

Data File : VL034701.D  
Acq On : 26 Feb 2020 23:53  
Operator : SY/AP  
Sample : L1663-02DL2 40X  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
EP-103DL2

Quant Time: Feb 27 07:32:15 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL022620AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Feb 26 06:58:15 2020  
QLast Update : Wed Feb 26 06:58:15 2020  
Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.68  | 49   | 981323   | 10.00 | ppbv  | 0.02     |
| 33) 1,4-Difluorobenzene | 7.20  | 114  | 2083372  | 10.00 | ppbv  | 0.02     |
| 55) Chlorobenzene-d5    | 12.14 | 117  | 2072785  | 10.00 | ppbv  | 0.02     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.48  | 95    | 1711532  | 10.07    | ppbv | 0.02    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 100.70% |

| Target Compounds        | R.T. | QIon | Response | Conc   | Units  | Qvalue |
|-------------------------|------|------|----------|--------|--------|--------|
| 9) Propene              | 2.98 | 41   | 1033     | 0.023  | ppbv # | 15     |
| 13) Ethanol             | 3.59 | 45   | 526219   | 37.628 | ppbv   | 96     |
| 15) Acetone             | 3.84 | 43   | 94533    | 0.845  | ppbv   | 96     |
| 17) tert-Butyl alcohol  | 4.30 | 59   | 15345    | 0.179  | ppbv   | 97     |
| 19) Isopropyl Alcohol   | 3.96 | 45   | 171347   | 2.573  | ppbv   | 99     |
| 20) Methylene Chloride  | 4.34 | 84   | 7936     | 0.191  | ppbv # | 92     |
| 26) Hexane              | 5.70 | 57   | 2129     | 0.023  | ppbv # | 1      |
| 27) Carbon Disulfide    | 4.96 | 76   | 12680    | 0.122  | ppbv # | 64     |
| 34) 2-Butanone          | 5.26 | 43   | 8061     | 0.061  | ppbv # | 89     |
| 36) Benzene             | 6.92 | 78   | 3810     | 0.021  | ppbv # | 54     |
| 39) 1,2-Dichloropropane | 7.20 | 63   | 572274   | 7.994  | ppbv # | 22     |
| 53) Toluene             | 9.85 | 91   | 17483    | 0.091  | ppbv   | 99     |

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

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Misc : 400ml/MSVOA\_L

ALS Vial : 1 Sample Multiplier: 1

Instrument :

MSVOA\_L

ClientSampleId :

EP-103DL2

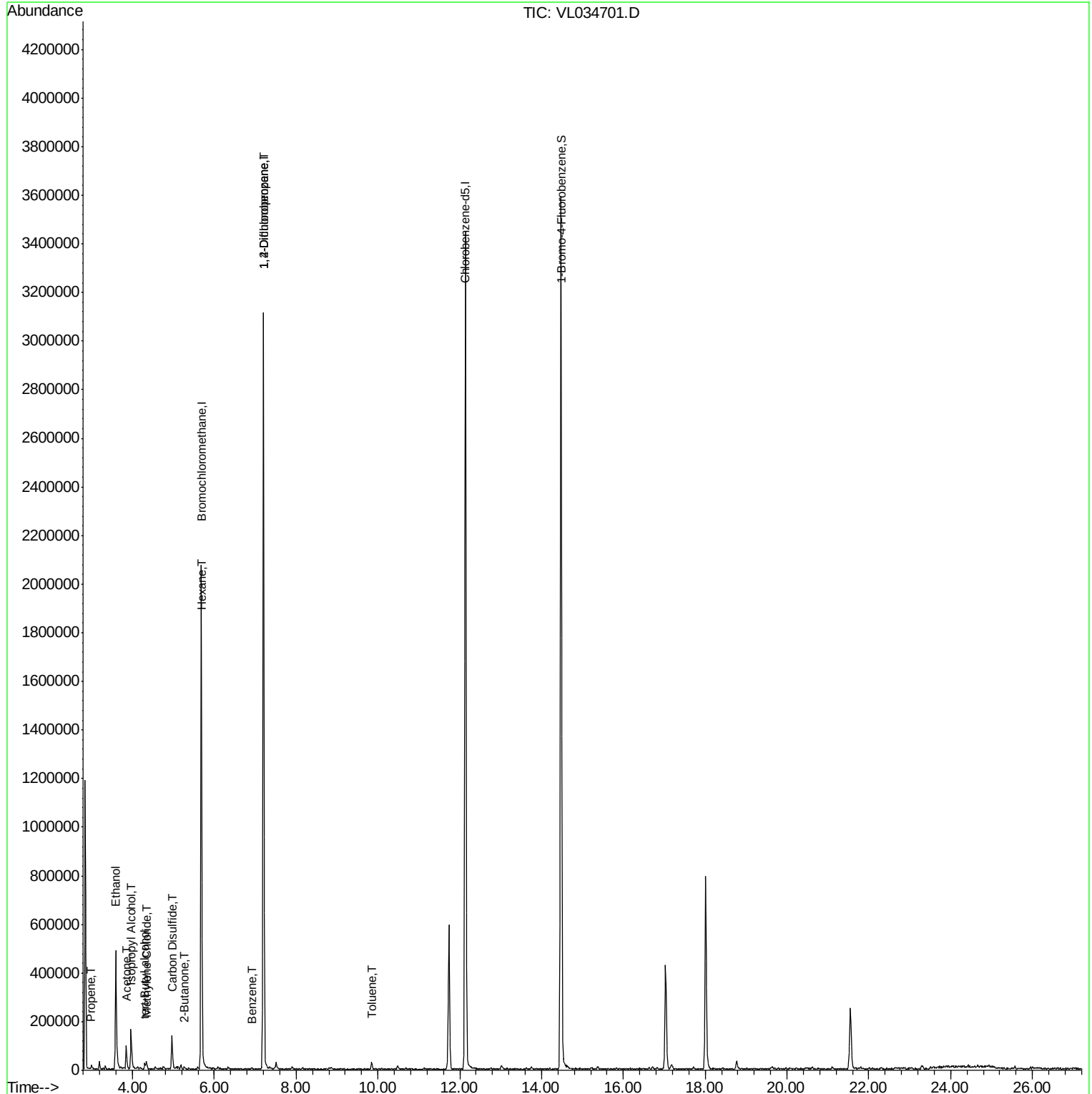
Quant Time: Feb 27 07:32:15 2020

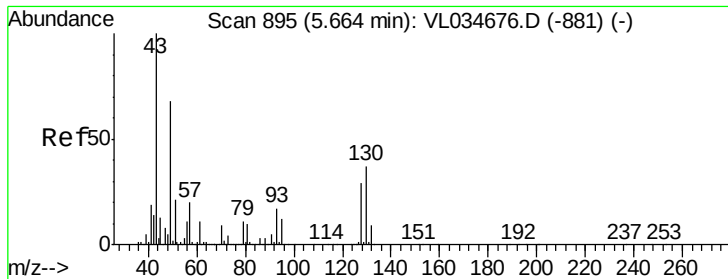
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL022620AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Feb 26 06:58:15 2020

QLast Update : Wed Feb 26 06:58:15 2020

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 900

Delta R.T. 0.02 min

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Instrument :

MSVOA\_L

ClientSampleId :

EP-103DL2

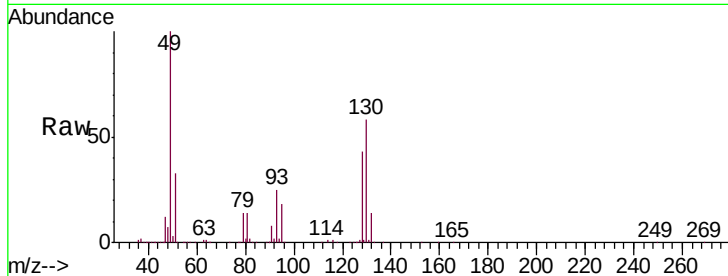
Tgt Ion: 49 Resp: 981323

Ion Ratio Lower Upper

49 100

128 45.3 21.6 65.0

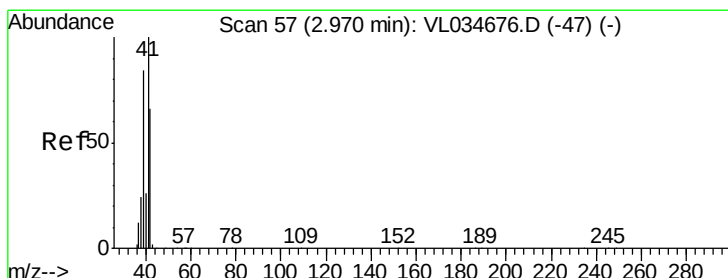
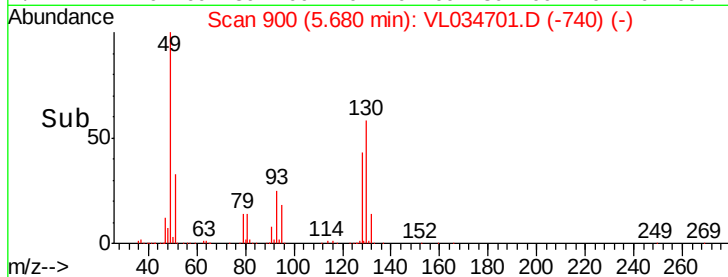
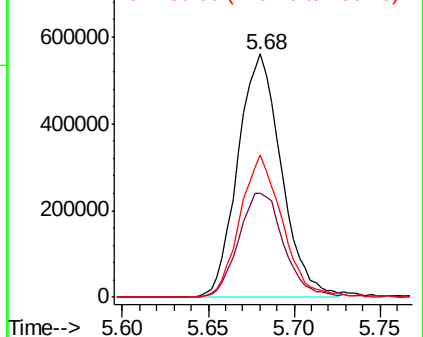
130 57.8 27.7 83.1



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#9

Propene

Concen: 0.023 ppbv

RT: 2.98 min Scan# 60

Delta R.T. 0.01 min

Lab File: VL034701.D

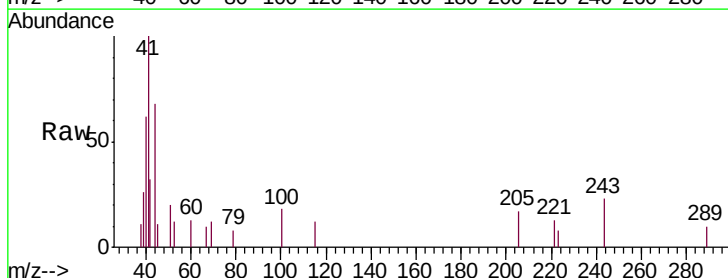
Acq: 26 Feb 2020 23:53

Tgt Ion: 41 Resp: 1033

Ion Ratio Lower Upper

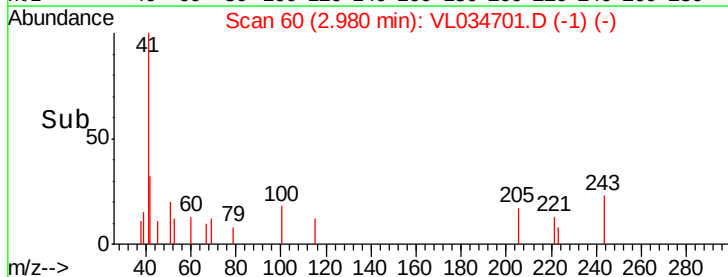
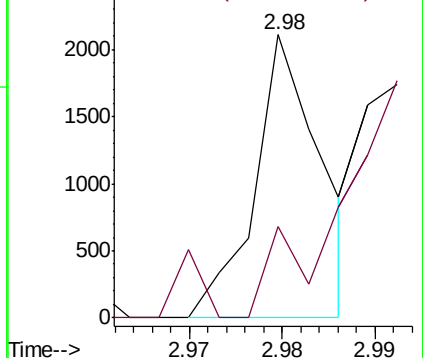
41 100

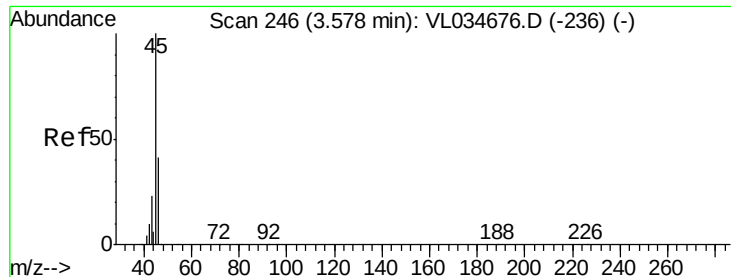
42 0.0 54.9 82.3#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#13

Ethanol

Concen: 37.628 ppbv

RT: 3.59 min Scan# 249

Delta R.T. 0.01 min

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Instrument :

MSVOA\_L

ClientSampleId :

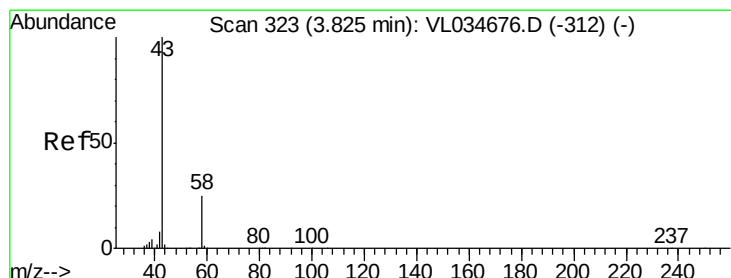
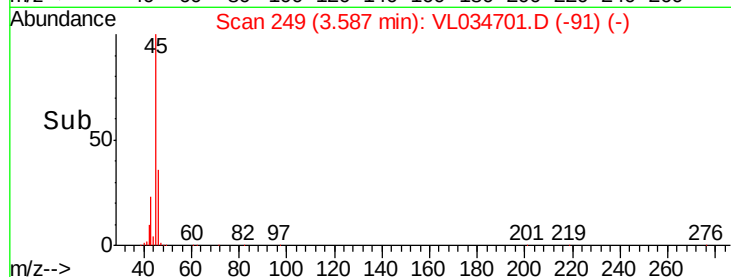
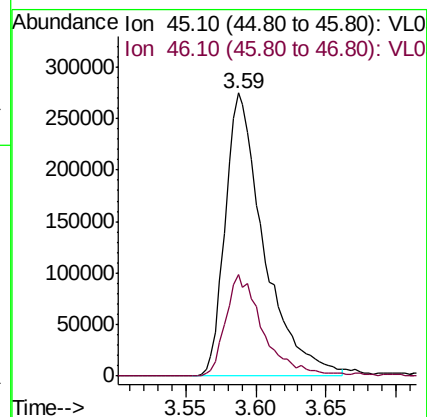
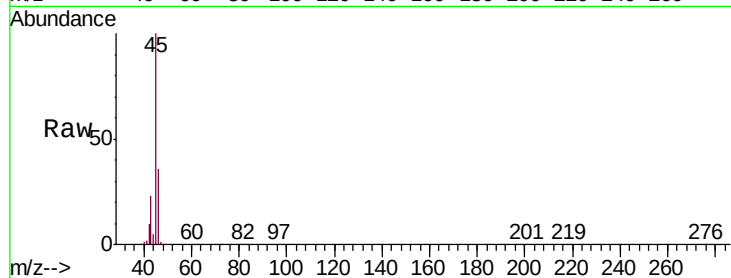
EP-103DL2

Tgt Ion: 45 Resp: 526219

Ion Ratio Lower Upper

45 100

46 35.7 15.4 61.4



#15

Acetone

Concen: 0.845 ppbv

RT: 3.84 min Scan# 329

Delta R.T. 0.02 min

Lab File: VL034701.D

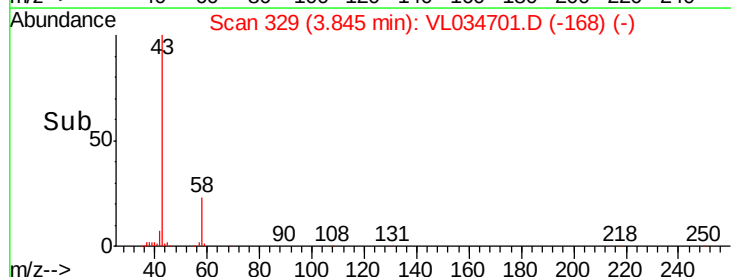
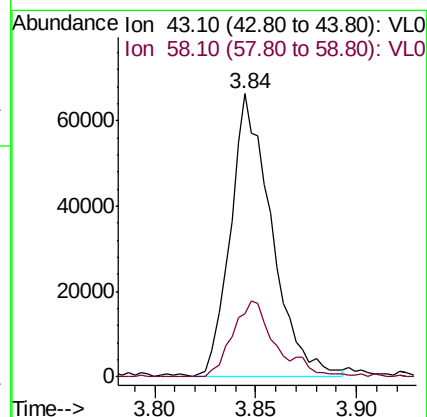
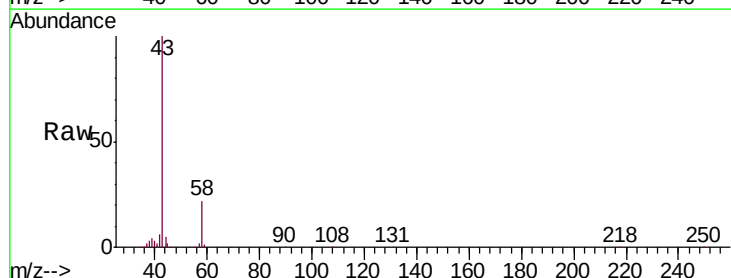
Acq: 26 Feb 2020 23:53

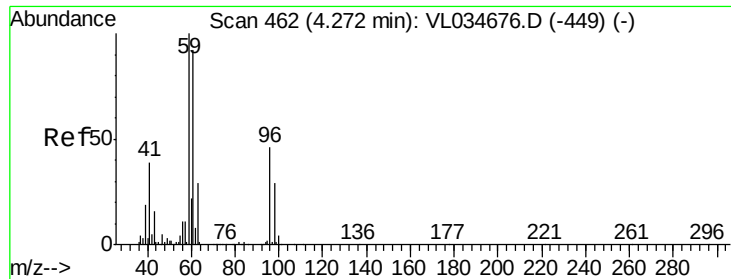
Tgt Ion: 43 Resp: 94533

Ion Ratio Lower Upper

43 100

58 29.0 21.4 32.0





#17

tert-Butyl alcohol

Concen: 0.179 ppbv

RT: 4.30 min Scan# 471

Delta R.T. 0.03 min

Lab File: VL034701.D

Acq: 26 Feb 2020 23:53

Instrument :

MSVOA\_L

ClientSampleId :

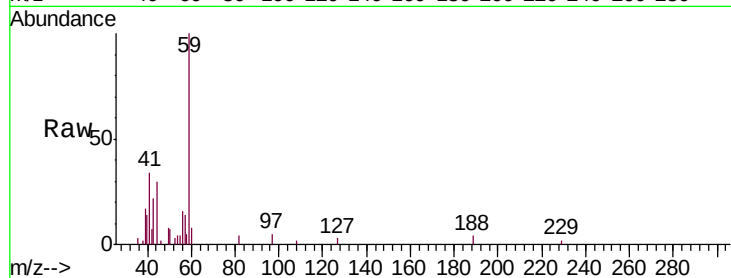
EP-103DL2

Tgt Ion: 59 Resp: 15345

Ion Ratio Lower Upper

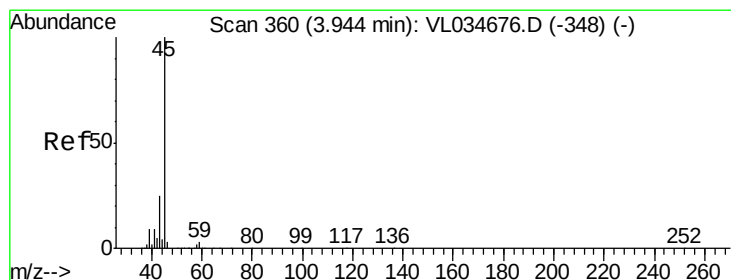
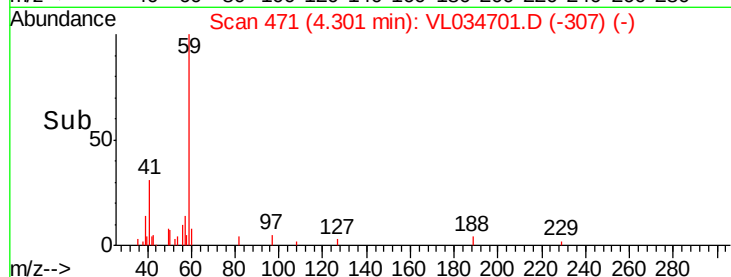
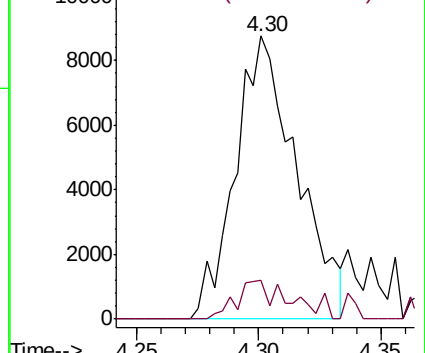
59 100

57 12.0 8.8 13.2



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#19

Isopropyl Alcohol

Concen: 2.573 ppbv

RT: 3.96 min Scan# 366

Delta R.T. 0.02 min

Lab File: VL034701.D

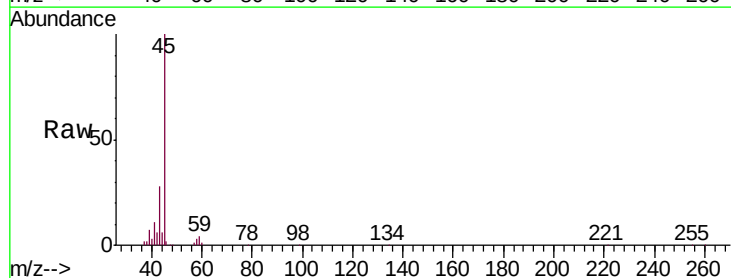
Acq: 26 Feb 2020 23:53

Tgt Ion: 45 Resp: 171347

Ion Ratio Lower Upper

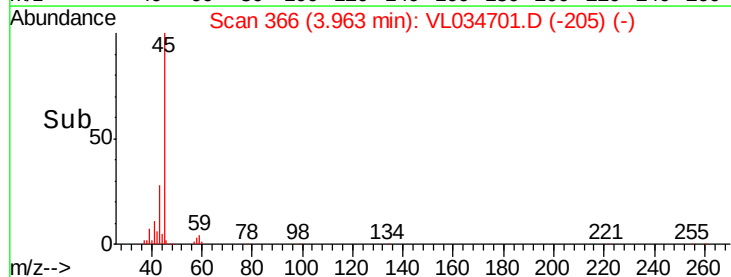
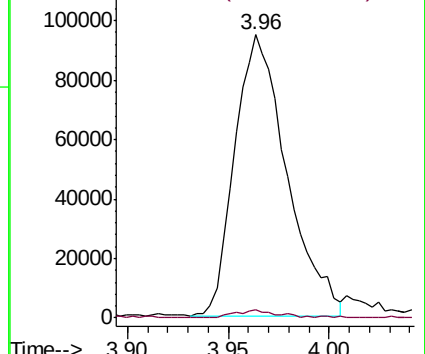
45 100

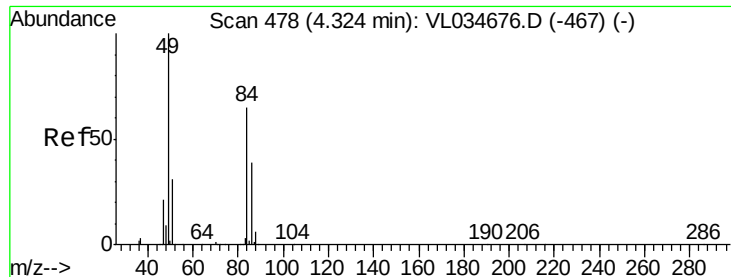
58 2.6 1.8 2.6



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

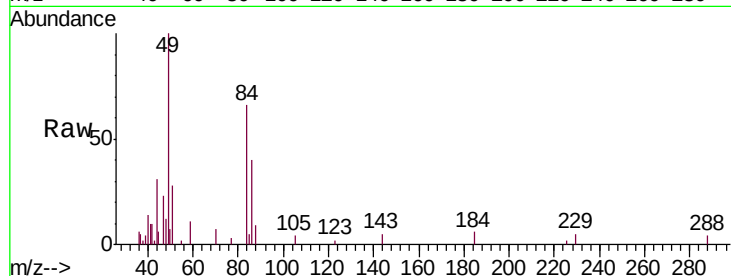




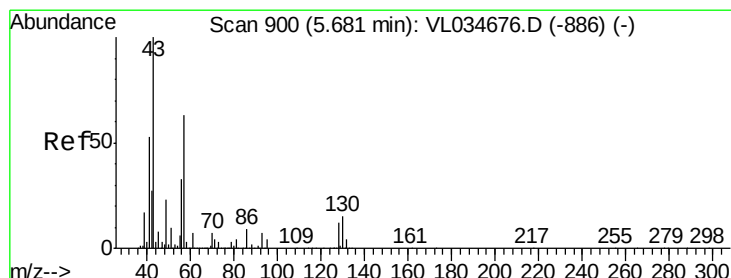
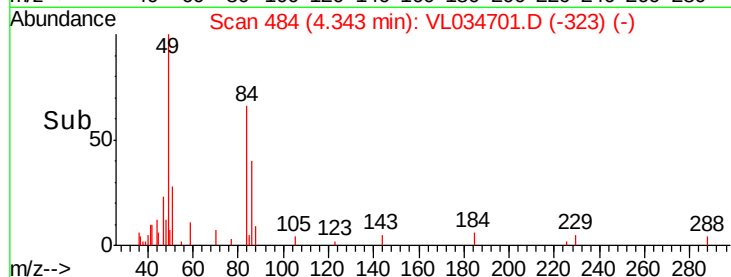
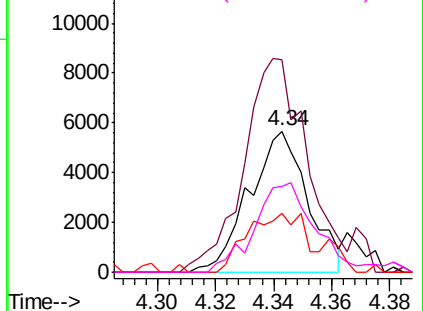
#20  
Methylene Chloride  
Concen: 0.191 ppbv  
RT: 4.34 min Scan# 484  
Delta R.T. 0.02 min  
Lab File: VL034701.D  
Acq: 26 Feb 2020 23:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
EP-103DL2

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 84    | Resp: | 7936  |
| Ion      | Ratio | Lower | Upper |
| 84       | 100   |       |       |
| 49       | 143.9 | 122.8 | 184.2 |
| 51       | 38.6  | 38.6  | 58.0# |
| 86       | 56.2  | 47.7  | 71.5  |

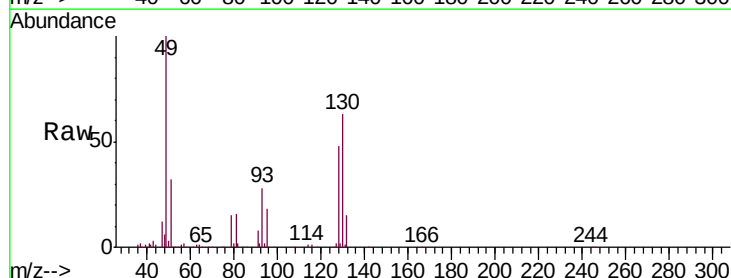


Abundance Ion 84.00 (83.70 to 84.70): VL0  
Ion 49.10 (48.80 to 49.80): VL0  
Ion 51.10 (50.80 to 51.80): VL0  
Ion 86.00 (85.70 to 86.70): VL0

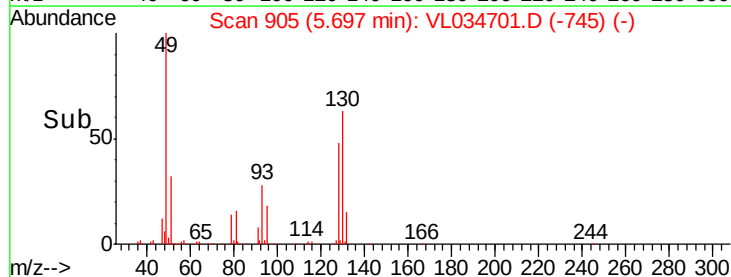
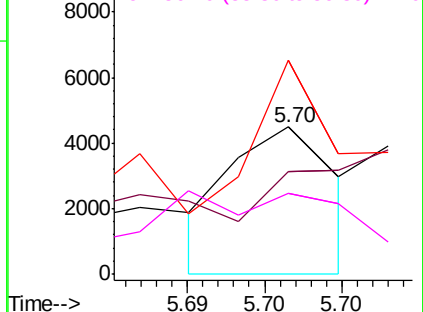


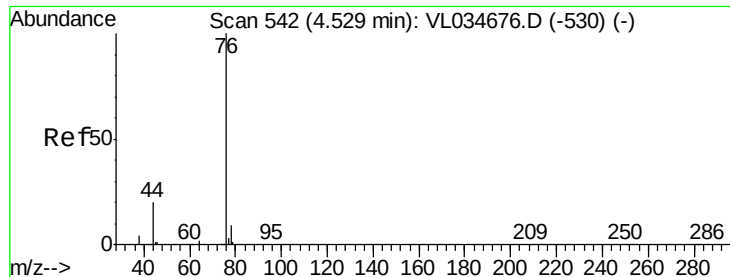
#26  
Hexane  
Concen: 0.023 ppbv  
RT: 5.70 min Scan# 905  
Delta R.T. 0.02 min  
Lab File: VL034701.D  
Acq: 26 Feb 2020 23:53

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 57    | Resp: | 2129   |
| Ion      | Ratio | Lower | Upper  |
| 57       | 100   |       |        |
| 41       | 0.0   | 70.3  | 105.5# |
| 43       | 409.7 | 177.0 | 265.4# |
| 56       | 0.0   | 42.6  | 64.0#  |



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: 0.122 ppbv

RT: 4.96 min Scan# 677

Delta R.T. 0.43 min

Lab File: VL034701.D

Acq: 26 Feb 2020 23:53

Instrument :

MSVOA\_L

ClientSampleId :

EP-103DL2

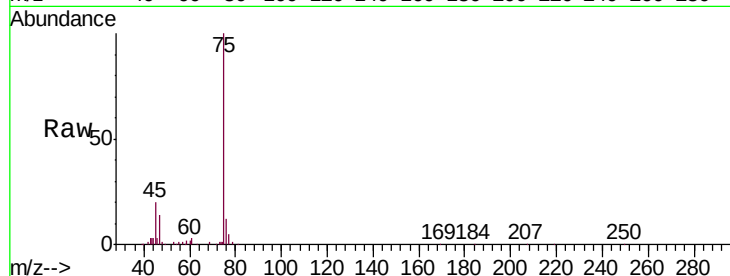
Tgt Ion: 76 Resp: 12680

Ion Ratio Lower Upper

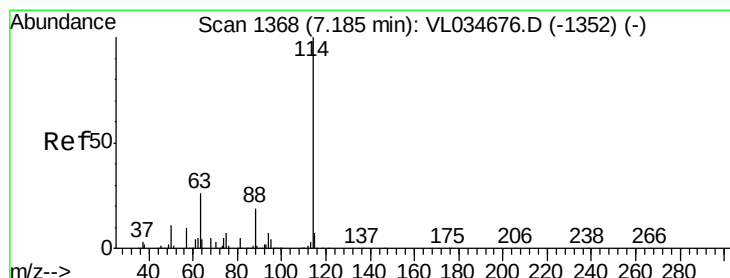
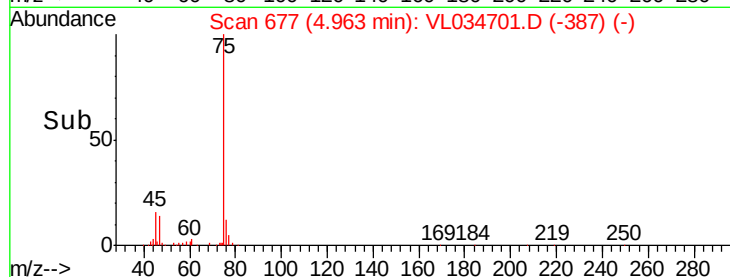
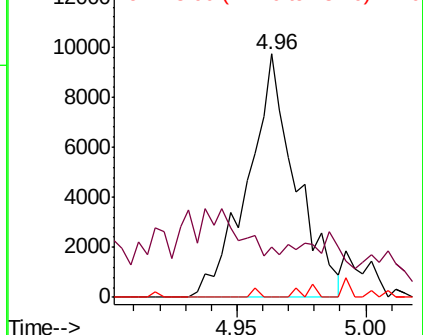
76 100

44 0.0 15.3 22.9#

78 1.2 7.6 11.4#



Abundance Ion 76.00 (75.70 to 76.70): VL0  
Ion 44.10 (43.80 to 44.80): VL0  
Ion 78.00 (77.70 to 78.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.20 min Scan# 1373

Delta R.T. 0.02 min

Lab File: VL034701.D

Acq: 26 Feb 2020 23:53

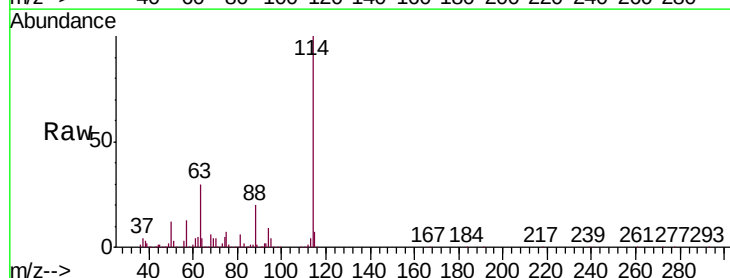
Tgt Ion: 114 Resp: 2083372

Ion Ratio Lower Upper

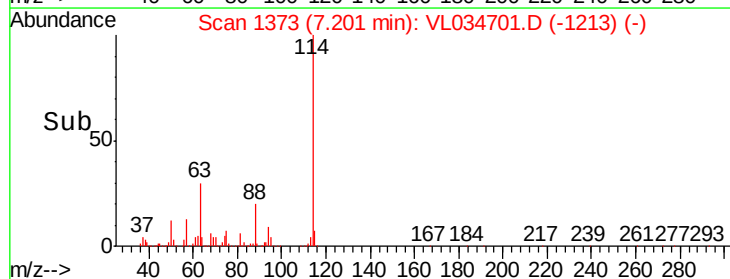
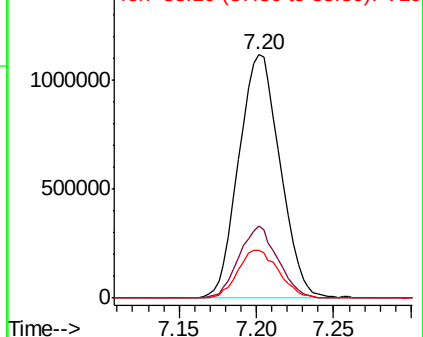
114 100

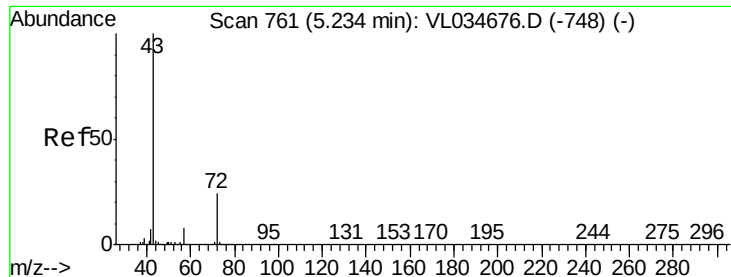
63 27.9 22.9 34.3

88 19.5 15.8 23.6



Abundance Ion 114.10 (113.80 to 114.80): V  
Ion 63.10 (62.80 to 63.80): VL0  
Ion 88.10 (87.80 to 88.80): VL0





#34

2-Butanone

Concen: 0.061 ppbv

RT: 5.26 min Scan# 770

Delta R.T. 0.03 min

Lab File: VL034701.D

Acq: 26 Feb 2020 23:53

Instrument :

MSVOA\_L

ClientSampleId :

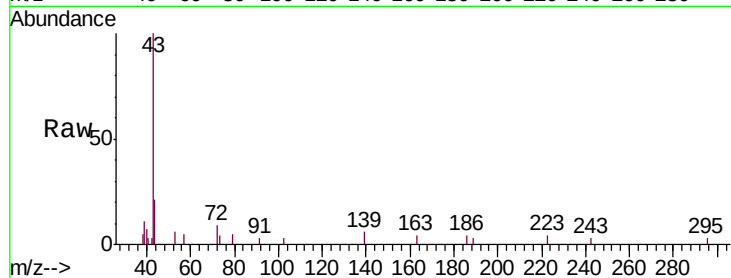
EP-103DL2

Tgt Ion: 43 Resp: 8061

Ion Ratio Lower Upper

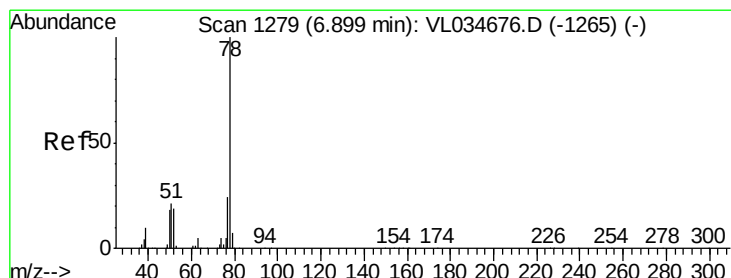
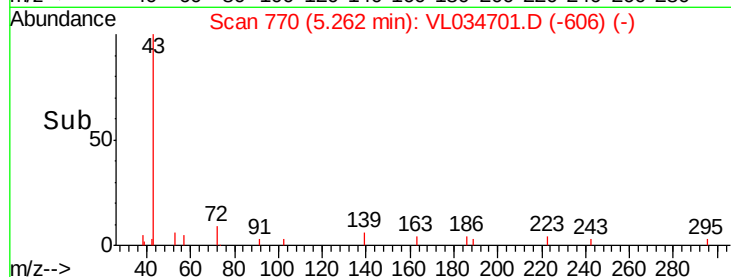
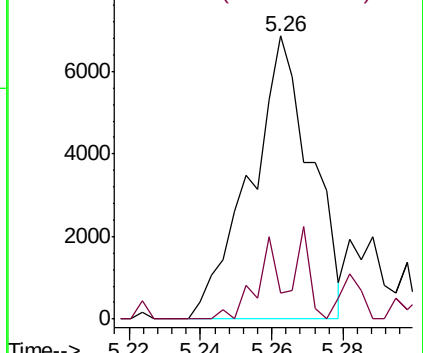
43 100

72 17.6 18.2 27.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#36

Benzene

Concen: 0.021 ppbv

RT: 6.92 min Scan# 1285

Delta R.T. 0.02 min

Lab File: VL034701.D

Acq: 26 Feb 2020 23:53

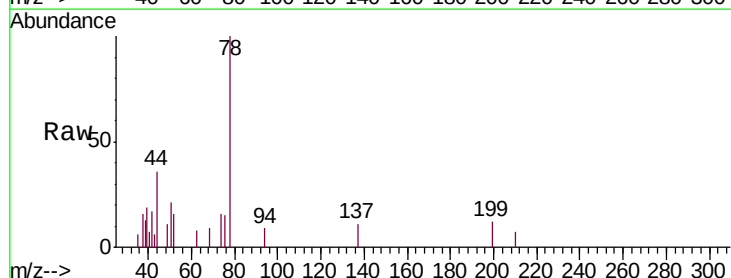
Tgt Ion: 78 Resp: 3810

Ion Ratio Lower Upper

78 100

77 0.0 19.5 29.3#

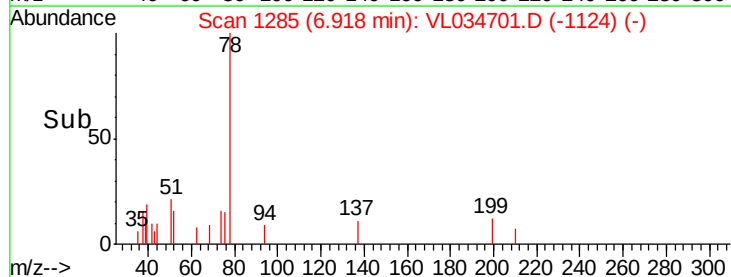
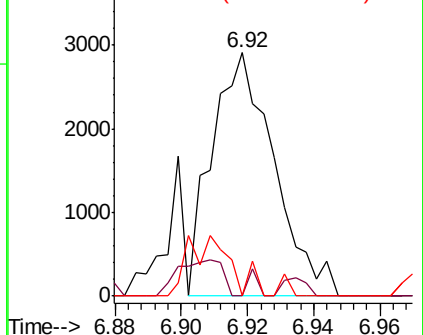
50 0.0 14.6 21.8#



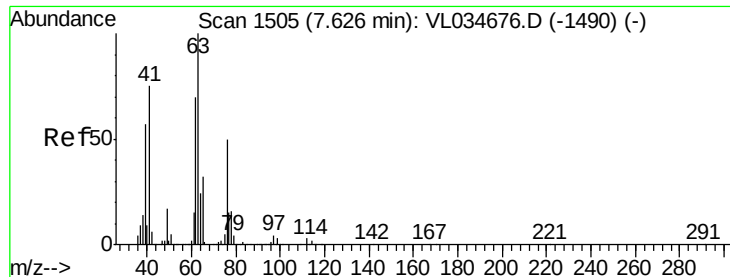
Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0







#39

1,2-Dichloropropane

Concen: 7.994 ppbv

RT: 7.20 min Scan# 1373

Delta R.T. -0.42 min

Lab File: VL034701.D

Acq: 26 Feb 2020 23:53

Instrument :

MSVOA\_L

ClientSampleId :

EP-103DL2

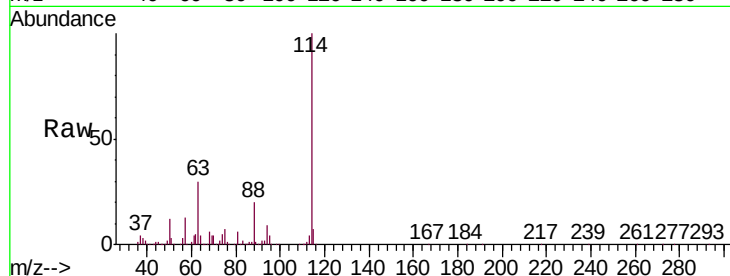
Tgt Ion: 63 Resp: 572274

Ion Ratio Lower Upper

63 100

41 0.0 60.2 90.4#

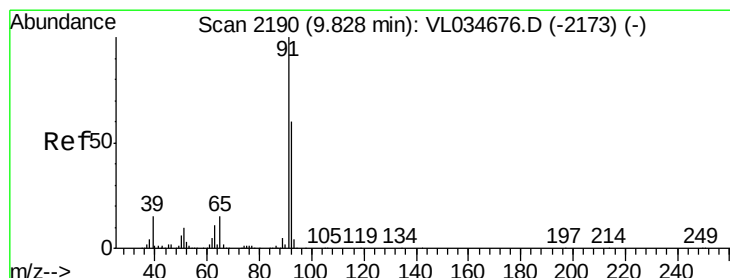
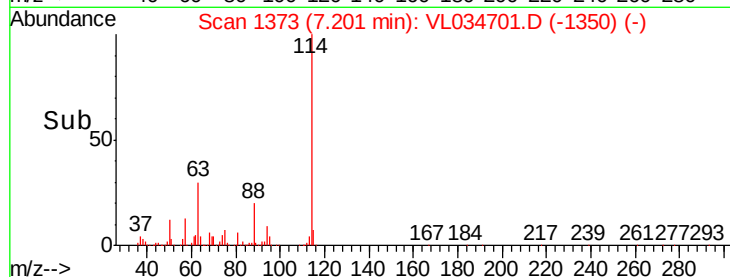
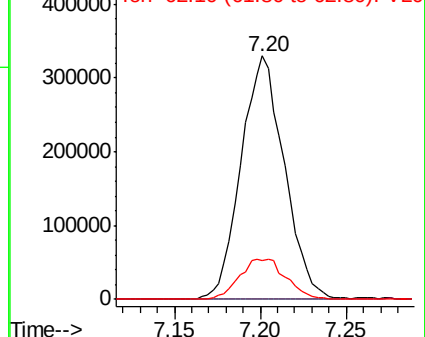
62 15.7 56.3 84.5#



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: 0.091 ppbv

RT: 9.85 min Scan# 2196

Delta R.T. 0.02 min

Lab File: VL034701.D

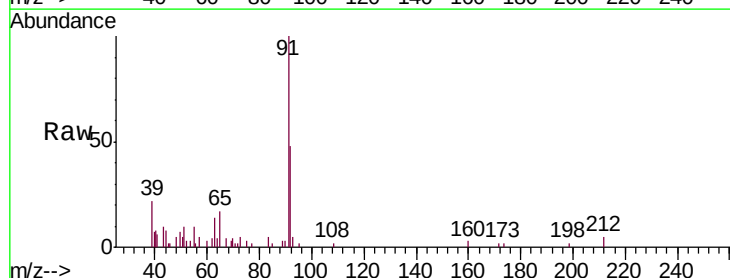
Acq: 26 Feb 2020 23:53

Tgt Ion: 91 Resp: 17483

Ion Ratio Lower Upper

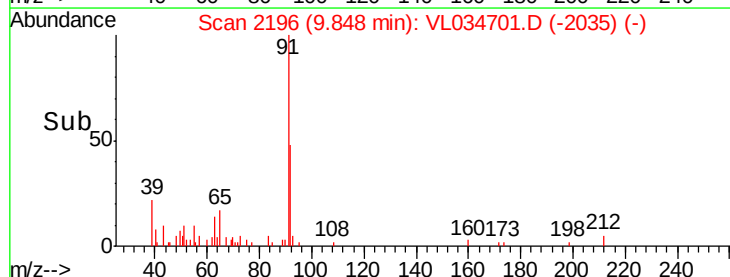
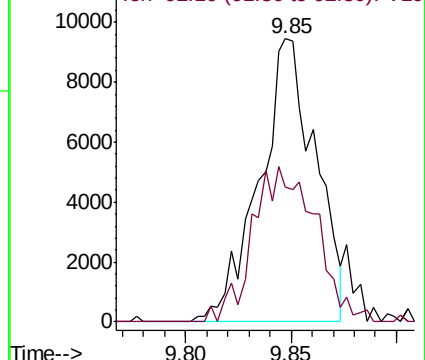
91 100

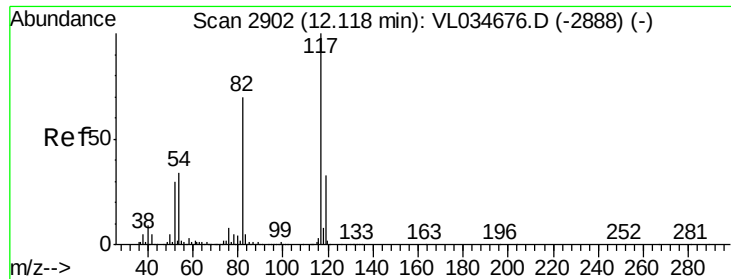
92 61.7 48.5 72.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

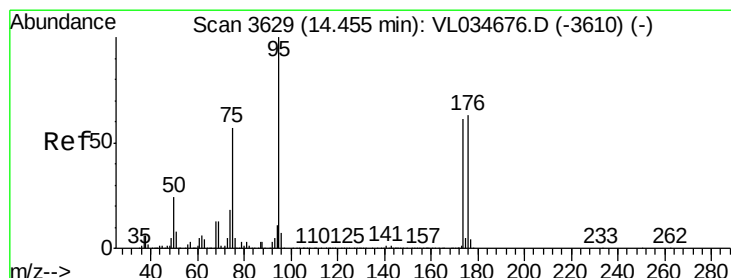
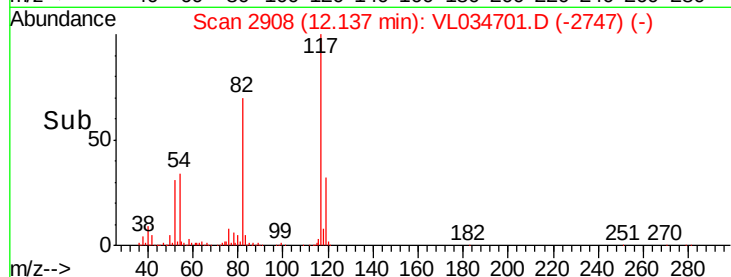
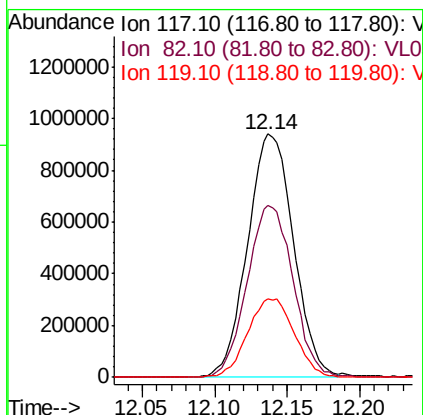
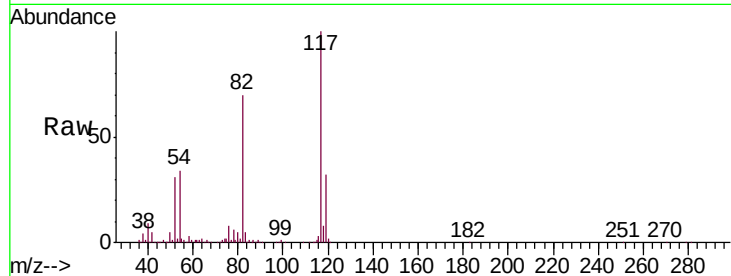




#55  
Chlorobenzene-d5  
Concen: 10.000 ppbv  
RT: 12.14 min Scan# 2908  
Delta R.T. 0.02 min  
Lab File: VL034701.D  
Acq: 26 Feb 2020 23:53

Instrument :  
MSVOA\_L  
ClientSampleId :  
EP-103DL2

Tgt Ion: 117 Resp: 2072785  
Ion Ratio Lower Upper  
117 100  
82 71.3 54.1 81.1  
119 33.1 27.6 41.4



#68  
1-Bromo-4-Fluorobenzene  
Concen: 10.070 ppbv  
RT: 14.48 min Scan# 3636  
Delta R.T. 0.02 min  
Lab File: VL034701.D  
Acq: 26 Feb 2020 23:53

Tgt Ion: 95 Resp: 1711532  
Ion Ratio Lower Upper  
95 100  
174 63.9 50.7 76.1  
175 4.8 3.9 5.9

