

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL031219\  
 Data File : VL033290.D  
 Acq On : 12 Mar 2019 19:41  
 Operator : SY/AP  
 Sample : K1805-05  
 Misc : 400ml/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ST-OA-1

Manual Integrations  
 APPROVED

MMDadoda  
 3/14/2019 5:06:15 AM

Quant Time: Mar 13 17:50:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL031219AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Mar 14 07:50:15 2019  
 QLast Update : Wed Mar 13 07:17:55 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.76  | 49   | 787724   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.29  | 114  | 1760322  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.24 | 117  | 1702182  | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 68) 1-Bromo-4-Fluorobenzene | 14.57  | 95    | 1357140  | 10.32    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 103.20% |

| Target Compounds           | R.T. | QIon | Response | Conc  | Units  | Qvalue |
|----------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane | 3.08 | 85   | 49294    | 0.310 | ppbv   | 99     |
| 3) Chlorodifluoromethane   | 3.01 | 51   | 30369    | 0.291 | ppbv   | 96     |
| 4) Chloromethane           | 3.17 | 50   | 25550    | 0.457 | ppbv   | 99     |
| 9) Propene                 | 3.05 | 41   | 25056    | 0.526 | ppbv # | 75     |
| 11) Trichlorofluoromethane | 4.00 | 101  | 30715    | 0.195 | ppbv   | 97     |
| 13) Ethanol                | 3.66 | 45   | 43370m   | 2.984 | ppbv   |        |
| 15) Acetone                | 3.90 | 43   | 542686   | 4.491 | ppbv   | 94     |
| 19) Isopropyl Alcohol      | 4.05 | 45   | 16405m   | 0.225 | ppbv   |        |
| 20) Methylene Chloride     | 4.41 | 84   | 51099    | 1.272 | ppbv   | 89     |
| 26) Hexane                 | 5.78 | 57   | 55454    | 0.634 | ppbv # | 39     |
| 34) 2-Butanone             | 5.33 | 43   | 24623m   | 0.212 | ppbv   |        |
| 36) Benzene                | 7.00 | 78   | 37100    | 0.229 | ppbv # | 95     |
| 53) Toluene                | 9.94 | 91   | 101894   | 0.545 | ppbv   | 100    |

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

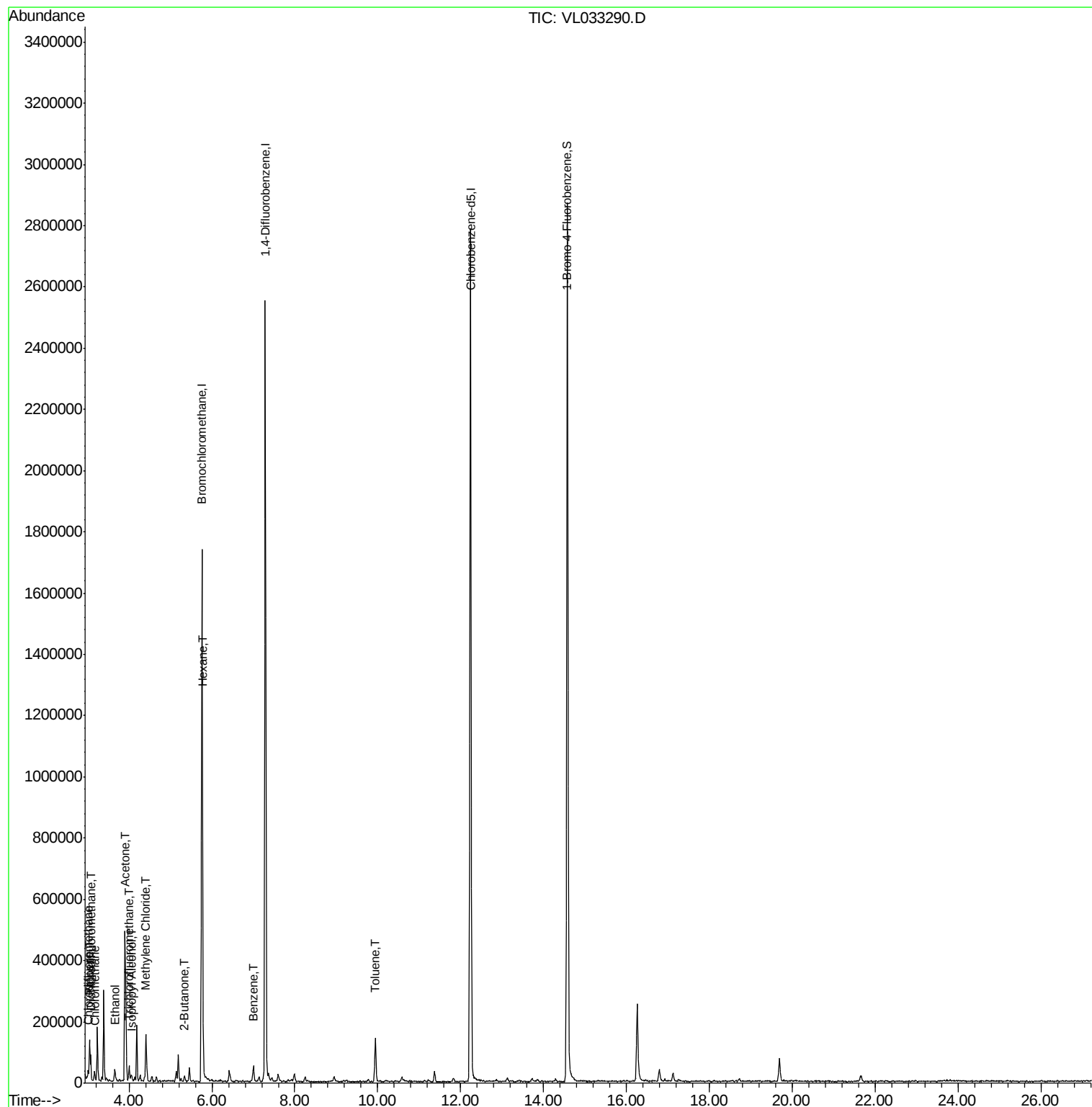
Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\DATA\VL031219\  
Data File : VL033290.D  
Acq On : 12 Mar 2019 19:41  
Operator : SY/AP  
Sample : K1805-05  
Misc : 400ml/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

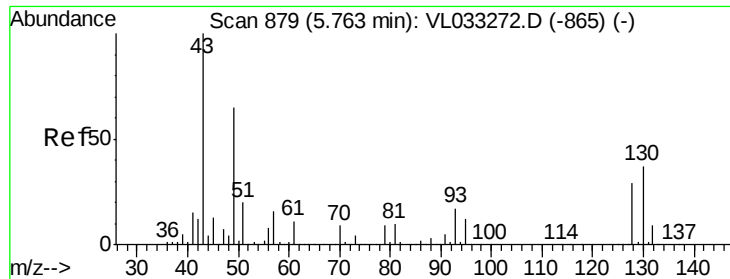
Instrument :  
MSVOA\_L  
ClientSampleId :  
ST-OA-1

Manual Integrations  
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3/14/2019 5:06:15 AM

Quant Time: Mar 13 17:50:15 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\VL031219AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Mar  
QLast Update : Wed Mar 13 07:17:55 2019  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.01 min

Lab File: VL033290.D

Acq: 12 Mar 2019 19:41

Instrument :

MSVOA\_L

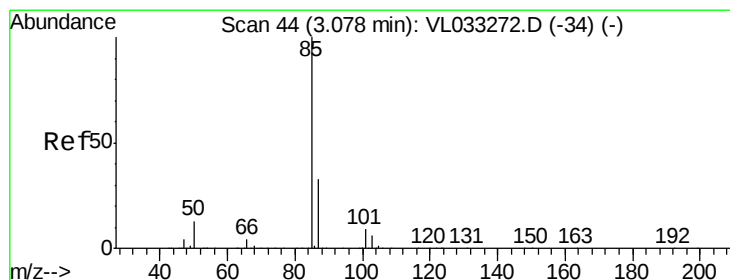
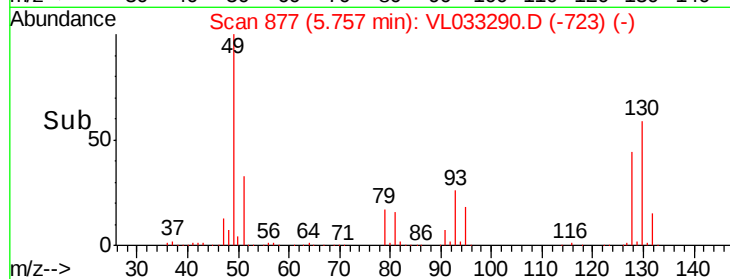
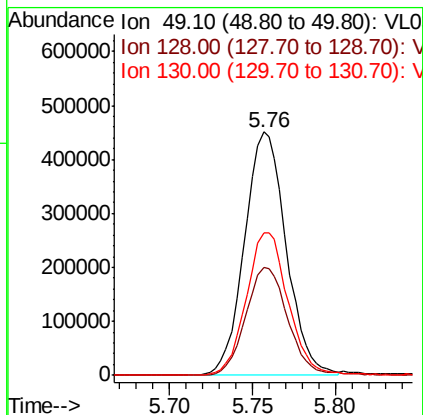
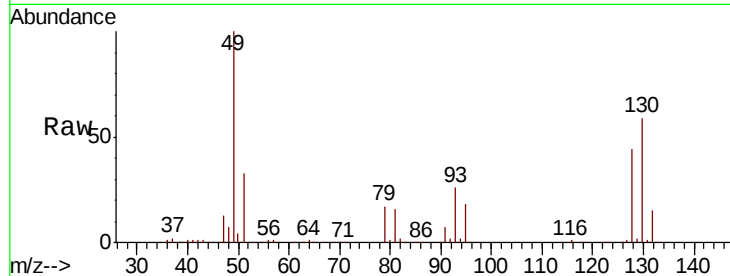
ClientSampled :

ST-OA-1

|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 49    | Resp: | 787724 |
| Ion Ratio | Lower | Upper |        |
| 49        | 100   |       |        |
| 128       | 45.2  | 23.3  | 69.9   |
| 130       | 59.0  | 30.0  | 90.1   |

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#2

Dichlorodifluoromethane

Concen: 0.310 ppbv

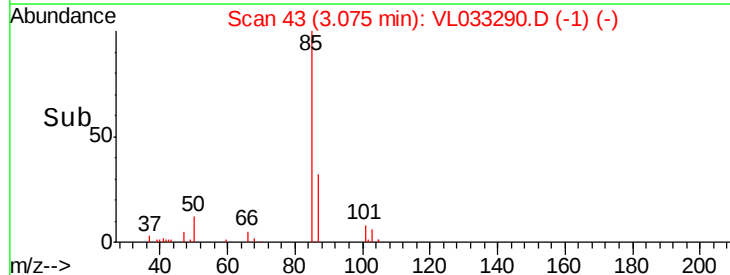
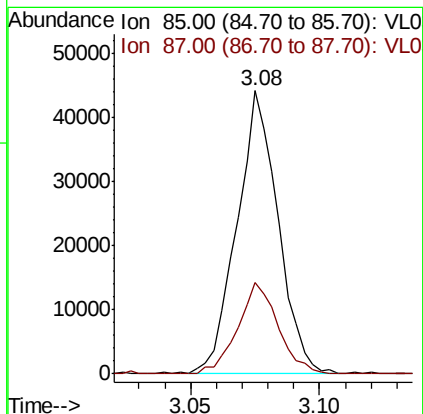
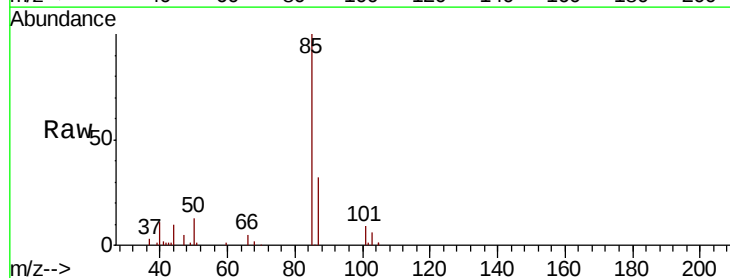
RT: 3.08 min Scan# 43

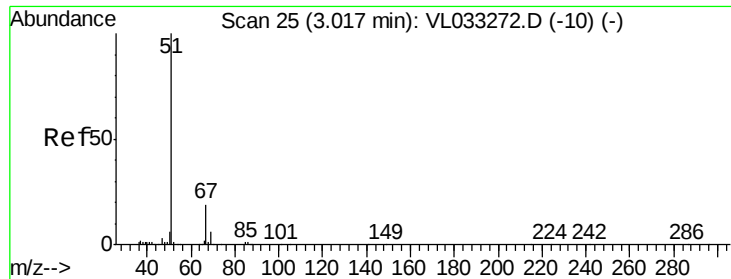
Delta R.T. -0.00 min

Lab File: VL033290.D

Acq: 12 Mar 2019 19:41

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 85    | Resp: | 49294 |
| Ion Ratio | Lower | Upper |       |
| 85        | 100   |       |       |
| 87        | 32.4  | 26.4  | 39.6  |





#3

Chlorodifluoromethane

Concen: 0.291 ppbv

RT: 3.01 min Scan# 23

Delta R.T. -0.01 min

Lab File: VL033290.D

Acq: 12 Mar 2019 19:41

Instrument :

MSVOA\_L

ClientSampleId :

ST-OA-1

Tgt Ion: 51 Resp: 30369

Ion Ratio Lower Upper

51 100

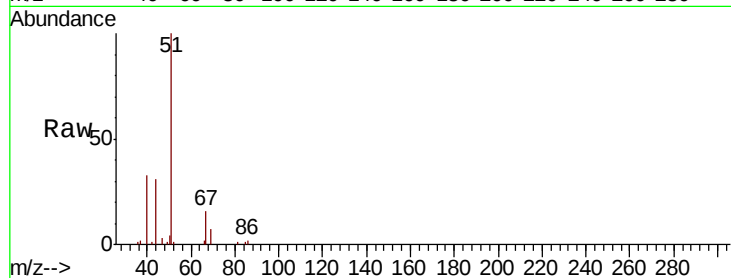
67 16.9 15.0 22.4

Manual Integrations

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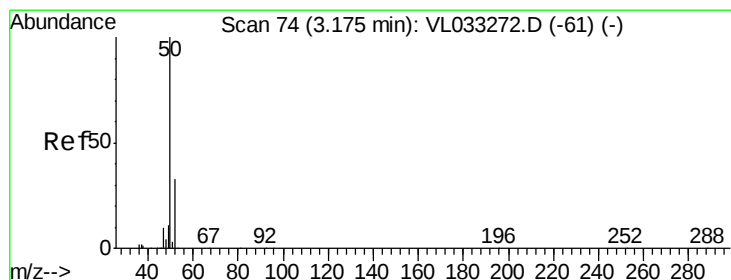
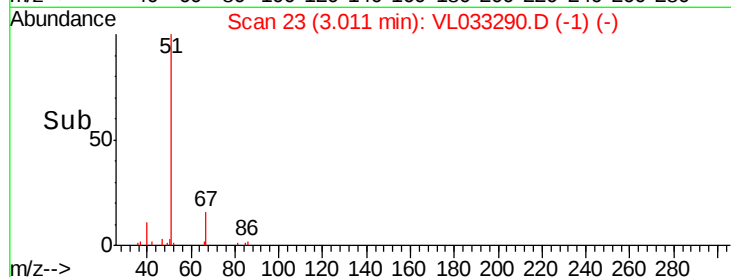
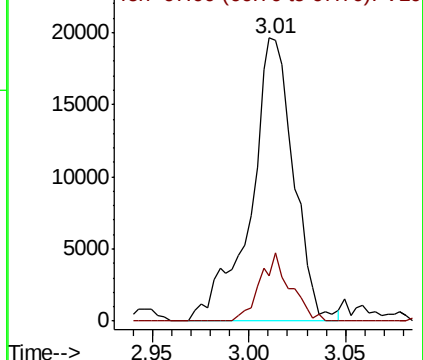
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.457 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033290.D

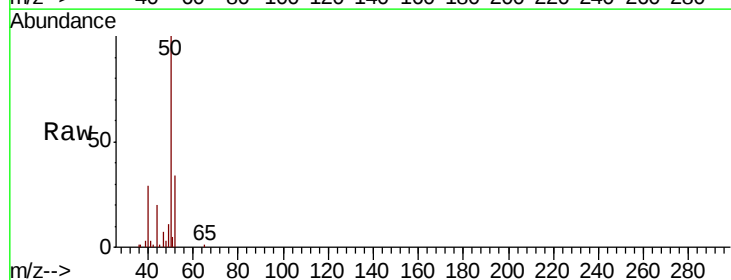
Acq: 12 Mar 2019 19:41

Tgt Ion: 50 Resp: 25550

Ion Ratio Lower Upper

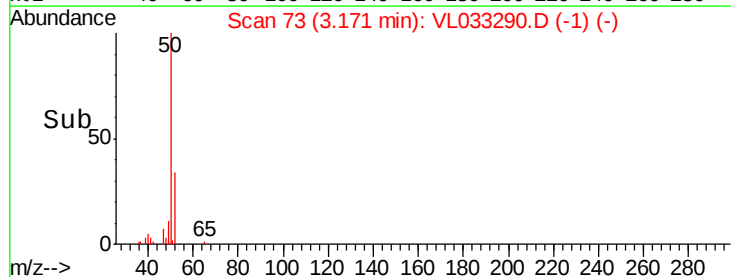
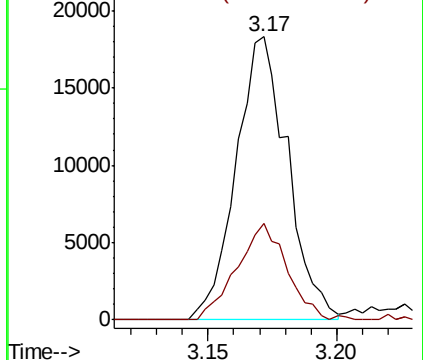
50 100

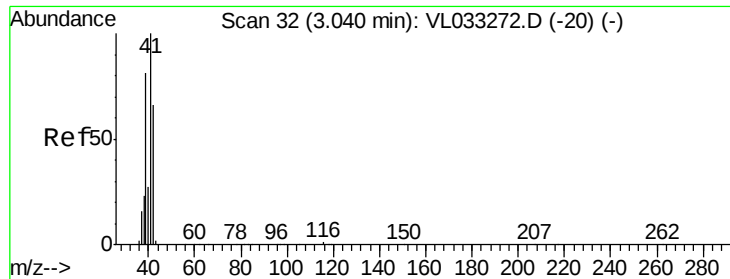
52 34.0 26.6 39.8



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.526 ppbv

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL033290.D

Acq: 12 Mar 2019 19:41

Instrument :

MSVOA\_L

ClientSampleId :

ST-OA-1

Tgt Ion: 41 Resp: 25056

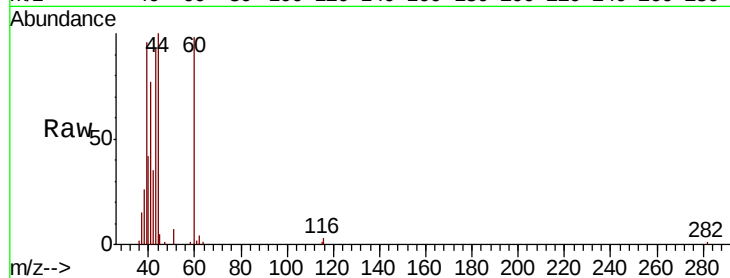
Ion Ratio Lower Upper

41 100

42 47.7 54.6 82.0#

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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

20000

15000

10000

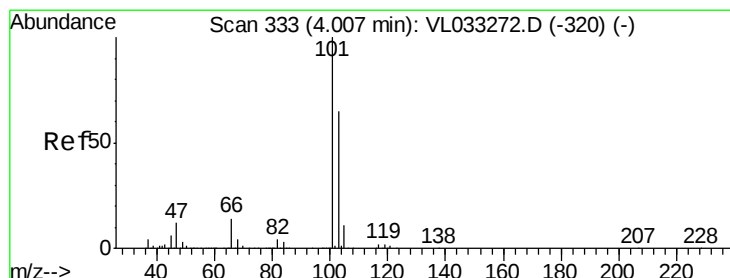
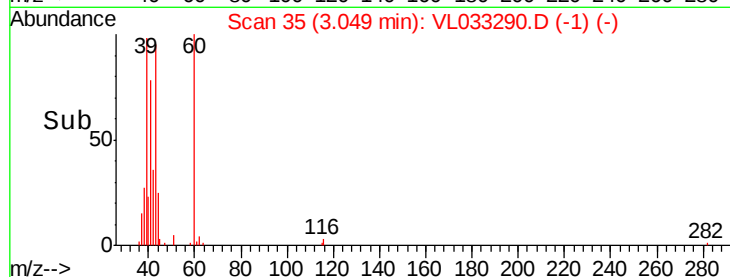
5000

0

Time-->

3.00 3.05 3.10

3.05



#11

Trichlorofluoromethane

Concen: 0.195 ppbv

RT: 4.00 min Scan# 331

Delta R.T. -0.01 min

Lab File: VL033290.D

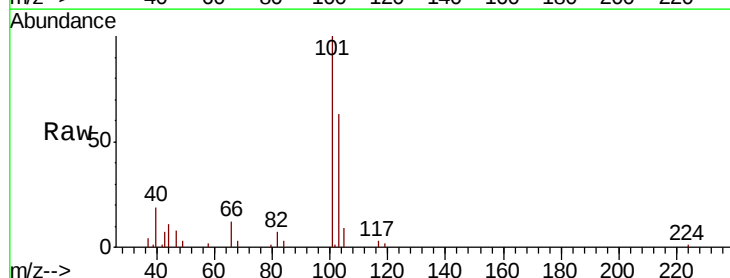
Acq: 12 Mar 2019 19:41

Tgt Ion: 101 Resp: 30715

Ion Ratio Lower Upper

101 100

103 62.8 51.8 77.8



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

25000

20000

15000

10000

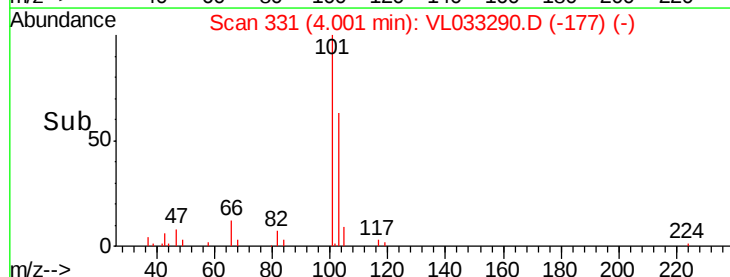
5000

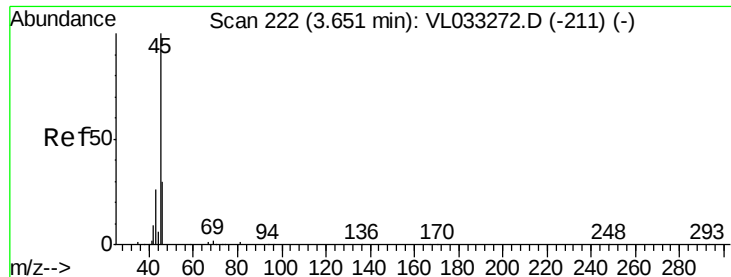
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Time-->

3.95 4.00

4.00





#13

Ethanol

Concen: 2.984 ppbv m

RT: 3.66 min Scan# 225

Delta R.T. 0.01 min

Lab File: VL033290.D

Acq: 12 Mar 2019 19:41

Instrument :

MSVOA\_L

ClientSampleId :

ST-OA-1

Tgt Ion: 45 Resp: 43370

Ion Ratio Lower Upper

45 100

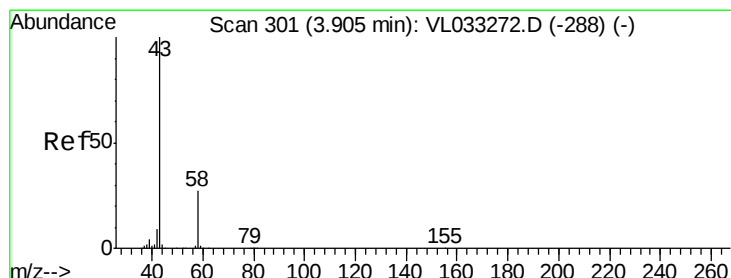
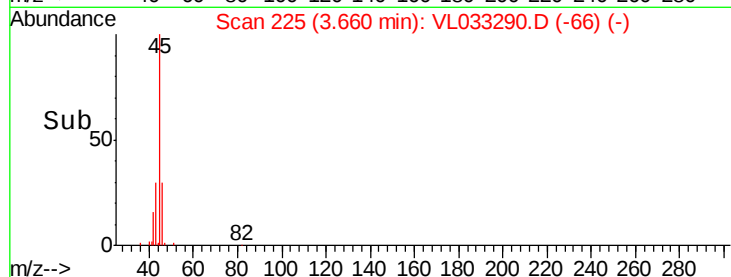
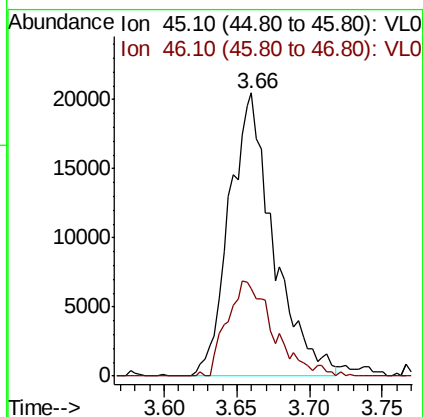
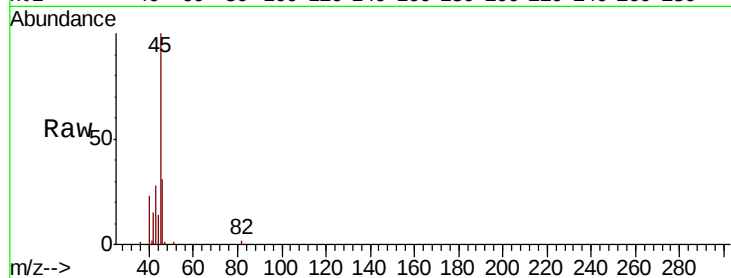
46 35.4 13.9 55.7

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#15

Acetone

Concen: 4.491 ppbv

RT: 3.90 min Scan# 299

Delta R.T. -0.01 min

Lab File: VL033290.D

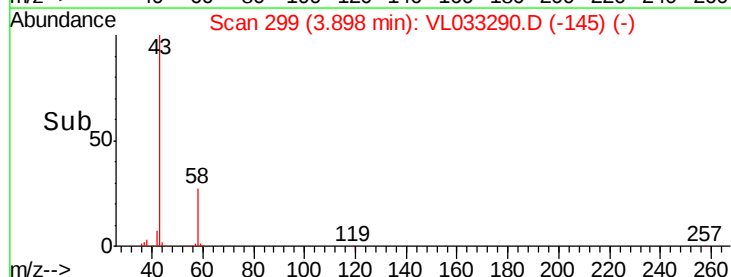
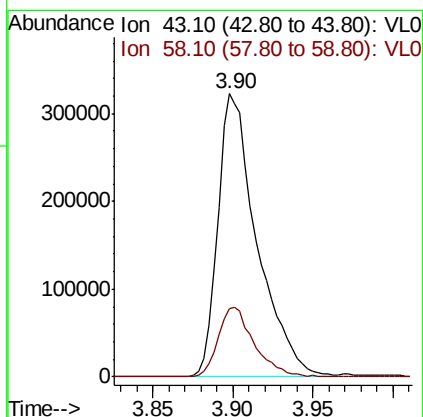
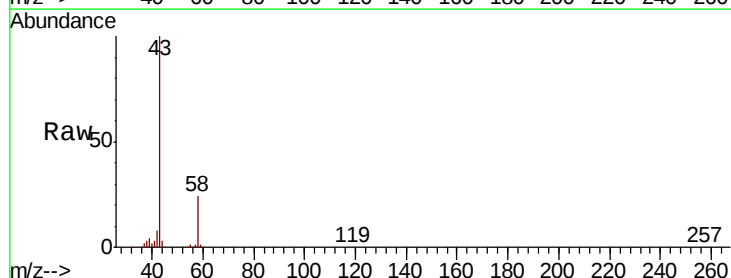
Acq: 12 Mar 2019 19:41

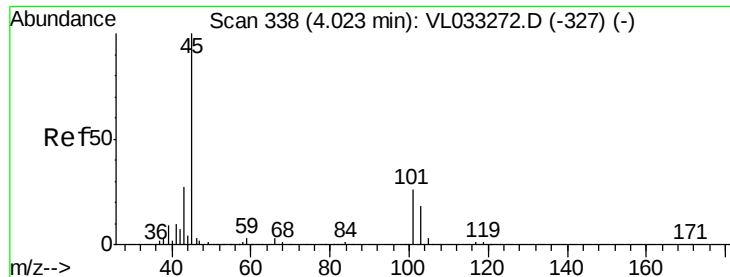
Tgt Ion: 43 Resp: 542686

Ion Ratio Lower Upper

43 100

58 23.1 21.1 31.7





#19

Isopropyl Alcohol

Concen: 0.225 ppbv m

RT: 4.05 min Scan# 345

Delta R.T. 0.02 min

Lab File: VL033290.D

Acq: 12 Mar 2019 19:41

Instrument :

MSVOA\_L

ClientSampleId :

ST-OA-1

Tgt Ion: 45 Resp: 16405

Ion Ratio Lower Upper

45 100

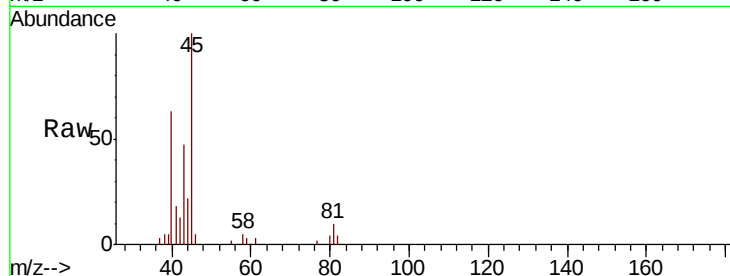
58 0.0 1.4 2.2#

Manual Integrations

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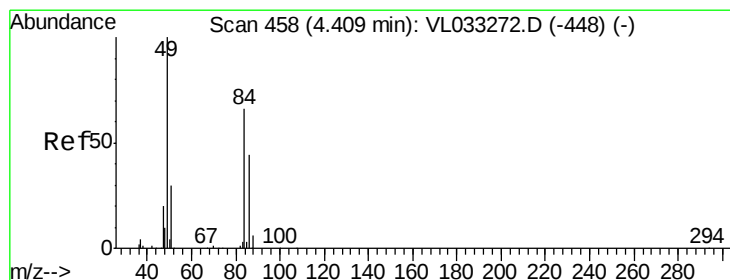
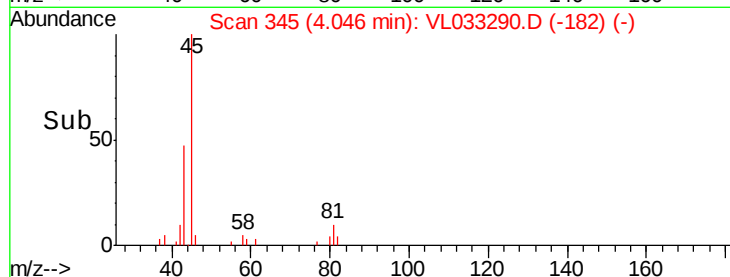
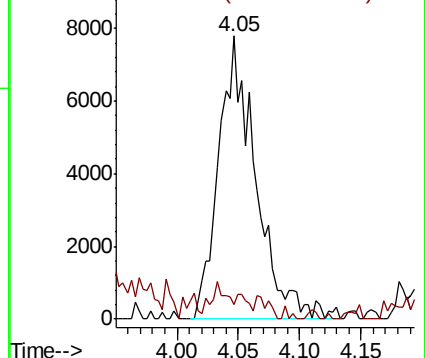
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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 1.272 ppbv

RT: 4.41 min Scan# 457

Delta R.T. -0.00 min

Lab File: VL033290.D

Acq: 12 Mar 2019 19:41

Tgt Ion: 84 Resp: 51099

Ion Ratio Lower Upper

84 100

49 134.2 120.3 180.5

51 38.3 36.2 54.4

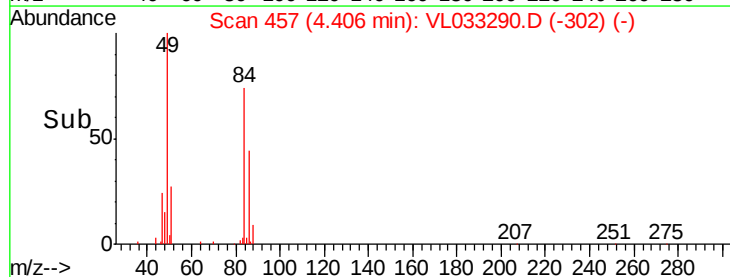
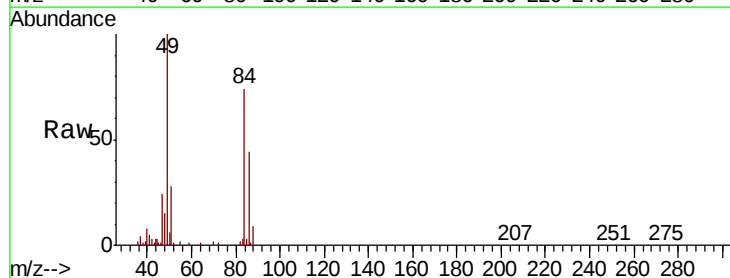
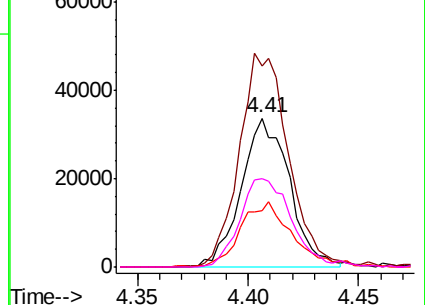
86 59.3 52.5 78.7

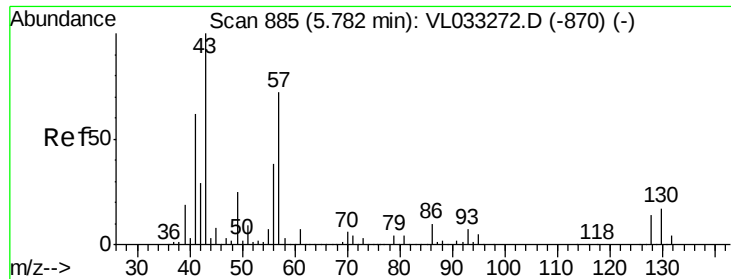
Abundance Ion 84.00 (83.70 to 84.70): VL0

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





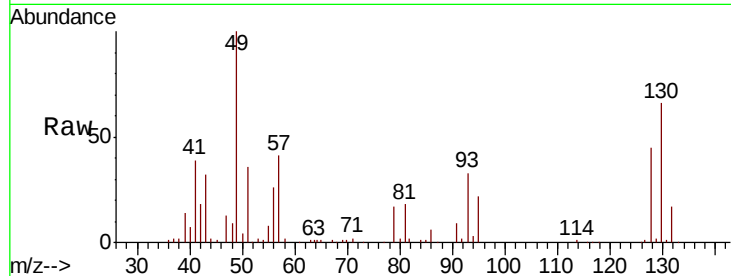
#26  
Hexane  
Concen: 0.634 ppbv  
RT: 5.78 min Scan# 884  
Delta R.T. -0.00 min  
Lab File: VL033290.D  
Acq: 12 Mar 2019 19:41

Instrument :  
MSVOA\_L  
ClientSampled :  
ST-OA-1

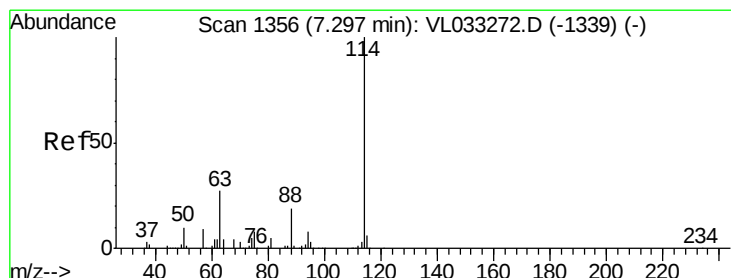
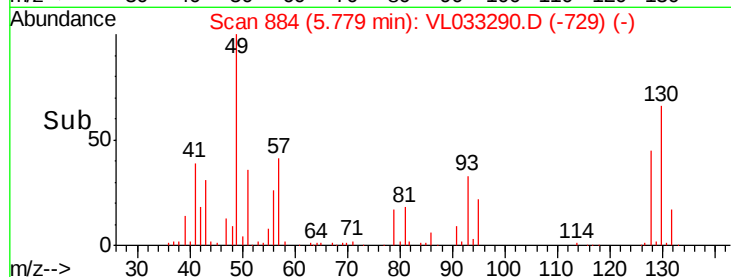
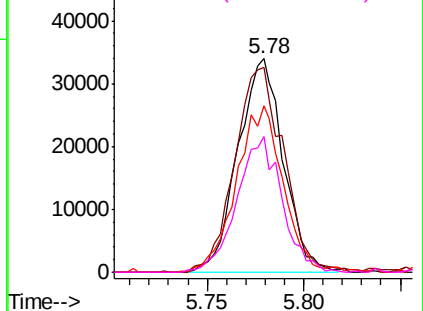
Tgt Ion: 57 Resp: 55454  
Ion Ratio Lower Upper  
57 100  
41 105.3 70.7 106.1  
43 81.0 178.6 267.8#  
56 62.8 41.3 61.9#

Manual Integrations  
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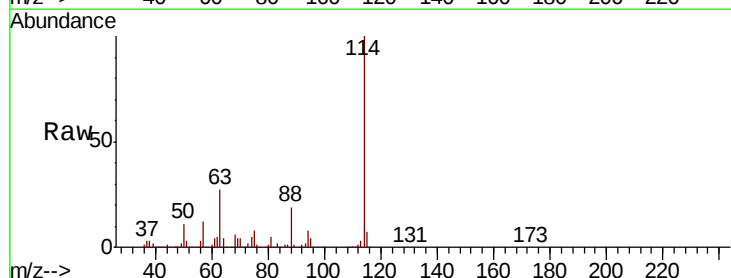


Abundance Ion 57.10 (56.80 to 57.80): VL0  
Ion 41.10 (40.80 to 41.80): VL0  
Ion 43.10 (42.80 to 43.80): VL0  
Ion 56.10 (55.80 to 56.80): VL0

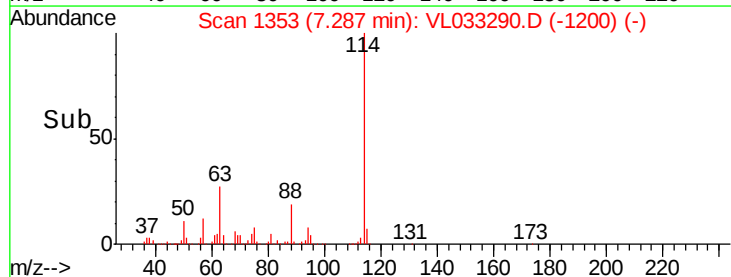
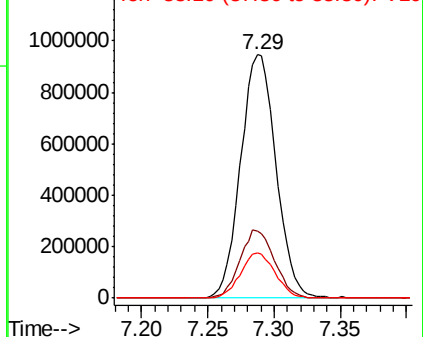


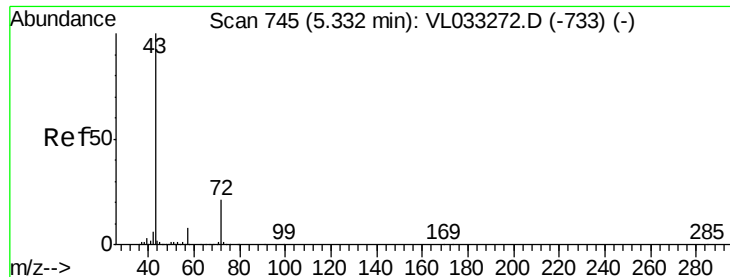
#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.29 min Scan# 1353  
Delta R.T. -0.01 min  
Lab File: VL033290.D  
Acq: 12 Mar 2019 19:41

Tgt Ion: 114 Resp: 1760322  
Ion Ratio Lower Upper  
114 100  
63 27.2 21.5 32.3  
88 18.2 14.6 22.0



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





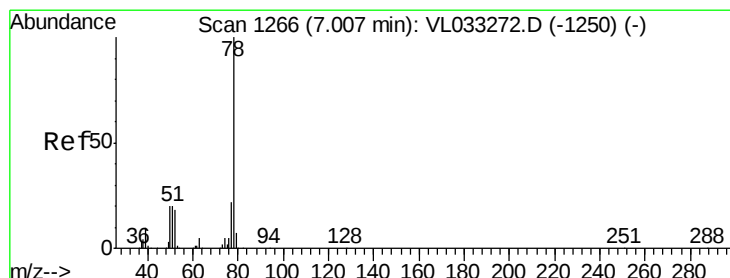
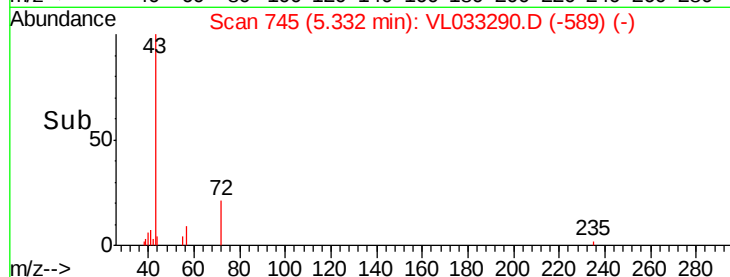
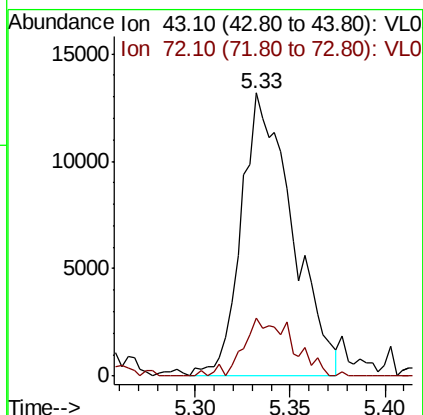
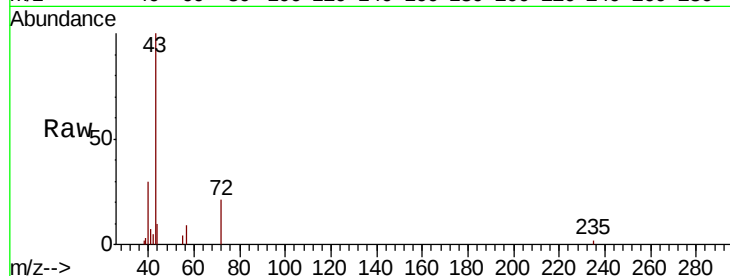
#34  
2-Butanone  
Concen: 0.212 ppbv m  
RT: 5.33 min Scan# 745  
Delta R.T. 0.00 min  
Lab File: VL033290.D  
Acq: 12 Mar 2019 19:41

Instrument :  
MSVOA\_L  
ClientSampled :  
ST-OA-1

Tgt Ion: 43 Resp: 24623  
Ion Ratio Lower Upper  
43 100  
72 19.9 17.0 25.6

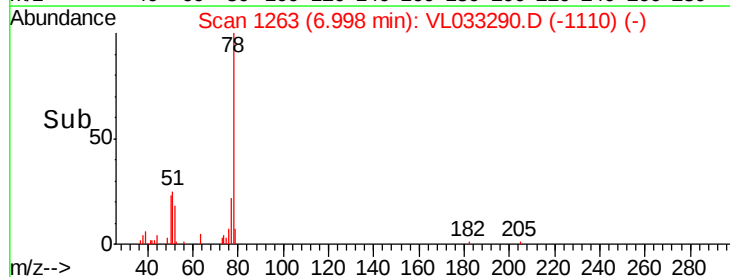
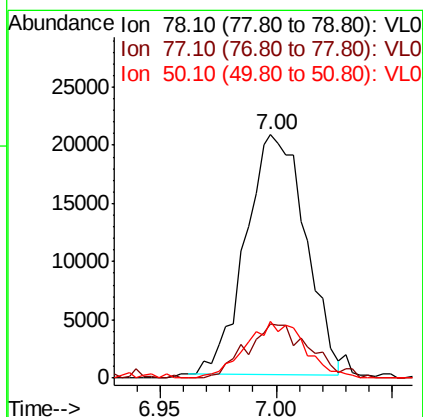
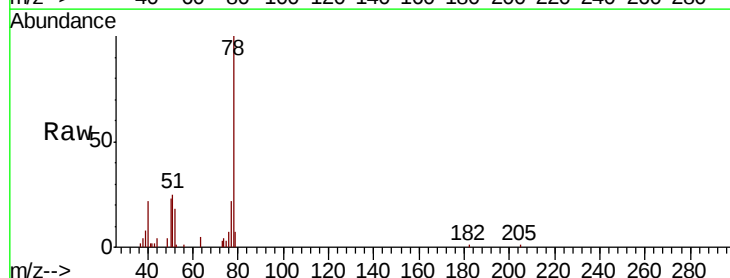
Manual Integrations  
APPROVED

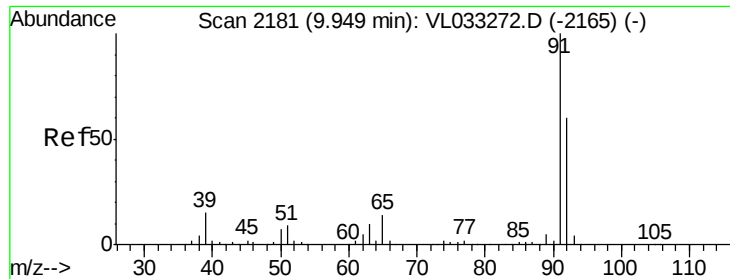
MMDadoda  
3/14/2019 5:06:15 AM



#36  
Benzene  
Concen: 0.229 ppbv  
RT: 7.00 min Scan# 1263  
Delta R.T. -0.01 min  
Lab File: VL033290.D  
Acq: 12 Mar 2019 19:41

Tgt Ion: 78 Resp: 37100  
Ion Ratio Lower Upper  
78 100  
77 22.6 17.7 26.5  
50 23.6 15.7 23.5#





#53

Toluene

Concen: 0.545 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.01 min

Lab File: VL033290.D

Acq: 12 Mar 2019 19:41

Instrument :

MSVOA\_L

ClientSampleId :

ST-OA-1

Tgt Ion: 91 Resp: 101894

Ion Ratio Lower Upper

91 100

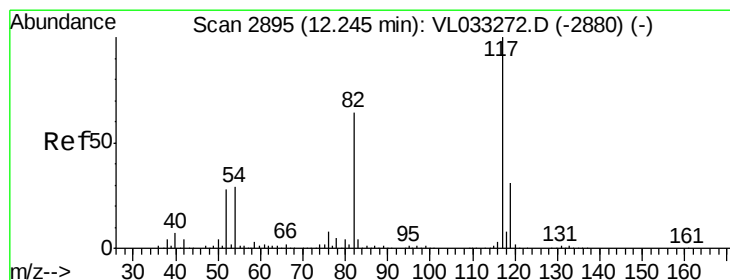
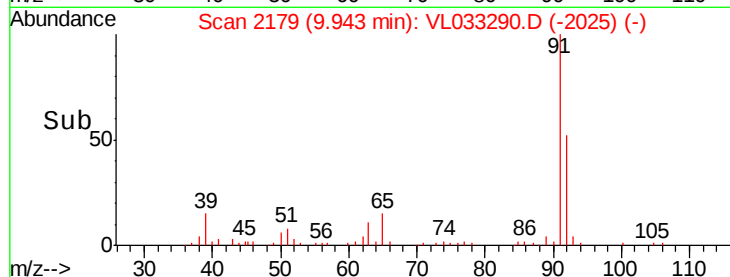
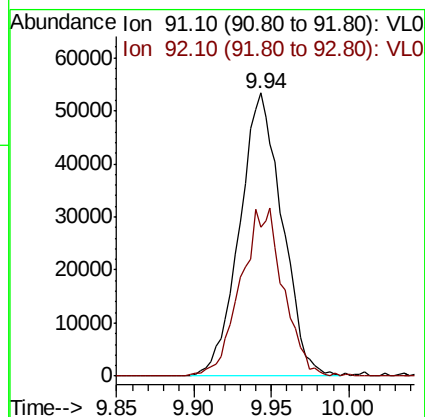
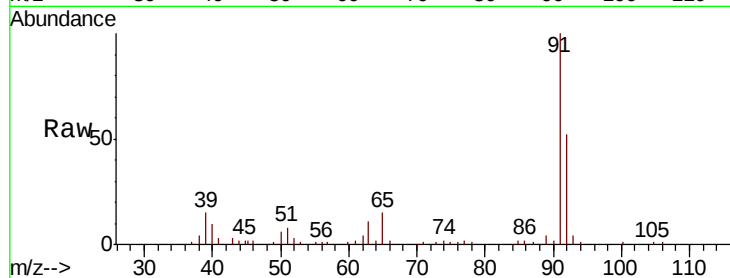
92 59.8 47.8 71.8

Manual Integrations

APPROVED

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3/14/2019 5:06:15 AM



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2893

Delta R.T. -0.01 min

Lab File: VL033290.D

Acq: 12 Mar 2019 19:41

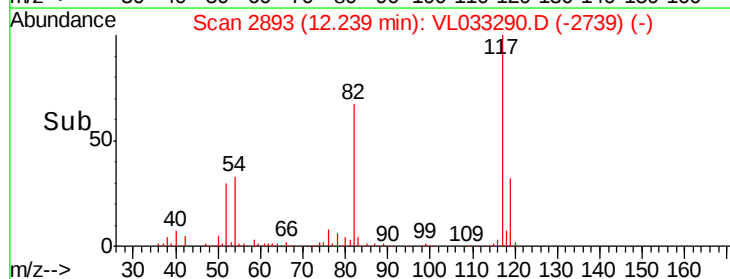
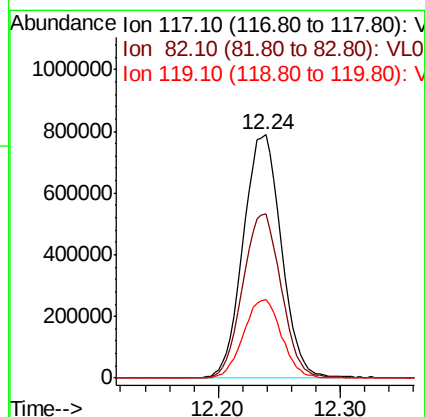
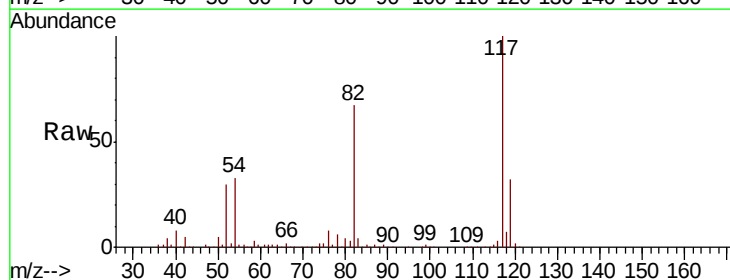
Tgt Ion: 117 Resp: 1702182

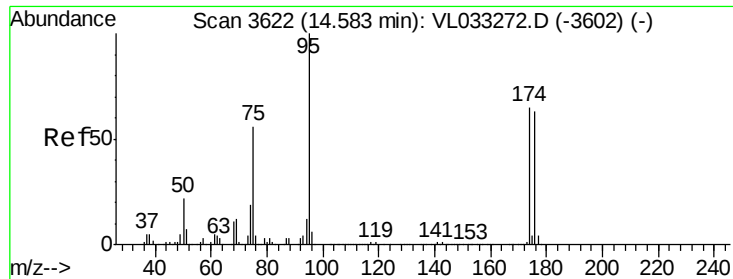
Ion Ratio Lower Upper

117 100

82 68.8 51.1 76.7

119 32.3 43.6 65.4#





#68  
 1-Bromo-4-Fluorobenzene  
 Concen: 10.324 ppbv  
 RT: 14.57 min Scan# 3619  
 Delta R.T. -0.01 min  
 Lab File: VL033290.D  
 Acq: 12 Mar 2019 19:41

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ST-OA-1

Tgt Ion: 95 Resp: 1357140  
 Ion Ratio Lower Upper  
 95 100  
 174 64.0 51.7 77.5  
 175 4.5 3.7 5.5

Manual Integrations  
 APPROVED

MMDadoda  
 3/14/2019 5:06:15 AM

