

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU081018\  
 Data File : VU026050.D  
 Acq On : 10 Aug 2018 17:57  
 Operator : MD/SY  
 Sample : J4361-24DL 20X  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 A4ZA7DL

Quant Time: Aug 11 01:36:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM080918WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Sat Aug 11 00:58:27 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.89  | 114  | 296368   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 282329   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.49 | 152  | 130614   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40    | 65    | 89356    | 41.25    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 82.50%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 69303    | 40.35    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 80.70%  |
| 11) 1,1-Dichloroethene-d2      | 2.27    | 63    | 133730   | 32.49    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 64.98%  |
| 21) 2-Butanone-d5              | 4.18    | 46    | 117166   | 64.89    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 64.89%  |
| 24) Chloroform-d               | 4.65    | 84    | 166873   | 36.33    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 72.66%  |
| 26) 1,2-Dichloroethane-d4      | 5.31    | 65    | 109092   | 35.15    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 70.30%  |
| 32) Benzene-d6                 | 5.34    | 84    | 331897   | 37.86    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 75.72%  |
| 36) 1,2-Dichloropropane-d6     | 6.33    | 67    | 104286   | 36.76    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 73.52%  |
| 41) Toluene-d8                 | 7.57    | 98    | 304216   | 36.27    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 72.54%# |
| 43) trans-1,3-Dichloropropene- | 7.85    | 79    | 48578    | 33.99    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 67.98%  |
| 47) 2-Hexanone-d5              | 8.31    | 63    | 82865    | 64.31    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 64.31%  |
| 57) 1,1,2,2-Tetrachloroethane- | 10.44   | 84    | 138937   | 33.49    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 66.98%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.86   | 152   | 118336   | 36.75    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 73.50%# |

## Target Compounds

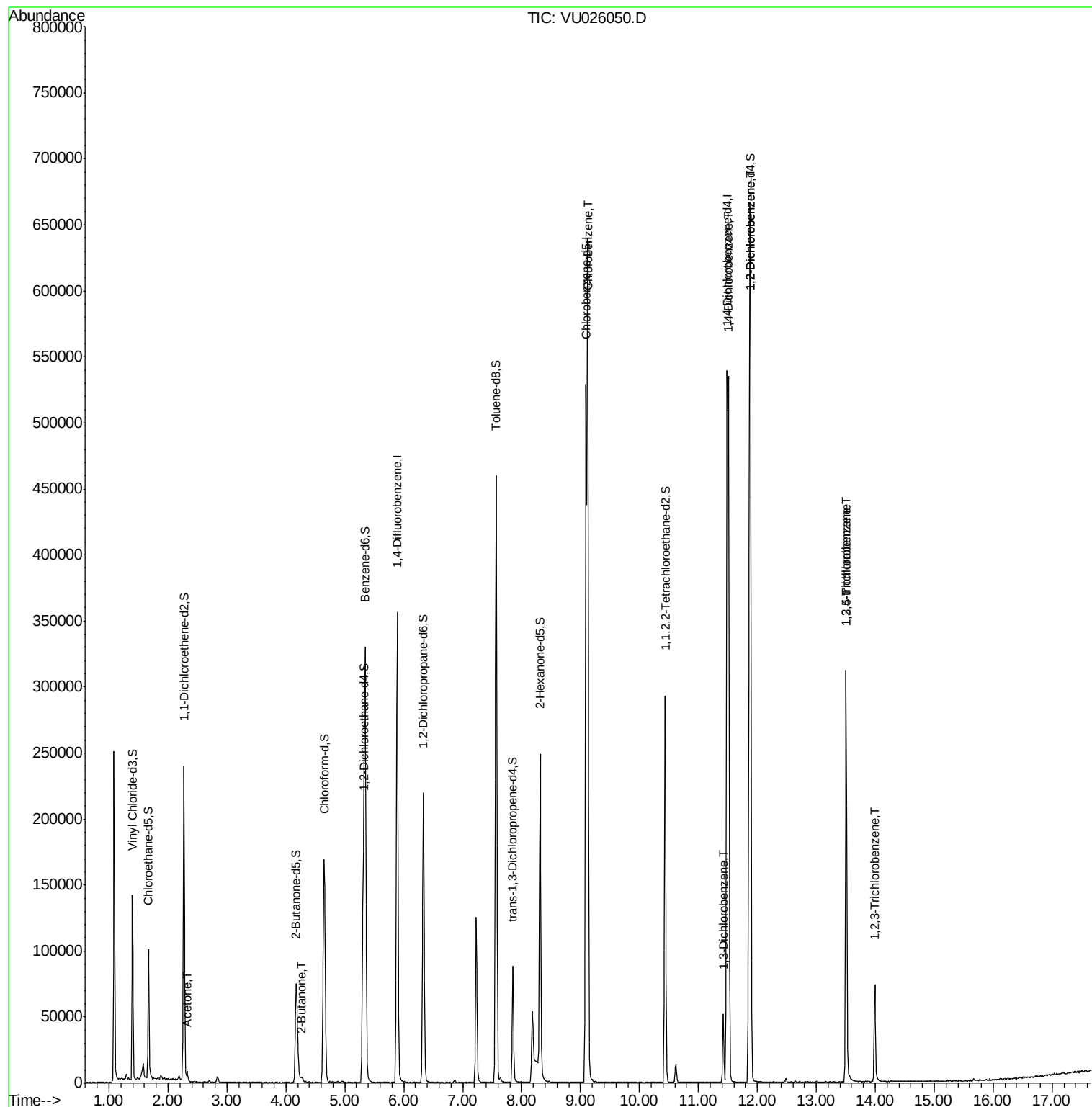
|                            |       |     |        |        | Ovalue   |
|----------------------------|-------|-----|--------|--------|----------|
| 13) Acetone                | 2.32  | 43  | 5341   | 4.762  | ug/L 92  |
| 22) 2-Butanone             | 4.28  | 43  | 3703   | 2.282  | ug/L 94  |
| 51) Chlorobenzene          | 9.12  | 112 | 328665 | 57.109 | ug/L 99  |
| 62) 1,3-Dichlorobenzene    | 11.42 | 146 | 21318  | 5.243  | ug/L 97  |
| 63) 1,4-Dichlorobenzene    | 11.51 | 146 | 192953 | 45.266 | ug/L 97  |
| 65) 1,2-Dichlorobenzene    | 11.88 | 146 | 216609 | 50.046 | ug/L 100 |
| 67) 1,3,5-Trichlorobenzene | 13.51 | 180 | 99265  | 32.663 | ug/L 99  |
| 68) 1,2,4-Trichlorobenzene | 13.51 | 180 | 99265  | 38.625 | ug/L 99  |
| 70) 1,2,3-Trichlorobenzene | 13.99 | 180 | 24705  | 8.944  | ug/L 98  |

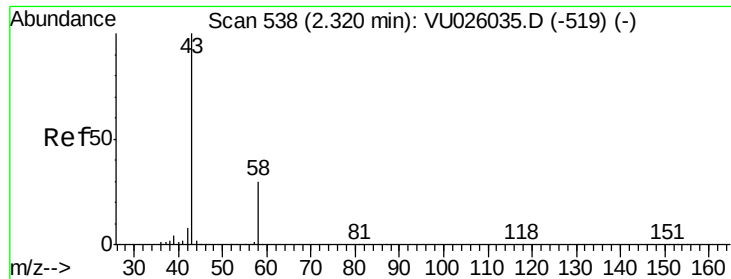
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : VOC Analysis  
QLast Update : Sat Aug 11 00:58:27 2018  
Response via : Initial Calibration





#13

Acetone

Concen: 4.762 ug/L

RT: 2.32 min Scan# 538

Delta R.T. 0.00 min

Lab File: VU026050.D

Acq: 10 Aug 2018 17:57

Instrument :

MSVOA\_U

ClientSampleId :

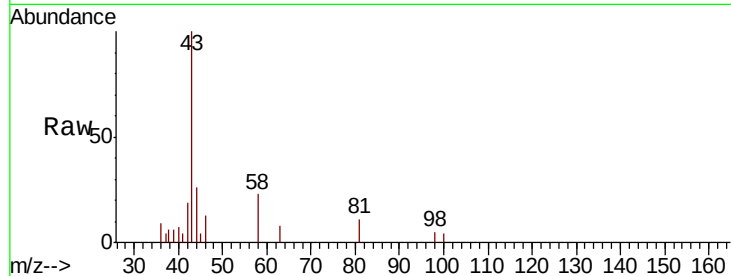
A4ZA7DL

Tot Ion: 43 Resp: 5341

Ion Ratio Lower Upper

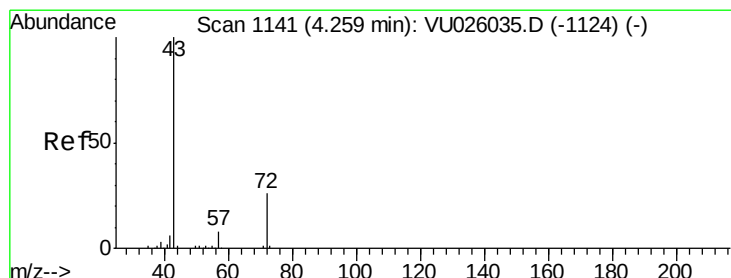
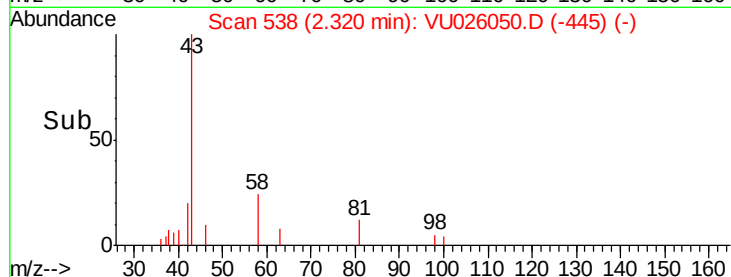
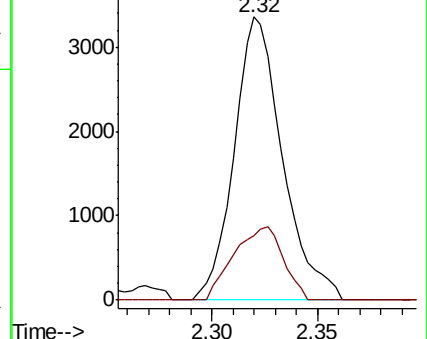
43 100

58 26.5 0.0 61.8



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 58.00 (57.70 to 58.70): VU0



#22

2-Butanone

Concen: 2.282 ug/L

RT: 4.28 min Scan# 1147

Delta R.T. 0.02 min

Lab File: VU026050.D

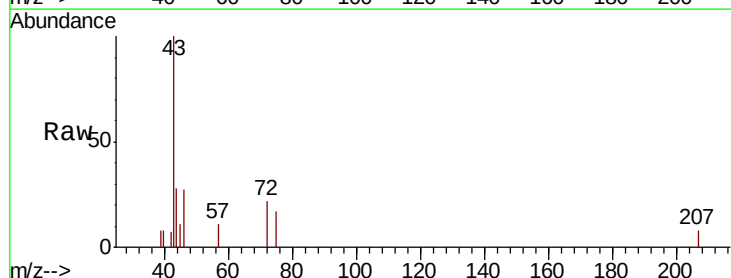
Acq: 10 Aug 2018 17:57

Tgt Ion: 43 Resp: 3703

Ion Ratio Lower Upper

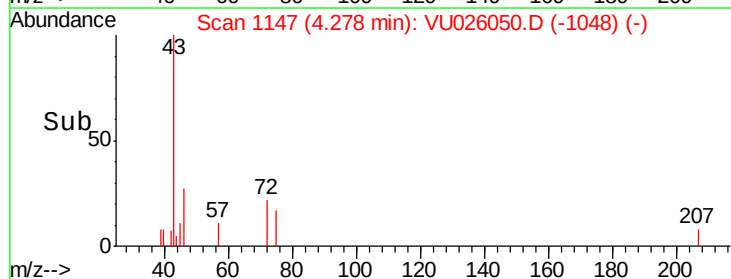
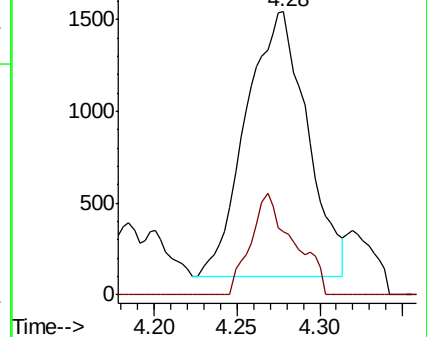
43 100

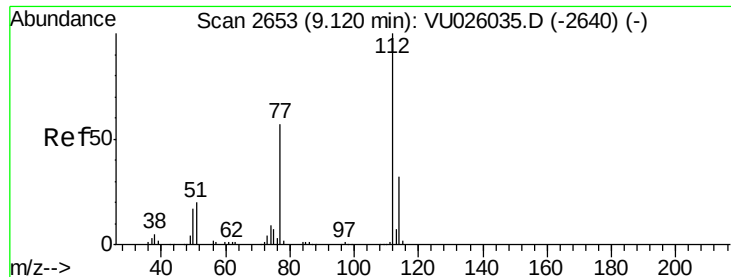
72 23.8 13.5 40.5



Abundance Ion 43.00 (42.70 to 43.70): VU0

Ion 72.00 (71.70 to 72.70): VU0

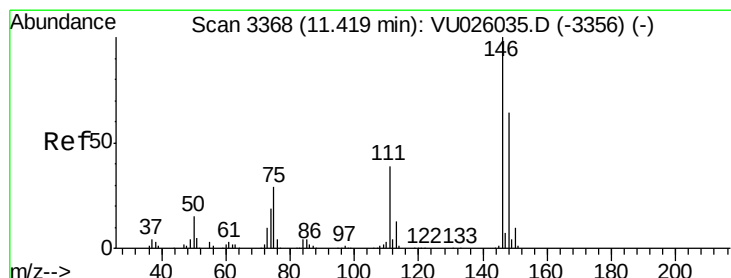
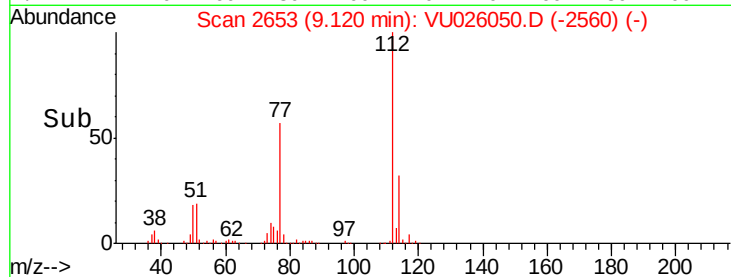
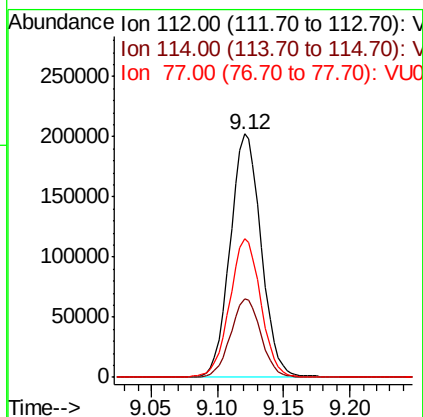
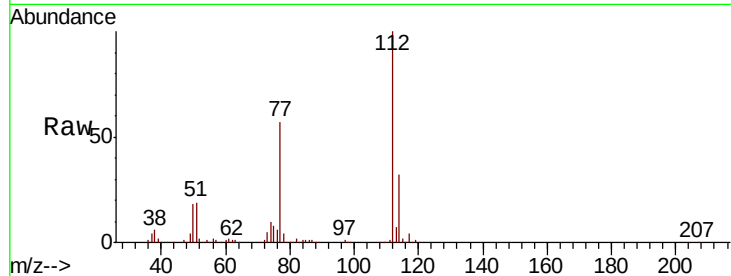




#51  
Chlorobenzene  
Concen: 57.109 ug/L  
RT: 9.12 min Scan# 2653  
Delta R.T. 0.00 min  
Lab File: VU026050.D  
Acq: 10 Aug 2018 17:57

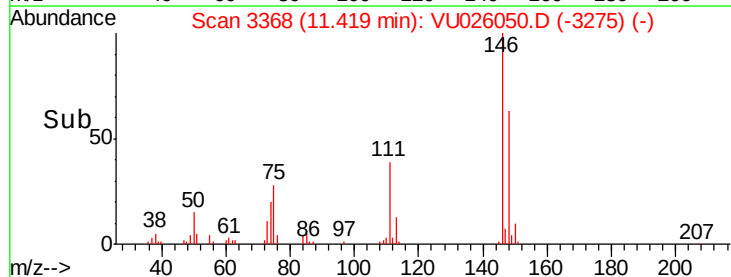
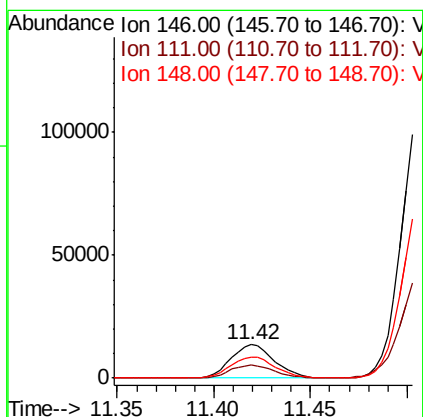
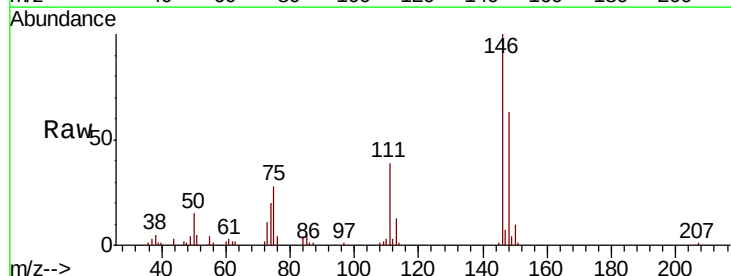
Instrument :  
MSVOA\_U  
ClientSampleId :  
A4ZA7DL

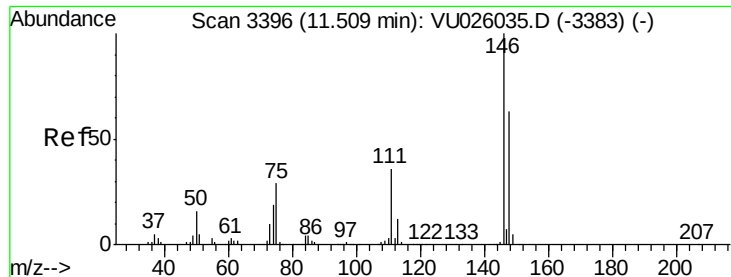
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 114     | 32.3  | 22.7  | 42.3  |
| 77      | 57.0  | 45.2  | 67.8  |



#62  
1,3-Dichlorobenzene  
Concen: 5.243 ug/L  
RT: 11.42 min Scan# 3368  
Delta R.T. 0.00 min  
Lab File: VU026050.D  
Acq: 10 Aug 2018 17:57

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 38.6  | 27.9  | 51.9  |
| 148     | 63.4  | 46.0  | 85.4  |





#63

1,4-Dichlorobenzene

Concen: 45.266 ug/L

RT: 11.51 min Scan# 3396

Delta R.T. 0.00 min

Lab File: VU026050.D

Acq: 10 Aug 2018 17:57

Instrument :

MSVOA\_U

ClientSampleId :

A4ZA7DL

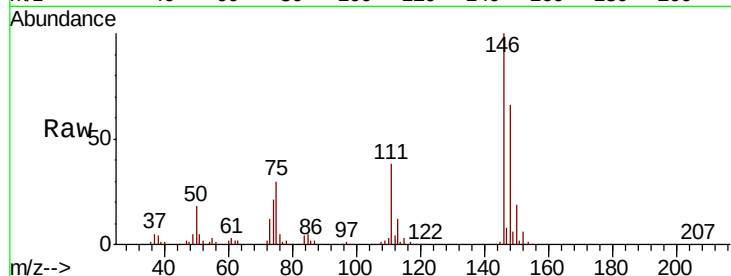
Tot Ion:146 Resp: 192953

Ion Ratio Lower Upper

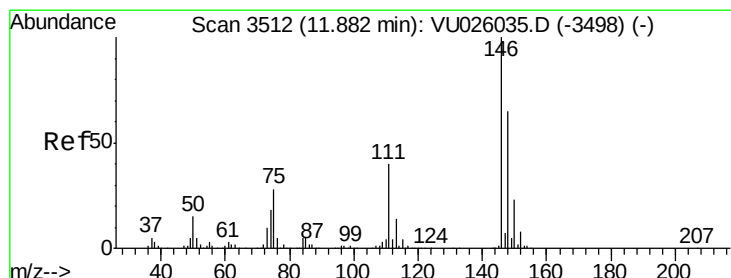
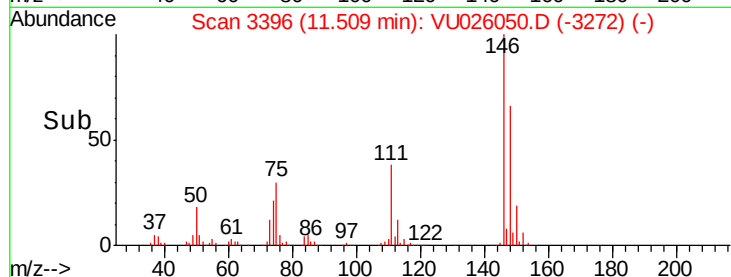
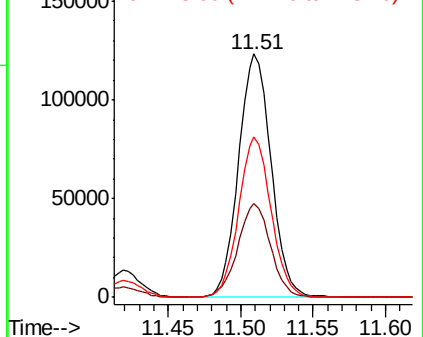
146 100

111 38.4 26.4 49.0

148 65.7 43.8 81.4



Abundance Ion 146.00 (145.70 to 146.70): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V



#65

1,2-Dichlorobenzene

Concen: 50.046 ug/L

RT: 11.88 min Scan# 3512

Delta R.T. 0.00 min

Lab File: VU026050.D

Acq: 10 Aug 2018 17:57

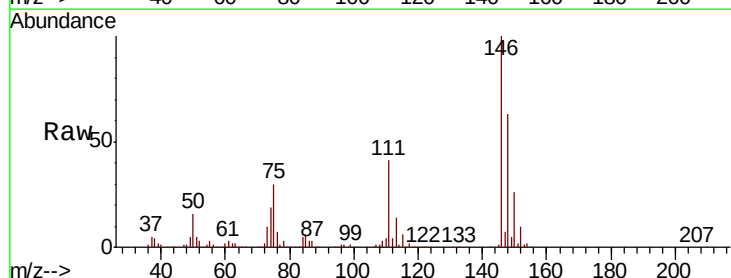
Tgt Ion:146 Resp: 216609

Ion Ratio Lower Upper

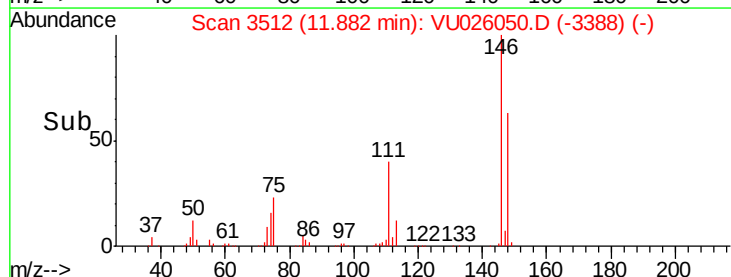
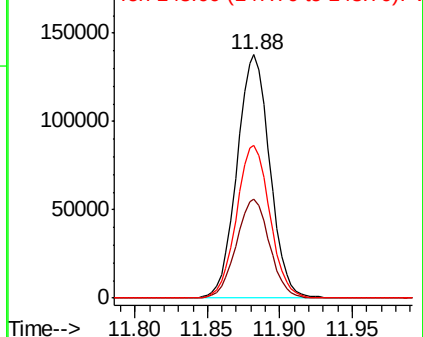
146 100

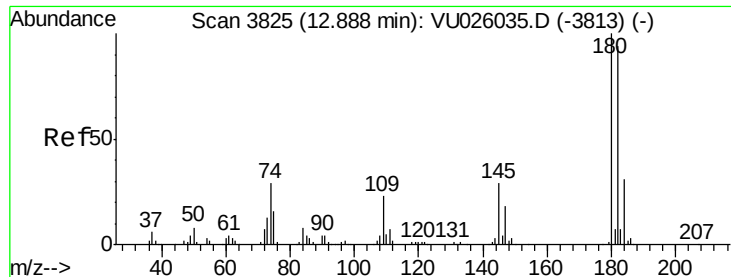
111 40.8 32.4 48.6

148 62.9 50.1 75.1



Abundance Ion 146.00 (145.70 to 146.70): V  
Ion 111.00 (110.70 to 111.70): V  
Ion 148.00 (147.70 to 148.70): V

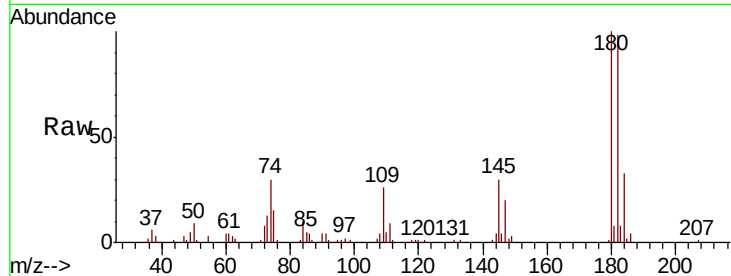




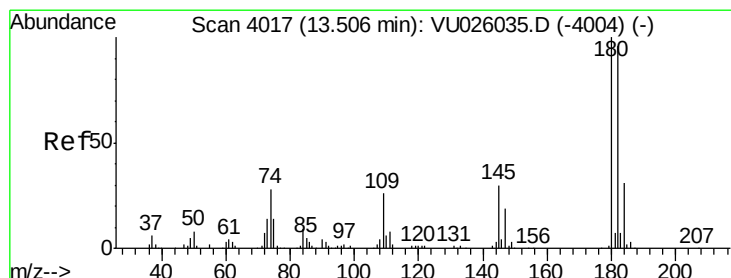
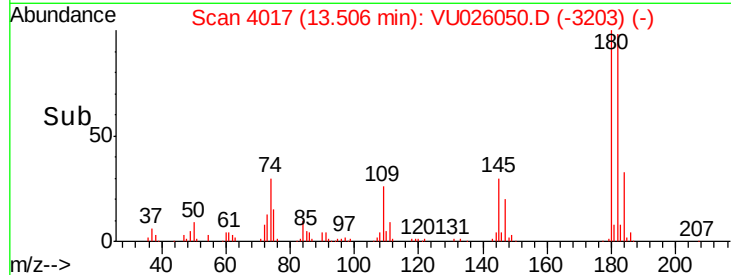
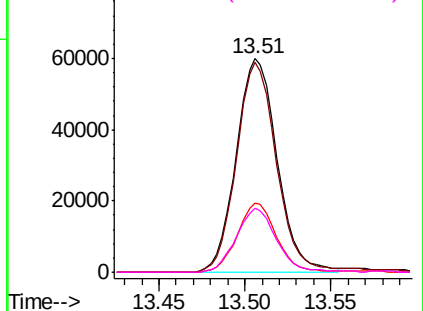
#67  
 1,3,5-Trichlorobenzene  
 Concen: 32.663 ug/L  
 RT: 13.51 min Scan# 4017  
 Delta R.T. 0.62 min  
 Lab File: VU026050.D  
 Acq: 10 Aug 2018 17:57

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 A4ZA7DL

|             |       |             |
|-------------|-------|-------------|
| Tot Ion:180 | Resp: | 99265       |
| Ion         | Ratio | Lower Upper |
| 180         | 100   |             |
| 182         | 96.9  | 76.5 114.7  |
| 184         | 30.9  | 24.3 36.5   |
| 145         | 29.5  | 23.5 35.3   |

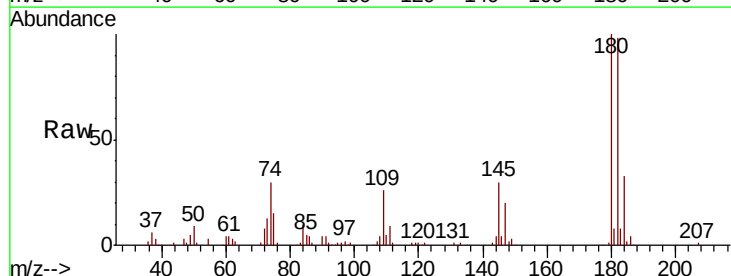


Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 184.00 (183.70 to 184.70): V  
 Ion 145.00 (144.70 to 145.70): V

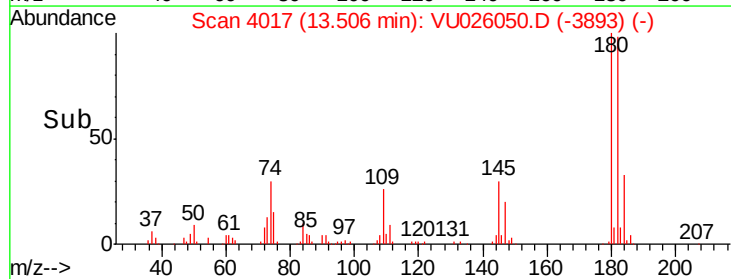
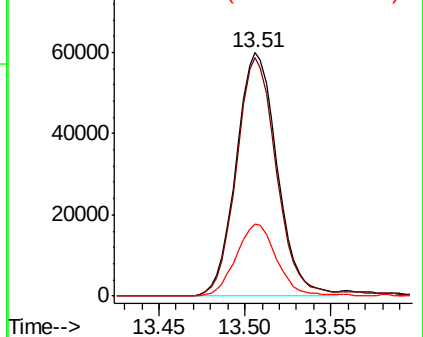


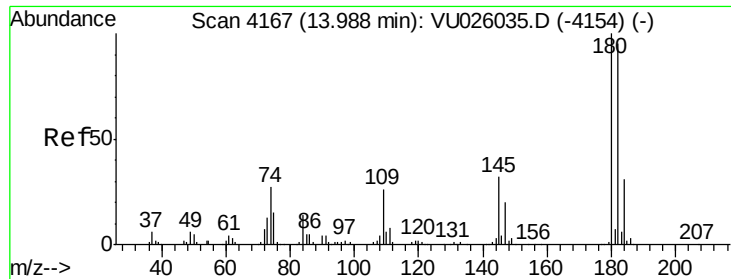
#68  
 1,2,4-trichlorobenzene  
 Concen: 38.625 ug/L  
 RT: 13.51 min Scan# 4017  
 Delta R.T. 0.00 min  
 Lab File: VU026050.D  
 Acq: 10 Aug 2018 17:57

|             |       |             |
|-------------|-------|-------------|
| Tgt Ion:180 | Resp: | 99265       |
| Ion         | Ratio | Lower Upper |
| 180         | 100   |             |
| 182         | 96.9  | 76.5 114.7  |
| 145         | 29.5  | 24.2 36.4   |



Abundance Ion 180.00 (179.70 to 180.70): V  
 Ion 182.00 (181.70 to 182.70): V  
 Ion 145.00 (144.70 to 145.70): V





#70  
 1,2,3-Trichlorobenzene  
 Concen: 8.944 ug/L  
 RT: 13.99 min Scan# 4168  
 Delta R.T. 0.00 min  
 Lab File: VU026050.D  
 Acq: 10 Aug 2018 17:57

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 A4ZA7DL

|             |       |            |
|-------------|-------|------------|
| Tot Ion:180 | Resp: | 24705      |
| Ion Ratio   | Lower | Upper      |
| 180         | 100   |            |
| 182         | 98.4  | 76.5 114.7 |
| 145         | 30.9  | 24.7 37.1  |

