

Data File : VU029522.D  
Acq On : 18 Feb 2019 11:37  
Operator : JC/SP  
Sample : K1489-01RE  
Misc : 25.0mL/MSVOA\_U/WATER  
ALS Vial : 6 Sample Multiplier: 1

Instrument :  
MSVOA\_U  
ClientSampleId :  
ESXF9RE

Quant Time: Feb 19 00:22:22 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR021219WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Feb 19 00:19:12 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.88  | 114  | 212400   | 5.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.09  | 117  | 207094   | 5.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.48 | 152  | 109394   | 5.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.40   | 65    | 66659    | 4.67     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 40 - 130 | Recovery | =    | 93.40%  |
| 7) Chloroethane-d5             | 1.68   | 69    | 59759    | 4.74     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 130 | Recovery | =    | 94.80%  |
| 11) 1,1-Dichloroethene-d2      | 2.27   | 63    | 107886   | 3.48     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 125 | Recovery | =    | 69.60%  |
| 20) 2-Butanone-d5              | 4.19   | 46    | 154175   | 51.96    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 40 - 130 | Recovery | =    | 103.92% |
| 24) Chloroform-d               | 4.65   | 84    | 112110   | 4.94     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 98.80%  |
| 26) 1,2-Dichloroethane-d4      | 5.31   | 65    | 61449    | 5.08     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 101.60% |
| 32) Benzene-d6                 | 5.34   | 84    | 243334   | 4.89     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 125 | Recovery | =    | 97.80%  |
| 36) 1,2-Dichloropropane-d6     | 6.33   | 67    | 73508    | 5.00     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 60 - 140 | Recovery | =    | 100.00% |
| 41) Toluene-d8                 | 7.56   | 98    | 237645   | 4.84     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 70 - 130 | Recovery | =    | 96.80%  |
| 43) trans-1,3-Dichloropropene- | 7.85   | 79    | 31427    | 4.78     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 55 - 130 | Recovery | =    | 95.60%  |
| 46) 2-Hexanone-d5              | 8.31   | 63    | 159284   | 52.63    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 45 - 130 | Recovery | =    | 105.26% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.43  | 84    | 62996    | 4.93     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 65 - 120 | Recovery | =    | 98.60%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.86  | 152   | 102948   | 5.10     | ug/L | 0.00    |
| Spiked Amount                  | 5.000  | Range | 80 - 120 | Recovery | =    | 102.00% |

#### Target Compounds

|                                |      |     |         |              | Qvalue |
|--------------------------------|------|-----|---------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.43 | 85  | 767     | 0.041 ug/L   | 89     |
| 5) Vinyl chloride              | 1.40 | 62  | 568176  | 27.776 ug/L  | 95     |
| 8) Chloroethane                | 1.71 | 64  | 9020    | 0.677 ug/L # | 52     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101 | 1323    | 0.072 ug/L # | 35     |
| 12) 1,1-Dichloroethene         | 2.28 | 96  | 4397    | 0.252 ug/L # | 1      |
| 13) Acetone                    | 2.32 | 43  | 5821    | 2.159 ug/L   | 98     |
| 14) Carbon disulfide           | 2.48 | 76  | 6114    | 0.106 ug/L # | 82     |
| 15) Methyl Acetate             | 2.45 | 43  | 11436   | 1.656 ug/L # | 48     |
| 17) Methyl tert-butyl Ether    | 3.00 | 73  | 21150   | 0.483 ug/L # | 92     |
| 18) trans-1,2-Dichloroethene   | 2.98 | 96  | 15695   | 0.842 ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 3.44 | 63  | 1852    | 0.066 ug/L # | 80     |
| 22) cis-1,2-Dichloroethene     | 4.22 | 96  | 1109020 | 64.684 ug/L  | 96     |
| 25) Chloroform                 | 4.68 | 83  | 2897    | 0.103 ug/L   | 95     |
| 34) Trichloroethene            | 6.19 | 95  | 7352    | 0.429 ug/L   | 94     |
| 35) Methylcyclohexane          | 6.33 | 83  | 17849   | 0.619 ug/L # | 22     |
| 37) 1,2-Dichloropropane        | 6.33 | 63  | 7990    | 0.523 ug/L # | 87     |
| 39) cis-1,3-Dichloropropene    | 7.22 | 75  | 2053    | 0.085 ug/L # | 75     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_U\DATA\VU021819\  
Quantitation Report (Not Reviewed)

Data File : VU029522.D  
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Instrument :  
MSVOA\_U  
ClientSampleId :  
ESXF9RE

Quant Time: Feb 19 00:22:22 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMUTR021219WMA.M  
Quant Title : TRACE VOA SOM01.0  
QLast Update : Tue Feb 19 00:19:12 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|----------------------------|-------|------|----------|-------|--------|----------|
| 40) 4-Methyl-2-pentanone   | 7.40  | 43   | 5219     | 0.593 | ug/L # | 41       |
| 47) Tetrachloroethene      | 8.22  | 164  | 3679     | 0.234 | ug/L   | 96       |
| 48) 2-Hexanone             | 8.37  | 43   | 2073     | 0.323 | ug/L # | 54       |
| 49) Dibromochloromethane   | 8.23  | 129  | 3367     | 0.214 | ug/L # | 11       |
| 53) m,p-xylene             | 9.38  | 106  | 2034     | 0.066 | ug/L   | 92       |
| 59) 1,2,3-Trichloropropane | 11.48 | 75   | 11118    | 1.135 | ug/L   | 95       |

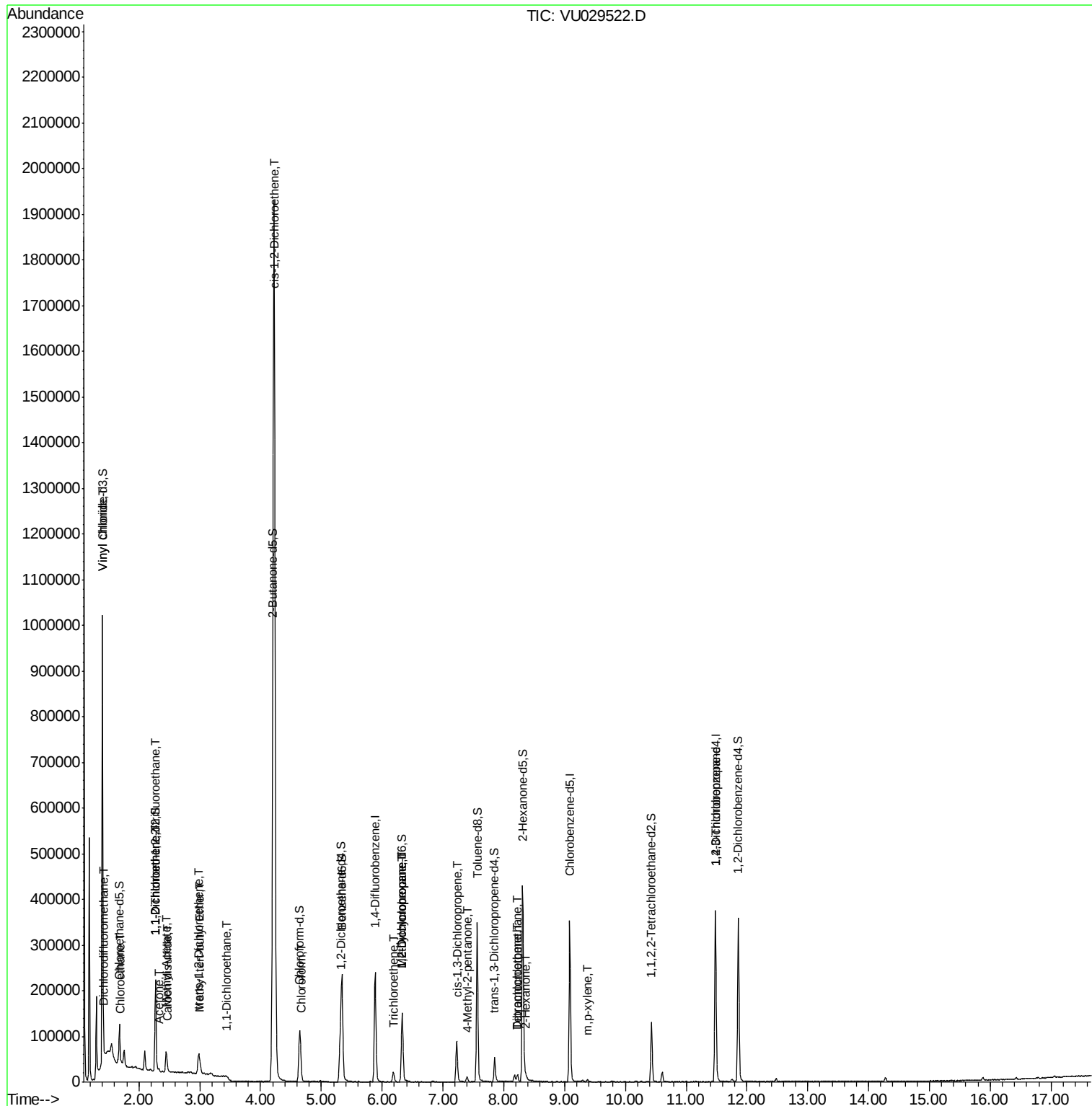
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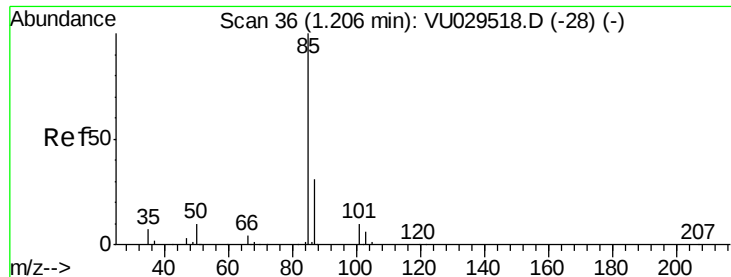
Data File : VU029522.D

```
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ALS Vial    : 6      Sample Multiplier: 1
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**Instrument :**  
MSVOA\_U  
**ClientSampleId :**  
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Quant Time: Feb 19 00:22:22 2019  
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#2

Dichlorodifluoromethane

Concen: 0.041 ug/L

RT: 1.43 min Scan# 107

Delta R.T. 0.23 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

Instrument :

MSVOA\_U

ClientSampleId :

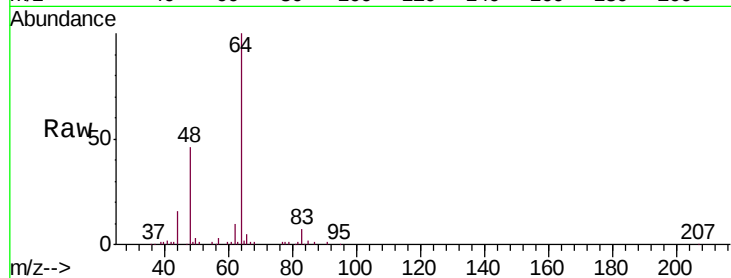
ESXF9RE

Tgt Ion: 85 Resp: 767

Ion Ratio Lower Upper

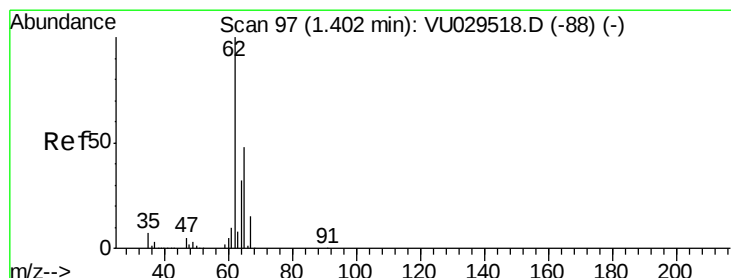
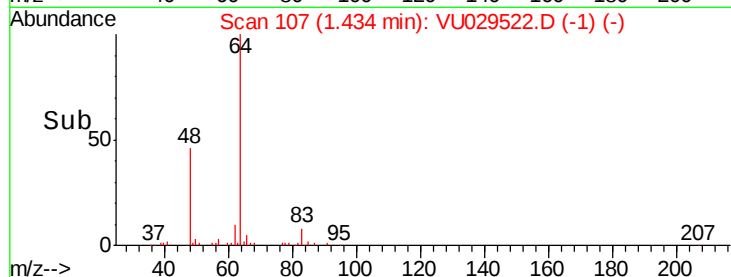
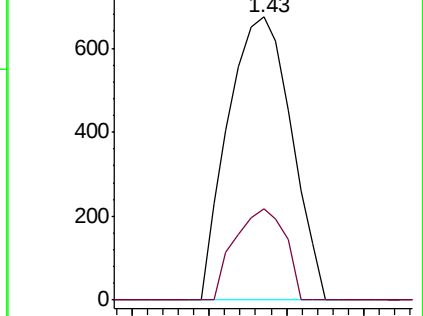
85 100

87 25.7 25.4 38.0



Abundance Ion 85.00 (84.70 to 85.70): VU0

Ion 87.00 (86.70 to 87.70): VU0



#5

Vinyl chloride

Concen: 27.776 ug/L

RT: 1.40 min Scan# 97

Delta R.T. 0.00 min

Lab File: VU029522.D

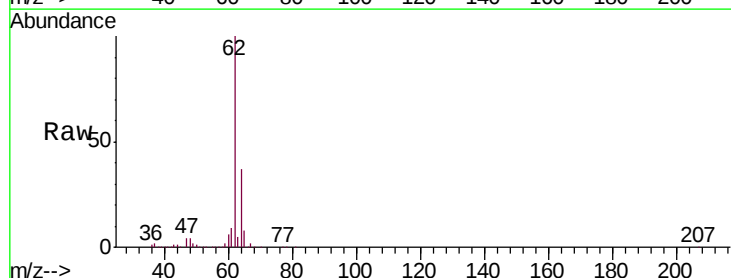
Acq: 18 Feb 2019 11:37

Tgt Ion: 62 Resp: 568176

Ion Ratio Lower Upper

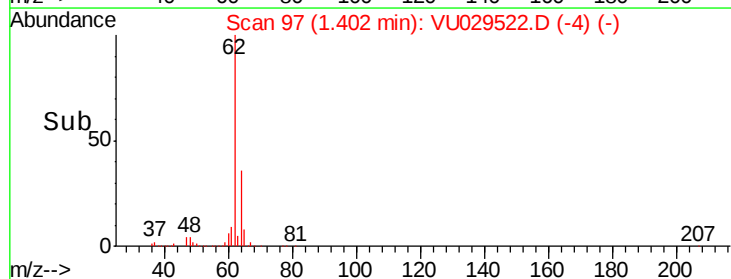
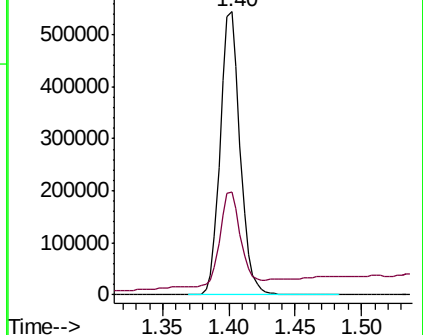
62 100

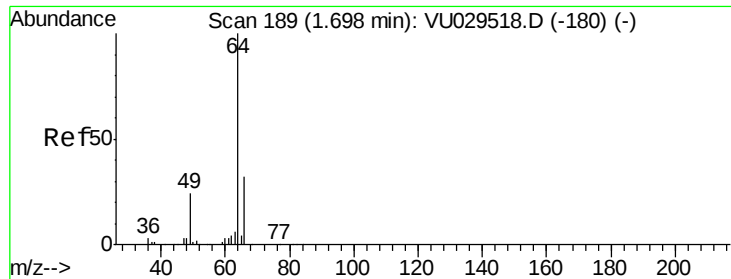
64 36.5 23.5 43.7



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.10 (63.80 to 64.80): VU0





#8

Chloroethane

Concen: 0.677 ug/L

RT: 1.71 min Scan# 192

Delta R.T. 0.01 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

Instrument :

MSVOA\_U

ClientSampleId :

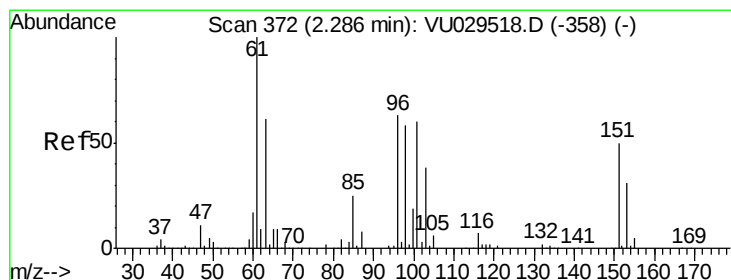
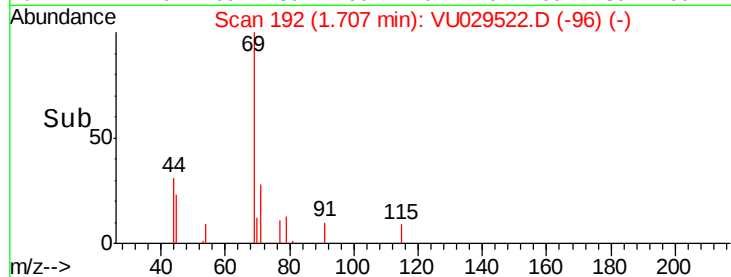
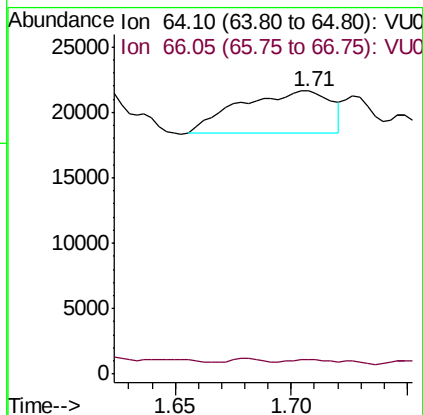
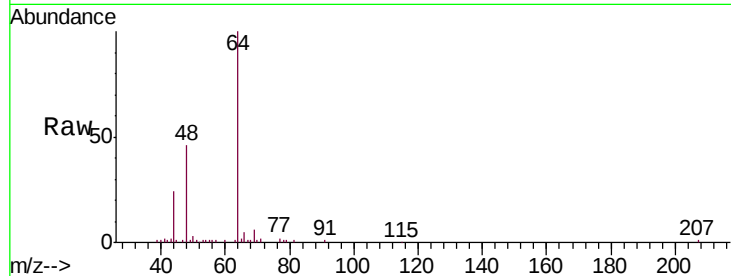
ESXF9RE

Tgt Ion: 64 Resp: 9020

Ion Ratio Lower Upper

64 100

66 5.1 22.0 40.8#



#10

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

Concen: 0.072 ug/L

RT: 2.27 min Scan# 368

Delta R.T. -0.01 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

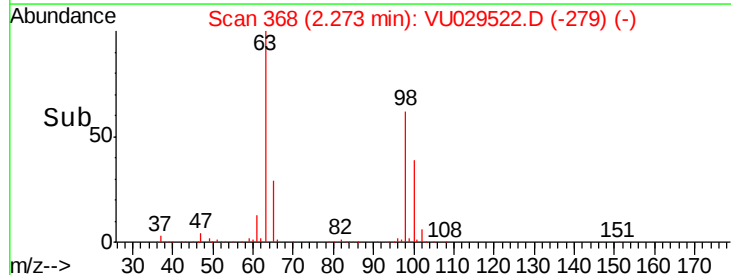
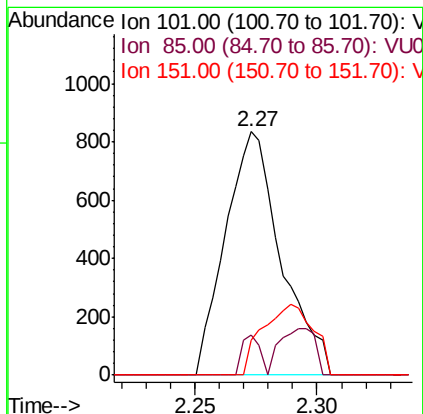
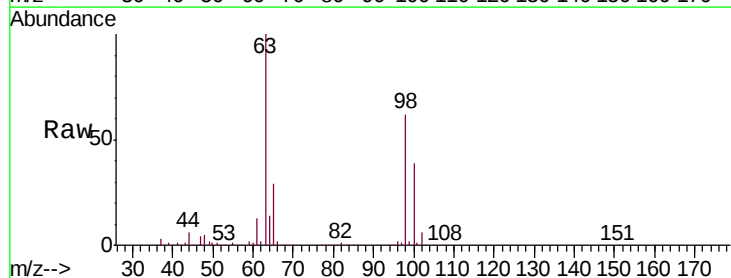
Tgt Ion: 101 Resp: 1323

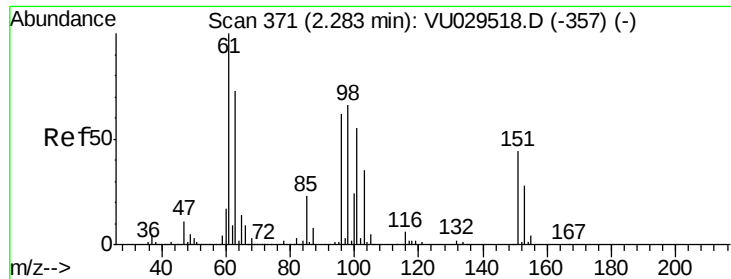
Ion Ratio Lower Upper

101 100

85 0.0 35.1 52.7#

151 26.3 67.0 100.6#





#12

1,1-Dichloroethene

Concen: 0.252 ug/L

RT: 2.28 min Scan# 371

Delta R.T. 0.00 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

Instrument :

MSVOA\_U

ClientSampleId :

ESXF9RE

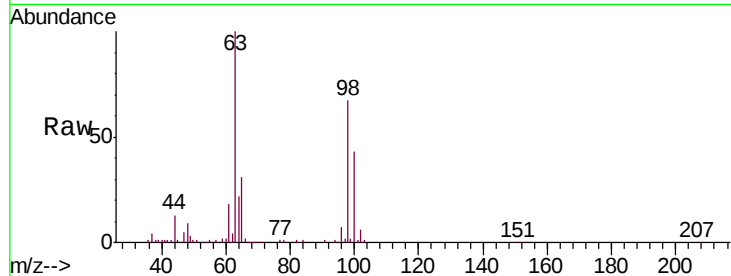
Tgt Ion: 96 Resp: 4397

Ion Ratio Lower Upper

96 100

61 262.8 115.1 213.7#

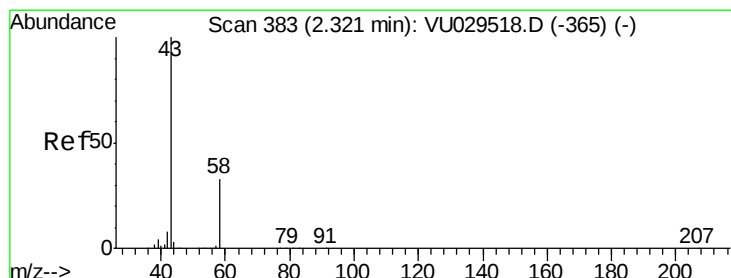
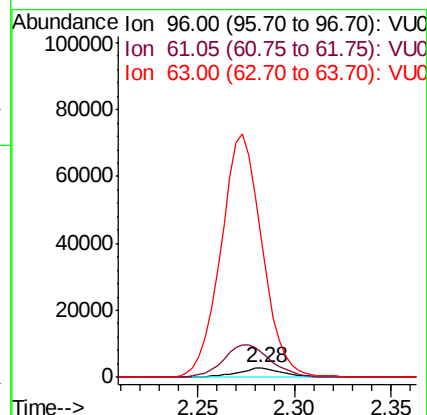
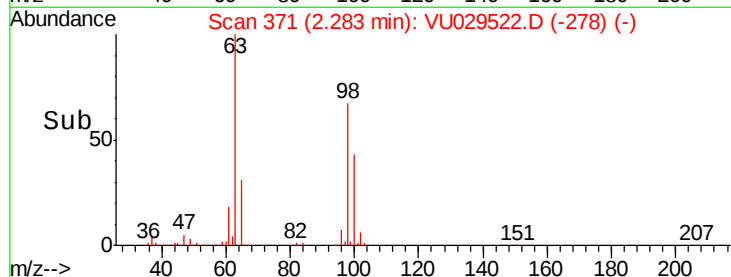
63 1432.7 83.5 155.1#



Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 63.00 (62.70 to 63.70): VU0



#13

Acetone

Concen: 2.159 ug/L

RT: 2.32 min Scan# 384

Delta R.T. 0.00 min

Lab File: VU029522.D

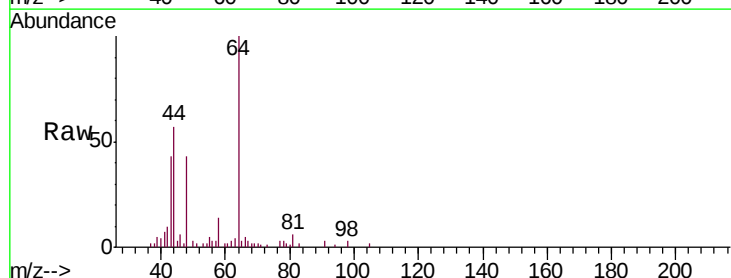
Acq: 18 Feb 2019 11:37

Tgt Ion: 43 Resp: 5821

Ion Ratio Lower Upper

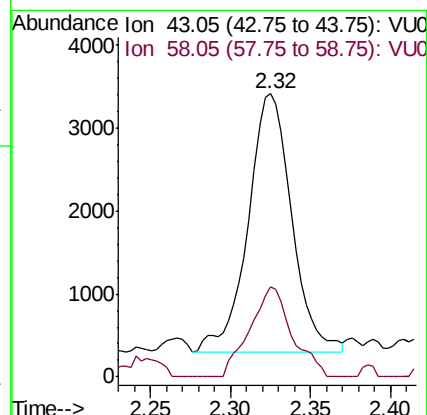
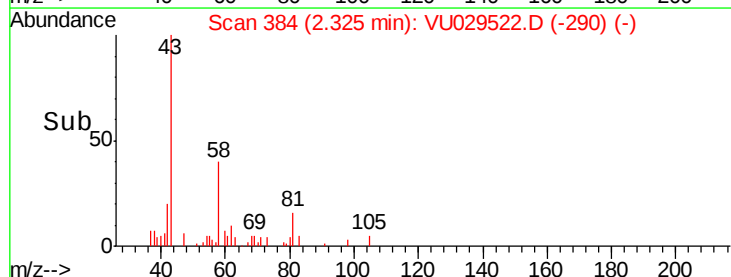
43 100

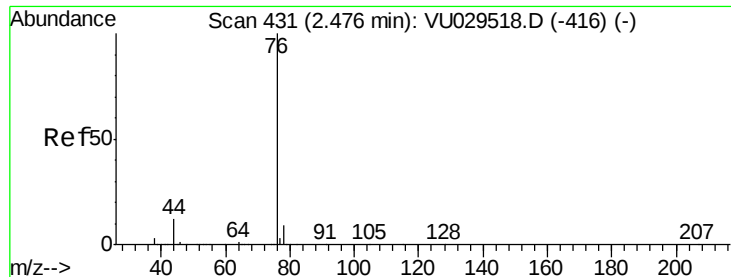
58 33.6 0.0 65.0



Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 58.05 (57.75 to 58.75): VU0





#14

Carbon disulfide

Concen: 0.106 ug/L

RT: 2.48 min Scan# 432

Delta R.T. 0.00 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

Instrument :

MSVOA\_U

ClientSampleId :

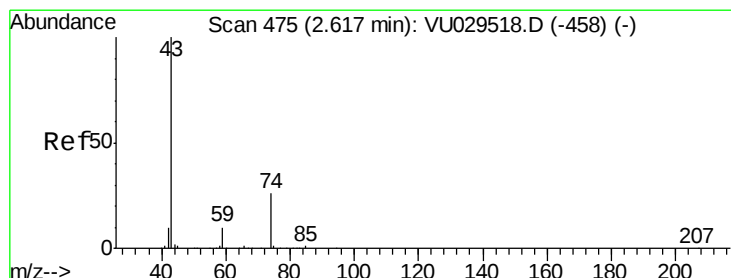
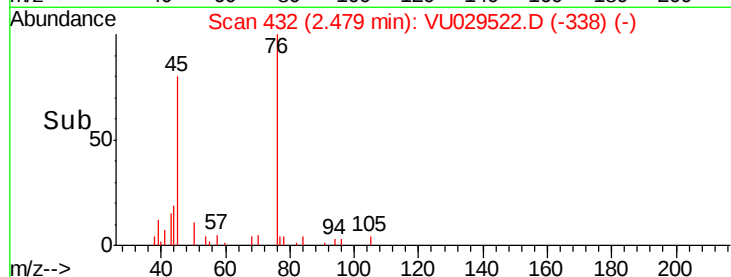
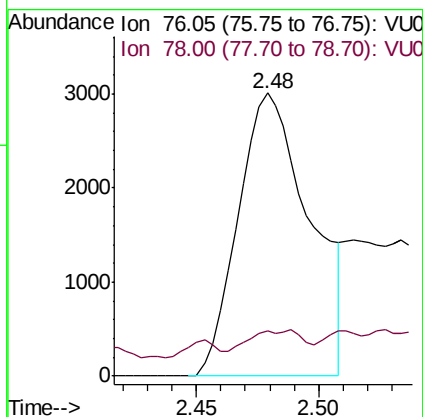
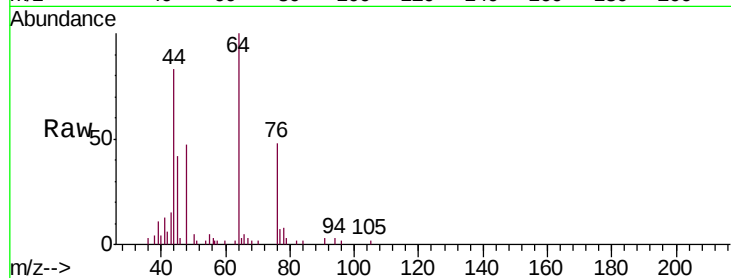
ESXF9RE

Tgt Ion: 76 Resp: 6114

Ion Ratio Lower Upper

76 100

78 16.0 7.5 11.3#



#15

Methyl Acetate

Concen: 1.656 ug/L

RT: 2.45 min Scan# 423

Delta R.T. -0.17 min

Lab File: VU029522.D

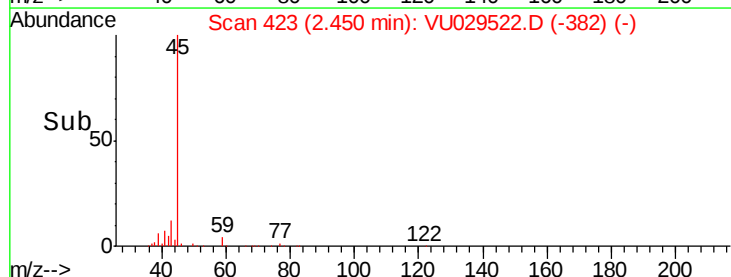
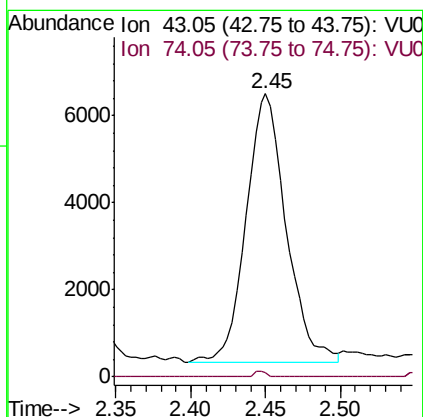
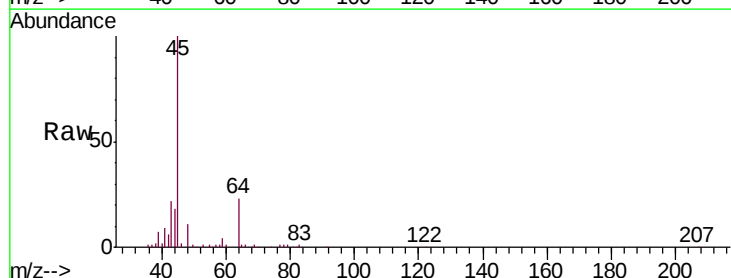
Acq: 18 Feb 2019 11:37

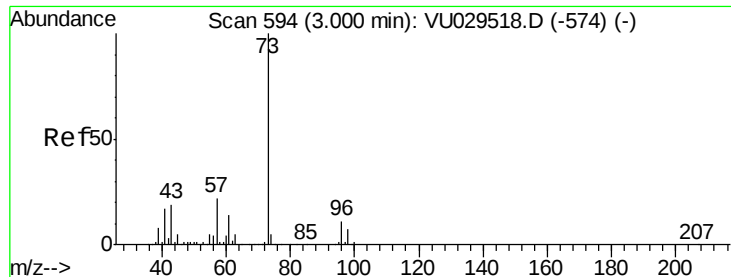
Tgt Ion: 43 Resp: 11436

Ion Ratio Lower Upper

43 100

74 0.6 22.3 33.5#





#17

Methyl tert-butyl Ether

Concen: 0.483 ug/L

RT: 3.00 min Scan# 595

Delta R.T. 0.00 min

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Acq: 18 Feb 2019 11:37

Instrument :

MSVOA\_U

ClientSampleId :

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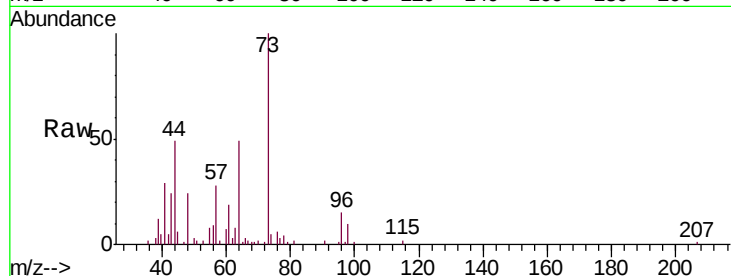
Tgt Ion: 73 Resp: 21150

Ion Ratio Lower Upper

73 100

43 21.3 16.0 24.0

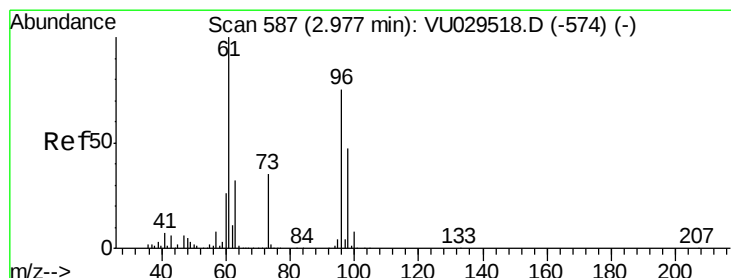
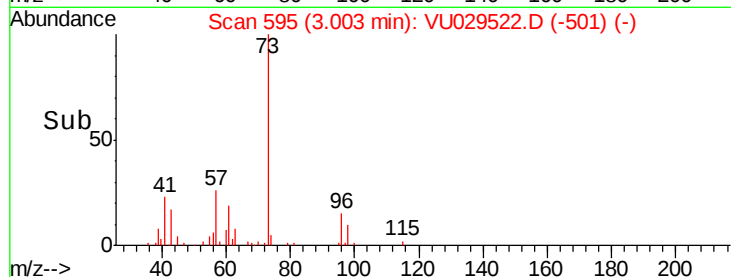
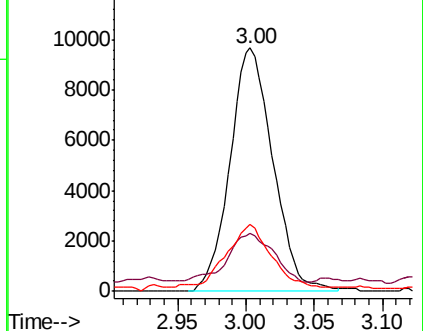
57 27.5 16.9 25.3#



Abundance Ion 73.10 (72.80 to 73.80): VU0

Ion 43.05 (42.75 to 43.75): VU0

Ion 57.10 (56.80 to 57.80): VU0



#18

trans-1,2-Dichloroethene

Concen: 0.842 ug/L

RT: 2.98 min Scan# 587

Delta R.T. 0.00 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

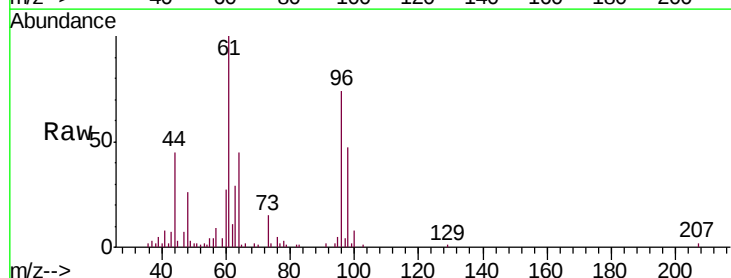
Tgt Ion: 96 Resp: 15695

Ion Ratio Lower Upper

96 100

61 135.0 95.4 177.2

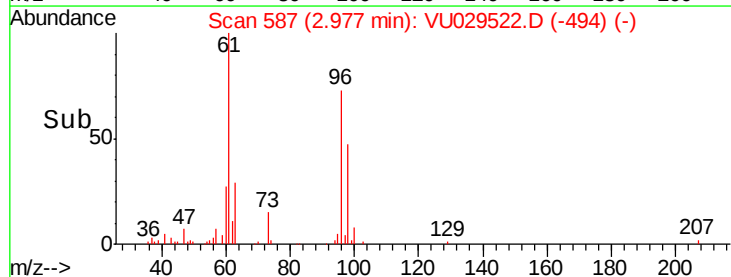
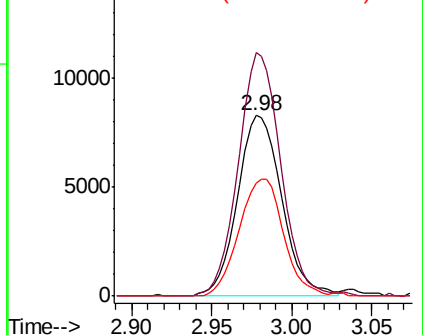
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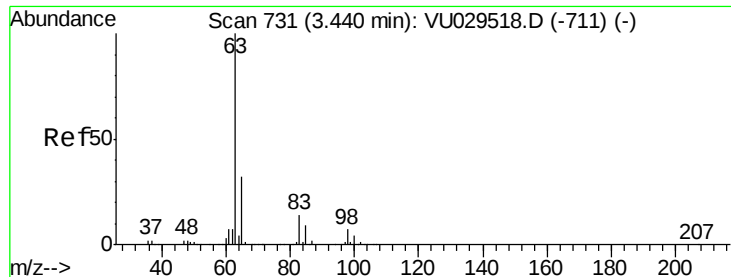


Abundance Ion 96.00 (95.70 to 96.70): VU0

Ion 61.05 (60.75 to 61.75): VU0

Ion 97.95 (97.65 to 98.65): VU0

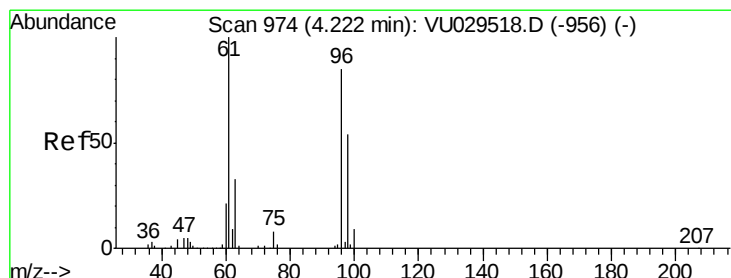
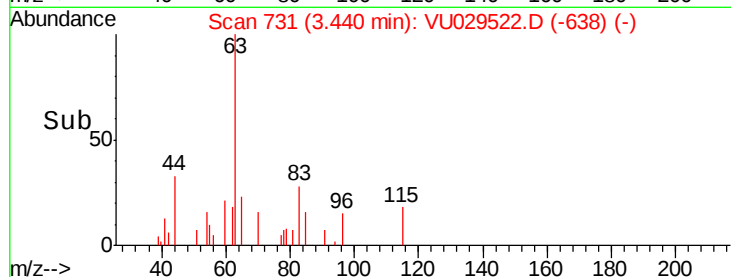
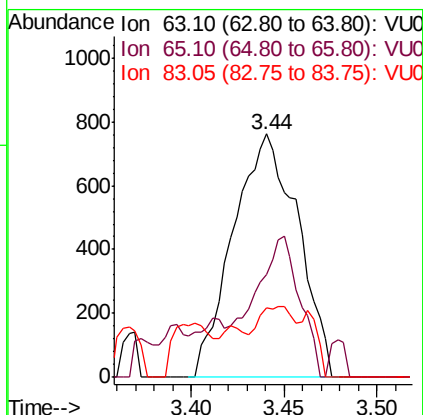
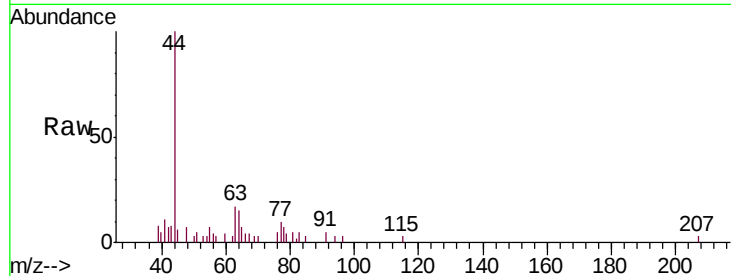




#19  
 1,1-Dichloroethane  
 Concen: 0.066 ug/L  
 RT: 3.44 min Scan# 731  
 Delta R.T. 0.00 min  
 Lab File: VU029522.D  
 Acq: 18 Feb 2019 11:37

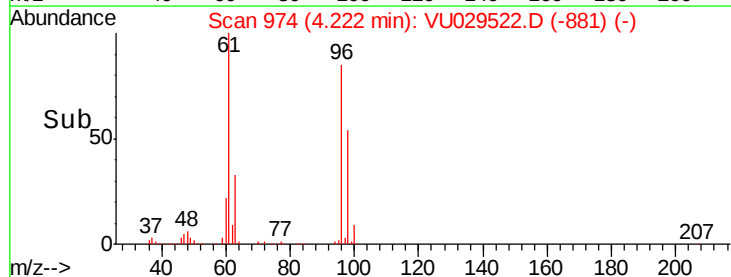
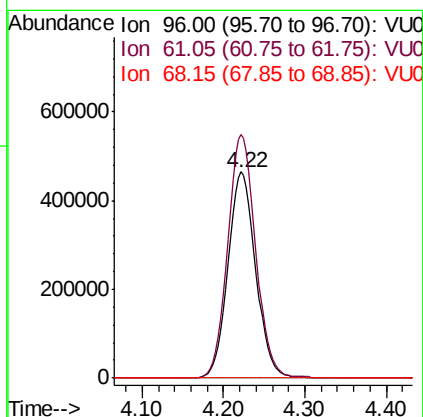
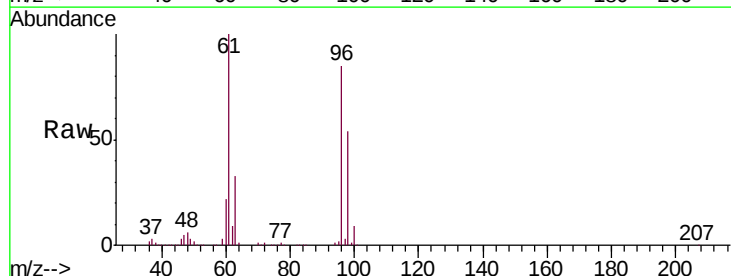
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 ESXF9RE

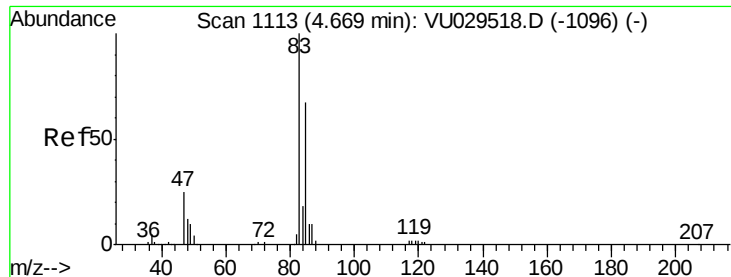
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 65      | 42.1  | 23.5  | 43.7  |
| 83      | 28.3  | 10.3  | 19.1  |



#22  
 cis-1,2-Dichloroethene  
 Concen: 64.684 ug/L  
 RT: 4.22 min Scan# 974  
 Delta R.T. 0.00 min  
 Lab File: VU029522.D  
 Acq: 18 Feb 2019 11:37

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 96      | 100   |       |       |
| 61      | 118.2 | 79.9  | 148.5 |
| 68      | 0.0   | 0.0   | 0.0   |

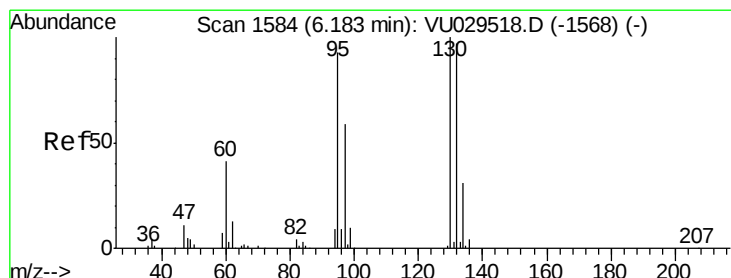
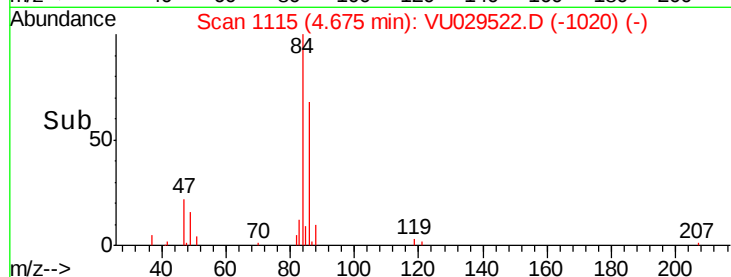
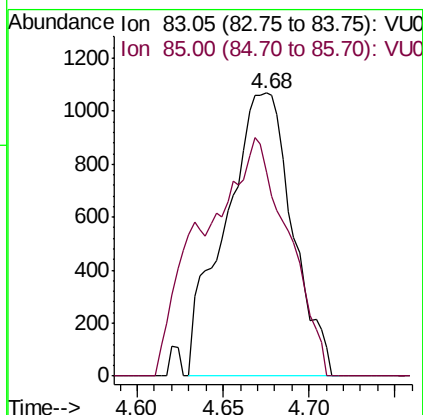
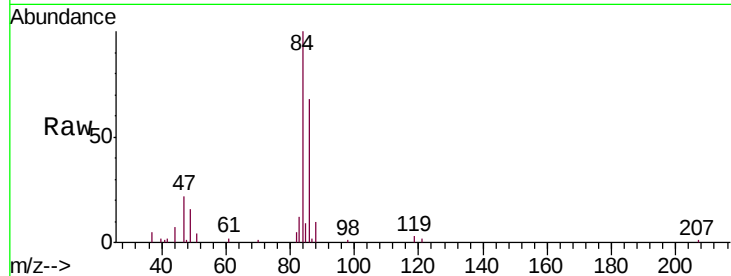




#25  
Chloroform  
Concen: 0.103 ug/L  
RT: 4.68 min Scan# 1115  
Delta R.T. 0.01 min  
Lab File: VU029522.D  
Acq: 18 Feb 2019 11:37

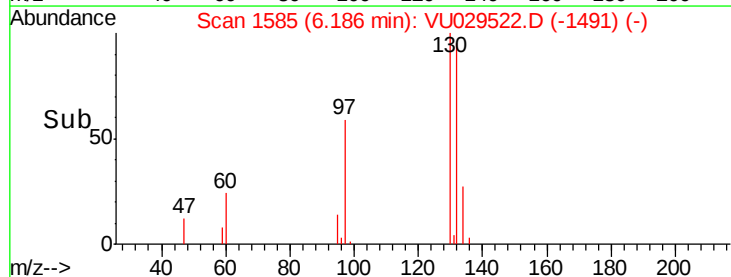
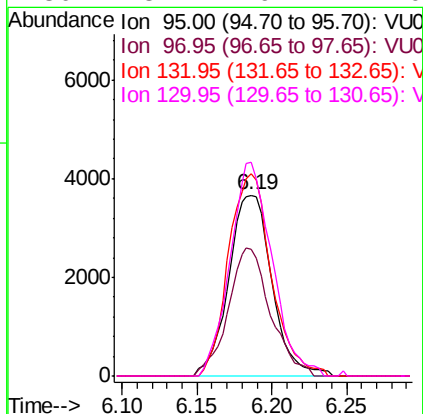
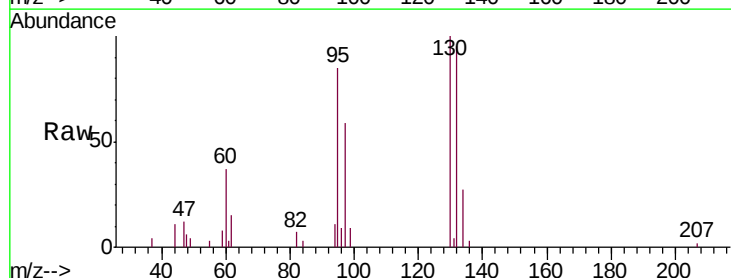
Instrument :  
MSVOA\_U  
ClientSampleId :  
ESXF9RE

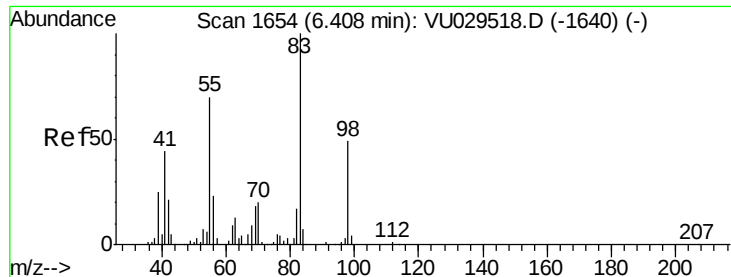
Tgt Ion: 83 Resp: 2897  
Ion Ratio Lower Upper  
83 100  
85 72.2 47.8 88.8



#34  
Trichloroethene  
Concen: 0.429 ug/L  
RT: 6.19 min Scan# 1585  
Delta R.T. 0.00 min  
Lab File: VU029522.D  
Acq: 18 Feb 2019 11:37

Tgt Ion: 95 Resp: 7352  
Ion Ratio Lower Upper  
95 100  
97 69.9 46.3 86.1  
132 111.9 72.9 135.3  
130 118.1 79.2 147.0





#35

Methylcyclohexane

Concen: 0.619 ug/L

RT: 6.33 min Scan# 1629

Delta R.T. -0.08 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

Instrument :

MSVOA\_U

ClientSampleId :

ESXF9RE

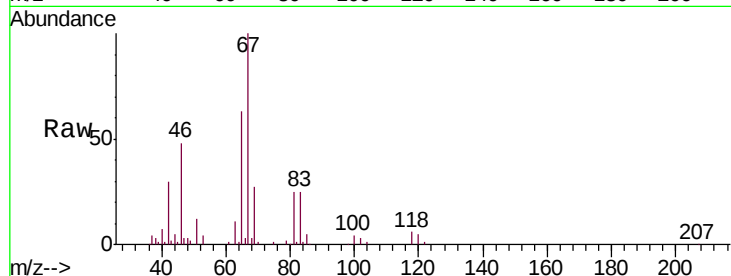
Tgt Ion: 83 Resp: 17849

Ion Ratio Lower Upper

83 100

55 0.7 55.9 83.9#

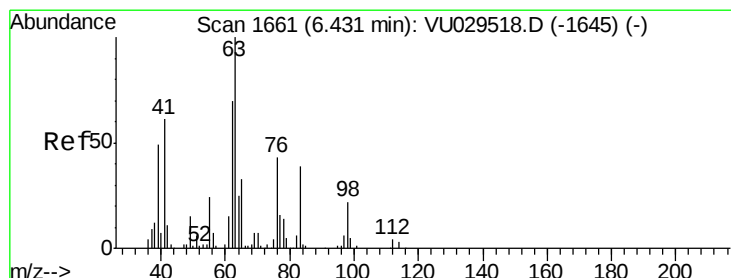
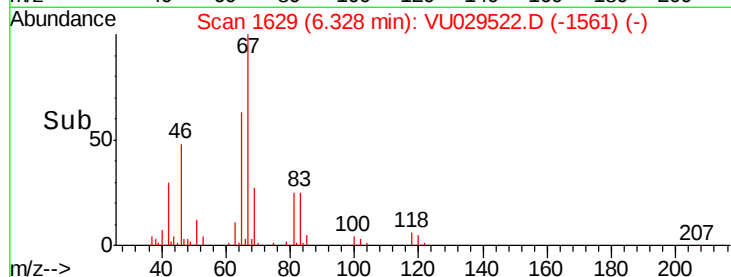
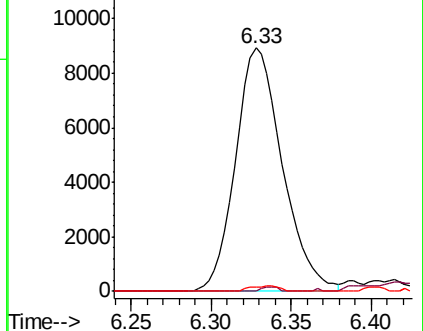
98 1.3 38.6 57.8#



Abundance Ion 83.15 (82.85 to 83.85): VU0

Ion 55.10 (54.80 to 55.80): VU0

Ion 98.15 (97.85 to 98.85): VU0



#37

1,2-Dichloropropane

Concen: 0.523 ug/L

RT: 6.33 min Scan# 1630

Delta R.T. -0.10 min

Lab File: VU029522.D

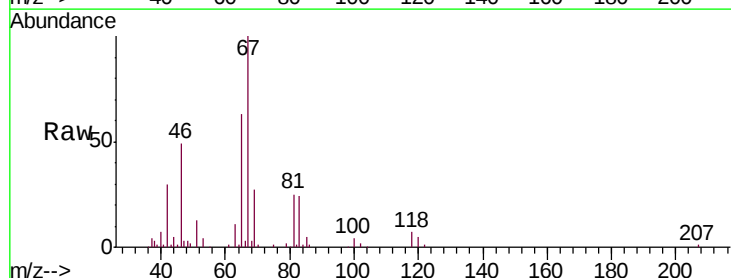
Acq: 18 Feb 2019 11:37

Tgt Ion: 63 Resp: 7990

Ion Ratio Lower Upper

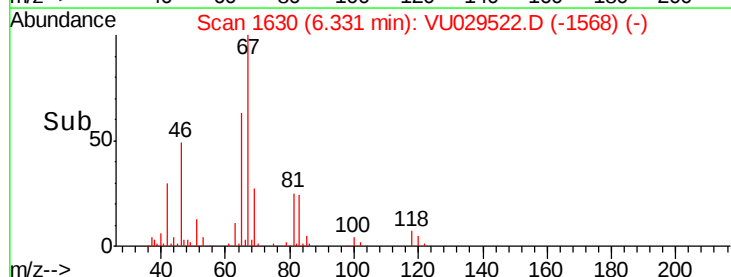
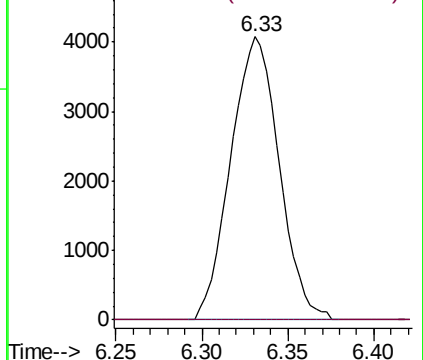
63 100

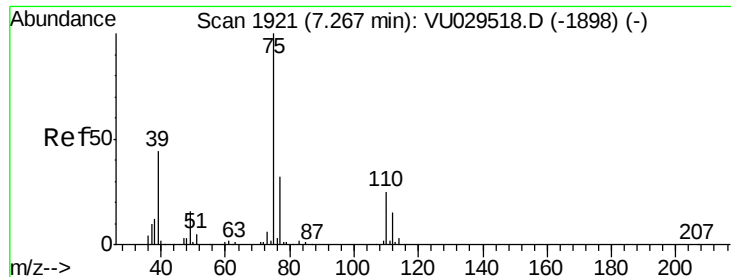
112 0.0 3.5 5.3#



Abundance Ion 63.10 (62.80 to 63.80): VU0

Ion 112.10 (111.80 to 112.80): V





#39

cis-1,3-Dichloropropene

Concen: 0.085 ug/L

RT: 7.22 min Scan# 1908

Delta R.T. -0.04 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

Instrument :

MSVOA\_U

ClientSampleId :

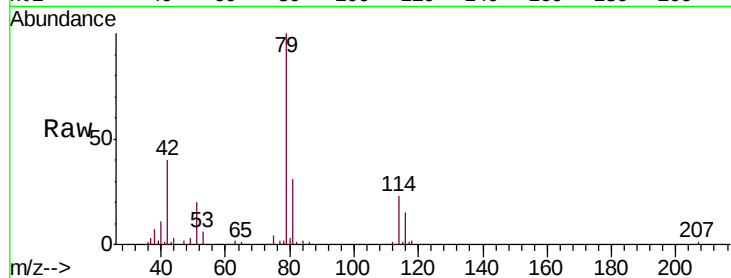
ESXF9RE

Tgt Ion: 75 Resp: 2053

Ion Ratio Lower Upper

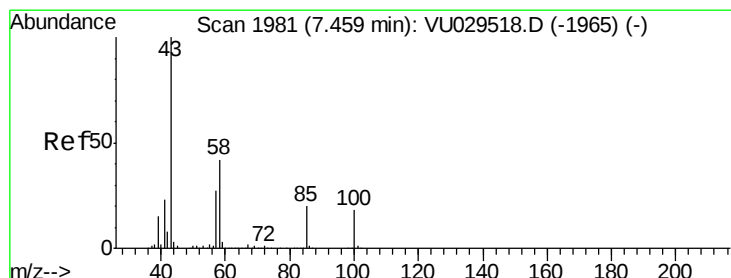
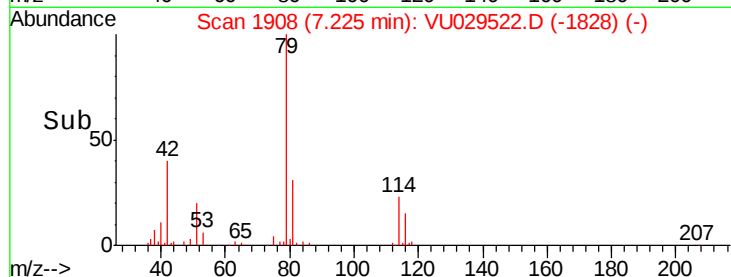
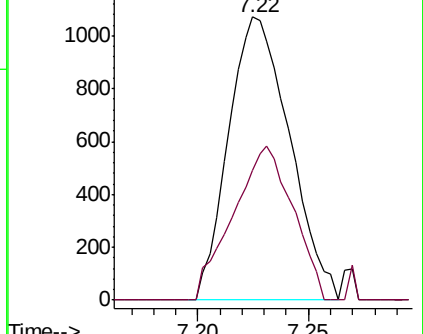
75 100

77 45.9 22.3 41.3#



Abundance Ion 75.05 (74.75 to 75.75): VU0

Ion 77.05 (76.75 to 77.75): VU0



#40

4-Methyl-2-pentanone

Concen: 0.593 ug/L

RT: 7.40 min Scan# 1962

Delta R.T. -0.06 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

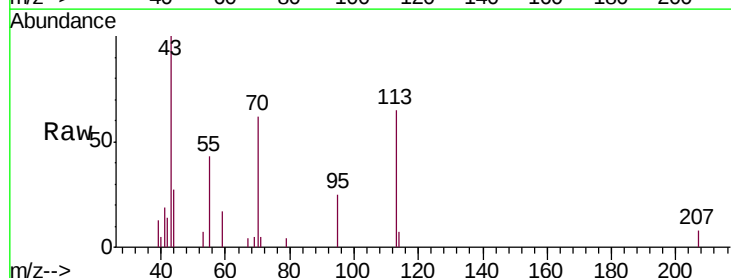
Tgt Ion: 43 Resp: 5219

Ion Ratio Lower Upper

43 100

58 0.0 33.4 50.2#

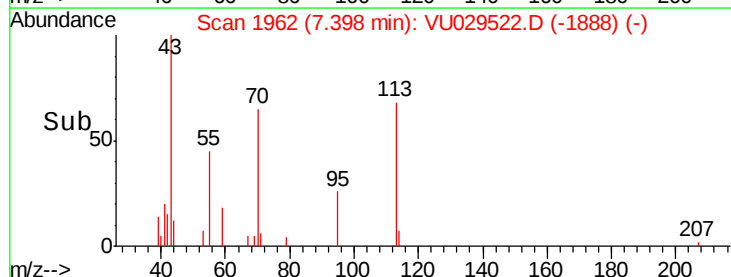
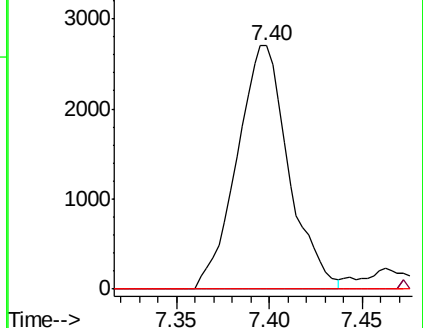
100 0.0 14.4 21.6#

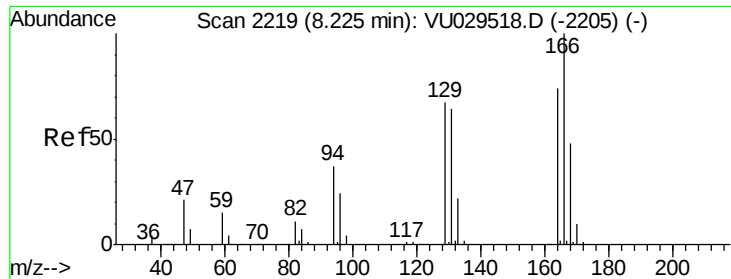


Abundance Ion 43.05 (42.75 to 43.75): VU0

Ion 58.05 (57.75 to 58.75): VU0

Ion 100.15 (99.85 to 100.85): VU0

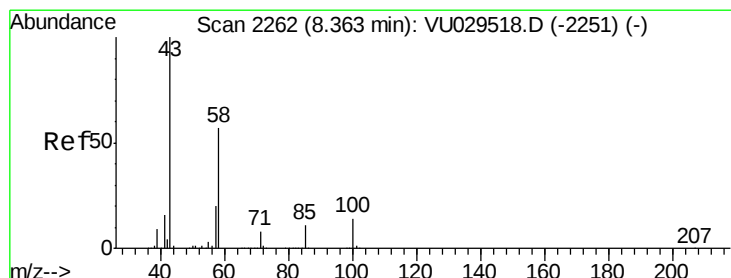
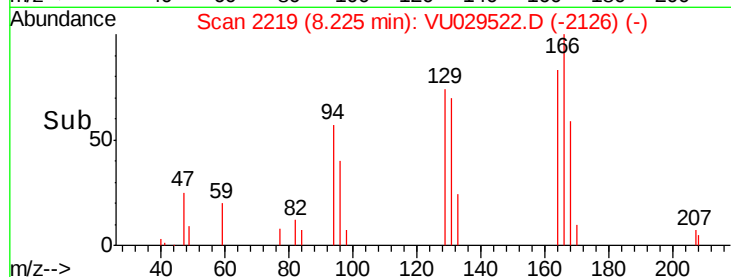
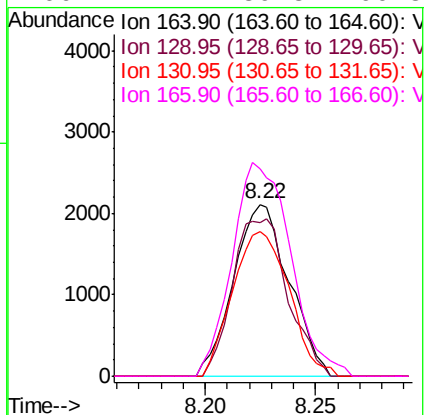
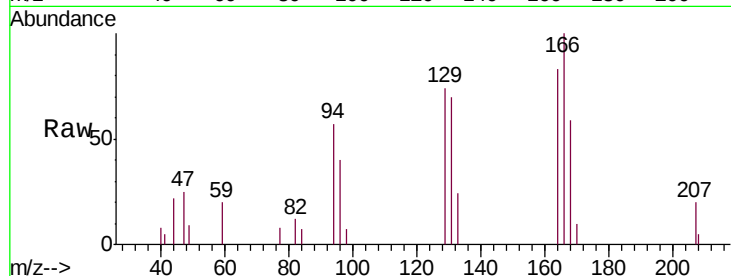




#47  
Tetrachloroethene  
Concen: 0.234 ug/L  
RT: 8.22 min Scan# 2219  
Delta R.T. 0.00 min  
Lab File: VU029522.D  
Acq: 18 Feb 2019 11:37

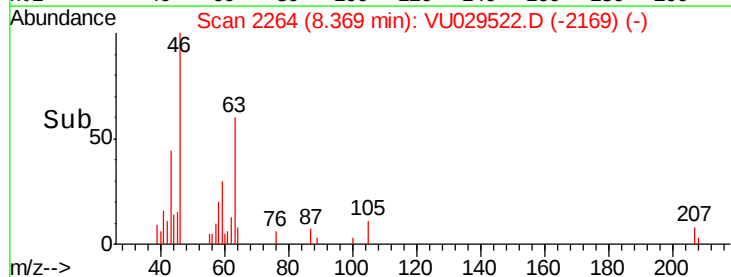
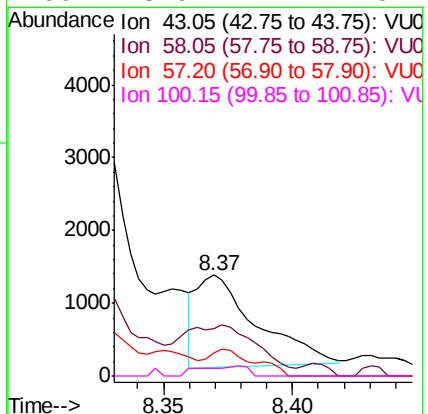
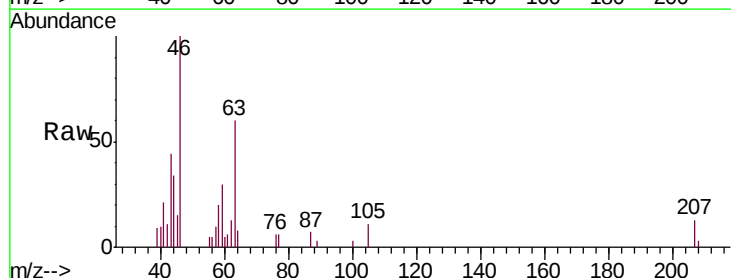
Instrument :  
MSVOA\_U  
ClientSampleId :  
ESXF9RE

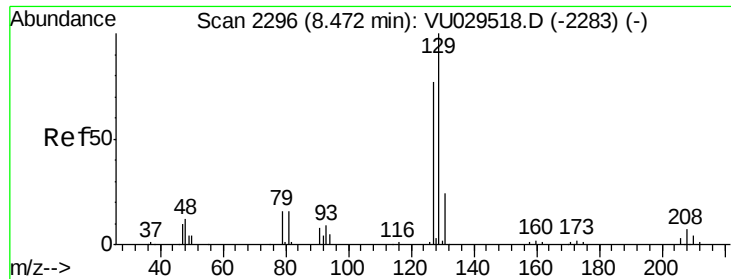
Tgt Ion:164 Resp: 3679  
Ion Ratio Lower Upper  
164 100  
129 89.4 62.9 116.9  
131 84.4 62.1 115.3  
166 121.1 89.8 166.8



#48  
2-Hexanone  
Concen: 0.323 ug/L  
RT: 8.37 min Scan# 2264  
Delta R.T. 0.01 min  
Lab File: VU029522.D  
Acq: 18 Feb 2019 11:37

Tgt Ion: 43 Resp: 2073  
Ion Ratio Lower Upper  
43 100  
58 7.9 45.7 68.5#  
57 22.2 16.4 24.6  
100 3.9 11.1 16.7#





#49

Dibromochloromethane

Concen: 0.214 ug/L

RT: 8.23 min Scan# 2220

Delta R.T. -0.24 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

Instrument :

MSVOA\_U

ClientSampleId :

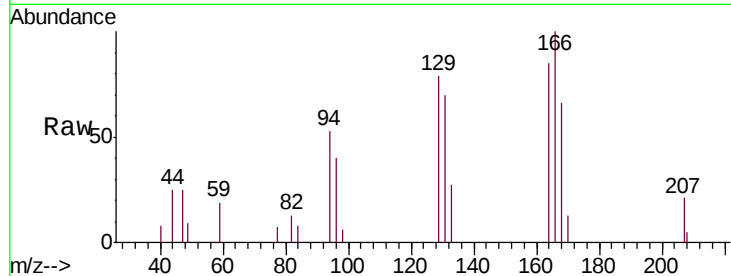
ESXF9RE

Tgt Ion:129 Resp: 3367

Ion Ratio Lower Upper

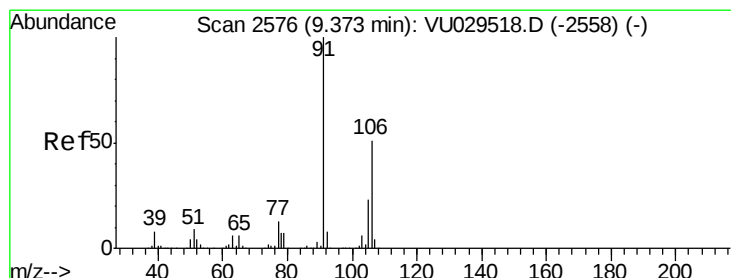
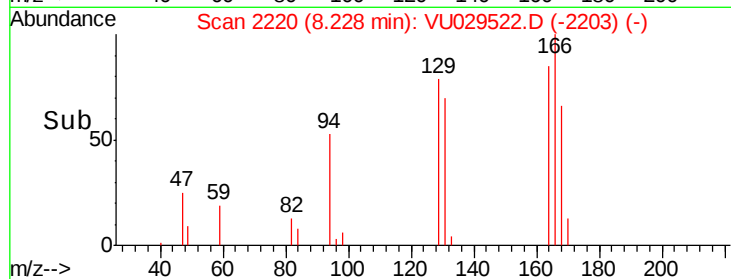
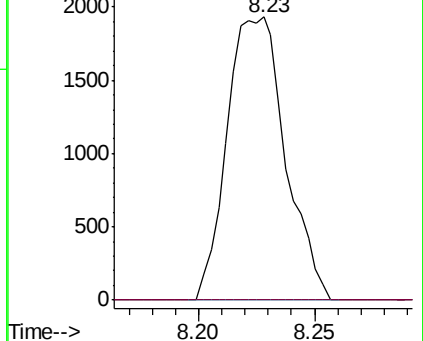
129 100

127 0.0 53.3 99.1#



Abundance Ion 128.95 (128.65 to 129.65): V

Ion 126.90 (126.60 to 127.60): V



#53

m,p-xylene

Concen: 0.066 ug/L

RT: 9.38 min Scan# 2577

Delta R.T. 0.00 min

Lab File: VU029522.D

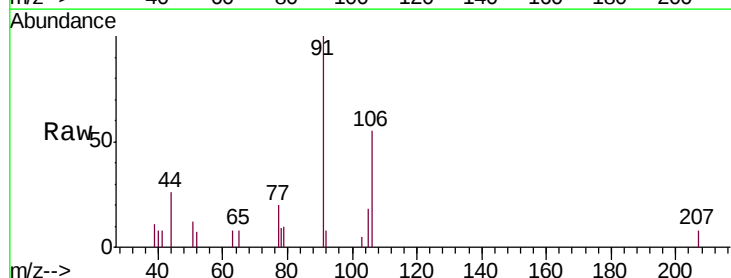
Acq: 18 Feb 2019 11:37

Tgt Ion:106 Resp: 2034

Ion Ratio Lower Upper

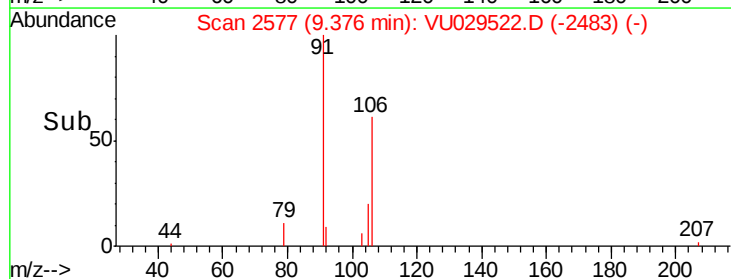
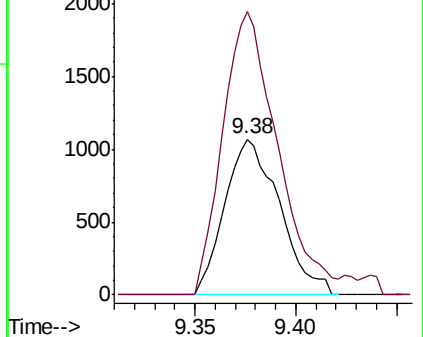
106 100

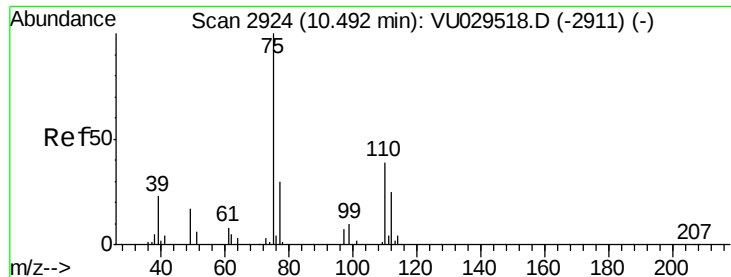
91 181.4 135.7 251.9



Abundance Ion 106.15 (105.85 to 106.85): V

Ion 91.15 (90.85 to 91.85): VU0





#59

1,2,3-Trichloropropane

Concen: 1.135 ug/L

RT: 11.48 min Scan# 3232

Delta R.T. 0.99 min

Lab File: VU029522.D

Acq: 18 Feb 2019 11:37

Instrument :

MSVOA\_U

ClientSampleId :

ESXF9RE

Tgt Ion: 75 Resp: 11118

Ion Ratio Lower Upper

75 100

77 38.3 28.2 42.2

