

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL051123\
 Data File : VL040404.D
 Acq On : 11 May 2023 17:22
 Operator : SY/MD
 Sample : 02748-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-04-20230510

Quant Time: May 12 05:55:09 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041323AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Apr 13 14:37:02 2023
 Response via : Initial Calibration

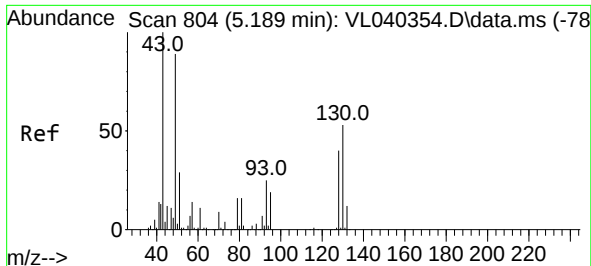
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.179	49	985530	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.642	114	2567031	10.000	ppbv	-0.01
55) Chlorobenzene-d5	11.465	117	2222084	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.777	95	1723606	9.380	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.800%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.710	85	56100	0.316	ppbv	96
3) Chlorodifluoromethane	2.636	51	130741	1.015	ppbv #	79
4) Chloromethane	2.796	50	33755	0.415	ppbv	90
9) Propene	2.678	41	93968	1.847	ppbv	86
10) Heptane	7.568	43	12129	0.105	ppbv #	25
11) Trichlorofluoromethane	3.546	101	65060	0.362	ppbv	88
12) 1,1,2-Trichlorotrifluo...	4.050	101	8102	0.064	ppbv	97
13) Ethanol	3.218	45	297978	70.158	ppbv	97
15) Acetone	3.449	43	768688	5.507	ppbv	90
16) 1,3-Butadiene	2.948	39	143257	2.480	ppbv #	16
17) tert-Butyl alcohol	3.870	59	12683	0.099	ppbv #	40
19) Isopropyl Alcohol	3.565	45	263611	4.139	ppbv	98
20) Methylene Chloride	3.919	84	395892	7.104	ppbv	97
23) Vinyl Acetate	4.597	43	10181	0.286	ppbv #	1
25) Ethyl Acetate	5.202	43	259769	1.106	ppbv #	79
26) Hexane	5.202	57	356210	3.597	ppbv #	39
29) Chloroform	5.263	83	5600	0.032	ppbv	94
30) Cyclohexane	6.584	84	6257	0.082	ppbv #	9
34) 2-Butanone	4.774	43	258767	1.869	ppbv	98
35) Carbon Tetrachloride	6.484	117	6530	0.036	ppbv #	76
36) Benzene	6.362	78	58395	0.279	ppbv	96
39) 1,2-Dichloropropane	6.642	63	636168	7.720	ppbv #	26
44) 2,2,4-Trimethylpentane	7.320	57	91321	0.261	ppbv #	77
53) Toluene	9.217	91	204045	0.919	ppbv	99
58) Ethyl Benzene	12.079	91	12071	0.044	ppbv	96
59) m/p-Xylene	12.365	91	11473	0.046	ppbv #	32
60) o-Xylene	13.057	91	14591	0.060	ppbv #	19
74) 1,2,4-Trimethylbenzene	16.111	105	35836	0.127	ppbv #	58
76) 1,4-Dichlorobenzene	16.478	146	14562	0.096	ppbv	87

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

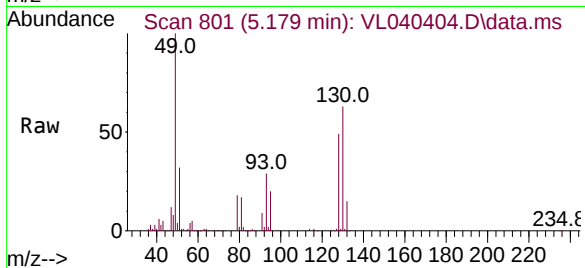
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QLast Update : Thu Apr 13 14:37:02 2023
Response via : Initial Calibration



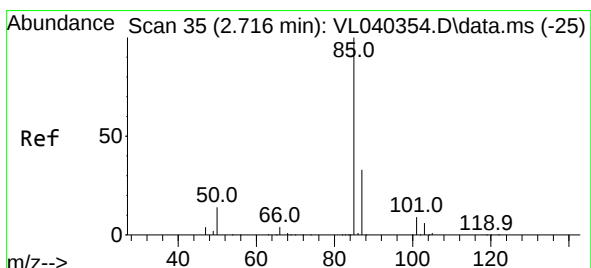
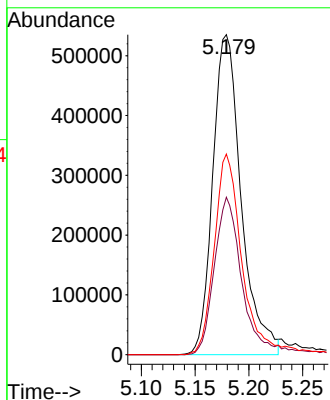
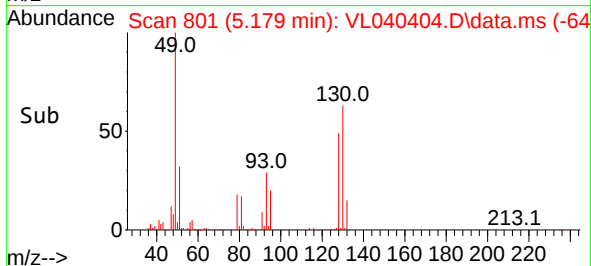


#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.179 min Scan# 80
Delta R.T. -0.010 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

Instrument :
MSVOA_L
ClientSampleId :
SV-04-20230510

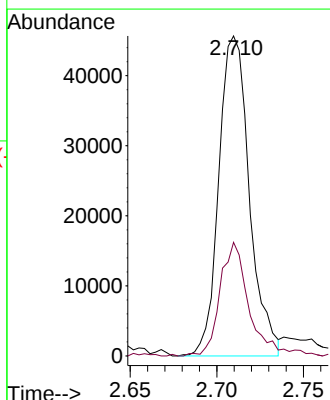
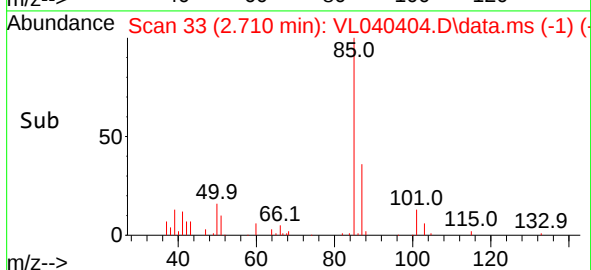
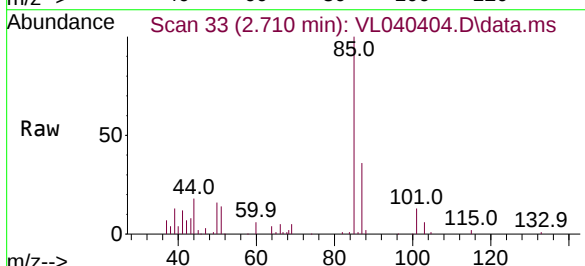


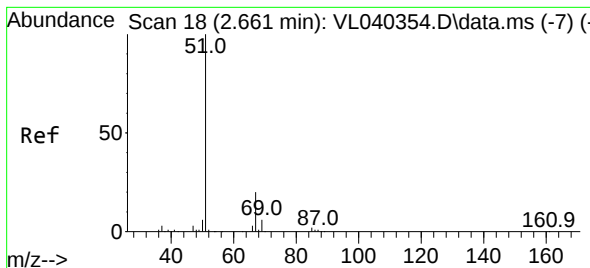
Tgt Ion: 49 Resp: 985530
Ion Ratio Lower Upper
49 100
128 49.8 23.7 71.1
130 63.0 29.9 89.8



#2
Dichlorodifluoromethane
Concen: 0.316 ppbv
RT: 2.710 min Scan# 33
Delta R.T. -0.006 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

Tgt Ion: 85 Resp: 56100
Ion Ratio Lower Upper
85 100
87 35.5 26.6 40.0





#3

Chlorodifluoromethane

Concen: 1.015 ppbv

RT: 2.636 min Scan# 10

Delta R.T. -0.025 min

Lab File: VL040404.D

Acq: 11 May 2023 17:22

Instrument :

MSVOA_L

ClientSampleId :

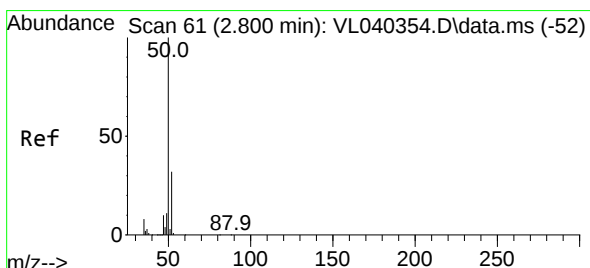
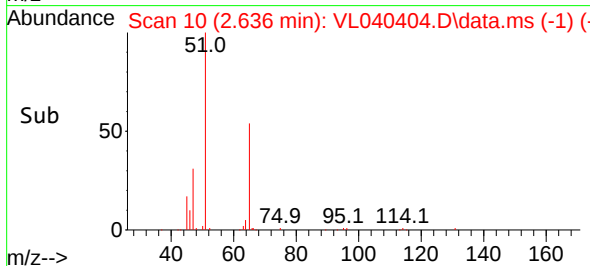
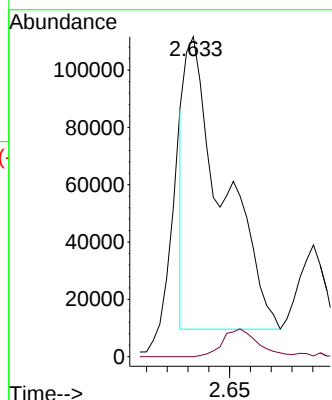
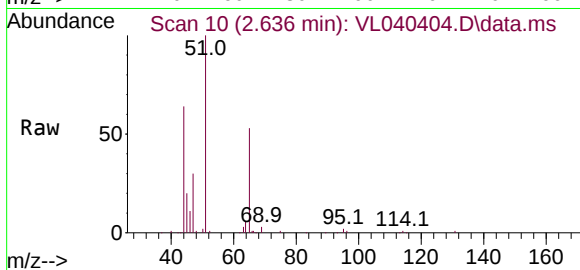
SV-04-20230510

Tgt Ion: 51 Resp: 130741

Ion Ratio Lower Upper

51 100

67 10.0 15.5 23.3#



#4

Chloromethane

Concen: 0.415 ppbv

RT: 2.796 min Scan# 60

Delta R.T. -0.004 min

Lab File: VL040404.D

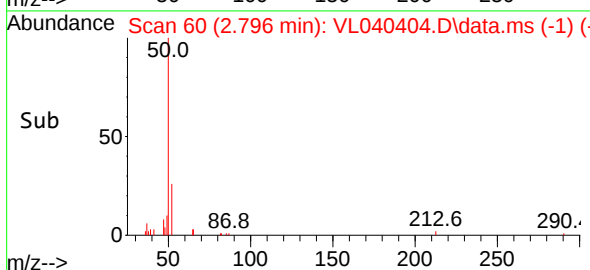
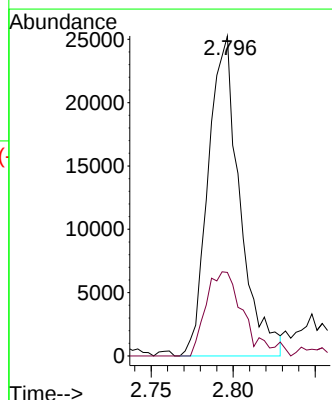
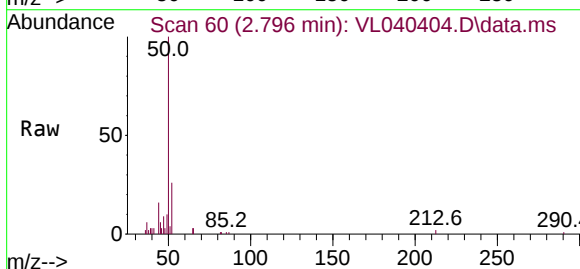
Acq: 11 May 2023 17:22

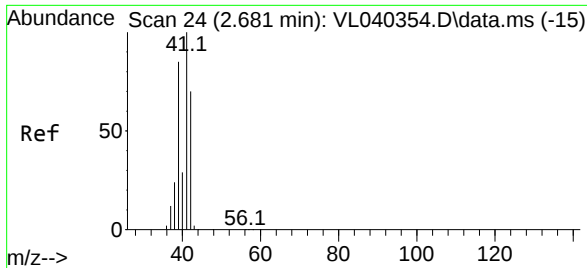
Tgt Ion: 50 Resp: 33755

Ion Ratio Lower Upper

50 100

52 26.1 25.3 37.9





#9

Propene

Concen: 1.847 ppbv

RT: 2.678 min Scan# 21

Delta R.T. -0.003 min

Lab File: VL040404.D

Acq: 11 May 2023 17:22

Instrument :

MSVOA_L

ClientSampleId :

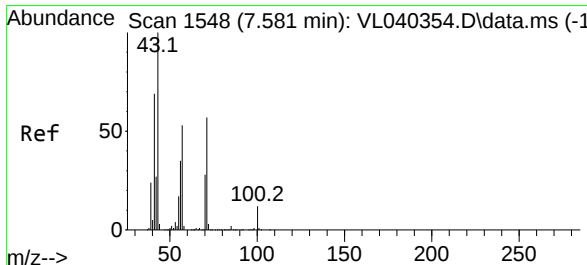
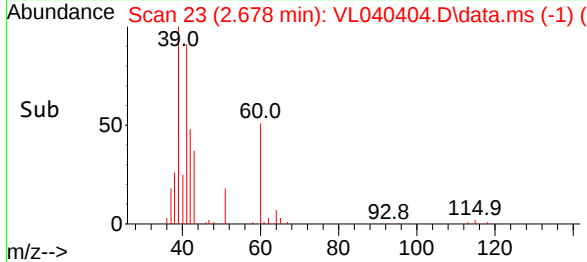
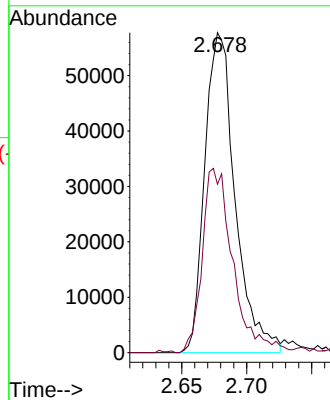
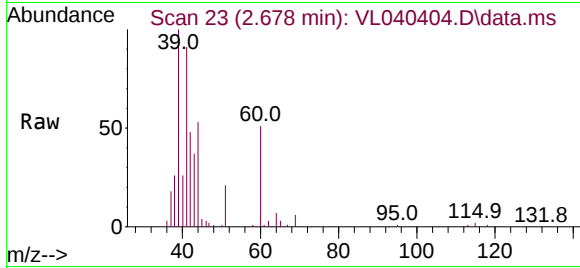
SV-04-20230510

Tgt Ion: 41 Resp: 93968

Ion Ratio Lower Upper

41 100

42 59.4 56.5 84.7



#10

Heptane

Concen: 0.105 ppbv

RT: 7.568 min Scan# 1544

Delta R.T. -0.013 min

Lab File: VL040404.D

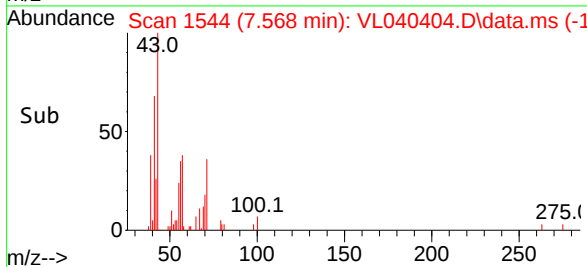
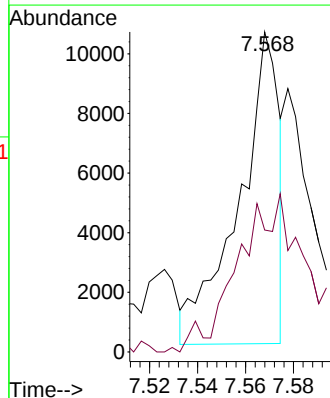
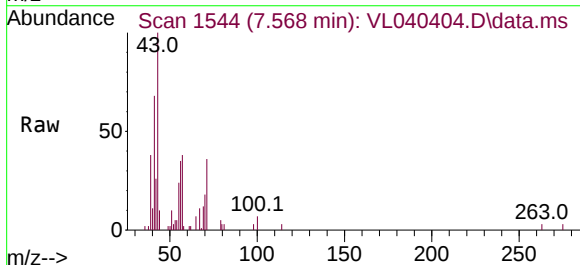
Acq: 11 May 2023 17:22

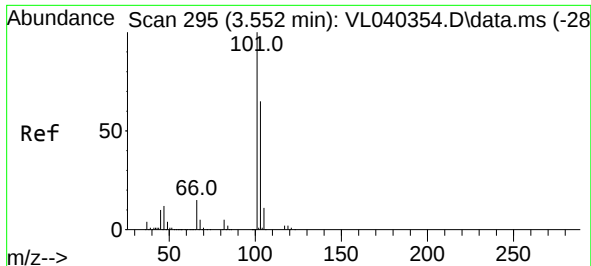
Tgt Ion: 43 Resp: 12129

Ion Ratio Lower Upper

43 100

57 0.0 42.2 63.4#

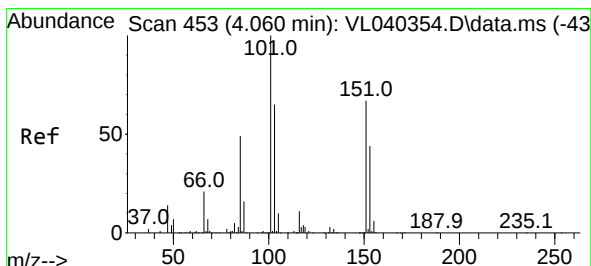
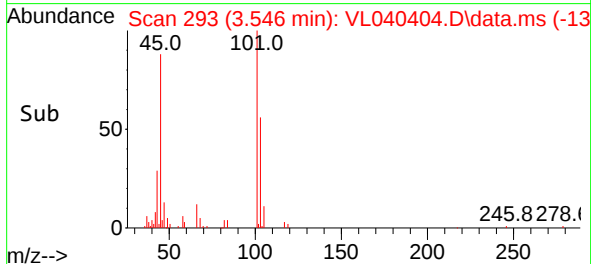
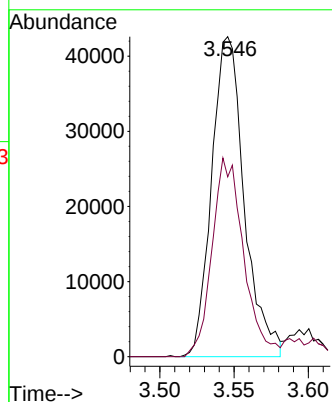
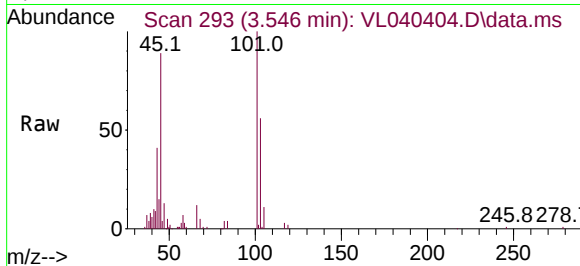




#11
 Trichlorofluoromethane
 Concen: 0.362 ppbv
 RT: 3.546 min Scan# 295
 Delta R.T. -0.006 min
 Lab File: VL040404.D
 Acq: 11 May 2023 17:22

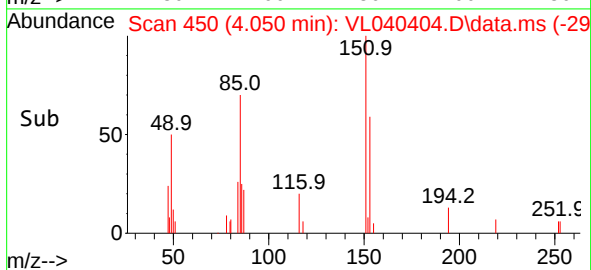
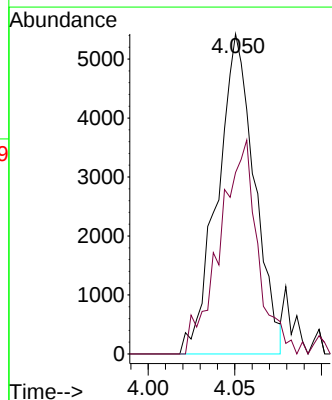
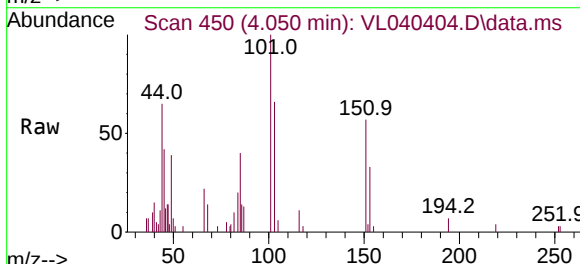
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-04-20230510

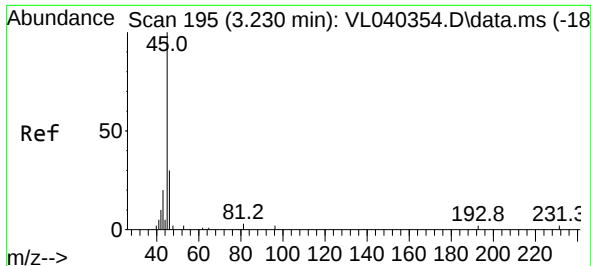
Tgt Ion:101 Resp: 65060
 Ion Ratio Lower Upper
 101 100
 103 56.2 52.2 78.4



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.064 ppbv
 RT: 4.050 min Scan# 450
 Delta R.T. -0.010 min
 Lab File: VL040404.D
 Acq: 11 May 2023 17:22

Tgt Ion:101 Resp: 8102
 Ion Ratio Lower Upper
 101 100
 151 70.7 54.7 82.1





#13

Ethanol

Concen: 70.158 ppbv

RT: 3.218 min Scan# 191

Delta R.T. -0.012 min

Lab File: VL040404.D

Acq: 11 May 2023 17:22

Instrument :

MSVOA_L

ClientSampleId :

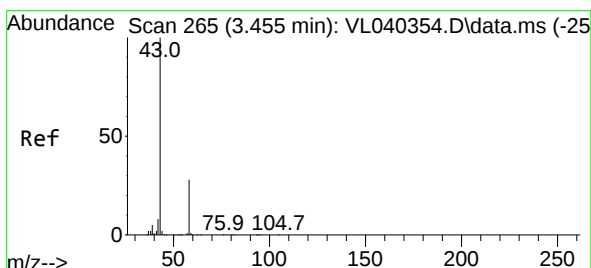
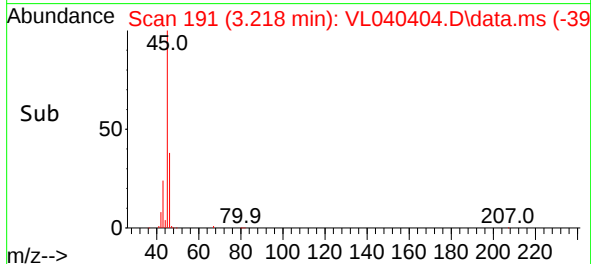
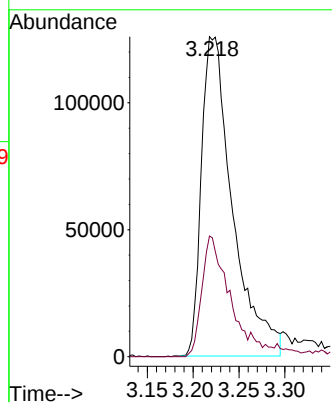
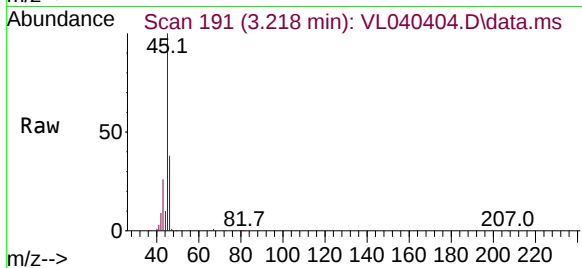
SV-04-20230510

Tgt Ion: 45 Resp: 297978

Ion Ratio Lower Upper

45 100

46 36.4 15.3 61.3



#15

Acetone

Concen: 5.507 ppbv

RT: 3.449 min Scan# 263

Delta R.T. -0.006 min

Lab File: VL040404.D

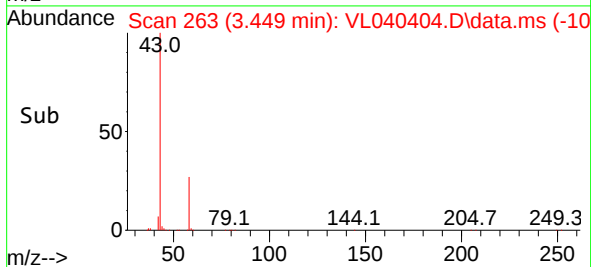
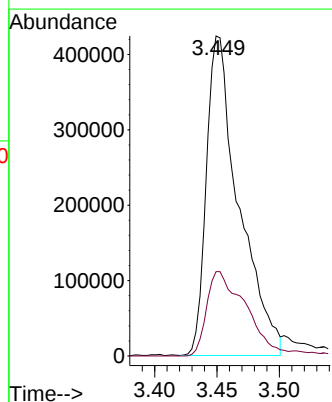
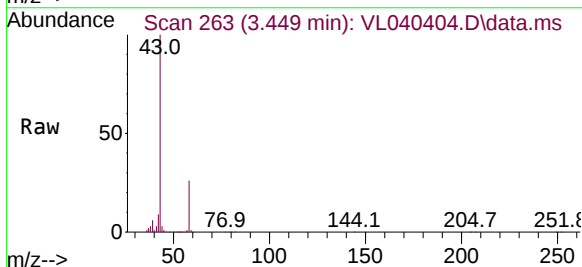
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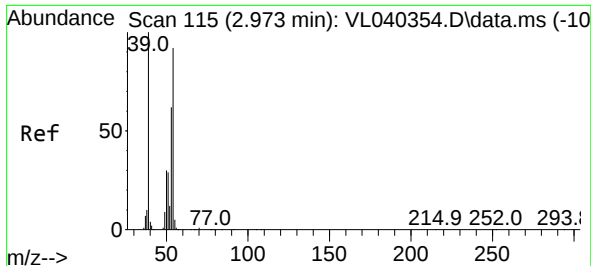
Tgt Ion: 43 Resp: 768688

Ion Ratio Lower Upper

43 100

58 33.1 22.2 33.2

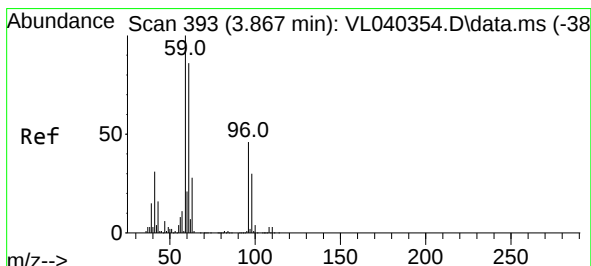
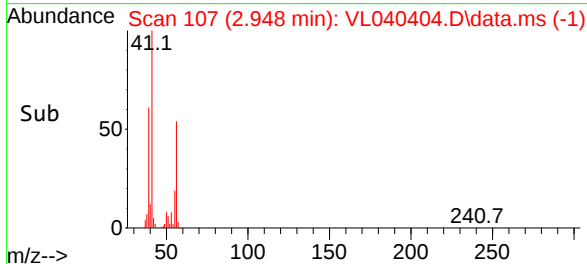
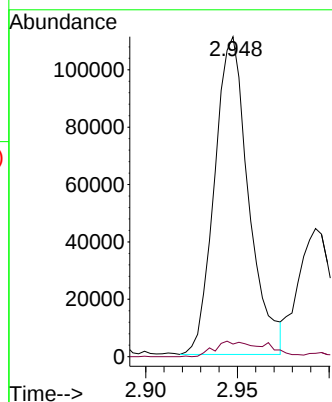
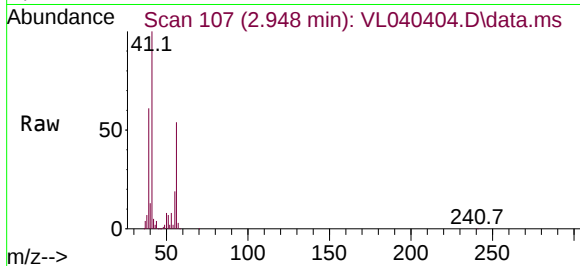




#16
1,3-Butadiene
Concen: 2.480 ppbv
RT: 2.948 min Scan# 115
Delta R.T. -0.025 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

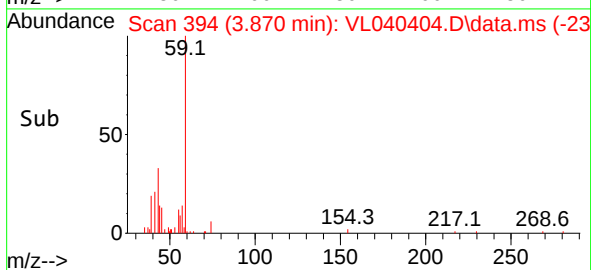
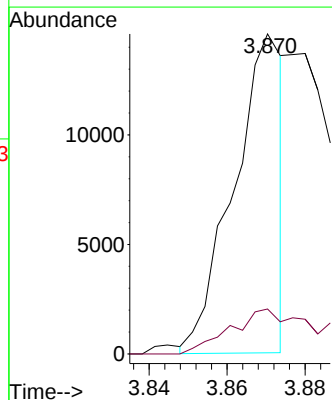
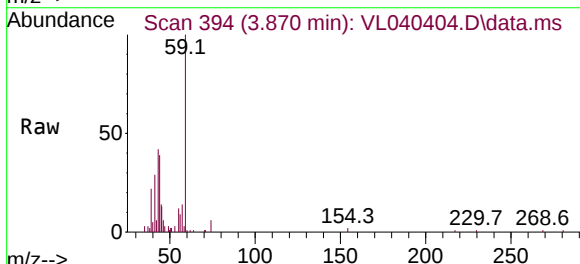
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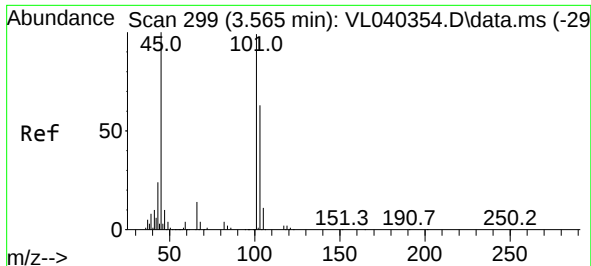
Tgt Ion: 39 Resp: 143257
Ion Ratio Lower Upper
39 100
54 8.5 68.8 103.2#



#17
tert-Butyl alcohol
Concen: 0.099 ppbv
RT: 3.870 min Scan# 394
Delta R.T. 0.003 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

Tgt Ion: 59 Resp: 12683
Ion Ratio Lower Upper
59 100
57 33.0 8.5 12.7#

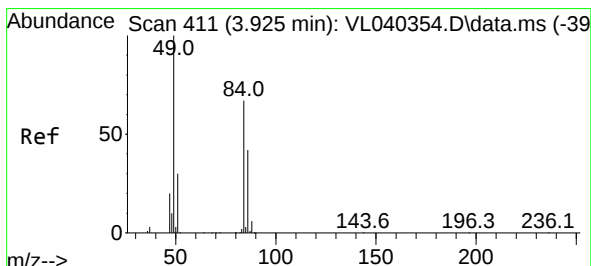
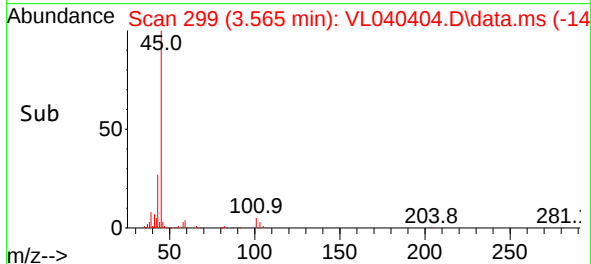
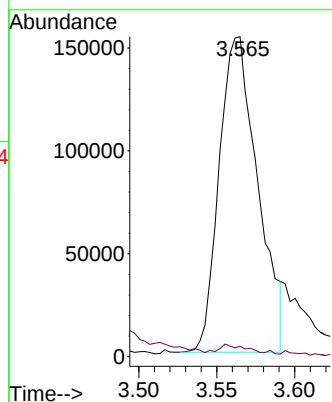
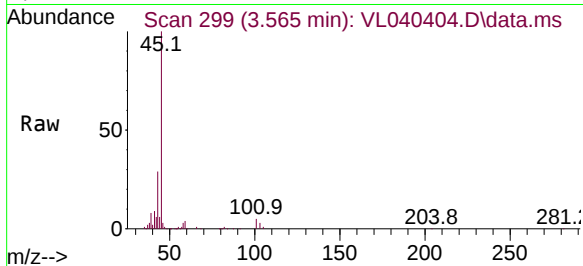




#19
Isopropyl Alcohol
Concen: 4.139 ppbv
RT: 3.565 min Scan# 299
Delta R.T. -0.000 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

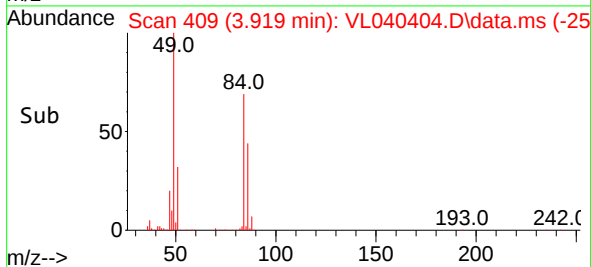
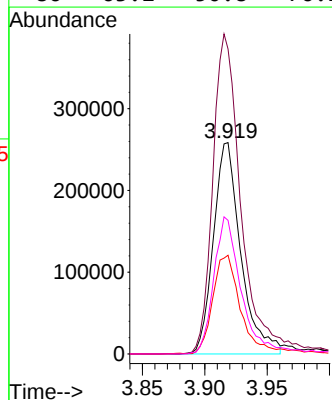
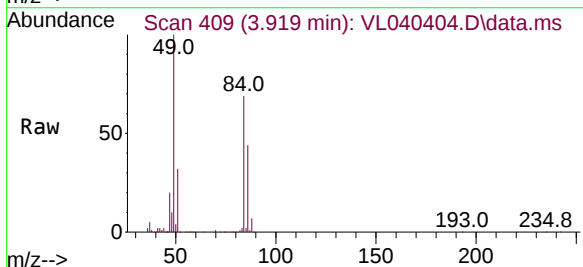
Instrument :
MSVOA_L
ClientSampleId :
SV-04-20230510

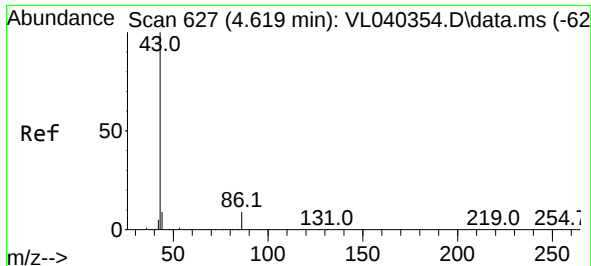
Tgt Ion: 45 Resp: 263611
Ion Ratio Lower Upper
45 100
58 3.9 2.6 4.0



#20
Methylene Chloride
Concen: 7.104 ppbv
RT: 3.919 min Scan# 409
Delta R.T. -0.006 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

Tgt Ion: 84 Resp: 395892
Ion Ratio Lower Upper
84 100
49 144.3 120.1 180.1
51 46.3 36.3 54.5
86 63.2 50.8 76.2

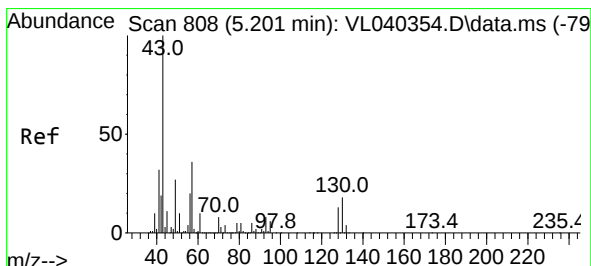
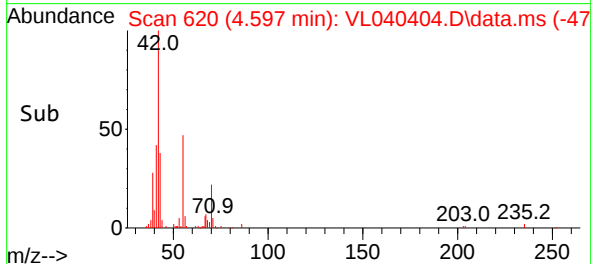
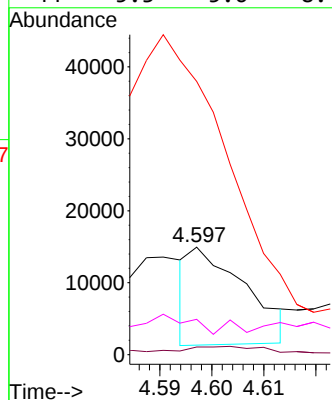
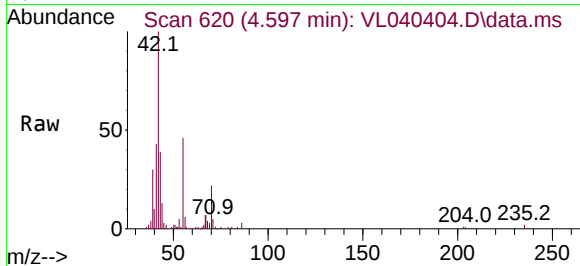




#23
 Vinyl Acetate
 Concen: 0.286 ppbv
 RT: 4.597 min Scan# 61
 Delta R.T. -0.022 min
 Lab File: VL040404.D
 Acq: 11 May 2023 17:22

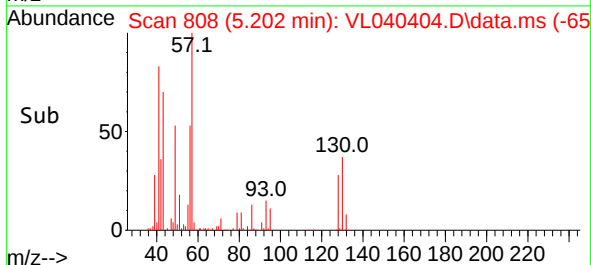
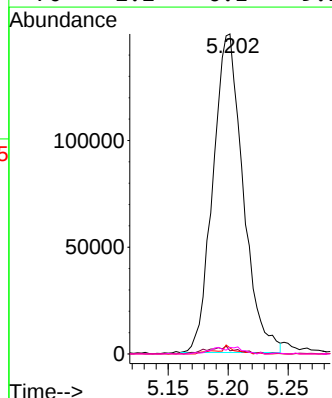
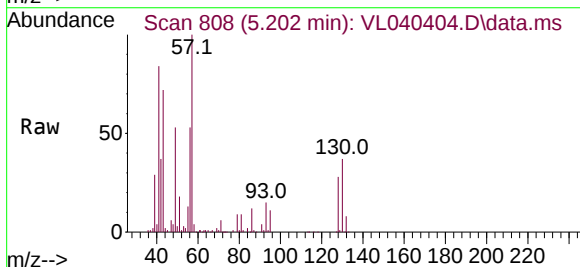
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-04-20230510

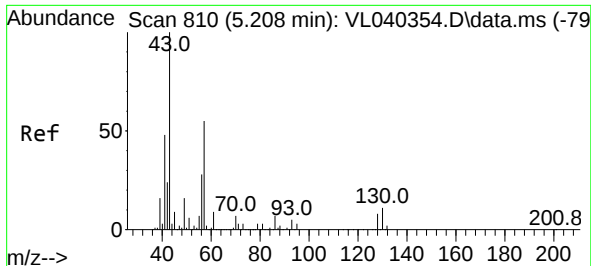
Tgt Ion: 43	Resp: 10181
Ion Ratio	Lower Upper
43 100	
86 8.5	6.0 9.0
42 312.0	6.4 9.6#
44 5.3	5.6 8.4#



#25
 Ethyl Acetate
 Concen: 1.106 ppbv
 RT: 5.202 min Scan# 808
 Delta R.T. 0.001 min
 Lab File: VL040404.D
 Acq: 11 May 2023 17:22

Tgt	Ion: 43	Resp:	259769
Ion	Ratio	Lower	Upper
43	100		
45	2.5	8.5	12.7#
61	1.7	8.5	12.7#
70	2.2	6.1	9.1#

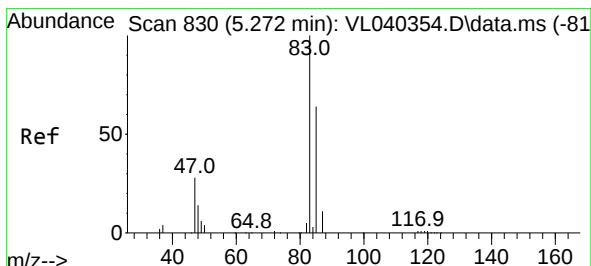
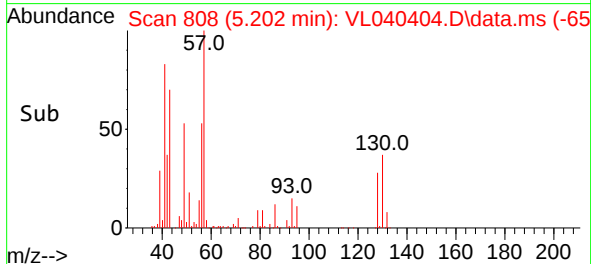
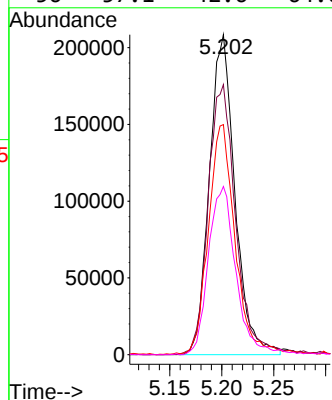
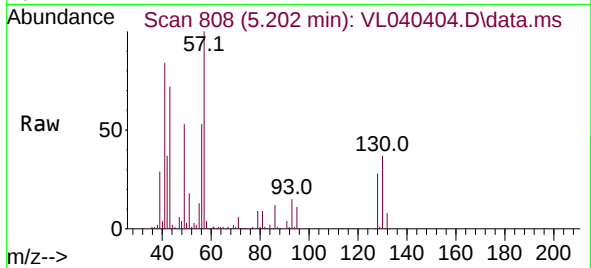




#26
Hexane
Concen: 3.597 ppbv
RT: 5.202 min Scan# 808
Delta R.T. -0.006 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

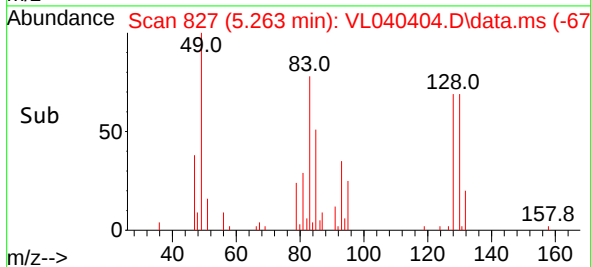
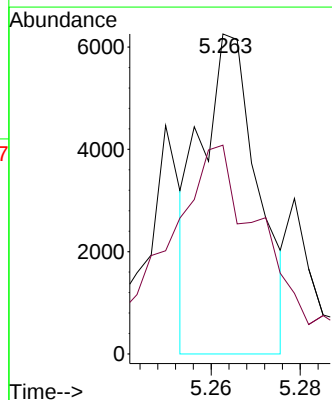
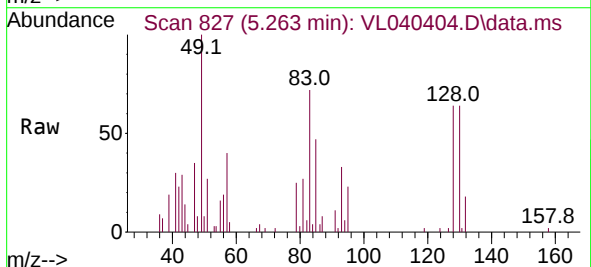
Instrument :
MSVOA_L
ClientSampleId :
SV-04-20230510

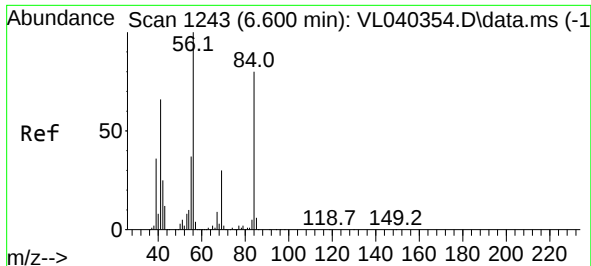
Tgt Ion: 57 Resp: 356210
Ion Ratio Lower Upper
57 100
41 92.5 74.8 112.2
43 75.4 192.7 289.1#
56 57.1 42.6 64.0



#29
Chloroform
Concen: 0.032 ppbv
RT: 5.263 min Scan# 827
Delta R.T. -0.009 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

Tgt Ion: 83 Resp: 5600
Ion Ratio Lower Upper
83 100
85 59.2 51.0 76.4

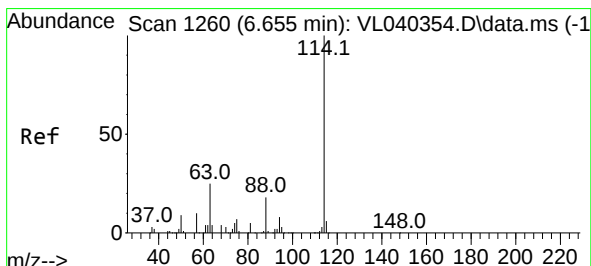
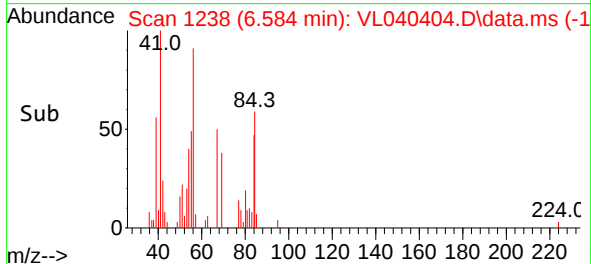
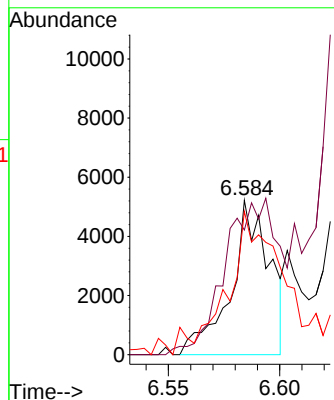
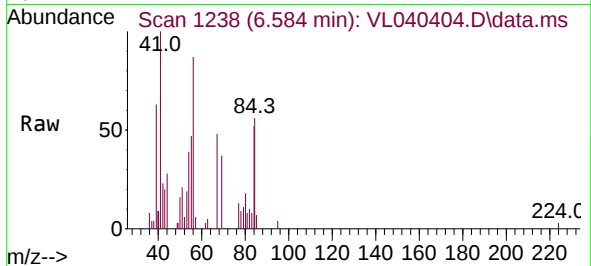




#30
Cyclohexane
Concen: 0.082 ppbv
RT: 6.584 min Scan# 11
Delta R.T. -0.016 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

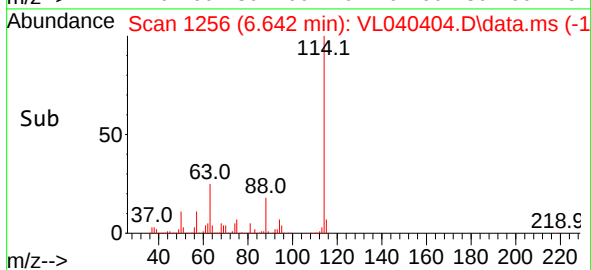
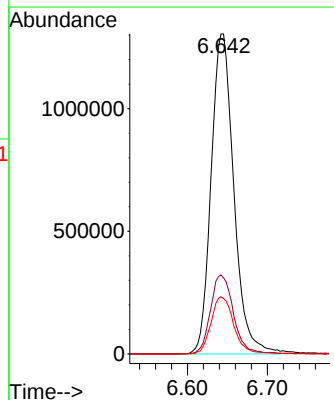
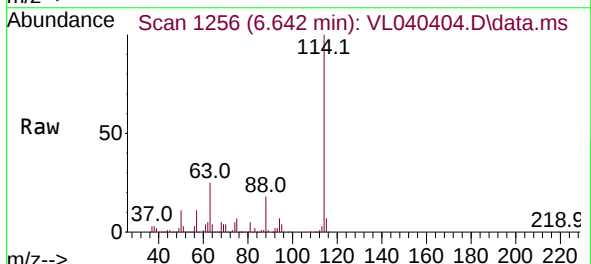
Instrument :
MSVOA_L
ClientSampleId :
SV-04-20230510

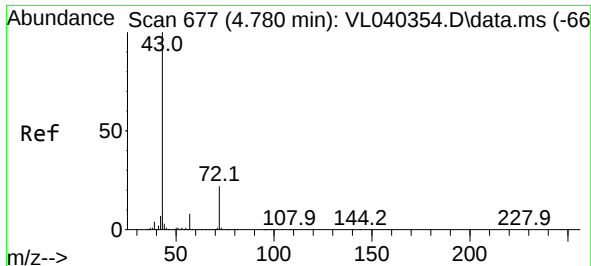
Tgt Ion: 84 Resp: 6257
Ion Ratio Lower Upper
84 100
56 0.0 107.0 160.6#
41 134.4 66.7 100.1#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.642 min Scan# 1256
Delta R.T. -0.013 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

Tgt Ion: 114 Resp: 2567031
Ion Ratio Lower Upper
114 100
63 25.3 21.4 32.0
88 18.1 14.6 22.0

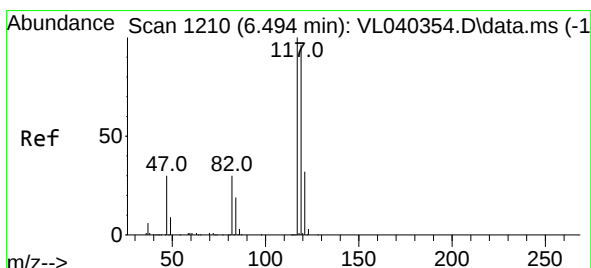
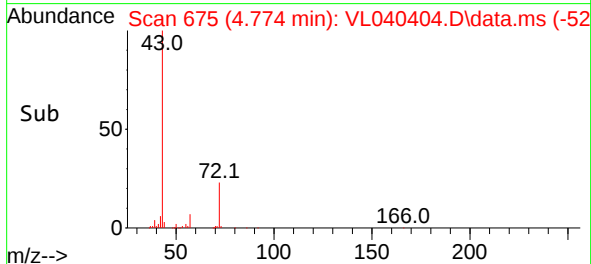
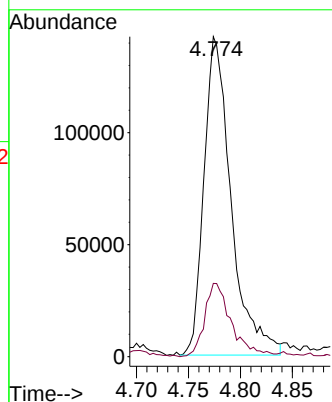
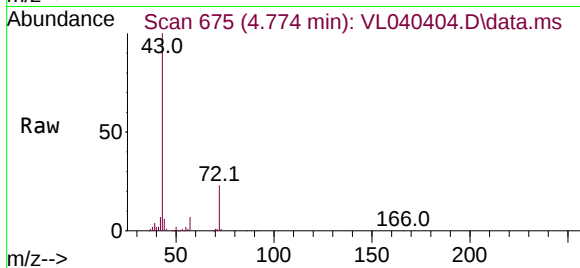




#34
2-Butanone
Concen: 1.869 ppbv
RT: 4.774 min Scan# 61
Delta R.T. -0.006 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

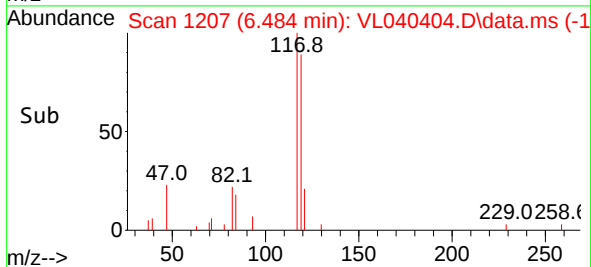
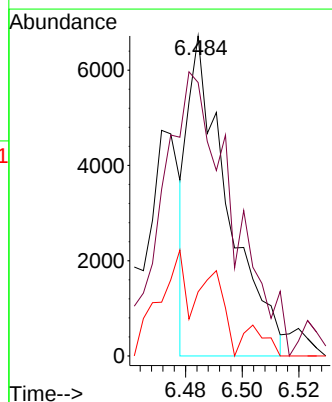
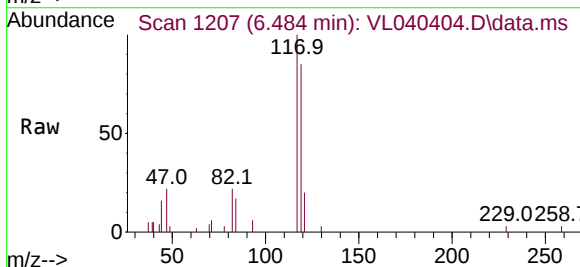
Instrument :
MSVOA_L
ClientSampleId :
SV-04-20230510

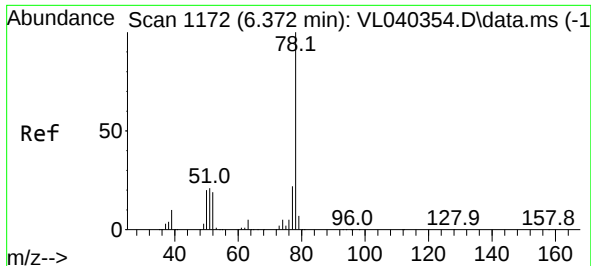
Tgt Ion: 43 Resp: 258767
Ion Ratio Lower Upper
43 100
72 23.9 18.4 27.6



#35
Carbon Tetrachloride
Concen: 0.036 ppbv
RT: 6.484 min Scan# 1207
Delta R.T. -0.010 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

Tgt Ion: 117 Resp: 6530
Ion Ratio Lower Upper
117 100
119 69.9 76.6 114.8#
121 21.5 25.3 37.9#

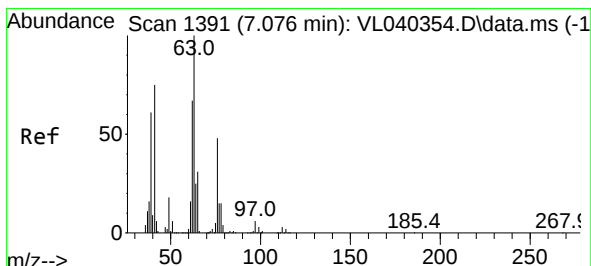
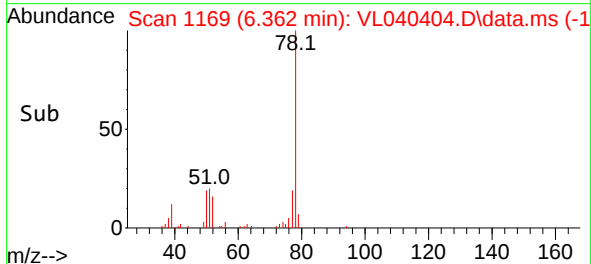
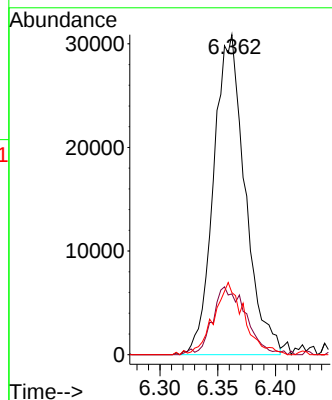
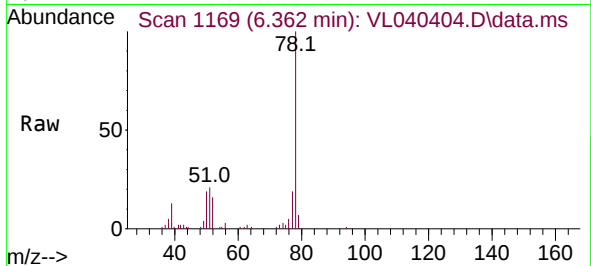




#36
Benzene
Concen: 0.279 ppbv
RT: 6.362 min Scan# 1172
Delta R.T. -0.010 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

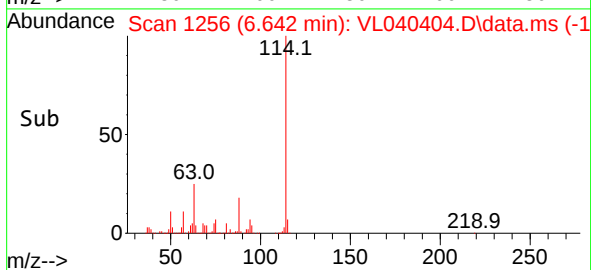
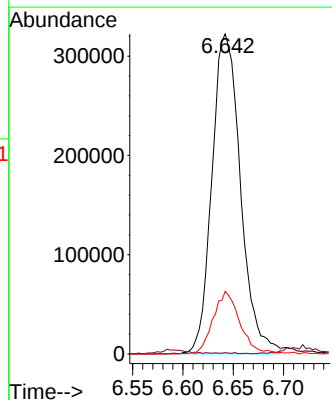
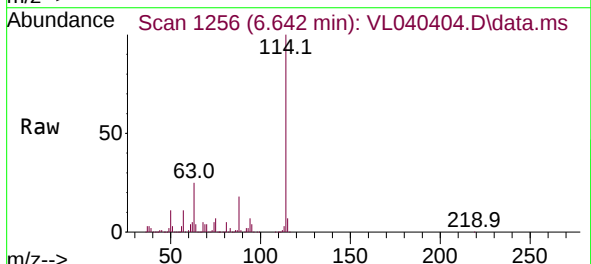
Instrument :
MSVOA_L
ClientSampleId :
SV-04-20230510

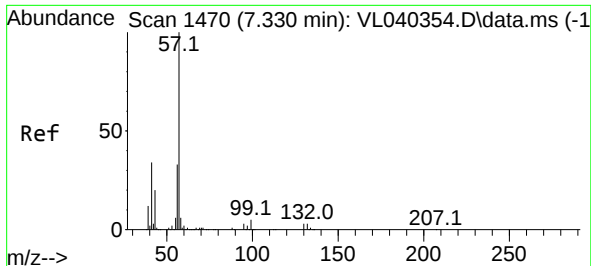
Tgt Ion: 78 Resp: 58395
Ion Ratio Lower Upper
78 100
77 19.0 17.8 26.8
50 19.4 15.6 23.4



#39
1,2-Dichloropropane
Concen: 7.720 ppbv
RT: 6.642 min Scan# 1256
Delta R.T. -0.434 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

Tgt Ion: 63 Resp: 636168
Ion Ratio Lower Upper
63 100
41 0.0 59.6 89.4#
62 19.4 53.9 80.9#

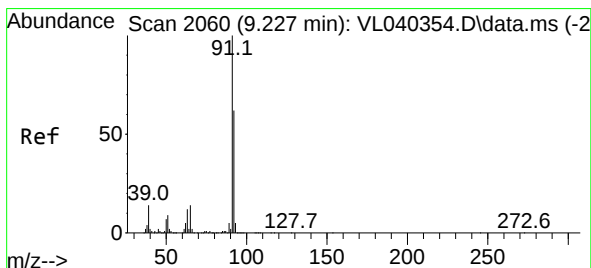
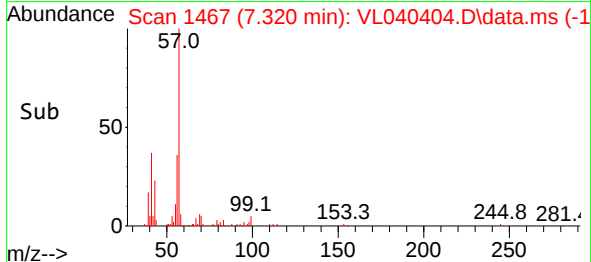
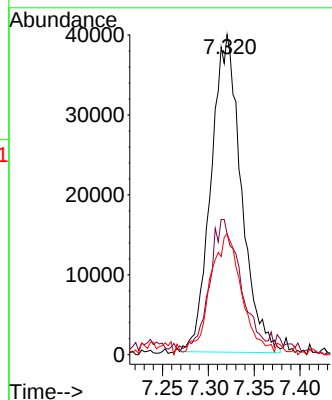
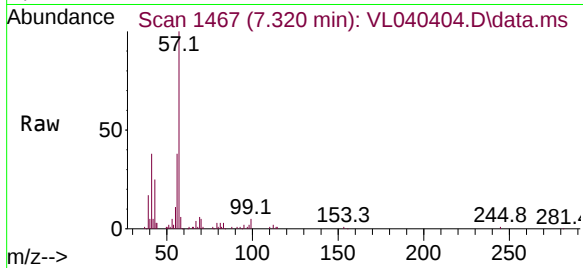




#44
 2,2,4-Trimethylpentane
 Concen: 0.261 ppbv
 RT: 7.320 min Scan# 1470
 Delta R.T. -0.010 min
 Lab File: VL040404.D
 Acq: 11 May 2023 17:22

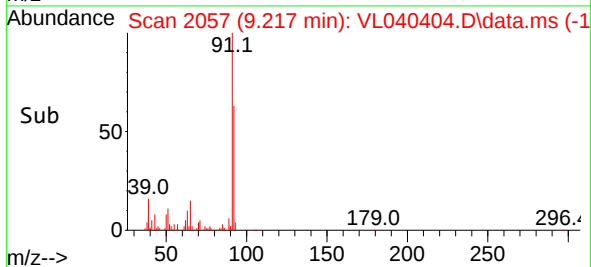
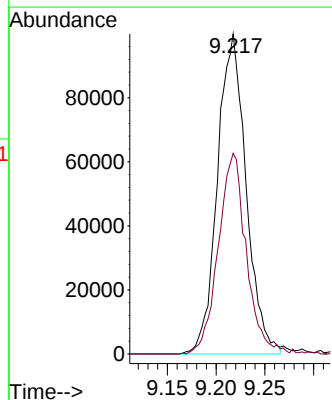
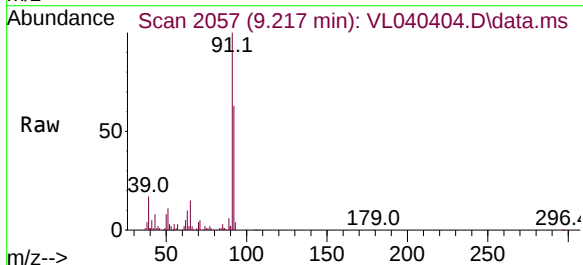
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-04-20230510

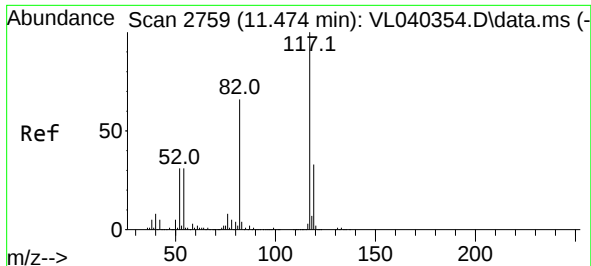
Tgt Ion: 57 Resp: 91321
 Ion Ratio Lower Upper
 57 100
 41 48.9 26.9 40.3#
 56 42.0 25.1 37.7#



#53
 Toluene
 Concen: 0.919 ppbv
 RT: 9.217 min Scan# 2057
 Delta R.T. -0.010 min
 Lab File: VL040404.D
 Acq: 11 May 2023 17:22

Tgt Ion: 91 Resp: 204045
 Ion Ratio Lower Upper
 91 100
 92 61.8 48.9 73.3

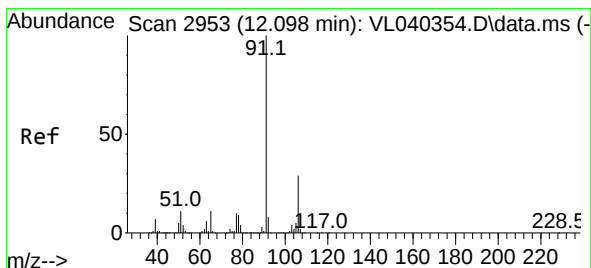
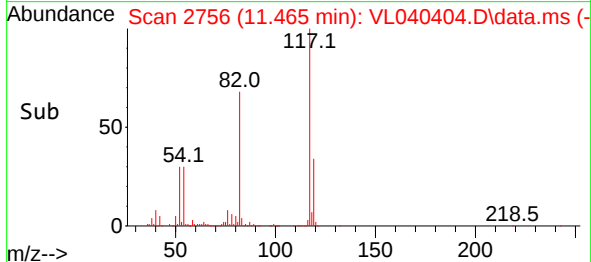
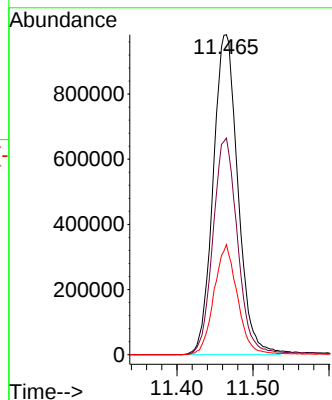
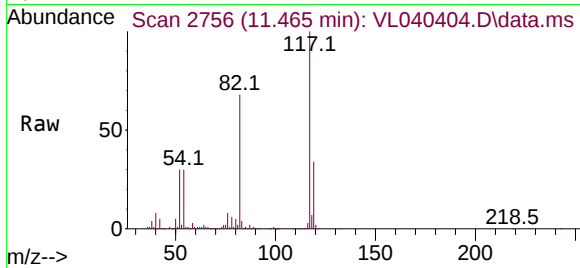




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.465 min Scan# 211
Delta R.T. -0.009 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

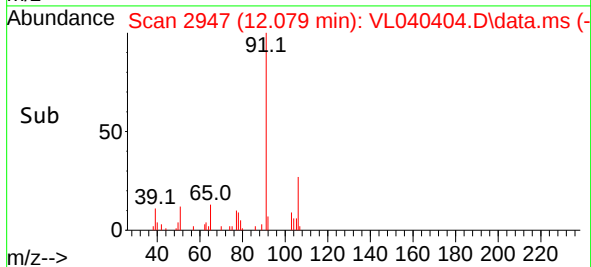
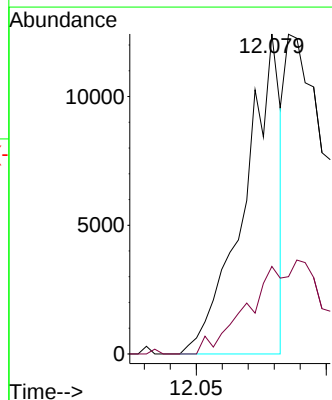
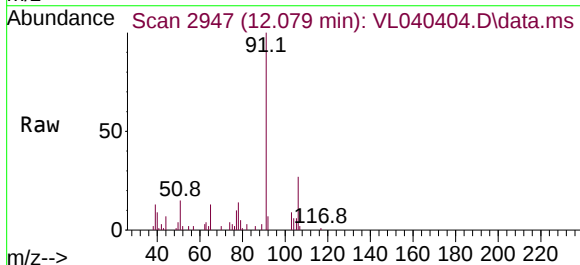
Instrument :
MSVOA_L
ClientSampleId :
SV-04-20230510

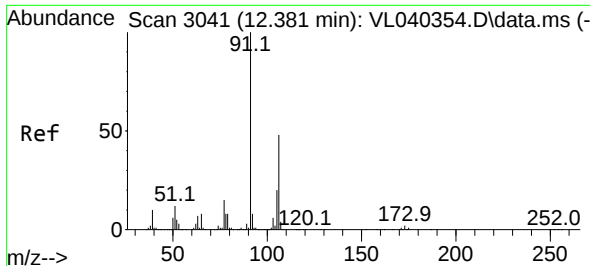
Tgt Ion:117 Resp: 2222084
Ion Ratio Lower Upper
117 100
82 68.1 52.5 78.7
119 33.0 24.3 36.5



#58
Ethyl Benzene
Concen: 0.044 ppbv
RT: 12.079 min Scan# 2947
Delta R.T. -0.019 min
Lab File: VL040404.D
Acq: 11 May 2023 17:22

Tgt Ion: 91 Resp: 12071
Ion Ratio Lower Upper
91 100
106 27.3 23.5 35.3





#59

m/p-Xylene

Concen: 0.046 ppbv

RT: 12.365 min Scan# 3041

Delta R.T. -0.016 min

Lab File: VL040404.D

Acq: 11 May 2023 17:22

Instrument :

MSVOA_L

ClientSampleId :

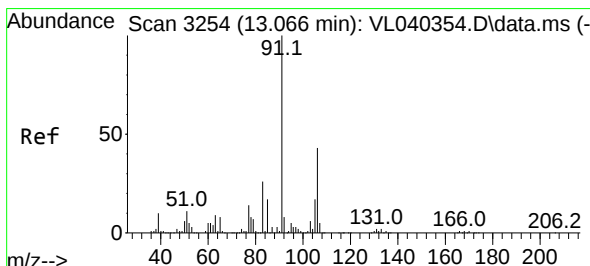
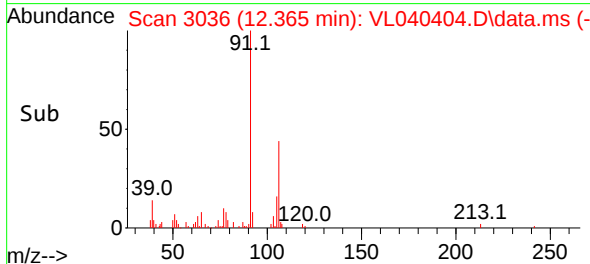
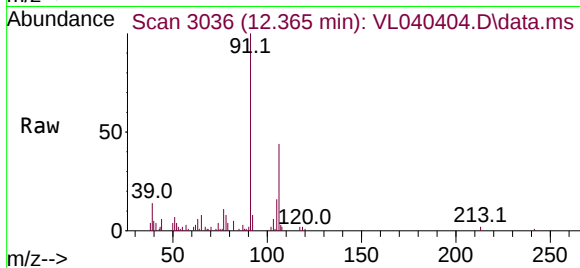
SV-04-20230510

Tgt Ion: 91 Resp: 11473

Ion Ratio Lower Upper

91 100

106 0.0 34.7 52.1#



#60

o-Xylene

Concen: 0.060 ppbv

RT: 13.057 min Scan# 3251

Delta R.T. -0.009 min

Lab File: VL040404.D

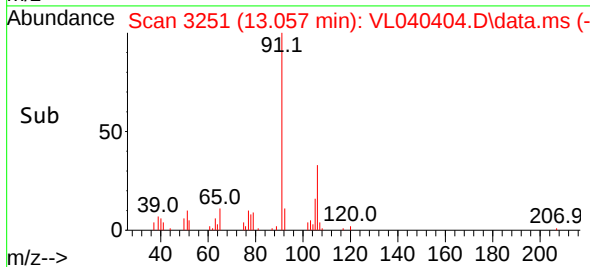
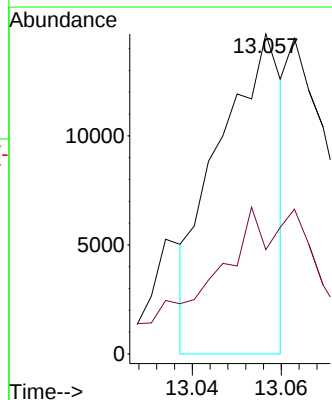
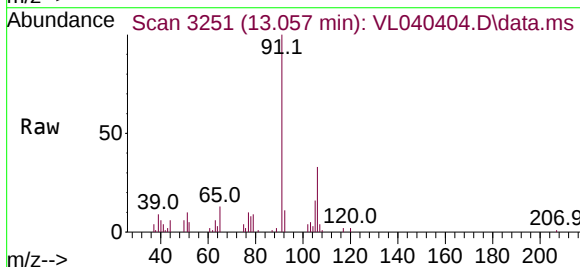
Acq: 11 May 2023 17:22

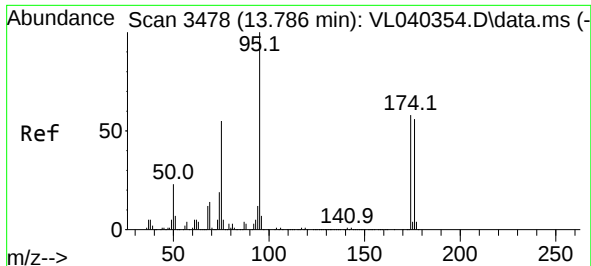
Tgt Ion: 91 Resp: 14591

Ion Ratio Lower Upper

91 100

106 96.4 21.9 65.8#

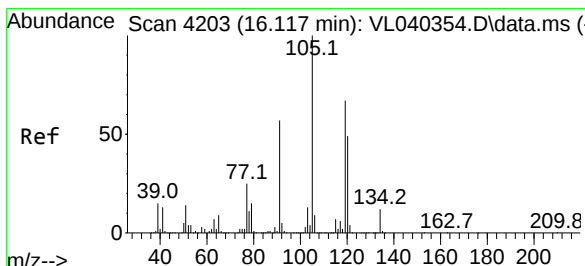
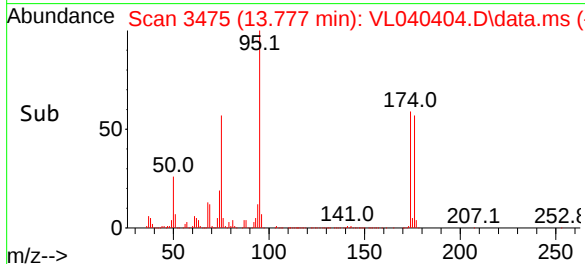
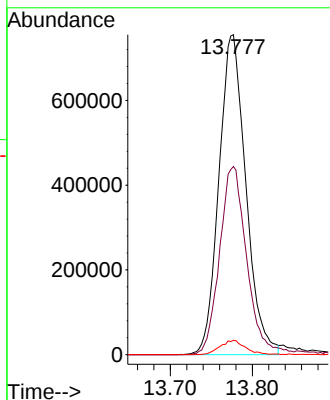
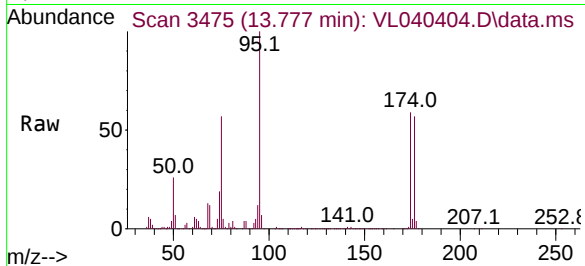




#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.380 ppbv
 RT: 13.777 min Scan# 3475
 Delta R.T. -0.009 min
 Lab File: VL040404.D
 Acq: 11 May 2023 17:22

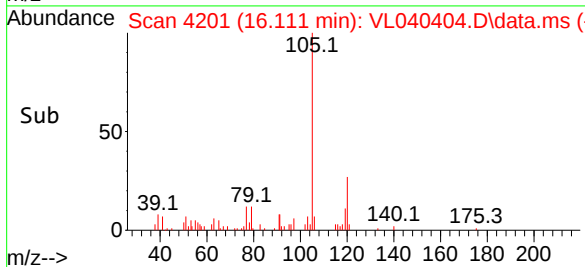
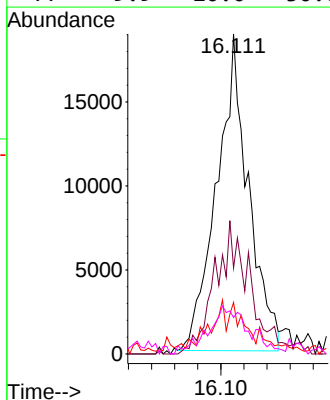
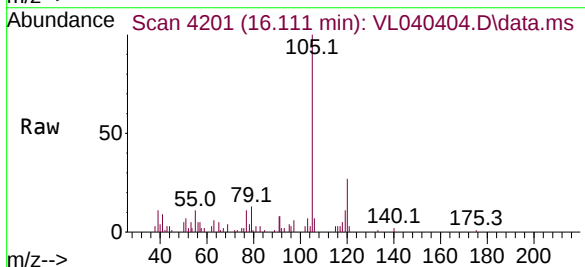
Instrument :
 MSVOA_1
 ClientSampleId :
 SV-04-20230510

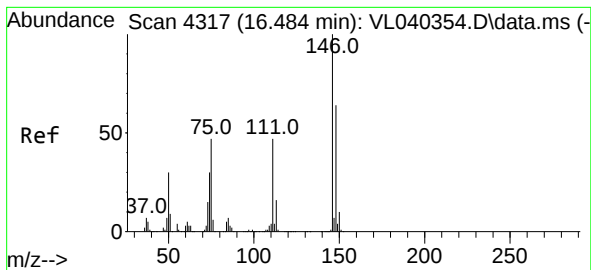
Tgt Ion: 95 Resp: 1723606
 Ion Ratio Lower Upper
 95 100
 174 61.3 47.2 70.8
 175 4.3 3.5 5.3



#74
 1,2,4-Trimethylbenzene
 Concen: 0.127 ppbv
 RT: 16.111 min Scan# 4201
 Delta R.T. -0.006 min
 Lab File: VL040404.D
 Acq: 11 May 2023 17:22

Tgt Ion: 105 Resp: 35836
 Ion Ratio Lower Upper
 105 100
 120 29.8 38.9 58.3#
 91 13.7 46.0 69.0#
 77 9.9 20.0 30.0#





#76
 1,4-Dichlorobenzene
 Concen: 0.096 ppbv
 RT: 16.478 min Scan# 41
 Delta R.T. -0.006 min
 Lab File: VL040404.D
 Acq: 11 May 2023 17:22

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-04-20230510

Tgt Ion	Ratio	Lower	Upper
146	100		
111	57.8	23.8	71.4
148	73.7	32.4	97.2

