

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL102522\
 Data File : VL039794.D
 Acq On : 25 Oct 2022 19:13
 Operator : SY/AP
 Sample : N5227-13
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

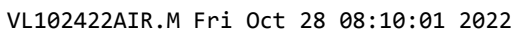
Instrument :
 MSVOA_L
 ClientSampleId :
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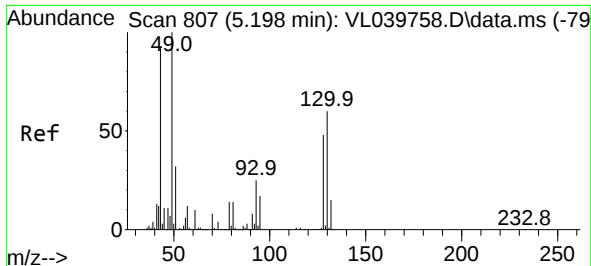
Quant Time: Oct 28 08:09:52 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL102422AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Mon Oct 24 20:00:55 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	5.201	49	844617	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.658	114	2239596	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.468	117	1931848	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.773	95	1351371	9.833	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.300%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.748	85	18976	0.215	ppbv	89
3) Chlorodifluoromethane	2.693	51	387445	3.819	ppbv #	63
4) Chloromethane	2.832	50	27268	0.429	ppbv	100
6) Bromomethane	3.137	94	629	0.033	ppbv #	26
9) Propene	2.713	41	623057	14.293	ppbv	91
10) Heptane	7.584	43	38232	0.366	ppbv #	84
11) Trichlorofluoromethane	3.581	101	28133	0.228	ppbv	96
12) 1,1,2-Trichlorotrifluo...	3.835	101	14458	0.151	ppbv	98
13) Ethanol	3.259	45	17259	5.513	ppbv #	37
15) Acetone	3.488	43	1146383	11.363	ppbv	100
16) 1,3-Butadiene	2.986	39	285938	5.735	ppbv #	41
19) Isopropyl Alcohol	3.600	45	15823	0.335	ppbv #	89
20) Methylene Chloride	3.951	84	261093	6.803	ppbv	97
21) Allyl Chloride	4.009	41	3376	0.052	ppbv #	1
23) Vinyl Acetate	4.632	43	57705	1.484	ppbv #	64
25) Ethyl Acetate	5.224	43	184375	0.935	ppbv #	79
26) Hexane	5.227	57	251836	3.071	ppbv #	37
27) Carbon Disulfide	4.144	76	73022	0.750	ppbv #	84
30) Cyclohexane	6.610	84	14727	0.219	ppbv #	67
34) 2-Butanone	4.809	43	149763	1.421	ppbv	92
36) Benzene	6.378	78	170829	0.990	ppbv	96
39) 1,2-Dichloropropane	6.658	63	538902	8.110	ppbv #	25
53) Toluene	9.227	91	318110	1.760	ppbv	99
59) m/p-Xylene	12.375	91	32035	0.161	ppbv #	31
60) o-Xylene	13.063	91	68815	0.369	ppbv	99
61) Styrene	12.902	104	3005	0.031	ppbv #	1
73) 1,3,5-Trimethylbenzene	15.355	105	6730	0.035	ppbv #	75
74) 1,2,4-Trimethylbenzene	16.111	105	87391	0.402	ppbv #	70
75) 1,3-Dichlorobenzene	16.336	146	4766	0.036	ppbv #	1
79) Naphthalene	21.381	128	5209	0.039	ppbv #	75
80) Naphthalene,2-methyl-	24.368	142	4018	0.089	ppbv #	74

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

Quant Time: Oct 28 08:09:52 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL102422AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Mon Oct 24 20:00:55 2022
Response via : Initial Calibration

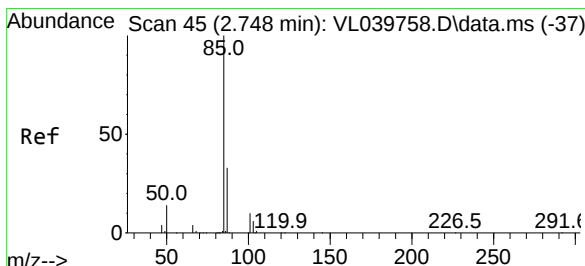
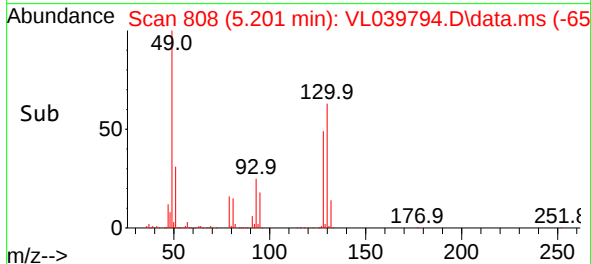
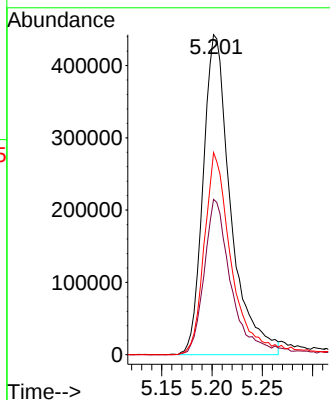
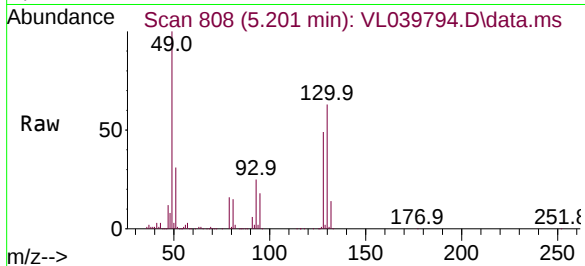




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.201 min Scan# 80
Delta R.T. 0.003 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

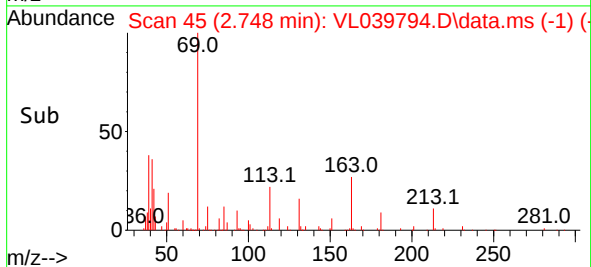
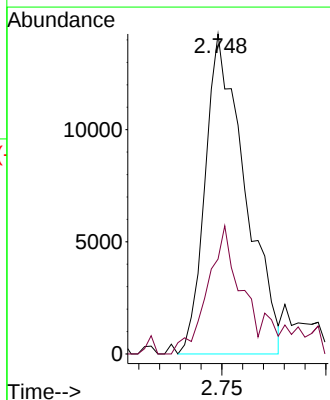
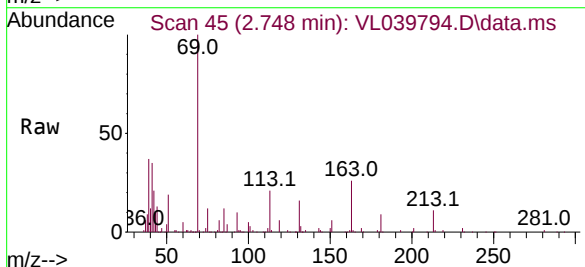
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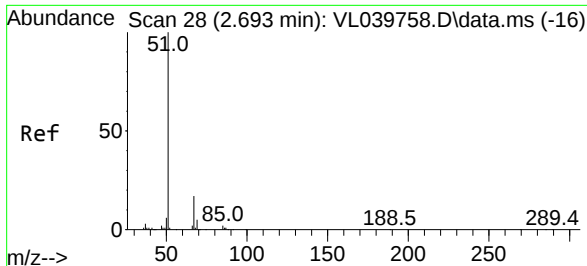
Tgt Ion: 49 Resp: 844617
Ion Ratio Lower Upper
49 100
128 50.5 24.6 74.0
130 64.5 31.8 95.3



#2
Dichlorodifluoromethane
Concen: 0.215 ppbv
RT: 2.748 min Scan# 45
Delta R.T. 0.000 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 85 Resp: 18976
Ion Ratio Lower Upper
85 100
87 26.2 26.1 39.1

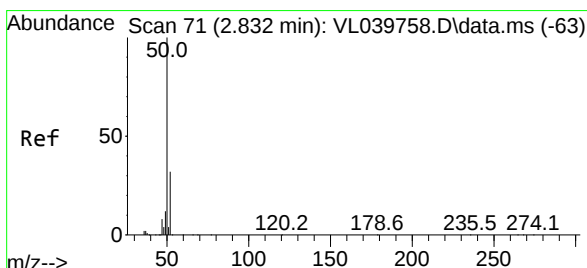
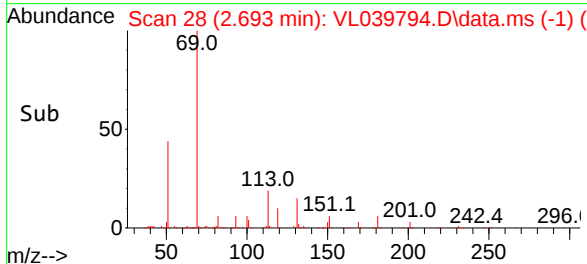
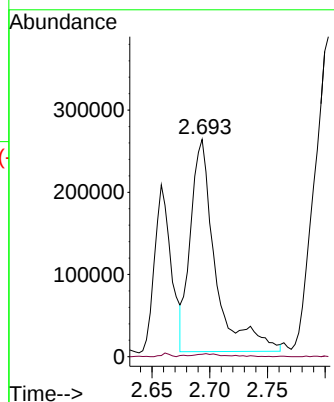
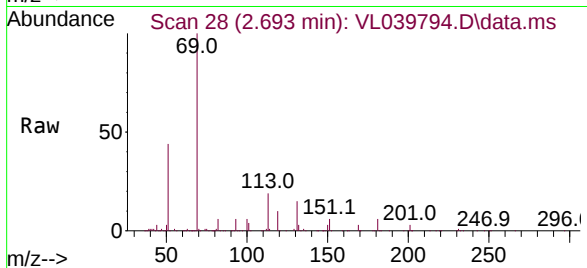




#3
Chlorodifluoromethane
Concen: 3.819 ppbv
RT: 2.693 min Scan# 28
Delta R.T. 0.000 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

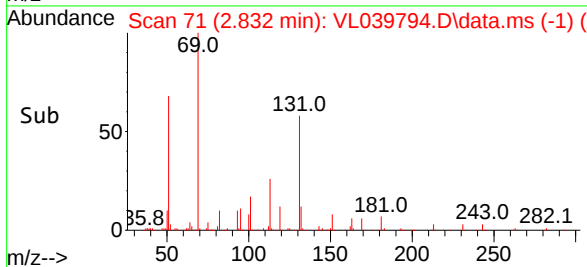
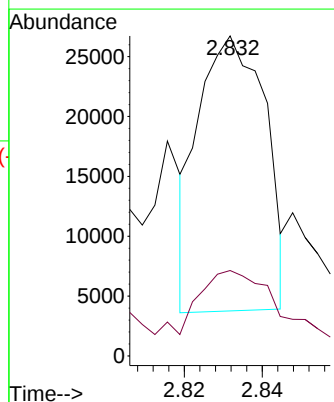
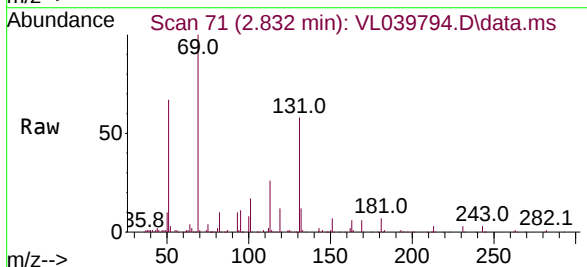
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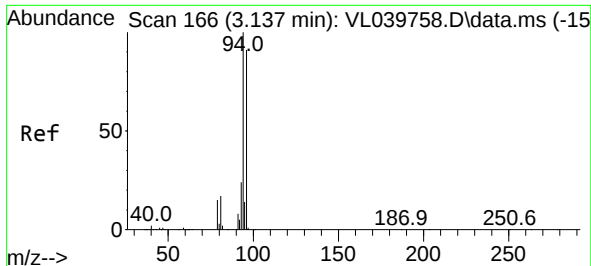
Tgt Ion: 51 Resp: 387445
Ion Ratio Lower Upper
51 100
67 1.5 14.2 21.2#



#4
Chloromethane
Concen: 0.429 ppbv
RT: 2.832 min Scan# 71
Delta R.T. 0.000 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 50 Resp: 27268
Ion Ratio Lower Upper
50 100
52 32.4 25.9 38.9

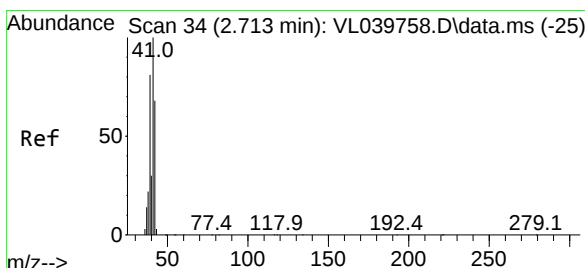
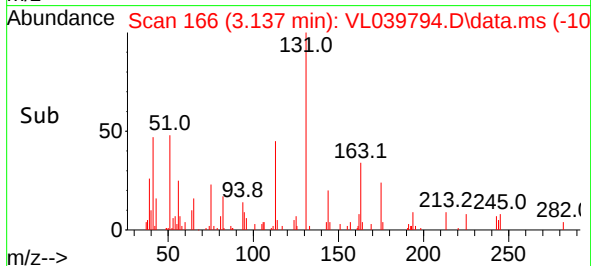
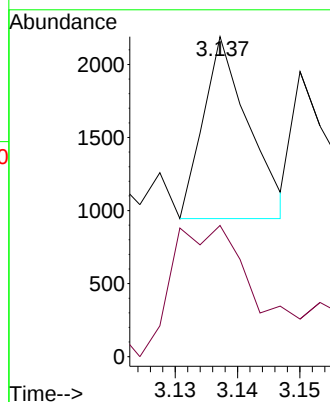
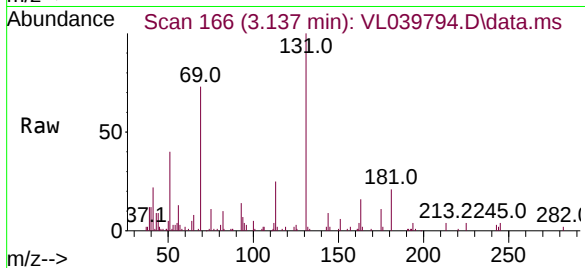




#6
Bromomethane
Concen: 0.033 ppbv
RT: 3.137 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

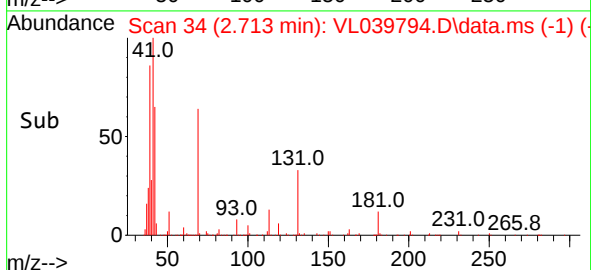
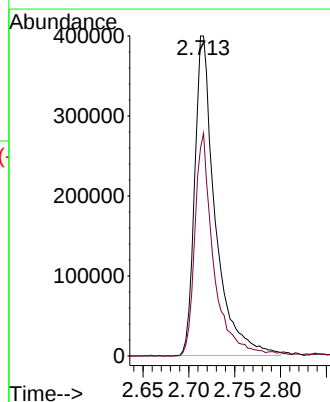
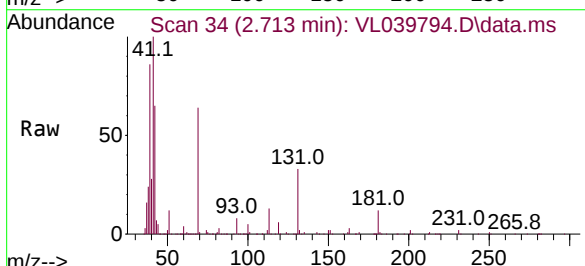
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MSVOA_L
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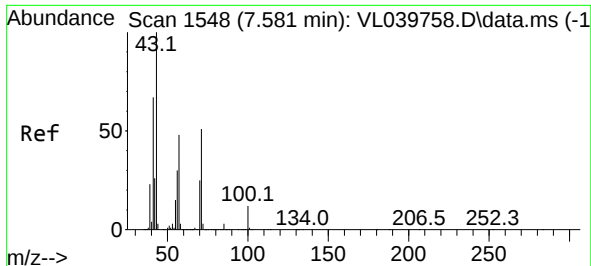
Tgt Ion: 94 Resp: 629
Ion Ratio Lower Upper
94 100
96 21.3 73.0 109.6#



#9
Propene
Concen: 14.293 ppbv
RT: 2.713 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 41 Resp: 623057
Ion Ratio Lower Upper
41 100
42 64.6 58.0 87.0

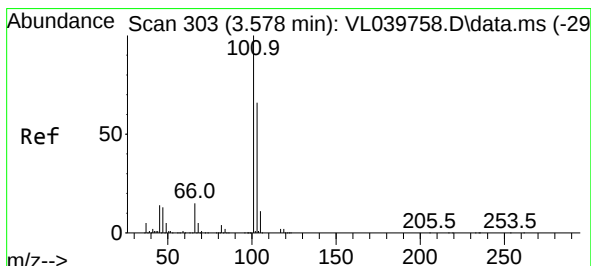
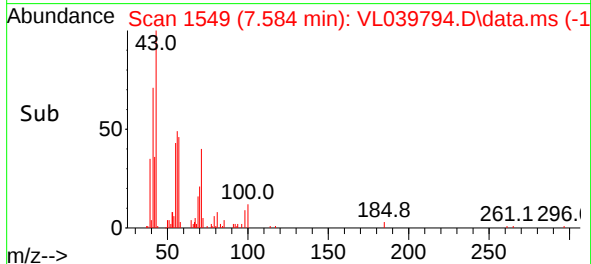
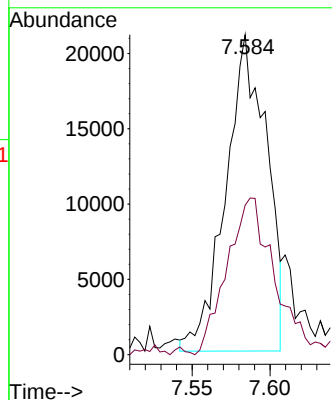
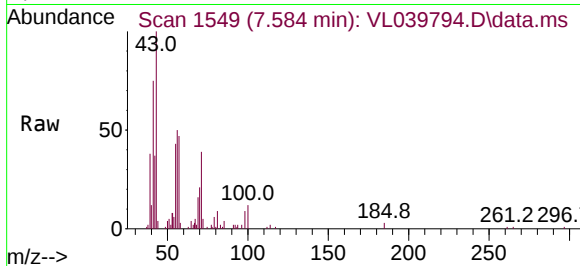




#10
 Heptane
 Concen: 0.366 ppbv
 RT: 7.584 min Scan# 11
 Delta R.T. 0.003 min
 Lab File: VL039794.D
 Acq: 25 Oct 2022 19:13

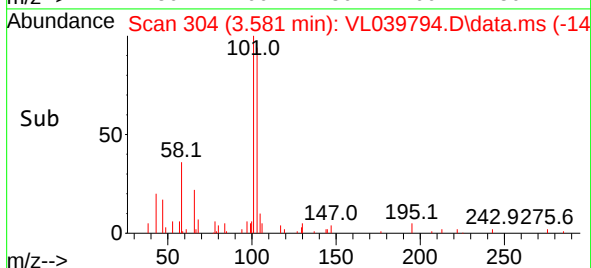
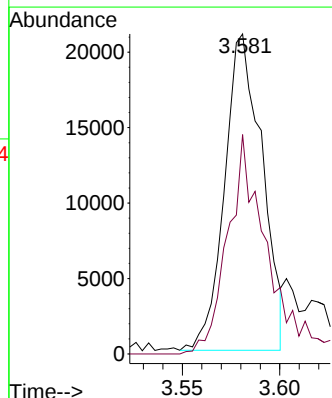
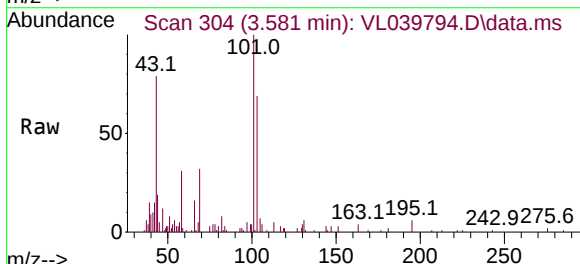
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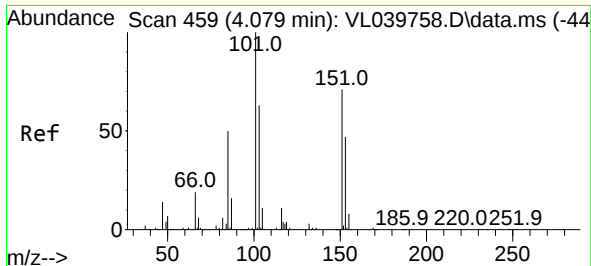
Tgt Ion: 43 Resp: 38232
 Ion Ratio Lower Upper
 43 100
 57 61.2 40.0 60.0#



#11
 Trichlorofluoromethane
 Concen: 0.228 ppbv
 RT: 3.581 min Scan# 304
 Delta R.T. 0.003 min
 Lab File: VL039794.D
 Acq: 25 Oct 2022 19:13

Tgt Ion: 101 Resp: 28133
 Ion Ratio Lower Upper
 101 100
 103 69.3 52.7 79.1

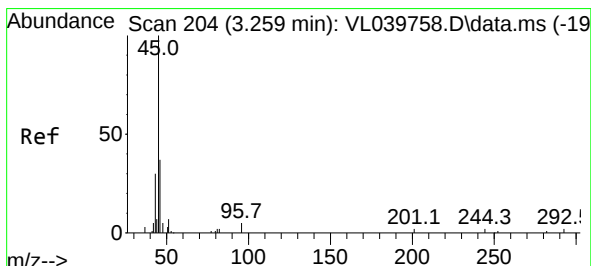
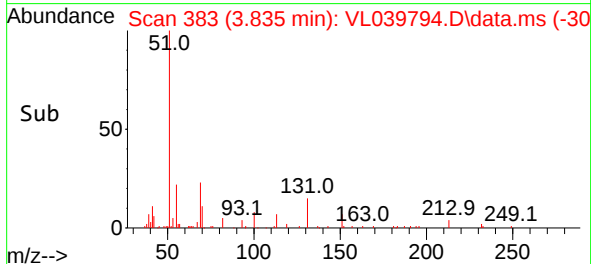
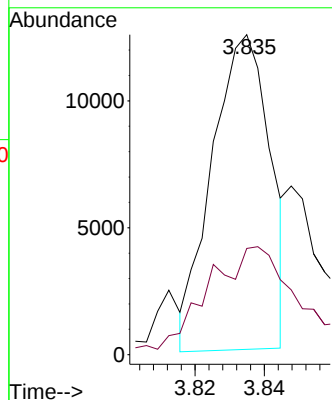
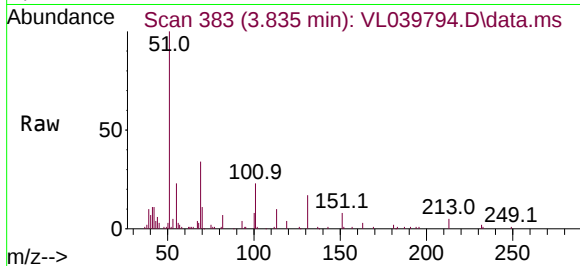




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.151 ppbv
RT: 3.835 min Scan# 383
Delta R.T. -0.244 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

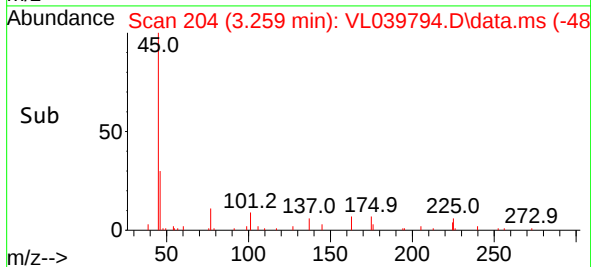
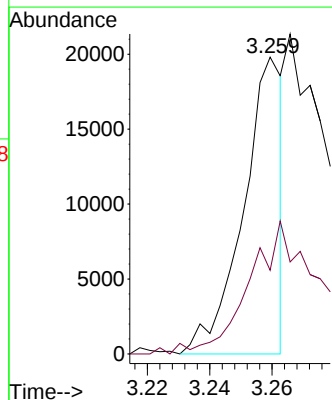
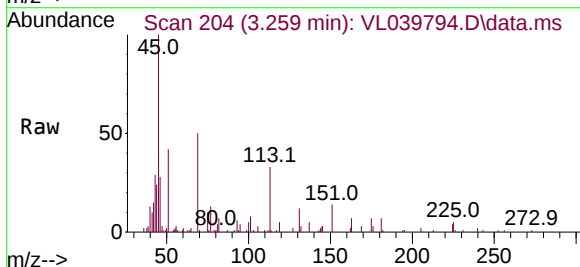
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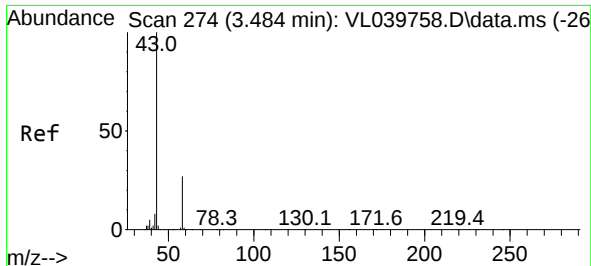
Tgt Ion:101 Resp: 14458
Ion Ratio Lower Upper
101 100
151 68.9 56.6 84.8



#13
Ethanol
Concen: 5.513 ppbv
RT: 3.259 min Scan# 204
Delta R.T. 0.000 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 45 Resp: 17259
Ion Ratio Lower Upper
45 100
46 0.0 15.3 61.3#

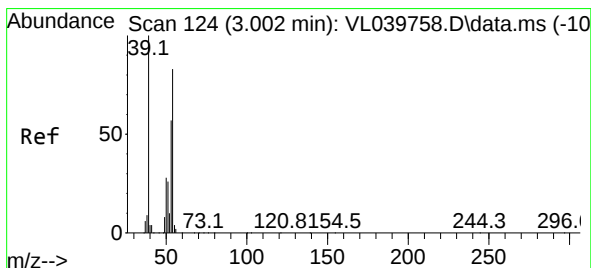
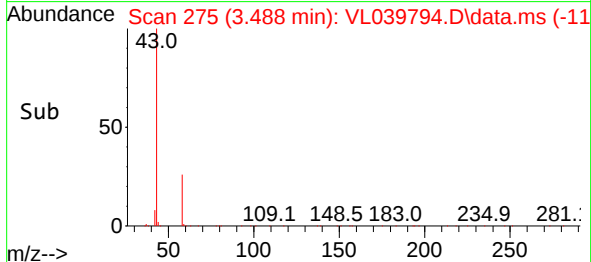
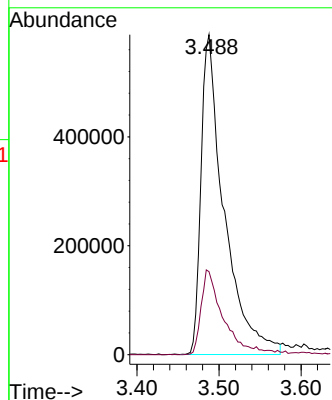
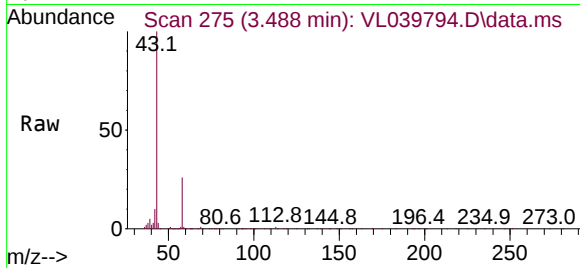




#15
Acetone
Concen: 11.363 ppbv
RT: 3.488 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

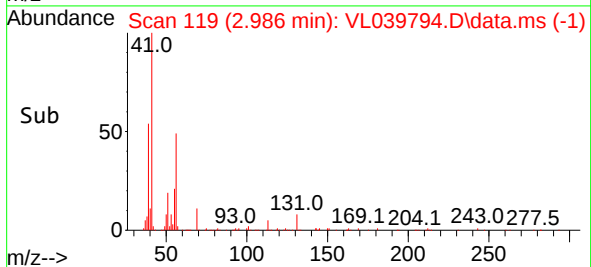
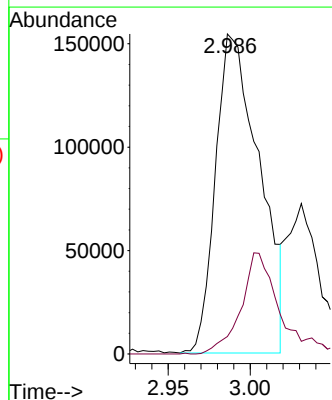
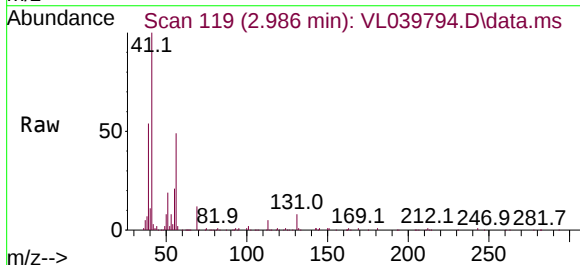
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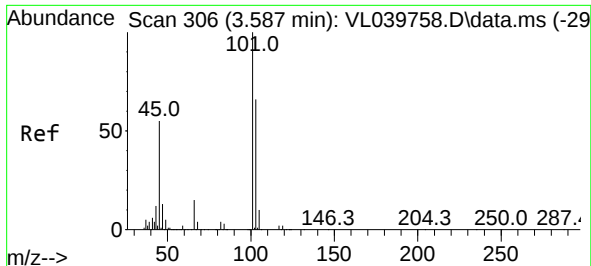
Tgt Ion: 43 Resp: 1146383
Ion Ratio Lower Upper
43 100
58 26.0 20.7 31.1



#16
1,3-Butadiene
Concen: 5.735 ppbv
RT: 2.986 min Scan# 119
Delta R.T. -0.016 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 39 Resp: 285938
Ion Ratio Lower Upper
39 100
54 28.2 64.6 97.0#

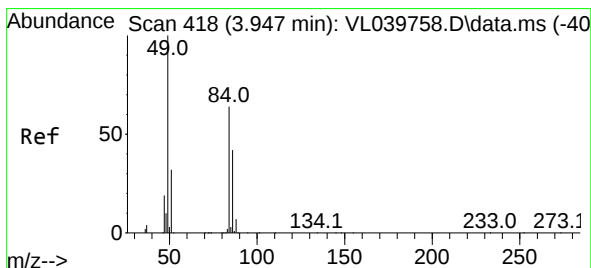
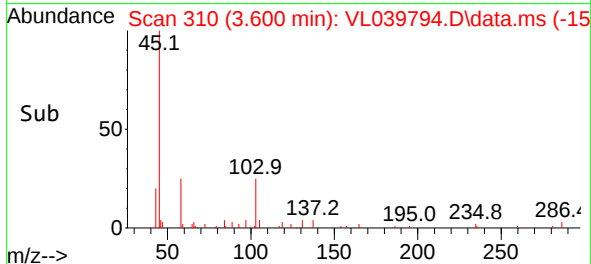
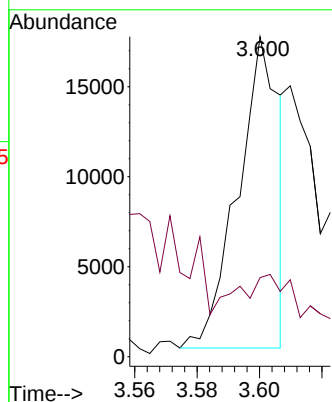
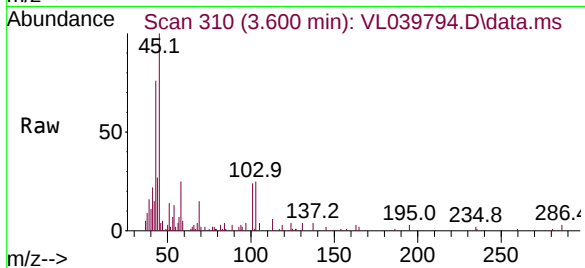




#19
Isopropyl Alcohol
Concen: 0.335 ppbv
RT: 3.600 min Scan# 310
Delta R.T. 0.013 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

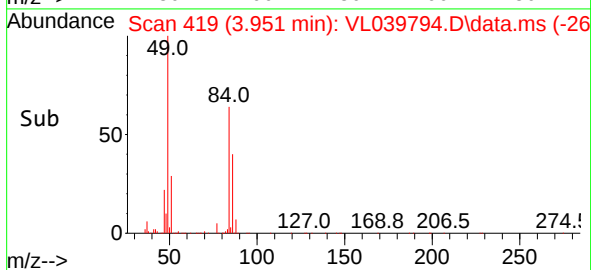
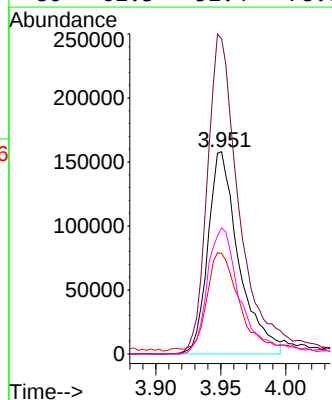
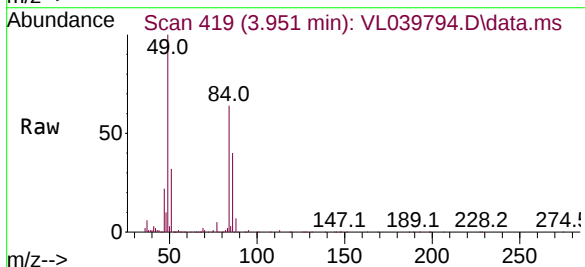
Instrument :
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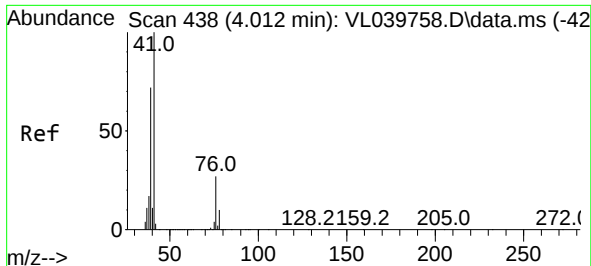
Tgt Ion: 45 Resp: 15823
Ion Ratio Lower Upper
45 100
58 0.0 2.8 4.2#



#20
Methylene Chloride
Concen: 6.803 ppbv
RT: 3.951 min Scan# 419
Delta R.T. 0.003 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 84 Resp: 261093
Ion Ratio Lower Upper
84 100
49 155.1 126.0 189.0
51 47.1 40.9 61.3
86 62.3 52.4 78.6

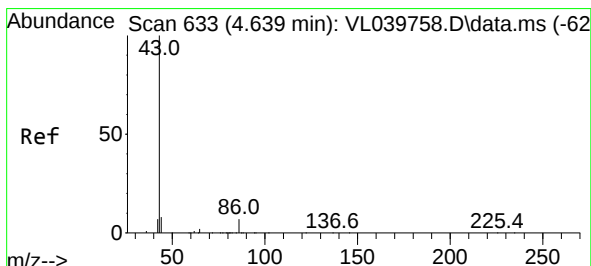
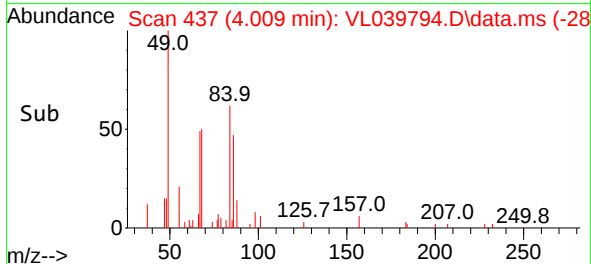
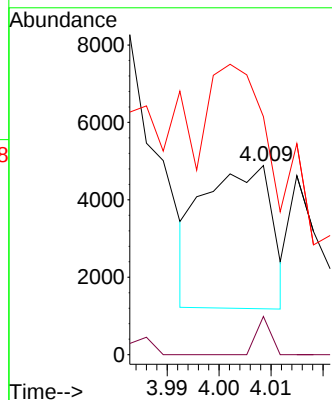
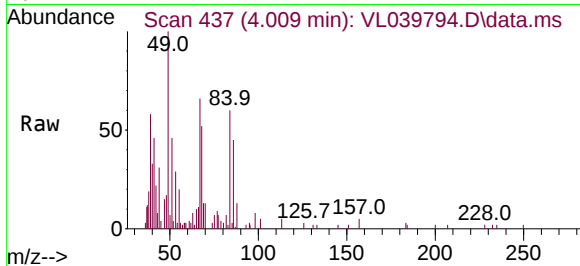




#21
 Allyl Chloride
 Concen: 0.052 ppbv
 RT: 4.009 min Scan# 41
 Delta R.T. -0.003 min
 Lab File: VL039794.D
 Acq: 25 Oct 2022 19:13

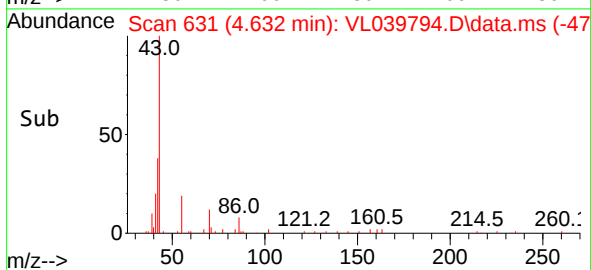
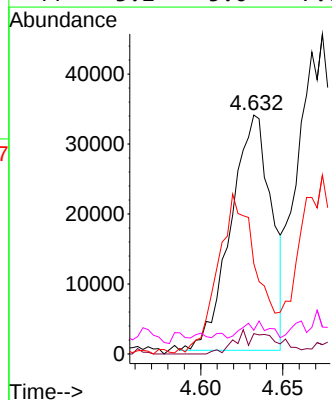
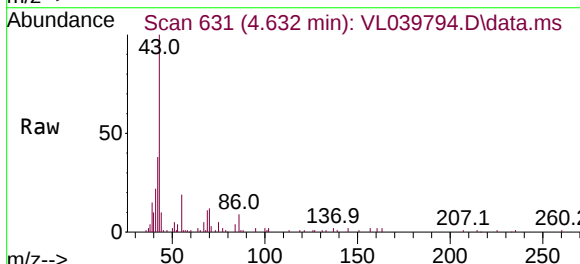
Instrument :
 MSVOA_L
 ClientSampleId :
 M

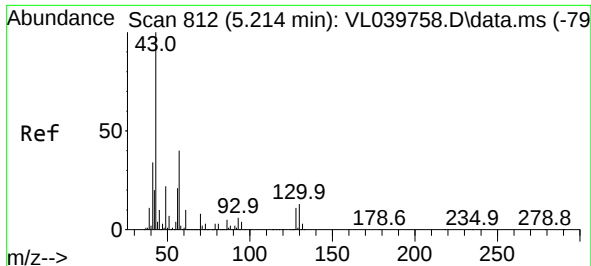
Tgt Ion: 41 Resp: 3376
 Ion Ratio Lower Upper
 41 100
 76 0.0 23.5 35.3#
 39 261.5 64.9 97.3#



#23
 Vinyl Acetate
 Concen: 1.484 ppbv
 RT: 4.632 min Scan# 631
 Delta R.T. -0.006 min
 Lab File: VL039794.D
 Acq: 25 Oct 2022 19:13

Tgt Ion: 43 Resp: 57705
 Ion Ratio Lower Upper
 43 100
 86 8.7 4.9 7.3#
 42 36.0 7.2 10.8#
 44 3.2 5.0 7.6#

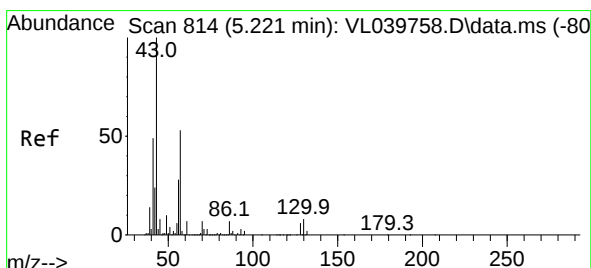
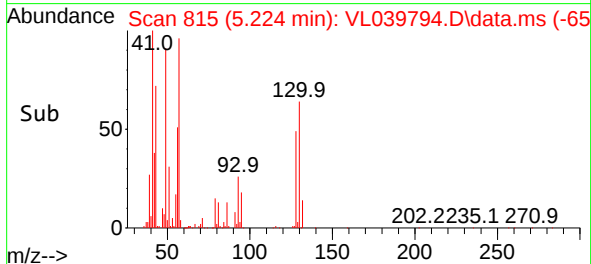
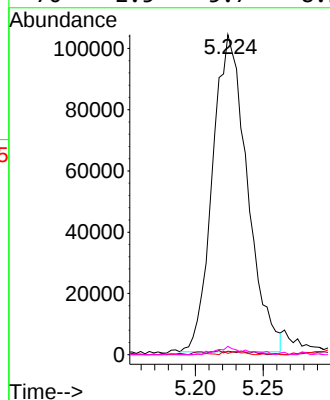
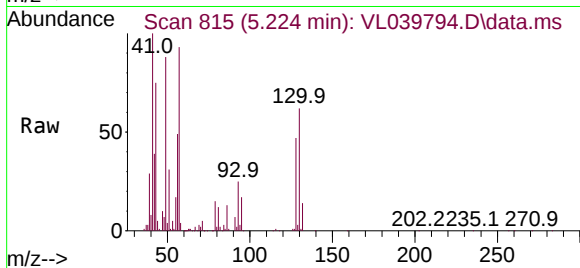




#25
Ethyl Acetate
Concen: 0.935 ppbv
RT: 5.224 min Scan# 812
Delta R.T. 0.010 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

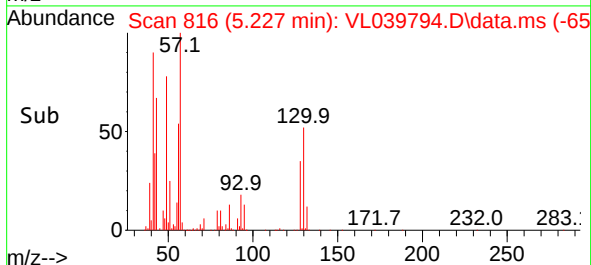
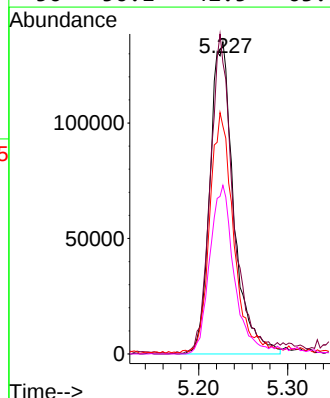
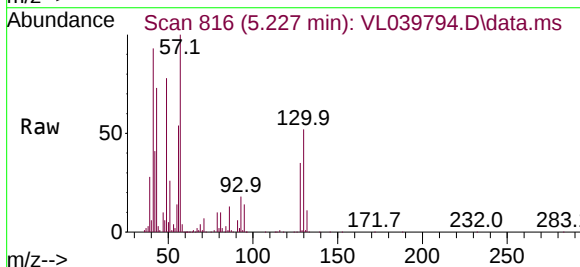
Instrument :
MSVOA_L
ClientSampleId :
M

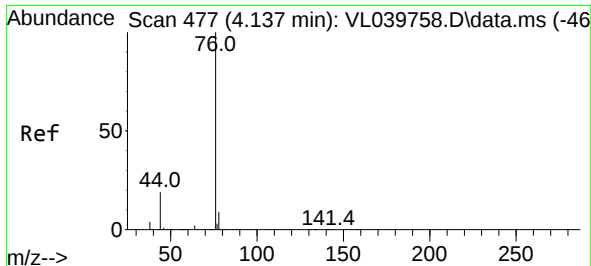
Tgt Ion: 43 Resp: 184375
Ion Ratio Lower Upper
43 100
45 1.8 8.2 12.2#
61 0.8 8.2 12.4#
70 2.5 5.7 8.5#



#26
Hexane
Concen: 3.071 ppbv
RT: 5.227 min Scan# 816
Delta R.T. 0.006 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 57 Resp: 251836
Ion Ratio Lower Upper
57 100
41 101.2 76.1 114.1
43 78.4 197.1 295.7#
56 56.1 42.5 63.7

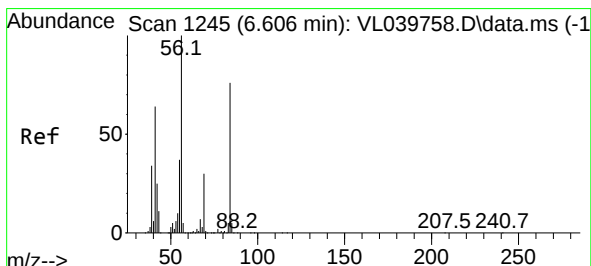
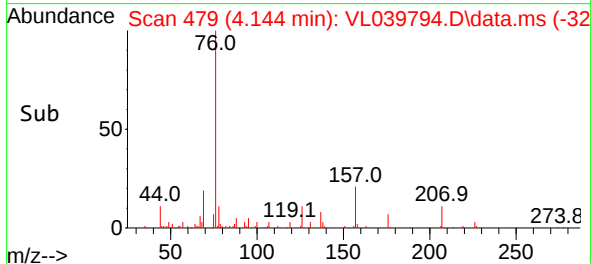
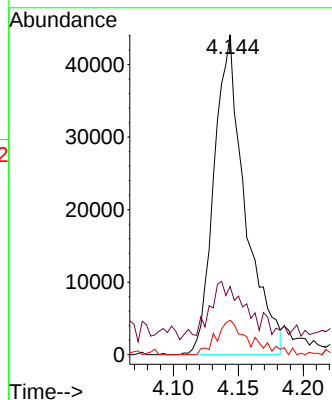
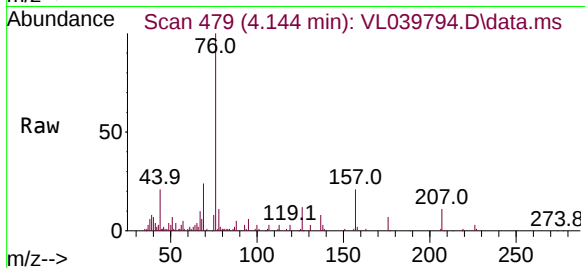




#27
Carbon Disulfide
Concen: 0.750 ppbv
RT: 4.144 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

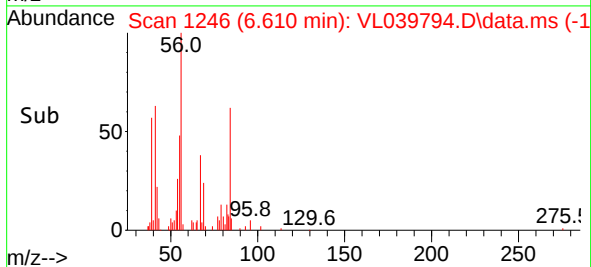
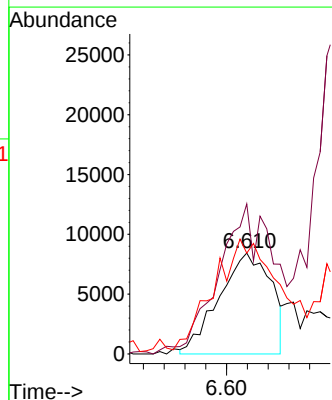
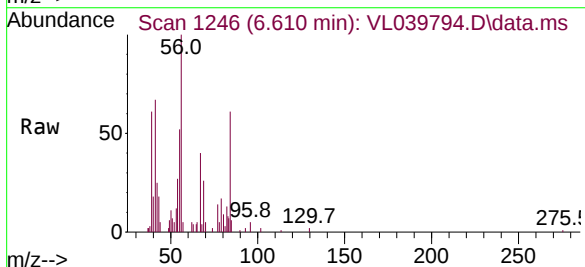
Instrument :
MSVOA_L
ClientSampleId :
M

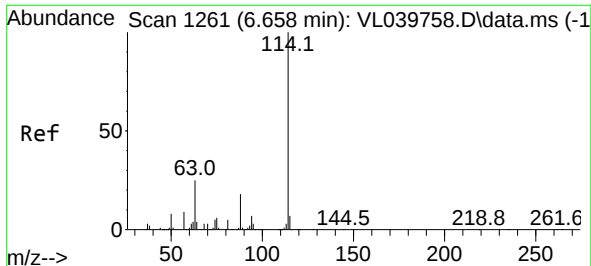
Tgt Ion: 76 Resp: 73022
Ion Ratio Lower Upper
76 100
44 30.6 16.6 25.0#
78 11.8 7.6 11.4#



#30
Cyclohexane
Concen: 0.219 ppbv
RT: 6.610 min Scan# 1246
Delta R.T. 0.003 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 84 Resp: 14727
Ion Ratio Lower Upper
84 100
56 163.6 111.8 167.6
41 140.9 71.5 107.3#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.658 min Scan# 11

Delta R.T. 0.000 min

Lab File: VL039794.D

Acq: 25 Oct 2022 19:13

Instrument :

MSVOA_L

ClientSampleId :

M

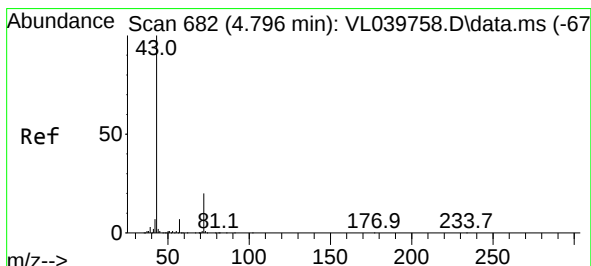
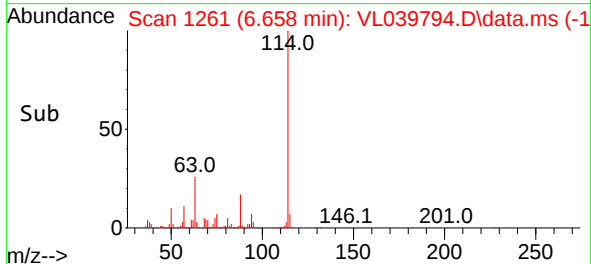
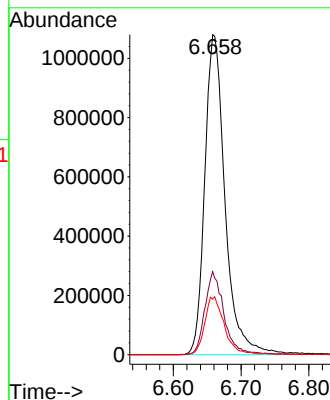
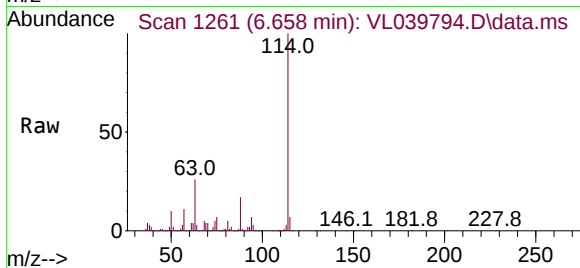
Tgt Ion:114 Resp: 2239596

Ion Ratio Lower Upper

114 100

63 24.9 20.1 30.1

88 17.8 14.5 21.7



#34

2-Butanone

Concen: 1.421 ppbv

RT: 4.809 min Scan# 686

Delta R.T. 0.013 min

Lab File: VL039794.D

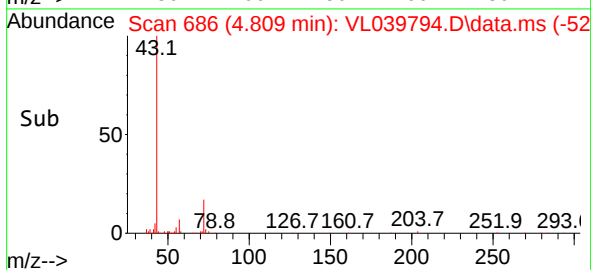
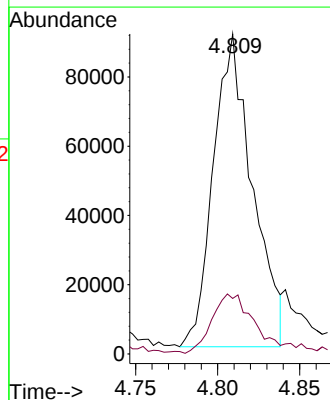
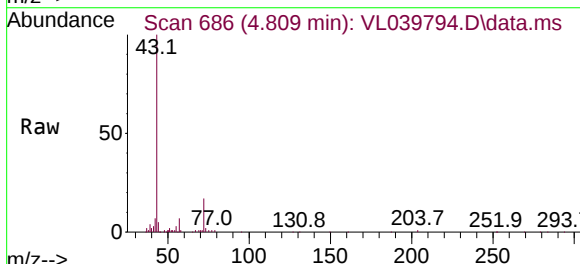
Acq: 25 Oct 2022 19:13

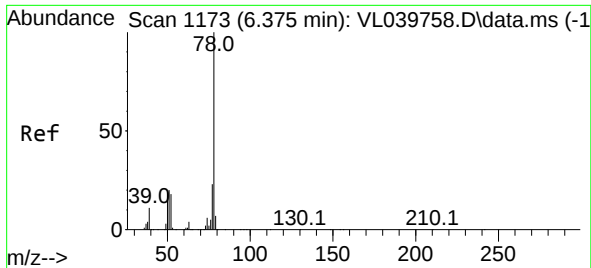
Tgt Ion: 43 Resp: 149763

Ion Ratio Lower Upper

43 100

72 24.5 16.5 24.7





#36

Benzene

Concen: 0.990 ppbv

RT: 6.378 min Scan# 1173

Delta R.T. 0.003 min

Lab File: VL039794.D

Acq: 25 Oct 2022 19:13

Instrument :

MSVOA_L

ClientSampleId :

M

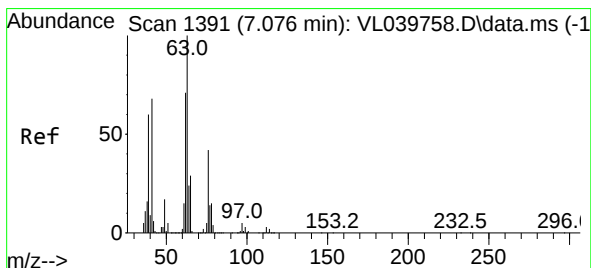
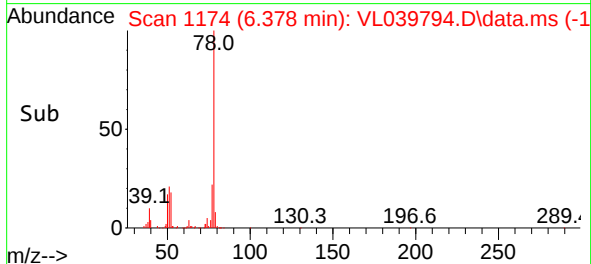
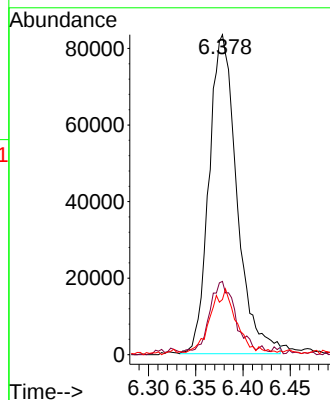
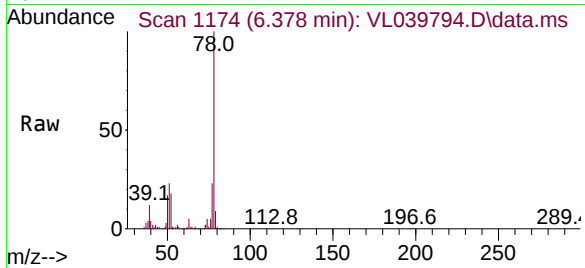
Tgt Ion: 78 Resp: 170829

Ion Ratio Lower Upper

78 100

77 22.1 18.3 27.5

50 16.3 15.2 22.8



#39

1,2-Dichloropropane

Concen: 8.110 ppbv

RT: 6.658 min Scan# 1261

Delta R.T. -0.418 min

Lab File: VL039794.D

Acq: 25 Oct 2022 19:13

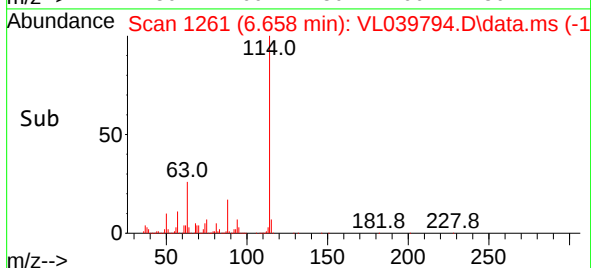
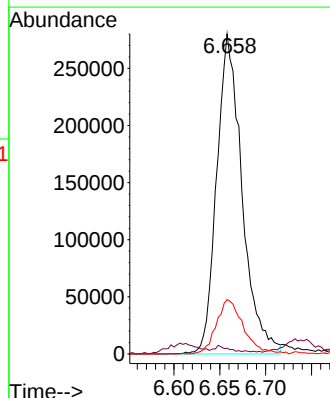
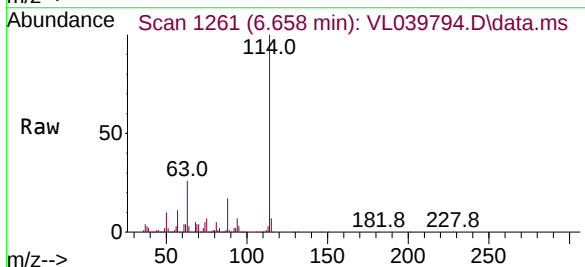
Tgt Ion: 63 Resp: 538902

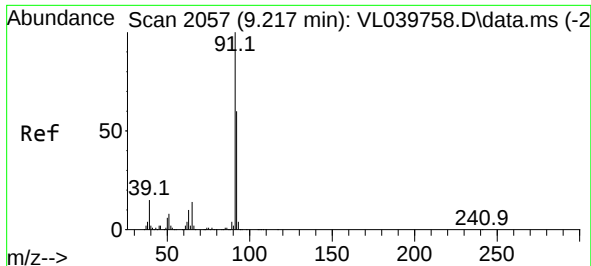
Ion Ratio Lower Upper

63 100

41 0.0 54.5 81.7#

62 16.8 56.6 85.0#

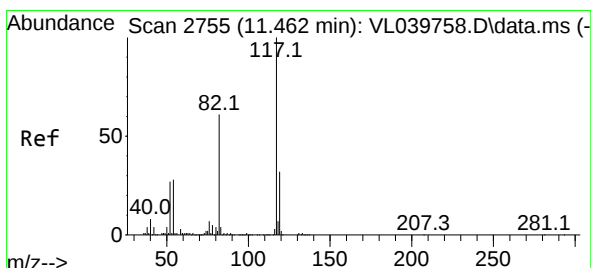
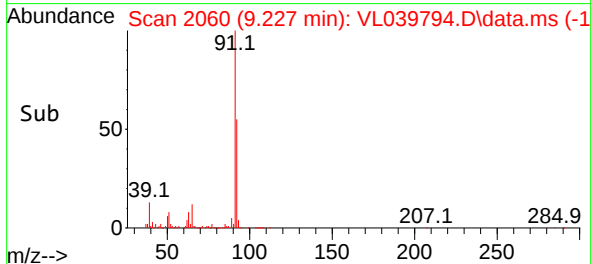
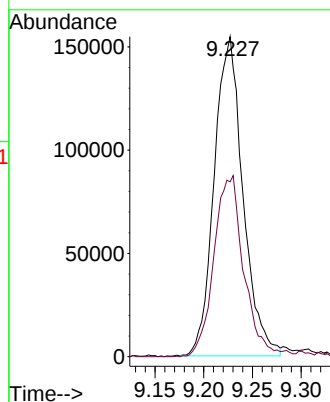
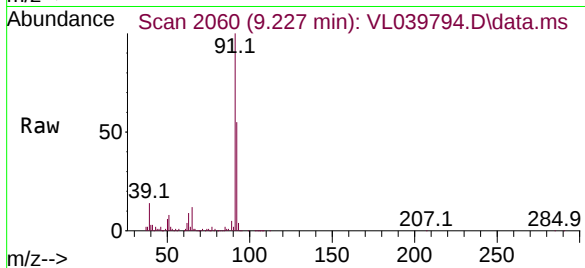




#53
Toluene
Concen: 1.760 ppbv
RT: 9.227 min Scan# 2057
Delta R.T. 0.010 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

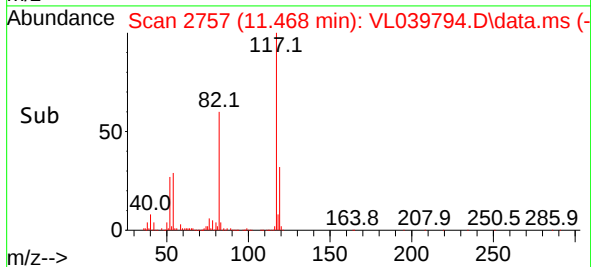
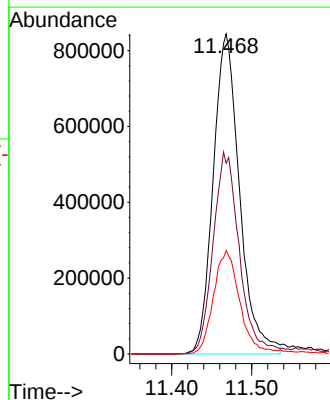
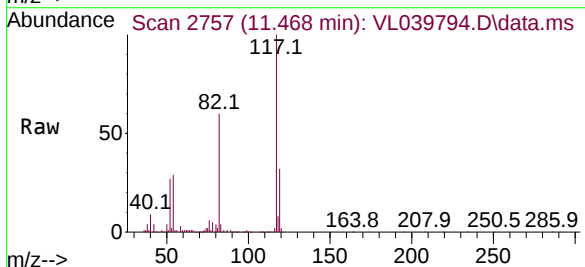
Instrument :
MSVOA_L
ClientSampleId :
M

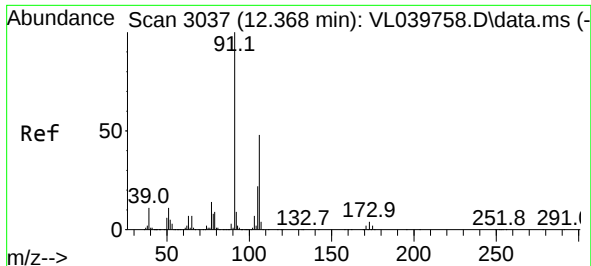
Tgt Ion: 91 Resp: 318110
Ion Ratio Lower Upper
91 100
92 59.6 48.0 72.0



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.468 min Scan# 2757
Delta R.T. 0.006 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 117 Resp: 1931848
Ion Ratio Lower Upper
117 100
82 66.1 49.9 74.9
119 33.3 25.2 37.8





#59

m/p-Xylene

Concen: 0.161 ppbv

RT: 12.375 min Scan# 3037

Delta R.T. 0.006 min

Lab File: VL039794.D

Acq: 25 Oct 2022 19:13

Instrument :

MSVOA_L

ClientSampleId :

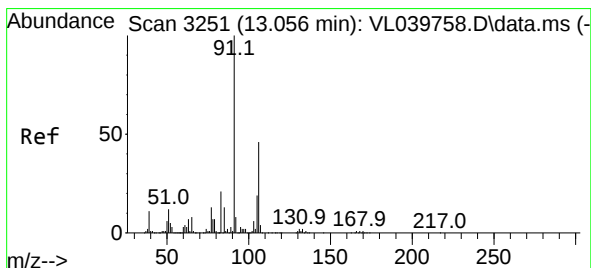
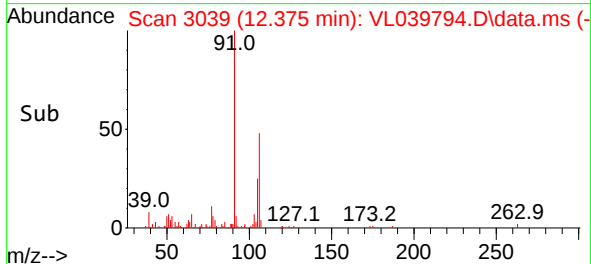
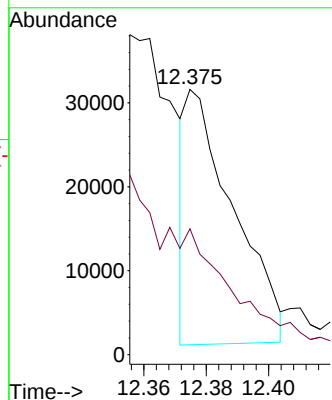
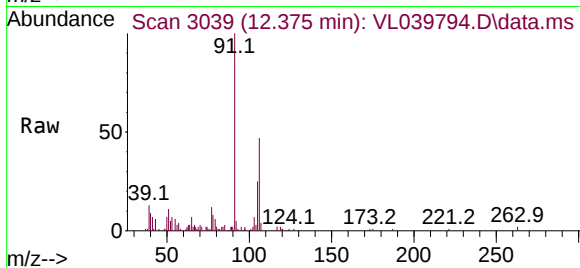
M

Tgt Ion: 91 Resp: 32035

Ion Ratio Lower Upper

91 100

106 0.0 36.4 54.6#



#60

o-Xylene

Concen: 0.369 ppbv

RT: 13.063 min Scan# 3253

Delta R.T. 0.006 min

Lab File: VL039794.D

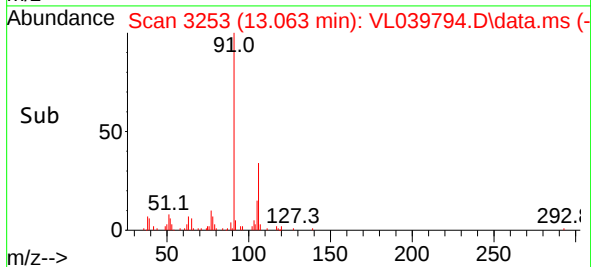
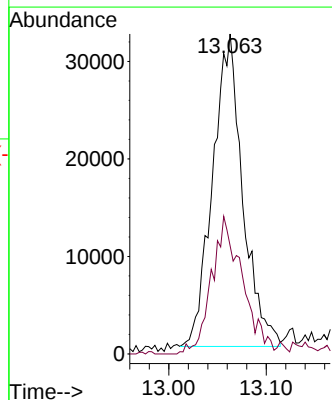
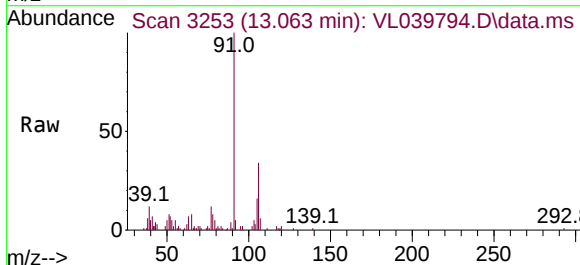
Acq: 25 Oct 2022 19:13

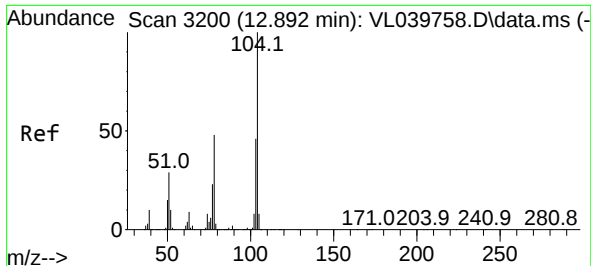
Tgt Ion: 91 Resp: 68815

Ion Ratio Lower Upper

91 100

106 46.3 22.9 68.8

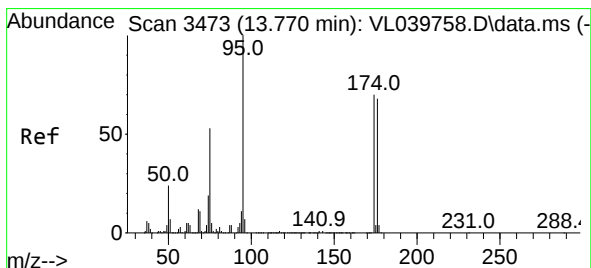
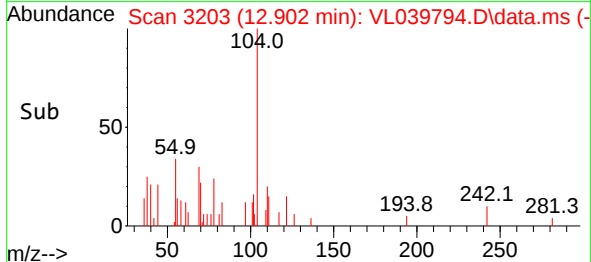
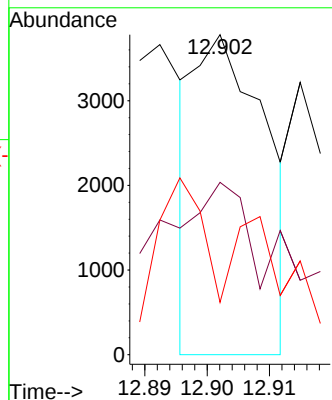
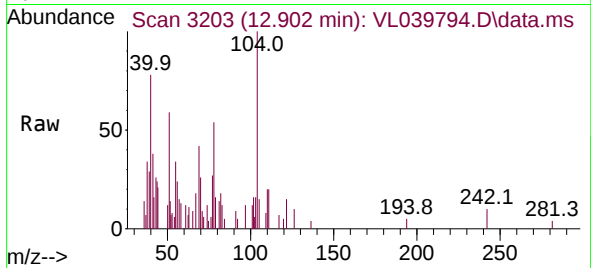




#61
Styrene
Concen: 0.031 ppbv
RT: 12.902 min Scan# 31
Delta R.T. 0.010 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

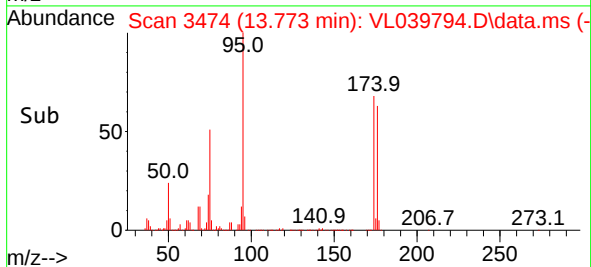
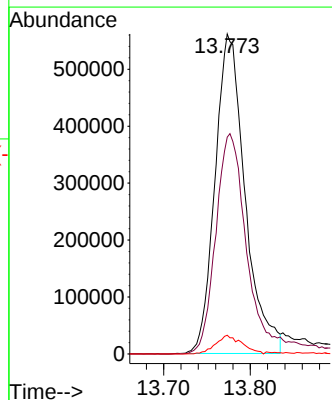
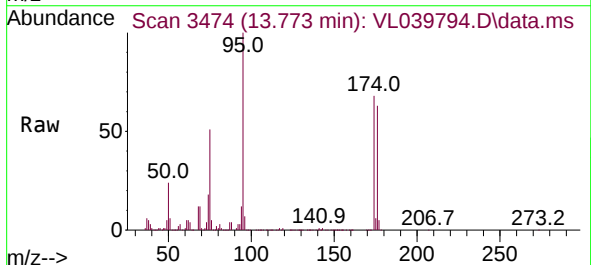
Instrument :
MSVOA_L
ClientSampleId :
M

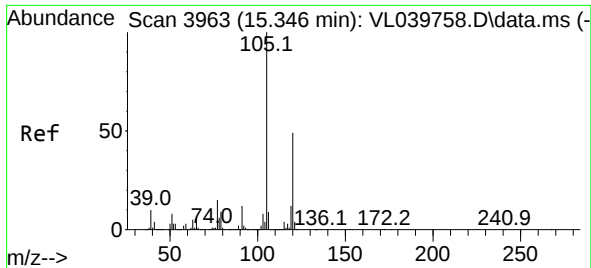
Tgt Ion:104 Resp: 3005
Ion Ratio Lower Upper
104 100
78 162.3 39.9 59.9#
103 0.0 38.8 58.2#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.833 ppbv
RT: 13.773 min Scan# 3474
Delta R.T. 0.003 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion: 95 Resp: 1351371
Ion Ratio Lower Upper
95 100
174 76.5 57.3 85.9
175 5.5 4.2 6.2

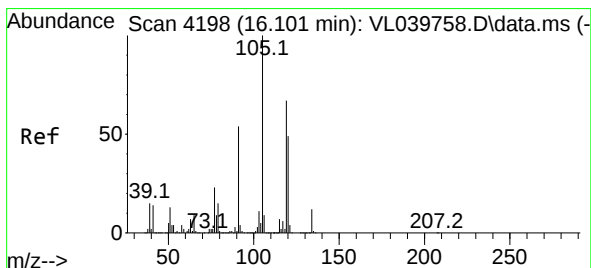
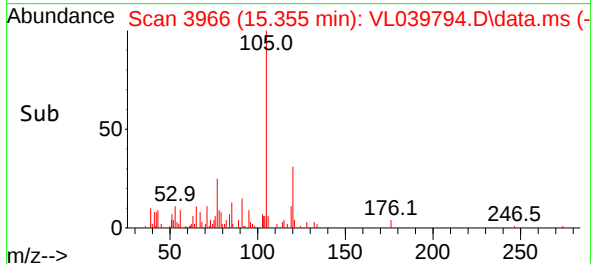
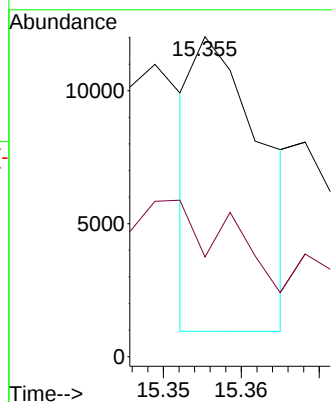
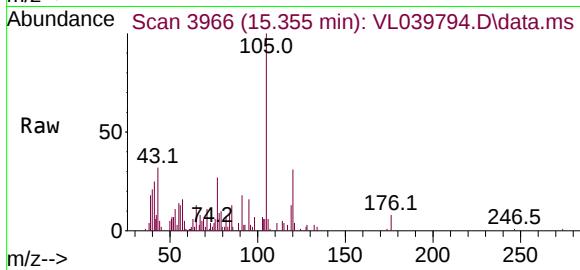




#73
 1,3,5-Trimethylbenzene
 Concen: 0.035 ppbv
 RT: 15.355 min Scan# 3966
 Delta R.T. 0.010 min
 Lab File: VL039794.D
 Acq: 25 Oct 2022 19:13

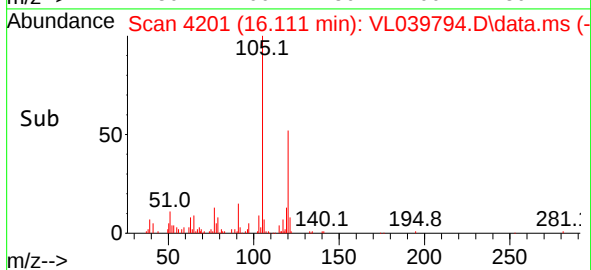
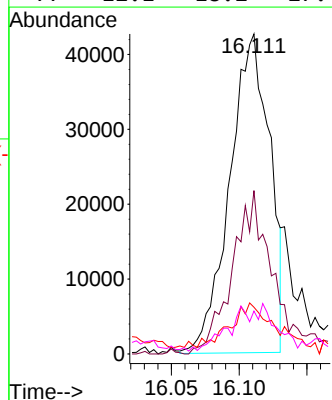
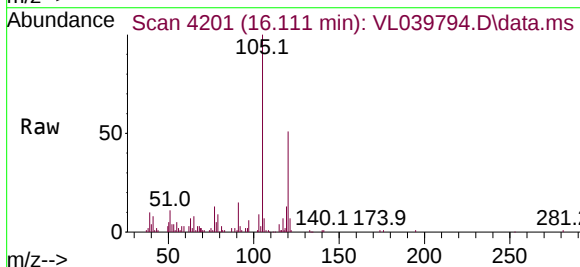
Instrument :
 MSVOA_L
 ClientSampleId :
 M

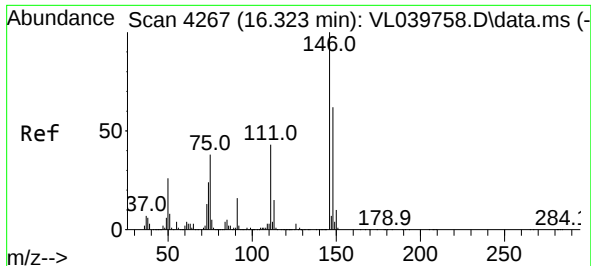
Tgt Ion:105 Resp: 6730
 Ion Ratio Lower Upper
 105 100
 120 31.6 39.0 58.6#



#74
 1,2,4-Trimethylbenzene
 Concen: 0.402 ppbv
 RT: 16.111 min Scan# 4201
 Delta R.T. 0.010 min
 Lab File: VL039794.D
 Acq: 25 Oct 2022 19:13

Tgt Ion:105 Resp: 87391
 Ion Ratio Lower Upper
 105 100
 120 51.2 39.6 59.4
 91 12.2 42.9 64.3#
 77 12.1 18.2 27.4#

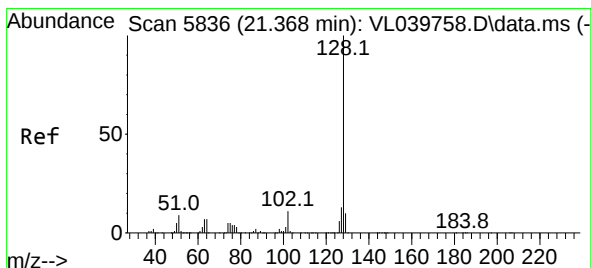
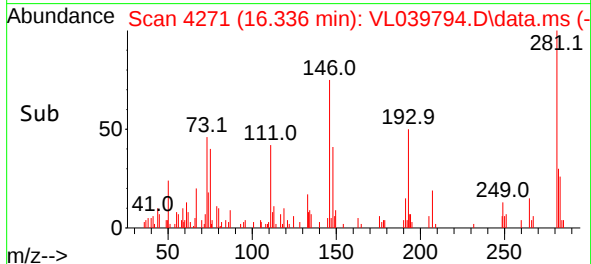
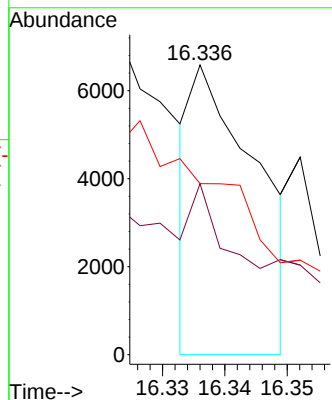
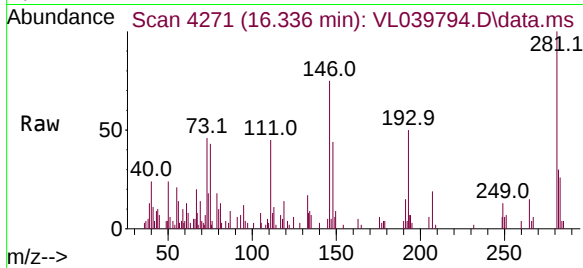




#75
1,3-Dichlorobenzene
Concen: 0.036 ppbv
RT: 16.336 min Scan# 41
Delta R.T. 0.013 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

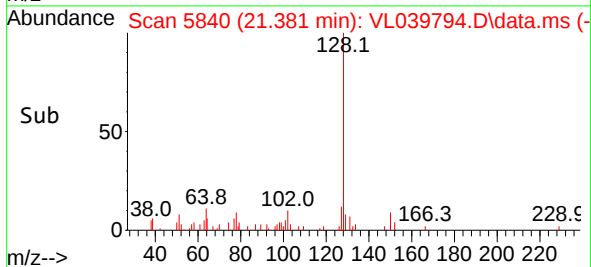
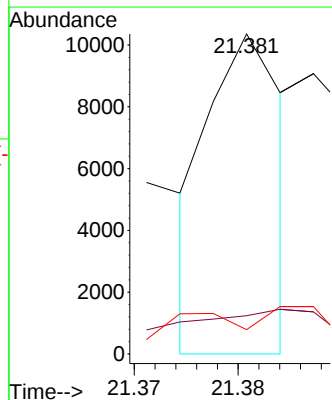
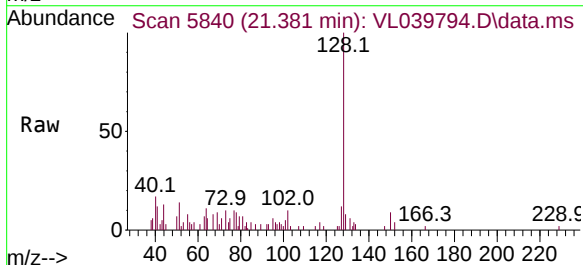
Instrument :
MSVOA_L
ClientSampleId :
M

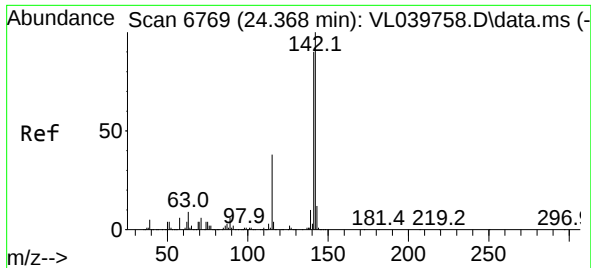
Tgt Ion:146 Resp: 4766
Ion Ratio Lower Upper
146 100
111 267.0 22.4 67.3#
148 0.0 32.4 97.0#



#79
Naphthalene
Concen: 0.039 ppbv
RT: 21.381 min Scan# 5840
Delta R.T. 0.013 min
Lab File: VL039794.D
Acq: 25 Oct 2022 19:13

Tgt Ion:128 Resp: 5209
Ion Ratio Lower Upper
128 100
127 3.9 10.5 15.7#
129 0.0 8.4 12.6#





#80

Naphthalene, 2-methyl-

Concen: 0.089 ppbv

RT: 24.368 min Scan# 61

Delta R.T. 0.000 min

Lab File: VL039794.D

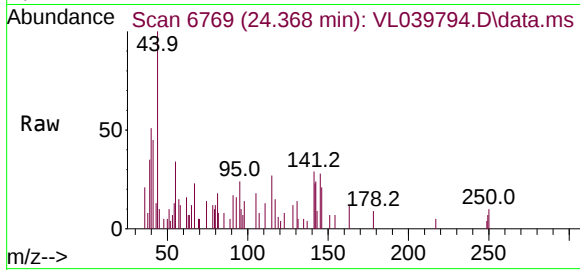
Acq: 25 Oct 2022 19:13

Instrument :

MSVOA_L

ClientSampleId :

M



Tgt Ion: 142 Resp: 4018

Ion Ratio Lower Upper

142 100

141 100.9 65.7 98.5#

115 57.8 28.3 42.5#

