

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120720\  
 Data File : VL036090.D  
 Acq On : 8 Dec 2020 7:41  
 Operator : SY/AP  
 Sample : L4948-06DL 10X  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-3BDL

Quant Time: Dec 08 08:43:06 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Dec 07 16:56:49 2020  
 QLast Update : Mon Dec 07 16:56:49 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.68  | 49   | 1331217  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.19  | 114  | 2808983  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.11 | 117  | 2483854  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.44  | 95    | 2108115  | 10.69    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 106.90% |

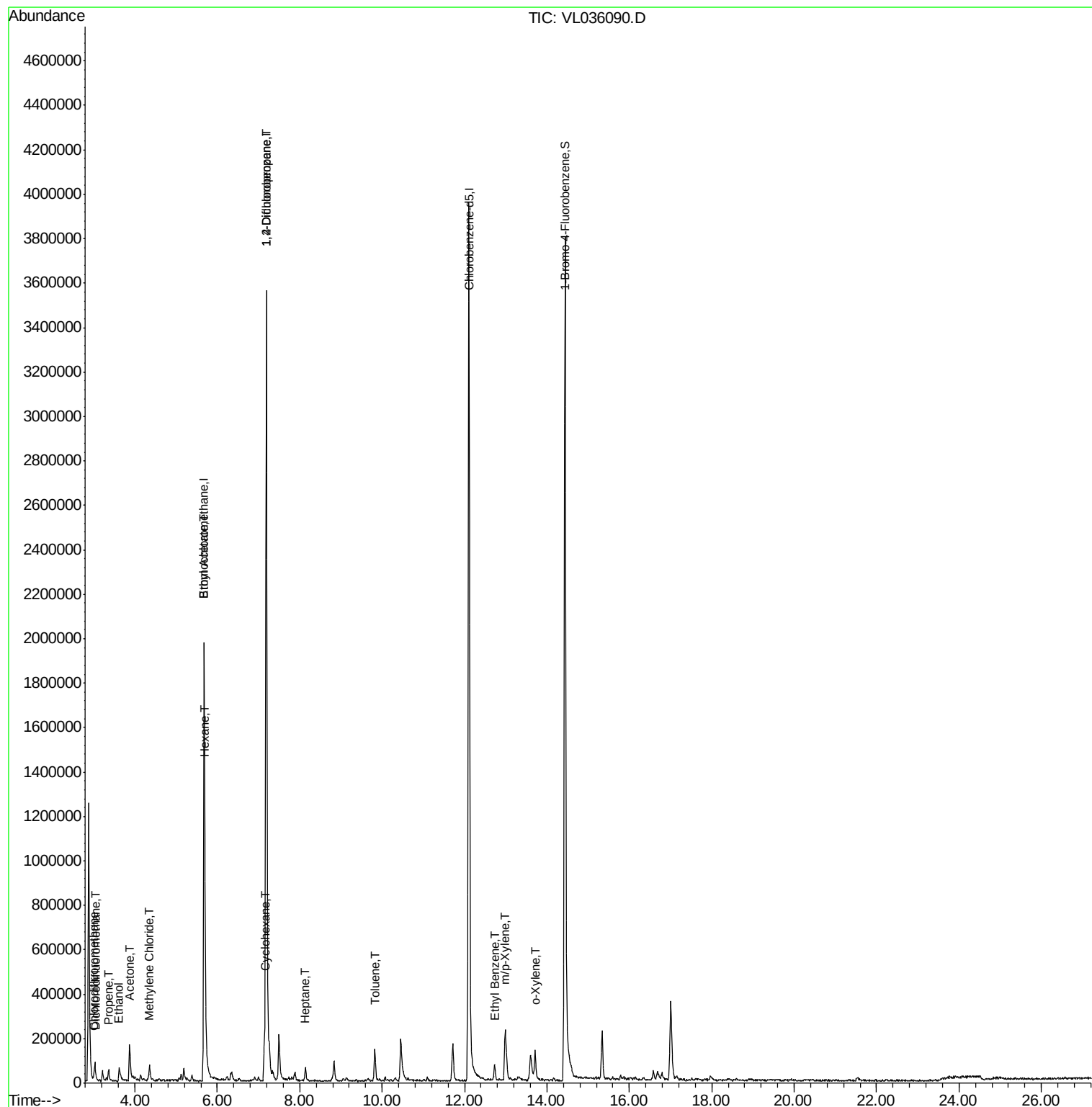
| Target Compounds           | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|----------------------------|-------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane | 3.06  | 85   | 7127     | 0.046 | ppbv # | 62     |
| 3) Chlorodifluoromethane   | 3.00  | 51   | 8129     | 0.054 | ppbv # | 87     |
| 9) Propene                 | 3.36  | 41   | 11696    | 0.154 | ppbv   | 96     |
| 10) Heptane                | 8.14  | 43   | 10434    | 0.054 | ppbv # | 29     |
| 13) Ethanol                | 3.62  | 45   | 35007    | 3.338 | ppbv # | 29     |
| 15) Acetone                | 3.87  | 43   | 197743   | 1.236 | ppbv   | 96     |
| 20) Methylene Chloride     | 4.35  | 84   | 8618     | 0.131 | ppbv # | 84     |
| 25) Ethyl Acetate          | 5.69  | 43   | 14469    | 0.045 | ppbv # | 75     |
| 26) Hexane                 | 5.70  | 57   | 40700    | 0.283 | ppbv # | 42     |
| 30) Cyclohexane            | 7.15  | 84   | 39818    | 0.377 | ppbv # | 30     |
| 39) 1,2-Dichloropropane    | 7.19  | 63   | 822953   | 8.754 | ppbv # | 24     |
| 53) Toluene                | 9.82  | 91   | 61519    | 0.230 | ppbv # | 21     |
| 58) Ethyl Benzene          | 12.73 | 91   | 44092    | 0.130 | ppbv   | 92     |
| 59) m/p-Xylene             | 13.00 | 91   | 47186    | 0.165 | ppbv # | 34     |
| 60) o-Xylene               | 13.71 | 91   | 77619    | 0.287 | ppbv   | 87     |

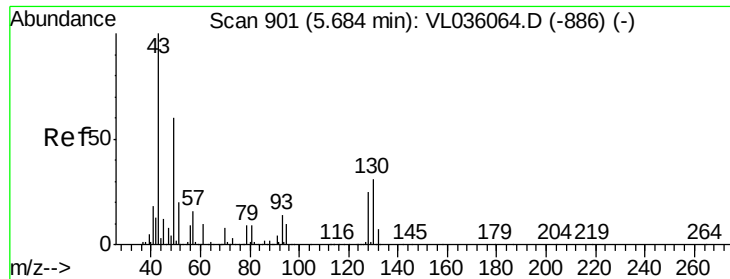
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120720\  
Data File : VL036090.D  
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Sample : L4948-06DL 10X  
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Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3BDL

Quant Time: Dec 08 08:43:06 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Dec 07 16:56:49 2020  
QLast Update : Mon Dec 07 16:56:49 2020  
Response via : Initial Calibration

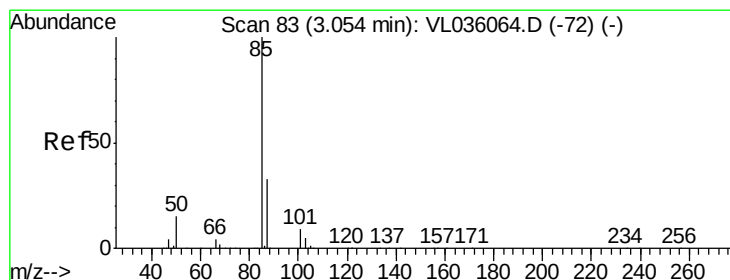
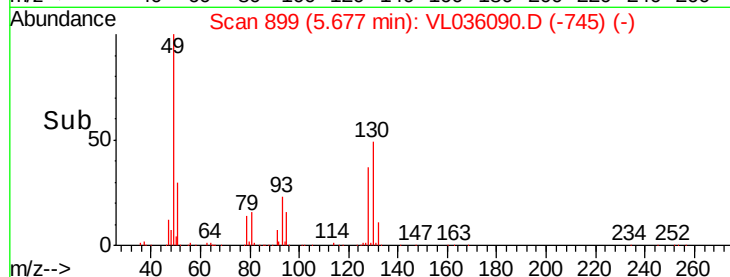
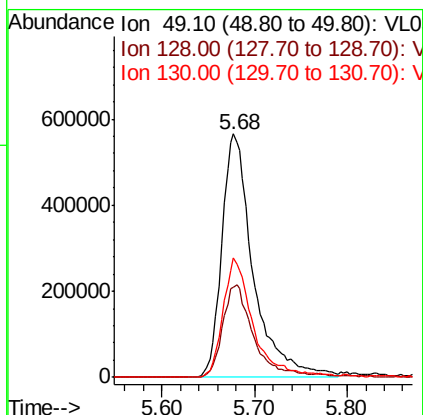
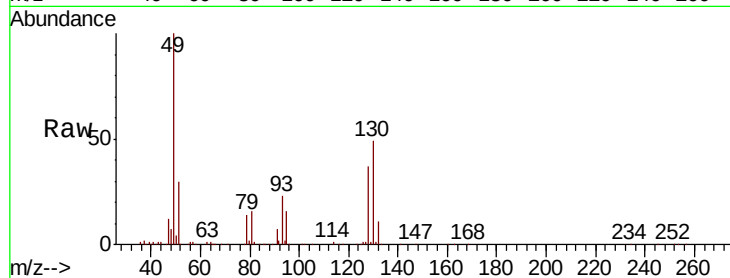




#1  
 Bromochloromethane  
 Concen: 10.000 ppbv  
 RT: 5.68 min Scan# 899  
 Delta R.T. -0.01 min  
 Lab File: VL036090.D  
 Acq: 8 Dec 2020 7:41

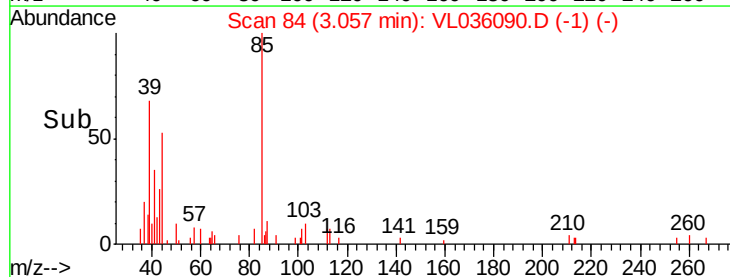
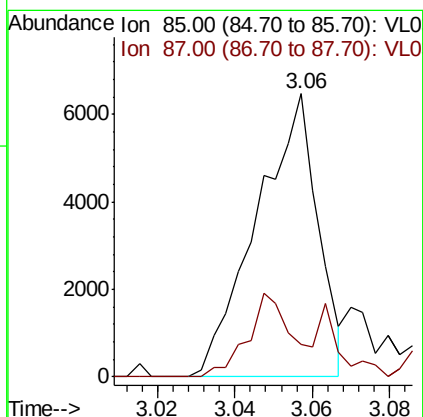
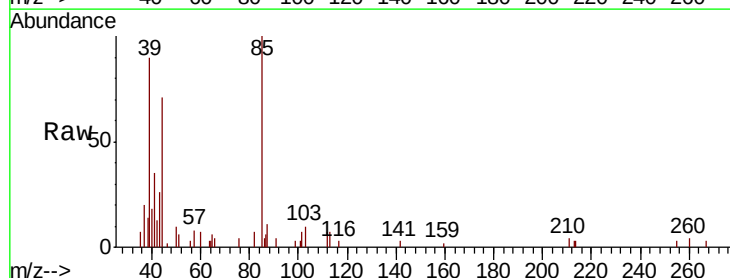
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-3BDL

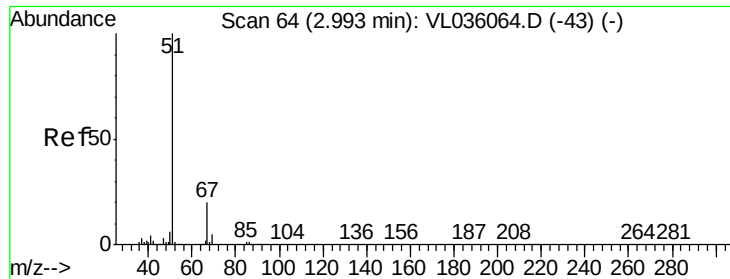
Tot Ion: 49 Resp: 1331217  
 Ion Ratio Lower Upper  
 49 100  
 128 37.8 21.1 63.1  
 130 47.6 27.1 81.3



#2  
 Dichlorodifluoromethane  
 Concen: 0.046 ppbv  
 RT: 3.06 min Scan# 84  
 Delta R.T. 0.00 min  
 Lab File: VL036090.D  
 Acq: 8 Dec 2020 7:41

Tgt Ion: 85 Resp: 7127  
 Ion Ratio Lower Upper  
 85 100  
 87 11.3 26.5 39.7#





#3

Chlorodifluoromethane

Concen: 0.054 ppbv

RT: 3.00 min Scan# 65

Delta R.T. 0.00 min

Lab File: VL036090.D

Acq: 8 Dec 2020 7:41

Instrument :

MSVOA\_L

ClientSampleId :

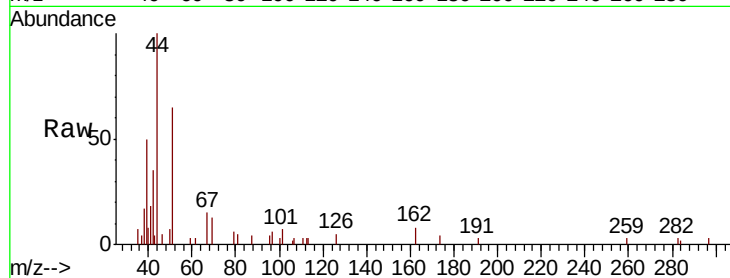
IA-3BDL

Tot Ion: 51 Resp: 8129

Ion Ratio Lower Upper

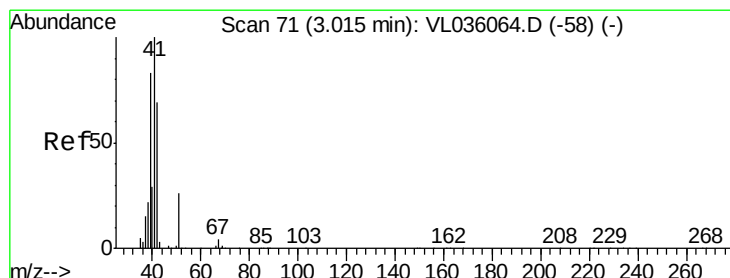
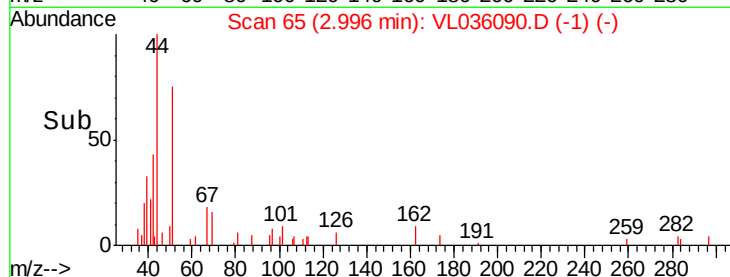
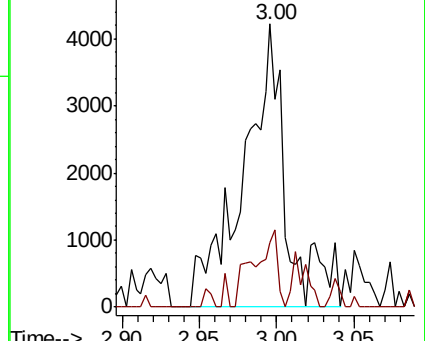
51 100

67 23.5 14.3 21.5#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#9

Propene

Concen: 0.154 ppbv

RT: 3.36 min Scan# 179

Delta R.T. 0.35 min

Lab File: VL036090.D

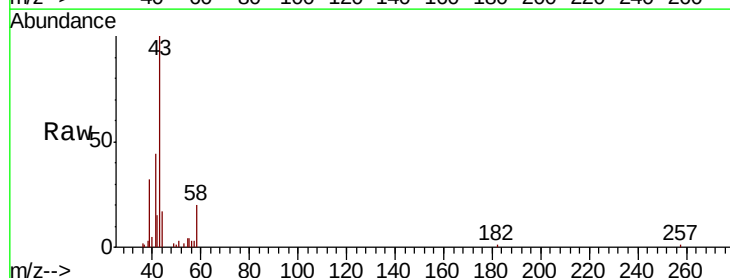
Acq: 8 Dec 2020 7:41

Tgt Ion: 41 Resp: 11696

Ion Ratio Lower Upper

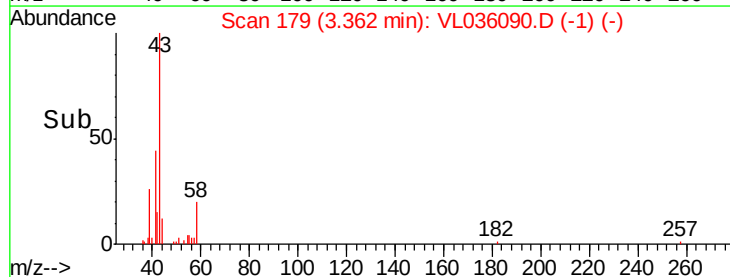
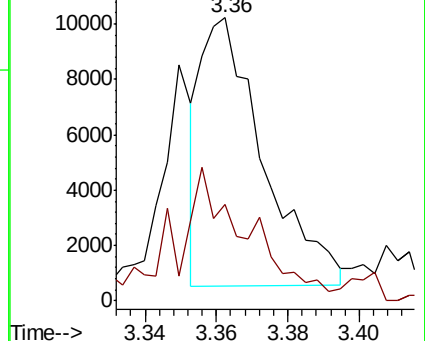
41 100

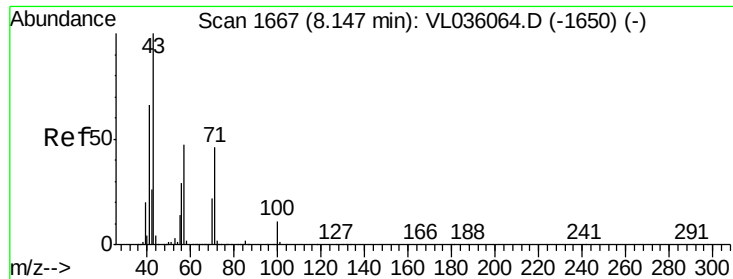
42 74.6 57.0 85.6



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

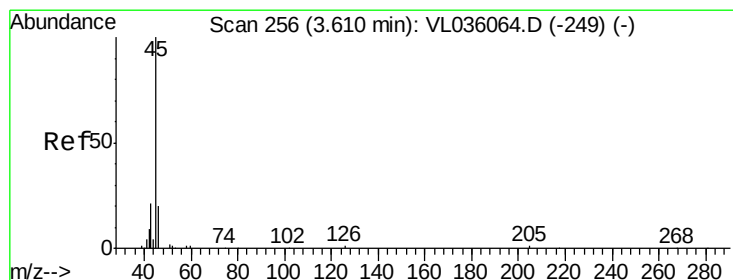
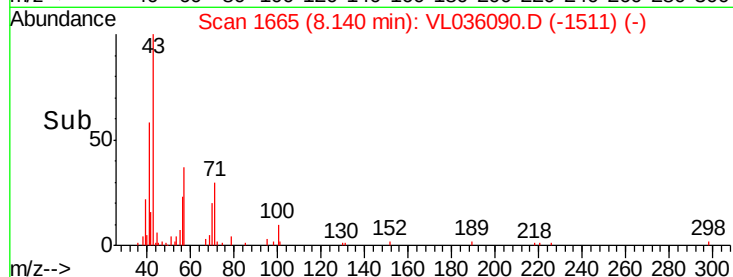
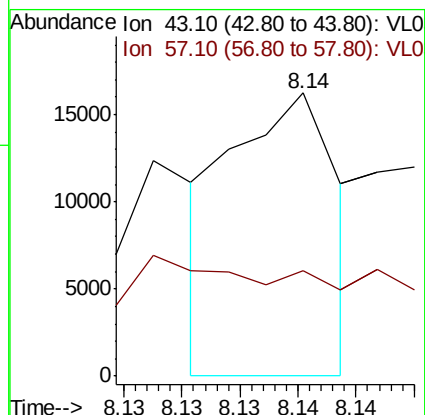
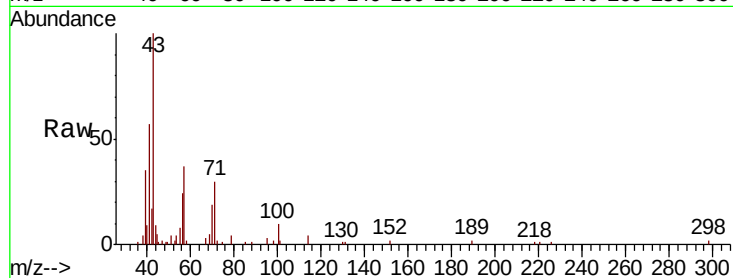




#10  
Heptane  
Concen: 0.054 ppbv  
RT: 8.14 min Scan# 1665  
Delta R.T. -0.01 min  
Lab File: VL036090.D  
Acq: 8 Dec 2020 7:41

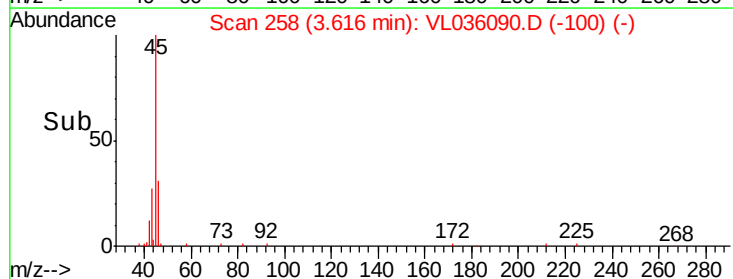
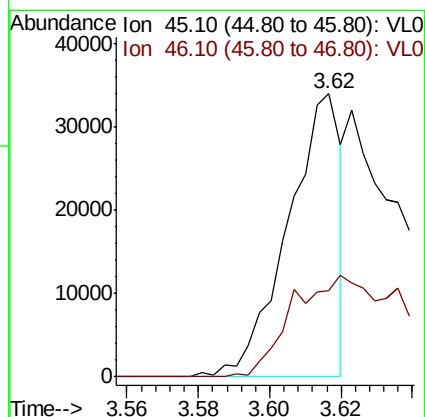
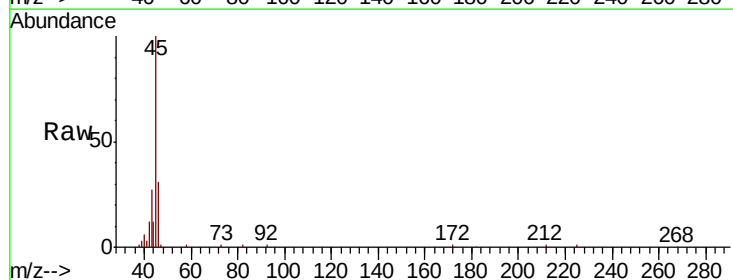
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3BDL

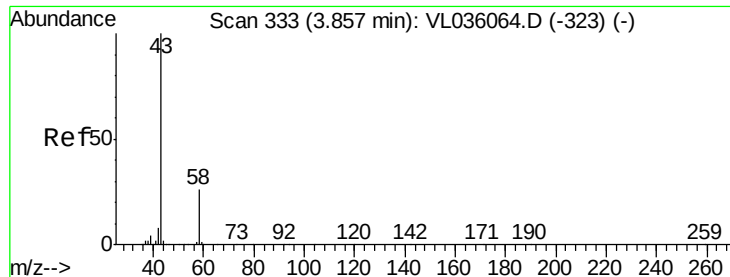
Tot Ion: 43 Resp: 10434  
Ion Ratio Lower Upper  
43 100  
57 0.0 37.9 56.9#



#13  
Ethanol  
Concen: 3.338 ppbv  
RT: 3.62 min Scan# 258  
Delta R.T. 0.01 min  
Lab File: VL036090.D  
Acq: 8 Dec 2020 7:41

Tgt Ion: 45 Resp: 35007  
Ion Ratio Lower Upper  
45 100  
46 0.0 19.0 75.8#





#15

Acetone

Concen: 1.236 ppbv

RT: 3.87 min Scan# 336

Delta R.T. 0.01 min

Lab File: VL036090.D

Acq: 8 Dec 2020 7:41

Instrument :

MSVOA\_L

ClientSampleId :

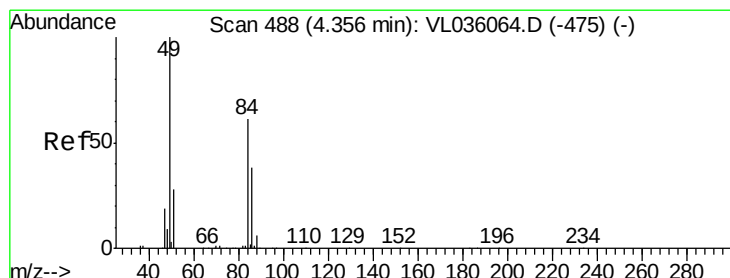
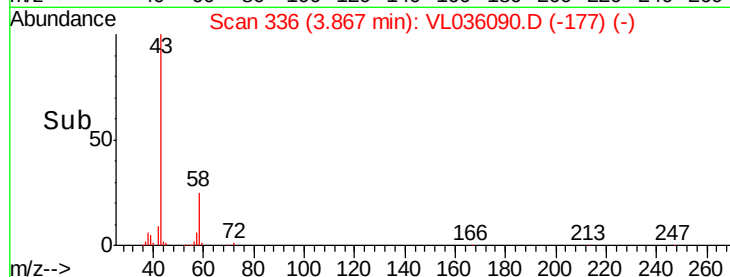
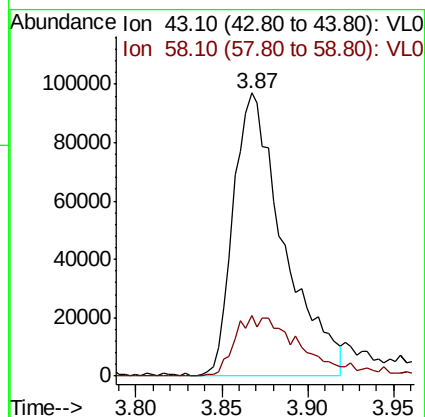
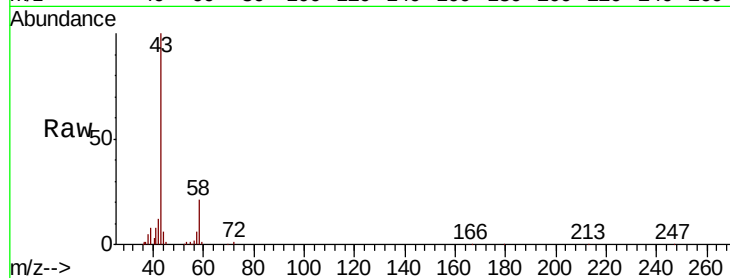
IA-3BDL

Tot Ion: 43 Resp: 197743

Ion Ratio Lower Upper

43 100

58 28.0 20.9 31.3



#20

Methylene Chloride

Concen: 0.131 ppbv

RT: 4.35 min Scan# 486

Delta R.T. -0.01 min

Lab File: VL036090.D

Acq: 8 Dec 2020 7:41

Tgt Ion: 84 Resp: 8618

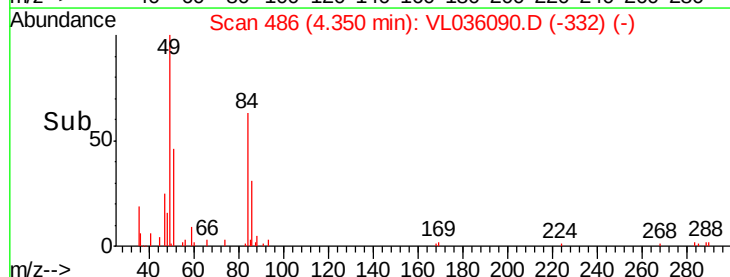
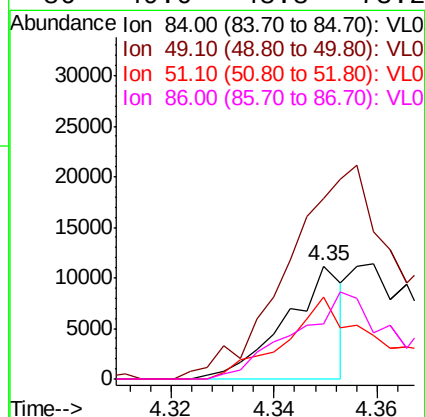
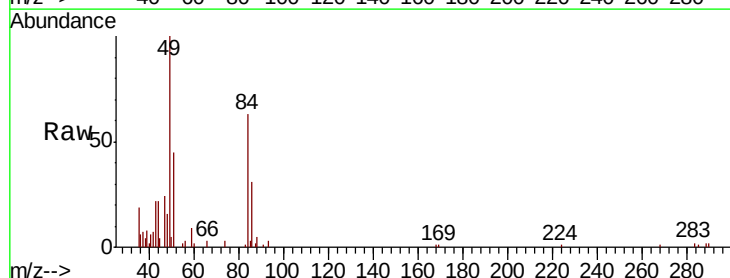
Ion Ratio Lower Upper

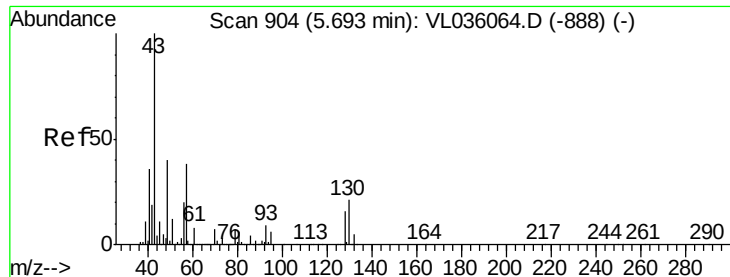
84 100

49 152.5 133.0 199.4

51 72.2 38.9 58.3#

86 49.0 48.8 73.2

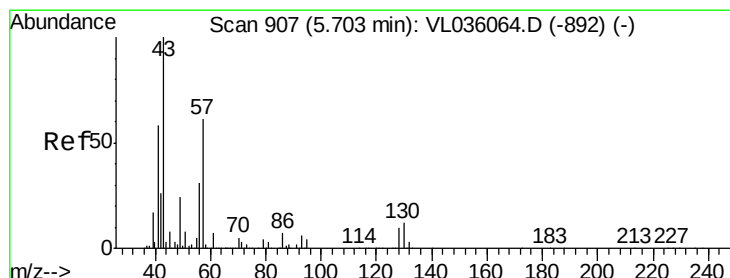
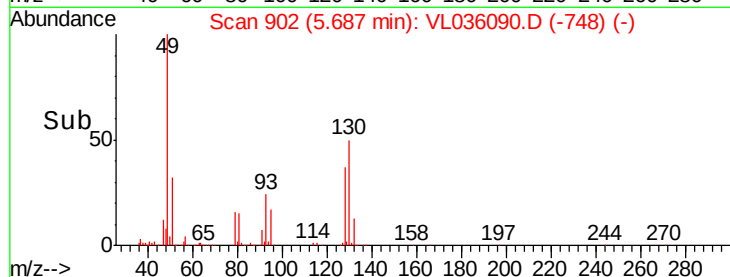
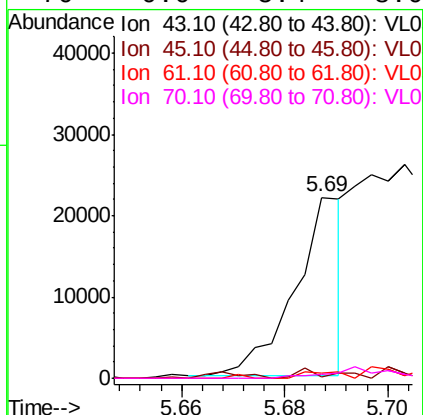
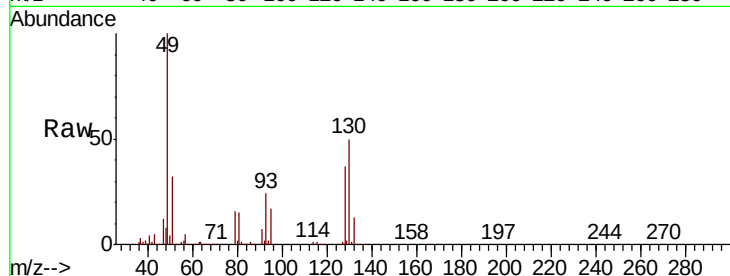




#25  
Ethyl Acetate  
Concen: 0.045 ppbv  
RT: 5.69 min Scan# 902  
Delta R.T. -0.01 min  
Lab File: VL036090.D  
Acq: 8 Dec 2020 7:41

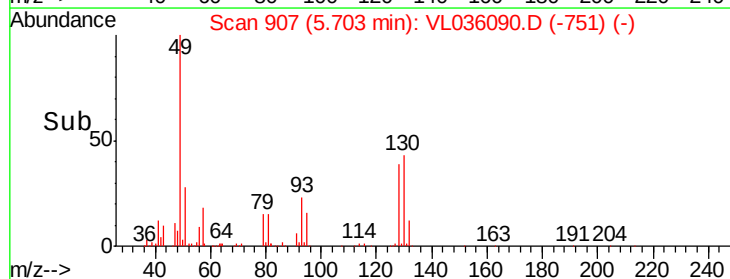
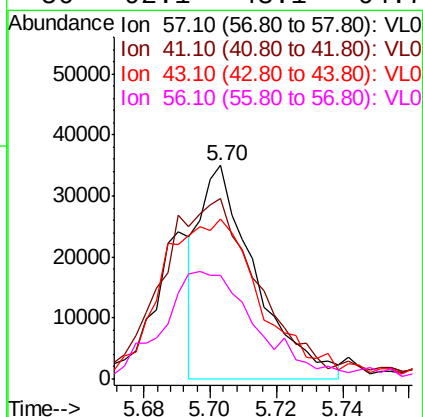
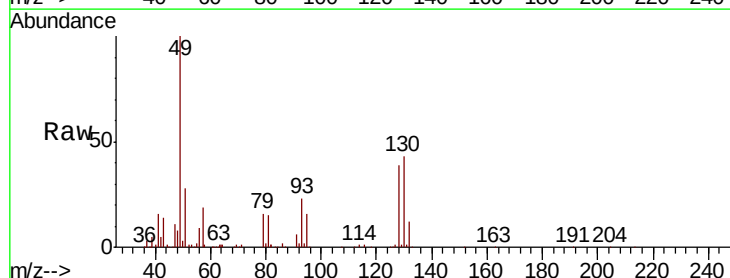
Instrument :  
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ClientSampleId :  
IA-3BDL

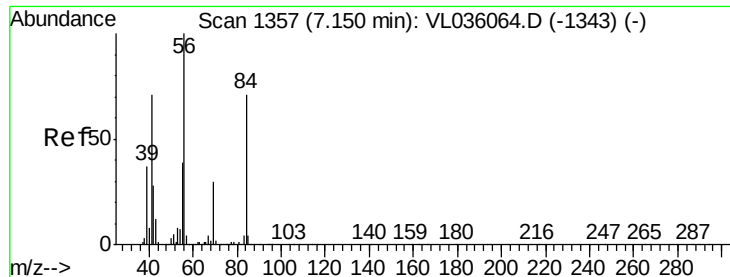
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|----------|-------|-------|-------|
| Tot Ion: | 43    | Resp: | 14469 |
| Ion      | Ratio | Lower | Upper |
| 43       | 100   |       |       |
| 45       | 0.0   | 8.2   | 12.4# |
| 61       | 0.0   | 7.4   | 11.2# |
| 70       | 0.0   | 5.4   | 8.0#  |



#26  
Hexane  
Concen: 0.283 ppbv  
RT: 5.70 min Scan# 907  
Delta R.T. 0.00 min  
Lab File: VL036090.D  
Acq: 8 Dec 2020 7:41

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 40700  |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 156.2 | 82.9  | 124.3# |
| 43       | 142.3 | 199.9 | 299.9# |
| 56       | 92.1  | 43.1  | 64.7#  |

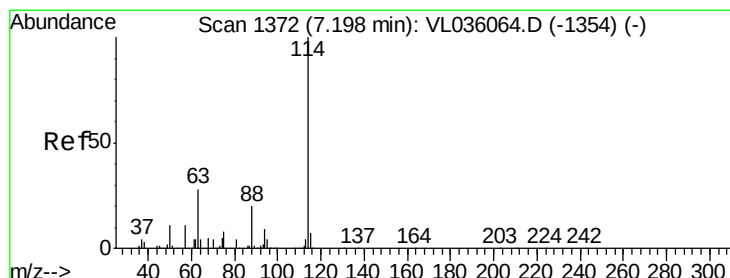
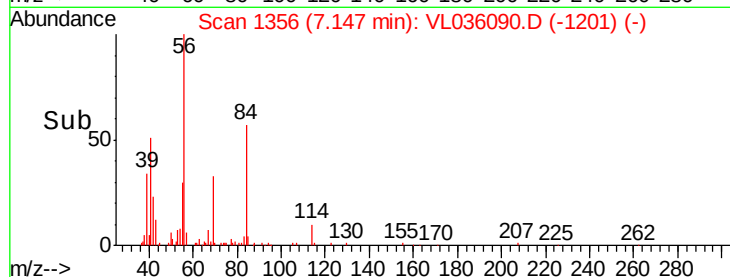
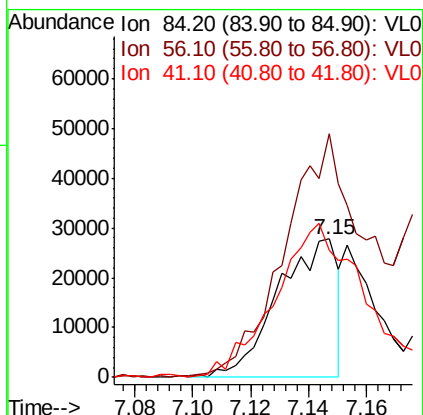
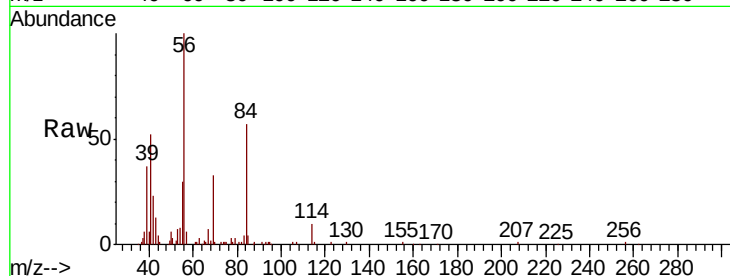




#30  
Cyclohexane  
Concen: 0.377 ppbv  
RT: 7.15 min Scan# 1356  
Delta R.T. -0.00 min  
Lab File: VL036090.D  
Acq: 8 Dec 2020 7:41

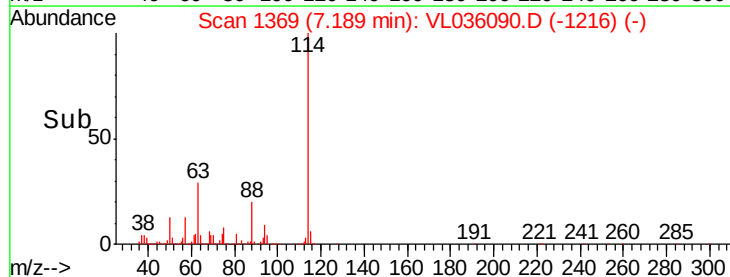
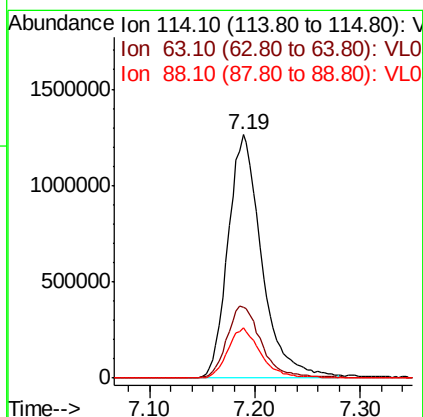
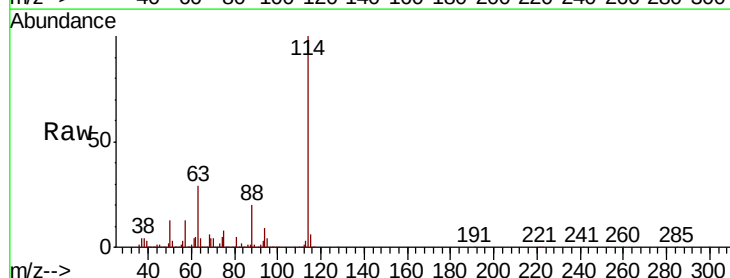
Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3BDL

Tot Ion: 84 Resp: 39818  
Ion Ratio Lower Upper  
84 100  
56 252.2 128.0 192.0#  
41 173.4 81.3 121.9#

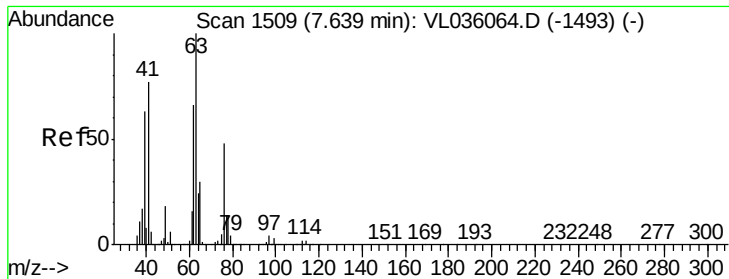


#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.19 min Scan# 1369  
Delta R.T. -0.01 min  
Lab File: VL036090.D  
Acq: 8 Dec 2020 7:41

Tgt Ion: 114 Resp: 2808983  
Ion Ratio Lower Upper  
114 100  
63 30.6 23.6 35.4  
88 20.4 15.8 23.6







#39

1,2-Dichloropropane

Concen: 8.754 ppbv

RT: 7.19 min Scan# 1368

Delta R.T. -0.45 min

Lab File: VL036090.D

Acq: 8 Dec 2020 7:41

Instrument :

MSVOA\_L

ClientSampleId :

IA-3BDL

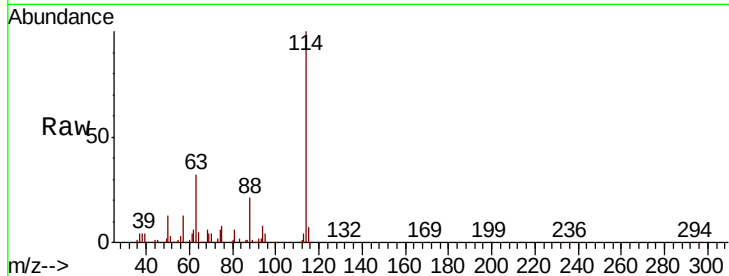
Tot Ion: 63 Resp: 822953

Ion Ratio Lower Upper

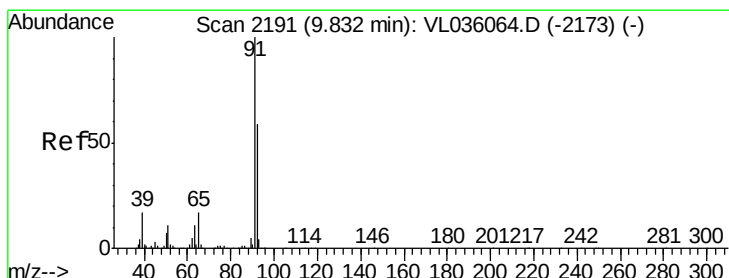
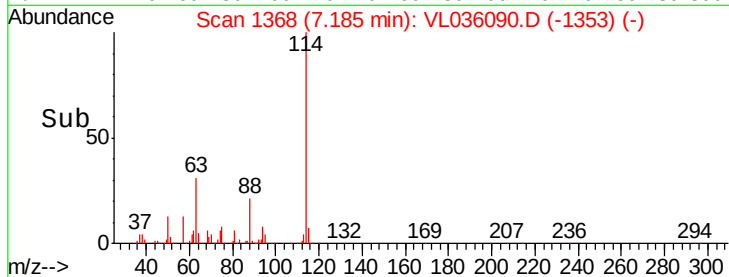
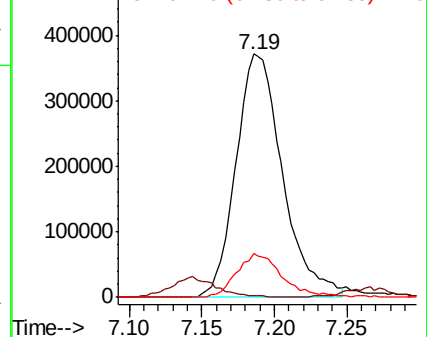
63 100

41 0.0 61.9 92.9#

62 18.0 52.5 78.7#



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



#53

Toluene

Concen: 0.230 ppbv

RT: 9.82 min Scan# 2188

Delta R.T. -0.01 min

Lab File: VL036090.D

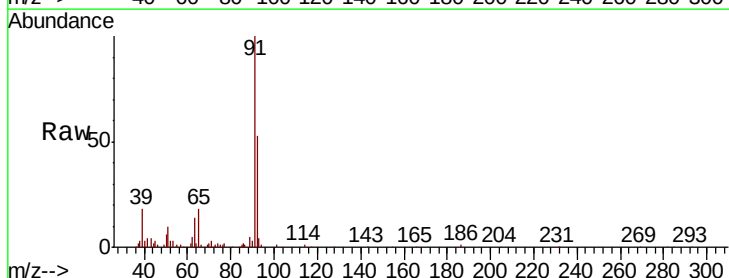
Acq: 8 Dec 2020 7:41

Tgt Ion: 91 Resp: 61519

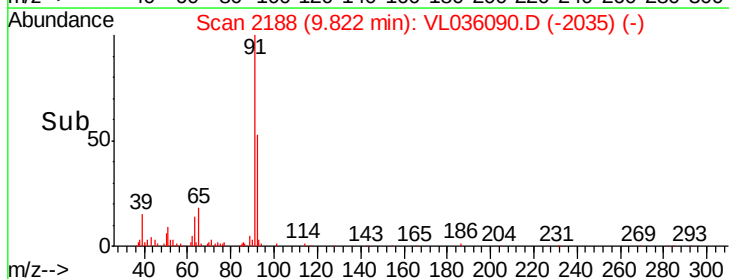
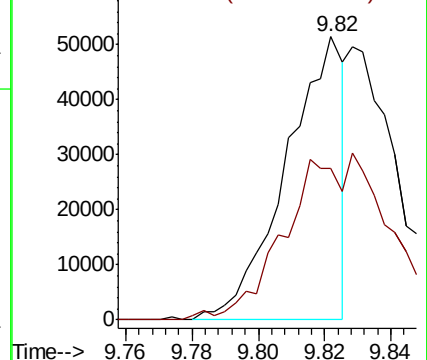
Ion Ratio Lower Upper

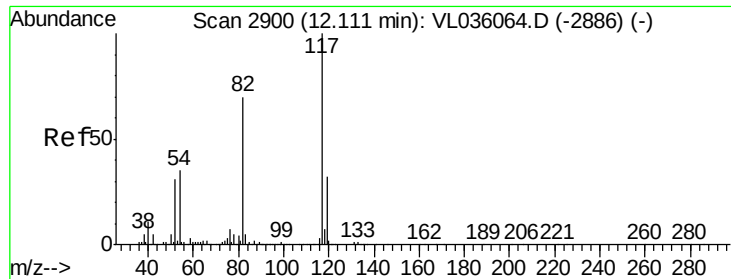
91 100

92 0.0 48.2 72.2#



Abundance Ion 91.10 (90.80 to 91.80): VL0  
Ion 92.10 (91.80 to 92.80): VL0

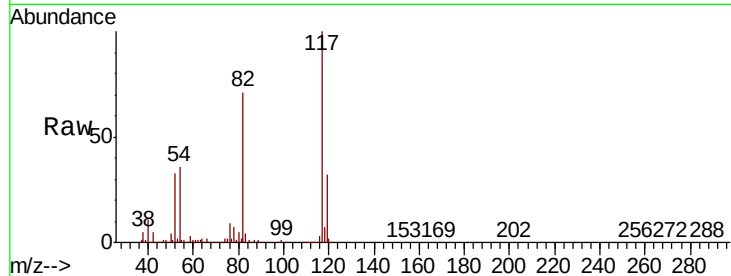




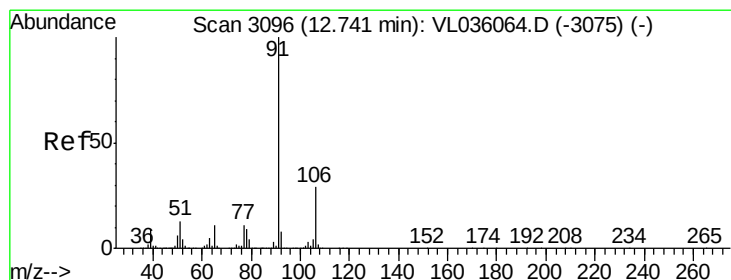
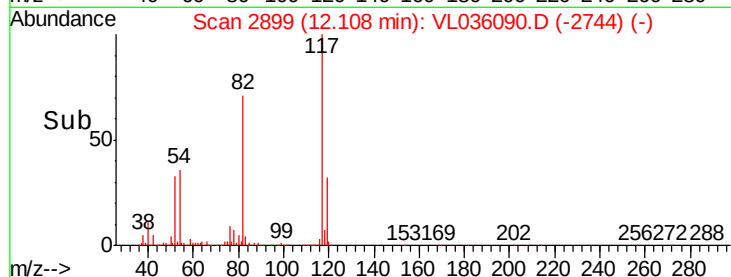
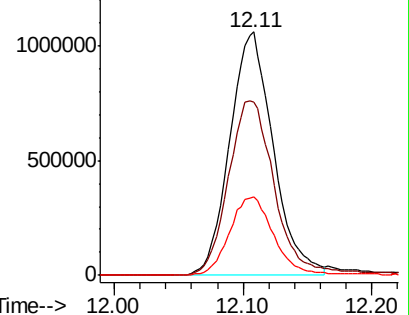
#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.11 min Scan# 2899  
Delta R.T. -0.00 min  
Lab File: VL036090.D  
Acq: 8 Dec 2020 7:41

Instrument :  
MSVOA\_L  
ClientSampleId :  
IA-3BDL

Tot Ion:117 Resp: 2483854  
Ion Ratio Lower Upper  
117 100  
82 77.9 0.0 0.0#  
119 33.8 0.0 0.0#

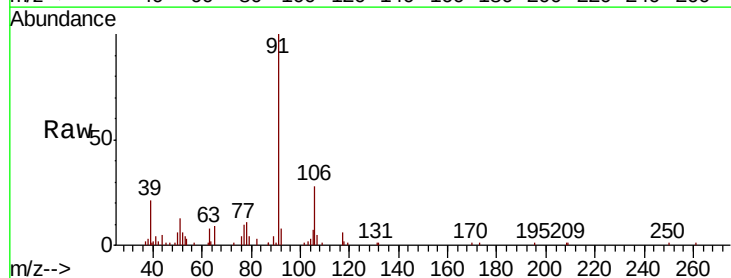


Abundance Ion 117.10 (116.80 to 117.80): V  
Ion 82.10 (81.80 to 82.80): VL0  
Ion 119.10 (118.80 to 119.80): V

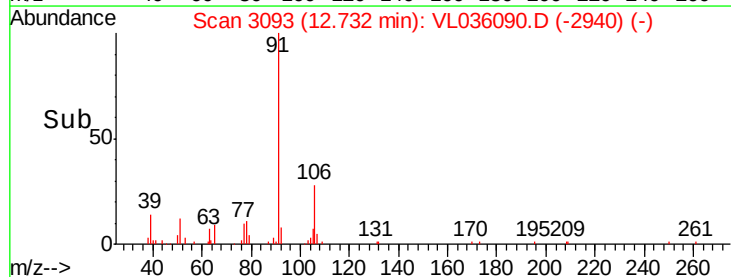
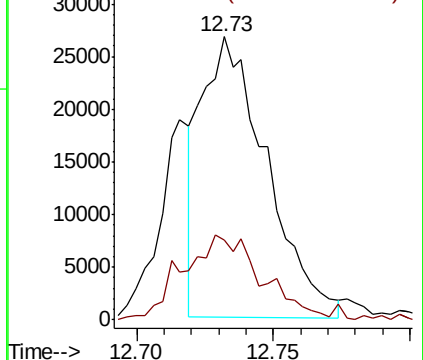


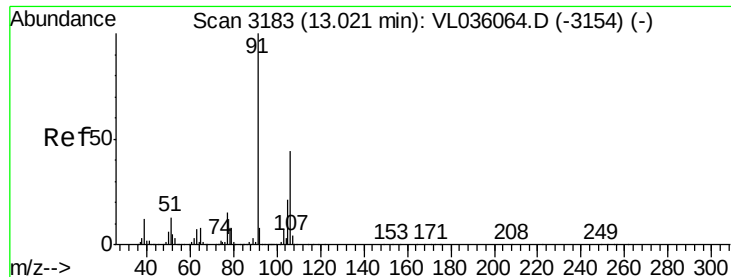
#58  
Ethyl Benzene  
Concen: 0.130 ppbv  
RT: 12.73 min Scan# 3093  
Delta R.T. -0.01 min  
Lab File: VL036090.D  
Acq: 8 Dec 2020 7:41

Tgt Ion: 91 Resp: 44092  
Ion Ratio Lower Upper  
91 100  
106 24.5 23.0 34.4



Abundance Ion 91.10 (90.80 to 91.80): VL0  
Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 0.165 ppbv

RT: 13.00 min Scan# 3175

Delta R.T. -0.03 min

Lab File: VL036090.D

Acq: 8 Dec 2020 7:41

Instrument :

MSVOA\_L

ClientSampleId :

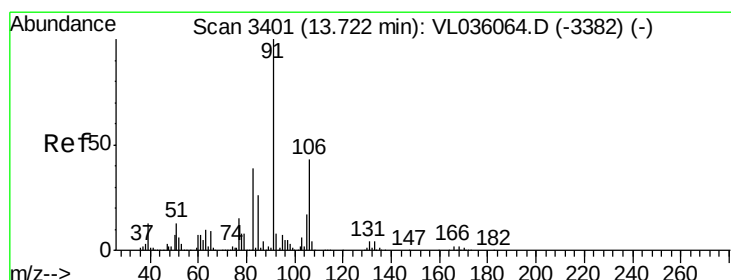
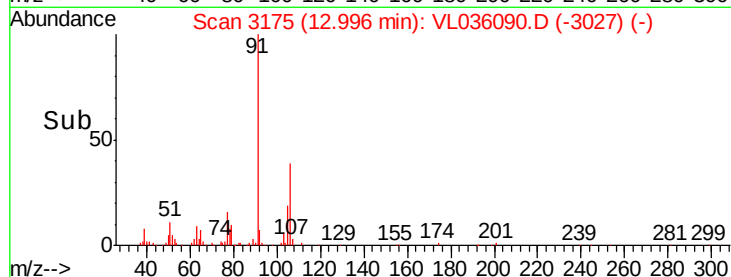
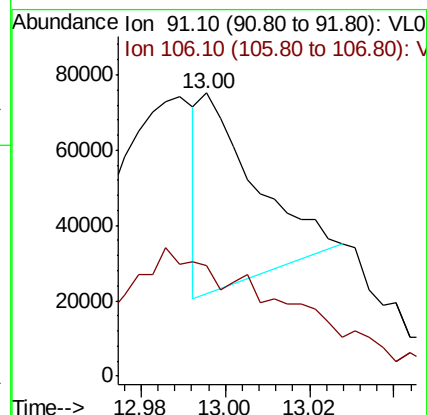
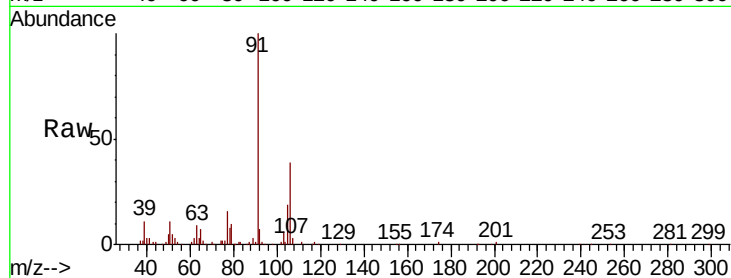
IA-3BDL

Tot Ion: 91 Resp: 47186

Ion Ratio Lower Upper

91 100

106 0.0 33.6 50.4#



#60

o-Xylene

Concen: 0.287 ppbv

RT: 13.71 min Scan# 3398

Delta R.T. -0.01 min

Lab File: VL036090.D

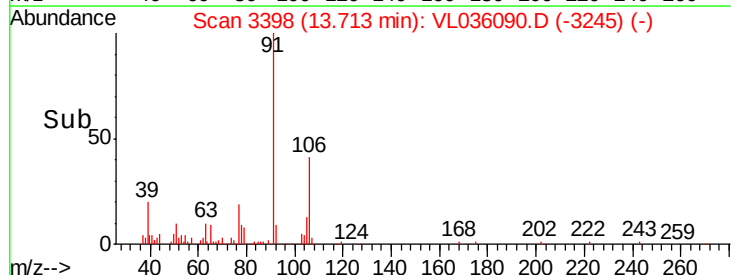
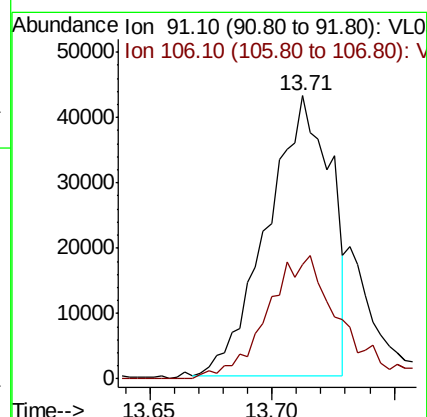
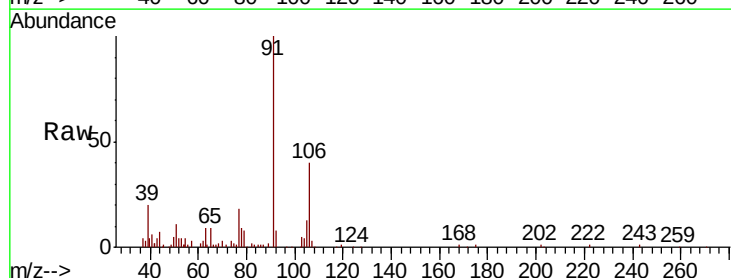
Acq: 8 Dec 2020 7:41

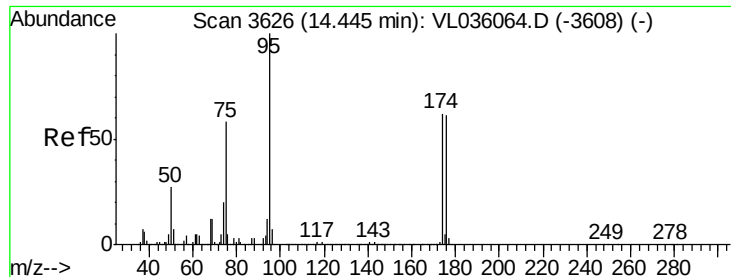
Tgt Ion: 91 Resp: 77619

Ion Ratio Lower Upper

91 100

106 51.3 21.6 64.6





#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.689 ppbv  
 RT: 14.44 min Scan# 3623  
 Delta R.T. -0.01 min  
 Lab File: VL036090.D  
 Acq: 8 Dec 2020 7:41

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 IA-3BDL

Tot Ion: 95 Resp: 2108115  
 Ion Ratio Lower Upper  
 95 100  
 174 58.1 50.7 76.1  
 175 4.1 4.0 6.0

