

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL092821\  
 Data File : VL037717.D  
 Acq On : 29 Sep 2021 00:25  
 Operator : SY/AP  
 Sample : M3948-05DL 40X  
 Misc : 400mL/MSVOA L  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Sep 29 03:43:08 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL091621AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Sep 16 13:42:46 2021  
 QLast Update : Thu Sep 16 13:42:46 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.67  | 49   | 1393243  | 10.00 | ppbv  | 0.02     |
| 33) 1,4-Difluorobenzene | 7.18  | 114  | 4022015  | 10.00 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 12.09 | 117  | 3443151  | 10.00 | ppbv  | 0.02     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.42  | 95    | 2435783  | 9.79     | ppbv | 0.03   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 97.90% |

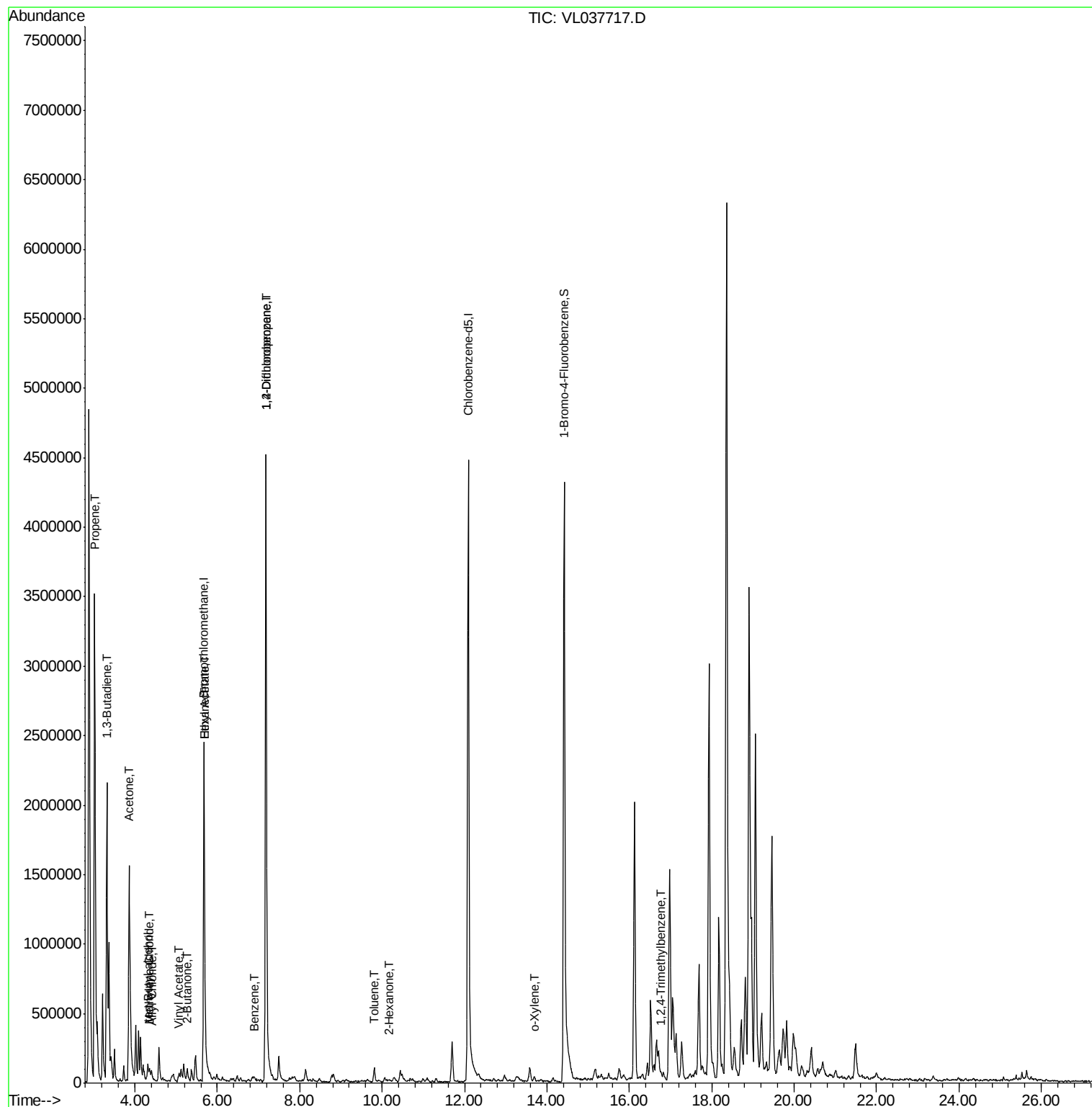
| Target Compounds           | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 9) Propene                 | 3.02  | 41   | 1971897  | 21.272 | ppbv   | 93     |
| 15) Acetone                | 3.86  | 43   | 2361380  | 16.313 | ppbv   | 98     |
| 16) 1,3-Butadiene          | 3.32  | 39   | 695191   | 7.686  | ppbv # | 27     |
| 17) tert-Butyl alcohol     | 4.33  | 59   | 12722    | 0.104  | ppbv # | 72     |
| 20) Methylene Chloride     | 4.35  | 84   | 12221    | 0.177  | ppbv   | 88     |
| 21) Allyl Chloride         | 4.40  | 41   | 4991     | 0.046  | ppbv # | 1      |
| 23) Vinyl Acetate          | 5.08  | 43   | 6611     | 0.033  | ppbv # | 83     |
| 25) Ethyl Acetate          | 5.69  | 43   | 22359    | 0.064  | ppbv # | 81     |
| 26) Hexane                 | 5.69  | 57   | 51160    | 0.307  | ppbv # | 48     |
| 34) 2-Butanone             | 5.27  | 43   | 137793   | 0.843  | ppbv   | 94     |
| 36) Benzene                | 6.90  | 78   | 15717    | 0.047  | ppbv # | 72     |
| 39) 1,2-Dichloropropane    | 7.18  | 63   | 954937   | 7.434  | ppbv # | 28     |
| 51) 2-Hexanone             | 10.16 | 43   | 4105     | 0.045  | ppbv # | 1      |
| 53) Toluene                | 9.81  | 91   | 59944    | 0.161  | ppbv # | 79     |
| 60) o-Xylene               | 13.70 | 91   | 11526    | 0.030  | ppbv # | 38     |
| 74) 1,2,4-Trimethylbenzene | 16.77 | 105  | 20977    | 0.049  | ppbv # | 67     |

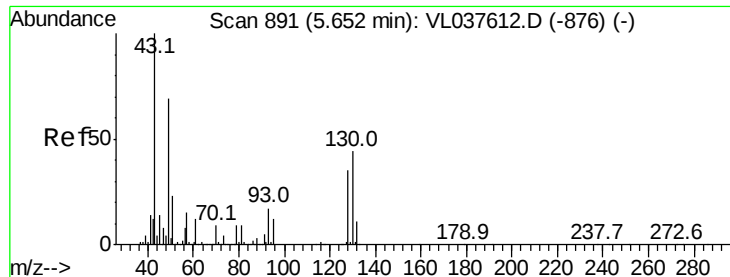
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL091621AIR.M  
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QLast Update : Thu Sep 16 13:42:46 2021  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 29 Sep 2021 00:25

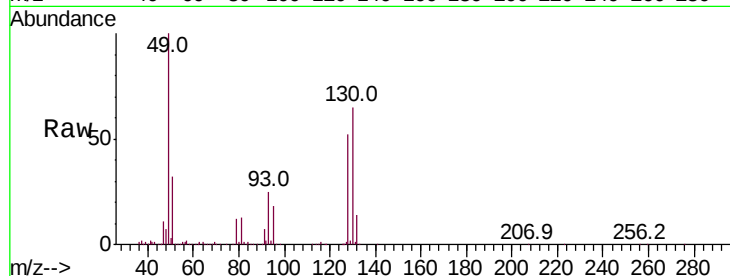
Tot Ion: 49 Resp: 1393243

Ion Ratio Lower Upper

49 100

128 53.2 27.9 83.6

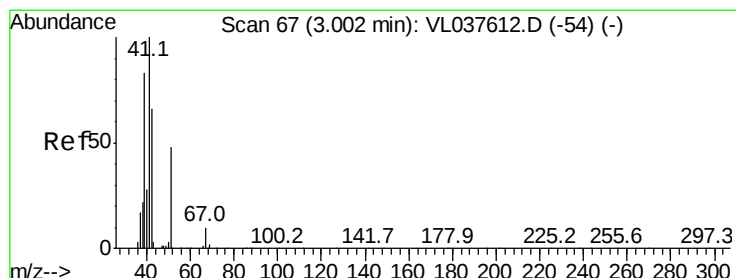
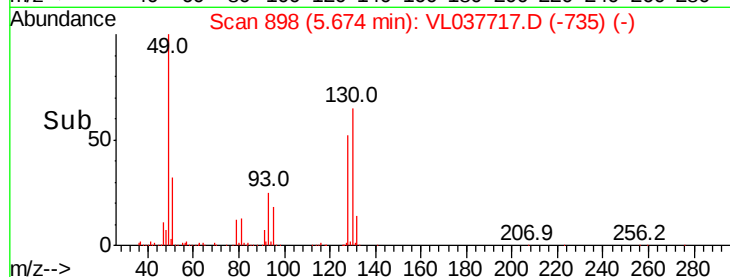
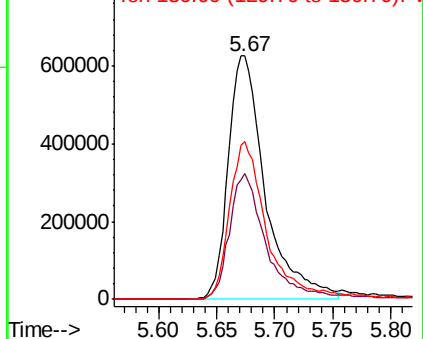
130 67.2 33.9 101.7



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#9

Propene

Concen: 21.272 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.02 min

Lab File: VL037717.D

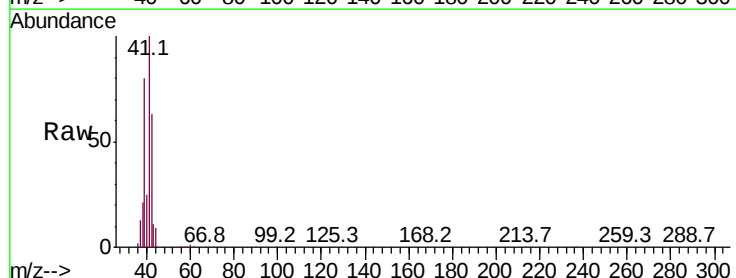
Acq: 29 Sep 2021 00:25

Tgt Ion: 41 Resp: 1971897

Ion Ratio Lower Upper

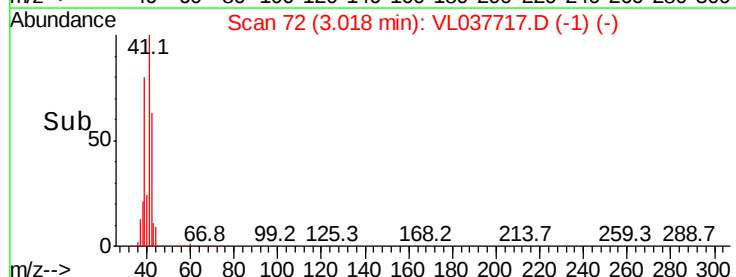
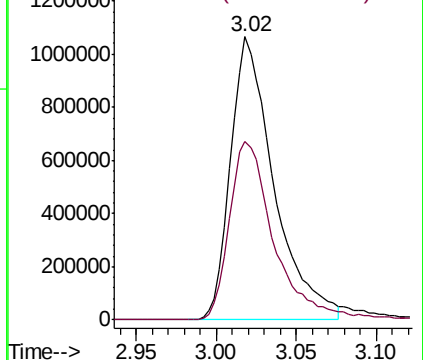
41 100

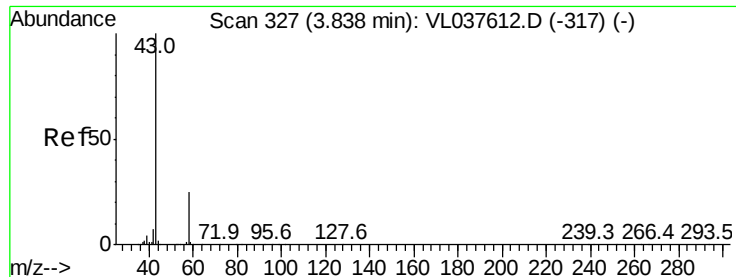
42 65.4 57.2 85.8



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#15

Acetone

Concen: 16.313 ppbv

RT: 3.86 Instrument :

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

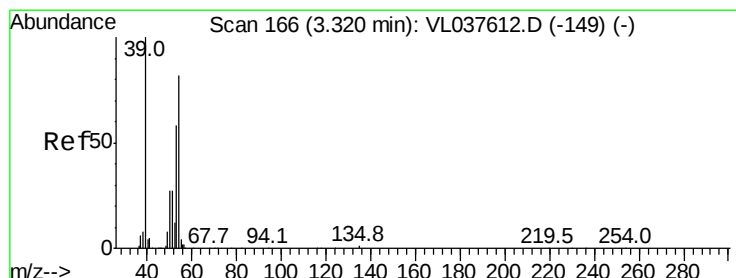
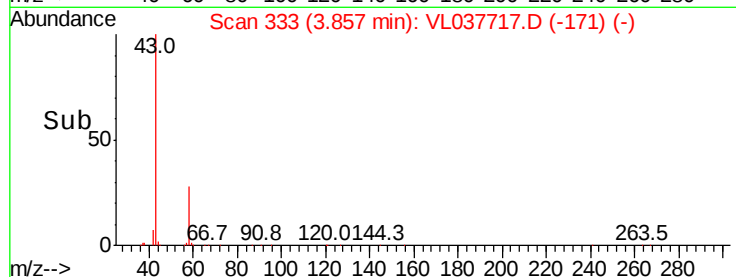
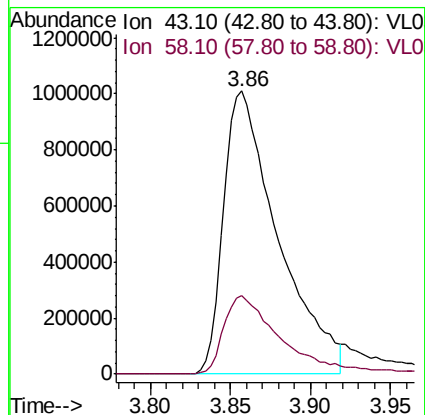
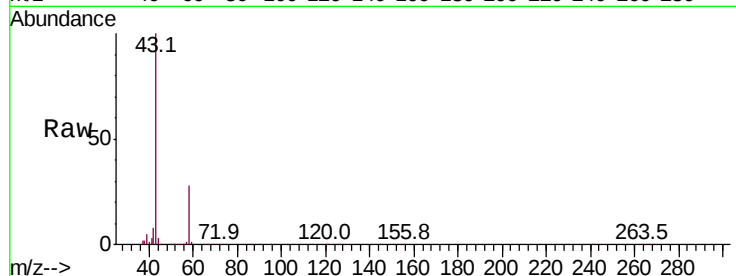
Acq: 29 Sep 2021 00:25

Tot Ion: 43 Resp: 2361380

Ion Ratio Lower Upper

43 100

58 30.2 24.9 37.3



#16

1,3-Butadiene

Concen: 7.686 ppbv

RT: 3.32 min Scan# 165

Delta R.T. -0.00 min

Lab File: VL037717.D

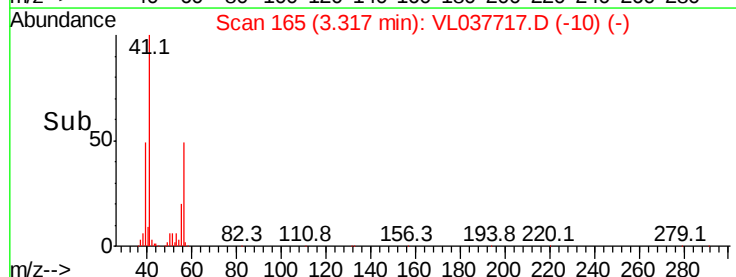
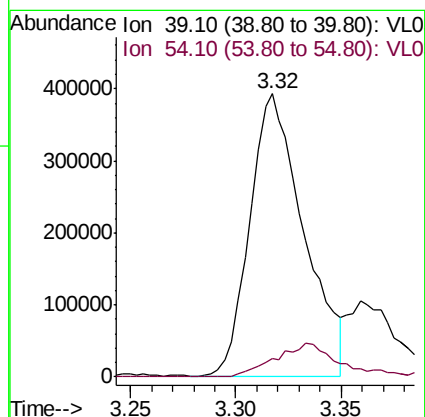
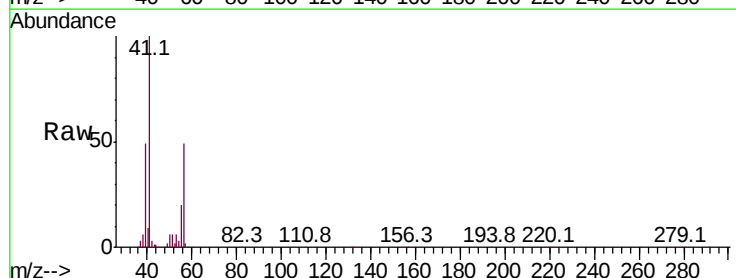
Acq: 29 Sep 2021 00:25

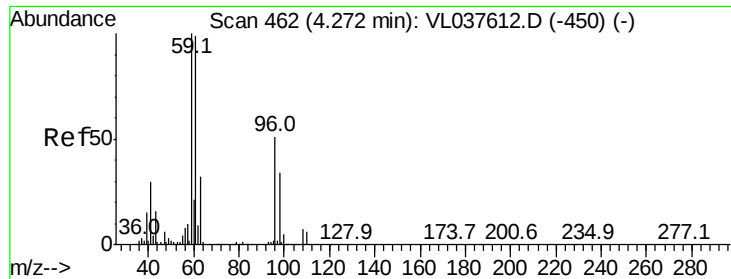
Tgt Ion: 39 Resp: 695191

Ion Ratio Lower Upper

39 100

54 14.7 62.6 93.8#





#17

tert-Butyl alcohol

Concen: 0.104 ppbv

RT: 4.33 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

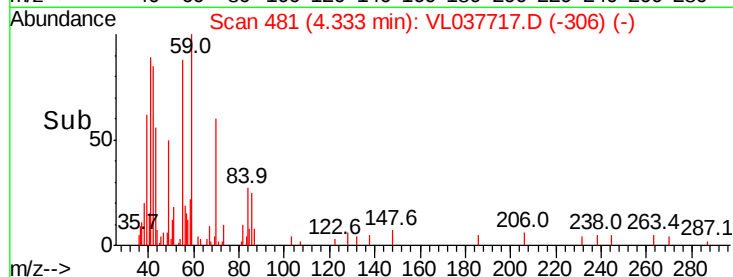
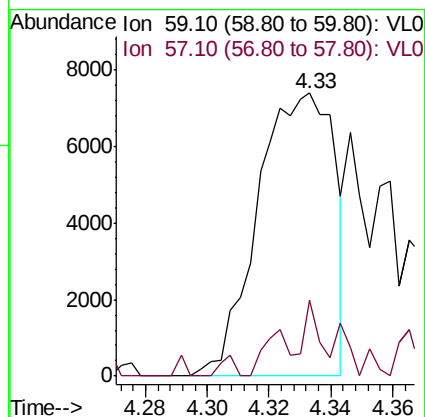
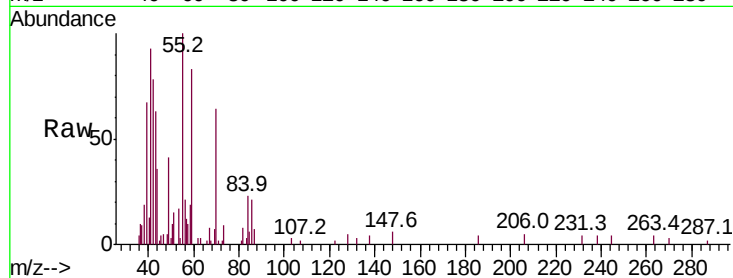
Acq: 29 Sep 2021 00:25

Tot Ion: 59 Resp: 12722

Ion Ratio Lower Upper

59 100

57 0.0 8.4 12.6#



#20

Methylene Chloride

Concen: 0.177 ppbv

RT: 4.35 min Scan# 486

Delta R.T. 0.02 min

Lab File: VL037717.D

Acq: 29 Sep 2021 00:25

Tgt Ion: 84 Resp: 12221

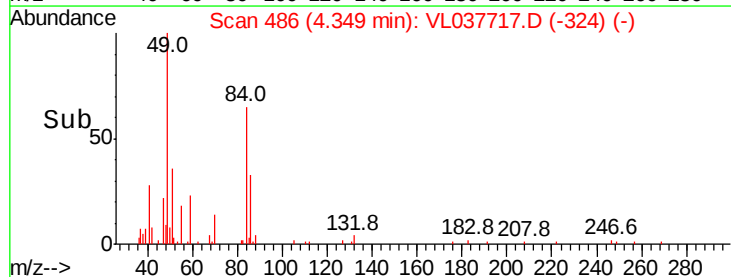
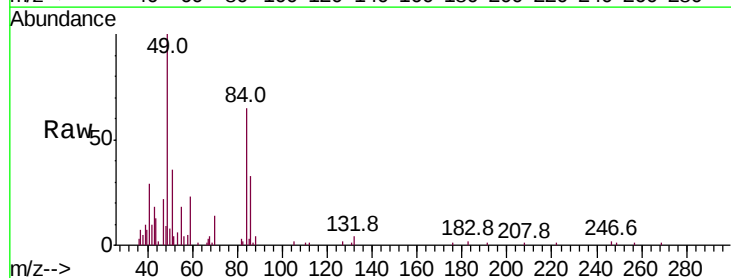
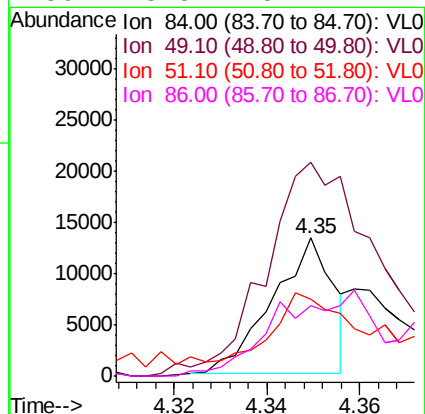
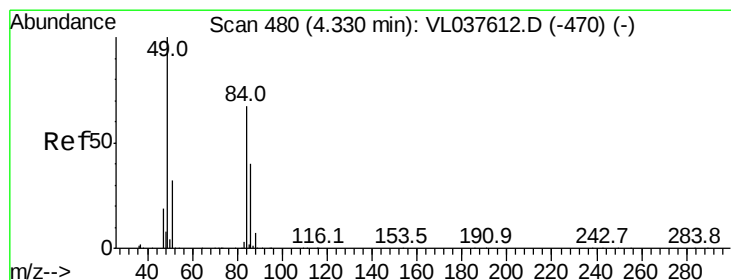
Ion Ratio Lower Upper

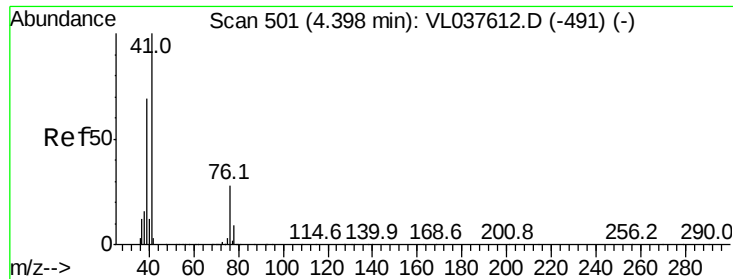
84 100

49 163.8 120.0 180.0

51 41.8 38.0 57.0

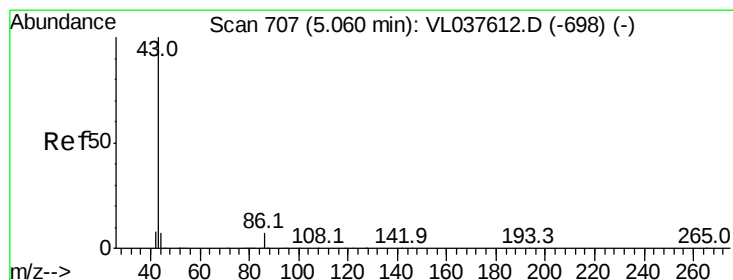
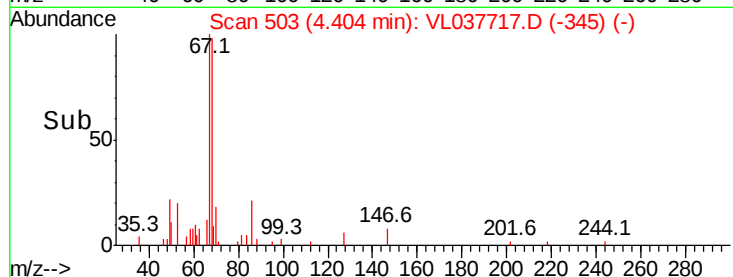
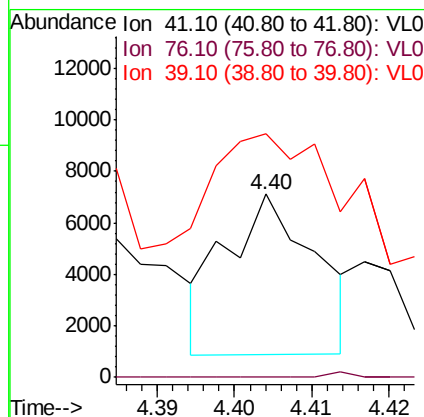
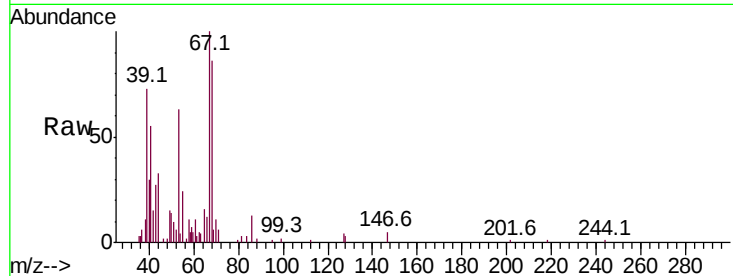
86 48.3 48.2 72.2





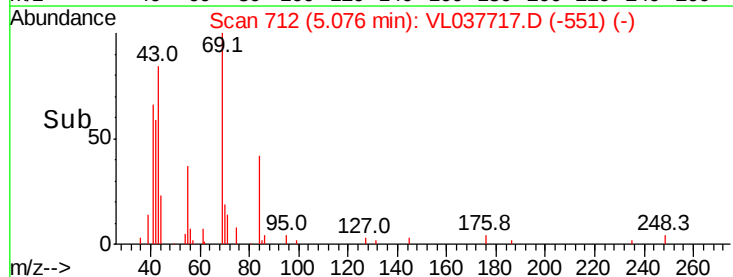
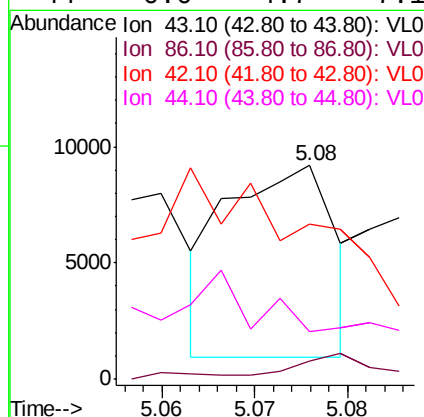
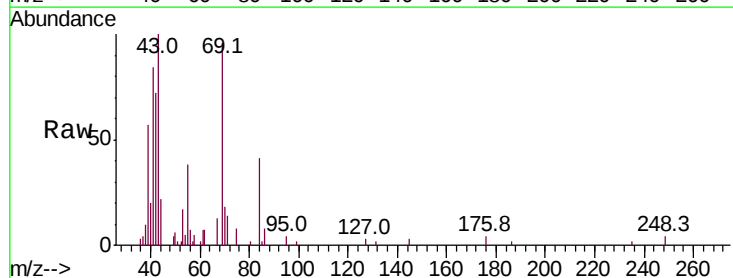
#21  
Allvl Chloride  
Concen: 0.046 ppbv  
RT: 4.40 min  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 29 Sep 2021 00:25

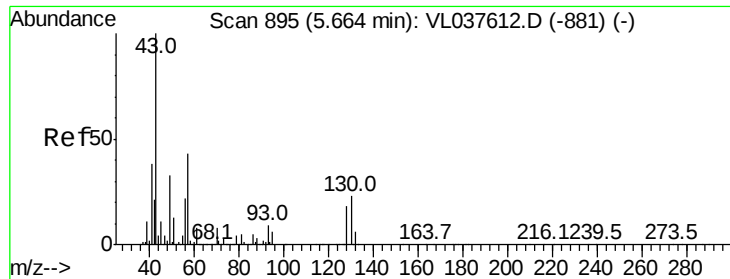
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 0.0   | 23.1  | 34.7# |
| 39      | 350.1 | 61.0  | 91.6# |



#23  
Vinyl Acetate  
Concen: 0.033 ppbv  
RT: 5.08 min Scan# 712  
Delta R.T. 0.02 min  
Lab File: VL037717.D  
Acq: 29 Sep 2021 00:25

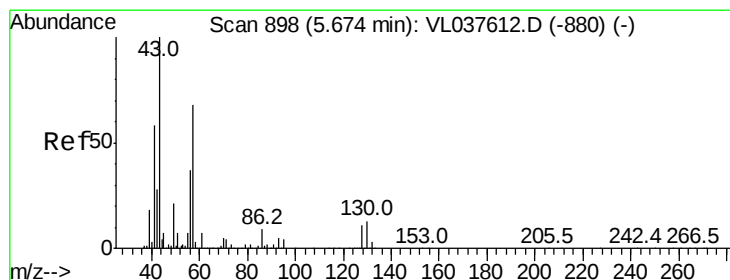
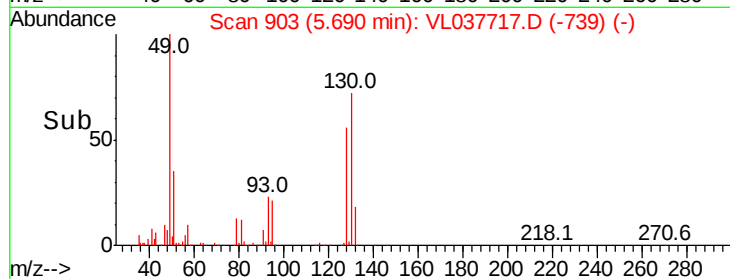
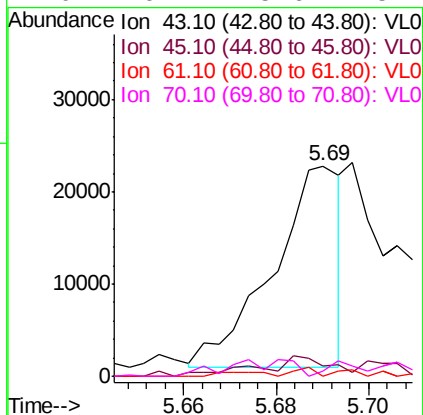
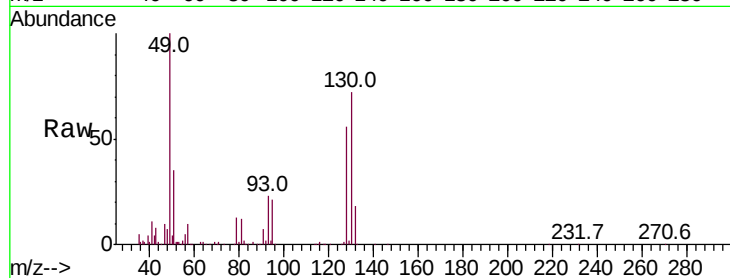
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 86      | 15.2  | 5.0   | 7.6#  |
| 42      | 5.5   | 7.5   | 11.3# |
| 44      | 0.0   | 4.7   | 7.1#  |





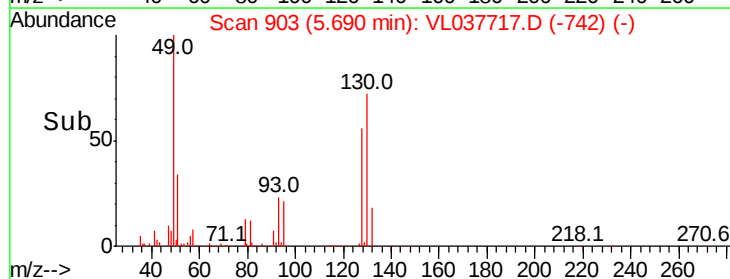
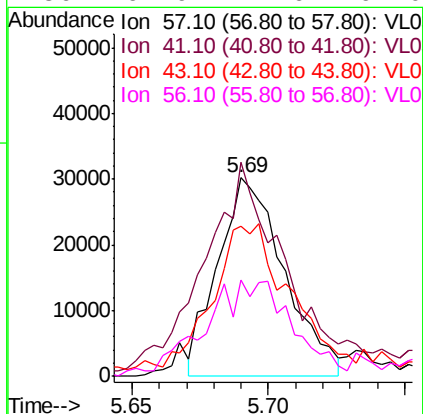
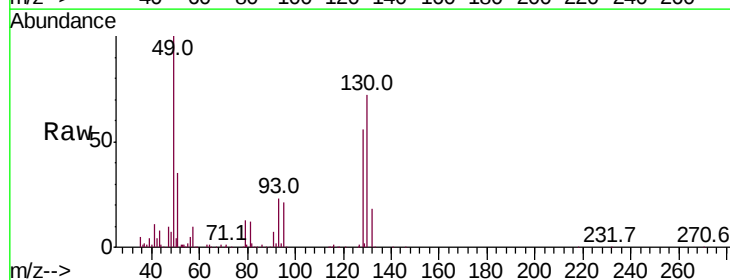
#25  
Ethyl Acetate  
Concen: 0.064 ppbv  
RT: 5.69 min  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId:  
Acq: 29 Sep 2021 00:25

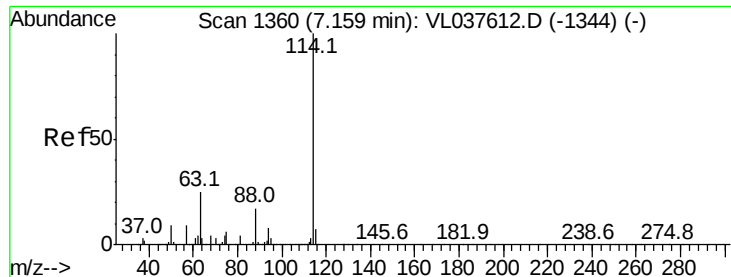
|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 22359 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 17.2  | 8.0   | 12.0# |
| 61       | 5.3   | 7.5   | 11.3# |
| 70       | 16.4  | 5.6   | 8.4#  |



#26  
Hexane  
Concen: 0.307 ppbv  
RT: 5.69 min Scan# 903  
Delta R.T.: 0.02 min  
Lab File: VL037717.D  
Acq: 29 Sep 2021 00:25

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 51160  |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 134.6 | 70.9  | 106.3# |
| 43       | 117.1 | 170.4 | 255.6# |
| 56       | 67.9  | 42.6  | 64.0#  |





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 Instrument: MSVOA\_1

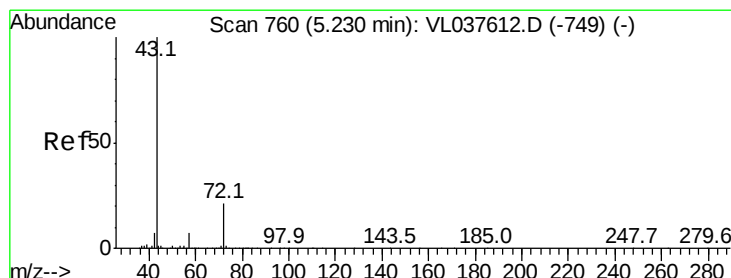
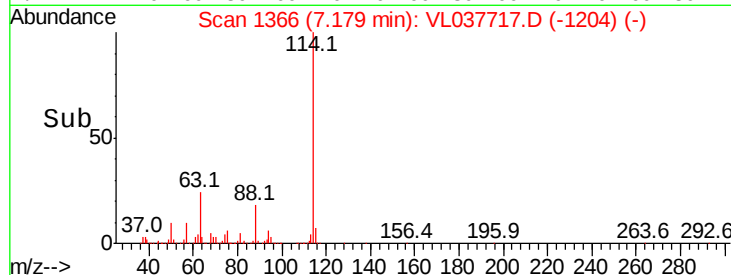
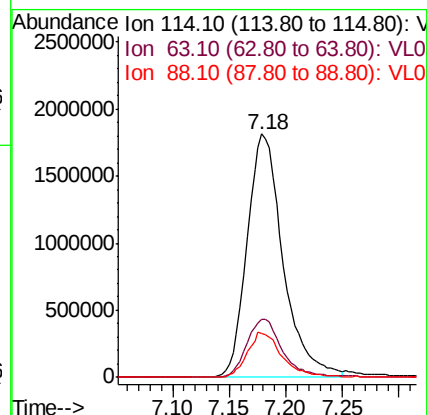
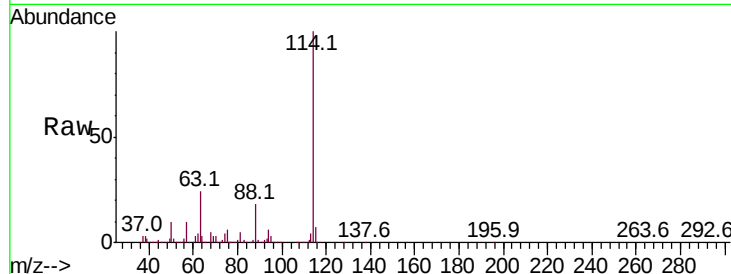
Delta R.T. ClientSampleId:

Lab File:

Acq: 29 Sep 2021 00:25

Tot Ion:114 Resp: 4022015

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 24.2  | 19.6  | 29.4  |
| 88  | 18.3  | 14.2  | 21.4  |



#34

2-Butanone

Concen: 0.843 ppbv

RT: 5.27 min Scan# 771

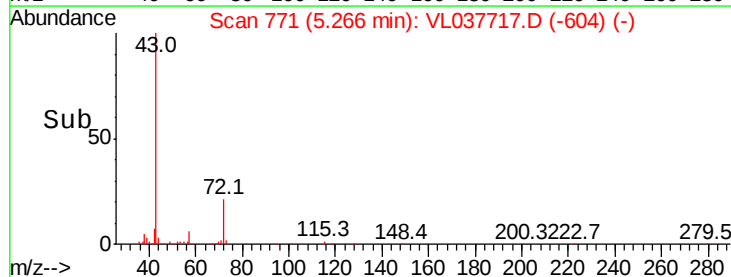
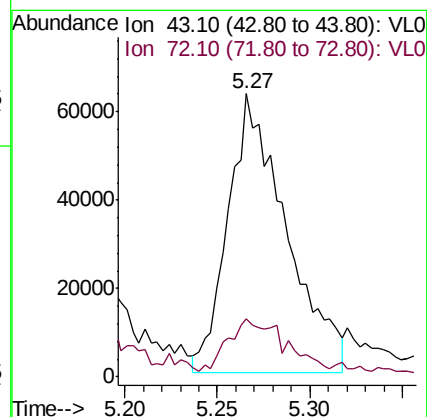
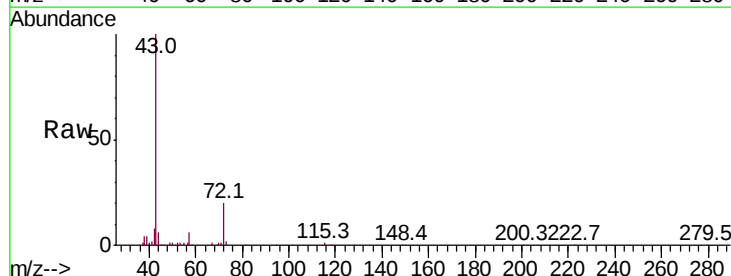
Delta R.T. 0.04 min

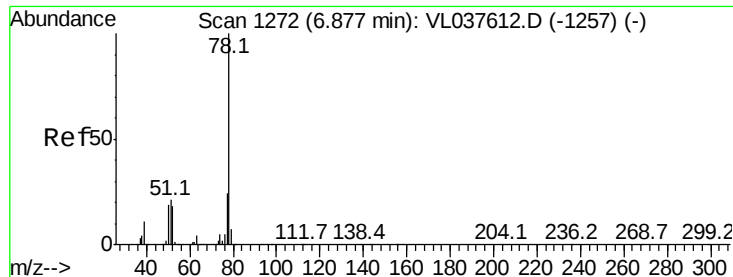
Lab File: VL037717.D

Acq: 29 Sep 2021 00:25

Tgt Ion: 43 Resp: 137793

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 25.8  | 18.4  | 27.6  |





#36

Benzene

Concen: 0.047 ppbv

RT: 6.90 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 29 Sep 2021 00:25

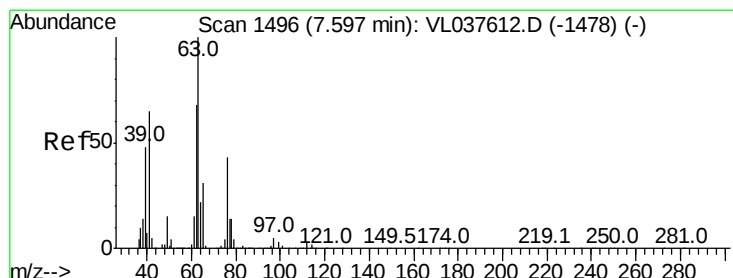
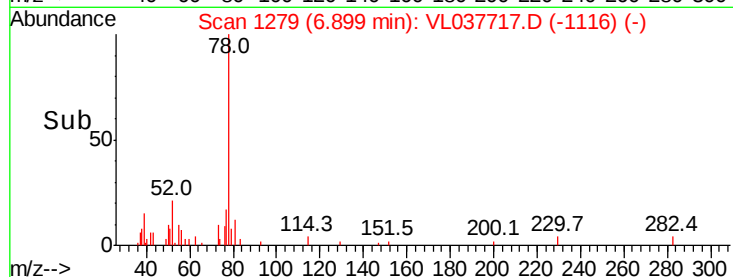
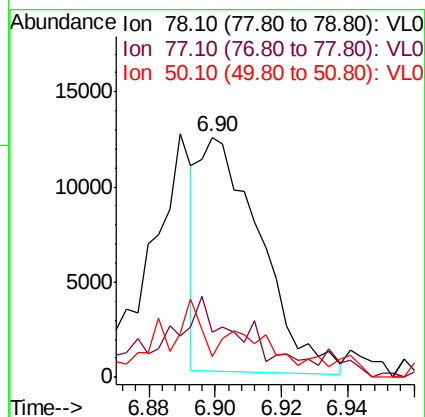
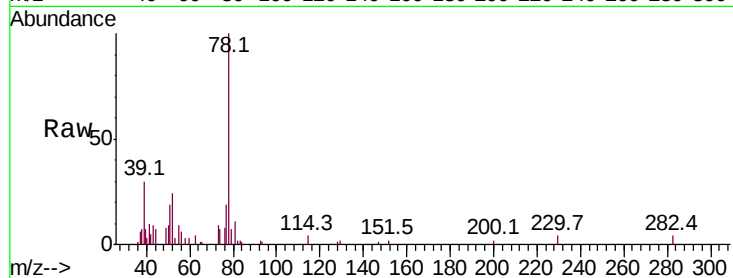
Tot Ion: 78 Resp: 15717

Ion Ratio Lower Upper

78 100

77 14.3 19.0 28.4#

50 1.0 14.8 22.2#



#39

1,2-Dichloropropane

Concen: 7.434 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.42 min

Lab File: VL037717.D

Acq: 29 Sep 2021 00:25

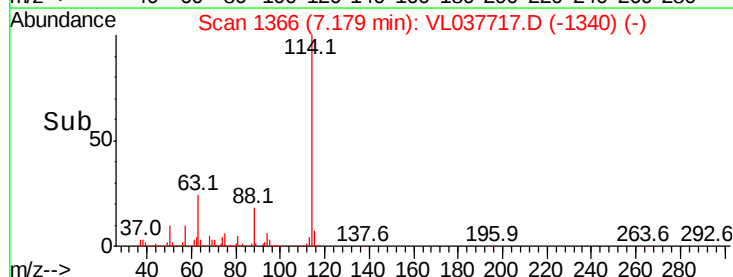
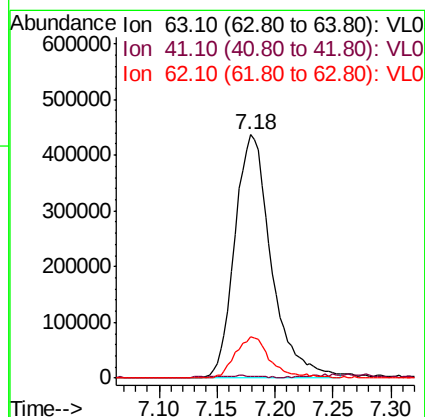
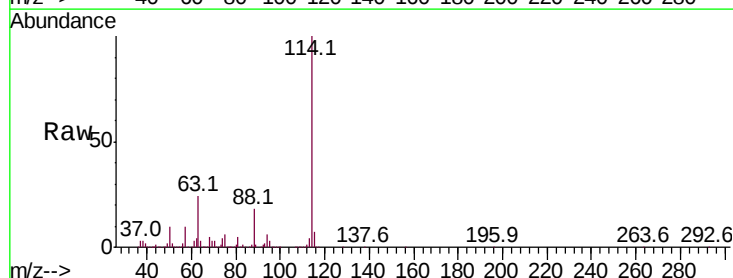
Tgt Ion: 63 Resp: 954937

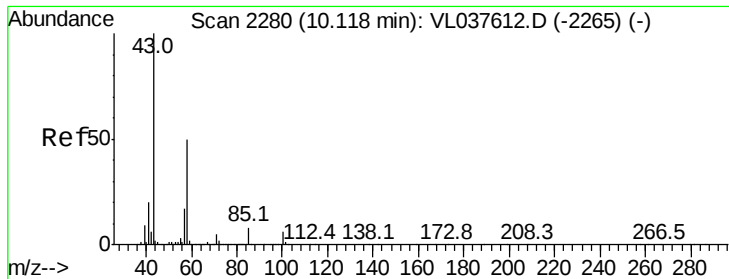
Ion Ratio Lower Upper

63 100

41 0.5 51.6 77.4#

62 16.9 54.6 81.8#





#51

2-Hexanone

Concen: 0.045 ppbv

RT: 10.16

Delta R.T. MSVOA\_L

Lab File:

Acq: 29 Sep 2021 00:25

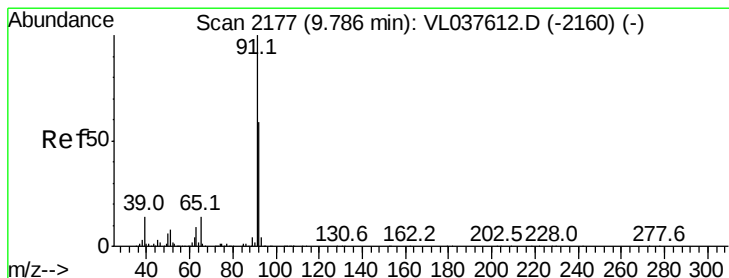
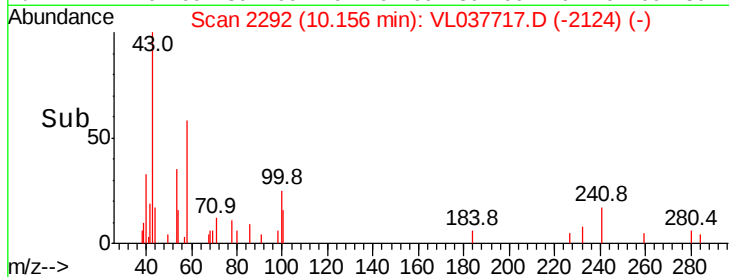
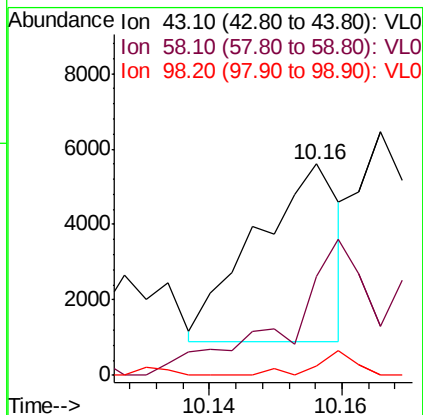
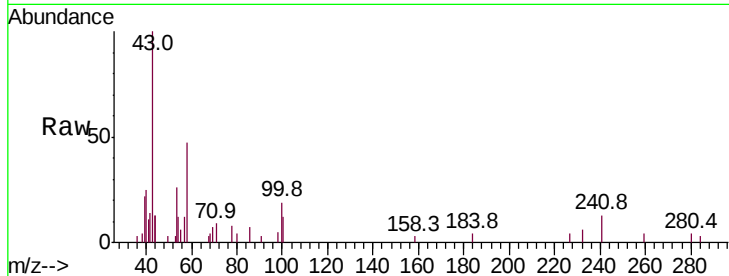
Tot Ion: 43 Resp: 4105

Ion Ratio Lower Upper

43 100

58 151.7 39.3 58.9#

98 6.6 0.4 0.6#



#53

Toluene

Concen: 0.161 ppbv

RT: 9.81 min Scan# 2184

Delta R.T. 0.02 min

Lab File: VL037717.D

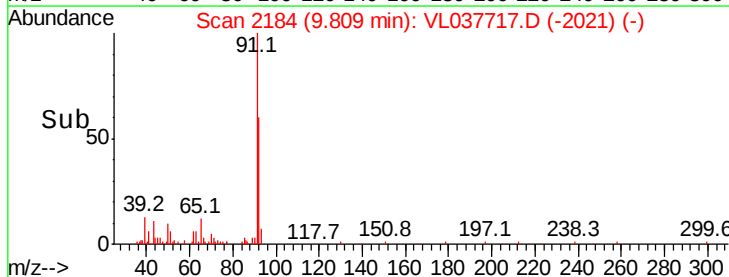
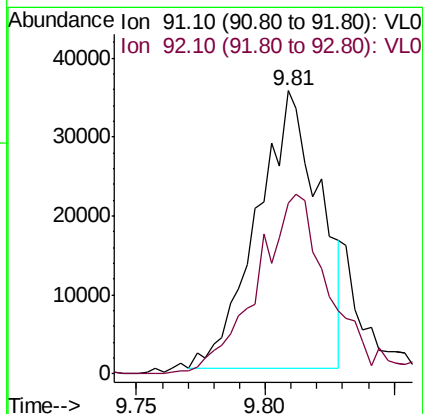
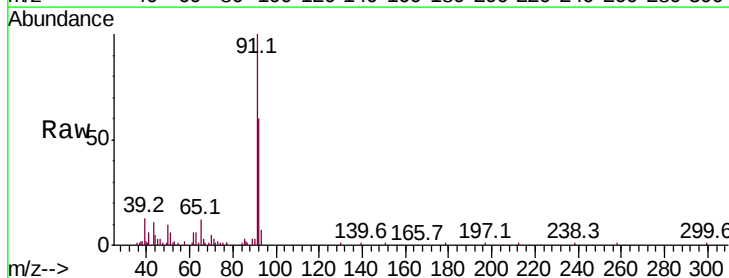
Acq: 29 Sep 2021 00:25

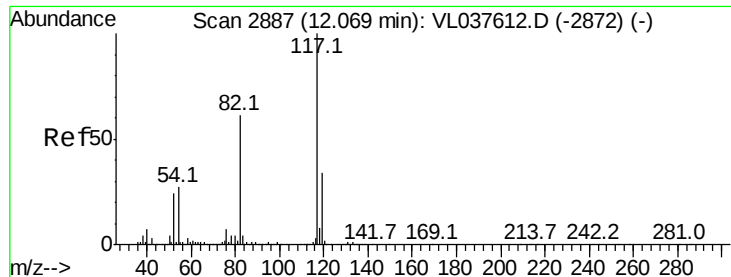
Tgt Ion: 91 Resp: 59944

Ion Ratio Lower Upper

91 100

92 77.1 48.9 73.3#

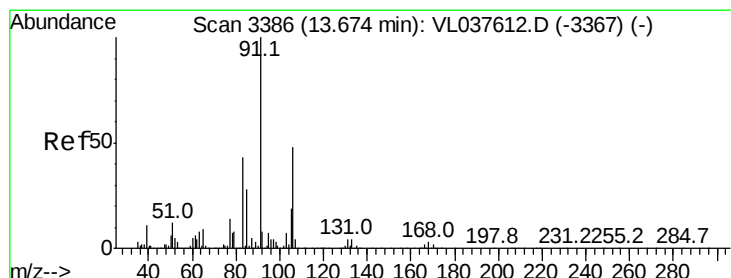
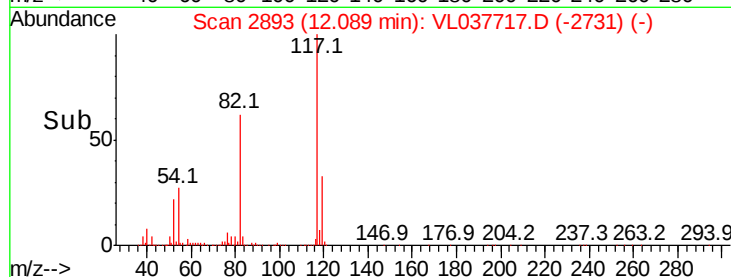
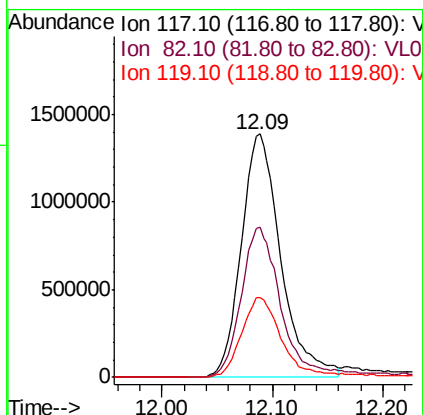
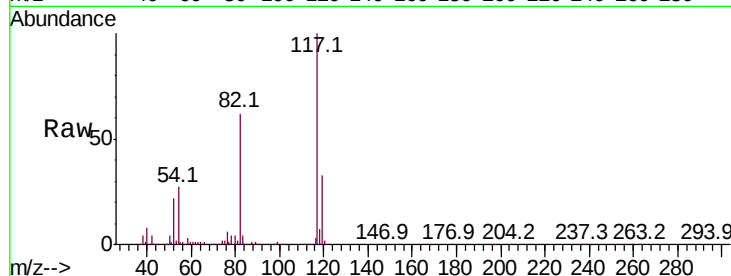




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.09 min  
Instrument: MSVOA\_1  
Delta R.T.:  
Lab File: ClientSampleId:  
Acq: 29 Sep 2021 00:25

Tot Ion: 117 Resp: 3443151

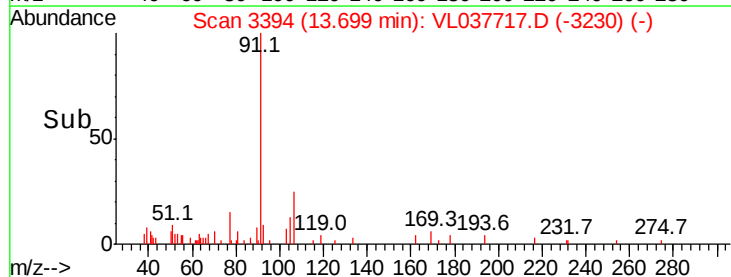
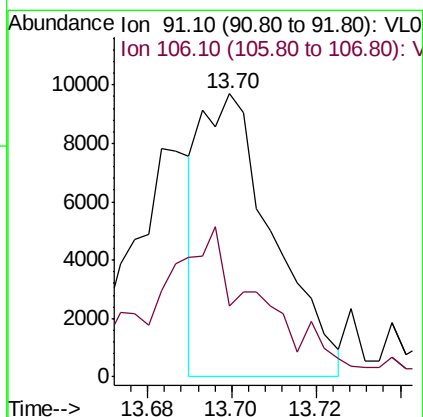
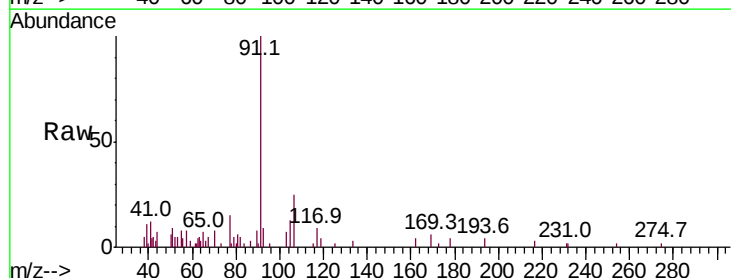
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 82  | 65.5  | 50.6  | 75.8  |
| 119 | 35.2  | 26.2  | 39.2  |

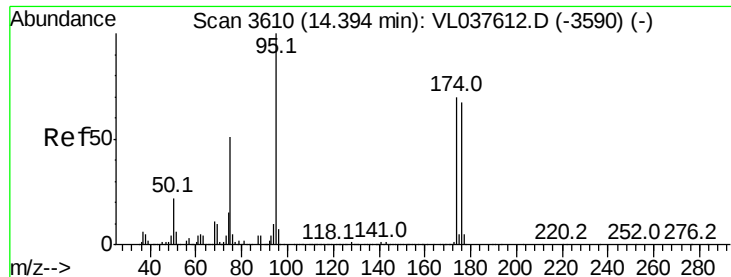


#60  
o-Xylene  
Concen: 0.030 ppbv  
RT: 13.70 min Scan# 3394  
Delta R.T.: 0.03 min  
Lab File: VL037717.D  
Acq: 29 Sep 2021 00:25

Tgt Ion: 91 Resp: 11526

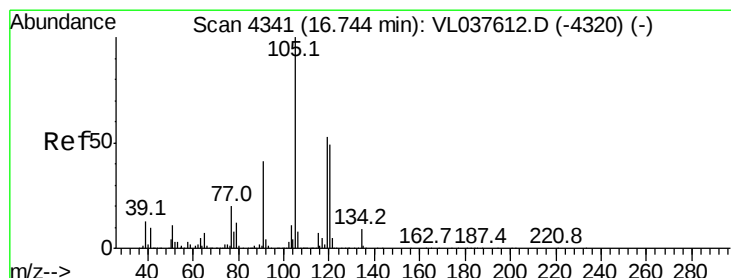
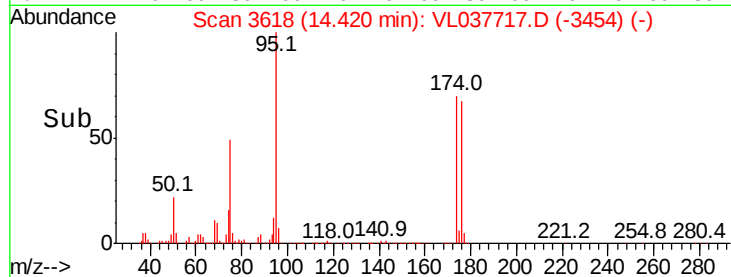
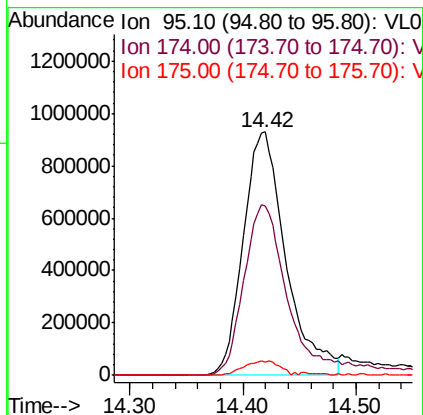
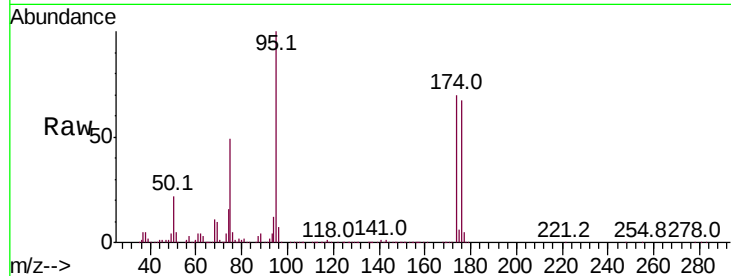
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 91  | 100   |       |       |
| 106 | 86.9  | 23.0  | 69.0# |





#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 9.789 ppbv  
 RT: 14.42 min  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 29 Sep 2021 00:25

Tot Ion: 95 Resp: 2435783  
 Ion Ratio Lower Upper  
 95 100  
 174 78.0 56.3 84.5  
 175 5.8 4.4 6.6



#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.049 ppbv  
 RT: 16.77 min Scan# 4348  
 Delta R.T. 0.02 min  
 Lab File: VL037717.D  
 Acq: 29 Sep 2021 00:25

Tgt Ion: 105 Resp: 20977  
 Ion Ratio Lower Upper  
 105 100  
 120 35.8 39.4 59.0#  
 91 10.4 33.3 49.9#  
 77 4.4 15.7 23.5#

