

72 8.1 42.6 63.8#

71 0.0 39.0 58.6#



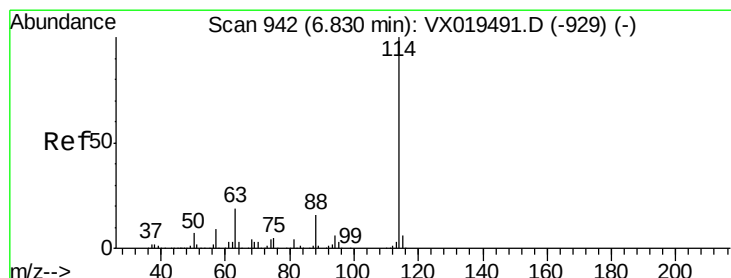
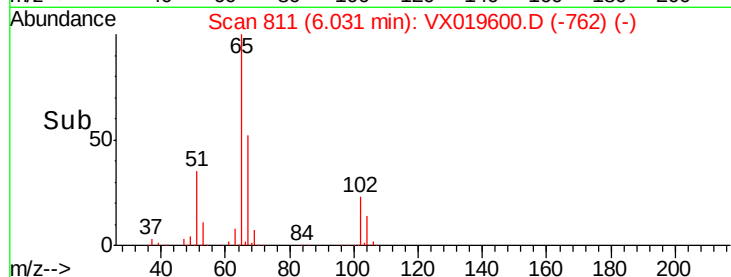
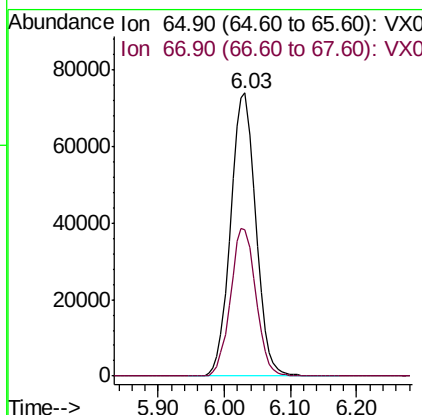
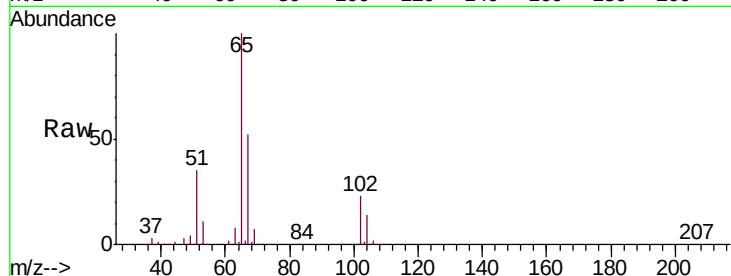




#33  
 1,2-Dichloroethane-d4  
 Concen: 47.937 ug/l  
 RT: 6.03 min Scan# 811  
 Delta R.T. -0.00 min  
 Lab File: VX019600.D  
 Acq: 24 Nov 2020 13:12

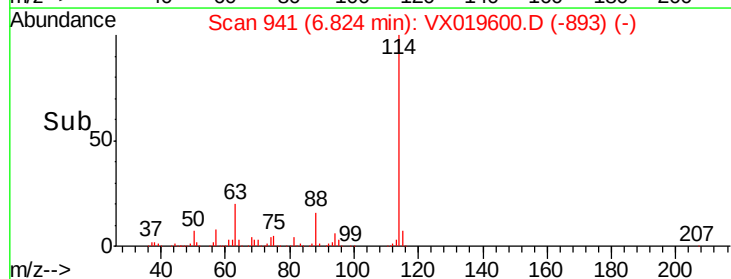
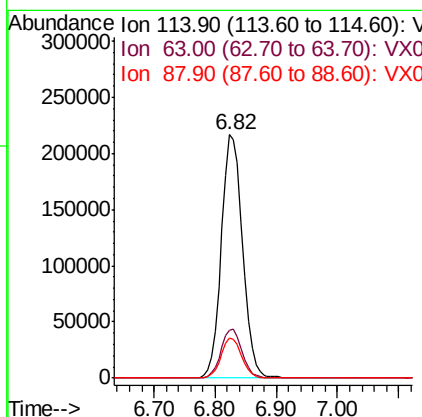
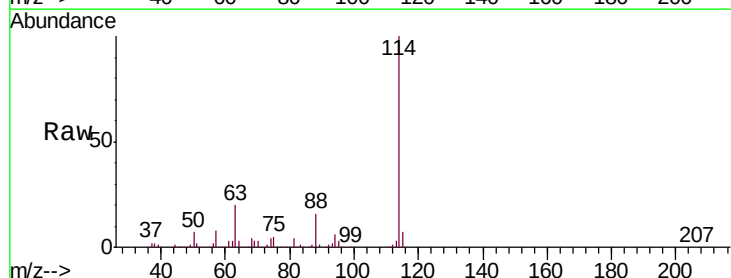
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 16855

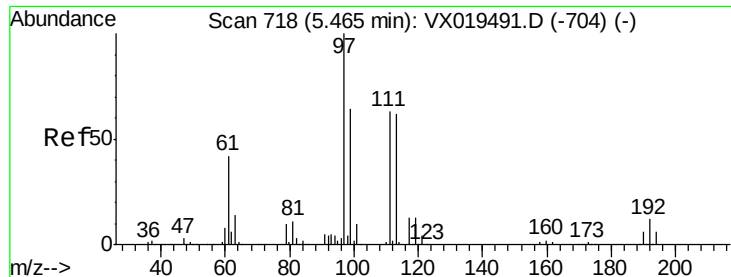
Tgt Ion: 65 Resp: 195649  
 Ion Ratio Lower Upper  
 65 100  
 67 52.6 0.0 105.0



#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 6.82 min Scan# 941  
 Delta R.T. -0.01 min  
 Lab File: VX019600.D  
 Acq: 24 Nov 2020 13:12

Tgt Ion: 114 Resp: 522513  
 Ion Ratio Lower Upper  
 114 100  
 63 19.8 0.0 38.8  
 88 16.2 0.0 31.6

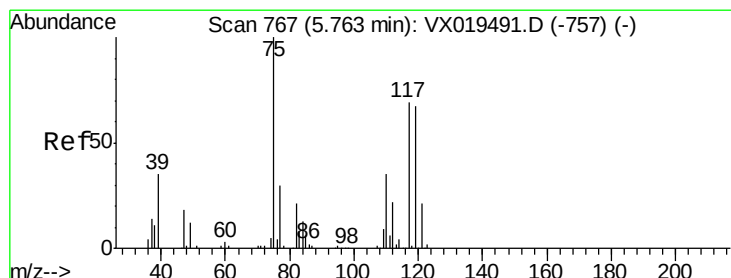
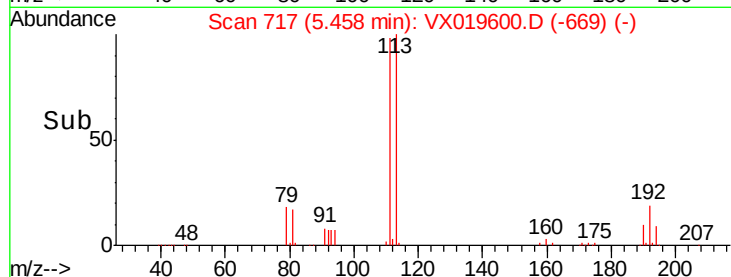
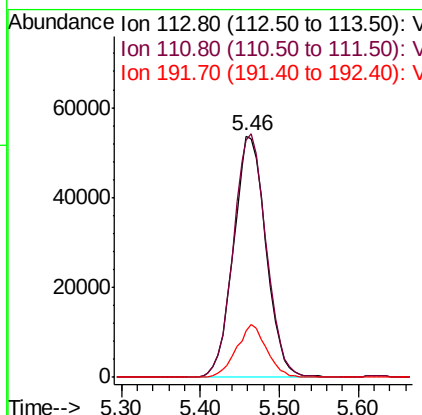
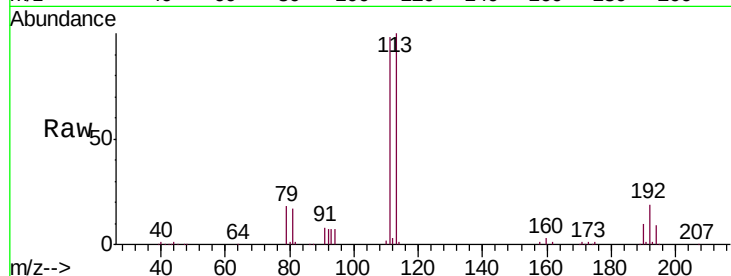




#35  
 Dibromofluoromethane  
 Concen: 46.834 ug/l  
 RT: 5.46 min Scan# 717  
 Delta R.T. -0.01 min  
 Lab File: VX019600.D  
 Acq: 24 Nov 2020 13:12

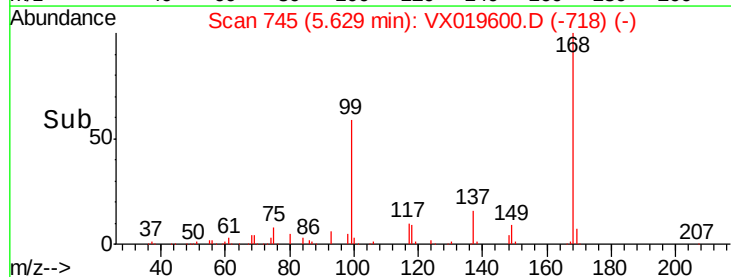
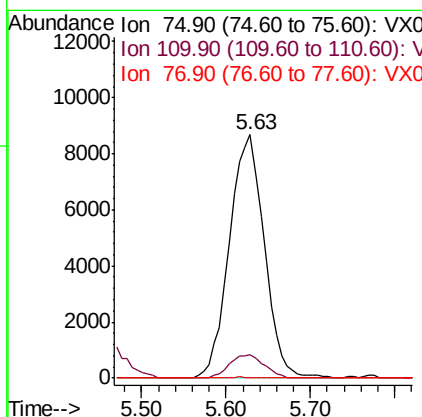
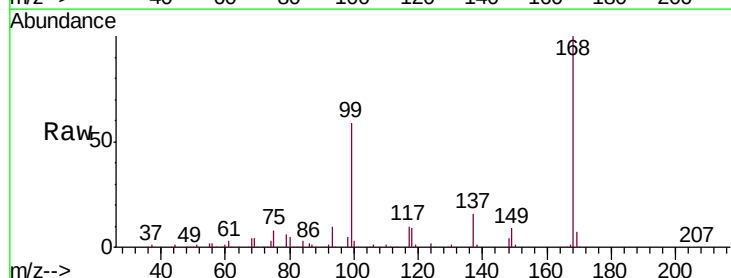
Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 16855

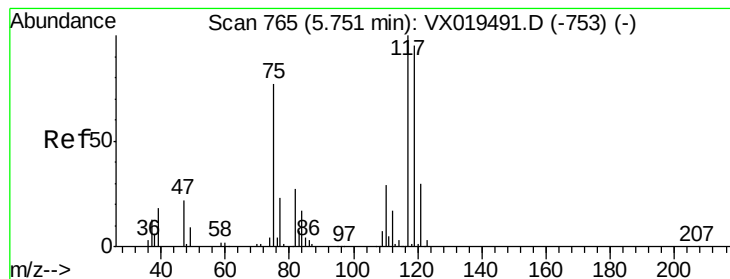
Tgt Ion:113 Resp: 153608  
 Ion Ratio Lower Upper  
 113 100  
 111 101.8 81.5 122.3  
 192 20.4 16.2 24.2



#36  
 1,1-Dichloropropene  
 Concen: 4.978 ug/l  
 RT: 5.63 min Scan# 745  
 Delta R.T. -0.13 min  
 Lab File: VX019600.D  
 Acq: 24 Nov 2020 13:12

Tgt Ion: 75 Resp: 24387  
 Ion Ratio Lower Upper  
 75 100  
 110 9.5 18.1 54.3#  
 77 0.1 24.2 36.4#





#38

Carbon Tetrachloride

Concen: 6.567 ug/l

RT: 5.62 min Scan# 744

Delta R.T. -0.13 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampleId :

16855

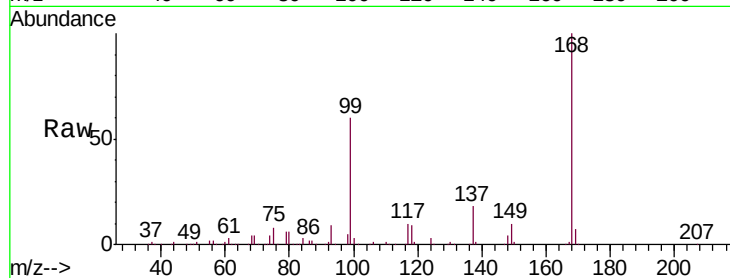
Tgt Ion:117 Resp: 31138

Ion Ratio Lower Upper

117 100

119 5.0 75.9 113.9#

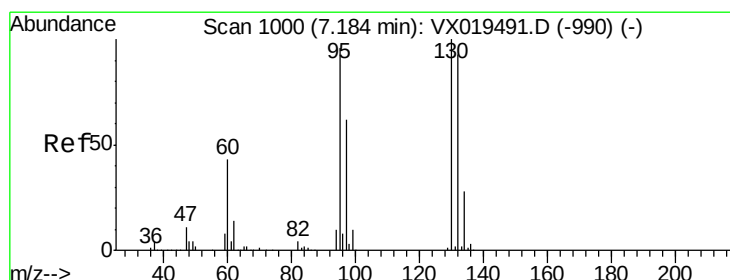
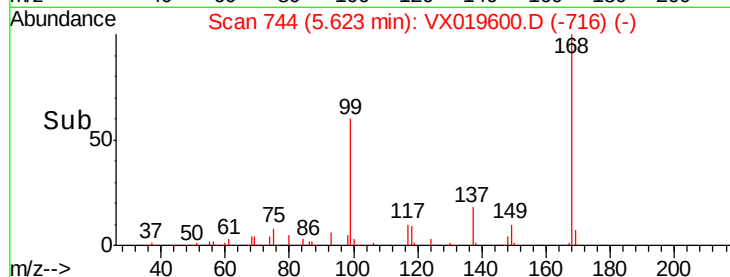
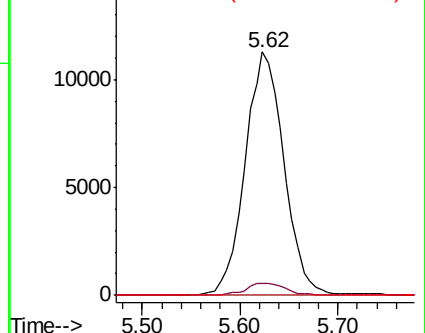
121 0.0 24.0 36.0#



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



#44

Trichloroethene

Concen: 0.249 ug/l

RT: 7.18 min Scan# 1000

Delta R.T. -0.00 min

Lab File: VX019600.D

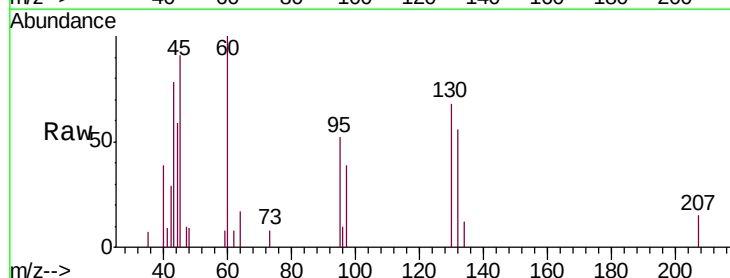
Acq: 24 Nov 2020 13:12

Tgt Ion:130 Resp: 982

Ion Ratio Lower Upper

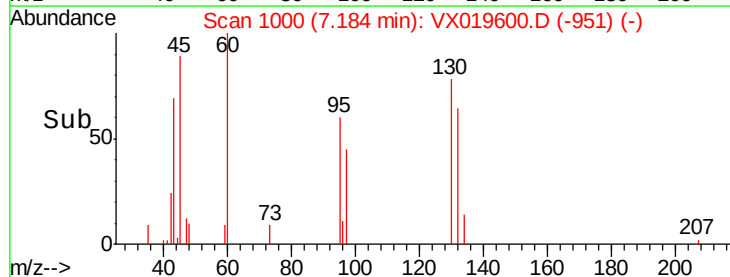
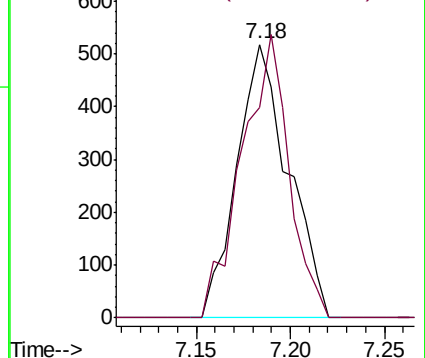
130 100

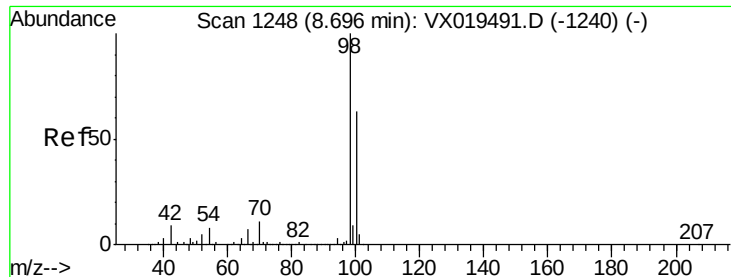
95 76.8 0.0 191.2



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): V

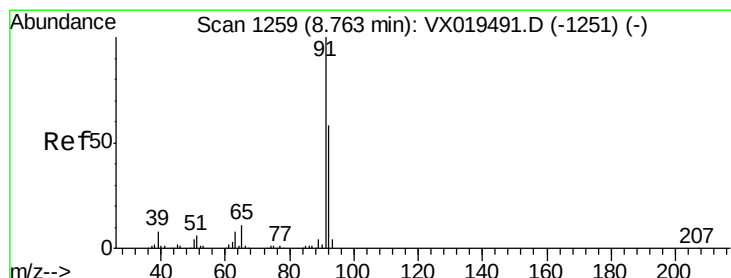
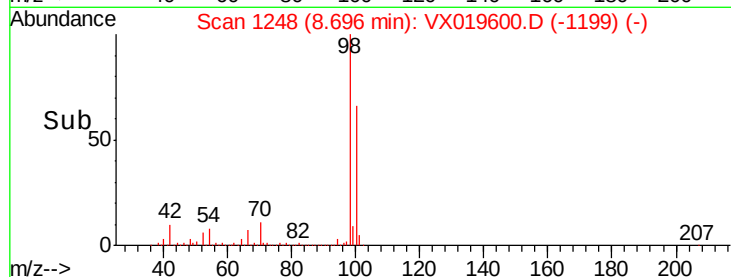
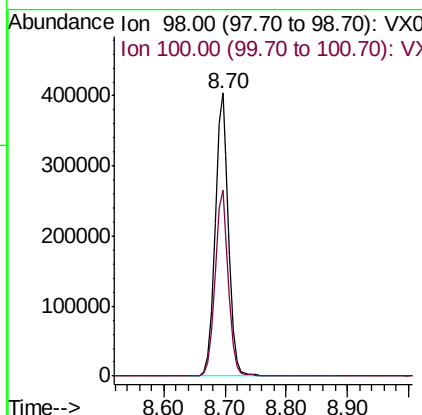
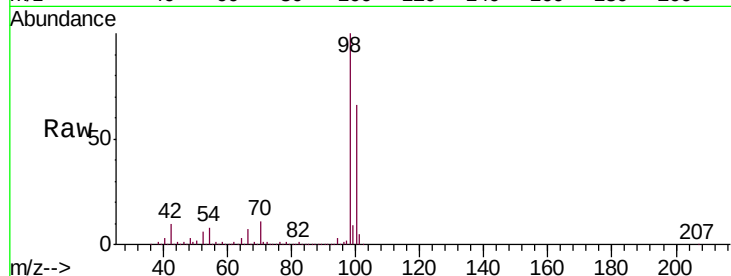




#50  
Toluene-d8  
Concen: 49.204 ug/l  
RT: 8.70 min Scan# 1248  
Delta R.T. -0.00 min  
Lab File: VX019600.D  
Acq: 24 Nov 2020 13:12

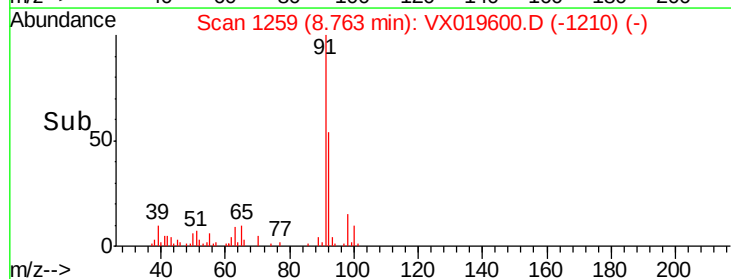
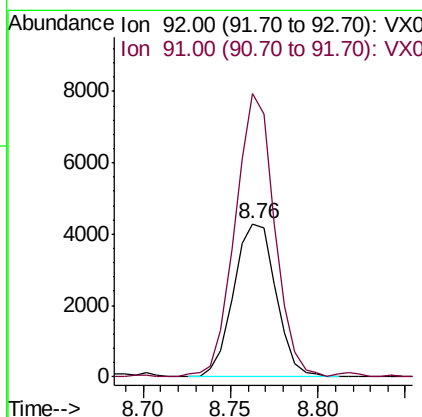
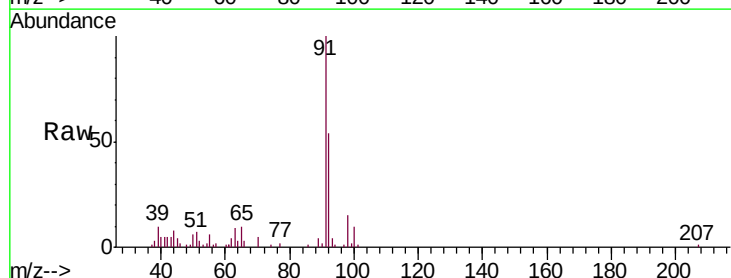
Instrument :  
MSVOA\_X  
ClientSampleId :  
16855

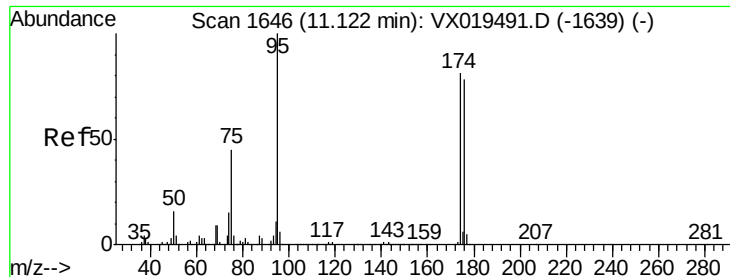
Tgt Ion: 98 Resp: 627108  
Ion Ratio Lower Upper  
98 100  
100 65.8 52.4 78.6



#52  
Toluene  
Concen: 0.784 ug/l  
RT: 8.76 min Scan# 1259  
Delta R.T. -0.00 min  
Lab File: VX019600.D  
Acq: 24 Nov 2020 13:12

Tgt Ion: 92 Resp: 7222  
Ion Ratio Lower Upper  
92 100  
91 172.2 138.1 207.1





#62

4-Bromofluorobenzene

Concen: 46.719 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.00 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampleId :

16855

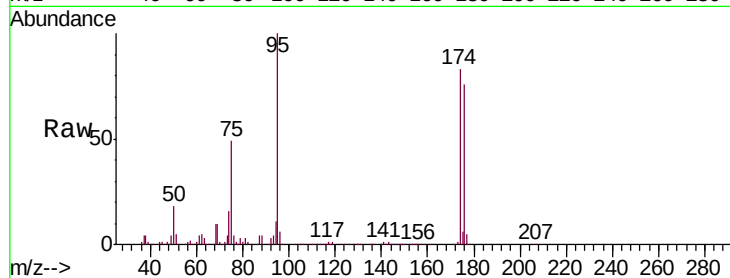
Tgt Ion: 95 Resp: 214230

Ion Ratio Lower Upper

95 100

174 79.9 0.0 156.2

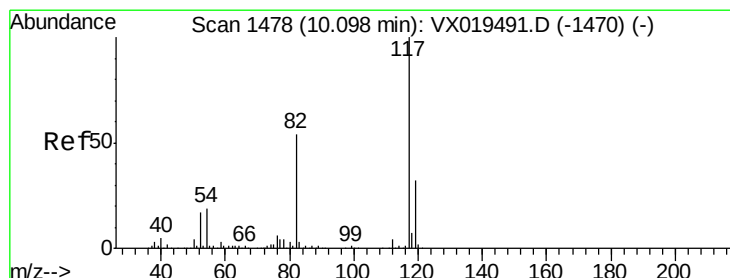
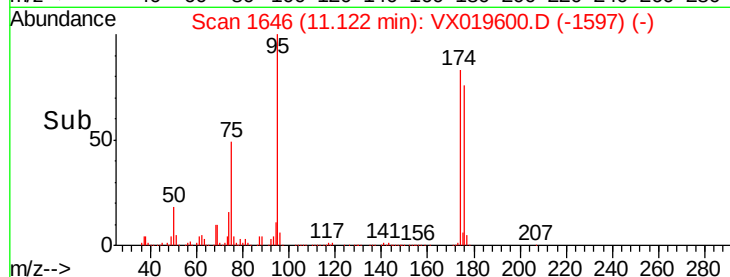
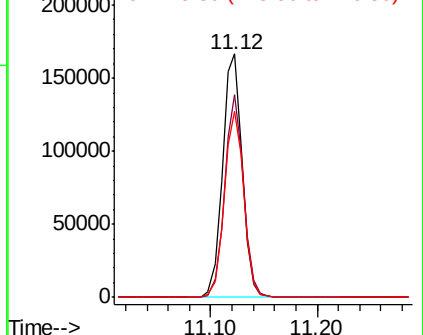
176 75.8 0.0 151.4



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: 10.10 min Scan# 1478

Delta R.T. -0.00 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

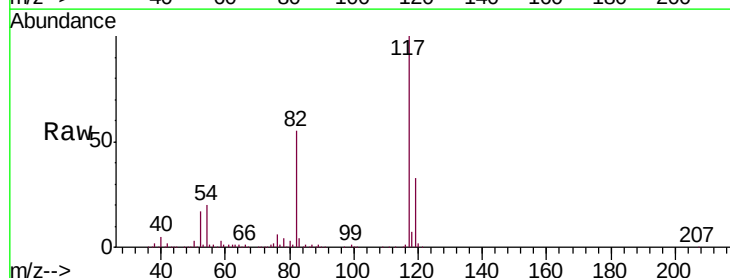
Tgt Ion: 117 Resp: 466480

Ion Ratio Lower Upper

117 100

82 54.5 43.0 64.4

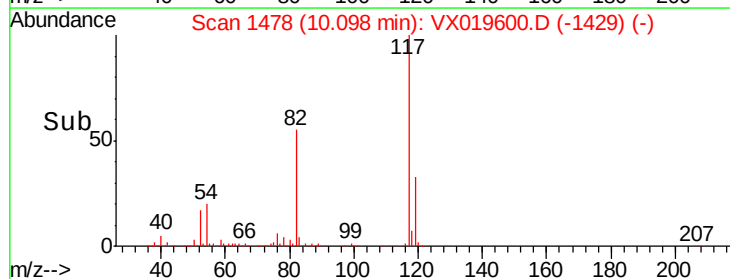
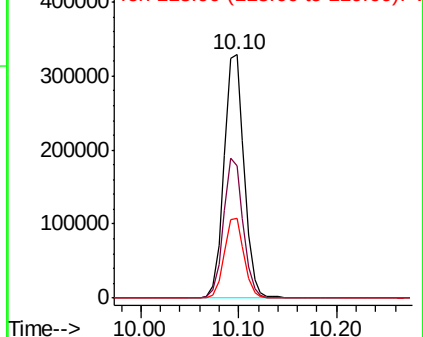
119 32.6 25.6 38.4

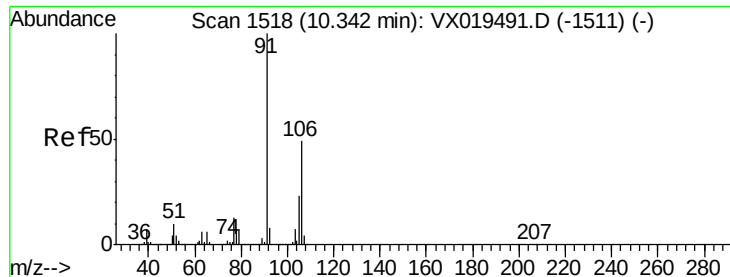


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): VX0

Ion 118.90 (118.60 to 119.60): V





#68

m/p-Xylenes

Concen: 0.668 ug/l

RT: 10.34 min Scan# 1517

Delta R.T. -0.01 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampled :

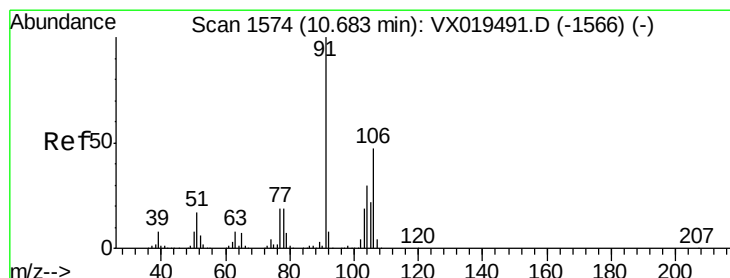
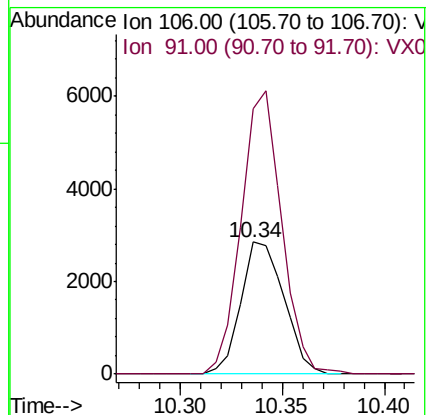
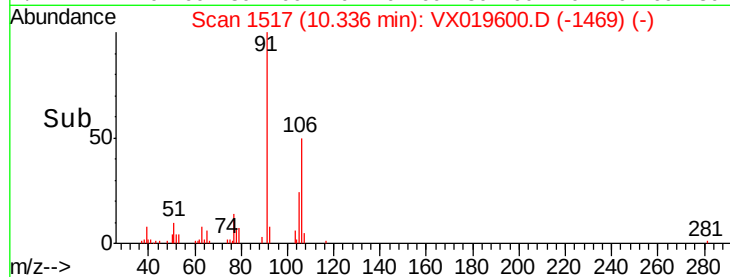
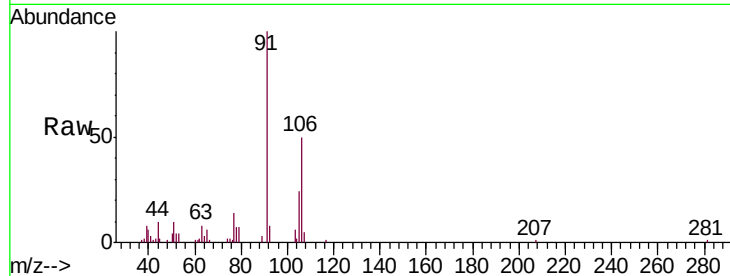
16855

Tgt Ion:106 Resp: 4179

Ion Ratio Lower Upper

106 100

91 201.0 163.3 244.9



#69

o-Xylene

Concen: 0.329 ug/l

RT: 10.68 min Scan# 1574

Delta R.T. -0.00 min

Lab File: VX019600.D

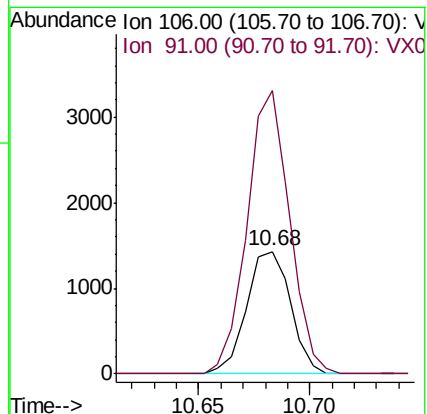
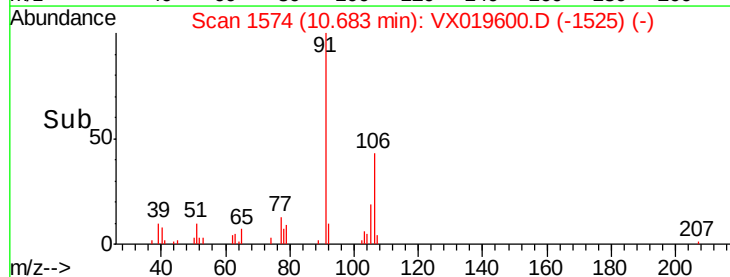
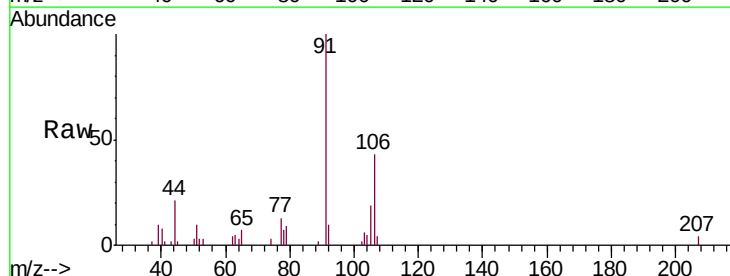
Acq: 24 Nov 2020 13:12

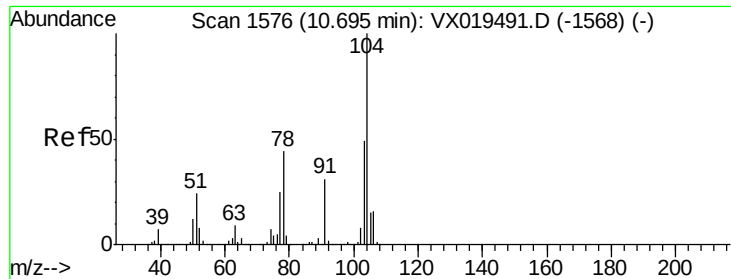
Tgt Ion:106 Resp: 1967

Ion Ratio Lower Upper

106 100

91 223.6 108.0 324.0

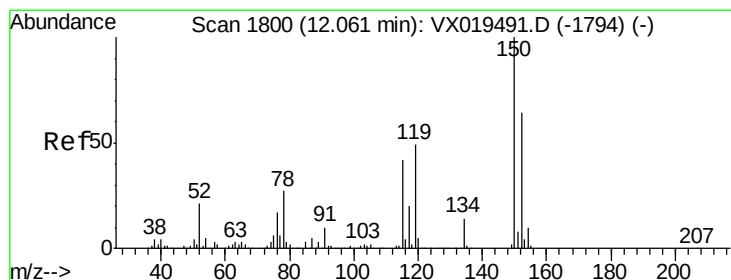
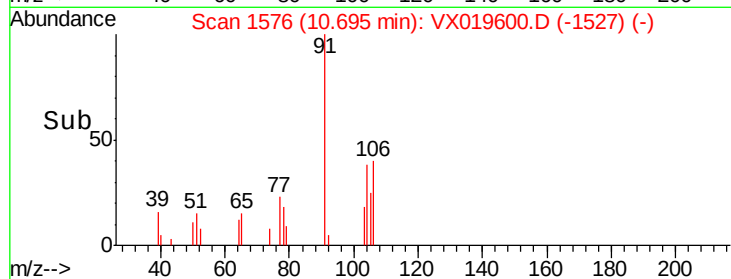
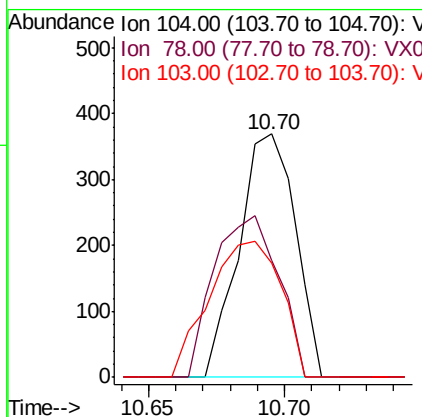
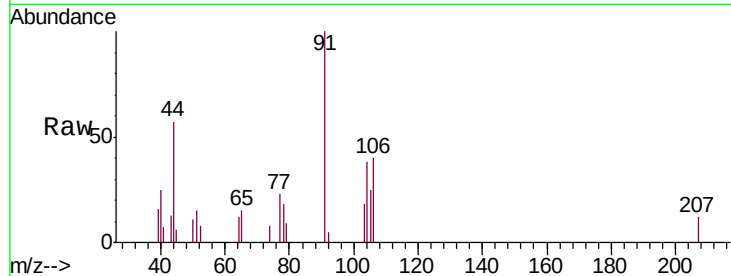




#70  
 Styrene  
 Concen: 1.692 ug/l  
 RT: 10.70 min Scan# 1576  
 Delta R.T. 0.00 min  
 Lab File: VX019600.D  
 Acq: 24 Nov 2020 13:12

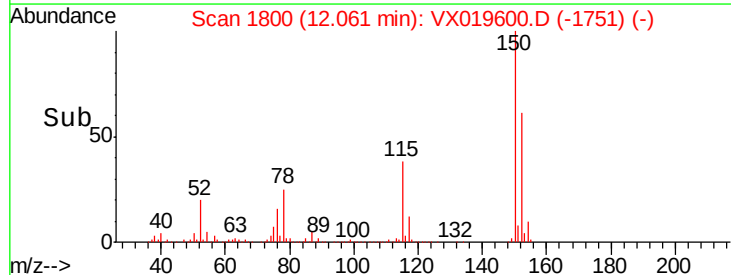
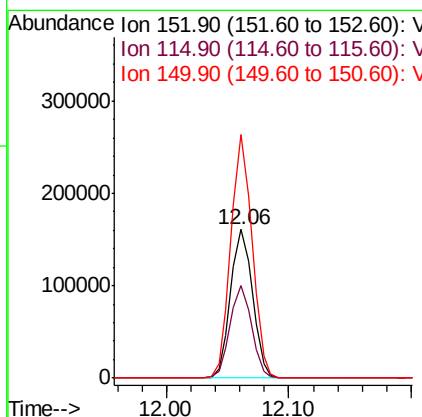
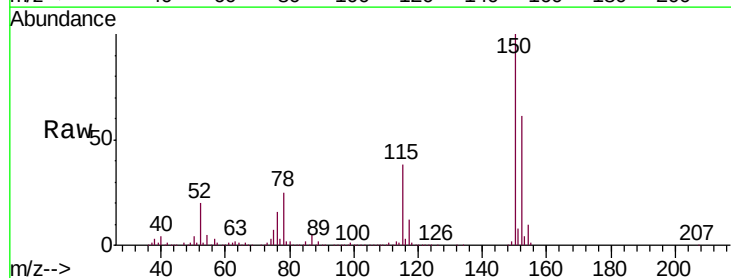
Instrument :  
 MSVOA\_X  
 ClientSampled :  
 16855

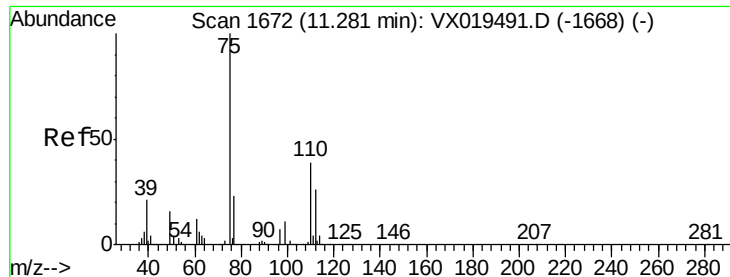
Tgt Ion:104 Resp: 527  
 Ion Ratio Lower Upper  
 104 100  
 78 76.1 39.5 59.3#  
 103 71.9 43.6 65.4#



#72  
 1,4-Dichlorobenzene-d4  
 Concen: 50.000 ug/l  
 RT: 12.06 min Scan# 1800  
 Delta R.T. -0.00 min  
 Lab File: VX019600.D  
 Acq: 24 Nov 2020 13:12

Tgt Ion:152 Resp: 199346  
 Ion Ratio Lower Upper  
 152 100  
 115 61.0 41.8 125.4  
 150 158.3 0.0 348.2





#76

1,2,3-Trichloropropane

Concen: 24.334 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. -0.16 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampled :

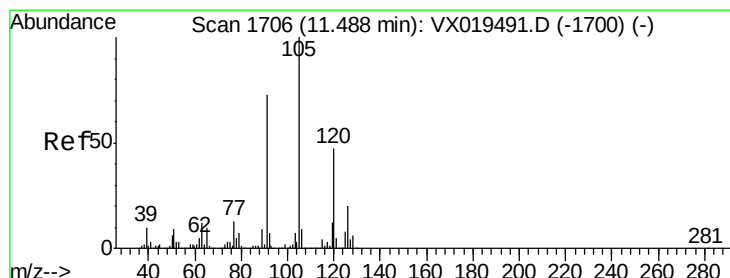
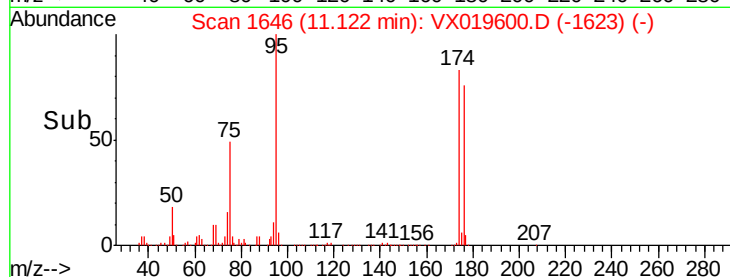
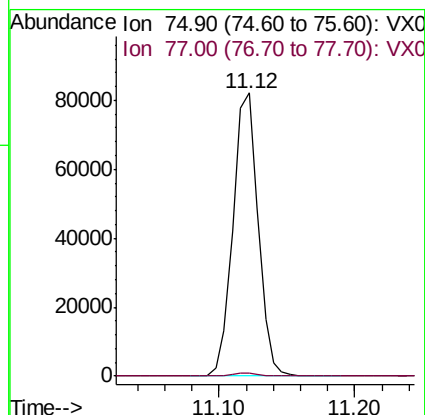
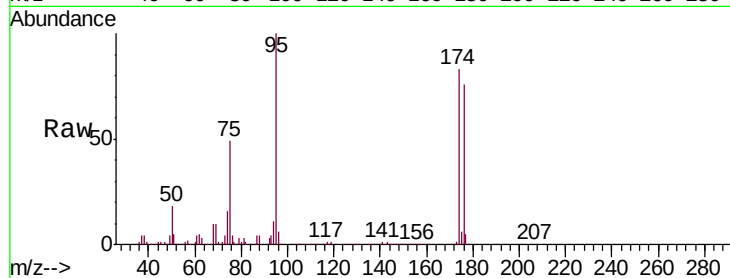
16855

Tgt Ion: 75 Resp: 105863

Ion Ratio Lower Upper

75 100

77 1.2 20.0 60.0#



#80

1,3,5-Trimethylbenzene

Concen: 0.333 ug/l

RT: 11.49 min Scan# 1706

Delta R.T. -0.00 min

Lab File: VX019600.D

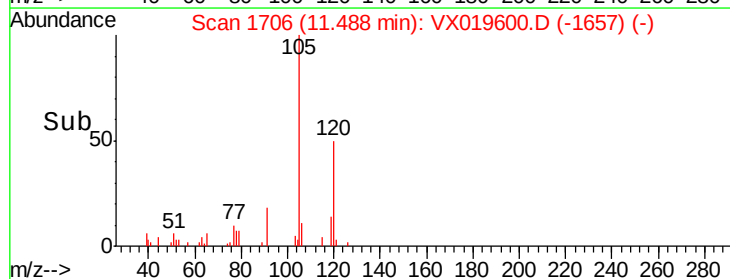
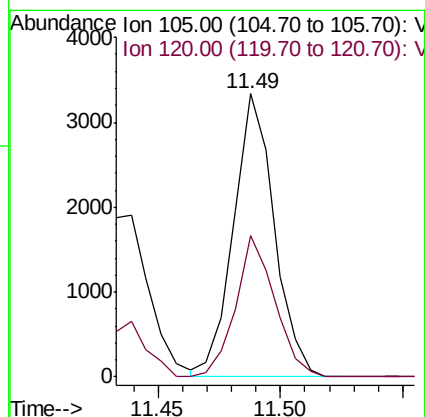
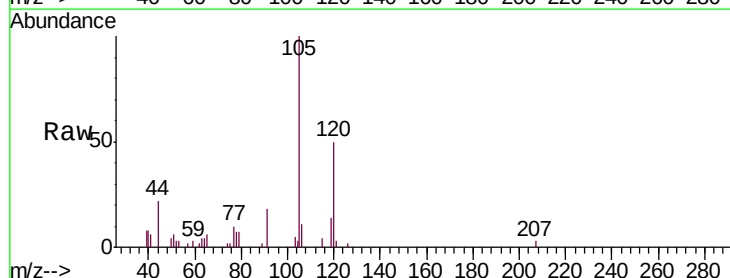
Acq: 24 Nov 2020 13:12

Tgt Ion: 105 Resp: 3857

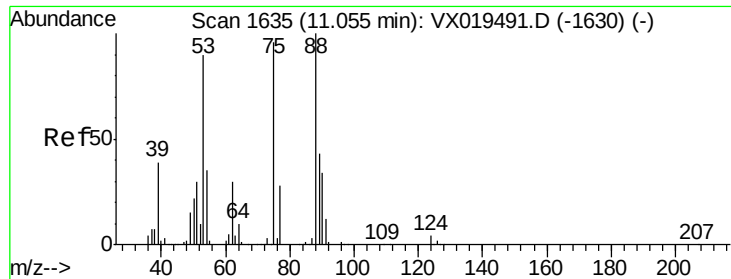
Ion Ratio Lower Upper

105 100

120 48.0 24.1 72.3







#81

trans-1,4-Dichloro-2-butene

Concen: 64.393 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.07 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampleId :

16855

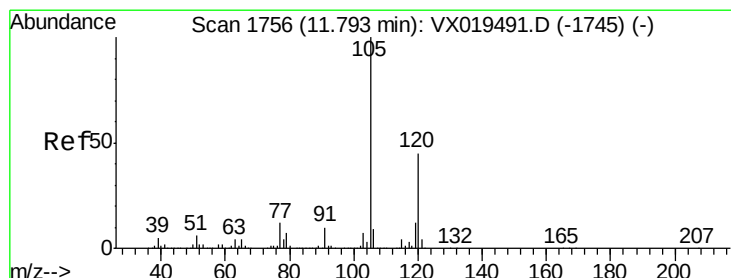
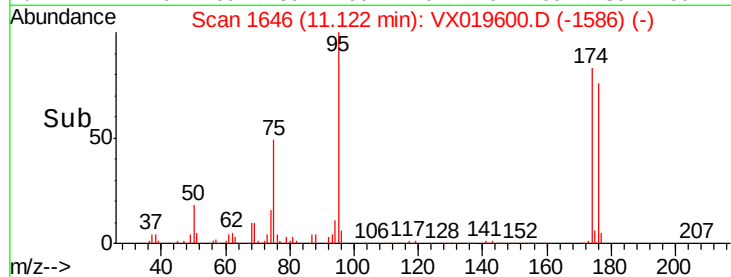
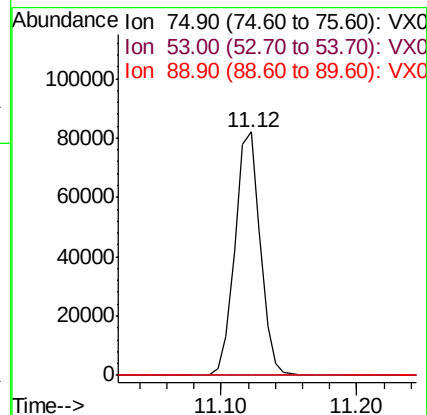
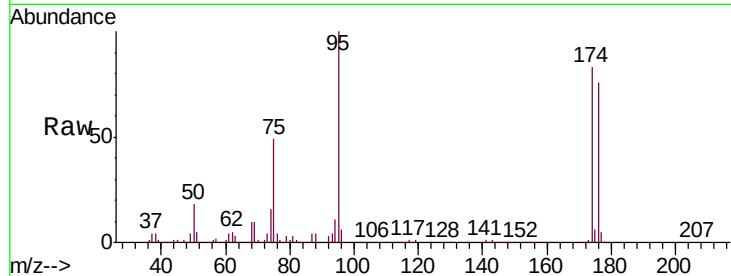
Tgt Ion: 75 Resp: 105863

Ion Ratio Lower Upper

75 100

53 0.0 73.9 110.9#

89 0.0 37.3 55.9#



#84

1,2,4-Trimethylbenzene

Concen: 1.146 ug/l

RT: 11.79 min Scan# 1756

Delta R.T. -0.00 min

Lab File: VX019600.D

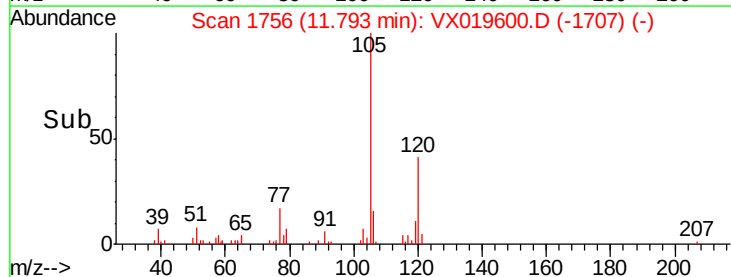
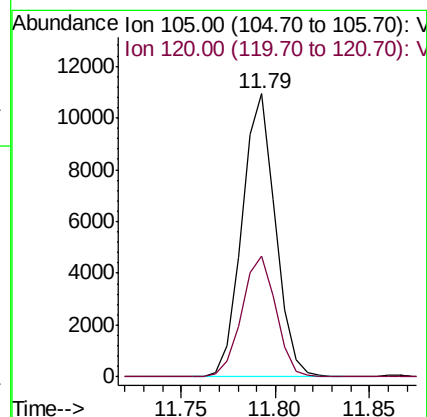
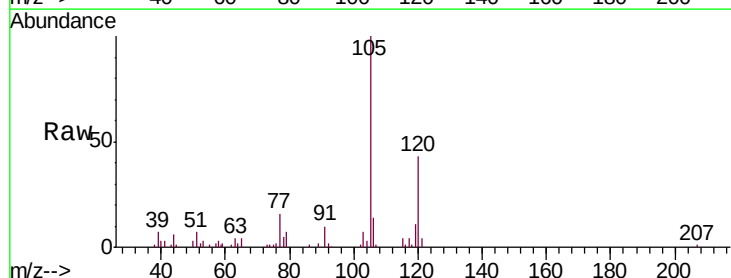
Acq: 24 Nov 2020 13:12

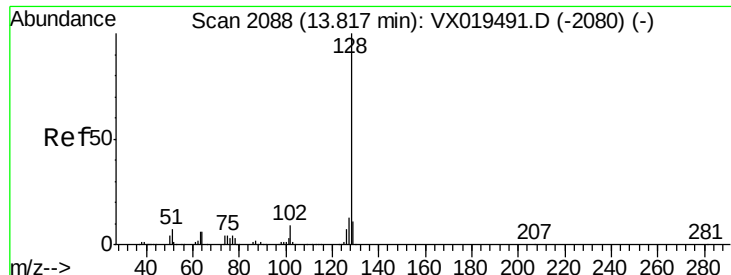
Tgt Ion: 105 Resp: 13411

Ion Ratio Lower Upper

105 100

120 43.5 22.2 66.6





#95

Naphthalene

Concen: 3.521 ug/l

RT: 13.82 min Scan# 2088

Delta R.T. 0.00 min

Lab File: VX019600.D

Acq: 24 Nov 2020 13:12

Instrument :

MSVOA\_X

ClientSampleId :

16855

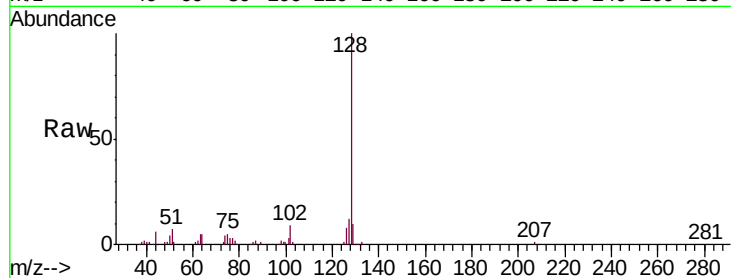
Tgt Ion:128 Resp: 20649

Ion Ratio Lower Upper

128 100

127 12.6 10.3 15.5

129 10.9 8.7 13.1



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

