

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN061219\  
 Data File : VN056259.D  
 Acq On : 12 Jun 2019 19:24  
 Operator : JC/SP  
 Sample : K3315-14DL 5X  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 26 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 RE125D2-20190610DL

Quant Time: Jun 13 04:35:10 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N060419W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jun 04 11:02:09 2019  
 Response via : Initial Calibration

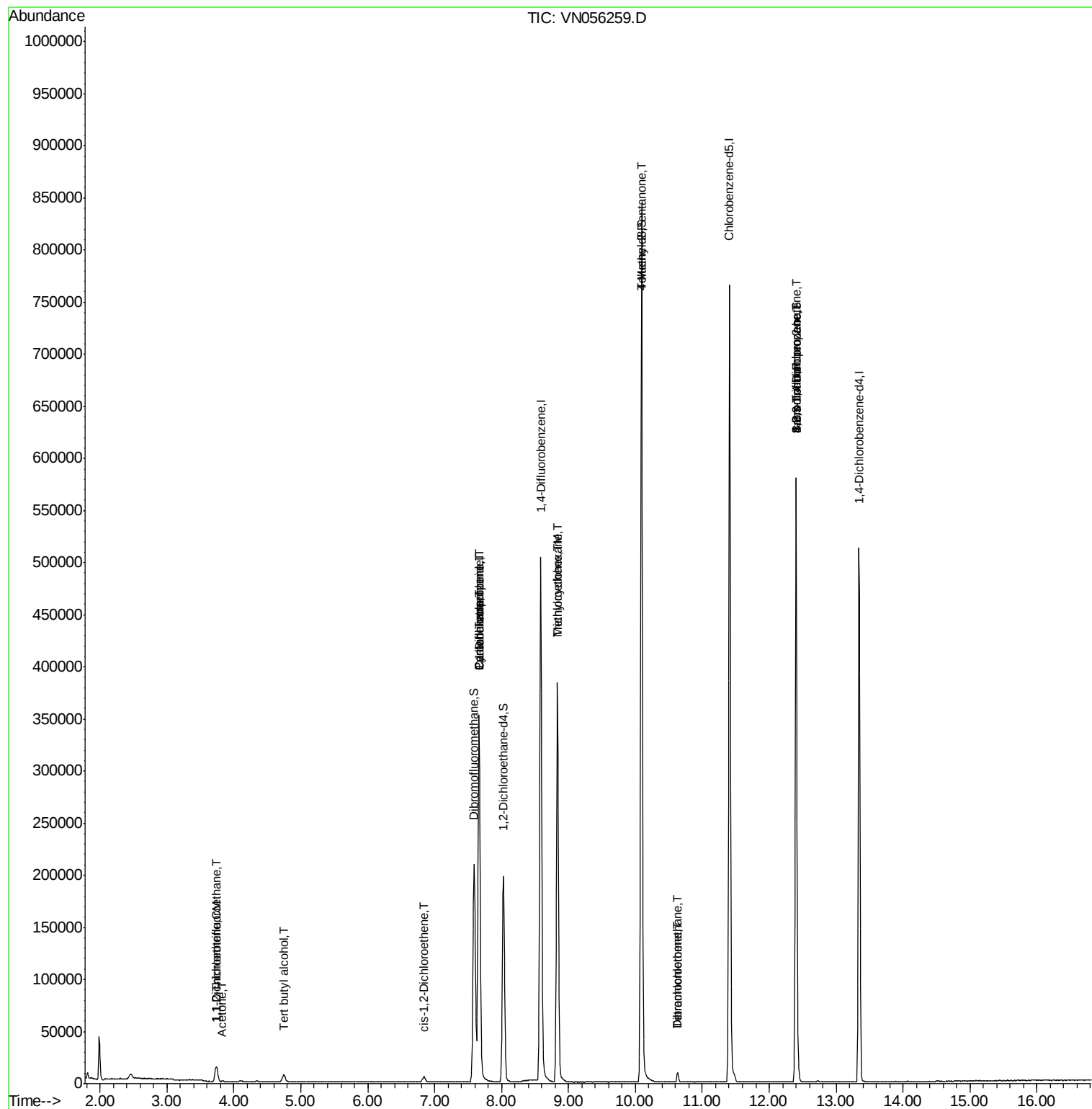
| Internal Standards             | R.T.  | QIon | Response | Conc      | Units   | Dev(Min) |
|--------------------------------|-------|------|----------|-----------|---------|----------|
| 1) Pentafluorobenzene          | 7.66  | 168  | 338199   | 50.00     | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene        | 8.58  | 114  | 507663   | 50.00     | ug/l    | 0.00     |
| 63) Chlorobenzene-d5           | 11.41 | 117  | 501402   | 50.00     | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4     | 13.35 | 152  | 161966   | 50.00     | ug/l    | 0.00     |
| System Monitoring Compounds    |       |      |          |           |         |          |
| 33) 1,2-Dichloroethane-d4      | 8.03  | 65   | 166478   | 49.58     | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =         | 99.16%  |          |
| 35) Dibromofluoromethane       | 7.59  | 113  | 159922   | 51.34     | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =         | 102.68% |          |
| 50) Toluene-d8                 | 10.09 | 98   | 626030   | 52.23     | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =         | 104.46% |          |
| 62) 4-Bromofluorobenzene       | 12.40 | 95   | 198127   | 48.61     | ug/l    | 0.00     |
| Spiked Amount 50.000           |       |      | Recovery | =         | 97.22%  |          |
| Target Compounds               |       |      |          |           |         |          |
|                                |       |      |          |           | Qvalue  |          |
| 9) 1,1,2-Trichlorotrifluoroet  | 3.73  | 101  | 8208     | 2.878     | ug/l    | 93       |
| 11) Tert butyl alcohol         | 4.75  | 59   | 6363     | 10.889    | ug/l #  | 74       |
| 12) 1,1-Dichloroethene         | 3.73  | 96   | 2434     | 0.857     | ug/l    | 96       |
| 16) Acetone                    | 3.82  | 43   | 1103     | 0.687     | ug/l #  | 41       |
| 18) Methyl Acetate             | 4.34  | 43   | 1208     | Below Cal | #       | 67       |
| 27) cis-1,2-Dichloroethene     | 6.83  | 96   | 2210     | 0.618     | ug/l    | 94       |
| 31) Cyclohexane                | 7.66  | 56   | 4477     | 0.840     | ug/l #  | 1        |
| 36) 1,1-Dichloropropene        | 7.66  | 75   | 18716    | 4.288     | ug/l #  | 49       |
| 38) Carbon Tetrachloride       | 7.66  | 117  | 26700    | 6.634     | ug/l #  | 15       |
| 39) Methylcyclohexane          | 8.84  | 83   | 1690     | 0.311     | ug/l #  | 1        |
| 44) Trichloroethene            | 8.83  | 130  | 161222   | 42.319    | ug/l    | 96       |
| 51) 4-Methyl-2-Pentanone       | 10.09 | 43   | 2511     | 0.638     | ug/l #  | 1        |
| 60) Dibromochloromethane       | 10.63 | 129  | 2243     | 3.044     | ug/l #  | 11       |
| 64) Tetrachloroethene          | 10.63 | 164  | 2619     | 0.603     | ug/l    | 88       |
| 71) Bromoform                  | 12.40 | 173  | 1532     | 3.243     | ug/l #  | 1        |
| 73) Isopropylbenzene           | 12.40 | 105  | 196      | Below Cal | #       | 48       |
| 76) 1,2,3-Trichloropropane     | 12.40 | 75   | 90065    | 30.221    | ug/l #  | 100      |
| 79) 2-Chlorotoluene            | 12.40 | 91   | 372      | Below Cal | #       | 39       |
| 81) trans-1,4-Dichloro-2-buten | 12.40 | 75   | 90065    | 100.641   | ug/l #  | 15       |

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

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Quant Title : SW846 8260  
QLast Update : Tue Jun 04 11:02:09 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. 0.00 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

Instrument :

MSVOA\_N

ClientSampleId :

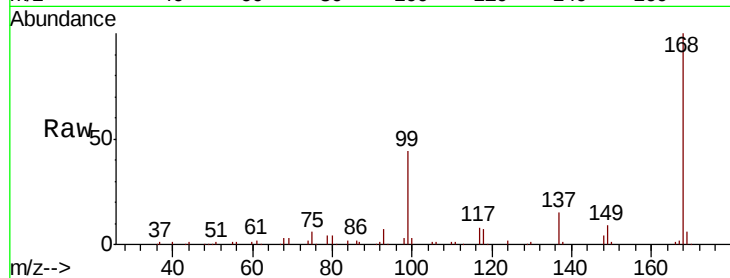
RE125D2-20190610DL

Tot Ion:168 Resp: 338199

Ion Ratio Lower Upper

168 100

99 44.2 37.2 55.8



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.66

150000

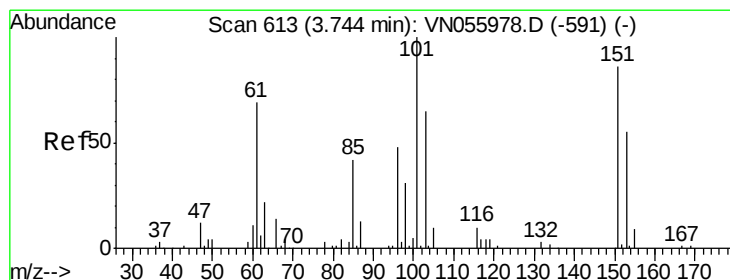
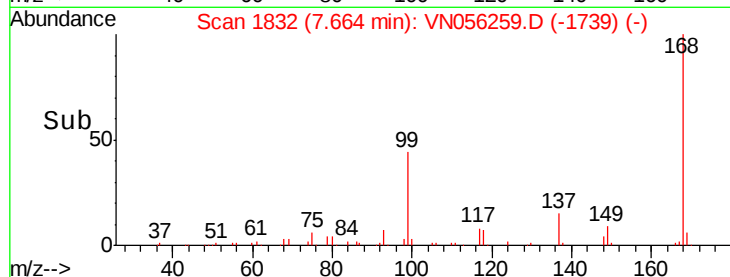
100000

50000

0

7.60 7.70 7.80

Time-->



#9

1,1,2-Trichlorotrifluoroethane

Concen: 2.878 ug/l

RT: 3.73 min Scan# 610

Delta R.T. -0.01 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

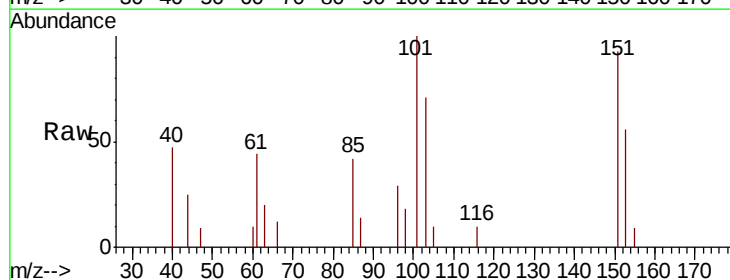
Tgt Ion:101 Resp: 8208

Ion Ratio Lower Upper

101 100

85 40.0 33.4 50.2

151 95.5 69.4 104.2



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VN

Ion 150.80 (150.50 to 151.50): V

3.73

3000

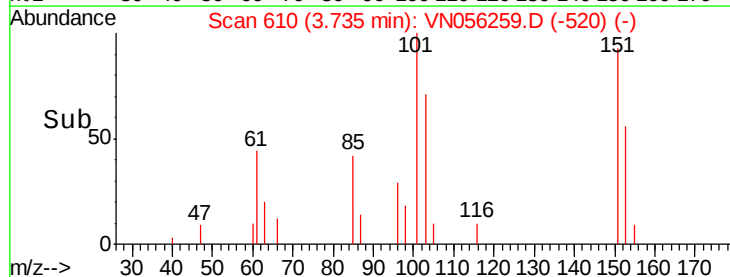
2000

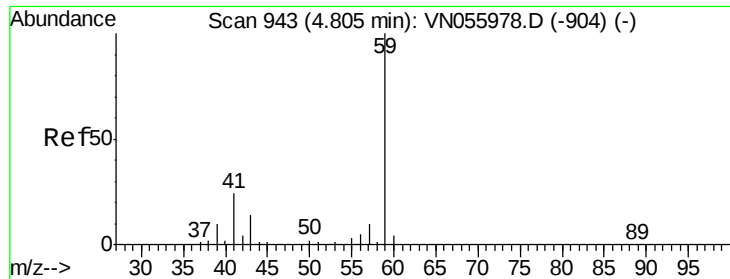
1000

0

3.65 3.70 3.75 3.80

Time-->

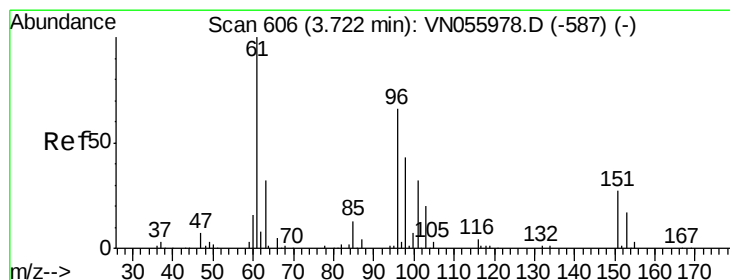
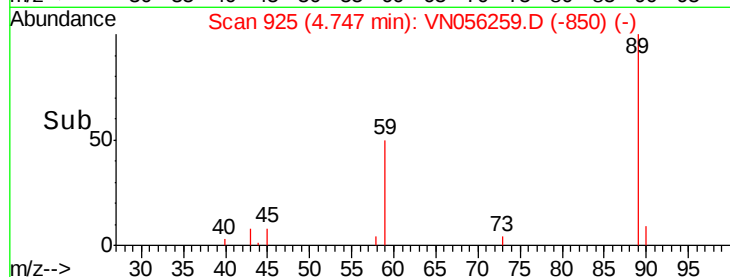
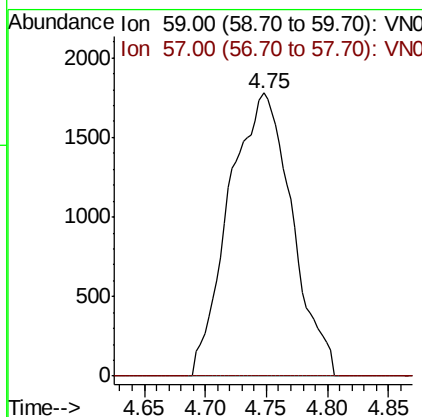
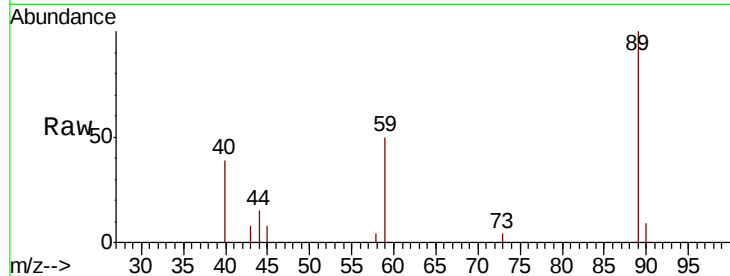




#11  
Tert butyl alcohol  
Concen: 10.889 ug/l  
RT: 4.75 min Scan# 925  
Delta R.T. -0.06 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

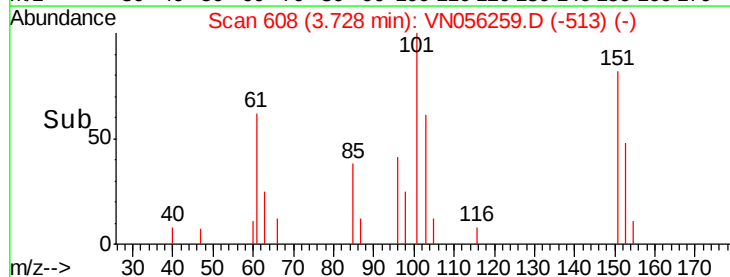
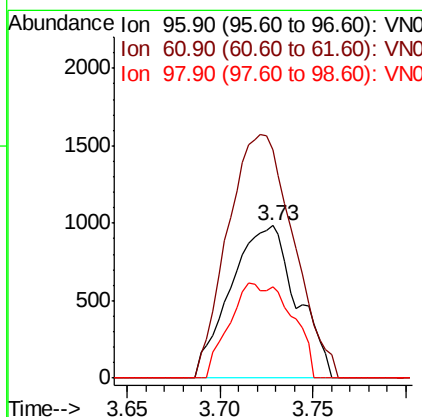
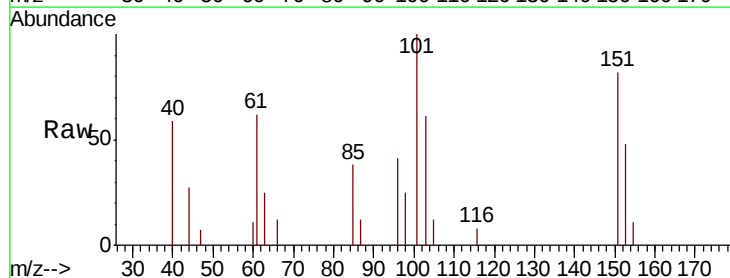
Instrument :  
MSVOA\_N  
ClientSampleId :  
RE125D2-20190610DL

Tot Ion: 59 Resp: 6363  
Ion Ratio Lower Upper  
59 100  
57 0.0 7.8 11.6#



#12  
1,1-Dichloroethene  
Concen: 0.857 ug/l  
RT: 3.73 min Scan# 608  
Delta R.T. 0.01 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Tgt Ion: 96 Resp: 2434  
Ion Ratio Lower Upper  
96 100  
61 149.7 123.2 184.8  
98 59.9 50.4 75.6





#16

Acetone

Concen: 0.687 ug/l

RT: 3.82 min Scan# 637

Delta R.T. 0.00 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

Instrument :

MSVOA\_N

ClientSampleId :

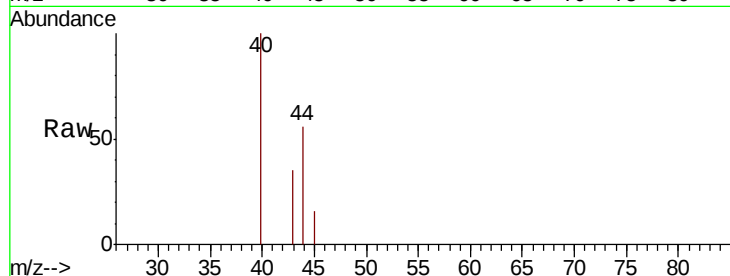
RE125D2-20190610DL

Tot Ion: 43 Resp: 1103

Ion Ratio Lower Upper

43 100

58 0.0 26.6 39.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0

3.82

400

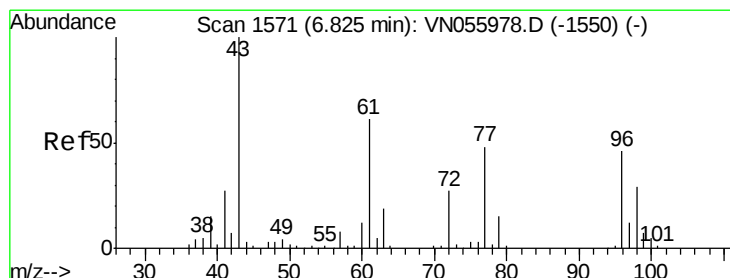
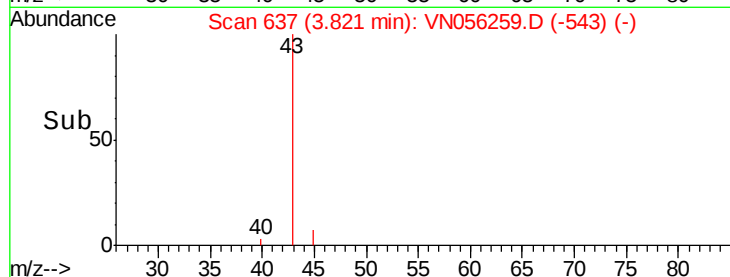
300

200

100

0

Time-->



#27

cis-1,2-Dichloroethene

Concen: 0.618 ug/l

RT: 6.83 min Scan# 1573

Delta R.T. 0.01 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

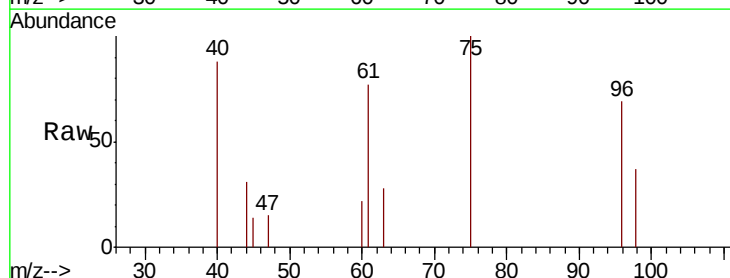
Tgt Ion: 96 Resp: 2210

Ion Ratio Lower Upper

96 100

61 133.5 0.0 275.8

98 55.4 0.0 128.4



Abundance Ion 95.90 (95.60 to 96.60): VN0

Ion 60.90 (60.60 to 61.60): VN0

Ion 97.90 (97.60 to 98.60): VN0

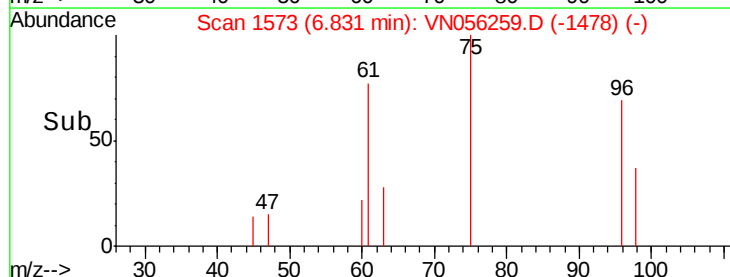
6.83

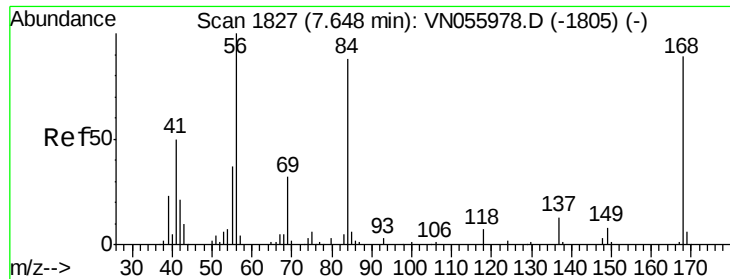
1000

500

0

Time-->

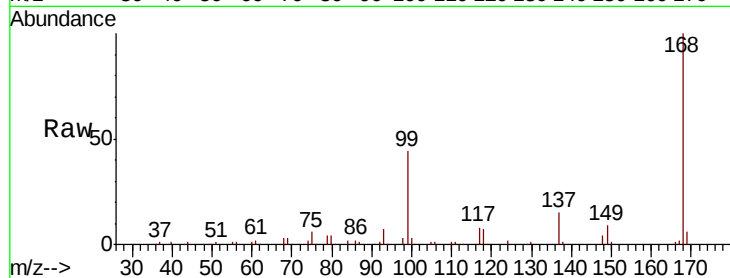




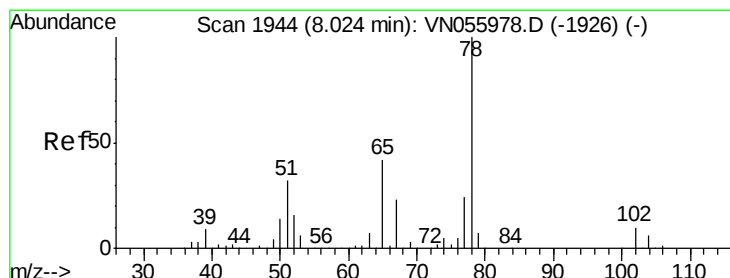
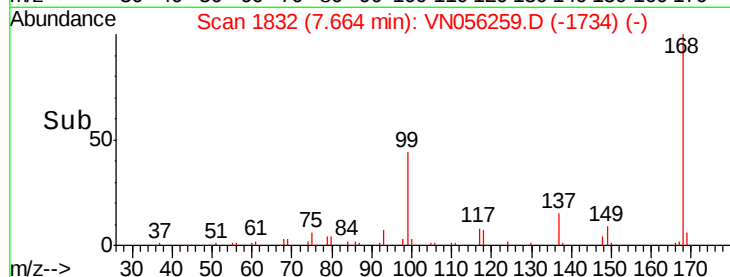
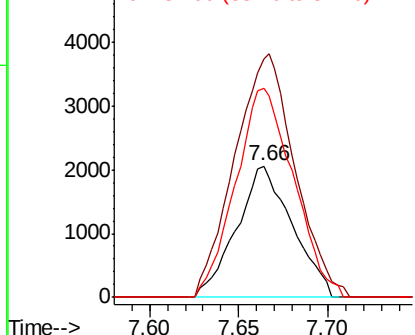
#31  
Cyclohexane  
Concen: 0.840 ug/l  
RT: 7.66 min Scan# 1832  
Delta R.T. 0.02 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Instrument :  
MSVOA\_N  
ClientSampleId :  
RE125D2-20190610DL

Tot Ion: 56 Resp: 4477  
Ion Ratio Lower Upper  
56 100  
69 181.4 25.6 38.4#  
84 159.6 67.4 101.0#

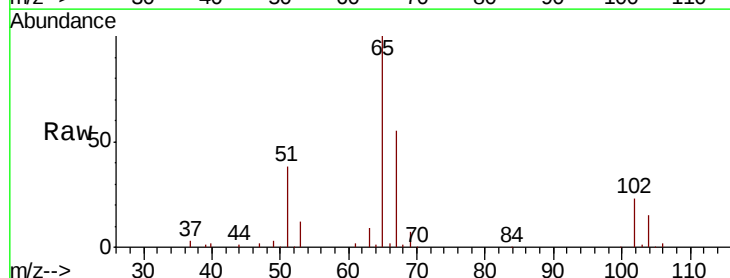


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

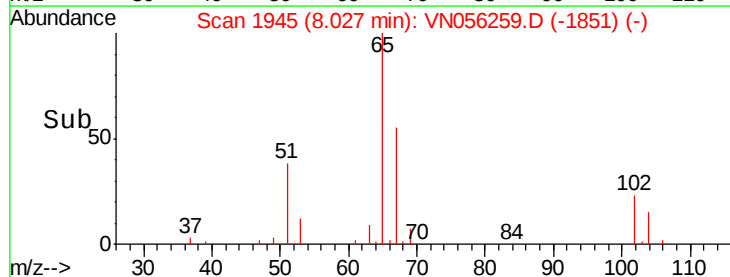
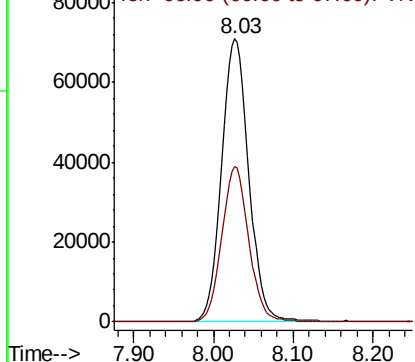


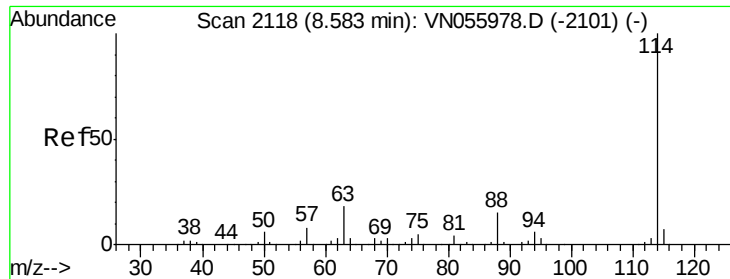
#33  
1,2-Dichloroethane-d4  
Concen: 49.576 ug/l  
RT: 8.03 min Scan# 1945  
Delta R.T. 0.00 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Tgt Ion: 65 Resp: 166478  
Ion Ratio Lower Upper  
65 100  
67 54.5 0.0 109.2



Abundance Ion 64.90 (64.60 to 65.60): VN0  
Ion 66.90 (66.60 to 67.60): VN0

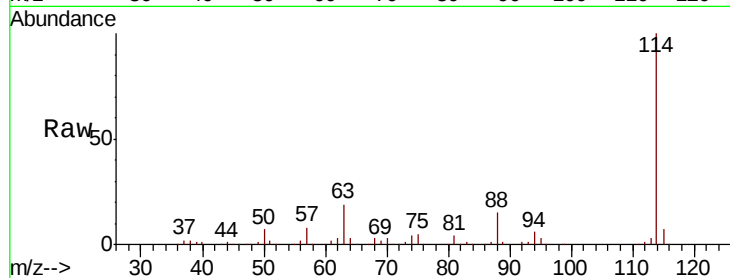




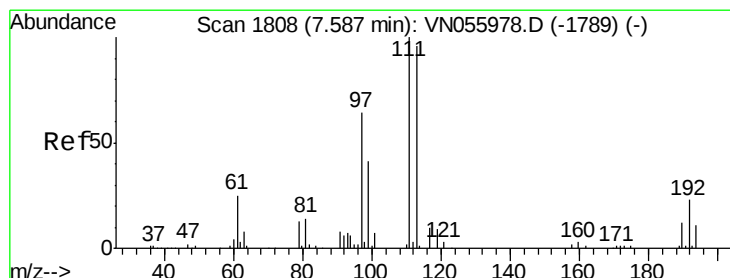
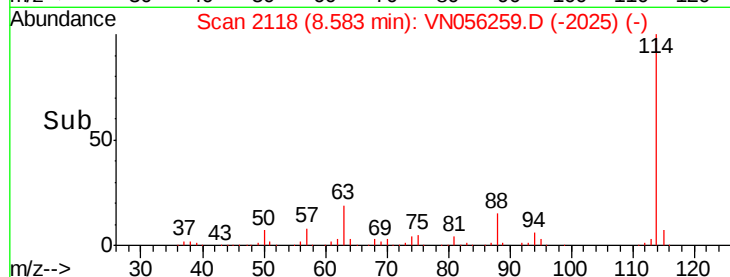
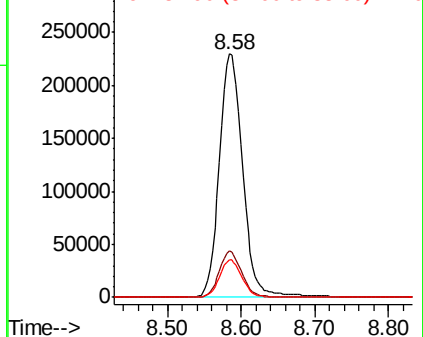
#34  
1,4-Difluorobenzene  
Concen: 50.000 ug/l  
RT: 8.58 min Scan# 2118  
Delta R.T. 0.00 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Instrument :  
MSVOA\_N  
ClientSampleId :  
RE125D2-20190610DL

Tot Ion:114 Resp: 507663  
Ion Ratio Lower Upper  
114 100  
63 18.9 0.0 39.2  
88 15.2 0.0 31.0

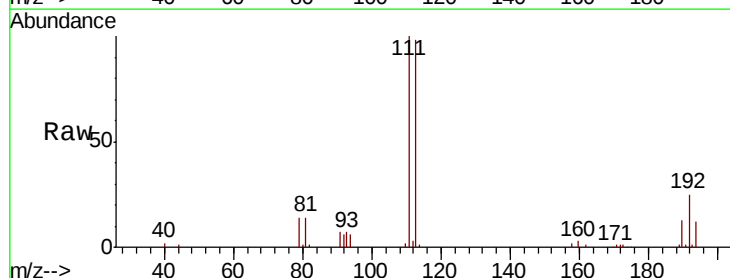


Abundance Ion 113.90 (113.60 to 114.60): V  
Ion 63.00 (62.70 to 63.70): V  
Ion 87.90 (87.60 to 88.60): V

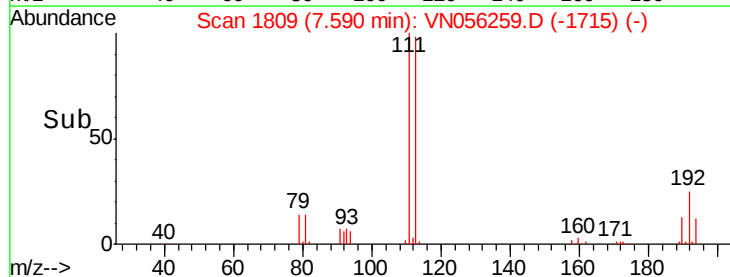
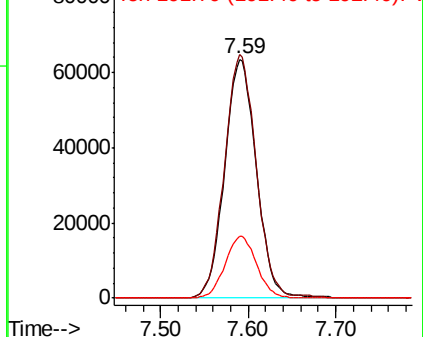


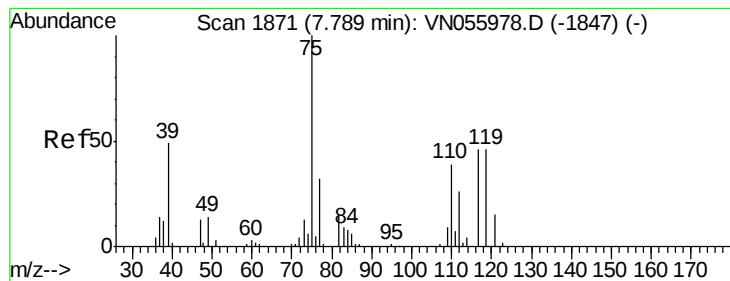
#35  
Dibromofluoromethane  
Concen: 51.345 ug/l  
RT: 7.59 min Scan# 1809  
Delta R.T. 0.00 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Tgt Ion:113 Resp: 159922  
Ion Ratio Lower Upper  
113 100  
111 102.3 81.9 122.9  
192 25.7 19.5 29.3



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





#36

1,1-Dichloropropene

Concen: 4.288 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.13 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

Instrument :

MSVOA\_N

ClientSampleId :

RE125D2-20190610DL

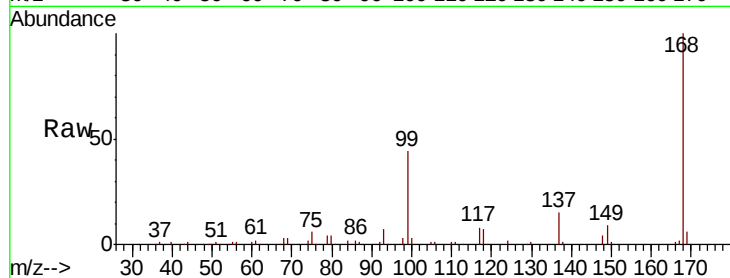
Tot Ion: 75 Resp: 18716

Ion Ratio Lower Upper

75 100

110 10.1 19.0 57.0#

77 0.0 25.1 37.7#

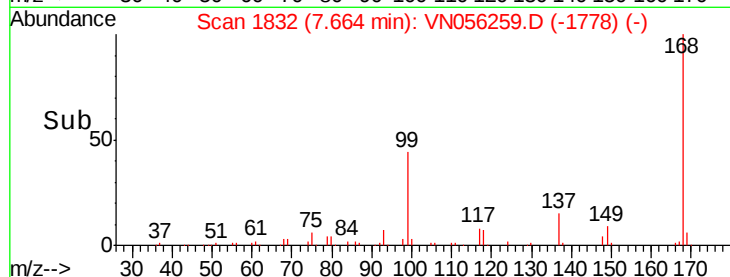


Abundance Ion 74.90 (74.60 to 75.60): VN055978.D (-1847) (-)

Ion 109.90 (109.60 to 110.60): VN055978.D (-1847) (-)

Ion 76.90 (76.60 to 77.60): VN055978.D (-1847) (-)

Time-->



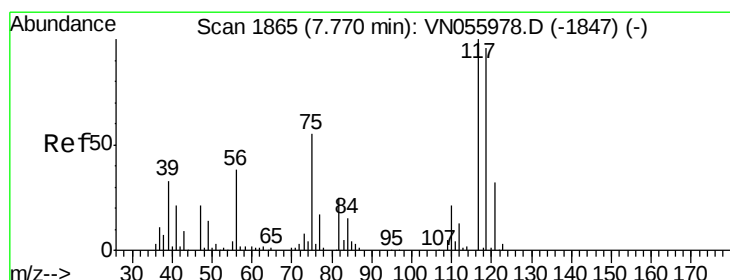
Abundance

Ion 74.90 (74.60 to 75.60): VN055978.D (-1847) (-)

Ion 109.90 (109.60 to 110.60): VN055978.D (-1847) (-)

Ion 76.90 (76.60 to 77.60): VN055978.D (-1847) (-)

Time-->



#38

Carbon Tetrachloride

Concen: 6.634 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.11 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

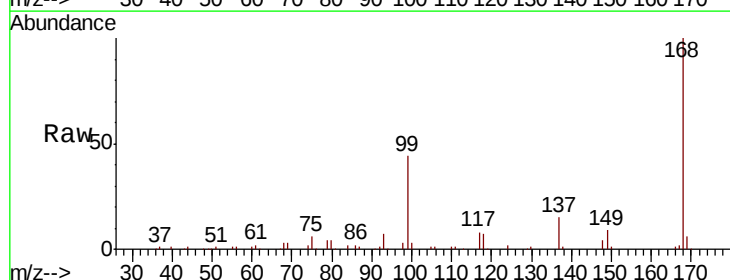
Tgt Ion: 117 Resp: 26700

Ion Ratio Lower Upper

117 100

119 5.1 79.0 118.6#

121 0.0 24.7 37.1#

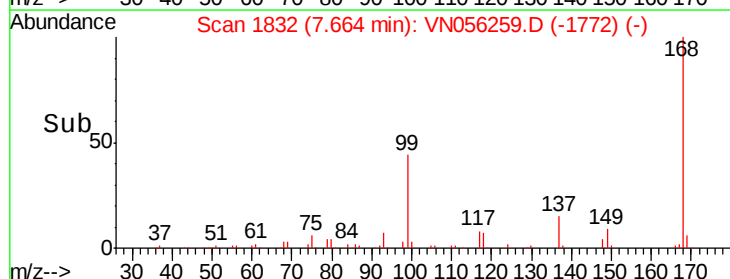


Abundance Ion 116.80 (116.50 to 117.50): VN055978.D (-1847) (-)

Ion 118.80 (118.50 to 119.50): VN055978.D (-1847) (-)

Ion 120.80 (120.50 to 121.50): VN055978.D (-1847) (-)

Time-->



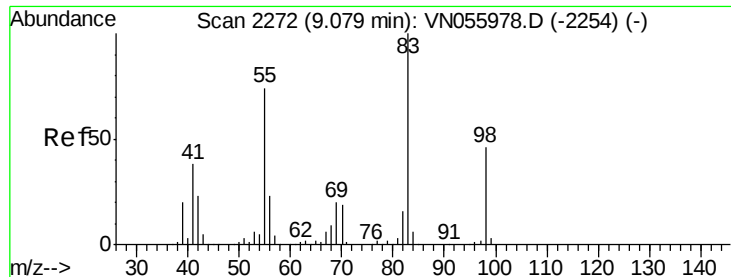
Abundance

Ion 116.80 (116.50 to 117.50): VN055978.D (-1847) (-)

Ion 118.80 (118.50 to 119.50): VN055978.D (-1847) (-)

Ion 120.80 (120.50 to 121.50): VN055978.D (-1847) (-)

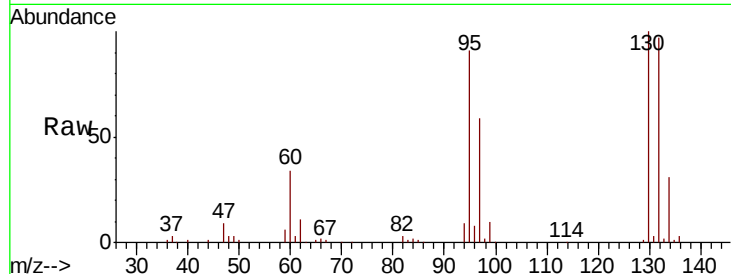
Time-->



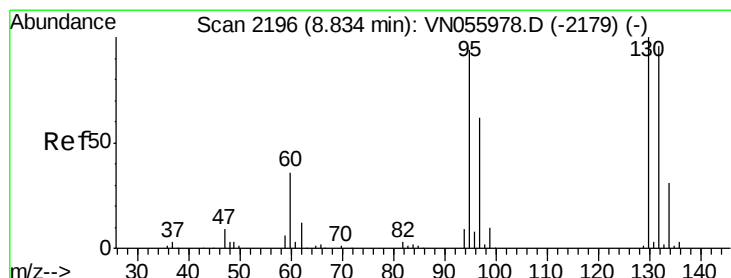
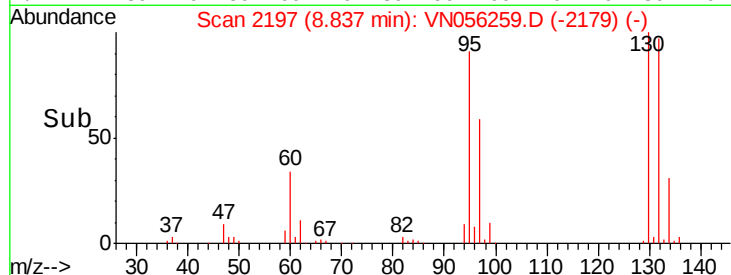
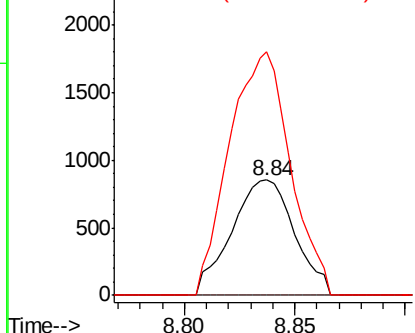
#39  
Methvlcvclohexane  
Concen: 0.311 ug/l  
RT: 8.84 min Scan# 2197  
Delta R.T. -0.24 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Instrument :  
MSVOA\_N  
ClientSampleId :  
RE125D2-20190610DL

Tot Ion: 83 Resp: 1690  
Ion Ratio Lower Upper  
83 100  
55 0.0 59.3 88.9#  
98 211.5 36.6 54.8#

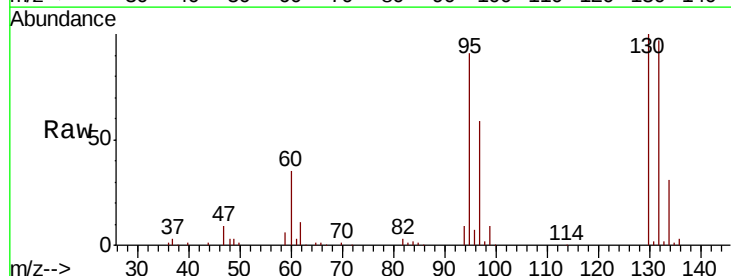


Abundance Ion 83.00 (82.70 to 83.70): VN0  
Ion 55.00 (54.70 to 55.70): VN0  
Ion 98.00 (97.70 to 98.70): VN0

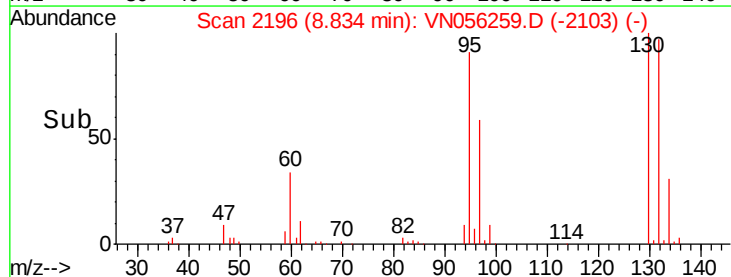
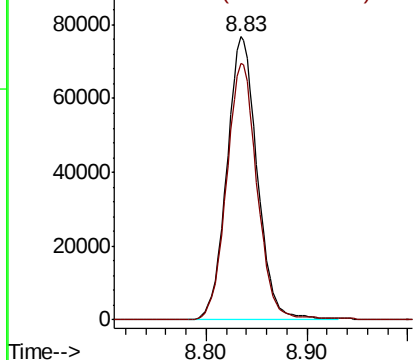


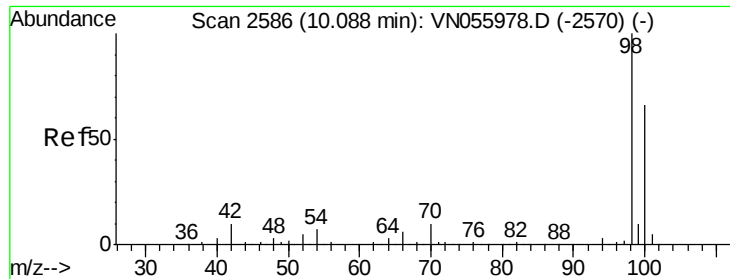
#44  
Trichloroethene  
Concen: 42.319 ug/l  
RT: 8.83 min Scan# 2196  
Delta R.T. 0.00 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Tgt Ion:130 Resp: 161222  
Ion Ratio Lower Upper  
130 100  
95 90.5 0.0 188.0



Abundance Ion 129.80 (129.50 to 130.50): V  
Ion 94.90 (94.60 to 95.60): VN0





#50

Toluene-d8

Concen: 52.233 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.00 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

Instrument :

MSVOA\_N

ClientSampleId :

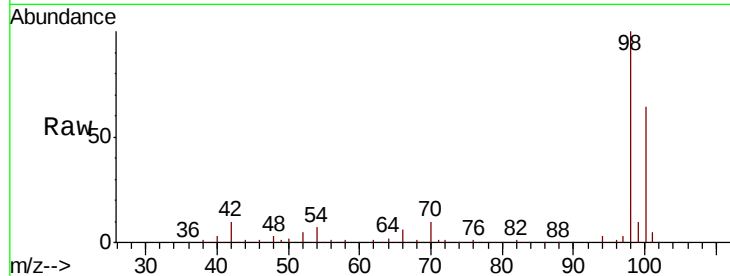
RE125D2-20190610DL

Tot Ion: 98 Resp: 626030

Ion Ratio Lower Upper

98 100

100 63.7 51.9 77.9



Abundance Ion 98.00 (97.70 to 98.70): VN055978.D (-2570) (-)

Ion 100.00 (99.70 to 100.70): VN055978.D (-2570) (-)

10.09

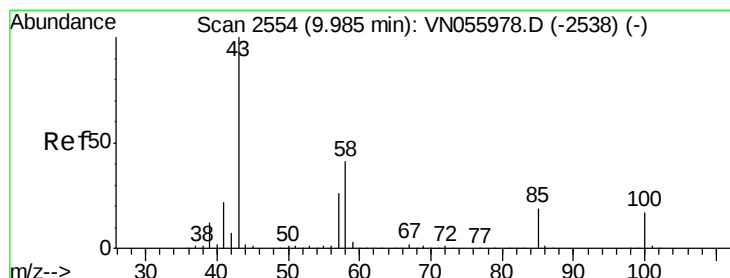
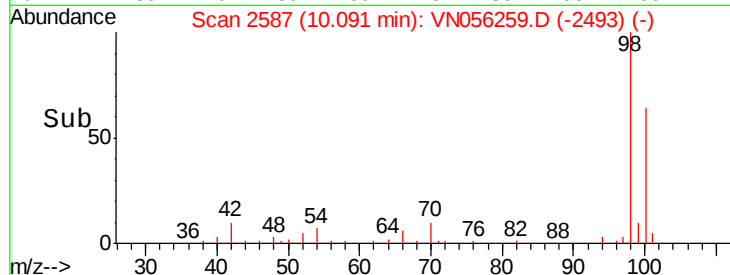
300000

200000

100000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 0.638 ug/l

RT: 10.09 min Scan# 2587

Delta R.T. 0.11 min

Lab File: VN056259.D

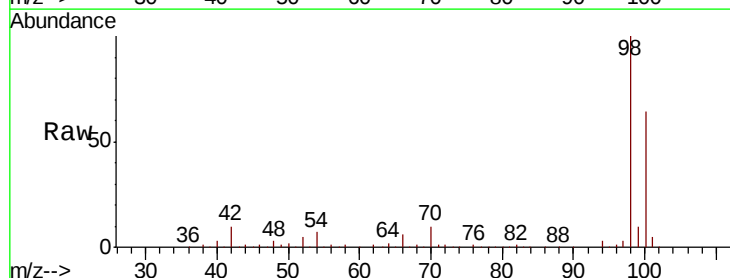
Acq: 12 Jun 2019 19:24

Tgt Ion: 43 Resp: 2511

Ion Ratio Lower Upper

43 100

58 163.0 32.1 48.1#



Abundance Ion 43.00 (42.70 to 43.70): VN055978.D (-2538) (-)

Ion 58.00 (57.70 to 58.70): VN055978.D (-2538) (-)

2500

2000

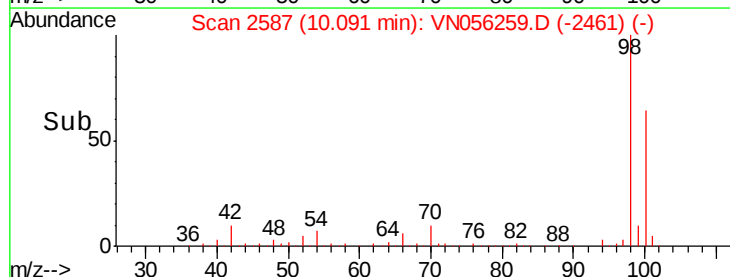
1500

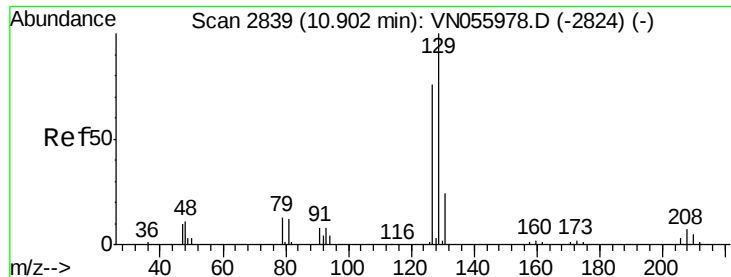
1000

500

0

Time-->





#60

Dibromochloromethane

Concen: 3.044 ug/l

RT: 10.63 min Scan# 2756

Delta R.T. -0.27 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

Instrument :

MSVOA\_N

ClientSampleId :

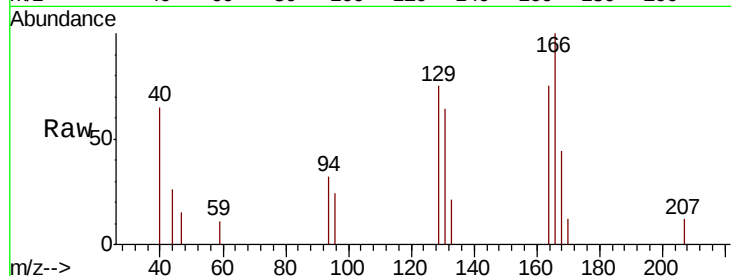
RE125D2-20190610DL

Tot Ion:129 Resp: 2243

Ion Ratio Lower Upper

129 100

127 0.0 38.1 114.3#



Abundance Ion 128.80 (128.50 to 129.50): V

Ion 126.80 (126.50 to 127.50): V

10.63

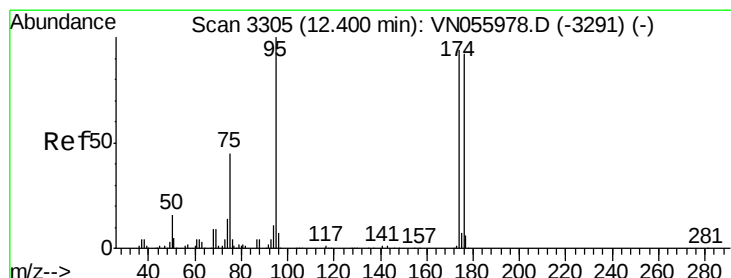
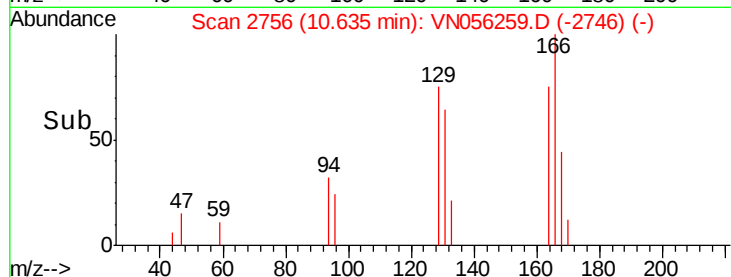
1500

1000

500

0

Time-->



#62

4-Bromofluorobenzene

Concen: 48.609 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

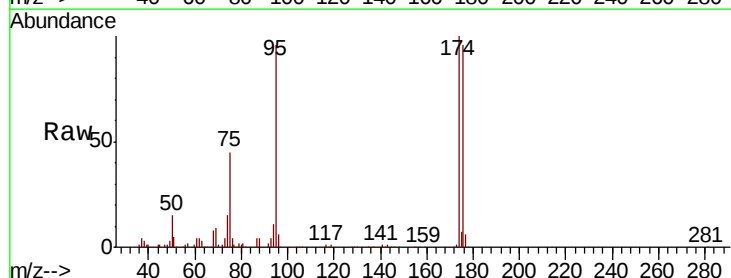
Tgt Ion: 95 Resp: 198127

Ion Ratio Lower Upper

95 100

174 103.4 0.0 191.0

176 99.3 0.0 185.2



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

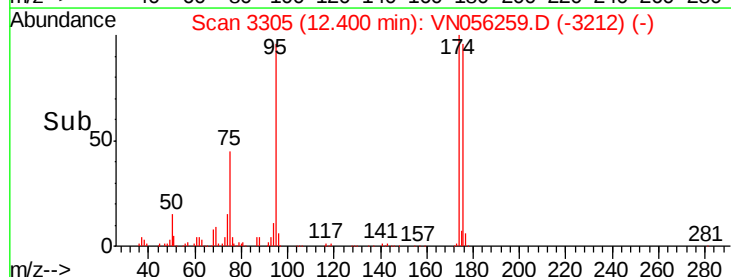
150000

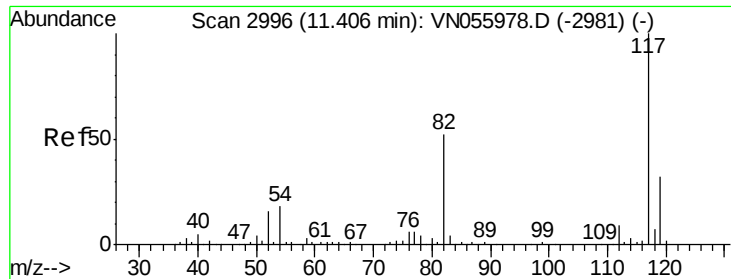
100000

50000

0

Time-->

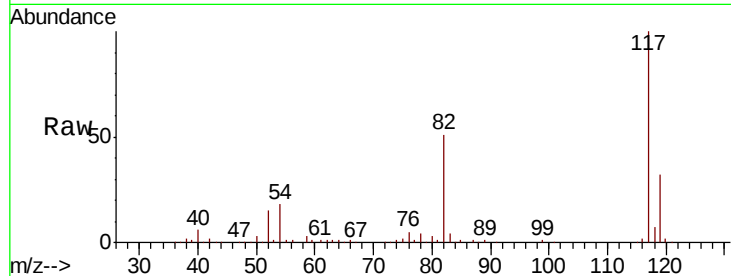




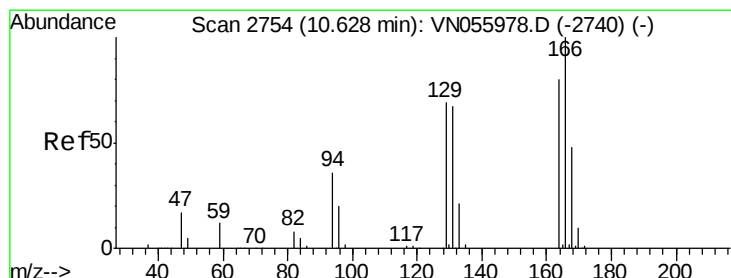
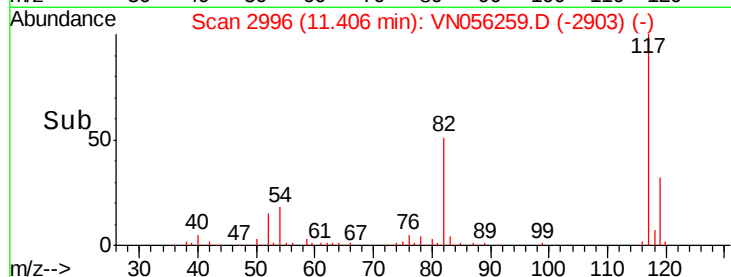
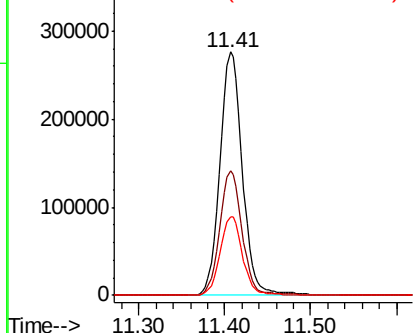
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.41 min Scan# 2996  
Delta R.T. 0.00 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Instrument :  
MSVOA\_N  
ClientSampleId :  
RE125D2-20190610DL

Tot Ion:117 Resp: 501402  
Ion Ratio Lower Upper  
117 100  
82 51.2 41.8 62.8  
119 32.1 25.4 38.0

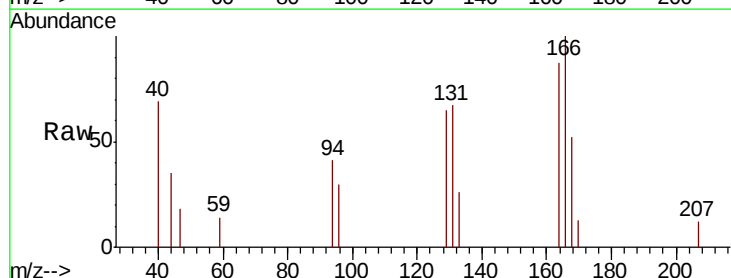


Abundance Ion 116.90 (116.60 to 117.60): V  
Ion 82.00 (81.70 to 82.70): V  
Ion 118.90 (118.60 to 119.60): V

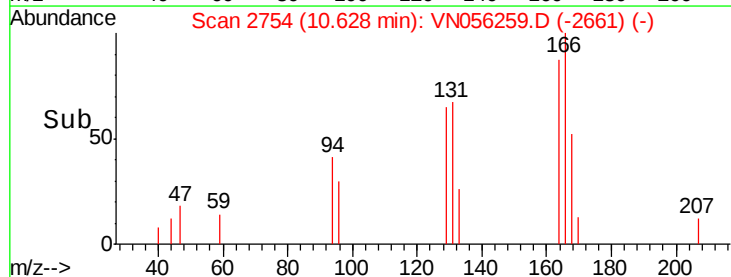
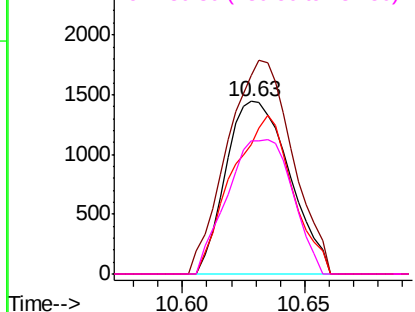


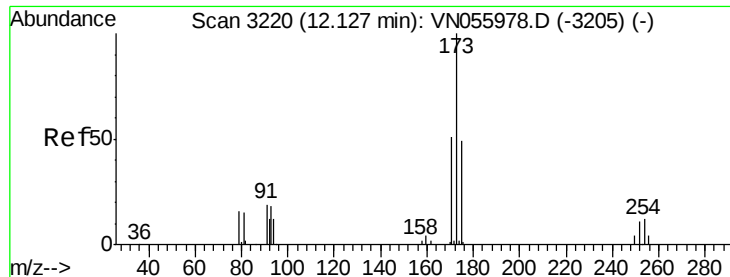
#64  
Tetrachloroethene  
Concen: 0.603 ug/l  
RT: 10.63 min Scan# 2754  
Delta R.T. 0.00 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Tgt Ion:164 Resp: 2619  
Ion Ratio Lower Upper  
164 100  
166 115.0 103.0 154.6  
129 74.9 70.6 105.8  
131 76.9 68.6 102.8



Abundance Ion 163.80 (163.50 to 164.50): V  
Ion 165.80 (165.50 to 166.50): V  
Ion 128.80 (128.50 to 129.50): V  
Ion 130.80 (130.50 to 131.50): V

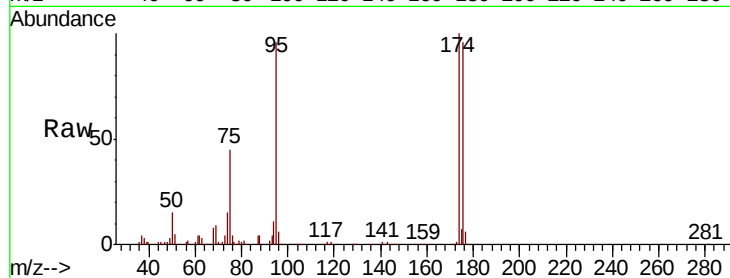




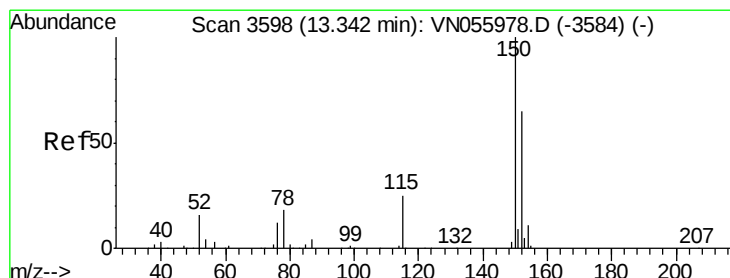
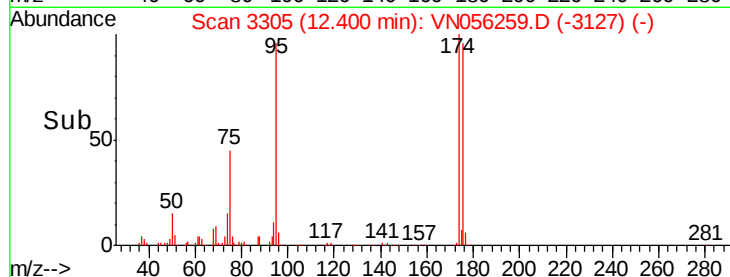
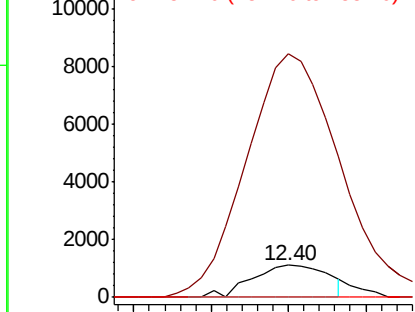
#71  
Bromoform  
Concen: 3.243 ug/l  
RT: 12.40 min Scan# 3305  
Delta R.T. 0.27 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Instrument :  
MSVOA\_N  
ClientSampleId :  
RE125D2-20190610DL

Tot Ion:173 Resp: 1532  
Ion Ratio Lower Upper  
173 100  
175 807.2 24.3 72.8#  
254 0.0 0.0 0.0

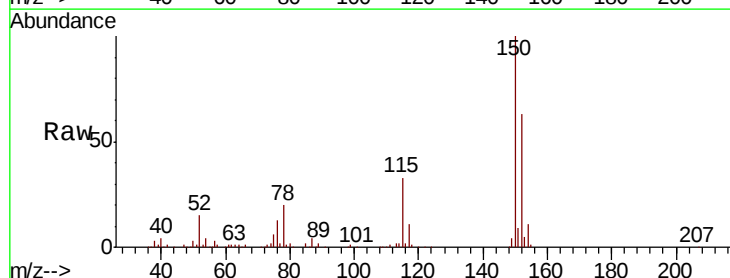


Abundance Ion 172.70 (172.40 to 173.40): V  
Ion 174.70 (174.40 to 175.40): V  
Ion 254.40 (254.10 to 255.10): V

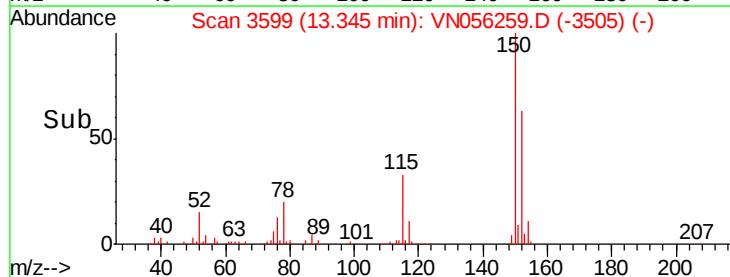
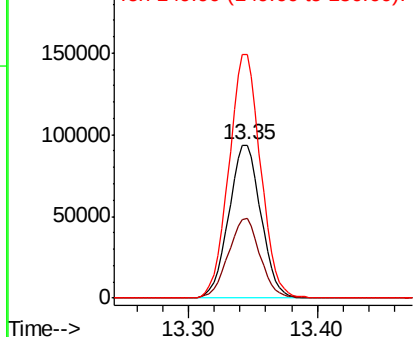


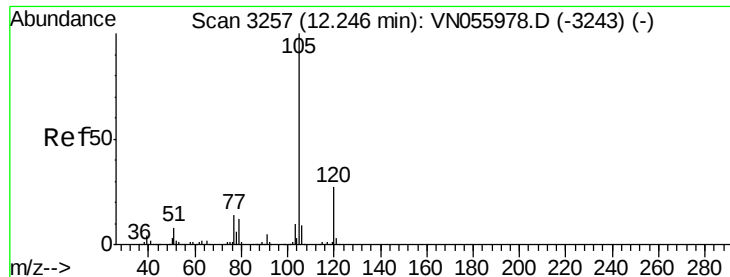
#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.35 min Scan# 3599  
Delta R.T. 0.00 min  
Lab File: VN056259.D  
Acq: 12 Jun 2019 19:24

Tgt Ion:152 Resp: 161966  
Ion Ratio Lower Upper  
152 100  
115 51.5 27.0 81.0  
150 157.0 0.0 343.2



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





#73

Isopropylbenzene

Concen: Below Cal

RT: 12.40 min Scan# 3305

Delta R.T. 0.15 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

Instrument :

MSVOA\_N

ClientSampleId :

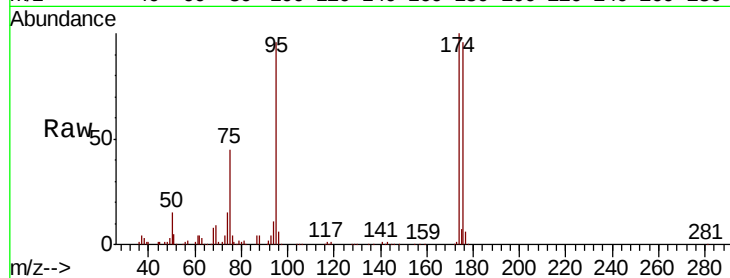
RE125D2-20190610DL

Tot Ion: 105 Resp: 196

Ion Ratio Lower Upper

105 100

120 0.0 13.6 40.7#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

250

200

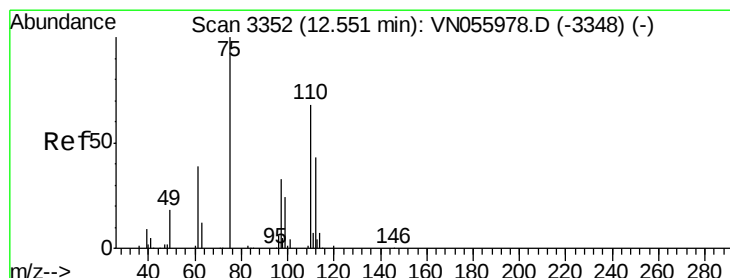
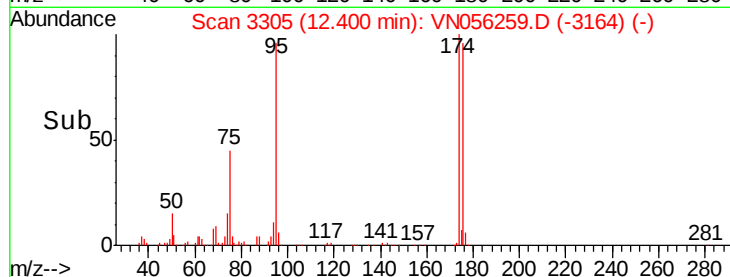
150

100

50

0

Time--> 12.38 12.40 12.42



#76

1,2,3-Trichloropropane

Concen: 30.221 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN056259.D

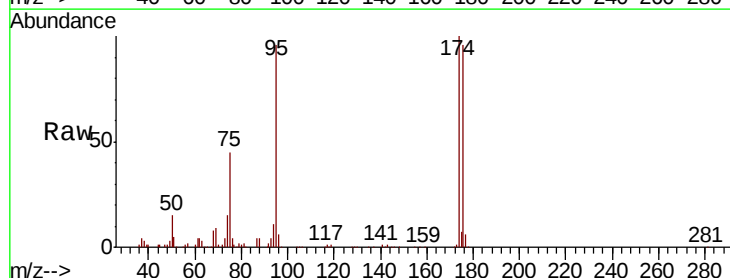
Acq: 12 Jun 2019 19:24

Tgt Ion: 75 Resp: 90065

Ion Ratio Lower Upper

75 100

77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V

60000

50000

40000

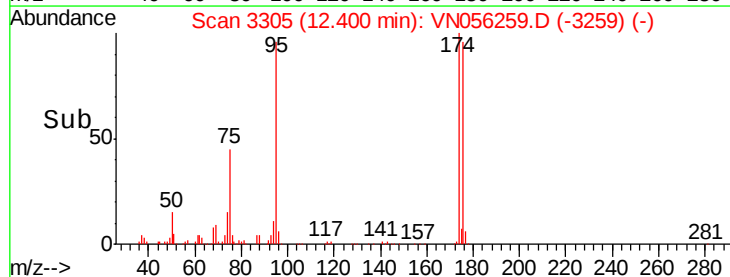
30000

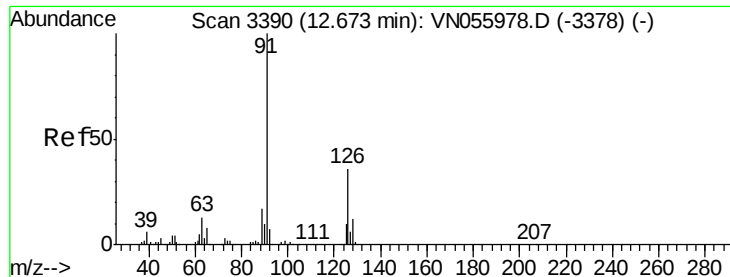
20000

10000

0

Time--> 12.40 12.50





#79

2-Chlorotoluene

Concen: Below Cal

RT: 12.40 min Scan# 3305

Delta R.T. -0.27 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

Instrument :

MSVOA\_N

ClientSampleId :

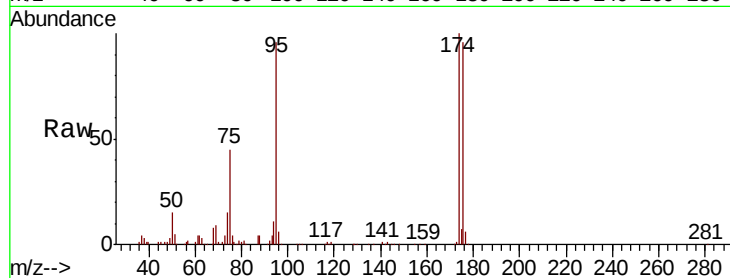
RE125D2-20190610DL

Tot Ion: 91 Resp: 372

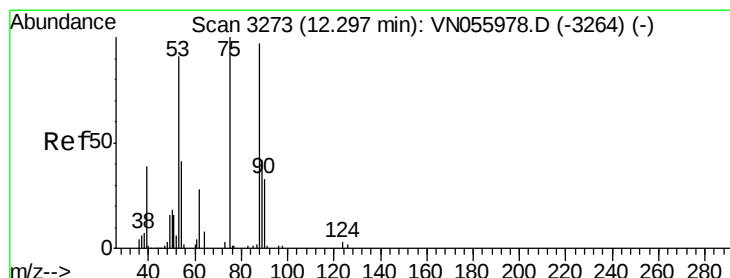
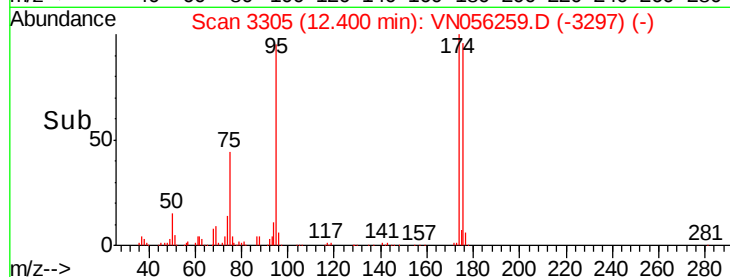
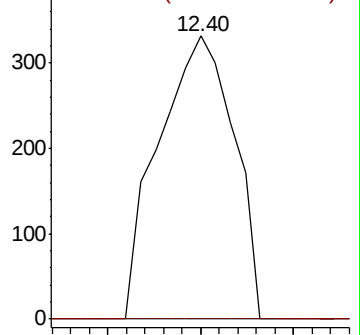
Ion Ratio Lower Upper

91 100

126 0.0 18.1 54.4#



Abundance Ion 91.00 (90.70 to 91.70): VNO



#81

trans-1,4-Dichloro-2-butene

Concen: 100.641 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN056259.D

Acq: 12 Jun 2019 19:24

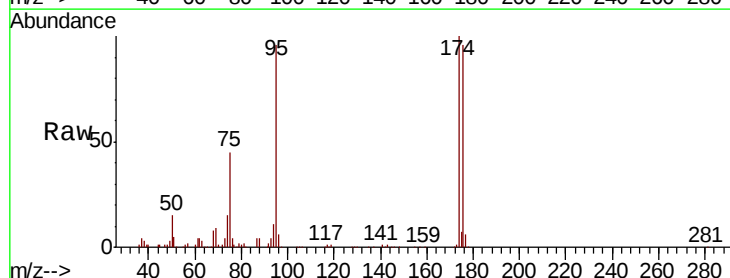
Tgt Ion: 75 Resp: 90065

Ion Ratio Lower Upper

75 100

53 0.0 68.1 102.1#

89 0.0 36.9 55.3#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 53.00 (52.70 to 53.70): VNO

Ion 88.90 (88.60 to 89.60): VNO

