

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020924\
 Data File : VL041063.D
 Acq On : 9 Feb 2024 18:25
 Operator : SY/MD
 Sample : P1420-01DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2RDUP

Quant Time: Feb 12 00:49:30 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL012324AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Mon Feb 12 00:40:04 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.189	49	1113055	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	6.648	114	2908808	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.462	117	2561382	10.000	ppbv	0.00

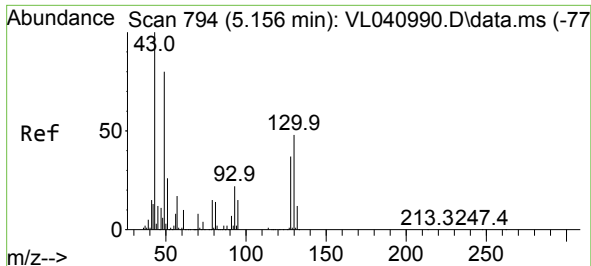
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.774	95	1946334	10.060	ppbv	0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.600%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.729	85	109916	0.447	ppbv	98
3) Chlorodifluoromethane	2.674	51	76733	0.410	ppbv #	87
4) Chloromethane	2.816	50	41256	0.588	ppbv #	86
9) Propene	2.874	41	99648	1.623	ppbv	96
10) Heptane	7.581	43	3282	0.022	ppbv #	1
11) Trichlorofluoromethane	3.562	101	41559	0.210	ppbv	90
12) 1,1,2-Trichlorotrifluo...	4.063	101	8638	0.060	ppbv	91
13) Ethanol	3.243	45	6618424	452.237	ppbv	95
15) Acetone	3.469	43	1059401	7.443	ppbv	97
16) 1,3-Butadiene	2.964	39	7101	0.104	ppbv #	10
17) tert-Butyl alcohol	3.893	59	16547	0.142	ppbv #	71
19) Isopropyl Alcohol	3.584	45	1219010	14.795	ppbv	99
20) Methylene Chloride	3.932	84	1981871	36.184	ppbv	95
23) Vinyl Acetate	4.620	43	3415	0.023	ppbv #	4
25) Ethyl Acetate	5.211	43	1201216	4.654	ppbv #	77
26) Hexane	5.208	57	1718286	15.619	ppbv #	38
29) Chloroform	5.269	83	20058	0.103	ppbv	99
34) 2-Butanone	4.793	43	12565	0.091	ppbv #	18
35) Carbon Tetrachloride	6.481	117	4336	0.022	ppbv	98
36) Benzene	6.365	78	57157	0.238	ppbv #	92
39) 1,2-Dichloropropane	6.648	63	709496	7.497	ppbv #	24
41) Tetrahydrofuran	5.211	42	645397	6.859	ppbv #	51
44) 2,2,4-Trimethylpentane	7.320	57	24468	0.061	ppbv #	28
53) Toluene	9.221	91	38771	0.147	ppbv #	13
59) m/p-Xylene	12.362	91	31747	0.106	ppbv #	1
60) o-Xylene	13.050	91	8254	0.029	ppbv #	50

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

Quant Time: Feb 12 00:49:30 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL012324AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Mon Feb 12 00:40:04 2024
Response via : Initial Calibration

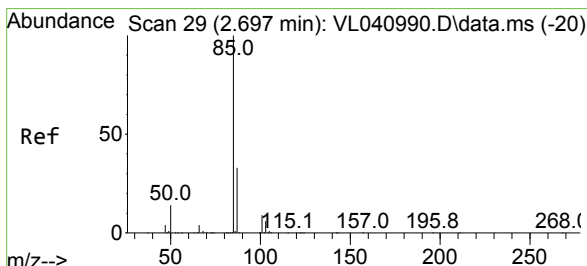
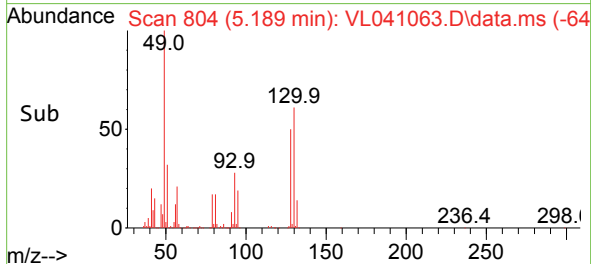
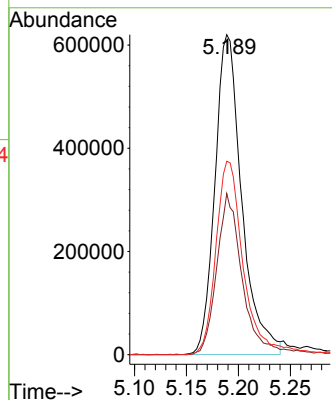
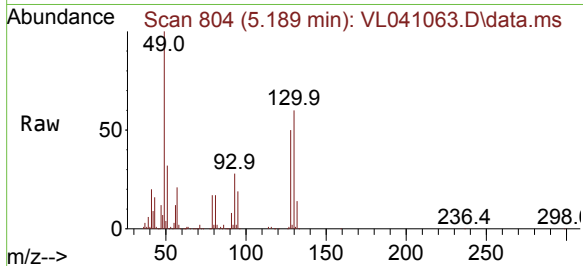




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.189 min Scan# 80
 Delta R.T. 0.013 min
 Lab File: VL041063.D
 Acq: 9 Feb 2024 18:25

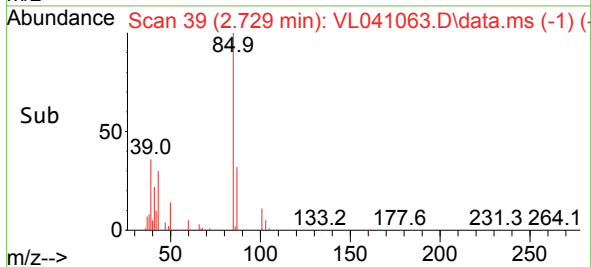
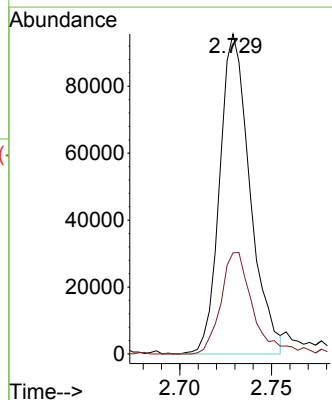
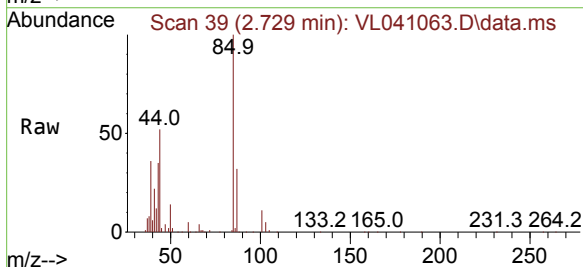
Instrument :
 MSVOA_L
 ClientSampleId :
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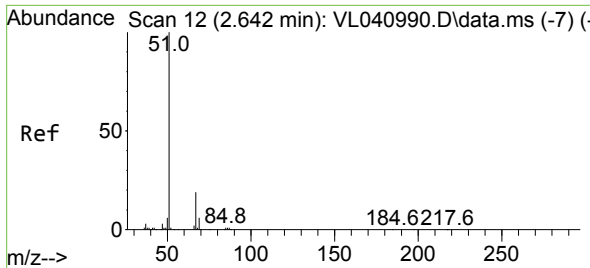
Tgt Ion: 49 Resp: 1113055
 Ion Ratio Lower Upper
 49 100
 128 49.4 23.9 71.7
 130 63.1 31.1 93.5



#2
 Dichlorodifluoromethane
 Concen: 0.447 ppbv
 RT: 2.729 min Scan# 39
 Delta R.T. 0.013 min
 Lab File: VL041063.D
 Acq: 9 Feb 2024 18:25

Tgt Ion: 85 Resp: 109916
 Ion Ratio Lower Upper
 85 100
 87 31.6 26.3 39.5

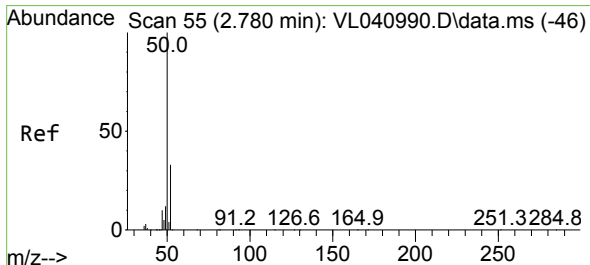
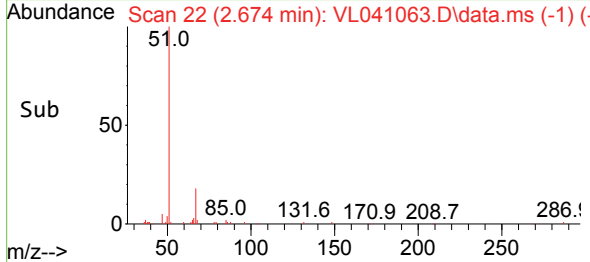
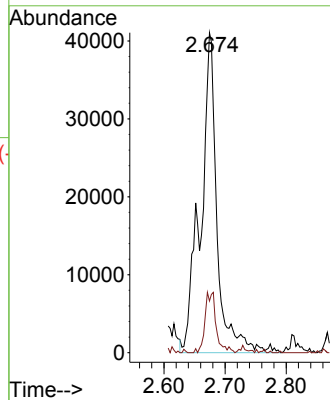
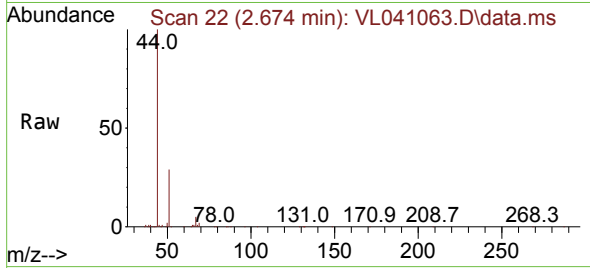




#3
Chlorodifluoromethane
Concen: 0.410 ppbv
RT: 2.674 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

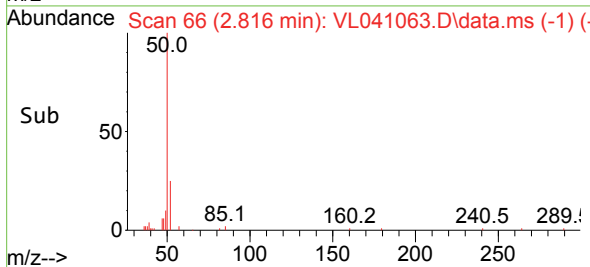
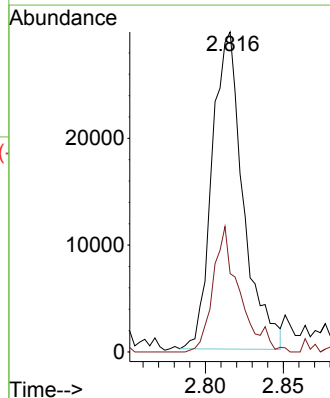
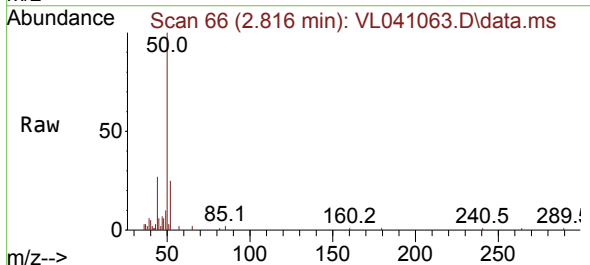
Instrument :
MSVOA_L
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IA2RDUP

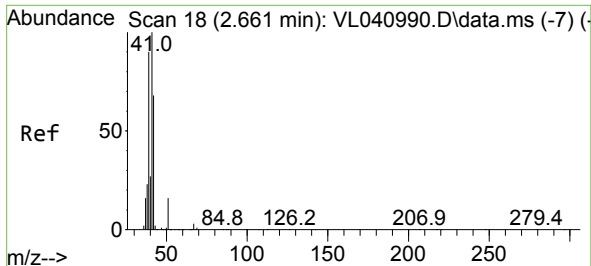
Tgt Ion: 51 Resp: 76733
Ion Ratio Lower Upper
51 100
67 12.8 14.8 22.2#



#4
Chloromethane
Concen: 0.588 ppbv
RT: 2.816 min Scan# 66
Delta R.T. 0.019 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

Tgt Ion: 50 Resp: 41256
Ion Ratio Lower Upper
50 100
52 24.8 26.2 39.4#

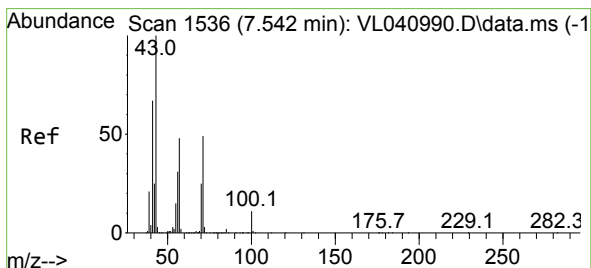
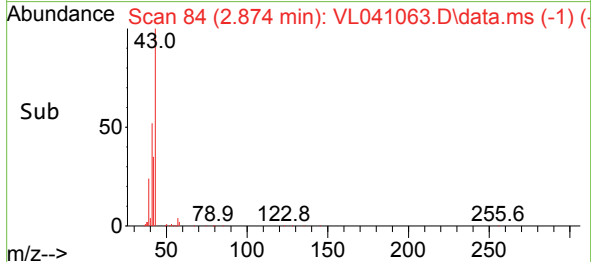
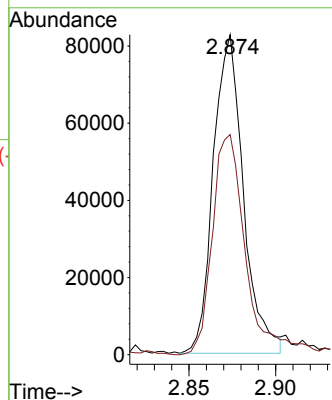
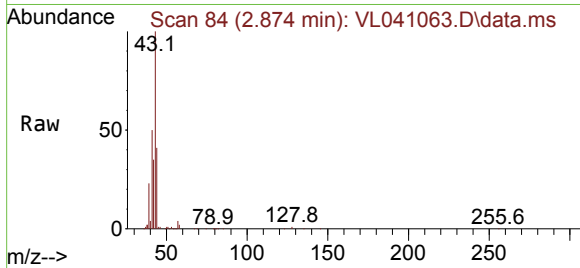




#9
Propene
Concen: 1.623 ppbv
RT: 2.874 min Scan# 84
Delta R.T. 0.196 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

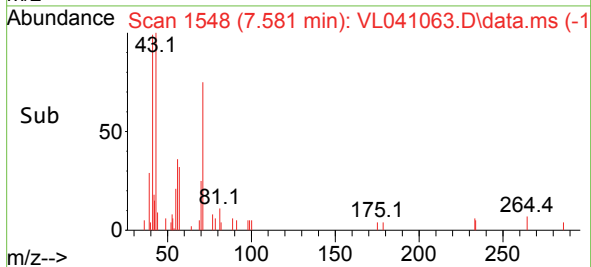
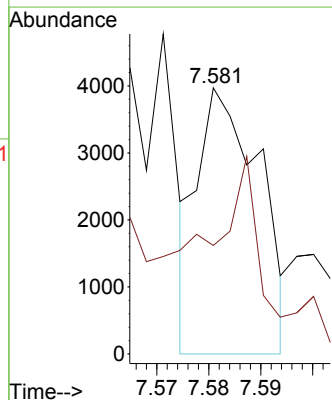
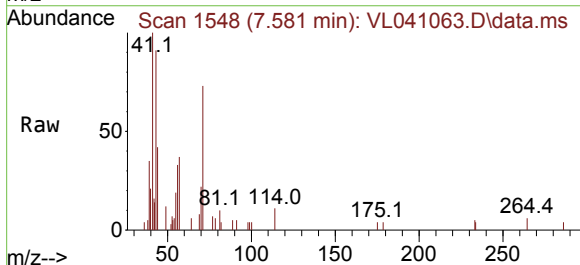
Instrument :
MSVOA_L
ClientSampleId :
IA2RDUP

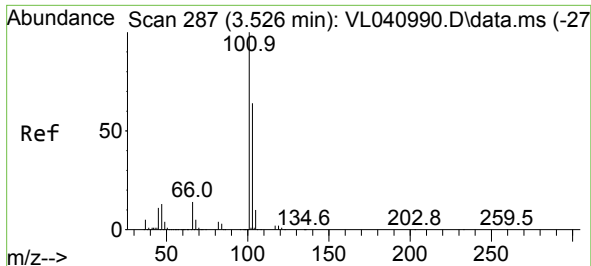
Tgt Ion: 41 Resp: 99648
Ion Ratio Lower Upper
41 100
42 76.7 59.0 88.4



#10
Heptane
Concen: 0.022 ppbv
RT: 7.581 min Scan# 1548
Delta R.T. 0.013 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

Tgt Ion: 43 Resp: 3282
Ion Ratio Lower Upper
43 100
57 155.1 39.4 59.2#

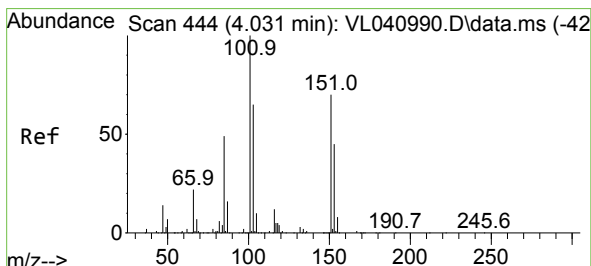
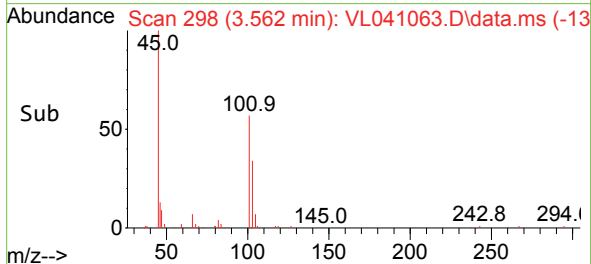
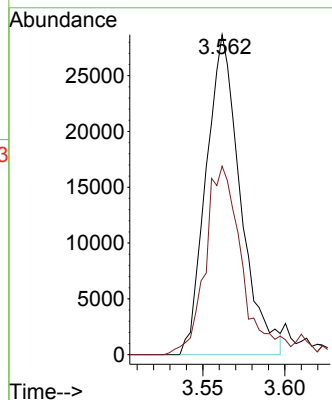
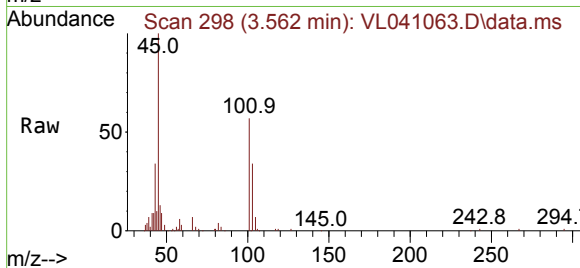




#11
 Trichlorofluoromethane
 Concen: 0.210 ppbv
 RT: 3.562 min Scan# 298
 Delta R.T. 0.013 min
 Lab File: VL041063.D
 Acq: 9 Feb 2024 18:25

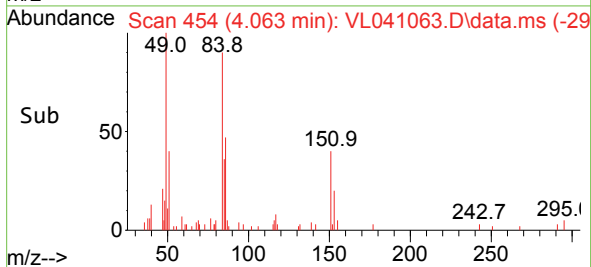
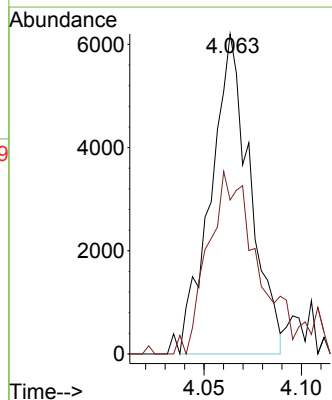
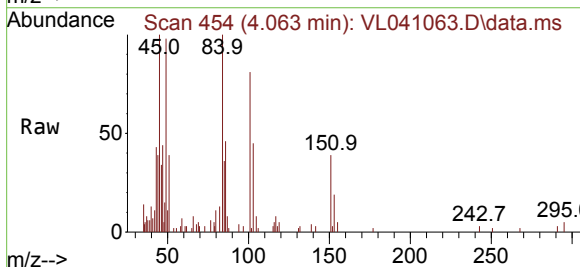
Instrument :
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 ClientSampleId :
 IA2RDUP

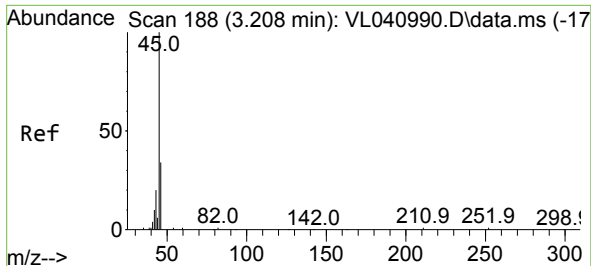
Tgt Ion:101 Resp: 41559
 Ion Ratio Lower Upper
 101 100
 103 56.5 51.4 77.2



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.060 ppbv
 RT: 4.063 min Scan# 454
 Delta R.T. 0.010 min
 Lab File: VL041063.D
 Acq: 9 Feb 2024 18:25

Tgt Ion:101 Resp: 8638
 Ion Ratio Lower Upper
 101 100
 151 77.9 56.6 85.0

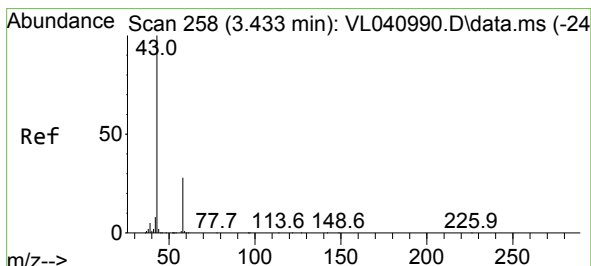
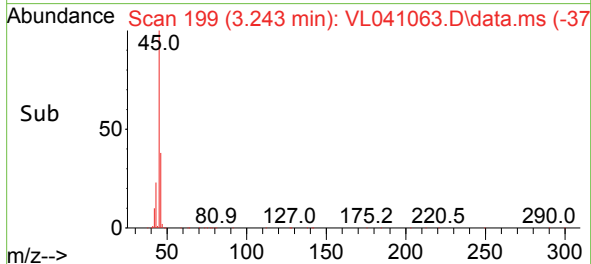
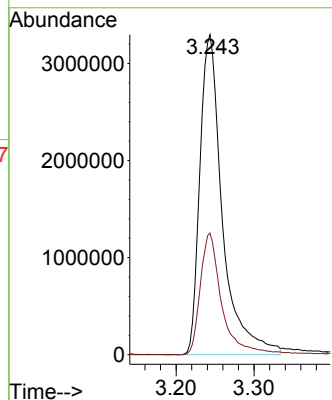
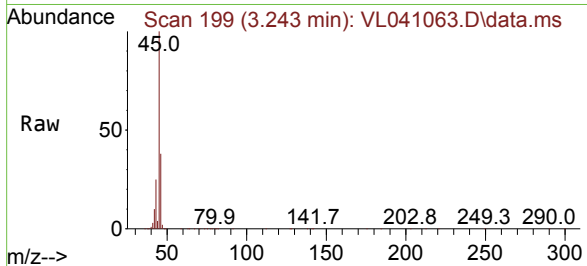




#13
Ethanol
Concen: 452.237 ppbv
RT: 3.243 min Scan# 199
Delta R.T. 0.019 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

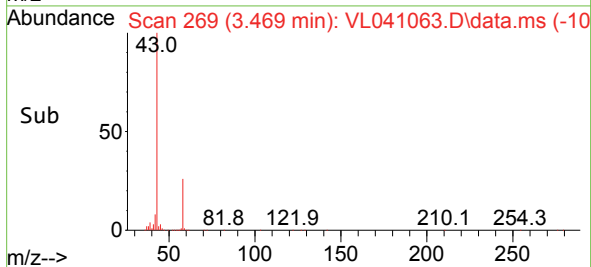
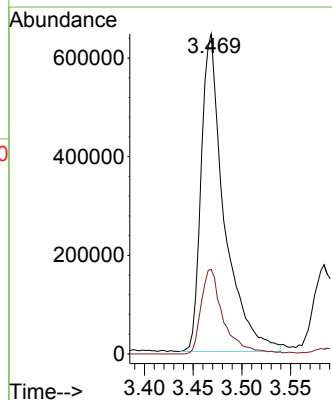
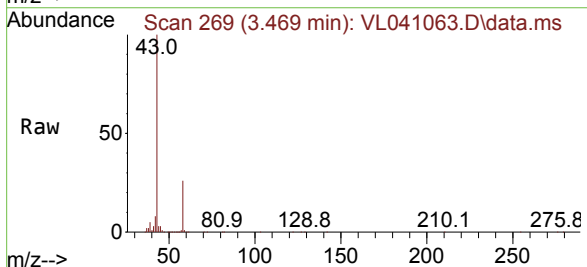
Instrument :
MSVOA_L
ClientSampleId :
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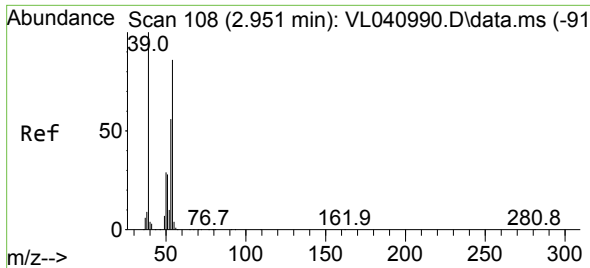
Tgt Ion: 45 Resp: 6618424
Ion Ratio Lower Upper
45 100
46 37.3 16.2 64.8



#15
Acetone
Concen: 7.443 ppbv
RT: 3.469 min Scan# 269
Delta R.T. 0.016 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

Tgt Ion: 43 Resp: 1059401
Ion Ratio Lower Upper
43 100
58 26.1 22.2 33.2

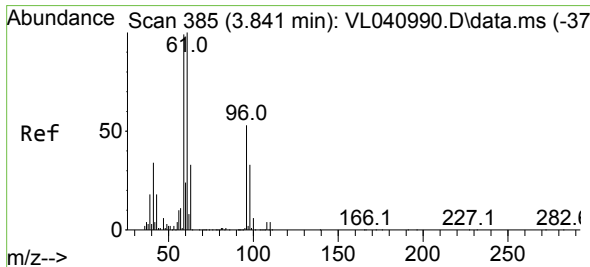
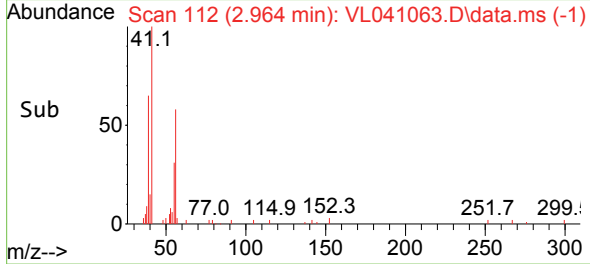
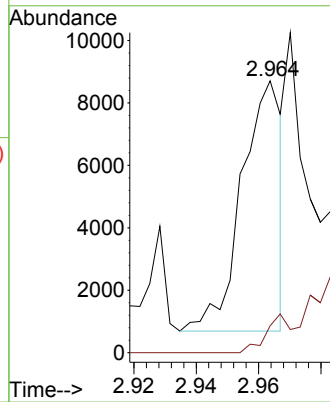
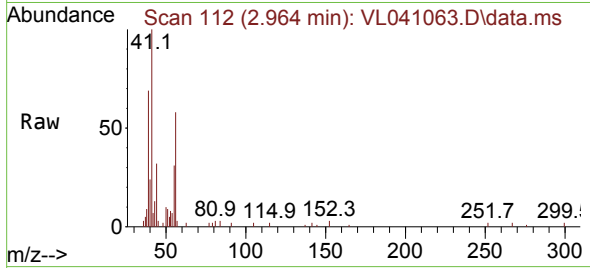




#16
1,3-Butadiene
Concen: 0.104 ppbv
RT: 2.964 min Scan# 112
Delta R.T. -0.006 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

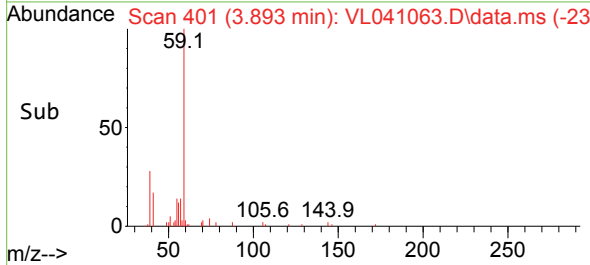
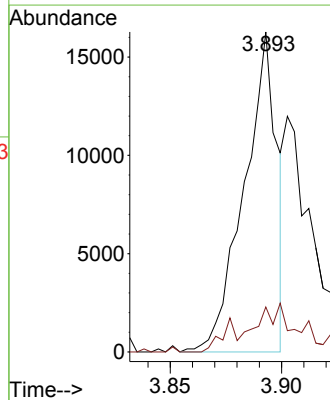
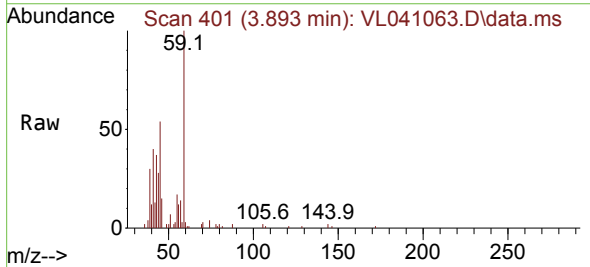
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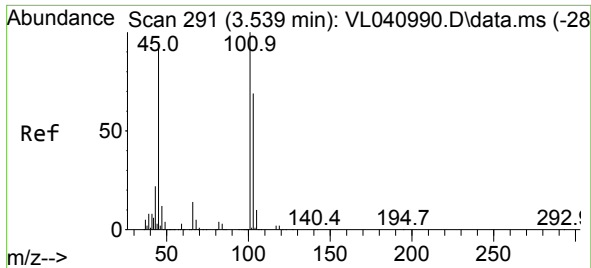
Tgt Ion: 39 Resp: 7101
Ion Ratio Lower Upper
39 100
54 0.0 62.7 94.1#



#17
tert-Butyl alcohol
Concen: 0.142 ppbv
RT: 3.893 min Scan# 401
Delta R.T. 0.029 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

Tgt Ion: 59 Resp: 16547
Ion Ratio Lower Upper
59 100
57 0.0 8.7 13.1#





#19

Isopropyl Alcohol

Concen: 14.795 ppbv

RT: 3.584 min Scan# 305

Delta R.T. 0.023 min

Lab File: VL041063.D

Acq: 9 Feb 2024 18:25

Instrument :

MSVOA_L

ClientSampleId :

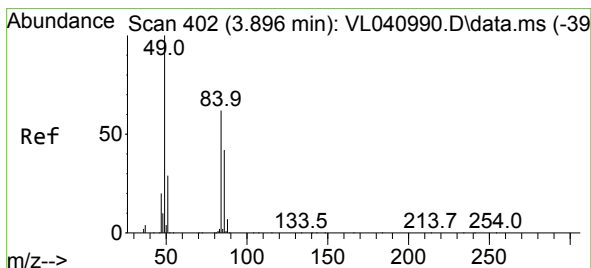
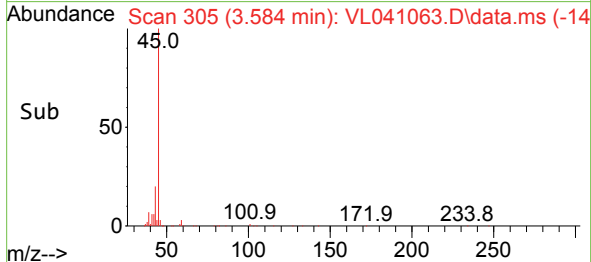
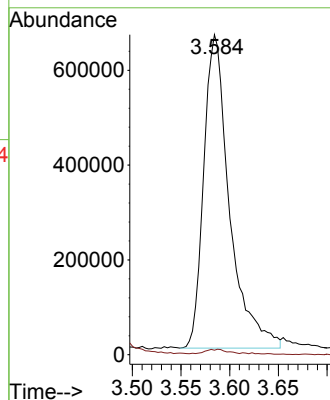
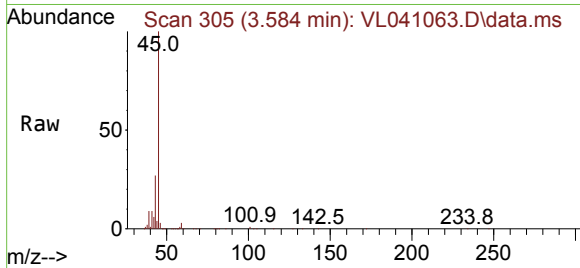
IA2RDUP

Tgt Ion: 45 Resp: 1219010

Ion Ratio Lower Upper

45 100

58 2.5 2.2 3.4



#20

Methylene Chloride

Concen: 36.184 ppbv

RT: 3.932 min Scan# 413

Delta R.T. 0.013 min

Lab File: VL041063.D

Acq: 9 Feb 2024 18:25

Tgt Ion: 84 Resp: 1981871

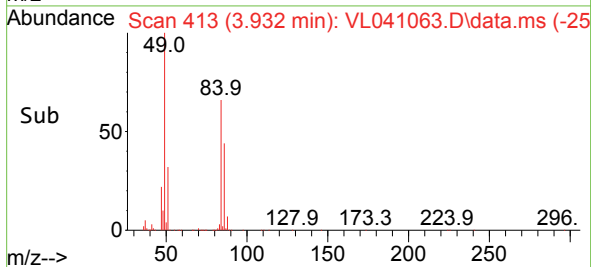
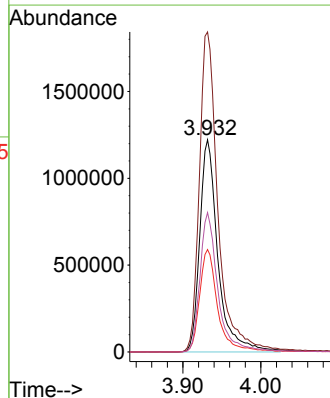
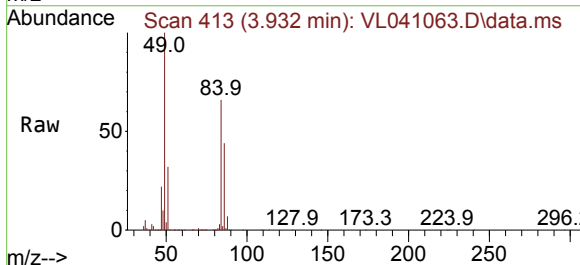
Ion Ratio Lower Upper

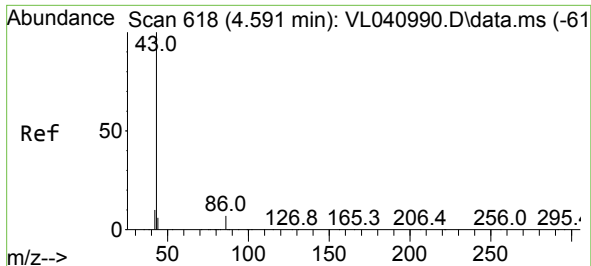
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49 150.6 128.1 192.1

51 48.2 36.5 54.7

86 65.6 54.1 81.1

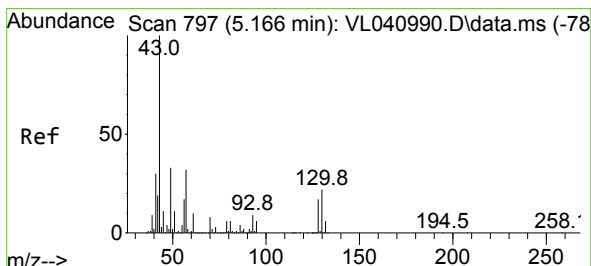
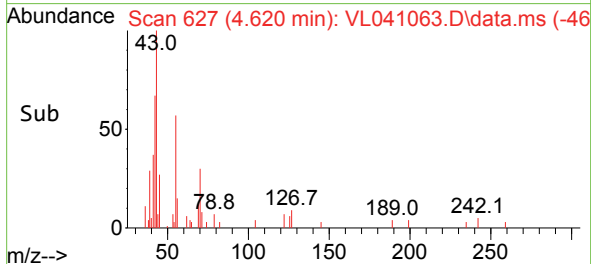
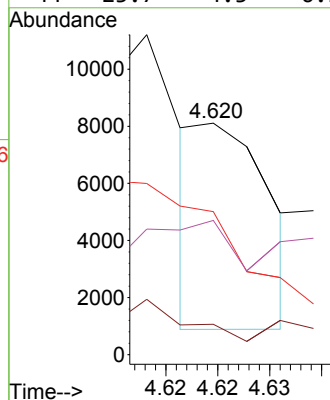
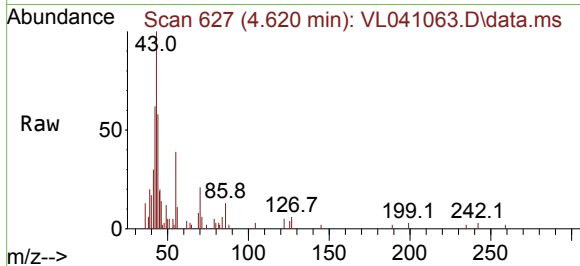




#23
 Vinyl Acetate
 Concen: 0.023 ppbv
 RT: 4.620 min Scan# 61
 Delta R.T. 0.006 min
 Lab File: VL041063.D
 Acq: 9 Feb 2024 18:25

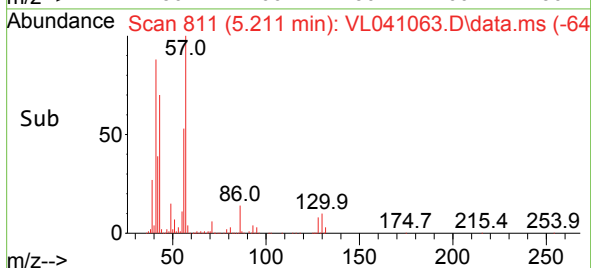
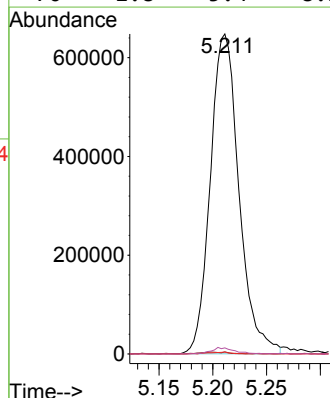
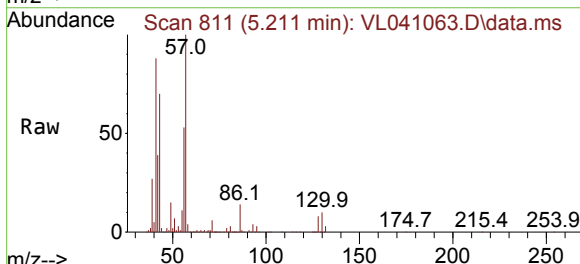
Instrument :
 MSVOA_L
 ClientSampleId :
 IA2RDUP

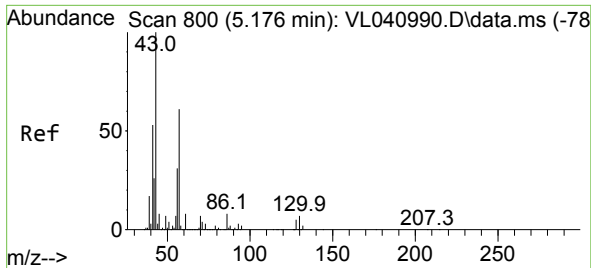
Tgt Ion: 43	Resp: 3415
Ion Ratio	Lower Upper
43 100	
86 0.6	5.4 8.0#
42 73.4	8.6 13.0#
44 23.7	4.3 6.5#



#25
 Ethyl Acetate
 Concen: 4.654 ppbv
 RT: 5.211 min Scan# 811
 Delta R.T. 0.019 min
 Lab File: VL041063.D
 Acq: 9 Feb 2024 18:25

Tgt Ion: 43	Resp: 1201216
Ion Ratio	Lower Upper
43 100	
45 0.9	8.2 12.4#
61 0.5	7.9 11.9#
70 1.8	5.4 8.2#

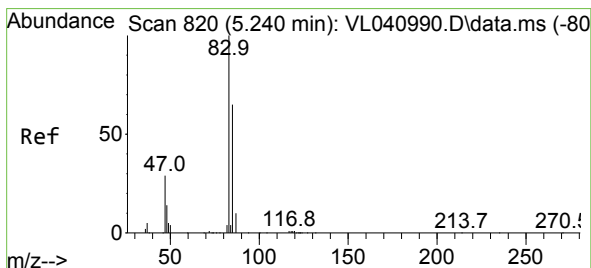
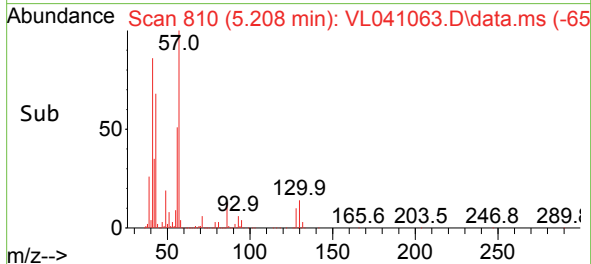
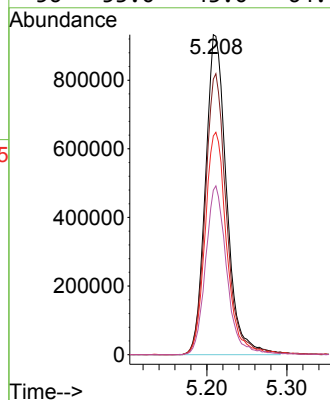
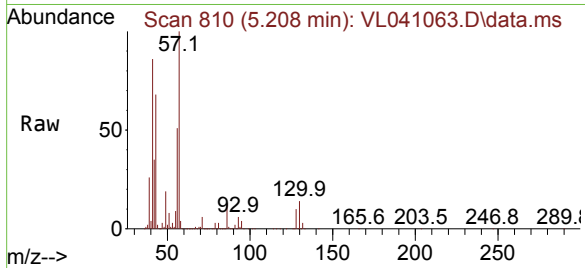




#26
Hexane
Concen: 15.619 ppbv
RT: 5.208 min Scan# 810
Delta R.T. 0.010 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

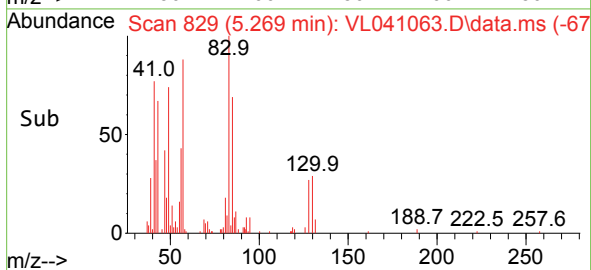
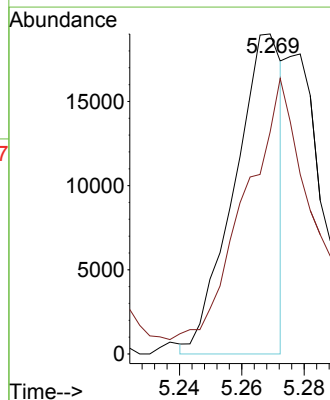
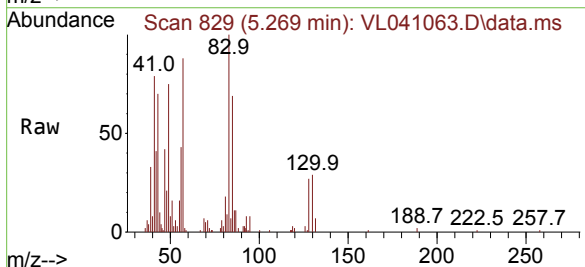
Instrument :
MSVOA_L
ClientSampleId :
IA2RDUP

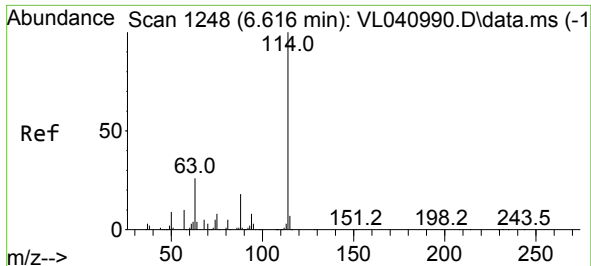
Tgt Ion: 57 Resp: 1718286
Ion Ratio Lower Upper
57 100
41 88.2 74.4 111.6
43 71.3 190.6 285.8#
56 53.0 43.0 64.4



#29
Chloroform
Concen: 0.103 ppbv
RT: 5.269 min Scan# 829
Delta R.T. 0.010 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

Tgt Ion: 83 Resp: 20058
Ion Ratio Lower Upper
83 100
85 65.1 51.6 77.4

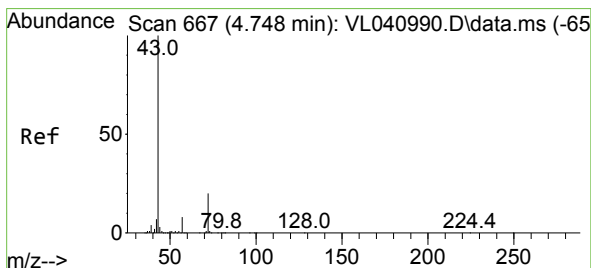
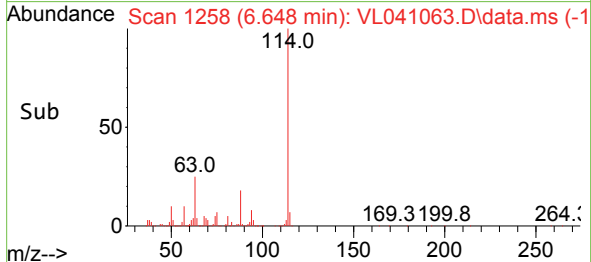
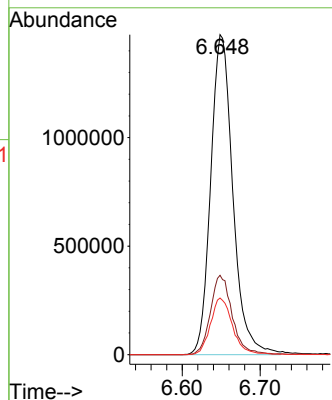
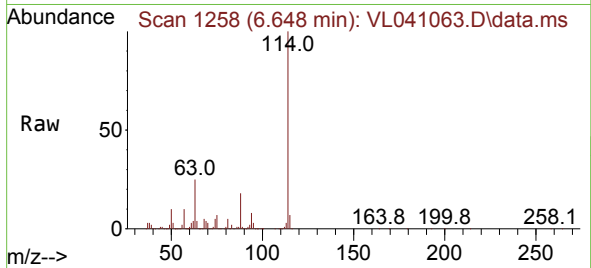




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 6.648 min Scan# 114
 Delta R.T. 0.007 min
 Lab File: VL041063.D
 Acq: 9 Feb 2024 18:25

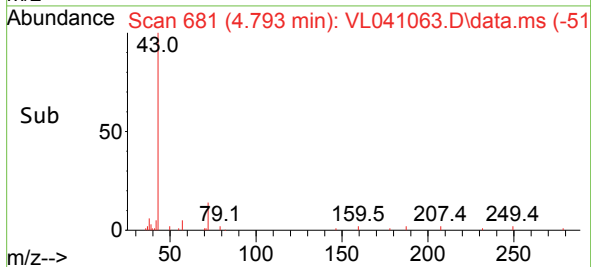
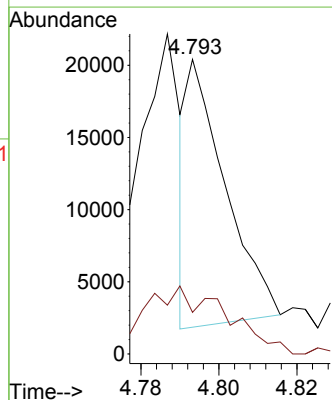
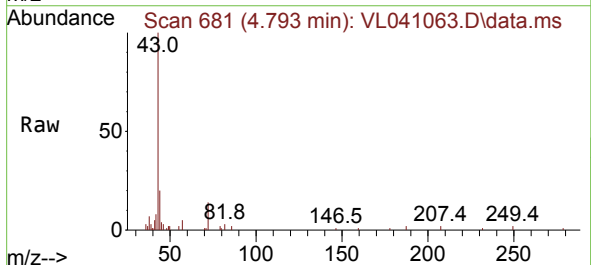
Instrument :
 MSVOA_L
 ClientSampleId :
 IA2RDUP

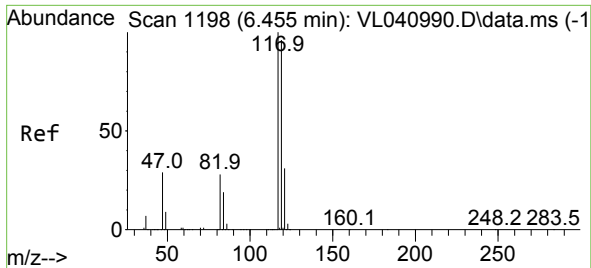
Tgt Ion:114 Resp: 2908808
 Ion Ratio Lower Upper
 114 100
 63 24.7 20.8 31.2
 88 17.8 14.3 21.5



#34
 2-Butanone
 Concen: 0.091 ppbv
 RT: 4.793 min Scan# 681
 Delta R.T. 0.023 min
 Lab File: VL041063.D
 Acq: 9 Feb 2024 18:25

Tgt Ion: 43 Resp: 12565
 Ion Ratio Lower Upper
 43 100
 72 61.1 17.5 26.3#

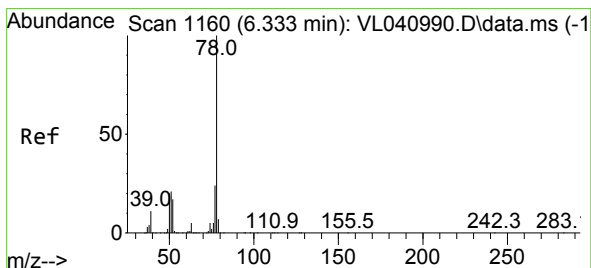
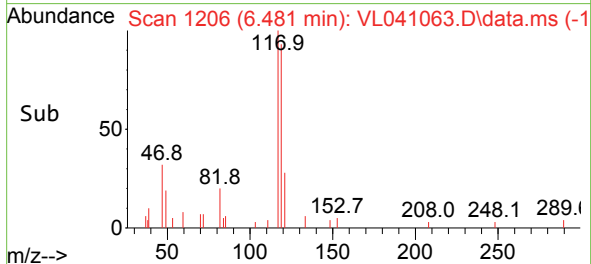
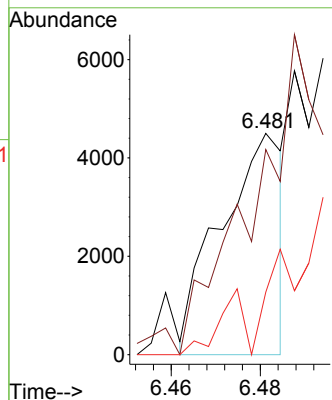
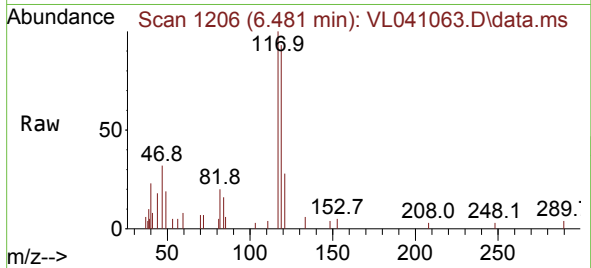




#35
Carbon Tetrachloride
Concen: 0.022 ppbv
RT: 6.481 min Scan# 1198
Delta R.T. 0.000 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

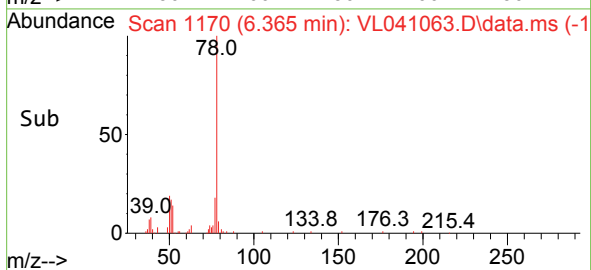
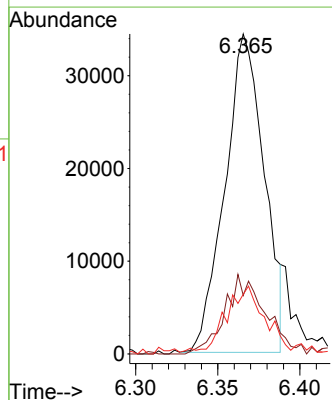
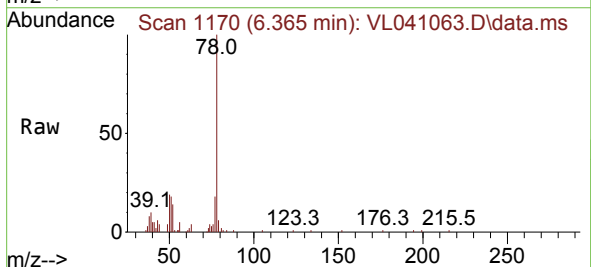
Instrument :
MSVOA_L
ClientSampleId :
IA2RDUP

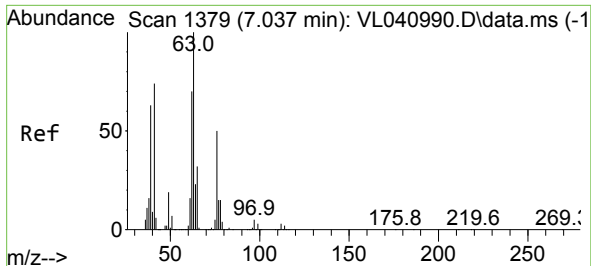
Tgt Ion:117 Resp: 4336
Ion Ratio Lower Upper
117 100
119 98.4 76.9 115.3
121 30.0 24.7 37.1



#36
Benzene
Concen: 0.238 ppbv
RT: 6.365 min Scan# 1170
Delta R.T. 0.007 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

Tgt Ion: 78 Resp: 57157
Ion Ratio Lower Upper
78 100
77 18.4 19.0 28.4#
50 17.1 15.8 23.6





#39

1,2-Dichloropropane

Concen: 7.497 ppbv

RT: 6.648 min Scan# 11

Delta R.T. -0.408 min

Lab File: VL041063.D

Acq: 9 Feb 2024 18:25

Instrument :

MSVOA_L

ClientSampleId :

IA2RDUP

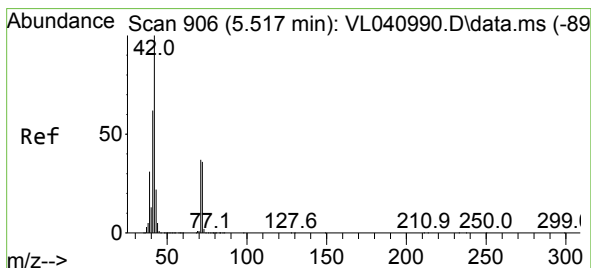
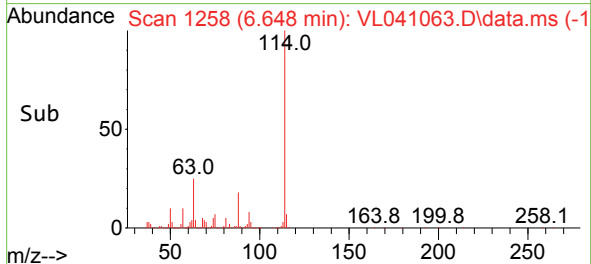
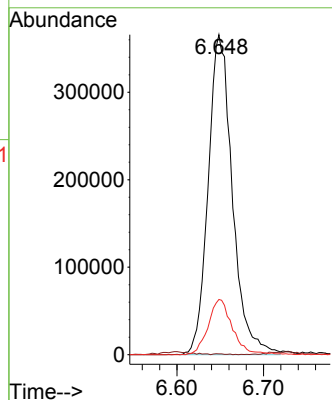
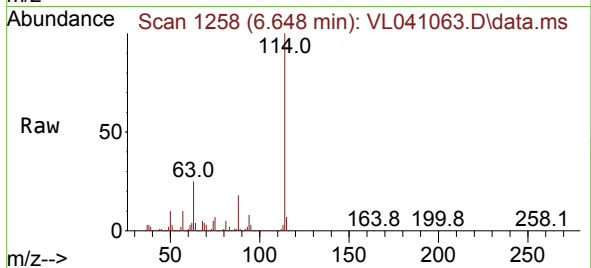
Tgt Ion: 63 Resp: 709496

Ion Ratio Lower Upper

63 100

41 0.0 59.6 89.4#

62 17.3 55.6 83.4#



#41

Tetrahydrofuran

Concen: 6.859 ppbv

RT: 5.211 min Scan# 811

Delta R.T. -0.328 min

Lab File: VL041063.D

Acq: 9 Feb 2024 18:25

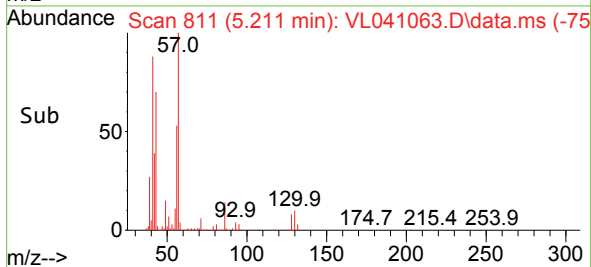
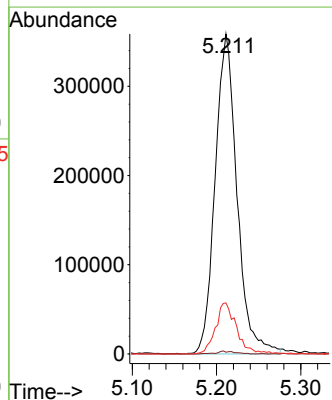
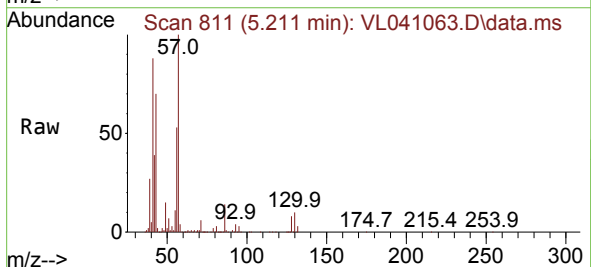
Tgt Ion: 42 Resp: 645397

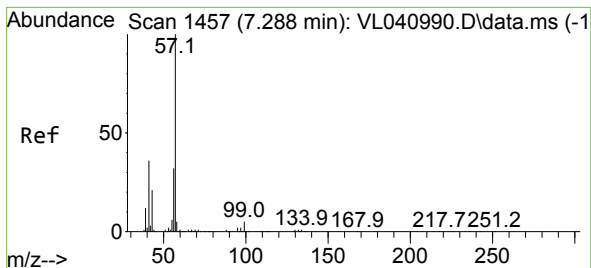
Ion Ratio Lower Upper

42 100

72 0.8 30.0 45.0#

71 15.6 29.5 44.3#





#44

2,2,4-Trimethylpentane

Concen: 0.061 ppbv

RT: 7.320 min Scan# 14

Delta R.T. 0.007 min

Lab File: VL041063.D

Acq: 9 Feb 2024 18:25

Instrument :

MSVOA_L

ClientSampleId :

IA2RDUP

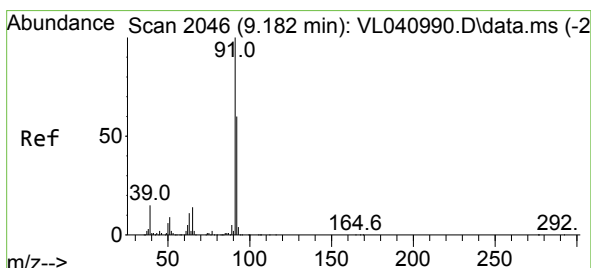
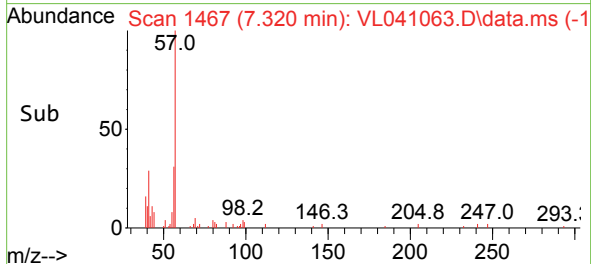
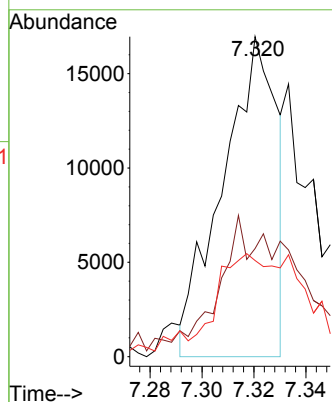
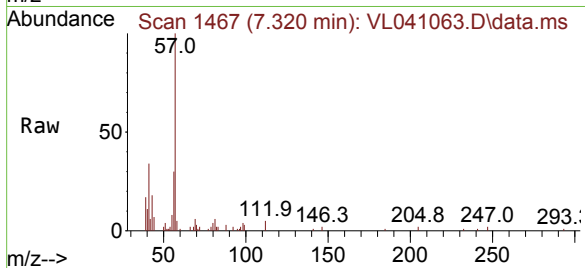
Tgt Ion: 57 Resp: 24468

Ion Ratio Lower Upper

57 100

41 81.8 28.6 43.0#

56 67.3 25.2 37.8#



#53

Toluene

Concen: 0.147 ppbv

RT: 9.221 min Scan# 2058

Delta R.T. 0.013 min

Lab File: VL041063.D

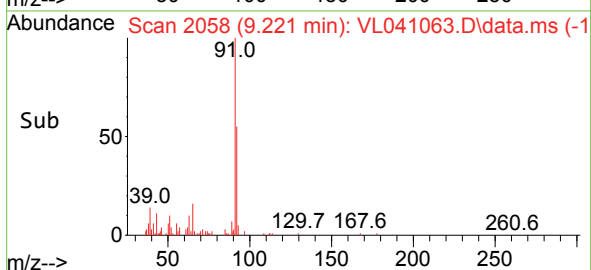
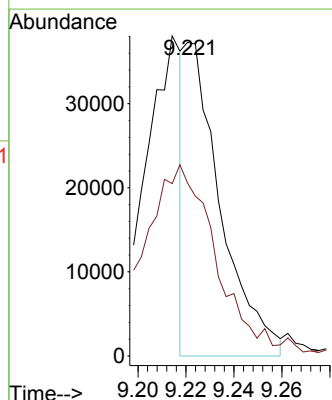
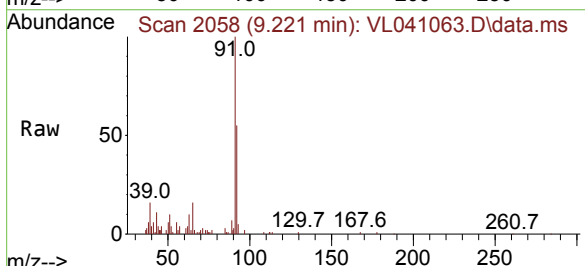
Acq: 9 Feb 2024 18:25

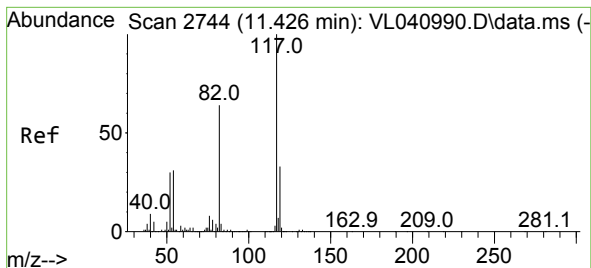
Tgt Ion: 91 Resp: 38771

Ion Ratio Lower Upper

91 100

92 126.6 48.6 72.8#

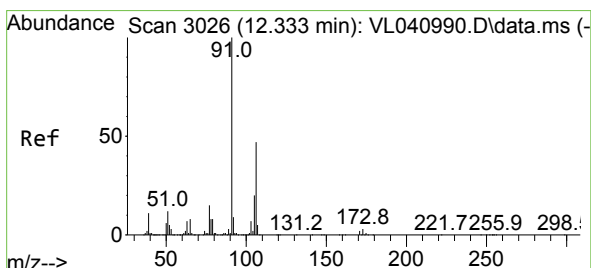
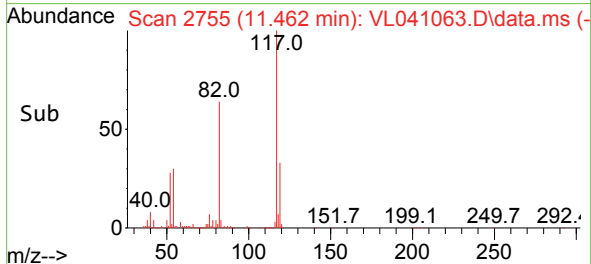
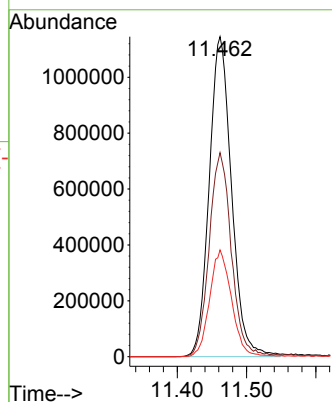
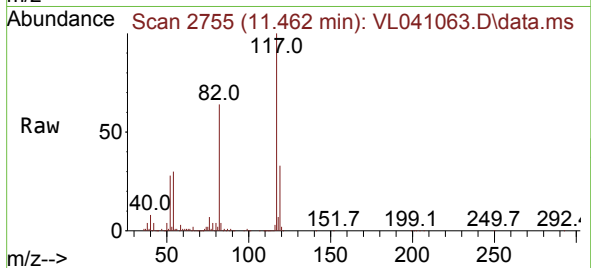




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.462 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

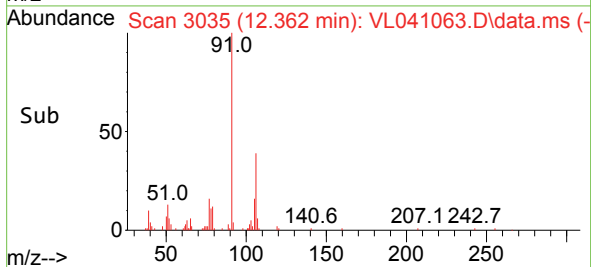
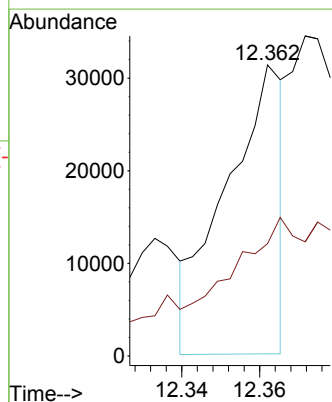
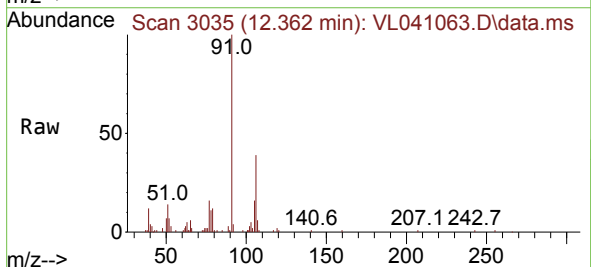
Instrument :
MSVOA_L
ClientSampleId :
IA2RDUP

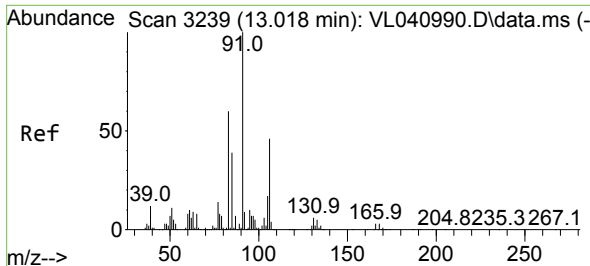
Tgt Ion:117 Resp: 2561382
Ion Ratio Lower Upper
117 100
82 64.3 51.7 77.5
119 32.9 23.8 35.6



#59
m/p-Xylene
Concen: 0.106 ppbv
RT: 12.362 min Scan# 3035
Delta R.T. 0.007 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

Tgt Ion: 91 Resp: 31747
Ion Ratio Lower Upper
91 100
106 135.0 34.9 52.3#

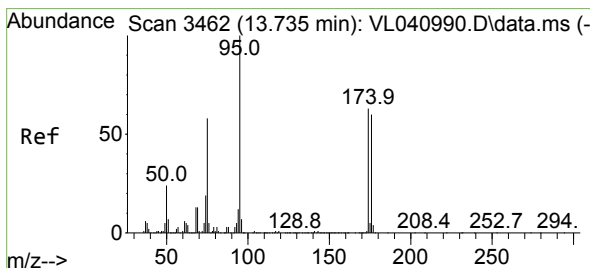
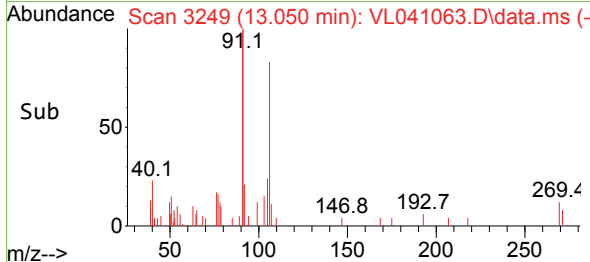
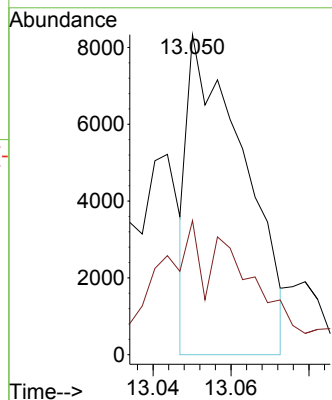
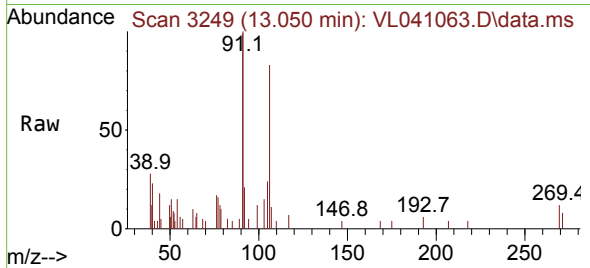




#60
o-Xylene
Concen: 0.029 ppbv
RT: 13.050 min Scan# 31
Delta R.T. 0.010 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

Instrument :
MSVOA_L
ClientSampleId :
IA2RDUP

Tgt Ion: 91 Resp: 8254
Ion Ratio Lower Upper
91 100
106 78.1 22.6 67.7#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.060 ppbv
RT: 13.774 min Scan# 3474
Delta R.T. 0.013 min
Lab File: VL041063.D
Acq: 9 Feb 2024 18:25

Tgt Ion: 95 Resp: 1946334
Ion Ratio Lower Upper
95 100
174 62.7 49.1 73.7
175 4.8 3.7 5.5

