

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL101024\
 Data File : VL041639.D
 Acq On : 10 Oct 2024 12:49
 Operator : SY/MD
 Sample : P4339-02 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Oct 11 05:39:29 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091624AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 17 09:12:21 2024
 Response via : Initial Calibration

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

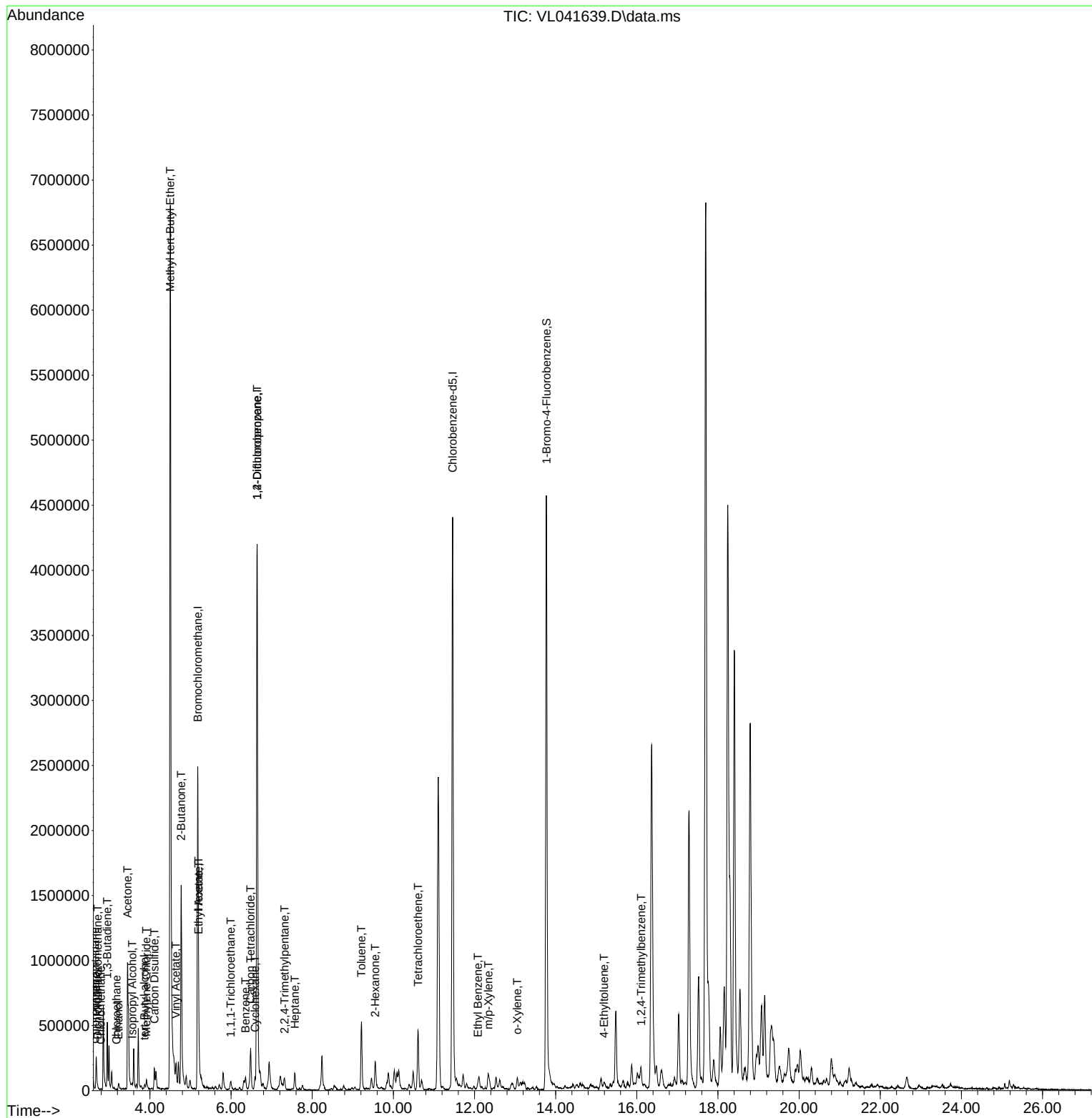
Internal Standards						
1) Bromochloromethane	5.179	49	1204174	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.642	114	3304761	10.000	ppbv	0.01
55) Chlorobenzene-d5	11.462	117	2985899	10.000	ppbv	0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.773	95	2257858	10.272	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	= 102.700%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.710	85	15777	0.091	ppbv	97
3) Chlorodifluoromethane	2.652	51	7756	0.053	ppbv	99
4) Chloromethane	2.793	50	3468	0.043	ppbv #	86
7) Chloroethane	3.176	64	843	0.031	ppbv	96
9) Propene	2.671	41	88303	1.433	ppbv	97
10) Heptane	7.568	43	51095	0.354	ppbv	94
13) Ethanol	3.227	45	28400	6.132	ppbv #	51
15) Acetone	3.449	43	1123717	7.433	ppbv	93
16) 1,3-Butadiene	2.951	39	115663	1.573	ppbv #	19
17) tert-Butyl alcohol	3.867	59	21680	0.163	ppbv #	89
19) Isopropyl Alcohol	3.568	45	32051	0.414	ppbv #	92
20) Methylene Chloride	3.912	84	21466	0.378	ppbv #	84
23) Vinyl Acetate	4.642	43	68970	0.829	ppbv #	40
25) Ethyl Acetate	5.201	43	98418	0.363	ppbv #	78
26) Hexane	5.198	57	138879	1.227	ppbv #	37
27) Carbon Disulfide	4.108	76	200762	1.669	ppbv #	92
28) Methyl tert-Butyl Ether	4.500	73	86622	1.241	ppbv #	73
30) Cyclohexane	6.587	84	18717	0.215	ppbv #	42
32) 1,1,1-Trichloroethane	5.992	97	11894	0.072	ppbv #	51
34) 2-Butanone	4.771	43	1960022	12.438	ppbv	99
35) Carbon Tetrachloride	6.481	117	179658	1.108	ppbv	92
36) Benzene	6.356	78	65006	0.283	ppbv	96
39) 1,2-Dichloropropane	6.642	63	815812	8.737	ppbv #	25
44) 2,2,4-Trimethylpentane	7.317	57	50556	0.127	ppbv #	48
51) 2-Hexanone	9.552	43	192928	1.048	ppbv #	98
52) Tetrachloroethene	10.610	164	113081	1.361	ppbv	97
53) Toluene	9.214	91	405313	1.664	ppbv	100
58) Ethyl Benzene	12.082	91	21934	0.069	ppbv	90
59) m/p-Xylene	12.339	91	128080	0.450	ppbv	98
60) o-Xylene	13.053	91	56557	0.207	ppbv	95
72) 4-Ethyltoluene	15.188	105	14680	0.046	ppbv #	51
74) 1,2,4-Trimethylbenzene	16.111	105	34608	0.105	ppbv #	65

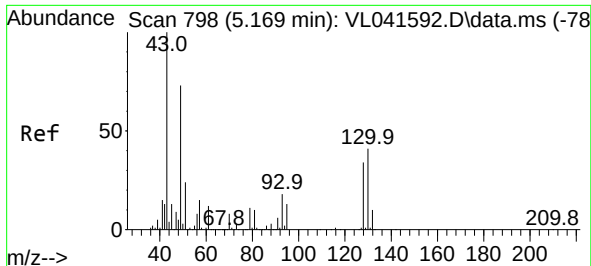
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL101024\
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Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Oct 11 05:39:29 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091624AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Tue Sep 17 09:12:21 2024
Response via : Initial Calibration

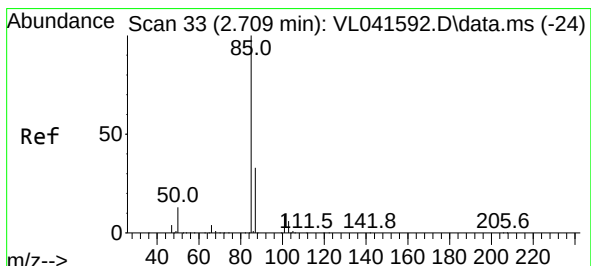
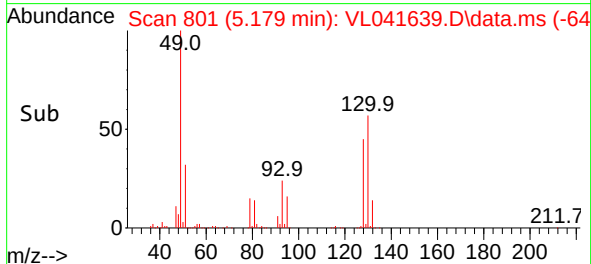
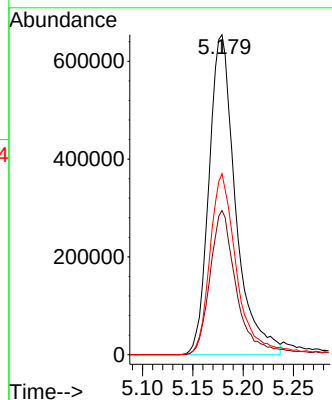
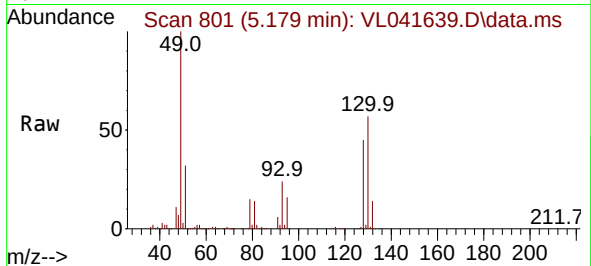




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.179 min Scan# 80
 Delta R.T. 0.010 min
 Lab File: VL041639.D
 Acq: 10 Oct 2024 12:49

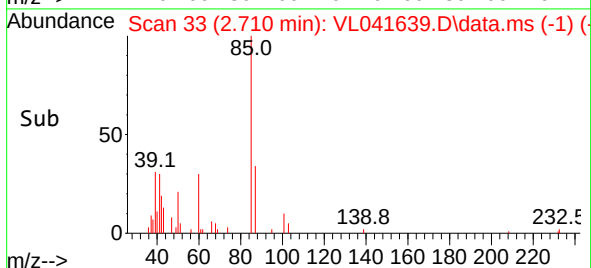
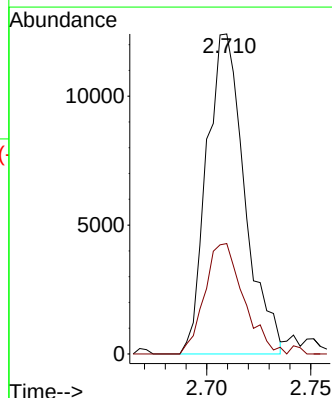
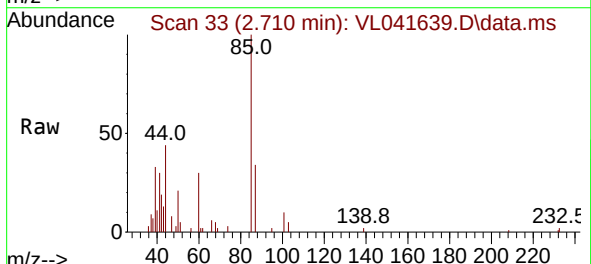
Instrument :
 MSVOA_L
 ClientSampleId :

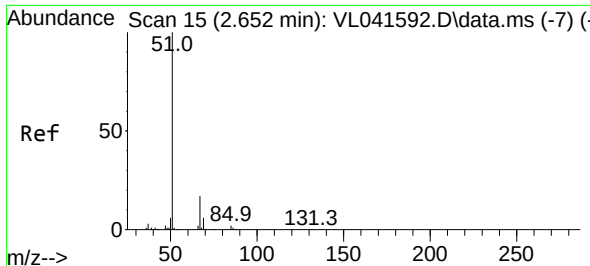
Tgt Ion: 49 Resp: 1204174
 Ion Ratio Lower Upper
 49 100
 128 46.5 23.8 71.5
 130 58.9 30.4 91.3



#2
 Dichlorodifluoromethane
 Concen: 0.091 ppbv
 RT: 2.710 min Scan# 33
 Delta R.T. 0.000 min
 Lab File: VL041639.D
 Acq: 10 Oct 2024 12:49

Tgt Ion: 85 Resp: 15777
 Ion Ratio Lower Upper
 85 100
 87 34.5 26.3 39.5

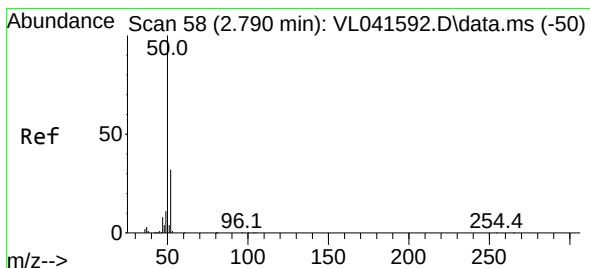
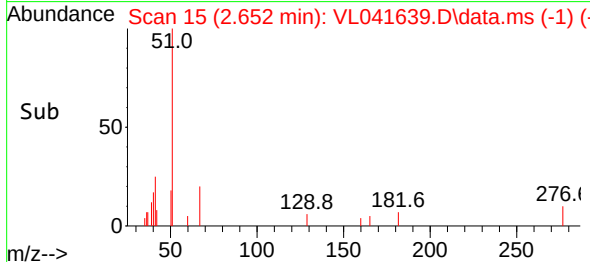
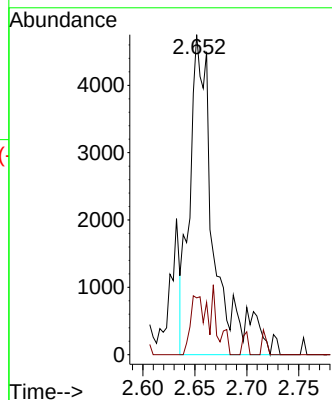
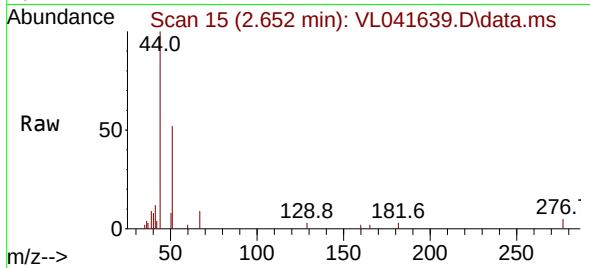




#3
Chlorodifluoromethane
Concen: 0.053 ppbv
RT: 2.652 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

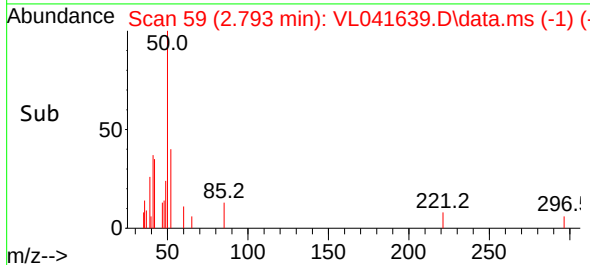
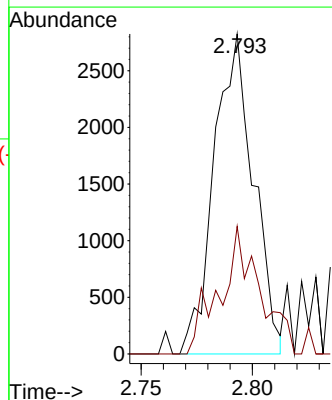
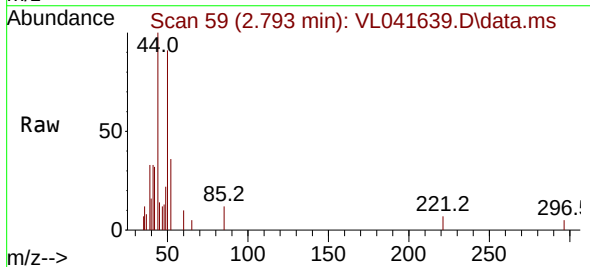
Instrument :
MSVOA_L
ClientSampleId :

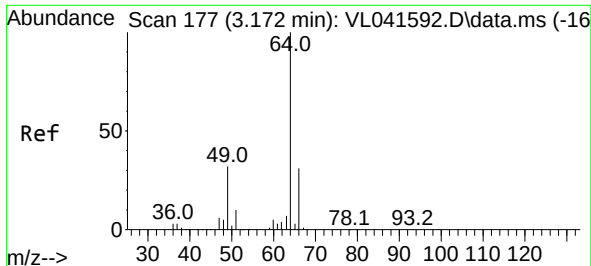
Tgt Ion: 51 Resp: 7756
Ion Ratio Lower Upper
51 100
67 17.3 14.1 21.1



#4
Chloromethane
Concen: 0.043 ppbv
RT: 2.793 min Scan# 59
Delta R.T. 0.003 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

Tgt Ion: 50 Resp: 3468
Ion Ratio Lower Upper
50 100
52 39.9 25.4 38.2#

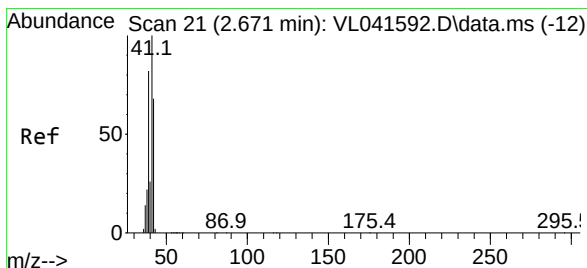
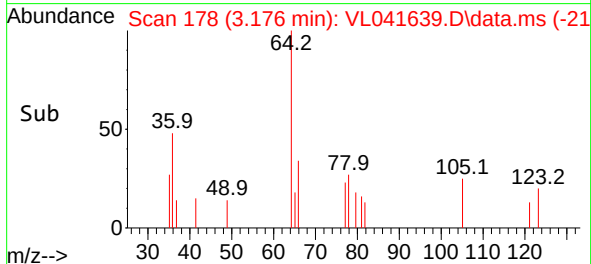
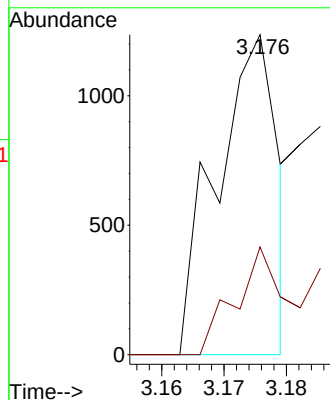
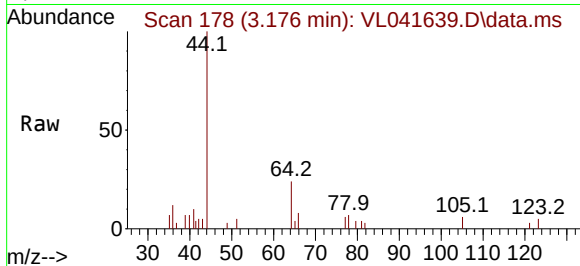




#7
Chloroethane
Concen: 0.031 ppbv
RT: 3.176 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

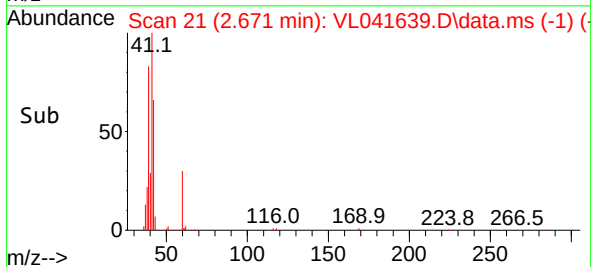
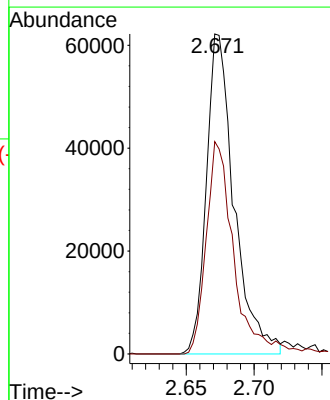
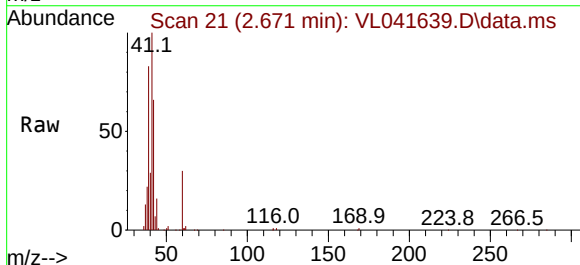
Instrument :
MSVOA_L
ClientSampleId :

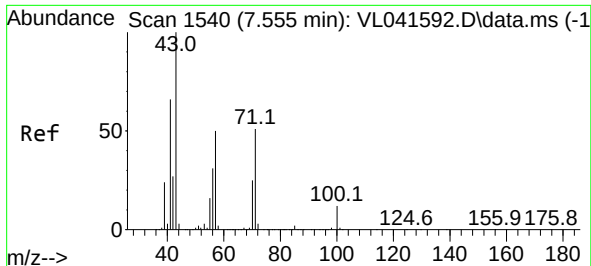
Tgt Ion: 64 Resp: 843
Ion Ratio Lower Upper
64 100
66 33.7 25.1 37.7



#9
Propene
Concen: 1.433 ppbv
RT: 2.671 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

Tgt Ion: 41 Resp: 88303
Ion Ratio Lower Upper
41 100
42 66.9 55.2 82.8

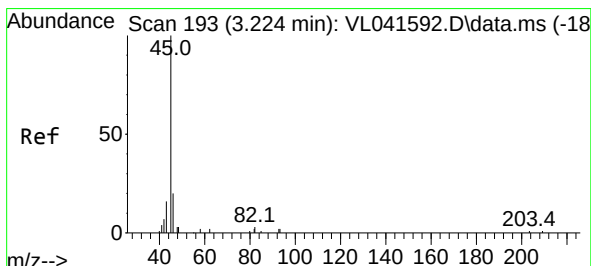
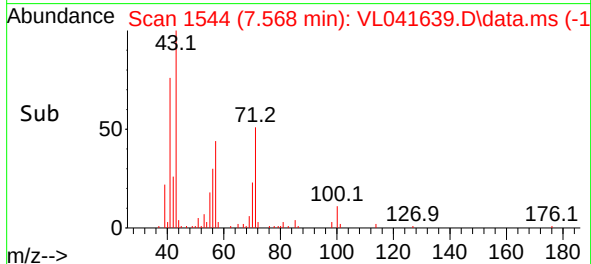
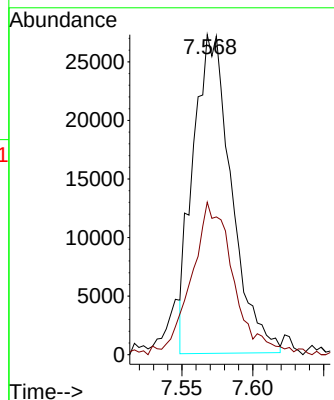
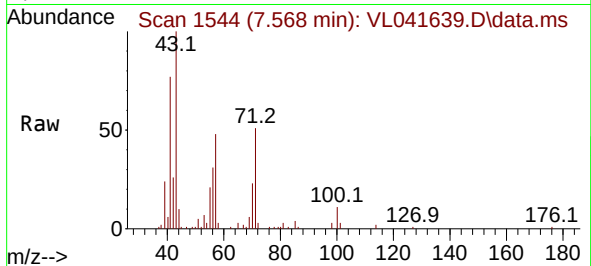




#10
Heptane
Concen: 0.354 ppbv
RT: 7.568 min Scan# 11
Delta R.T. 0.013 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

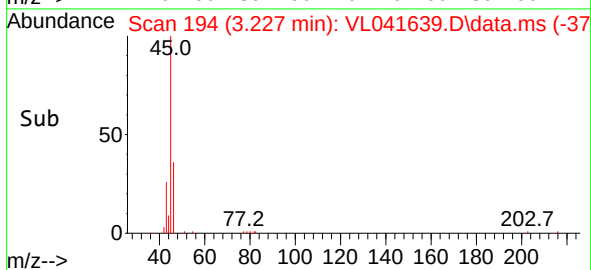
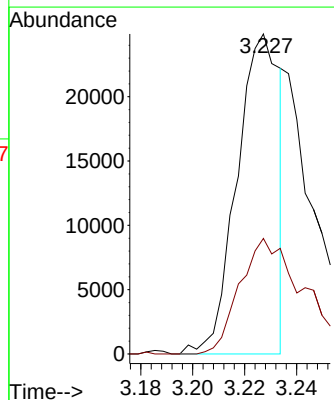
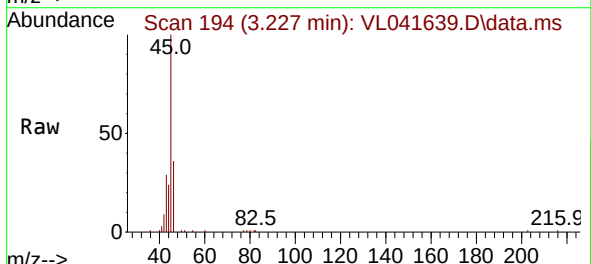
Instrument :
MSVOA_L
ClientSampleId :

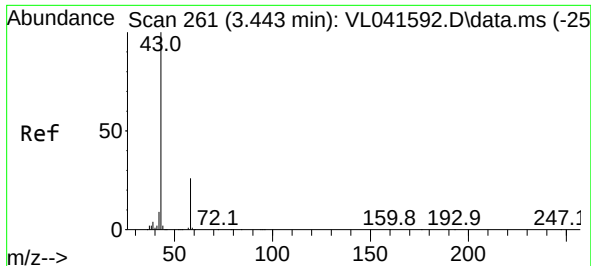
Tgt Ion: 43 Resp: 51095
Ion Ratio Lower Upper
43 100
57 53.7 39.8 59.8



#13
Ethanol
Concen: 6.132 ppbv
RT: 3.227 min Scan# 194
Delta R.T. 0.003 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

Tgt Ion: 45 Resp: 28400
Ion Ratio Lower Upper
45 100
46 67.8 15.2 60.8#





#15

Acetone

Concen: 7.433 ppbv

RT: 3.449 min Scan# 2

Delta R.T. 0.007 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Instrument :

MSVOA_L

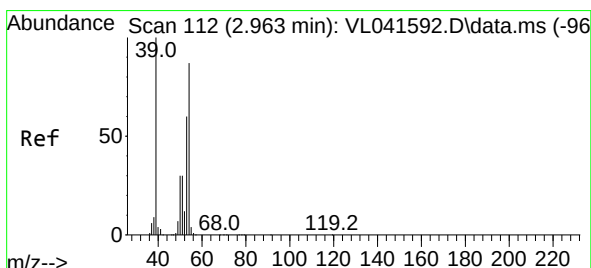
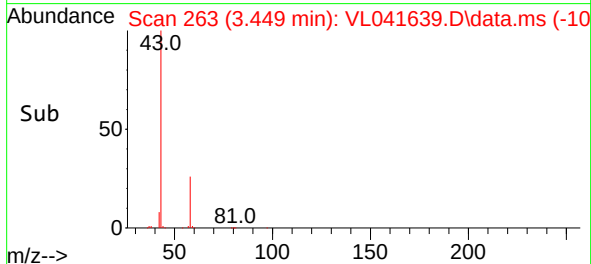
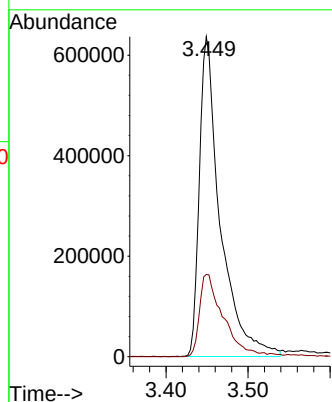
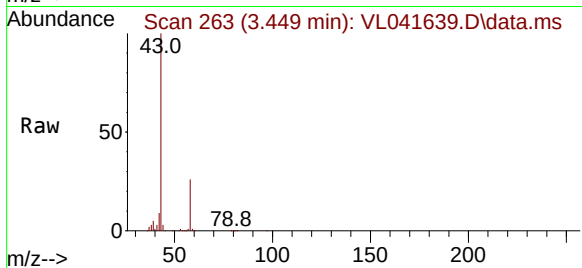
ClientSampleId :

Tgt Ion: 43 Resp: 1123717

Ion Ratio Lower Upper

43 100

58 30.3 21.5 32.3



#16

1,3-Butadiene

Concen: 1.573 ppbv

RT: 2.951 min Scan# 108

Delta R.T. -0.013 min

Lab File: VL041639.D

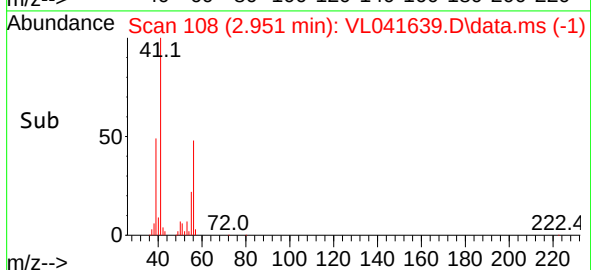
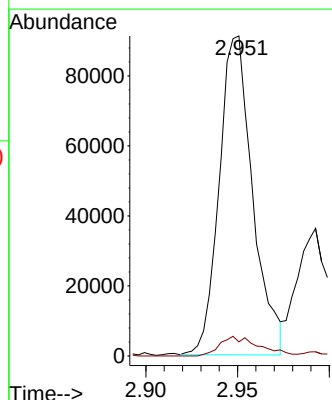
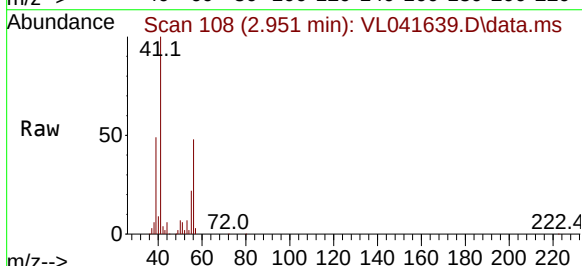
Acq: 10 Oct 2024 12:49

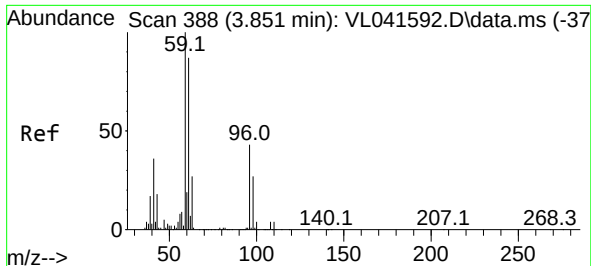
Tgt Ion: 39 Resp: 115663

Ion Ratio Lower Upper

39 100

54 8.2 62.9 94.3#





#17

tert-Butyl alcohol

Concen: 0.163 ppbv

RT: 3.867 min Scan# 300

Delta R.T. 0.016 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Instrument :

MSVOA_L

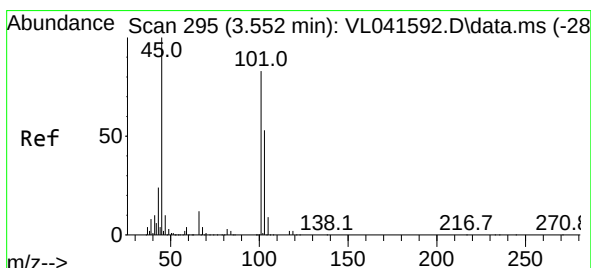
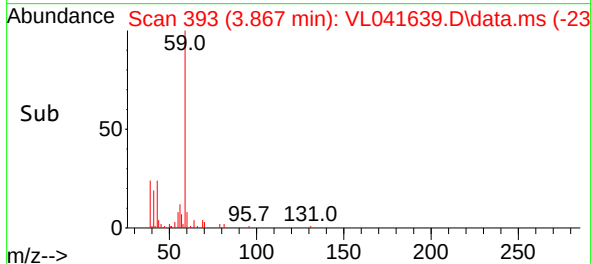
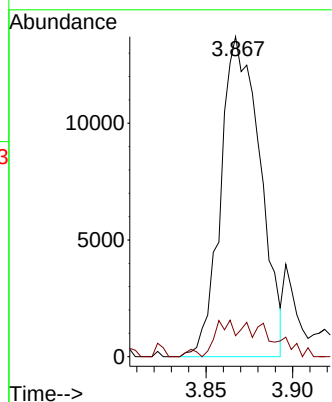
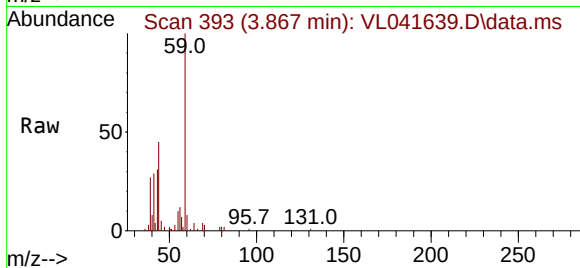
ClientSampleId :

Tgt Ion: 59 Resp: 21680

Ion Ratio Lower Upper

59 100

57 15.2 8.7 13.1#



#19

Isopropyl Alcohol

Concen: 0.414 ppbv

RT: 3.568 min Scan# 300

Delta R.T. 0.016 min

Lab File: VL041639.D

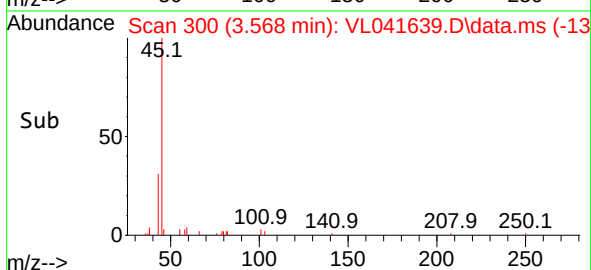
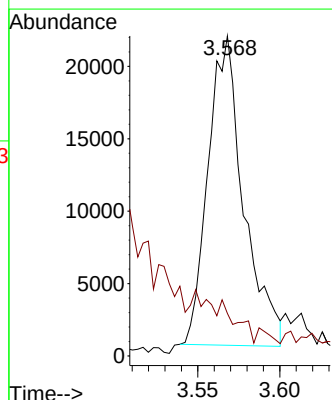
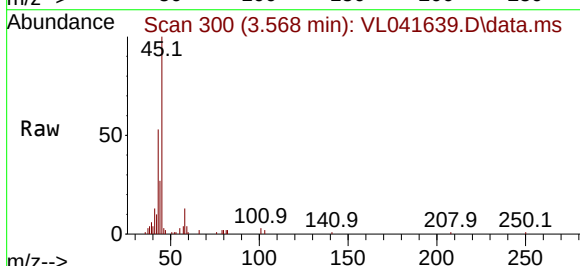
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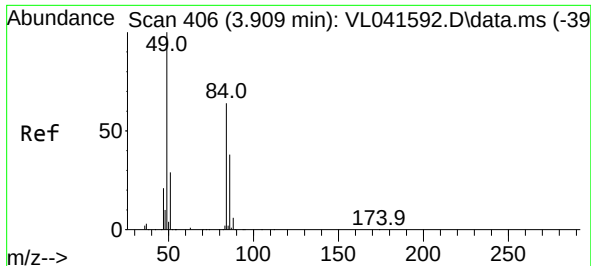
Tgt Ion: 45 Resp: 32051

Ion Ratio Lower Upper

45 100

58 0.0 2.1 3.1#





#20

Methylene Chloride

Concen: 0.378 ppbv

RT: 3.912 min Scan# 406

Delta R.T. 0.003 min

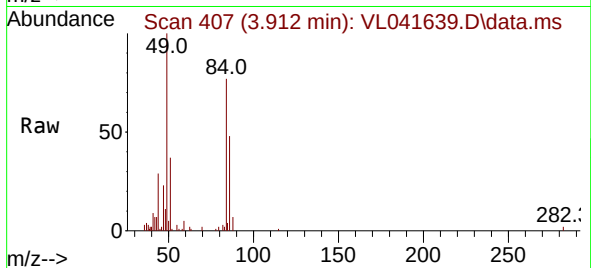
Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion: 84 Resp: 21466

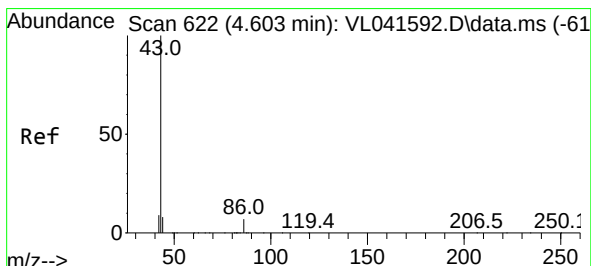
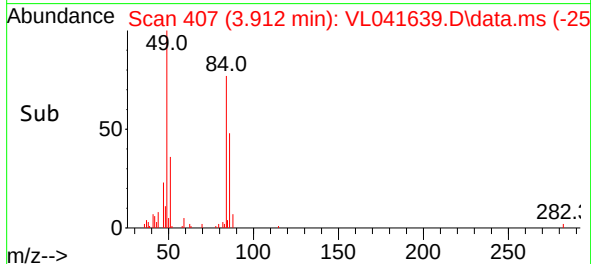
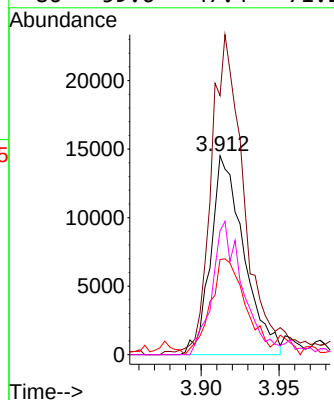
Ion Ratio Lower Upper

84 100

49 122.4 124.3 186.5#

51 43.4 36.3 54.5

86 59.6 47.4 71.2



#23

Vinyl Acetate

Concen: 0.829 ppbv

RT: 4.642 min Scan# 634

Delta R.T. 0.039 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Tgt Ion: 43 Resp: 68970

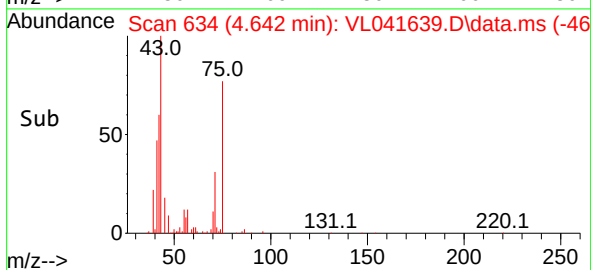
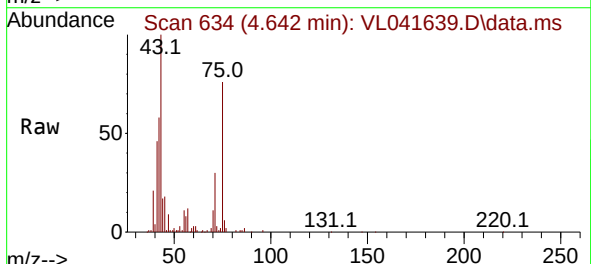
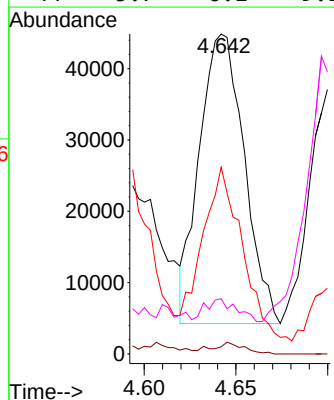
Ion Ratio Lower Upper

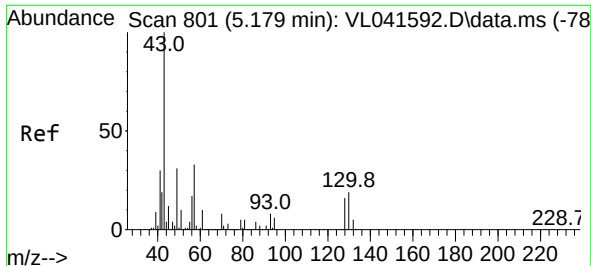
43 100

86 2.5 4.9 7.3#

42 58.7 8.0 12.0#

44 5.7 6.1 9.1#

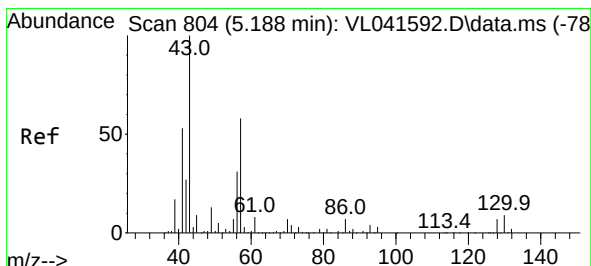
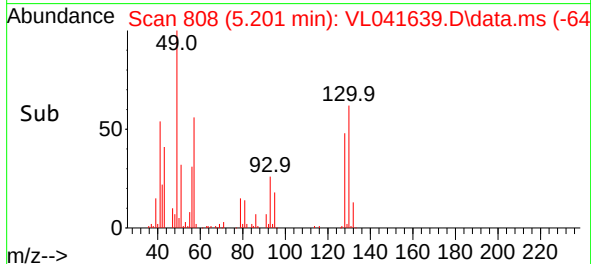
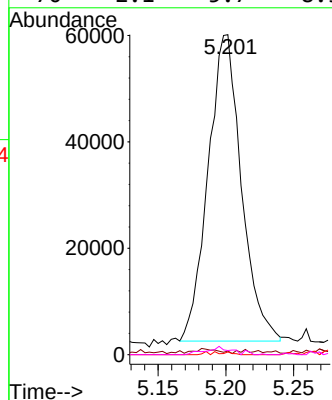
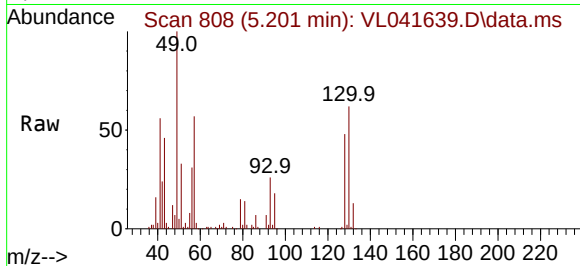




#25
Ethyl Acetate
Concen: 0.363 ppbv
RT: 5.201 min Scan# 801
Delta R.T. 0.023 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

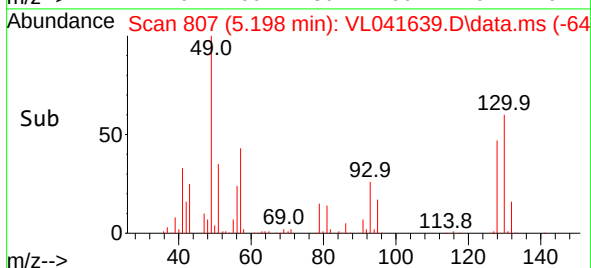
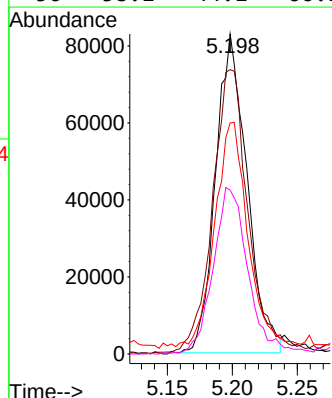
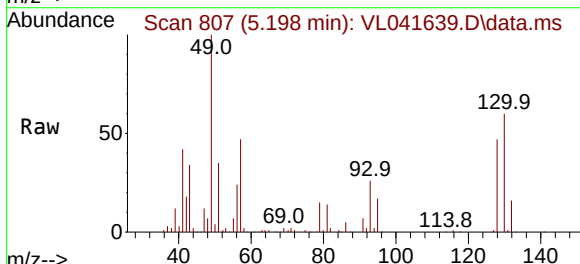
Instrument :
MSVOA_L
ClientSampleId :

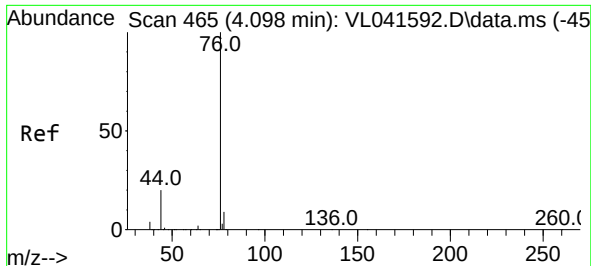
Tgt Ion: 43	Resp: 98418
Ion Ratio	Lower Upper
43 100	
45 1.5	8.2 12.2#
61 0.5	8.0 12.0#
70 2.1	5.7 8.5#



#26
Hexane
Concen: 1.227 ppbv
RT: 5.198 min Scan# 807
Delta R.T. 0.010 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

Tgt	Ion: 57	Resp:	138879
Ion	Ratio	Lower	Upper
57	100		
41	102.2	75.7	113.5
43	78.3	198.5	297.7#
56	58.1	44.1	66.1





#27

Carbon Disulfide

Concen: 1.669 ppbv

RT: 4.108 min Scan# 4

Delta R.T. 0.010 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Instrument :

MSVOA_L

ClientSampleId :

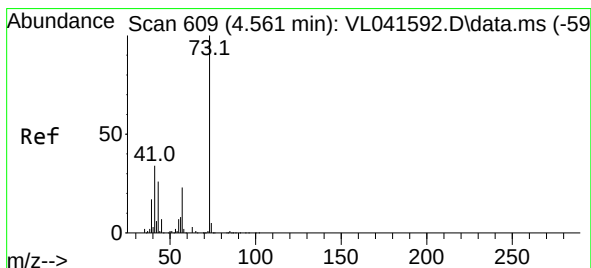
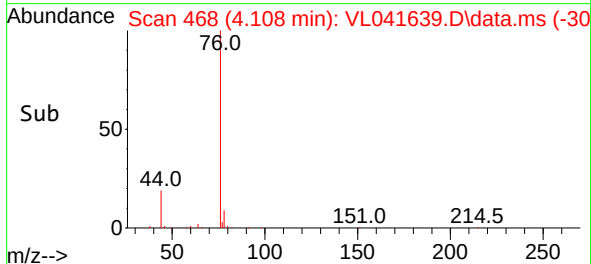
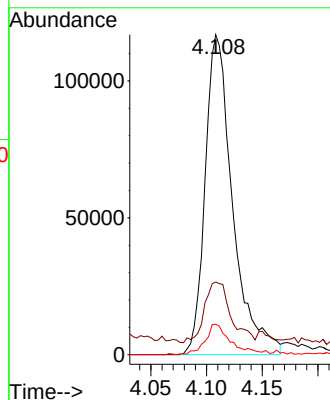
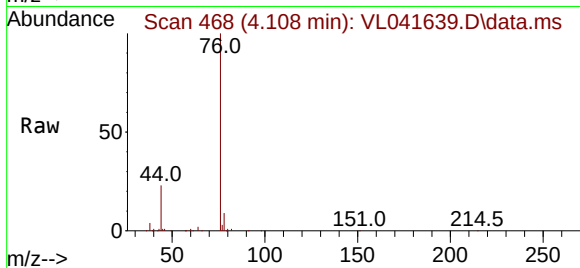
Tgt Ion: 76 Resp: 200762

Ion Ratio Lower Upper

76 100

44 25.3 15.8 23.8#

78 9.5 7.5 11.3



#28

Methyl tert-Butyl Ether

Concen: 1.241 ppbv

RT: 4.500 min Scan# 590

Delta R.T. -0.061 min

Lab File: VL041639.D

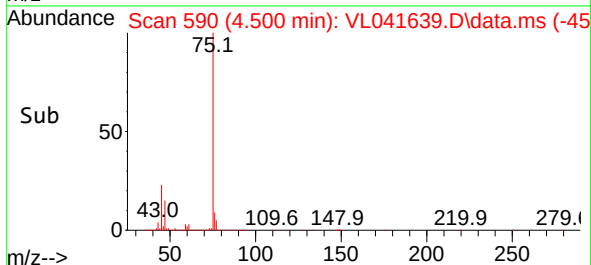
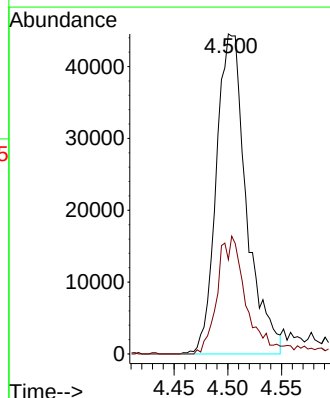
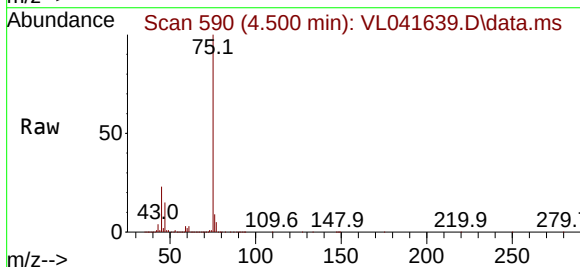
Acq: 10 Oct 2024 12:49

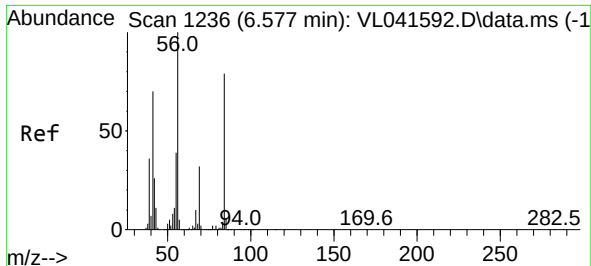
Tgt Ion: 73 Resp: 86622

Ion Ratio Lower Upper

73 100

57 37.5 19.3 28.9#



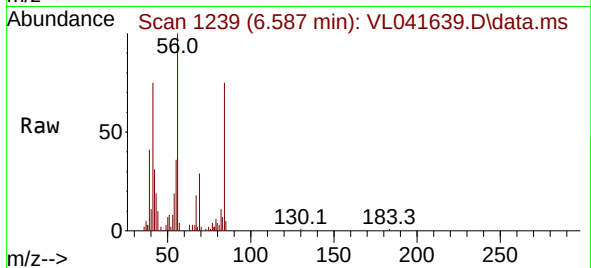


#30
Cyclohexane
Concen: 0.215 ppbv
RT: 6.587 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

Instrument :

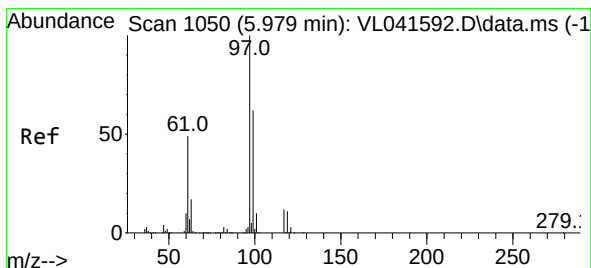
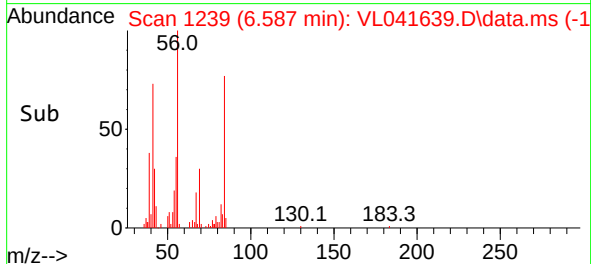
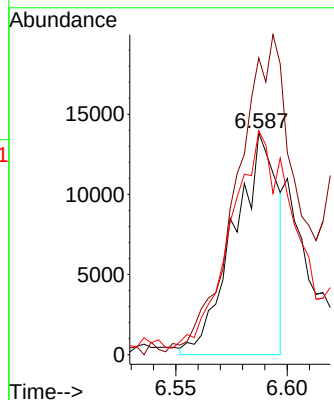
MSVOA_L

ClientSampleId :



Tgt Ion: 84 Resp: 18717

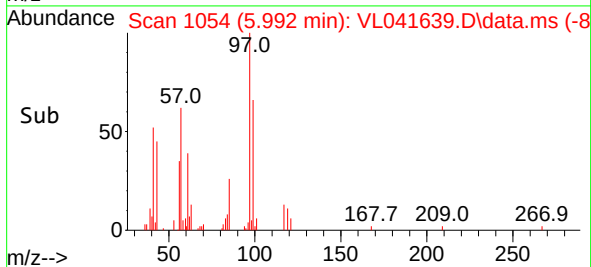
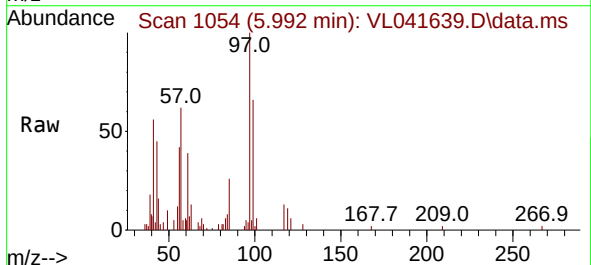
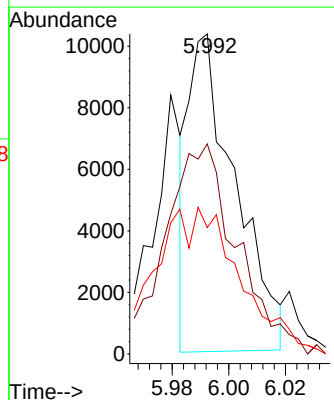
Ion	Ratio	Lower	Upper
84	100		
56	181.2	111.5	167.3#
41	178.2	70.9	106.3#

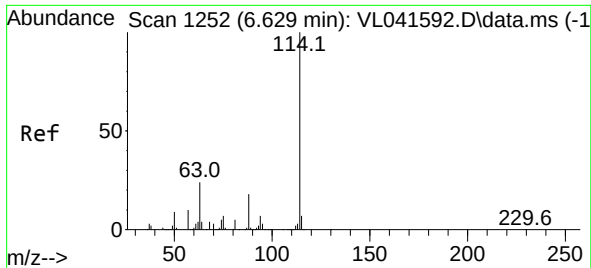


#32
1,1,1-Trichloroethane
Concen: 0.072 ppbv
RT: 5.992 min Scan# 1054
Delta R.T. 0.013 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

Tgt Ion: 97 Resp: 11894

Ion	Ratio	Lower	Upper
97	100		
99	102.5	51.0	76.4#
61	85.0	41.0	61.6#

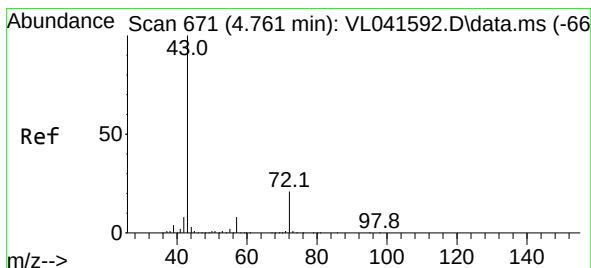
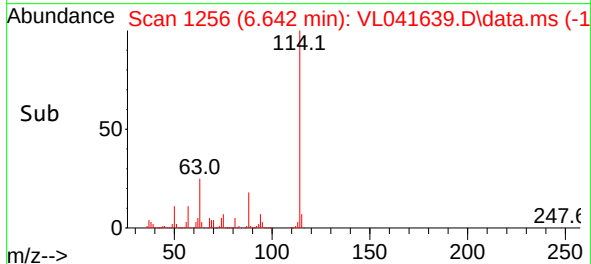
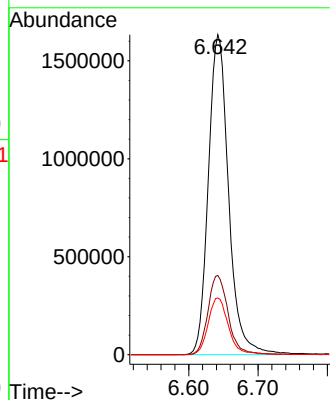
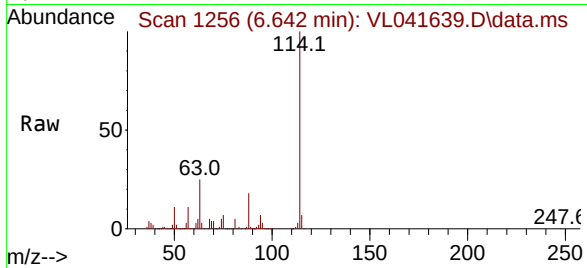




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.642 min Scan# 114
Delta R.T. 0.013 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

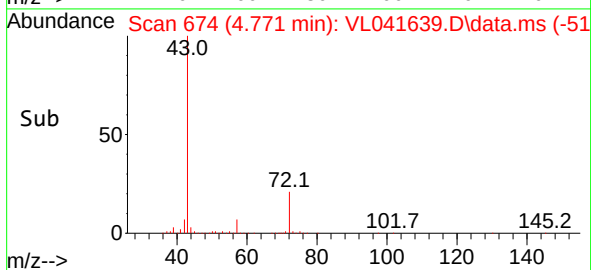
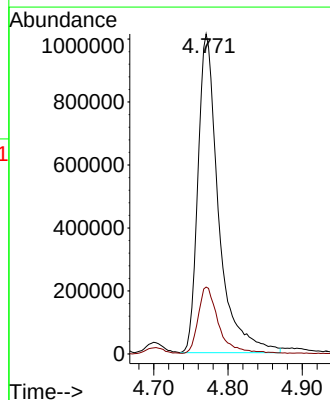
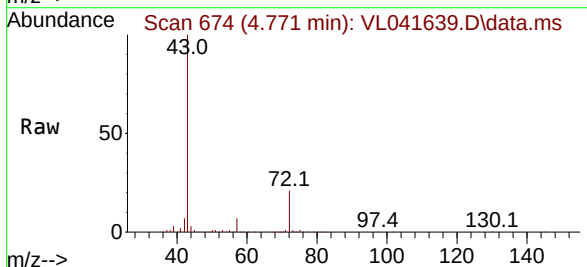
Instrument :
MSVOA_L
ClientSampleId :

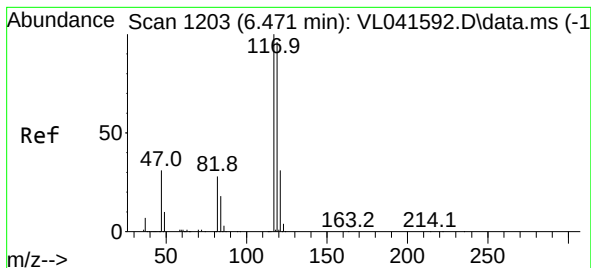
Tgt Ion:114 Resp: 3304761
Ion Ratio Lower Upper
114 100
63 25.0 20.2 30.2
88 17.9 14.2 21.4



#34
2-Butanone
Concen: 12.438 ppbv
RT: 4.771 min Scan# 674
Delta R.T. 0.010 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

Tgt Ion: 43 Resp: 1960022
Ion Ratio Lower Upper
43 100
72 21.5 16.8 25.2





#35

Carbon Tetrachloride

Concen: 1.108 ppbv

RT: 6.481 min Scan# 1167

Delta R.T. 0.010 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Instrument :

MSVOA_L

ClientSampleId :

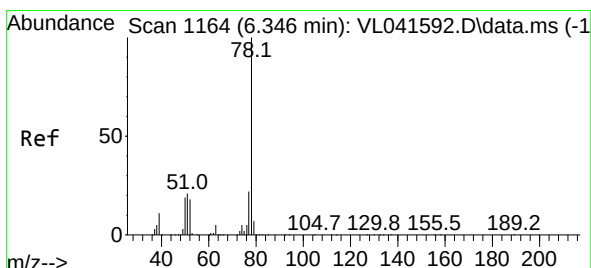
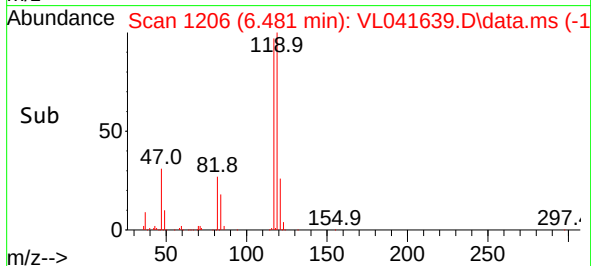
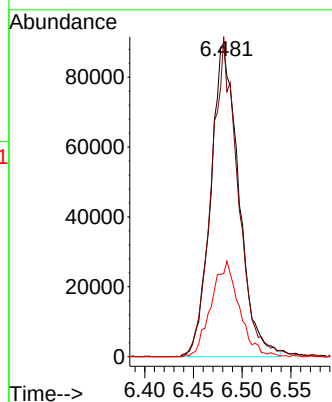
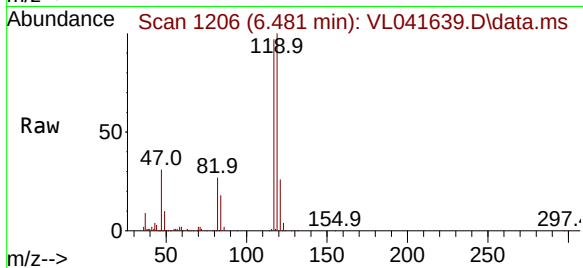
Tgt Ion:117 Resp: 179658

Ion Ratio Lower Upper

117 100

119 103.3 76.8 115.2

121 26.8 25.0 37.6



#36

Benzene

Concen: 0.283 ppbv

RT: 6.356 min Scan# 1167

Delta R.T. 0.010 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

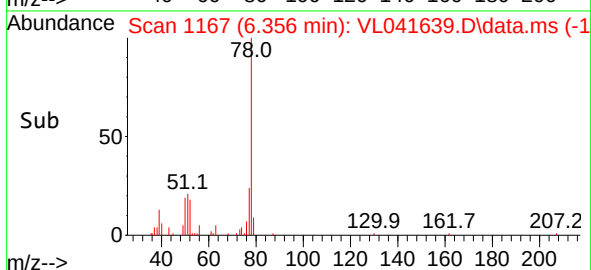
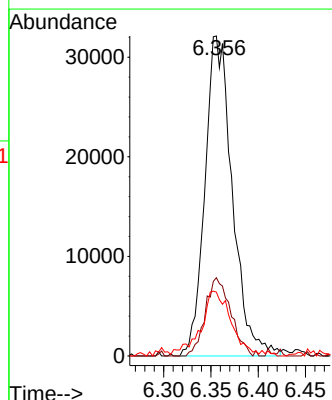
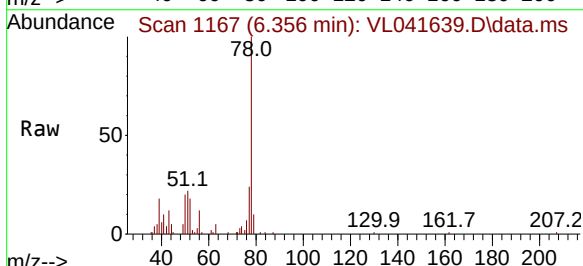
Tgt Ion: 78 Resp: 65006

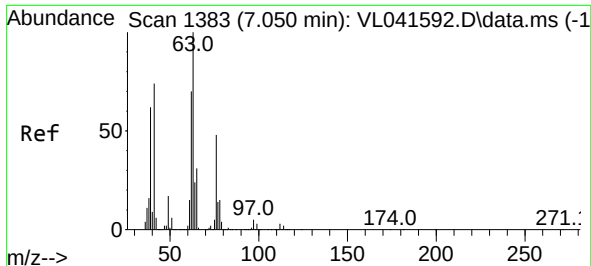
Ion Ratio Lower Upper

78 100

77 25.0 17.8 26.6

50 20.4 15.4 23.0





#39

1,2-Dichloropropane

Concen: 8.737 ppbv

RT: 6.642 min Scan# 11

Delta R.T. -0.408 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Instrument :

MSVOA_L

ClientSampleId :

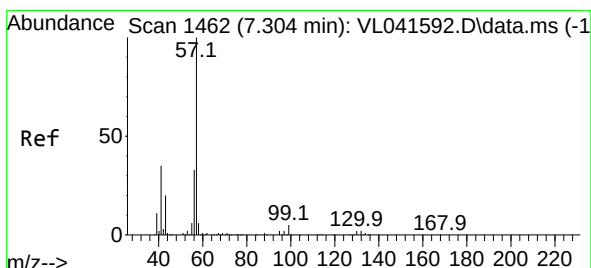
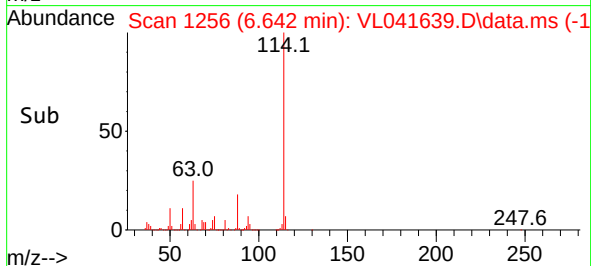
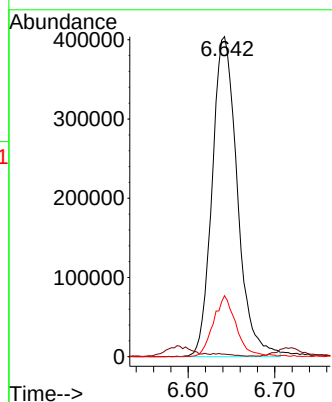
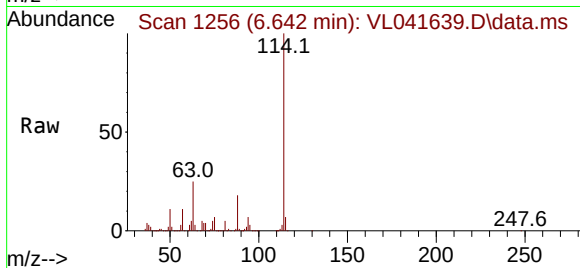
Tgt Ion: 63 Resp: 815812

Ion Ratio Lower Upper

63 100

41 0.0 59.5 89.3#

62 19.0 56.2 84.2#



#44

2,2,4-Trimethylpentane

Concen: 0.127 ppbv

RT: 7.317 min Scan# 1466

Delta R.T. 0.013 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

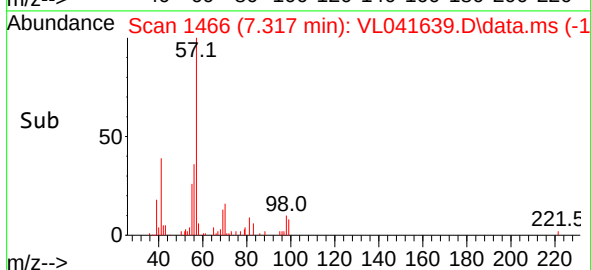
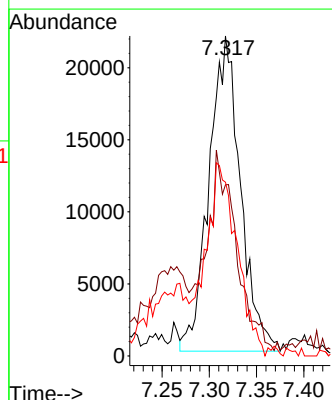
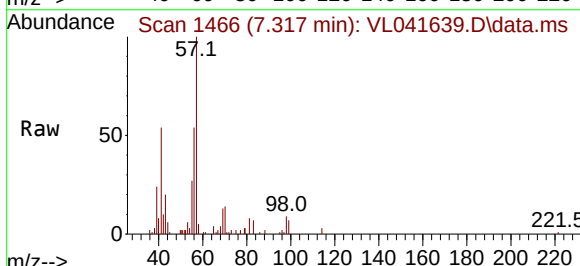
Tgt Ion: 57 Resp: 50556

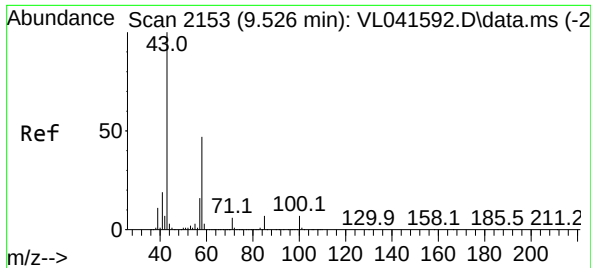
Ion Ratio Lower Upper

57 100

41 59.5 27.0 40.6#

56 65.4 25.5 38.3#

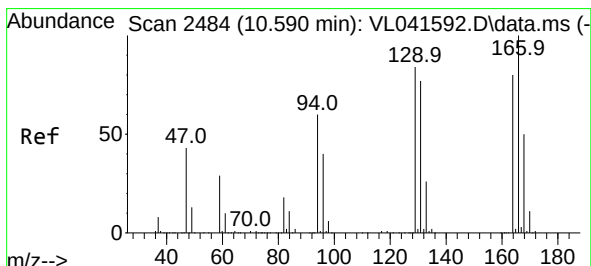
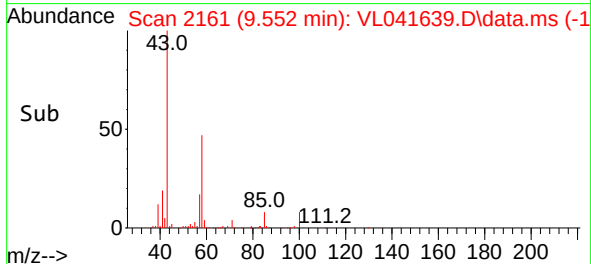
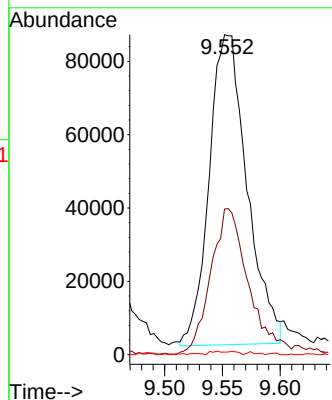
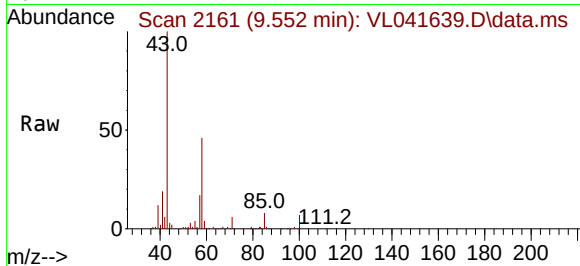




#51
2-Hexanone
Concen: 1.048 ppbv
RT: 9.552 min Scan# 2153
Delta R.T. 0.026 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

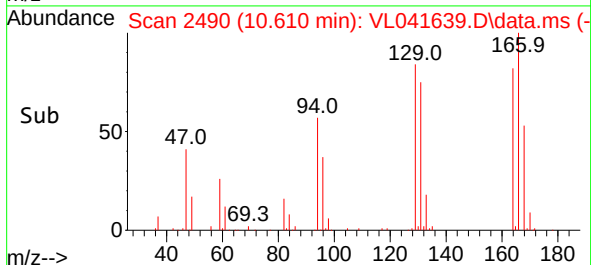
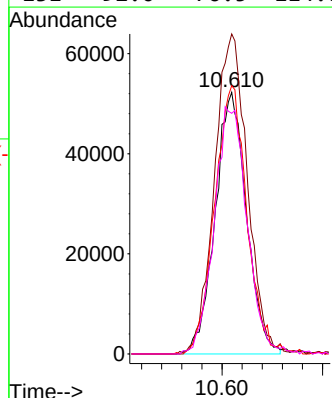
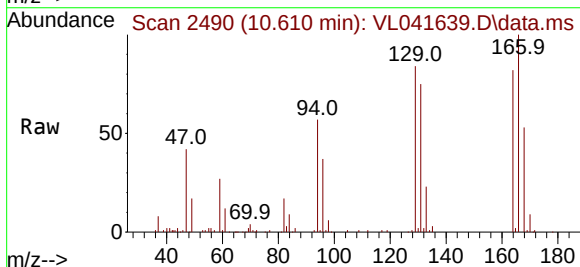
Instrument :
MSVOA_L
ClientSampleId :

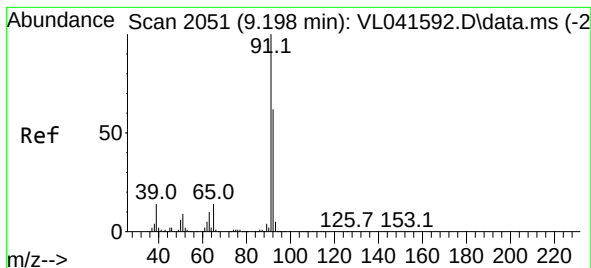
Tgt Ion: 43 Resp: 192928
Ion Ratio Lower Upper
43 100
58 47.6 37.2 55.8
98 1.2 0.5 0.7#



#52
Tetrachloroethene
Concen: 1.361 ppbv
RT: 10.610 min Scan# 2490
Delta R.T. 0.019 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

Tgt Ion: 164 Resp: 113081
Ion Ratio Lower Upper
164 100
166 121.3 99.4 149.2
129 102.6 83.5 125.3
131 92.0 76.5 114.7





#53

Toluene

Concen: 1.664 ppbv

RT: 9.214 min Scan# 2051

Delta R.T. 0.016 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Instrument :

MSVOA_L

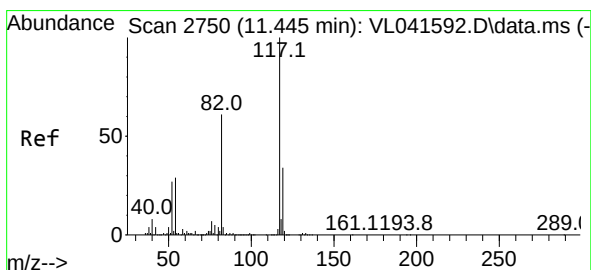
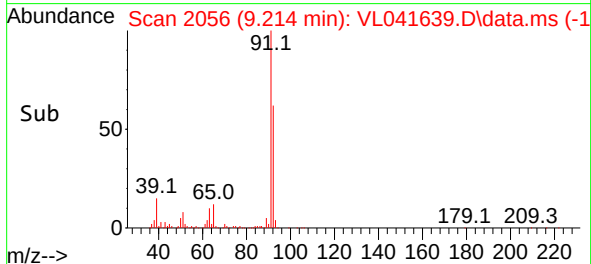
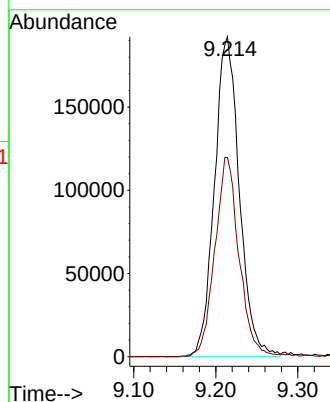
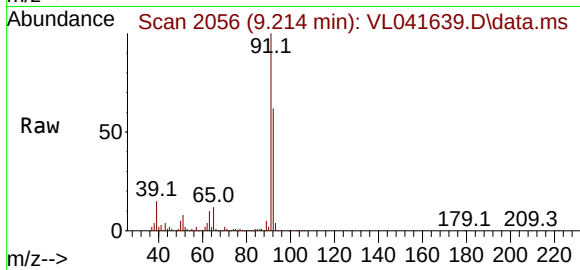
ClientSampleId :

Tgt Ion: 91 Resp: 405313

Ion Ratio Lower Upper

91 100

92 61.0 48.9 73.3



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.462 min Scan# 2755

Delta R.T. 0.016 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

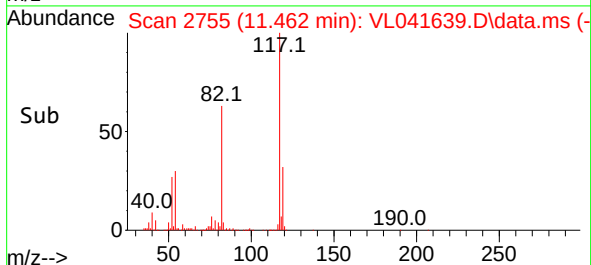
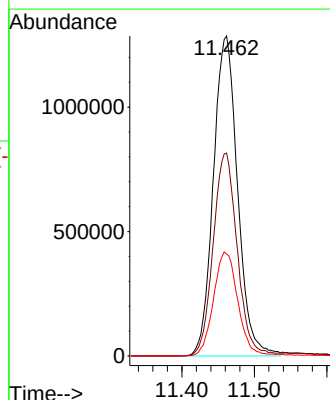
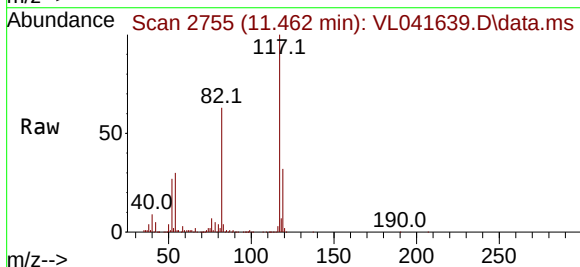
Tgt Ion: 117 Resp: 2985899

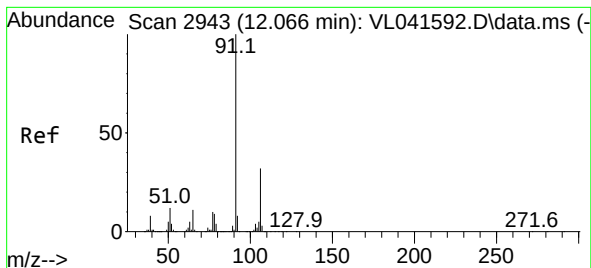
Ion Ratio Lower Upper

117 100

82 64.7 49.4 74.2

119 33.2 24.4 36.6





#58

Ethyl Benzene

Concen: 0.069 ppbv

RT: 12.082 min Scan# 2943

Delta R.T. 0.016 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Instrument :

MSVOA_L

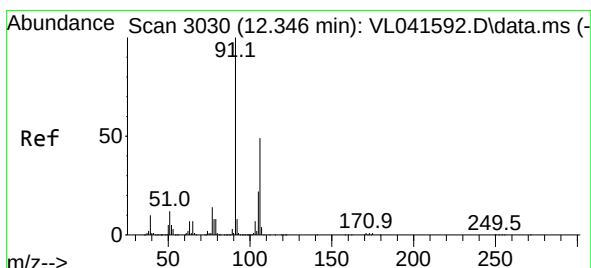
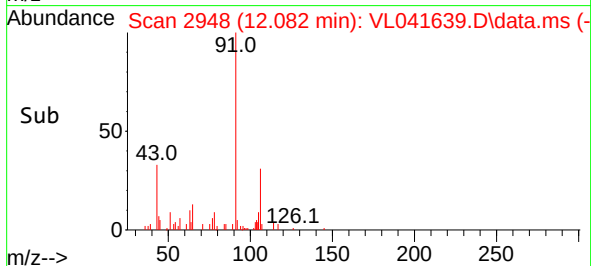
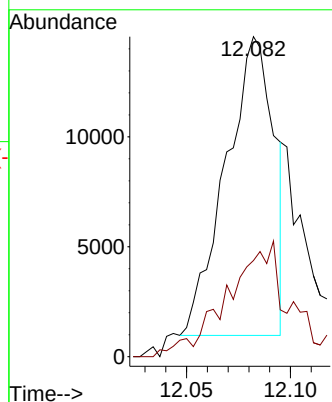
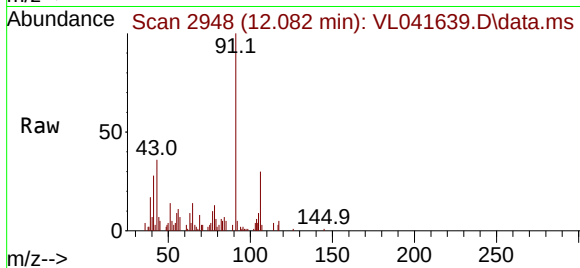
ClientSampleId :

Tgt Ion: 91 Resp: 21934

Ion Ratio Lower Upper

91 100

106 26.7 25.8 38.6



#59

m/p-Xylene

Concen: 0.450 ppbv

RT: 12.339 min Scan# 3028

Delta R.T. -0.006 min

Lab File: VL041639.D

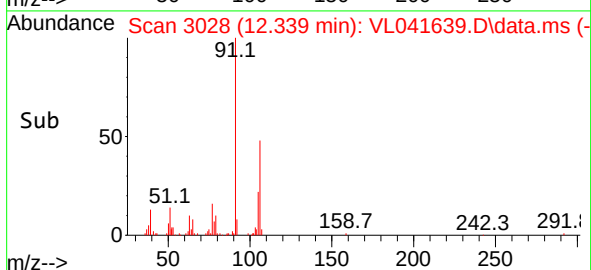
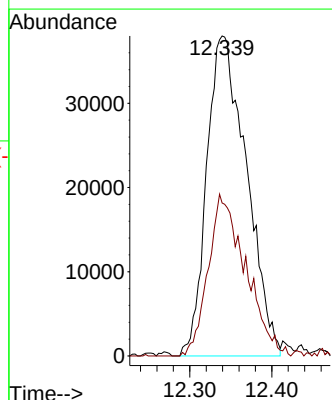
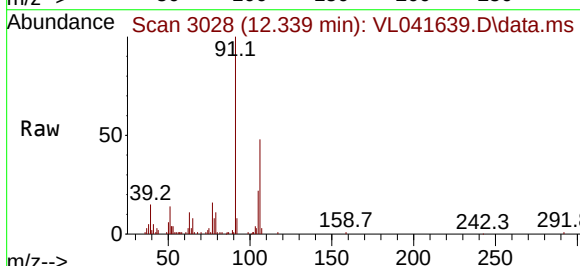
Acq: 10 Oct 2024 12:49

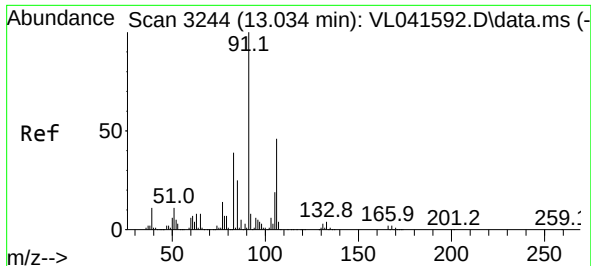
Tgt Ion: 91 Resp: 128080

Ion Ratio Lower Upper

91 100

106 47.4 36.8 55.2

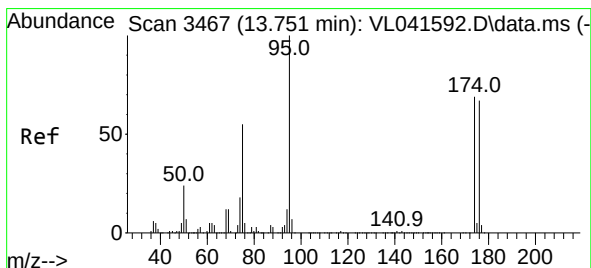
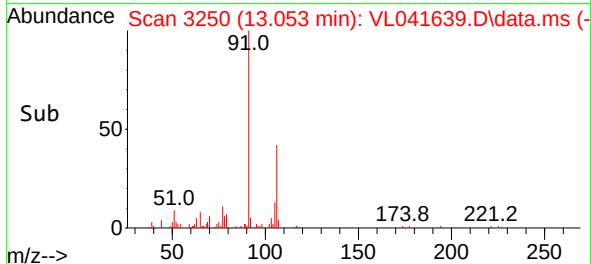
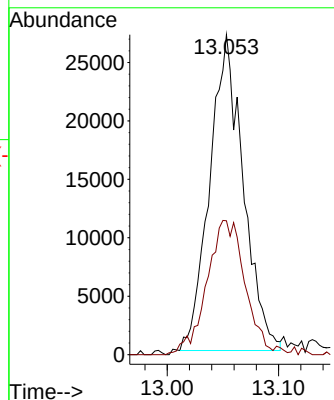
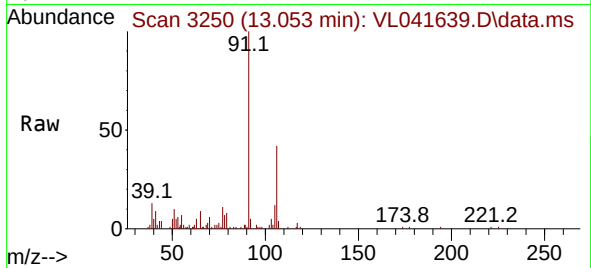




#60
o-Xylene
Concen: 0.207 ppbv
RT: 13.053 min Scan# 31
Delta R.T. 0.019 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

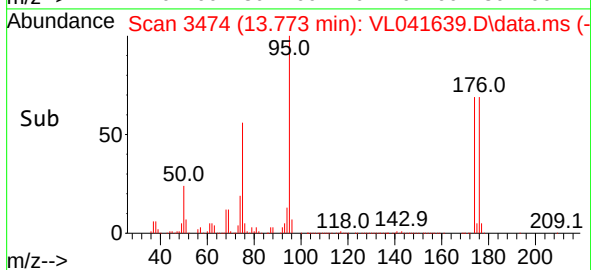
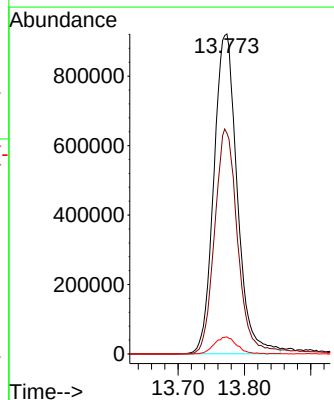
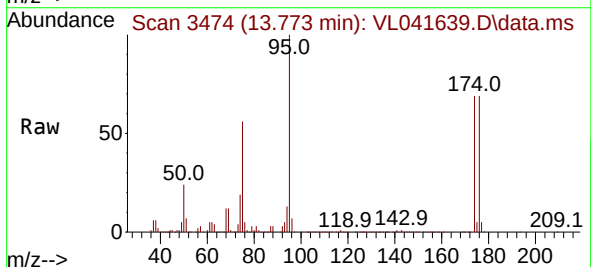
Instrument :
MSVOA_L
ClientSampleId :

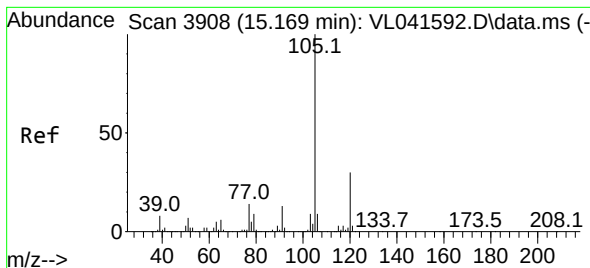
Tgt Ion: 91 Resp: 56557
Ion Ratio Lower Upper
91 100
106 49.4 23.1 69.3



#68
1-Bromo-4-Fluorobenzene
Concen: 10.272 ppbv
RT: 13.773 min Scan# 3474
Delta R.T. 0.023 min
Lab File: VL041639.D
Acq: 10 Oct 2024 12:49

Tgt Ion: 95 Resp: 2257858
Ion Ratio Lower Upper
95 100
174 71.0 55.8 83.8
175 5.2 4.1 6.1





#72

4-Ethyltoluene

Concen: 0.046 ppbv

RT: 15.188 min Scan# 3908

Delta R.T. 0.019 min

Lab File: VL041639.D

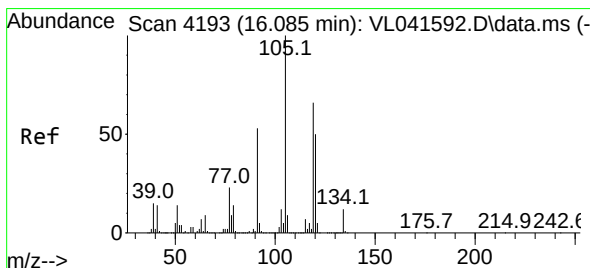
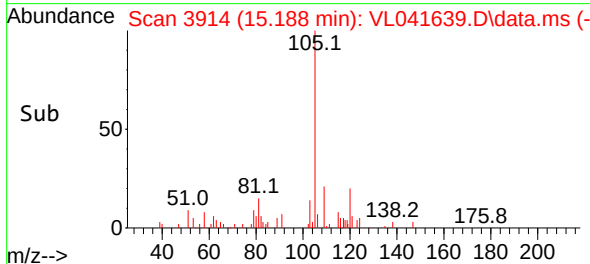
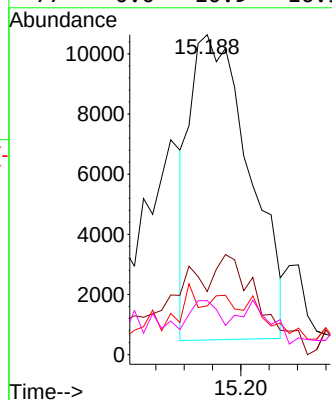
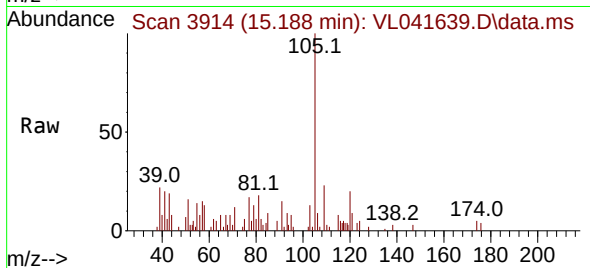
Acq: 10 Oct 2024 12:49

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:	105	Resp:	14680
Ion	Ratio	Lower	Upper
105	100		
120	53.5	24.1	36.1#
91	44.3	10.2	15.2#
77	0.0	10.9	16.3#



#74

1,2,4-Trimethylbenzene

Concen: 0.105 ppbv

RT: 16.111 min Scan# 4201

Delta R.T. 0.026 min

Lab File: VL041639.D

Acq: 10 Oct 2024 12:49

Tgt Ion:	105	Resp:	34608
Ion	Ratio	Lower	Upper
105	100		
120	41.0	39.9	59.9
91	10.2	42.6	63.8#
77	10.1	18.2	27.2#

