

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL081523\
 Data File : VL040640.D
 Acq On : 15 Aug 2023 20:08
 Operator : SY/MD
 Sample : 03861-01DL 2X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 E065-1100DL

Quant Time: Aug 16 05:58:16 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081523AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Aug 16 05:43:50 2023
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.192	49	935047	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.655	114	2535327	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.471	117	2226674	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.780	95	1823133	10.295	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.000%

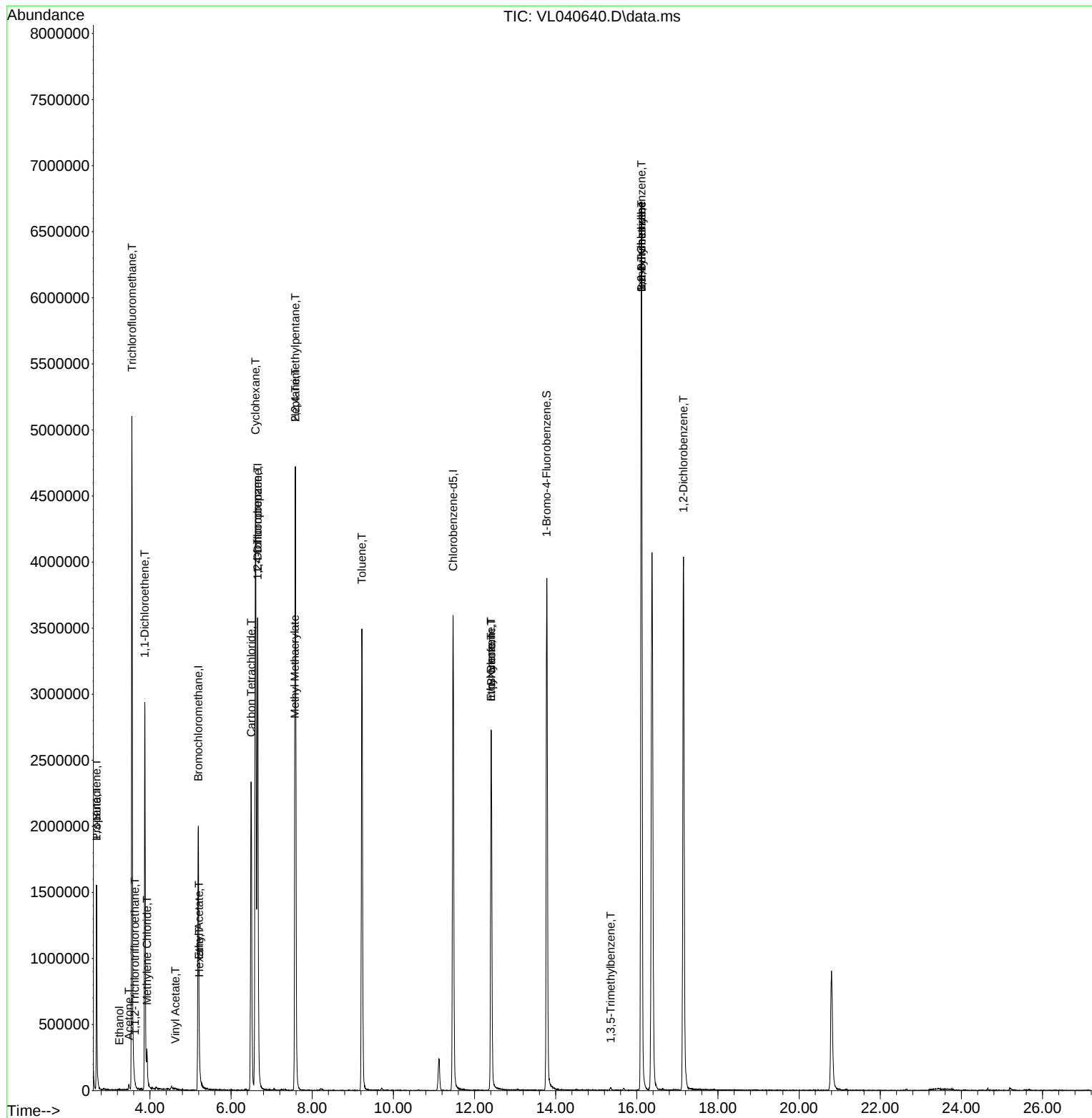
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
9) Propene	2.684	41	578586	12.162	ppbv	99
10) Heptane	7.584	43	2105654	19.222	ppbv	99
11) Trichlorofluoromethane	3.555	101	3386772	20.830	ppbv	99
12) 1,1,2-Trichlorotrifluo...	3.626	101	27420	0.227	ppbv #	15
13) Ethanol	3.250	45	1528	0.115	ppbv #	39
15) Acetone	3.481	43	40412	0.353	ppbv #	83
16) 1,3-Butadiene	2.684	39	508127	8.934	ppbv #	8
18) 1,1-Dichloroethene	3.873	96	889733	16.269	ppbv	92
20) Methylene Chloride	3.928	84	73022	1.307	ppbv	92
23) Vinyl Acetate	4.629	43	3954	0.030	ppbv #	72
25) Ethyl Acetate	5.211	43	21194	0.099	ppbv #	82
26) Hexane	5.214	57	12745	0.123	ppbv #	36
30) Cyclohexane	6.603	84	1703842	21.427	ppbv	97
35) Carbon Tetrachloride	6.494	117	1440919	9.083	ppbv	100
39) 1,2-Dichloropropane	6.651	63	642086	8.368	ppbv #	27
43) Methyl Methacrylate	7.568	69	13990	0.185	ppbv #	1
44) 2,2,4-Trimethylpentane	7.584	57	1100882	3.377	ppbv #	1
49) Bromoform	12.413	173	1431869	13.174	ppbv	98
53) Toluene	9.224	91	2762835	12.890	ppbv	98
58) Ethyl Benzene	12.407	91	264424	0.985	ppbv #	46
59) m/p-Xylene	12.407	91	264424	1.080	ppbv #	33
65) tert-Butylbenzene	16.117	119	559787	1.838	ppbv #	60
66) Benzyl Chloride	16.114	91	666076	17.395	ppbv #	66
73) 1,3,5-Trimethylbenzene	15.355	105	7271	0.031	ppbv	86
74) 1,2,4-Trimethylbenzene	16.114	105	5176670	18.921	ppbv #	72
77) 1,2-Dichlorobenzene	17.149	146	2018547	12.970	ppbv	98

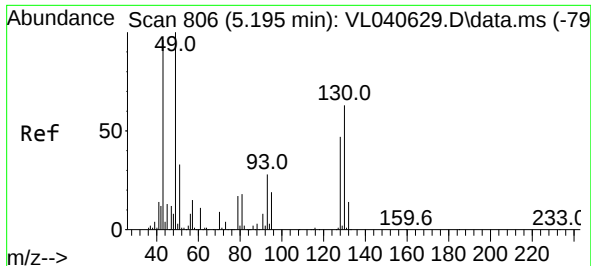
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Aug 16 05:58:16 2023
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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Wed Aug 16 05:43:50 2023
Response via : Initial Calibration

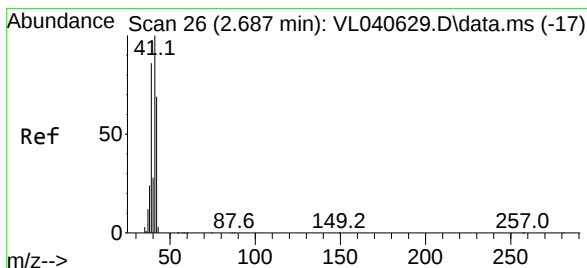
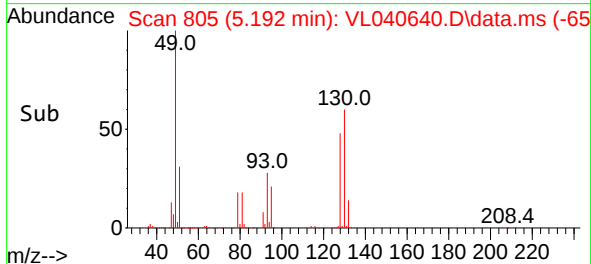
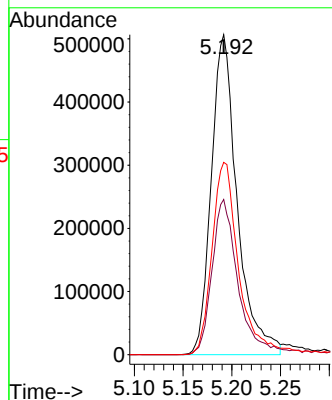
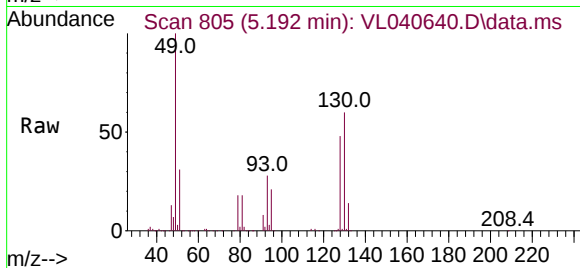




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 806
Delta R.T. -0.003 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

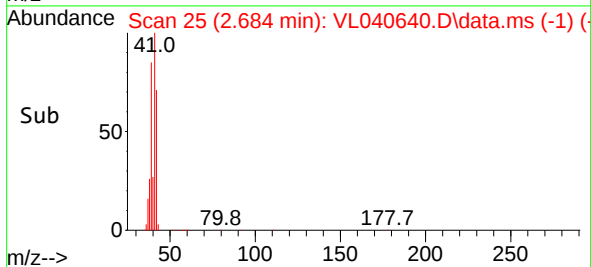
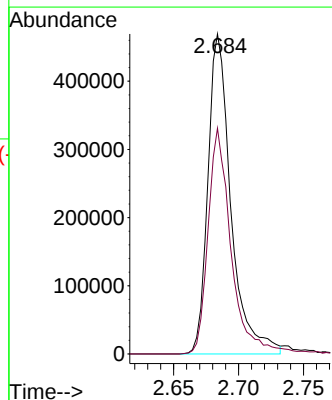
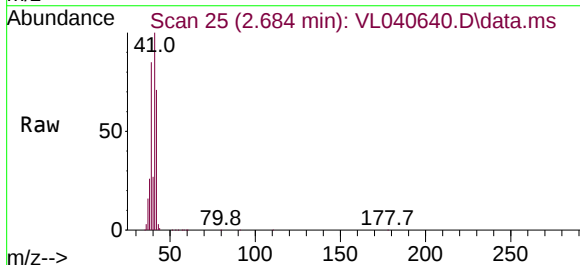
Instrument :
MSVOA_L
ClientSampleId :
E065-1100DL

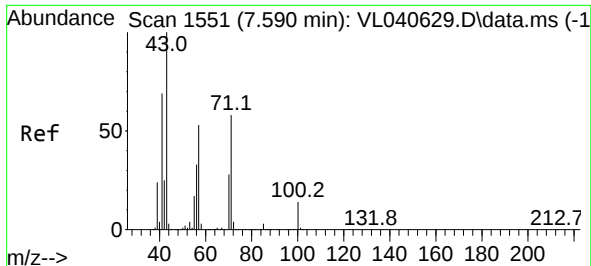
Tgt Ion: 49 Resp: 935047
Ion Ratio Lower Upper
49 100
128 50.5 24.9 74.7
130 64.3 32.2 96.6



#9
Propene
Concen: 12.162 ppbv
RT: 2.684 min Scan# 25
Delta R.T. -0.003 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

Tgt Ion: 41 Resp: 578586
Ion Ratio Lower Upper
41 100
42 71.7 56.5 84.7

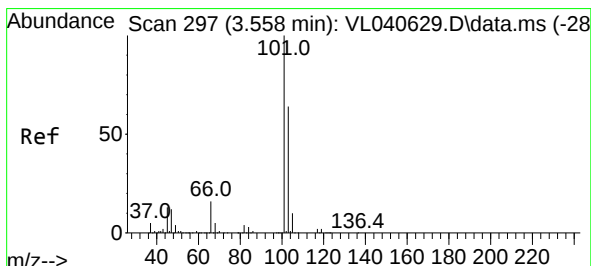
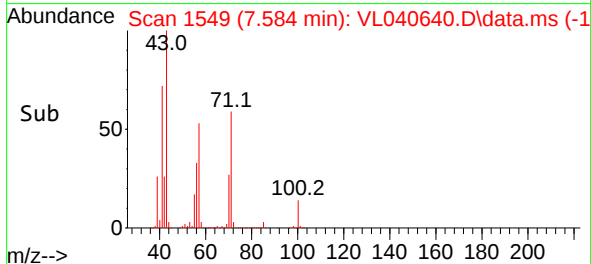
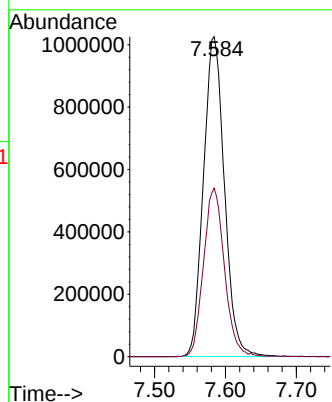
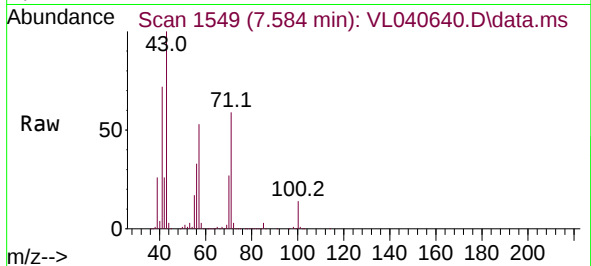




#10
Heptane
Concen: 19.222 ppbv
RT: 7.584 min Scan# 11
Delta R.T. -0.007 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

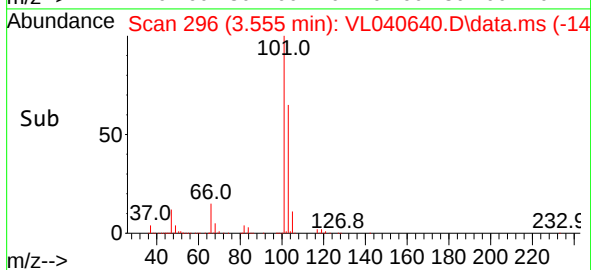
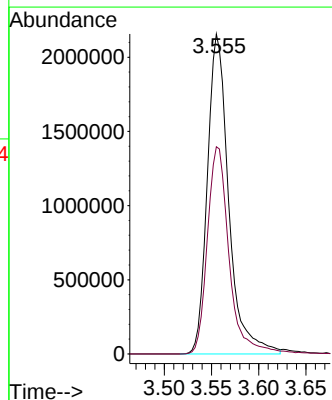
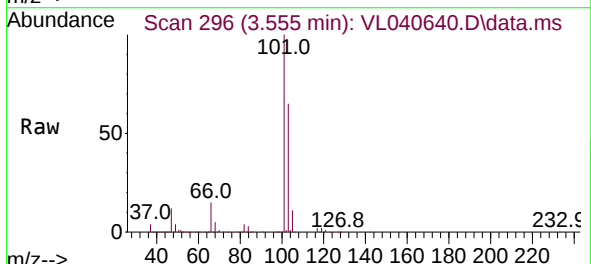
Instrument :
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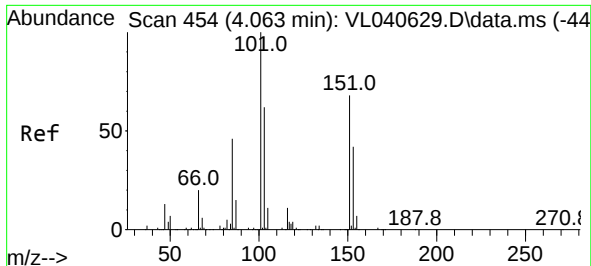
Tgt Ion: 43 Resp: 2105654
Ion Ratio Lower Upper
43 100
57 52.7 42.5 63.7



#11
Trichlorofluoromethane
Concen: 20.830 ppbv
RT: 3.555 min Scan# 296
Delta R.T. -0.003 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

Tgt Ion:101 Resp: 3386772
Ion Ratio Lower Upper
101 100
103 64.8 51.1 76.7

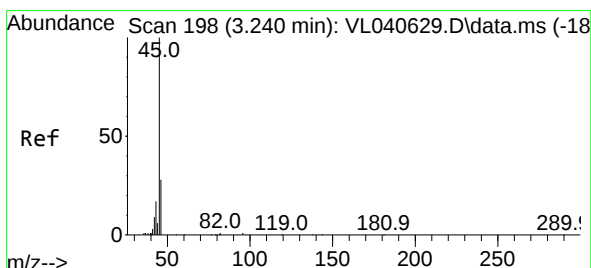
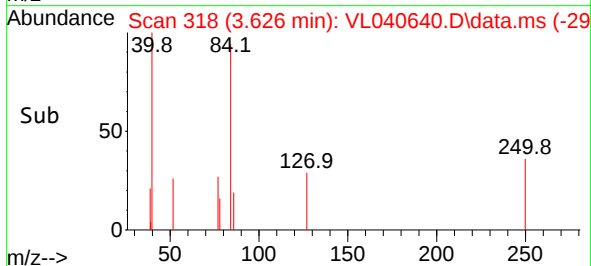
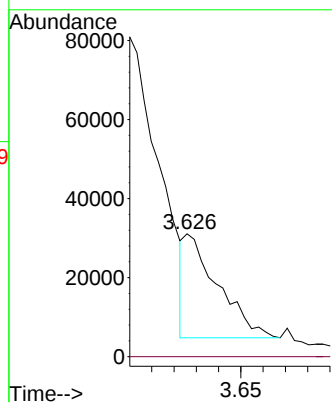
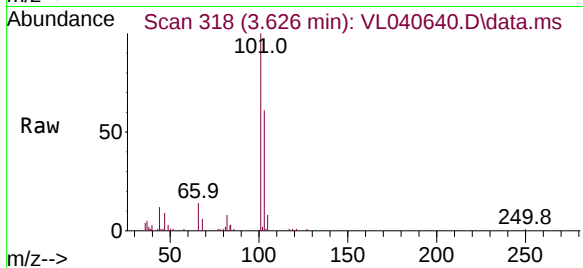




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.227 ppbv
RT: 3.626 min Scan# 31
Delta R.T. -0.437 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

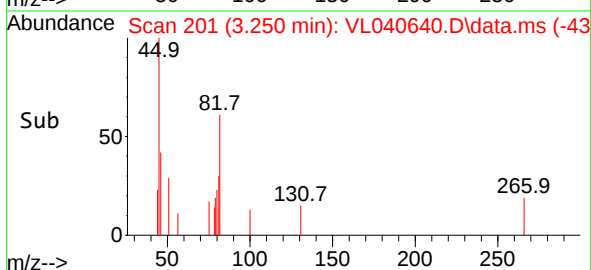
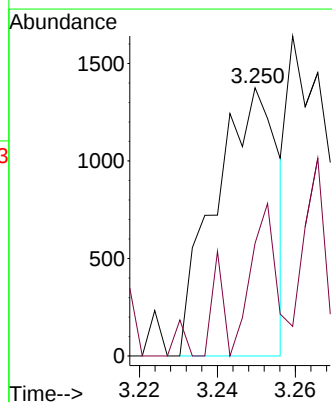
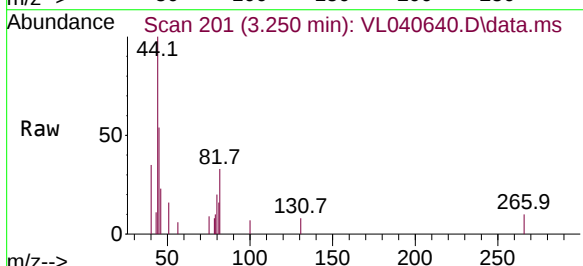
Instrument :
MSVOA_L
ClientSampleId :
E065-1100DL

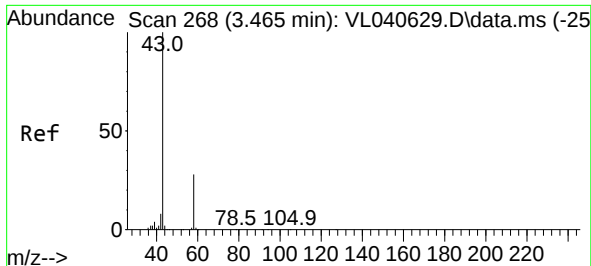
Tgt Ion:101 Resp: 27420
Ion Ratio Lower Upper
101 100
151 0.0 56.2 84.2#



#13
Ethanol
Concen: 0.115 ppbv
RT: 3.250 min Scan# 201
Delta R.T. 0.010 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

Tgt Ion: 45 Resp: 1528
Ion Ratio Lower Upper
45 100
46 0.0 14.2 56.6#





#15

Acetone

Concen: 0.353 ppbv

RT: 3.481 min Scan# 21

Delta R.T. 0.016 min

Lab File: VL040640.D

Acq: 15 Aug 2023 20:08

Instrument :

MSVOA_L

ClientSampleId :

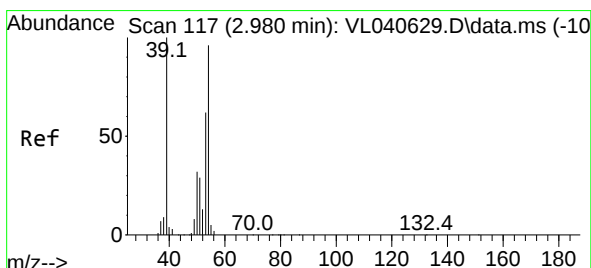
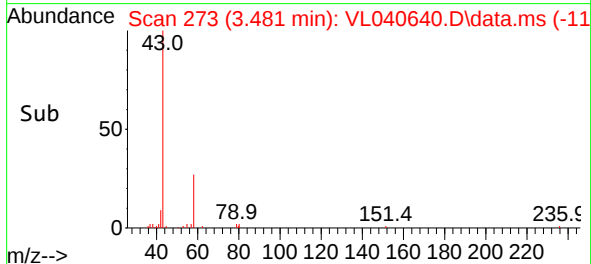
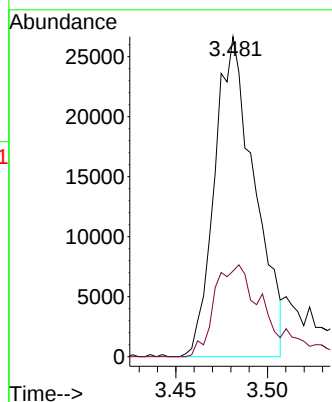
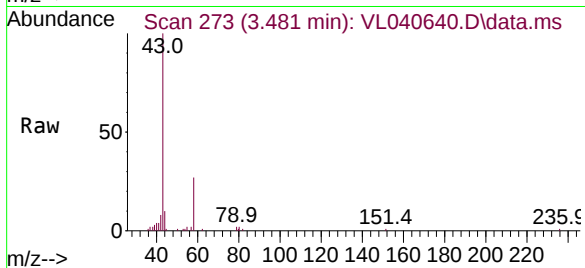
E065-1100DL

Tgt Ion: 43 Resp: 40412

Ion Ratio Lower Upper

43 100

58 37.1 22.4 33.6#



#16

1,3-Butadiene

Concen: 8.934 ppbv

RT: 2.684 min Scan# 25

Delta R.T. -0.296 min

Lab File: VL040640.D

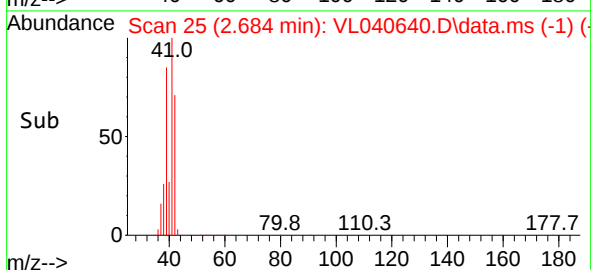
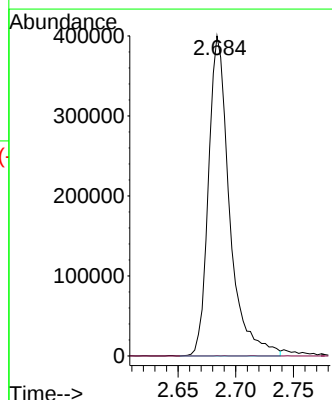
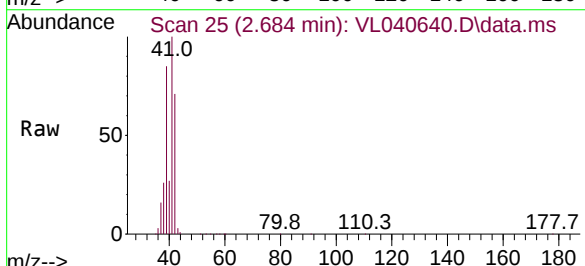
Acq: 15 Aug 2023 20:08

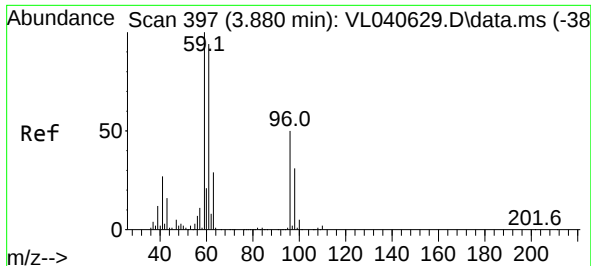
Tgt Ion: 39 Resp: 508127

Ion Ratio Lower Upper

39 100

54 0.0 66.6 99.8#

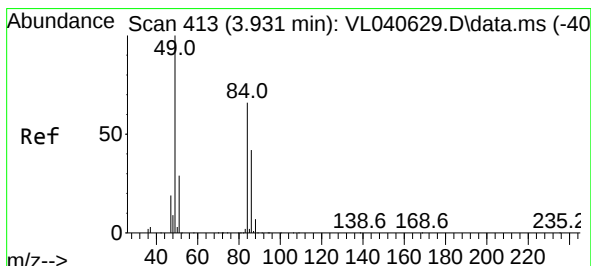
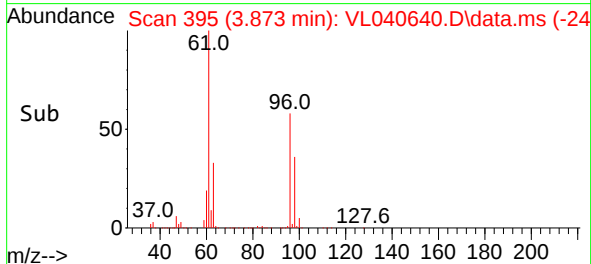
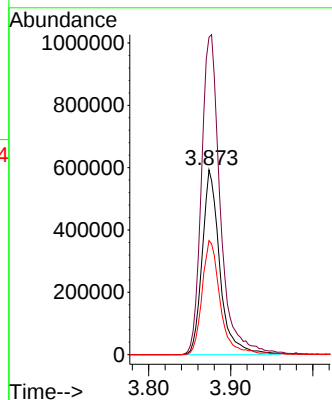
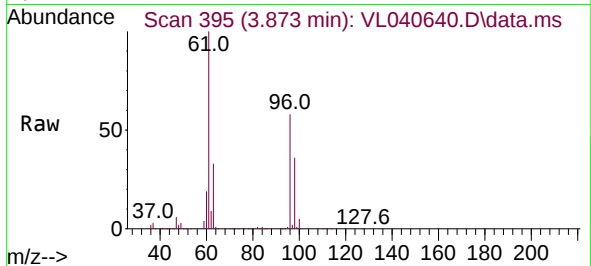




#18
1,1-Dichloroethene
Concen: 16.269 ppbv
RT: 3.873 min Scan# 397
Delta R.T. -0.007 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

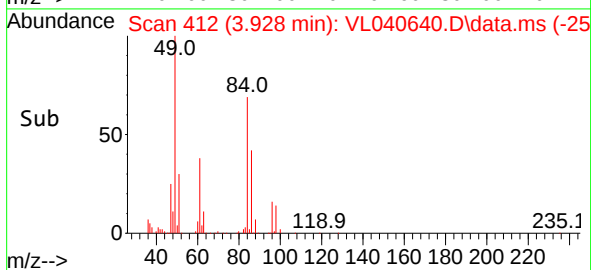
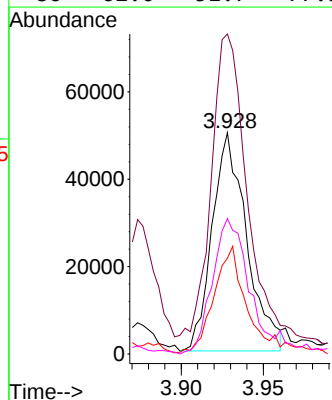
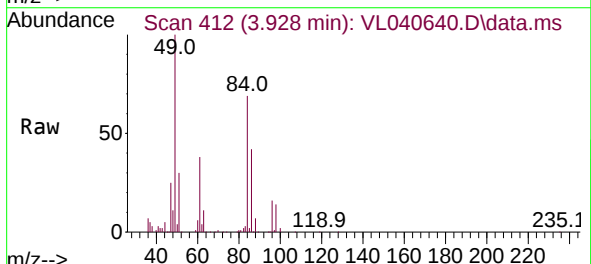
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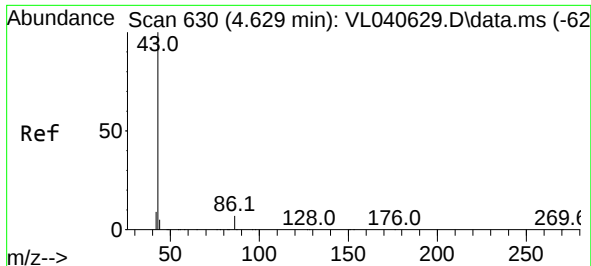
Tgt Ion: 96 Resp: 889733
Ion Ratio Lower Upper
96 100
61 171.8 150.4 225.6
98 61.8 49.7 74.5



#20
Methylene Chloride
Concen: 1.307 ppbv
RT: 3.928 min Scan# 412
Delta R.T. -0.003 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

Tgt Ion: 84 Resp: 73022
Ion Ratio Lower Upper
84 100
49 138.1 122.1 183.1
51 43.0 35.4 53.2
86 62.0 51.7 77.5

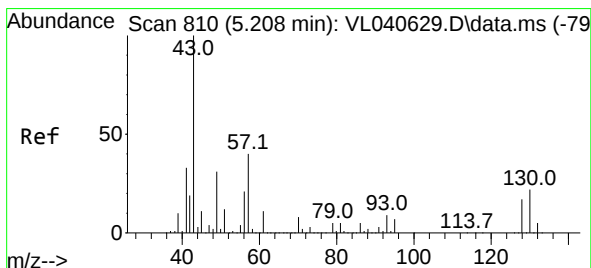
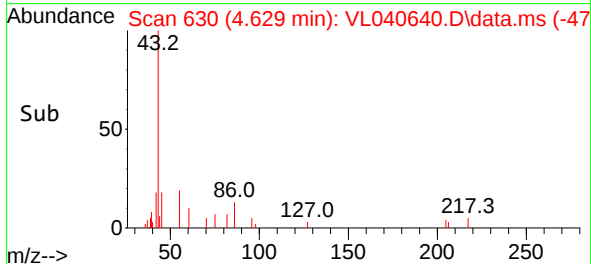
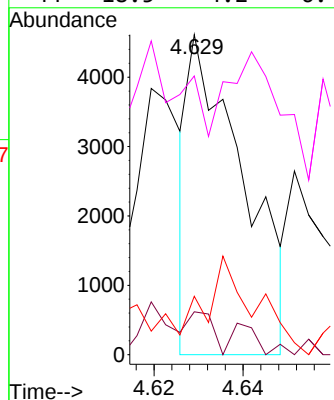
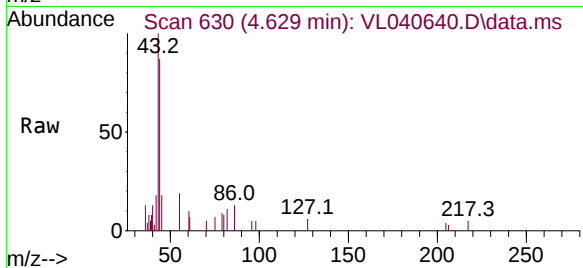




#23
 Vinyl Acetate
 Concen: 0.030 ppbv
 RT: 4.629 min Scan# 61
 Delta R.T. -0.000 min
 Lab File: VL040640.D
 Acq: 15 Aug 2023 20:08

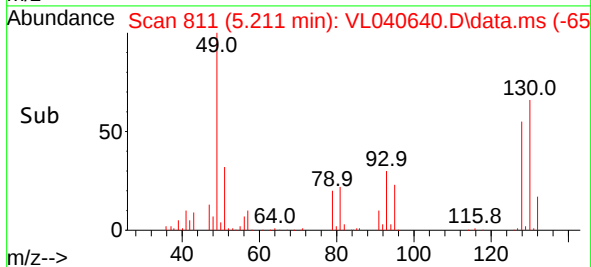
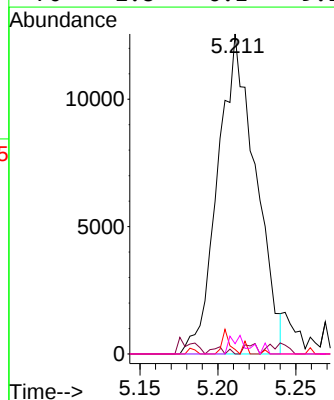
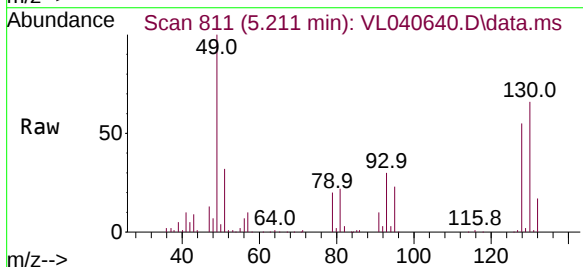
Instrument :
 MSVOA_1
 ClientSampleId :
 E065-1100DL

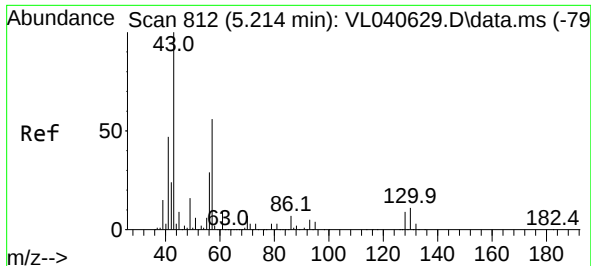
Tgt Ion:	43	Resp:	3954
Ion	Ratio	Lower	Upper
43	100		
86	15.4	5.0	7.6#
42	18.3	7.8	11.8#
44	18.5	4.2	6.4#



#25
 Ethyl Acetate
 Concen: 0.099 ppbv
 RT: 5.211 min Scan# 811
 Delta R.T. 0.003 min
 Lab File: VL040640.D
 Acq: 15 Aug 2023 20:08

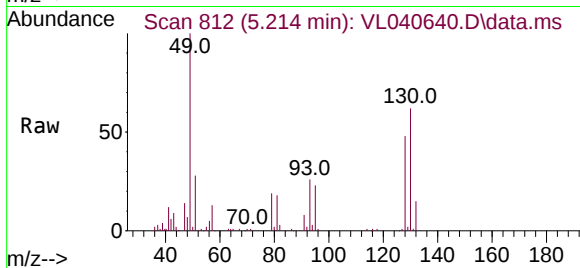
Tgt Ion:	43	Resp:	21194
Ion	Ratio	Lower	Upper
43	100		
45	3.6	8.2	12.4#
61	2.1	8.3	12.5#
70	2.8	6.1	9.1#



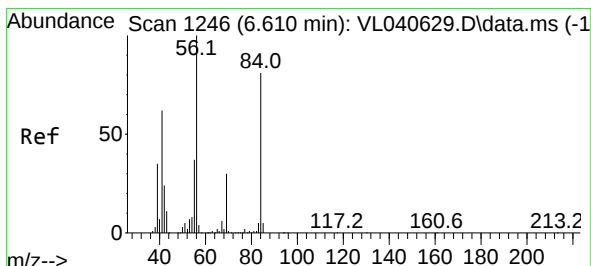
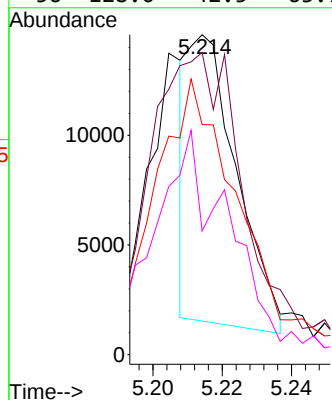
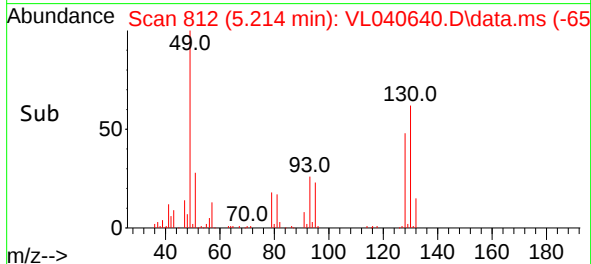


#26
Hexane
Concen: 0.123 ppbv
RT: 5.214 min Scan# 812
Delta R.T. -0.000 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

Instrument :
MSVOA_L
ClientSampleId :
E065-1100DL

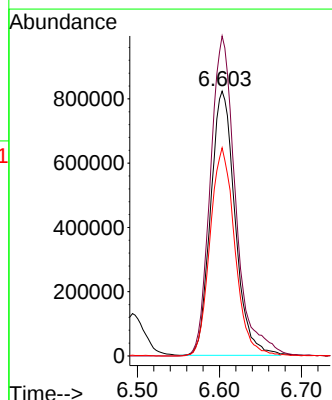
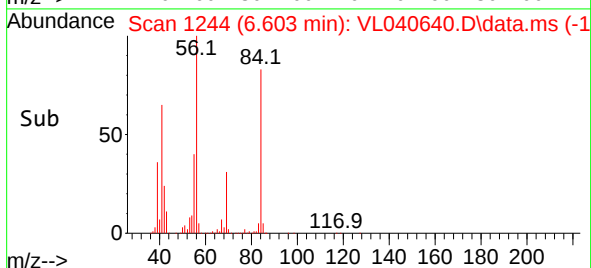
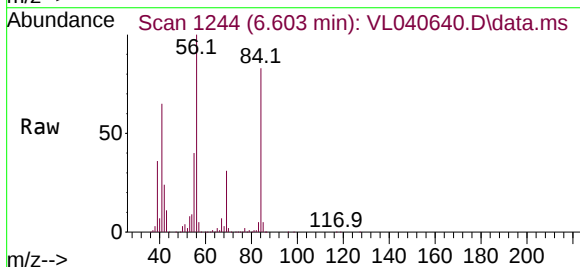


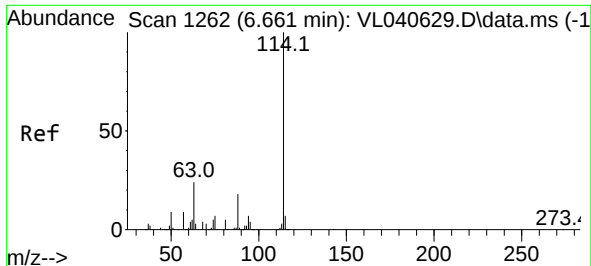
Tgt Ion: 57 Resp: 12745
Ion Ratio Lower Upper
57 100
41 217.1 69.3 103.9#
43 182.5 177.9 266.9
56 128.0 42.5 63.7#



#30
Cyclohexane
Concen: 21.427 ppbv
RT: 6.603 min Scan# 1244
Delta R.T. -0.007 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

Tgt Ion: 84 Resp: 1703842
Ion Ratio Lower Upper
84 100
56 125.5 105.4 158.2
41 80.1 64.2 96.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.655 min Scan# 11

Delta R.T. -0.007 min

Lab File: VL040640.D

Acq: 15 Aug 2023 20:08

Instrument :

MSVOA_L

ClientSampleId :

E065-1100DL

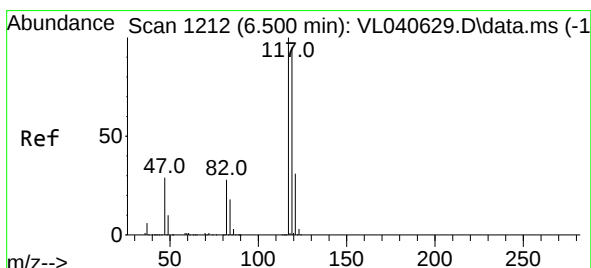
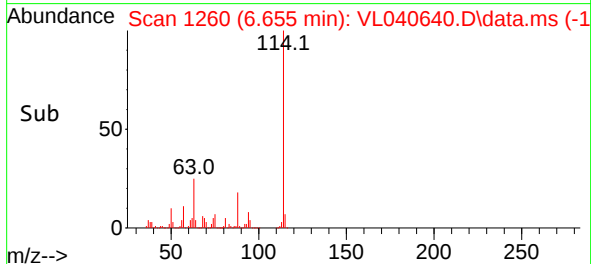
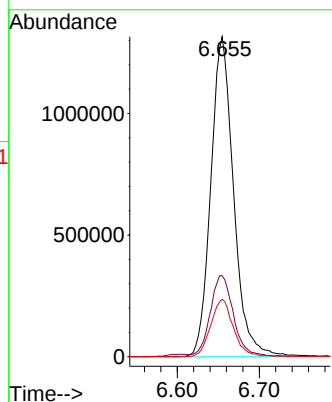
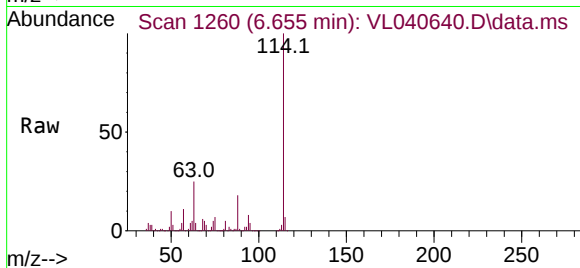
Tgt Ion:114 Resp: 2535327

Ion Ratio Lower Upper

114 100

63 26.9 20.2 30.2

88 18.0 14.1 21.1



#35

Carbon Tetrachloride

Concen: 9.083 ppbv

RT: 6.494 min Scan# 1210

Delta R.T. -0.007 min

Lab File: VL040640.D

Acq: 15 Aug 2023 20:08

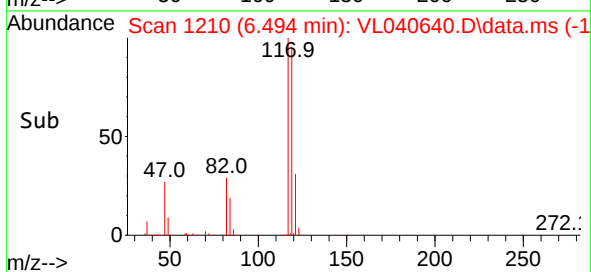
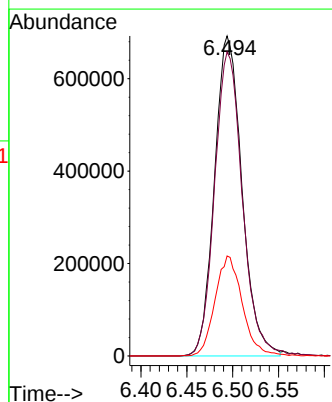
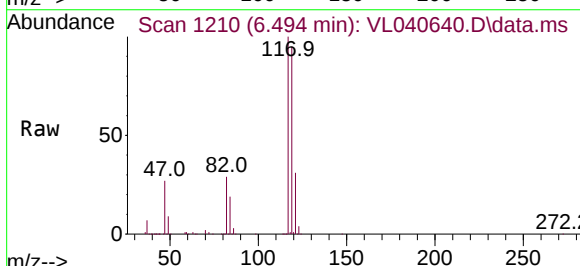
Tgt Ion:117 Resp: 1440919

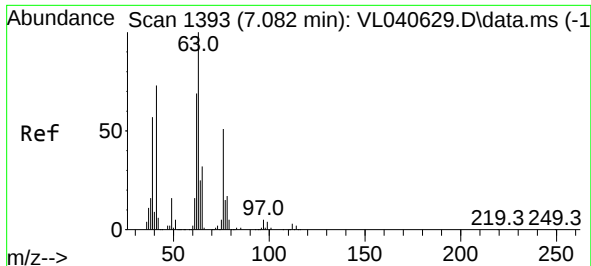
Ion Ratio Lower Upper

117 100

119 95.0 75.6 113.4

121 31.2 24.9 37.3





#39

1,2-Dichloropropane

Concen: 8.368 ppbv

RT: 6.651 min Scan# 1

Delta R.T. -0.431 min

Lab File: VL040640.D

Acq: 15 Aug 2023 20:08

Instrument :

MSVOA_L

ClientSampleId :

E065-1100DL

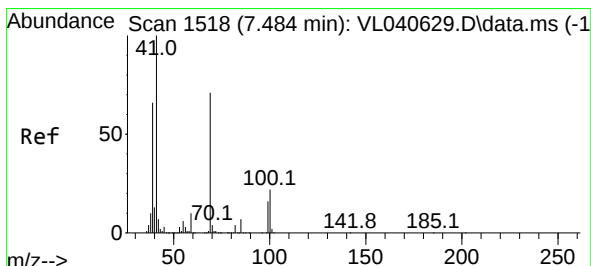
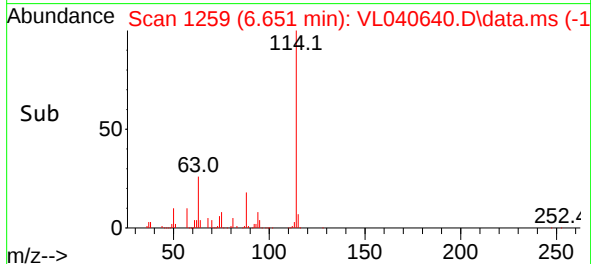
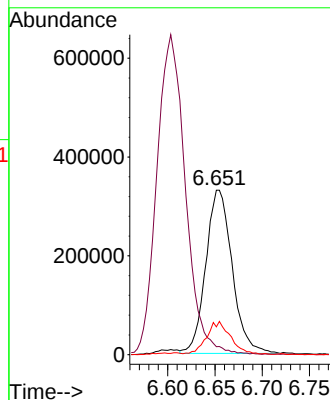
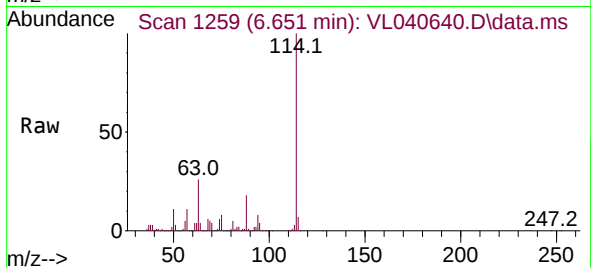
Tgt Ion: 63 Resp: 642086

Ion Ratio Lower Upper

63 100

41 4.7 58.2 87.2#

62 16.5 55.0 82.4#



#43

Methyl Methacrylate

Concen: 0.185 ppbv

RT: 7.568 min Scan# 1544

Delta R.T. 0.083 min

Lab File: VL040640.D

Acq: 15 Aug 2023 20:08

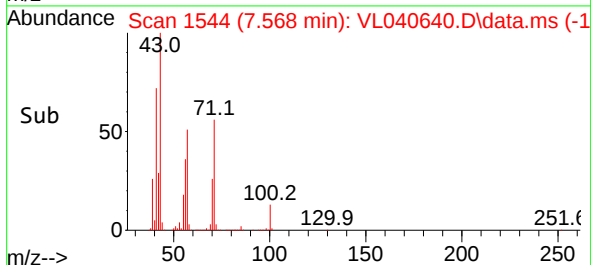
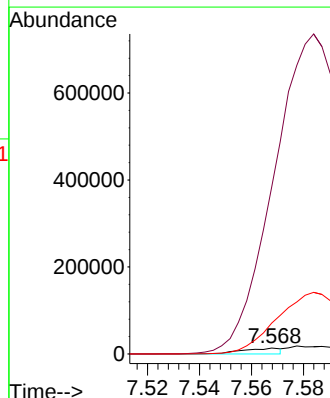
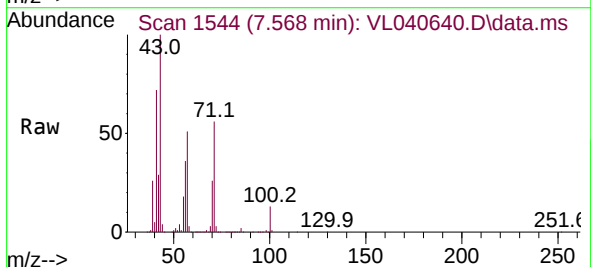
Tgt Ion: 69 Resp: 13990

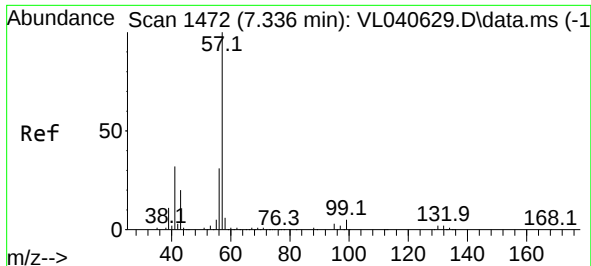
Ion Ratio Lower Upper

69 100

41 0.0 111.8 167.8#

100 0.0 25.8 38.6#

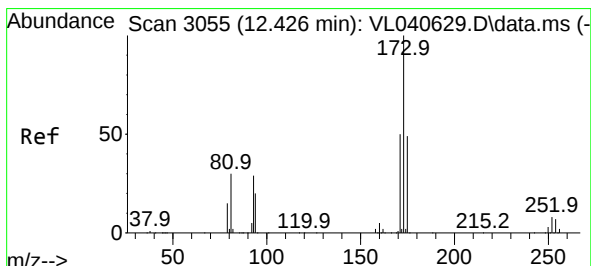
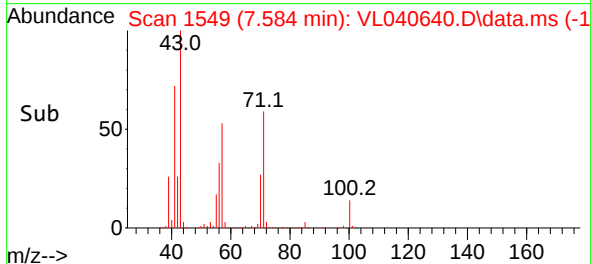
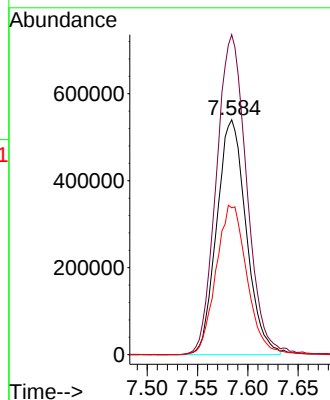
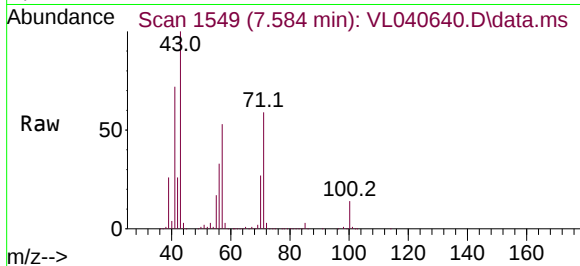




#44
2,2,4-Trimethylpentane
Concen: 3.377 ppbv
RT: 7.584 min Scan# 11
Delta R.T. 0.247 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

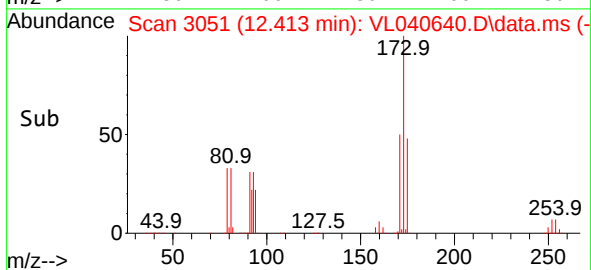
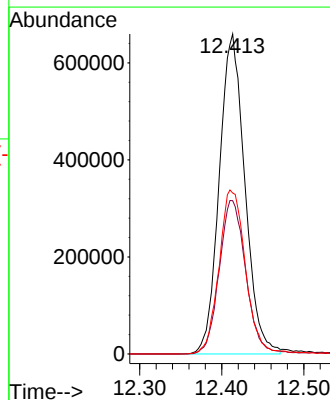
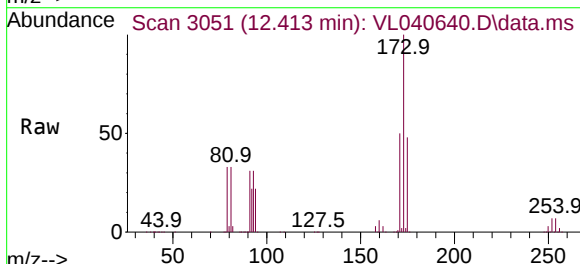
Instrument :
MSVOA_L
ClientSampleId :
E065-1100DL

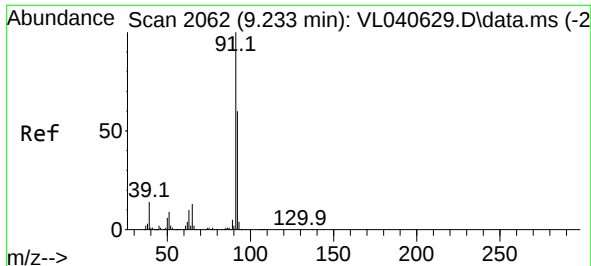
Tgt Ion: 57 Resp: 1100882
Ion Ratio Lower Upper
57 100
41 141.5 26.2 39.4#
56 67.2 24.7 37.1#



#49
Bromoform
Concen: 13.174 ppbv
RT: 12.413 min Scan# 3051
Delta R.T. -0.013 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

Tgt Ion: 173 Resp: 1431869
Ion Ratio Lower Upper
173 100
175 49.7 39.0 58.6
171 53.6 41.9 62.9





#53

Toluene

Concen: 12.890 ppbv

RT: 9.224 min Scan# 2062

Delta R.T. -0.010 min

Lab File: VL040640.D

Acq: 15 Aug 2023 20:08

Instrument :

MSVOA_L

ClientSampleId :

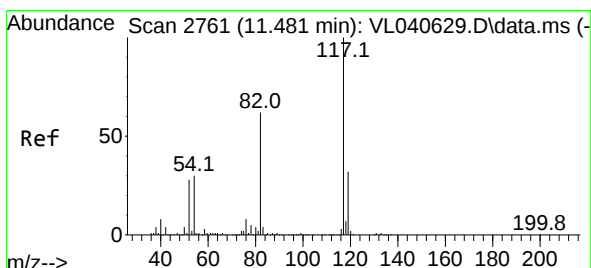
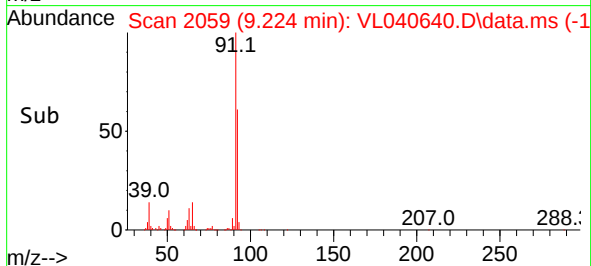
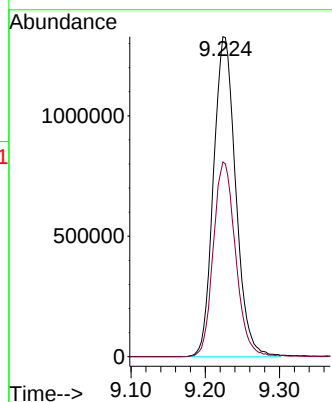
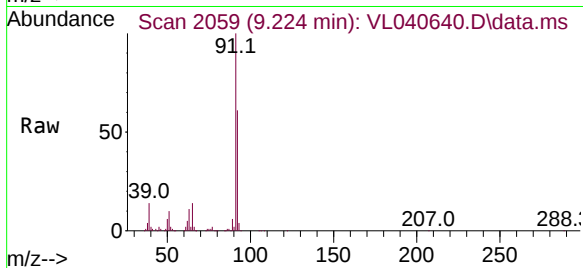
E065-1100DL

Tgt Ion: 91 Resp: 2762835

Ion Ratio Lower Upper

91 100

92 61.1 48.0 72.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.471 min Scan# 2758

Delta R.T. -0.010 min

Lab File: VL040640.D

Acq: 15 Aug 2023 20:08

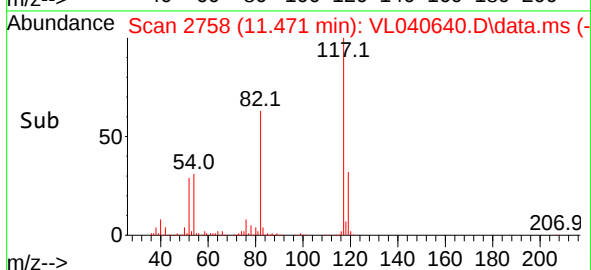
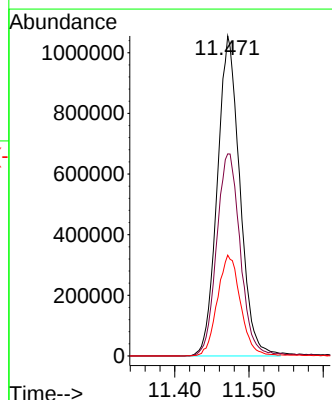
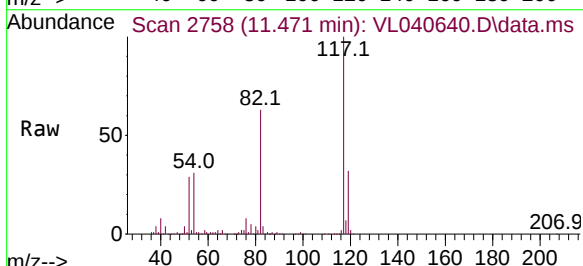
Tgt Ion: 117 Resp: 2226674

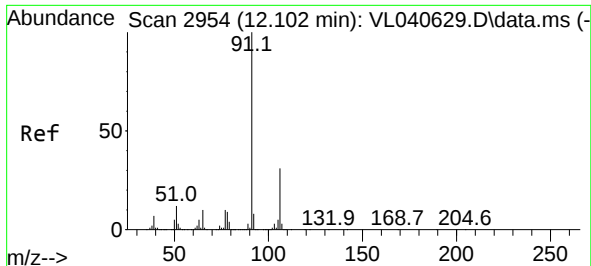
Ion Ratio Lower Upper

117 100

82 66.8 49.5 74.3

119 32.4 24.5 36.7

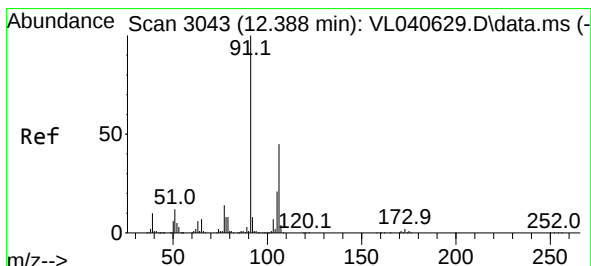
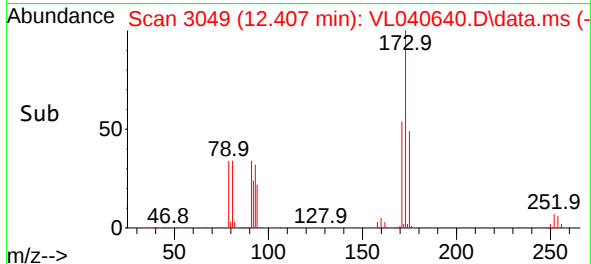
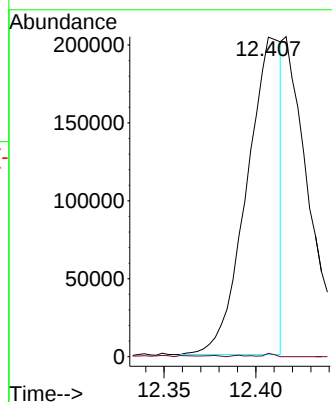
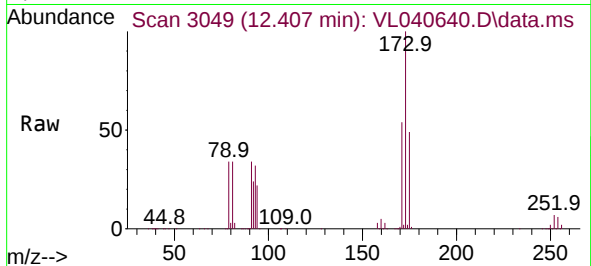




#58
Ethyl Benzene
Concen: 0.985 ppbv
RT: 12.407 min Scan# 3049
Delta R.T. 0.305 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

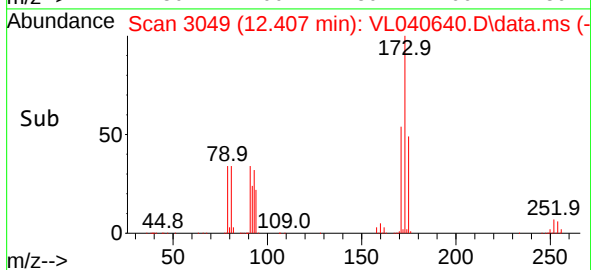
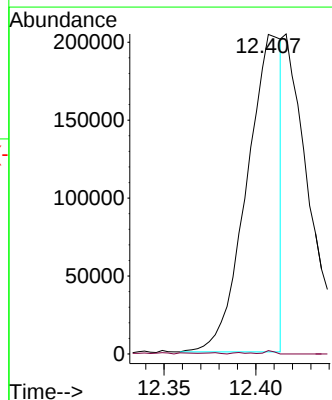
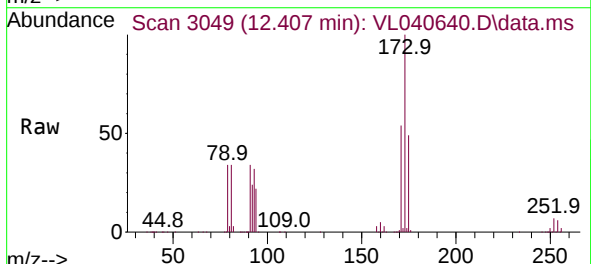
Instrument :
MSVOA_1
ClientSampleId :
E065-1100DL

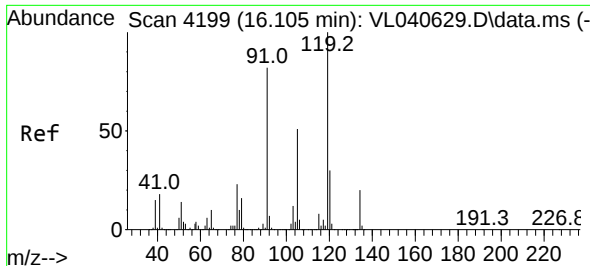
Tgt Ion: 91 Resp: 264424
Ion Ratio Lower Upper
91 100
106 1.0 24.6 36.8#



#59
m/p-Xylene
Concen: 1.080 ppbv
RT: 12.407 min Scan# 3049
Delta R.T. 0.019 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

Tgt Ion: 91 Resp: 264424
Ion Ratio Lower Upper
91 100
106 0.7 35.3 52.9#

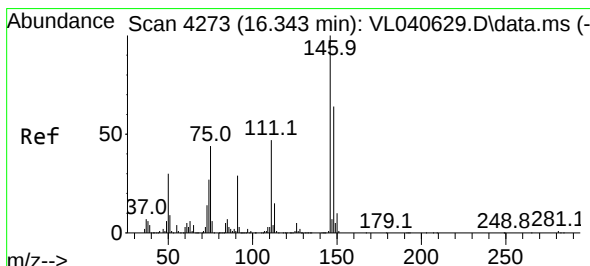
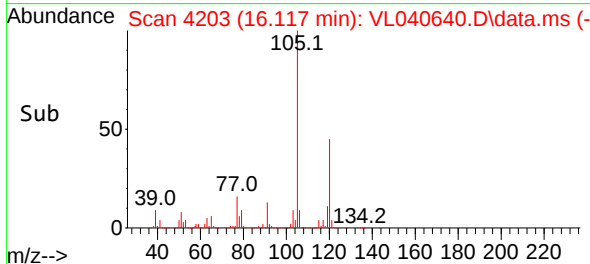
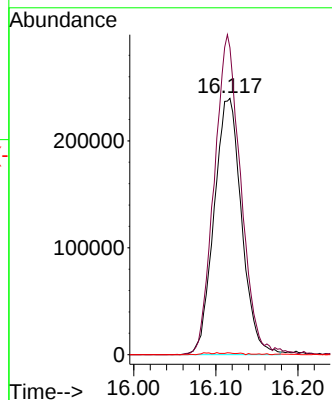
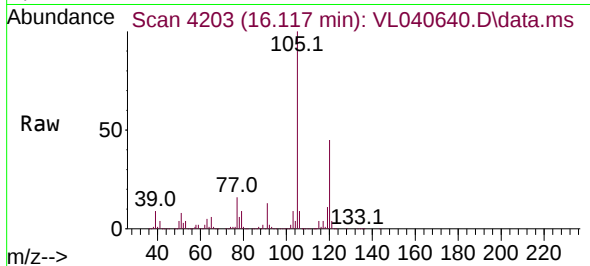




#65
tert-Butylbenzene
Concen: 1.838 ppbv
RT: 16.117 min Scan# 4199
Delta R.T. 0.013 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

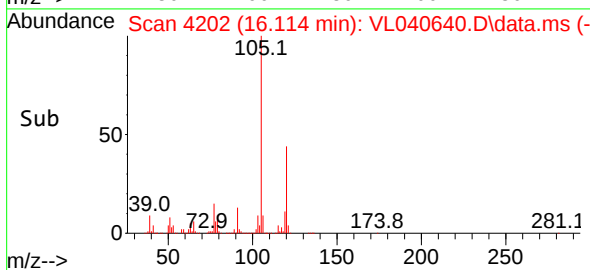
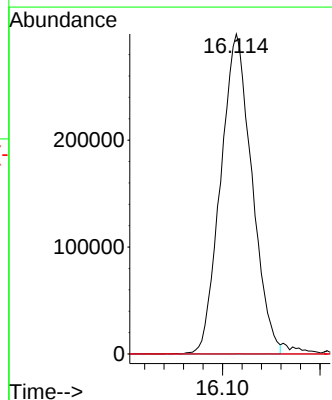
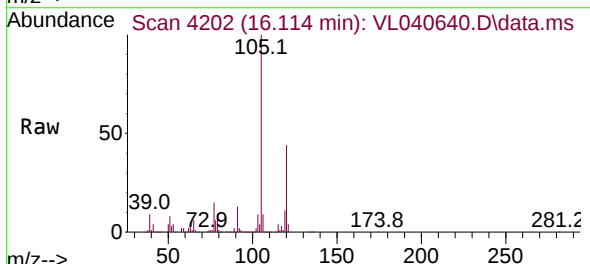
Instrument :
MSVOA_L
ClientSampleId :
E065-1100DL

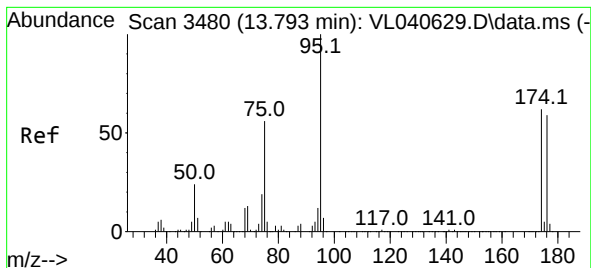
Tgt Ion:119 Resp: 559787
Ion Ratio Lower Upper
119 100
91 121.5 67.8 101.6#
134 1.0 15.7 23.5#



#66
Benzyl Chloride
Concen: 17.395 ppbv
RT: 16.114 min Scan# 4202
Delta R.T. -0.228 min
Lab File: VL040640.D
Acq: 15 Aug 2023 20:08

Tgt Ion: 91 Resp: 666076
Ion Ratio Lower Upper
91 100
126 0.0 13.6 20.4#
128 0.0 4.3 6.5#

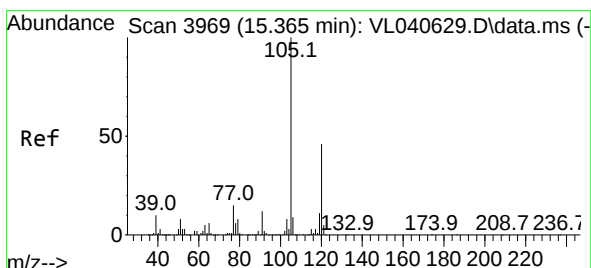
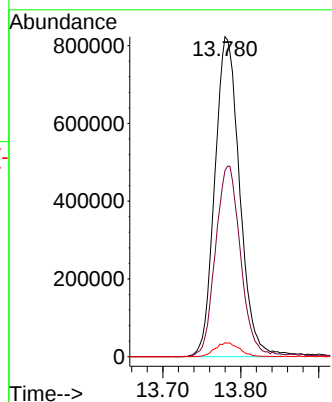
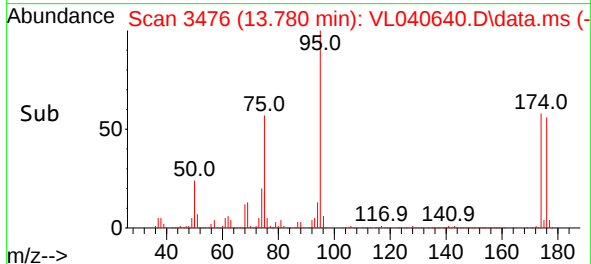
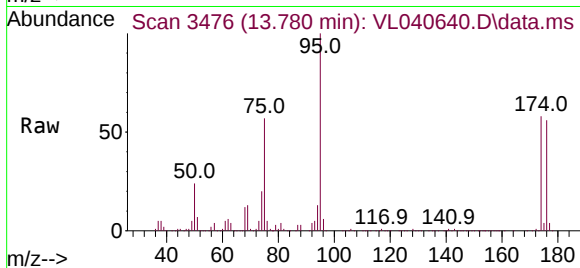




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.295 ppbv
 RT: 13.780 min Scan# 3480
 Delta R.T. -0.013 min
 Lab File: VL040640.D
 Acq: 15 Aug 2023 20:08

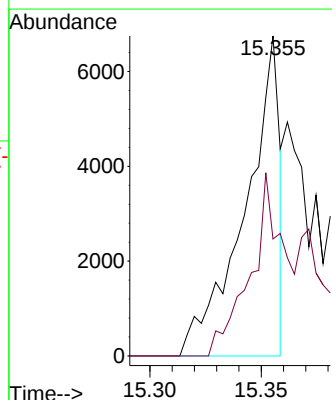
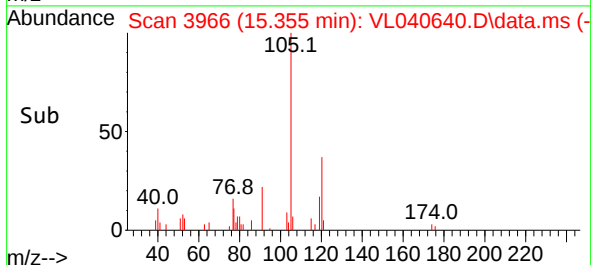
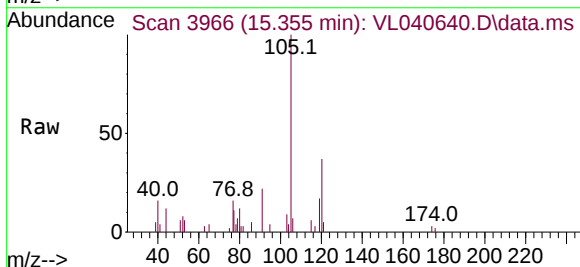
Instrument :
 MSVOA_L
 ClientSampleId :
 E065-1100DL

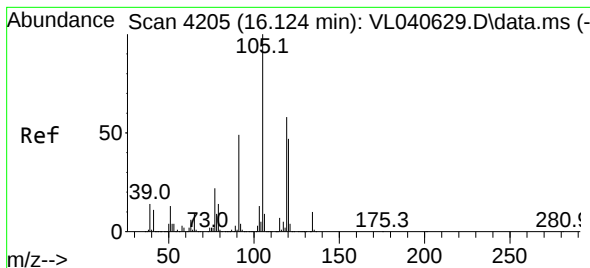
Tgt Ion: 95 Resp: 1823133
 Ion Ratio Lower Upper
 95 100
 174 61.1 49.1 73.7
 175 4.4 3.7 5.5



#73
 1,3,5-Trimethylbenzene
 Concen: 0.031 ppbv
 RT: 15.355 min Scan# 3966
 Delta R.T. -0.010 min
 Lab File: VL040640.D
 Acq: 15 Aug 2023 20:08

Tgt Ion: 105 Resp: 7271
 Ion Ratio Lower Upper
 105 100
 120 36.5 36.5 54.7





#74

1,2,4-Trimethylbenzene

Concen: 18.921 ppbv

RT: 16.114 min Scan# 41

Delta R.T. -0.010 min

Lab File: VL040640.D

Acq: 15 Aug 2023 20:08

Instrument :

MSVOA_L

ClientSampleId :

E065-1100DL

Tgt Ion:105 Resp: 5176670

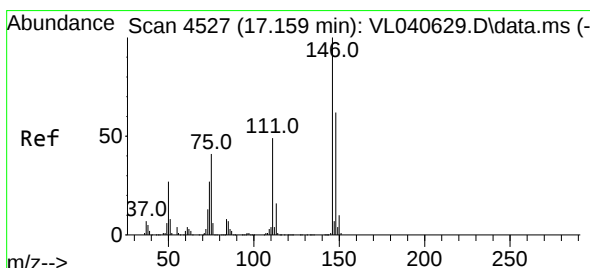
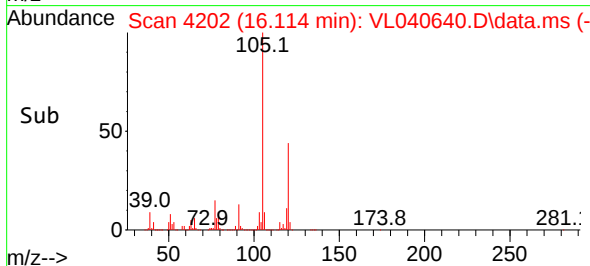
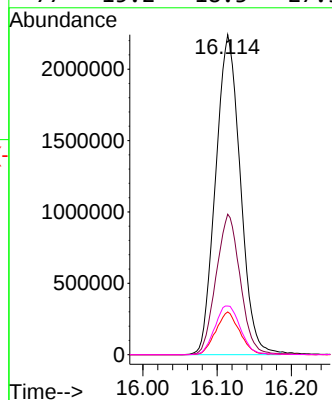
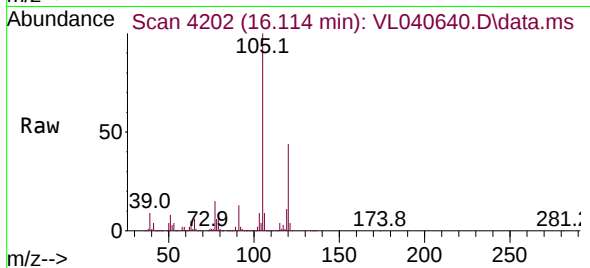
Ion Ratio Lower Upper

105 100

120 43.9 37.7 56.5

91 13.3 41.2 61.8#

77 15.2 18.3 27.5#



#77

1,2-Dichlorobenzene

Concen: 12.970 ppbv

RT: 17.149 min Scan# 4524

Delta R.T. -0.010 min

Lab File: VL040640.D

Acq: 15 Aug 2023 20:08

Tgt Ion:146 Resp: 2018547

Ion Ratio Lower Upper

146 100

111 51.9 24.6 74.0

148 65.4 32.1 96.5

