

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091824\
 Data File : VL041605.D
 Acq On : 18 Sep 2024 13:42
 Operator : SY/MD
 Sample : P4028-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Sep 19 01:32:42 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091624AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 17 09:12:21 2024
 Response via : Initial Calibration

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

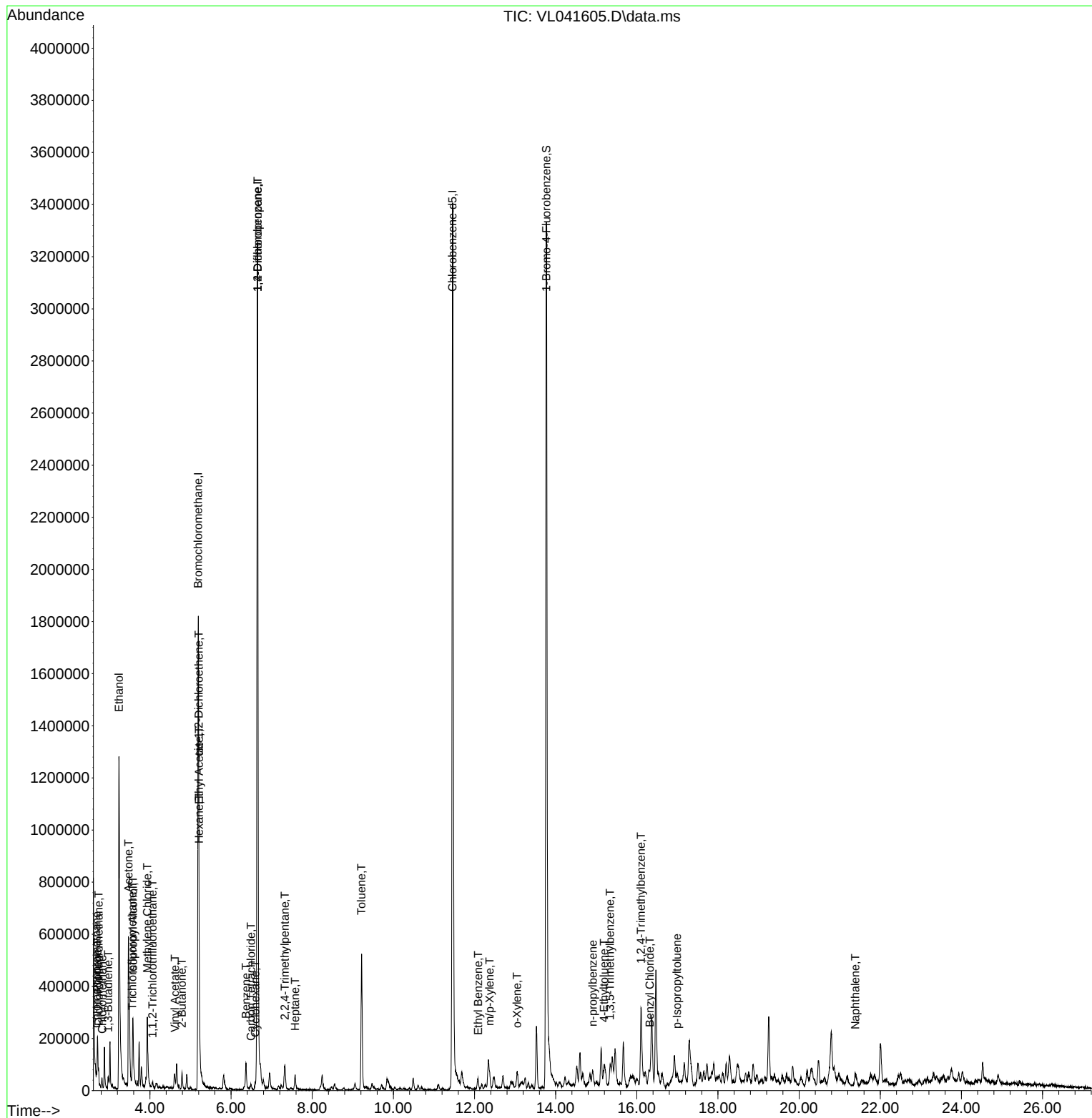
Internal Standards						
1) Bromochloromethane	5.189	49	873658	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	6.652	114	2449749	10.000	ppbv	0.02
55) Chlorobenzene-d5	11.459	117	2230436	10.000	ppbv	0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.770	95	1637558	9.973	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.739	85	37493	0.297	ppbv	96
3) Chlorodifluoromethane	2.681	51	58473	0.552	ppbv #	86
4) Chloromethane	2.822	50	31818	0.546	ppbv #	88
9) Propene	2.706	41	56780	1.270	ppbv	92
10) Heptane	7.574	43	16778	0.160	ppbv	90
11) Trichlorofluoromethane	3.565	101	33119	0.247	ppbv	94
12) 1,1,2-Trichlorotrifluo...	4.063	101	7125	0.073	ppbv	98
13) Ethanol	3.237	45	1441284	428.905	ppbv	94
15) Acetone	3.472	43	643754	5.869	ppbv	95
16) 1,3-Butadiene	2.970	39	14856	0.278	ppbv #	10
19) Isopropyl Alcohol	3.581	45	240865	4.290	ppbv #	91
20) Methylene Chloride	3.935	84	84712	2.056	ppbv	96
23) Vinyl Acetate	4.616	43	9424	0.156	ppbv #	1
25) Ethyl Acetate	5.208	43	90367	0.459	ppbv #	93
26) Hexane	5.211	57	64569	0.786	ppbv #	57
30) Cyclohexane	6.600	84	4153	0.066	ppbv #	1
31) cis-1,2-Dichloroethene	5.205	61	3424	0.044	ppbv #	28
34) 2-Butanone	4.790	43	65953	0.565	ppbv	98
35) Carbon Tetrachloride	6.491	117	9382	0.078	ppbv	94
36) Benzene	6.365	78	72852	0.428	ppbv	95
39) 1,2-Dichloropropane	6.652	63	602689	8.708	ppbv #	23
44) 2,2,4-Trimethylpentane	7.327	57	57890	0.197	ppbv #	64
53) Toluene	9.214	91	364858	2.020	ppbv	100
58) Ethyl Benzene	12.092	91	10440	0.044	ppbv	97
59) m/p-Xylene	12.368	91	26874	0.126	ppbv #	30
60) o-Xylene	13.047	91	20711	0.102	ppbv #	30
64) n-propylbenzene	14.915	120	3454	0.043	ppbv #	1
66) Benzyl Chloride	16.320	91	512	0.035	ppbv #	63
69) p-Isopropyltoluene	16.992	119	12120	0.038	ppbv #	43
72) 4-Ethyltoluene	15.188	105	47913	0.201	ppbv #	93
73) 1,3,5-Trimethylbenzene	15.339	105	23310	0.111	ppbv	87
74) 1,2,4-Trimethylbenzene	16.101	105	185611	0.754	ppbv #	71
79) Naphthalene	21.384	128	10240	0.057	ppbv #	82

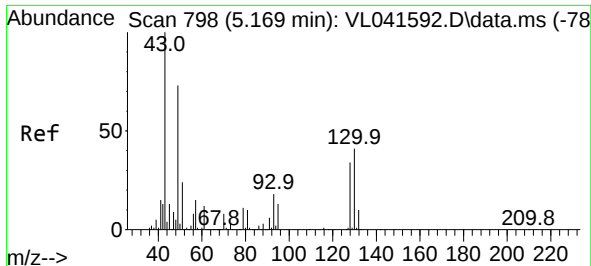
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091824\
Data File : VL041605.D
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Instrument :
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091624AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Tue Sep 17 09:12:21 2024
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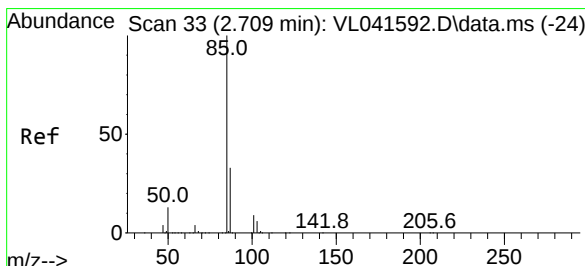
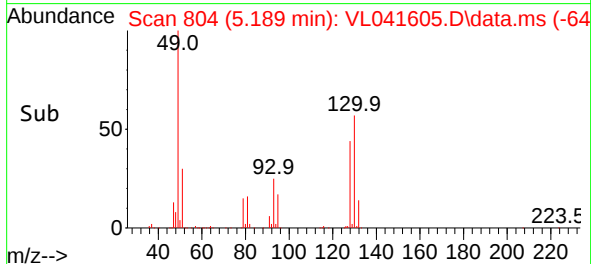
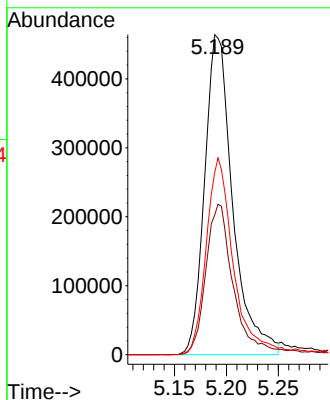
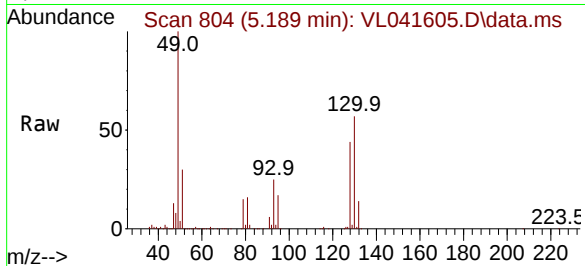




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.189 min Scan# 80
Delta R.T. 0.020 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

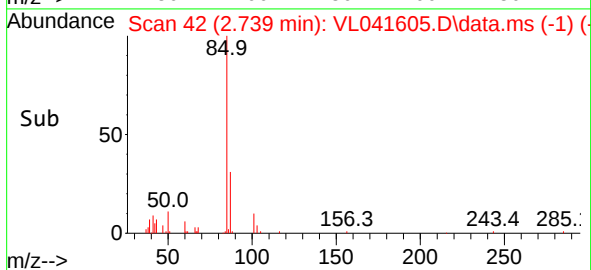
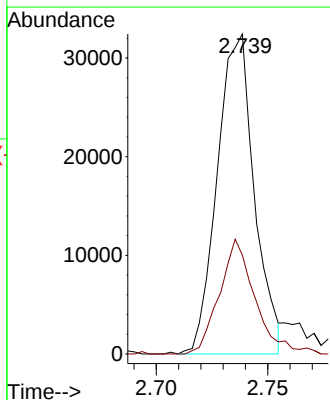
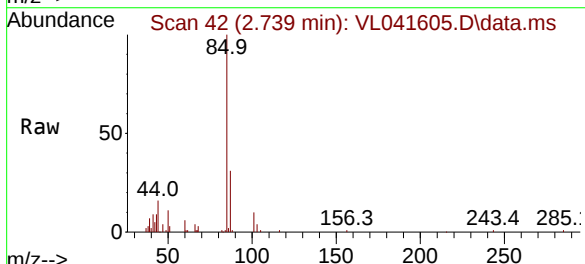
Instrument :
MSVOA_L
ClientSampleId :

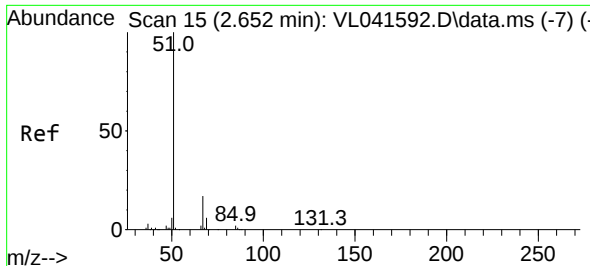
Tgt Ion: 49 Resp: 873658
Ion Ratio Lower Upper
49 100
128 48.0 23.8 71.5
130 61.9 30.4 91.3



#2
Dichlorodifluoromethane
Concen: 0.297 ppbv
RT: 2.739 min Scan# 42
Delta R.T. 0.029 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Tgt Ion: 85 Resp: 37493
Ion Ratio Lower Upper
85 100
87 30.9 26.3 39.5

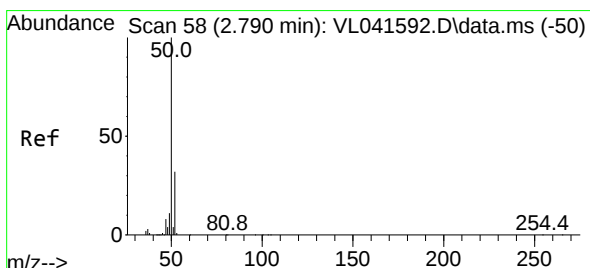
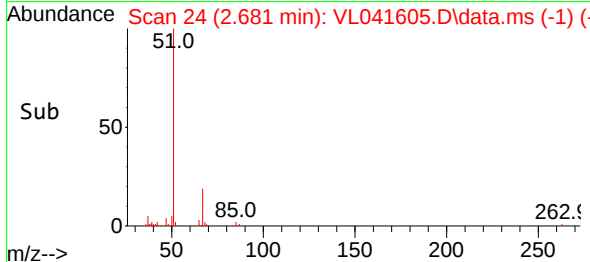
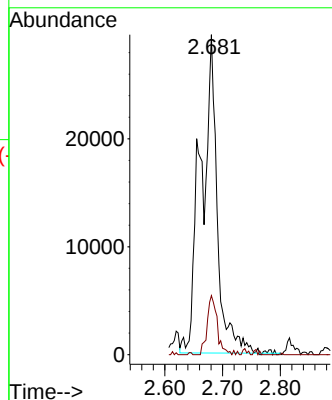
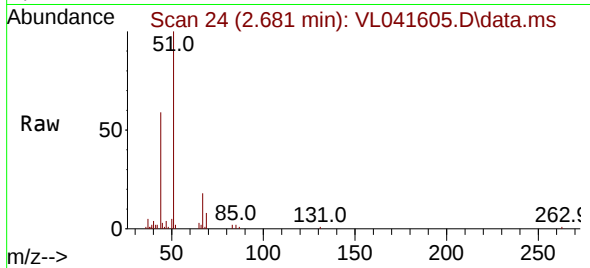




#3
Chlorodifluoromethane
Concen: 0.552 ppbv
RT: 2.681 min Scan# 24
Delta R.T. 0.029 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

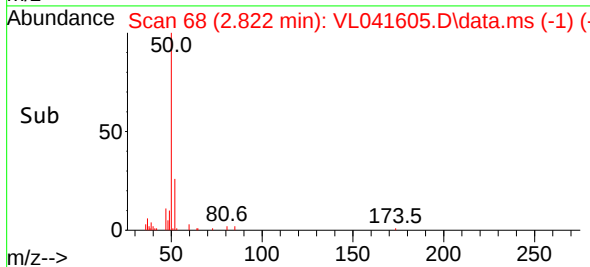
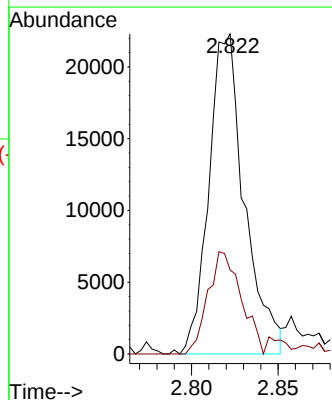
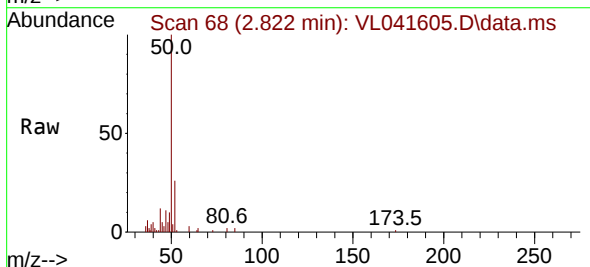
Instrument :
MSVOA_L
ClientSampleId :

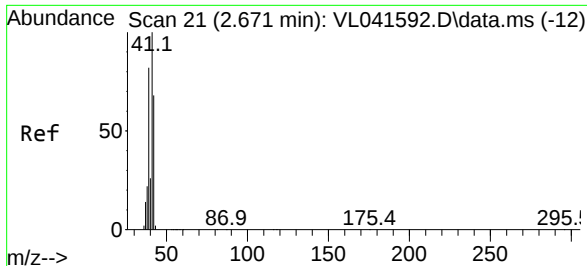
Tgt Ion: 51 Resp: 58473
Ion Ratio Lower Upper
51 100
67 11.6 14.1 21.1#



#4
Chloromethane
Concen: 0.546 ppbv
RT: 2.822 min Scan# 68
Delta R.T. 0.032 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Tgt Ion: 50 Resp: 31818
Ion Ratio Lower Upper
50 100
52 25.3 25.4 38.2#





#9

Propene

Concen: 1.270 ppbv

RT: 2.706 min Scan# 31

Delta R.T. 0.036 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

Instrument :

MSVOA_L

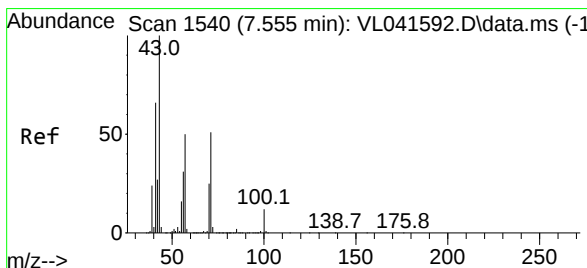
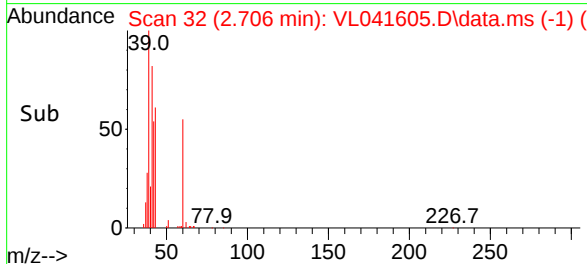
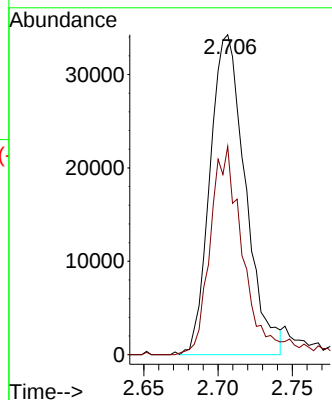
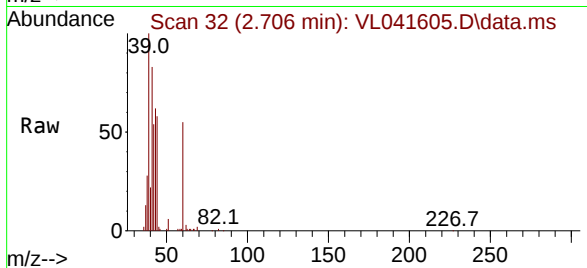
ClientSampleId :

Tgt Ion: 41 Resp: 56780

Ion Ratio Lower Upper

41 100

42 62.4 55.2 82.8



#10

Heptane

Concen: 0.160 ppbv

RT: 7.574 min Scan# 1546

Delta R.T. 0.020 min

Lab File: VL041605.D

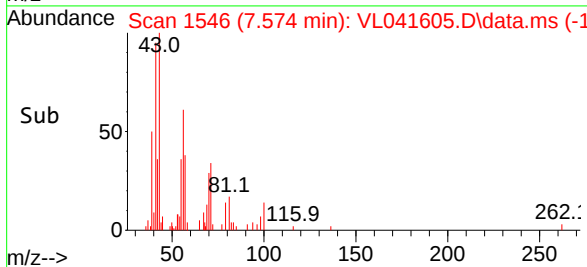
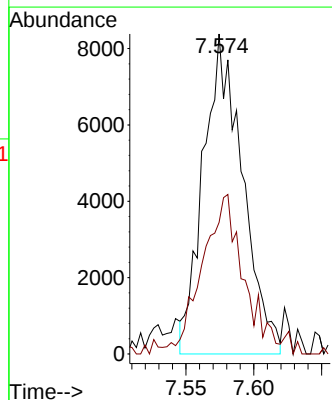
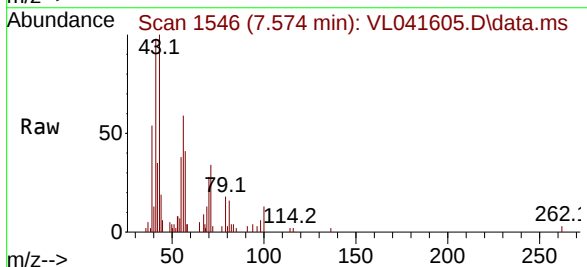
Acq: 18 Sep 2024 13:42

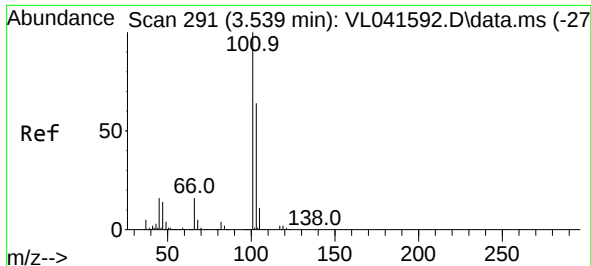
Tgt Ion: 43 Resp: 16778

Ion Ratio Lower Upper

43 100

57 56.4 39.8 59.8

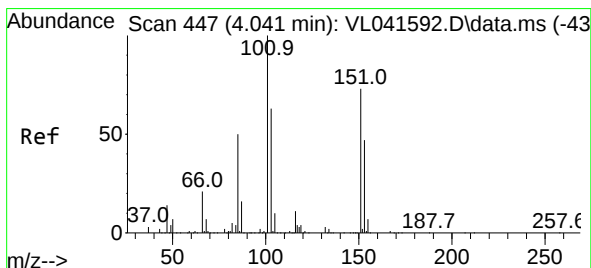
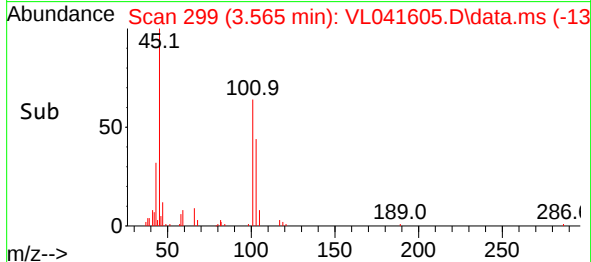
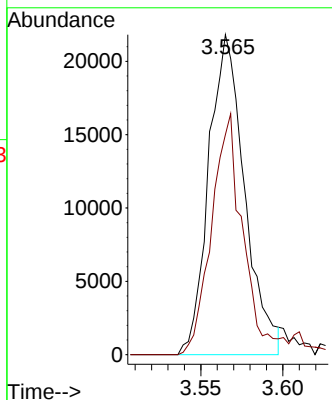
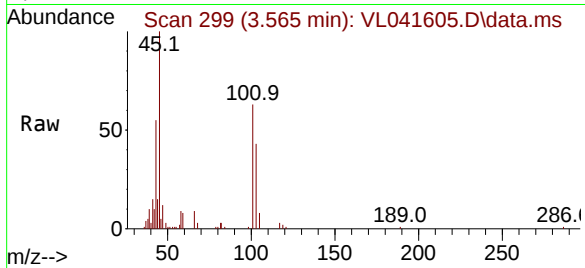




#11
Trichlorofluoromethane
Concen: 0.247 ppbv
RT: 3.565 min Scan# 291
Delta R.T. 0.026 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

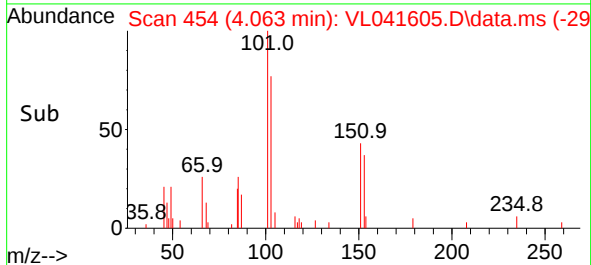
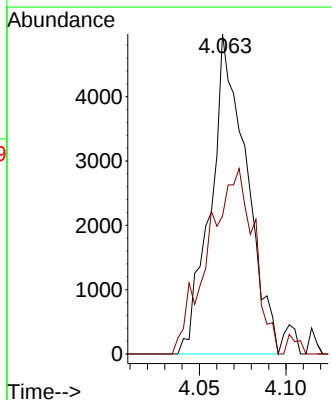
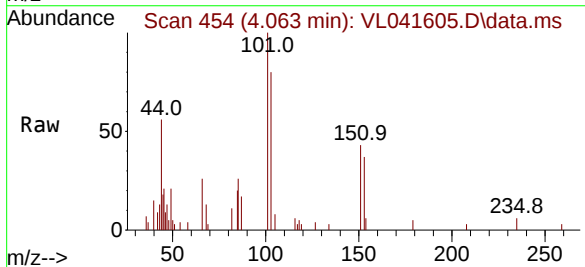
Instrument :
MSVOA_L
ClientSampleId :

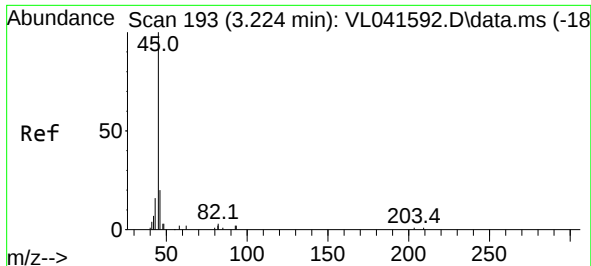
Tgt Ion:101 Resp: 33119
Ion Ratio Lower Upper
101 100
103 68.8 51.2 76.8



#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.073 ppbv
RT: 4.063 min Scan# 454
Delta R.T. 0.023 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Tgt Ion:101 Resp: 7125
Ion Ratio Lower Upper
101 100
151 76.0 59.4 89.2

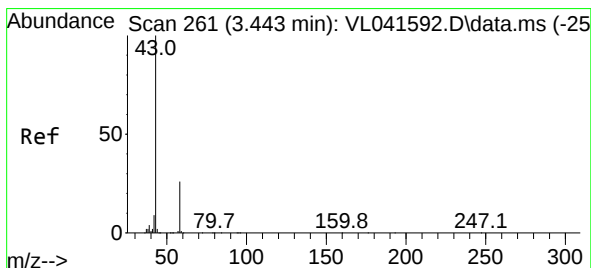
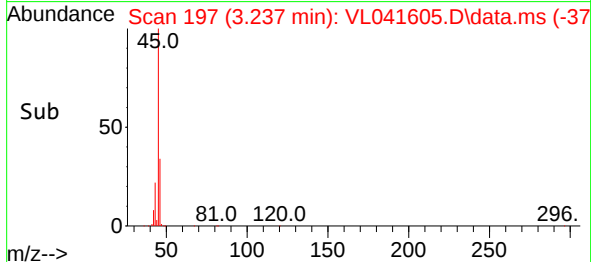
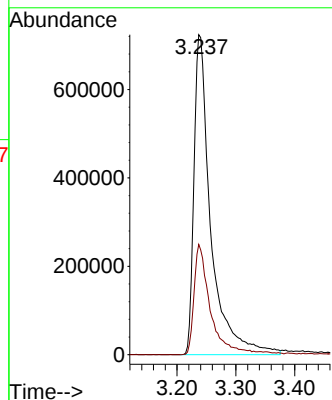
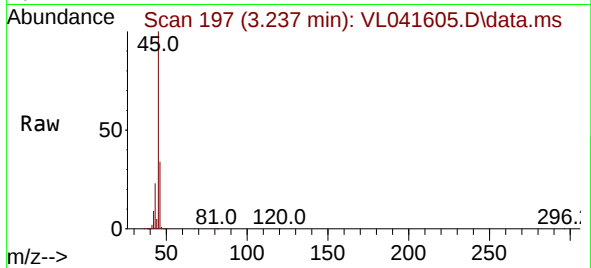




#13
 Ethanol
 Concen: 428.905 ppbv
 RT: 3.237 min Scan# 197
 Delta R.T. 0.013 min
 Lab File: VL041605.D
 Acq: 18 Sep 2024 13:42

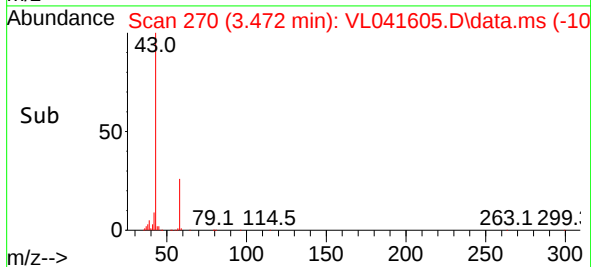
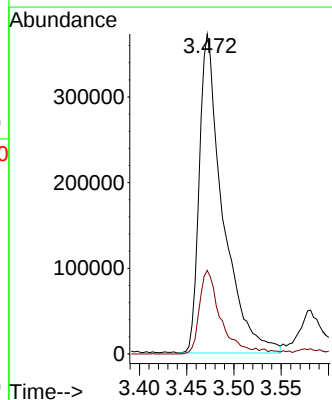
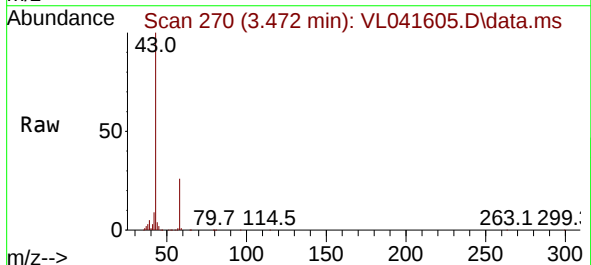
Instrument :
 MSVOA_L
 ClientSampleId :

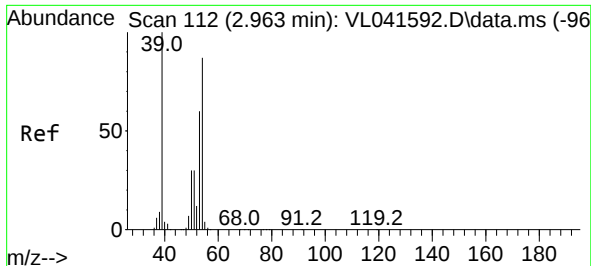
Tgt Ion: 45 Resp: 1441284
 Ion Ratio Lower Upper
 45 100
 46 34.3 15.2 60.8



#15
 Acetone
 Concen: 5.869 ppbv
 RT: 3.472 min Scan# 270
 Delta R.T. 0.029 min
 Lab File: VL041605.D
 Acq: 18 Sep 2024 13:42

Tgt Ion: 43 Resp: 643754
 Ion Ratio Lower Upper
 43 100
 58 24.5 21.5 32.3

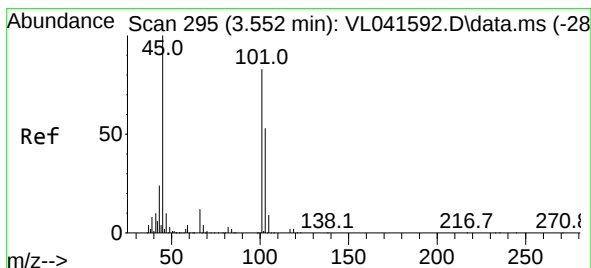
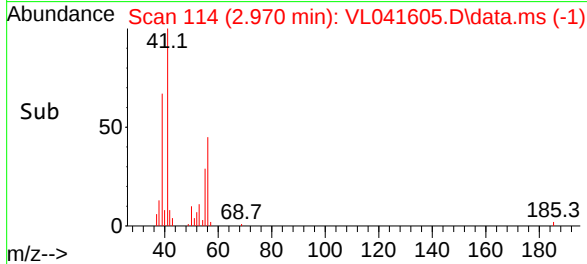
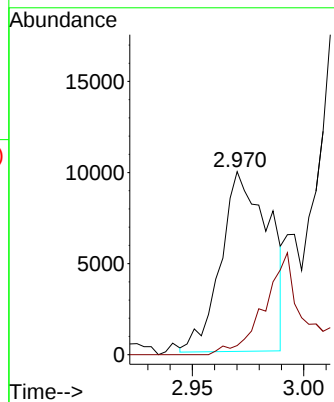
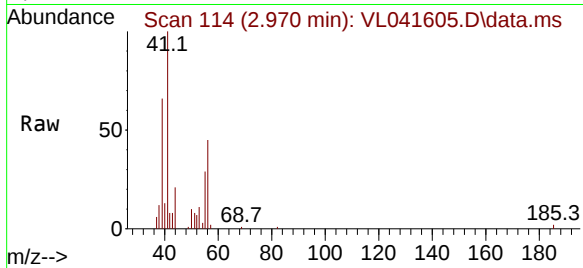




#16
1,3-Butadiene
Concen: 0.278 ppbv
RT: 2.970 min Scan# 11
Delta R.T. 0.007 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

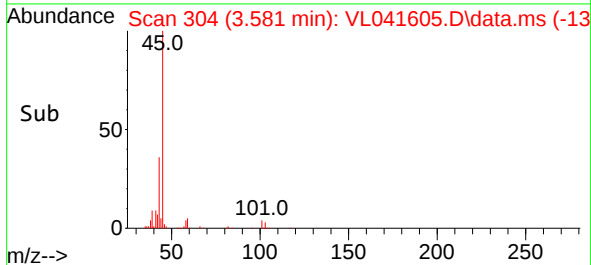
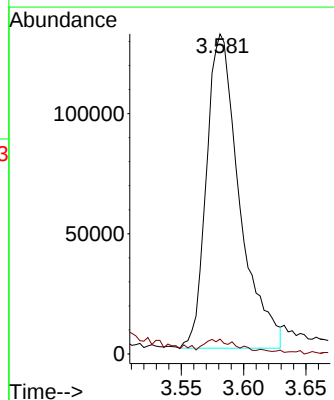
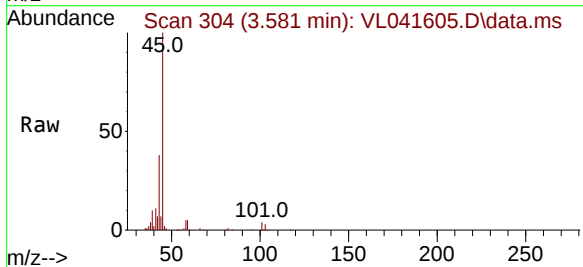
Instrument :
MSVOA_L
ClientSampleId :

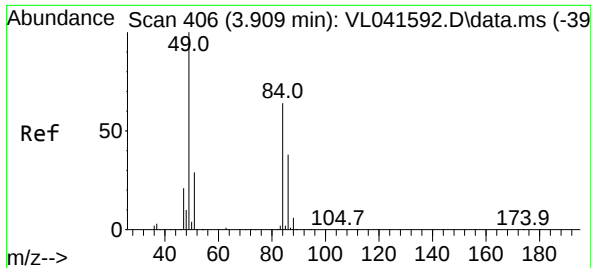
Tgt Ion: 39 Resp: 14856
Ion Ratio Lower Upper
39 100
54 0.0 62.9 94.3#



#19
Isopropyl Alcohol
Concen: 4.290 ppbv
RT: 3.581 min Scan# 304
Delta R.T. 0.029 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

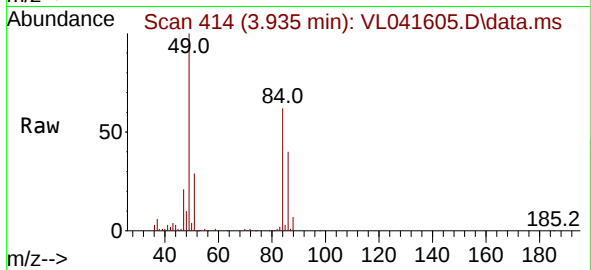
Tgt Ion: 45 Resp: 240865
Ion Ratio Lower Upper
45 100
58 5.7 2.1 3.1#





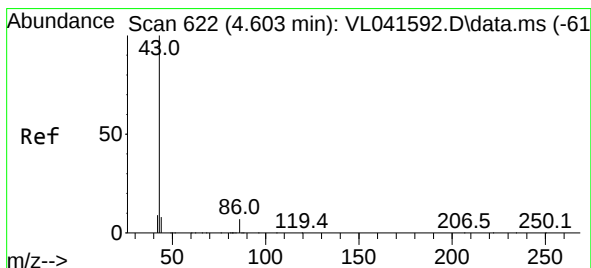
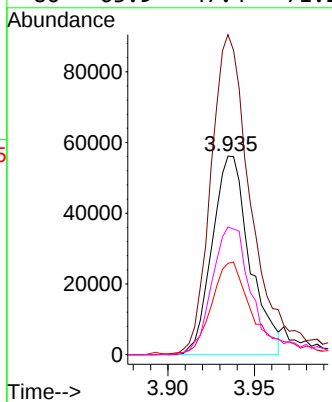
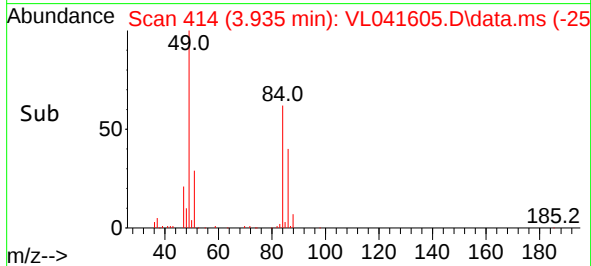
#20
Methylene Chloride
Concen: 2.056 ppbv
RT: 3.935 min Scan# 411
Delta R.T. 0.026 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion: 84 Resp: 84712

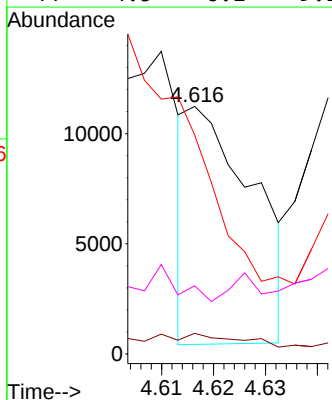
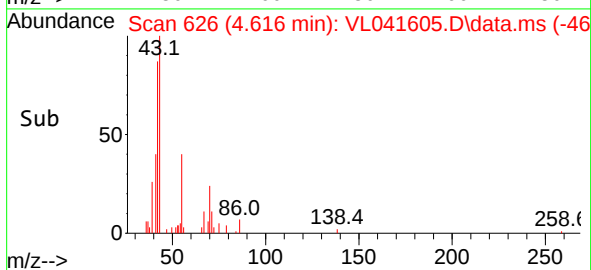
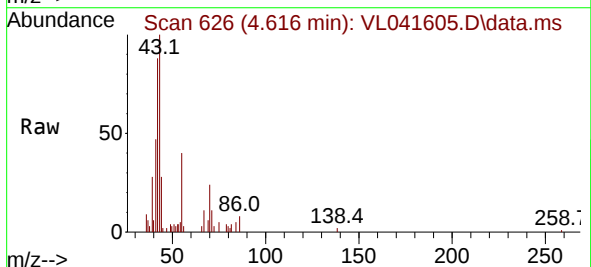
Ion	Ratio	Lower	Upper
84	100		
49	159.8	124.3	186.5
51	44.9	36.3	54.5
86	63.9	47.4	71.2

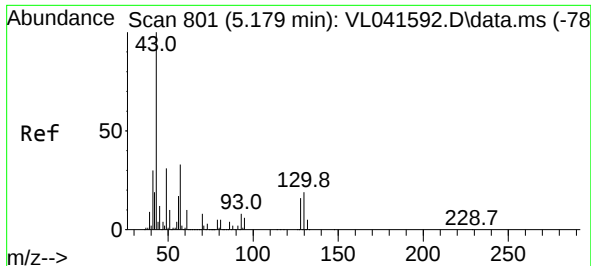


#23
Vinyl Acetate
Concen: 0.156 ppbv
RT: 4.616 min Scan# 626
Delta R.T. 0.013 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Tgt Ion: 43 Resp: 9424

Ion	Ratio	Lower	Upper
43	100		
86	11.8	4.9	7.3#
42	122.0	8.0	12.0#
44	4.5	6.1	9.1#

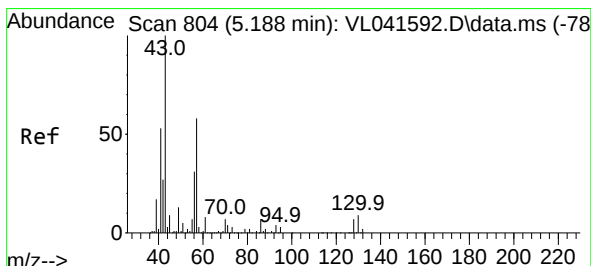
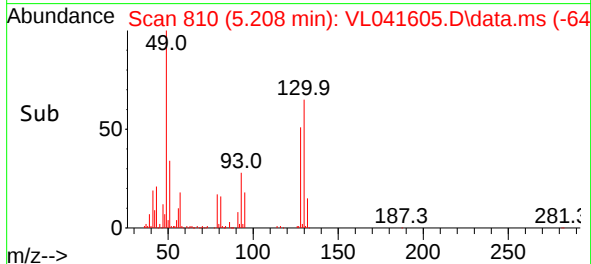
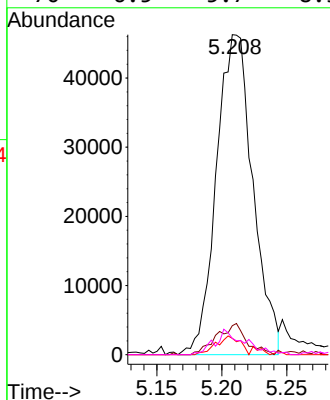
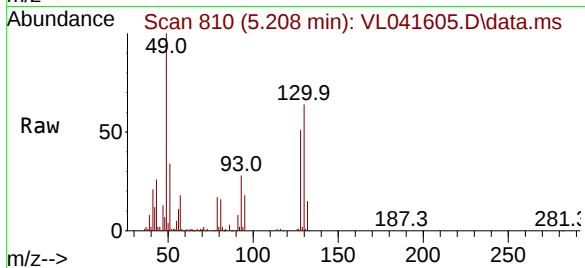




#25
Ethyl Acetate
Concen: 0.459 ppbv
RT: 5.208 min Scan# 810
Delta R.T. 0.029 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

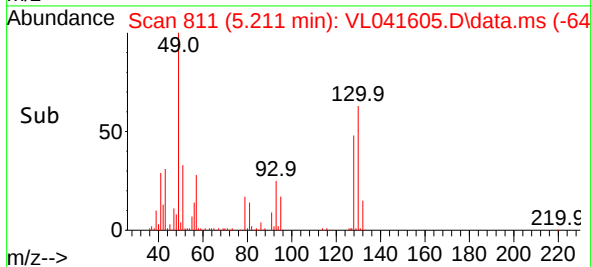
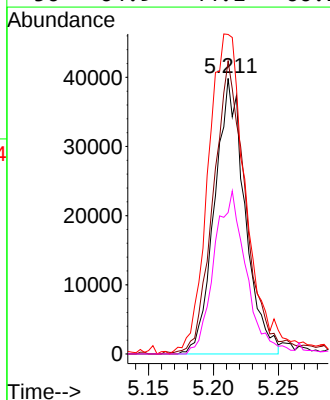
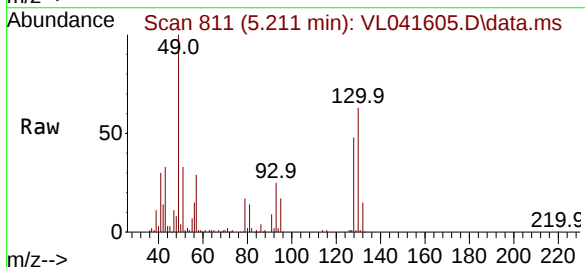
Instrument :
MSVOA_L
ClientSampleId :

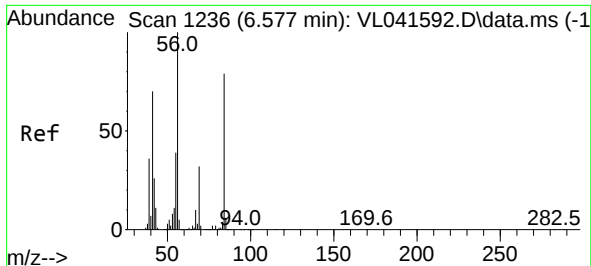
Tgt Ion: 43	Resp: 90367
Ion Ratio	Lower Upper
43 100	
45 8.8	8.2 12.2
61 4.6	8.0 12.0
70 6.5	5.7 8.5



#26
Hexane
Concen: 0.786 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.023 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Tgt Ion: 57	Resp: 64569
Ion Ratio	Lower Upper
57 100	
41 118.5	75.7 113.5
43 148.6	198.5 297.7
56 64.9	44.1 66.1

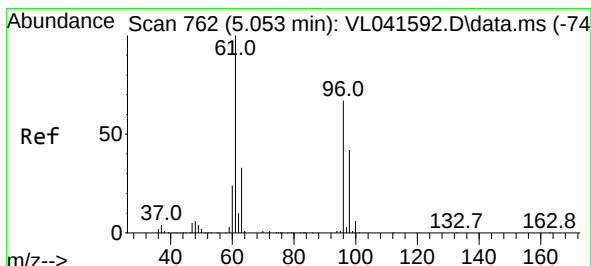
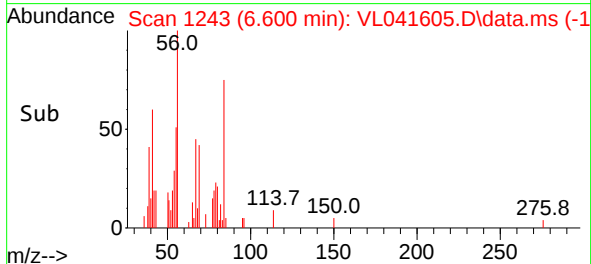
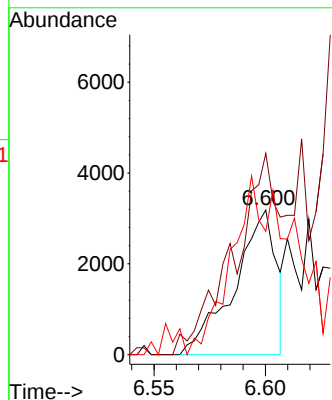
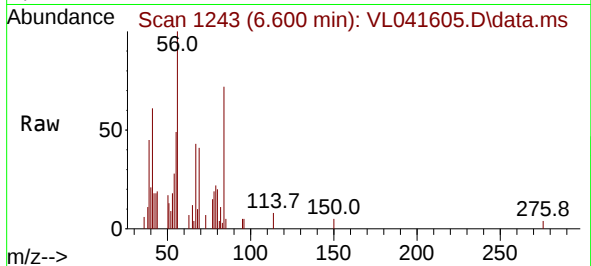




#30
Cyclohexane
Concen: 0.066 ppbv
RT: 6.600 min Scan# 11
Delta R.T. 0.023 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

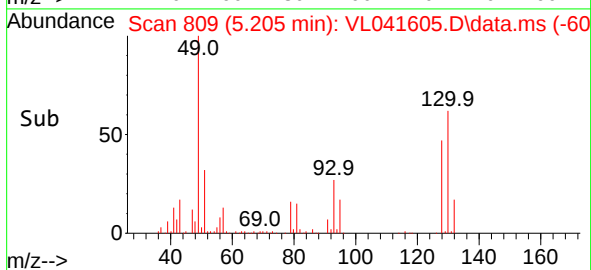
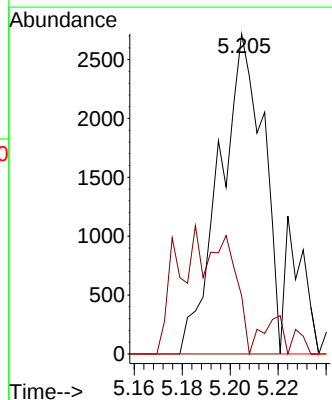
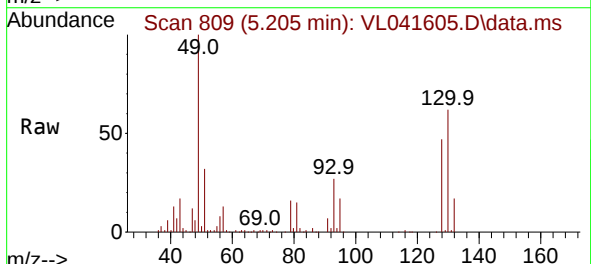
Instrument :
MSVOA_L
ClientSampleId :

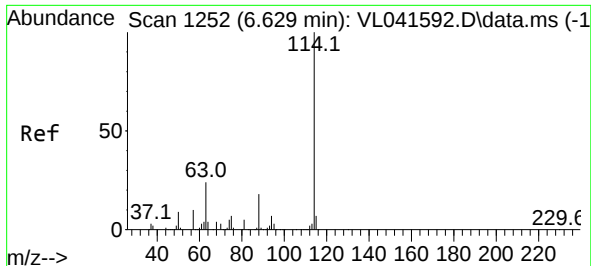
Tgt Ion: 84 Resp: 4153
Ion Ratio Lower Upper
84 100
56 0.0 111.5 167.3#
41 229.9 70.9 106.3#



#31
cis-1,2-Dichloroethene
Concen: 0.044 ppbv
RT: 5.205 min Scan# 809
Delta R.T. 0.151 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Tgt Ion: 61 Resp: 3424
Ion Ratio Lower Upper
61 100
96 6.3 53.5 80.3#
98 0.0 33.7 50.5#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.652 min Scan# 114

Delta R.T. 0.023 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

Instrument :

MSVOA_L

ClientSampleId :

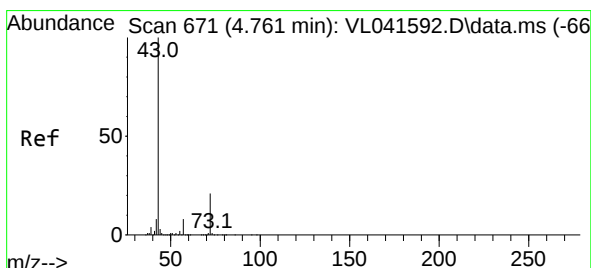
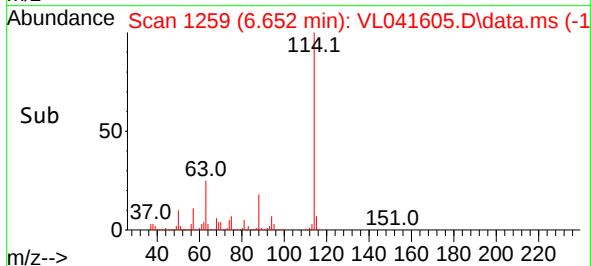
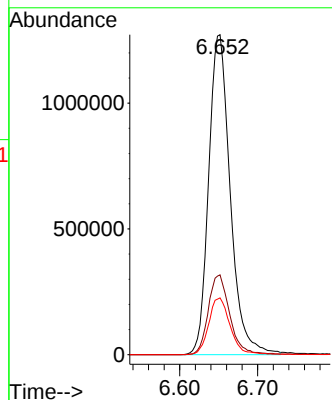
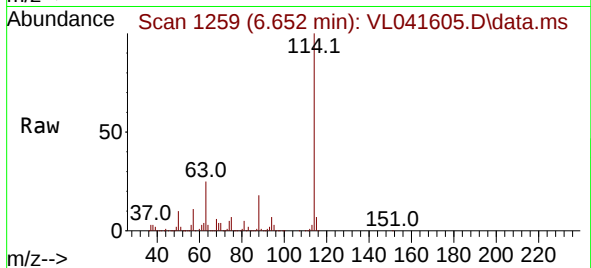
Tgt Ion:114 Resp: 2449749

Ion Ratio Lower Upper

114 100

63 25.1 20.2 30.2

88 17.8 14.2 21.4



#34

2-Butanone

Concen: 0.565 ppbv

RT: 4.790 min Scan# 680

Delta R.T. 0.029 min

Lab File: VL041605.D

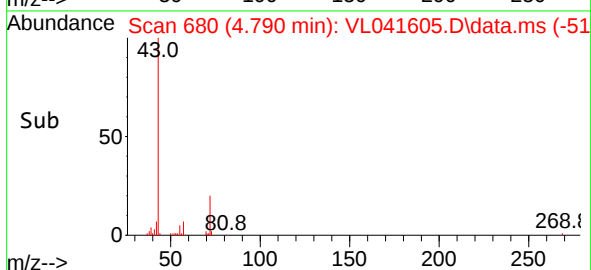
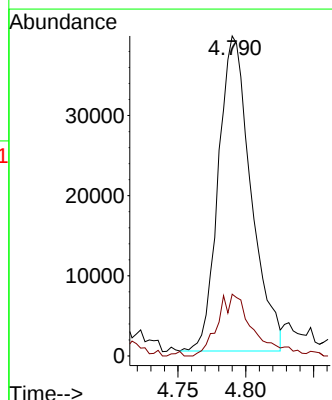
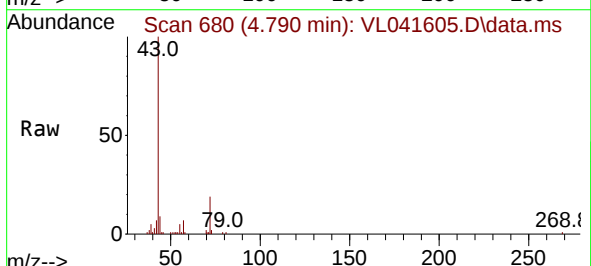
Acq: 18 Sep 2024 13:42

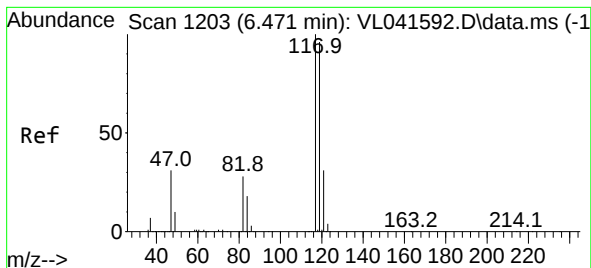
Tgt Ion: 43 Resp: 65953

Ion Ratio Lower Upper

43 100

72 22.1 16.8 25.2





#35

Carbon Tetrachloride

Concen: 0.078 ppbv

RT: 6.491 min Scan# 1170

Delta R.T. 0.020 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

Instrument :

MSVOA_L

ClientSampleId :

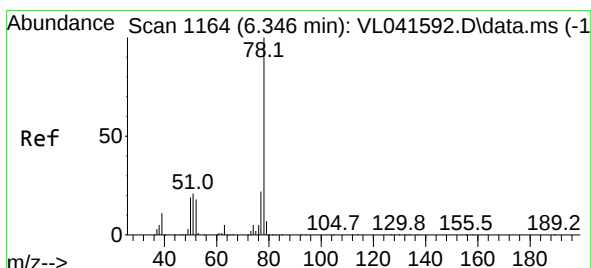
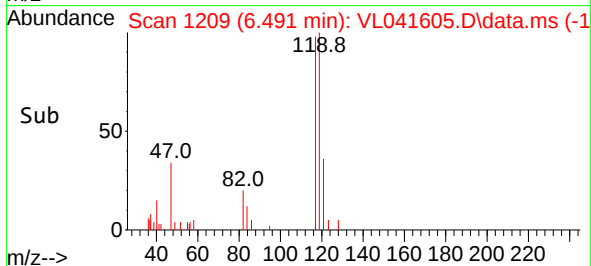
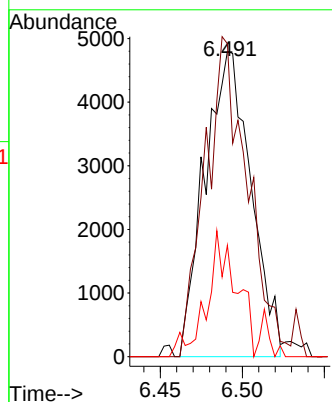
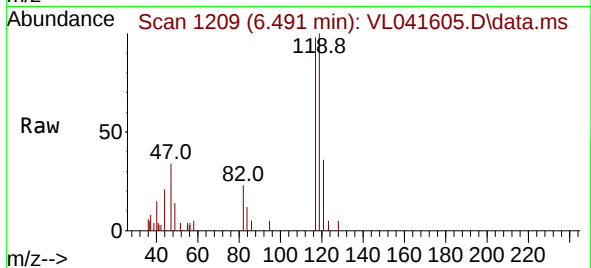
Tgt Ion:117 Resp: 9382

Ion Ratio Lower Upper

117 100

119 102.5 76.8 115.2

121 32.9 25.0 37.6



#36

Benzene

Concen: 0.428 ppbv

RT: 6.365 min Scan# 1170

Delta R.T. 0.020 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

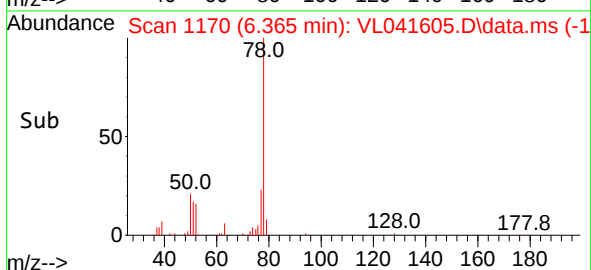
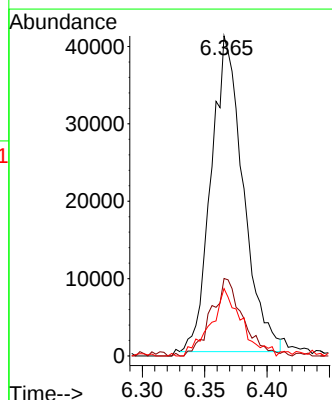
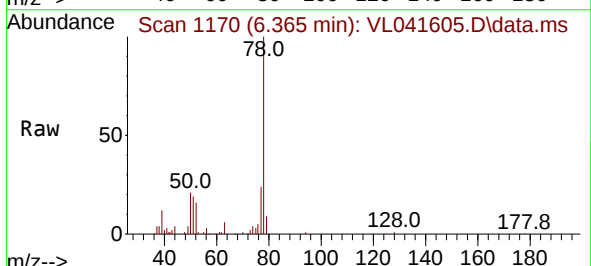
Tgt Ion: 78 Resp: 72852

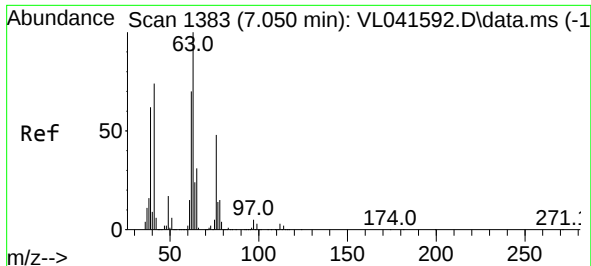
Ion Ratio Lower Upper

78 100

77 24.5 17.8 26.6

50 21.3 15.4 23.0





#39

1,2-Dichloropropane

Concen: 8.708 ppbv

RT: 6.652 min Scan# 1

Delta R.T. -0.398 min

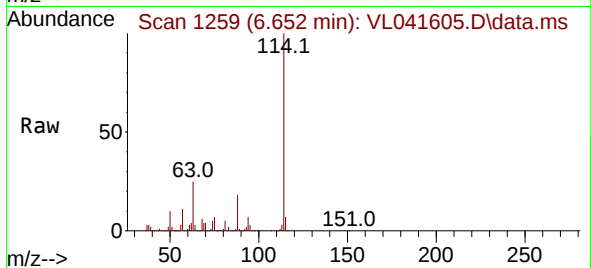
Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

Instrument :

MSVOA_L

ClientSampleId :



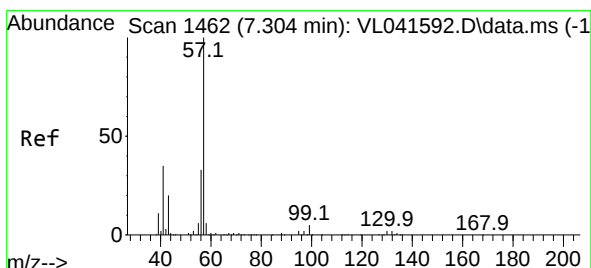
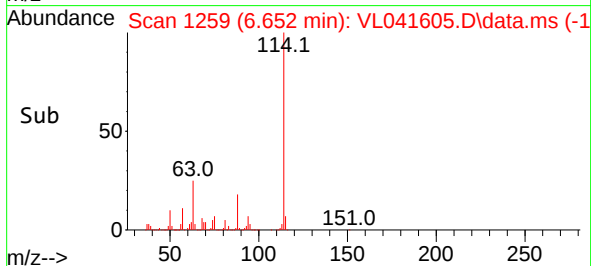
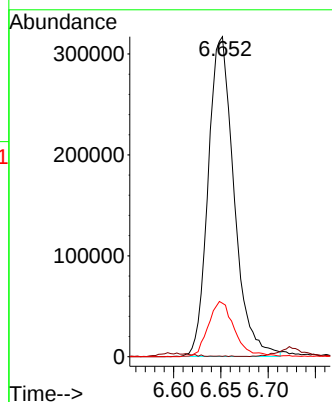
Tgt Ion: 63 Resp: 602689

Ion Ratio Lower Upper

63 100

41 0.0 59.5 89.3#

62 16.7 56.2 84.2#



#44

2,2,4-Trimethylpentane

Concen: 0.197 ppbv

RT: 7.327 min Scan# 1469

Delta R.T. 0.023 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

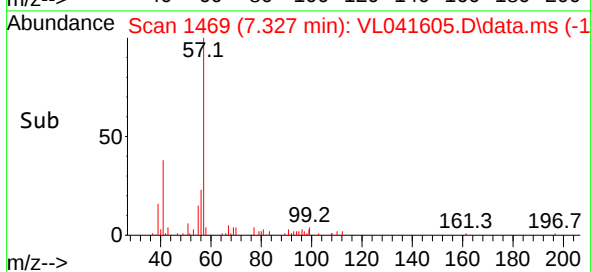
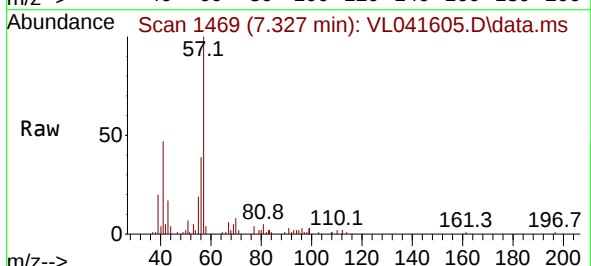
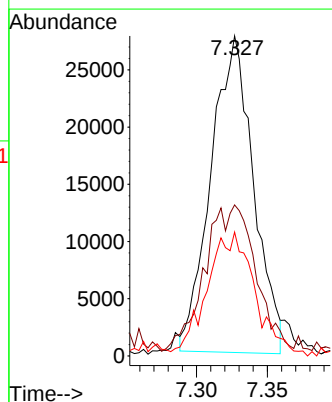
Tgt Ion: 57 Resp: 57890

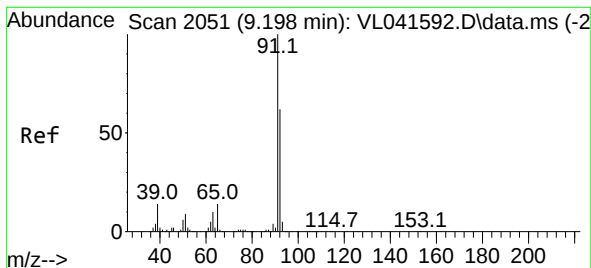
Ion Ratio Lower Upper

57 100

41 61.7 27.0 40.6#

56 43.9 25.5 38.3#





#53

Toluene

Concen: 2.020 ppbv

RT: 9.214 min Scan# 2051

Delta R.T. 0.016 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

Instrument :

MSVOA_L

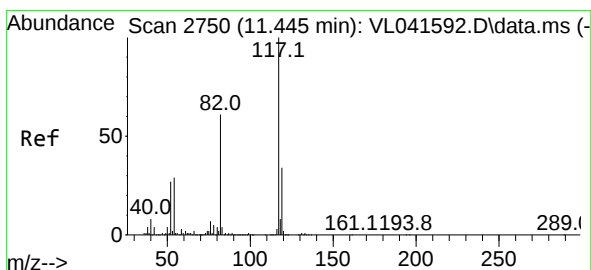
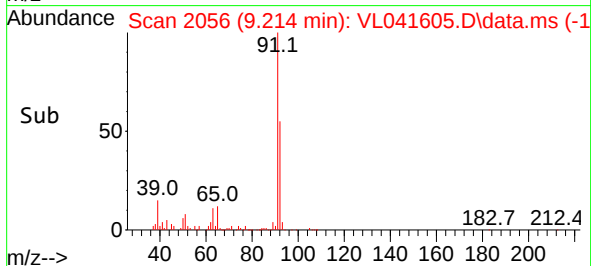
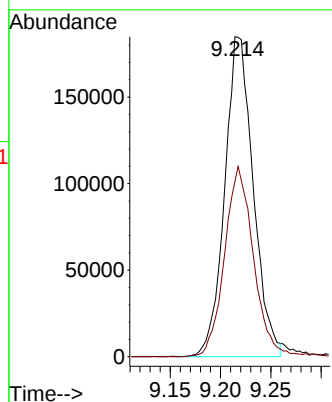
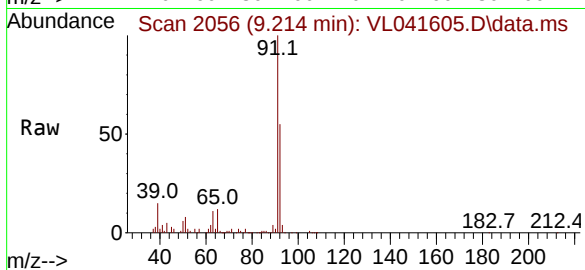
ClientSampleId :

Tgt Ion: 91 Resp: 364858

Ion Ratio Lower Upper

91 100

92 60.9 48.9 73.3



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.459 min Scan# 2754

Delta R.T. 0.013 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

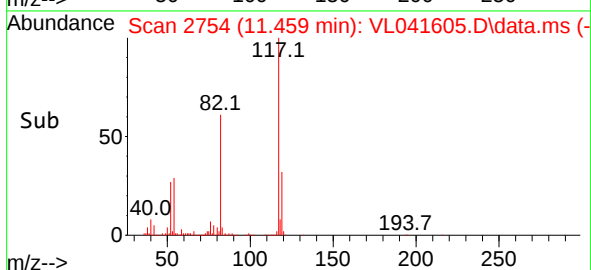
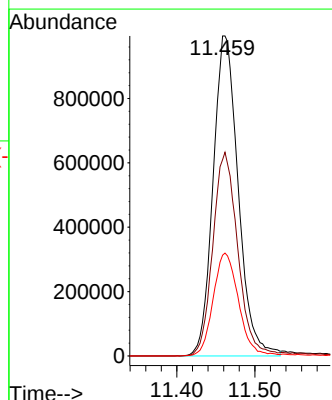
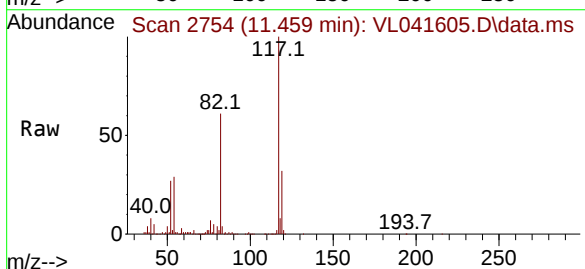
Tgt Ion: 117 Resp: 2230436

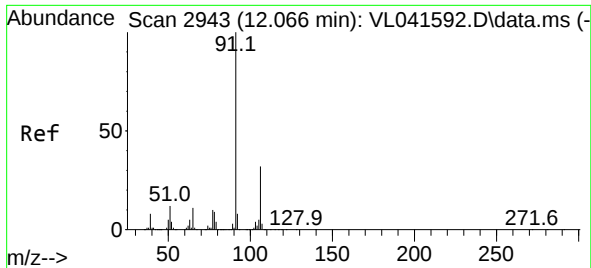
Ion Ratio Lower Upper

117 100

82 65.0 49.4 74.2

119 33.3 24.4 36.6

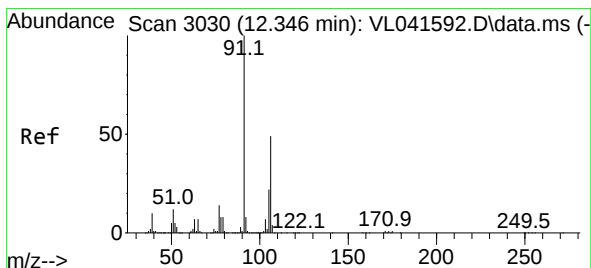
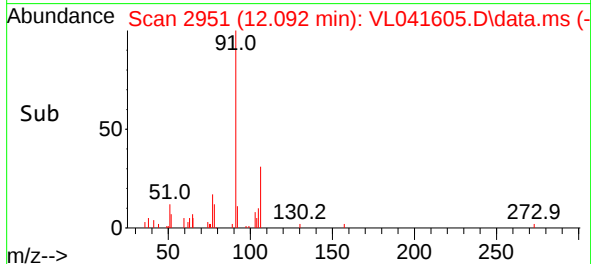
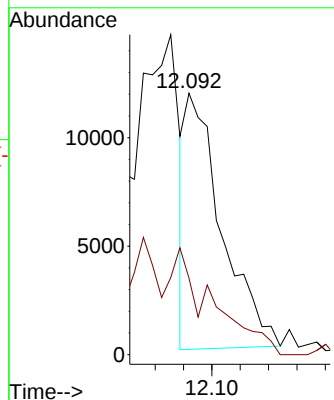
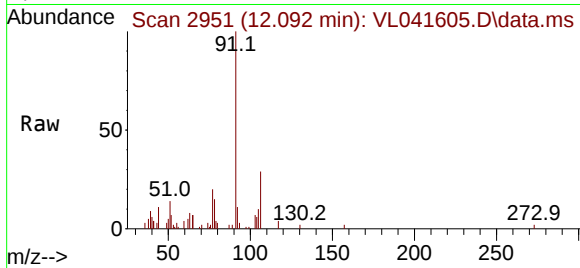




#58
Ethyl Benzene
Concen: 0.044 ppbv
RT: 12.092 min Scan# 2943
Delta R.T. 0.026 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

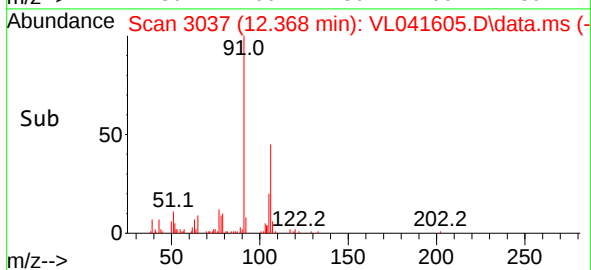
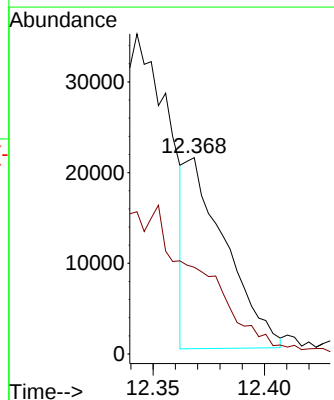
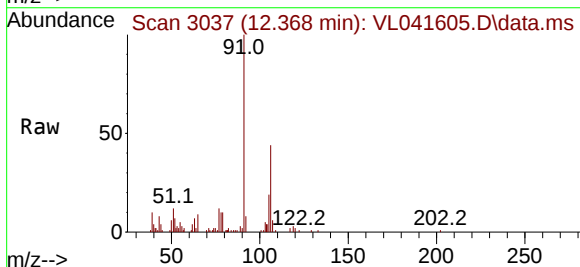
Instrument :
MSVOA_L
ClientSampleId :

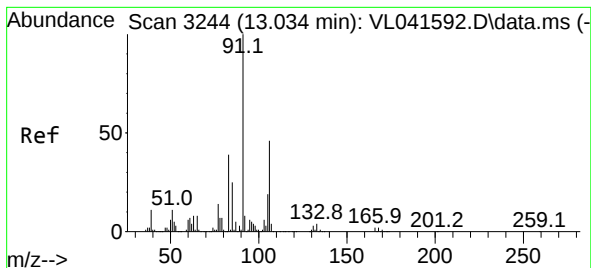
Tgt Ion: 91 Resp: 10440
Ion Ratio Lower Upper
91 100
106 30.2 25.8 38.6



#59
m/p-Xylene
Concen: 0.126 ppbv
RT: 12.368 min Scan# 3037
Delta R.T. 0.023 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Tgt Ion: 91 Resp: 26874
Ion Ratio Lower Upper
91 100
106 0.0 36.8 55.2#





#60

o-Xylene

Concen: 0.102 ppbv

RT: 13.047 min Scan# 31

Delta R.T. 0.013 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

Instrument :

MSVOA_L

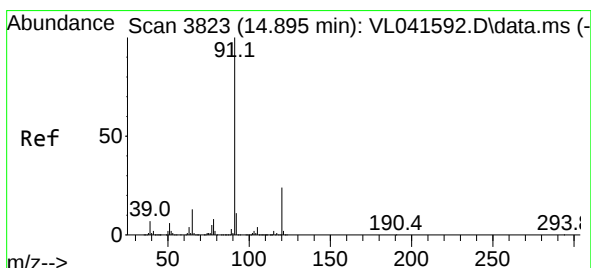
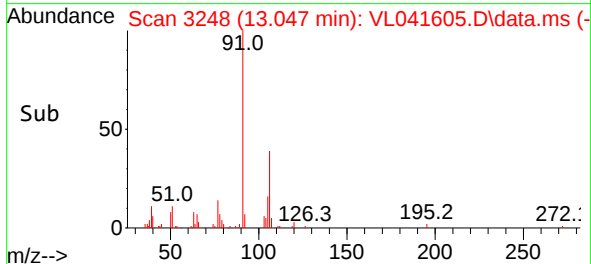
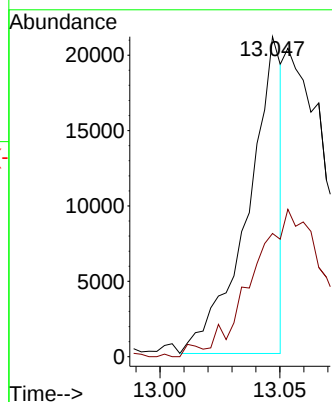
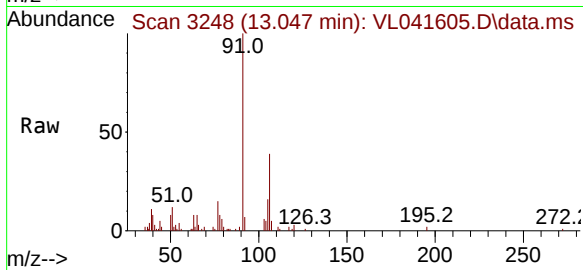
ClientSampleId :

Tgt Ion: 91 Resp: 20711

Ion Ratio Lower Upper

91 100

106 0.0 23.1 69.3#



#64

n-propylbenzene

Concen: 0.043 ppbv

RT: 14.915 min Scan# 3829

Delta R.T. 0.020 min

Lab File: VL041605.D

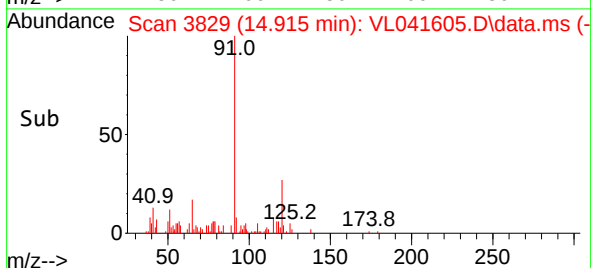
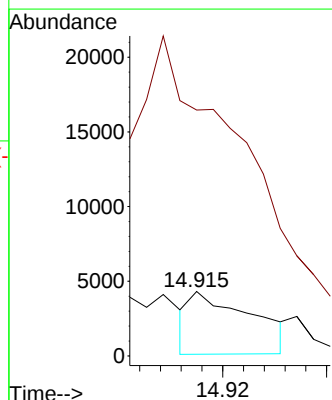
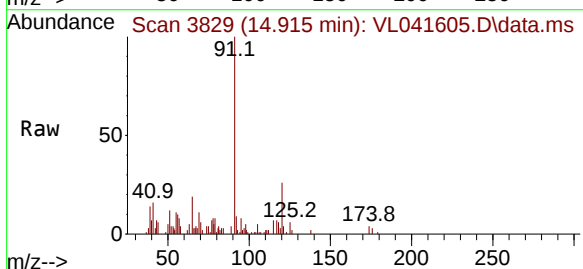
Acq: 18 Sep 2024 13:42

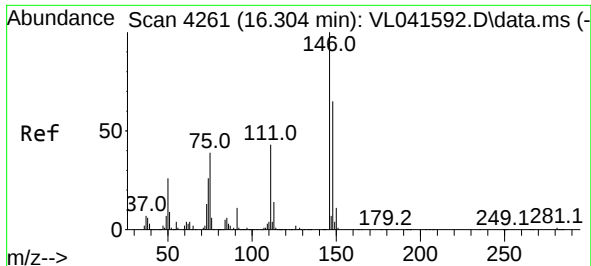
Tgt Ion: 120 Resp: 3454

Ion Ratio Lower Upper

120 100

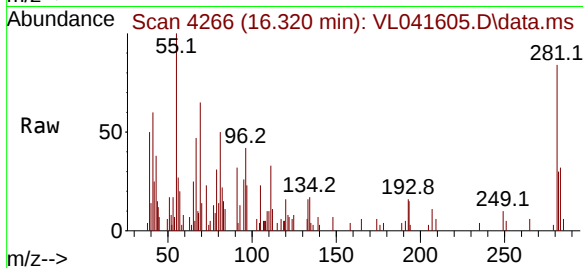
91 0.0 366.4 549.6#



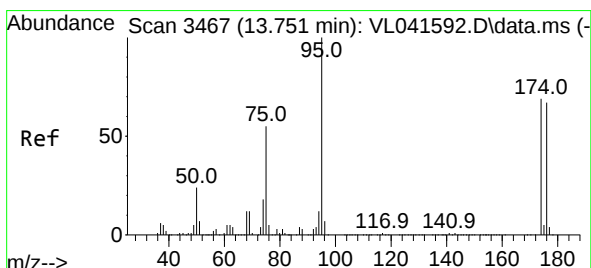
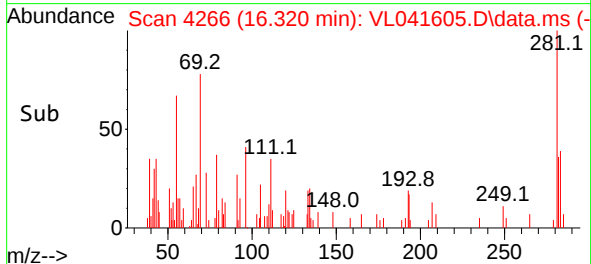
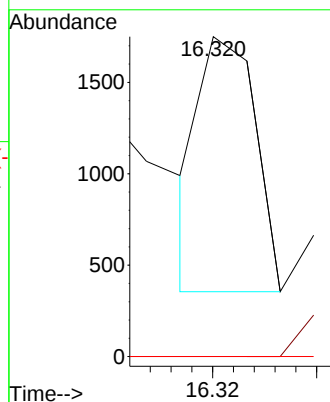


#66
Benzyl Chloride
Concen: 0.035 ppbv
RT: 16.320 min Scan# 41
Delta R.T. 0.016 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Instrument :
MSVOA_L
ClientSampleId :

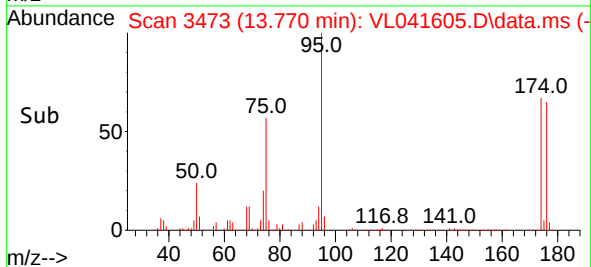
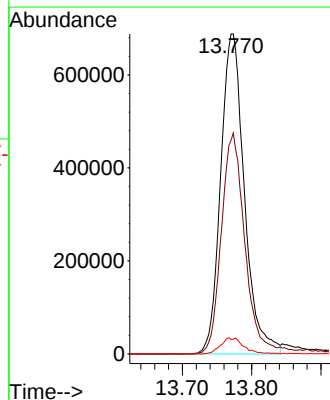
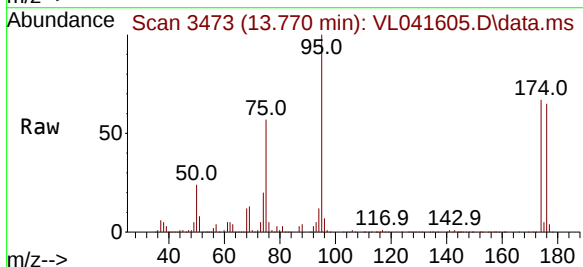


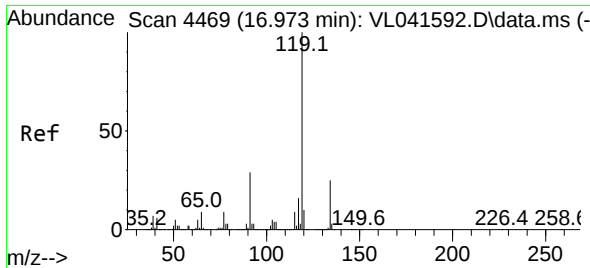
Tgt Ion: 91 Resp: 512
Ion Ratio Lower Upper
91 100
126 0.0 15.4 23.2#
128 0.0 4.8 7.2#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.973 ppbv
RT: 13.770 min Scan# 3473
Delta R.T. 0.020 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Tgt Ion: 95 Resp: 1637558
Ion Ratio Lower Upper
95 100
174 69.0 55.8 83.8
175 5.1 4.1 6.1

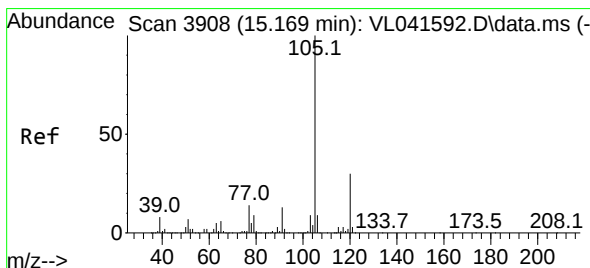
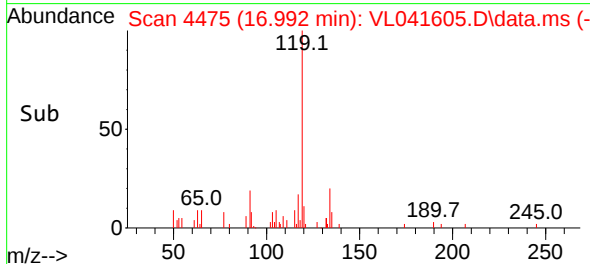
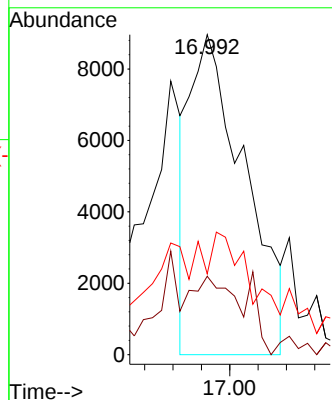
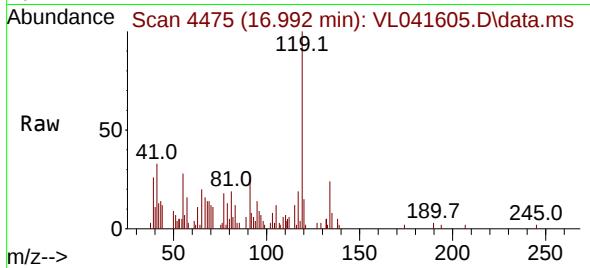




#69
p-Isopropyltoluene
Concen: 0.038 ppbv
RT: 16.992 min Scan# 4469
Delta R.T. 0.020 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

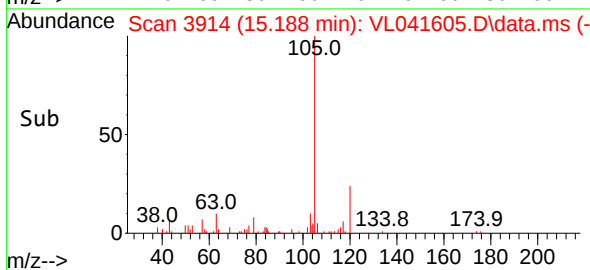
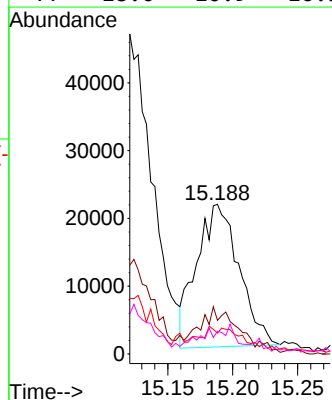
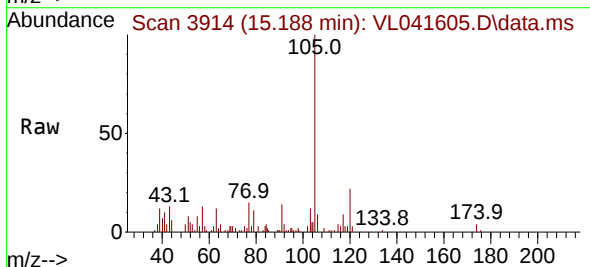
Instrument :
MSVOA_L
ClientSampleId :

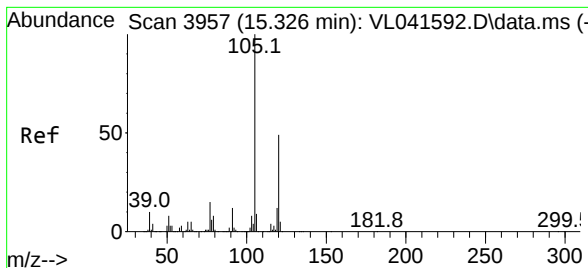
Tgt Ion:119 Resp: 12120
Ion Ratio Lower Upper
119 100
134 0.0 20.5 30.7#
91 61.9 23.1 34.7#



#72
4-Ethyltoluene
Concen: 0.201 ppbv
RT: 15.188 min Scan# 3914
Delta R.T. 0.020 min
Lab File: VL041605.D
Acq: 18 Sep 2024 13:42

Tgt Ion:105 Resp: 47913
Ion Ratio Lower Upper
105 100
120 32.9 24.1 36.1
91 16.2 10.2 15.2#
77 18.0 10.9 16.3#





#73

1,3,5-Trimethylbenzene

Concen: 0.111 ppbv

RT: 15.339 min Scan# 3957

Delta R.T. 0.013 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

Instrument :

MSVOA_L

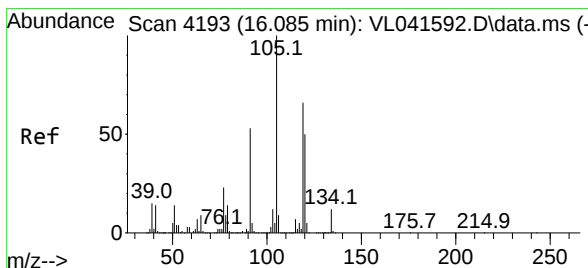
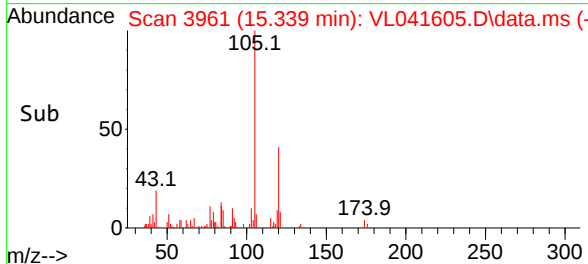
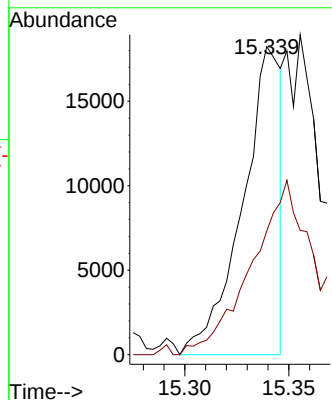
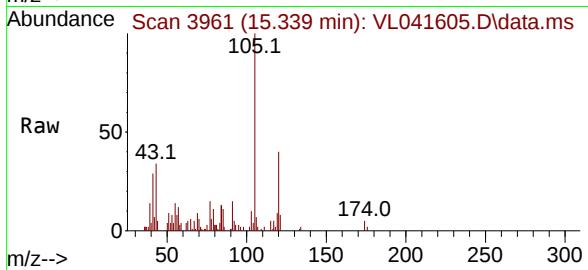
ClientSampleId :

Tgt Ion:105 Resp: 23310

Ion Ratio Lower Upper

105 100

120 40.1 39.4 59.0



#74

1,2,4-Trimethylbenzene

Concen: 0.754 ppbv

RT: 16.101 min Scan# 4198

Delta R.T. 0.016 min

Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

Tgt Ion:105 Resp: 185611

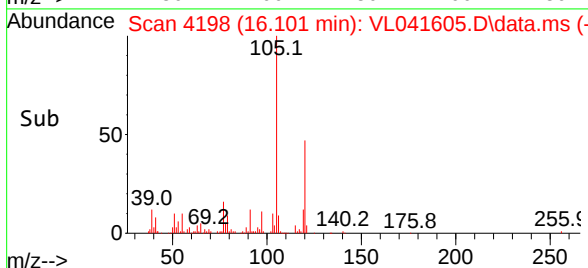
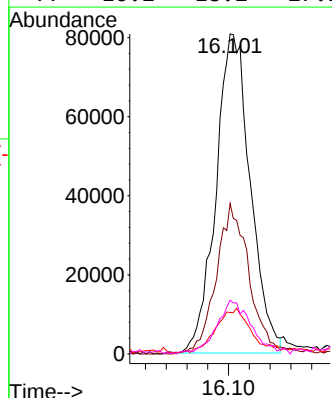
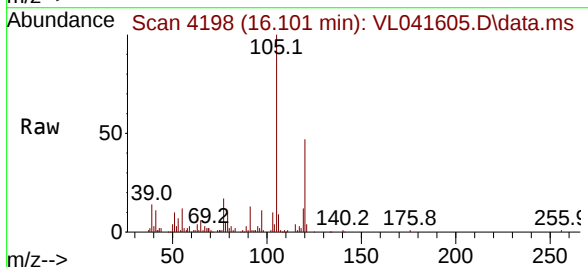
Ion Ratio Lower Upper

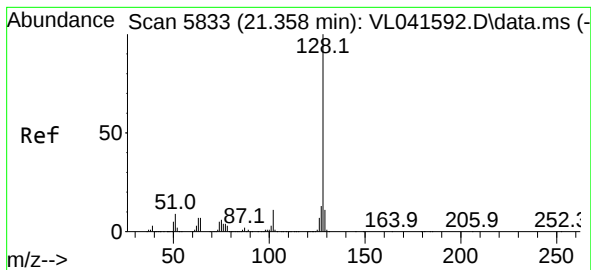
105 100

120 46.6 39.9 59.9

91 12.4 42.6 63.8#

77 16.2 18.2 27.2#





#79

Naphthalene

Concen: 0.057 ppbv

RT: 21.384 min Scan# 5841

Delta R.T. 0.026 min

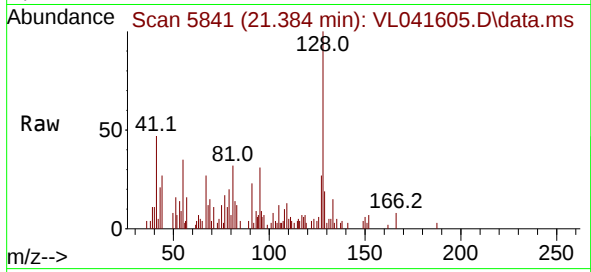
Lab File: VL041605.D

Acq: 18 Sep 2024 13:42

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion:128 Resp: 10240

Ion Ratio Lower Upper

128 100

127 23.3 10.1 15.1#

129 14.5 9.1 13.7#

