

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV110320\  
 Data File : VV019221.D  
 Acq On : 03 Nov 2020 00:53  
 Operator : SY/MD  
 Sample : L4485-16  
 Misc : 5.0µL/5.0mL/100µL/5.0mL/MSVOA\_V/MEOH  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleID :  
 MDL-ME-SOIL-02

Quant Time: Nov 03 05:30:16 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM110320WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Nov 03 05:28:09 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.64  | 114  | 231508   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.87  | 117  | 221045   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.27 | 152  | 112050   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 86656    | 48.50    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 97.00%  |
| 7) Chloroethane-d5             | 1.58    | 69    | 75115    | 53.65    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 107.30% |
| 11) 1,1-Dichloroethene-d2      | 2.12    | 63    | 137114   | 41.45    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 82.90%  |
| 21) 2-Butanone-d5              | 3.91    | 46    | 110734   | 112.40   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 112.40% |
| 24) Chloroform-d               | 4.38    | 84    | 169493   | 50.69    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 101.38% |
| 26) 1,2-Dichloroethane-d4      | 5.06    | 65    | 121221   | 52.03    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 104.06% |
| 32) Benzene-d6                 | 5.08    | 84    | 318701   | 52.22    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 104.44% |
| 36) 1,2-Dichloropropane-d6     | 6.09    | 67    | 96403    | 52.90    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 105.80% |
| 41) Toluene-d8                 | 7.34    | 98    | 285129   | 50.15    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 100.30% |
| 43) trans-1,3-Dichloropropene- | 7.64    | 79    | 52100    | 50.49    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 100.98% |
| 47) 2-Hexanone-d5              | 8.11    | 63    | 72236    | 102.11   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 102.11% |
| 56) 1,1,2,2-Tetrachloroethane- | 10.23   | 84    | 119513   | 49.22    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 98.44%  |
| 66) 1,2-Dichlorobenzene-d4     | 11.65   | 152   | 118790   | 52.99    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 105.98% |

## Target Compounds

|                                |      |     |       |              | Ovalue |
|--------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 3483  | 2.456 ug/L   | 96     |
| 3) Chloromethane               | 1.25 | 50  | 4003  | 2.711 ug/L   | 99     |
| 5) Vinyl chloride              | 1.32 | 62  | 4404  | 2.865 ug/L # | 60     |
| 6) Bromomethane                | 1.53 | 94  | 3058  | 2.960 ug/L   | 97     |
| 8) Chloroethane                | 1.60 | 64  | 3146  | 3.129 ug/L   | 92     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 6575  | 2.584 ug/L   | 96     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101 | 4298  | 3.554 ug/L # | 75     |
| 12) 1,1-Dichloroethene         | 2.13 | 96  | 4077  | 3.262 ug/L # | 1      |
| 13) Acetone                    | 2.19 | 43  | 4389  | 5.858 ug/L   | 94     |
| 14) Carbon disulfide           | 2.31 | 76  | 9614  | 2.679 ug/L   | 100    |
| 15) Methyl Acetate             | 2.46 | 43  | 3914  | 2.696 ug/L # | 88     |
| 16) Methylene chloride         | 2.53 | 84  | 4278  | 2.879 ug/L   | 99     |
| 17) trans-1,2-Dichloroethene   | 2.79 | 96  | 3481  | 2.567 ug/L   | 96     |
| 18) Methyl tert-butyl Ether    | 2.79 | 73  | 12295 | 2.580 ug/L   | 99     |
| 19) 1,1-Dichloroethane         | 3.22 | 63  | 7231  | 2.722 ug/L   | 95     |
| 20) cis-1,2-Dichloroethene     | 3.94 | 96  | 1967  | 1.313 ug/L   | 88     |
| 23) Bromochloromethane         | 4.28 | 128 | 2048  | 2.482 ug/L # | 85     |

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 Operator : SY/MD  
 Sample : L4485-16  
 Misc : 5.0µ/5.0mL/100µL/5.0mL/MSVOA\_V/MEOH  
 ALS Vial : 21 Sample Multiplier: 1

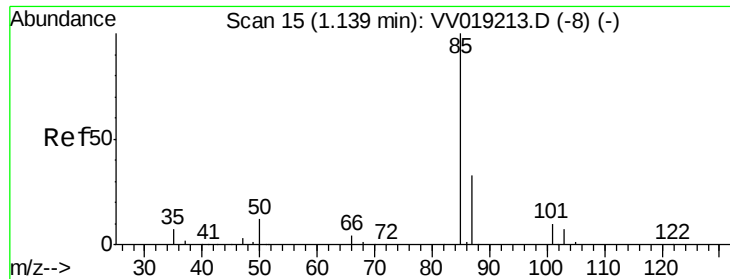
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-ME-SOIL-02

Quant Time: Nov 03 05:30:16 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM110320WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Tue Nov 03 05:28:09 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 25) Chloroform                 | 4.40  | 83   | 8998     | 3.159 | ug/L   | 89       |
| 27) 1,2-Dichloroethane         | 5.16  | 62   | 6904     | 2.852 | ug/L   | 97       |
| 29) Cyclohexane                | 4.71  | 56   | 4582     | 2.422 | ug/L # | 89       |
| 30) 1,1,1-Trichloroethane      | 4.63  | 97   | 6228     | 2.429 | ug/L   | 93       |
| 31) Carbon tetrachloride       | 4.86  | 117  | 5398     | 2.439 | ug/L   | 100      |
| 33) Benzene                    | 5.13  | 78   | 14186    | 2.582 | ug/L   | 100      |
| 34) Trichloroethene            | 5.94  | 95   | 4021     | 2.693 | ug/L   | 96       |
| 35) Methylcyclohexane          | 6.15  | 83   | 4201     | 2.325 | ug/L   | 96       |
| 37) 1,2-Dichloropropane        | 6.20  | 63   | 3124     | 2.131 | ug/L # | 91       |
| 38) Bromodichloromethane       | 6.54  | 83   | 5678     | 2.691 | ug/L # | 92       |
| 39) cis-1,3-Dichloropropene    | 7.06  | 75   | 6049     | 2.579 | ug/L   | 98       |
| 40) 4-Methyl-2-pentanone       | 7.25  | 43   | 9356     | 4.750 | ug/L   | 99       |
| 42) Toluene                    | 7.41  | 91   | 17320    | 2.917 | ug/L   | 98       |
| 44) trans-1,3-Dichloropropene  | 7.68  | 75   | 6318     | 2.628 | ug/L   | 99       |
| 45) 1,1,2-Trichloroethane      | 7.87  | 97   | 3682     | 2.541 | ug/L   | 95       |
| 46) Tetrachloroethene          | 8.00  | 164  | 2976     | 2.443 | ug/L   | 89       |
| 48) 2-Hexanone                 | 8.16  | 43   | 9914     | 6.658 | ug/L   | 98       |
| 49) Dibromochloromethane       | 8.27  | 129  | 4191     | 2.425 | ug/L   | 100      |
| 50) 1,2-Dibromoethane          | 8.38  | 107  | 4129     | 2.749 | ug/L # | 95       |
| 51) Chlorobenzene              | 8.90  | 112  | 10136    | 2.552 | ug/L   | 99       |
| 52) Ethylbenzene               | 9.04  | 91   | 15504    | 2.367 | ug/L   | 95       |
| 53) m,p-Xylene                 | 9.16  | 106  | 5875     | 2.395 | ug/L   | 83       |
| 54) o-Xylene                   | 9.57  | 106  | 5353     | 2.214 | ug/L   | 90       |
| 55) Styrene                    | 9.59  | 104  | 8918     | 2.072 | ug/L   | 95       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.26 | 83   | 5853     | 2.670 | ug/L # | 94       |
| 59) Bromoform                  | 9.76  | 173  | 3181     | 2.558 | ug/L   | 98       |
| 60) Isopropylbenzene           | 9.96  | 105  | 13779    | 2.346 | ug/L   | 99       |
| 61) 1,2,3-Trichloropropane     | 10.30 | 75   | 4791     | 2.752 | ug/L   | 98       |
| 62) 1,3,5-Trimethylbenzene     | 10.56 | 105  | 11009    | 2.251 | ug/L   | 98       |
| 63) 1,2,4-Trimethylbenzene     | 10.94 | 105  | 10424    | 2.178 | ug/L   | 99       |
| 64) 1,3-Dichlorobenzene        | 11.21 | 146  | 8074     | 2.628 | ug/L   | 99       |
| 65) 1,4-Dichlorobenzene        | 11.30 | 146  | 8363     | 2.632 | ug/L   | 98       |
| 67) 1,2-Dichlorobenzene        | 11.67 | 146  | 8608     | 2.739 | ug/L   | 98       |
| 68) 1,2-Dibromo-3-chloropropan | 12.45 | 75   | 1390     | 2.737 | ug/L   | 96       |
| 69) 1,3,5-Trichlorobenzene     | 12.67 | 180  | 5244     | 2.378 | ug/L   | 99       |
| 70) 1,2,4-trichlorobenzene     | 13.29 | 180  | 4351     | 2.097 | ug/L   | 94       |
| 71) Naphthalene                | 13.53 | 128  | 10039    | 1.716 | ug/L   | 98       |
| 72) 1,2,3-Trichlorobenzene     | 13.77 | 180  | 4710     | 2.290 | ug/L   | 93       |

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





#2

Dichlorodifluoromethane

Concen: 2.456 ug/L

RT: 1.14 min Scan# 15

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

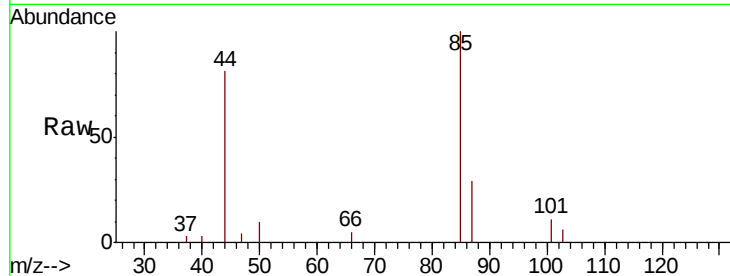
MDL-ME-SOIL-02

Tot Ion: 85 Resp: 3483

Ion Ratio Lower Upper

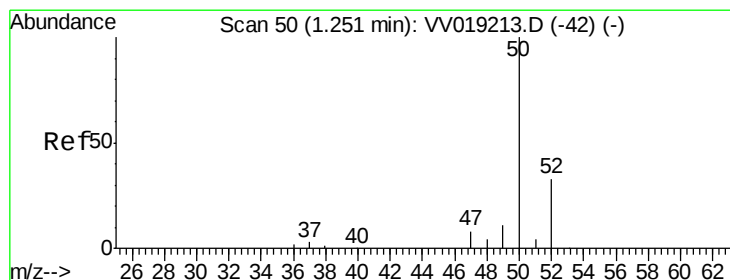
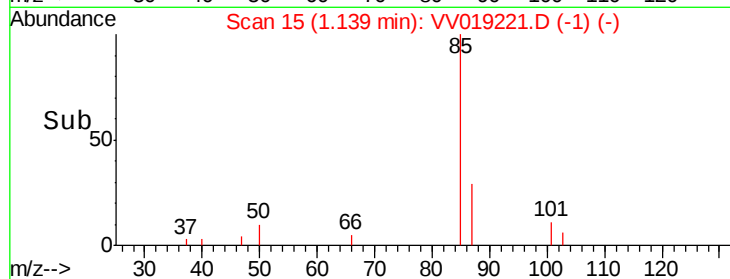
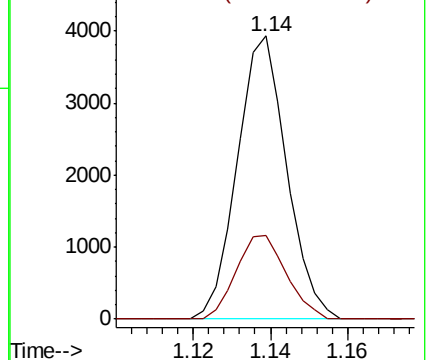
85 100

87 30.0 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VV0

Ion 87.00 (86.70 to 87.70): VV0



#3

Chloromethane

Concen: 2.711 ug/L

RT: 1.25 min Scan# 50

Delta R.T. 0.00 min

Lab File: VV019221.D

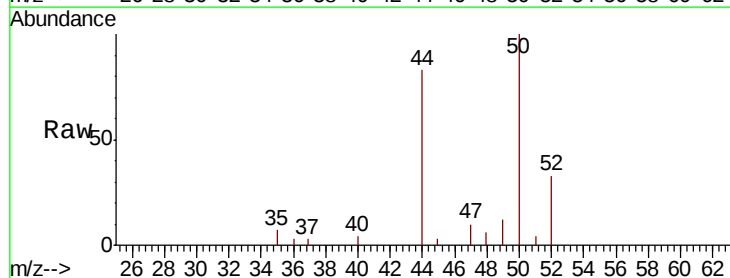
Acq: 03 Nov 2020 00:53

Tgt Ion: 50 Resp: 4003

Ion Ratio Lower Upper

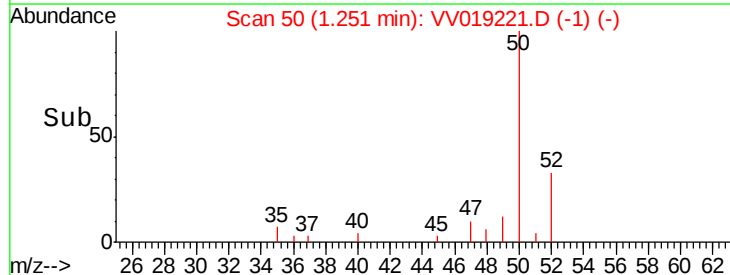
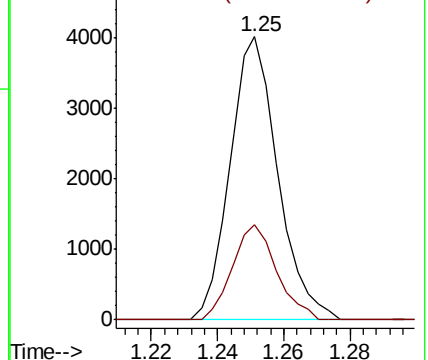
50 100

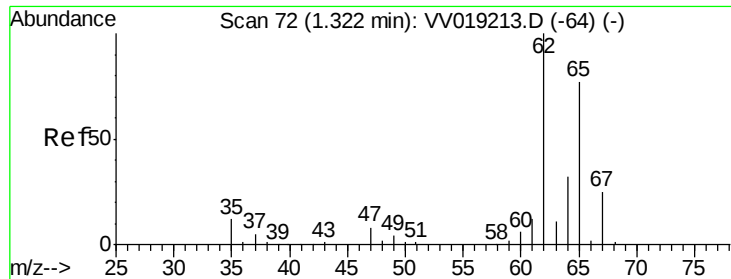
52 33.5 23.0 42.6



Abundance Ion 50.00 (49.70 to 50.70): VV0

Ion 52.00 (51.70 to 52.70): VV0





#5

Vinyl chloride

Concen: 2.865 ug/L

RT: 1.32 min Scan# 72

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

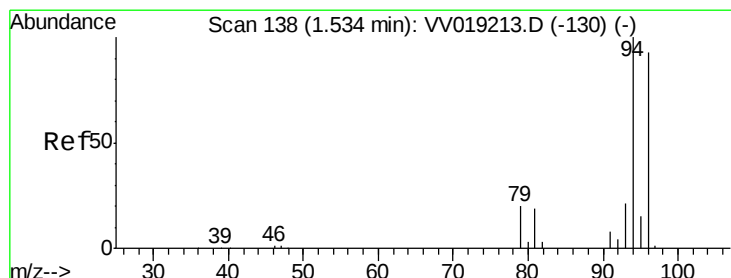
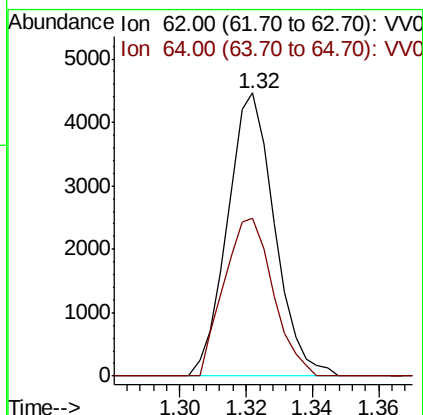
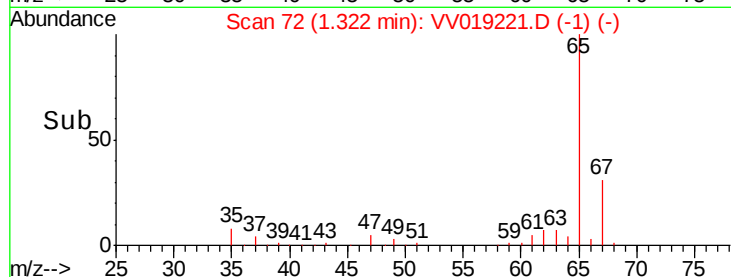
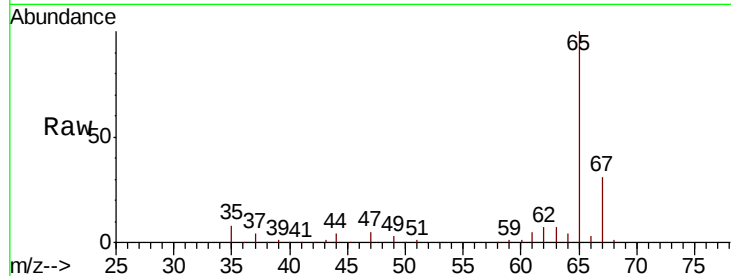
MDL-ME-SOIL-02

Tot Ion: 62 Resp: 4404

Ion Ratio Lower Upper

62 100

64 55.8 23.3 43.3#



#6

Bromomethane

Concen: 2.960 ug/L

RT: 1.53 min Scan# 138

Delta R.T. 0.00 min

Lab File: VV019221.D

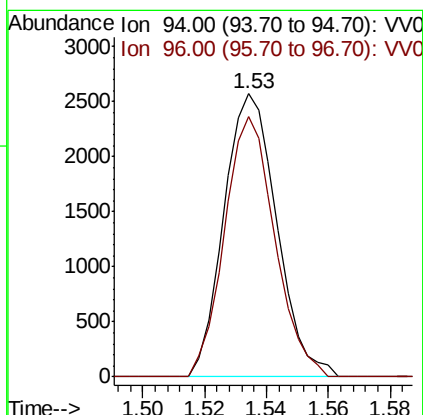
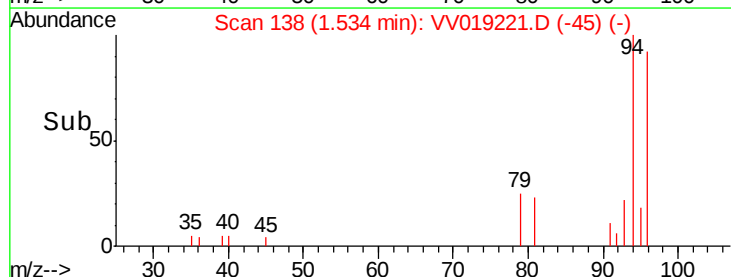
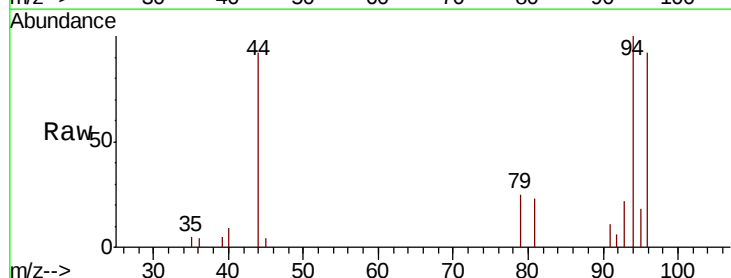
Acq: 03 Nov 2020 00:53

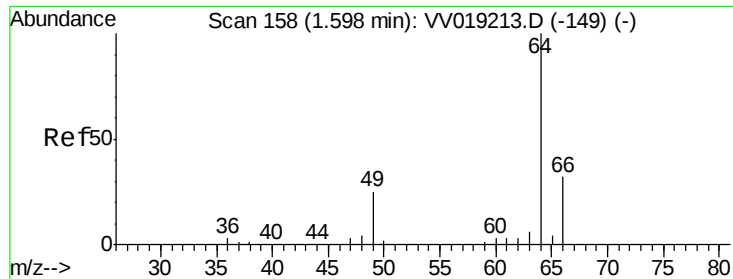
Tgt Ion: 94 Resp: 3058

Ion Ratio Lower Upper

94 100

96 92.2 66.4 123.2

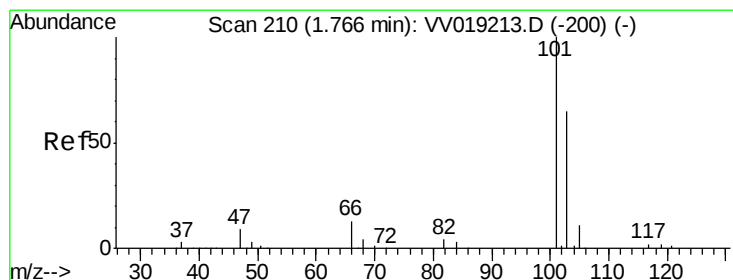
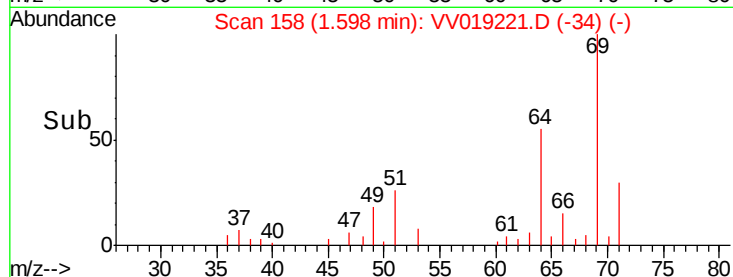
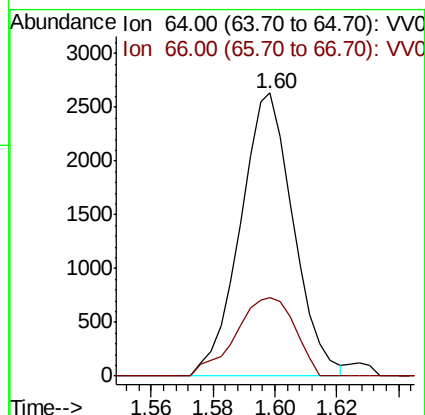
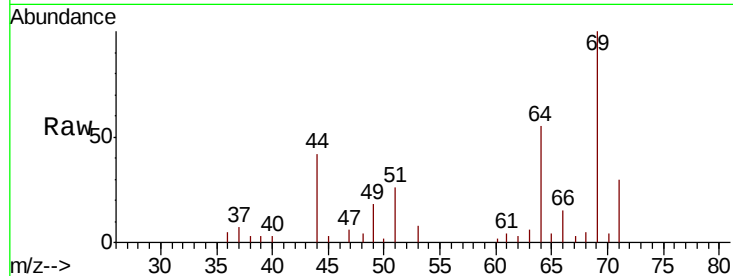




#8  
Chloroethane  
Concen: 3.129 ug/L  
RT: 1.60 min Scan# 158  
Delta R.T. 0.00 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

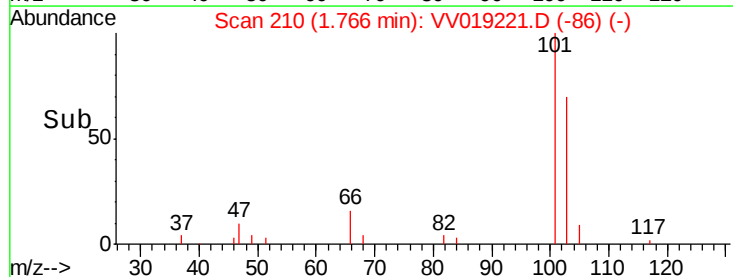
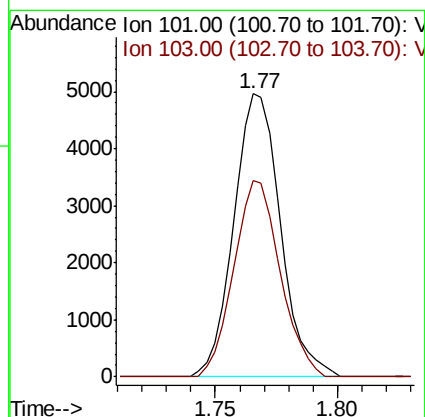
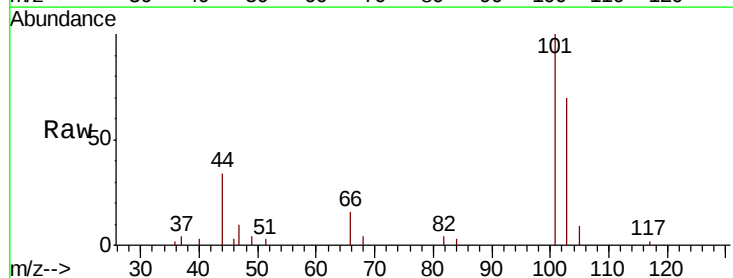
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-ME-SOIL-02

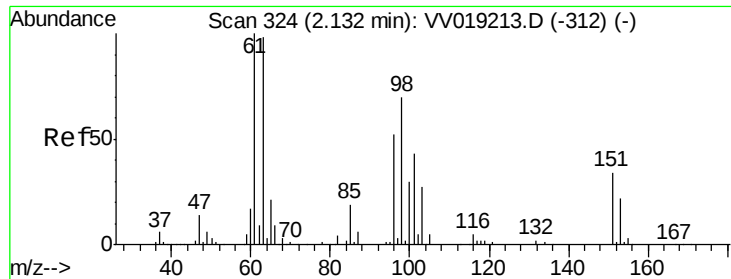
Tot Ion: 64 Resp: 3146  
Ion Ratio Lower Upper  
64 100  
66 27.8 22.5 41.9



#9  
Trichlorofluoromethane  
Concen: 2.584 ug/L  
RT: 1.77 min Scan# 210  
Delta R.T. 0.00 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Tgt Ion: 101 Resp: 6575  
Ion Ratio Lower Upper  
101 100  
103 68.9 52.3 78.5





#10

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

Concen: 3.554 ug/L

RT: 2.13 min Scan# 324

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

MDL-ME-SOIL-02

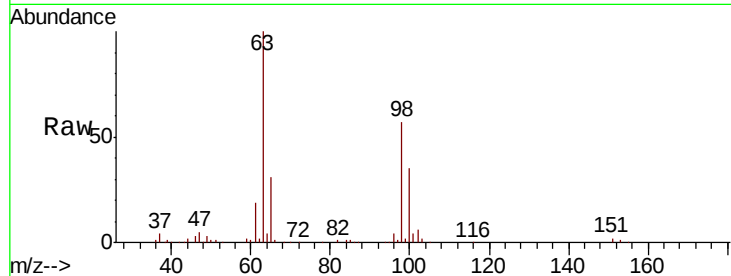
Tot Ion:101 Resp: 4298

Ion Ratio Lower Upper

101 100

85 33.9 35.6 53.4#

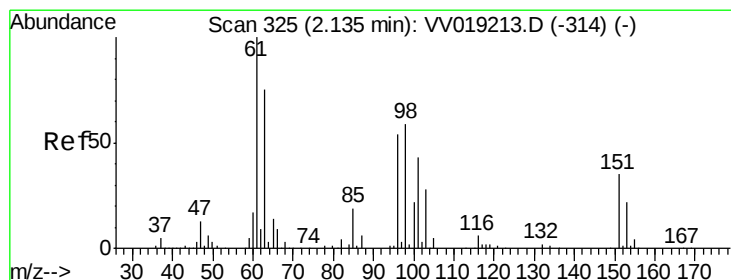
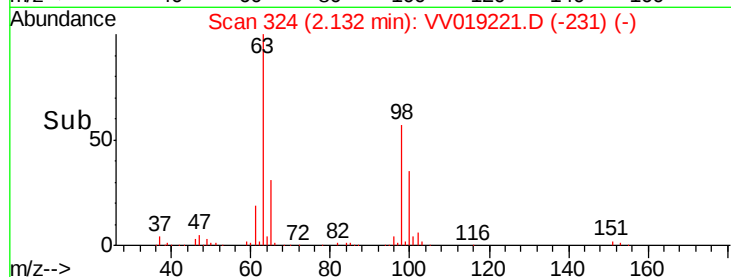
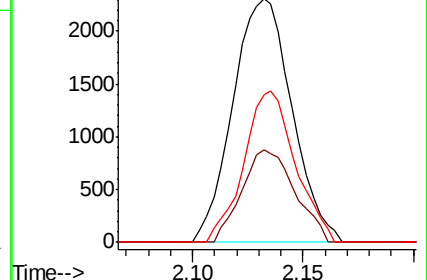
151 54.0 64.1 96.1#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VV0

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 3.262 ug/L

RT: 2.13 min Scan# 324

Delta R.T. -0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

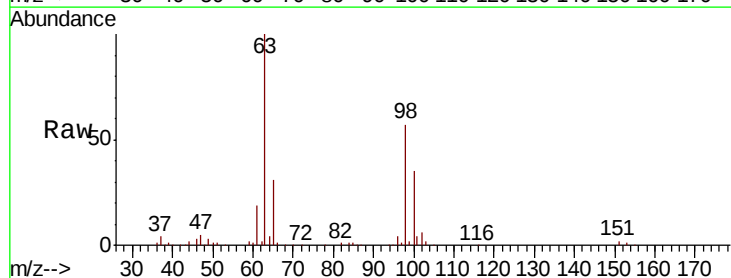
Tgt Ion: 96 Resp: 4077

Ion Ratio Lower Upper

96 100

61 489.8 133.6 248.0#

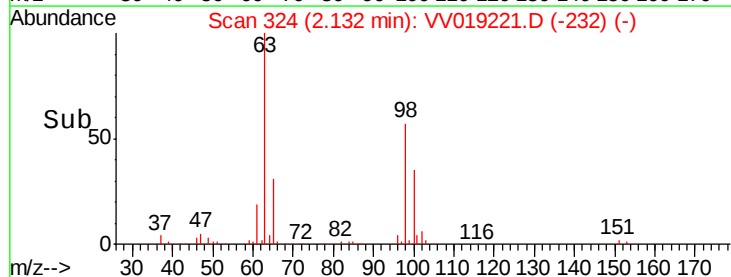
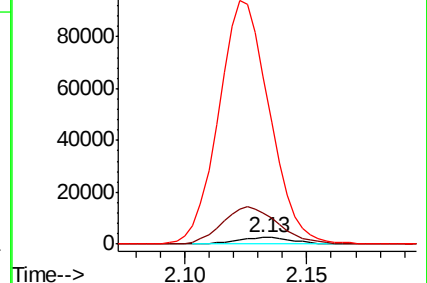
63 2626.5 103.0 191.2#

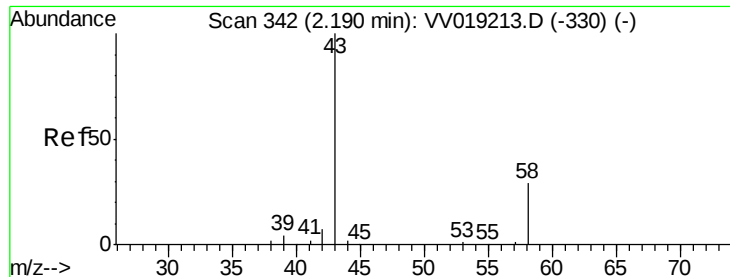


Abundance Ion 96.00 (95.70 to 96.70): VV0

Ion 61.00 (60.70 to 61.70): VV0

Ion 63.00 (62.70 to 63.70): VV0





#13

Acetone

Concen: 5.858 ug/L

RT: 2.19 min Scan# 343

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

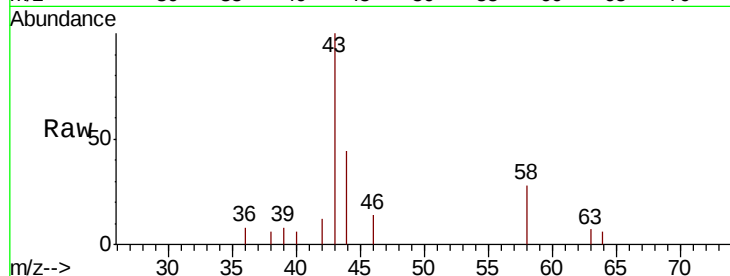
MDL-ME-SOIL-02

Tot Ion: 43 Resp: 4389

Ion Ratio Lower Upper

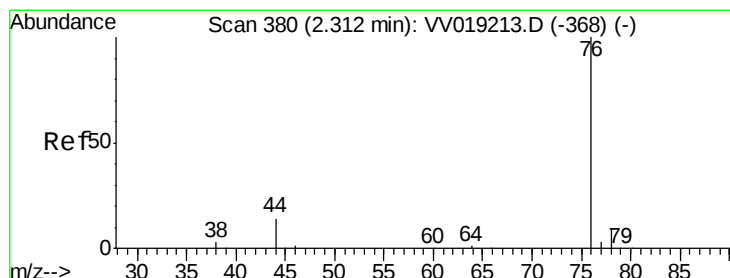
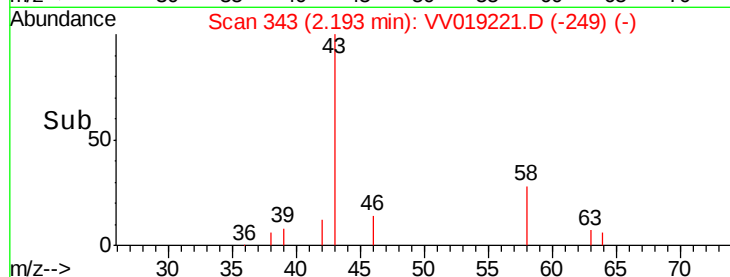
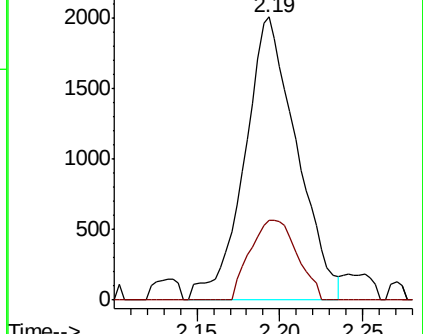
43 100

58 25.6 0.0 57.8



Abundance Ion 43.00 (42.70 to 43.70): VV019221.D (-249) (-)

Ion 58.00 (57.70 to 58.70): VV019221.D (-249) (-)



#14

Carbon disulfide

Concen: 2.679 ug/L

RT: 2.31 min Scan# 380

Delta R.T. 0.00 min

Lab File: VV019221.D

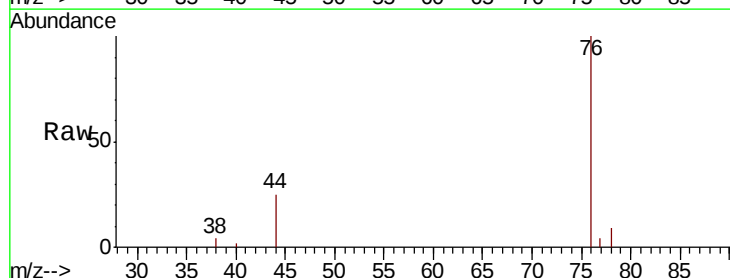
Acq: 03 Nov 2020 00:53

Tgt Ion: 76 Resp: 9614

Ion Ratio Lower Upper

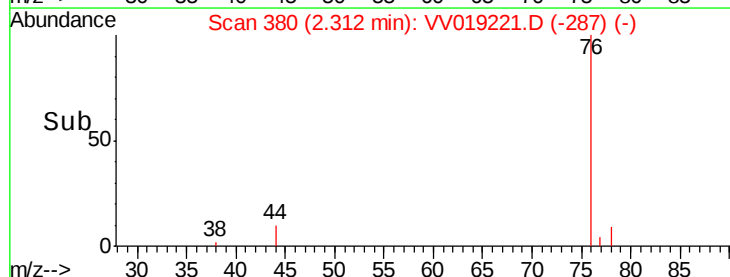
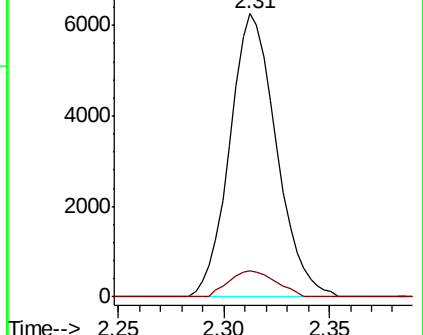
76 100

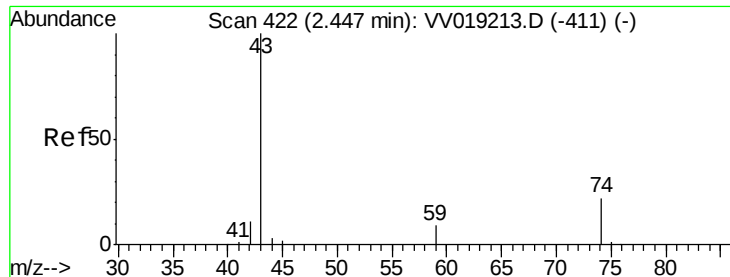
78 9.0 7.4 11.0



Abundance Ion 76.00 (75.70 to 76.70): VV019221.D (-287) (-)

Ion 78.00 (77.70 to 78.70): VV019221.D (-287) (-)

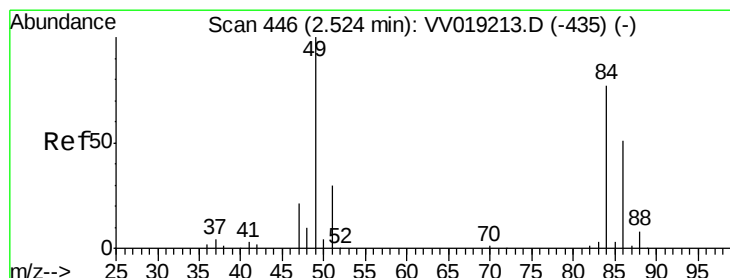
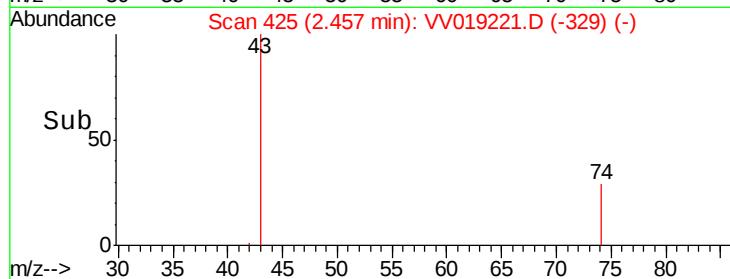
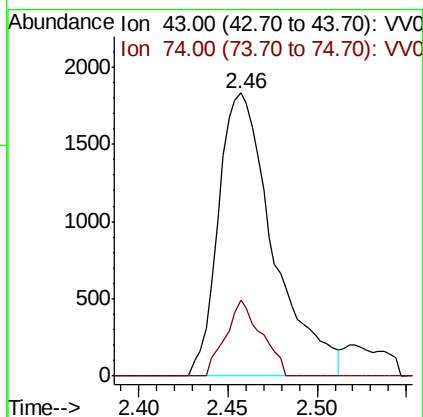
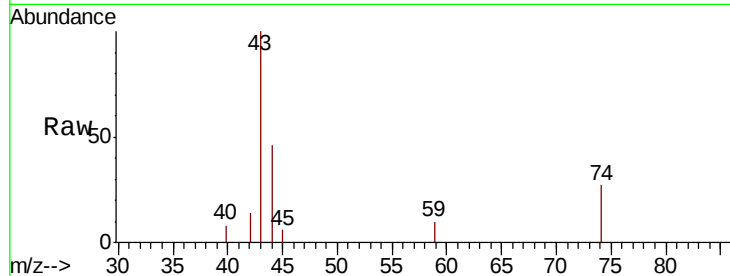




#15  
Methvl Acetate  
Concen: 2.696 ug/L  
RT: 2.46 min Scan# 425  
Delta R.T. 0.01 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

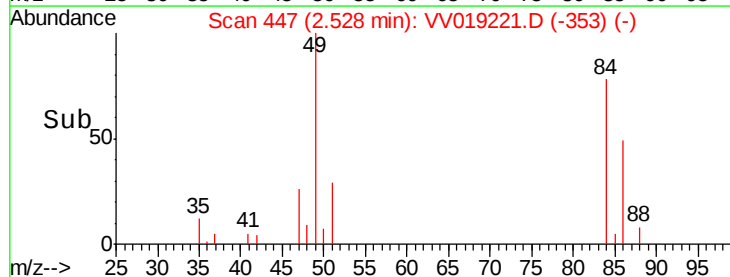
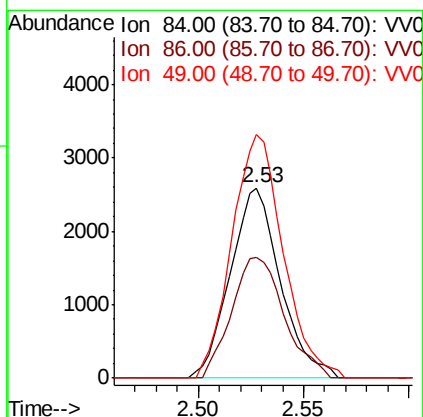
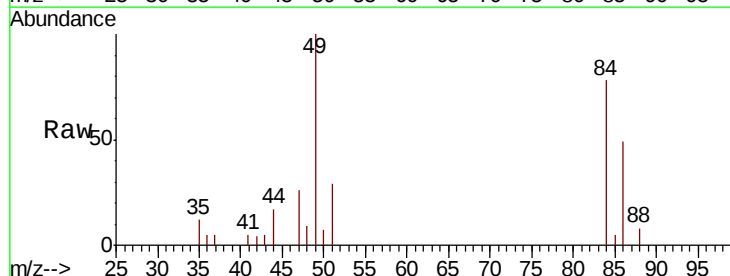
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-ME-SOIL-02

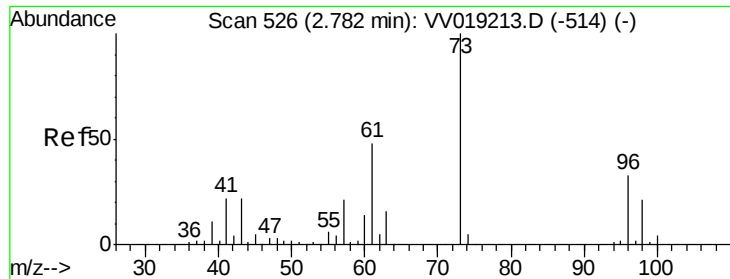
Tot Ion: 43 Resp: 3914  
Ion Ratio Lower Upper  
43 100  
74 17.5 18.8 28.2#



#16  
Methylene chloride  
Concen: 2.879 ug/L  
RT: 2.53 min Scan# 447  
Delta R.T. 0.00 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Tgt Ion: 84 Resp: 4278  
Ion Ratio Lower Upper  
84 100  
86 63.2 45.6 84.8  
49 128.0 89.3 165.9

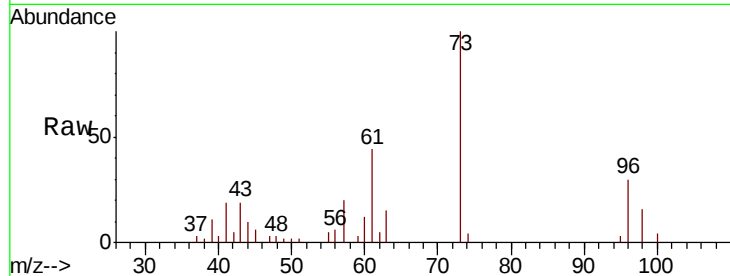




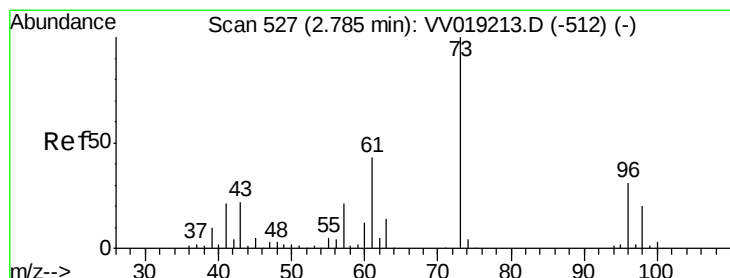
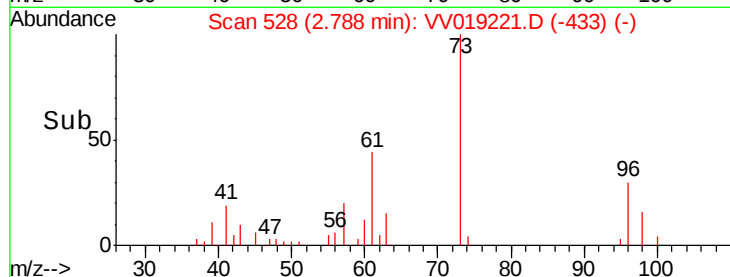
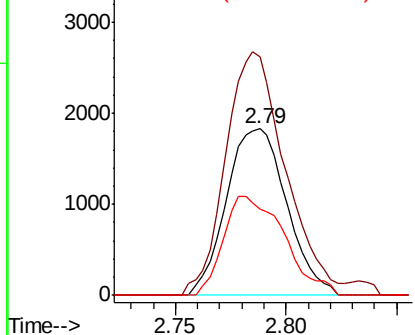
#17  
trans-1,2-Dichloroethene  
Concen: 2.567 ug/L  
RT: 2.79 min Scan# 528  
Delta R.T. 0.01 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-ME-SOIL-02

Tot Ion: 96 Resp: 3481  
Ion Ratio Lower Upper  
96 100  
61 143.1 100.7 187.1  
98 52.0 42.9 79.7

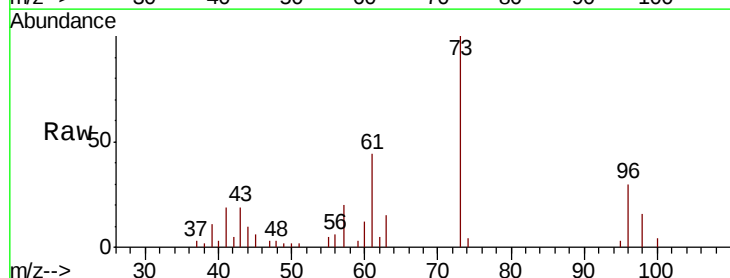


Abundance Ion 96.00 (95.70 to 96.70): VV0  
Ion 61.00 (60.70 to 61.70): VV0  
Ion 98.00 (97.70 to 98.70): VV0

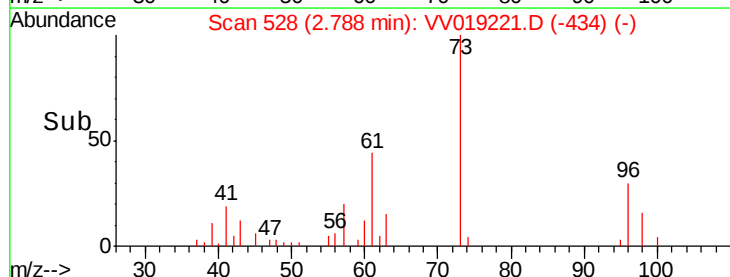
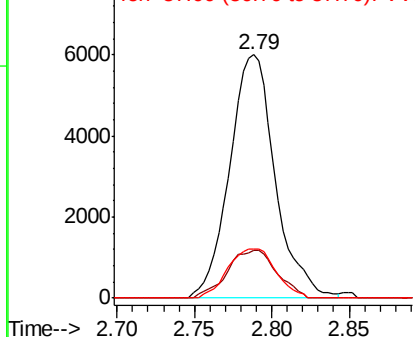


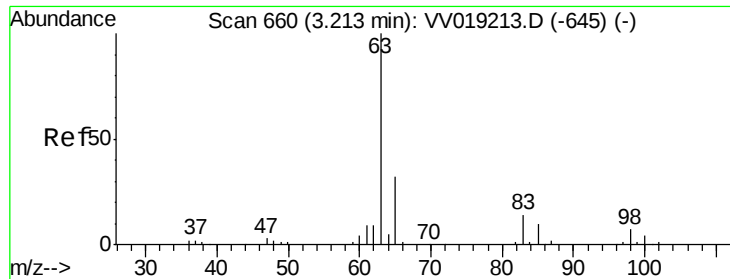
#18  
Methyl tert-butyl Ether  
Concen: 2.580 ug/L  
RT: 2.79 min Scan# 528  
Delta R.T. 0.00 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Tgt Ion: 73 Resp: 12295  
Ion Ratio Lower Upper  
73 100  
43 21.3 17.9 26.9  
57 21.3 17.1 25.7



Abundance Ion 73.00 (72.70 to 73.70): VV0  
Ion 43.00 (42.70 to 43.70): VV0  
Ion 57.00 (56.70 to 57.70): VV0

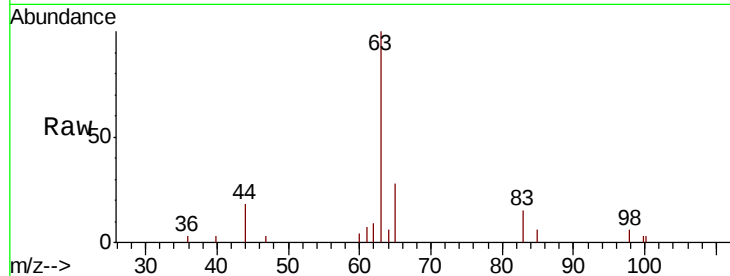




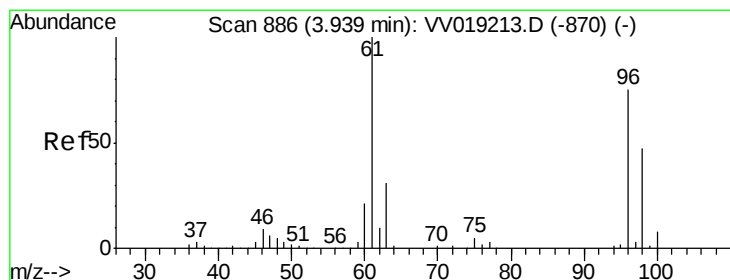
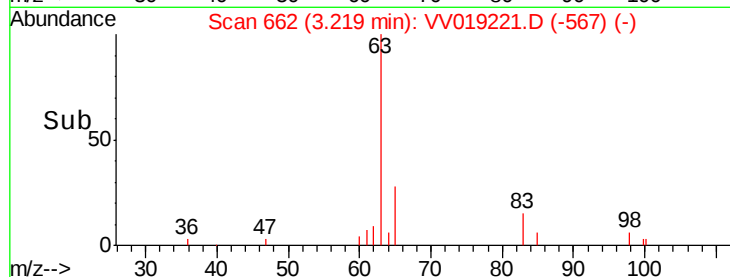
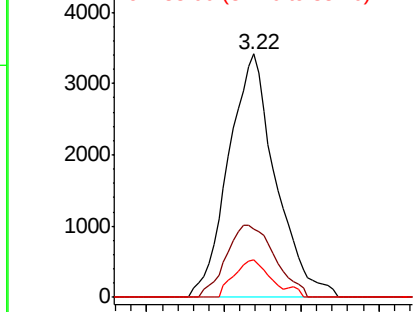
#19  
 1,1-Dichloroethane  
 Concen: 2.722 ug/L  
 RT: 3.22 min Scan# 662  
 Delta R.T. 0.01 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-ME-SOIL-02

Tot Ion: 63 Resp: 7231  
 Ion Ratio Lower Upper  
 63 100  
 65 28.1 21.8 40.6  
 83 15.3 9.5 17.7

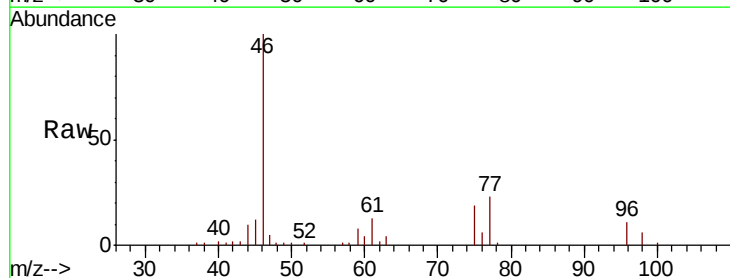


Abundance Ion 63.00 (62.70 to 63.70): VV0  
 Ion 65.00 (64.70 to 65.70): VV0  
 Ion 83.00 (82.70 to 83.70): VV0

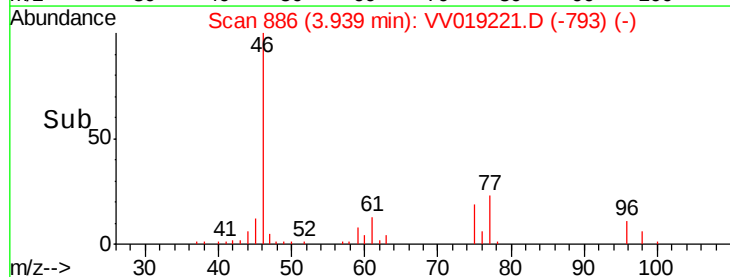
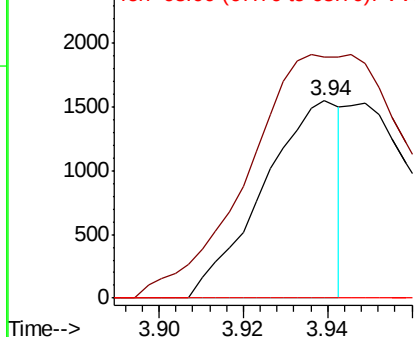


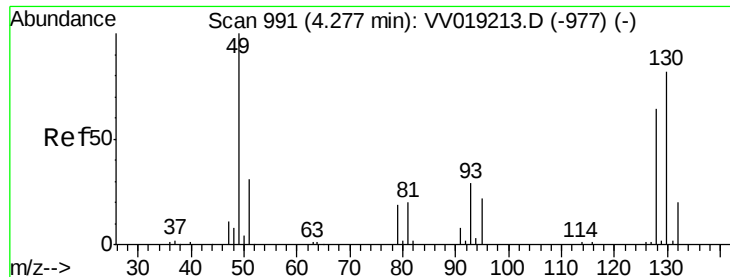
#20  
 cis-1,2-Dichloroethene  
 Concen: 1.313 ug/L  
 RT: 3.94 min Scan# 886  
 Delta R.T. 0.00 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Tgt Ion: 96 Resp: 1967  
 Ion Ratio Lower Upper  
 96 100  
 61 122.0 95.6 177.6  
 68 0.0 0.0 0.0



Abundance Ion 96.00 (95.70 to 96.70): VV0  
 Ion 61.00 (60.70 to 61.70): VV0  
 Ion 68.00 (67.70 to 68.70): VV0





#23

Bromochloromethane

Concen: 2.482 ug/L

RT: 4.28 min Scan# 993

Delta R.T. 0.01 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

MDL-ME-SOIL-02

Tot Ion:128 Resp: 2048

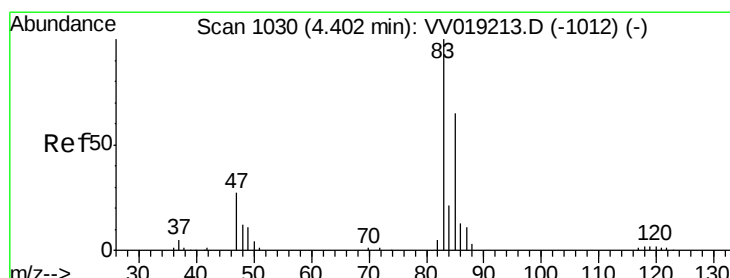
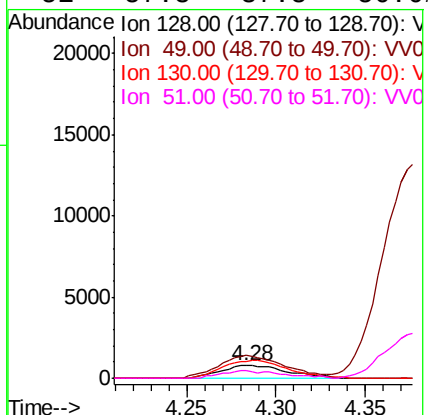
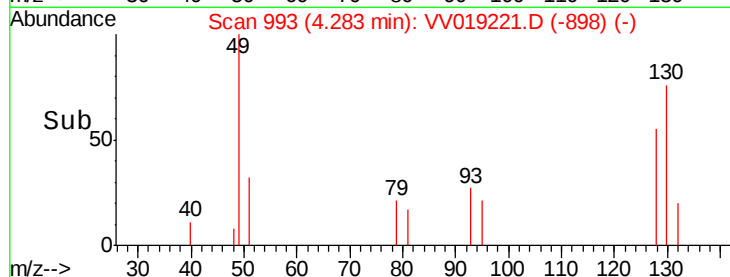
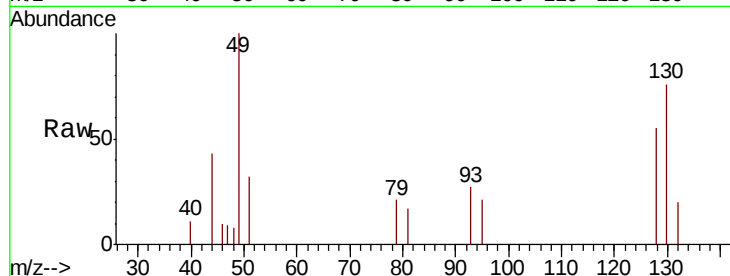
Ion Ratio Lower Upper

128 100

49 180.3 108.8 202.2

130 136.3 88.5 164.3

51 57.8 37.8 56.6#



#25

Chloroform

Concen: 3.159 ug/L

RT: 4.40 min Scan# 1030

Delta R.T. 0.00 min

Lab File: VV019221.D

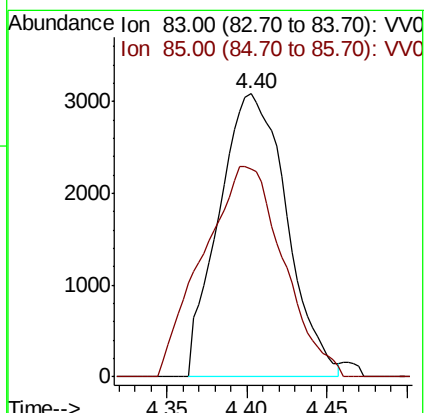
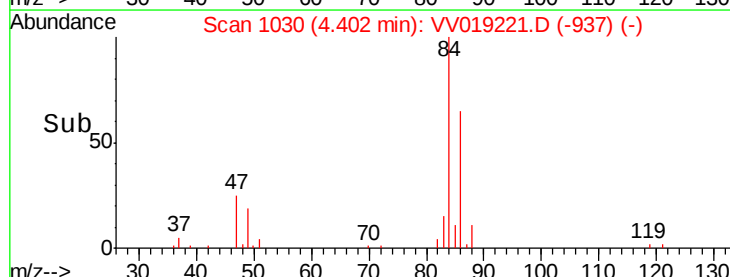
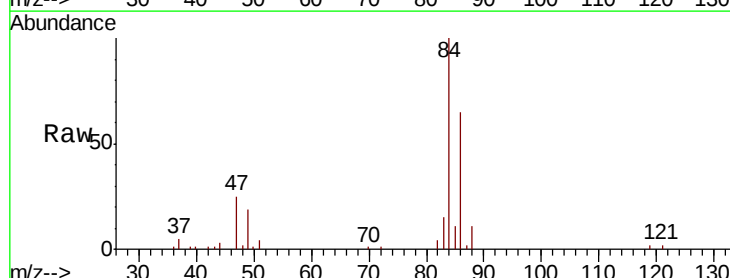
Acq: 03 Nov 2020 00:53

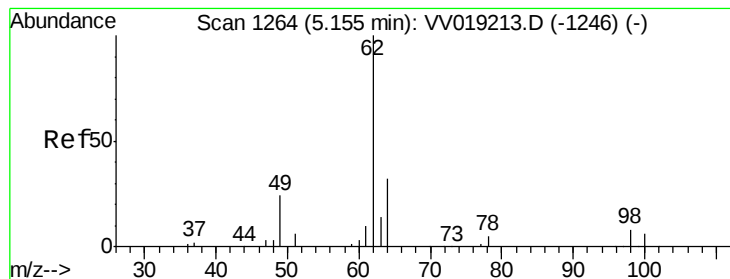
Tgt Ion: 83 Resp: 8998

Ion Ratio Lower Upper

83 100

85 73.4 45.4 84.4





#27

1,2-Dichloroethane

Concen: 2.852 ug/L

RT: 5.16 min Scan# 1267

Delta R.T. 0.01 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

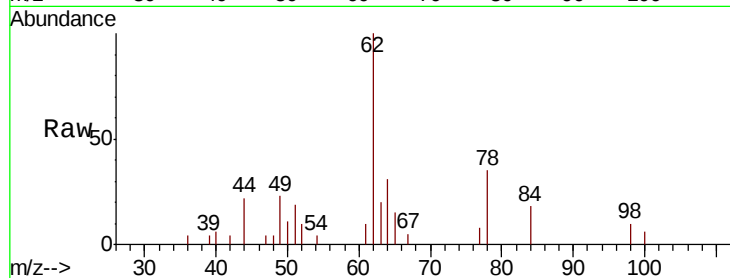
MDL-ME-SOIL-02

Tot Ion: 62 Resp: 6904

Ion Ratio Lower Upper

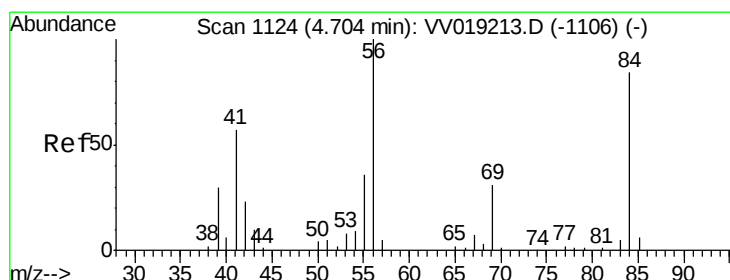
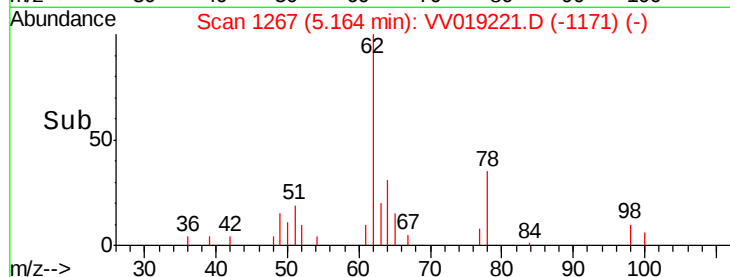
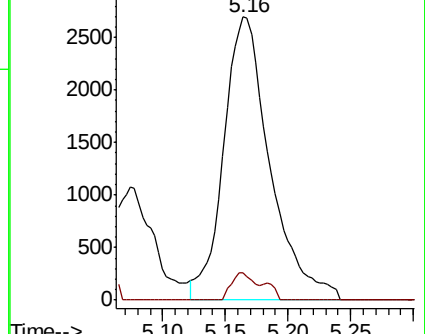
62 100

98 9.5 6.8 10.2



Abundance Ion 62.00 (61.70 to 62.70): VV0

Ion 98.00 (97.70 to 98.70): VV0



#29

Cyclohexane

Concen: 2.422 ug/L

RT: 4.71 min Scan# 1125

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

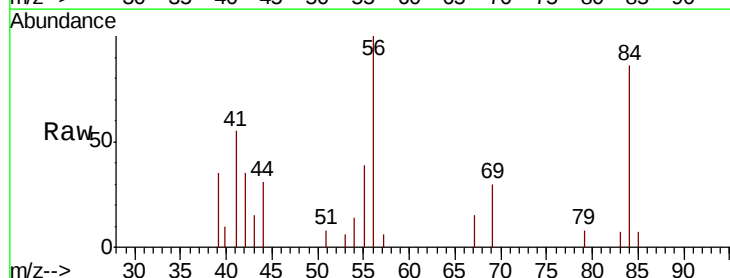
Tgt Ion: 56 Resp: 4582

Ion Ratio Lower Upper

56 100

69 16.0 24.6 36.8#

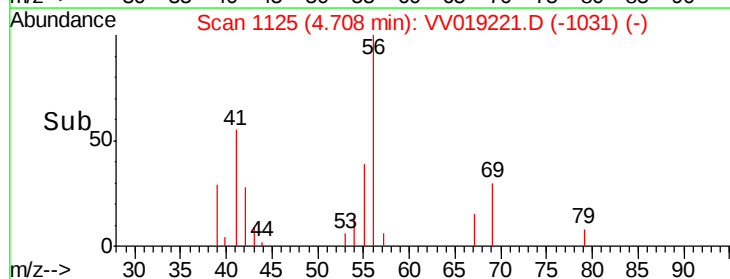
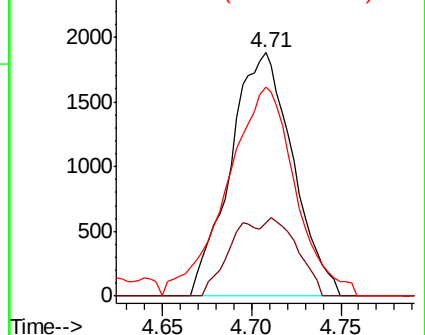
84 93.5 70.5 105.7

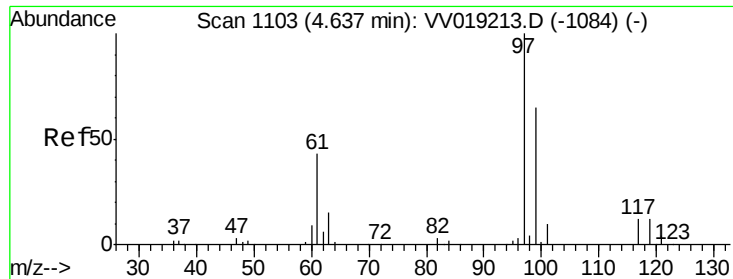


Abundance Ion 56.00 (55.70 to 56.70): VV0

Ion 69.00 (68.70 to 69.70): VV0

Ion 84.00 (83.70 to 84.70): VV0

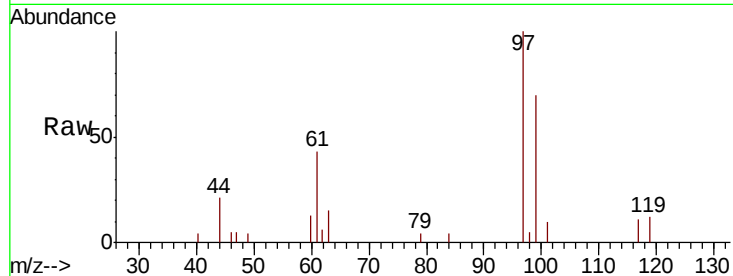




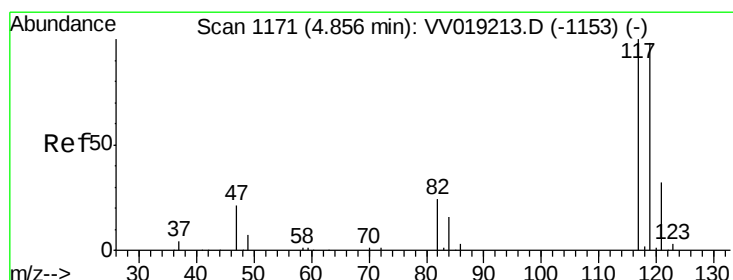
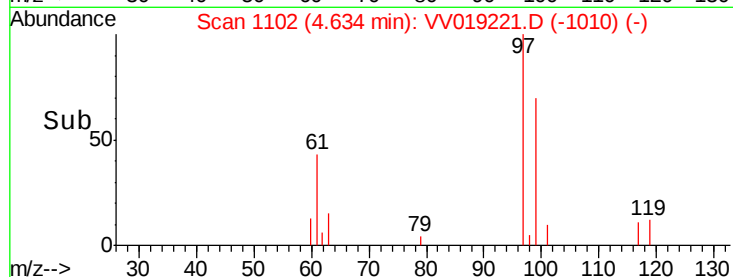
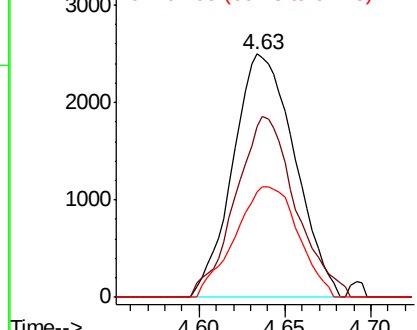
#30  
 1,1,1-Trichloroethane  
 Concen: 2.429 ug/L  
 RT: 4.63 min Scan# 1102  
 Delta R.T. -0.00 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-ME-SOIL-02

Tot Ion: 97 Resp: 6228  
 Ion Ratio Lower Upper  
 97 100  
 99 72.3 52.0 78.0  
 61 46.6 35.3 52.9

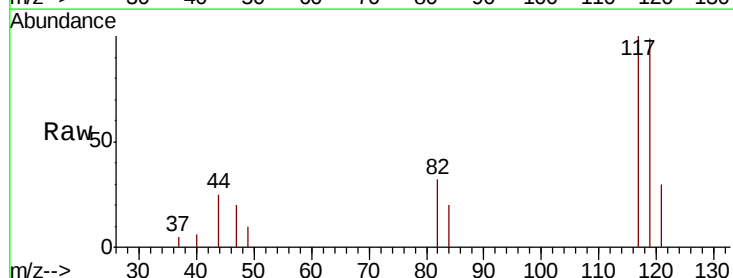


Abundance Ion 97.00 (96.70 to 97.70): VV0  
 Ion 99.00 (98.70 to 99.70): VV0  
 Ion 61.05 (60.75 to 61.75): VV0

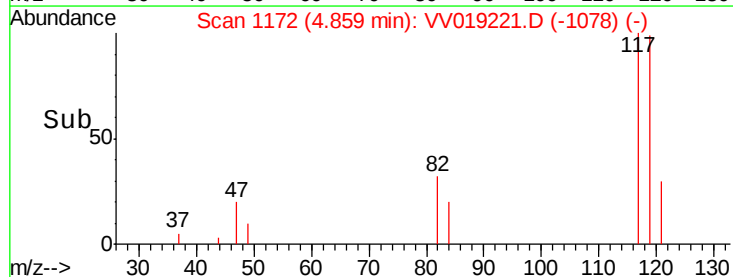
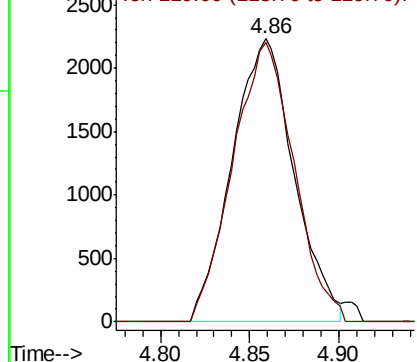


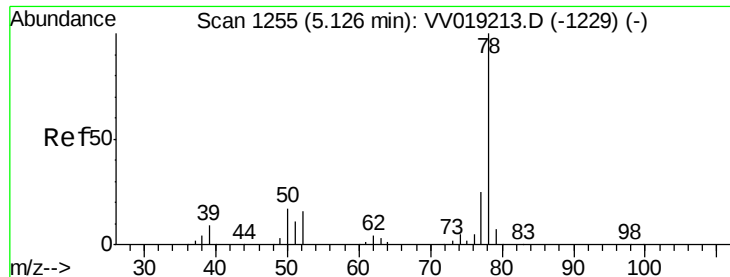
#31  
 Carbon tetrachloride  
 Concen: 2.439 ug/L  
 RT: 4.86 min Scan# 1172  
 Delta R.T. 0.00 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Tgt Ion: 117 Resp: 5398  
 Ion Ratio Lower Upper  
 117 100  
 119 97.6 77.8 116.6



Abundance Ion 117.00 (116.70 to 117.70): V  
 Ion 119.00 (118.70 to 119.70): V





#33

Benzene

Concen: 2.582 ug/L

RT: 5.13 min Scan# 1256

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

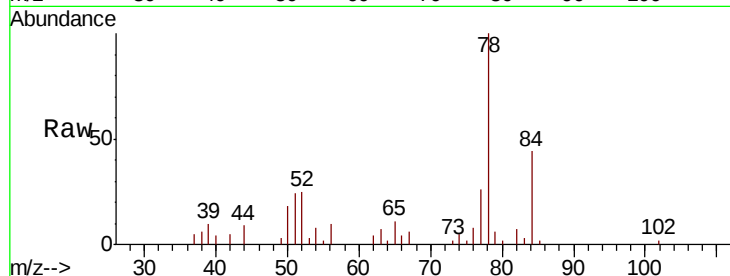
Instrument :

MSVOA\_V

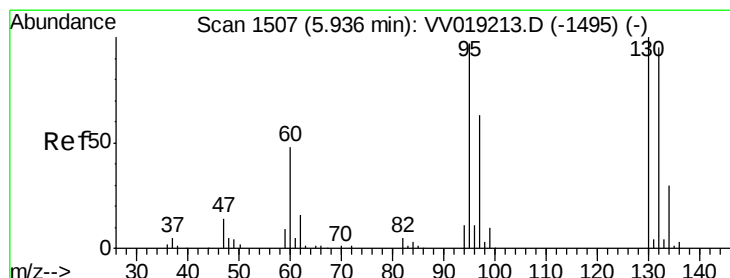
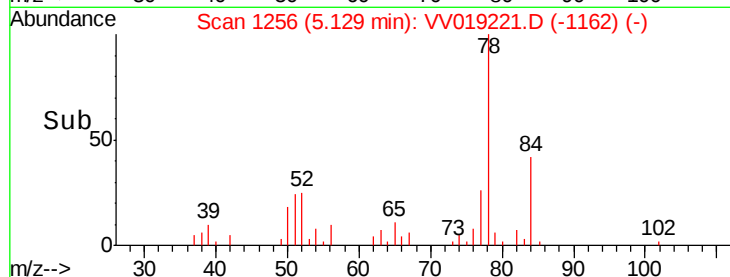
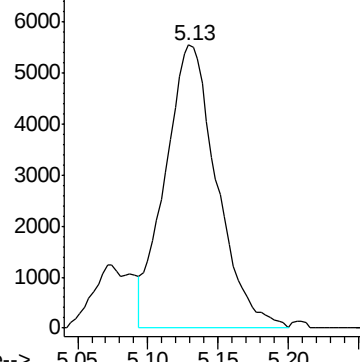
ClientSampleId :

MDL-ME-SOIL-02

Tgt Ion: 78 Resp: 14186



Abundance Ion 78.00 (77.70 to 78.70): VV0



#34

Trichloroethene

Concen: 2.693 ug/L

RT: 5.94 min Scan# 1509

Delta R.T. 0.01 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Tgt Ion: 95 Resp: 4021

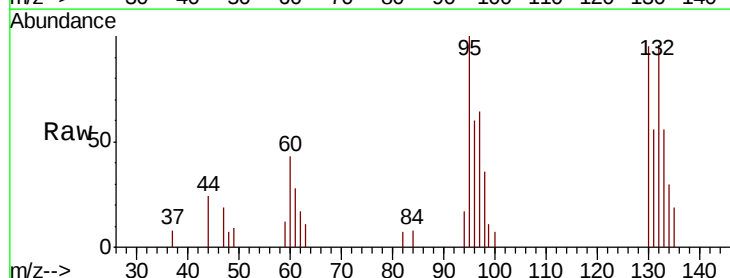
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 97  | 63.9  | 45.4  | 84.4  |
| 132 | 95.8  | 68.5  | 127.3 |
| 130 | 94.8  | 72.0  | 133.6 |

95 100

97 63.9 45.4 84.4

132 95.8 68.5 127.3

130 94.8 72.0 133.6

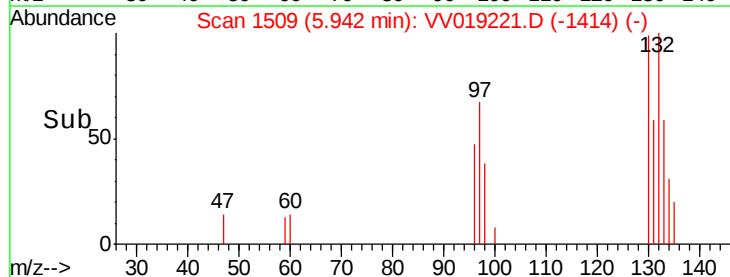
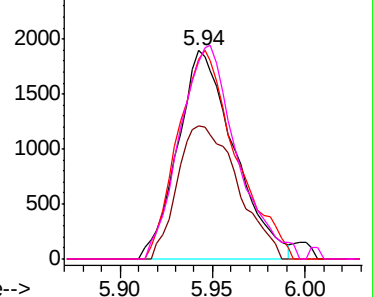


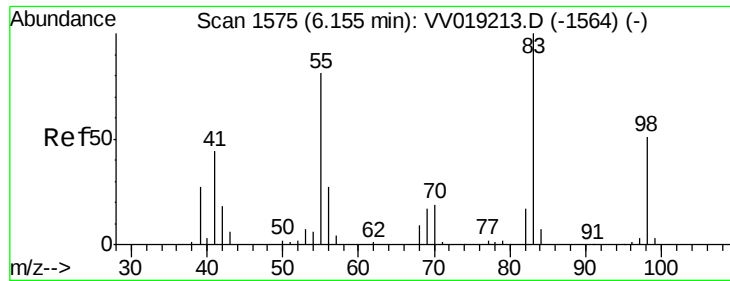
Abundance Ion 95.00 (94.70 to 95.70): VV0

Ion 97.00 (96.70 to 97.70): VV0

Ion 132.00 (131.70 to 132.70): VV0

Ion 130.00 (129.70 to 130.70): VV0

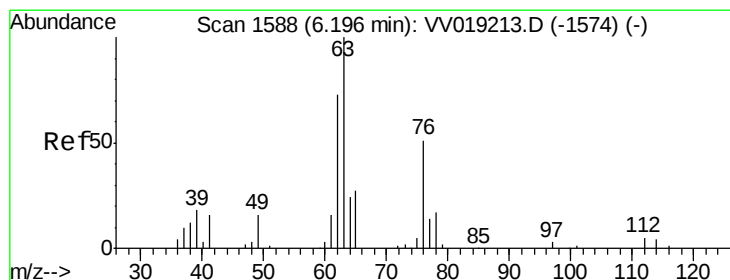
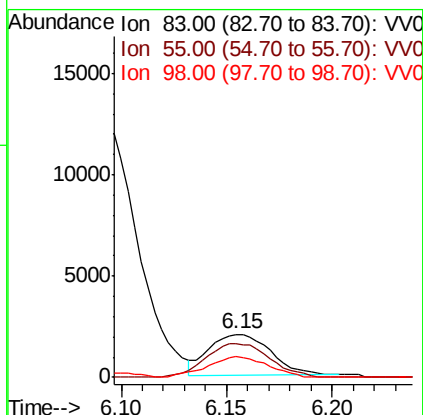
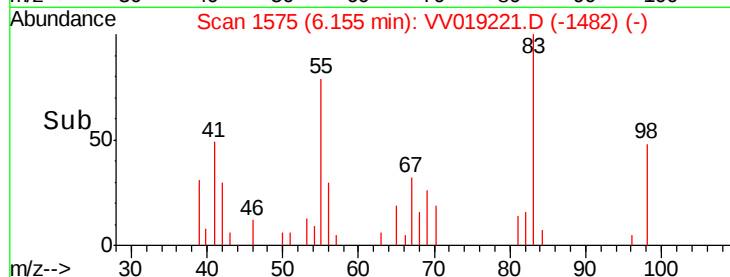
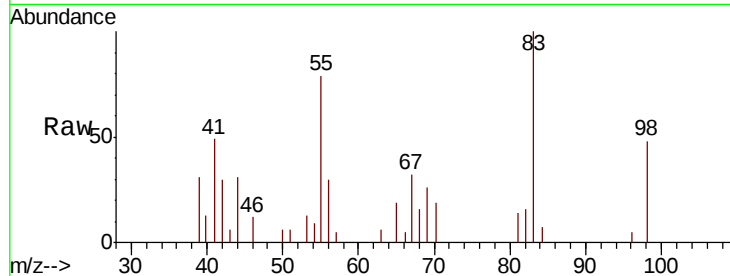




#35  
Methvlcvclohexane  
Concen: 2.325 ug/L  
RT: 6.15 min Scan# 1575  
Delta R.T. 0.00 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

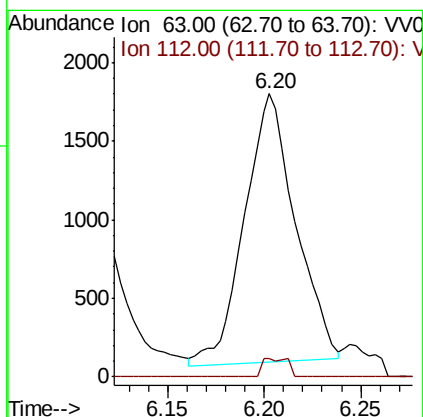
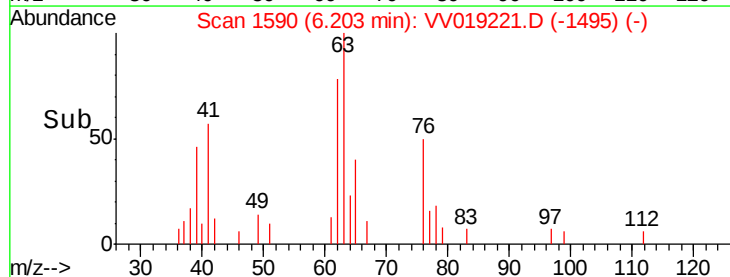
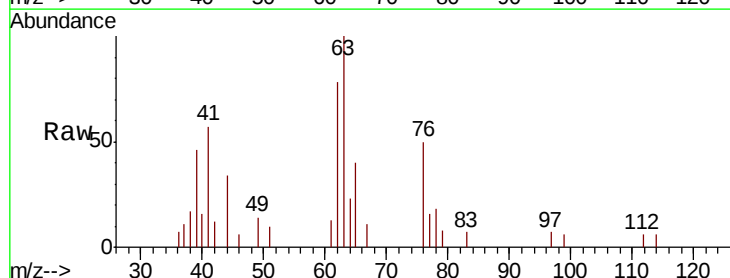
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-ME-SOIL-02

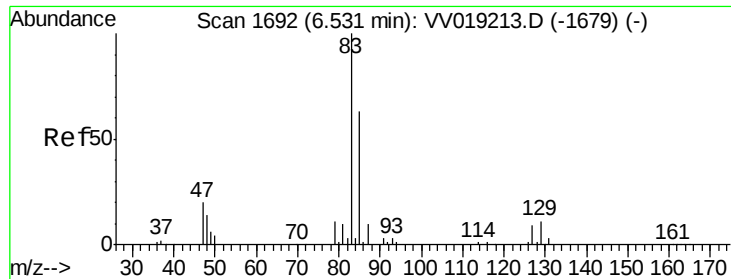
Tot Ion: 83 Resp: 4201  
Ion Ratio Lower Upper  
83 100  
55 83.6 62.8 94.2  
98 48.0 38.6 58.0



#37  
1,2-Dichloropropane  
Concen: 2.131 ug/L  
RT: 6.20 min Scan# 1590  
Delta R.T. 0.01 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Tgt Ion: 63 Resp: 3124  
Ion Ratio Lower Upper  
63 100  
112 2.1 4.2 6.2#

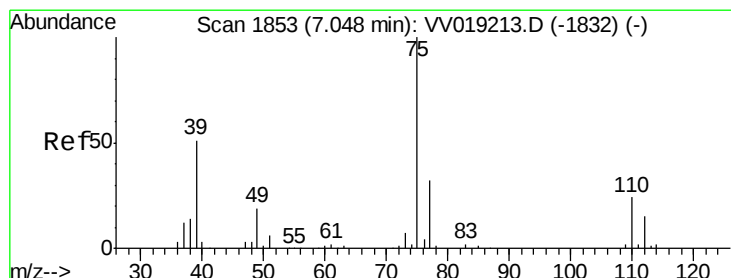
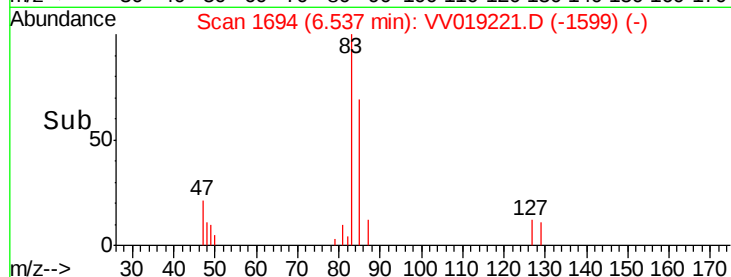
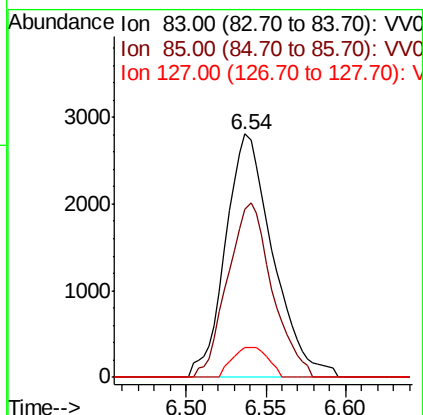
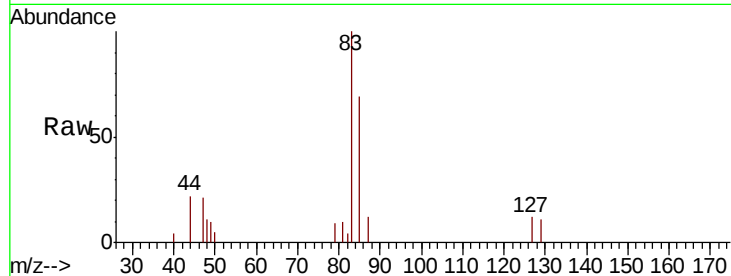




#38  
 Bromodichloromethane  
 Concen: 2.691 ug/L  
 RT: 6.54 min Scan# 1694  
 Delta R.T. 0.01 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

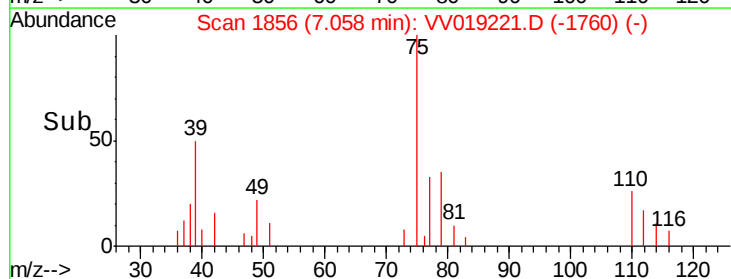
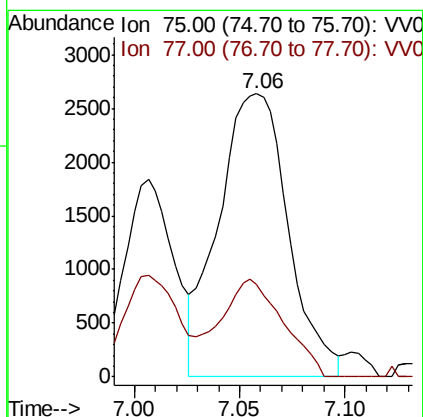
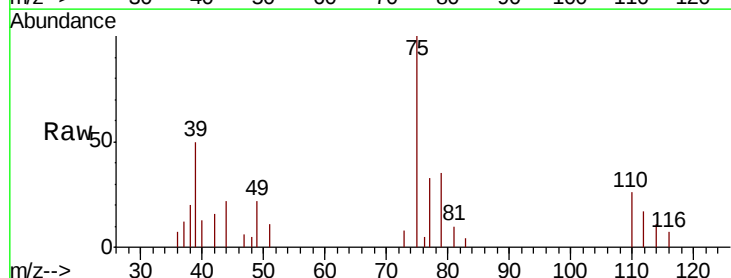
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-ME-SOIL-02

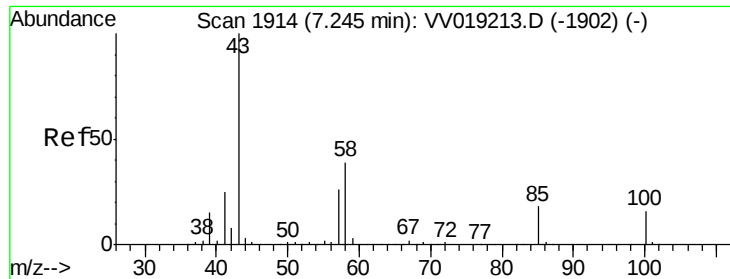
Tot Ion: 83 Resp: 5678  
 Ion Ratio Lower Upper  
 83 100  
 85 68.9 44.0 81.8  
 127 12.2 7.3 10.9#



#39  
 cis-1,3-Dichloropropene  
 Concen: 2.579 ug/L  
 RT: 7.06 min Scan# 1856  
 Delta R.T. 0.01 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Tgt Ion: 75 Resp: 6049  
 Ion Ratio Lower Upper  
 75 100  
 77 32.6 22.2 41.2

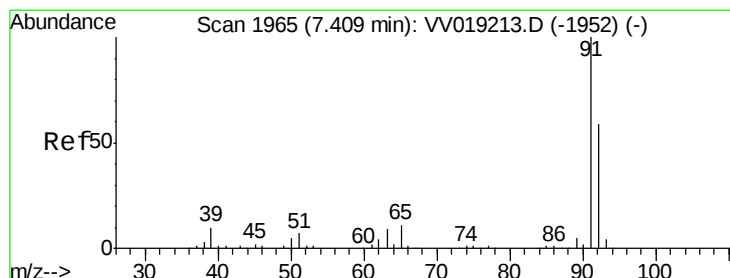
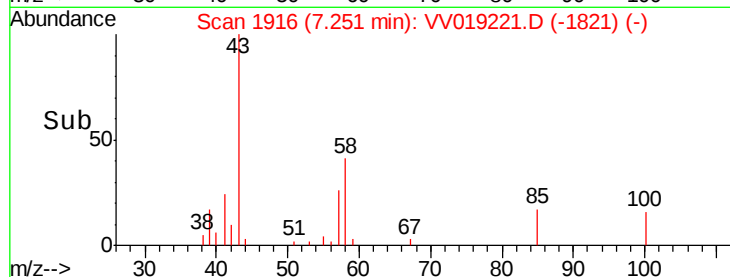
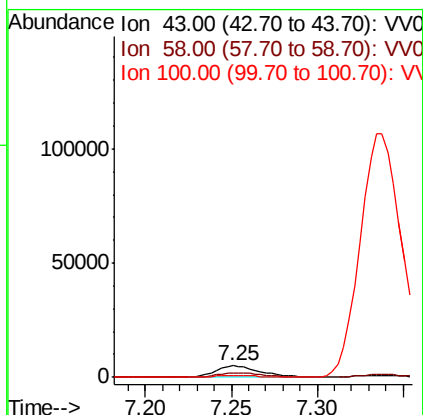
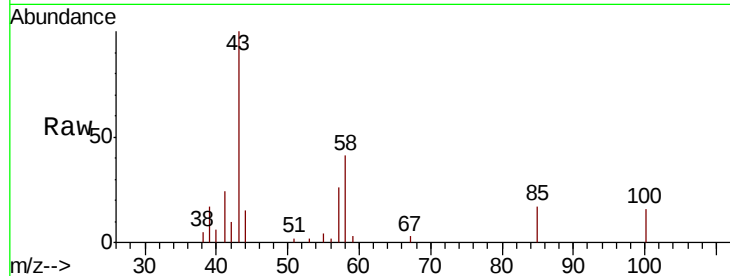




#40  
4-Methyl-2-pentanone  
Concen: 4.750 ug/L  
RT: 7.25 min Scan# 1916  
Delta R.T. 0.01 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

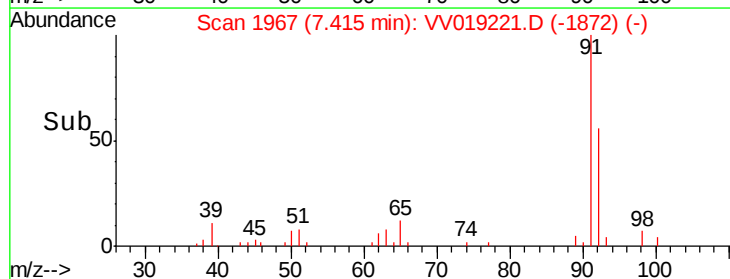
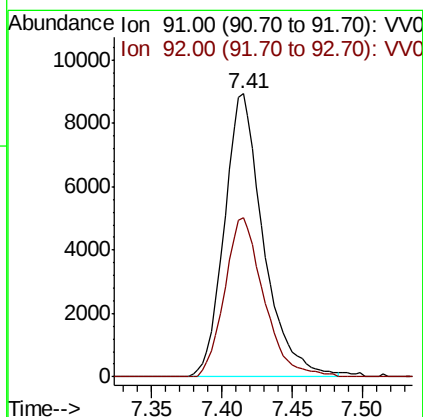
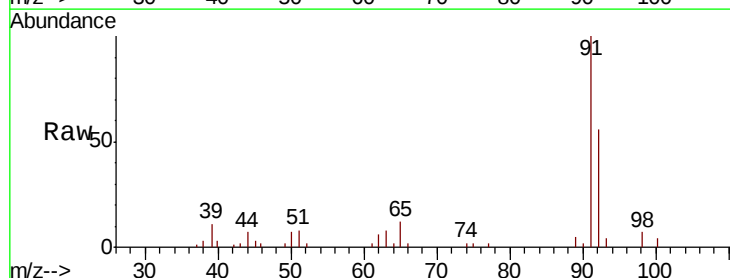
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-ME-SOIL-02

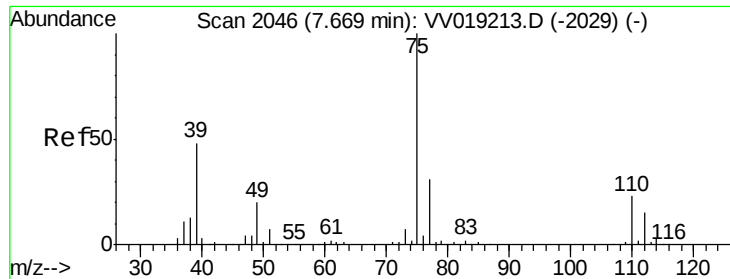
Tot Ion: 43 Resp: 9356  
Ion Ratio Lower Upper  
43 100  
58 38.7 30.5 45.7  
100 15.4 12.7 19.1



#42  
Toluene  
Concen: 2.917 ug/L  
RT: 7.41 min Scan# 1967  
Delta R.T. 0.01 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Tgt Ion: 91 Resp: 17320  
Ion Ratio Lower Upper  
91 100  
92 56.2 40.6 75.4





#44

trans-1,3-Dichloropropene

Concen: 2.628 ug/L

RT: 7.68 min Scan# 2048

Delta R.T. 0.01 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

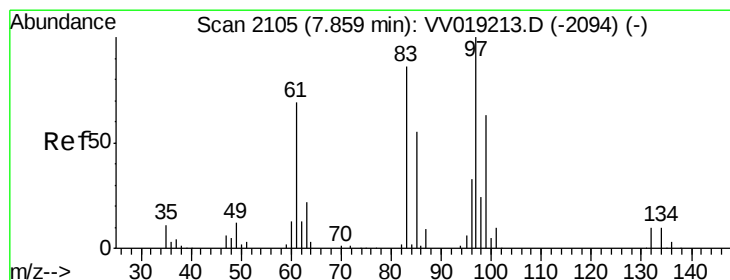
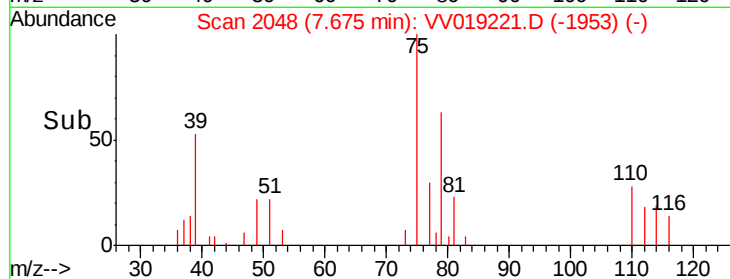
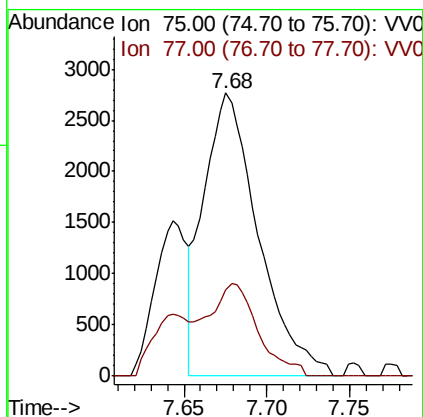
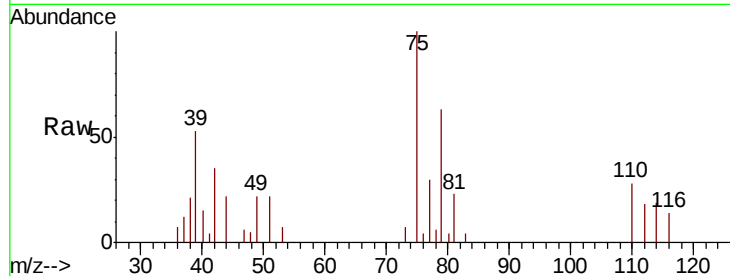
MDL-ME-SOIL-02

Tot Ion: 75 Resp: 6318

Ion Ratio Lower Upper

75 100

77 30.4 21.6 40.2



#45

1,1,2-Trichloroethane

Concen: 2.541 ug/L

RT: 7.87 min Scan# 2107

Delta R.T. 0.01 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Tgt Ion: 97 Resp: 3682

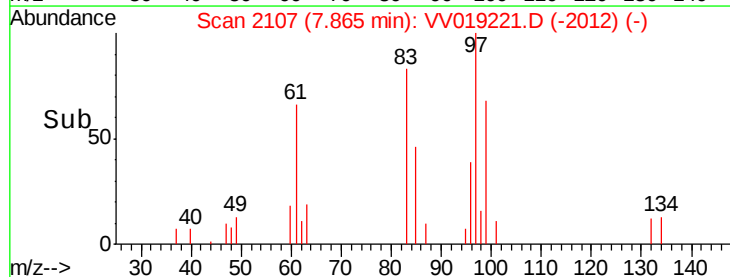
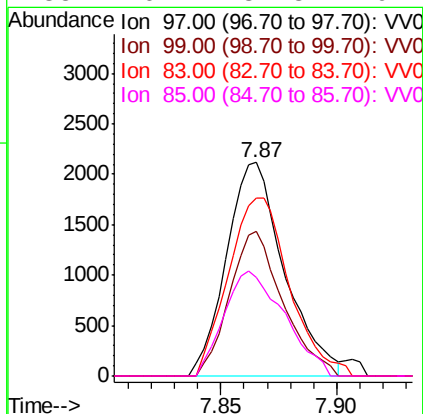
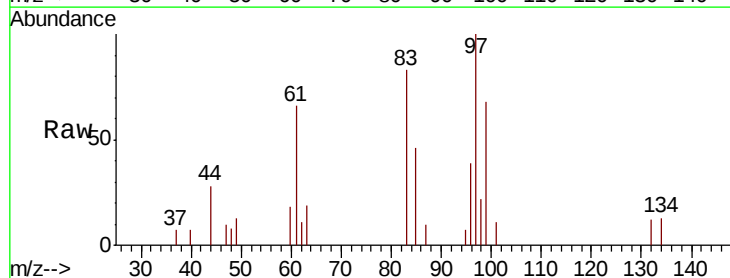
Ion Ratio Lower Upper

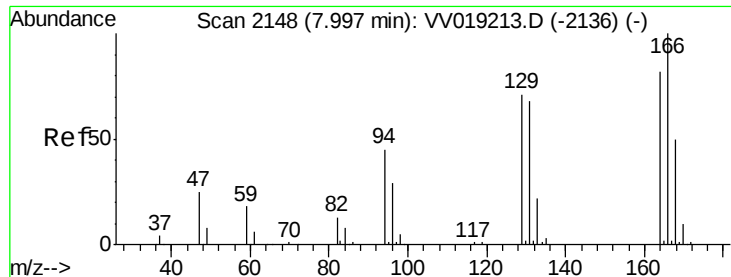
97 100

99 67.9 45.1 83.9

83 83.4 57.6 107.0

85 46.1 37.8 70.2

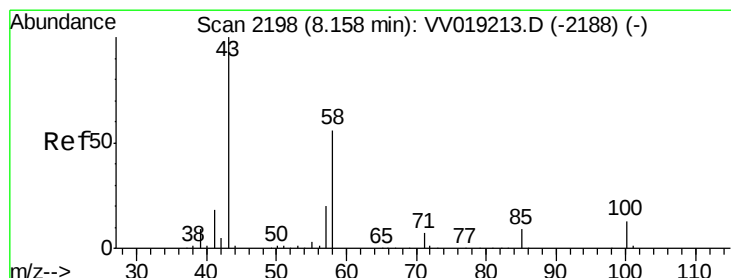
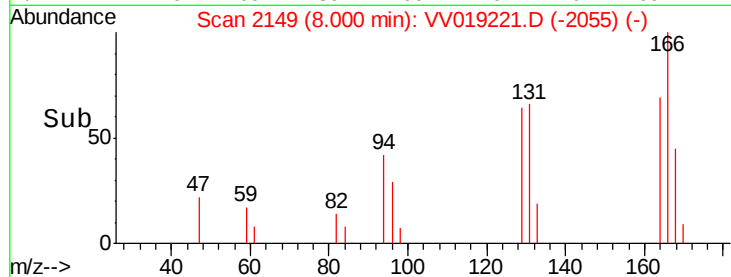
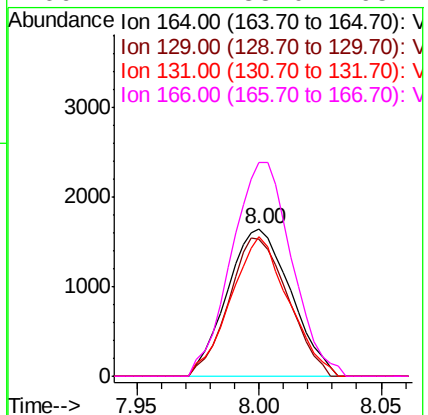
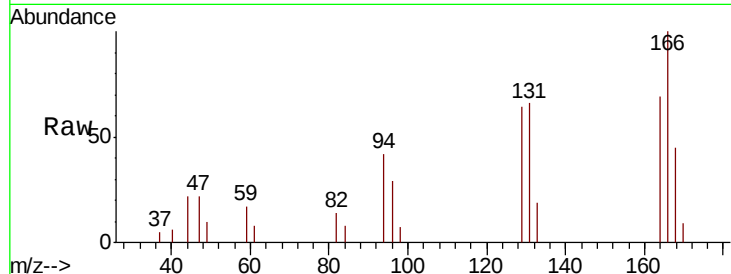




#46  
Tetrachloroethene  
Concen: 2.443 ug/L  
RT: 8.00 min Scan# 2149  
Delta R.T. 0.00 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

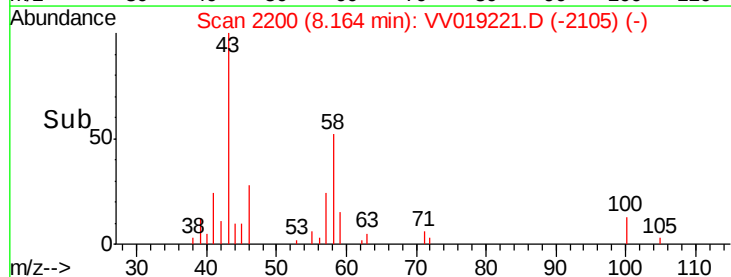
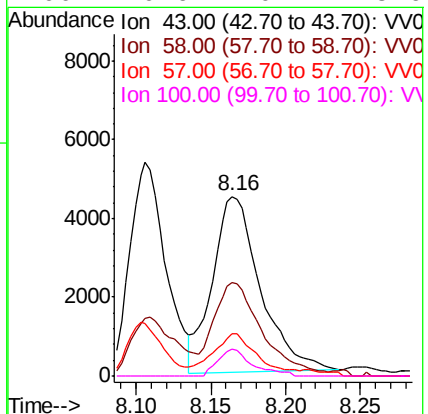
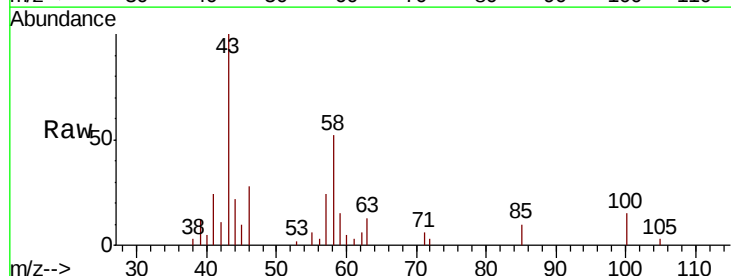
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-ME-SOIL-02

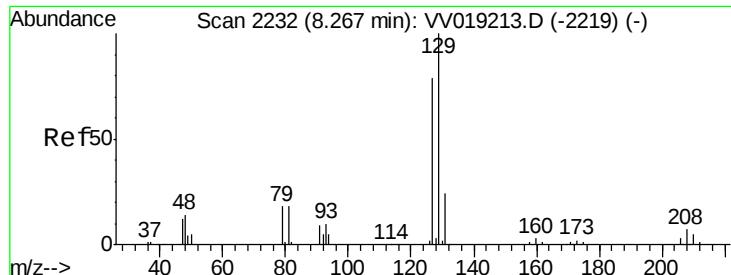
Tot Ion:164 Resp: 2976  
Ion Ratio Lower Upper  
164 100  
129 93.0 62.6 116.3  
131 95.0 59.0 109.6  
166 144.7 88.0 163.4



#48  
2-Hexanone  
Concen: 6.658 ug/L  
RT: 8.16 min Scan# 2200  
Delta R.T. 0.01 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Tgt Ion: 43 Resp: 9914  
Ion Ratio Lower Upper  
43 100  
58 53.9 42.6 63.8  
57 18.3 15.8 23.8  
100 10.6 10.4 15.6





#49

Dibromochloromethane

Concen: 2.425 ug/L

RT: 8.27 min Scan# 2232

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

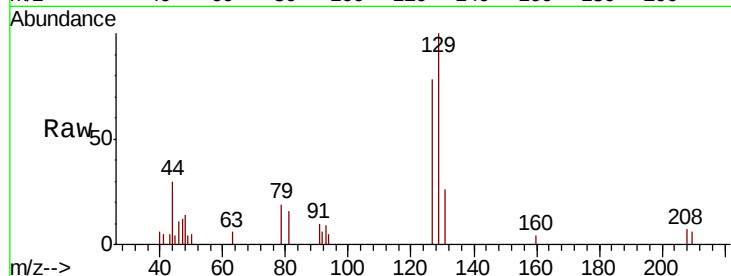
MDL-ME-SOIL-02

Tot Ion:129 Resp: 4191

Ion Ratio Lower Upper

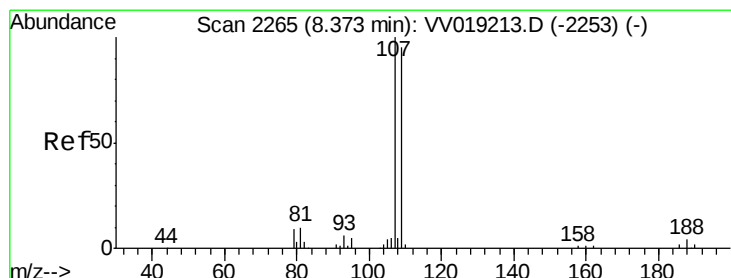
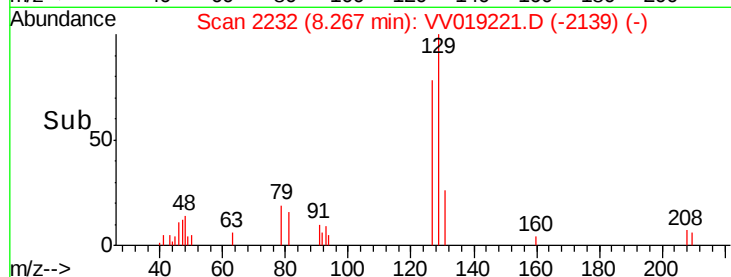
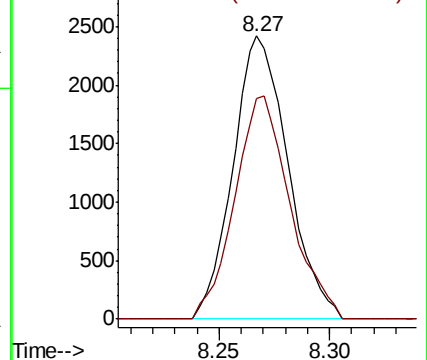
129 100

127 78.0 54.4 101.0



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#50

1,2-Dibromoethane

Concen: 2.749 ug/L

RT: 8.38 min Scan# 2266

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

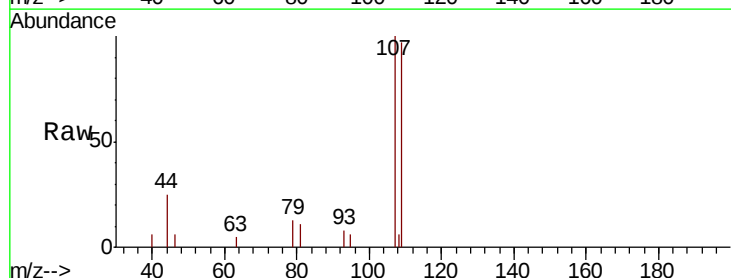
Tgt Ion:107 Resp: 4129

Ion Ratio Lower Upper

107 100

109 96.7 64.8 120.4

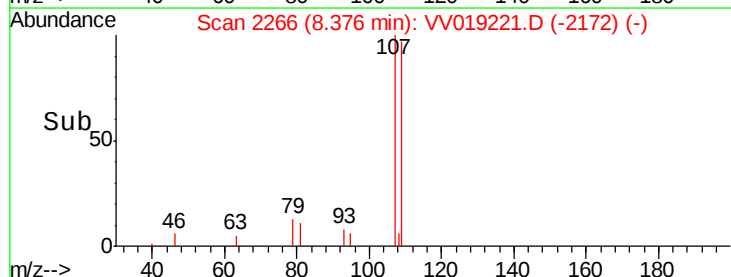
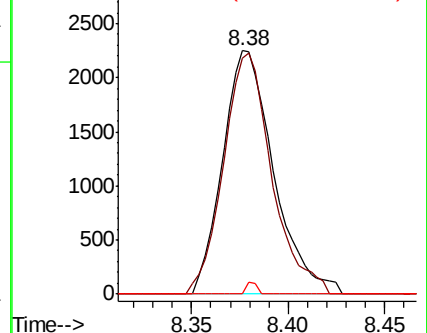
188 0.0 3.8 5.8#

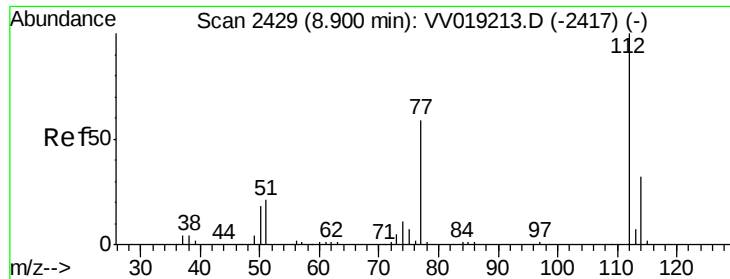


Abundance Ion 107.00 (106.70 to 107.70): V

Ion 109.00 (108.70 to 109.70): V

Ion 188.00 (187.70 to 188.70): V





#51

Chlorobenzene

Concen: 2.552 ug/L

RT: 8.90 min Scan# 2430

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

MDL-ME-SOIL-02

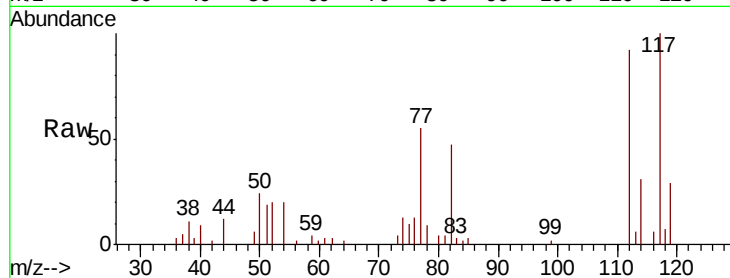
Tot Ion:112 Resp: 10136

Ion Ratio Lower Upper

112 100

114 33.5 22.7 42.1

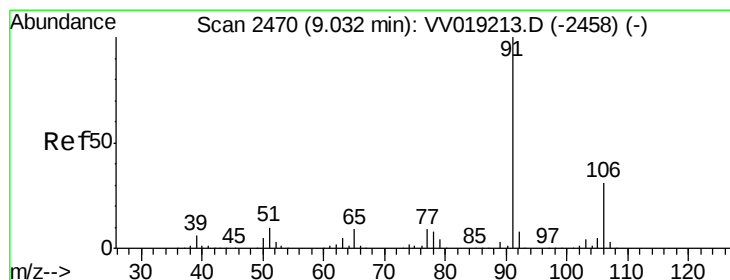
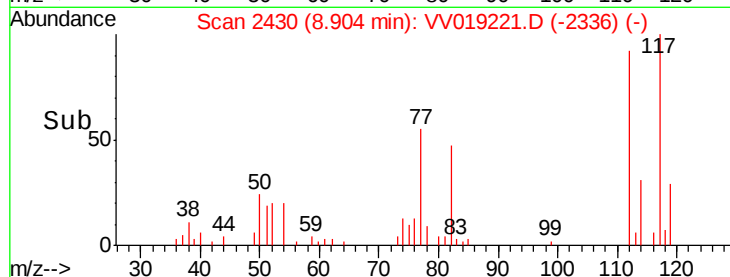
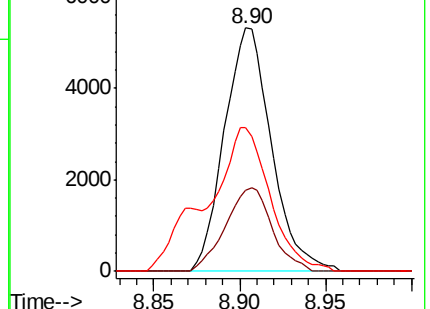
77 59.2 47.3 70.9



Abundance Ion 112.00 (111.70 to 112.70): V

Ion 114.00 (113.70 to 114.70): V

Ion 77.00 (76.70 to 77.70): V



#52

Ethylbenzene

Concen: 2.367 ug/L

RT: 9.04 min Scan# 2471

Delta R.T. 0.00 min

Lab File: VV019221.D

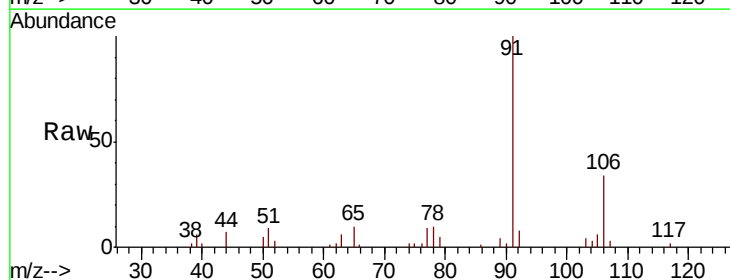
Acq: 03 Nov 2020 00:53

Tgt Ion: 91 Resp: 15504

Ion Ratio Lower Upper

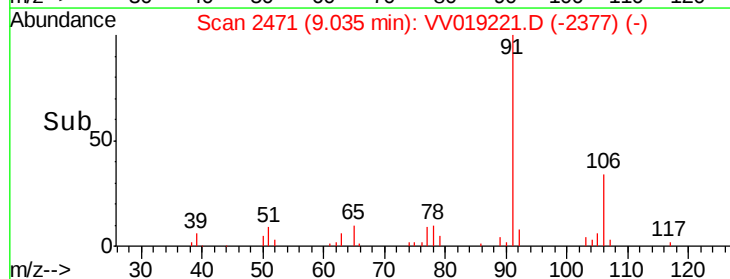
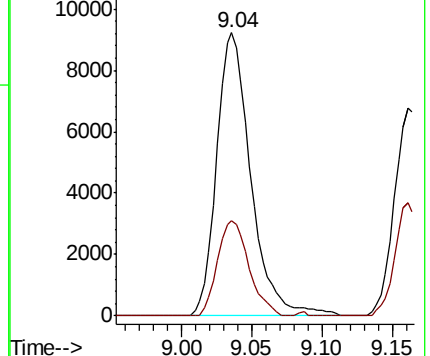
91 100

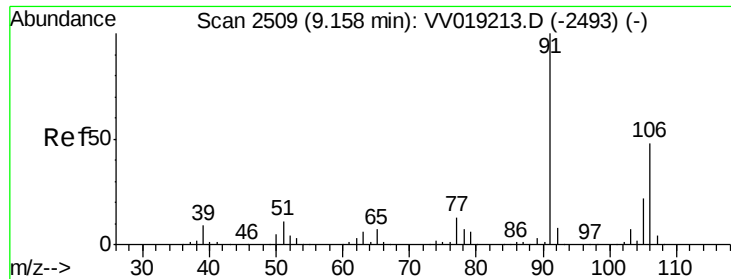
106 33.8 21.6 40.0



Abundance Ion 91.00 (90.70 to 91.70): V

Ion 106.00 (105.70 to 106.70): V

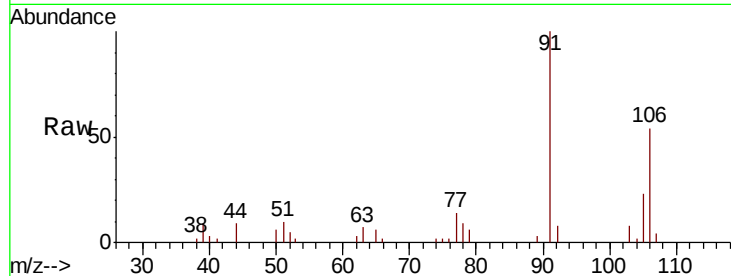




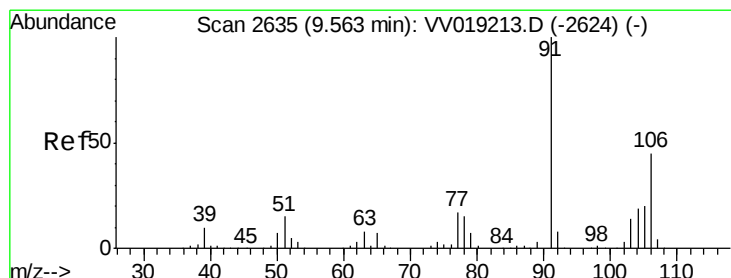
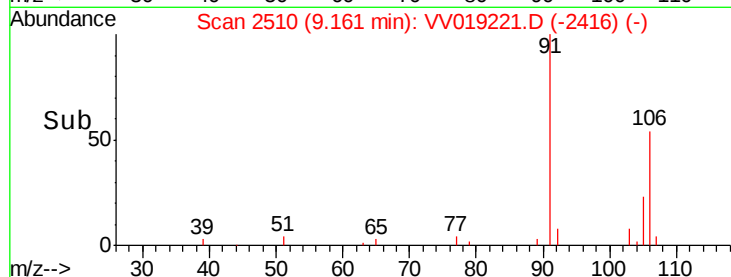
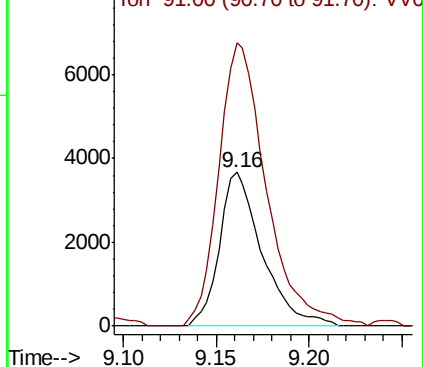
#53  
m,p-Xylene  
Concen: 2.395 ug/L  
RT: 9.16 min Scan# 2510  
Delta R.T. 0.00 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-ME-SOIL-02

Tot Ion:106 Resp: 5875  
Ion Ratio Lower Upper  
106 100  
91 183.8 147.2 273.4

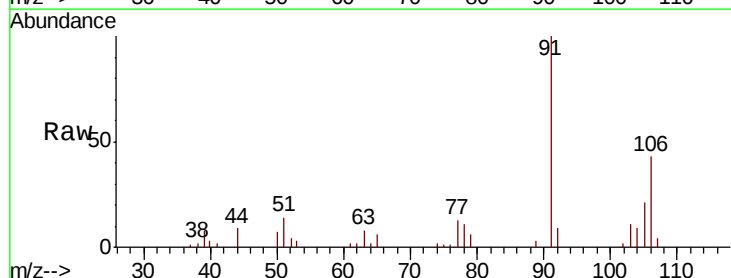


Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VV0

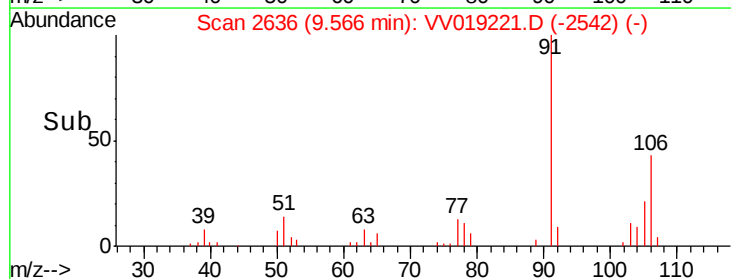
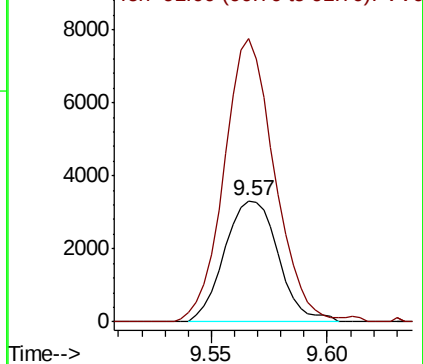


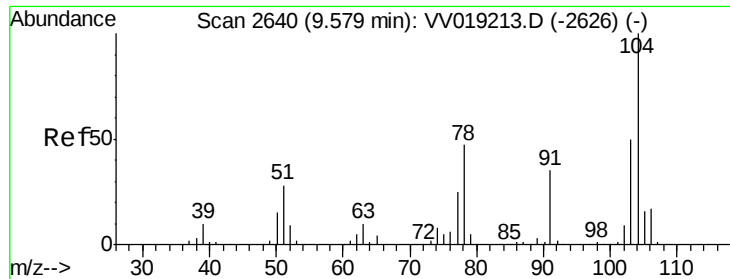
#54  
o-Xylene  
Concen: 2.214 ug/L  
RT: 9.57 min Scan# 2636  
Delta R.T. 0.00 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Tgt Ion:106 Resp: 5353  
Ion Ratio Lower Upper  
106 100  
91 233.1 151.6 281.6



Abundance Ion 106.00 (105.70 to 106.70): V  
Ion 91.00 (90.70 to 91.70): VV0

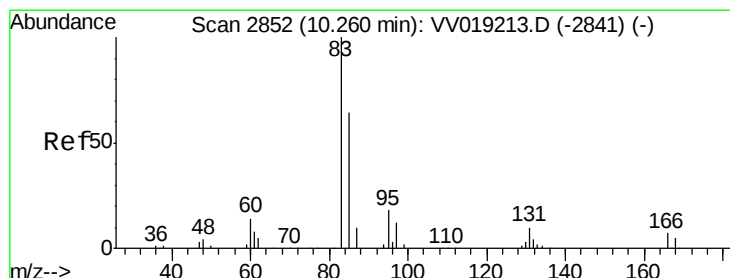
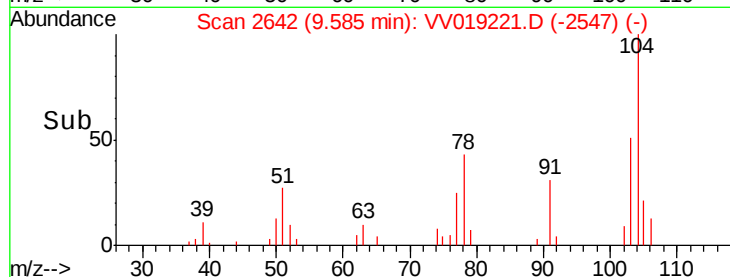
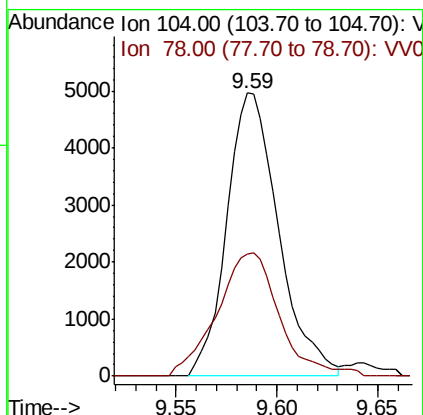
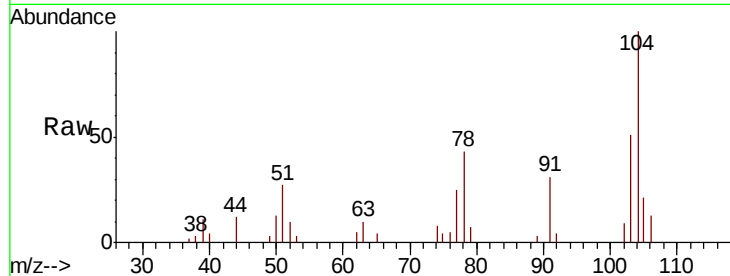




#55  
Stvrene  
Concen: 2.072 ug/L  
RT: 9.59 min Scan# 2642  
Delta R.T. 0.01 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

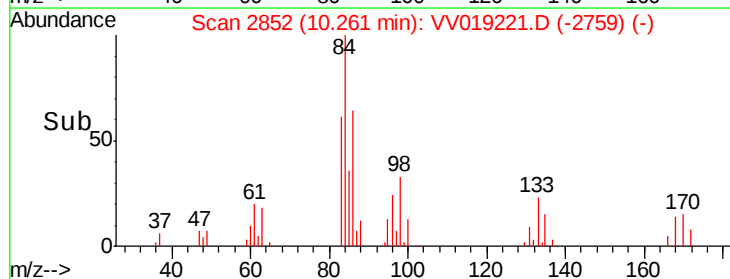
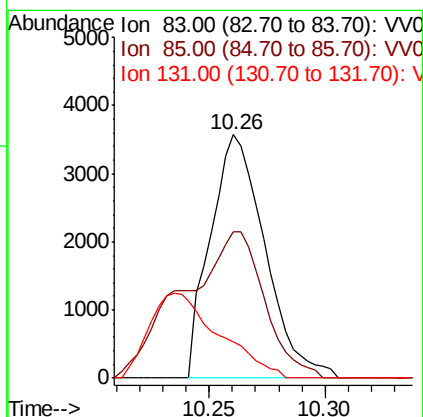
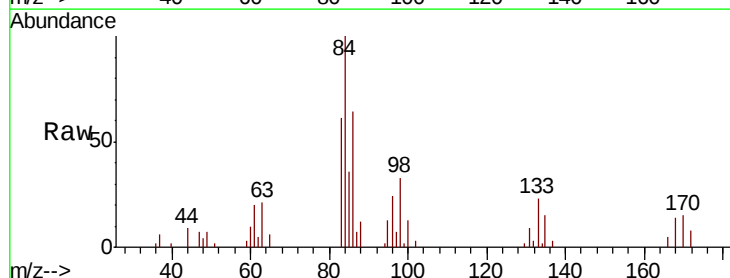
Instrument :  
MSVOA\_V  
ClientSampleId :  
MDL-ME-SOIL-02

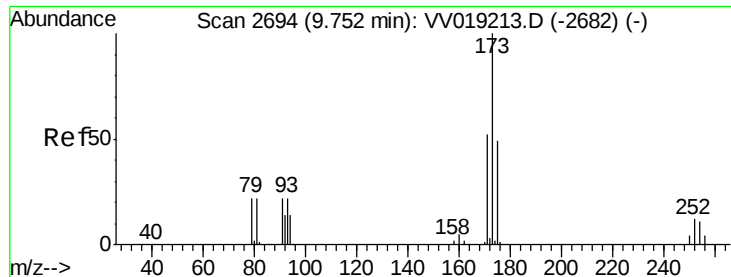
Tot Ion: 104 Resp: 8918  
Ion Ratio Lower Upper  
104 100  
78 43.1 32.6 60.5



#57  
1,1,2,2-Tetrachloroethane  
Concen: 2.670 ug/L  
RT: 10.26 min Scan# 2852  
Delta R.T. 0.00 min  
Lab File: VV019221.D  
Acq: 03 Nov 2020 00:53

Tgt Ion: 83 Resp: 5853  
Ion Ratio Lower Upper  
83 100  
85 59.9 45.0 83.6  
131 15.1 8.9 13.3#





#59

Bromoform

Concen: 2.558 ug/L

RT: 9.76 min Scan# 2695

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

MDL-ME-SOIL-02

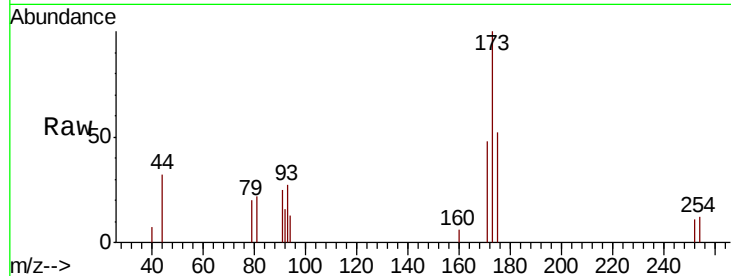
Tot Ion:173 Resp: 3181

Ion Ratio Lower Upper

173 100

175 49.1 38.4 57.6

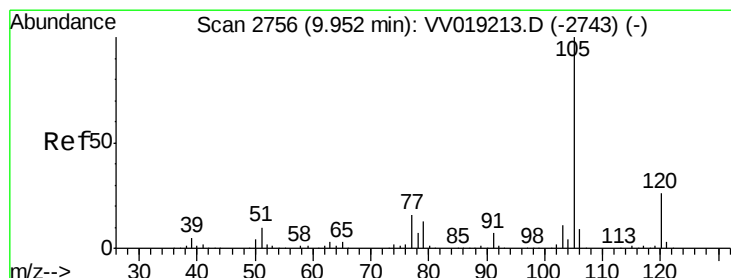
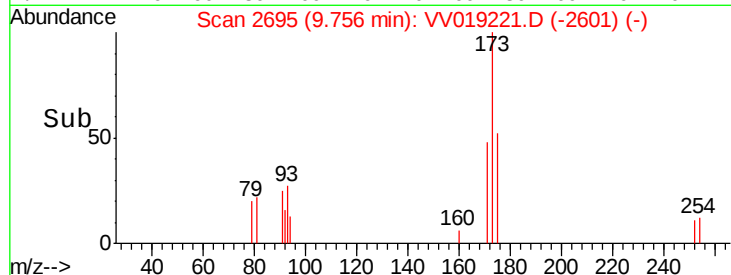
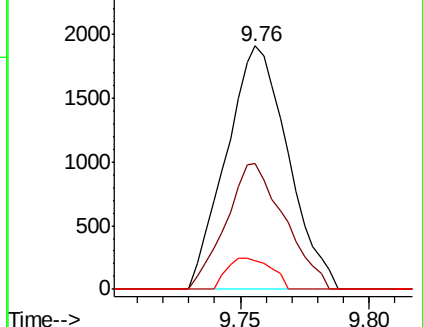
254 9.3 9.0 13.6



Abundance Ion 173.00 (172.70 to 173.70): V

Ion 175.00 (174.70 to 175.70): V

Ion 254.00 (253.70 to 254.70): V



#60

Isopropylbenzene

Concen: 2.346 ug/L

RT: 9.96 min Scan# 2757

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

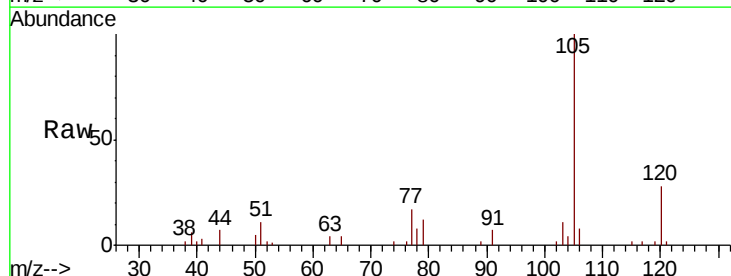
Tgt Ion:105 Resp: 13779

Ion Ratio Lower Upper

105 100

120 25.8 21.0 31.4

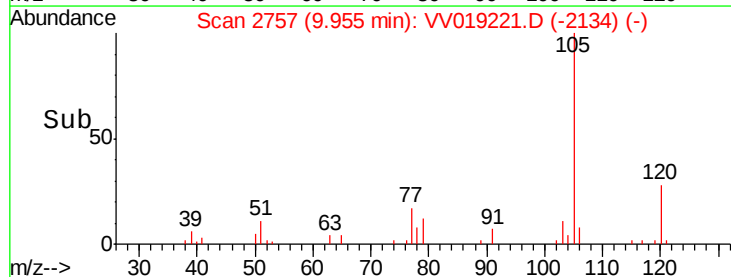
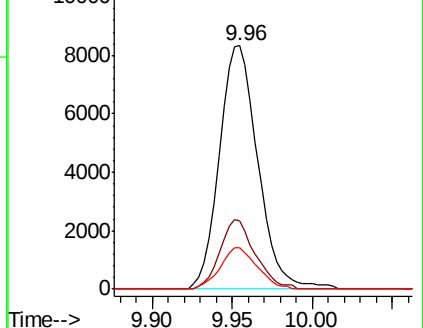
77 16.4 13.0 19.6

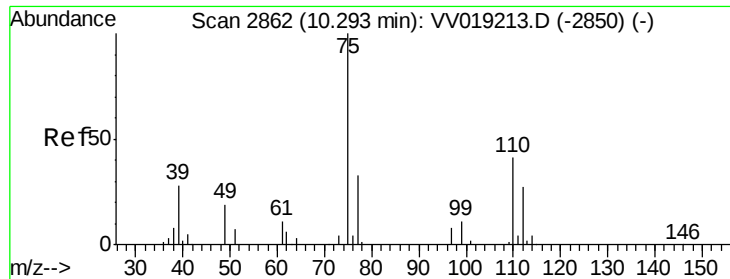


Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

Ion 77.00 (76.70 to 77.70): VV0

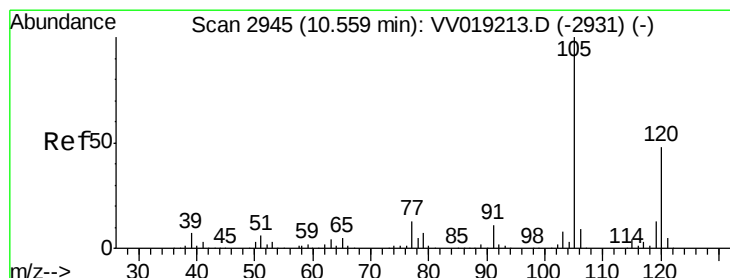
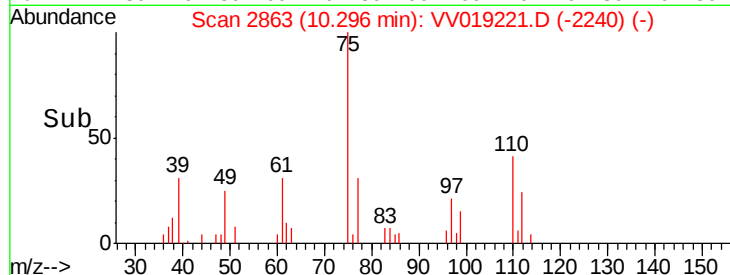
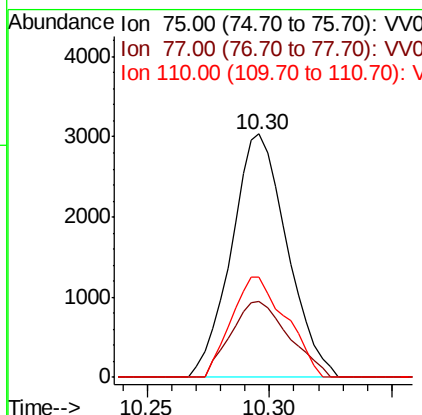
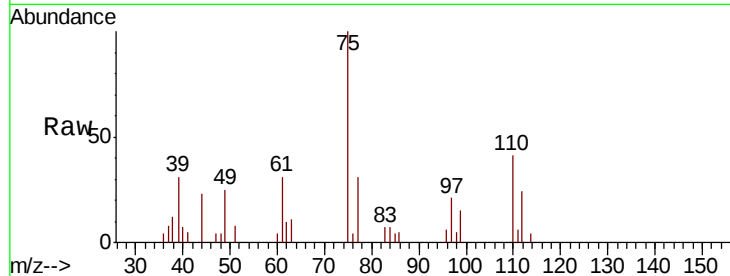




#61  
 1,2,3-Trichloropropane  
 Concen: 2.752 ug/L  
 RT: 10.30 min Scan# 2863  
 Delta R.T. 0.00 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

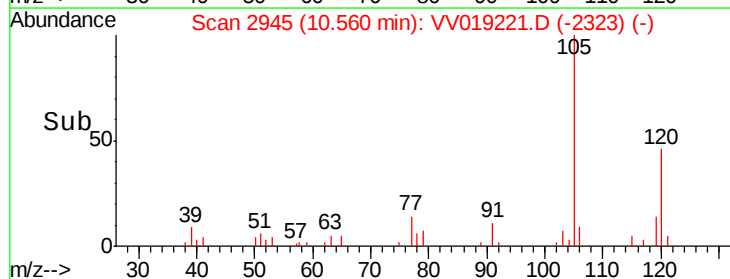
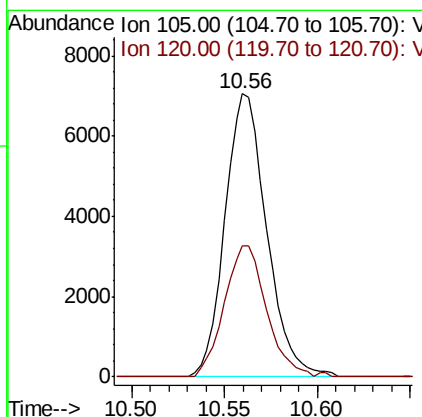
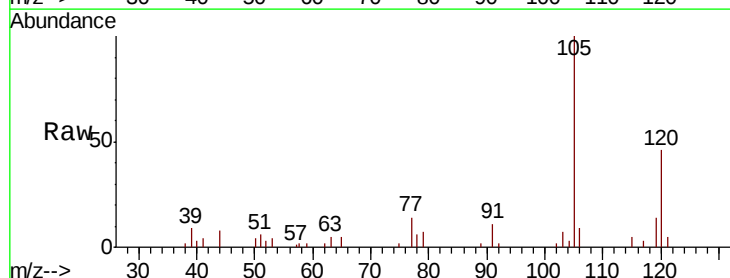
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-ME-SOIL-02

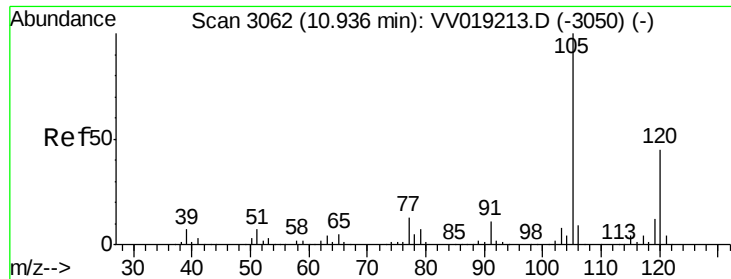
Tot Ion: 75 Resp: 4791  
 Ion Ratio Lower Upper  
 75 100  
 77 32.5 24.8 37.2  
 110 40.7 33.4 50.2



#62  
 1,3,5-Trimethylbenzene  
 Concen: 2.251 ug/L  
 RT: 10.56 min Scan# 2945  
 Delta R.T. 0.00 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Tgt Ion: 105 Resp: 11009  
 Ion Ratio Lower Upper  
 105 100  
 120 46.7 38.3 57.5

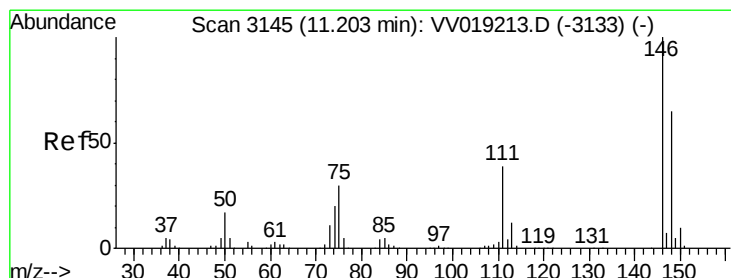
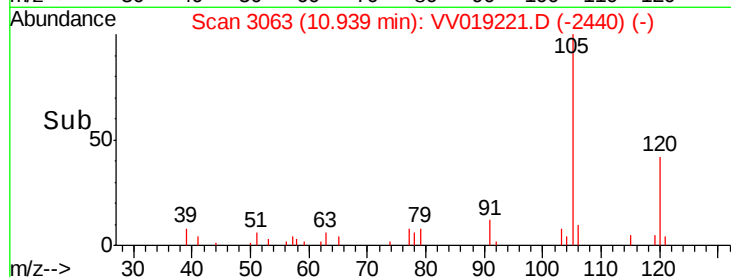
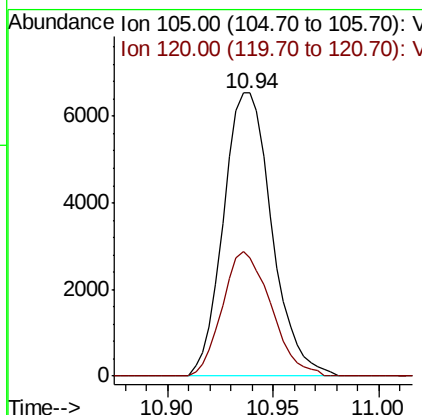
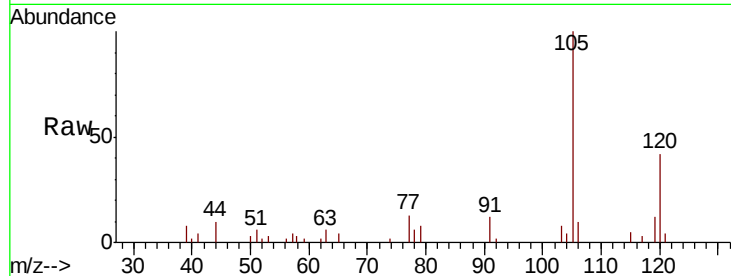




#63  
 1,2,4-Trimethylbenzene  
 Concen: 2.178 ug/L  
 RT: 10.94 min Scan# 3063  
 Delta R.T. 0.00 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

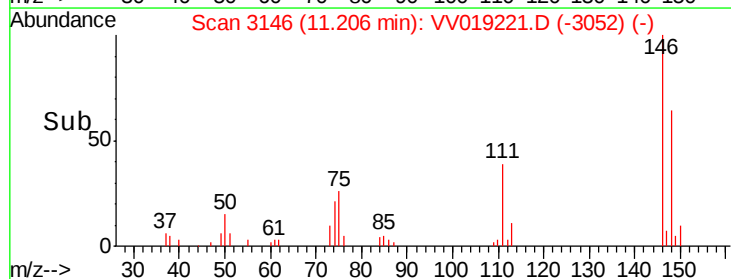
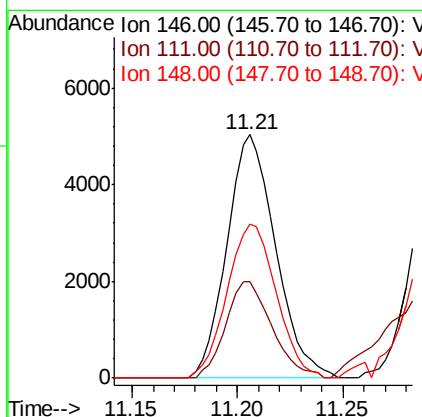
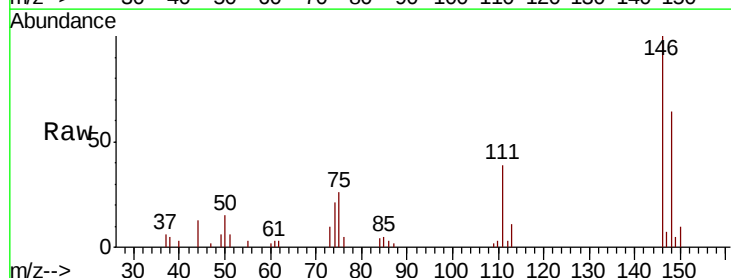
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-ME-SOIL-02

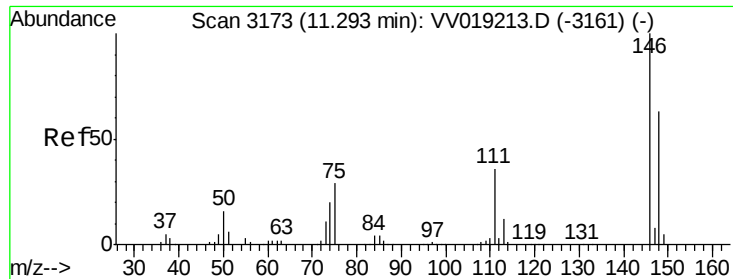
Tot Ion:105 Resp: 10424  
 Ion Ratio Lower Upper  
 105 100  
 120 44.2 35.7 53.5



#64  
 1,3-Dichlorobenzene  
 Concen: 2.628 ug/L  
 RT: 11.21 min Scan# 3146  
 Delta R.T. 0.00 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Tgt Ion:146 Resp: 8074  
 Ion Ratio Lower Upper  
 146 100  
 111 39.4 27.3 50.7  
 148 63.5 45.2 84.0





#65

1,4-Dichlorobenzene

Concen: 2.632 ug/L

RT: 11.30 min Scan# 3174

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

Instrument :

MSVOA\_V

ClientSampleId :

MDL-ME-SOIL-02

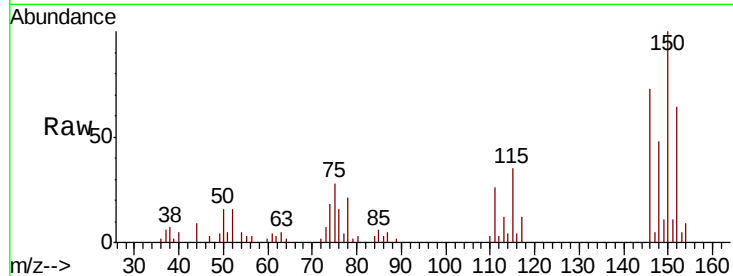
Tot Ion:146 Resp: 8363

Ion Ratio Lower Upper

146 100

111 35.8 25.9 48.1

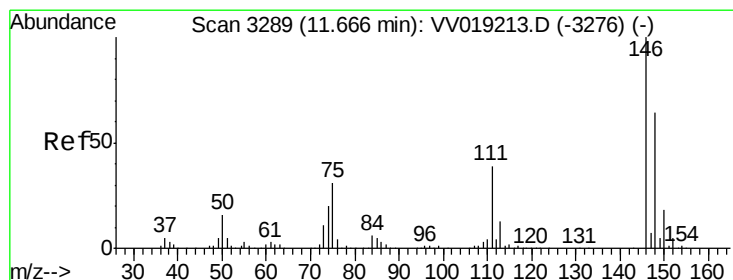
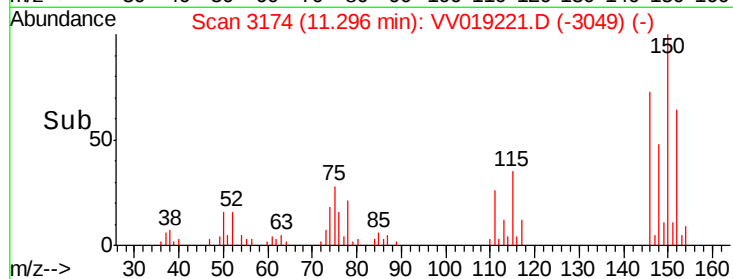
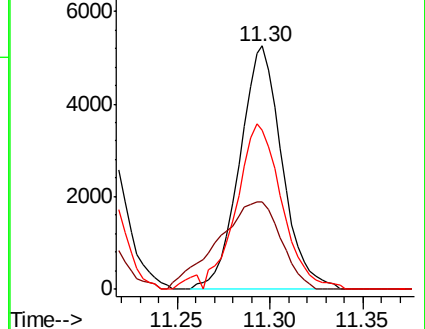
148 65.6 44.9 83.5



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V



#67

1,2-Dichlorobenzene

Concen: 2.739 ug/L

RT: 11.67 min Scan# 3289

Delta R.T. 0.00 min

Lab File: VV019221.D

Acq: 03 Nov 2020 00:53

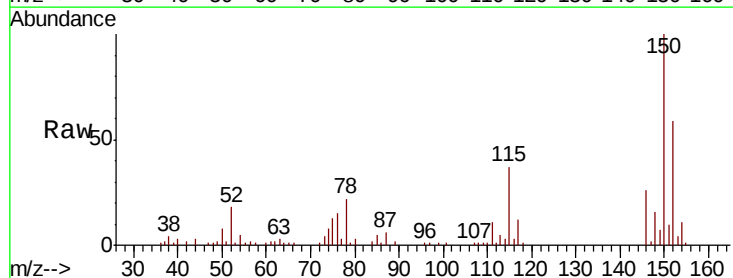
Tgt Ion:146 Resp: 8608

Ion Ratio Lower Upper

146 100

111 42.5 32.6 48.8

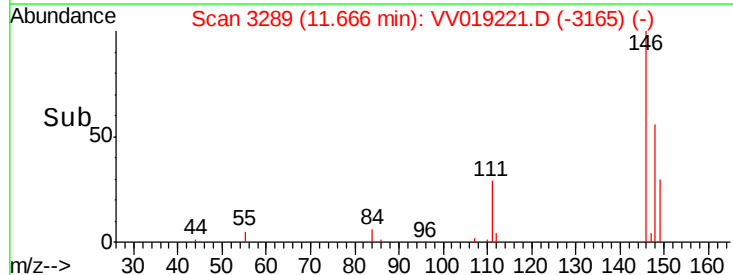
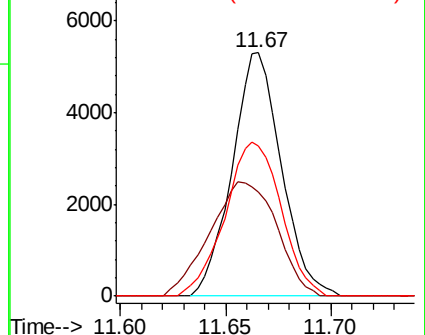
148 61.6 50.1 75.1

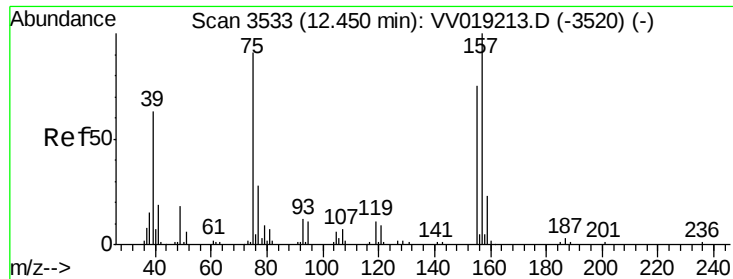


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.00 (110.70 to 111.70): V

Ion 148.00 (147.70 to 148.70): V

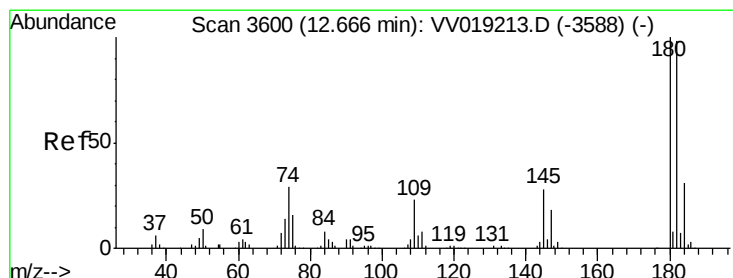
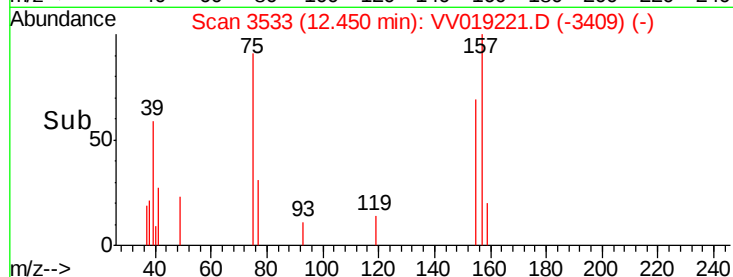
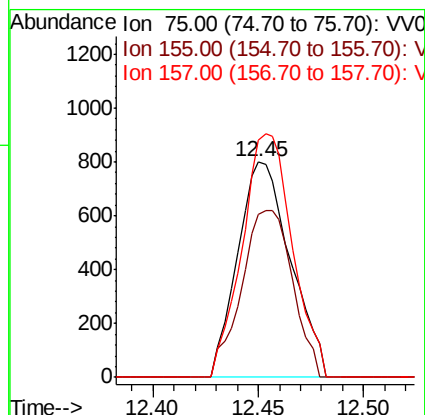
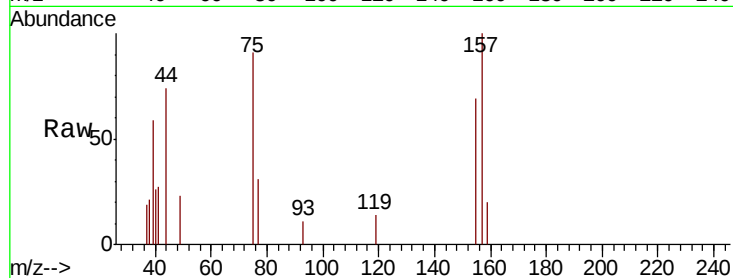




#68  
 1,2-Dibromo-3-chloropropane  
 Concen: 2.737 ug/L  
 RT: 12.45 min Scan# 3533  
 Delta R.T. 0.00 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

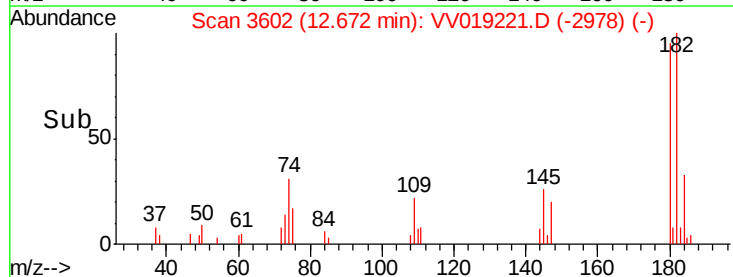
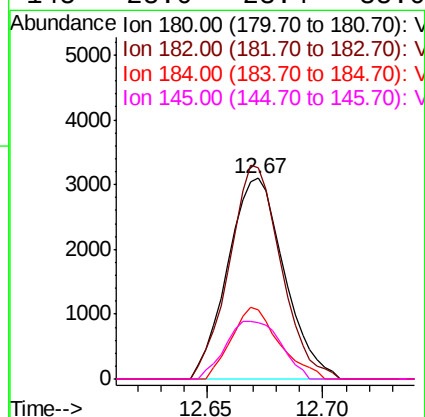
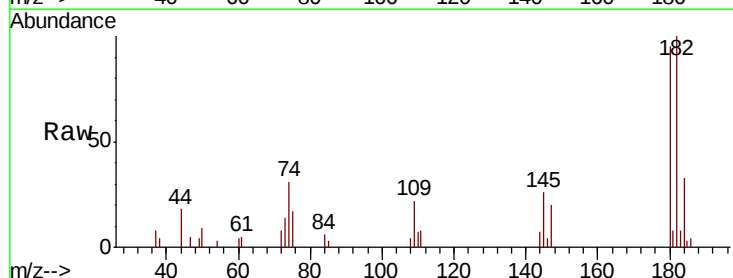
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-ME-SOIL-02

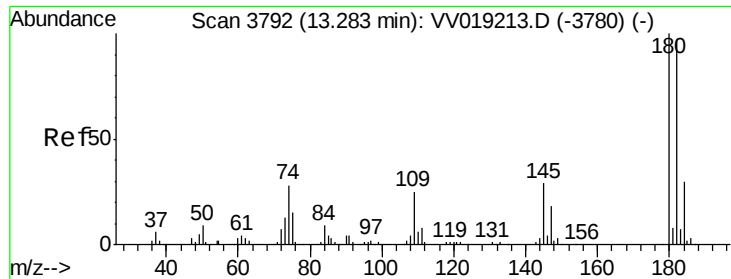
Tot Ion: 75 Resp: 1390  
 Ion Ratio Lower Upper  
 75 100  
 155 75.5 65.8 98.6  
 157 109.7 86.3 129.5



#69  
 1,3,5-Trichlorobenzene  
 Concen: 2.378 ug/L  
 RT: 12.67 min Scan# 3602  
 Delta R.T. 0.01 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Tgt Ion: 180 Resp: 5244  
 Ion Ratio Lower Upper  
 180 100  
 182 97.4 77.7 116.5  
 184 30.2 24.9 37.3  
 145 28.0 23.4 35.0

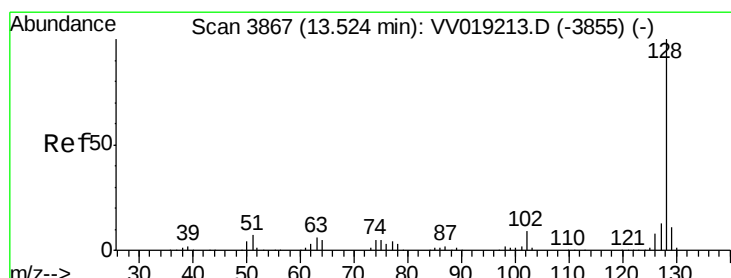
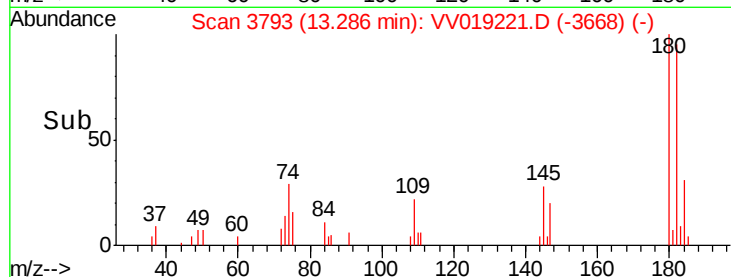
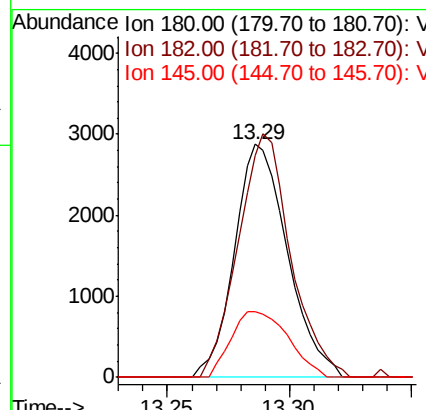
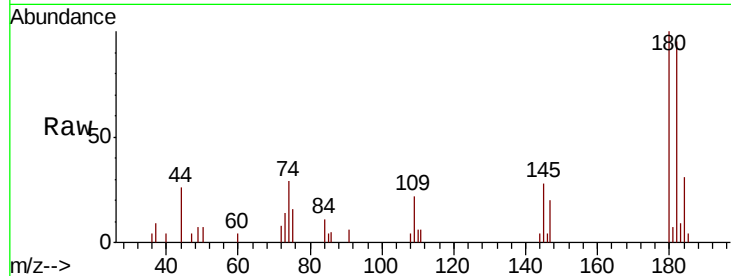




#70  
 1,2,4-trichlorobenzene  
 Concen: 2.097 ug/L  
 RT: 13.29 min Scan# 3793  
 Delta R.T. 0.00 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

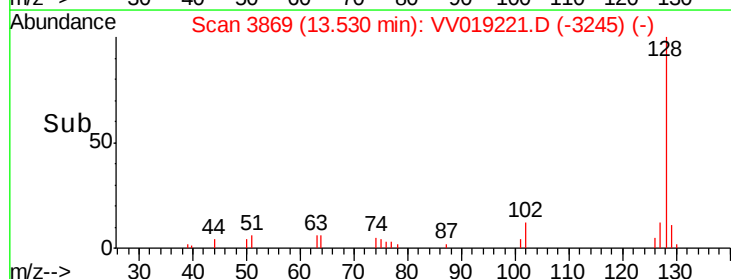
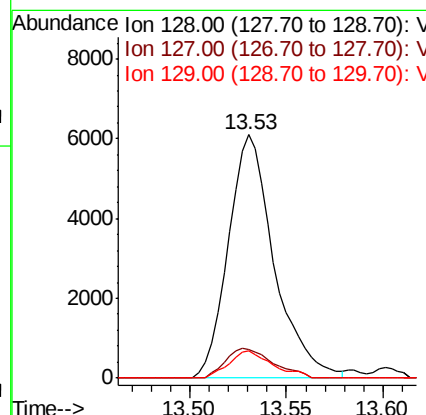
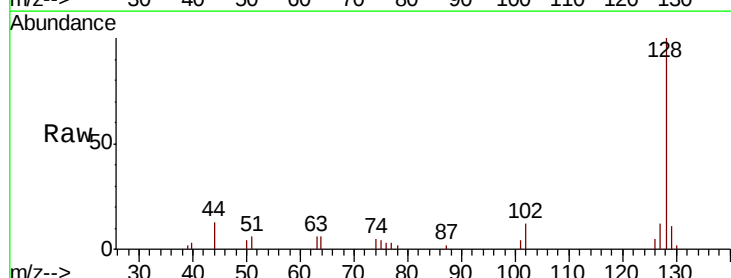
Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-ME-SOIL-02

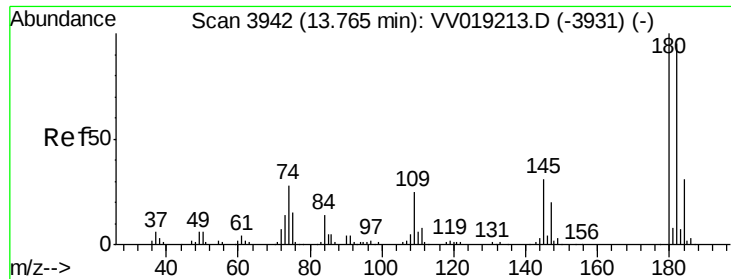
Tot Ion:180 Resp: 4351  
 Ion Ratio Lower Upper  
 180 100  
 182 103.1 76.6 114.8  
 145 30.4 23.2 34.8



#71  
 Naphthalene  
 Concen: 1.716 ug/L  
 RT: 13.53 min Scan# 3869  
 Delta R.T. 0.01 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Tgt Ion:128 Resp: 10039  
 Ion Ratio Lower Upper  
 128 100  
 127 12.6 10.7 16.1  
 129 9.7 8.6 13.0

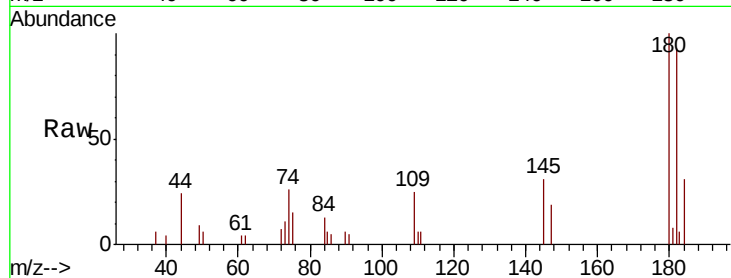




#72  
 1,2,3-Trichlorobenzene  
 Concen: 2.290 ug/L  
 RT: 13.77 min Scan# 3944  
 Delta R.T. 0.01 min  
 Lab File: VV019221.D  
 Acq: 03 Nov 2020 00:53

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL-ME-SOIL-02

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 180     | 100   |       |       |
| 182     | 89.5  | 77.4  | 116.0 |
| 145     | 28.7  | 24.7  | 37.1  |



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

