

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041923\
 Data File : VL040388.D
 Acq On : 19 Apr 2023 20:28
 Operator : SY/MD
 Sample : 02368-05 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VP-1ADL

Quant Time: Apr 20 05:14:07 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041323AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Apr 13 14:37:02 2023
 Response via : Initial Calibration

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

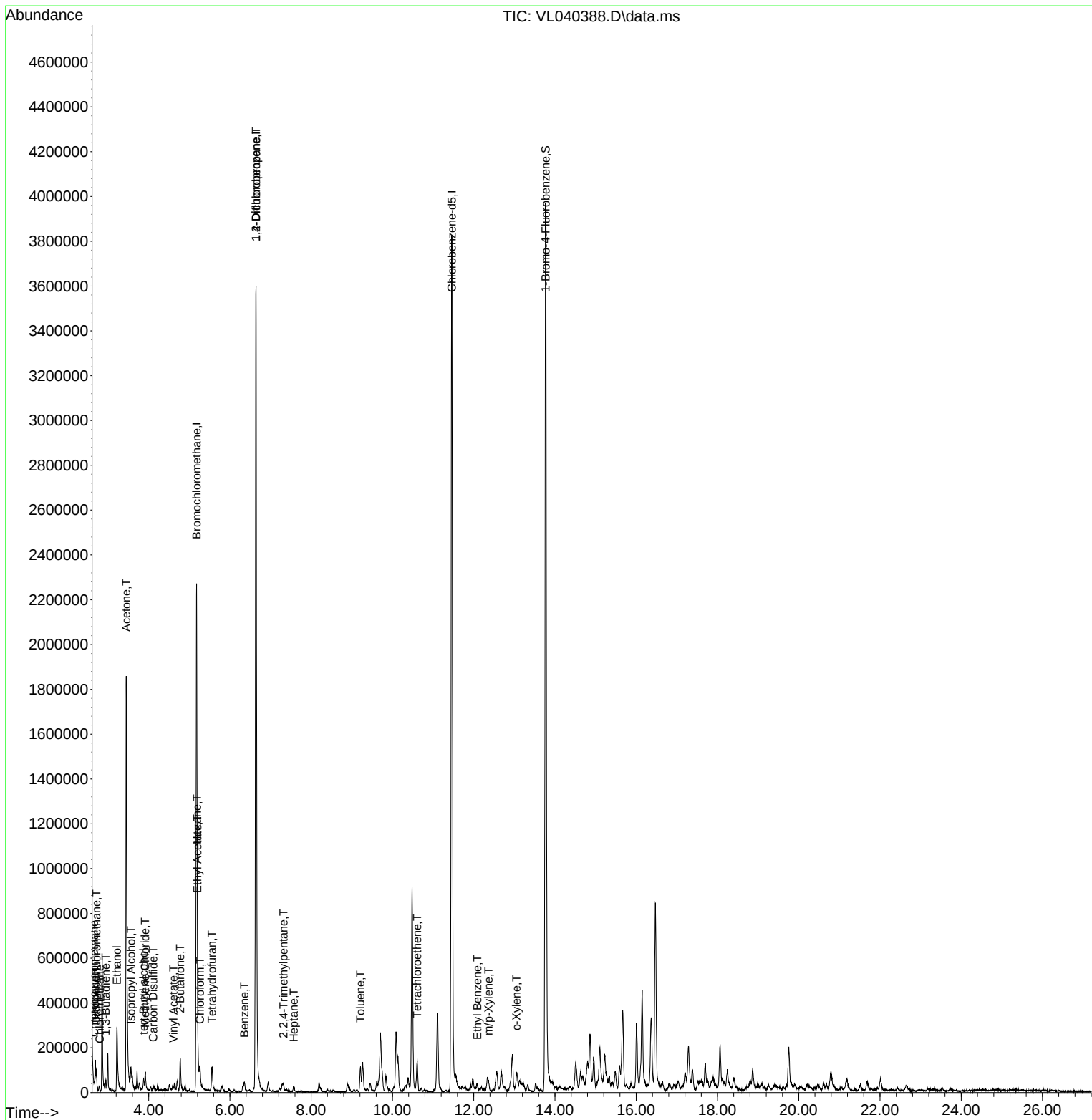
Internal Standards						
1) Bromochloromethane	5.179	49	1056221	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	6.642	114	2728148	10.000	ppbv	-0.01
55) Chlorobenzene-d5	11.462	117	2473857	10.000	ppbv	-0.01

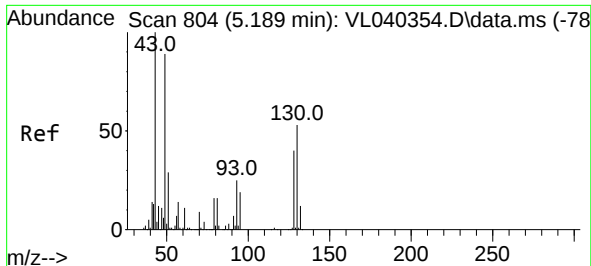
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.770	95	2040628	9.975	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.800%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.710	85	48578	0.255	ppbv	98
3) Chlorodifluoromethane	2.655	51	23725	0.172	ppbv #	91
4) Chloromethane	2.796	50	10899	0.125	ppbv #	85
9) Propene	2.681	41	25260	0.463	ppbv	85
10) Heptane	7.568	43	7717	0.062	ppbv #	76
13) Ethanol	3.221	45	326119	71.645	ppbv	98
15) Acetone	3.449	43	1881113	12.574	ppbv	97
16) 1,3-Butadiene	2.944	39	11183	0.181	ppbv #	35
17) tert-Butyl alcohol	3.877	59	31919	0.232	ppbv #	89
19) Isopropyl Alcohol	3.565	45	93514	1.370	ppbv #	1
20) Methylene Chloride	3.915	84	24566	0.411	ppbv	95
23) Vinyl Acetate	4.610	43	2813	0.074	ppbv #	82
25) Ethyl Acetate	5.198	43	20234	0.080	ppbv #	94
26) Hexane	5.195	57	13779	0.130	ppbv #	50
27) Carbon Disulfide	4.108	76	17005	0.124	ppbv #	33
29) Chloroform	5.266	83	16606	0.088	ppbv	95
34) 2-Butanone	4.777	43	157233	1.069	ppbv	91
36) Benzene	6.353	78	13633	0.061	ppbv	95
39) 1,2-Dichloropropane	6.642	63	682101	7.788	ppbv #	24
41) Tetrahydrofuran	5.555	42	55311	0.687	ppbv	94
44) 2,2,4-Trimethylpentane	7.320	57	19796	0.053	ppbv #	42
52) Tetrachloroethene	10.606	164	15426	0.222	ppbv #	83
53) Toluene	9.214	91	82193	0.348	ppbv	98
58) Ethyl Benzene	12.089	91	9153	0.030	ppbv	99
59) m/p-Xylene	12.362	91	9109	0.033	ppbv #	32
60) o-Xylene	13.053	91	15410	0.057	ppbv #	52

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

Quant Time: Apr 20 05:14:07 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041323AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Apr 13 14:37:02 2023
Response via : Initial Calibration

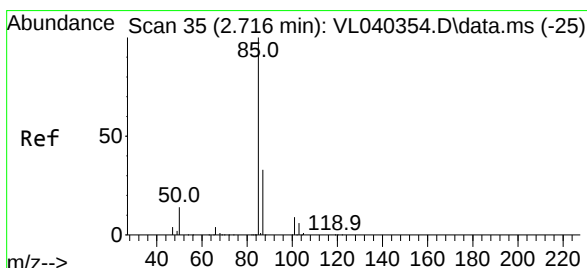
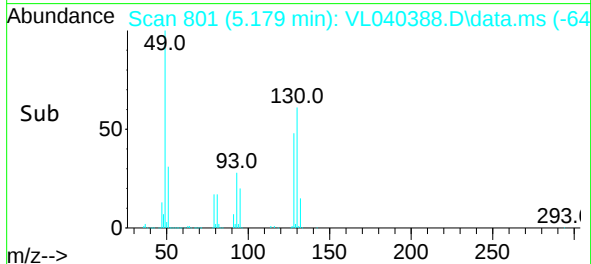
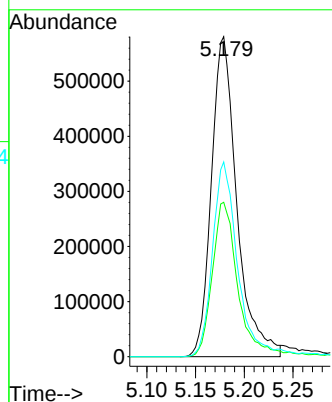
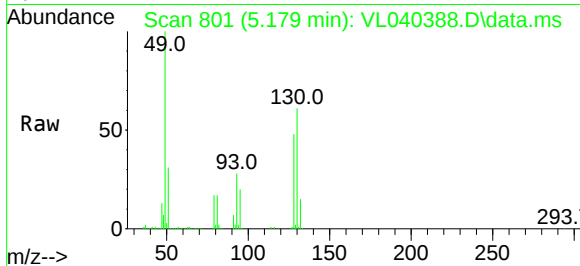




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.179 min Scan# 80
 Delta R.T. -0.010 min
 Lab File: VL040388.D
 Acq: 19 Apr 2023 20:28

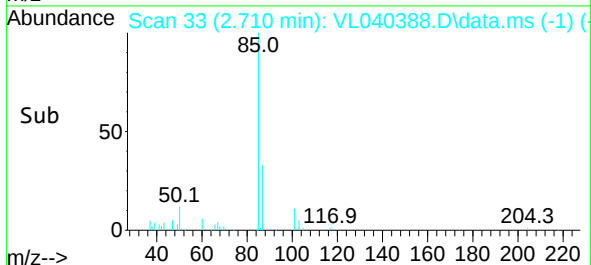
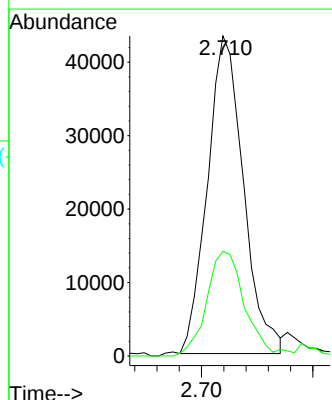
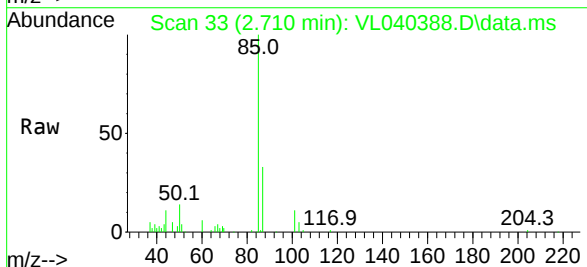
Instrument :
 MSVOA_L
 ClientSampleId :
 VP-1ADL

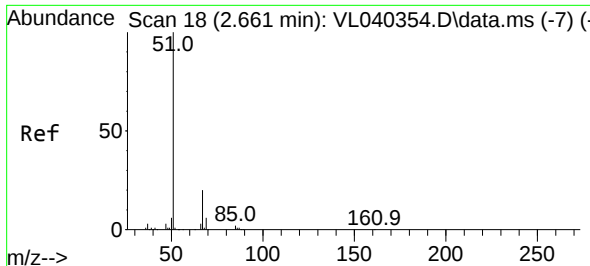
Tgt Ion: 49 Resp: 1056221
 Ion Ratio Lower Upper
 49 100
 128 49.5 23.7 71.1
 130 62.5 29.9 89.8



#2
 Dichlorodifluoromethane
 Concen: 0.255 ppbv
 RT: 2.710 min Scan# 33
 Delta R.T. -0.006 min
 Lab File: VL040388.D
 Acq: 19 Apr 2023 20:28

Tgt Ion: 85 Resp: 48578
 Ion Ratio Lower Upper
 85 100
 87 32.2 26.6 40.0

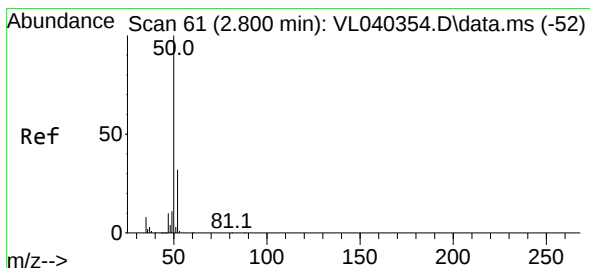
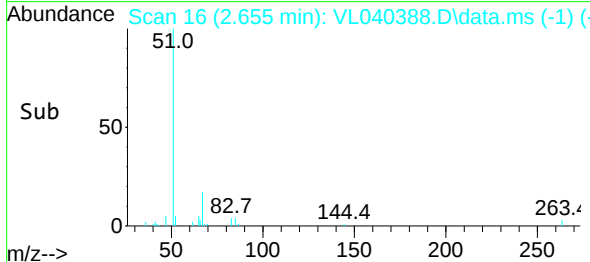
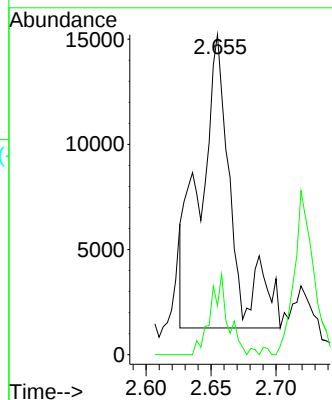
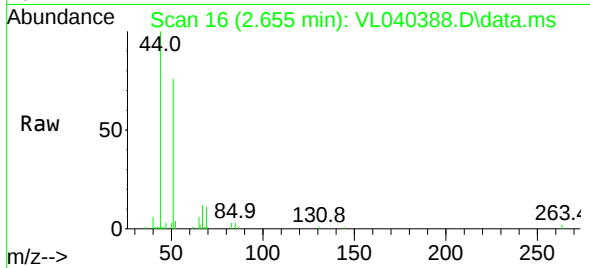




#3
 Chlorodifluoromethane
 Concen: 0.172 ppbv
 RT: 2.655 min Scan# 11
 Delta R.T. -0.006 min
 Lab File: VL040388.D
 Acq: 19 Apr 2023 20:28

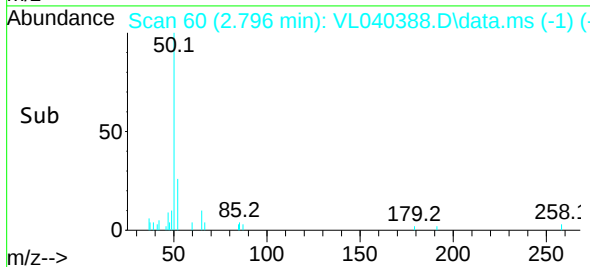
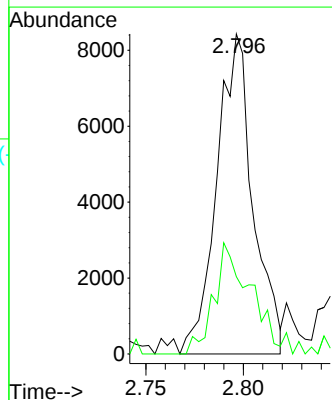
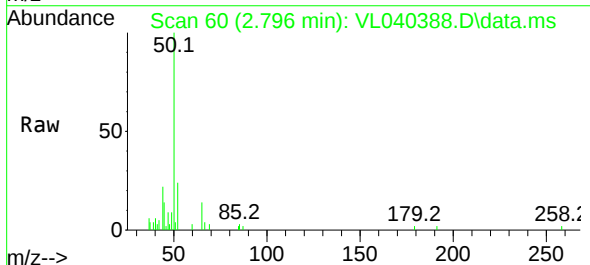
Instrument :
 MSVOA_L
 ClientSampleId :
 VP-1ADL

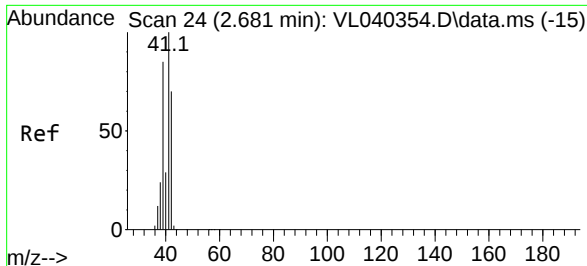
Tgt Ion: 51 Resp: 23725
 Ion Ratio Lower Upper
 51 100
 67 15.5 15.5 23.3#



#4
 Chloromethane
 Concen: 0.125 ppbv
 RT: 2.796 min Scan# 60
 Delta R.T. -0.004 min
 Lab File: VL040388.D
 Acq: 19 Apr 2023 20:28

Tgt Ion: 50 Resp: 10899
 Ion Ratio Lower Upper
 50 100
 52 23.2 25.3 37.9#





#9

Propene

Concen: 0.463 ppbv

RT: 2.681 min Scan# 24

Delta R.T. -0.000 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

Instrument :

MSVOA_L

ClientSampleId :

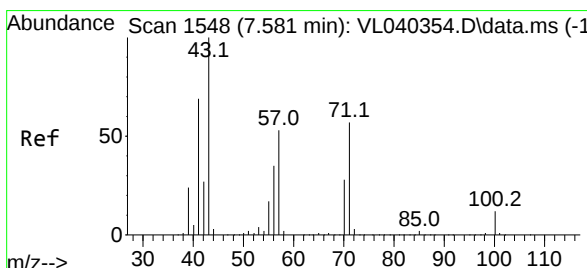
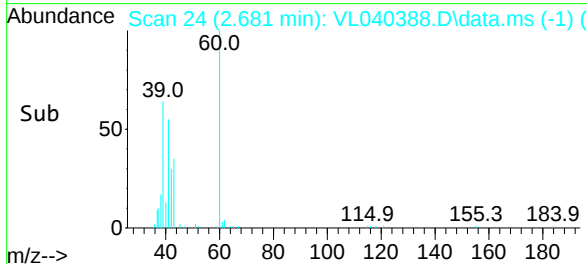
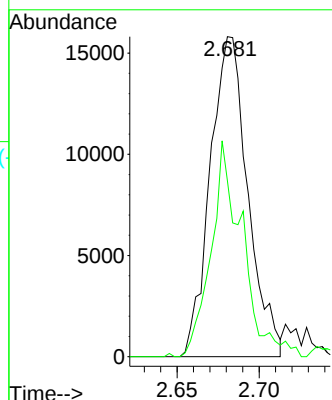
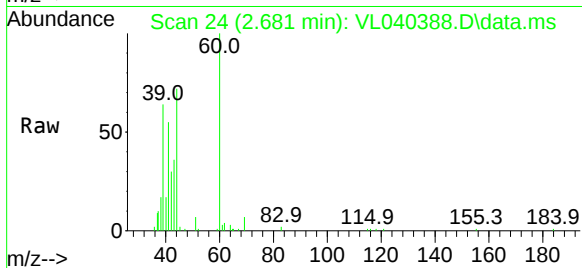
VP-1ADL

Tgt Ion: 41 Resp: 25260

Ion Ratio Lower Upper

41 100

42 57.9 56.5 84.7



#10

Heptane

Concen: 0.062 ppbv

RT: 7.568 min Scan# 1544

Delta R.T. -0.013 min

Lab File: VL040388.D

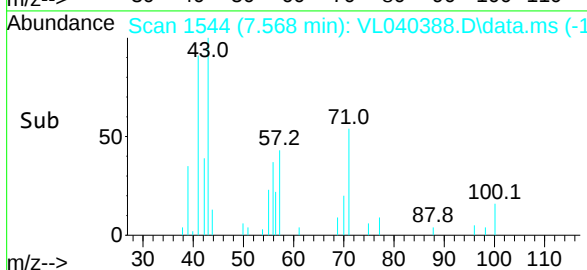
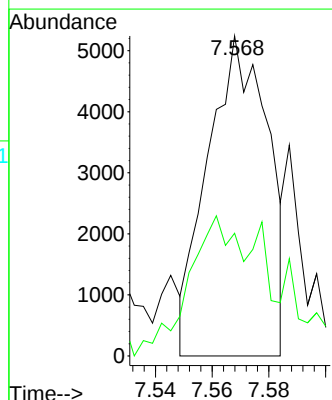
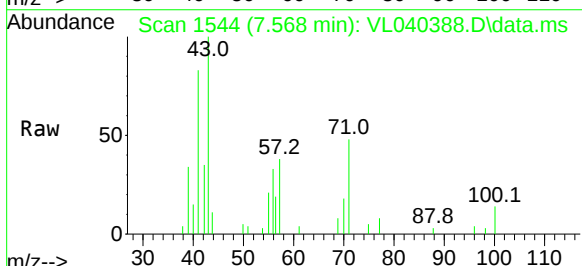
Acq: 19 Apr 2023 20:28

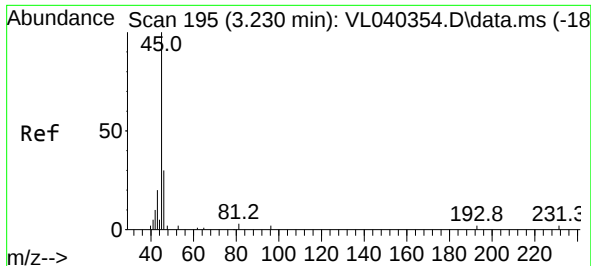
Tgt Ion: 43 Resp: 7717

Ion Ratio Lower Upper

43 100

57 69.8 42.2 63.4#

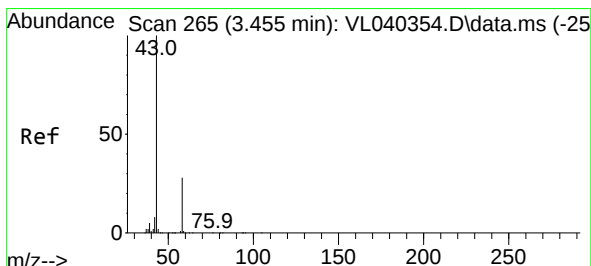
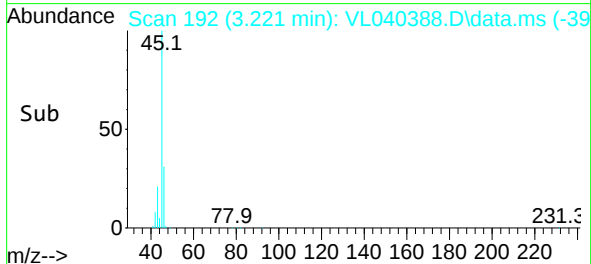
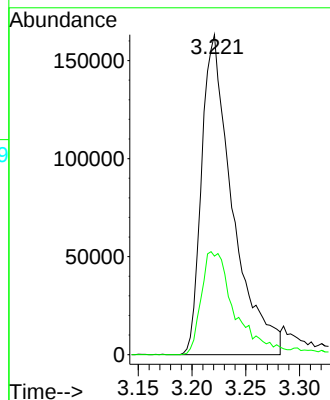
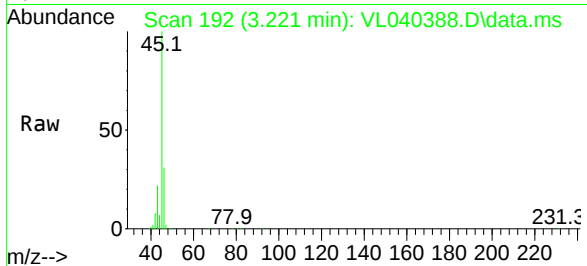




#13
Ethanol
Concen: 71.645 ppbv
RT: 3.221 min Scan# 19
Delta R.T. -0.009 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

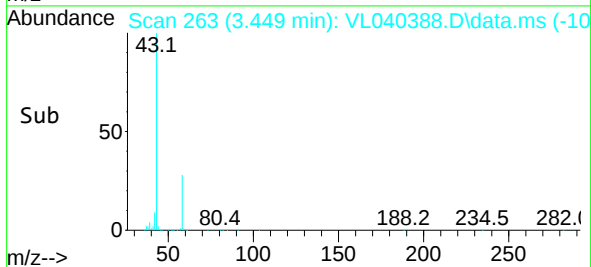
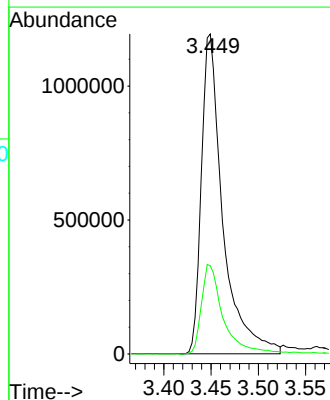
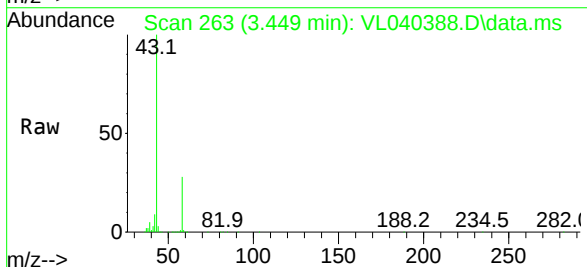
Instrument :
MSVOA_L
ClientSampleId :
VP-1ADL

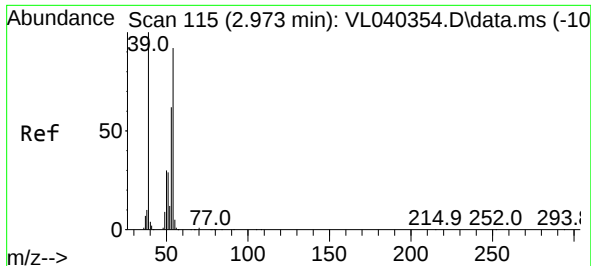
Tgt Ion: 45 Resp: 326119
Ion Ratio Lower Upper
45 100
46 36.9 15.3 61.3



#15
Acetone
Concen: 12.574 ppbv
RT: 3.449 min Scan# 263
Delta R.T. -0.006 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

Tgt Ion: 43 Resp: 1881113
Ion Ratio Lower Upper
43 100
58 29.4 22.2 33.2





#16

1,3-Butadiene

Concen: 0.181 ppbv

RT: 2.944 min Scan# 11

Delta R.T. -0.029 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

Instrument :

MSVOA_L

ClientSampleId :

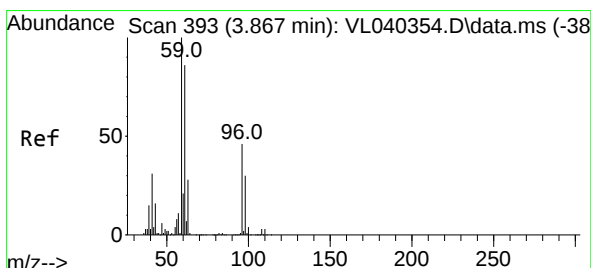
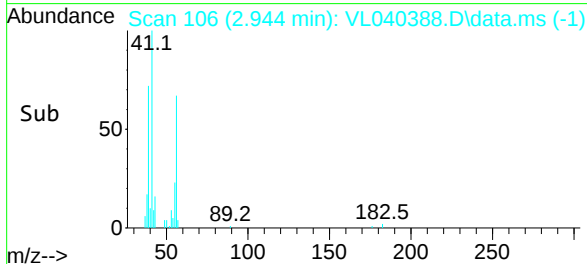
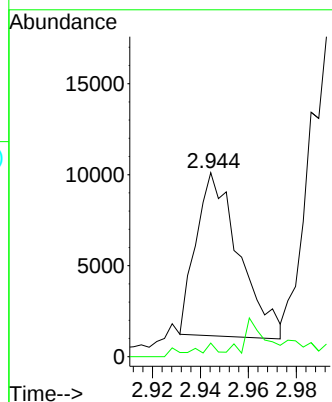
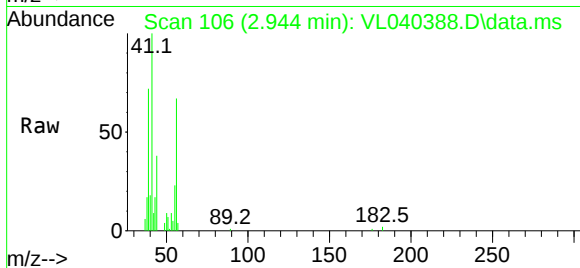
VP-1ADL

Tgt Ion: 39 Resp: 11183

Ion Ratio Lower Upper

39 100

54 25.9 68.8 103.2#



#17

tert-Butyl alcohol

Concen: 0.232 ppbv

RT: 3.877 min Scan# 396

Delta R.T. 0.010 min

Lab File: VL040388.D

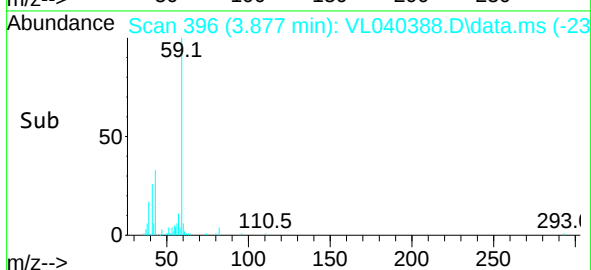
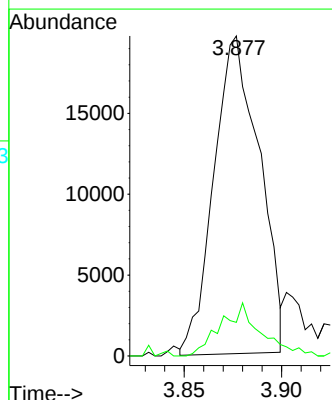
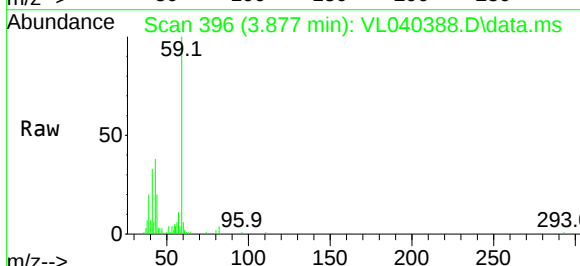
Acq: 19 Apr 2023 20:28

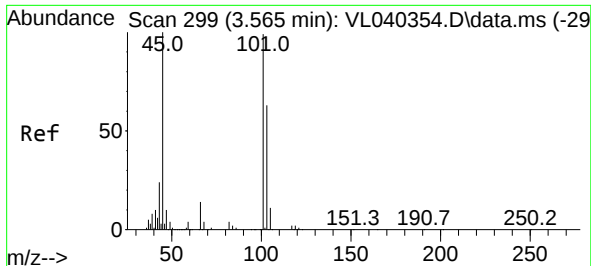
Tgt Ion: 59 Resp: 31919

Ion Ratio Lower Upper

59 100

57 14.8 8.5 12.7#





#19

Isopropyl Alcohol

Concen: 1.370 ppbv

RT: 3.565 min Scan# 299

Delta R.T. -0.000 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

Instrument :

MSVOA_L

ClientSampleId :

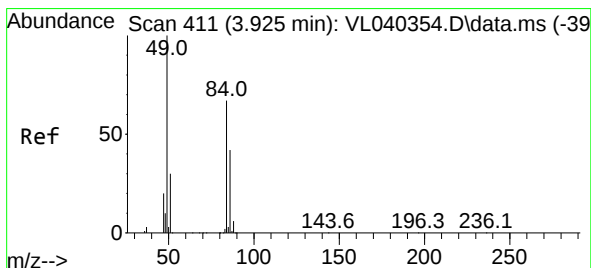
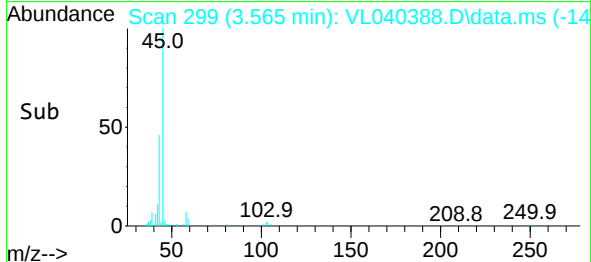
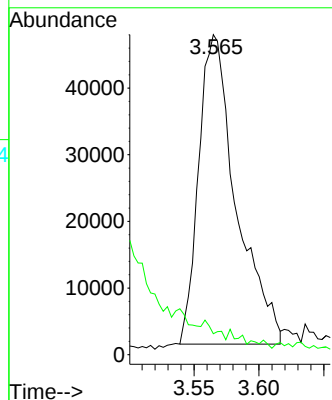
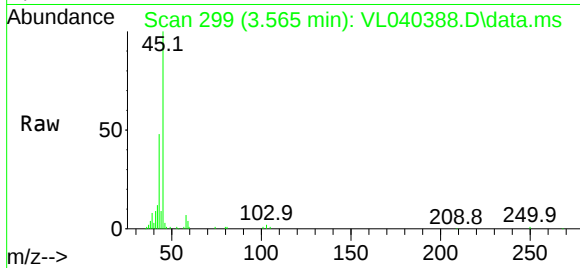
VP-1ADL

Tgt Ion: 45 Resp: 93514

Ion Ratio Lower Upper

45 100

58 588.1 2.6 4.0#



#20

Methylene Chloride

Concen: 0.411 ppbv

RT: 3.915 min Scan# 408

Delta R.T. -0.010 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

Tgt Ion: 84 Resp: 24566

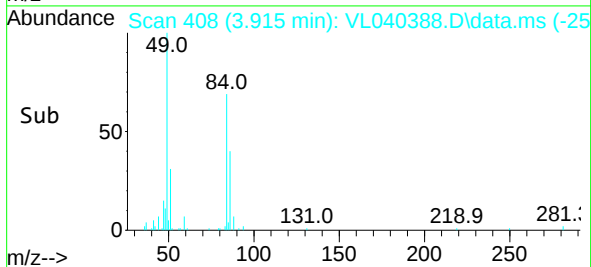
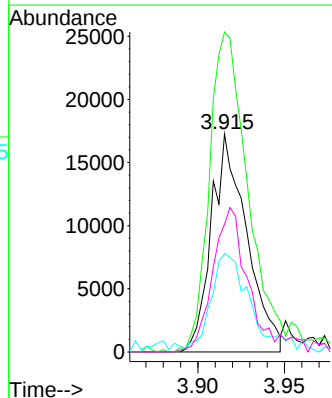
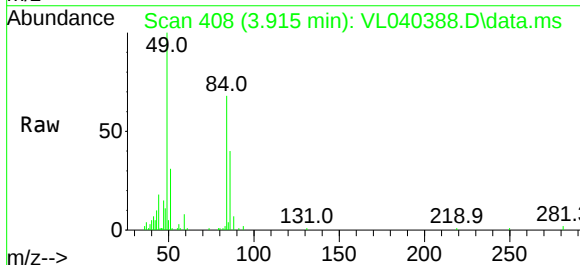
Ion Ratio Lower Upper

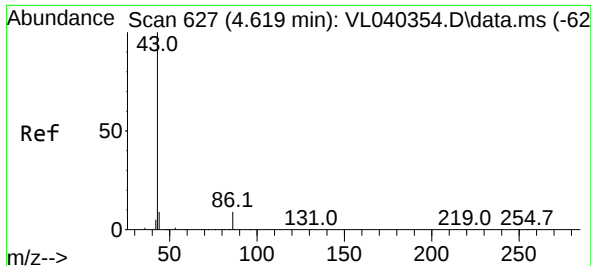
84 100

49 145.0 120.1 180.1

51 42.5 36.3 54.5

86 57.7 50.8 76.2

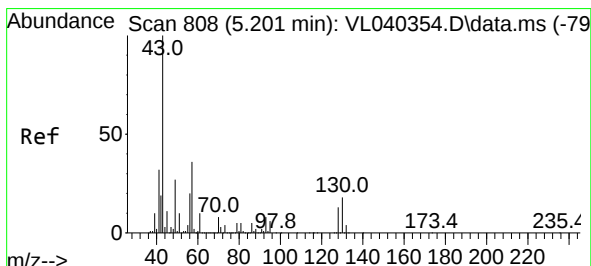
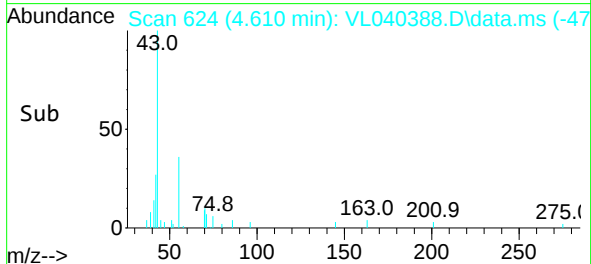
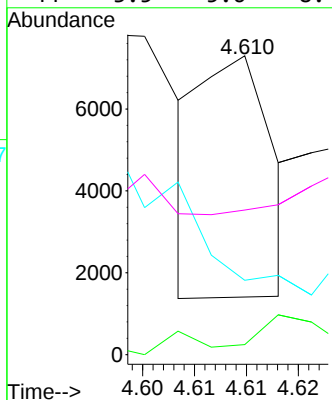
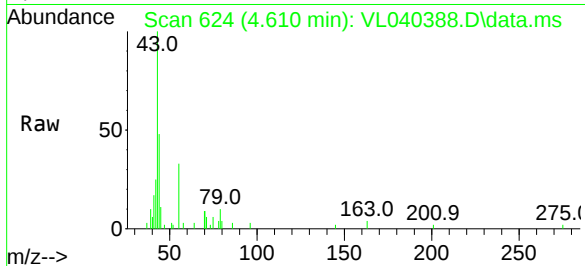




#23
 Vinyl Acetate
 Concen: 0.074 ppbv
 RT: 4.610 min Scan# 61
 Delta R.T. -0.009 min
 Lab File: VL040388.D
 Acq: 19 Apr 2023 20:28

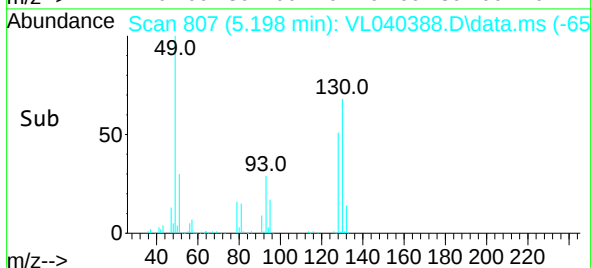
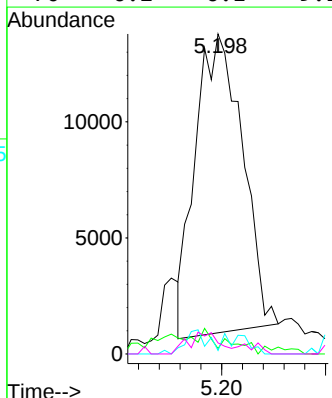
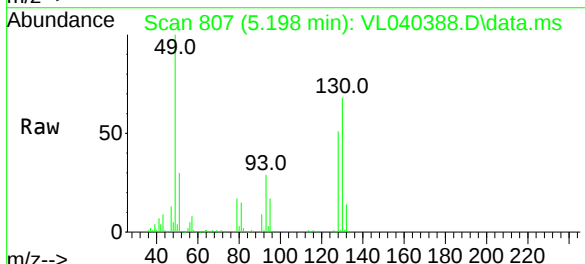
Instrument :
 MSVOA_L
 ClientSampleId :
 VP-1ADL

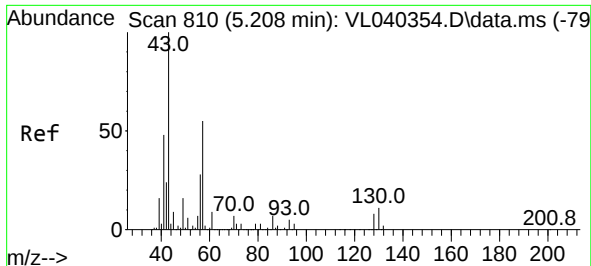
Tgt Ion: 43	Resp: 2813
Ion Ratio	Lower Upper
43 100	
86 0.0	6.0 9.0#
42 0.0	6.4 9.6#
44 3.5	5.6 8.4#



#25
 Ethyl Acetate
 Concen: 0.080 ppbv
 RT: 5.198 min Scan# 807
 Delta R.T. -0.003 min
 Lab File: VL040388.D
 Acq: 19 Apr 2023 20:28

Tgt Ion: 43	Resp: 20234
Ion Ratio	Lower Upper
43 100	
45 12.3	8.5 12.7
61 7.0	8.5 12.7#
70 6.2	6.1 9.1

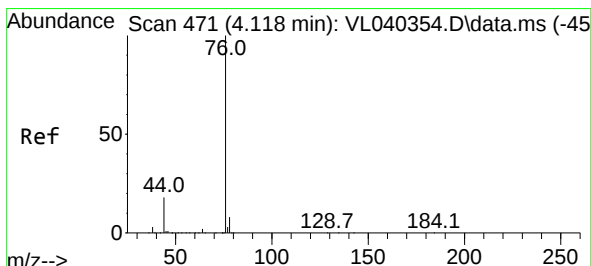
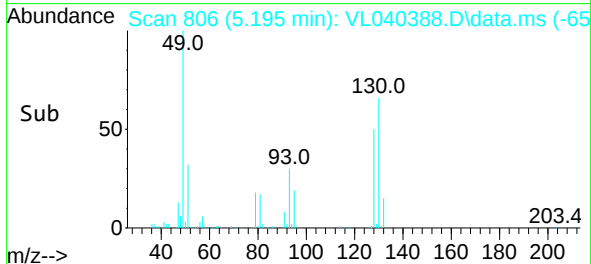
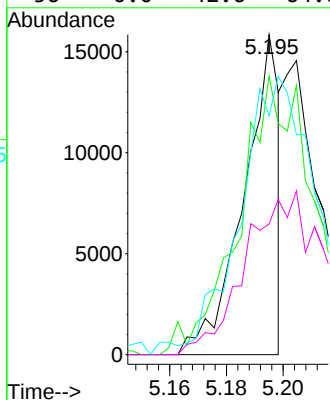
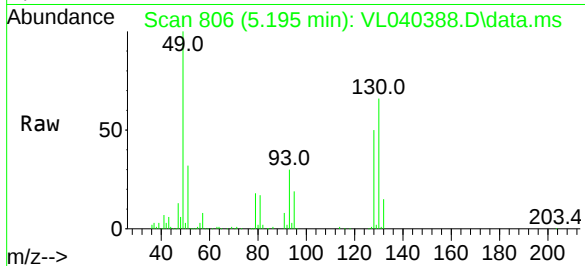




#26
Hexane
Concen: 0.130 ppbv
RT: 5.195 min Scan# 810
Delta R.T. -0.013 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

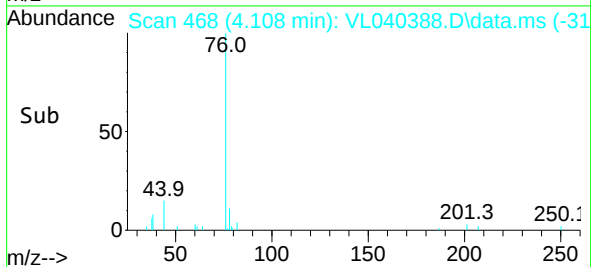
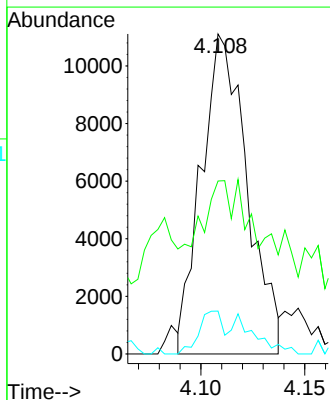
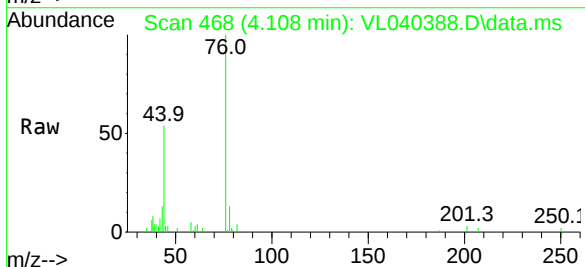
Instrument :
MSVOA_L
ClientSampleId :
VP-1ADL

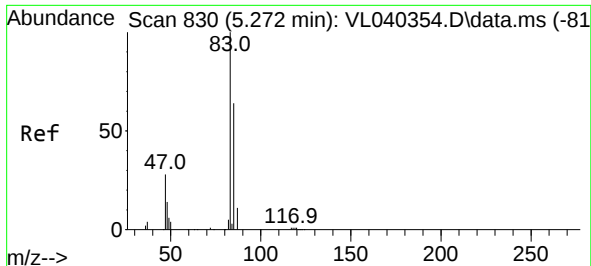
Tgt Ion: 57 Resp: 13779
Ion Ratio Lower Upper
57 100
41 200.4 74.8 112.2#
43 206.7 192.7 289.1
56 0.0 42.6 64.0#



#27
Carbon Disulfide
Concen: 0.124 ppbv
RT: 4.108 min Scan# 468
Delta R.T. -0.010 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

Tgt Ion: 76 Resp: 17005
Ion Ratio Lower Upper
76 100
44 61.3 14.7 22.1#
78 13.5 7.7 11.5#





#29

Chloroform

Concen: 0.088 ppbv

RT: 5.266 min Scan# 81

Delta R.T. -0.006 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

Instrument :

MSVOA_L

ClientSampleId :

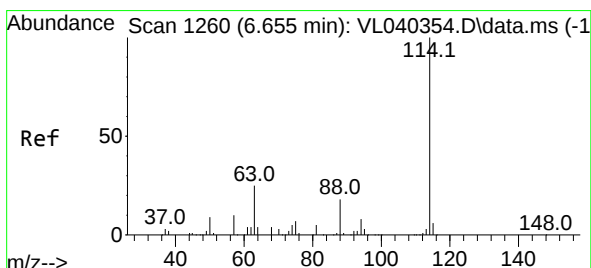
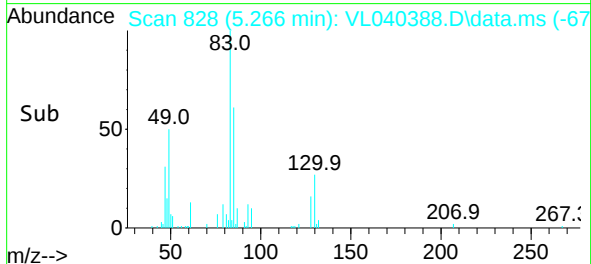
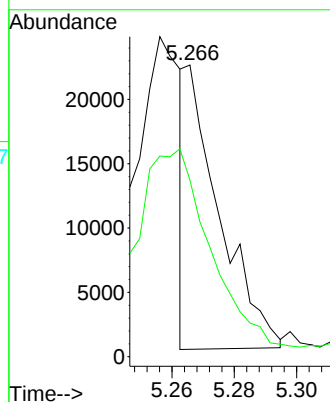
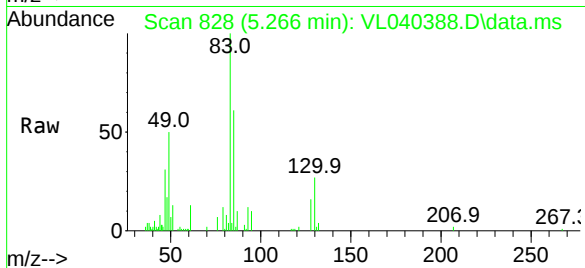
VP-1ADL

Tgt Ion: 83 Resp: 16606

Ion Ratio Lower Upper

83 100

85 59.8 51.0 76.4



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.642 min Scan# 1256

Delta R.T. -0.013 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

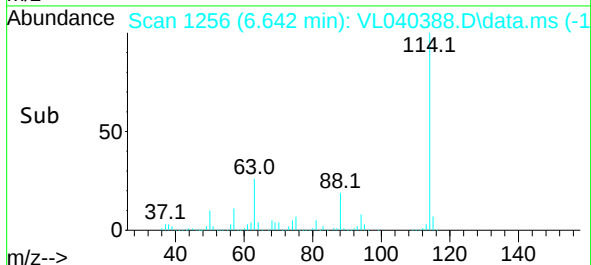
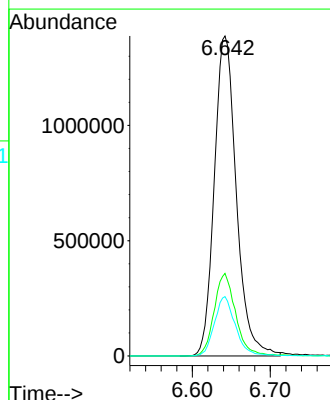
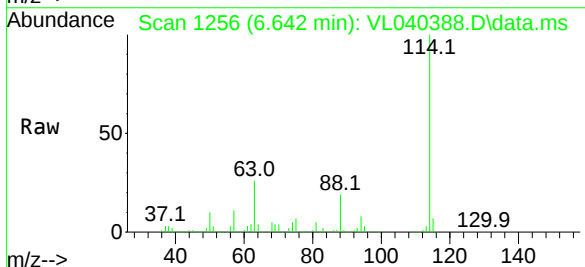
Tgt Ion: 114 Resp: 2728148

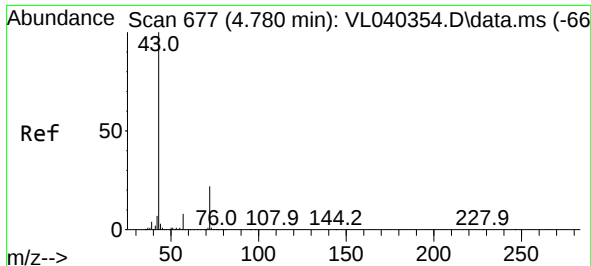
Ion Ratio Lower Upper

114 100

63 25.5 21.4 32.0

88 17.9 14.6 22.0

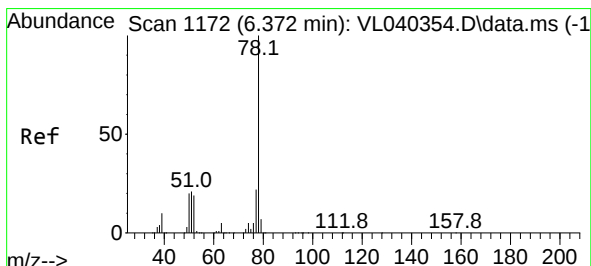
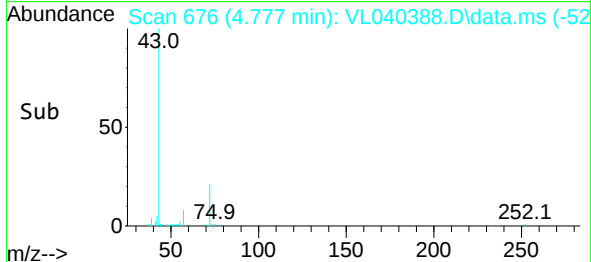
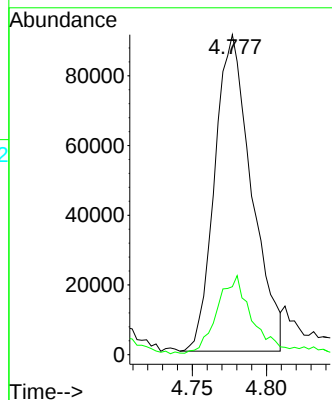
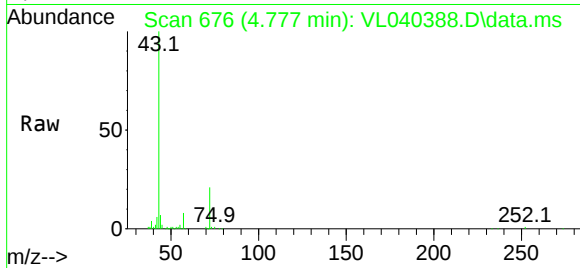




#34
2-Butanone
Concen: 1.069 ppbv
RT: 4.777 min Scan# 61
Delta R.T. -0.003 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

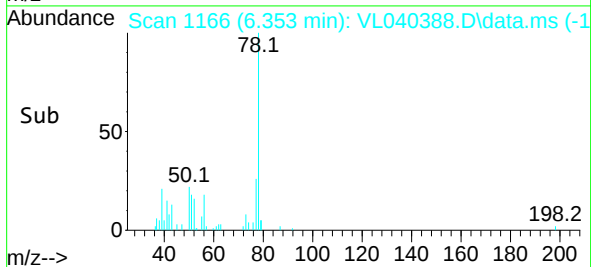
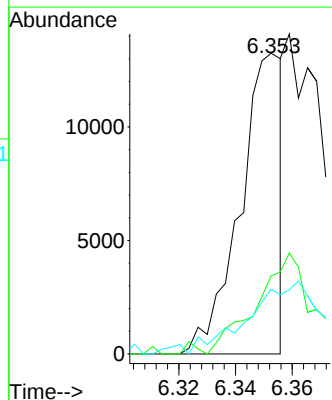
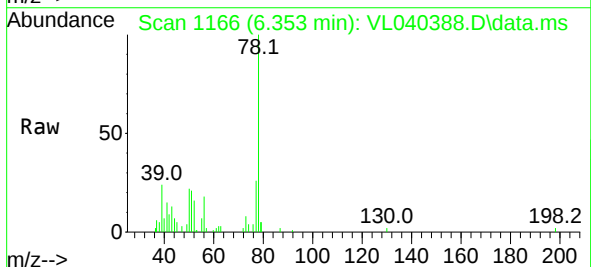
Instrument :
MSVOA_L
ClientSampleId :
VP-1ADL

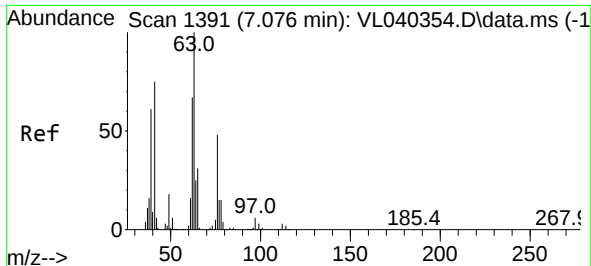
Tgt Ion: 43 Resp: 157233
Ion Ratio Lower Upper
43 100
72 27.4 18.4 27.6



#36
Benzene
Concen: 0.061 ppbv
RT: 6.353 min Scan# 1166
Delta R.T. -0.019 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

Tgt Ion: 78 Resp: 13633
Ion Ratio Lower Upper
78 100
77 26.3 17.8 26.8
50 18.6 15.6 23.4





#39

1,2-Dichloropropane

Concen: 7.788 ppbv

RT: 6.642 min Scan# 1

Delta R.T. -0.434 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

Instrument :

MSVOA_L

ClientSampleId :

VP-1ADL

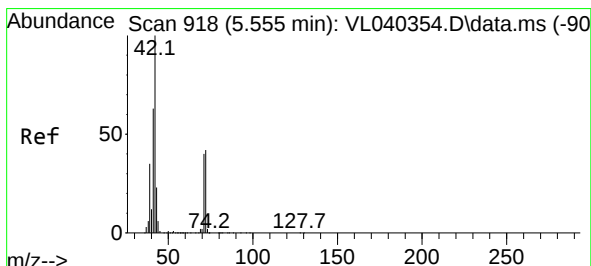
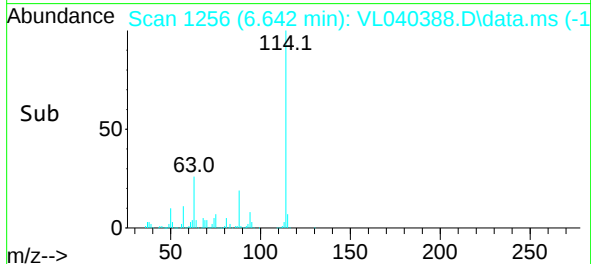
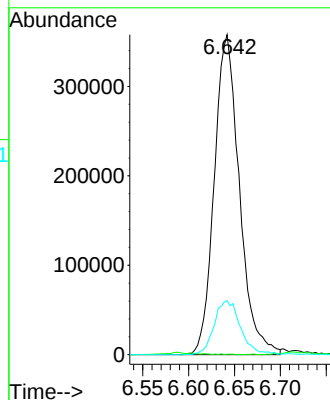
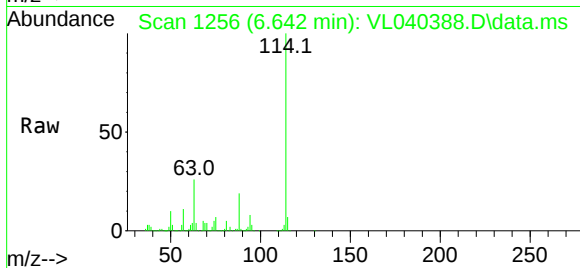
Tgt Ion: 63 Resp: 682101

Ion Ratio Lower Upper

63 100

41 0.0 59.6 89.4#

62 16.9 53.9 80.9#



#41

Tetrahydrofuran

Concen: 0.687 ppbv

RT: 5.555 min Scan# 918

Delta R.T. 0.000 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

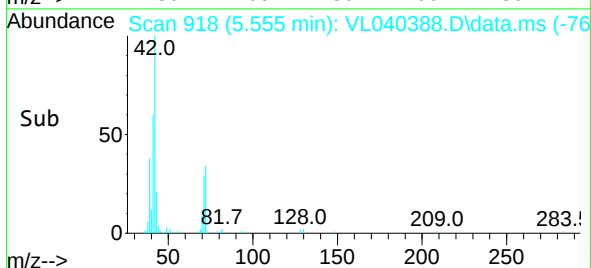
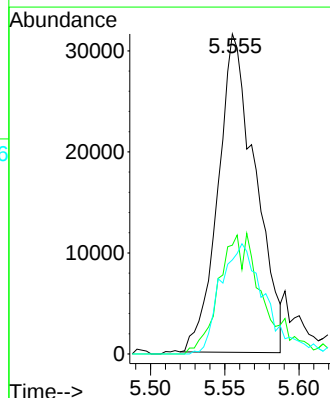
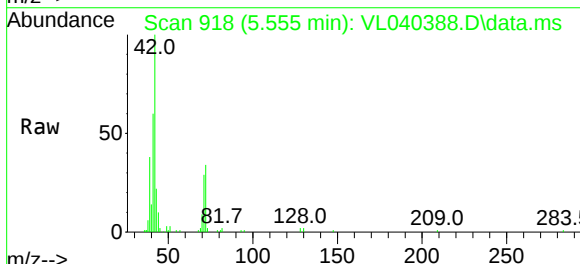
Tgt Ion: 42 Resp: 55311

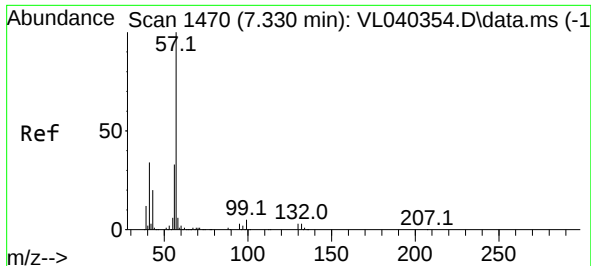
Ion Ratio Lower Upper

42 100

72 45.7 33.7 50.5

71 43.9 32.2 48.2

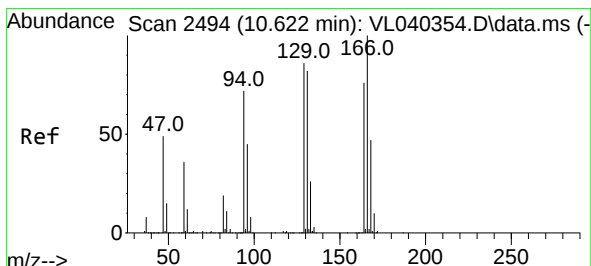
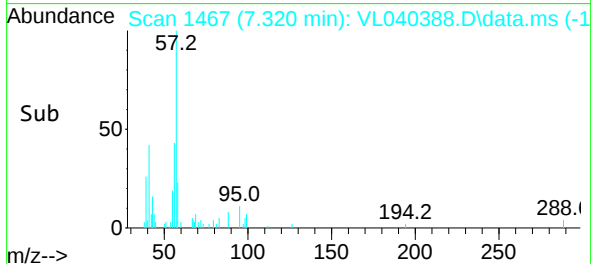
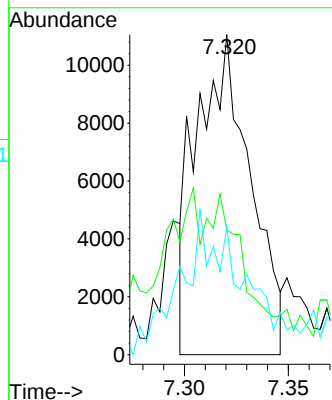
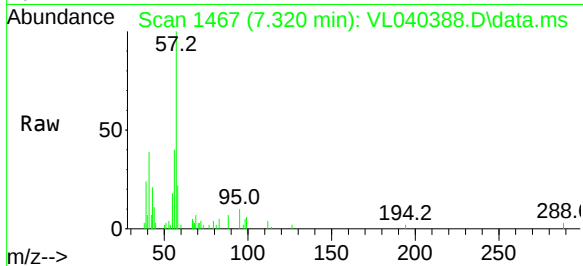




#44
2,2,4-Trimethylpentane
Concen: 0.053 ppbv
RT: 7.320 min Scan# 1470
Delta R.T. -0.010 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

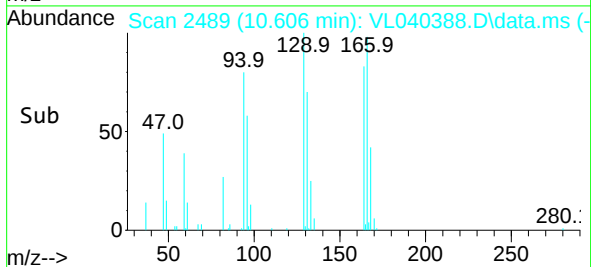
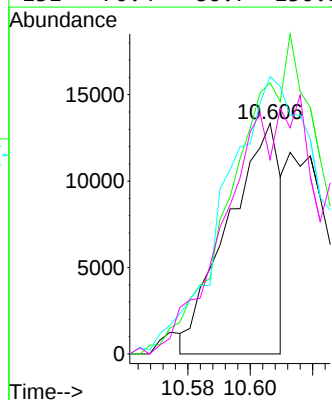
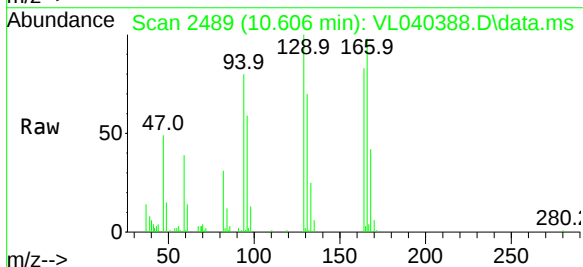
Instrument :
MSVOA_L
ClientSampleId :
VP-1ADL

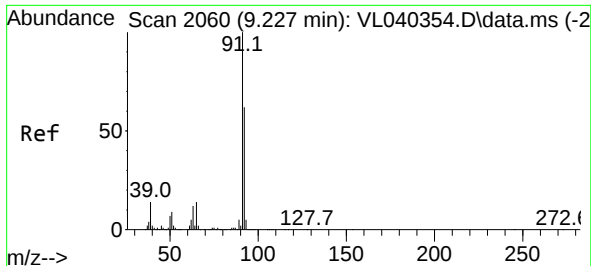
Tgt Ion: 57 Resp: 19796
Ion Ratio Lower Upper
57 100
41 0.0 26.9 40.3#
56 0.0 25.1 37.7#



#52
Tetrachloroethene
Concen: 0.222 ppbv
RT: 10.606 min Scan# 2489
Delta R.T. -0.016 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

Tgt Ion: 164 Resp: 15426
Ion Ratio Lower Upper
164 100
166 114.0 105.2 157.8
129 112.8 90.3 135.5
131 70.4 86.7 130.1#

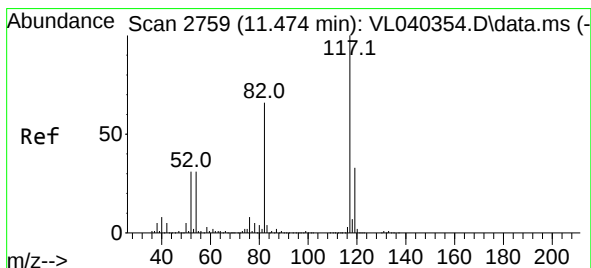
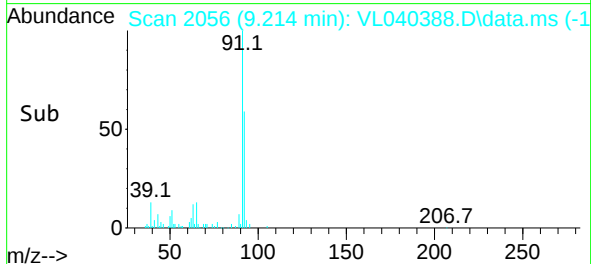
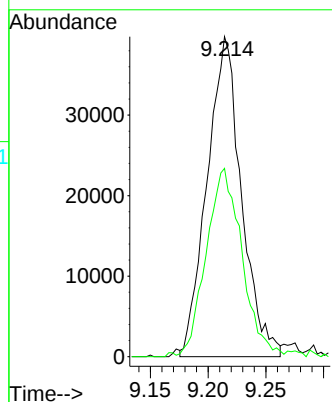
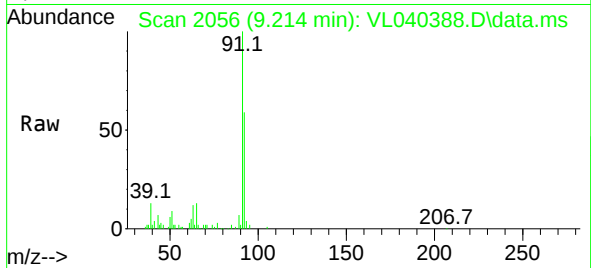




#53
Toluene
Concen: 0.348 ppbv
RT: 9.214 min Scan# 2060
Delta R.T. -0.013 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

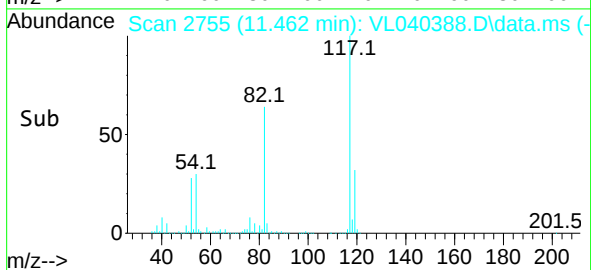
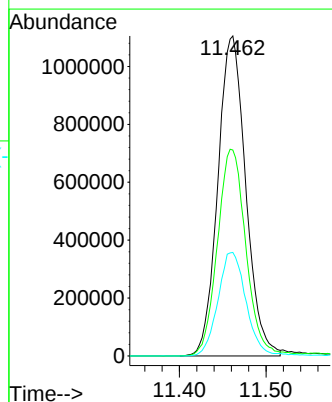
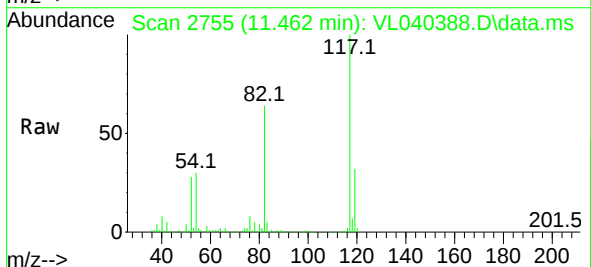
Instrument :
MSVOA_L
ClientSampleId :
VP-1ADL

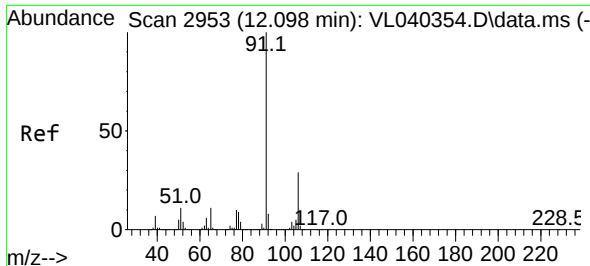
Tgt Ion: 91 Resp: 82193
Ion Ratio Lower Upper
91 100
92 62.4 48.9 73.3



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.462 min Scan# 2755
Delta R.T. -0.012 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

Tgt Ion: 117 Resp: 2473857
Ion Ratio Lower Upper
117 100
82 66.2 52.5 78.7
119 33.1 24.3 36.5

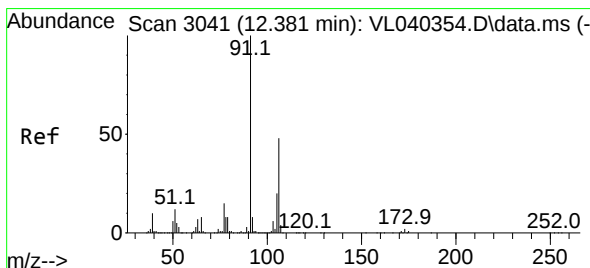
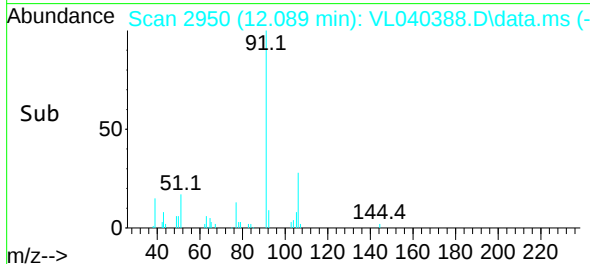
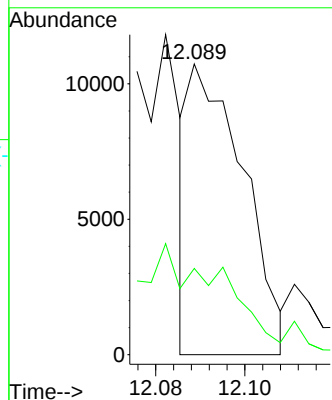
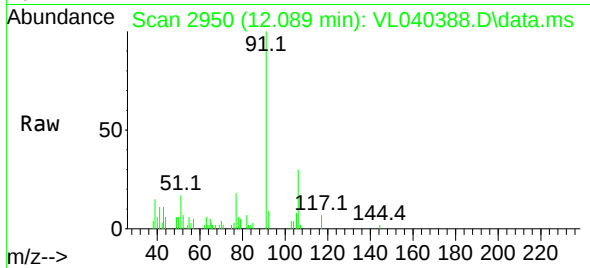




#58
Ethyl Benzene
Concen: 0.030 ppbv
RT: 12.089 min Scan# 2953
Delta R.T. -0.009 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

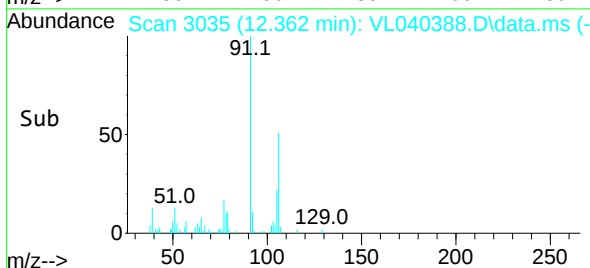
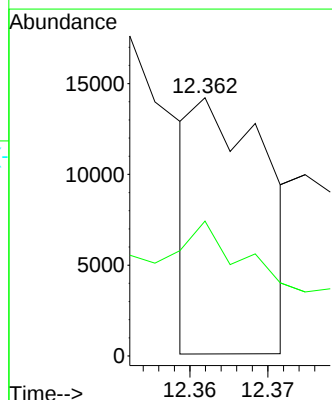
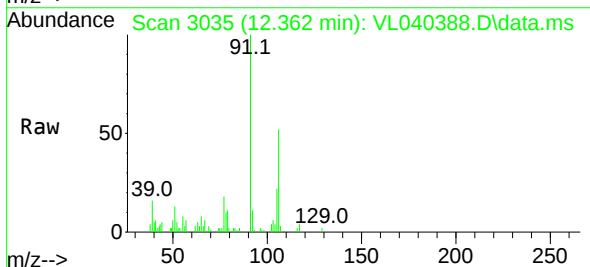
Instrument :
MSVOA_L
ClientSampleId :
VP-1ADL

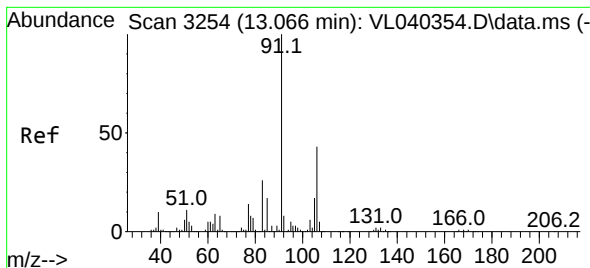
Tgt Ion: 91 Resp: 9153
Ion Ratio Lower Upper
91 100
106 30.0 23.5 35.3



#59
m/p-Xylene
Concen: 0.033 ppbv
RT: 12.362 min Scan# 3035
Delta R.T. -0.019 min
Lab File: VL040388.D
Acq: 19 Apr 2023 20:28

Tgt Ion: 91 Resp: 9109
Ion Ratio Lower Upper
91 100
106 0.0 34.7 52.1#





#60

o-Xylene

Concen: 0.057 ppbv

RT: 13.053 min Scan# 31

Delta R.T. -0.013 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

Instrument :

MSVOA_L

ClientSampleId :

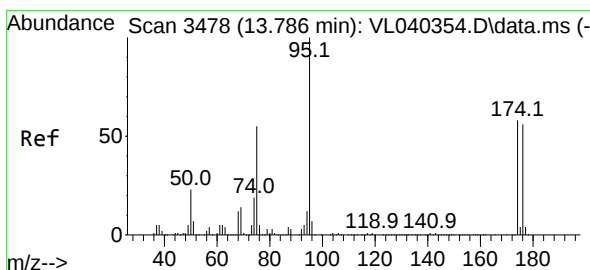
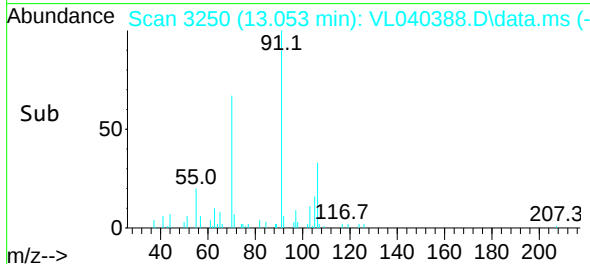
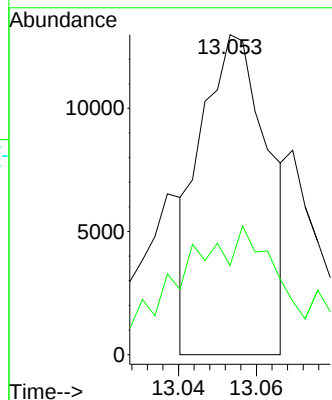
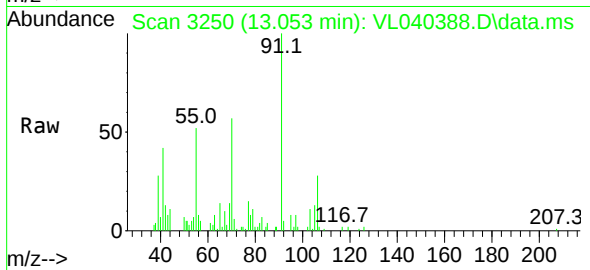
VP-1ADL

Tgt Ion: 91 Resp: 15410

Ion Ratio Lower Upper

91 100

106 74.7 21.9 65.8#



#68

1-Bromo-4-Fluorobenzene

Concen: 9.975 ppbv

RT: 13.770 min Scan# 3473

Delta R.T. -0.016 min

Lab File: VL040388.D

Acq: 19 Apr 2023 20:28

Tgt Ion: 95 Resp: 2040628

Ion Ratio Lower Upper

95 100

174 60.6 47.2 70.8

175 4.3 3.5 5.3

