

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL121222\
 Data File : VL039983.D
 Acq On : 12 Dec 2022 19:46
 Operator : SY/MD
 Sample : N5971-04
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA-2

Quant Time: Dec 13 07:08:38 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111822AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Dec 02 23:21:36 2022
 Response via : Initial Calibration

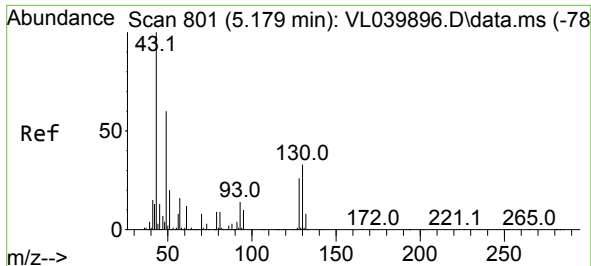
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.166	49	1149912	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	6.632	114	2907234	10.000	ppbv	0.01
55) Chlorobenzene-d5	11.449	117	2644556	10.000	ppbv	0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.761	95	2180759	10.796	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	= 108.000%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	2.706	85	62220	0.378	ppbv	94
3) Chlorodifluoromethane	2.652	51	74120	0.467	ppbv	96
4) Chloromethane	2.790	50	48145	0.475	ppbv	94
6) Bromomethane	3.092	94	567	0.021	ppbv #	52
9) Propene	2.674	41	54121	0.724	ppbv #	15
11) Trichlorofluoromethane	3.539	101	46247	0.230	ppbv	91
12) 1,1,2-Trichlorotrifluo...	4.041	101	4886	0.032	ppbv #	12
13) Ethanol	3.211	45	1131096	198.207	ppbv	100
15) Acetone	3.446	43	828952	5.435	ppbv	98
16) 1,3-Butadiene	2.948	39	4191	0.055	ppbv	84
19) Isopropyl Alcohol	3.594	45	21903	0.265	ppbv #	29
20) Methylene Chloride	3.909	84	766916	10.379	ppbv	98
23) Vinyl Acetate	4.597	43	55696	0.889	ppbv #	78
25) Ethyl Acetate	5.192	43	349510	1.248	ppbv #	77
26) Hexane	5.192	57	485949	3.972	ppbv #	39
29) Chloroform	5.247	83	6726	0.041	ppbv	98
30) Cyclohexane	6.574	84	3484	0.029	ppbv #	1
34) 2-Butanone	4.767	43	52567	0.378	ppbv #	54
35) Carbon Tetrachloride	6.468	117	11647	0.071	ppbv #	84
36) Benzene	6.349	78	57356	0.232	ppbv	94
37) 1,2-Dichloroethane	5.790	62	7395	0.055	ppbv #	93
39) 1,2-Dichloropropane	6.632	63	732482	7.608	ppbv #	26
41) Tetrahydrofuran	5.549	42	1930	0.020	ppbv #	1
44) 2,2,4-Trimethylpentane	7.304	57	23219	0.056	ppbv #	20
53) Toluene	9.198	91	160063	0.569	ppbv	96
58) Ethyl Benzene	12.066	91	9703	0.027	ppbv	100
60) o-Xylene	13.040	91	17873	0.062	ppbv	84
74) 1,2,4-Trimethylbenzene	16.098	105	12933	0.041	ppbv #	78

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

Quant Time: Dec 13 07:08:38 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111822AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Dec 02 23:21:36 2022
Response via : Initial Calibration

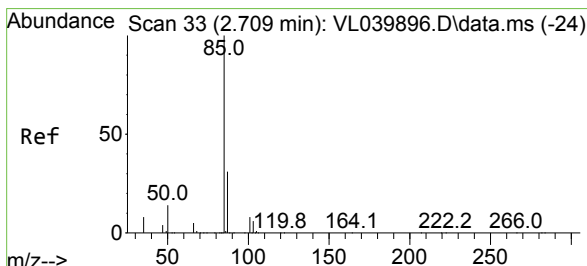
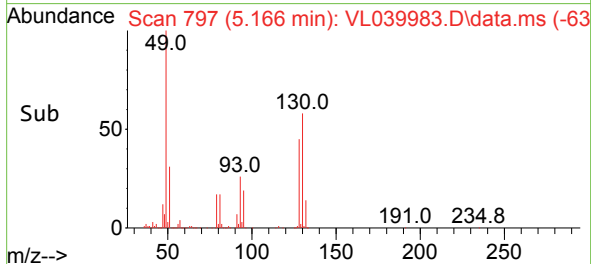
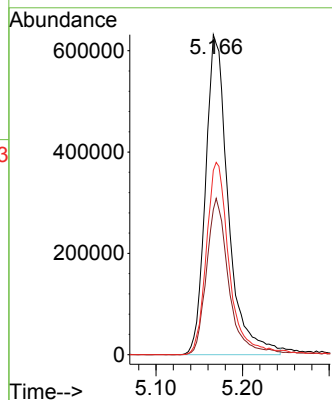
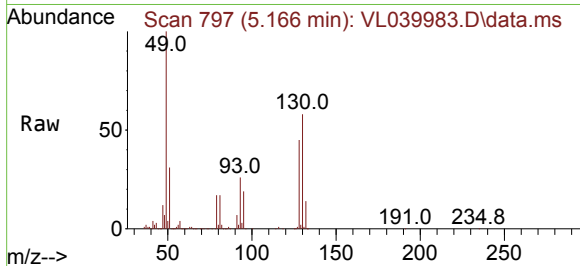




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.166 min Scan# 79
 Delta R.T. 0.010 min
 Lab File: VL039983.D
 Acq: 12 Dec 2022 19:46

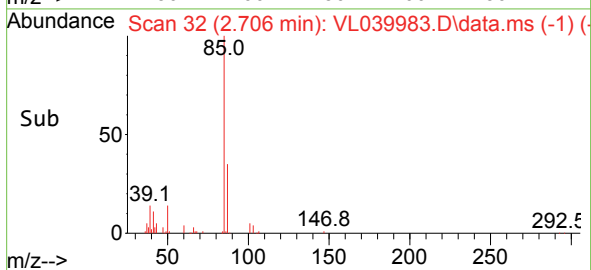
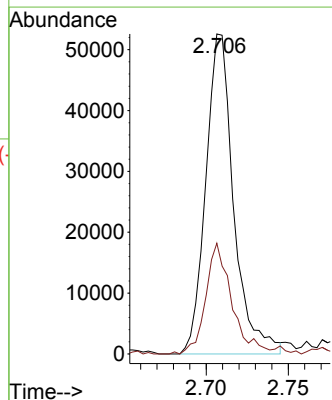
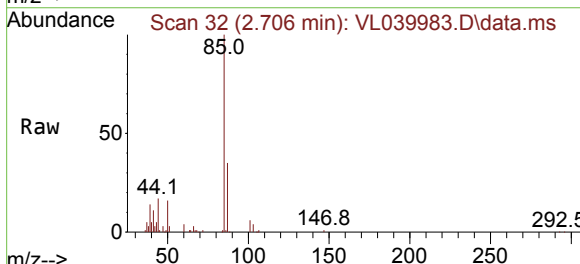
Instrument :
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 OA-2

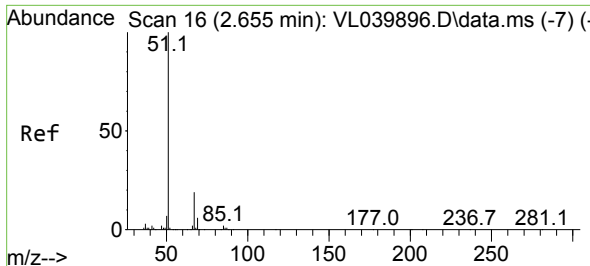
Tgt Ion: 49 Resp: 1149912
 Ion Ratio Lower Upper
 49 100
 128 48.6 22.1 66.3
 130 61.9 27.7 83.1



#2
 Dichlorodifluoromethane
 Concen: 0.378 ppbv
 RT: 2.706 min Scan# 32
 Delta R.T. 0.010 min
 Lab File: VL039983.D
 Acq: 12 Dec 2022 19:46

Tgt Ion: 85 Resp: 62220
 Ion Ratio Lower Upper
 85 100
 87 34.6 25.0 37.4

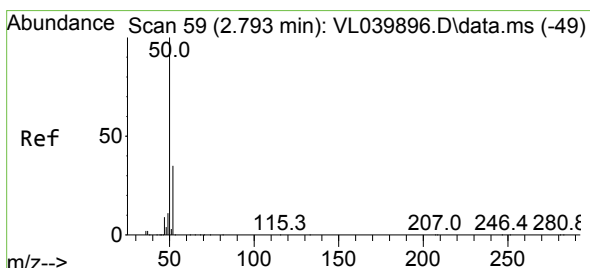
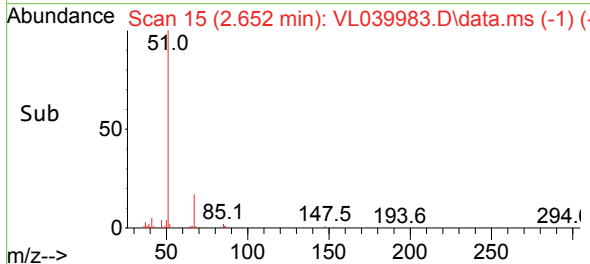
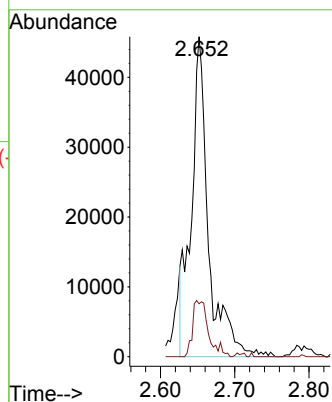
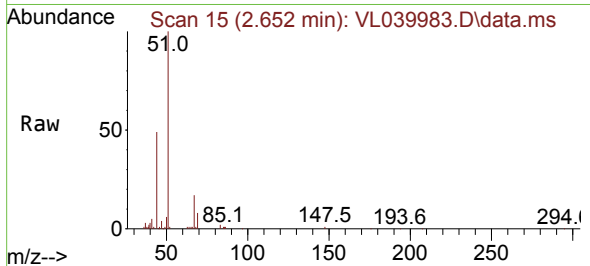




#3
Chlorodifluoromethane
Concen: 0.467 ppbv
RT: 2.652 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

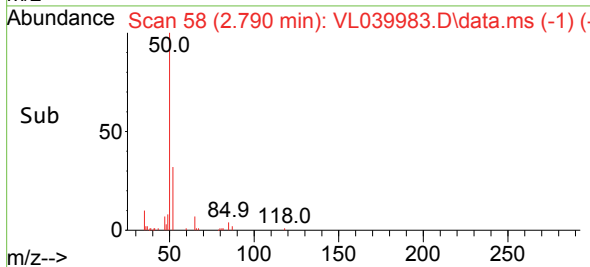
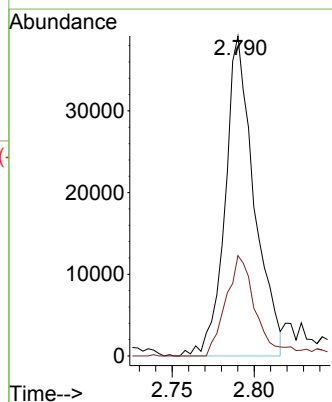
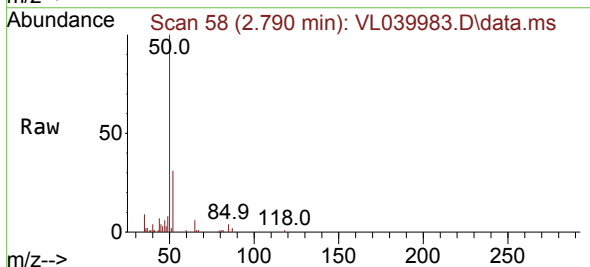
Instrument :
MSVOA_L
ClientSampleId :
OA-2

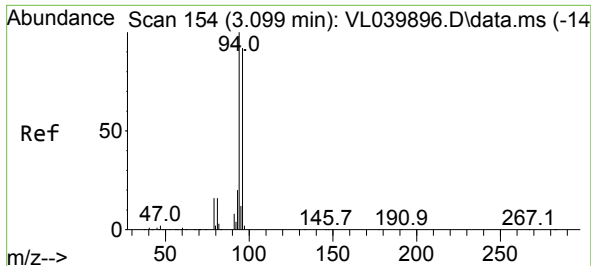
Tgt Ion: 51 Resp: 74120
Ion Ratio Lower Upper
51 100
67 16.1 14.2 21.4



#4
Chloromethane
Concen: 0.475 ppbv
RT: 2.790 min Scan# 58
Delta R.T. 0.010 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt Ion: 50 Resp: 48145
Ion Ratio Lower Upper
50 100
52 31.3 27.8 41.8

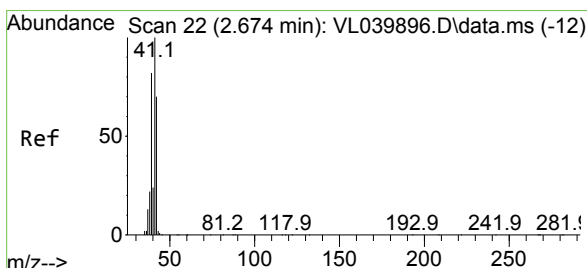
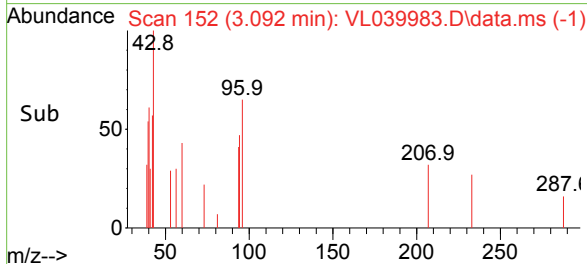
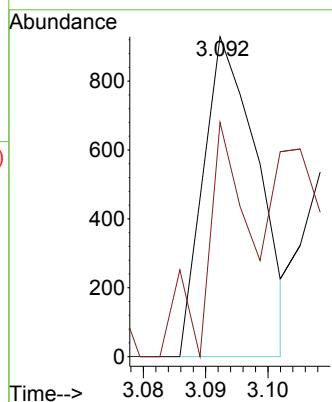
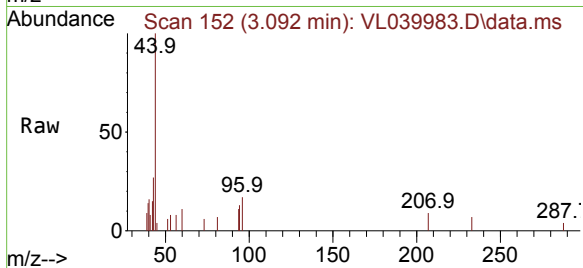




#6
Bromomethane
Concen: 0.021 ppbv
RT: 3.092 min Scan# 11
Delta R.T. 0.007 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

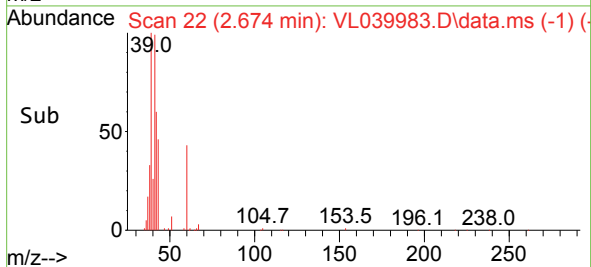
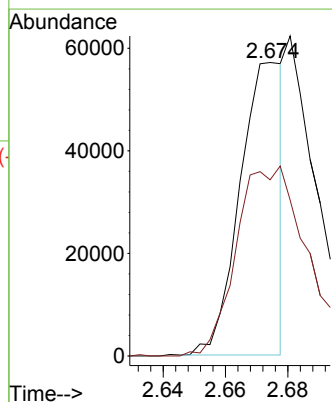
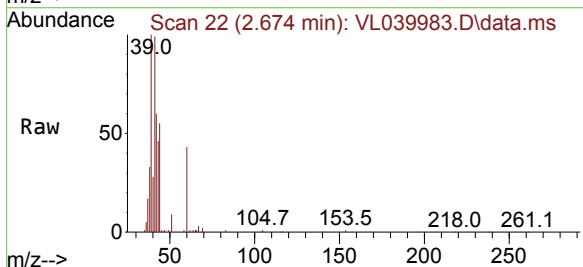
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MSVOA_L
ClientSampleId :
OA-2

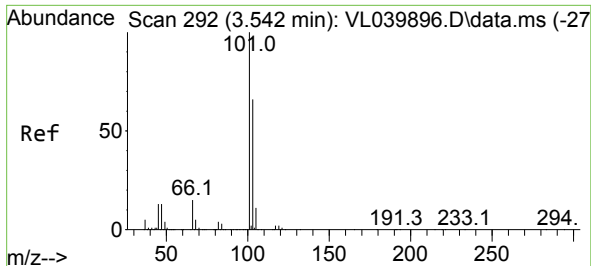
Tgt Ion: 94 Resp: 567
Ion Ratio Lower Upper
94 100
96 46.1 73.7 110.5#



#9
Propene
Concen: 0.724 ppbv
RT: 2.674 min Scan# 22
Delta R.T. 0.013 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt Ion: 41 Resp: 54121
Ion Ratio Lower Upper
41 100
42 0.0 55.8 83.6#

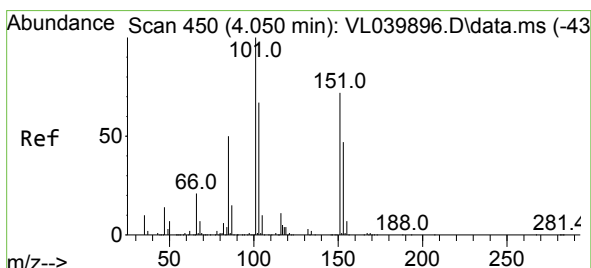
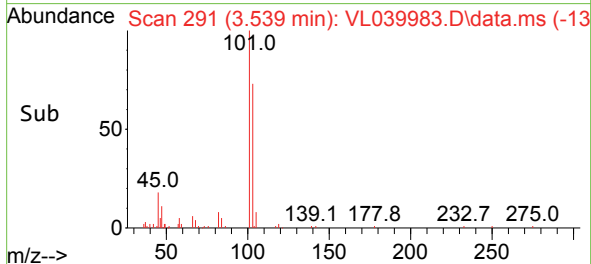
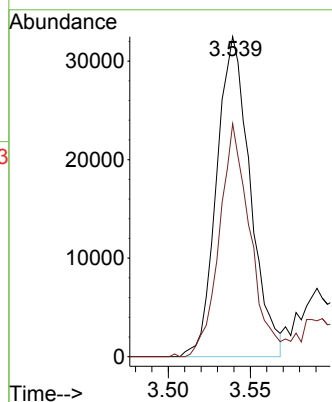
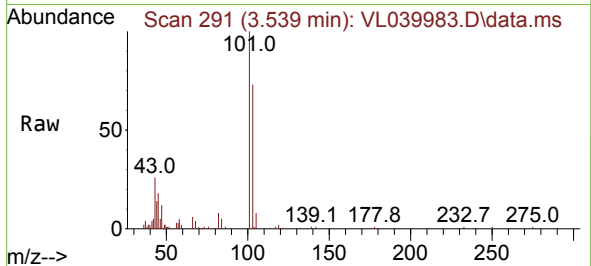




#11
 Trichlorofluoromethane
 Concen: 0.230 ppbv
 RT: 3.539 min Scan# 292
 Delta R.T. 0.010 min
 Lab File: VL039983.D
 Acq: 12 Dec 2022 19:46

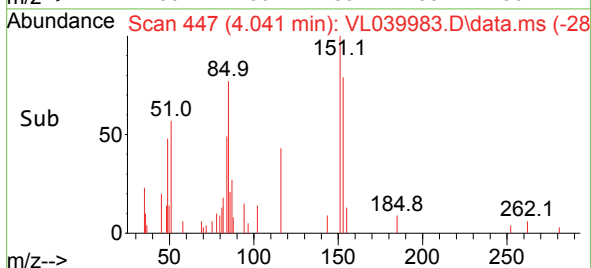
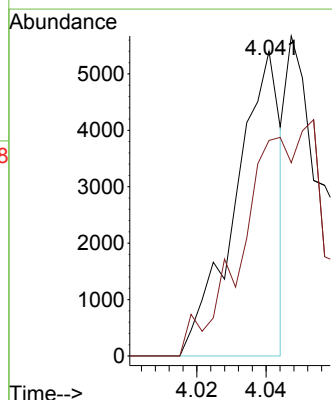
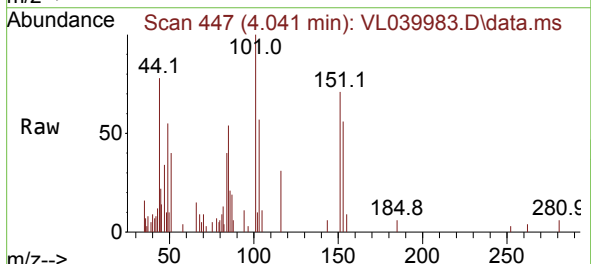
Instrument :
 MSVOA_L
 ClientSampleId :
 OA-2

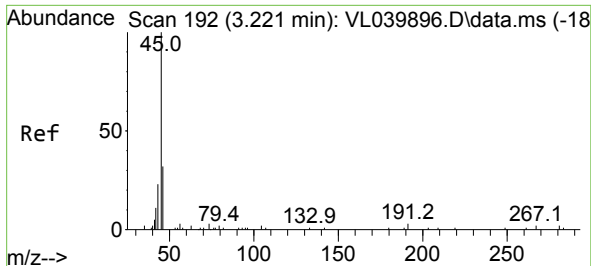
Tgt Ion:101 Resp: 46247
 Ion Ratio Lower Upper
 101 100
 103 72.8 52.6 78.8



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.032 ppbv
 RT: 4.041 min Scan# 447
 Delta R.T. 0.010 min
 Lab File: VL039983.D
 Acq: 12 Dec 2022 19:46

Tgt Ion:101 Resp: 4886
 Ion Ratio Lower Upper
 101 100
 151 0.0 59.6 89.4#

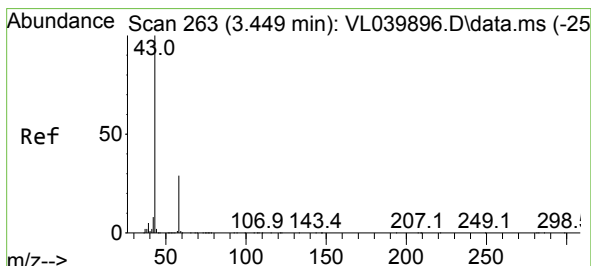
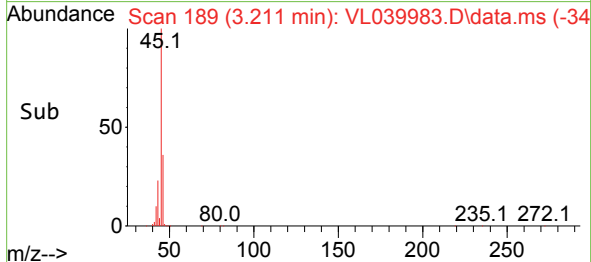
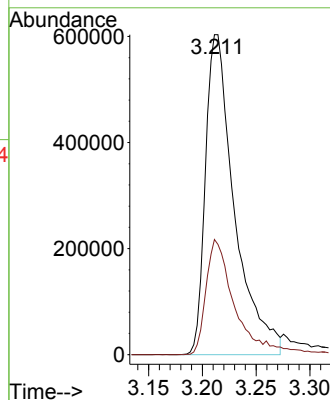
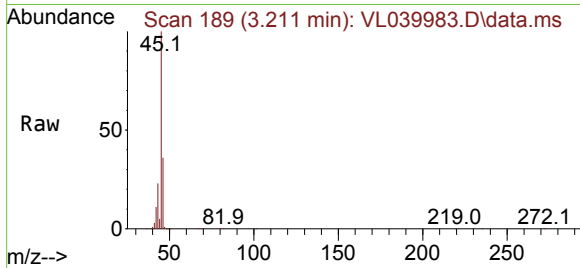




#13
Ethanol
Concen: 198.207 ppbv
RT: 3.211 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

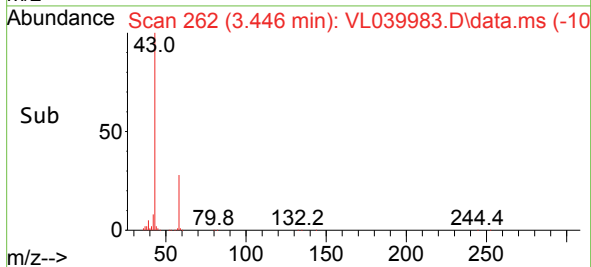
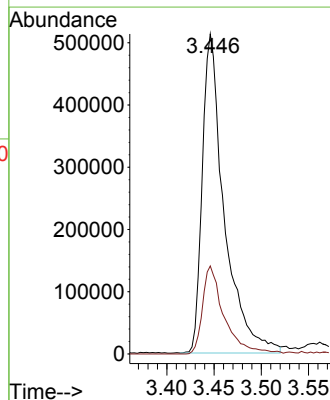
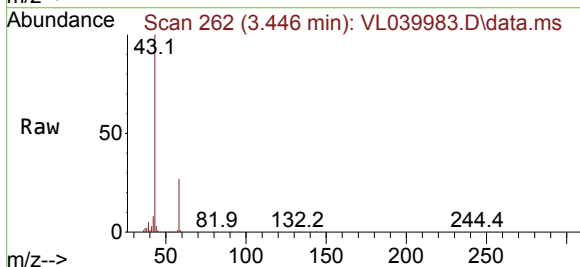
Instrument :
MSVOA_L
ClientSampleId :
OA-2

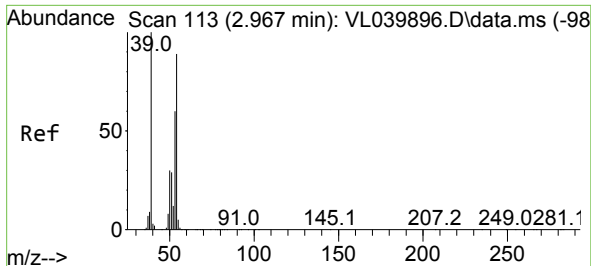
Tgt Ion: 45 Resp: 1131096
Ion Ratio Lower Upper
45 100
46 36.4 14.6 58.2



#15
Acetone
Concen: 5.435 ppbv
RT: 3.446 min Scan# 262
Delta R.T. 0.013 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt Ion: 43 Resp: 828952
Ion Ratio Lower Upper
43 100
58 27.3 22.9 34.3

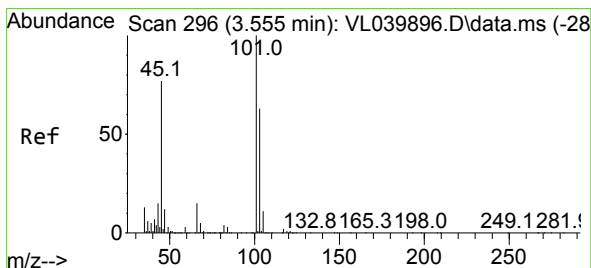
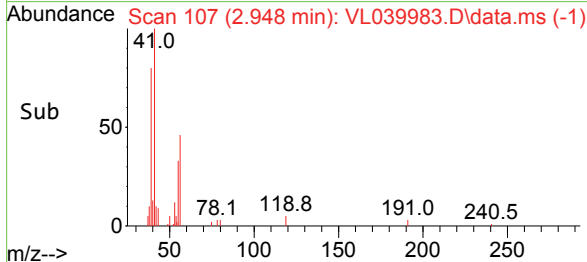
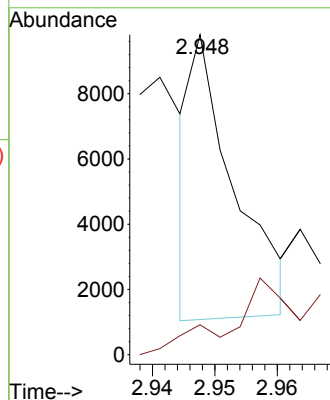
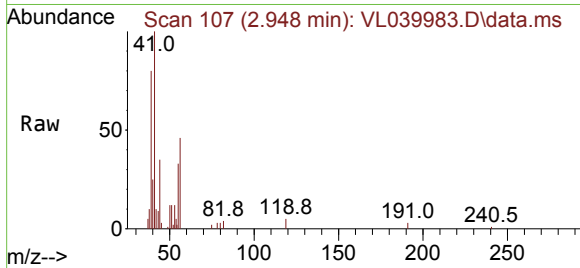




#16
1,3-Butadiene
Concen: 0.055 ppbv
RT: 2.948 min Scan# 113
Delta R.T. -0.003 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

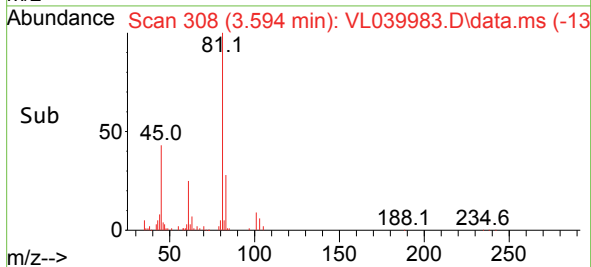
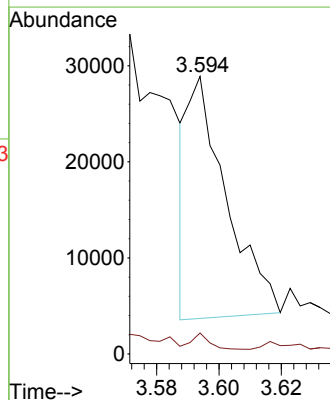
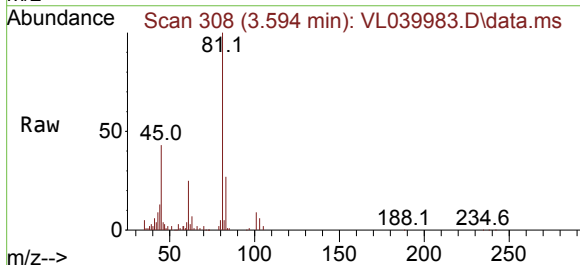
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OA-2

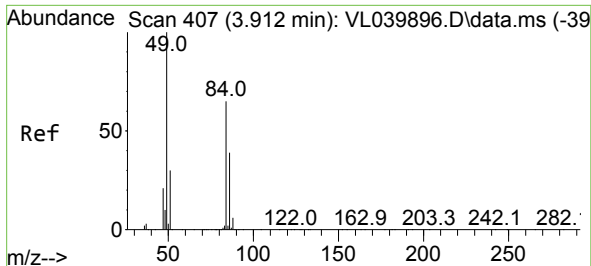
Tgt Ion: 39 Resp: 4191
Ion Ratio Lower Upper
39 100
54 97.9 66.6 99.8



#19
Isopropyl Alcohol
Concen: 0.265 ppbv
RT: 3.594 min Scan# 308
Delta R.T. 0.052 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt Ion: 45 Resp: 21903
Ion Ratio Lower Upper
45 100
58 0.0 38.7 58.1#





#20

Methylene Chloride

Concen: 10.379 ppbv

RT: 3.909 min Scan# 407

Delta R.T. 0.013 min

Lab File: VL039983.D

Acq: 12 Dec 2022 19:46

Instrument :

MSVOA_L

ClientSampleId :

OA-2

Tgt Ion: 84 Resp: 766916

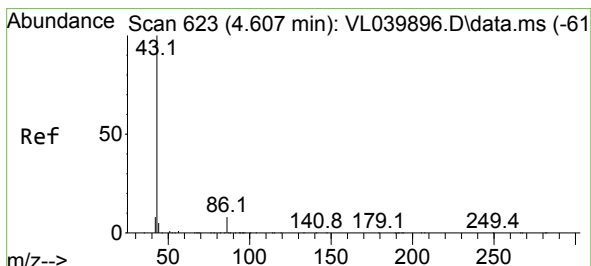
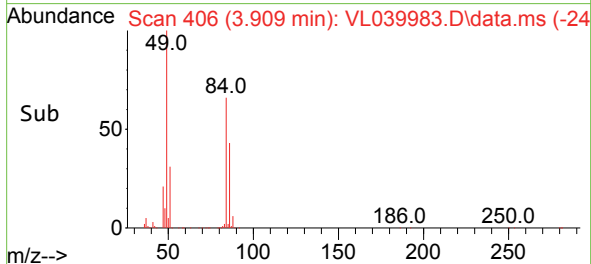
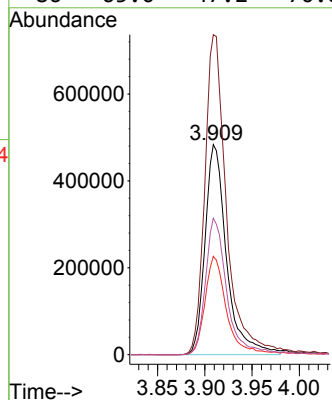
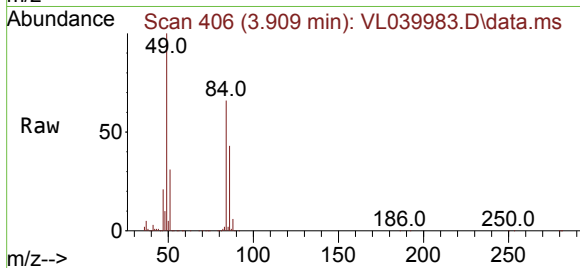
Ion Ratio Lower Upper

84 100

49 152.3 122.2 183.4

51 46.7 36.3 54.5

86 65.0 47.2 70.8



#23

Vinyl Acetate

Concen: 0.889 ppbv

RT: 4.597 min Scan# 620

Delta R.T. 0.003 min

Lab File: VL039983.D

Acq: 12 Dec 2022 19:46

Tgt Ion: 43 Resp: 55696

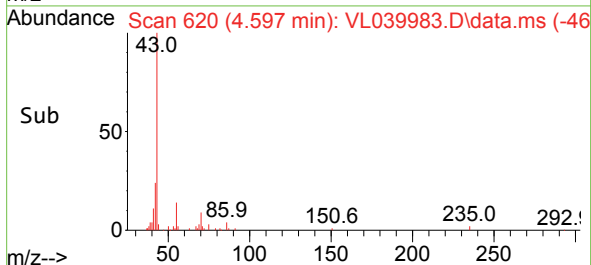
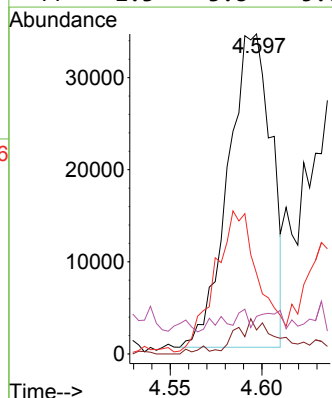
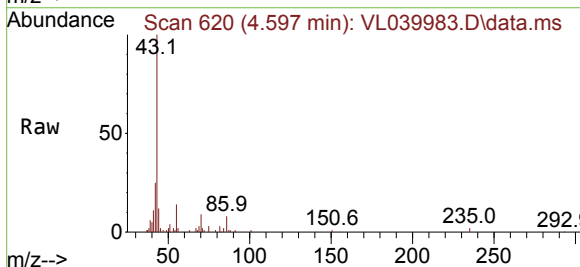
Ion Ratio Lower Upper

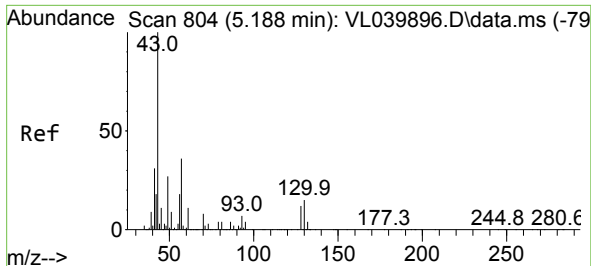
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86 7.7 5.0 7.4#

42 24.8 7.6 11.4#

44 2.3 3.8 5.6#

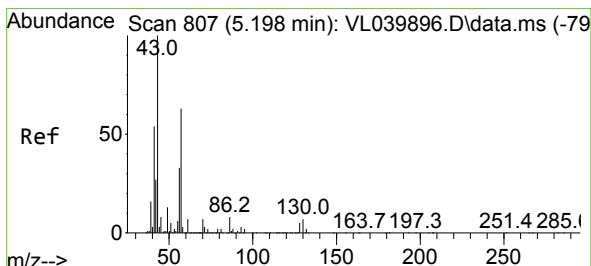
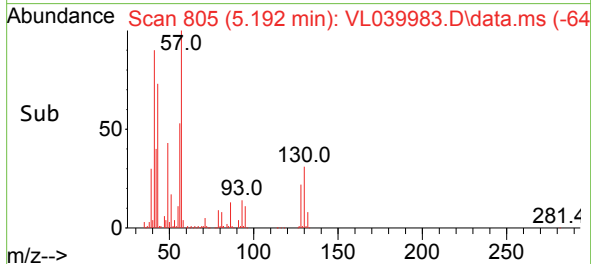
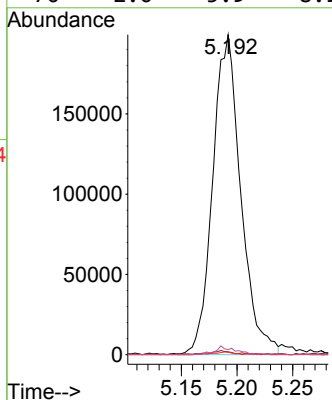
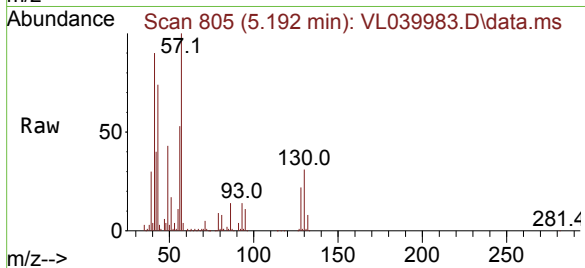




#25
Ethyl Acetate
Concen: 1.248 ppbv
RT: 5.192 min Scan# 805
Delta R.T. 0.023 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

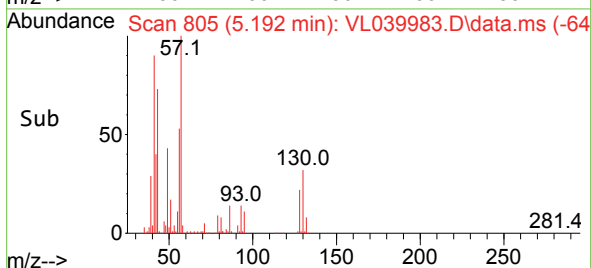
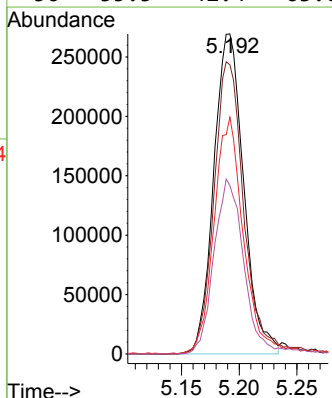
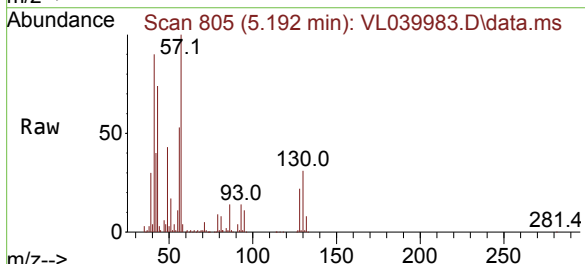
Instrument :
MSVOA_L
ClientSampleId :
OA-2

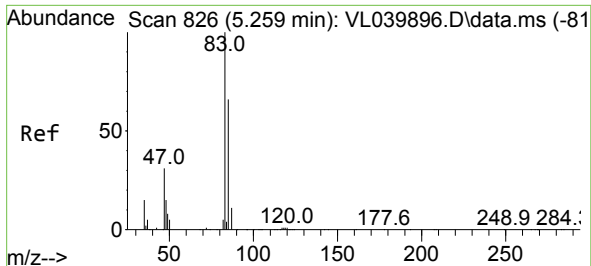
Tgt Ion: 43	Resp: 349510
Ion Ratio	Lower Upper
43 100	
45 1.5	8.4 12.6#
61 0.8	8.5 12.7#
70 2.0	5.9 8.9#



#26
Hexane
Concen: 3.972 ppbv
RT: 5.192 min Scan# 805
Delta R.T. 0.016 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt	Ion: 57	Resp:	485949
Ion	Ratio	Lower	Upper
57	100		
41	93.4	72.3	108.5
43	73.8	188.7	283.1#
56	55.5	42.4	63.6





#29

Chloroform

Concen: 0.041 ppbv

RT: 5.247 min Scan# 81

Delta R.T. 0.010 min

Lab File: VL039983.D

Acq: 12 Dec 2022 19:46

Instrument :

MSVOA_L

ClientSampleId :

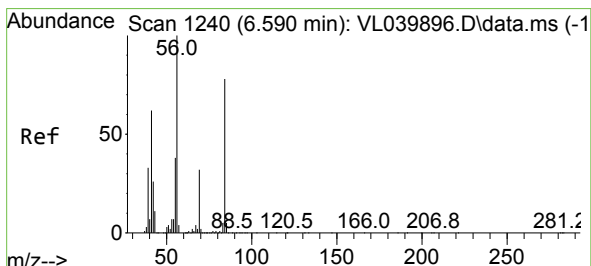
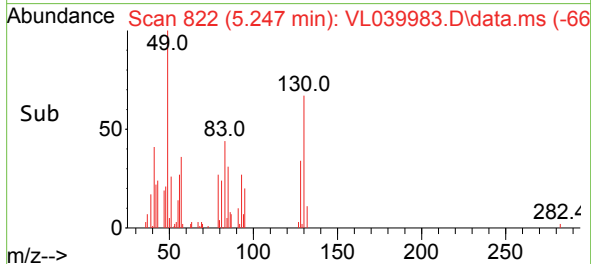
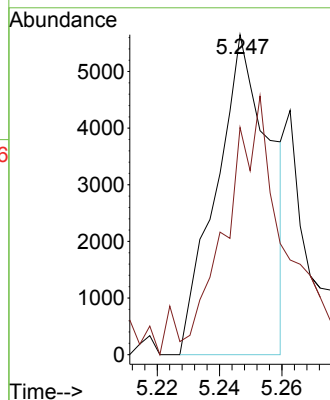
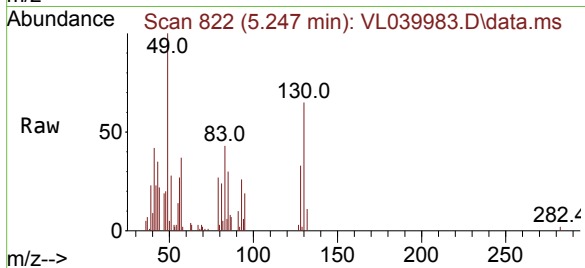
OA-2

Tgt Ion: 83 Resp: 6726

Ion Ratio Lower Upper

83 100

85 66.9 52.4 78.6



#30

Cyclohexane

Concen: 0.029 ppbv

RT: 6.574 min Scan# 1235

Delta R.T. 0.010 min

Lab File: VL039983.D

Acq: 12 Dec 2022 19:46

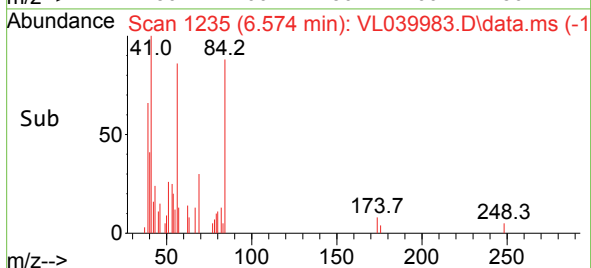
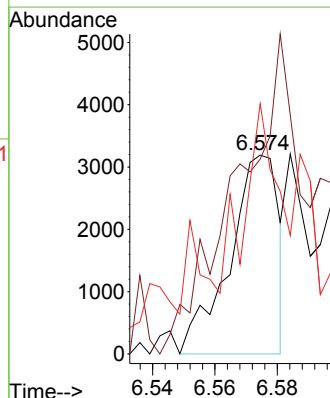
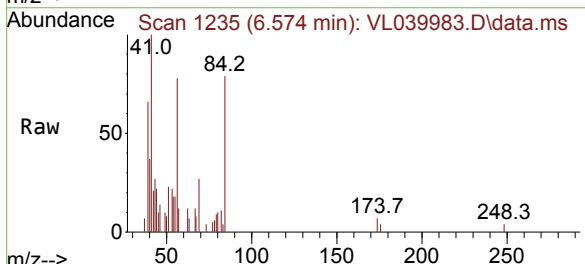
Tgt Ion: 84 Resp: 3484

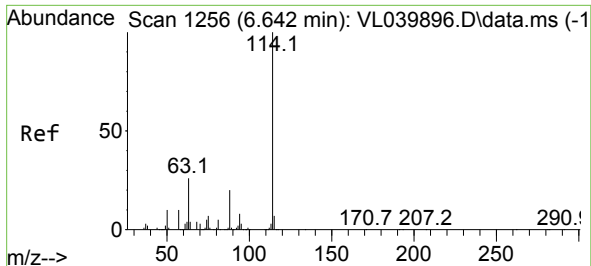
Ion Ratio Lower Upper

84 100

56 0.0 112.5 168.7#

41 229.0 67.8 101.8#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.632 min Scan# 114

Delta R.T. 0.013 min

Lab File: VL039983.D

Acq: 12 Dec 2022 19:46

Instrument :

MSVOA_L

ClientSampleId :

OA-2

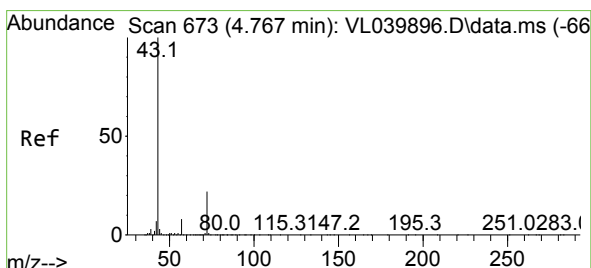
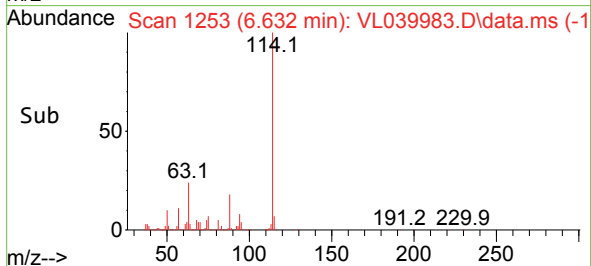
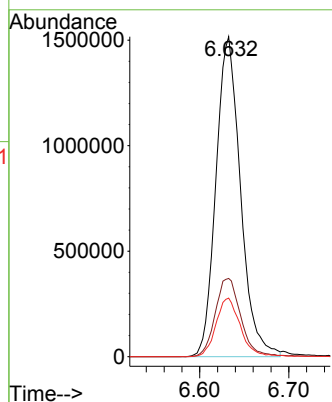
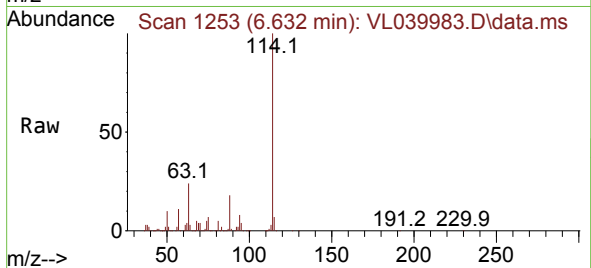
Tgt Ion:114 Resp: 2907234

Ion Ratio Lower Upper

114 100

63 25.8 21.4 32.0

88 18.3 15.3 22.9



#34

2-Butanone

Concen: 0.378 ppbv

RT: 4.767 min Scan# 673

Delta R.T. 0.016 min

Lab File: VL039983.D

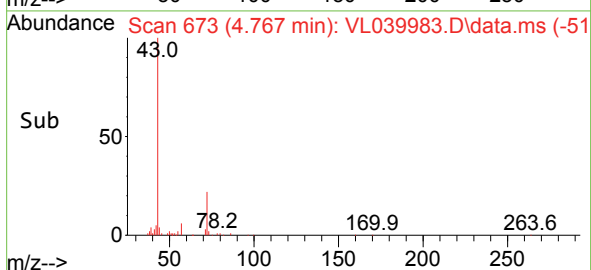
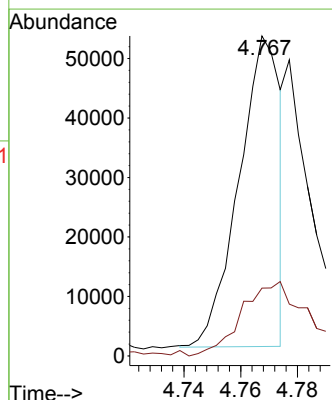
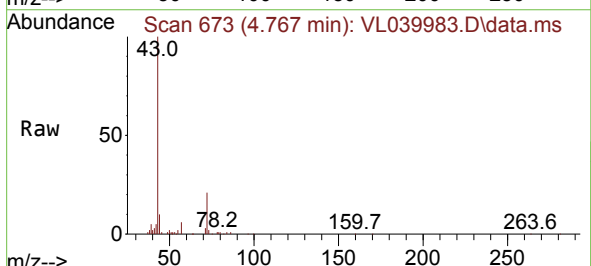
Acq: 12 Dec 2022 19:46

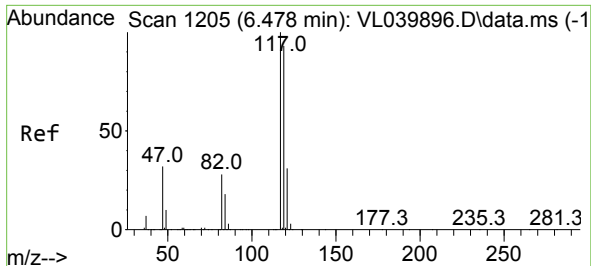
Tgt Ion: 43 Resp: 52567

Ion Ratio Lower Upper

43 100

72 0.0 17.4 26.2#

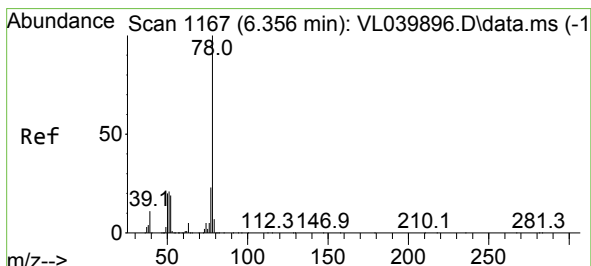
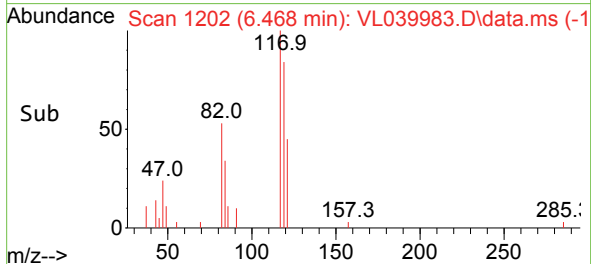
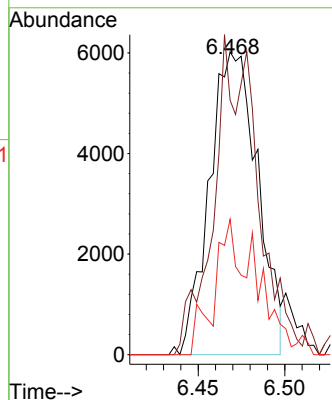
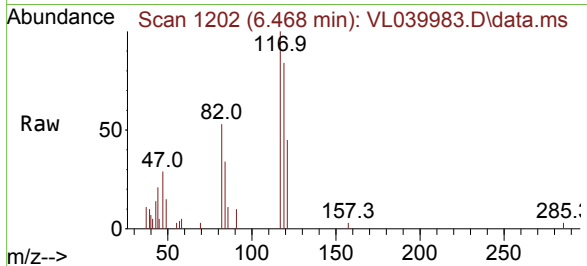




#35
Carbon Tetrachloride
Concen: 0.071 ppbv
RT: 6.468 min Scan# 1165
Delta R.T. 0.013 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

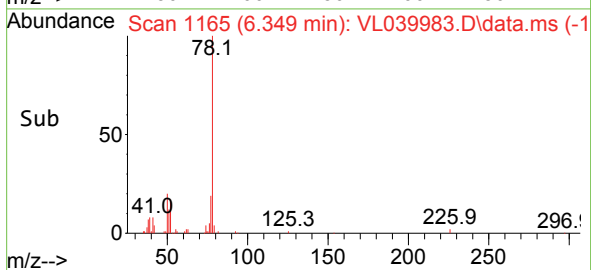
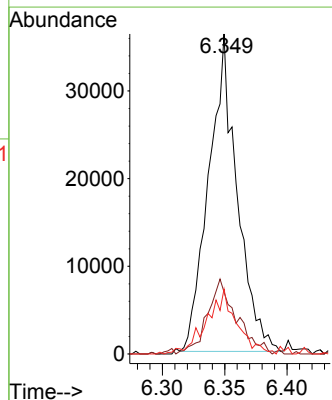
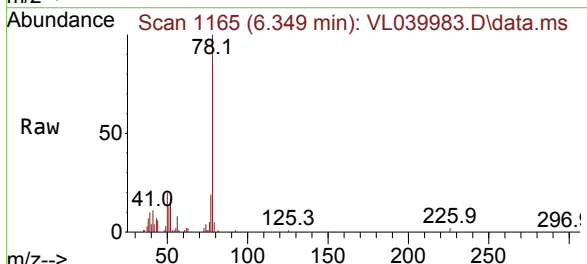
Instrument :
MSVOA_L
ClientSampleId :
OA-2

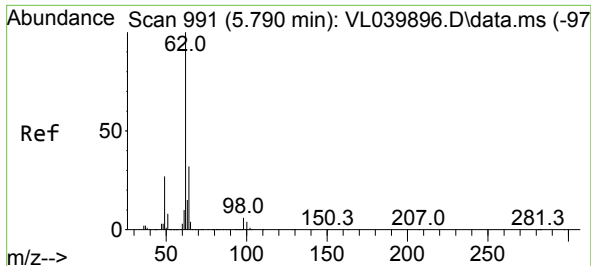
Tgt Ion:117 Resp: 11647
Ion Ratio Lower Upper
117 100
119 80.6 74.7 112.1
121 44.8 24.5 36.7#



#36
Benzene
Concen: 0.232 ppbv
RT: 6.349 min Scan# 1165
Delta R.T. 0.016 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt Ion: 78 Resp: 57356
Ion Ratio Lower Upper
78 100
77 18.3 18.2 27.2
50 18.8 15.8 23.8

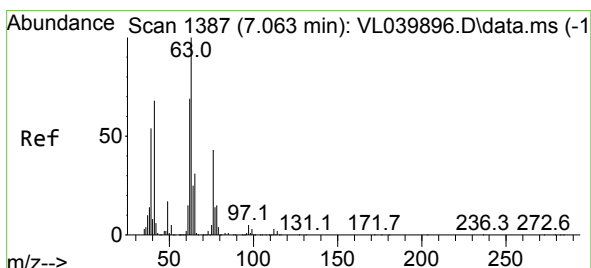
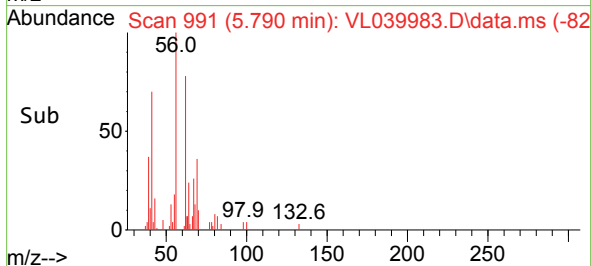
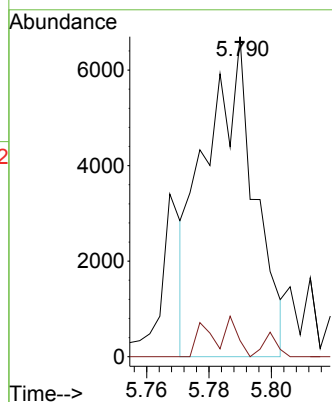
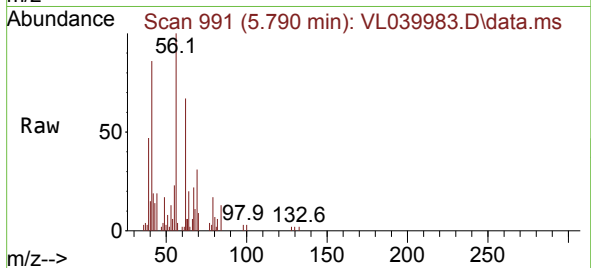




#37
1,2-Dichloroethane
Concen: 0.055 ppbv
RT: 5.790 min Scan# 991
Delta R.T. 0.023 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

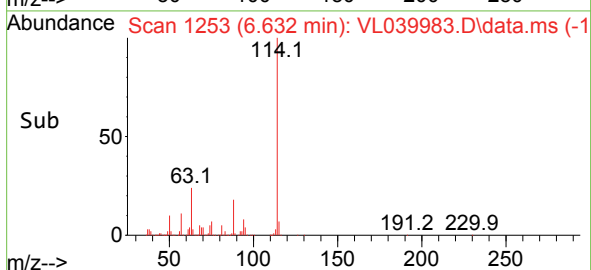
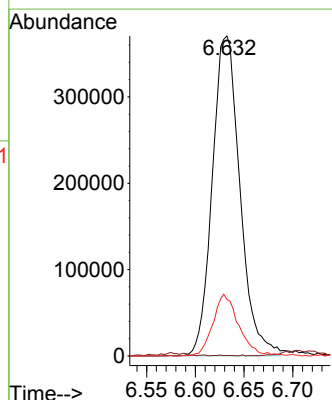
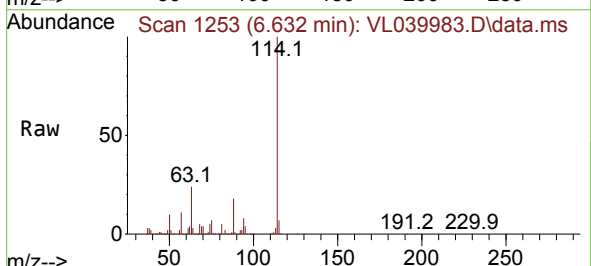
Instrument :
MSVOA_L
ClientSampleId :
OA-2

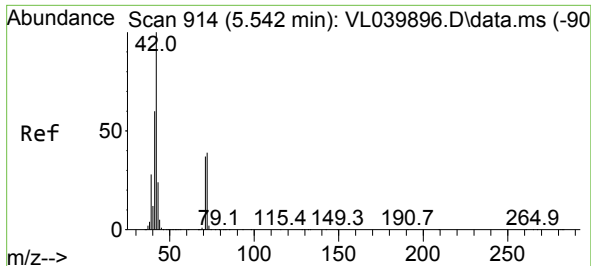
Tgt Ion: 62 Resp: 7395
Ion Ratio Lower Upper
62 100
98 8.8 5.0 7.6#



#39
1,2-Dichloropropane
Concen: 7.608 ppbv
RT: 6.632 min Scan# 1253
Delta R.T. -0.402 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt Ion: 63 Resp: 732482
Ion Ratio Lower Upper
63 100
41 0.0 54.7 82.1#
62 17.7 55.0 82.6#

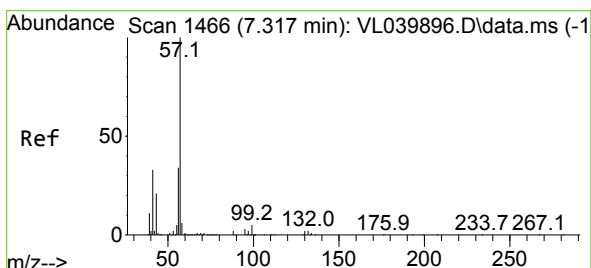
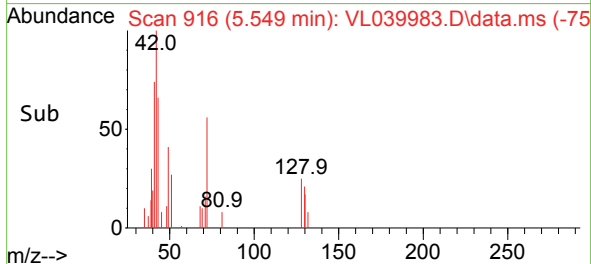
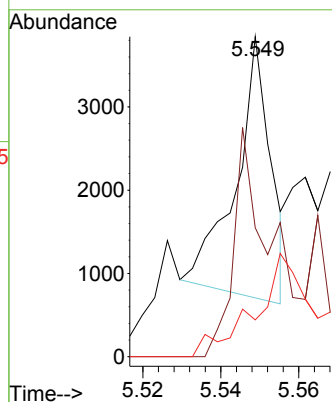
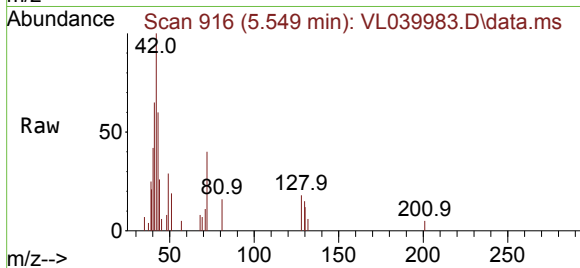




#41
Tetrahydrofuran
Concen: 0.020 ppbv
RT: 5.549 min Scan# 914
Delta R.T. 0.029 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

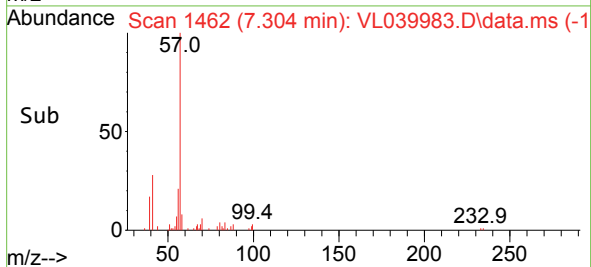
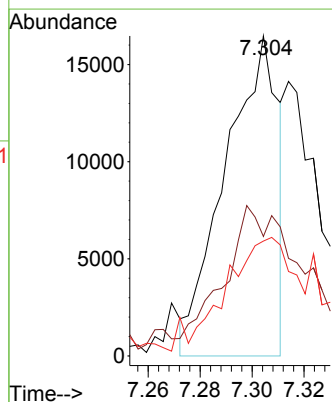
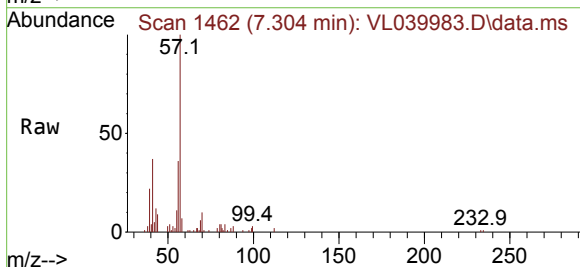
Instrument :
MSVOA_L
ClientSampleId :
OA-2

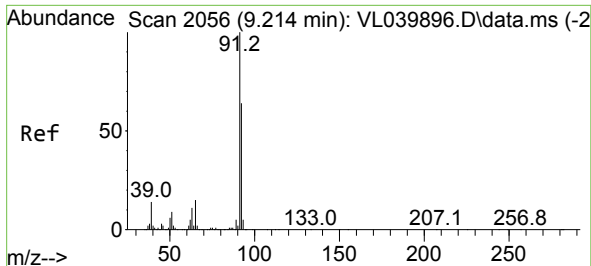
Tgt Ion: 42 Resp: 1930
Ion Ratio Lower Upper
42 100
72 150.1 31.6 47.4#
71 88.2 31.2 46.8#



#44
2,2,4-Trimethylpentane
Concen: 0.056 ppbv
RT: 7.304 min Scan# 1462
Delta R.T. 0.013 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt Ion: 57 Resp: 23219
Ion Ratio Lower Upper
57 100
41 79.0 26.2 39.2#
56 75.3 25.5 38.3#





#53

Toluene

Concen: 0.569 ppbv

RT: 9.198 min Scan# 2051

Delta R.T. 0.013 min

Lab File: VL039983.D

Acq: 12 Dec 2022 19:46

Instrument :

MSVOA_L

ClientSampleId :

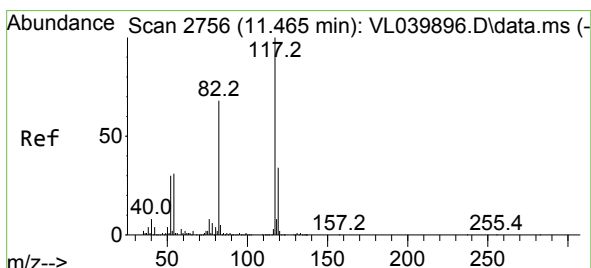
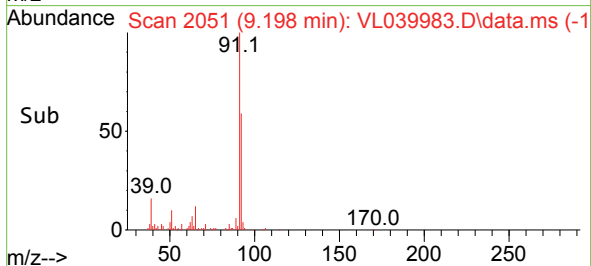
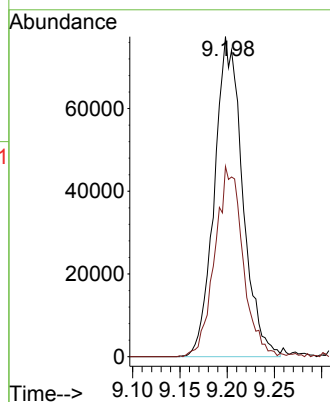
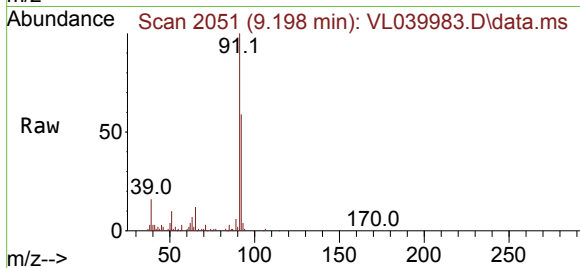
OA-2

Tgt Ion: 91 Resp: 160063

Ion Ratio Lower Upper

91 100

92 59.4 49.8 74.6



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.449 min Scan# 2751

Delta R.T. 0.016 min

Lab File: VL039983.D

Acq: 12 Dec 2022 19:46

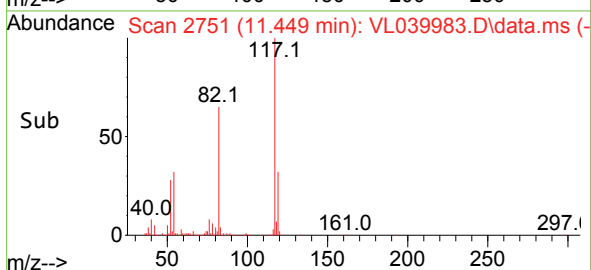
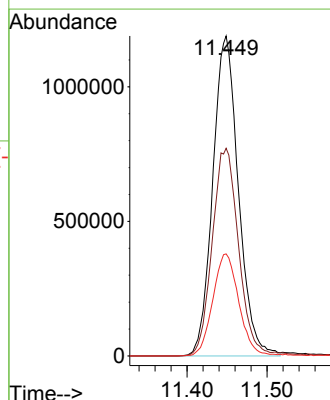
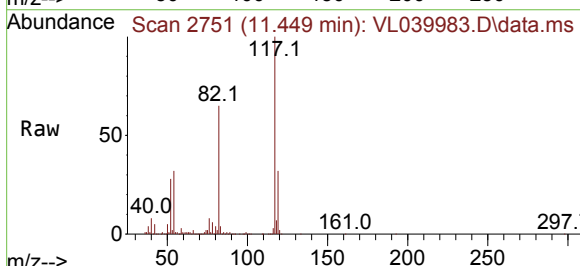
Tgt Ion: 117 Resp: 2644556

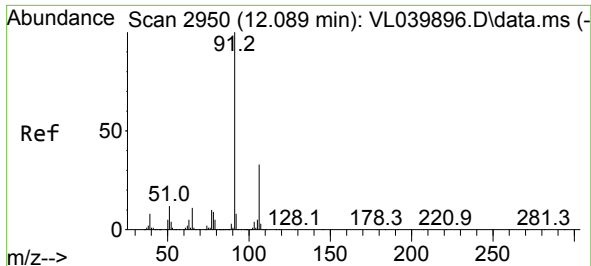
Ion Ratio Lower Upper

117 100

82 67.9 52.3 78.5

119 33.0 25.7 38.5

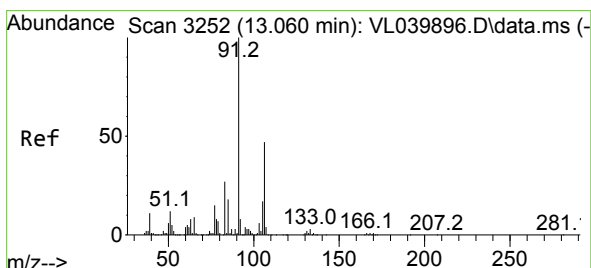
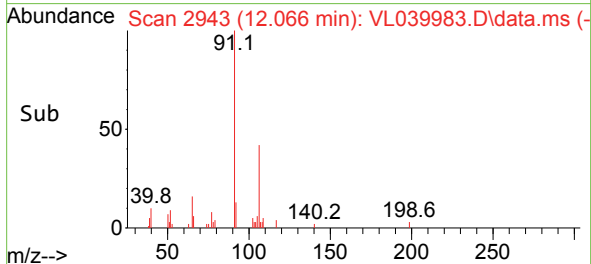
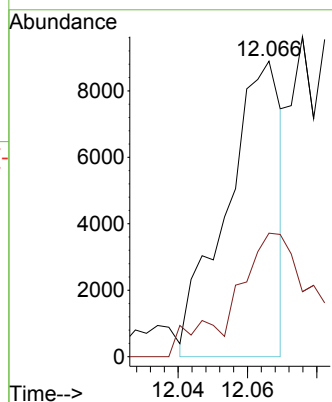
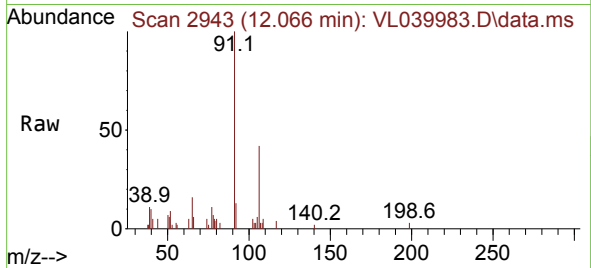




#58
Ethyl Benzene
Concen: 0.027 ppbv
RT: 12.066 min Scan# 2950
Delta R.T. 0.010 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

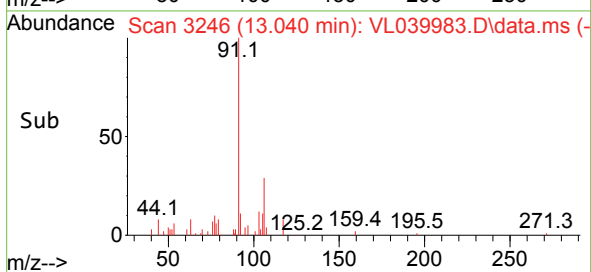
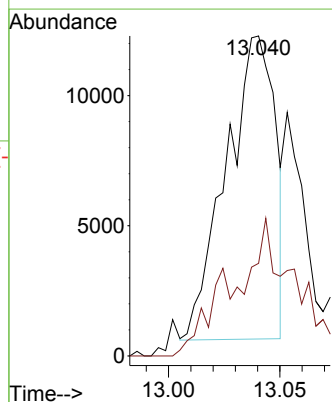
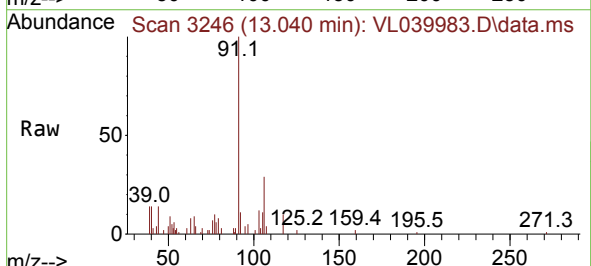
Instrument :
MSVOA_L
ClientSampleId :
OA-2

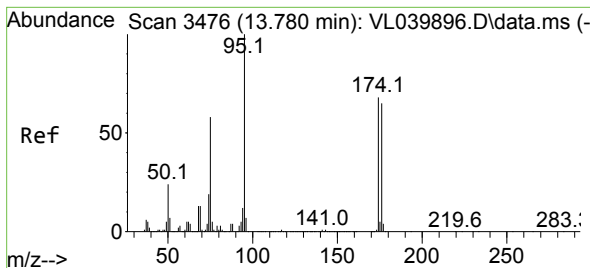
Tgt Ion: 91 Resp: 9703
Ion Ratio Lower Upper
91 100
106 32.6 26.1 39.1



#60
o-Xylene
Concen: 0.062 ppbv
RT: 13.040 min Scan# 3246
Delta R.T. 0.013 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt Ion: 91 Resp: 17873
Ion Ratio Lower Upper
91 100
106 57.1 23.2 69.6

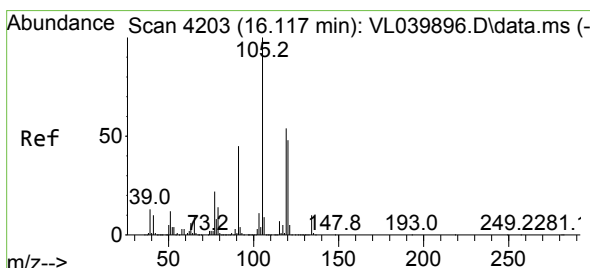
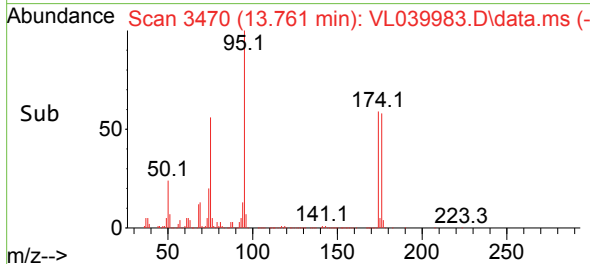
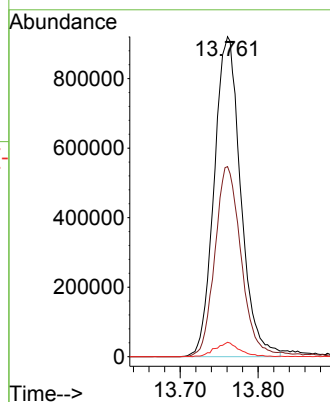
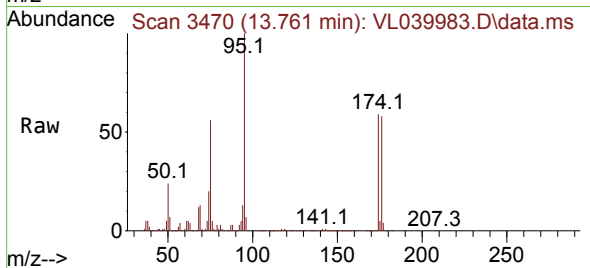




#68
1-Bromo-4-Fluorobenzene
Concen: 10.796 ppbv
RT: 13.761 min Scan# 3476
Delta R.T. 0.020 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Instrument :
MSVOA_L
ClientSampleId :
OA-2

Tgt Ion: 95 Resp: 2180759
Ion Ratio Lower Upper
95 100
174 60.6 53.7 80.5
175 4.3 4.0 6.0



#74
1,2,4-Trimethylbenzene
Concen: 0.041 ppbv
RT: 16.098 min Scan# 4197
Delta R.T. 0.023 min
Lab File: VL039983.D
Acq: 12 Dec 2022 19:46

Tgt Ion: 105 Resp: 12933
Ion Ratio Lower Upper
105 100
120 43.4 38.7 58.1
91 15.2 36.4 54.6#
77 19.0 17.4 26.0

