

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062722\  
 Data File : VL039375.D  
 Acq On : 28 Jun 2022 2:12  
 Operator : SY/AP  
 Sample : N3453-02 4X  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SG-2

Quant Time: Jun 28 04:39:45 2022  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Jun 01 01:22:18 2022  
 QLast Update : Wed Jun 01 01:22:18 2022  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 1048630  | 10.00 | ppbv  | -0.01    |
| 33) 1,4-Difluorobenzene | 7.17  | 114  | 2979471  | 10.00 | ppbv  | -0.01    |
| 55) Chlorobenzene-d5    | 12.08 | 117  | 2655696  | 10.00 | ppbv  | -0.02    |

| System Monitoring Compounds |        | R.T.  | QIon     | Response | Conc | Units  | Dev(Min) |
|-----------------------------|--------|-------|----------|----------|------|--------|----------|
| 68) 1-Bromo-4-Fluorobenzene | 14.40  | 95    | 1995090  | 9.09     | ppbv | -0.01  |          |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 90.90% |          |

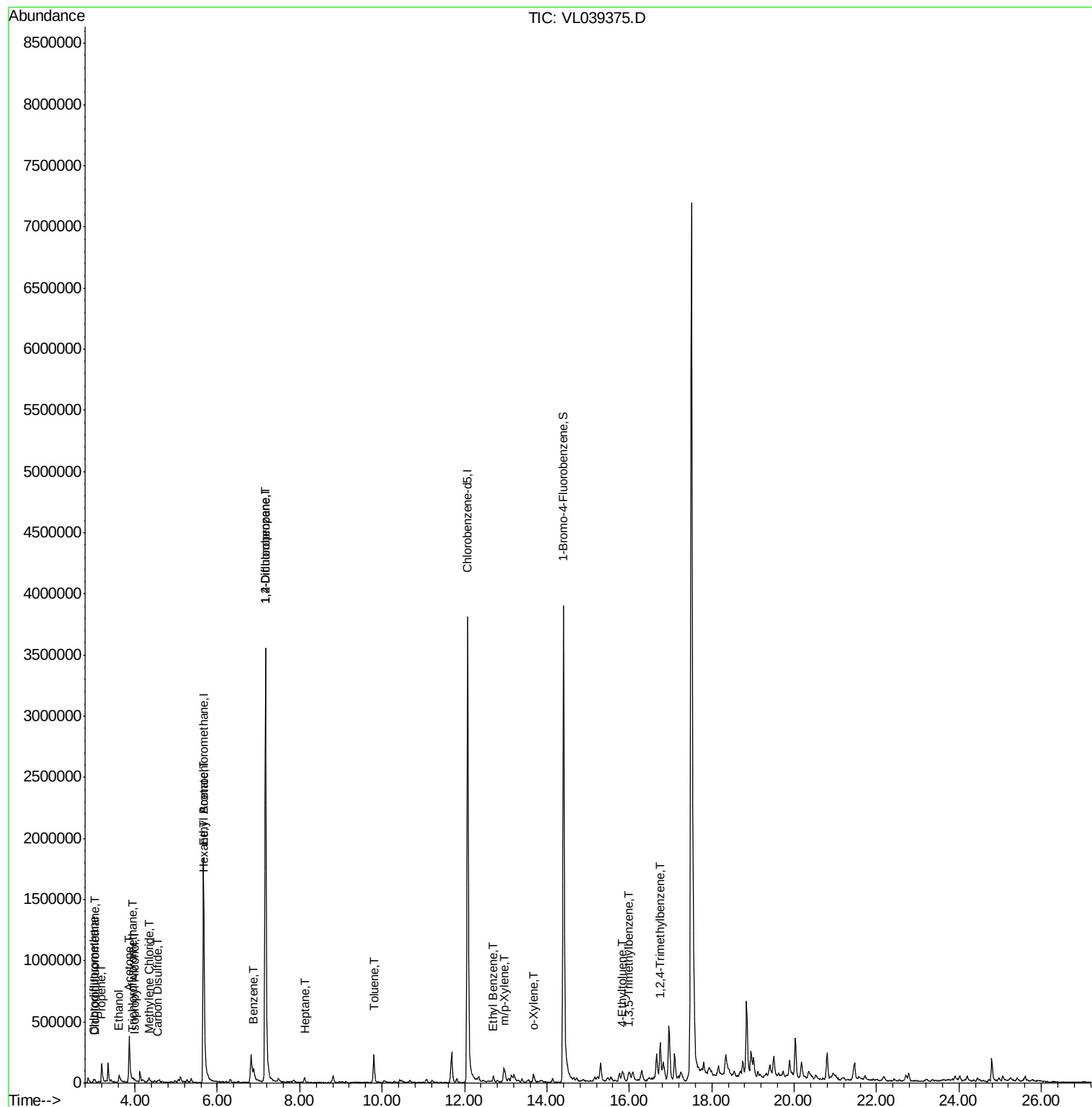
| Target Compounds           | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane | 3.03  | 85   | 9817     | 0.053  | ppbv   | 97     |
| 3) Chlorodifluoromethane   | 2.98  | 51   | 10132    | 0.076  | ppbv   | 91     |
| 9) Propene                 | 3.19  | 41   | 54968    | 0.945  | ppbv   | 85     |
| 10) Heptane                | 8.11  | 43   | 13282    | 0.098  | ppbv # | 73     |
| 11) Trichlorofluoromethane | 3.94  | 101  | 5118     | 0.031  | ppbv   | 98     |
| 13) Ethanol                | 3.61  | 45   | 68631    | 21.631 | ppbv # | 100    |
| 15) Acetone                | 3.86  | 43   | 466018   | 4.266  | ppbv   | 97     |
| 19) Isopropyl Alcohol      | 3.98  | 45   | 2865     | 0.056  | ppbv # | 93     |
| 20) Methylene Chloride     | 4.34  | 84   | 5812     | 0.126  | ppbv # | 41     |
| 25) Ethyl Acetate          | 5.68  | 43   | 21752    | 0.088  | ppbv # | 79     |
| 26) Hexane                 | 5.68  | 57   | 13392    | 0.124  | ppbv # | 33     |
| 27) Carbon Disulfide       | 4.55  | 76   | 14723    | 0.131  | ppbv # | 82     |
| 36) Benzene                | 6.88  | 78   | 38155    | 0.158  | ppbv # | 92     |
| 39) 1,2-Dichloropropane    | 7.17  | 63   | 732982   | 7.618  | ppbv # | 24     |
| 53) Toluene                | 9.80  | 91   | 177289   | 0.637  | ppbv   | 96     |
| 58) Ethyl Benzene          | 12.69 | 91   | 13703    | 0.037  | ppbv   | 90     |
| 59) m/p-Xylene             | 12.98 | 91   | 38159    | 0.118  | ppbv # | 33     |
| 60) o-Xylene               | 13.68 | 91   | 22939    | 0.076  | ppbv # | 21     |
| 72) 4-Ethyltoluene         | 15.83 | 105  | 19437    | 0.055  | ppbv # | 67     |
| 73) 1,3,5-Trimethylbenzene | 15.98 | 105  | 19167    | 0.060  | ppbv   | 90     |
| 74) 1,2,4-Trimethylbenzene | 16.75 | 105  | 205354   | 0.575  | ppbv # | 61     |

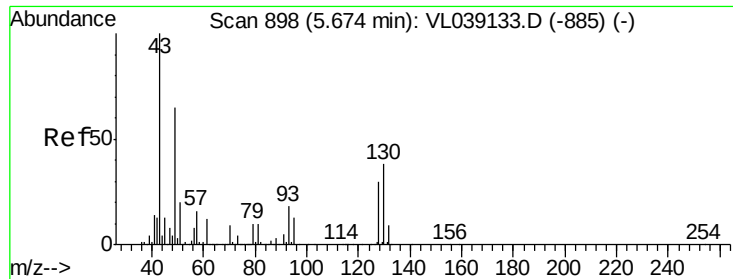
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL062722\  
Data File : VL039375.D  
Acq On : 28 Jun 2022 2:12  
Operator : SY/AP  
Sample : N3453-02 4X  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SG-2

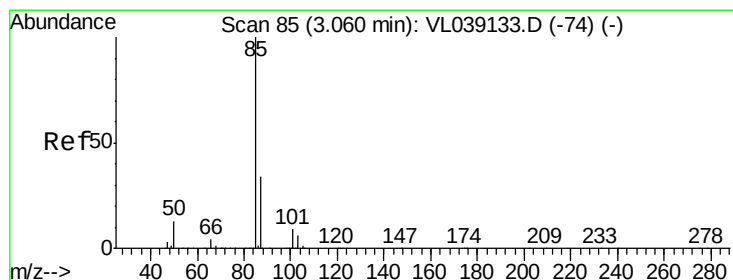
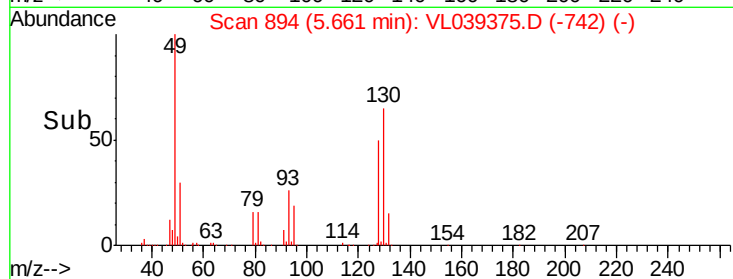
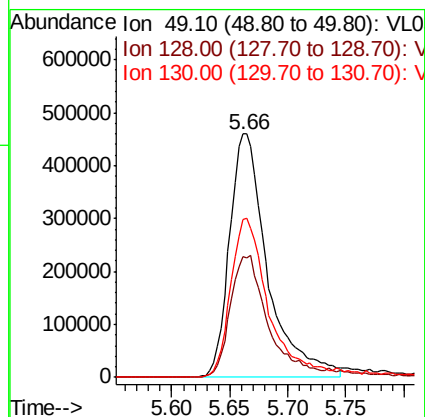
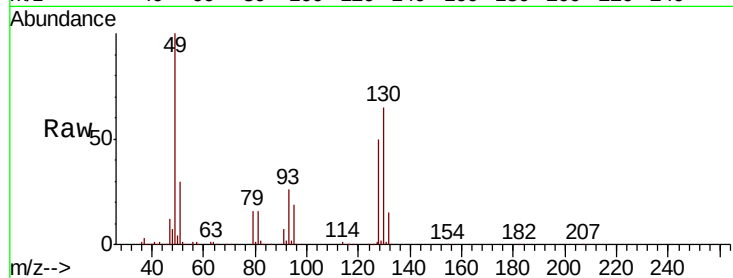
Quant Time: Jun 28 04:39:45 2022  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL053122AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Jun 01 01:22:18 2022  
QLast Update : Wed Jun 01 01:22:18 2022  
Response via : Initial Calibration





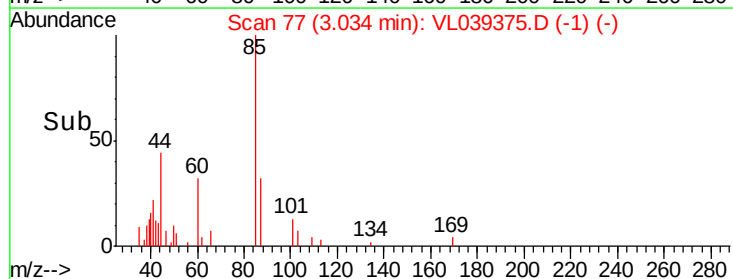
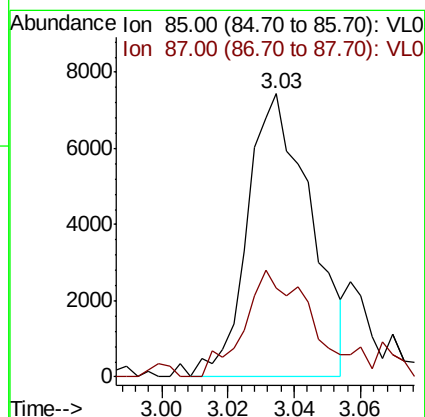
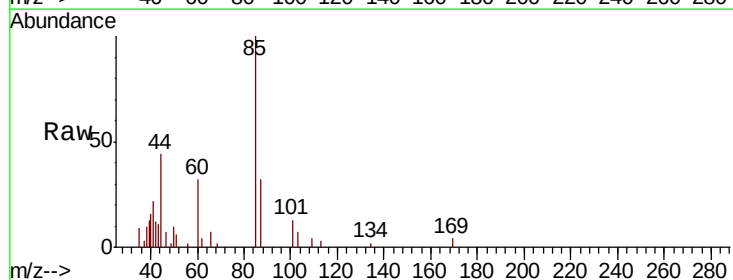
#1  
 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.66  
 Instrument: MSVOA\_1  
 Delta R.T.:  
 Lab File: ClientSampleId :  
 Acq: 28 Jun 2022 2:12

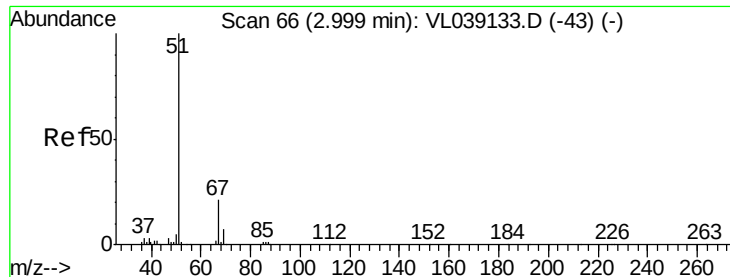
Tot Ion: 49 Resp: 1048630  
 Ion Ratio Lower Upper  
 49 100  
 128 53.0 24.7 74.1  
 130 68.8 31.4 94.0



#2  
 Dichlorodifluoromethane  
 Concen: 0.053 ppbv  
 RT: 3.03 min Scan# 77  
 Delta R.T. -0.03 min  
 Lab File: VL039375.D  
 Acq: 28 Jun 2022 2:12

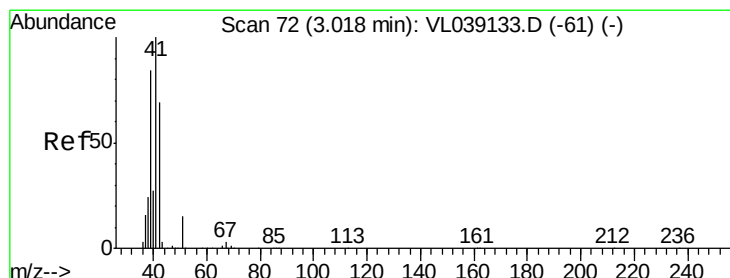
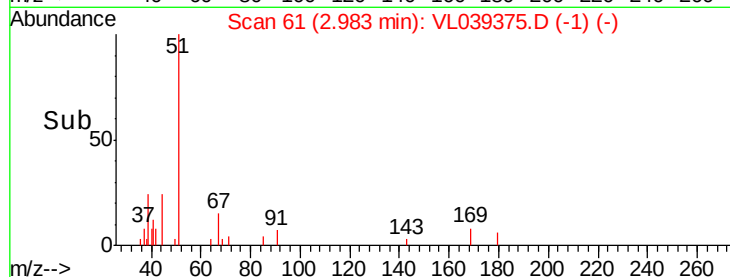
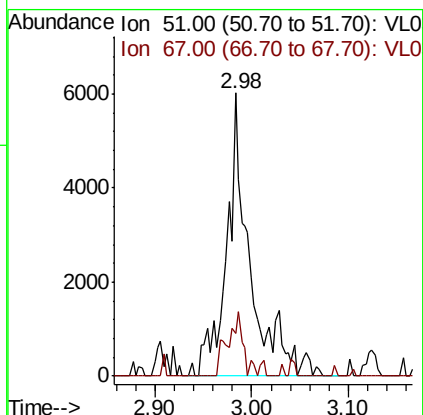
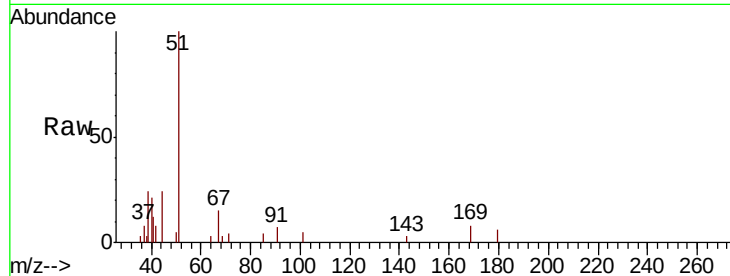
Tgt Ion: 85 Resp: 9817  
 Ion Ratio Lower Upper  
 85 100  
 87 31.6 26.9 40.3





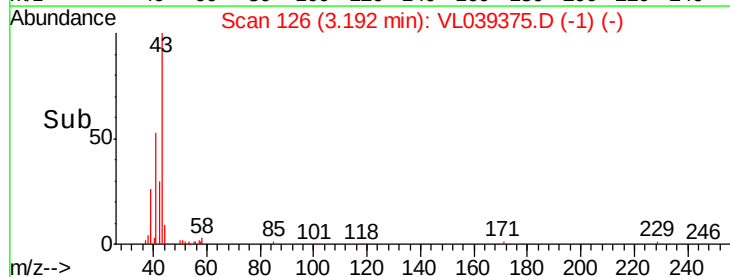
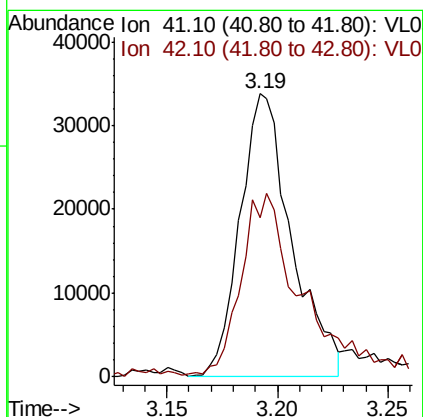
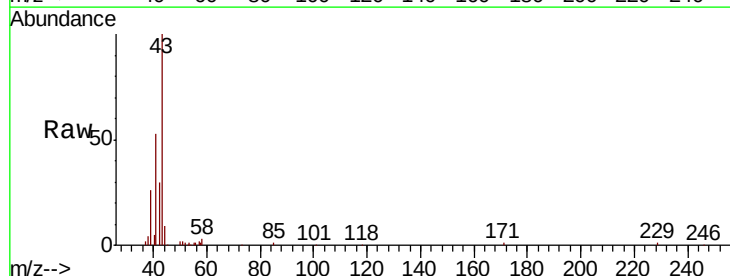
#3  
 Chlorodifluoromethane  
 Concen: 0.076 ppbv  
 RT: 2.98  
 Delta R.T. MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 28 Jun 2022 2:12

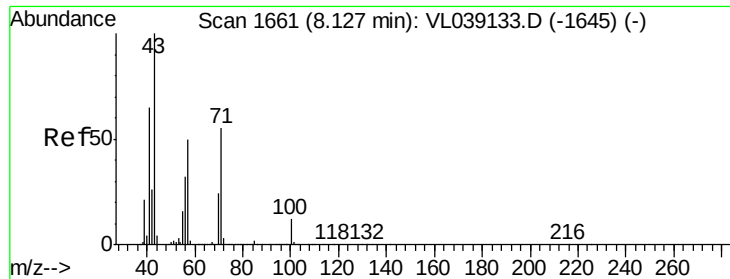
Tot Ion: 51 Resp: 10132  
 Ion Ratio Lower Upper  
 51 100  
 67 16.3 16.2 24.4



#9  
 Propene  
 Concen: 0.945 ppbv  
 RT: 3.19 min Scan# 126  
 Delta R.T. 0.17 min  
 Lab File: VL039375.D  
 Acq: 28 Jun 2022 2:12

Tgt Ion: 41 Resp: 54968  
 Ion Ratio Lower Upper  
 41 100  
 42 81.4 55.4 83.2





#10

Heptane

Concen: 0.098 ppbv

RT: 8.11 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

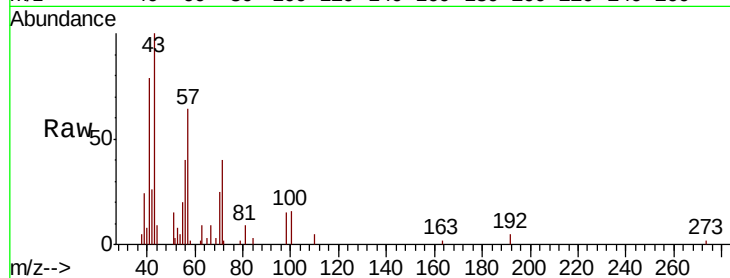
Acq: 28 Jun 2022 2:12

Tot Ion: 43 Resp: 13282

Ion Ratio Lower Upper

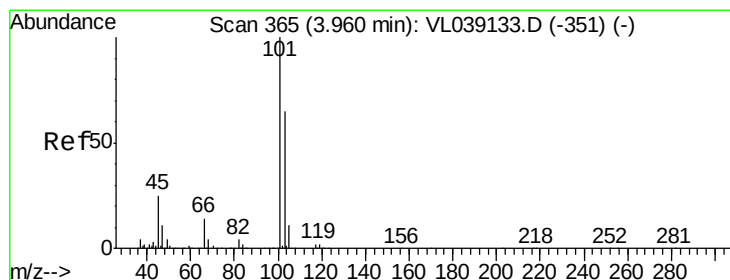
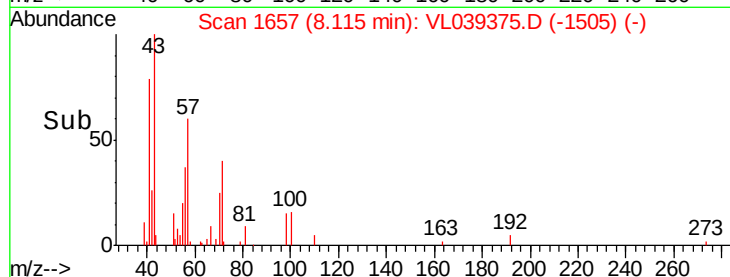
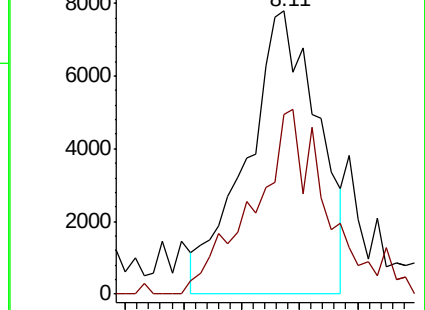
43 100

57 70.6 41.4 62.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#11

Trichlorofluoromethane

Concen: 0.031 ppbv

RT: 3.94 min Scan# 359

Delta R.T. -0.02 min

Lab File: VL039375.D

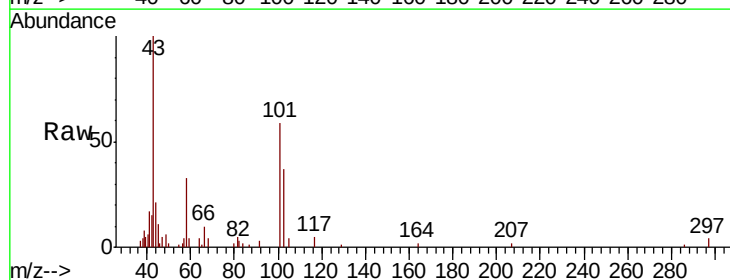
Acq: 28 Jun 2022 2:12

Tgt Ion:101 Resp: 5118

Ion Ratio Lower Upper

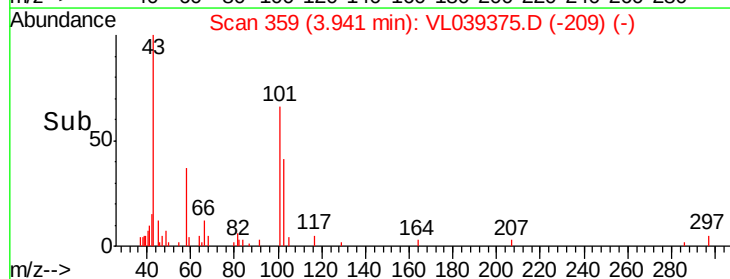
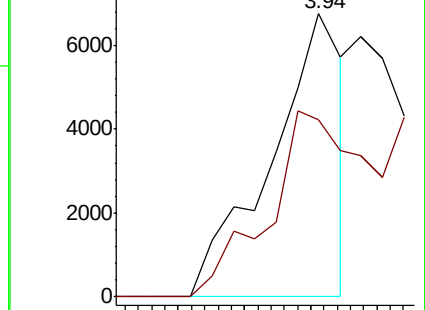
101 100

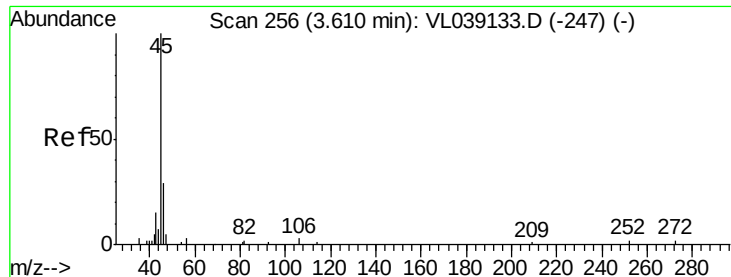
103 62.7 51.7 77.5



Abundance Ion 101.00 (100.70 to 101.70): V

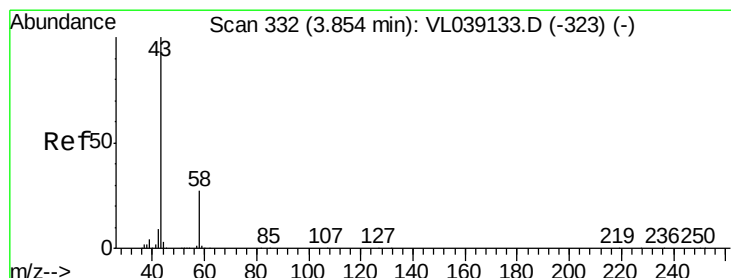
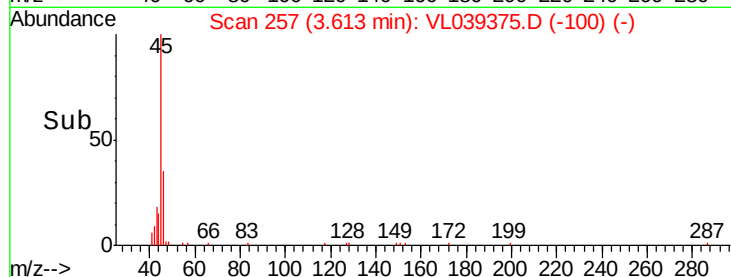
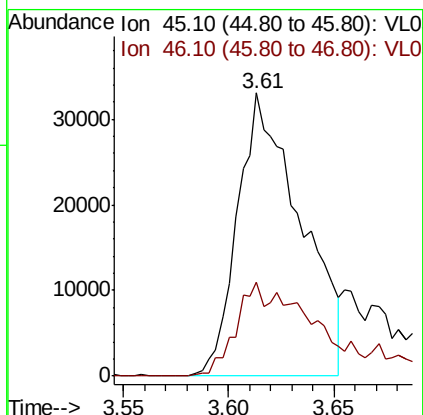
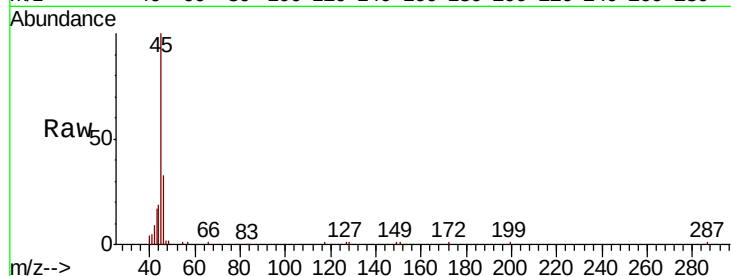
Ion 103.00 (102.70 to 103.70): V





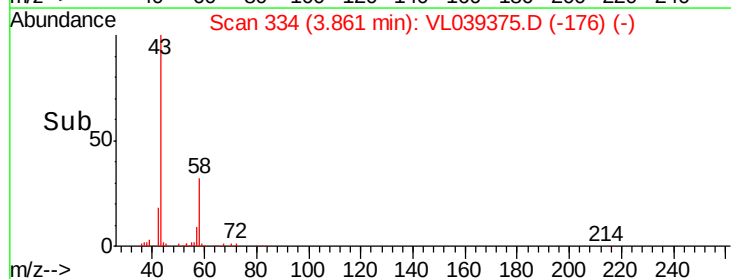
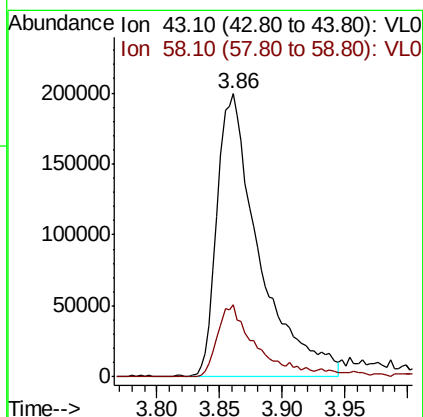
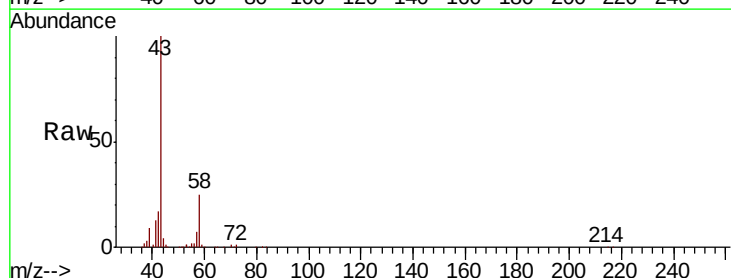
#13  
Ethanol  
Concen: 21.631 ppbv  
RT: 3.61  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 28 Jun 2022 2:12

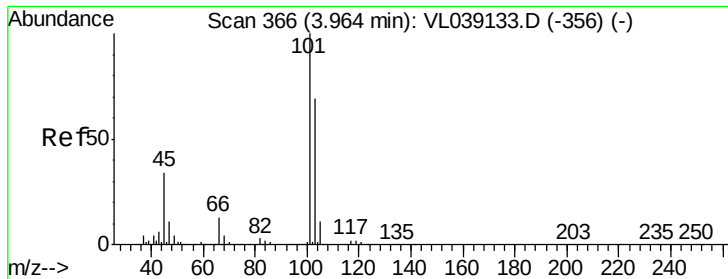
Tot Ion: 45 Resp: 68631  
Ion Ratio Lower Upper  
45 100  
46 38.9 0.0 0.0#



#15  
Acetone  
Concen: 4.266 ppbv  
RT: 3.86 min Scan# 334  
Delta R.T. 0.01 min  
Lab File: VL039375.D  
Acq: 28 Jun 2022 2:12

Tgt Ion: 43 Resp: 466018  
Ion Ratio Lower Upper  
43 100  
58 26.6 22.5 33.7





#19

Isopropyl Alcohol

Concen: 0.056 ppbv

RT: 3.98 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

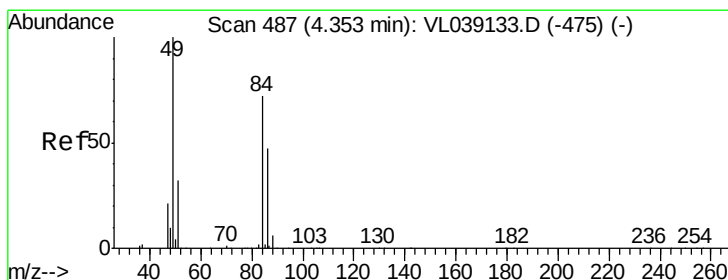
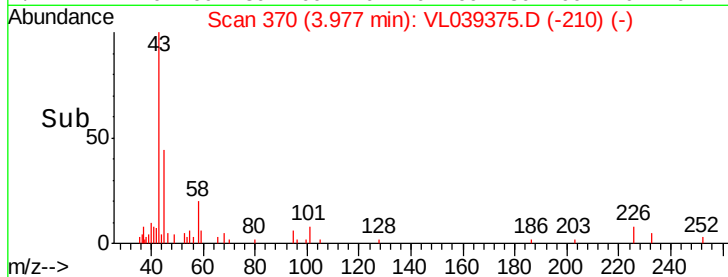
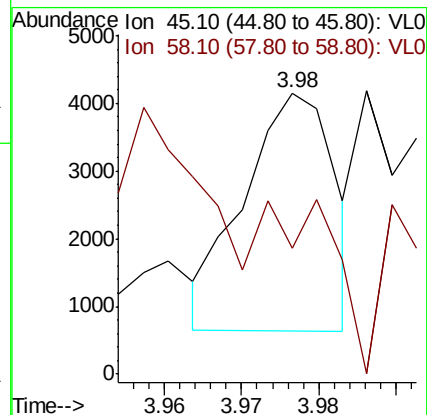
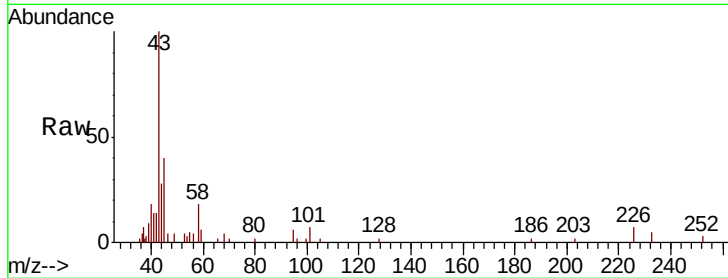
Acq: 28 Jun 2022 2:12 SG-2

Tot Ion: 45 Resp: 2865

Ion Ratio Lower Upper

45 100

58 0.0 1.8 2.8#



#20

Methylene Chloride

Concen: 0.126 ppbv

RT: 4.34 min Scan# 482

Delta R.T. -0.02 min

Lab File: VL039375.D

Acq: 28 Jun 2022 2:12

Tgt Ion: 84 Resp: 5812

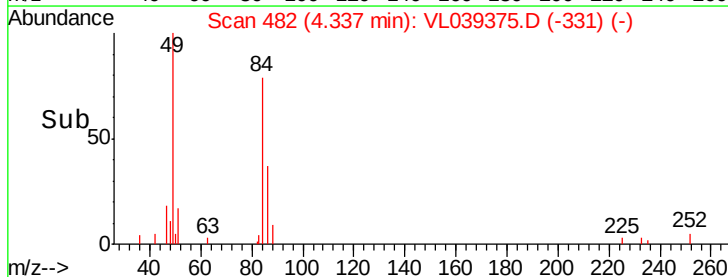
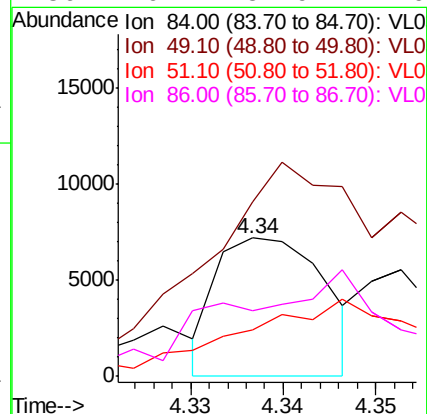
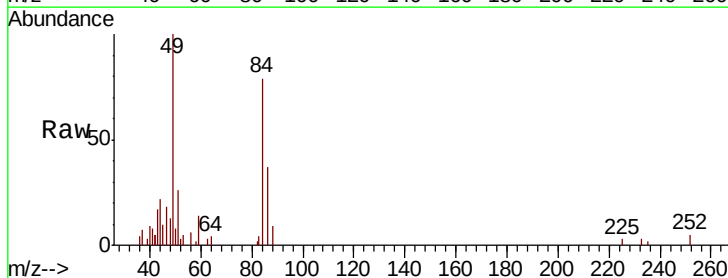
Ion Ratio Lower Upper

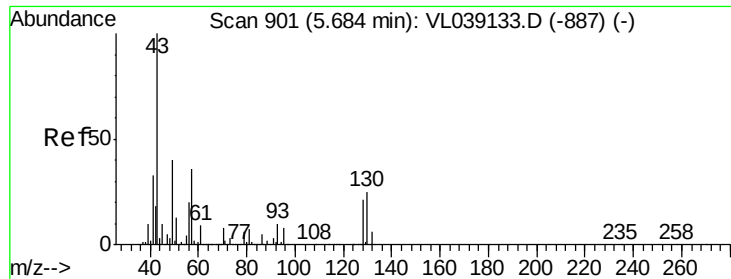
84 100

49 71.9 111.1 166.7#

51 19.9 35.3 52.9#

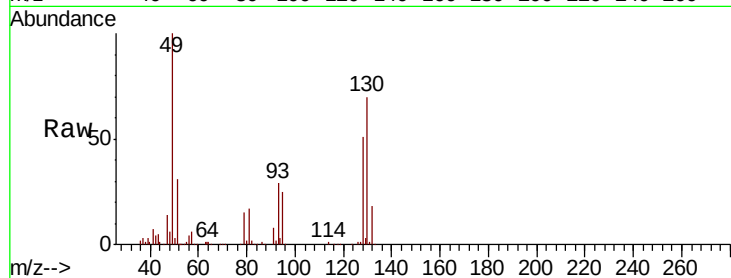
86 0.1 51.9 77.9#



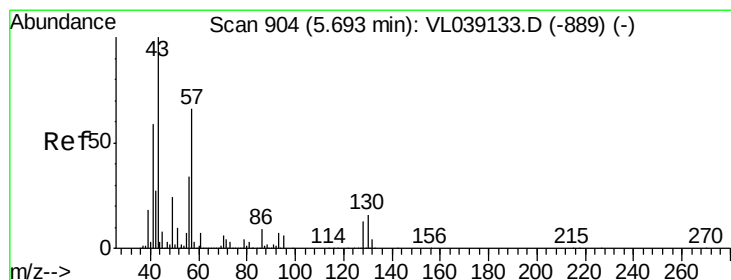
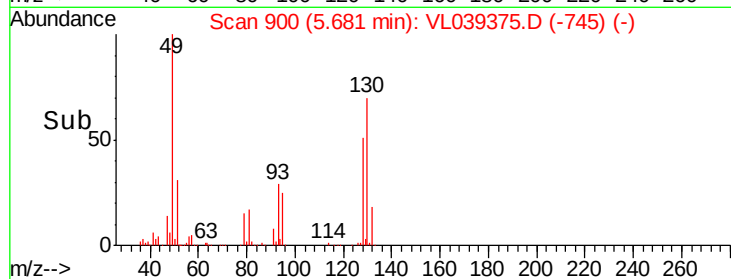
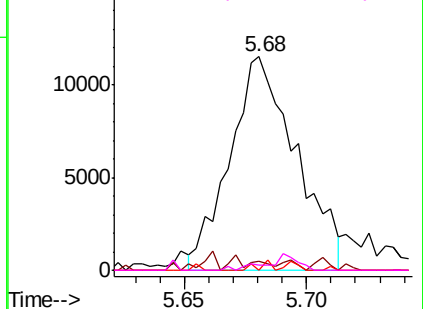


#25  
Ethyl Acetate  
Concen: 0.088 ppbv  
RT: 5.68  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 28 Jun 2022 2:12

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 21752 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 0.0   | 8.2   | 12.2# |
| 61       | 1.8   | 8.4   | 12.6# |
| 70       | 3.4   | 5.6   | 8.4#  |

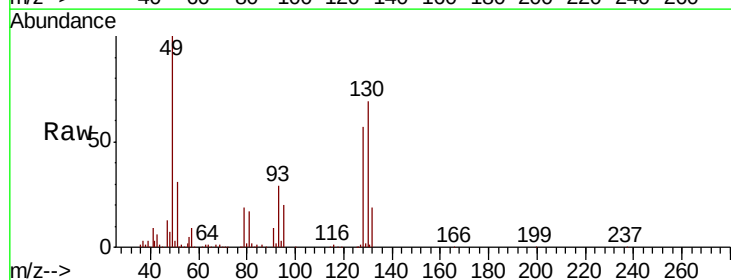


Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 45.10 (44.80 to 45.80): VL0  
Ion 61.10 (60.80 to 61.80): VL0  
Ion 70.10 (69.80 to 70.80): VL0

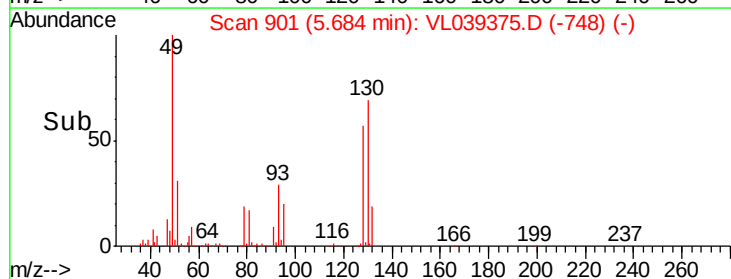
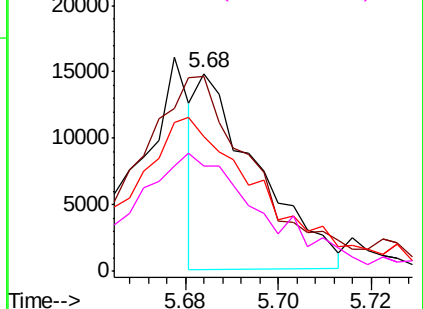


#26  
Hexane  
Concen: 0.124 ppbv  
RT: 5.68 min Scan# 901  
Delta R.T. -0.01 min  
Lab File: VL039375.D  
Acq: 28 Jun 2022 2:12

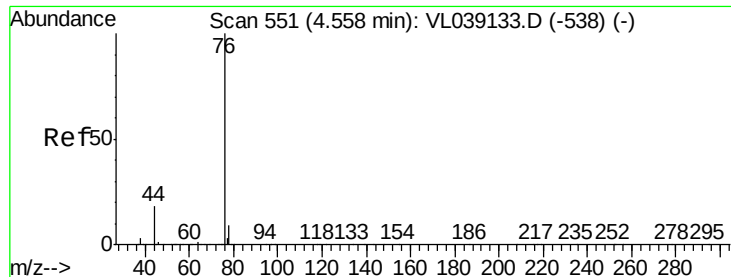
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 13392  |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 223.9 | 72.4  | 108.6# |
| 43       | 191.6 | 187.0 | 280.6  |
| 56       | 142.4 | 41.8  | 62.6#  |



Abundance Ion 57.10 (56.80 to 57.80): VL0  
Ion 41.10 (40.80 to 41.80): VL0  
Ion 43.10 (42.80 to 43.80): VL0  
Ion 56.10 (55.80 to 56.80): VL0







#27

Carbon Disulfide

Concen: 0.131 ppbv

RT: 4.55 Instrument: MSVOA\_1

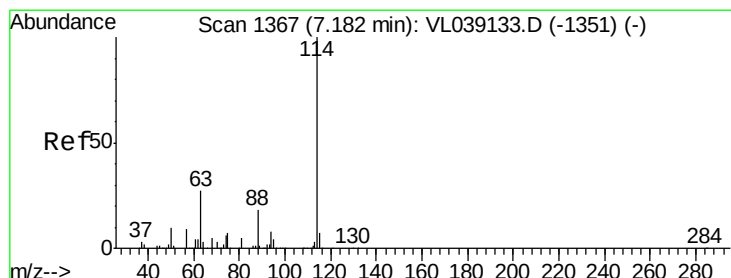
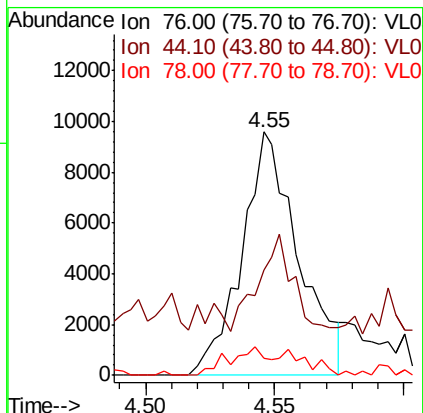
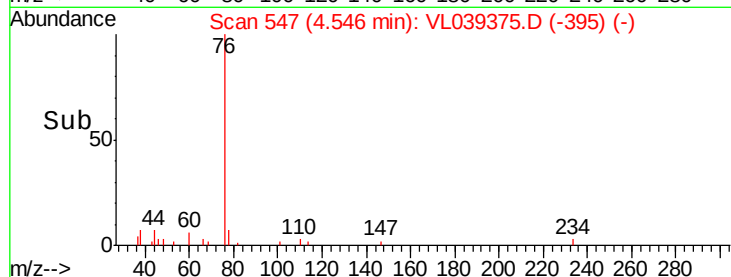
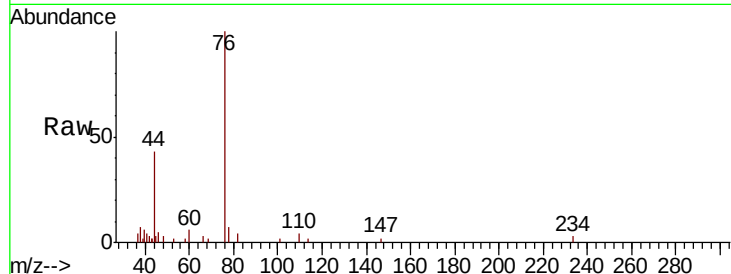
Delta R.T.

Lab File: ClientSampleId :

Acq: 28 Jun 2022 2:12

Tot Ion: 76 Resp: 14723

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 76  | 100   |       |       |
| 44  | 28.1  | 14.4  | 21.6# |
| 78  | 13.4  | 7.7   | 11.5# |



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1363

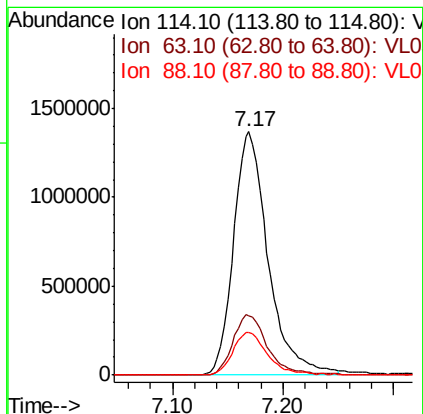
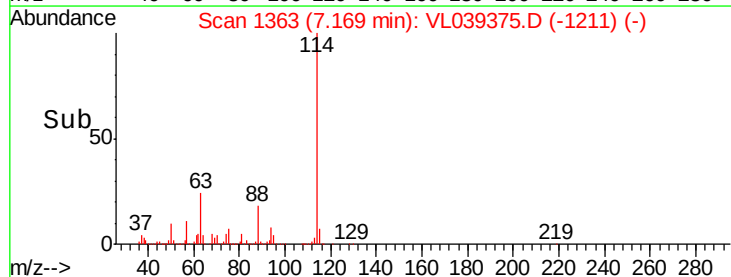
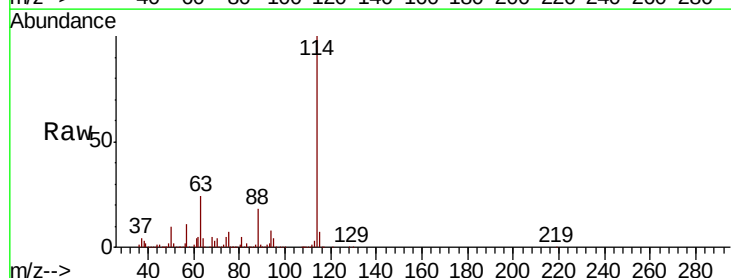
Delta R.T. -0.01 min

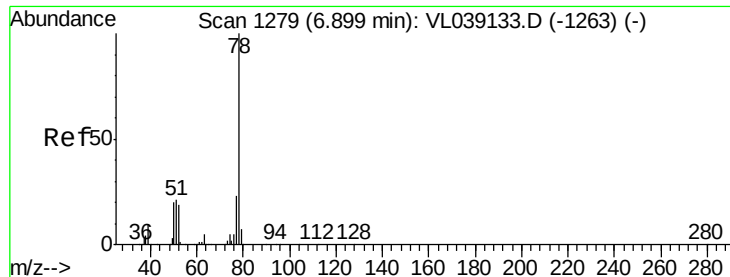
Lab File: VL039375.D

Acq: 28 Jun 2022 2:12

Tgt Ion: 114 Resp: 2979471

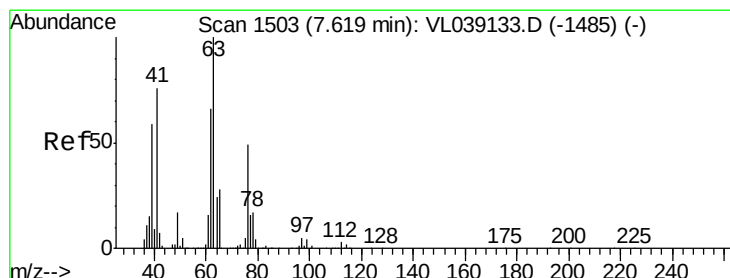
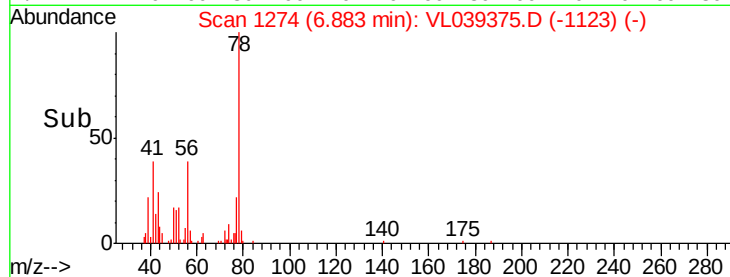
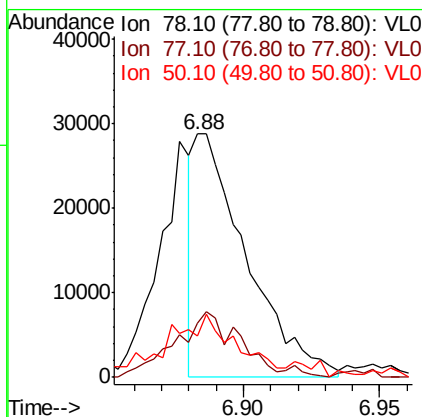
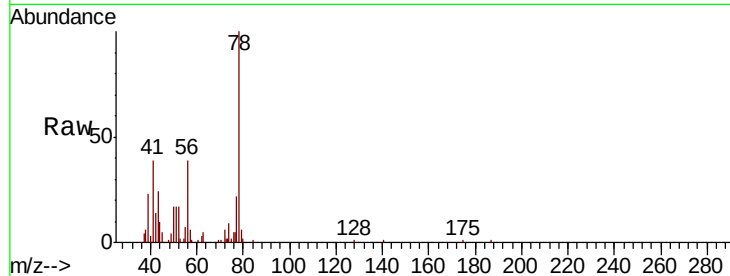
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 25.1  | 21.7  | 32.5  |
| 88  | 18.2  | 14.8  | 22.2  |





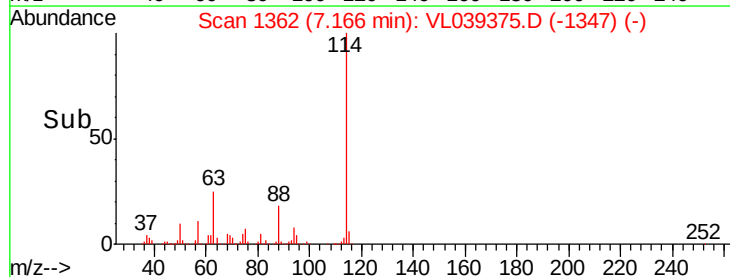
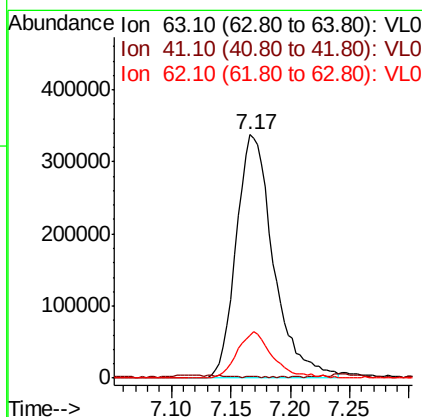
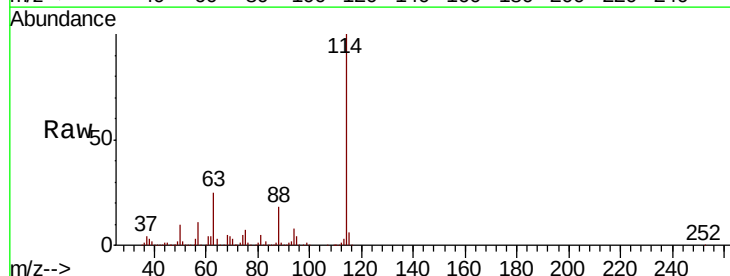
#36  
Benzene  
Concen: 0.158 ppbv  
RT: 6.88  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 28 Jun 2022 2:12

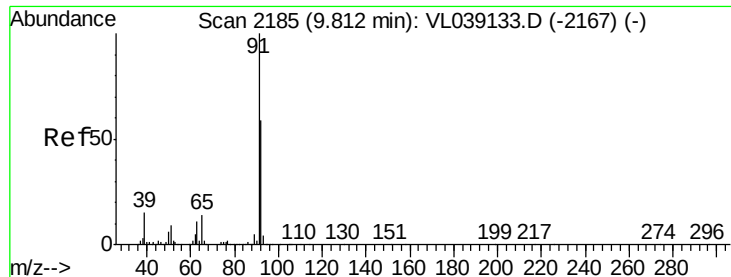
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 20.9  | 18.6  | 27.8  |
| 50      | 14.9  | 15.8  | 23.8  |



#39  
1,2-Dichloropropane  
Concen: 7.618 ppbv  
RT: 7.17 min Scan# 1362  
Delta R.T. -0.45 min  
Lab File: VL039375.D  
Acq: 28 Jun 2022 2:12

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 41      | 0.0   | 60.8  | 91.2  |
| 62      | 17.5  | 52.9  | 79.3  |





#53

Toluene

Concen: 0.637 ppbv

RT: 9.80 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

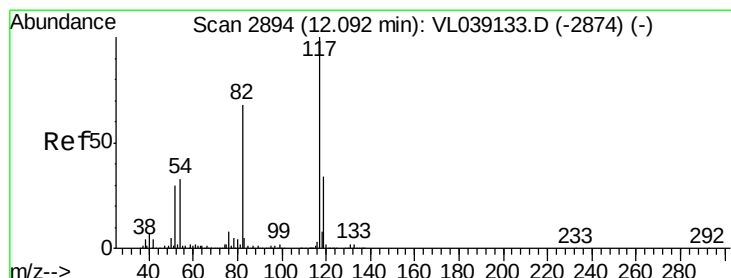
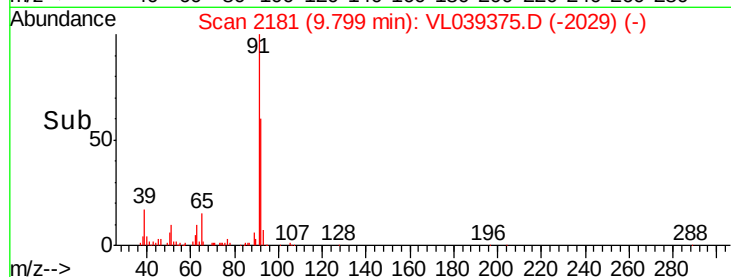
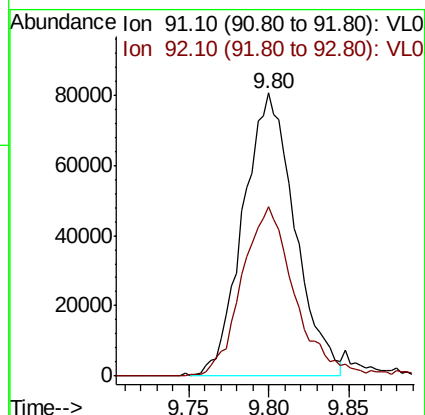
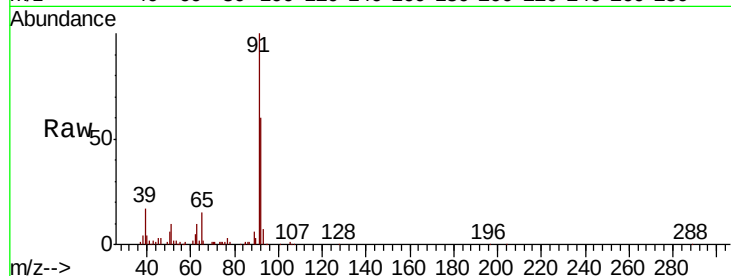
Acq: 28 Jun 2022 2:12 SG-2

Tot Ion: 91 Resp: 177289

Ion Ratio Lower Upper

91 100

92 63.4 48.1 72.1



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2889

Delta R.T. -0.02 min

Lab File: VL039375.D

Acq: 28 Jun 2022 2:12

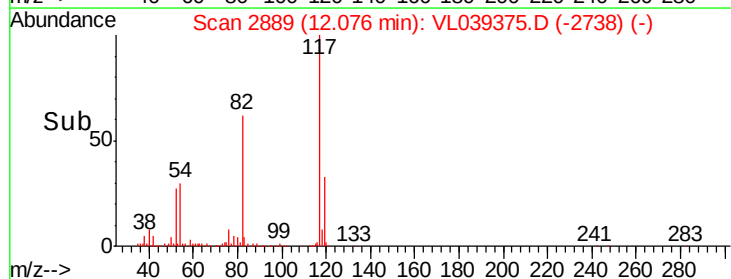
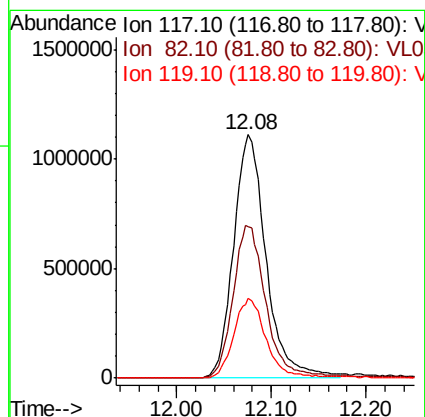
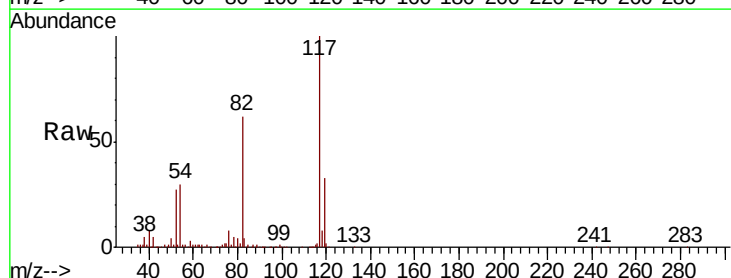
Tgt Ion: 117 Resp: 2655696

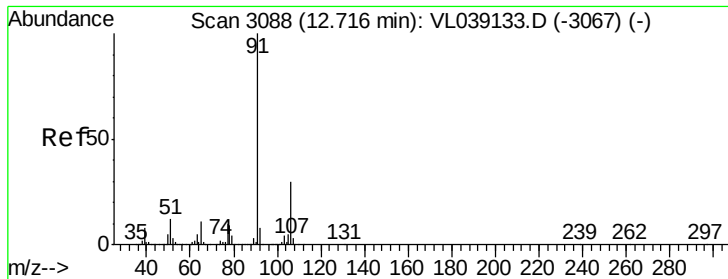
Ion Ratio Lower Upper

117 100

82 64.6 55.1 82.7

119 33.6 24.7 37.1





#58

Ethyl Benzene

Concen: 0.037 ppbv

RT: 12.69 min

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

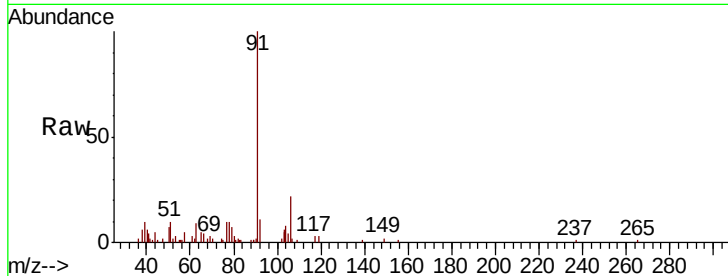
Acq: 28 Jun 2022 2:12

Tot Ion: 91 Resp: 13703

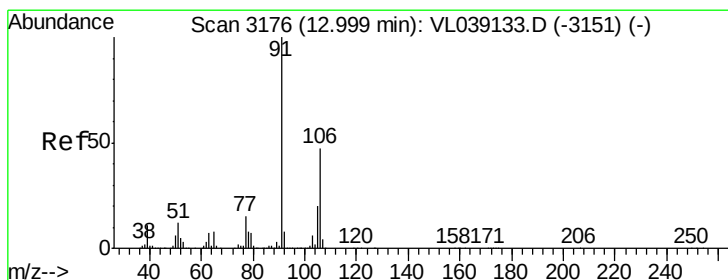
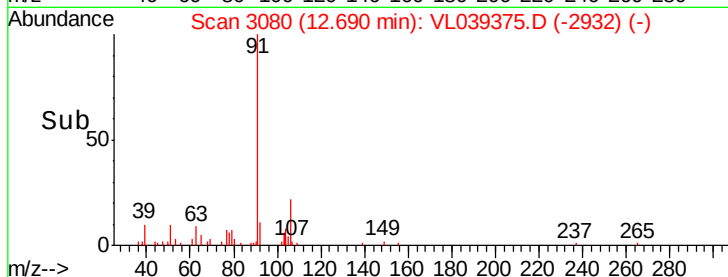
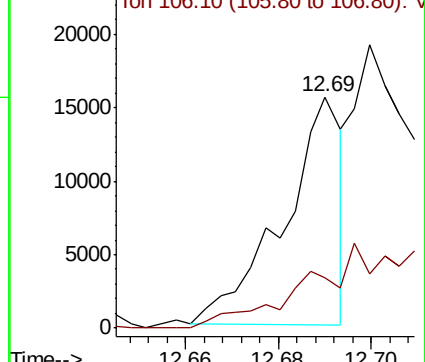
Ion Ratio Lower Upper

91 100

106 24.8 24.2 36.4



Abundance Ion 91.10 (90.80 to 91.80): VL0



#59

m/p-Xylene

Concen: 0.118 ppbv

RT: 12.98 min Scan# 3170

Delta R.T. -0.02 min

Lab File: VL039375.D

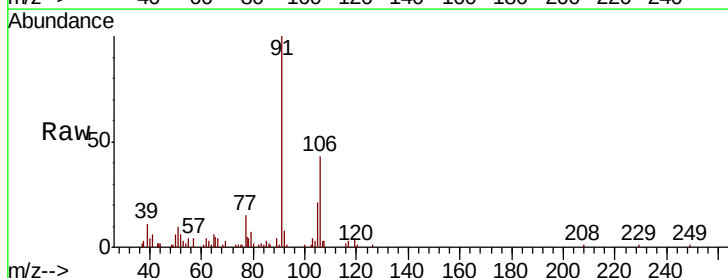
Acq: 28 Jun 2022 2:12

Tgt Ion: 91 Resp: 38159

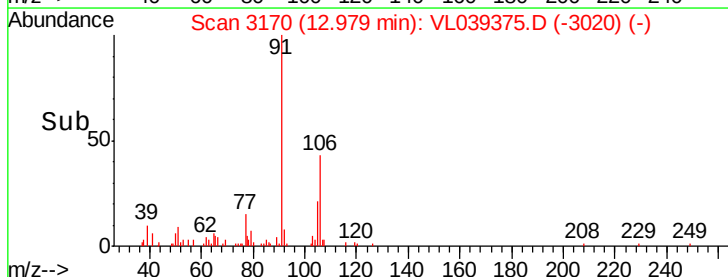
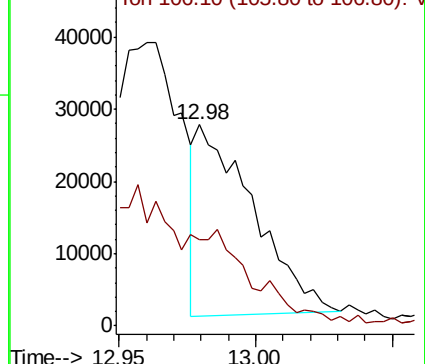
Ion Ratio Lower Upper

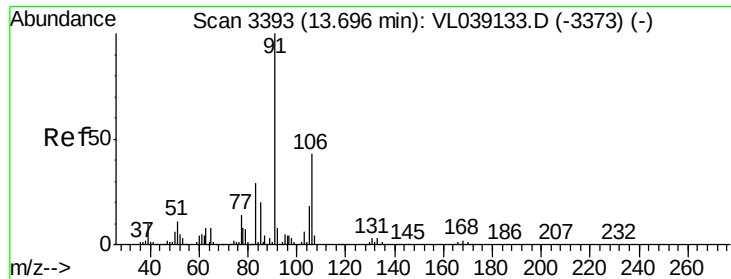
91 100

106 0.0 34.3 51.5#



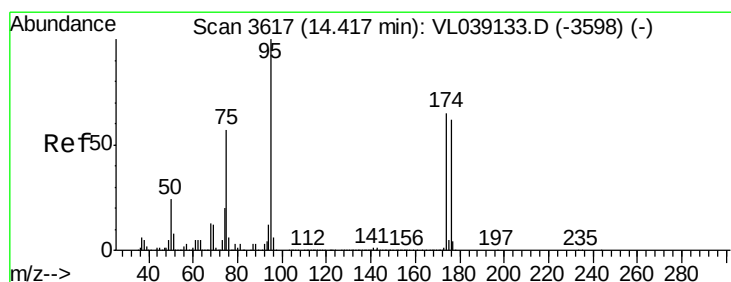
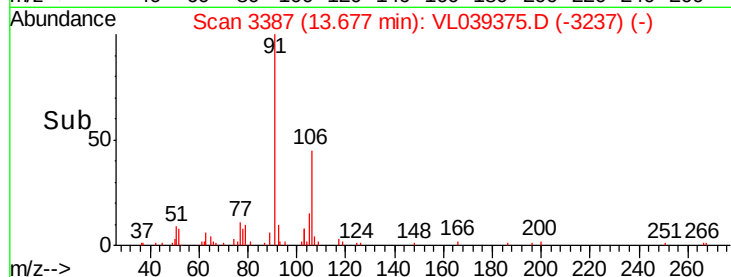
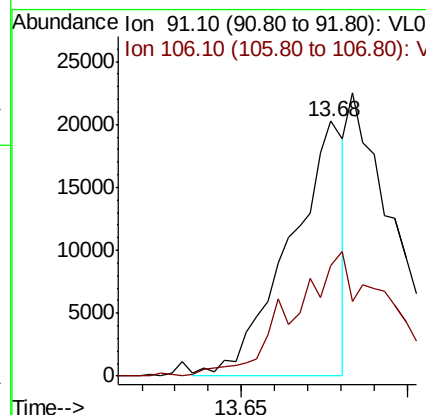
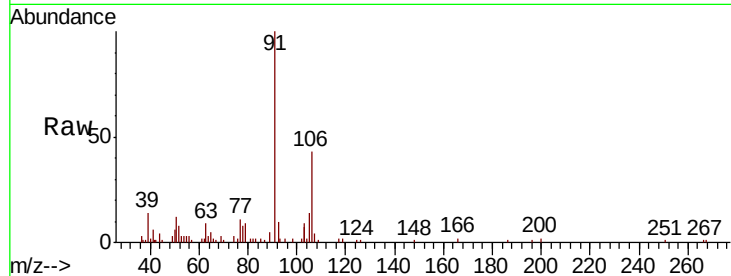
Abundance Ion 91.10 (90.80 to 91.80): VL0





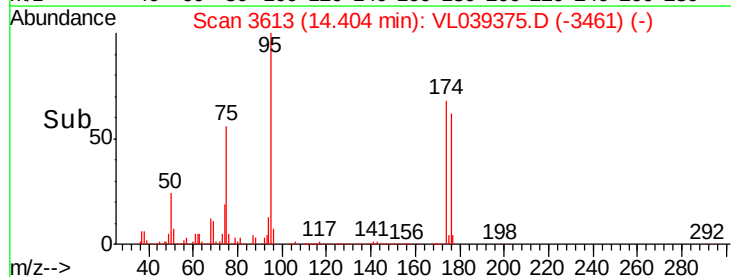
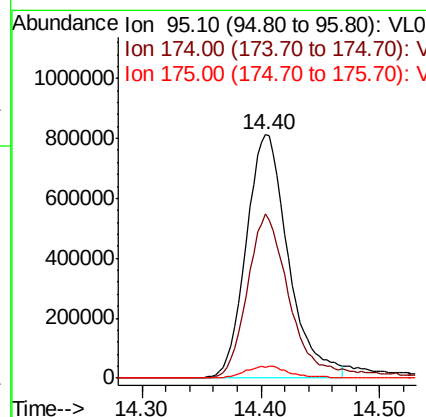
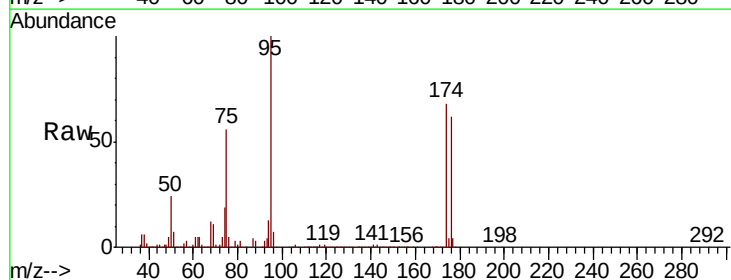
#60  
o-Xylene  
Concen: 0.076 ppbv  
RT: 13.68  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 28 Jun 2022 2:12

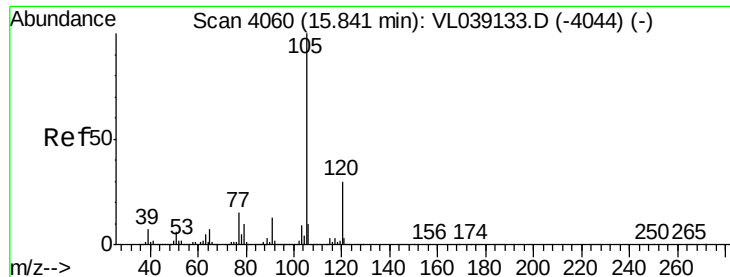
Tot Ion: 91 Resp: 22939  
Ion Ratio Lower Upper  
91 100  
106 96.2 22.3 66.9#



#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.087 ppbv  
RT: 14.40 min Scan# 3613  
Delta R.T. -0.01 min  
Lab File: VL039375.D  
Acq: 28 Jun 2022 2:12

Tgt Ion: 95 Resp: 1995090  
Ion Ratio Lower Upper  
95 100  
174 70.7 53.8 80.8  
175 5.4 4.1 6.1





#72

4-Ethyltoluene

Concen: 0.055 ppbv

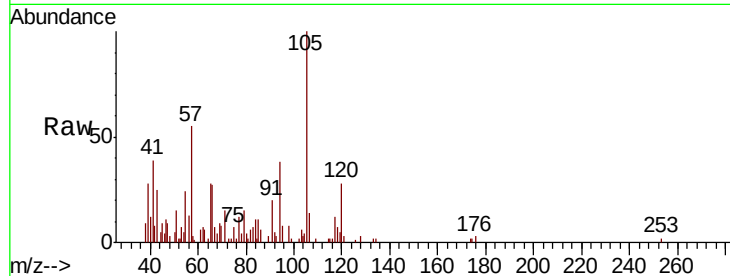
RT: 15.83

Delta R.T. MSVOA\_L

Lab File: ClientSampleId :

Acq: 28 Jun 2022 2:12

|          |       |       |       |
|----------|-------|-------|-------|
| Tot Ion: | 105   | Resp: | 19437 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 53.0  | 23.9  | 35.9# |
| 91       | 28.0  | 10.6  | 16.0# |
| 77       | 19.4  | 11.7  | 17.5# |

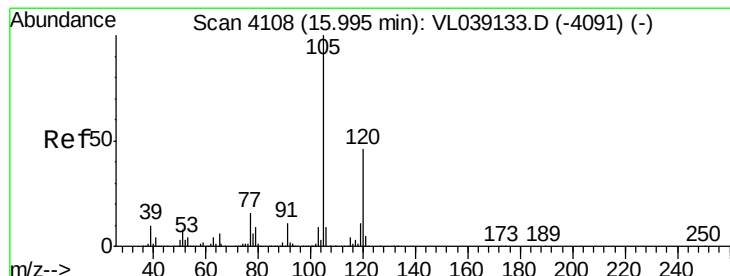
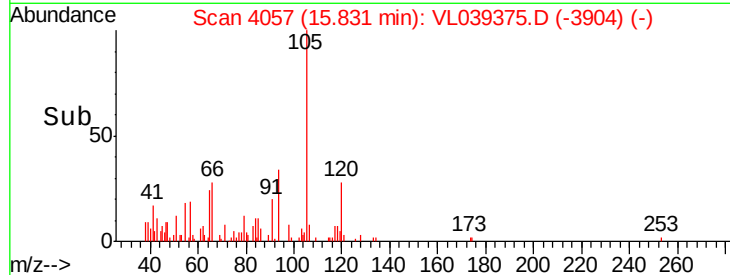
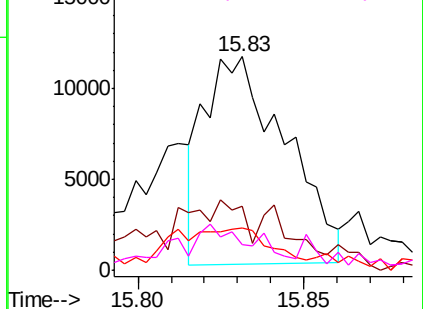


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.060 ppbv

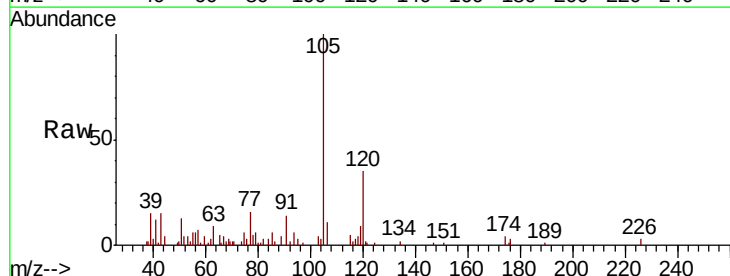
RT: 15.98 min Scan# 4103

Delta R.T. -0.02 min

Lab File: VL039375.D

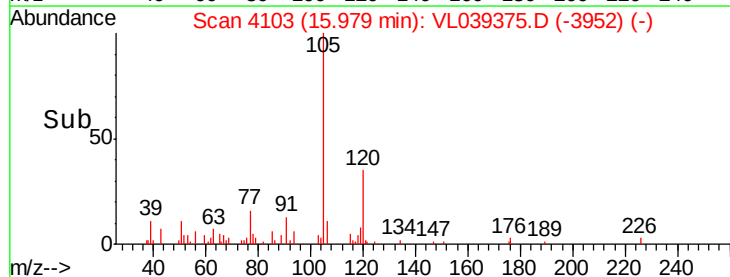
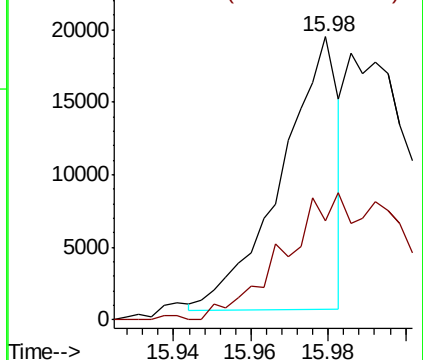
Acq: 28 Jun 2022 2:12

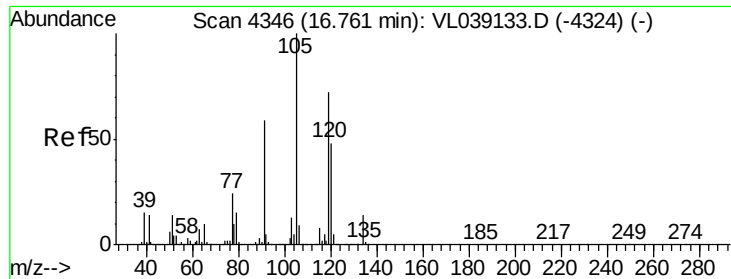
|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 105   | Resp: | 19167 |
| Ion      | Ratio | Lower | Upper |
| 105      | 100   |       |       |
| 120      | 39.2  | 36.7  | 55.1  |



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.575 ppbv  
 RT: 16.75  
 Delta R.T: MSVOA\_L  
 Lab File: ClientSampleId :  
 Acq: 28 Jun 2022 2.12

|           |       |       |        |
|-----------|-------|-------|--------|
| Tot Ion:  | 105   | Resp: | 205354 |
| Ion Ratio | Lower | Upper |        |
| 105       | 100   |       |        |
| 120       | 34.7  | 38.1  | 57.1#  |
| 91        | 13.9  | 47.4  | 71.0#  |
| 77        | 11.6  | 19.5  | 29.3#  |

