

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\U100720\  
 Data File : VU040552.D  
 Acq On : 07 Oct 2020 18:31  
 Operator : SY/MD  
 Sample : L4485-18  
 Misc : 5.0µL/5.0mL/100µL/5.0mL/MSVOA\_U/MEOH  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleID :  
 MDL-ME-SOIL-04

Quant Time: Oct 08 01:22:08 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SFAMUL100620WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Oct 08 01:13:08 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.26  | 114  | 258290   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.42  | 117  | 256904   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.81 | 152  | 123238   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.61    | 65    | 100190   | 45.17    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 90.34%  |
| 7) Chloroethane-d5             | 1.92    | 69    | 80305    | 47.52    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 95.04%  |
| 11) 1,1-Dichloroethene-d2      | 2.58    | 63    | 153766   | 36.33    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 72.66%  |
| 21) 2-Butanone-d5              | 4.64    | 46    | 211685   | 120.25   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 120.25% |
| 24) Chloroform-d               | 5.08    | 84    | 186655   | 48.78    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.56%  |
| 26) 1,2-Dichloroethane-d4      | 5.72    | 65    | 131784   | 49.46    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 98.92%  |
| 32) Benzene-d6                 | 5.75    | 84    | 358221   | 48.99    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.98%  |
| 36) 1,2-Dichloropropane-d6     | 6.70    | 67    | 117788   | 48.07    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 96.14%  |
| 41) Toluene-d8                 | 7.91    | 98    | 314985   | 47.52    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 95.04%  |
| 43) trans-1,3-Dichloropropene- | 8.19    | 79    | 57079    | 46.53    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 93.06%  |
| 47) 2-Hexanone-d5              | 8.64    | 63    | 136596   | 119.57   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 119.57% |
| 56) 1,1,2,2-Tetrachloroethane- | 10.75   | 84    | 176948   | 49.99    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 99.98%  |
| 66) 1,2-Dichlorobenzene-d4     | 12.19   | 152   | 127346   | 50.77    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 101.54% |

## Target Compounds

|                                |      |     |       |              | Ovalue |
|--------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85  | 6253  | 2.514 ug/L   | 92     |
| 3) Chloromethane               | 1.53 | 50  | 6740  | 2.579 ug/L   | 93     |
| 5) Vinyl chloride              | 1.61 | 62  | 6777  | 2.619 ug/L # | 56     |
| 6) Bromomethane                | 1.86 | 94  | 3371  | 2.482 ug/L   | 93     |
| 8) Chloroethane                | 1.94 | 64  | 4103  | 2.628 ug/L   | 89     |
| 9) Trichlorofluoromethane      | 2.15 | 101 | 8617  | 2.596 ug/L   | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.59 | 101 | 6292  | 3.180 ug/L # | 85     |
| 12) 1,1-Dichloroethene         | 2.59 | 96  | 5881  | 3.215 ug/L # | 1      |
| 13) Acetone                    | 2.64 | 43  | 9498  | 5.618 ug/L   | 100    |
| 14) Carbon disulfide           | 2.81 | 76  | 16663 | 2.653 ug/L   | 98     |
| 15) Methyl Acetate             | 2.96 | 43  | 7763  | 2.815 ug/L   | 96     |
| 16) Methylene chloride         | 3.06 | 84  | 5963  | 2.749 ug/L   | 92     |
| 17) trans-1,2-Dichloroethene   | 3.37 | 96  | 5441  | 2.792 ug/L   | 85     |
| 18) Methyl tert-butyl Ether    | 3.38 | 73  | 15219 | 2.483 ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 3.89 | 63  | 10107 | 2.601 ug/L   | 93     |
| 20) cis-1,2-Dichloroethene     | 4.69 | 96  | 5171  | 2.463 ug/L   | 98     |
| 22) 2-Butanone                 | 4.73 | 43  | 12832 | 5.950 ug/L # | 65     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU100720\  
 Data File : VU040552.D  
 Acq On : 07 Oct 2020 18:31  
 Operator : SY/MD  
 Sample : L4485-18  
 Misc : 5.0µ/5.0mL/100µL/5.0mL/MSVOA\_U/MEOH  
 ALS Vial : 15 Sample Multiplier: 1

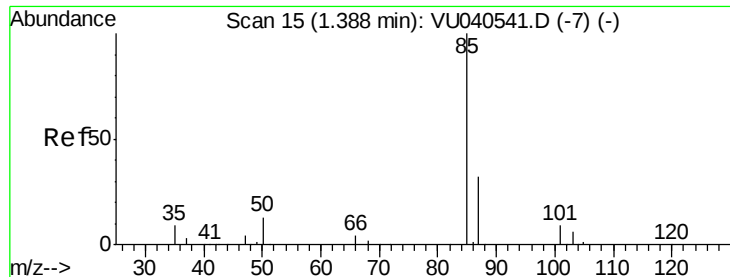
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL-ME-SOIL-04

Quant Time: Oct 08 01:22:08 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SFAMUL100620WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Oct 08 01:13:08 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 23) Bromochloromethane         | 5.00  | 128  | 2646     | 2.418 | ug/L # | 91       |
| 25) Chloroform                 | 5.11  | 83   | 11531    | 2.910 | ug/L   | 92       |
| 27) 1,2-Dichloroethane         | 5.81  | 62   | 8625     | 2.637 | ug/L   | 97       |
| 29) Cyclohexane                | 5.41  | 56   | 7930     | 2.305 | ug/L   | 95       |
| 30) 1,1,1-Trichloroethane      | 5.34  | 97   | 8896     | 2.696 | ug/L   | 95       |
| 31) Carbon tetrachloride       | 5.54  | 117  | 7190     | 2.520 | ug/L   | 96       |
| 33) Benzene                    | 5.79  | 78   | 21138    | 2.546 | ug/L   | 100      |
| 34) Trichloroethene            | 6.55  | 95   | 5321     | 2.487 | ug/L   | 94       |
| 35) Methylcyclohexane          | 6.77  | 83   | 7820     | 2.405 | ug/L   | 96       |
| 37) 1,2-Dichloropropane        | 6.80  | 63   | 6280     | 2.754 | ug/L # | 90       |
| 38) Bromodichloromethane       | 7.12  | 83   | 7019     | 2.370 | ug/L   | 97       |
| 39) cis-1,3-Dichloropropene    | 7.62  | 75   | 7905     | 2.365 | ug/L   | 98       |
| 40) 4-Methyl-2-pentanone       | 7.80  | 43   | 18298    | 5.086 | ug/L   | 100      |
| 42) Toluene                    | 7.98  | 91   | 20289    | 2.393 | ug/L   | 92       |
| 44) trans-1,3-Dichloropropene  | 8.21  | 75   | 8602     | 2.556 | ug/L   | 96       |
| 45) 1,1,2-Trichloroethane      | 8.41  | 97   | 4972     | 2.434 | ug/L   | 97       |
| 46) Tetrachloroethene          | 8.56  | 164  | 3813     | 2.467 | ug/L   | 80       |
| 48) 2-Hexanone                 | 8.69  | 43   | 18158    | 6.209 | ug/L   | 93       |
| 49) Dibromochloromethane       | 8.82  | 129  | 5527     | 2.478 | ug/L   | 85       |
| 50) 1,2-Dibromoethane          | 8.93  | 107  | 5734     | 2.648 | ug/L # | 95       |
| 51) Chlorobenzene              | 9.45  | 112  | 14294    | 2.571 | ug/L   | 98       |
| 52) Ethylbenzene               | 9.57  | 91   | 21068    | 2.239 | ug/L   | 94       |
| 53) m,p-Xylene                 | 9.70  | 106  | 7653     | 2.209 | ug/L   | 85       |
| 54) o-xylene                   | 10.10 | 106  | 7241     | 2.196 | ug/L   | 85       |
| 55) Styrene                    | 10.11 | 104  | 12064    | 2.078 | ug/L   | 96       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.78 | 83   | 10058    | 2.784 | ug/L # | 95       |
| 59) Bromoform                  | 10.29 | 173  | 3606     | 2.387 | ug/L # | 98       |
| 60) 1,2,3-Trichloropropane     | 10.82 | 75   | 8090     | 2.890 | ug/L   | 99       |
| 61) Isopropylbenzene           | 10.48 | 105  | 18433    | 2.227 | ug/L   | 97       |
| 62) 1,3,5-Trimethylbenzene     | 11.09 | 105  | 13191    | 1.940 | ug/L   | 97       |
| 63) 1,2,4-Trimethylbenzene     | 11.47 | 105  | 13461    | 1.952 | ug/L   | 95       |
| 64) 1,3-Dichlorobenzene        | 11.74 | 146  | 10113    | 2.506 | ug/L   | 99       |
| 65) 1,4-Dichlorobenzene        | 11.83 | 146  | 10957    | 2.585 | ug/L   | 96       |
| 67) 1,2-Dichlorobenzene        | 12.21 | 146  | 12079    | 2.988 | ug/L   | 96       |
| 68) 1,2-Dibromo-3-chloropropan | 12.99 | 75   | 2732     | 3.474 | ug/L   | 91       |
| 69) 1,3,5-Trichlorobenzene     | 13.21 | 180  | 7277     | 2.752 | ug/L   | 100      |
| 70) 1,2,4-trichlorobenzene     | 13.83 | 180  | 5807     | 2.534 | ug/L   | 98       |
| 71) Naphthalene                | 14.08 | 128  | 16763    | 2.366 | ug/L   | 99       |
| 72) 1,2,3-Trichlorobenzene     | 14.32 | 180  | 5888     | 2.588 | ug/L   | 100      |
| -----                          |       |      |          |       |        |          |

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





#2

Dichlorodifluoromethane

Concen: 2.514 ug/L

RT: 1.39 min Scan# 15

Delta R.T. -0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

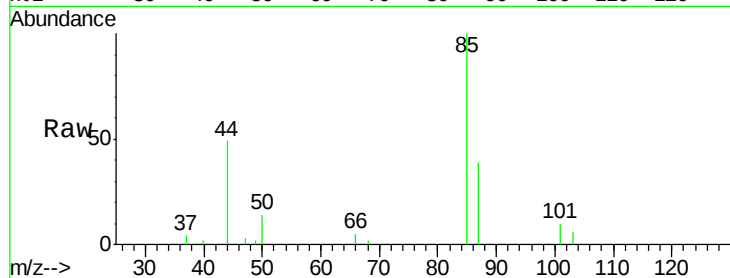
MDL-ME-SOIL-04

Tot Ion: 85 Resp: 6253

Ion Ratio Lower Upper

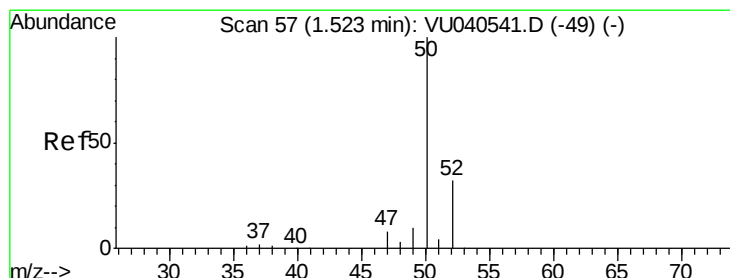
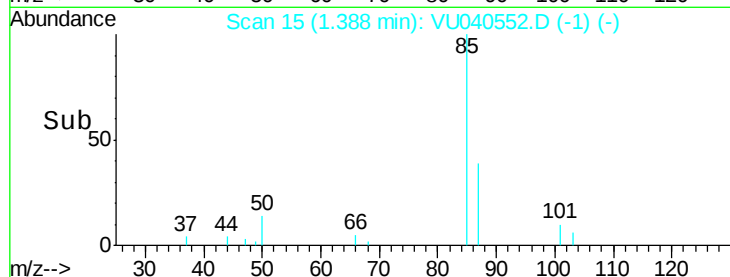
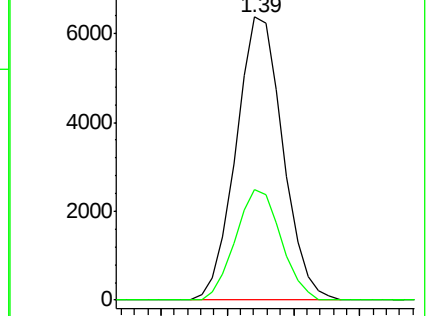
85 100

87 37.9 26.5 39.7



Abundance Ion 85.00 (84.70 to 85.70): VU040552.D (-1) (-)

Ion 87.00 (86.70 to 87.70): VU040552.D (-1) (-)



#3

Chloromethane

Concen: 2.579 ug/L

RT: 1.53 min Scan# 58

Delta R.T. 0.00 min

Lab File: VU040552.D

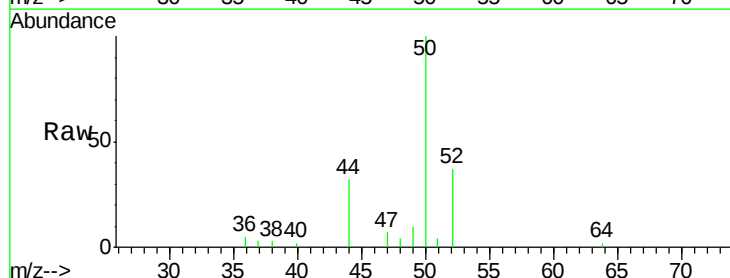
Acq: 07 Oct 2020 18:31

Tgt Ion: 50 Resp: 6740

Ion Ratio Lower Upper

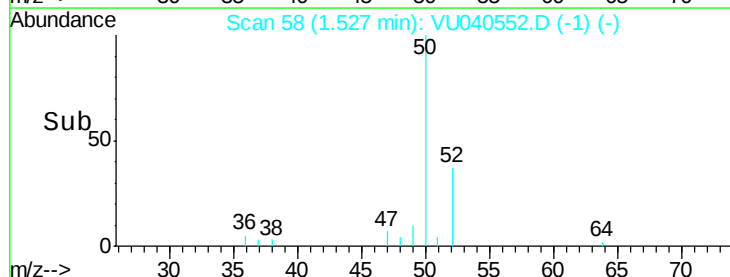
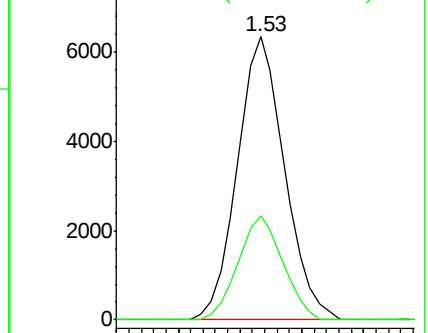
50 100

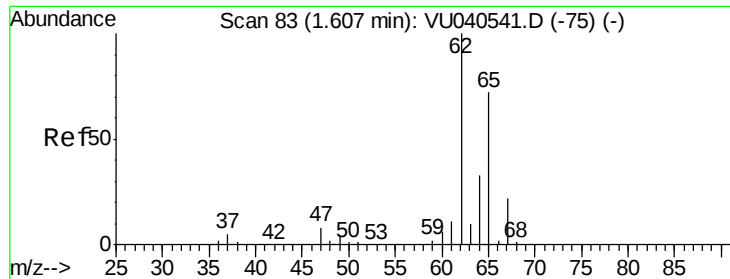
52 36.6 22.9 42.5



Abundance Ion 50.00 (49.70 to 50.70): VU040552.D (-1) (-)

Ion 52.00 (51.70 to 52.70): VU040552.D (-1) (-)





#5

Vinyl chloride

Concen: 2.619 ug/L

RT: 1.61 min Scan# 84

Delta R.T. 0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

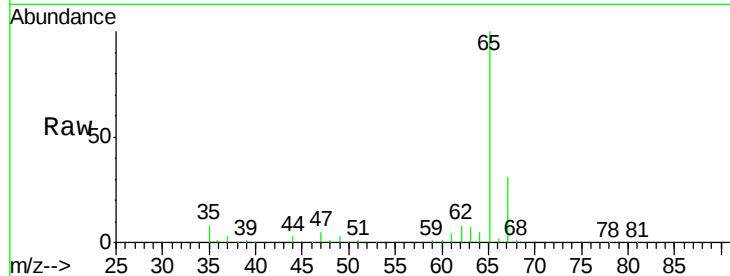
MDL-ME-SOIL-04

Tot Ion: 62 Resp: 6777

Ion Ratio Lower Upper

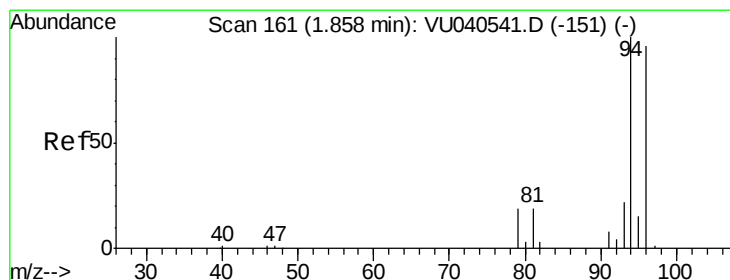
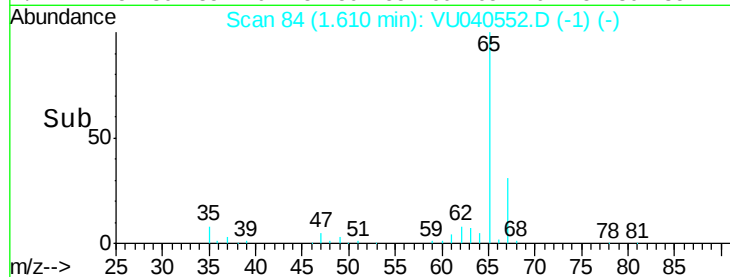
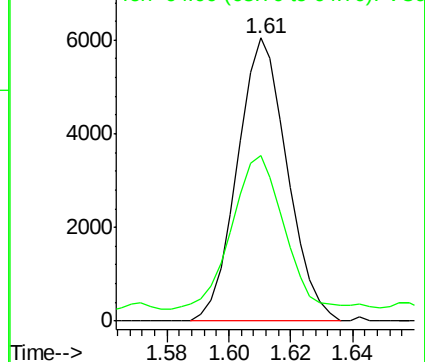
62 100

64 58.6 23.4 43.6#



Abundance Ion 62.00 (61.70 to 62.70): VU0

Ion 64.00 (63.70 to 64.70): VU0



#6

Bromomethane

Concen: 2.482 ug/L

RT: 1.86 min Scan# 163

Delta R.T. 0.01 min

Lab File: VU040552.D

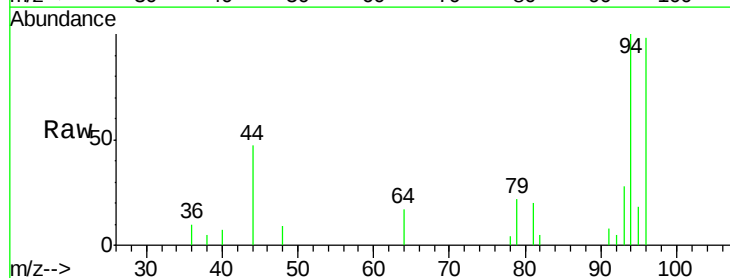
Acq: 07 Oct 2020 18:31

Tgt Ion: 94 Resp: 3371

Ion Ratio Lower Upper

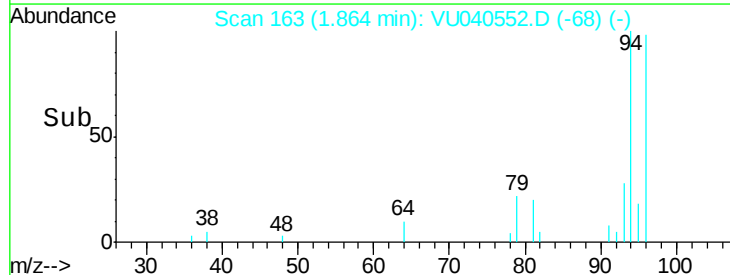
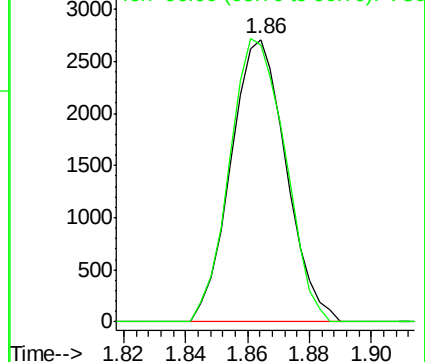
94 100

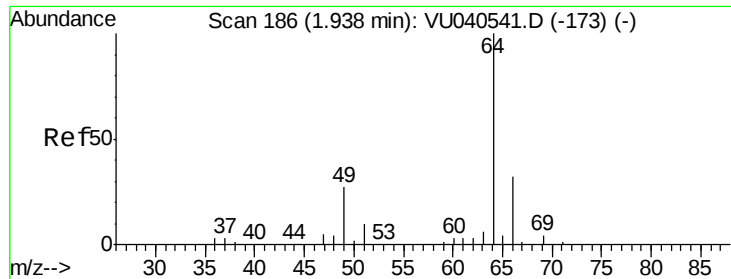
96 98.3 64.4 119.6



Abundance Ion 94.00 (93.70 to 94.70): VU0

Ion 96.00 (95.70 to 96.70): VU0





#8

Chloroethane

Concen: 2.628 ug/L

RT: 1.94 min Scan# 187

Delta R.T. 0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

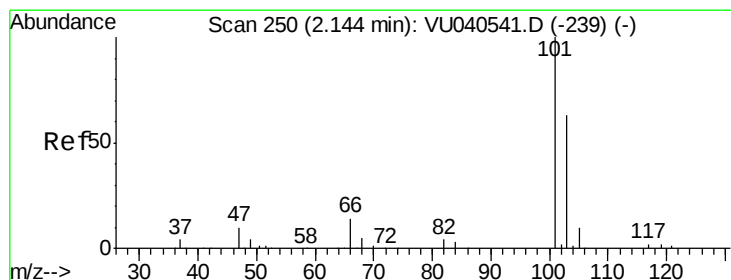
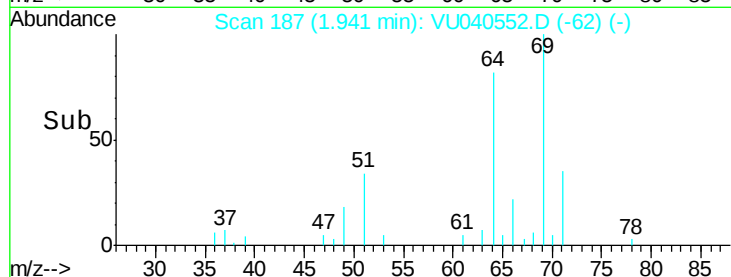
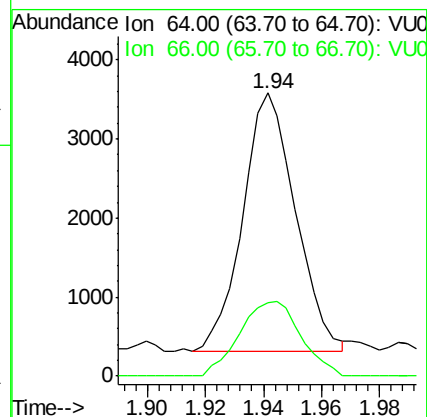
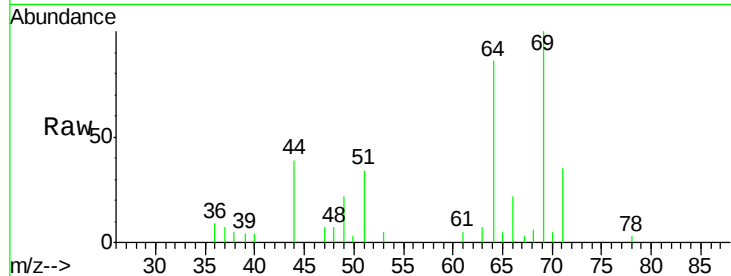
MDL-ME-SOIL-04

Tot Ion: 64 Resp: 4103

Ion Ratio Lower Upper

64 100

66 26.0 22.5 41.9



#9

Trichlorofluoromethane

Concen: 2.596 ug/L

RT: 2.15 min Scan# 251

Delta R.T. 0.00 min

Lab File: VU040552.D

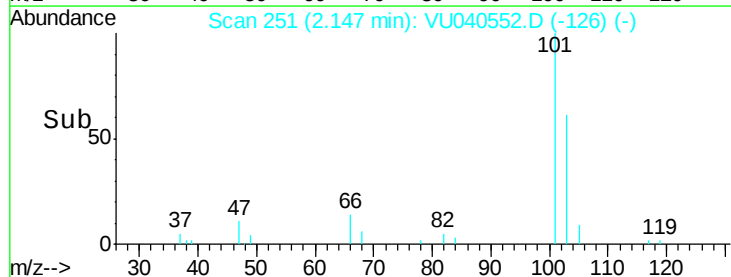
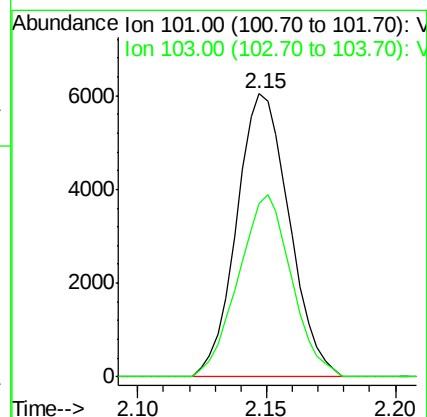
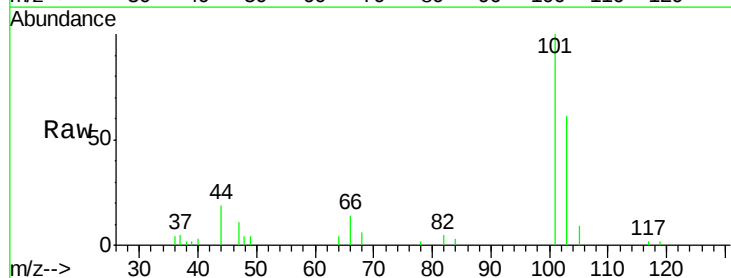
Acq: 07 Oct 2020 18:31

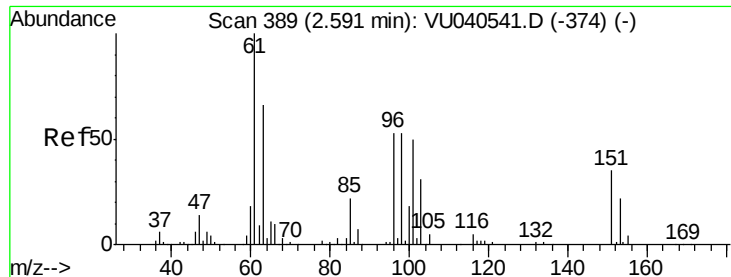
Tgt Ion: 101 Resp: 8617

Ion Ratio Lower Upper

101 100

103 64.9 52.1 78.1





#10

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

Concen: 3.180 ug/L

RT: 2.59 min Scan# 390

Delta R.T. 0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

MDL-ME-SOIL-04

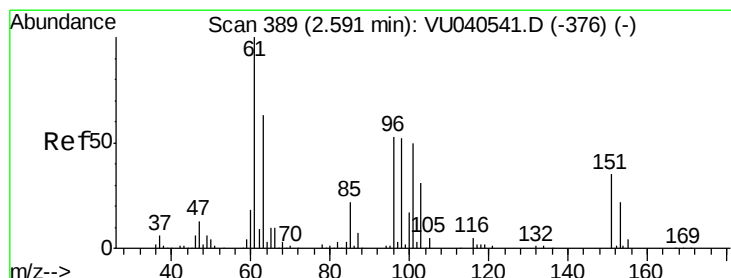
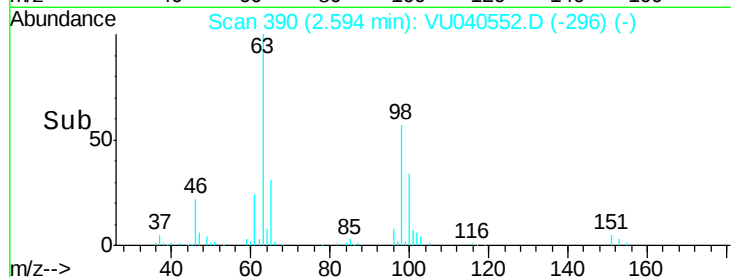
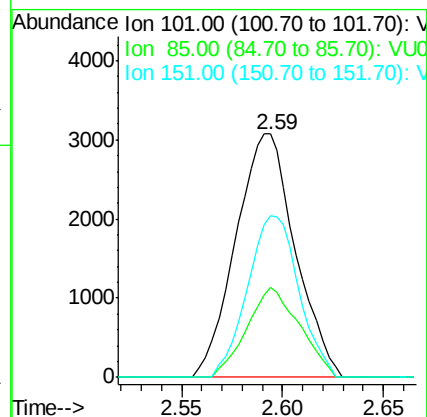
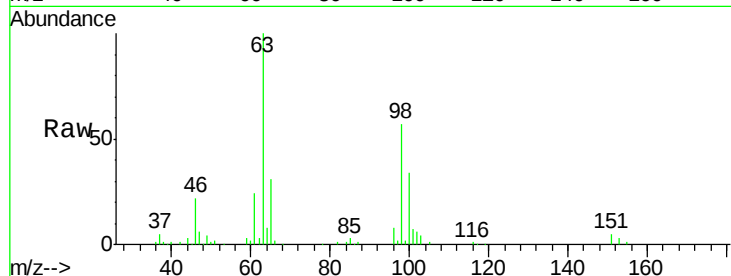
Tot Ion:101 Resp: 6292

Ion Ratio Lower Upper

101 100

85 32.9 35.4 53.2#

151 57.6 54.8 82.2



#12

1,1-Dichloroethene

Concen: 3.215 ug/L

RT: 2.59 min Scan# 390

Delta R.T. 0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

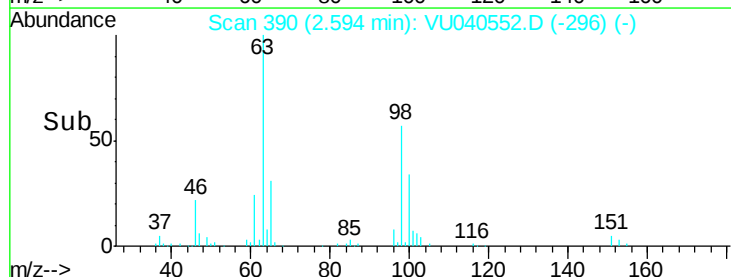
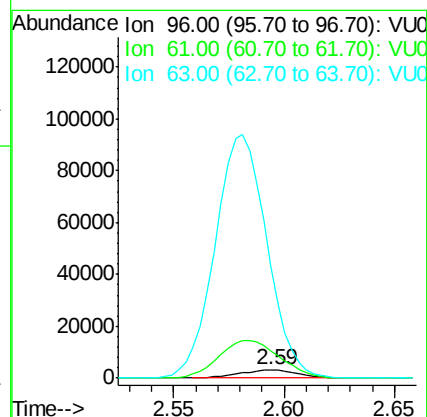
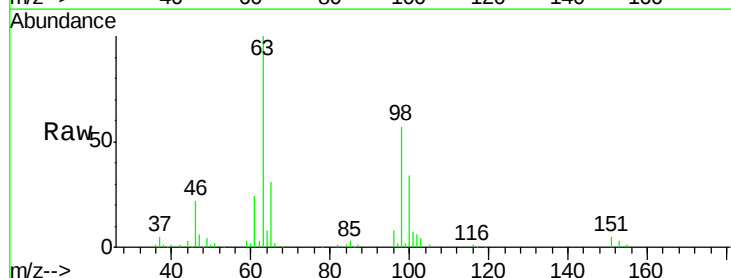
Tgt Ion: 96 Resp: 5881

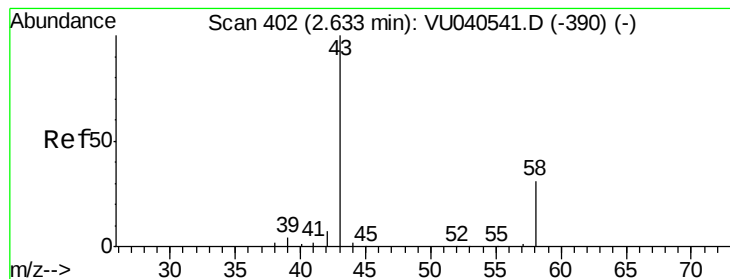
Ion Ratio Lower Upper

96 100

61 317.2 135.0 250.8#

63 1308.5 101.4 188.2#





#13

Acetone

Concen: 5.618 ug/L

RT: 2.64 min Scan# 404

Delta R.T. 0.01 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

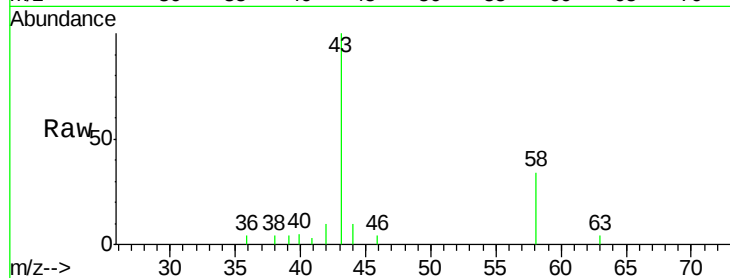
MDL-ME-SOIL-04

Tot Ion: 43 Resp: 9498

Ion Ratio Lower Upper

43 100

58 29.9 0.0 60.2



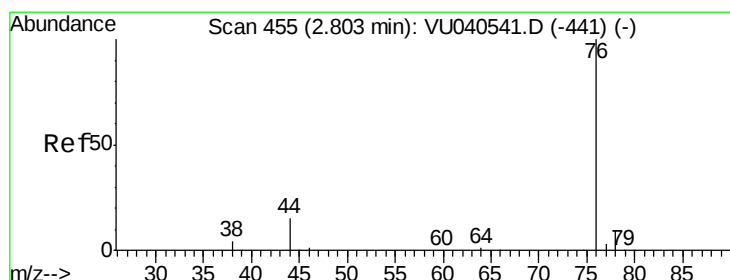
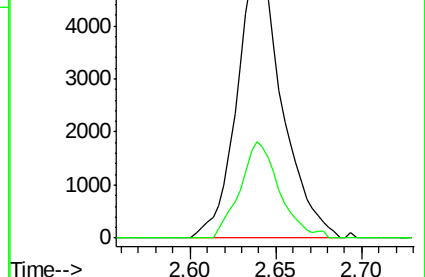
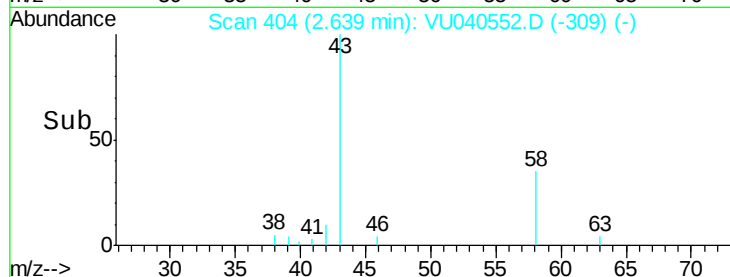
Abundance Ion 43.00 (42.70 to 43.70): VU040552.D (-309) (-)

Ion 58.00 (57.70 to 58.70): VU040552.D (-309) (-)

2.64

2.65

2.70



#14

Carbon disulfide

Concen: 2.653 ug/L

RT: 2.81 min Scan# 456

Delta R.T. 0.00 min

Lab File: VU040552.D

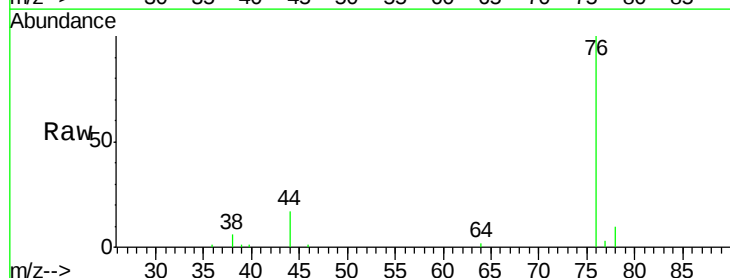
Acq: 07 Oct 2020 18:31

Tgt Ion: 76 Resp: 16663

Ion Ratio Lower Upper

76 100

78 10.0 7.4 11.0

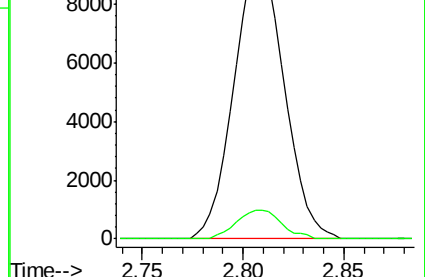
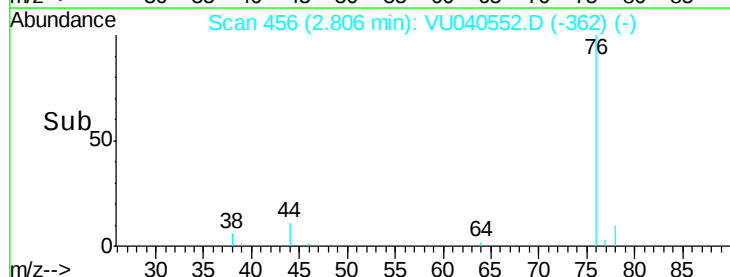


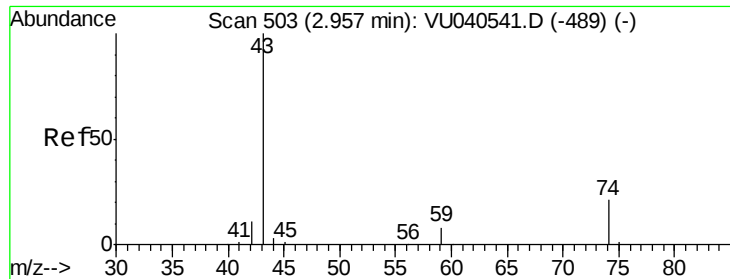
Abundance Ion 76.00 (75.70 to 76.70): VU040552.D (-362) (-)

Ion 78.00 (77.70 to 78.70): VU040552.D (-362) (-)

2.81

2.85





#15

Methvl Acetate

Concen: 2.815 ug/L

RT: 2.96 min Scan# 505

Delta R.T. 0.01 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

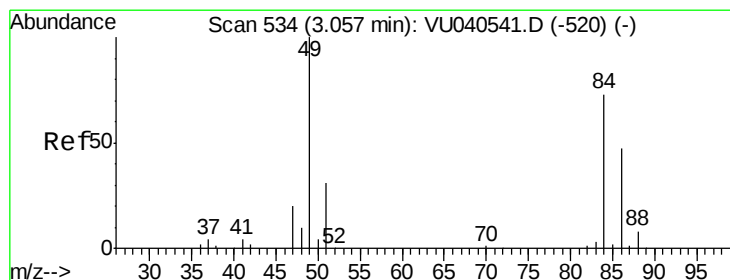
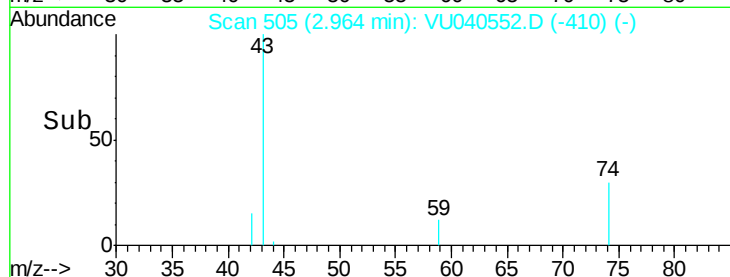
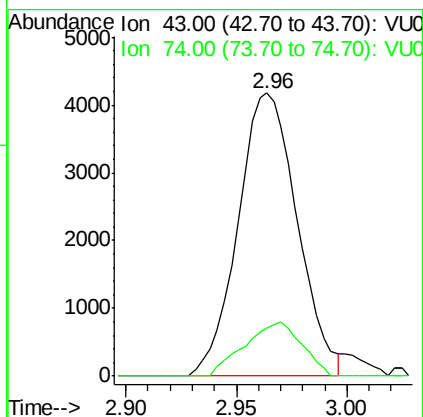
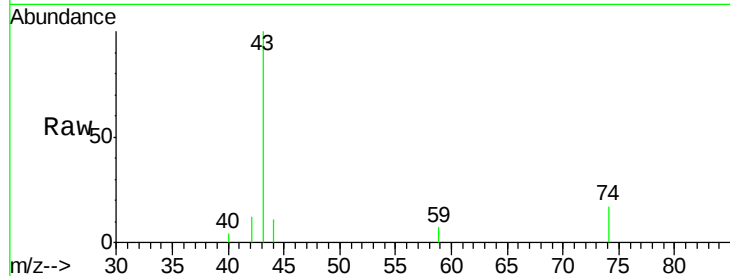
MDL-ME-SOIL-04

Tot Ion: 43 Resp: 7763

Ion Ratio Lower Upper

43 100

74 18.5 16.4 24.6



#16

Methylene chloride

Concen: 2.749 ug/L

RT: 3.06 min Scan# 536

Delta R.T. 0.01 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

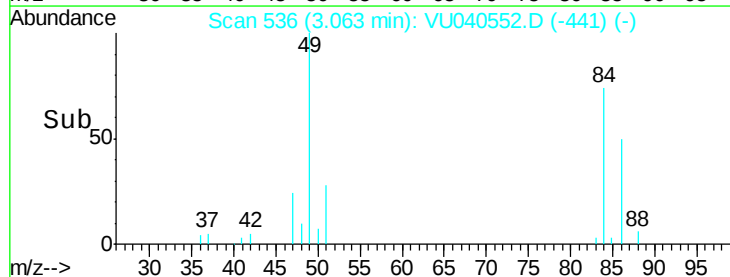
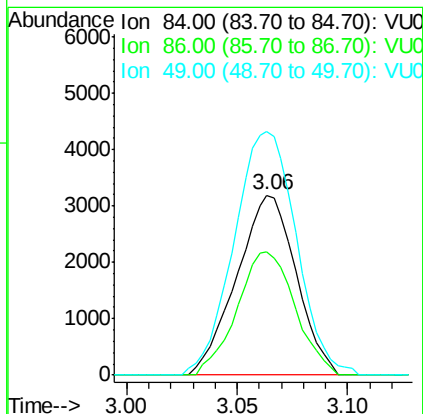
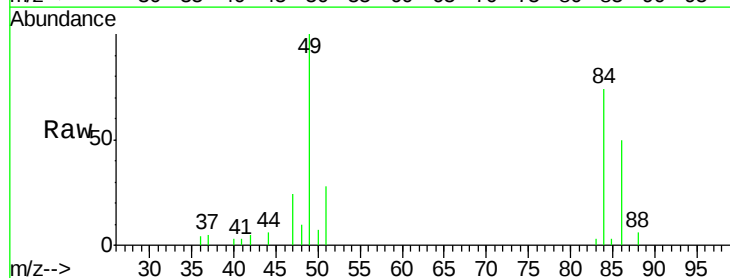
Tgt Ion: 84 Resp: 5963

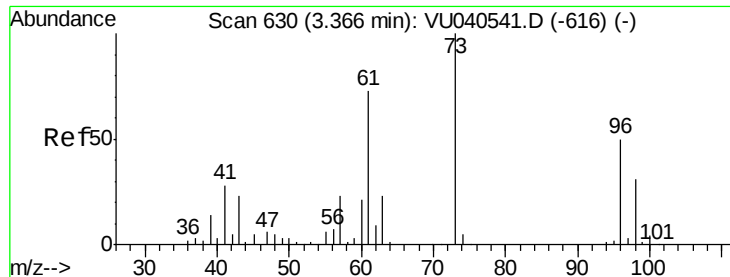
Ion Ratio Lower Upper

84 100

86 68.1 45.4 84.4

49 135.2 102.9 191.1





#17

trans-1,2-Dichloroethene

Concen: 2.792 ug/L

RT: 3.37 min Scan# 631

Delta R.T. 0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

MDL-ME-SOIL-04

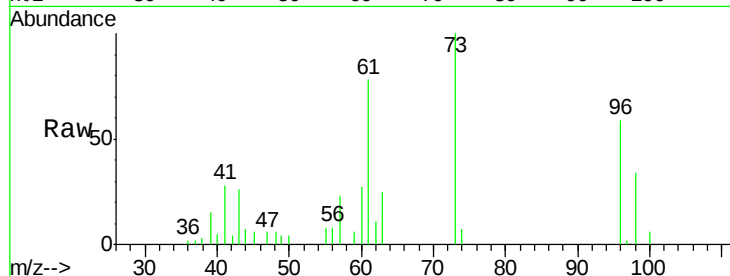
Tot Ion: 96 Resp: 5441

Ion Ratio Lower Upper

96 100

61 132.5 109.6 203.6

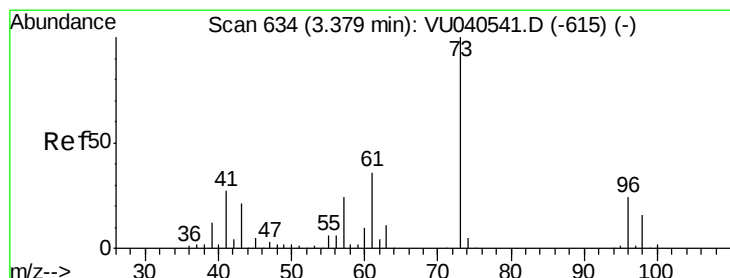
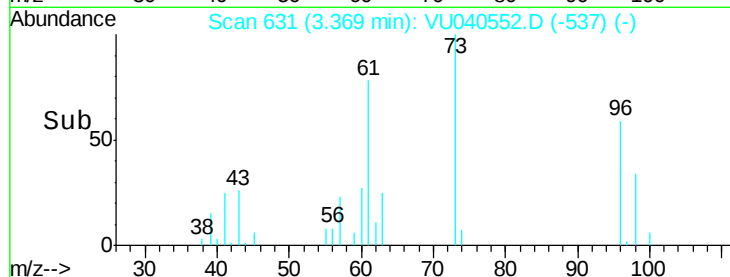
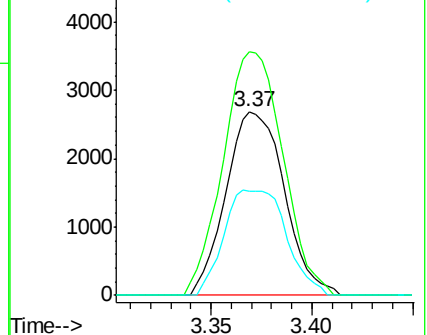
98 56.8 43.3 80.3



Abundance Ion 96.00 (95.70 to 96.70): VU040552.D (-537) (-)

Ion 61.00 (60.70 to 61.70): VU040552.D (-537) (-)

Ion 98.00 (97.70 to 98.70): VU040552.D (-537) (-)



#18

Methyl tert-butyl Ether

Concen: 2.483 ug/L

RT: 3.38 min Scan# 635

Delta R.T. 0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

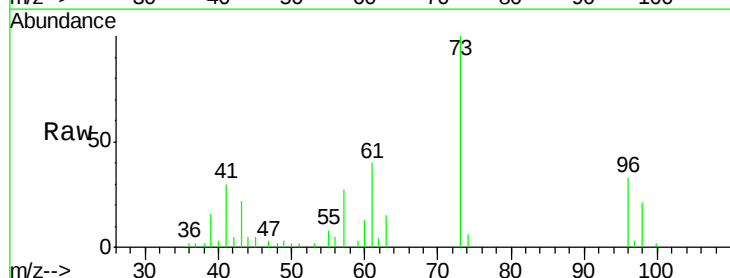
Tgt Ion: 73 Resp: 15219

Ion Ratio Lower Upper

73 100

43 23.1 18.2 27.2

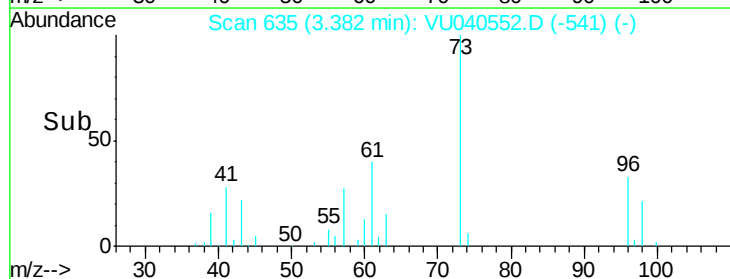
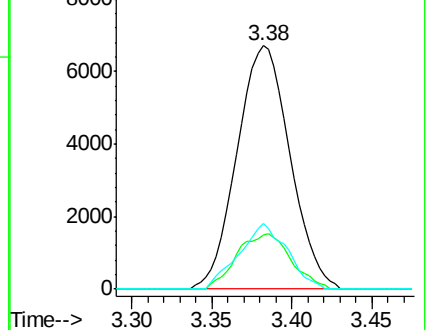
57 24.5 18.5 27.7

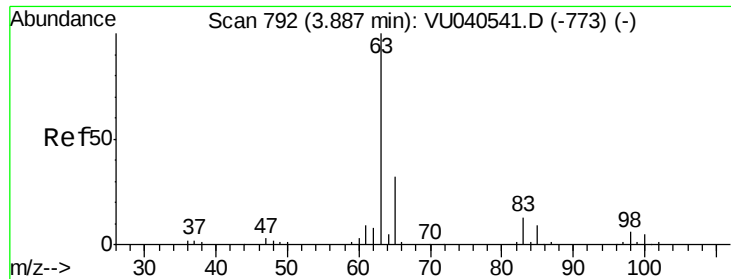


Abundance Ion 73.00 (72.70 to 73.70): VU040552.D (-541) (-)

Ion 43.00 (42.70 to 43.70): VU040552.D (-541) (-)

Ion 57.00 (56.70 to 57.70): VU040552.D (-541) (-)

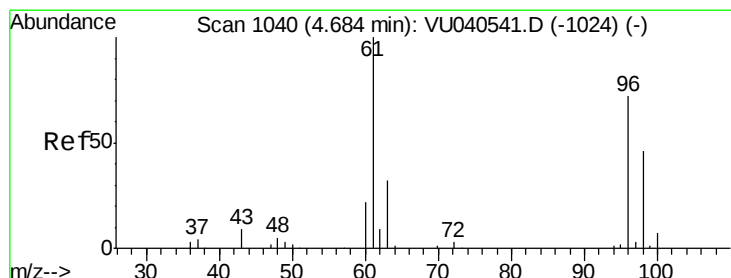
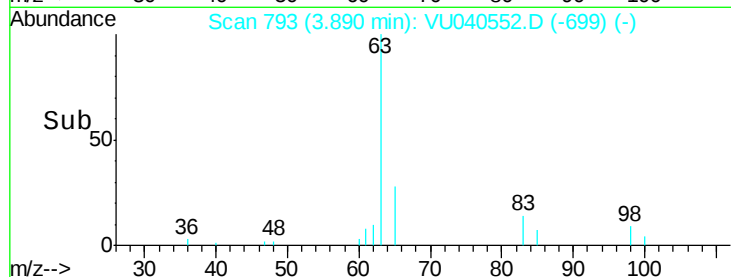
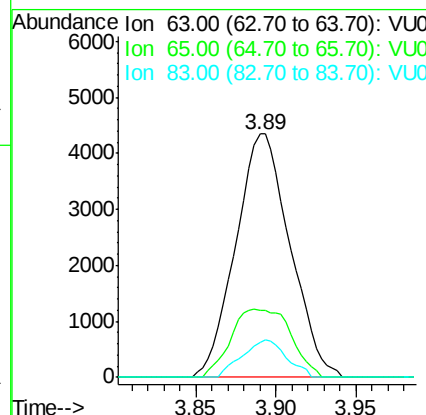
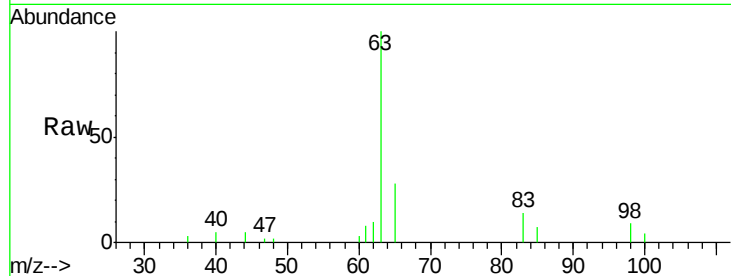




#19  
 1,1-Dichloroethane  
 Concen: 2.601 ug/L  
 RT: 3.89 min Scan# 793  
 Delta R.T. 0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

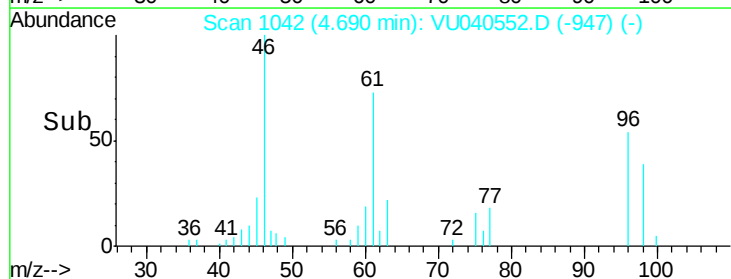
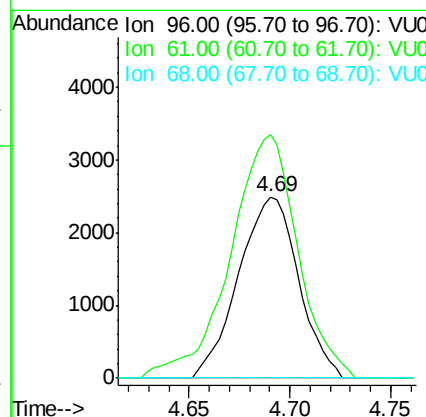
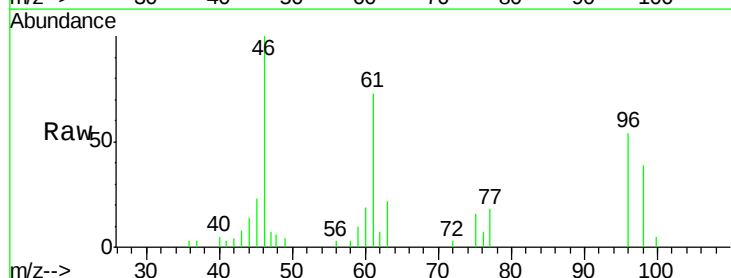
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL-ME-SOIL-04

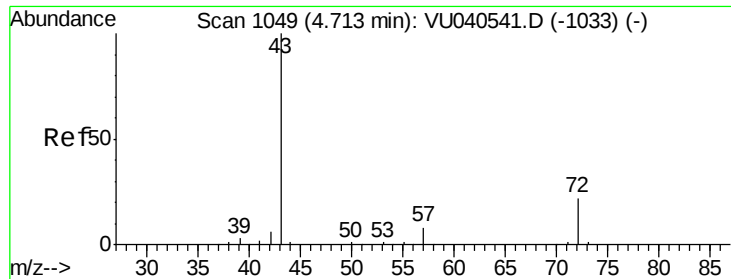
Tot Ion: 63 Resp: 10107  
 Ion Ratio Lower Upper  
 63 100  
 65 27.7 22.6 42.0  
 83 14.4 9.1 16.9



#20  
 cis-1,2-Dichloroethene  
 Concen: 2.463 ug/L  
 RT: 4.69 min Scan# 1042  
 Delta R.T. 0.01 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

Tgt Ion: 96 Resp: 5171  
 Ion Ratio Lower Upper  
 96 100  
 61 134.5 95.7 177.7  
 68 0.0 0.0 0.0





#22

2-Butanone

Concen: 5.950 ug/L

RT: 4.73 min Scan# 1053

Delta R.T. 0.01 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

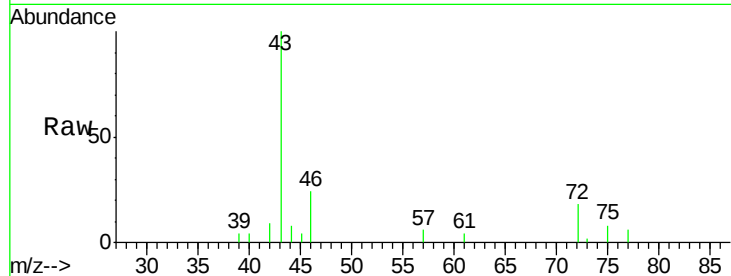
MDL-ME-SOIL-04

Tot Ion: 43 Resp: 12832

Ion Ratio Lower Upper

43 100

72 6.8 11.9 35.9#

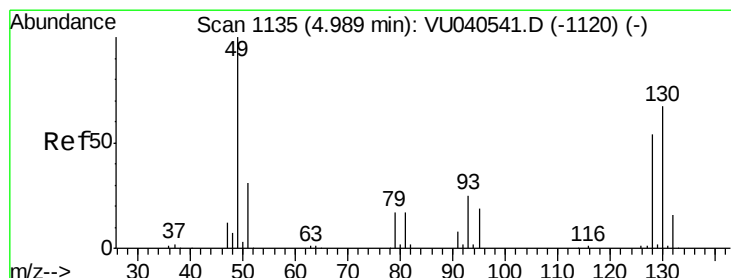
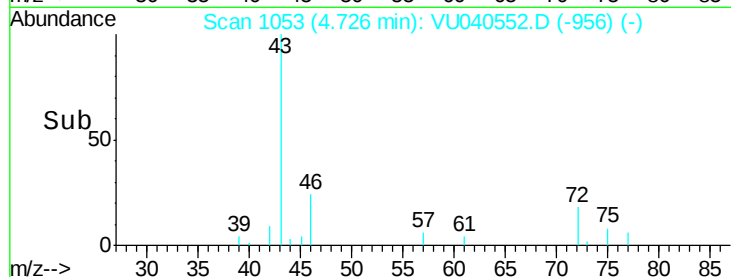


Abundance Ion 43.00 (42.70 to 43.70): VU040552.D (-956) (-)

Ion 72.00 (71.70 to 72.70): VU040552.D (-956) (-)

4.73

Time-->



#23

Bromochloromethane

Concen: 2.418 ug/L

RT: 5.00 min Scan# 1137

Delta R.T. 0.01 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Tgt Ion: 128 Resp: 2646

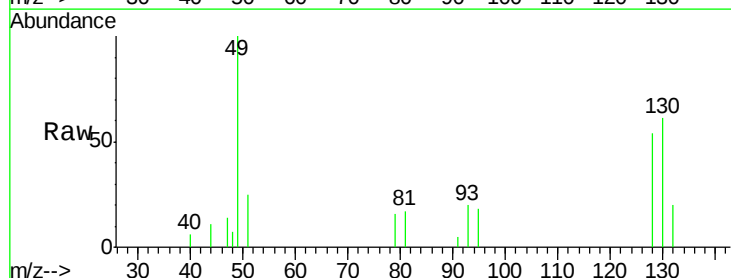
Ion Ratio Lower Upper

128 100

49 186.0 133.1 247.3

130 113.1 90.5 168.1

51 46.0 48.4 72.6#



Abundance Ion 128.00 (127.70 to 128.70): VU040552.D (-1042) (-)

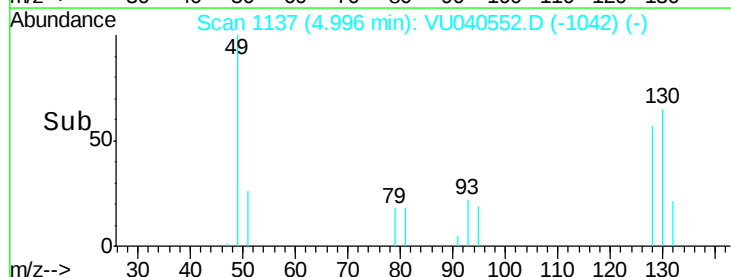
Ion 49.00 (48.70 to 49.70): VU040552.D (-1042) (-)

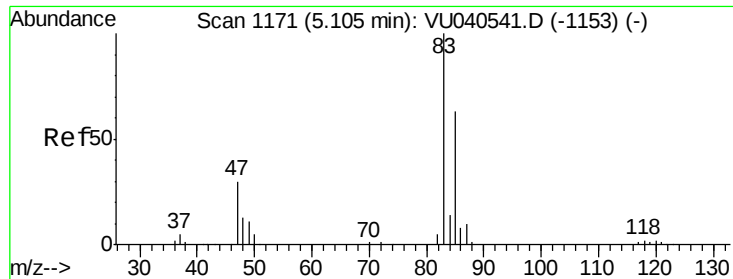
Ion 130.00 (129.70 to 130.70): VU040552.D (-1042) (-)

Ion 51.00 (50.70 to 51.70): VU040552.D (-1042) (-)

5.00

Time-->

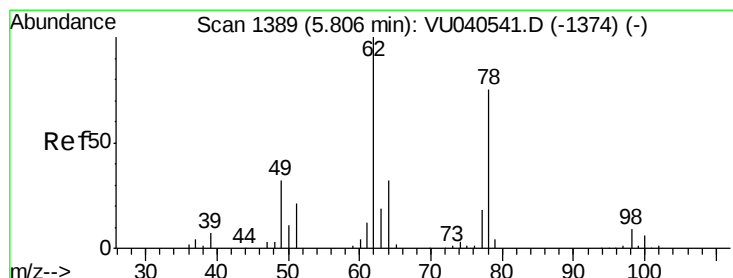
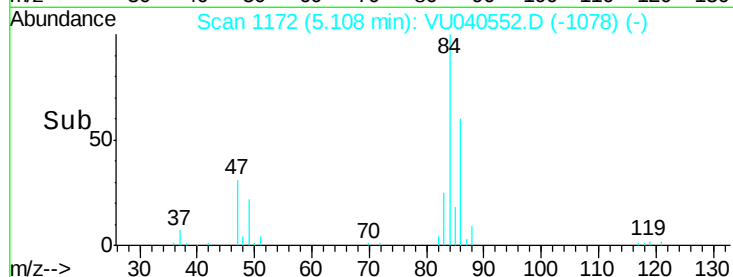
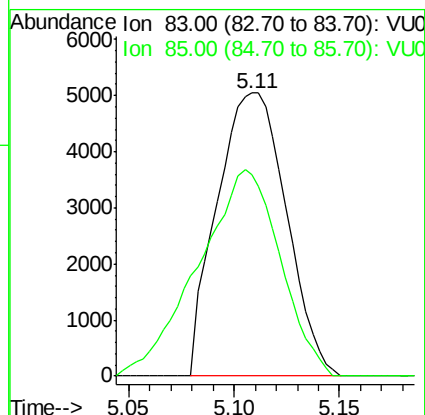
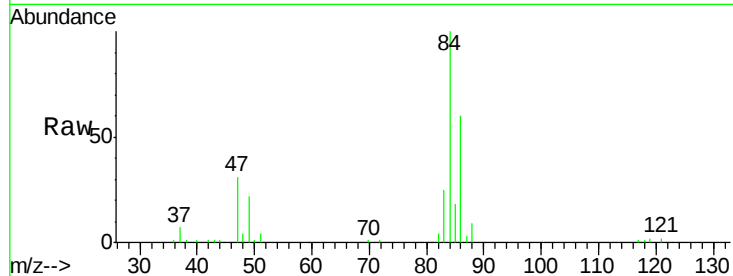




#25  
Chloroform  
Concen: 2.910 ug/L  
RT: 5.11 min Scan# 1172  
Delta R.T. 0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

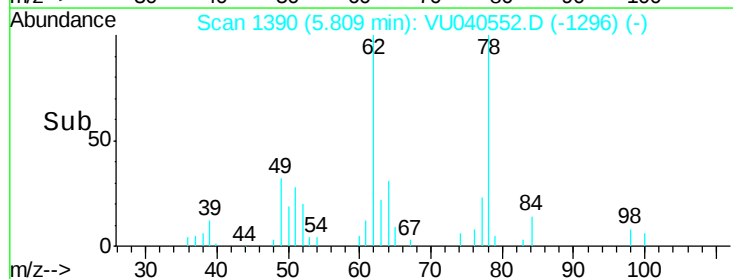
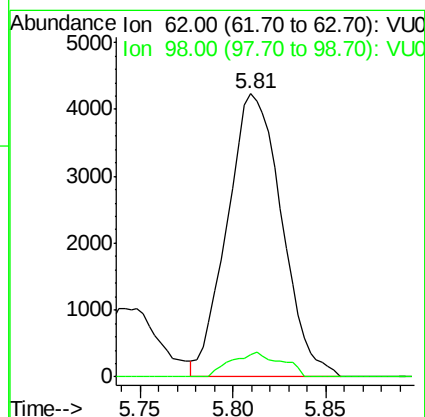
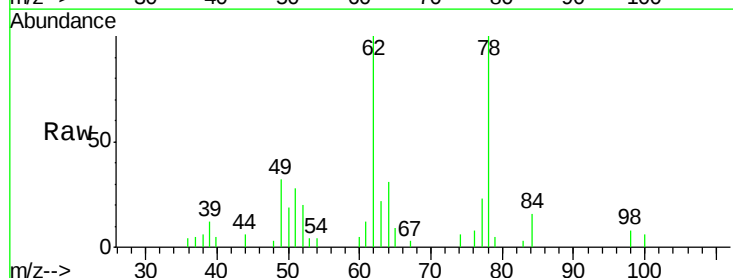
Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL-ME-SOIL-04

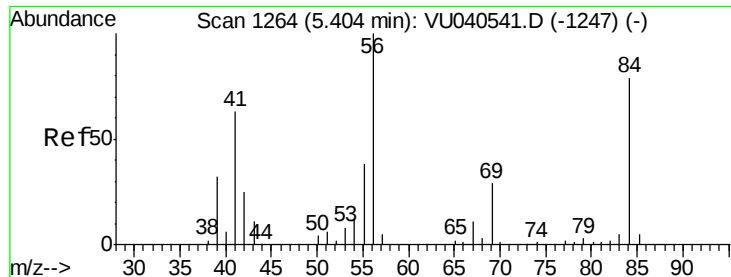
Tot Ion: 83 Resp: 11531  
Ion Ratio Lower Upper  
83 100  
85 71.3 45.6 84.8



#27  
1,2-Dichloroethane  
Concen: 2.637 ug/L  
RT: 5.81 min Scan# 1390  
Delta R.T. 0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

Tgt Ion: 62 Resp: 8625  
Ion Ratio Lower Upper  
62 100  
98 8.0 7.1 10.7

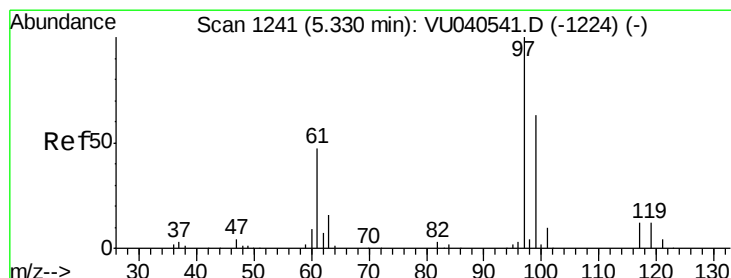
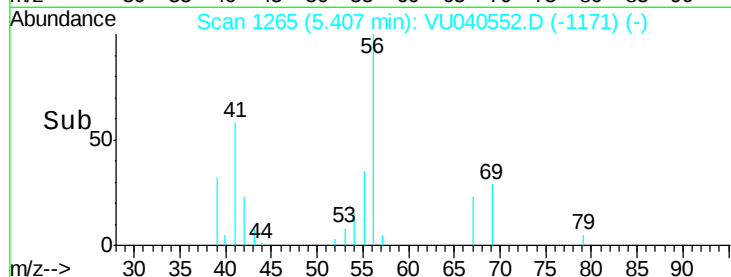
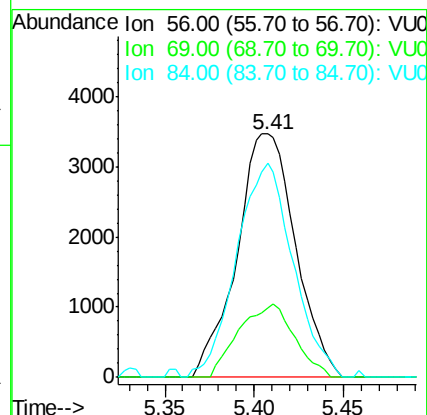
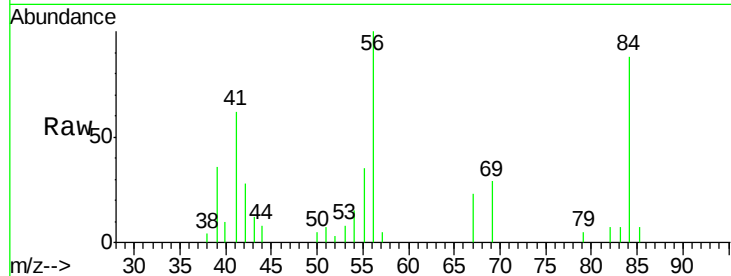




#29  
Cyclohexane  
Concen: 2.305 ug/L  
RT: 5.41 min Scan# 1265  
Delta R.T. 0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

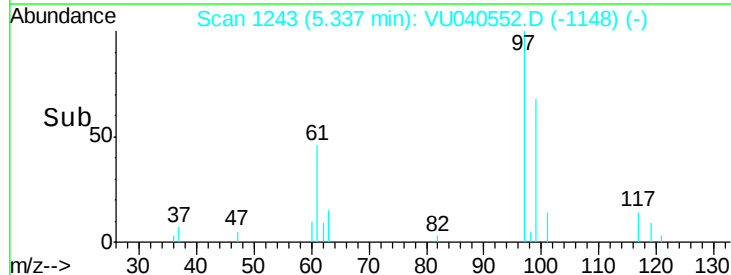
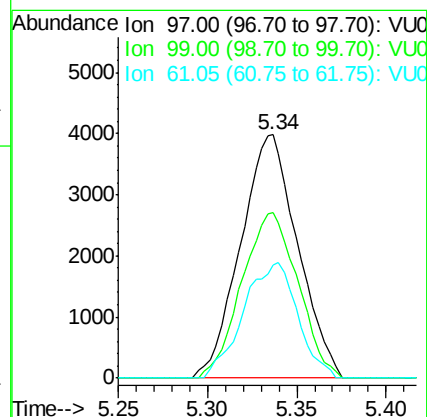
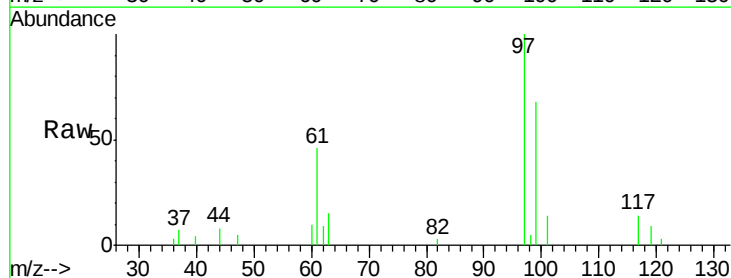
Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL-ME-SOIL-04

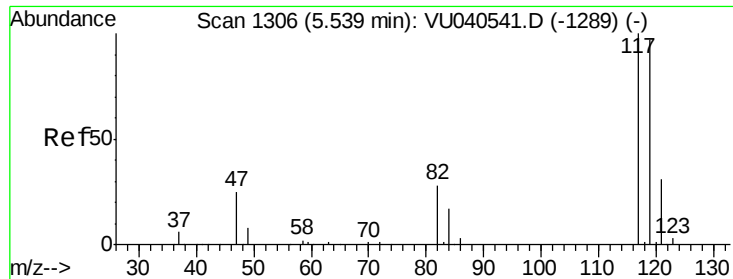
Tot Ion: 56 Resp: 7930  
Ion Ratio Lower Upper  
56 100  
69 28.7 22.6 34.0  
84 84.9 63.1 94.7



#30  
1,1,1-Trichloroethane  
Concen: 2.696 ug/L  
RT: 5.34 min Scan# 1243  
Delta R.T. 0.01 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

Tgt Ion: 97 Resp: 8896  
Ion Ratio Lower Upper  
97 100  
99 66.7 51.0 76.6  
61 45.1 39.4 59.2





#31

Carbon tetrachloride

Concen: 2.520 ug/L

RT: 5.54 min Scan# 1307

Delta R.T. 0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

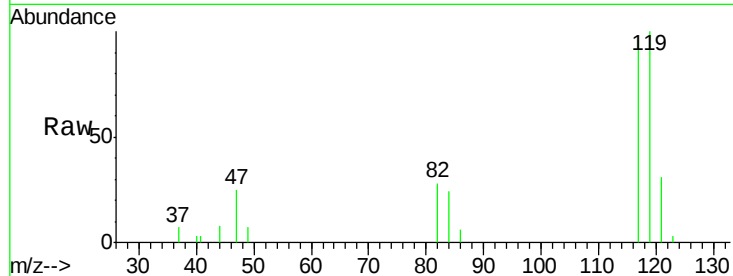
MDL-ME-SOIL-04

Tot Ion:117 Resp: 7190

Ion Ratio Lower Upper

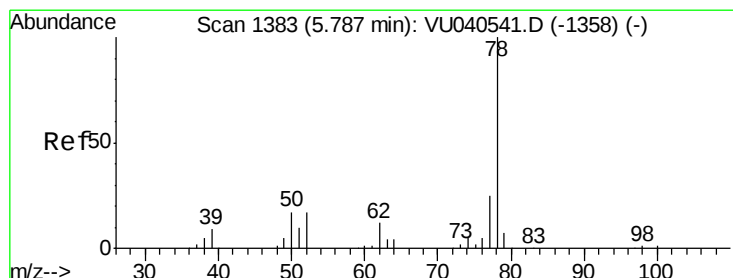
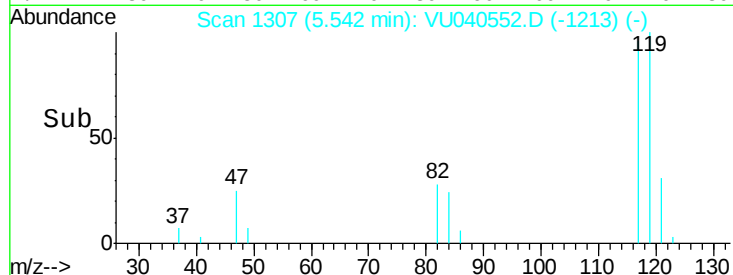
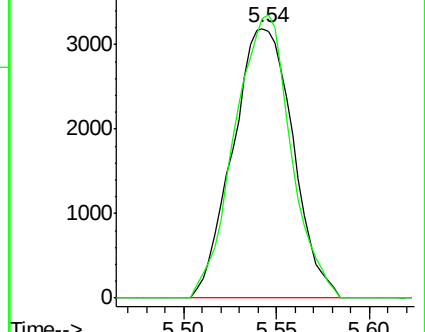
117 100

119 98.5 75.8 113.6



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#33

Benzene

Concen: 2.546 ug/L

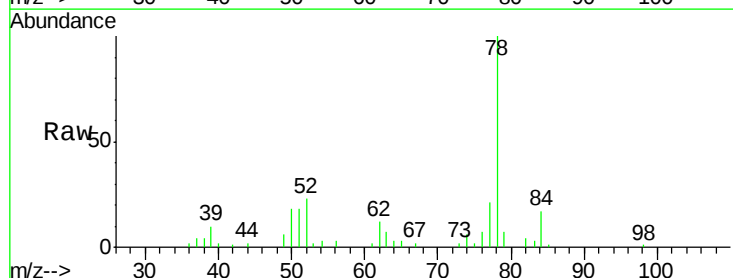
RT: 5.79 min Scan# 1384

Delta R.T. 0.00 min

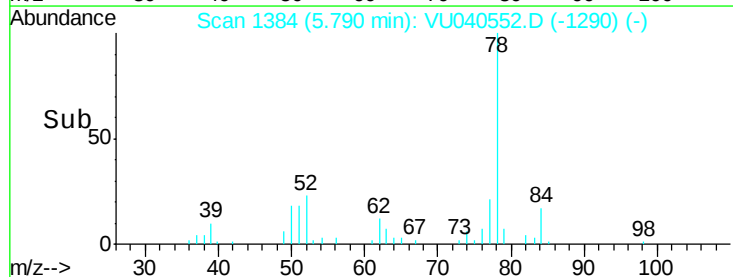
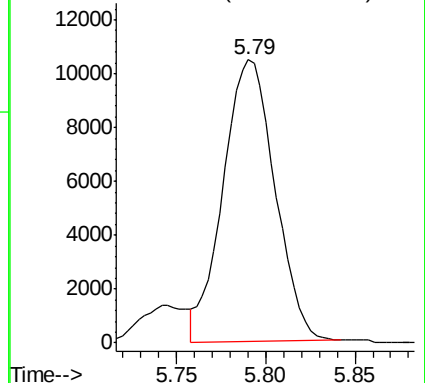
Lab File: VU040552.D

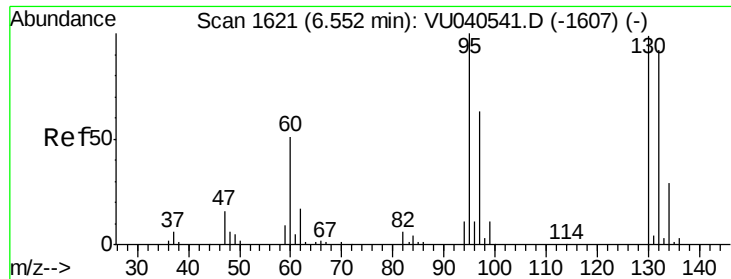
Acq: 07 Oct 2020 18:31

Tgt Ion: 78 Resp: 21138



Abundance Ion 78.00 (77.70 to 78.70): VU0

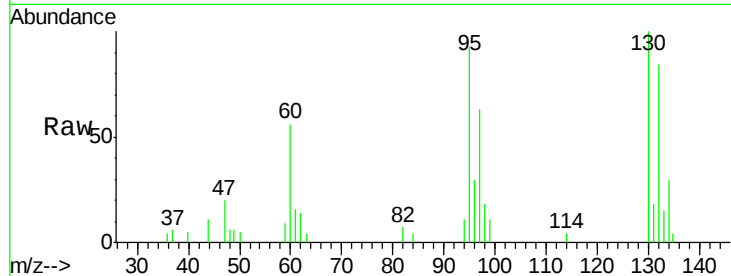




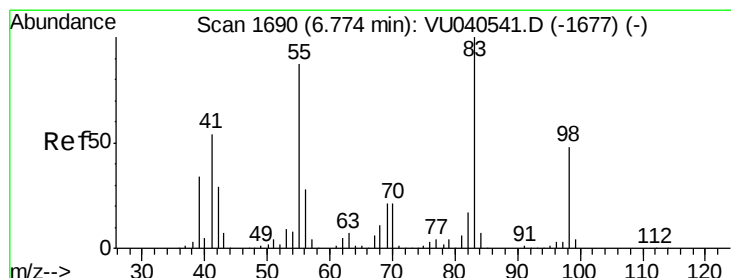
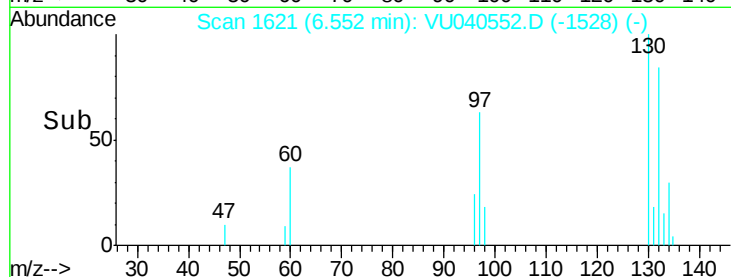
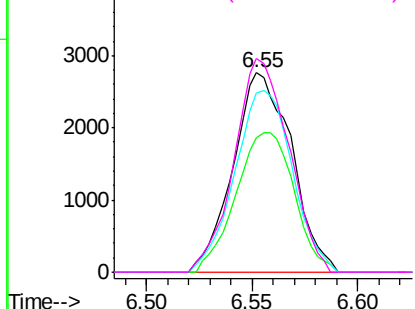
#34  
 Trichloroethene  
 Concen: 2.487 ug/L  
 RT: 6.55 min Scan# 1621  
 Delta R.T. -0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL-ME-SOIL-04

Tot Ion: 95 Resp: 5321  
 Ion Ratio Lower Upper  
 95 100  
 97 67.5 44.3 82.3  
 132 89.7 64.2 119.2  
 130 107.0 67.3 125.1

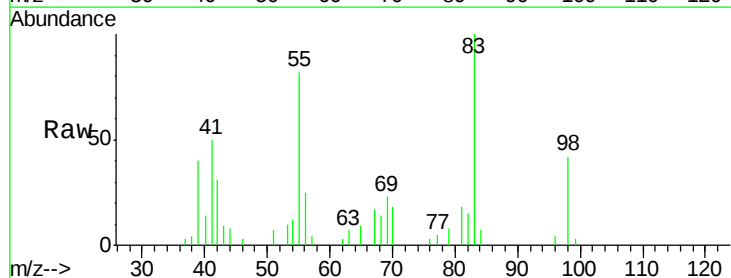


Abundance Ion 95.00 (94.70 to 95.70): VU0  
 Ion 97.00 (96.70 to 97.70): VU0  
 Ion 132.00 (131.70 to 132.70): V  
 Ion 130.00 (129.70 to 130.70): V

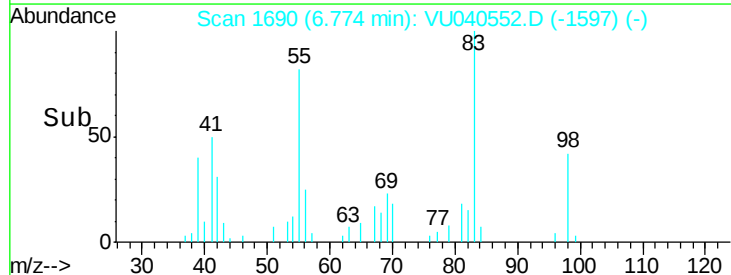
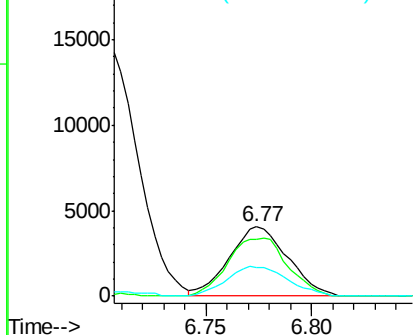


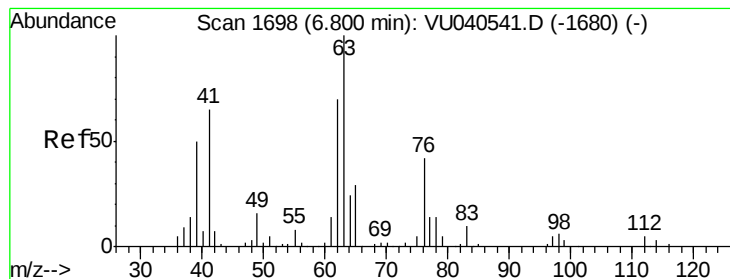
#35  
 Methylcyclohexane  
 Concen: 2.405 ug/L  
 RT: 6.77 min Scan# 1690  
 Delta R.T. -0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

Tgt Ion: 83 Resp: 7820  
 Ion Ratio Lower Upper  
 83 100  
 55 85.3 69.8 104.8  
 98 44.3 39.1 58.7



Abundance Ion 83.00 (82.70 to 83.70): VU0  
 Ion 55.00 (54.70 to 55.70): VU0  
 Ion 98.00 (97.70 to 98.70): VU0





#37

1,2-Dichloropropane

Concen: 2.754 ug/L

RT: 6.80 min Scan# 1699

Delta R.T. 0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

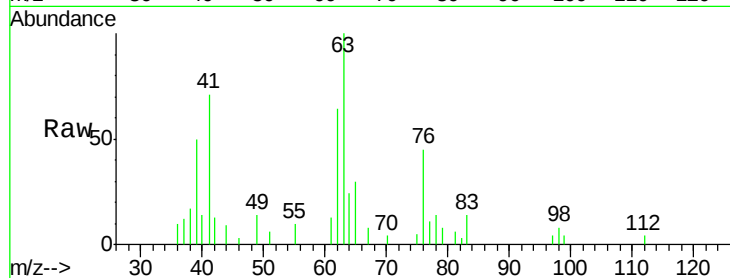
MDL-ME-SOIL-04

Tot Ion: 63 Resp: 6280

Ion Ratio Lower Upper

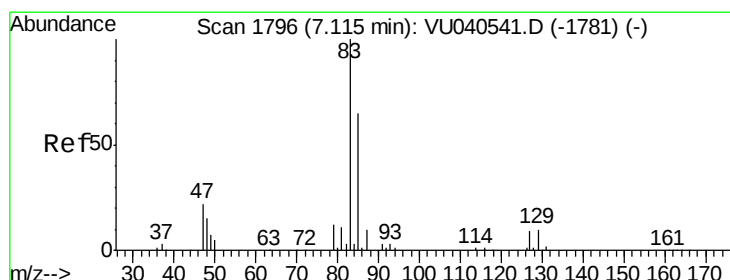
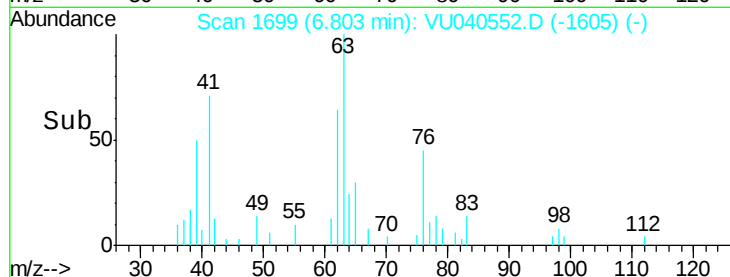
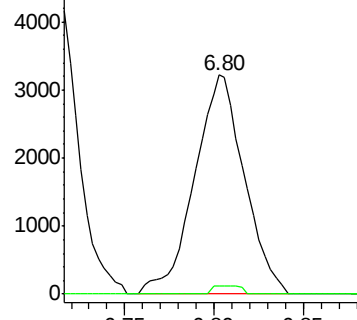
63 100

112 1.2 3.5 5.3#



Abundance Ion 63.00 (62.70 to 63.70): VU040541.D (-1680) (-)

Ion 112.00 (111.70 to 112.70): VU040541.D (-1680) (-)



#38

Bromodichloromethane

Concen: 2.370 ug/L

RT: 7.12 min Scan# 1797

Delta R.T. 0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

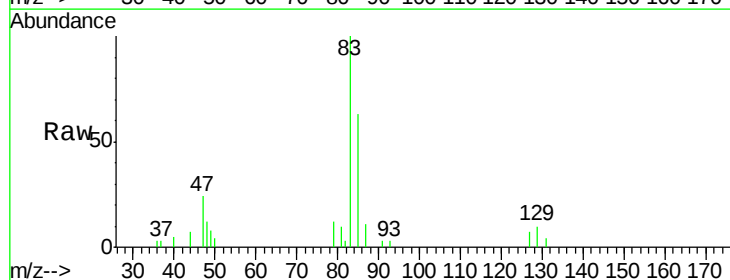
Tgt Ion: 83 Resp: 7019

Ion Ratio Lower Upper

83 100

85 62.6 45.2 84.0

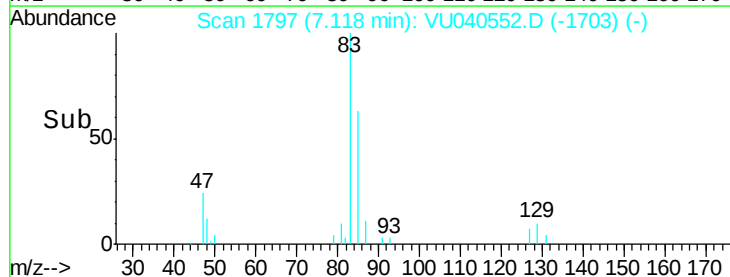
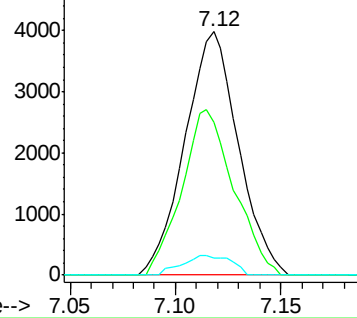
127 7.2 6.7 10.1

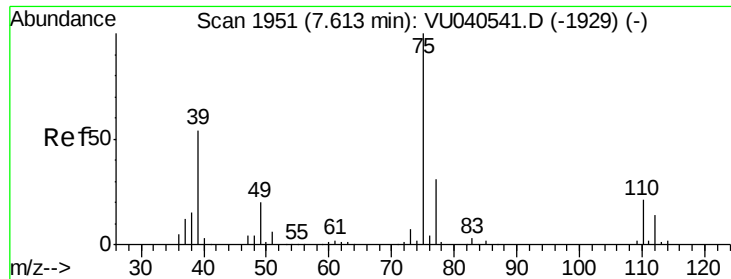


Abundance Ion 83.00 (82.70 to 83.70): VU040541.D (-1781) (-)

Ion 85.00 (84.70 to 85.70): VU040541.D (-1781) (-)

Ion 127.00 (126.70 to 127.70): VU040541.D (-1781) (-)

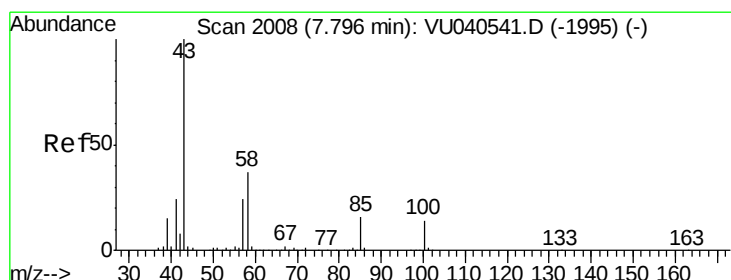
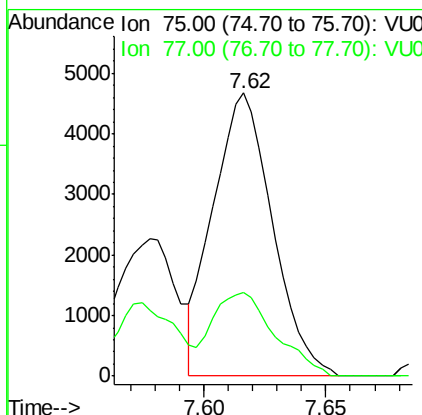
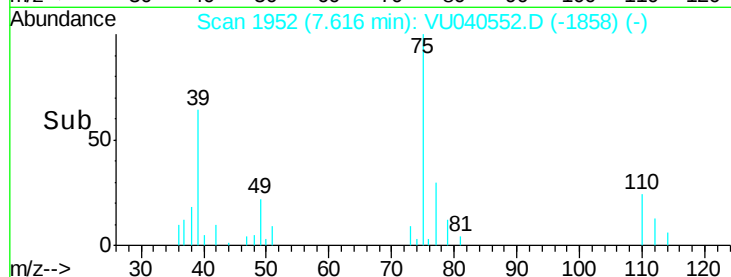
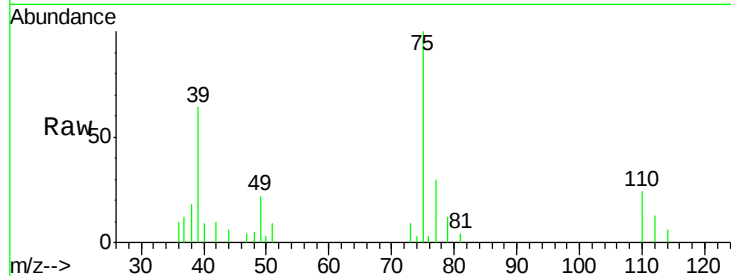




#39  
 cis-1,3-Dichloropropene  
 Concen: 2.365 ug/L  
 RT: 7.62 min Scan# 1952  
 Delta R.T. 0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

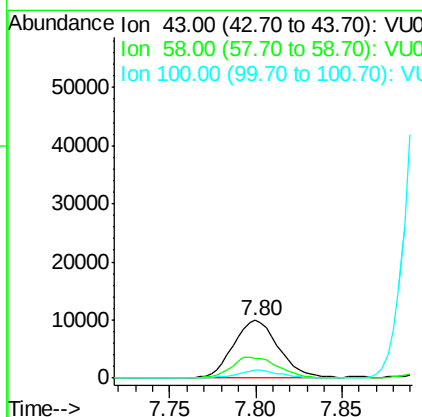
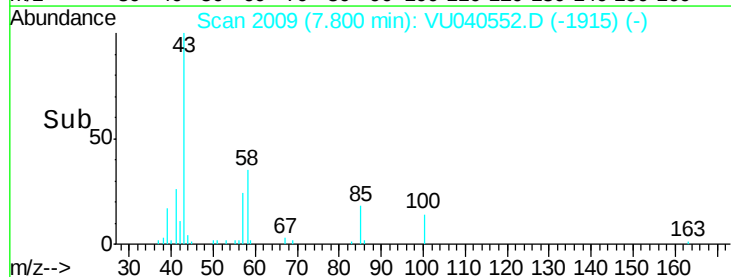
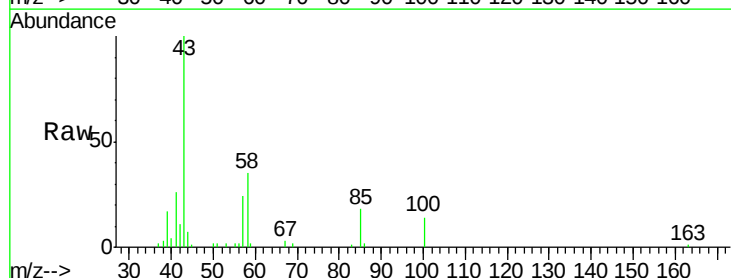
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL-ME-SOIL-04

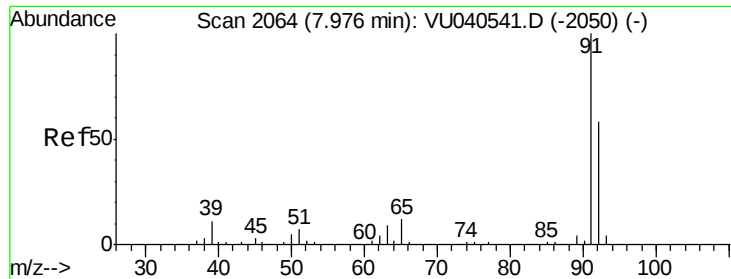
Tot Ion: 75 Resp: 7905  
 Ion Ratio Lower Upper  
 75 100  
 77 29.7 21.4 39.8



#40  
 4-Methyl-2-pentanone  
 Concen: 5.086 ug/L  
 RT: 7.80 min Scan# 2009  
 Delta R.T. 0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

Tgt Ion: 43 Resp: 18298  
 Ion Ratio Lower Upper  
 43 100  
 58 37.3 29.7 44.5  
 100 12.9 10.5 15.7





#42

Toluene

Concen: 2.393 ug/L

RT: 7.98 min Scan# 2064

Delta R.T. -0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

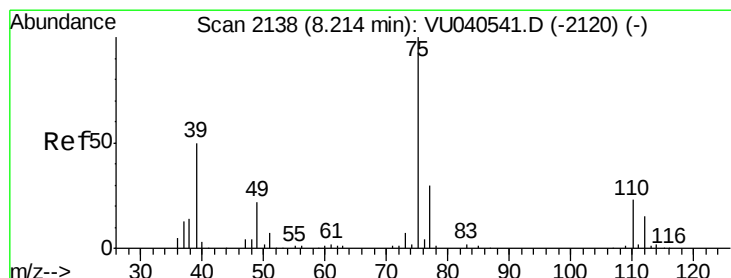
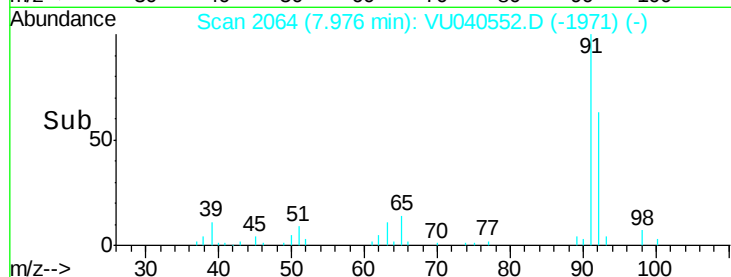
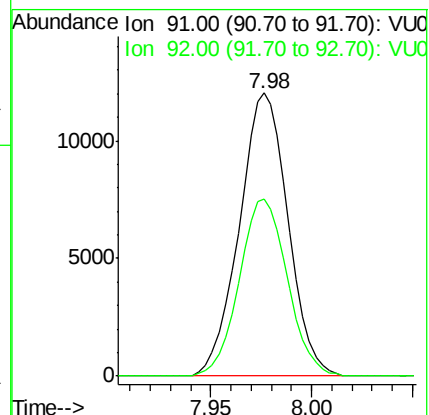
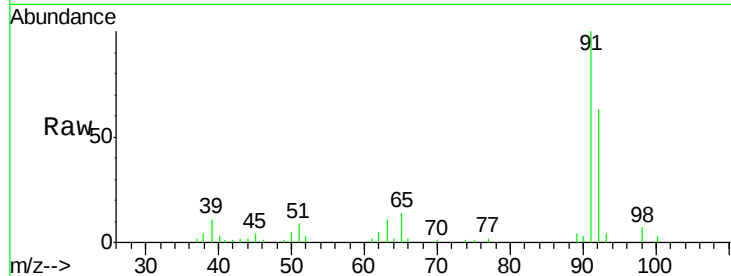
MDL-ME-SOIL-04

Tot Ion: 91 Resp: 20289

Ion Ratio Lower Upper

91 100

92 62.8 39.9 74.1



#44

trans-1,3-Dichloropropene

Concen: 2.556 ug/L

RT: 8.21 min Scan# 2138

Delta R.T. -0.00 min

Lab File: VU040552.D

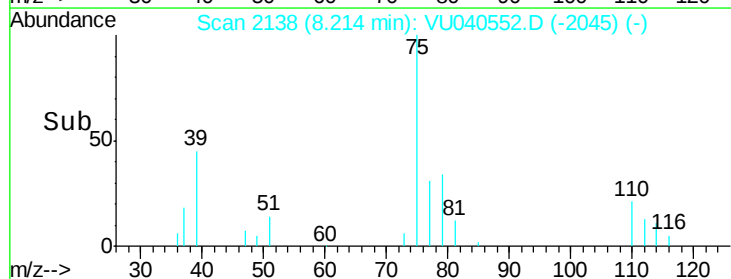
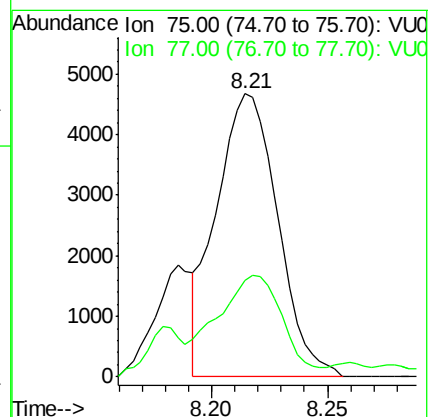
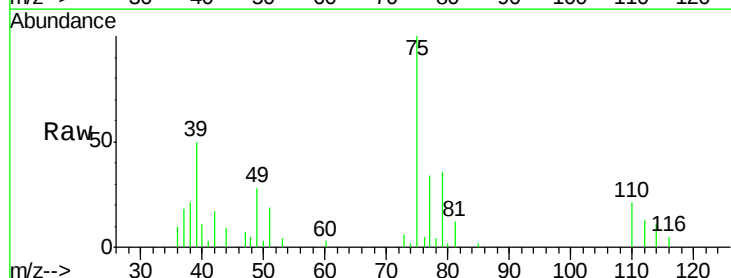
Acq: 07 Oct 2020 18:31

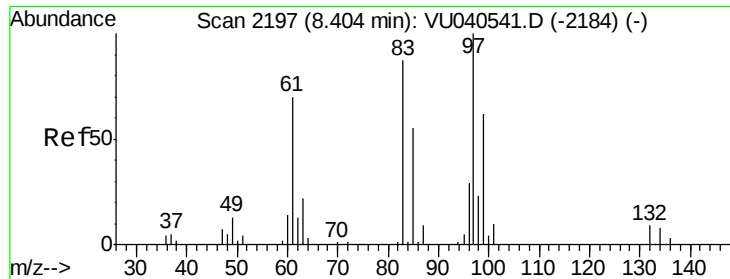
Tgt Ion: 75 Resp: 8602

Ion Ratio Lower Upper

75 100

77 33.9 22.1 41.1

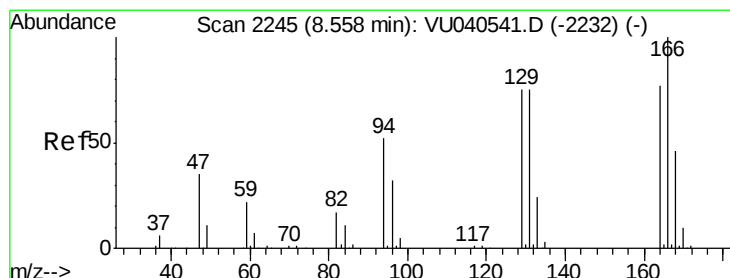
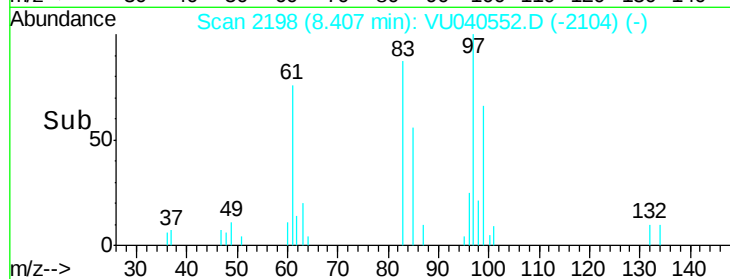
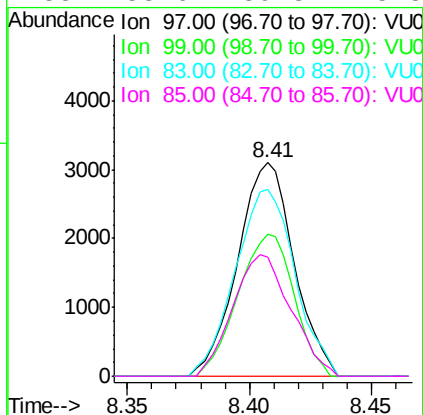
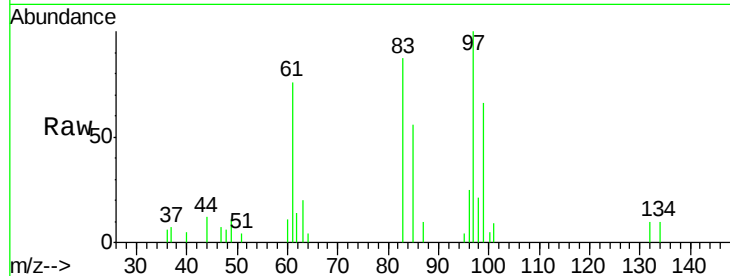




#45  
1,1,2-Trichloroethane  
Concen: 2.434 ug/L  
RT: 8.41 min Scan# 2198  
Delta R.T. 0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

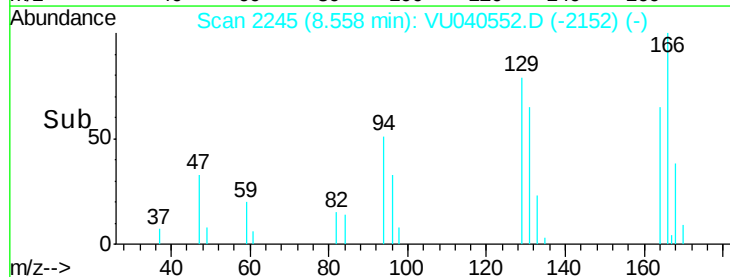
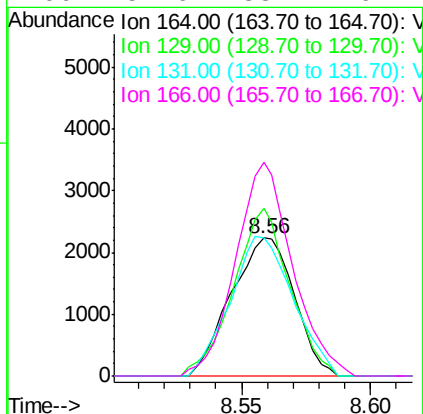
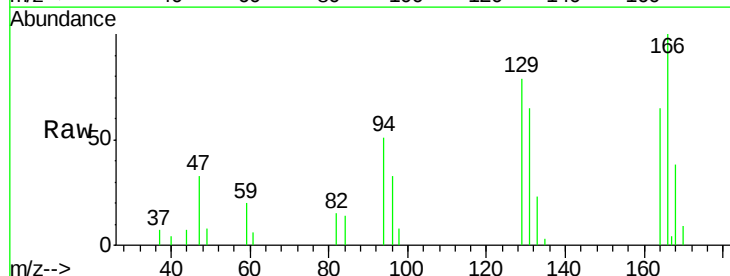
Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL-ME-SOIL-04

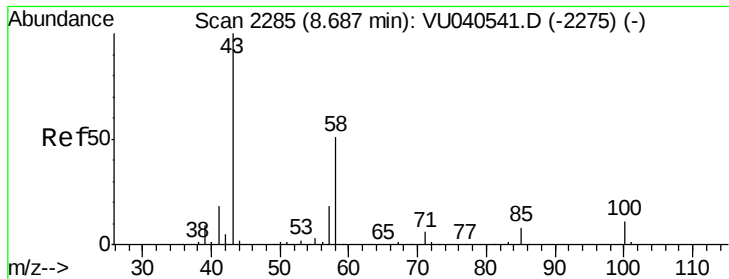
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 97    | Resp: | 4972  |
| Ion      | Ratio | Lower | Upper |
| 97       | 100   |       |       |
| 99       | 66.4  | 42.7  | 79.3  |
| 83       | 87.3  | 61.0  | 113.4 |
| 85       | 55.6  | 39.8  | 73.8  |



#46  
Tetrachloroethene  
Concen: 2.467 ug/L  
RT: 8.56 min Scan# 2245  
Delta R.T. -0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 164   | Resp: | 3813  |
| Ion      | Ratio | Lower | Upper |
| 164      | 100   |       |       |
| 129      | 121.5 | 67.4  | 125.2 |
| 131      | 100.1 | 63.8  | 118.6 |
| 166      | 154.6 | 88.7  | 164.7 |

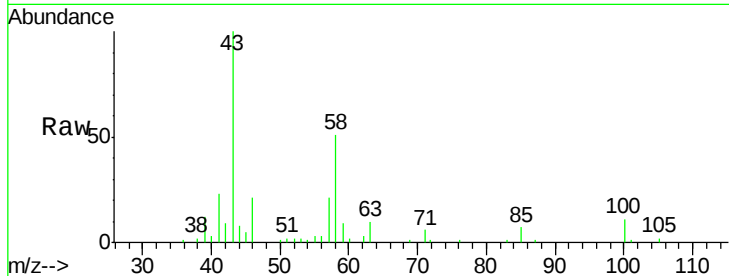




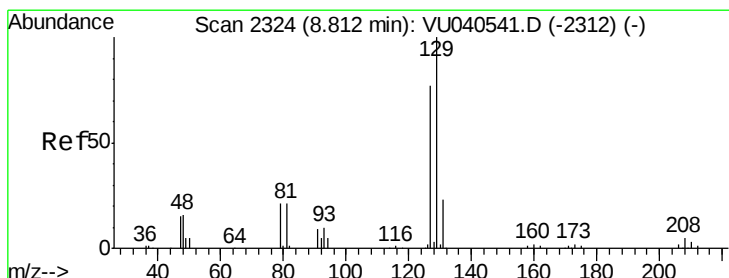
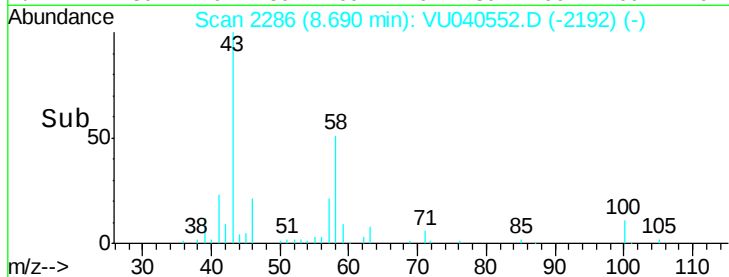
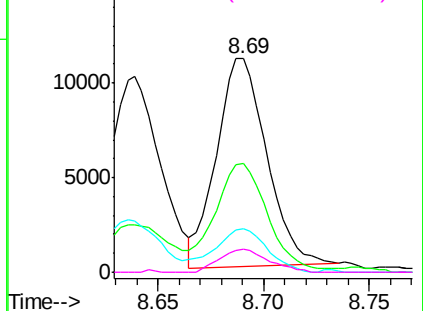
#48  
2-Hexanone  
Concen: 6.209 ug/L  
RT: 8.69 min Scan# 2286  
Delta R.T. 0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL-ME-SOIL-04

Tot Ion: 43 Resp: 18158  
Ion Ratio Lower Upper  
43 100  
58 56.4 40.6 60.8  
57 21.0 14.3 21.5  
100 10.8 8.5 12.7

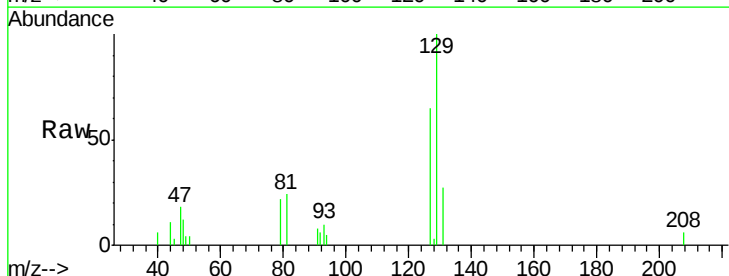


Abundance Ion 43.00 (42.70 to 43.70): VU040552.D (-2192) (-)  
Ion 58.00 (57.70 to 58.70): VU040552.D (-2192) (-)  
Ion 57.00 (56.70 to 57.70): VU040552.D (-2192) (-)  
Ion 100.00 (99.70 to 100.70): VU040552.D (-2192) (-)

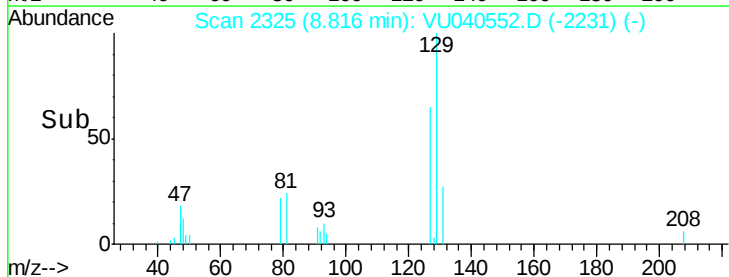
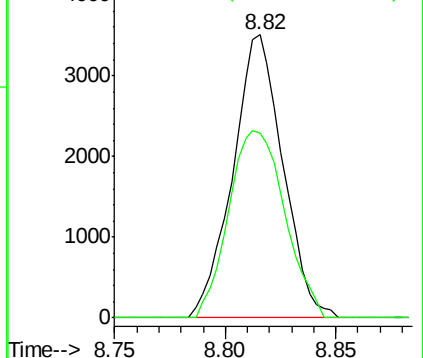


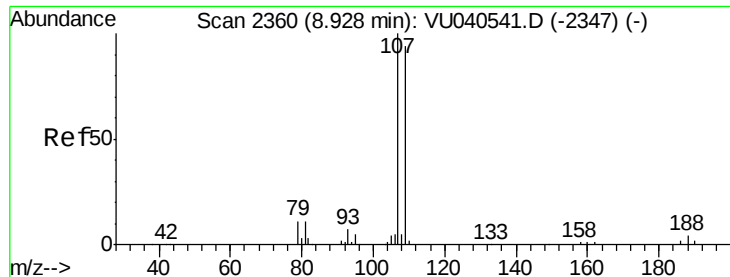
#49  
Dibromochloromethane  
Concen: 2.478 ug/L  
RT: 8.82 min Scan# 2325  
Delta R.T. 0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

Tgt Ion: 129 Resp: 5527  
Ion Ratio Lower Upper  
129 100  
127 65.5 54.9 102.1



Abundance Ion 129.00 (128.70 to 129.70): VU040552.D (-2231) (-)  
Ion 127.00 (126.70 to 127.70): VU040552.D (-2231) (-)

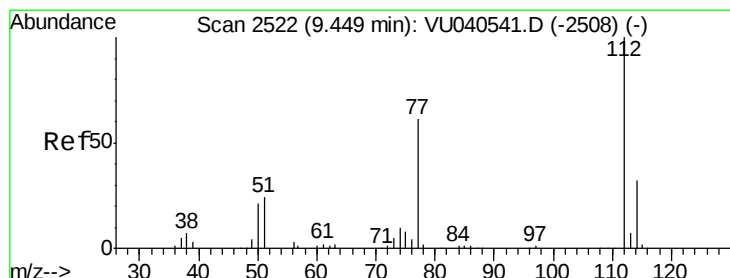
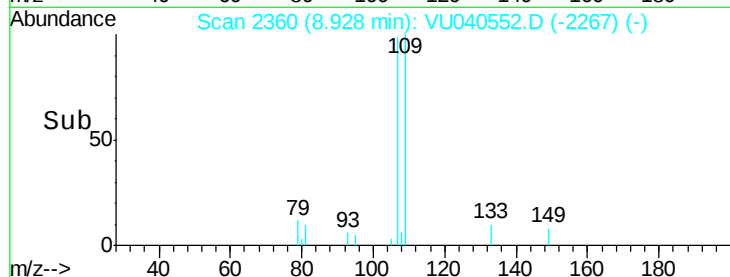
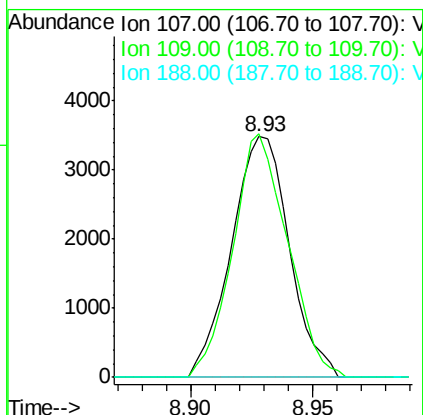
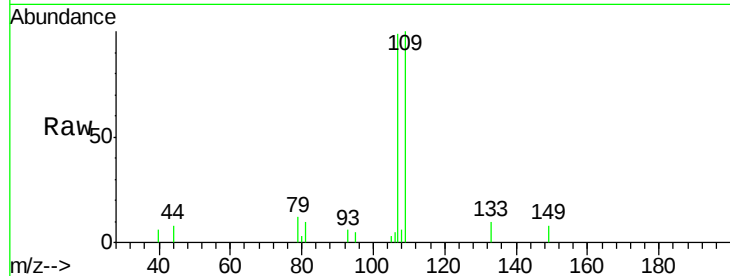




#50  
1,2-Dibromoethane  
Concen: 2.648 ug/L  
RT: 8.93 min Scan# 2360  
Delta R.T. -0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

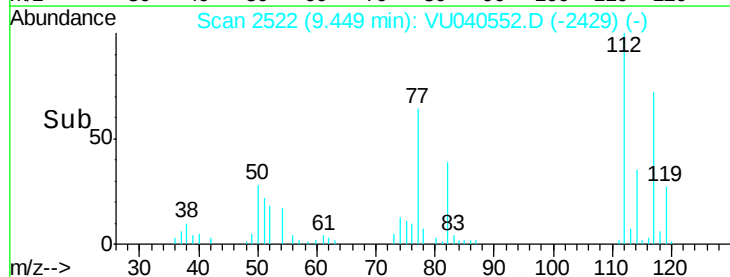
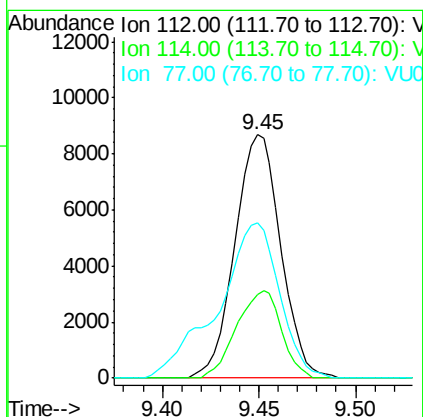
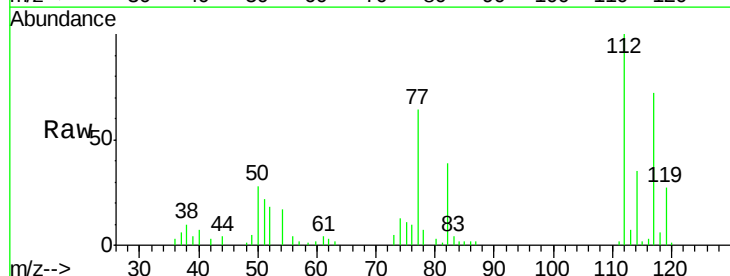
Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL-ME-SOIL-04

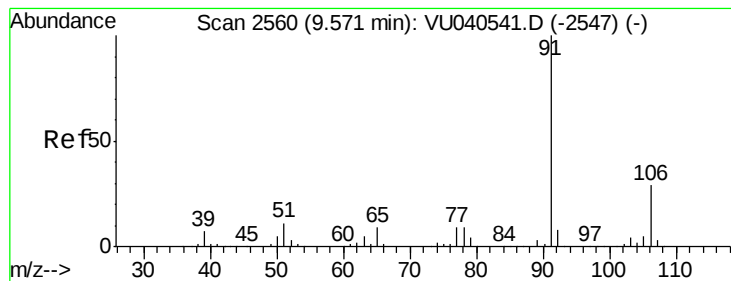
Tot Ion:107 Resp: 5734  
Ion Ratio Lower Upper  
107 100  
109 101.2 67.8 125.8  
188 0.0 2.8 4.2#



#51  
Chlorobenzene  
Concen: 2.571 ug/L  
RT: 9.45 min Scan# 2522  
Delta R.T. -0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

Tgt Ion:112 Resp: 14294  
Ion Ratio Lower Upper  
112 100  
114 34.5 22.1 41.1  
77 63.7 50.4 75.6





#52

Ethylbenzene

Concen: 2.239 ug/L

RT: 9.57 min Scan# 2560

Delta R.T. -0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

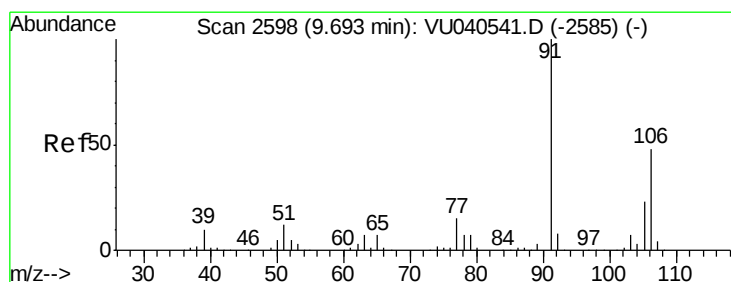
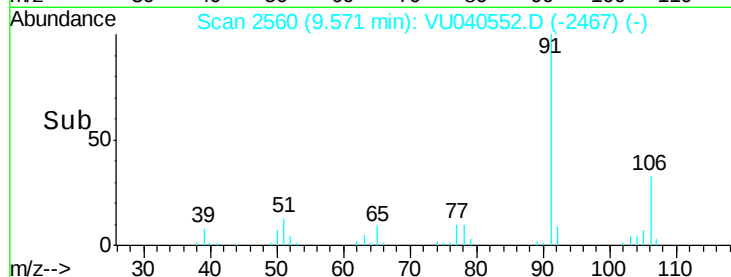
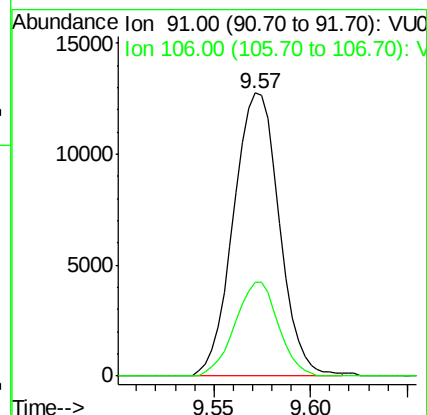
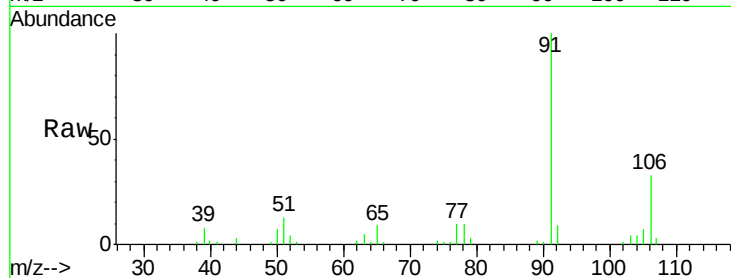
MDL-ME-SOIL-04

Tot Ion: 91 Resp: 21068

Ion Ratio Lower Upper

91 100

106 33.0 20.9 38.9



#53

m,p-Xylene

Concen: 2.209 ug/L

RT: 9.70 min Scan# 2599

Delta R.T. 0.00 min

Lab File: VU040552.D

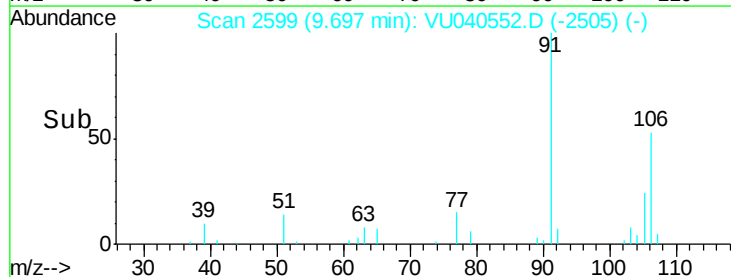
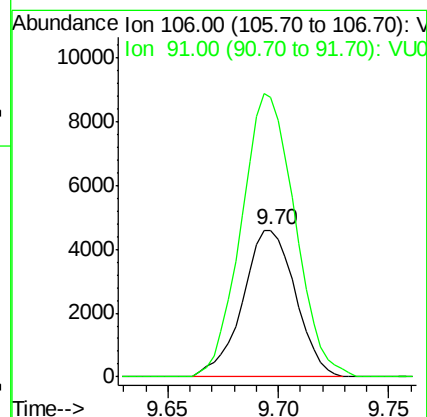
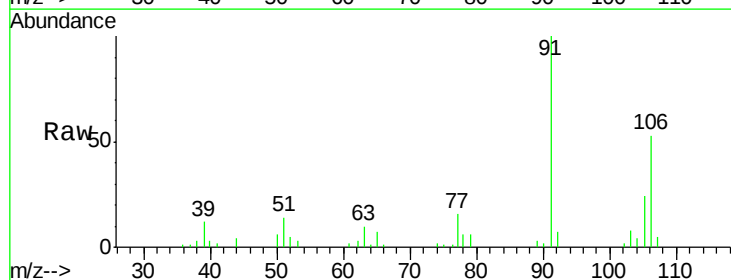
Acq: 07 Oct 2020 18:31

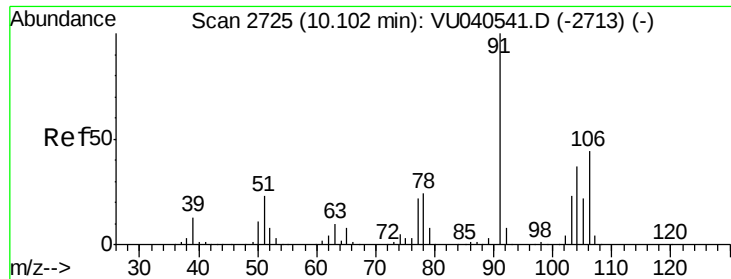
Tgt Ion: 106 Resp: 7653

Ion Ratio Lower Upper

106 100

91 190.4 150.1 278.7





#54

o-xylene

Concen: 2.196 ug/L

RT: 10.10 min Scan# 2725

Delta R.T. -0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

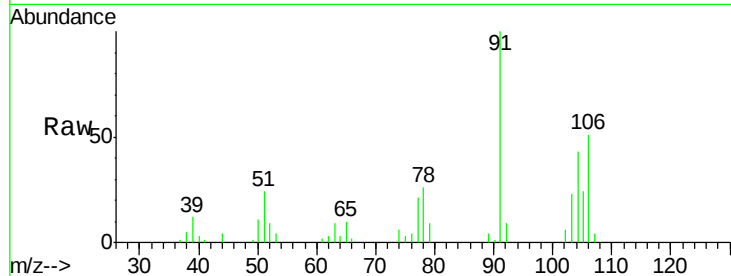
MDL-ME-SOIL-04

Tot Ion:106 Resp: 7241

Ion Ratio Lower Upper

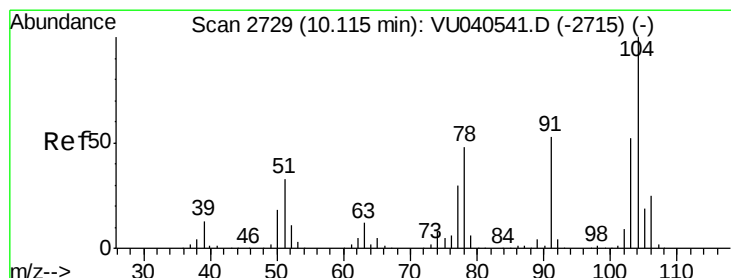
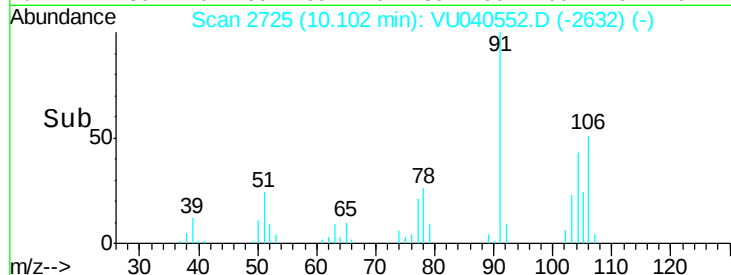
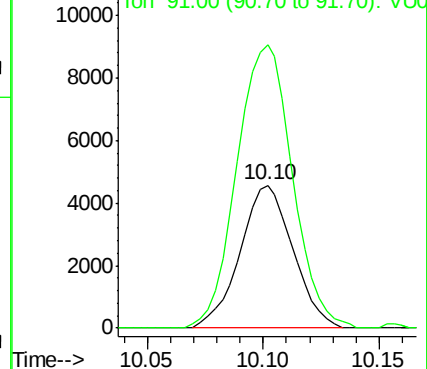
106 100

91 197.8 155.6 289.0



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VU0



#55

Styrene

Concen: 2.078 ug/L

RT: 10.11 min Scan# 2729

Delta R.T. -0.00 min

Lab File: VU040552.D

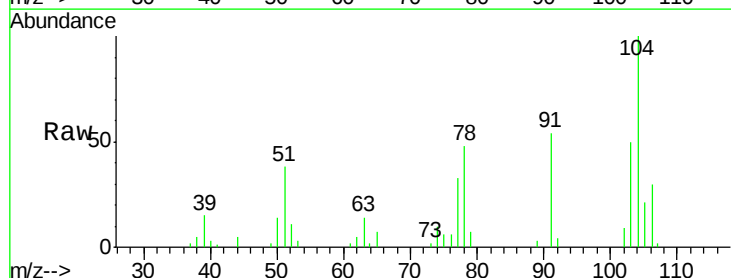
Acq: 07 Oct 2020 18:31

Tgt Ion:104 Resp: 12064

Ion Ratio Lower Upper

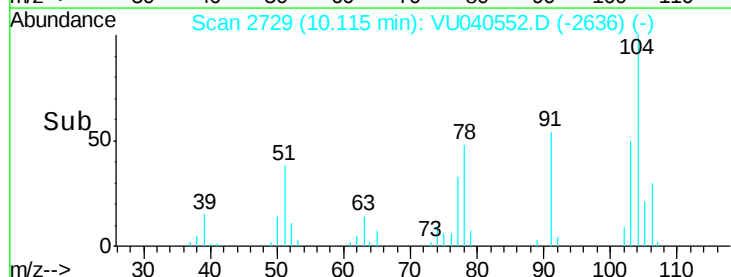
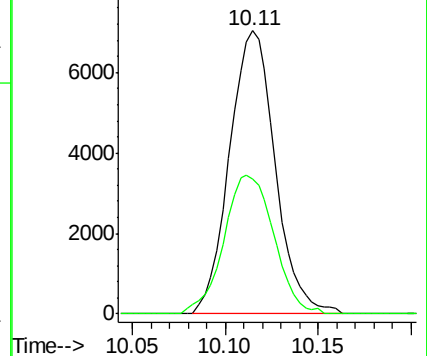
104 100

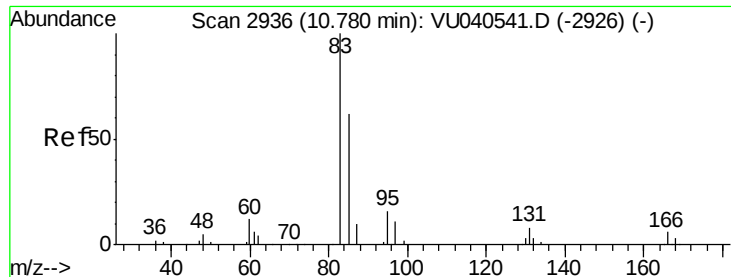
78 47.9 35.2 65.4



Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VU0





#57

1,1,2,2-Tetrachloroethane

Concen: 2.784 ug/L

RT: 10.78 min Scan# 2936

Delta R.T. -0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

MDL-ME-SOIL-04

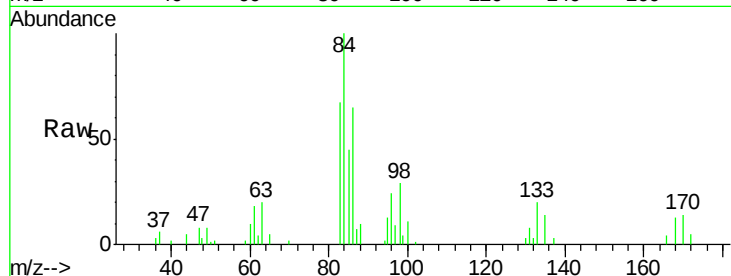
Tot Ion: 83 Resp: 10058

Ion Ratio Lower Upper

83 100

85 67.2 44.2 82.2

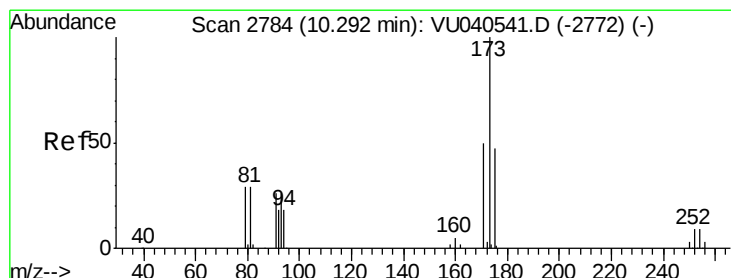
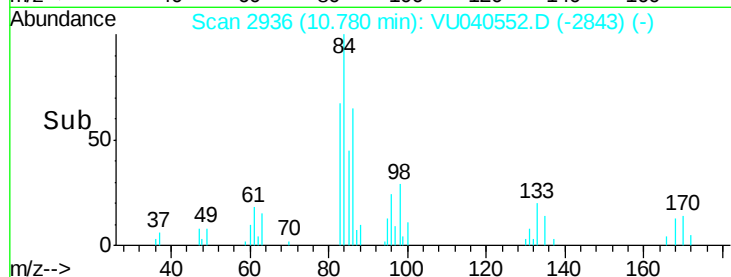
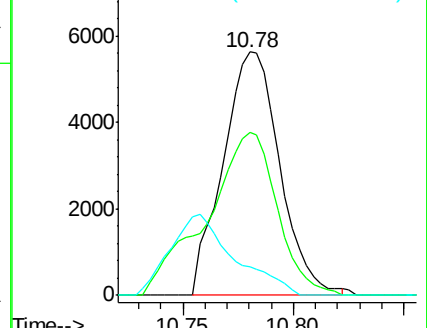
131 11.7 7.1 10.7#



Abundance Ion 83.00 (82.70 to 83.70): VU040541.D (-2926) (-)

Ion 85.00 (84.70 to 85.70): VU040541.D (-2926) (-)

Ion 131.00 (130.70 to 131.70): VU040541.D (-2926) (-)



#59

Bromoform

Concen: 2.387 ug/L

RT: 10.29 min Scan# 2784

Delta R.T. -0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

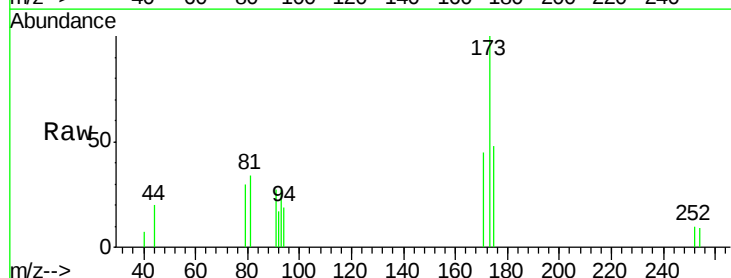
Tgt Ion: 173 Resp: 3606

Ion Ratio Lower Upper

173 100

175 49.0 38.5 57.7

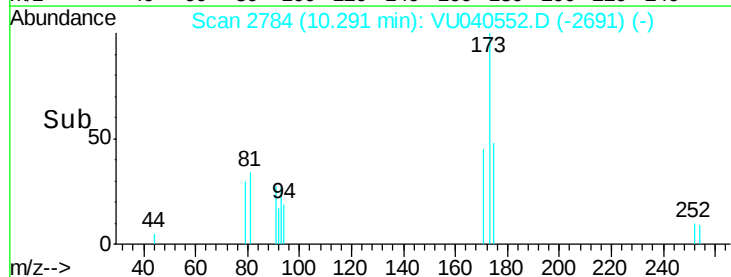
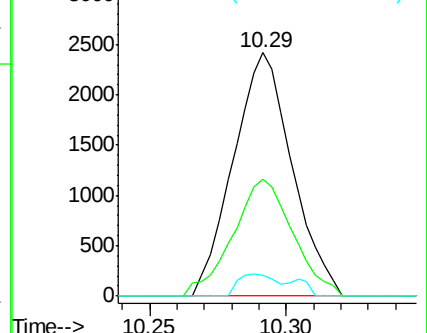
254 5.8 7.0 10.6#

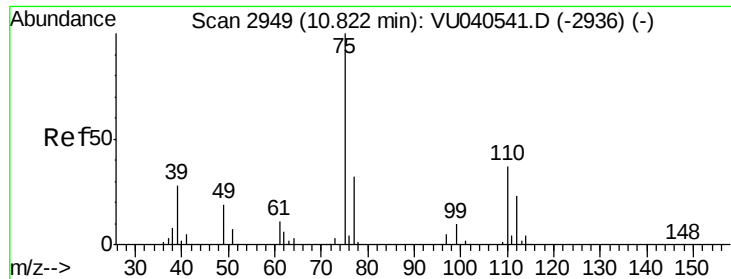


Abundance Ion 173.00 (172.70 to 173.70): VU040541.D (-2772) (-)

Ion 175.00 (174.70 to 175.70): VU040541.D (-2772) (-)

Ion 254.00 (253.70 to 254.70): VU040541.D (-2772) (-)

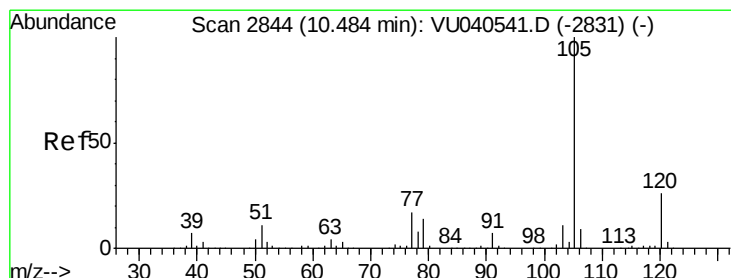
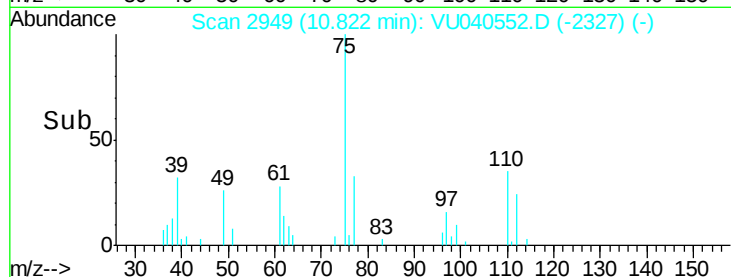
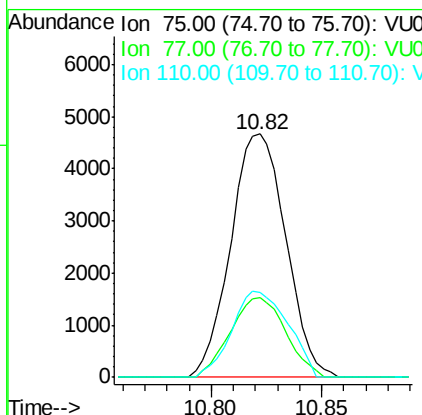
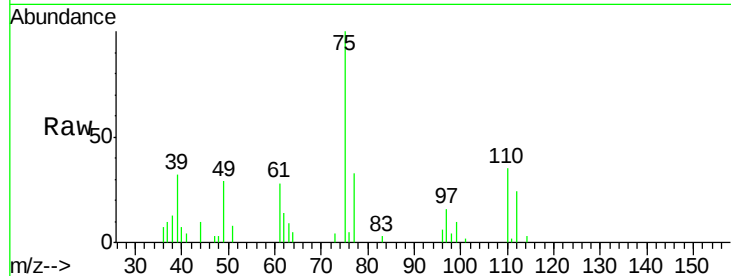




#60  
 1,2,3-Trichloropropane  
 Concen: 2.890 ug/L  
 RT: 10.82 min Scan# 2949  
 Delta R.T. -0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

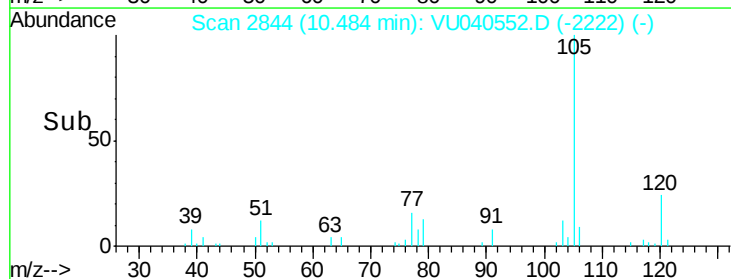
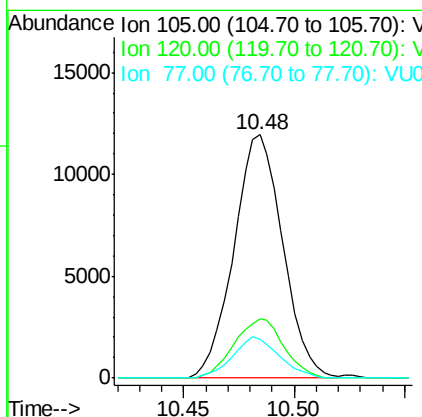
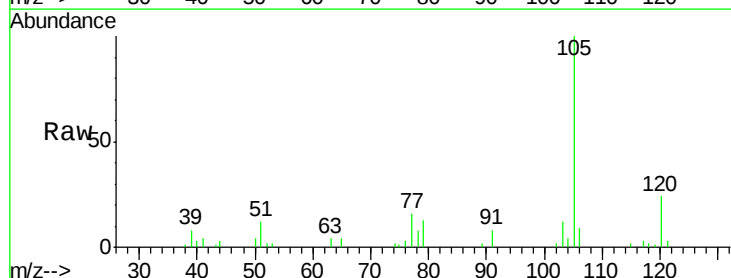
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL-ME-SOIL-04

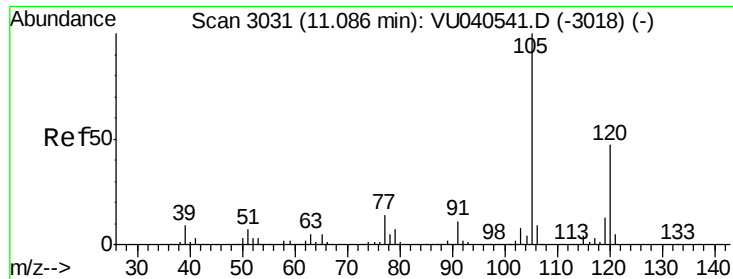
Tot Ion: 75 Resp: 8090  
 Ion Ratio Lower Upper  
 75 100  
 77 32.9 26.4 39.6  
 110 36.1 30.1 45.1



#61  
 Isopropylbenzene  
 Concen: 2.227 ug/L  
 RT: 10.48 min Scan# 2844  
 Delta R.T. -0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

Tgt Ion: 105 Resp: 18433  
 Ion Ratio Lower Upper  
 105 100  
 120 24.6 20.7 31.1  
 77 16.2 13.8 20.8





#62

1,3,5-Trimethylbenzene

Concen: 1.940 ug/L

RT: 11.09 min Scan# 3031

Delta R.T. -0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

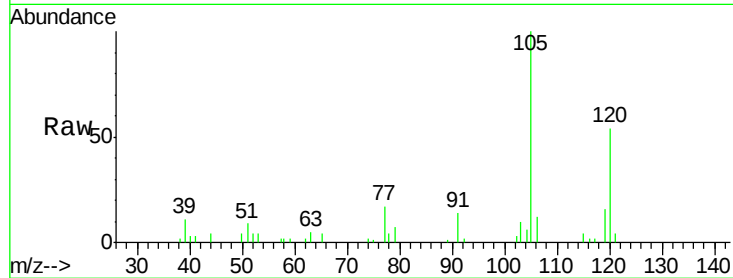
MDL-ME-SOIL-04

Tot Ion:105 Resp: 13191

Ion Ratio Lower Upper

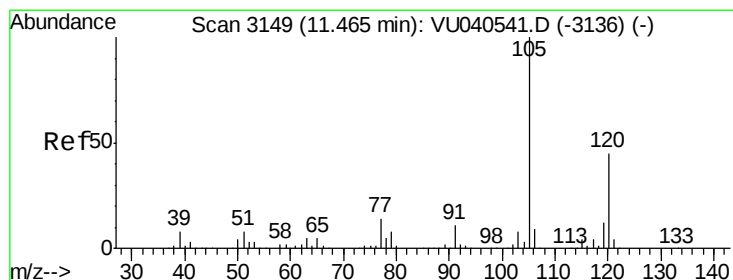
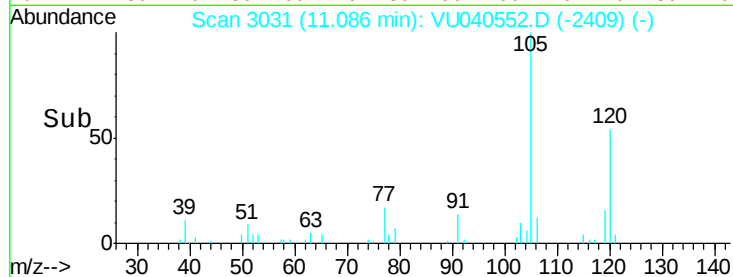
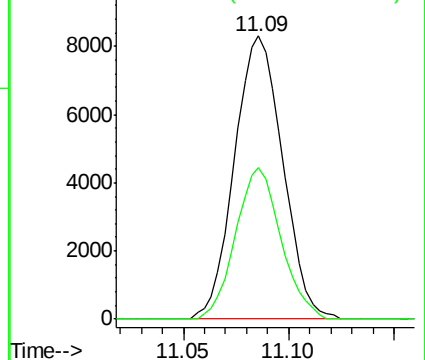
105 100

120 50.3 38.6 58.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#63

1,2,4-Trimethylbenzene

Concen: 1.952 ug/L

RT: 11.47 min Scan# 3149

Delta R.T. -0.00 min

Lab File: VU040552.D

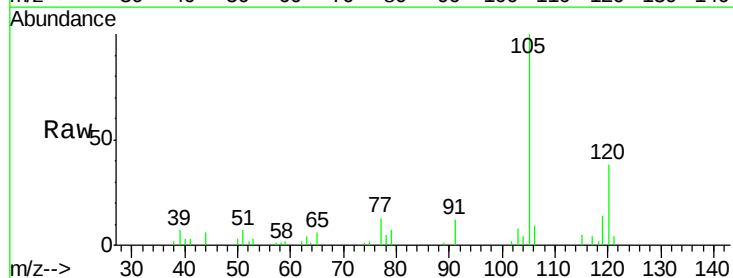
Acq: 07 Oct 2020 18:31

Tgt Ion:105 Resp: 13461

Ion Ratio Lower Upper

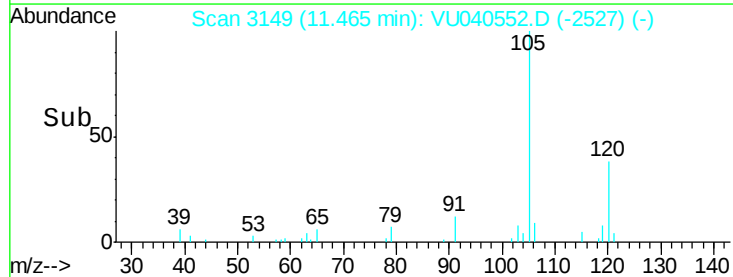
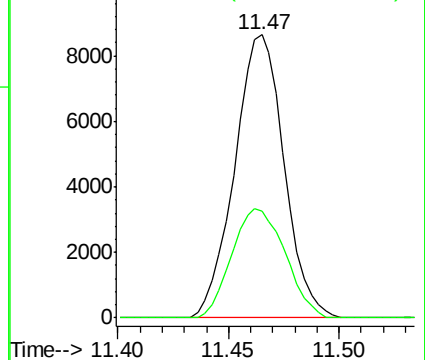
105 100

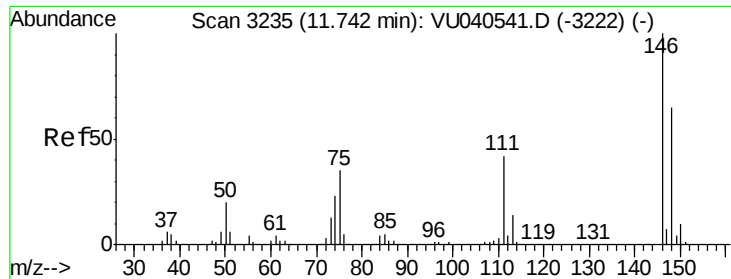
120 41.5 35.7 53.5



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

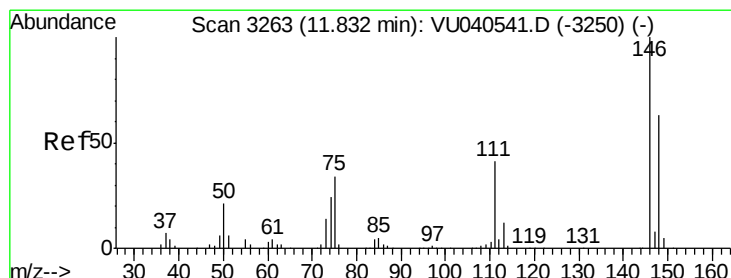
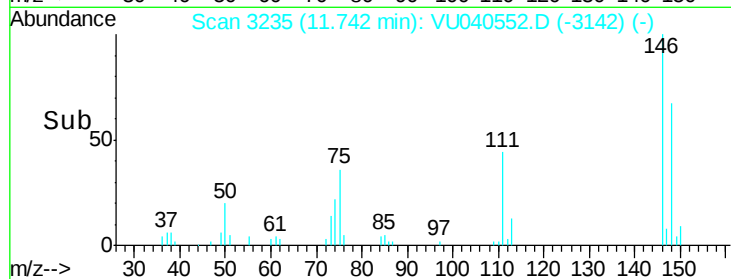
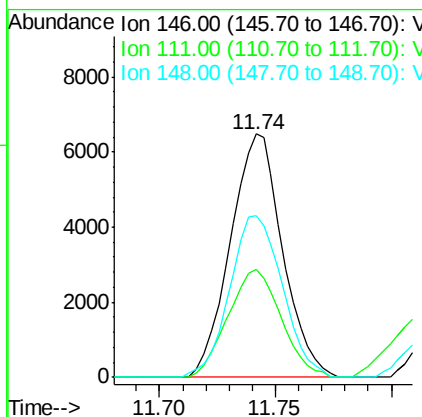
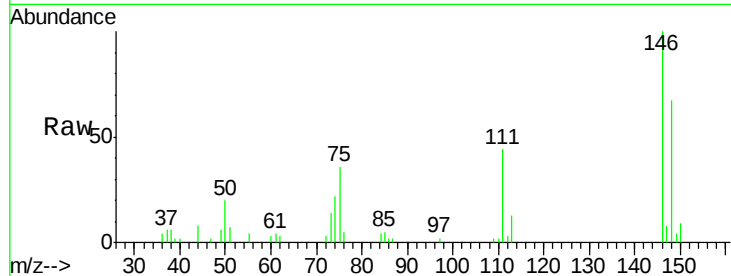




#64  
 1,3-Dichlorobenzene  
 Concen: 2.506 ug/L  
 RT: 11.74 min Scan# 3235  
 Delta R.T. -0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

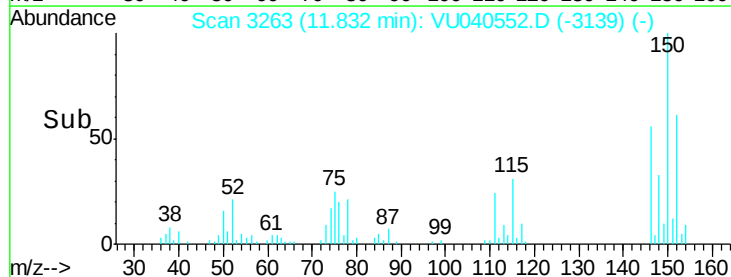
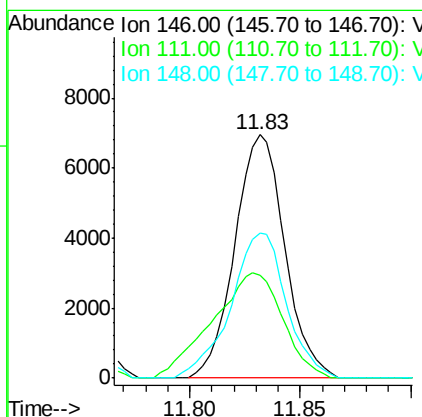
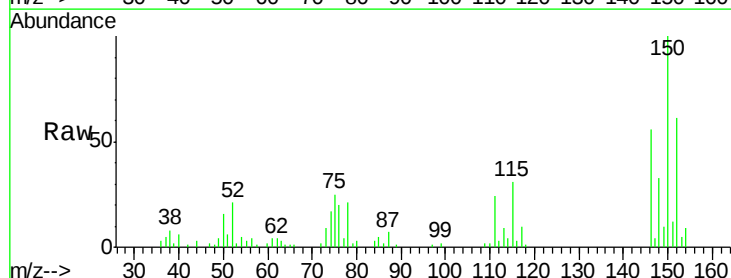
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL-ME-SOIL-04

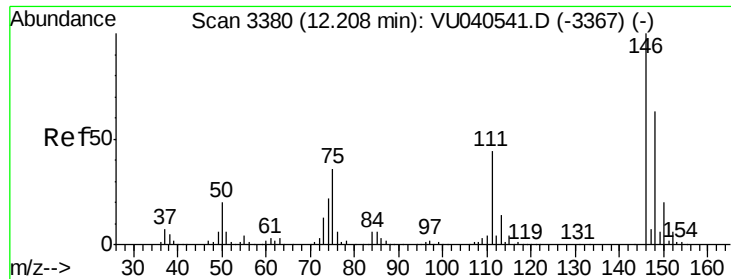
Tot Ion:146 Resp: 10113  
 Ion Ratio Lower Upper  
 146 100  
 111 44.2 30.8 57.2  
 148 66.5 45.4 84.2



#65  
 1,4-Dichlorobenzene  
 Concen: 2.585 ug/L  
 RT: 11.83 min Scan# 3263  
 Delta R.T. -0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

Tgt Ion:146 Resp: 10957  
 Ion Ratio Lower Upper  
 146 100  
 111 42.5 28.7 53.3  
 148 59.3 44.1 81.9





#67

1,2-Dichlorobenzene

Concen: 2.988 ug/L

RT: 12.21 min Scan# 3380

Delta R.T. -0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

Instrument :

MSVOA\_U

ClientSampleId :

MDL-ME-SOIL-04

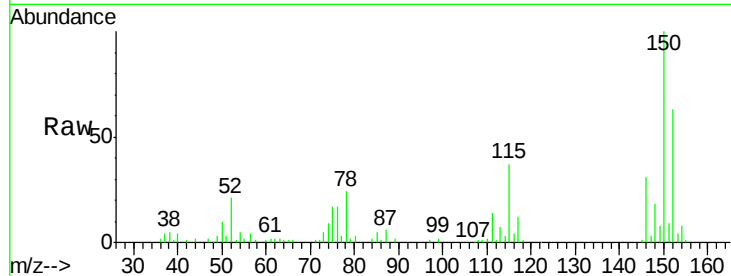
Tot Ion:146 Resp: 12079

Ion Ratio Lower Upper

146 100

111 46.7 35.7 53.5

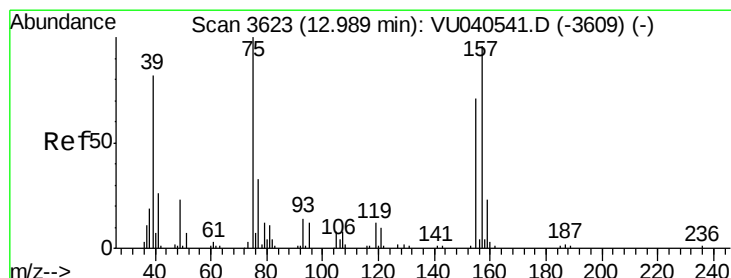
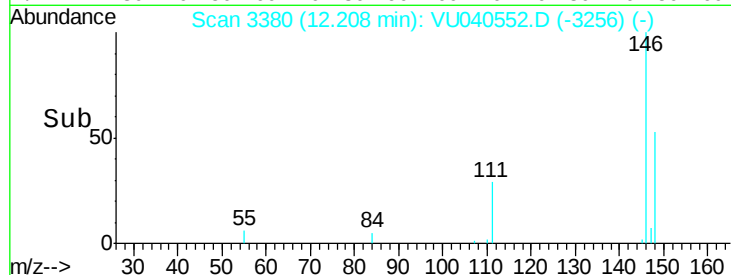
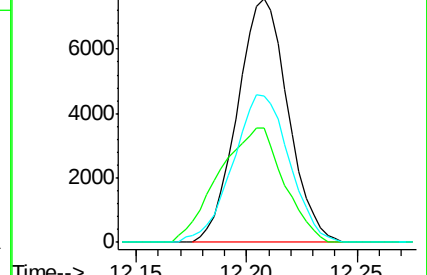
148 60.2 50.6 75.8



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



#68

1,2-Dibromo-3-chloropropane

Concen: 3.474 ug/L

RT: 12.99 min Scan# 3623

Delta R.T. -0.00 min

Lab File: VU040552.D

Acq: 07 Oct 2020 18:31

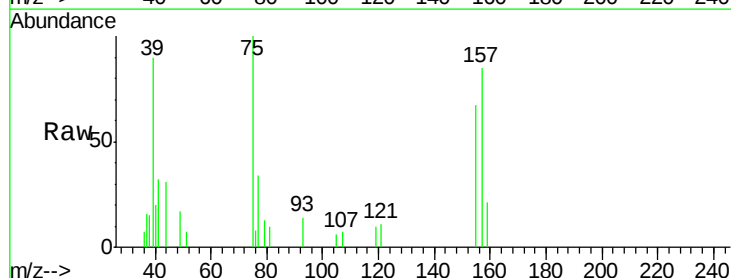
Tgt Ion: 75 Resp: 2732

Ion Ratio Lower Upper

75 100

155 66.6 61.0 91.6

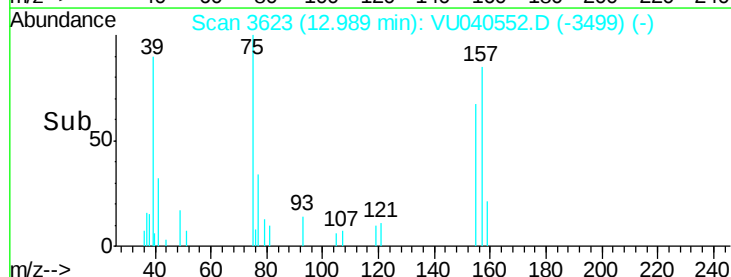
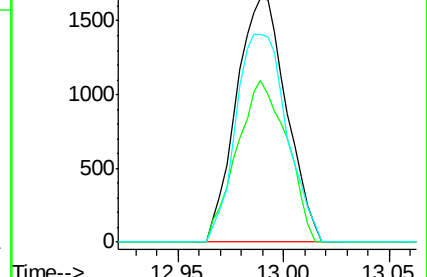
157 85.5 73.5 110.3

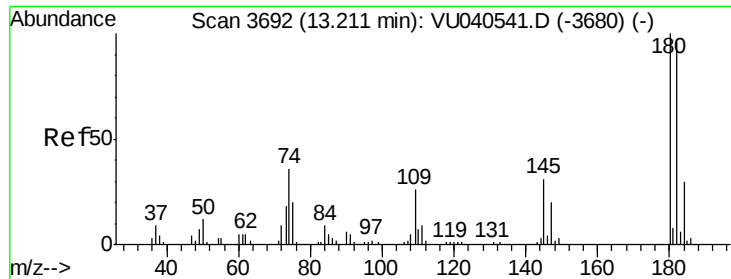


Abundance Ion 75.00 (74.70 to 75.70): VU0

Ion 155.00 (154.70 to 155.70): V

Ion 157.00 (156.70 to 157.70): V

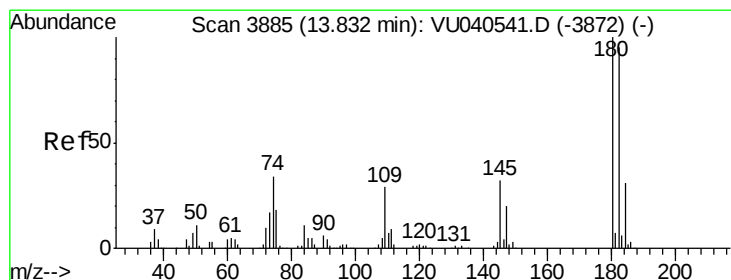
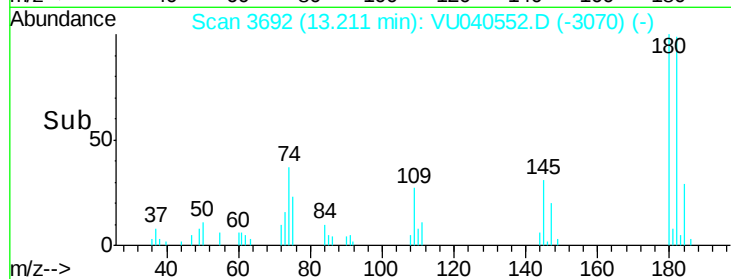
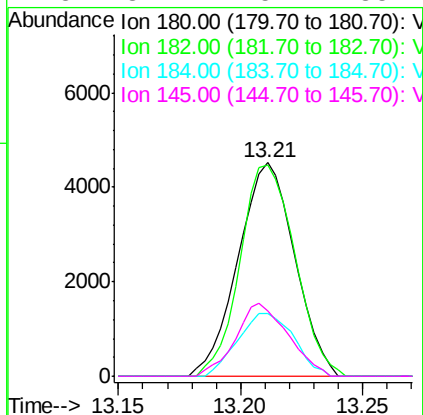
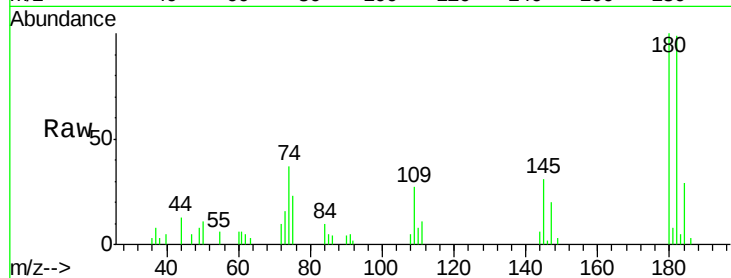




#69  
 1,3,5-Trichlorobenzene  
 Concen: 2.752 ug/L  
 RT: 13.21 min Scan# 3692  
 Delta R.T. -0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

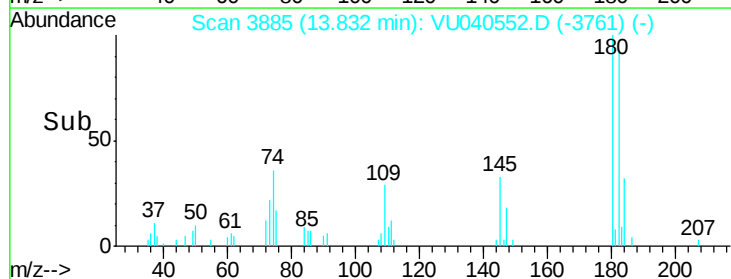
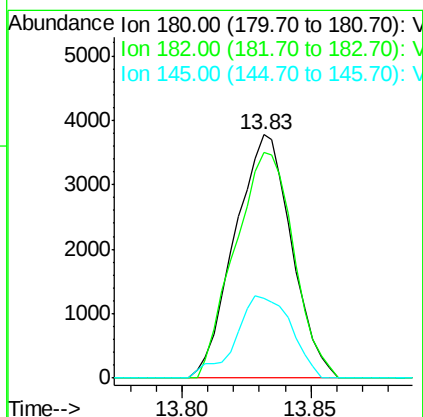
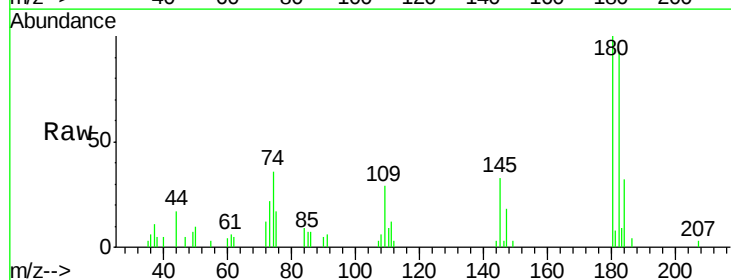
Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL-ME-SOIL-04

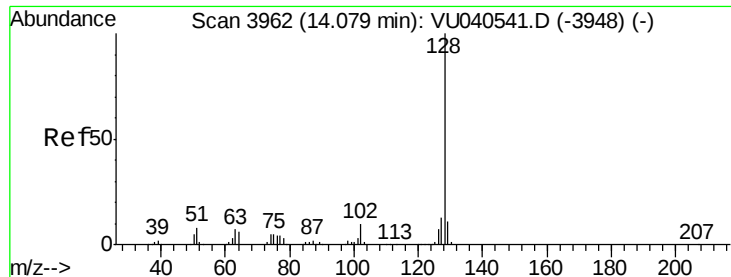
Tot Ion:180 Resp: 7277  
 Ion Ratio Lower Upper  
 180 100  
 182 96.0 76.9 115.3  
 184 29.3 24.2 36.2  
 145 31.7 25.4 38.2



#70  
 1,2,4-trichlorobenzene  
 Concen: 2.534 ug/L  
 RT: 13.83 min Scan# 3885  
 Delta R.T. -0.00 min  
 Lab File: VU040552.D  
 Acq: 07 Oct 2020 18:31

Tgt Ion:180 Resp: 5807  
 Ion Ratio Lower Upper  
 180 100  
 182 96.0 75.0 112.6  
 145 31.3 25.9 38.9

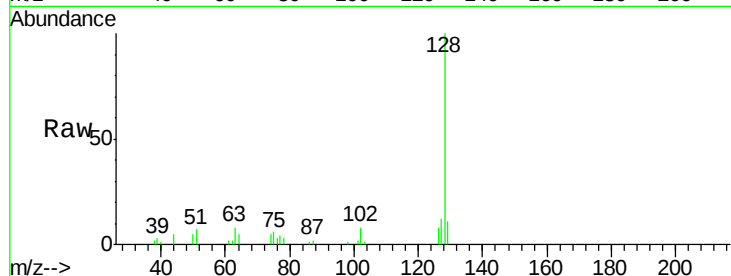




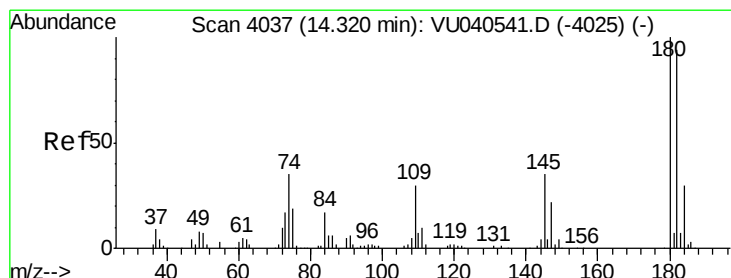
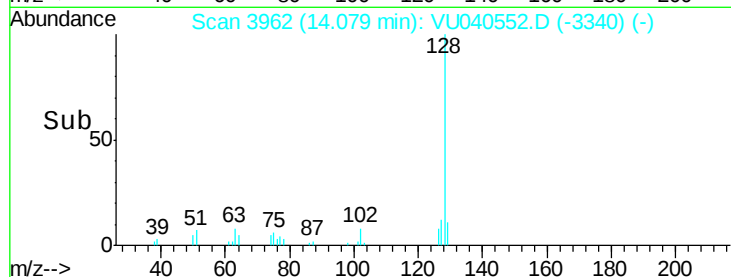
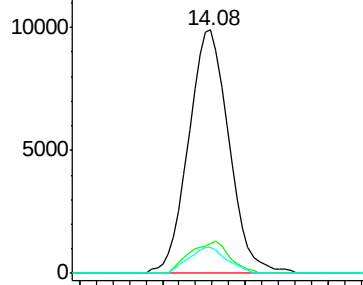
#71  
Naphthalene  
Concen: 2.366 ug/L  
RT: 14.08 min Scan# 3962  
Delta R.T. -0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

Instrument :  
MSVOA\_U  
ClientSampleId :  
MDL-ME-SOIL-04

Tot Ion:128 Resp: 16763  
Ion Ratio Lower Upper  
128 100  
127 12.9 10.5 15.7  
129 10.1 8.6 13.0

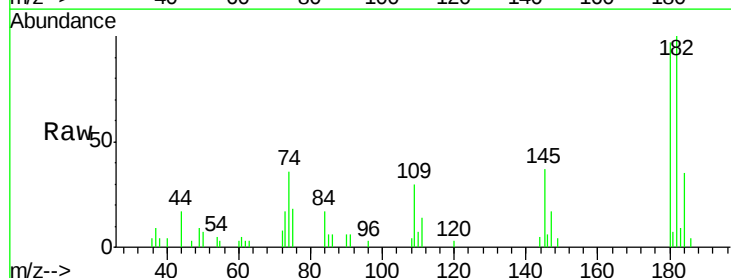


Abundance Ion 128.00 (127.70 to 128.70): V  
Ion 127.00 (126.70 to 127.70): V  
Ion 129.00 (128.70 to 129.70): V



#72  
1,2,3-Trichlorobenzene  
Concen: 2.588 ug/L  
RT: 14.32 min Scan# 4037  
Delta R.T. -0.00 min  
Lab File: VU040552.D  
Acq: 07 Oct 2020 18:31

Tgt Ion:180 Resp: 5888  
Ion Ratio Lower Upper  
180 100  
182 96.8 77.7 116.5  
145 35.1 28.4 42.6



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

