

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL092821\  
 Data File : VL037712.D  
 Acq On : 28 Sep 2021 21:18  
 Operator : SY/AP  
 Sample : M3948-02DL2 80X  
 Misc : 400mL/MSVOA L  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :

Quant Time: Sep 29 03:42:08 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   | 1396807  | 10.00 | ppbv  | 0.02     |
| 33) 1,4-Difluorobenzene | 7.18  | 114  | 4113605  | 10.00 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 12.09 | 117  | 3434746  | 10.00 | ppbv  | 0.02     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.42  | 95    | 2410848  | 9.71     | ppbv | 0.03   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 97.10% |

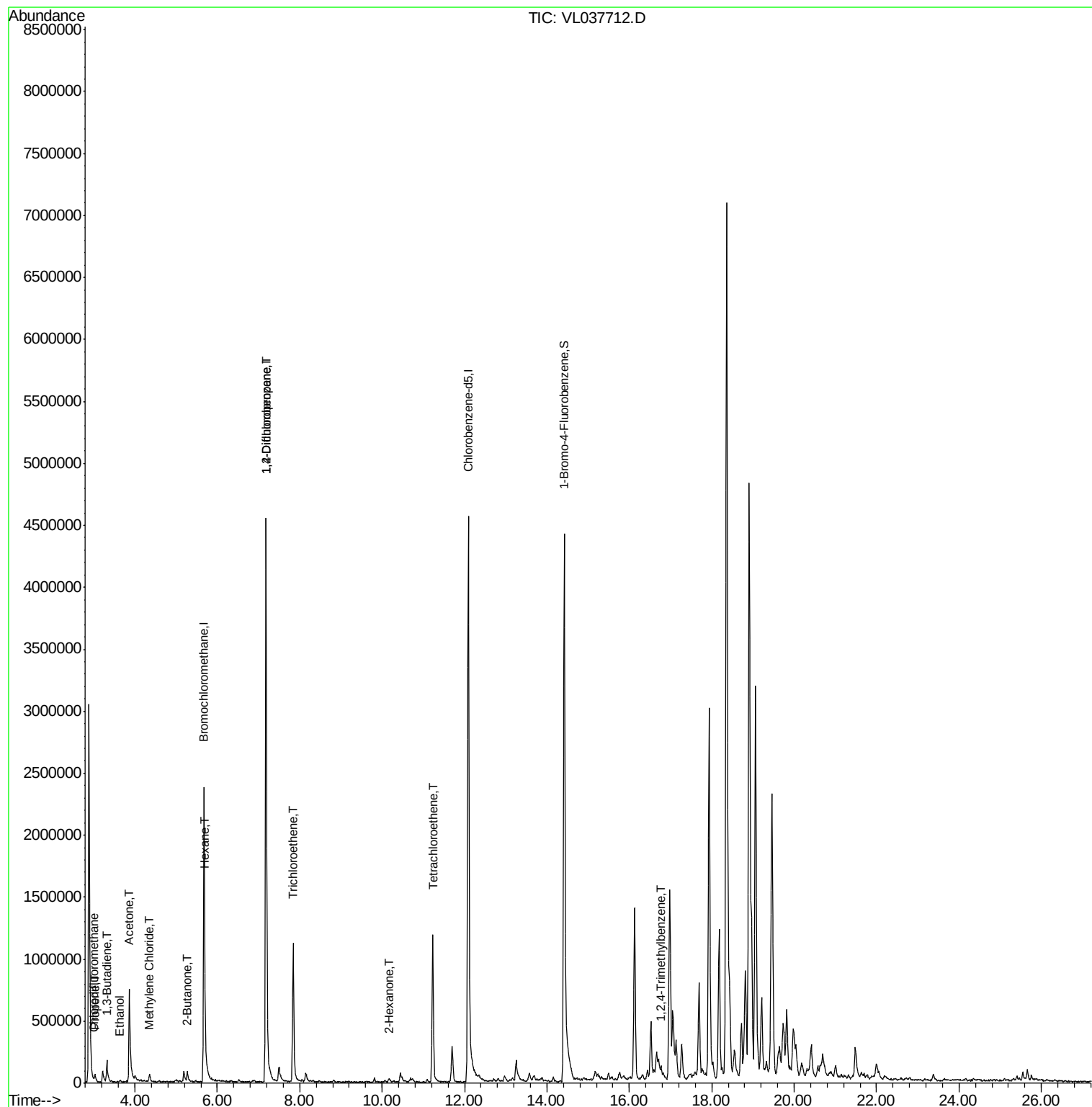
| Target Compounds           |       |     |         |              | Ovalue |
|----------------------------|-------|-----|---------|--------------|--------|
| 3) Chlorodifluoromethane   | 3.00  | 51  | 26558   | 0.101 ppbv # | 90     |
| 9) Propene                 | 3.02  | 41  | 5472    | 0.059 ppbv # | 14     |
| 13) Ethanol                | 3.62  | 45  | 3527    | 0.388 ppbv # | 33     |
| 15) Acetone                | 3.86  | 43  | 1139913 | 7.855 ppbv   | 98     |
| 16) 1,3-Butadiene          | 3.32  | 39  | 43814   | 0.483 ppbv # | 23     |
| 20) Methylene Chloride     | 4.35  | 84  | 18626   | 0.269 ppbv # | 76     |
| 26) Hexane                 | 5.70  | 57  | 10719   | 0.064 ppbv # | 35     |
| 34) 2-Butanone             | 5.27  | 43  | 107875  | 0.645 ppbv # | 82     |
| 38) Trichloroethene        | 7.84  | 130 | 414280  | 2.891 ppbv   | 94     |
| 39) 1,2-Dichloropropane    | 7.18  | 63  | 936251  | 7.126 ppbv # | 27     |
| 51) 2-Hexanone             | 10.17 | 43  | 20650   | 0.221 ppbv # | 79     |
| 52) Tetrachloroethene      | 11.23 | 164 | 207686  | 1.577 ppbv   | 95     |
| 74) 1,2,4-Trimethylbenzene | 16.77 | 105 | 27116   | 0.064 ppbv # | 65     |

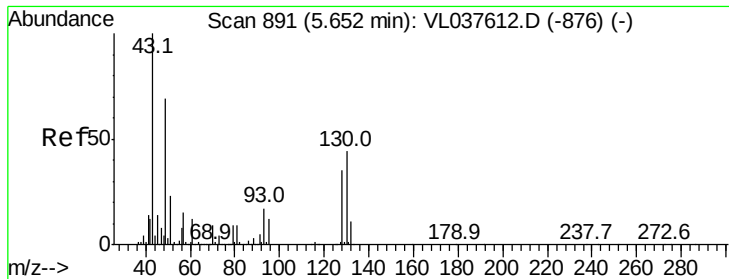
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL092821\  
Data File : VL037712.D  
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Operator : SY/AP  
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Misc : 400mL/MSVOA L  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :

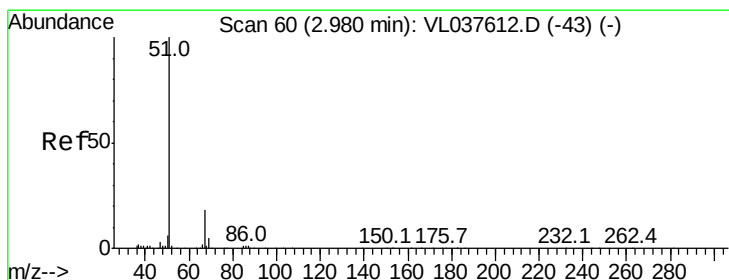
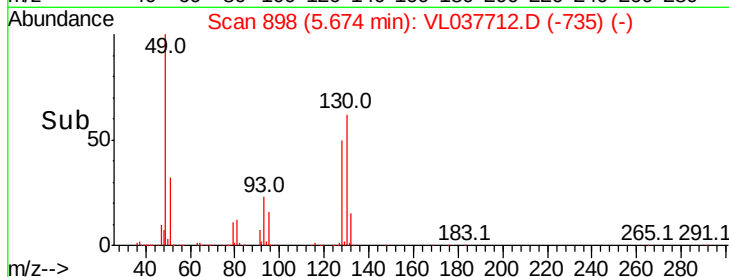
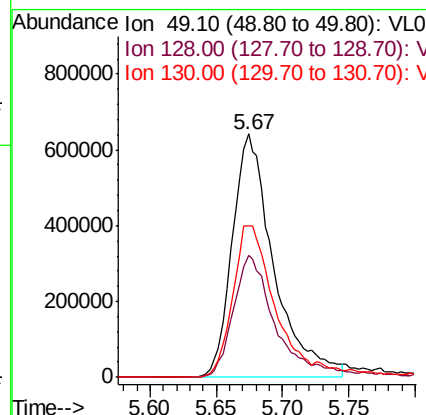
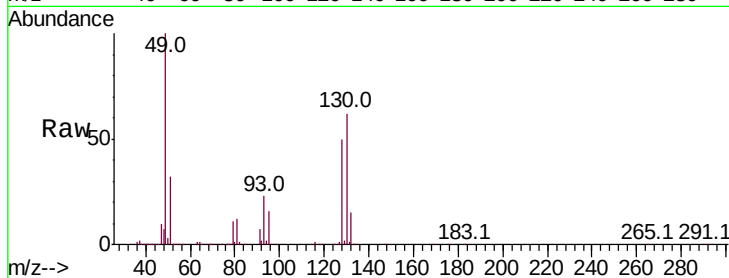
Quant Time: Sep 29 03:42:08 2021  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL091621AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Sep 16 13:42:46 2021  
QLast Update : Thu Sep 16 13:42:46 2021  
Response via : Initial Calibration





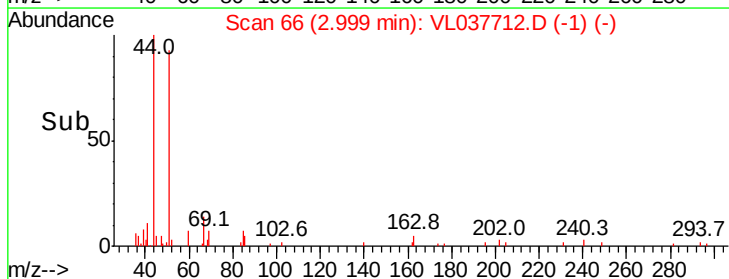
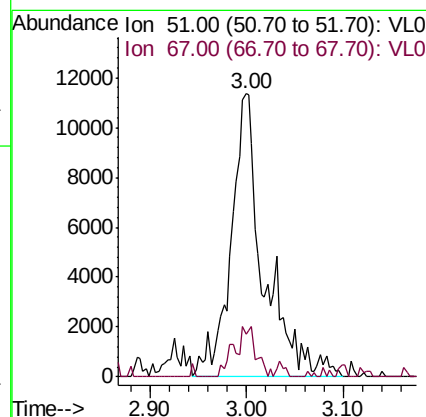
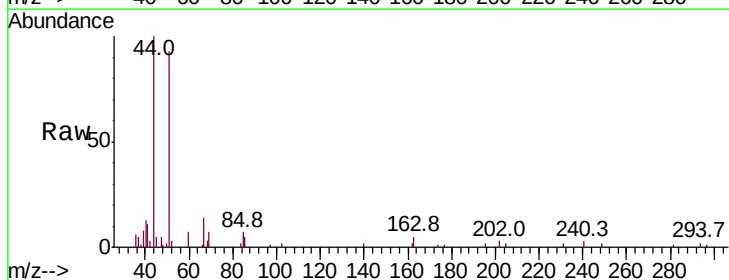
#1  
 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.67  
 Instrument: MSVOA\_1  
 Delta R.T.:  
 Lab File: ClientSampleId:  
 Acq: 28 Sep 2021 21:18

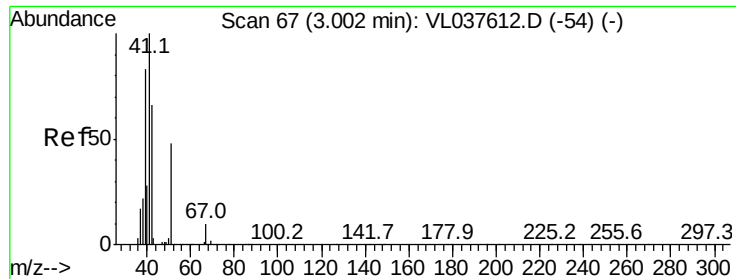
Tot Ion: 49 Resp: 1396807  
 Ion Ratio Lower Upper  
 49 100  
 128 53.5 27.9 83.6  
 130 68.5 33.9 101.7



#3  
 Chlorodifluoromethane  
 Concen: 0.101 ppbv  
 RT: 3.00 min Scan# 66  
 Delta R.T.: 0.02 min  
 Lab File: VL037712.D  
 Acq: 28 Sep 2021 21:18

Tgt Ion: 51 Resp: 26558  
 Ion Ratio Lower Upper  
 51 100  
 67 13.2 14.0 21.0#





#9

Propene

Concen: 0.059 ppbv

RT: 3.02 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

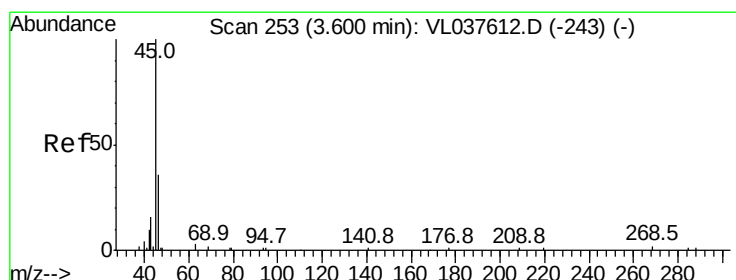
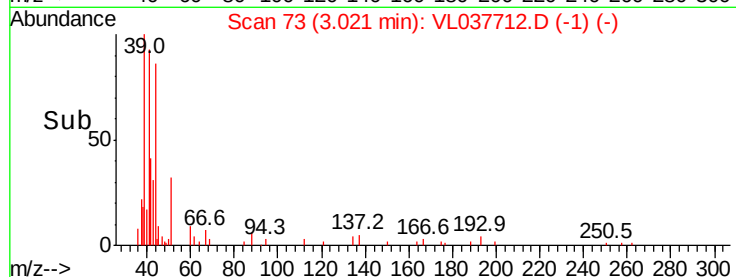
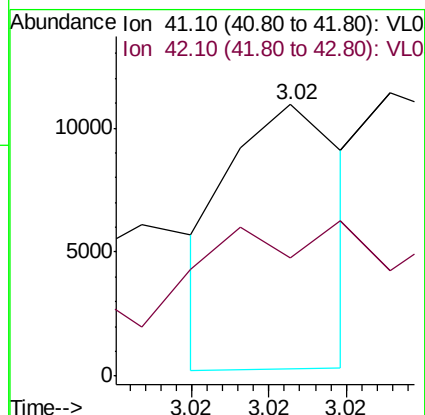
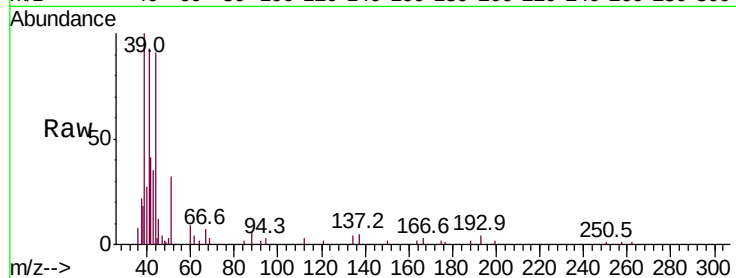
Acq: 28 Sep 2021 21:18

Tot Ion: 41 Resp: 5472

Ion Ratio Lower Upper

41 100

42 0.0 57.2 85.8#



#13

Ethanol

Concen: 0.388 ppbv

RT: 3.62 min Scan# 258

Delta R.T. 0.02 min

Lab File: VL037712.D

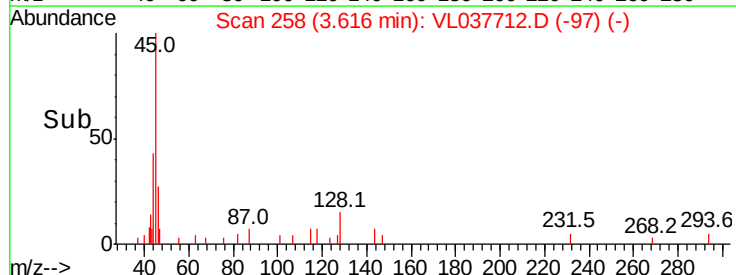
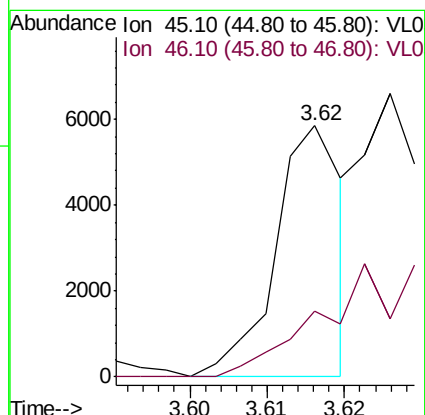
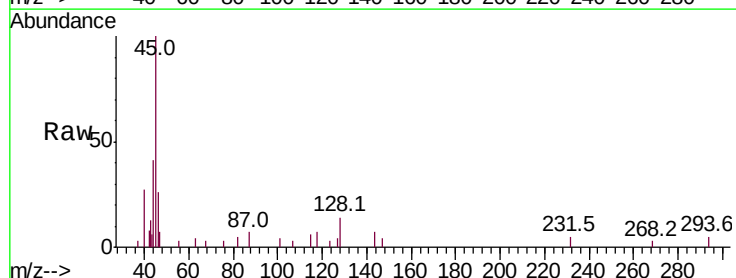
Acq: 28 Sep 2021 21:18

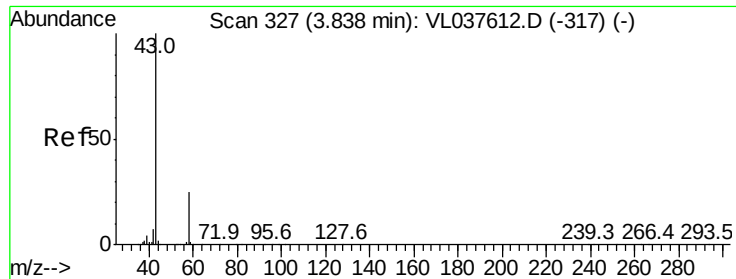
Tgt Ion: 45 Resp: 3527

Ion Ratio Lower Upper

45 100

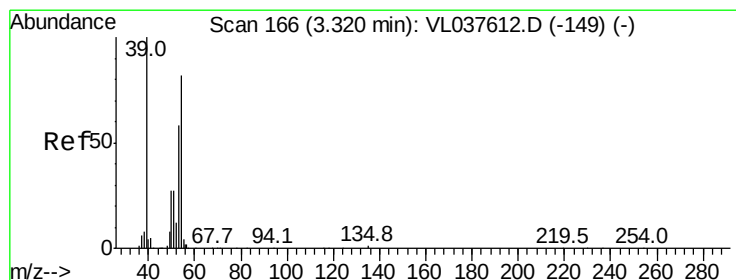
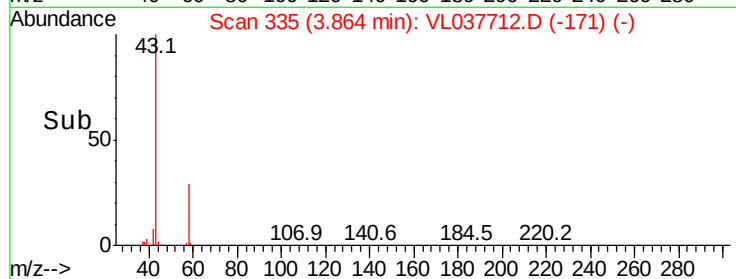
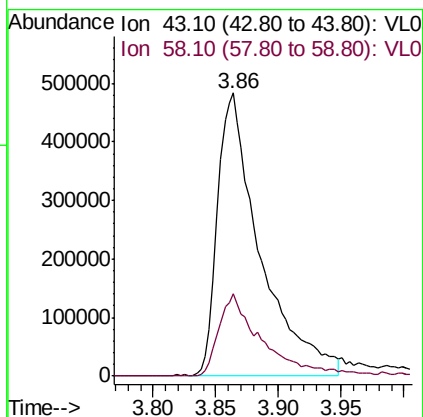
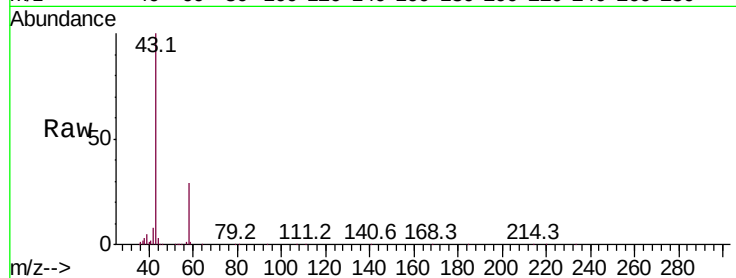
46 0.0 17.2 68.8#





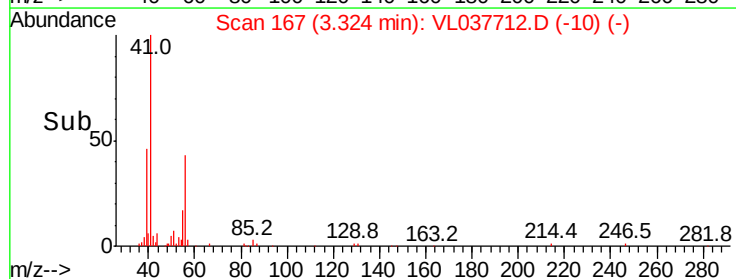
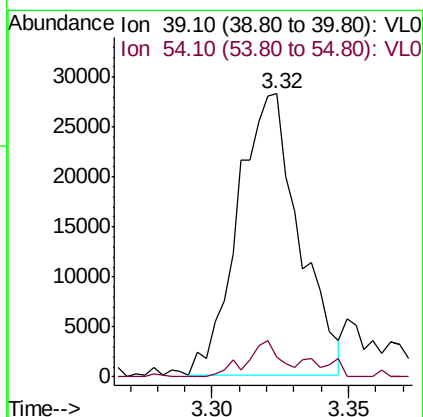
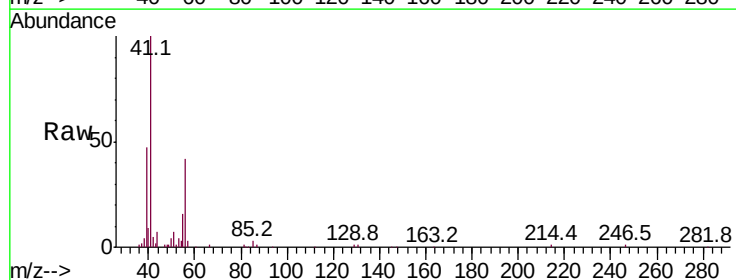
#15  
Acetone  
Concen: 7.855 ppbv  
RT: 3.86  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 28 Sep 2021 21:18

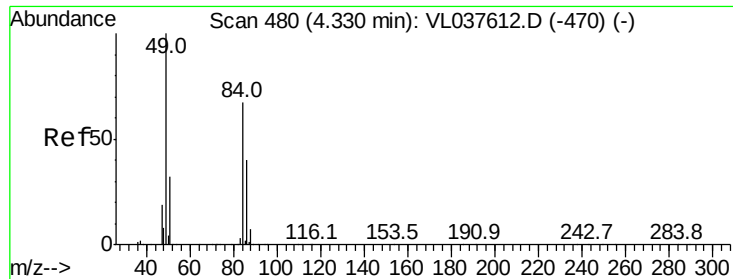
Tot Ion: 43 Resp: 1139913  
Ion Ratio Lower Upper  
43 100  
58 30.1 24.9 37.3



#16  
1,3-Butadiene  
Concen: 0.483 ppbv  
RT: 3.32 min Scan# 167  
Delta R.T. 0.00 min  
Lab File: VL037712.D  
Acq: 28 Sep 2021 21:18

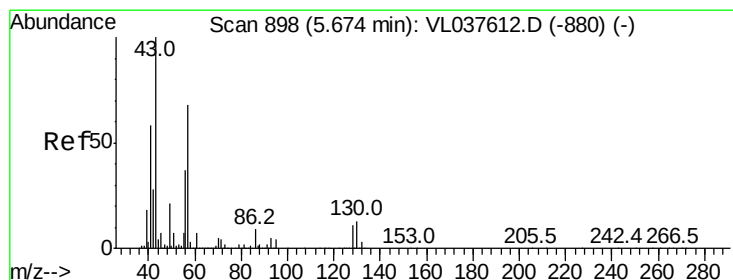
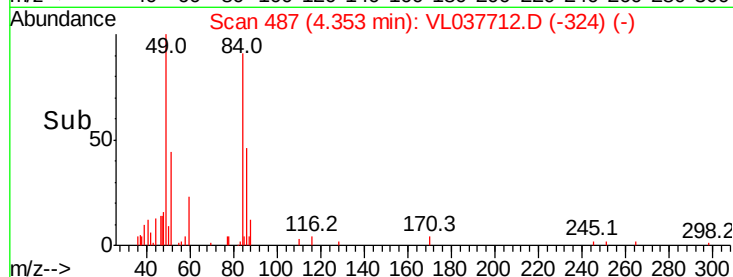
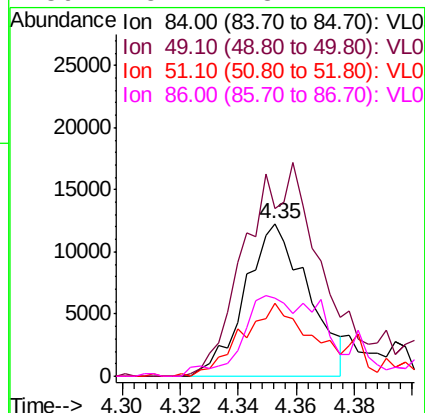
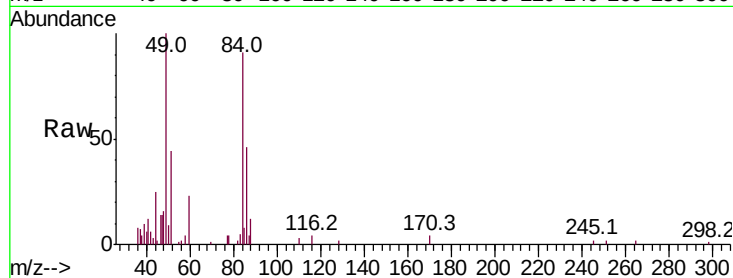
Tgt Ion: 39 Resp: 43814  
Ion Ratio Lower Upper  
39 100  
54 11.3 62.6 93.8#





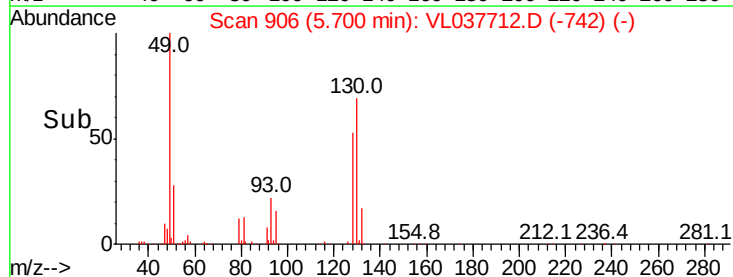
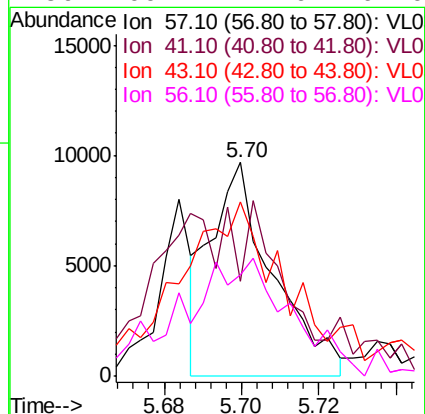
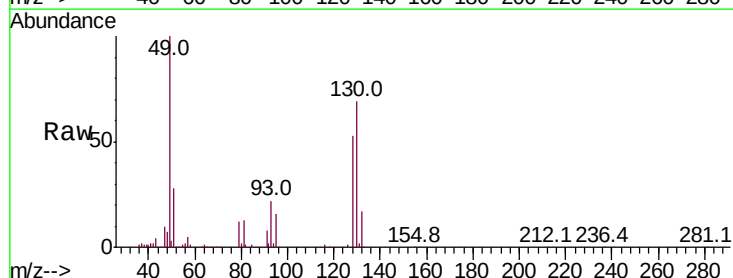
#20  
Methvlene Chloride  
Concen: 0.269 ppbv  
RT: 4.35  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 28 Sep 2021 21:18

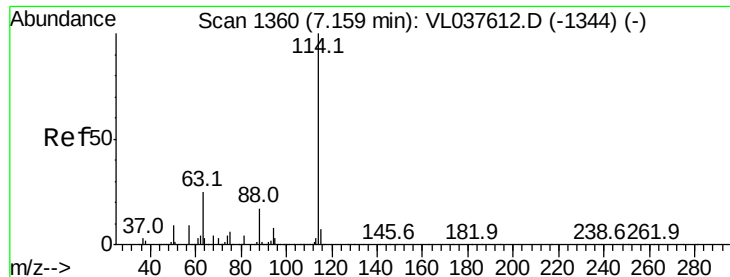
|          |       |       |        |
|----------|-------|-------|--------|
| Tot Ion: | 84    | Resp: | 18626  |
| Ion      | Ratio | Lower | Upper  |
| 84       | 100   |       |        |
| 49       | 108.2 | 120.0 | 180.0# |
| 51       | 48.1  | 38.0  | 57.0   |
| 86       | 45.2  | 48.2  | 72.2#  |



#26  
Hexane  
Concen: 0.064 ppbv  
RT: 5.70 min Scan# 906  
Delta R.T. 0.03 min  
Lab File: VL037712.D  
Acq: 28 Sep 2021 21:18

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 10719  |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 192.2 | 70.9  | 106.3# |
| 43       | 146.2 | 170.4 | 255.6# |
| 56       | 109.2 | 42.6  | 64.0#  |





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 Instrument: MSVOA\_1

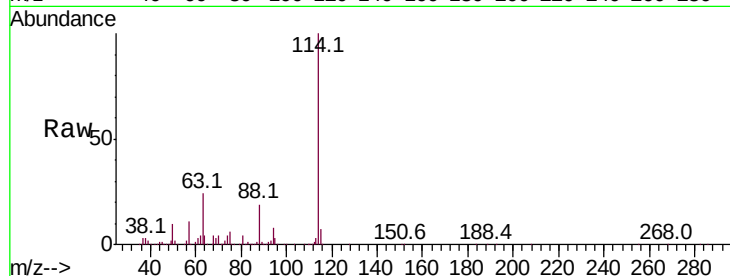
Delta R.T. ClientSampleId:

Lab File:

Acq: 28 Sep 2021 21:18

Tot Ion: 114 Resp: 4113605

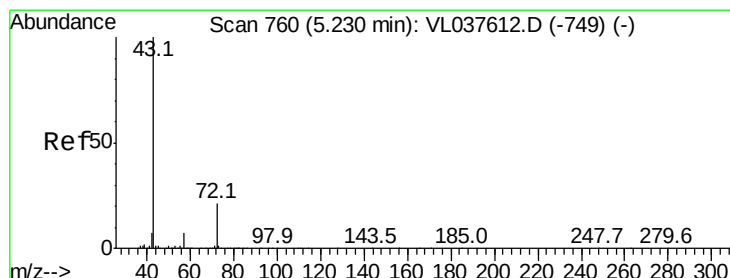
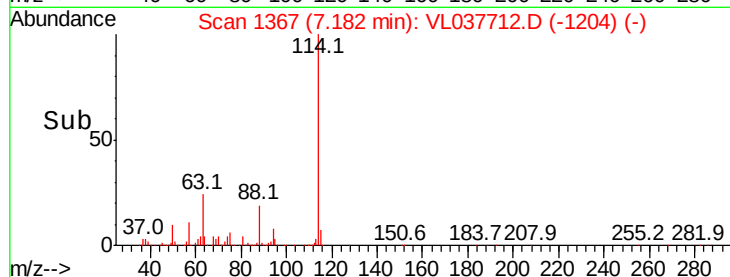
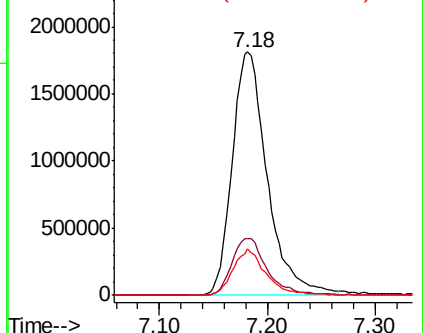
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 114 | 100   |       |       |
| 63  | 24.0  | 19.6  | 29.4  |
| 88  | 18.2  | 14.2  | 21.4  |



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.645 ppbv

RT: 5.27 min Scan# 773

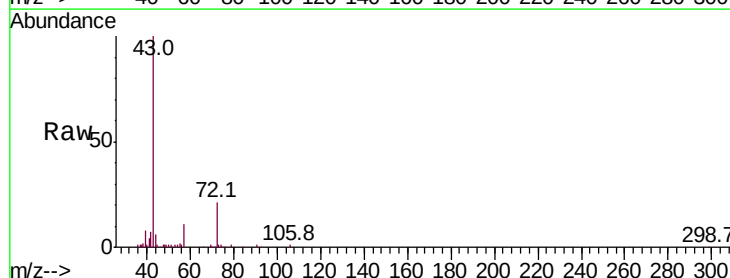
Delta R.T. 0.04 min

Lab File: VL037712.D

Acq: 28 Sep 2021 21:18

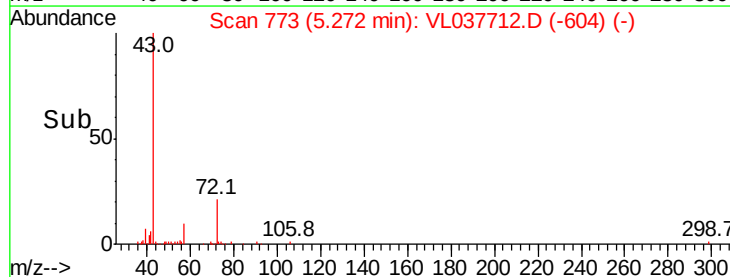
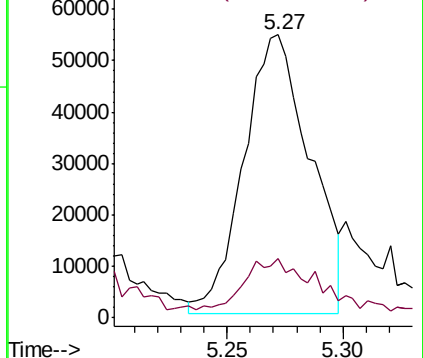
Tgt Ion: 43 Resp: 107875

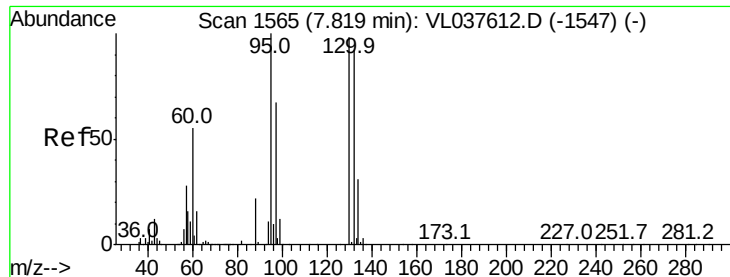
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 43  | 100   |       |       |
| 72  | 31.6  | 18.4  | 27.6  |



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#38

Trichloroethene

Concen: 2.891 ppbv

RT: 7.84 Instrument:

Delta R.T. MSVOA\_1

Lab File: ClientSampleId:

Acq: 28 Sep 2021 21:18

Tot Ion:130 Resp: 414280

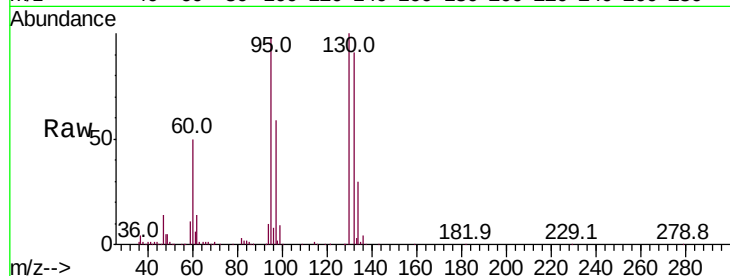
Ion Ratio Lower Upper

130 100

95 97.3 81.8 122.6

132 91.1 75.3 112.9

97 58.4 54.7 82.1

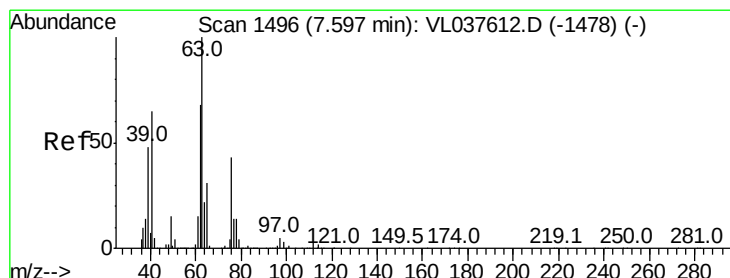
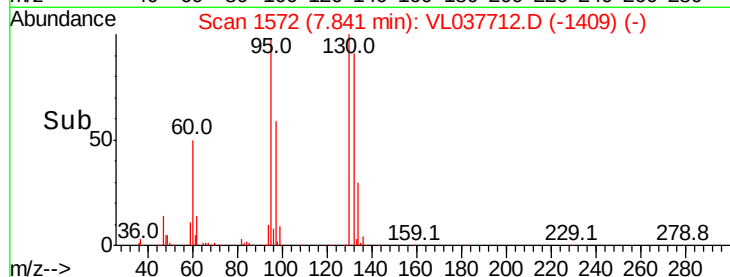
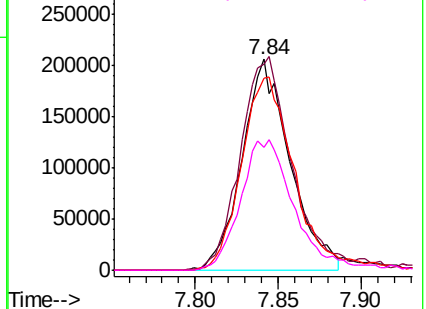


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 7.126 ppbv

RT: 7.18 min Scan# 1367

Delta R.T. -0.41 min

Lab File: VL037712.D

Acq: 28 Sep 2021 21:18

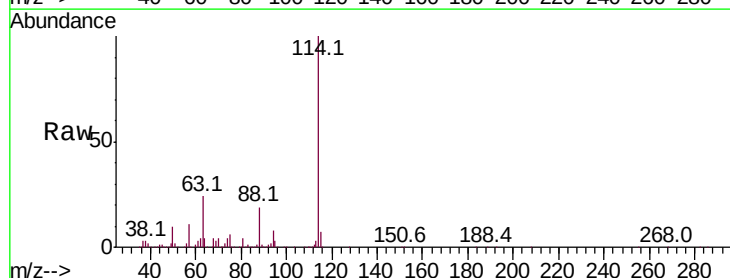
Tgt Ion: 63 Resp: 936251

Ion Ratio Lower Upper

63 100

41 0.0 51.6 77.4#

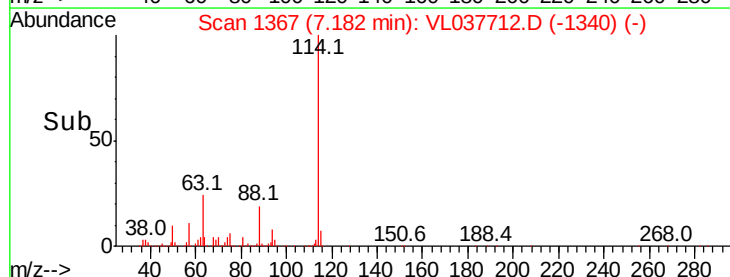
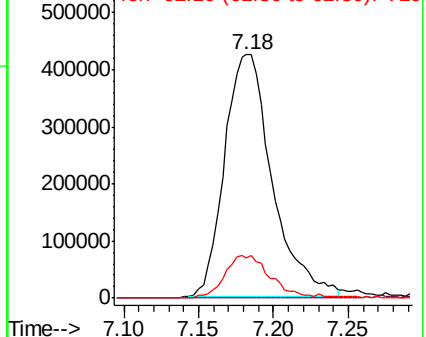
62 16.4 54.6 81.8#



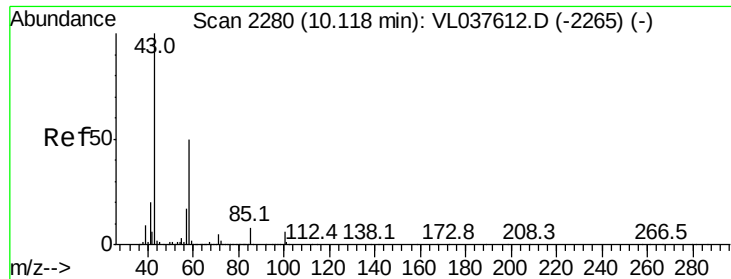
Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0

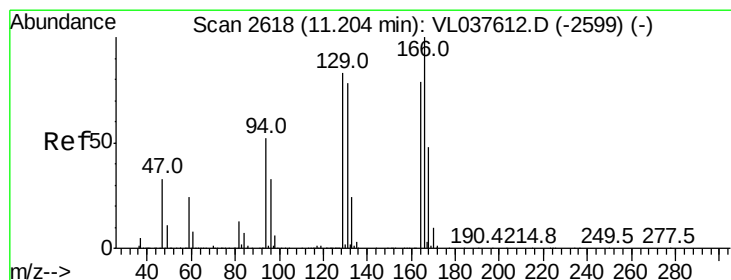
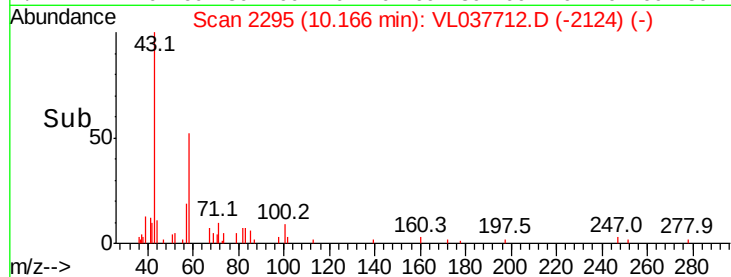
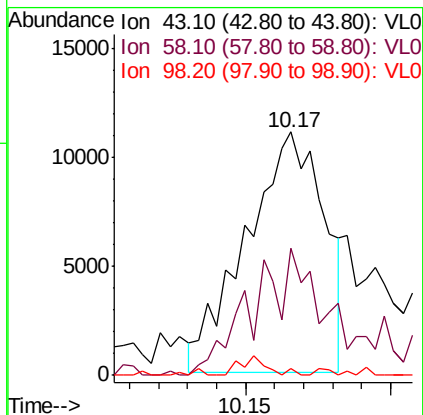
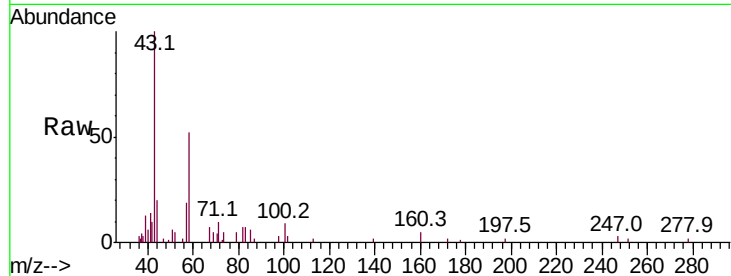






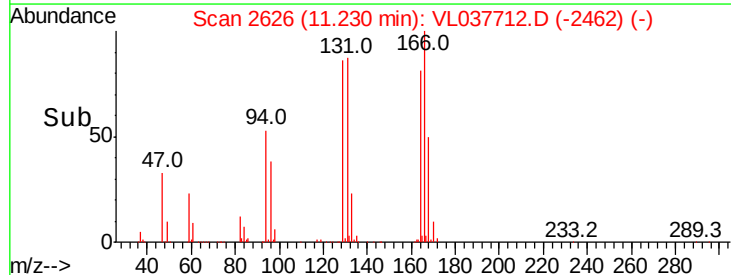
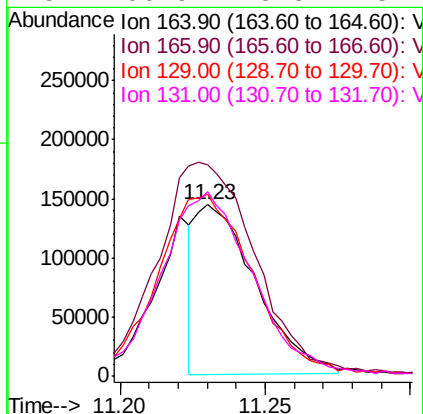
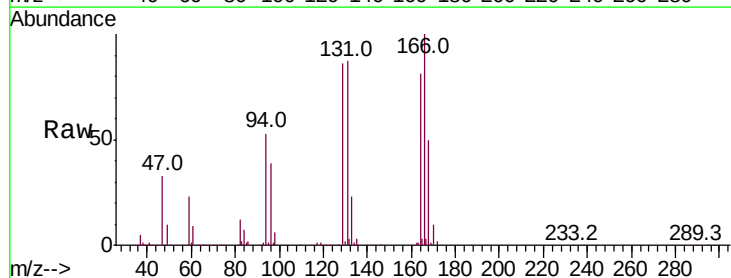
#51  
2-Hexanone  
Concen: 0.221 ppbv  
RT: 10.17  
Delta R.T. MSVOA\_L  
Lab File: ClientSampleId :  
Acq: 28 Sep 2021 21:18

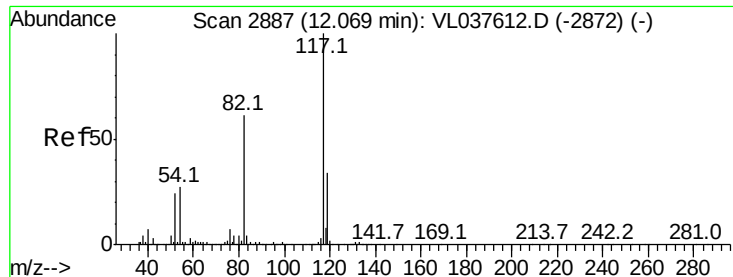
| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 63.5  | 39.3  | 58.9# |
| 98      | 4.0   | 0.4   | 0.6#  |



#52  
Tetrachloroethene  
Concen: 1.577 ppbv  
RT: 11.23 min Scan# 2626  
Delta R.T. 0.03 min  
Lab File: VL037712.D  
Acq: 28 Sep 2021 21:18

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 164     | 100   |       |       |
| 166     | 121.4 | 101.2 | 151.8 |
| 129     | 106.9 | 84.0  | 126.0 |
| 131     | 106.9 | 78.8  | 118.2 |

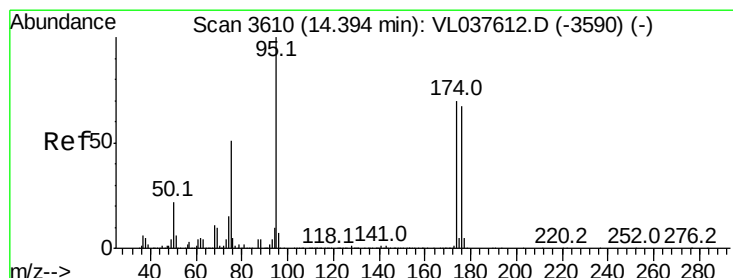
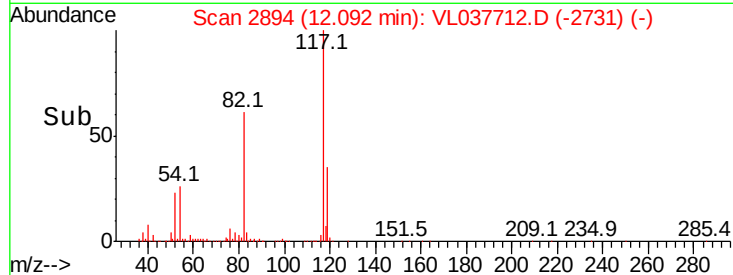
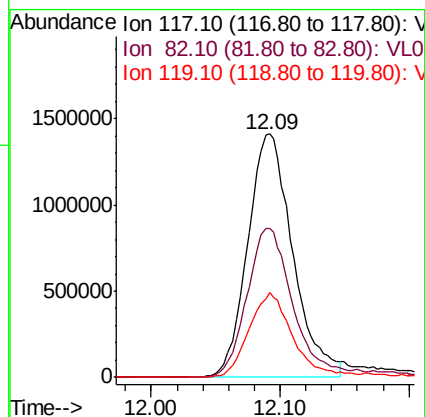
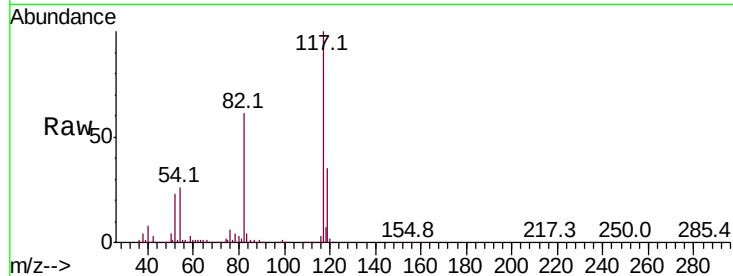




#55  
 Chlorobenzene-d5  
 Concen: 10.000 ppbv  
 RT: 12.09 min  
 Instrument: MSVOA\_1  
 Delta R.T.:  
 Lab File: ClientSampleId:  
 Acq: 28 Sep 2021 21:18

Tot Ion: 117 Resp: 3434746

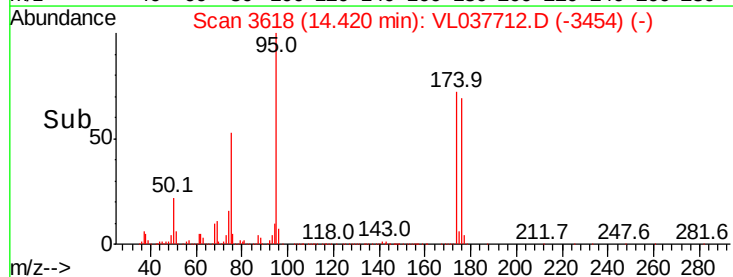
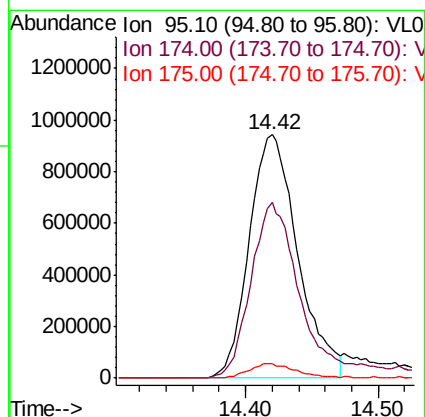
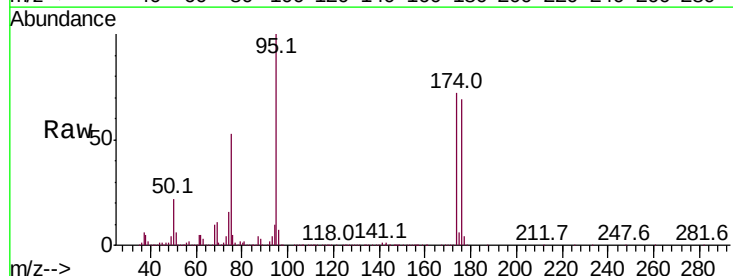
| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 117 | 100   |       |       |
| 82  | 68.1  | 50.6  | 75.8  |
| 119 | 35.2  | 26.2  | 39.2  |

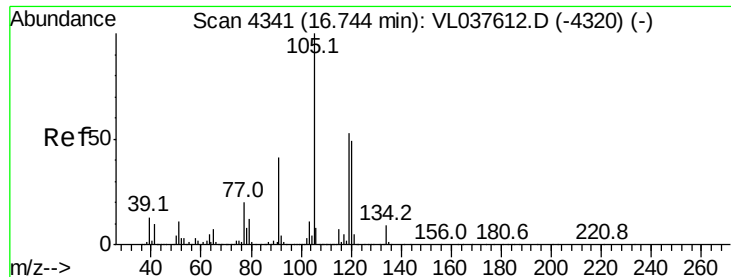


#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 9.712 ppbv  
 RT: 14.42 min Scan# 3618  
 Delta R.T.: 0.03 min  
 Lab File: VL037712.D  
 Acq: 28 Sep 2021 21:18

Tgt Ion: 95 Resp: 2410848

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 95  | 100   |       |       |
| 174 | 80.6  | 56.3  | 84.5  |
| 175 | 5.6   | 4.4   | 6.6   |





#74

1,2,4-Trimethylbenzene

Concen: 0.064 ppbv

RT: 16.77 Instrument:

Delta R.T. MSVOA\_L

Lab File: ClientSampleId:

Acq: 28 Sep 2021 21:18

Tot Ion:105 Resp: 27116

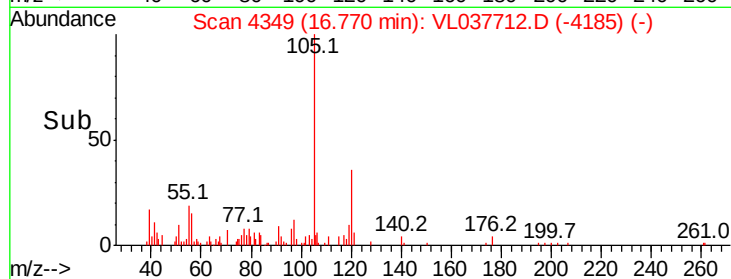
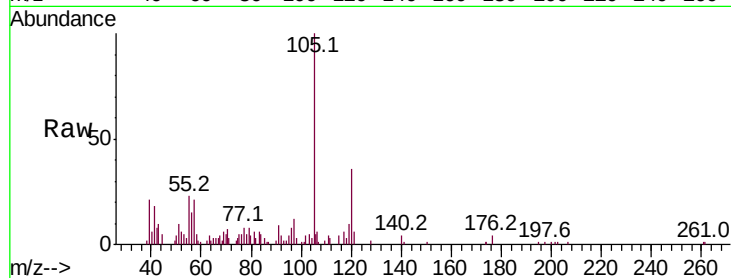
Ion Ratio Lower Upper

105 100

120 33.1 39.4 59.0#

91 9.3 33.3 49.9#

77 7.5 15.7 23.5#



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

