

Data Path : Y:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081621\  
 Data File : VL037480.D  
 Acq On : 17 Aug 2021 3:11  
 Operator : SY/AP  
 Sample : M2940-13 0.1 LOD  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

Manual Integrations  
 APPROVED

MMDadoda  
 8/19/2021 5:59:50 PM

Quant Time: Aug 17 11:51:11 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Aug 17 2021  
 QLast Update : Tue Aug 17 02:13:47 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.65  | 49   | 1345166  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.16  | 114  | 4043899  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.07 | 117  | 3449135  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.40  | 95    | 2483550  | 10.14    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.40% |

| Target Compounds               | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.04 | 85   | 33038    | 0.153 | ppbv   | 90     |
| 3) Chlorodifluoromethane       | 2.99 | 51   | 36779    | 0.143 | ppbv   | 100    |
| 4) Chloromethane               | 3.14 | 50   | 12801m   | 0.139 | ppbv   |        |
| 5) Vinyl Chloride              | 3.25 | 62   | 9803m    | 0.104 | ppbv   |        |
| 6) Bromomethane                | 3.46 | 94   | 9163m    | 0.177 | ppbv   |        |
| 7) Chloroethane                | 3.55 | 64   | 3922m    | 0.122 | ppbv   |        |
| 8) Dichlorotetrafluoroethane   | 3.18 | 85   | 28900    | 0.130 | ppbv   | 97     |
| 9) Propene                     | 3.00 | 41   | 20122m   | 0.218 | ppbv   |        |
| 10) Heptane                    | 8.11 | 43   | 19429m   | 0.092 | ppbv   |        |
| 11) Trichlorofluoromethane     | 3.94 | 101  | 23732    | 0.117 | ppbv # | 78     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.47 | 101  | 18018m   | 0.121 | ppbv   |        |
| 13) Ethanol                    | 3.62 | 45   | 1568m    | 0.175 | ppbv   |        |
| 14) Bromoethene                | 3.73 | 108  | 8423m    | 0.125 | ppbv   |        |
| 15) Acetone                    | 3.87 | 43   | 43400m   | 0.317 | ppbv   |        |
| 16) 1,3-Butadiene              | 3.31 | 39   | 11848m   | 0.135 | ppbv   |        |
| 17) tert-Butyl alcohol         | 4.33 | 59   | 16836m   | 0.135 | ppbv   |        |
| 18) 1,1-Dichloroethene         | 4.28 | 96   | 10039m   | 0.149 | ppbv   |        |
| 19) Isopropyl Alcohol          | 4.02 | 45   | 12004m   | 0.153 | ppbv   |        |
| 20) Methylene Chloride         | 4.33 | 84   | 15279    | 0.223 | ppbv # | 78     |
| 21) Allyl Chloride             | 4.40 | 41   | 14313m   | 0.129 | ppbv   |        |
| 22) trans-1,2-Dichloroethene   | 4.88 | 96   | 7014m    | 0.104 | ppbv   |        |
| 23) Vinyl Acetate              | 5.07 | 43   | 32981m   | 0.163 | ppbv   |        |
| 24) 1,1-Dichloroethane         | 5.00 | 63   | 23685m   | 0.162 | ppbv   |        |
| 25) Ethyl Acetate              | 5.67 | 43   | 37103m   | 0.107 | ppbv   |        |
| 26) Hexane                     | 5.67 | 57   | 17248    | 0.102 | ppbv # | 89     |
| 27) Carbon Disulfide           | 4.53 | 76   | 13997m   | 0.092 | ppbv   |        |
| 28) Methyl tert-Butyl Ether    | 5.04 | 73   | 19649m   | 0.120 | ppbv   |        |
| 29) Chloroform                 | 5.74 | 83   | 32712m   | 0.136 | ppbv   |        |
| 30) Cyclohexane                | 7.13 | 84   | 25423m   | 0.180 | ppbv   |        |
| 31) cis-1,2-Dichloroethene     | 5.54 | 61   | 16448m   | 0.107 | ppbv   |        |
| 32) 1,1,1-Trichloroethane      | 6.50 | 97   | 26546m   | 0.112 | ppbv   |        |
| 34) 2-Butanone                 | 5.27 | 43   | 28111m   | 0.170 | ppbv   |        |
| 35) Carbon Tetrachloride       | 7.00 | 117  | 26475m   | 0.111 | ppbv   |        |
| 36) Benzene                    | 6.87 | 78   | 34267m   | 0.101 | ppbv   |        |
| 37) 1,2-Dichloroethane         | 6.29 | 62   | 20097m   | 0.119 | ppbv   |        |
| 38) Trichloroethene            | 7.82 | 130  | 16935m   | 0.121 | ppbv   |        |
| 39) 1,2-Dichloropropane        | 7.60 | 63   | 19863m   | 0.152 | ppbv   |        |
| 40) 1,4-Dioxane                | 7.90 | 88   | 4383m    | 0.137 | ppbv   |        |
| 41) Tetrahydrofuran            | 6.07 | 42   | 7606m    | 0.096 | ppbv   |        |
| 42) Bromodichloromethane       | 7.77 | 83   | 24991m   | 0.101 | ppbv   |        |
| 43) Methyl Methacrylate        | 8.01 | 69   | 10244m   | 0.086 | ppbv   |        |

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 ClientSampleId :  
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Manual Integrations  
 APPROVED

MMDadoda  
 8/19/2021 5:59:50 PM

Quant Time: Aug 17 11:51:11 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Aug 17 2021  
 QLast Update : Tue Aug 17 02:13:47 2021  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------------|-------|------|----------|-------|-------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.85  | 57   | 54973m   | 0.096 | ppbv  |          |
| 45) t-1,3-Dichloropropene     | 9.25  | 75   | 6253m    | 0.070 | ppbv  |          |
| 46) cis-1,3-Dichloropropene   | 8.68  | 75   | 8332m    | 0.067 | ppbv  |          |
| 47) 1,1,2-Trichloroethane     | 9.46  | 97   | 15608m   | 0.111 | ppbv  |          |
| 48) Dibromochloromethane      | 10.28 | 129  | 16478m   | 0.081 | ppbv  |          |
| 49) Bromoform                 | 13.02 | 173  | 10239m   | 0.064 | ppbv  |          |
| 50) 4-Methyl-2-Pentanone      | 8.76  | 43   | 19361m   | 0.090 | ppbv  |          |
| 51) 2-Hexanone                | 10.18 | 43   | 7333m    | 0.074 | ppbv  |          |
| 52) Tetrachloroethene         | 11.21 | 164  | 15343m   | 0.110 | ppbv  |          |
| 53) Toluene                   | 9.80  | 91   | 30633m   | 0.079 | ppbv  |          |
| 54) 1,2-Dibromoethane         | 10.60 | 107  | 21531m   | 0.109 | ppbv  |          |
| 56) 1,1,1,2-Tetrachloroethane | 12.10 | 131  | 16100m   | 0.112 | ppbv  |          |
| 57) Chlorobenzene             | 12.13 | 112  | 38330m   | 0.134 | ppbv  |          |
| 58) Ethyl Benzene             | 12.70 | 91   | 39273m   | 0.082 | ppbv  |          |
| 59) m/p-Xylene                | 12.98 | 91   | 66005m   | 0.159 | ppbv  |          |
| 60) o-Xylene                  | 13.67 | 91   | 40240m   | 0.104 | ppbv  |          |
| 61) Styrene                   | 13.52 | 104  | 12107m   | 0.060 | ppbv  |          |
| 62) Isopropylbenzene          | 14.65 | 105  | 56920m   | 0.104 | ppbv  |          |
| 63) 1,1,2,2-Tetrachloroethane | 13.66 | 83   | 34154m   | 0.119 | ppbv  |          |
| 64) n-propylbenzene           | 15.55 | 120  | 12243m   | 0.088 | ppbv  |          |
| 65) tert-Butylbenzene         | 16.73 | 119  | 43489m   | 0.087 | ppbv  |          |
| 66) Benzyl Chloride           | 16.98 | 91   | 2946m    | 0.131 | ppbv  |          |
| 67) sec-Butylbenzene          | 17.28 | 105  | 68648m   | 0.099 | ppbv  |          |
| 69) p-Isopropyltoluene        | 17.64 | 119  | 43801m   | 0.077 | ppbv  |          |
| 70) n-Butylbenzene            | 18.54 | 91   | 39197m   | 0.072 | ppbv  |          |
| 71) 2-Chlorotoluene           | 15.44 | 91   | 35599m   | 0.089 | ppbv  |          |
| 72) 4-Ethyltoluene            | 15.82 | 105  | 37181m   | 0.081 | ppbv  |          |
| 73) 1,3,5-Trimethylbenzene    | 15.98 | 105  | 36961m   | 0.086 | ppbv  |          |
| 74) 1,2,4-Trimethylbenzene    | 16.75 | 105  | 41027m   | 0.090 | ppbv  |          |
| 75) 1,3-Dichlorobenzene       | 16.98 | 146  | 34602m   | 0.126 | ppbv  |          |
| 76) 1,4-Dichlorobenzene       | 17.12 | 146  | 32453m   | 0.117 | ppbv  |          |
| 77) 1,2-Dichlorobenzene       | 17.80 | 146  | 31640m   | 0.117 | ppbv  |          |
| 78) Hexachloro-1,3-Butadiene  | 23.36 | 225  | 29999m   | 0.134 | ppbv  |          |
| 79) Naphthalene               | 22.18 | 128  | 14770m   | 0.048 | ppbv  |          |
| 81) 1,2,4-Trichlorobenzene    | 21.92 | 180  | 14199m   | 0.074 | ppbv  |          |

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

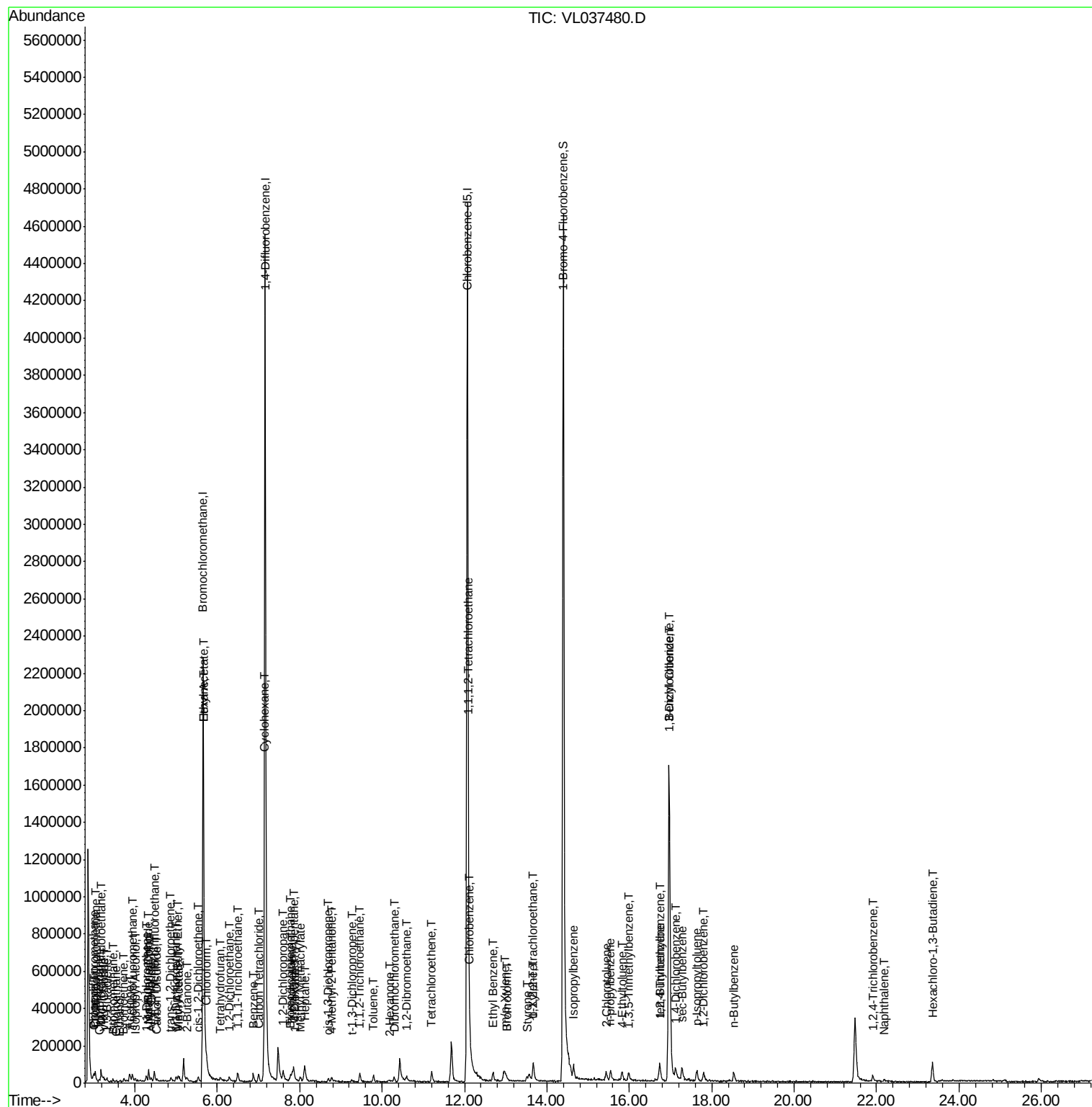
Data Path : Y:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081621\  
Data File : VL037480.D  
Acq On : 17 Aug 2021 3:11  
Operator : SY/AP  
Sample : M2940-13 0.1 LOD  
Misc : 400mL/MSVOA L  
ALS Vial : 1 Sample Multiplier: 1

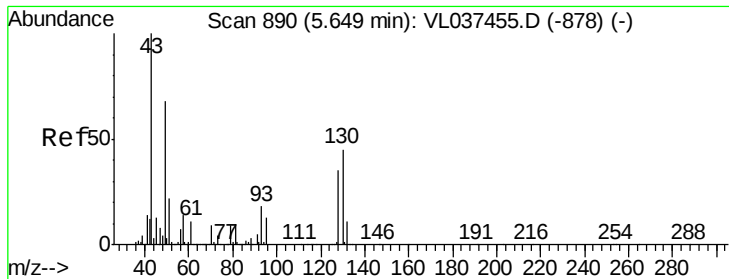
Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

Manual Integrations  
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8/19/2021 5:59:50 PM

Quant Time: Aug 17 11:51:11 2021  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Aug  
QLast Update : Tue Aug 17 02:13:47 2021  
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. 0.01 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

ClientSampleId :

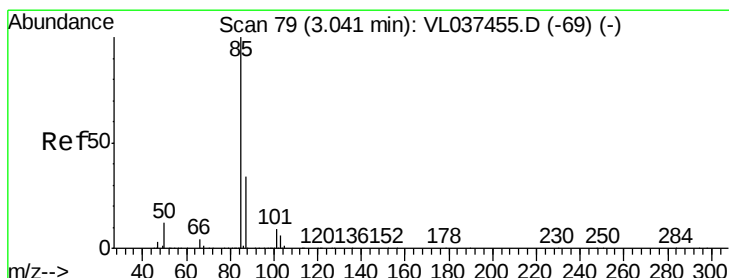
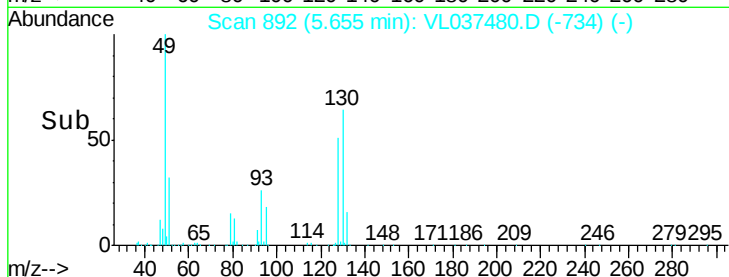
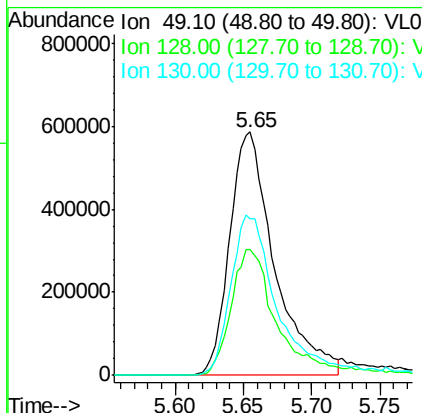
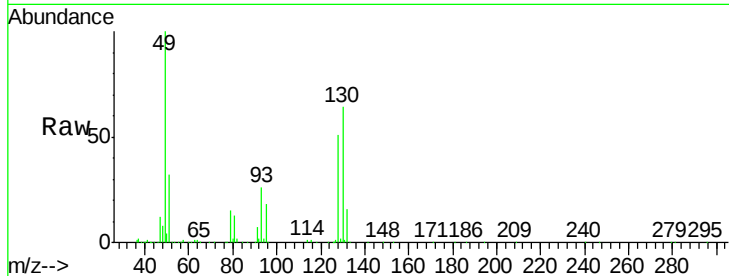
LOD-MDL-AIR-01-QT3-2021

Tot Ion: 49 Resp: 1345166

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 49  | 100   |       |       |
| 128 | 54.6  | 27.5  | 82.4  |
| 130 | 70.2  | 34.0  | 101.8 |

Manual Integrations  
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8/19/2021 5:59:50 PM



#2

Dichlorodifluoromethane

Concen: 0.153 ppbv

RT: 3.04 min Scan# 79

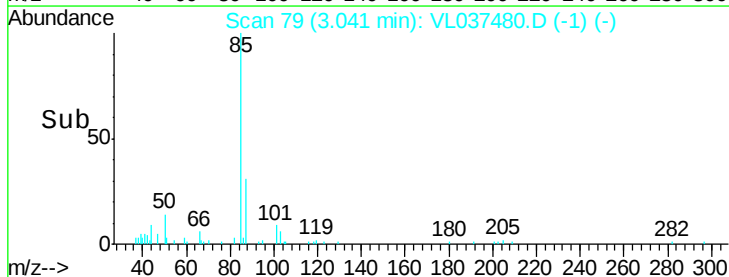
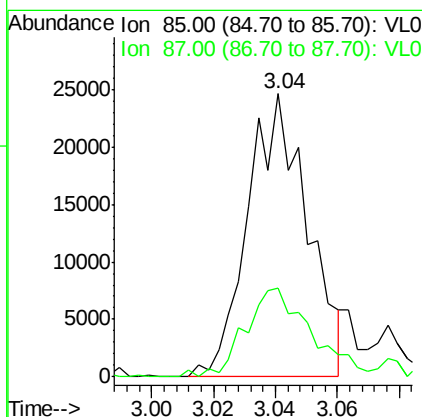
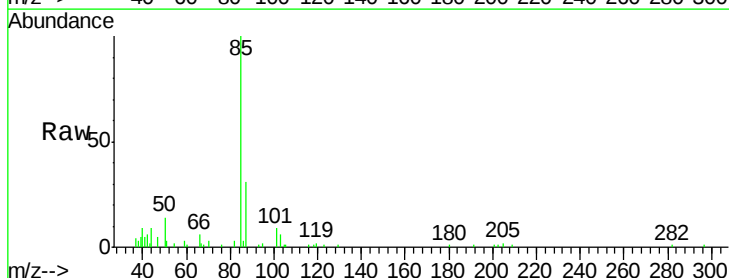
Delta R.T. 0.00 min

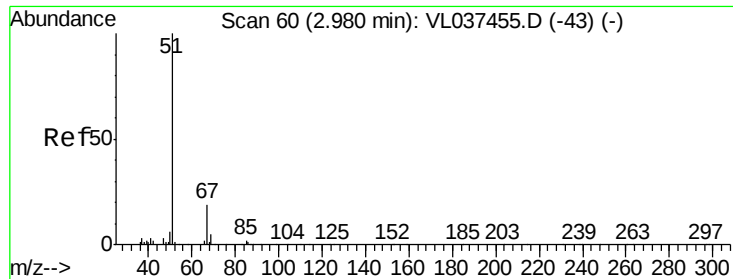
Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Tgt Ion: 85 Resp: 33038

| Ion | Ratio | Lower | Upper |
|-----|-------|-------|-------|
| 85  | 100   |       |       |
| 87  | 28.9  | 27.6  | 41.4  |





#3

Chlorodifluoromethane

Concen: 0.143 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.01 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

Tot Ion: 51 Resp: 36779

Ion Ratio Lower Upper

51 100

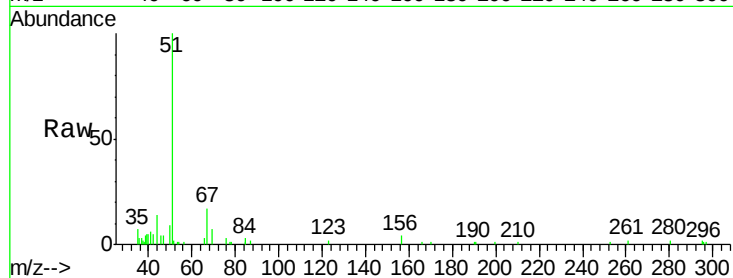
67 17.9 14.2 21.2

Manual Integrations

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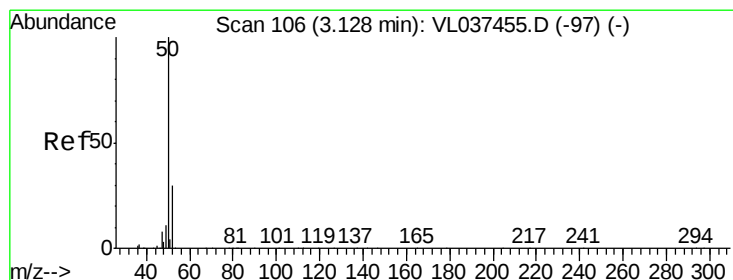
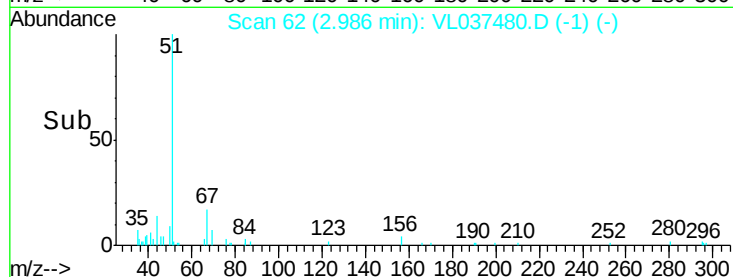
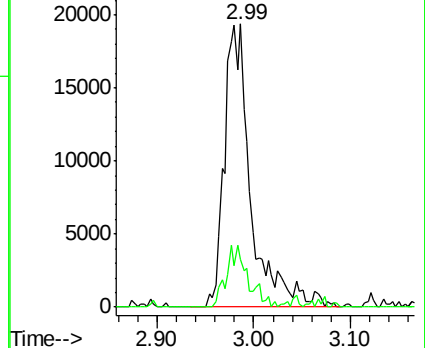
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8/19/2021 5:59:50 PM



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.139 ppbv m

RT: 3.14 min Scan# 109

Delta R.T. 0.01 min

Lab File: VL037480.D

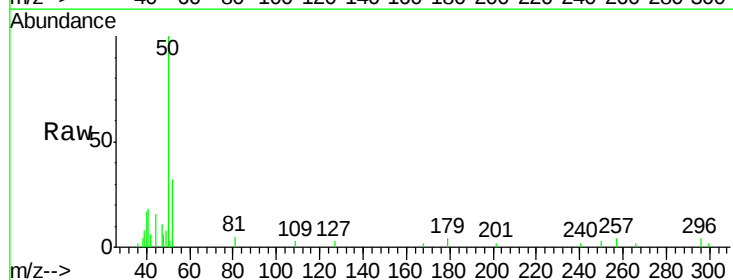
Acq: 17 Aug 2021 3:11

Tgt Ion: 50 Resp: 12801

Ion Ratio Lower Upper

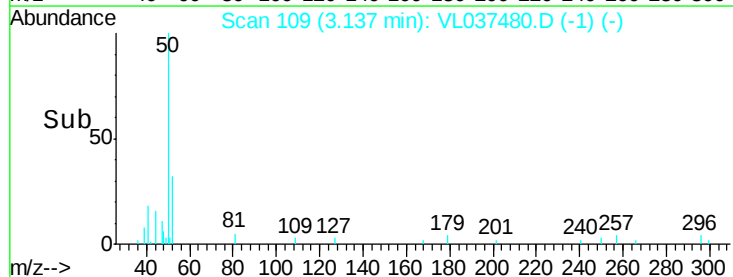
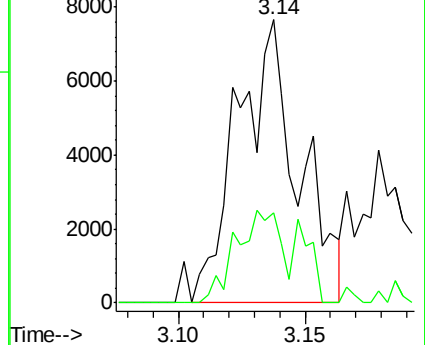
50 100

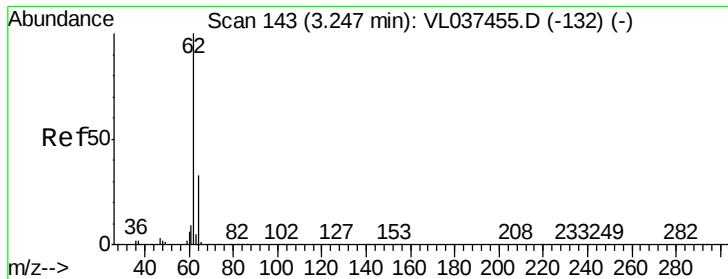
52 31.8 24.0 36.0



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#5

Vinyl Chloride

Concen: 0.104 ppbv m

RT: 3.25 min Scan# 144

Delta R.T. 0.00 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

Tot Ion: 62 Resp: 9803

Ion Ratio Lower Upper

62 100

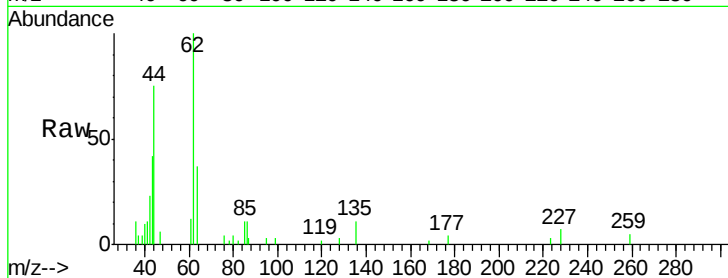
64 36.7 26.5 39.7

Manual Integrations

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Abundance Ion 62.10 (61.80 to 62.80): VL0

Ion 64.10 (63.80 to 64.80): VL0

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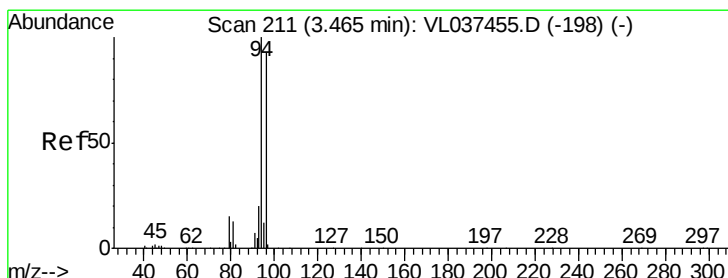
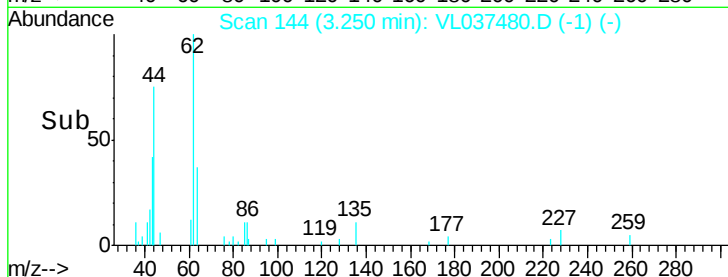
3.25

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#6

Bromomethane

Concen: 0.177 ppbv m

RT: 3.46 min Scan# 210

Delta R.T. -0.00 min

Lab File: VL037480.D

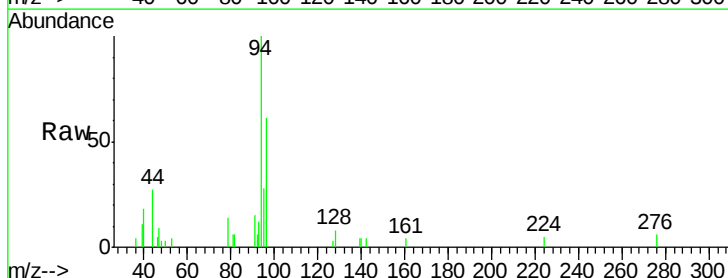
Acq: 17 Aug 2021 3:11

Tgt Ion: 94 Resp: 9163

Ion Ratio Lower Upper

94 100

96 61.0 74.5 111.7#



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0

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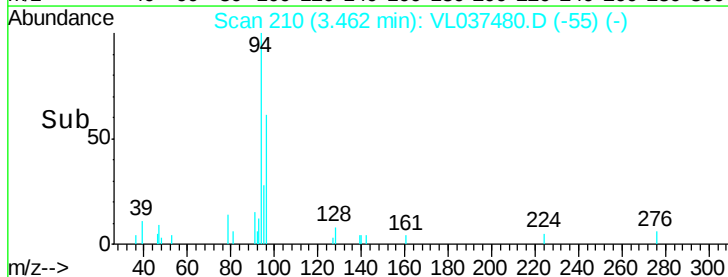
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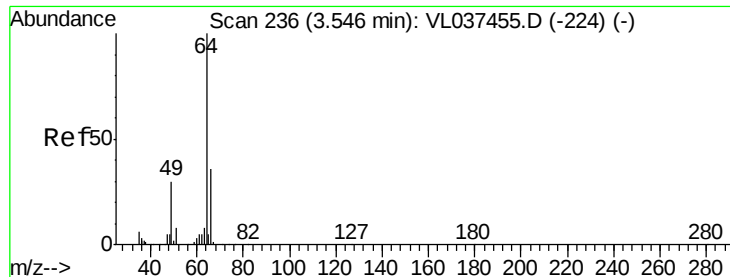
3.46

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Time-->



#7

Chloroethane

Concen: 0.122 ppbv m

RT: 3.55 min Scan# 236

Delta R.T. 0.00 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

Tot Ion: 64 Resp: 3922

Ion Ratio Lower Upper

64 100

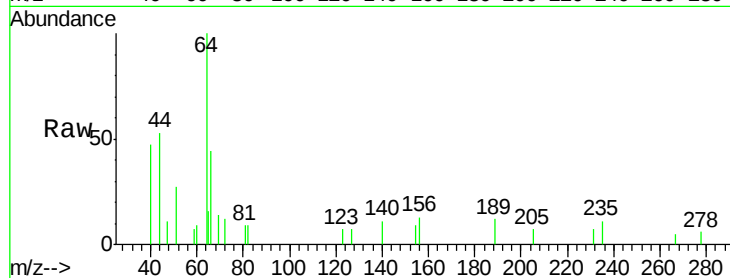
66 44.4 28.6 43.0#

Manual Integrations

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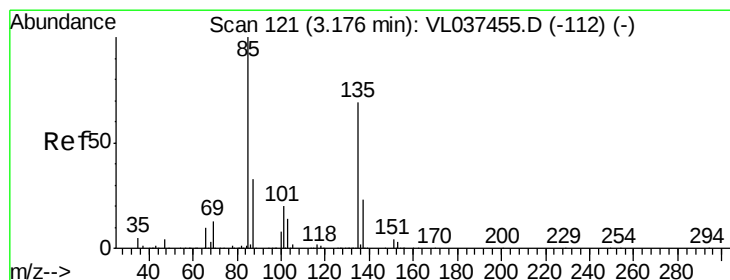
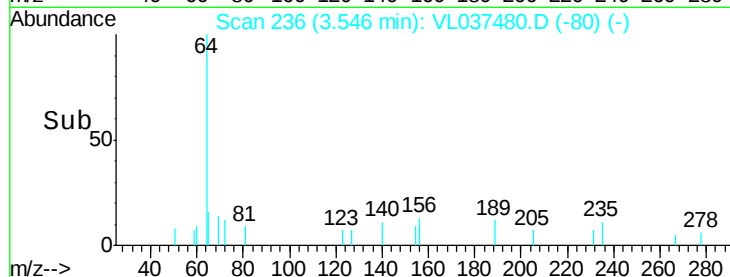
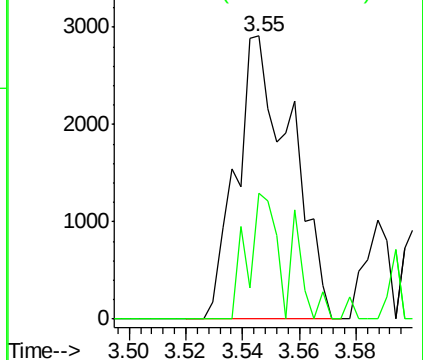
MMDadoda

8/19/2021 5:59:50 PM



Abundance Ion 64.10 (63.80 to 64.80): VL0

Ion 66.10 (65.80 to 66.80): VL0



#8

Dichlorotetrafluoroethane

Concen: 0.130 ppbv

RT: 3.18 min Scan# 121

Delta R.T. 0.00 min

Lab File: VL037480.D

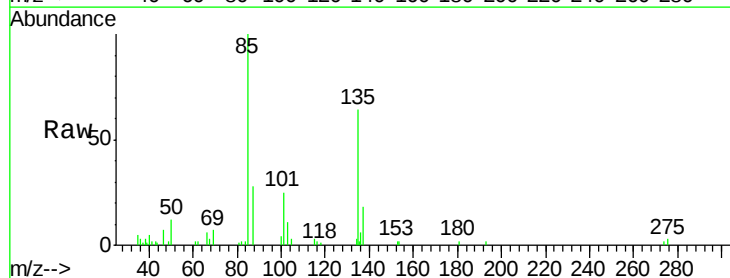
Acq: 17 Aug 2021 3:11

Tgt Ion: 85 Resp: 28900

Ion Ratio Lower Upper

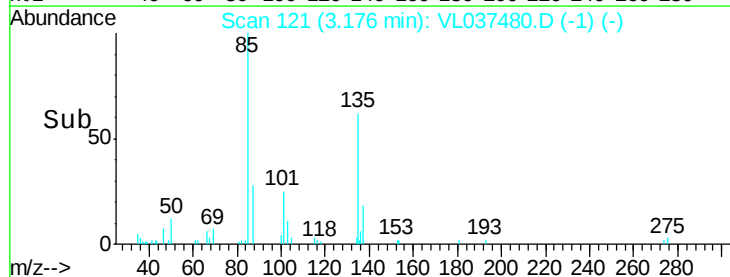
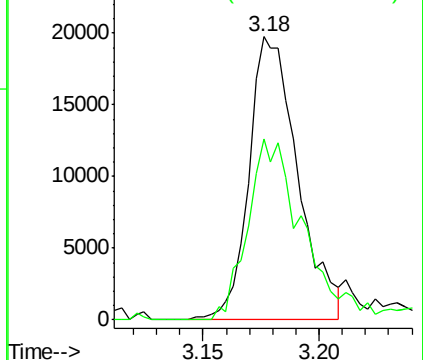
85 100

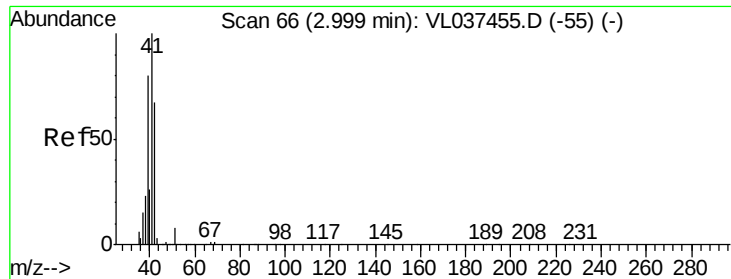
135 76.1 58.8 88.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 135.00 (134.70 to 135.70): V





#9

Propene

Concen: 0.218 ppbv m

RT: 3.00 min Scan# 67

Delta R.T. 0.00 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

Tot Ion: 41 Resp: 20122

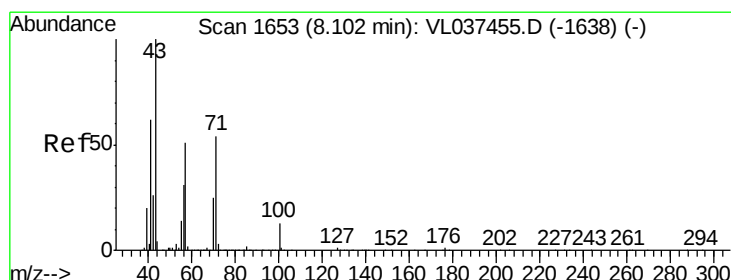
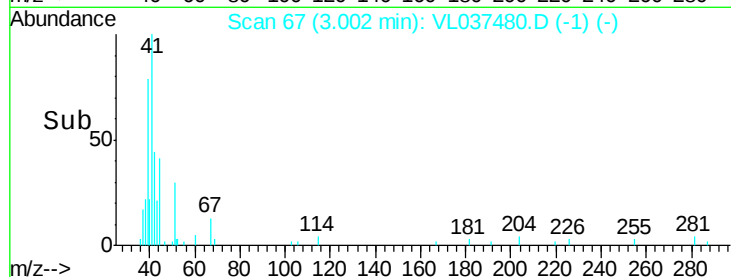
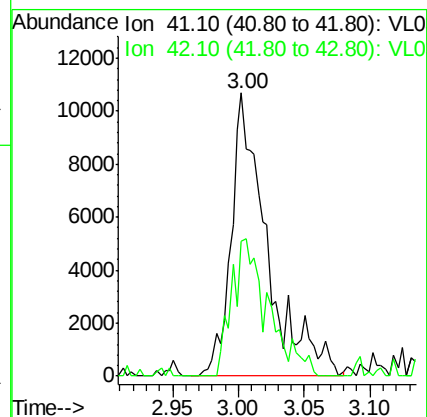
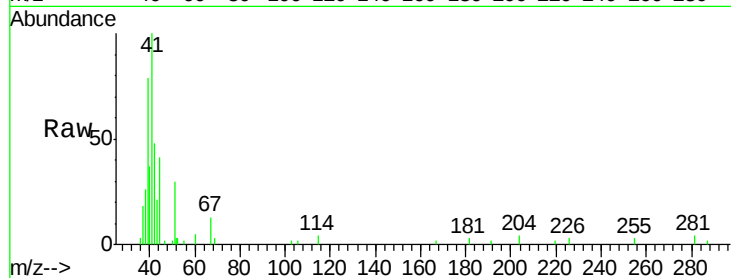
Ion Ratio Lower Upper

41 100

42 49.3 53.7 80.5#

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8/19/2021 5:59:50 PM



#10

Heptane

Concen: 0.092 ppbv m

RT: 8.11 min Scan# 1656

Delta R.T. 0.01 min

Lab File: VL037480.D

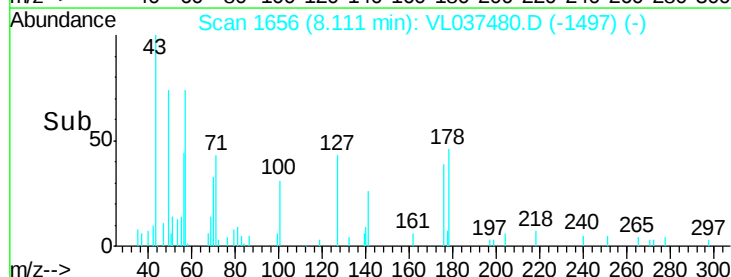
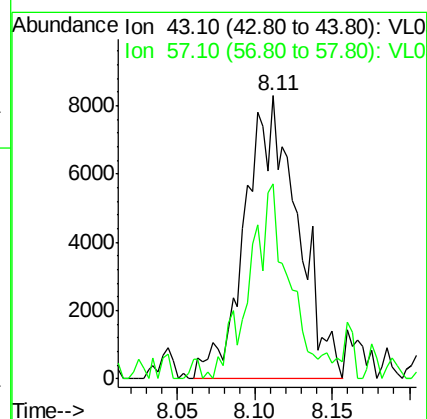
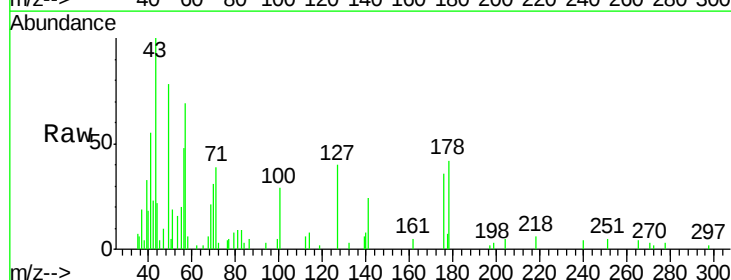
Acq: 17 Aug 2021 3:11

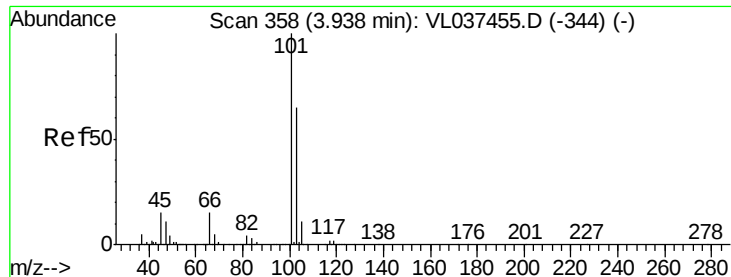
Tgt Ion: 43 Resp: 19429

Ion Ratio Lower Upper

43 100

57 53.9 41.0 61.6





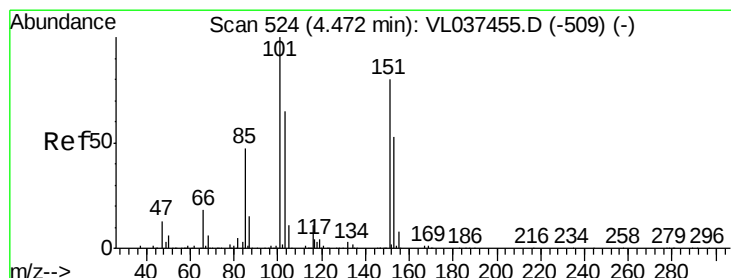
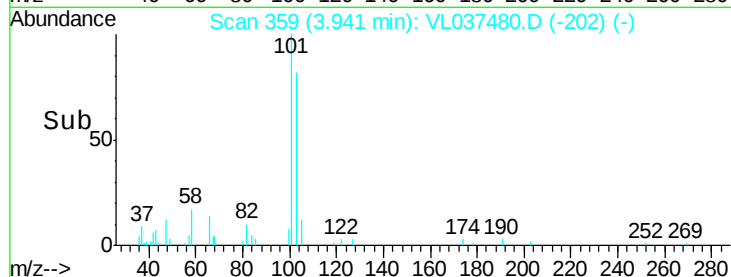
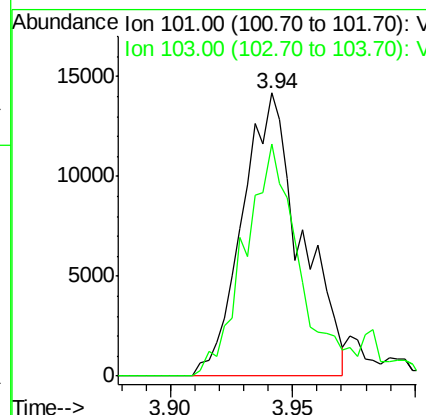
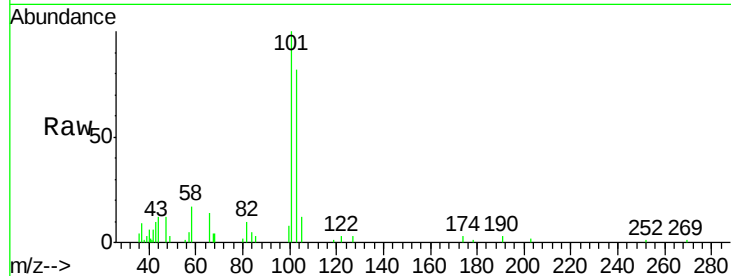
#11  
 Trichlorofluoromethane  
 Concen: 0.117 ppbv  
 RT: 3.94 min Scan# 359  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 101     | 100   | 23732 |       |       |
| 103     | 82.1  | 51.8  | 77.6# |       |

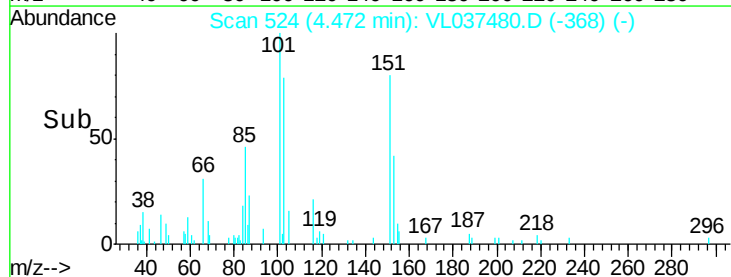
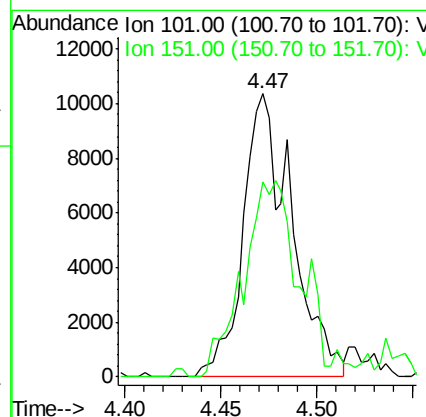
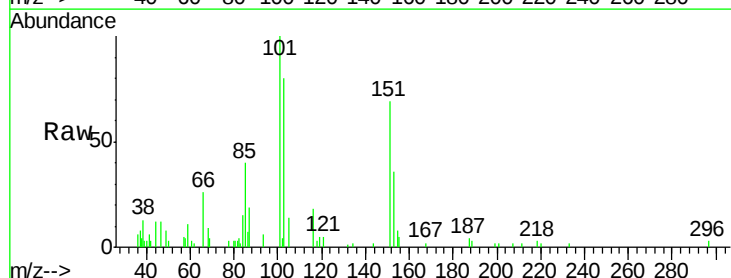
Manual Integrations  
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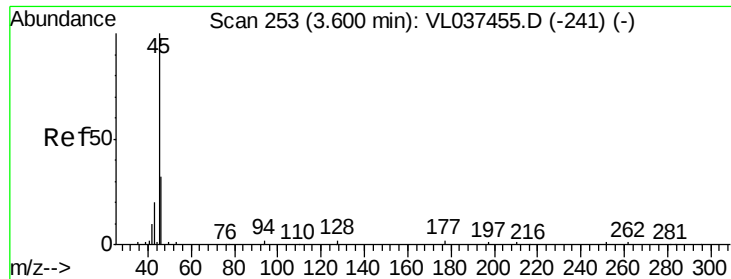
MMDadoda  
 8/19/2021 5:59:50 PM



#12  
 1,1,2-Trichlorotrifluoroethane  
 Concen: 0.121 ppbv m  
 RT: 4.47 min Scan# 524  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 101     | 100   | 18018 |       |       |
| 151     | 83.3  | 63.7  | 95.5  |       |





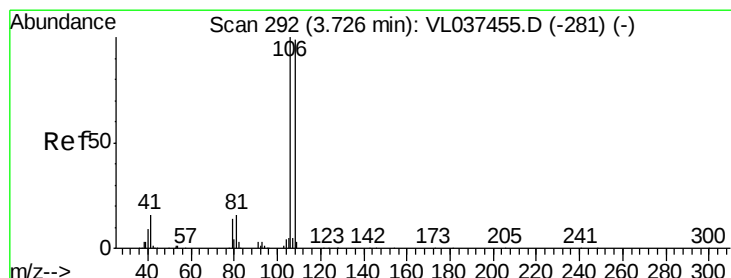
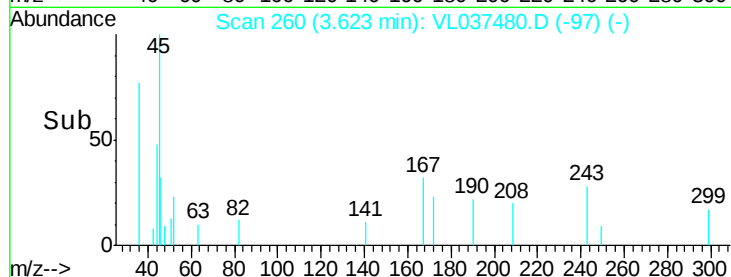
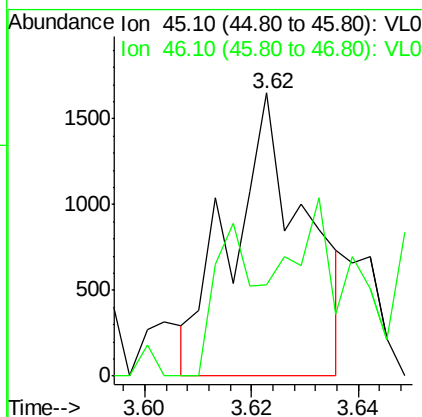
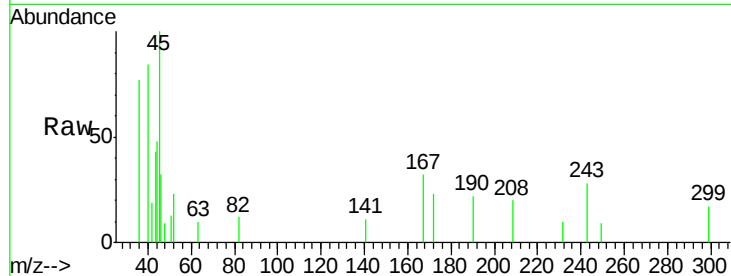
#13  
Ethanol  
Concen: 0.175 ppbv m  
RT: 3.62 min Scan# 260  
Delta R.T. 0.02 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

Tot Ion: 45 Resp: 1568  
Ion Ratio Lower Upper  
45 100  
46 0.0 14.1 56.5#

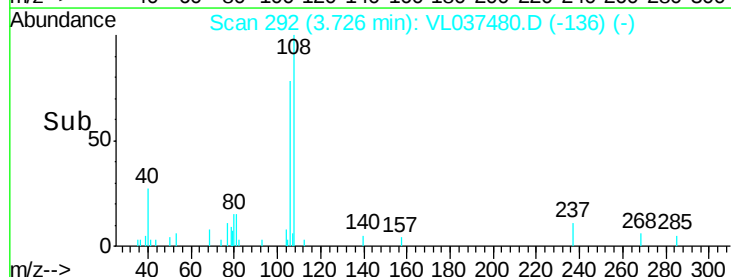
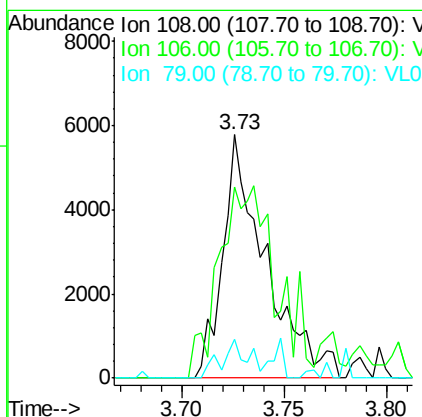
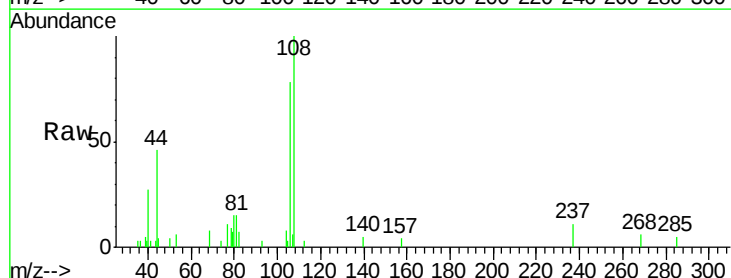
Manual Integrations  
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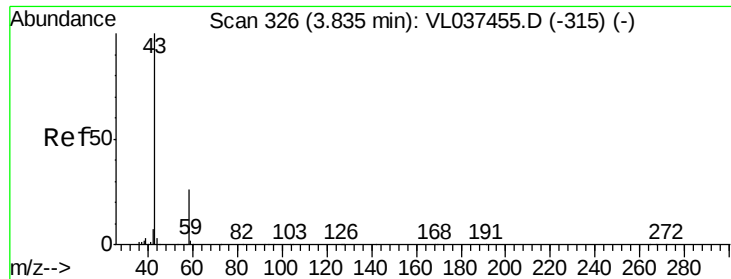
MMDadoda  
8/19/2021 5:59:50 PM



#14  
Bromoethene  
Concen: 0.125 ppbv m  
RT: 3.73 min Scan# 292  
Delta R.T. 0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Tgt Ion: 108 Resp: 8423  
Ion Ratio Lower Upper  
108 100  
106 0.0 85.8 128.8#  
79 13.8 12.6 18.8





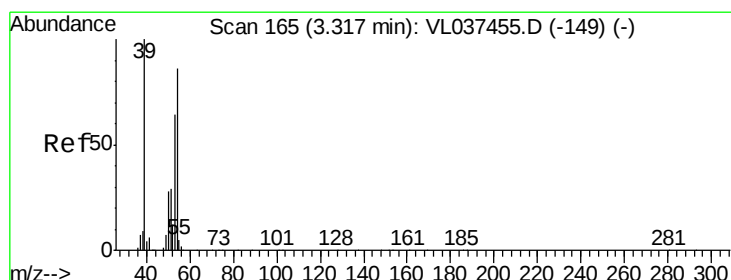
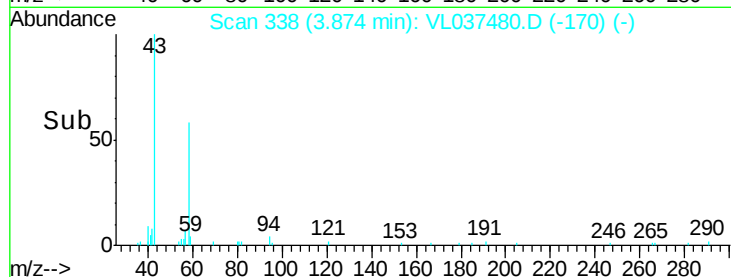
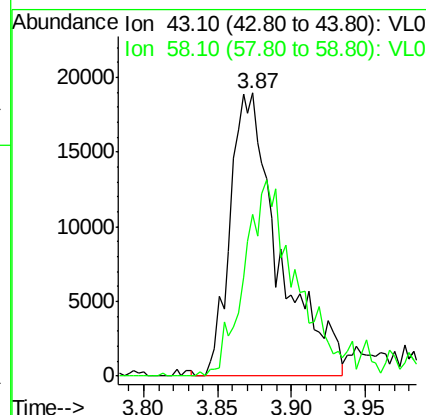
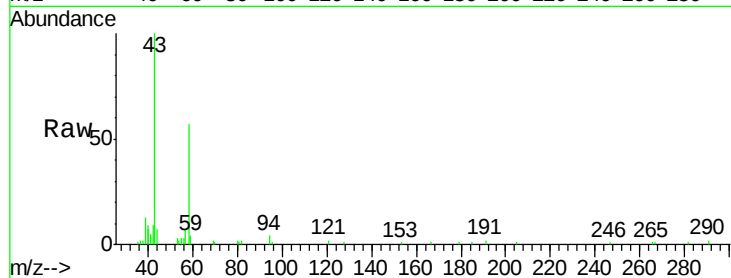
#15  
Acetone  
Concen: 0.317 ppbv m  
RT: 3.87 min Scan# 338  
Delta R.T. 0.04 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 80.9  | 24.8  | 37.2# |

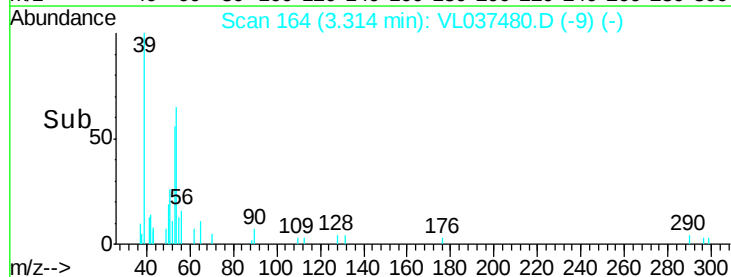
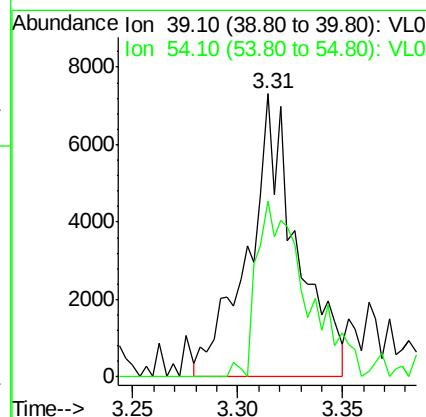
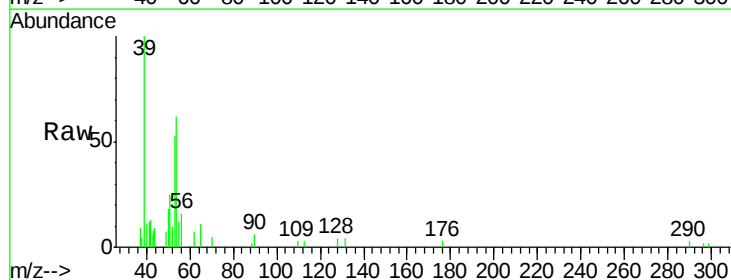
Manual Integrations  
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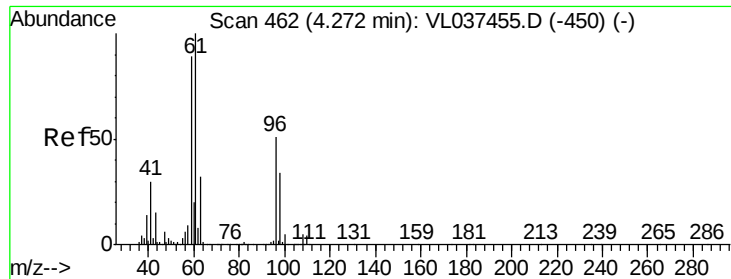
MMDadoda  
8/19/2021 5:59:50 PM



#16  
1,3-Butadiene  
Concen: 0.135 ppbv m  
RT: 3.31 min Scan# 164  
Delta R.T. -0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 39      | 100   |       |       |
| 54      | 68.0  | 63.7  | 95.5  |





#17

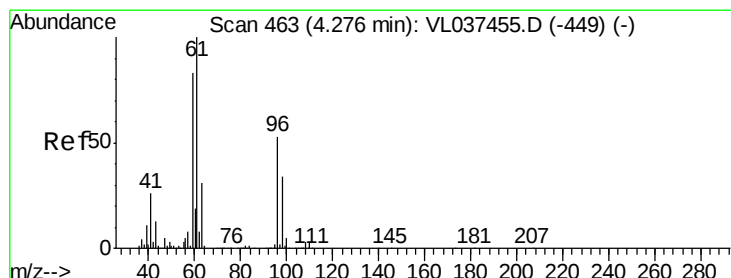
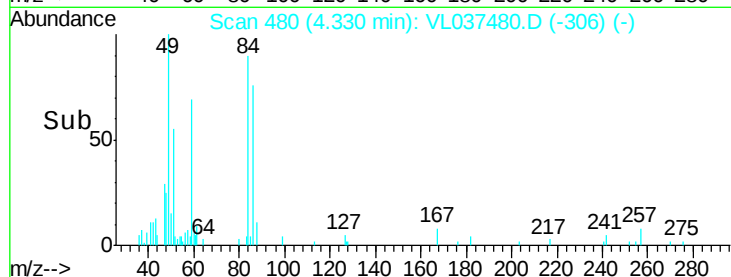
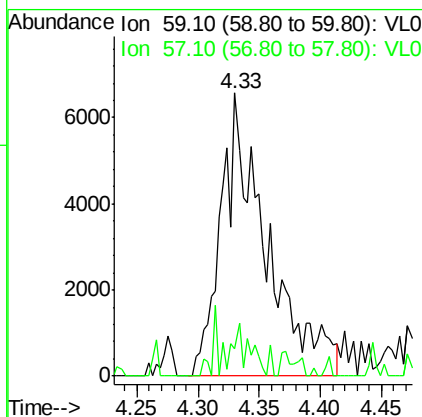
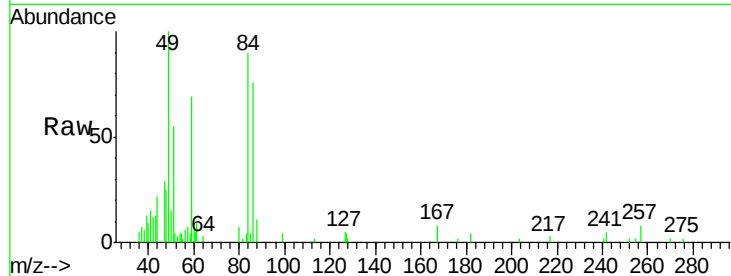
tert-Butyl alcohol  
 Concen: 0.135 ppbv m  
 RT: 4.33 min Scan# 480  
 Delta R.T. 0.06 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 59      | 100   |       |       |
| 57      | 0.0   | 8.3   | 12.5# |

Manual Integrations  
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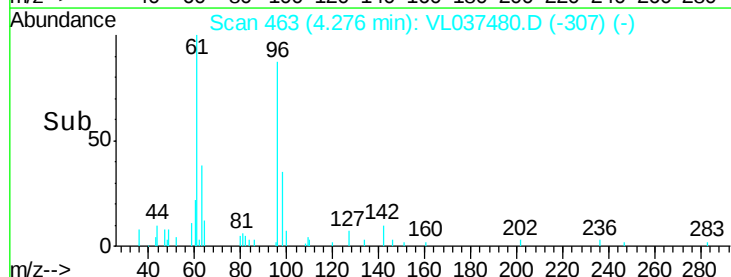
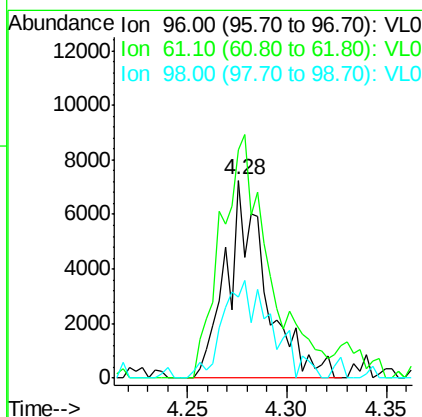
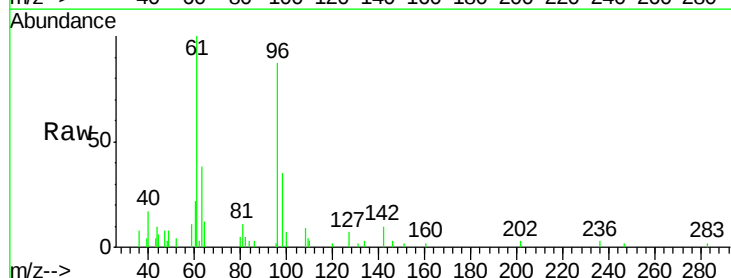
MMDadoda  
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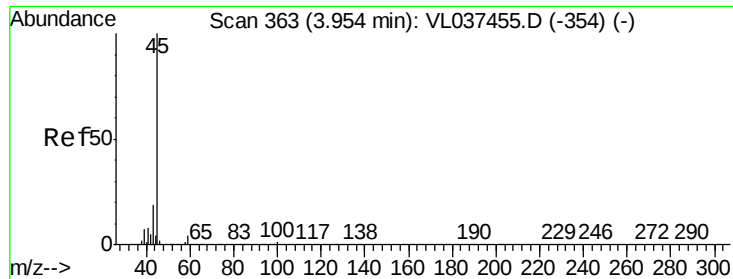


#18

1,1-Dichloroethene  
 Concen: 0.149 ppbv m  
 RT: 4.28 min Scan# 463  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 96      | 100   |       |        |
| 61      | 115.2 | 151.1 | 226.7# |
| 98      | 40.9  | 51.8  | 77.8#  |





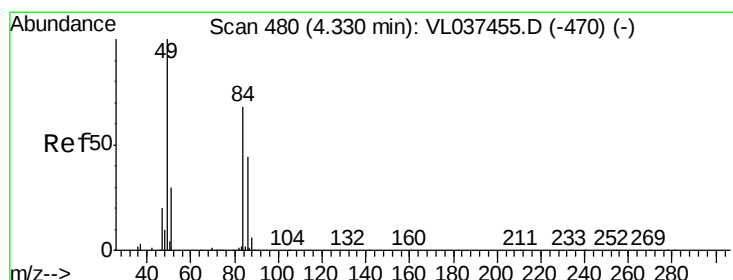
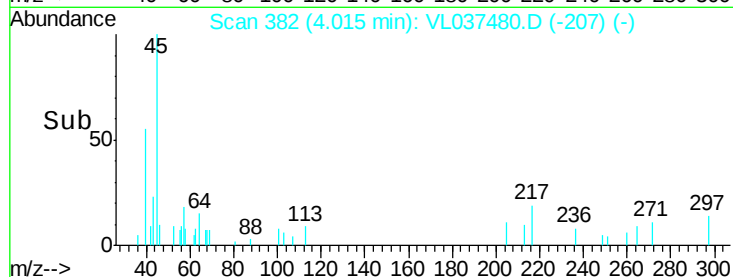
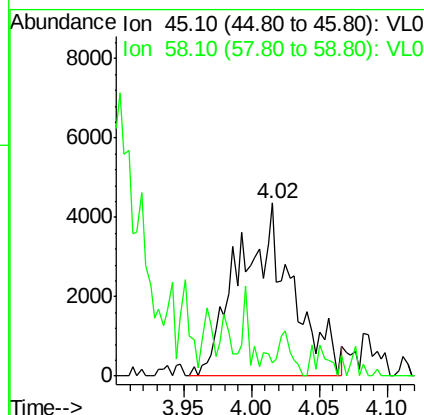
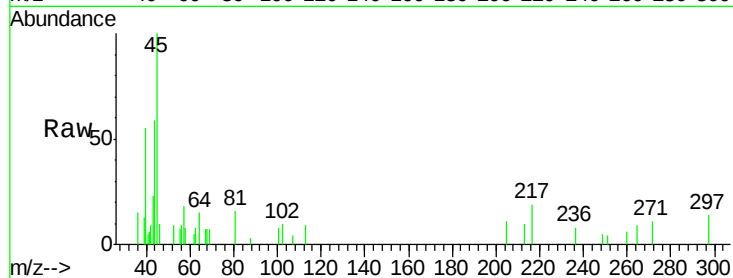
#19  
Isopropyl Alcohol  
Concen: 0.153 ppbv m  
RT: 4.02 min Scan# 382  
Delta R.T. 0.06 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

Tot Ion: 45 Resp: 12004  
Ion Ratio Lower Upper  
45 100  
58 0.0 1.4 2.2#

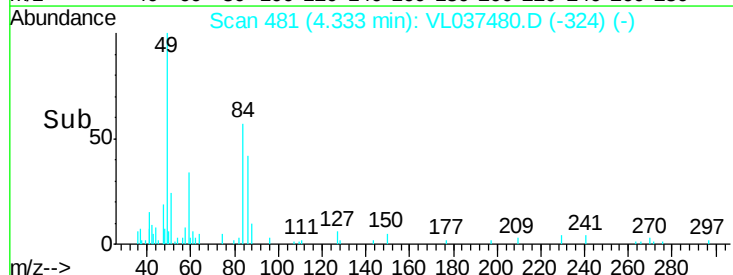
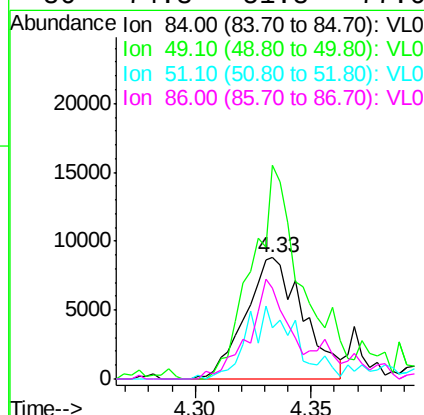
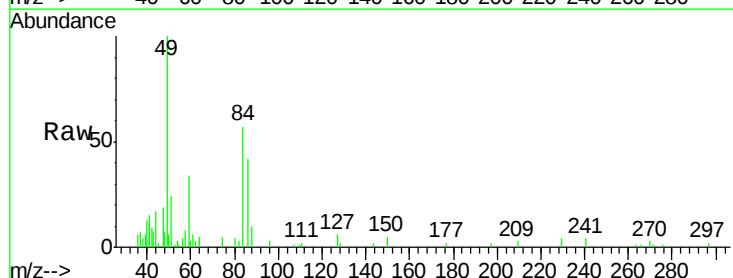
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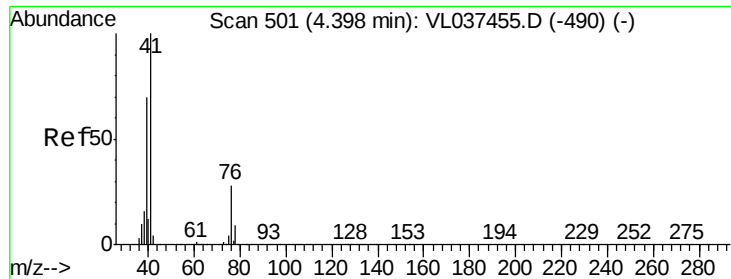
MMDadoda  
8/19/2021 5:59:50 PM



#20  
Methylene Chloride  
Concen: 0.223 ppbv  
RT: 4.33 min Scan# 481  
Delta R.T. 0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Tgt Ion: 84 Resp: 15279  
Ion Ratio Lower Upper  
84 100  
49 187.0 118.2 177.2#  
51 42.3 36.6 55.0  
86 74.3 51.8 77.6





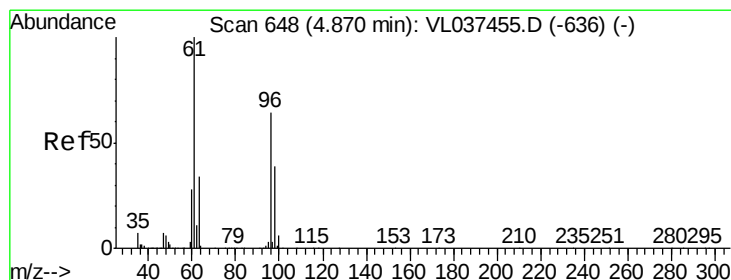
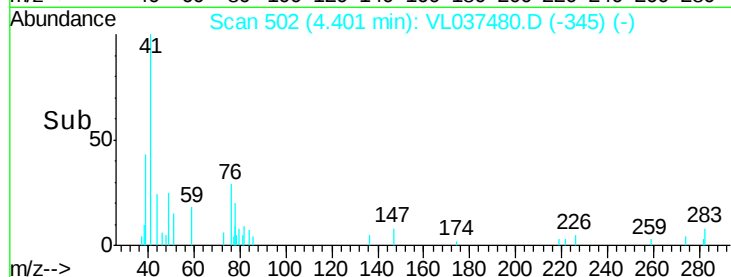
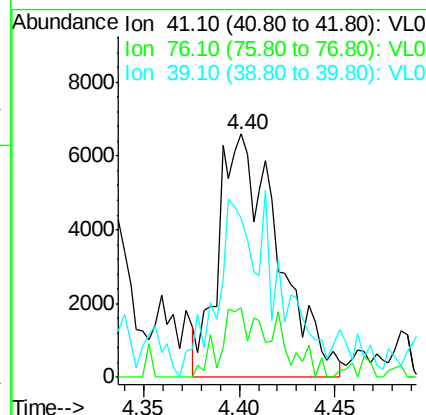
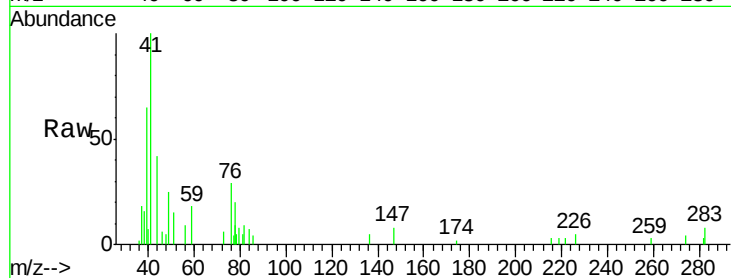
#21  
 Allvl Chloride  
 Concen: 0.129 ppbv m  
 RT: 4.40 min Scan# 502  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 41      | 100   |       |       |
| 76      | 27.8  | 21.8  | 32.6  |
| 39      | 0.0   | 56.8  | 85.2# |

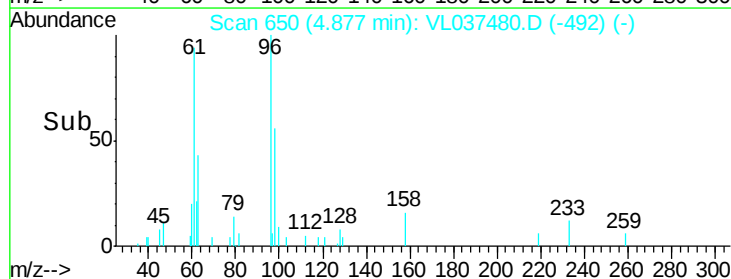
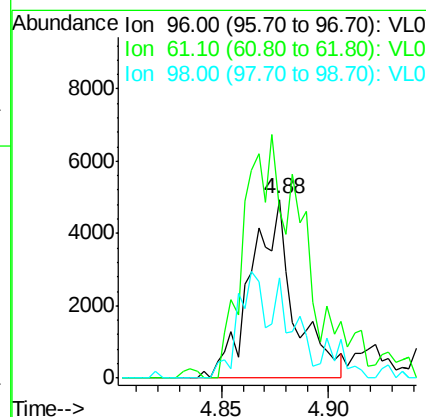
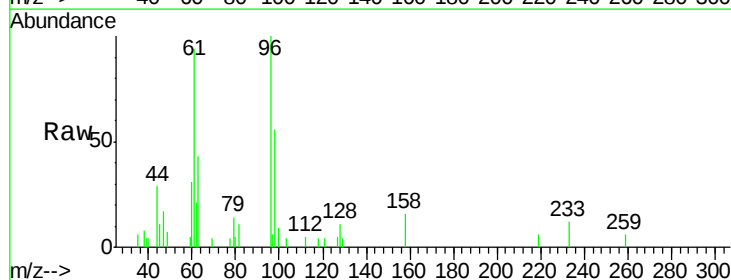
Manual Integrations  
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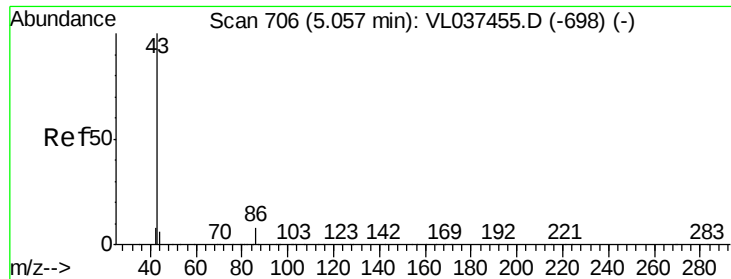
MMDadoda  
 8/19/2021 5:59:50 PM



#22  
 trans-1,2-Dichloroethene  
 Concen: 0.104 ppbv m  
 RT: 4.88 min Scan# 650  
 Delta R.T. 0.01 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 96      | 100   |       |        |
| 61      | 93.9  | 125.5 | 188.3# |
| 98      | 55.9  | 49.0  | 73.4   |





#23

Vinyl Acetate

Concen: 0.163 ppbv m

RT: 5.07 min Scan# 710

Delta R.T. 0.01 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

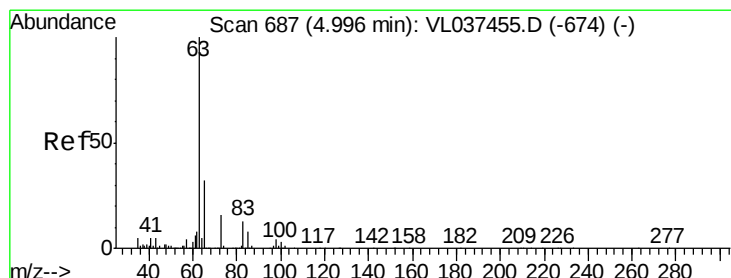
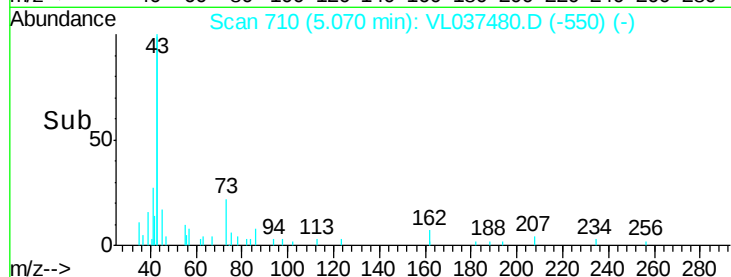
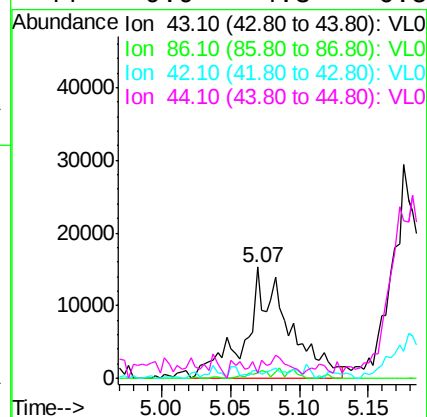
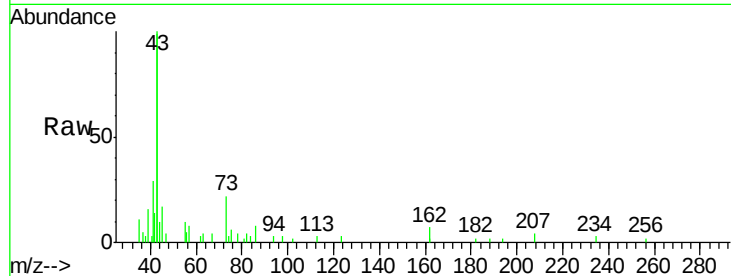
ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 86      | 8.2   | 5.7   | 8.5   |
| 42      | 14.3  | 7.4   | 11.2# |
| 44      | 9.9   | 4.3   | 6.5#  |

Manual Integrations  
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MMDadoda  
8/19/2021 5:59:50 PM



#24

1,1-Dichloroethane

Concen: 0.162 ppbv m

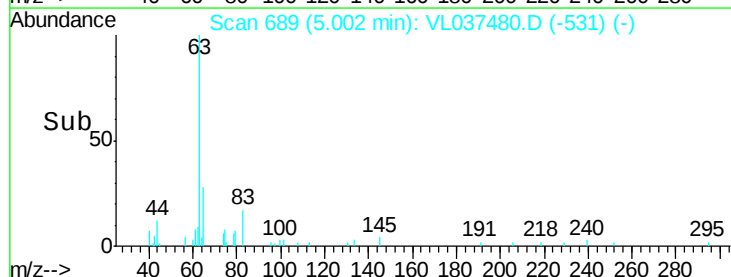
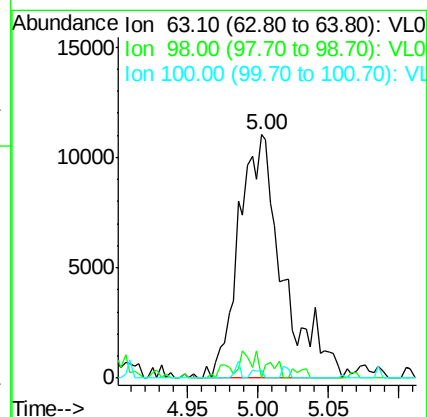
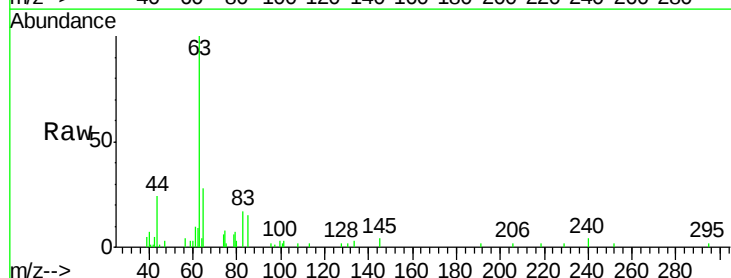
RT: 5.00 min Scan# 689

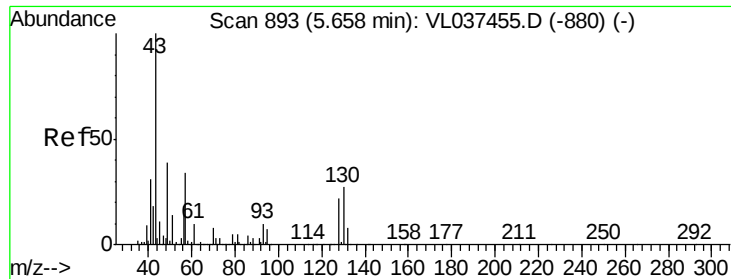
Delta R.T. 0.01 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 63      | 100   |       |       |
| 98      | 0.0   | 2.1   | 6.3#  |
| 100     | 3.1   | 1.6   | 4.7   |





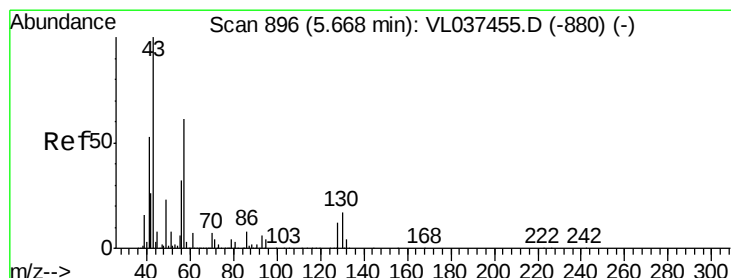
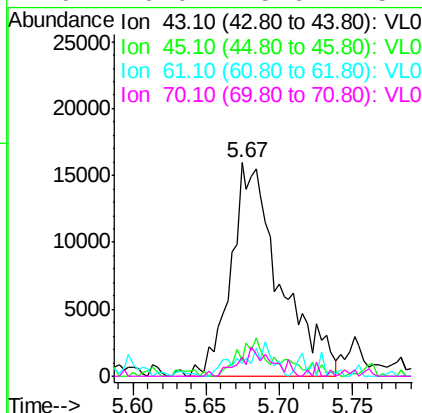
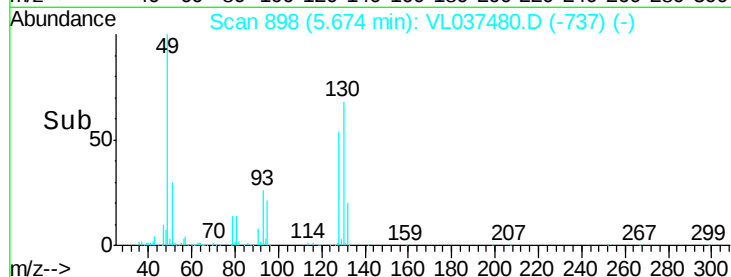
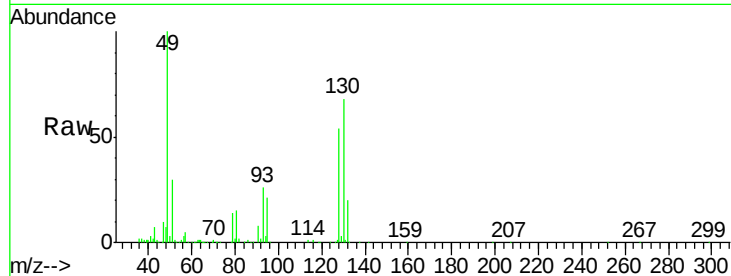
#25  
Ethyl Acetate  
Concen: 0.107 ppbv m  
RT: 5.67 min Scan# 898  
Delta R.T. 0.02 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 45      | 0.0   | 8.0   | 12.0# |
| 61      | 0.0   | 8.0   | 12.0# |
| 70      | 0.0   | 5.6   | 8.4#  |

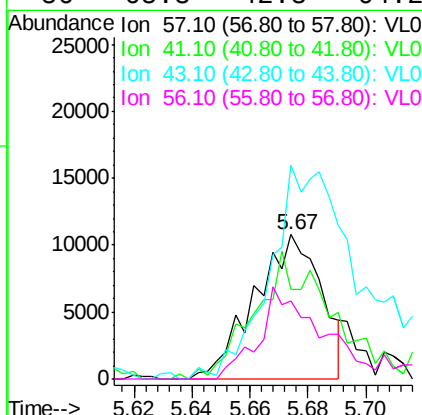
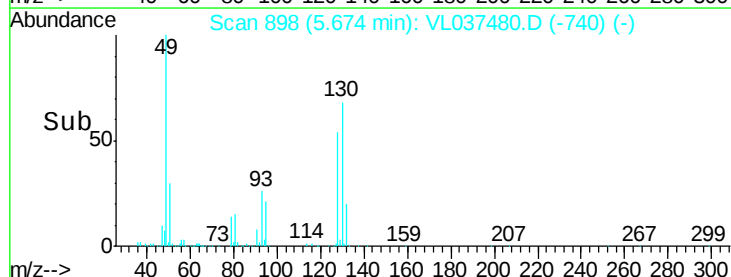
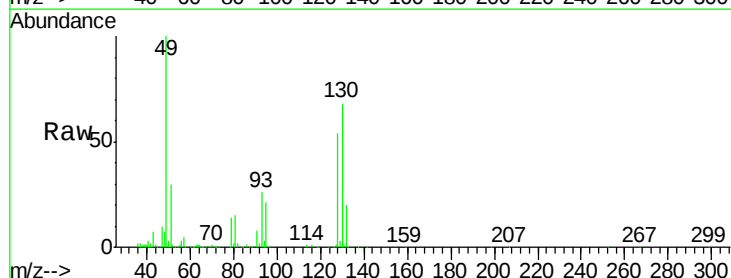
Manual Integrations  
APPROVED

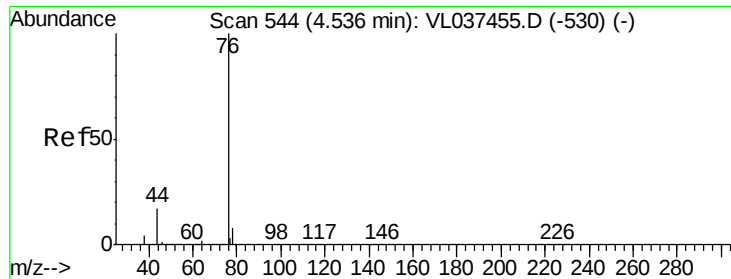
MMDadoda  
8/19/2021 5:59:50 PM



#26  
Hexane  
Concen: 0.102 ppbv  
RT: 5.67 min Scan# 898  
Delta R.T. 0.01 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 100.2 | 72.3  | 108.5 |
| 43      | 231.1 | 172.3 | 258.5 |
| 56      | 65.8  | 42.8  | 64.2# |





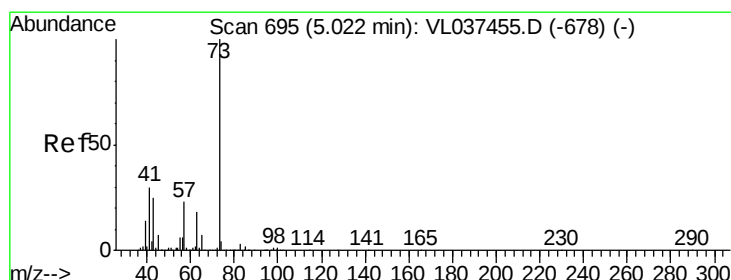
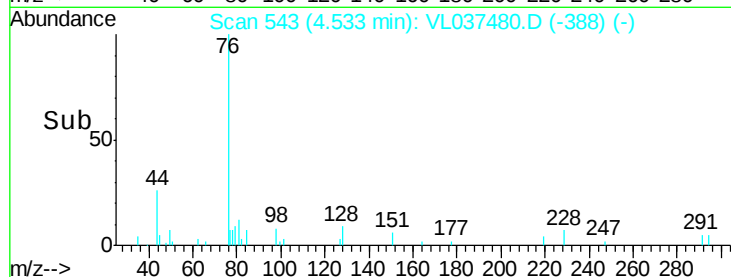
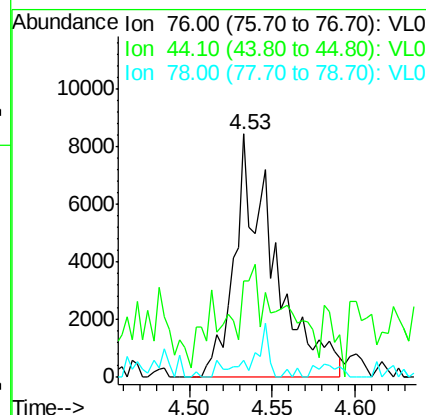
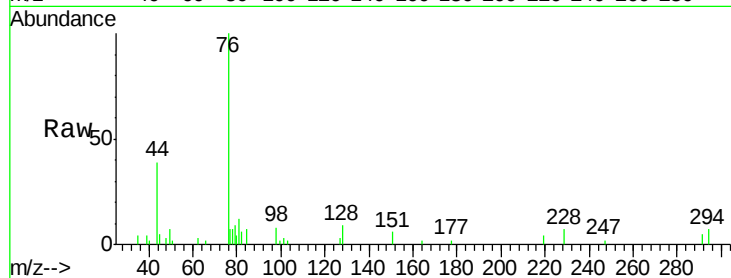
#27  
Carbon Disulfide  
Concen: 0.092 ppbv m  
RT: 4.53 min Scan# 543  
Delta R.T. -0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 76      | 100   |       |       |
| 44      | 23.9  | 13.9  | 20.9# |
| 78      | 9.7   | 7.9   | 11.9  |

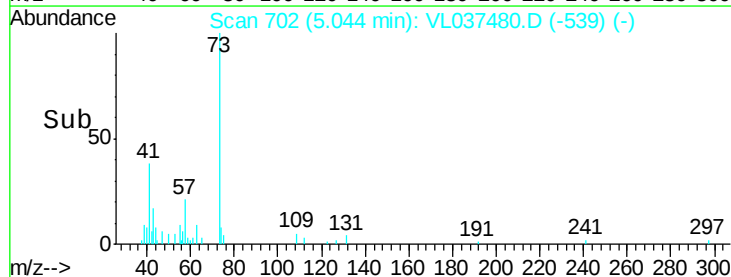
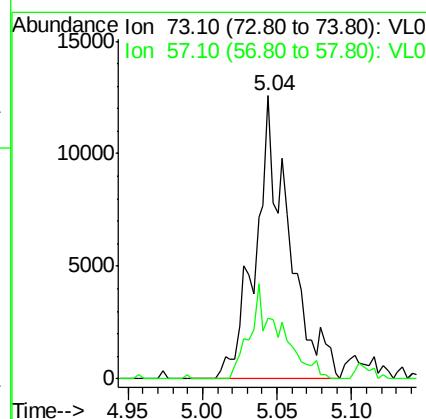
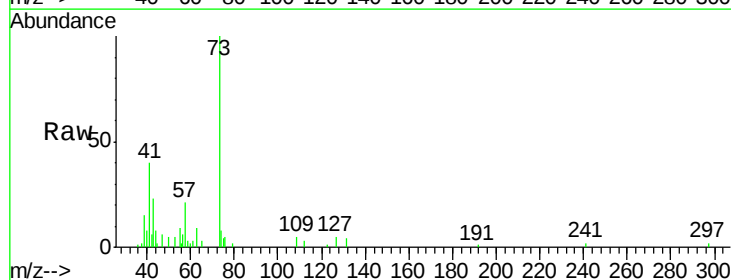
Manual Integrations  
APPROVED

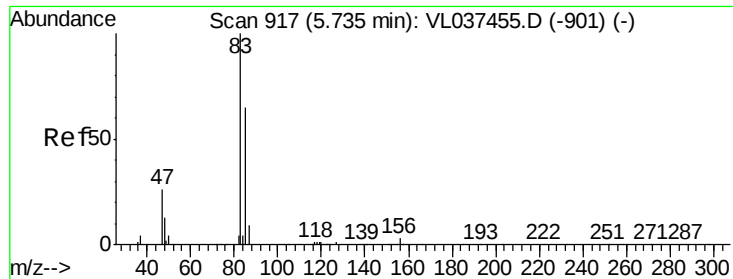
MMDadoda  
8/19/2021 5:59:50 PM



#28  
Methyl tert-Butyl Ether  
Concen: 0.120 ppbv m  
RT: 5.04 min Scan# 702  
Delta R.T. 0.02 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 73      | 100   |       |       |
| 57      | 0.0   | 19.4  | 29.2# |





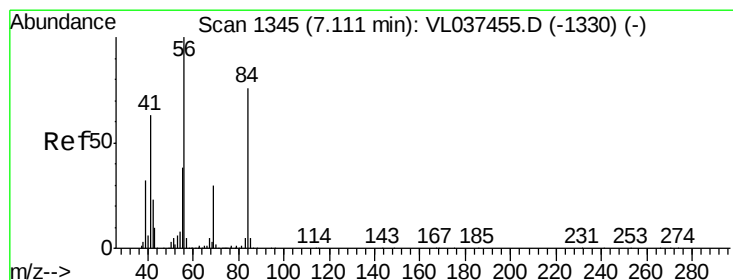
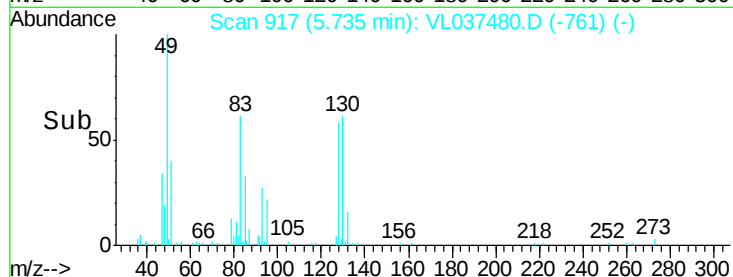
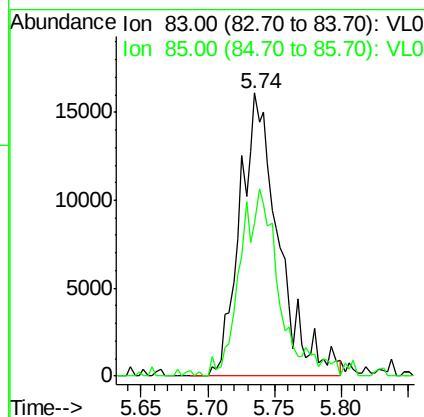
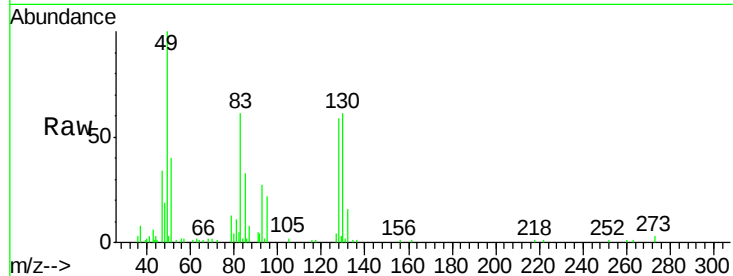
#29  
Chloroform  
Concen: 0.136 ppbv m  
RT: 5.74 min Scan# 917  
Delta R.T. 0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

Tot Ion: 83 Resp: 32712  
Ion Ratio Lower Upper  
83 100  
85 54.0 52.3 78.5

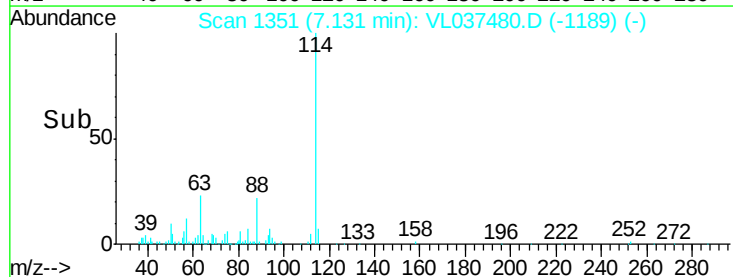
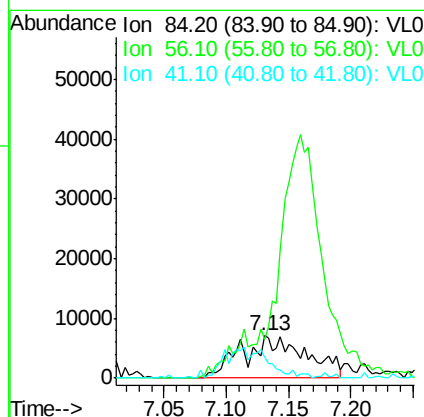
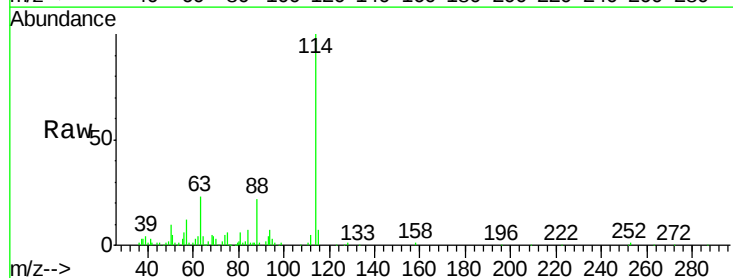
Manual Integrations  
APPROVED

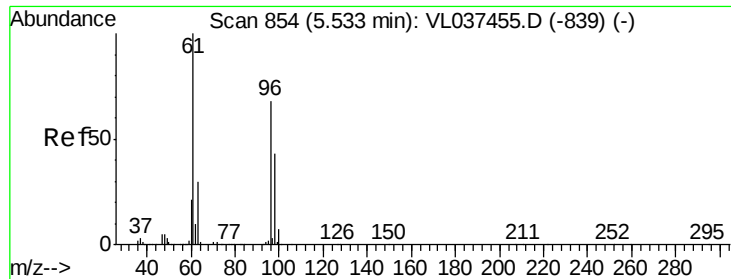
MMDadoda  
8/19/2021 5:59:50 PM



#30  
Cyclohexane  
Concen: 0.180 ppbv m  
RT: 7.13 min Scan# 1351  
Delta R.T. 0.02 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Tgt Ion: 84 Resp: 25423  
Ion Ratio Lower Upper  
84 100  
56 0.0 110.6 165.8#  
41 0.0 67.0 100.6#





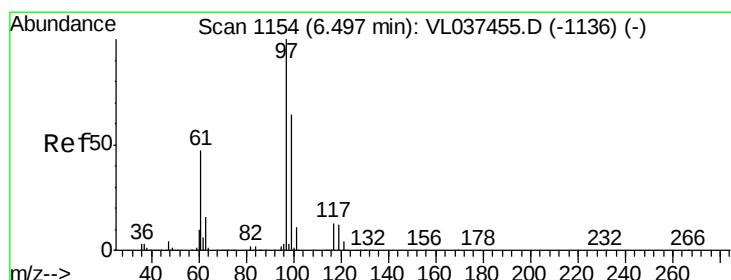
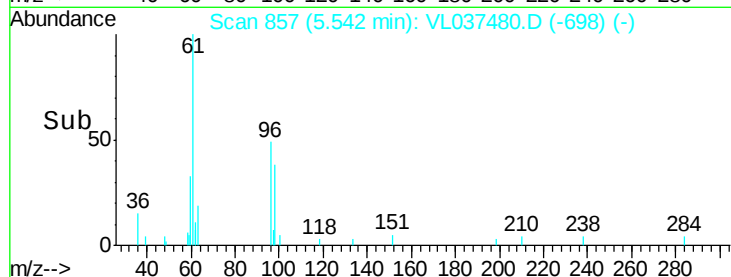
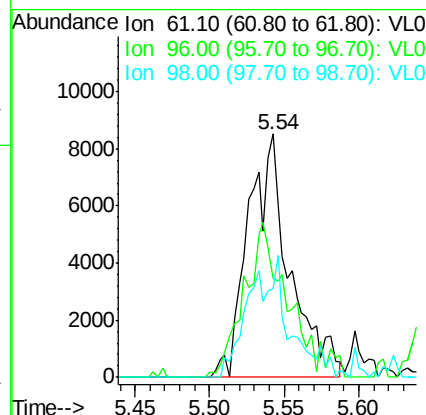
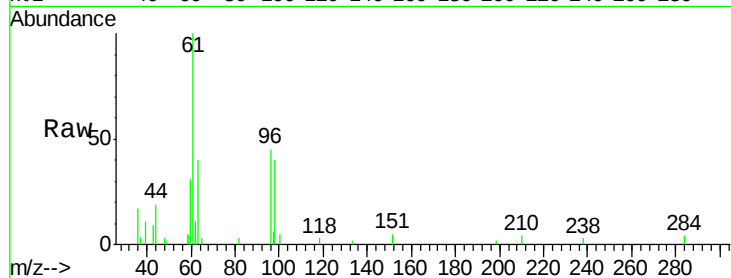
#31  
 cis-1,2-Dichloroethene  
 Concen: 0.107 ppbv m  
 RT: 5.54 min Scan# 857  
 Delta R.T. 0.01 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 61      | 100   |      |       |       |
| 96      | 44.7  | 54.8 | 82.2# |       |
| 98      | 40.3  | 34.2 | 51.2  |       |

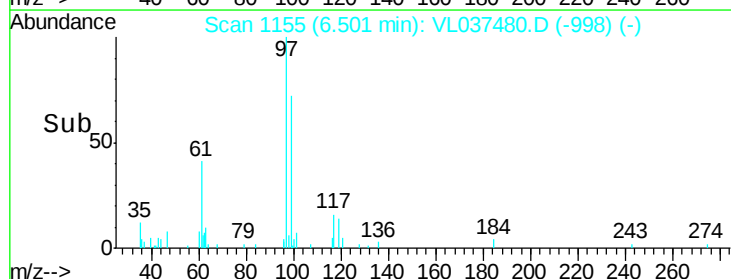
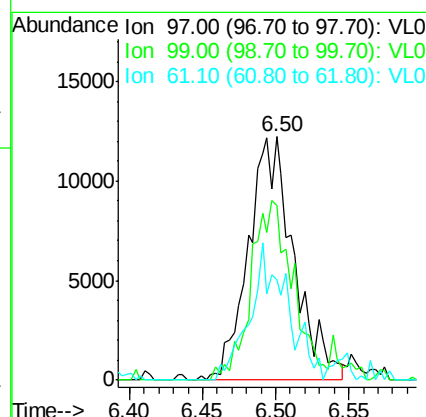
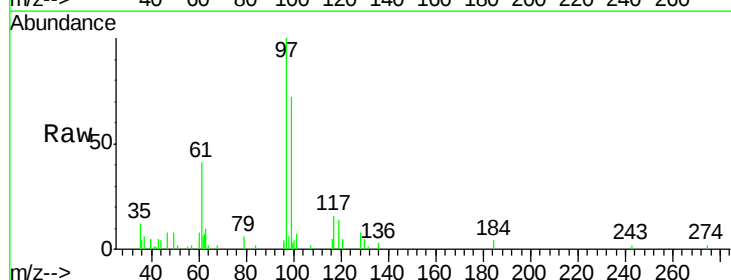
Manual Integrations  
 APPROVED

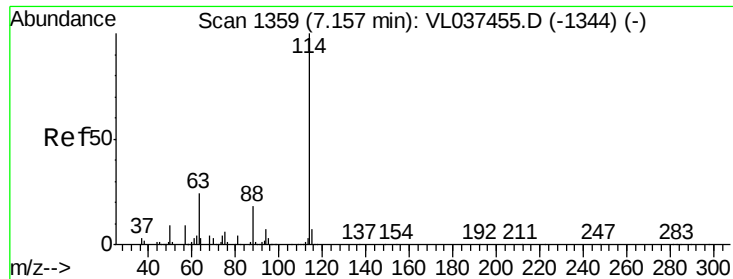
MMDadoda  
 8/19/2021 5:59:50 PM



#32  
 1,1,1-Trichloroethane  
 Concen: 0.112 ppbv m  
 RT: 6.50 min Scan# 1155  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 97      | 100   |      |       |       |
| 99      | 73.2  | 51.8 | 77.6  |       |
| 61      | 0.0   | 39.6 | 59.4# |       |





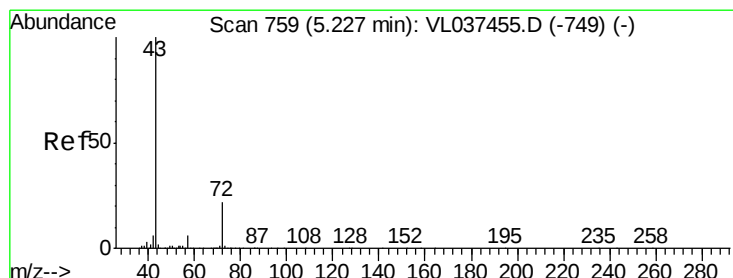
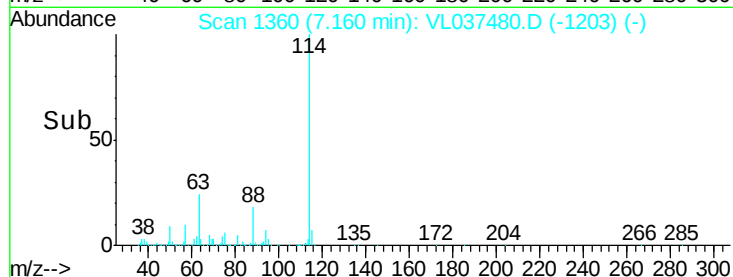
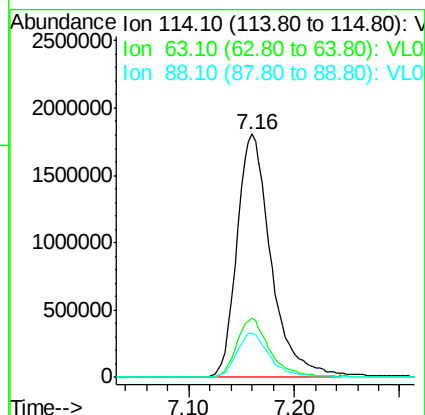
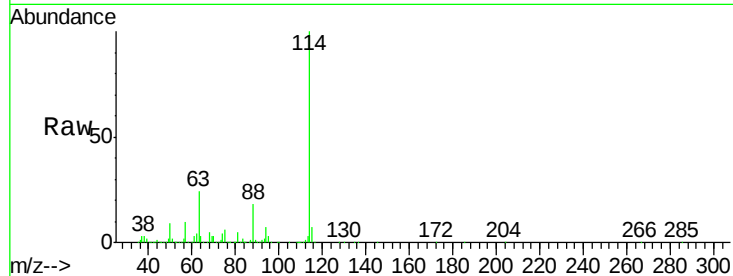
#33  
 1,4-Difluorobenzene  
 Concen: 10.000 ppbv  
 RT: 7.16 min Scan# 1360  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 114     | 100   |       |       |
| 63      | 24.3  | 19.3  | 28.9  |
| 88      | 18.2  | 14.2  | 21.4  |

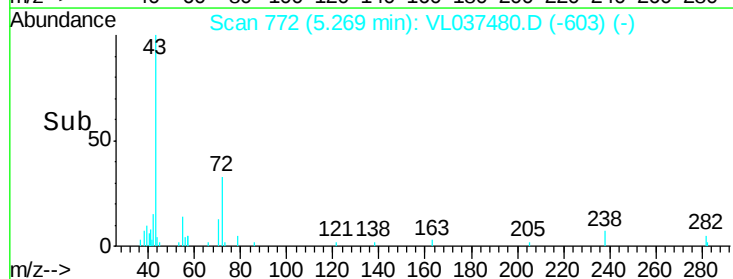
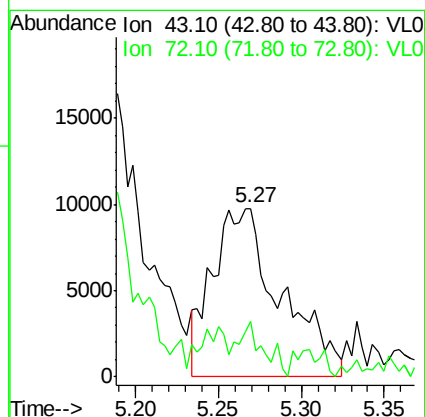
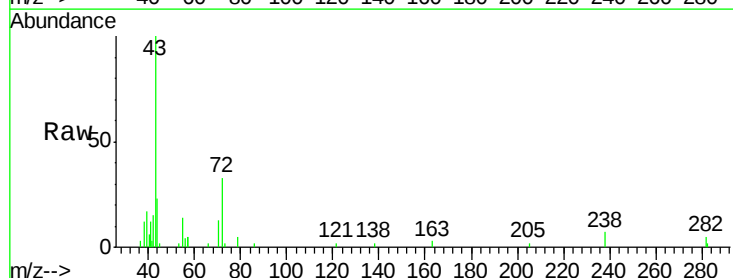
Manual Integrations  
 APPROVED

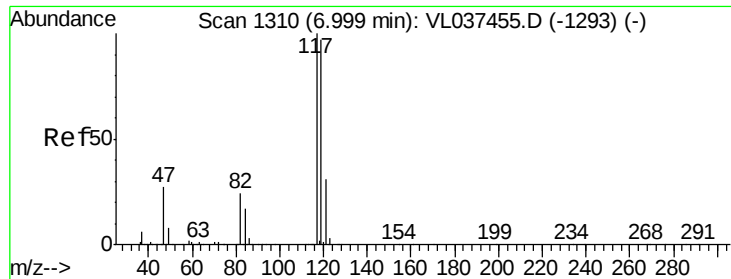
MMDadoda  
 8/19/2021 5:59:50 PM



#34  
 2-Butanone  
 Concen: 0.170 ppbv m  
 RT: 5.27 min Scan# 772  
 Delta R.T. 0.04 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 72      | 0.0   | 17.4  | 26.0# |





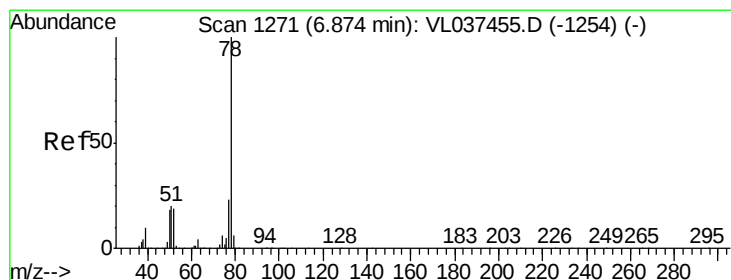
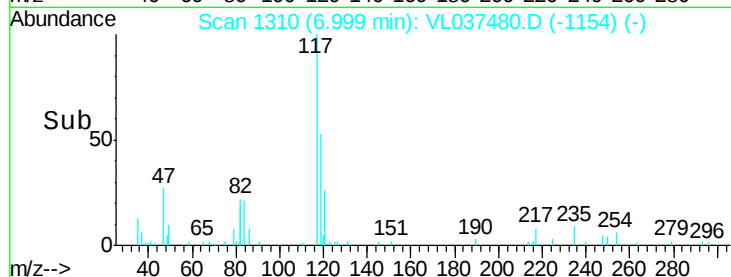
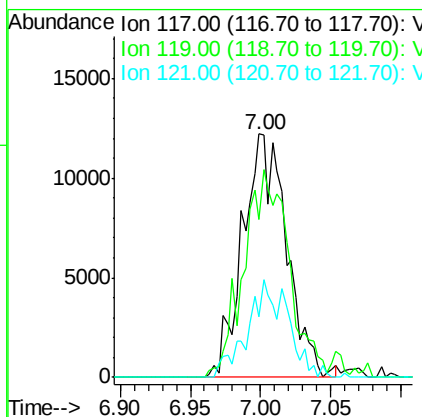
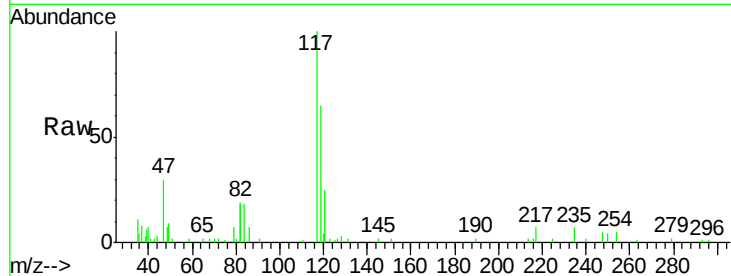
#35  
Carbon Tetrachloride  
Concen: 0.111 ppbv m  
RT: 7.00 min Scan# 1310  
Delta R.T. 0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 117     | 100   |       |        |
| 119     | 64.7  | 77.3  | 115.9# |
| 121     | 25.0  | 25.2  | 37.8#  |

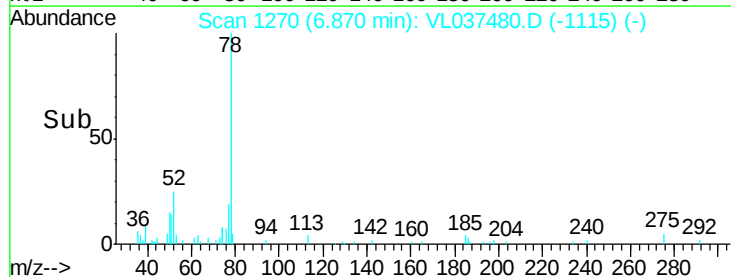
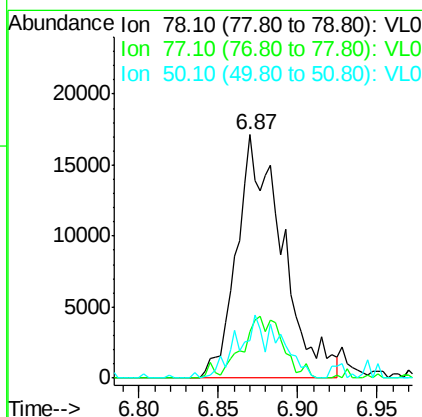
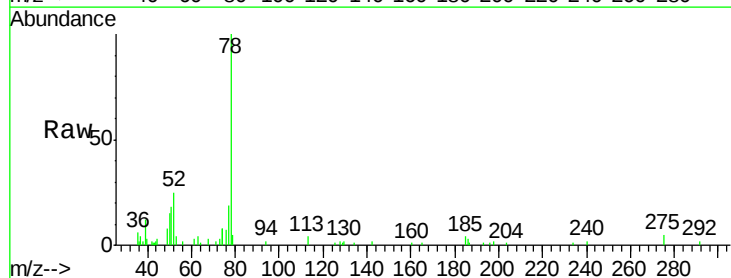
Manual Integrations  
APPROVED

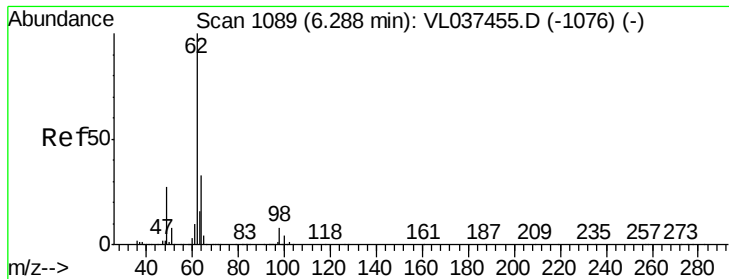
MMDadoda  
8/19/2021 5:59:50 PM



#36  
Benzene  
Concen: 0.101 ppbv m  
RT: 6.87 min Scan# 1270  
Delta R.T. -0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 78      | 100   |       |       |
| 77      | 19.3  | 18.2  | 27.4  |
| 50      | 15.2  | 14.6  | 21.8  |





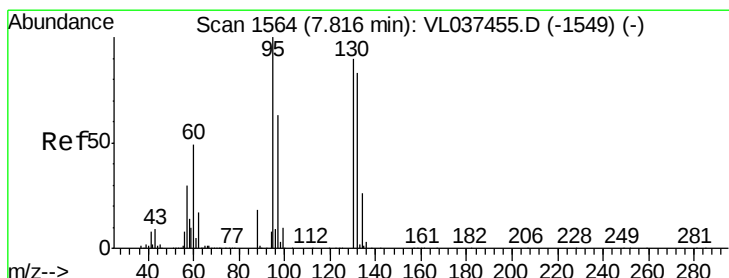
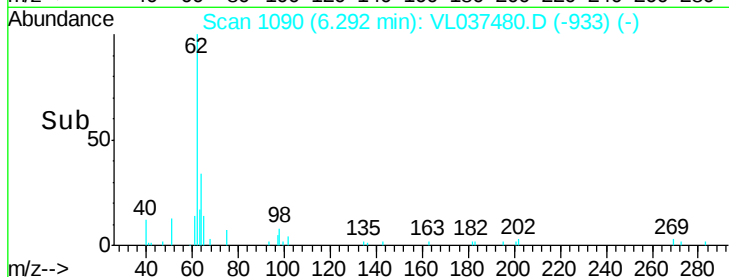
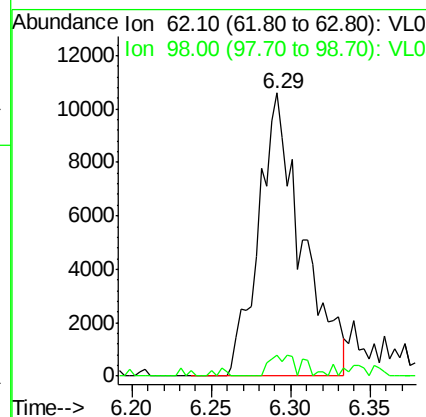
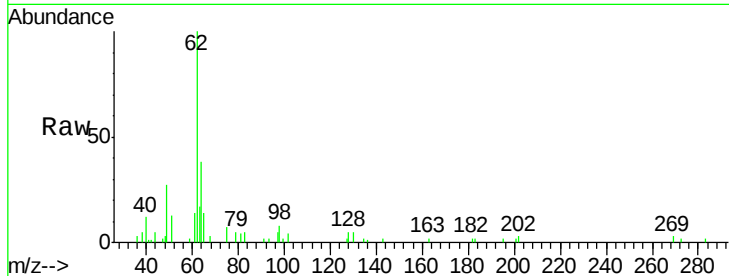
#37  
 1,2-Dichloroethane  
 Concen: 0.119 ppbv m  
 RT: 6.29 min Scan# 1090  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 62      | 100   | 20097 |       |       |
| 98      | 5.8   | 6.0   | 9.0#  |       |

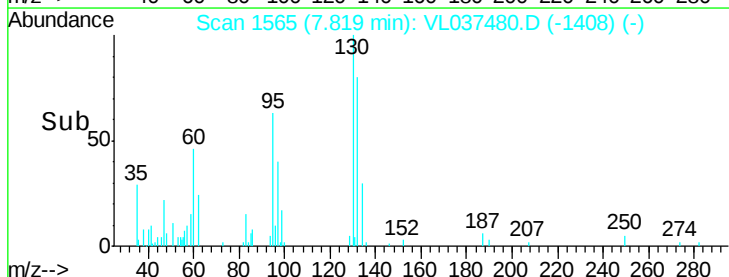
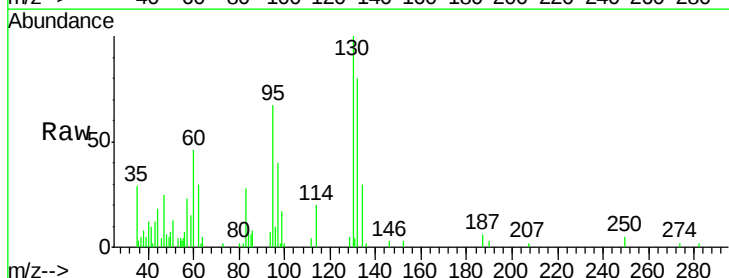
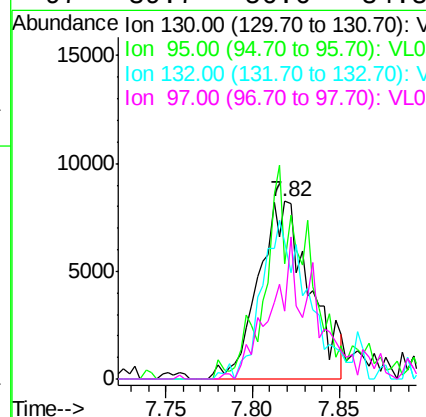
Manual Integrations  
 APPROVED

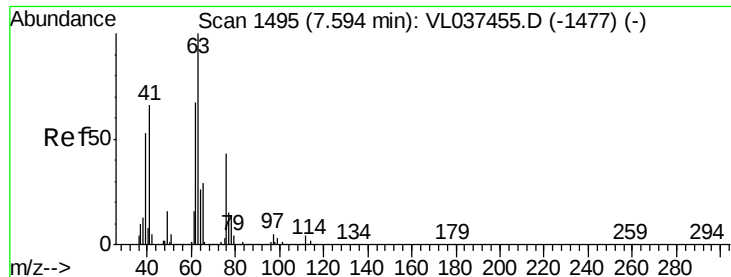
MMDadoda  
 8/19/2021 5:59:50 PM



#38  
 Trichloroethene  
 Concen: 0.121 ppbv m  
 RT: 7.82 min Scan# 1565  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Resp  | Lower  | Upper |
|---------|-------|-------|--------|-------|
| 130     | 100   | 16935 |        |       |
| 95      | 67.5  | 89.2  | 133.8# |       |
| 132     | 79.7  | 74.0  | 111.0  |       |
| 97      | 39.7  | 56.6  | 84.8#  |       |





#39

1,2-Dichloropropane

Concen: 0.152 ppbv m

RT: 7.60 min Scan# 1497

Delta R.T. 0.01 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

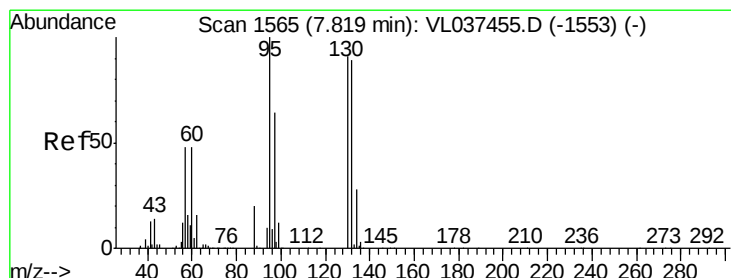
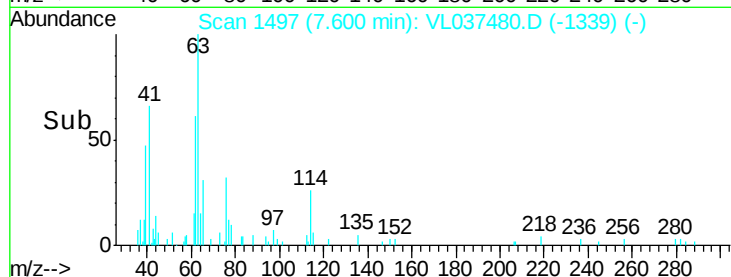
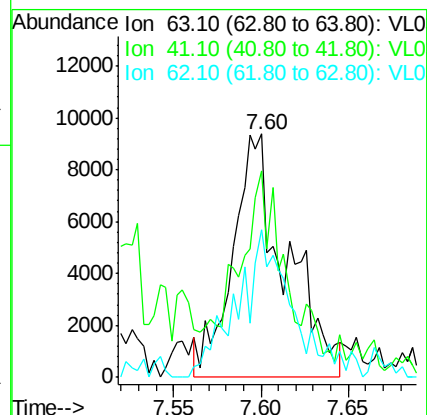
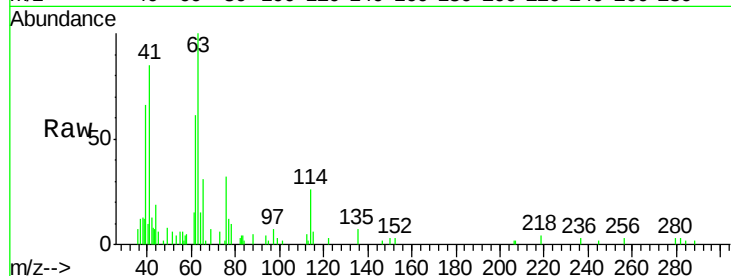
ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 63    | Resp: | 19863 |
| Ion Ratio | Lower | Upper |       |
| 63        | 100   |       |       |
| 41        | 84.8  | 52.4  | 78.6# |
| 62        | 60.5  | 53.6  | 80.4  |

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#40

1,4-Dioxane

Concen: 0.137 ppbv m

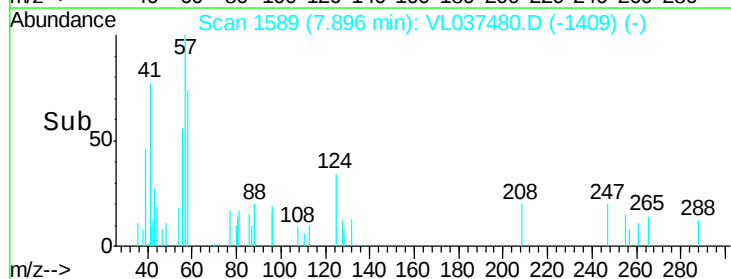
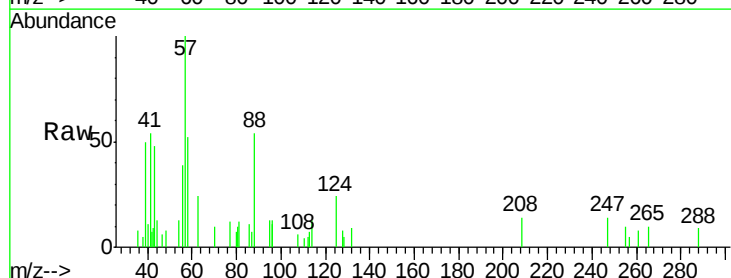
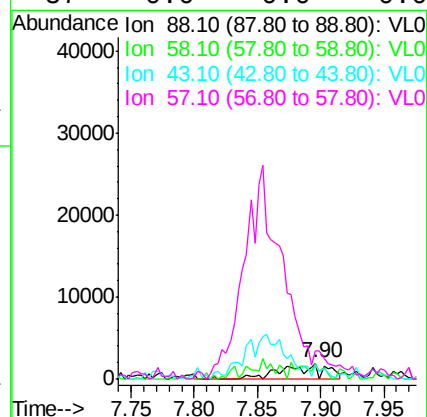
RT: 7.90 min Scan# 1589

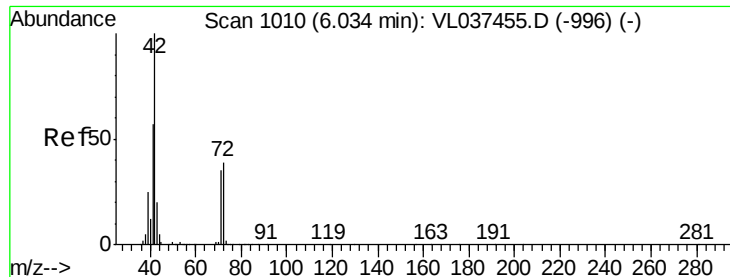
Delta R.T. 0.08 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

|           |       |       |      |
|-----------|-------|-------|------|
| Tgt Ion:  | 88    | Resp: | 4383 |
| Ion Ratio | Lower | Upper |      |
| 88        | 100   |       |      |
| 58        | 0.0   | 0.0   | 0.0  |
| 43        | 0.0   | 0.0   | 0.0  |
| 57        | 0.0   | 0.0   | 0.0  |





#41

Tetrahydrofuran

Concen: 0.096 ppbv m

RT: 6.07 min Scan# 1022

Delta R.T. 0.04 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

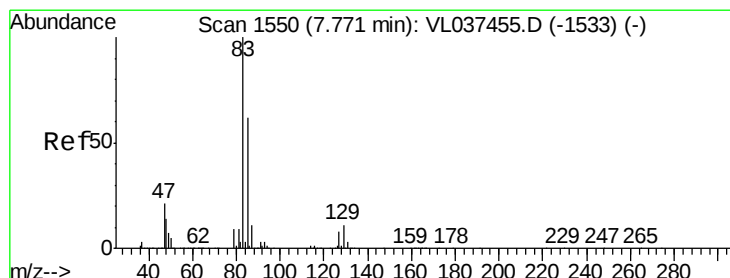
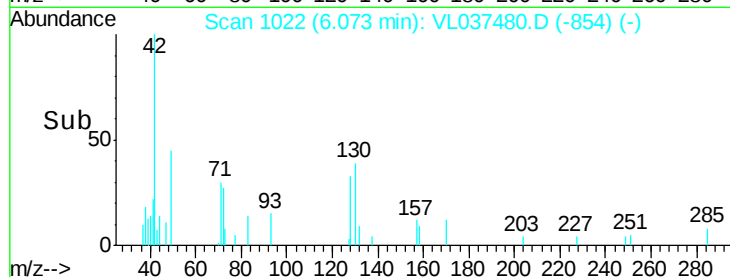
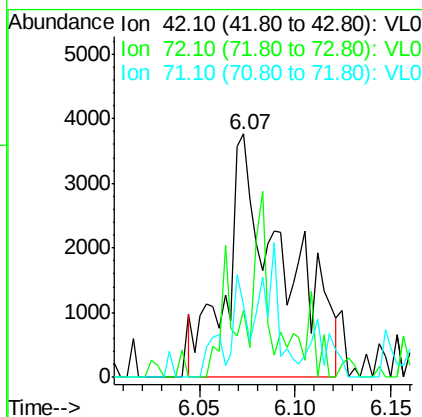
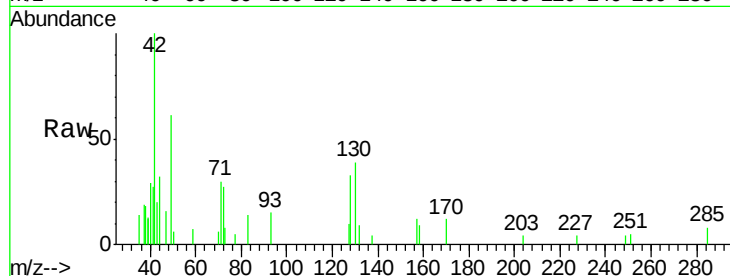
ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 42      | 100   |       |       |
| 72      | 0.0   | 32.2  | 48.4# |
| 71      | 0.0   | 30.5  | 45.7# |

Manual Integrations  
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#42

Bromodichloromethane

Concen: 0.101 ppbv m

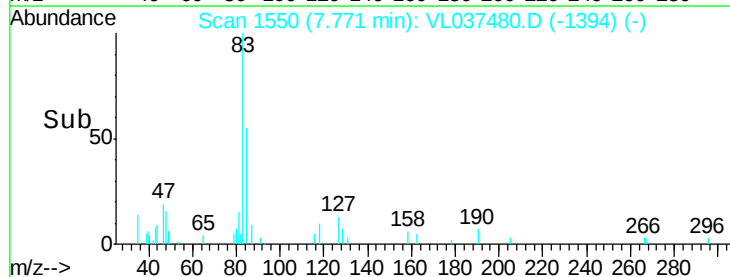
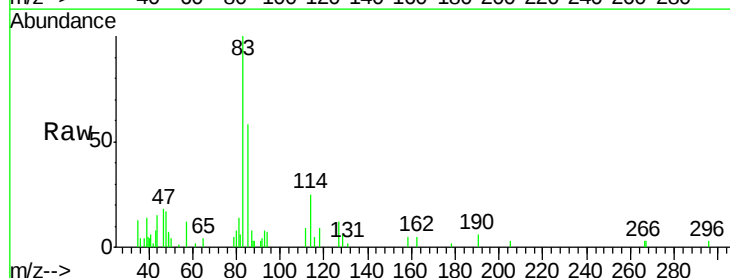
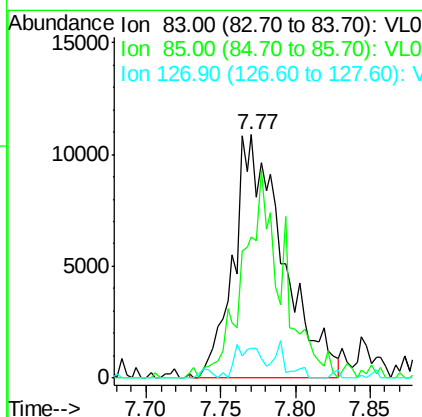
RT: 7.77 min Scan# 1550

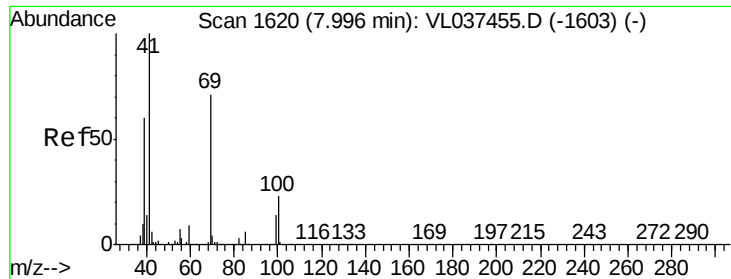
Delta R.T. 0.00 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 83      | 100   |       |       |
| 85      | 57.9  | 49.5  | 74.3  |
| 127     | 12.2  | 6.3   | 9.5#  |





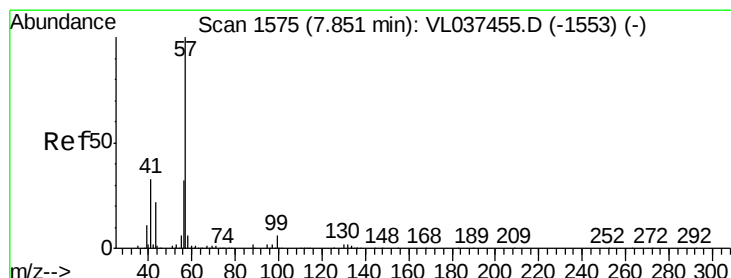
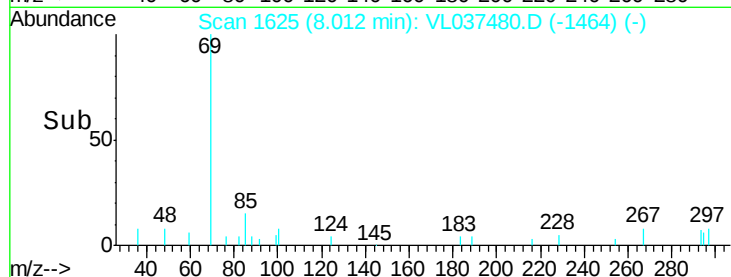
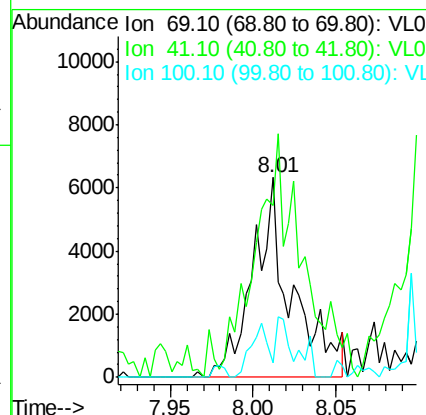
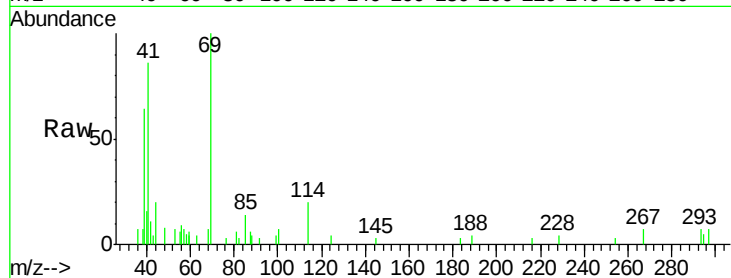
#43  
Methvl Methacrilate  
Concen: 0.086 ppbv m  
RT: 8.01 min Scan# 1625  
Delta R.T. 0.02 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 69      | 100   |       |        |
| 41      | 0.0   | 118.6 | 178.0# |
| 100     | 0.0   | 27.4  | 41.0#  |

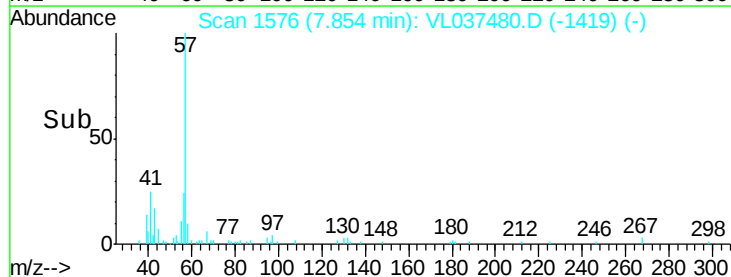
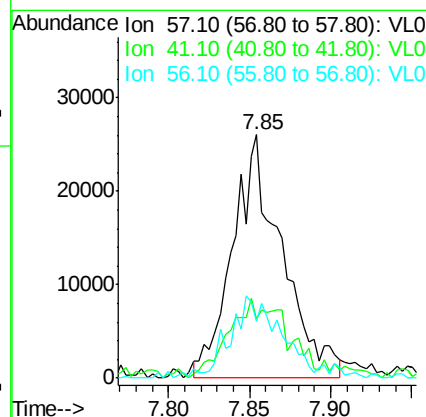
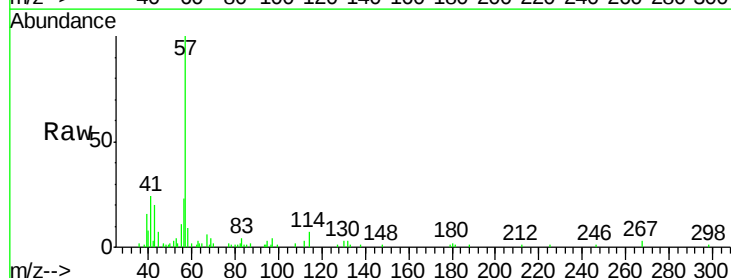
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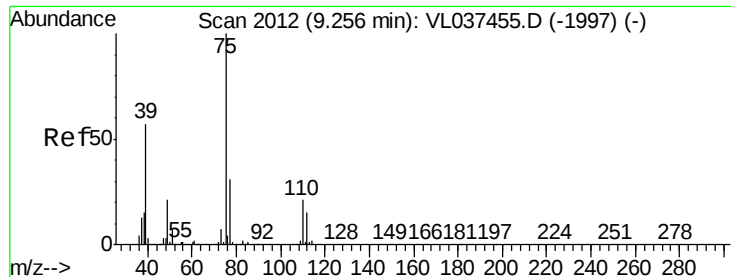
MMDadoda  
8/19/2021 5:59:50 PM



#44  
2,2,4-Trimethylpentane  
Concen: 0.096 ppbv m  
RT: 7.85 min Scan# 1576  
Delta R.T. 0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 57      | 100   |       |       |
| 41      | 37.1  | 26.2  | 39.4  |
| 56      | 38.0  | 25.4  | 38.2  |





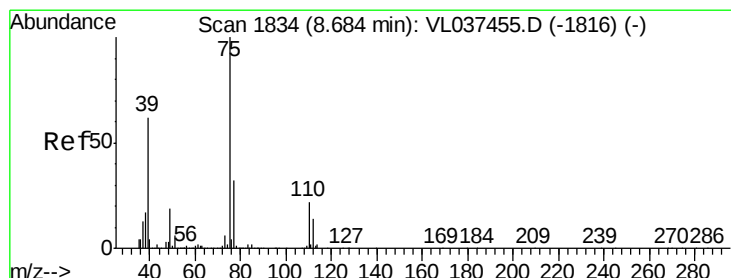
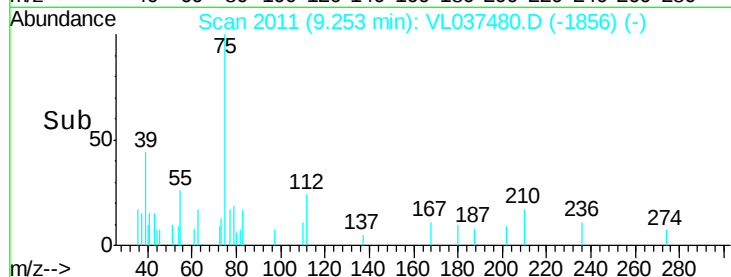
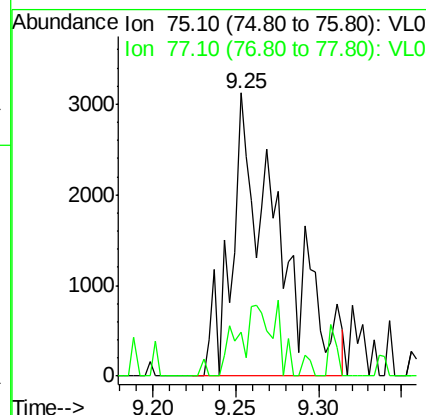
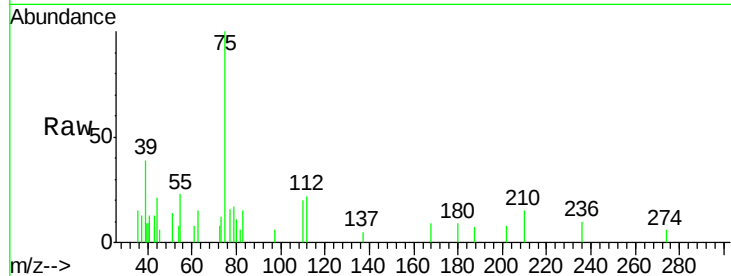
#45  
t-1,3-Dichloropropene  
Concen: 0.070 ppbv m  
RT: 9.25 min Scan# 2011  
Delta R.T. -0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

Tot Ion: 75 Resp: 6253  
Ion Ratio Lower Upper  
75 100  
77 15.6 24.5 36.7#

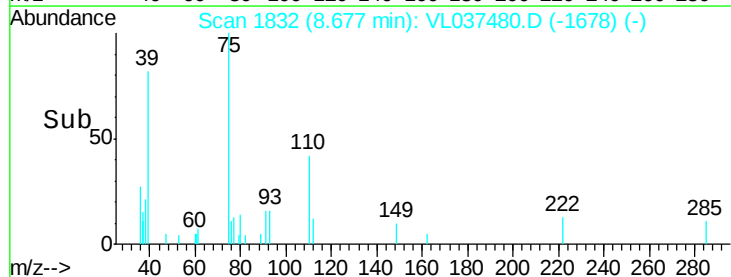
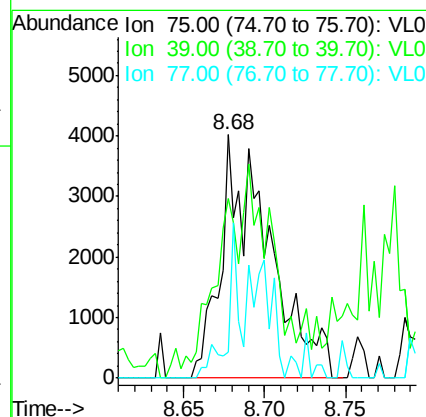
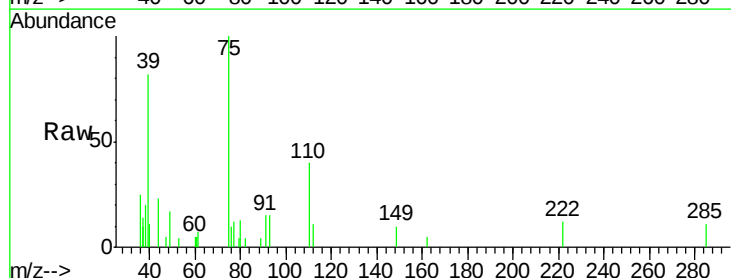
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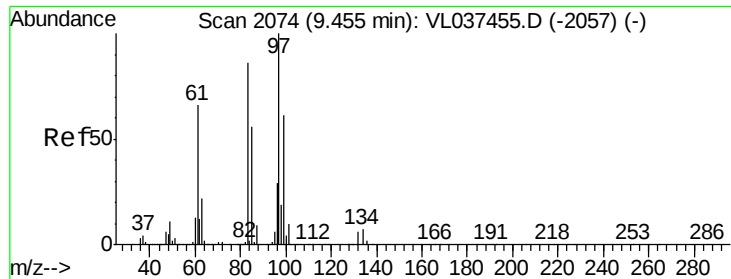
MMDadoda  
8/19/2021 5:59:50 PM



#46  
cis-1,3-Dichloropropene  
Concen: 0.067 ppbv m  
RT: 8.68 min Scan# 1832  
Delta R.T. -0.01 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Tgt Ion: 75 Resp: 8332  
Ion Ratio Lower Upper  
75 100  
39 81.6 49.7 74.5#  
77 12.0 25.4 38.0#





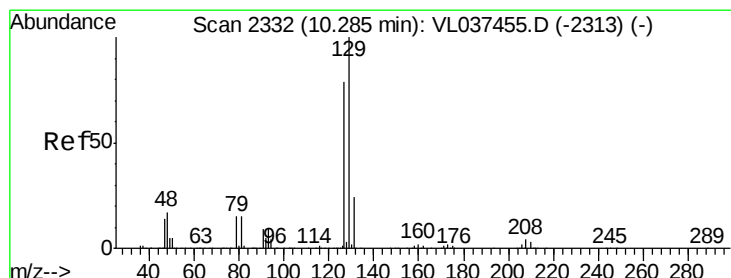
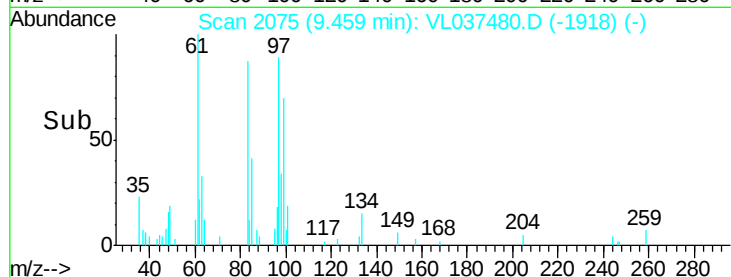
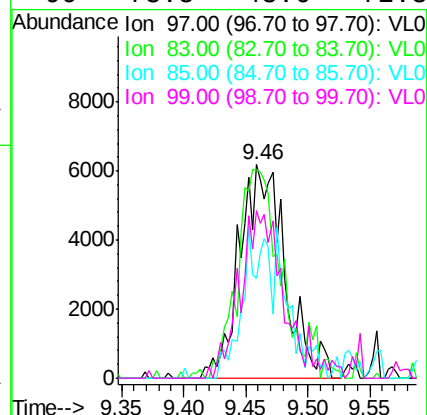
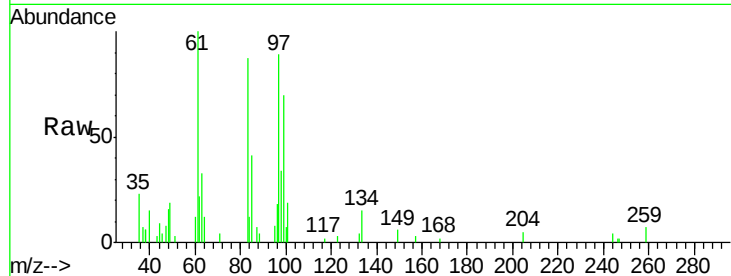
#47  
 1,1,2-Trichloroethane  
 Concen: 0.111 ppbv m  
 RT: 9.46 min Scan# 2075  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ion  | Ratio | Resp  | Lower | Upper |
|---------|------|-------|-------|-------|-------|
| 97      | 100  |       | 15608 |       |       |
| 83      | 97.7 | 68.7  | 103.1 |       |       |
| 85      | 46.8 | 44.7  | 67.1  |       |       |
| 99      | 78.5 | 48.6  | 72.8# |       |       |

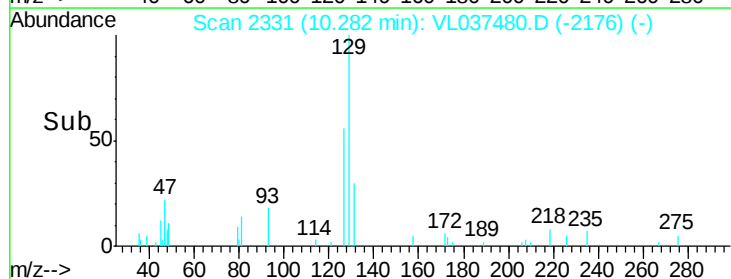
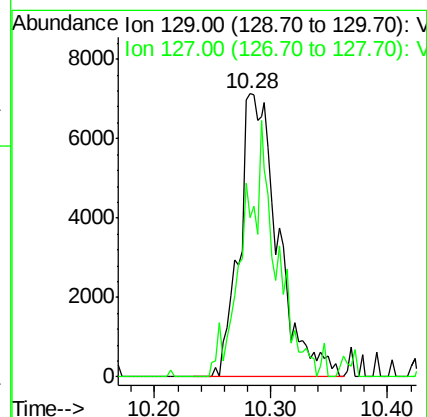
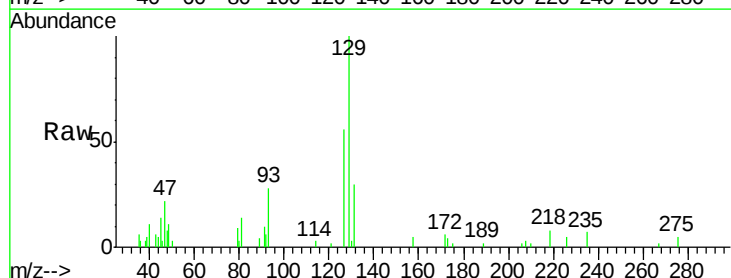
Manual Integrations  
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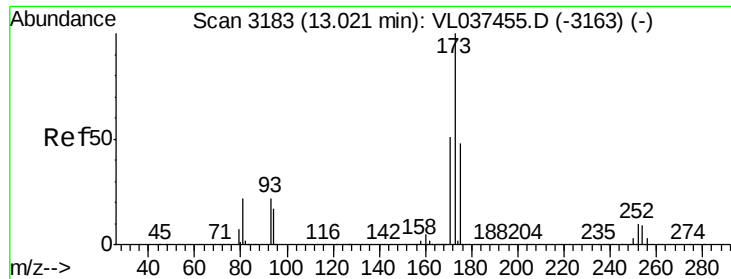
MMDadoda  
 8/19/2021 5:59:50 PM



#48  
 Dibromochloromethane  
 Concen: 0.081 ppbv m  
 RT: 10.28 min Scan# 2331  
 Delta R.T. -0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ion  | Ratio | Resp  | Lower | Upper |
|---------|------|-------|-------|-------|-------|
| 129     | 100  |       | 16478 |       |       |
| 127     | 76.8 | 40.0  | 120.0 |       |       |





#49

Bromoform

Concen: 0.064 ppbv m

RT: 13.02 min Scan# 3183

Delta R.T. 0.00 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

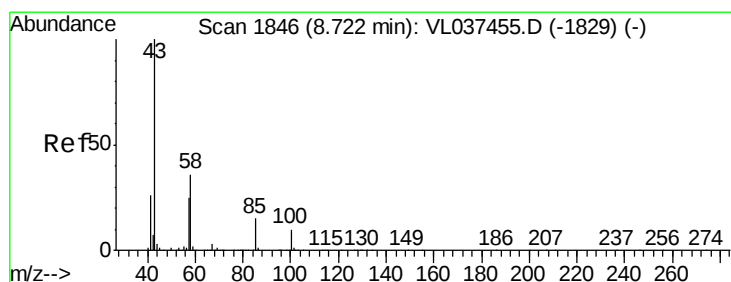
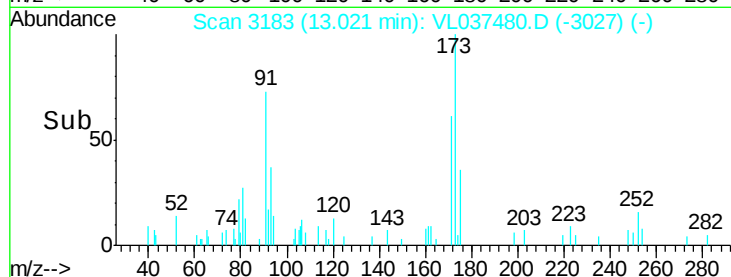
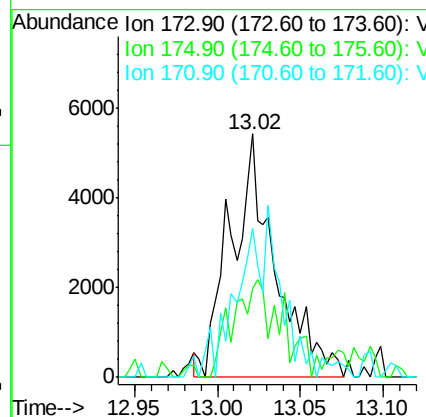
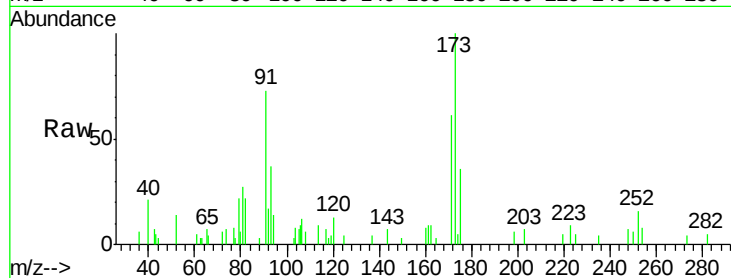
ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 173   | Resp: | 10239 |
| Ion Ratio | Lower | Upper |       |
| 173       | 100   |       |       |
| 175       | 0.0   | 41.9  | 62.9# |
| 171       | 66.1  | 44.2  | 66.4  |

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8/19/2021 5:59:50 PM



#50

4-Methyl-2-Pentanone

Concen: 0.090 ppbv m

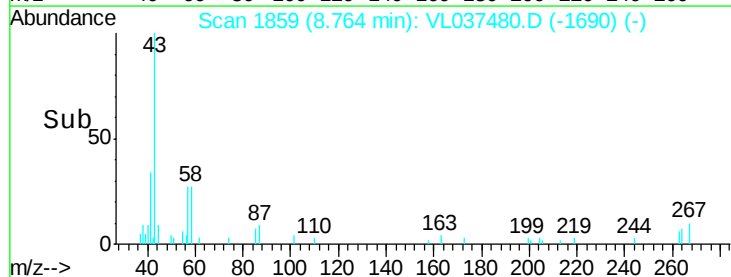
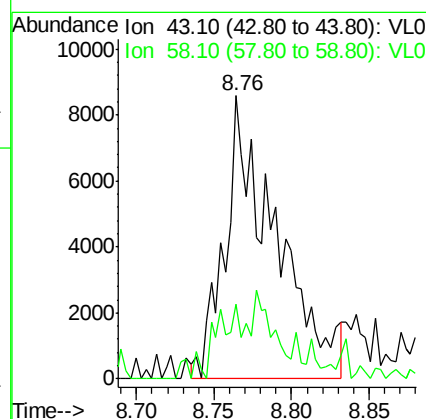
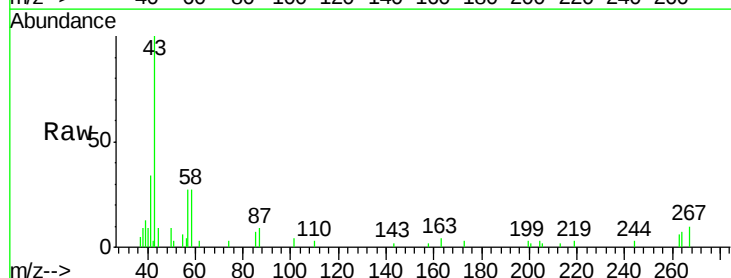
RT: 8.76 min Scan# 1859

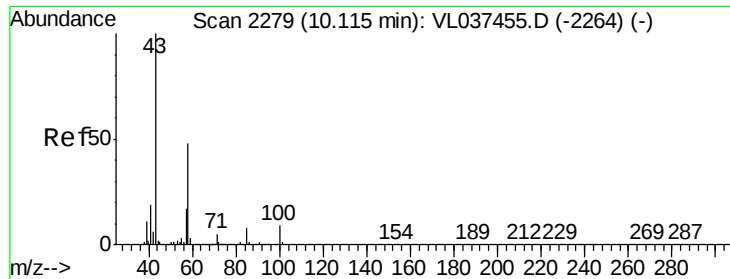
Delta R.T. 0.04 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 43    | Resp: | 19361 |
| Ion Ratio | Lower | Upper |       |
| 43        | 100   |       |       |
| 58        | 0.0   | 29.9  | 44.9# |





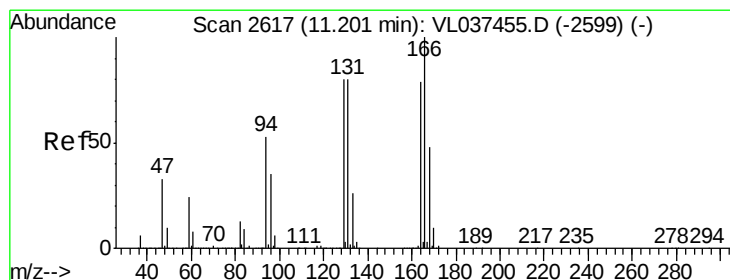
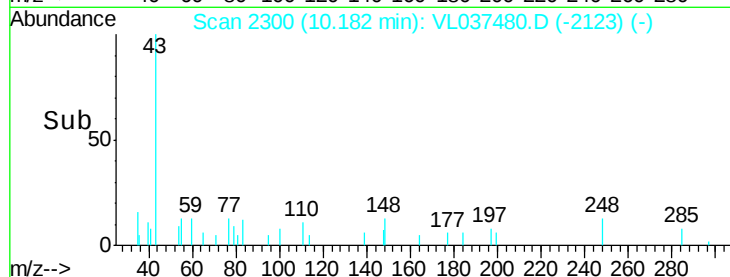
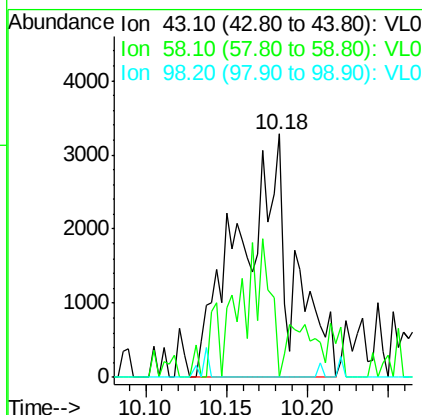
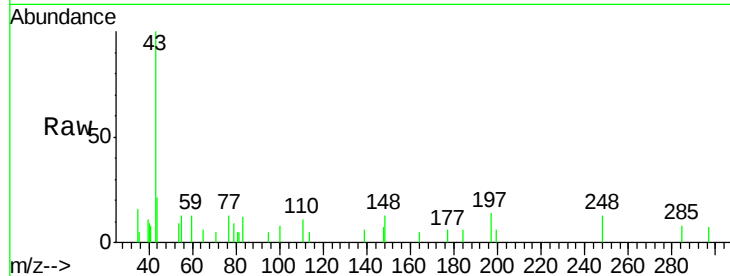
#51  
2-Hexanone  
Concen: 0.074 ppbv m  
RT: 10.18 min Scan# 2300  
Delta R.T. 0.07 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 43      | 100   |       |       |
| 58      | 0.0   | 41.0  | 61.6# |
| 98      | 0.0   | 0.3   | 0.5#  |

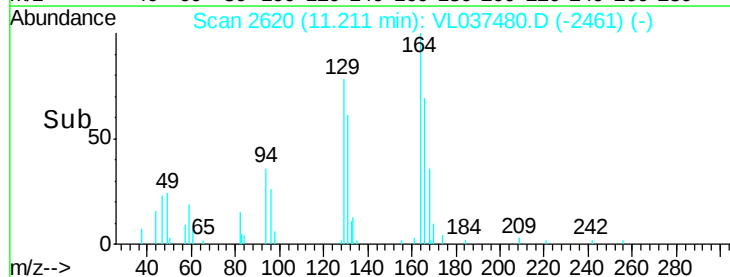
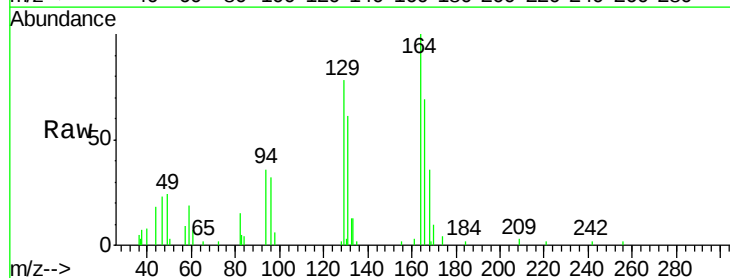
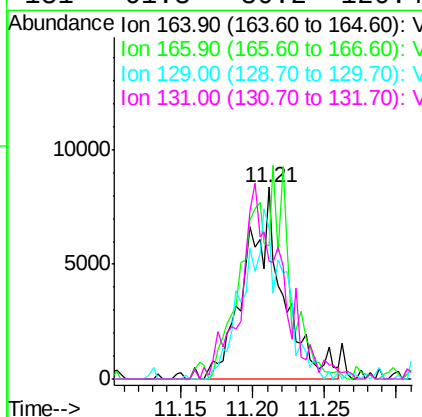
Manual Integrations  
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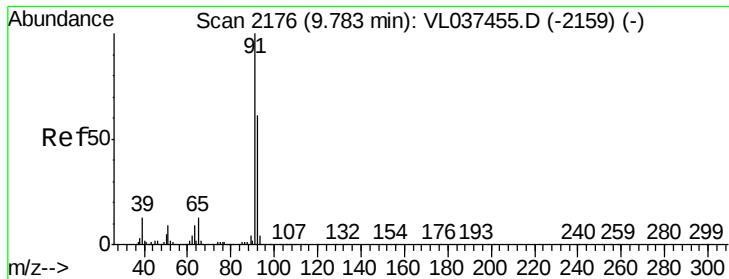
MMDadoda  
8/19/2021 5:59:50 PM



#52  
Tetrachloroethene  
Concen: 0.110 ppbv m  
RT: 11.21 min Scan# 2620  
Delta R.T. 0.01 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 164     | 100   |       |        |
| 166     | 69.1  | 100.7 | 151.1# |
| 129     | 78.5  | 80.9  | 121.3# |
| 131     | 61.3  | 80.2  | 120.4# |





#53

Toluene

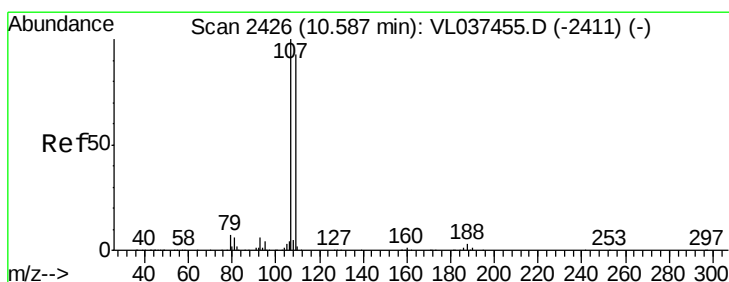
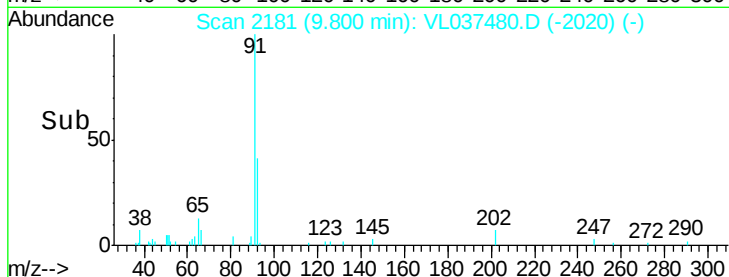
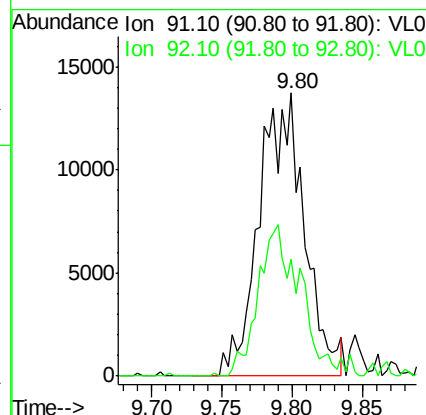
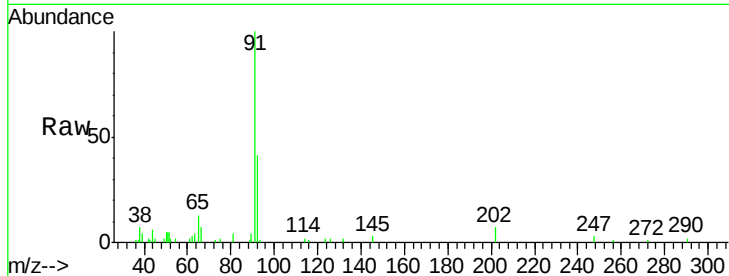
Concen: 0.079 ppbv m  
RT: 9.80 min Scan# 2181  
Delta R.T. 0.02 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 92      | 50.4  | 48.8  | 73.2  |

Manual Integrations  
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8/19/2021 5:59:50 PM

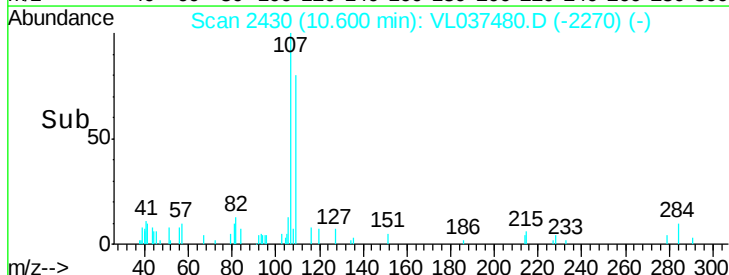
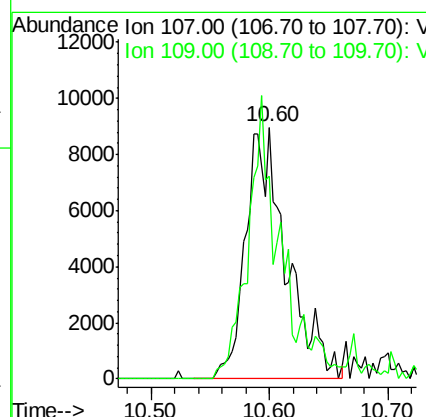
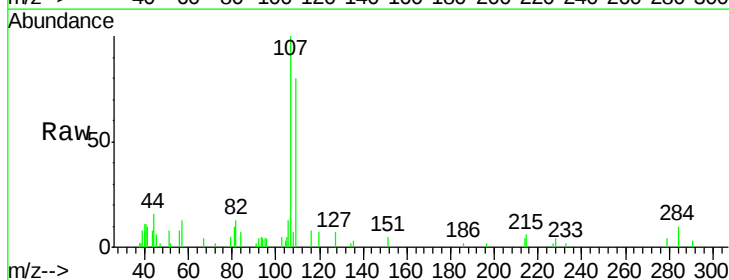


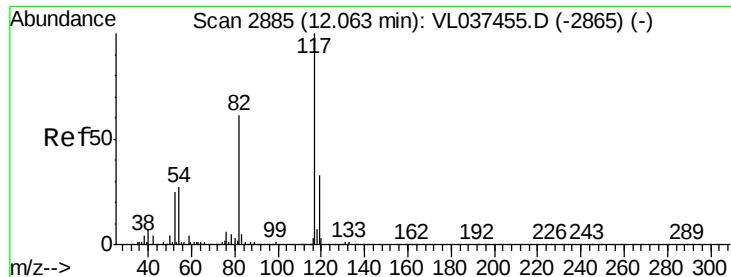
#54

1,2-Dibromoethane

Concen: 0.109 ppbv m  
RT: 10.60 min Scan# 2430  
Delta R.T. 0.01 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 107     | 100   |       |       |
| 109     | 80.4  | 74.2  | 111.4 |





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2887

Delta R.T. 0.01 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

Tot Ion:117 Resp: 3449135

Ion Ratio Lower Upper

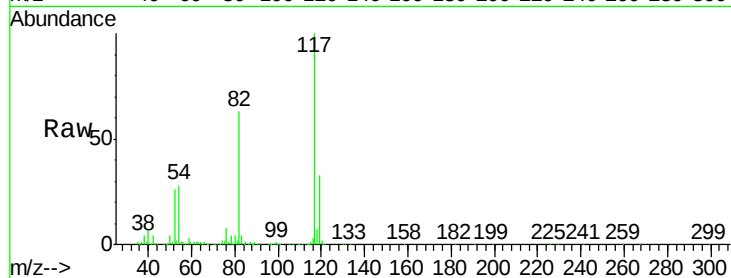
117 100

82 66.1 52.9 79.3

119 35.0 24.8 37.2

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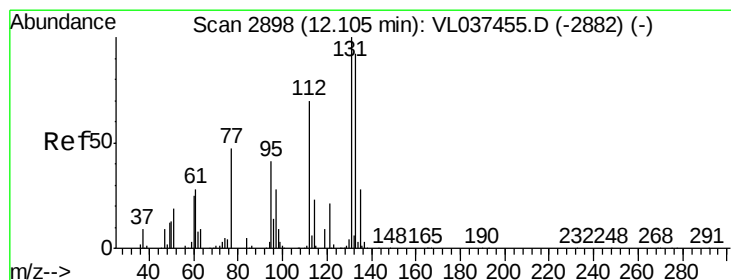
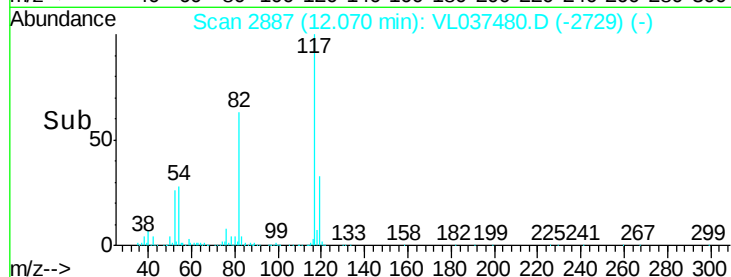
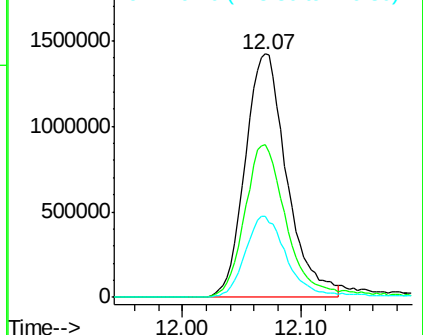
MMDadoda  
8/19/2021 5:59:50 PM



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V



#56

1,1,1,2-Tetrachloroethane

Concen: 0.112 ppbv m

RT: 12.10 min Scan# 2897

Delta R.T. -0.00 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

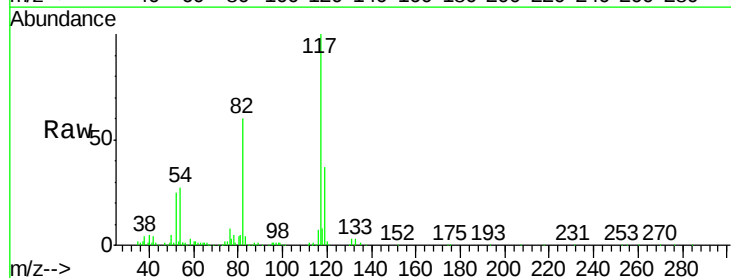
Tgt Ion:131 Resp: 16100

Ion Ratio Lower Upper

131 100

133 0.0 78.7 118.1#

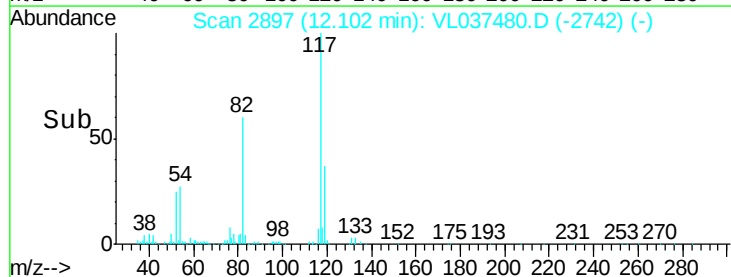
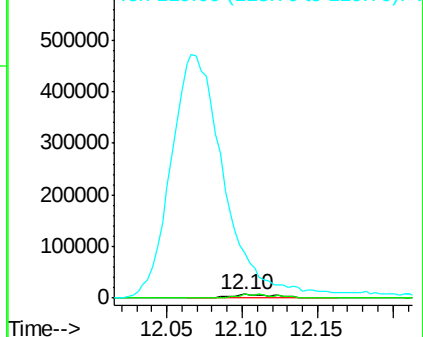
119 0.0 56.6 85.0#

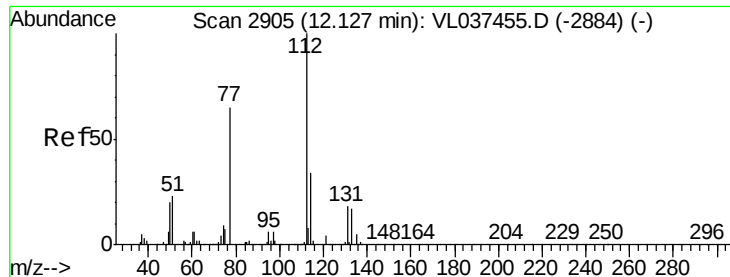


Abundance Ion 131.00 (130.70 to 131.70): V

Ion 133.00 (132.70 to 133.70): V

Ion 119.00 (118.70 to 119.70): V





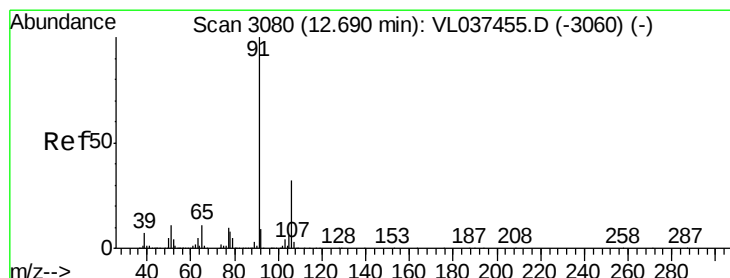
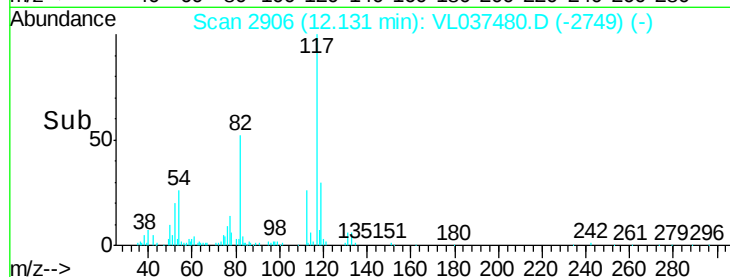
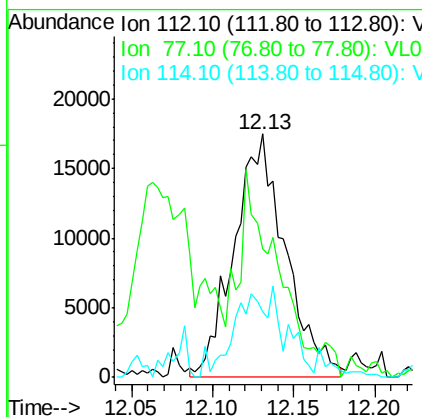
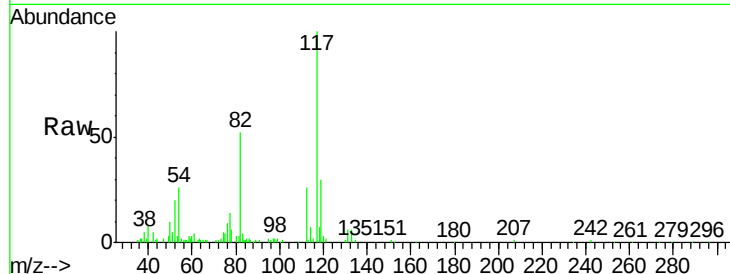
#57  
Chlorobenzene  
Concen: 0.134 ppbv m  
RT: 12.13 min Scan# 2906  
Delta R.T. 0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 112     | 100   |       |       |
| 77      | 52.8  | 51.6  | 77.4  |
| 114     | 26.9  | 30.7  | 37.5# |

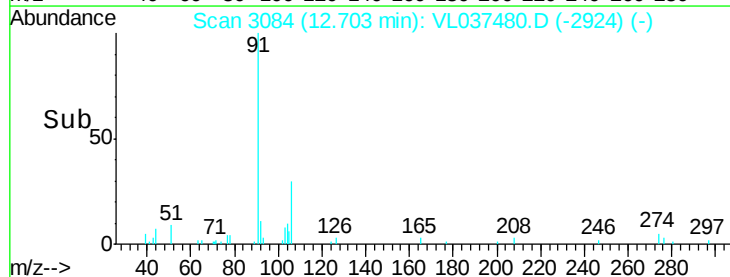
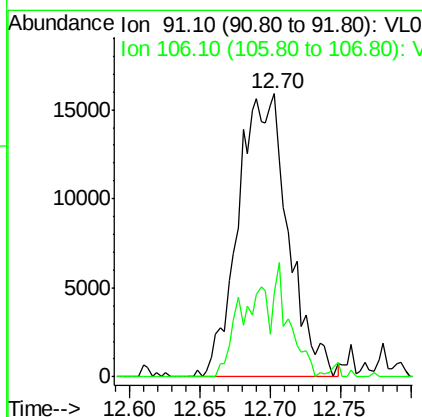
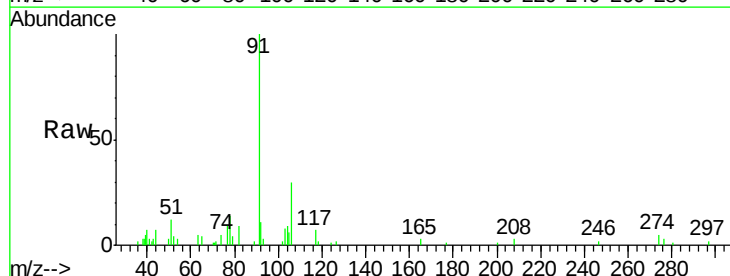
Manual Integrations  
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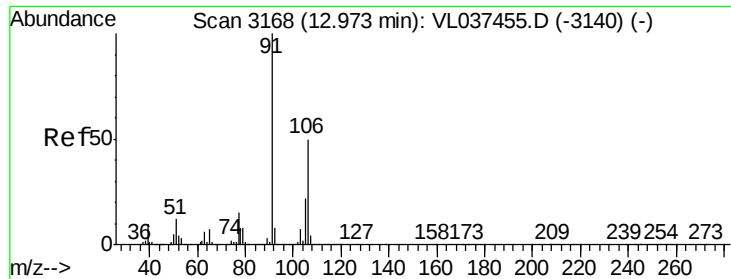
MMDadoda  
8/19/2021 5:59:50 PM



#58  
Ethyl Benzene  
Concen: 0.082 ppbv m  
RT: 12.70 min Scan# 3084  
Delta R.T. 0.01 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 91      | 100   |       |       |
| 106     | 29.7  | 25.7  | 38.5  |





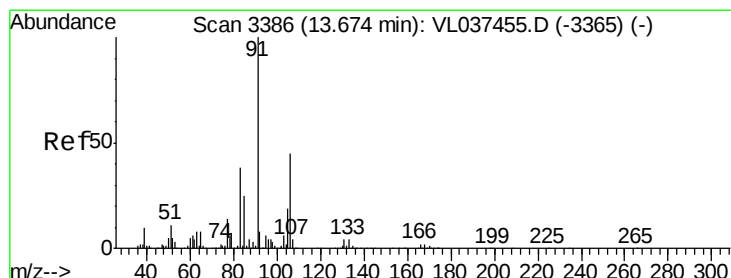
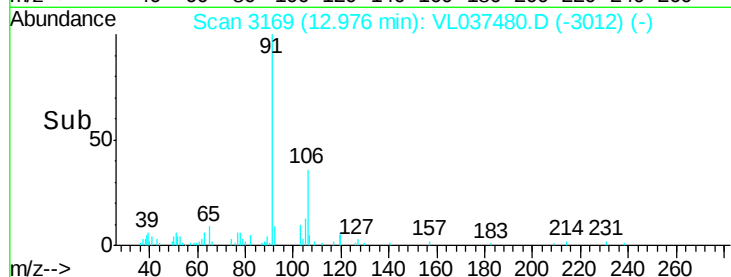
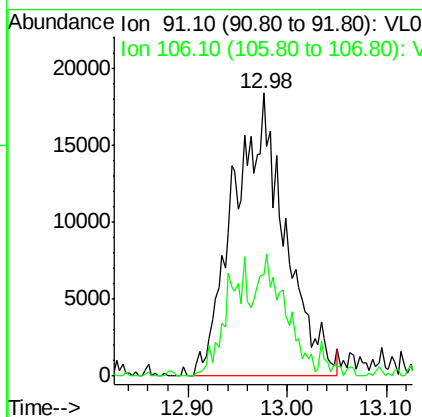
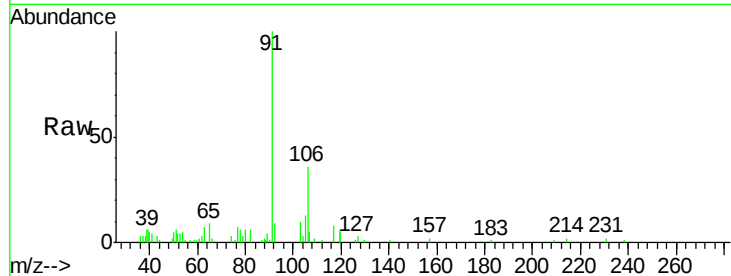
#59  
m/p-Xylene  
Concen: 0.159 ppbv m  
RT: 12.98 min Scan# 3169  
Delta R.T. 0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

Tot Ion: 91 Resp: 66005  
Ion Ratio Lower Upper  
91 100  
106 44.6 36.9 55.3

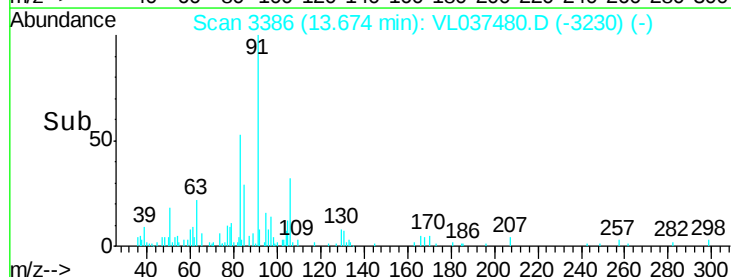
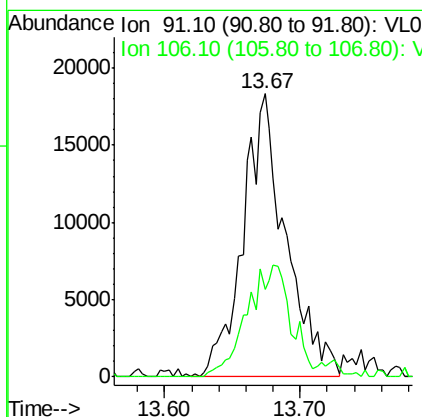
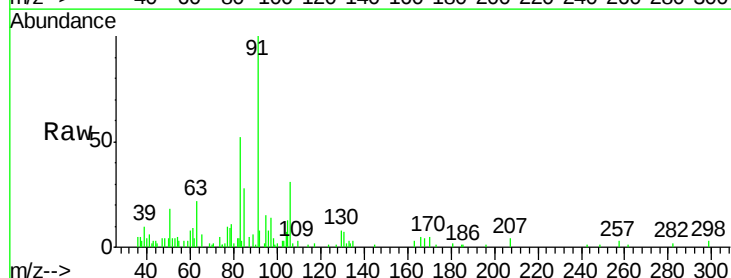
Manual Integrations  
APPROVED

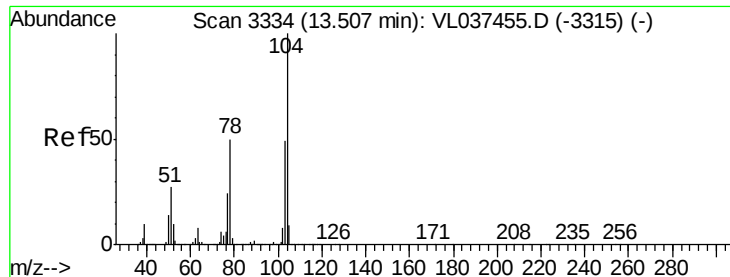
MMDadoda  
8/19/2021 5:59:50 PM



#60  
o-Xylene  
Concen: 0.104 ppbv m  
RT: 13.67 min Scan# 3386  
Delta R.T. 0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Tgt Ion: 91 Resp: 40240  
Ion Ratio Lower Upper  
91 100  
106 43.3 23.7 71.1





#61

Stvrene

Concen: 0.060 ppbv m

RT: 13.52 min Scan# 3337

Delta R.T. 0.01 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

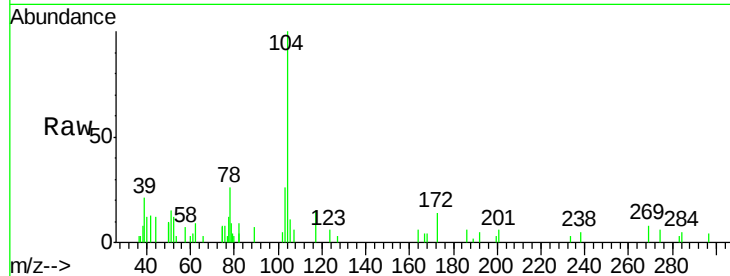
ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

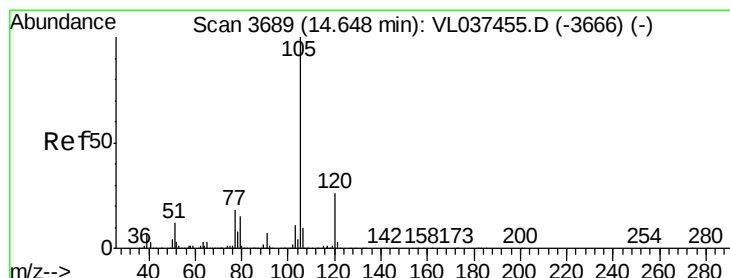
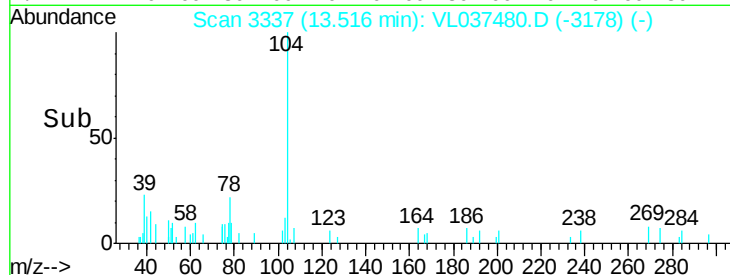
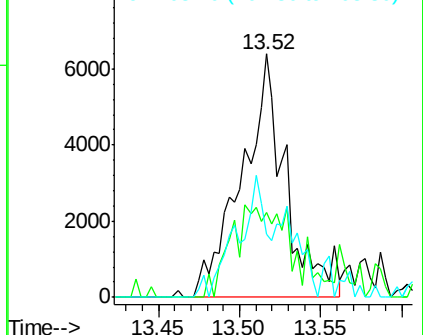
|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 104   | Resp: | 12107 |
| Ion Ratio | Lower | Upper |       |
| 104       | 100   |       |       |
| 78        | 0.0   | 41.3  | 61.9# |
| 103       | 59.1  | 39.4  | 59.0# |

Manual Integrations  
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MMDadoda  
8/19/2021 5:59:50 PM



Abundance Ion 104.10 (103.80 to 104.80): V  
Ion 78.10 (77.80 to 78.80): V  
Ion 103.10 (102.80 to 103.80): V



#62

Isopropylbenzene

Concen: 0.104 ppbv m

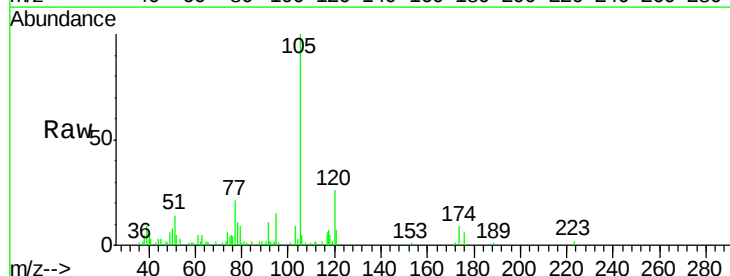
RT: 14.65 min Scan# 3690

Delta R.T. 0.00 min

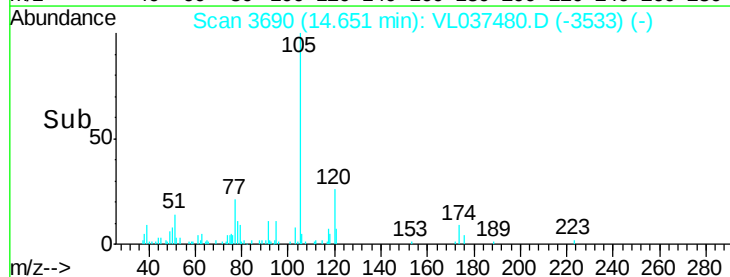
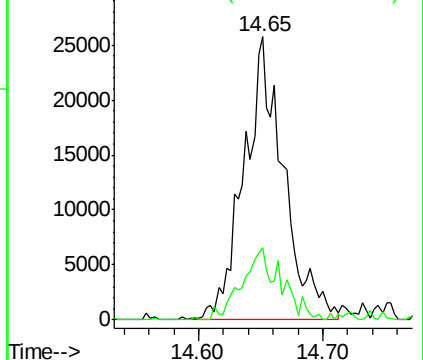
Lab File: VL037480.D

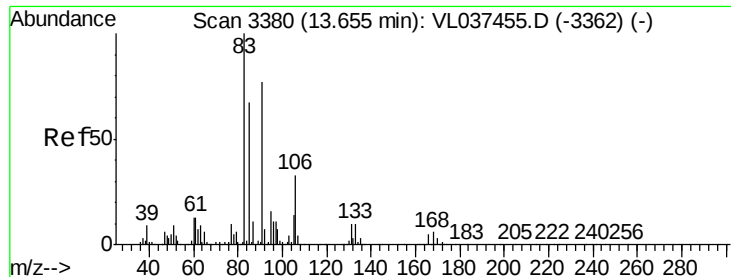
Acq: 17 Aug 2021 3:11

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 105   | Resp: | 56920 |
| Ion Ratio | Lower | Upper |       |
| 105       | 100   |       |       |
| 120       | 26.3  | 21.5  | 32.3  |



Abundance Ion 105.10 (104.80 to 105.80): V  
Ion 120.20 (119.90 to 120.90): V





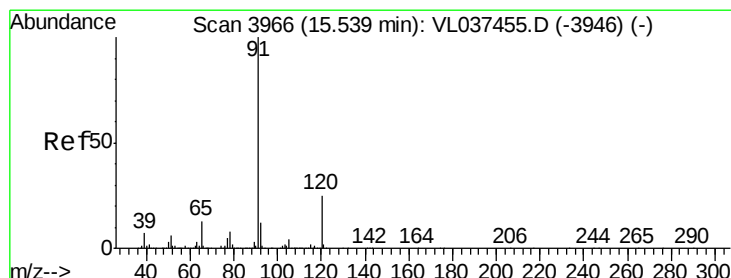
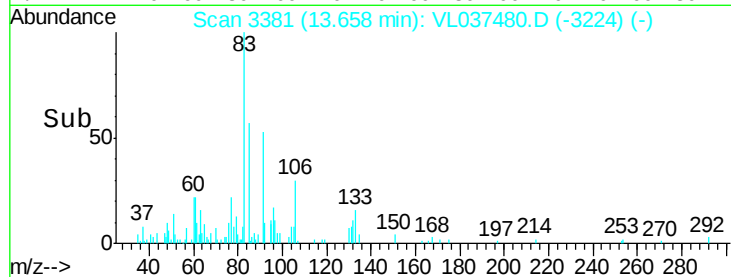
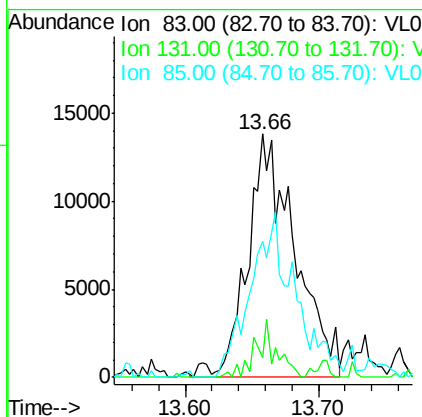
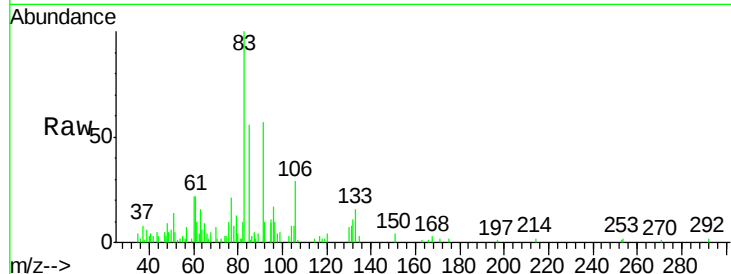
#63  
 1,1,2,2-Tetrachloroethane  
 Concen: 0.119 ppbv m  
 RT: 13.66 min Scan# 3381  
 Delta R.T. 0.00 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper  |
|---------|-------|-------|--------|
| 83      | 100   |       |        |
| 131     | 11.8  | 5.0   | 15.0   |
| 85      | 0.0   | 33.8  | 101.3# |

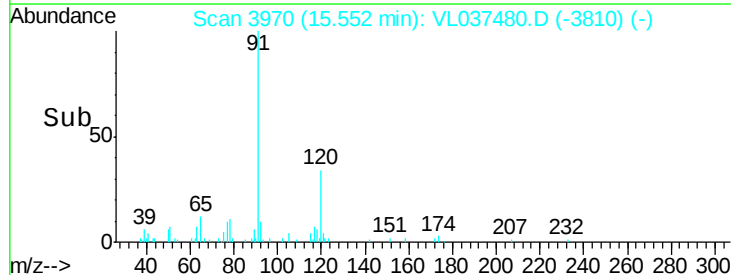
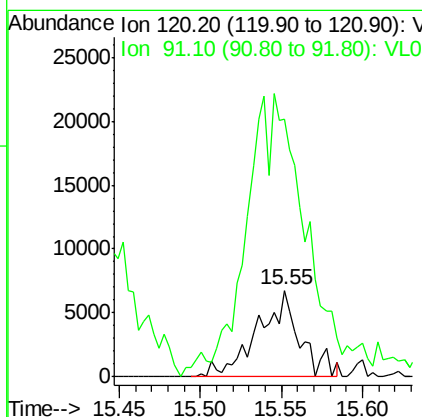
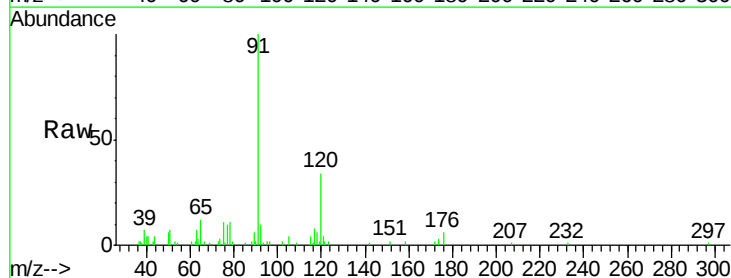
Manual Integrations  
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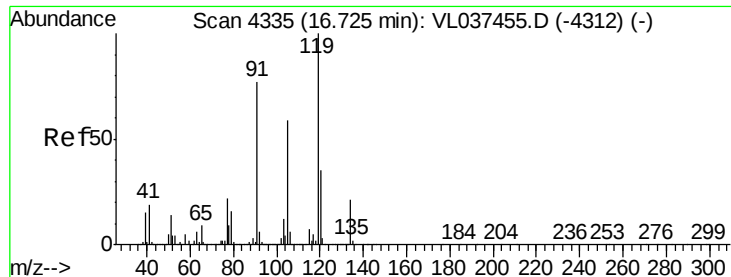
MMDadoda  
 8/19/2021 5:59:50 PM



#64  
 n-propylbenzene  
 Concen: 0.088 ppbv m  
 RT: 15.55 min Scan# 3970  
 Delta R.T. 0.01 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 120     | 100   |       |       |
| 91      | 496.7 | 373.8 | 560.6 |





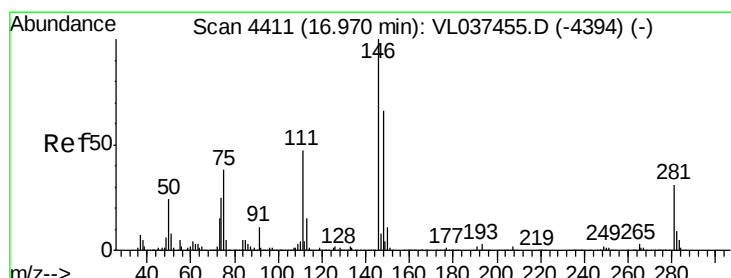
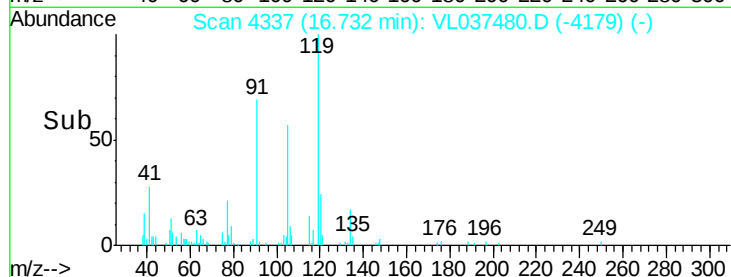
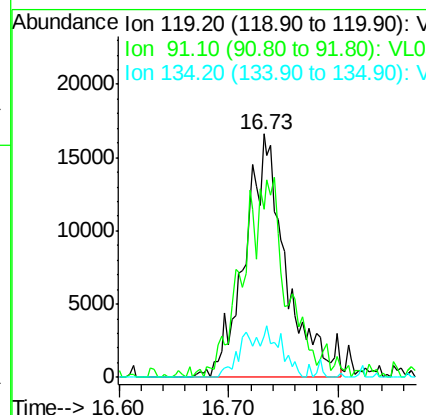
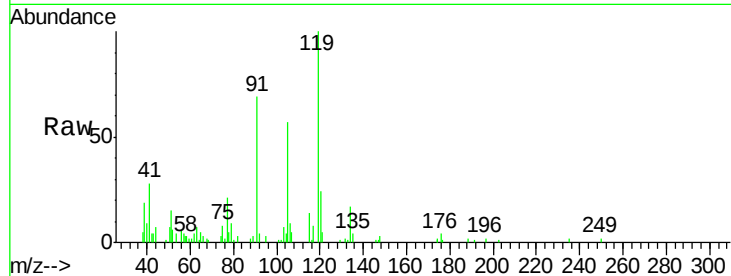
#65  
tert-Butylbenzene  
Concen: 0.087 ppbv m  
RT: 16.73 min Scan# 4337  
Delta R.T. 0.01 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 119     | 100   | 43489 |       |       |
| 91      | 91.3  | 62.9  | 94.3  |       |
| 134     | 19.8  | 16.4  | 24.6  |       |

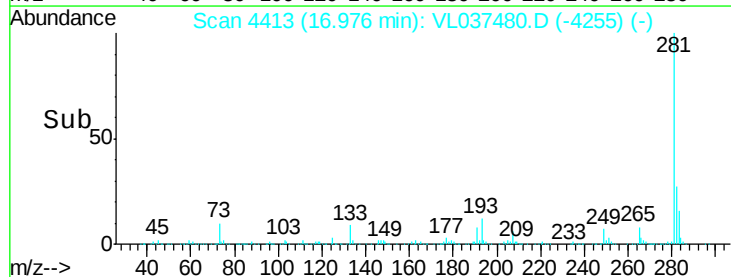
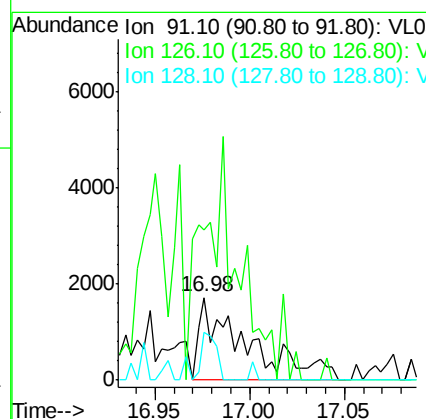
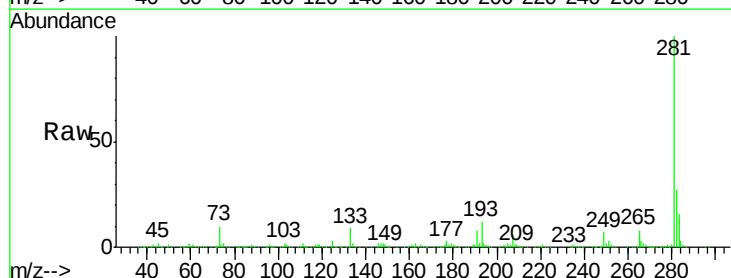
Manual Integrations  
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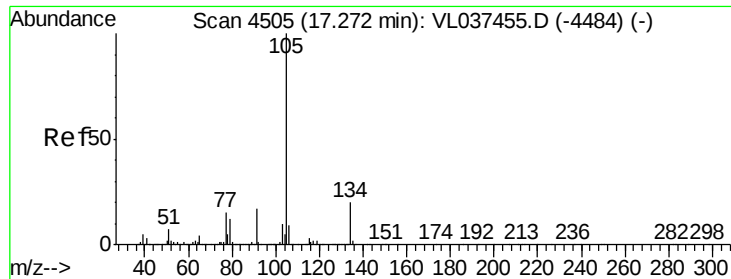
MMDadoda  
8/19/2021 5:59:50 PM



#66  
Benzyl Chloride  
Concen: 0.131 ppbv m  
RT: 16.98 min Scan# 4413  
Delta R.T. 0.01 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Resp | Lower | Upper |
|---------|-------|------|-------|-------|
| 91      | 100   | 2946 |       |       |
| 126     | 0.0   | 15.9 | 23.9# |       |
| 128     | 21.3  | 5.4  | 8.0#  |       |





#67

sec-Butylbenzene

Concen: 0.099 ppbv m

RT: 17.28 min Scan# 4506

Delta R.T. 0.00 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

Tot Ion: 105 Resp: 68648

Ion Ratio Lower Upper

105 100

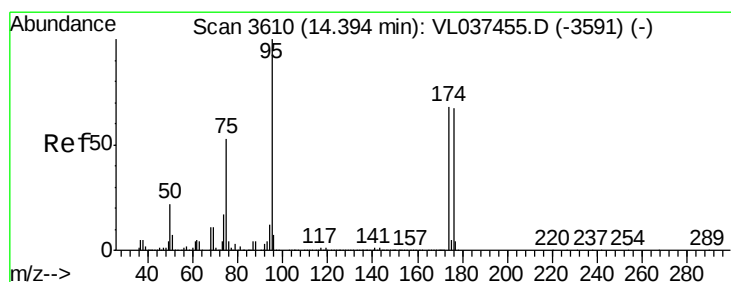
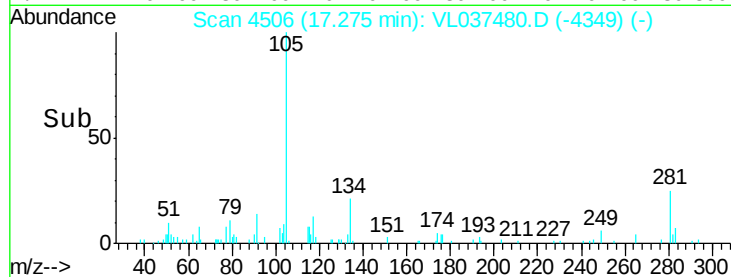
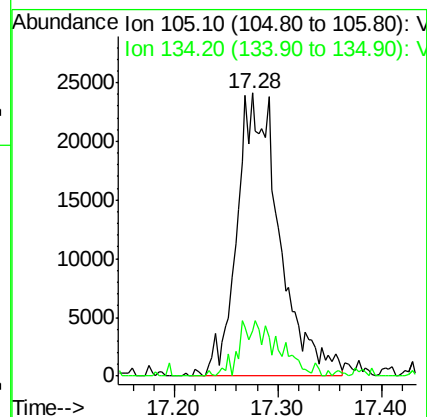
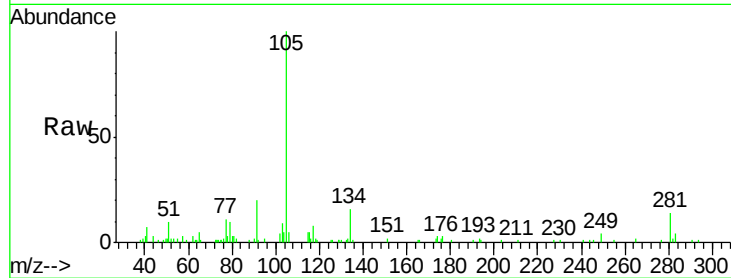
134 19.3 15.2 22.8

Manual Integrations

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8/19/2021 5:59:50 PM



#68

1-Bromo-4-Fluorobenzene

Concen: 10.135 ppbv

RT: 14.40 min Scan# 3611

Delta R.T. 0.00 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

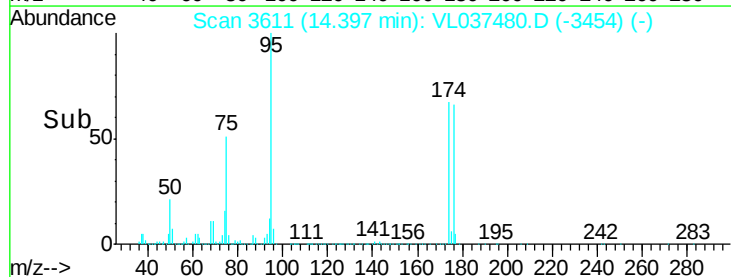
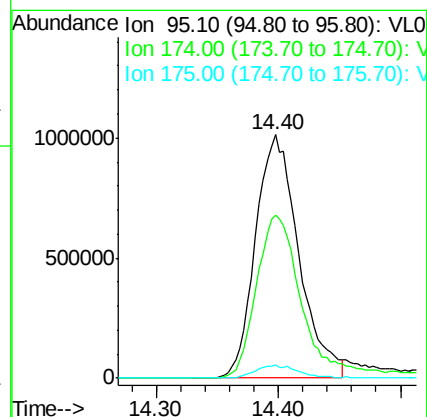
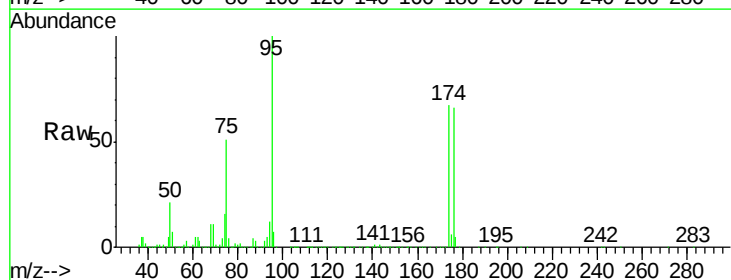
Tgt Ion: 95 Resp: 2483550

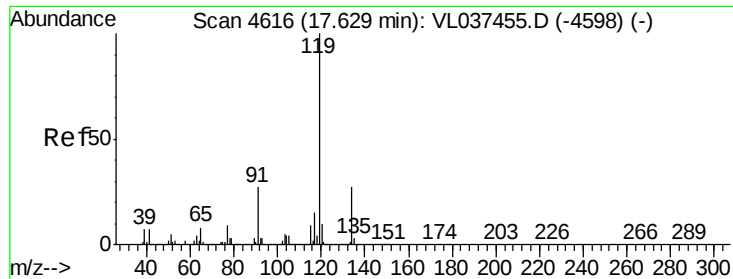
Ion Ratio Lower Upper

95 100

174 75.1 59.6 89.4

175 5.3 4.6 7.0





#69

p-Isopropyltoluene

Concen: 0.077 ppbv m

RT: 17.64 min Scan# 4621

Delta R.T. 0.02 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

Instrument :

MSVOA\_L

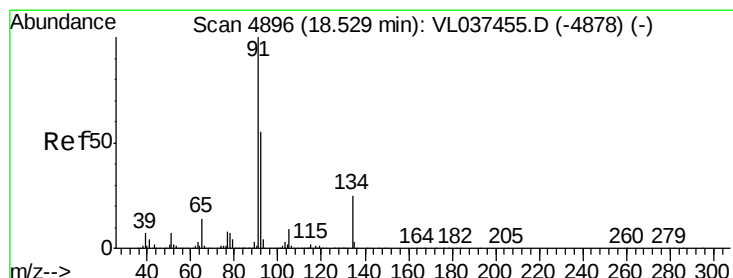
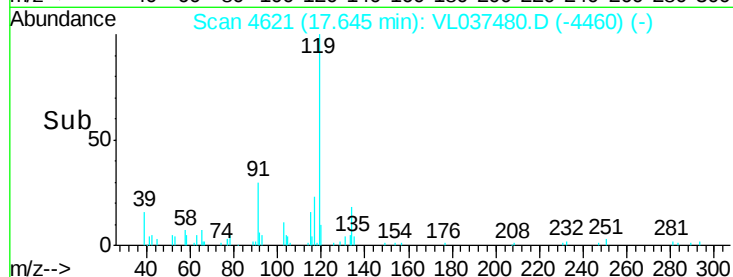
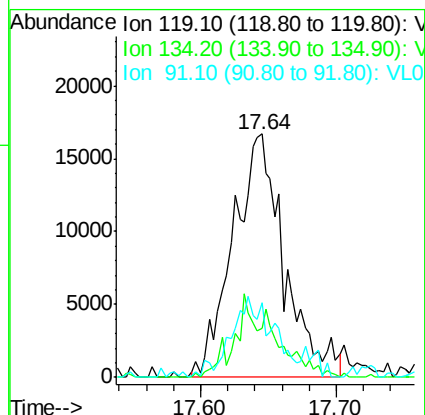
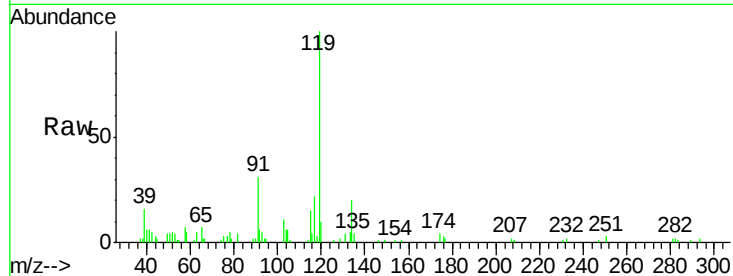
ClientSampleId :

LOD-MDL-AIR-01-QT3-2021

|           |       |       |       |
|-----------|-------|-------|-------|
| Tot Ion:  | 119   | Resp: | 43801 |
| Ion Ratio | Lower | Upper |       |
| 119       | 100   |       |       |
| 134       | 0.0   | 21.1  | 31.7# |
| 91        | 0.0   | 22.4  | 33.6# |

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#70

n-Butylbenzene

Concen: 0.072 ppbv m

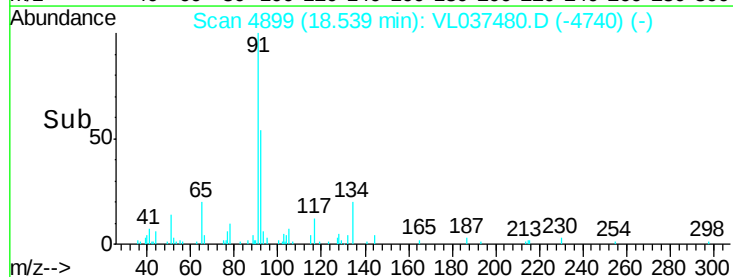
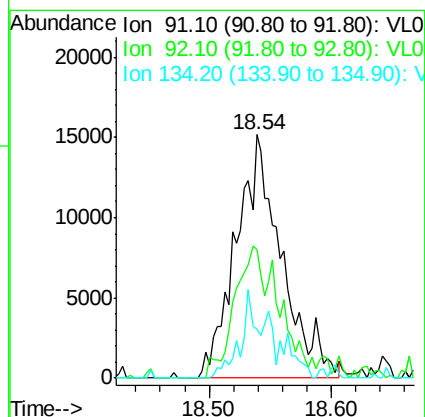
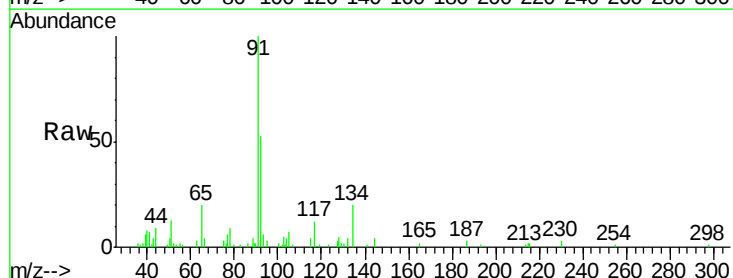
RT: 18.54 min Scan# 4899

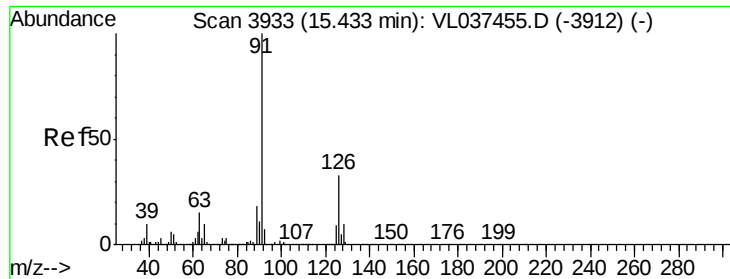
Delta R.T. 0.01 min

Lab File: VL037480.D

Acq: 17 Aug 2021 3:11

|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 91    | Resp: | 39197 |
| Ion Ratio | Lower | Upper |       |
| 91        | 100   |       |       |
| 92        | 0.0   | 44.0  | 66.0# |
| 134       | 0.0   | 19.5  | 29.3# |





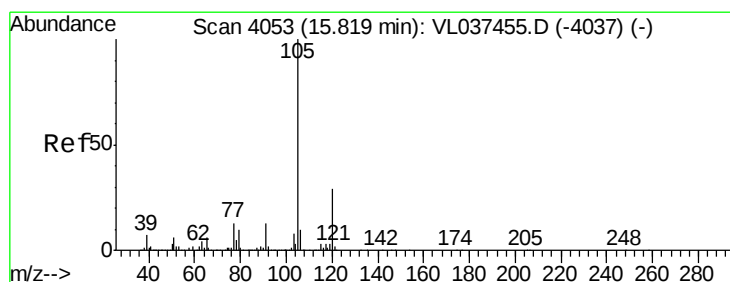
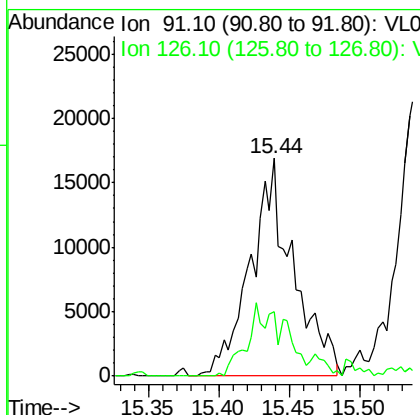
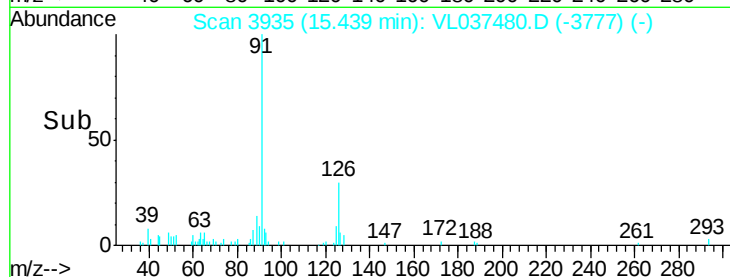
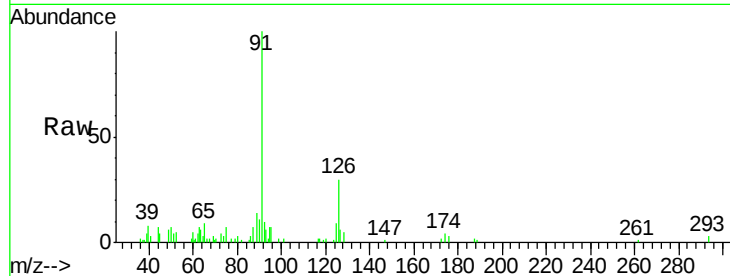
#71  
2-Chlorotoluene  
Concen: 0.089 ppbv m  
RT: 15.44 min Scan# 3935  
Delta R.T. 0.01 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

Tot Ion: 91 Resp: 35599  
Ion Ratio Lower Upper  
91 100  
126 0.0 13.6 54.4#

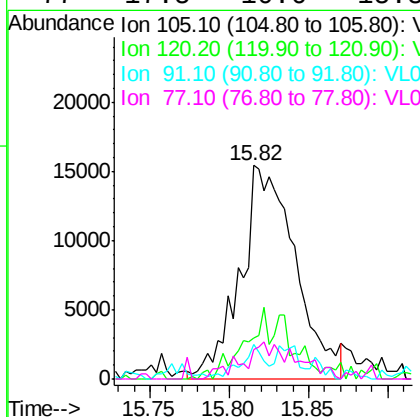
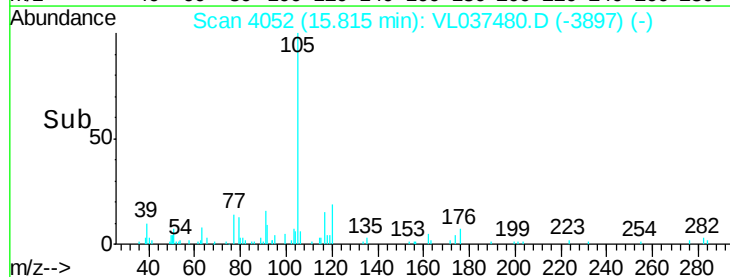
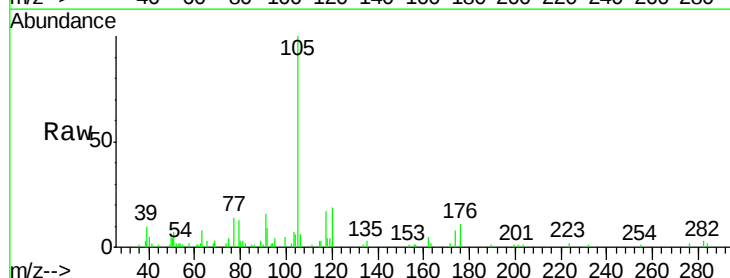
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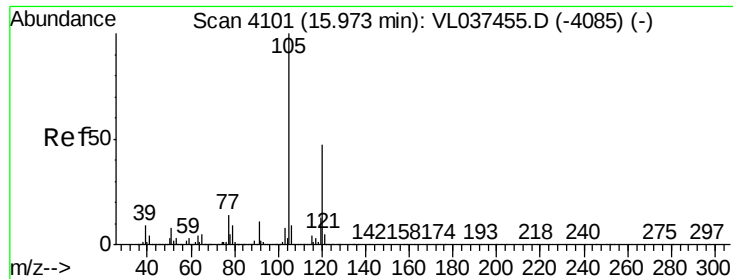
MMDadoda  
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#72  
4-Ethyltoluene  
Concen: 0.081 ppbv m  
RT: 15.82 min Scan# 4052  
Delta R.T. -0.00 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Tgt Ion: 105 Resp: 37181  
Ion Ratio Lower Upper  
105 100  
120 29.7 24.7 37.1  
91 0.0 9.8 14.8#  
77 17.5 10.6 15.8#





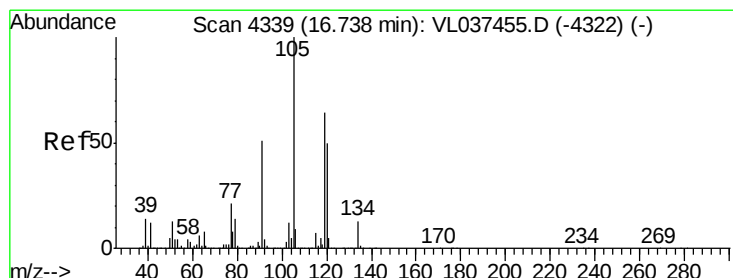
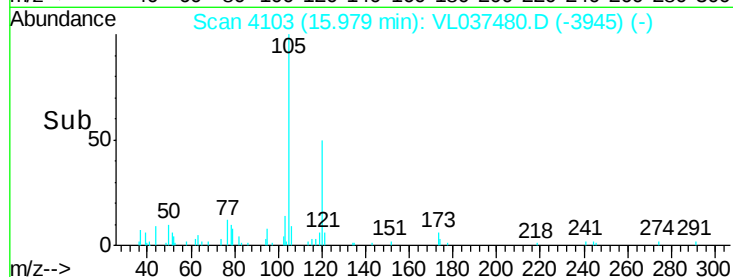
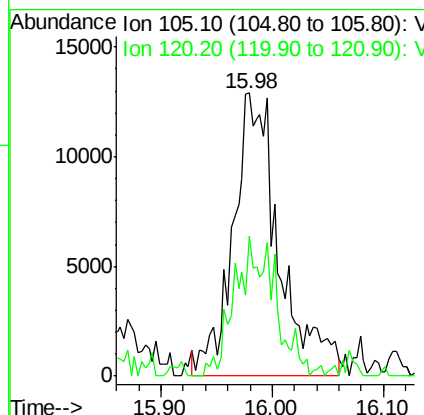
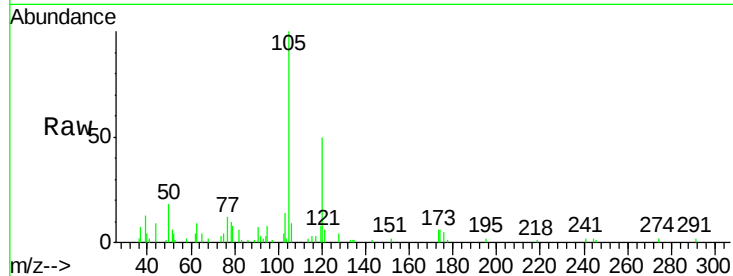
#73  
 1,3,5-Trimethylbenzene  
 Concen: 0.086 ppbv m  
 RT: 15.98 min Scan# 4103  
 Delta R.T. 0.01 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 105     | 100   | 36961 |       |       |
| 120     | 49.6  | 37.6  | 56.4  |       |

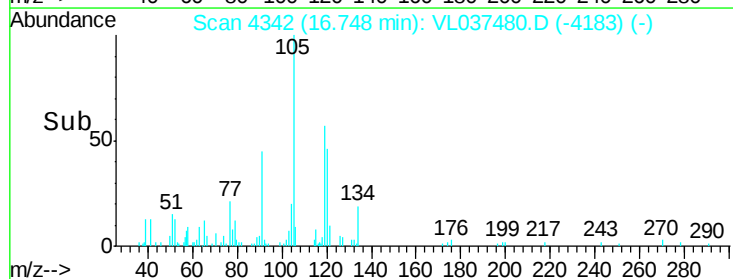
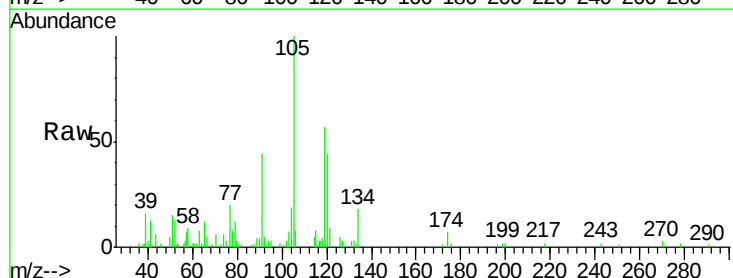
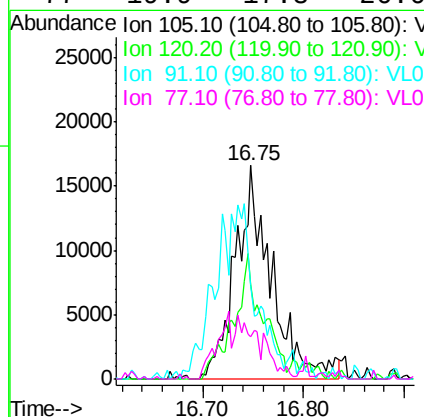
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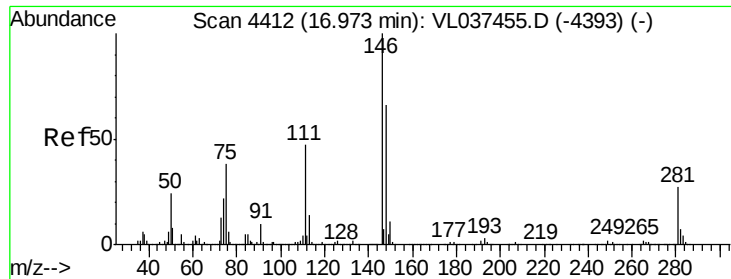
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#74  
 1,2,4-Trimethylbenzene  
 Concen: 0.090 ppbv m  
 RT: 16.75 min Scan# 4342  
 Delta R.T. 0.01 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 105     | 100   | 41027 |       |       |
| 120     | 44.5  | 40.4  | 60.6  |       |
| 91      | 43.5  | 44.6  | 67.0# |       |
| 77      | 19.9  | 17.8  | 26.6  |       |





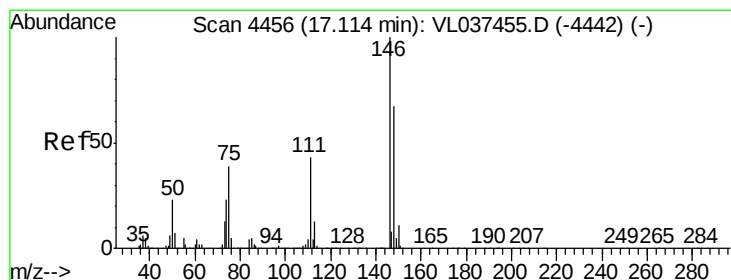
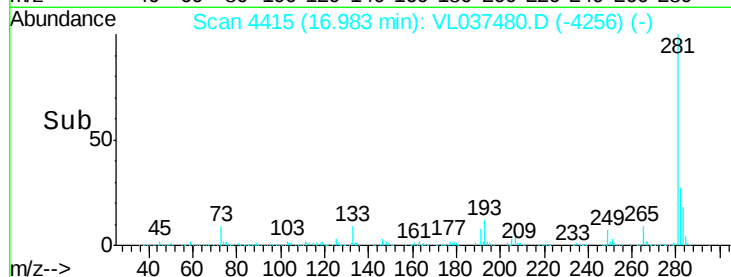
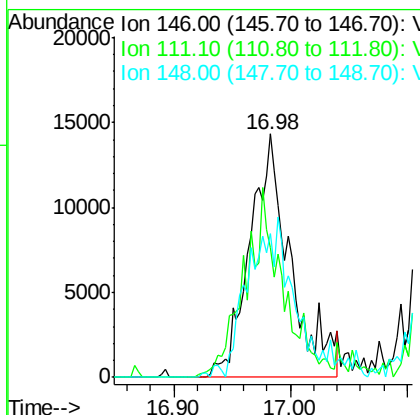
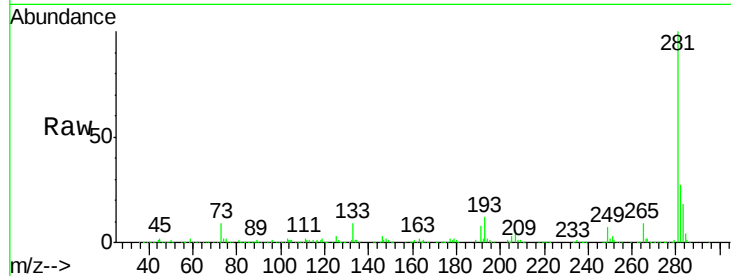
#75  
 1,3-Dichlorobenzene  
 Concen: 0.126 ppbv m  
 RT: 16.98 min Scan# 4415  
 Delta R.T. 0.01 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 0.0   | 23.4  | 70.0# |
| 148     | 77.9  | 33.1  | 99.5  |

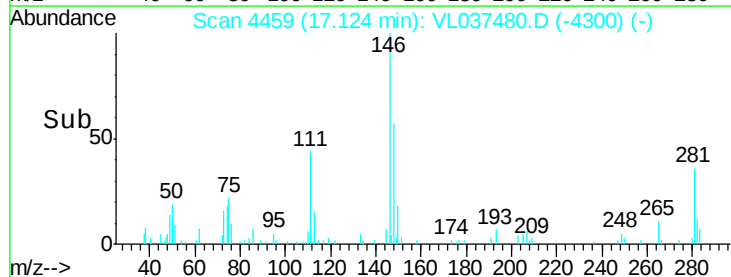
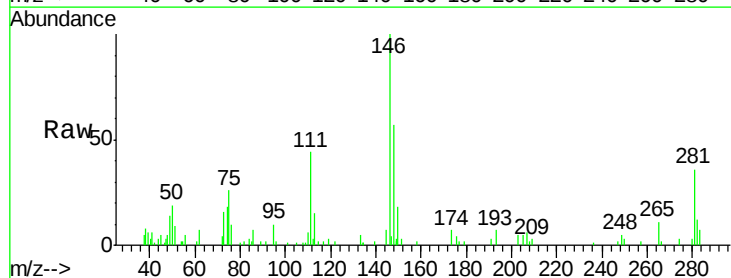
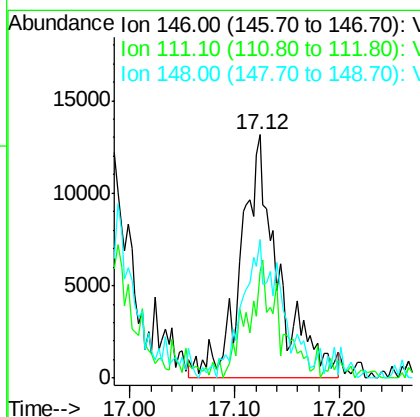
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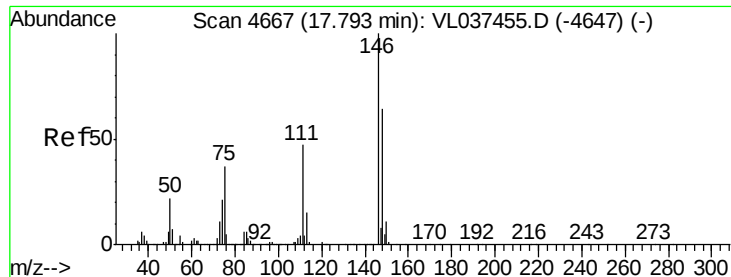
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#76  
 1,4-Dichlorobenzene  
 Concen: 0.117 ppbv m  
 RT: 17.12 min Scan# 4459  
 Delta R.T. 0.01 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 43.3  | 22.1  | 66.5  |
| 148     | 58.5  | 32.4  | 97.0  |





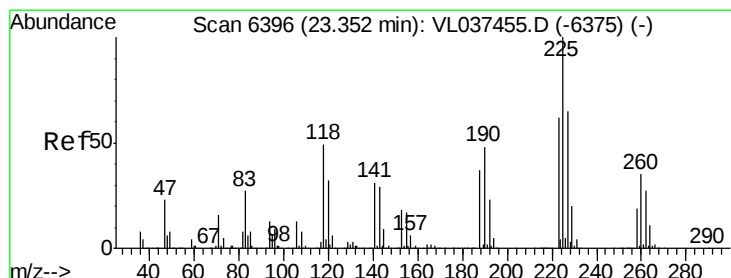
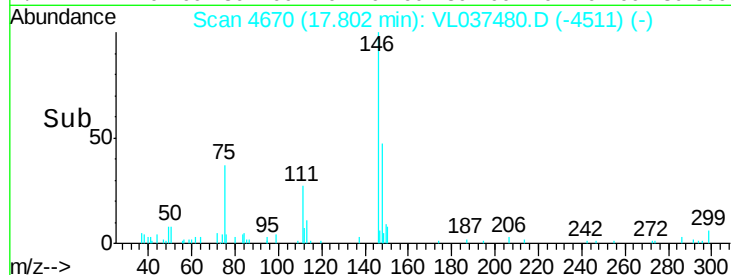
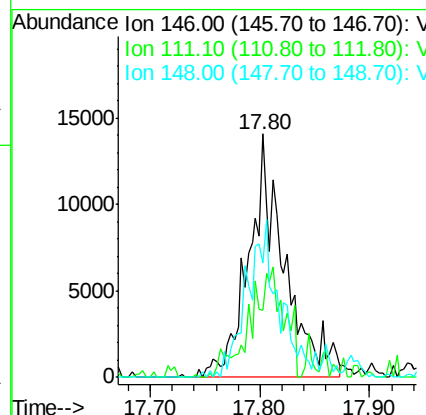
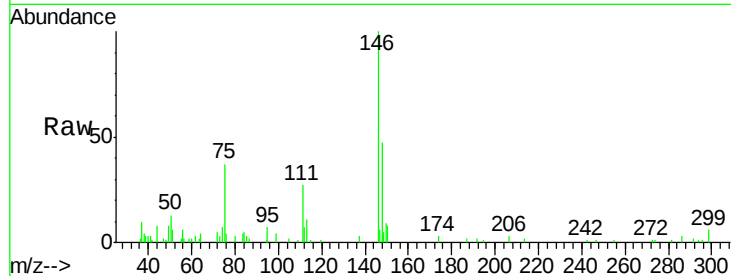
#77  
 1,2-Dichlorobenzene  
 Concen: 0.117 ppbv m  
 RT: 17.80 min Scan# 4670  
 Delta R.T. 0.01 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 146     | 100   |       |       |
| 111     | 0.0   | 23.4  | 70.3# |
| 148     | 57.1  | 32.5  | 97.5  |

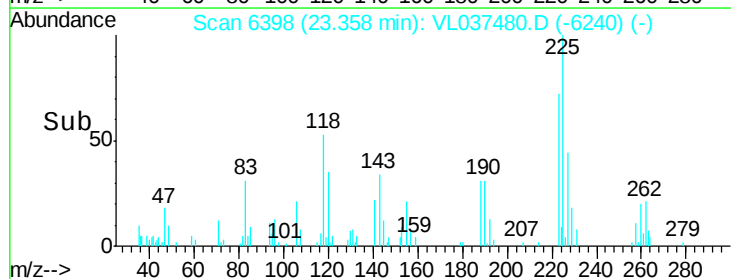
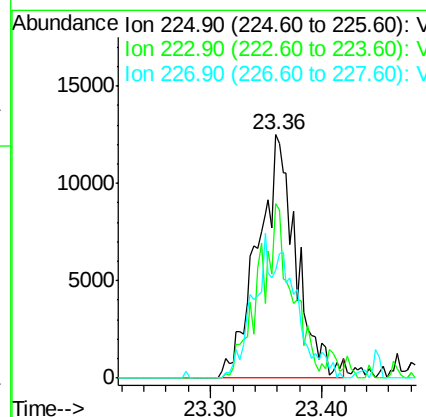
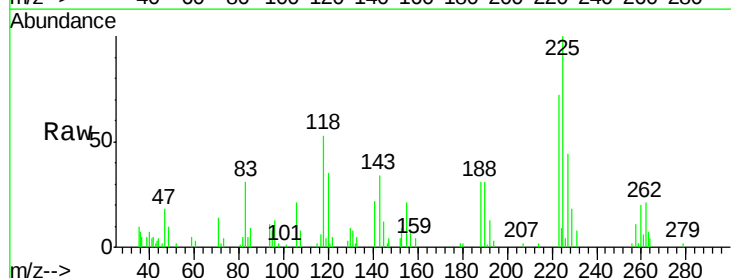
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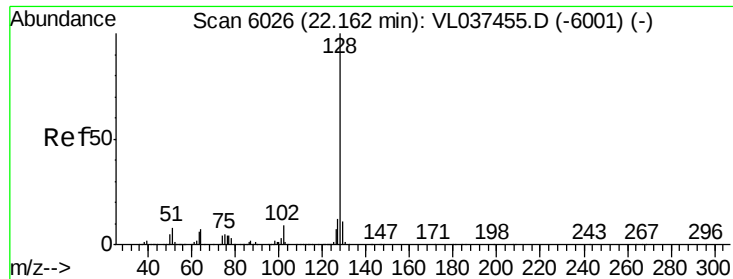
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#78  
 Hexachloro-1,3-Butadiene  
 Concen: 0.134 ppbv m  
 RT: 23.36 min Scan# 6398  
 Delta R.T. 0.01 min  
 Lab File: VL037480.D  
 Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 225     | 100   |       |       |
| 223     | 61.5  | 51.4  | 77.0  |
| 227     | 0.0   | 52.9  | 79.3# |





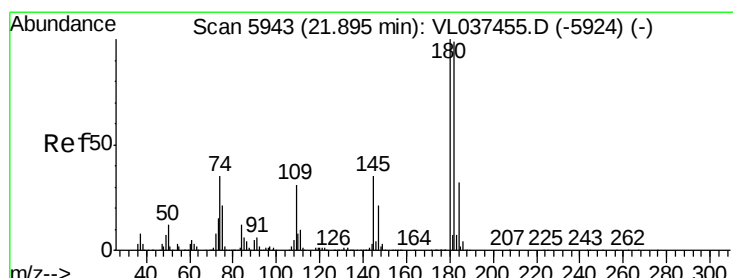
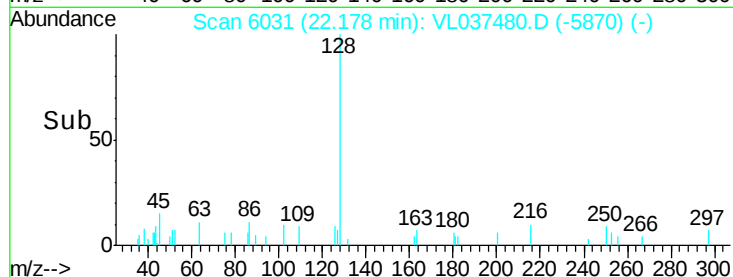
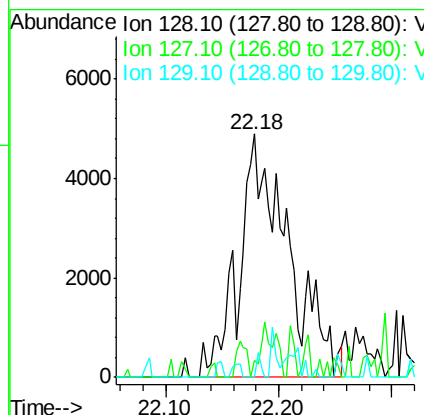
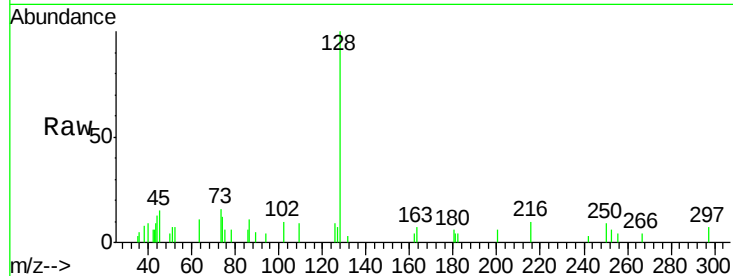
#79  
Naphthalene  
Concen: 0.048 ppbv m  
RT: 22.18 min Scan# 6031  
Delta R.T. 0.02 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

Instrument :  
MSVOA\_L  
ClientSampleId :  
LOD-MDL-AIR-01-QT3-2021

| Tot Ion | Ratio | Resp  | Lower | Upper |
|---------|-------|-------|-------|-------|
| 128     | 100   | 14770 |       |       |
| 127     | 7.0   |       | 9.4   | 14.2# |
| 129     | 0.0   |       | 8.8   | 13.2# |

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#81  
1,2,4-Trichlorobenzene  
Concen: 0.074 ppbv m  
RT: 21.92 min Scan# 5952  
Delta R.T. 0.03 min  
Lab File: VL037480.D  
Acq: 17 Aug 2021 3:11

| Tgt Ion | Ratio | Resp  | Lower | Upper  |
|---------|-------|-------|-------|--------|
| 180     | 100   | 14199 |       |        |
| 182     | 0.0   |       | 79.6  | 119.4# |
| 184     | 38.0  |       | 25.4  | 38.2   |

