

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU032422\  
 Data File : VU047645.D  
 Acq On : 24 Mar 2022 20:23  
 Operator : SY/MD  
 Sample : N2081-04  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 EW5X3

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 03/25/2022  
 Supervised By : Mahesh Dadoda 03/29/2022

Quant Time: Mar 24 23:49:32 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM032422WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Mar 24 23:34:42 2022  
 Response via : Initial Calibration

| Compound                      | R.T.    | QIon  | Response | Conc     | Units  | Dev(Min)  |
|-------------------------------|---------|-------|----------|----------|--------|-----------|
| -----                         |         |       |          |          |        |           |
| Internal Standards            |         |       |          |          |        |           |
| 1) 1,4-Difluorobenzene        | 6.253   | 114   | 104379   | 50.000   | ug/L   | 0.00      |
| 28) Chlorobenzene-d5          | 9.417   | 117   | 110939   | 50.000   | ug/L   | 0.00      |
| 58) 1,4-Dichlorobenzene-d4    | 11.812  | 152   | 65150    | 50.000   | ug/L   | 0.00      |
| System Monitoring Compounds   |         |       |          |          |        |           |
| 4) Vinyl Chloride-d3          | 1.600   | 65    | 61307    | 80.995   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 60 - 135 | Recovery | =      | 162.000%# |
| 7) Chloroethane-d5            | 1.919   | 69    | 47573    | 79.709   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 130 | Recovery | =      | 159.420%# |
| 11) 1,1-Dichloroethene-d2     | 2.571   | 63    | 86040    | 62.130   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 124.260%  |
| 21) 2-Butanone-d5             | 4.639   | 46    | 112031   | 172.440  | ug/L   | 0.00      |
| Spiked Amount                 | 100.000 | Range | 40 - 130 | Recovery | =      | 172.440%# |
| 24) Chloroform-d              | 5.066   | 84    | 114850   | 82.926   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 165.860%# |
| 26) 1,2-Dichloroethane-d4     | 5.706   | 65    | 72688    | 85.573   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 171.140%# |
| 32) Benzene-d6                | 5.732   | 84    | 229818   | 82.327   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 125 | Recovery | =      | 164.660%# |
| 36) 1,2-Dichloropropane-d6    | 6.693   | 67    | 71223    | 83.078   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 70 - 120 | Recovery | =      | 166.160%# |
| 41) Toluene-d8                | 7.899   | 98    | 208133   | 76.526   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 153.060%# |
| 43) trans-1,3-Dichloroprop... | 8.179   | 79    | 33780    | 77.775   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 60 - 125 | Recovery | =      | 155.560%# |
| 47) 2-Hexanone-d5             | 8.635   | 63    | 76131    | 151.695  | ug/L   | 0.00      |
| Spiked Amount                 | 100.000 | Range | 45 - 130 | Recovery | =      | 151.700%# |
| 56) 1,1,2,2-Tetrachloroeth... | 10.758  | 84    | 111253   | 75.616   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 65 - 120 | Recovery | =      | 151.240%# |
| 66) 1,2-Dichlorobenzene-d4    | 12.192  | 152   | 93797    | 80.924   | ug/L   | 0.00      |
| Spiked Amount                 | 50.000  | Range | 80 - 120 | Recovery | =      | 161.840%# |
| Target Compounds              |         |       |          |          |        |           |
|                               |         |       |          |          | Qvalue |           |
| 3) Chloromethane              | 1.526   | 50    | 1374     | 1.485    | ug/L   | 84        |
| 5) Vinyl chloride             | 1.607   | 62    | 12596    | 13.345   | ug/L   | 92        |
| 8) Chloroethane               | 1.938   | 64    | 209685   | 353.896  | ug/L   | 99        |
| 12) 1,1-Dichloroethene        | 2.587   | 96    | 7868     | 10.989   | ug/L # | 1         |
| 13) Acetone                   | 2.658   | 43    | 21064    | 34.840   | ug/L   | 72        |
| 14) Carbon disulfide          | 2.800   | 76    | 1390     | 0.614    | ug/L # | 87        |
| 17) trans-1,2-Dichloroethene  | 3.359   | 96    | 2458     | 3.183    | ug/L   | 92        |
| 18) Methyl tert-butyl Ether   | 3.372   | 73    | 1454     | 0.667    | ug/L # | 70        |
| 19) 1,1-Dichloroethane        | 3.877   | 63    | 438596   | 329.301  | ug/L   | 99        |
| 20) cis-1,2-Dichloroethene    | 4.671   | 96    | 290617   | 343.256  | ug/L   | 96        |
| 22) 2-Butanone                | 4.722   | 43    | 17350    | 22.277   | ug/L   | 86        |
| 29) Cyclohexane               | 5.388   | 56    | 1130m    | 1.004    | ug/L   |           |
| 30) 1,1,1-Trichloroethane     | 5.320   | 97    | 213413   | 169.654  | ug/L   | 99        |
| 34) Trichloroethene           | 6.545   | 95    | 17545    | 20.840   | ug/L   | 97        |
| 35) Methylcyclohexane         | 6.764   | 83    | 2241     | 1.750    | ug/L   | 92        |
| 42) Toluene                   | 7.970   | 91    | 7895     | 2.241    | ug/L   | 91        |
| 46) Tetrachloroethene         | 8.555   | 164   | 51879    | 68.574   | ug/L   | 98        |
| 52) Ethylbenzene              | 9.571   | 91    | 26273    | 7.092    | ug/L   | 98        |
| 53) m,p-Xylene                | 9.697   | 106   | 4314     | 2.968    | ug/L   | 91        |

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 Sample : N2081-04  
 Misc : 5.0mL/MSVOA\_U/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 EW5X3

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 03/25/2022  
 Supervised By : Mahesh Dadoda 03/29/2022

Quant Time: Mar 24 23:49:32 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM032422WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Mar 24 23:34:42 2022  
 Response via : Initial Calibration

| Compound                   | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|--------|------|----------|--------|-------|----------|
| 54) o-Xylene               | 10.102 | 106  | 15281    | 10.711 | ug/L  | 97       |
| 61) Isopropylbenzene       | 10.484 | 105  | 7596     | 2.157  | ug/L  | 95       |
| 62) 1,3,5-Trimethylbenzene | 11.089 | 105  | 31326    | 16.397 | ug/L  | 99       |
| 63) 1,2,4-Trimethylbenzene | 11.468 | 105  | 154116   | 53.109 | ug/L  | 99       |
| 67) 1,2-Dichlorobenzene    | 12.214 | 146  | 4584     | 2.341  | ug/L  | 93       |

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

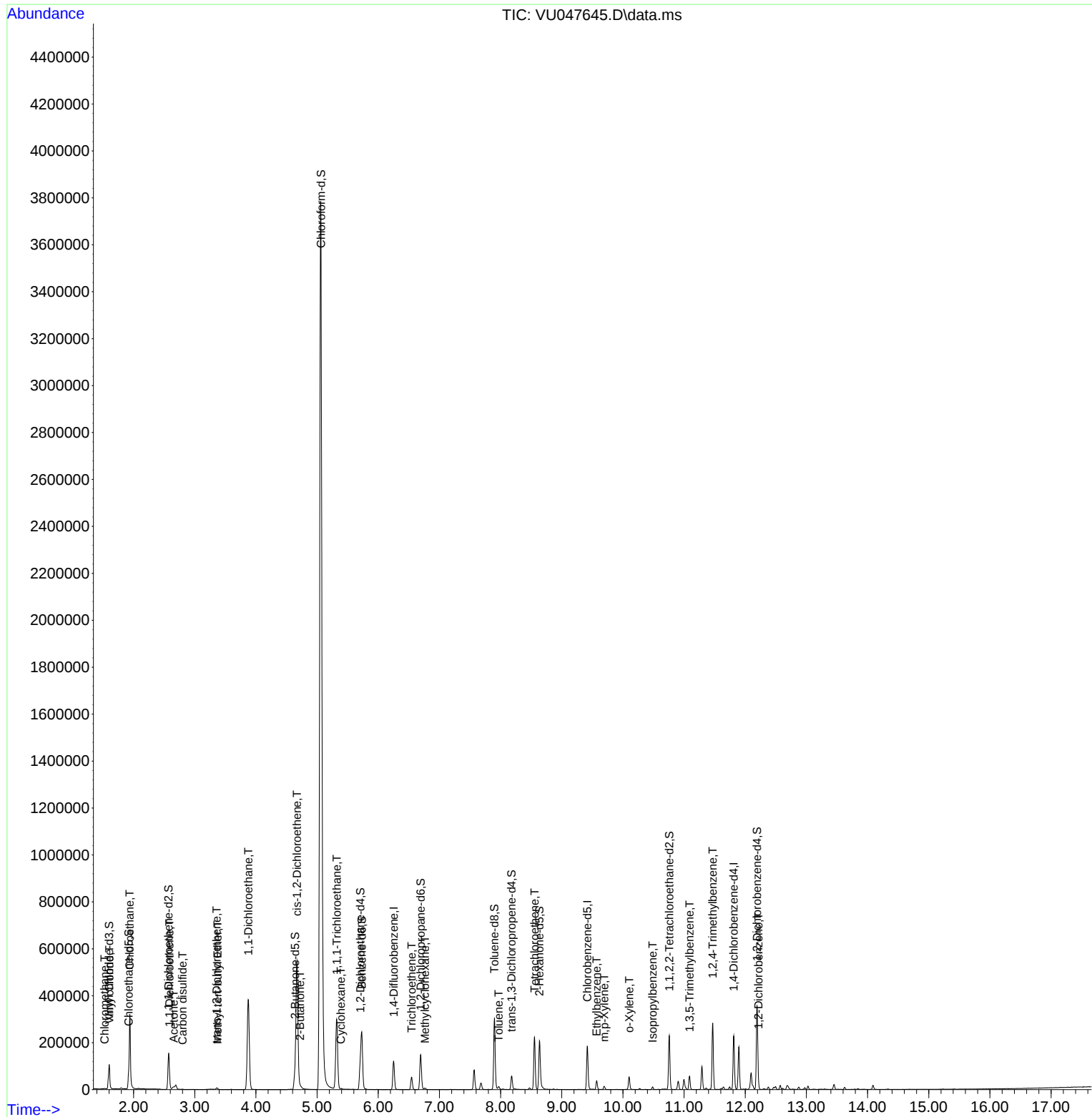
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_U\Data\VU032422\  
Data File : VU047645.D  
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Operator : SY/MD  
Sample : N2081-04  
Misc : 5.0mL/MSVOA\_U/WATER  
ALS Vial : 16 Sample Multiplier: 1

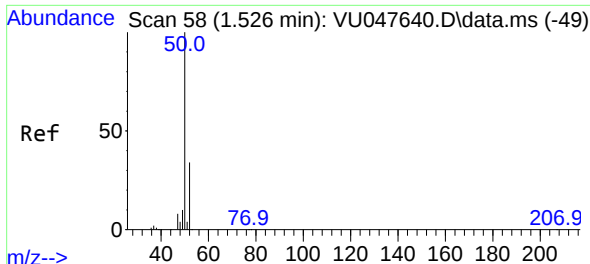
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3

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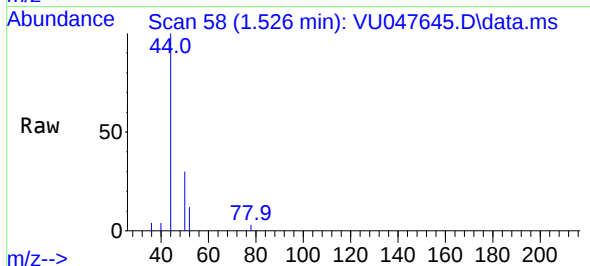
Quant Time: Mar 24 23:49:32 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_U\Method\SFAMULM032422WMA.M  
Quant Title : VOC Analysis  
QLast Update : Thu Mar 24 23:34:42 2022  
Response via : Initial Calibration





#3  
Chloromethane  
Concen: 1.485 ug/L  
RT: 1.526 min Scan# 58  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

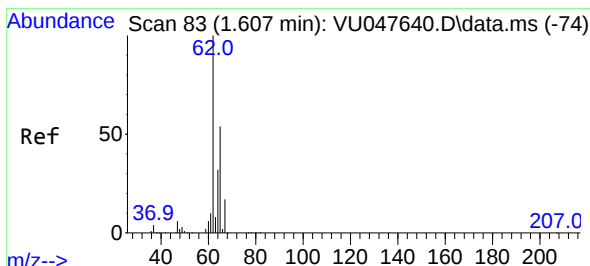
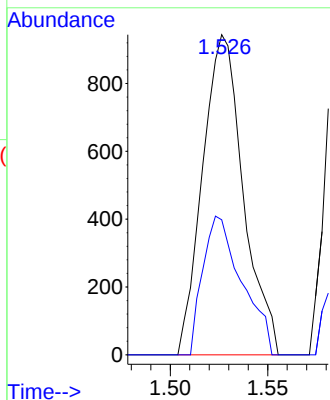
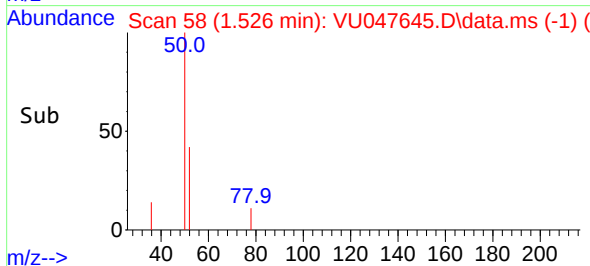
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3



Tgt Ion: 50 Resp: 1374  
Ion Ratio Lower Upper  
50 100  
52 42.2 23.2 43.2

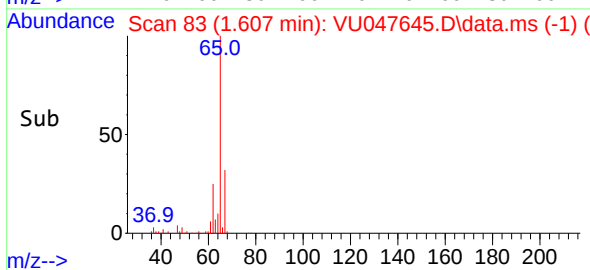
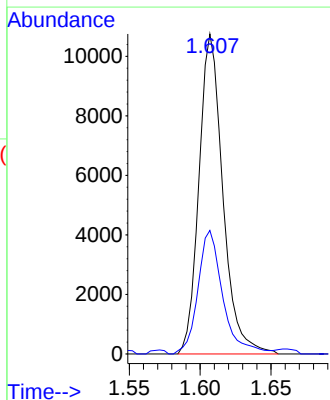
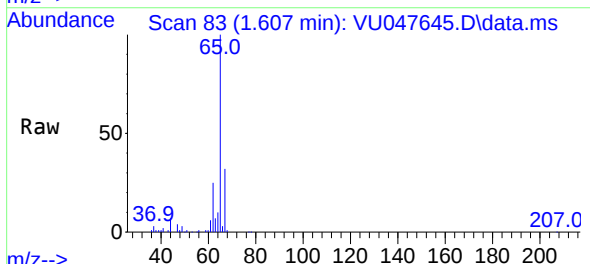
Manual Integrations  
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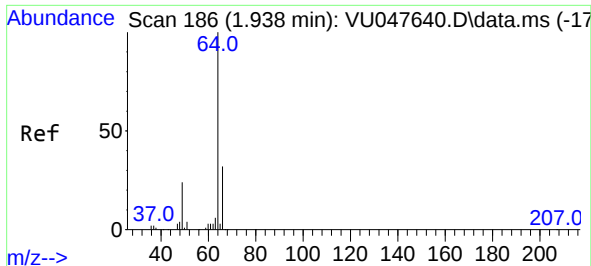
Reviewed By :John Carlone 03/25/2022  
Supervised By :Mahesh Dadoda 03/29/2022



#5  
Vinyl chloride  
Concen: 13.345 ug/L  
RT: 1.607 min Scan# 83  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

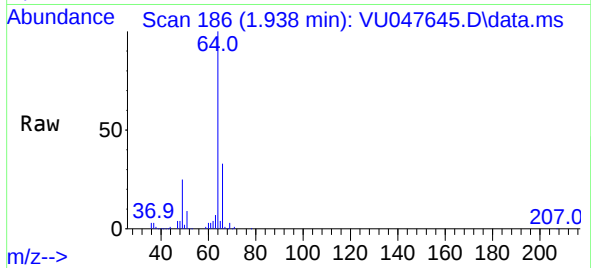
Tgt Ion: 62 Resp: 12596  
Ion Ratio Lower Upper  
62 100  
64 38.6 23.7 43.9





#8  
Chloroethane  
Concen: 353.896 ug/L  
RT: 1.938 min Scan# 186  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

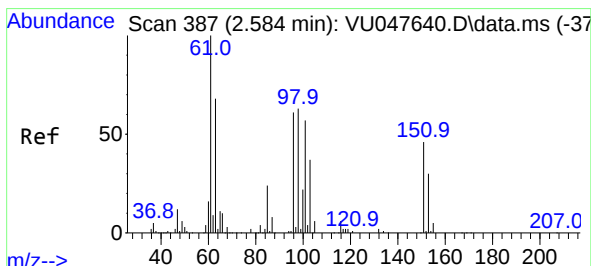
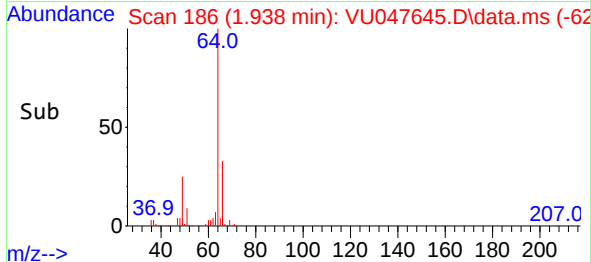
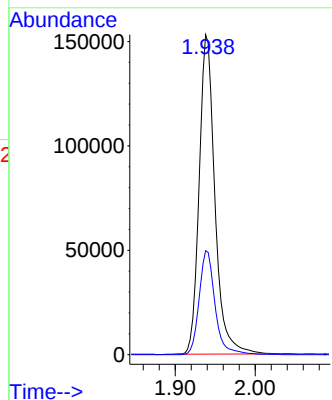
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3



Tgt Ion: 64 Resp: 20968  
Ion Ratio Lower Upper  
64 100  
66 32.5 23.3 43.3

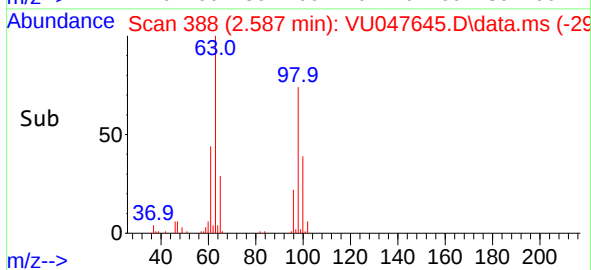
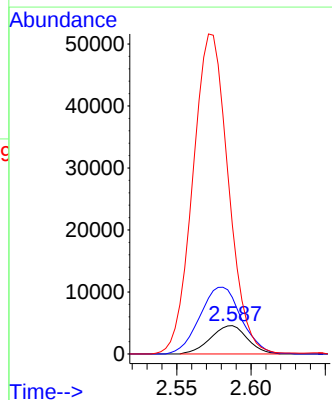
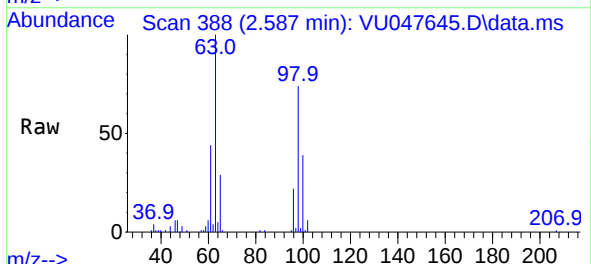
Manual Integrations  
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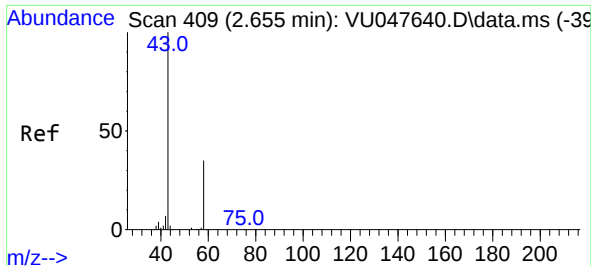
Reviewed By :John Carlone 03/25/2022  
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#12  
1,1-Dichloroethene  
Concen: 10.989 ug/L  
RT: 2.587 min Scan# 388  
Delta R.T. 0.003 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

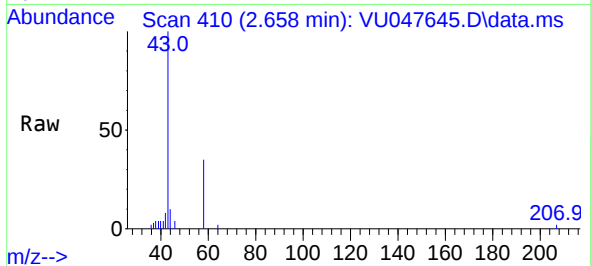
Tgt Ion: 96 Resp: 7868  
Ion Ratio Lower Upper  
96 100  
61 199.5 113.1 210.1  
63 455.4 94.8 176.0#





#13  
Acetone  
Concen: 34.840 ug/L  
RT: 2.658 min Scan# 410  
Delta R.T. 0.003 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

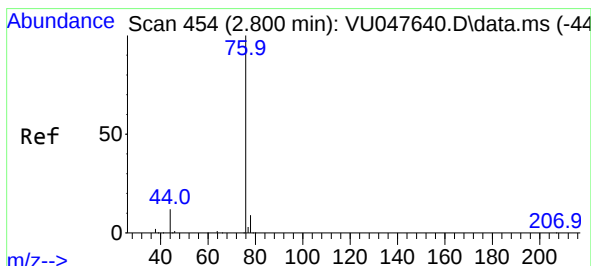
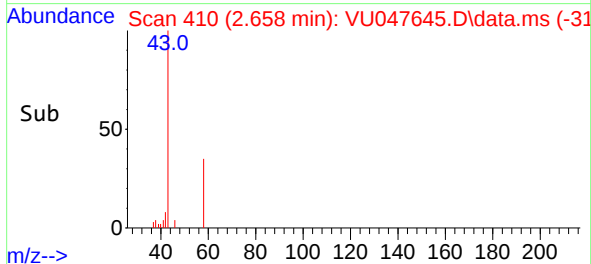
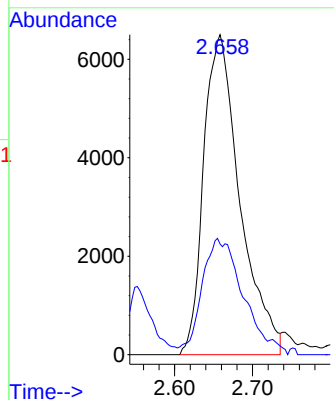
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3



Tgt Ion: 43 Resp: 21064  
Ion Ratio Lower Upper  
43 100  
58 18.5 0.0 70.0

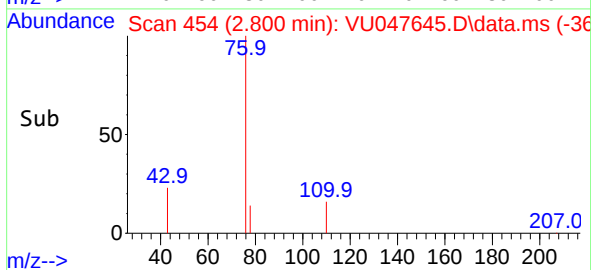
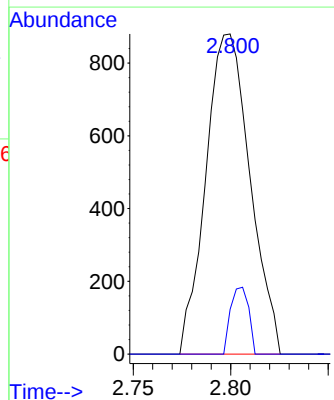
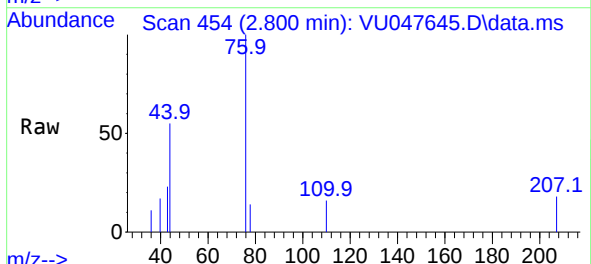
Manual Integrations  
APPROVED

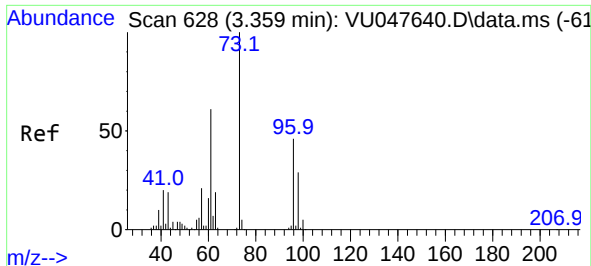
Reviewed By :John Carlone 03/25/2022  
Supervised By :Mahesh Dadoda 03/29/2022



#14  
Carbon disulfide  
Concen: 0.614 ug/L  
RT: 2.800 min Scan# 454  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

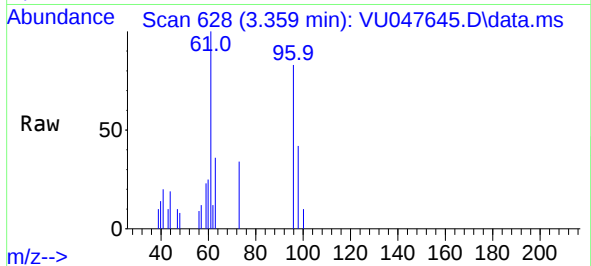
Tgt Ion: 76 Resp: 1390  
Ion Ratio Lower Upper  
76 100  
78 14.0 7.4 11.0#





#17  
trans-1,2-Dichloroethene  
Concen: 3.183 ug/L  
RT: 3.359 min Scan# 61  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

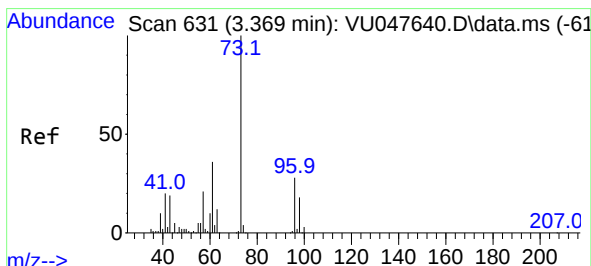
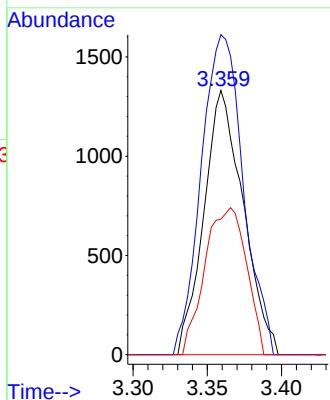
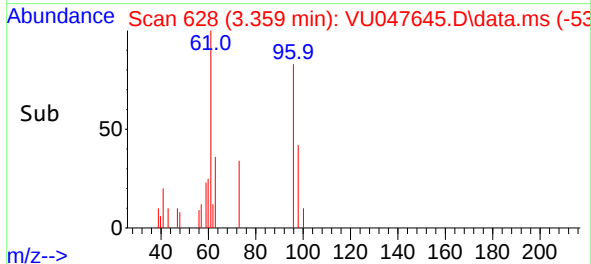
Instrument :  
MSVOA\_U  
ClientSampleId :  
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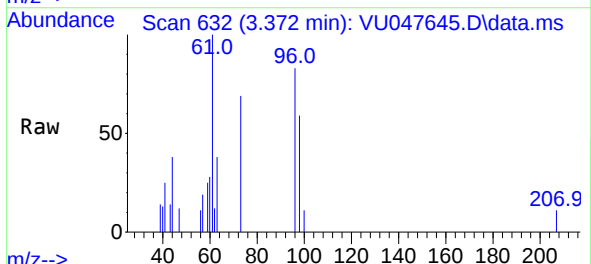
Tgt Ion: 96 Resp: 2458  
Ion Ratio Lower Upper  
96 100  
61 121.1 88.4 164.2  
98 51.3 43.3 80.5

Manual Integrations  
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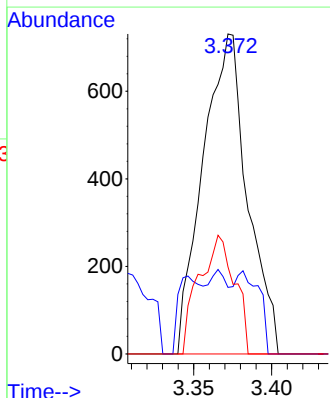
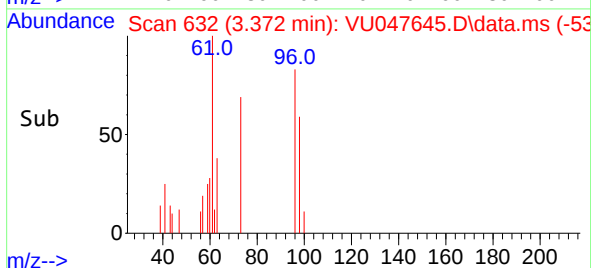
Reviewed By :John Carlone 03/25/2022  
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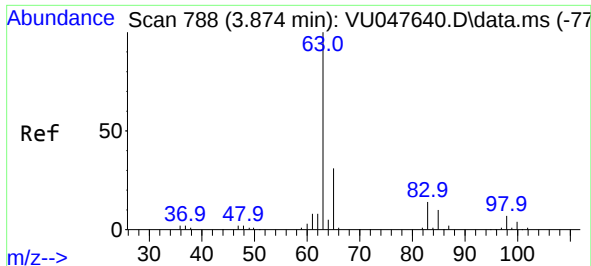


#18  
Methyl tert-butyl Ether  
Concen: 0.667 ug/L  
RT: 3.372 min Scan# 632  
Delta R.T. 0.003 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23



Tgt Ion: 73 Resp: 1454  
Ion Ratio Lower Upper  
73 100  
43 4.6 15.3 22.9#  
57 8.4 17.0 25.6#





#19

1,1-Dichloroethane

Concen: 329.301 ug/L

RT: 3.877 min Scan# 788

Delta R.T. 0.003 min

Lab File: VU047645.D

Acq: 24 Mar 2022 20:23

Instrument :

MSVOA\_U

ClientSampleId :

EW5X3

Tgt Ion: 63 Resp: 438590

Ion Ratio Lower Upper

63 100

65 32.4 22.0 41.0

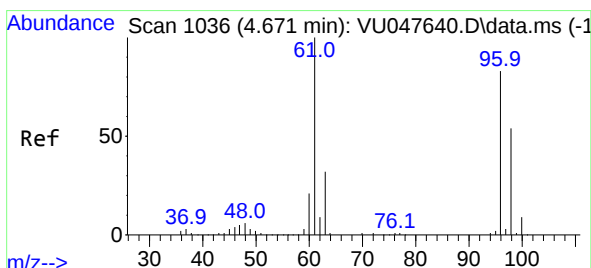
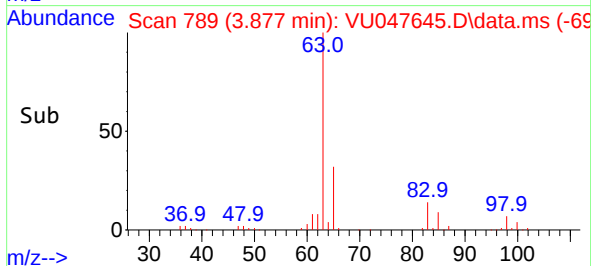
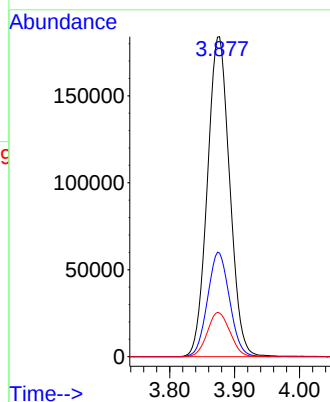
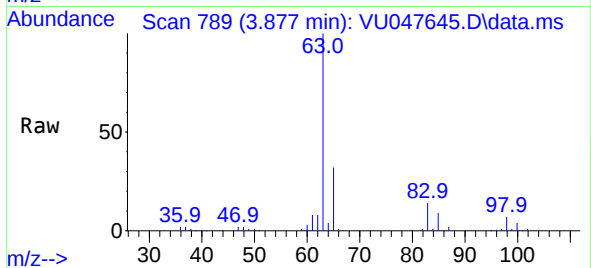
83 13.7 9.7 18.1

Manual Integrations

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#20

cis-1,2-Dichloroethene

Concen: 343.256 ug/L

RT: 4.671 min Scan# 1036

Delta R.T. -0.000 min

Lab File: VU047645.D

Acq: 24 Mar 2022 20:23

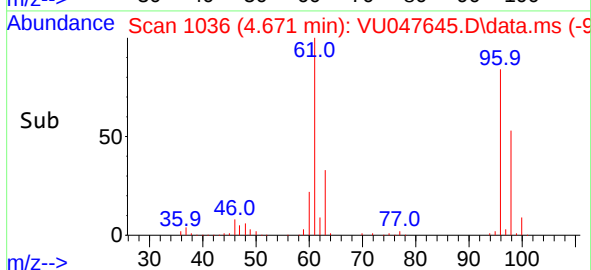
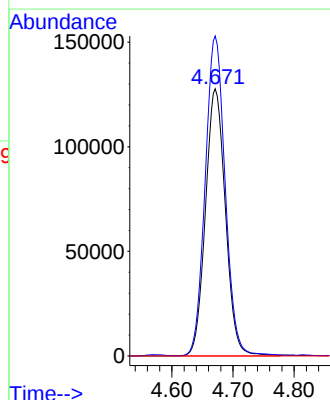
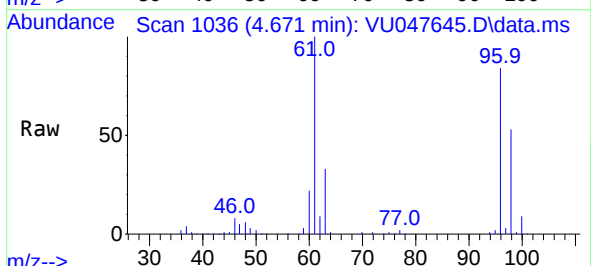
Tgt Ion: 96 Resp: 290617

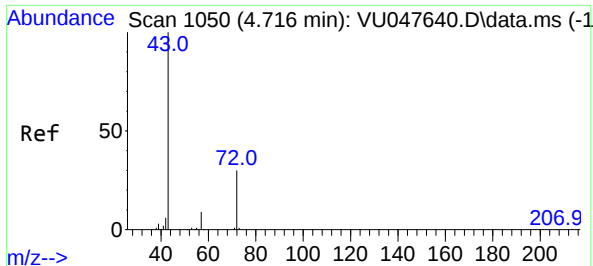
Ion Ratio Lower Upper

96 100

61 119.7 80.7 149.9

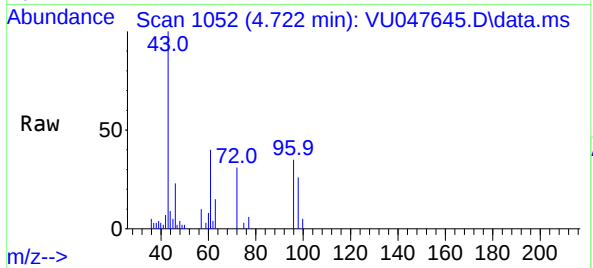
68 0.0 0.0 0.0





#22  
2-Butanone  
Concen: 22.277 ug/L  
RT: 4.722 min Scan# 1052  
Delta R.T. 0.006 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

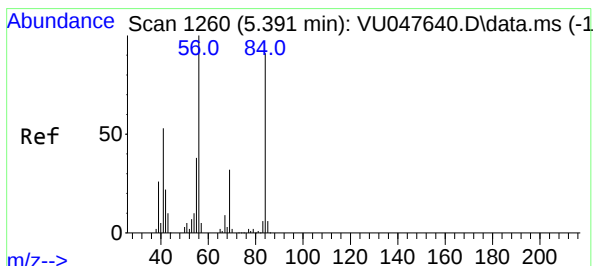
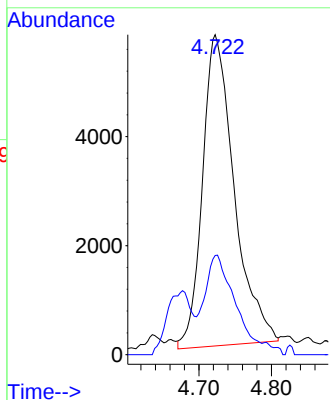
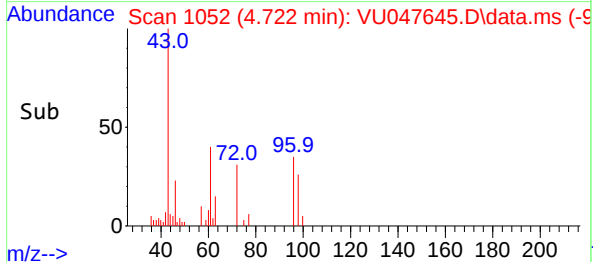
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3



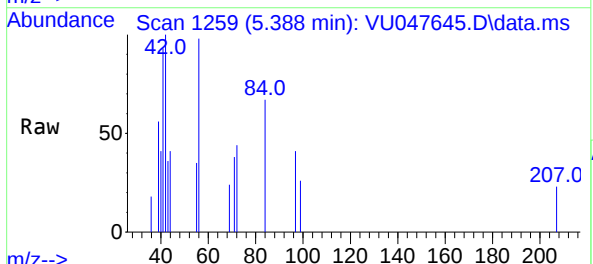
Tgt Ion: 43 Resp: 17350  
Ion Ratio Lower Upper  
43 100  
72 23.9 16.0 47.9

Manual Integrations  
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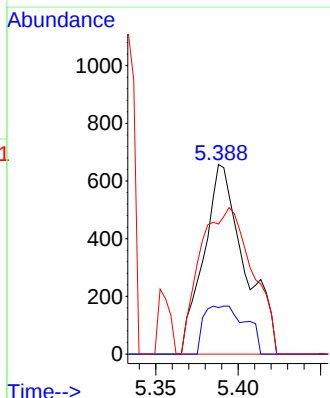
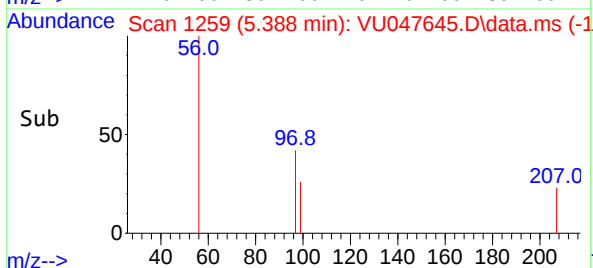
Reviewed By :John Carlone 03/25/2022  
Supervised By :Mahesh Dadoda 03/29/2022

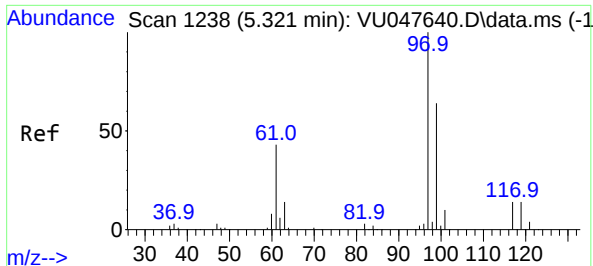


#29  
Cyclohexane  
Concen: 1.004 ug/L m  
RT: 5.388 min Scan# 1259  
Delta R.T. -0.003 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23



Tgt Ion: 56 Resp: 1130  
Ion Ratio Lower Upper  
56 100  
69 10.4 25.4 38.2#  
84 41.0 77.0 115.6#





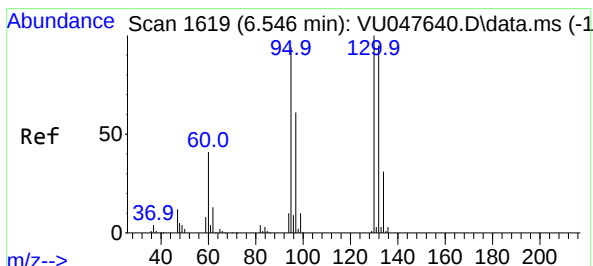
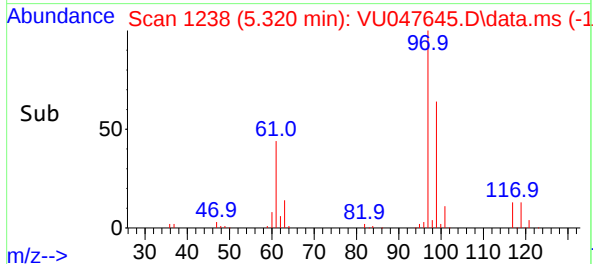
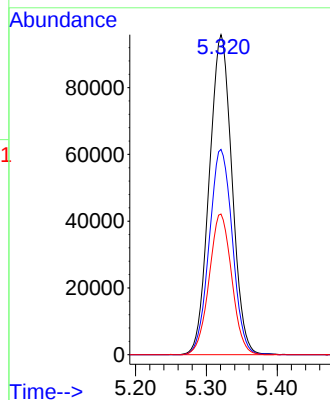
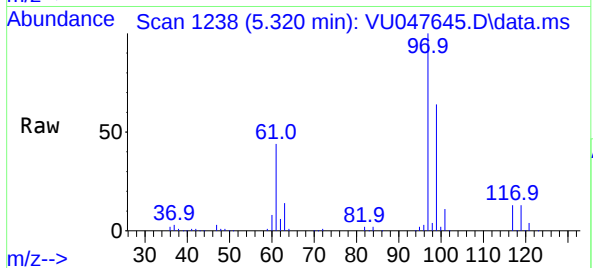
#30  
1,1,1-Trichloroethane  
Concen: 169.654 ug/L  
RT: 5.320 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3

Tgt Ion: 97 Resp: 21341  
Ion Ratio Lower Upper  
97 100  
99 65.4 51.6 77.4  
61 43.7 34.2 51.4

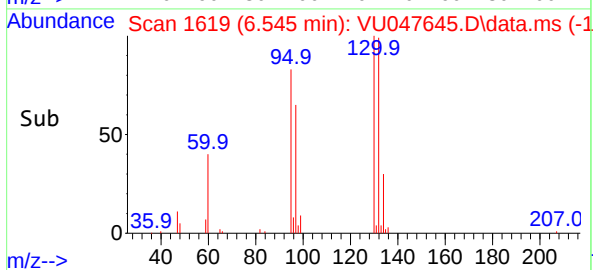
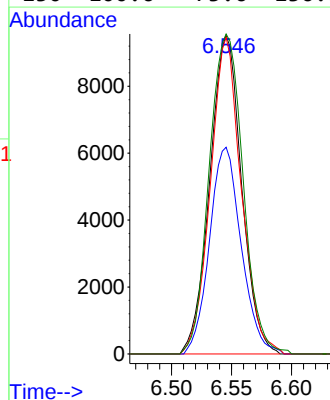
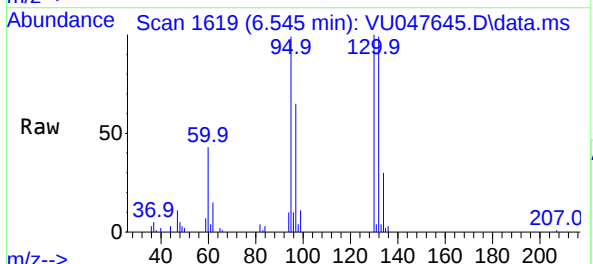
Manual Integrations  
APPROVED

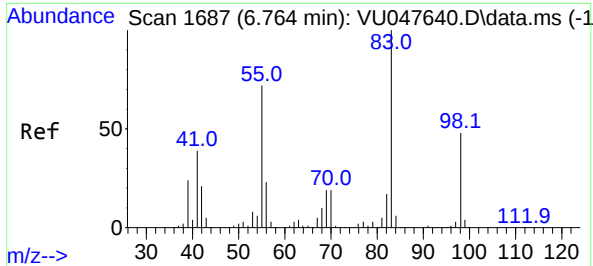
Reviewed By :John Carlone 03/25/2022  
Supervised By :Mahesh Dadoda 03/29/2022



#34  
Trichloroethene  
Concen: 20.840 ug/L  
RT: 6.545 min Scan# 1619  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

Tgt Ion: 95 Resp: 17545  
Ion Ratio Lower Upper  
95 100  
97 65.0 44.7 82.9  
132 99.5 70.4 130.8  
130 100.6 73.6 136.8





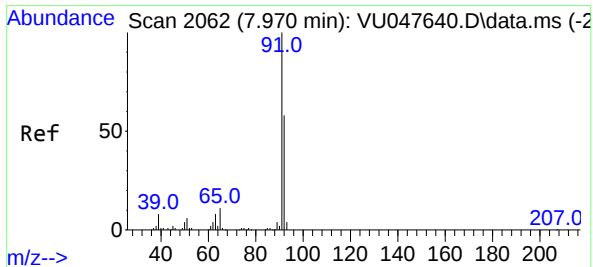
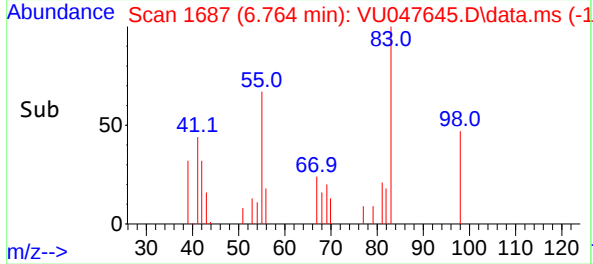
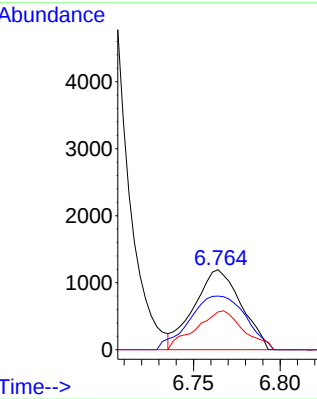
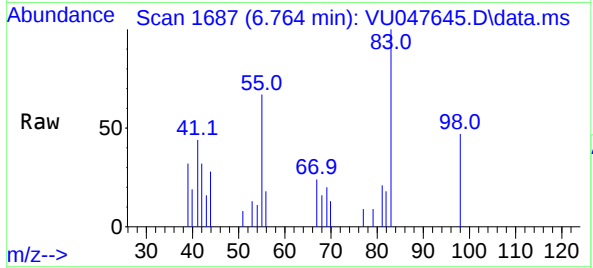
#35  
Methylcyclohexane  
Concen: 1.750 ug/L  
RT: 6.764 min Scan# 1687  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3

Tgt Ion: 83 Resp: 224  
Ion Ratio Lower Upper  
83 100  
55 80.5 56.8 85.2  
98 49.4 38.1 57.1

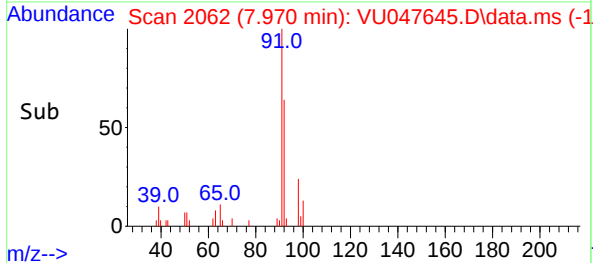
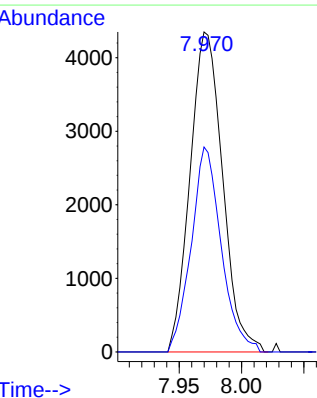
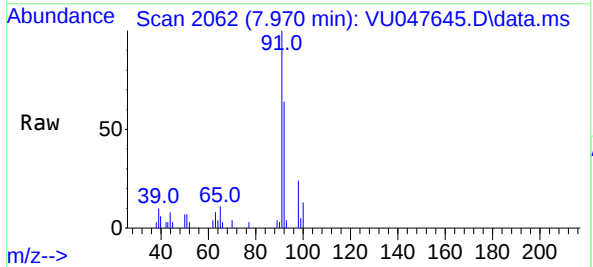
Manual Integrations  
APPROVED

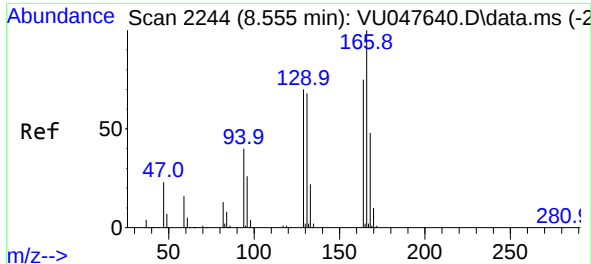
Reviewed By :John Carlone 03/25/2022  
Supervised By :Mahesh Dadoda 03/29/2022



#42  
Toluene  
Concen: 2.241 ug/L  
RT: 7.970 min Scan# 2062  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

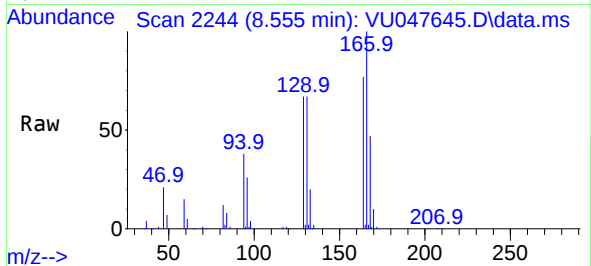
Tgt Ion: 91 Resp: 7895  
Ion Ratio Lower Upper  
91 100  
92 64.0 40.4 75.0





#46  
Tetrachloroethene  
Concen: 68.574 ug/L  
RT: 8.555 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

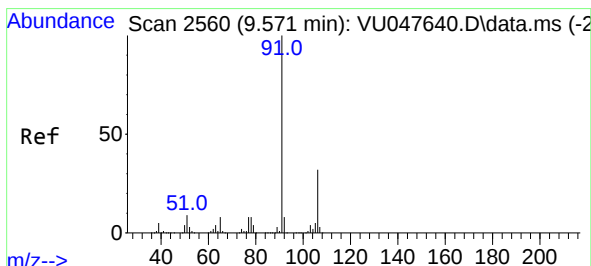
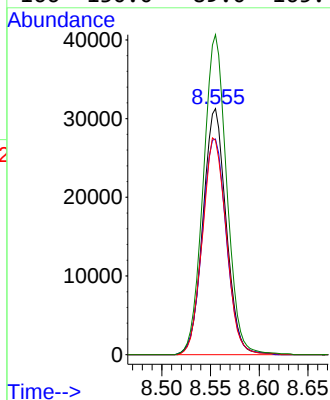
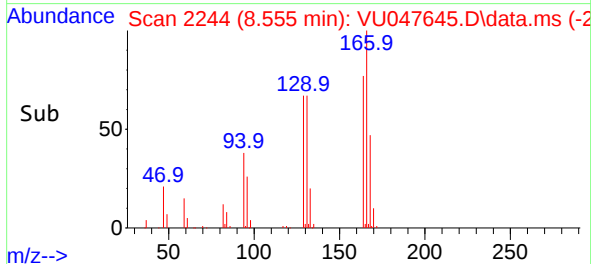
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3



Tgt Ion:164 Resp: 51879  
Ion Ratio Lower Upper  
164 100  
129 87.7 62.4 116.0  
131 87.1 60.7 112.7  
166 130.0 89.0 165.4

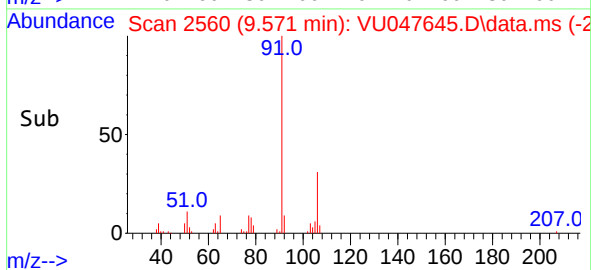
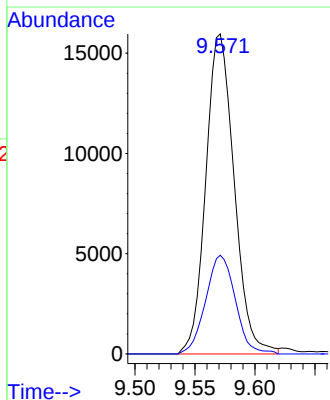
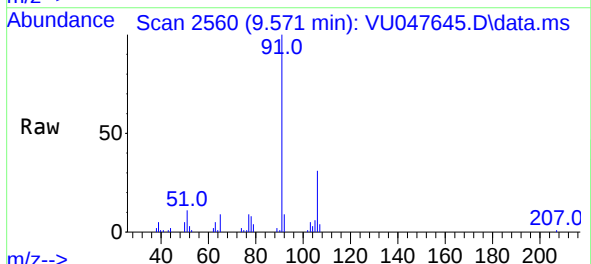
Manual Integrations  
APPROVED

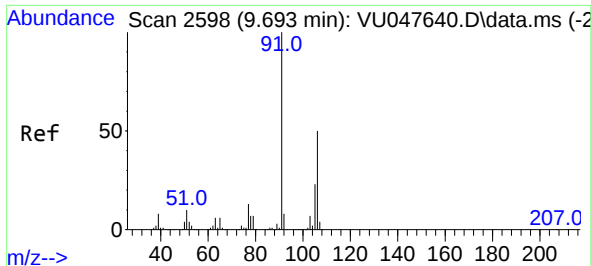
Reviewed By :John Carlone 03/25/2022  
Supervised By :Mahesh Dadoda 03/29/2022



#52  
Ethylbenzene  
Concen: 7.092 ug/L  
RT: 9.571 min Scan# 2560  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

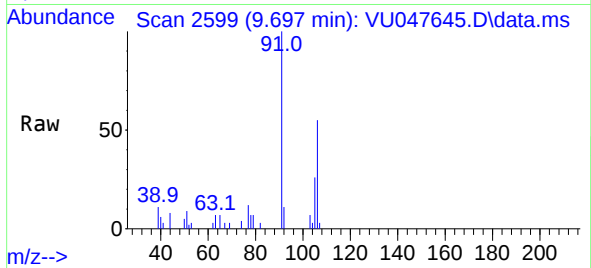
Tgt Ion: 91 Resp: 26273  
Ion Ratio Lower Upper  
91 100  
106 30.9 22.4 41.6





#53  
m,p-Xylene  
Concen: 2.968 ug/L  
RT: 9.697 min Scan# 2599  
Delta R.T. 0.003 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

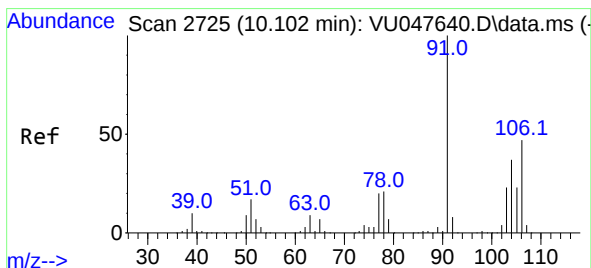
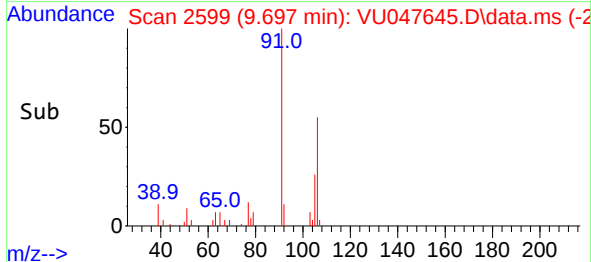
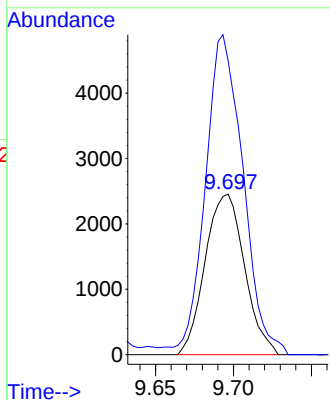
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3



Tgt Ion:106 Resp: 4314  
Ion Ratio Lower Upper  
106 100  
91 183.1 137.7 255.7

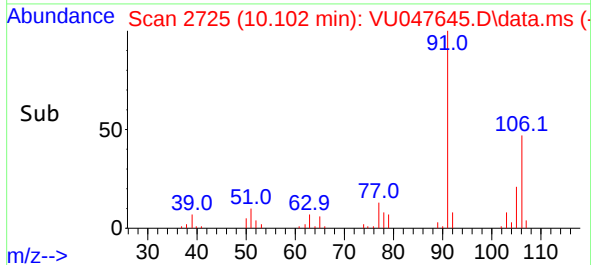
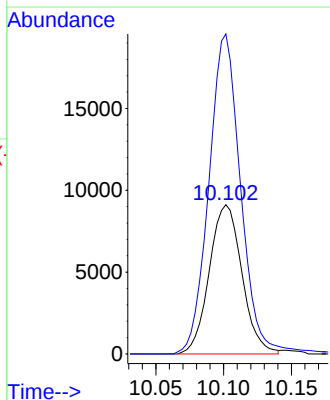
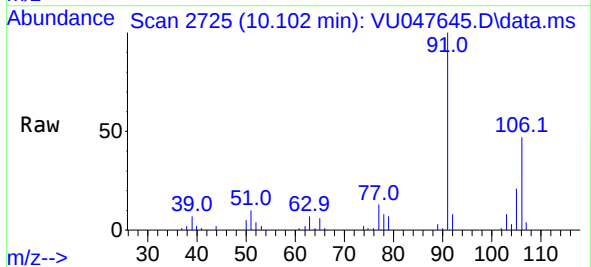
Manual Integrations  
APPROVED

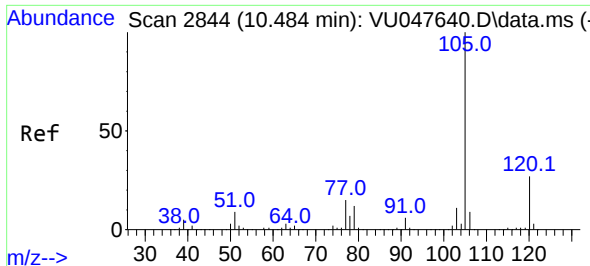
Reviewed By :John Carlone 03/25/2022  
Supervised By :Mahesh Dadoda 03/29/2022



#54  
o-Xylene  
Concen: 10.711 ug/L  
RT: 10.102 min Scan# 2725  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

Tgt Ion:106 Resp: 15281  
Ion Ratio Lower Upper  
106 100  
91 214.4 146.7 272.5





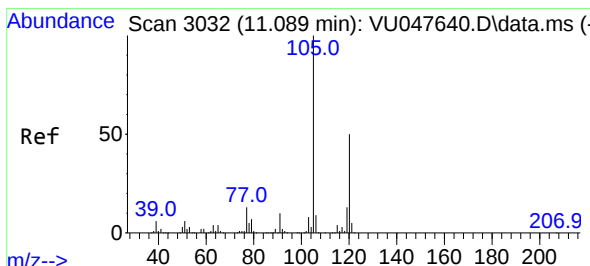
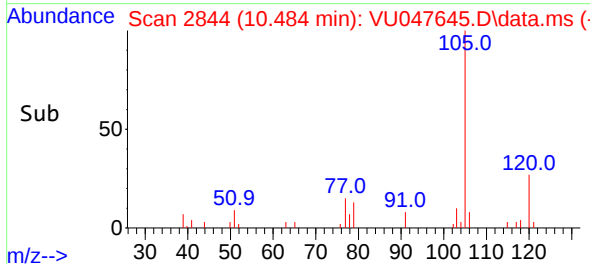
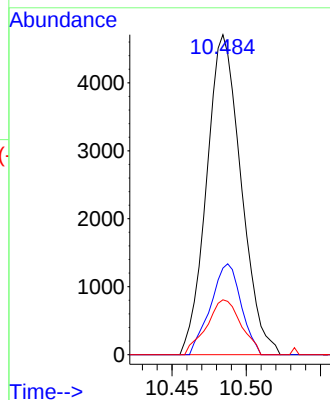
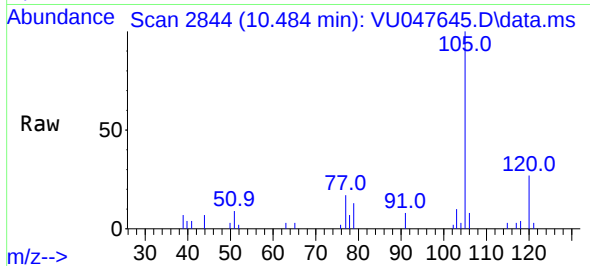
#61  
Isopropylbenzene  
Concen: 2.157 ug/L  
RT: 10.484 min Scan# 2844  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3

Tgt Ion:105 Resp: 7590  
Ion Ratio Lower Upper  
105 100  
120 25.1 21.9 32.9  
77 17.1 12.1 18.1

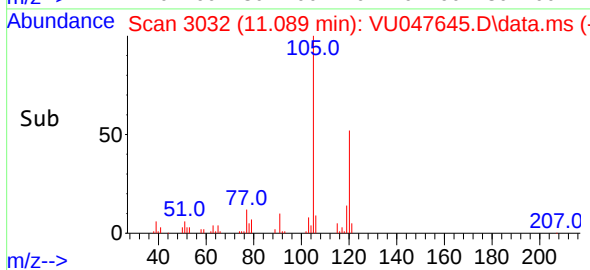
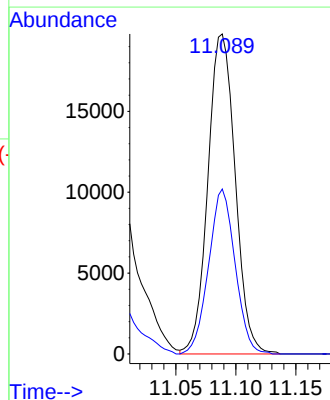
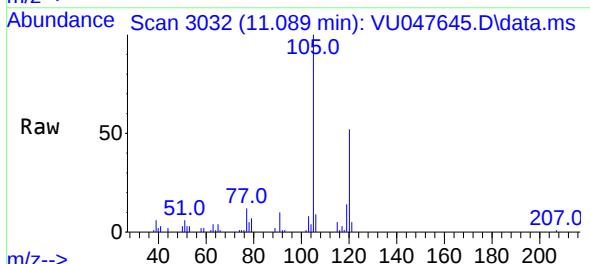
Manual Integrations  
APPROVED

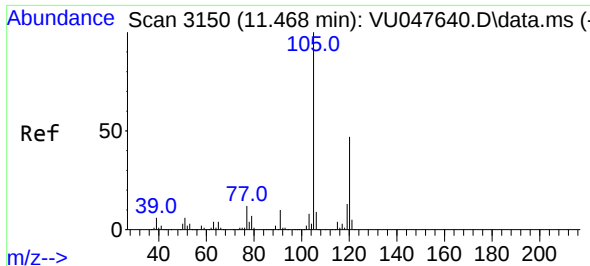
Reviewed By :John Carlone 03/25/2022  
Supervised By :Mahesh Dadoda 03/29/2022



#62  
1,3,5-Trimethylbenzene  
Concen: 16.397 ug/L  
RT: 11.089 min Scan# 3032  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

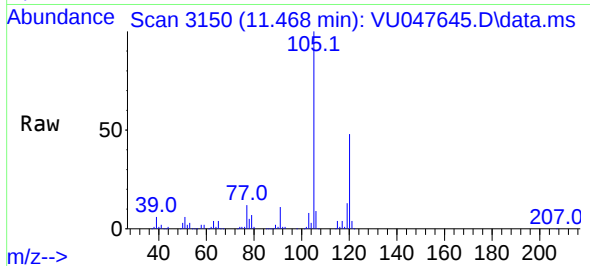
Tgt Ion:105 Resp: 31326  
Ion Ratio Lower Upper  
105 100  
120 50.0 40.8 61.2





#63  
1,2,4-Trimethylbenzene  
Concen: 53.109 ug/L  
RT: 11.468 min Scan# 3150  
Delta R.T. -0.000 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23

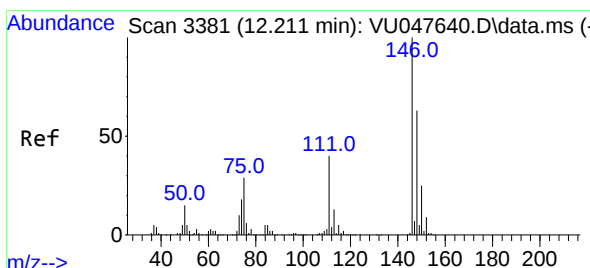
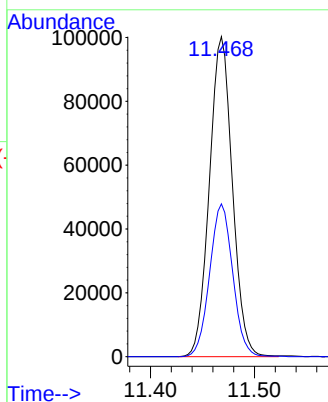
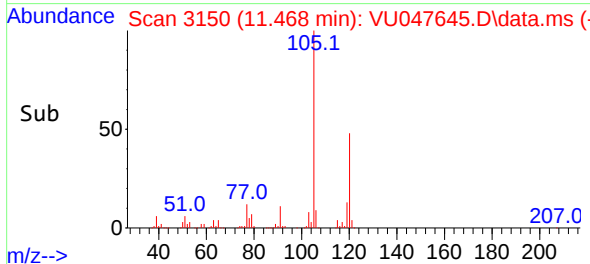
Instrument :  
MSVOA\_U  
ClientSampleId :  
EW5X3



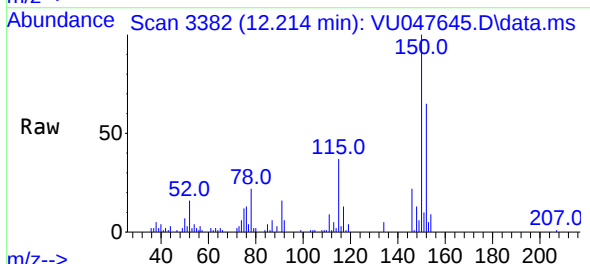
Tgt Ion:105 Resp: 154110  
Ion Ratio Lower Upper  
105 100  
120 47.8 37.6 56.4

Manual Integrations  
APPROVED

Reviewed By :John Carlone 03/25/2022  
Supervised By :Mahesh Dadoda 03/29/2022



#67  
1,2-Dichlorobenzene  
Concen: 2.341 ug/L  
RT: 12.214 min Scan# 3382  
Delta R.T. 0.003 min  
Lab File: VU047645.D  
Acq: 24 Mar 2022 20:23



Tgt Ion:146 Resp: 4584  
Ion Ratio Lower Upper  
146 100  
111 42.0 31.7 47.5  
148 57.9 51.4 77.2

