

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041923\
 Data File : VL040381.D
 Acq On : 19 Apr 2023 15:54
 Operator : SY/MD
 Sample : 02368-04
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Apr 20 05:11:01 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)

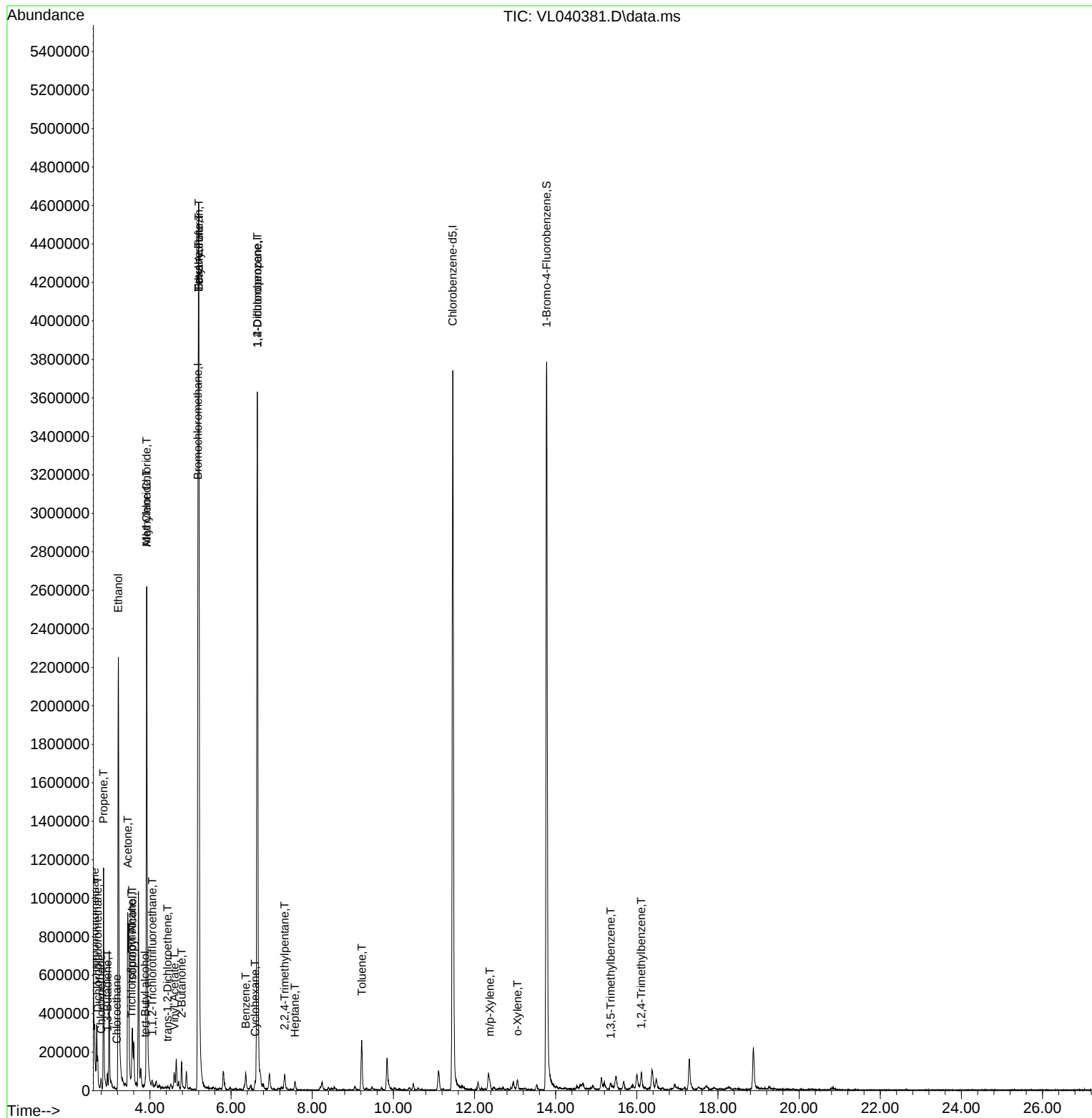
Internal Standards						
1) Bromochloromethane	5.182	49	1085558	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.645	114	2700435	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.465	117	2371301	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.780	95	1914743	9.765	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.600%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.713	85	91499	0.467	ppbv	92
3) Chlorodifluoromethane	2.636	51	156335	1.102	ppbv #	74
4) Chloromethane	2.796	50	39349	0.439	ppbv	92
7) Chloroethane	3.182	64	1277	0.046	ppbv	99
9) Propene	2.857	41	277205	4.947	ppbv	96
10) Heptane	7.574	43	11149	0.088	ppbv #	63
11) Trichlorofluoromethane	3.549	101	42531	0.215	ppbv	97
12) 1,1,2-Trichlorotrifluo...	4.057	101	4807	0.035	ppbv #	1
13) Ethanol	3.221	45	2273215	485.906	ppbv	97
15) Acetone	3.452	43	1087492	7.073	ppbv	94
16) 1,3-Butadiene	2.954	39	18198	0.286	ppbv #	34
17) tert-Butyl alcohol	3.880	59	7819	0.055	ppbv #	72
19) Isopropyl Alcohol	3.568	45	335910	4.788	ppbv	99
20) Methylene Chloride	3.918	84	905233	14.747	ppbv	100
21) Allyl Chloride	3.918	41	27646	0.316	ppbv #	25
22) trans-1,2-Dichloroethene	4.436	96	2361	0.038	ppbv #	43
23) Vinyl Acetate	4.603	43	46332	1.184	ppbv #	44
25) Ethyl Acetate	5.205	43	1146866	4.433	ppbv #	77
26) Hexane	5.201	57	1668261	15.295	ppbv #	36
30) Cyclohexane	6.594	84	5397	0.064	ppbv #	1
34) 2-Butanone	4.780	43	153862	1.057	ppbv	97
36) Benzene	6.362	78	61294	0.278	ppbv	93
39) 1,2-Dichloropropane	6.645	63	680842	7.854	ppbv #	25
41) Tetrahydrofuran	5.205	42	603231	7.564	ppbv #	47
44) 2,2,4-Trimethylpentane	7.320	57	57282	0.156	ppbv #	75
53) Toluene	9.220	91	183168	0.784	ppbv	98
59) m/p-Xylene	12.378	91	14729	0.055	ppbv #	32
60) o-Xylene	13.060	91	39834	0.155	ppbv	98
73) 1,3,5-Trimethylbenzene	15.355	105	11346	0.043	ppbv	100
74) 1,2,4-Trimethylbenzene	16.108	105	32868	0.110	ppbv #	68

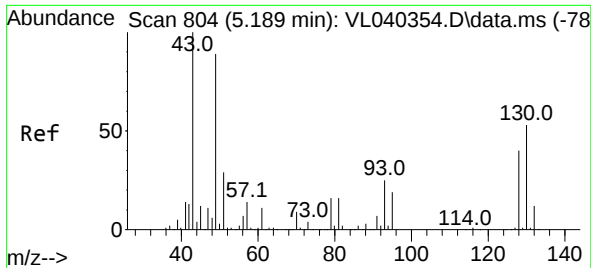
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041923\
Data File : VL040381.D
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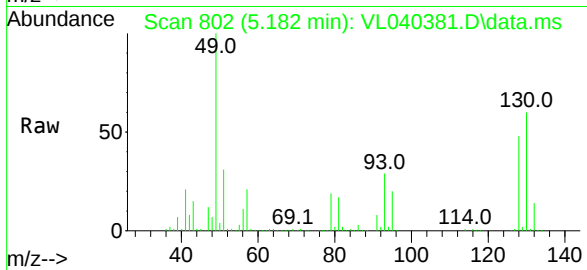
Quant Time: Apr 20 05:11:01 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041323AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
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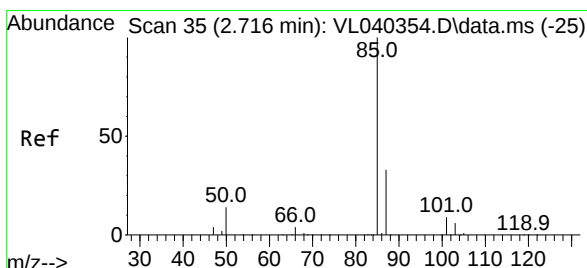
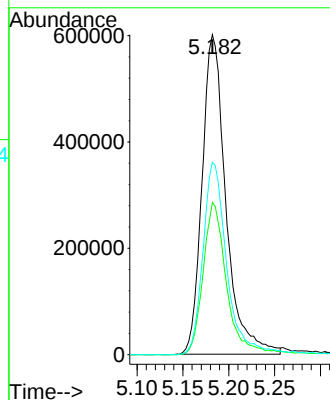
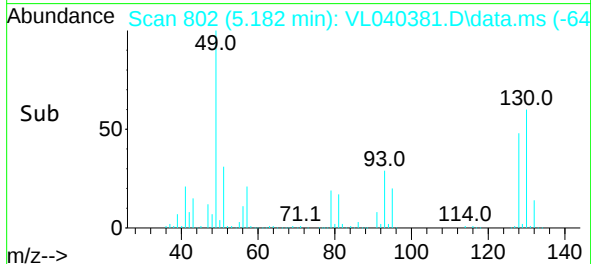


#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.182 min Scan# 80
 Delta R.T. -0.007 min
 Lab File: VL040381.D
 Acq: 19 Apr 2023 15:54

Instrument :
 MSVOA_L
 ClientSampleId :

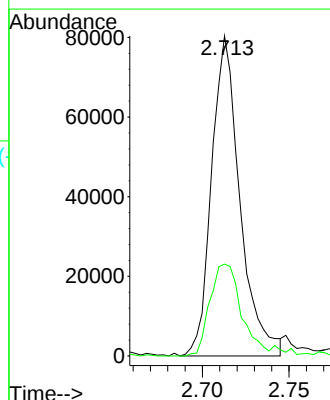
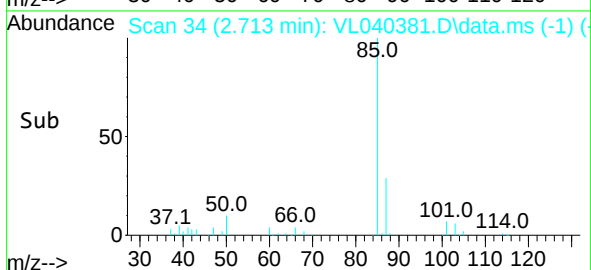
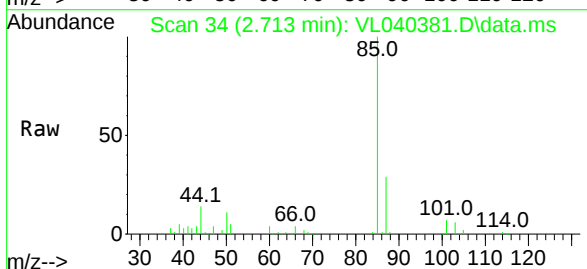


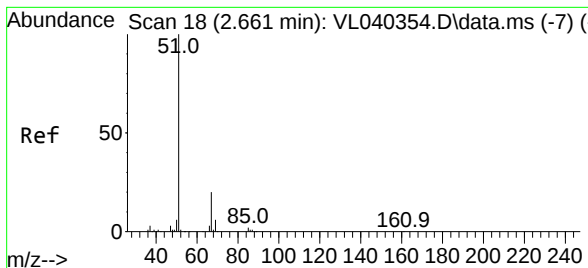
Tgt Ion: 49 Resp: 1085558
 Ion Ratio Lower Upper
 49 100
 128 47.7 23.7 71.1
 130 61.4 29.9 89.8



#2
 Dichlorodifluoromethane
 Concen: 0.467 ppbv
 RT: 2.713 min Scan# 34
 Delta R.T. -0.003 min
 Lab File: VL040381.D
 Acq: 19 Apr 2023 15:54

Tgt Ion: 85 Resp: 91499
 Ion Ratio Lower Upper
 85 100
 87 28.7 26.6 40.0





#3

Chlorodifluoromethane

Concen: 1.102 ppbv

RT: 2.636 min Scan# 10

Delta R.T. -0.025 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

Instrument :

MSVOA_L

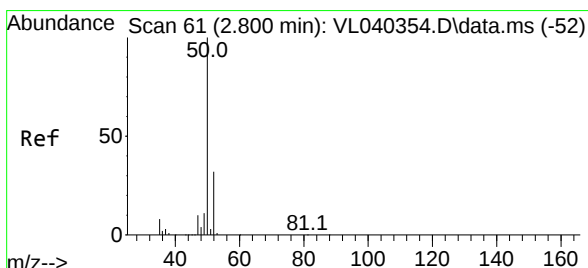
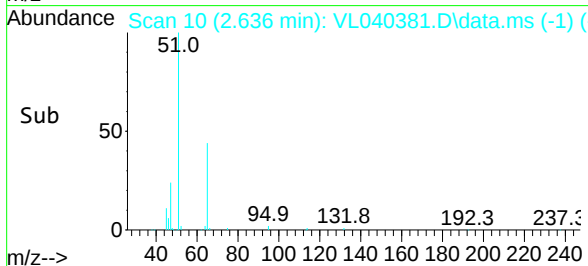
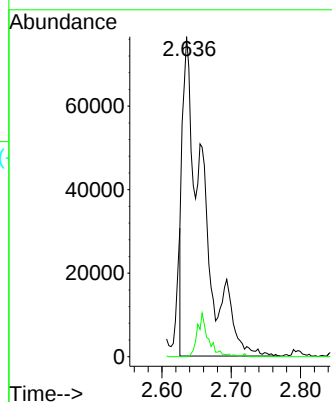
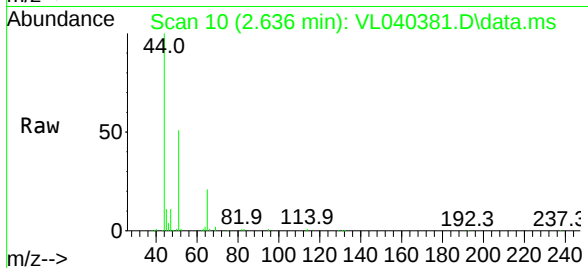
ClientSampleId :

Tgt Ion: 51 Resp: 156335

Ion Ratio Lower Upper

51 100

67 7.6 15.5 23.3#



#4

Chloromethane

Concen: 0.439 ppbv

RT: 2.796 min Scan# 60

Delta R.T. -0.004 min

Lab File: VL040381.D

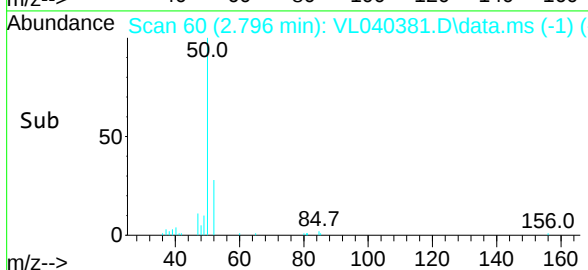
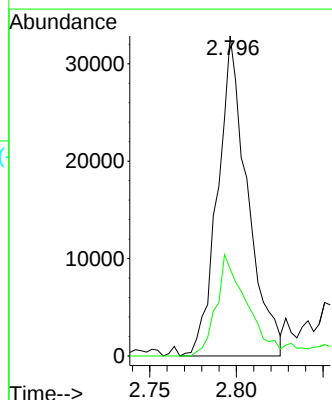
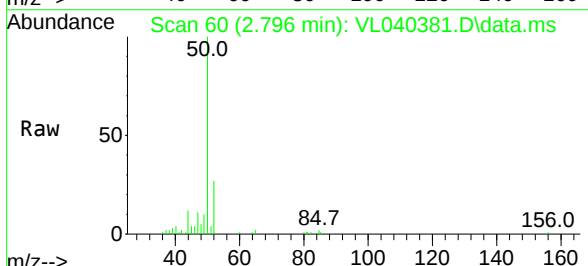
Acq: 19 Apr 2023 15:54

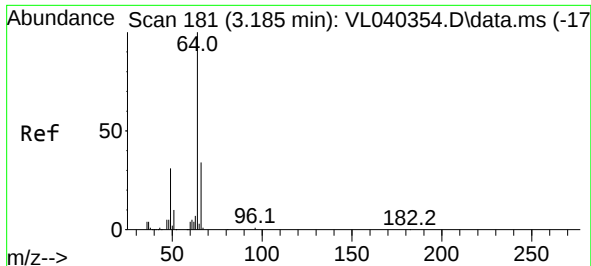
Tgt Ion: 50 Resp: 39349

Ion Ratio Lower Upper

50 100

52 27.3 25.3 37.9

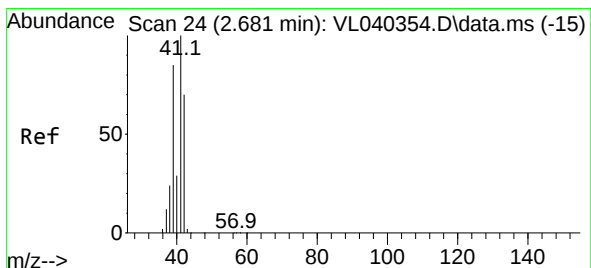
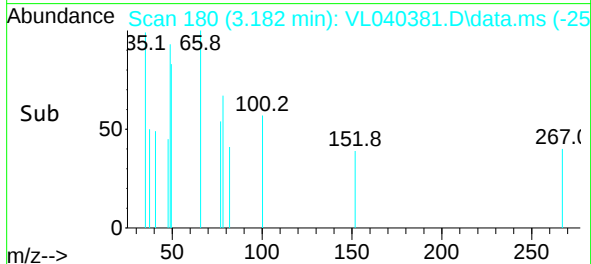
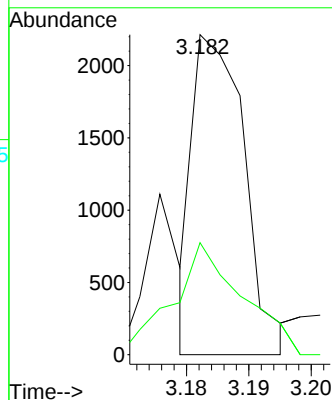
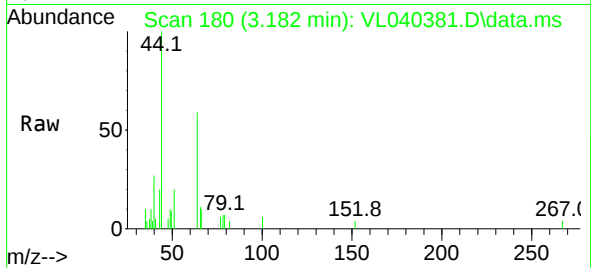




#7
Chloroethane
Concen: 0.046 ppbv
RT: 3.182 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

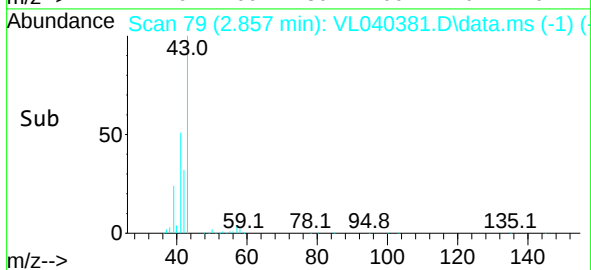
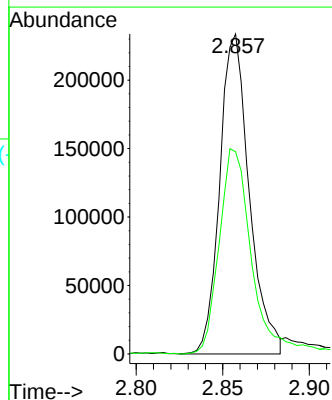
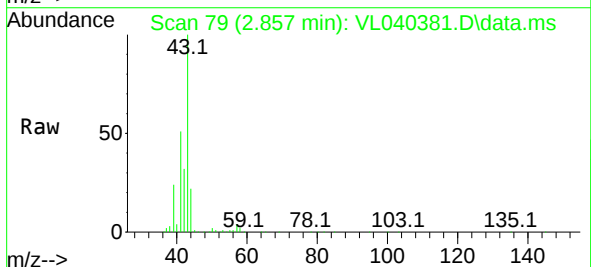
Instrument :
MSVOA_L
ClientSampleId :

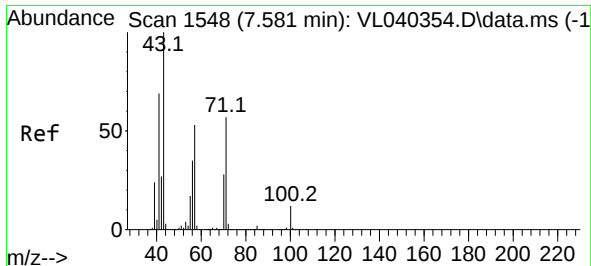
Tgt Ion: 64 Resp: 1277
Ion Ratio Lower Upper
64 100
66 35.0 27.5 41.3



#9
Propene
Concen: 4.947 ppbv
RT: 2.857 min Scan# 79
Delta R.T. 0.176 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

Tgt Ion: 41 Resp: 277205
Ion Ratio Lower Upper
41 100
42 73.5 56.5 84.7





#10

Heptane

Concen: 0.088 ppbv

RT: 7.574 min Scan# 11

Delta R.T. -0.007 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

Instrument :

MSVOA_L

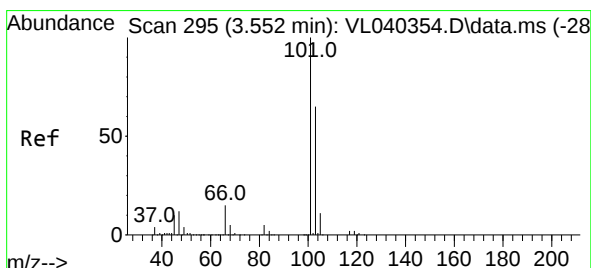
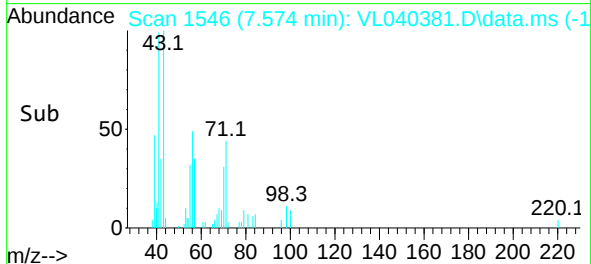
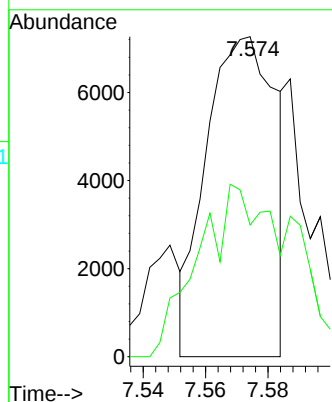
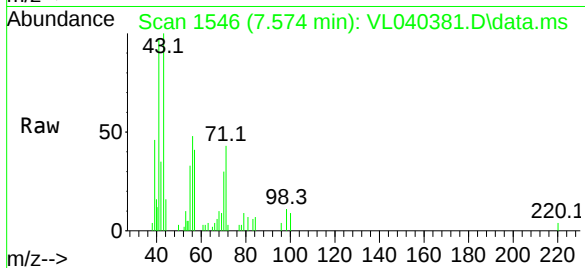
ClientSampleId :

Tgt Ion: 43 Resp: 11149

Ion Ratio Lower Upper

43 100

57 78.7 42.2 63.4#



#11

Trichlorofluoromethane

Concen: 0.215 ppbv

RT: 3.549 min Scan# 294

Delta R.T. -0.003 min

Lab File: VL040381.D

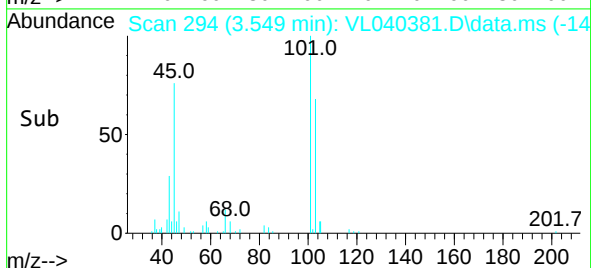
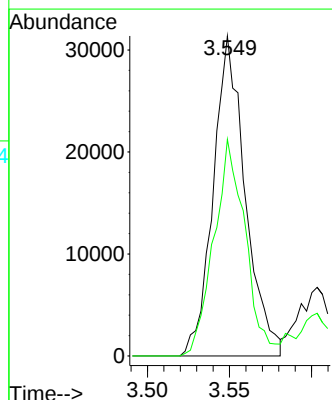
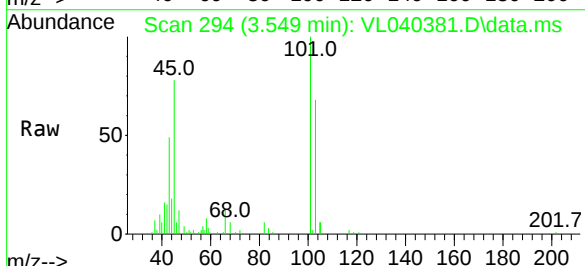
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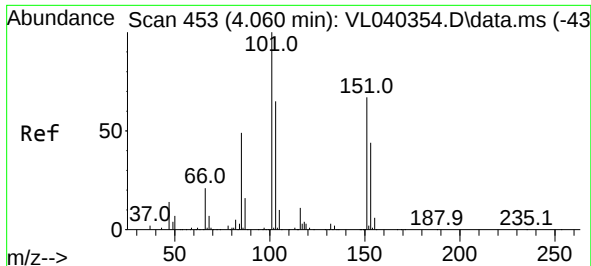
Tgt Ion:101 Resp: 42531

Ion Ratio Lower Upper

101 100

103 67.7 52.2 78.4

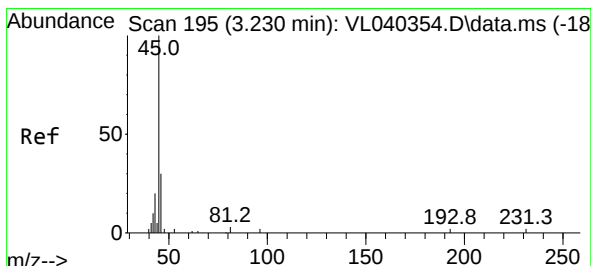
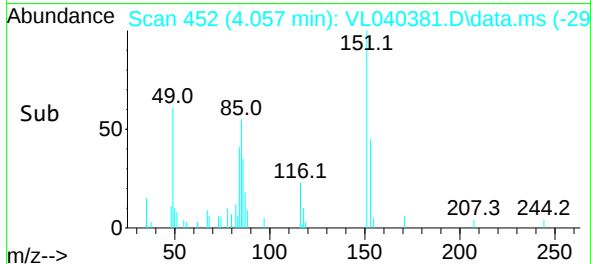
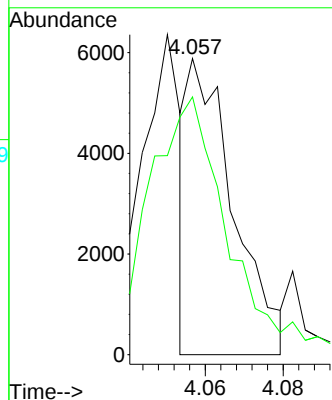
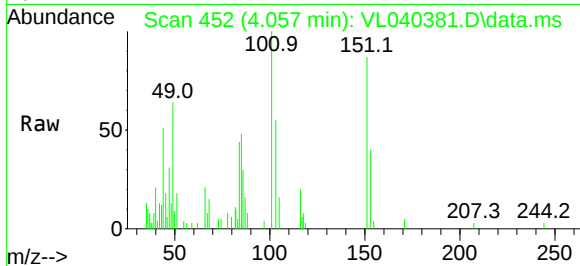




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.035 ppbv
RT: 4.057 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

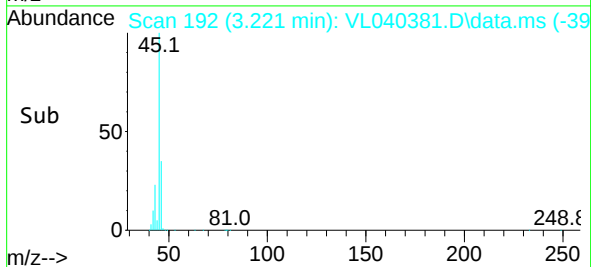
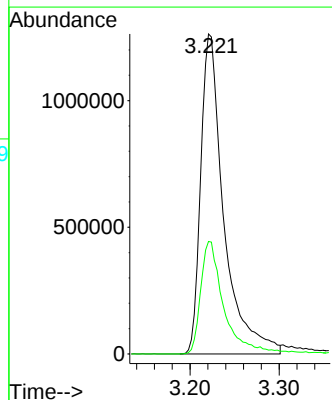
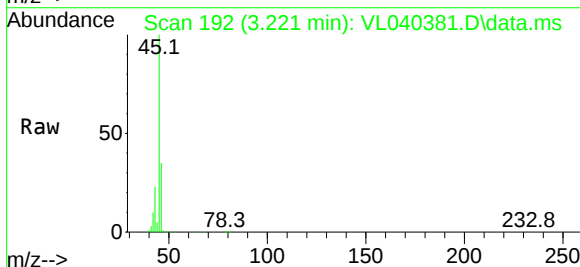
Instrument :
MSVOA_L
ClientSampleId :

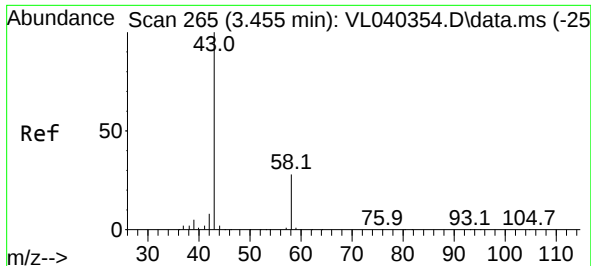
Tgt Ion:101 Resp: 4807
Ion Ratio Lower Upper
101 100
151 155.9 54.7 82.1#



#13
Ethanol
Concen: 485.906 ppbv
RT: 3.221 min Scan# 192
Delta R.T. -0.009 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

Tgt Ion: 45 Resp: 2273215
Ion Ratio Lower Upper
45 100
46 36.4 15.3 61.3

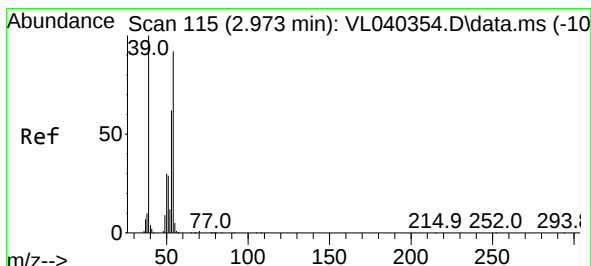
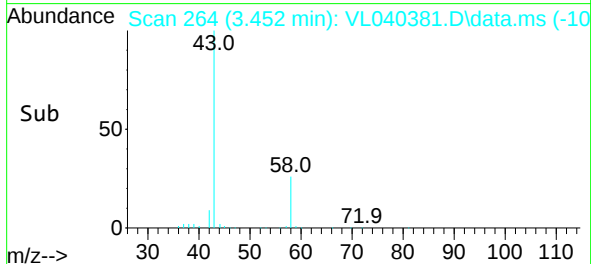
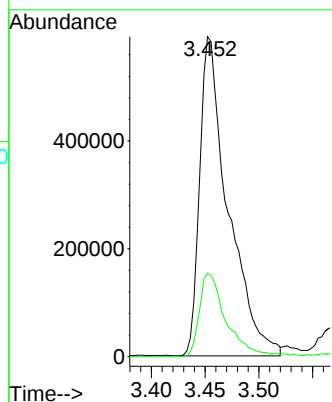
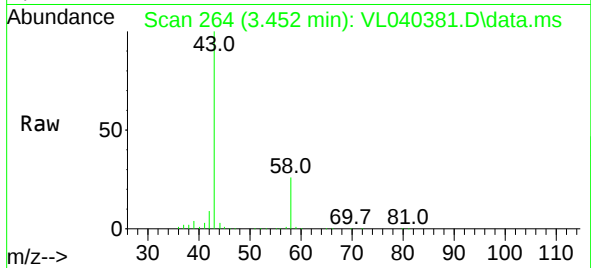




#15
Acetone
Concen: 7.073 ppbv
RT: 3.452 min Scan# 20
Delta R.T. -0.003 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

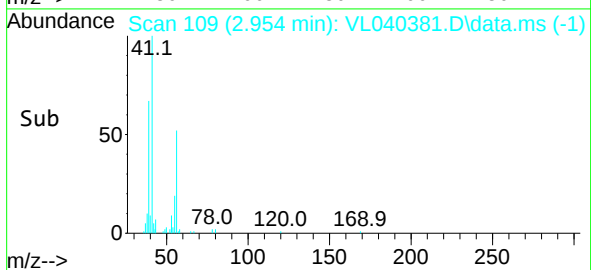
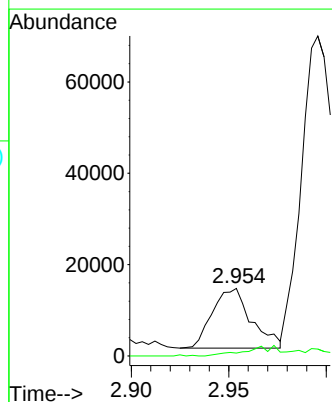
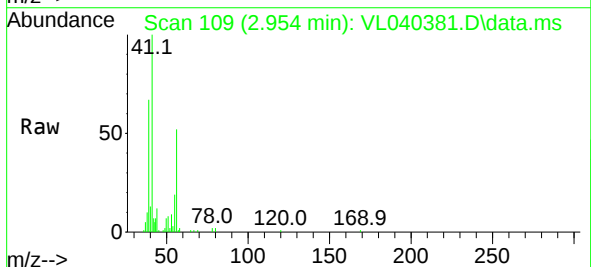
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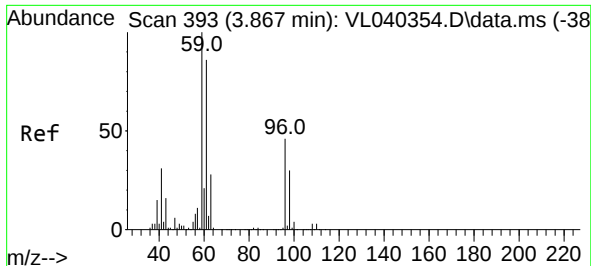
Tgt Ion: 43 Resp: 1087492
Ion Ratio Lower Upper
43 100
58 24.8 22.2 33.2



#16
1,3-Butadiene
Concen: 0.286 ppbv
RT: 2.954 min Scan# 109
Delta R.T. -0.019 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

Tgt Ion: 39 Resp: 18198
Ion Ratio Lower Upper
39 100
54 25.8 68.8 103.2





#17

tert-Butyl alcohol

Concen: 0.055 ppbv

RT: 3.880 min Scan# 30

Delta R.T. 0.013 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

Instrument :

MSVOA_L

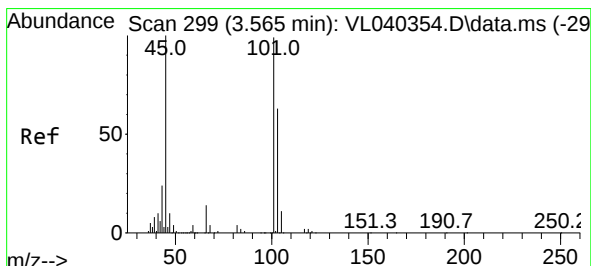
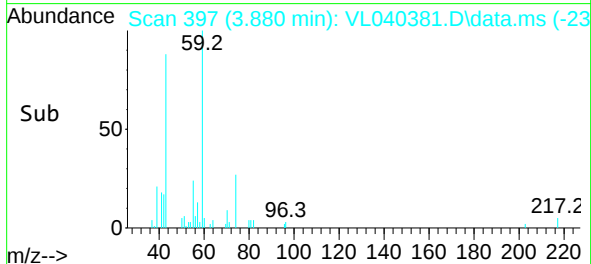
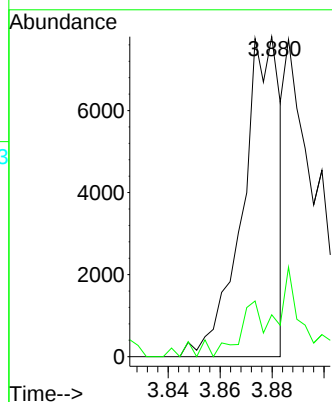
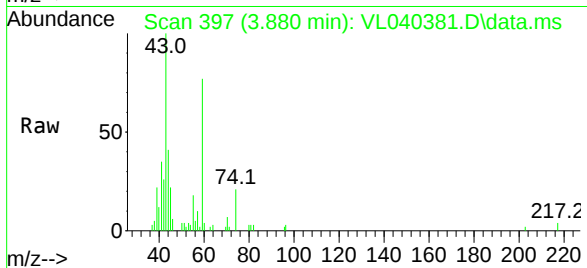
ClientSampleId :

Tgt Ion: 59 Resp: 7819

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#



#19

Isopropyl Alcohol

Concen: 4.788 ppbv

RT: 3.568 min Scan# 300

Delta R.T. 0.003 min

Lab File: VL040381.D

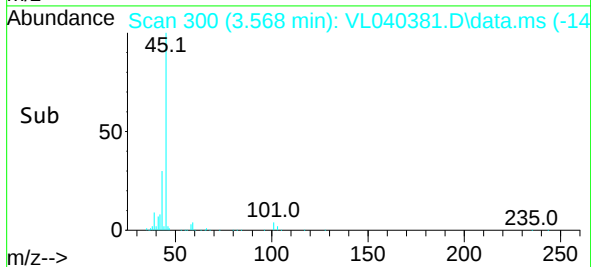
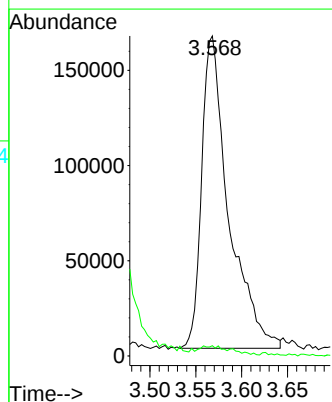
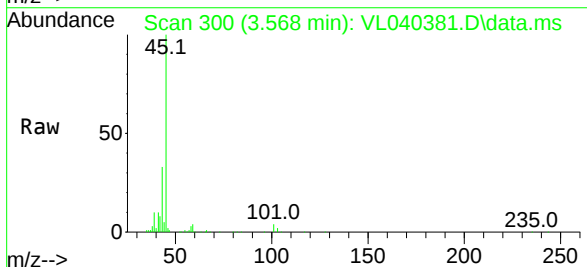
Acq: 19 Apr 2023 15:54

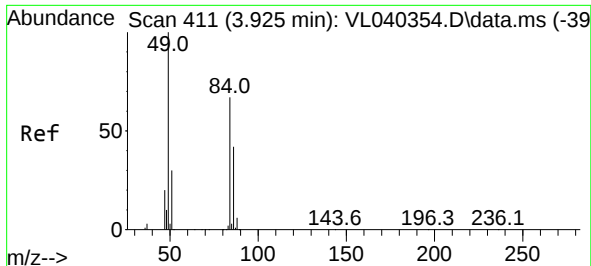
Tgt Ion: 45 Resp: 335910

Ion Ratio Lower Upper

45 100

58 3.7 2.6 4.0





#20

Methylene Chloride

Concen: 14.747 ppbv

RT: 3.918 min Scan# 409

Delta R.T. -0.007 min

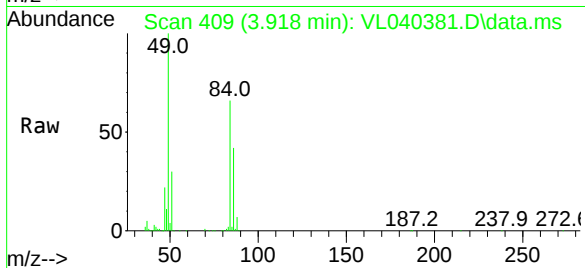
Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion: 84 Resp: 905233

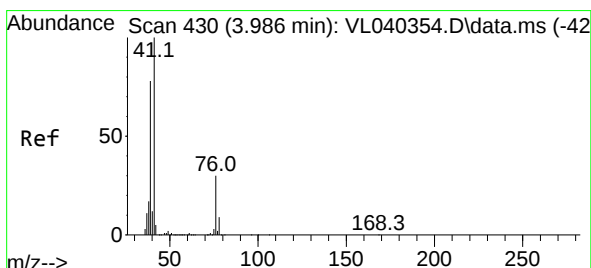
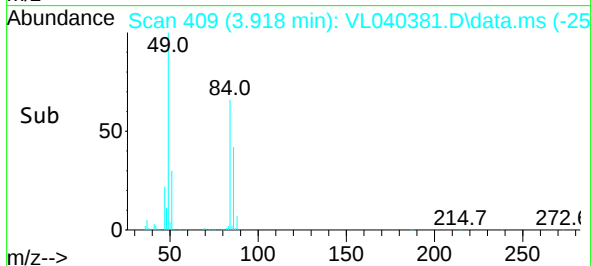
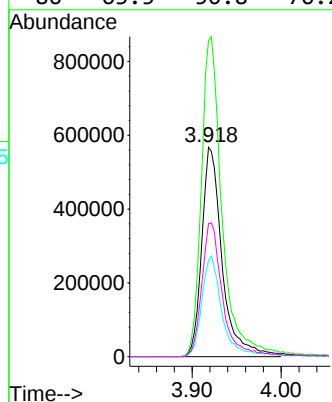
Ion Ratio Lower Upper

84 100

49 150.8 120.1 180.1

51 45.8 36.3 54.5

86 63.5 50.8 76.2



#21

Allyl Chloride

Concen: 0.316 ppbv

RT: 3.918 min Scan# 409

Delta R.T. -0.068 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

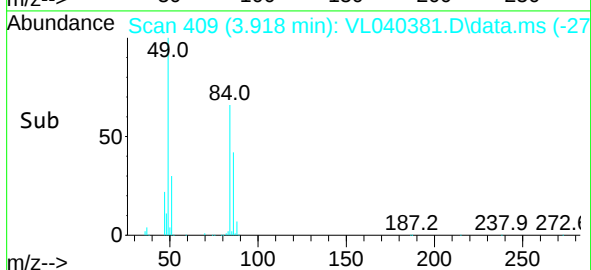
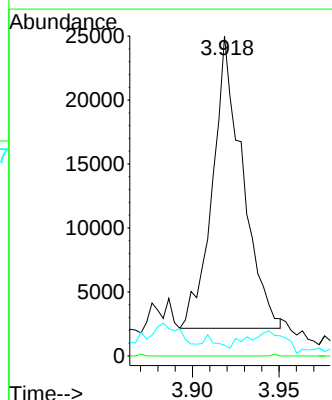
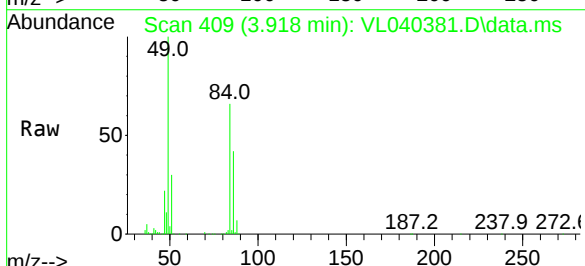
Tgt Ion: 41 Resp: 27646

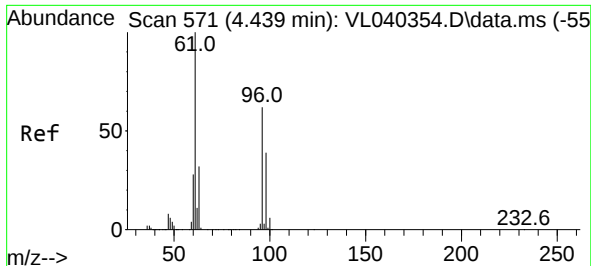
Ion Ratio Lower Upper

41 100

76 11.3 25.5 38.3#

39 0.0 64.0 96.0#

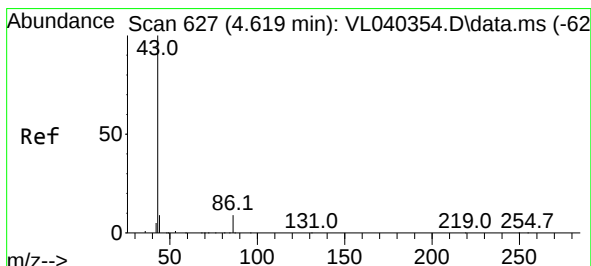
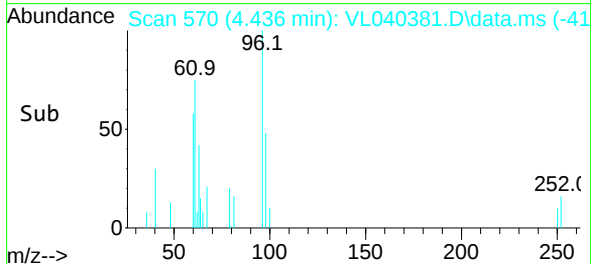
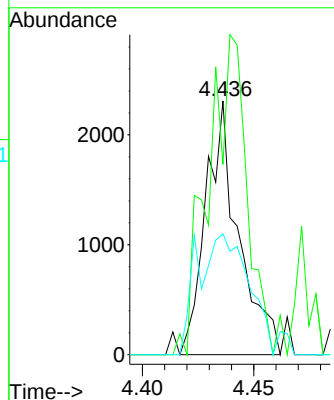
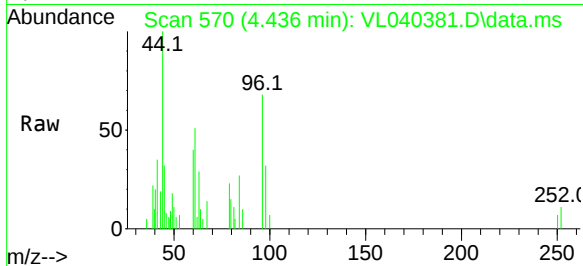




#22
trans-1,2-Dichloroethene
Concen: 0.038 ppbv
RT: 4.436 min Scan# 571
Delta R.T. -0.003 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

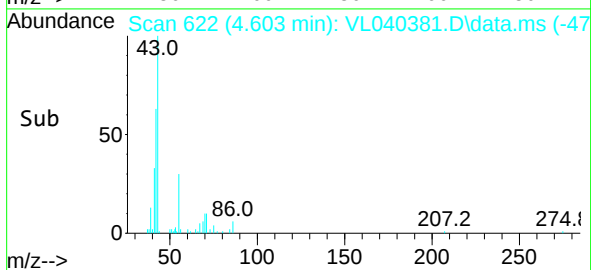
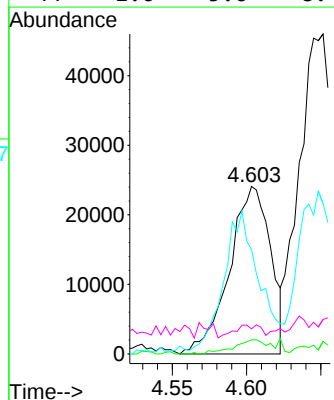
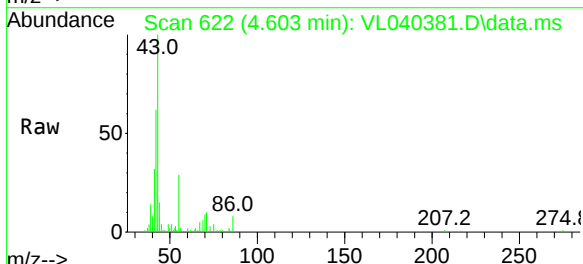
Instrument :
MSVOA_L
ClientSampleId :

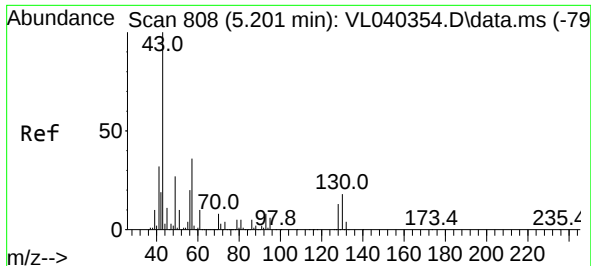
Tgt Ion: 96 Resp: 2361
Ion Ratio Lower Upper
96 100
61 66.8 129.4 194.2#
98 47.6 51.0 76.4#



#23
Vinyl Acetate
Concen: 1.184 ppbv
RT: 4.603 min Scan# 622
Delta R.T. -0.016 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

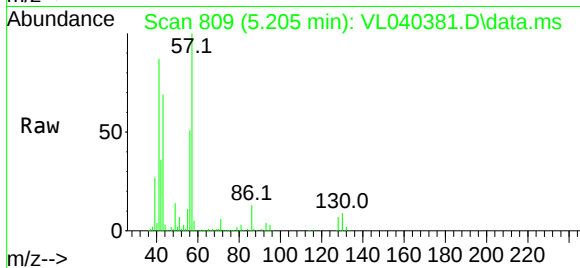
Tgt Ion: 43 Resp: 46332
Ion Ratio Lower Upper
43 100
86 8.5 6.0 9.0
42 57.6 6.4 9.6#
44 1.6 5.6 8.4#





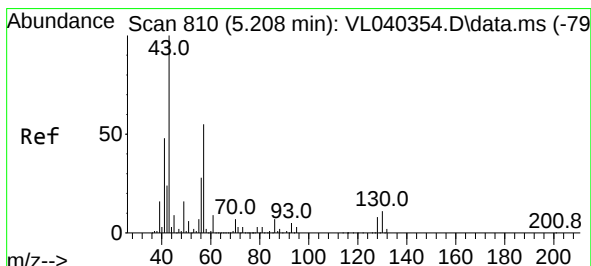
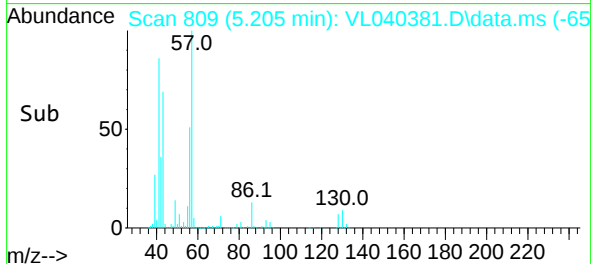
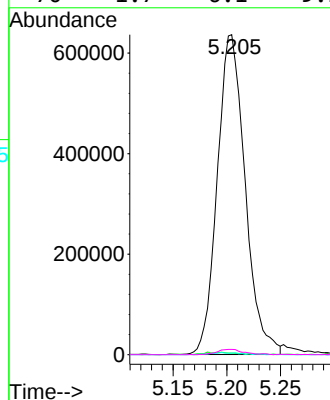
#25
Ethyl Acetate
Concen: 4.433 ppbv
RT: 5.205 min Scan# 808
Delta R.T. 0.004 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion: 43 Resp: 1146866

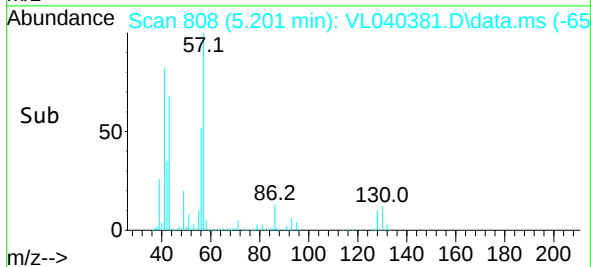
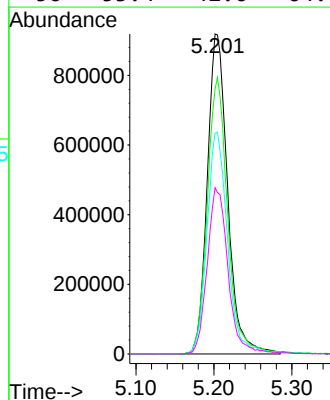
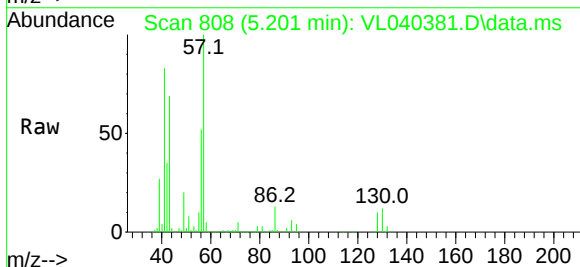
Ion	Ratio	Lower	Upper
43	100		
45	1.1	8.5	12.7#
61	0.7	8.5	12.7#
70	1.7	6.1	9.1#

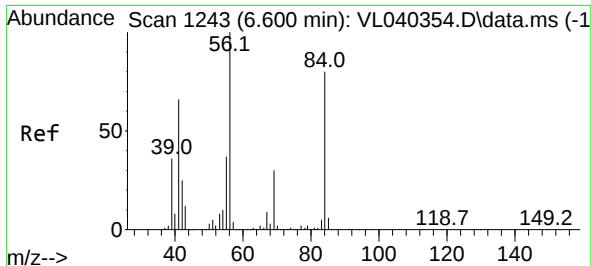


#26
Hexane
Concen: 15.295 ppbv
RT: 5.201 min Scan# 808
Delta R.T. -0.007 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

Tgt Ion: 57 Resp: 1668261

Ion	Ratio	Lower	Upper
57	100		
41	87.1	74.8	112.2
43	70.6	192.7	289.1#
56	53.4	42.6	64.0





#30

Cyclohexane

Concen: 0.064 ppbv

RT: 6.594 min Scan# 11

Delta R.T. -0.006 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

Instrument :

MSVOA_L

ClientSampleId :

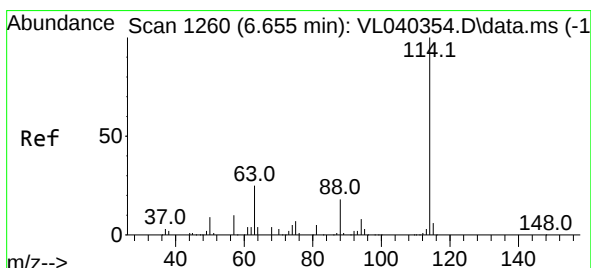
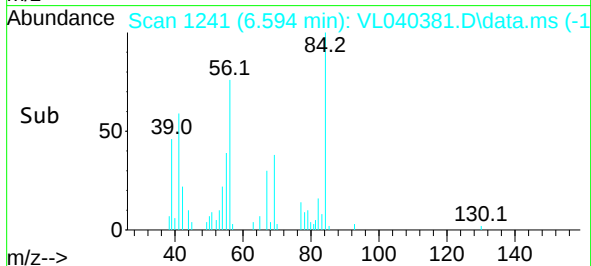
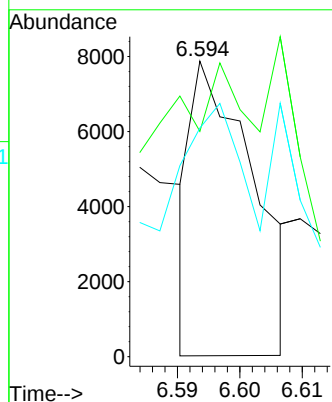
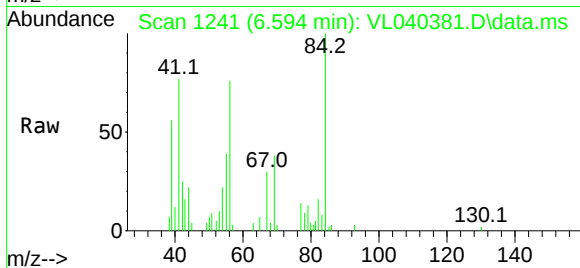
Tgt Ion: 84 Resp: 5397

Ion Ratio Lower Upper

84 100

56 280.0 107.0 160.6#

41 0.0 66.7 100.1#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.645 min Scan# 1257

Delta R.T. -0.010 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

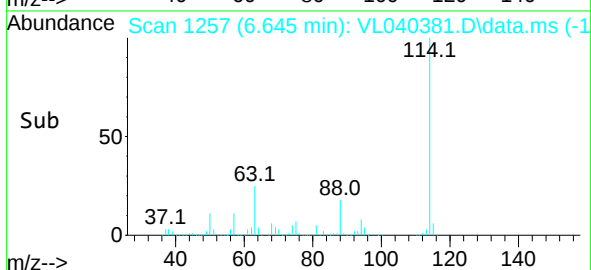
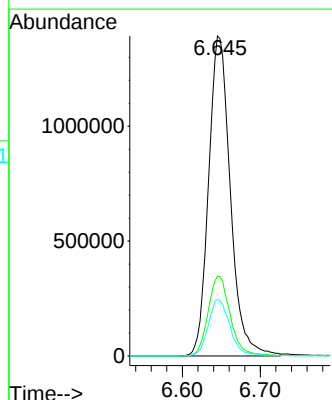
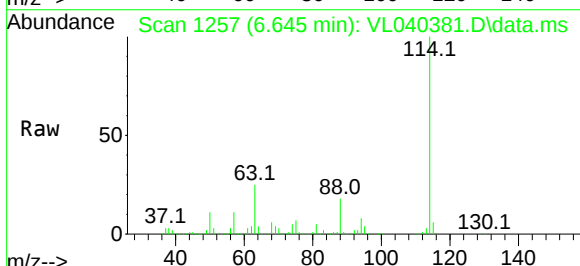
Tgt Ion: 114 Resp: 2700435

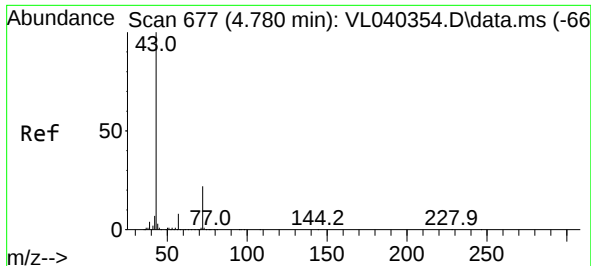
Ion Ratio Lower Upper

114 100

63 25.5 21.4 32.0

88 17.9 14.6 22.0

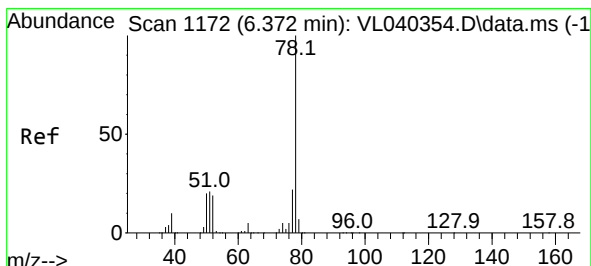
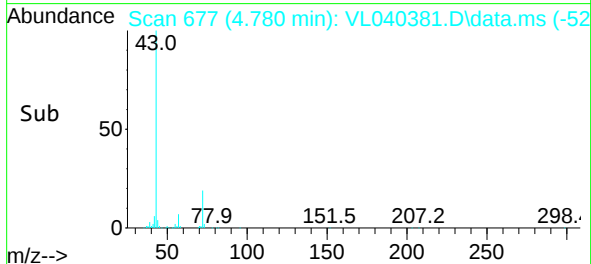
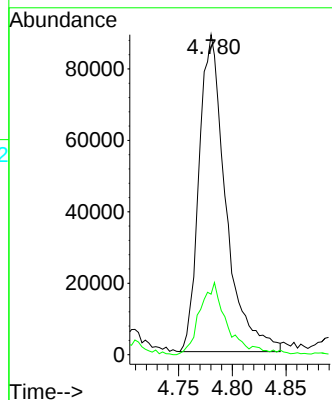
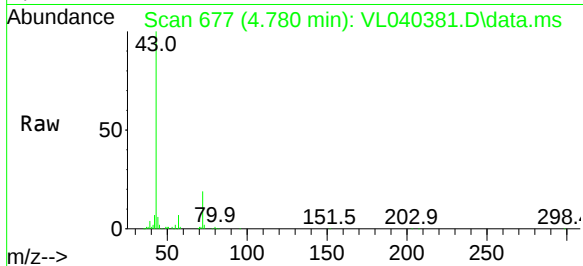




#34
2-Butanone
Concen: 1.057 ppbv
RT: 4.780 min Scan# 61
Delta R.T. 0.000 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

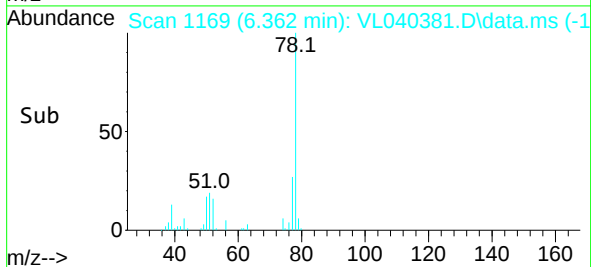
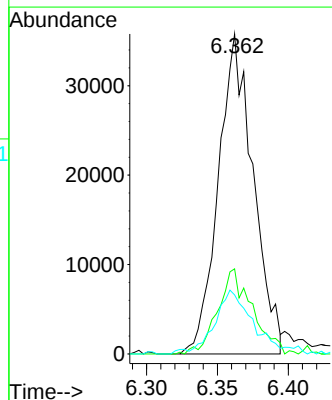
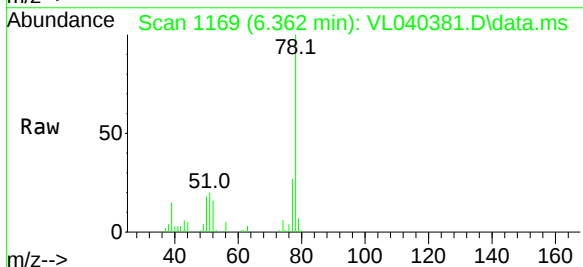
Instrument :
MSVOA_L
ClientSampleId :

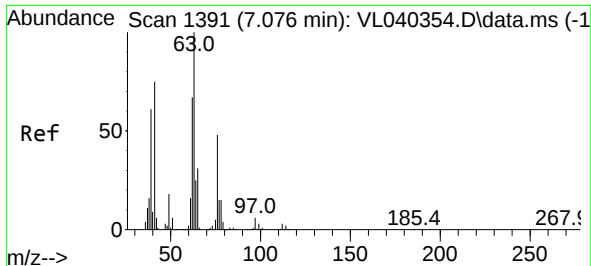
Tgt Ion: 43 Resp: 153862
Ion Ratio Lower Upper
43 100
72 24.4 18.4 27.6



#36
Benzene
Concen: 0.278 ppbv
RT: 6.362 min Scan# 1169
Delta R.T. -0.010 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

Tgt Ion: 78 Resp: 61294
Ion Ratio Lower Upper
78 100
77 26.0 17.8 26.8
50 17.0 15.6 23.4





#39

1,2-Dichloropropane

Concen: 7.854 ppbv

RT: 6.645 min Scan# 1

Delta R.T. -0.431 min

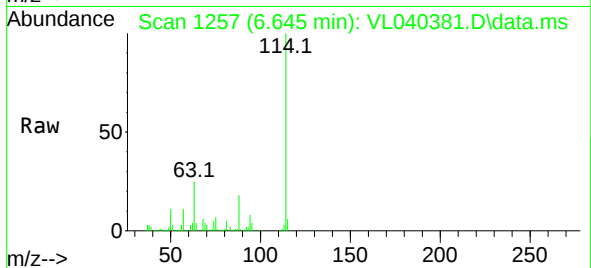
Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

Instrument :

MSVOA_L

ClientSampleId :



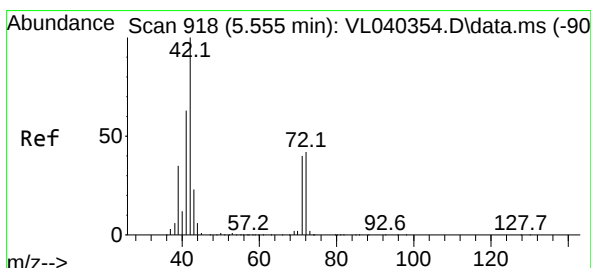
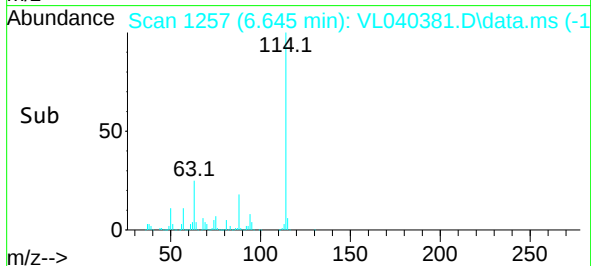
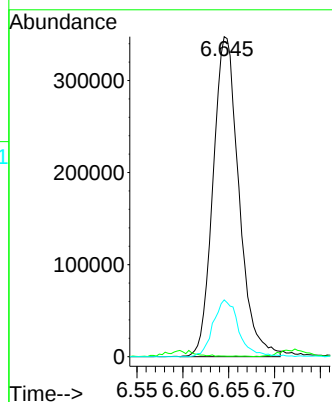
Tgt Ion: 63 Resp: 680842

Ion Ratio Lower Upper

63 100

41 0.0 59.6 89.4#

62 17.8 53.9 80.9#



#41

Tetrahydrofuran

Concen: 7.564 ppbv

RT: 5.205 min Scan# 809

Delta R.T. -0.350 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

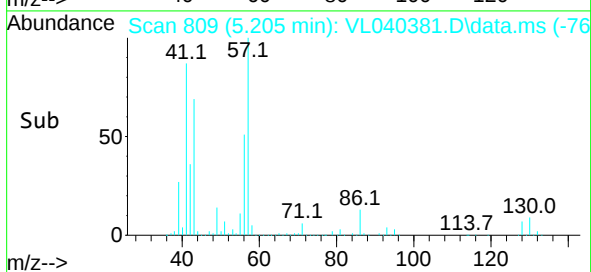
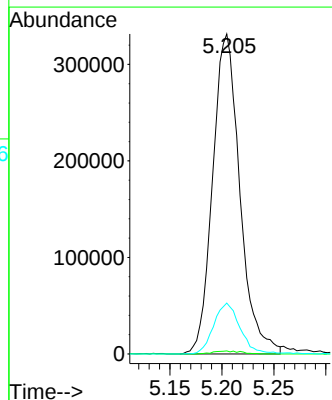
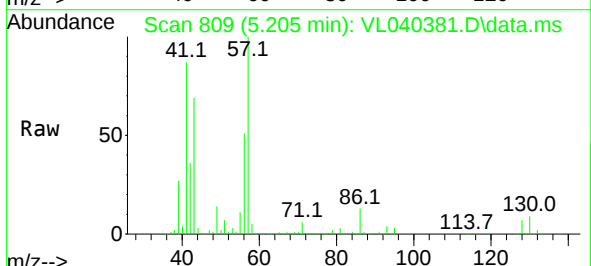
Tgt Ion: 42 Resp: 603231

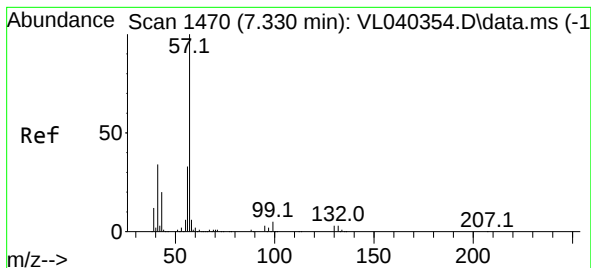
Ion Ratio Lower Upper

42 100

72 0.9 33.7 50.5#

71 15.6 32.2 48.2#





#44

2,2,4-Trimethylpentane

Concen: 0.156 ppbv

RT: 7.320 min Scan# 14

Delta R.T. -0.010 min

Lab File: VL040381.D

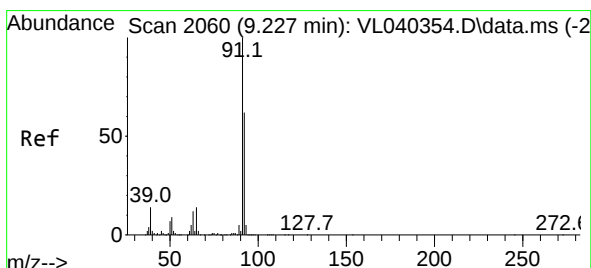
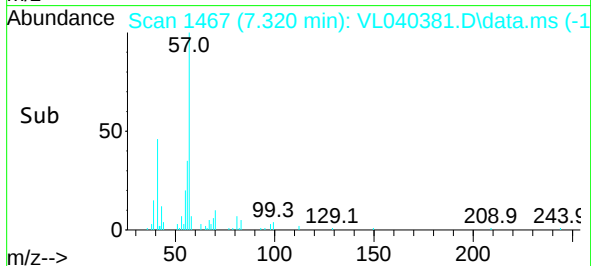
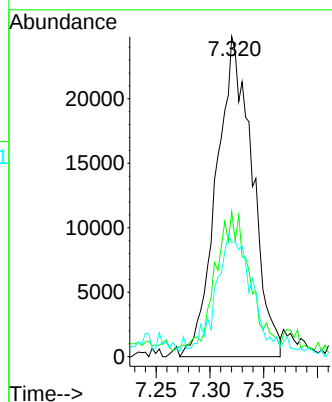
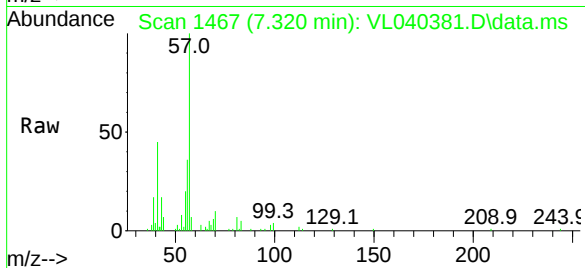
Acq: 19 Apr 2023 15:54

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:	57	Resp:	57282
Ion	Ratio	Lower	Upper
57	100		
41	50.6	26.9	40.3#
56	42.9	25.1	37.7#



#53

Toluene

Concen: 0.784 ppbv

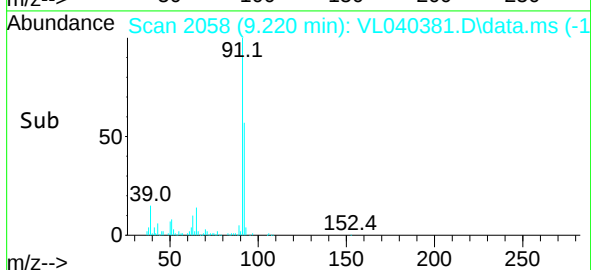
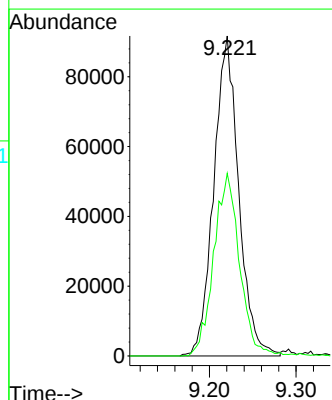
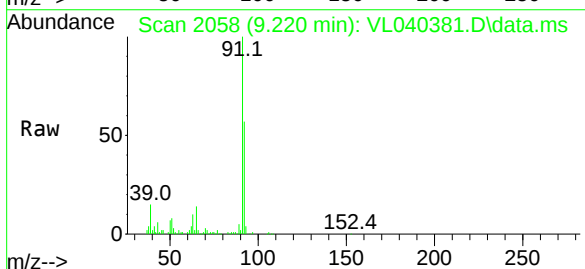
RT: 9.220 min Scan# 2058

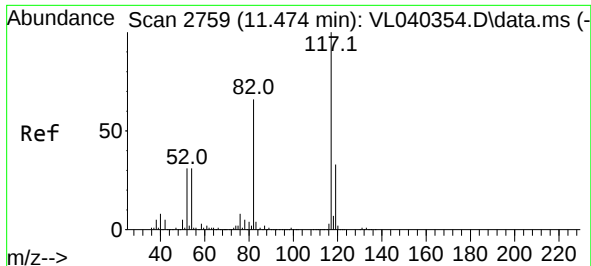
Delta R.T. -0.007 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

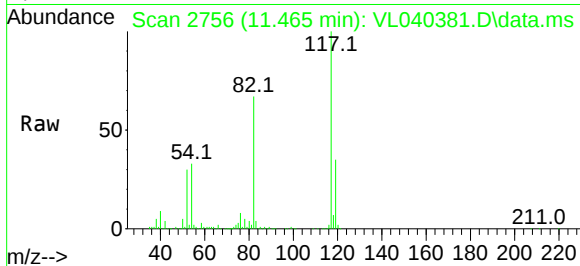
Tgt Ion:	91	Resp:	183168
Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.9	73.3



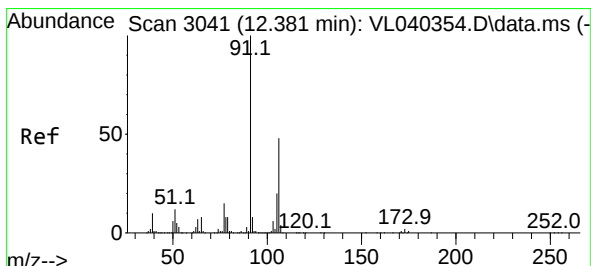
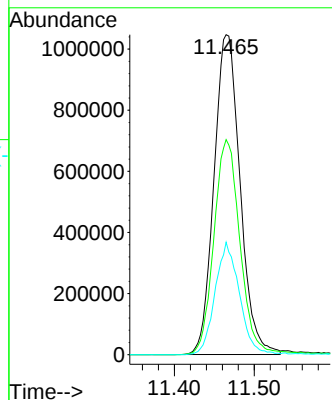
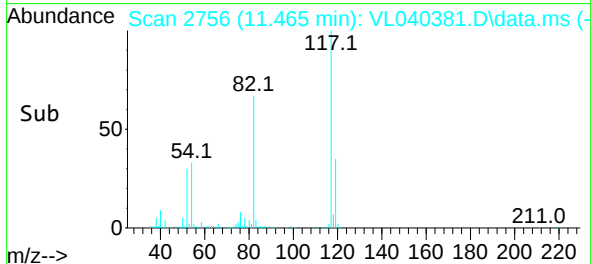


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.465 min Scan# 21
Delta R.T. -0.009 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

Instrument :
MSVOA_L
ClientSampleId :

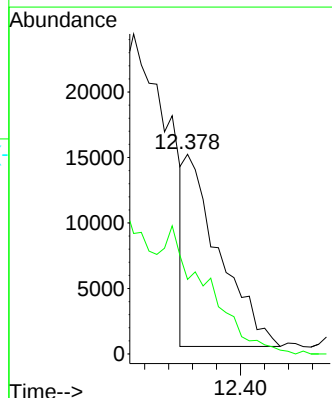
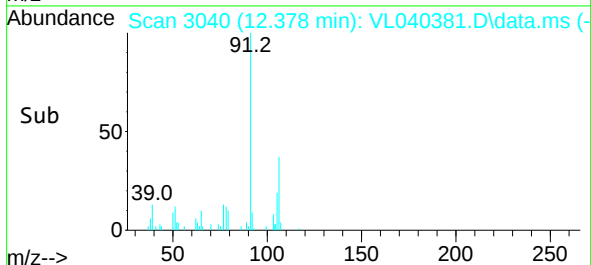
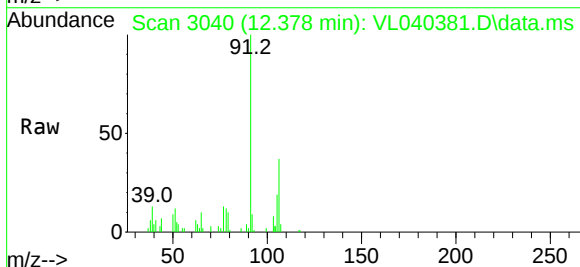


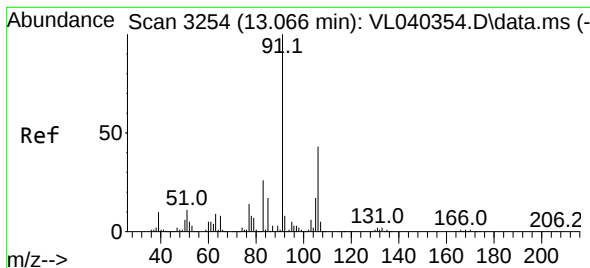
Tgt Ion:117 Resp: 2371301
Ion Ratio Lower Upper
117 100
82 67.5 52.5 78.7
119 33.2 24.3 36.5



#59
m/p-Xylene
Concen: 0.055 ppbv
RT: 12.378 min Scan# 3040
Delta R.T. -0.003 min
Lab File: VL040381.D
Acq: 19 Apr 2023 15:54

Tgt Ion: 91 Resp: 14729
Ion Ratio Lower Upper
91 100
106 0.0 34.7 52.1#





#60

o-Xylene

Concen: 0.155 ppbv

RT: 13.060 min Scan# 31

Delta R.T. -0.006 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

Instrument :

MSVOA_L

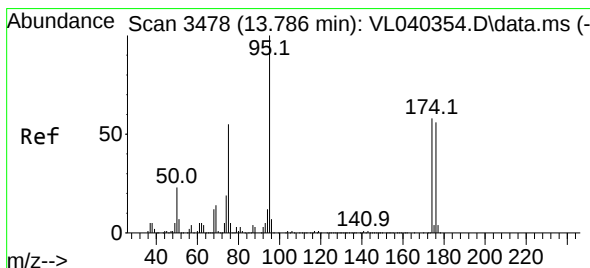
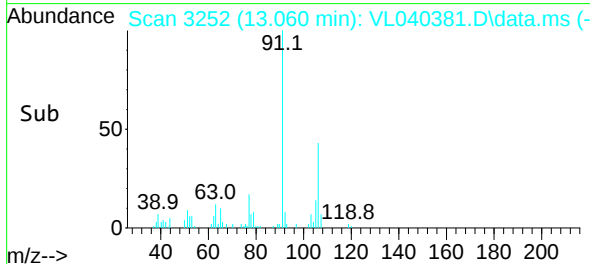
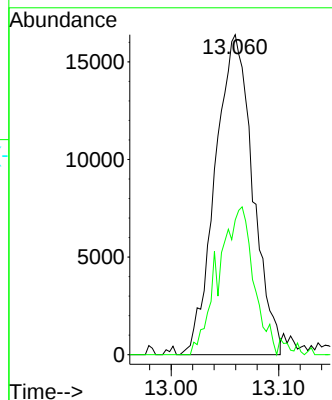
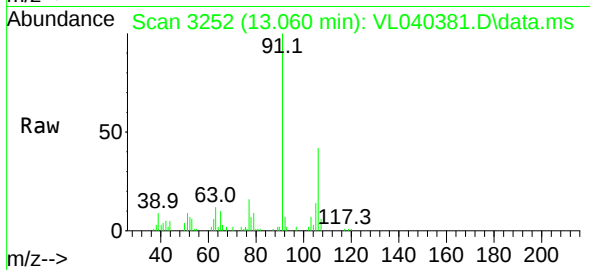
ClientSampleId :

Tgt Ion: 91 Resp: 39834

Ion Ratio Lower Upper

91 100

106 44.9 21.9 65.8



#68

1-Bromo-4-Fluorobenzene

Concen: 9.765 ppbv

RT: 13.780 min Scan# 3476

Delta R.T. -0.006 min

Lab File: VL040381.D

Acq: 19 Apr 2023 15:54

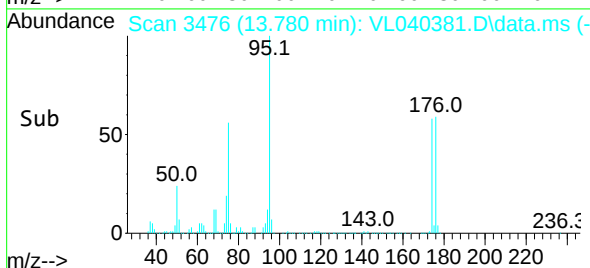
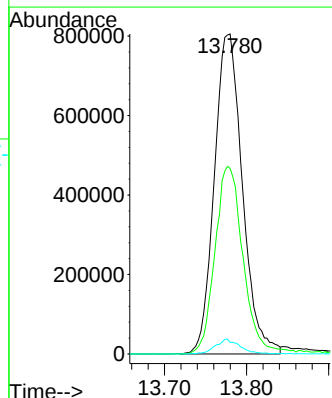
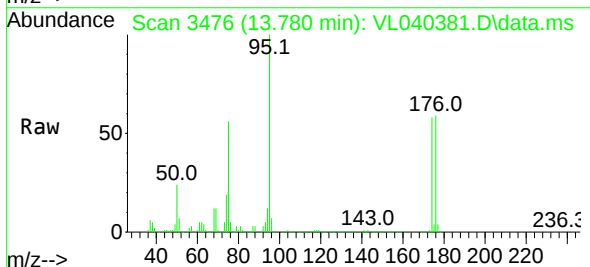
Tgt Ion: 95 Resp: 1914743

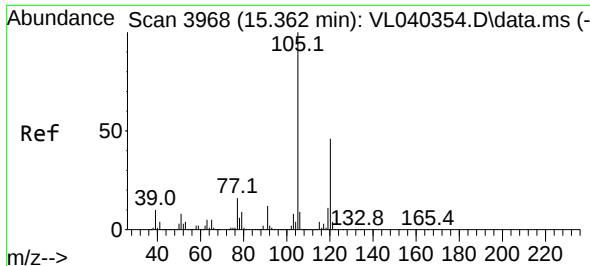
Ion Ratio Lower Upper

95 100

174 60.0 47.2 70.8

175 4.2 3.5 5.3

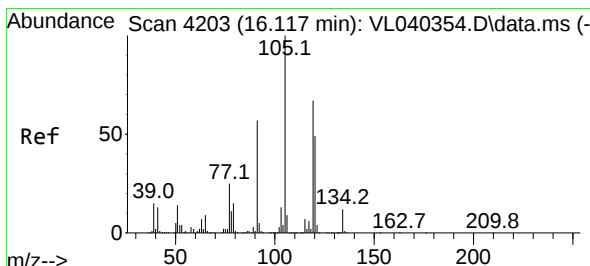
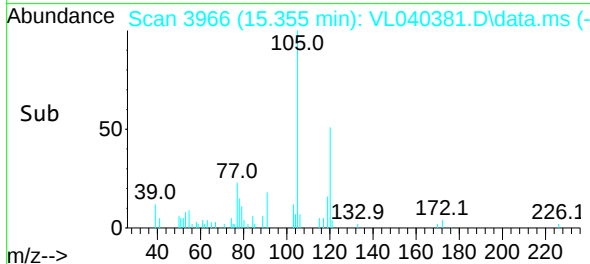
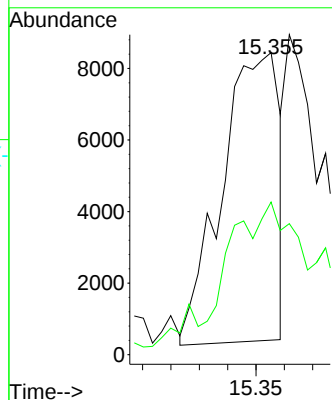
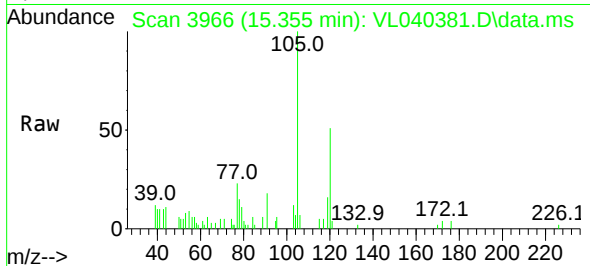




#73
 1,3,5-Trimethylbenzene
 Concen: 0.043 ppbv
 RT: 15.355 min Scan# 3966
 Delta R.T. -0.007 min
 Lab File: VL040381.D
 Acq: 19 Apr 2023 15:54

Instrument :
 MSVOA_L
 ClientSampleId :

Tgt Ion:105 Resp: 11346
 Ion Ratio Lower Upper
 105 100
 120 46.3 36.9 55.3



#74
 1,2,4-Trimethylbenzene
 Concen: 0.110 ppbv
 RT: 16.108 min Scan# 4200
 Delta R.T. -0.009 min
 Lab File: VL040381.D
 Acq: 19 Apr 2023 15:54

Tgt Ion:105 Resp: 32868
 Ion Ratio Lower Upper
 105 100
 120 42.1 38.9 58.3
 91 15.3 46.0 69.0#
 77 15.8 20.0 30.0#

