

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040424\
 Data File : VL041139.D
 Acq On : 5 Apr 2024 00:13
 Operator : SY/MD
 Sample : P1986-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Quant Time: Apr 05 03:48:00 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL040424AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Apr 05 03:20:09 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.214	49	1223079	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.674	114	3344117	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.490	117	3050031	10.000	ppbv	-0.02

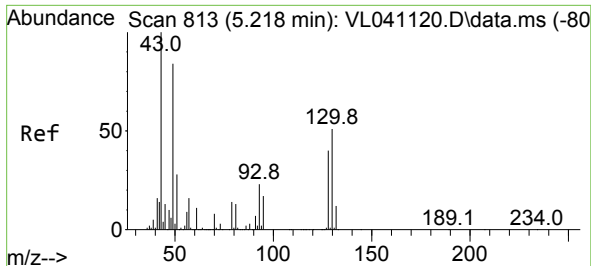
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.802	95	2344506	9.520	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.200%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.738	85	76268	0.363	ppbv	90
3) Chlorodifluoromethane	2.684	51	108433	0.576	ppbv #	80
4) Chloromethane	2.822	50	47965	0.673	ppbv	89
9) Propene	2.713	41	47484	0.792	ppbv #	82
11) Trichlorofluoromethane	3.578	101	40895	0.216	ppbv	94
12) 1,1,2-Trichlorotrifluo...	4.079	101	5083	0.037	ppbv #	15
13) Ethanol	3.250	45	2747942	196.861	ppbv	98
15) Acetone	3.478	43	4194265	31.671	ppbv	96
16) 1,3-Butadiene	2.976	39	11579	0.178	ppbv #	50
17) tert-Butyl alcohol	4.327	59	40967	0.341	ppbv	97
19) Isopropyl Alcohol	3.594	45	469535	5.771	ppbv #	1
20) Methylene Chloride	3.951	84	764397	13.995	ppbv	98
23) Vinyl Acetate	4.632	43	44723	0.325	ppbv #	62
25) Ethyl Acetate	5.230	43	358088	1.440	ppbv #	88
26) Hexane	5.233	57	413975	3.710	ppbv #	47
30) Cyclohexane	6.632	84	3098	0.035	ppbv #	1
34) 2-Butanone	4.806	43	93093	0.644	ppbv	92
35) Carbon Tetrachloride	6.523	117	8738	0.046	ppbv #	84
36) Benzene	6.391	78	55155	0.225	ppbv	95
39) 1,2-Dichloropropane	6.674	63	803418	8.251	ppbv #	22
44) 2,2,4-Trimethylpentane	7.346	57	20428	0.050	ppbv #	15
53) Toluene	9.246	91	292058	1.126	ppbv	100
60) o-Xylene	13.085	91	27599	0.096	ppbv	77
74) 1,2,4-Trimethylbenzene	16.127	105	51681	0.158	ppbv #	59

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

Quant Time: Apr 05 03:48:00 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL040424AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 05 03:20:09 2024
Response via : Initial Calibration

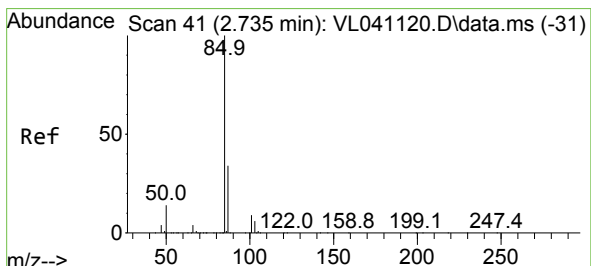
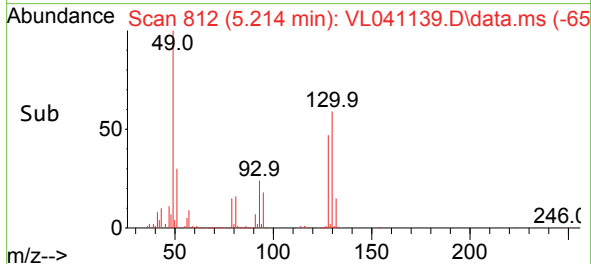
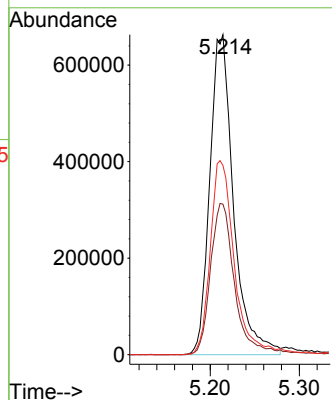
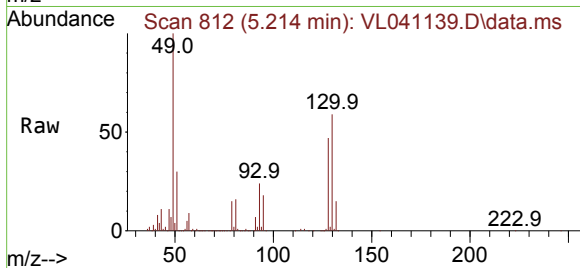




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.214 min Scan# 81
Delta R.T. -0.004 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

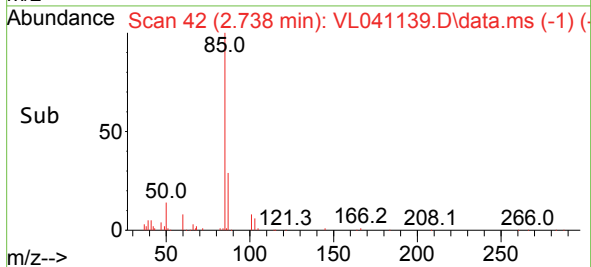
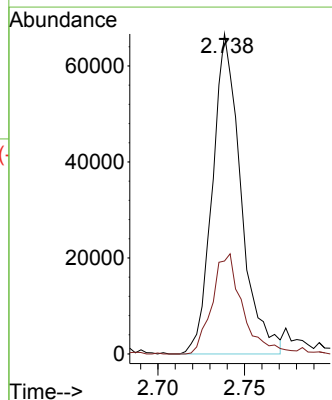
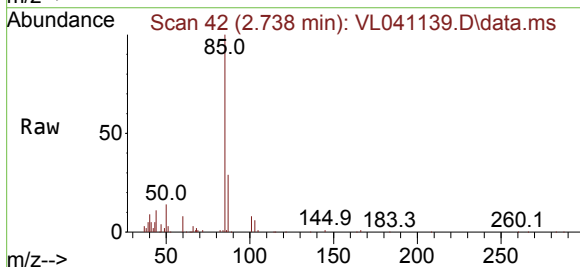
Instrument :
MSVOA_L
ClientSampleId :
IA1

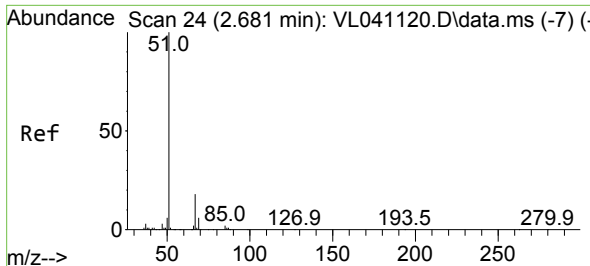
Tgt Ion: 49 Resp: 1223079
Ion Ratio Lower Upper
49 100
128 49.3 23.8 71.5
130 62.6 30.3 90.9



#2
Dichlorodifluoromethane
Concen: 0.363 ppbv
RT: 2.738 min Scan# 42
Delta R.T. 0.003 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 85 Resp: 76268
Ion Ratio Lower Upper
85 100
87 29.0 28.1 42.1

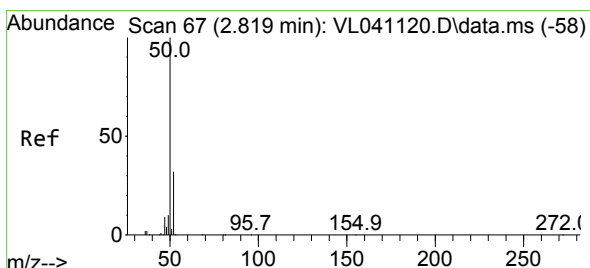
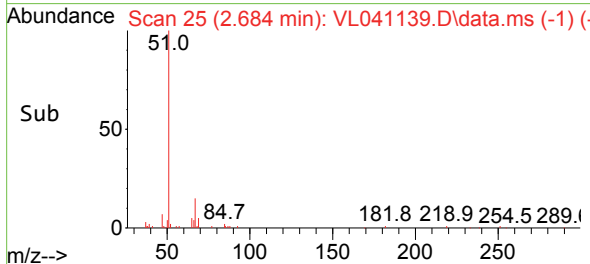
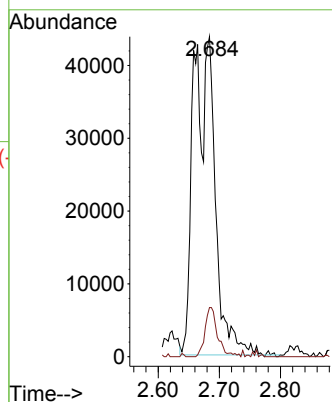
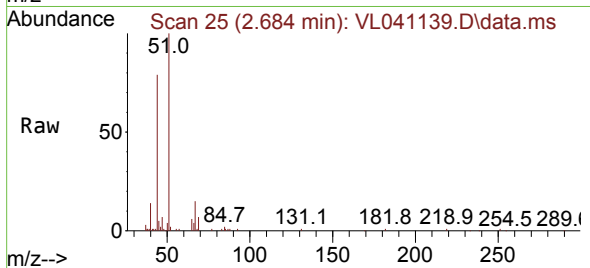




#3
Chlorodifluoromethane
Concen: 0.576 ppbv
RT: 2.684 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

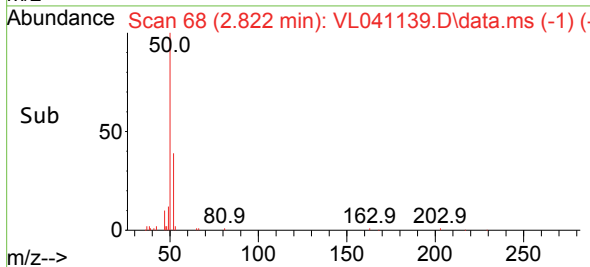
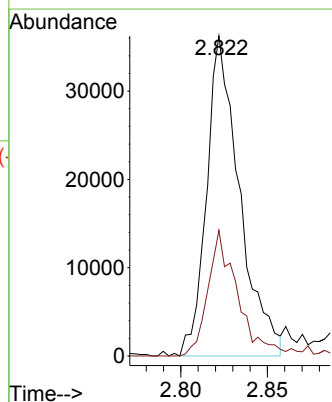
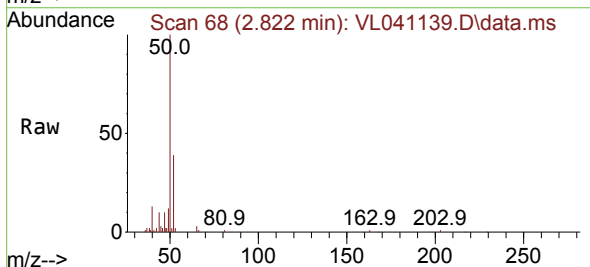
Instrument :
MSVOA_L
ClientSampleId :
IA1

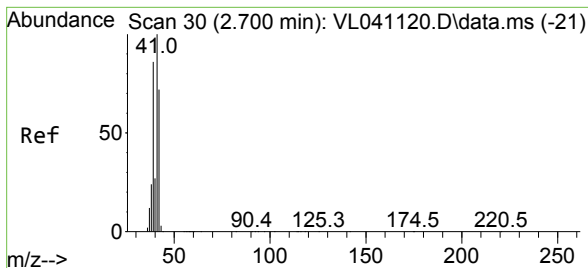
Tgt Ion: 51 Resp: 108433
Ion Ratio Lower Upper
51 100
67 9.1 14.5 21.7#



#4
Chloromethane
Concen: 0.673 ppbv
RT: 2.822 min Scan# 68
Delta R.T. 0.003 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 50 Resp: 47965
Ion Ratio Lower Upper
50 100
52 39.5 26.6 40.0





#9

Propene

Concen: 0.792 ppbv

RT: 2.713 min Scan# 34

Delta R.T. 0.013 min

Lab File: VL041139.D

Acq: 5 Apr 2024 00:13

Instrument :

MSVOA_L

ClientSampleId :

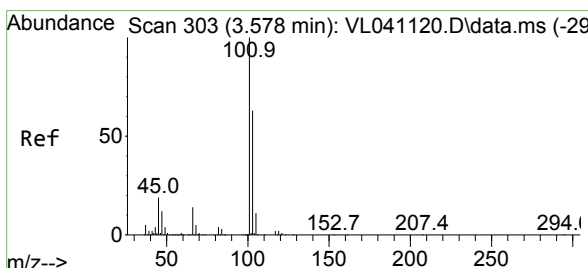
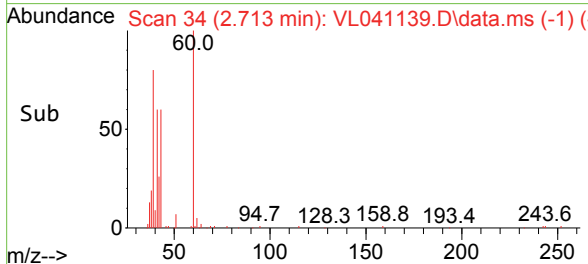
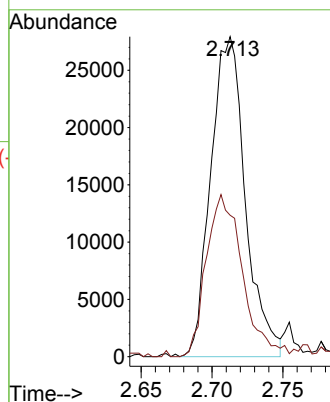
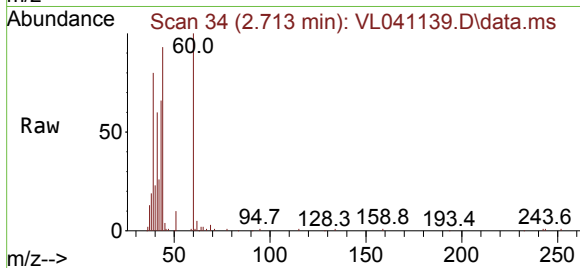
IA1

Tgt Ion: 41 Resp: 47484

Ion Ratio Lower Upper

41 100

42 55.1 55.9 83.9#



#11

Trichlorofluoromethane

Concen: 0.216 ppbv

RT: 3.578 min Scan# 303

Delta R.T. -0.000 min

Lab File: VL041139.D

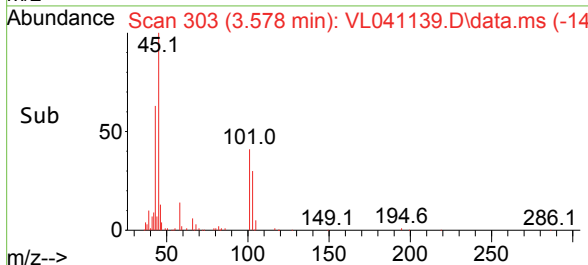
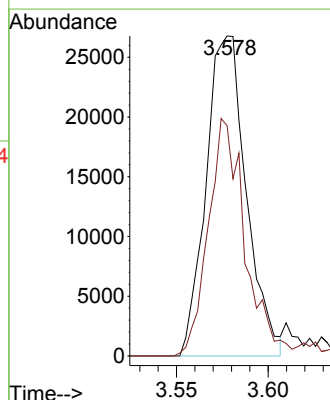
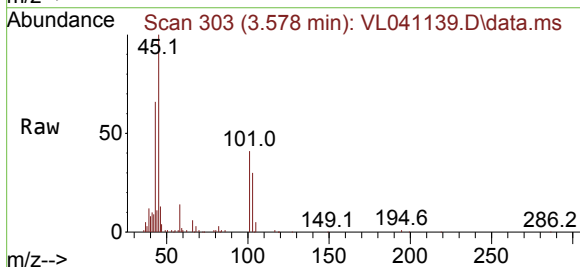
Acq: 5 Apr 2024 00:13

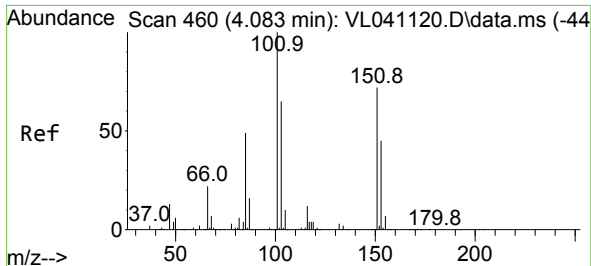
Tgt Ion:101 Resp: 40895

Ion Ratio Lower Upper

101 100

103 71.0 53.0 79.4





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.037 ppbv

RT: 4.079 min Scan# 41

Delta R.T. -0.003 min

Lab File: VL041139.D

Acq: 5 Apr 2024 00:13

Instrument :

MSVOA_L

ClientSampleId :

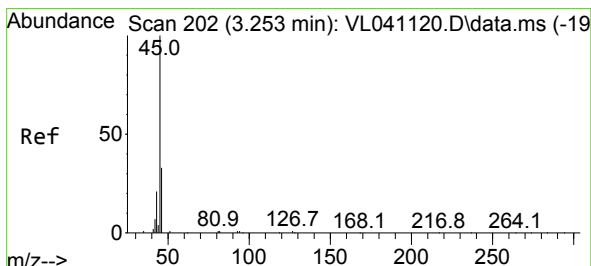
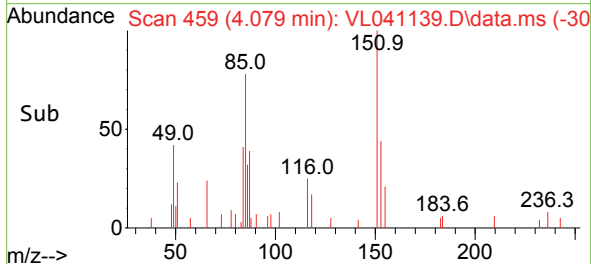
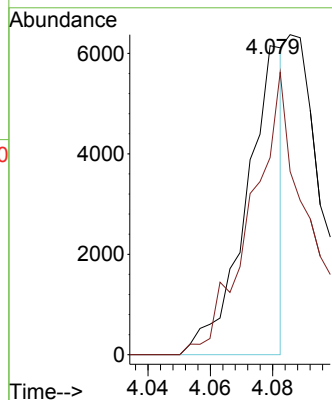
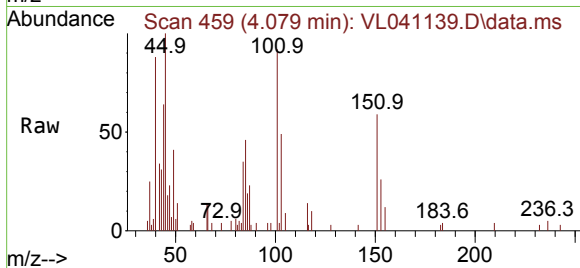
IA1

Tgt Ion:101 Resp: 5083

Ion Ratio Lower Upper

101 100

151 0.0 55.8 83.8#



#13

Ethanol

Concen: 196.861 ppbv

RT: 3.250 min Scan# 201

Delta R.T. -0.003 min

Lab File: VL041139.D

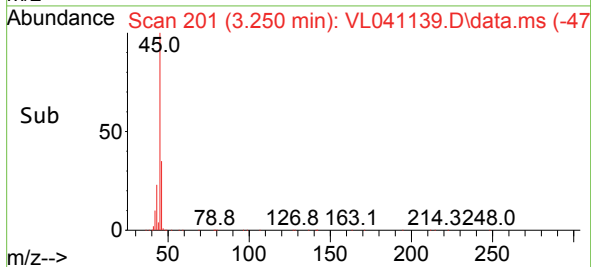
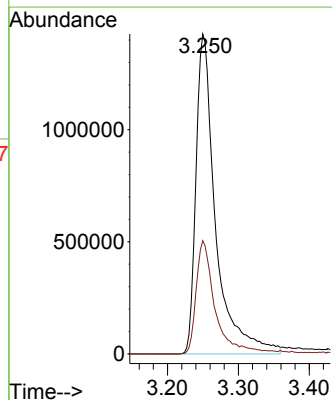
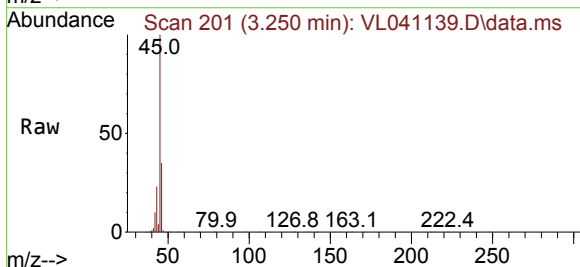
Acq: 5 Apr 2024 00:13

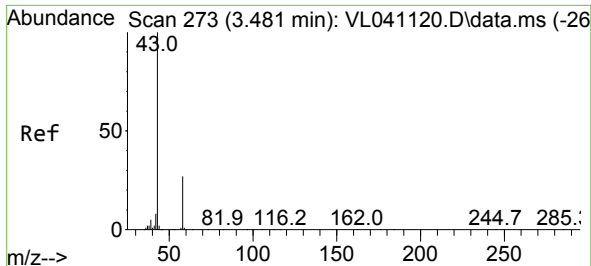
Tgt Ion: 45 Resp: 2747942

Ion Ratio Lower Upper

45 100

46 35.1 14.6 58.2

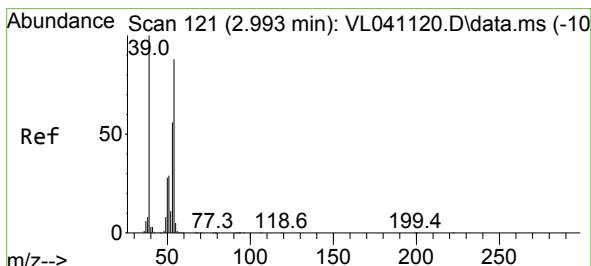
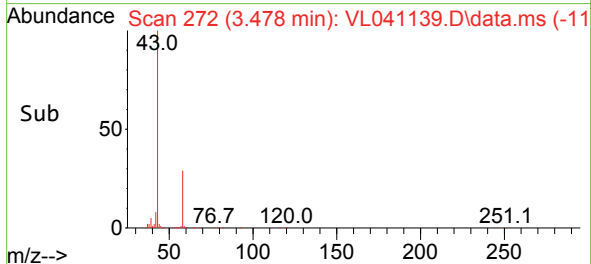
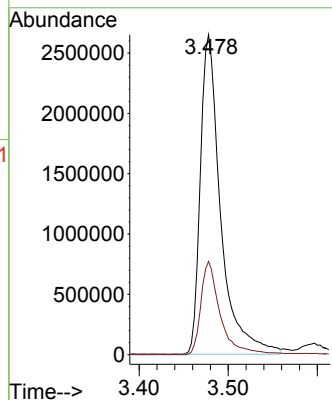
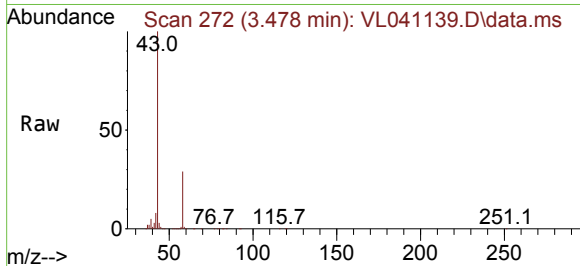




#15
Acetone
Concen: 31.671 ppbv
RT: 3.478 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

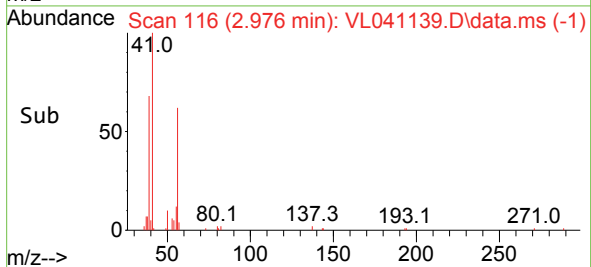
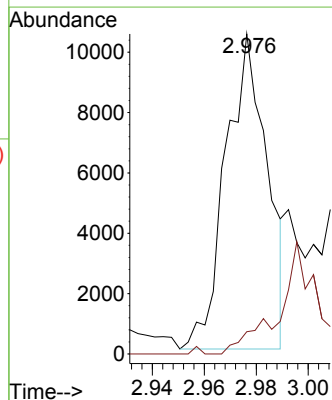
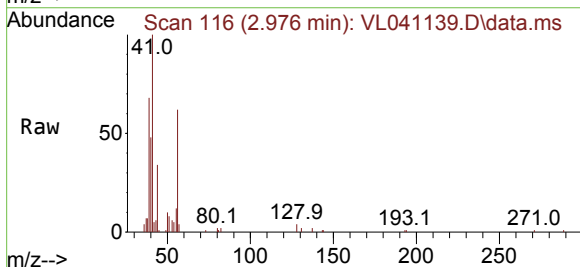
Instrument :
MSVOA_L
ClientSampleId :
IA1

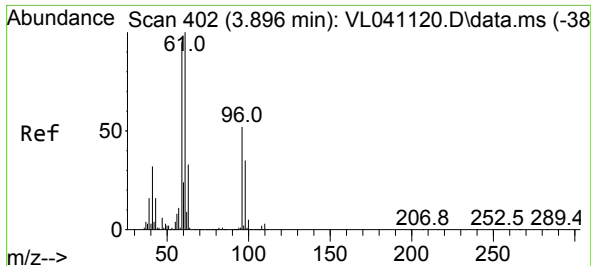
Tgt Ion: 43 Resp: 4194265
Ion Ratio Lower Upper
43 100
58 28.9 21.7 32.5



#16
1,3-Butadiene
Concen: 0.178 ppbv
RT: 2.976 min Scan# 116
Delta R.T. -0.016 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 39 Resp: 11579
Ion Ratio Lower Upper
39 100
54 35.7 64.0 96.0#





#17

tert-Butyl alcohol

Concen: 0.341 ppbv

RT: 4.327 min Scan# 51

Delta R.T. 0.431 min

Lab File: VL041139.D

Acq: 5 Apr 2024 00:13

Instrument :

MSVOA_L

ClientSampleId :

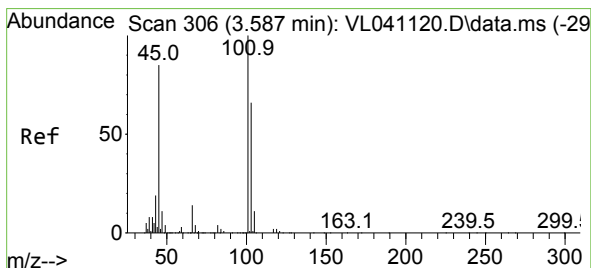
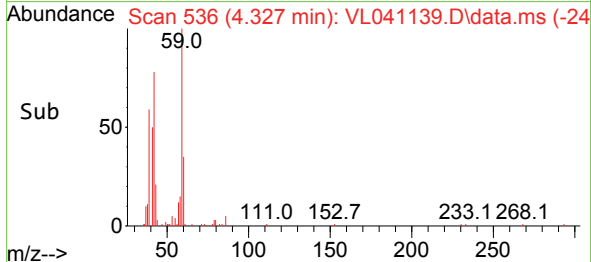
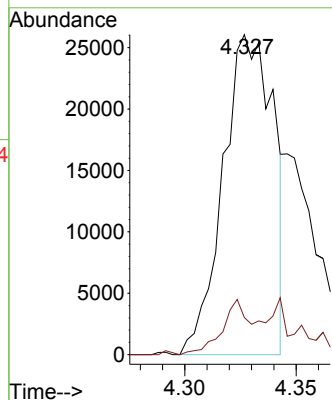
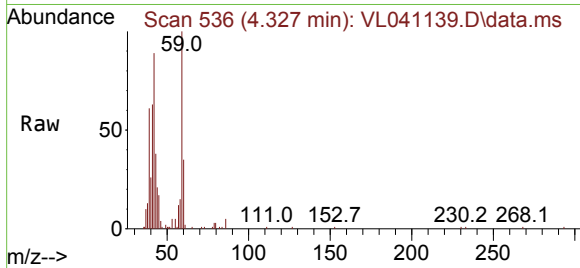
IA1

Tgt Ion: 59 Resp: 40967

Ion Ratio Lower Upper

59 100

57 10.2 9.0 13.6



#19

Isopropyl Alcohol

Concen: 5.771 ppbv

RT: 3.594 min Scan# 308

Delta R.T. 0.006 min

Lab File: VL041139.D

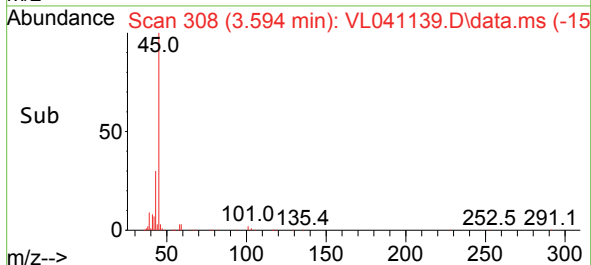
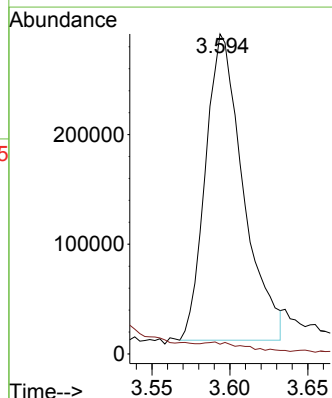
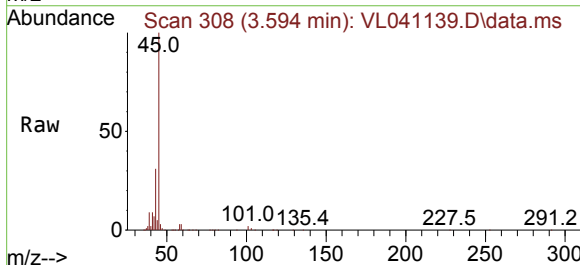
Acq: 5 Apr 2024 00:13

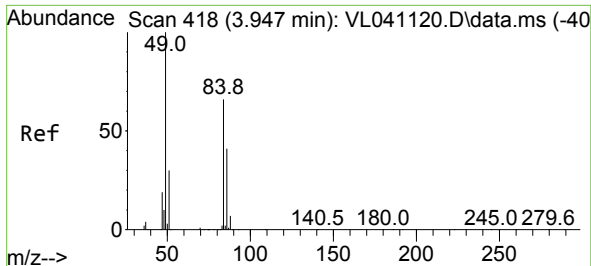
Tgt Ion: 45 Resp: 469535

Ion Ratio Lower Upper

45 100

58 258.3 2.2 3.4#

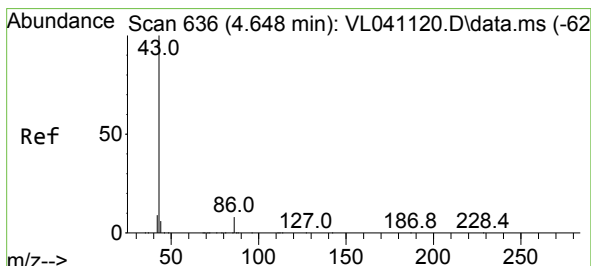
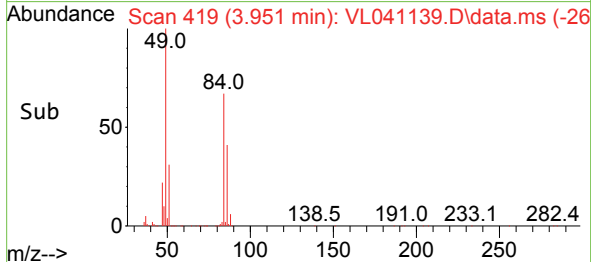
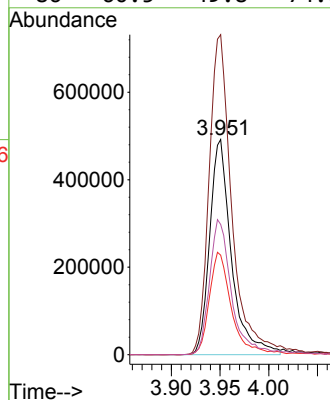
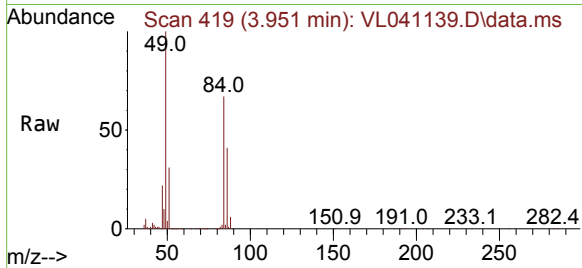




#20
Methylene Chloride
Concen: 13.995 ppbv
RT: 3.951 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

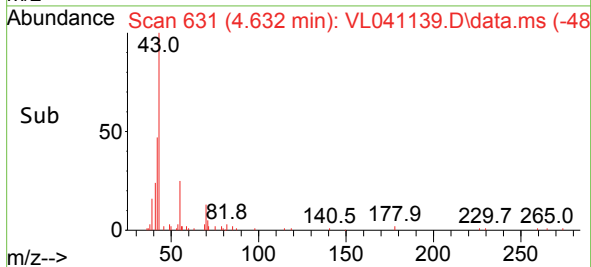
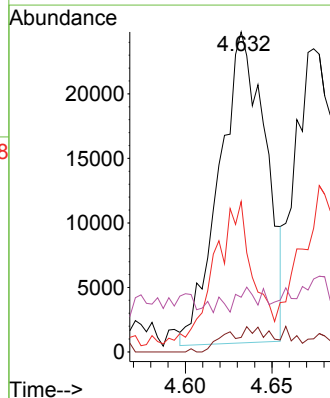
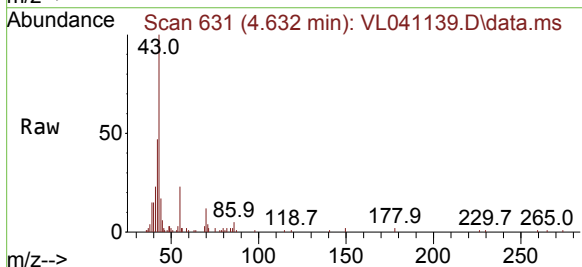
Instrument :
MSVOA_L
ClientSampleId :
IA1

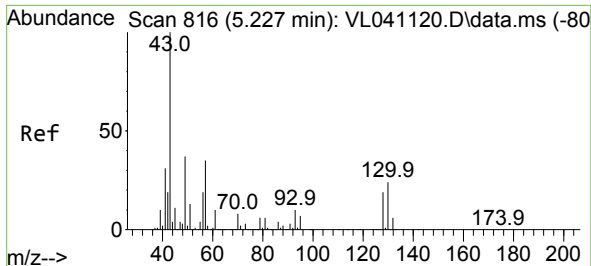
Tgt Ion: 84 Resp: 764397
Ion Ratio Lower Upper
84 100
49 148.7 117.0 175.6
51 46.2 34.9 52.3
86 60.5 49.8 74.6



#23
Vinyl Acetate
Concen: 0.325 ppbv
RT: 4.632 min Scan# 631
Delta R.T. -0.016 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 43 Resp: 44723
Ion Ratio Lower Upper
43 100
86 4.8 5.4 8.2#
42 37.4 8.0 12.0#
44 0.9 4.2 6.2#

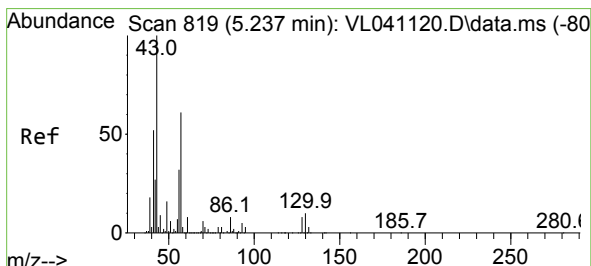
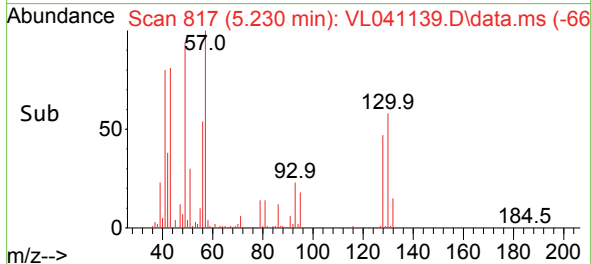
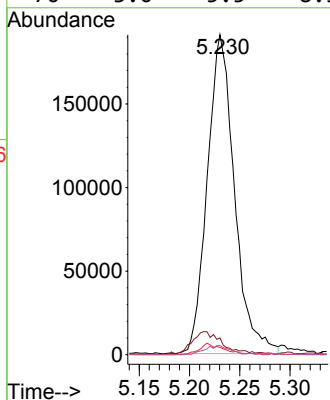
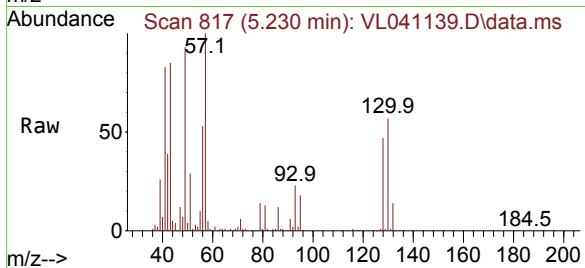




#25
Ethyl Acetate
Concen: 1.440 ppbv
RT: 5.230 min Scan# 816
Delta R.T. 0.003 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

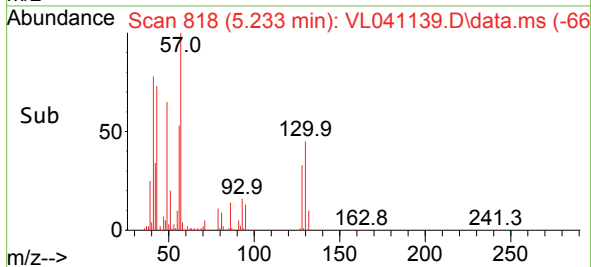
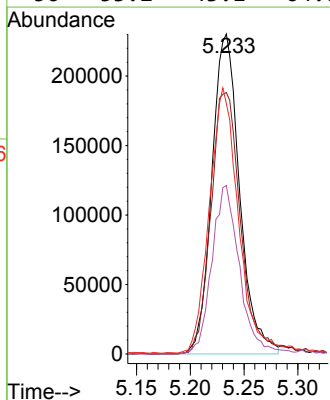
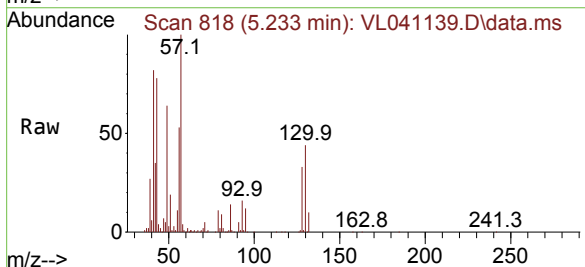
Instrument :
MSVOA_L
ClientSampleId :
IA1

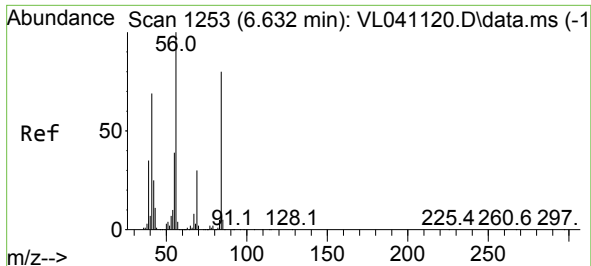
Tgt Ion: 43 Resp: 358088
Ion Ratio Lower Upper
43 100
45 8.3 8.2 12.2
61 3.2 8.2 12.2#
70 3.0 5.5 8.3#



#26
Hexane
Concen: 3.710 ppbv
RT: 5.233 min Scan# 818
Delta R.T. -0.003 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 57 Resp: 413975
Ion Ratio Lower Upper
57 100
41 89.4 73.8 110.6
43 89.3 184.2 276.2#
56 53.2 43.1 64.7

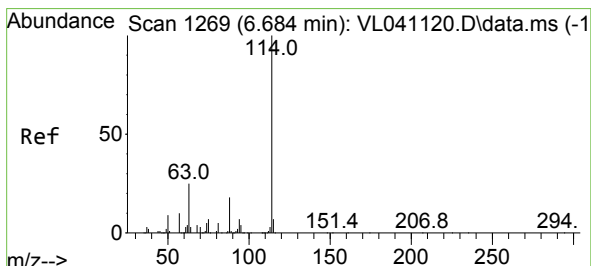
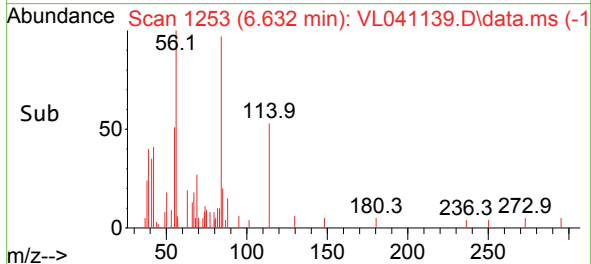
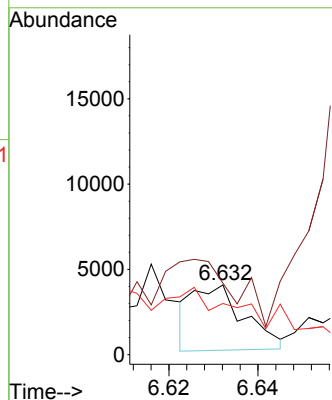
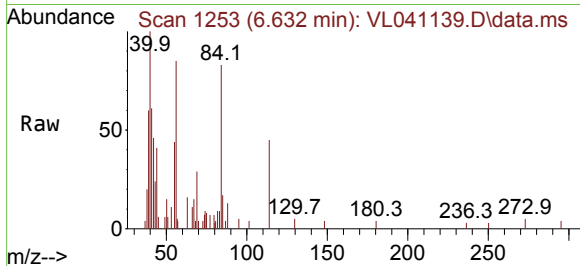




#30
Cyclohexane
Concen: 0.035 ppbv
RT: 6.632 min Scan# 1253
Delta R.T. -0.000 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

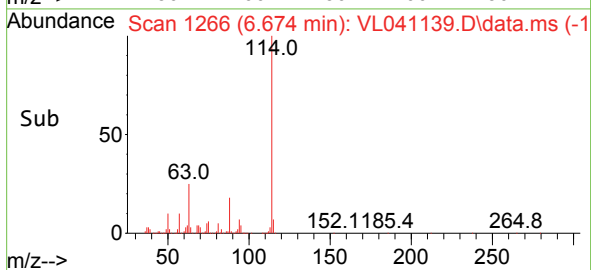
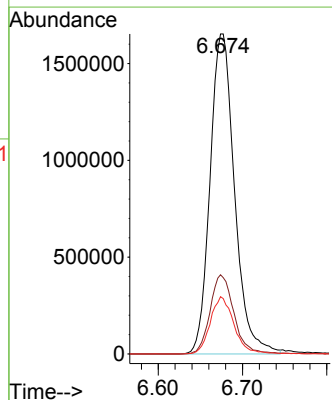
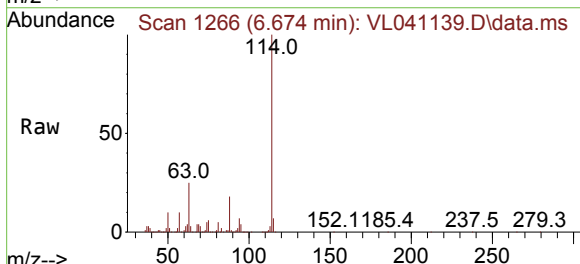
Instrument :
MSVOA_L
ClientSampleId :
IA1

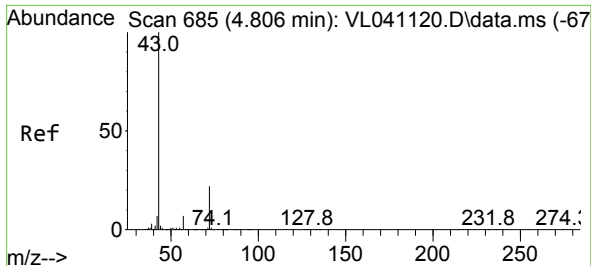
Tgt Ion: 84 Resp: 3098
Ion Ratio Lower Upper
84 100
56 0.0 110.4 165.6#
41 324.3 70.6 105.8#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.674 min Scan# 1266
Delta R.T. -0.010 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion:114 Resp: 3344117
Ion Ratio Lower Upper
114 100
63 24.3 21.0 31.6
88 17.5 14.6 22.0

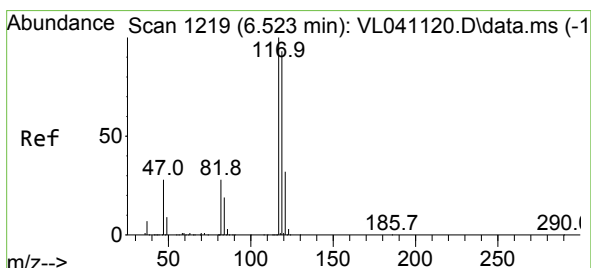
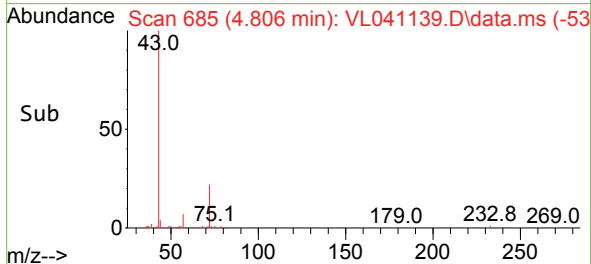
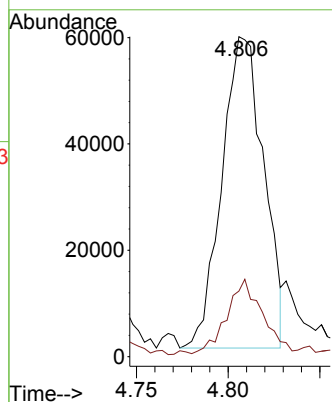
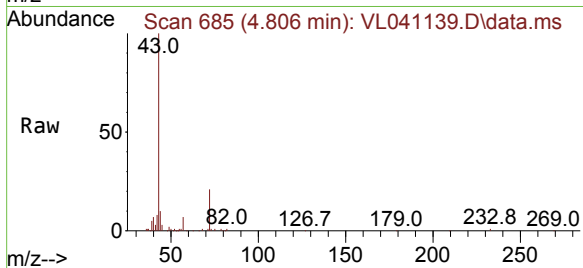




#34
2-Butanone
Concen: 0.644 ppbv
RT: 4.806 min Scan# 61
Delta R.T. -0.000 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

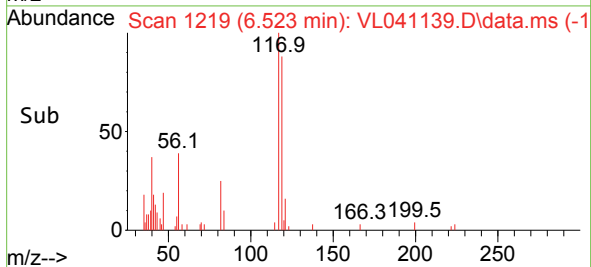
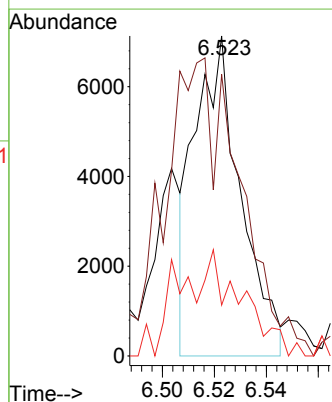
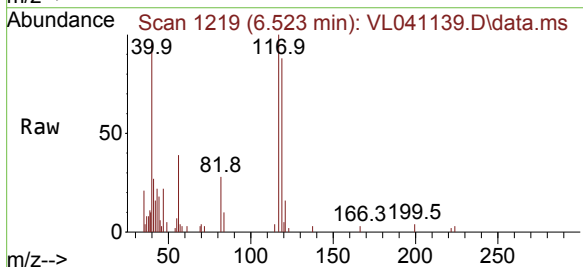
Instrument :
MSVOA_L
ClientSampleId :
IA1

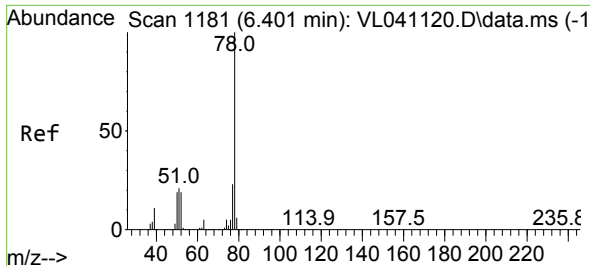
Tgt Ion: 43 Resp: 93093
Ion Ratio Lower Upper
43 100
72 25.3 17.4 26.0



#35
Carbon Tetrachloride
Concen: 0.046 ppbv
RT: 6.523 min Scan# 1219
Delta R.T. -0.000 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 117 Resp: 8738
Ion Ratio Lower Upper
117 100
119 86.4 75.6 113.4
121 8.5 23.4 35.2#

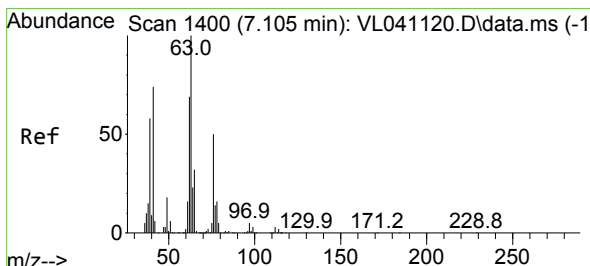
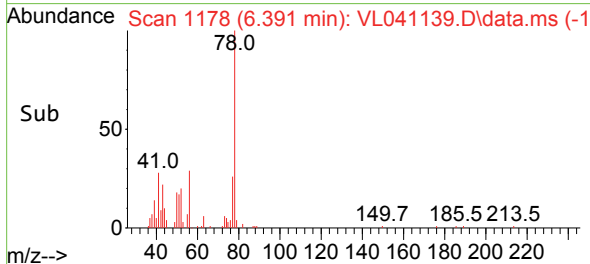
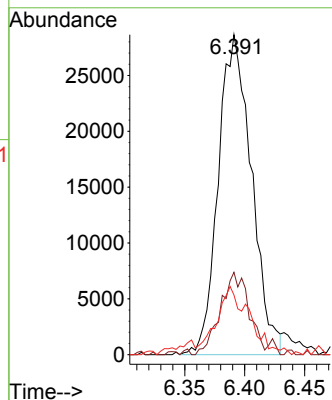
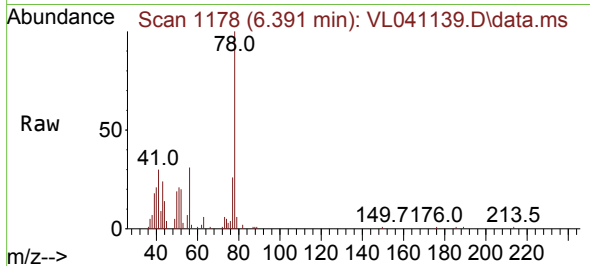




#36
Benzene
Concen: 0.225 ppbv
RT: 6.391 min Scan# 1181
Delta R.T. -0.010 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

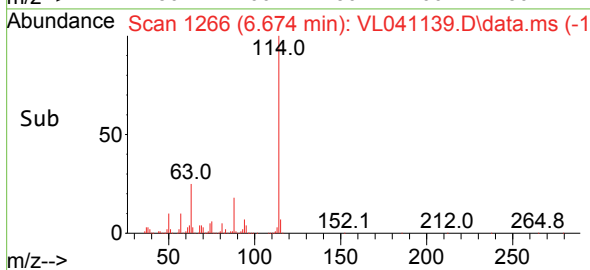
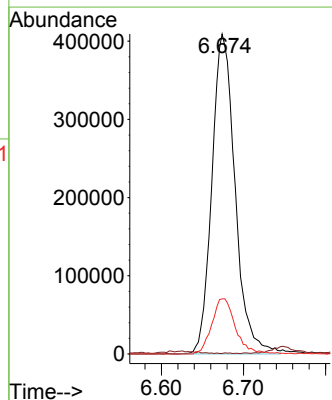
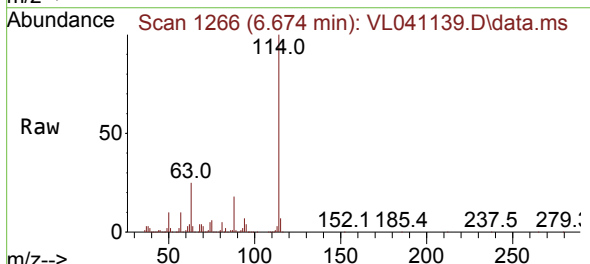
Instrument :
MSVOA_L
ClientSampleId :
IA1

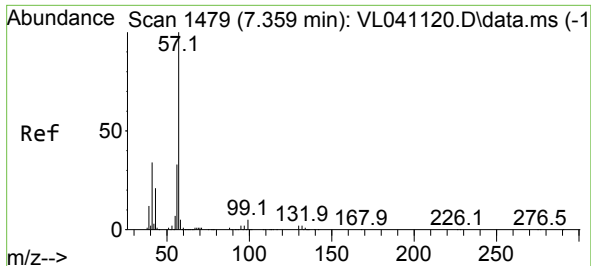
Tgt Ion: 78 Resp: 55155
Ion Ratio Lower Upper
78 100
77 25.8 18.8 28.2
50 17.2 15.5 23.3



#39
1,2-Dichloropropane
Concen: 8.251 ppbv
RT: 6.674 min Scan# 1266
Delta R.T. -0.431 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 63 Resp: 803418
Ion Ratio Lower Upper
63 100
41 0.0 62.2 93.4#
62 17.2 57.0 85.4#

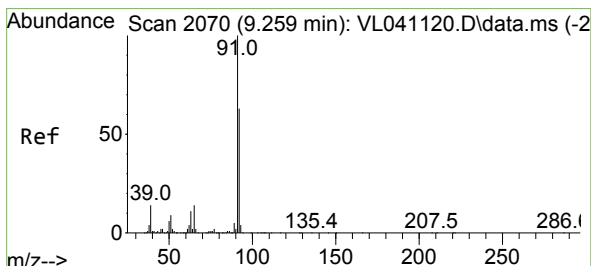
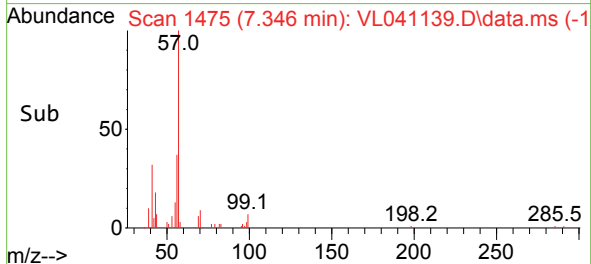
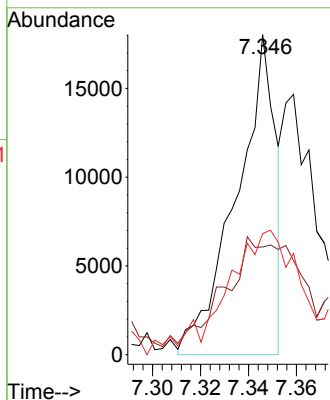
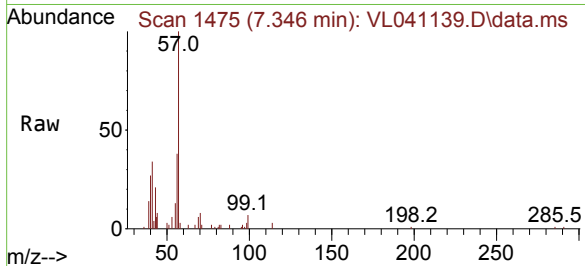




#44
2,2,4-Trimethylpentane
Concen: 0.050 ppbv
RT: 7.346 min Scan# 1479
Delta R.T. -0.013 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

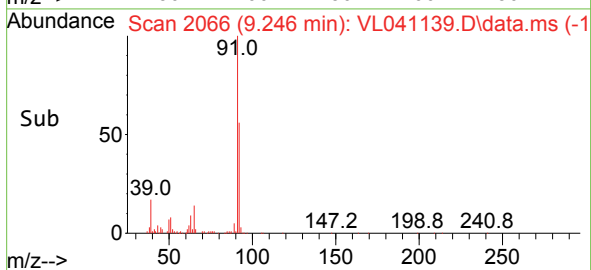
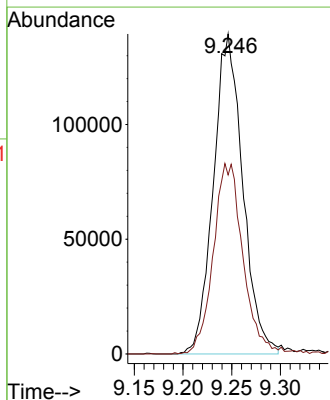
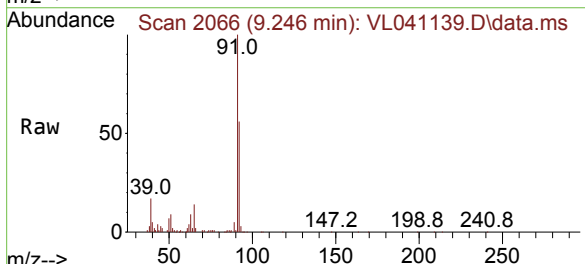
Instrument :
MSVOA_L
ClientSampleId :
IA1

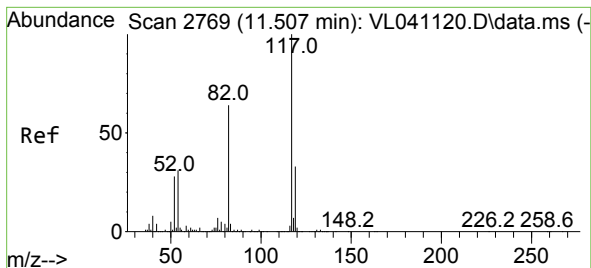
Tgt Ion: 57 Resp: 20428
Ion Ratio Lower Upper
57 100
41 84.0 28.0 42.0#
56 80.0 25.7 38.5#



#53
Toluene
Concen: 1.126 ppbv
RT: 9.246 min Scan# 2066
Delta R.T. -0.013 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 91 Resp: 292058
Ion Ratio Lower Upper
91 100
92 61.1 48.9 73.3

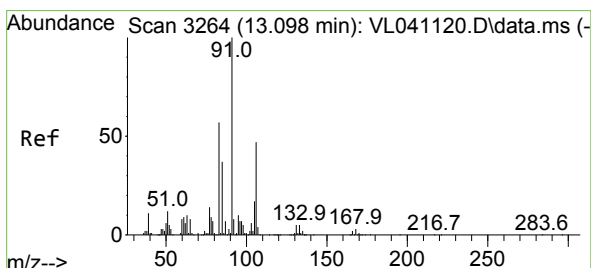
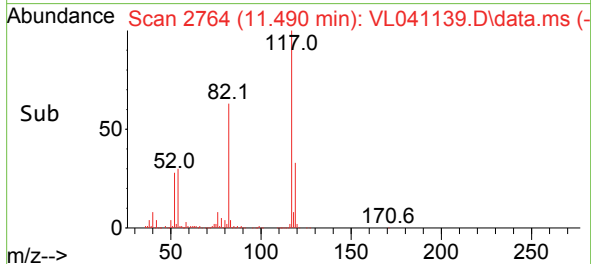
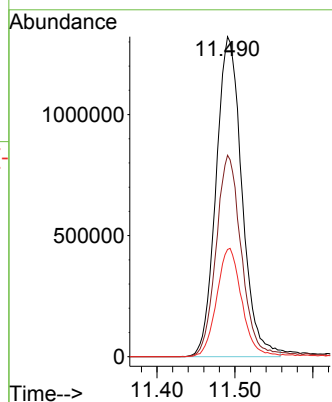
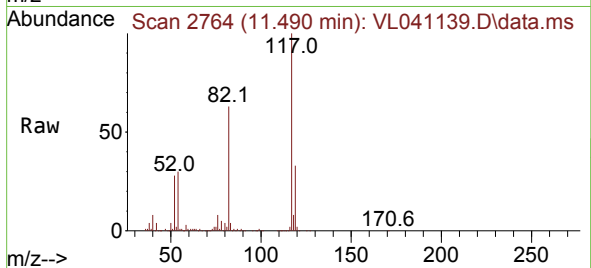




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.490 min Scan# 21
Delta R.T. -0.016 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

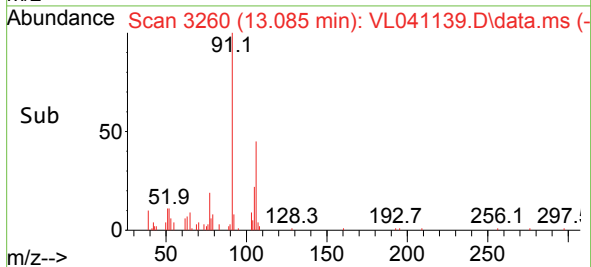
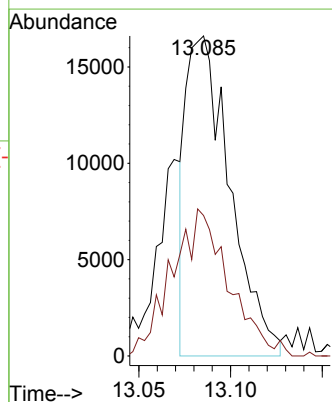
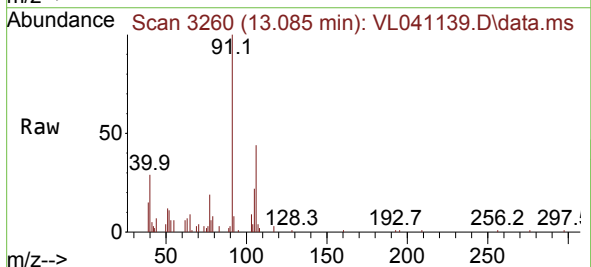
Instrument :
MSVOA_L
ClientSampleId :
IA1

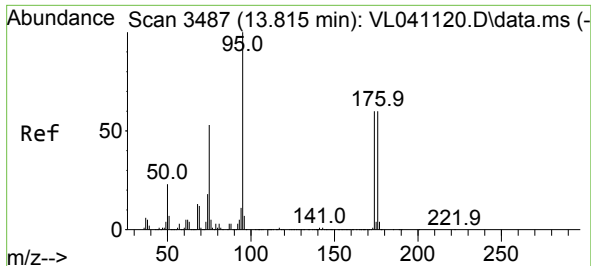
Tgt Ion:117 Resp: 3050031
Ion Ratio Lower Upper
117 100
82 62.8 51.4 77.2
119 33.7 23.7 35.5



#60
o-Xylene
Concen: 0.096 ppbv
RT: 13.085 min Scan# 3260
Delta R.T. -0.013 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 91 Resp: 27599
Ion Ratio Lower Upper
91 100
106 59.8 22.4 67.3

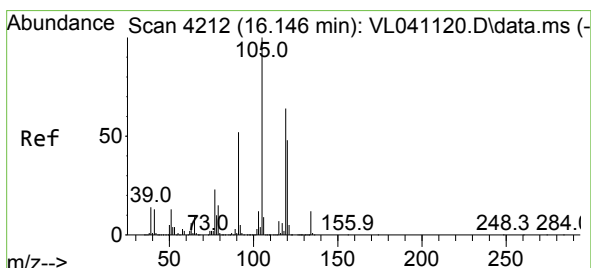
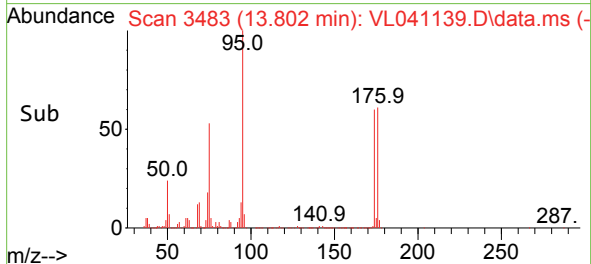
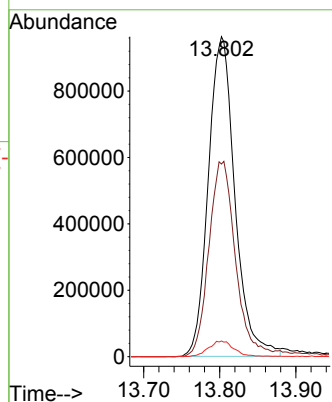
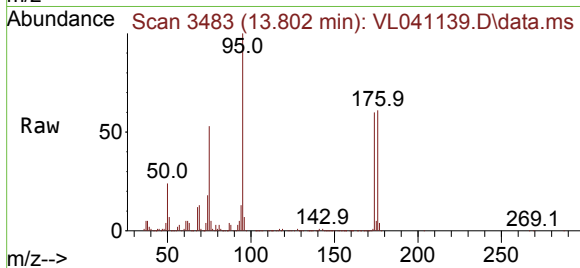




#68
1-Bromo-4-Fluorobenzene
Concen: 9.520 ppbv
RT: 13.802 min Scan# 34
Delta R.T. -0.013 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion: 95 Resp: 2344506
Ion Ratio Lower Upper
95 100
174 63.4 47.8 71.8
175 4.8 3.5 5.3



#74
1,2,4-Trimethylbenzene
Concen: 0.158 ppbv
RT: 16.127 min Scan# 4206
Delta R.T. -0.019 min
Lab File: VL041139.D
Acq: 5 Apr 2024 00:13

Tgt Ion: 105 Resp: 51681
Ion Ratio Lower Upper
105 100
120 32.6 40.4 60.6#
91 6.4 41.4 62.0#
77 12.2 19.0 28.4#

