

Data File : VL034025.D  
Acq On : 11 Jul 2019 20:04  
Operator : SY/AP  
Sample : K3747-02DL 10X  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
SVS-2DL

Quant Time: Jul 12 07:02:25 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL070219AIR.M  
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Tue Jul 02 19:31:31 2019  
QLast Update : Tue Jul 02 19:31:31 2019  
Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.73  | 49   | 1084296  | 10.00 | ppbv  | -0.01    |
| 33) 1,4-Difluorobenzene | 7.25  | 114  | 2783860  | 10.00 | ppbv  | -0.02    |
| 55) Chlorobenzene-d5    | 12.19 | 117  | 2665944  | 10.00 | ppbv  | -0.01    |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.53  | 95    | 2114053  | 9.30     | ppbv | -0.01  |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 93.00% |

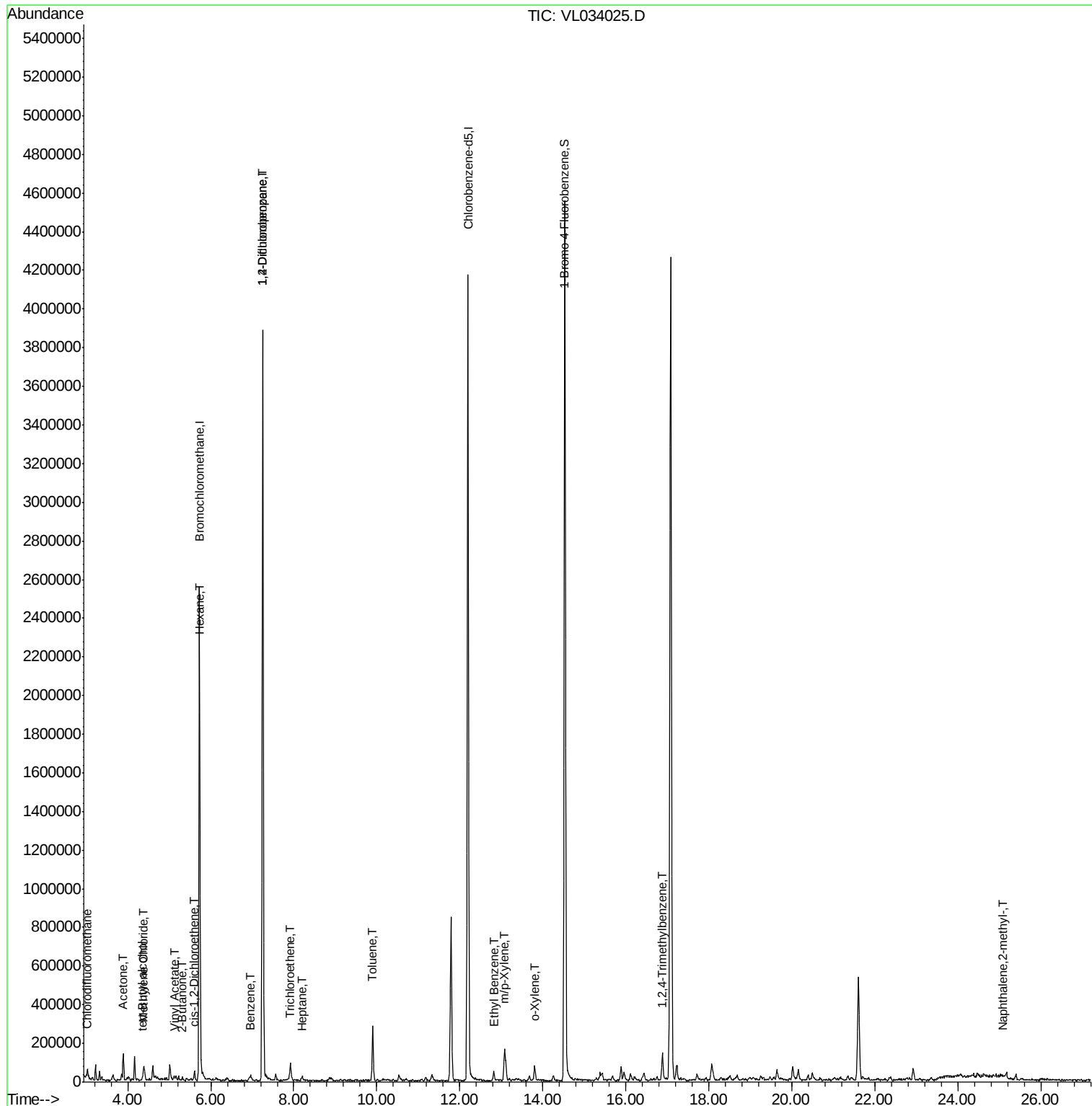
| Target Compounds           |       |     |        |              | Qvalue |
|----------------------------|-------|-----|--------|--------------|--------|
| 3) Chlorodifluoromethane   | 3.00  | 51  | 8478   | 0.063 ppbv # | 89     |
| 10) Heptane                | 8.20  | 43  | 3978   | 0.032 ppbv # | 23     |
| 15) Acetone                | 3.89  | 43  | 135711 | 0.744 ppbv   | 92     |
| 17) tert-Butyl alcohol     | 4.35  | 59  | 7576   | 0.052 ppbv # | 57     |
| 20) Methylene Chloride     | 4.38  | 84  | 11569  | 0.146 ppbv # | 91     |
| 23) Vinyl Acetate          | 5.12  | 43  | 9770   | 0.054 ppbv # | 93     |
| 26) Hexane                 | 5.74  | 57  | 19733  | 0.173 ppbv # | 45     |
| 31) cis-1,2-Dichloroethene | 5.61  | 61  | 15576  | 0.141 ppbv   | 90     |
| 34) 2-Butanone             | 5.32  | 43  | 16312  | 0.111 ppbv   | 92     |
| 36) Benzene                | 6.96  | 78  | 8860   | 0.041 ppbv # | 66     |
| 38) Trichloroethene        | 7.91  | 130 | 10837  | 0.112 ppbv # | 83     |
| 39) 1,2-Dichloropropane    | 7.25  | 63  | 681366 | 8.412 ppbv # | 23     |
| 53) Toluene                | 9.90  | 91  | 205938 | 0.826 ppbv   | 98     |
| 58) Ethyl Benzene          | 12.82 | 91  | 29316  | 0.091 ppbv # | 84     |
| 59) m/p-Xylene             | 13.08 | 91  | 93673  | 0.323 ppbv # | 41     |
| 60) o-Xylene               | 13.80 | 91  | 21770  | 0.075 ppbv # | 4      |
| 74) 1,2,4-Trimethylbenzene | 16.88 | 105 | 62729  | 0.163 ppbv # | 74     |
| 80) Naphthalene,2-methyl-  | 25.07 | 142 | 3954   | 0.034 ppbv # | 83     |

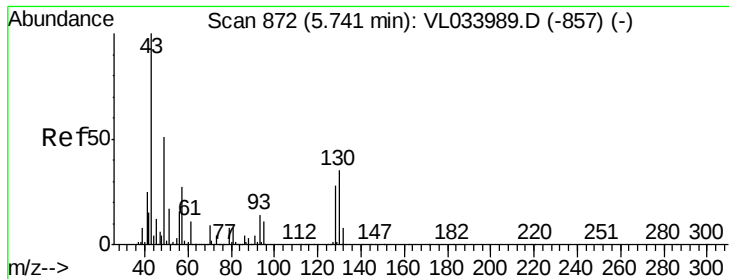
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.73 min Scan# 868

Delta R.T. -0.01 min

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Acq: 11 Jul 2019 20:04

Instrument :

MSVOA\_L

ClientSampleId :

SVS-2DL

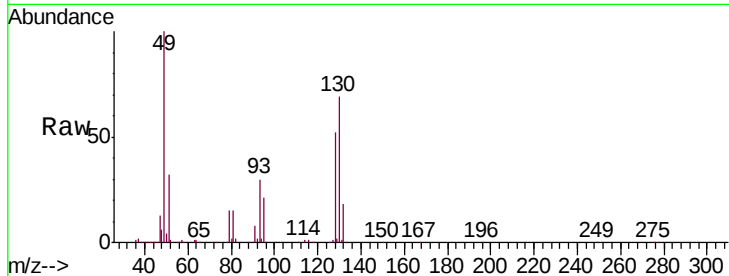
Tgt Ion: 49 Resp: 1084296

Ion Ratio Lower Upper

49 100

128 56.2 27.9 83.6

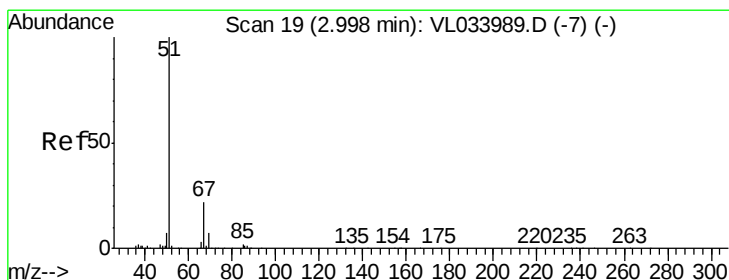
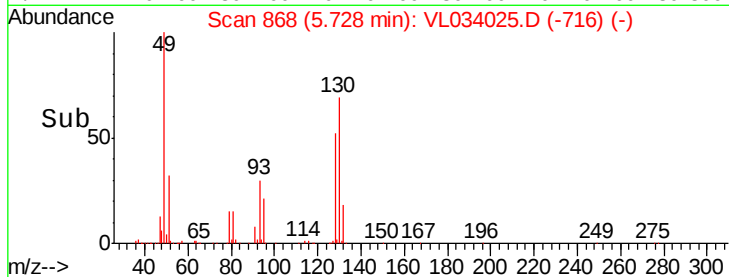
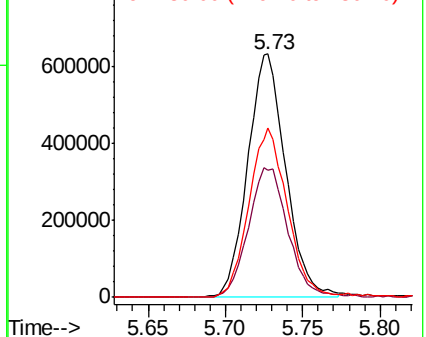
130 70.8 35.8 107.4



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#3

Chlorodifluoromethane

Concen: 0.063 ppbv

RT: 3.00 min Scan# 20

Delta R.T. 0.00 min

Lab File: VL034025.D

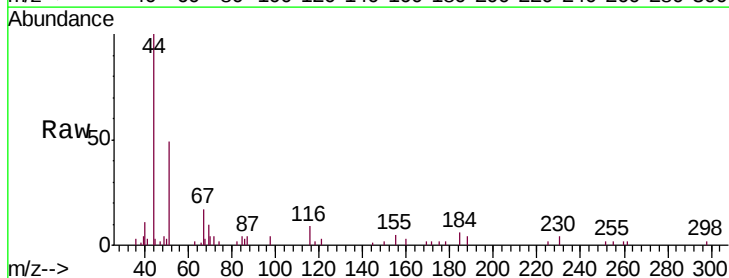
Acq: 11 Jul 2019 20:04

Tgt Ion: 51 Resp: 8478

Ion Ratio Lower Upper

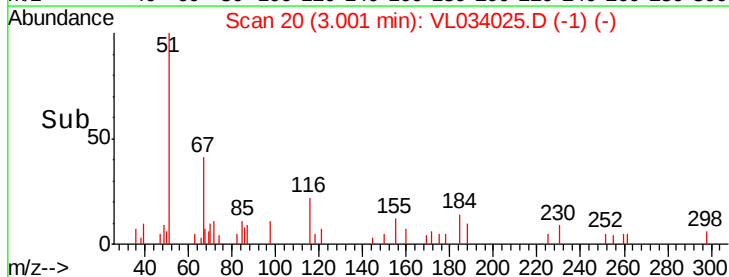
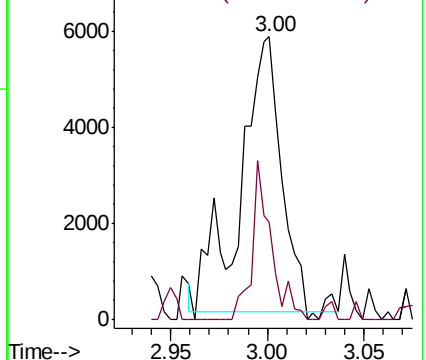
51 100

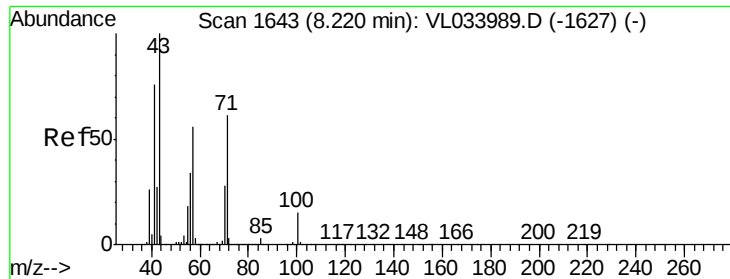
67 27.0 17.3 25.9#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#10

Heptane

Concen: 0.032 ppbv

RT: 8.20 min Scan# 1638

Delta R.T. -0.02 min

Lab File: VL034025.D

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Instrument :

MSVOA\_L

ClientSampleId :

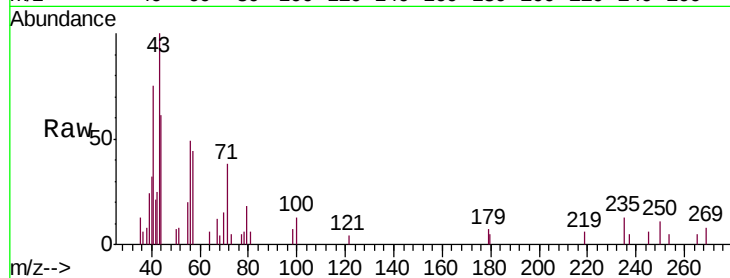
SVS-2DL

Tgt Ion: 43 Resp: 3978

Ion Ratio Lower Upper

43 100

57 0.0 44.6 66.8#

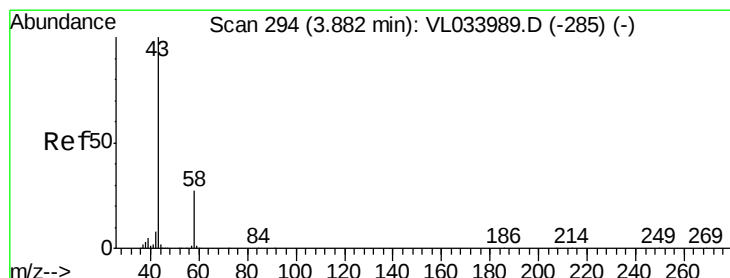
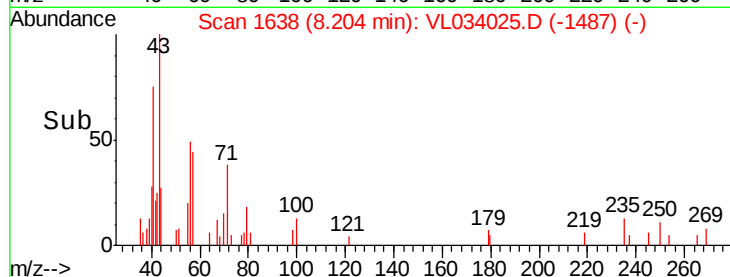


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.20

Time-->



#15

Acetone

Concen: 0.744 ppbv

RT: 3.89 min Scan# 296

Delta R.T. 0.01 min

Lab File: VL034025.D

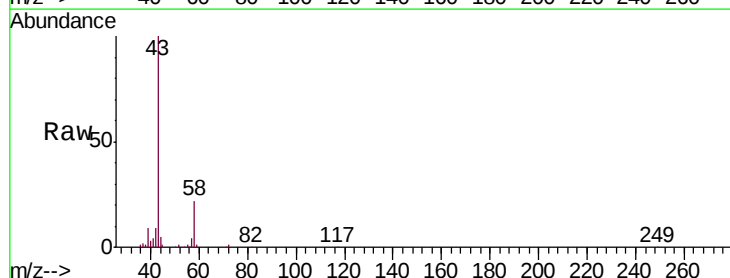
Acq: 11 Jul 2019 20:04

Tgt Ion: 43 Resp: 135711

Ion Ratio Lower Upper

43 100

58 31.0 21.4 32.0

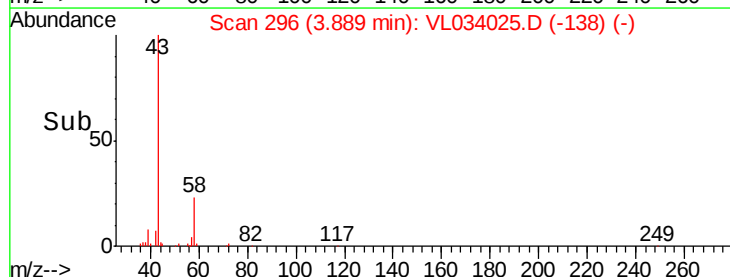


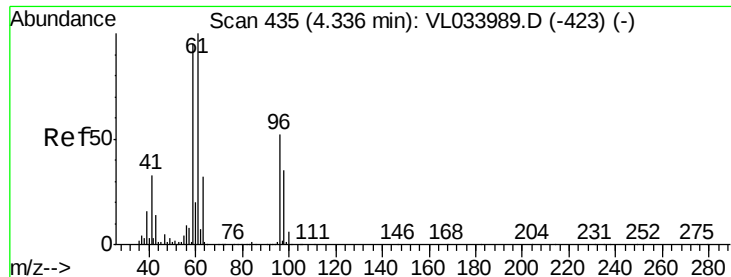
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.89

Time-->





#17

tert-Butyl alcohol

Concen: 0.052 ppbv

RT: 4.35 min Scan# 440

Delta R.T. 0.02 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

Instrument :

MSVOA\_L

ClientSampleId :

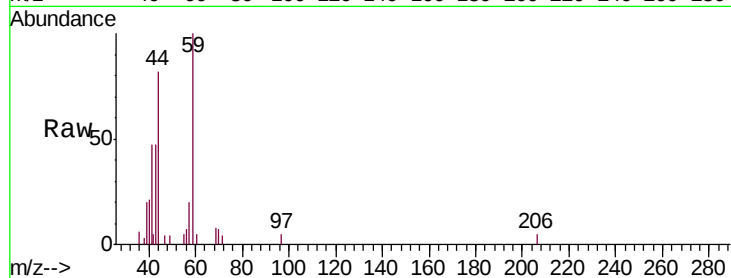
SVS-2DL

Tgt Ion: 59 Resp: 7576

Ion Ratio Lower Upper

59 100

57 26.3 8.2 12.2#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8000

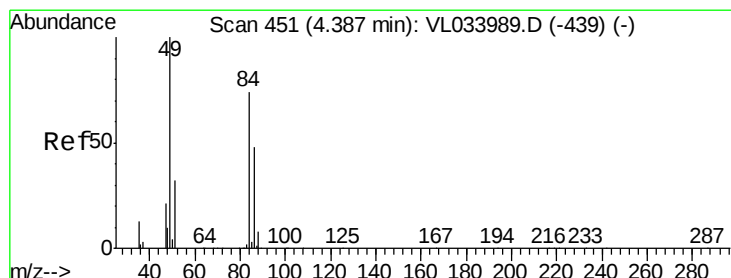
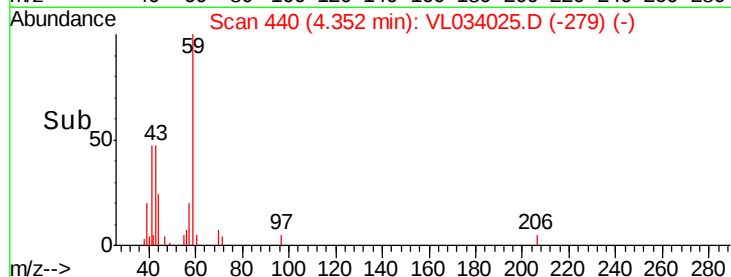
6000

4000

2000

0

Time--> 4.32 4.34 4.36



#20

Methylene Chloride

Concen: 0.146 ppbv

RT: 4.38 min Scan# 449

Delta R.T. -0.01 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

Tgt Ion: 84 Resp: 11569

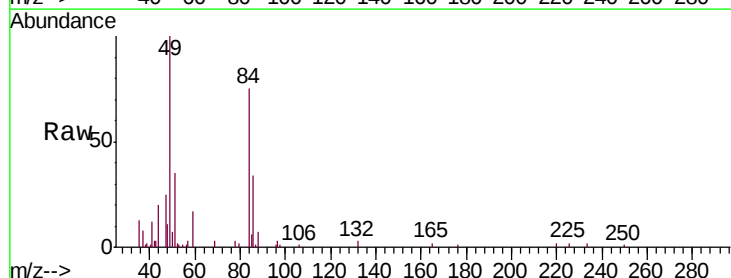
Ion Ratio Lower Upper

84 100

49 131.9 107.6 161.4

51 47.4 35.0 52.6

86 46.0 52.1 78.1#



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

30000

25000

20000

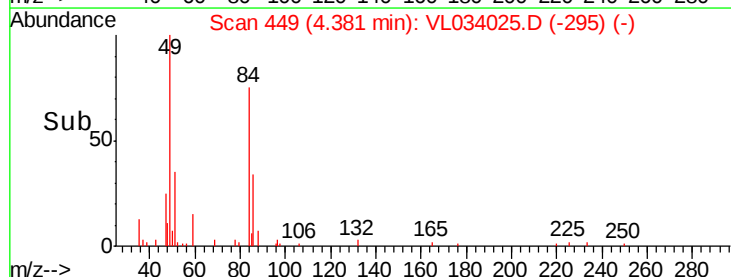
15000

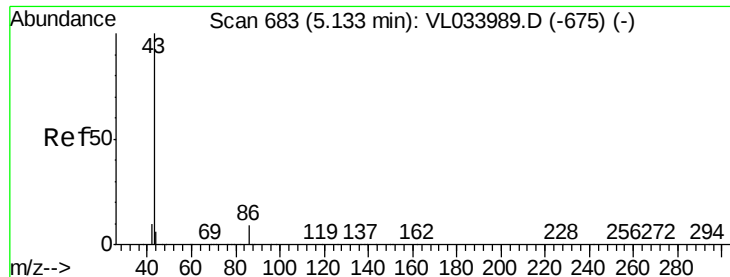
10000

5000

0

Time--> 4.34 4.36 4.38





#23

Vinyl Acetate

Concen: 0.054 ppbv

RT: 5.12 min Scan# 680

Delta R.T. -0.01 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

Instrument :

MSVOA\_L

ClientSampleId :

SVS-2DL

Tgt Ion: 43 Resp: 9770

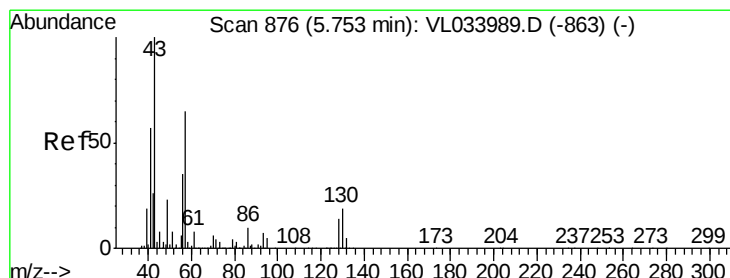
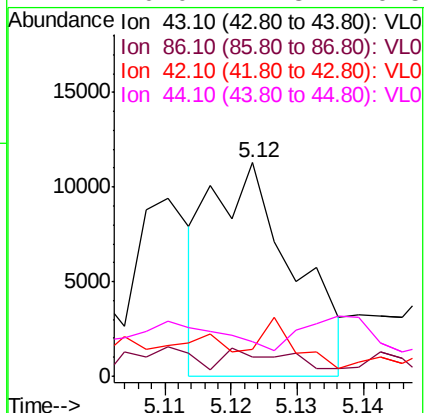
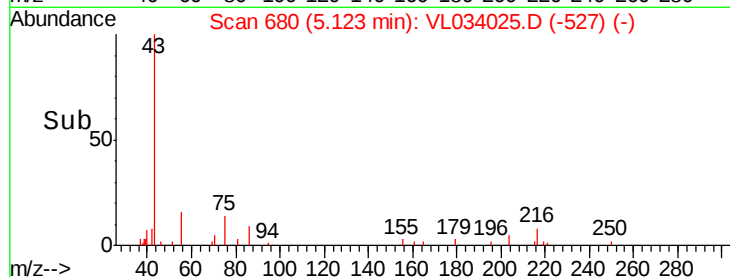
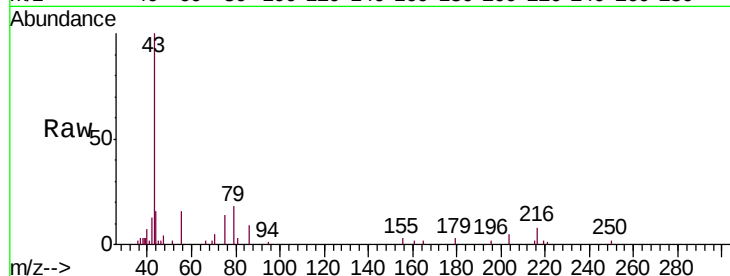
Ion Ratio Lower Upper

43 100

86 7.5 6.6 9.8

42 12.5 8.3 12.5

44 0.0 4.3 6.5#



#26

Hexane

Concen: 0.173 ppbv

RT: 5.74 min Scan# 873

Delta R.T. -0.01 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

Tgt Ion: 57 Resp: 19733

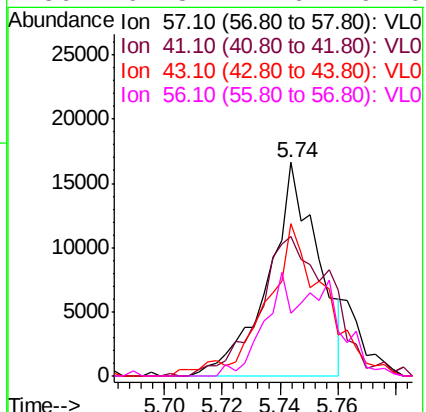
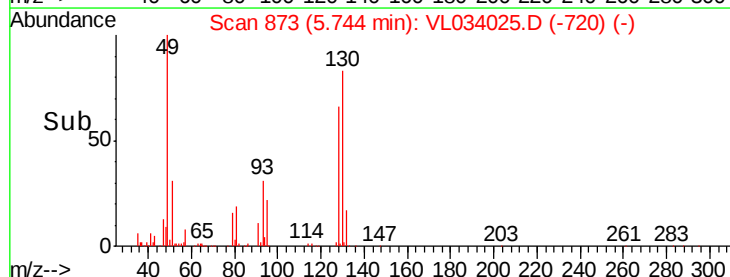
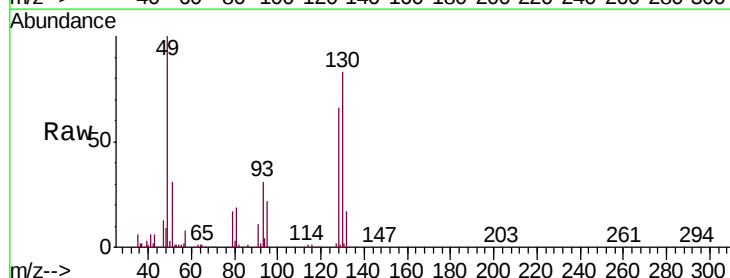
Ion Ratio Lower Upper

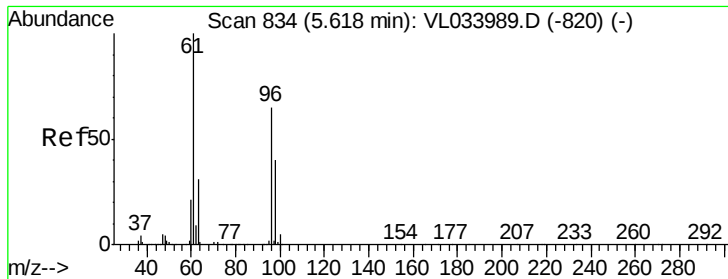
57 100

41 97.3 70.6 105.8

43 86.9 177.6 266.4#

56 62.8 42.6 64.0



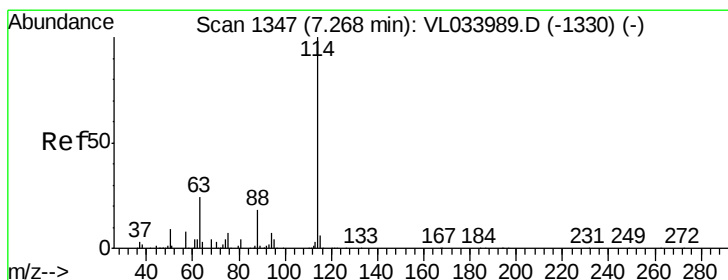
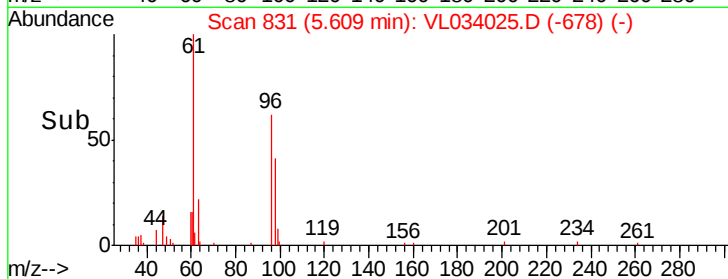
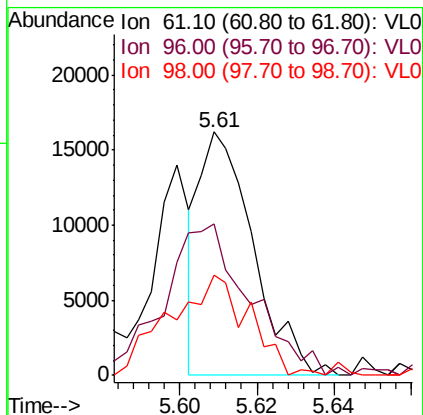
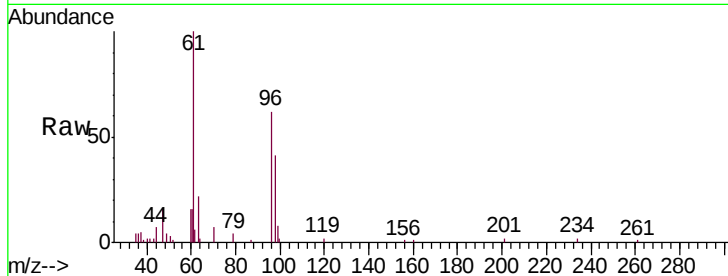


#31

cis-1,2-Dichloroethene  
 Concen: 0.141 ppbv  
 RT: 5.61 min Scan# 831  
 Delta R.T. -0.01 min  
 Lab File: VL034025.D  
 Acq: 11 Jul 2019 20:04

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SVS-2DL

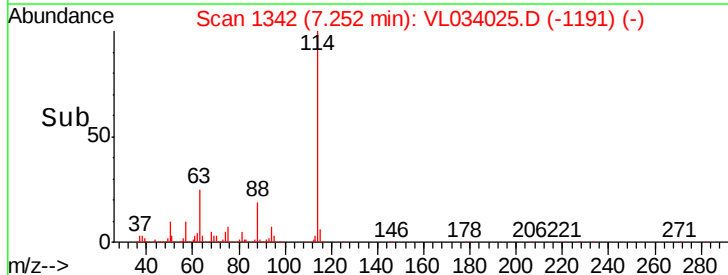
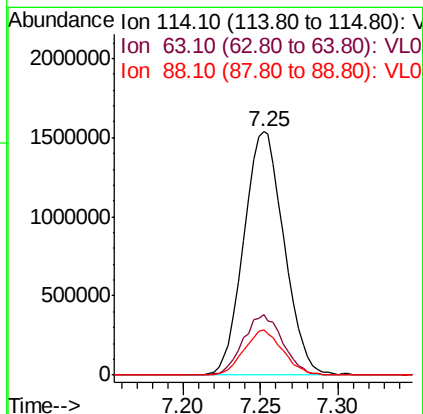
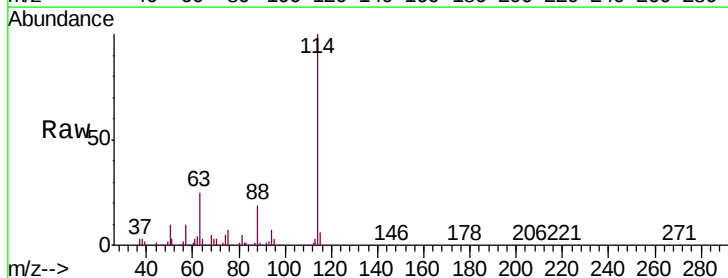
| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 61      | 100   |       |       |
| 96      | 56.3  | 51.8  | 77.6  |
| 98      | 34.1  | 32.1  | 48.1  |

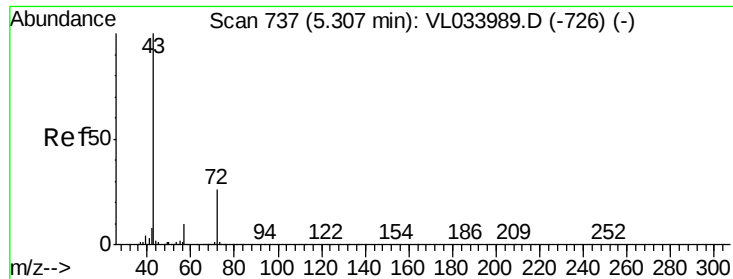


#33

1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.25 min Scan# 1342  
 Delta R.T. -0.02 min  
 Lab File: VL034025.D  
 Acq: 11 Jul 2019 20:04

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 24.6  | 20.2  | 30.2  |
| 88      | 18.0  | 14.1  | 21.1  |

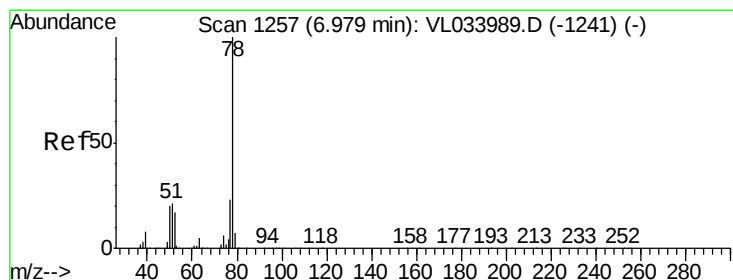
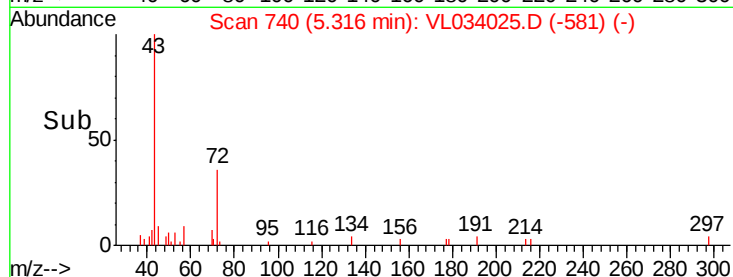
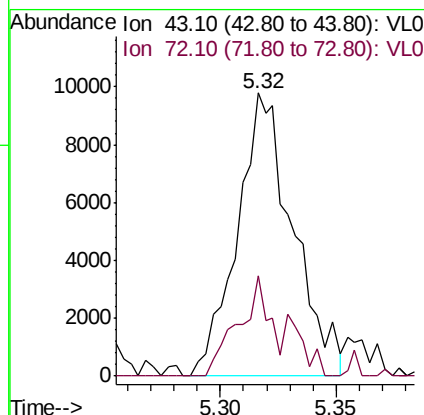
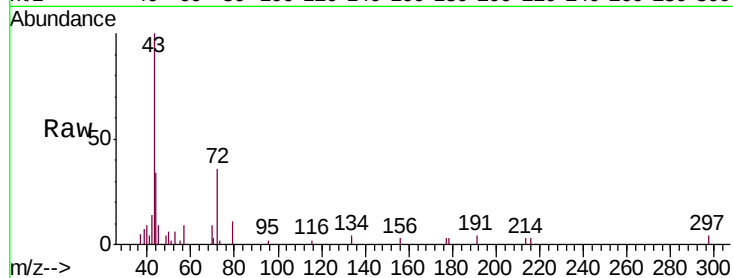




#34  
2-Butanone  
Concen: 0.111 ppbv  
RT: 5.32 min Scan# 740  
Delta R.T. 0.01 min  
Lab File: VL034025.D  
Acq: 11 Jul 2019 20:04

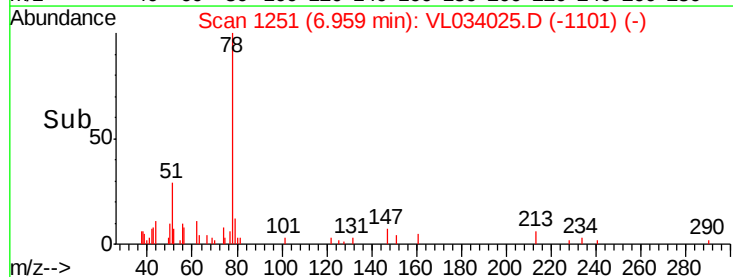
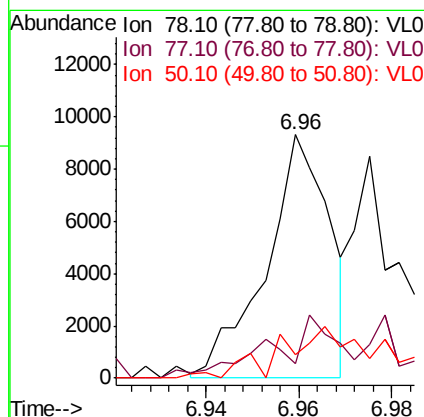
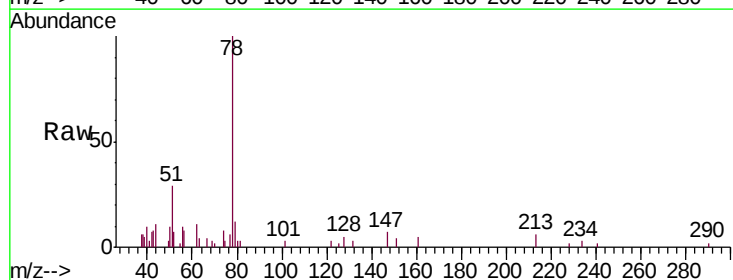
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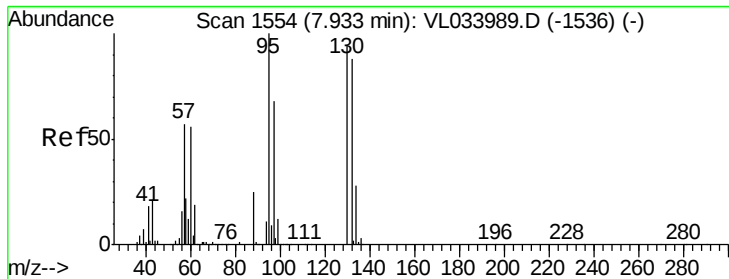
Tgt Ion: 43 Resp: 16312  
Ion Ratio Lower Upper  
43 100  
72 29.1 19.9 29.9



#36  
Benzene  
Concen: 0.041 ppbv  
RT: 6.96 min Scan# 1251  
Delta R.T. -0.02 min  
Lab File: VL034025.D  
Acq: 11 Jul 2019 20:04

Tgt Ion: 78 Resp: 8860  
Ion Ratio Lower Upper  
78 100  
77 3.8 18.7 28.1#  
50 7.9 16.2 24.2#





#38

Trichloroethene

Concen: 0.112 ppbv

RT: 7.91 min Scan# 1548

Delta R.T. -0.02 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

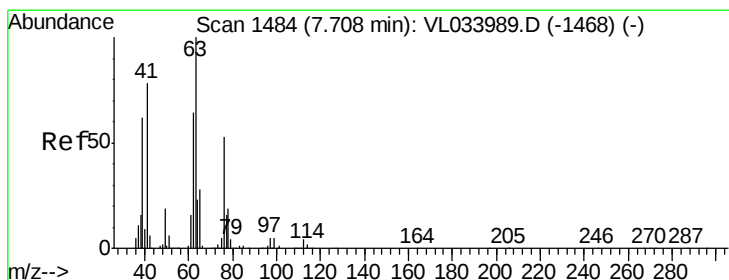
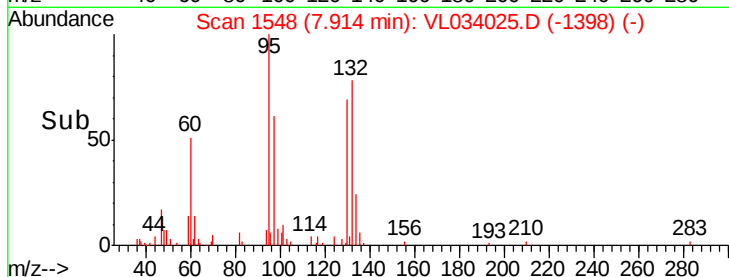
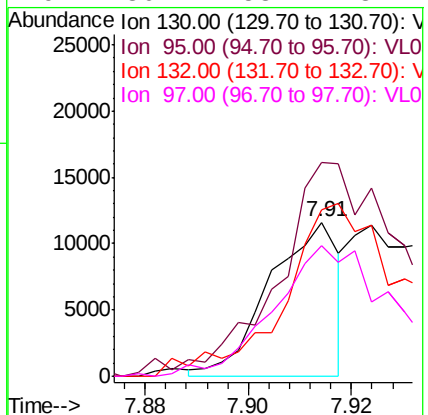
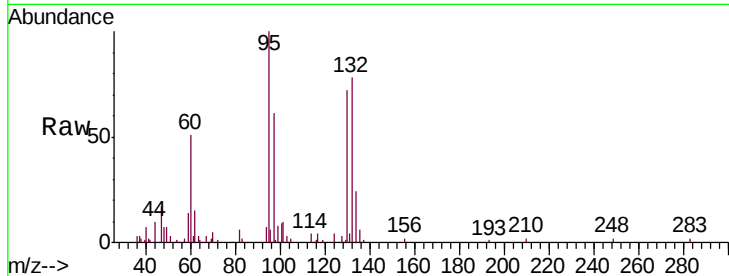
Instrument :

MSVOA\_L

ClientSampleId :

SVS-2DL

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 130   | Resp: | 10837  |
| Ion Ratio | Lower | Upper |        |
| 130       | 100   |       |        |
| 95        | 133.8 | 85.5  | 128.3# |
| 132       | 105.6 | 75.1  | 112.7  |
| 97        | 80.4  | 58.1  | 87.1   |



#39

1,2-Dichloropropane

Concen: 8.412 ppbv

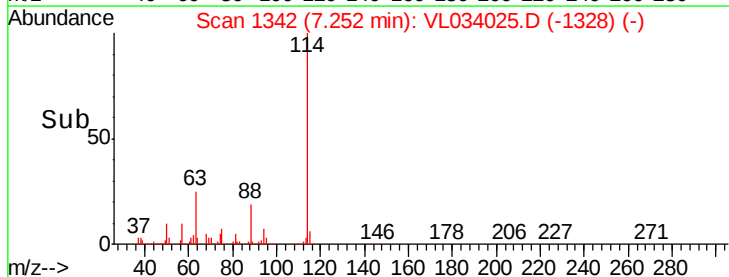
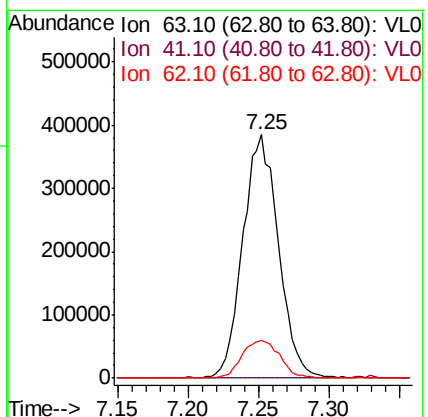
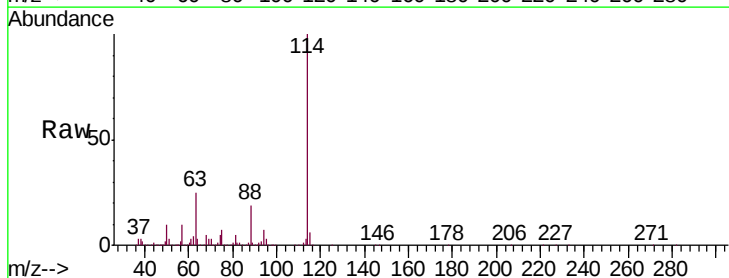
RT: 7.25 min Scan# 1342

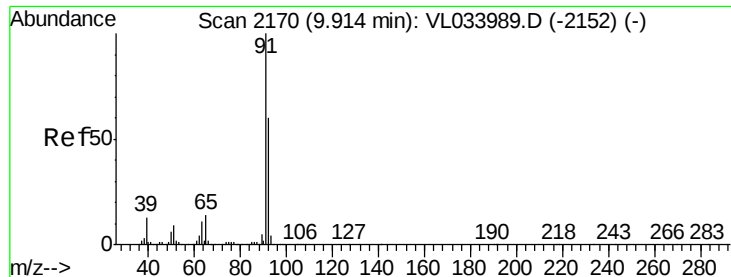
Delta R.T. -0.46 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 63    | Resp: | 681366 |
| Ion Ratio | Lower | Upper |        |
| 63        | 100   |       |        |
| 41        | 0.0   | 62.3  | 93.5#  |
| 62        | 15.3  | 51.4  | 77.2#  |





#53

Toluene

Concen: 0.826 ppbv

RT: 9.90 min Scan# 2166

Delta R.T. -0.01 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

Instrument :

MSVOA\_L

ClientSampleId :

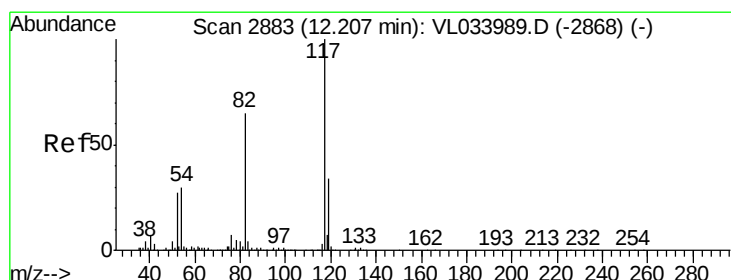
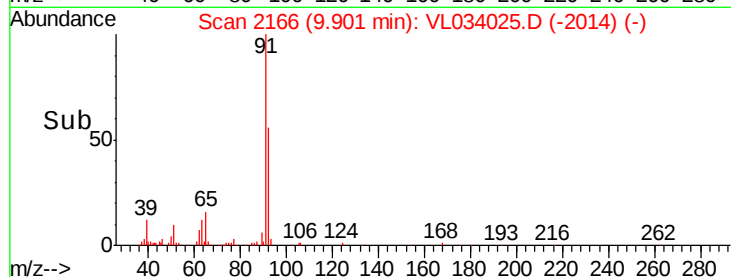
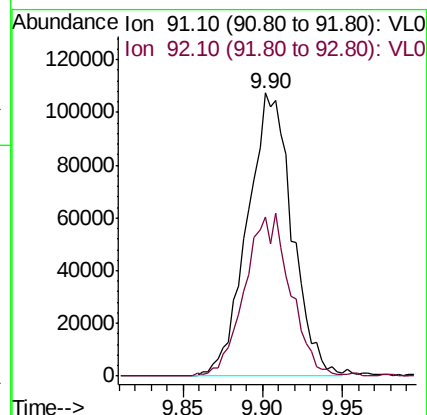
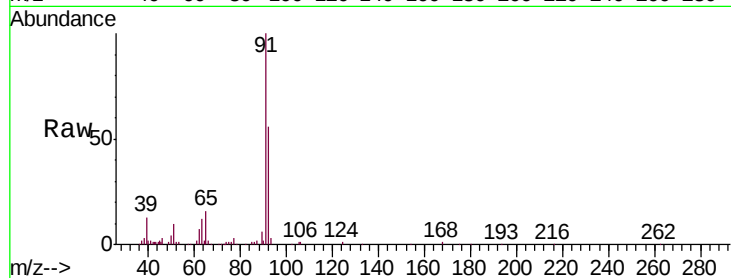
SVS-2DL

Tgt Ion: 91 Resp: 205938

Ion Ratio Lower Upper

91 100

92 58.3 47.7 71.5



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.19 min Scan# 2879

Delta R.T. -0.01 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

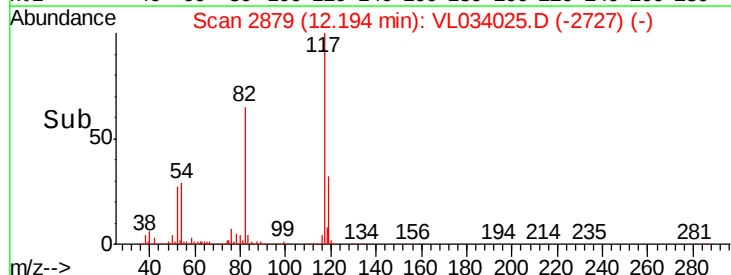
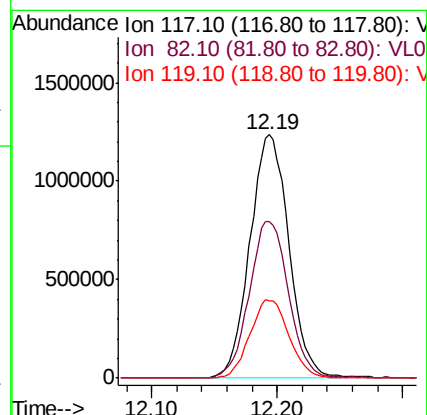
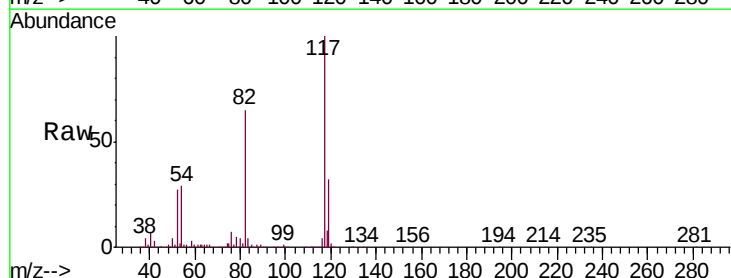
Tgt Ion: 117 Resp: 2665944

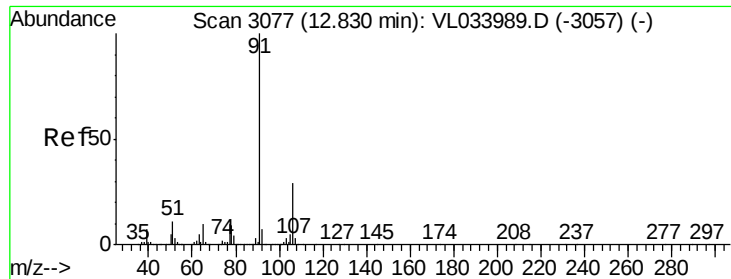
Ion Ratio Lower Upper

117 100

82 65.5 50.8 76.2

119 32.5 24.0 36.0





#58

Ethyl Benzene

Concen: 0.091 ppbv

RT: 12.82 min Scan# 3074

Delta R.T. -0.01 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

Instrument :

MSVOA\_L

ClientSampleId :

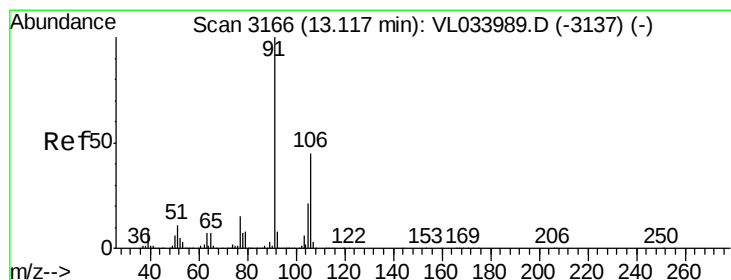
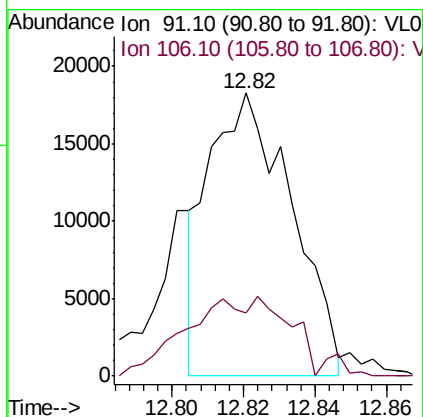
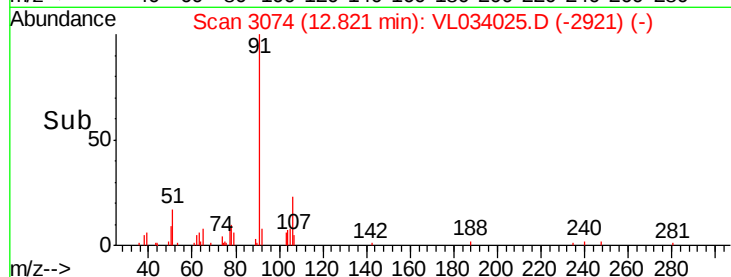
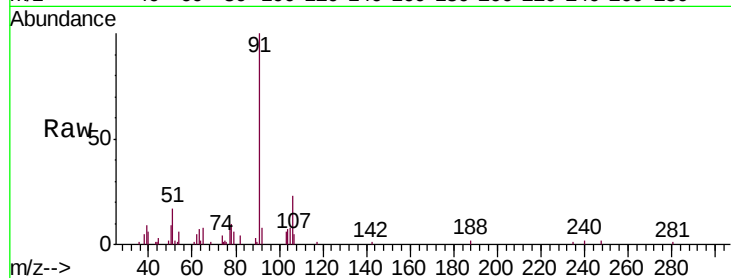
SVS-2DL

Tgt Ion: 91 Resp: 29316

Ion Ratio Lower Upper

91 100

106 20.5 23.3 34.9#



#59

m/p-Xylene

Concen: 0.323 ppbv

RT: 13.08 min Scan# 3156

Delta R.T. -0.03 min

Lab File: VL034025.D

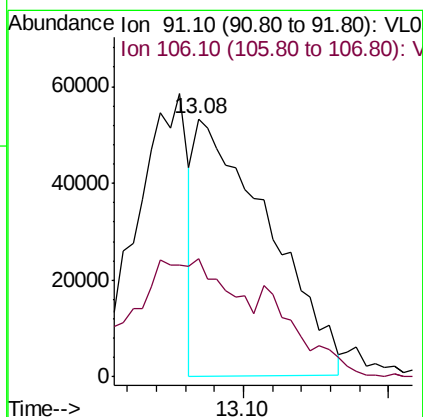
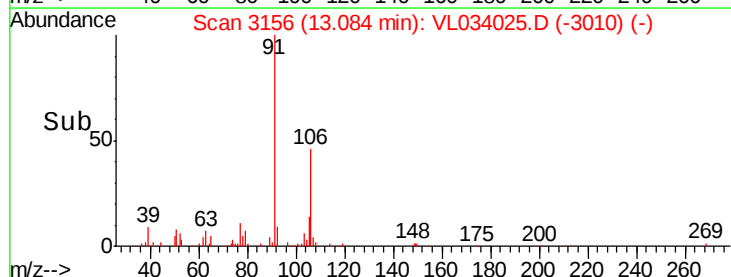
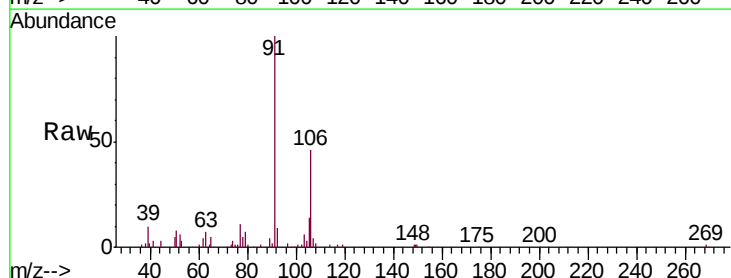
Acq: 11 Jul 2019 20:04

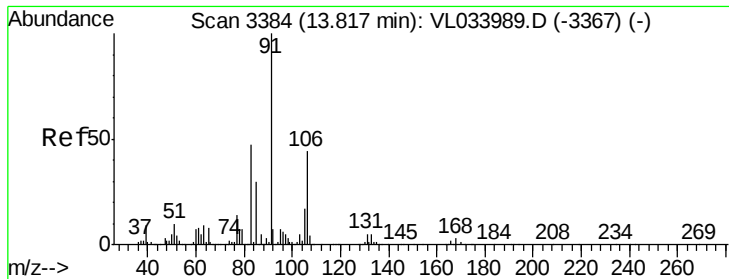
Tgt Ion: 91 Resp: 93673

Ion Ratio Lower Upper

91 100

106 83.2 35.7 53.5#

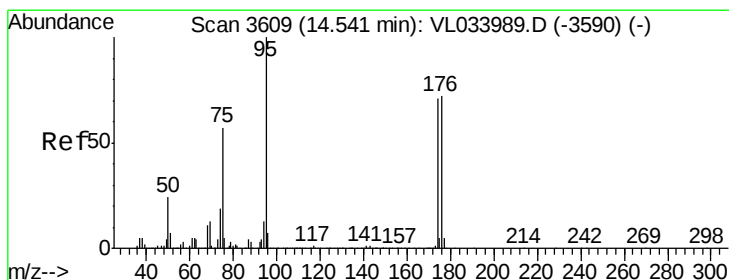
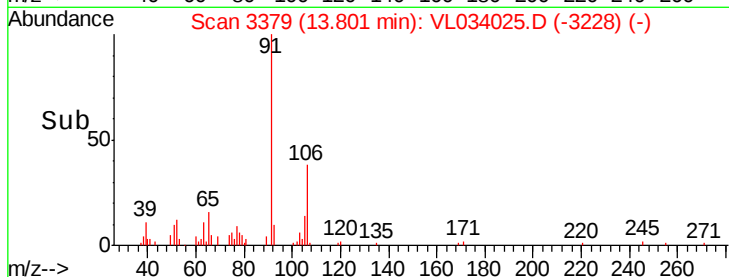
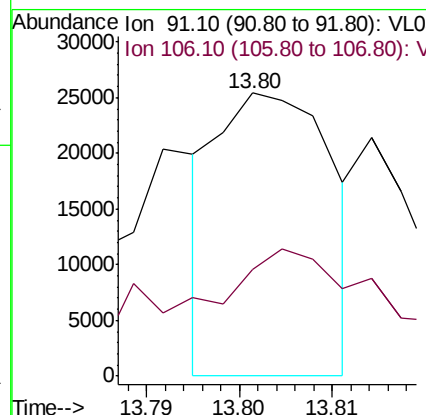
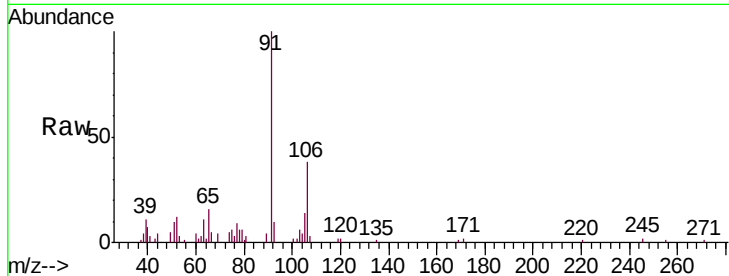




#60  
o-Xylene  
Concen: 0.075 ppbv  
RT: 13.80 min Scan# 3379  
Delta R.T. -0.02 min  
Lab File: VL034025.D  
Acq: 11 Jul 2019 20:04

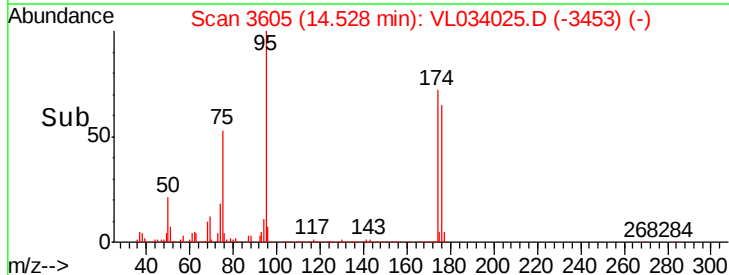
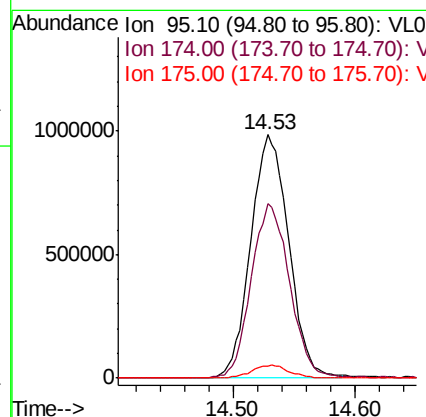
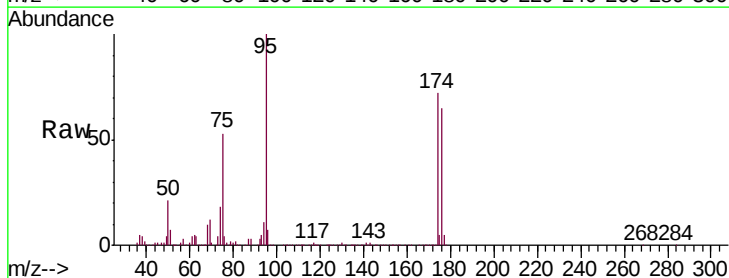
Instrument :  
MSVOA\_L  
ClientSampleId :  
SVS-2DL

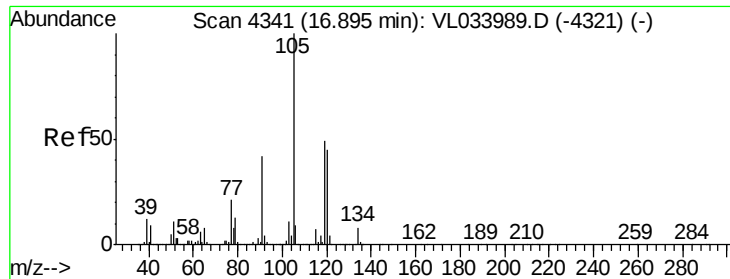
Tgt Ion: 91 Resp: 21770  
Ion Ratio Lower Upper  
91 100  
106 105.6 21.9 65.7#



#68  
1-Bromo-4-Fluorobenzene  
Concen: 9.298 ppbv  
RT: 14.53 min Scan# 3605  
Delta R.T. -0.01 min  
Lab File: VL034025.D  
Acq: 11 Jul 2019 20:04

Tgt Ion: 95 Resp: 2114053  
Ion Ratio Lower Upper  
95 100  
174 73.4 60.5 90.7  
175 5.4 4.0 6.0





#74

1,2,4-Trimethylbenzene

Concen: 0.163 ppbv

RT: 16.88 min Scan# 4337

Delta R.T. -0.01 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

Instrument :

MSVOA\_L

ClientSampleId :

SVS-2DL

Tgt Ion:105 Resp: 62729

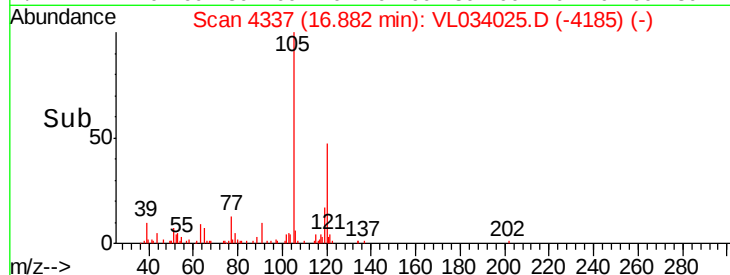
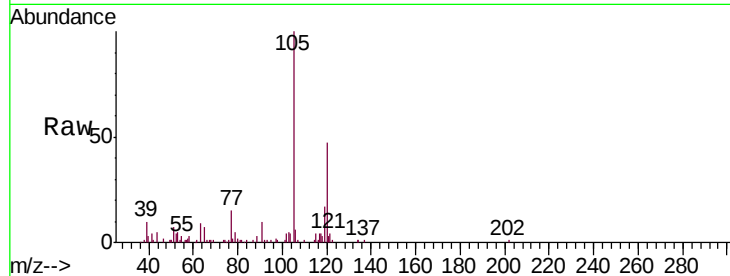
Ion Ratio Lower Upper

105 100

120 50.2 36.2 54.2

91 10.3 34.3 51.5#

77 15.2 17.1 25.7#

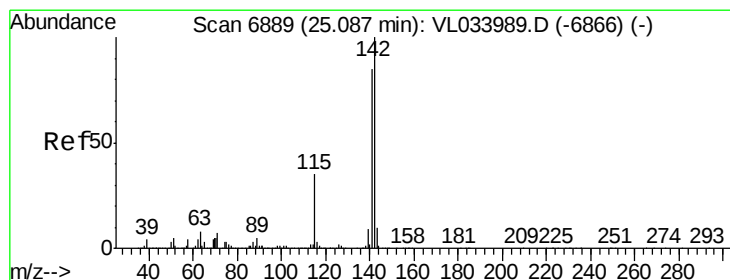
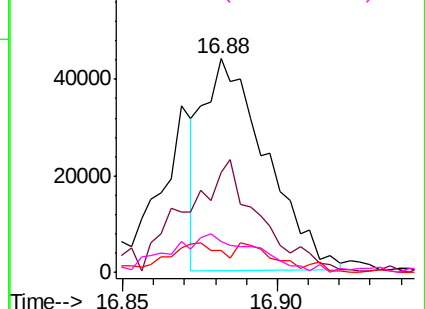


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#80

Naphthalene,2-methyl-

Concen: 0.034 ppbv

RT: 25.07 min Scan# 6885

Delta R.T. -0.01 min

Lab File: VL034025.D

Acq: 11 Jul 2019 20:04

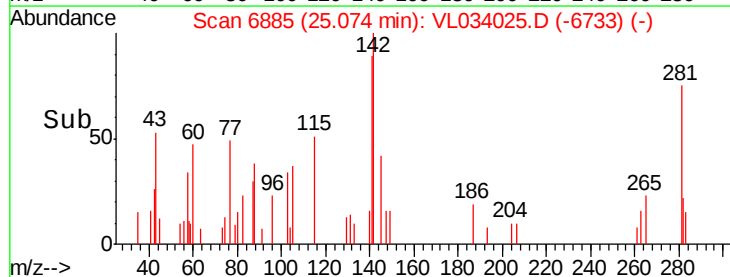
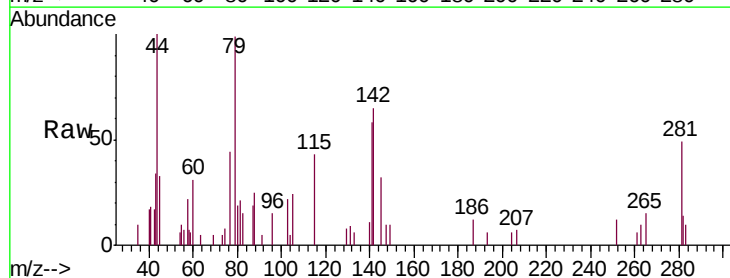
Tgt Ion:142 Resp: 3954

Ion Ratio Lower Upper

142 100

141 82.5 68.2 102.2

115 8.8 29.9 44.9#



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

