

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL060524\  
 Data File : VL041333.D  
 Acq On : 5 Jun 2024 18:53  
 Operator : SY/MD  
 Sample : P2716-01 4X  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 SV1

Quant Time: Jun 06 04:42:19 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL060424AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Wed Jun 05 04:42:10 2024  
 Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.211  | 49   | 903422   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.668  | 114  | 2358068  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.478 | 117  | 2163420  | 10.000 | ppbv  | 0.02     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.786 | 95    | 1729217  | 10.352   | ppbv | 0.02     |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 103.500% |

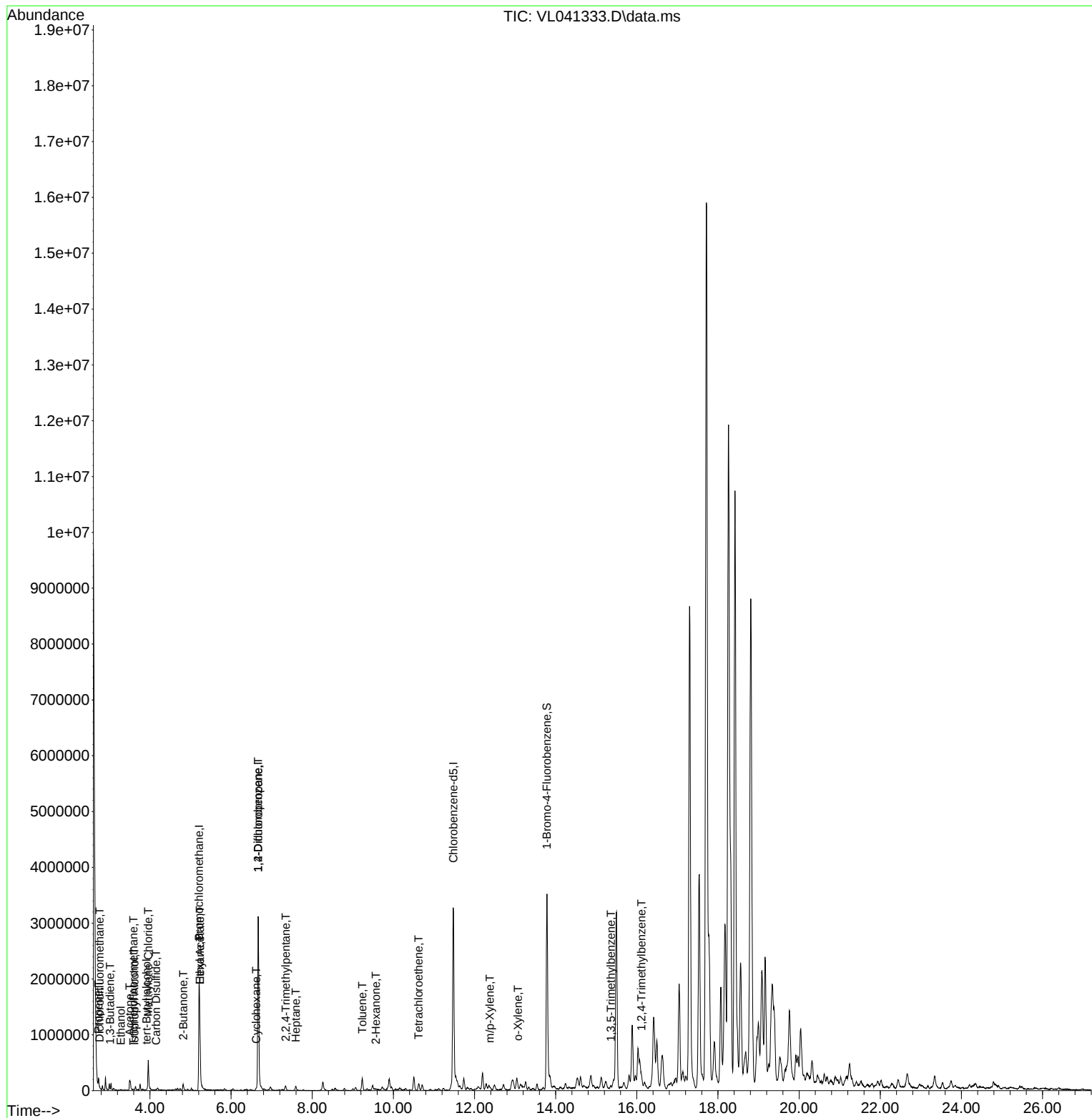
| Target Compounds           |        |     |        |       |        | Qvalue |
|----------------------------|--------|-----|--------|-------|--------|--------|
| 2) Dichlorodifluoromethane | 2.761  | 85  | 21202  | 0.147 | ppbv   | 90     |
| 9) Propene                 | 2.732  | 41  | 47848  | 0.941 | ppbv # | 81     |
| 10) Heptane                | 7.597  | 43  | 30219  | 0.251 | ppbv   | 94     |
| 11) Trichlorofluoromethane | 3.594  | 101 | 7121   | 0.054 | ppbv   | 91     |
| 13) Ethanol                | 3.282  | 45  | 12084  | 0.913 | ppbv   | 78     |
| 15) Acetone                | 3.501  | 43  | 204297 | 1.981 | ppbv   | 91     |
| 16) 1,3-Butadiene          | 3.021  | 39  | 1836   | 0.035 | ppbv # | 1      |
| 17) tert-Butyl alcohol     | 3.922  | 59  | 4391   | 0.046 | ppbv # | 67     |
| 19) Isopropyl Alcohol      | 3.616  | 45  | 8082   | 0.125 | ppbv # | 95     |
| 20) Methylene Chloride     | 3.960  | 84  | 166766 | 4.448 | ppbv   | 97     |
| 25) Ethyl Acetate          | 5.234  | 43  | 171015 | 0.838 | ppbv # | 77     |
| 26) Hexane                 | 5.234  | 57  | 236962 | 2.582 | ppbv # | 42     |
| 27) Carbon Disulfide       | 4.153  | 76  | 7832   | 0.077 | ppbv # | 7      |
| 30) Cyclohexane            | 6.619  | 84  | 8498   | 0.114 | ppbv # | 49     |
| 34) 2-Butanone             | 4.819  | 43  | 127358 | 1.127 | ppbv   | 94     |
| 39) 1,2-Dichloropropane    | 6.668  | 63  | 602356 | 8.276 | ppbv # | 24     |
| 44) 2,2,4-Trimethylpentane | 7.346  | 57  | 16876  | 0.054 | ppbv # | 1      |
| 51) 2-Hexanone             | 9.568  | 43  | 7050   | 0.053 | ppbv # | 30     |
| 52) Tetrachloroethene      | 10.622 | 164 | 10402  | 0.156 | ppbv   | 92     |
| 53) Toluene                | 9.233  | 91  | 73232  | 0.348 | ppbv # | 41     |
| 59) m/p-Xylene             | 12.381 | 91  | 10771  | 0.045 | ppbv # | 31     |
| 60) o-Xylene               | 13.072 | 91  | 16836  | 0.074 | ppbv # | 31     |
| 73) 1,3,5-Trimethylbenzene | 15.365 | 105 | 14892  | 0.065 | ppbv   | 92     |
| 74) 1,2,4-Trimethylbenzene | 16.117 | 105 | 140255 | 0.541 | ppbv # | 75     |

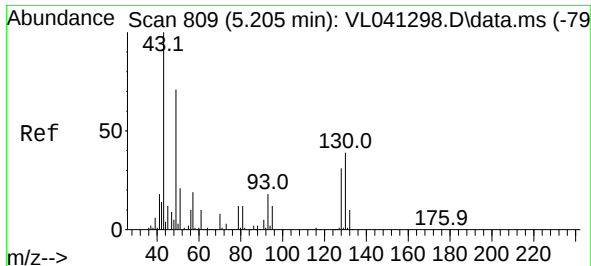
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL060524\  
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SV1

Quant Time: Jun 06 04:42:19 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL060424AIR.M  
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Wed Jun 05 04:42:10 2024  
Response via : Initial Calibration

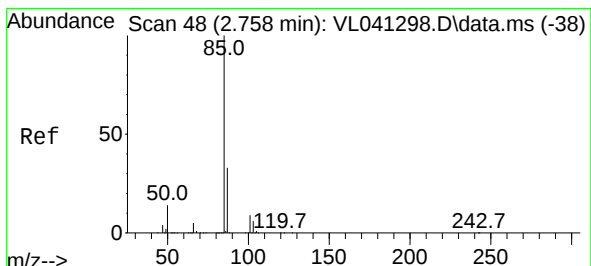
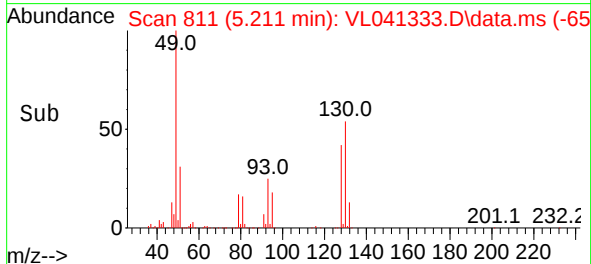
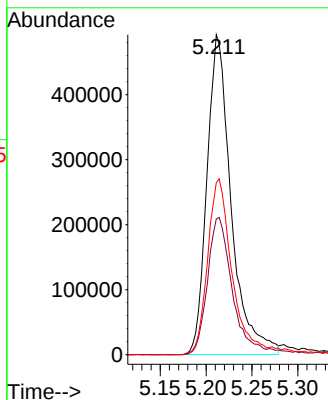
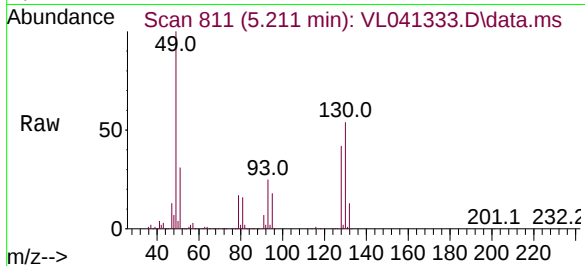




#1  
Bromochloromethane  
Concen: 10.000 ppbv  
RT: 5.211 min Scan# 81  
Delta R.T. 0.006 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

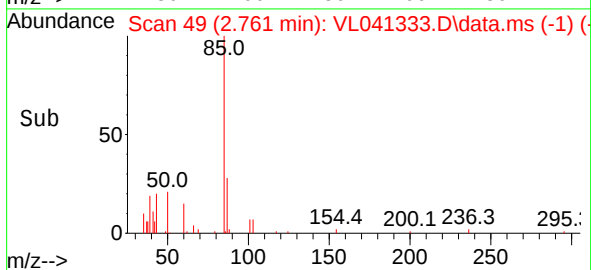
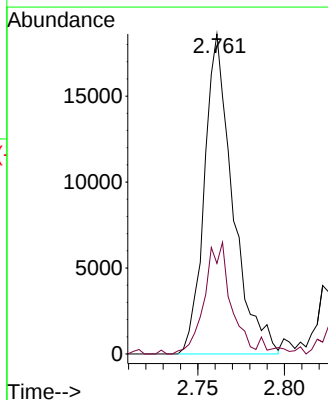
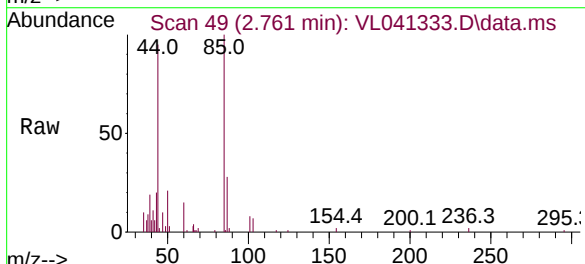
Instrument :  
MSVOA\_L  
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SV1

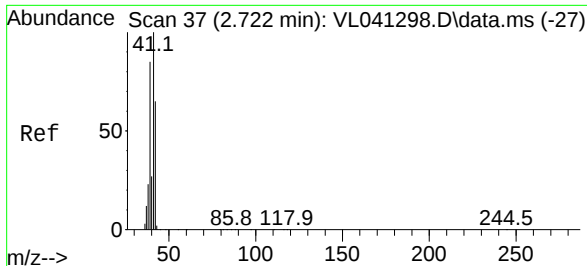
Tgt Ion: 49 Resp: 903422  
Ion Ratio Lower Upper  
49 100  
128 45.6 22.8 68.3  
130 58.6 28.4 85.3



#2  
Dichlorodifluoromethane  
Concen: 0.147 ppbv  
RT: 2.761 min Scan# 49  
Delta R.T. 0.003 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

Tgt Ion: 85 Resp: 21202  
Ion Ratio Lower Upper  
85 100  
87 27.4 26.5 39.7





#9

Propene

Concen: 0.941 ppbv

RT: 2.732 min Scan# 40

Delta R.T. 0.010 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Instrument :

MSVOA\_L

ClientSampleId :

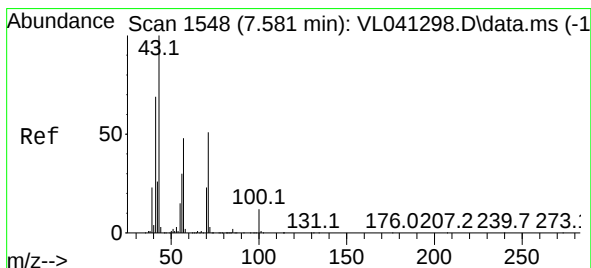
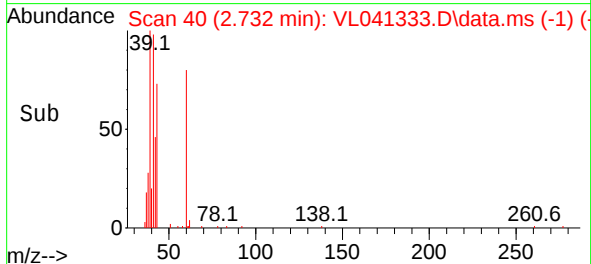
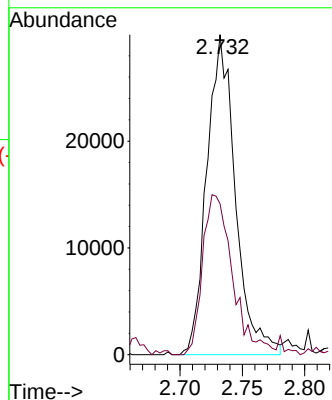
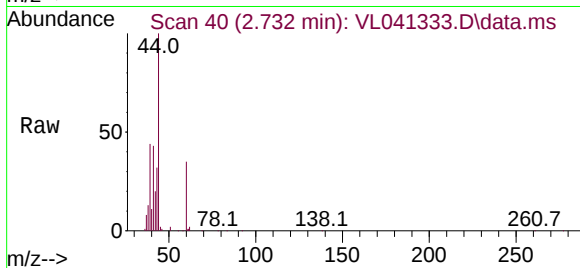
SV1

Tgt Ion: 41 Resp: 47848

Ion Ratio Lower Upper

41 100

42 53.9 55.2 82.8#



#10

Heptane

Concen: 0.251 ppbv

RT: 7.597 min Scan# 1553

Delta R.T. 0.016 min

Lab File: VL041333.D

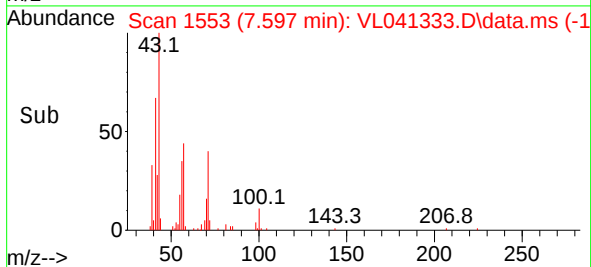
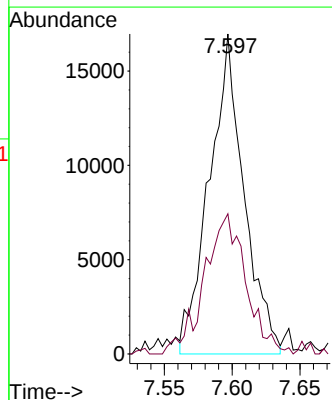
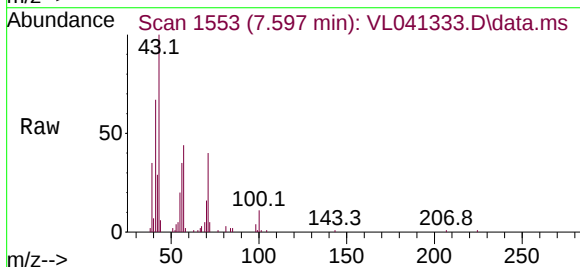
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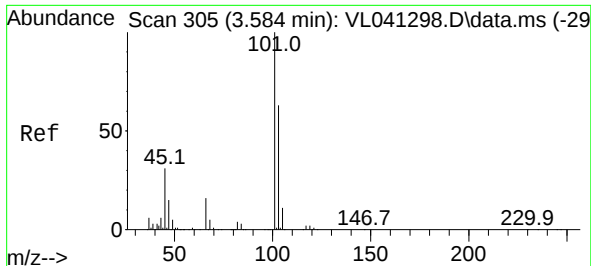
Tgt Ion: 43 Resp: 30219

Ion Ratio Lower Upper

43 100

57 52.8 39.0 58.4





#11

Trichlorofluoromethane

Concen: 0.054 ppbv

RT: 3.594 min Scan# 305

Delta R.T. 0.010 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Instrument :

MSVOA\_L

ClientSampleId :

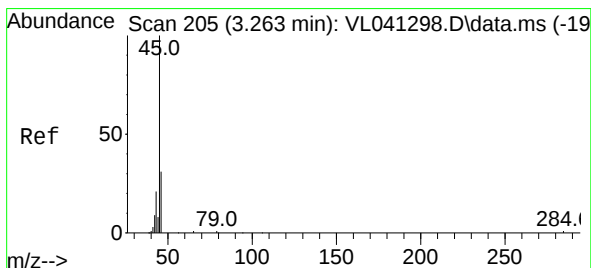
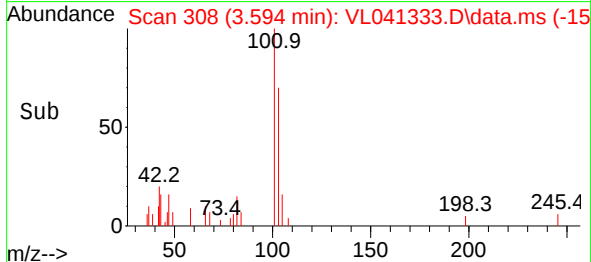
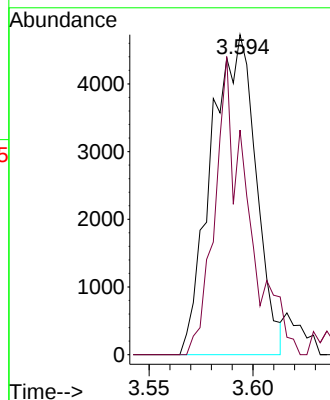
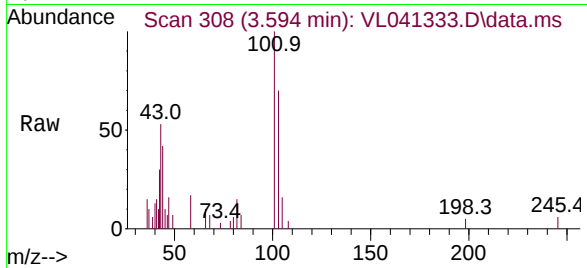
SV1

Tgt Ion:101 Resp: 7121

Ion Ratio Lower Upper

101 100

103 70.2 50.6 76.0



#13

Ethanol

Concen: 0.913 ppbv

RT: 3.282 min Scan# 211

Delta R.T. 0.019 min

Lab File: VL041333.D

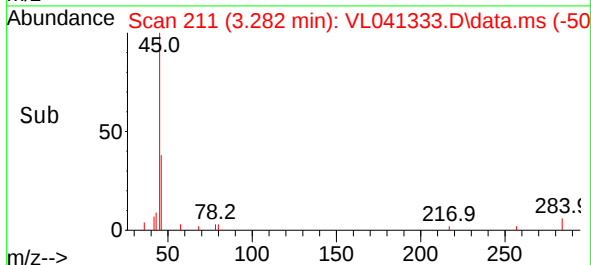
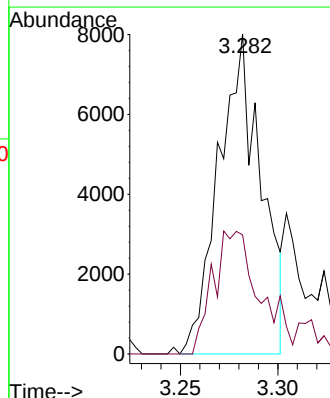
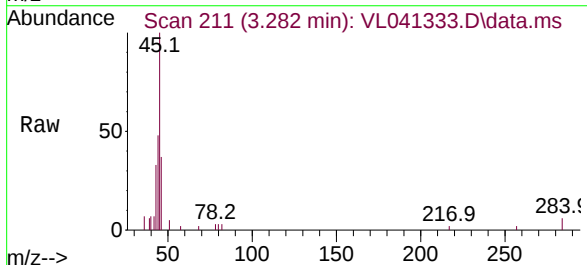
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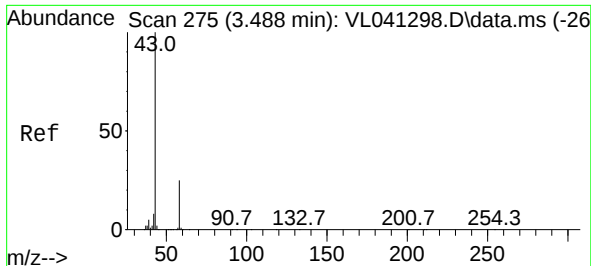
Tgt Ion: 45 Resp: 12084

Ion Ratio Lower Upper

45 100

46 48.2 14.2 56.6

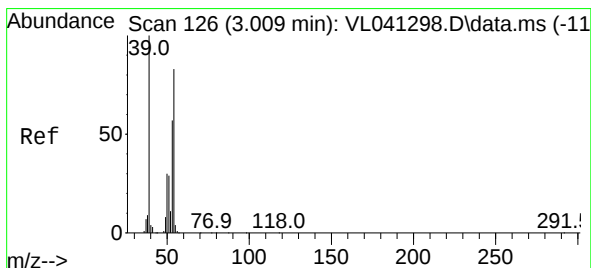
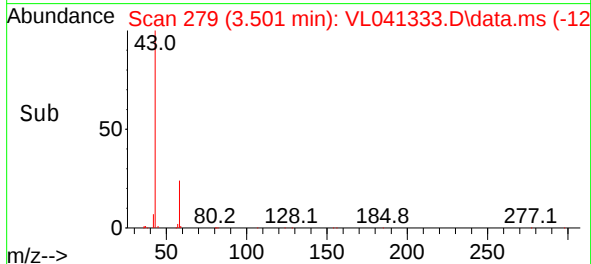
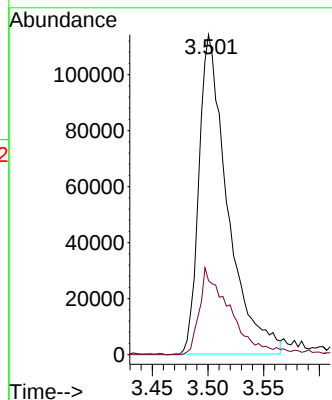
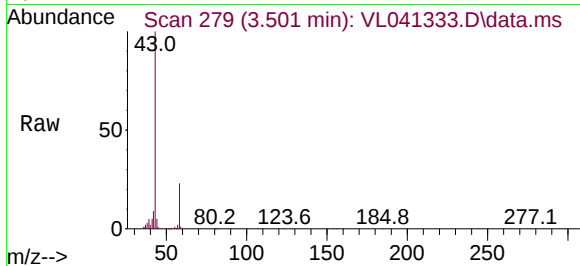




#15  
Acetone  
Concen: 1.981 ppbv  
RT: 3.501 min Scan# 21  
Delta R.T. 0.013 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

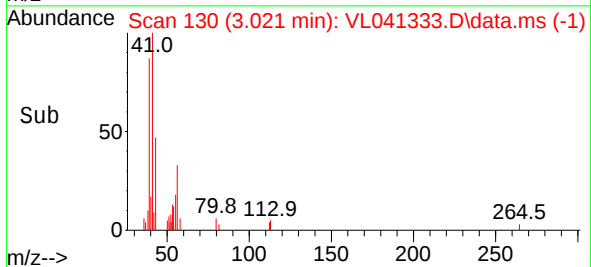
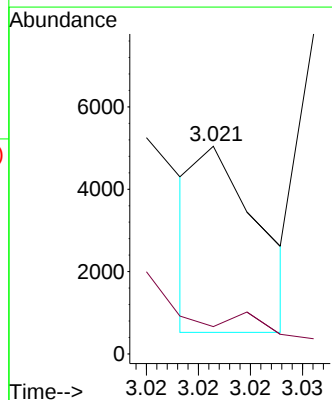
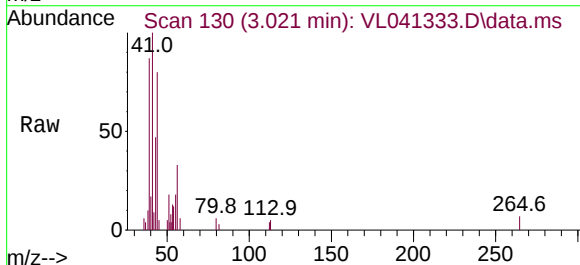
Instrument :  
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SV1

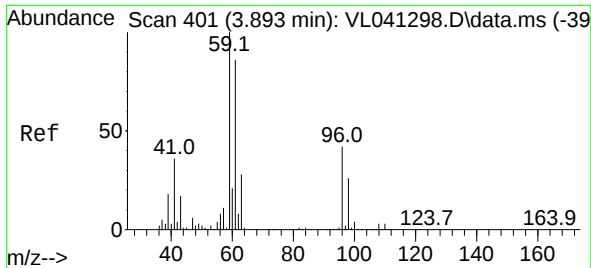
Tgt Ion: 43 Resp: 204297  
Ion Ratio Lower Upper  
43 100  
58 30.6 20.6 31.0



#16  
1,3-Butadiene  
Concen: 0.035 ppbv  
RT: 3.021 min Scan# 130  
Delta R.T. 0.013 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

Tgt Ion: 39 Resp: 1836  
Ion Ratio Lower Upper  
39 100  
54 203.7 60.5 90.7#

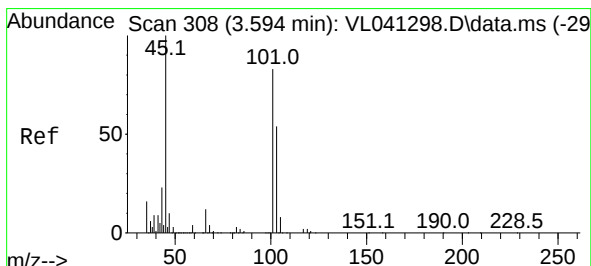
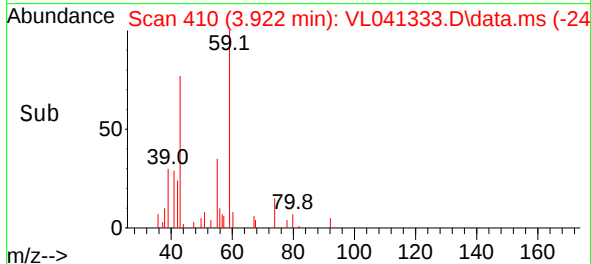
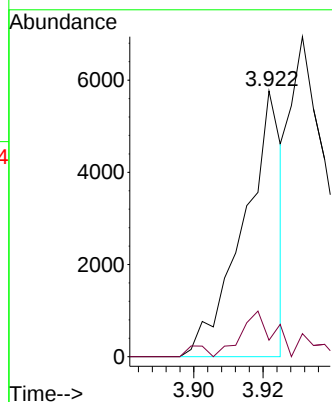
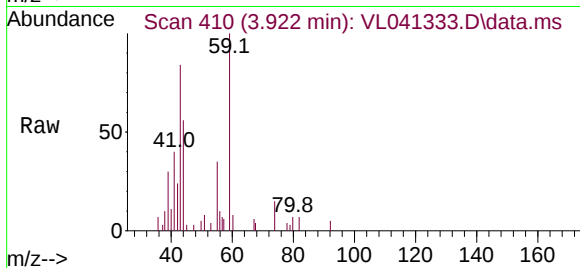




#17  
tert-Butyl alcohol  
Concen: 0.046 ppbv  
RT: 3.922 min Scan# 410  
Delta R.T. 0.029 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

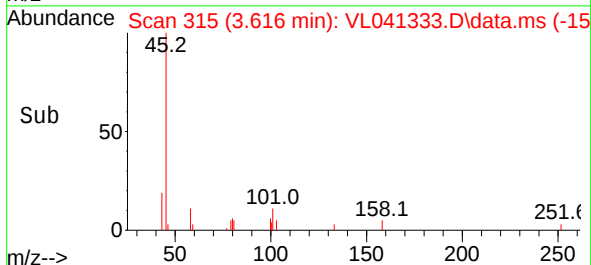
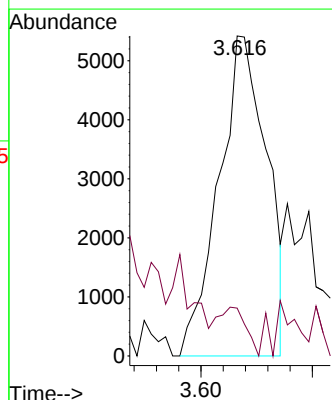
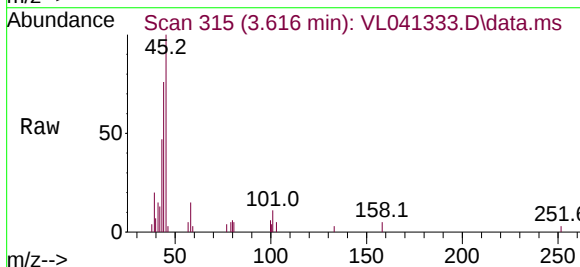
Instrument :  
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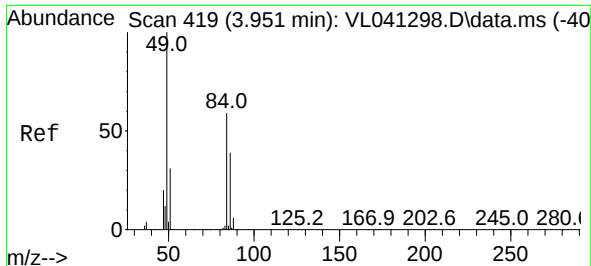
Tgt Ion: 59 Resp: 4391  
Ion Ratio Lower Upper  
59 100  
57 23.7 9.0 13.4#



#19  
Isopropyl Alcohol  
Concen: 0.125 ppbv  
RT: 3.616 min Scan# 315  
Delta R.T. 0.022 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

Tgt Ion: 45 Resp: 8082  
Ion Ratio Lower Upper  
45 100  
58 0.0 1.4 2.2#

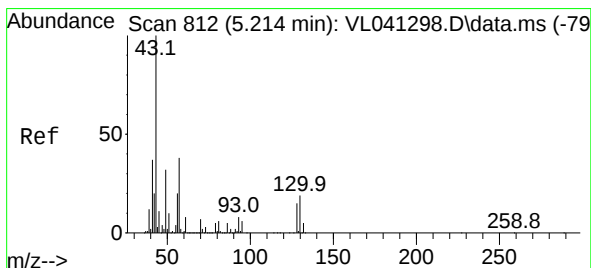
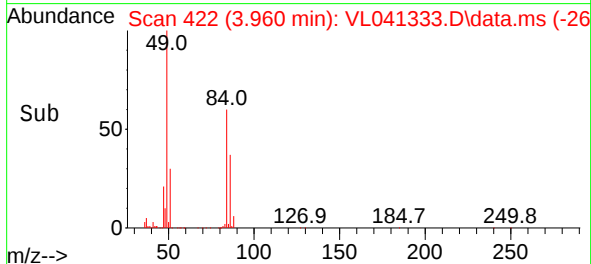
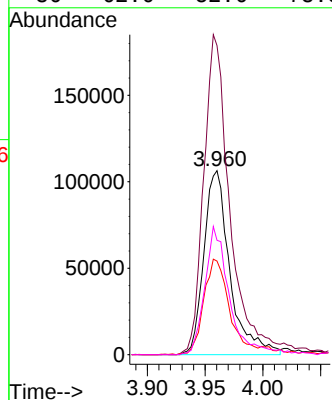
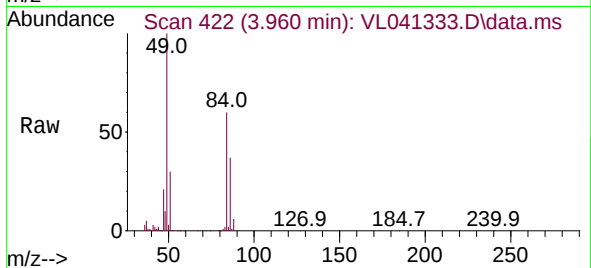




#20  
Methylene Chloride  
Concen: 4.448 ppbv  
RT: 3.960 min Scan# 419  
Delta R.T. 0.010 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

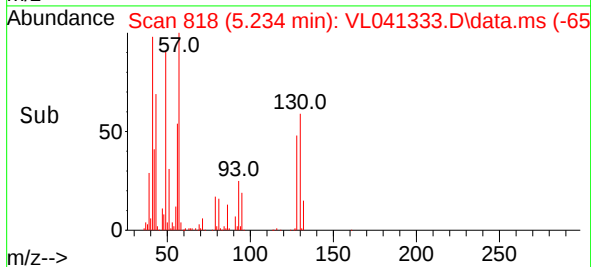
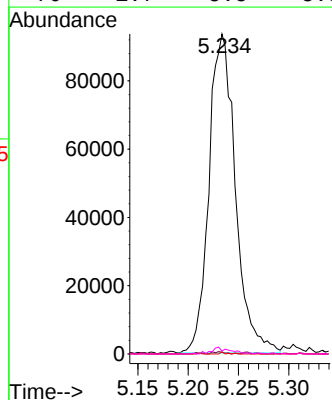
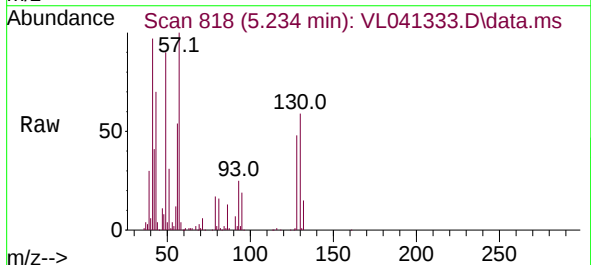
Instrument :  
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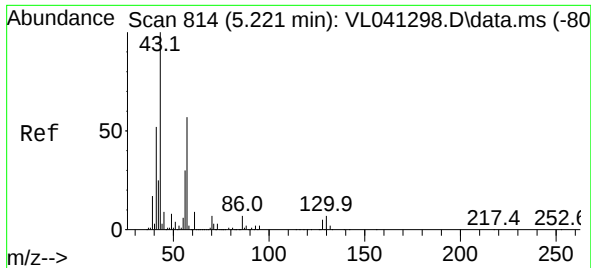
Tgt Ion: 84 Resp: 166766  
Ion Ratio Lower Upper  
84 100  
49 167.4 136.2 204.2  
51 50.3 41.9 62.9  
86 62.0 52.6 78.8



#25  
Ethyl Acetate  
Concen: 0.838 ppbv  
RT: 5.234 min Scan# 818  
Delta R.T. 0.019 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

Tgt Ion: 43 Resp: 171015  
Ion Ratio Lower Upper  
43 100  
45 0.4 8.1 12.1#  
61 0.0 7.4 11.0#  
70 1.7 5.5 8.3#

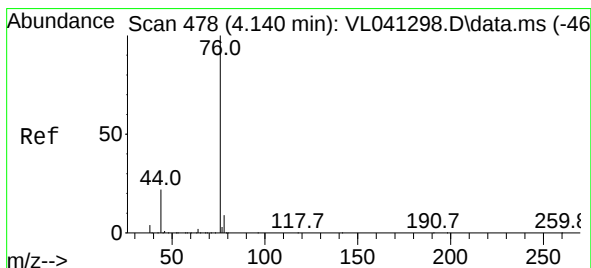
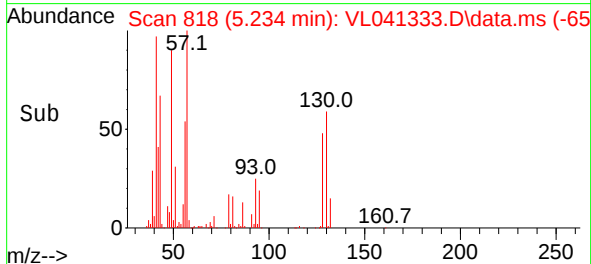
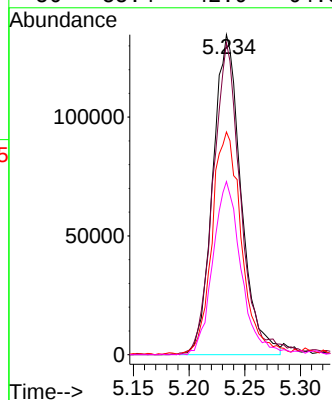
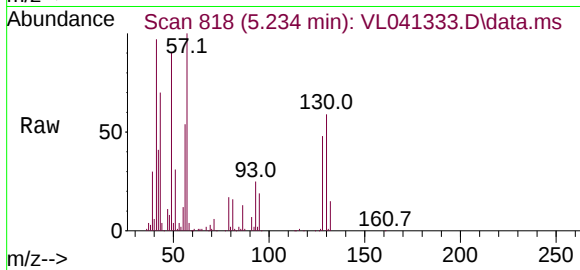




#26  
Hexane  
Concen: 2.582 ppbv  
RT: 5.234 min Scan# 814  
Delta R.T. 0.013 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

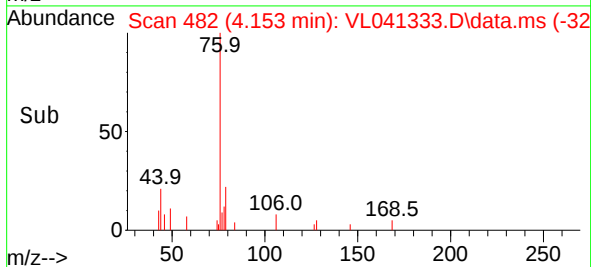
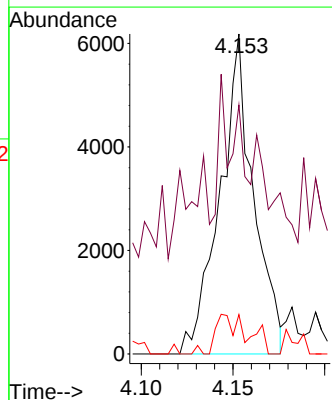
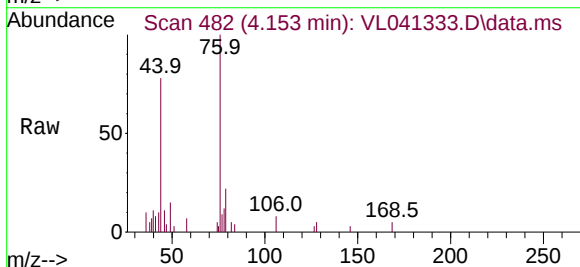
Instrument :  
MSVOA\_L  
ClientSampleId :  
SV1

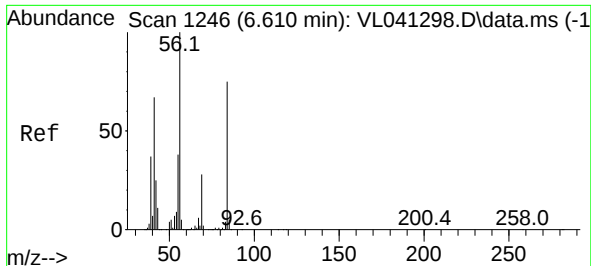
Tgt Ion: 57 Resp: 236962  
Ion Ratio Lower Upper  
57 100  
41 98.3 77.1 115.7  
43 75.2 186.1 279.1#  
56 55.4 42.9 64.3



#27  
Carbon Disulfide  
Concen: 0.077 ppbv  
RT: 4.153 min Scan# 482  
Delta R.T. 0.013 min  
Lab File: VL041333.D  
Acq: 5 Jun 2024 18:53

Tgt Ion: 76 Resp: 7832  
Ion Ratio Lower Upper  
76 100  
44 82.9 17.7 26.5#  
78 14.9 7.8 11.6#





#30

Cyclohexane

Concen: 0.114 ppbv

RT: 6.619 min Scan# 1249

Delta R.T. 0.010 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Instrument :

MSVOA\_L

ClientSampleId :

SV1

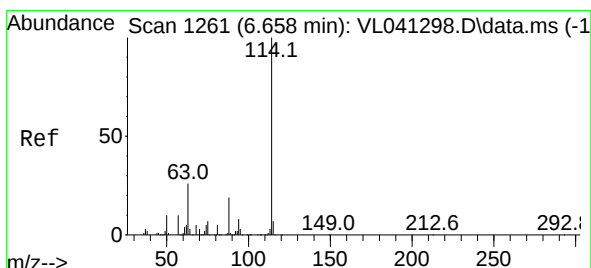
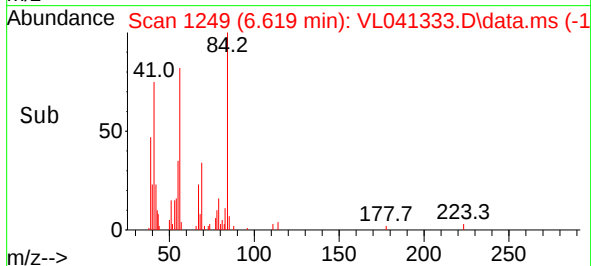
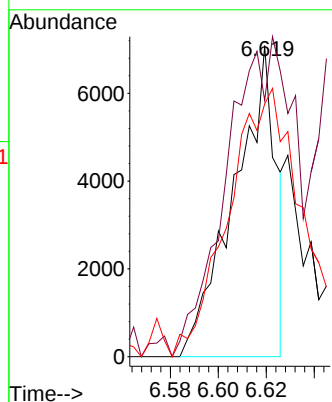
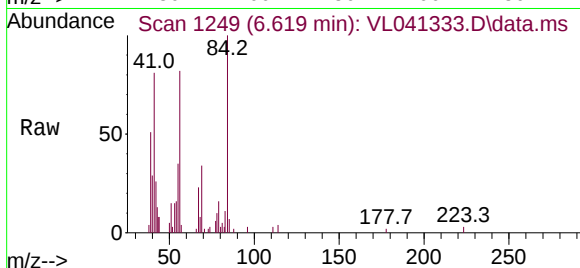
Tgt Ion: 84 Resp: 8498

Ion Ratio Lower Upper

84 100

56 170.6 114.9 172.3

41 185.0 74.4 111.6#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.668 min Scan# 1264

Delta R.T. 0.010 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

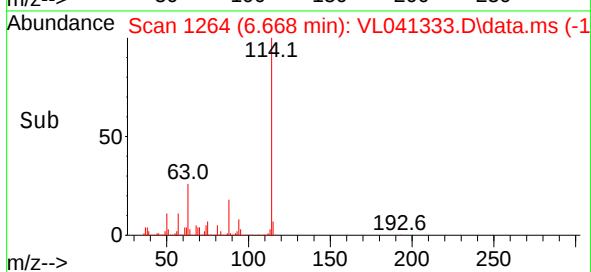
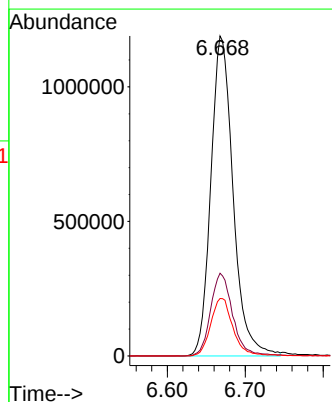
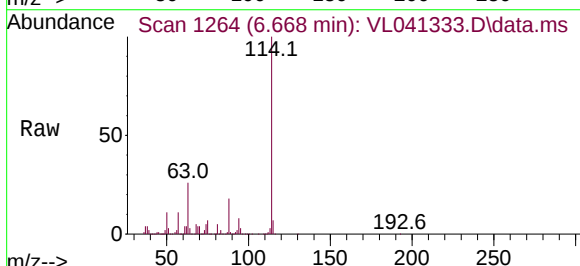
Tgt Ion:114 Resp: 2358068

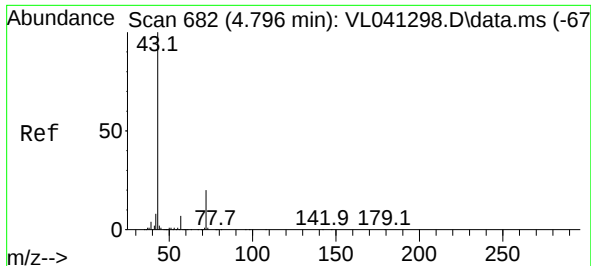
Ion Ratio Lower Upper

114 100

63 25.8 20.6 30.8

88 18.2 14.5 21.7





#34

2-Butanone

Concen: 1.127 ppbv

RT: 4.819 min Scan# 61

Delta R.T. 0.022 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Instrument :

MSVOA\_L

ClientSampleId :

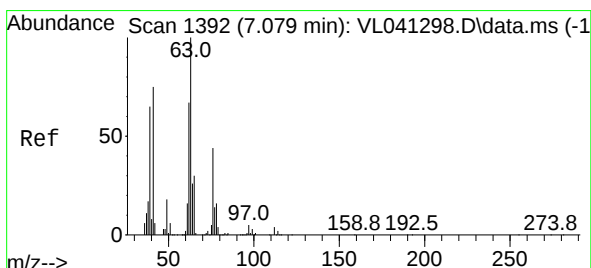
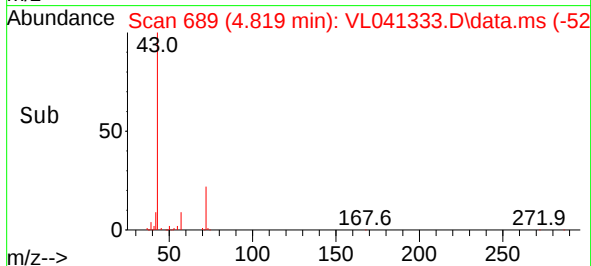
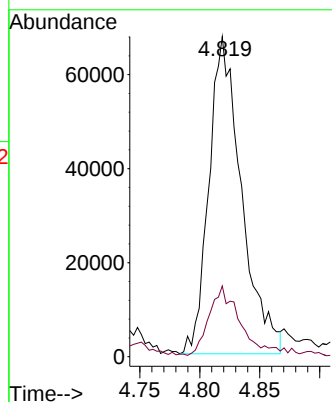
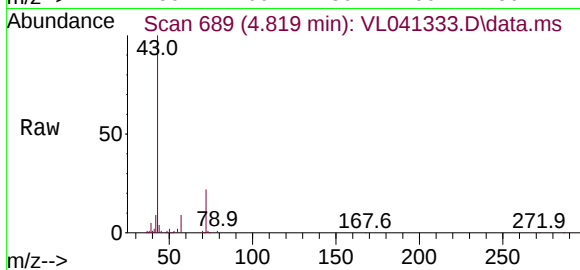
SV1

Tgt Ion: 43 Resp: 127358

Ion Ratio Lower Upper

43 100

72 24.4 17.4 26.0



#39

1,2-Dichloropropane

Concen: 8.276 ppbv

RT: 6.668 min Scan# 1264

Delta R.T. -0.412 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

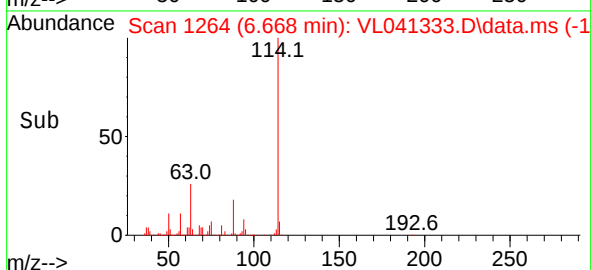
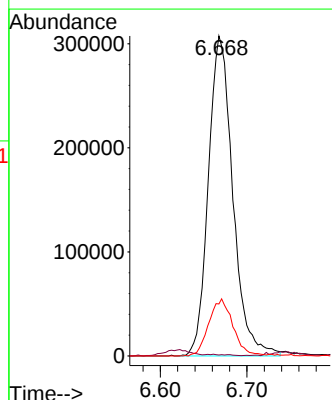
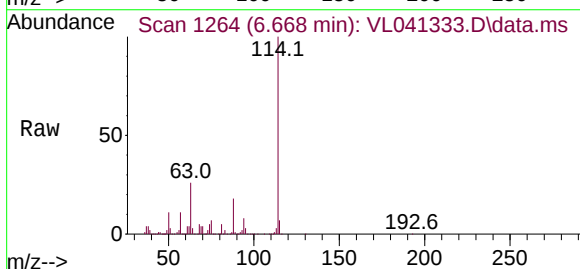
Tgt Ion: 63 Resp: 602356

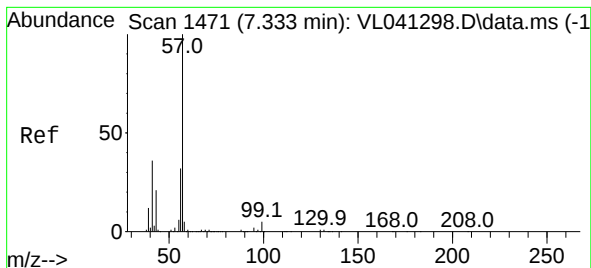
Ion Ratio Lower Upper

63 100

41 0.0 59.9 89.9#

62 16.2 53.8 80.6#





#44

2,2,4-Trimethylpentane

Concen: 0.054 ppbv

RT: 7.346 min Scan# 1471

Delta R.T. 0.013 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Instrument :

MSVOA\_L

ClientSampleId :

SV1

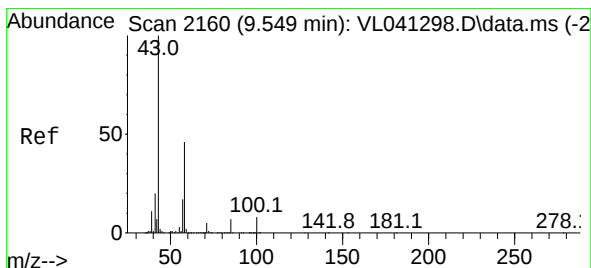
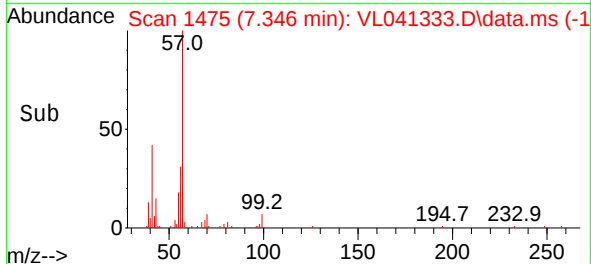
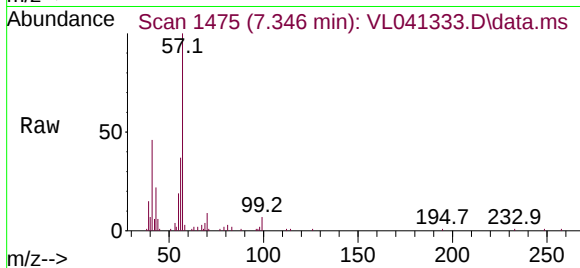
Tgt Ion: 57 Resp: 16876

Ion Ratio Lower Upper

57 100

41 178.7 29.4 44.2#

56 160.4 25.0 37.4#



#51

2-Hexanone

Concen: 0.053 ppbv

RT: 9.568 min Scan# 2166

Delta R.T. 0.019 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

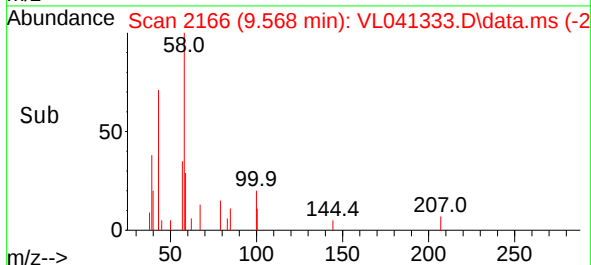
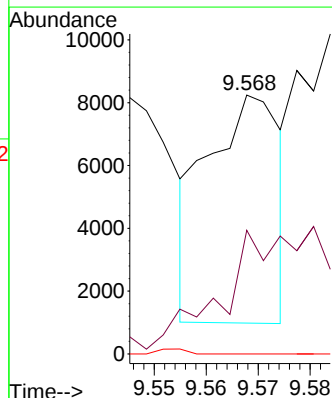
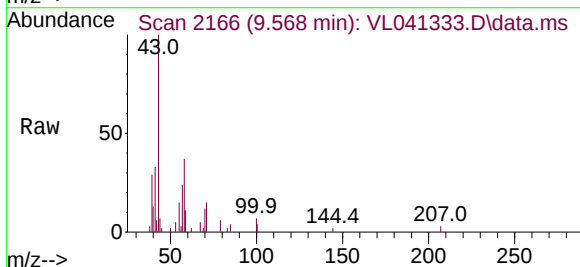
Tgt Ion: 43 Resp: 7050

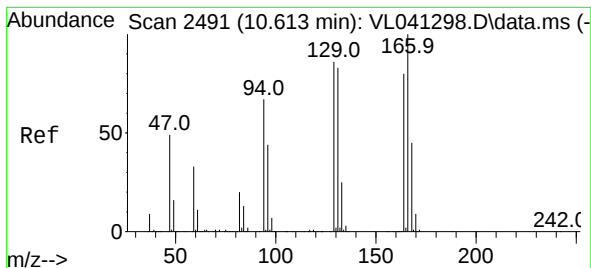
Ion Ratio Lower Upper

43 100

58 0.0 37.4 56.0#

98 0.0 0.2 0.4#





#52

Tetrachloroethene

Concen: 0.156 ppbv

RT: 10.622 min Scan# 2494

Delta R.T. 0.010 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Instrument :

MSVOA\_L

ClientSampleId :

SV1

Tgt Ion:164 Resp: 10402

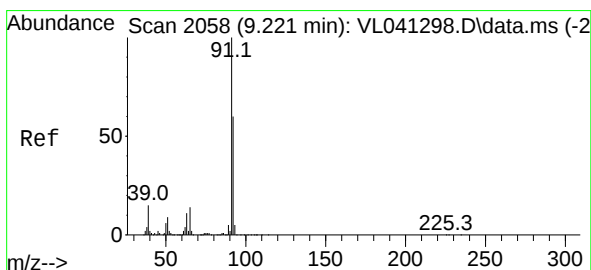
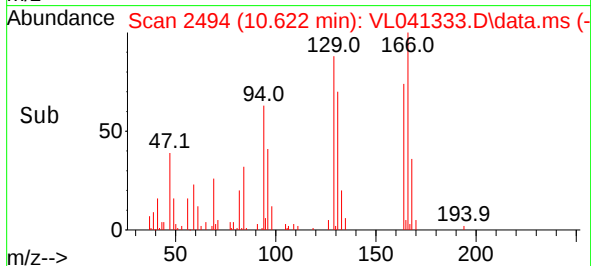
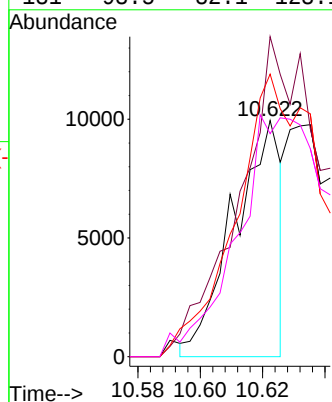
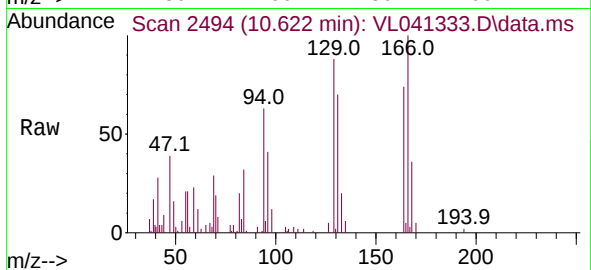
Ion Ratio Lower Upper

164 100

166 133.3 99.4 149.0

129 114.2 85.4 128.2

131 93.5 82.1 123.1



#53

Toluene

Concen: 0.348 ppbv

RT: 9.233 min Scan# 2062

Delta R.T. 0.013 min

Lab File: VL041333.D

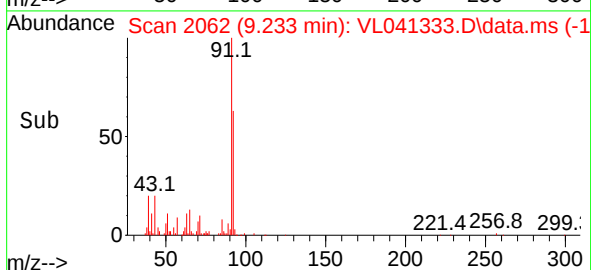
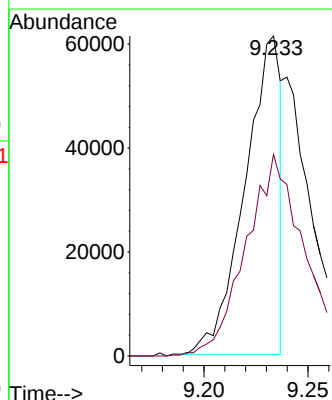
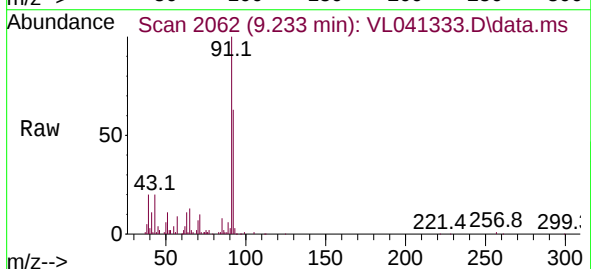
Acq: 5 Jun 2024 18:53

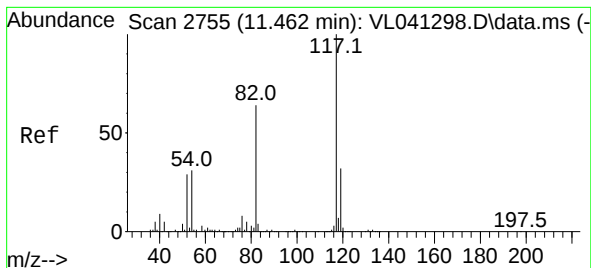
Tgt Ion: 91 Resp: 73232

Ion Ratio Lower Upper

91 100

92 106.9 49.2 73.8#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.478 min Scan# 21

Delta R.T. 0.016 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Instrument :

MSVOA\_L

ClientSampleId :

SV1

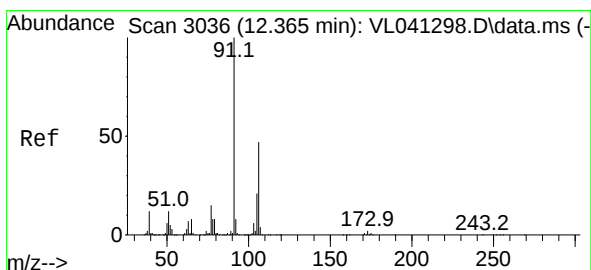
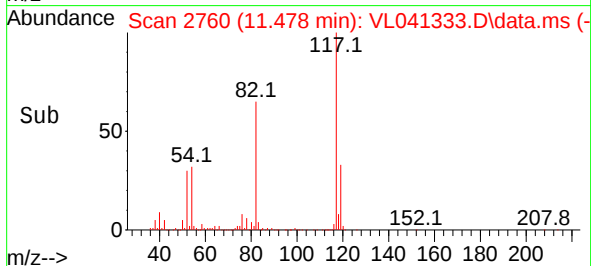
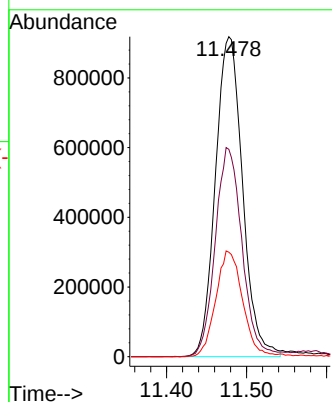
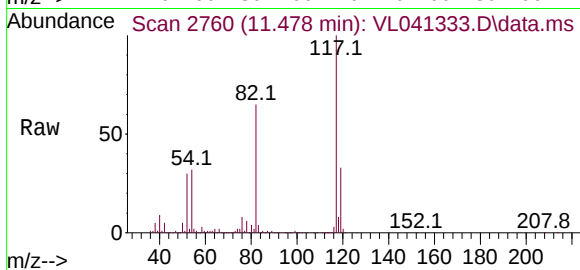
Tgt Ion:117 Resp: 2163420

Ion Ratio Lower Upper

117 100

82 65.0 52.3 78.5

119 33.0 26.2 39.2



#59

m/p-Xylene

Concen: 0.045 ppbv

RT: 12.381 min Scan# 3041

Delta R.T. 0.016 min

Lab File: VL041333.D

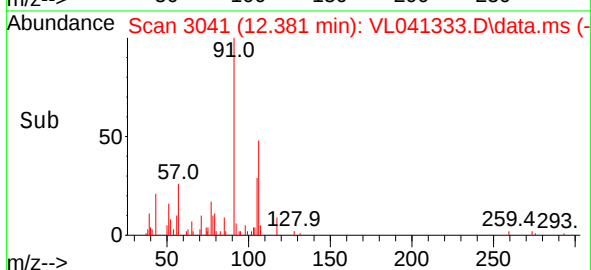
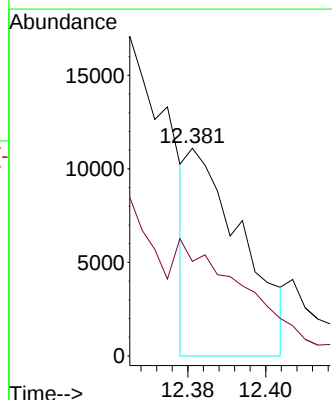
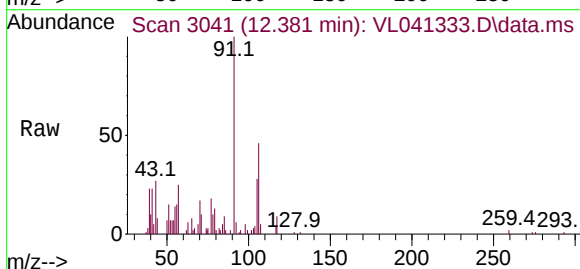
Acq: 5 Jun 2024 18:53

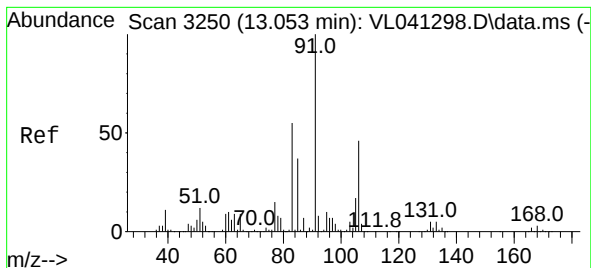
Tgt Ion: 91 Resp: 10771

Ion Ratio Lower Upper

91 100

106 0.0 35.7 53.5#





#60

o-Xylene

Concen: 0.074 ppbv

RT: 13.072 min Scan# 31

Delta R.T. 0.019 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Instrument :

MSVOA\_L

ClientSampleId :

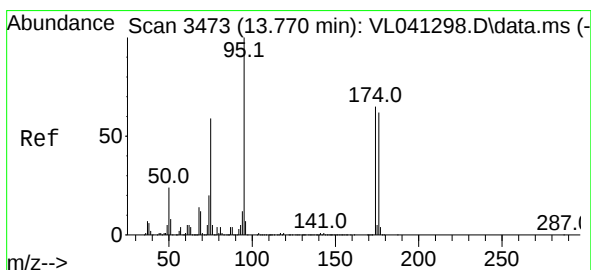
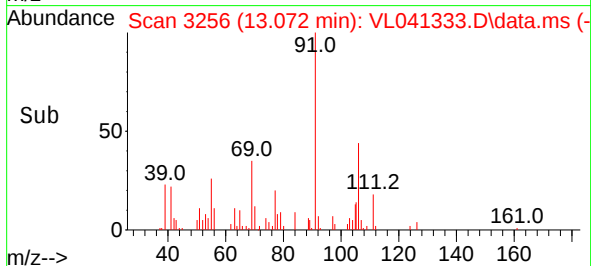
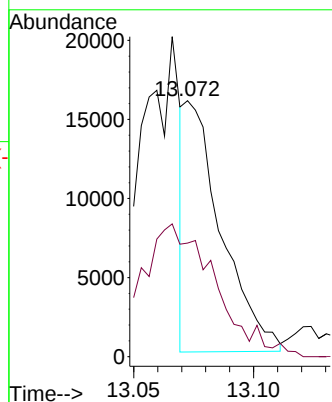
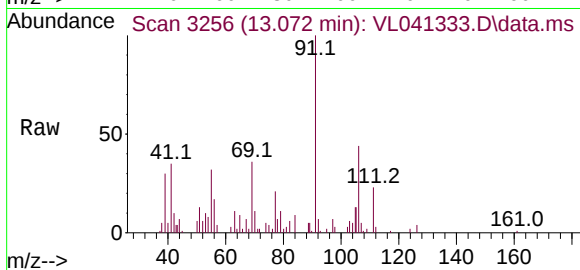
SV1

Tgt Ion: 91 Resp: 16836

Ion Ratio Lower Upper

91 100

106 0.0 22.8 68.4#



#68

1-Bromo-4-Fluorobenzene

Concen: 10.352 ppbv

RT: 13.786 min Scan# 3478

Delta R.T. 0.016 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

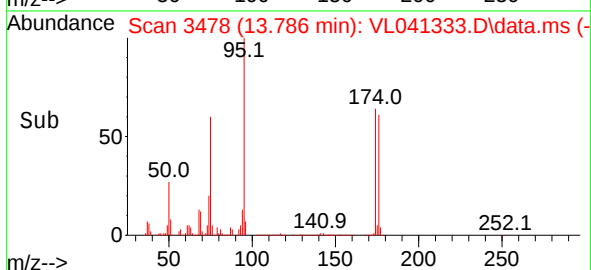
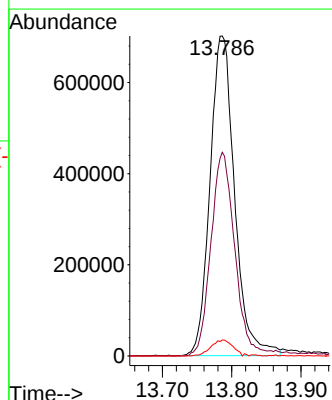
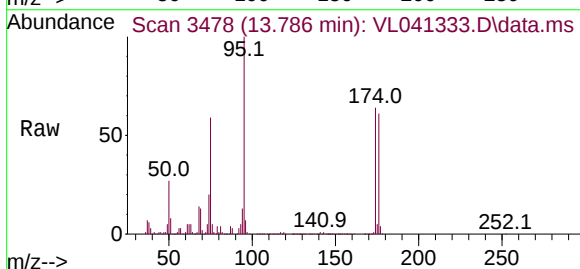
Tgt Ion: 95 Resp: 1729217

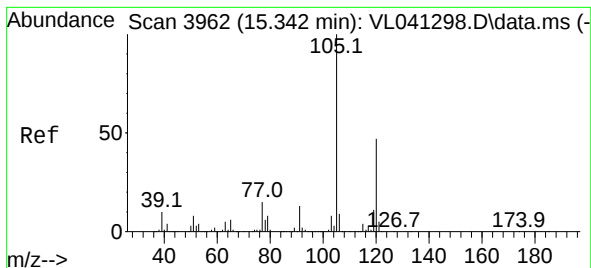
Ion Ratio Lower Upper

95 100

174 64.3 52.2 78.2

175 4.7 4.1 6.1





#73

1,3,5-Trimethylbenzene

Concen: 0.065 ppbv

RT: 15.365 min Scan# 3969

Delta R.T. 0.022 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Instrument :

MSVOA\_L

ClientSampleId :

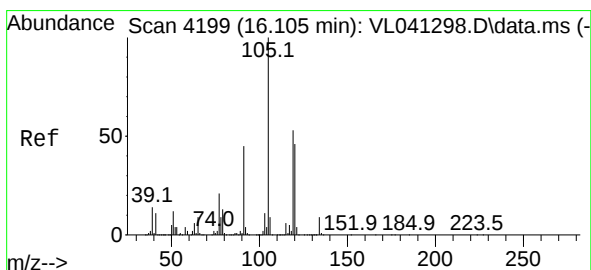
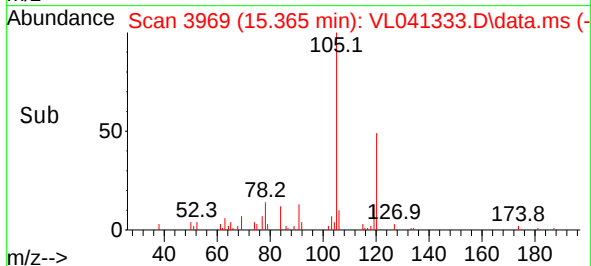
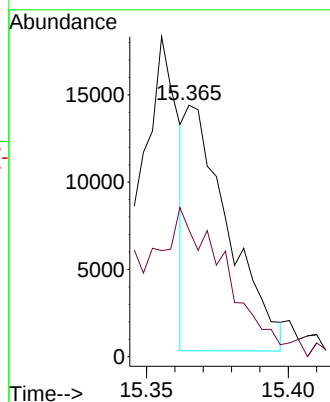
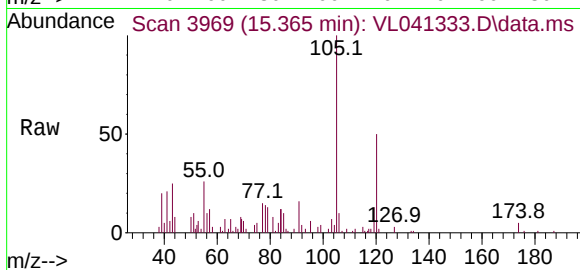
SV1

Tgt Ion:105 Resp: 14892

Ion Ratio Lower Upper

105 100

120 52.8 37.8 56.8



#74

1,2,4-Trimethylbenzene

Concen: 0.541 ppbv

RT: 16.117 min Scan# 4203

Delta R.T. 0.013 min

Lab File: VL041333.D

Acq: 5 Jun 2024 18:53

Tgt Ion:105 Resp: 140255

Ion Ratio Lower Upper

105 100

120 45.6 37.0 55.6

91 11.9 36.2 54.4#

77 11.5 16.6 24.8#

