

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL080824\
 Data File : VL041513.D
 Acq On : 8 Aug 2024 15:07
 Operator : SY/MD
 Sample : P3496-04
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

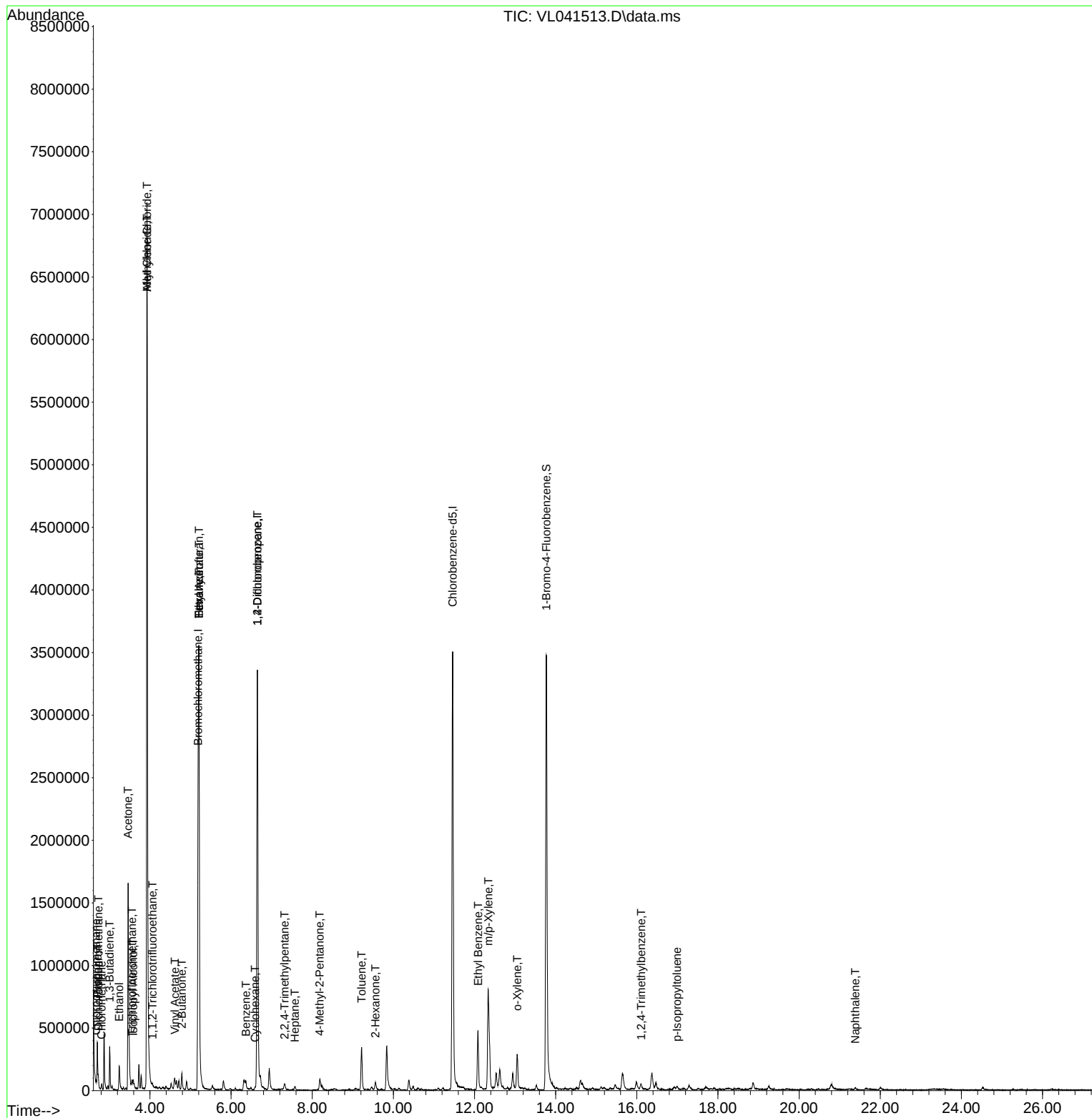
Quant Time: Aug 09 05:55:34 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL072524AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Aug 06 01:32:58 2024
 Response via : Initial Calibration

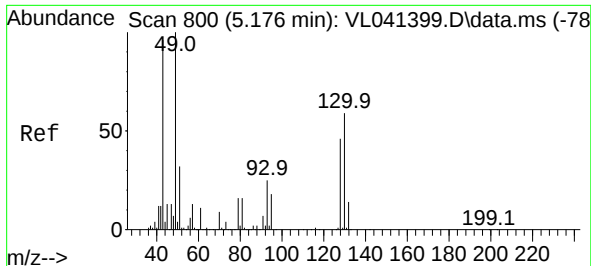
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.185	49	986215	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.648	114	2544924	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.462	117	2330038	10.000	ppbv	# 0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.770	95	1738193	9.694	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.900%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.729	85	54198	0.319	ppbv	92
3) Chlorodifluoromethane	2.674	51	74064	0.631	ppbv #	88
4) Chloromethane	2.809	50	34628	0.555	ppbv	96
9) Propene	2.703	41	76421	1.417	ppbv #	75
10) Heptane	7.571	43	10526	0.087	ppbv	99
11) Trichlorofluoromethane	3.562	101	34547	0.229	ppbv #	79
12) 1,1,2-Trichlorotrifluo...	4.063	101	7749	0.071	ppbv	91
13) Ethanol	3.243	45	192304	39.894	ppbv	95
15) Acetone	3.462	43	1700109	15.172	ppbv	98
16) 1,3-Butadiene	3.009	39	35588	0.594	ppbv #	20
19) Isopropyl Alcohol	3.591	45	62045	0.947	ppbv #	1
20) Methylene Chloride	3.928	84	2395568	57.330	ppbv	98
21) Allyl Chloride	3.928	41	101330	1.379	ppbv #	21
23) Vinyl Acetate	4.616	43	68722	0.803	ppbv #	86
25) Ethyl Acetate	5.208	43	862082	3.873	ppbv #	77
26) Hexane	5.208	57	1164591	12.611	ppbv #	39
30) Cyclohexane	6.594	84	3094	0.041	ppbv #	1
34) 2-Butanone	4.787	43	143097	1.162	ppbv	99
36) Benzene	6.365	78	41673	0.224	ppbv	94
39) 1,2-Dichloropropane	6.648	63	636252	8.937	ppbv #	25
41) Tetrahydrofuran	5.208	42	465102	6.606	ppbv #	49
44) 2,2,4-Trimethylpentane	7.317	57	20255	0.065	ppbv #	28
50) 4-Methyl-2-Pentanone	8.185	43	31011	0.160	ppbv #	40
51) 2-Hexanone	9.558	43	42724	0.291	ppbv #	90
53) Toluene	9.217	91	254079	1.227	ppbv	98
58) Ethyl Benzene	12.085	91	395641	1.473	ppbv	96
59) m/p-Xylene	12.339	91	826035	3.563	ppbv	96
60) o-Xylene	13.053	91	222364	1.014	ppbv	99
69) p-Isopropyltoluene	16.989	119	13317	0.039	ppbv #	58
74) 1,2,4-Trimethylbenzene	16.108	105	28091	0.109	ppbv #	72
79) Naphthalene	21.381	128	7789	0.034	ppbv #	74

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

Quant Time: Aug 09 05:55:34 2024
Quant Method : Z:\voasrv\HPCHEM1\MSV0A_L\methods\VL072524AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSV0A_LFri Aug 26 06:05:16 2022
QLast Update : Tue Aug 06 01:32:58 2024
Response via : Initial Calibration

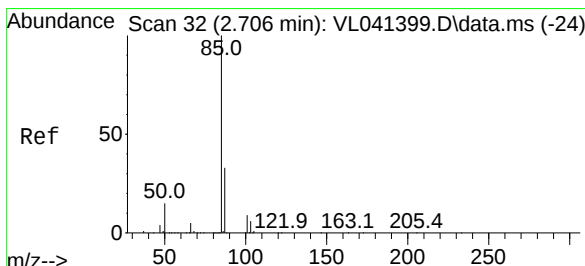
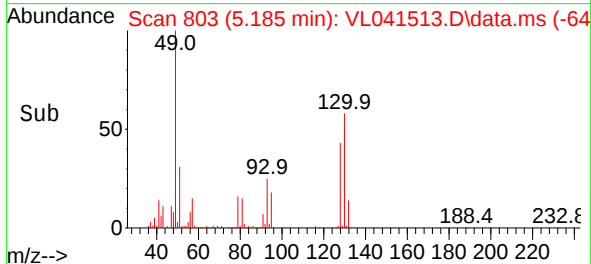
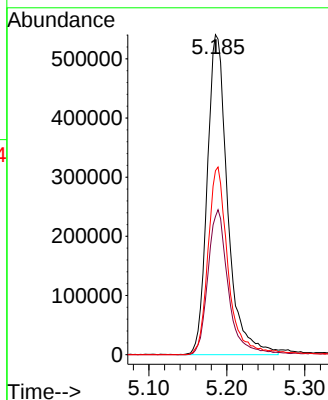
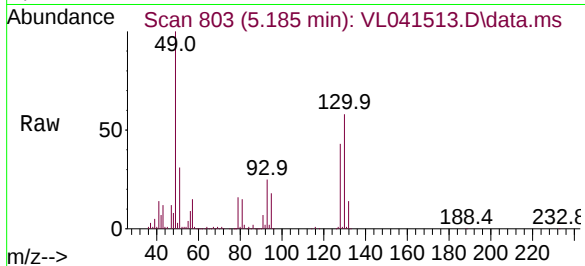




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.185 min Scan# 80
Delta R.T. -0.004 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

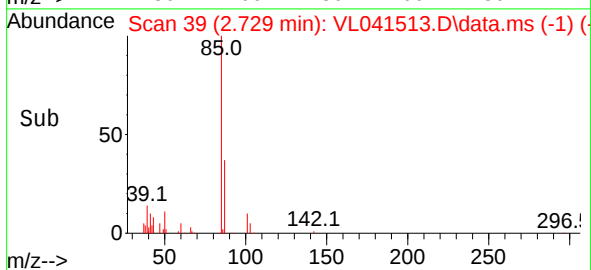
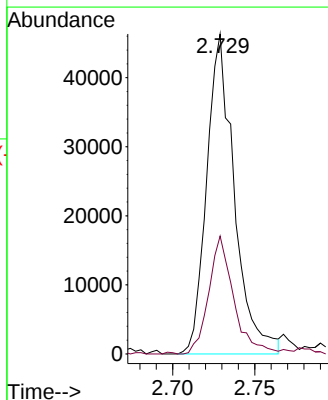
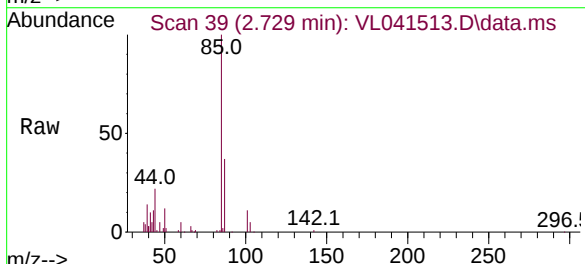
Instrument :
MSVOA_L
ClientSampleId :

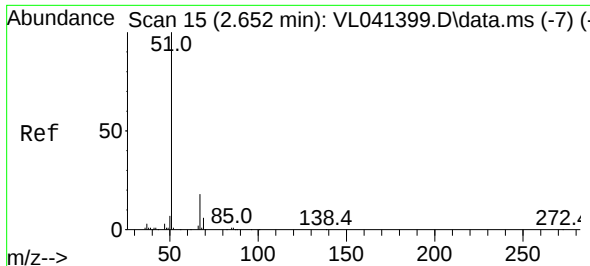
Tgt Ion: 49 Resp: 986215
Ion Ratio Lower Upper
49 100
128 45.4 23.8 71.4
130 58.5 30.8 92.4



#2
Dichlorodifluoromethane
Concen: 0.319 ppbv
RT: 2.729 min Scan# 39
Delta R.T. -0.003 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

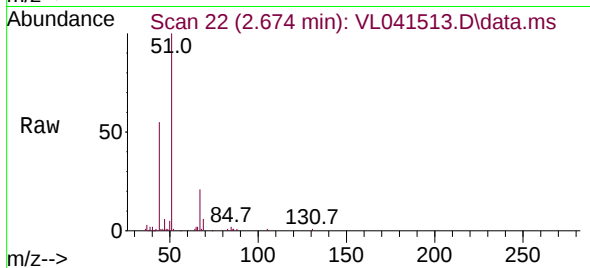
Tgt Ion: 85 Resp: 54198
Ion Ratio Lower Upper
85 100
87 36.8 26.0 39.0



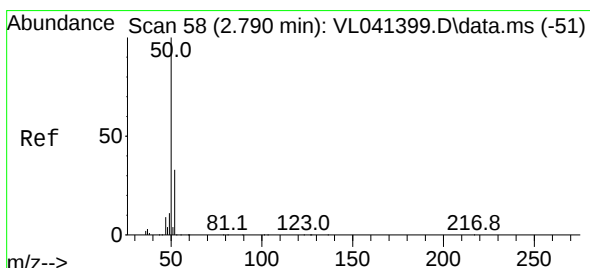
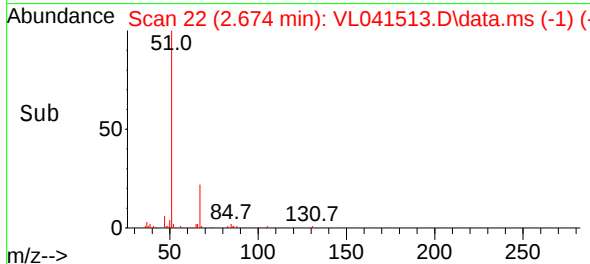
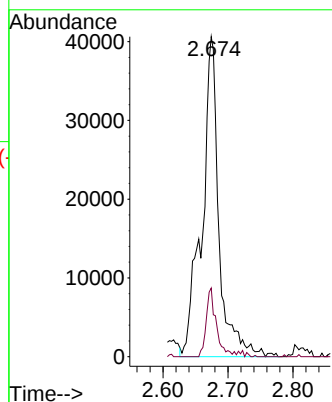


#3
Chlorodifluoromethane
Concen: 0.631 ppbv
RT: 2.674 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

Instrument :
MSVOA_L
ClientSampleId :

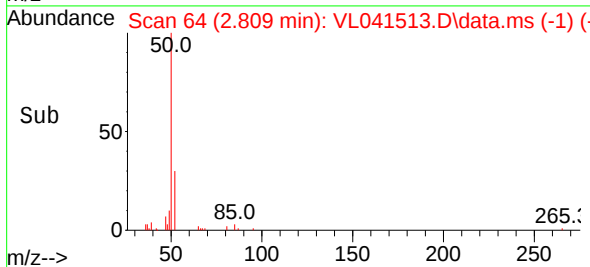
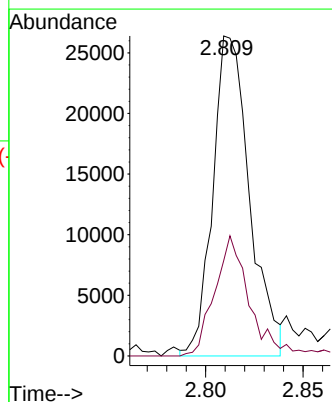
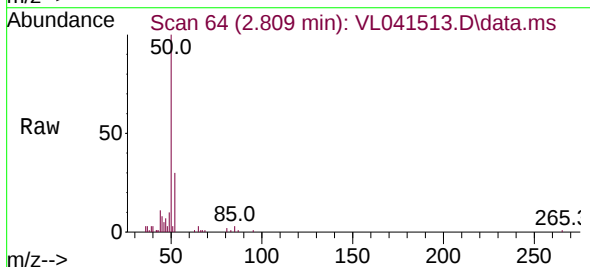


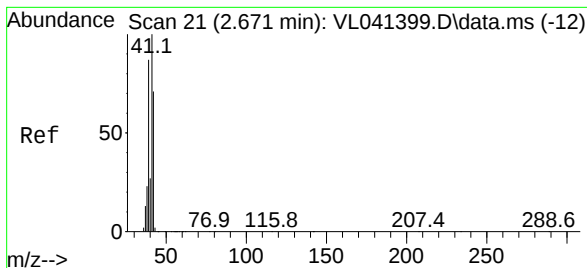
Tgt Ion: 51 Resp: 74064
Ion Ratio Lower Upper
51 100
67 12.7 14.5 21.7#



#4
Chloromethane
Concen: 0.555 ppbv
RT: 2.809 min Scan# 64
Delta R.T. -0.006 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

Tgt Ion: 50 Resp: 34628
Ion Ratio Lower Upper
50 100
52 30.3 26.1 39.1





#9

Propene

Concen: 1.417 ppbv

RT: 2.703 min Scan# 31

Delta R.T. 0.007 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

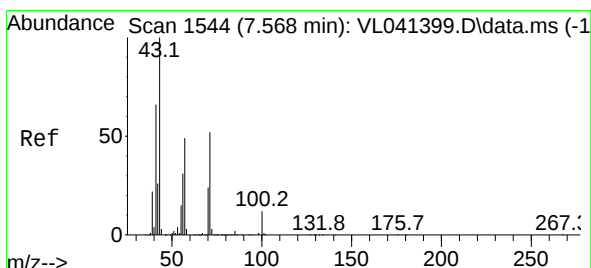
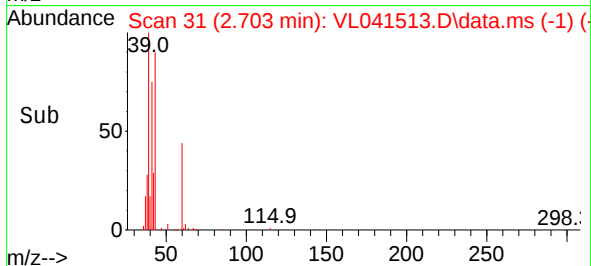
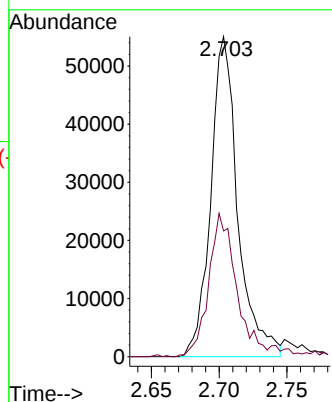
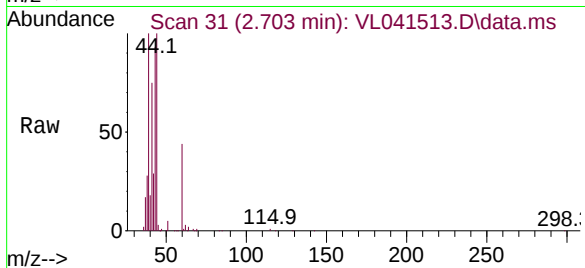
ClientSampleId :

Tgt Ion: 41 Resp: 76421

Ion Ratio Lower Upper

41 100

42 49.4 55.9 83.9#



#10

Heptane

Concen: 0.087 ppbv

RT: 7.571 min Scan# 1545

Delta R.T. -0.003 min

Lab File: VL041513.D

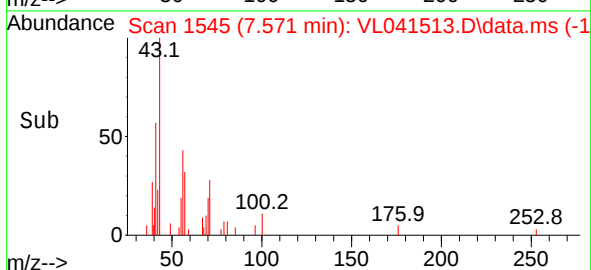
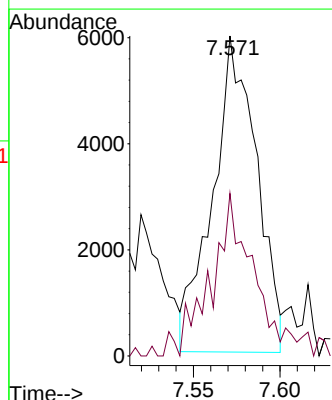
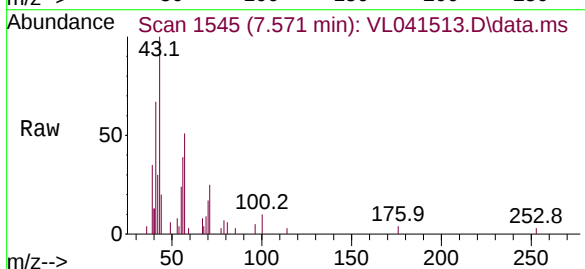
Acq: 8 Aug 2024 15:07

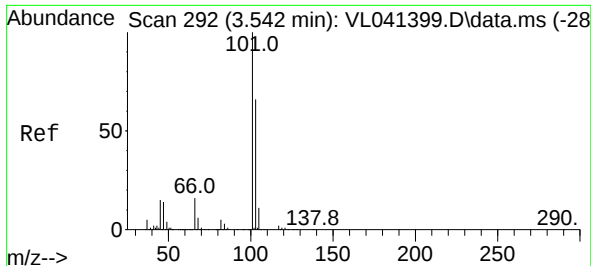
Tgt Ion: 43 Resp: 10526

Ion Ratio Lower Upper

43 100

57 51.0 40.5 60.7





#11

Trichlorofluoromethane

Concen: 0.229 ppbv

RT: 3.562 min Scan# 20

Delta R.T. 0.000 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

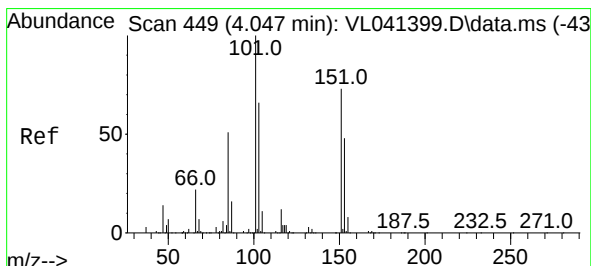
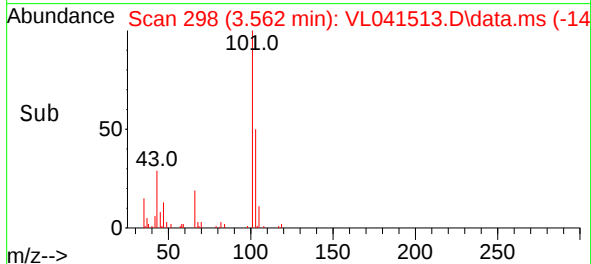
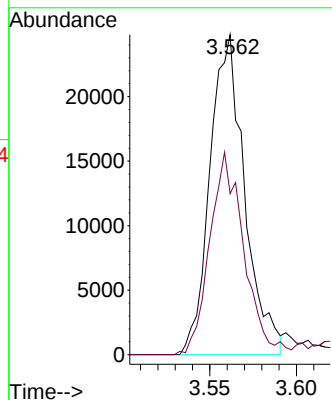
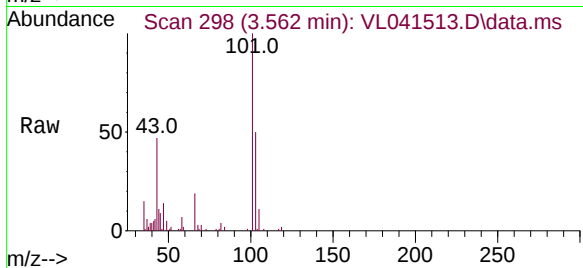
ClientSampleId :

Tgt Ion:101 Resp: 34547

Ion Ratio Lower Upper

101 100

103 49.3 52.6 79.0#



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.071 ppbv

RT: 4.063 min Scan# 454

Delta R.T. 0.000 min

Lab File: VL041513.D

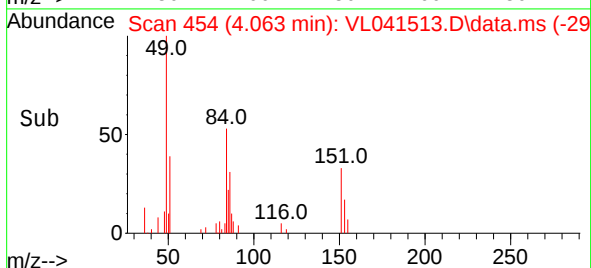
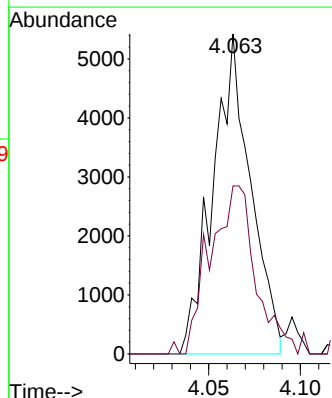
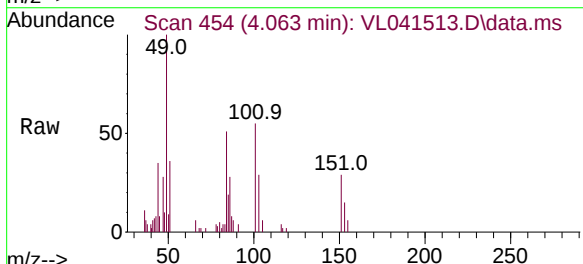
Acq: 8 Aug 2024 15:07

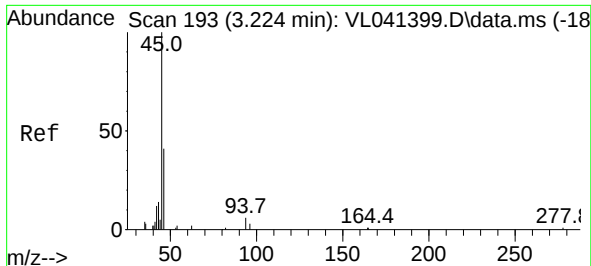
Tgt Ion:101 Resp: 7749

Ion Ratio Lower Upper

101 100

151 66.6 59.4 89.2





#13

Ethanol

Concen: 39.894 ppbv

RT: 3.243 min Scan# 199

Delta R.T. 0.000 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

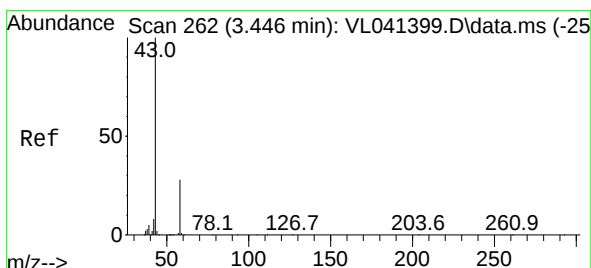
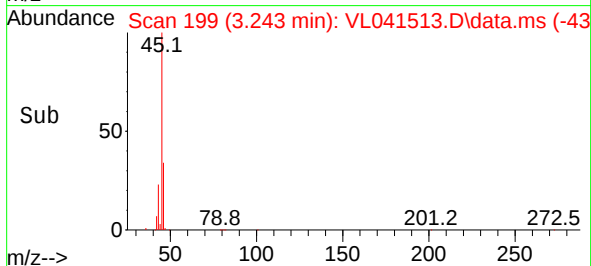
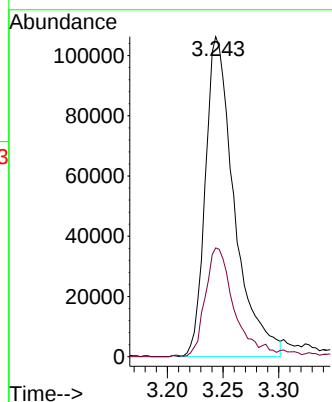
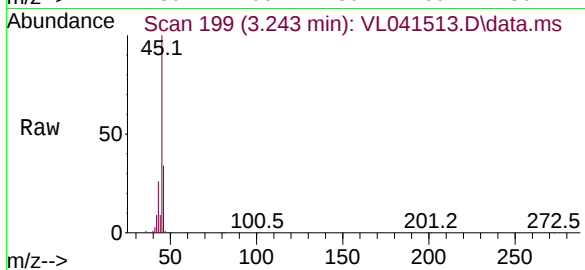
ClientSampleId :

Tgt Ion: 45 Resp: 192304

Ion Ratio Lower Upper

45 100

46 36.5 13.4 53.4



#15

Acetone

Concen: 15.172 ppbv

RT: 3.462 min Scan# 267

Delta R.T. -0.006 min

Lab File: VL041513.D

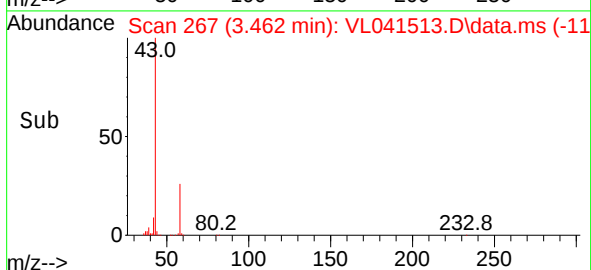
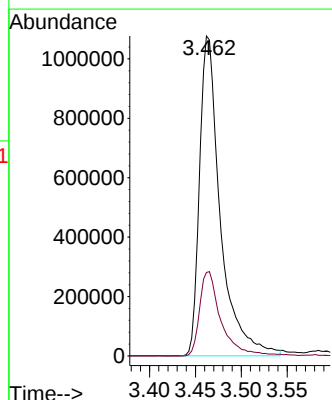
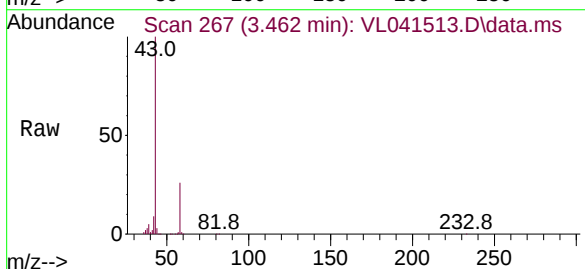
Acq: 8 Aug 2024 15:07

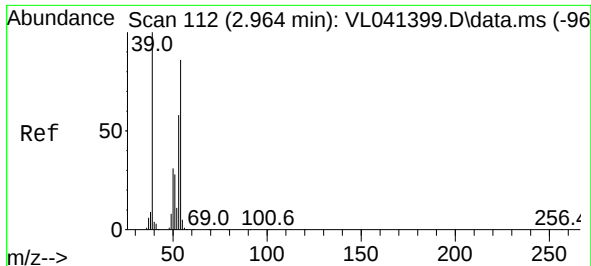
Tgt Ion: 43 Resp: 1700109

Ion Ratio Lower Upper

43 100

58 27.7 21.4 32.2





#16

1,3-Butadiene

Concen: 0.594 ppbv

RT: 3.009 min Scan# 11

Delta R.T. 0.023 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

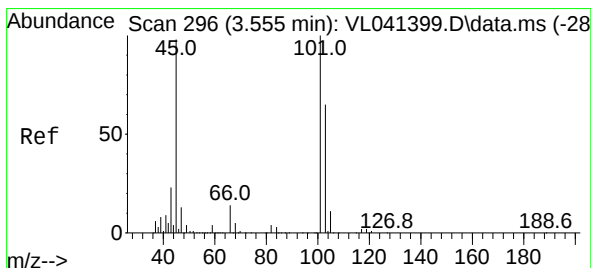
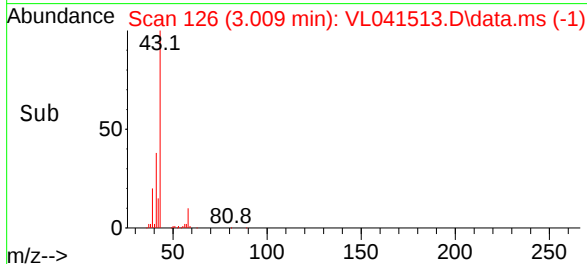
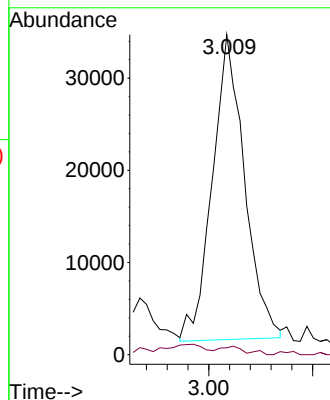
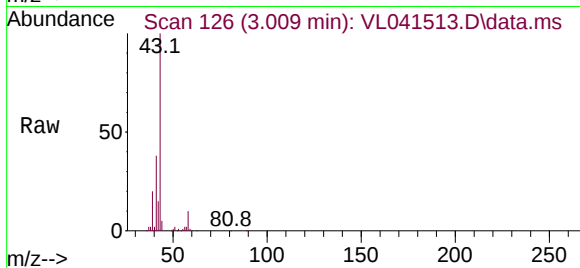
ClientSampleId :

Tgt Ion: 39 Resp: 35588

Ion Ratio Lower Upper

39 100

54 8.1 62.5 93.7#



#19

Isopropyl Alcohol

Concen: 0.947 ppbv

RT: 3.591 min Scan# 307

Delta R.T. 0.016 min

Lab File: VL041513.D

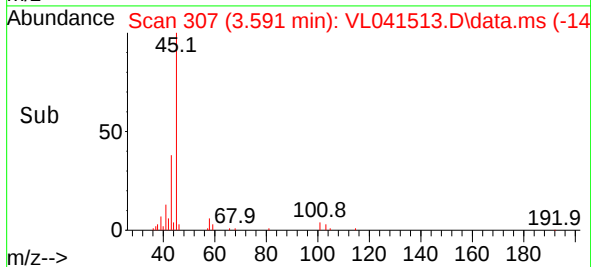
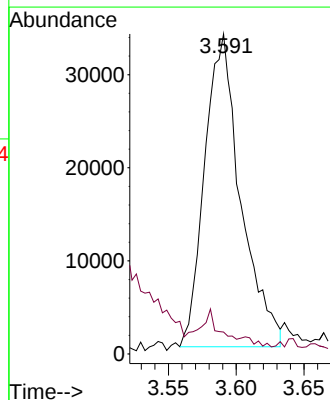
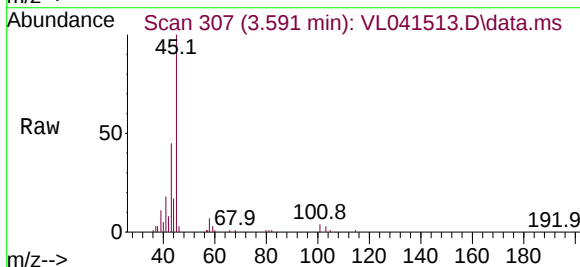
Acq: 8 Aug 2024 15:07

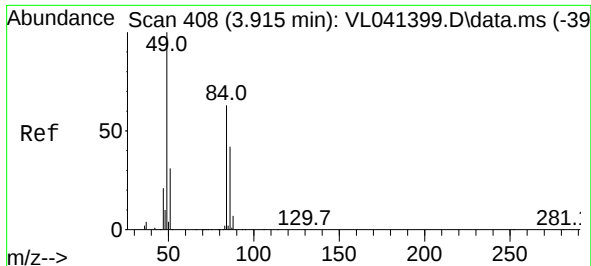
Tgt Ion: 45 Resp: 62045

Ion Ratio Lower Upper

45 100

58 758.0 1.9 2.9#





#20

Methylene Chloride

Concen: 57.330 ppbv

RT: 3.928 min Scan# 412

Delta R.T. -0.003 min

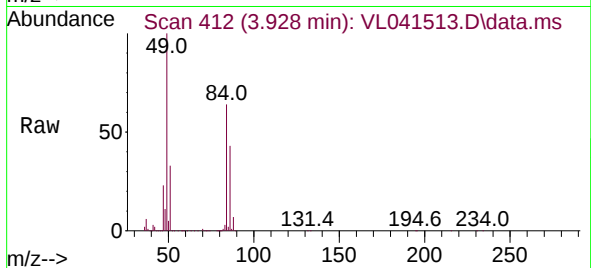
Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion: 84 Resp: 2395568

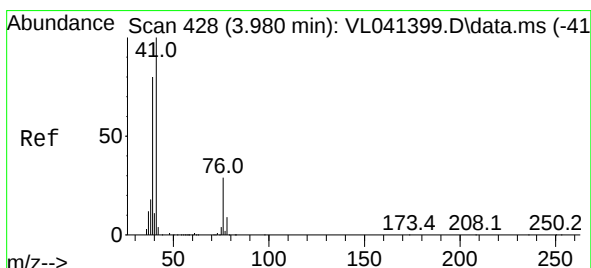
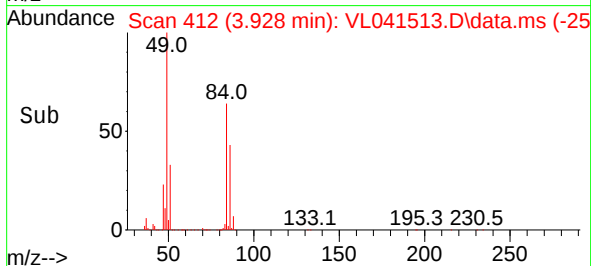
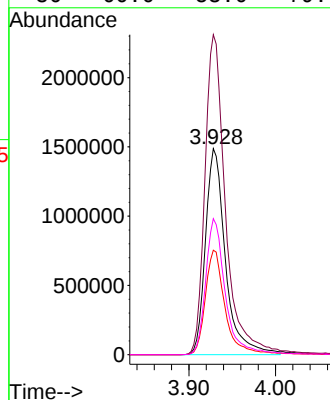
Ion Ratio Lower Upper

84 100

49 155.2 126.6 190.0

51 50.7 38.6 58.0

86 66.0 53.0 79.4



#21

Allyl Chloride

Concen: 1.379 ppbv

RT: 3.928 min Scan# 412

Delta R.T. -0.067 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

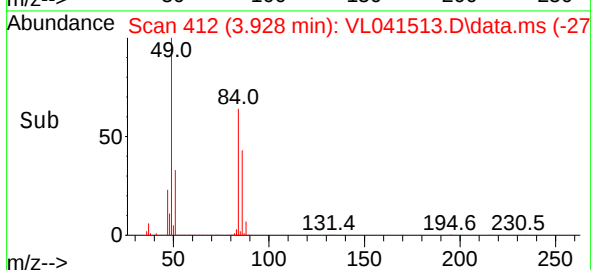
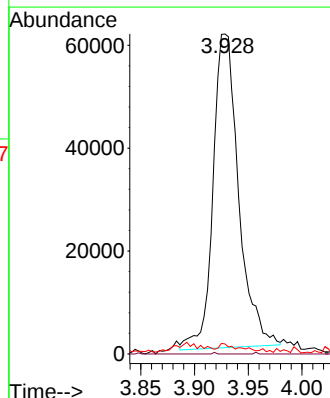
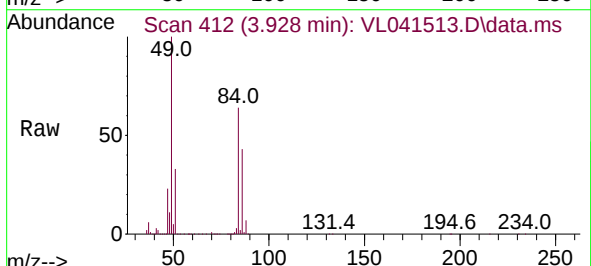
Tgt Ion: 41 Resp: 101330

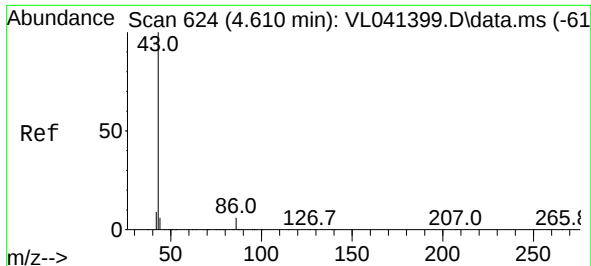
Ion Ratio Lower Upper

41 100

76 0.1 23.7 35.5#

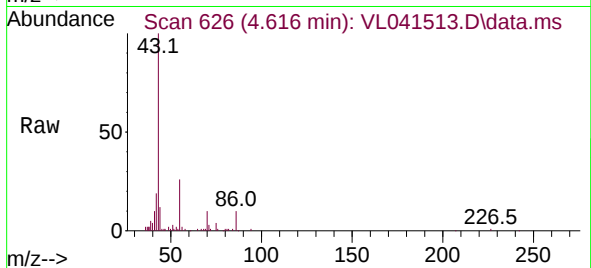
39 2.0 64.3 96.5#





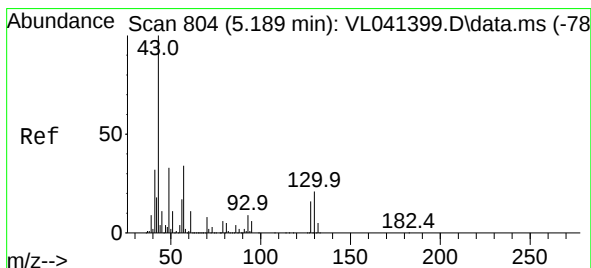
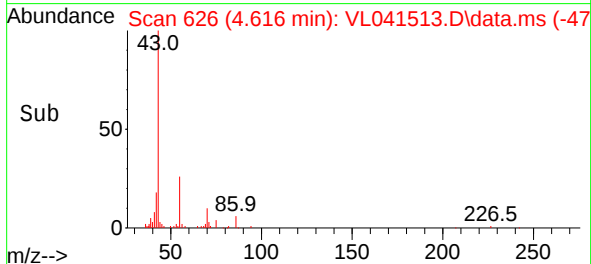
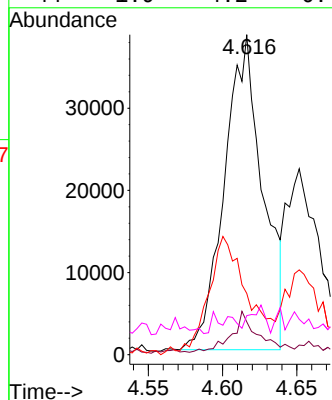
#23
Vinyl Acetate
Concen: 0.803 ppbv
RT: 4.616 min Scan# 61
Delta R.T. -0.010 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion: 43 Resp: 68722

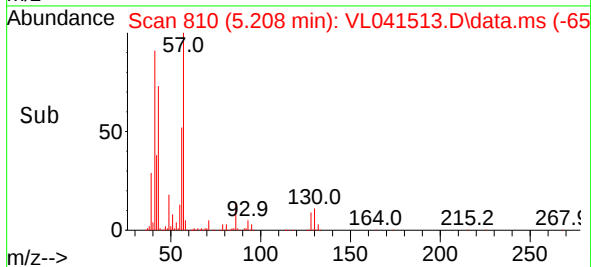
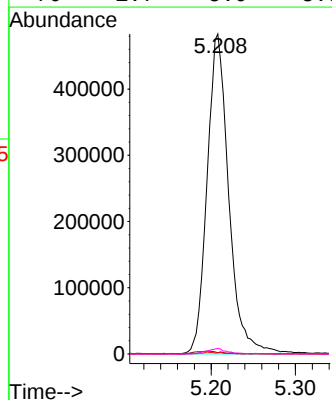
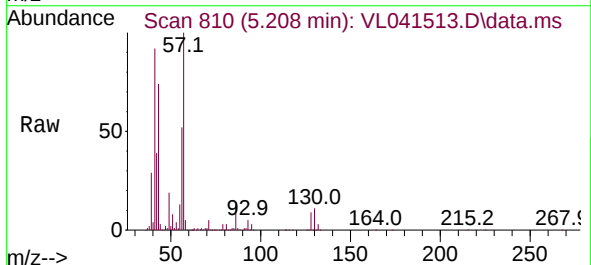
Ion	Ratio	Lower	Upper
43	100		
86	9.5	4.6	6.8#
42	16.7	7.9	11.9#
44	1.9	4.2	6.4#

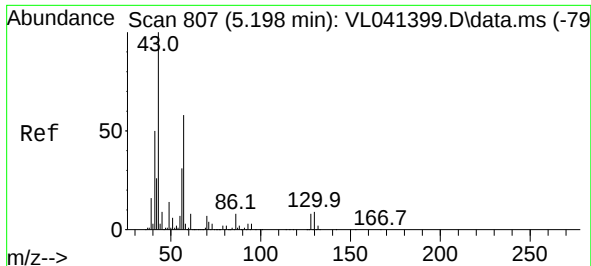


#25
Ethyl Acetate
Concen: 3.873 ppbv
RT: 5.208 min Scan# 810
Delta R.T. 0.007 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

Tgt Ion: 43 Resp: 862082

Ion	Ratio	Lower	Upper
43	100		
45	1.2	8.5	12.7#
61	0.6	8.0	12.0#
70	1.7	5.9	8.9#





#26

Hexane

Concen: 12.611 ppbv

RT: 5.208 min Scan# 81

Delta R.T. -0.003 min

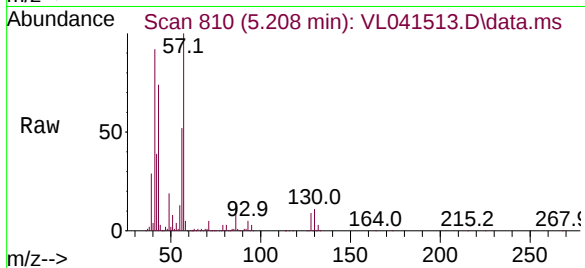
Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion: 57 Resp: 1164591

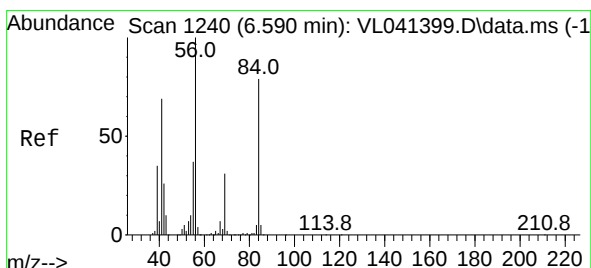
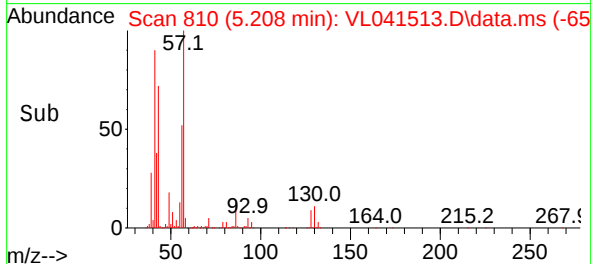
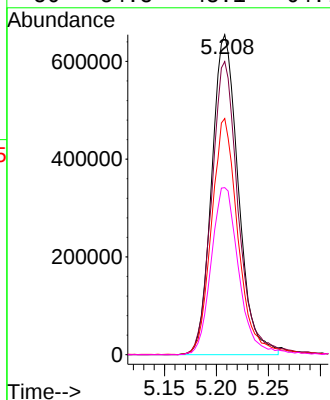
Ion Ratio Lower Upper

57 100

41 93.2 74.0 111.0

43 74.5 193.6 290.4#

56 54.8 43.1 64.7



#30

Cyclohexane

Concen: 0.041 ppbv

RT: 6.594 min Scan# 1241

Delta R.T. -0.003 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

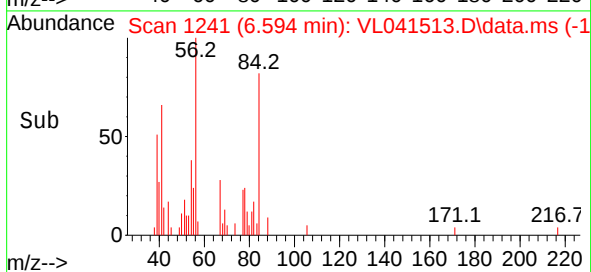
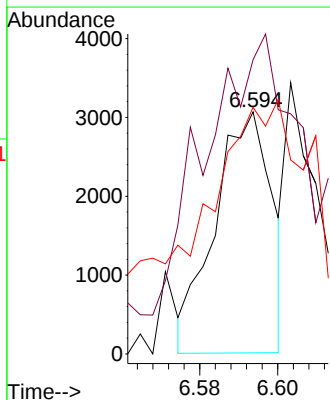
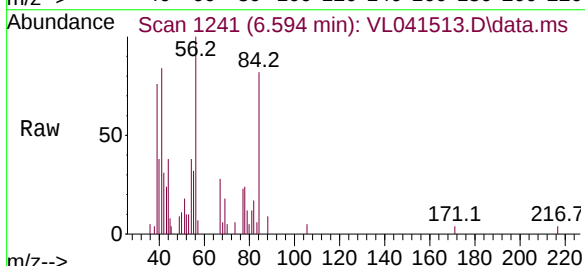
Tgt Ion: 84 Resp: 3094

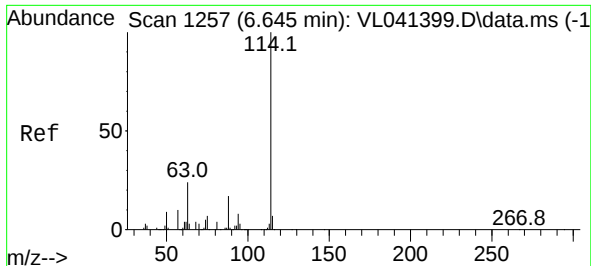
Ion Ratio Lower Upper

84 100

56 0.0 111.2 166.8#

41 0.0 70.3 105.5#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.648 min Scan# 11

Delta R.T. 0.000 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

ClientSampleId :

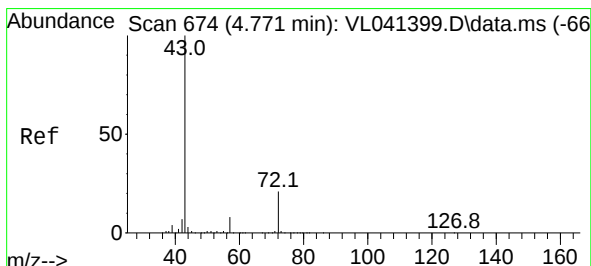
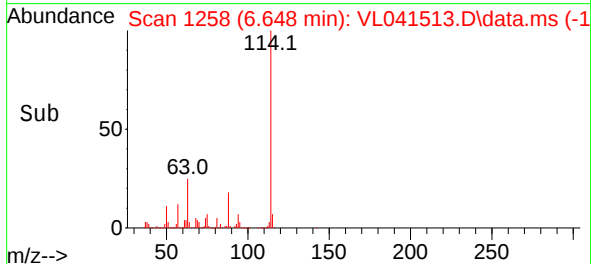
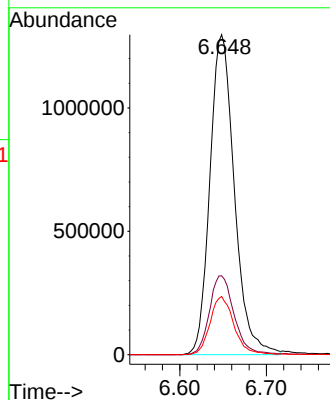
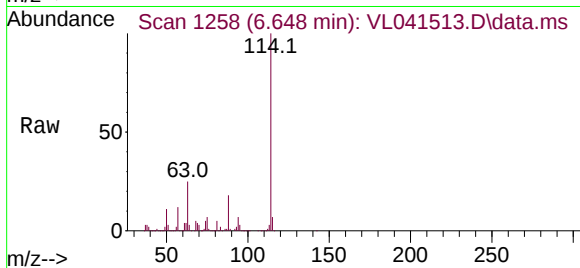
Tgt Ion:114 Resp: 2544924

Ion Ratio Lower Upper

114 100

63 25.3 20.3 30.5

88 17.9 14.3 21.5



#34

2-Butanone

Concen: 1.162 ppbv

RT: 4.787 min Scan# 679

Delta R.T. 0.003 min

Lab File: VL041513.D

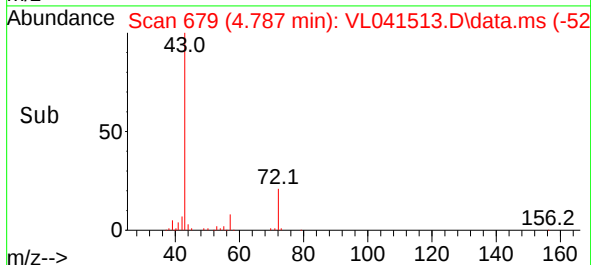
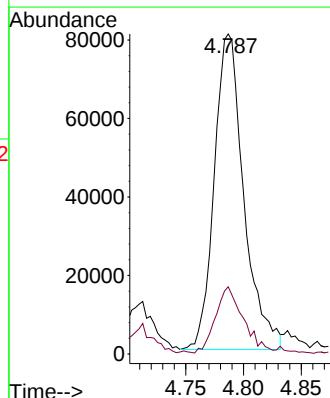
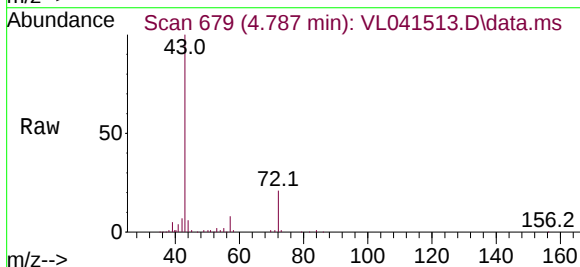
Acq: 8 Aug 2024 15:07

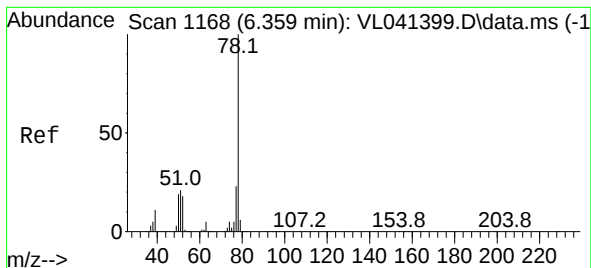
Tgt Ion: 43 Resp: 143097

Ion Ratio Lower Upper

43 100

72 21.9 17.3 25.9





#36

Benzene

Concen: 0.224 ppbv

RT: 6.365 min Scan# 1168

Delta R.T. -0.003 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

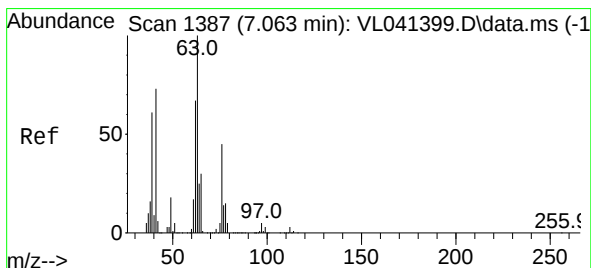
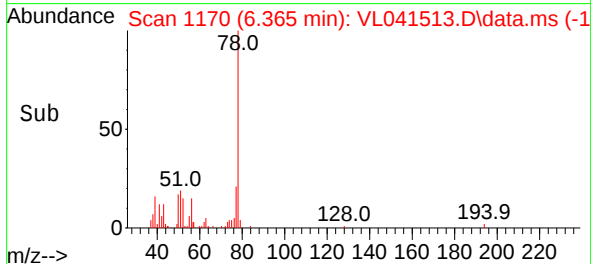
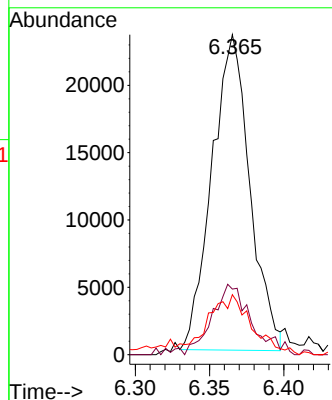
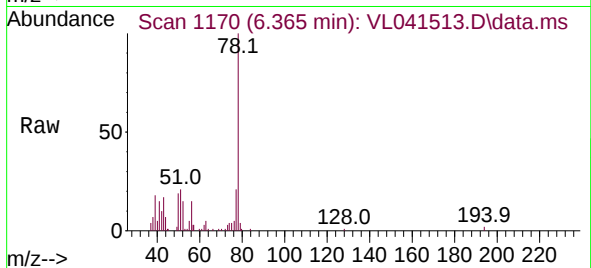
Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 78 Resp: 41673

Ion	Ratio	Lower	Upper
78	100		
77	19.2	18.1	27.1
50	17.1	15.5	23.3



#39

1,2-Dichloropropane

Concen: 8.937 ppbv

RT: 6.648 min Scan# 1258

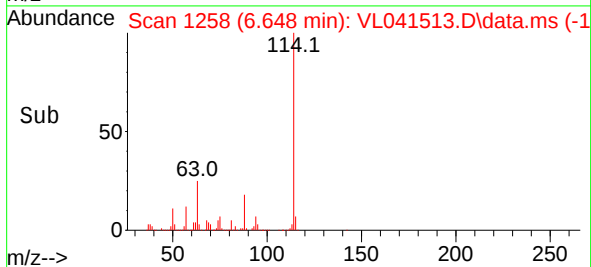
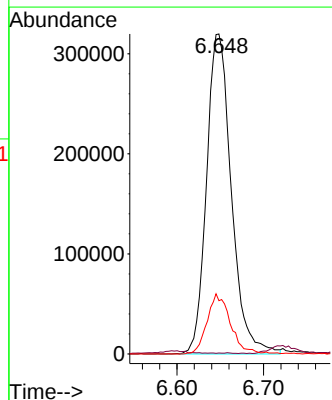
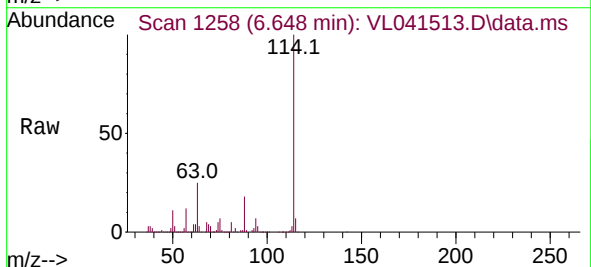
Delta R.T. -0.421 min

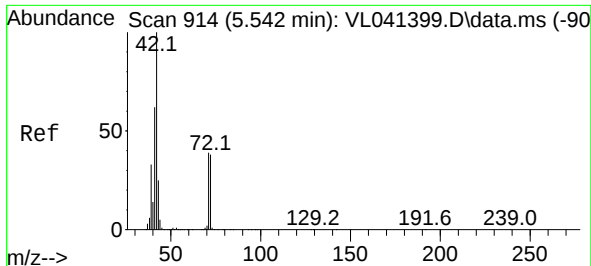
Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Tgt Ion: 63 Resp: 636252

Ion	Ratio	Lower	Upper
63	100		
41	0.0	58.3	87.5#
62	16.6	53.9	80.9#





#41

Tetrahydrofuran

Concen: 6.606 ppbv

RT: 5.208 min Scan# 81

Delta R.T. -0.344 min

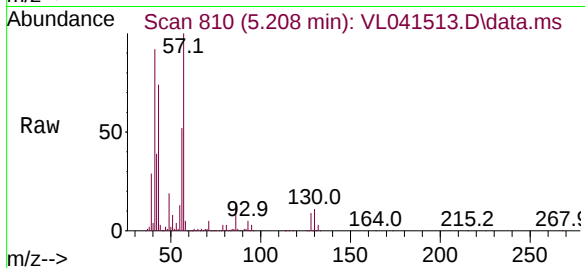
Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

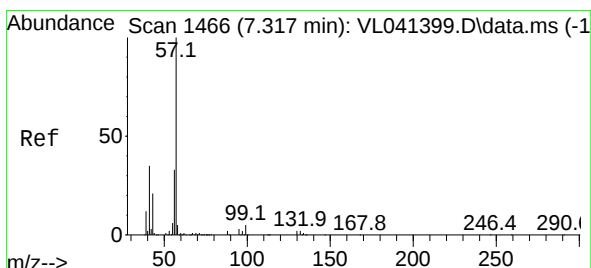
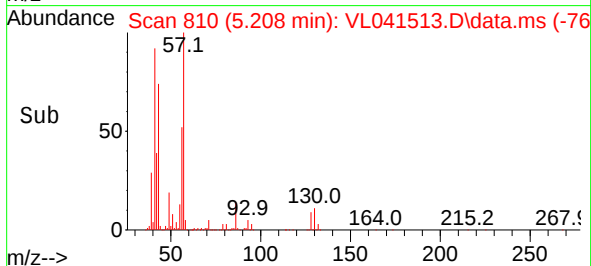
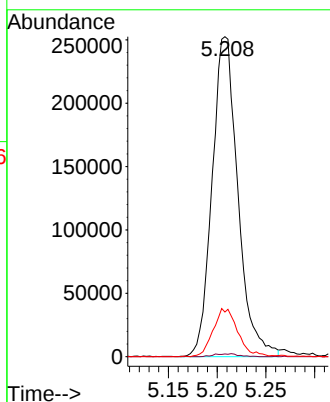
Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion:	42	Resp:	465102
Ion	Ratio	Lower	Upper
42	100		
72	0.9	31.2	46.8#
71	14.7	30.5	45.7#



#44

2,2,4-Trimethylpentane

Concen: 0.065 ppbv

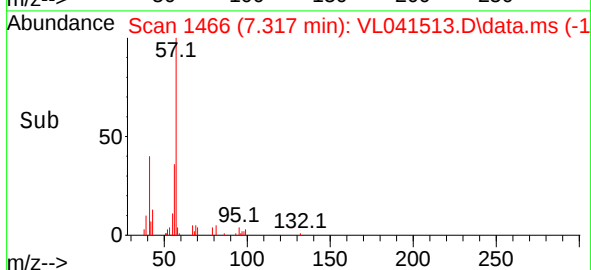
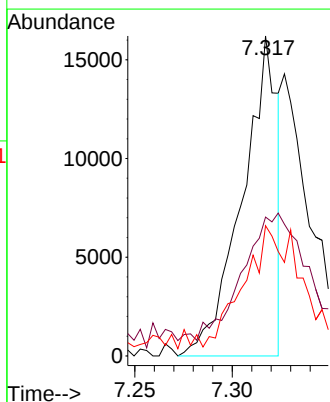
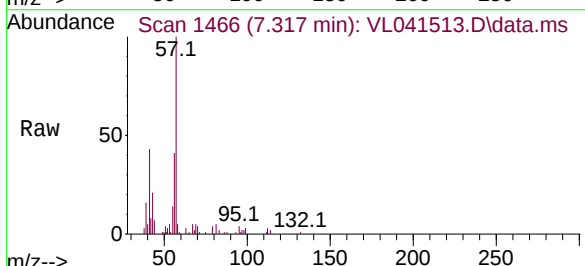
RT: 7.317 min Scan# 1466

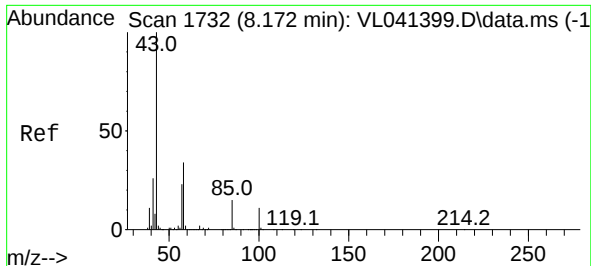
Delta R.T. -0.003 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Tgt Ion:	57	Resp:	20255
Ion	Ratio	Lower	Upper
57	100		
41	0.0	27.0	40.6#
56	79.0	25.2	37.8#





#50

4-Methyl-2-Pentanone

Concen: 0.160 ppbv

RT: 8.185 min Scan# 1

Delta R.T. 0.010 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

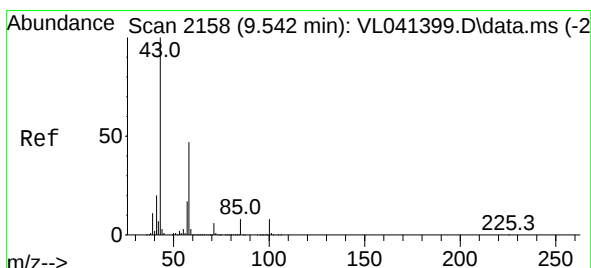
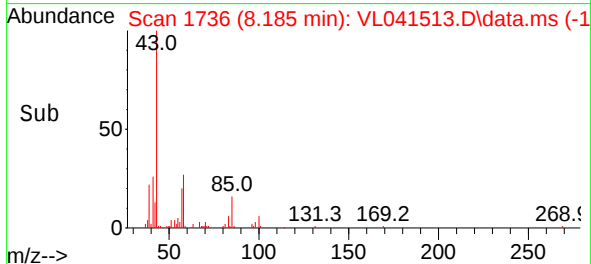
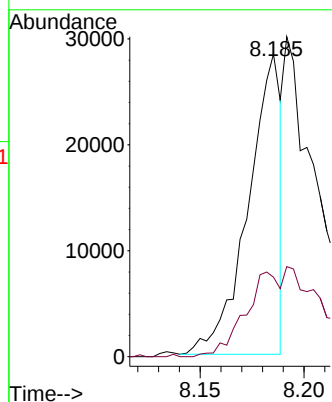
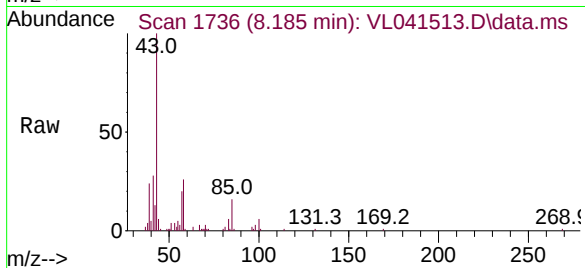
ClientSampleId :

Tgt Ion: 43 Resp: 31011

Ion Ratio Lower Upper

43 100

58 0.0 27.9 41.9#



#51

2-Hexanone

Concen: 0.291 ppbv

RT: 9.558 min Scan# 2163

Delta R.T. 0.013 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

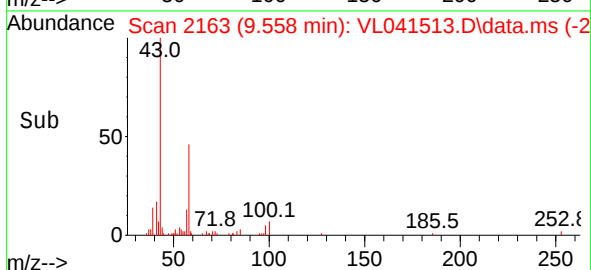
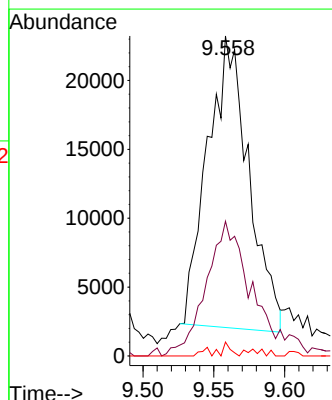
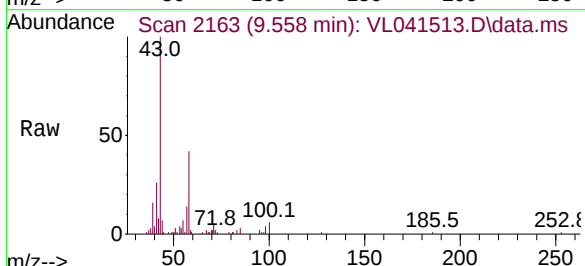
Tgt Ion: 43 Resp: 42724

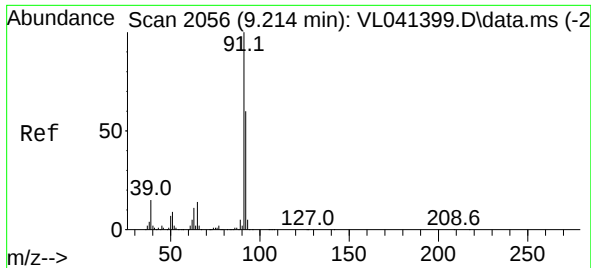
Ion Ratio Lower Upper

43 100

58 54.3 38.2 57.2

98 2.6 0.3 0.5#

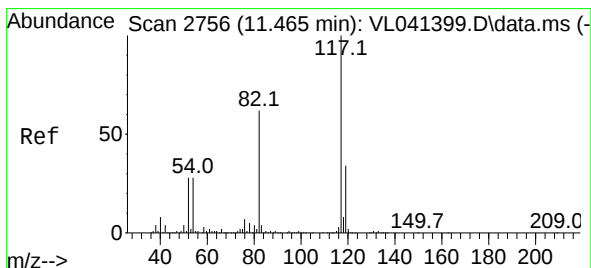
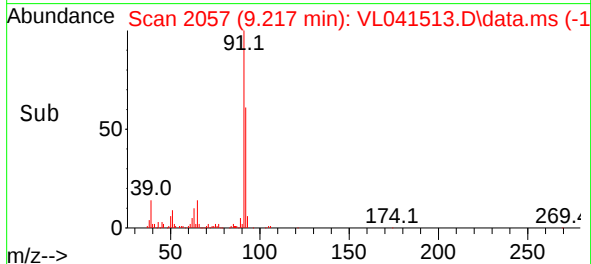
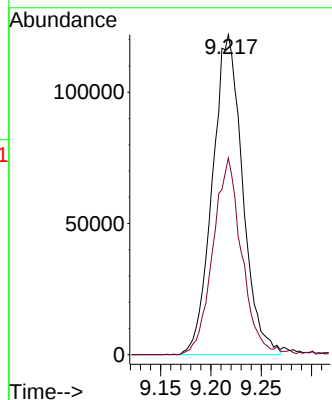
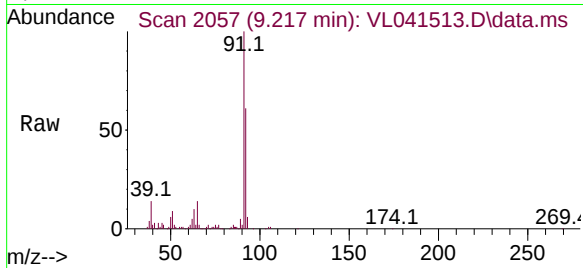




#53
Toluene
Concen: 1.227 ppbv
RT: 9.217 min Scan# 2056
Delta R.T. 0.000 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

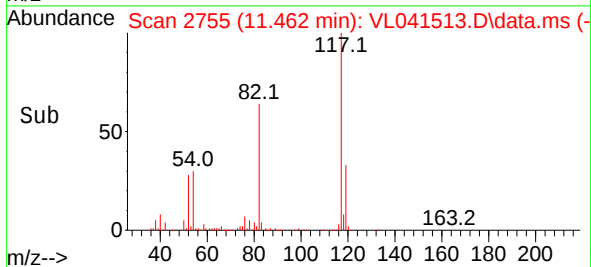
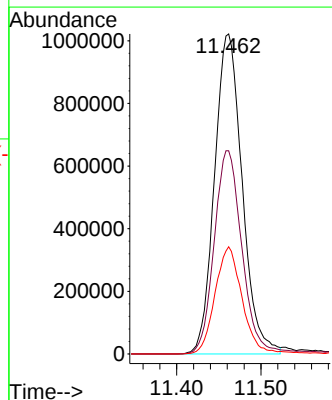
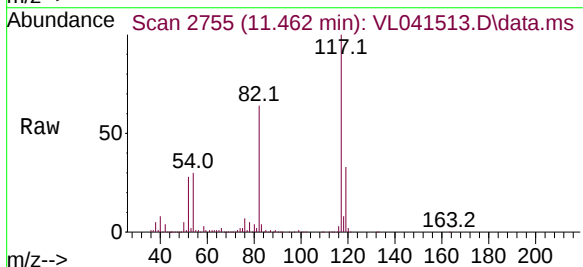
Instrument :
MSVOA_L
ClientSampleId :

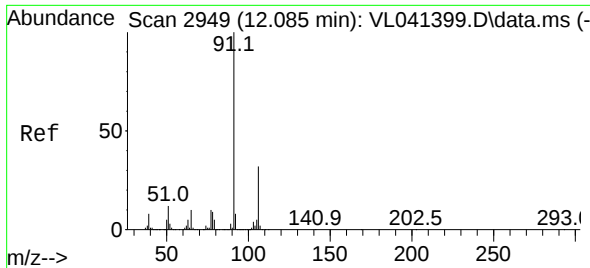
Tgt Ion: 91 Resp: 254079
Ion Ratio Lower Upper
91 100
92 59.7 48.7 73.1



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.462 min Scan# 2755
Delta R.T. 0.000 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

Tgt Ion: 117 Resp: 2330038
Ion Ratio Lower Upper
117 100
82 65.5 51.0 76.6
119 33.4 45.2 67.8#

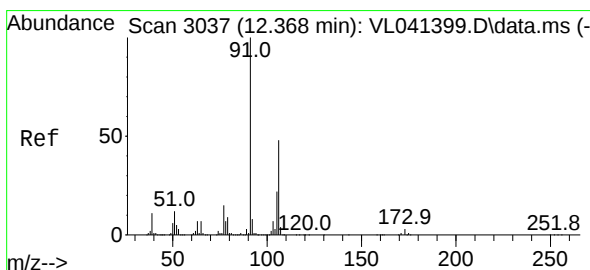
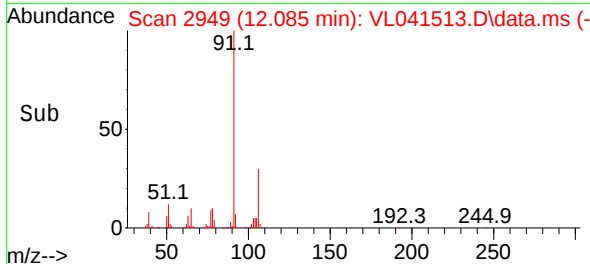
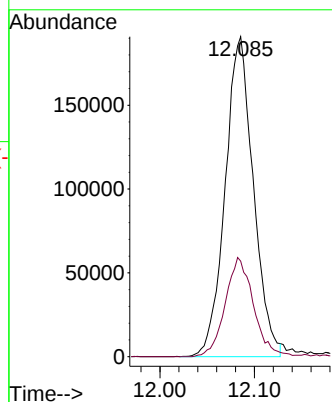
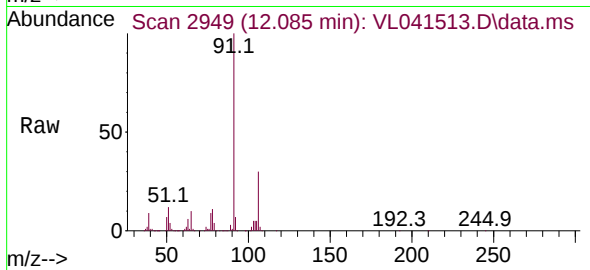




#58
Ethyl Benzene
Concen: 1.473 ppbv
RT: 12.085 min Scan# 20
Delta R.T. 0.000 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

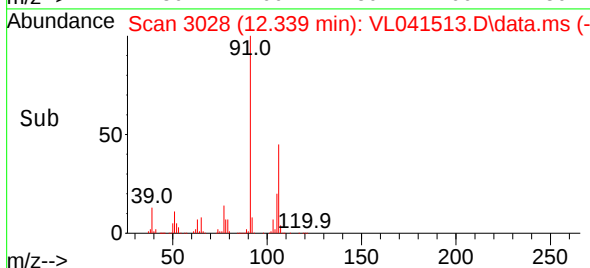
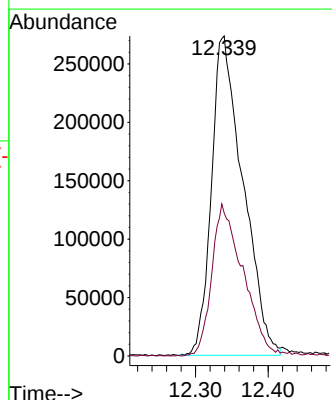
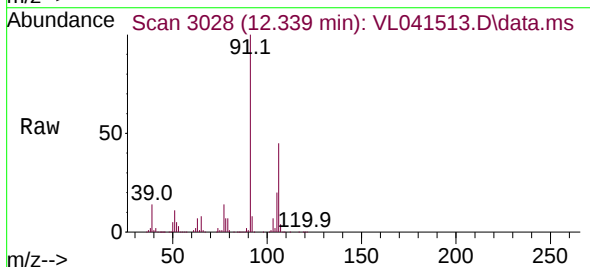
Instrument :
MSVOA_L
ClientSampleId :

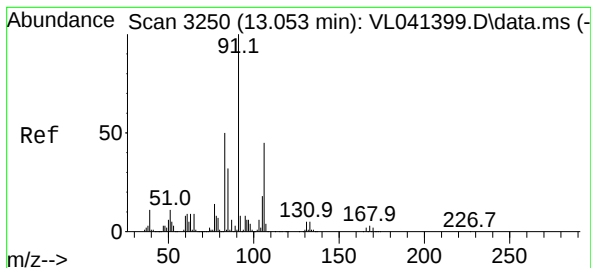
Tgt Ion: 91 Resp: 395641
Ion Ratio Lower Upper
91 100
106 29.8 25.8 38.8



#59
m/p-Xylene
Concen: 3.563 ppbv
RT: 12.339 min Scan# 3028
Delta R.T. -0.029 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

Tgt Ion: 91 Resp: 826035
Ion Ratio Lower Upper
91 100
106 48.0 36.3 54.5





#60

o-Xylene

Concen: 1.014 ppbv

RT: 13.053 min Scan# 3250

Delta R.T. 0.000 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

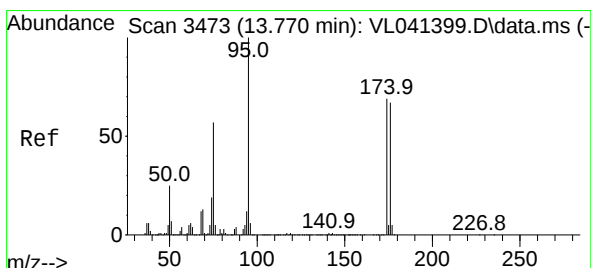
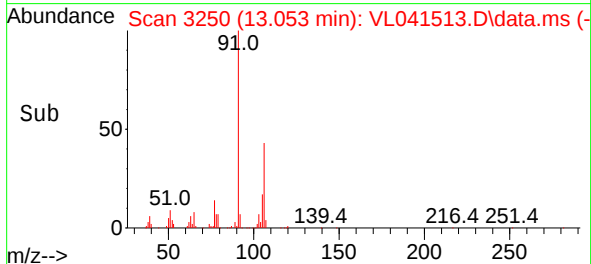
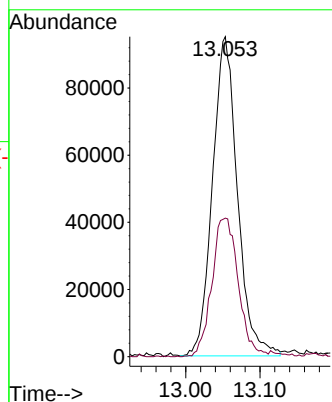
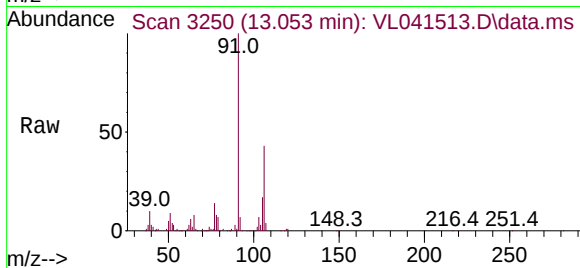
ClientSampleId :

Tgt Ion: 91 Resp: 222364

Ion Ratio Lower Upper

91 100

106 46.7 23.1 69.3



#68

1-Bromo-4-Fluorobenzene

Concen: 9.694 ppbv

RT: 13.770 min Scan# 3473

Delta R.T. 0.003 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

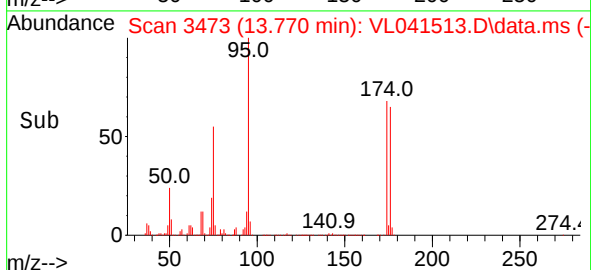
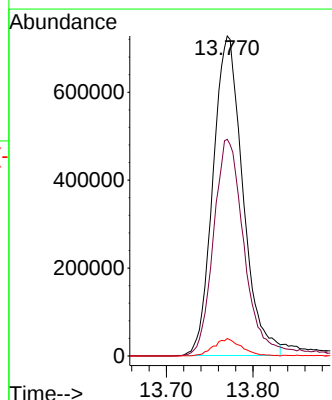
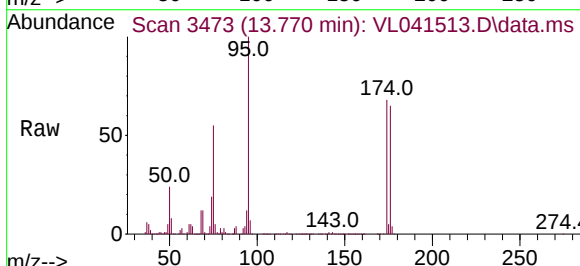
Tgt Ion: 95 Resp: 1738193

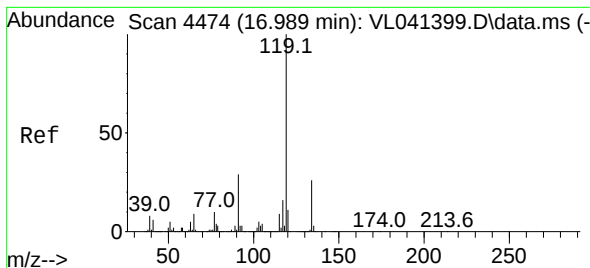
Ion Ratio Lower Upper

95 100

174 72.3 56.3 84.5

175 5.3 4.0 6.0





#69

p-Isopropyltoluene

Concen: 0.039 ppbv

RT: 16.989 min Scan# 41

Delta R.T. 0.000 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Instrument :

MSVOA_L

ClientSampleId :

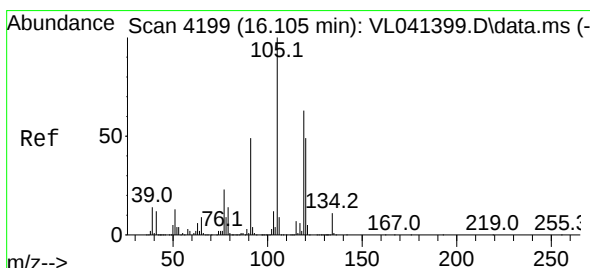
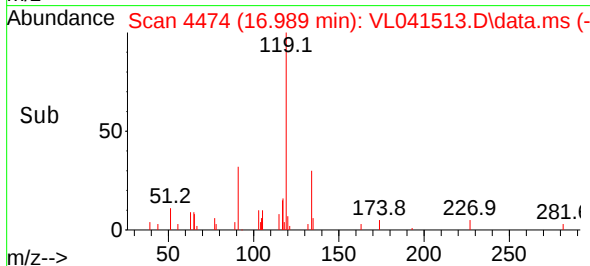
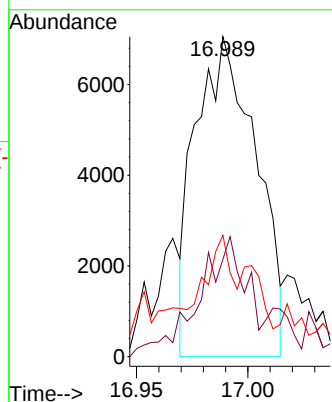
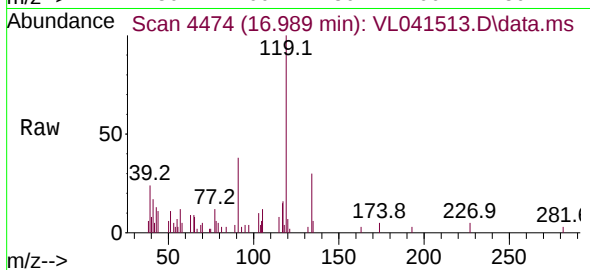
Tgt Ion:119 Resp: 13317

Ion Ratio Lower Upper

119 100

134 39.7 20.5 30.7#

91 57.8 23.2 34.8#



#74

1,2,4-Trimethylbenzene

Concen: 0.109 ppbv

RT: 16.108 min Scan# 4200

Delta R.T. 0.007 min

Lab File: VL041513.D

Acq: 8 Aug 2024 15:07

Tgt Ion:105 Resp: 28091

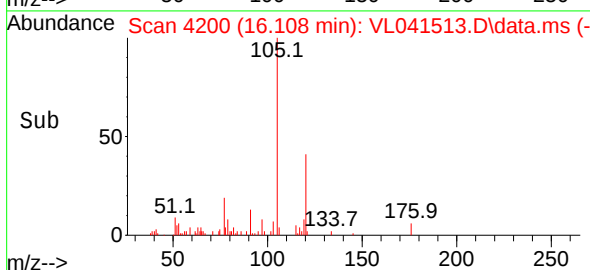
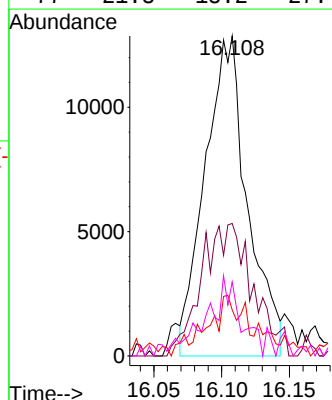
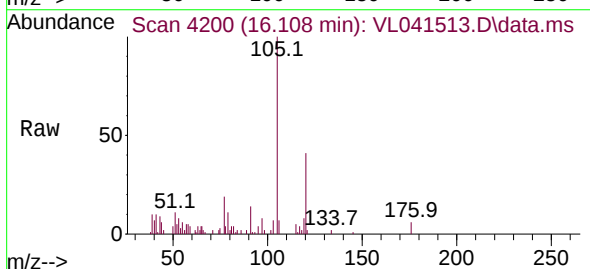
Ion Ratio Lower Upper

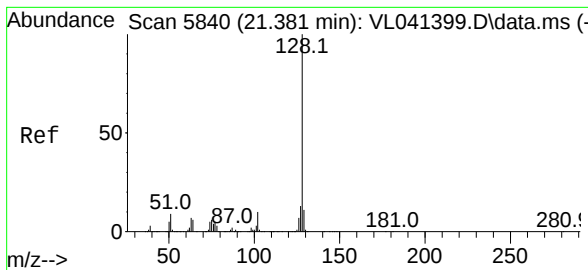
105 100

120 40.7 39.5 59.3

91 12.2 39.8 59.8#

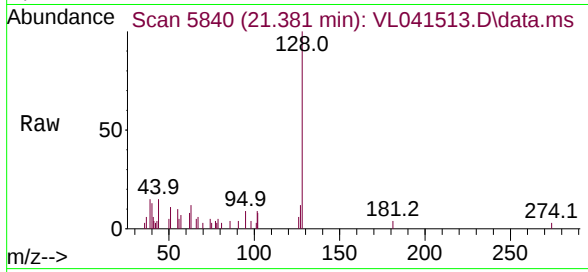
77 21.3 18.2 27.4





#79
Naphthalene
Concen: 0.034 ppbv
RT: 21.381 min Scan# 51
Delta R.T. 0.010 min
Lab File: VL041513.D
Acq: 8 Aug 2024 15:07

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion:128 Resp: 7789
Ion Ratio Lower Upper
128 100
127 3.9 10.3 15.5#
129 0.0 9.0 13.4#

