

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN052919\  
 Data File : VN055882.D  
 Acq On : 29 May 2019 17:03  
 Operator : JC/SP  
 Sample : K3082-02 10X  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 14B-2

Quant Time: May 30 03:41:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N052219W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu May 23 05:54:54 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 7.19  | 128  | 51639    | 30.00 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 8.58  | 114  | 271553   | 30.00 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 11.41 | 117  | 219163   | 30.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |       |          |          |      |         |
|---------------------------|--------|-------|----------|----------|------|---------|
| 27) 1,2-Dichloroethane-d4 | 8.03   | 65    | 104302   | 30.90    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 50 - 169 | Recovery | =    | 103.00% |
| 60) 4-Bromofluorobenzene  | 12.40  | 95    | 80624    | 23.65    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 56 - 143 | Recovery | =    | 78.83%  |
| 63) Toluene-d8            | 10.09  | 98    | 317456   | 31.70    | ug/l | 0.00    |
| Spiked Amount             | 30.000 | Range | 66 - 137 | Recovery | =    | 105.67% |

## Target Compounds

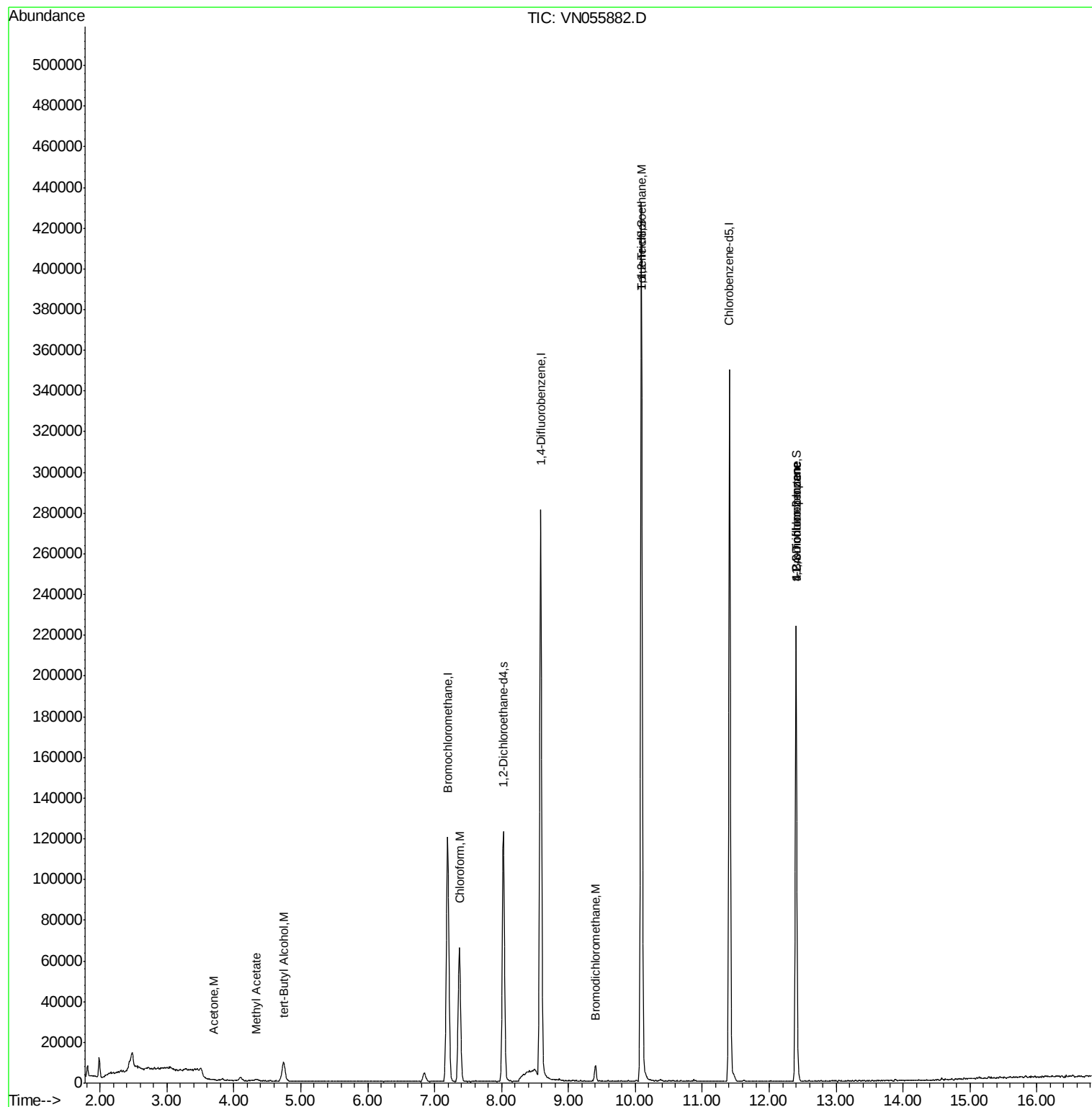
|                             |       |    |       |               | Ovalue |
|-----------------------------|-------|----|-------|---------------|--------|
| 12) Methyl Acetate          | 4.34  | 43 | 2302  | 0.691 ug/l #  | 51     |
| 15) Acetone                 | 3.70  | 58 | 138   | 0.292 ug/l #  | 1      |
| 23) tert-Butyl Alcohol      | 4.74  | 59 | 9034  | 13.535 ug/l # | 100    |
| 25) Chloroform              | 7.37  | 83 | 71887 | 13.523 ug/l   | 100    |
| 41) Bromodichloromethane    | 9.40  | 83 | 5741  | 1.375 ug/l    | 96     |
| 50) 1,1,2-Trichloroethane   | 10.10 | 97 | 9894  | 3.336 ug/l #  | 1      |
| 72) 1,2,3-Trichloropropane  | 12.40 | 75 | 36995 | 11.028 ug/l   | 1      |
| 77) t-1,4-Dichloro-2-butene | 12.40 | 75 | 36995 | 27.763 ug/l # | 17     |

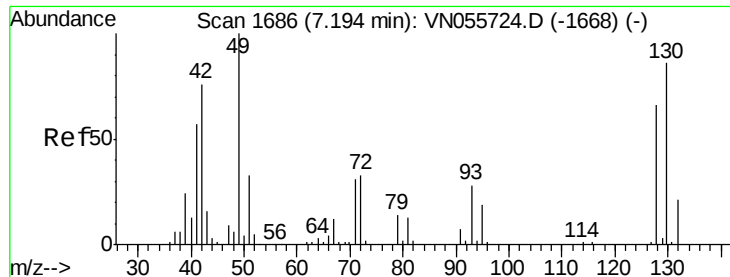
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN052919\  
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Instrument :  
MSVOA\_N  
ClientSampleId :  
14B-2

Quant Time: May 30 03:41:15 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA N\METHODS\624N052219W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Thu May 23 05:54:54 2019  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.19 min Scan# 1686

Delta R.T. 0.00 min

Lab File: VN055882.D

Acq: 29 May 2019 17:03

Instrument :

MSVOA\_N

ClientSampled :

14B-2

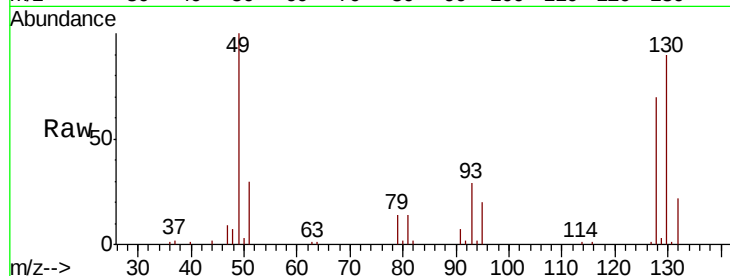
Tot Ion:128 Resp: 51639

Ion Ratio Lower Upper

128 100

49 146.1 0.0 383.2

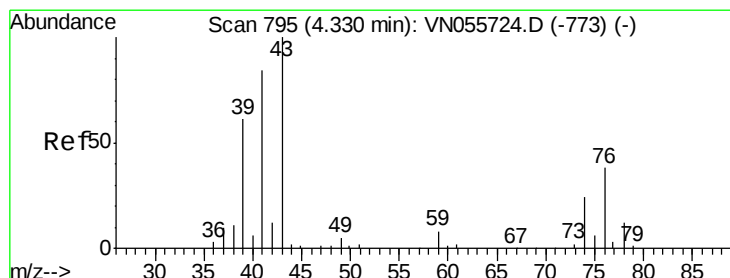
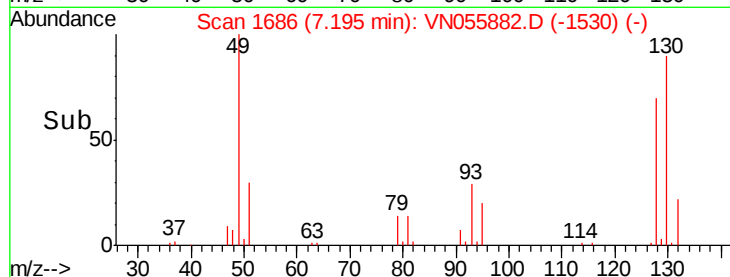
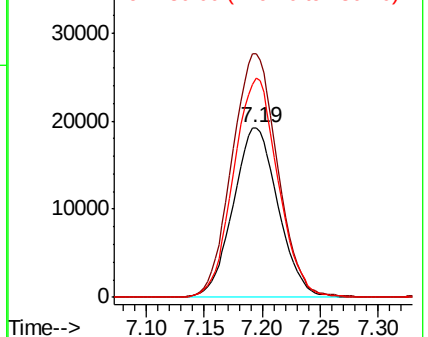
130 128.5 0.0 326.3



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VN0

Ion 130.00 (129.70 to 130.70): V



#12

Methyl Acetate

Concen: 0.691 ug/l

RT: 4.34 min Scan# 797

Delta R.T. 0.01 min

Lab File: VN055882.D

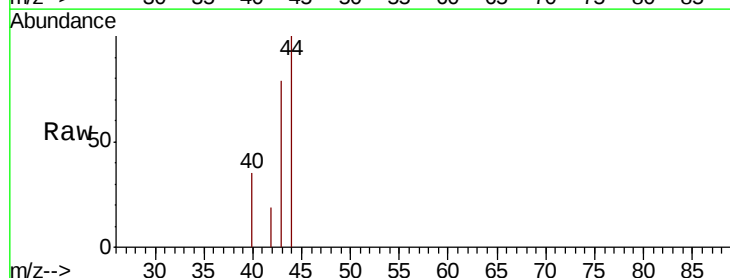
Acq: 29 May 2019 17:03

Tgt Ion: 43 Resp: 2302

Ion Ratio Lower Upper

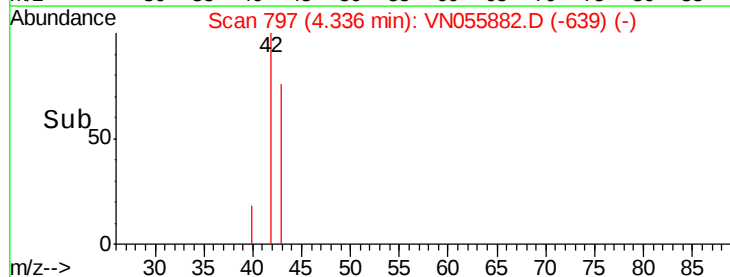
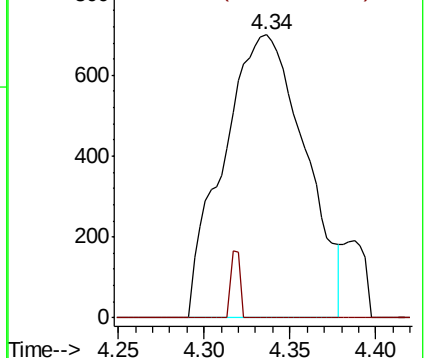
43 100

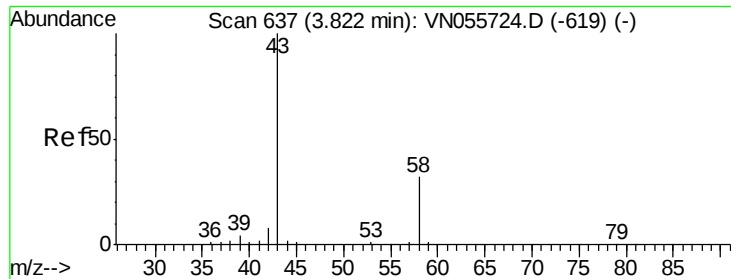
74 0.0 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 74.00 (73.70 to 74.70): VN0





#15

Acetone

Concen: 0.292 ug/l

RT: 3.70 min Scan# 599

Delta R.T. -0.12 min

Lab File: VN055882.D

Acq: 29 May 2019 17:03

Instrument :

MSVOA\_N

ClientSampleId :

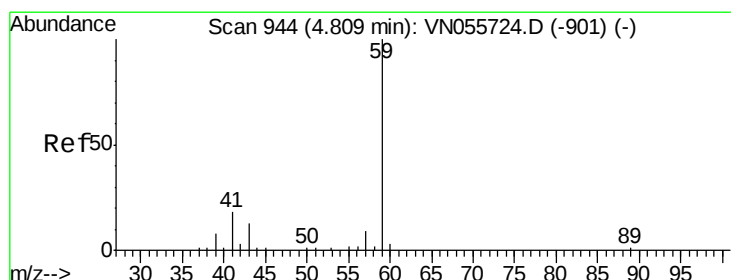
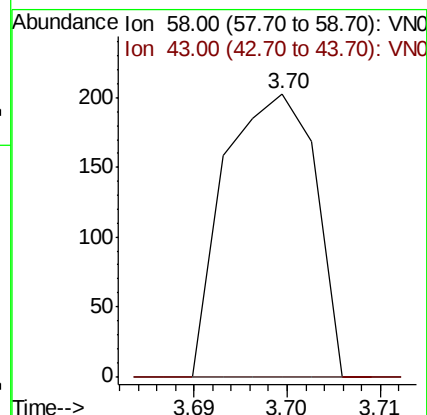
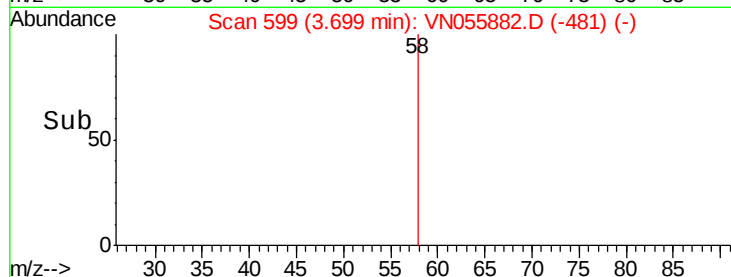
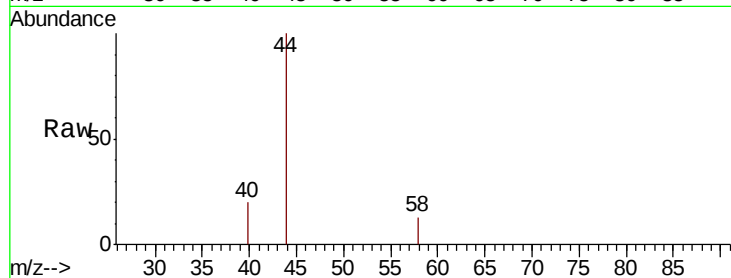
14B-2

Tot Ion: 58 Resp: 138

Ion Ratio Lower Upper

58 100

43 0.0 248.8 373.2#



#23

tert-Butyl Alcohol

Concen: 13.535 ug/l

RT: 4.74 min Scan# 923

Delta R.T. -0.07 min

Lab File: VN055882.D

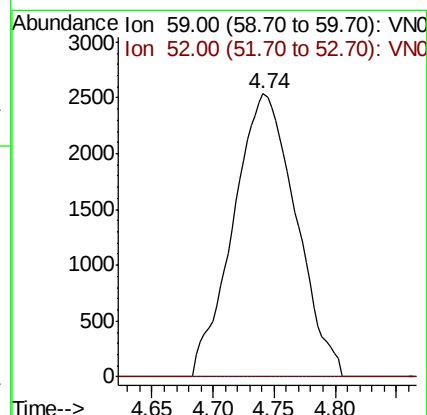
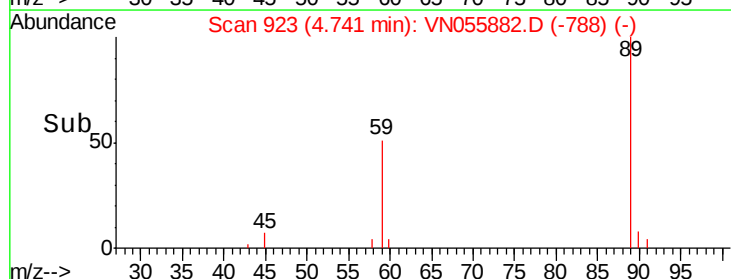
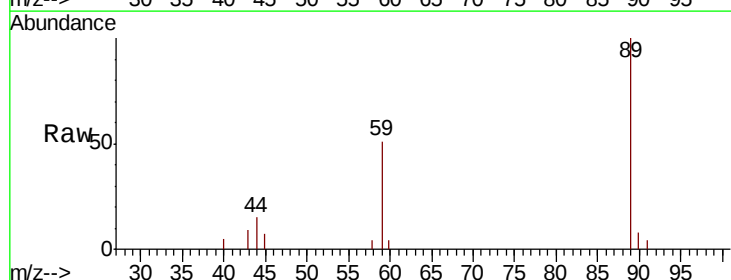
Acq: 29 May 2019 17:03

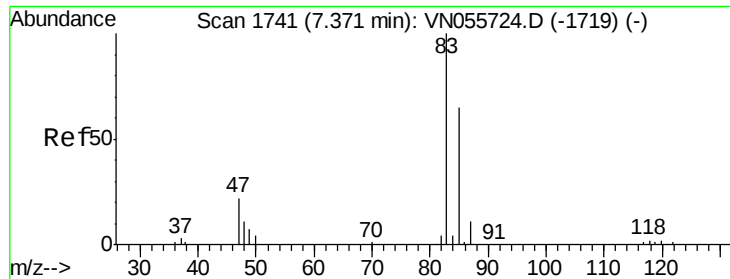
Tgt Ion: 59 Resp: 9034

Ion Ratio Lower Upper

59 100

52 0.0 0.0 0.0

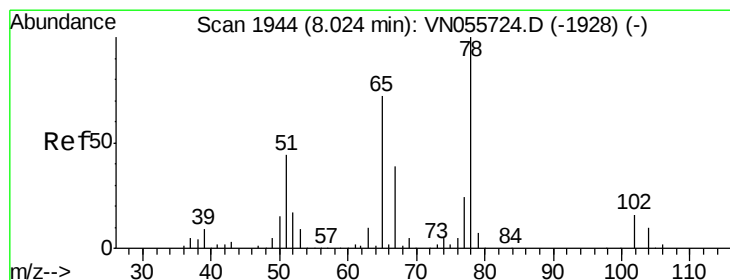
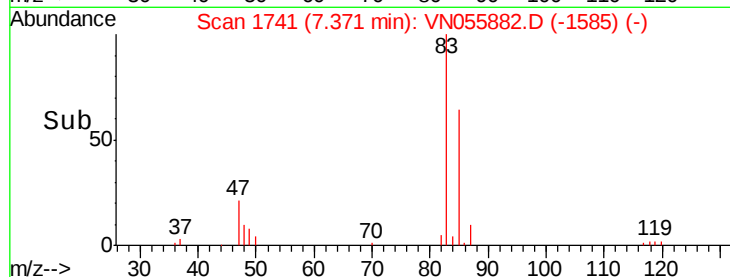
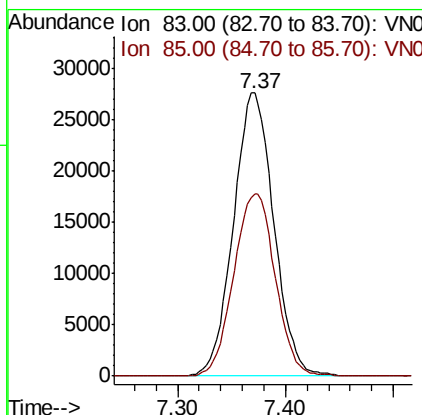
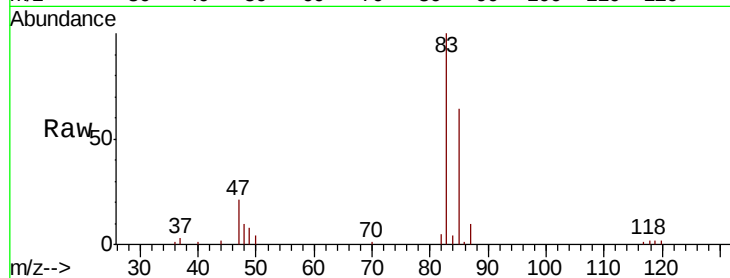




#25  
Chloroform  
Concen: 13.523 ug/l  
RT: 7.37 min Scan# 1741  
Delta R.T. 0.00 min  
Lab File: VN055882.D  
Acq: 29 May 2019 17:03

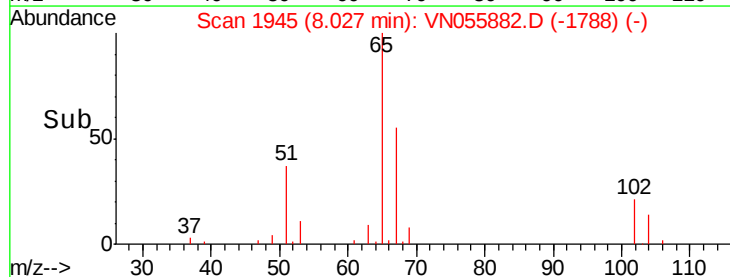
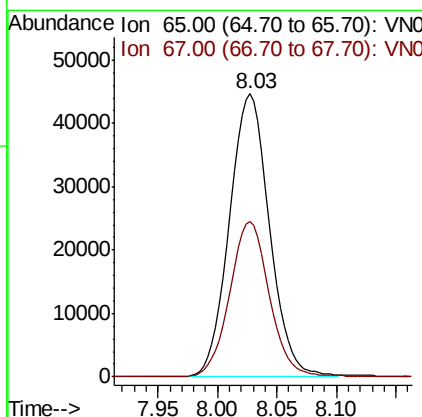
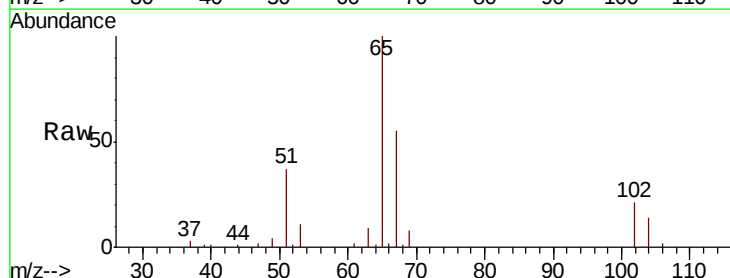
Instrument :  
MSVOA\_N  
ClientSampled :  
14B-2

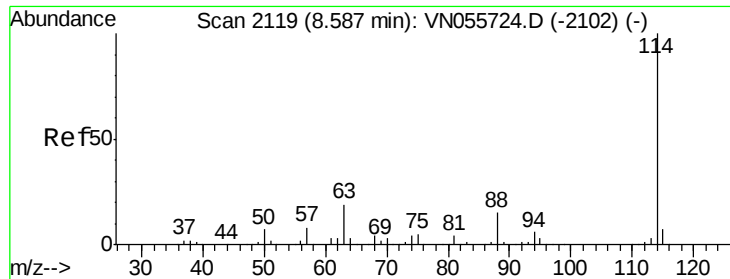
Tot Ion: 83 Resp: 71887  
Ion Ratio Lower Upper  
83 100  
85 64.5 51.7 77.5



#27  
1,2-Dichloroethane-d4  
Concen: 30.902 ug/l  
RT: 8.03 min Scan# 1945  
Delta R.T. 0.00 min  
Lab File: VN055882.D  
Acq: 29 May 2019 17:03

Tgt Ion: 65 Resp: 104302  
Ion Ratio Lower Upper  
65 100  
67 54.3 43.5 65.3

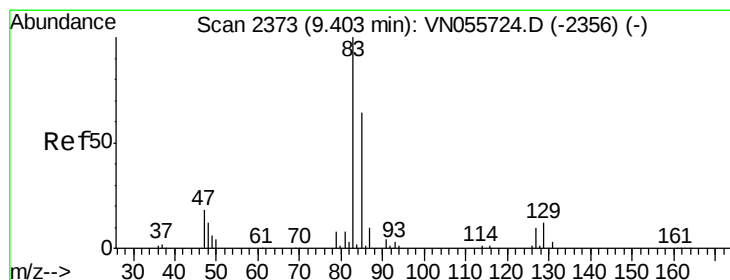
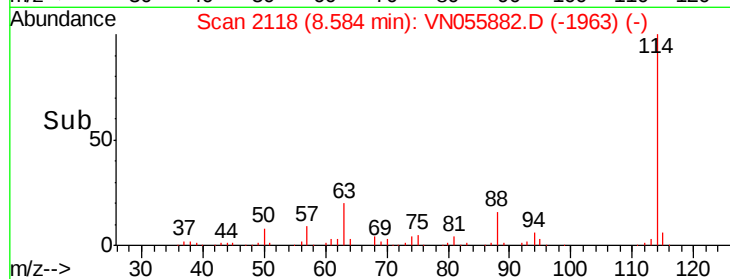
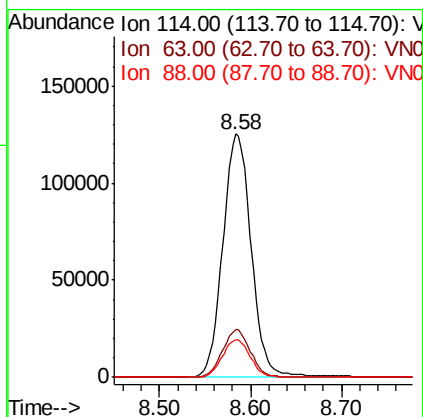
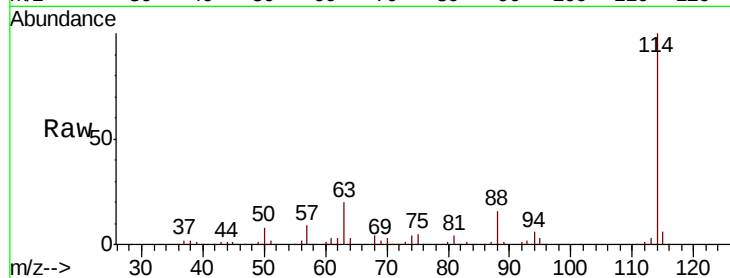




#28  
 1,4-Difluorobenzene  
 Concen: 30.000 ug/l  
 RT: 8.58 min Scan# 2118  
 Delta R.T. -0.00 min  
 Lab File: VN055882.D  
 Acq: 29 May 2019 17:03

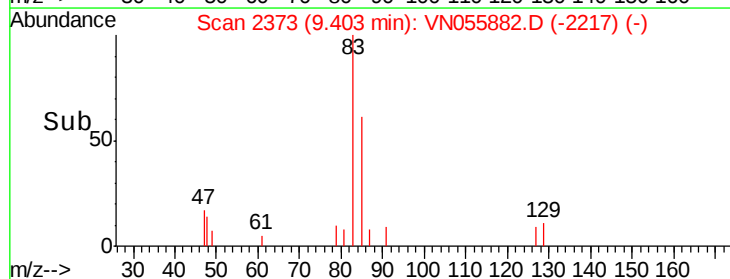
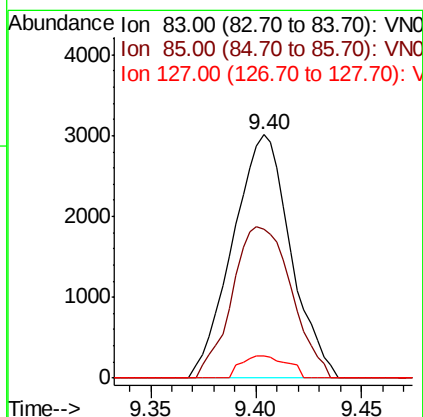
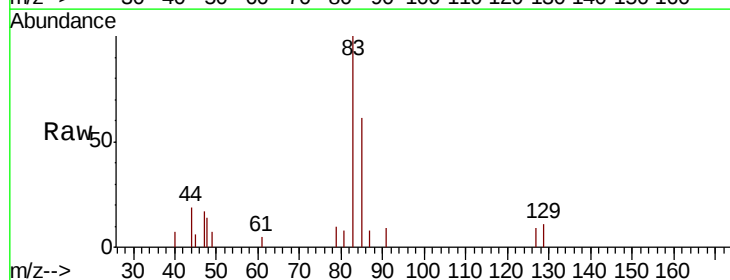
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 14B-2

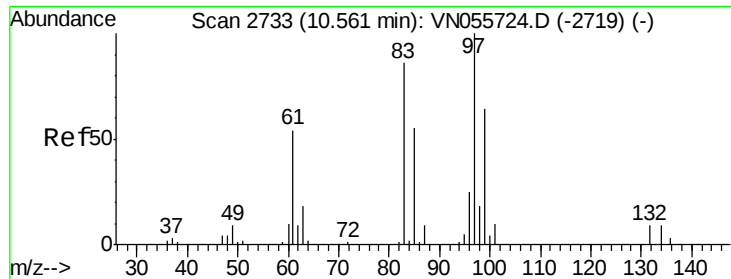
Tot Ion:114 Resp: 271553  
 Ion Ratio Lower Upper  
 114 100  
 63 19.1 15.6 23.4  
 88 15.3 12.3 18.5



#41  
 Bromodichloromethane  
 Concen: 1.375 ug/l  
 RT: 9.40 min Scan# 2373  
 Delta R.T. 0.00 min  
 Lab File: VN055882.D  
 Acq: 29 May 2019 17:03

Tgt Ion: 83 Resp: 5741  
 Ion Ratio Lower Upper  
 83 100  
 85 60.9 51.4 77.0  
 127 9.3 7.7 11.5

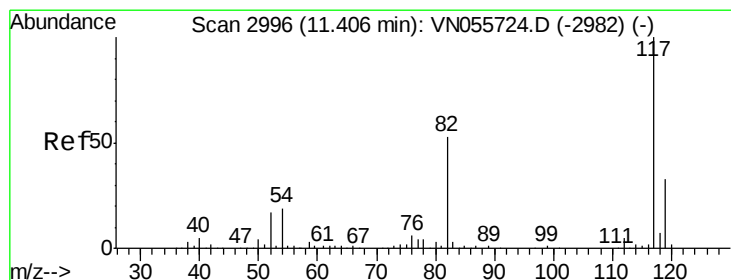
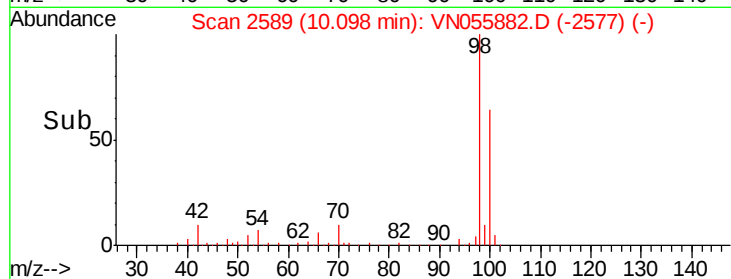
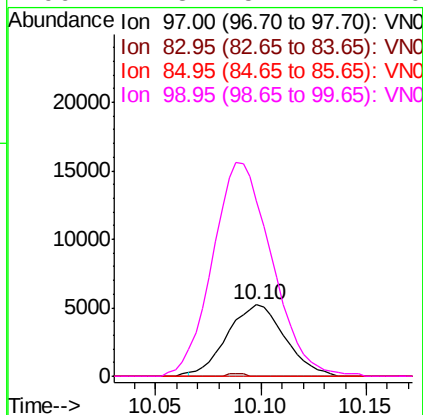
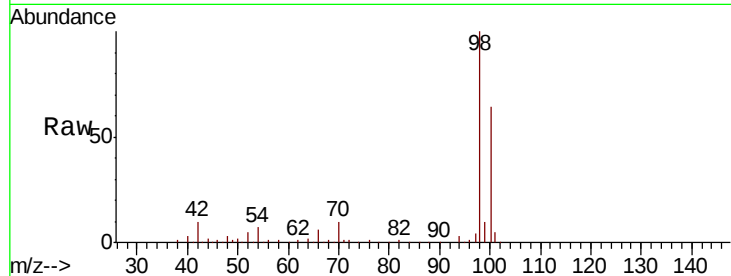




#50  
 1,1,2-Trichloroethane  
 Concen: 3.336 ug/l  
 RT: 10.10 min Scan# 2589  
 Delta R.T. -0.46 min  
 Lab File: VN055882.D  
 Acq: 29 May 2019 17:03

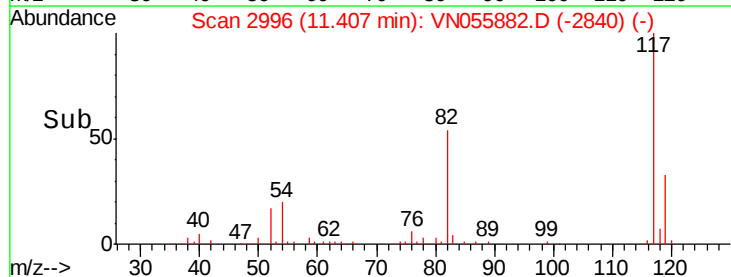
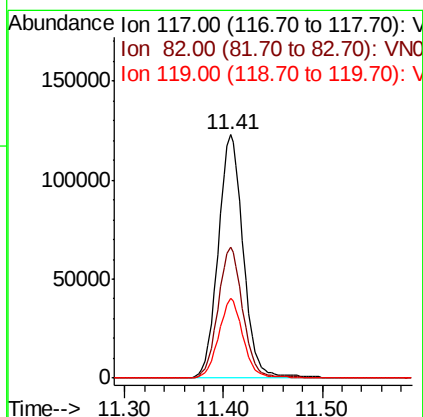
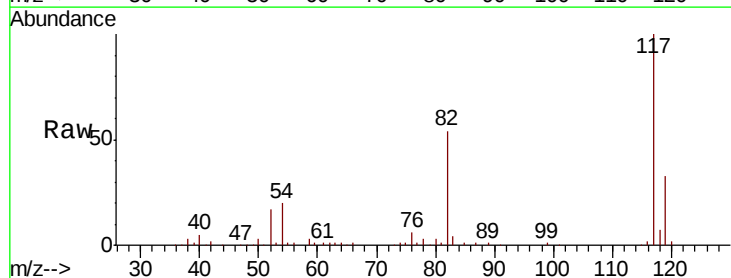
Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 14B-2

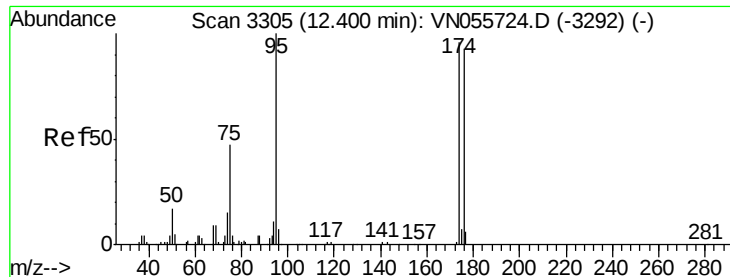
Tot Ion: 97 Resp: 9894  
 Ion Ratio Lower Upper  
 97 100  
 83 0.0 68.9 103.3#  
 85 0.0 44.3 66.5#  
 99 241.8 51.4 77.0#



#57  
 Chlorobenzene-d5  
 Concen: 30.000 ug/l  
 RT: 11.41 min Scan# 2996  
 Delta R.T. 0.00 min  
 Lab File: VN055882.D  
 Acq: 29 May 2019 17:03

Tgt Ion: 117 Resp: 219163  
 Ion Ratio Lower Upper  
 117 100  
 82 53.0 42.6 64.0  
 119 31.5 25.9 38.9





#60

4-Bromofluorobenzene

Concen: 23.648 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN055882.D

Acq: 29 May 2019 17:03

Instrument :

MSVOA\_N

ClientSampleId :

14B-2

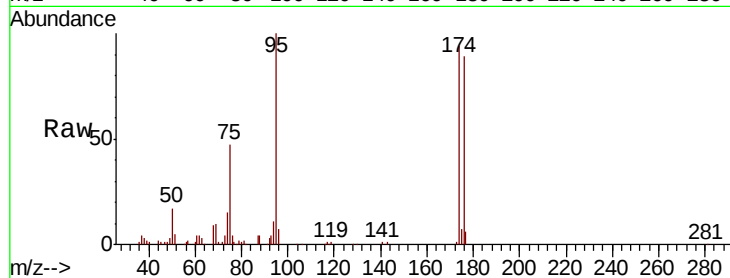
Tot Ion: 95 Resp: 80624

Ion Ratio Lower Upper

95 100

174 91.9 75.7 113.5

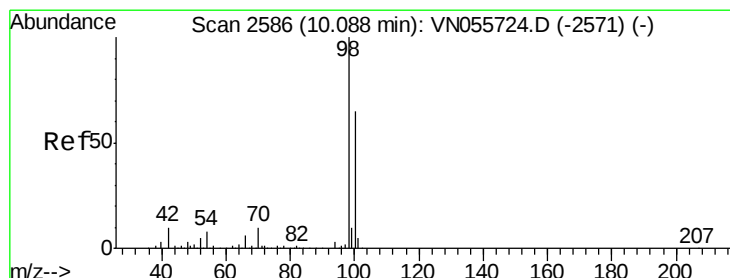
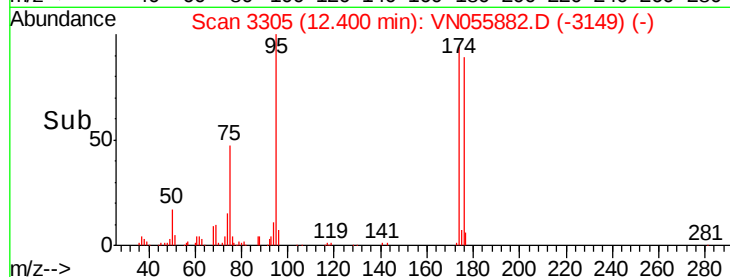
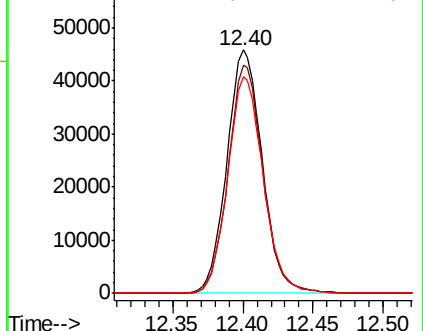
176 89.3 74.1 111.1



Abundance Ion 95.00 (94.70 to 95.70): VN055882.D (-2430) (-)

Ion 174.00 (173.70 to 174.70): VN055882.D (-2430) (-)

Ion 176.00 (175.70 to 176.70): VN055882.D (-2430) (-)



#63

Toluene-d8

Concen: 31.696 ug/l

RT: 10.09 min Scan# 2586

Delta R.T. 0.00 min

Lab File: VN055882.D

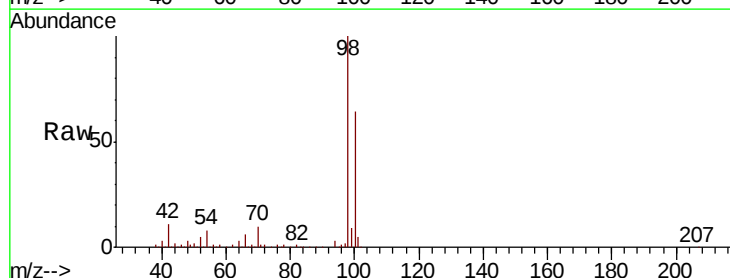
Acq: 29 May 2019 17:03

Tgt Ion: 98 Resp: 317456

Ion Ratio Lower Upper

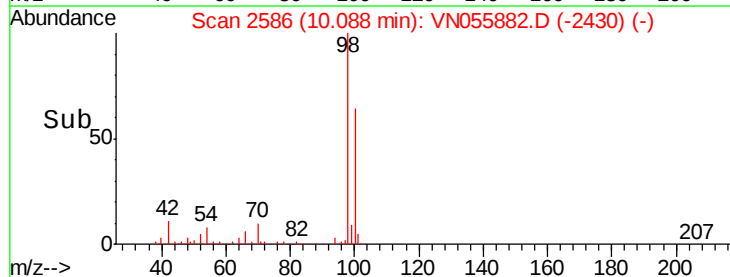
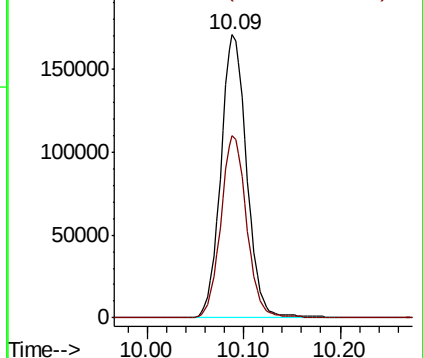
98 100

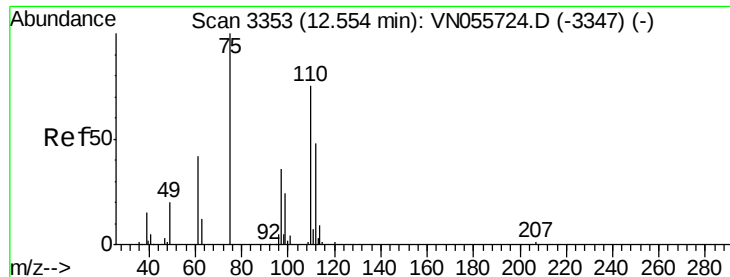
100 64.5 51.6 77.4



Abundance Ion 98.00 (97.70 to 98.70): VN055882.D (-2430) (-)

Ion 100.00 (99.70 to 100.70): VN055882.D (-2430) (-)





#72

1,2,3-Trichloropropane

Concen: 11.028 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN055882.D

Acq: 29 May 2019 17:03

Instrument :

MSVOA\_N

ClientSampleId :

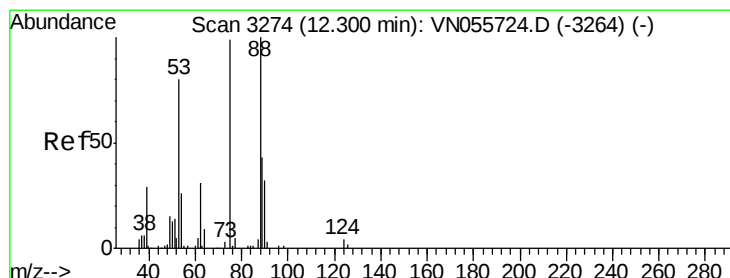
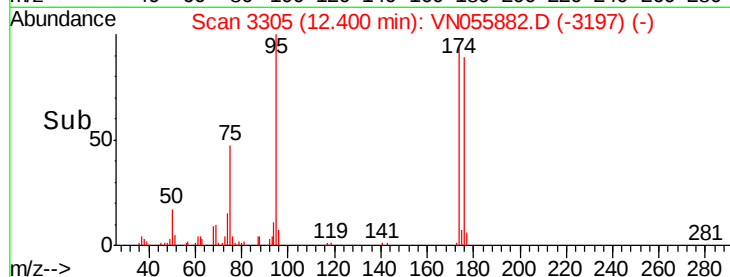
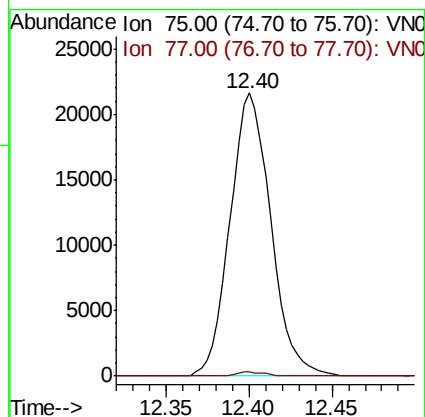
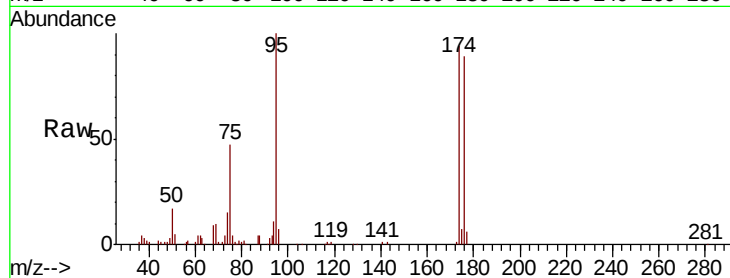
14B-2

Tot Ion: 75 Resp: 36995

Ion Ratio Lower Upper

75 100

77 1.0 0.0 349.8



#77

t-1,4-Dichloro-2-butene

Concen: 27.763 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN055882.D

Acq: 29 May 2019 17:03

Tgt Ion: 75 Resp: 36995

Ion Ratio Lower Upper

75 100

53 0.0 40.1 120.3#

89 0.0 22.6 67.8#

