

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031020\  
 Data File : VL034873.D  
 Acq On : 10 Mar 2020 19:38  
 Operator : SY/AP  
 Sample : L1861-03  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 NS-1

Manual Integrations  
 APPROVED

MMDadoda  
 3/11/2020 3:17:36 PM

Quant Time: Mar 11 07:29:35 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL030920AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Mar 0  
 QLast Update : Mon Mar 09 16:42:53 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 875336   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.18  | 114  | 1935687  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.11 | 117  | 1945589  | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 68) 1-Bromo-4-Fluorobenzene | 14.45  | 95    | 1598971  | 10.54    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 105.40% |

| Target Compounds           | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane | 3.01  | 85   | 72399    | 0.604  | ppbv   | 90     |
| 3) Chlorodifluoromethane   | 2.95  | 51   | 27862m   | 0.285  | ppbv   |        |
| 4) Chloromethane           | 3.10  | 50   | 31128    | 0.563  | ppbv   | 95     |
| 9) Propene                 | 2.97  | 41   | 150474   | 3.223  | ppbv   | 93     |
| 10) Heptane                | 8.13  | 43   | 44561    | 0.388  | ppbv   | 98     |
| 11) Trichlorofluoromethane | 3.92  | 101  | 31876    | 0.250  | ppbv   | 84     |
| 13) Ethanol                | 3.58  | 45   | 254869   | 17.957 | ppbv   | 93     |
| 15) Acetone                | 3.82  | 43   | 1821518  | 16.055 | ppbv   | 100    |
| 20) Methylene Chloride     | 4.32  | 84   | 130481   | 3.638  | ppbv   | 97     |
| 26) Hexane                 | 5.68  | 57   | 69352    | 0.797  | ppbv # | 41     |
| 34) 2-Butanone             | 5.24  | 43   | 26719    | 0.208  | ppbv   | 94     |
| 36) Benzene                | 6.90  | 78   | 27368    | 0.159  | ppbv   | 98     |
| 53) Toluene                | 9.83  | 91   | 668956   | 3.357  | ppbv   | 99     |
| 74) 1,2,4-Trimethylbenzene | 16.80 | 105  | 45035    | 0.183  | ppbv # | 83     |

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

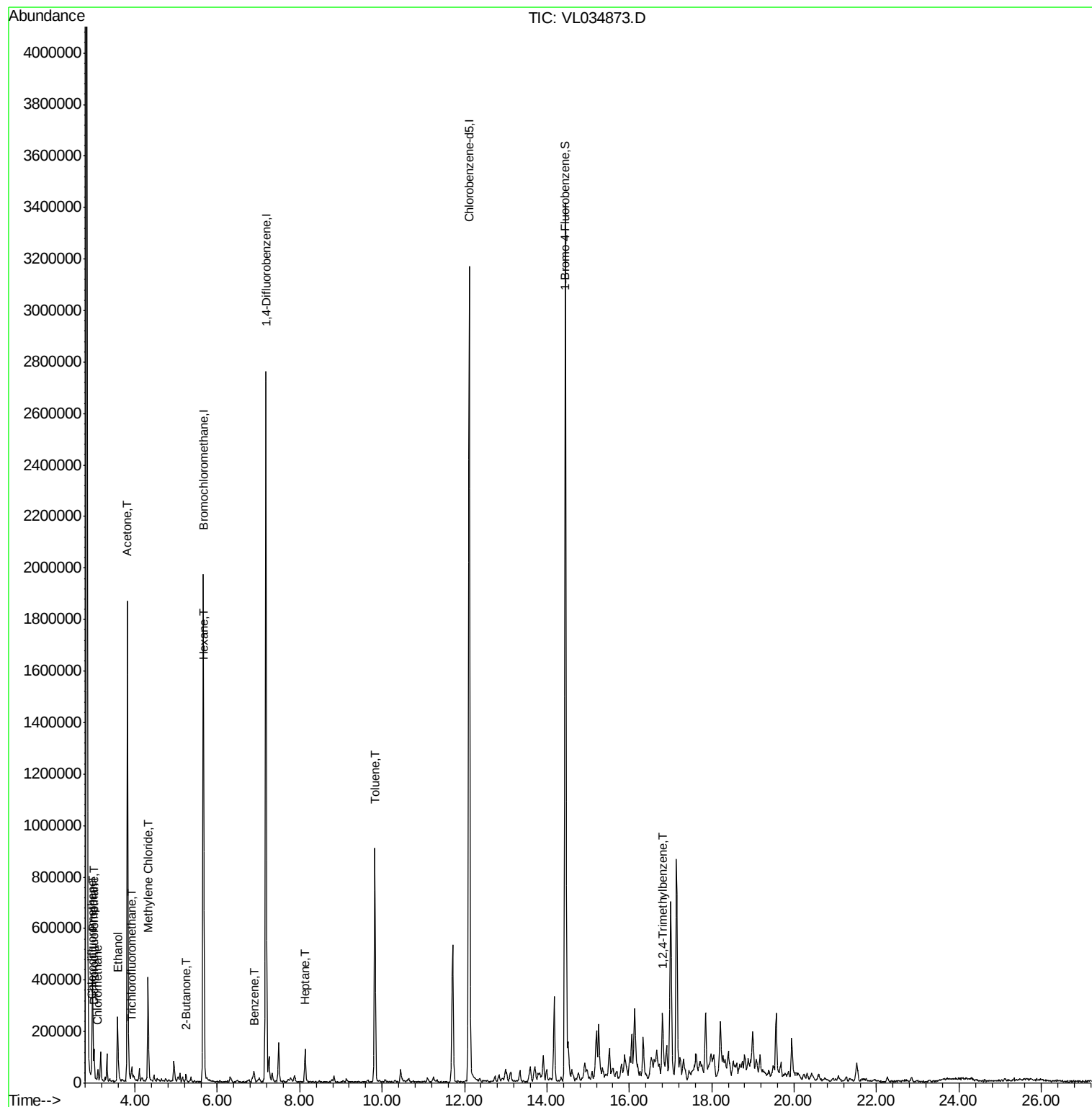
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL031020\  
Data File : VL034873.D  
Acq On : 10 Mar 2020 19:38  
Operator : SY/AP  
Sample : L1861-03  
Misc : 400ml/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

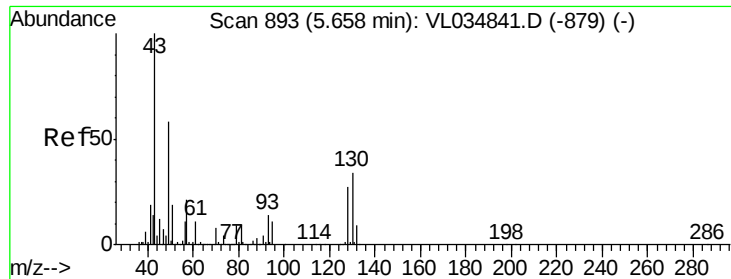
Instrument :  
MSVOA\_L  
ClientSampleId :  
NS-1

Manual Integrations  
APPROVED

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3/11/2020 3:17:36 PM

Quant Time: Mar 11 07:29:35 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL030920AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Mon Mar  
QLast Update : Mon Mar 09 16:42:53 2020  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. 0.00 min

Lab File: VL034873.D

Acq: 10 Mar 2020 19:38

Instrument :

MSVOA\_L

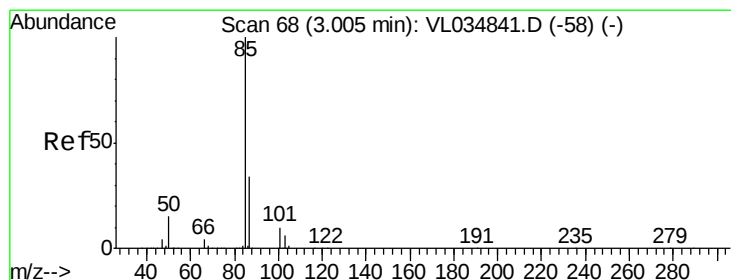
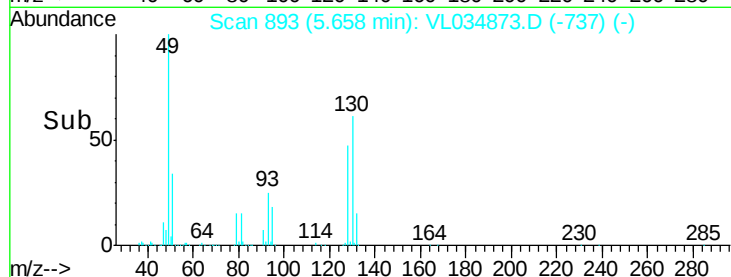
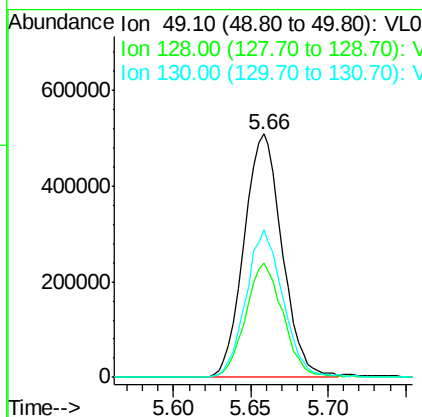
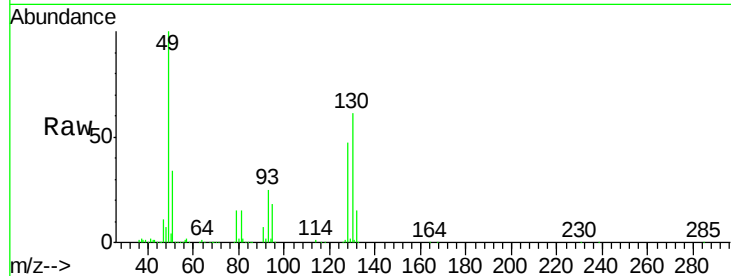
ClientSampled :

NS-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 49      | 100   |       |       |
| 128     | 46.3  | 23.4  | 70.3  |
| 130     | 59.6  | 30.0  | 90.0  |

Manual Integrations  
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#2

Dichlorodifluoromethane

Concen: 0.604 ppbv

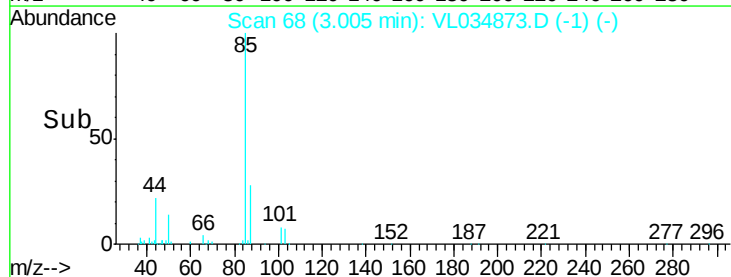
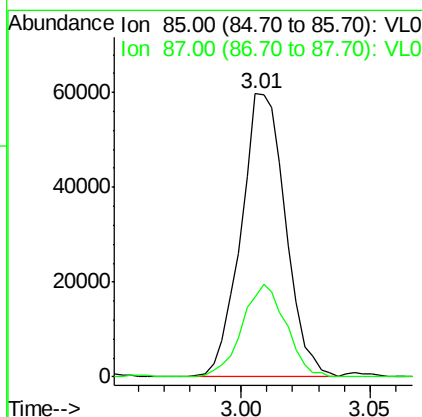
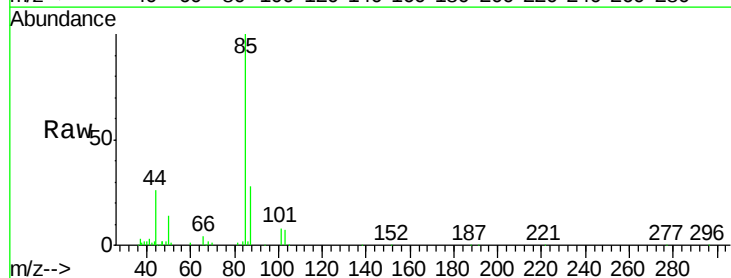
RT: 3.01 min Scan# 68

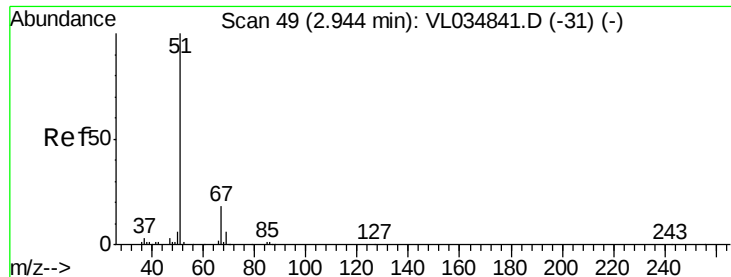
Delta R.T. 0.00 min

Lab File: VL034873.D

Acq: 10 Mar 2020 19:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 85      | 100   |       |       |
| 87      | 28.2  | 26.9  | 40.3  |





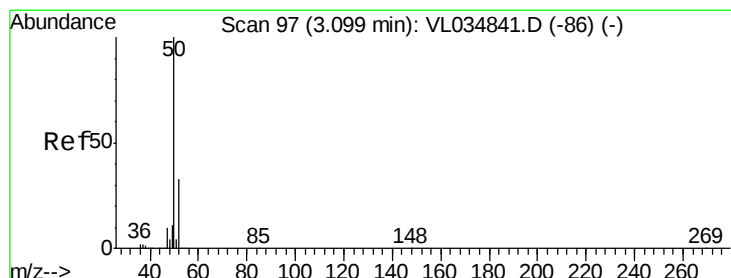
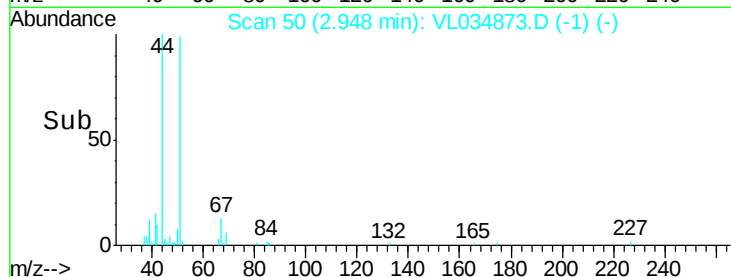
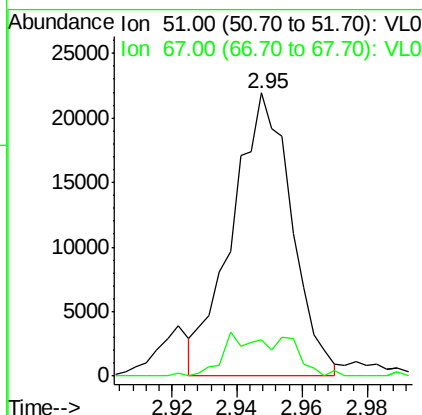
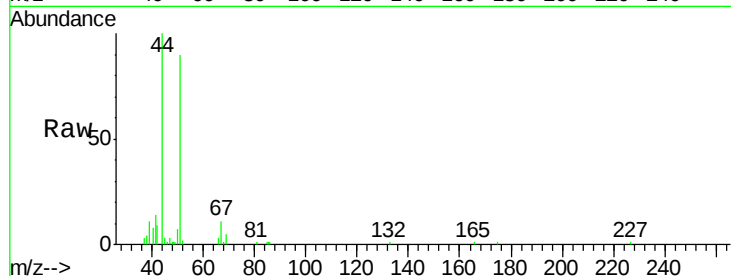
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Chlorodifluoromethane  
Concen: 0.285 ppbv  
RT: 2.95 min Scan# 50  
Delta R.T. 0.00 min  
Lab File: VL034873.D  
Acq: 10 Mar 2020 19:38

Instrument :  
MSVOA\_L  
ClientSampleId :  
NS-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 51      | 100   |       |       |
| 67      | 16.2  | 14.3  | 21.5  |

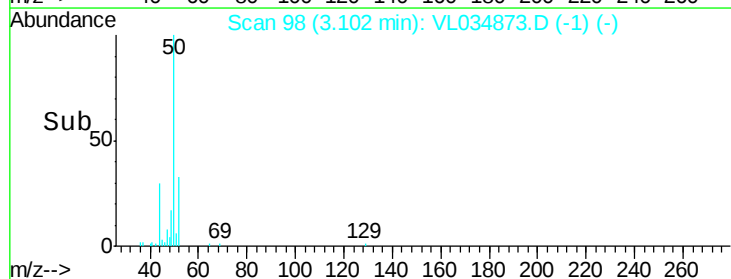
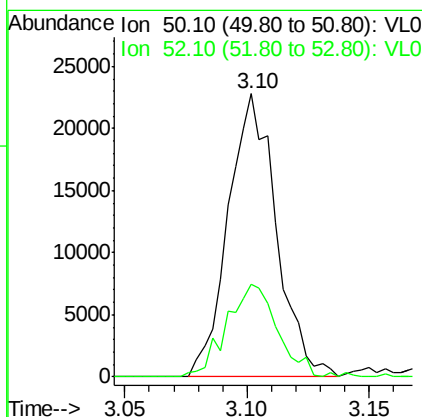
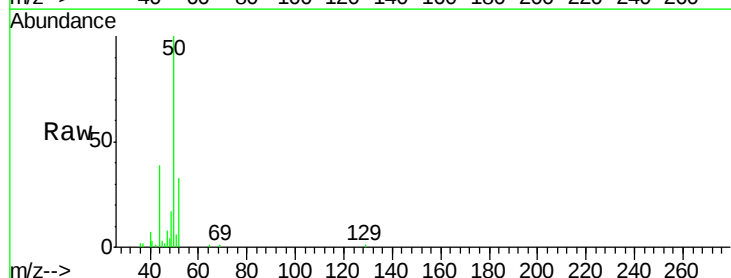
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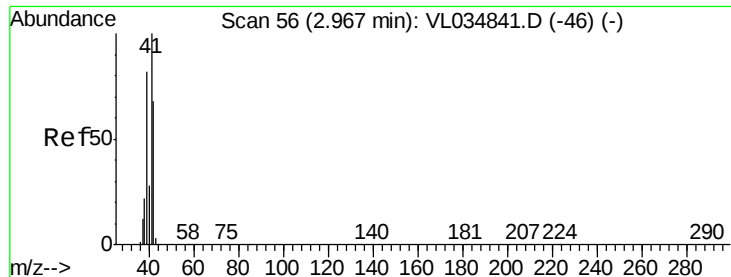
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#4  
Chloromethane  
Concen: 0.563 ppbv  
RT: 3.10 min Scan# 98  
Delta R.T. 0.00 min  
Lab File: VL034873.D  
Acq: 10 Mar 2020 19:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 50      | 100   |       |       |
| 52      | 30.8  | 26.8  | 40.2  |





#9

Propene

Concen: 3.223 ppbv

RT: 2.97 min Scan# 57

Delta R.T. 0.00 min

Lab File: VL034873.D

Acq: 10 Mar 2020 19:38

Instrument :

MSVOA\_L

ClientSampled :

NS-1

Tot Ion: 41 Resp: 150474

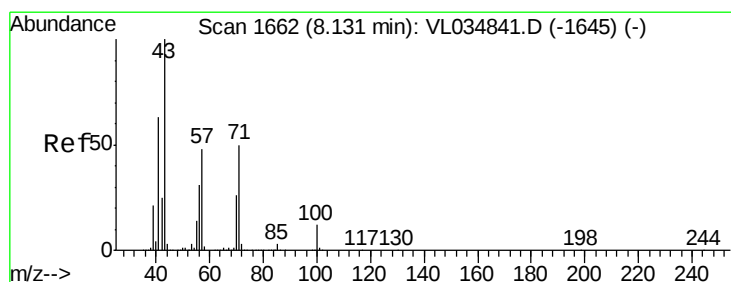
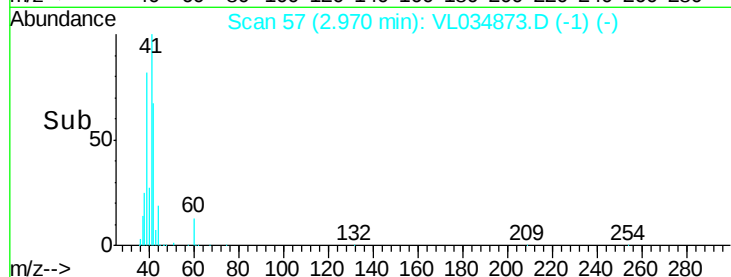
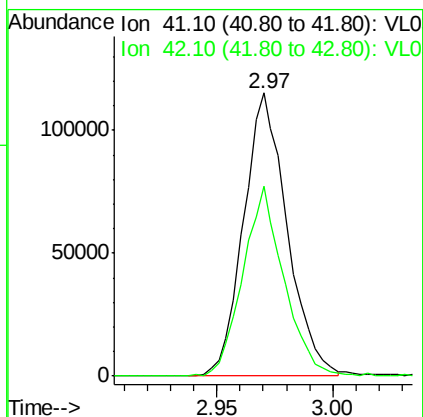
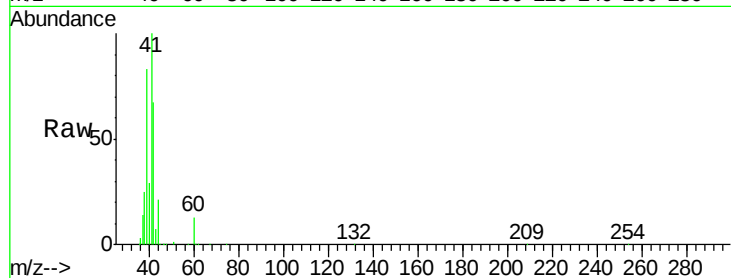
Ion Ratio Lower Upper

41 100

42 63.6 55.2 82.8

Manual Integrations  
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3/11/2020 3:17:36 PM



#10

Heptane

Concen: 0.388 ppbv

RT: 8.13 min Scan# 1661

Delta R.T. -0.00 min

Lab File: VL034873.D

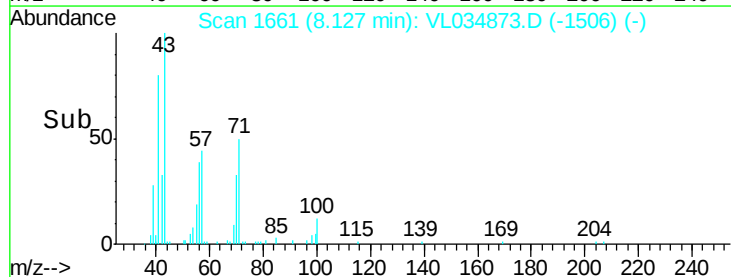
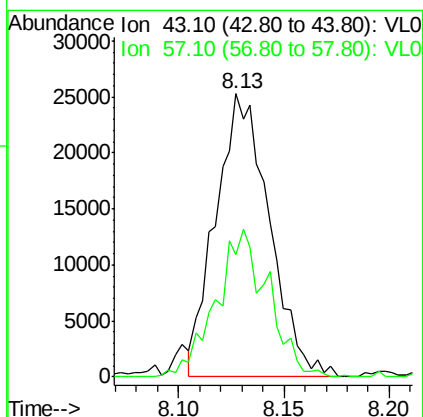
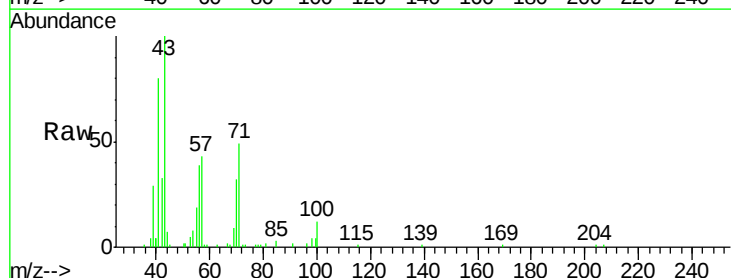
Acq: 10 Mar 2020 19:38

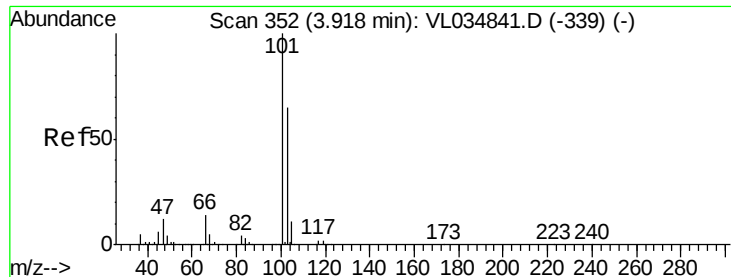
Tgt Ion: 43 Resp: 44561

Ion Ratio Lower Upper

43 100

57 51.0 39.7 59.5





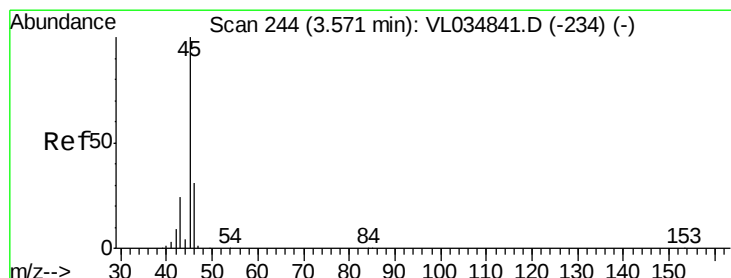
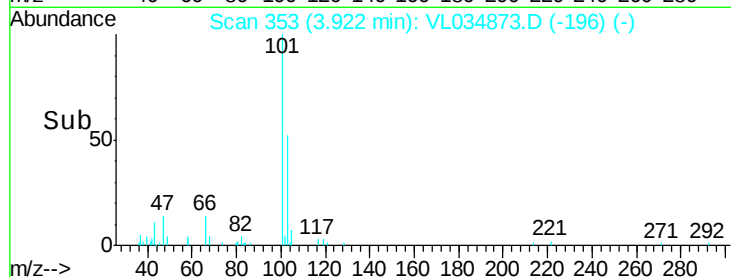
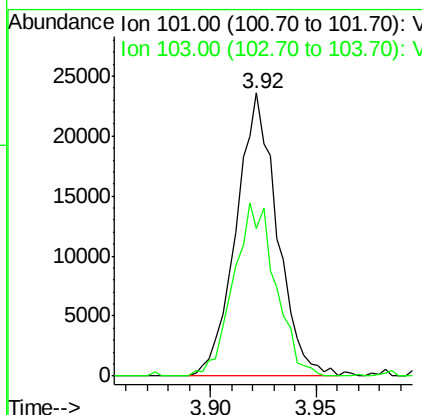
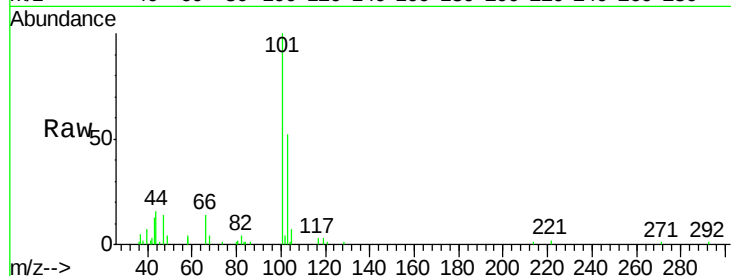
#11  
 Trichlorofluoromethane  
 Concen: 0.250 ppbv  
 RT: 3.92 min Scan# 353  
 Delta R.T. 0.00 min  
 Lab File: VL034873.D  
 Acq: 10 Mar 2020 19:38

Instrument :  
 MSVOA\_L  
 ClientSampled :  
 NS-1

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 101     | 100   |       |       |
| 103     | 52.2  | 51.8  | 77.8  |

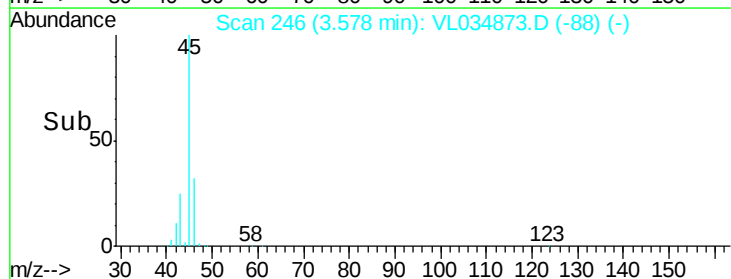
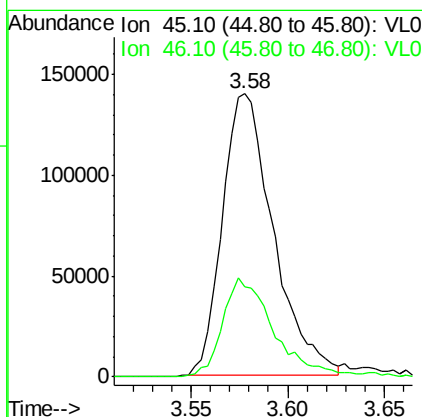
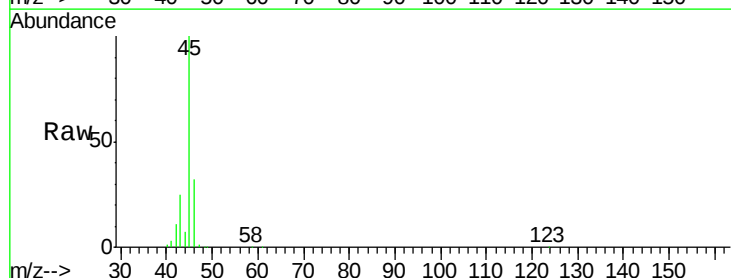
Manual Integrations  
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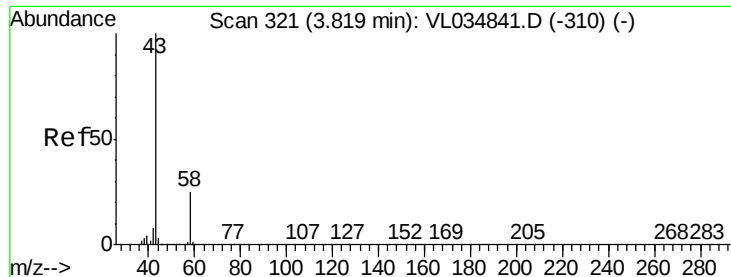
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 3/11/2020 3:17:36 PM



#13  
 Ethanol  
 Concen: 17.957 ppbv  
 RT: 3.58 min Scan# 246  
 Delta R.T. 0.01 min  
 Lab File: VL034873.D  
 Acq: 10 Mar 2020 19:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 45      | 100   |       |       |
| 46      | 35.9  | 16.0  | 64.0  |





#15

Acetone

Concen: 16.055 ppbv

RT: 3.82 min Scan# 320

Delta R.T. -0.00 min

Lab File: VL034873.D

Acq: 10 Mar 2020 19:38

Tot Ion: 43 Resp: 1821518

Ion Ratio Lower Upper

43 100

58 26.3 21.0 31.6

Instrument :

MSVOA\_L

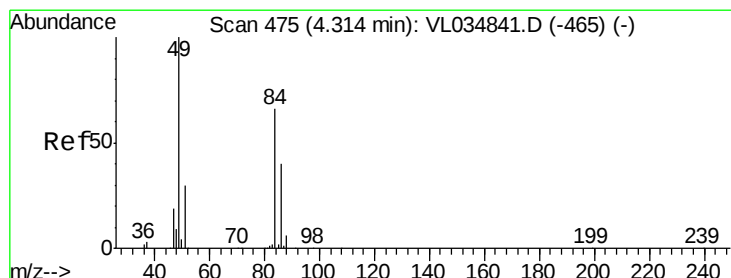
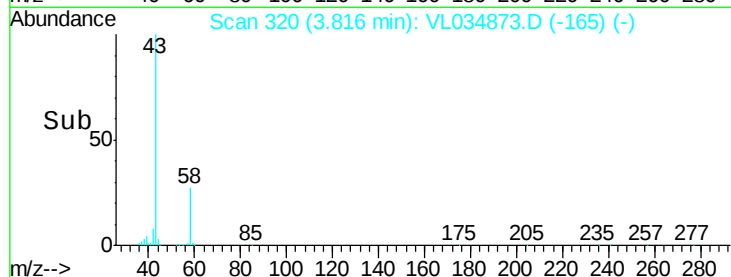
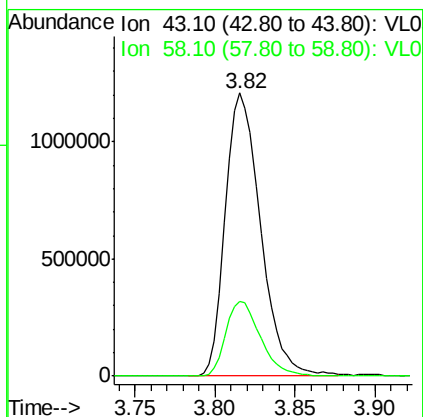
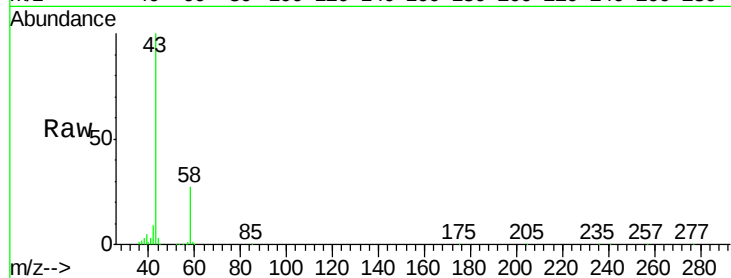
ClientSampleId :

NS-1

Manual Integrations  
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#20

Methylene Chloride

Concen: 3.638 ppbv

RT: 4.32 min Scan# 476

Delta R.T. 0.00 min

Lab File: VL034873.D

Acq: 10 Mar 2020 19:38

Tgt Ion: 84 Resp: 130481

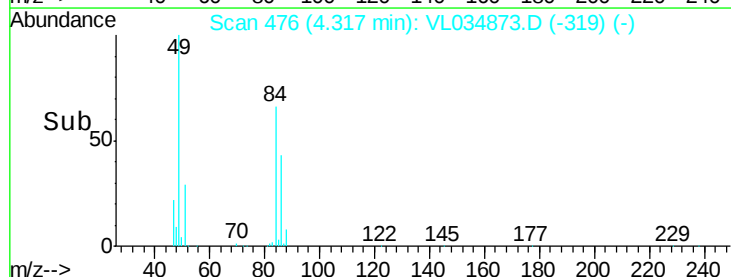
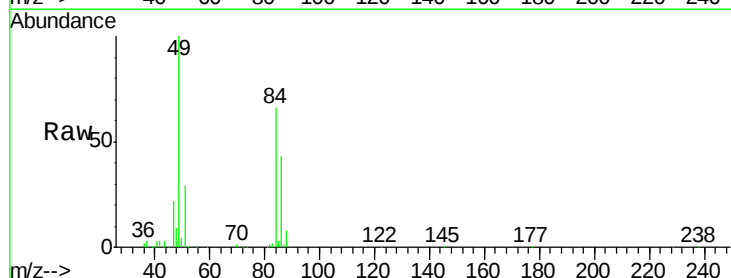
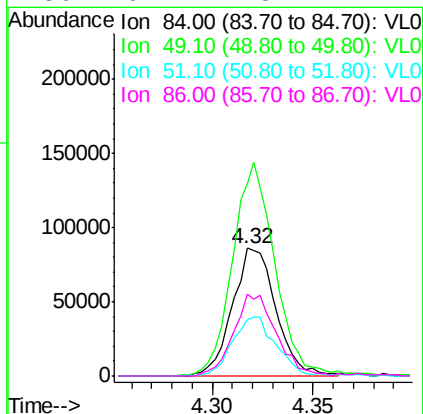
Ion Ratio Lower Upper

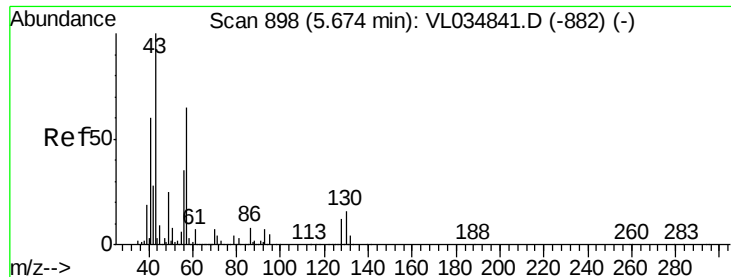
84 100

49 150.0 121.5 182.3

51 43.5 36.6 55.0

86 64.4 48.2 72.2





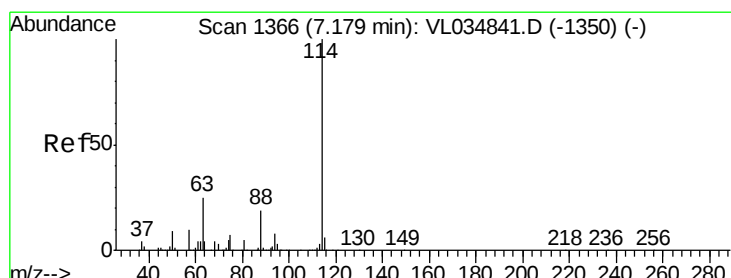
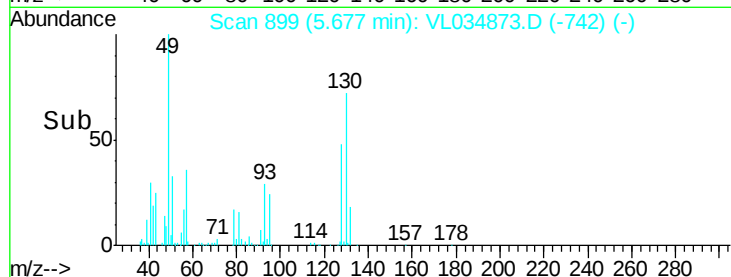
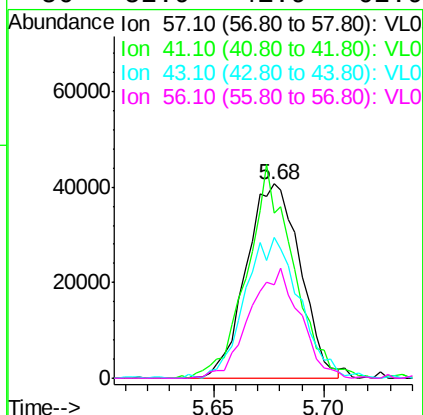
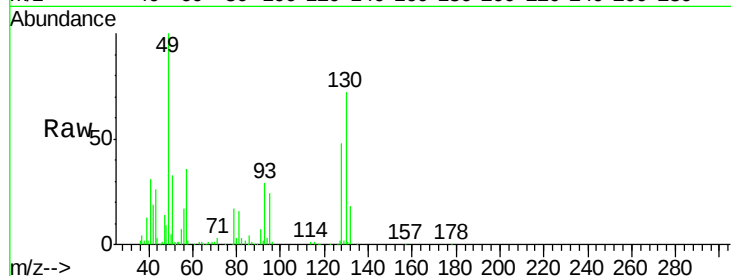
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Hexane  
Concen: 0.797 ppbv  
RT: 5.68 min Scan# 899  
Delta R.T. 0.00 min  
Lab File: VL034873.D  
Acq: 10 Mar 2020 19:38

Instrument :  
MSVOA\_L  
ClientSampleId :  
NS-1

| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 57      | 100   |       |        |
| 41      | 95.0  | 72.6  | 109.0  |
| 43      | 74.2  | 183.8 | 275.6# |
| 56      | 52.9  | 41.9  | 62.9   |

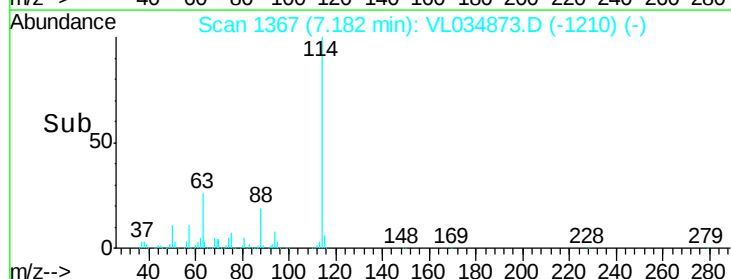
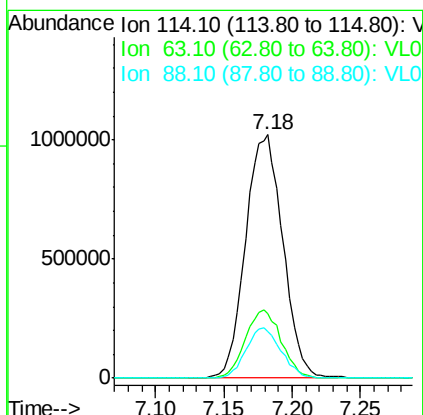
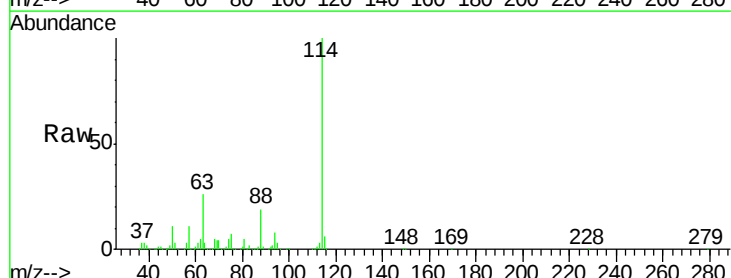
Manual Integrations  
APPROVED

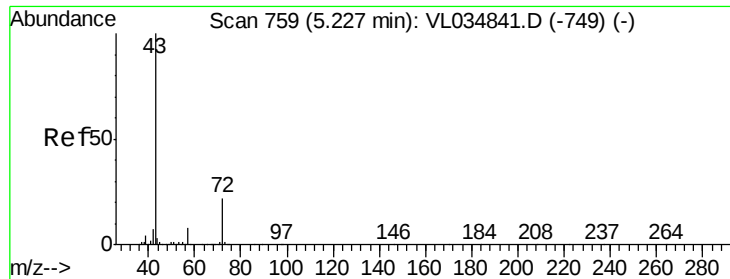
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#33  
1,4-Difluorobenzene  
Concen: 10.000 ppbv  
RT: 7.18 min Scan# 1367  
Delta R.T. 0.00 min  
Lab File: VL034873.D  
Acq: 10 Mar 2020 19:38

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 27.2  | 20.6  | 31.0  |
| 88      | 19.5  | 15.0  | 22.6  |





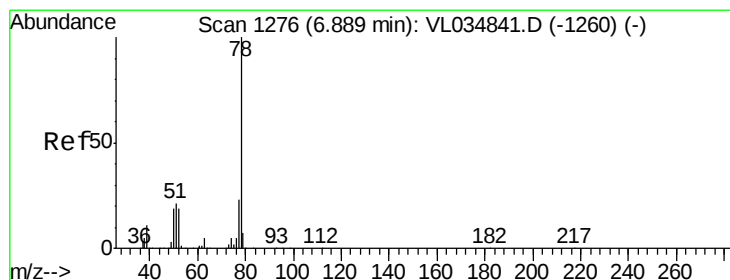
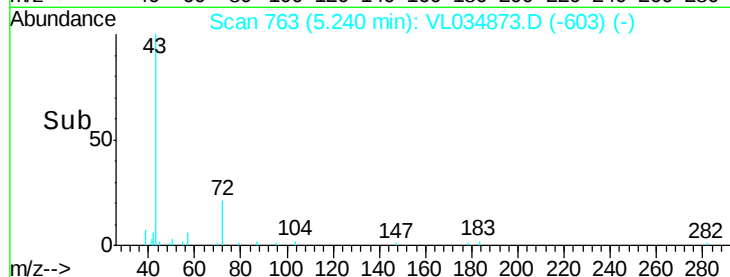
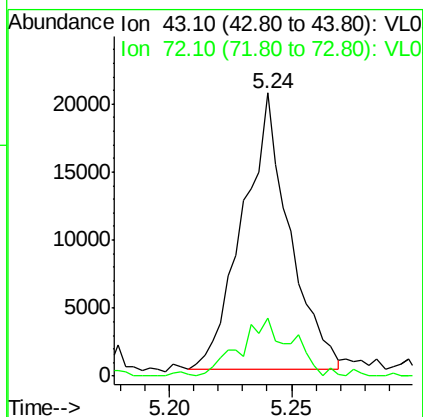
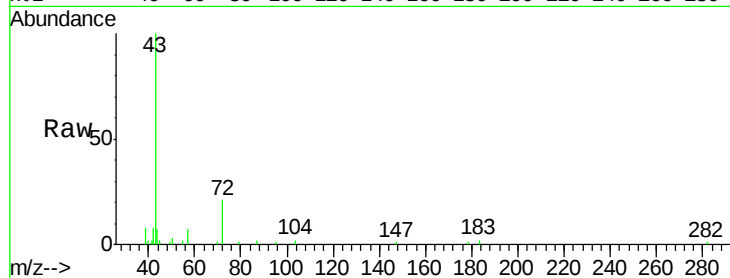
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2-Butanone  
Concen: 0.208 ppbv  
RT: 5.24 min Scan# 763  
Delta R.T. 0.01 min  
Lab File: VL034873.D  
Acq: 10 Mar 2020 19:38

Instrument :  
MSVOA\_L  
ClientSampleId :  
NS-1

Tot Ion: 43 Resp: 26719  
Ion Ratio Lower Upper  
43 100  
72 24.8 17.6 26.4

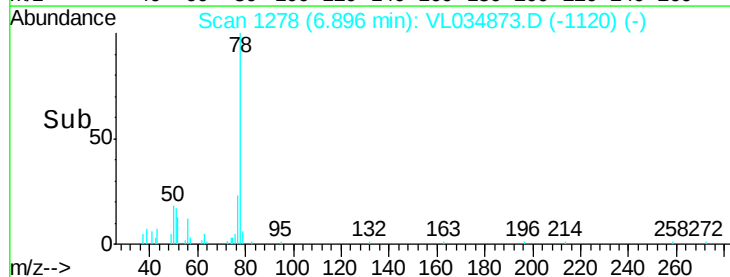
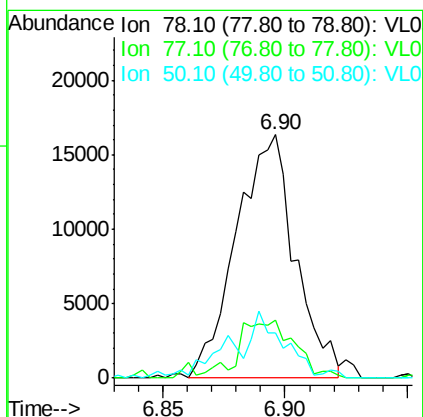
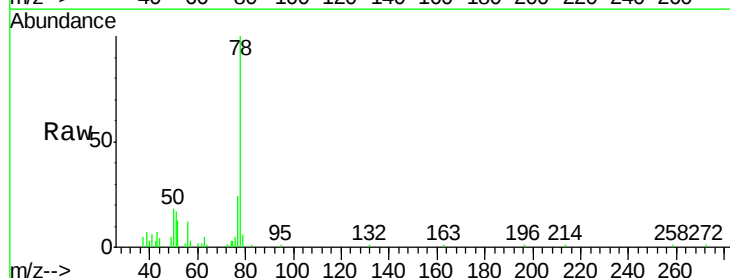
Manual Integrations  
APPROVED

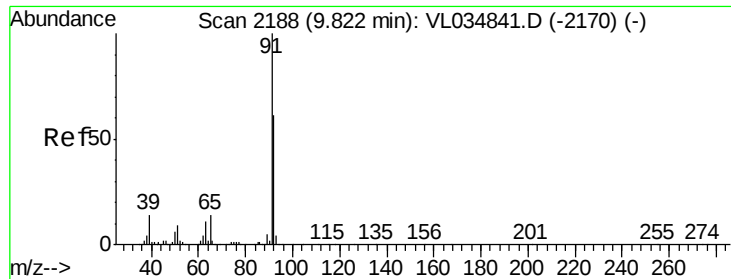
MMDadoda  
3/11/2020 3:17:36 PM



#36  
Benzene  
Concen: 0.159 ppbv  
RT: 6.90 min Scan# 1278  
Delta R.T. 0.01 min  
Lab File: VL034873.D  
Acq: 10 Mar 2020 19:38

Tgt Ion: 78 Resp: 27368  
Ion Ratio Lower Upper  
78 100  
77 22.6 18.2 27.2  
50 17.0 15.2 22.8





#53

Toluene

Concen: 3.357 ppbv

RT: 9.83 min Scan# 2189

Delta R.T. 0.00 min

Lab File: VL034873.D

Acq: 10 Mar 2020 19:38

Instrument :

MSVOA\_L

ClientSampleId :

NS-1

Tot Ion: 91 Resp: 668956

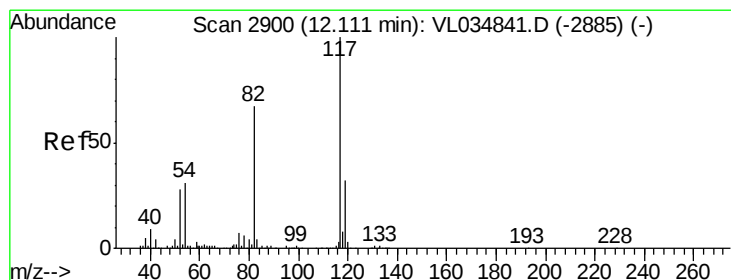
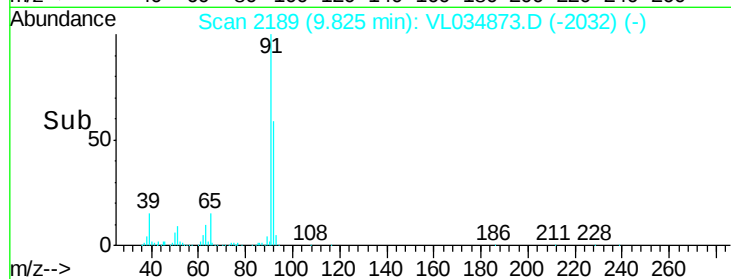
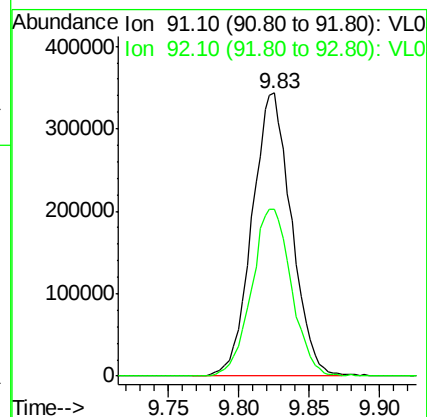
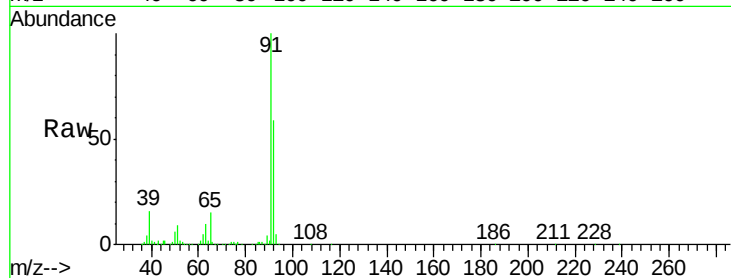
Ion Ratio Lower Upper

91 100

92 59.9 48.6 72.8

Manual Integrations  
APPROVED

MMDadoda  
3/11/2020 3:17:36 PM



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.11 min Scan# 2900

Delta R.T. 0.00 min

Lab File: VL034873.D

Acq: 10 Mar 2020 19:38

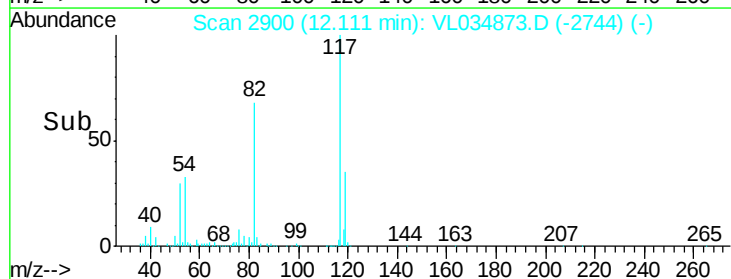
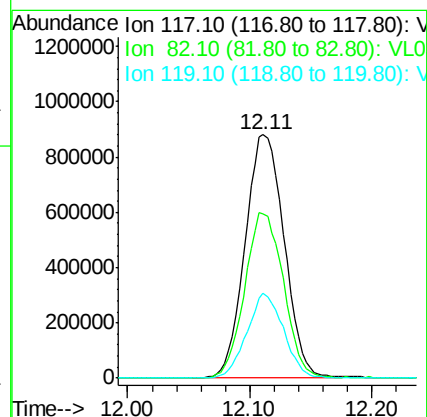
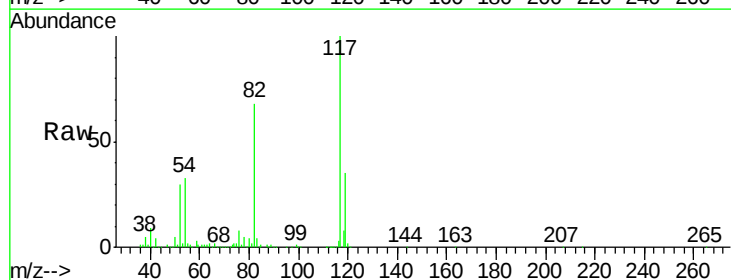
Tgt Ion: 117 Resp: 1945589

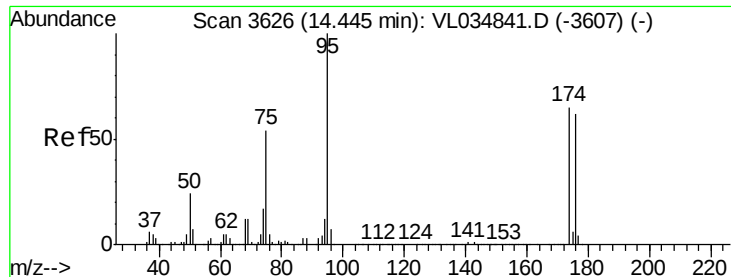
Ion Ratio Lower Upper

117 100

82 67.5 51.1 76.7

119 32.6 27.3 40.9





#68

1-Bromo-4-Fluorobenzene

Concen: 10.538 ppbv

RT: 14.45 min Scan# 3627

Delta R.T. 0.00 min

Lab File: VL034873.D

Acq: 10 Mar 2020 19:38

Instrument :

MSVOA\_L

ClientSampled :

NS-1

Tot Ion: 95 Resp: 1598971

Ion Ratio Lower Upper

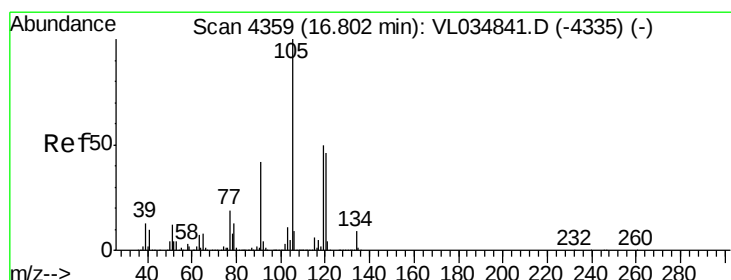
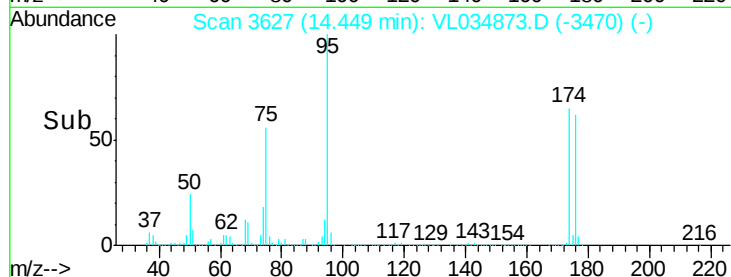
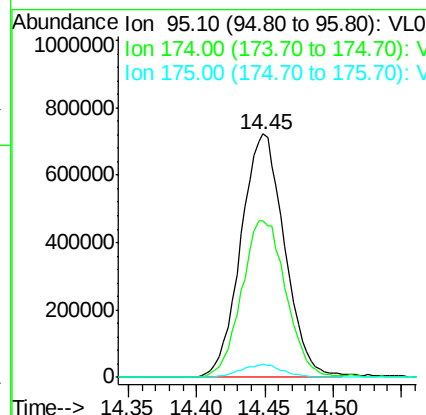
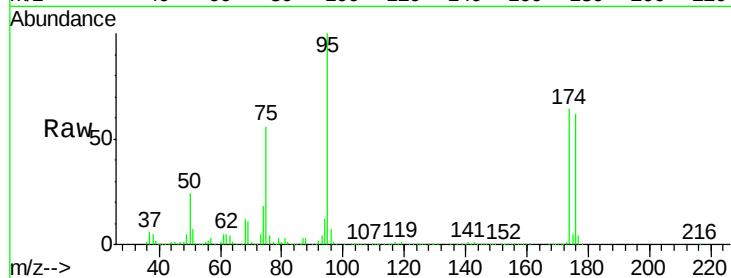
95 100

174 66.4 55.2 82.8

175 5.2 4.3 6.5

Manual Integrations  
APPROVED

MMDadoda  
3/11/2020 3:17:36 PM



#74

1,2,4-Trimethylbenzene

Concen: 0.183 ppbv

RT: 16.80 min Scan# 4359

Delta R.T. 0.00 min

Lab File: VL034873.D

Acq: 10 Mar 2020 19:38

Tgt Ion: 105 Resp: 45035

Ion Ratio Lower Upper

105 100

120 42.6 37.0 55.4

91 18.6 33.8 50.6#

77 18.6 15.4 23.0

