

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL101719\  
 Data File : VL034323.D  
 Acq On : 17 Oct 2019 19:22  
 Operator : SY/AP  
 Sample : K5409-01  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

Quant Time: Oct 18 04:34:36 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL101619AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct 17 05:12:37 2019  
 QLast Update : Thu Oct 17 05:12:37 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.70  | 49   | 1061207  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.22  | 114  | 2019609  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.17 | 117  | 2086203  | 10.00 | ppbv  | 0.01     |

## System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.50  | 95    | 1845735  | 10.45    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 104.50% |

## Target Compounds

|                                |       |     |          |         |        | Qvalue |
|--------------------------------|-------|-----|----------|---------|--------|--------|
| 3) Chlorodifluoromethane       | 2.97  | 51  | 54268    | 0.436   | ppbv # | 91     |
| 4) Chloromethane               | 3.12  | 50  | 79397    | 1.079   | ppbv   | 98     |
| 5) Vinyl Chloride              | 3.24  | 62  | 17907    | 0.255   | ppbv # | 77     |
| 7) Chloroethane                | 3.55  | 64  | 3177     | 0.129   | ppbv # | 62     |
| 9) Propene                     | 2.99  | 41  | 1418556  | 25.727  | ppbv   | 98     |
| 10) Heptane                    | 8.17  | 43  | 76993    | 0.544   | ppbv # | 1      |
| 11) Trichlorofluoromethane     | 3.95  | 101 | 42432    | 0.244   | ppbv   | 93     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.49  | 101 | 5551     | 0.049   | ppbv # | 53     |
| 13) Ethanol                    | 3.60  | 45  | 75352    | 6.104   | ppbv   | 97     |
| 15) Acetone                    | 3.84  | 43  | 8311081  | 54.754  | ppbv # | 64     |
| 16) 1,3-Butadiene              | 3.29  | 39  | 1759668  | 28.531  | ppbv # | 20     |
| 17) tert-Butyl alcohol         | 4.30  | 59  | 89376    | 0.923   | ppbv   | 94     |
| 18) 1,1-Dichloroethene         | 4.29  | 96  | 3347     | 0.067   | ppbv # | 49     |
| 19) Isopropyl Alcohol          | 3.97  | 45  | 44763    | 0.529   | ppbv # | 95     |
| 20) Methylene Chloride         | 4.35  | 84  | 127810   | 2.329   | ppbv   | 92     |
| 21) Allyl Chloride             | 4.41  | 41  | 3582     | 0.043   | ppbv # | 1      |
| 22) trans-1,2-Dichloroethene   | 4.91  | 96  | 26886    | 0.541   | ppbv # | 76     |
| 23) Vinyl Acetate              | 5.08  | 43  | 272083   | 1.435   | ppbv # | 67     |
| 25) Ethyl Acetate              | 5.71  | 43  | 186133   | 0.726   | ppbv # | 81     |
| 26) Hexane                     | 5.71  | 57  | 217507   | 1.991   | ppbv # | 39     |
| 27) Carbon Disulfide           | 4.56  | 76  | 532575   | 4.697   | ppbv   | 98     |
| 29) Chloroform                 | 5.78  | 83  | 110854   | 0.642   | ppbv   | 96     |
| 30) Cyclohexane                | 7.17  | 84  | 44517    | 0.554   | ppbv # | 89     |
| 31) cis-1,2-Dichloroethene     | 5.57  | 61  | 972231   | 8.771   | ppbv   | 95     |
| 34) 2-Butanone                 | 5.26  | 43  | 1221209  | 7.398   | ppbv   | 98     |
| 35) Carbon Tetrachloride       | 7.06  | 117 | 5604     | 0.032   | ppbv # | 60     |
| 36) Benzene                    | 6.93  | 78  | 411751   | 2.125   | ppbv # | 91     |
| 38) Trichloroethene            | 7.88  | 130 | 661477   | 8.507   | ppbv   | 94     |
| 39) 1,2-Dichloropropane        | 7.22  | 63  | 606648   | 7.271   | ppbv # | 23     |
| 41) Tetrahydrofuran            | 6.08  | 42  | 2944     | 0.032   | ppbv # | 40     |
| 44) 2,2,4-Trimethylpentane     | 7.92  | 57  | 28031    | 0.078   | ppbv # | 1      |
| 50) 4-Methyl-2-Pentanone       | 8.81  | 43  | 105955   | 0.448   | ppbv   | 98     |
| 51) 2-Hexanone                 | 10.20 | 43  | 260088   | 1.343   | ppbv # | 95     |
| 52) Tetrachloroethene          | 11.35 | 164 | 18169840 | 239.218 | ppbv   | 92     |
| 53) Toluene                    | 9.86  | 91  | 1575881  | 7.369   | ppbv   | 99     |
| 56) 1,1,1,2-Tetrachloroethane  | 12.21 | 131 | 4527     | 0.047   | ppbv # | 11     |
| 58) Ethyl Benzene              | 12.79 | 91  | 522278   | 1.791   | ppbv   | 99     |
| 59) m/p-Xylene                 | 13.04 | 91  | 1532462  | 6.065   | ppbv   | 98     |
| 60) o-Xylene                   | 13.77 | 91  | 316668   | 1.259   | ppbv # | 48     |
| 61) Styrene                    | 13.61 | 104 | 8334     | 0.047   | ppbv # | 1      |
| 64) n-propylbenzene            | 15.64 | 120 | 17577    | 0.206   | ppbv # | 1      |

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Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Quant Time: Oct 18 04:34:36 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL101619AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Oct 17 05:12:37 2019  
QLast Update : Thu Oct 17 05:12:37 2019  
Response via : Initial Calibration

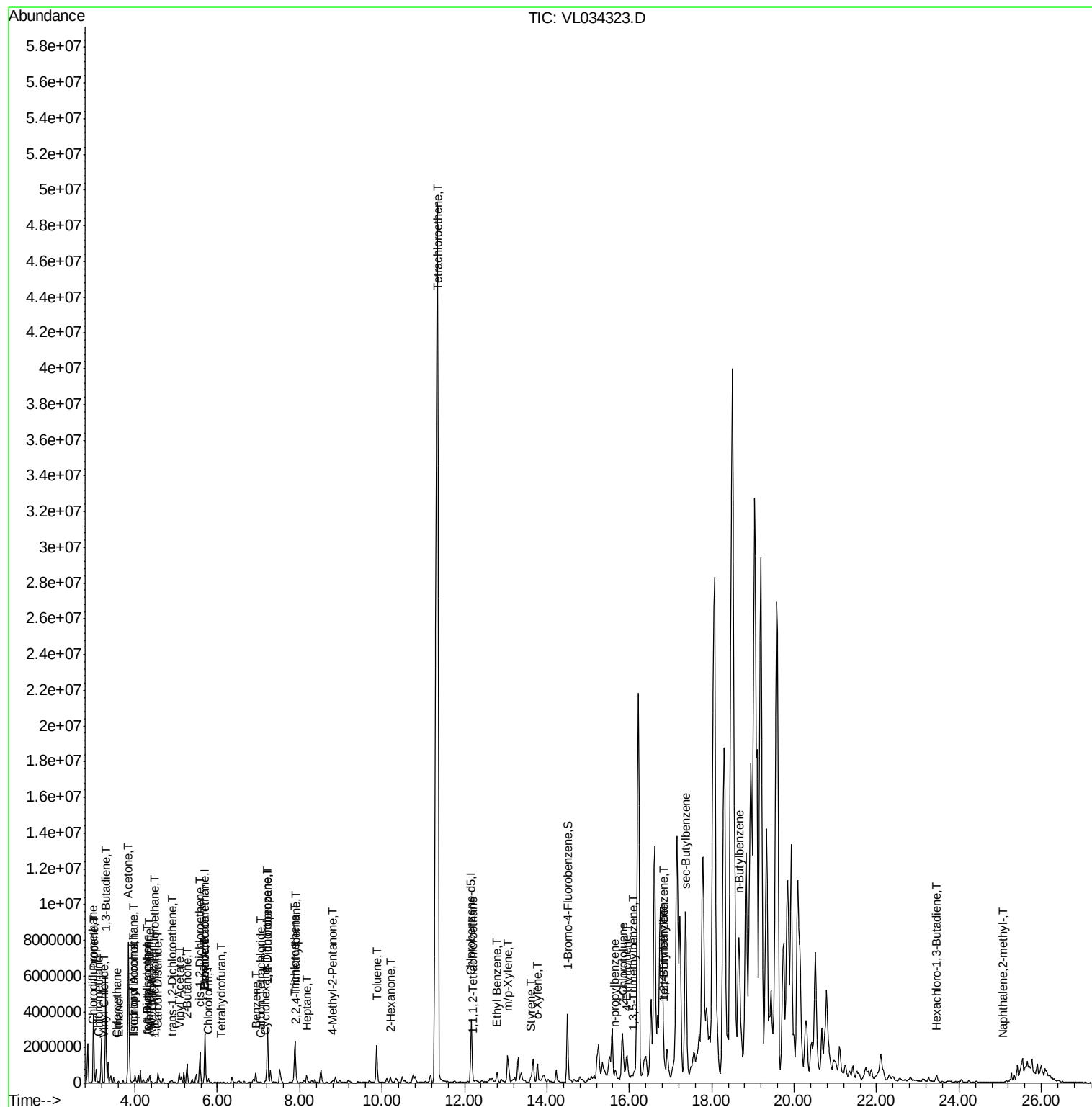
| Internal Standards           | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|------------------------------|-------|------|----------|-------|--------|----------|
| 65) tert-Butylbenzene        | 16.84 | 119  | 17563    | 0.060 | ppbv # | 18       |
| 67) sec-Butylbenzene         | 17.39 | 105  | 15234    | 0.037 | ppbv # | 73       |
| 70) n-Butylbenzene           | 18.66 | 91   | 75876    | 0.206 | ppbv # | 53       |
| 71) 2-Chlorotoluene          | 15.86 | 91   | 19627    | 0.076 | ppbv   | 69       |
| 72) 4-Ethyltoluene           | 15.92 | 105  | 189170   | 0.669 | ppbv   | 95       |
| 73) 1,3,5-Trimethylbenzene   | 16.08 | 105  | 129763   | 0.463 | ppbv   | 92       |
| 74) 1,2,4-Trimethylbenzene   | 16.85 | 105  | 408366   | 1.397 | ppbv # | 69       |
| 78) Hexachloro-1,3-Butadiene | 23.47 | 225  | 8539     | 0.060 | ppbv # | 23       |
| 80) Naphthalene,2-methyl-    | 25.06 | 142  | 4948     | 0.080 | ppbv # | 49       |

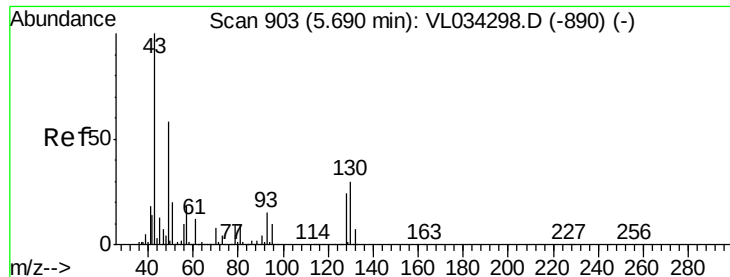
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA\_L\DATA\VL101719\  
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QLast Update : Thu Oct 17 05:12:37 2019  
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.01 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

SV1

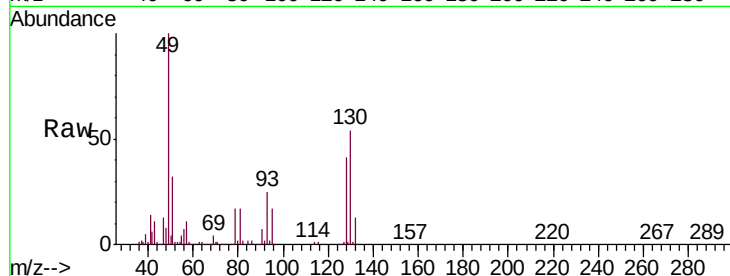
Tgt Ion: 49 Resp: 1061207

Ion Ratio Lower Upper

49 100

128 41.1 20.6 61.8

130 53.7 26.2 78.5

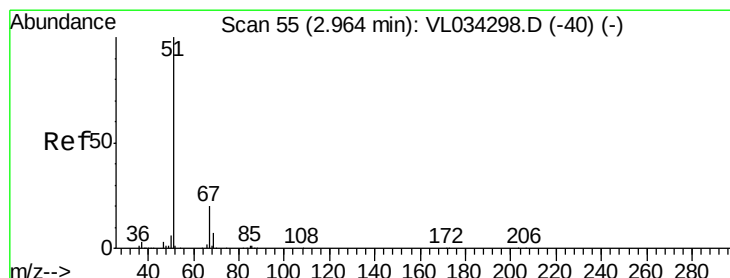
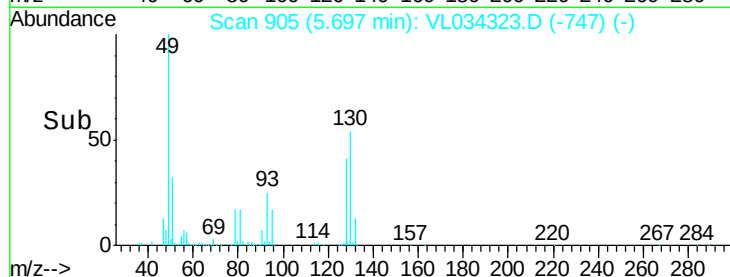
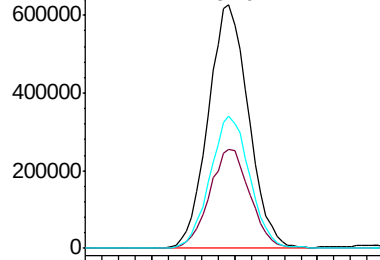


Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.70



#3

Chlorodifluoromethane

Concen: 0.436 ppbv

RT: 2.97 min Scan# 56

Delta R.T. 0.00 min

Lab File: VL034323.D

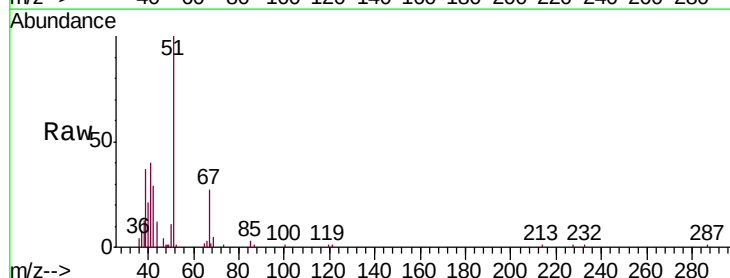
Acq: 17 Oct 2019 19:22

Tgt Ion: 51 Resp: 54268

Ion Ratio Lower Upper

51 100

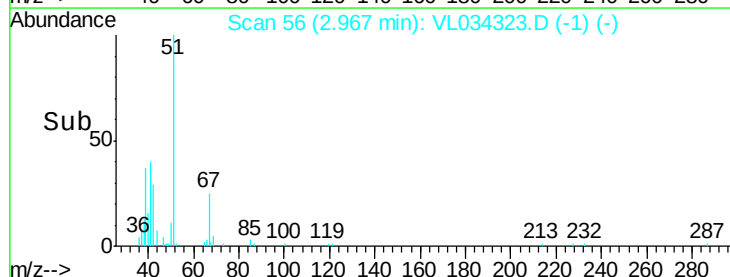
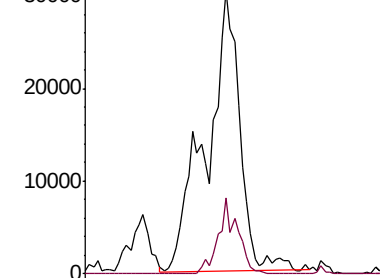
67 15.8 15.8 23.8#

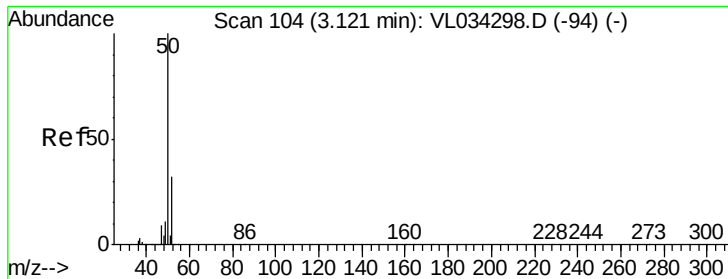


Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

2.97





#4

Chloromethane

Concen: 1.079 ppbv

RT: 3.12 min Scan# 105

Delta R.T. 0.00 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

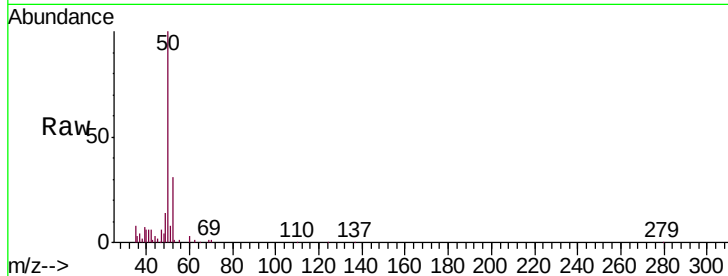
SV1

Tgt Ion: 50 Resp: 79397

Ion Ratio Lower Upper

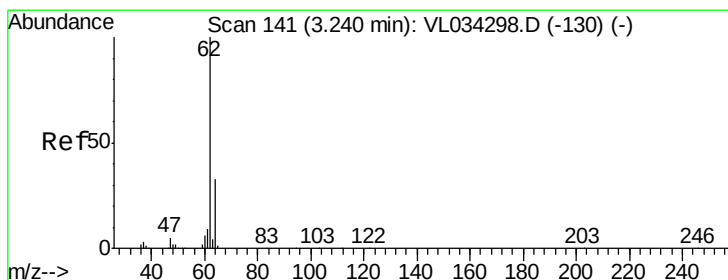
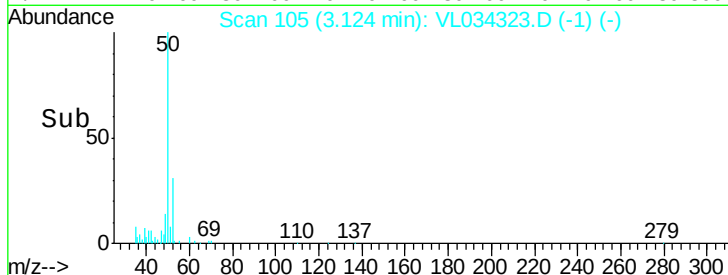
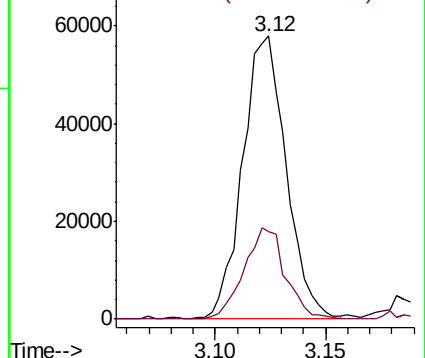
50 100

52 30.8 25.4 38.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#5

Vinyl Chloride

Concen: 0.255 ppbv

RT: 3.24 min Scan# 142

Delta R.T. 0.00 min

Lab File: VL034323.D

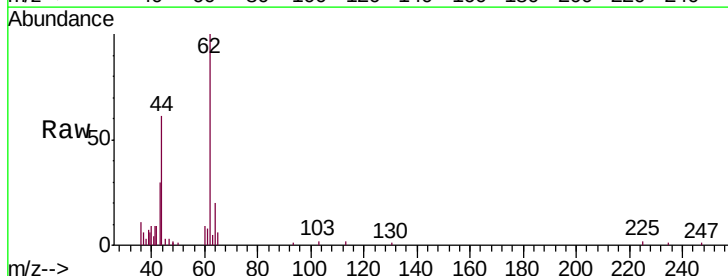
Acq: 17 Oct 2019 19:22

Tgt Ion: 62 Resp: 17907

Ion Ratio Lower Upper

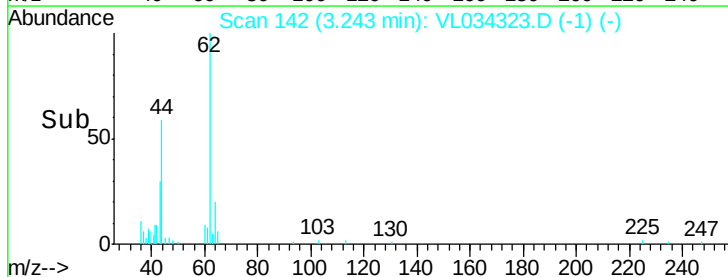
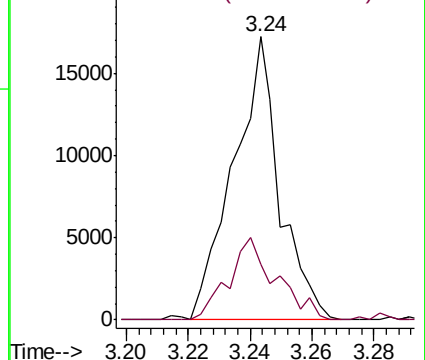
62 100

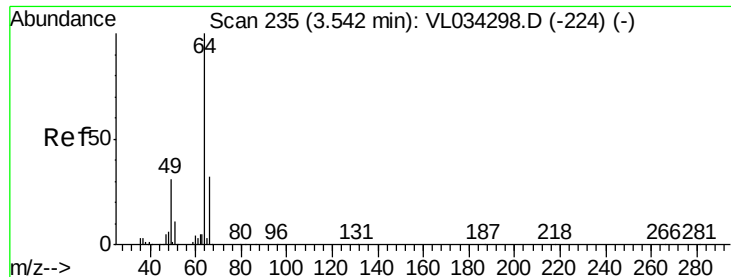
64 19.6 26.0 39.0#



Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0





#7

Chloroethane

Concen: 0.129 ppbv

RT: 3.55 min Scan# 238

Delta R.T. 0.01 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

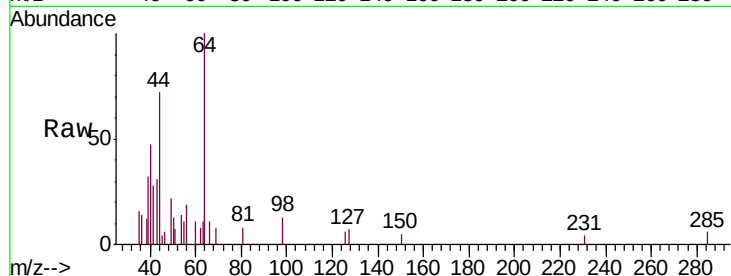
SV1

Tgt Ion: 64 Resp: 3177

Ion Ratio Lower Upper

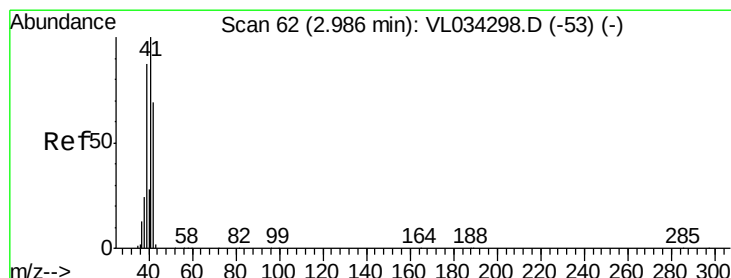
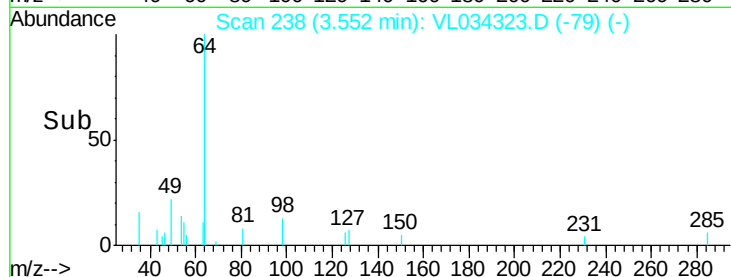
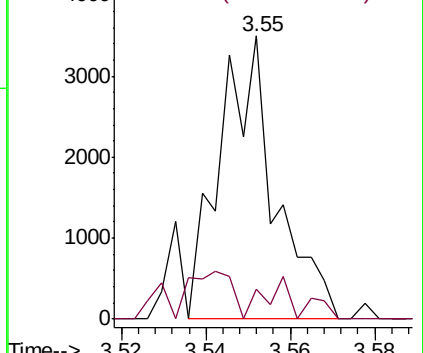
64 100

66 10.7 25.4 38.0#



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#9

Propene

Concen: 25.727 ppbv

RT: 2.99 min Scan# 63

Delta R.T. 0.00 min

Lab File: VL034323.D

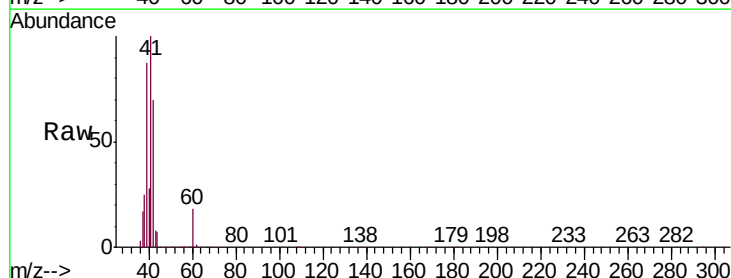
Acq: 17 Oct 2019 19:22

Tgt Ion: 41 Resp: 1418556

Ion Ratio Lower Upper

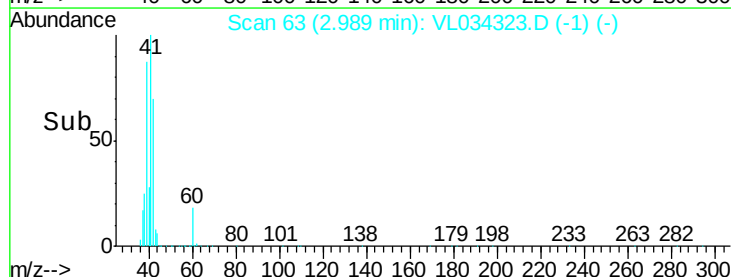
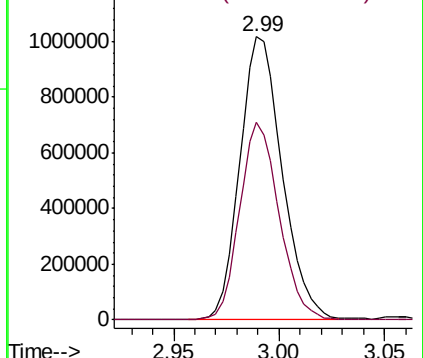
41 100

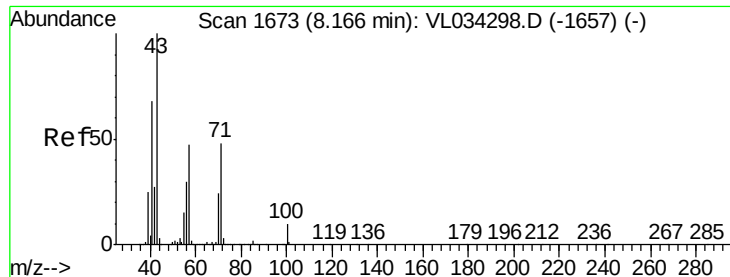
42 65.5 53.9 80.9



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

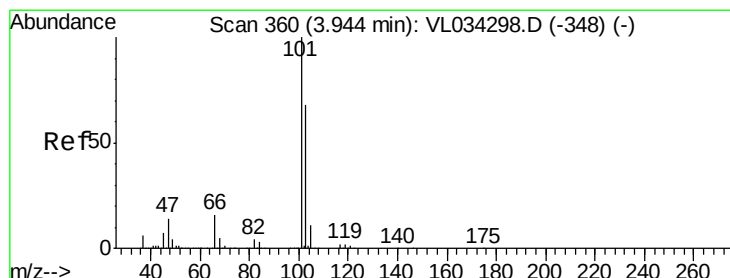
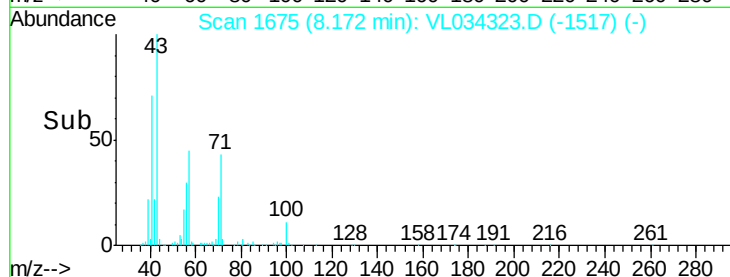
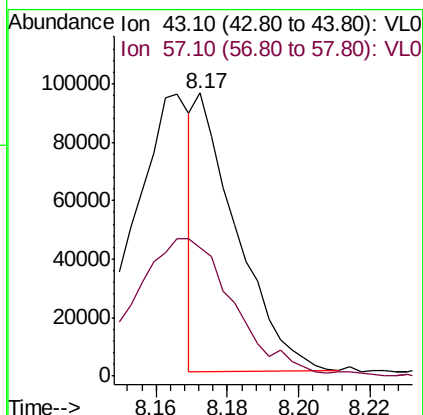
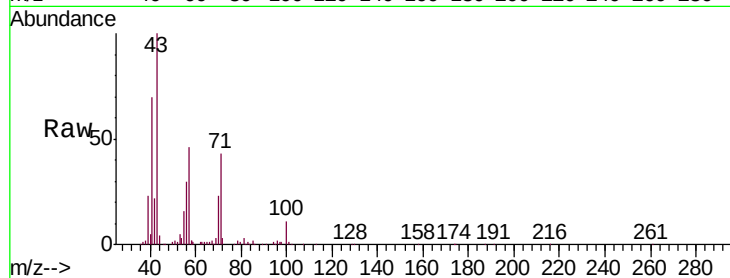




#10  
 Heptane  
 Concen: 0.544 ppbv  
 RT: 8.17 min Scan# 1675  
 Delta R.T. 0.01 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

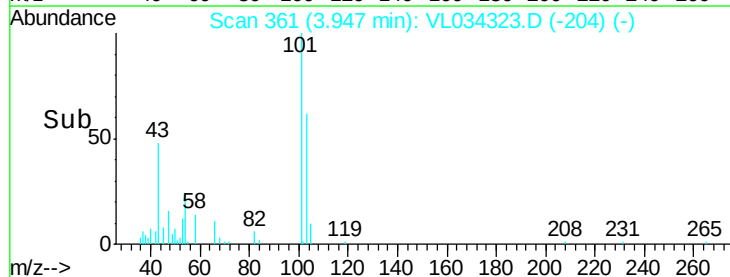
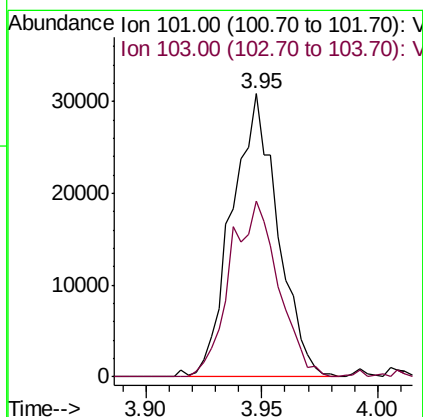
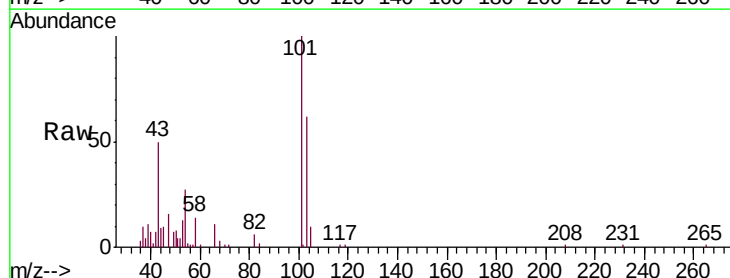
Instrument :  
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 ClientSampleId :  
 SV1

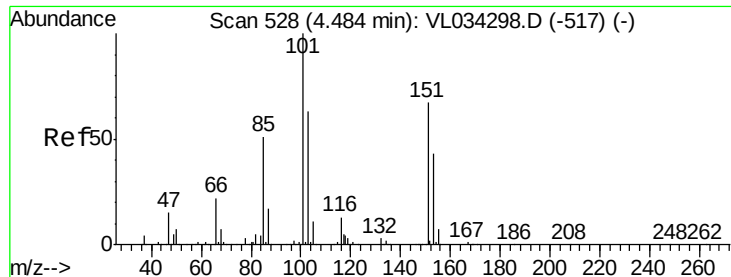
Tgt Ion: 43 Resp: 76993  
 Ion Ratio Lower Upper  
 43 100  
 57 123.7 39.5 59.3#



#11  
 Trichlorofluoromethane  
 Concen: 0.244 ppbv  
 RT: 3.95 min Scan# 361  
 Delta R.T. 0.00 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

Tgt Ion: 101 Resp: 42432  
 Ion Ratio Lower Upper  
 101 100  
 103 62.2 54.5 81.7





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.049 ppbv

RT: 4.49 min Scan# 529

Delta R.T. 0.00 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

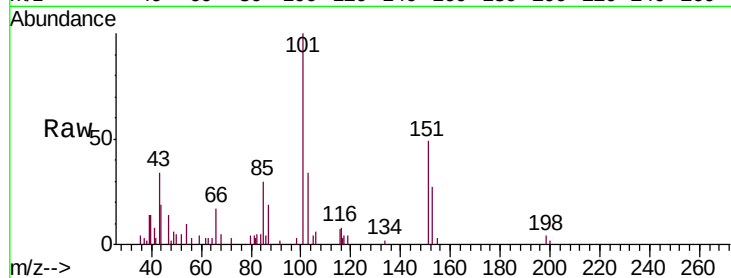
SV1

Tgt Ion:101 Resp: 5551

Ion Ratio Lower Upper

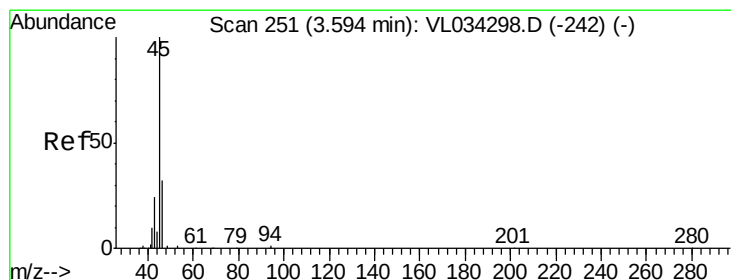
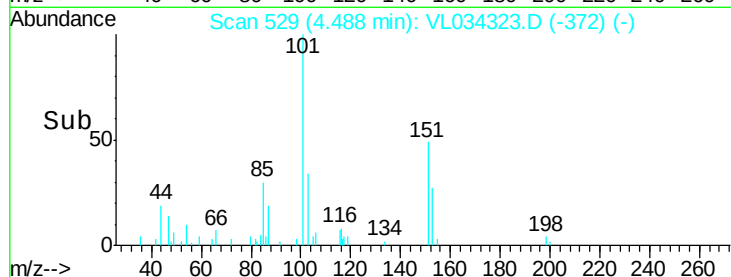
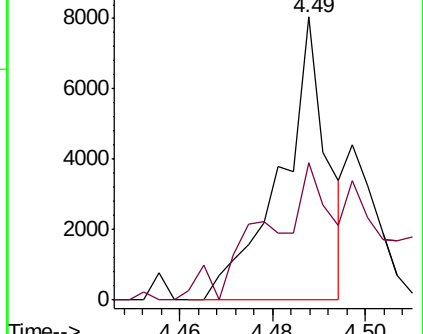
101 100

151 110.6 57.4 86.2#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 6.104 ppbv

RT: 3.60 min Scan# 254

Delta R.T. 0.01 min

Lab File: VL034323.D

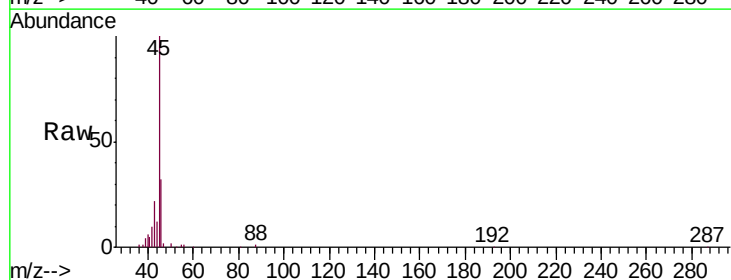
Acq: 17 Oct 2019 19:22

Tgt Ion: 45 Resp: 75352

Ion Ratio Lower Upper

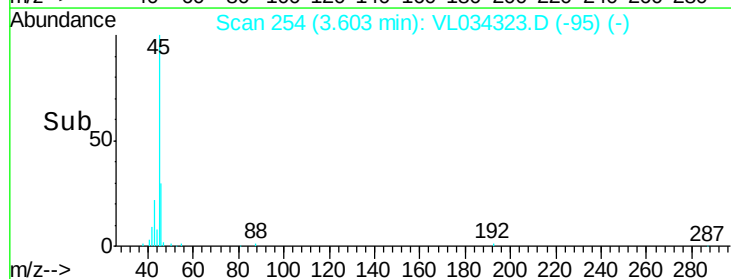
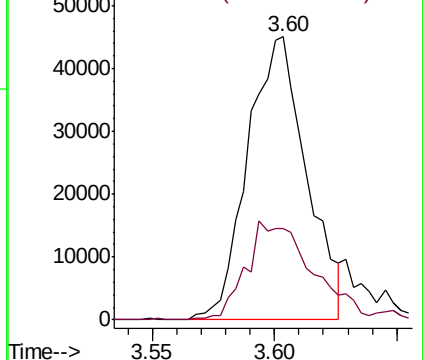
45 100

46 41.1 15.8 63.2

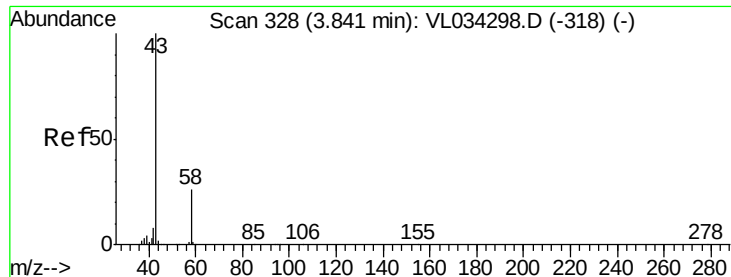


Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0







#15

Acetone

Concen: 54.754 ppbv

RT: 3.84 min Scan# 328

Delta R.T. 0.00 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

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ClientSampleId :

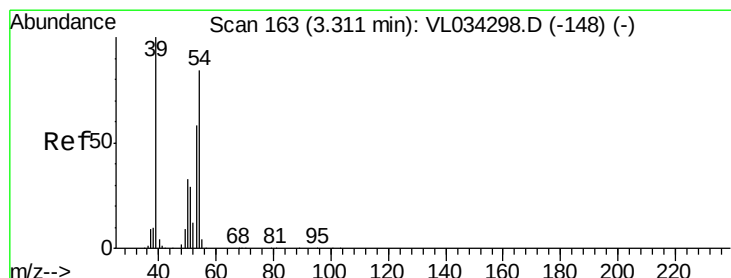
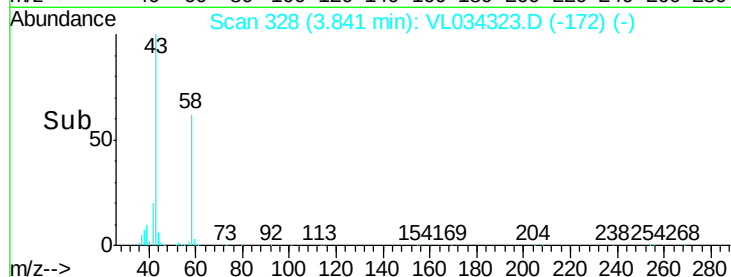
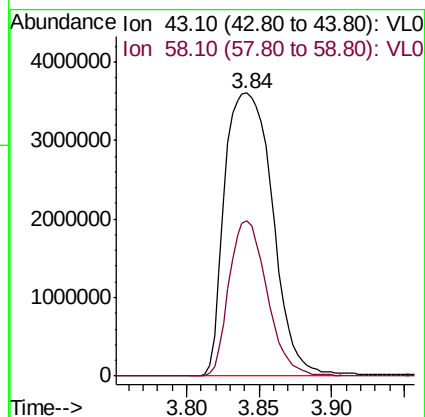
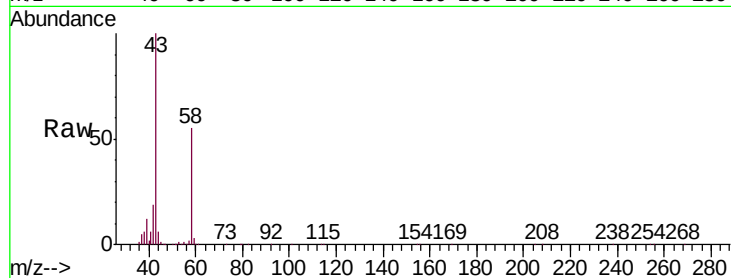
SV1

Tgt Ion: 43 Resp: 8311081

Ion Ratio Lower Upper

43 100

58 43.7 20.4 30.6#



#16

1,3-Butadiene

Concen: 28.531 ppbv

RT: 3.29 min Scan# 157

Delta R.T. -0.02 min

Lab File: VL034323.D

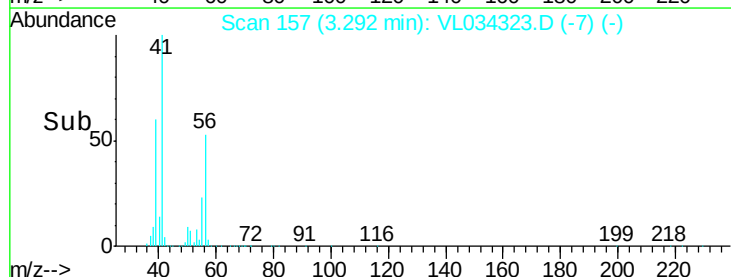
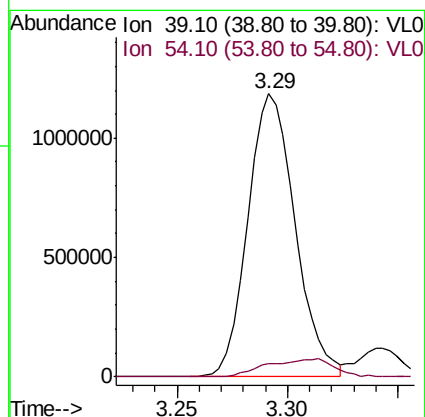
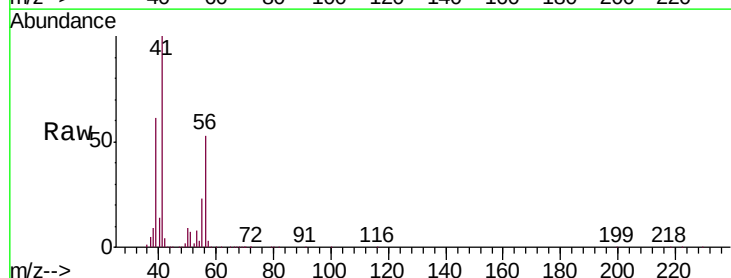
Acq: 17 Oct 2019 19:22

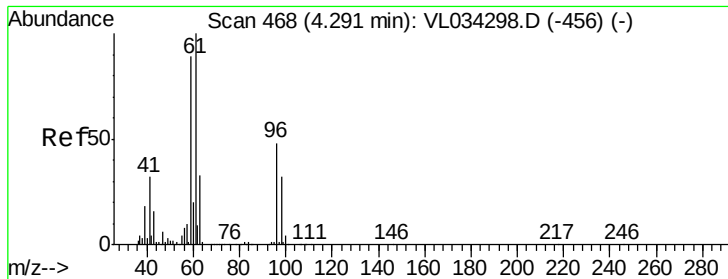
Tgt Ion: 39 Resp: 1759668

Ion Ratio Lower Upper

39 100

54 9.3 63.9 95.9#



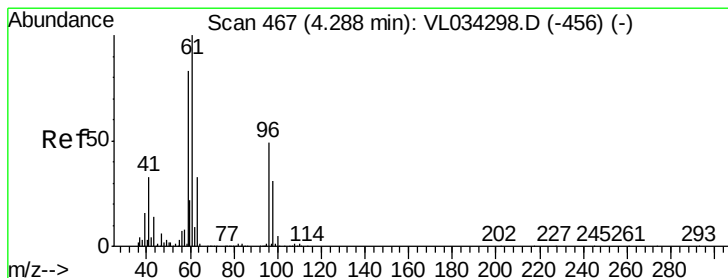
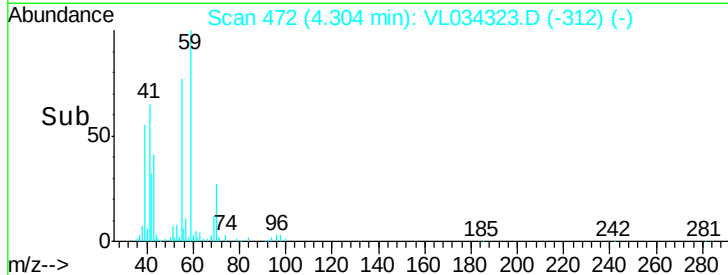
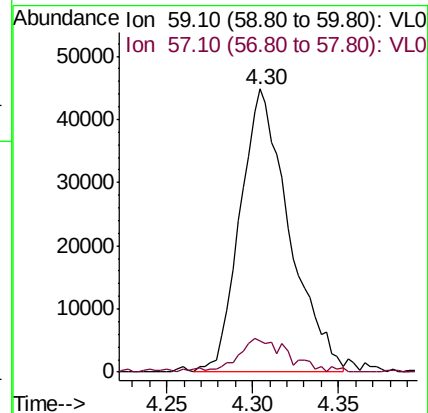
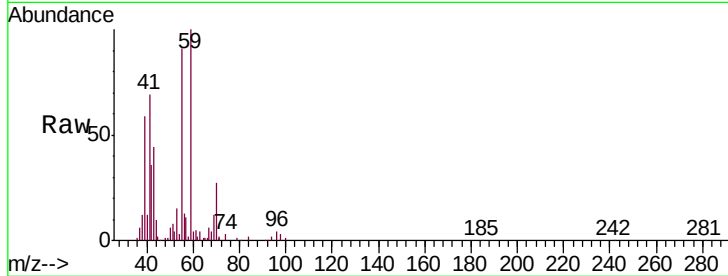


#17

tert-Butyl alcohol  
 Concen: 0.923 ppbv  
 RT: 4.30 min Scan# 472  
 Delta R.T. 0.01 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

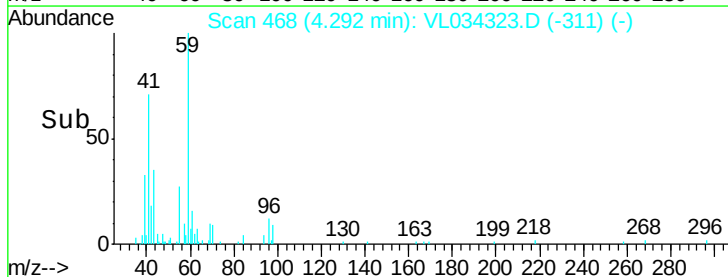
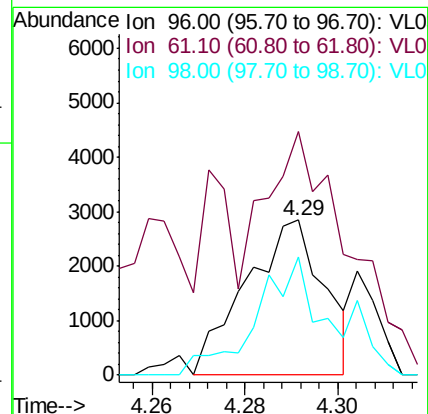
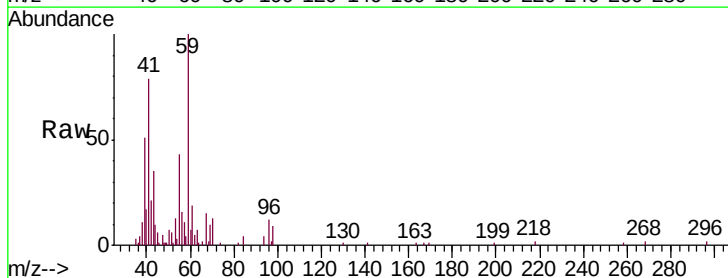
Tgt Ion: 59 Resp: 89376  
 Ion Ratio Lower Upper  
 59 100  
 57 13.2 8.8 13.2

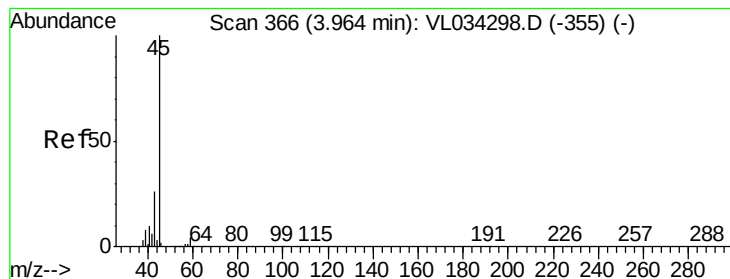


#18

1,1-Dichloroethene  
 Concen: 0.067 ppbv  
 RT: 4.29 min Scan# 468  
 Delta R.T. 0.00 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

Tgt Ion: 96 Resp: 3347  
 Ion Ratio Lower Upper  
 96 100  
 61 103.8 164.5 246.7#  
 98 63.3 51.7 77.5





#19

Isopropyl Alcohol

Concen: 0.529 ppbv

RT: 3.97 min Scan# 368

Delta R.T. 0.01 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

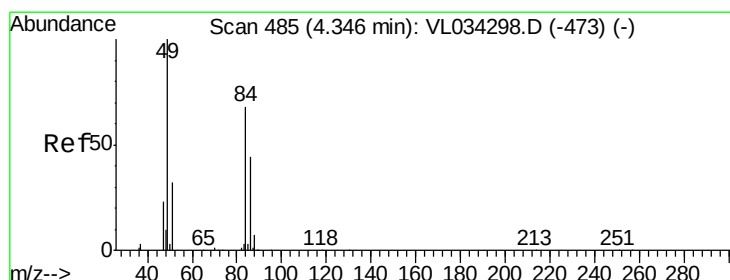
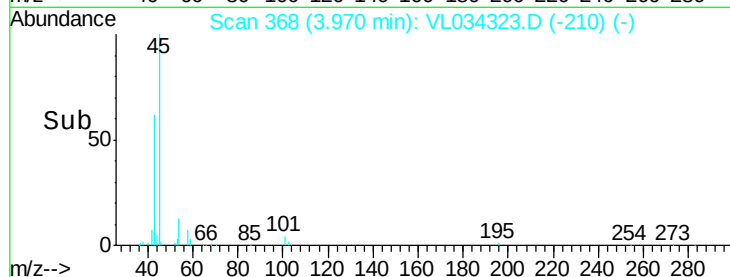
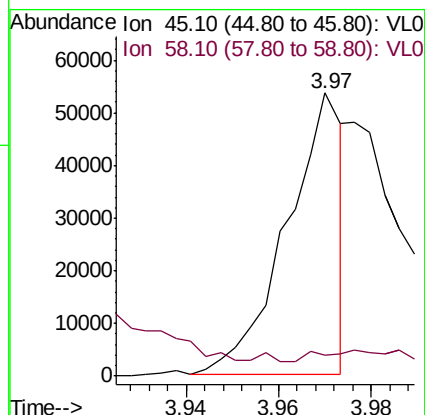
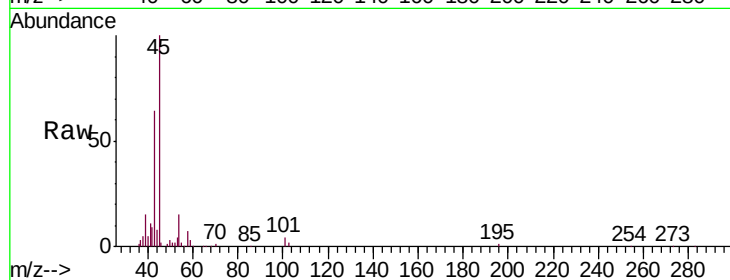
SV1

Tgt Ion: 45 Resp: 44763

Ion Ratio Lower Upper

45 100

58 0.0 1.4 2.2#



#20

Methylene Chloride

Concen: 2.329 ppbv

RT: 4.35 min Scan# 487

Delta R.T. 0.01 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Tgt Ion: 84 Resp: 127810

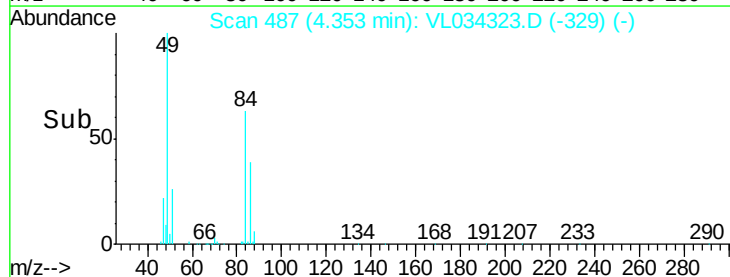
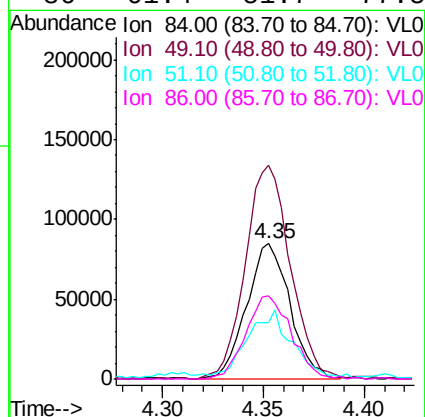
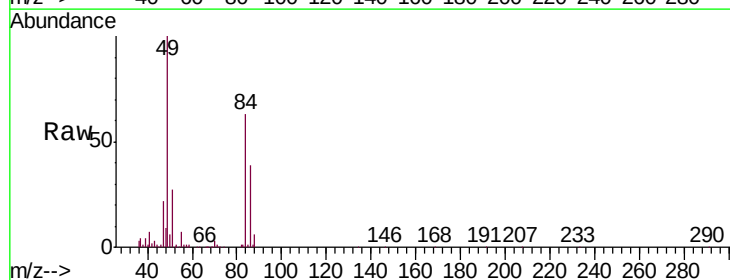
Ion Ratio Lower Upper

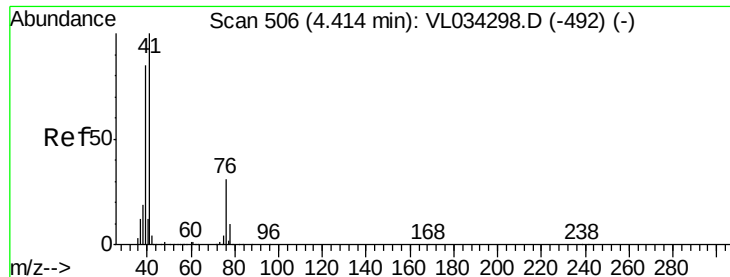
84 100

49 157.7 118.5 177.7

51 40.1 38.8 58.2

86 61.4 51.7 77.5

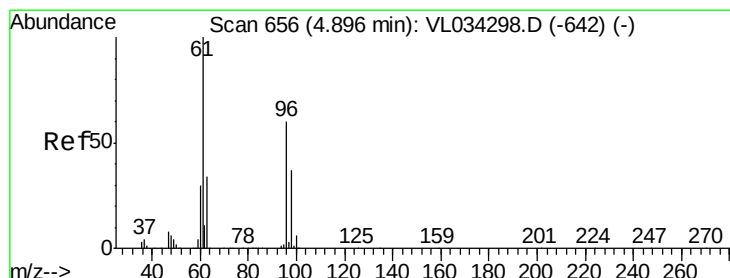
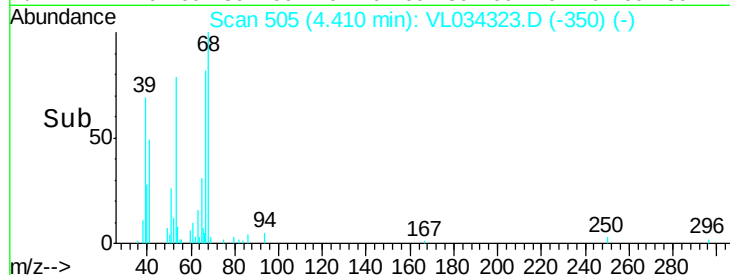
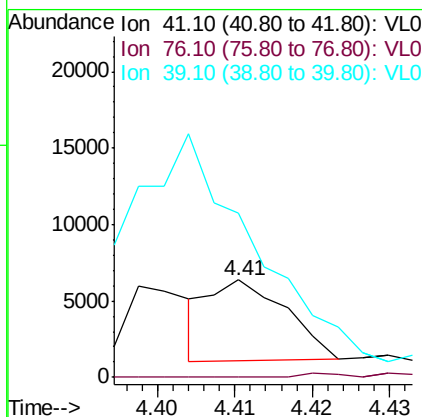
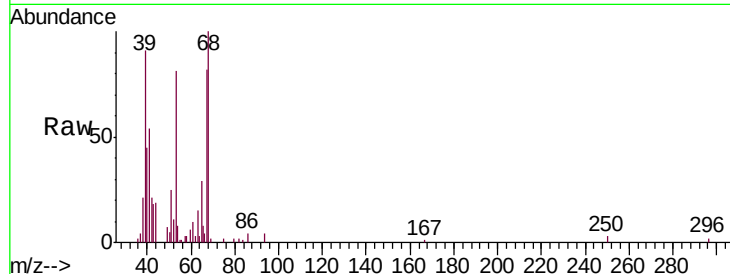




#21  
 Allyl Chloride  
 Concen: 0.043 ppbv  
 RT: 4.41 min Scan# 505  
 Delta R.T. -0.00 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

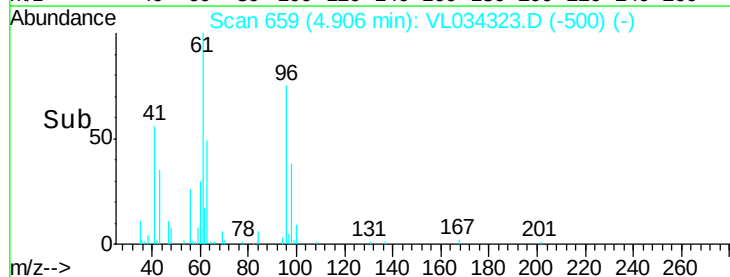
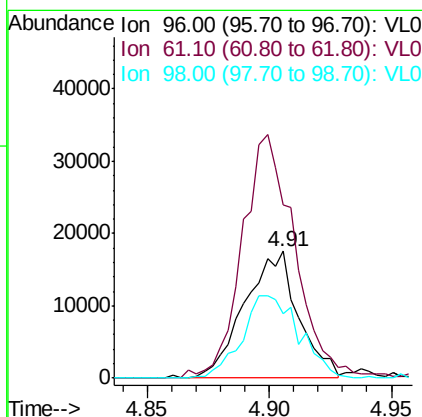
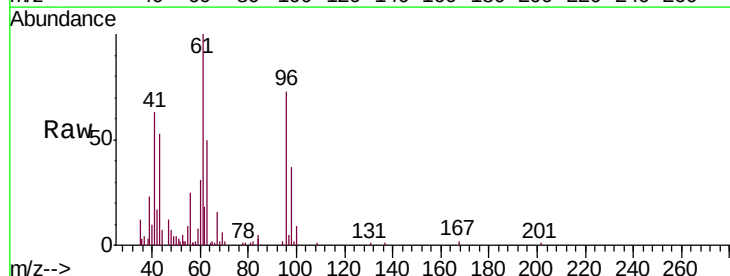
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

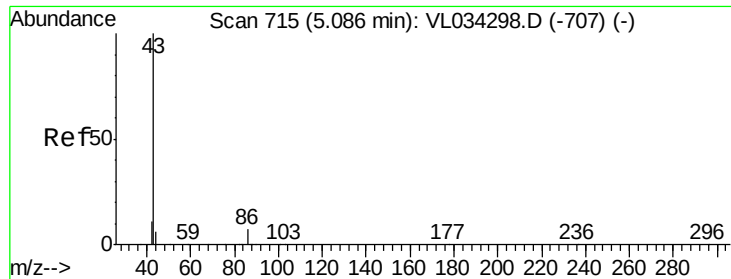
Tgt Ion: 41 Resp: 3582  
 Ion Ratio Lower Upper  
 41 100  
 76 0.0 22.8 34.2#  
 39 454.7 66.0 99.0#



#22  
 trans-1,2-Dichloroethene  
 Concen: 0.541 ppbv  
 RT: 4.91 min Scan# 659  
 Delta R.T. 0.01 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

Tgt Ion: 96 Resp: 26886  
 Ion Ratio Lower Upper  
 96 100  
 61 129.9 133.8 200.6#  
 98 50.7 49.4 74.0

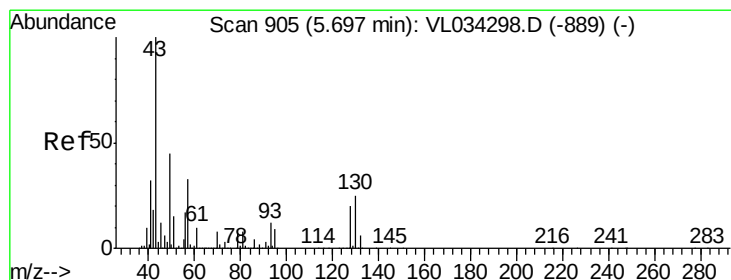
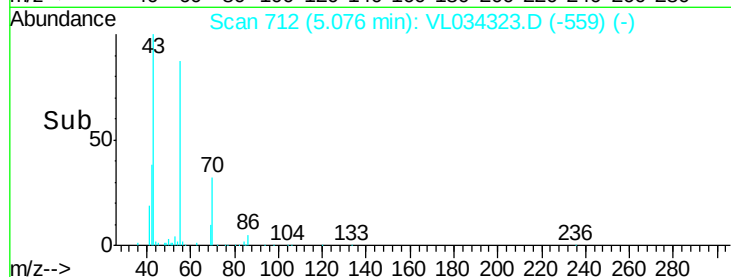
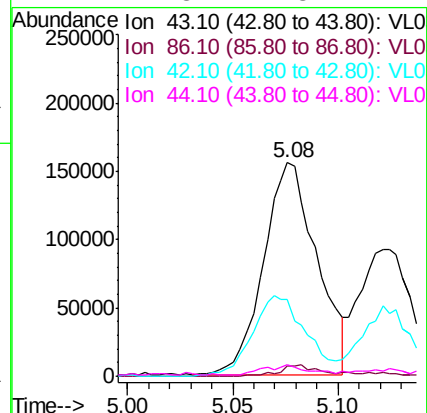
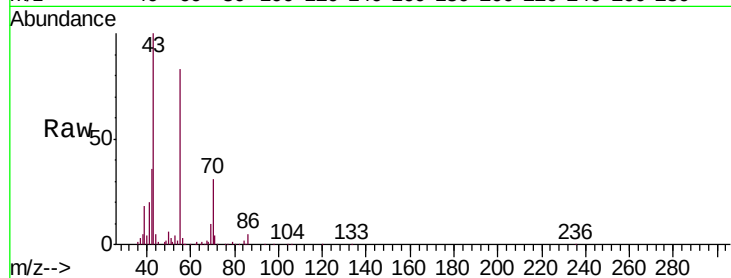




#23  
 Vinyl Acetate  
 Concen: 1.435 ppbv  
 RT: 5.08 min Scan# 712  
 Delta R.T. -0.01 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

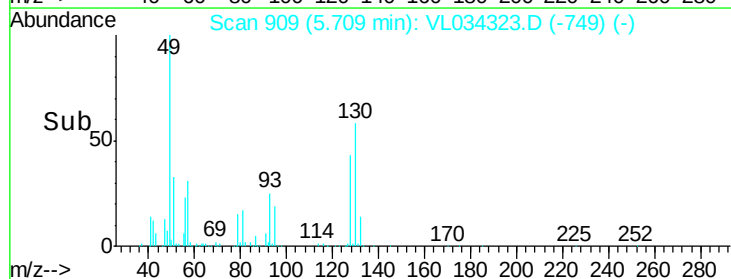
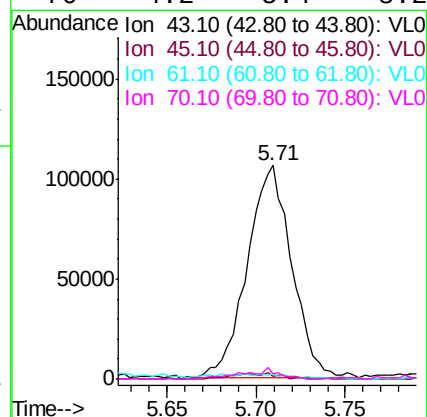
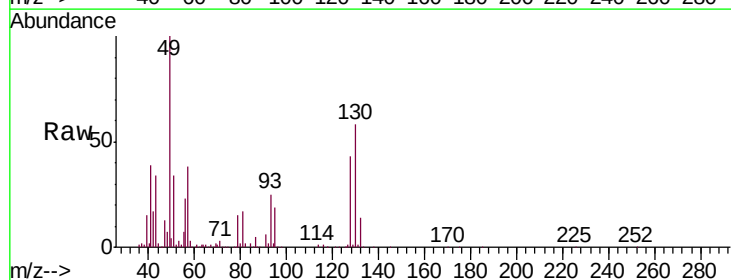
Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 SV1

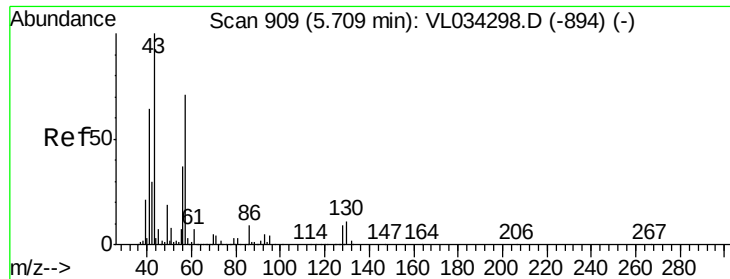
|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 272083 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 86       | 4.7   | 5.0   | 7.4#   |
| 42       | 35.5  | 8.6   | 13.0#  |
| 44       | 4.3   | 4.8   | 7.2#   |



#25  
 Ethyl Acetate  
 Concen: 0.726 ppbv  
 RT: 5.71 min Scan# 909  
 Delta R.T. 0.01 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 43    | Resp: | 186133 |
| Ion      | Ratio | Lower | Upper  |
| 43       | 100   |       |        |
| 45       | 2.9   | 8.3   | 12.5#  |
| 61       | 0.0   | 7.7   | 11.5#  |
| 70       | 4.2   | 5.4   | 8.2#   |

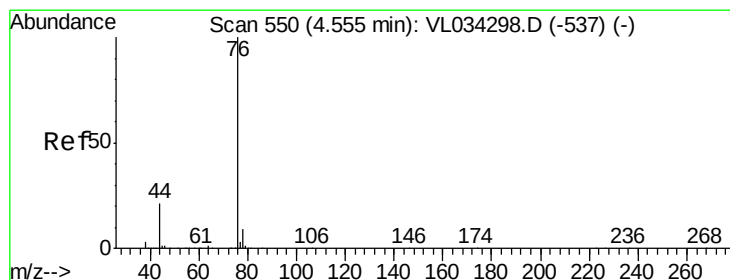
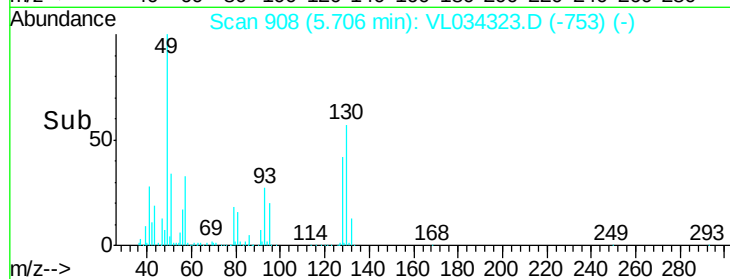
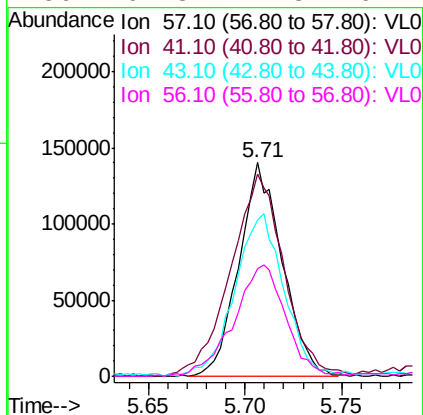
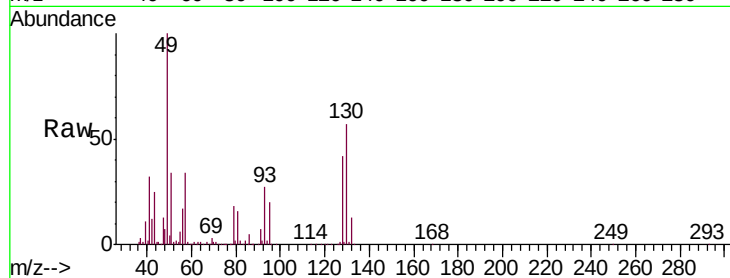




#26  
Hexane  
Concen: 1.991 ppbv  
RT: 5.71 min Scan# 908  
Delta R.T. -0.00 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

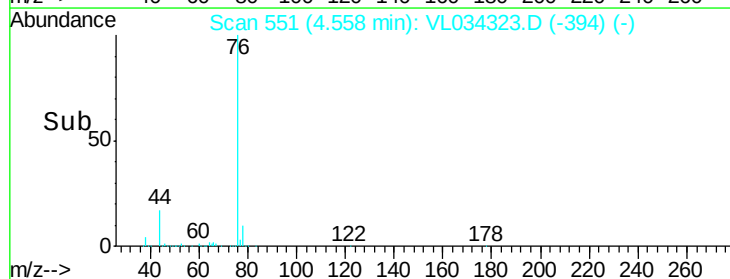
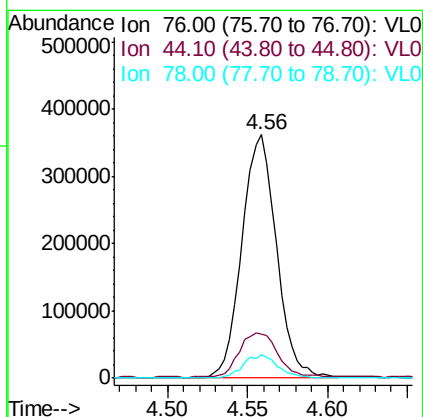
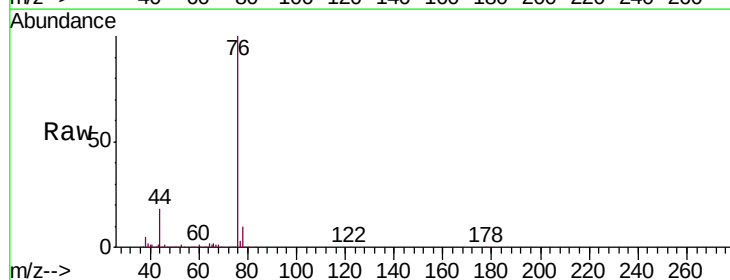
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

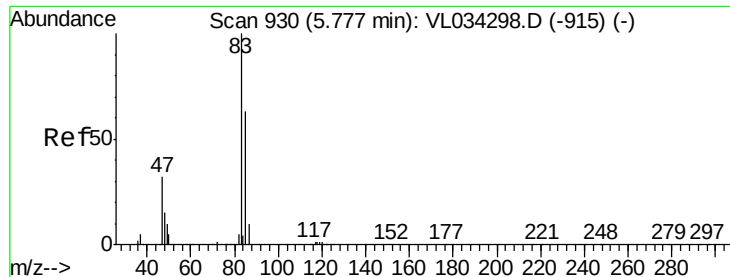
| Tgt Ion | Resp   | Lower | Upper  |
|---------|--------|-------|--------|
| 57      | 217507 |       |        |
| 41      | 116.5  | 76.5  | 114.7# |
| 43      | 86.8   | 188.5 | 282.7# |
| 56      | 62.8   | 42.8  | 64.2   |



#27  
Carbon Disulfide  
Concen: 4.697 ppbv  
RT: 4.56 min Scan# 551  
Delta R.T. 0.00 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

| Tgt Ion | Resp   | Lower | Upper |
|---------|--------|-------|-------|
| 76      | 532575 |       |       |
| 44      | 20.1   | 17.3  | 25.9  |
| 78      | 9.6    | 7.8   | 11.6  |

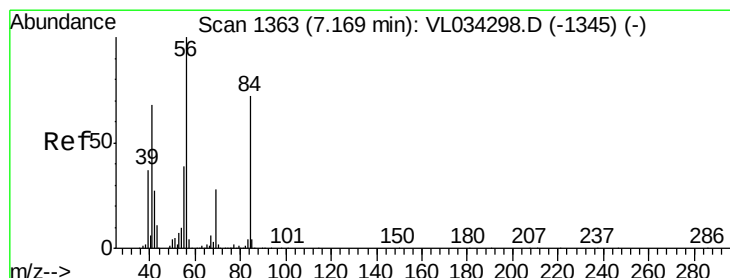
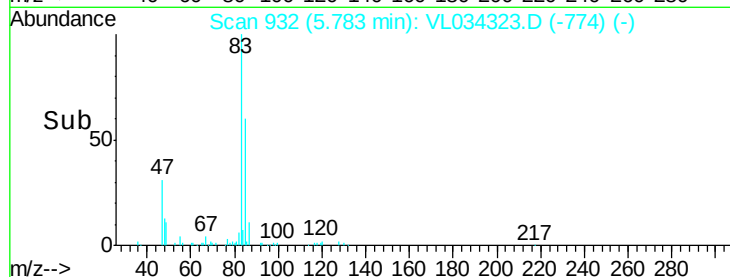
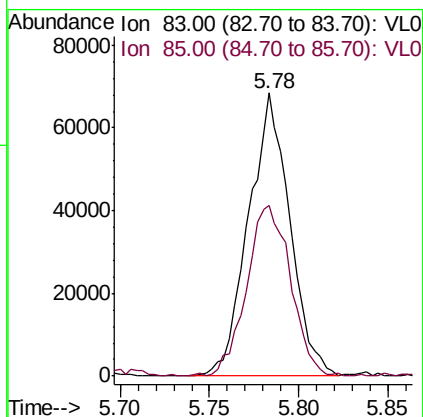
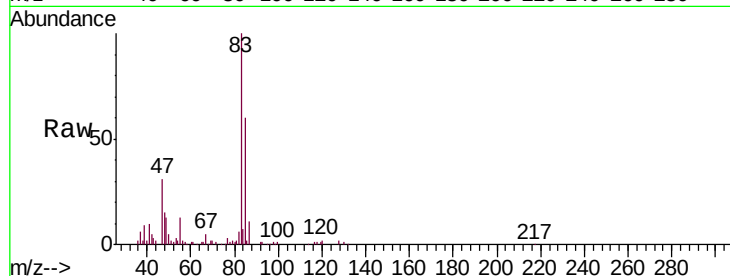




#29  
Chloroform  
Concen: 0.642 ppbv  
RT: 5.78 min Scan# 932  
Delta R.T. 0.01 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

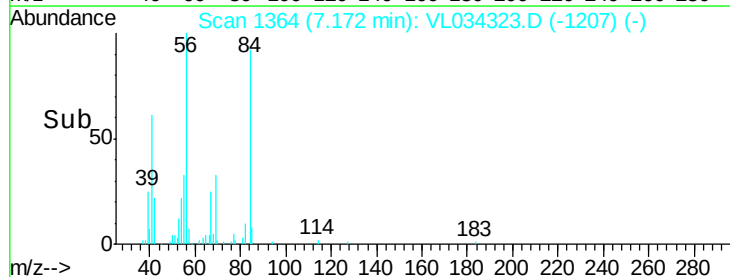
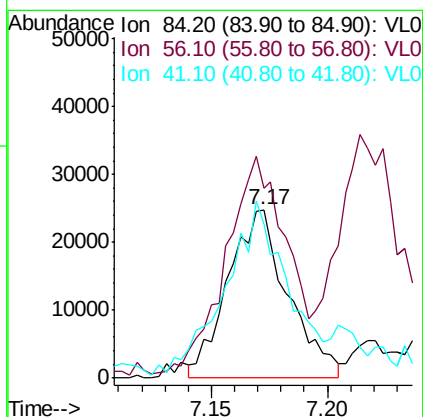
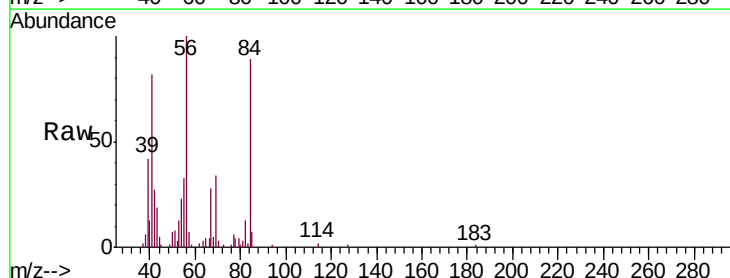
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

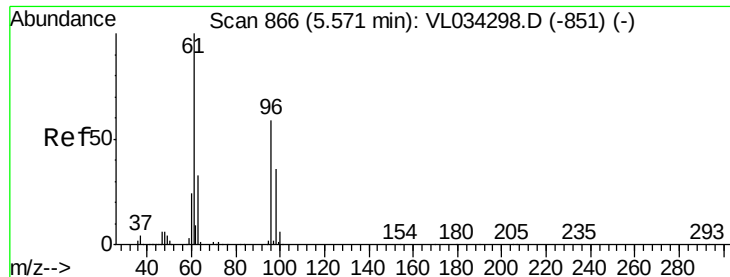
Tgt Ion: 83 Resp: 110854  
Ion Ratio Lower Upper  
83 100  
85 60.2 50.5 75.7



#30  
Cyclohexane  
Concen: 0.554 ppbv  
RT: 7.17 min Scan# 1364  
Delta R.T. 0.00 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

Tgt Ion: 84 Resp: 44517  
Ion Ratio Lower Upper  
84 100  
56 147.1 119.4 179.0  
41 122.8 78.7 118.1#



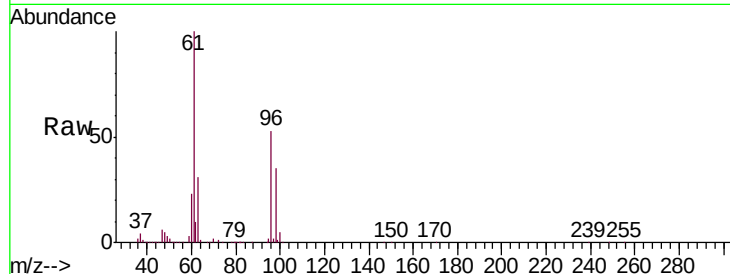


#31

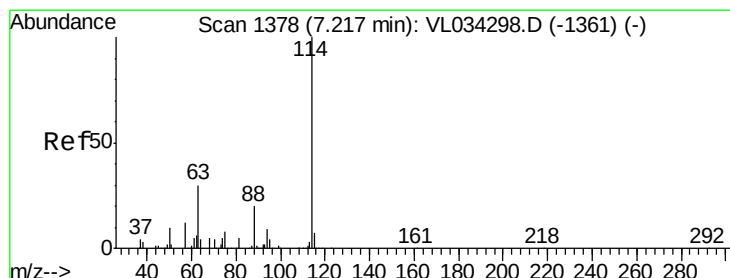
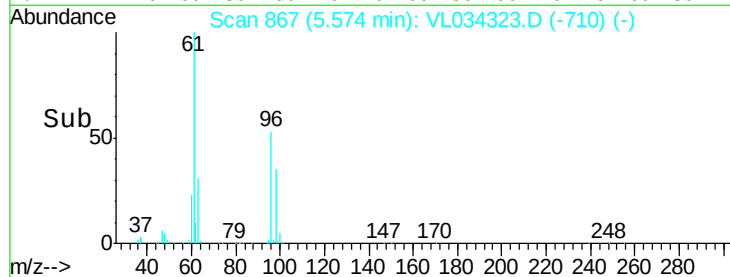
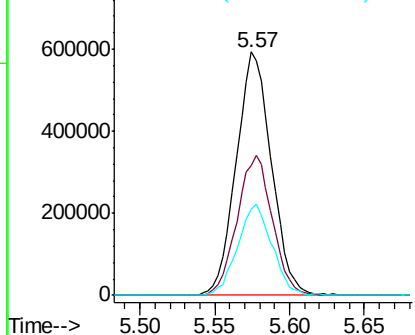
cis-1,2-Dichloroethene  
 Concen: 8.771 ppbv  
 RT: 5.57 min Scan# 867  
 Delta R.T. 0.00 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 53.4  | 47.5  | 71.3  |
| 98      | 35.4  | 28.8  | 43.2  |



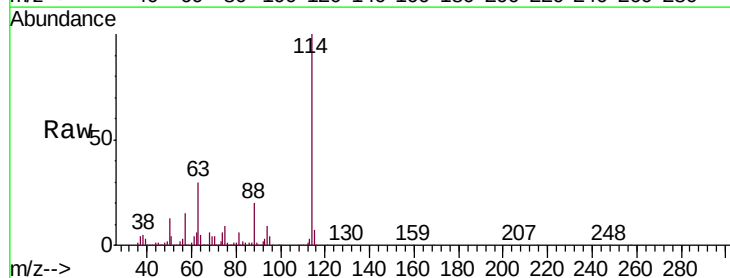
Abundance Ion 61.10 (60.80 to 61.80): VL0  
 Ion 96.00 (95.70 to 96.70): VL0  
 Ion 98.00 (97.70 to 98.70): VL0



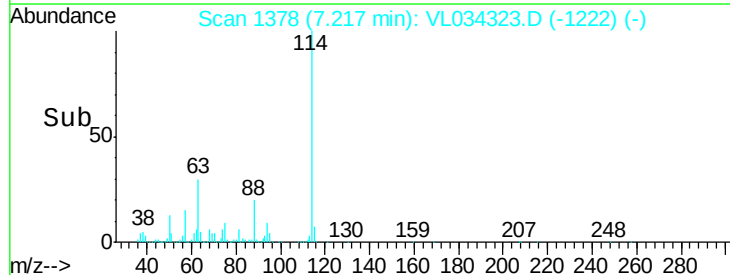
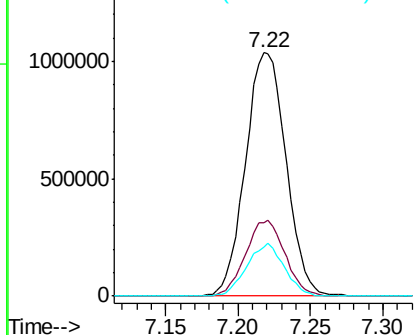
#33

1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.22 min Scan# 1378  
 Delta R.T. 0.00 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

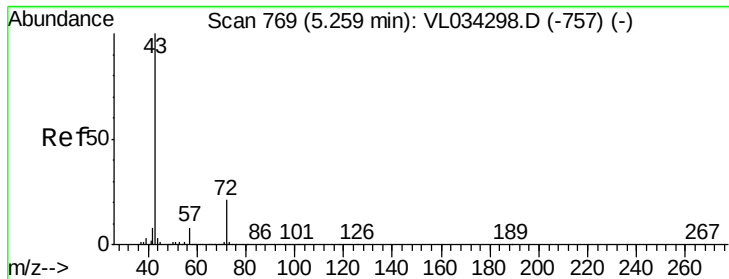
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 30.5  | 25.2  | 37.8  |
| 88      | 20.2  | 16.0  | 24.0  |



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



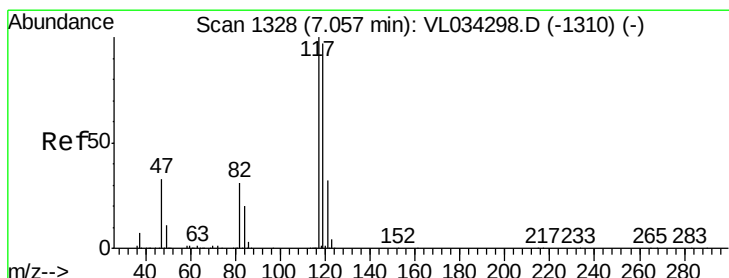
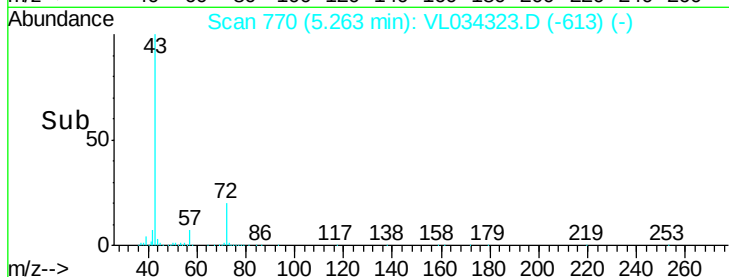
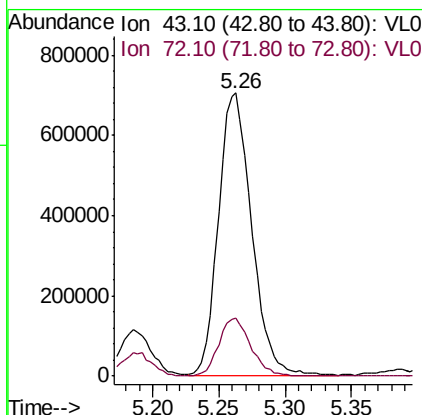
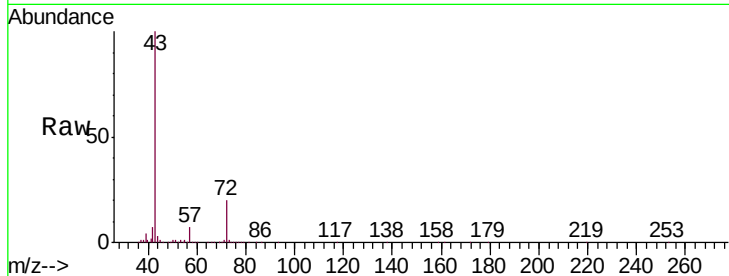




#34  
2-Butanone  
Concen: 7.398 ppbv  
RT: 5.26 min Scan# 770  
Delta R.T. 0.00 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

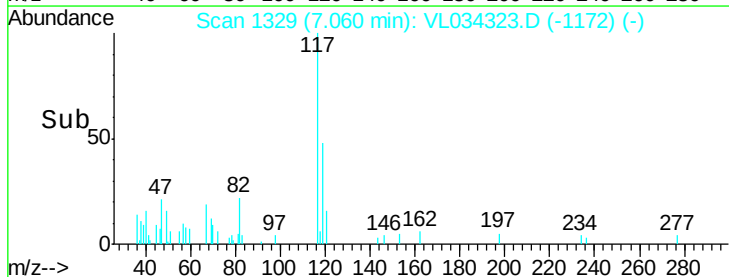
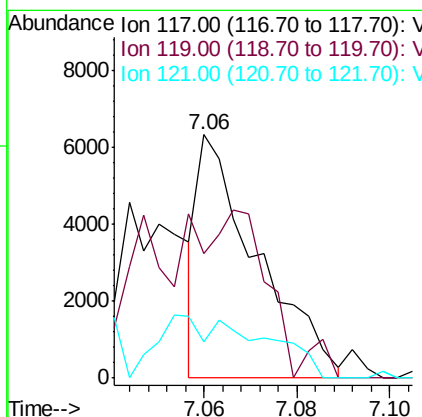
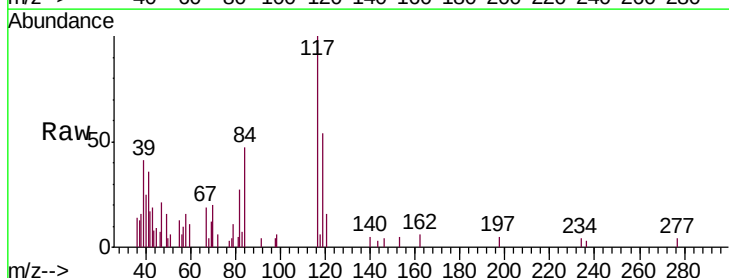
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

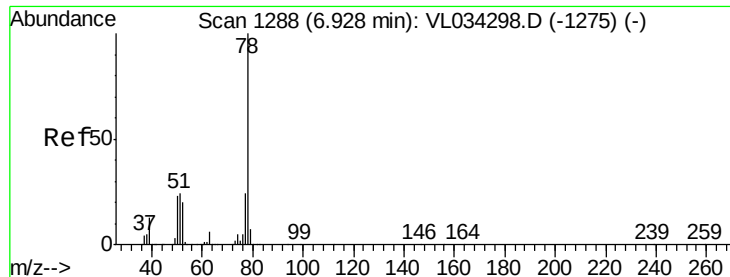
Tgt Ion: 43 Resp: 1221209  
Ion Ratio Lower Upper  
43 100  
72 19.7 16.3 24.5



#35  
Carbon Tetrachloride  
Concen: 0.032 ppbv  
RT: 7.06 min Scan# 1329  
Delta R.T. 0.00 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

Tgt Ion: 117 Resp: 5604  
Ion Ratio Lower Upper  
117 100  
119 53.6 77.3 115.9#  
121 15.8 25.5 38.3#





#36

Benzene

Concen: 2.125 ppbv

RT: 6.93 min Scan# 1289

Delta R.T. 0.00 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

SV1

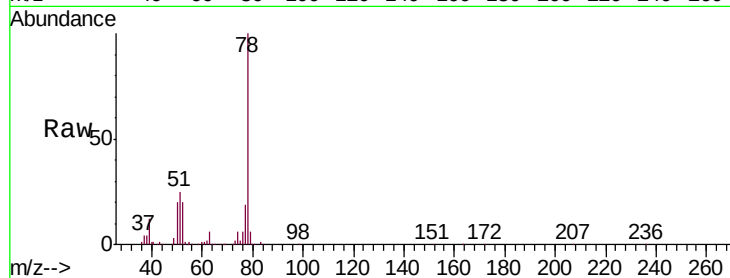
Tgt Ion: 78 Resp: 411751

Ion Ratio Lower Upper

78 100

77 18.8 19.0 28.4#

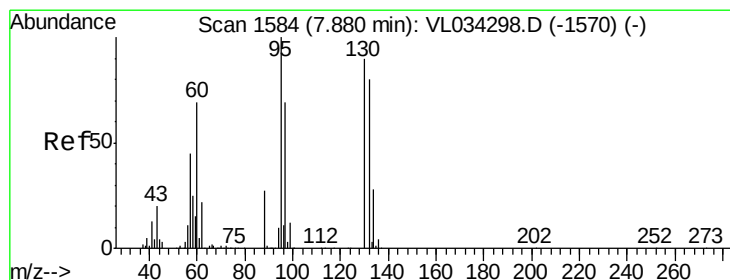
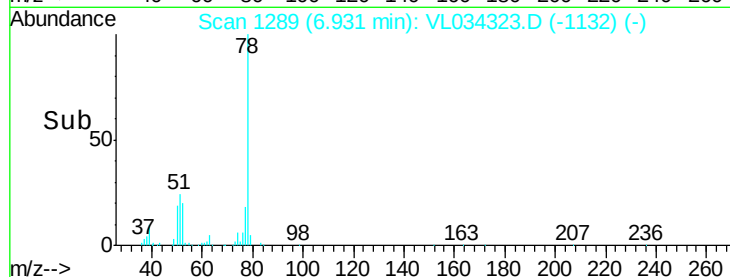
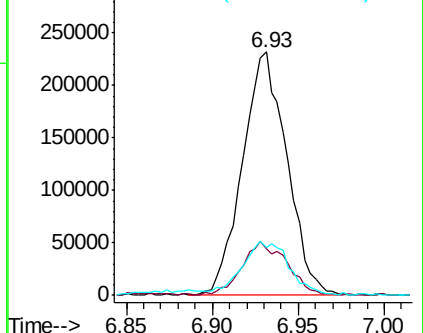
50 19.3 18.6 27.8



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



#38

Trichloroethene

Concen: 8.507 ppbv

RT: 7.88 min Scan# 1585

Delta R.T. 0.00 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Tgt Ion: 130 Resp: 661477

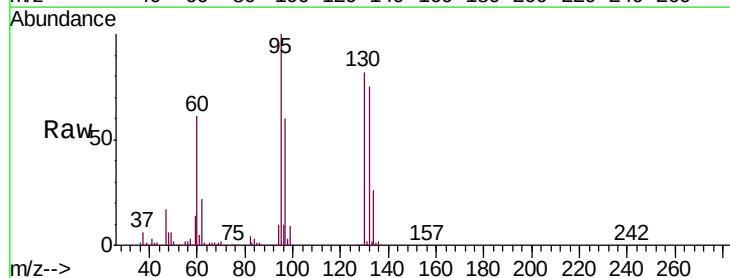
Ion Ratio Lower Upper

130 100

95 121.8 88.6 132.8

132 91.9 71.2 106.8

97 73.6 61.0 91.4

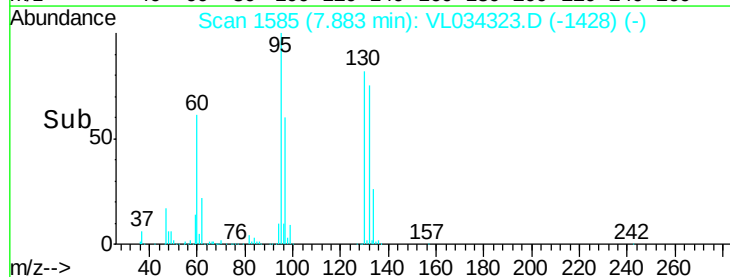
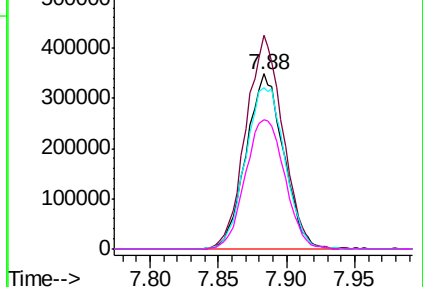


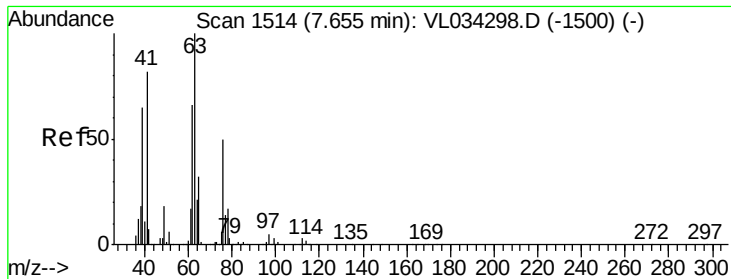
Abundance Ion 130.00 (129.70 to 130.70): V

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: 7.271 ppbv

RT: 7.22 min Scan# 1379

Delta R.T. -0.43 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

SV1

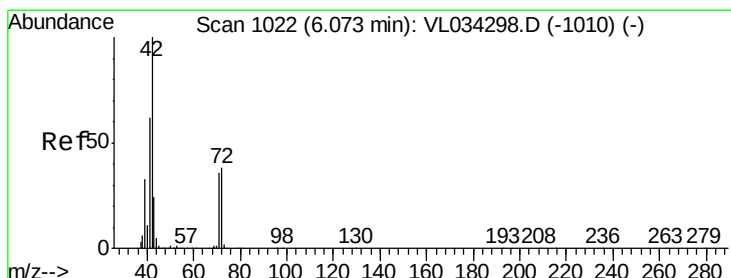
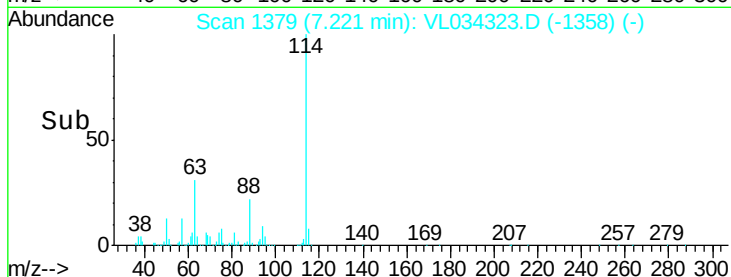
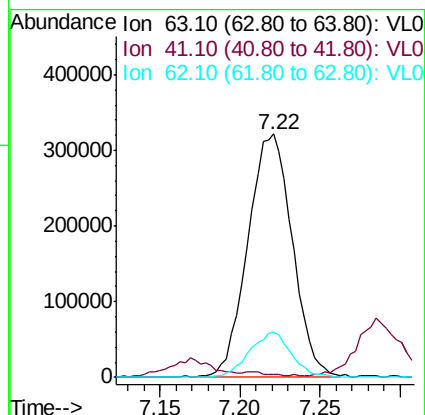
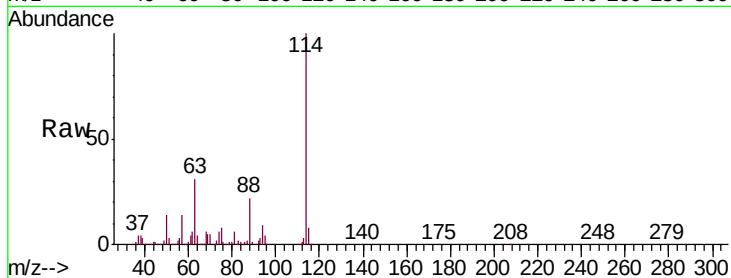
Tgt Ion: 63 Resp: 606648

Ion Ratio Lower Upper

63 100

41 0.0 65.6 98.4#

62 18.5 53.0 79.6#



#41

Tetrahydrofuran

Concen: 0.032 ppbv

RT: 6.08 min Scan# 1025

Delta R.T. 0.01 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

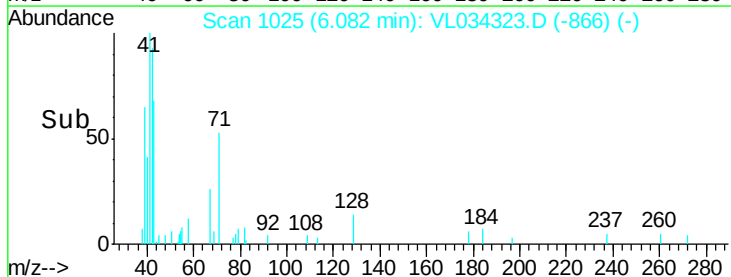
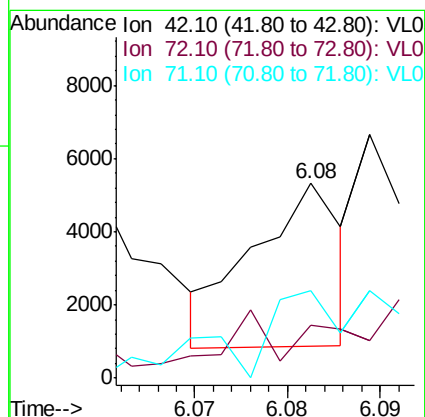
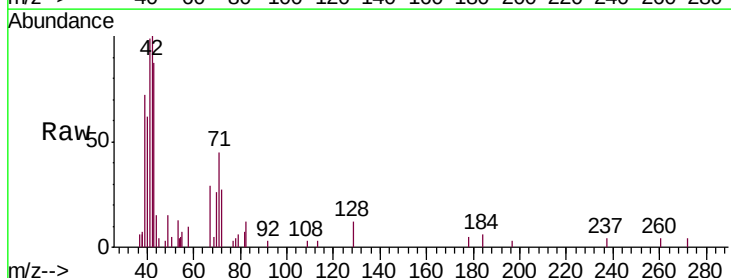
Tgt Ion: 42 Resp: 2944

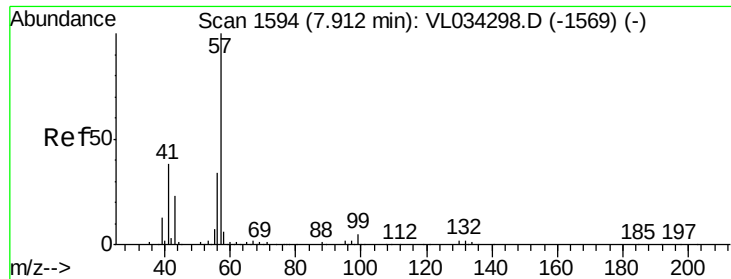
Ion Ratio Lower Upper

42 100

72 0.0 28.0 42.0#

71 0.0 27.3 40.9#





#44

2,2,4-Trimethylpentane

Concen: 0.078 ppbv

RT: 7.92 min Scan# 1595

Delta R.T. 0.00 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

SV1

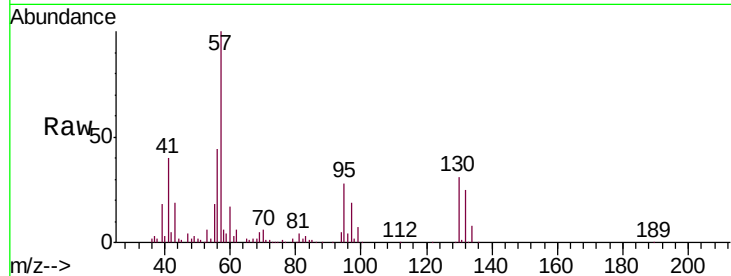
Tgt Ion: 57 Resp: 28031

Ion Ratio Lower Upper

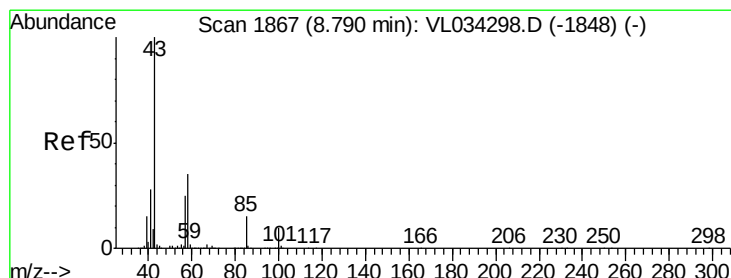
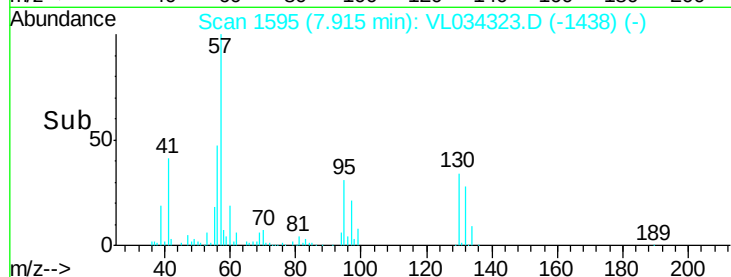
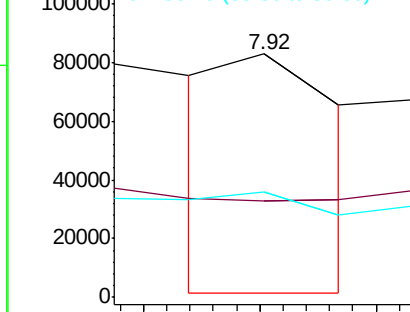
57 100

41 0.0 29.3 43.9#

56 274.8 25.3 37.9#



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



#50

4-Methyl-2-Pentanone

Concen: 0.448 ppbv

RT: 8.81 min Scan# 1872

Delta R.T. 0.02 min

Lab File: VL034323.D

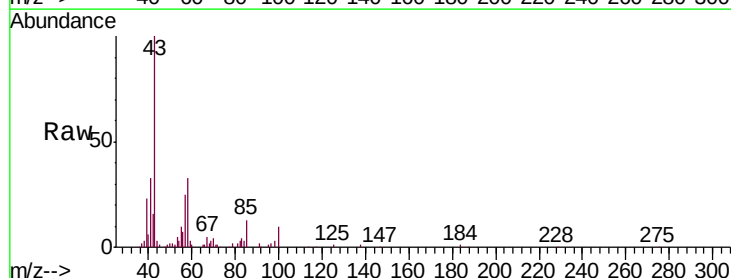
Acq: 17 Oct 2019 19:22

Tgt Ion: 43 Resp: 105955

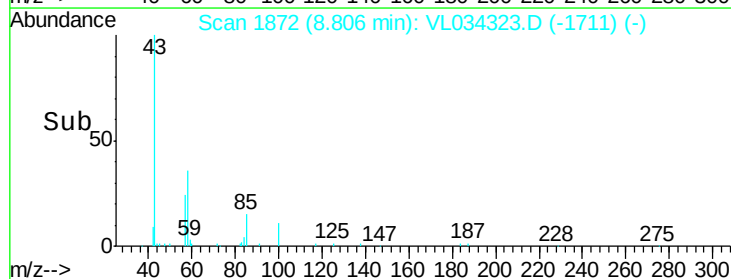
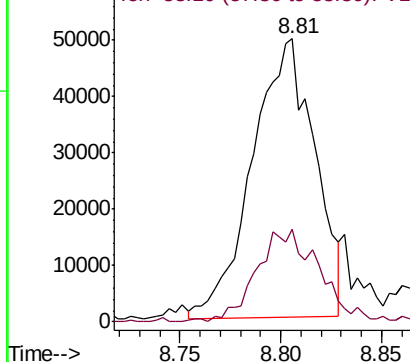
Ion Ratio Lower Upper

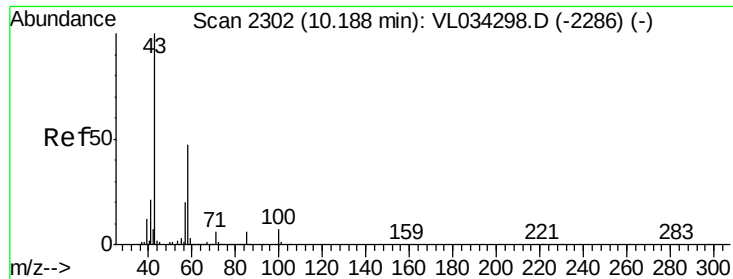
43 100

58 33.6 27.6 41.4



Abundance Ion 43.10 (42.80 to 43.80): VL0  
Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 1.343 ppbv

RT: 10.20 min Scan# 2306

Delta R.T. 0.01 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

SV1

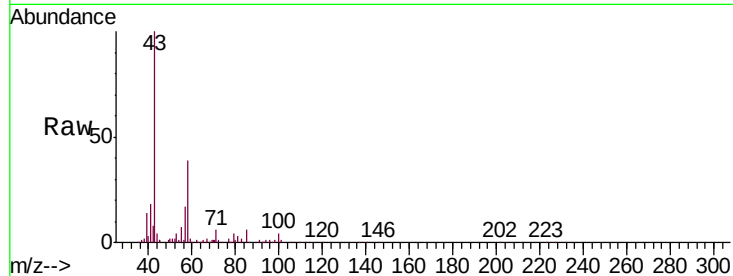
Tgt Ion: 43 Resp: 260088

Ion Ratio Lower Upper

43 100

58 42.9 37.0 55.6

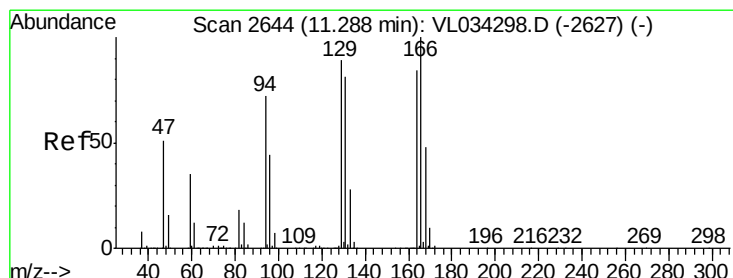
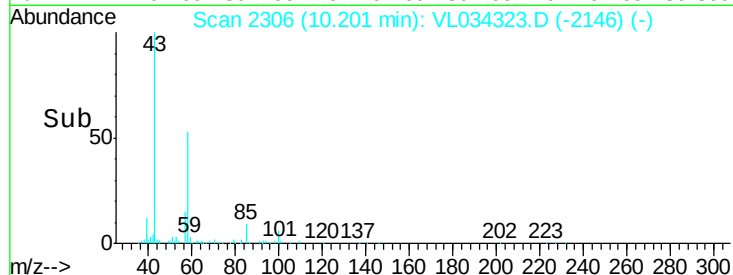
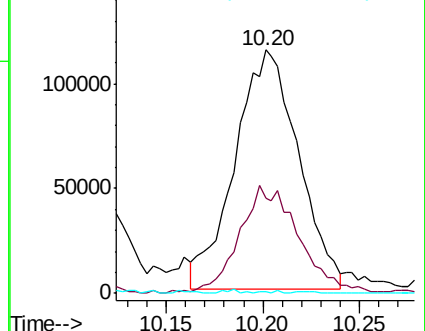
98 0.6 0.2 0.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 239.218 ppbv

RT: 11.35 min Scan# 2662

Delta R.T. 0.06 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Tgt Ion: 164 Resp: 18169840

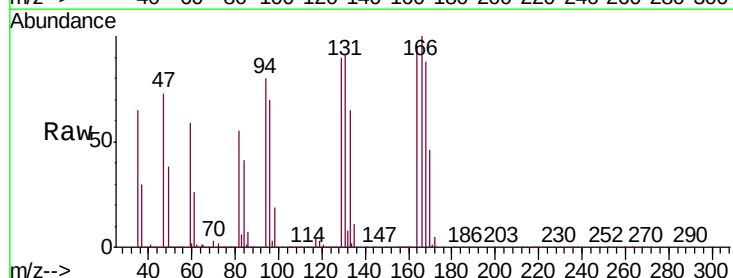
Ion Ratio Lower Upper

164 100

166 105.6 95.3 142.9

129 95.2 84.5 126.7

131 96.2 77.3 115.9

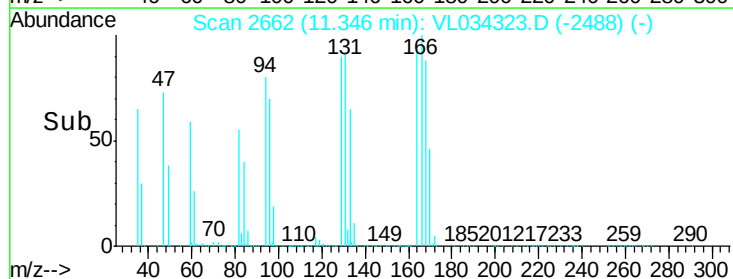
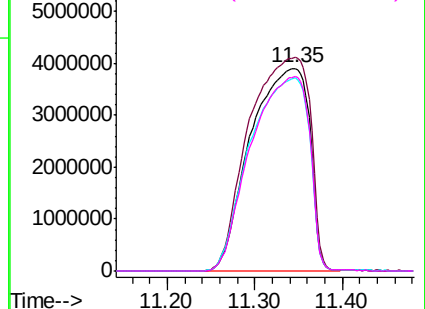


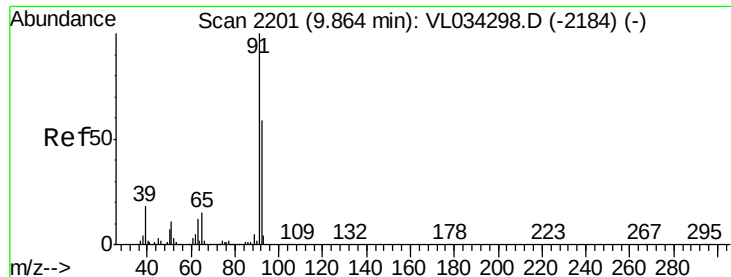
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 7.369 ppbv

RT: 9.86 min Scan# 2201

Delta R.T. 0.00 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

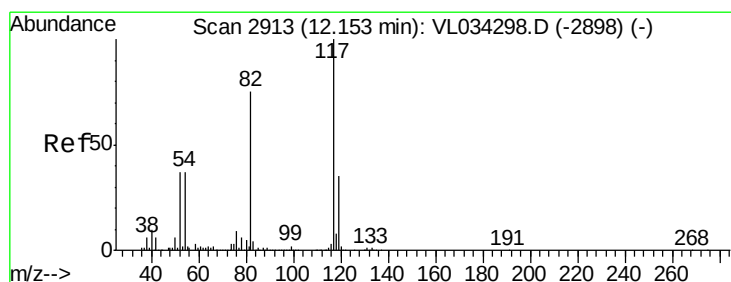
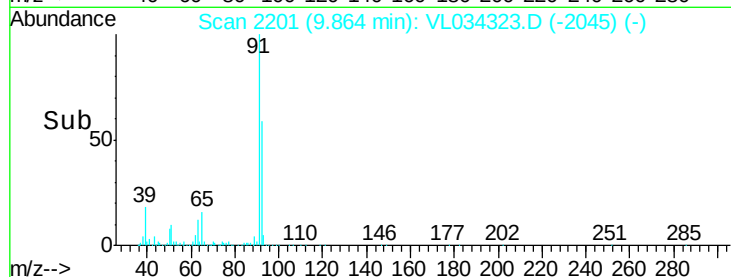
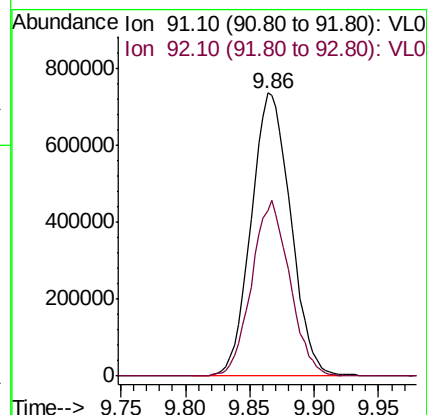
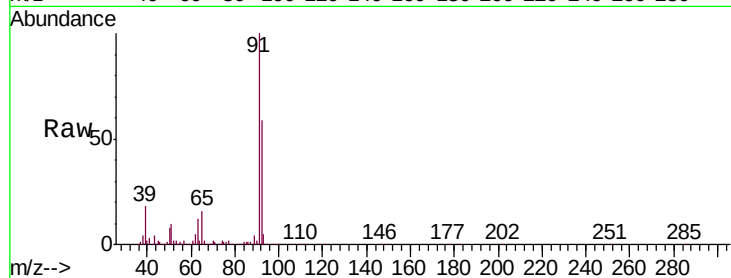
SV1

Tgt Ion: 91 Resp: 1575881

Ion Ratio Lower Upper

91 100

92 59.6 48.4 72.6



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.17 min Scan# 2917

Delta R.T. 0.01 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

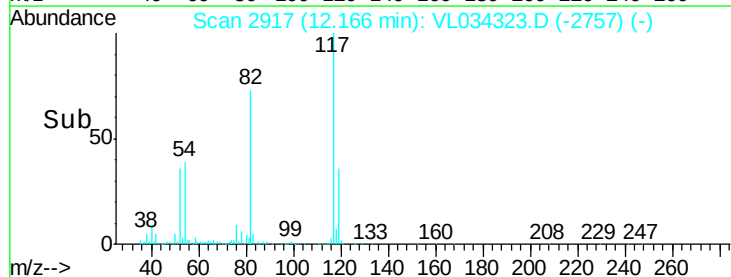
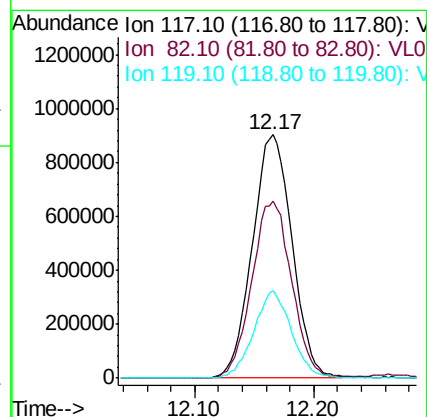
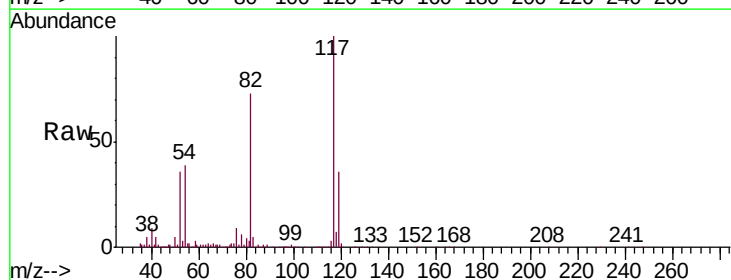
Tgt Ion: 117 Resp: 2086203

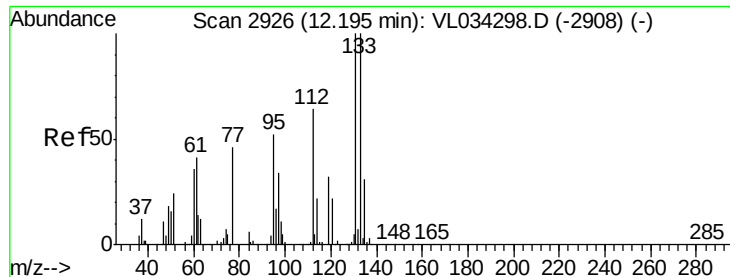
Ion Ratio Lower Upper

117 100

82 73.0 55.5 83.3

119 34.2 26.5 39.7

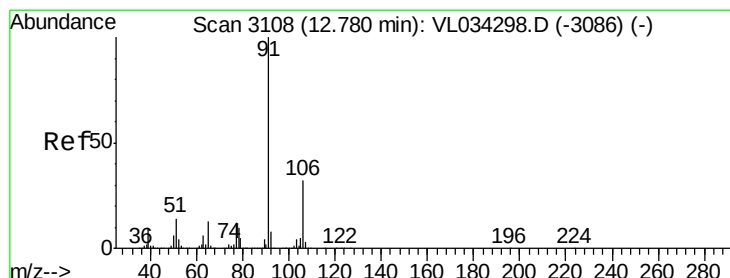
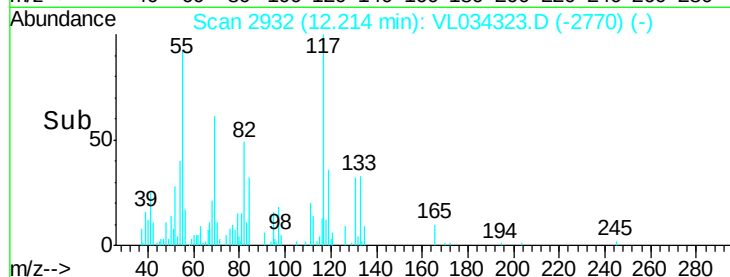
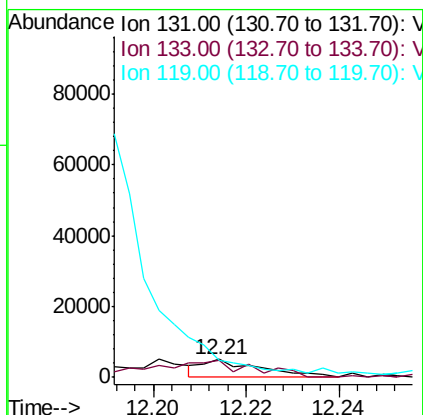
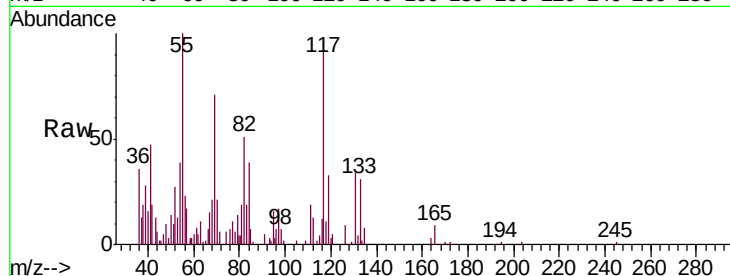




#56  
 1,1,1,2-Tetrachloroethane  
 Concen: 0.047 ppbv  
 RT: 12.21 min Scan# 2932  
 Delta R.T. 0.02 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

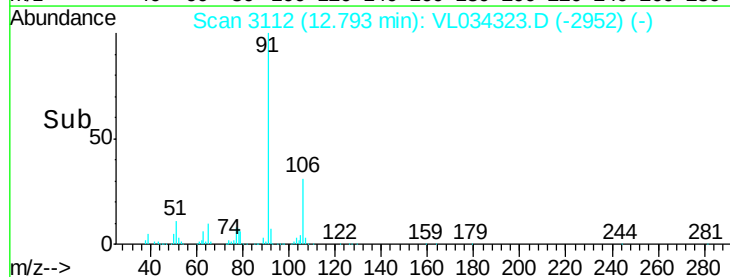
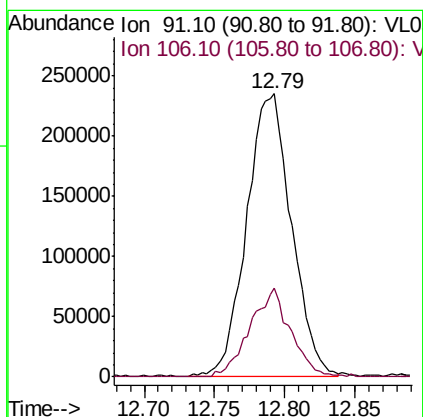
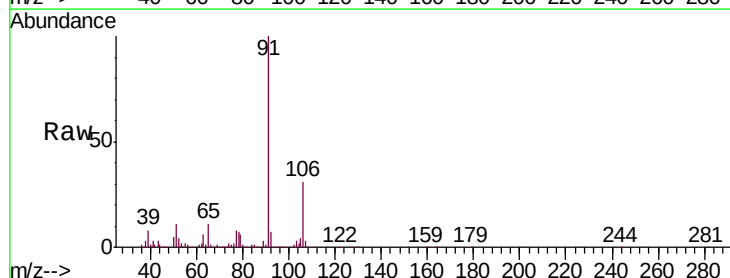
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

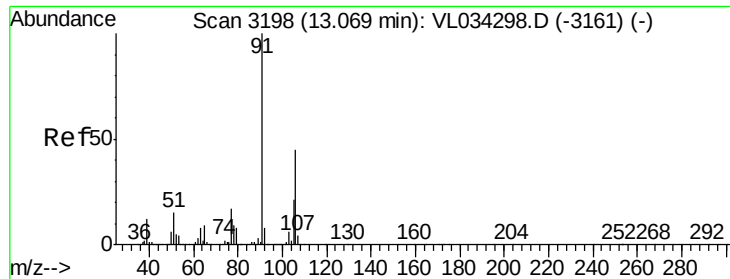
Tgt Ion: 131 Resp: 4527  
 Ion Ratio Lower Upper  
 131 100  
 133 189.9 77.1 115.7#  
 119 0.0 49.0 73.4#



#58  
 Ethyl Benzene  
 Concen: 1.791 ppbv  
 RT: 12.79 min Scan# 3112  
 Delta R.T. 0.01 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

Tgt Ion: 91 Resp: 522278  
 Ion Ratio Lower Upper  
 91 100  
 106 31.2 25.3 37.9

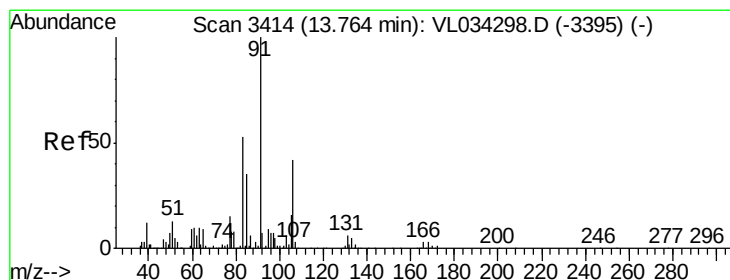
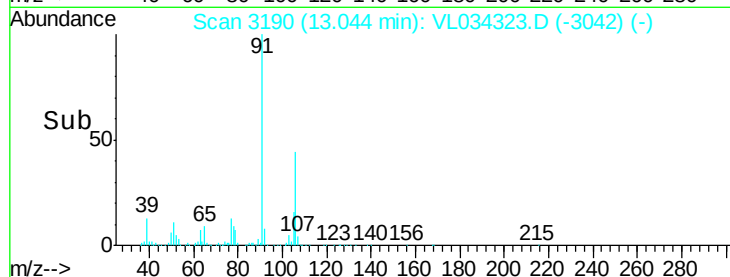
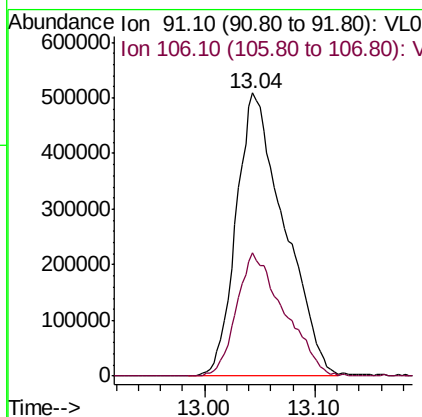
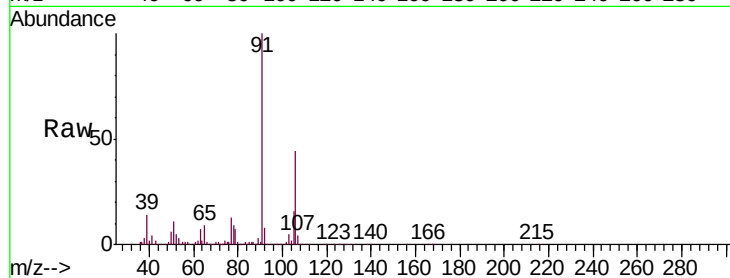




#59  
m/p-Xylene  
Concen: 6.065 ppbv  
RT: 13.04 min Scan# 3190  
Delta R.T. -0.03 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

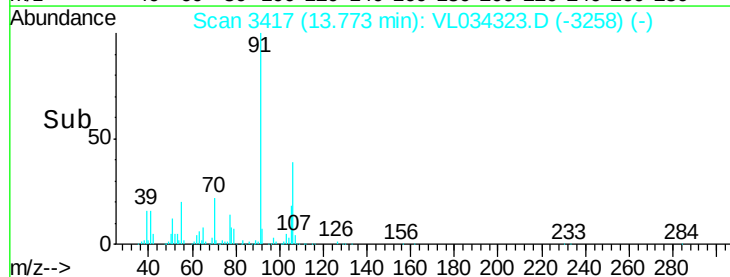
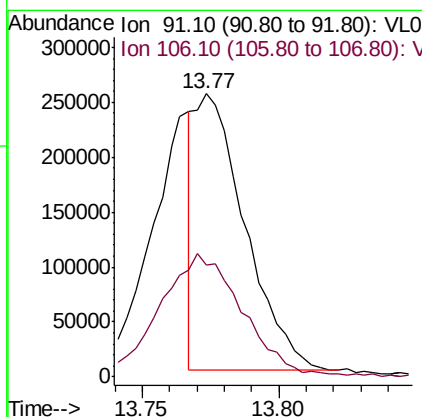
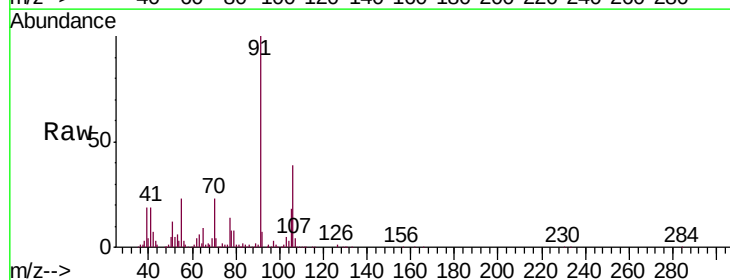
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

Tgt Ion: 91 Resp: 1532462  
Ion Ratio Lower Upper  
91 100  
106 43.2 35.4 53.2

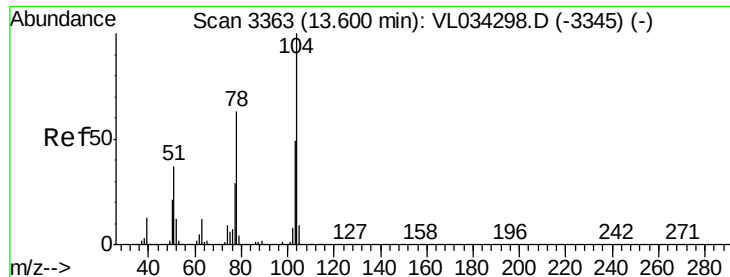


#60  
o-Xylene  
Concen: 1.259 ppbv  
RT: 13.77 min Scan# 3417  
Delta R.T. 0.01 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

Tgt Ion: 91 Resp: 316668  
Ion Ratio Lower Upper  
91 100  
106 76.4 21.6 64.6#







#61

Styrene

Concen: 0.047 ppbv

RT: 13.61 min Scan# 3366

Delta R.T. 0.01 min

Lab File: VL034323.D

Acq: 17 Oct 2019 19:22

Instrument :

MSVOA\_L

ClientSampleId :

SV1

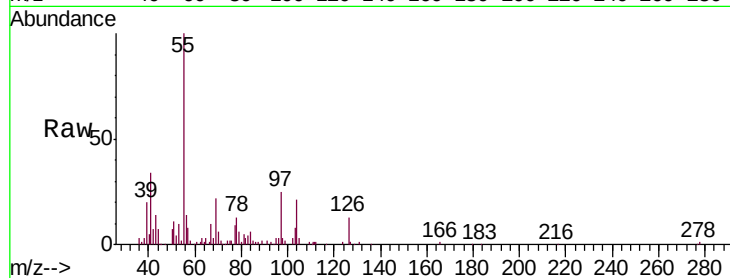
Tgt Ion:104 Resp: 8334

Ion Ratio Lower Upper

104 100

78 285.4 47.8 71.8#

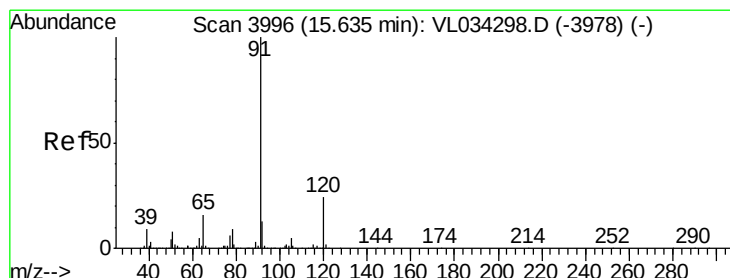
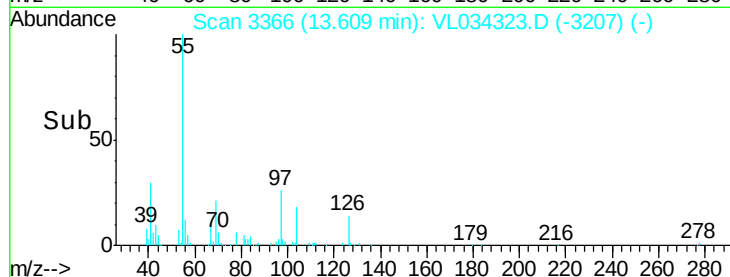
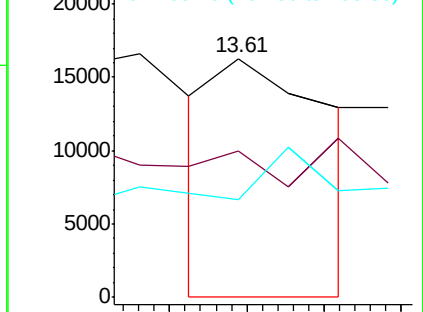
103 226.7 39.0 58.6#



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#64

n-propylbenzene

Concen: 0.206 ppbv

RT: 15.64 min Scan# 3999

Delta R.T. 0.01 min

Lab File: VL034323.D

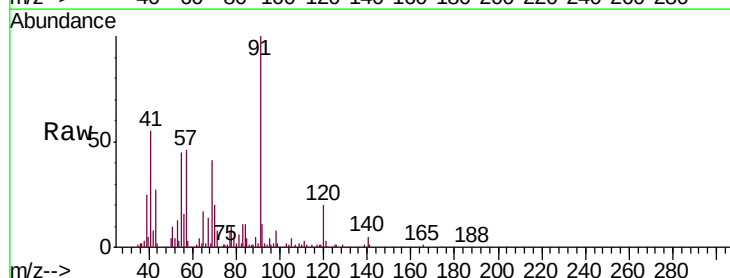
Acq: 17 Oct 2019 19:22

Tgt Ion:120 Resp: 17577

Ion Ratio Lower Upper

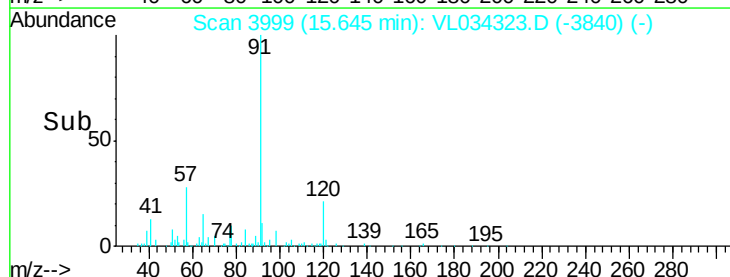
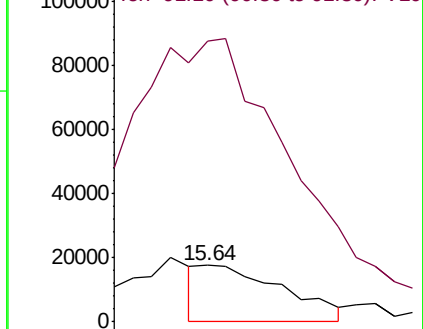
120 100

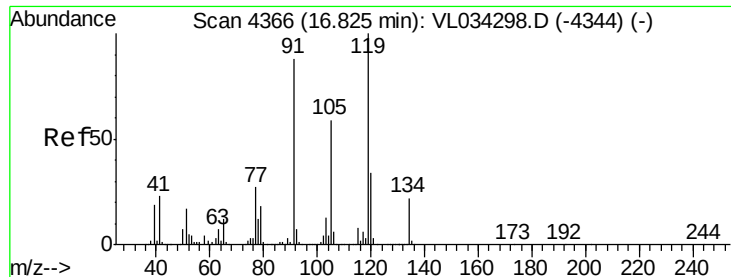
91 1248.7 374.9 562.3#



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

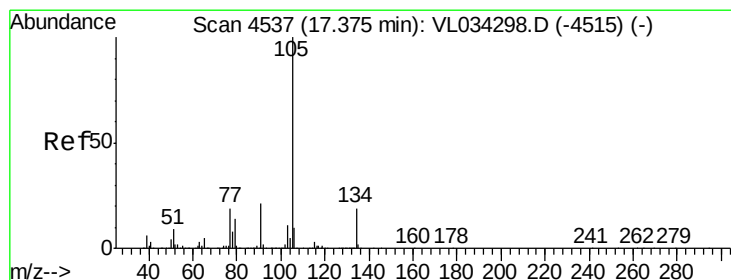
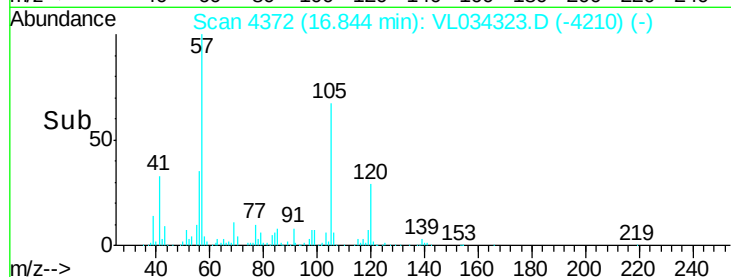
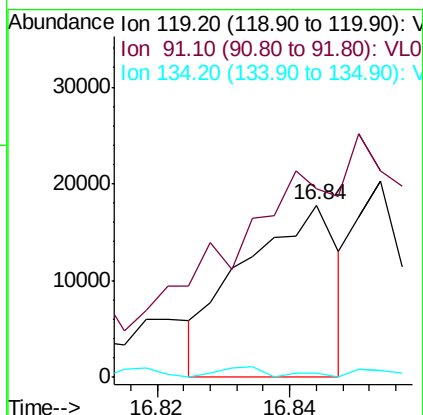
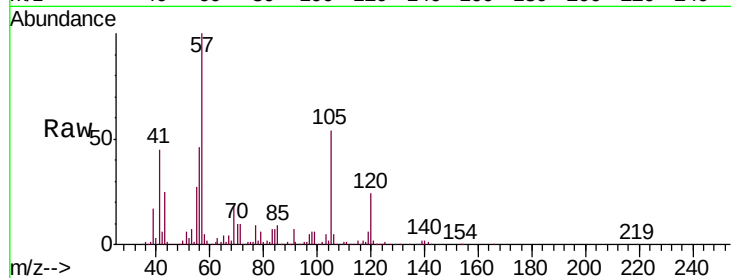




#65  
tert-Butylbenzene  
Concen: 0.060 ppbv  
RT: 16.84 min Scan# 4372  
Delta R.T. 0.02 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

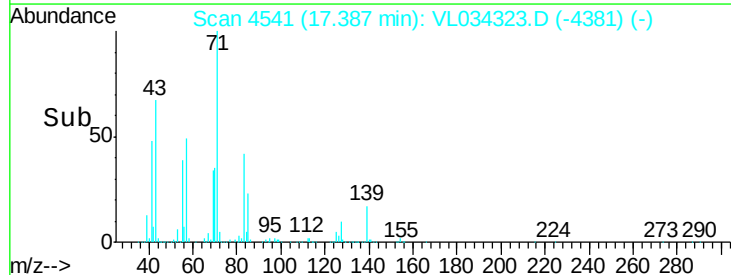
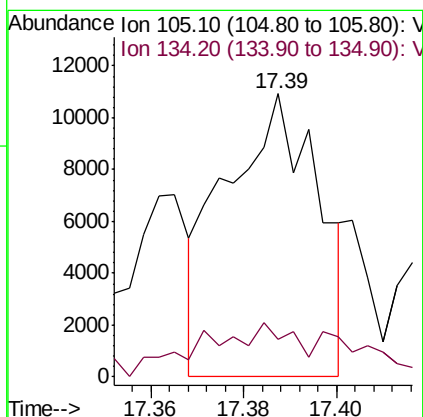
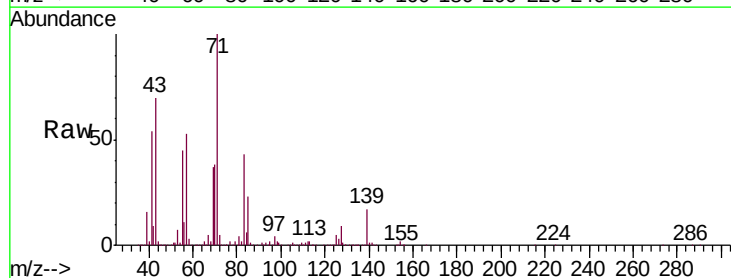
Instrument :  
MSVOA\_L  
ClientSampled :  
SV1

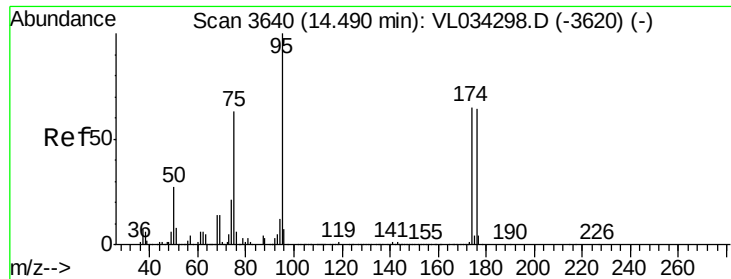
Tgt Ion:119 Resp: 17563  
Ion Ratio Lower Upper  
119 100  
91 0.0 71.4 107.0#  
134 9.1 15.9 23.9#



#67  
sec-Butylbenzene  
Concen: 0.037 ppbv  
RT: 17.39 min Scan# 4541  
Delta R.T. 0.01 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

Tgt Ion:105 Resp: 15234  
Ion Ratio Lower Upper  
105 100  
134 31.3 15.4 23.0#

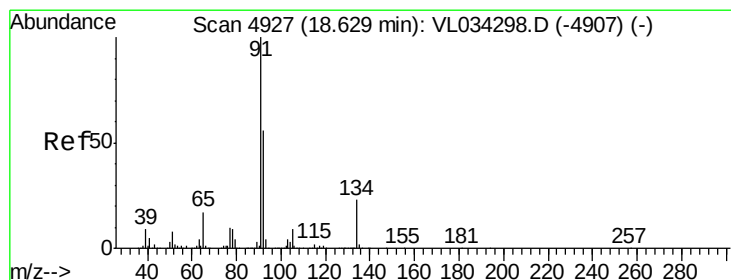
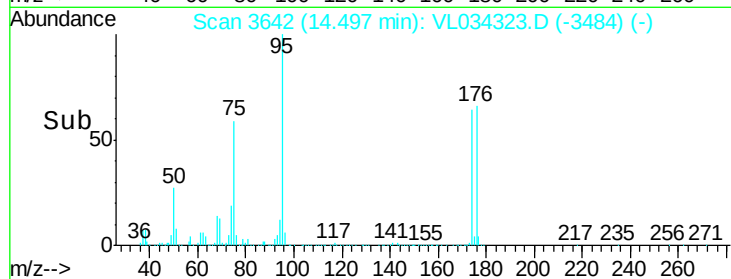
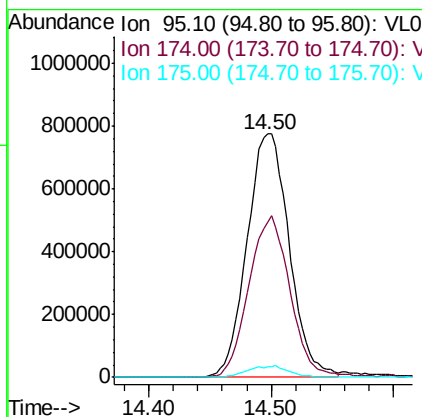
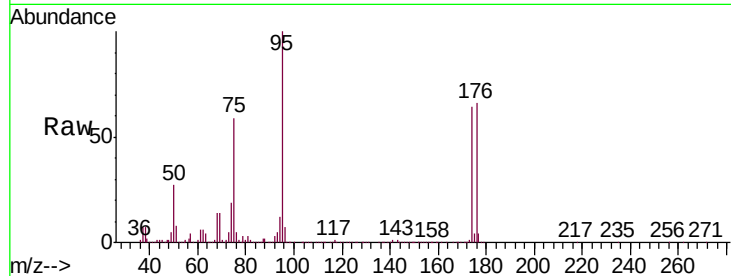




#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.446 ppbv  
 RT: 14.50 min Scan# 3642  
 Delta R.T. 0.01 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

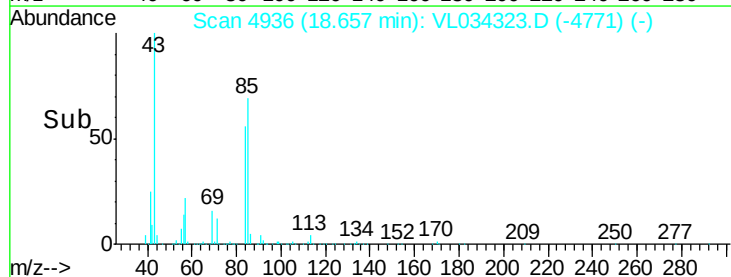
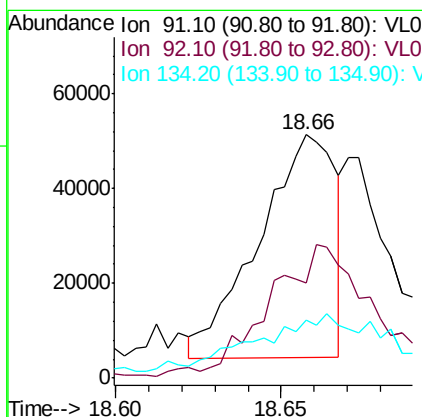
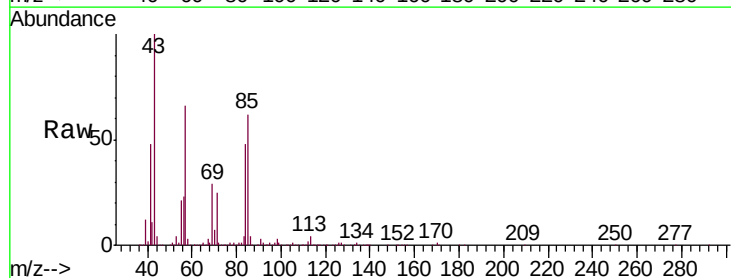
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

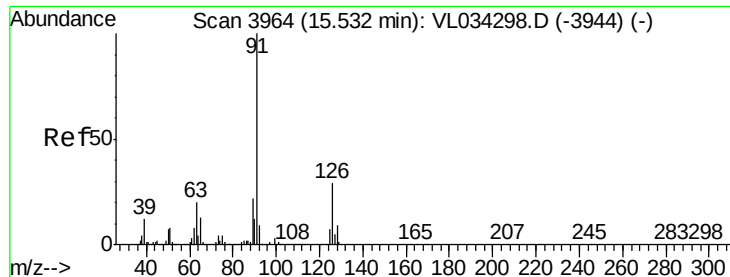
Tgt Ion: 95 Resp: 1845735  
 Ion Ratio Lower Upper  
 95 100  
 174 66.1 52.6 78.8  
 175 4.6 3.8 5.6



#70  
 n-Butylbenzene  
 Concen: 0.206 ppbv  
 RT: 18.66 min Scan# 4936  
 Delta R.T. 0.03 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

Tgt Ion: 91 Resp: 75876  
 Ion Ratio Lower Upper  
 91 100  
 92 83.4 44.5 66.7#  
 134 55.7 18.2 27.2#

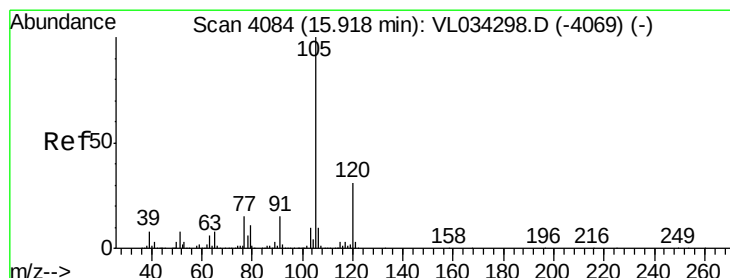
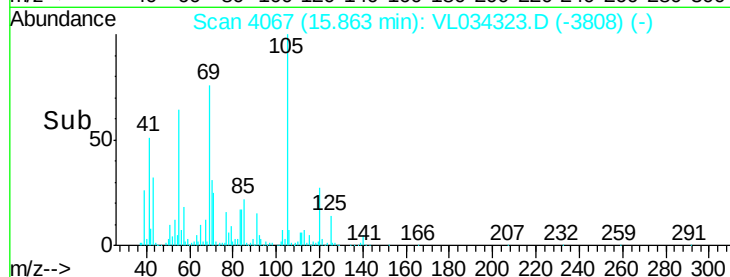
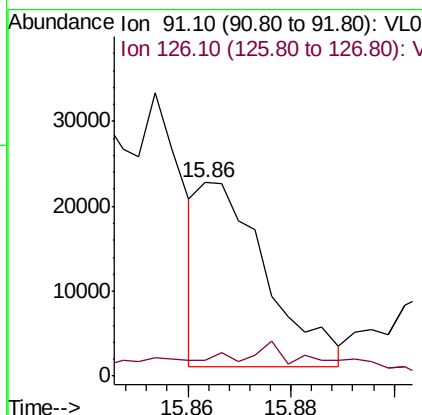
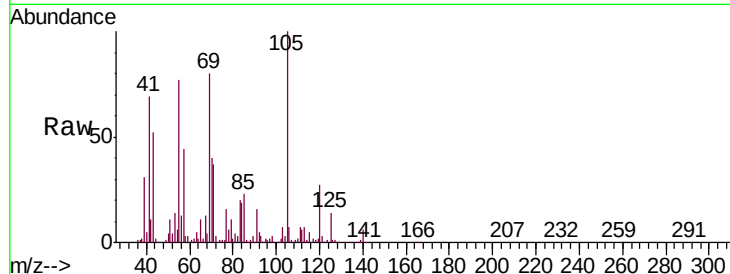




#71  
 2-Chlorotoluene  
 Concen: 0.076 ppbv  
 RT: 15.86 min Scan# 4067  
 Delta R.T. 0.33 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

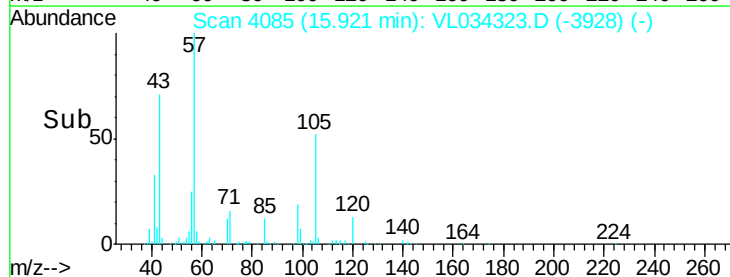
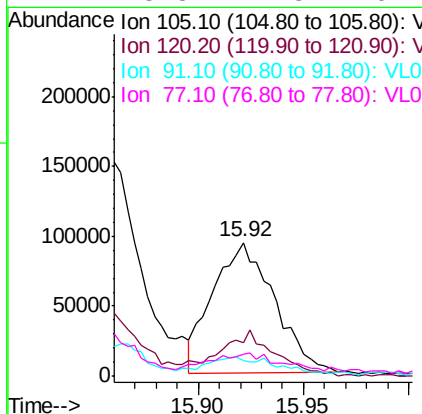
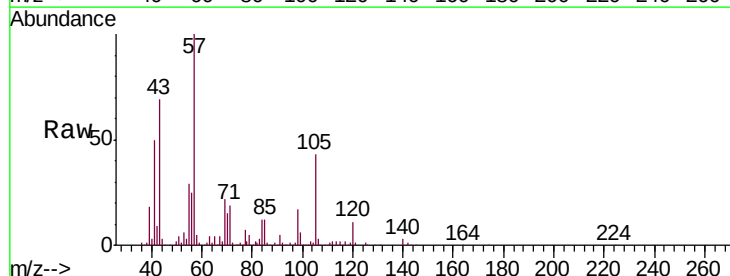
Instrument :  
 MSVOA\_L  
 ClientSampled :  
 SV1

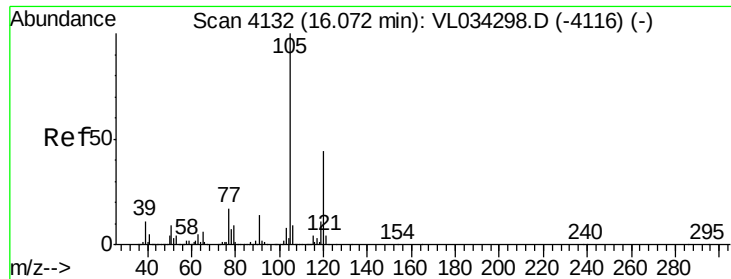
Tgt Ion: 91 Resp: 19627  
 Ion Ratio Lower Upper  
 91 100  
 126 46.7 11.9 47.5



#72  
 4-Ethyltoluene  
 Concen: 0.669 ppbv  
 RT: 15.92 min Scan# 4085  
 Delta R.T. 0.00 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

Tgt Ion: 105 Resp: 189170  
 Ion Ratio Lower Upper  
 105 100  
 120 32.1 23.8 35.8  
 91 16.6 11.2 16.8  
 77 18.8 12.8 19.2

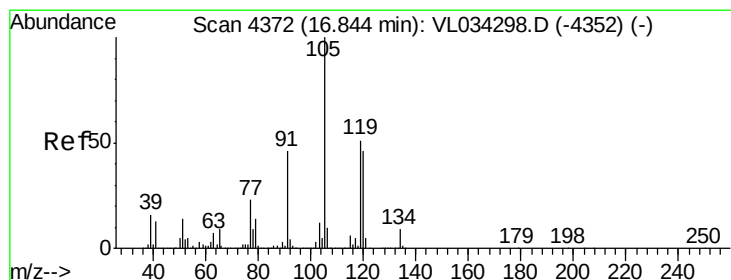
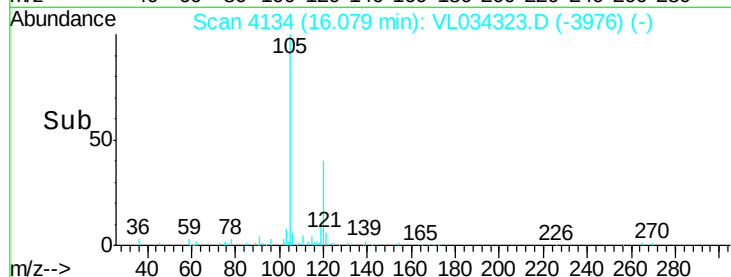
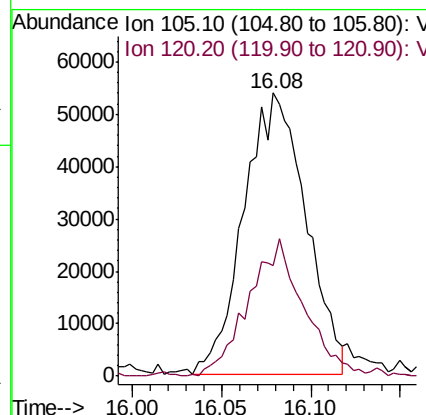
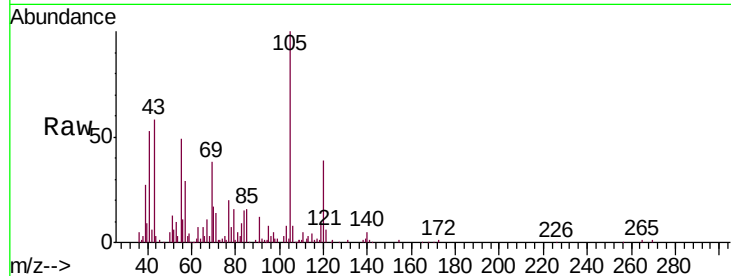




#73  
 1,3,5-Trimethylbenzene  
 Concen: 0.463 ppbv  
 RT: 16.08 min Scan# 4134  
 Delta R.T. 0.01 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

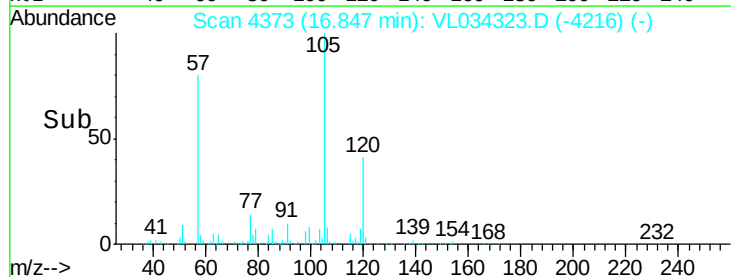
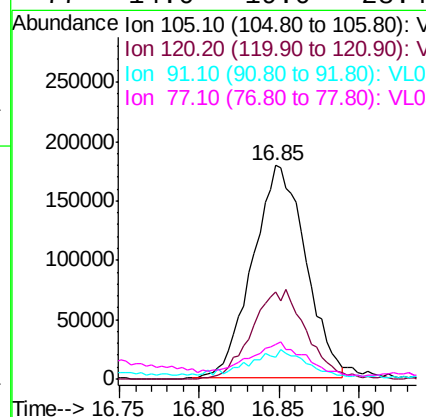
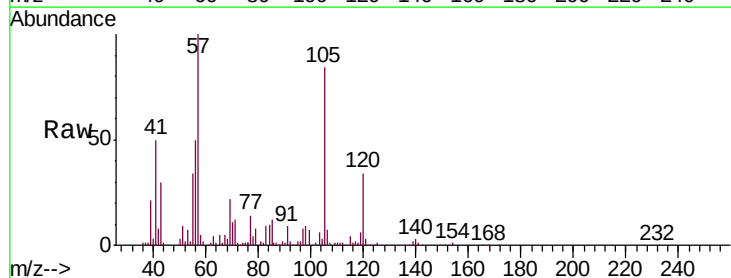
Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

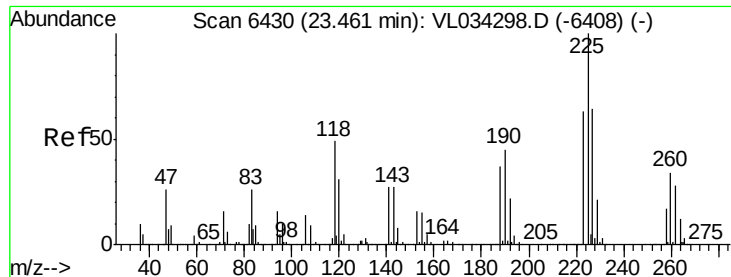
Tgt Ion:105 Resp: 129763  
 Ion Ratio Lower Upper  
 105 100  
 120 39.0 35.2 52.8



#74  
 1,2,4-Trimethylbenzene  
 Concen: 1.397 ppbv  
 RT: 16.85 min Scan# 4373  
 Delta R.T. 0.00 min  
 Lab File: VL034323.D  
 Acq: 17 Oct 2019 19:22

Tgt Ion:105 Resp: 408366  
 Ion Ratio Lower Upper  
 105 100  
 120 40.7 37.0 55.6  
 91 8.7 38.2 57.2#  
 77 14.0 19.0 28.4#

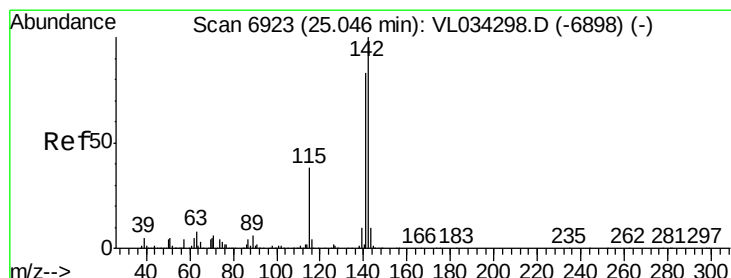
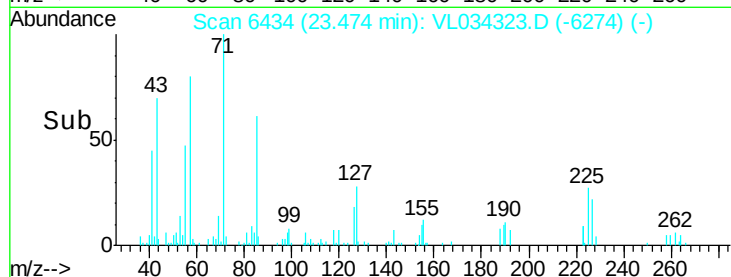
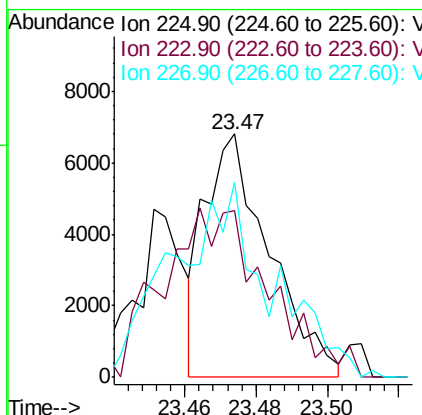
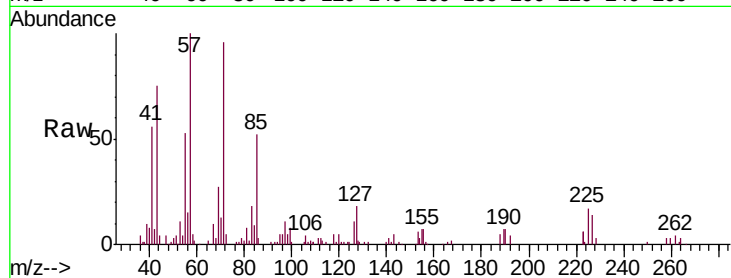




#78  
Hexachloro-1,3-Butadiene  
Concen: 0.060 ppbv  
RT: 23.47 min Scan# 6434  
Delta R.T. 0.01 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

Instrument :  
MSVOA\_L  
ClientSampled :  
SV1

Tgt Ion: 225 Resp: 8539  
Ion Ratio Lower Upper  
225 100  
223 117.8 50.8 76.2#  
227 130.1 51.5 77.3#



#80  
Naphthalene, 2-methyl-  
Concen: 0.080 ppbv  
RT: 25.06 min Scan# 6928  
Delta R.T. 0.02 min  
Lab File: VL034323.D  
Acq: 17 Oct 2019 19:22

Tgt Ion: 142 Resp: 4948  
Ion Ratio Lower Upper  
142 100  
141 130.3 65.7 98.5#  
115 65.7 30.9 46.3#

