

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042324\
 Data File : VL041159.D
 Acq On : 23 Apr 2024 14:00
 Operator : SY/MD
 Sample : P2222-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Apr 24 02:52:12 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL040424AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Apr 24 02:47:46 2024
 Response via : Initial Calibration

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

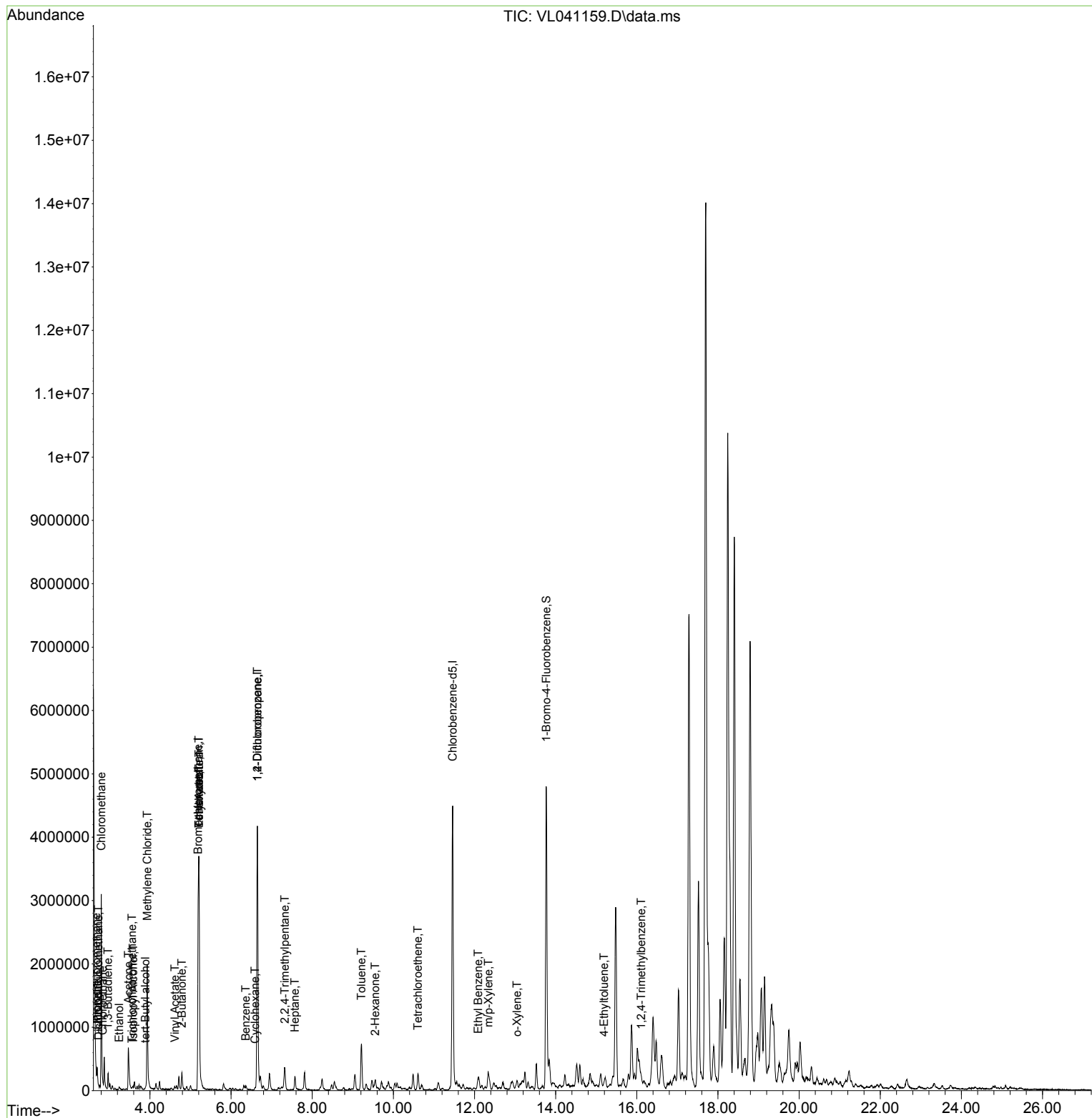
Internal Standards						
1) Bromochloromethane	5.189	49	1234642	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.648	114	3061210	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.462	117	2925416	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.767	95	2391876	10.168	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.732	85	23199	0.110	ppbv	100
3) Chlorodifluoromethane	2.678	51	33784	0.178	ppbv #	85
4) Chloromethane	2.800	50	42324	0.588	ppbv #	46
7) Chloroethane	2.835	64	5391	0.211	ppbv #	86
9) Propene	2.700	41	105547	1.745	ppbv	86
10) Heptane	7.571	43	78217	0.545	ppbv	97
11) Trichlorofluoromethane	3.562	101	14035	0.073	ppbv	98
13) Ethanol	3.243	45	45269	3.146	ppbv	97
15) Acetone	3.468	43	697866	5.220	ppbv #	71
16) 1,3-Butadiene	2.967	39	74417	1.134	ppbv #	30
17) tert-Butyl alcohol	3.890	59	17071	0.141	ppbv #	93
19) Isopropyl Alcohol	3.591	45	28277	0.348	ppbv #	89
20) Methylene Chloride	3.935	84	660624	11.981	ppbv	95
23) Vinyl Acetate	4.613	43	10337	0.076	ppbv #	83
25) Ethyl Acetate	5.211	43	820795	3.269	ppbv #	77
26) Hexane	5.208	57	1148906	10.199	ppbv #	40
30) Cyclohexane	6.587	84	3220	0.035	ppbv #	1
34) 2-Butanone	4.787	43	305533	2.359	ppbv	96
36) Benzene	6.362	78	40593	0.181	ppbv	99
39) 1,2-Dichloropropane	6.648	63	788024	8.890	ppbv #	25
41) Tetrahydrofuran	5.211	42	461940	5.356	ppbv #	49
44) 2,2,4-Trimethylpentane	7.324	57	285328	0.767	ppbv #	84
51) 2-Hexanone	9.552	43	149875	0.948	ppbv #	86
52) Tetrachloroethene	10.603	164	55135	0.769	ppbv	93
53) Toluene	9.214	91	361790	1.528	ppbv	98
58) Ethyl Benzene	12.086	91	103319	0.323	ppbv	93
59) m/p-Xylene	12.339	91	289055	0.999	ppbv	99
60) o-Xylene	13.050	91	95244	0.348	ppbv	98
72) 4-Ethyltoluene	15.195	105	15263	0.050	ppbv #	39
74) 1,2,4-Trimethylbenzene	16.105	105	44292	0.143	ppbv #	70

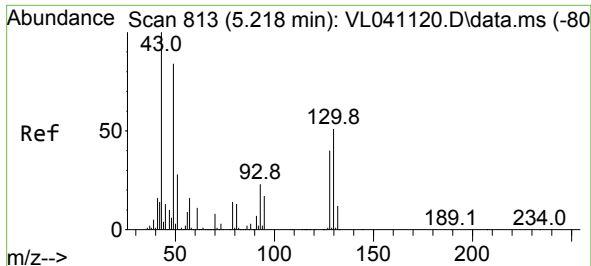
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042324\
Data File : VL041159.D
Acq On : 23 Apr 2024 14:00
Operator : SY/MD
Sample : P2222-01 4X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Apr 24 02:52:12 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL040424AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Wed Apr 24 02:47:46 2024
Response via : Initial Calibration

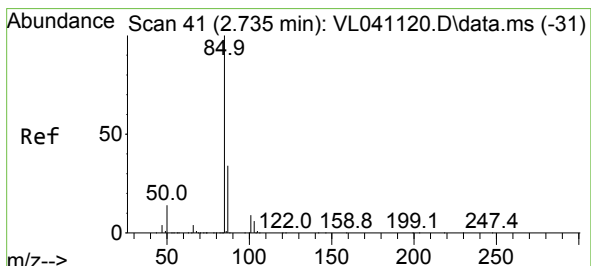
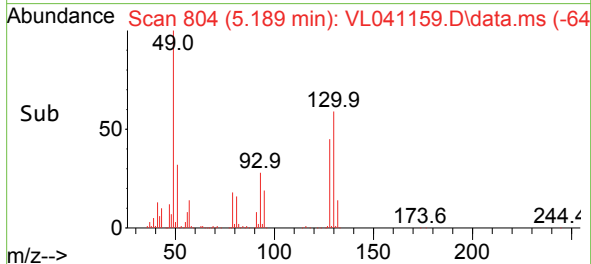
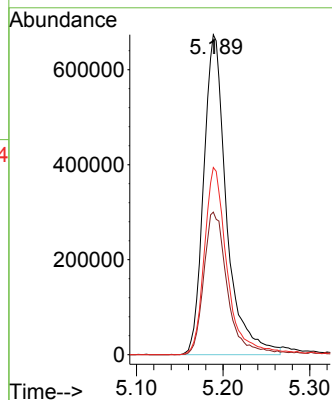
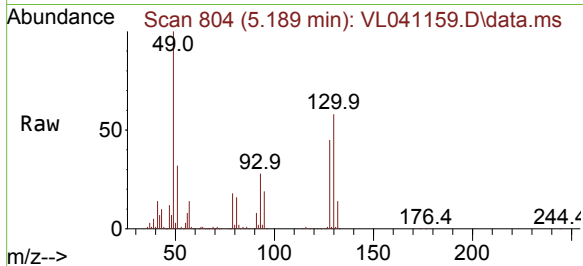




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.189 min Scan# 80
 Delta R.T. -0.000 min
 Lab File: VL041159.D
 Acq: 23 Apr 2024 14:00

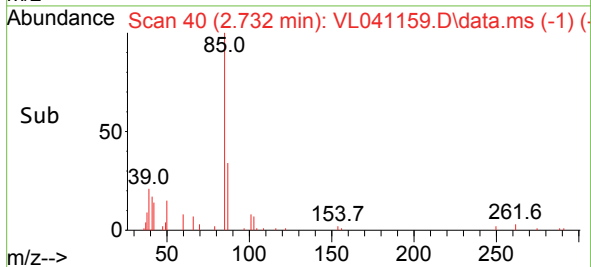
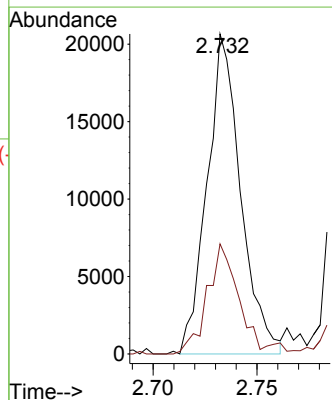
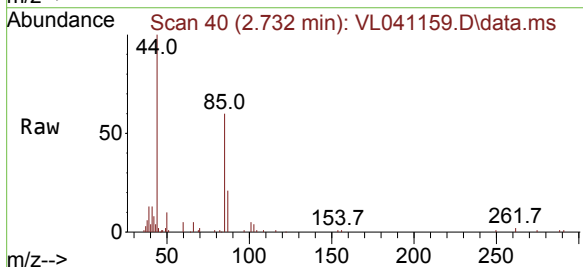
Instrument :
 MSVOA_L
 ClientSampleId :

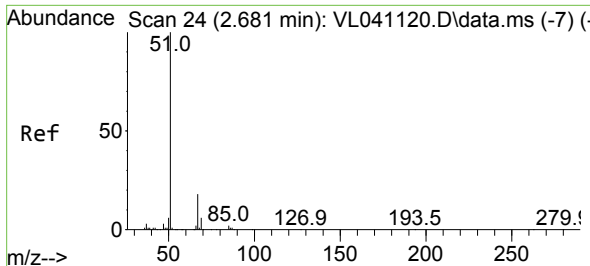
Tgt Ion: 49 Resp: 1234642
 Ion Ratio Lower Upper
 49 100
 128 47.1 23.6 71.0
 130 59.9 30.1 90.5



#2
 Dichlorodifluoromethane
 Concen: 0.110 ppbv
 RT: 2.732 min Scan# 40
 Delta R.T. -0.003 min
 Lab File: VL041159.D
 Acq: 23 Apr 2024 14:00

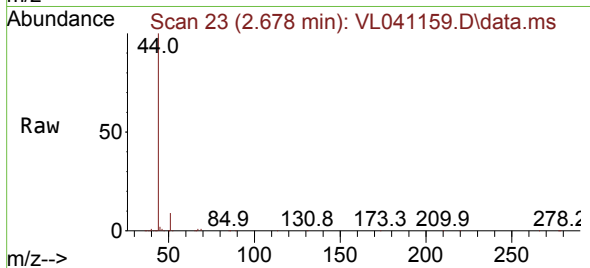
Tgt Ion: 85 Resp: 23199
 Ion Ratio Lower Upper
 85 100
 87 33.6 27.0 40.6



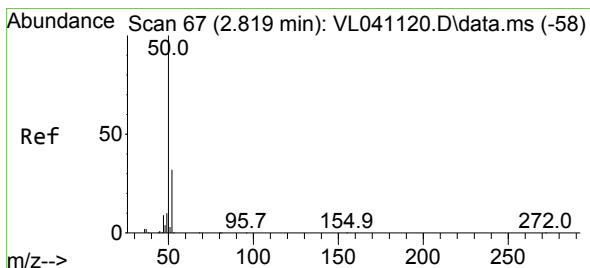
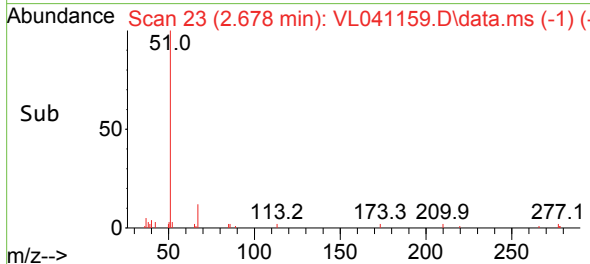
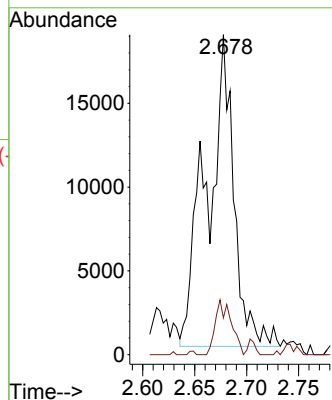


#3
Chlorodifluoromethane
Concen: 0.178 ppbv
RT: 2.678 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Instrument :
MSVOA_L
ClientSampleId :

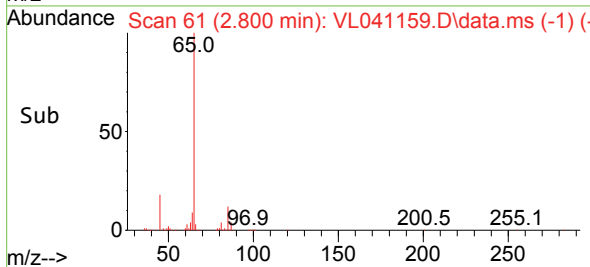
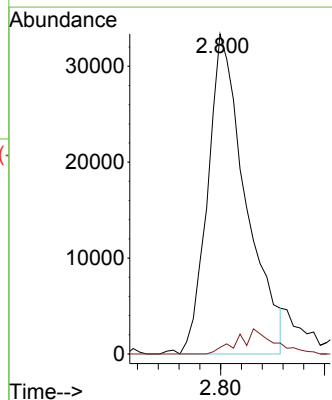
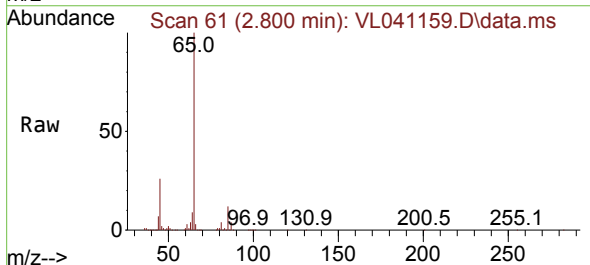


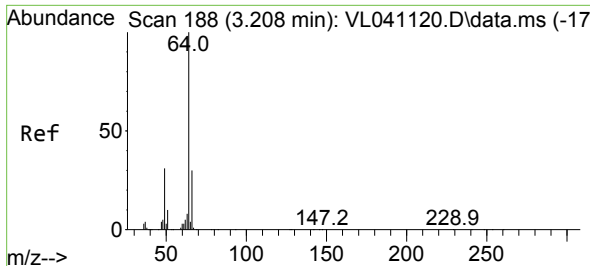
Tgt Ion: 51 Resp: 33784
Ion Ratio Lower Upper
51 100
67 11.8 14.9 22.3#



#4
Chloromethane
Concen: 0.588 ppbv
RT: 2.800 min Scan# 61
Delta R.T. -0.019 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Tgt Ion: 50 Resp: 42324
Ion Ratio Lower Upper
50 100
52 2.1 26.0 39.0#



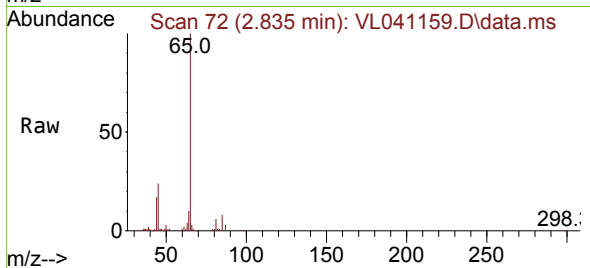


#7
Chloroethane
Concen: 0.211 ppbv
RT: 2.835 min Scan# 71
Delta R.T. -0.363 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

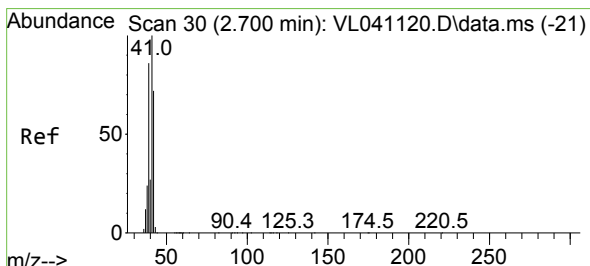
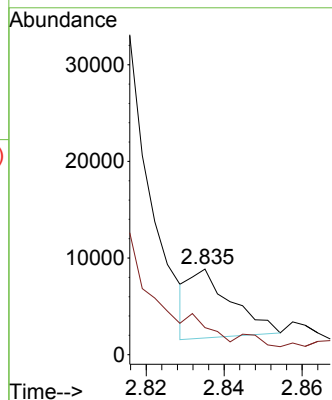
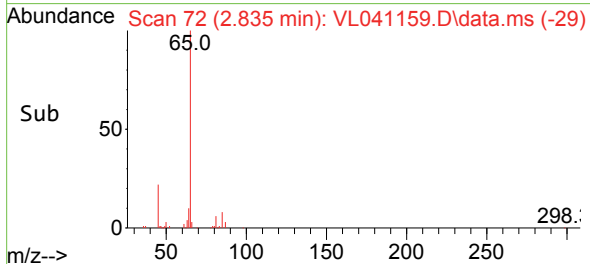
Instrument :

MSVOA_L

ClientSampleId :

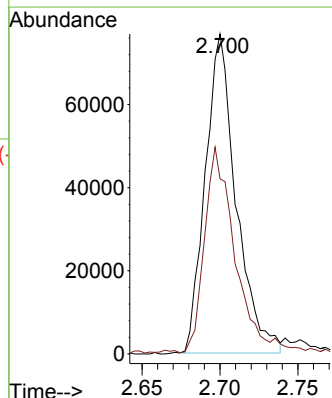
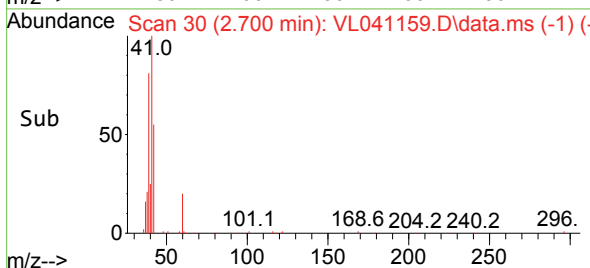
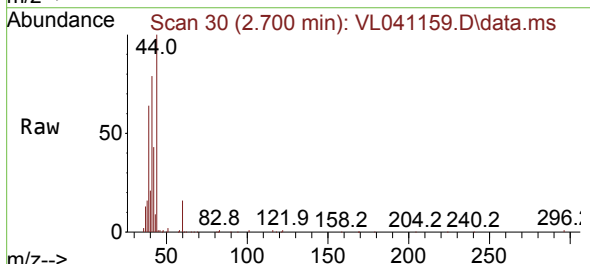


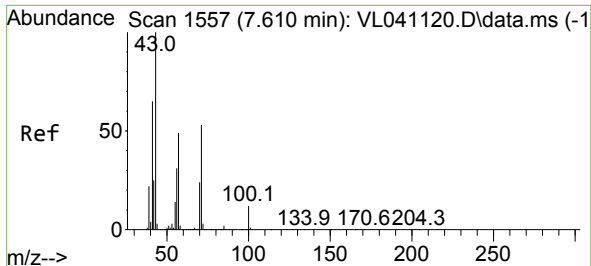
Tgt Ion: 64 Resp: 5391
Ion Ratio Lower Upper
64 100
66 37.7 24.2 36.4#



#9
Propene
Concen: 1.745 ppbv
RT: 2.700 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Tgt Ion: 41 Resp: 105547
Ion Ratio Lower Upper
41 100
42 63.5 60.1 90.1

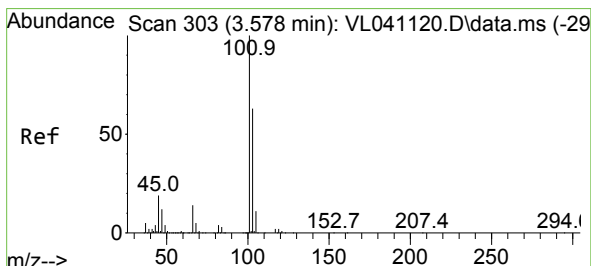
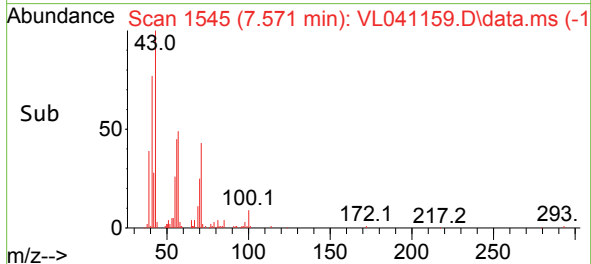
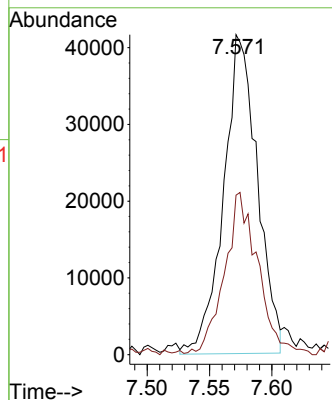
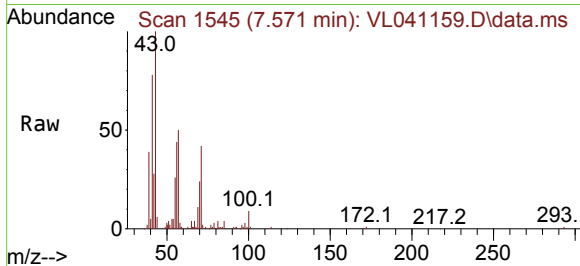




#10
Heptane
Concen: 0.545 ppbv
RT: 7.571 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

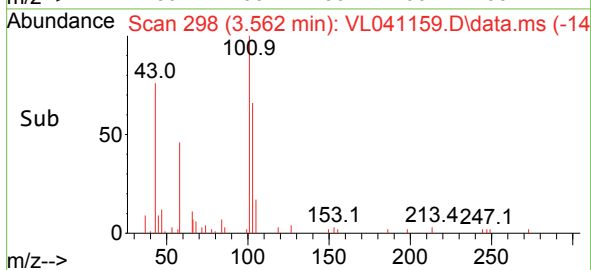
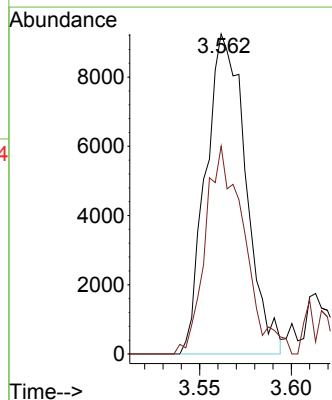
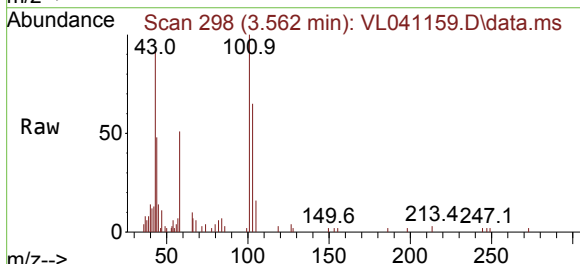
Instrument :
MSVOA_L
ClientSampleId :

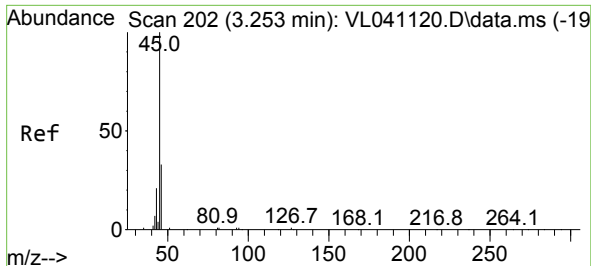
Tgt Ion: 43 Resp: 78217
Ion Ratio Lower Upper
43 100
57 51.9 39.9 59.9



#11
Trichlorofluoromethane
Concen: 0.073 ppbv
RT: 3.562 min Scan# 298
Delta R.T. -0.000 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Tgt Ion: 101 Resp: 14035
Ion Ratio Lower Upper
101 100
103 61.9 50.6 75.8

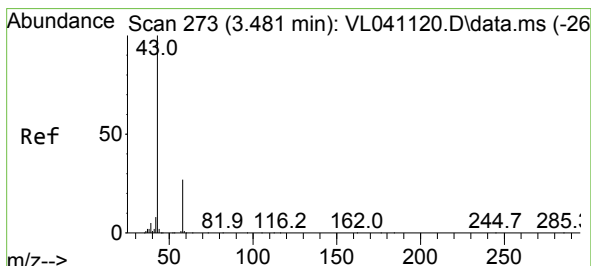
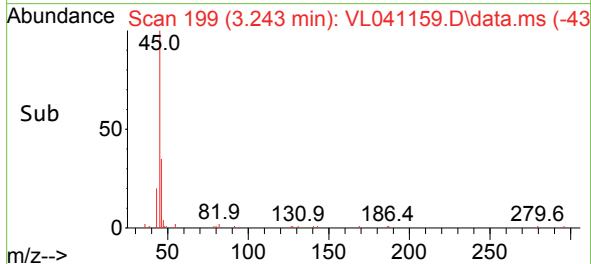
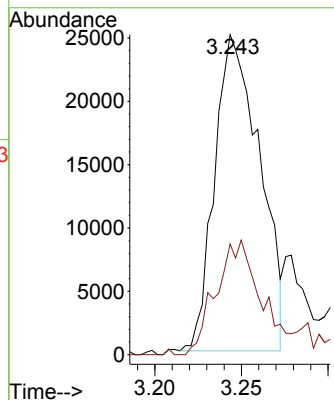
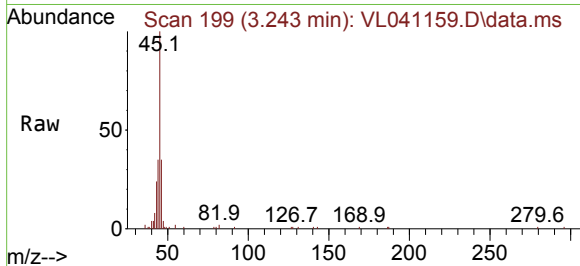




#13
Ethanol
Concen: 3.146 ppbv
RT: 3.243 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

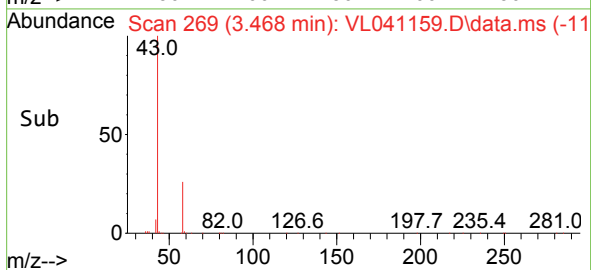
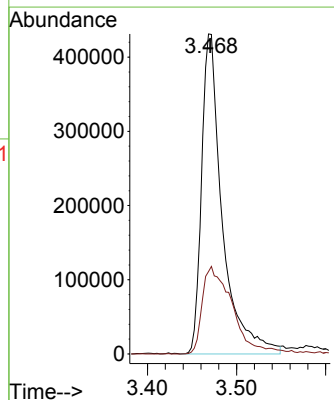
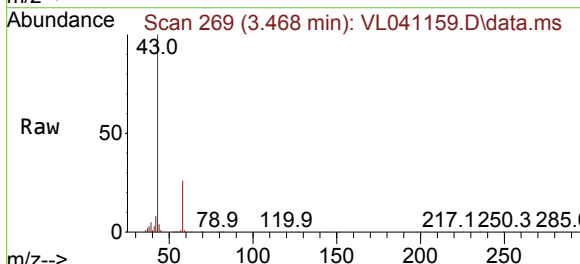
Instrument :
MSVOA_L
ClientSampleId :

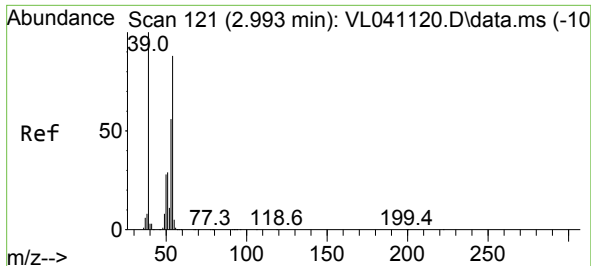
Tgt Ion: 45 Resp: 45269
Ion Ratio Lower Upper
45 100
46 39.1 15.0 59.8



#15
Acetone
Concen: 5.220 ppbv
RT: 3.468 min Scan# 269
Delta R.T. -0.000 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Tgt Ion: 43 Resp: 697866
Ion Ratio Lower Upper
43 100
58 41.0 21.1 31.7#





#16

1,3-Butadiene

Concen: 1.134 ppbv

RT: 2.967 min Scan# 113

Delta R.T. -0.023 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

Instrument :

MSVOA_L

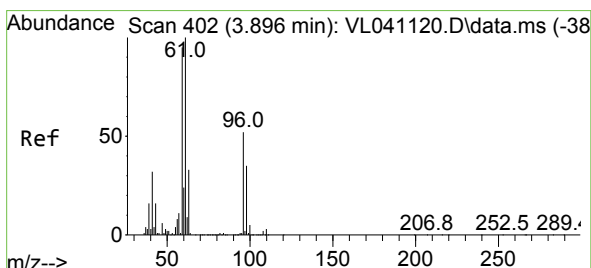
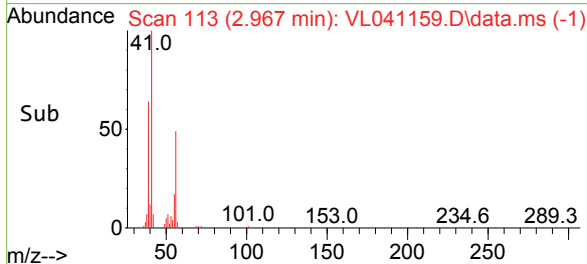
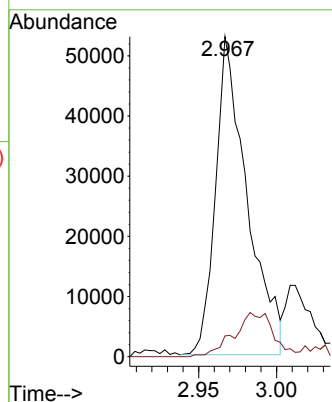
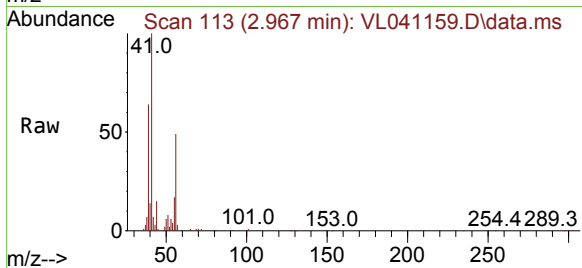
ClientSampleId :

Tgt Ion: 39 Resp: 74417

Ion Ratio Lower Upper

39 100

54 18.1 63.5 95.3#



#17

tert-Butyl alcohol

Concen: 0.141 ppbv

RT: 3.890 min Scan# 400

Delta R.T. 0.013 min

Lab File: VL041159.D

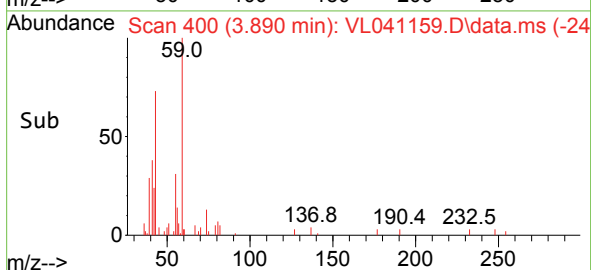
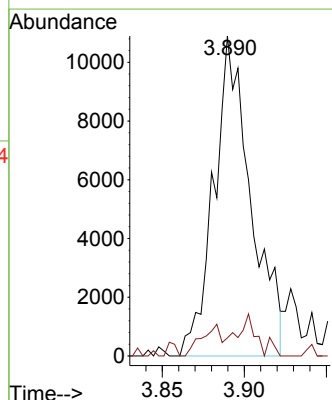
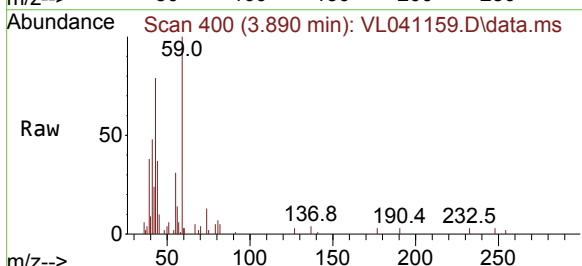
Acq: 23 Apr 2024 14:00

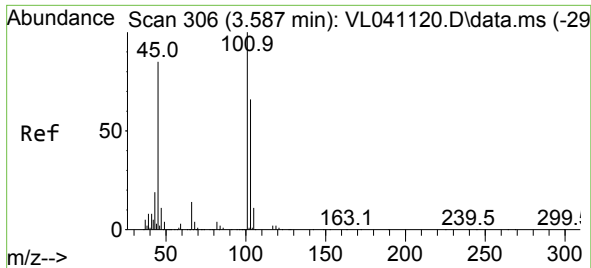
Tgt Ion: 59 Resp: 17071

Ion Ratio Lower Upper

59 100

57 13.5 8.7 13.1#





#19

Isopropyl Alcohol

Concen: 0.348 ppbv

RT: 3.591 min Scan# 306

Delta R.T. 0.016 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

Instrument :

MSVOA_L

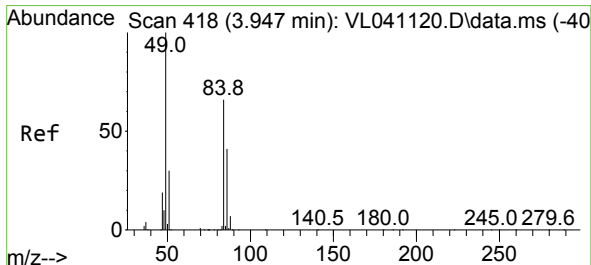
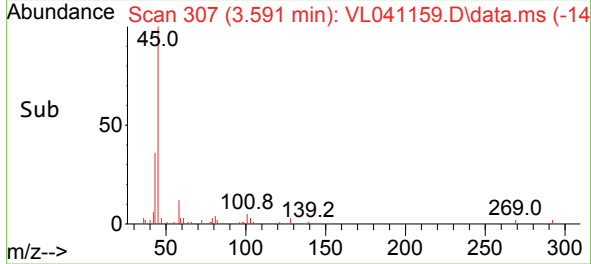
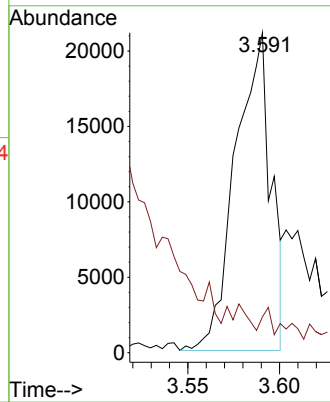
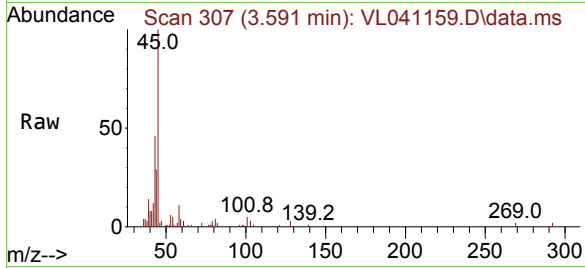
ClientSampleId :

Tgt Ion: 45 Resp: 28277

Ion Ratio Lower Upper

45 100

58 0.0 2.8 4.2#



#20

Methylene Chloride

Concen: 11.981 ppbv

RT: 3.935 min Scan# 414

Delta R.T. 0.003 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

Tgt Ion: 84 Resp: 660624

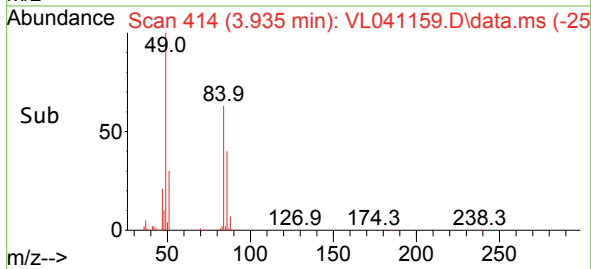
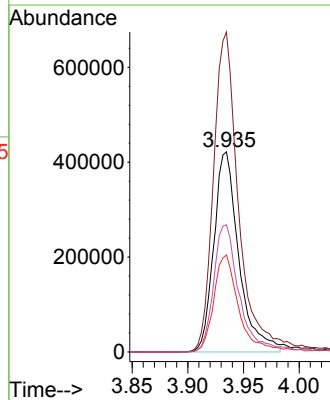
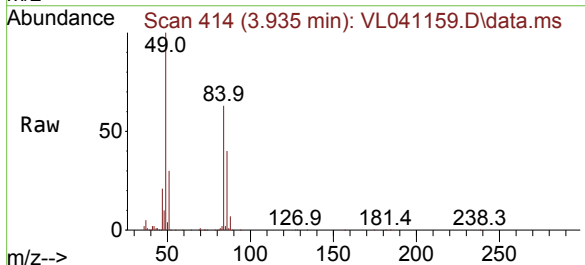
Ion Ratio Lower Upper

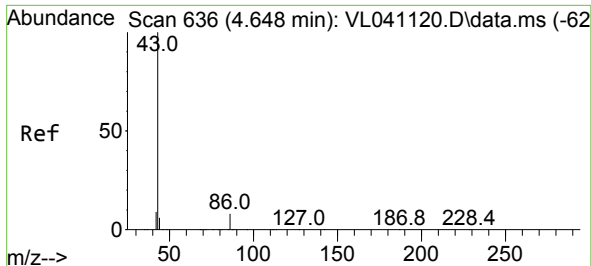
84 100

49 159.7 120.7 181.1

51 48.4 36.6 54.8

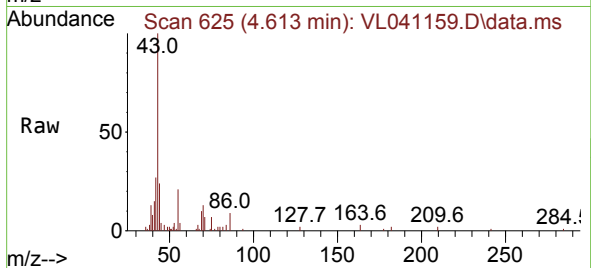
86 63.5 49.2 73.8



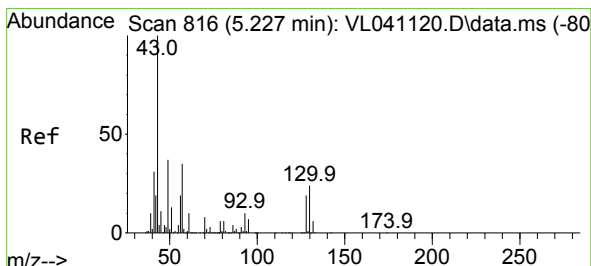
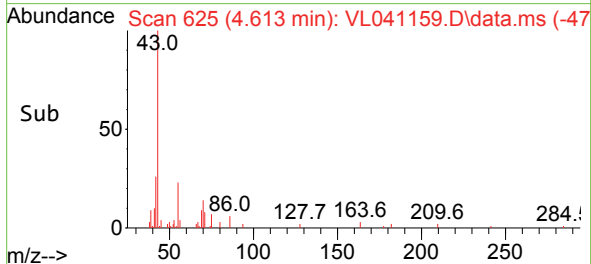
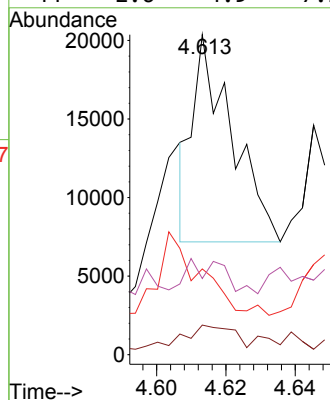


#23
 Vinyl Acetate
 Concen: 0.076 ppbv
 RT: 4.613 min Scan# 61
 Delta R.T. -0.010 min
 Lab File: VL041159.D
 Acq: 23 Apr 2024 14:00

Instrument :
 MSVOA_L
 ClientSampleId :

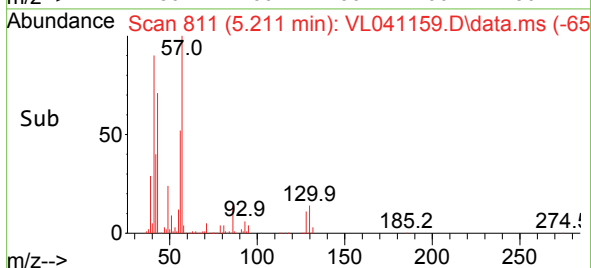
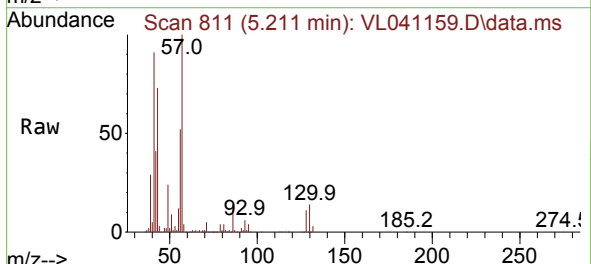
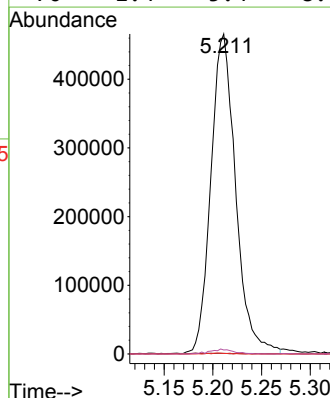


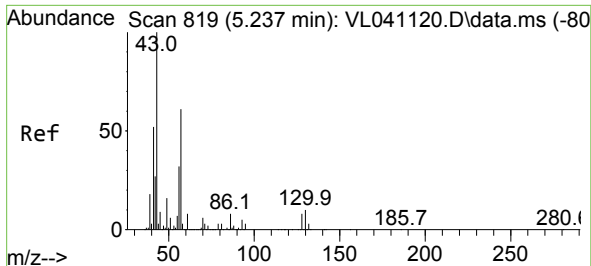
Tgt Ion:	43	Resp:	10337
Ion	Ratio	Lower	Upper
43	100		
86	9.5	6.2	9.4#
42	20.7	7.7	11.5#
44	2.6	4.9	7.3#



#25
 Ethyl Acetate
 Concen: 3.269 ppbv
 RT: 5.211 min Scan# 811
 Delta R.T. 0.013 min
 Lab File: VL041159.D
 Acq: 23 Apr 2024 14:00

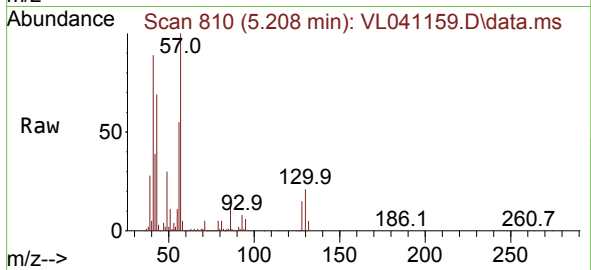
Tgt Ion:	43	Resp:	820795
Ion	Ratio	Lower	Upper
43	100		
45	0.3	8.0	12.0#
61	0.2	7.8	11.6#
70	1.4	5.4	8.0#





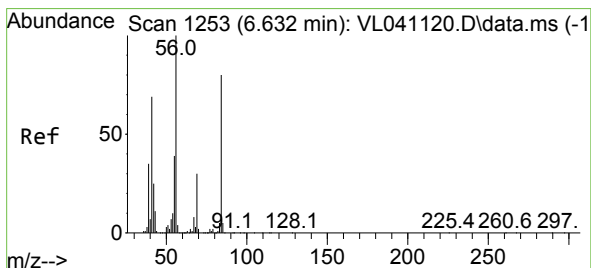
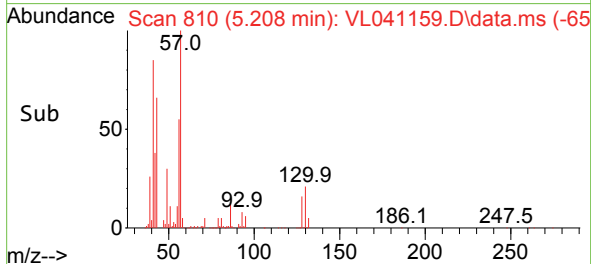
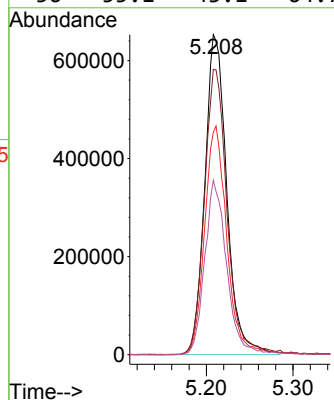
#26
Hexane
Concen: 10.199 ppbv
RT: 5.208 min Scan# 81
Delta R.T. 0.000 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion: 57 Resp: 1148906

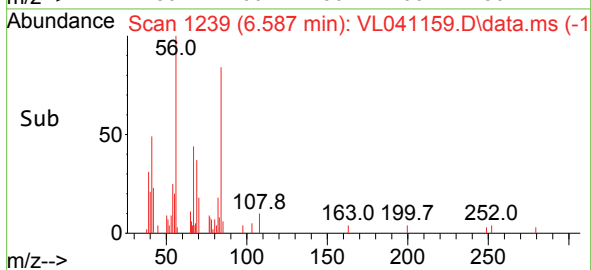
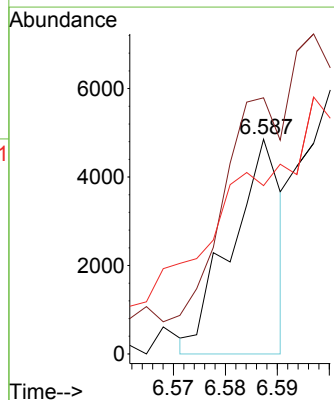
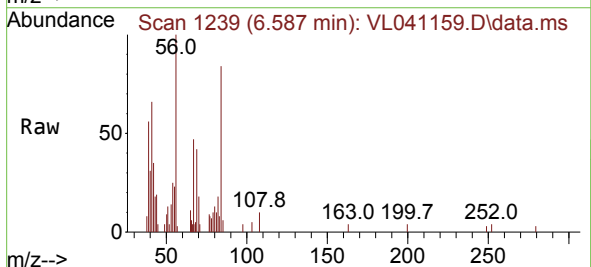
Ion	Ratio	Lower	Upper
57	100		
41	93.5	73.8	110.8
43	72.5	186.2	279.2#
56	55.1	43.1	64.7

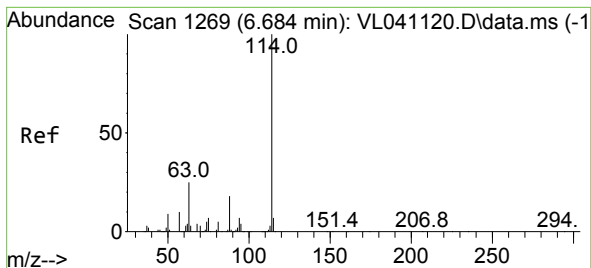


#30
Cyclohexane
Concen: 0.035 ppbv
RT: 6.587 min Scan# 1239
Delta R.T. -0.006 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Tgt Ion: 84 Resp: 3220

Ion	Ratio	Lower	Upper
84	100		
56	0.0	111.9	167.9#
41	0.0	71.0	106.6#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.648 min Scan# 1

Delta R.T. 0.003 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

Instrument :

MSVOA_L

ClientSampleId :

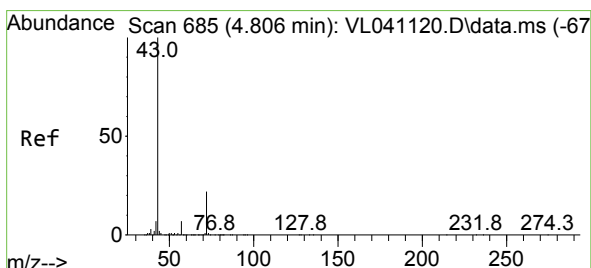
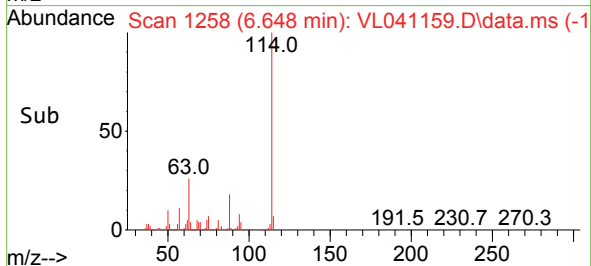
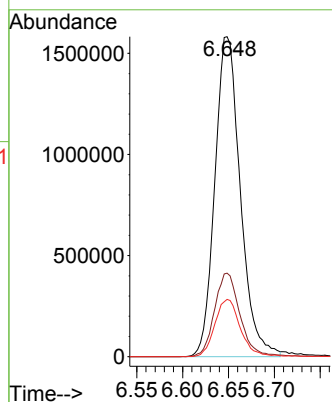
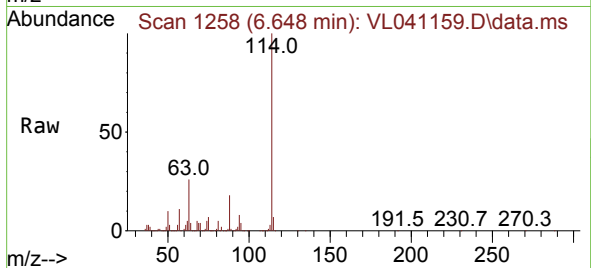
Tgt Ion:114 Resp: 3061210

Ion Ratio Lower Upper

114 100

63 26.4 20.9 31.3

88 18.2 14.5 21.7



#34

2-Butanone

Concen: 2.359 ppbv

RT: 4.787 min Scan# 679

Delta R.T. 0.006 min

Lab File: VL041159.D

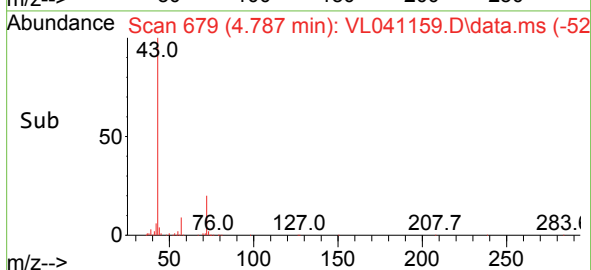
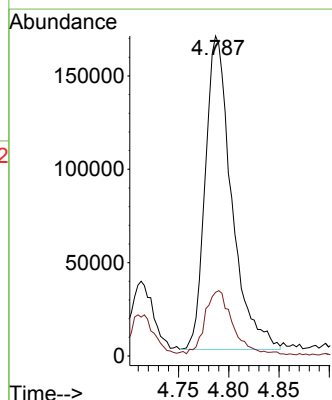
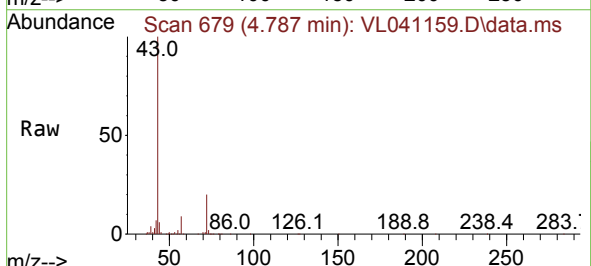
Acq: 23 Apr 2024 14:00

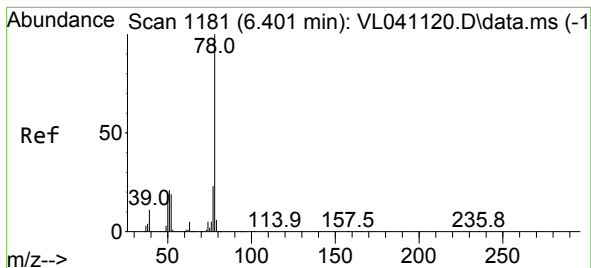
Tgt Ion: 43 Resp: 305533

Ion Ratio Lower Upper

43 100

72 23.9 17.6 26.4





#36

Benzene

Concen: 0.181 ppbv

RT: 6.362 min Scan# 1169

Delta R.T. -0.000 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

Instrument :

MSVOA_L

ClientSampleId :

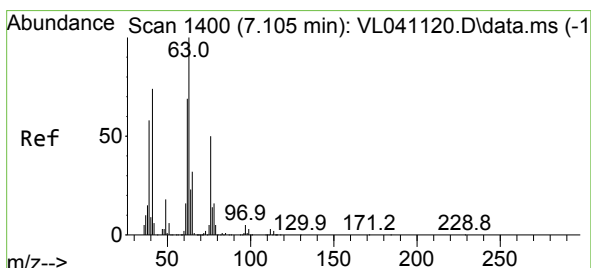
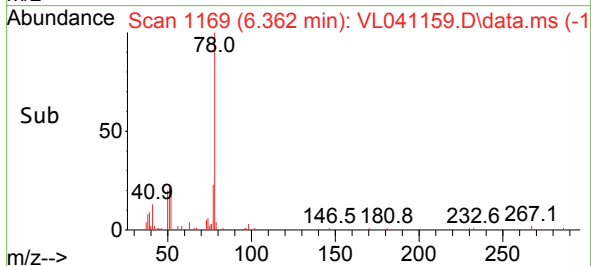
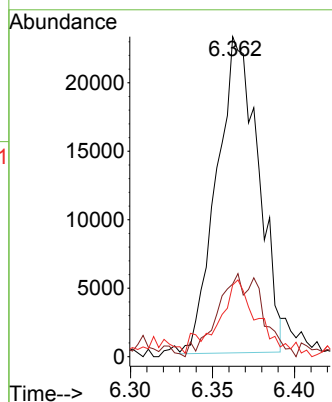
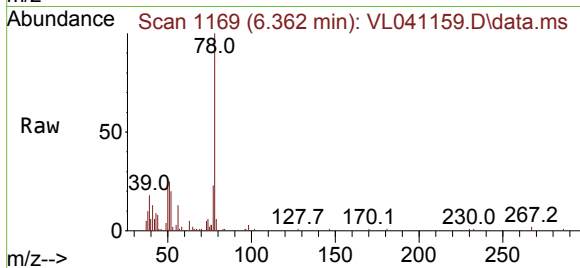
Tgt Ion: 78 Resp: 40593

Ion Ratio Lower Upper

78 100

77 22.1 18.2 27.4

50 19.6 15.4 23.2



#39

1,2-Dichloropropane

Concen: 8.890 ppbv

RT: 6.648 min Scan# 1258

Delta R.T. -0.415 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

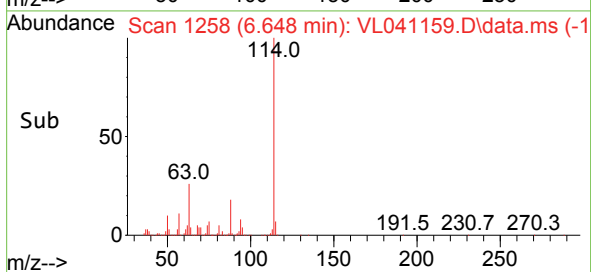
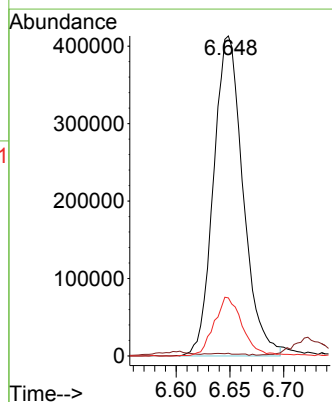
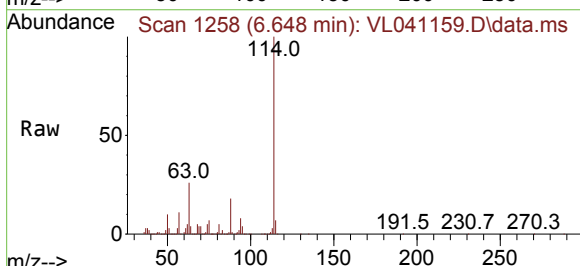
Tgt Ion: 63 Resp: 788024

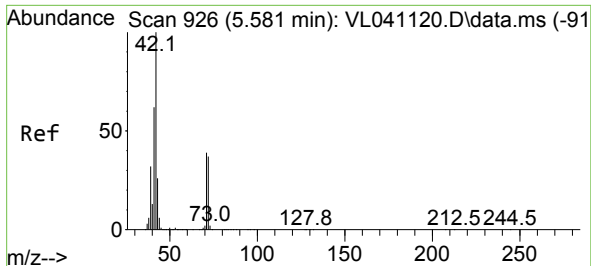
Ion Ratio Lower Upper

63 100

41 0.0 58.7 88.1#

62 18.0 55.5 83.3#

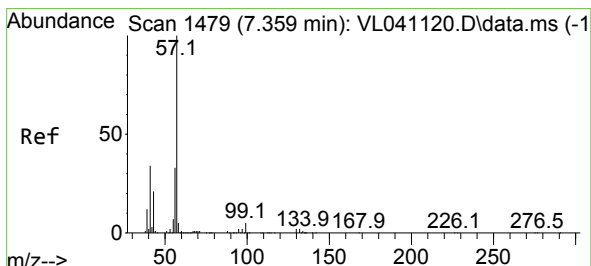
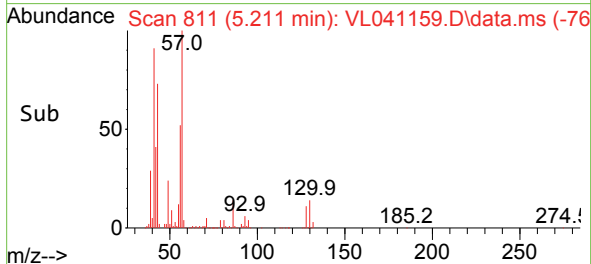
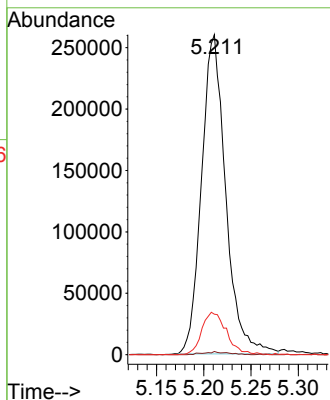
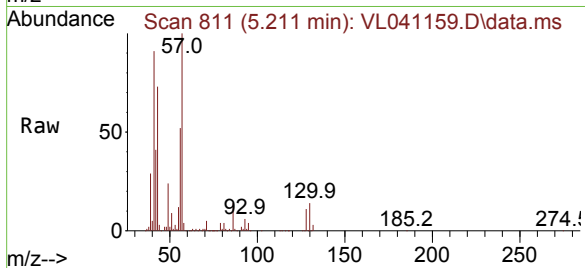




#41
Tetrahydrofuran
Concen: 5.356 ppbv
RT: 5.211 min Scan# 81
Delta R.T. -0.338 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

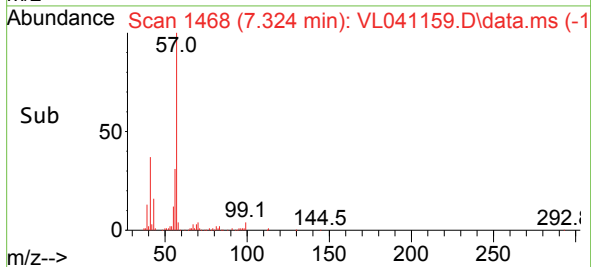
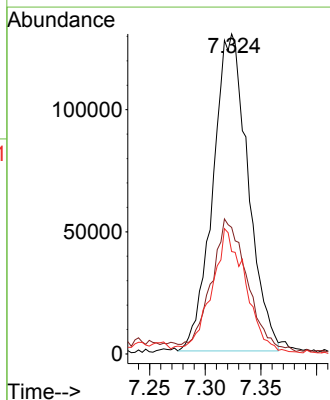
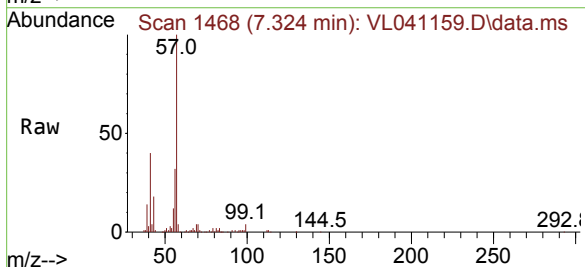
Instrument :
MSVOA_L
ClientSampleId :

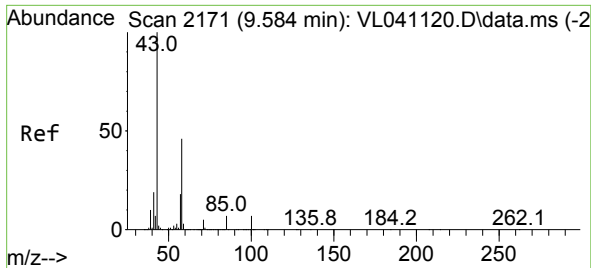
Tgt Ion: 42 Resp: 461940
Ion Ratio Lower Upper
42 100
72 1.0 31.2 46.8#
71 13.7 29.9 44.9#



#44
2,2,4-Trimethylpentane
Concen: 0.767 ppbv
RT: 7.324 min Scan# 1468
Delta R.T. 0.003 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Tgt Ion: 57 Resp: 285328
Ion Ratio Lower Upper
57 100
41 44.6 28.2 42.2#
56 40.3 25.2 37.8#

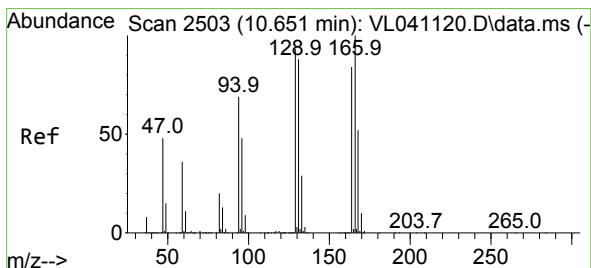
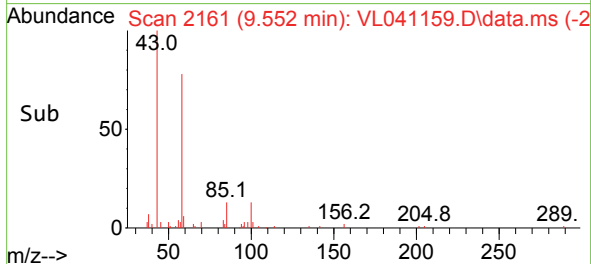
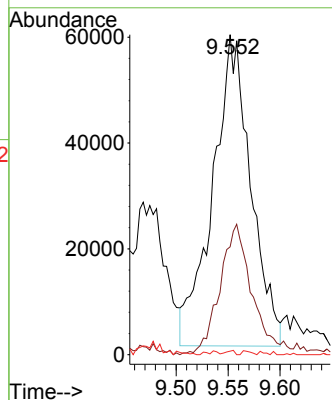
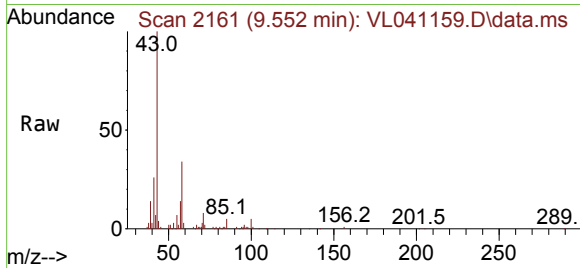




#51
2-Hexanone
Concen: 0.948 ppbv
RT: 9.552 min Scan# 2171
Delta R.T. 0.013 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

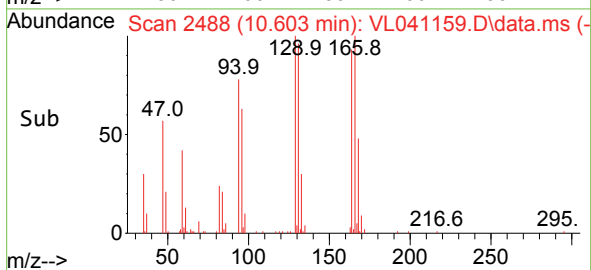
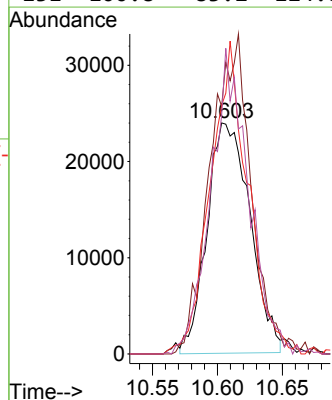
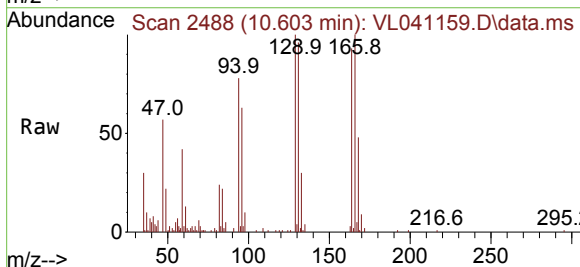
Instrument :
MSVOA_L
ClientSampleId :

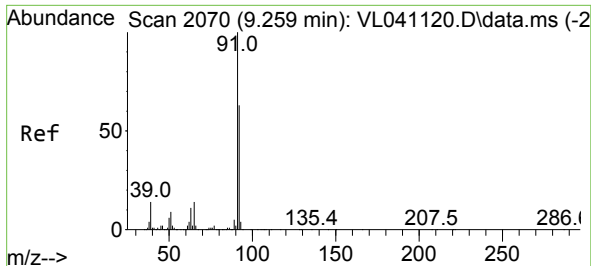
Tgt Ion: 43 Resp: 149875
Ion Ratio Lower Upper
43 100
58 37.3 37.3 55.9#
98 0.7 0.3 0.5#



#52
Tetrachloroethene
Concen: 0.769 ppbv
RT: 10.603 min Scan# 2488
Delta R.T. -0.003 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Tgt Ion: 164 Resp: 55135
Ion Ratio Lower Upper
164 100
166 105.5 95.0 142.6
129 106.0 88.7 133.1
131 100.8 83.2 124.8

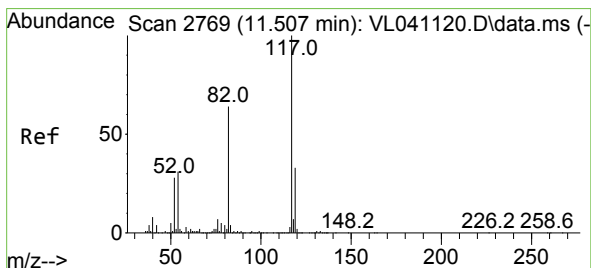
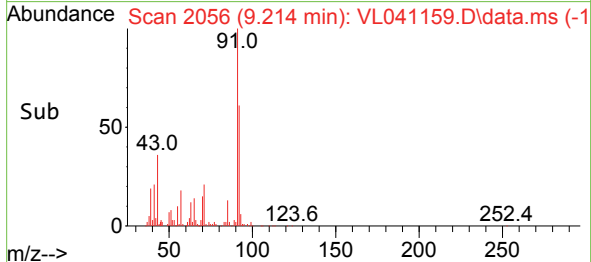
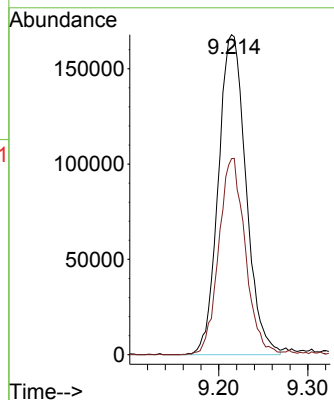
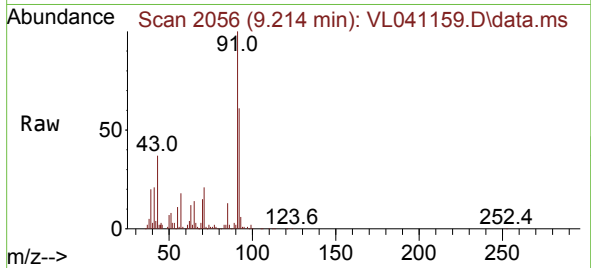




#53
Toluene
Concen: 1.528 ppbv
RT: 9.214 min Scan# 2070
Delta R.T. 0.003 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

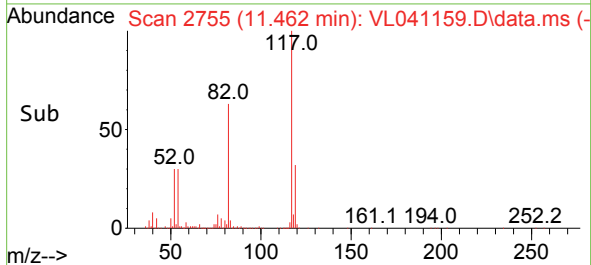
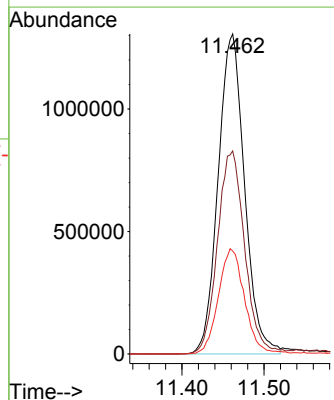
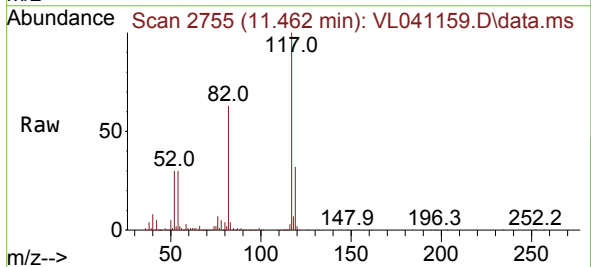
Instrument :
MSVOA_L
ClientSampleId :

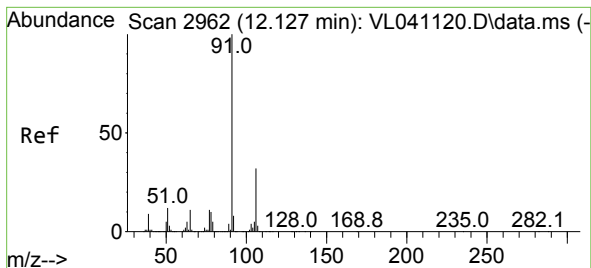
Tgt Ion: 91 Resp: 361790
Ion Ratio Lower Upper
91 100
92 59.4 49.0 73.4



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.462 min Scan# 2755
Delta R.T. 0.006 min
Lab File: VL041159.D
Acq: 23 Apr 2024 14:00

Tgt Ion: 117 Resp: 2925416
Ion Ratio Lower Upper
117 100
82 65.3 51.0 76.6
119 33.1 25.2 37.8





#58

Ethyl Benzene

Concen: 0.323 ppbv

RT: 12.086 min Scan# 2962

Delta R.T. 0.010 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

Instrument :

MSVOA_L

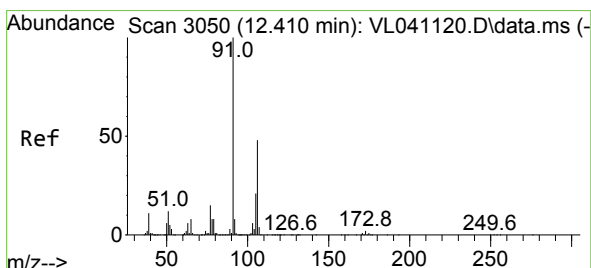
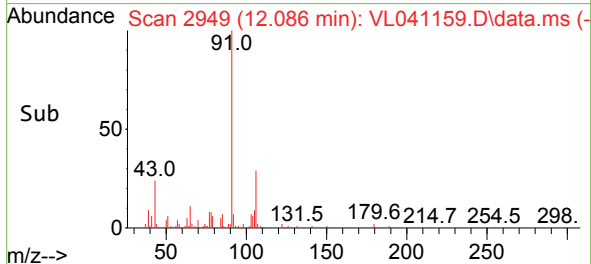
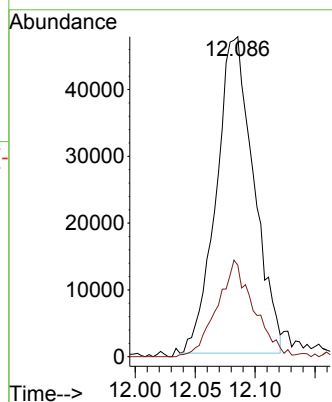
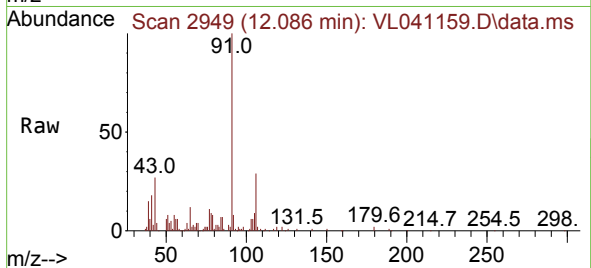
ClientSampleId :

Tgt Ion: 91 Resp: 103319

Ion Ratio Lower Upper

91 100

106 28.3 25.6 38.4



#59

m/p-Xylene

Concen: 0.999 ppbv

RT: 12.339 min Scan# 3028

Delta R.T. -0.023 min

Lab File: VL041159.D

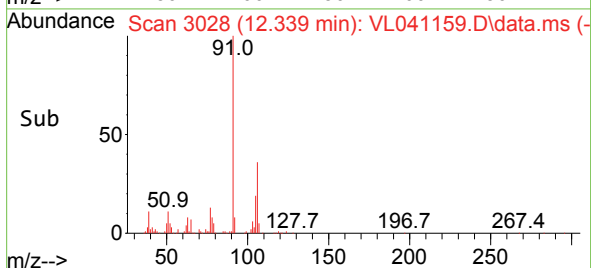
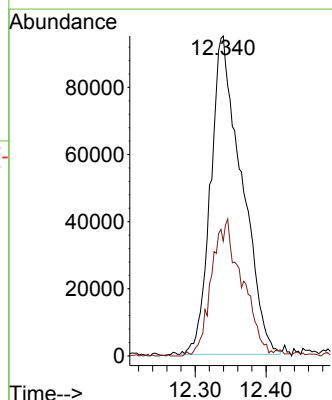
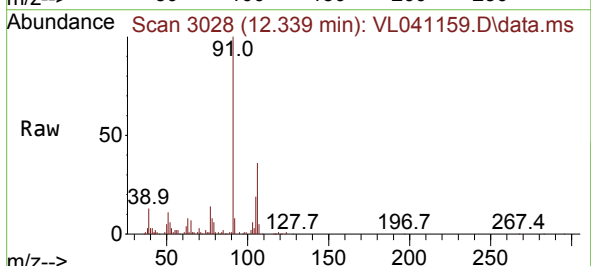
Acq: 23 Apr 2024 14:00

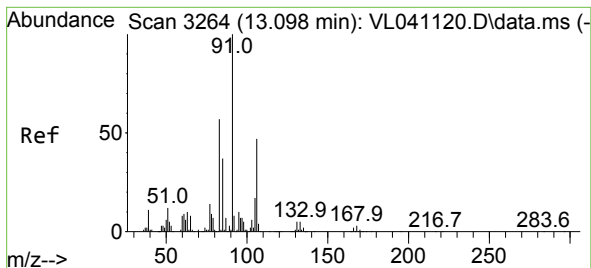
Tgt Ion: 91 Resp: 289055

Ion Ratio Lower Upper

91 100

106 43.6 35.4 53.2





#60

o-Xylene

Concen: 0.348 ppbv

RT: 13.050 min Scan# 31

Delta R.T. 0.003 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

Instrument :

MSVOA_L

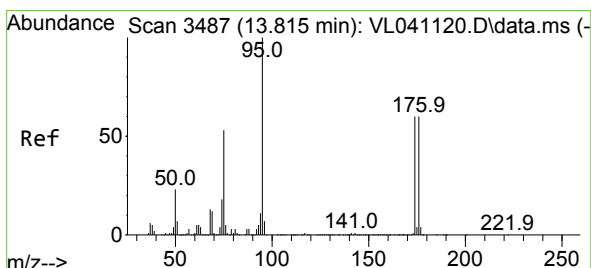
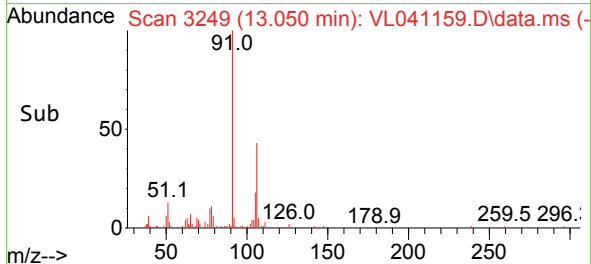
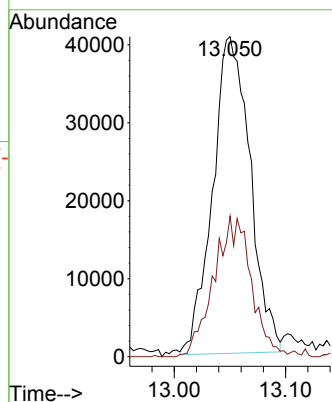
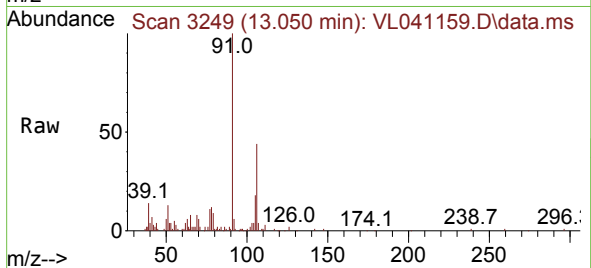
ClientSampleId :

Tgt Ion: 91 Resp: 95244

Ion Ratio Lower Upper

91 100

106 44.7 22.9 68.5



#68

1-Bromo-4-Fluorobenzene

Concen: 10.168 ppbv

RT: 13.767 min Scan# 3472

Delta R.T. 0.003 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

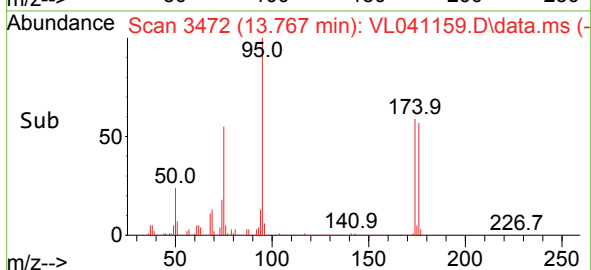
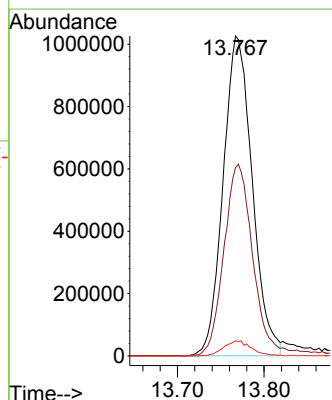
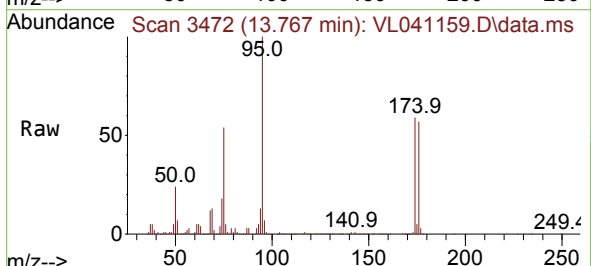
Tgt Ion: 95 Resp: 2391876

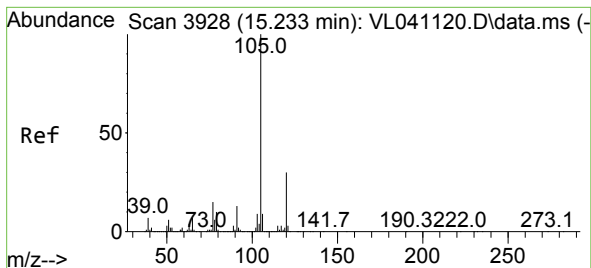
Ion Ratio Lower Upper

95 100

174 61.9 49.3 73.9

175 4.7 3.6 5.4





#72

4-Ethyltoluene

Concen: 0.050 ppbv

RT: 15.195 min Scan# 3916

Delta R.T. 0.013 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:105 Resp: 15263

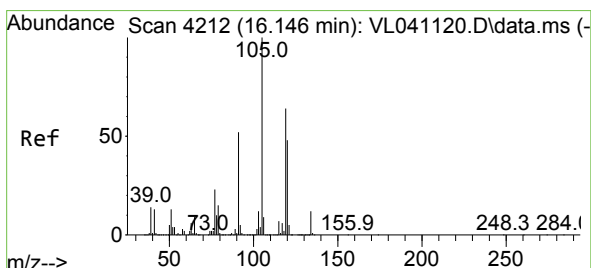
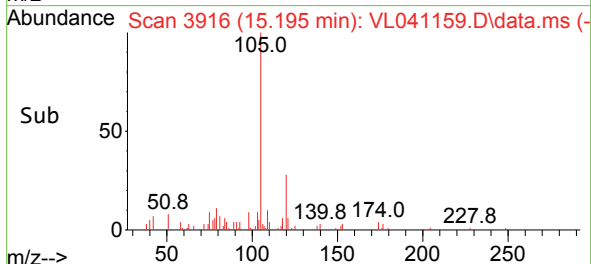
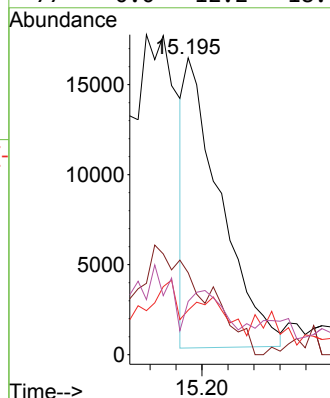
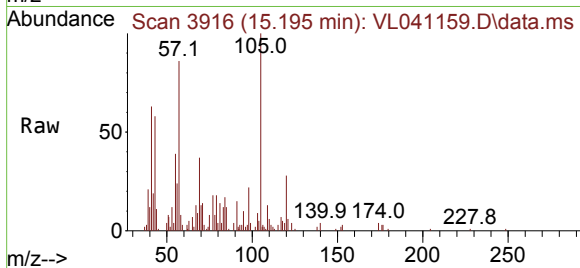
Ion Ratio Lower Upper

105 100

120 0.0 24.2 36.2#

91 54.7 11.2 16.8#

77 0.0 12.2 18.4#



#74

1,2,4-Trimethylbenzene

Concen: 0.143 ppbv

RT: 16.105 min Scan# 4199

Delta R.T. 0.010 min

Lab File: VL041159.D

Acq: 23 Apr 2024 14:00

Tgt Ion:105 Resp: 44292

Ion Ratio Lower Upper

105 100

120 46.5 38.9 58.3

91 9.4 43.0 64.6#

77 16.9 18.6 28.0#

