

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV101618\  
 Data File : VV008317.D  
 Acq On : 17 Oct 2018 01:18  
 Operator : SY/MD  
 Sample : J5463-04  
 Misc : 25.0 mL/MSVOA V/WATER  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0JB5

Quant Time: Oct 17 06:43:37 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR101518WMA.M  
 Quant Title : TRACE VOA SOM01.0  
 QLast Update : Wed Oct 17 05:02:19 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.67  | 114  | 77894    | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 71535    | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 29494    | 5.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |          |
|--------------------------------|--------|-------|----------|----------|------|----------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 43592    | 9.90     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 198.00%# |
| 7) Chloroethane-d5             | 1.58   | 69    | 16941    | 4.88     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 97.60%   |
| 11) 1,1-Dichloroethene-d2      | 2.14   | 63    | 57530    | 6.81     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 136.20%# |
| 20) 2-Butanone-d5              | 3.97   | 46    | 66293    | 44.90    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 89.80%   |
| 24) Chloroform-d               | 4.41   | 84    | 40678    | 4.13     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 82.60%   |
| 26) 1,2-Dichloroethane-d4      | 5.09   | 65    | 21818    | 4.37     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 87.40%   |
| 32) Benzene-d6                 | 5.10   | 84    | 89705    | 4.27     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 85.40%   |
| 36) 1,2-Dichloropropane-d6     | 6.13   | 67    | 29700    | 4.30     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 86.00%   |
| 41) Toluene-d8                 | 7.36   | 98    | 79348    | 4.17     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 83.40%   |
| 43) trans-1,3-Dichloropropene- | 7.67   | 79    | 11083    | 3.87     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 77.40%   |
| 46) 2-Hexanone-d5              | 8.14   | 63    | 48182    | 47.91    | ug/L | 0.00     |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 95.82%   |
| 57) 1,1,2,2-Tetrachloroethane- | 10.27  | 84    | 19987    | 4.35     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 87.00%   |
| 64) 1,2-Dichlorobenzene-d4     | 11.68  | 152   | 24788    | 4.43     | ug/L | 0.00     |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 88.60%   |

## Target Compounds

| Target Compounds             | R.T.  | QIon | Response | Conc     | Units  | Ovalue |
|------------------------------|-------|------|----------|----------|--------|--------|
| 5) Vinyl chloride            | 1.33  | 62   | 3282024  | 566.283  | ug/L   | 99     |
| 12) 1,1-Dichloroethene       | 2.15  | 96   | 44498    | 11.892   | ug/L # | 79     |
| 17) Methyl tert-butyl Ether  | 2.81  | 73   | 16411    | 1.544    | ug/L   | 99     |
| 18) trans-1,2-Dichloroethene | 2.79  | 96   | 26719    | 6.637    | ug/L   | 96     |
| 19) 1,1-Dichloroethane       | 3.23  | 63   | 36473    | 4.385    | ug/L   | 96     |
| 22) cis-1,2-Dichloroethene   | 3.97  | 96   | 11298732 | 1738.252 | ug/L # | 95     |
| 33) Benzene                  | 5.16  | 78   | 3109     | 0.129    | ug/L   | 100    |
| 34) Trichloroethene          | 5.97  | 95   | 6503065  | 973.472  | ug/L   | 97     |
| 42) Toluene                  | 7.43  | 91   | 94697    | 3.769    | ug/L   | 100    |
| 45) 1,1,2-Trichloroethane    | 7.89  | 97   | 1461     | 0.362    | ug/L # | 82     |
| 51) Chlorobenzene            | 8.93  | 112  | 2479     | 0.166    | ug/L   | 94     |
| 52) Ethylbenzene             | 9.06  | 91   | 41583    | 1.505    | ug/L   | 97     |
| 53) m,p-xylene               | 9.19  | 106  | 20638    | 2.065    | ug/L   | 87     |
| 54) o-xylene                 | 9.59  | 106  | 15259    | 1.533    | ug/L   | 99     |
| 56) Isopropylbenzene         | 9.98  | 105  | 4777     | 0.182    | ug/L   | 97     |
| 62) 1,3-Dichlorobenzene      | 11.23 | 146  | 1351     | 0.135    | ug/L # | 86     |
| 63) 1,4-Dichlorobenzene      | 11.32 | 146  | 11070    | 1.120    | ug/L   | 97     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV101618\  
Data File : VV008317.D  
Acq On : 17 Oct 2018 01:18  
Operator : SY/MD  
Sample : J5463-04  
Misc : 25.0 mL/MSVOA V/WATER  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JB5

Quant Time: Oct 17 06:43:37 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR101518WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Oct 17 05:02:19 2018  
Response via : Initial Calibration

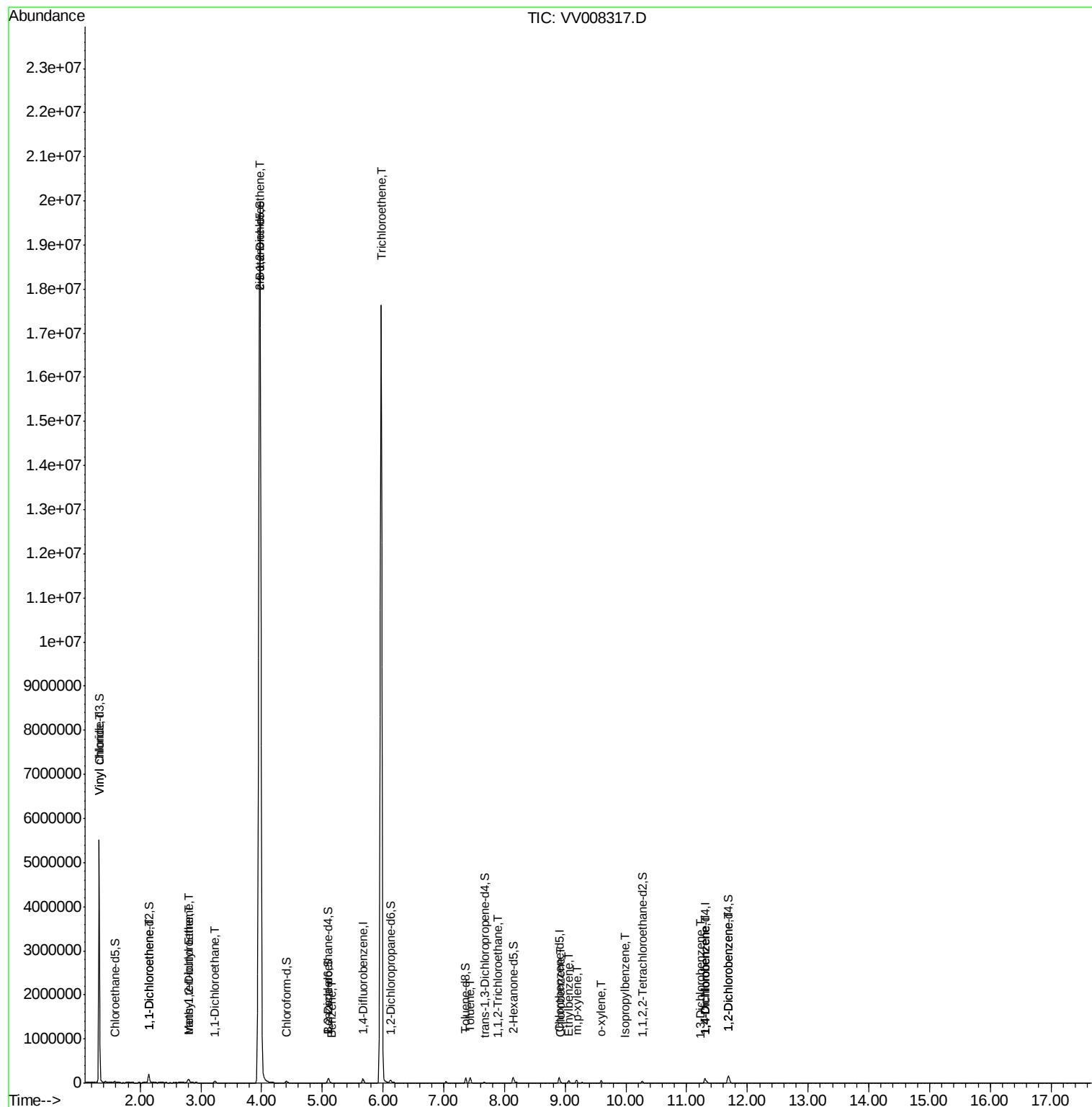
| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 65) 1,2-Dichlorobenzene | 11.69 | 146  | 55215    | 5.769 | ug/L  | 97       |

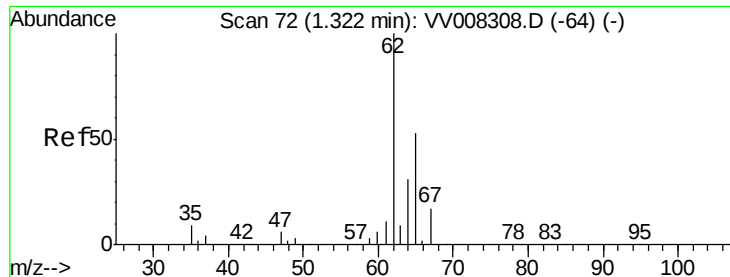
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA V\DATA\VV101618\  
Data File : VV008317.D  
Acq On : 17 Oct 2018 01:18  
Operator : SY/MD  
Sample : J5463-04  
Misc : 25.0 mL/MSVOA V/WATER  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JB5

Quant Time: Oct 17 06:43:37 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_V\METHOD\SOMVTR101518WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Wed Oct 17 05:02:19 2018  
Response via : Initial Calibration





#5

Vinyl chloride

Concen: 566.283 ug/L

RT: 1.33 min Scan# 73

Delta R.T. 0.00 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

Instrument :

MSVOA\_V

ClientSampleId :

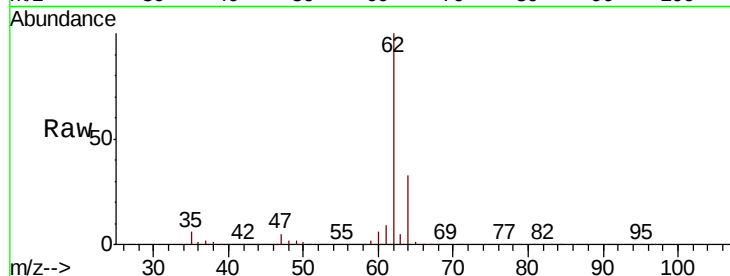
C0JB5

Tot Ion: 62 Resp: 3282024

Ion Ratio Lower Upper

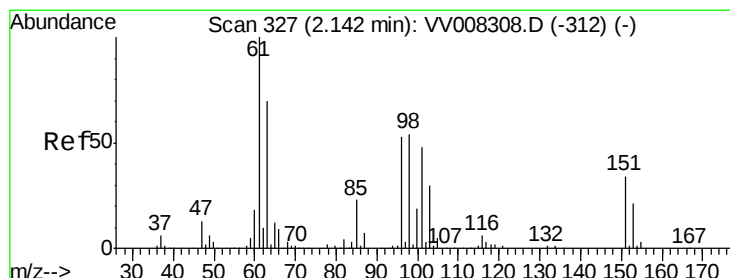
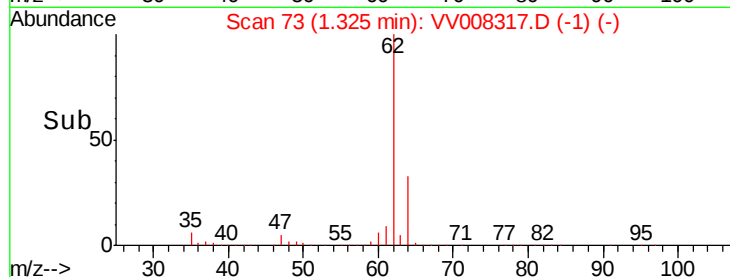
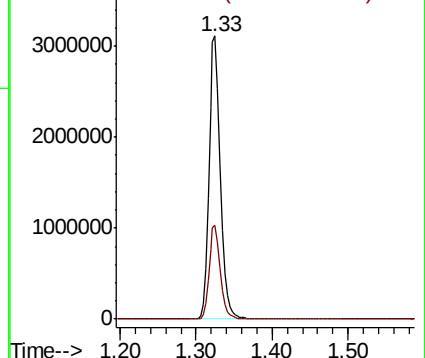
62 100

64 33.3 22.9 42.5



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 64.10 (63.80 to 64.80): VV0



#12

1,1-Dichloroethene

Concen: 11.892 ug/L

RT: 2.15 min Scan# 328

Delta R.T. 0.00 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

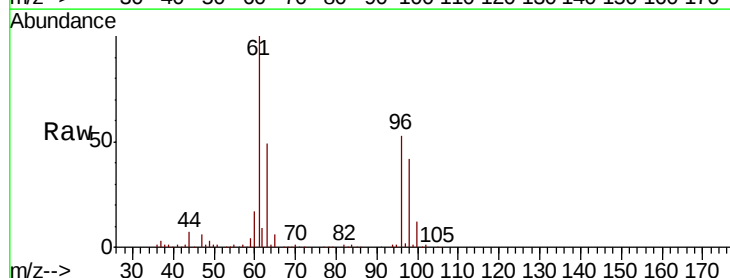
Tgt Ion: 96 Resp: 44498

Ion Ratio Lower Upper

96 100

61 189.5 129.9 241.3

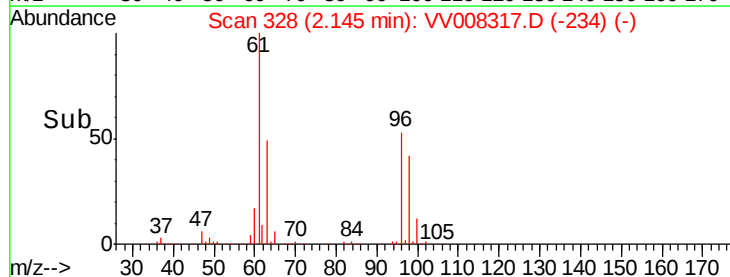
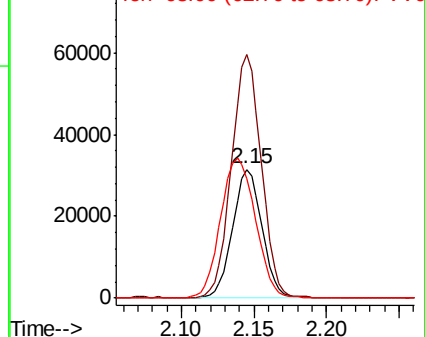
63 92.6 103.0 191.4#

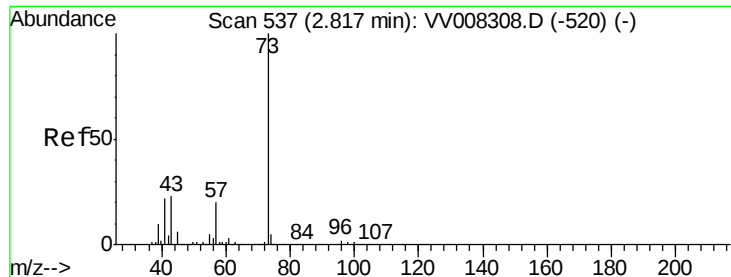


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 63.00 (62.70 to 63.70): VV0



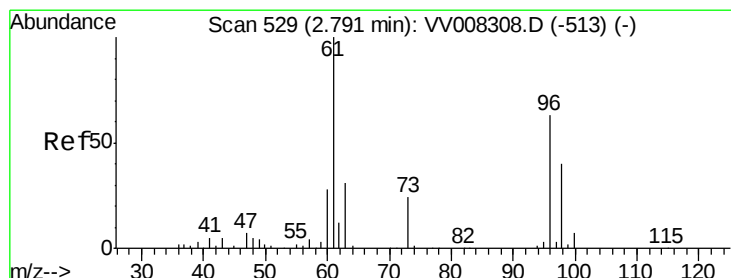
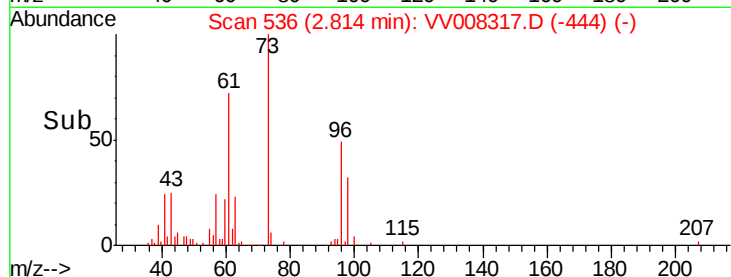
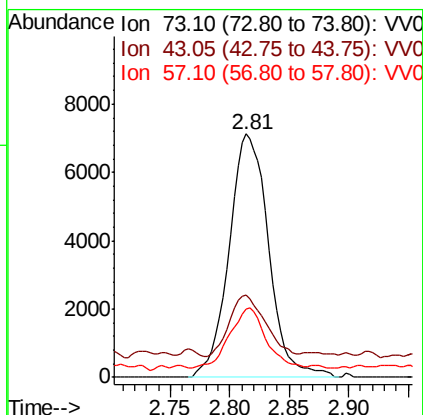
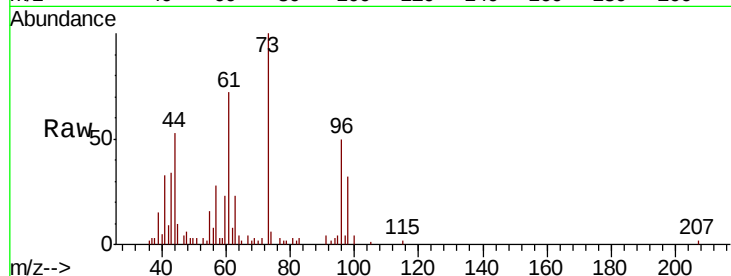


#17

Methvl tert-butvl Ether  
 Concen: 1.544 ug/L  
 RT: 2.81 min Scan# 536  
 Delta R.T. -0.00 min  
 Lab File: VV008317.D  
 Acq: 17 Oct 2018 01:18

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0JB5

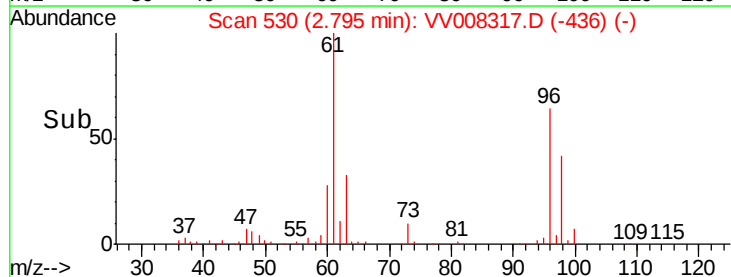
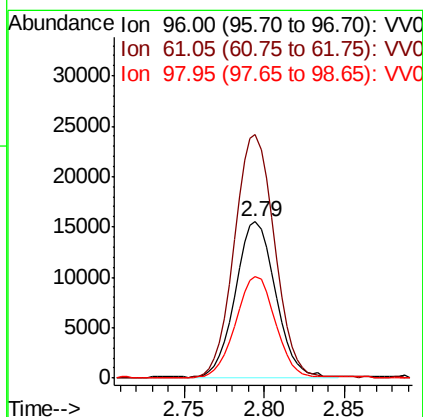
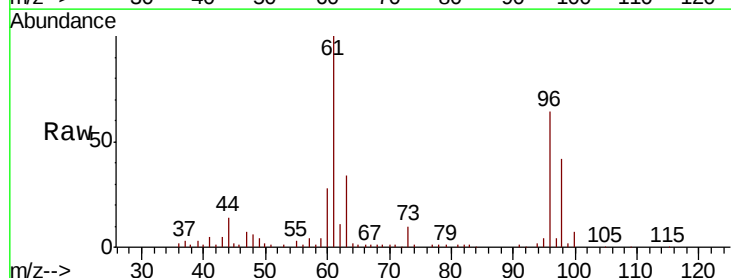
Tot Ion: 73 Resp: 16411  
 Ion Ratio Lower Upper  
 73 100  
 43 22.9 19.0 28.6  
 57 22.8 18.2 27.2

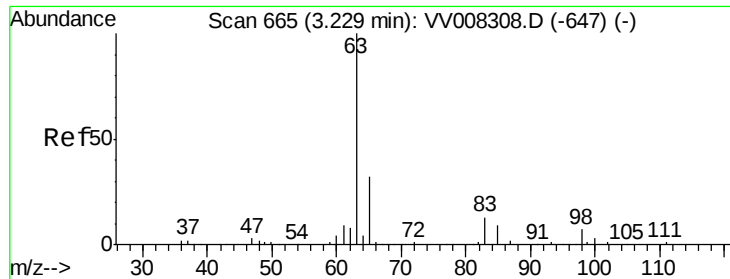


#18

trans-1,2-Dichloroethene  
 Concen: 6.637 ug/L  
 RT: 2.79 min Scan# 530  
 Delta R.T. 0.00 min  
 Lab File: VV008317.D  
 Acq: 17 Oct 2018 01:18

Tgt Ion: 96 Resp: 26719  
 Ion Ratio Lower Upper  
 96 100  
 61 155.7 104.6 194.2  
 98 65.2 44.1 81.9





#19

1,1-Dichloroethane

Concen: 4.385 ug/L

RT: 3.23 min Scan# 665

Delta R.T. 0.00 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

Instrument :

MSVOA\_V

ClientSampleId :

C0JB5

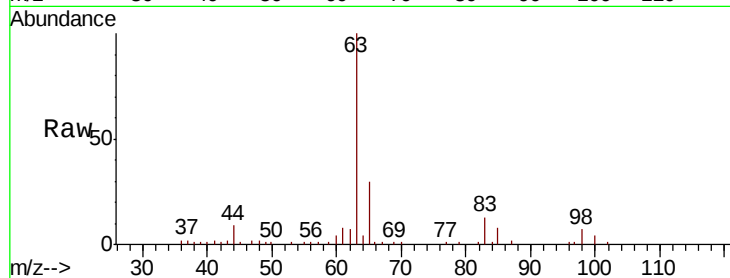
Tot Ion: 63 Resp: 36473

Ion Ratio Lower Upper

63 100

65 30.4 22.6 42.0

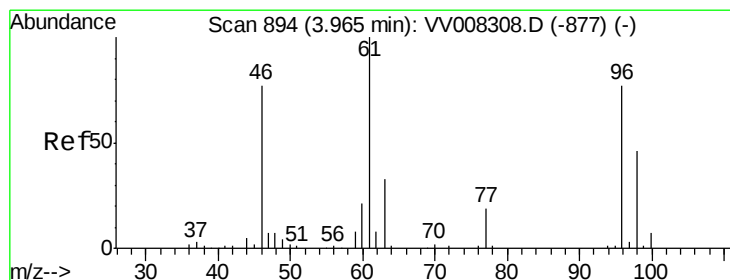
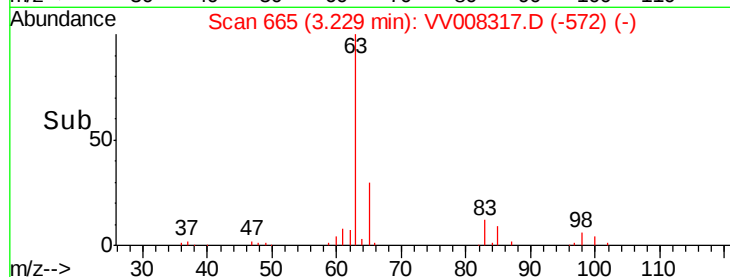
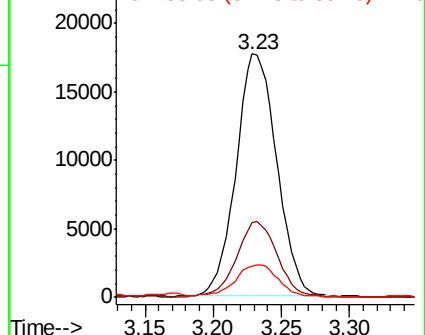
83 12.9 11.0 20.4



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: 1738.252 ug/L

RT: 3.97 min Scan# 896

Delta R.T. 0.01 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

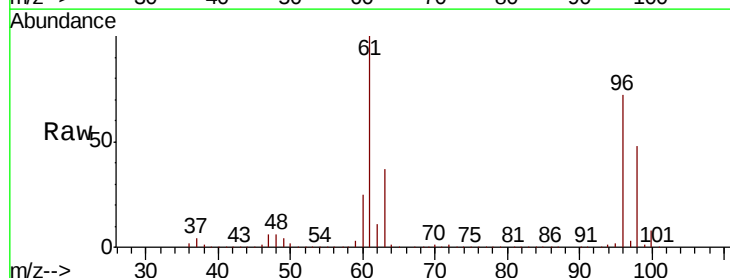
Tgt Ion: 96 Resp: 11298732

Ion Ratio Lower Upper

96 100

61 139.4 93.7 174.1

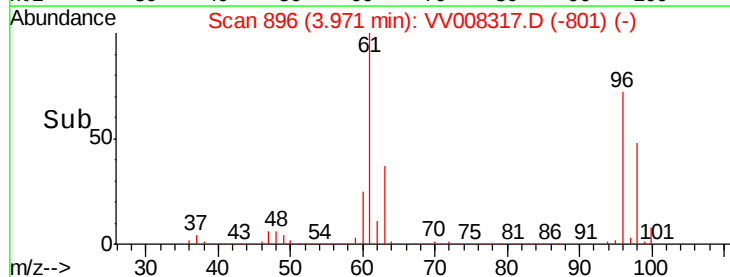
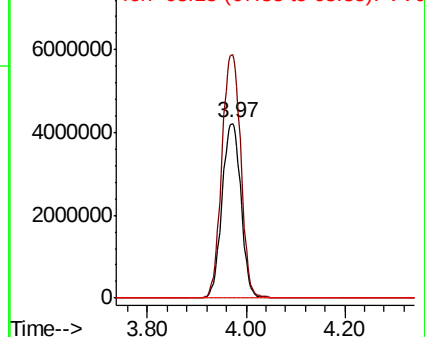
68 0.0 0.6 1.2#

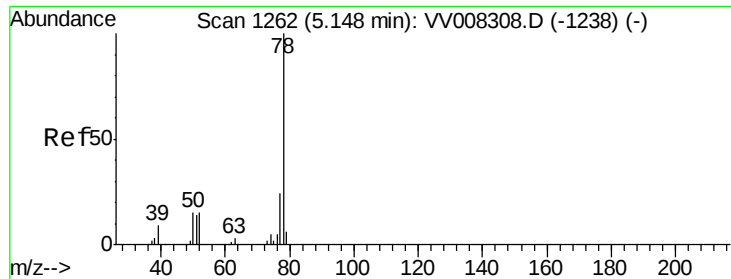


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.05 (60.75 to 61.75): VV0

Ion 68.15 (67.85 to 68.85): VV0





#33

Benzene

Concen: 0.129 ug/L

RT: 5.16 min Scan# 1265

Delta R.T. 0.01 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

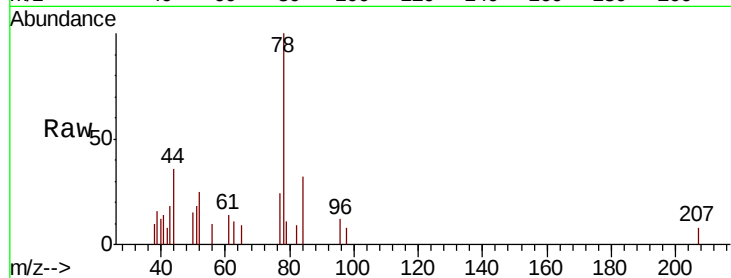
Instrument :

MSVOA\_V

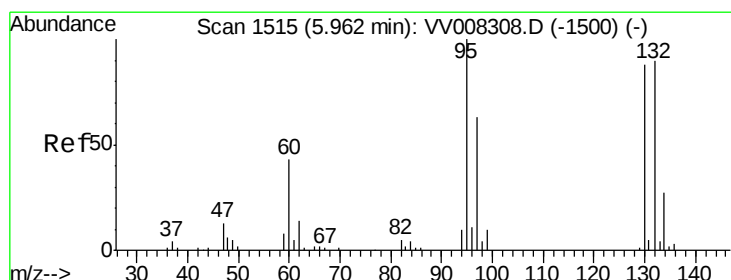
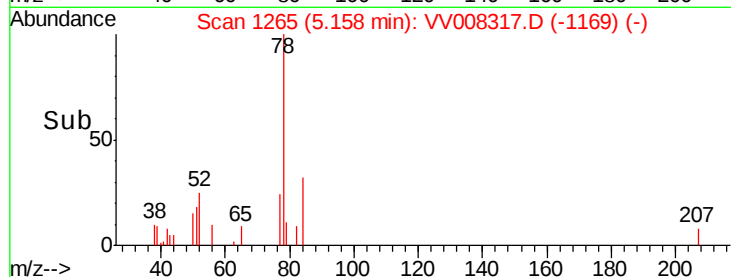
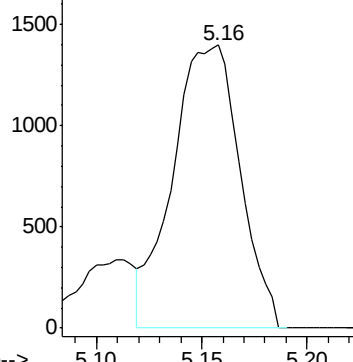
ClientSampleId :

C0JB5

Tgt Ion: 78 Resp: 3109



Abundance Ion 78.10 (77.80 to 78.80): VV0



#34

Trichloroethene

Concen: 973.472 ug/L

RT: 5.97 min Scan# 1518

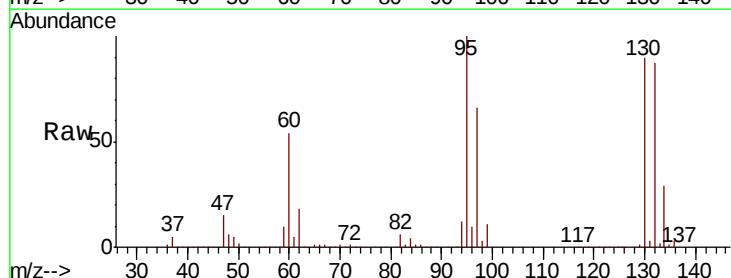
Delta R.T. 0.01 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

Tgt Ion: 95 Resp: 6503065

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 66.4  | 44.4  | 82.4  |
| 132 | 86.8  | 60.4  | 112.2 |
| 130 | 90.1  | 65.5  | 121.7 |

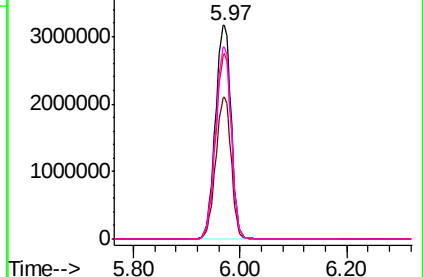
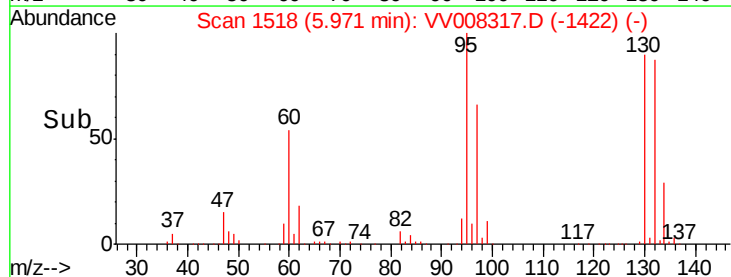


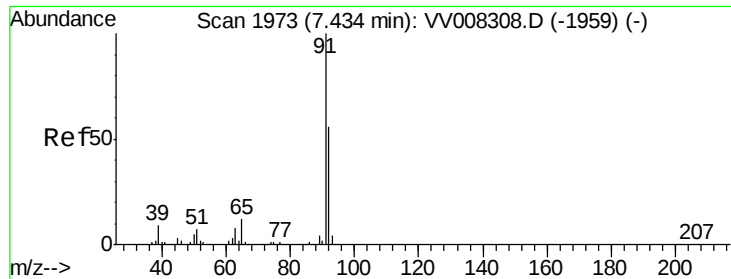
Abundance Ion 95.00 (94.70 to 95.70): VV0

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





#42

Toluene

Concen: 3.769 ug/L

RT: 7.43 min Scan# 1973

Delta R.T. 0.00 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

Instrument :

MSVOA\_V

ClientSampleId :

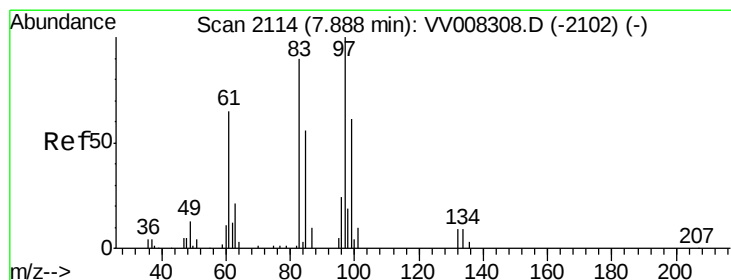
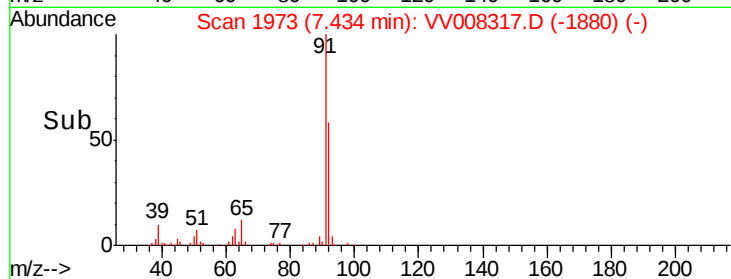
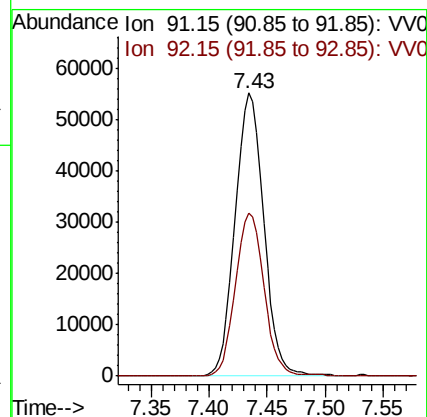
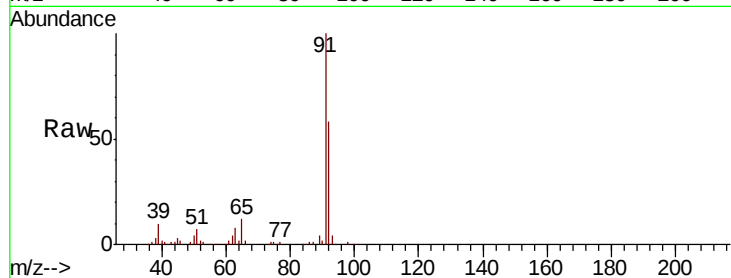
C0JB5

Tot Ion: 91 Resp: 94697

Ion Ratio Lower Upper

91 100

92 57.6 40.1 74.5



#45

1,1,2-Trichloroethane

Concen: 0.362 ug/L

RT: 7.89 min Scan# 2114

Delta R.T. 0.00 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

Tgt Ion: 97 Resp: 1461

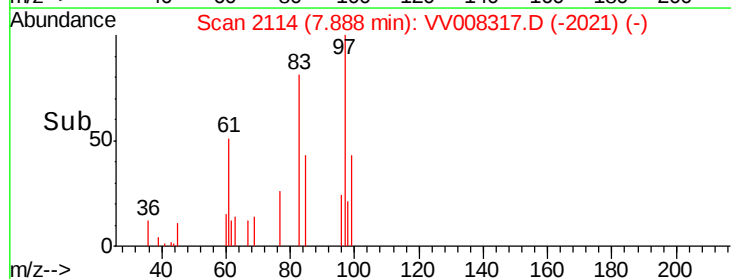
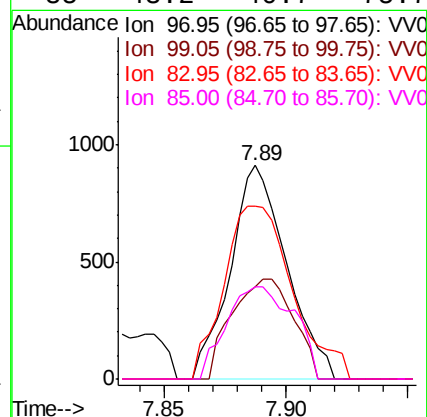
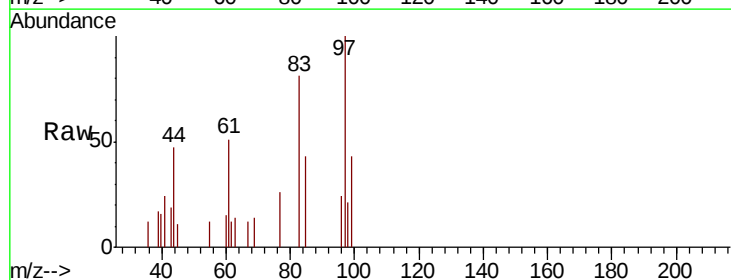
Ion Ratio Lower Upper

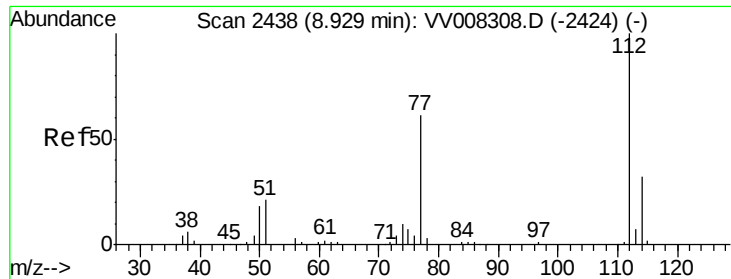
97 100

99 43.0 44.1 81.9#

83 80.9 63.7 118.3

85 43.2 40.7 75.7

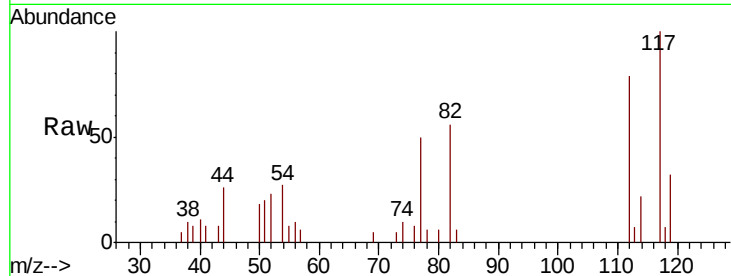




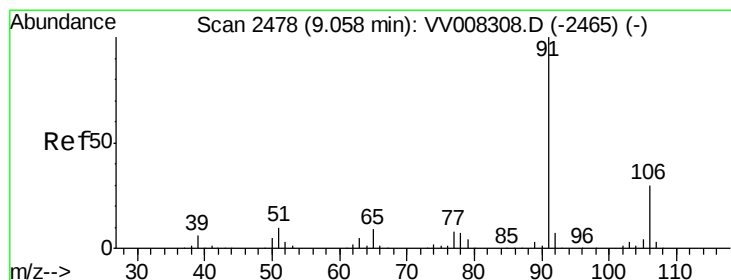
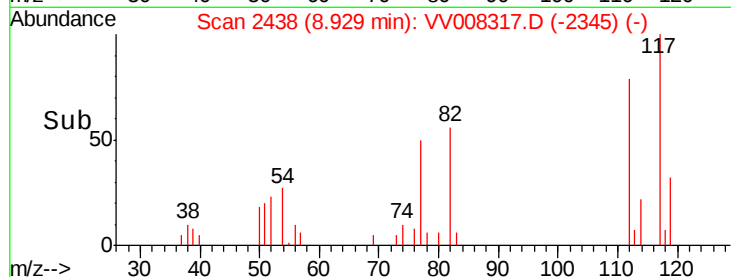
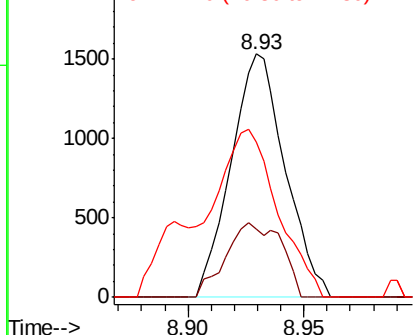
#51  
Chlorobenzene  
Concen: 0.166 ug/L  
RT: 8.93 min Scan# 2438  
Delta R.T. 0.00 min  
Lab File: VV008317.D  
Acq: 17 Oct 2018 01:18

Instrument :  
MSVOA\_V  
ClientSampleId :  
C0JB5

Tot Ion:112 Resp: 2479  
Ion Ratio Lower Upper  
112 100  
114 25.7 21.6 40.0  
77 58.4 49.7 74.5

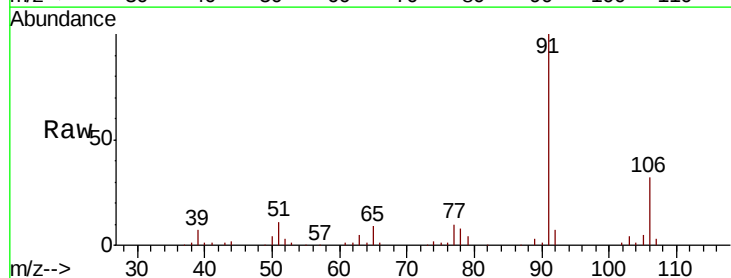


Abundance Ion 112.10 (111.80 to 112.80): V  
Ion 114.05 (113.75 to 114.75): V  
Ion 77.10 (76.80 to 77.80): V

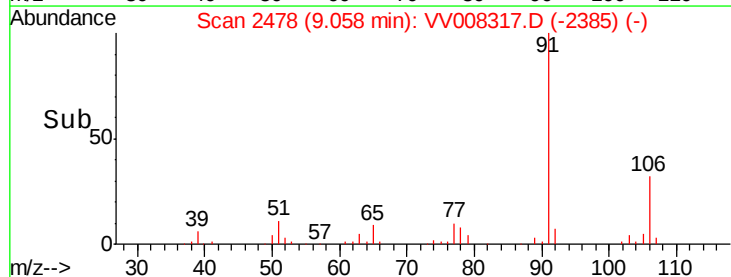
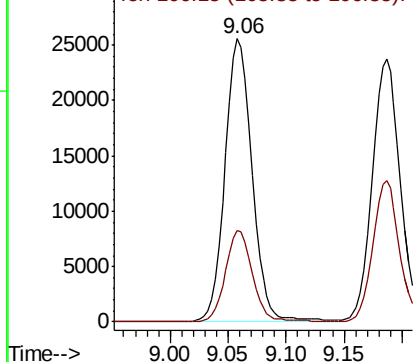


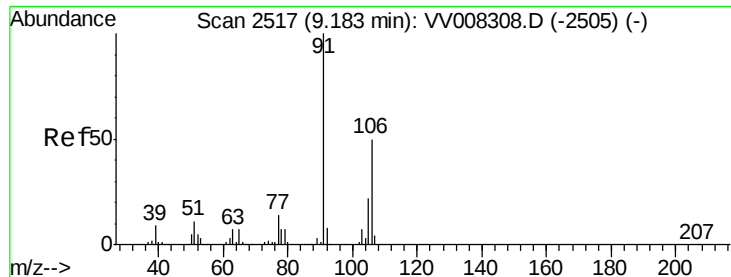
#52  
Ethylbenzene  
Concen: 1.505 ug/L  
RT: 9.06 min Scan# 2478  
Delta R.T. 0.00 min  
Lab File: VV008317.D  
Acq: 17 Oct 2018 01:18

Tgt Ion: 91 Resp: 41583  
Ion Ratio Lower Upper  
91 100  
106 32.5 21.6 40.2



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





#53

m,p-xylene

Concen: 2.065 ug/L

RT: 9.19 min Scan# 2518

Delta R.T. 0.00 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

Instrument :

MSVOA\_V

ClientSampled :

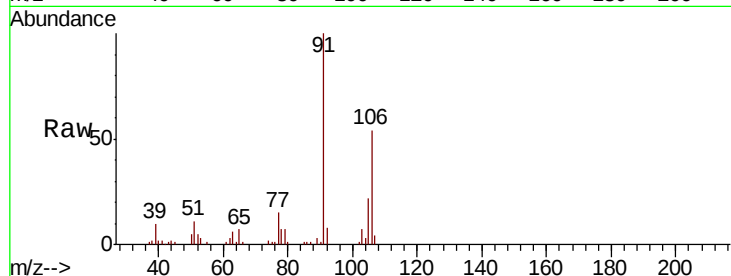
C0JB5

Tot Ion:106 Resp: 20638

Ion Ratio Lower Upper

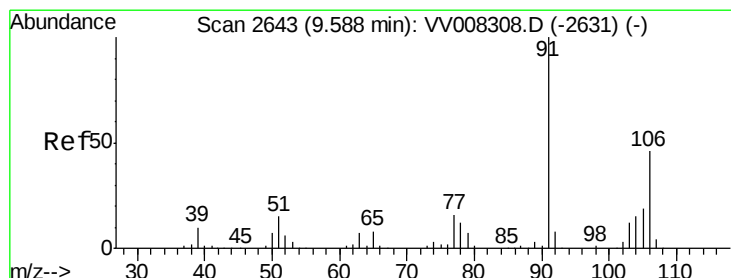
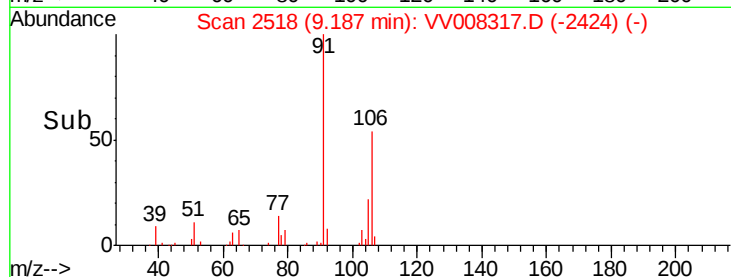
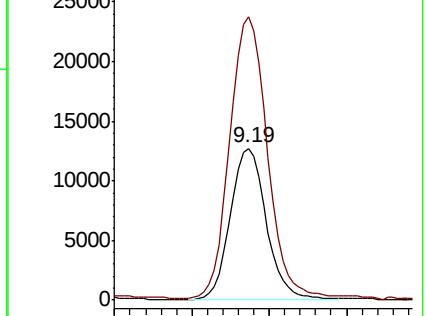
106 100

91 186.5 145.2 269.6



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0



#54

o-xylene

Concen: 1.533 ug/L

RT: 9.59 min Scan# 2644

Delta R.T. 0.00 min

Lab File: VV008317.D

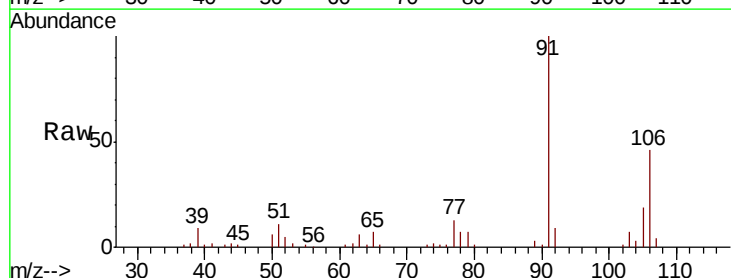
Acq: 17 Oct 2018 01:18

Tgt Ion:106 Resp: 15259

Ion Ratio Lower Upper

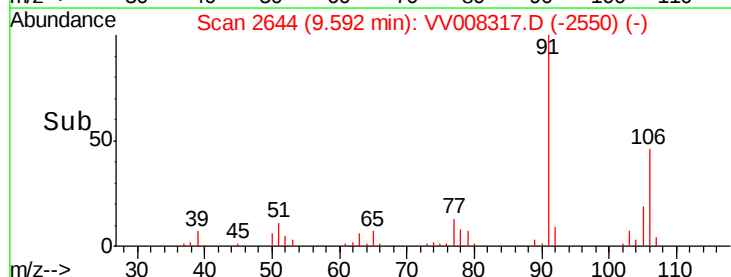
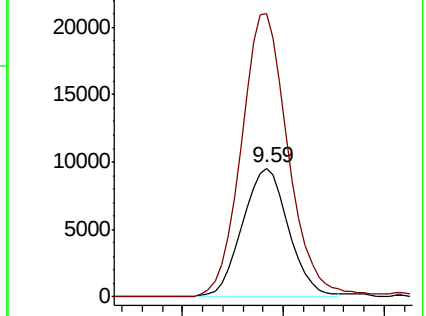
106 100

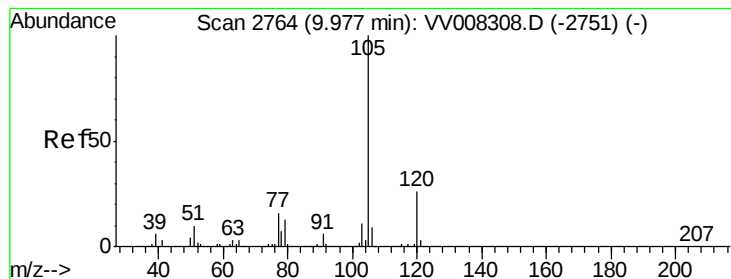
91 219.6 153.2 284.4



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VV0





#56

Isopropylbenzene

Concen: 0.182 ug/L

RT: 9.98 min Scan# 2764

Delta R.T. 0.00 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

Instrument :

MSVOA\_V

ClientSampleId :

C0JB5

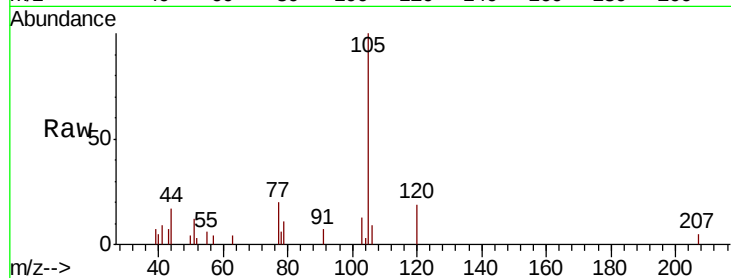
Tot Ion:105 Resp: 4777

Ion Ratio Lower Upper

105 100

120 24.8 21.2 31.8

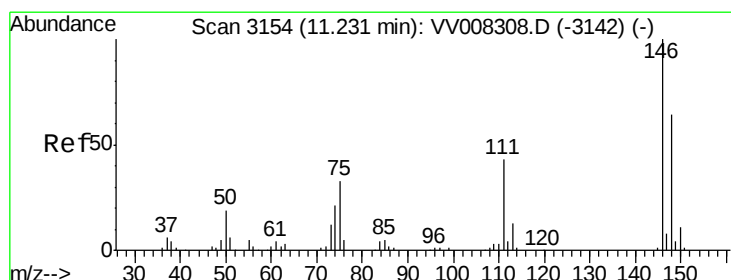
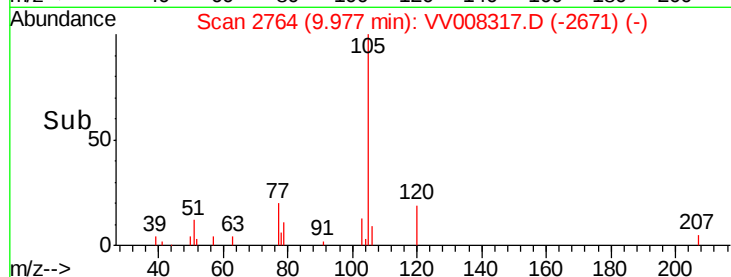
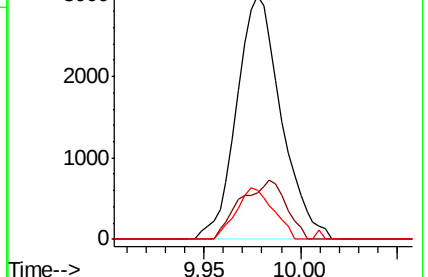
77 17.5 13.0 19.6



Abundance Ion 105.05 (104.75 to 105.75): V

Ion 120.10 (119.80 to 120.80): V

Ion 77.10 (76.80 to 77.80): V



#62

1,3-Dichlorobenzene

Concen: 0.135 ug/L

RT: 11.23 min Scan# 3154

Delta R.T. 0.00 min

Lab File: VV008317.D

Acq: 17 Oct 2018 01:18

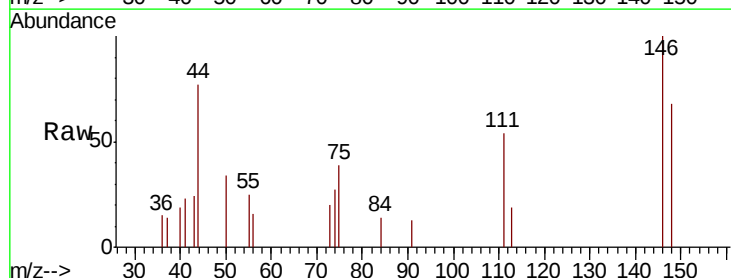
Tgt Ion:146 Resp: 1351

Ion Ratio Lower Upper

146 100

111 53.6 28.0 52.0#

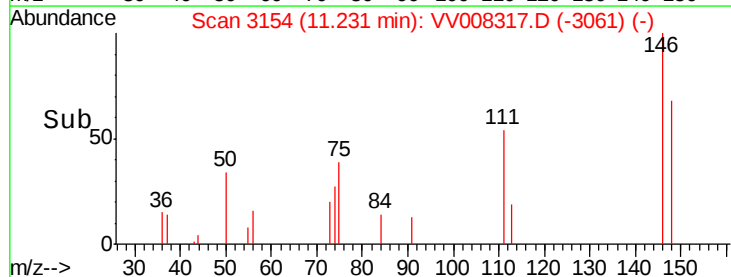
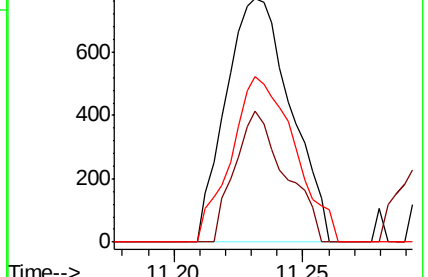
148 68.3 42.9 79.7

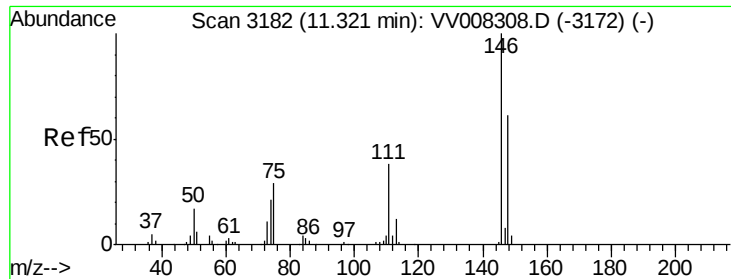


Abundance Ion 145.95 (145.65 to 146.65): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

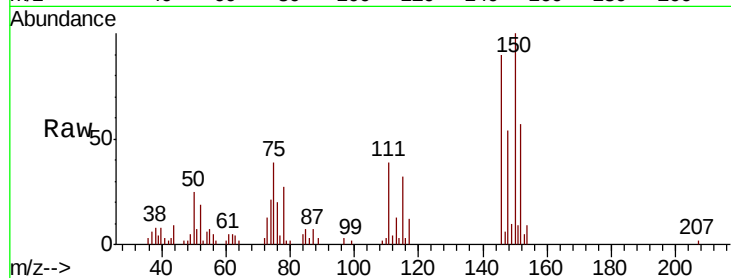




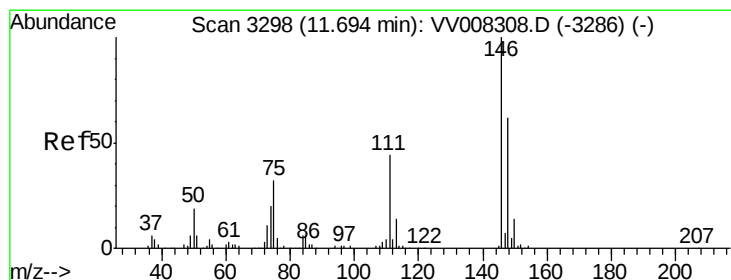
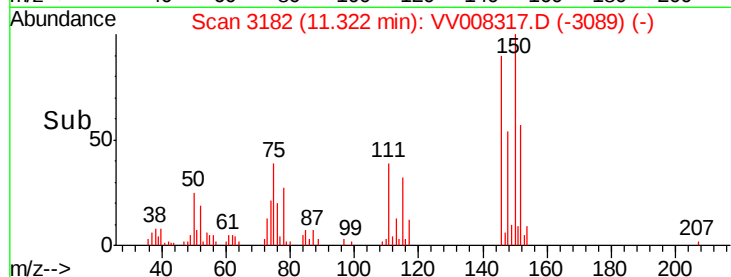
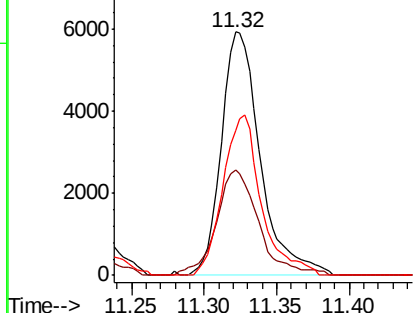
#63  
 1,4-Dichlorobenzene  
 Concen: 1.120 ug/L  
 RT: 11.32 min Scan# 3182  
 Delta R.T. 0.00 min  
 Lab File: VV008317.D  
 Acq: 17 Oct 2018 01:18

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 C0JB5

Tot Ion:146 Resp: 11070  
 Ion Ratio Lower Upper  
 146 100  
 111 43.3 30.0 55.6  
 148 59.7 44.5 82.7

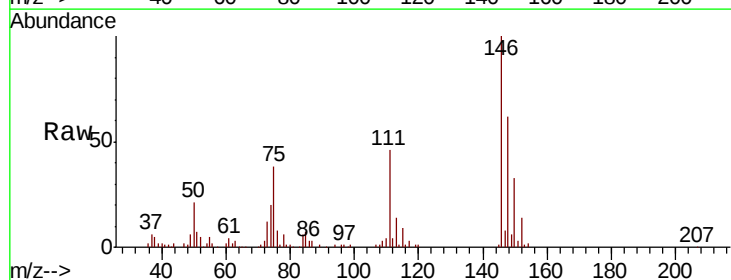


Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V



#65  
 1,2-Dichlorobenzene  
 Concen: 5.769 ug/L  
 RT: 11.69 min Scan# 3298  
 Delta R.T. 0.00 min  
 Lab File: VV008317.D  
 Acq: 17 Oct 2018 01:18

Tgt Ion:146 Resp: 55215  
 Ion Ratio Lower Upper  
 146 100  
 111 46.1 35.5 53.3  
 148 62.2 51.5 77.3



Abundance Ion 145.95 (145.65 to 146.65): V  
 Ion 111.00 (110.70 to 111.70): V  
 Ion 148.00 (147.70 to 148.70): V

