

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL121824\
 Data File : VL041811.D
 Acq On : 19 Dec 2024 00:44
 Operator : SY/MD
 Sample : P5294-03
 Misc : 400mL/MSVOA_L
 ALS Vial : 12 Sample Multiplier: 1

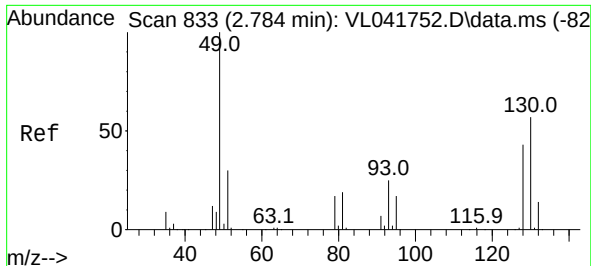
Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Dec 19 08:02:26 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL121624AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Dec 19 07:32:09 2024
 Response via : Initial Calibration

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

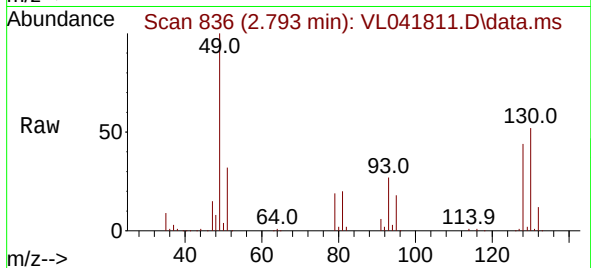
Internal Standards						
1) Bromochloromethane	2.793	49	77490	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	186355	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.891	117	163591	10.000	ppbv	0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	137750	10.105	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.000%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	5098	0.370	ppbv	91
3) Chlorodifluoromethane	1.466	51	11261	0.891	ppbv #	77
4) Chloromethane	1.534	50	3262	0.605	ppbv #	79
6) Bromomethane	1.670	94	133	0.052	ppbv #	70
7) Chloroethane	1.706	64	106	0.050	ppbv #	40
9) Propene	1.560	41	13953	2.547	ppbv	88
10) Heptane	4.998	43	1116	0.079	ppbv #	36
11) Trichlorofluoromethane	1.881	101	2991	0.204	ppbv	99
12) 1,1,2-Trichlorotri fluo...	2.143	101	715	0.064	ppbv	95
13) Ethanol	1.722	45	711075	1567.837	ppbv	95
15) Acetone	1.839	43	119725	7.941	ppbv #	87
16) 1,3-Butadiene	1.602	39	3399	0.573	ppbv #	58
17) tert-Butyl alcohol	2.046	59	4030	0.269	ppbv #	1
19) Isopropyl Alcohol	1.890	45	46673	5.159	ppbv #	38
20) Methylene Chloride	2.065	84	1430	0.333	ppbv	92
21) Allyl Chloride	2.085	41	770	0.094	ppbv #	33
23) Vinyl Acetate	2.460	43	9928	1.418	ppbv #	93
25) Ethyl Acetate	2.848	43	2243	0.080	ppbv #	50
26) Hexane	2.832	57	3902	0.367	ppbv #	63
29) Chloroform	2.855	83	3971	0.245	ppbv	91
30) Cyclohexane	3.862	84	475	0.052	ppbv #	46
31) cis-1,2-Dichloroethene	2.845	61	594	0.054	ppbv #	26
34) 2-Butanone	2.564	43	14105	0.941	ppbv	96
35) Carbon Tetrachloride	3.768	117	417	0.032	ppbv #	67
36) Benzene	3.664	78	7992	0.415	ppbv	98
39) 1,2-Dichloropropane	3.965	63	52285	7.500	ppbv #	17
44) 2,2,4-Trimethylpentane	4.655	57	6997	0.213	ppbv #	41
53) Toluene	6.949	91	16221	0.742	ppbv	99
58) Ethyl Benzene	9.361	91	3309	0.112	ppbv	90
59) m/p-Xylene	9.561	91	1793	0.076	ppbv #	100
60) o-Xylene	9.972	91	3000	0.126	ppbv	98
61) Styrene	9.882	104	483	0.047	ppbv #	66
71) 2-Chlorotoluene	10.866	91	11185	0.411	ppbv #	46
74) 1,2,4-Trimethylbenzene	11.542	105	3276	0.131	ppbv #	50

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

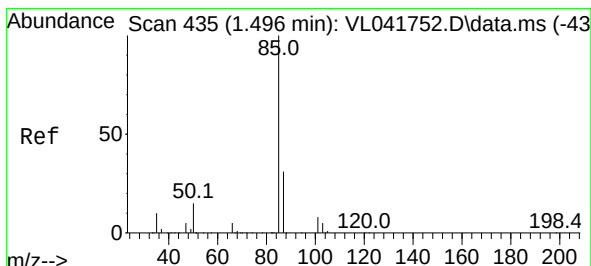
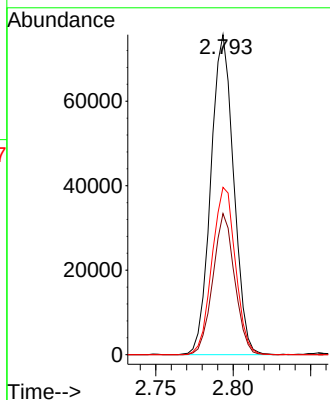
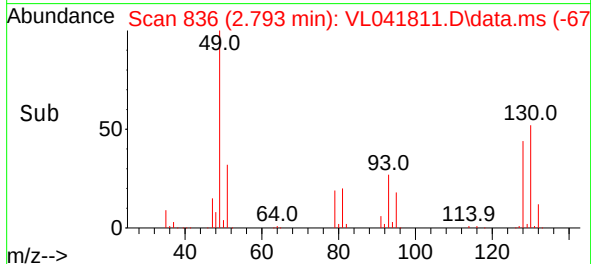


#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.793 min Scan# 833
Delta R.T. 0.009 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

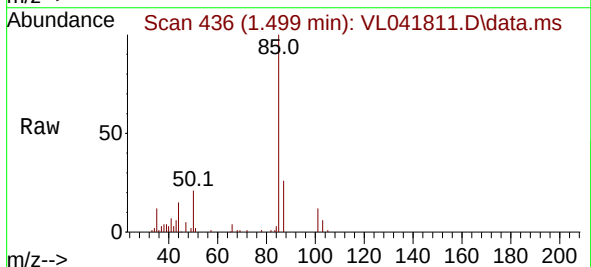
Instrument :
MSVOA_L
ClientSampleId :



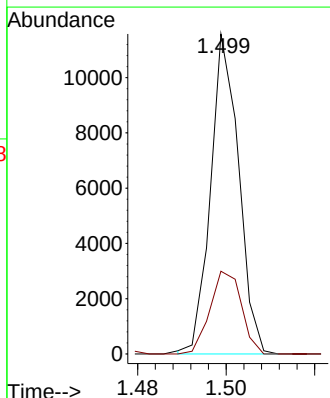
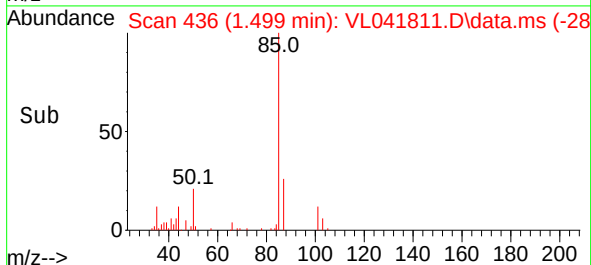
Tgt Ion: 49 Resp: 77490
Ion Ratio Lower Upper
49 100
128 42.1 21.6 64.6
130 53.5 28.3 85.0

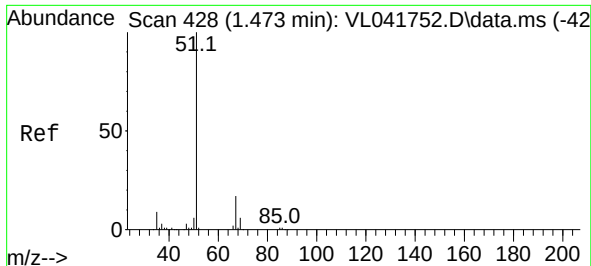


#2
Dichlorodifluoromethane
Concen: 0.370 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44



Tgt Ion: 85 Resp: 5098
Ion Ratio Lower Upper
85 100
87 25.9 24.5 36.7

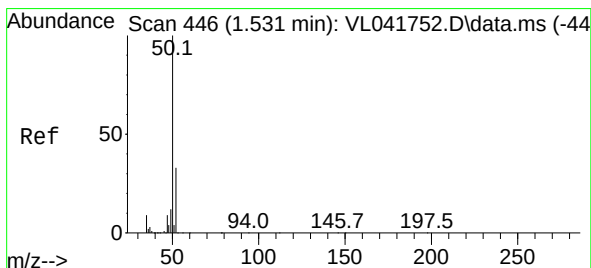
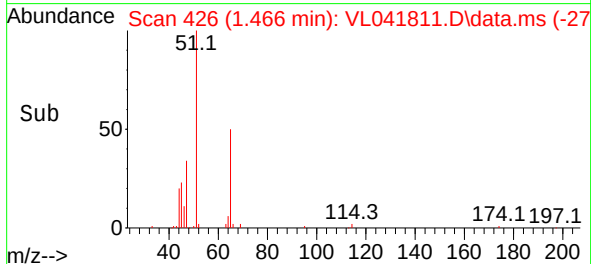
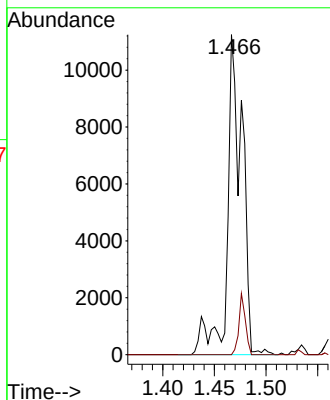
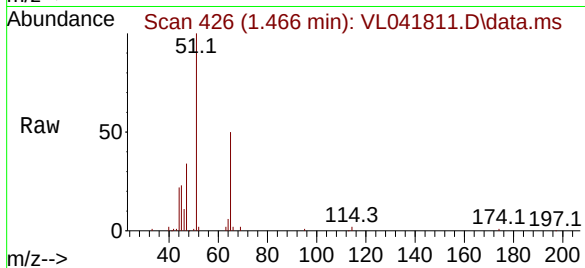




#3
Chlorodifluoromethane
Concen: 0.891 ppbv
RT: 1.466 min Scan# 41
Delta R.T. -0.007 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

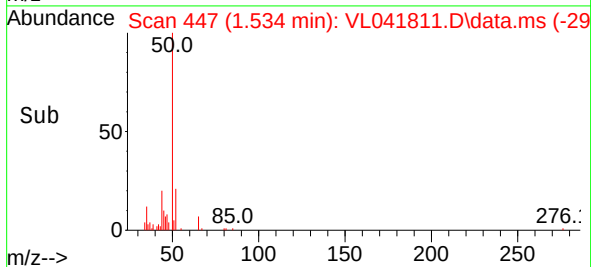
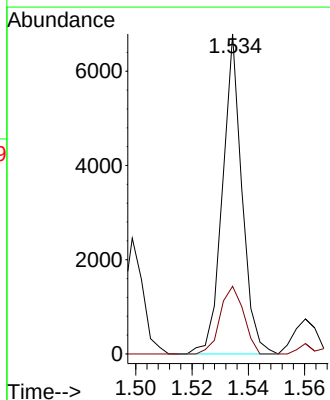
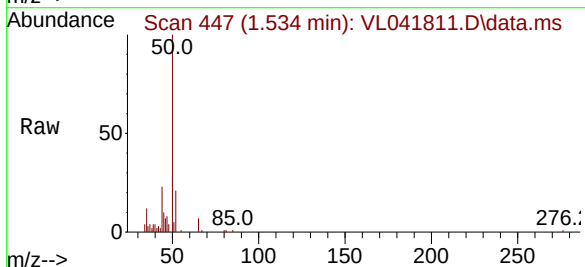
Instrument :
MSVOA_L
ClientSampleId :

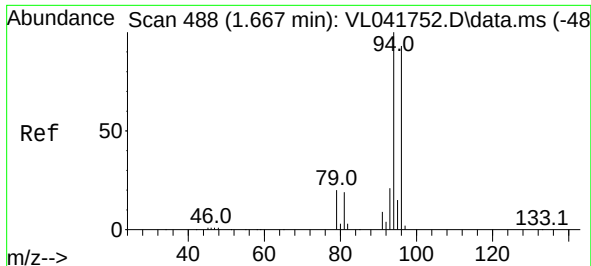
Tgt Ion: 51 Resp: 11261
Ion Ratio Lower Upper
51 100
67 8.3 15.0 22.4#



#4
Chloromethane
Concen: 0.605 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

Tgt Ion: 50 Resp: 3262
Ion Ratio Lower Upper
50 100
52 21.1 26.2 39.2#

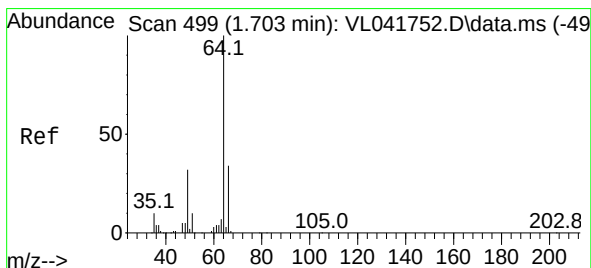
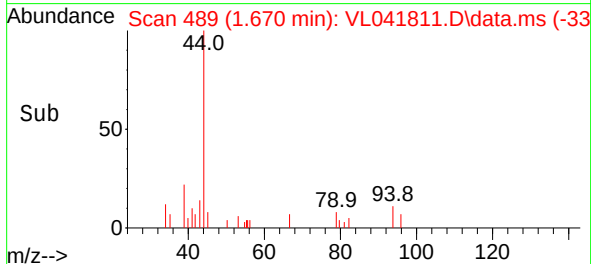
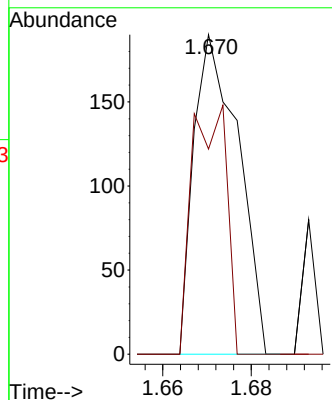
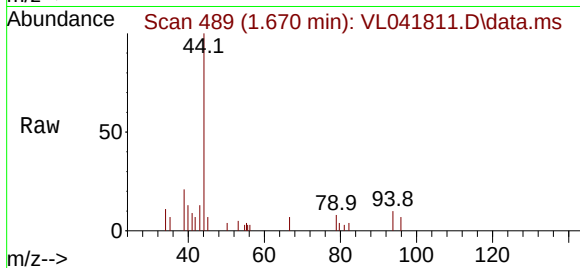




#6
Bromomethane
Concen: 0.052 ppbv
RT: 1.670 min Scan# 411
Delta R.T. 0.003 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

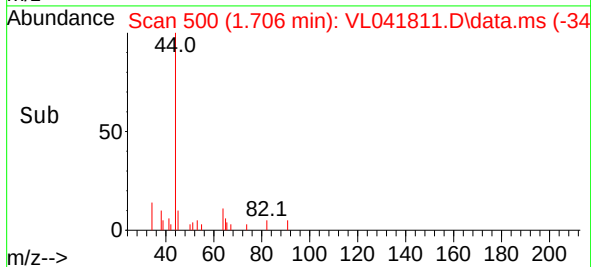
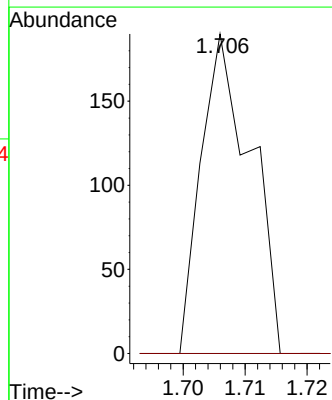
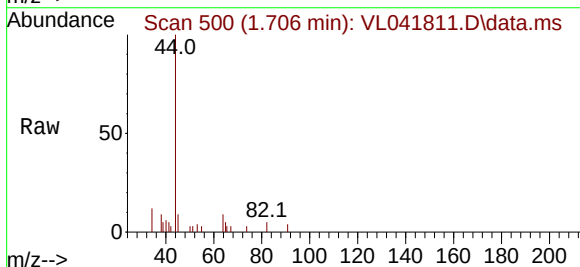
Instrument :
MSVOA_L
ClientSampleId :

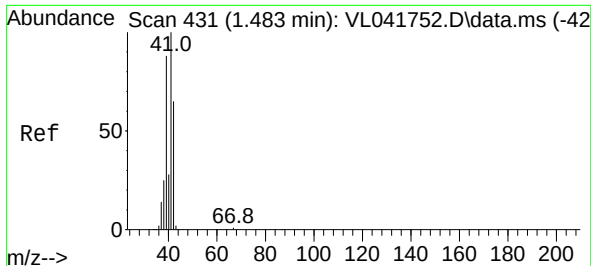
Tgt Ion: 94 Resp: 133
Ion Ratio Lower Upper
94 100
96 64.2 74.7 112.1#



#7
Chloroethane
Concen: 0.050 ppbv
RT: 1.706 min Scan# 500
Delta R.T. 0.003 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

Tgt Ion: 64 Resp: 106
Ion Ratio Lower Upper
64 100
66 0.0 27.5 41.3#





#9

Propene

Concen: 2.547 ppbv

RT: 1.560 min Scan# 41

Delta R.T. 0.077 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_L

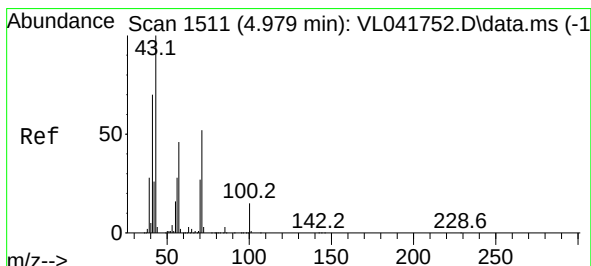
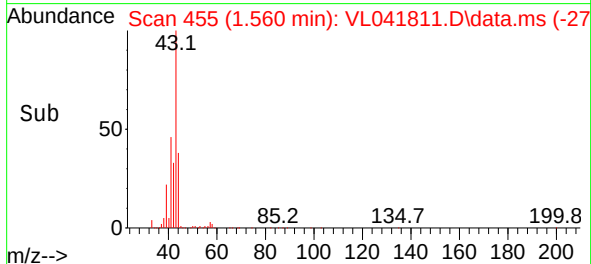
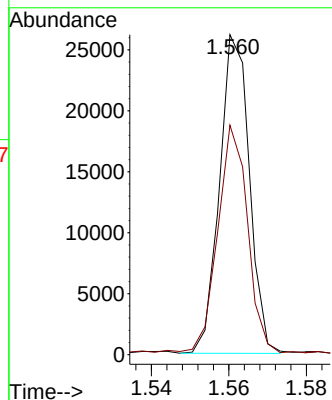
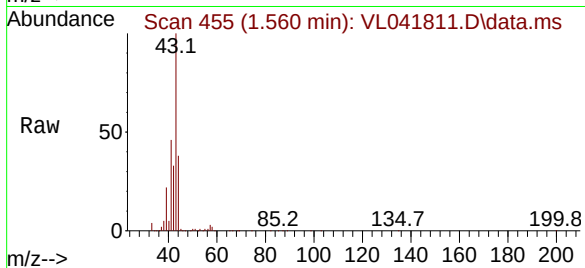
ClientSampleId :

Tgt Ion: 41 Resp: 13953

Ion Ratio Lower Upper

41 100

42 74.7 52.4 78.6



#10

Heptane

Concen: 0.079 ppbv

RT: 4.998 min Scan# 1517

Delta R.T. 0.019 min

Lab File: VL041811.D

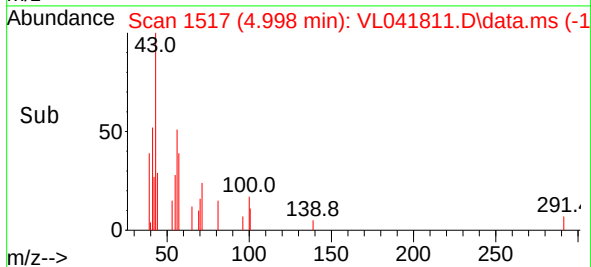
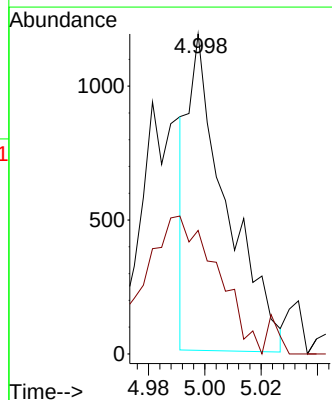
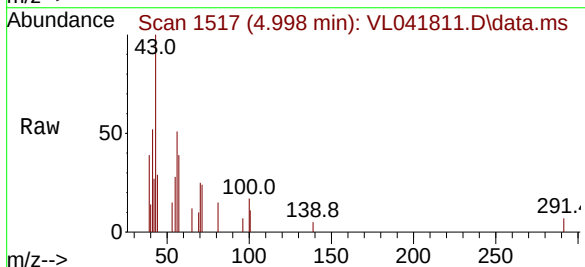
Acq: 19 Dec 2024 00:44

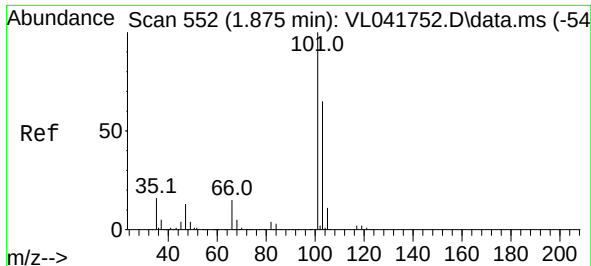
Tgt Ion: 43 Resp: 1116

Ion Ratio Lower Upper

43 100

57 91.5 38.5 57.7#





#11

Trichlorofluoromethane

Concen: 0.204 ppbv

RT: 1.881 min Scan# 554

Delta R.T. 0.006 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_L

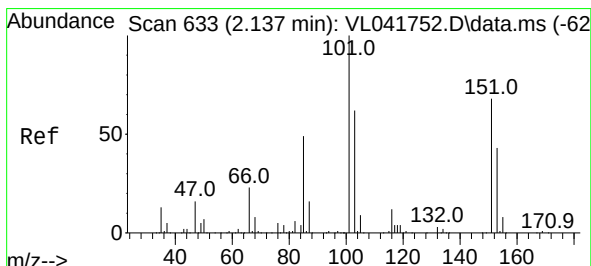
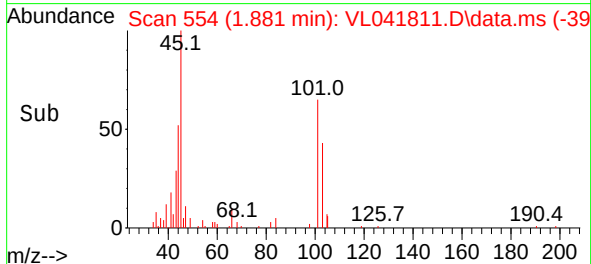
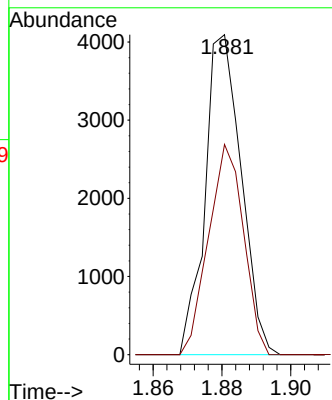
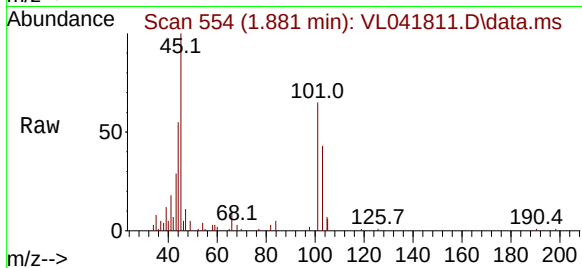
ClientSampleId :

Tgt Ion:101 Resp: 2991

Ion Ratio Lower Upper

101 100

103 65.7 51.8 77.8



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.064 ppbv

RT: 2.143 min Scan# 635

Delta R.T. 0.006 min

Lab File: VL041811.D

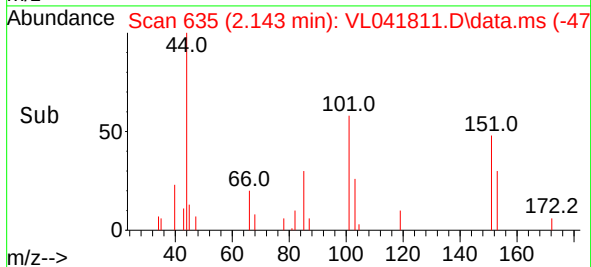
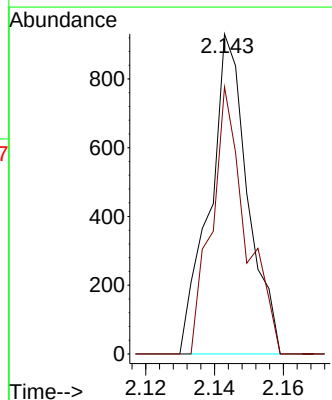
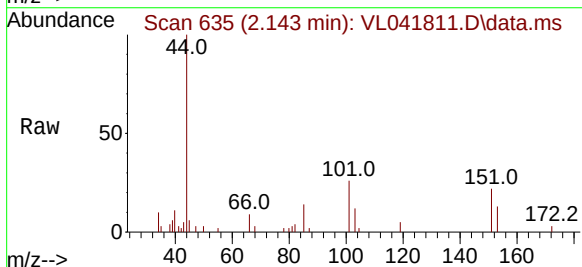
Acq: 19 Dec 2024 00:44

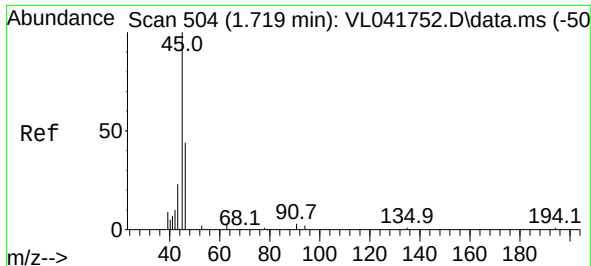
Tgt Ion:101 Resp: 715

Ion Ratio Lower Upper

101 100

151 74.8 56.8 85.2





#13

Ethanol

Concen: 1567.837 ppbv

RT: 1.722 min Scan# 504

Delta R.T. 0.003 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_L

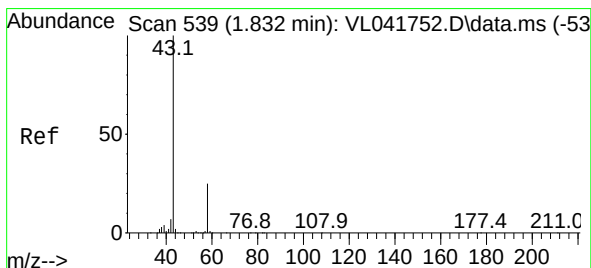
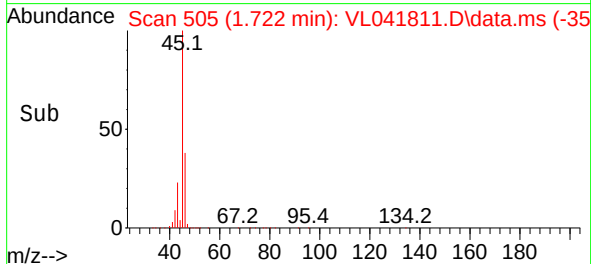
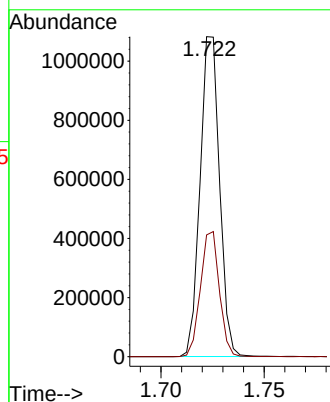
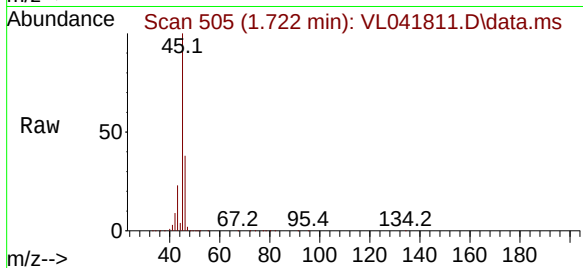
ClientSampleId :

Tgt Ion: 45 Resp: 711075

Ion Ratio Lower Upper

45 100

46 38.1 16.4 65.8



#15

Acetone

Concen: 7.941 ppbv

RT: 1.839 min Scan# 541

Delta R.T. 0.006 min

Lab File: VL041811.D

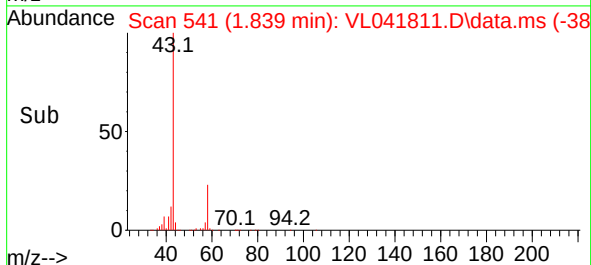
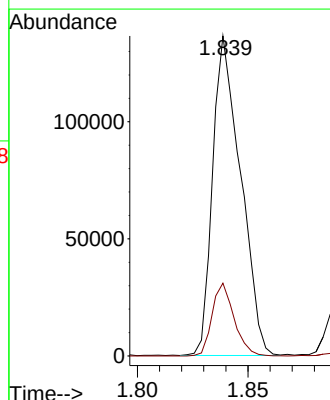
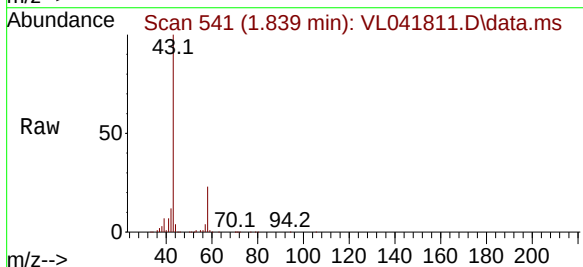
Acq: 19 Dec 2024 00:44

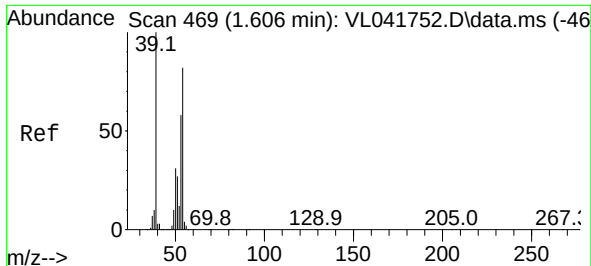
Tgt Ion: 43 Resp: 119725

Ion Ratio Lower Upper

43 100

58 18.0 19.7 29.5#





#16

1,3-Butadiene

Concen: 0.573 ppbv

RT: 1.602 min Scan# 4

Delta R.T. -0.004 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_L

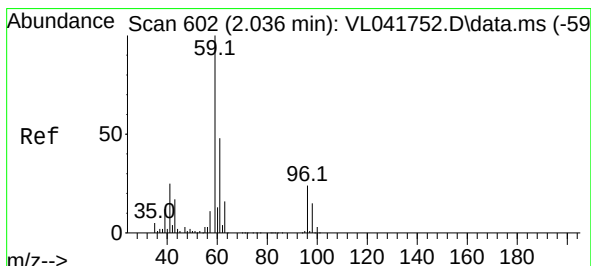
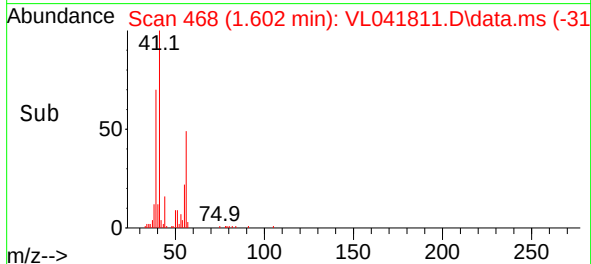
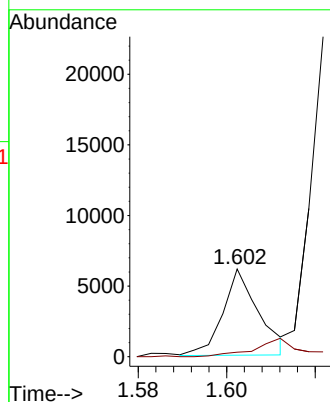
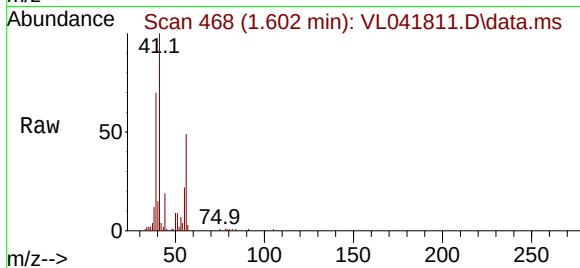
ClientSampleId :

Tgt Ion: 39 Resp: 3399

Ion Ratio Lower Upper

39 100

54 37.4 58.4 87.6#



#17

tert-Butyl alcohol

Concen: 0.269 ppbv

RT: 2.046 min Scan# 605

Delta R.T. 0.009 min

Lab File: VL041811.D

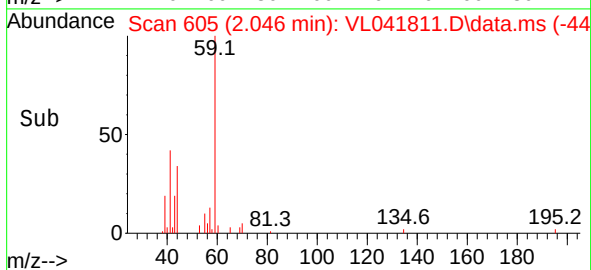
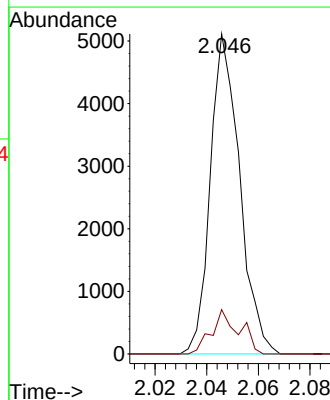
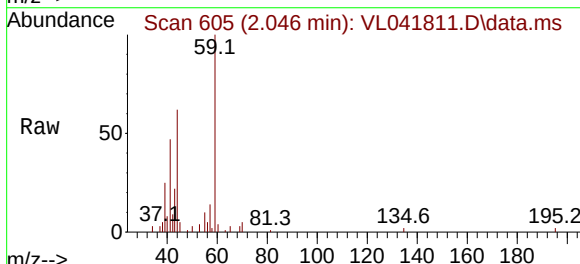
Acq: 19 Dec 2024 00:44

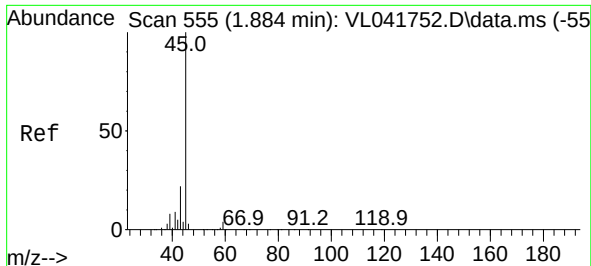
Tgt Ion: 59 Resp: 4030

Ion Ratio Lower Upper

59 100

57 207.8 8.6 13.0#





#19

Isopropyl Alcohol

Concen: 5.159 ppbv

RT: 1.890 min Scan# 51

Delta R.T. 0.006 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_L

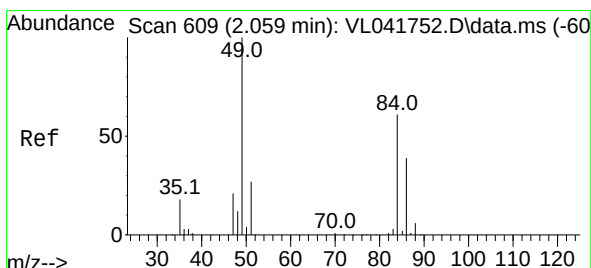
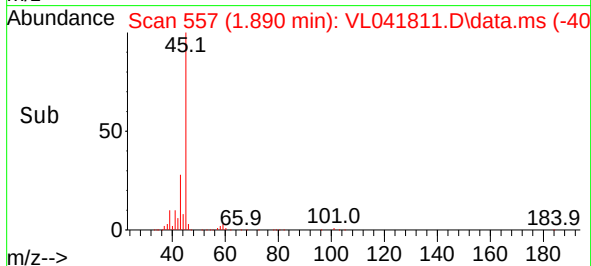
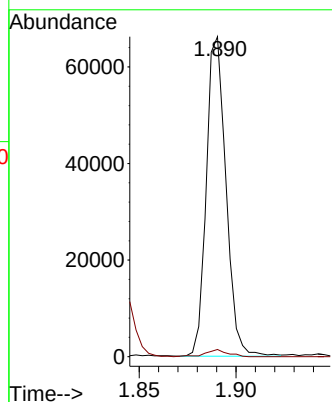
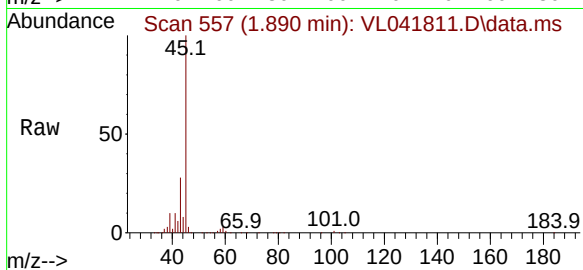
ClientSampleId :

Tgt Ion: 45 Resp: 46673

Ion Ratio Lower Upper

45 100

58 2.5 33.3 49.9#



#20

Methylene Chloride

Concen: 0.333 ppbv

RT: 2.065 min Scan# 611

Delta R.T. 0.006 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Tgt Ion: 84 Resp: 1430

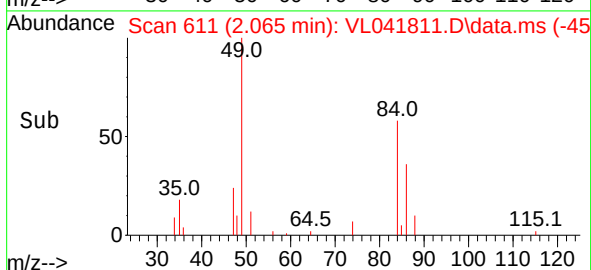
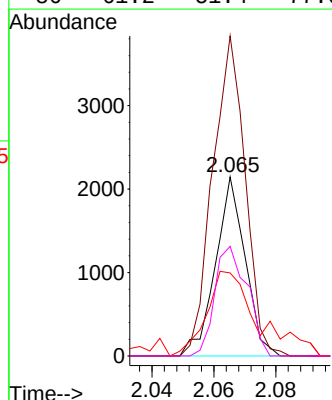
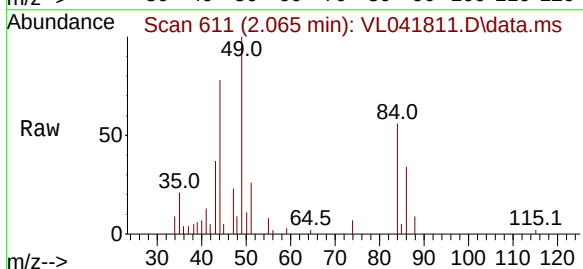
Ion Ratio Lower Upper

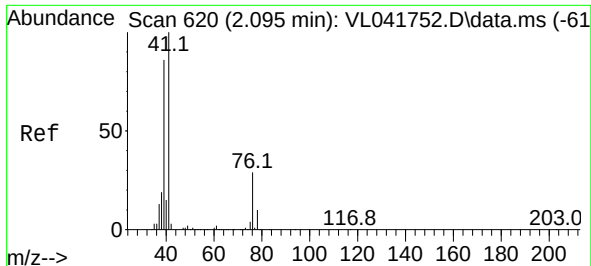
84 100

49 178.8 132.6 198.8

51 43.8 37.6 56.4

86 61.2 51.4 77.0





#21

Allyl Chloride

Concen: 0.094 ppbv

RT: 2.085 min Scan# 61

Delta R.T. -0.010 min

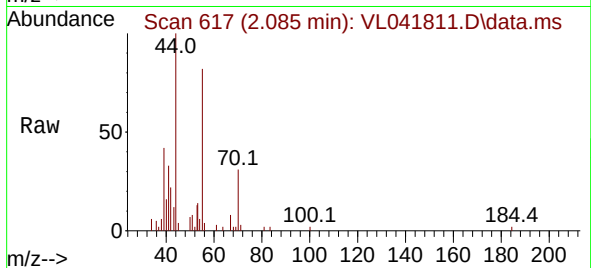
Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

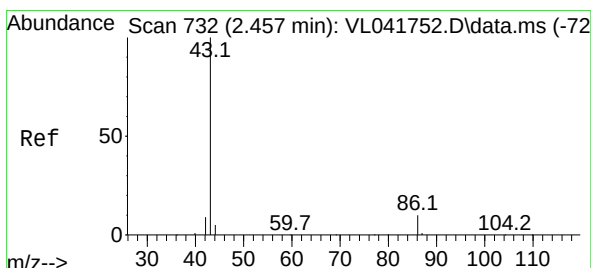
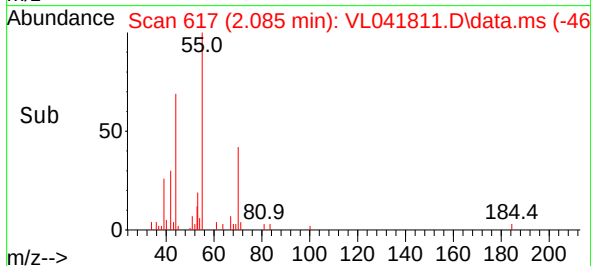
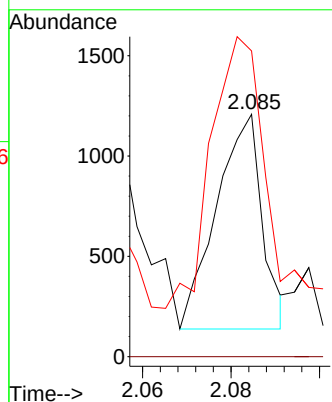
Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion: 41	Resp: 770
Ion Ratio	Lower Upper
41	100
76	0.0 22.3 33.5#
39	152.1 69.2 103.8#



#23

Vinyl Acetate

Concen: 1.418 ppbv

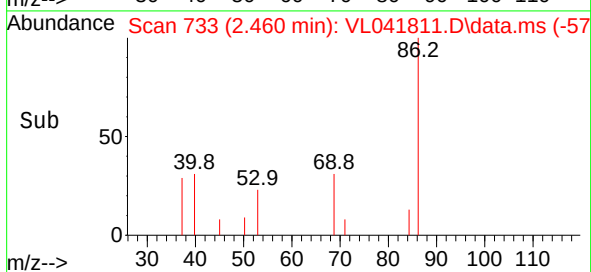
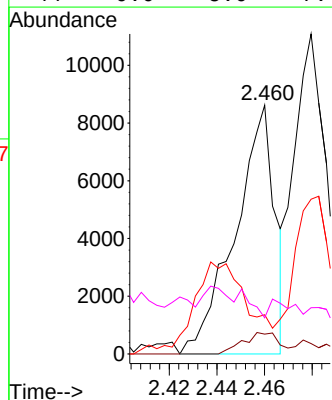
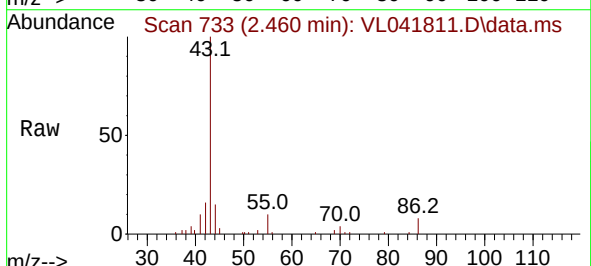
RT: 2.460 min Scan# 733

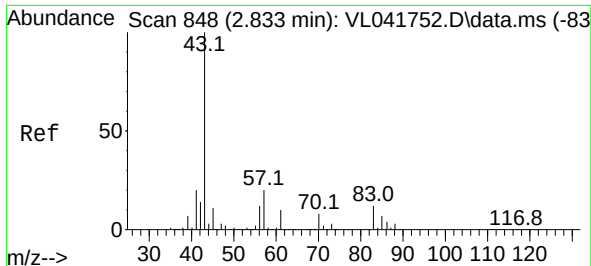
Delta R.T. 0.003 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Tgt Ion: 43	Resp: 9928
Ion Ratio	Lower Upper
43	100
86	7.9 6.6 10.0
42	8.2 8.2 12.2
44	0.0 5.0 7.4#





#25

Ethyl Acetate

Concen: 0.080 ppbv

RT: 2.848 min Scan# 848

Delta R.T. 0.016 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 43 Resp: 2243

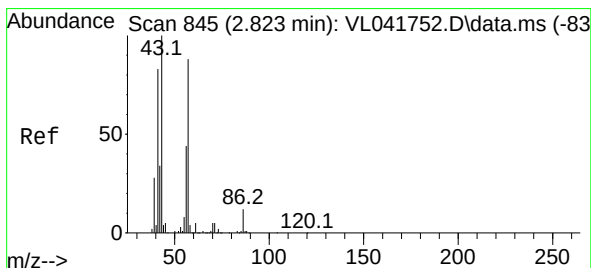
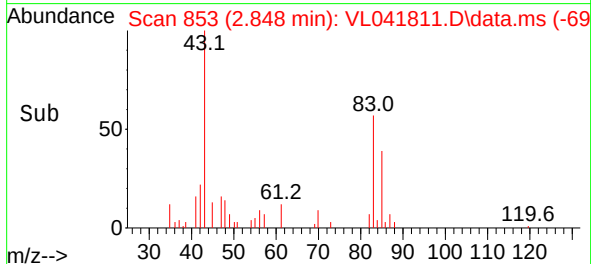
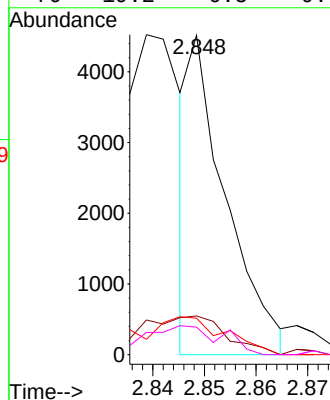
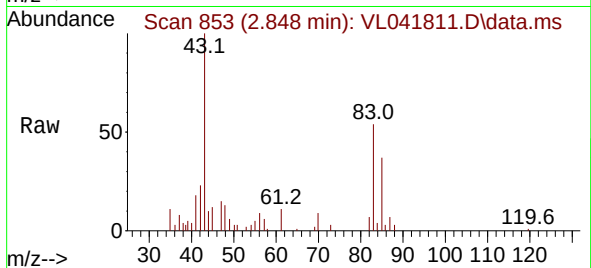
Ion Ratio Lower Upper

43 100

45 34.3 8.1 12.1#

61 26.5 7.0 10.6#

70 19.2 6.5 9.7#



#26

Hexane

Concen: 0.367 ppbv

RT: 2.832 min Scan# 848

Delta R.T. 0.009 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Tgt Ion: 57 Resp: 3902

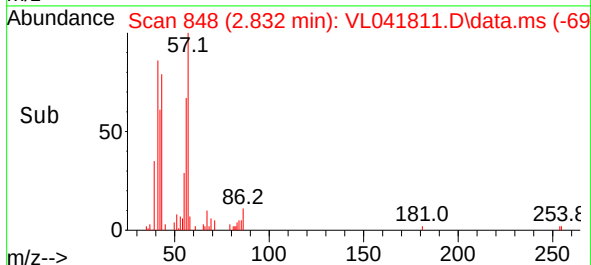
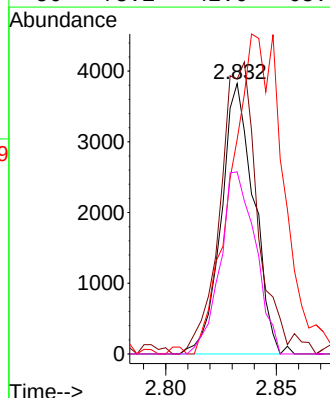
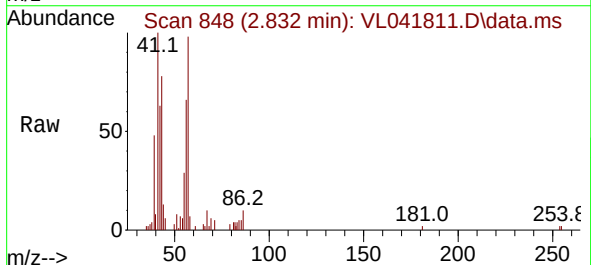
Ion Ratio Lower Upper

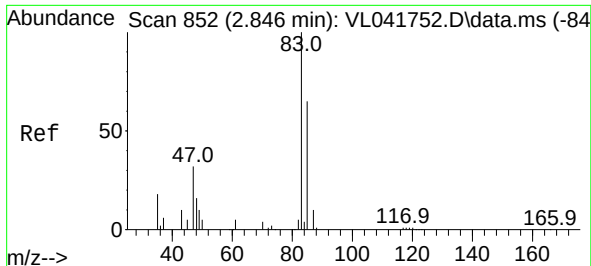
57 100

41 131.0 79.6 119.4#

43 191.5 211.0 316.6#

56 73.1 42.6 63.8#





#29

Chloroform

Concen: 0.245 ppbv

RT: 2.855 min Scan# 80

Delta R.T. 0.009 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_L

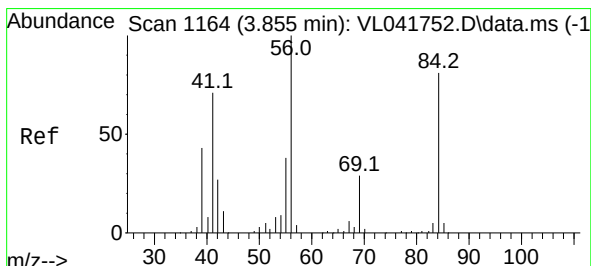
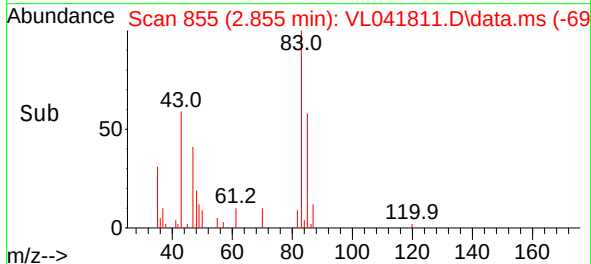
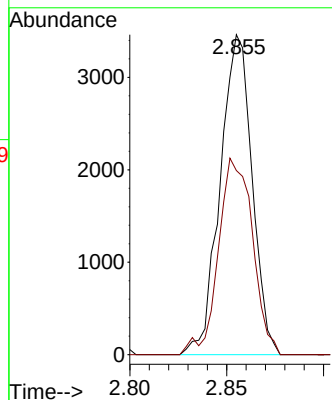
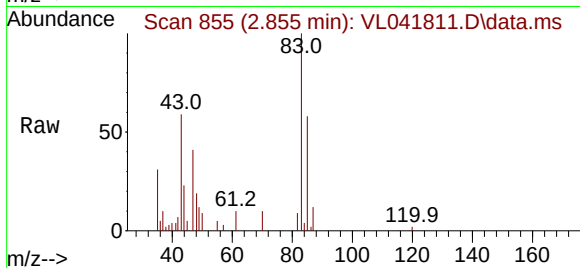
ClientSampleId :

Tgt Ion: 83 Resp: 3971

Ion Ratio Lower Upper

83 100

85 57.6 51.8 77.6



#30

Cyclohexane

Concen: 0.052 ppbv

RT: 3.862 min Scan# 1166

Delta R.T. 0.006 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

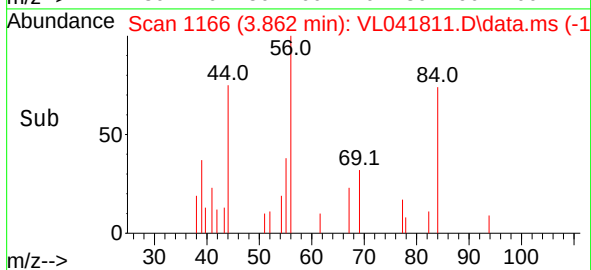
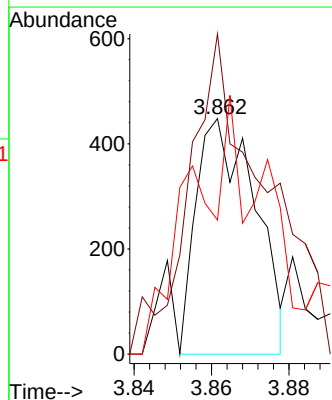
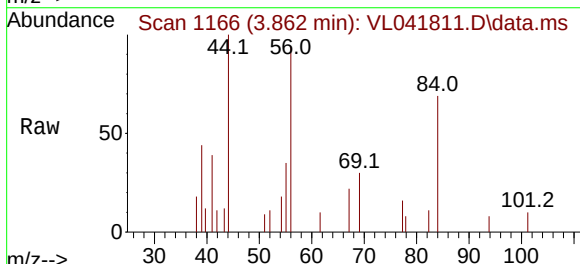
Tgt Ion: 84 Resp: 475

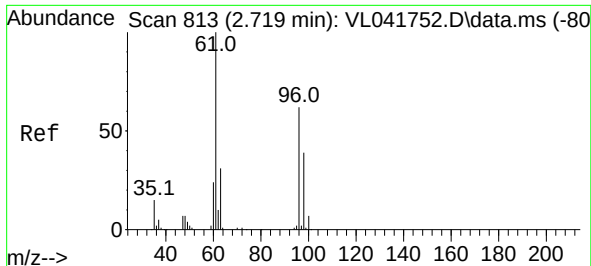
Ion Ratio Lower Upper

84 100

56 174.5 102.3 153.5#

41 161.1 74.0 111.0#

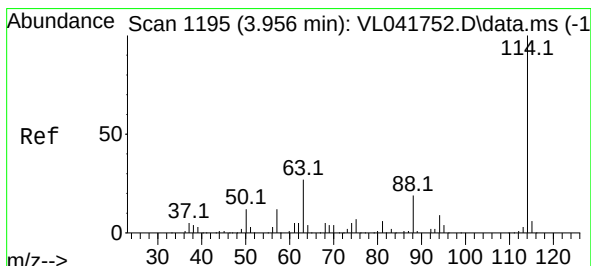
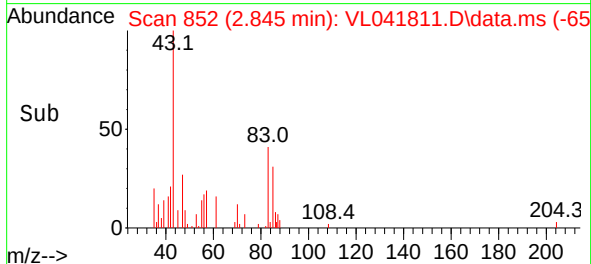
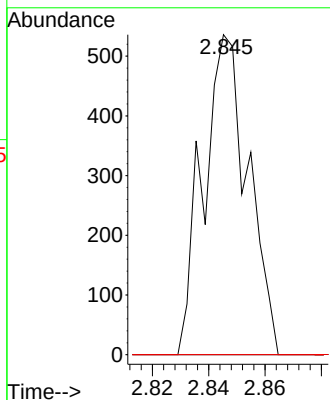
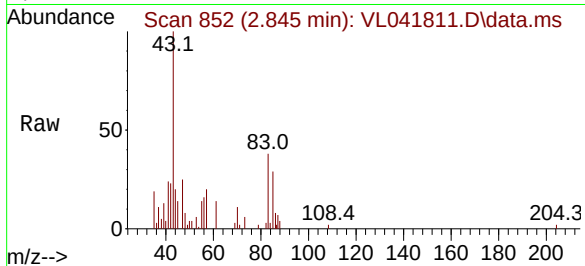




#31
 cis-1,2-Dichloroethene
 Concen: 0.054 ppbv
 RT: 2.845 min Scan# 813
 Delta R.T. 0.126 min
 Lab File: VL041811.D
 Acq: 19 Dec 2024 00:44

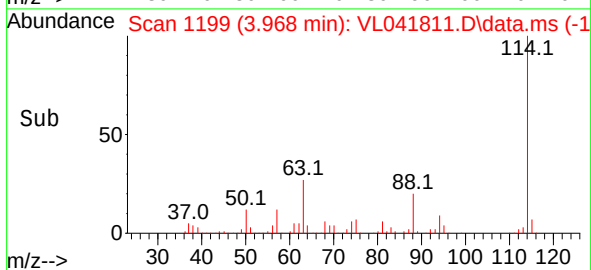
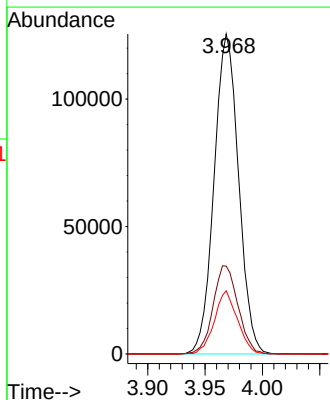
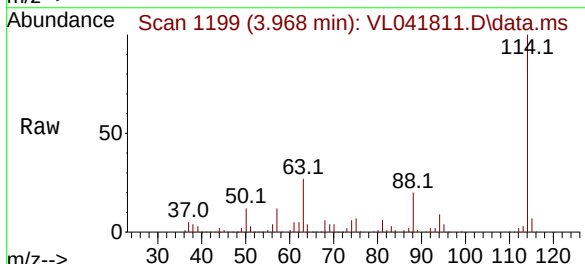
Instrument :
 MSVOA_L
 ClientSampleId :

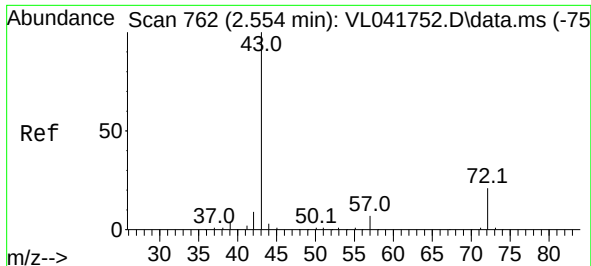
Tgt Ion: 61 Resp: 594
 Ion Ratio Lower Upper
 61 100
 96 0.0 49.7 74.5#
 98 0.0 30.8 46.2#



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 3.968 min Scan# 1199
 Delta R.T. 0.013 min
 Lab File: VL041811.D
 Acq: 19 Dec 2024 00:44

Tgt Ion: 114 Resp: 186355
 Ion Ratio Lower Upper
 114 100
 63 28.1 21.8 32.8
 88 18.6 14.8 22.2





#34

2-Butanone

Concen: 0.941 ppbv

RT: 2.564 min Scan# 7

Delta R.T. 0.009 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_L

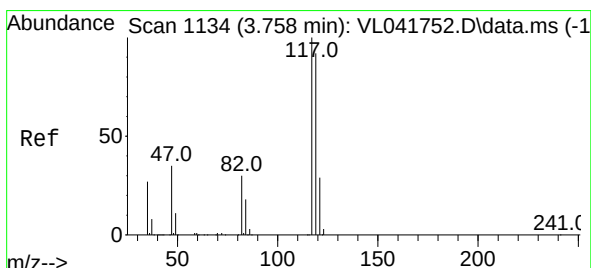
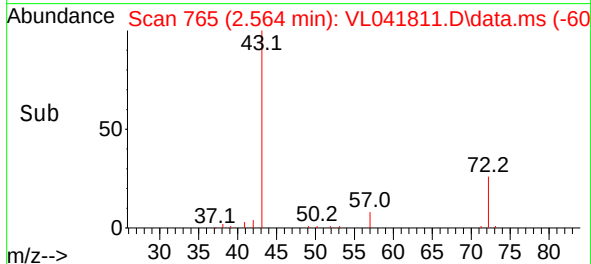
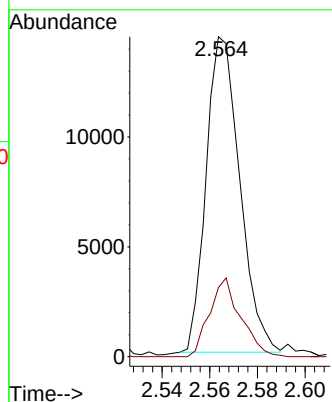
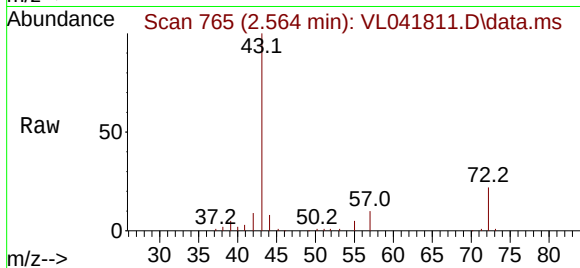
ClientSampleId :

Tgt Ion: 43 Resp: 14105

Ion Ratio Lower Upper

43 100

72 23.0 16.8 25.2



#35

Carbon Tetrachloride

Concen: 0.032 ppbv

RT: 3.768 min Scan# 1137

Delta R.T. 0.009 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

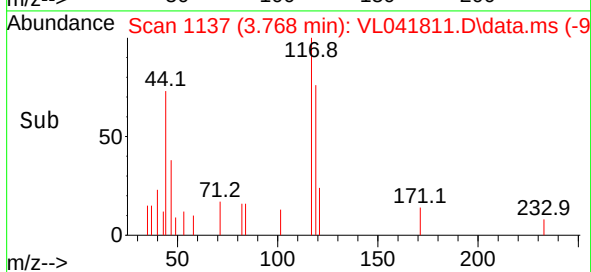
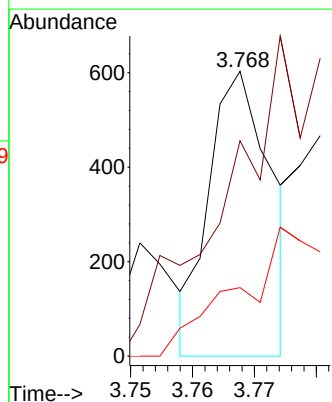
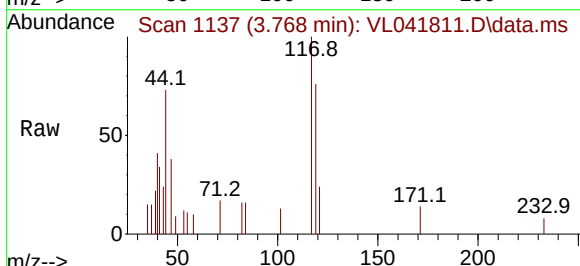
Tgt Ion: 117 Resp: 417

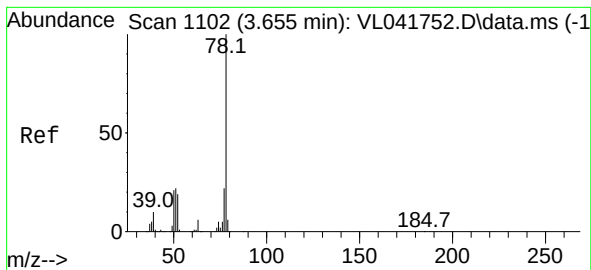
Ion Ratio Lower Upper

117 100

119 56.7 73.7 110.5#

121 18.5 23.0 34.4#





#36

Benzene

Concen: 0.415 ppbv

RT: 3.664 min Scan# 1105

Delta R.T. 0.009 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

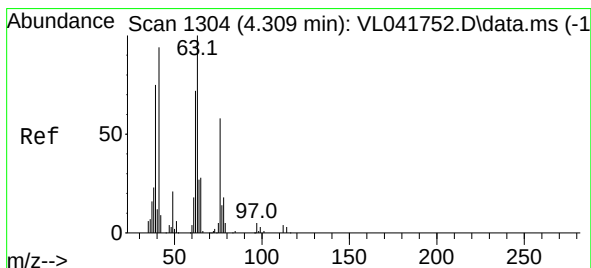
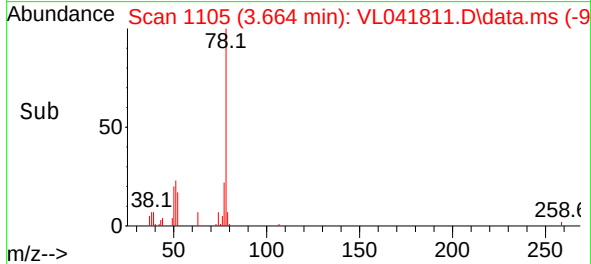
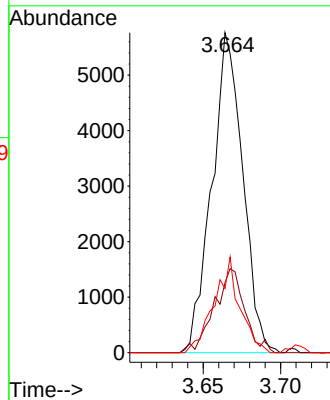
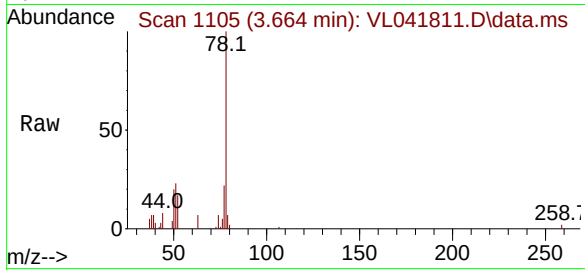
Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 78 Resp: 7992

Ion	Ratio	Lower	Upper
78	100		
77	21.9	17.8	26.6
50	20.0	17.2	25.8



#39

1,2-Dichloropropane

Concen: 7.500 ppbv

RT: 3.965 min Scan# 1198

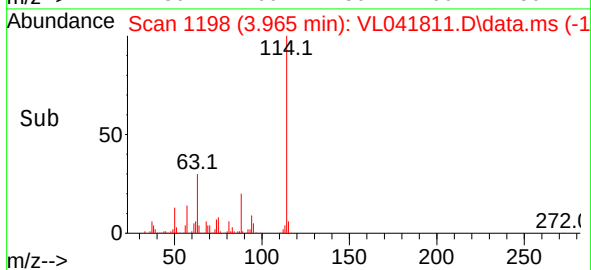
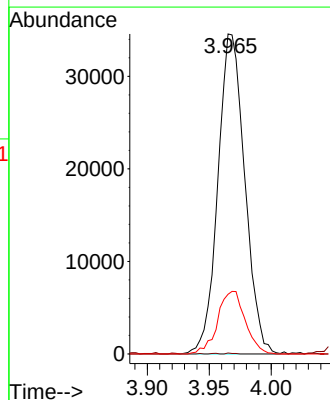
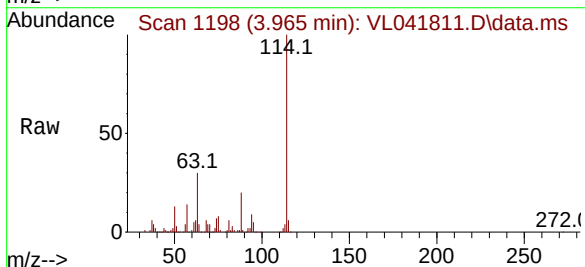
Delta R.T. -0.343 min

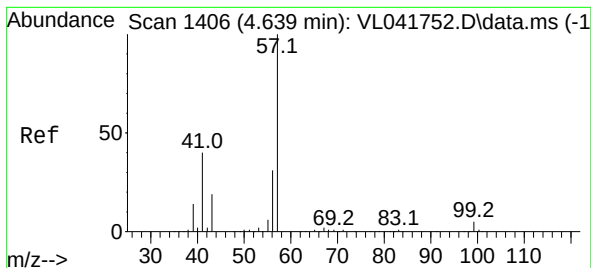
Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Tgt Ion: 63 Resp: 52285

Ion	Ratio	Lower	Upper
63	100		
41	0.3	75.3	112.9#
62	18.6	57.3	85.9#





#44

2,2,4-Trimethylpentane

Concen: 0.213 ppbv

RT: 4.655 min Scan# 1406

Delta R.T. 0.016 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_L

ClientSampleId :

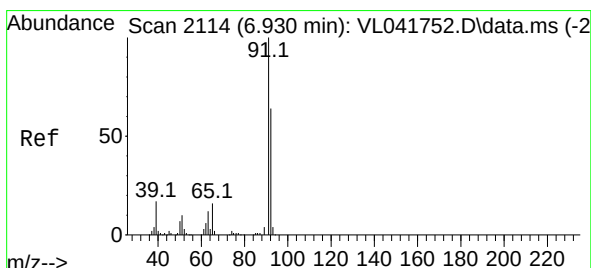
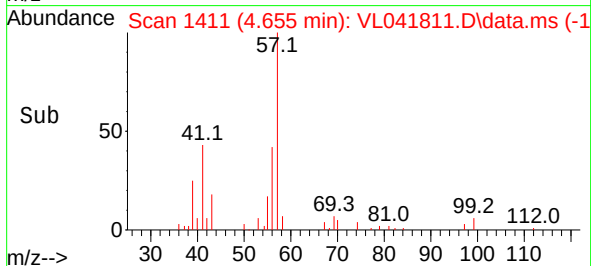
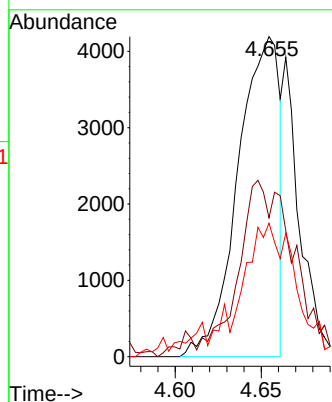
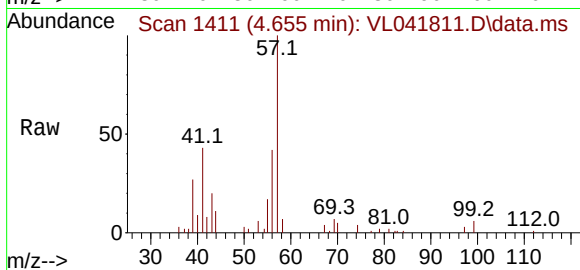
Tgt Ion: 57 Resp: 6997

Ion Ratio Lower Upper

57 100

41 77.1 30.7 46.1#

56 60.9 25.4 38.0#



#53

Toluene

Concen: 0.742 ppbv

RT: 6.949 min Scan# 2120

Delta R.T. 0.019 min

Lab File: VL041811.D

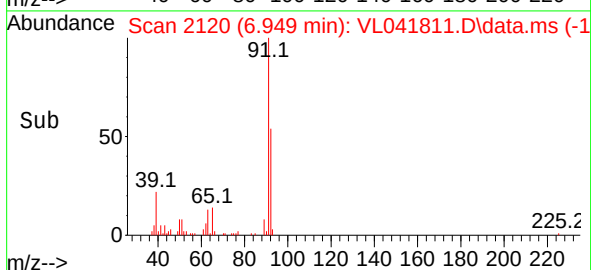
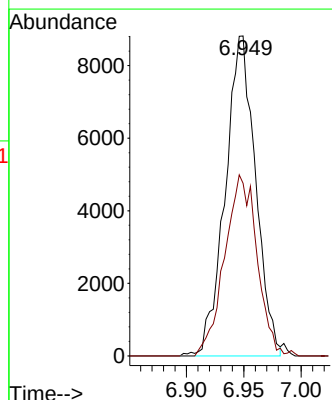
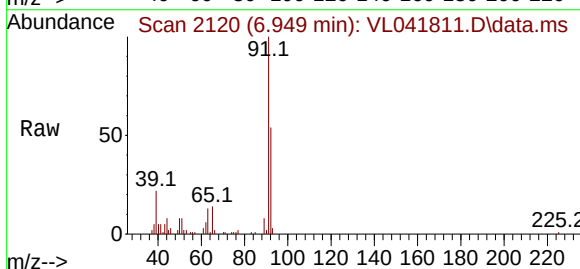
Acq: 19 Dec 2024 00:44

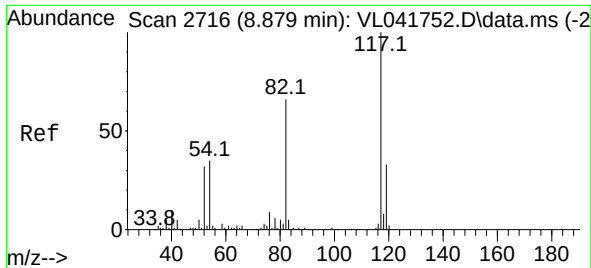
Tgt Ion: 91 Resp: 16221

Ion Ratio Lower Upper

91 100

92 60.5 47.9 71.9

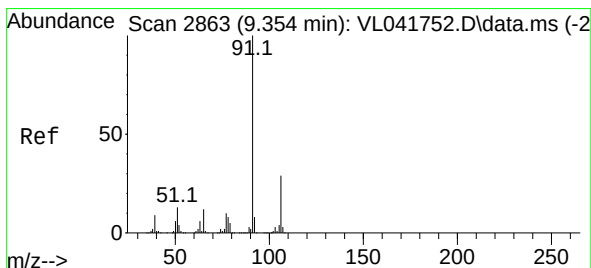
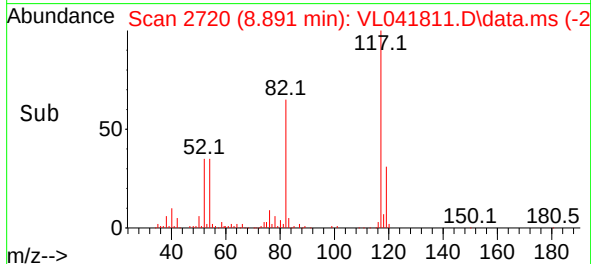
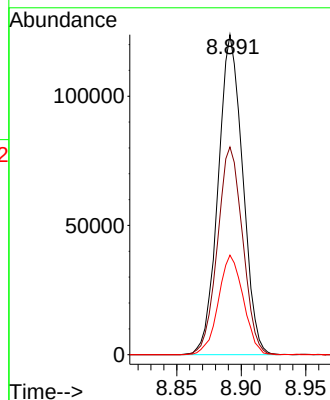
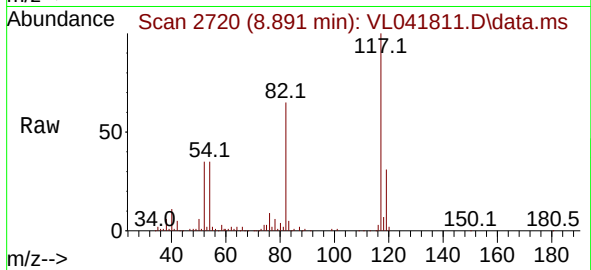




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.891 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

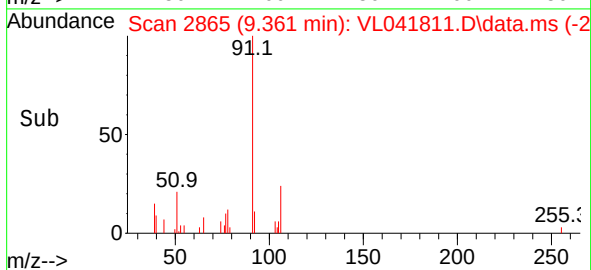
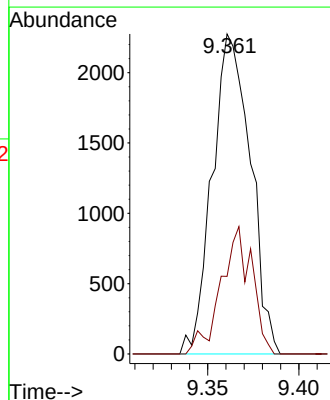
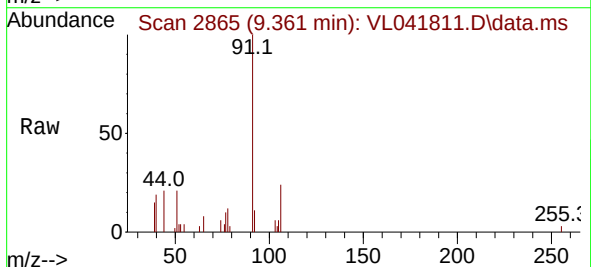
Instrument :
MSVOA_L
ClientSampleId :

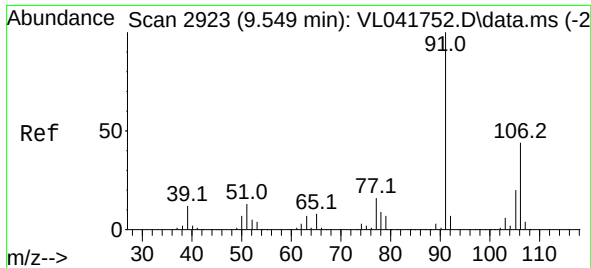
Tgt Ion:117 Resp: 163591
Ion Ratio Lower Upper
117 100
82 66.6 53.8 80.8
119 31.7 26.7 40.1



#58
Ethyl Benzene
Concen: 0.112 ppbv
RT: 9.361 min Scan# 2865
Delta R.T. 0.006 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

Tgt Ion: 91 Resp: 3309
Ion Ratio Lower Upper
91 100
106 24.3 23.5 35.3





#59

m/p-Xylene

Concen: 0.076 ppbv

RT: 9.561 min Scan# 2923

Delta R.T. 0.013 min

Lab File: VL041811.D

Acq: 19 Dec 2024 00:44

Instrument :

MSVOA_1

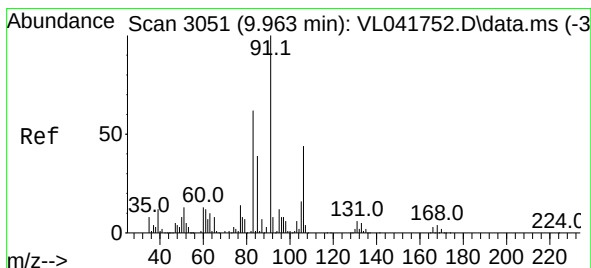
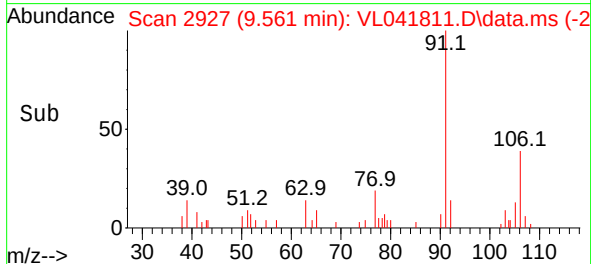
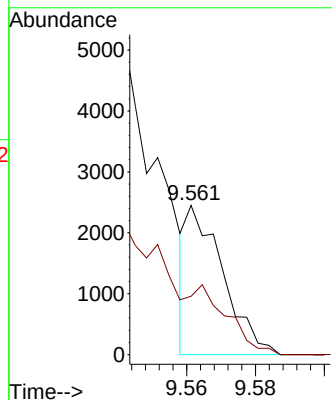
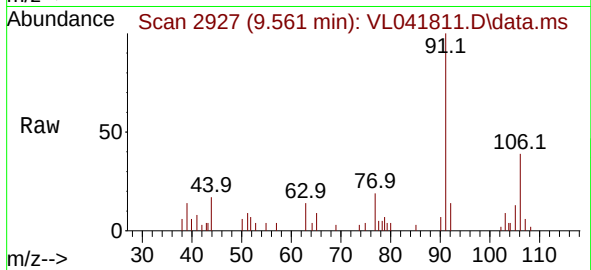
ClientSampleId :

Tgt Ion: 91 Resp: 1793

Ion Ratio Lower Upper

91 100

106 0.0 0.0 0.0



#60

o-Xylene

Concen: 0.126 ppbv

RT: 9.972 min Scan# 3054

Delta R.T. 0.009 min

Lab File: VL041811.D

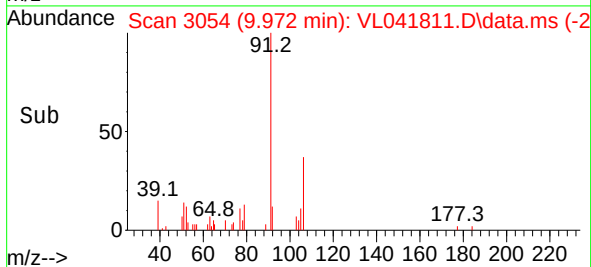
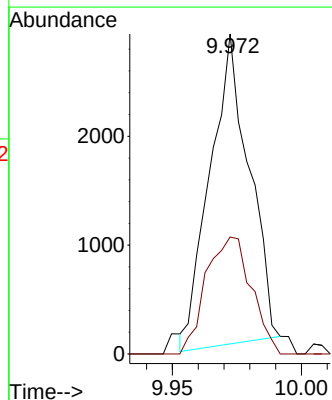
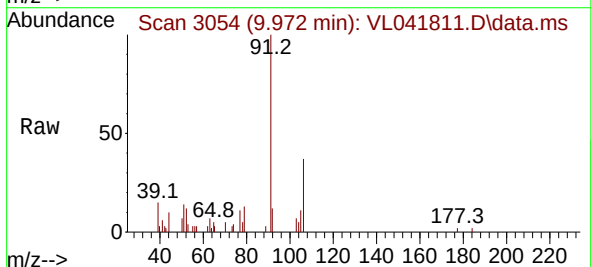
Acq: 19 Dec 2024 00:44

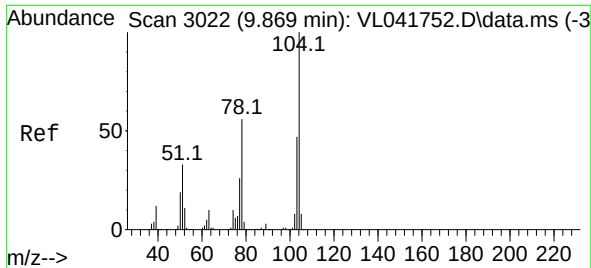
Tgt Ion: 91 Resp: 3000

Ion Ratio Lower Upper

91 100

106 43.6 21.1 63.4

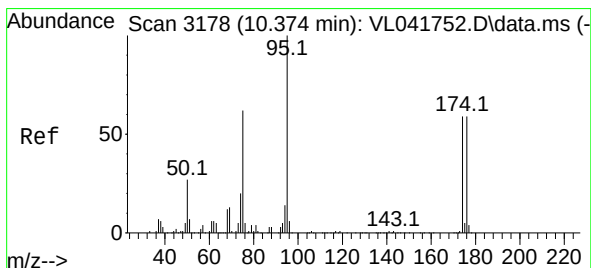
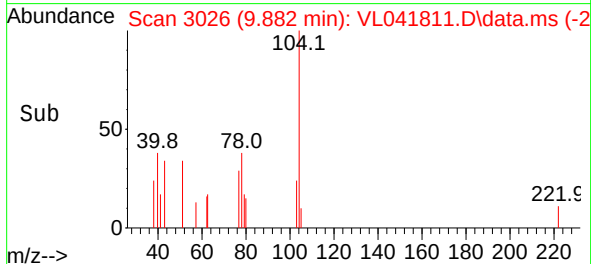
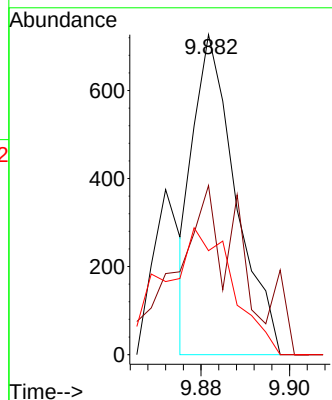
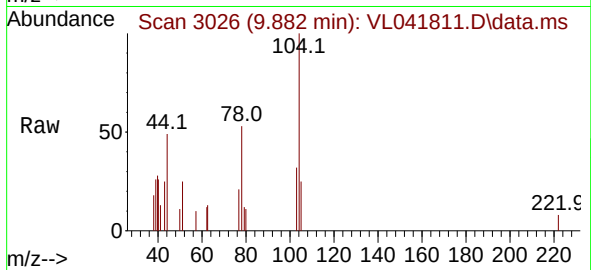




#61
Styrene
Concen: 0.047 ppbv
RT: 9.882 min Scan# 3022
Delta R.T. 0.013 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

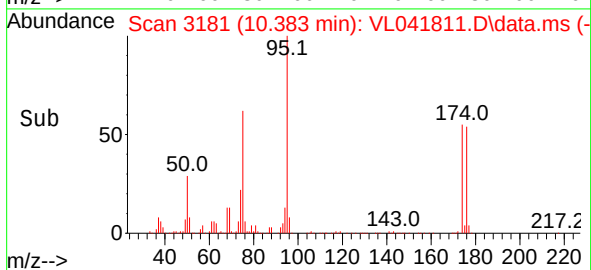
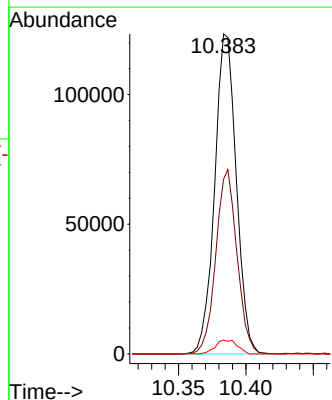
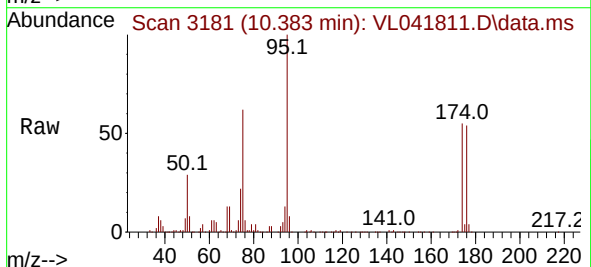
Instrument :
MSVOA_1
ClientSampleId :

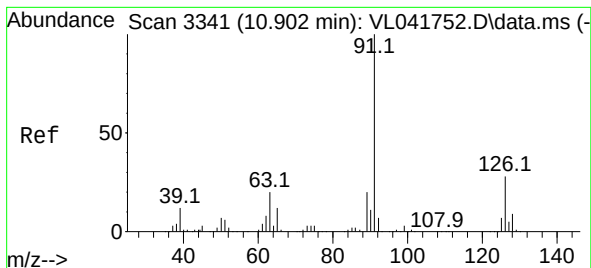
Tgt Ion:104 Resp: 483
Ion Ratio Lower Upper
104 100
78 83.9 43.8 65.6#
103 65.2 37.8 56.6#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.105 ppbv
RT: 10.383 min Scan# 3181
Delta R.T. 0.009 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

Tgt Ion: 95 Resp: 137750
Ion Ratio Lower Upper
95 100
174 56.6 47.6 71.4
175 4.4 3.7 5.5

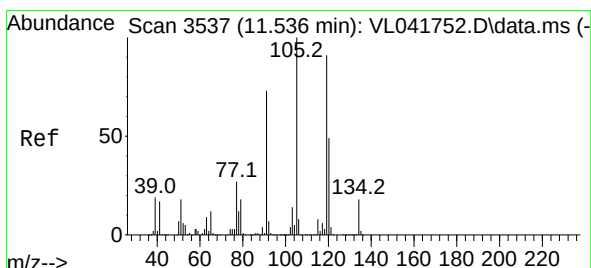
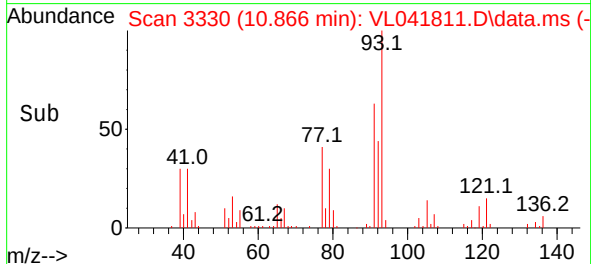
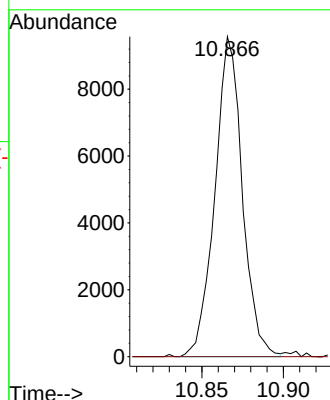
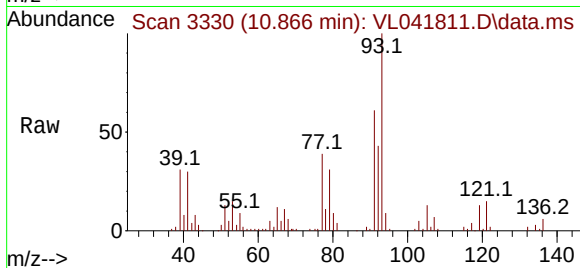




#71
2-Chlorotoluene
Concen: 0.411 ppbv
RT: 10.866 min Scan# 3411
Delta R.T. -0.036 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

Instrument :
MSVOA_L
ClientSampleId :

Tgt Ion: 91 Resp: 11185
Ion Ratio Lower Upper
91 100
126 0.0 11.6 46.4#



#74
1,2,4-Trimethylbenzene
Concen: 0.131 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. 0.006 min
Lab File: VL041811.D
Acq: 19 Dec 2024 00:44

Tgt Ion:105 Resp: 3276
Ion Ratio Lower Upper
105 100
120 27.1 39.0 58.4#
91 13.0 58.1 87.1#
77 13.2 21.8 32.8#

