

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN061325\  
 Data File : VN087014.D  
 Acq On : 13 Jun 2025 19:51  
 Operator : JC\MD  
 Sample : Q2302-01RE  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 250611078-02-VOARE

Manual Integrations  
 APPROVED

Reviewed By :John  
 Carlone

Quant Time: Jun 14 00:35:13 2025  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N060625W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 07 02:12:50 2025  
 Response via : Initial Calibration

| Compound                    | R.T.   | QIon           | Response | Conc       | Units | Dev(Min) |
|-----------------------------|--------|----------------|----------|------------|-------|----------|
| -----                       |        |                |          |            |       |          |
| Internal Standards          |        |                |          |            |       |          |
| 1) Pentafluorobenzene       | 8.230  | 168            | 194559   | 50.000     | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene     | 9.106  | 114            | 391285   | 50.000     | ug/l  | 0.00     |
| 63) Chlorobenzene-d5        | 11.865 | 117            | 359346   | 50.000     | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4  | 13.788 | 152            | 172357   | 50.000     | ug/l  | 0.00     |
| System Monitoring Compounds |        |                |          |            |       |          |
| 33) 1,2-Dichloroethane-d4   | 8.588  | 65             | 143349   | 55.030     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 74 - 125 | Recovery | = 110.060% |       |          |
| 35) Dibromofluoromethane    | 8.177  | 113            | 117876   | 50.834     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 75 - 124 | Recovery | = 101.660% |       |          |
| 50) Toluene-d8              | 10.571 | 98             | 486367   | 52.983     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 86 - 113 | Recovery | = 105.960% |       |          |
| 62) 4-Bromofluorobenzene    | 12.847 | 95             | 178943   | 52.468     | ug/l  | 0.00     |
| Spiked Amount               | 50.000 | Range 77 - 121 | Recovery | = 104.940% |       |          |
| Target Compounds            |        |                |          |            |       |          |
|                             |        |                |          |            |       | Qvalue   |
| 8) Diethyl Ether            | 3.989  | 74             | 6195     | 4.211      | ug/l  | 98       |
| 11) Tert butyl alcohol      | 5.536  | 59             | 5696001  | 8058.605   | ug/l  | 99       |
| 16) Acetone                 | 4.442  | 43             | 412948   | 298.931    | ug/l  | 98       |
| 17) Carbon Disulfide        | 4.742  | 76             | 21971    | 3.668      | ug/l  | 99       |
| 19) Methyl tert-butyl Ether | 5.818  | 73             | 23767    | 3.031      | ug/l  | 96       |
| 25) 2-Butanone              | 7.494  | 43             | 550634m  | 245.222    | ug/l  |          |
| 29) Tetrahydrofuran         | 7.847  | 42             | 1077967  | 736.946    | ug/l  | 95       |
| 40) Benzene                 | 8.612  | 78             | 66077    | 5.848      | ug/l  | 100      |
| 51) 4-Methyl-2-Pentanone    | 10.453 | 43             | 33325    | 7.841      | ug/l  | 87       |
| 52) Toluene                 | 10.629 | 92             | 117077   | 16.955     | ug/l  | 99       |
| 65) Chlorobenzene           | 11.894 | 112            | 26534    | 3.348      | ug/l  | 99       |
| 67) Ethyl Benzene           | 11.965 | 91             | 242492   | 17.763     | ug/l  | 100      |
| 68) m/p-Xylenes             | 12.065 | 106            | 88981    | 17.027     | ug/l  | 98       |
| 69) o-Xylene                | 12.400 | 106            | 46826    | 9.356      | ug/l  | 99       |
| 73) Isopropylbenzene        | 12.694 | 105            | 29376    | 2.340      | ug/l  | 97       |
| 78) n-propylbenzene         | 13.035 | 91             | 13690    | 0.897      | ug/l  | 96       |
| 80) 1,3,5-Trimethylbenzene  | 13.170 | 105            | 15371    | 1.483      | ug/l  | 98       |
| 84) 1,2,4-Trimethylbenzene  | 13.482 | 105            | 57257    | 5.508      | ug/l  | 100      |
| 86) p-Isopropyltoluene      | 13.729 | 119            | 207851   | 18.246     | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene     | 13.812 | 146            | 24483    | 4.239      | ug/l  | 92       |
| 95) Naphthalene             | 15.641 | 128            | 387562   | 29.956     | ug/l  | 100      |
| -----                       |        |                |          |            |       |          |

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

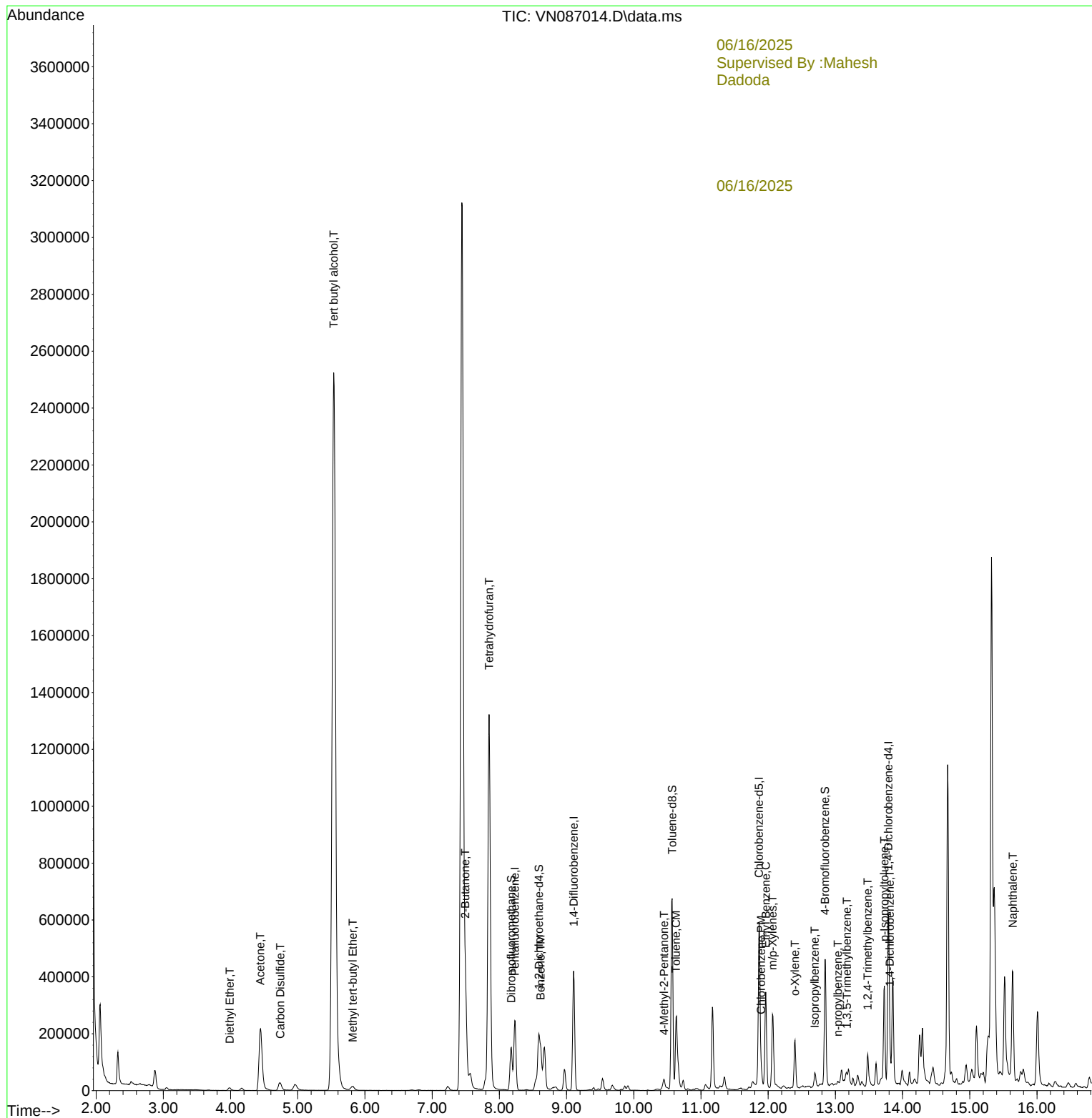
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Data File : VN087014.D  
Acq On : 13 Jun 2025 19:51  
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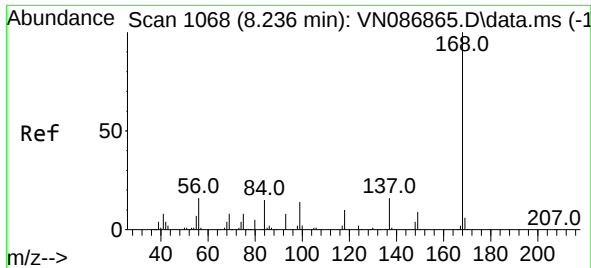
Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE

Manual Integrations  
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Quant Time: Jun 14 00:35:13 2025  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N060625W.M  
Quant Title : SW846 8260  
QLast Update : Sat Jun 07 02:12:50 2025  
Response via : Initial Calibration





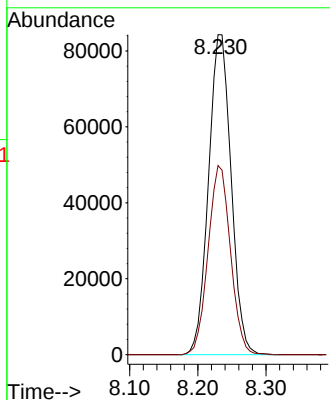
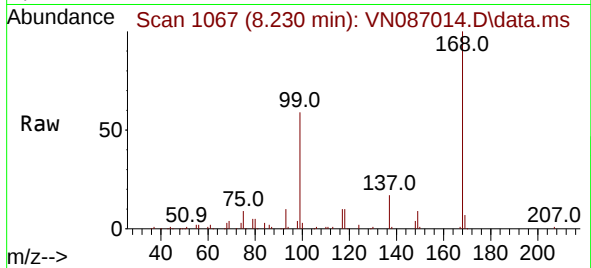
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Pentafluorobenzene  
Concen: 50.000 ug/l  
RT: 8.230 min Scan# 1068  
Delta R.T. -0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Instrument : MSVOA\_N  
ClientSampleId : 250611078-02-VOARE

Tgt Ion:168 Resp: 19455  
Ion Ratio Lower Upper  
168 100  
99 59.1 49.1 73.7

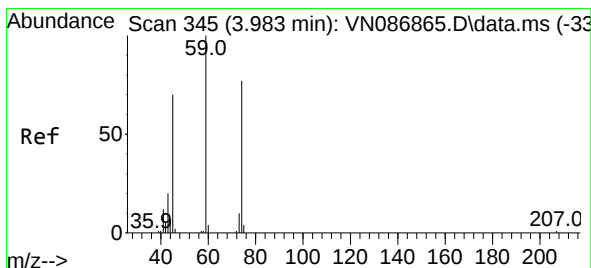
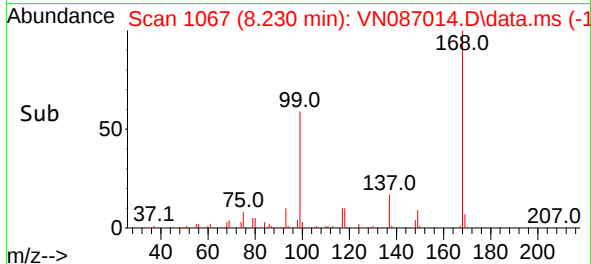
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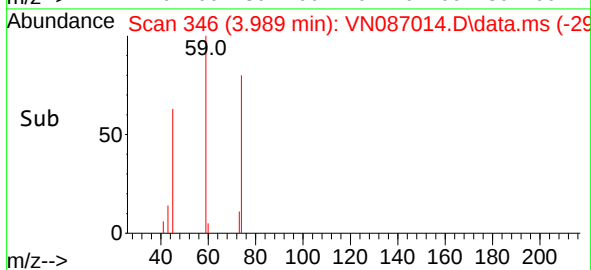
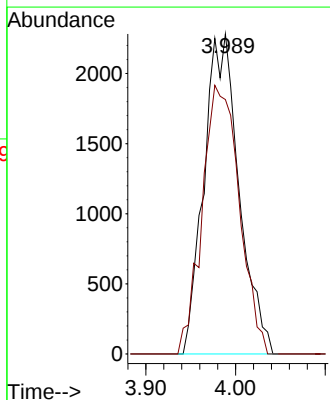
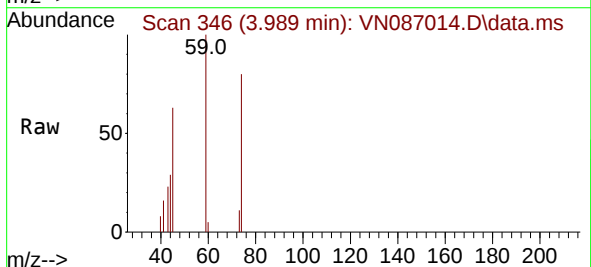
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Dadoda

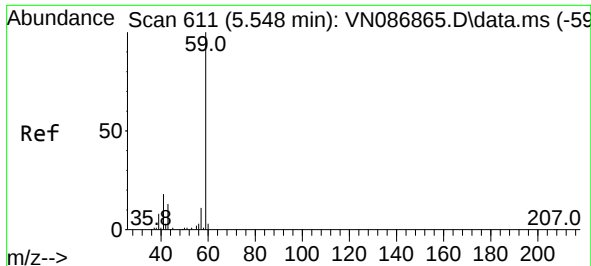
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#8  
Diethyl Ether  
Concen: 4.211 ug/l  
RT: 3.989 min Scan# 346  
Delta R.T. 0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

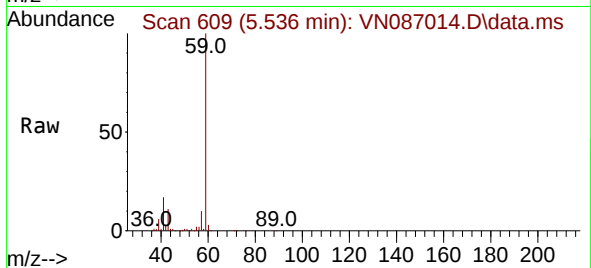
Tgt Ion: 74 Resp: 6195  
Ion Ratio Lower Upper  
74 100  
45 88.7 45.5 136.5





#11  
Tert butyl alcohol  
Concen: 8058.605 ug/l  
RT: 5.536 min Scan# 609  
Delta R.T. -0.012 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

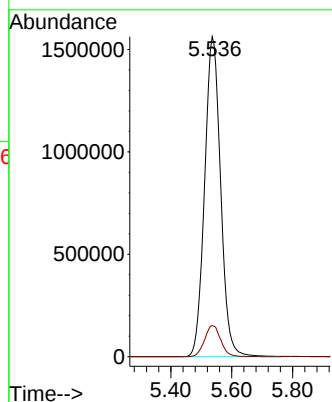
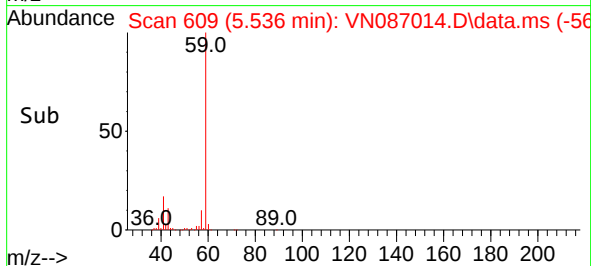
Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE



Tgt Ion: 59 Resp: 569600  
Ion Ratio Lower Upper  
59 100  
57 9.9 8.1 12.1

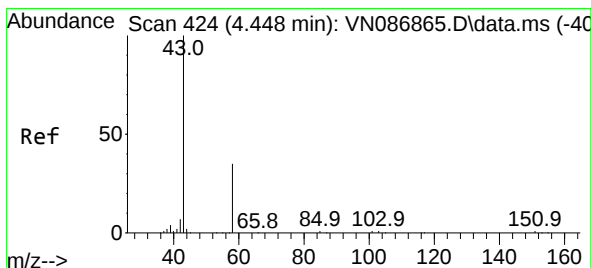
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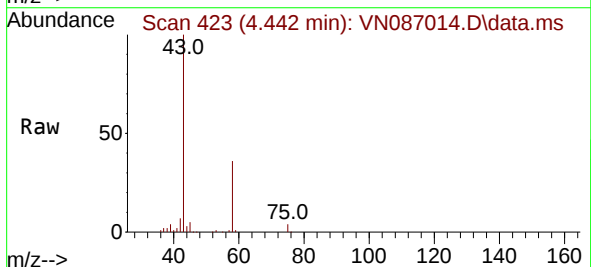


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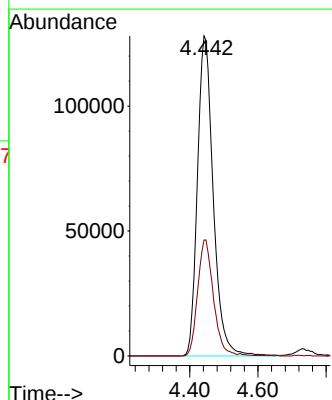
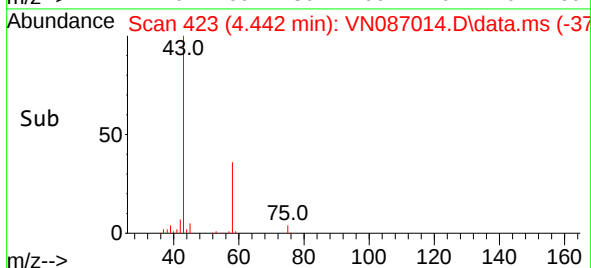
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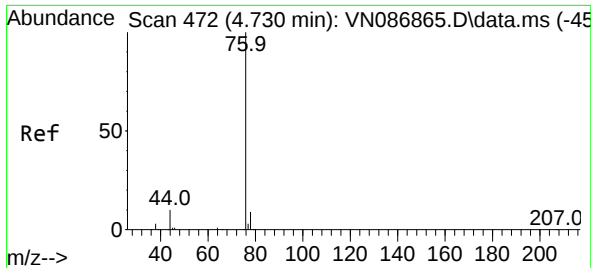


#16  
Acetone  
Concen: 298.931 ug/l  
RT: 4.442 min Scan# 423  
Delta R.T. -0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51



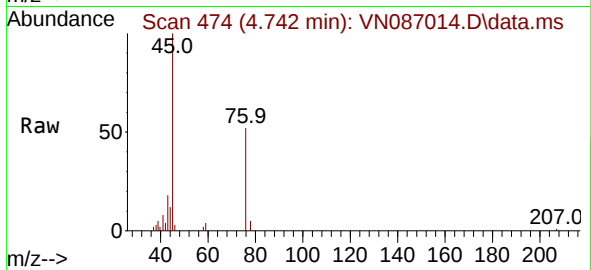
Tgt Ion: 43 Resp: 412948  
Ion Ratio Lower Upper  
43 100  
58 36.2 28.0 42.0





#17  
Carbon Disulfide  
Concen: 3.668 ug/l  
RT: 4.742 min Scan# 41  
Delta R.T. 0.012 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

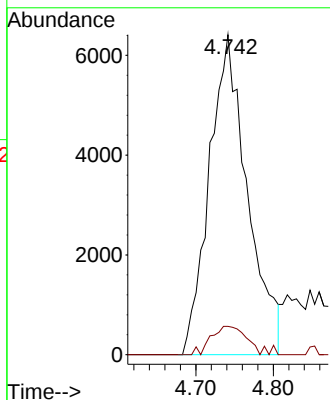
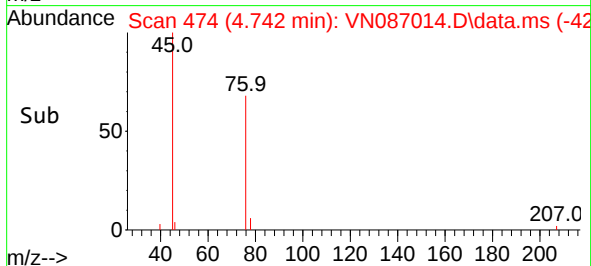
Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE



Tgt Ion: 76 Resp: 2197  
Ion Ratio Lower Upper  
76 100  
78 8.8 7.3 10.9

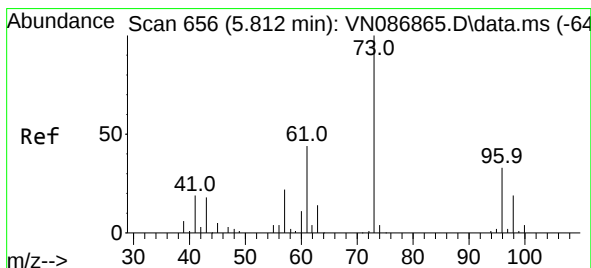
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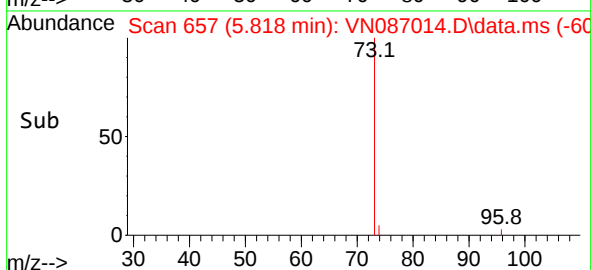
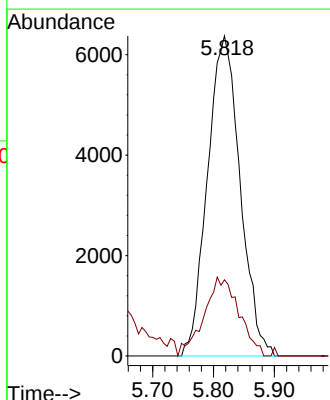
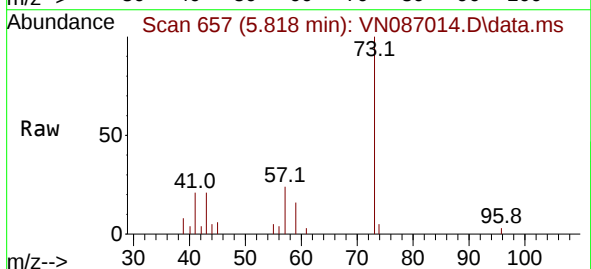
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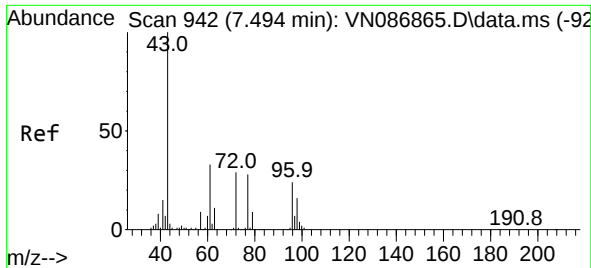
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#19  
Methyl tert-butyl Ether  
Concen: 3.031 ug/l  
RT: 5.818 min Scan# 657  
Delta R.T. 0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

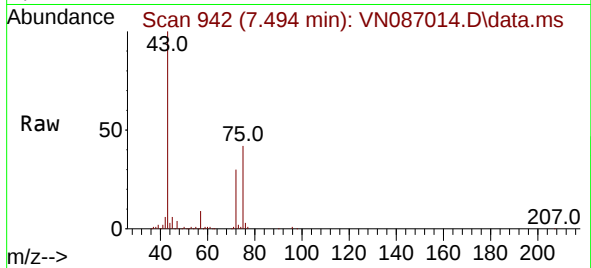
Tgt Ion: 73 Resp: 23767  
Ion Ratio Lower Upper  
73 100  
57 23.8 17.4 26.2





#25  
2-Butanone  
Concen: 245.222 ug/l m  
RT: 7.494 min Scan# 94  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

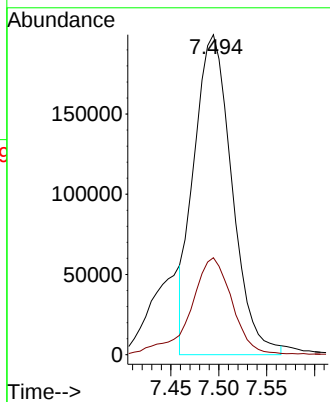
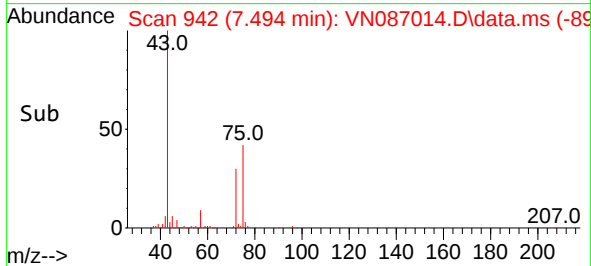
Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE



Tgt Ion: 43 Resp: 550634  
Ion Ratio Lower Upper  
43 100  
72 30.3 23.0 34.6

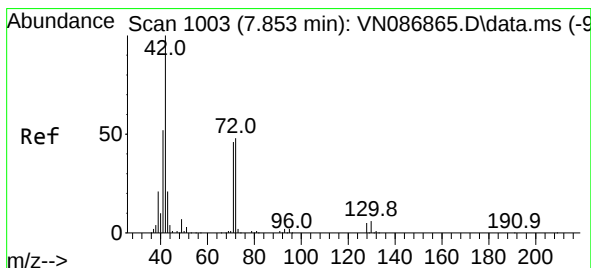
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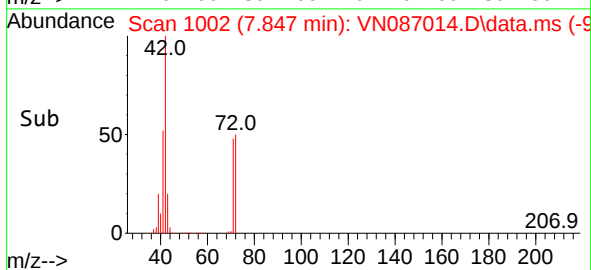
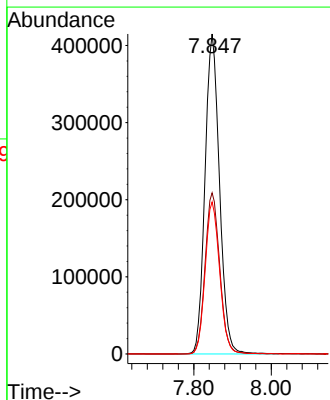
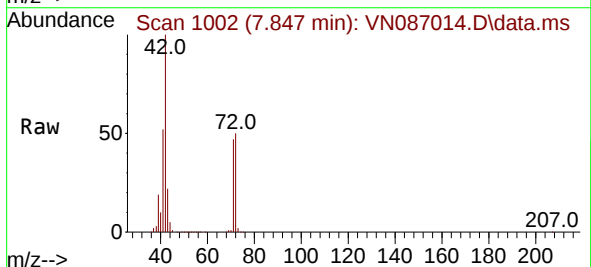
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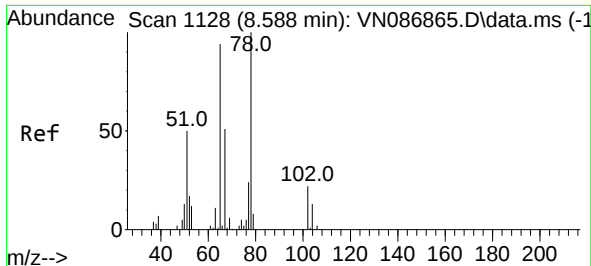
06/16/2025



#29  
Tetrahydrofuran  
Concen: 736.946 ug/l  
RT: 7.847 min Scan# 1002  
Delta R.T. -0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Tgt Ion: 42 Resp: 1077967  
Ion Ratio Lower Upper  
42 100  
72 50.9 37.8 56.6  
71 47.6 35.6 53.4





#33

1,2-Dichloroethane-d4

Concen: 55.030 ug/l

RT: 8.588 min Scan# 1128

Delta R.T. -0.000 min

Lab File: VN087014.D

Acq: 13 Jun 2025 19:51

Instrument :

MSVOA\_N

ClientSampleId :

250611078-02-VOARE

Tgt Ion: 65 Resp: 143349

Ion Ratio Lower Upper

65 100

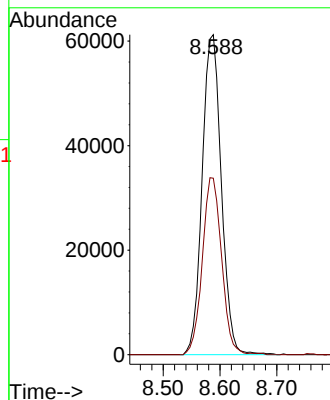
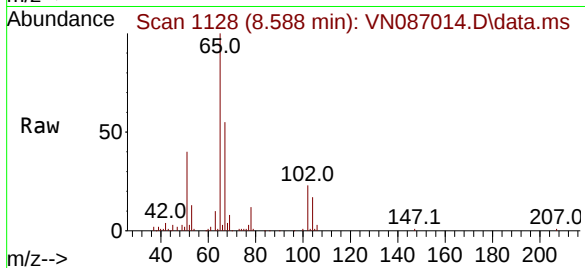
67 55.7 0.0 105.6

Manual Integrations

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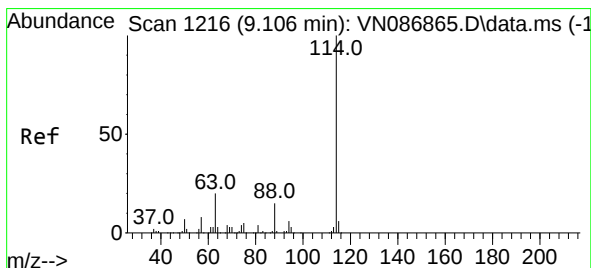
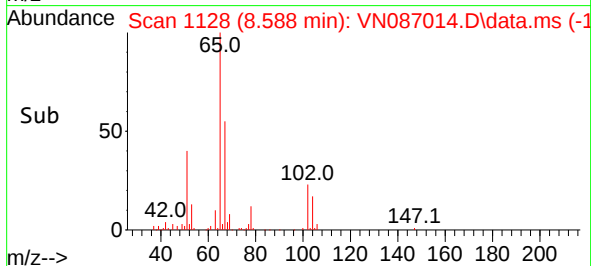


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#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 9.106 min Scan# 1216

Delta R.T. -0.000 min

Lab File: VN087014.D

Acq: 13 Jun 2025 19:51

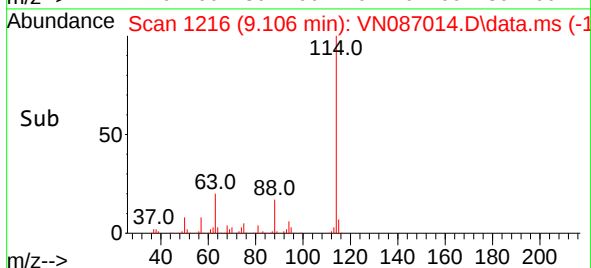
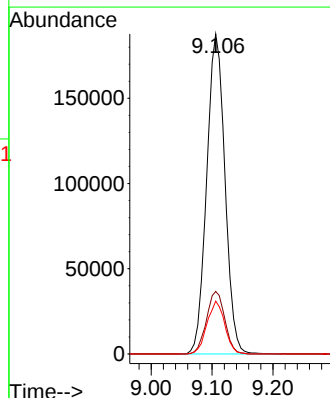
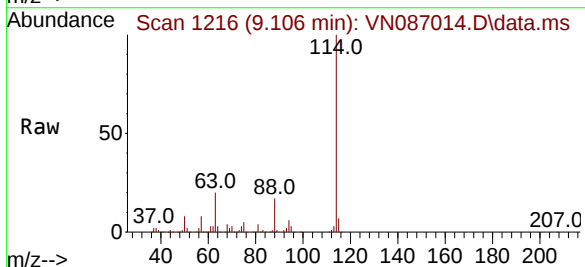
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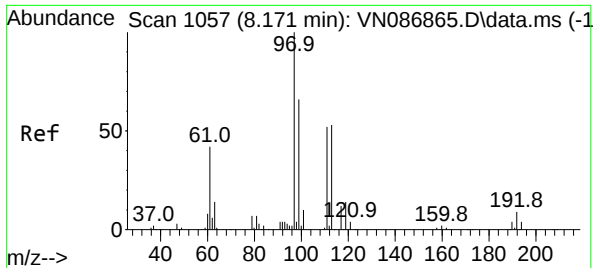
Ion Ratio Lower Upper

114 100

63 19.6 0.0 39.6

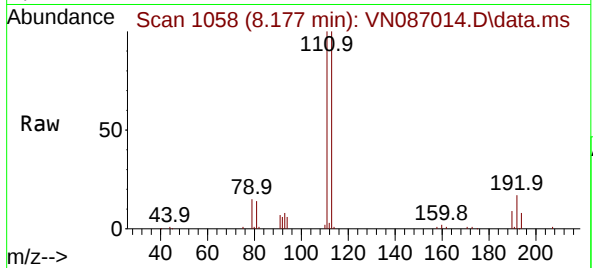
88 16.5 0.0 30.2





#35  
Dibromofluoromethane  
Concen: 50.834 ug/l  
RT: 8.177 min Scan# 1107  
Delta R.T. 0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

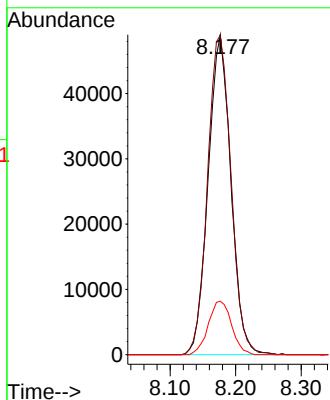
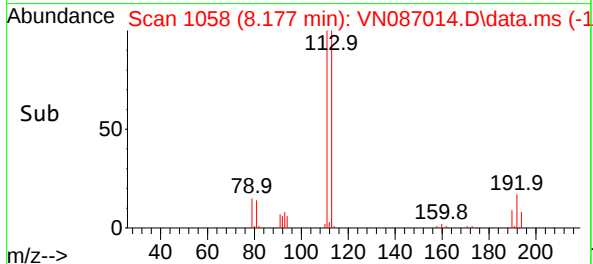
Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE



Tgt Ion:113 Resp: 117870  
Ion Ratio Lower Upper  
113 100  
111 102.6 84.2 126.2  
192 17.1 14.2 21.4

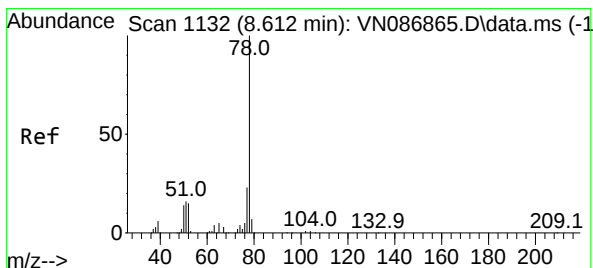
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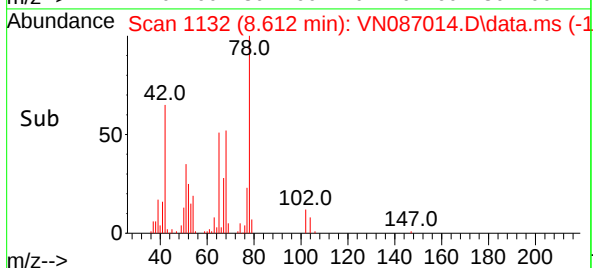
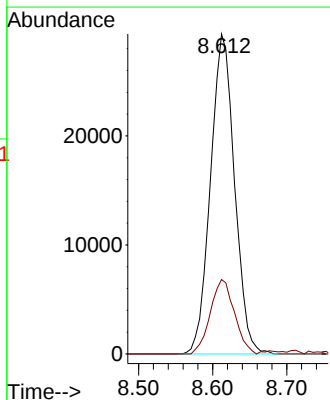
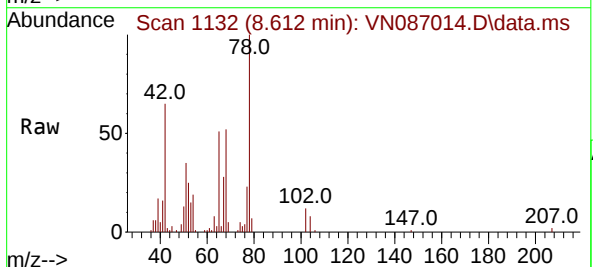
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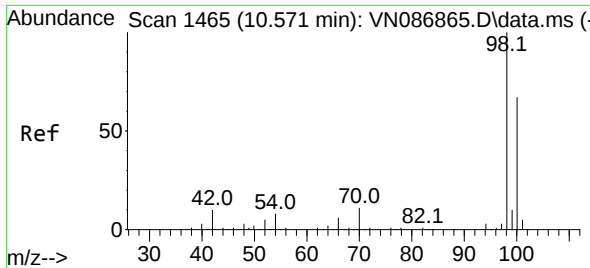
06/16/2025



#40  
Benzene  
Concen: 5.848 ug/l  
RT: 8.612 min Scan# 1132  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

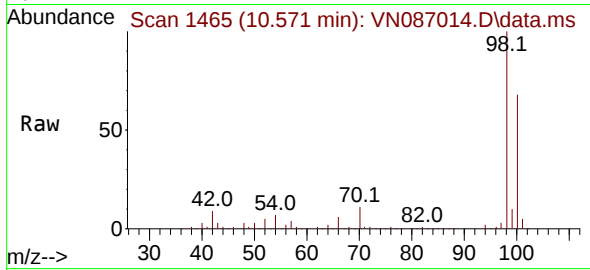
Tgt Ion: 78 Resp: 66077  
Ion Ratio Lower Upper  
78 100  
77 23.3 18.7 28.1





#50  
Toluene-d8  
Concen: 52.983 ug/l  
RT: 10.571 min Scan# 1465  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

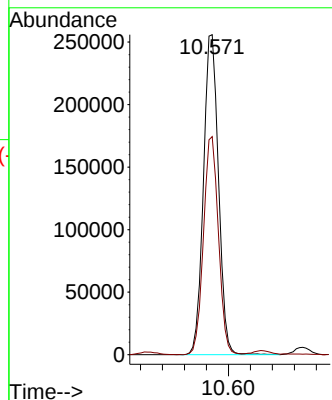
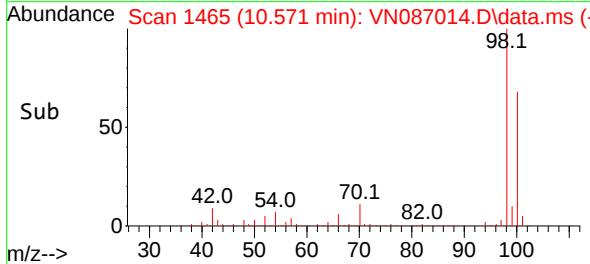
Instrument : MSVOA\_N  
ClientSampleId : 250611078-02-VOARE



Tgt Ion: 98 Resp: 48636  
Ion Ratio Lower Upper  
98 100  
100 67.7 53.4 80.0

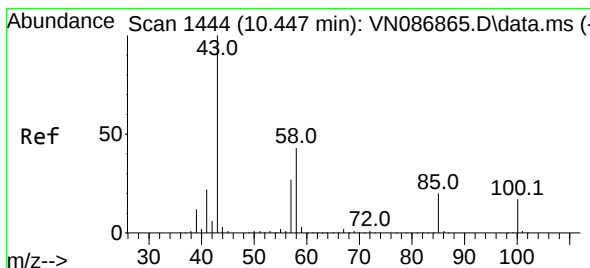
Manual Integrations  
APPROVED

Reviewed By :John  
Carlone

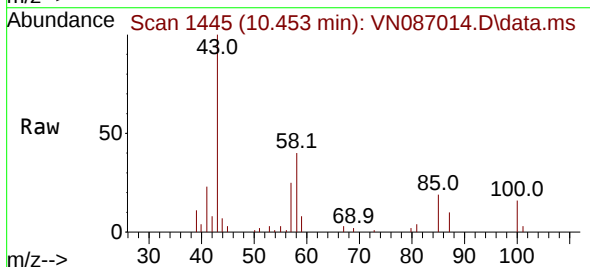


06/16/2025  
Supervised By :Mahesh  
Dadoda

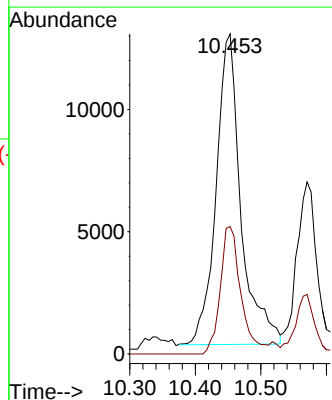
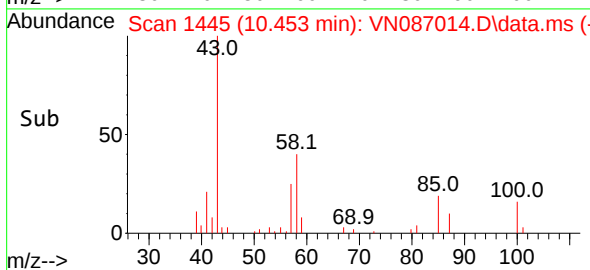
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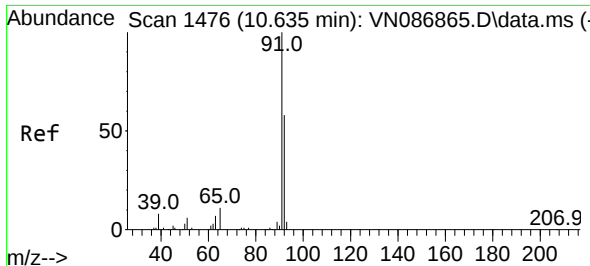


#51  
4-Methyl-2-Pentanone  
Concen: 7.841 ug/l  
RT: 10.453 min Scan# 1445  
Delta R.T. 0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51



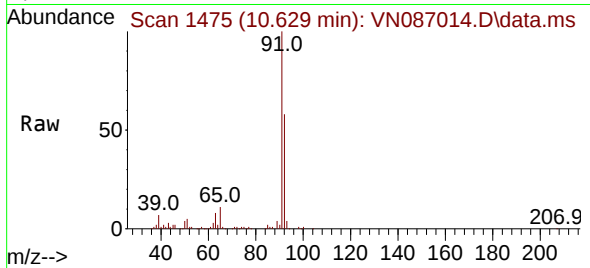
Tgt Ion: 43 Resp: 33325  
Ion Ratio Lower Upper  
43 100  
58 34.3 34.2 51.4





#52  
Toluene  
Concen: 16.955 ug/l  
RT: 10.629 min Scan# 1476  
Delta R.T. -0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

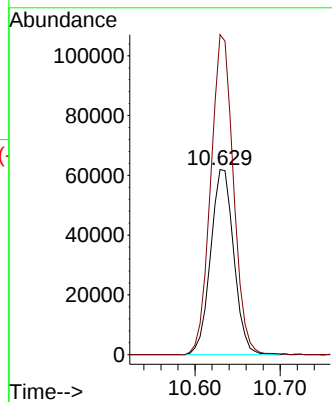
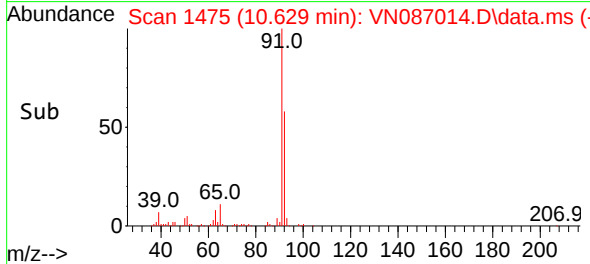
Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE



Tgt Ion: 92 Resp: 11707  
Ion Ratio Lower Upper  
92 100  
91 169.6 136.5 204.7

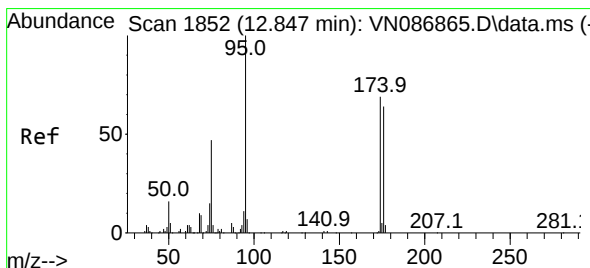
Manual Integrations  
APPROVED

Reviewed By :John  
Carlone



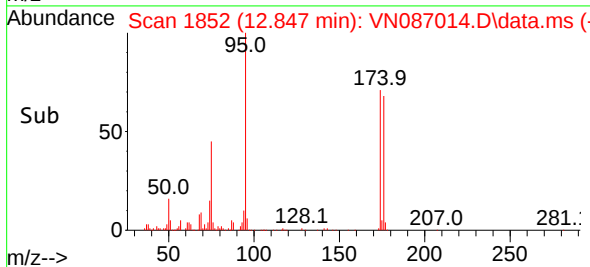
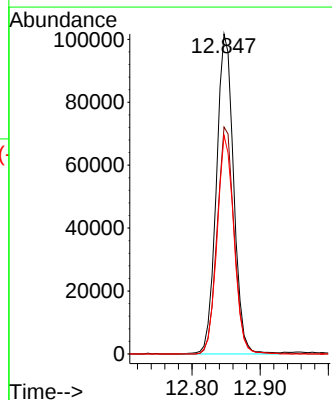
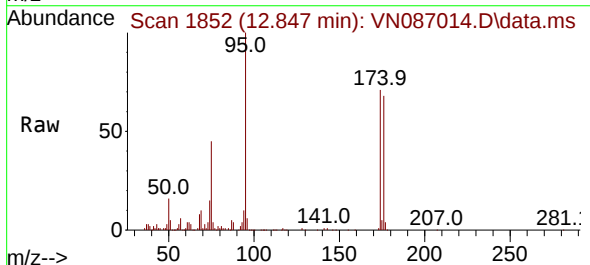
06/16/2025  
Supervised By :Mahesh  
Dadoda

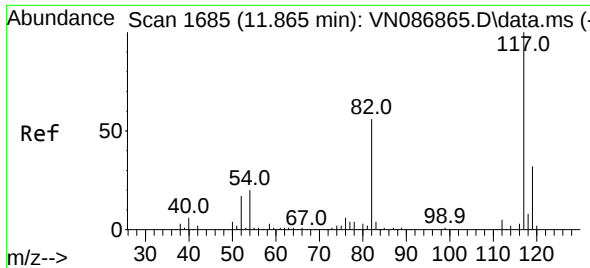
06/16/2025



#62  
4-Bromofluorobenzene  
Concen: 52.468 ug/l  
RT: 12.847 min Scan# 1852  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Tgt Ion: 95 Resp: 178943  
Ion Ratio Lower Upper  
95 100  
174 70.3 0.0 141.8  
176 66.8 0.0 132.6





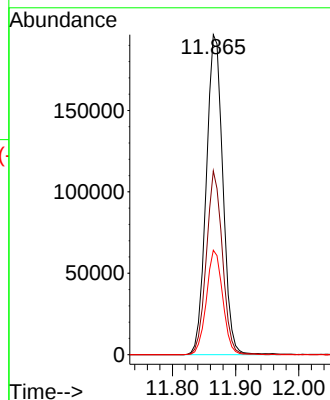
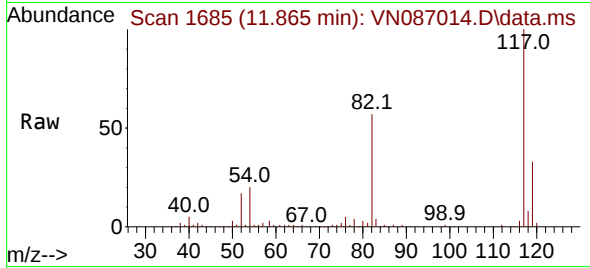
#63  
Chlorobenzene-d5  
Concen: 50.000 ug/l  
RT: 11.865 min Scan# 1685  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE

Tgt Ion:117 Resp: 359340  
Ion Ratio Lower Upper  
117 100  
82 57.5 44.6 67.0  
119 32.7 25.5 38.3

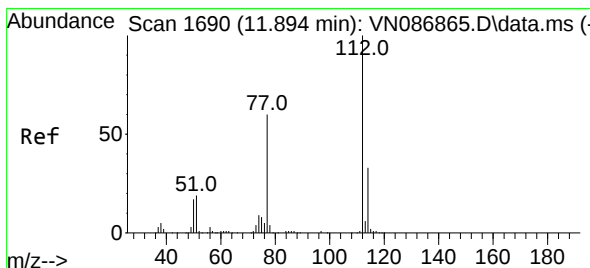
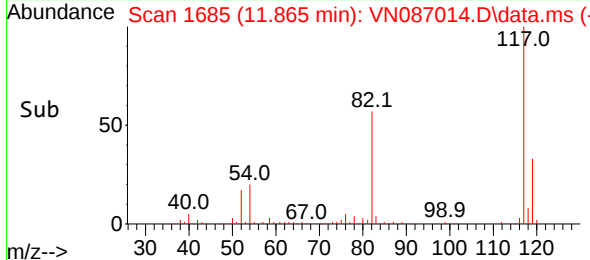
Manual Integrations  
APPROVED

Reviewed By :John  
Carlone



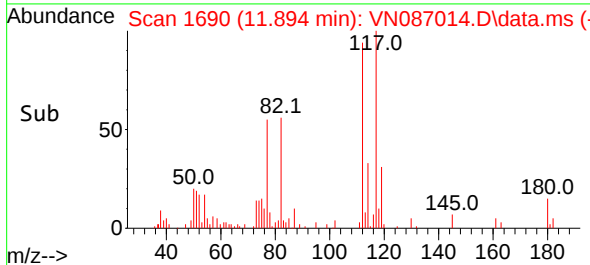
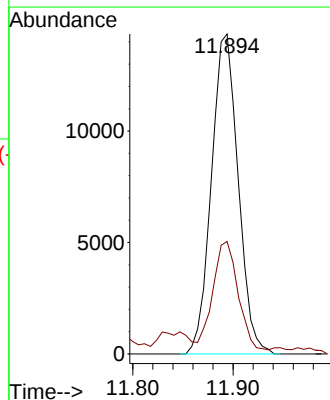
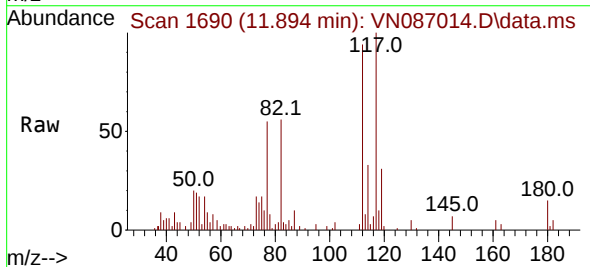
06/16/2025  
Supervised By :Mahesh  
Dadoda

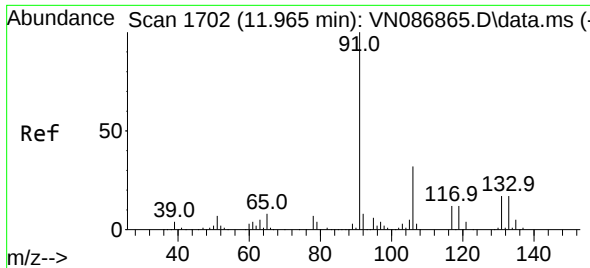
06/16/2025



#65  
Chlorobenzene  
Concen: 3.348 ug/l  
RT: 11.894 min Scan# 1690  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

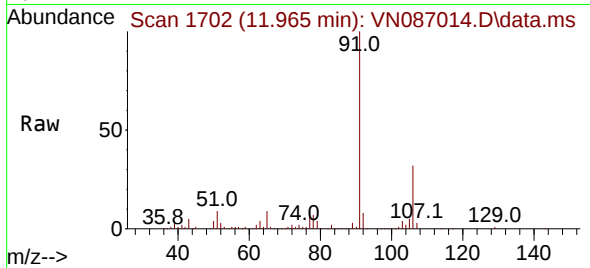
Tgt Ion:112 Resp: 26534  
Ion Ratio Lower Upper  
112 100  
114 33.2 26.2 39.2





#67  
Ethyl Benzene  
Concen: 17.763 ug/l  
RT: 11.965 min Scan# 1719  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

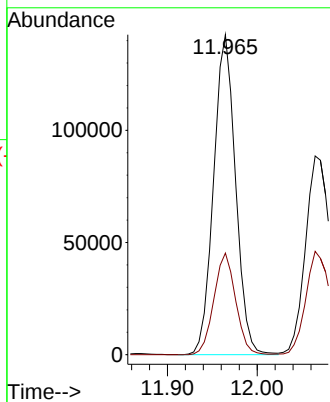
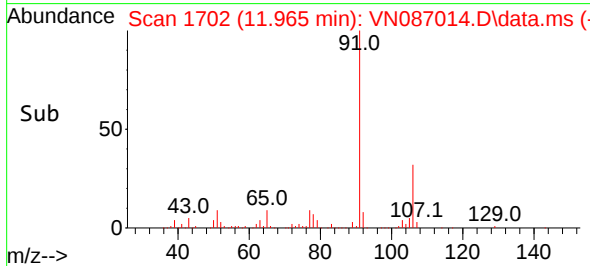
Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE



Tgt Ion: 91 Resp: 242492  
Ion Ratio Lower Upper  
91 100  
106 31.7 25.4 38.2

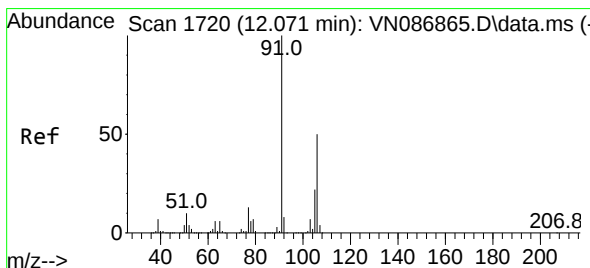
Manual Integrations  
APPROVED

Reviewed By :John  
Carlone



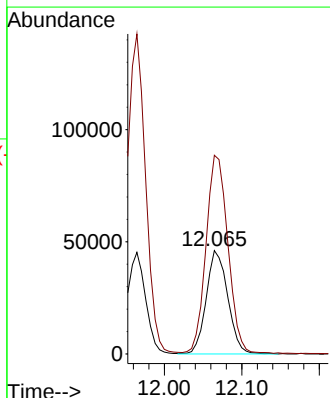
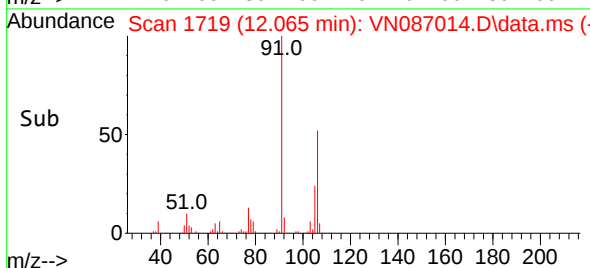
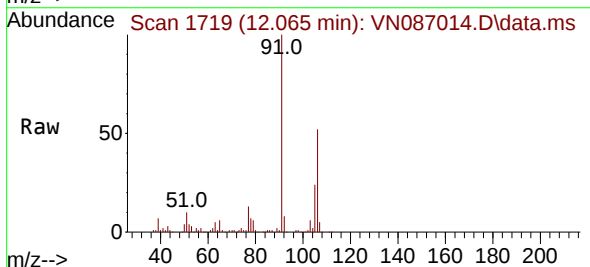
06/16/2025  
Supervised By :Mahesh  
Dadoda

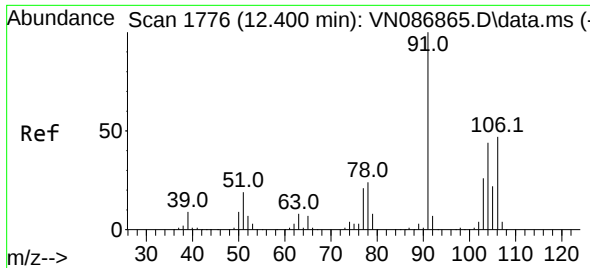
06/16/2025



#68  
m/p-Xylenes  
Concen: 17.027 ug/l  
RT: 12.065 min Scan# 1719  
Delta R.T. -0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Tgt Ion:106 Resp: 88981  
Ion Ratio Lower Upper  
106 100  
91 195.7 159.4 239.0





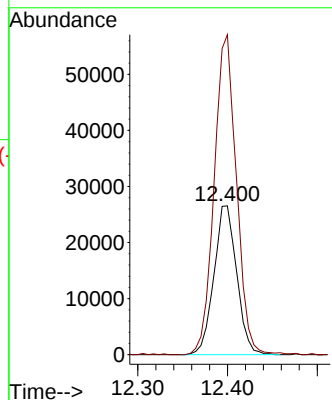
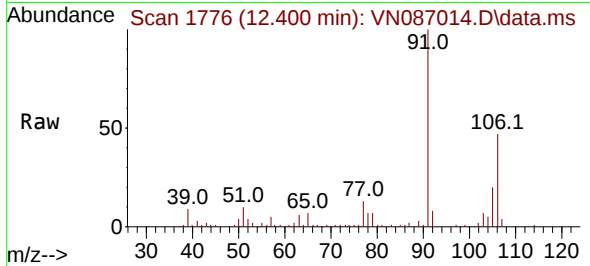
#69  
o-Xylene  
Concen: 9.356 ug/l  
RT: 12.400 min Scan# 11  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE

Tgt Ion:106 Resp: 46820  
Ion Ratio Lower Upper  
106 100  
91 210.2 106.1 318.1

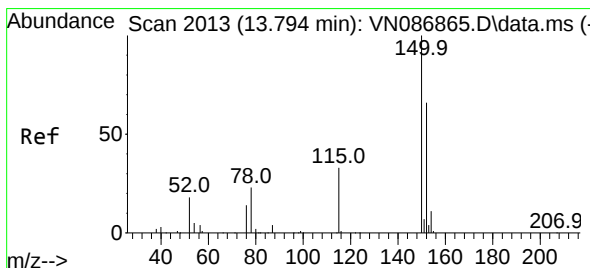
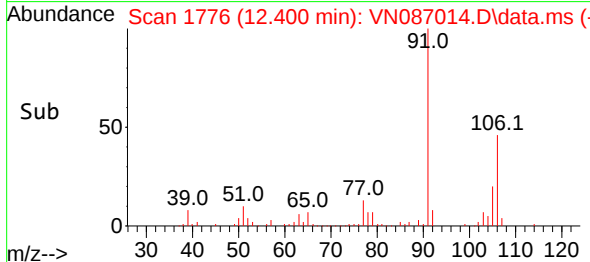
Manual Integrations  
APPROVED

Reviewed By :John  
Carlone



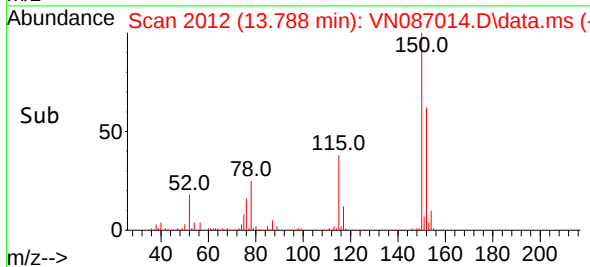
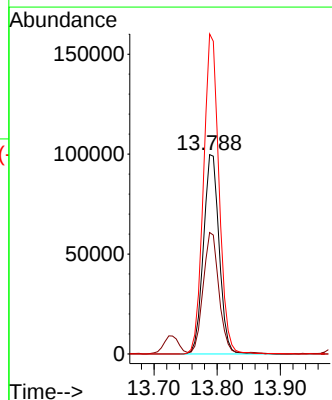
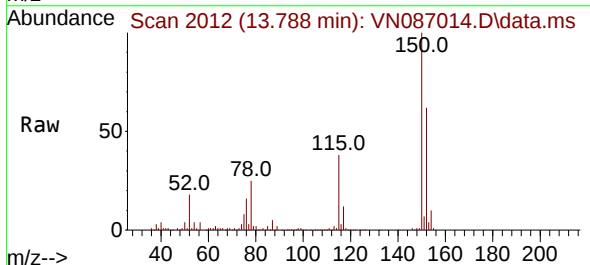
06/16/2025  
Supervised By :Mahesh  
Dadoda

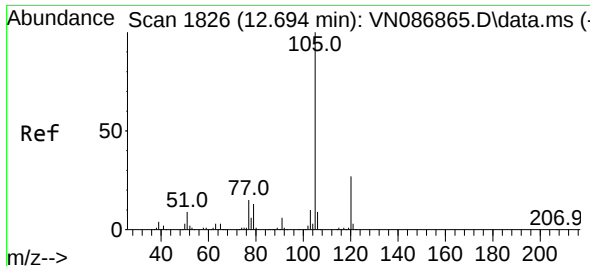
06/16/2025



#72  
1,4-Dichlorobenzene-d4  
Concen: 50.000 ug/l  
RT: 13.788 min Scan# 2012  
Delta R.T. -0.006 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Tgt Ion:152 Resp: 172357  
Ion Ratio Lower Upper  
152 100  
115 60.0 30.1 90.5  
150 158.9 0.0 345.0





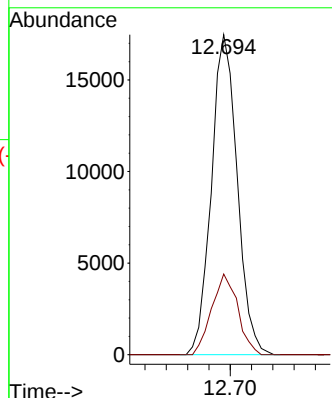
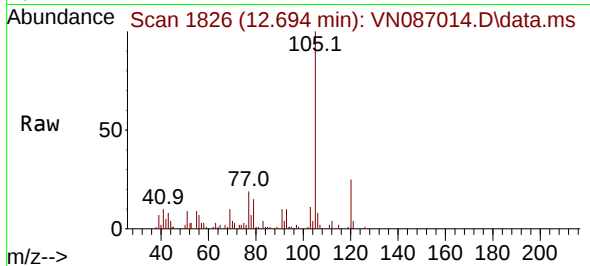
#73  
Isopropylbenzene  
Concen: 2.340 ug/l  
RT: 12.694 min Scan# 1826  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Instrument : MSVOA\_N  
ClientSampleId : 250611078-02-VOARE

Tgt Ion: 105 Resp: 29370  
Ion Ratio Lower Upper  
105 100  
120 25.5 13.5 40.4

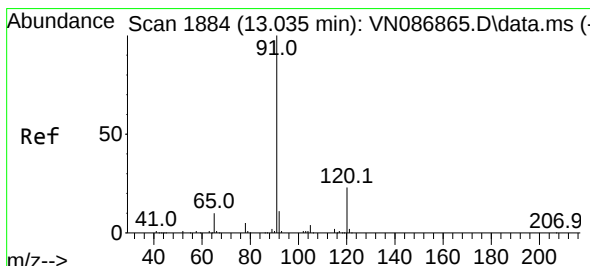
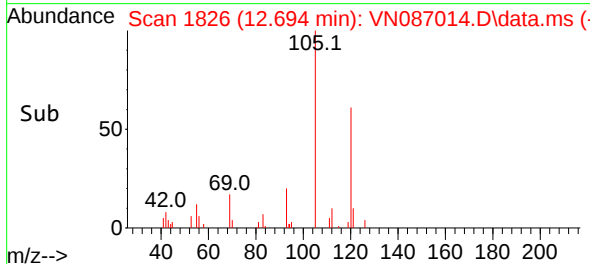
Manual Integrations  
APPROVED

Reviewed By :John  
Carlone



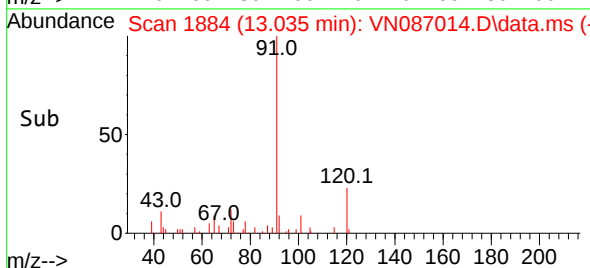
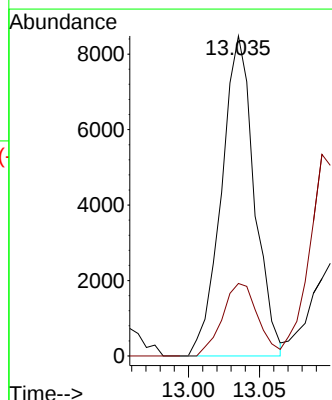
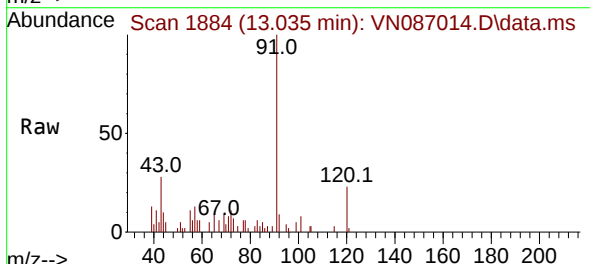
06/16/2025  
Supervised By :Mahesh  
Dadoda

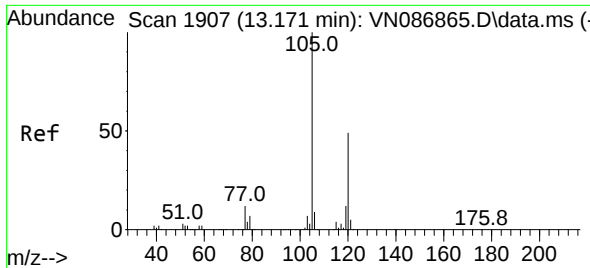
06/16/2025



#78  
n-propylbenzene  
Concen: 0.897 ug/l  
RT: 13.035 min Scan# 1884  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Tgt Ion: 91 Resp: 13690  
Ion Ratio Lower Upper  
91 100  
120 24.6 11.4 34.2





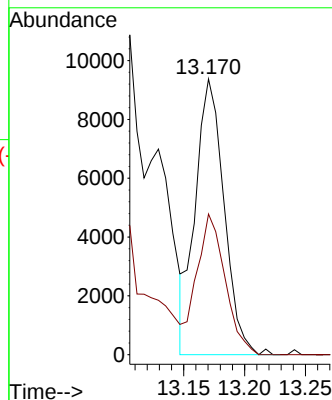
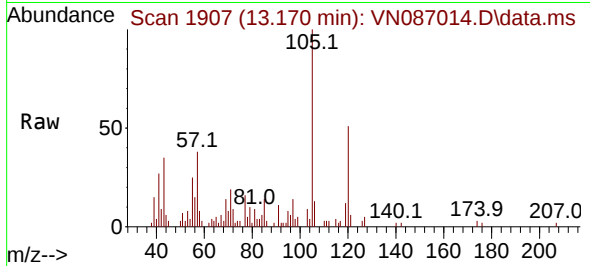
#80  
 1,3,5-Trimethylbenzene  
 Concen: 1.483 ug/l  
 RT: 13.170 min Scan# 1907  
 Delta R.T. -0.000 min  
 Lab File: VN087014.D  
 Acq: 13 Jun 2025 19:51

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 250611078-02-VOARE

Tgt Ion:105 Resp: 1537  
 Ion Ratio Lower Upper  
 105 100  
 120 50.8 24.9 74.6

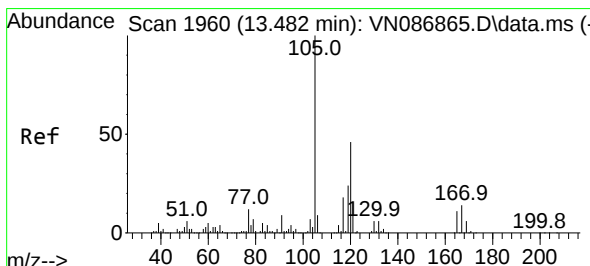
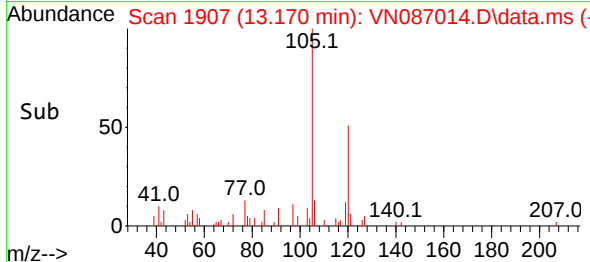
Manual Integrations  
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Reviewed By :John  
 Carlone



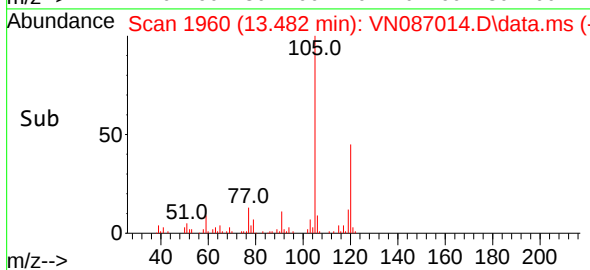
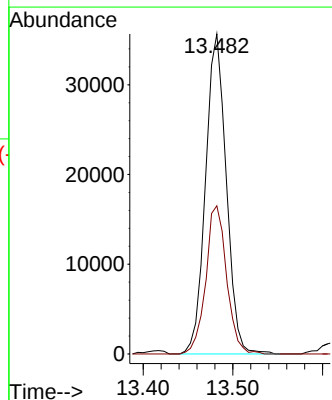
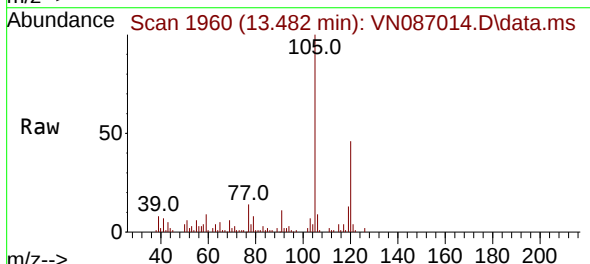
06/16/2025  
 Supervised By :Mahesh  
 Dadoda

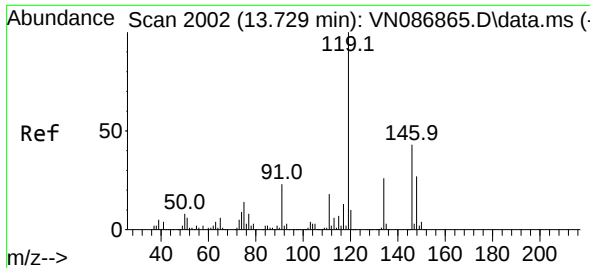
06/16/2025



#84  
 1,2,4-Trimethylbenzene  
 Concen: 5.508 ug/l  
 RT: 13.482 min Scan# 1960  
 Delta R.T. -0.000 min  
 Lab File: VN087014.D  
 Acq: 13 Jun 2025 19:51

Tgt Ion:105 Resp: 57257  
 Ion Ratio Lower Upper  
 105 100  
 120 46.6 23.2 69.6





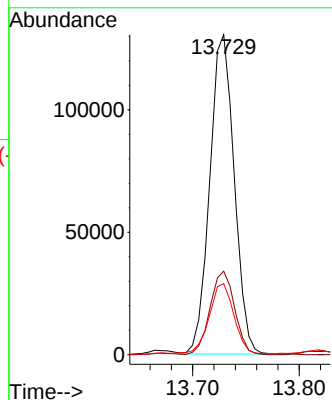
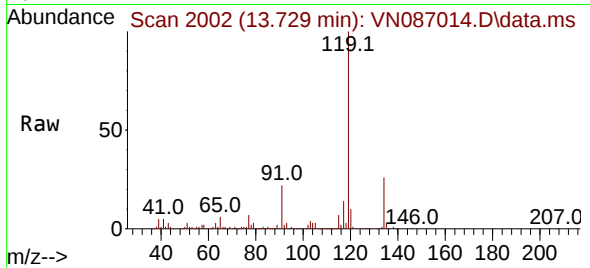
#86  
p-Isopropyltoluene  
Concen: 18.246 ug/l  
RT: 13.729 min Scan# 2002  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

Instrument : MSVOA\_N  
ClientSampleId : 250611078-02-VOARE

Tgt Ion:119 Resp: 20785  
Ion Ratio Lower Upper  
119 100  
134 26.3 13.5 40.4  
91 22.2 11.5 34.4

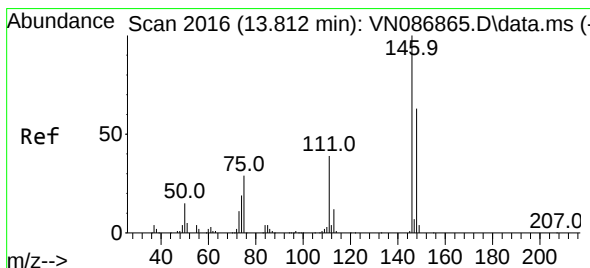
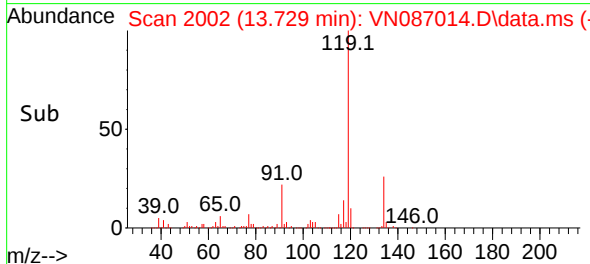
Manual Integrations  
APPROVED

Reviewed By :John  
Carlone



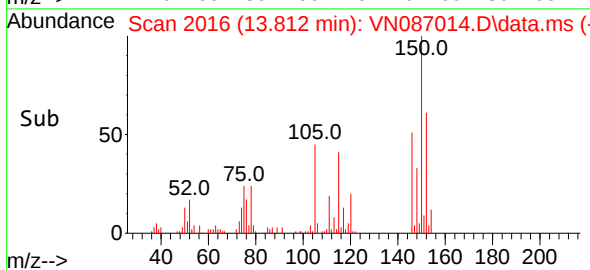
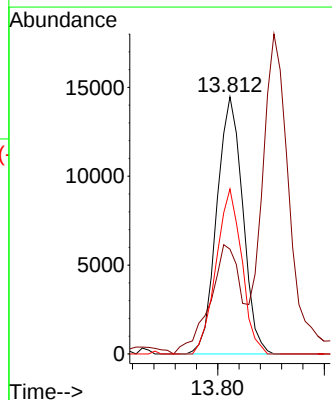
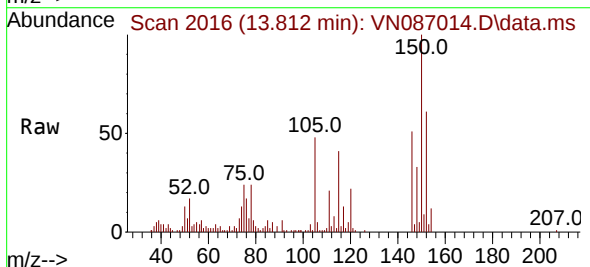
06/16/2025  
Supervised By :Mahesh  
Dadoda

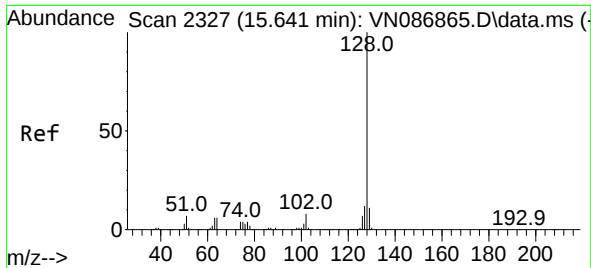
06/16/2025



#88  
1,4-Dichlorobenzene  
Concen: 4.239 ug/l  
RT: 13.812 min Scan# 2016  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

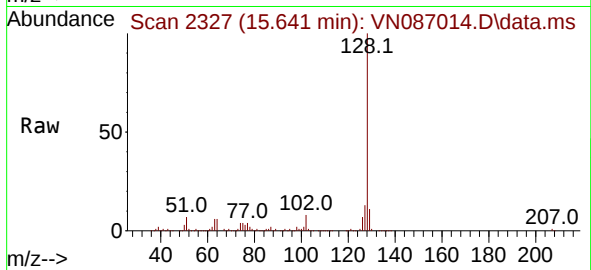
Tgt Ion:146 Resp: 24483  
Ion Ratio Lower Upper  
146 100  
111 51.6 19.9 59.7  
148 63.3 31.8 95.4





#95  
Naphthalene  
Concen: 29.956 ug/l  
RT: 15.641 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: VN087014.D  
Acq: 13 Jun 2025 19:51

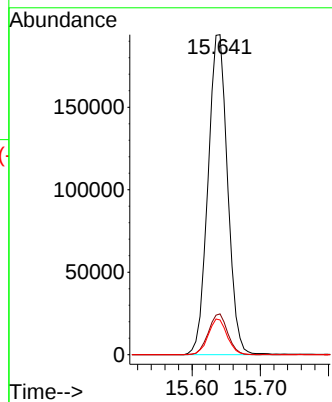
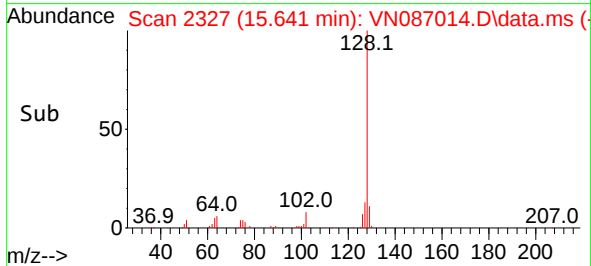
Instrument :  
MSVOA\_N  
ClientSampleId :  
250611078-02-VOARE



Tgt Ion:128 Resp: 387562  
Ion Ratio Lower Upper  
128 100  
127 12.6 10.2 15.2  
129 10.8 8.8 13.2

Manual Integrations  
APPROVED

Reviewed By :John  
Carlone



06/16/2025  
Supervised By :Mahesh  
Dadoda

06/16/2025