

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL122223\
 Data File : VL040956.D
 Acq On : 22 Dec 2023 12:07
 Operator : SY/MD
 Sample : 05813-04RE
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 10492RE

Quant Time: Dec 23 01:20:22 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL122023AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Dec 22 23:57:16 2023
 Response via : Initial Calibration

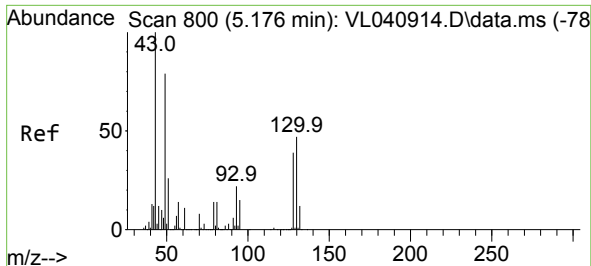
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.192	49	1040945	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.639	114	2676804	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.433	117	2261040	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.741	95	1644865	9.876	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.800%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.768	85	94822	0.478	ppbv	94
3) Chlorodifluoromethane	2.694	51	332478	2.122	ppbv #	64
4) Chloromethane	2.851	50	28457	0.493	ppbv #	84
9) Propene	2.909	41	69544	1.346	ppbv	88
10) Heptane	7.562	43	6163	0.048	ppbv #	28
11) Trichlorofluoromethane	3.584	101	35354	0.228	ppbv #	75
12) 1,1,2-Trichlorotrifluo...	4.086	101	8077	0.067	ppbv	98
13) Ethanol	3.263	45	171859	13.180	ppbv	94
15) Acetone	3.494	43	1105163	8.852	ppbv	99
16) 1,3-Butadiene	3.044	39	42512	0.791	ppbv #	16
17) tert-Butyl alcohol	3.594	59	99438	1.077	ppbv	97
19) Isopropyl Alcohol	3.597	45	2979050	45.730	ppbv #	99
20) Methylene Chloride	3.951	84	285727	6.421	ppbv	94
21) Allyl Chloride	3.954	41	9921	0.134	ppbv #	19
22) trans-1,2-Dichloroethene	4.459	96	5409	0.095	ppbv #	68
23) Vinyl Acetate	4.623	43	20439	0.148	ppbv #	1
25) Ethyl Acetate	5.214	43	203310	0.940	ppbv #	81
26) Hexane	5.214	57	260740	2.720	ppbv #	42
29) Chloroform	5.269	83	8205	0.051	ppbv	85
30) Cyclohexane	6.587	84	3106	0.039	ppbv #	1
34) 2-Butanone	4.796	43	14036	0.099	ppbv #	40
35) Carbon Tetrachloride	6.481	117	7825	0.047	ppbv	83
36) Benzene	6.362	78	30119	0.144	ppbv	96
39) 1,2-Dichloropropane	6.642	63	663186	8.065	ppbv #	23
43) Methyl Methacrylate	7.455	69	2470	0.030	ppbv #	1
52) Tetrachloroethene	10.581	164	2544	0.036	ppbv #	50
53) Toluene	9.198	91	129803	0.559	ppbv	98
58) Ethyl Benzene	12.050	91	13829	0.048	ppbv	94
59) m/p-Xylene	12.327	91	8072	0.033	ppbv #	100
60) o-Xylene	13.021	91	11948	0.051	ppbv #	31
74) 1,2,4-Trimethylbenzene	16.069	105	17936	0.073	ppbv #	59

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

Quant Time: Dec 23 01:20:22 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL122023AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Dec 22 23:57:16 2023
Response via : Initial Calibration

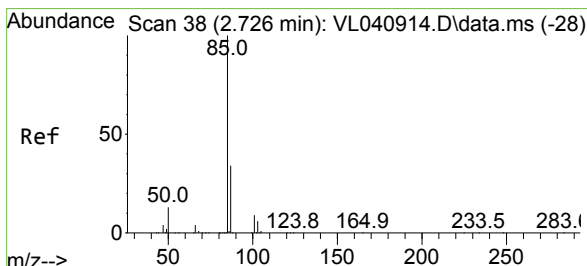
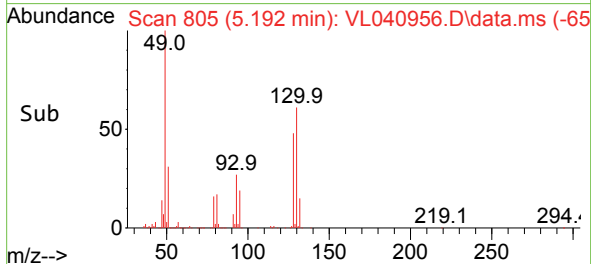
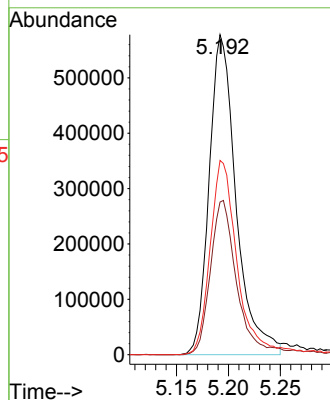
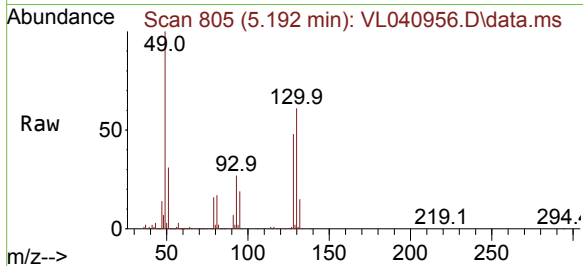




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 80
Delta R.T. -0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

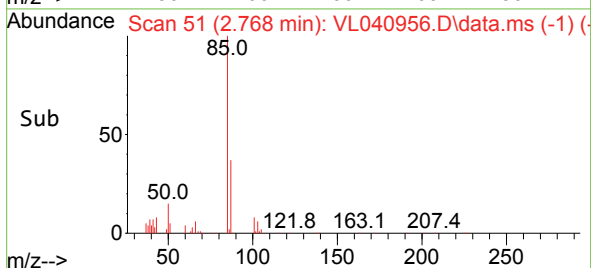
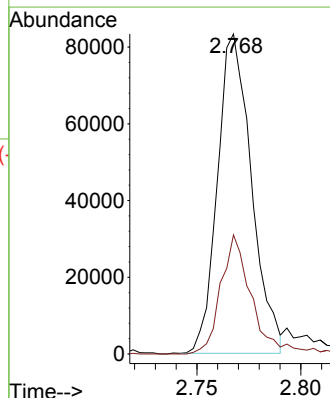
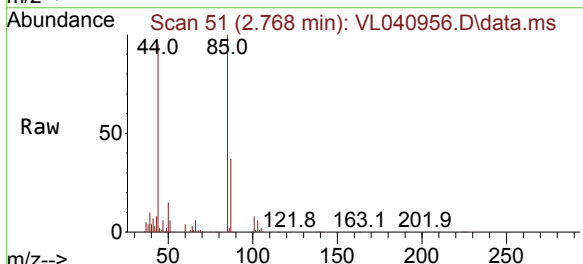
Instrument :
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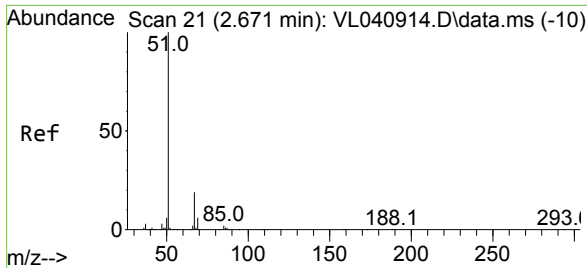
Tgt Ion: 49 Resp: 1040945
Ion Ratio Lower Upper
49 100
128 49.1 23.8 71.2
130 63.6 30.1 90.5



#2
Dichlorodifluoromethane
Concen: 0.478 ppbv
RT: 2.768 min Scan# 51
Delta R.T. -0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 85 Resp: 94822
Ion Ratio Lower Upper
85 100
87 37.3 27.0 40.6

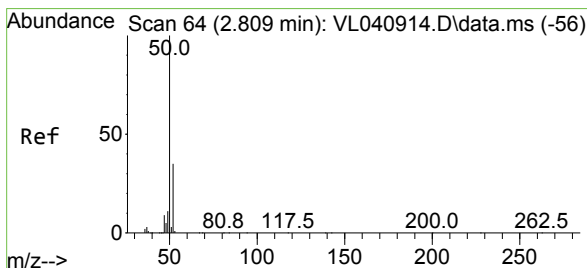
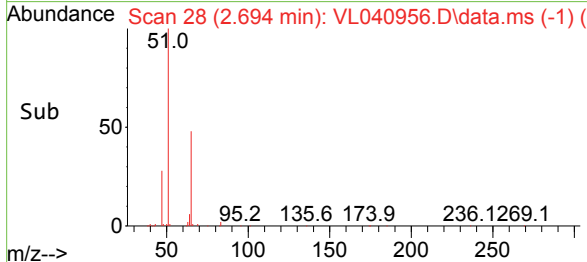
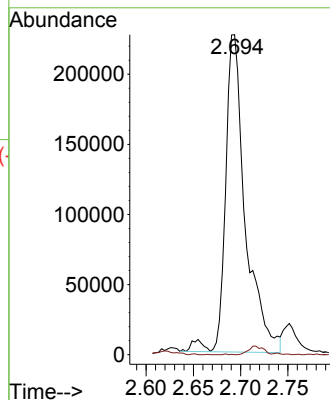
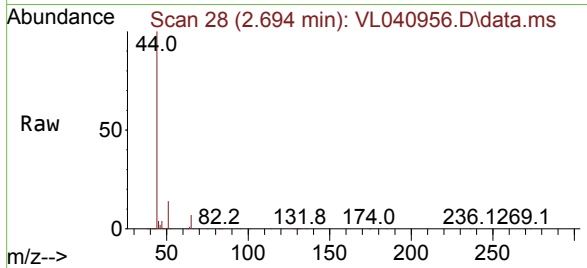




#3
Chlorodifluoromethane
Concen: 2.122 ppbv
RT: 2.694 min Scan# 21
Delta R.T. -0.022 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

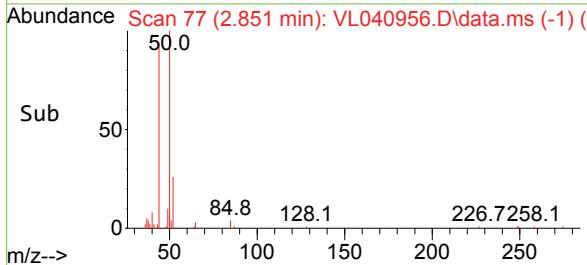
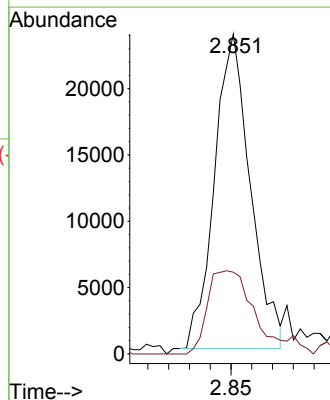
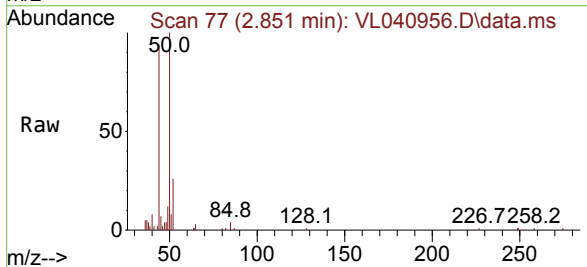
Instrument :
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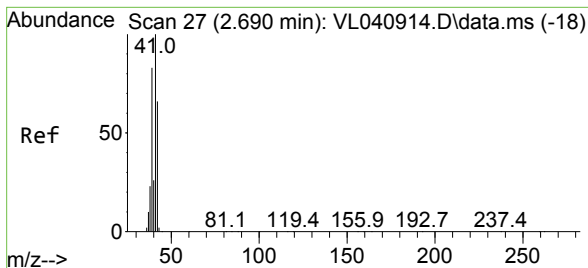
Tgt Ion: 51 Resp: 332478
Ion Ratio Lower Upper
51 100
67 2.4 14.7 22.1#



#4
Chloromethane
Concen: 0.493 ppbv
RT: 2.851 min Scan# 77
Delta R.T. -0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 50 Resp: 28457
Ion Ratio Lower Upper
50 100
52 26.0 28.0 42.0#





#9

Propene

Concen: 1.346 ppbv

RT: 2.909 min Scan# 91

Delta R.T. 0.174 min

Lab File: VL040956.D

Acq: 22 Dec 2023 12:07

Instrument :

MSVOA_L

ClientSampleId :

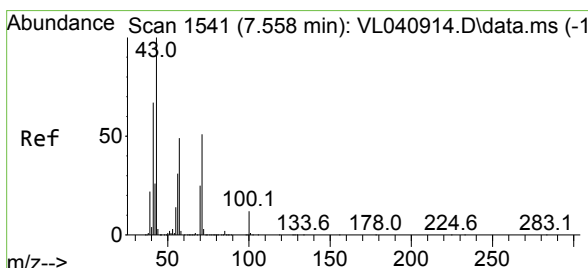
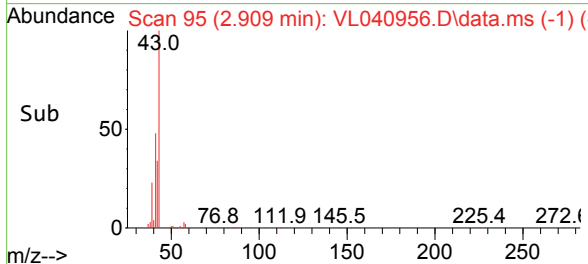
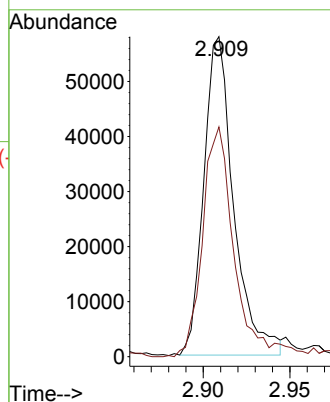
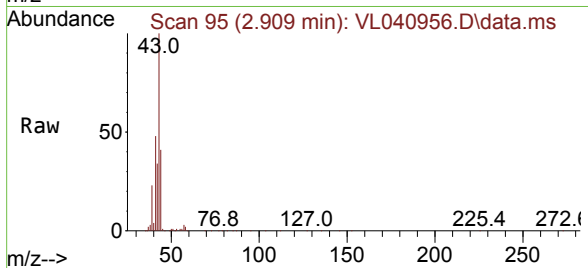
10492RE

Tgt Ion: 41 Resp: 69544

Ion Ratio Lower Upper

41 100

42 79.7 55.8 83.6



#10

Heptane

Concen: 0.048 ppbv

RT: 7.562 min Scan# 1542

Delta R.T. -0.003 min

Lab File: VL040956.D

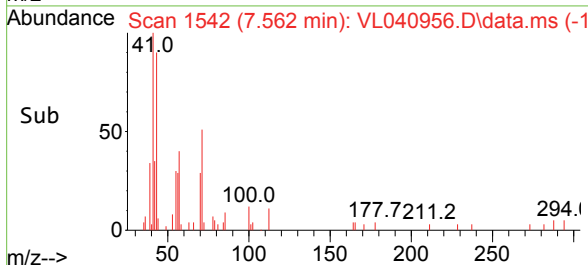
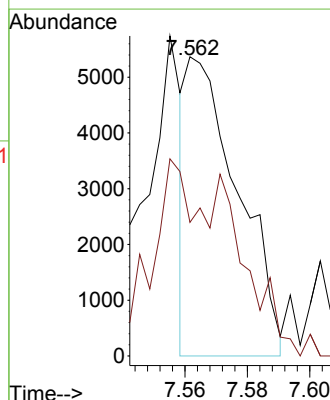
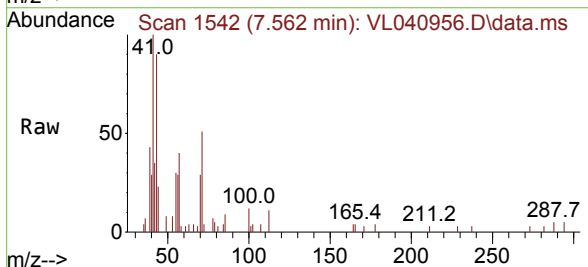
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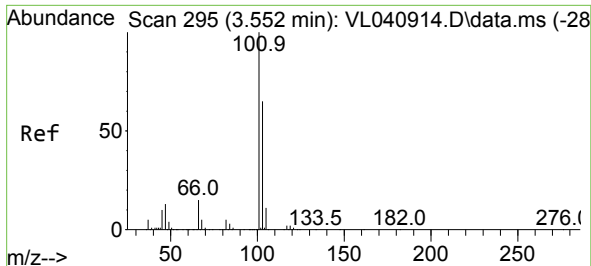
Tgt Ion: 43 Resp: 6163

Ion Ratio Lower Upper

43 100

57 0.0 39.3 58.9#





#11

Trichlorofluoromethane

Concen: 0.228 ppbv

RT: 3.584 min Scan# 305

Delta R.T. -0.003 min

Lab File: VL040956.D

Acq: 22 Dec 2023 12:07

Instrument :

MSVOA_L

ClientSampleId :

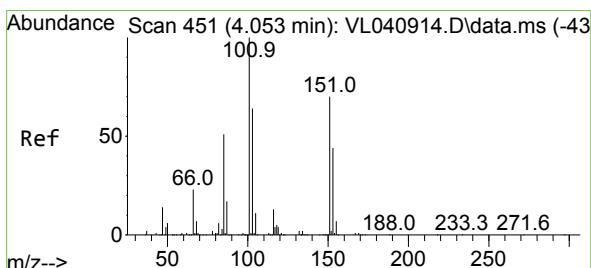
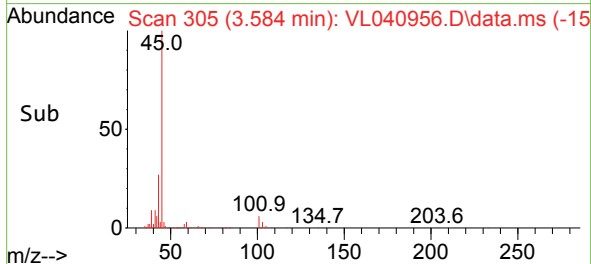
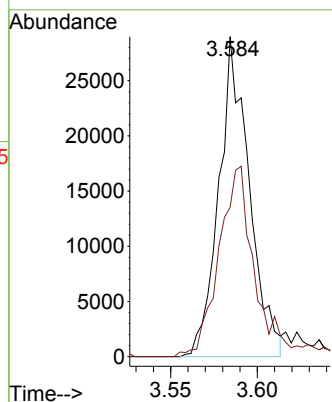
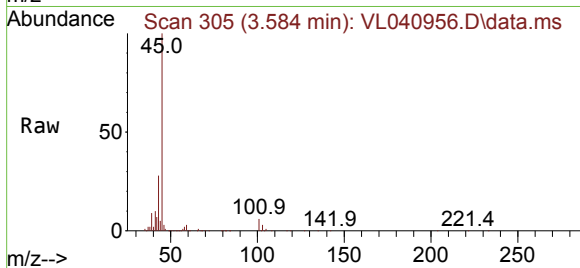
10492RE

Tgt Ion:101 Resp: 35354

Ion Ratio Lower Upper

101 100

103 45.2 51.9 77.9#



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.067 ppbv

RT: 4.086 min Scan# 461

Delta R.T. 0.003 min

Lab File: VL040956.D

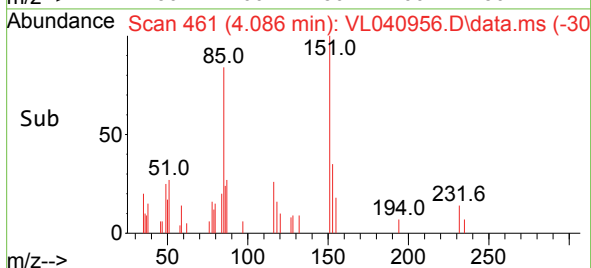
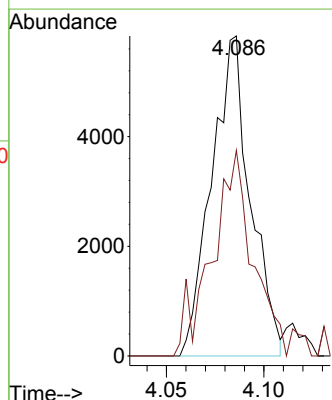
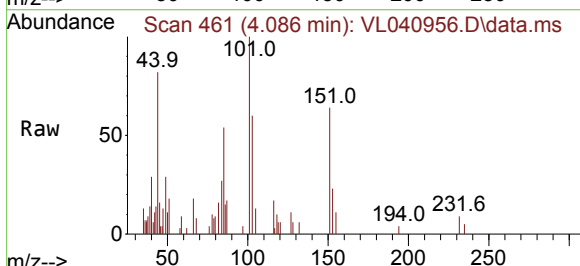
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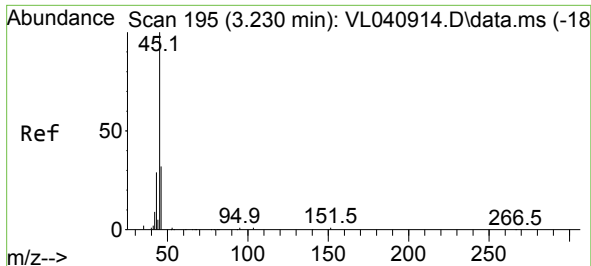
Tgt Ion:101 Resp: 8077

Ion Ratio Lower Upper

101 100

151 71.6 55.8 83.8

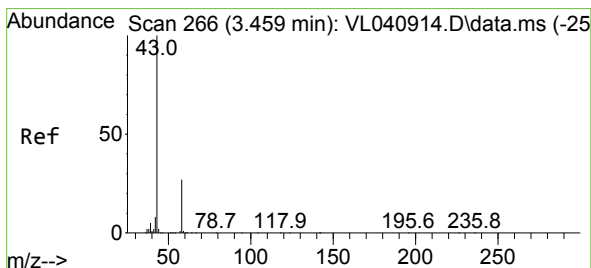
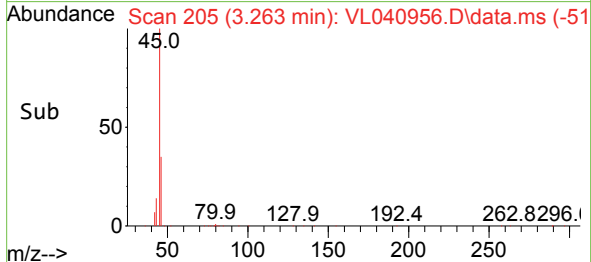
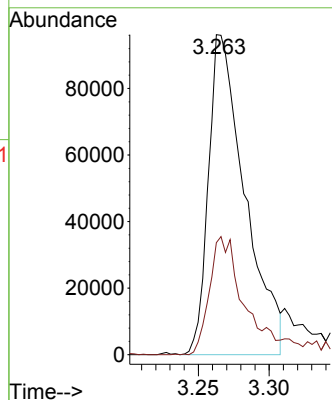
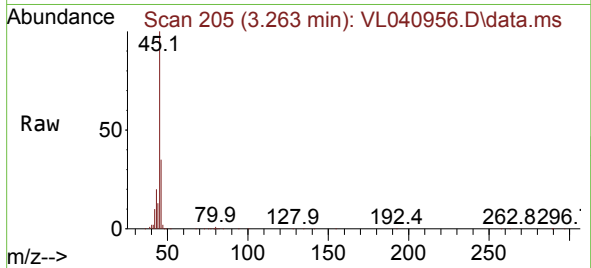




#13
Ethanol
Concen: 13.180 ppbv
RT: 3.263 min Scan# 205
Delta R.T. -0.006 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

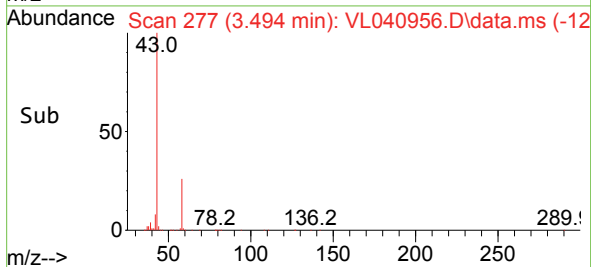
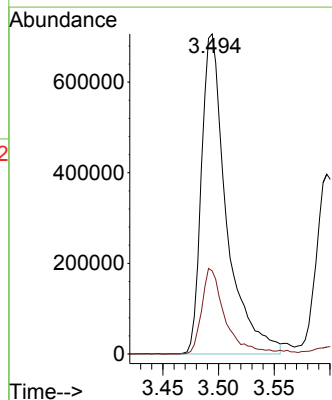
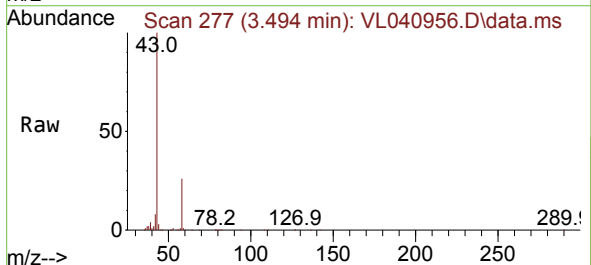
Instrument :
MSVOA_L
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10492RE

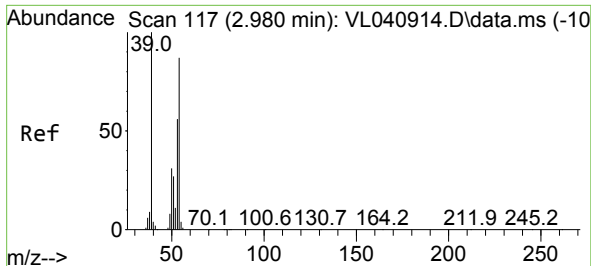
Tgt Ion: 45 Resp: 171859
Ion Ratio Lower Upper
45 100
46 41.1 15.0 60.0



#15
Acetone
Concen: 8.852 ppbv
RT: 3.494 min Scan# 277
Delta R.T. 0.000 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 43 Resp: 1105163
Ion Ratio Lower Upper
43 100
58 25.3 20.6 30.8

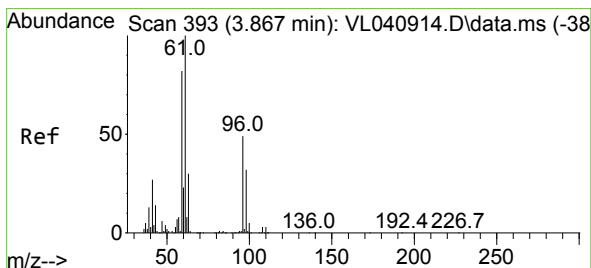
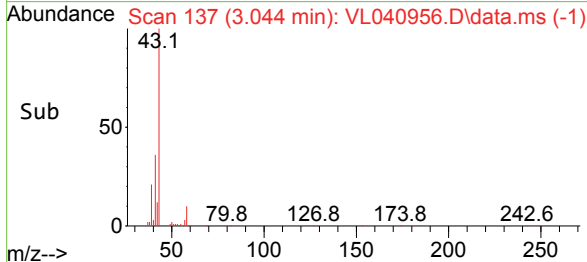
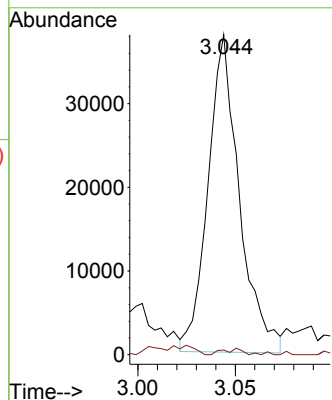
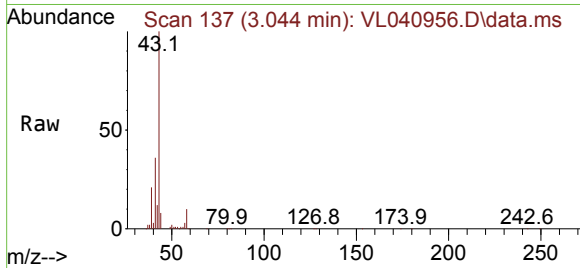




#16
1,3-Butadiene
Concen: 0.791 ppbv
RT: 3.044 min Scan# 117
Delta R.T. 0.023 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

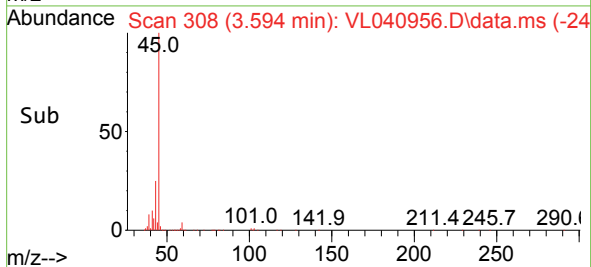
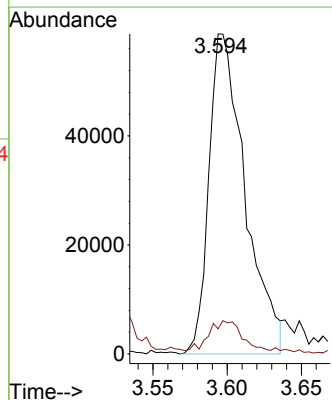
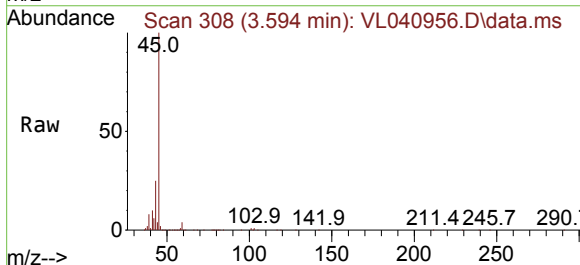
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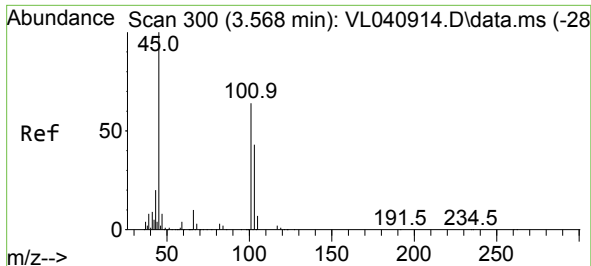
Tgt Ion: 39 Resp: 42512
Ion Ratio Lower Upper
39 100
54 5.6 63.8 95.6#



#17
tert-Butyl alcohol
Concen: 1.077 ppbv
RT: 3.594 min Scan# 308
Delta R.T. -0.305 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 59 Resp: 99438
Ion Ratio Lower Upper
59 100
57 11.7 8.3 12.5

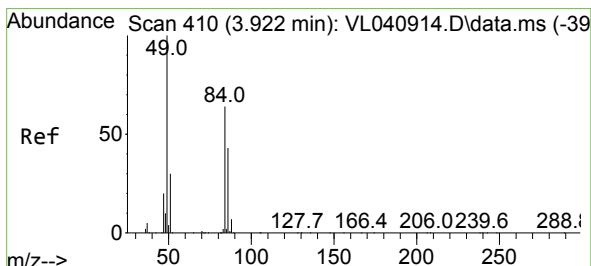
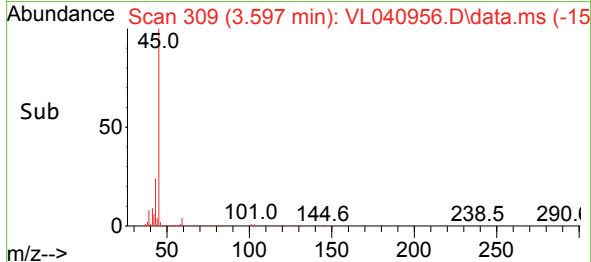
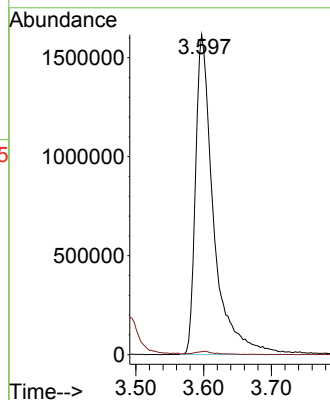
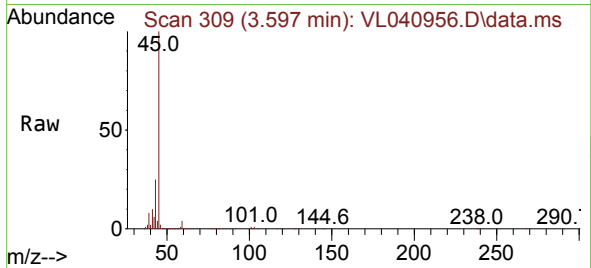




#19
Isopropyl Alcohol
Concen: 45.730 ppbv
RT: 3.597 min Scan# 300
Delta R.T. -0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

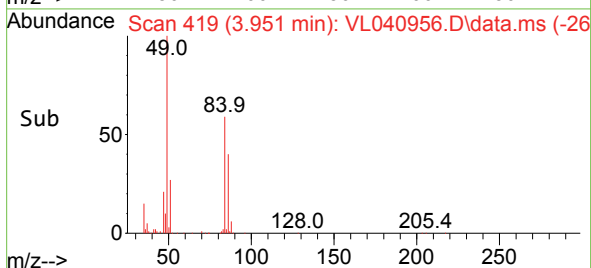
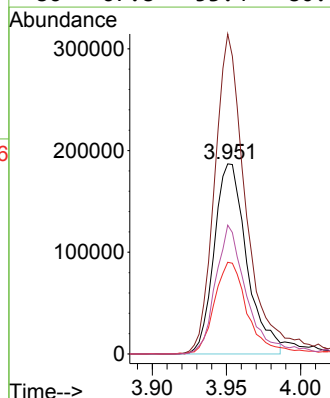
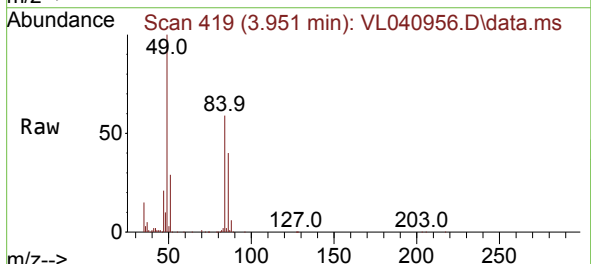
Instrument :
MSVOA_L
ClientSampleId :
10492RE

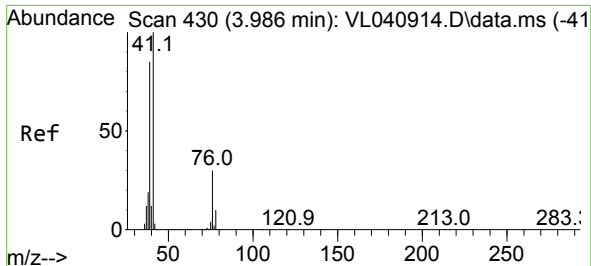
Tgt Ion: 45 Resp: 2979050
Ion Ratio Lower Upper
45 100
58 1.5 1.5 2.3#



#20
Methylene Chloride
Concen: 6.421 ppbv
RT: 3.951 min Scan# 419
Delta R.T. 0.000 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 84 Resp: 285727
Ion Ratio Lower Upper
84 100
49 168.1 124.6 187.0
51 47.8 37.2 55.8
86 67.8 53.4 80.0

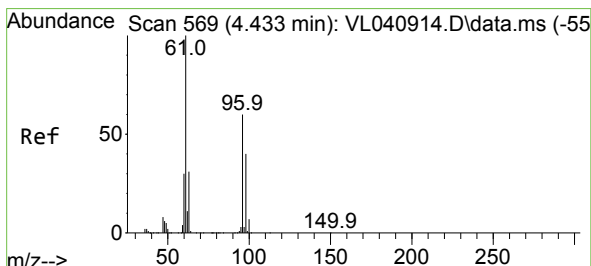
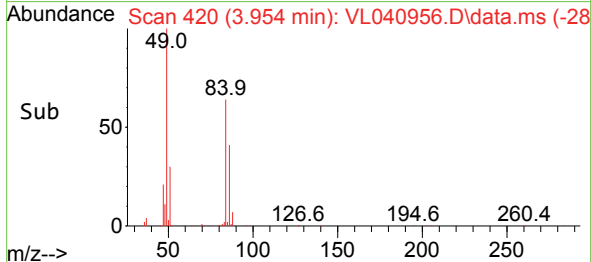
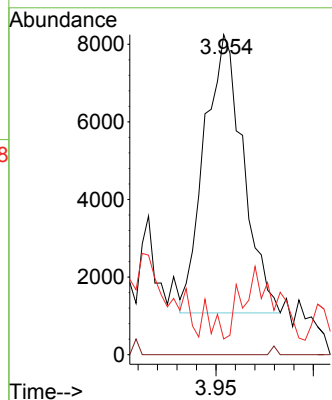
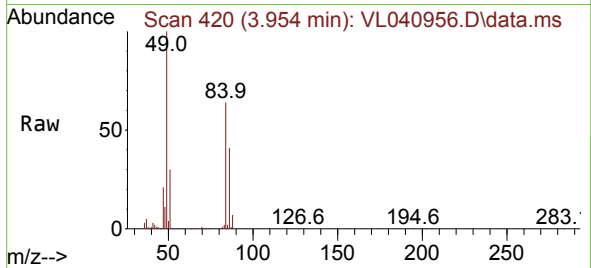




#21
 Allyl Chloride
 Concen: 0.134 ppbv
 RT: 3.954 min Scan# 41
 Delta R.T. -0.061 min
 Lab File: VL040956.D
 Acq: 22 Dec 2023 12:07

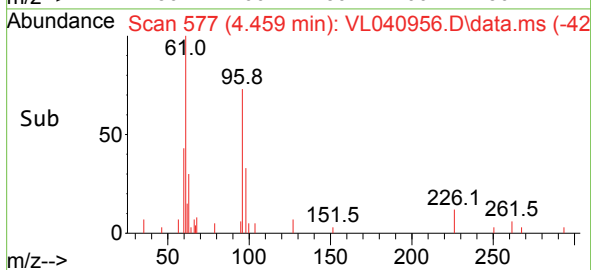
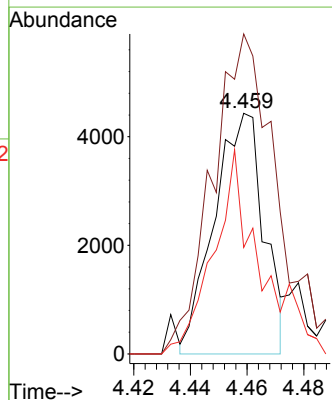
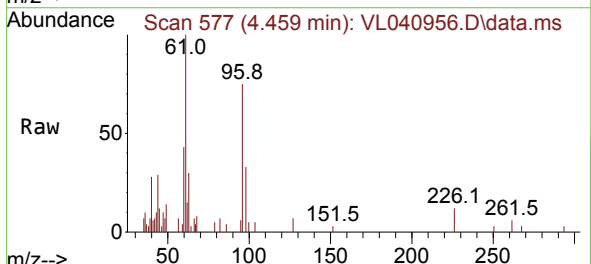
Instrument :
 MSVOA_L
 ClientSampleId :
 10492RE

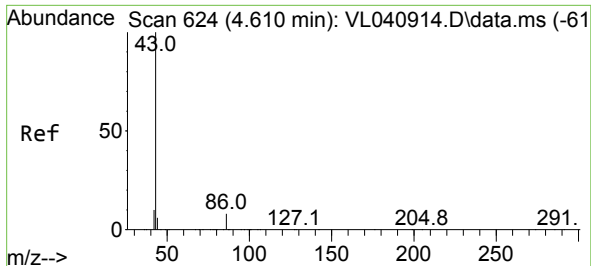
Tgt Ion: 41 Resp: 9921
 Ion Ratio Lower Upper
 41 100
 76 2.0 23.9 35.9#
 39 0.0 66.5 99.7#



#22
 trans-1,2-Dichloroethene
 Concen: 0.095 ppbv
 RT: 4.459 min Scan# 577
 Delta R.T. 0.003 min
 Lab File: VL040956.D
 Acq: 22 Dec 2023 12:07

Tgt Ion: 96 Resp: 5409
 Ion Ratio Lower Upper
 96 100
 61 124.0 133.0 199.6#
 98 40.8 53.7 80.5#

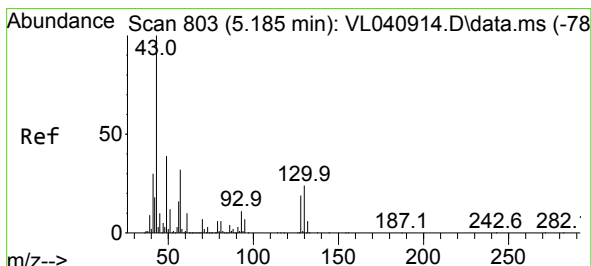
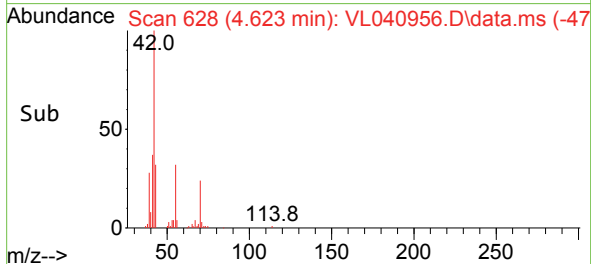
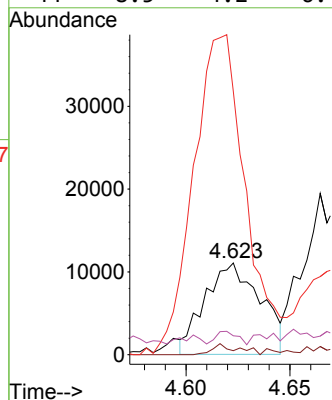
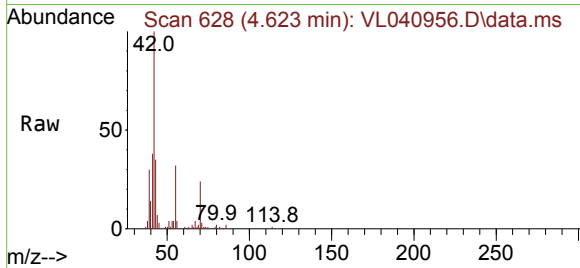




#23
 Vinyl Acetate
 Concen: 0.148 ppbv
 RT: 4.623 min Scan# 61
 Delta R.T. -0.013 min
 Lab File: VL040956.D
 Acq: 22 Dec 2023 12:07

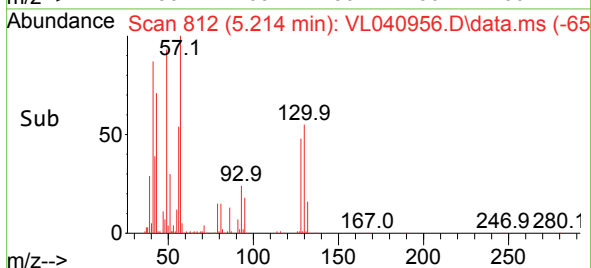
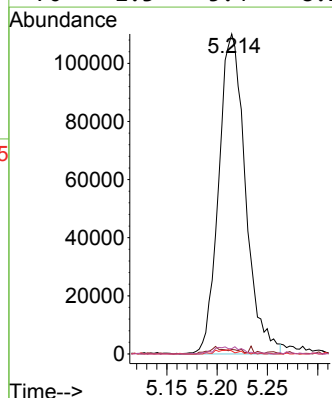
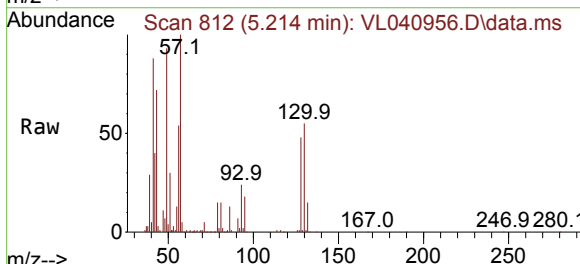
Instrument :
 MSVOA_L
 ClientSampleId :
 10492RE

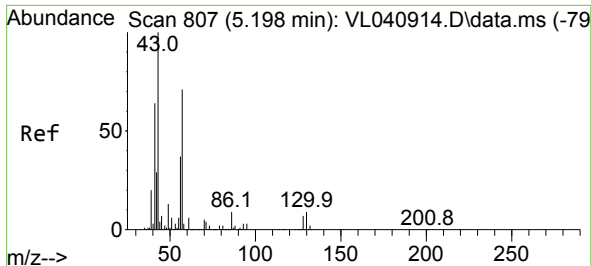
Tgt Ion: 43	Resp: 20439
Ion Ratio	Lower Upper
43 100	
86 6.7	5.5 8.3
42 374.3	8.4 12.6#
44 8.5	4.2 6.4#



#25
 Ethyl Acetate
 Concen: 0.940 ppbv
 RT: 5.214 min Scan# 812
 Delta R.T. 0.010 min
 Lab File: VL040956.D
 Acq: 22 Dec 2023 12:07

Tgt Ion: 43	Resp: 203310
Ion Ratio	Lower Upper
43 100	
45 2.8	8.2 12.2#
61 1.1	7.6 11.4#
70 2.3	5.4 8.2#

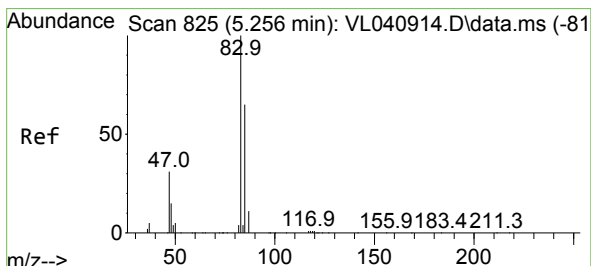
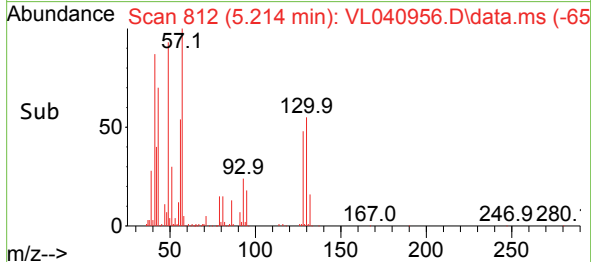
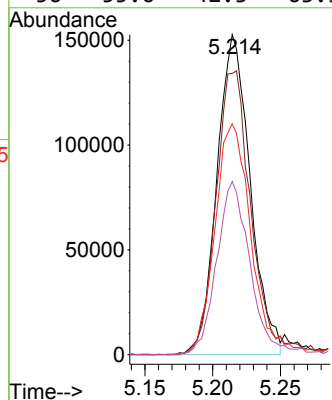
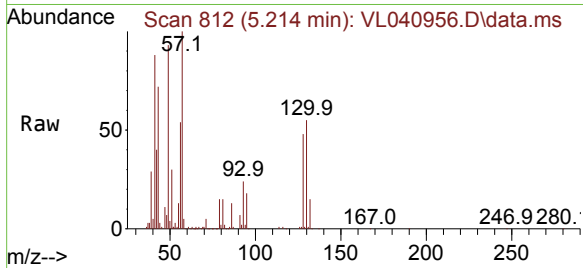




#26
Hexane
Concen: 2.720 ppbv
RT: 5.214 min Scan# 812
Delta R.T. 0.000 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

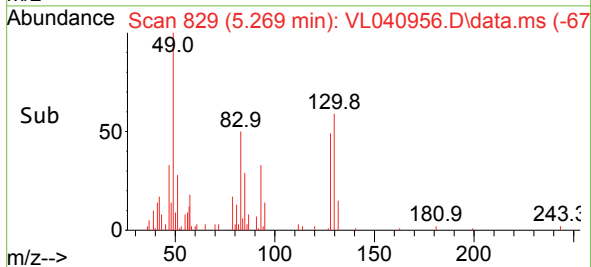
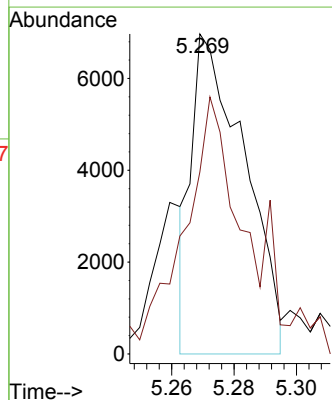
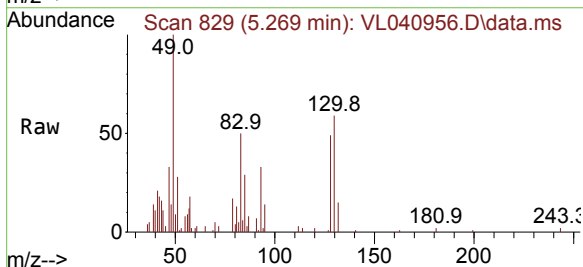
Instrument :
MSVOA_L
ClientSampleId :
10492RE

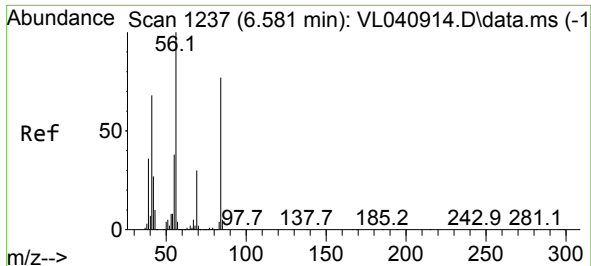
Tgt Ion: 57 Resp: 260740
Ion Ratio Lower Upper
57 100
41 96.0 75.2 112.8
43 80.1 188.0 282.0#
56 55.6 42.3 63.5



#29
Chloroform
Concen: 0.051 ppbv
RT: 5.269 min Scan# 829
Delta R.T. -0.006 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 83 Resp: 8205
Ion Ratio Lower Upper
83 100
85 53.4 52.3 78.5

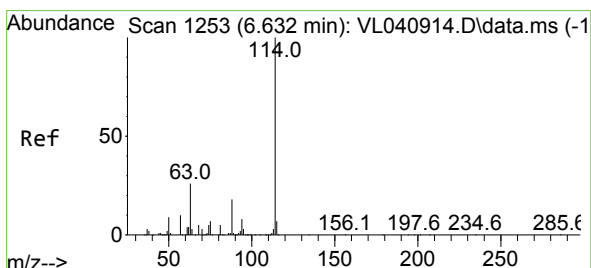
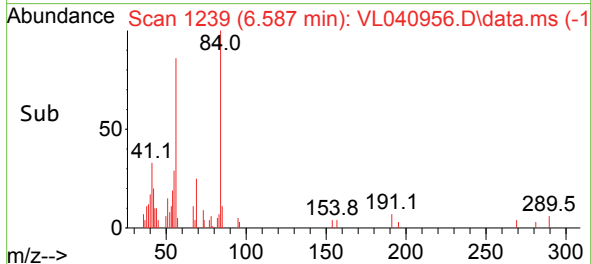
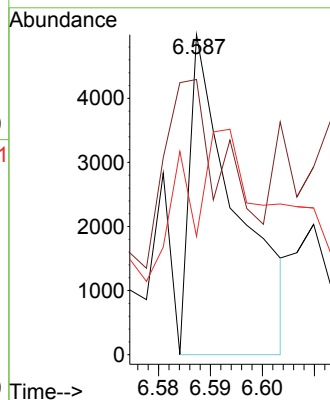
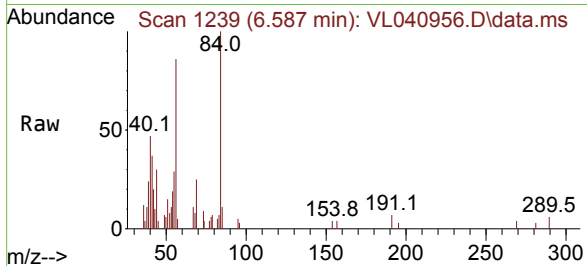




#30
Cyclohexane
Concen: 0.039 ppbv
RT: 6.587 min Scan# 1237
Delta R.T. -0.006 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

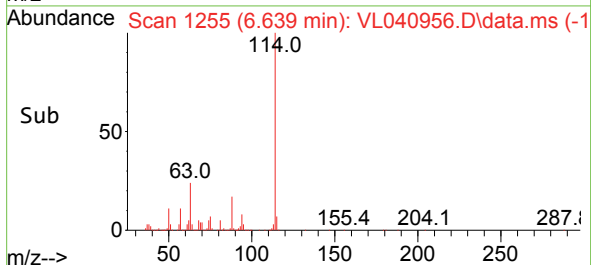
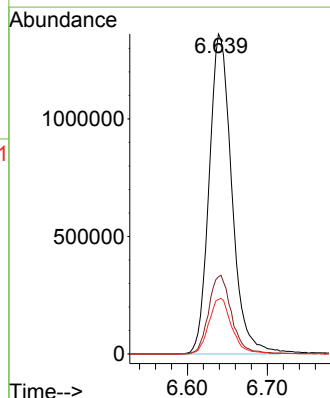
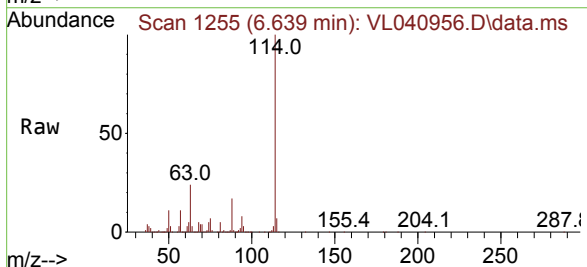
Instrument :
MSVOA_L
ClientSampleId :
10492RE

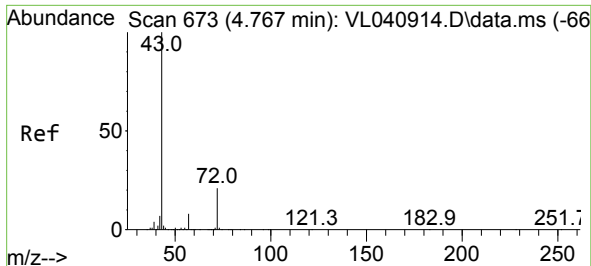
Tgt Ion: 84 Resp: 3106
Ion Ratio Lower Upper
84 100
56 0.0 111.4 167.2#
41 276.0 70.0 105.0#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.639 min Scan# 1255
Delta R.T. -0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 114 Resp: 2676804
Ion Ratio Lower Upper
114 100
63 25.1 21.0 31.6
88 17.7 14.3 21.5

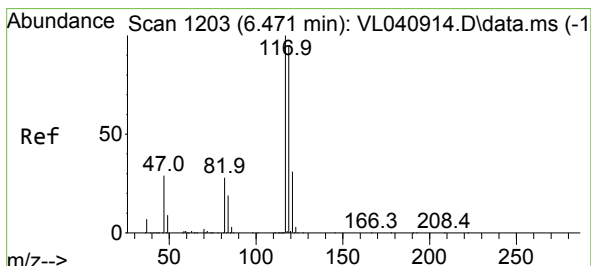
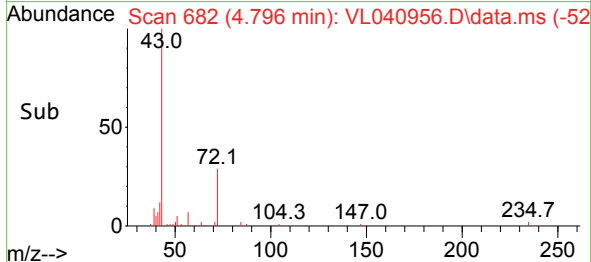
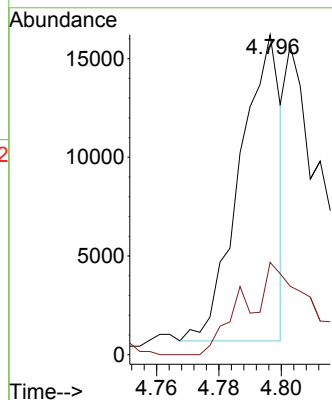
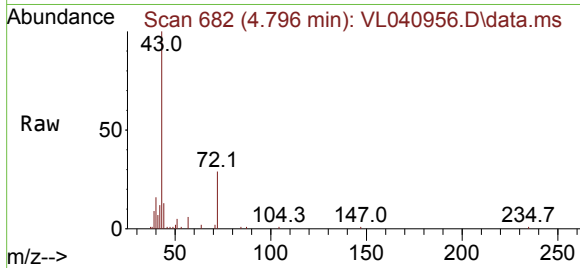




#34
2-Butanone
Concen: 0.099 ppbv
RT: 4.796 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

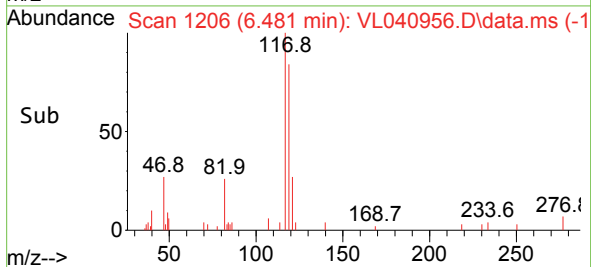
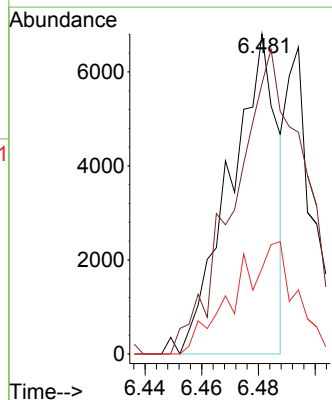
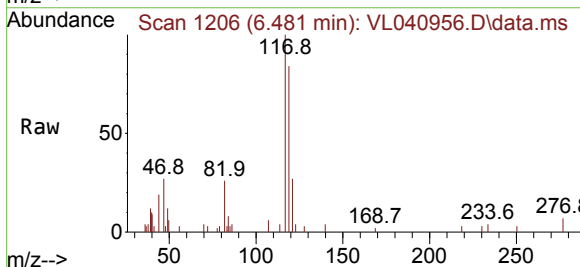
Instrument :
MSVOA_L
ClientSampleId :
10492RE

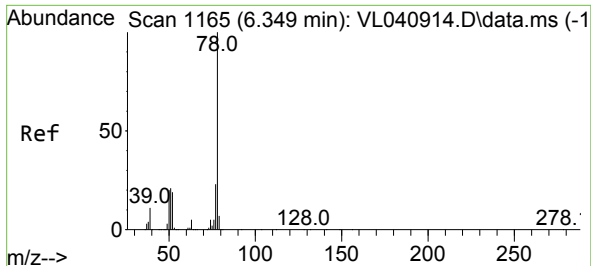
Tgt Ion: 43 Resp: 14036
Ion Ratio Lower Upper
43 100
72 49.8 17.2 25.8#



#35
Carbon Tetrachloride
Concen: 0.047 ppbv
RT: 6.481 min Scan# 1206
Delta R.T. -0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 117 Resp: 7825
Ion Ratio Lower Upper
117 100
119 76.5 76.3 114.5
121 26.7 24.9 37.3

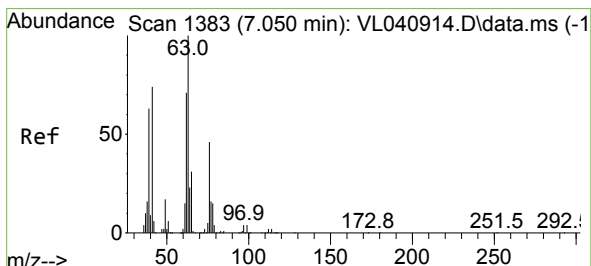
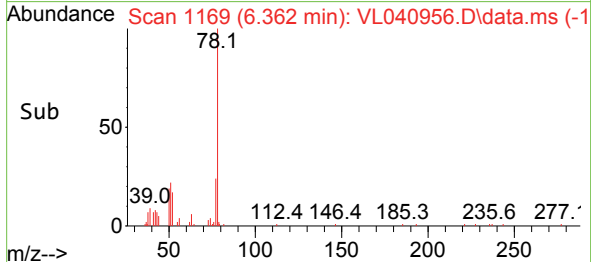
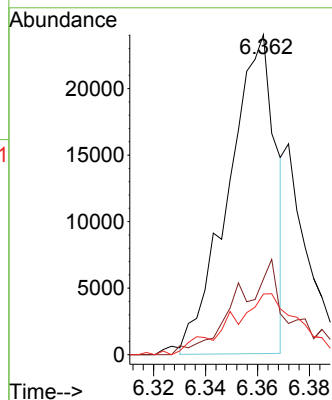
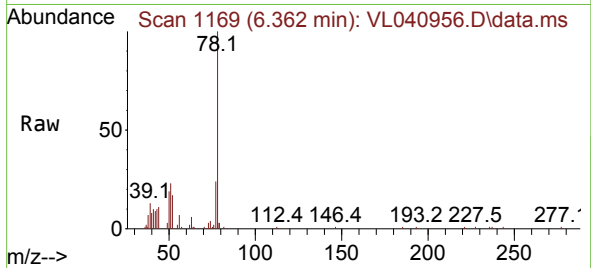




#36
Benzene
Concen: 0.144 ppbv
RT: 6.362 min Scan# 1169
Delta R.T. 0.000 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

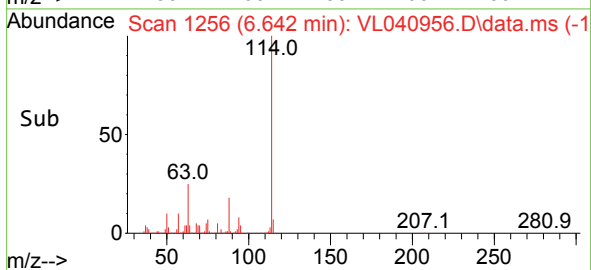
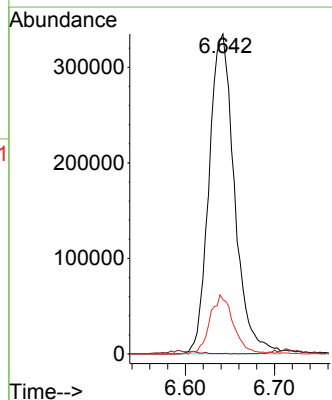
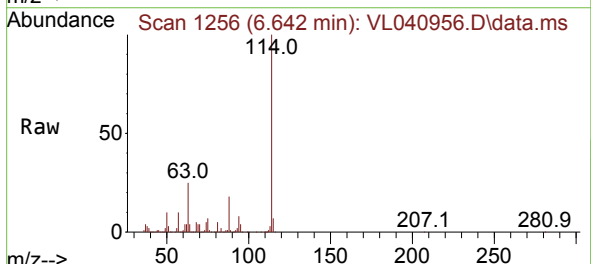
Instrument :
MSVOA_L
ClientSampleId :
10492RE

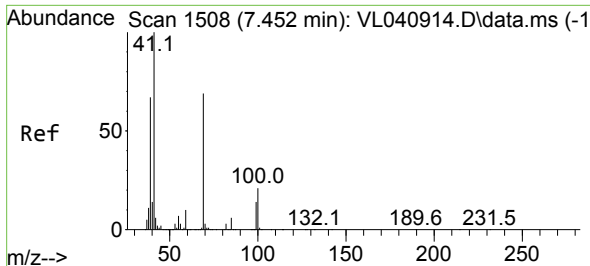
Tgt Ion: 78 Resp: 30119
Ion Ratio Lower Upper
78 100
77 21.2 18.4 27.6
50 18.1 16.0 24.0



#39
1,2-Dichloropropane
Concen: 8.065 ppbv
RT: 6.642 min Scan# 1256
Delta R.T. -0.418 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 63 Resp: 663186
Ion Ratio Lower Upper
63 100
41 0.0 59.0 88.6#
62 17.0 56.6 85.0#

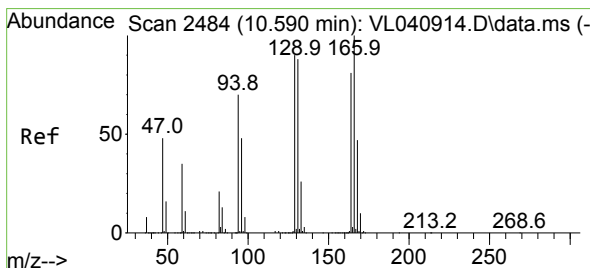
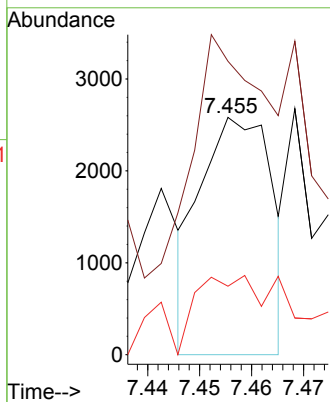
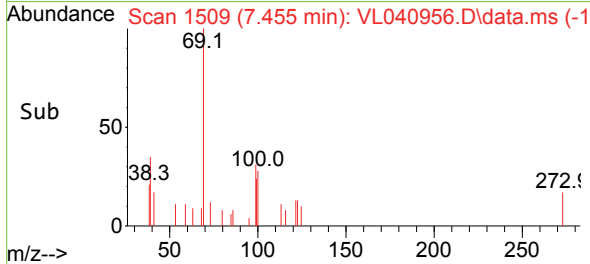
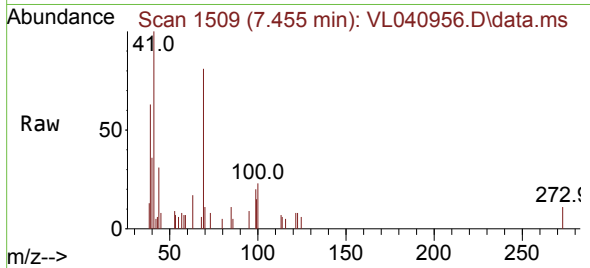




#43
Methyl Methacrylate
Concen: 0.030 ppbv
RT: 7.455 min Scan# 1509
Delta R.T. 0.000 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

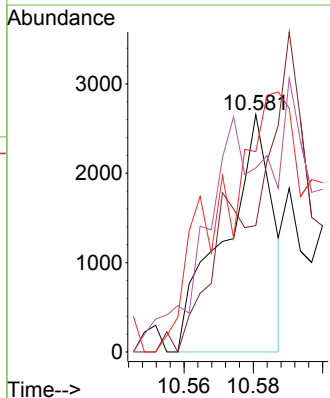
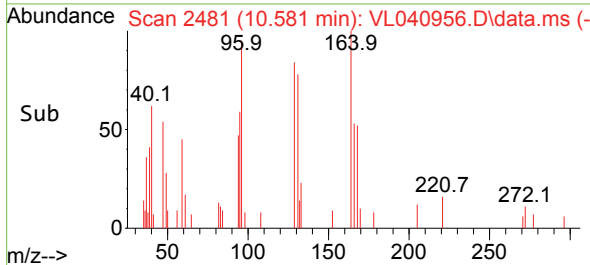
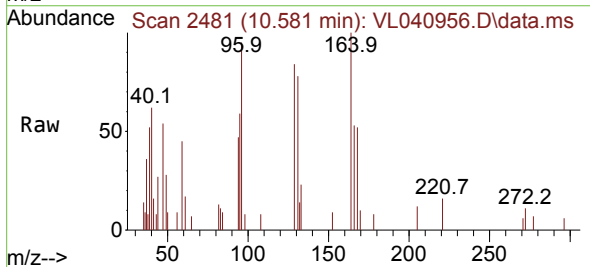
Instrument :
MSVOA_L
ClientSampleId :
10492RE

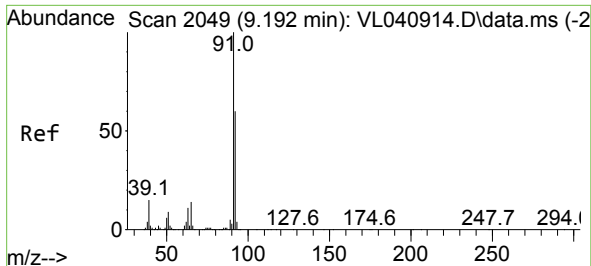
Tgt Ion: 69 Resp: 2470
Ion Ratio Lower Upper
69 100
41 336.8 119.9 179.9#
100 66.4 25.1 37.7#



#52
Tetrachloroethene
Concen: 0.036 ppbv
RT: 10.581 min Scan# 2481
Delta R.T. -0.006 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 164 Resp: 2544
Ion Ratio Lower Upper
164 100
166 53.3 98.9 148.3#
129 69.8 88.7 133.1#
131 58.0 87.1 130.7#

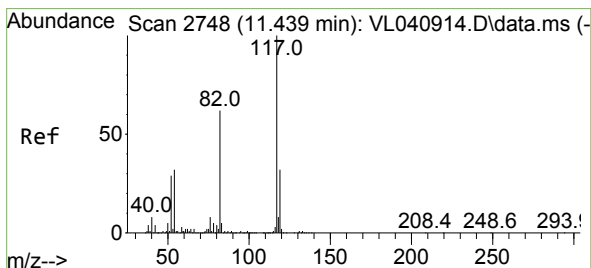
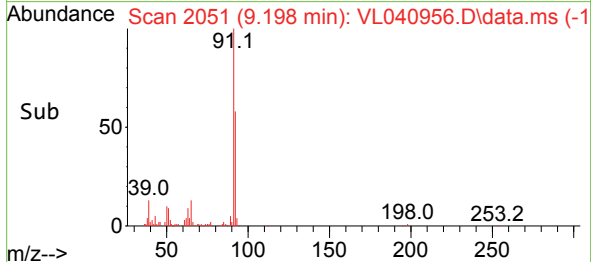
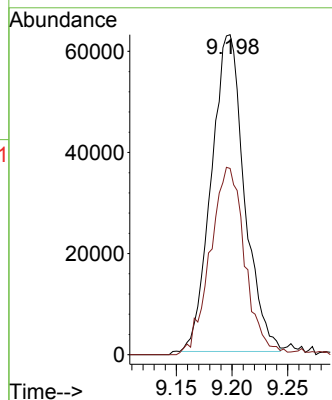
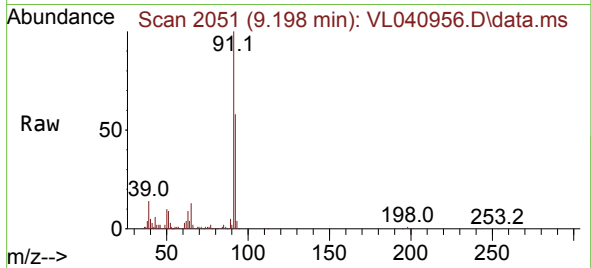




#53
Toluene
Concen: 0.559 ppbv
RT: 9.198 min Scan# 2049
Delta R.T. 0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

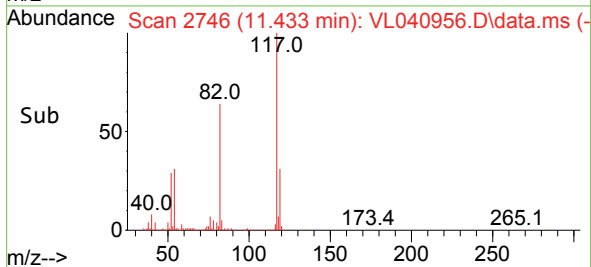
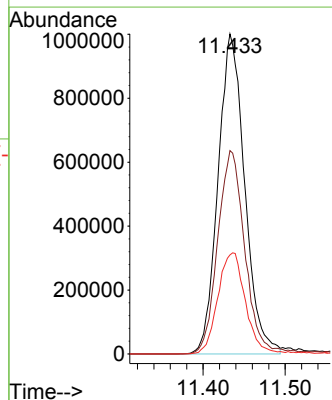
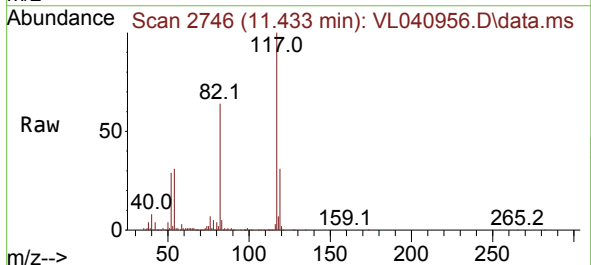
Instrument :
MSVOA_L
ClientSampleId :
10492RE

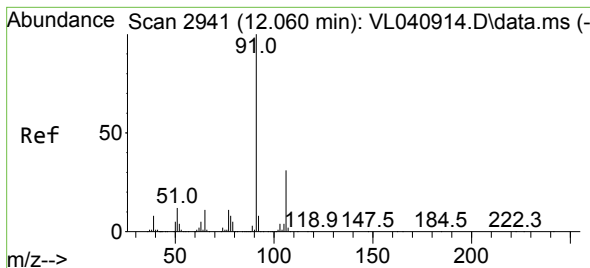
Tgt Ion: 91 Resp: 129803
Ion Ratio Lower Upper
91 100
92 62.9 49.2 73.8



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.433 min Scan# 2746
Delta R.T. -0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 117 Resp: 2261040
Ion Ratio Lower Upper
117 100
82 66.1 49.6 74.4
119 33.5 23.4 35.0





#58

Ethyl Benzene

Concen: 0.048 ppbv

RT: 12.050 min Scan# 2941

Delta R.T. -0.006 min

Lab File: VL040956.D

Acq: 22 Dec 2023 12:07

Instrument :

MSVOA_L

ClientSampleId :

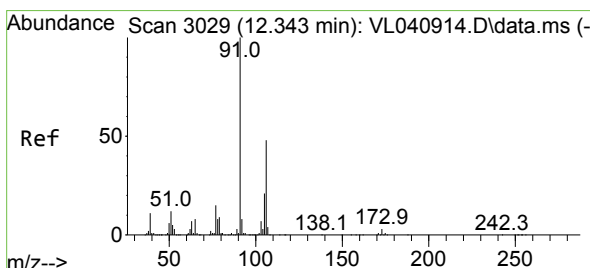
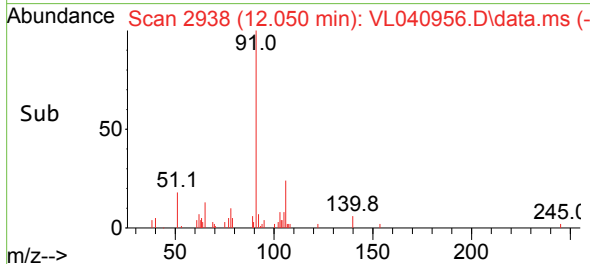
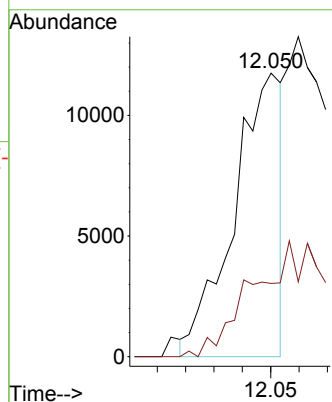
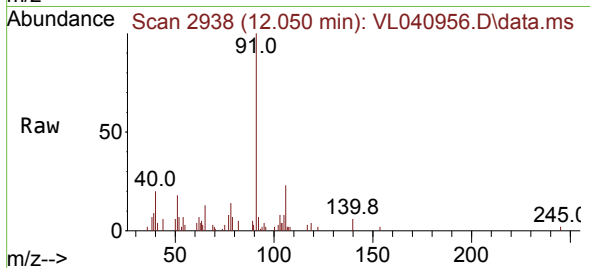
10492RE

Tgt Ion: 91 Resp: 13829

Ion Ratio Lower Upper

91 100

106 28.0 24.9 37.3



#59

m/p-Xylene

Concen: 0.033 ppbv

RT: 12.327 min Scan# 3024

Delta R.T. -0.010 min

Lab File: VL040956.D

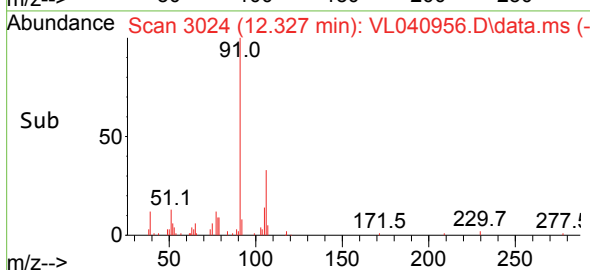
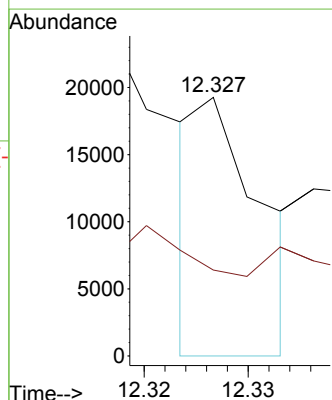
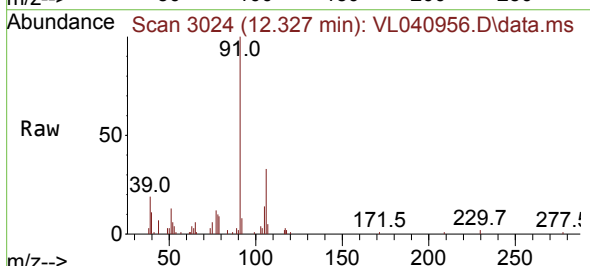
Acq: 22 Dec 2023 12:07

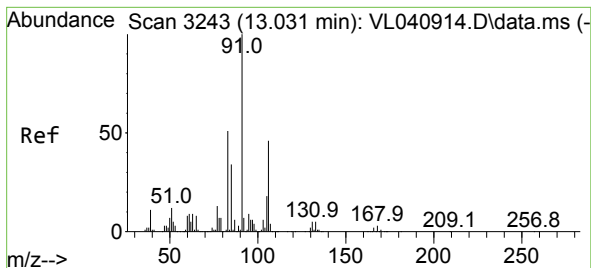
Tgt Ion: 91 Resp: 8072

Ion Ratio Lower Upper

91 100

106 0.0 0.0 0.0

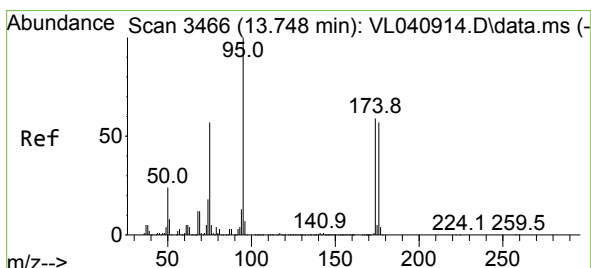
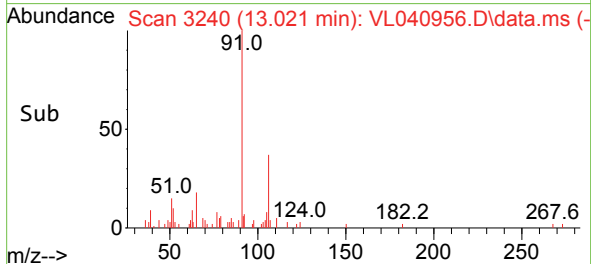
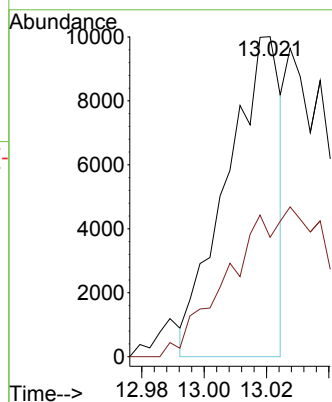
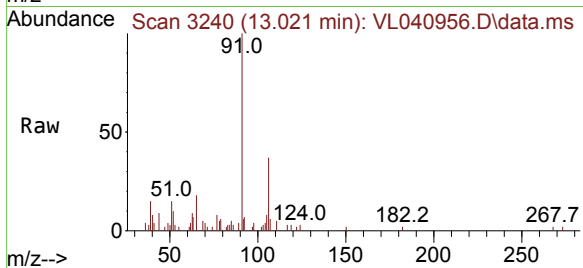




#60
o-Xylene
Concen: 0.051 ppbv
RT: 13.021 min Scan# 31
Delta R.T. -0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

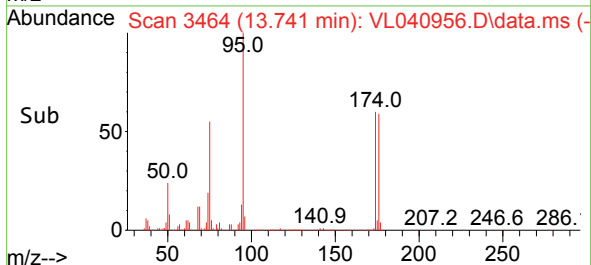
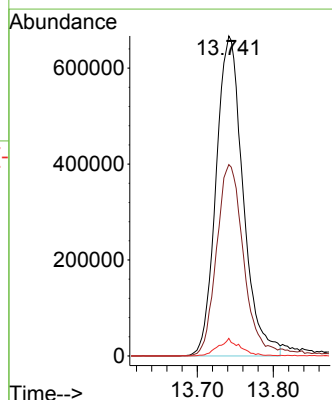
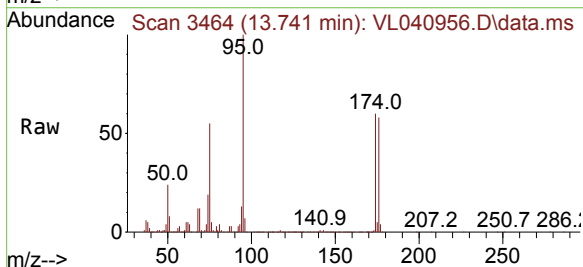
Instrument :
MSVOA_L
ClientSampleId :
10492RE

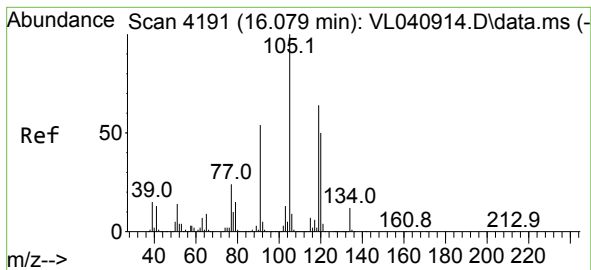
Tgt Ion: 91 Resp: 11948
Ion Ratio Lower Upper
91 100
106 0.0 22.6 67.7#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.876 ppbv
RT: 13.741 min Scan# 3464
Delta R.T. 0.003 min
Lab File: VL040956.D
Acq: 22 Dec 2023 12:07

Tgt Ion: 95 Resp: 1644865
Ion Ratio Lower Upper
95 100
174 61.3 48.0 72.0
175 4.7 3.7 5.5





#74

1,2,4-Trimethylbenzene

Concen: 0.073 ppbv

RT: 16.069 min Scan# 41

Delta R.T. -0.003 min

Lab File: VL040956.D

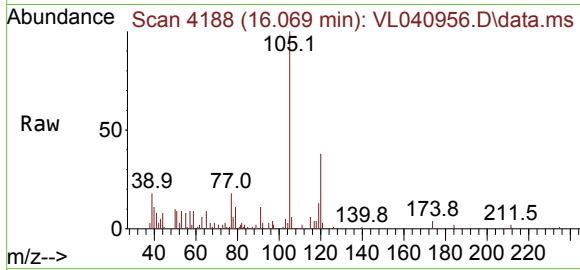
Acq: 22 Dec 2023 12:07

Instrument :

MSVOA_L

ClientSampleId :

10492RE



Tgt Ion:105 Resp: 17936

Ion Ratio Lower Upper

105 100

120 34.8 40.2 60.4#

91 5.6 43.0 64.6#

77 14.0 18.9 28.3#

