

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL051123\
 Data File : VL040413.D
 Acq On : 12 May 2023 8:19
 Operator : SY/MD
 Sample : 02761-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: May 12 15:57:27 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041323AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Apr 13 14:37:02 2023
 Response via : Initial Calibration

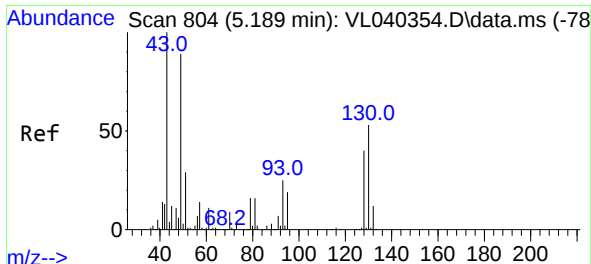
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.176	49	1035946	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	6.639	114	2646116	10.000	ppbv	-0.02
55) Chlorobenzene-d5	11.458	117	2391998	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.767	95	1844282	9.324	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.200%
Target Compounds						
					Qvalue	
3) Chlorodifluoromethane	2.652	51	52805	0.390	ppbv #	87
4) Chloromethane	2.793	50	37496	0.438	ppbv	97
9) Propene	2.674	41	244082	4.564	ppbv	97
10) Heptane	7.568	43	10571	0.087	ppbv	90
11) Trichlorofluoromethane	3.546	101	35993	0.190	ppbv	98
12) 1,1,2-Trichlorotrifluo...	4.054	101	4805	0.036	ppbv #	7
13) Ethanol	3.221	45	211775	47.435	ppbv	99
15) Acetone	3.443	43	3149297	21.464	ppbv #	67
16) 1,3-Butadiene	2.944	39	986356	16.244	ppbv #	12
17) tert-Butyl alcohol	3.864	59	253249	1.880	ppbv	99
19) Isopropyl Alcohol	3.562	45	89504	1.337	ppbv #	90
20) Methylene Chloride	3.912	84	64534	1.102	ppbv	93
21) Allyl Chloride	3.867	41	75329	0.904	ppbv #	65
23) Vinyl Acetate	4.697	43	38637	1.034	ppbv #	4
25) Ethyl Acetate	5.195	43	119805	0.485	ppbv #	82
26) Hexane	5.198	57	147639	1.418	ppbv #	39
34) 2-Butanone	4.764	43	2429129	17.024	ppbv	99
36) Benzene	6.356	78	46274	0.214	ppbv #	93
39) 1,2-Dichloropropane	6.639	63	648101	7.629	ppbv #	24
44) 2,2,4-Trimethylpentane	7.314	57	34618	0.096	ppbv #	26
51) 2-Hexanone	9.552	43	32747	0.205	ppbv #	30
53) Toluene	9.208	91	51995	0.227	ppbv #	20
58) Ethyl Benzene	12.082	91	17733	0.060	ppbv	96
59) m/p-Xylene	12.356	91	18832	0.070	ppbv #	32
60) o-Xylene	13.050	91	15099	0.058	ppbv #	32
73) 1,3,5-Trimethylbenzene	15.349	105	9283	0.035	ppbv #	73
74) 1,2,4-Trimethylbenzene	16.101	105	43907	0.145	ppbv #	68
79) Naphthalene	21.374	128	9953	0.049	ppbv #	80
80) Naphthalene,2-methyl-	24.371	142	11202	0.184	ppbv #	28

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

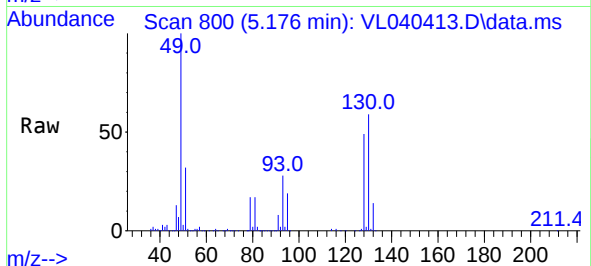
Quant Time: May 12 15:57:27 2023
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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Apr 13 14:37:02 2023
Response via : Initial Calibration



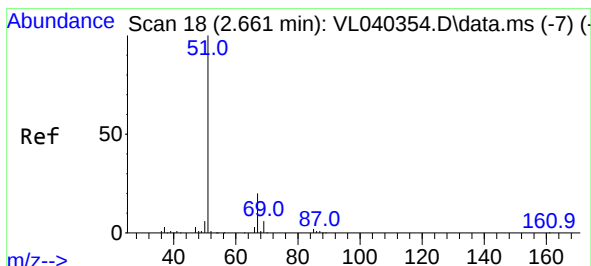
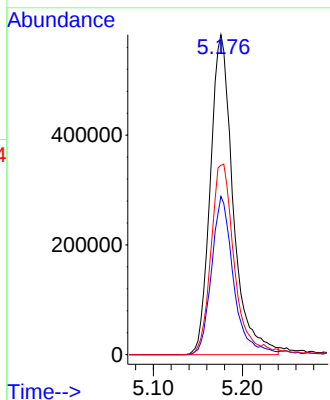
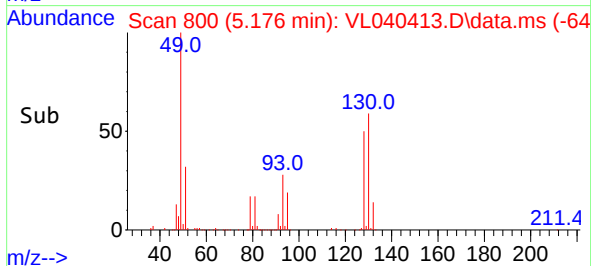


#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.176 min Scan# 80
Delta R.T. -0.013 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Instrument :
MSVOA_L
ClientSampleId :

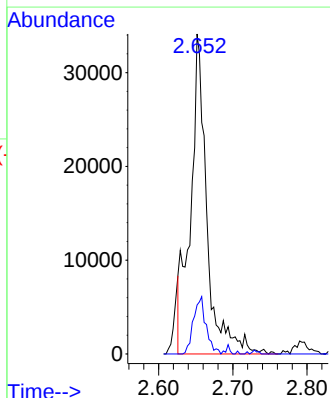
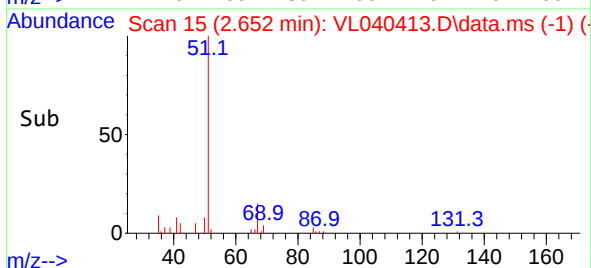
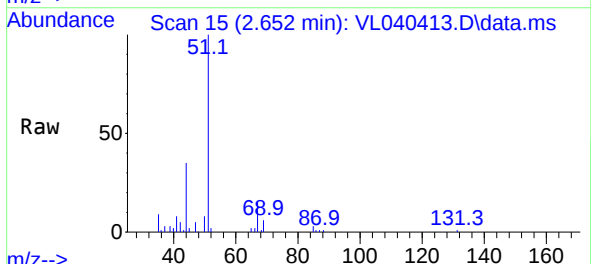


Tgt Ion: 49 Resp: 1035946
Ion Ratio Lower Upper
49 100
128 49.2 23.7 71.1
130 63.5 29.9 89.8

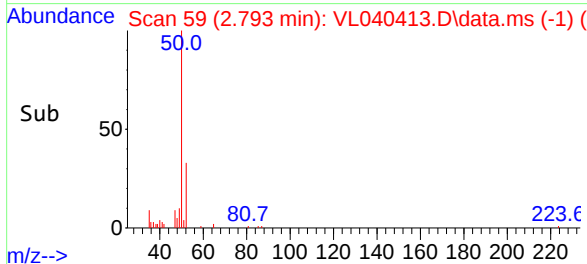
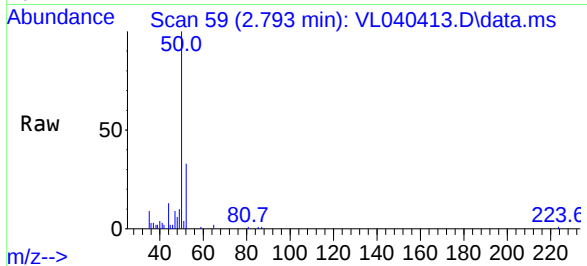
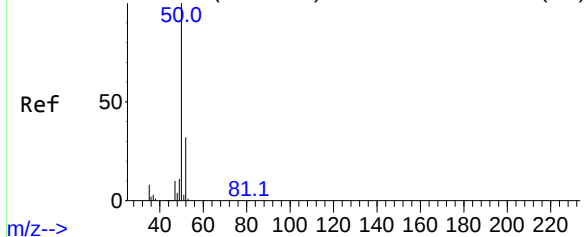


#3
Chlorodifluoromethane
Concen: 0.390 ppbv
RT: 2.652 min Scan# 15
Delta R.T. -0.009 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Tgt Ion: 51 Resp: 52805
Ion Ratio Lower Upper
51 100
67 13.6 15.5 23.3#



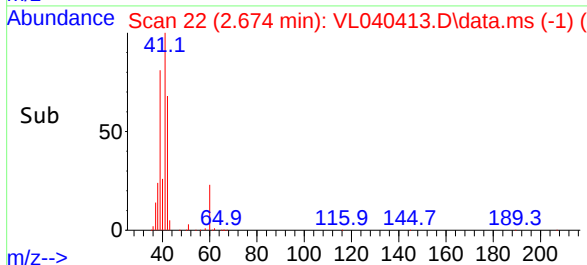
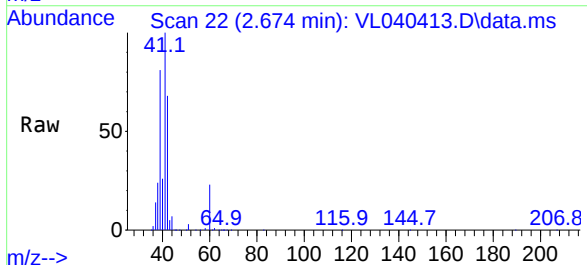
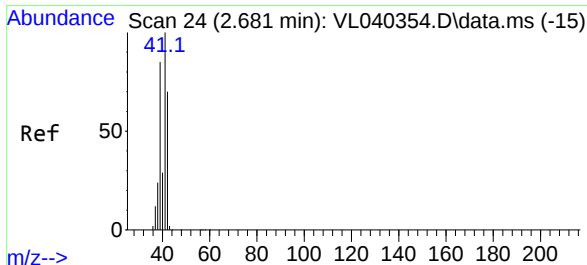
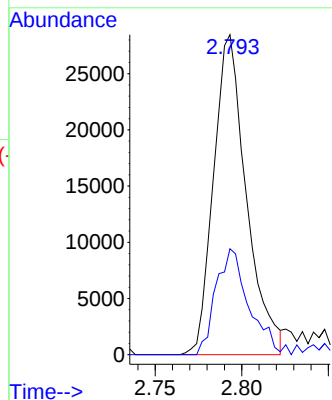
Abundance Scan 61 (2.800 min): VL040354.D\data.ms (-52)



#4
Chloromethane
Concen: 0.438 ppbv
RT: 2.793 min Scan# 51
Delta R.T. -0.007 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

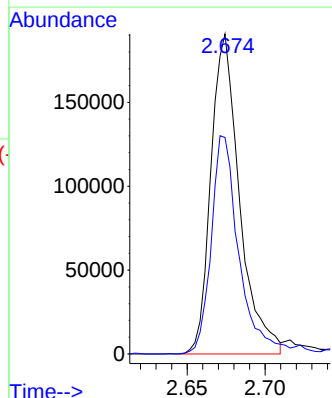
Instrument :
MSVOA_L
ClientSampleId :

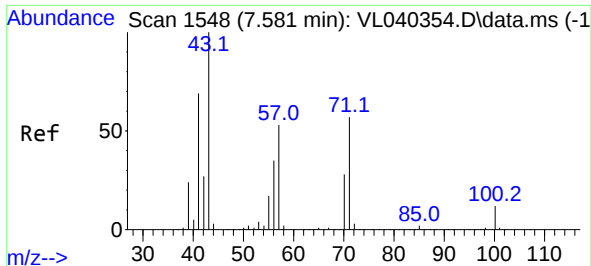
Tgt Ion: 50 Resp: 37496
Ion Ratio Lower Upper
50 100
52 33.1 25.3 37.9



#9
Propene
Concen: 4.564 ppbv
RT: 2.674 min Scan# 22
Delta R.T. -0.007 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Tgt Ion: 41 Resp: 244082
Ion Ratio Lower Upper
41 100
42 68.3 56.5 84.7

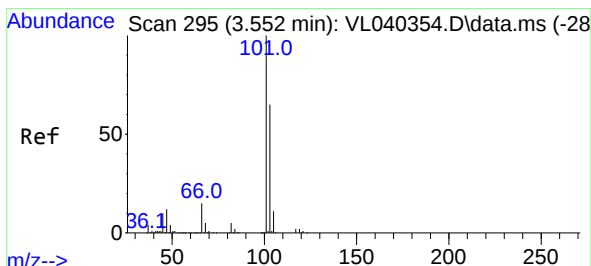
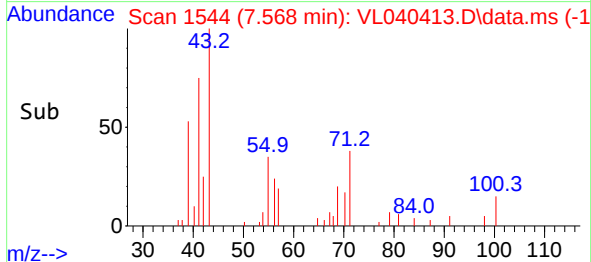
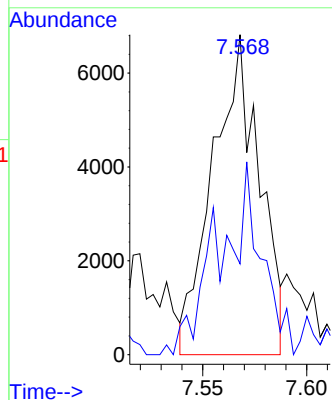
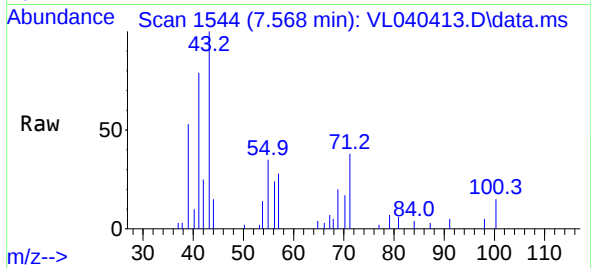




#10
Heptane
Concen: 0.087 ppbv
RT: 7.568 min Scan# 11
Delta R.T. -0.013 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

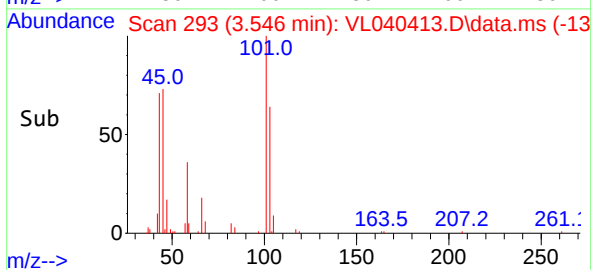
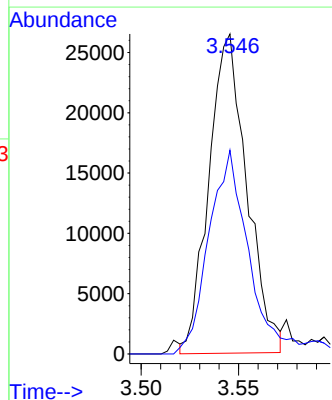
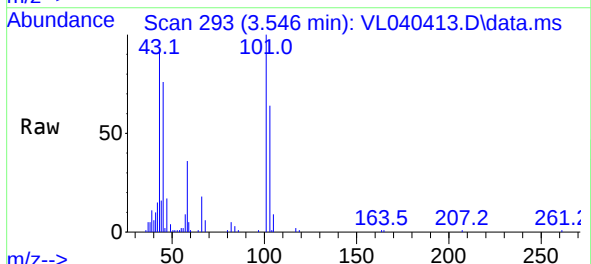
Instrument :
MSVOA_L
ClientSampleId :

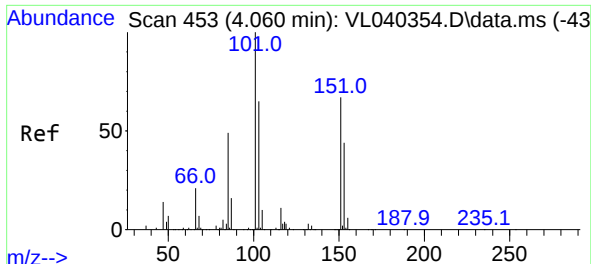
Tgt Ion: 43 Resp: 10571
Ion Ratio Lower Upper
43 100
57 59.6 42.2 63.4



#11
Trichlorofluoromethane
Concen: 0.190 ppbv
RT: 3.546 min Scan# 293
Delta R.T. -0.006 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Tgt Ion:101 Resp: 35993
Ion Ratio Lower Upper
101 100
103 63.6 52.2 78.4

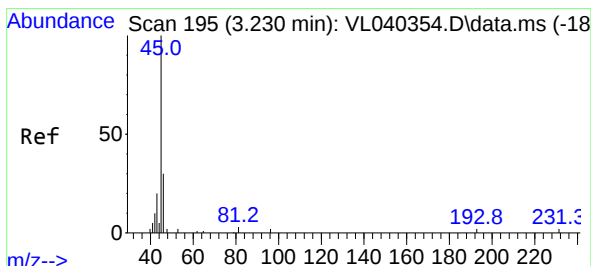
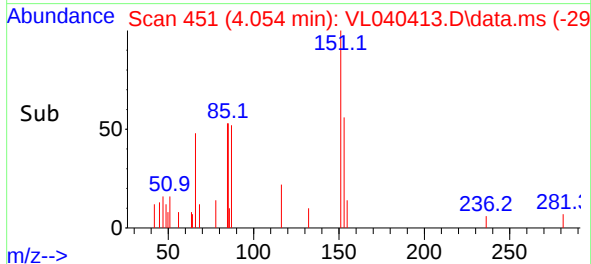
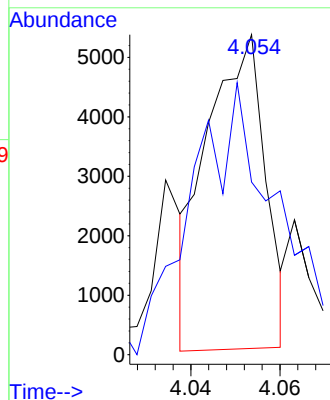
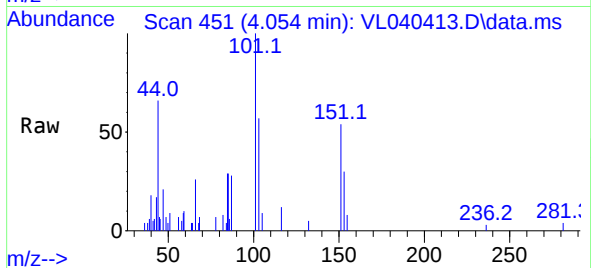




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.036 ppbv
RT: 4.054 min Scan# 41
Delta R.T. -0.006 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

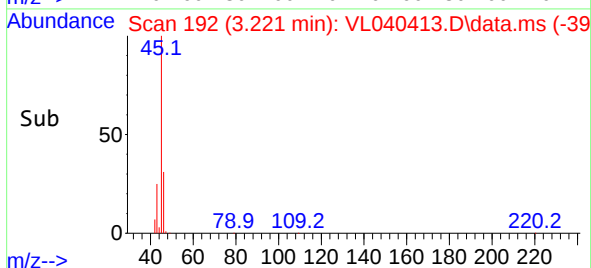
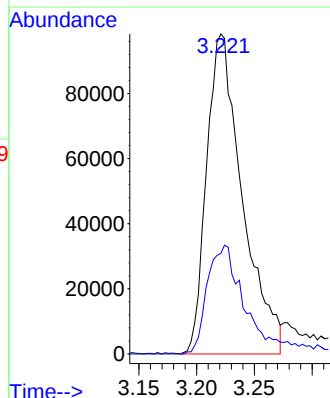
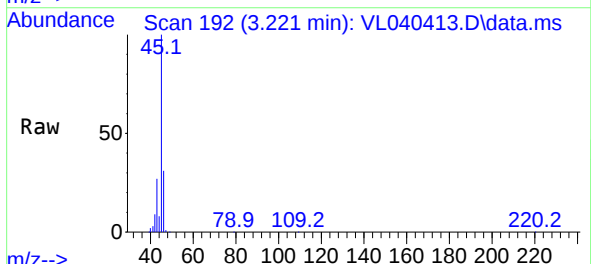
Instrument :
MSVOA_L
ClientSampleId :

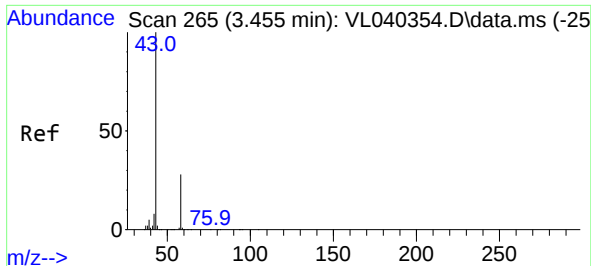
Tgt Ion:101 Resp: 4805
Ion Ratio Lower Upper
101 100
151 143.8 54.7 82.1#



#13
Ethanol
Concen: 47.435 ppbv
RT: 3.221 min Scan# 192
Delta R.T. -0.009 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Tgt Ion: 45 Resp: 211775
Ion Ratio Lower Upper
45 100
46 37.5 15.3 61.3

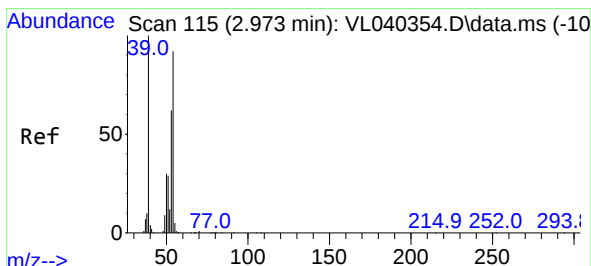
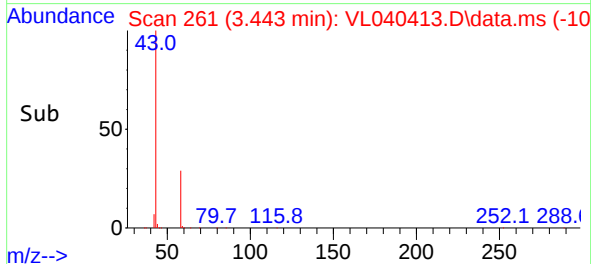
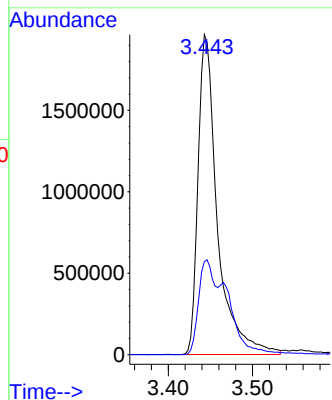
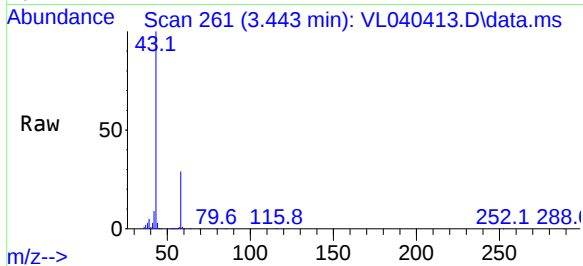




#15
Acetone
Concen: 21.464 ppbv
RT: 3.443 min Scan# 20
Delta R.T. -0.012 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

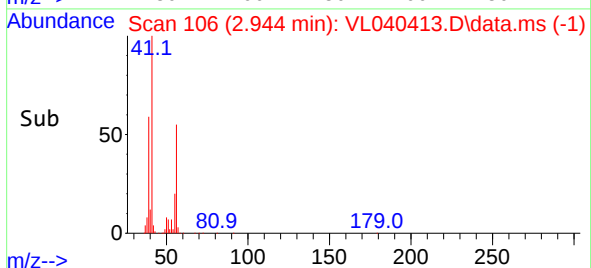
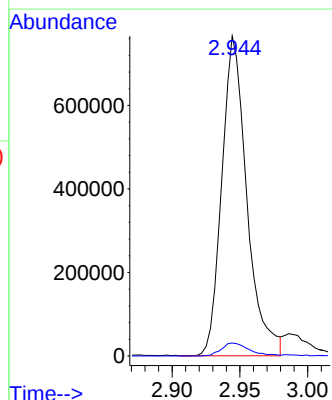
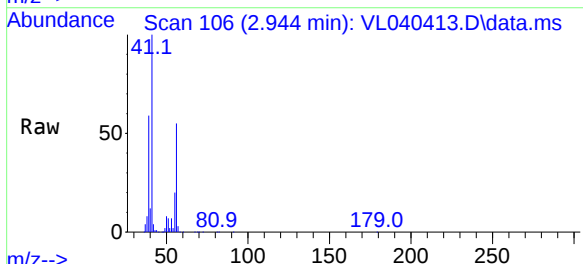
Instrument :
MSVOA_L
ClientSampleId :

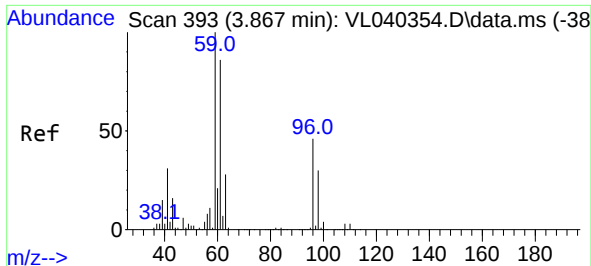
Tgt Ion: 43 Resp: 3149297
Ion Ratio Lower Upper
43 100
58 45.0 22.2 33.2#



#16
1,3-Butadiene
Concen: 16.244 ppbv
RT: 2.944 min Scan# 106
Delta R.T. -0.029 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Tgt Ion: 39 Resp: 986356
Ion Ratio Lower Upper
39 100
54 4.8 68.8 103.2#





#17

tert-Butyl alcohol

Concen: 1.880 ppbv

RT: 3.864 min Scan# 393

Delta R.T. -0.003 min

Lab File: VL040413.D

Acq: 12 May 2023 8:19

Instrument :

MSVOA_L

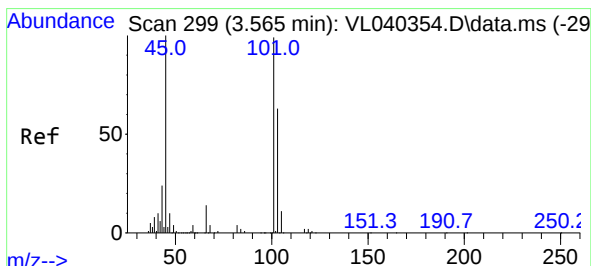
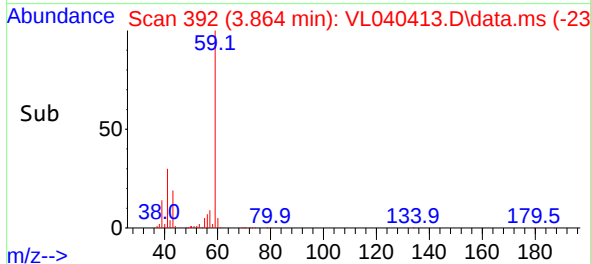
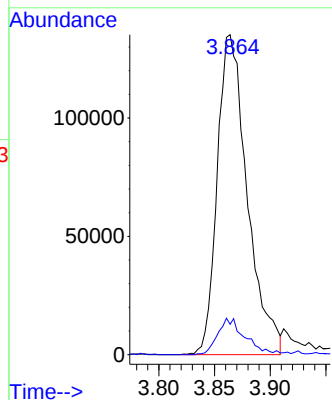
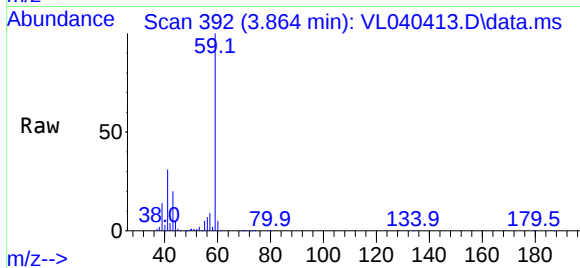
ClientSampleId :

Tgt Ion: 59 Resp: 253249

Ion Ratio Lower Upper

59 100

57 10.9 8.5 12.7



#19

Isopropyl Alcohol

Concen: 1.337 ppbv

RT: 3.562 min Scan# 298

Delta R.T. -0.003 min

Lab File: VL040413.D

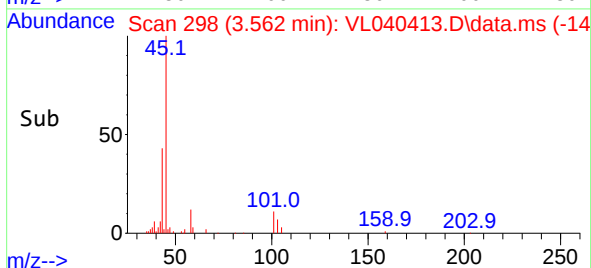
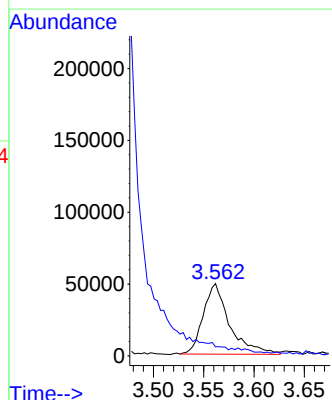
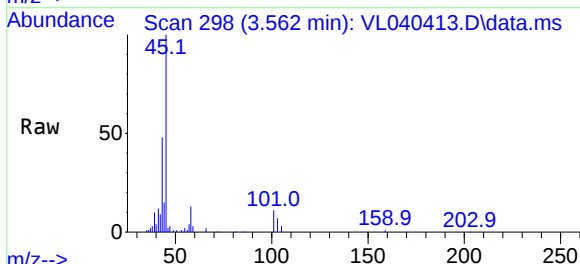
Acq: 12 May 2023 8:19

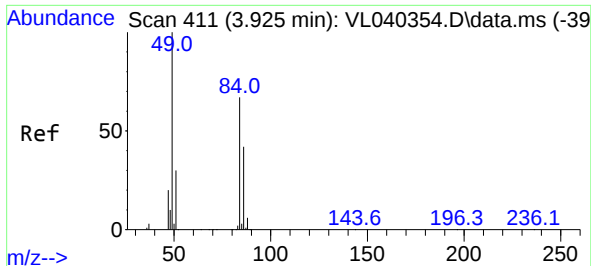
Tgt Ion: 45 Resp: 89504

Ion Ratio Lower Upper

45 100

58 0.0 2.6 4.0#





#20

Methylene Chloride

Concen: 1.102 ppbv

RT: 3.912 min Scan# 407

Delta R.T. -0.013 min

Lab File: VL040413.D

Acq: 12 May 2023 8:19

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 84 Resp: 64534

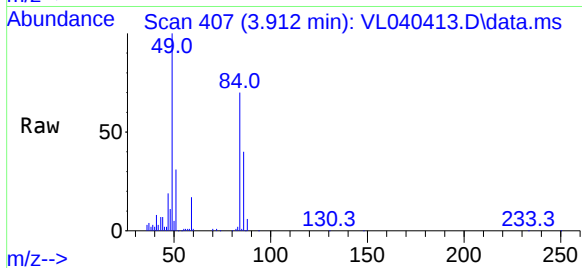
Ion Ratio Lower Upper

84 100

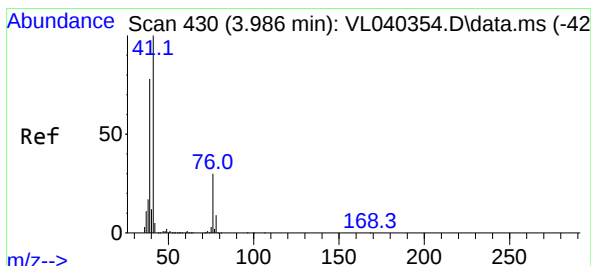
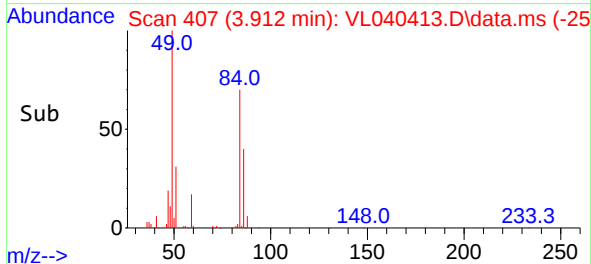
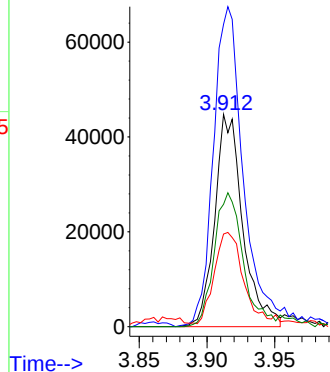
49 140.2 120.1 180.1

51 41.3 36.3 54.5

86 57.7 50.8 76.2



Abundance



#21

Allyl Chloride

Concen: 0.904 ppbv

RT: 3.867 min Scan# 393

Delta R.T. -0.119 min

Lab File: VL040413.D

Acq: 12 May 2023 8:19

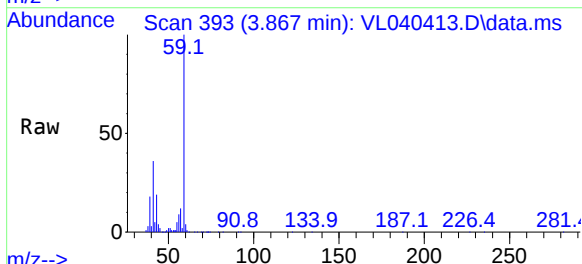
Tgt Ion: 41 Resp: 75329

Ion Ratio Lower Upper

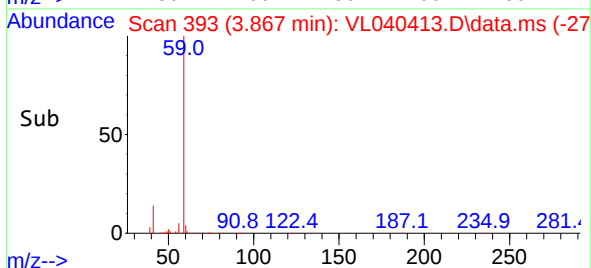
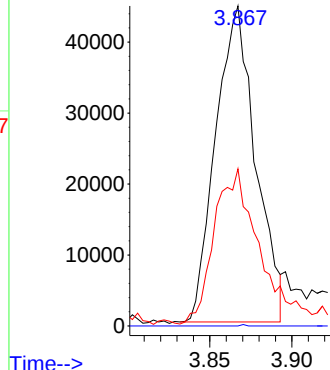
41 100

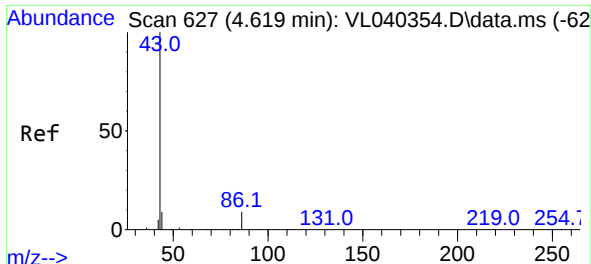
76 0.0 25.5 38.3#

39 57.5 64.0 96.0#



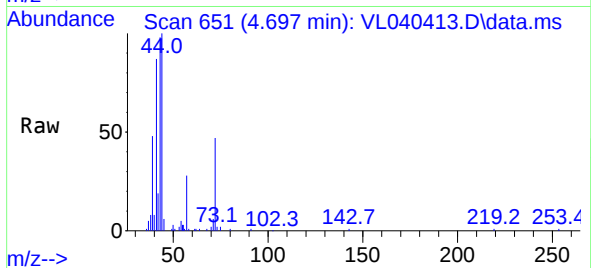
Abundance





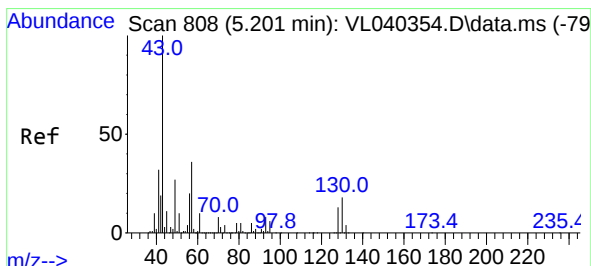
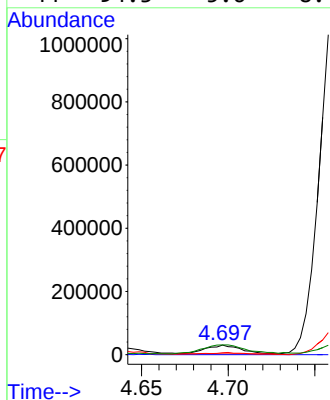
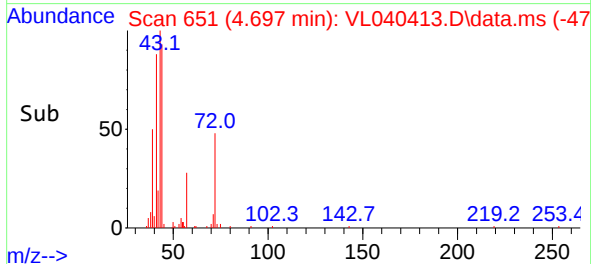
#23
 Vinyl Acetate
 Concen: 1.034 ppbv
 RT: 4.697 min Scan# 61
 Delta R.T. 0.078 min
 Lab File: VL040413.D
 Acq: 12 May 2023 8:19

Instrument :
 MSVOA_L
 ClientSampleId :

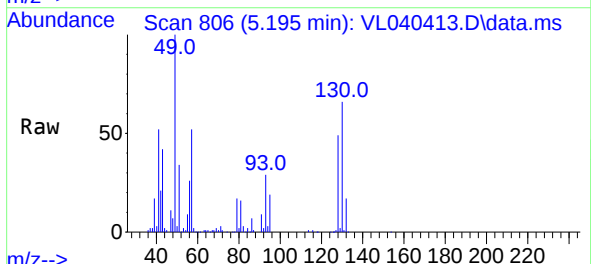


Tgt Ion: 43 Resp: 38637

Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.0	9.0#
42	18.0	6.4	9.6#
44	94.3	5.6	8.4#

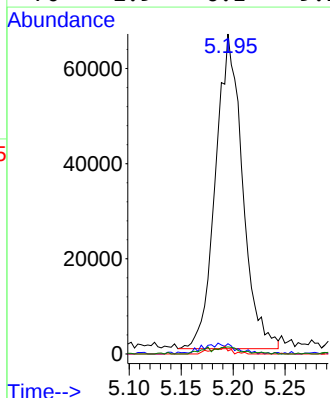
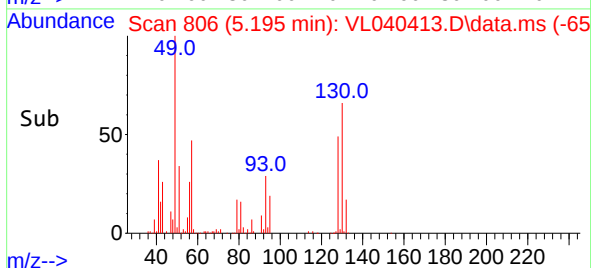


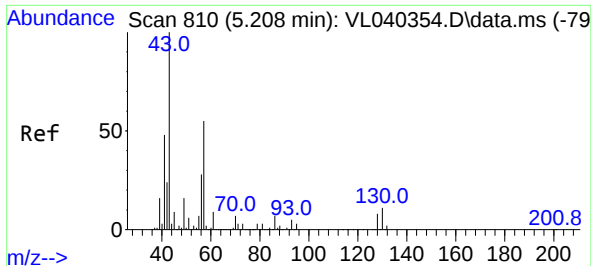
#25
 Ethyl Acetate
 Concen: 0.485 ppbv
 RT: 5.195 min Scan# 806
 Delta R.T. -0.006 min
 Lab File: VL040413.D
 Acq: 12 May 2023 8:19



Tgt Ion: 43 Resp: 119805

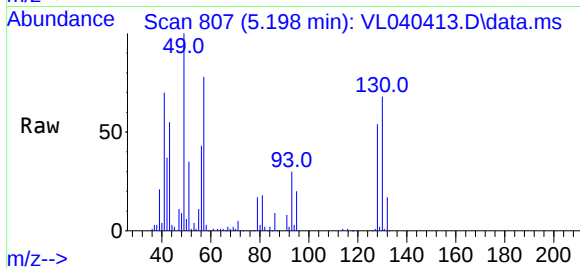
Ion	Ratio	Lower	Upper
43	100		
45	4.4	8.5	12.7#
61	1.5	8.5	12.7#
70	2.9	6.1	9.1#





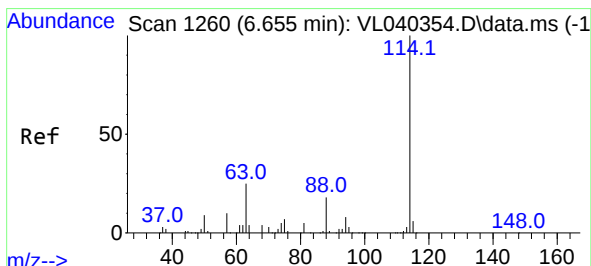
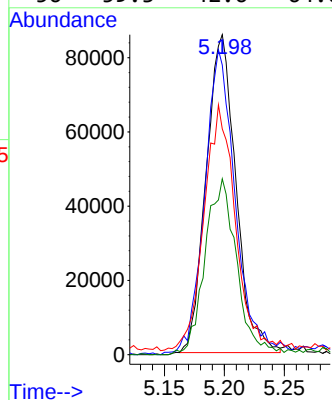
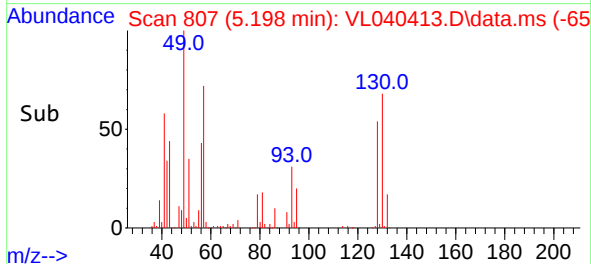
#26
Hexane
Concen: 1.418 ppbv
RT: 5.198 min Scan# 80
Delta R.T. -0.010 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Instrument :
MSVOA_L
ClientSampleId :

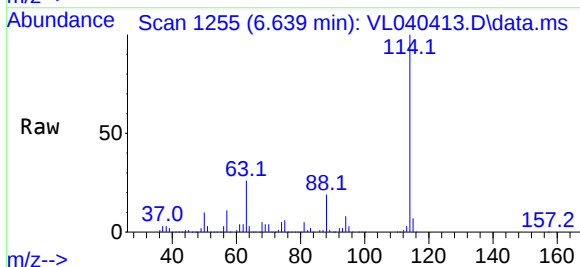


Tgt Ion: 57 Resp: 147639

Ion	Ratio	Lower	Upper
57	100		
41	103.7	74.8	112.2
43	82.7	192.7	289.1#
56	59.3	42.6	64.0

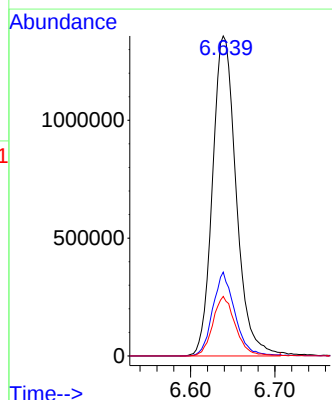
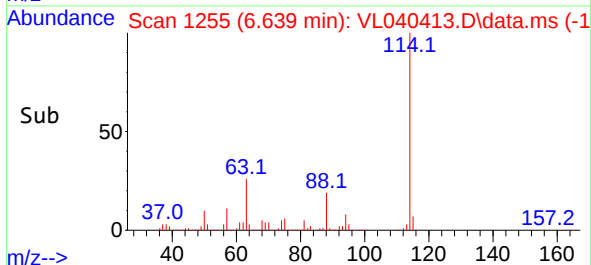


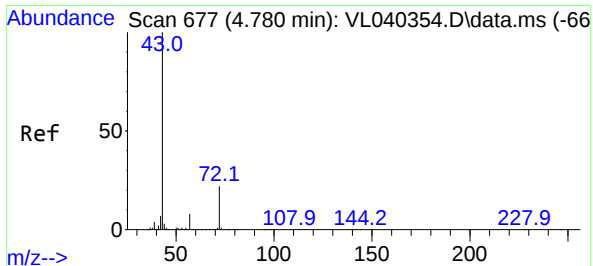
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.639 min Scan# 1255
Delta R.T. -0.016 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19



Tgt Ion: 114 Resp: 2646116

Ion	Ratio	Lower	Upper
114	100		
63	24.9	21.4	32.0
88	18.0	14.6	22.0





#34

2-Butanone

Concen: 17.024 ppbv

RT: 4.764 min Scan# 61

Delta R.T. -0.016 min

Lab File: VL040413.D

Acq: 12 May 2023 8:19

Instrument :

MSVOA_L

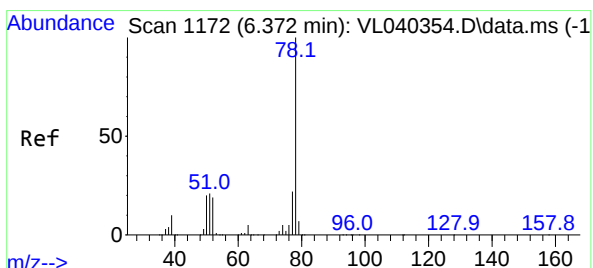
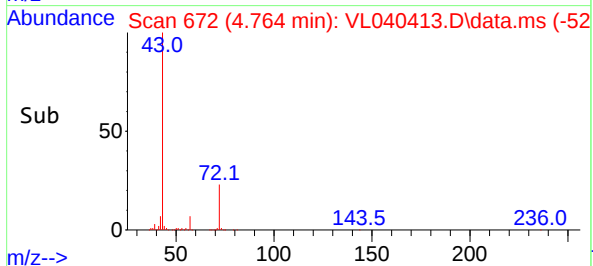
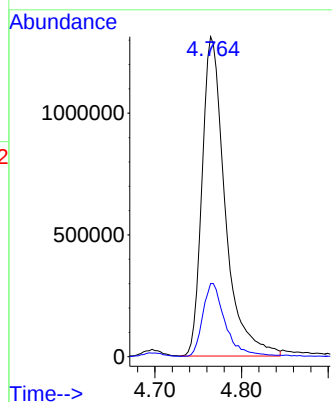
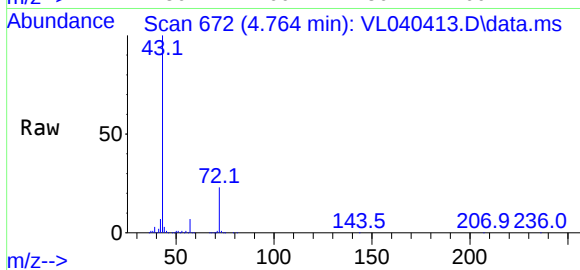
ClientSampleId :

Tgt Ion: 43 Resp: 2429129

Ion Ratio Lower Upper

43 100

72 22.7 18.4 27.6



#36

Benzene

Concen: 0.214 ppbv

RT: 6.356 min Scan# 1167

Delta R.T. -0.016 min

Lab File: VL040413.D

Acq: 12 May 2023 8:19

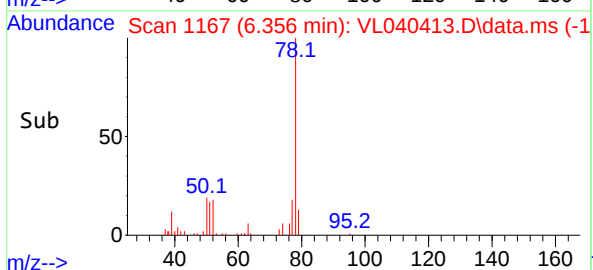
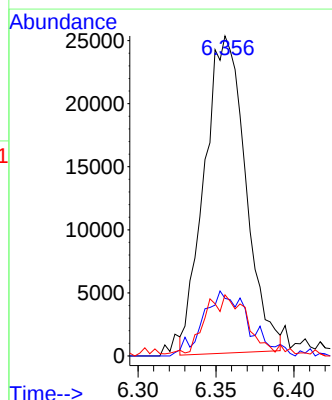
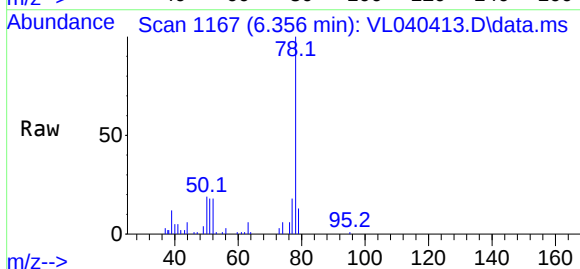
Tgt Ion: 78 Resp: 46274

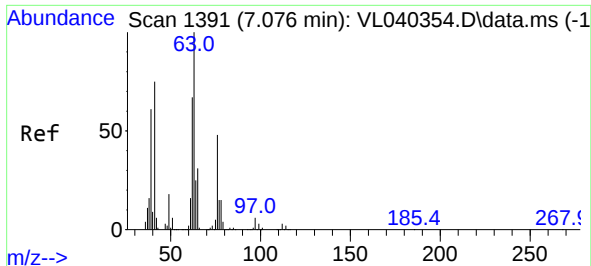
Ion Ratio Lower Upper

78 100

77 17.2 17.8 26.8#

50 18.4 15.6 23.4





#39

1,2-Dichloropropane

Concen: 7.629 ppbv

RT: 6.639 min Scan# 11

Delta R.T. -0.437 min

Lab File: VL040413.D

Acq: 12 May 2023 8:19

Instrument :

MSVOA_L

ClientSampleId :

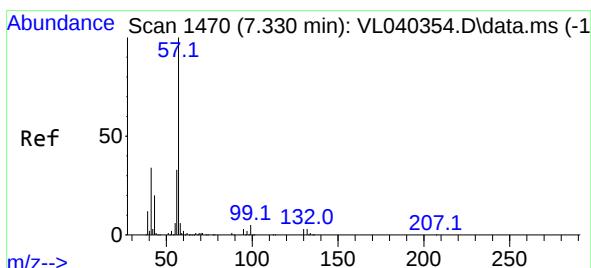
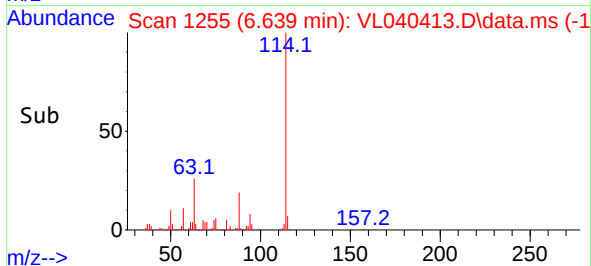
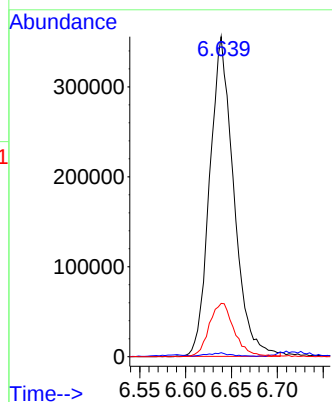
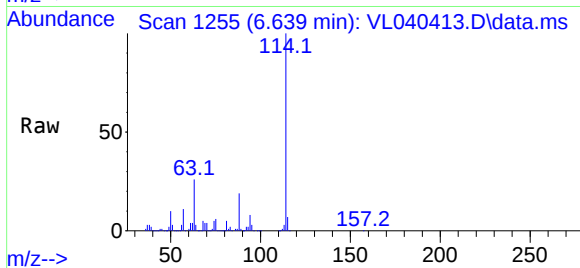
Tgt Ion: 63 Resp: 648101

Ion Ratio Lower Upper

63 100

41 0.8 59.6 89.4#

62 16.7 53.9 80.9#



#44

2,2,4-Trimethylpentane

Concen: 0.096 ppbv

RT: 7.314 min Scan# 1465

Delta R.T. -0.016 min

Lab File: VL040413.D

Acq: 12 May 2023 8:19

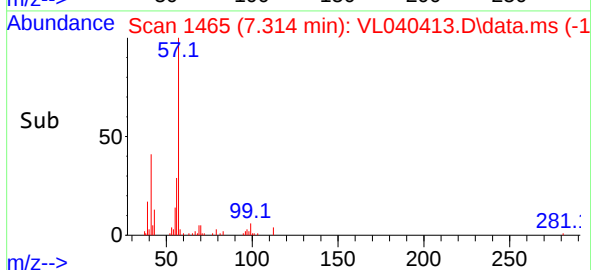
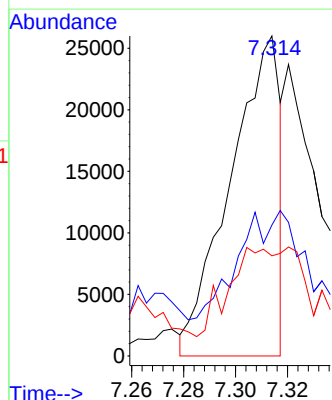
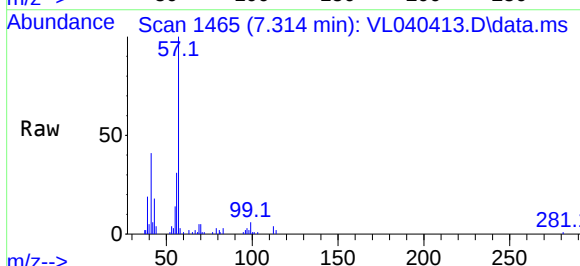
Tgt Ion: 57 Resp: 34618

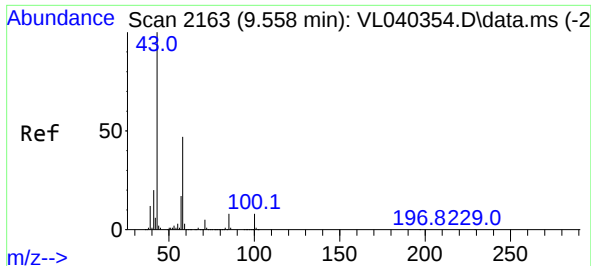
Ion Ratio Lower Upper

57 100

41 84.8 26.9 40.3#

56 0.0 25.1 37.7#

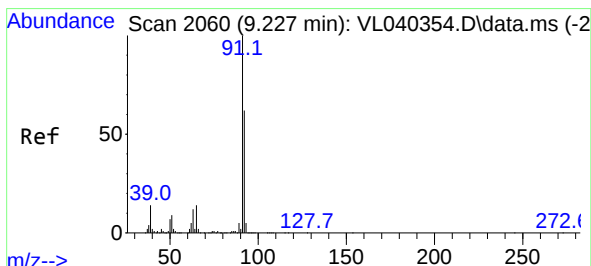
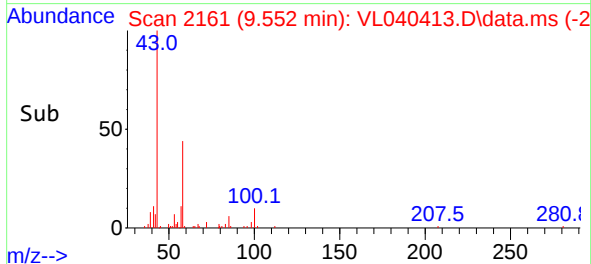
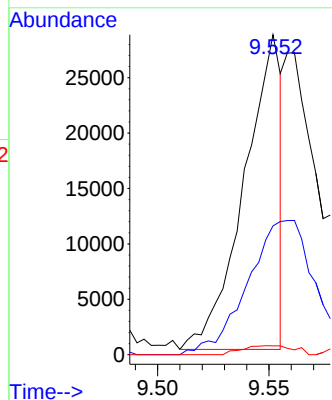
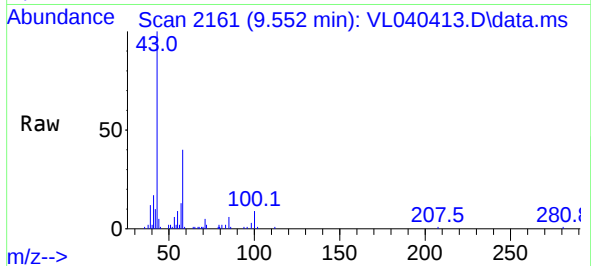




#51
2-Hexanone
Concen: 0.205 ppbv
RT: 9.552 min Scan# 2161
Delta R.T. -0.006 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

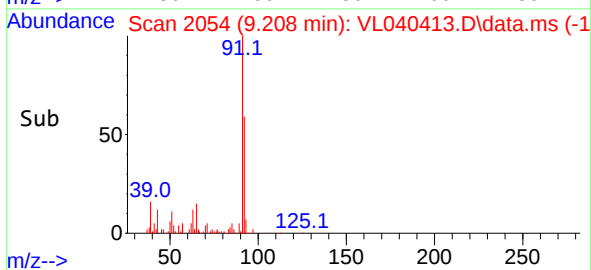
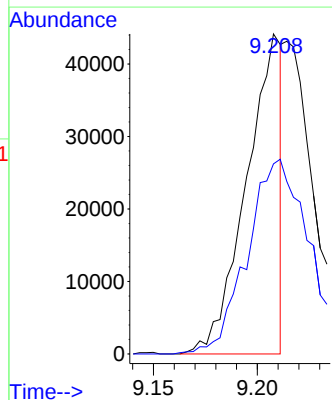
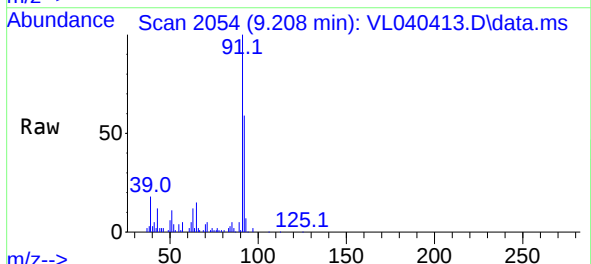
Instrument :
MSVOA_L
ClientSampleId :

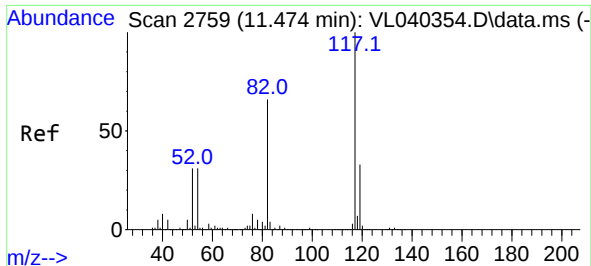
Tgt Ion: 43 Resp: 32747
Ion Ratio Lower Upper
43 100
58 0.0 38.3 57.5#
98 5.1 0.4 0.6#



#53
Toluene
Concen: 0.227 ppbv
RT: 9.208 min Scan# 2054
Delta R.T. -0.019 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Tgt Ion: 91 Resp: 51995
Ion Ratio Lower Upper
91 100
92 0.0 48.9 73.3#

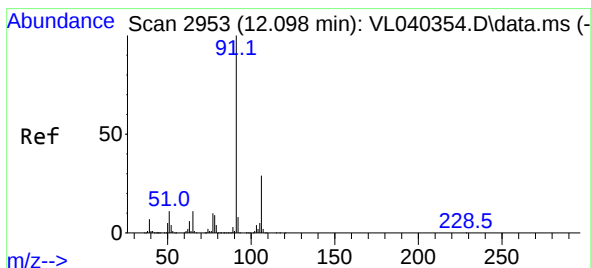
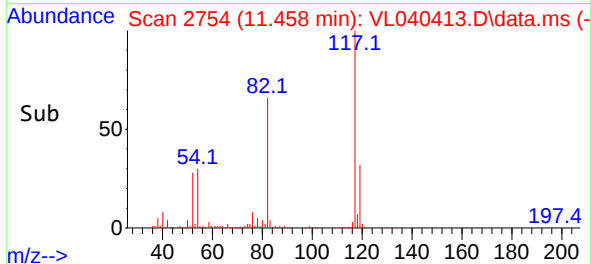
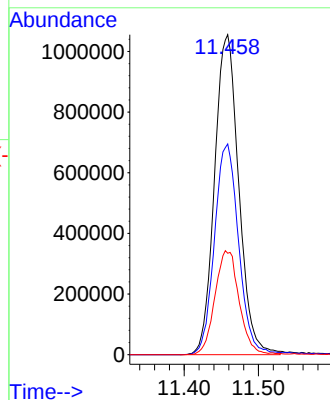
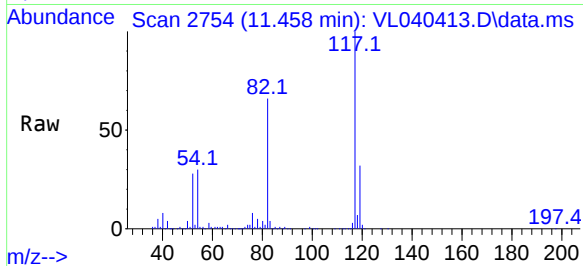




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.458 min Scan# 21
Delta R.T. -0.016 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

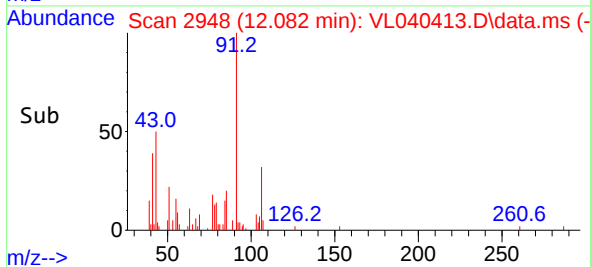
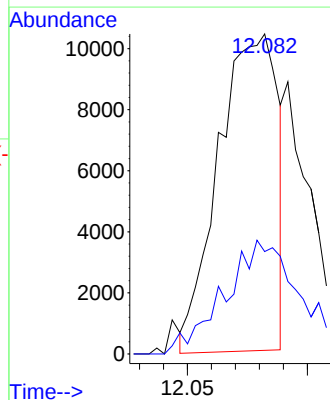
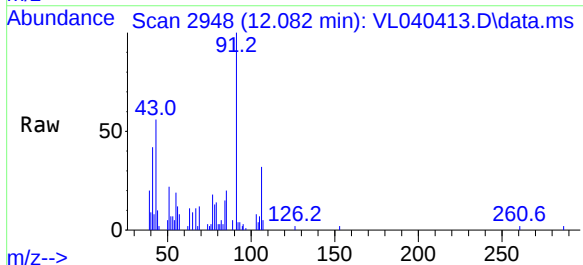
Instrument :
MSVOA_L
ClientSampleId :

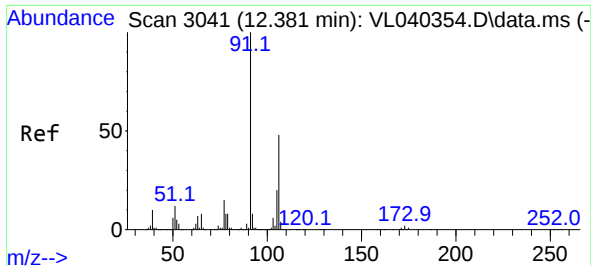
Tgt Ion:117 Resp: 2391998
Ion Ratio Lower Upper
117 100
82 66.6 52.5 78.7
119 32.8 24.3 36.5



#58
Ethyl Benzene
Concen: 0.060 ppbv
RT: 12.082 min Scan# 2948
Delta R.T. -0.016 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Tgt Ion: 91 Resp: 17733
Ion Ratio Lower Upper
91 100
106 27.2 23.5 35.3





#59

m/p-Xylene

Concen: 0.070 ppbv

RT: 12.356 min Scan# 3041

Delta R.T. -0.025 min

Lab File: VL040413.D

Acq: 12 May 2023 8:19

Instrument :

MSVOA_L

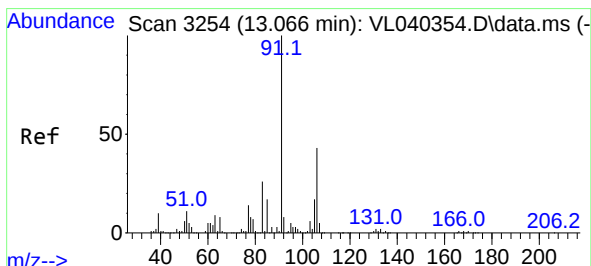
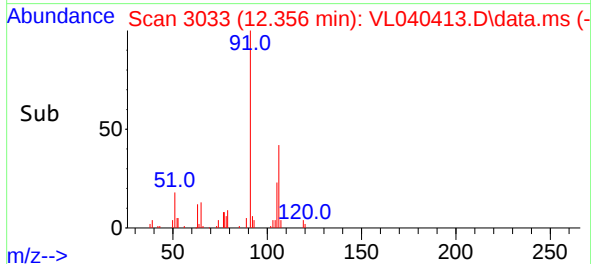
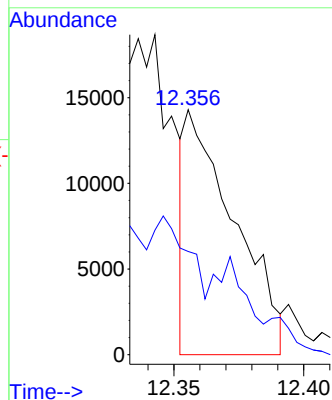
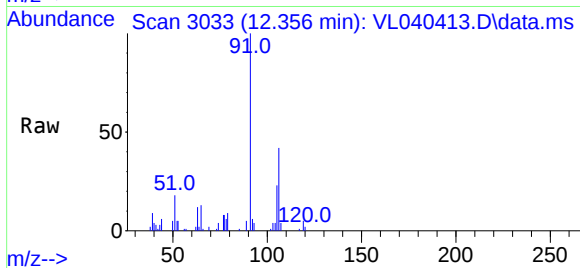
ClientSampleId :

Tgt Ion: 91 Resp: 18832

Ion Ratio Lower Upper

91 100

106 0.0 34.7 52.1#



#60

o-Xylene

Concen: 0.058 ppbv

RT: 13.050 min Scan# 3249

Delta R.T. -0.016 min

Lab File: VL040413.D

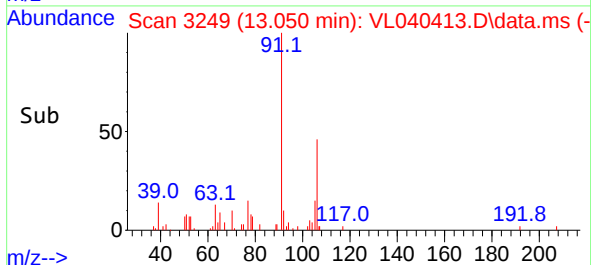
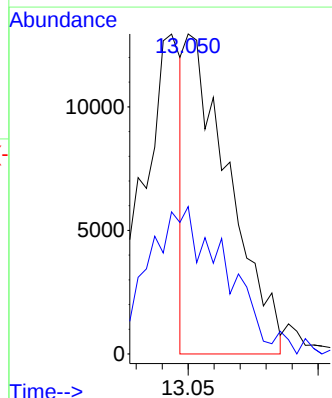
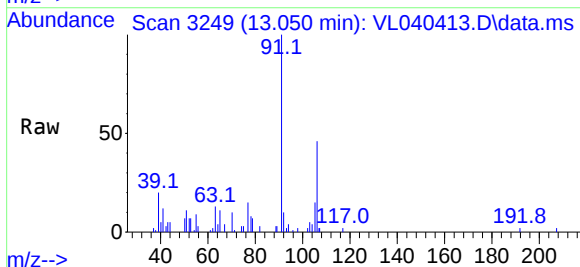
Acq: 12 May 2023 8:19

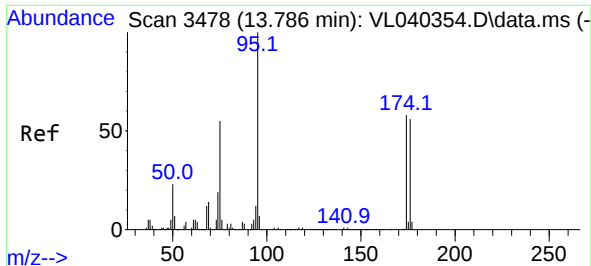
Tgt Ion: 91 Resp: 15099

Ion Ratio Lower Upper

91 100

106 87.5 21.9 65.8#

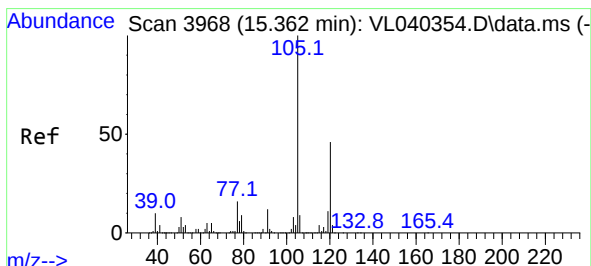
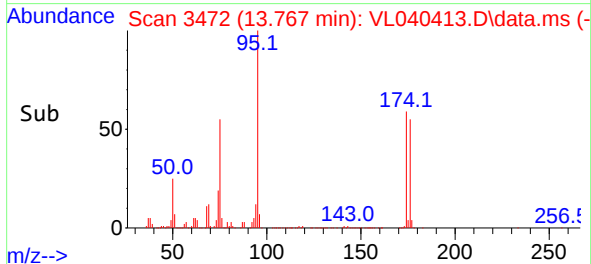
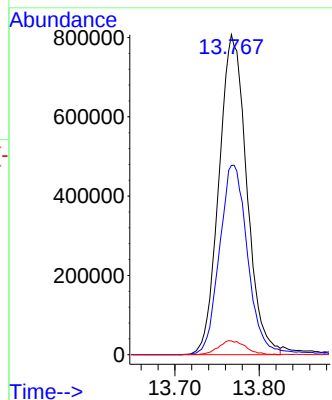
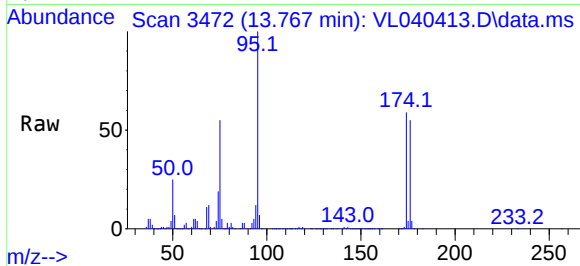




#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.324 ppbv
 RT: 13.767 min Scan# 3478
 Delta R.T. -0.019 min
 Lab File: VL040413.D
 Acq: 12 May 2023 8:19

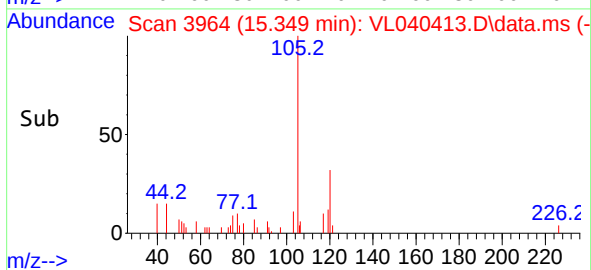
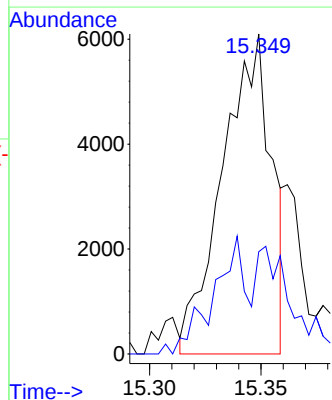
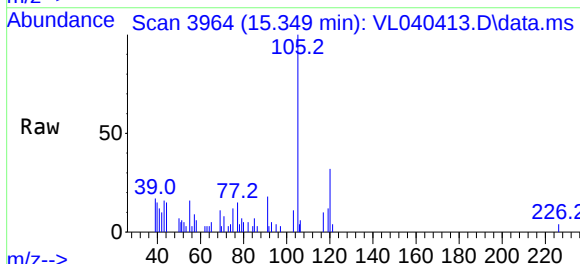
Instrument :
 MSVOA_L
 ClientSampleId :

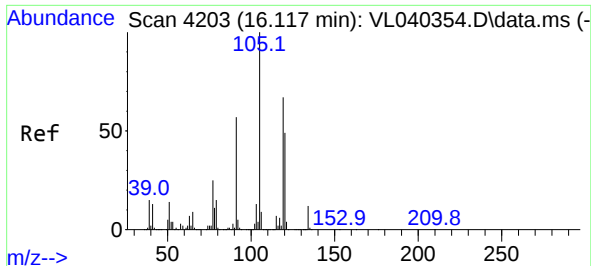
Tgt Ion: 95 Resp: 1844282
 Ion Ratio Lower Upper
 95 100
 174 61.1 47.2 70.8
 175 4.4 3.5 5.3



#73
 1,3,5-Trimethylbenzene
 Concen: 0.035 ppbv
 RT: 15.349 min Scan# 3964
 Delta R.T. -0.013 min
 Lab File: VL040413.D
 Acq: 12 May 2023 8:19

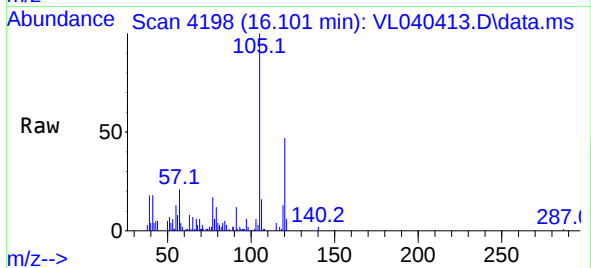
Tgt Ion: 105 Resp: 9283
 Ion Ratio Lower Upper
 105 100
 120 28.3 36.9 55.3#





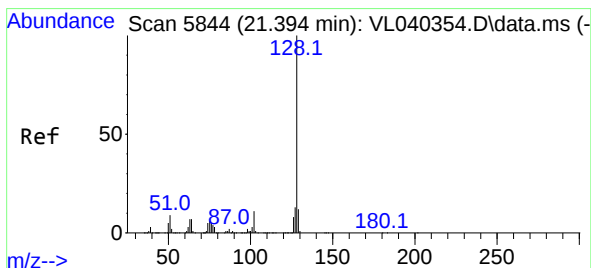
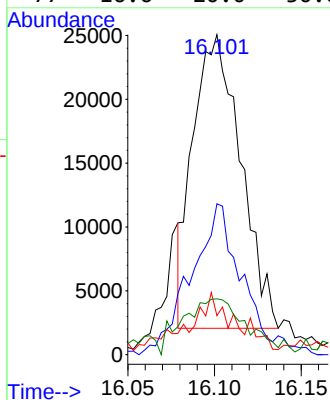
#74
1,2,4-Trimethylbenzene
Concen: 0.145 ppbv
RT: 16.101 min Scan# 4198
Delta R.T. -0.016 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion:105 Resp: 43907

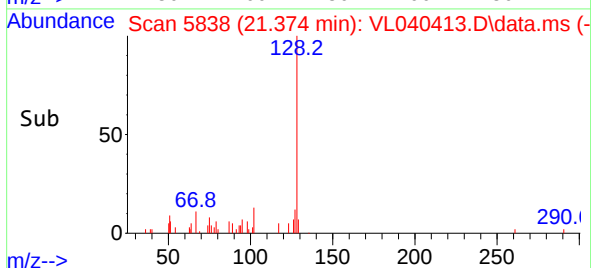
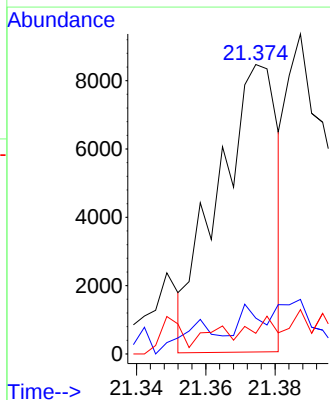
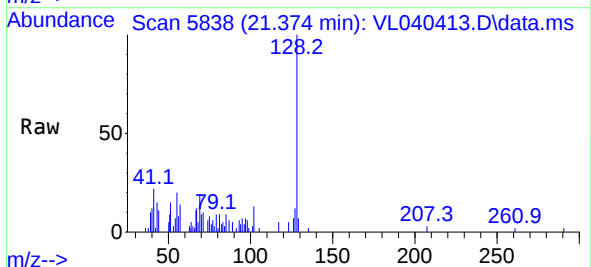
Ion	Ratio	Lower	Upper
105	100		
120	45.0	38.9	58.3
91	11.5	46.0	69.0#
77	16.6	20.0	30.0#

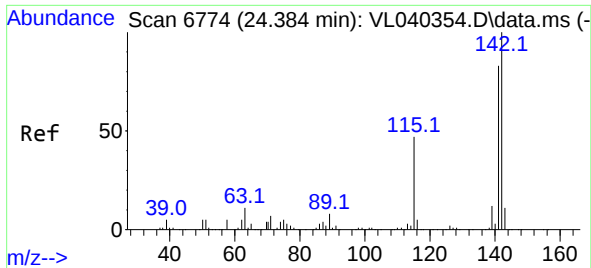


#79
Naphthalene
Concen: 0.049 ppbv
RT: 21.374 min Scan# 5838
Delta R.T. -0.020 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Tgt Ion:128 Resp: 9953

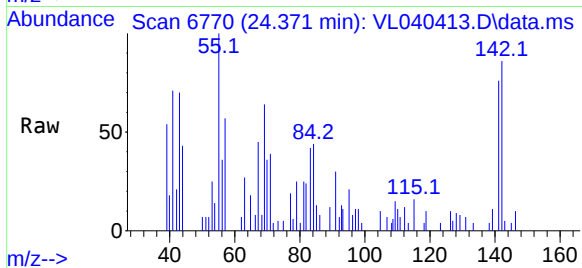
Ion	Ratio	Lower	Upper
128	100		
127	8.7	10.0	15.0#
129	0.0	9.4	14.0#





#80
Naphthalene, 2-methyl-
Concen: 0.184 ppbv
RT: 24.371 min Scan# 61
Delta R.T. -0.013 min
Lab File: VL040413.D
Acq: 12 May 2023 8:19

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion: 142 Resp: 11202
Ion Ratio Lower Upper
142 100
141 0.0 65.1 97.7#
115 20.6 36.5 54.7#

