

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN080919\  
 Data File : VN057149.D  
 Acq On : 9 Aug 2019 16:14  
 Operator : JC/SP  
 Sample : I.BLK  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 I.BLK

Quant Time: Aug 10 02:13:23 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N080719W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 08 06:49:25 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.05  | 168  | 1379524  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.01  | 114  | 1940577  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.91 | 117  | 1556439  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.88 | 152  | 361139   | 50.00 | ug/l  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-----------------------------|-------|------|----------|-------|--------|----------|
| 33) 1,2-Dichloroethane-d4   | 7.44  | 65   | 641630   | 45.23 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 90.46% |          |
| 35) Dibromofluoromethane    | 6.99  | 113  | 577360   | 47.41 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 94.82% |          |
| 50) Toluene-d8              | 9.56  | 98   | 2235260  | 47.98 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 95.96% |          |
| 62) 4-Bromofluorobenzene    | 11.92 | 95   | 552758   | 36.82 | ug/l   | 0.00     |
| Spiked Amount               |       |      | Recovery | =     | 73.64% |          |

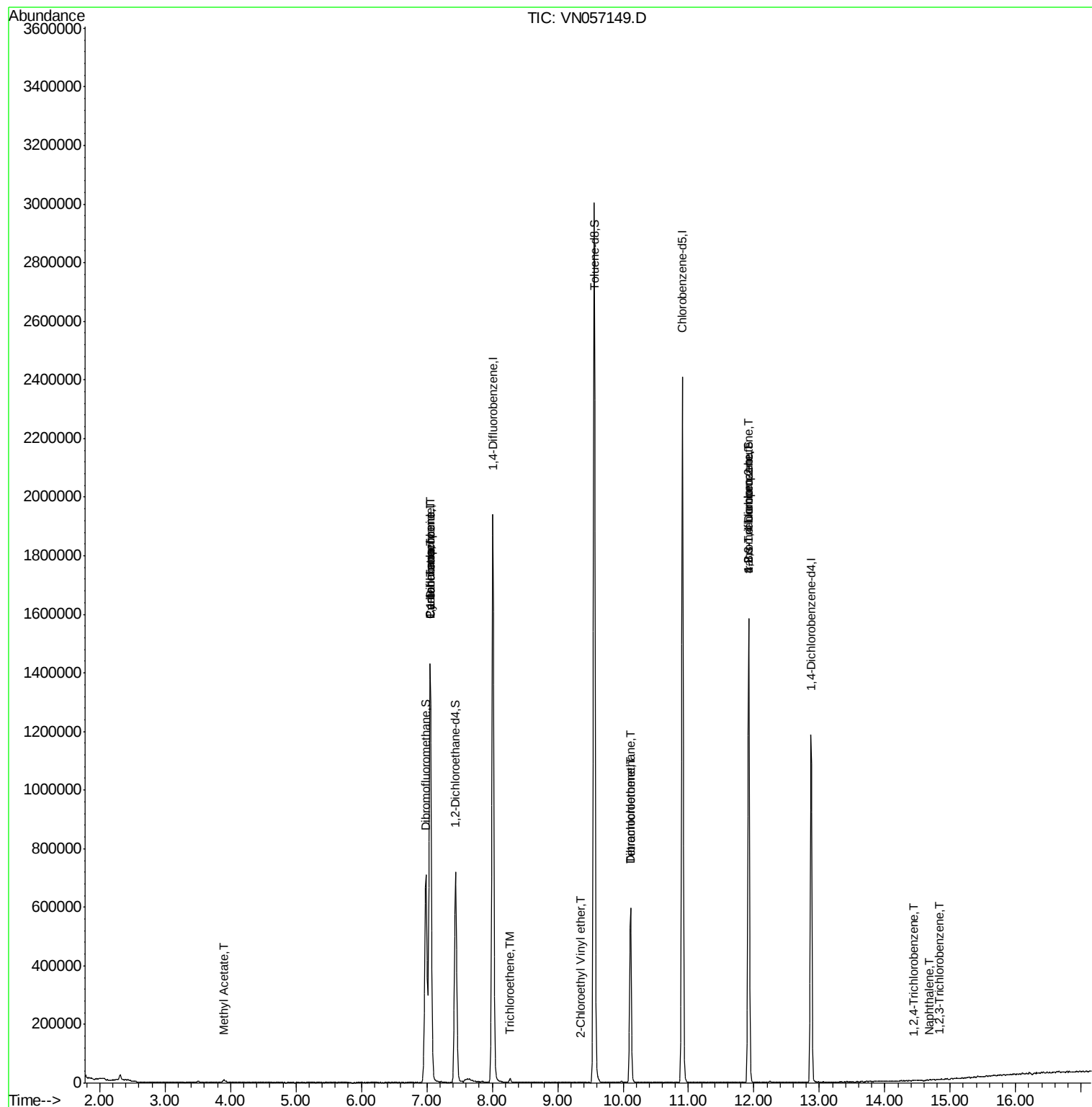
| Target Compounds               | R.T.  | QIon | Response | Conc      | Units  | Qvalue |
|--------------------------------|-------|------|----------|-----------|--------|--------|
| 18) Methyl Acetate             | 3.90  | 43   | 14990    | 0.524     | ug/l   | 99     |
| 31) Cyclohexane                | 7.05  | 56   | 19668    | 0.956     | ug/l # | 1      |
| 36) 1,1-Dichloropropene        | 7.05  | 75   | 84364    | 5.280     | ug/l # | 46     |
| 37) Ethyl Acetate              | 6.30  | 43   | 60       | Below Cal | #      | 70     |
| 38) Carbon Tetrachloride       | 7.05  | 117  | 115985   | 6.965     | ug/l # | 17     |
| 44) Trichloroethene            | 8.27  | 130  | 4547     | 0.321     | ug/l   | 90     |
| 58) 2-Chloroethyl Vinyl ether  | 9.36  | 63   | 32       | 13.120    | ug/l # | 47     |
| 60) Dibromochloromethane       | 10.11 | 129  | 130689   | 10.079    | ug/l # | 11     |
| 64) Tetrachloroethene          | 10.11 | 164  | 158139   | 12.217    | ug/l   | 97     |
| 73) Isopropylbenzene           | 11.77 | 105  | 157      | Below Cal | #      | 48     |
| 75) 1,1,2,2-Tetrachloroethane  | 11.92 | 83   | 211      | Below Cal | #      | 1      |
| 76) 1,2,3-Trichloropropane     | 11.92 | 75   | 254669   | 35.256    | ug/l # | 100    |
| 79) 2-Chlorotoluene            | 12.19 | 91   | 173      | Below Cal | #      | 39     |
| 81) trans-1,4-Dichloro-2-buten | 11.92 | 75   | 254669   | 103.686   | ug/l # | 14     |
| 83) tert-Butylbenzene          | 12.27 | 119  | 30       | Below Cal | #      | 28     |
| 93) 1,2,4-Trichlorobenzene     | 14.45 | 180  | 150      | 5.955     | ug/l # | 76     |
| 95) Naphthalene                | 14.67 | 128  | 62       | 2.809     | ug/l # | 69     |
| 96) 1,2,3-Trichlorobenzene     | 14.84 | 180  | 280      | 5.767     | ug/l # | 32     |

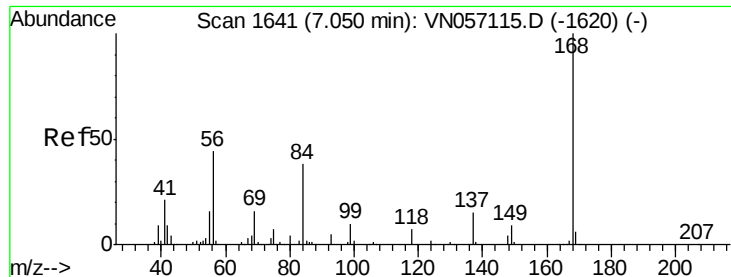
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_N\DATA\VN080919\  
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Sample : I.BLK  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
I.BLK

Quant Time: Aug 10 02:13:23 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N080719W.M  
Quant Title : SW846 8260  
QLast Update : Thu Aug 08 06:49:25 2019  
Response via : Initial Calibration





#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.05 min Scan# 1642

Delta R.T. 0.00 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

Instrument :

MSVOA\_N

ClientSampled :

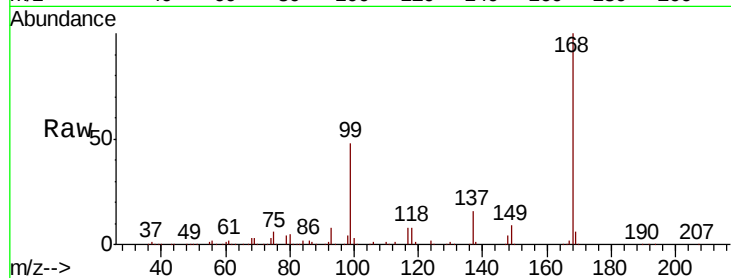
I.BLK

Tgt Ion:168 Resp: 1379524

Ion Ratio Lower Upper

168 100

99 48.4 38.6 57.8



Abundance Ion 167.90 (167.60 to 168.60): VN057149.D (-1548) (-)

Ion 98.90 (98.60 to 99.60): VN057149.D (-1548) (-)

7.05

600000

500000

400000

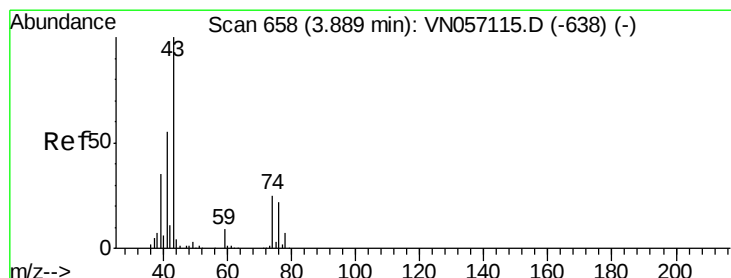
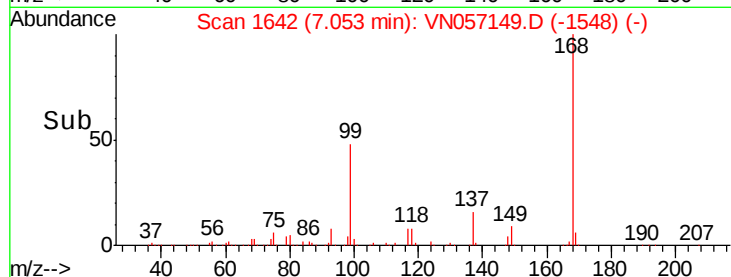
300000

200000

100000

0

Time--> 6.90 7.00 7.10 7.20



#18

Methyl Acetate

Concen: 0.524 ug/l

RT: 3.90 min Scan# 662

Delta R.T. 0.01 min

Lab File: VN057149.D

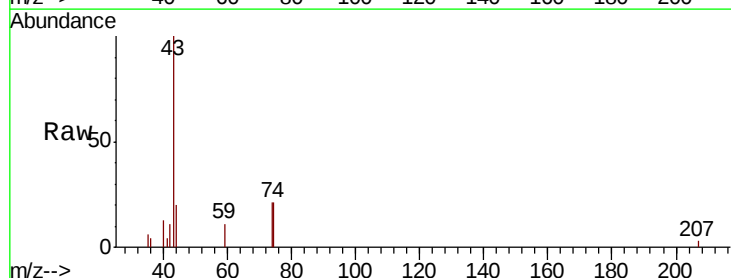
Acq: 9 Aug 2019 16:14

Tgt Ion: 43 Resp: 14990

Ion Ratio Lower Upper

43 100

74 24.9 20.2 30.4



Abundance Ion 43.00 (42.70 to 43.70): VN057149.D (-565) (-)

Ion 74.00 (73.70 to 74.70): VN057149.D (-565) (-)

3.90

6000

5000

4000

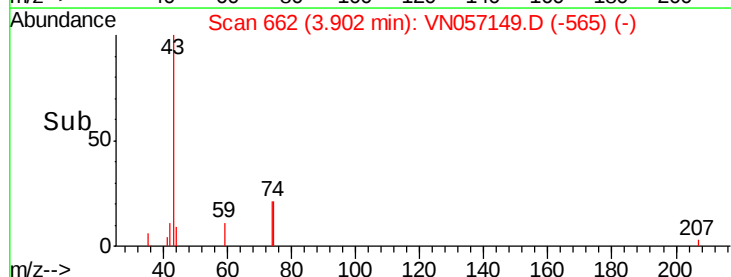
3000

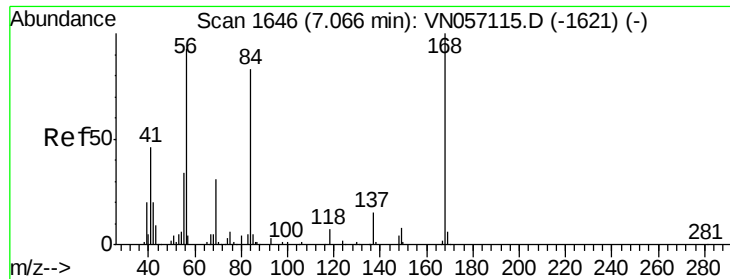
2000

1000

0

Time--> 3.80 3.85 3.90 3.95

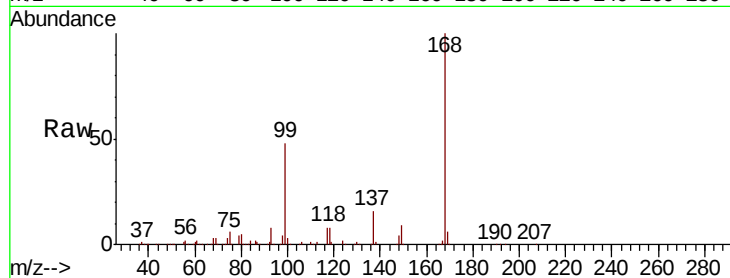




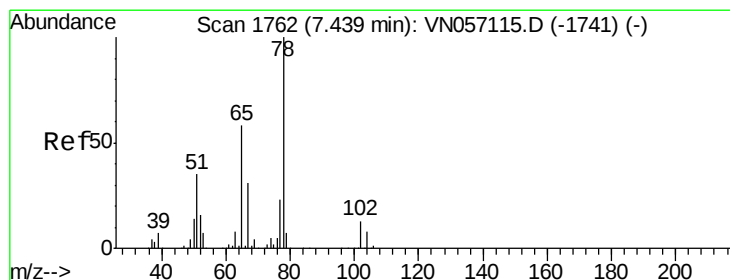
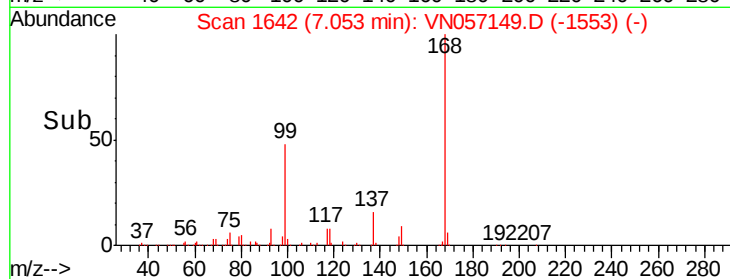
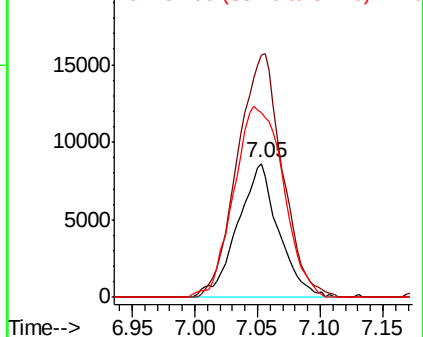
#31  
Cyclohexane  
Concen: 0.956 ug/l  
RT: 7.05 min Scan# 1642  
Delta R.T. -0.01 min  
Lab File: VN057149.D  
Acq: 9 Aug 2019 16:14

Instrument :  
MSVOA\_N  
ClientSampled :  
I.BLK

Tgt Ion: 56 Resp: 19668  
Ion Ratio Lower Upper  
56 100  
69 181.0 26.9 40.3#  
84 138.0 71.9 107.9#

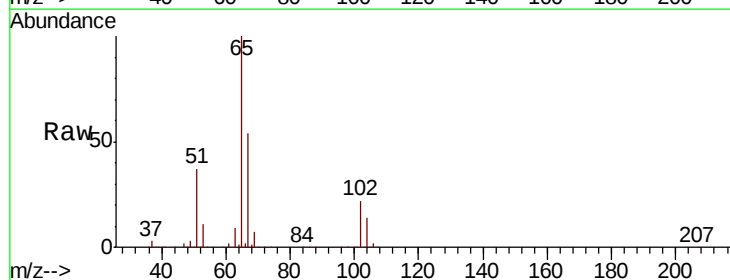


Abundance Ion 56.00 (55.70 to 56.70): VN0  
Ion 69.00 (68.70 to 69.70): VN0  
Ion 84.00 (83.70 to 84.70): VN0

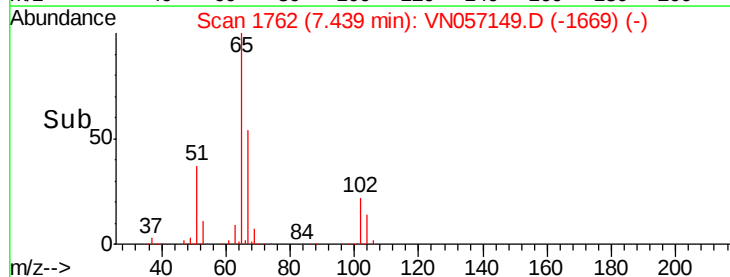
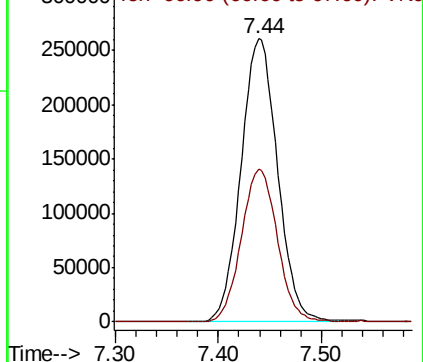


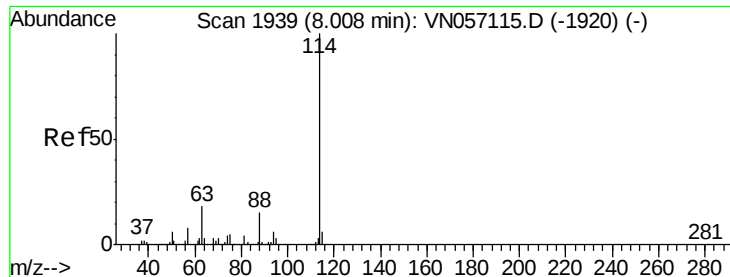
#33  
1,2-Dichloroethane-d4  
Concen: 45.225 ug/l  
RT: 7.44 min Scan# 1762  
Delta R.T. 0.00 min  
Lab File: VN057149.D  
Acq: 9 Aug 2019 16:14

Tgt Ion: 65 Resp: 641630  
Ion Ratio Lower Upper  
65 100  
67 53.5 0.0 108.2



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

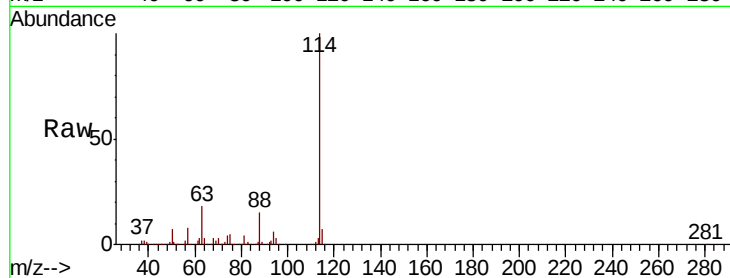




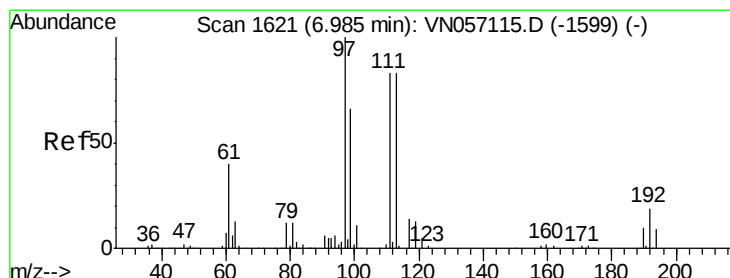
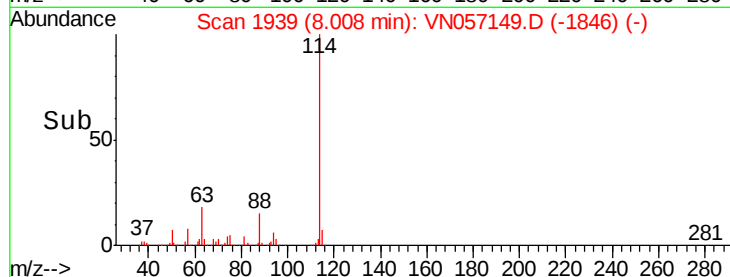
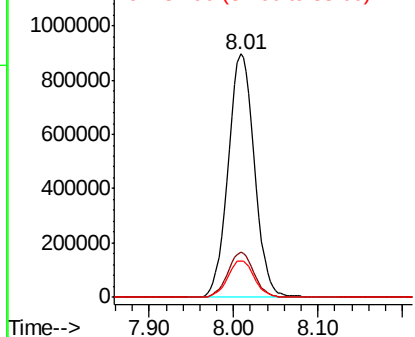
#34  
 1,4-Difluorobenzene  
 Concen: 50.000 ug/l  
 RT: 8.01 min Scan# 1939  
 Delta R.T. -0.00 min  
 Lab File: VN057149.D  
 Acq: 9 Aug 2019 16:14

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 I.BLK

Tgt Ion:114 Resp: 1940577  
 Ion Ratio Lower Upper  
 114 100  
 63 18.5 0.0 36.2  
 88 15.1 0.0 30.0

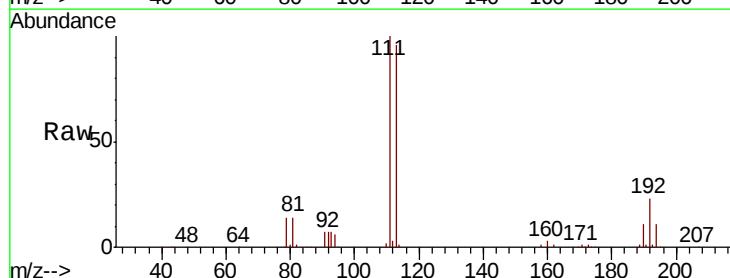


Abundance Ion 113.90 (113.60 to 114.60): V  
 1200000 Ion 63.00 (62.70 to 63.70): VN  
 1000000 Ion 87.90 (87.60 to 88.60): VN

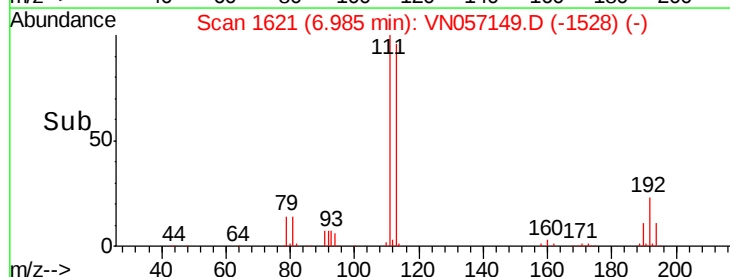
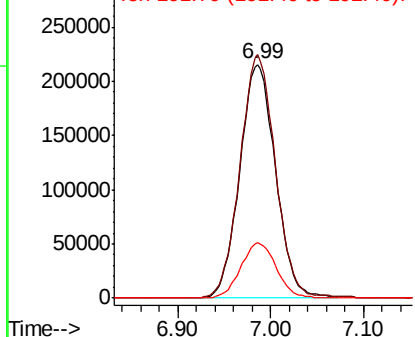


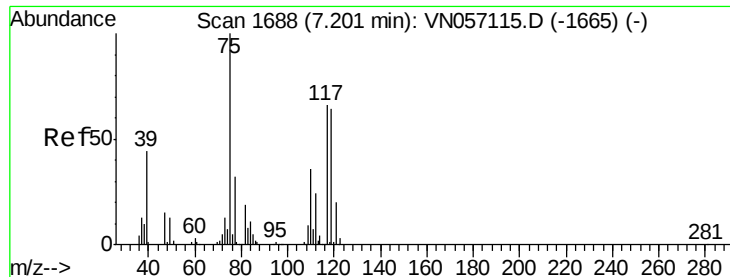
#35  
 Dibromofluoromethane  
 Concen: 47.412 ug/l  
 RT: 6.99 min Scan# 1621  
 Delta R.T. -0.00 min  
 Lab File: VN057149.D  
 Acq: 9 Aug 2019 16:14

Tgt Ion:113 Resp: 577360  
 Ion Ratio Lower Upper  
 113 100  
 111 102.4 81.3 121.9  
 192 23.5 19.0 28.4



Abundance Ion 112.80 (112.50 to 113.50): V  
 300000 Ion 110.80 (110.50 to 111.50): V  
 250000 Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 5.280 ug/l

RT: 7.05 min Scan# 1640

Delta R.T. -0.15 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

Instrument :

MSVOA\_N

ClientSampleId :

I.BLK

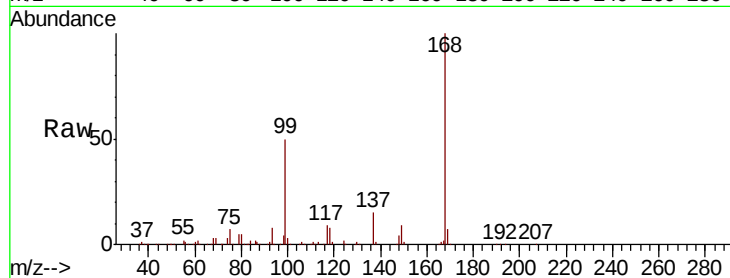
Tgt Ion: 75 Resp: 84364

Ion Ratio Lower Upper

75 100

110 6.7 18.7 56.1#

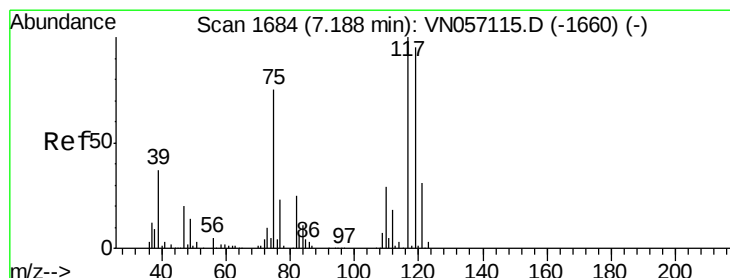
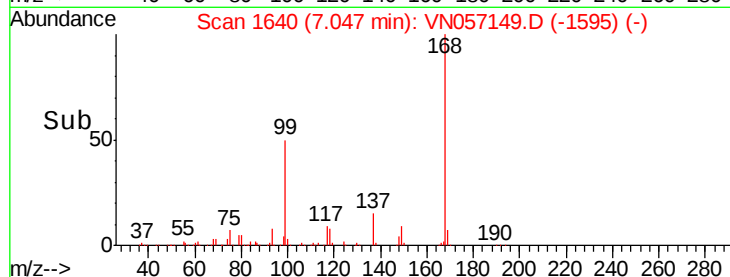
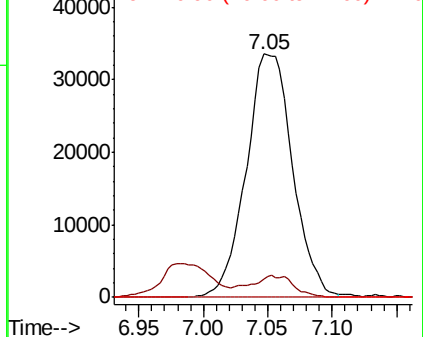
77 0.0 25.0 37.4#



Abundance Ion 74.90 (74.60 to 75.60): VN057149.D (-1595) (-)

Ion 109.90 (109.60 to 110.60): VN057149.D (-1595) (-)

Ion 76.90 (76.60 to 77.60): VN057149.D (-1595) (-)



#38

Carbon Tetrachloride

Concen: 6.965 ug/l

RT: 7.05 min Scan# 1641

Delta R.T. -0.14 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

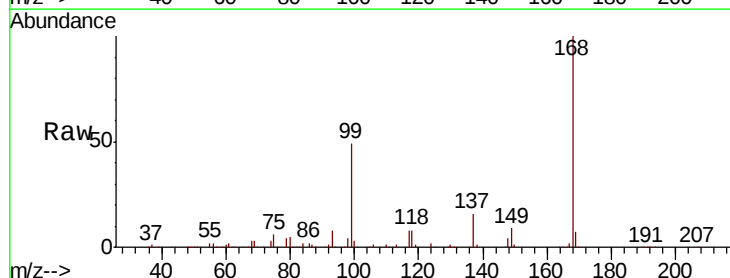
Tgt Ion: 117 Resp: 115985

Ion Ratio Lower Upper

117 100

119 6.3 75.8 113.6#

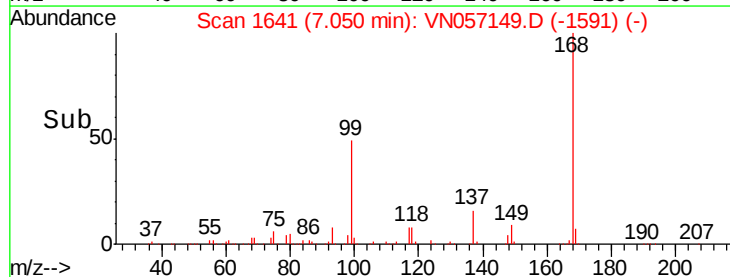
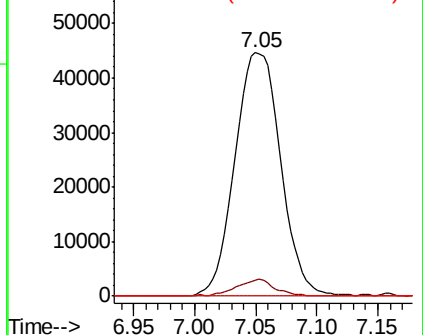
121 0.0 24.4 36.6#

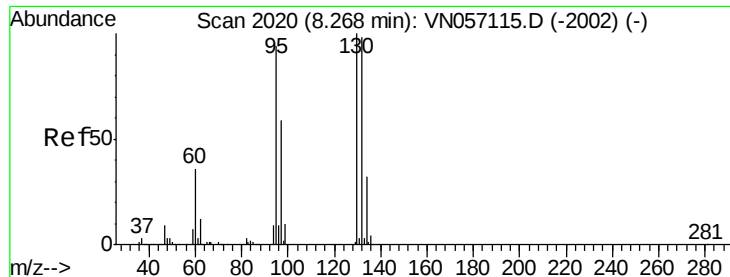


Abundance Ion 116.80 (116.50 to 117.50): VN057149.D (-1591) (-)

Ion 118.80 (118.50 to 119.50): VN057149.D (-1591) (-)

Ion 120.80 (120.50 to 121.50): VN057149.D (-1591) (-)





#44

Trichloroethene

Concen: 0.321 ug/l

RT: 8.27 min Scan# 2022

Delta R.T. 0.01 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

Instrument :

MSVOA\_N

ClientSampled :

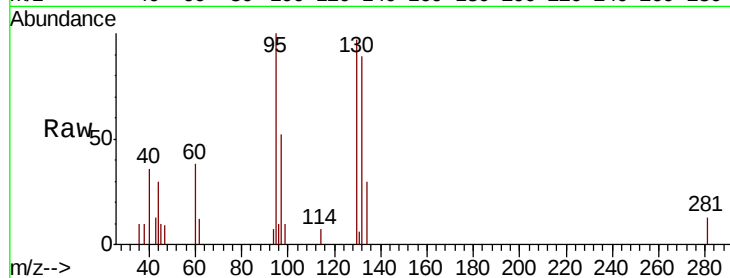
I.BLK

Tgt Ion:130 Resp: 4547

Ion Ratio Lower Upper

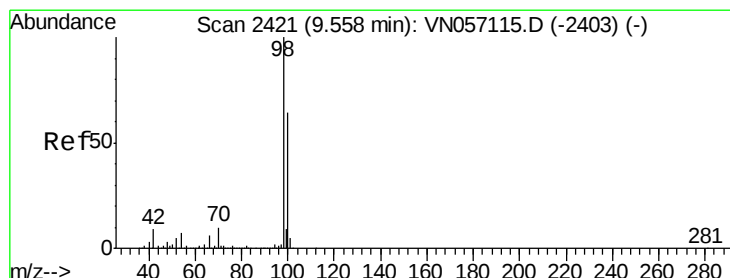
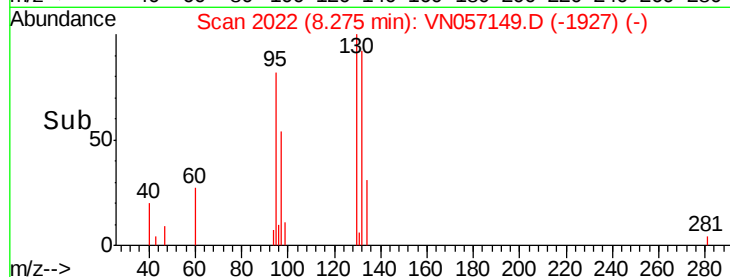
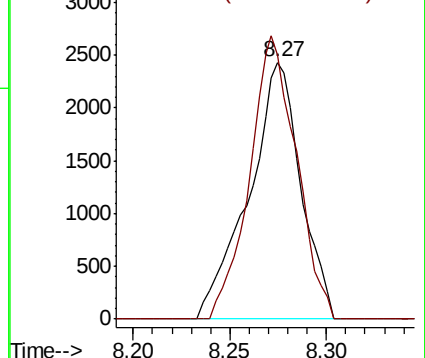
130 100

95 103.1 0.0 187.4



Abundance Ion 129.80 (129.50 to 130.50): V

Ion 94.90 (94.60 to 95.60): VN



#50

Toluene-d8

Concen: 47.979 ug/l

RT: 9.56 min Scan# 2421

Delta R.T. 0.00 min

Lab File: VN057149.D

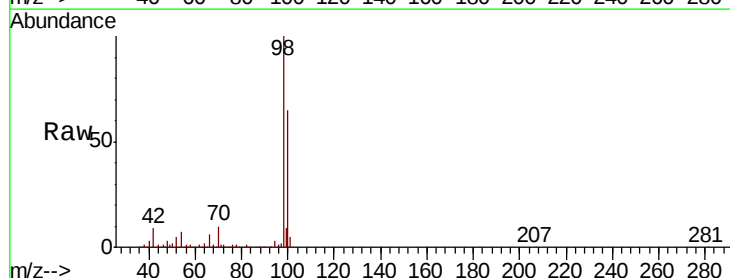
Acq: 9 Aug 2019 16:14

Tgt Ion: 98 Resp: 2235260

Ion Ratio Lower Upper

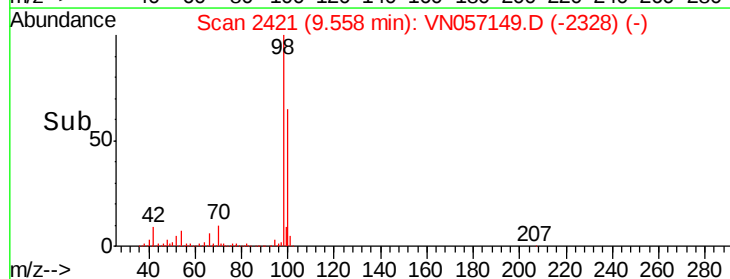
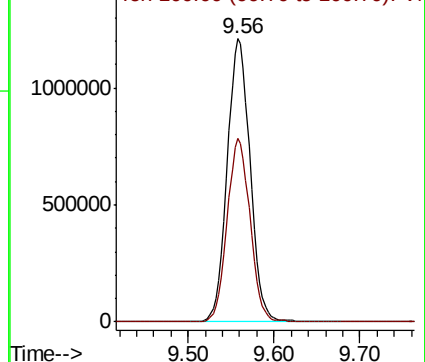
98 100

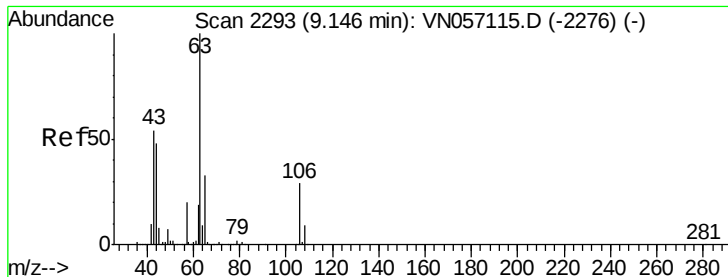
100 64.7 51.2 76.8



Abundance Ion 98.00 (97.70 to 98.70): VN

Ion 100.00 (99.70 to 100.70): VN

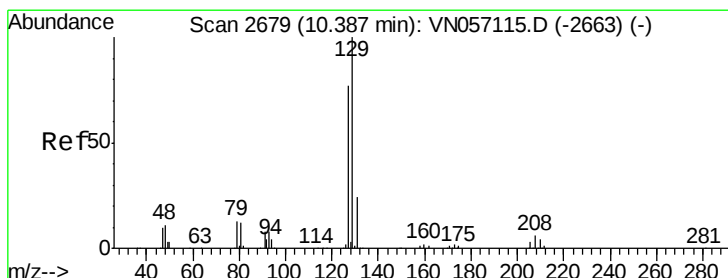
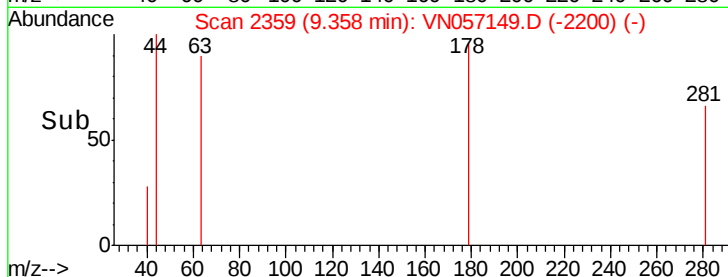
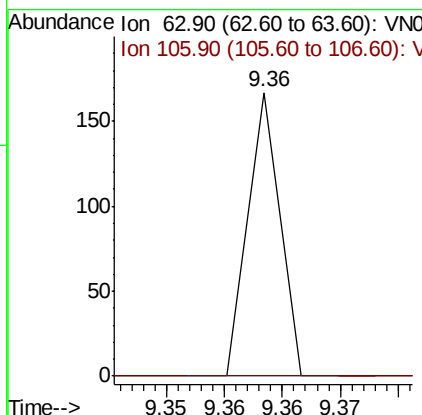
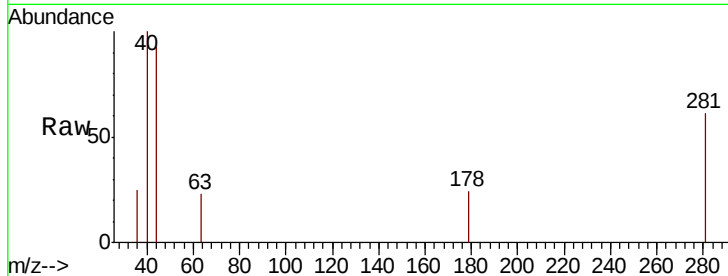




#58  
 2-Chloroethyl Vinyl ether  
 Concen: 13.120 ug/l  
 RT: 9.36 min Scan# 2359  
 Delta R.T. 0.21 min  
 Lab File: VN057149.D  
 Acq: 9 Aug 2019 16:14

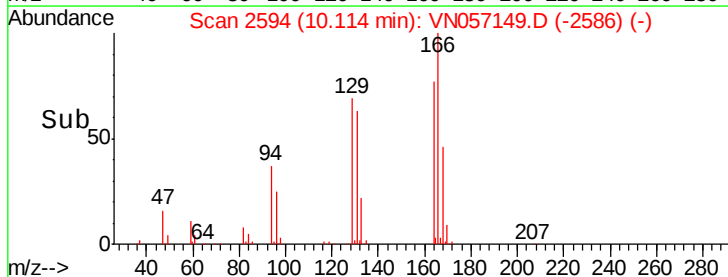
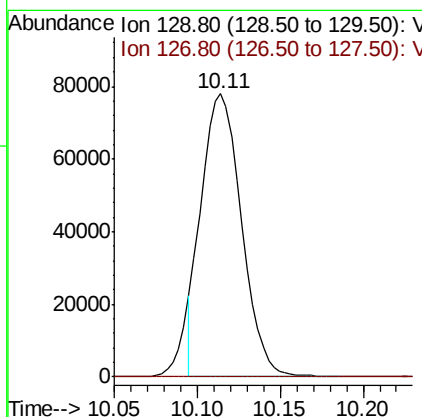
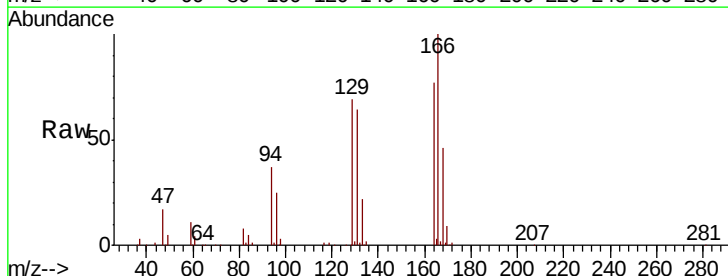
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 I.BLK

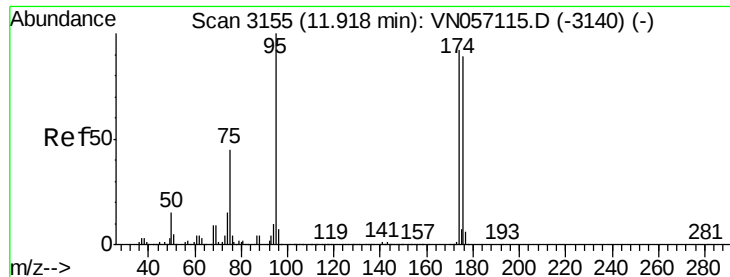
Tgt Ion: 63 Resp: 32  
 Ion Ratio Lower Upper  
 63 100  
 106 0.0 22.6 33.8#



#60  
 Dibromochloromethane  
 Concen: 10.079 ug/l  
 RT: 10.11 min Scan# 2594  
 Delta R.T. -0.27 min  
 Lab File: VN057149.D  
 Acq: 9 Aug 2019 16:14

Tgt Ion: 129 Resp: 130689  
 Ion Ratio Lower Upper  
 129 100  
 127 0.0 38.6 116.0#





#62

4-Bromofluorobenzene

Concen: 36.823 ug/l

RT: 11.92 min Scan# 3156

Delta R.T. 0.00 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

Instrument :

MSVOA\_N

ClientSampleId :

I.BLK

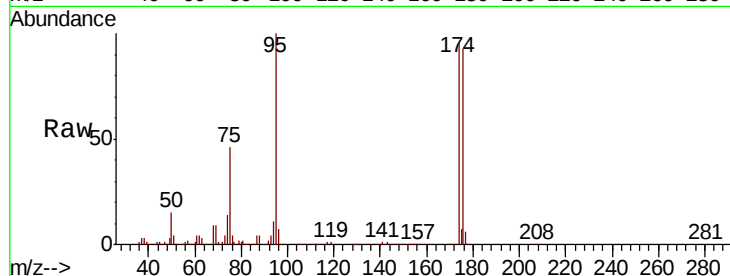
Tgt Ion: 95 Resp: 552758

Ion Ratio Lower Upper

95 100

174 94.6 0.0 185.0

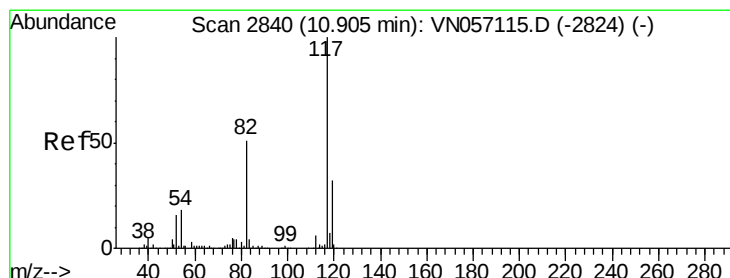
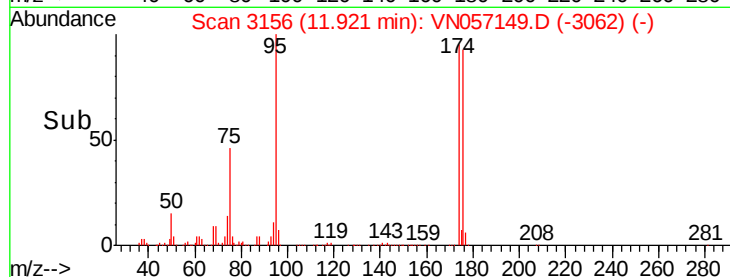
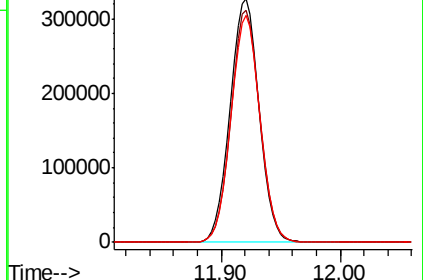
176 92.9 0.0 181.2



Abundance Ion 94.90 (94.60 to 95.60): VN057115.D (-3140) (-)

Ion 173.80 (173.50 to 174.50): VN057115.D (-3140) (-)

Ion 175.80 (175.50 to 176.50): VN057115.D (-3140) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 10.91 min Scan# 2841

Delta R.T. 0.00 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

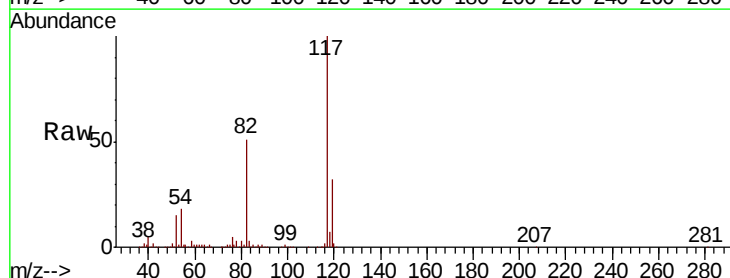
Tgt Ion: 117 Resp: 1556439

Ion Ratio Lower Upper

117 100

82 50.8 40.8 61.2

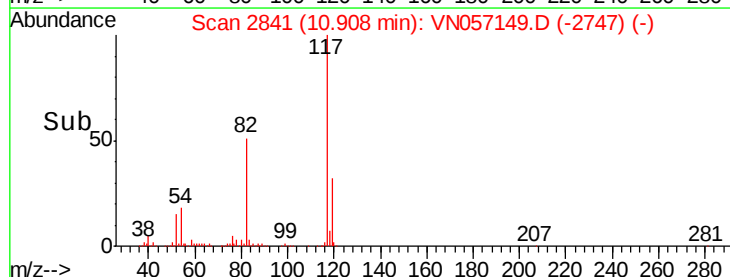
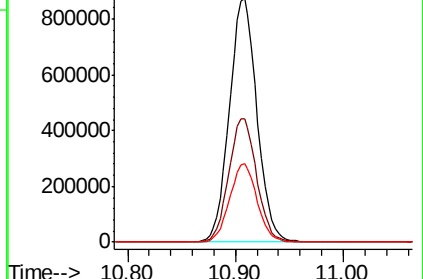
119 32.3 25.7 38.5

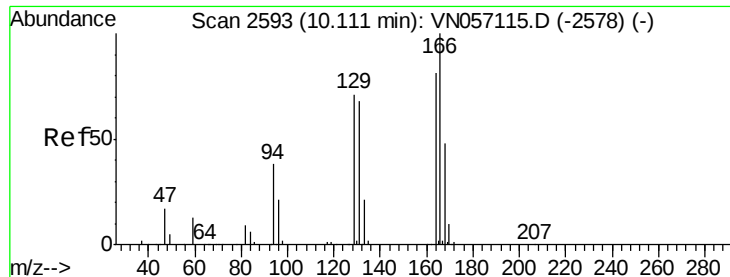


Abundance Ion 116.90 (116.60 to 117.60): VN057115.D (-2824) (-)

Ion 82.00 (81.70 to 82.70): VN057115.D (-2824) (-)

Ion 118.90 (118.60 to 119.60): VN057115.D (-2824) (-)

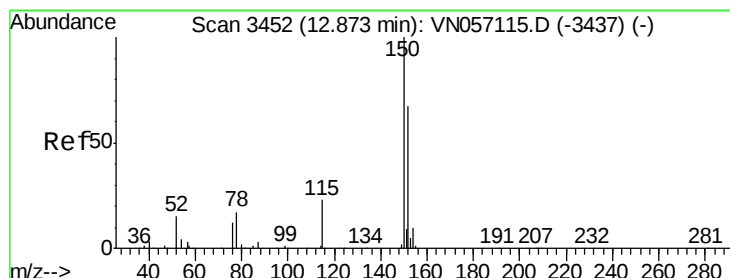
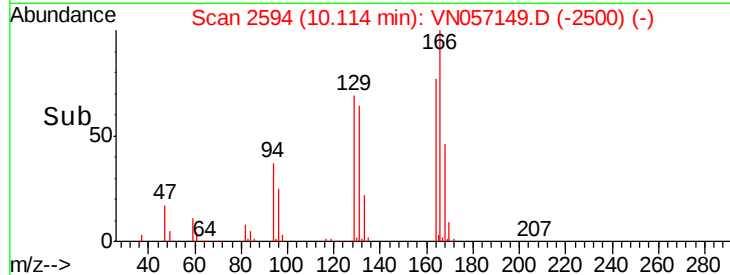
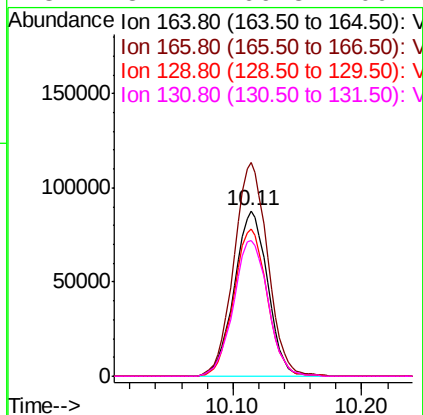
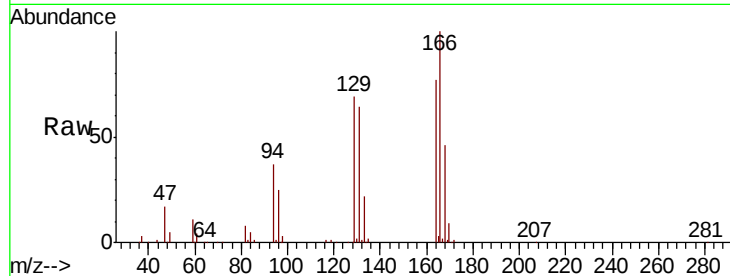




#64  
Tetrachloroethene  
Concen: 12.217 ug/l  
RT: 10.11 min Scan# 2594  
Delta R.T. 0.00 min  
Lab File: VN057149.D  
Acq: 9 Aug 2019 16:14

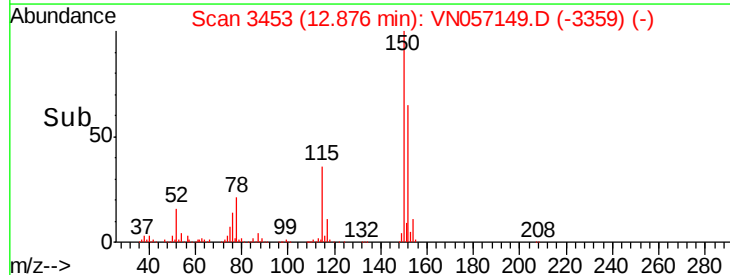
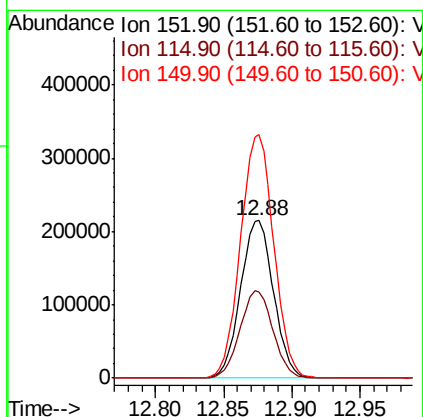
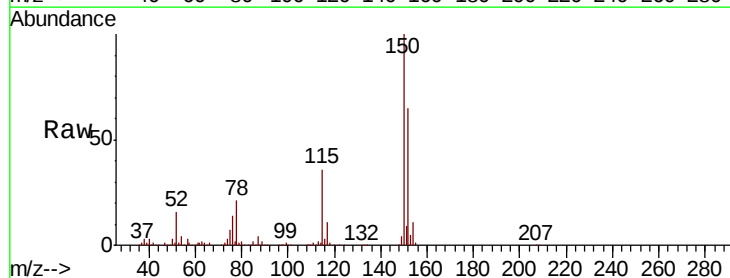
Instrument :  
MSVOA\_N  
ClientSampleId :  
I.BLK

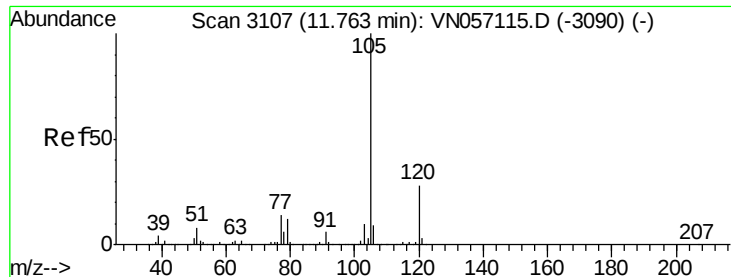
Tgt Ion:164 Resp: 158139  
Ion Ratio Lower Upper  
164 100  
166 129.1 98.3 147.5  
129 88.8 69.8 104.6  
131 82.4 66.8 100.2



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 12.88 min Scan# 3453  
Delta R.T. 0.00 min  
Lab File: VN057149.D  
Acq: 9 Aug 2019 16:14

Tgt Ion:152 Resp: 361139  
Ion Ratio Lower Upper  
152 100  
115 55.2 27.5 82.5  
150 155.8 0.0 341.6





#73

Isopropylbenzene

Concen: Below Cal

RT: 11.77 min Scan# 3109

Delta R.T. 0.01 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

Instrument :

MSVOA\_N

ClientSampled :

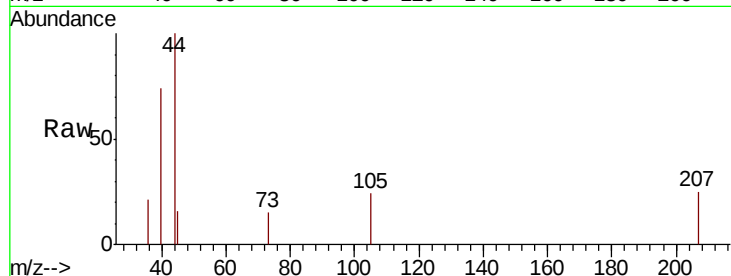
I.BLK

Tgt Ion: 105 Resp: 157

Ion Ratio Lower Upper

105 100

120 0.0 13.7 41.0#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

11.77

250

200

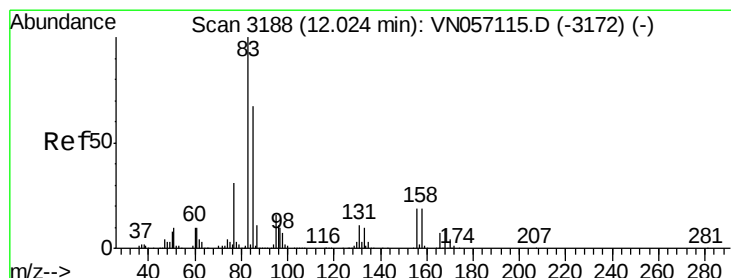
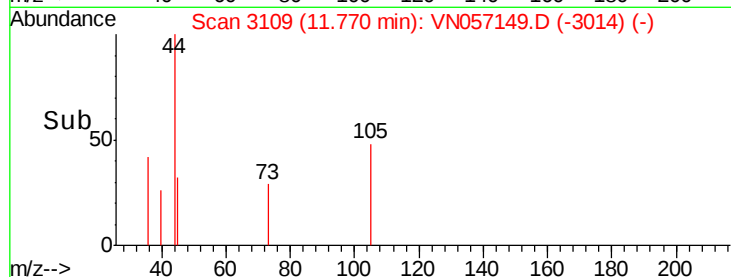
150

100

50

0

Time-->



#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 11.92 min Scan# 3155

Delta R.T. -0.11 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

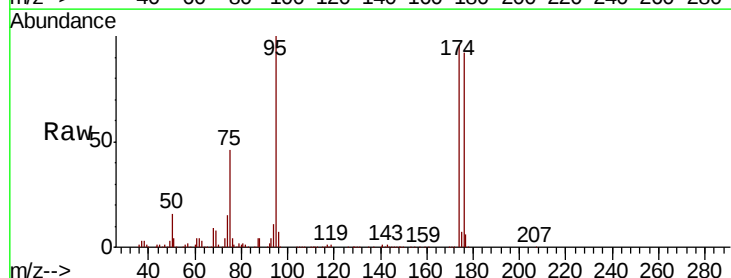
Tgt Ion: 83 Resp: 211

Ion Ratio Lower Upper

83 100

131 262.1 5.5 16.4#

85 0.0 32.4 97.0#



Abundance Ion 82.90 (82.60 to 83.60): V

Ion 130.80 (130.50 to 131.50): V

Ion 84.90 (84.60 to 85.60): V

500

400

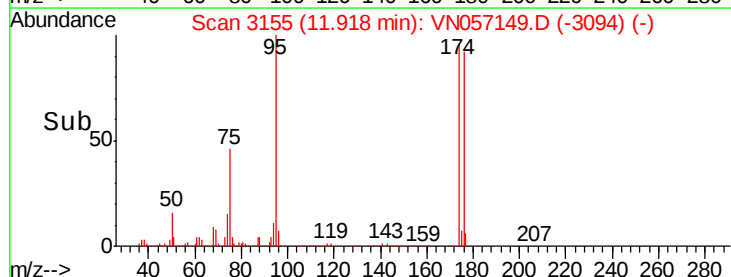
300

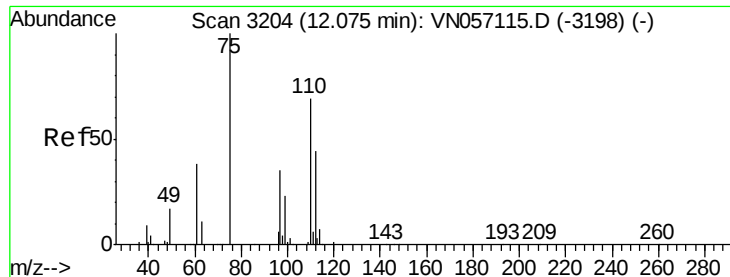
200

100

0

Time-->





#76

1,2,3-Trichloropropane

Concen: 35.256 ug/l

RT: 11.92 min Scan# 3156

Delta R.T. -0.15 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

Instrument :

MSVOA\_N

ClientSampleId :

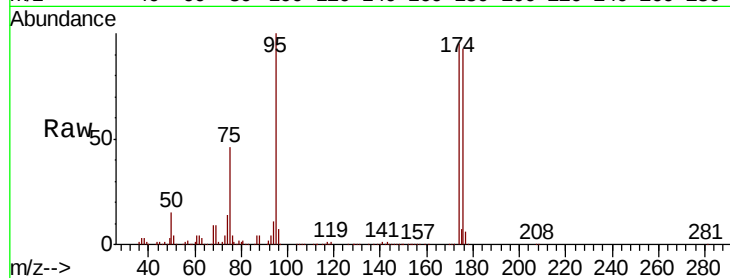
I.BLK

Tgt Ion: 75 Resp: 254669

Ion Ratio Lower Upper

75 100

77 1.5 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

11.92

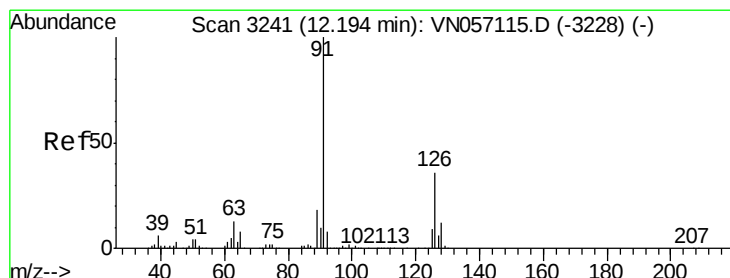
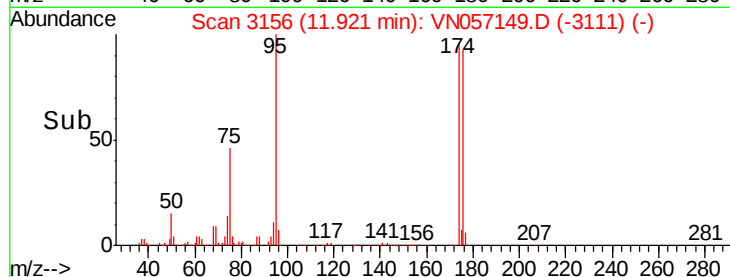
150000

100000

50000

0

Time-->



#79

2-Chlorotoluene

Concen: Below Cal

RT: 12.19 min Scan# 3240

Delta R.T. -0.00 min

Lab File: VN057149.D

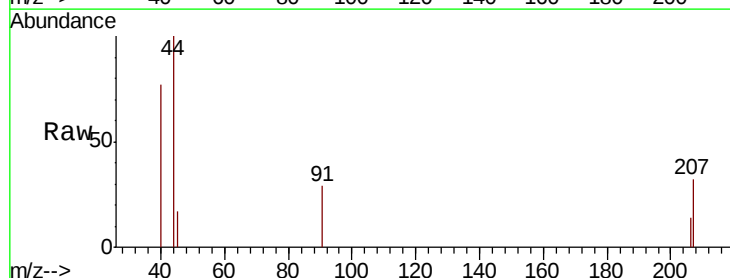
Acq: 9 Aug 2019 16:14

Tgt Ion: 91 Resp: 173

Ion Ratio Lower Upper

91 100

126 0.0 18.1 54.3#



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 125.90 (125.60 to 126.60): V

12.19

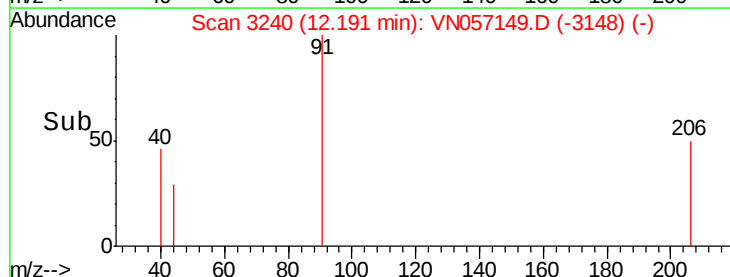
300

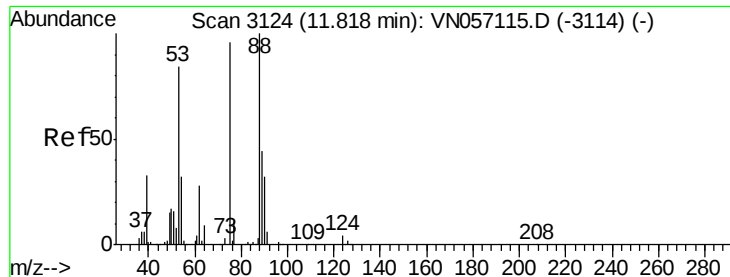
200

100

0

Time-->





#81

trans-1,4-Dichloro-2-butene

Concen: 103.686 ug/l

RT: 11.92 min Scan# 3156

Delta R.T. 0.10 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

Instrument :

MSVOA\_N

ClientSampleId :

I.BLK

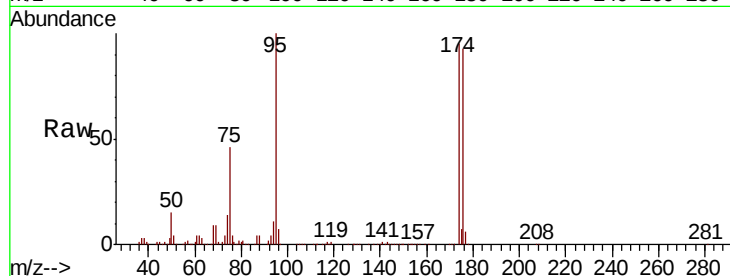
Tgt Ion: 75 Resp: 254669

Ion Ratio Lower Upper

75 100

53 0.0 70.6 106.0#

89 0.0 36.4 54.6#



Abundance Ion 74.90 (74.60 to 75.60): VN057149.D (-3031) (-)

Ion 53.00 (52.70 to 53.70): VN057149.D (-3031) (-)

Ion 88.90 (88.60 to 89.60): VN057149.D (-3031) (-)

11.92

200000

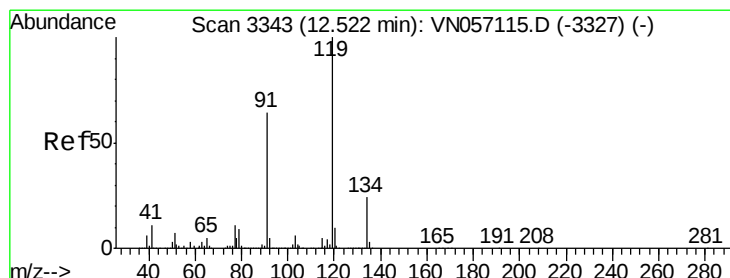
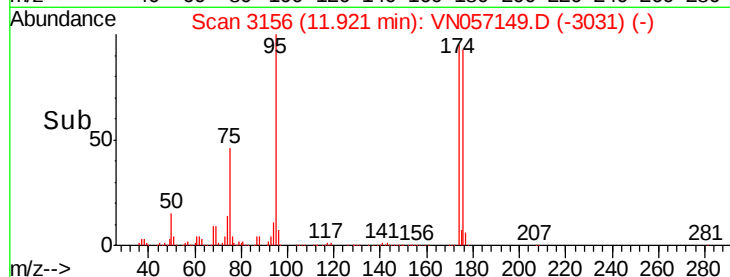
150000

100000

50000

0

Time-->



#83

tert-Butylbenzene

Concen: Below Cal

RT: 12.27 min Scan# 3264

Delta R.T. -0.25 min

Lab File: VN057149.D

Acq: 9 Aug 2019 16:14

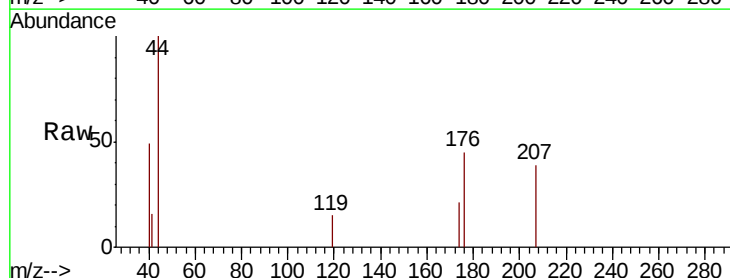
Tgt Ion: 119 Resp: 30

Ion Ratio Lower Upper

119 100

91 0.0 31.4 94.2#

134 0.0 13.2 39.6#



Abundance Ion 119.00 (118.70 to 119.70): VN057149.D (-3250) (-)

Ion 91.00 (90.70 to 91.70): VN057149.D (-3250) (-)

Ion 134.00 (133.70 to 134.70): VN057149.D (-3250) (-)

12.27

200

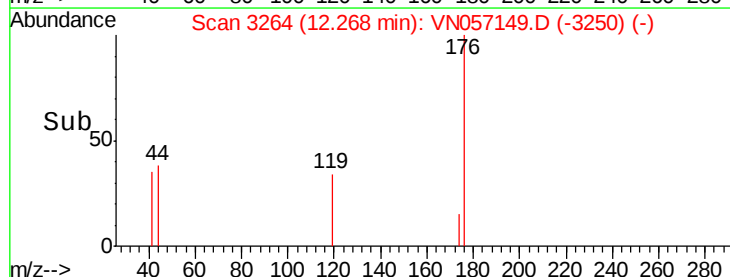
150

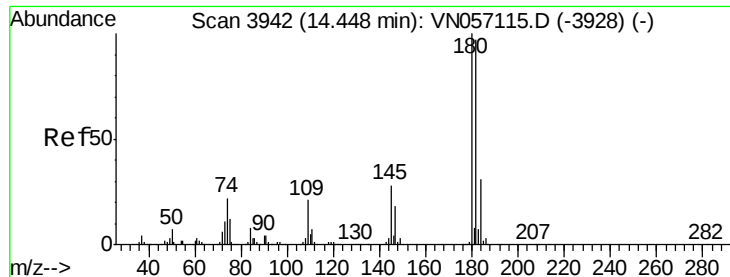
100

50

0

Time-->

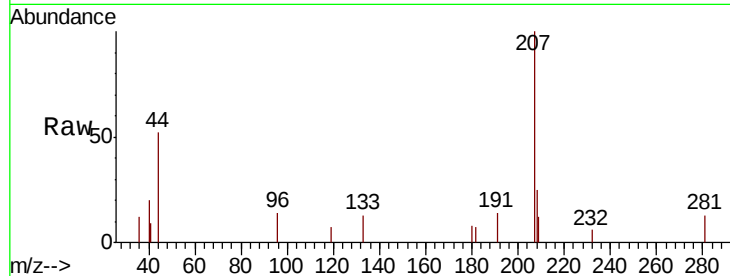




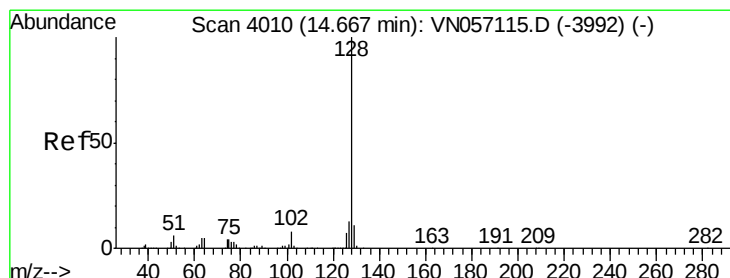
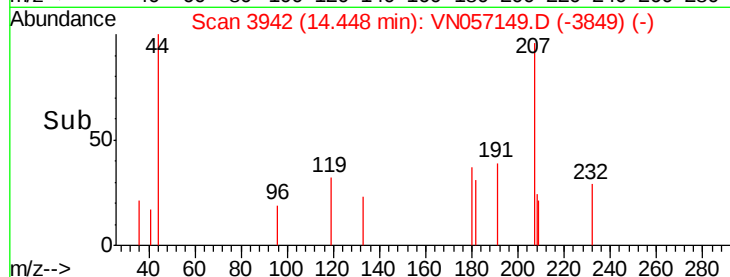
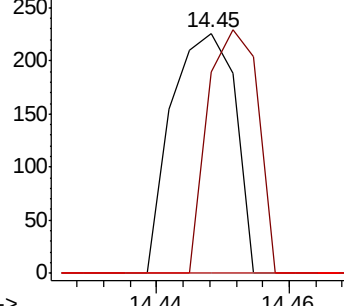
#93  
 1,2,4-Trichlorobenzene  
 Concen: 5.955 ug/l  
 RT: 14.45 min Scan# 3942  
 Delta R.T. 0.00 min  
 Lab File: VN057149.D  
 Acq: 9 Aug 2019 16:14

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 I.BLK

Tgt Ion:180 Resp: 150  
 Ion Ratio Lower Upper  
 180 100  
 182 80.0 47.5 142.6  
 145 0.0 14.1 42.2#

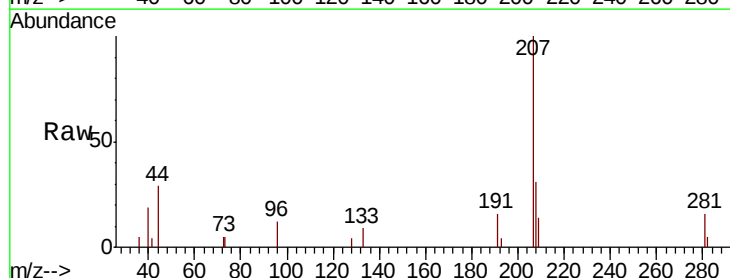


Abundance Ion 179.80 (179.50 to 180.50): V  
 Ion 181.80 (181.50 to 182.50): V  
 Ion 144.80 (144.50 to 145.50): V

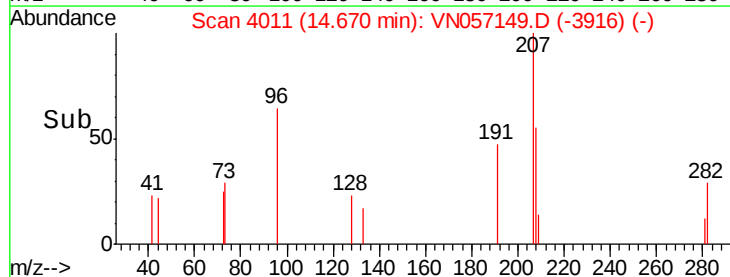
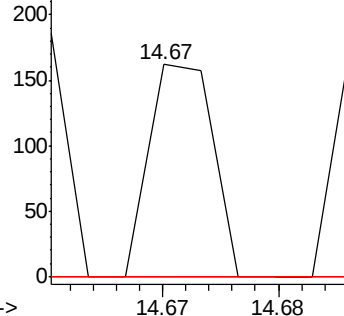


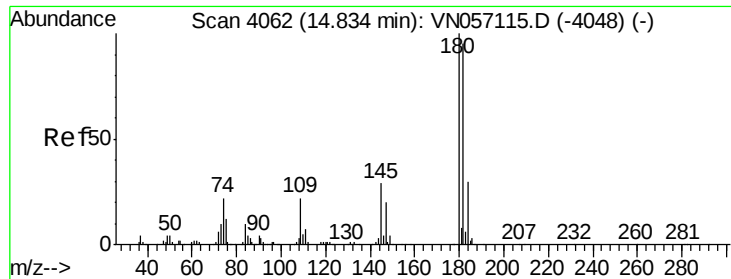
#95  
 Naphthalene  
 Concen: 2.809 ug/l  
 RT: 14.67 min Scan# 4011  
 Delta R.T. 0.00 min  
 Lab File: VN057149.D  
 Acq: 9 Aug 2019 16:14

Tgt Ion:128 Resp: 62  
 Ion Ratio Lower Upper  
 128 100  
 127 0.0 10.3 15.5#  
 129 0.0 8.8 13.2#



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





#96  
 1,2,3-Trichlorobenzene  
 Concen: 5.767 ug/l  
 RT: 14.84 min Scan# 4063  
 Delta R.T. 0.00 min  
 Lab File: VN057149.D  
 Acq: 9 Aug 2019 16:14

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 I.BLK

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 180     | 100   |       |        |
| 182     | 26.4  | 48.3  | 144.8# |
| 145     | 0.0   | 14.9  | 44.5#  |

