

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD111220\  
 Data File : VD067619.D  
 Acq On : 12 Nov 2020 13:24  
 Operator : VA/SY  
 Sample : L4704-01  
 Misc : 4.14G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 KL-SOIL

Quant Time: Nov 13 00:29:54 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D110320S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 04 00:56:28 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 342963   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 525841   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 525996   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 229361   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.34   | 65  | 160489   | 53.52 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.04% |      |
| 35) Dibromofluoromethane  | 7.91   | 113 | 171374   | 54.09 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.18% |      |
| 50) Toluene-d8            | 10.34  | 98  | 620878   | 55.77 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.54% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 216692   | 56.37 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 112.74% |      |

## Target Compounds

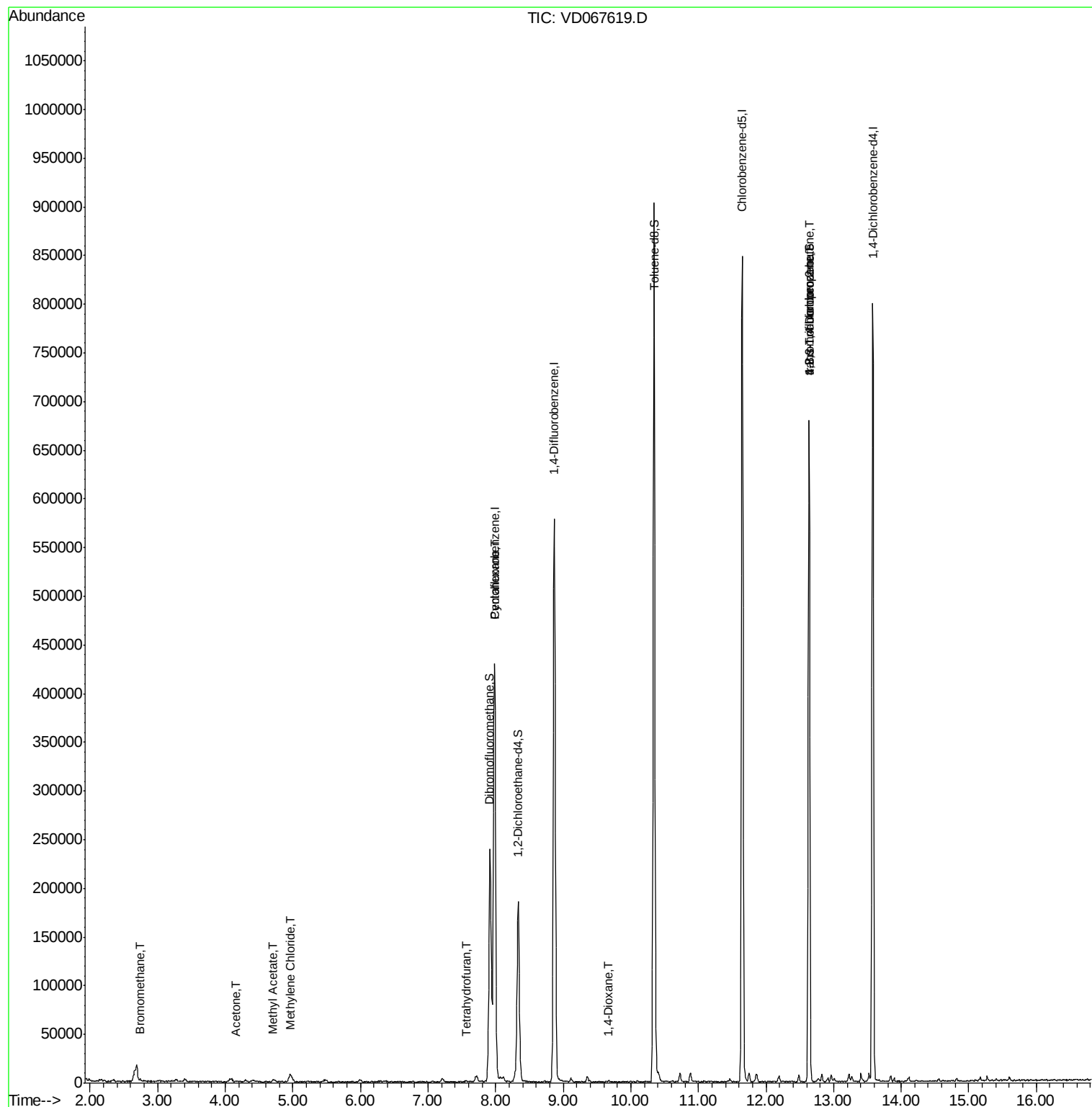
|                                |       |    |        |              | Qvalue |
|--------------------------------|-------|----|--------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.99  | 85 | 1578   | Below Cal    | 93     |
| 5) Bromomethane                | 2.74  | 94 | 2541   | 1.317 ug/l   | 83     |
| 11) Tert butyl alcohol         | 5.24  | 59 | 54     | Below Cal    | # 79   |
| 16) Acetone                    | 4.16  | 43 | 643    | 1.433 ug/l   | # 74   |
| 18) Methyl Acetate             | 4.71  | 43 | 2975   | 3.208 ug/l   | # 50   |
| 20) Methylene Chloride         | 4.96  | 84 | 7543   | 2.380 ug/l   | # 87   |
| 29) Tetrahydrofuran            | 7.57  | 42 | 682    | 2.374 ug/l   | # 85   |
| 31) Cyclohexane                | 7.98  | 56 | 7024   | 1.615 ug/l   | # 1    |
| 49) 1,4-Dioxane                | 9.67  | 88 | 53     | 3.115 ug/l   | # 31   |
| 76) 1,2,3-Trichloropropane     | 12.64 | 75 | 109392 | 79.061 ug/l  | # 100  |
| 81) trans-1,4-Dichloro-2-buten | 12.64 | 75 | 109392 | 160.515 ug/l | # 10   |

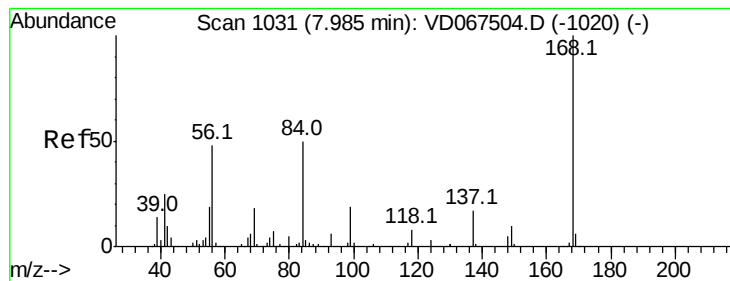
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : SW846 8260  
QLast Update : Wed Nov 04 00:56:28 2020  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.98 min Scan# 1031

Delta R.T. -0.00 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

Instrument :

MSVOA\_D

ClientSampleId :

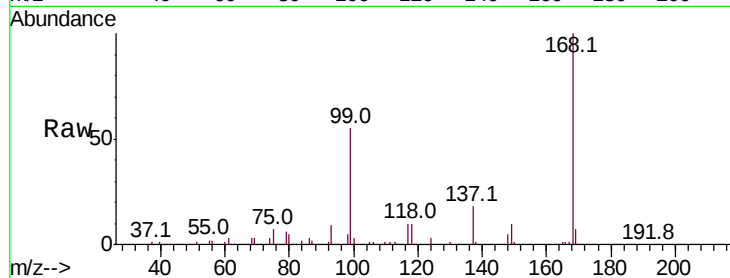
KL-SOIL

Tot Ion:168 Resp: 342963

Ion Ratio Lower Upper

168 100

99 54.5 45.0 67.6



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VDC

7.98

150000

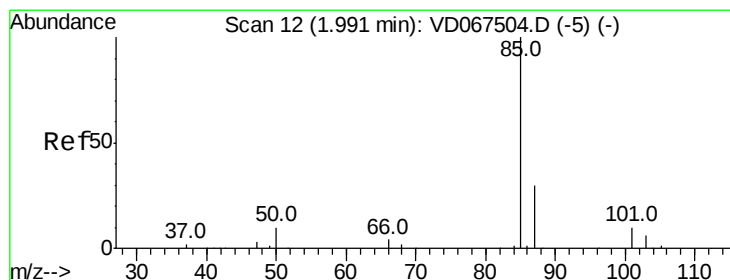
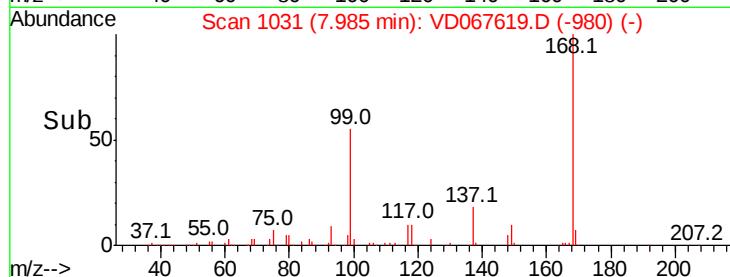
100000

50000

0

7.90 8.00 8.10 8.20

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 1.99 min Scan# 11

Delta R.T. -0.01 min

Lab File: VD067619.D

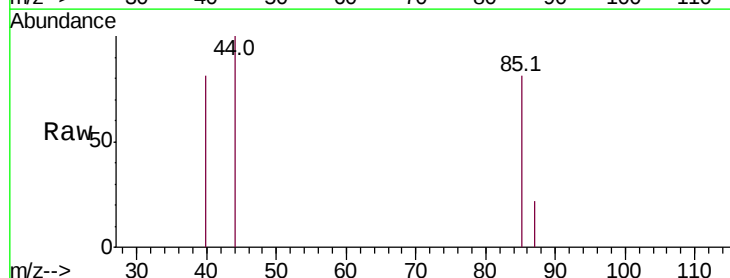
Acq: 12 Nov 2020 13:24

Tgt Ion: 85 Resp: 1578

Ion Ratio Lower Upper

85 100

87 26.8 15.3 45.8



Abundance Ion 84.90 (84.60 to 85.60): VDC

Ion 86.90 (86.60 to 87.60): VDC

1.99

1500

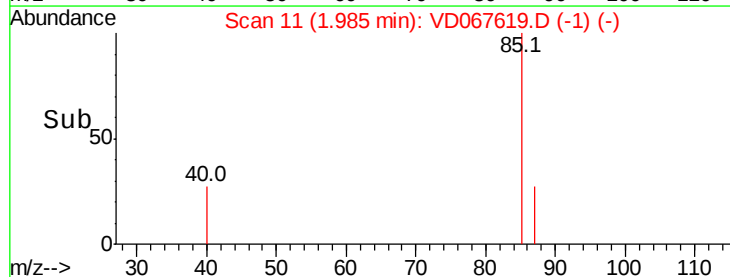
1000

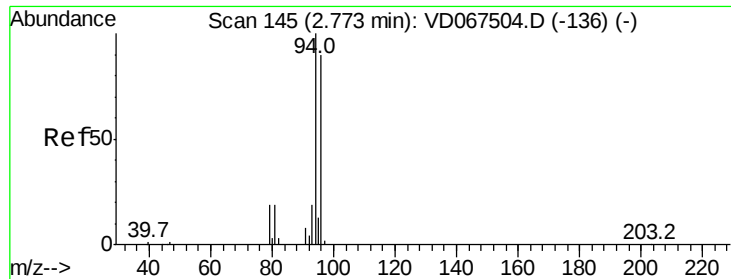
500

0

1.95 2.00

Time-->





#5

Bromomethane

Concen: 1.317 ug/l

RT: 2.74 min Scan# 140

Delta R.T. -0.03 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

Instrument :

MSVOA\_D

ClientSampled :

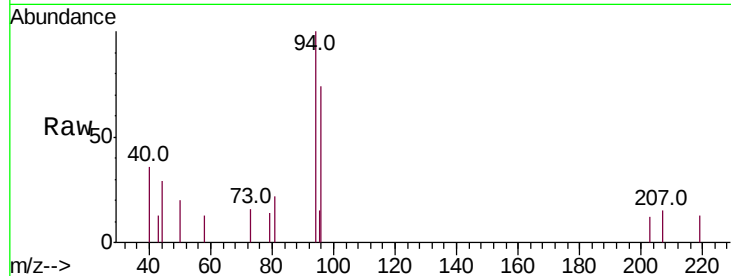
KL-SOIL

Tot Ion: 94 Resp: 2541

Ion Ratio Lower Upper

94 100

96 74.2 72.2 108.2



Abundance Ion 93.90 (93.60 to 94.60): VDC

Ion 95.90 (95.60 to 96.60): VDC

2.74

1500

1000

500

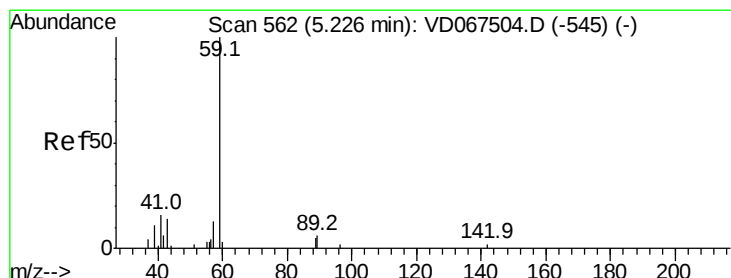
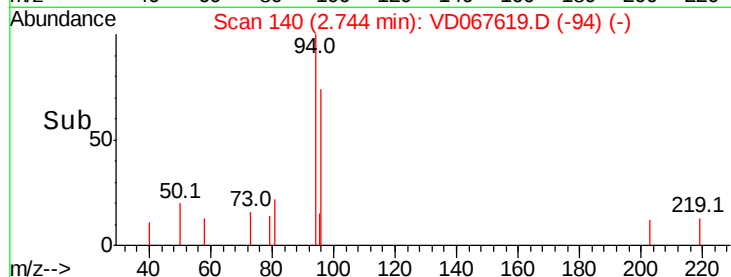
0

Time-->

2.70

2.75

2.80



#11

Tert butyl alcohol

Concen: Below Cal

RT: 5.24 min Scan# 564

Delta R.T. 0.01 min

Lab File: VD067619.D

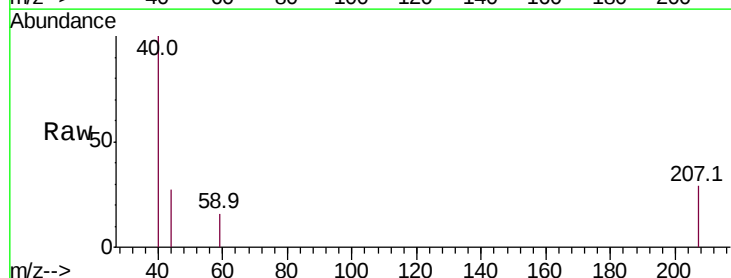
Acq: 12 Nov 2020 13:24

Tgt Ion: 59 Resp: 54

Ion Ratio Lower Upper

59 100

57 0.0 5.9 8.9#



Abundance Ion 59.00 (58.70 to 59.70): VDC

Ion 57.00 (56.70 to 57.70): VDC

5.24

150

100

50

0

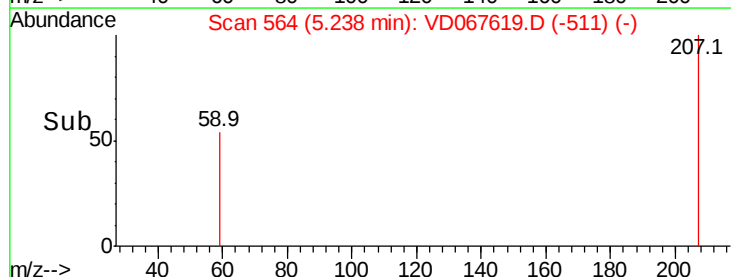
Time-->

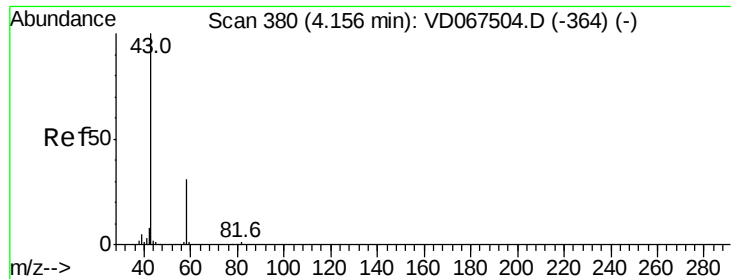
5.22

5.23

5.24

5.25





#16

Acetone

Concen: 1.433 ug/l

RT: 4.16 min Scan# 381

Delta R.T. 0.01 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

Instrument :

MSVOA\_D

ClientSampled :

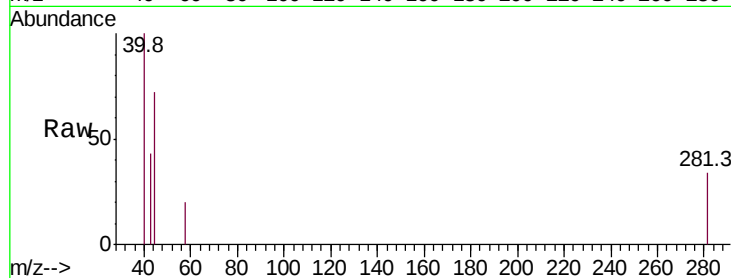
KL-SOIL

Tot Ion: 43 Resp: 643

Ion Ratio Lower Upper

43 100

58 45.8 25.2 37.8#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

4.16

300

200

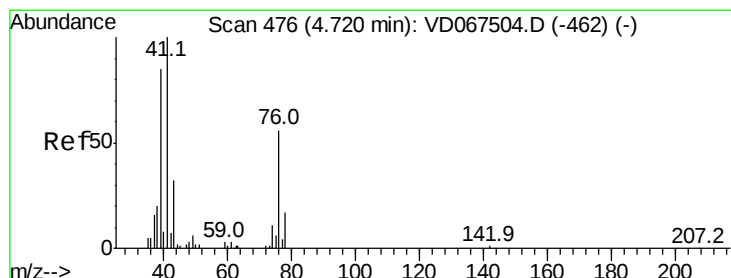
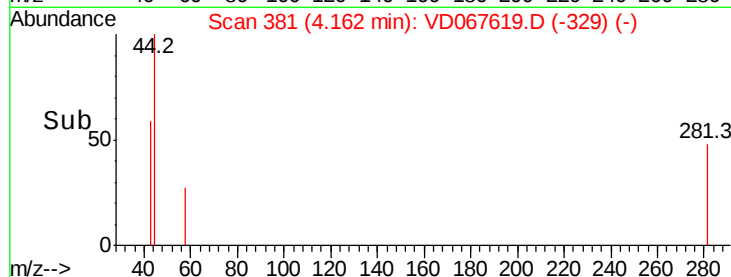
100

0

4.15

4.20

Time-->



#18

Methyl Acetate

Concen: 3.208 ug/l

RT: 4.71 min Scan# 474

Delta R.T. -0.01 min

Lab File: VD067619.D

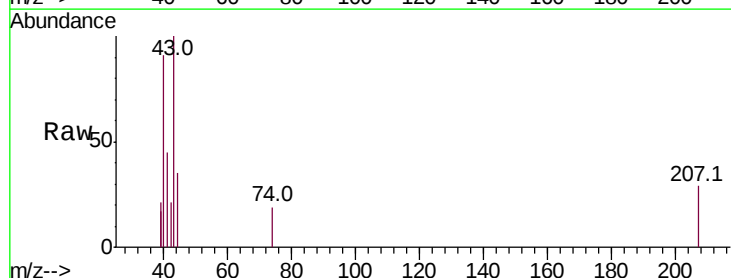
Acq: 12 Nov 2020 13:24

Tgt Ion: 43 Resp: 2975

Ion Ratio Lower Upper

43 100

74 5.3 27.2 40.8#



Abundance Ion 43.00 (42.70 to 43.70): VDC

Ion 74.00 (73.70 to 74.70): VDC

4.71

1200

1000

800

600

400

200

0

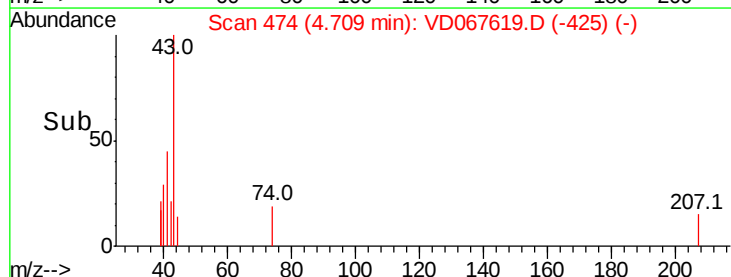
4.65

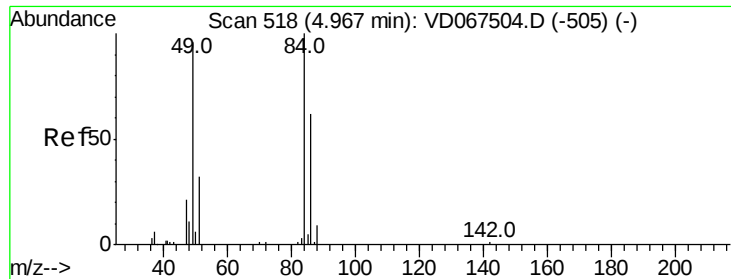
4.70

4.75

4.80

Time-->

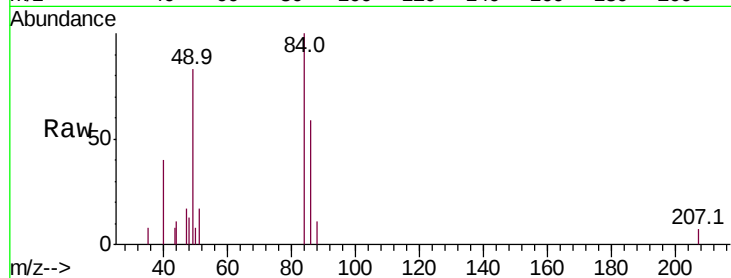




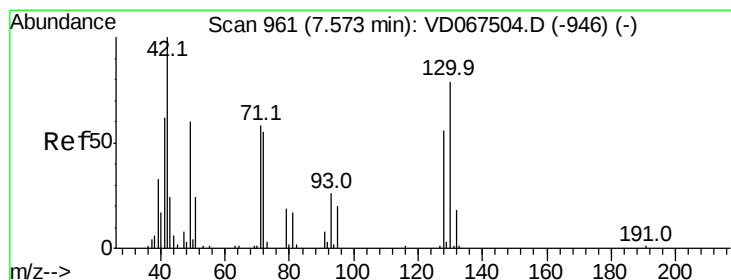
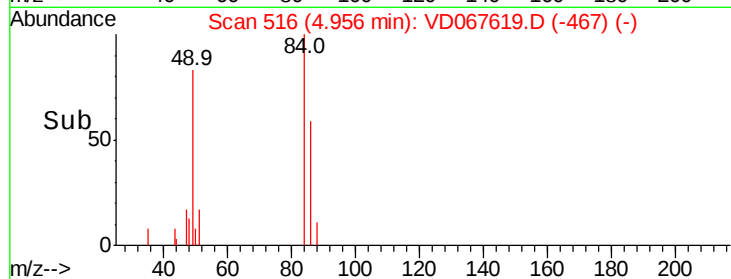
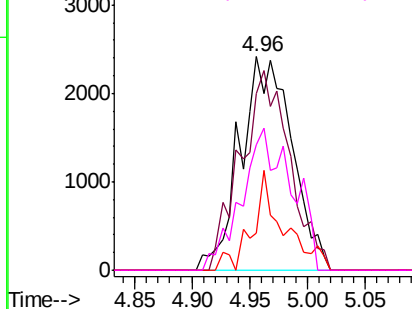
#20  
Methylene Chloride  
Concen: 2.380 ug/l  
RT: 4.96 min Scan# 516  
Delta R.T. -0.01 min  
Lab File: VD067619.D  
Acq: 12 Nov 2020 13:24

Instrument :  
MSVOA\_D  
ClientSampleId :  
KL-SOIL

Tot Ion: 84 Resp: 7543  
Ion Ratio Lower Upper  
84 100  
49 82.9 77.0 115.4  
51 17.3 25.4 38.2#  
86 58.5 49.4 74.0

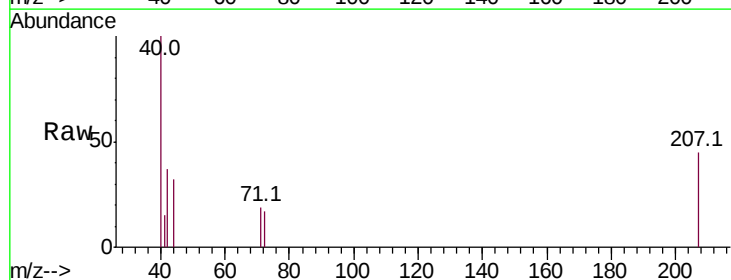


Abundance Ion 83.90 (83.60 to 84.60): VDC  
Ion 48.90 (48.60 to 49.60): VDC  
Ion 50.90 (50.60 to 51.60): VDC  
Ion 85.90 (85.60 to 86.60): VDC

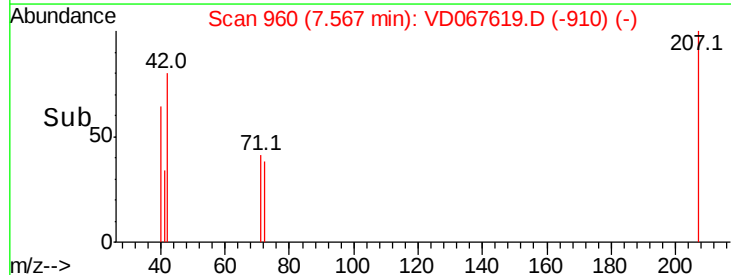
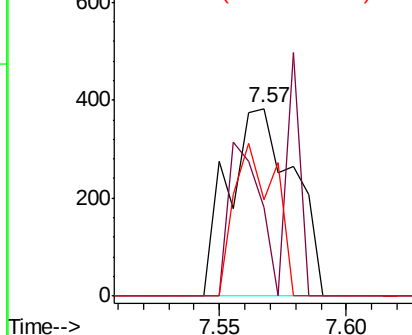


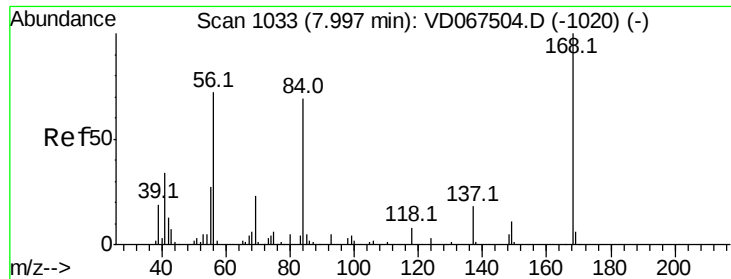
#29  
Tetrahydrofuran  
Concen: 2.374 ug/l  
RT: 7.57 min Scan# 960  
Delta R.T. -0.01 min  
Lab File: VD067619.D  
Acq: 12 Nov 2020 13:24

Tgt Ion: 42 Resp: 682  
Ion Ratio Lower Upper  
42 100  
72 40.0 46.3 69.5#  
71 51.2 44.0 66.0



Abundance Ion 42.00 (41.70 to 42.70): VDC  
Ion 72.00 (71.70 to 72.70): VDC  
Ion 71.00 (70.70 to 71.70): VDC

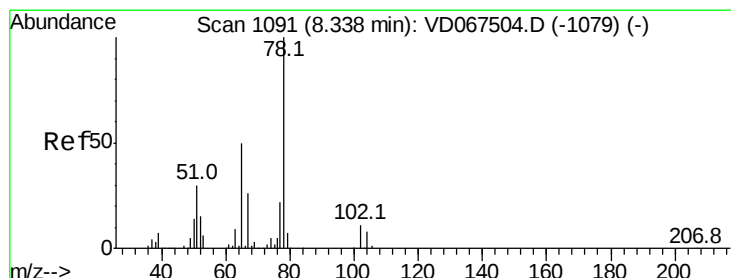
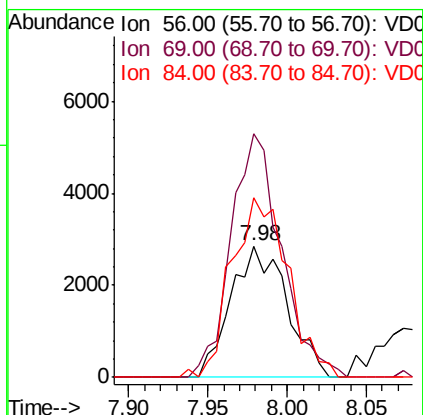
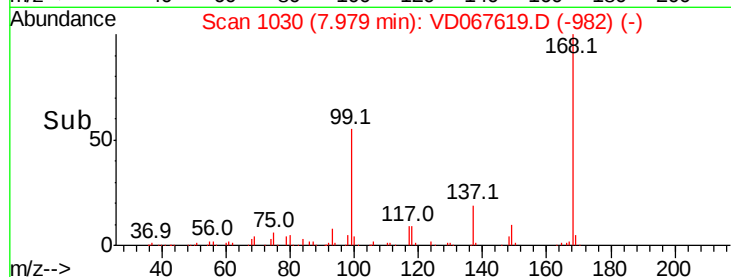
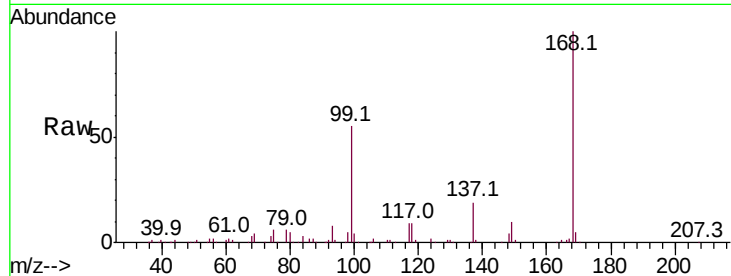




#31  
Cyclohexane  
Concen: 1.615 ug/l  
RT: 7.98 min Scan# 1030  
Delta R.T. -0.02 min  
Lab File: VD067619.D  
Acq: 12 Nov 2020 13:24

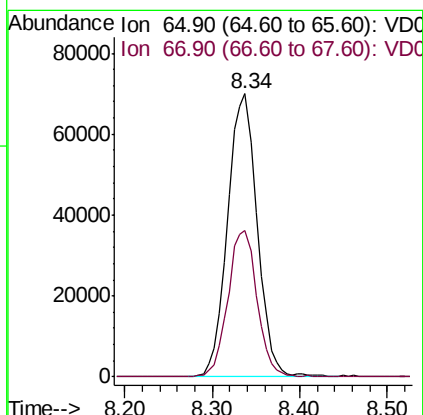
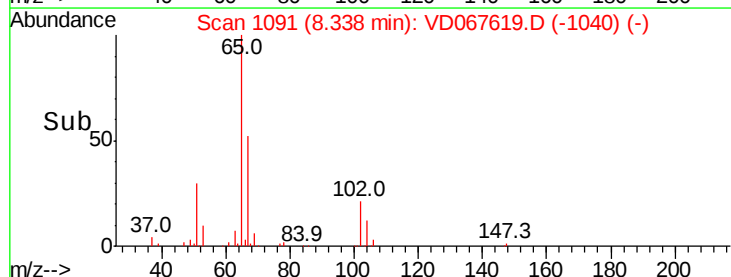
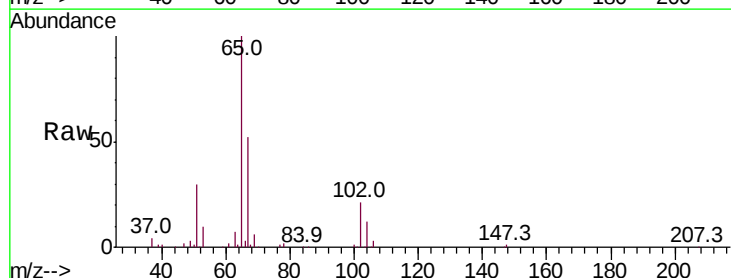
Instrument :  
MSVOA\_D  
ClientSampleID :  
KL-SOIL

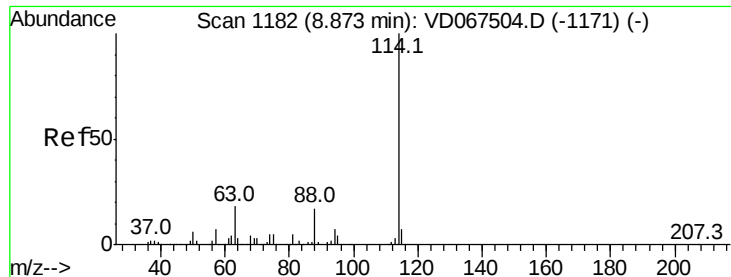
Tot Ion: 56 Resp: 7024  
Ion Ratio Lower Upper  
56 100  
69 185.6 25.9 38.9#  
84 137.1 76.2 114.4#



#33  
1,2-Dichloroethane-d4  
Concen: 53.517 ug/l  
RT: 8.34 min Scan# 1091  
Delta R.T. -0.00 min  
Lab File: VD067619.D  
Acq: 12 Nov 2020 13:24

Tgt Ion: 65 Resp: 160489  
Ion Ratio Lower Upper  
65 100  
67 50.6 0.0 99.4





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.87 min Scan# 1181

Delta R.T. -0.01 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

Instrument :

MSVOA\_D

ClientSampleId :

KL-SOIL

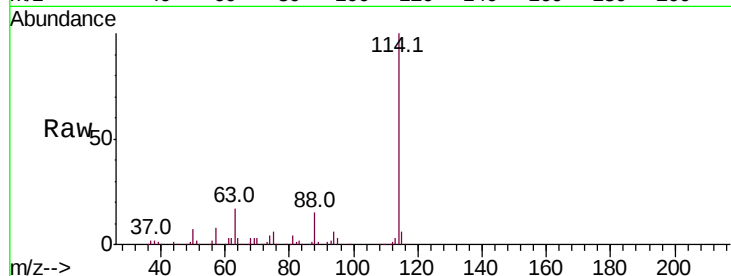
Tot Ion:114 Resp: 525841

Ion Ratio Lower Upper

114 100

63 17.4 0.0 35.0

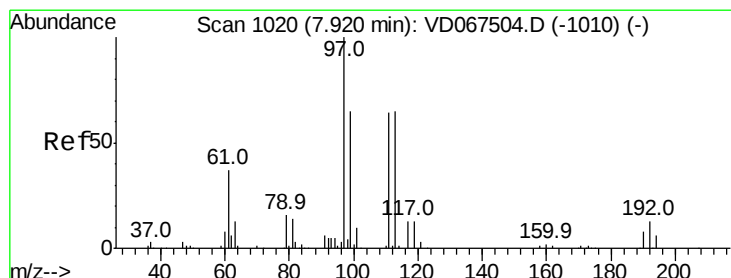
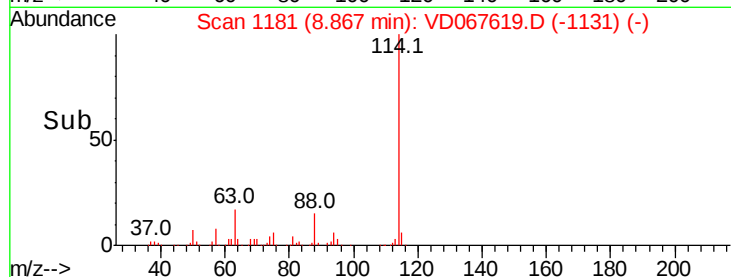
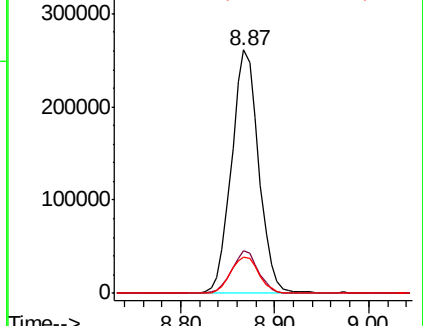
88 15.1 0.0 33.0



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): V

Ion 87.90 (87.60 to 88.60): V



#35

Dibromofluoromethane

Concen: 54.092 ug/l

RT: 7.91 min Scan# 1019

Delta R.T. -0.01 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

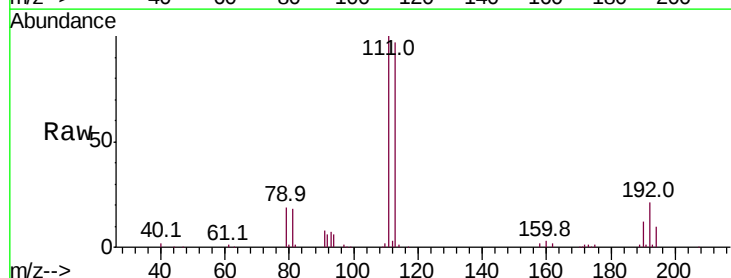
Tgt Ion:113 Resp: 171374

Ion Ratio Lower Upper

113 100

111 102.8 80.0 120.0

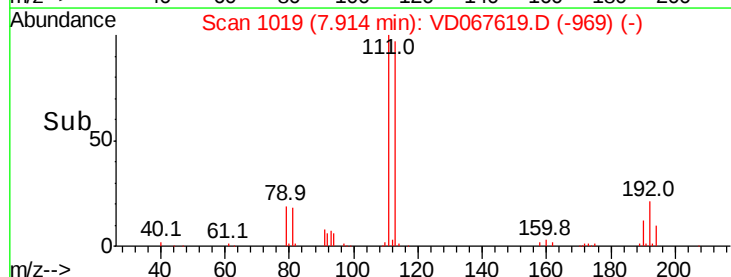
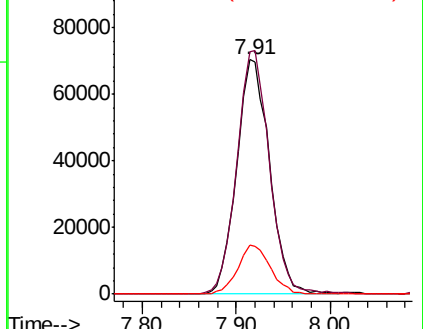
192 20.7 16.3 24.5

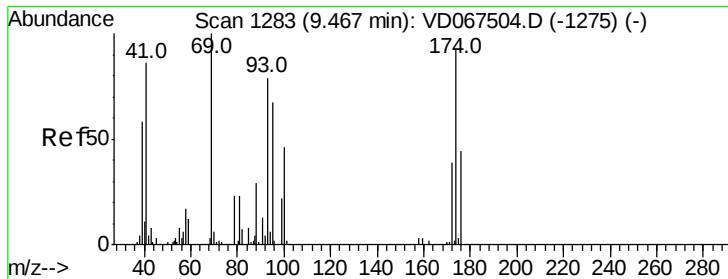


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#49

1,4-Dioxane

Concen: 3.115 ug/l

RT: 9.67 min Scan# 1317

Delta R.T. 0.20 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

Instrument :

MSVOA\_D

ClientSampleId :

KL-SOIL

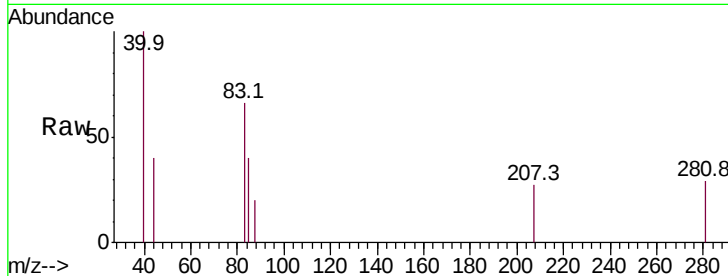
Tot Ion: 88 Resp: 53

Ion Ratio Lower Upper

88 100

43 0.0 23.6 35.4#

58 0.0 44.7 67.1#



Abundance Ion 88.00 (87.70 to 88.70): VDC

Ion 43.00 (42.70 to 43.70): VDC

Ion 58.00 (57.70 to 58.70): VDC

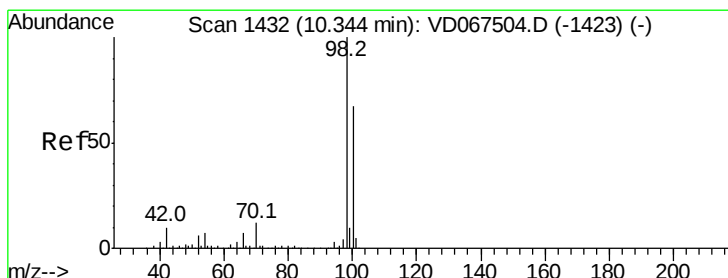
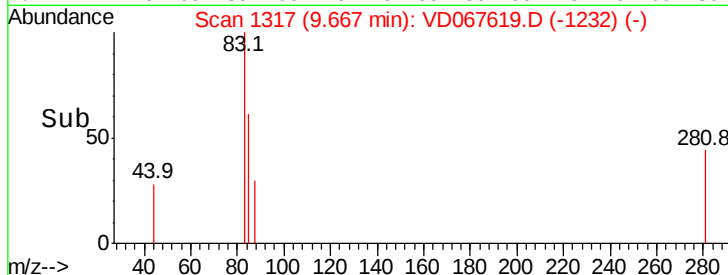
9.67

100

50

0

Time--> 9.65 9.66 9.67 9.68



#50

Toluene-d8

Concen: 55.766 ug/l

RT: 10.34 min Scan# 1432

Delta R.T. -0.00 min

Lab File: VD067619.D

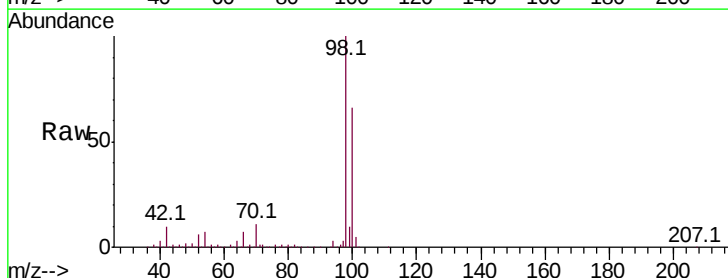
Acq: 12 Nov 2020 13:24

Tgt Ion: 98 Resp: 620878

Ion Ratio Lower Upper

98 100

100 65.4 53.0 79.6



Abundance Ion 98.00 (97.70 to 98.70): VDC

Ion 100.00 (99.70 to 100.70): VDC

10.34

400000

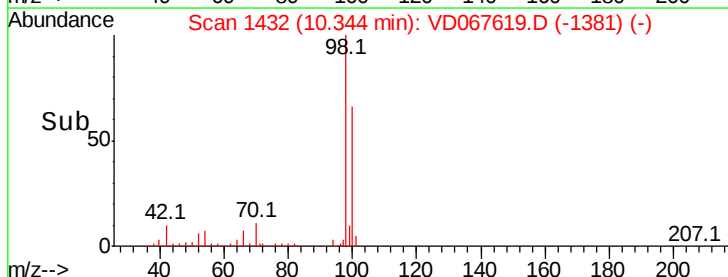
300000

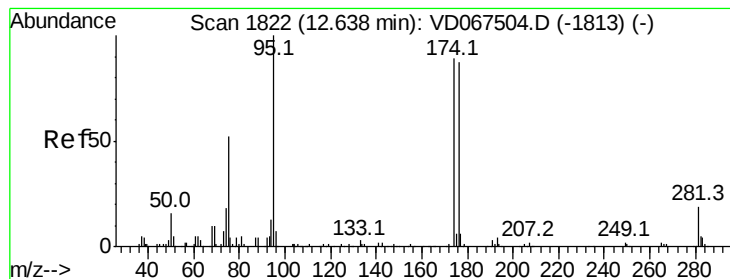
200000

100000

0

Time--> 10.20 10.30 10.40 10.50





#62

4-Bromofluorobenzene

Concen: 56.373 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.00 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

Instrument :

MSVOA\_D

ClientSampleId :

KL-SOIL

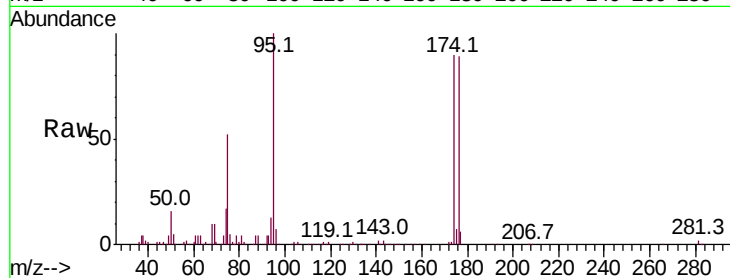
Tot Ion: 95 Resp: 216692

Ion Ratio Lower Upper

95 100

174 89.0 0.0 177.8

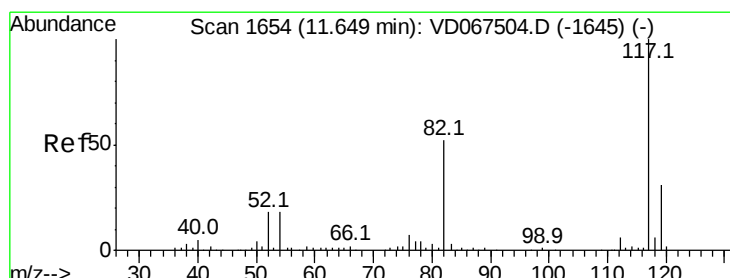
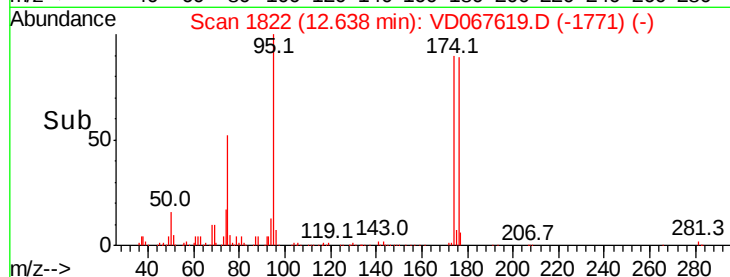
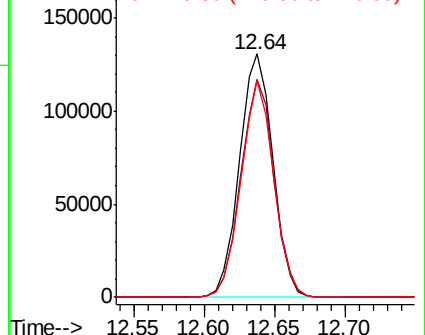
176 87.0 0.0 172.0



Abundance Ion 94.90 (94.60 to 95.60): V

Ion 173.80 (173.50 to 174.50): V

Ion 175.80 (175.50 to 176.50): V



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.65 min Scan# 1654

Delta R.T. -0.00 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

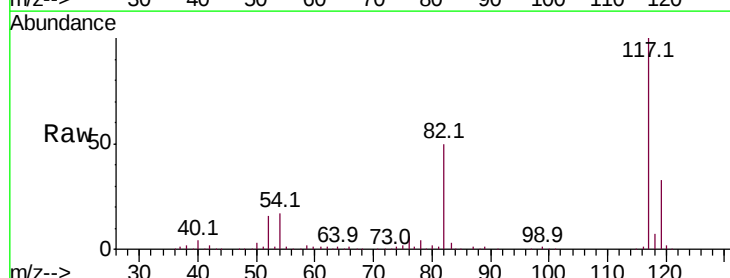
Tgt Ion: 117 Resp: 525996

Ion Ratio Lower Upper

117 100

82 50.5 41.6 62.4

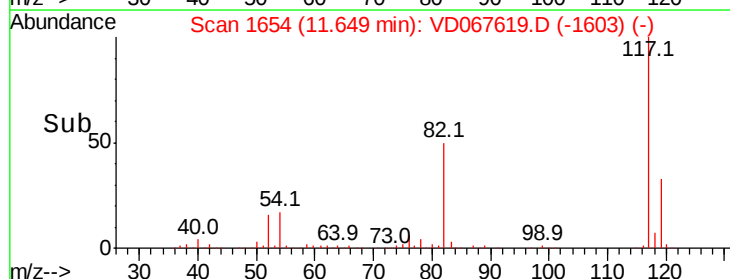
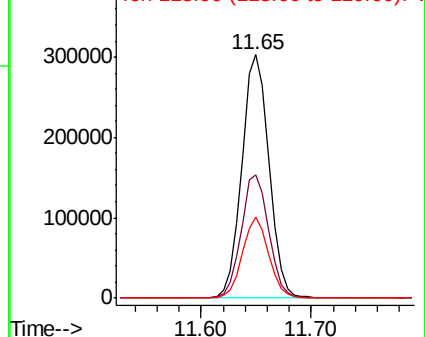
119 33.2 25.1 37.7

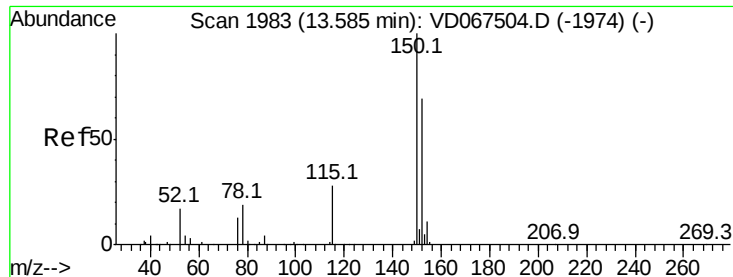


Abundance Ion 116.90 (116.60 to 117.60): V

Ion 82.00 (81.70 to 82.70): V

Ion 118.90 (118.60 to 119.60): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.58 min Scan# 1982

Delta R.T. -0.01 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

Instrument :

MSVOA\_D

ClientSampleId :

KL-SOIL

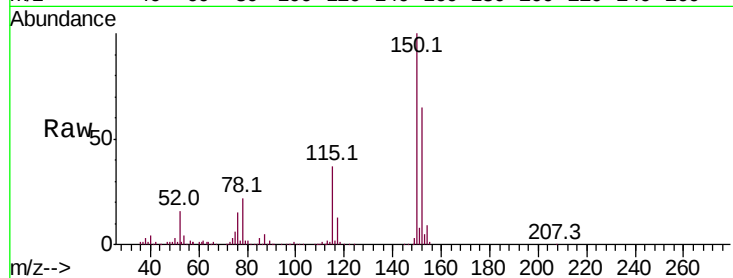
Tot Ion:152 Resp: 229361

Ion Ratio Lower Upper

152 100

115 58.7 29.3 88.0

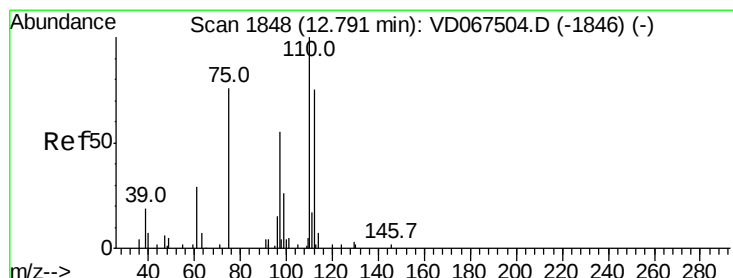
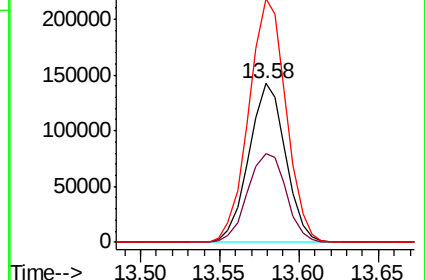
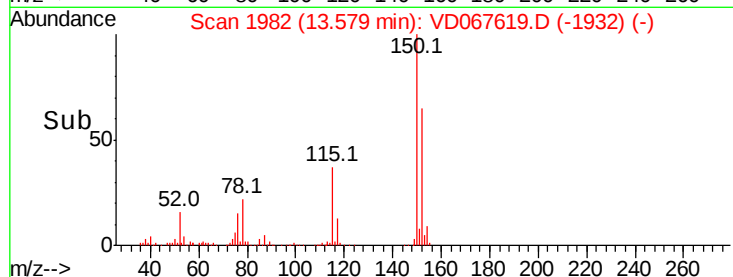
150 155.3 0.0 338.2



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 79.061 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. -0.15 min

Lab File: VD067619.D

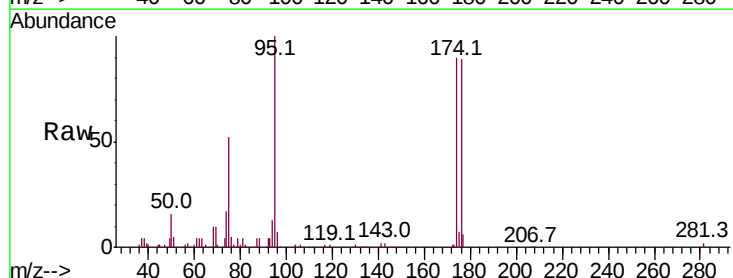
Acq: 12 Nov 2020 13:24

Tgt Ion: 75 Resp: 109392

Ion Ratio Lower Upper

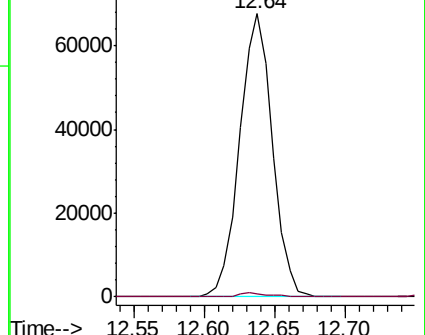
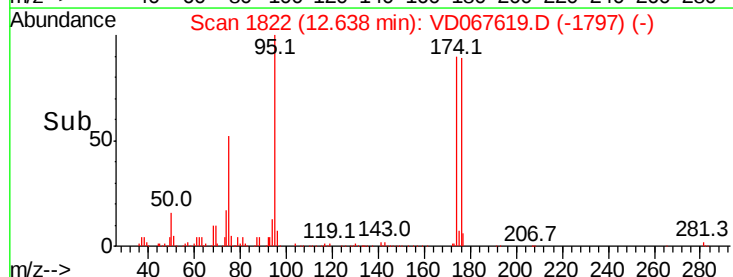
75 100

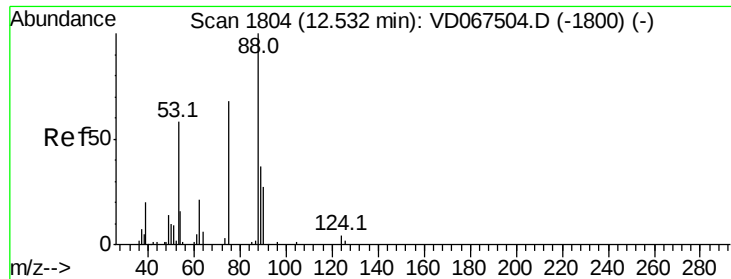
77 1.3 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#81

trans-1,4-Dichloro-2-butene

Concen: 160.515 ug/l

RT: 12.64 min Scan# 1822

Delta R.T. 0.11 min

Lab File: VD067619.D

Acq: 12 Nov 2020 13:24

Instrument :

MSVOA\_D

ClientSampleId :

KL-SOIL

Tot Ion: 75 Resp: 109392

Ion Ratio Lower Upper

75 100

53 0.1 75.9 113.9#

89 0.0 44.6 67.0#

