

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV070220\  
 Data File : VV017319.D  
 Acq On : 02 Jul 2020 20:37  
 Operator : SY/MD  
 Sample : L3154-05DL 20X  
 Misc : 25.0mL/MSVOA V/WATER  
 ALS Vial : 23 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 H4307DL

Quant Time: Jul 03 06:18:21 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR061720WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Fri Jul 03 06:15:26 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 170910   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 164236   | 5.00 | ug/L  | 0.00     |
| 61) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 79059    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 43072    | 4.20     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 84.00% |
| 7) Chloroethane-d5             | 1.58   | 69    | 34500    | 4.63     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 92.60% |
| 11) 1,1-Dichloroethene-d2      | 2.13   | 63    | 67796    | 3.47     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 69.40% |
| 20) 2-Butanone-d5              | 3.92   | 46    | 91716    | 35.08    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 70.16% |
| 24) Chloroform-d               | 4.38   | 84    | 95176    | 4.34     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 86.80% |
| 26) 1,2-Dichloroethane-d4      | 5.06   | 65    | 51864    | 4.46     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 89.20% |
| 32) Benzene-d6                 | 5.08   | 84    | 169316   | 3.98     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 79.60% |
| 36) 1,2-Dichloropropane-d6     | 6.10   | 67    | 48471    | 3.80     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 76.00% |
| 41) Toluene-d8                 | 7.34   | 98    | 160180   | 4.01     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 80.20% |
| 45) trans-1,3-Dichloropropene- | 7.65   | 79    | 19214    | 3.62     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 72.40% |
| 48) 2-Hexanone-d5              | 8.11   | 63    | 62726    | 30.99    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 61.98% |
| 59) 1,1,2,2-Tetrachloroethane- | 10.24  | 84    | 33840    | 3.99     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 79.80% |
| 65) 1,2-Dichlorobenzene-d4     | 11.65  | 152   | 64253    | 4.40     | ug/L | 0.00   |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 88.00% |

## Target Compounds

|                                |       |     |       |       | Ovalue    |
|--------------------------------|-------|-----|-------|-------|-----------|
| 5) Vinyl chloride              | 1.32  | 62  | 86503 | 7.713 | ug/L 98   |
| 8) Chloroethane                | 1.57  | 64  | 23822 | 3.844 | ug/L # 52 |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.12  | 101 | 731   | 0.081 | ug/L # 26 |
| 12) 1,1-Dichloroethene         | 2.13  | 96  | 1998  | 0.244 | ug/L # 1  |
| 14) Carbon disulfide           | 2.32  | 76  | 1101  | 0.045 | ug/L # 22 |
| 15) Methyl Acetate             | 2.45  | 43  | 790   | 0.245 | ug/L # 62 |
| 16) Methylene chloride         | 2.52  | 84  | 9661  | 1.100 | ug/L 98   |
| 18) trans-1,2-Dichloroethene   | 2.78  | 96  | 20610 | 2.371 | ug/L 95   |
| 22) cis-1,2-Dichloroethene     | 3.94  | 96  | 95454 | 8.031 | ug/L # 96 |
| 33) Benzene                    | 5.13  | 78  | 3069  | 0.071 | ug/L 100  |
| 34) Trichloroethene            | 5.94  | 95  | 22873 | 1.816 | ug/L 96   |
| 35) Methylcyclohexane          | 6.10  | 83  | 13520 | 0.691 | ug/L # 19 |
| 37) 1,2-Dichloropropane        | 6.09  | 63  | 6613  | 0.621 | ug/L # 85 |
| 39) cis-1,3-Dichloropropene    | 7.01  | 75  | 1963  | 0.124 | ug/L # 61 |
| 42) Toluene                    | 7.42  | 91  | 5679  | 0.114 | ug/L 97   |
| 43) 1,3,5-Trimethylbenzene     | 11.36 | 105 | 2707  | 0.061 | ug/L 90   |
| 44) 1,2,4-Trimethylbenzene     | 11.36 | 105 | 2707  | 0.059 | ug/L 95   |

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Instrument :  
MSVOA\_V  
ClientSampleId :  
H4307DL

Quant Time: Jul 03 06:18:21 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR061720WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Jul 03 06:15:26 2020  
Response via : Initial Calibration

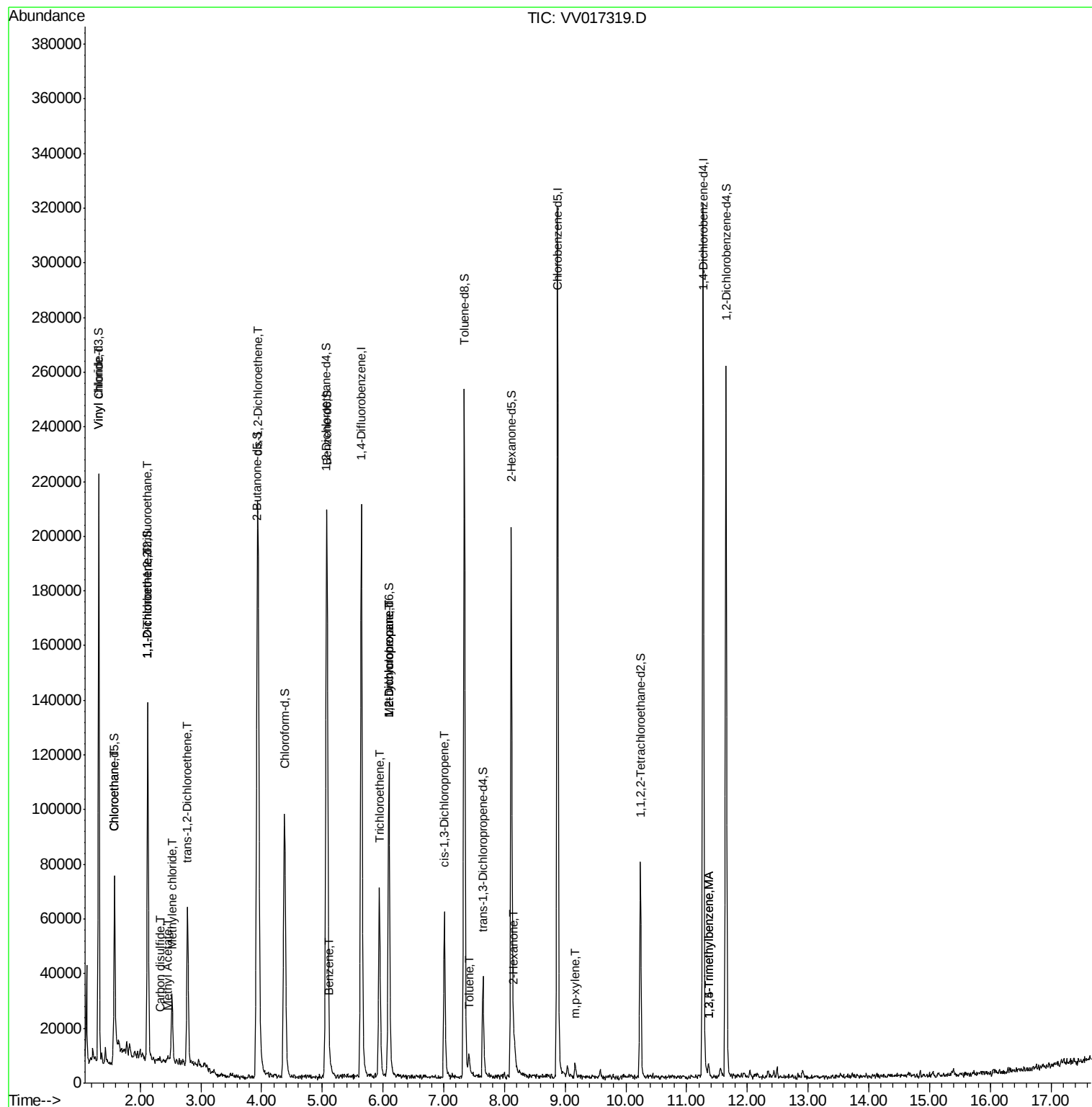
| Internal Standards | R.T. | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------|------|------|----------|-------|--------|----------|
| 50) 2-Hexanone     | 8.16 | 43   | 5877     | 1.343 | ug/L # | 79       |
| 55) m,p-xylene     | 9.16 | 106  | 1507     | 0.072 | ug/L   | 72       |

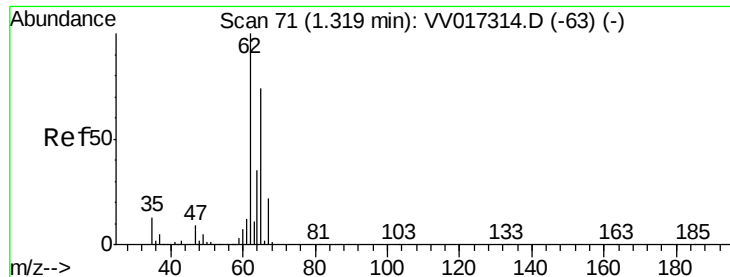
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : TRACE VOA SOM01.0  
QLast Update : Fri Jul 03 06:15:26 2020  
Response via : Initial Calibration





#5

Vinyl chloride

Concen: 7.713 ug/L

RT: 1.32 min Scan# 71

Delta R.T. -0.00 min

Lab File: VV017319.D

Acq: 02 Jul 2020 20:37

Instrument :

MSVOA\_V

ClientSampleId :

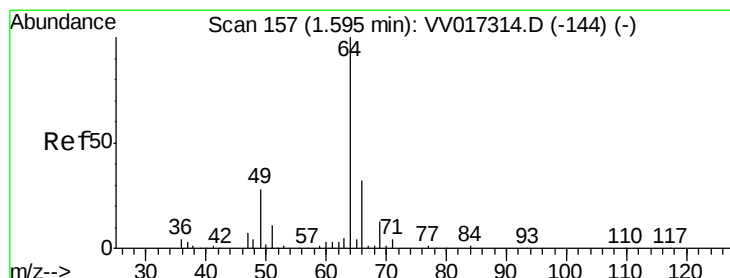
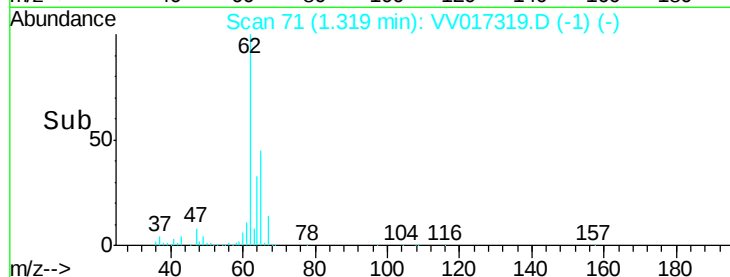
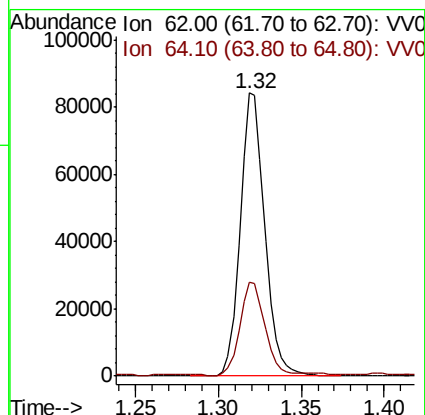
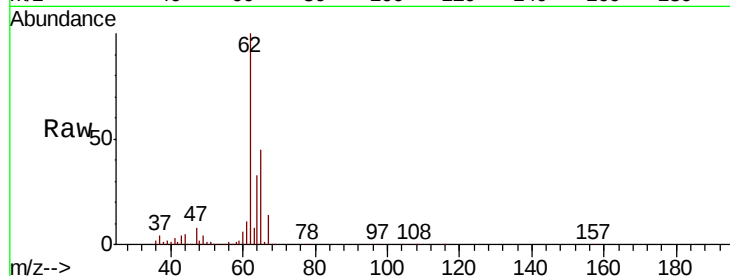
H4307DL

Tot Ion: 62 Resp: 86503

Ion Ratio Lower Upper

62 100

64 33.3 22.5 41.7



#8

Chloroethane

Concen: 3.844 ug/L

RT: 1.57 min Scan# 149

Delta R.T. -0.03 min

Lab File: VV017319.D

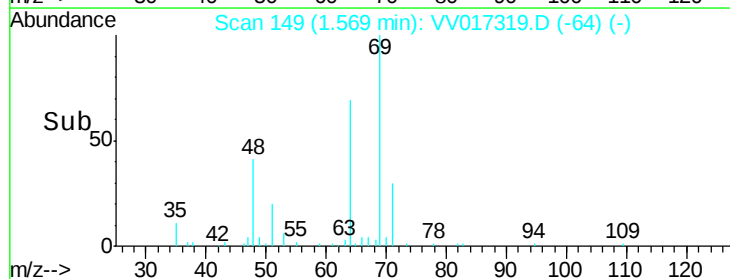
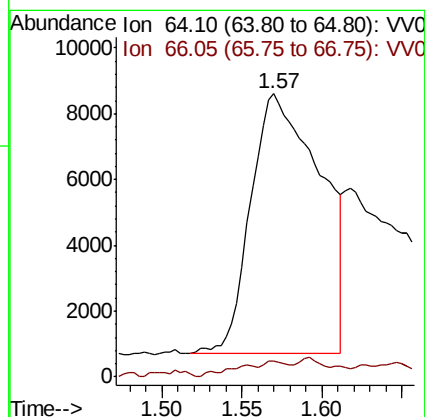
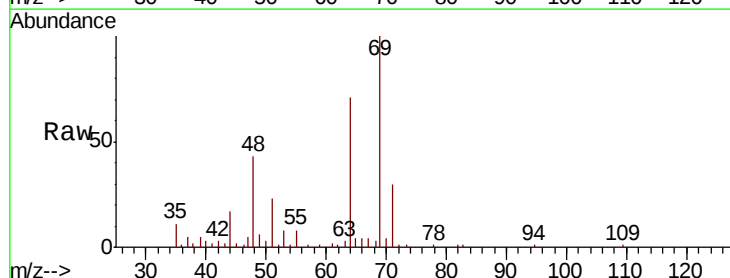
Acq: 02 Jul 2020 20:37

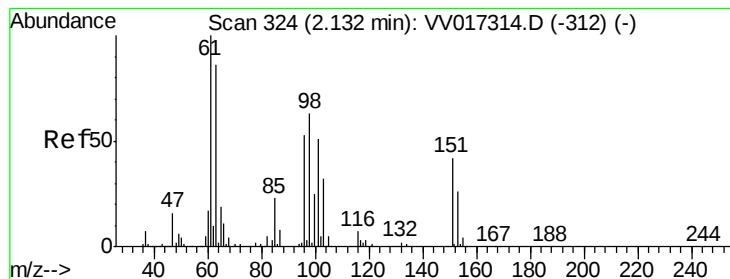
Tgt Ion: 64 Resp: 23822

Ion Ratio Lower Upper

64 100

66 5.6 22.8 42.4#





#10

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 0.081 ug/L

RT: 2.12 min Scan# 321

Delta R.T. -0.01 min

Lab File: VV017319.D

Acq: 02 Jul 2020 20:37

Instrument :

MSVOA\_V

ClientSampleId :

H4307DL

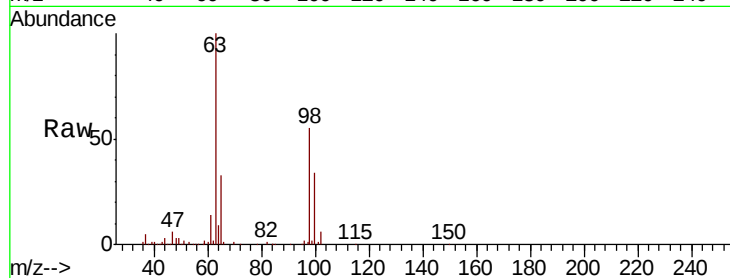
Tot Ion:101 Resp: 731

Ion Ratio Lower Upper

101 100

85 6.7 35.4 53.2#

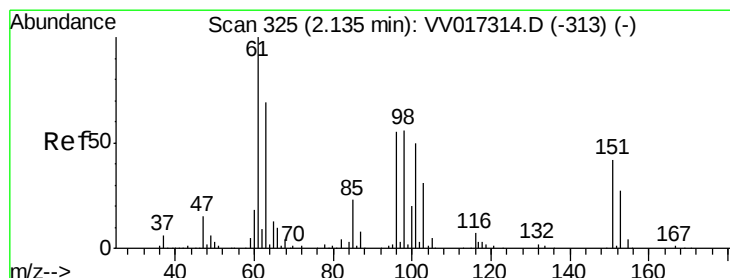
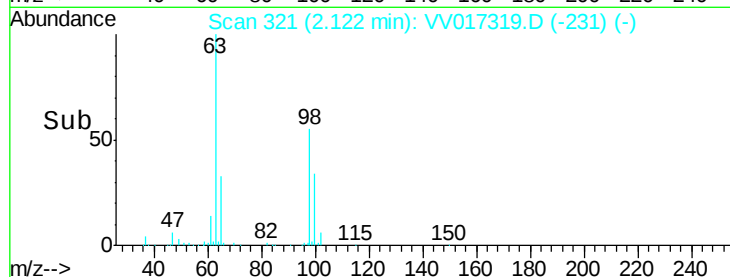
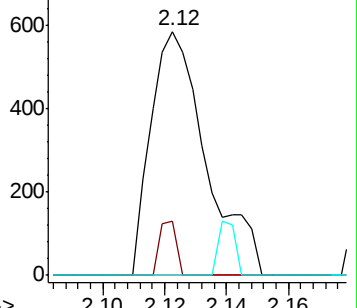
151 6.6 63.9 95.9#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 0.244 ug/L

RT: 2.13 min Scan# 324

Delta R.T. -0.00 min

Lab File: VV017319.D

Acq: 02 Jul 2020 20:37

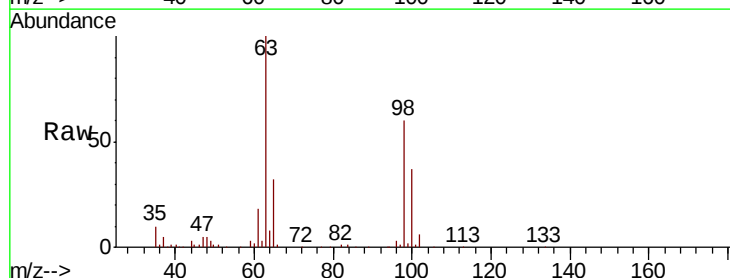
Tgt Ion: 96 Resp: 1998

Ion Ratio Lower Upper

96 100

61 550.4 125.0 232.2#

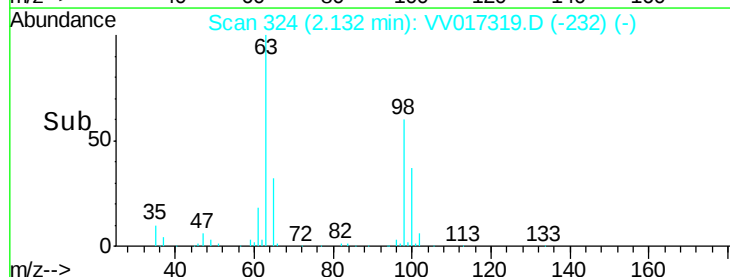
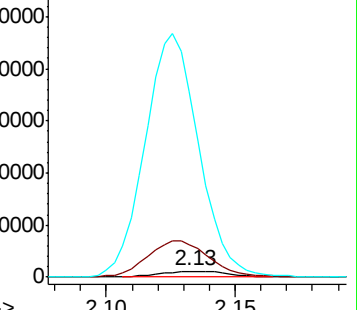
63 3097.7 109.8 203.8#

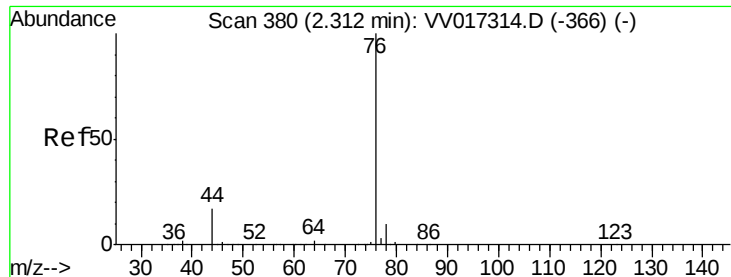


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0





#14

Carbon disulfide

Concen: 0.045 ug/L

RT: 2.32 min Scan# 381

Delta R.T. 0.00 min

Lab File: VV017319.D

Acq: 02 Jul 2020 20:37

Instrument :

MSVOA\_V

ClientSampled :

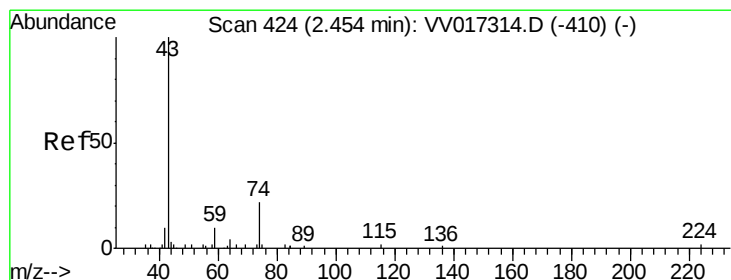
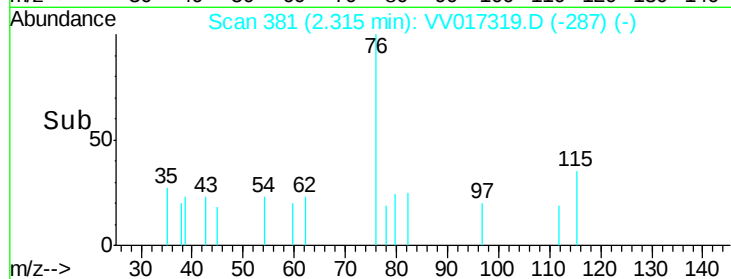
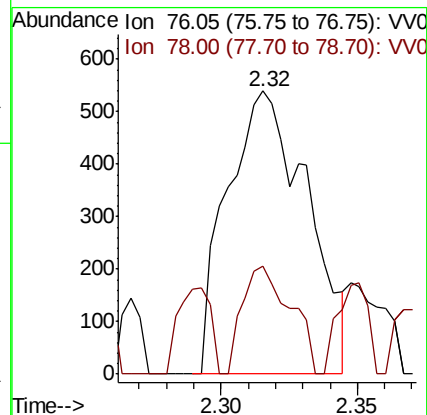
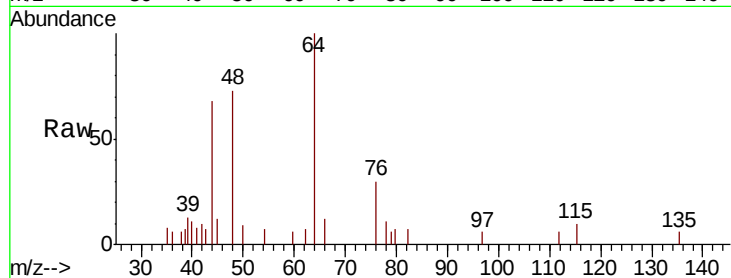
H4307DL

Tot Ion: 76 Resp: 1101

Ion Ratio Lower Upper

76 100

78 38.2 7.7 11.5#



#15

Methyl Acetate

Concen: 0.245 ug/L

RT: 2.45 min Scan# 422

Delta R.T. -0.01 min

Lab File: VV017319.D

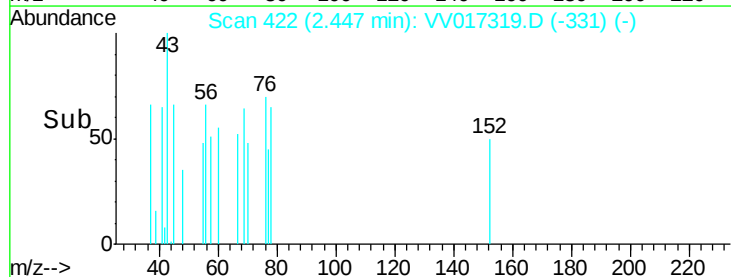
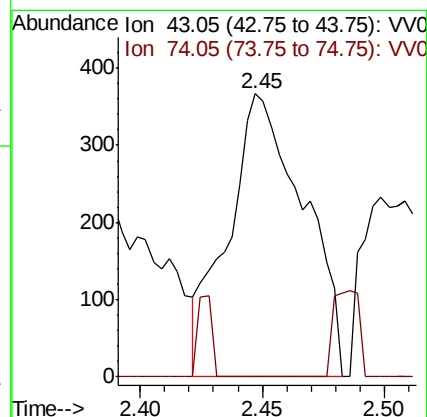
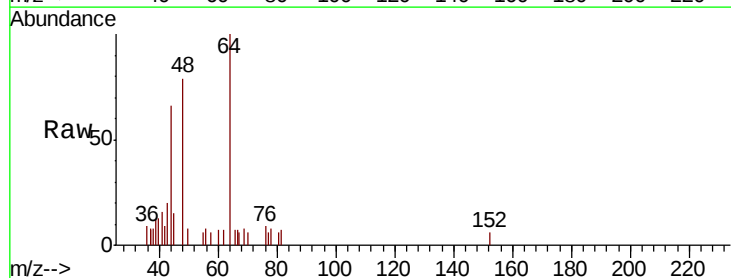
Acq: 02 Jul 2020 20:37

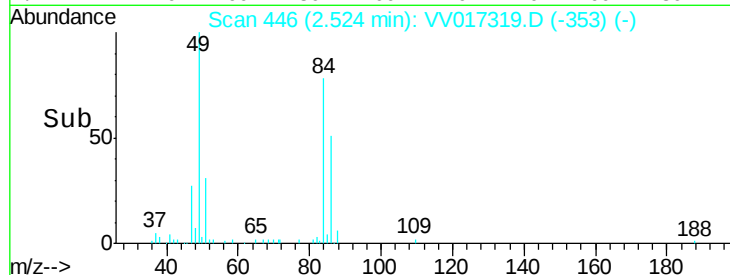
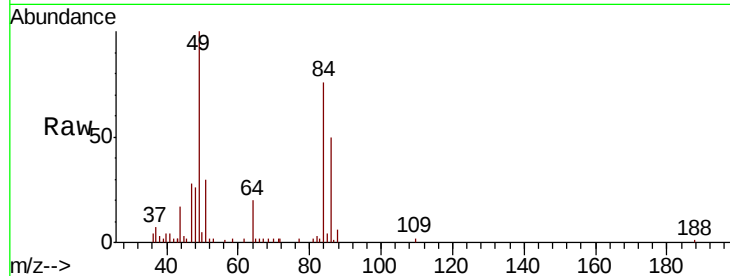
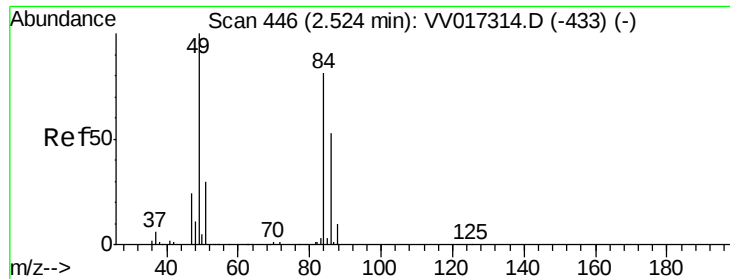
Tgt Ion: 43 Resp: 790

Ion Ratio Lower Upper

43 100

74 5.1 19.1 28.7#

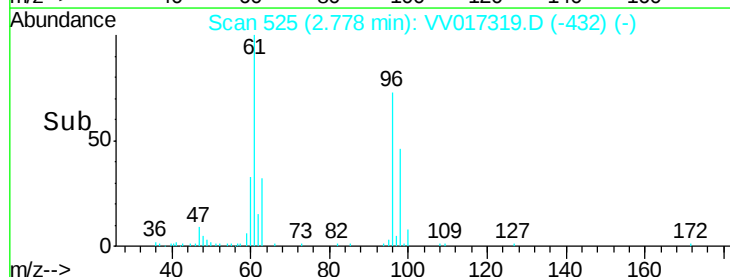
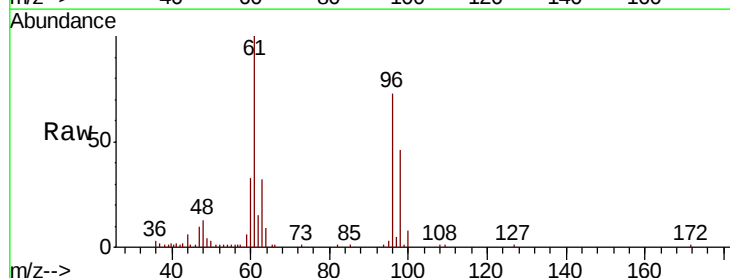
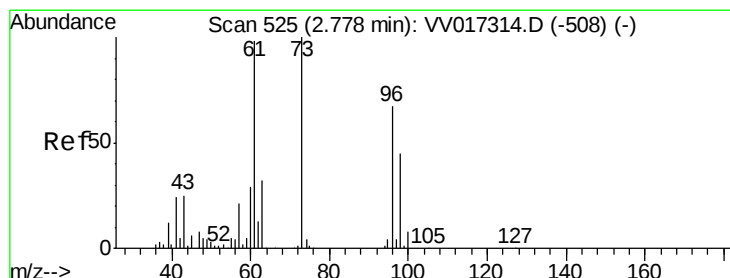
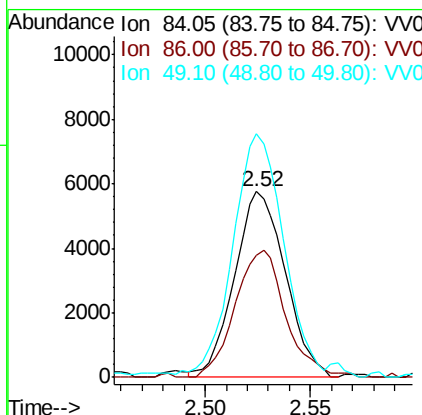




#16  
Methylene chloride  
Concen: 1.100 ug/L  
RT: 2.52 min Scan# 446  
Delta R.T. -0.00 min  
Lab File: VV017319.D  
Acq: 02 Jul 2020 20:37

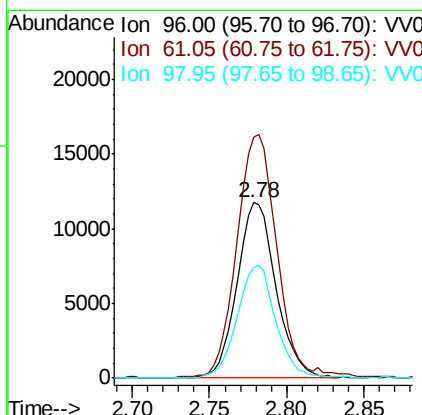
Instrument :  
MSVOA\_V  
ClientSampled :  
H4307DL

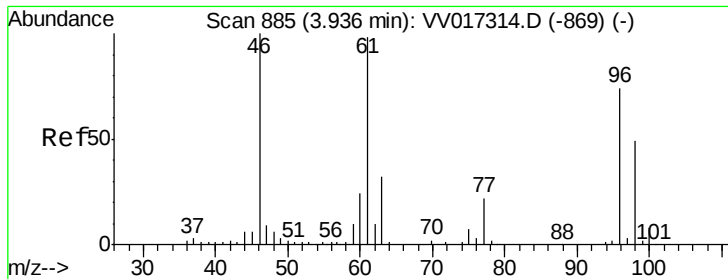
Tot Ion: 84 Resp: 9661  
Ion Ratio Lower Upper  
84 100  
86 65.6 45.8 85.0  
49 131.2 89.6 166.4



#18  
trans-1,2-Dichloroethene  
Concen: 2.371 ug/L  
RT: 2.78 min Scan# 525  
Delta R.T. -0.00 min  
Lab File: VV017319.D  
Acq: 02 Jul 2020 20:37

Tgt Ion: 96 Resp: 20610  
Ion Ratio Lower Upper  
96 100  
61 137.7 102.3 189.9  
98 63.3 44.7 82.9



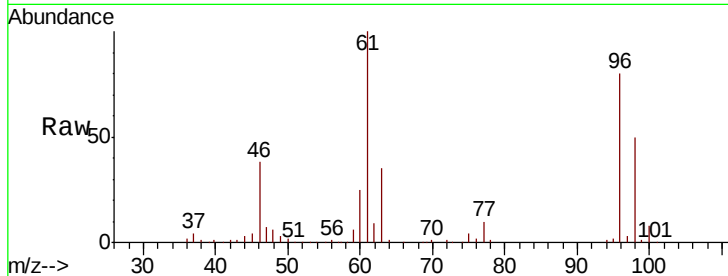


#22

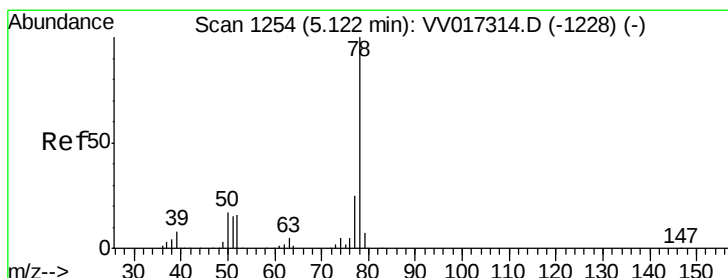
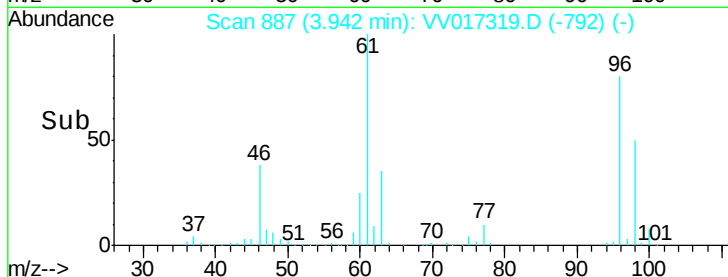
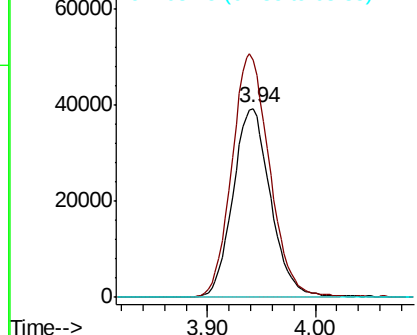
cis-1,2-Dichloroethene  
Concen: 8.031 ug/L  
RT: 3.94 min Scan# 887  
Delta R.T. 0.01 min  
Lab File: VV017319.D  
Acq: 02 Jul 2020 20:37

Instrument :  
MSVOA\_V  
ClientSampleId :  
H4307DL

Tot Ion: 96 Resp: 95454  
Ion Ratio Lower Upper  
96 100  
61 125.7 91.0 169.0  
68 0.3 0.0 0.0#



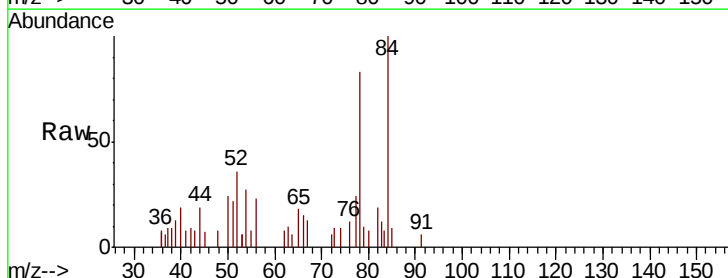
Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.05 (60.75 to 61.75): VV0  
Ion 68.15 (67.85 to 68.85): VV0



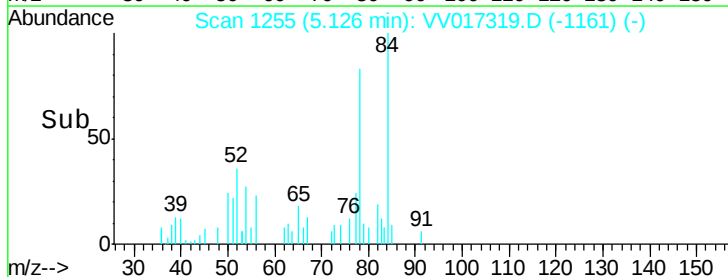
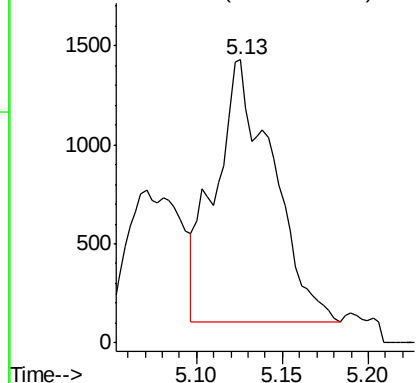
#33

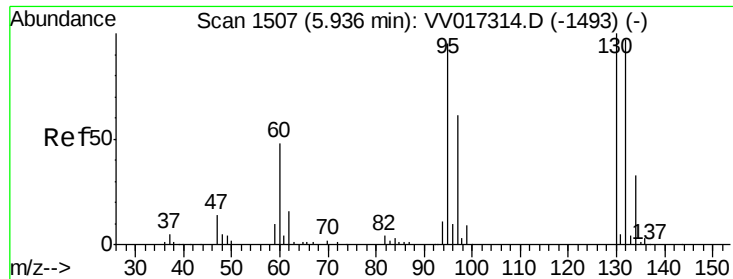
Benzene  
Concen: 0.071 ug/L  
RT: 5.13 min Scan# 1255  
Delta R.T. 0.00 min  
Lab File: VV017319.D  
Acq: 02 Jul 2020 20:37

Tgt Ion: 78 Resp: 3069



Abundance Ion 78.10 (77.80 to 78.80): VV0





#34

Trichloroethene

Concen: 1.816 ug/L

RT: 5.94 min Scan# 1508

Delta R.T. 0.00 min

Lab File: VV017319.D

Acq: 02 Jul 2020 20:37

Instrument :

MSVOA\_V

ClientSampleID :

H4307DL

Tot Ion: 95 Resp: 22873

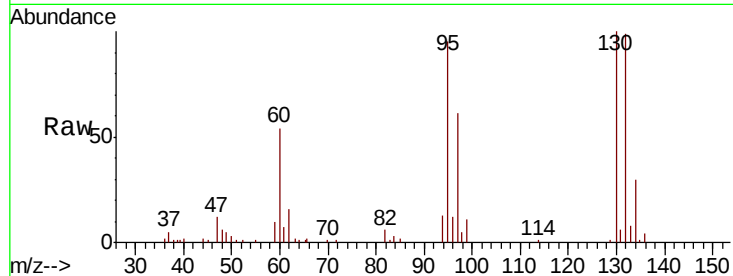
Ion Ratio Lower Upper

95 100

97 64.3 45.3 84.1

132 104.5 68.8 127.8

130 105.1 70.2 130.4

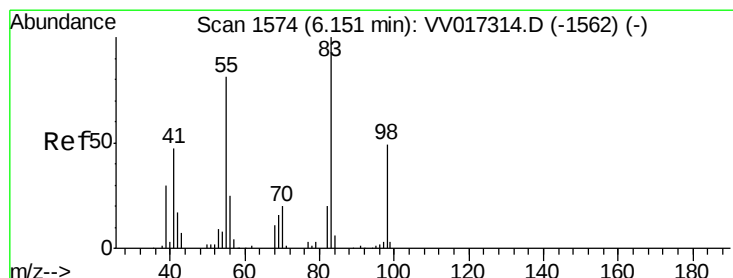
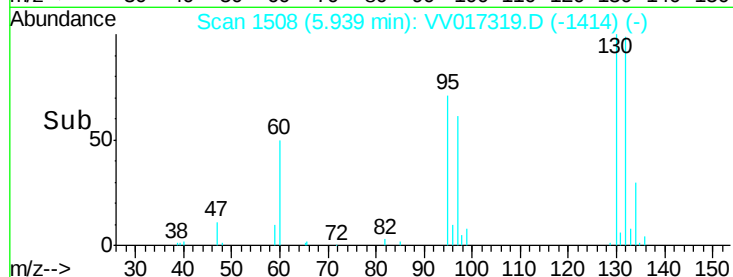
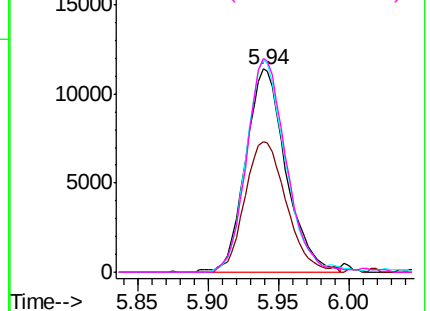


Abundance Ion 95.00 (94.70 to 95.70): VV0

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



#35

Methylcyclohexane

Concen: 0.691 ug/L

RT: 6.10 min Scan# 1557

Delta R.T. -0.05 min

Lab File: VV017319.D

Acq: 02 Jul 2020 20:37

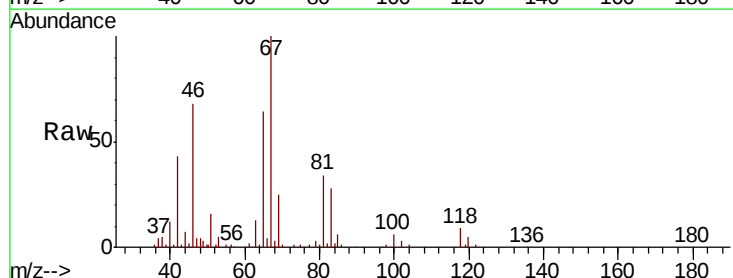
Tgt Ion: 83 Resp: 13520

Ion Ratio Lower Upper

83 100

55 1.6 63.6 95.4#

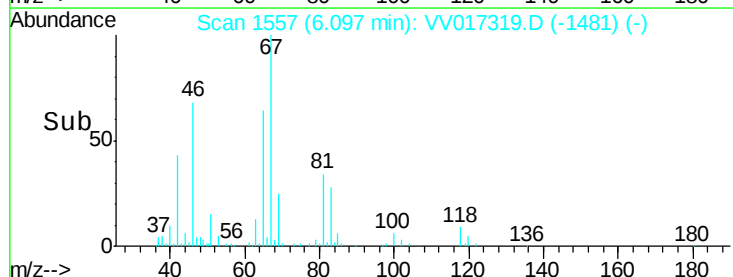
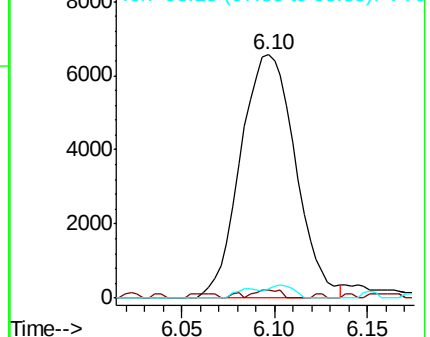
98 2.3 38.8 58.2#

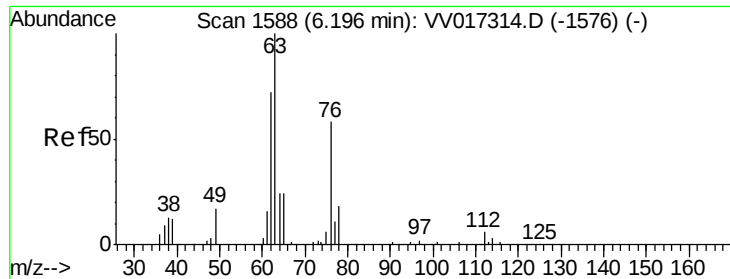


Abundance Ion 83.15 (82.85 to 83.85): VV0

Ion 55.10 (54.80 to 55.80): VV0

Ion 98.15 (97.85 to 98.85): VV0

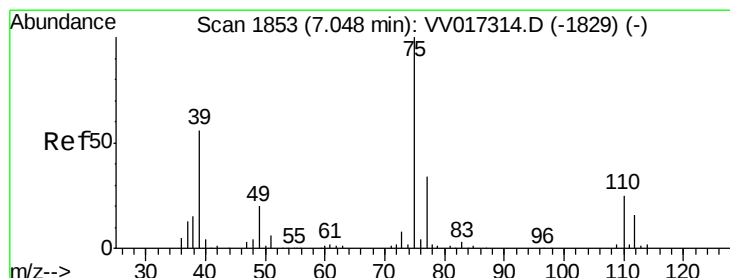
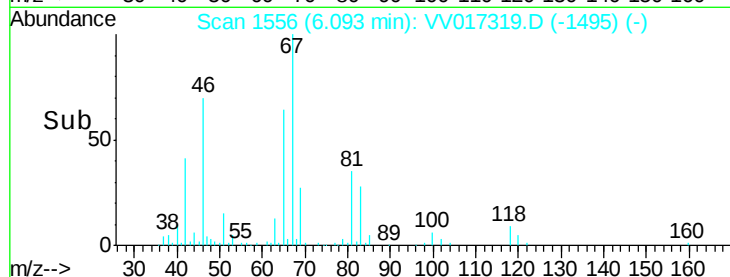
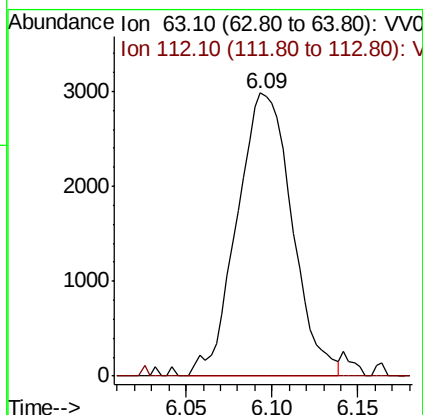
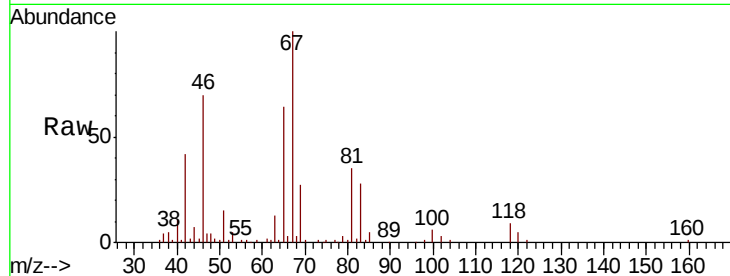




#37  
 1,2-Dichloropropane  
 Concen: 0.621 ug/L  
 RT: 6.09 min Scan# 1556  
 Delta R.T. -0.10 min  
 Lab File: VV017319.D  
 Acq: 02 Jul 2020 20:37

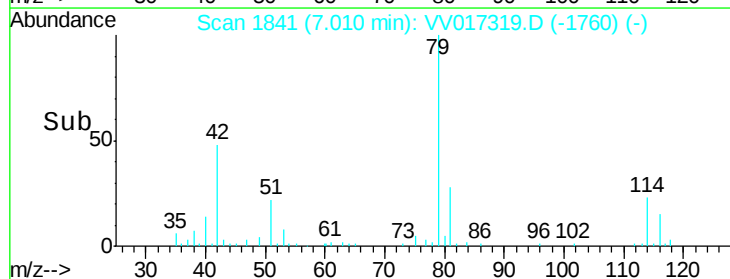
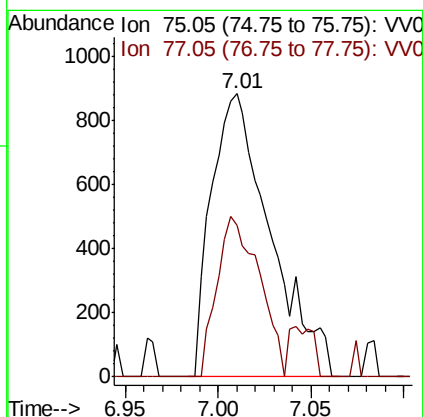
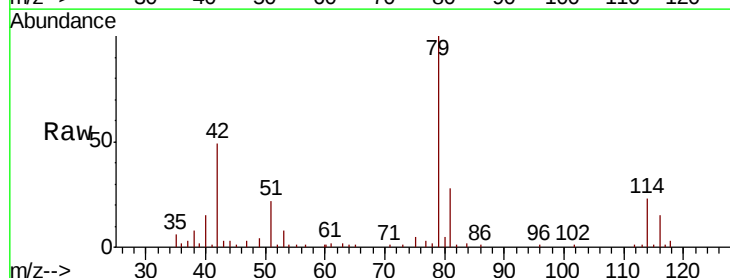
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 H4307DL

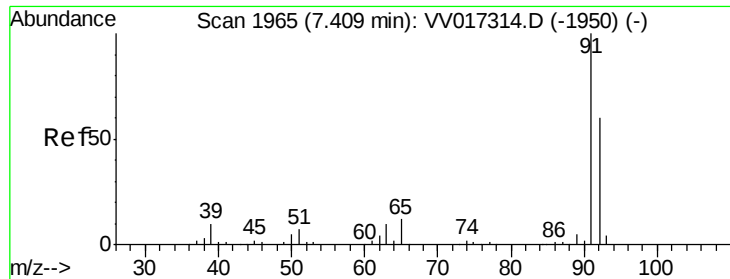
Tot Ion: 63 Resp: 6613  
 Ion Ratio Lower Upper  
 63 100  
 112 0.3 4.4 6.6#



#39  
 cis-1,3-Dichloropropene  
 Concen: 0.124 ug/L  
 RT: 7.01 min Scan# 1841  
 Delta R.T. -0.04 min  
 Lab File: VV017319.D  
 Acq: 02 Jul 2020 20:37

Tgt Ion: 75 Resp: 1963  
 Ion Ratio Lower Upper  
 75 100  
 77 53.5 22.3 41.5#





#42

Toluene

Concen: 0.114 ug/L

RT: 7.42 min Scan# 1968

Delta R.T. 0.01 min

Lab File: VV017319.D

Acq: 02 Jul 2020 20:37

Instrument :

MSVOA\_V

ClientSampleId :

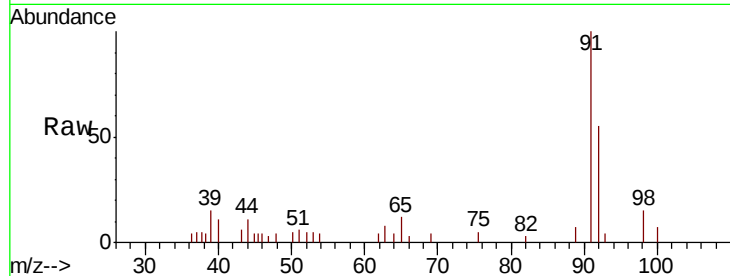
H4307DL

Tot Ion: 91 Resp: 5679

Ion Ratio Lower Upper

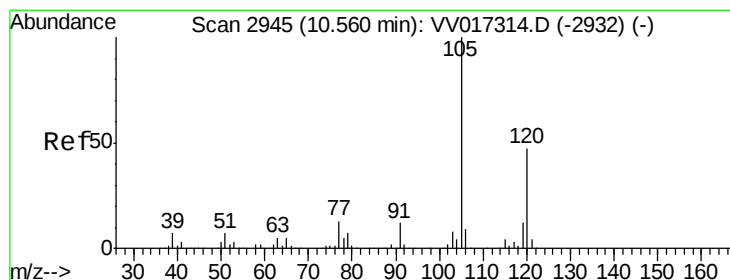
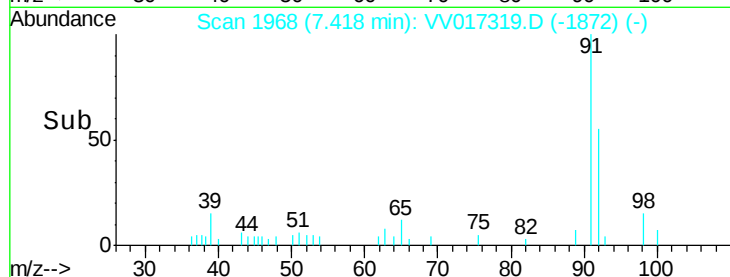
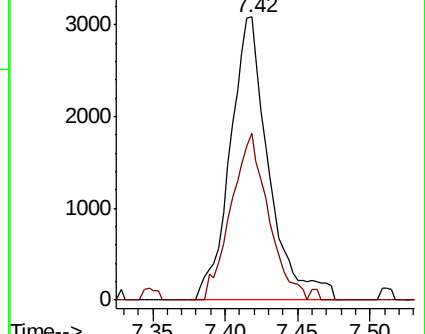
91 100

92 59.0 39.9 74.1



Abundance Ion 91.15 (90.85 to 91.85): VV017314.D (-1950) (-)

Ion 92.15 (91.85 to 92.85): VV017314.D (-1950) (-)



#43

1,3,5-Trimethylbenzene

Concen: 0.061 ug/L

RT: 11.36 min Scan# 3194

Delta R.T. 0.80 min

Lab File: VV017319.D

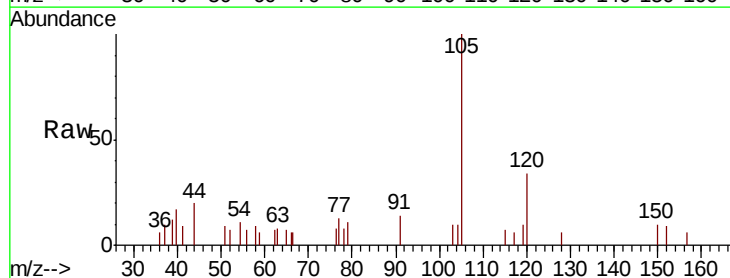
Acq: 02 Jul 2020 20:37

Tgt Ion: 105 Resp: 2707

Ion Ratio Lower Upper

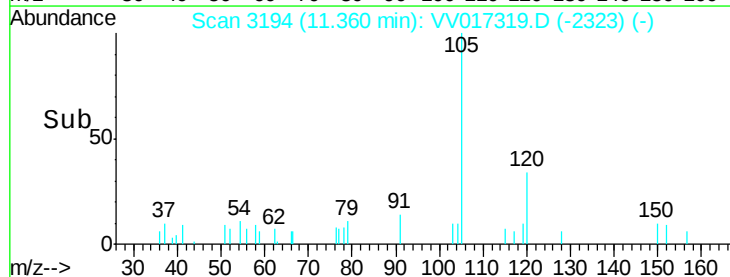
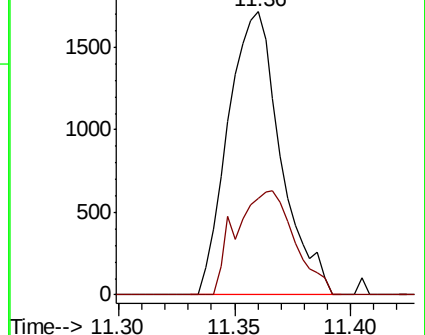
105 100

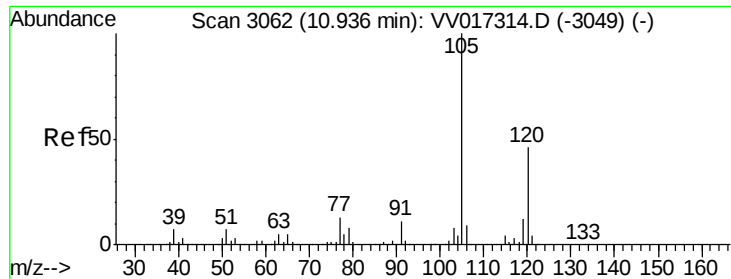
120 41.2 38.6 57.8



Abundance Ion 105.00 (104.70 to 105.70): VV017314.D (-2932) (-)

Ion 120.00 (119.70 to 120.70): VV017314.D (-2932) (-)

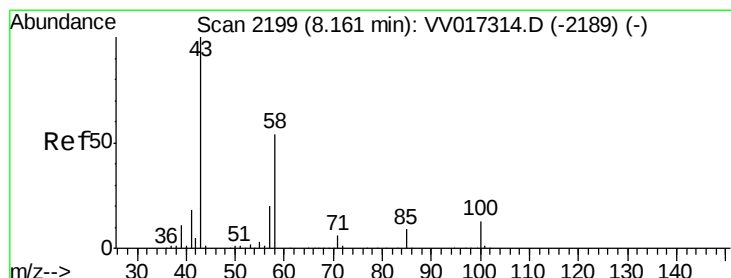
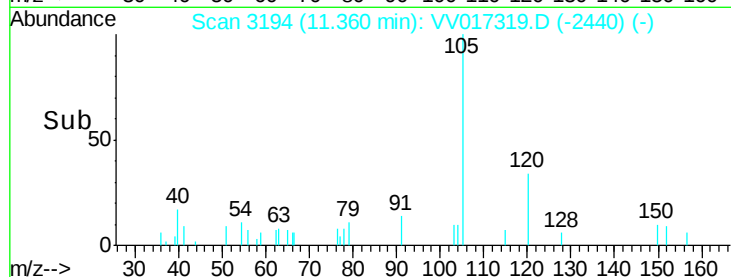
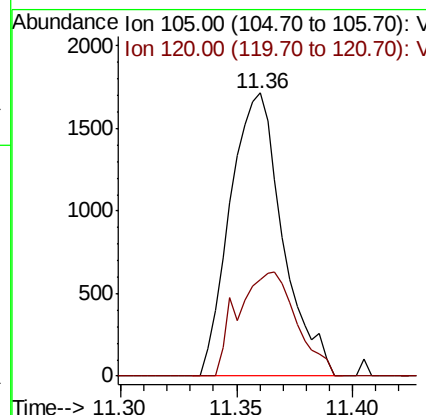
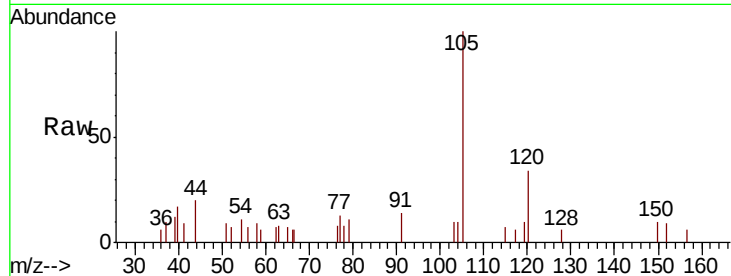




#44  
 1,2,4-Trimethylbenzene  
 Concen: 0.059 ug/L  
 RT: 11.36 min Scan# 3194  
 Delta R.T. 0.42 min  
 Lab File: VV017319.D  
 Acq: 02 Jul 2020 20:37

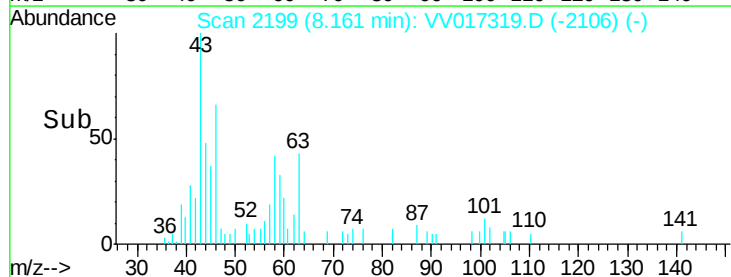
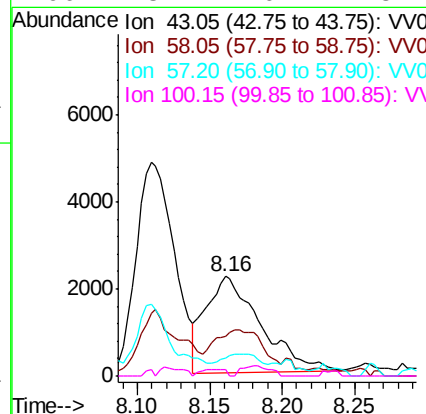
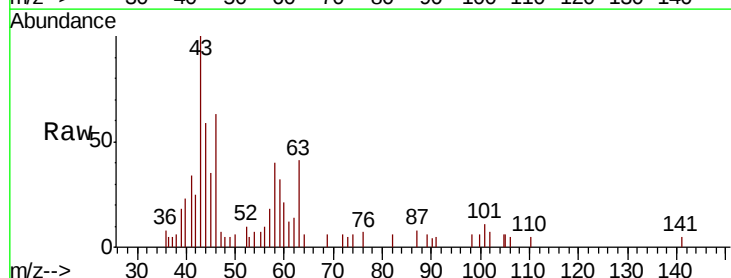
Instrument :  
 MSVOA\_V  
 ClientSampleID :  
 H4307DL

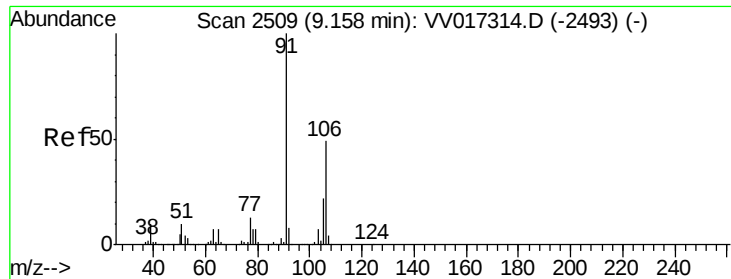
Tot Ion:105 Resp: 2707  
 Ion Ratio Lower Upper  
 105 100  
 120 41.2 35.8 53.8



#50  
 2-Hexanone  
 Concen: 1.343 ug/L  
 RT: 8.16 min Scan# 2199  
 Delta R.T. -0.00 min  
 Lab File: VV017319.D  
 Acq: 02 Jul 2020 20:37

Tgt Ion: 43 Resp: 5877  
 Ion Ratio Lower Upper  
 43 100  
 58 43.5 41.6 62.4  
 57 0.0 15.4 23.0#  
 100 3.1 10.1 15.1#





#55  
 m,p-xylene  
 Concen: 0.072 ug/L  
 RT: 9.16 min Scan# 2510  
 Delta R.T. 0.00 min  
 Lab File: VV017319.D  
 Acq: 02 Jul 2020 20:37

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 H4307DL

Tot Ion:106 Resp: 1507  
 Ion Ratio Lower Upper  
 106 100  
 91 160.1 142.7 264.9

