

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV052820\  
 Data File : VV016284.D  
 Acq On : 28 May 2020 18:11  
 Operator : SY/MD  
 Sample : L2756-07DL 5000X  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :

Quant Time: May 29 01:17:13 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR052620WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri May 29 01:10:53 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 86703    | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 84269    | 5.00 | ug/L  | 0.00     |
| 61) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 38787    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 21621    | 3.88     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 77.60% |
| 7) Chloroethane-d5             | 1.58   | 69    | 21407    | 4.38     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 87.60% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 33430    | 3.20     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 64.00% |
| 20) 2-Butanone-d5              | 3.94   | 46    | 68952    | 49.92    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 99.84% |
| 24) Chloroform-d               | 4.38   | 84    | 47027    | 4.24     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 84.80% |
| 26) 1,2-Dichloroethane-d4      | 5.06   | 65    | 27168    | 4.63     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 92.60% |
| 32) Benzene-d6                 | 5.08   | 84    | 94920    | 4.55     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 91.00% |
| 36) 1,2-Dichloropropane-d6     | 6.10   | 67    | 29420    | 4.56     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 91.20% |
| 41) Toluene-d8                 | 7.34   | 98    | 83684    | 4.21     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 84.20% |
| 45) trans-1,3-Dichloropropene- | 7.65   | 79    | 9867     | 4.10     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 82.00% |
| 48) 2-Hexanone-d5              | 8.12   | 63    | 49291    | 44.65    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 89.30% |
| 59) 1,1,2,2-Tetrachloroethane- | 10.24  | 84    | 21363    | 4.48     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 89.60% |
| 65) 1,2-Dichlorobenzene-d4     | 11.65  | 152   | 28985    | 4.47     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 89.40% |

## Target Compounds

|                               |      |    |        |              | Ovalue |
|-------------------------------|------|----|--------|--------------|--------|
| 8) Chloroethane               | 1.60 | 64 | 460    | 0.108 ug/L # | 42     |
| 12) 1,1-Dichloroethene        | 2.13 | 96 | 583    | 0.114 ug/L # | 1      |
| 16) Methylene chloride        | 2.53 | 84 | 916    | 0.156 ug/L   | 80     |
| 19) 1,1-Dichloroethane        | 3.22 | 63 | 1686   | 0.159 ug/L   | 96     |
| 22) cis-1,2-Dichloroethene    | 3.94 | 96 | 45721  | 6.908 ug/L   | 95     |
| 25) Chloroform                | 4.41 | 83 | 3144   | 0.279 ug/L   | 94     |
| 27) 1,2-Dichloroethane        | 5.14 | 62 | 1292   | 0.176 ug/L # | 79     |
| 29) 1,1,1-Trichloroethane     | 4.63 | 97 | 6544   | 0.654 ug/L   | 96     |
| 33) Benzene                   | 5.13 | 78 | 127886 | 5.274 ug/L   | 100    |
| 34) Trichloroethene           | 5.94 | 95 | 10580  | 1.675 ug/L   | 96     |
| 35) Methylcyclohexane         | 6.10 | 83 | 7308   | 0.686 ug/L # | 18     |
| 37) 1,2-Dichloropropane       | 6.10 | 63 | 3648   | 0.613 ug/L # | 88     |
| 39) cis-1,3-Dichloropropene   | 7.01 | 75 | 868    | 0.103 ug/L # | 73     |
| 40) 4-Methyl-2-pentanone      | 7.26 | 43 | 4919   | 1.329 ug/L # | 84     |
| 42) Toluene                   | 7.41 | 91 | 240861 | 9.108 ug/L   | 100    |
| 46) trans-1,3-Dichloropropene | 7.65 | 75 | 462    | 0.066 ug/L   | 88     |
| 54) Ethylbenzene              | 9.04 | 91 | 5839   | 0.198 ug/L   | 93     |

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Misc : 25.0mL/MSVOA V/WATER  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :

Quant Time: May 29 01:17:13 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR052620WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri May 29 01:10:53 2020  
Response via : Initial Calibration

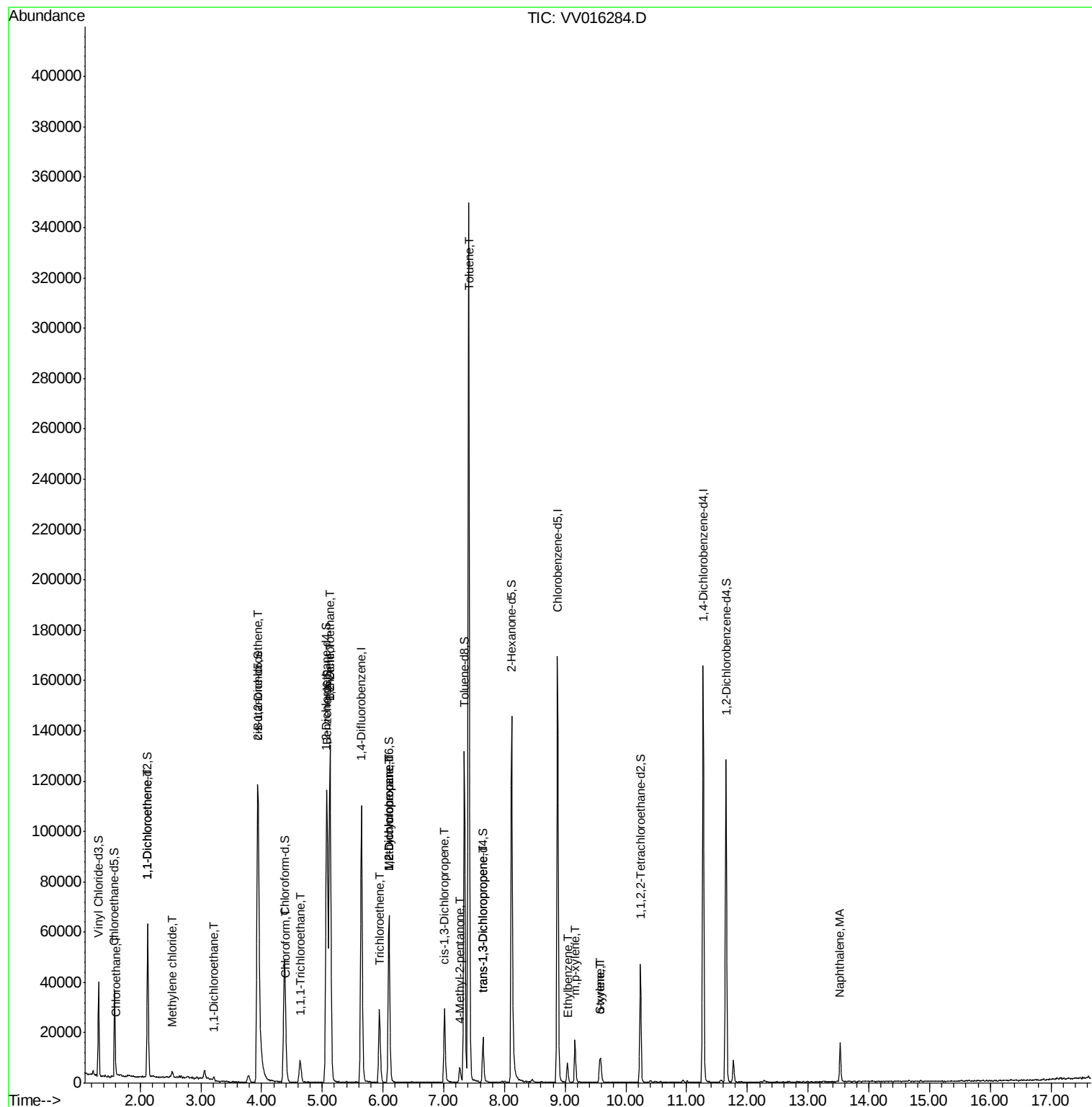
| Internal Standards | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------|-------|------|----------|-------|--------|----------|
| 55) m,p-xylene     | 9.16  | 106  | 4498     | 0.407 | ug/L   | 96       |
| 56) o-xylene       | 9.57  | 106  | 1814     | 0.172 | ug/L   | 99       |
| 57) Styrene        | 9.59  | 104  | 3808     | 0.217 | ug/L   | 94       |
| 70) Naphthalene    | 13.53 | 128  | 11463    | 0.713 | ug/L # | 96       |

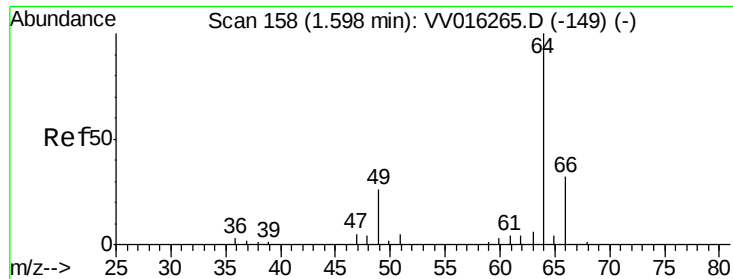
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA V\DATA\VV052820\  
Data File : VV016284.D  
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Sample : L2756-07DL 5000X  
Misc : 25.0mL/MSVOA V/WATER  
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Quant Time: May 29 01:17:13 2020  
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Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri May 29 01:10:53 2020  
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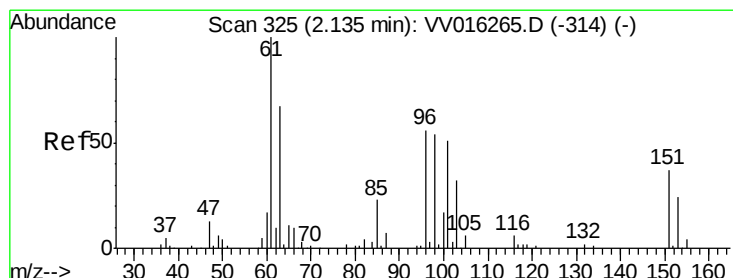
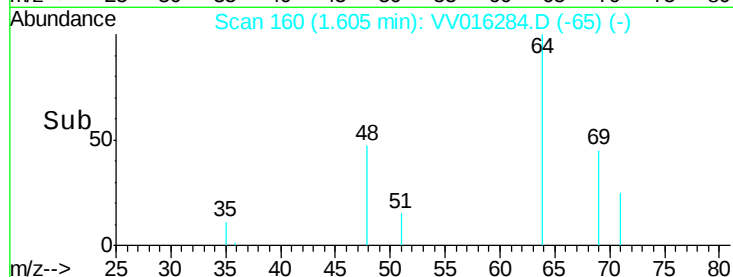
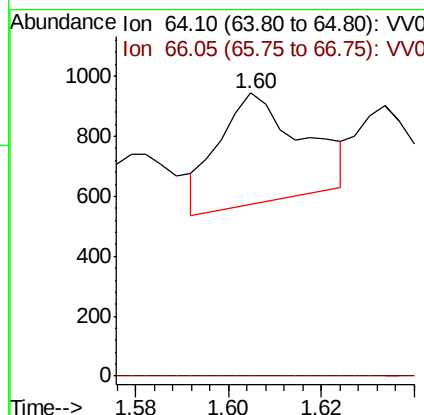
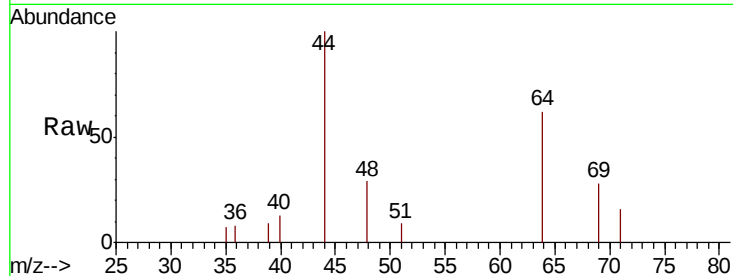




#8  
 Chloroethane  
 Concen: 0.108 ug/L  
 RT: 1.60 min Scan# 160  
 Delta R.T. 0.01 min  
 Lab File: VV016284.D  
 Acq: 28 May 2020 18:11

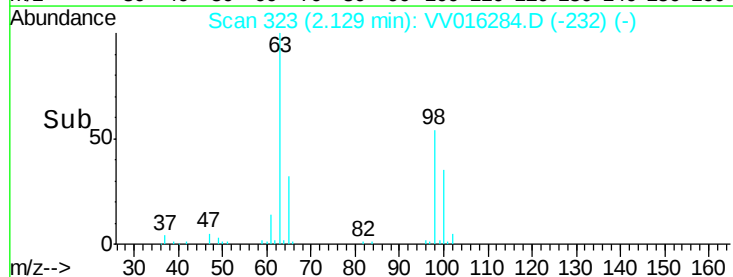
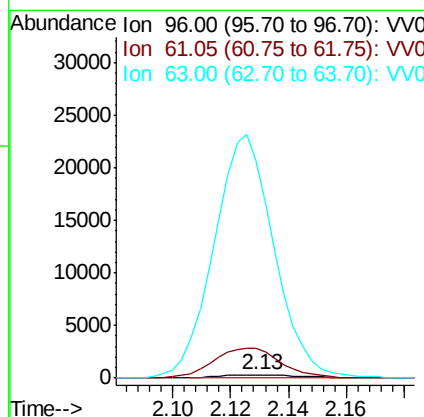
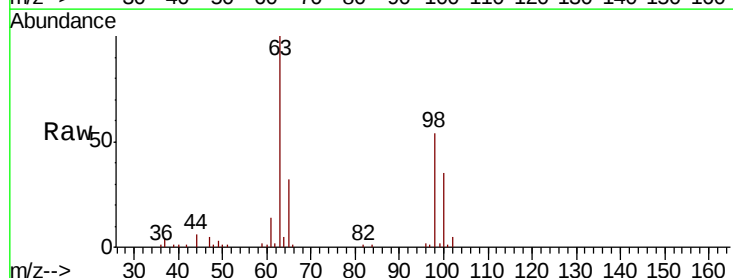
Instrument :  
 MSVOA\_V  
 ClientSampled :

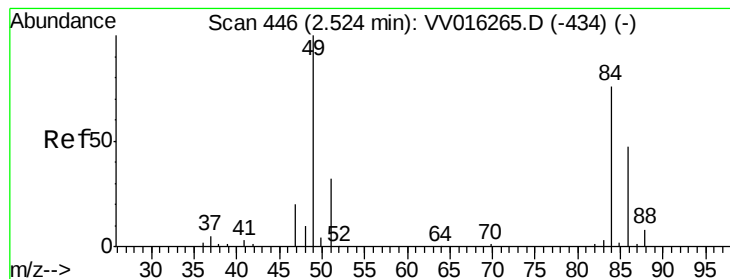
Tot Ion: 64 Resp: 460  
 Ion Ratio Lower Upper  
 64 100  
 66 0.0 22.9 42.5#



#12  
 1,1-Dichloroethene  
 Concen: 0.114 ug/L  
 RT: 2.13 min Scan# 323  
 Delta R.T. -0.01 min  
 Lab File: VV016284.D  
 Acq: 28 May 2020 18:11

Tgt Ion: 96 Resp: 583  
 Ion Ratio Lower Upper  
 96 100  
 61 890.5 124.9 231.9#  
 63 6546.4 80.4 149.2#





#16

Methylene chloride

Concen: 0.156 ug/L

RT: 2.53 min Scan# 448

Delta R.T. 0.01 min

Lab File: VV016284.D

Acq: 28 May 2020 18:11

Instrument :  
MSVOA\_V  
ClientSampled :

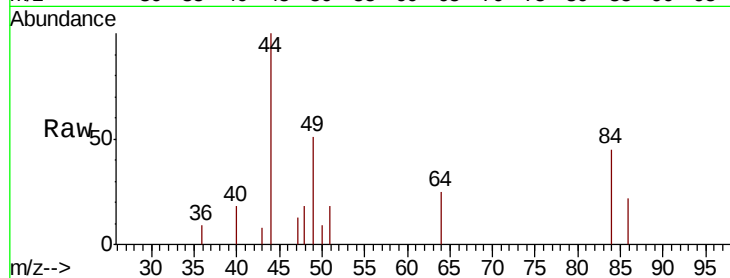
Tot Ion: 84 Resp: 916

Ion Ratio Lower Upper

84 100

86 49.3 44.9 83.5

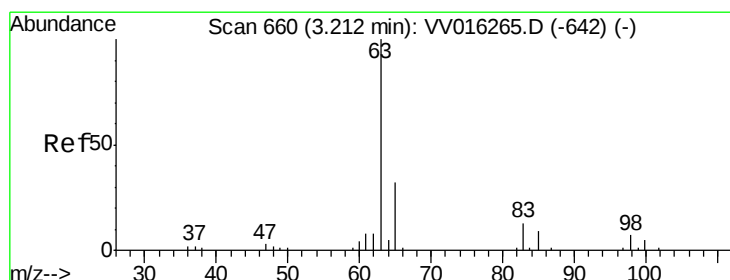
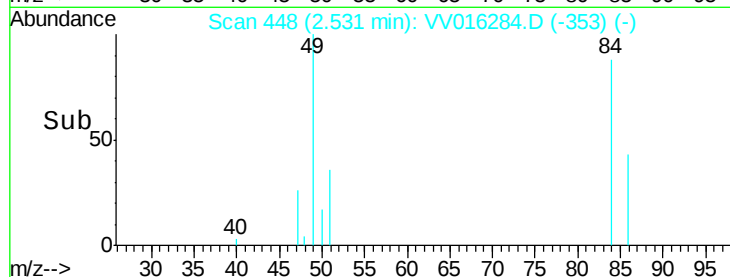
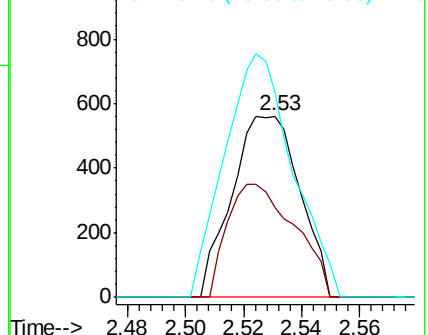
49 113.3 96.7 179.7



Abundance Ion 84.05 (83.75 to 84.75): VV0

Ion 86.00 (85.70 to 86.70): VV0

Ion 49.10 (48.80 to 49.80): VV0



#19

1,1-Dichloroethane

Concen: 0.159 ug/L

RT: 3.22 min Scan# 661

Delta R.T. 0.00 min

Lab File: VV016284.D

Acq: 28 May 2020 18:11

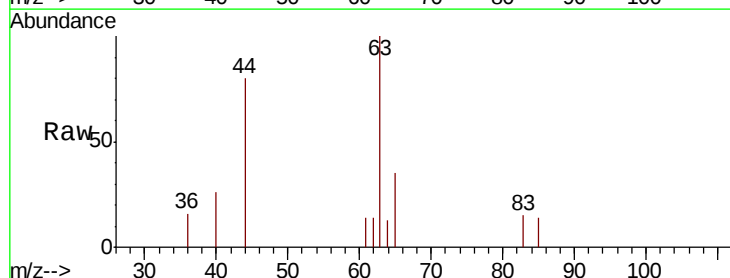
Tgt Ion: 63 Resp: 1686

Ion Ratio Lower Upper

63 100

65 34.5 22.3 41.5

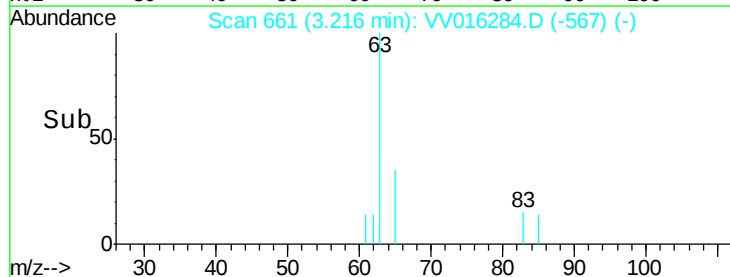
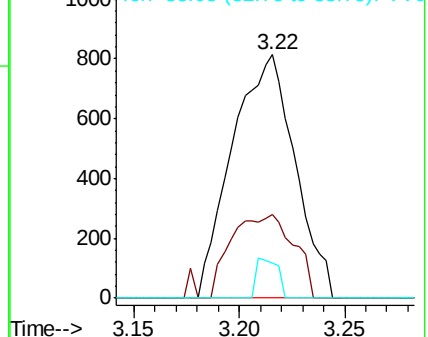
83 14.6 9.4 17.4

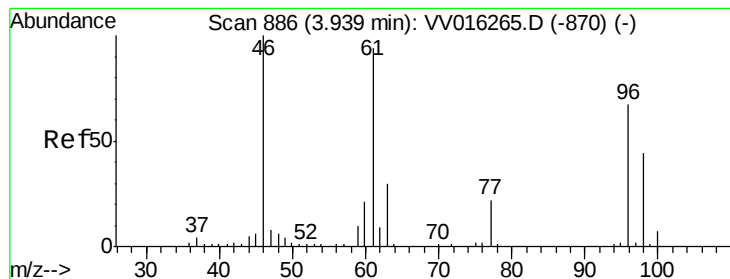


Abundance Ion 63.10 (62.80 to 63.80): VV0

Ion 65.10 (64.80 to 65.80): VV0

Ion 83.05 (82.75 to 83.75): VV0



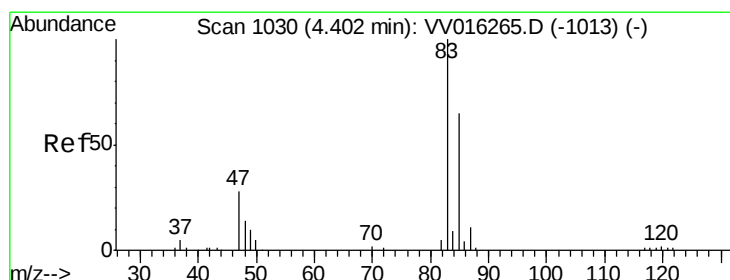
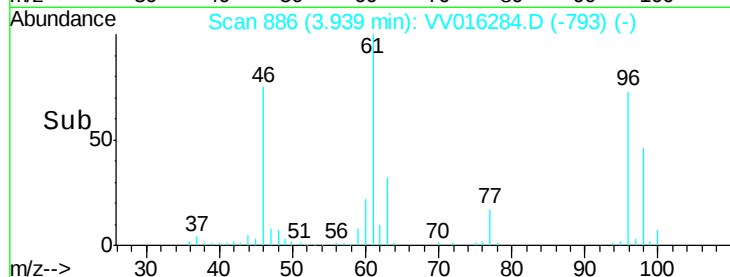
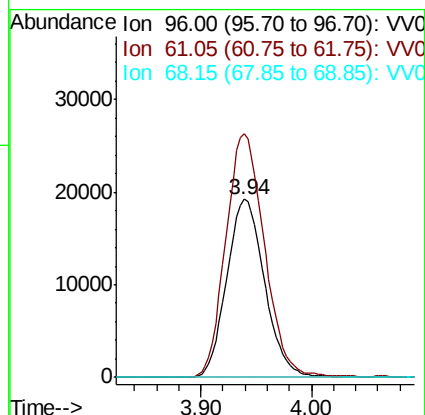
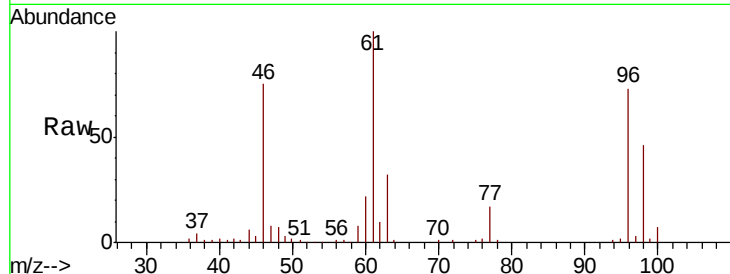


#22

cis-1,2-Dichloroethene  
Concen: 6.908 ug/L  
RT: 3.94 min Scan# 886  
Delta R.T. -0.00 min  
Lab File: VV016284.D  
Acq: 28 May 2020 18:11

Instrument :  
MSVOA\_V  
ClientSampleId :

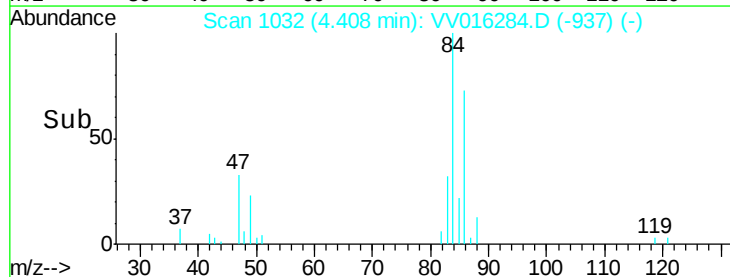
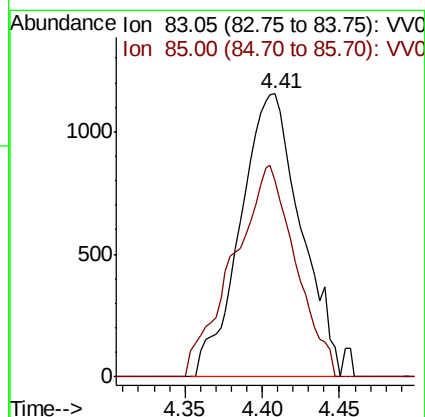
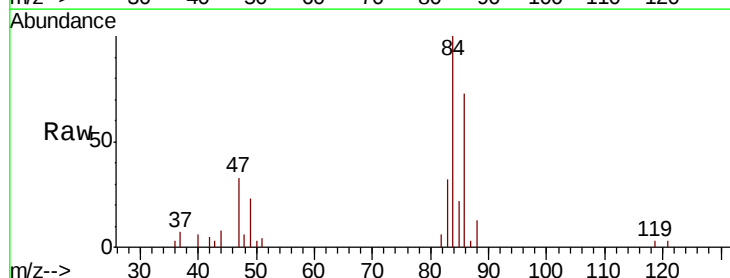
Tot Ion: 96 Resp: 45721  
Ion Ratio Lower Upper  
96 100  
61 136.7 99.7 185.1  
68 0.0 0.0 0.0

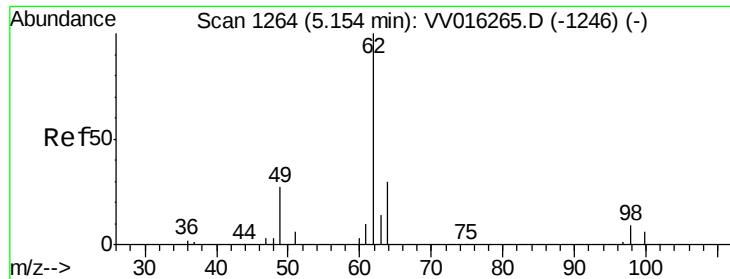


#25

Chloroform  
Concen: 0.279 ug/L  
RT: 4.41 min Scan# 1032  
Delta R.T. 0.01 min  
Lab File: VV016284.D  
Acq: 28 May 2020 18:11

Tgt Ion: 83 Resp: 3144  
Ion Ratio Lower Upper  
83 100  
85 69.4 45.1 83.7

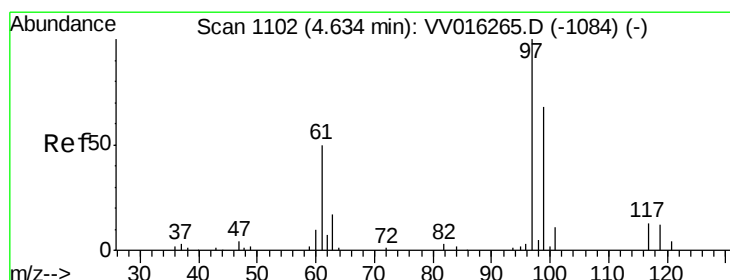
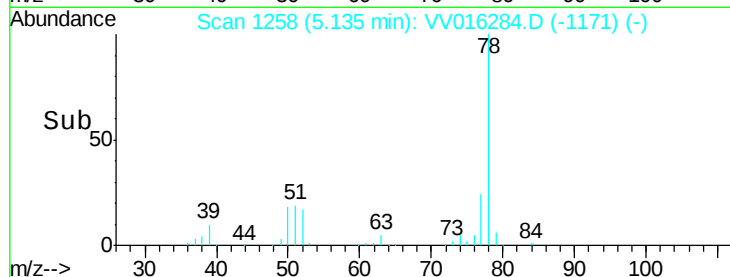
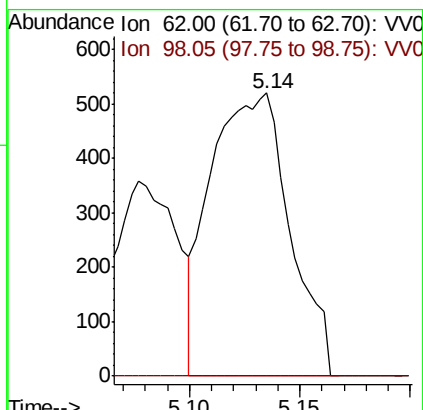
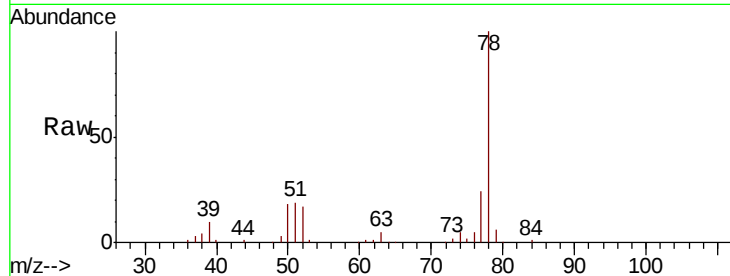




#27  
 1,2-Dichloroethane  
 Concen: 0.176 ug/L  
 RT: 5.14 min Scan# 1258  
 Delta R.T. -0.02 min  
 Lab File: VV016284.D  
 Acq: 28 May 2020 18:11

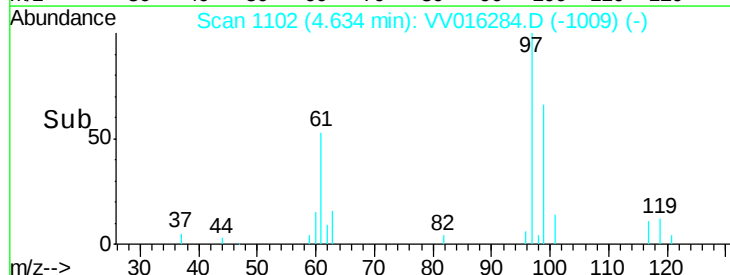
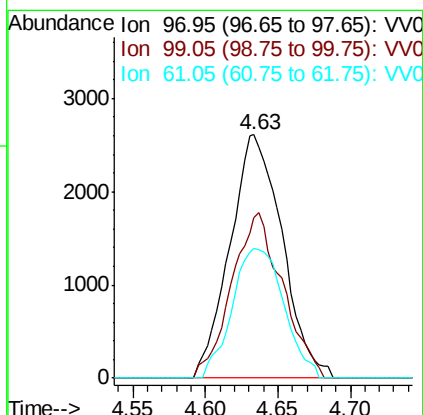
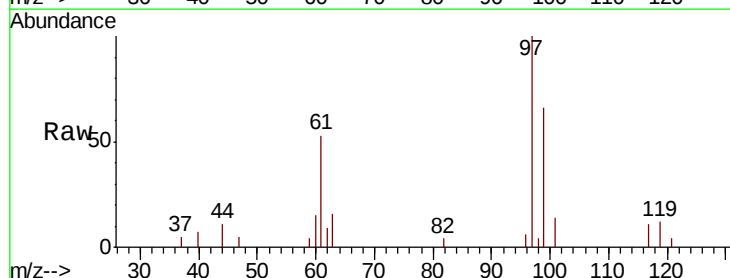
Instrument :  
 MSVOA\_V  
 ClientSampled :

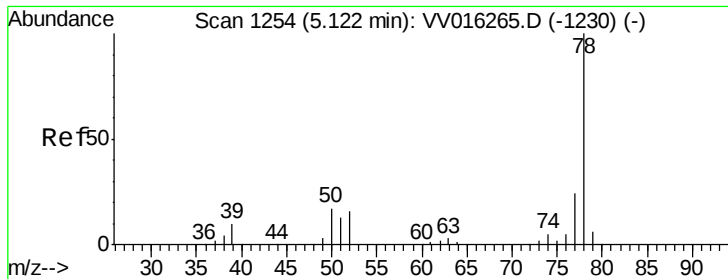
Tot Ion: 62 Resp: 1292  
 Ion Ratio Lower Upper  
 62 100  
 98 0.0 5.7 8.5#



#29  
 1,1,1-Trichloroethane  
 Concen: 0.654 ug/L  
 RT: 4.63 min Scan# 1102  
 Delta R.T. -0.00 min  
 Lab File: VV016284.D  
 Acq: 28 May 2020 18:11

Tgt Ion: 97 Resp: 6544  
 Ion Ratio Lower Upper  
 97 100  
 99 65.8 51.2 76.8  
 61 52.5 38.6 57.8





#33

Benzene

Concen: 5.274 ug/L

RT: 5.13 min Scan# 1255

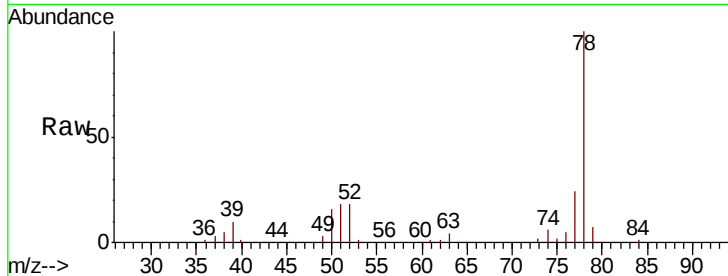
Delta R.T. 0.00 min

Lab File: VV016284.D

Acq: 28 May 2020 18:11

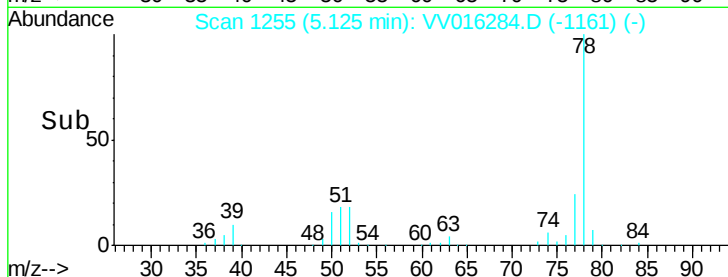
Instrument :  
MSVOA\_V  
ClientSampled :

Tgt Ion: 78 Resp: 127886

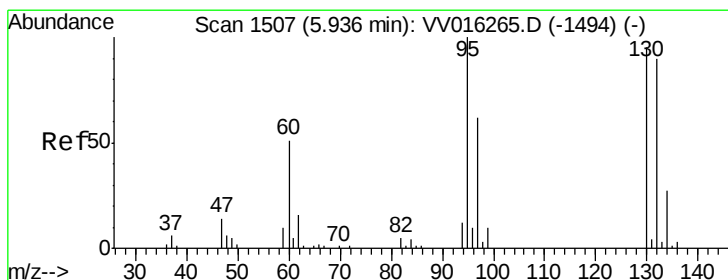


Abundance Ion 78.10 (77.80 to 78.80): VV0

5.13



Time-->



#34

Trichloroethene

Concen: 1.675 ug/L

RT: 5.94 min Scan# 1509

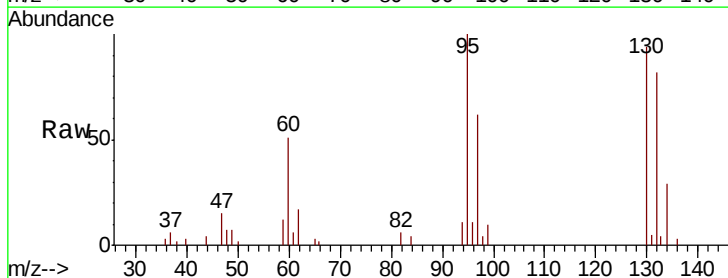
Delta R.T. 0.01 min

Lab File: VV016284.D

Acq: 28 May 2020 18:11

Tgt Ion: 95 Resp: 10580

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 61.5  | 43.6  | 81.0  |
| 132 | 82.3  | 63.9  | 118.7 |
| 130 | 94.4  | 65.2  | 121.0 |

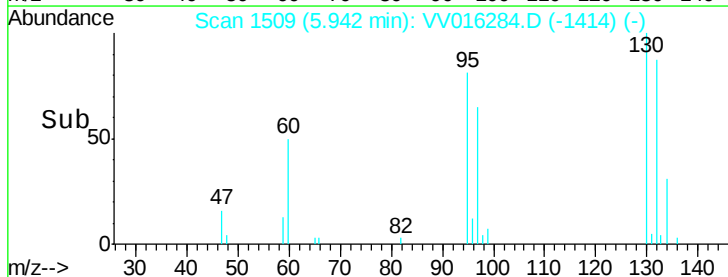


Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 96.95 (96.65 to 97.65): VV0

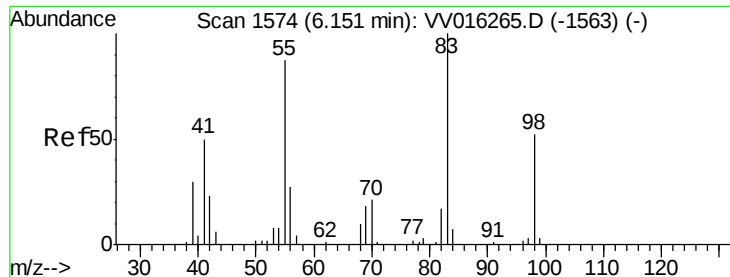
Ion 131.95 (131.65 to 132.65): VV0

Ion 129.95 (129.65 to 130.65): VV0



Time-->

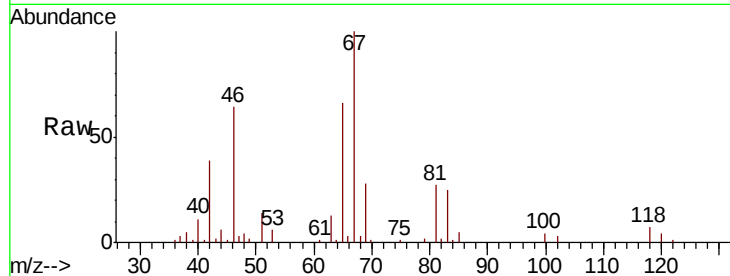
5.94



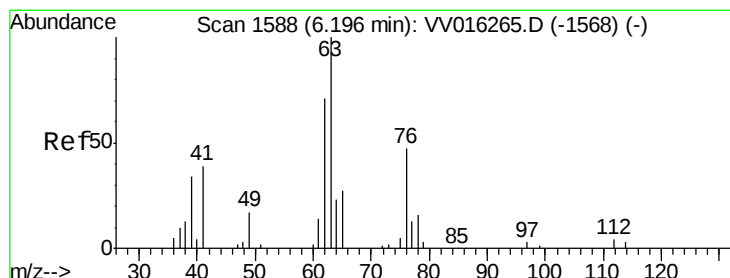
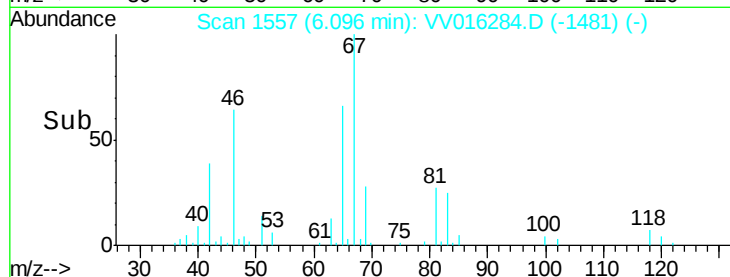
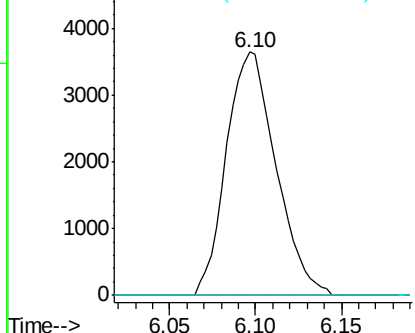
#35  
Methvlcvclohexane  
Concen: 0.686 ug/L  
RT: 6.10 min Scan# 1557  
Delta R.T. -0.05 min  
Lab File: VV016284.D  
Acq: 28 May 2020 18:11

Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 83 Resp: 7308  
Ion Ratio Lower Upper  
83 100  
55 0.0 65.4 98.0#  
98 3.3 39.3 58.9#

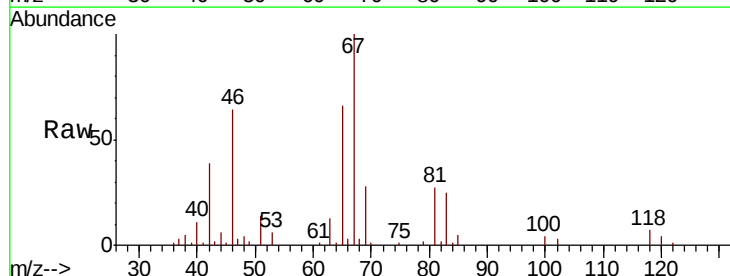


Abundance Ion 83.15 (82.85 to 83.85): VV0  
Ion 55.10 (54.80 to 55.80): VV0  
Ion 98.15 (97.85 to 98.85): VV0

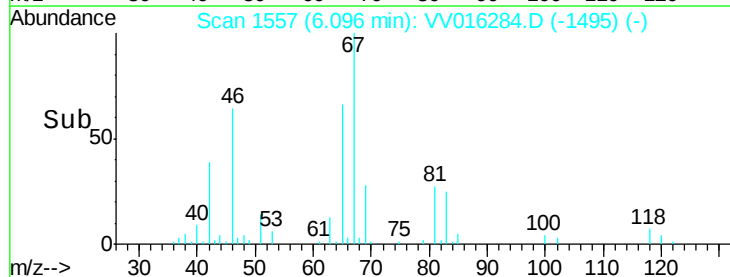
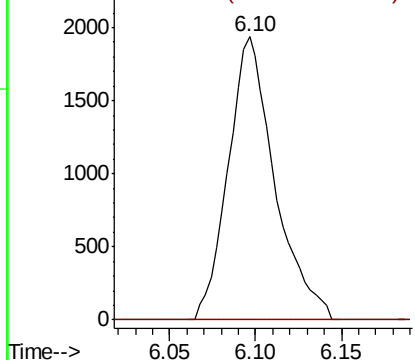


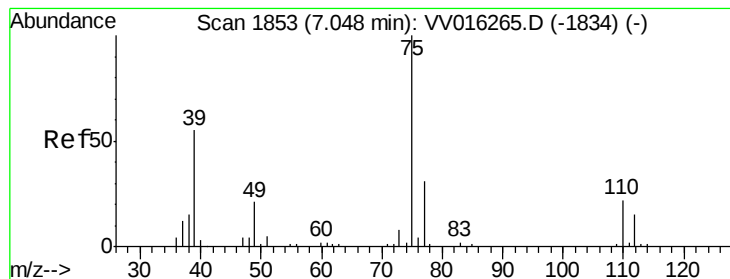
#37  
1,2-Dichloropropane  
Concen: 0.613 ug/L  
RT: 6.10 min Scan# 1557  
Delta R.T. -0.10 min  
Lab File: VV016284.D  
Acq: 28 May 2020 18:11

Tgt Ion: 63 Resp: 3648  
Ion Ratio Lower Upper  
63 100  
112 0.0 3.1 4.7#



Abundance Ion 63.10 (62.80 to 63.80): VV0  
Ion 112.10 (111.80 to 112.80): V



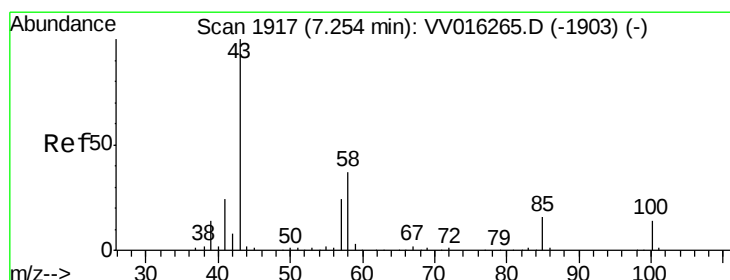
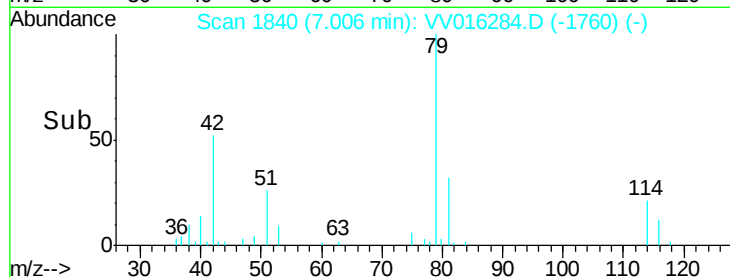
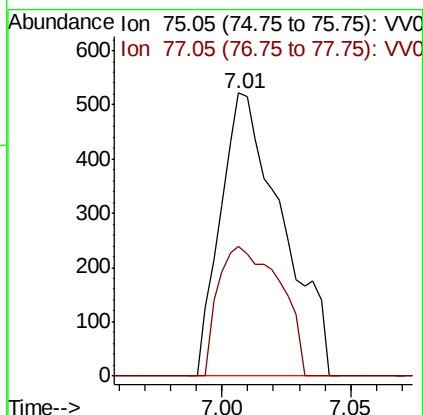
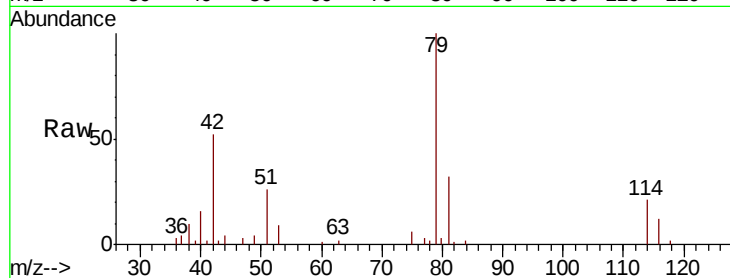


#39

cis-1,3-Dichloropropene  
 Concen: 0.103 ug/L  
 RT: 7.01 min Scan# 1840  
 Delta R.T. -0.04 min  
 Lab File: VV016284.D  
 Acq: 28 May 2020 18:11

Instrument :  
 MSVOA\_V  
 ClientSampled :

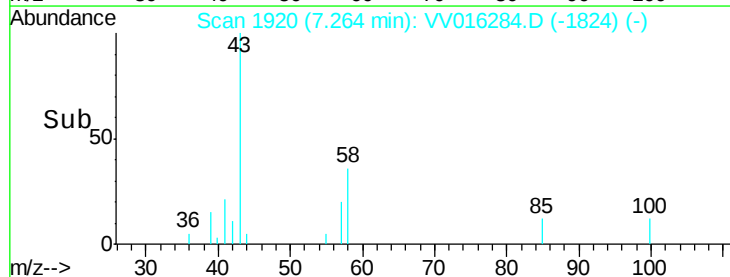
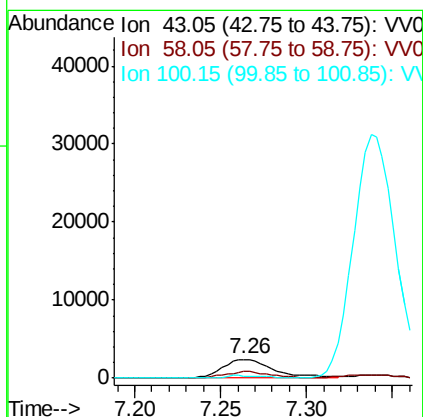
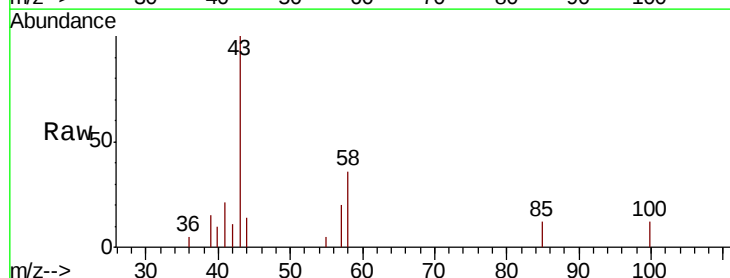
Tot Ion: 75 Resp: 868  
 Ion Ratio Lower Upper  
 75 100  
 77 46.0 21.7 40.3#

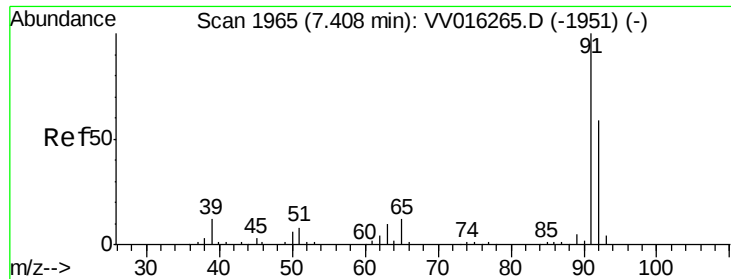


#40

4-Methyl-2-pentanone  
 Concen: 1.329 ug/L  
 RT: 7.26 min Scan# 1920  
 Delta R.T. 0.01 min  
 Lab File: VV016284.D  
 Acq: 28 May 2020 18:11

Tgt Ion: 43 Resp: 4919  
 Ion Ratio Lower Upper  
 43 100  
 58 31.3 29.5 44.3  
 100 0.0 11.1 16.7#





#42

Toluene

Concen: 9.108 ug/L

RT: 7.41 min Scan# 1966

Delta R.T. 0.00 min

Lab File: VV016284.D

Acq: 28 May 2020 18:11

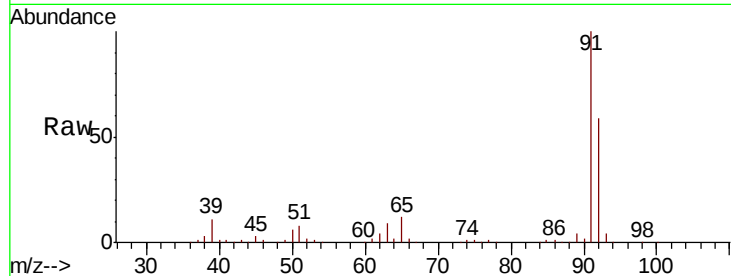
Instrument :  
MSVOA\_V  
ClientSampleId :

Tot Ion: 91 Resp: 240861

Ion Ratio Lower Upper

91 100

92 58.7 40.9 76.0



Abundance Ion 91.15 (90.85 to 91.85): VV0

Ion 92.15 (91.85 to 92.85): VV0

7.41

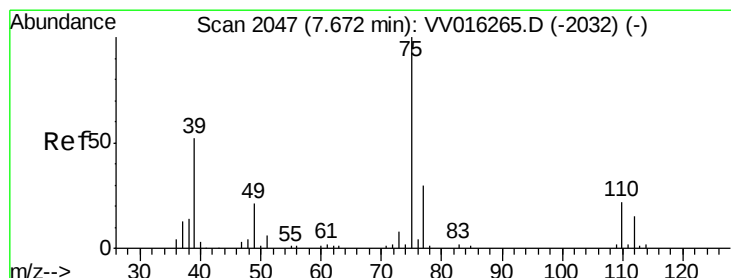
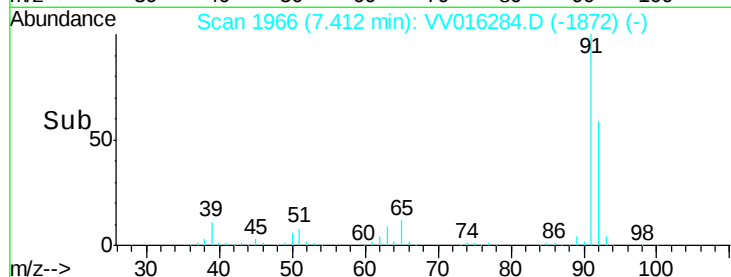
150000

100000

50000

0

Time-->



#46

trans-1,3-Dichloropropene

Concen: 0.066 ug/L

RT: 7.65 min Scan# 2039

Delta R.T. -0.03 min

Lab File: VV016284.D

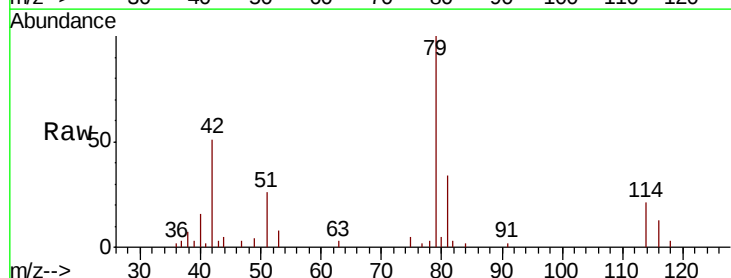
Acq: 28 May 2020 18:11

Tgt Ion: 75 Resp: 462

Ion Ratio Lower Upper

75 100

77 37.5 21.7 40.3



Abundance Ion 75.05 (74.75 to 75.75): VV0

Ion 77.05 (76.75 to 77.75): VV0

7.65

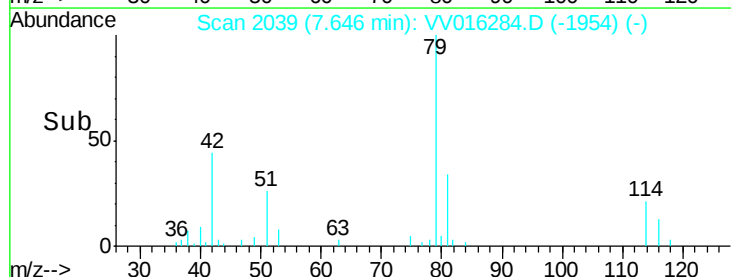
300

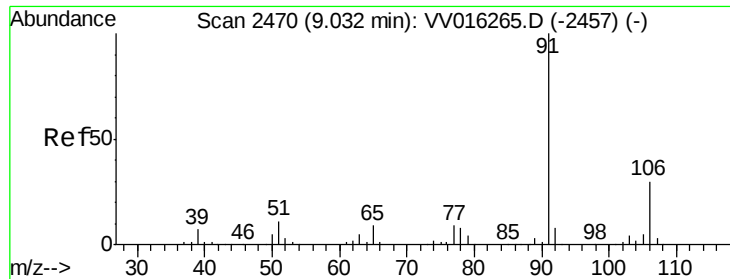
200

100

0

Time-->

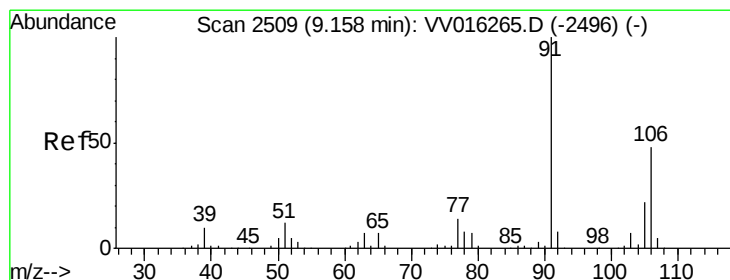
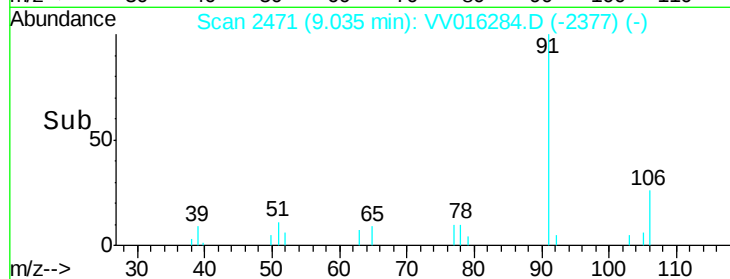
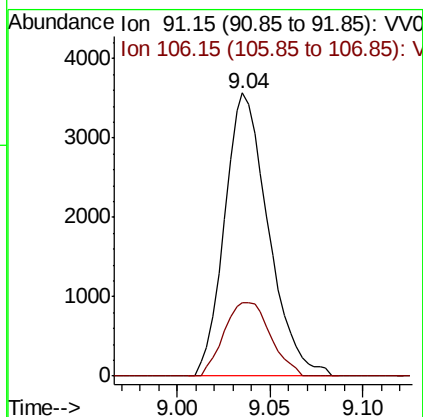
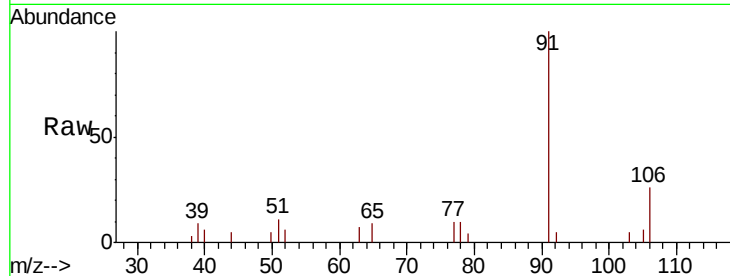




#54  
Ethylbenzene  
Concen: 0.198 ug/L  
RT: 9.04 min Scan# 2471  
Delta R.T. 0.00 min  
Lab File: VV016284.D  
Acq: 28 May 2020 18:11

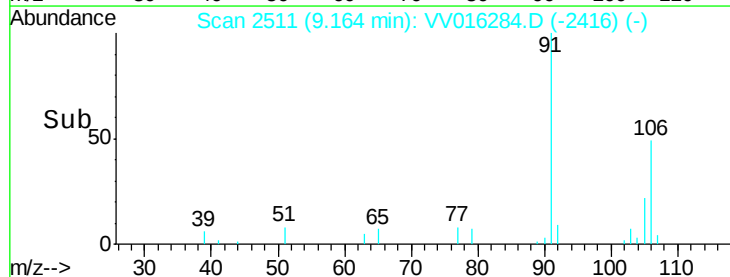
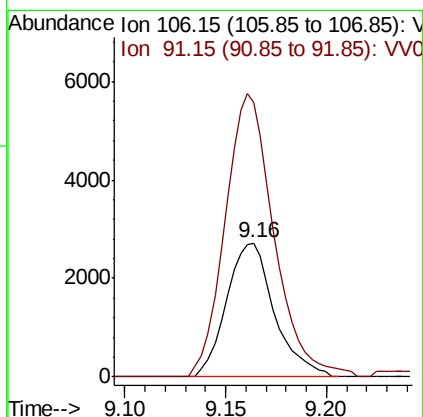
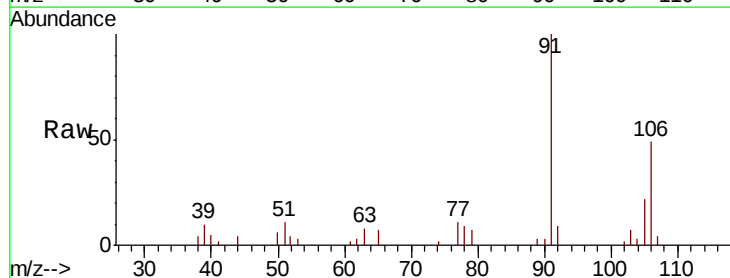
Instrument :  
MSVOA\_V  
ClientSampleId :

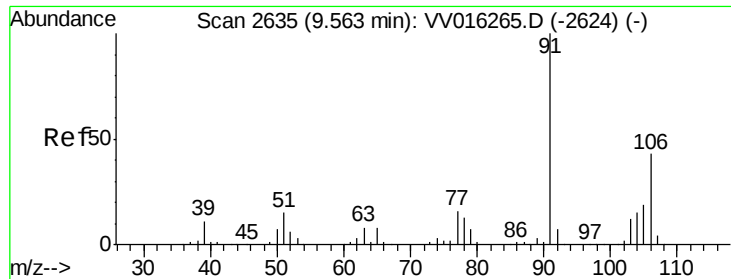
Tot Ion: 91 Resp: 5839  
Ion Ratio Lower Upper  
91 100  
106 26.1 21.0 39.0



#55  
m,p-xylene  
Concen: 0.407 ug/L  
RT: 9.16 min Scan# 2511  
Delta R.T. 0.01 min  
Lab File: VV016284.D  
Acq: 28 May 2020 18:11

Tgt Ion: 106 Resp: 4498  
Ion Ratio Lower Upper  
106 100  
91 204.6 148.1 275.0

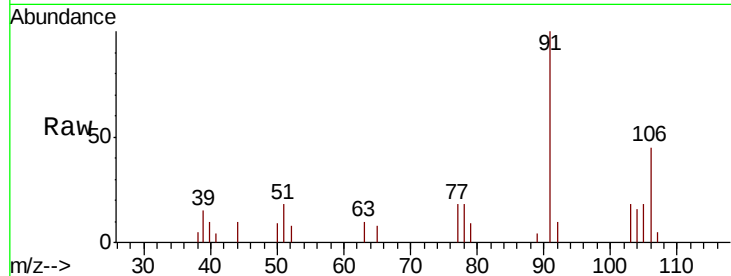




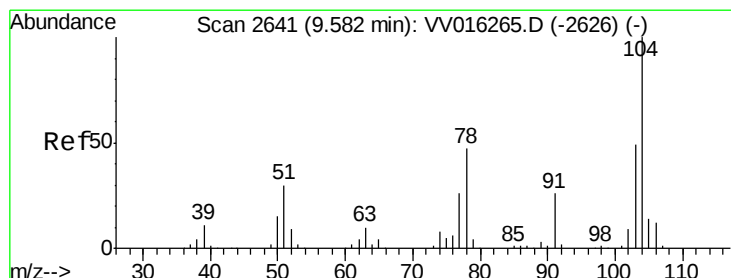
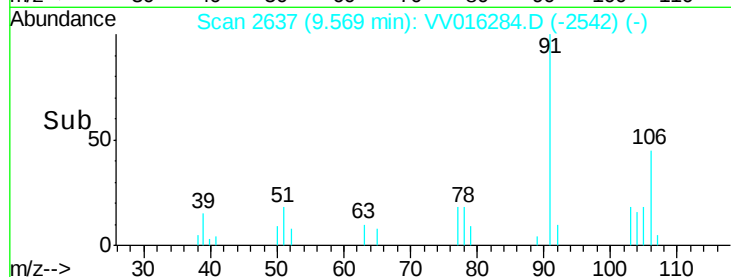
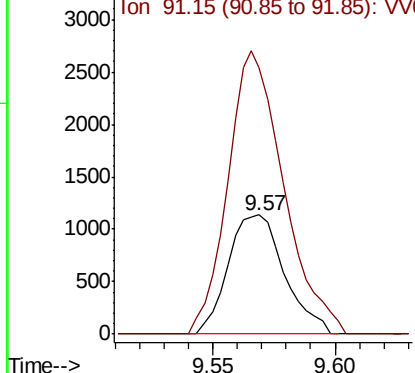
#56  
o-xylene  
Concen: 0.172 ug/L  
RT: 9.57 min Scan# 2637  
Delta R.T. 0.01 min  
Lab File: VV016284.D  
Acq: 28 May 2020 18:11

Instrument :  
MSVOA\_V  
ClientSampled :

Tot Ion:106 Resp: 1814  
Ion Ratio Lower Upper  
106 100  
91 224.7 158.8 294.8

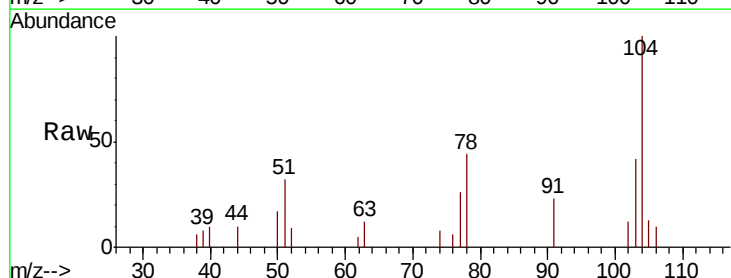


Abundance Ion 106.15 (105.85 to 106.85): V  
Ion 91.15 (90.85 to 91.85): VV0

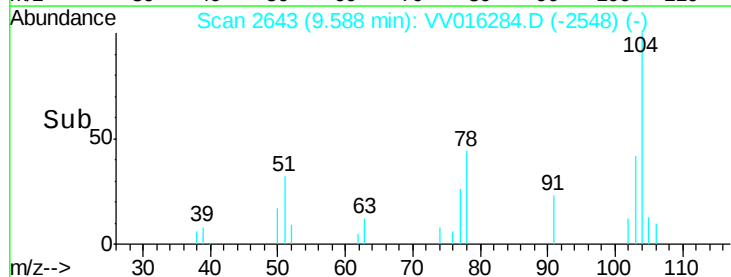
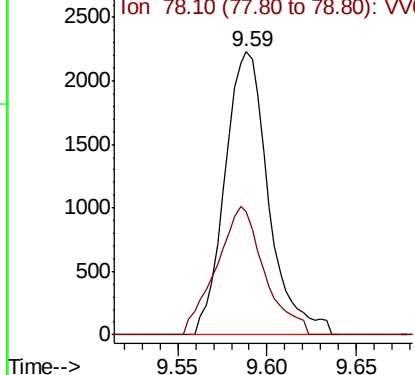


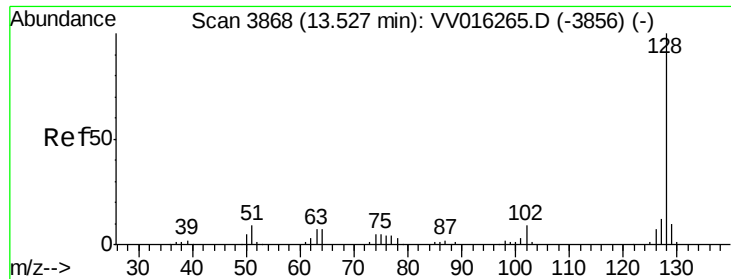
#57  
Styrene  
Concen: 0.217 ug/L  
RT: 9.59 min Scan# 2643  
Delta R.T. 0.01 min  
Lab File: VV016284.D  
Acq: 28 May 2020 18:11

Tgt Ion:104 Resp: 3808  
Ion Ratio Lower Upper  
104 100  
78 43.6 33.2 61.7



Abundance Ion 104.10 (103.80 to 104.80): V  
Ion 78.10 (77.80 to 78.80): VV0





#70

Naphthalene

Concen: 0.713 ug/L

RT: 13.53 min Scan# 3869

Delta R.T. 0.00 min

Lab File: VV016284.D

Acq: 28 May 2020 18:11

Instrument :

MSVOA\_V

ClientSampleId :

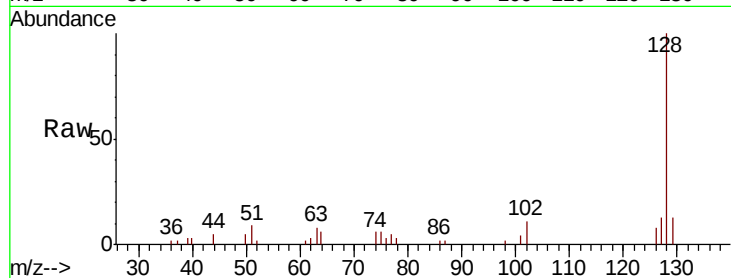
Tot Ion:128 Resp: 11463

Ion Ratio Lower Upper

128 100

129 13.0 8.6 13.0#

127 13.9 10.6 15.8



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V

