

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN050821\  
 Data File : VN067057.D  
 Acq On : 7 May 2021 17:46  
 Operator : JC/MD  
 Sample : M2313-01  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 210505078-02-VOA

Manual Integrations  
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 5/10/2021 2:24:15 PM

Quant Time: May 08 03:26:03 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N050721W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri May 07 07:26:20 2021  
 Response via : Initial Calibration

| Compound                    | R.T.           | QIon | Response   | Conc    | Units  | Dev(Min) |
|-----------------------------|----------------|------|------------|---------|--------|----------|
| -----                       |                |      |            |         |        |          |
| Internal Standards          |                |      |            |         |        |          |
| 1) Bromochloromethane       | 7.109          | 128  | 76001      | 30.00   | ug/l   | 0.00     |
| 28) 1,4-Difluorobenzene     | 8.517          | 114  | 389925     | 30.00   | ug/l   | 0.00     |
| 57) Chlorobenzene-d5        | 11.350         | 117  | 340194     | 30.00   | ug/l   | 0.00     |
|                             |                |      |            |         |        |          |
| System Monitoring Compounds |                |      |            |         |        |          |
| 27) 1,2-Dichloroethane-d4   | 7.952          | 65   | 205845     | 30.91   | ug/l   | 0.00     |
| Spiked Amount 30.000        | Range 91 - 110 |      | Recovery = | 103.03% |        |          |
| 60) 4-Bromofluorobenzene    | 12.353         | 95   | 158455m    | 28.00   | ug/l   | 0.00     |
| Spiked Amount 30.000        | Range 63 - 112 |      | Recovery = | 93.33%  |        |          |
| 63) Toluene-d8              | 10.030         | 98   | 514109     | 30.51   | ug/l   | 0.00     |
| Spiked Amount 30.000        | Range 91 - 112 |      | Recovery = | 101.70% |        |          |
|                             |                |      |            |         |        |          |
| Target Compounds            |                |      |            |         |        |          |
| 8) Diethyl Ether            | 3.355          | 74   | 11065      | 3.52    | ug/l   | 93       |
| 15) Acetone                 | 3.752          | 58   | 399262     | 565.80  | ug/l   | 95       |
| 16) Carbon Disulfide        | 3.980          | 76   | 24104      | 1.68    | ug/l   | 100      |
| 23) tert-Butyl Alcohol      | 4.704          | 59   | 3674260    | 3794.16 | ug/l # | 100      |
| 30) 2-Butanone              | 6.745          | 43   | 2401147    | 734.31  | ug/l   | 97       |
| 45) 1,4-Dioxane             | 9.134          | 88   | 4272       | 57.14   | ug/l # | 82       |
| 58) 4-Methyl-2-Pentanone    | 9.925          | 43   | 29266m     | 4.60    | ug/l   |          |
| 62) Toluene                 | 10.094         | 91   | 49644      | 2.37    | ug/l   | 100      |
| 64) Chlorobenzene           | 11.376         | 112  | 8831       | 0.72    | ug/l   | 94       |
| 66) Ethyl Benzene           | 11.457         | 91   | 118050     | 5.54    | ug/l   | 100      |
| 67) m/p-Xylenes             | 11.564         | 106  | 45661      | 5.71    | ug/l   | 84       |
| 68) o-Xylene                | 11.894         | 106  | 25868      | 3.28    | ug/l   | 91       |
| 70) Isopropylbenzene        | 12.194         | 105  | 11971m     | 0.58    | ug/l   |          |
| 76) 1,3,5-Trimethylbenzene  | 12.691         | 105  | 11593m     | 0.64    | ug/l   |          |
| 80) 1,2,4-Trimethylbenzene  | 12.994         | 105  | 23476      | 1.38    | ug/l   | 94       |
| 82) p-Isopropyltoluene      | 13.238         | 119  | 31229      | 1.94    | ug/l   | 98       |
| 91) Naphthalene             | 15.075         | 128  | 169577     | 14.41   | ug/l   | 98       |
| -----                       |                |      |            |         |        |          |

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

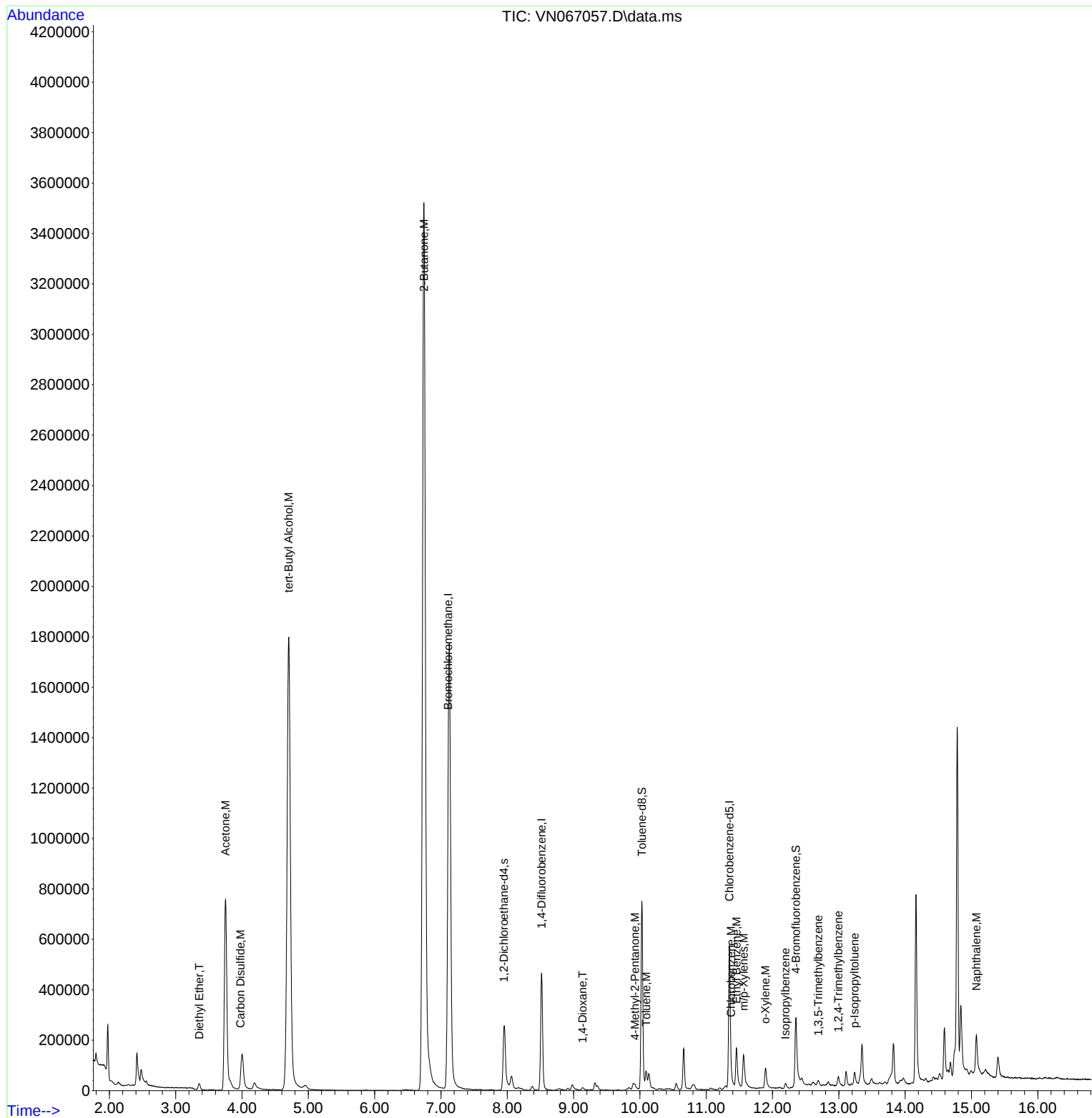
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Data File : VN067057.D  
Acq On : 7 May 2021 17:46  
Operator : JC/MD  
Sample : M2313-01  
Misc : 5.00mL/MSVOA\_N/WATER  
ALS Vial : 12 Sample Multiplier: 1

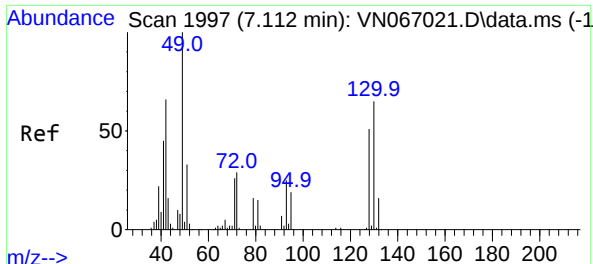
Instrument :  
MSVOA\_N  
ClientSampleId :  
210505078-02-VOA

Manual Integrations  
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5/10/2021 2:24:15 PM

Quant Time: May 08 03:26:03 2021  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\624N050721W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Fri May 07 07:26:20 2021  
Response via : Initial Calibration





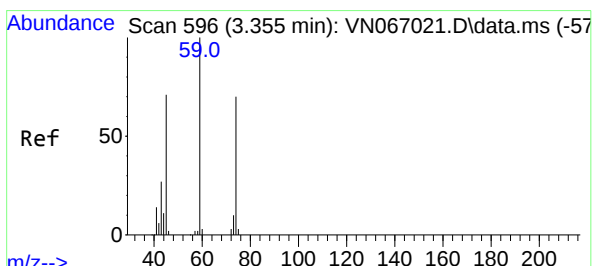
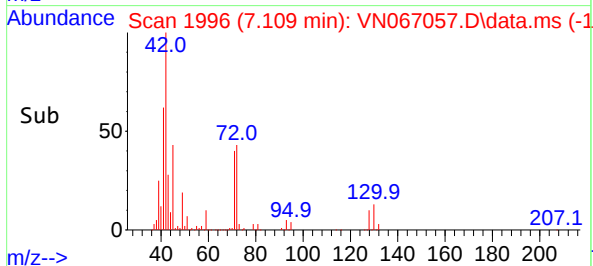
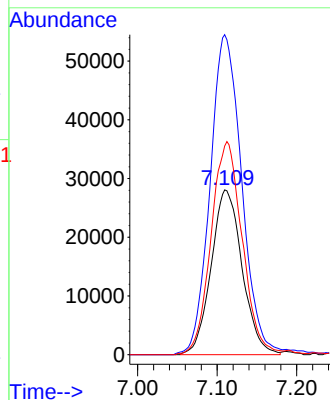
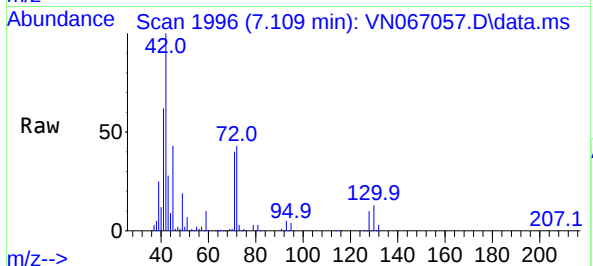
#1  
Bromochloromethane  
Concen: 30.00 ug/l  
RT: 7.109 min Scan# 1996  
Delta R.T. -0.003 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 128     | 100   |       |       |
| 49      | 197.7 | 0.0   | 486.3 |
| 130     | 128.5 | 0.0   | 326.0 |

Instrument :  
MSVOA\_N  
ClientSampleId :  
210505078-02-VOA

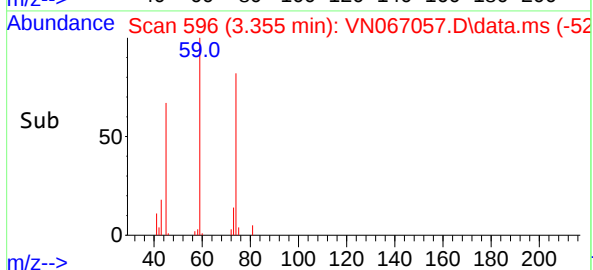
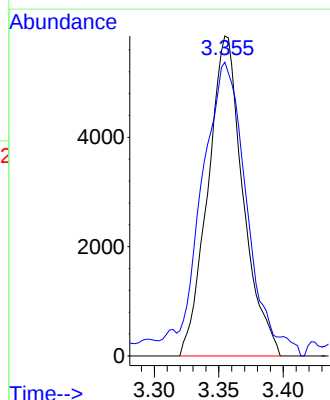
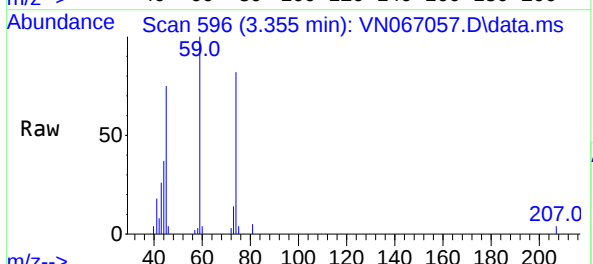
Manual Integrations  
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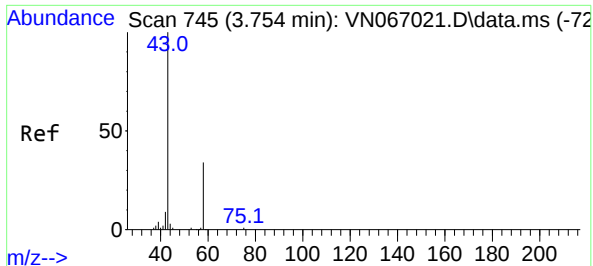
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#8  
Diethyl Ether  
Concen: 3.52 ug/l  
RT: 3.355 min Scan# 596  
Delta R.T. 0.000 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

| Tgt Ion | Ratio | Lower | Upper |
|---------|-------|-------|-------|
| 74      | 100   |       |       |
| 45      | 98.4  | 21.1  | 190.3 |





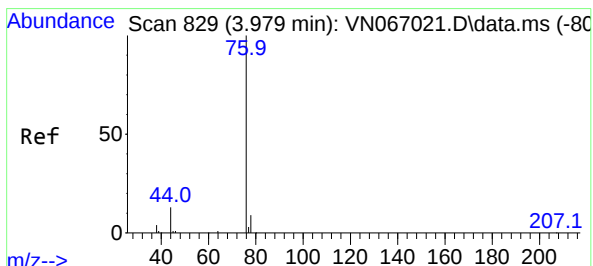
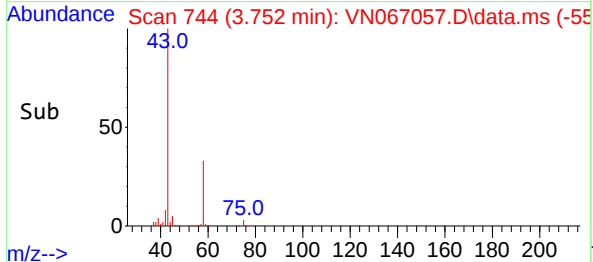
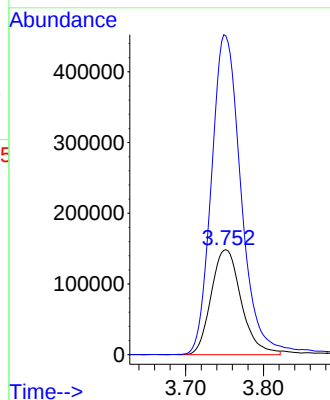
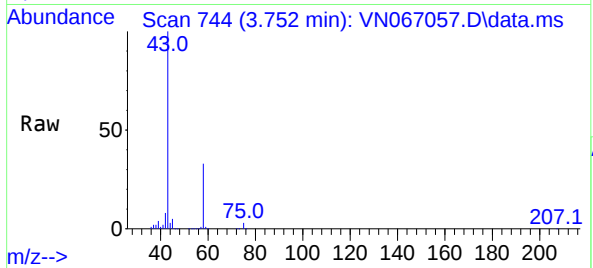
#15  
Acetone  
Concen: 565.80 ug/l  
RT: 3.752 min Scan# 744  
Delta R.T. -0.003 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

Tgt Ion: 58 Resp: 399262  
Ion Ratio Lower Upper  
58 100  
43 303.2 235.0 352.6

Instrument :  
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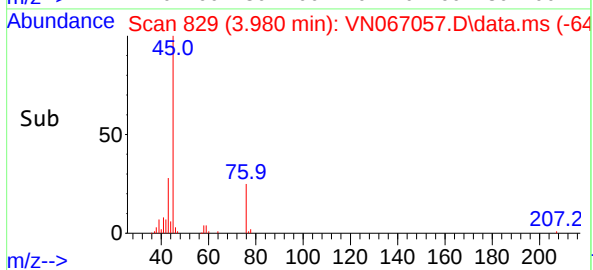
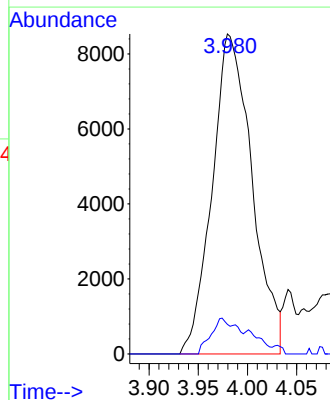
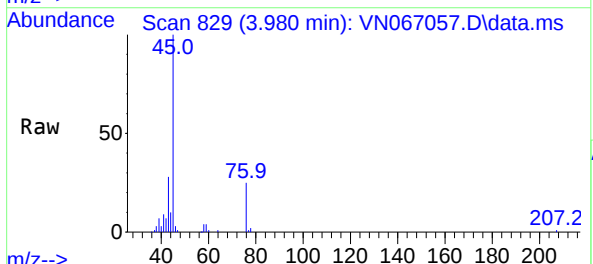
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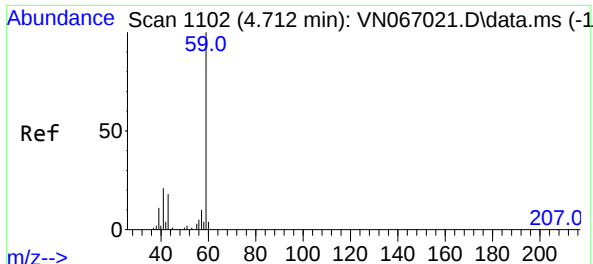
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#16  
Carbon Disulfide  
Concen: 1.68 ug/l  
RT: 3.980 min Scan# 829  
Delta R.T. 0.000 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

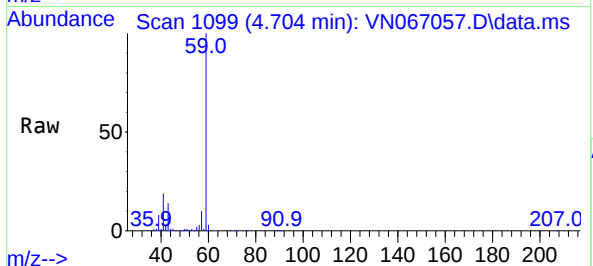
Tgt Ion: 76 Resp: 24104  
Ion Ratio Lower Upper  
76 100  
78 9.3 7.5 11.3





#23  
tert-Butyl Alcohol  
Concen: 3794.16 ug/l  
RT: 4.704 min Scan# 1099  
Delta R.T. -0.008 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

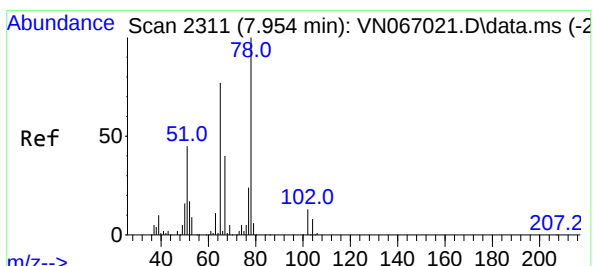
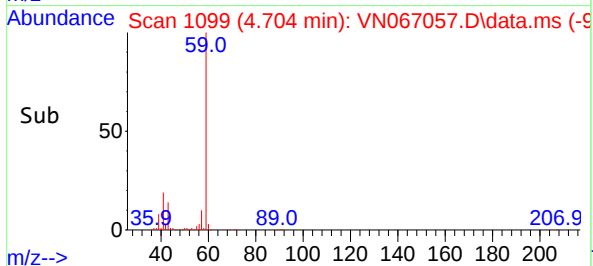
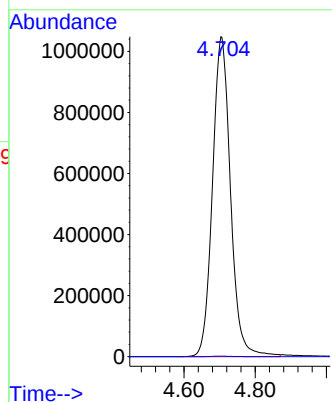
Instrument :  
MSVOA\_N  
ClientSampleId :  
210505078-02-VOA



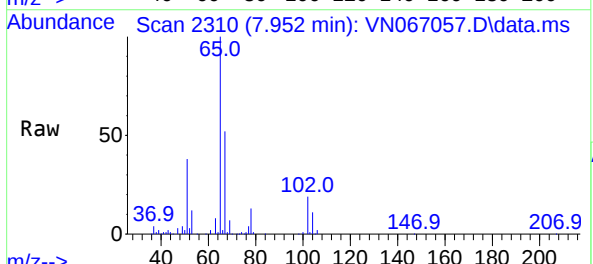
Tgt Ion: 59 Resp: 3674260  
Ion Ratio Lower Upper  
59 100  
52 0.0 0.0 0.0#

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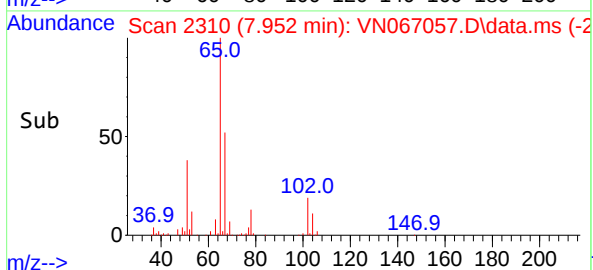
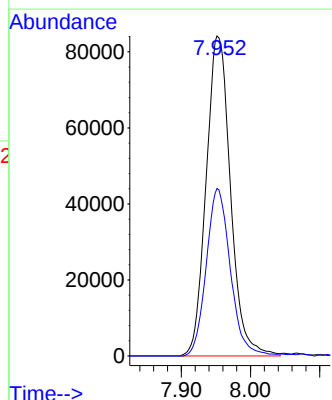
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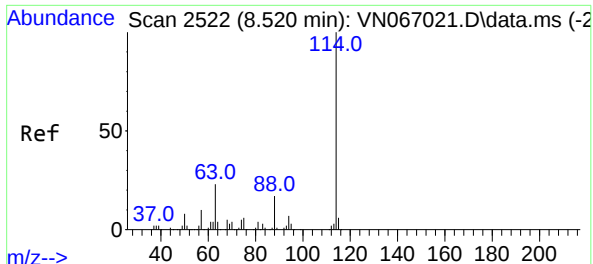


#27  
1,2-Dichloroethane-d4  
Concen: 30.91 ug/l  
RT: 7.952 min Scan# 2310  
Delta R.T. -0.002 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46



Tgt Ion: 65 Resp: 205845  
Ion Ratio Lower Upper  
65 100  
67 51.5 41.6 62.4





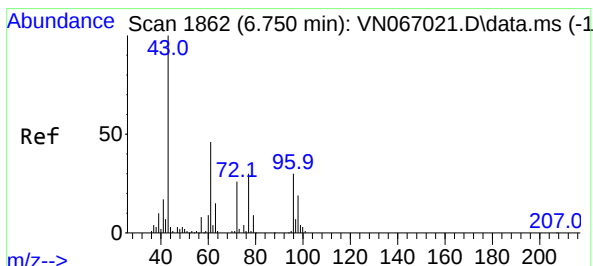
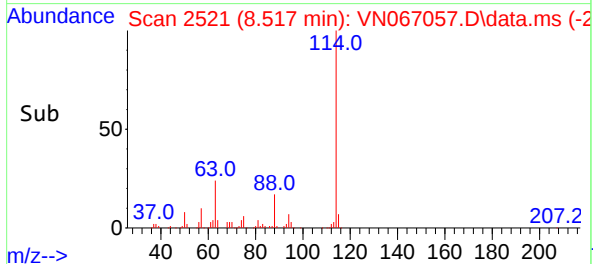
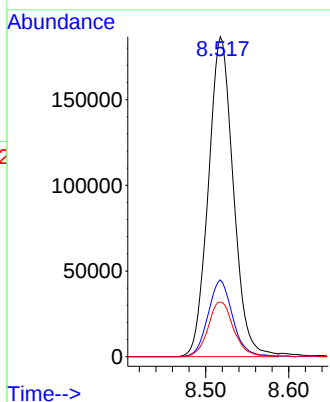
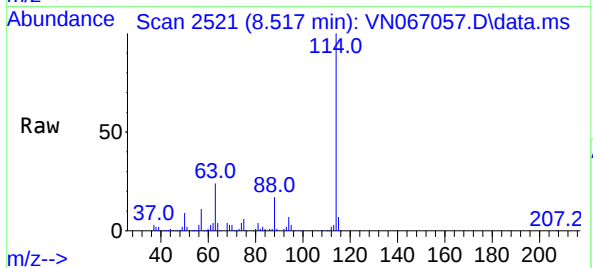
#28  
1,4-Difluorobenzene  
Concen: 30.00 ug/l  
RT: 8.517 min Scan# 2521  
Delta R.T. -0.003 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 114   | Resp: | 389925 |
| Ion      | Ratio | Lower | Upper  |
| 114      | 100   |       |        |
| 63       | 23.5  | 18.8  | 28.2   |
| 88       | 17.5  | 13.8  | 20.6   |

Instrument :  
MSVOA\_N  
ClientSampleId :  
210505078-02-VOA

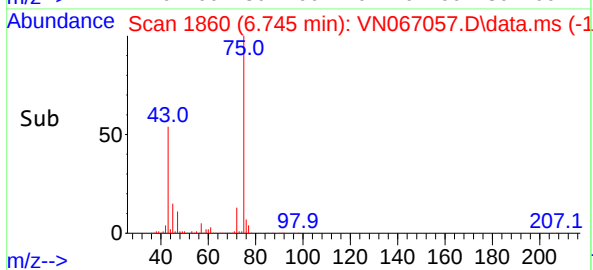
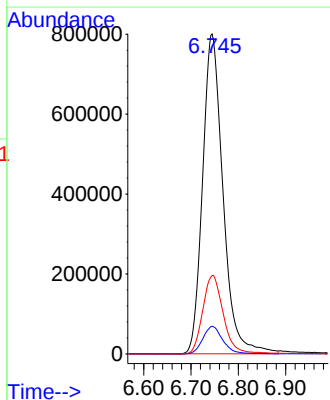
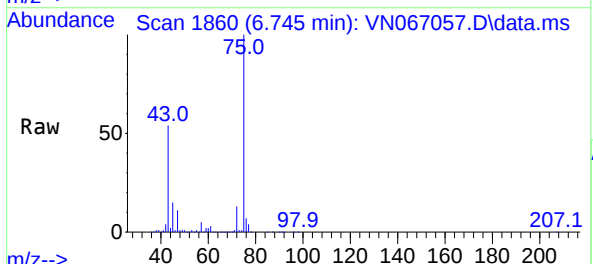
Manual Integrations  
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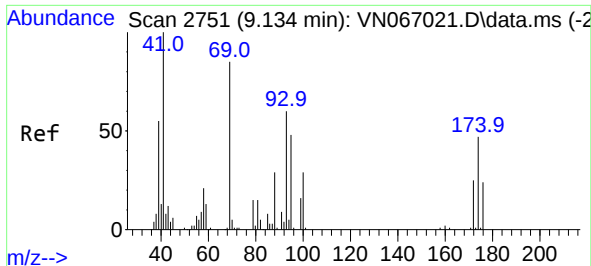
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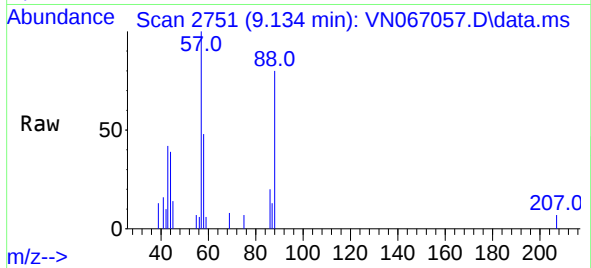
#30  
2-Butanone  
Concen: 734.31 ug/l  
RT: 6.745 min Scan# 1860  
Delta R.T. -0.005 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

|          |       |       |         |
|----------|-------|-------|---------|
| Tgt Ion: | 43    | Resp: | 2401147 |
| Ion      | Ratio | Lower | Upper   |
| 43       | 100   |       |         |
| 57       | 8.4   | 6.5   | 9.7     |
| 72       | 24.4  | 21.2  | 31.8    |

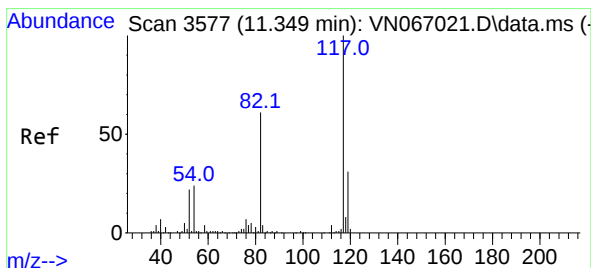
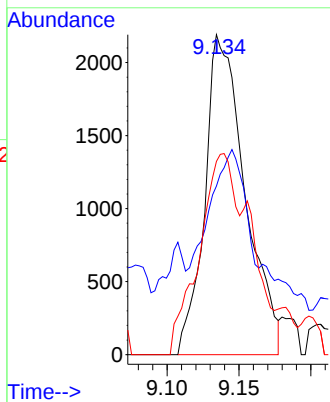
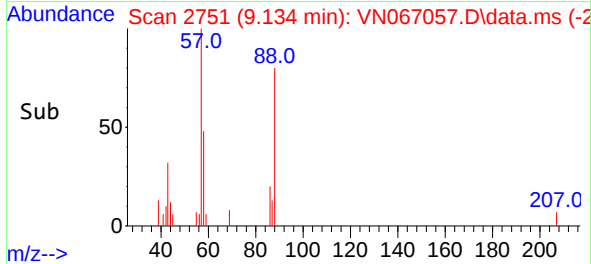




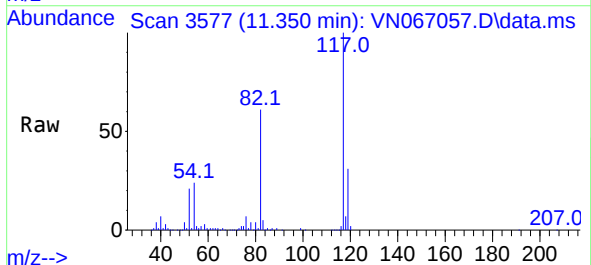
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1,4-Dioxane  
Concen: 57.14 ug/l  
RT: 9.134 min Scan# 2751  
Delta R.T. 0.000 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46



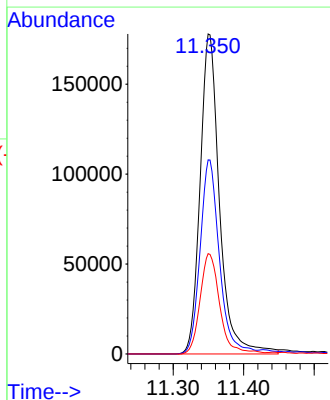
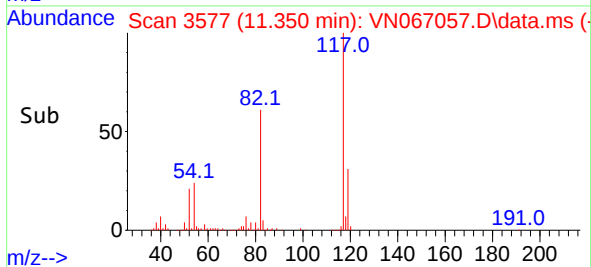
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Ion Ratio Lower Upper  
88 100  
43 33.4 28.0 42.0  
58 57.3 62.8 94.2#



#57  
Chlorobenzene-d5  
Concen: 30.00 ug/l  
RT: 11.350 min Scan# 3577  
Delta R.T. 0.001 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46



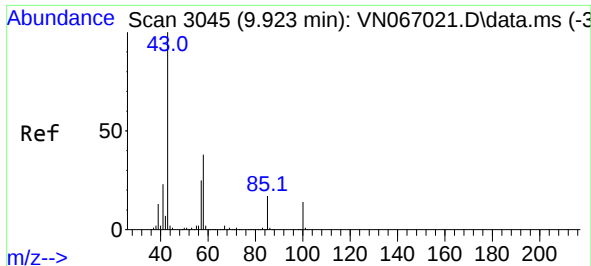
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Ion Ratio Lower Upper  
117 100  
82 60.4 49.3 73.9  
119 31.3 25.5 38.3



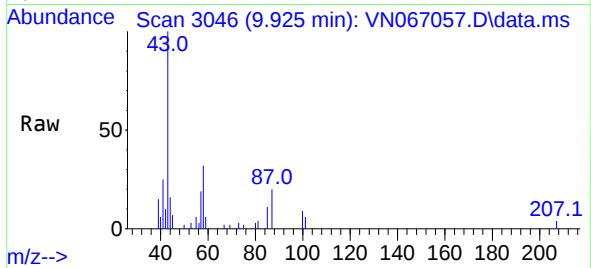
Instrument :  
MSVOA\_N  
ClientSampleId :  
210505078-02-VOA

Manual Integrations  
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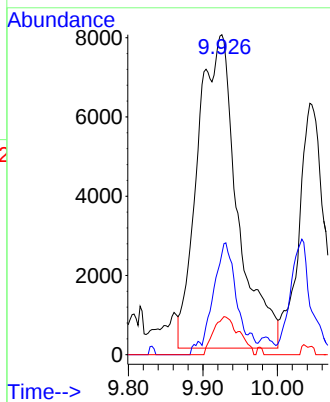
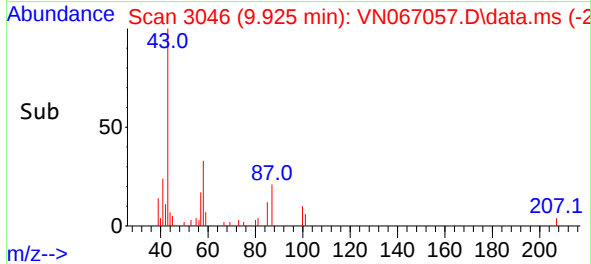
MMDadoda  
5/10/2021 2:24:15 PM



#58  
4-Methyl-2-Pentanone  
Concen: 4.60 ug/l m  
RT: 9.925 min Scan# 3046  
Delta R.T. 0.003 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46



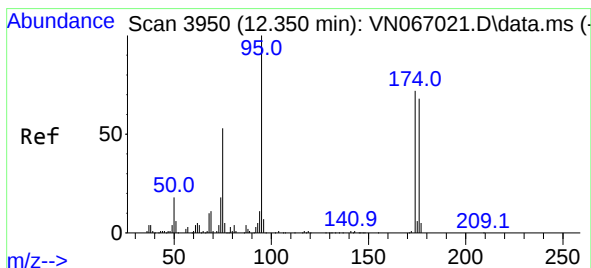
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Ion Ratio Lower Upper  
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85 0.0 13.4 20.0#



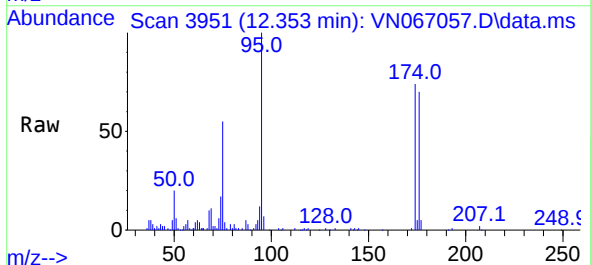
Instrument :  
MSVOA\_N  
ClientSampleId :  
210505078-02-VOA

Manual Integrations  
APPROVED

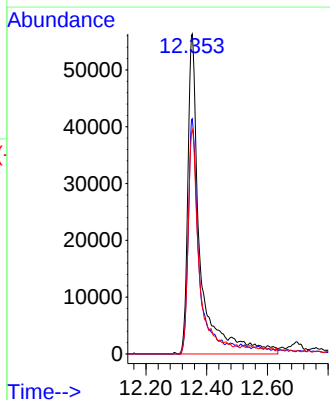
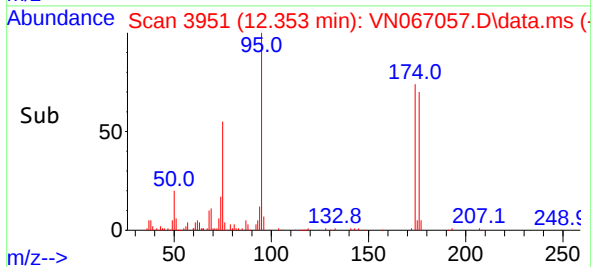
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5/10/2021 2:24:15 PM

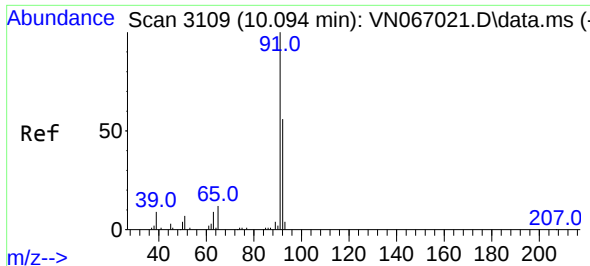


#60  
4-Bromofluorobenzene  
Concen: 28.00 ug/l m  
RT: 12.353 min Scan# 3951  
Delta R.T. 0.003 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46



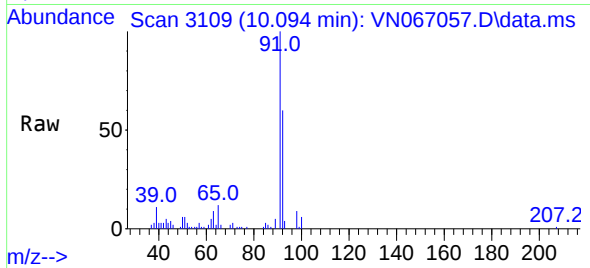
Tgt Ion: 95 Resp: 158455  
Ion Ratio Lower Upper  
95 100  
174 60.0 57.2 85.8  
176 56.5 54.5 81.7





#62  
Toluene  
Concen: 2.37 ug/l  
RT: 10.094 min Scan# 3109  
Delta R.T. 0.000 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

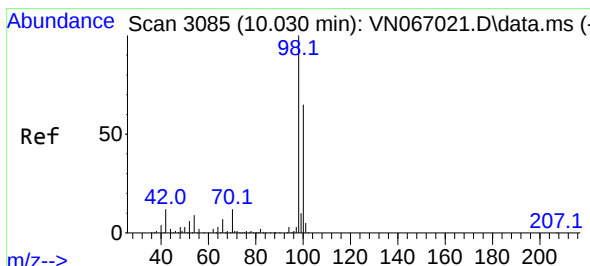
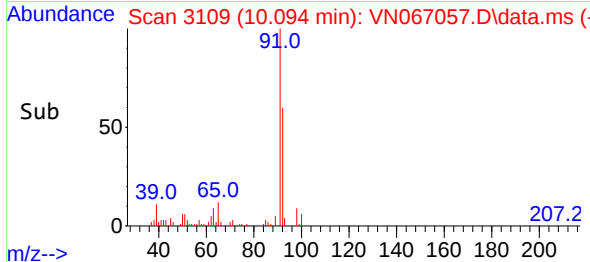
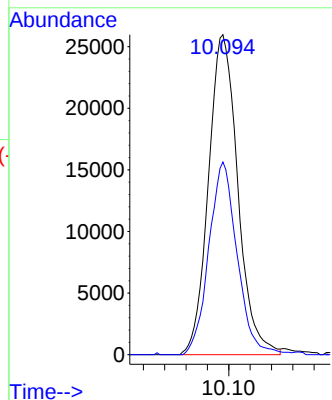
Instrument :  
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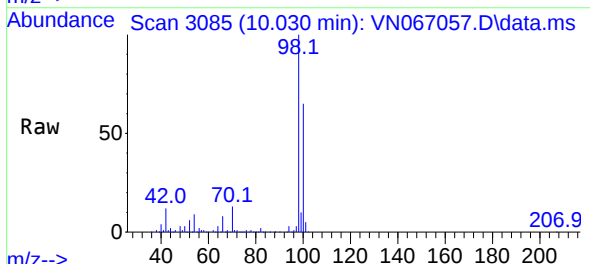
Tgt Ion: 91 Resp: 49644  
Ion Ratio Lower Upper  
91 100  
92 58.0 46.2 69.2

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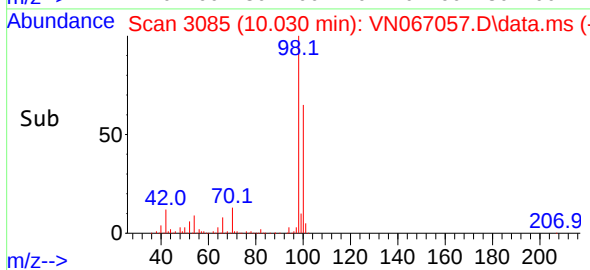
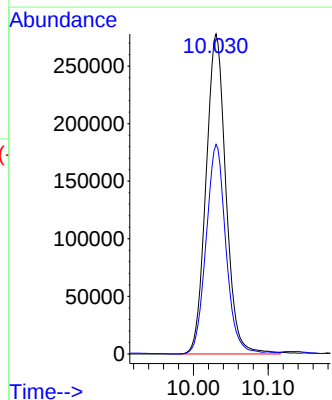
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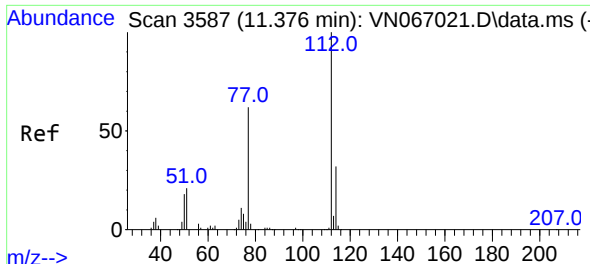


#63  
Toluene-d8  
Concen: 30.51 ug/l  
RT: 10.030 min Scan# 3085  
Delta R.T. 0.000 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46



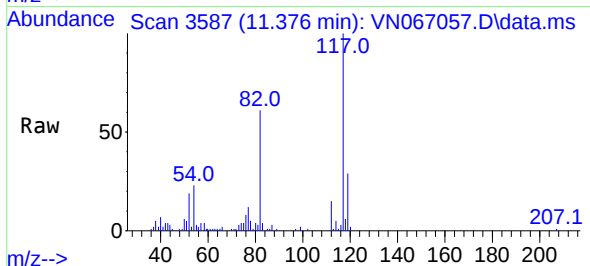
Tgt Ion: 98 Resp: 514109  
Ion Ratio Lower Upper  
98 100  
100 65.1 51.1 76.7





#64  
Chlorobenzene  
Concen: 0.72 ug/l  
RT: 11.376 min Scan# 3587  
Delta R.T. 0.000 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

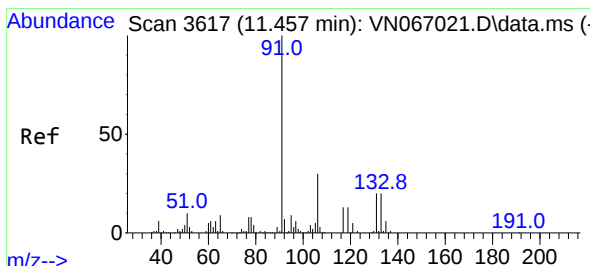
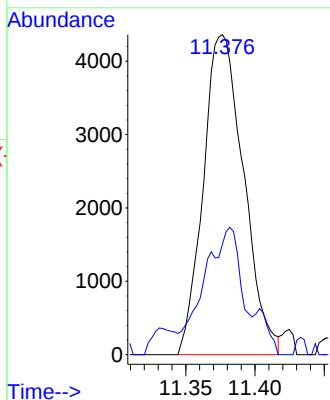
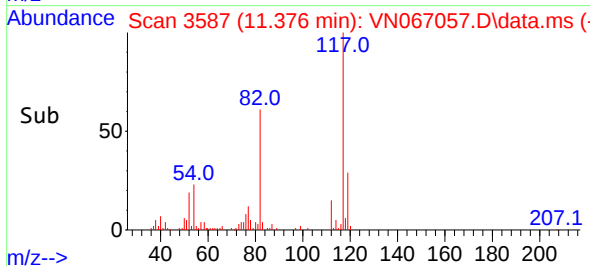
Instrument :  
MSVOA\_N  
ClientSampleId :  
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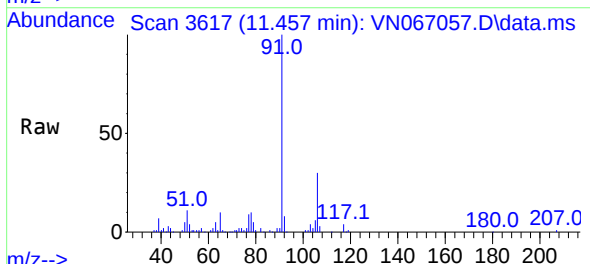
Tgt Ion:112 Resp: 8831  
Ion Ratio Lower Upper  
112 100  
114 34.7 25.2 37.8

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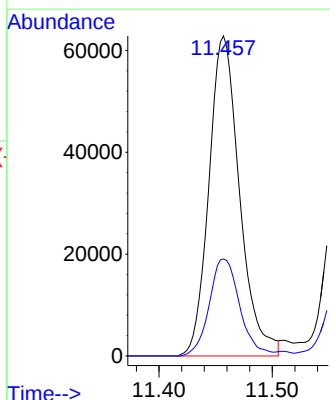
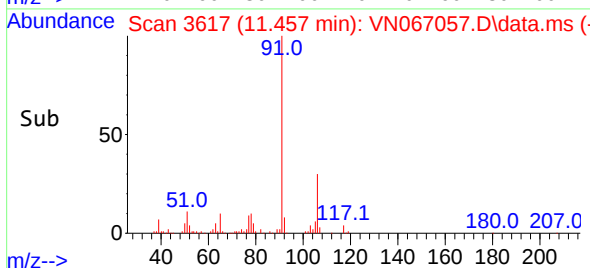
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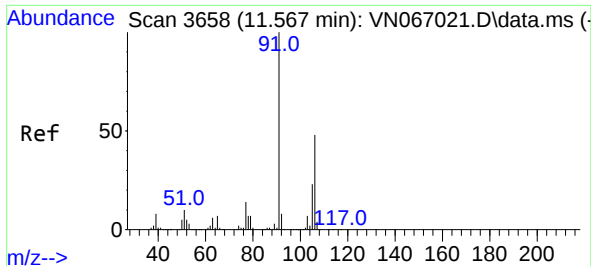


#66  
Ethyl Benzene  
Concen: 5.54 ug/l  
RT: 11.457 min Scan# 3617  
Delta R.T. 0.000 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46



Tgt Ion: 91 Resp: 118050  
Ion Ratio Lower Upper  
91 100  
106 30.3 24.1 36.1





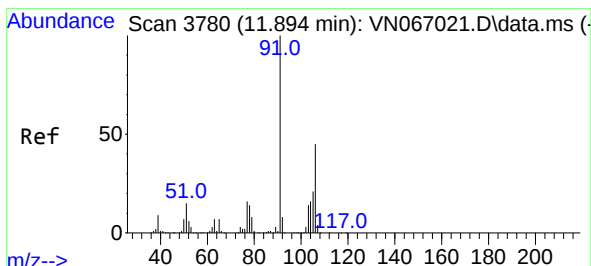
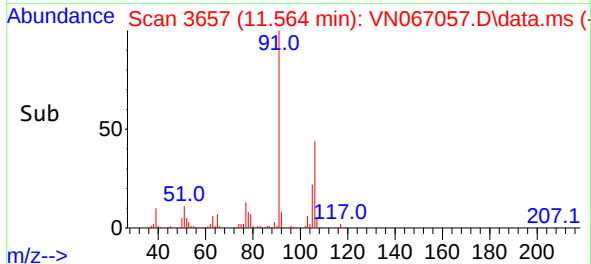
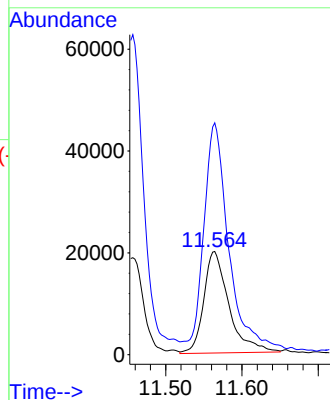
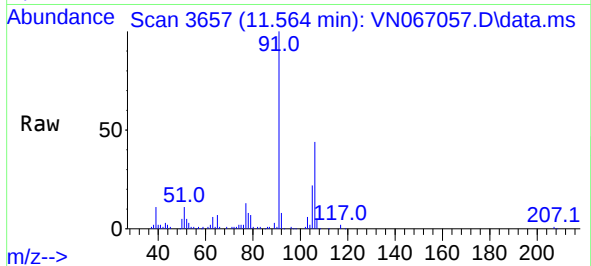
#67  
m/p-Xylenes  
Concen: 5.71 ug/l  
RT: 11.564 min Scan# 3657  
Delta R.T. -0.003 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

Tgt Ion:106 Resp: 45661  
Ion Ratio Lower Upper  
106 100  
91 190.6 173.2 259.8

Instrument :  
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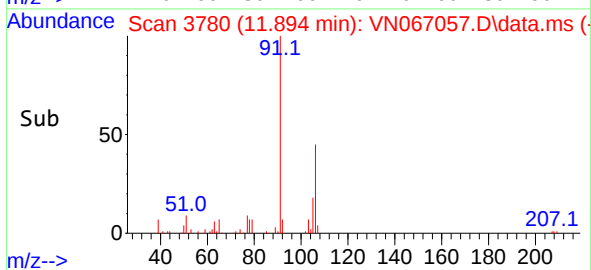
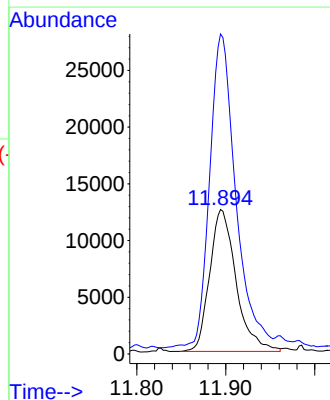
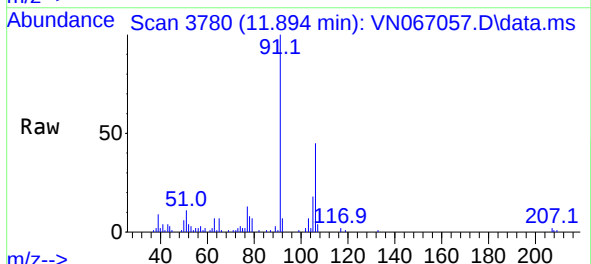
Manual Integrations  
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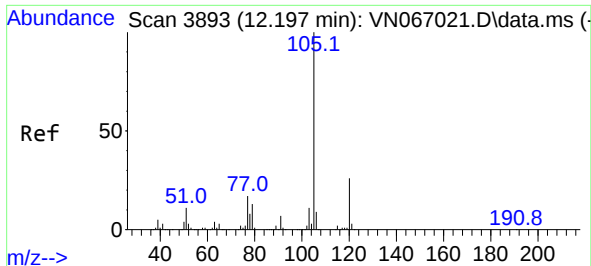
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#68  
o-Xylene  
Concen: 3.28 ug/l  
RT: 11.894 min Scan# 3780  
Delta R.T. 0.000 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

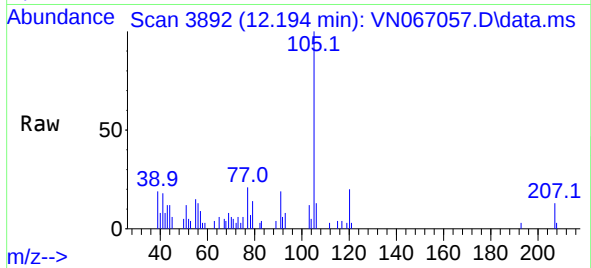
Tgt Ion:106 Resp: 25868  
Ion Ratio Lower Upper  
106 100  
91 211.3 113.3 339.9





#70  
Isopropylbenzene  
Concen: 0.58 ug/l m  
RT: 12.194 min Scan# 3892  
Delta R.T. -0.003 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

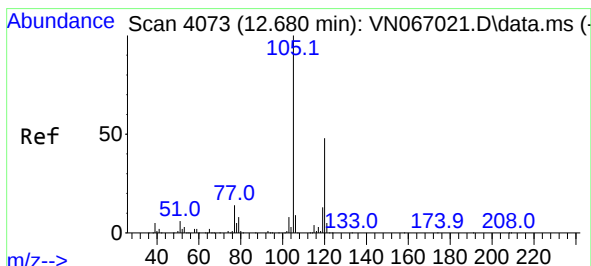
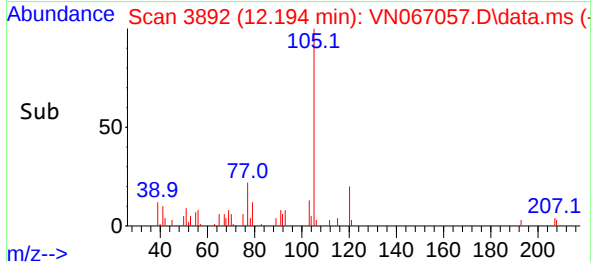
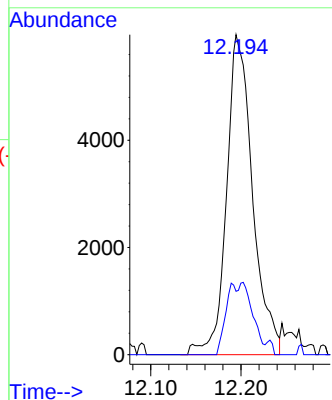
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ClientSampleId :  
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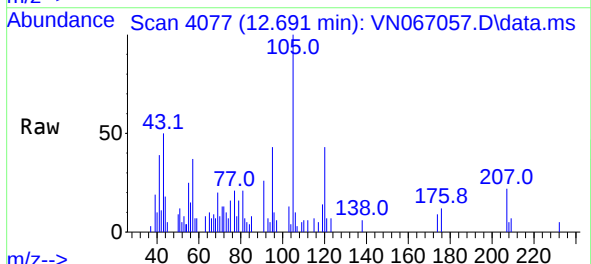
Tgt Ion:105 Resp: 11971  
Ion Ratio Lower Upper  
105 100  
120 8.9 18.2 33.8#

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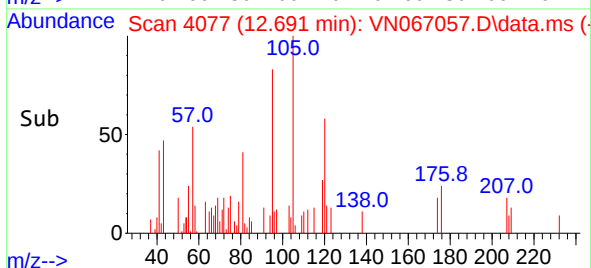
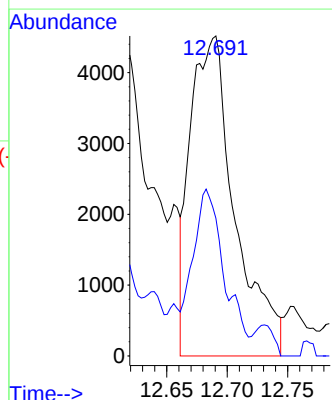
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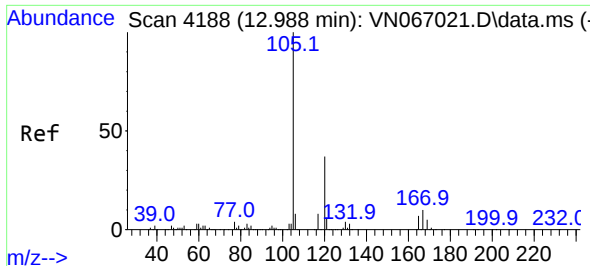


#76  
1,3,5-Trimethylbenzene  
Concen: 0.64 ug/l m  
RT: 12.691 min Scan# 4077  
Delta R.T. 0.011 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46



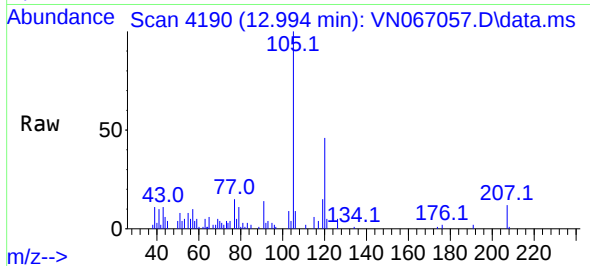
Tgt Ion:105 Resp: 11593  
Ion Ratio Lower Upper  
105 100  
120 9.1 0.0 93.4





#80  
1,2,4-Trimethylbenzene  
Concen: 1.38 ug/l  
RT: 12.994 min Scan# 4190  
Delta R.T. 0.006 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

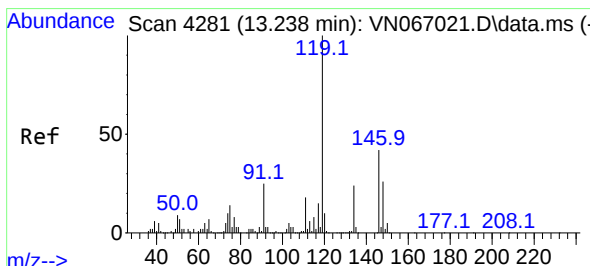
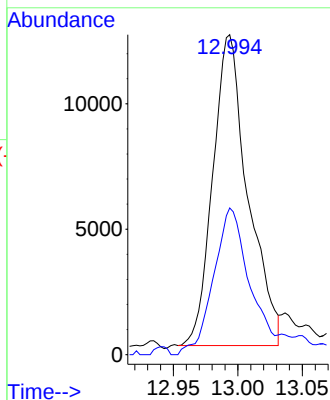
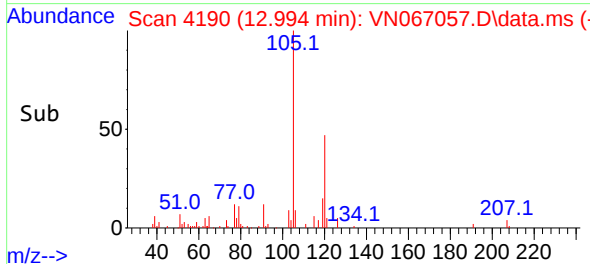
Instrument :  
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ClientSampleId :  
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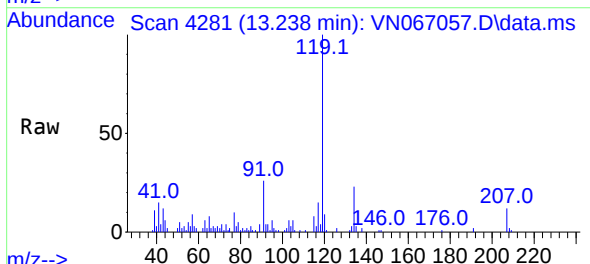
Tgt Ion:105 Resp: 23476  
Ion Ratio Lower Upper  
105 100  
120 48.1 0.0 88.8

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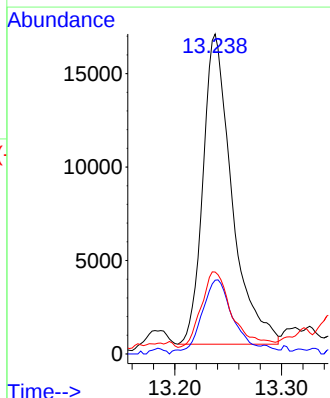
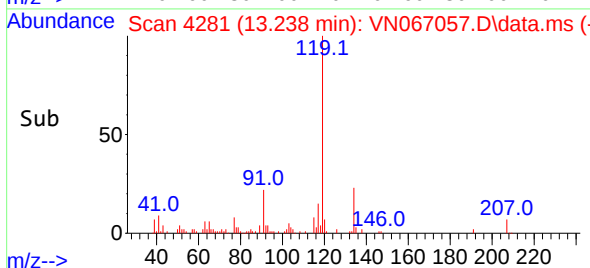
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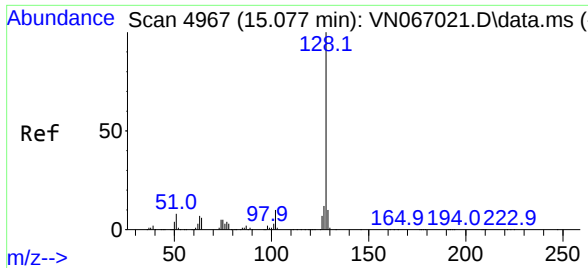


#82  
p-Isopropyltoluene  
Concen: 1.94 ug/l  
RT: 13.238 min Scan# 4281  
Delta R.T. 0.000 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46



Tgt Ion:119 Resp: 31229  
Ion Ratio Lower Upper  
119 100  
134 23.2 0.0 49.8  
91 24.2 0.0 49.6





#91  
Naphthalene  
Concen: 14.41 ug/l  
RT: 15.075 min Scan# 4966  
Delta R.T. -0.003 min  
Lab File: VN067057.D  
Acq: 7 May 2021 17:46

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 128   | Resp: | 169577 |
| Ion      | Ratio | Lower | Upper  |
| 128      | 100   |       |        |
| 127      | 11.8  | 9.8   | 14.6   |
| 129      | 11.2  | 7.8   | 11.8   |

Instrument :  
MSVOA\_N  
ClientSampleId :  
210505078-02-VOA

Manual Integrations  
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