

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL101123\
 Data File : VL040770.D
 Acq On : 12 Oct 2023 00:33
 Operator : SY/MD
 Sample : 04827-04
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Quant Time: Oct 13 01:21:42 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101123AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Oct 12 00:21:08 2023
 Response via : Initial Calibration

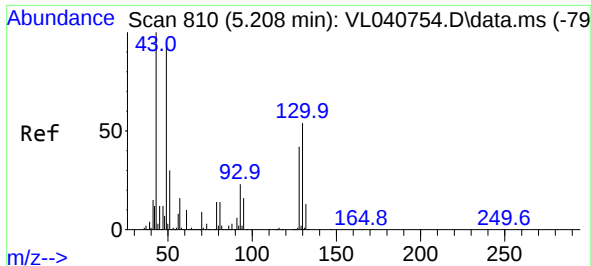
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.211	49	863339	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.664	114	2434442	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.471	117	2198974	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.780	95	1615892	9.987	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.900%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.761	85	86154	0.567	ppbv	95
3) Chlorodifluoromethane	2.706	51	46501	0.367	ppbv #	92
4) Chloromethane	2.844	50	26940	0.538	ppbv	98
9) Propene	2.729	41	18529	0.393	ppbv #	23
10) Heptane	7.587	43	18364	0.155	ppbv	96
11) Trichlorofluoromethane	3.587	101	27858	0.237	ppbv	99
12) 1,1,2-Trichlorotrifluo...	4.089	101	5586	0.067	ppbv #	80
13) Ethanol	3.269	45	158345	14.885	ppbv	97
15) Acetone	3.497	43	551973	6.184	ppbv	95
19) Isopropyl Alcohol	3.613	45	118435	2.061	ppbv #	1
20) Methylene Chloride	3.957	84	64202	1.727	ppbv	96
21) Allyl Chloride	4.188	41	2165	0.037	ppbv	95
23) Vinyl Acetate	4.632	43	17586	0.155	ppbv #	1
25) Ethyl Acetate	5.230	43	96173	0.492	ppbv #	86
26) Hexane	5.230	57	113635	1.271	ppbv #	49
30) Cyclohexane	6.616	84	2782	0.037	ppbv #	1
34) 2-Butanone	4.819	43	40738	0.370	ppbv	95
35) Carbon Tetrachloride	6.507	117	8735	0.064	ppbv	97
36) Benzene	6.385	78	48019	0.256	ppbv #	91
39) 1,2-Dichloropropane	6.661	63	561473	7.675	ppbv #	25
43) Methyl Methacrylate	7.491	69	3757	0.050	ppbv #	71
44) 2,2,4-Trimethylpentane	7.343	57	37109	0.117	ppbv #	90
53) Toluene	9.230	91	180793	0.811	ppbv	97
59) m/p-Xylene	12.368	91	12701	0.056	ppbv #	30
60) o-Xylene	13.066	91	27590	0.127	ppbv #	40
62) Isopropylbenzene	14.034	105	12807	0.038	ppbv #	48
64) n-propylbenzene	14.912	120	13078	0.146	ppbv #	1
65) tert-Butylbenzene	16.111	119	63209	0.210	ppbv #	66
71) 2-Chlorotoluene	14.921	91	120242	0.479	ppbv #	43
72) 4-Ethyltoluene	15.198	105	289556	1.139	ppbv	100
73) 1,3,5-Trimethylbenzene	15.355	105	208515	0.931	ppbv	97
74) 1,2,4-Trimethylbenzene	16.111	105	541403	2.214	ppbv #	72

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

Quant Time: Oct 13 01:21:42 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101123AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Oct 12 00:21:08 2023
Response via : Initial Calibration

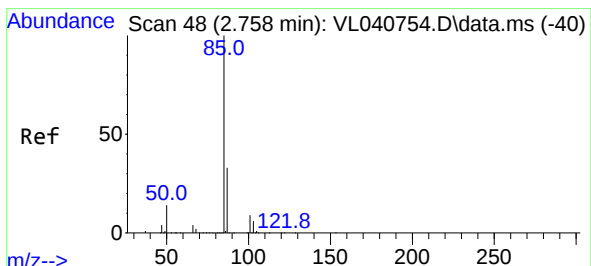
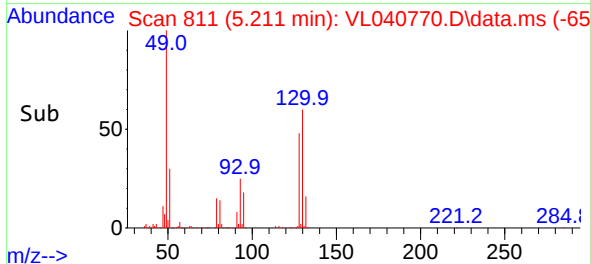
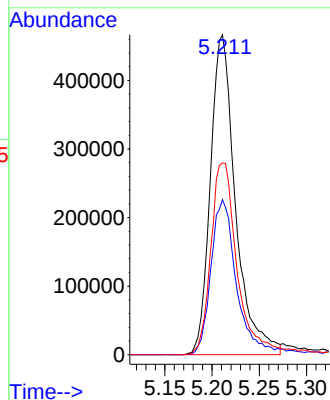
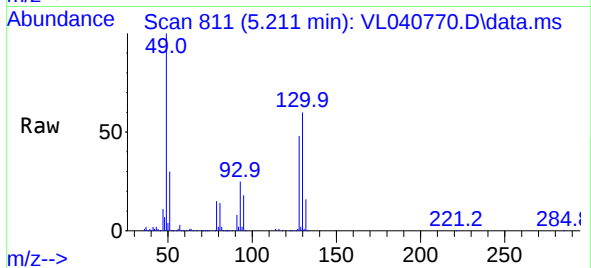




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.211 min Scan# 81
 Delta R.T. 0.003 min
 Lab File: VL040770.D
 Acq: 12 Oct 2023 00:33

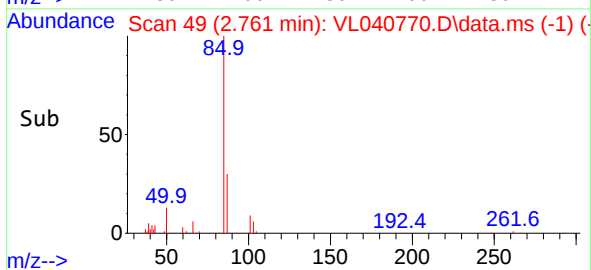
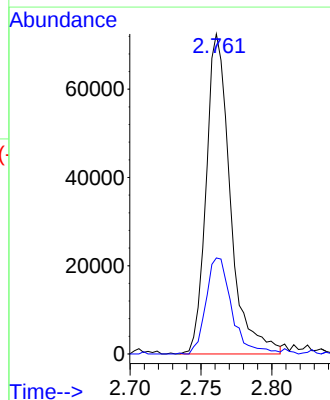
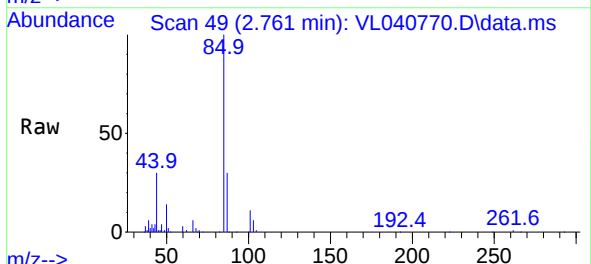
Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

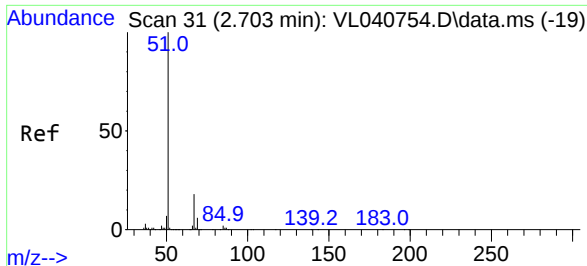
Tgt Ion: 49 Resp: 863339
 Ion Ratio Lower Upper
 49 100
 128 51.1 23.9 71.7
 130 64.9 30.7 92.1



#2
 Dichlorodifluoromethane
 Concen: 0.567 ppbv
 RT: 2.761 min Scan# 49
 Delta R.T. 0.003 min
 Lab File: VL040770.D
 Acq: 12 Oct 2023 00:33

Tgt Ion: 85 Resp: 86154
 Ion Ratio Lower Upper
 85 100
 87 29.7 26.0 39.0

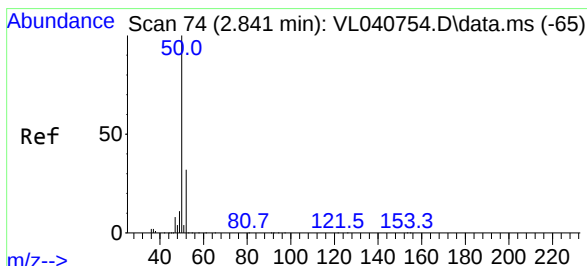
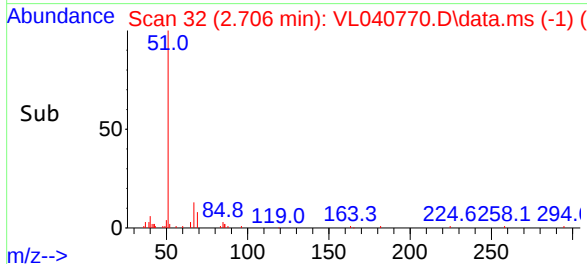
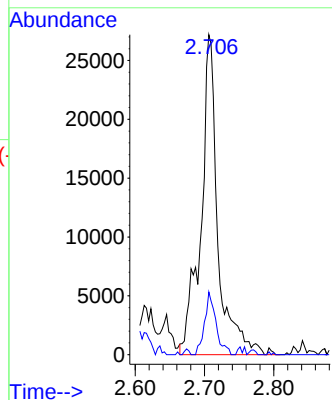
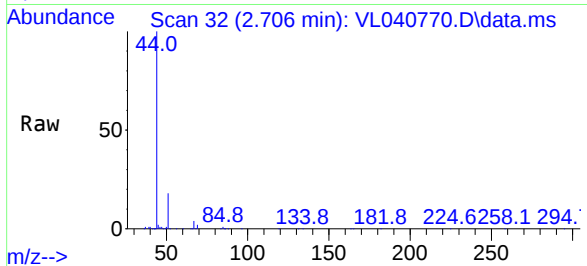




#3
Chlorodifluoromethane
Concen: 0.367 ppbv
RT: 2.706 min Scan# 31
Delta R.T. 0.003 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

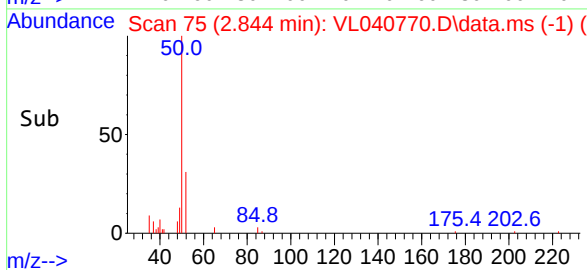
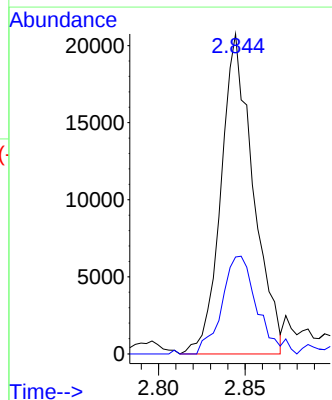
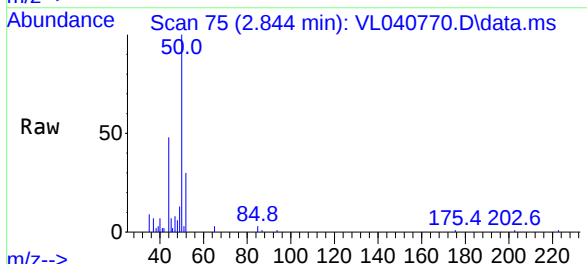
Instrument :
MSVOA_L
ClientSampleId :
OA1

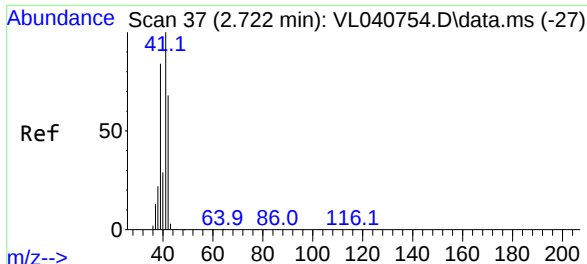
Tgt Ion: 51 Resp: 46501
Ion Ratio Lower Upper
51 100
67 13.5 13.8 20.6#



#4
Chloromethane
Concen: 0.538 ppbv
RT: 2.844 min Scan# 75
Delta R.T. 0.003 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 50 Resp: 26940
Ion Ratio Lower Upper
50 100
52 30.3 25.3 37.9

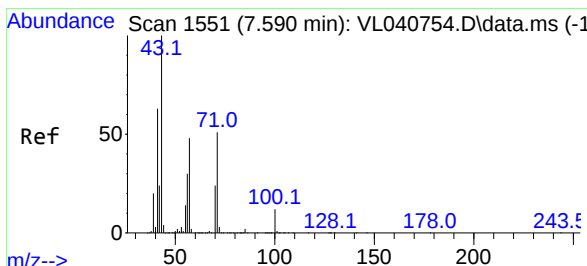
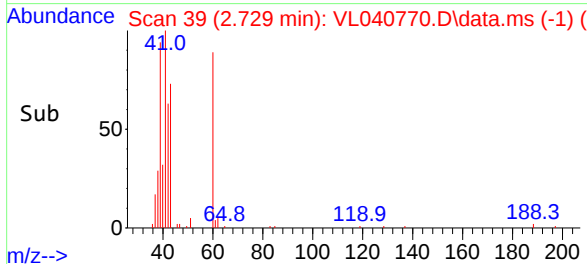
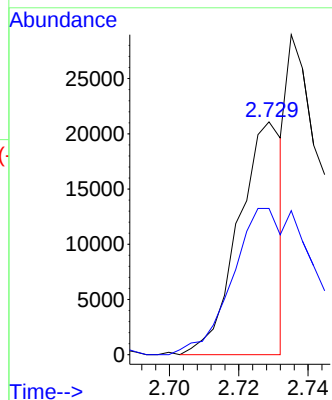
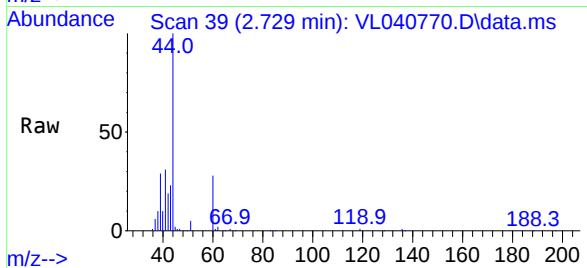




#9
Propene
Concen: 0.393 ppbv
RT: 2.729 min Scan# 39
Delta R.T. 0.006 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

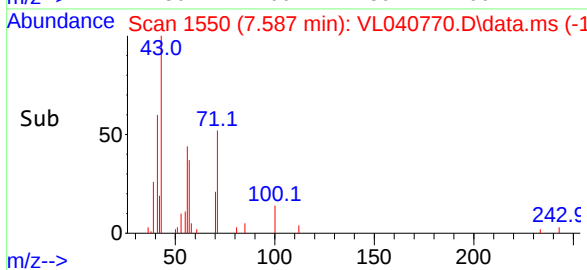
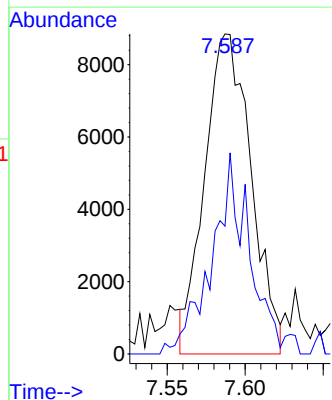
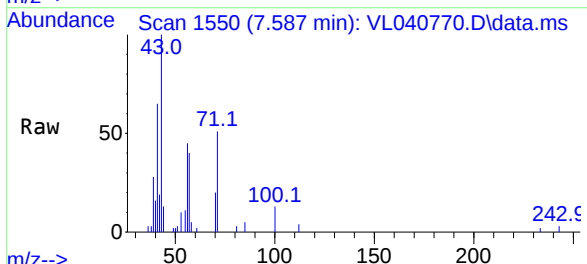
Instrument :
MSVOA_L
ClientSampleId :
OA1

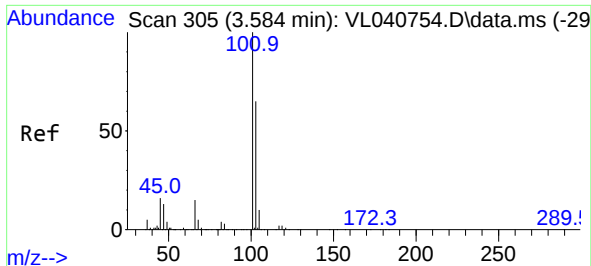
Tgt Ion: 41 Resp: 18529
Ion Ratio Lower Upper
41 100
42 135.1 57.1 85.7#



#10
Heptane
Concen: 0.155 ppbv
RT: 7.587 min Scan# 1550
Delta R.T. -0.003 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 43 Resp: 18364
Ion Ratio Lower Upper
43 100
57 52.6 40.0 60.0

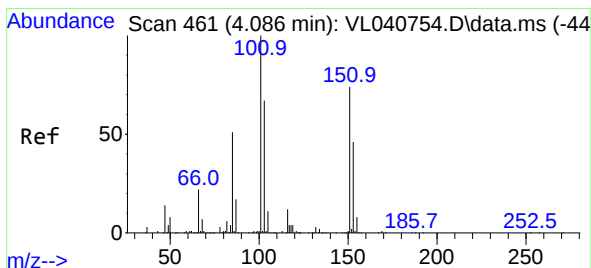
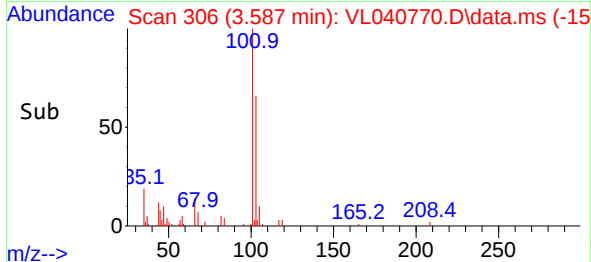
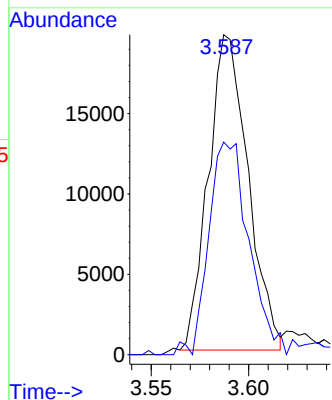
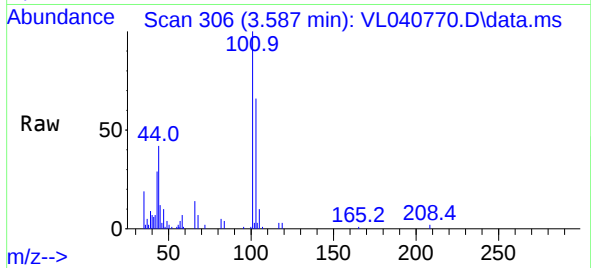




#11
 Trichlorofluoromethane
 Concen: 0.237 ppbv
 RT: 3.587 min Scan# 305
 Delta R.T. 0.003 min
 Lab File: VL040770.D
 Acq: 12 Oct 2023 00:33

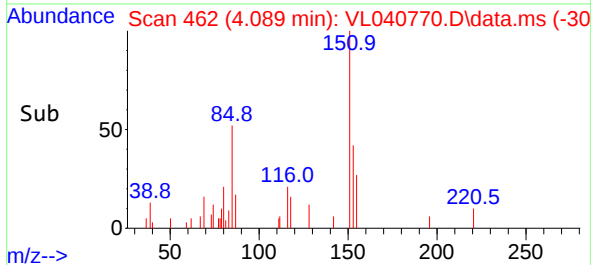
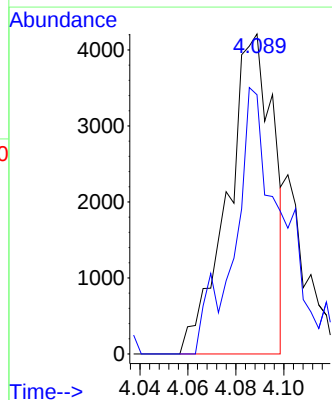
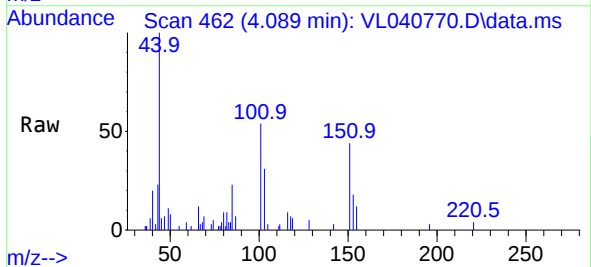
Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

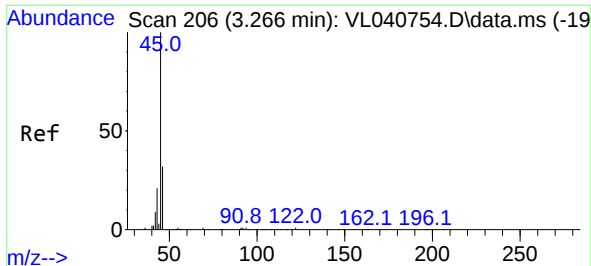
Tgt Ion:101 Resp: 27858
 Ion Ratio Lower Upper
 101 100
 103 66.2 52.2 78.2



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.067 ppbv
 RT: 4.089 min Scan# 462
 Delta R.T. 0.003 min
 Lab File: VL040770.D
 Acq: 12 Oct 2023 00:33

Tgt Ion:101 Resp: 5586
 Ion Ratio Lower Upper
 101 100
 151 89.2 58.1 87.1#

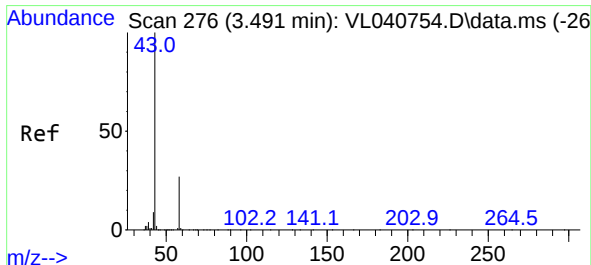
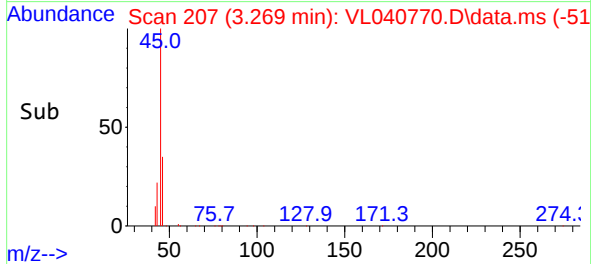
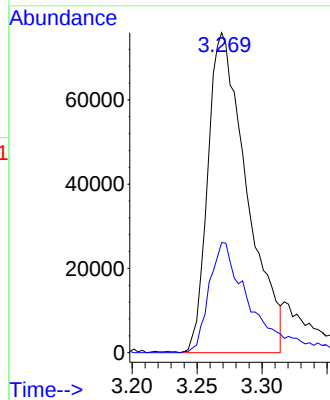
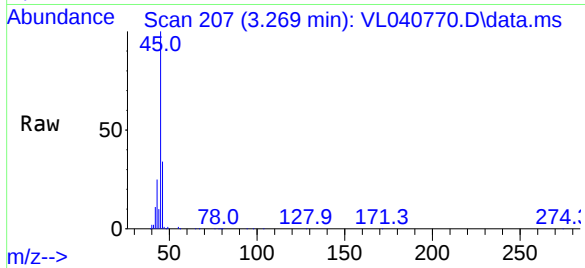




#13
Ethanol
Concen: 14.885 ppbv
RT: 3.269 min Scan# 206
Delta R.T. 0.003 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

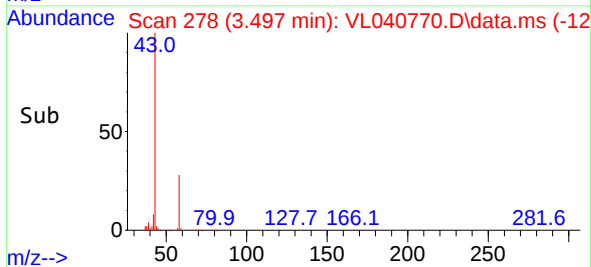
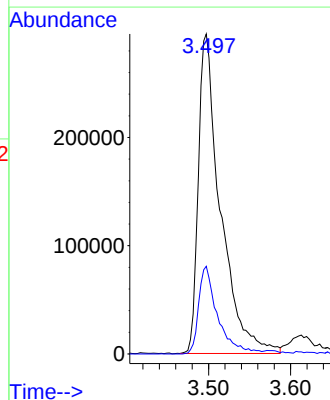
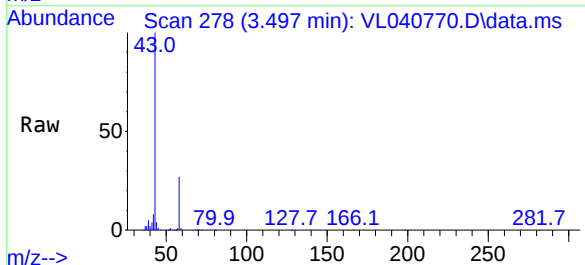
Instrument :
MSVOA_L
ClientSampleId :
OA1

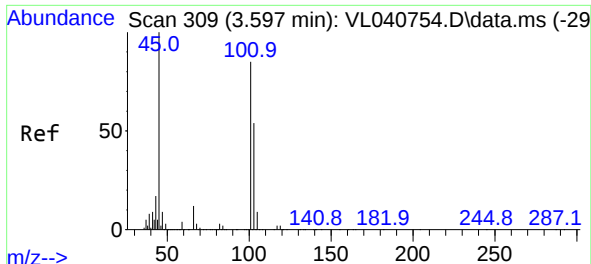
Tgt Ion: 45 Resp: 158345
Ion Ratio Lower Upper
45 100
46 38.4 14.6 58.2



#15
Acetone
Concen: 6.184 ppbv
RT: 3.497 min Scan# 278
Delta R.T. 0.006 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 43 Resp: 551973
Ion Ratio Lower Upper
43 100
58 24.5 21.6 32.4





#19

Isopropyl Alcohol

Concen: 2.061 ppbv

RT: 3.613 min Scan# 314

Delta R.T. 0.016 min

Lab File: VL040770.D

Acq: 12 Oct 2023 00:33

Instrument :

MSVOA_L

ClientSampleId :

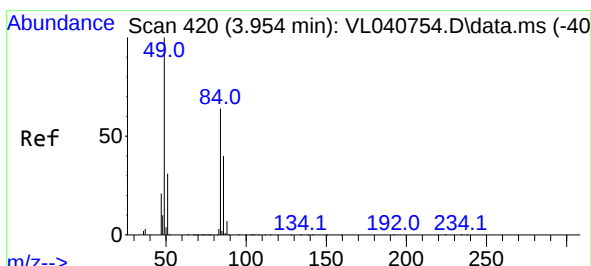
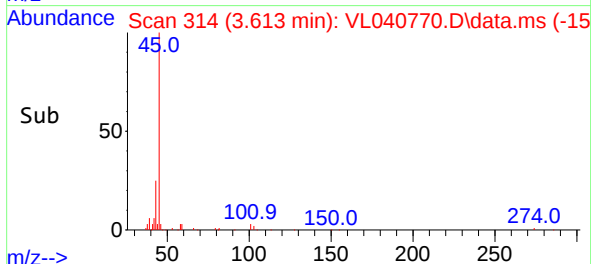
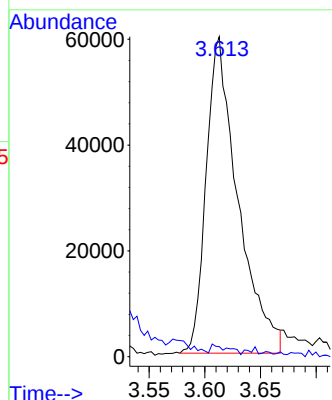
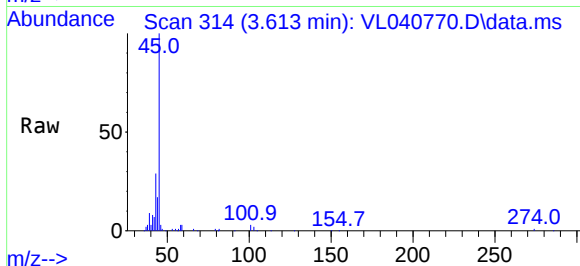
OA1

Tgt Ion: 45 Resp: 118435

Ion Ratio Lower Upper

45 100

58 114.2 30.3 45.5#



#20

Methylene Chloride

Concen: 1.727 ppbv

RT: 3.957 min Scan# 421

Delta R.T. 0.003 min

Lab File: VL040770.D

Acq: 12 Oct 2023 00:33

Tgt Ion: 84 Resp: 64202

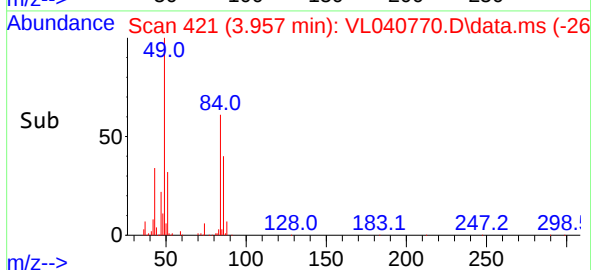
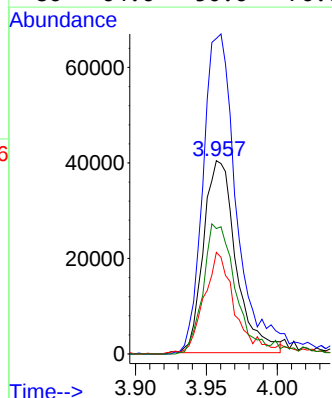
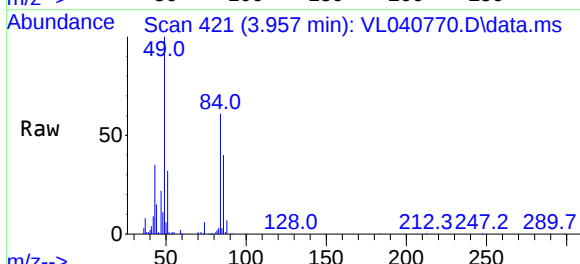
Ion Ratio Lower Upper

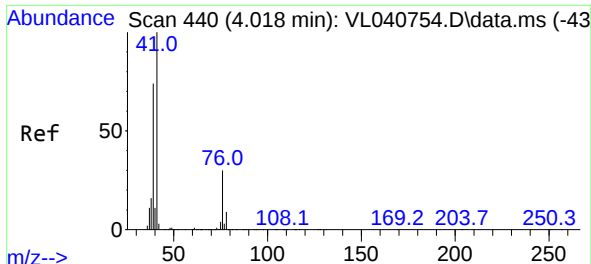
84 100

49 162.8 125.6 188.4

51 51.9 38.9 58.3

86 64.6 50.6 76.0





#21

Allyl Chloride

Concen: 0.037 ppbv

RT: 4.188 min Scan# 41

Delta R.T. 0.170 min

Lab File: VL040770.D

Acq: 12 Oct 2023 00:33

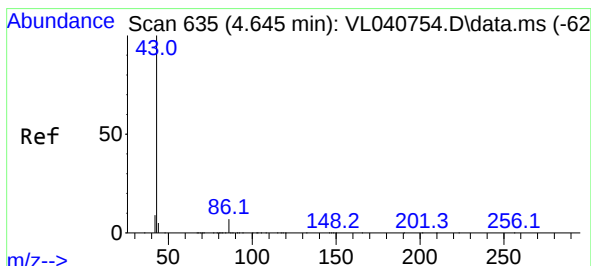
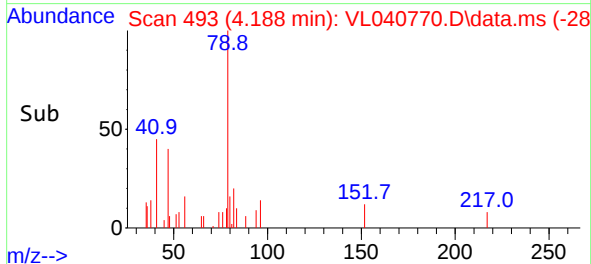
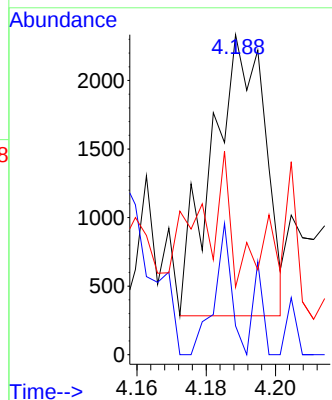
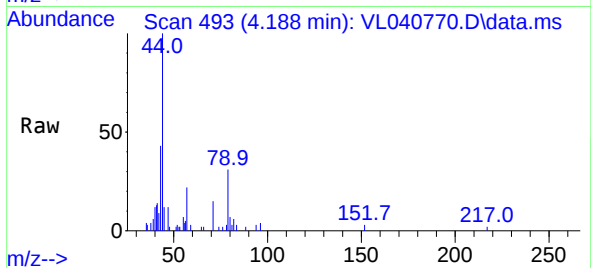
Instrument :

MSVOA_L

ClientSampleId :

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Tgt Ion:	41	Resp:	2165
Ion	Ratio	Lower	Upper
41	100		
76	26.5	24.1	36.1
39	75.8	63.8	95.6



#23

Vinyl Acetate

Concen: 0.155 ppbv

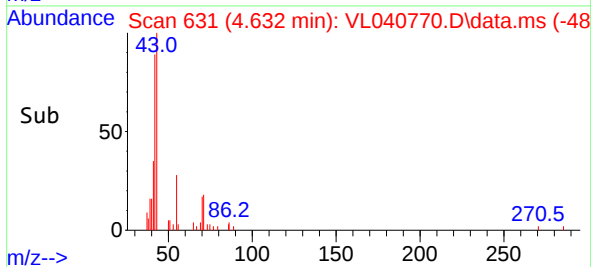
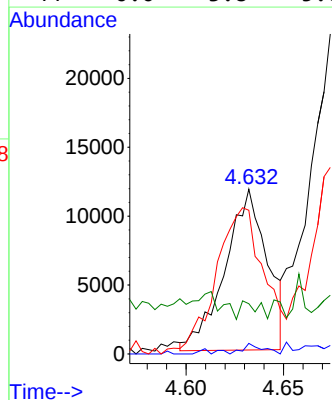
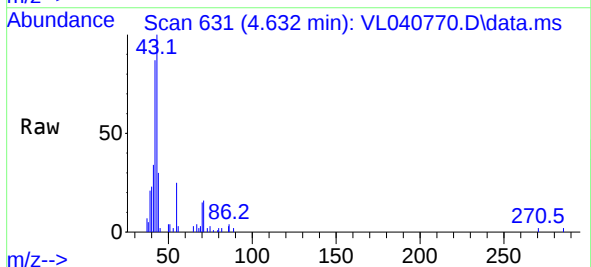
RT: 4.632 min Scan# 631

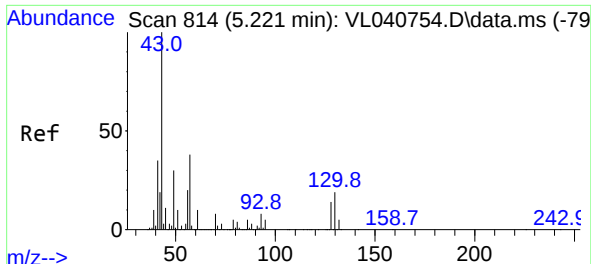
Delta R.T. -0.013 min

Lab File: VL040770.D

Acq: 12 Oct 2023 00:33

Tgt Ion:	43	Resp:	17586
Ion	Ratio	Lower	Upper
43	100		
86	6.9	4.9	7.3
42	90.1	7.8	11.6#
44	0.0	3.8	5.6#

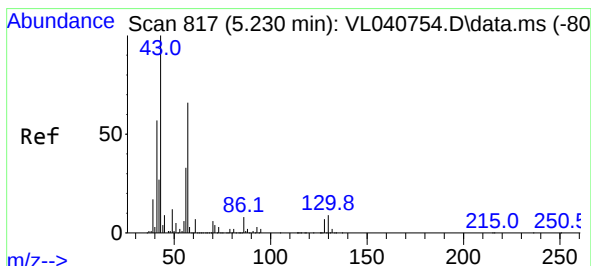
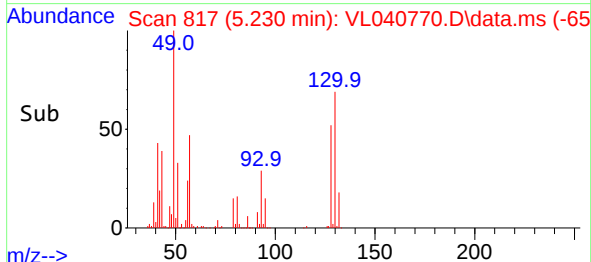
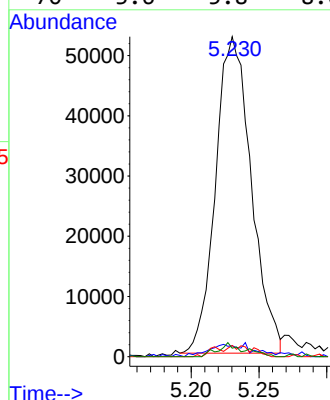
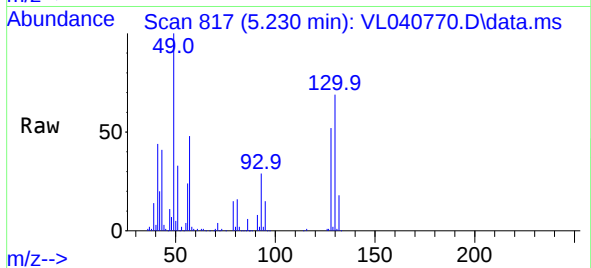




#25
Ethyl Acetate
Concen: 0.492 ppbv
RT: 5.230 min Scan# 814
Delta R.T. 0.010 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

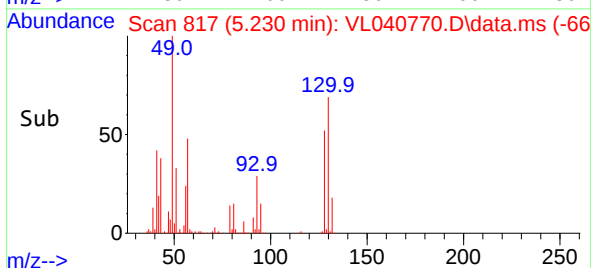
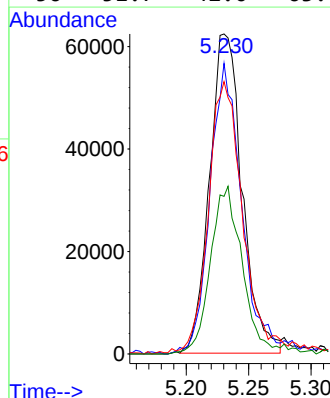
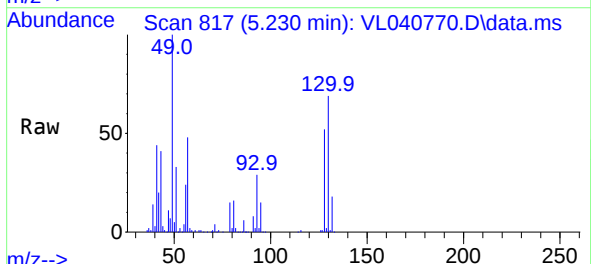
Instrument :
MSVOA_L
ClientSampleId :
OA1

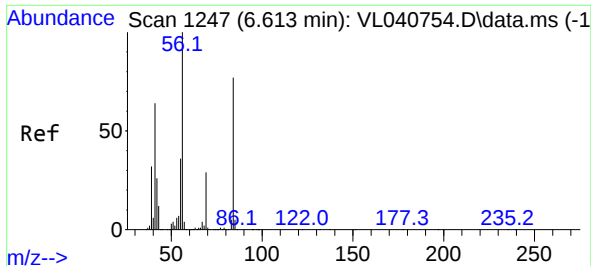
Tgt Ion: 43 Resp: 96173
Ion Ratio Lower Upper
43 100
45 5.7 8.2 12.4#
61 3.6 8.2 12.2#
70 3.6 5.8 8.6#



#26
Hexane
Concen: 1.271 ppbv
RT: 5.230 min Scan# 817
Delta R.T. -0.000 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 57 Resp: 113635
Ion Ratio Lower Upper
57 100
41 91.4 71.4 107.2
43 93.4 182.3 273.5#
56 51.7 42.0 63.0

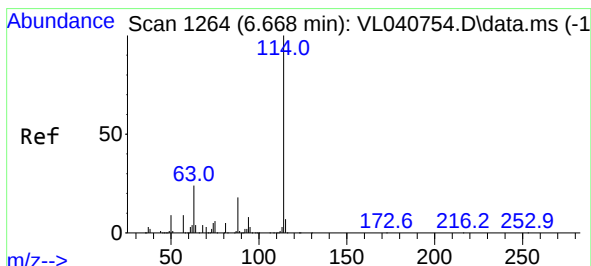
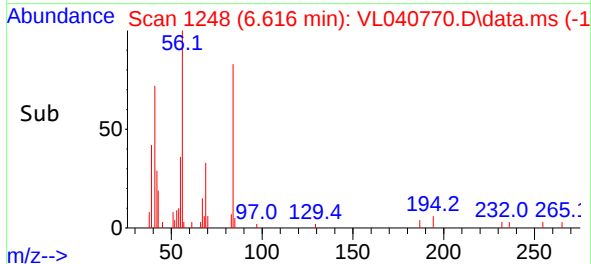
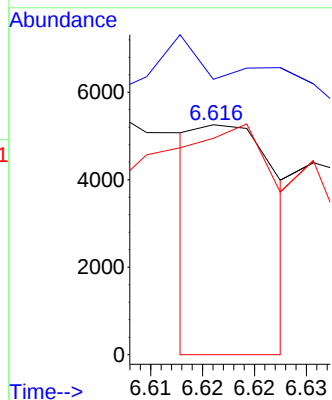
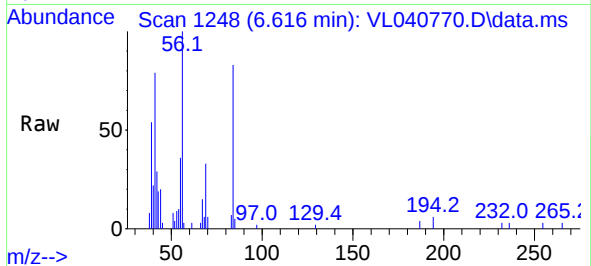




#30
Cyclohexane
Concen: 0.037 ppbv
RT: 6.616 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

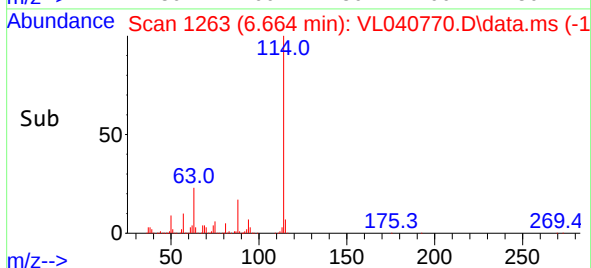
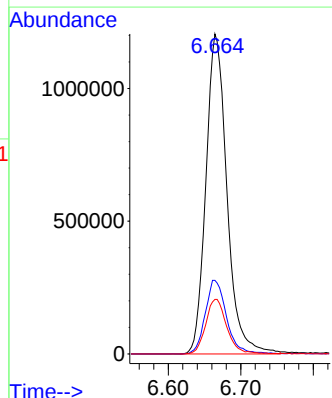
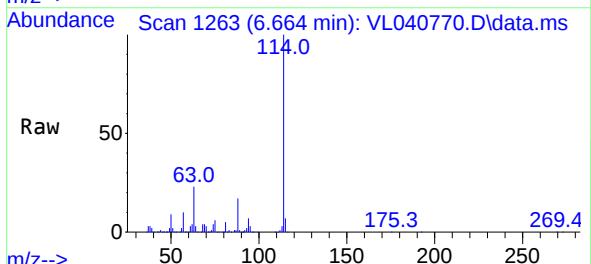
Instrument :
MSVOA_L
ClientSampleId :
OA1

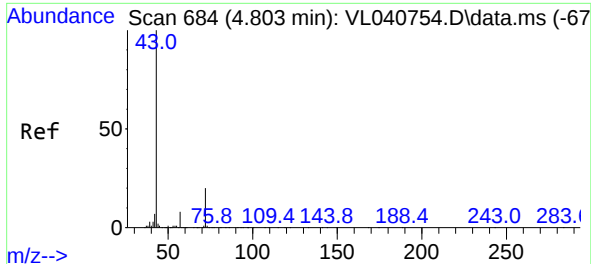
Tgt Ion: 84 Resp: 2782
Ion Ratio Lower Upper
84 100
56 0.0 110.3 165.5#
41 404.4 67.4 101.2#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.664 min Scan# 1263
Delta R.T. -0.003 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 114 Resp: 2434442
Ion Ratio Lower Upper
114 100
63 23.5 19.8 29.6
88 17.2 14.2 21.2

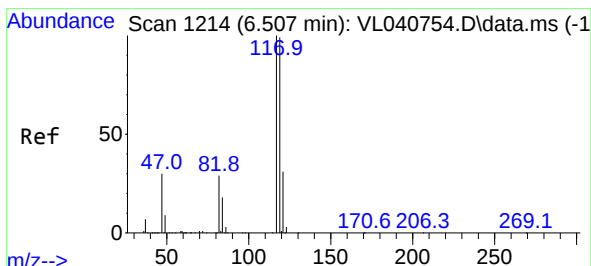
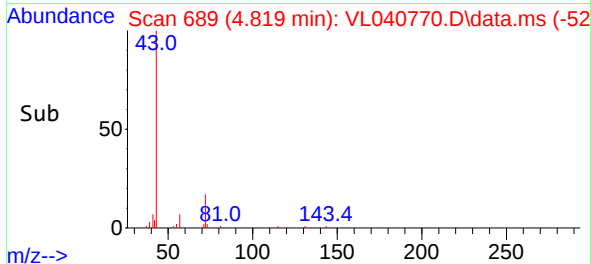
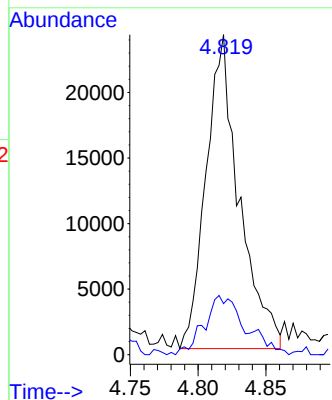
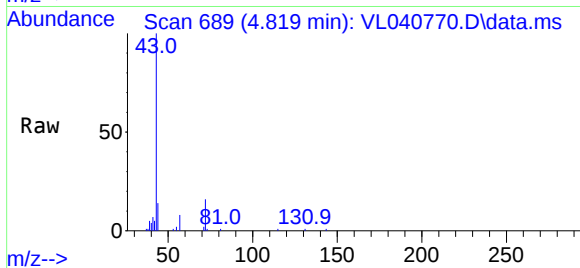




#34
2-Butanone
Concen: 0.370 ppbv
RT: 4.819 min Scan# 61
Delta R.T. 0.016 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

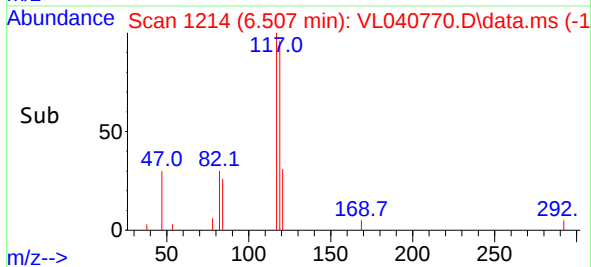
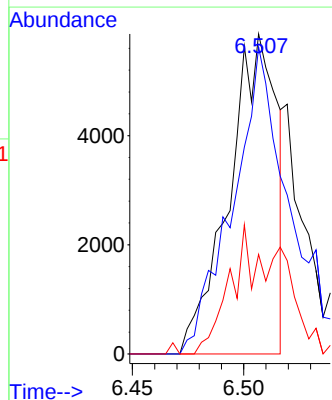
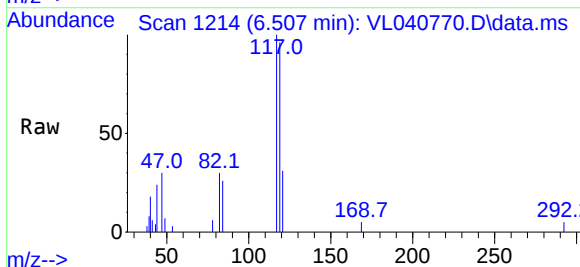
Instrument :
MSVOA_L
ClientSampleId :
OA1

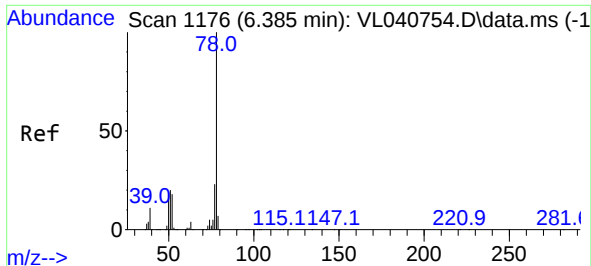
Tgt Ion: 43 Resp: 40738
Ion Ratio Lower Upper
43 100
72 23.4 16.8 25.2



#35
Carbon Tetrachloride
Concen: 0.064 ppbv
RT: 6.507 min Scan# 1214
Delta R.T. -0.000 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 117 Resp: 8735
Ion Ratio Lower Upper
117 100
119 95.9 79.4 119.0
121 31.1 25.0 37.4

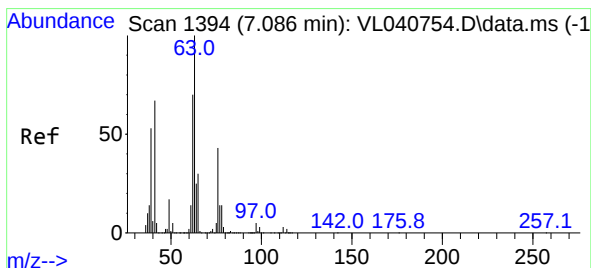
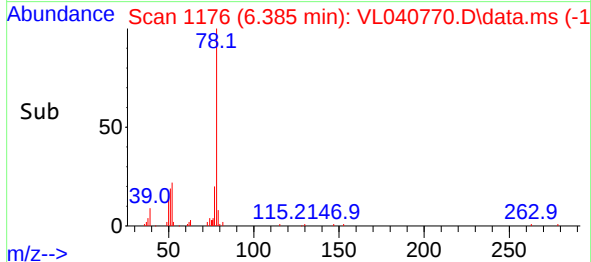
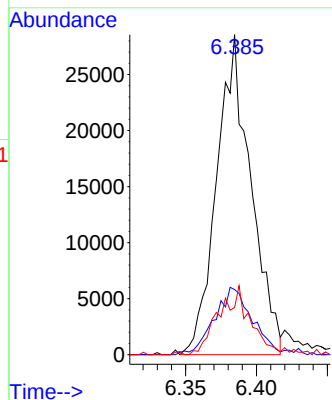
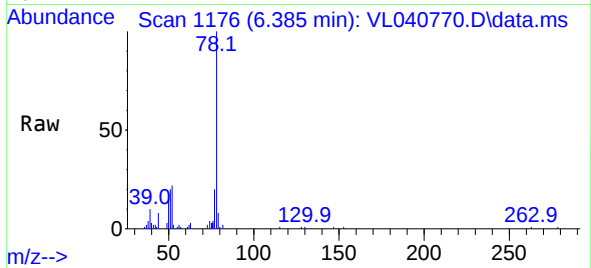




#36
Benzene
Concen: 0.256 ppbv
RT: 6.385 min Scan# 1176
Delta R.T. -0.000 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

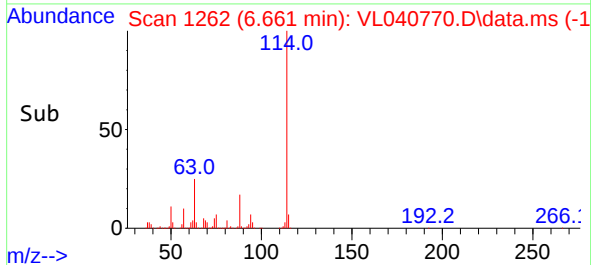
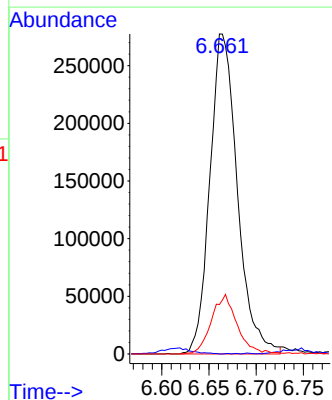
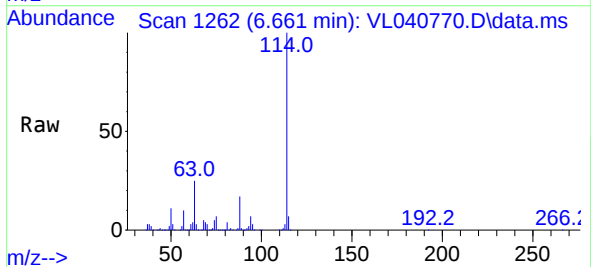
Instrument :
MSVOA_L
ClientSampleId :
OA1

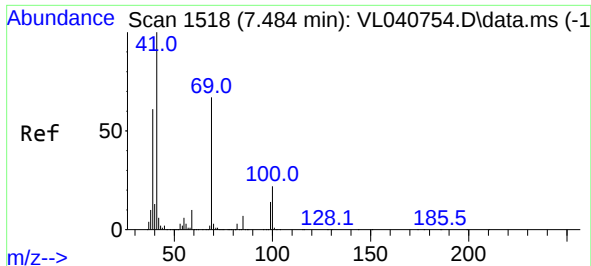
Tgt Ion: 78 Resp: 48019
Ion Ratio Lower Upper
78 100
77 19.6 18.4 27.6
50 13.9 15.0 22.4#



#39
1,2-Dichloropropane
Concen: 7.675 ppbv
RT: 6.661 min Scan# 1262
Delta R.T. -0.424 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 63 Resp: 561473
Ion Ratio Lower Upper
63 100
41 0.0 53.7 80.5#
62 15.4 55.7 83.5#

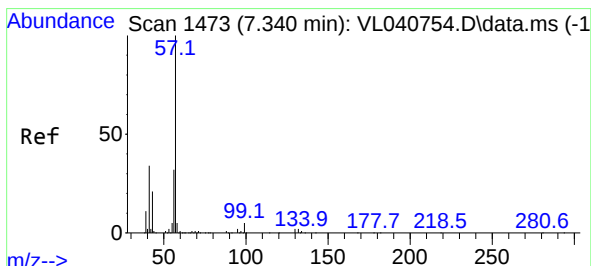
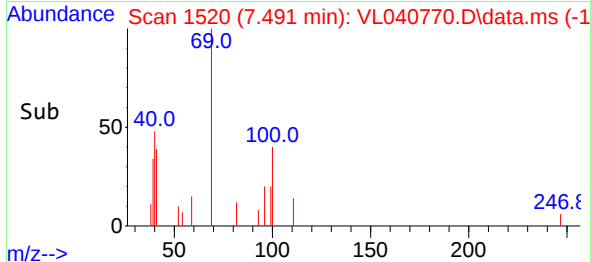
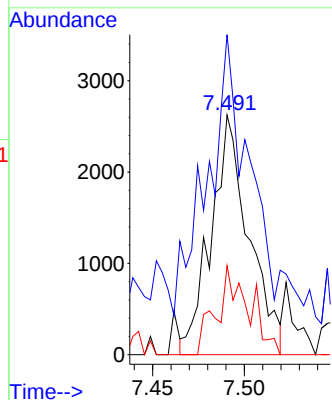
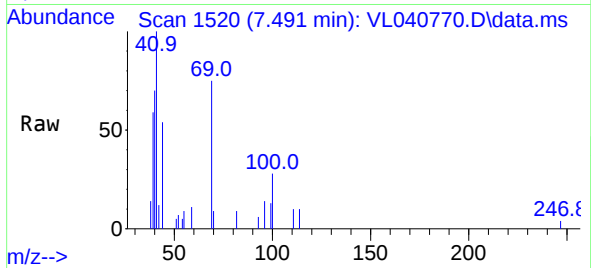




#43
Methyl Methacrylate
Concen: 0.050 ppbv
RT: 7.491 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

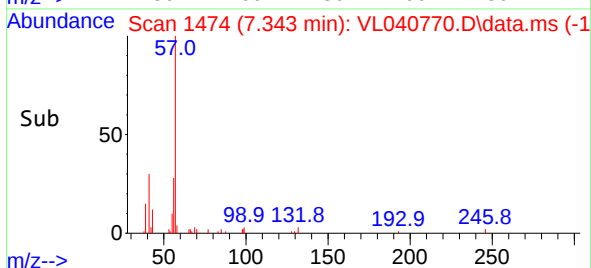
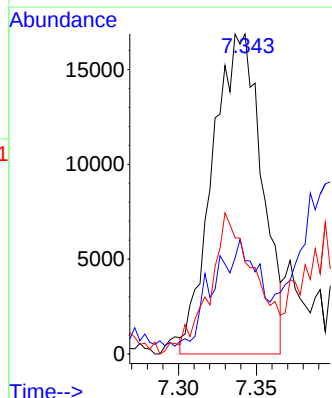
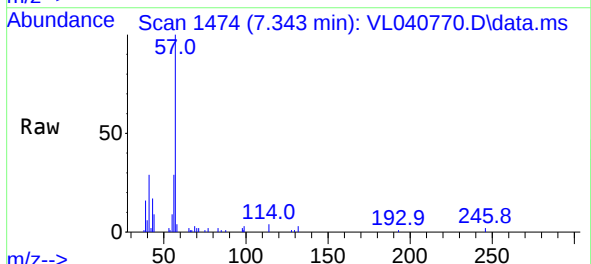
Instrument :
MSVOA_L
ClientSampleId :
OA1

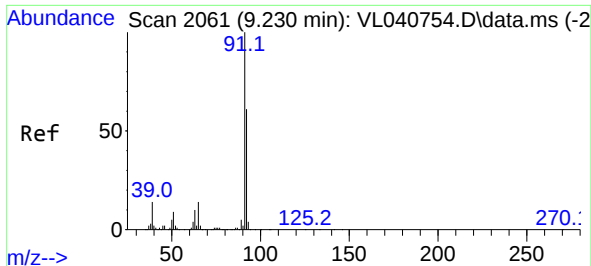
Tgt Ion: 69 Resp: 3757
Ion Ratio Lower Upper
69 100
41 194.2 120.6 181.0#
100 31.8 27.1 40.7



#44
2,2,4-Trimethylpentane
Concen: 0.117 ppbv
RT: 7.343 min Scan# 1474
Delta R.T. 0.003 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 57 Resp: 37109
Ion Ratio Lower Upper
57 100
41 32.9 27.4 41.0
56 41.0 25.0 37.6#

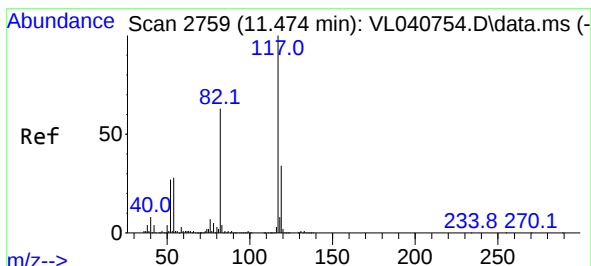
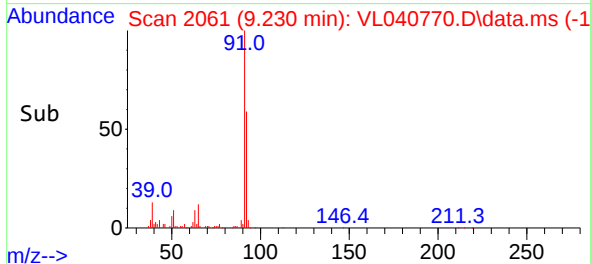
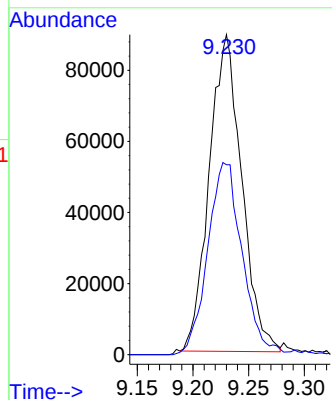
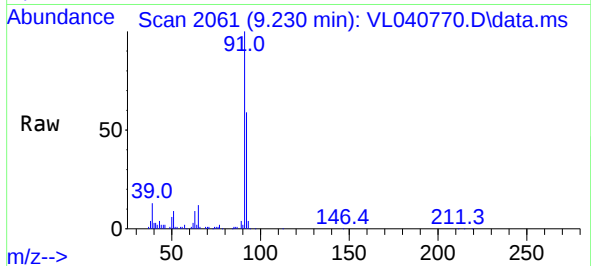




#53
Toluene
Concen: 0.811 ppbv
RT: 9.230 min Scan# 2061
Delta R.T. -0.000 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

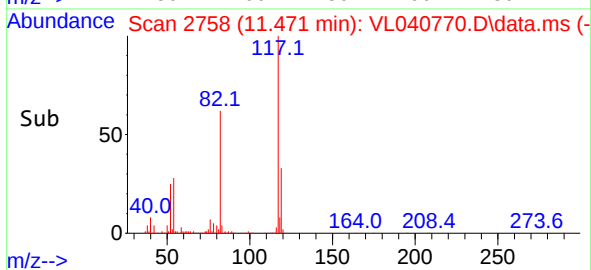
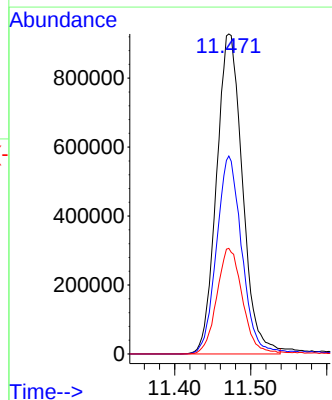
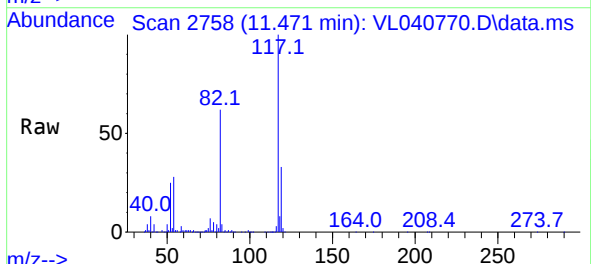
Instrument :
MSVOA_L
ClientSampleId :
OA1

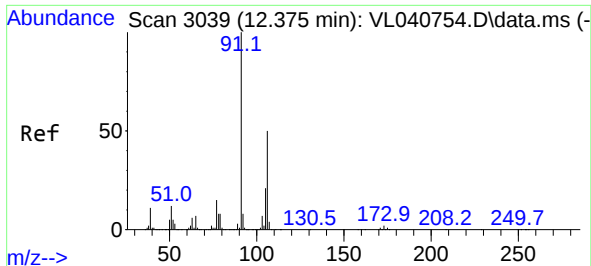
Tgt Ion: 91 Resp: 180793
Ion Ratio Lower Upper
91 100
92 65.4 50.2 75.2



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.471 min Scan# 2758
Delta R.T. -0.003 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 117 Resp: 2198974
Ion Ratio Lower Upper
117 100
82 61.8 46.6 70.0
119 33.2 26.0 39.0





#59

m/p-Xylene

Concen: 0.056 ppbv

RT: 12.368 min Scan# 3039

Delta R.T. -0.006 min

Lab File: VL040770.D

Acq: 12 Oct 2023 00:33

Instrument :

MSVOA_L

ClientSampleId :

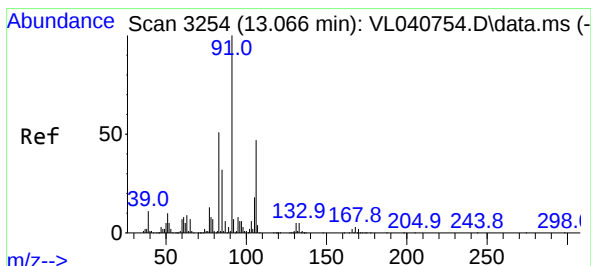
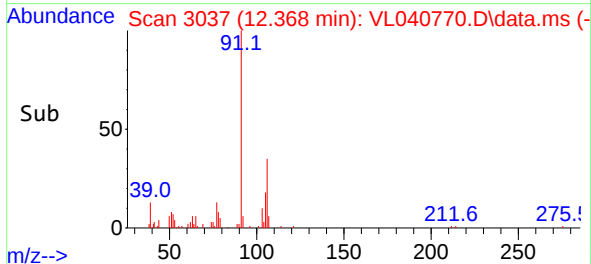
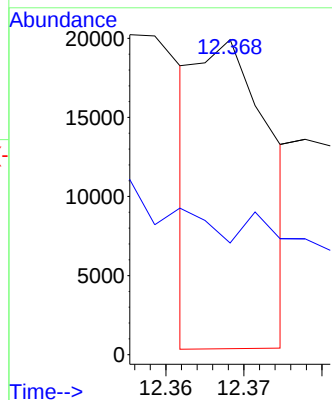
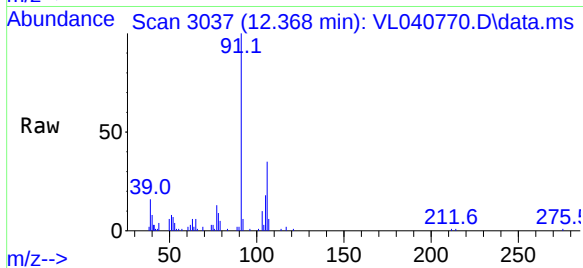
OA1

Tgt Ion: 91 Resp: 12701

Ion Ratio Lower Upper

91 100

106 0.0 37.7 56.5#



#60

o-Xylene

Concen: 0.127 ppbv

RT: 13.066 min Scan# 3254

Delta R.T. -0.000 min

Lab File: VL040770.D

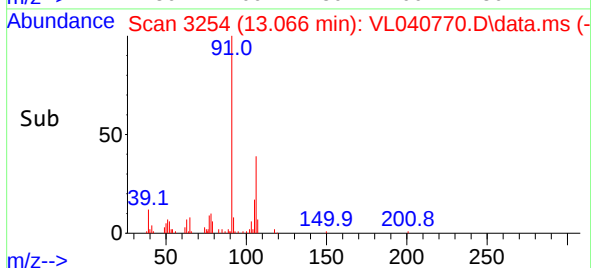
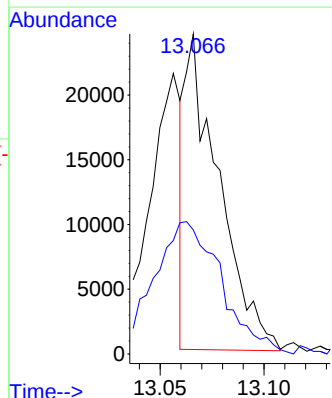
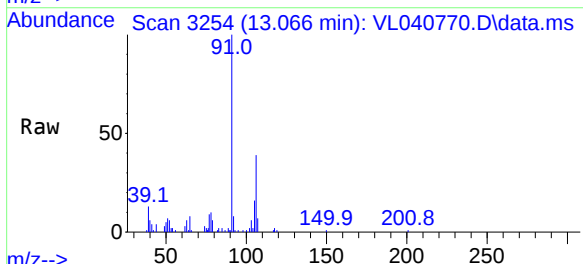
Acq: 12 Oct 2023 00:33

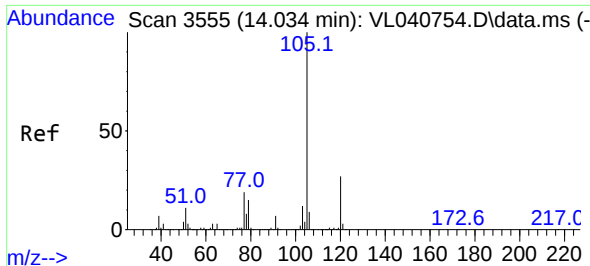
Tgt Ion: 91 Resp: 27590

Ion Ratio Lower Upper

91 100

106 86.9 23.5 70.5#

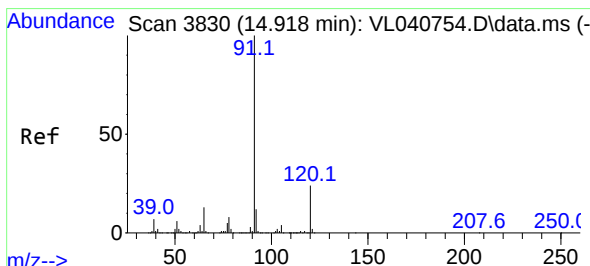
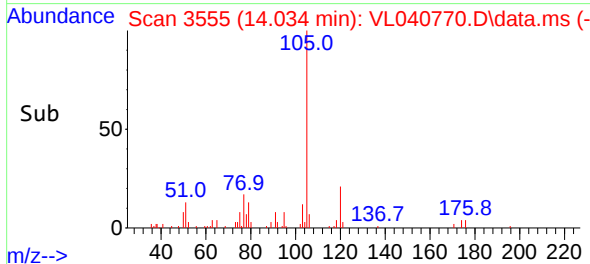
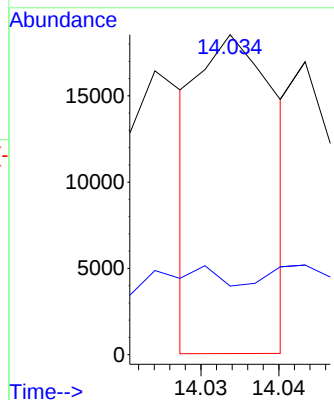
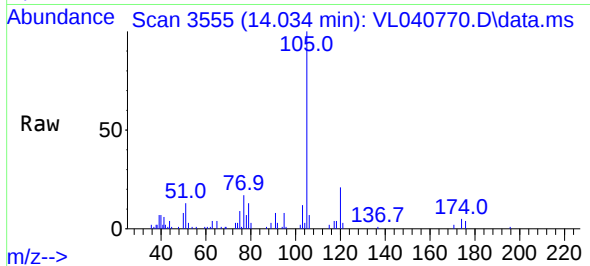




#62
Isopropylbenzene
Concen: 0.038 ppbv
RT: 14.034 min Scan# 31
Delta R.T. -0.000 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

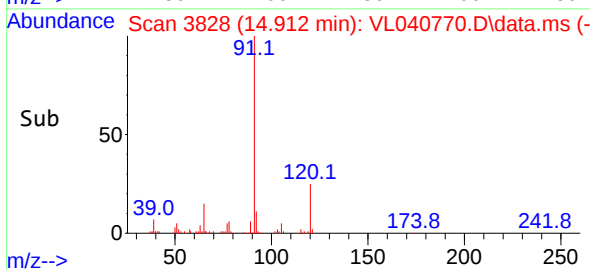
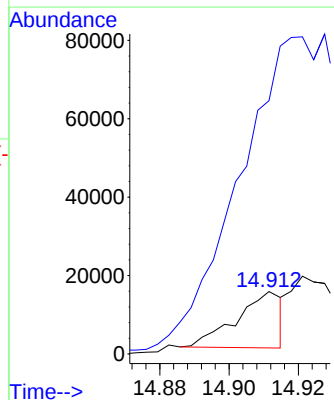
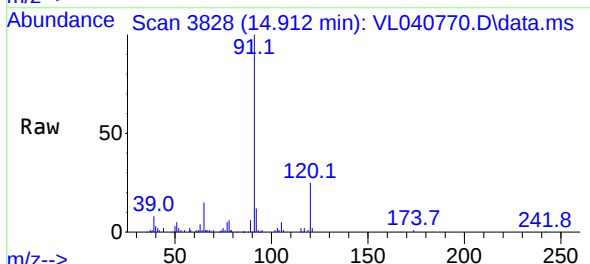
Instrument :
MSVOA_L
ClientSampleId :
OA1

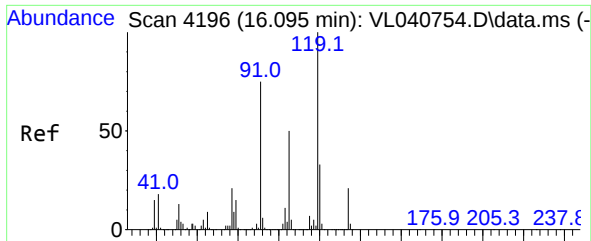
Tgt Ion:105 Resp: 12807
Ion Ratio Lower Upper
105 100
120 0.0 21.5 32.3#



#64
n-propylbenzene
Concen: 0.146 ppbv
RT: 14.912 min Scan# 3828
Delta R.T. -0.006 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion:120 Resp: 13078
Ion Ratio Lower Upper
120 100
91 0.0 345.9 518.9#

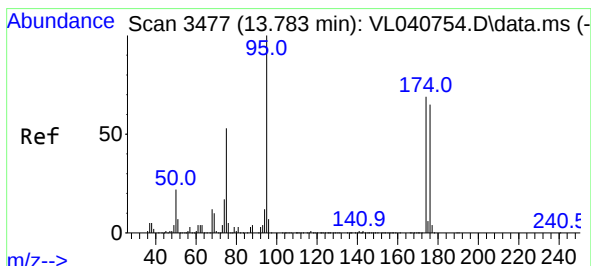
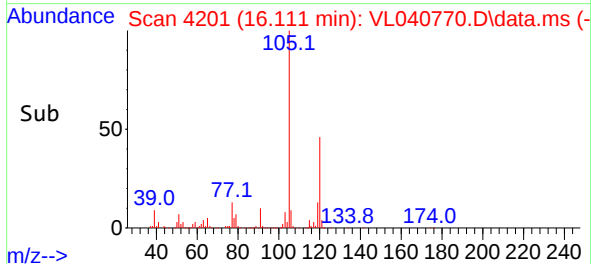
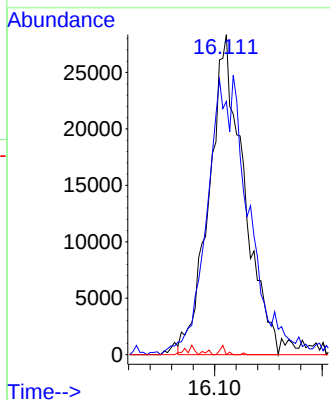
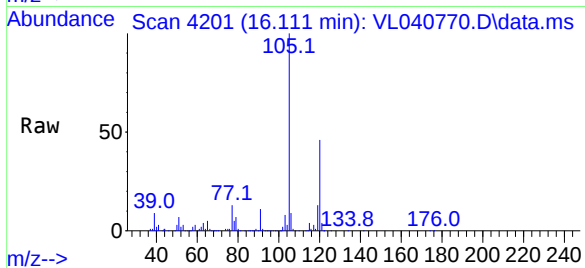




#65
tert-Butylbenzene
Concen: 0.210 ppbv
RT: 16.111 min Scan# 4196
Delta R.T. 0.016 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

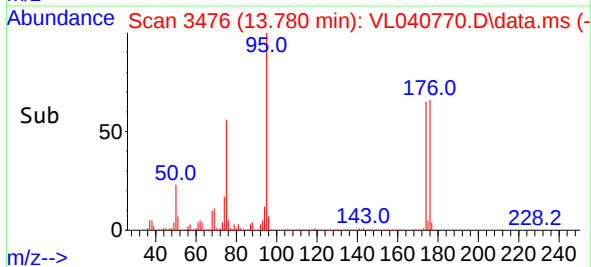
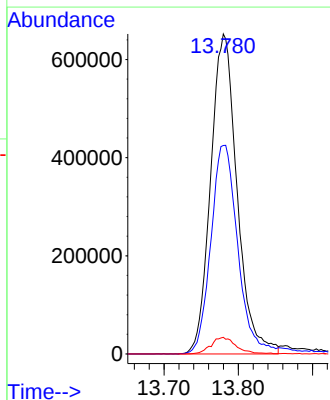
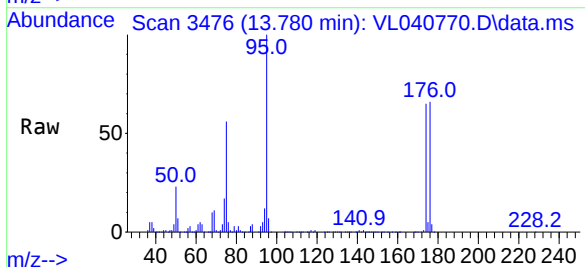
Instrument :
MSVOA_L
ClientSampleId :
OA1

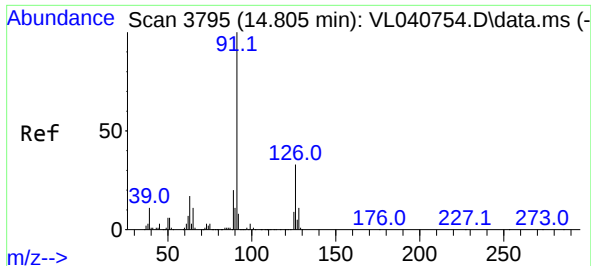
Tgt Ion:119 Resp: 63209
Ion Ratio Lower Upper
119 100
91 105.9 62.2 93.2#
134 1.3 16.1 24.1#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.987 ppbv
RT: 13.780 min Scan# 3476
Delta R.T. -0.003 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion: 95 Resp: 1615892
Ion Ratio Lower Upper
95 100
174 68.7 54.7 82.1
175 5.1 4.2 6.4

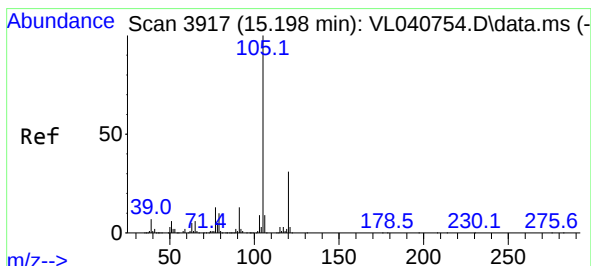
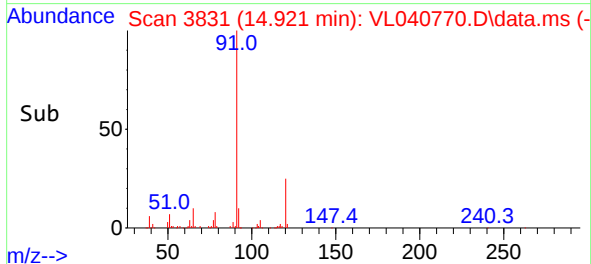
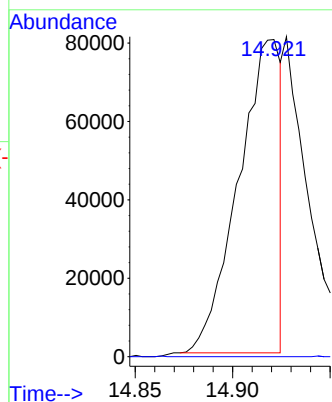
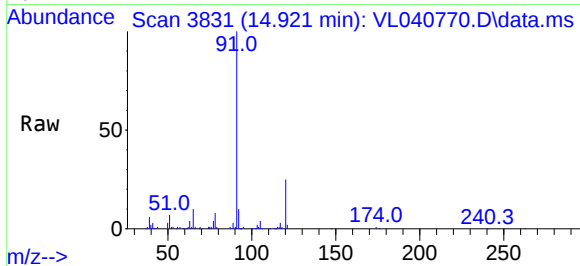




#71
2-Chlorotoluene
Concen: 0.479 ppbv
RT: 14.921 min Scan# 3831
Delta R.T. 0.116 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

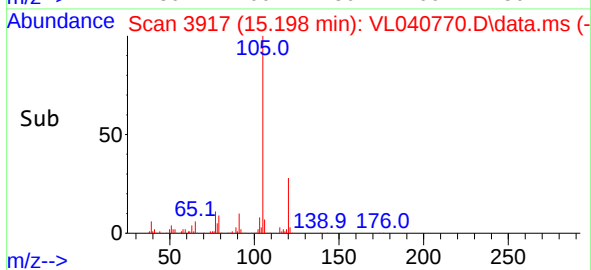
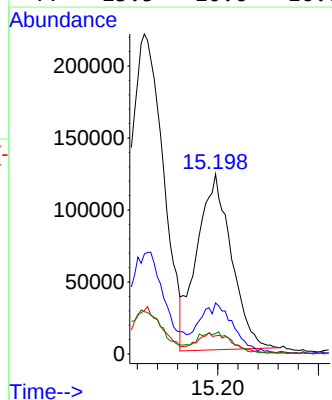
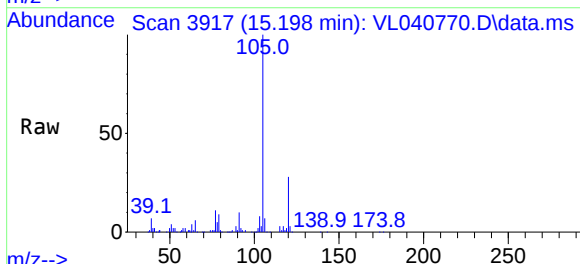
Instrument :
MSVOA_L
ClientSampleId :
OA1

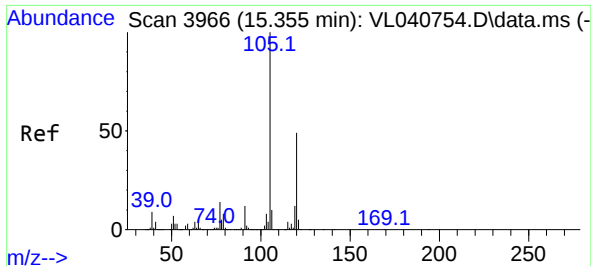
Tgt Ion: 91 Resp: 120242
Ion Ratio Lower Upper
91 100
126 1.0 13.3 53.1#



#72
4-Ethyltoluene
Concen: 1.139 ppbv
RT: 15.198 min Scan# 3917
Delta R.T. -0.000 min
Lab File: VL040770.D
Acq: 12 Oct 2023 00:33

Tgt Ion:105 Resp: 289556
Ion Ratio Lower Upper
105 100
120 31.2 25.0 37.4
91 12.4 9.8 14.8
77 13.5 10.6 16.0

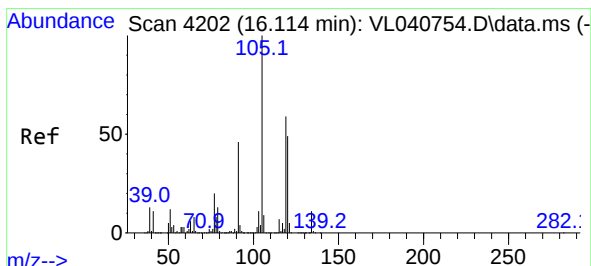
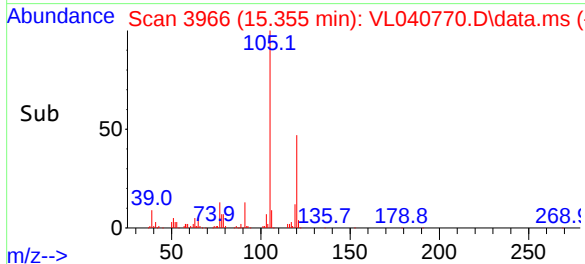
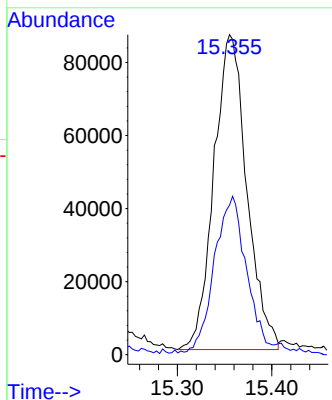
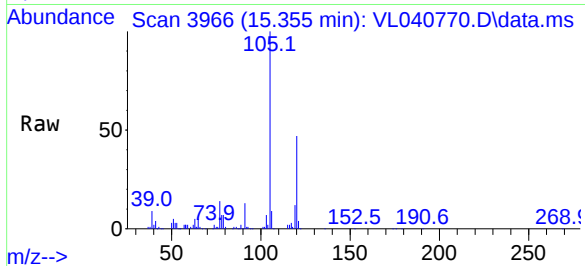




#73
 1,3,5-Trimethylbenzene
 Concen: 0.931 ppbv
 RT: 15.355 min Scan# 3966
 Delta R.T. -0.000 min
 Lab File: VL040770.D
 Acq: 12 Oct 2023 00:33

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Tgt Ion:105 Resp: 208515
 Ion Ratio Lower Upper
 105 100
 120 47.0 39.4 59.2



#74
 1,2,4-Trimethylbenzene
 Concen: 2.214 ppbv
 RT: 16.111 min Scan# 4201
 Delta R.T. -0.003 min
 Lab File: VL040770.D
 Acq: 12 Oct 2023 00:33

Tgt Ion:105 Resp: 541403
 Ion Ratio Lower Upper
 105 100
 120 46.2 39.4 59.2
 91 10.3 38.6 58.0#
 77 13.3 16.6 25.0#

