

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL082224\
 Data File : VL041581.D
 Acq On : 22 Aug 2024 10:52
 Operator : SY/MD
 Sample : VIBLK
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Aug 23 01:29:31 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL072524AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Aug 23 01:15:26 2024
 Response via : Initial Calibration

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

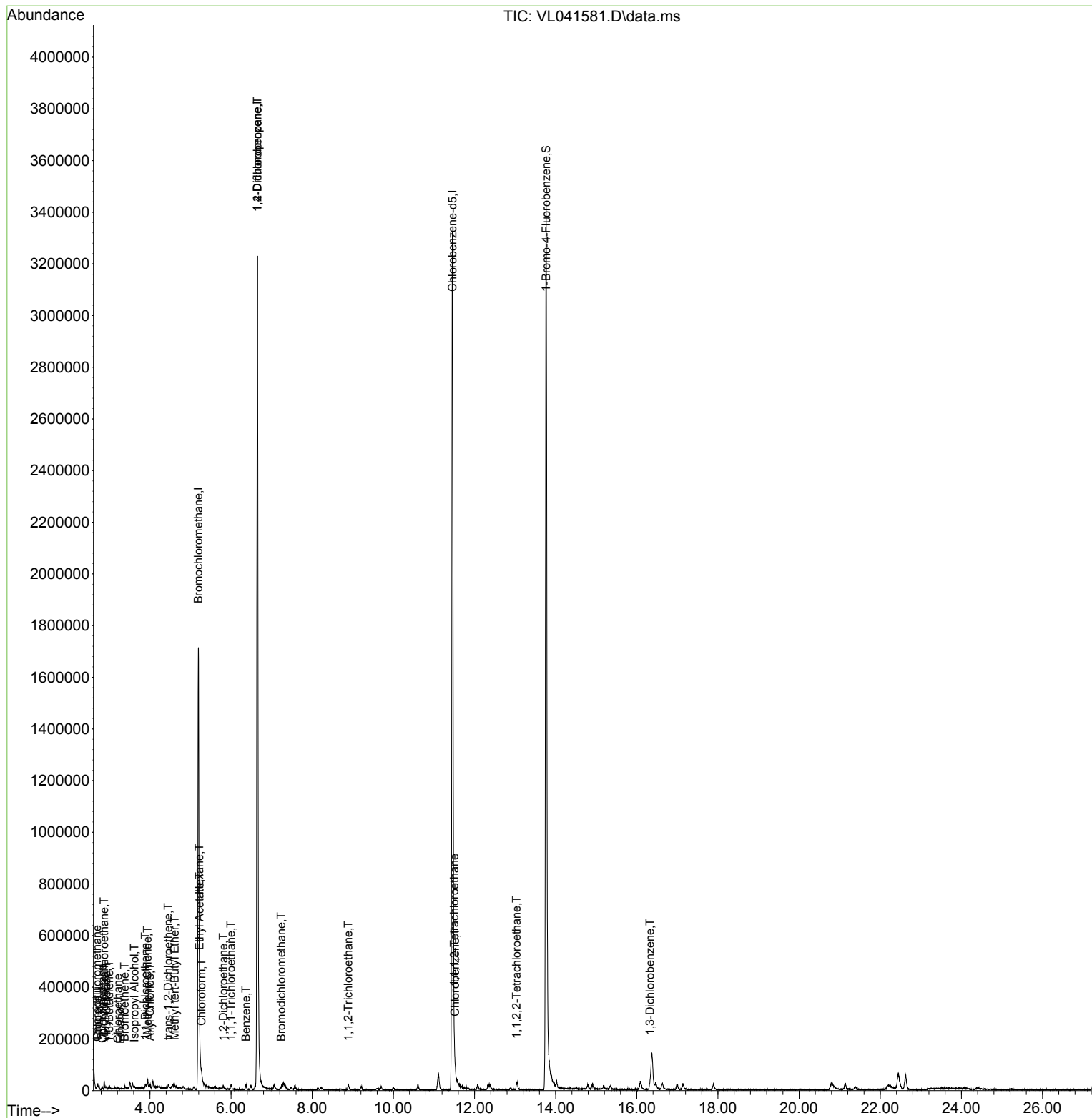
Internal Standards						
1) Bromochloromethane	5.195	49	939698	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.648	114	2485961	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.455	117	2242537	10.000	ppbv	# 0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.764	95	1706036	9.886	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.900%
Target Compounds						
					Qvalue	
3) Chlorodifluoromethane	2.694	51	10454	0.093	ppbv	93
4) Chloromethane	2.829	50	5312	0.089	ppbv	91
5) Vinyl Chloride	2.931	62	4354	0.074	ppbv #	88
7) Chloroethane	3.211	64	2090	0.103	ppbv	99
8) Dichlorotetrafluoroethane	2.874	85	11604	0.081	ppbv	97
9) Propene	2.716	41	3294	0.064	ppbv #	1
13) Ethanol	3.269	45	376	0.082	ppbv #	41
14) Bromoethene	3.375	108	3022	0.075	ppbv #	85
16) 1,3-Butadiene	2.996	39	4205	0.074	ppbv	90
18) 1,1-Dichloroethene	3.890	96	3043	0.069	ppbv #	83
19) Isopropyl Alcohol	3.616	45	7200	0.115	ppbv #	90
20) Methylene Chloride	3.941	84	4643	0.117	ppbv	86
21) Allyl Chloride	4.002	41	3140	0.045	ppbv #	19
22) trans-1,2-Dichloroethene	4.449	96	1933	0.044	ppbv #	90
25) Ethyl Acetate	5.221	43	10269	0.048	ppbv #	78
26) Hexane	5.214	57	2825	0.032	ppbv #	1
28) Methyl tert-Butyl Ether	4.610	73	4477	0.081	ppbv	93
29) Chloroform	5.272	83	7779	0.054	ppbv	86
32) 1,1,1-Trichloroethane	5.996	97	9310	0.067	ppbv	93
36) Benzene	6.369	78	5521	0.030	ppbv #	65
37) 1,2-Dichloroethane	5.806	62	4675	0.046	ppbv #	82
39) 1,2-Dichloropropane	6.648	63	615024	8.844	ppbv #	25
42) Bromodichloromethane	7.240	83	5836	0.040	ppbv #	89
47) 1,1,2-Trichloroethane	8.889	97	3824	0.050	ppbv #	70
56) 1,1,1,2-Tetrachloroethane	11.500	131	3319	0.038	ppbv #	1
57) Chlorobenzene	11.520	112	8261	0.052	ppbv #	93
63) 1,1,2,2-Tetrachloroethane	13.034	83	4415	0.033	ppbv #	25
75) 1,3-Dichlorobenzene	16.326	146	6601	0.042	ppbv #	5

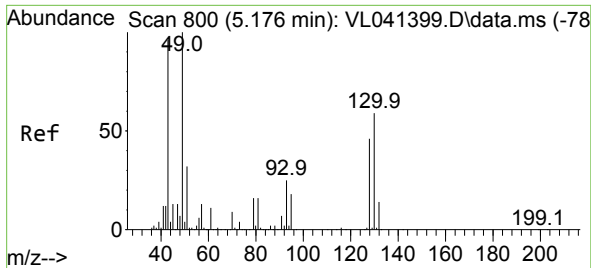
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Aug 23 01:29:31 2024
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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
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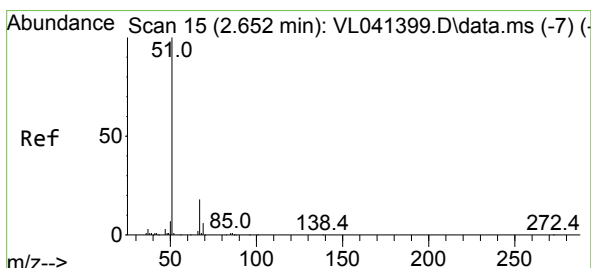
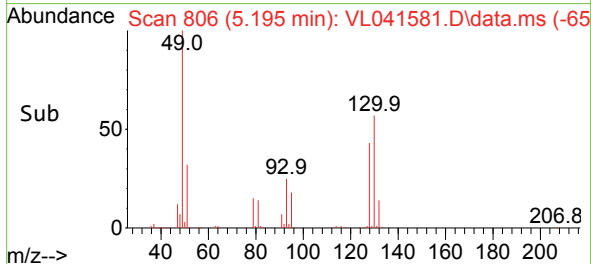
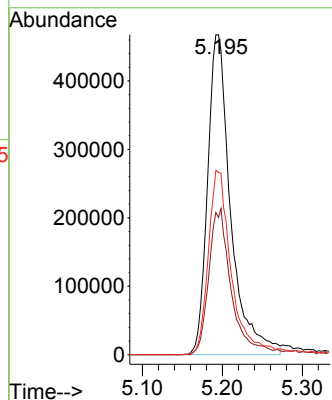
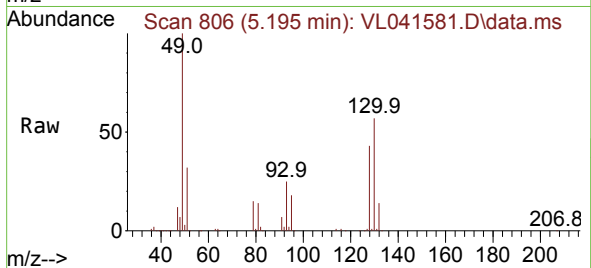




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.195 min Scan# 80
Delta R.T. 0.003 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

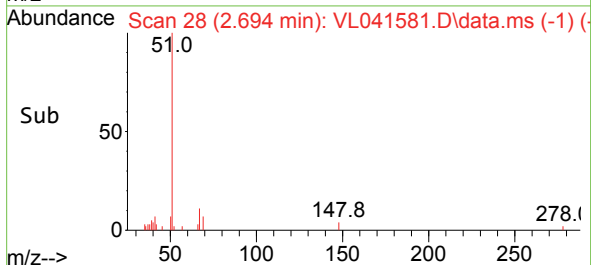
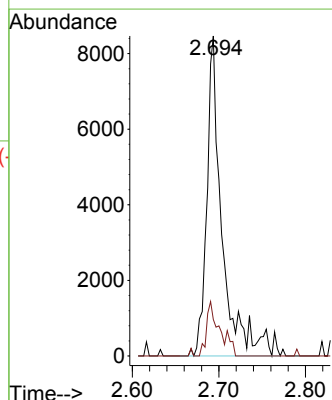
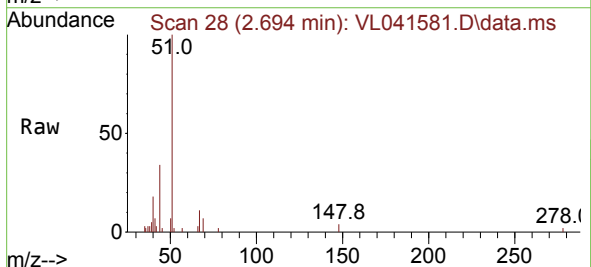
Instrument :
MSVOA_L
ClientSampleId :

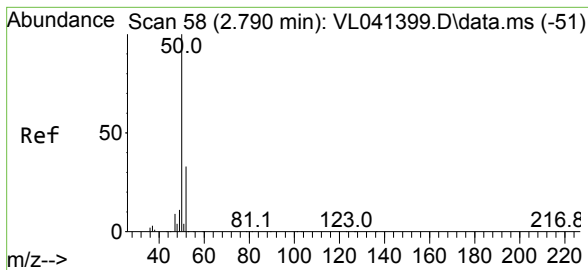
Tgt Ion: 49 Resp: 939698
Ion Ratio Lower Upper
49 100
128 46.5 23.8 71.4
130 59.5 30.8 92.4



#3
Chlorodifluoromethane
Concen: 0.093 ppbv
RT: 2.694 min Scan# 28
Delta R.T. 0.003 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

Tgt Ion: 51 Resp: 10454
Ion Ratio Lower Upper
51 100
67 15.1 14.5 21.7

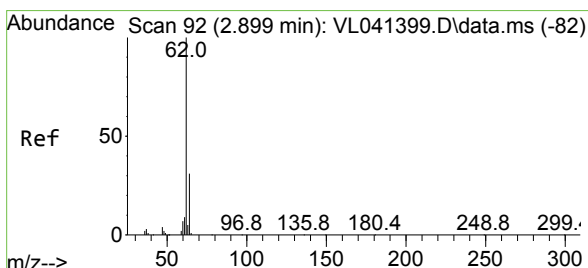
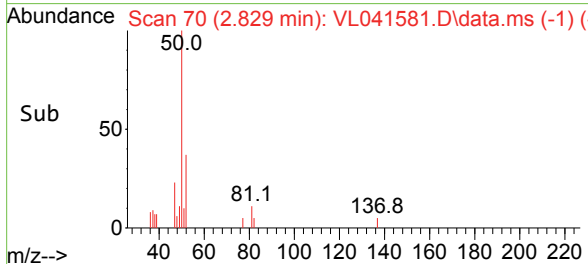
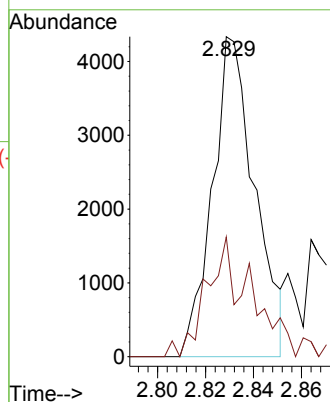
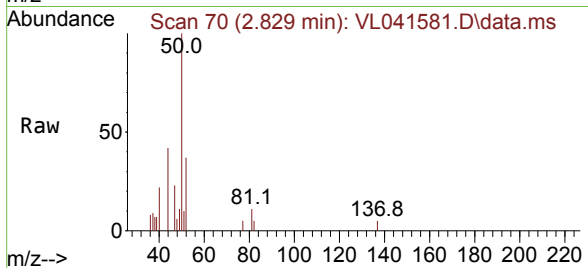




#4
Chloromethane
Concen: 0.089 ppbv
RT: 2.829 min Scan# 70
Delta R.T. 0.003 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

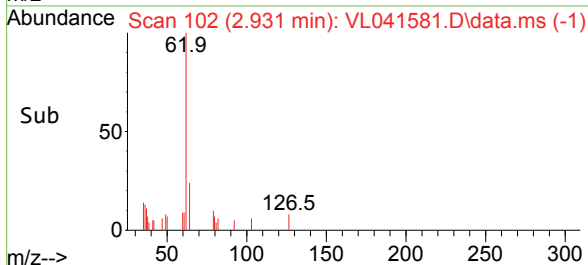
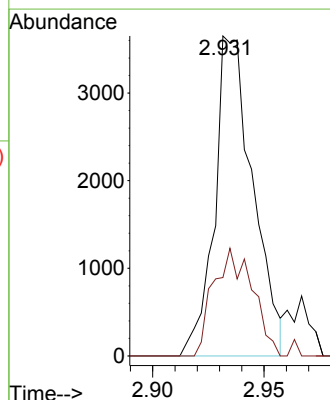
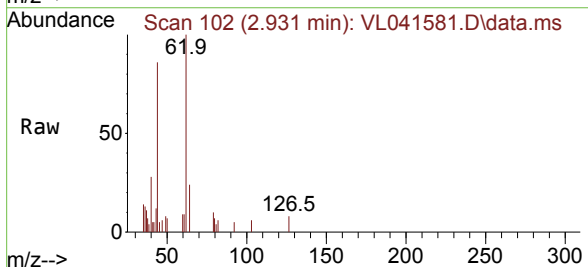
Instrument :
MSVOA_L
ClientSampleId :

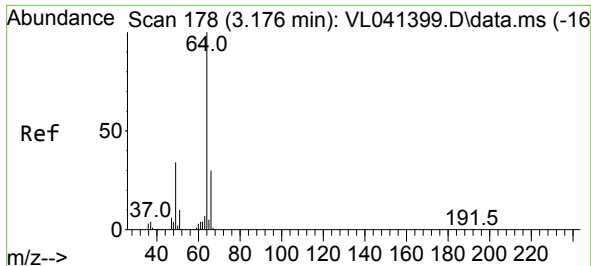
Tgt Ion: 50 Resp: 5312
Ion Ratio Lower Upper
50 100
52 37.4 26.1 39.1



#5
Vinyl Chloride
Concen: 0.074 ppbv
RT: 2.931 min Scan# 102
Delta R.T. 0.000 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

Tgt Ion: 62 Resp: 4354
Ion Ratio Lower Upper
62 100
64 24.5 25.0 37.4#

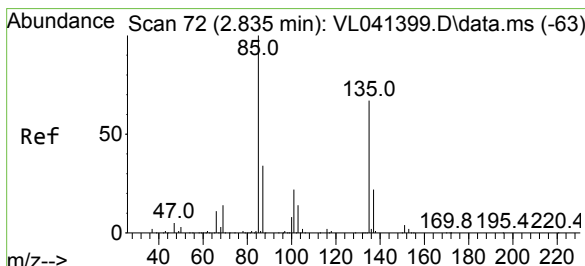
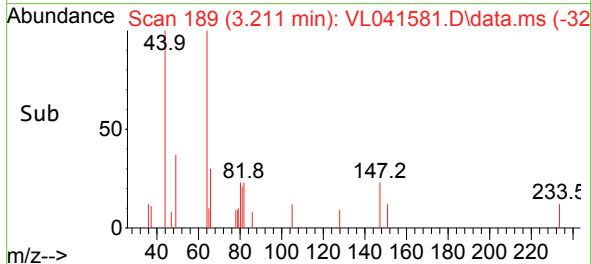
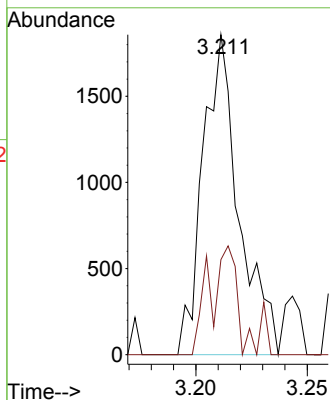
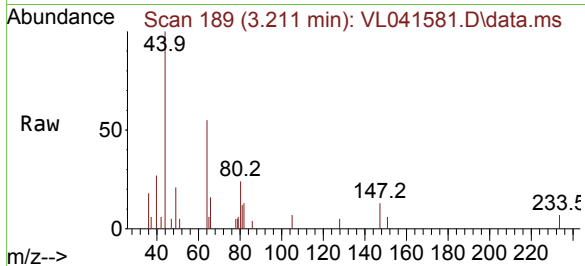




#7
Chloroethane
Concen: 0.103 ppbv
RT: 3.211 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

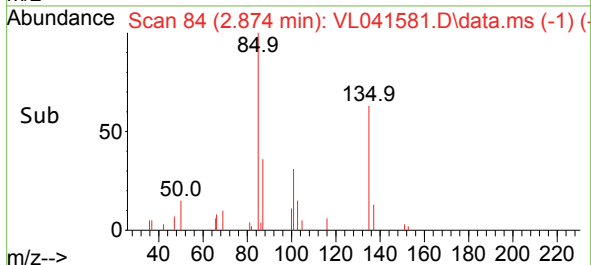
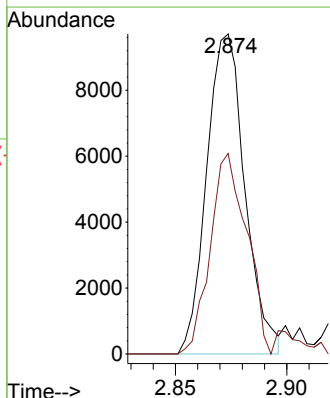
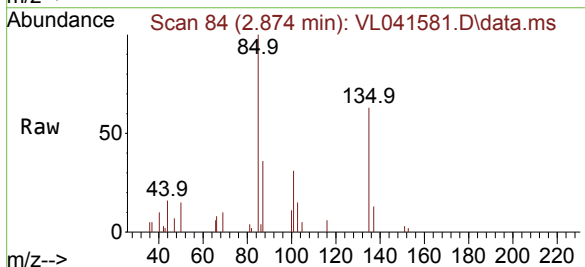
Instrument :
MSVOA_L
ClientSampleId :

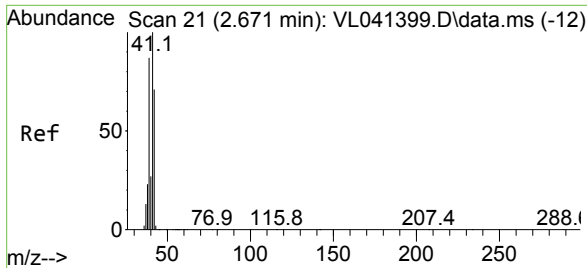
Tgt Ion: 64 Resp: 2090
Ion Ratio Lower Upper
64 100
66 29.7 24.2 36.2



#8
Dichlorotetrafluoroethane
Concen: 0.081 ppbv
RT: 2.874 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

Tgt Ion: 85 Resp: 11604
Ion Ratio Lower Upper
85 100
135 66.7 55.4 83.0

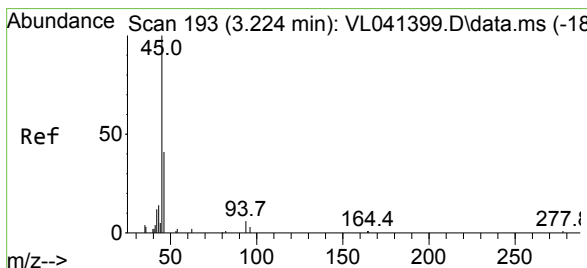
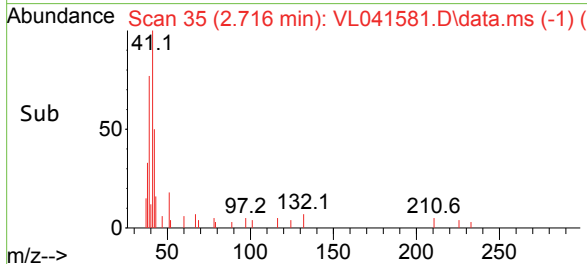
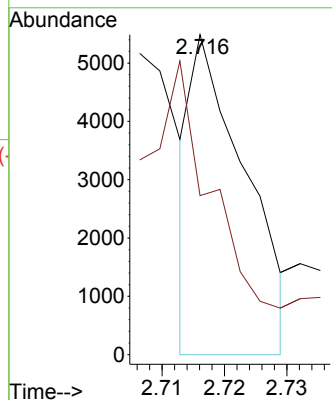
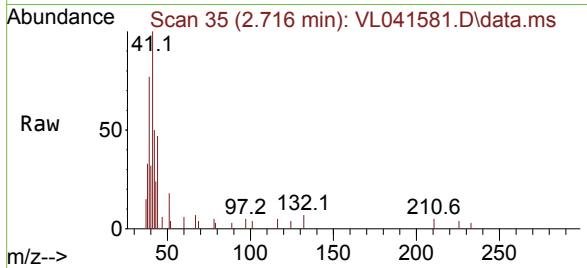




#9
 Propene
 Concen: 0.064 ppbv
 RT: 2.716 min Scan# 31
 Delta R.T. 0.007 min
 Lab File: VL041581.D
 Acq: 22 Aug 2024 10:52

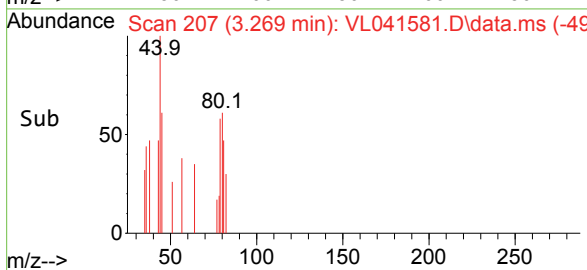
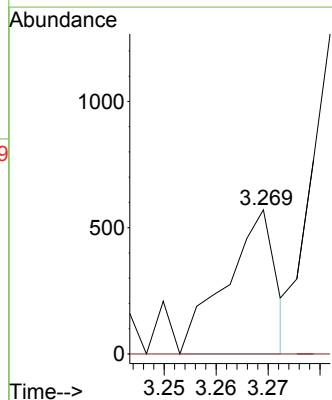
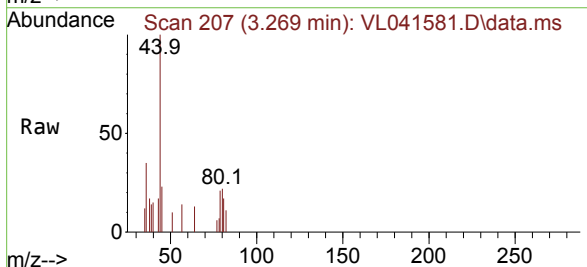
Instrument :
 MSVOA_L
 ClientSampleId :

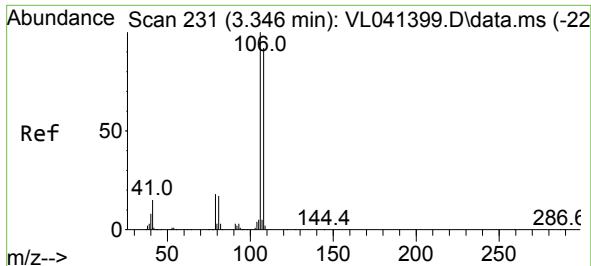
Tgt Ion: 41 Resp: 3294
 Ion Ratio Lower Upper
 41 100
 42 177.3 55.9 83.9#



#13
 Ethanol
 Concen: 0.082 ppbv
 RT: 3.269 min Scan# 207
 Delta R.T. 0.007 min
 Lab File: VL041581.D
 Acq: 22 Aug 2024 10:52

Tgt Ion: 45 Resp: 376
 Ion Ratio Lower Upper
 45 100
 46 0.0 13.4 53.4#





#14

Bromoethene

Concen: 0.075 ppbv

RT: 3.375 min Scan# 24

Delta R.T. 0.000 min

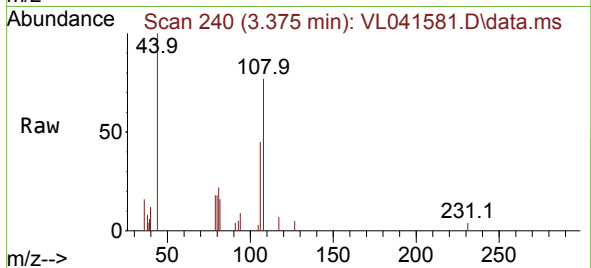
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Acq: 22 Aug 2024 10:52

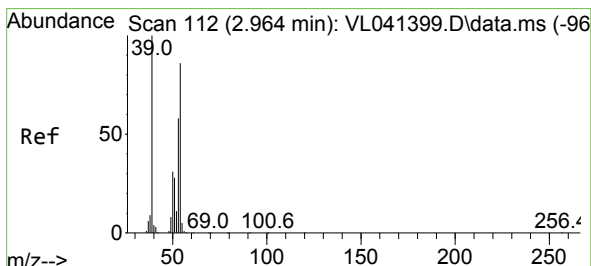
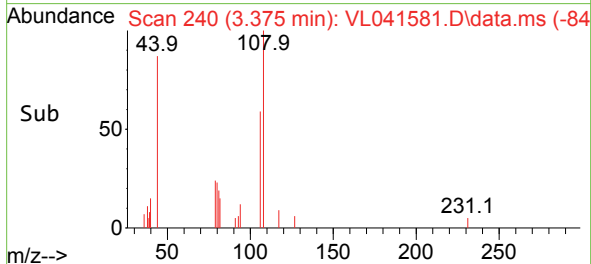
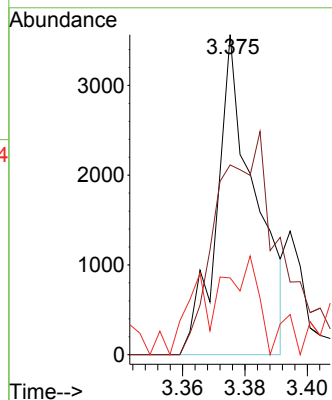
Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion:	108	Resp:	3022
Ion	Ratio	Lower	Upper
108	100		
106	115.4	86.9	130.3
79	47.1	16.2	24.4



#16

1,3-Butadiene

Concen: 0.074 ppbv

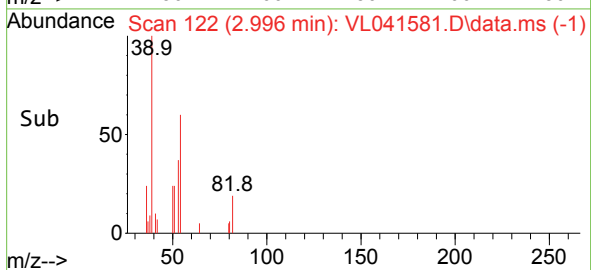
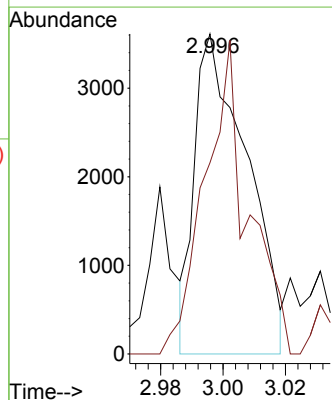
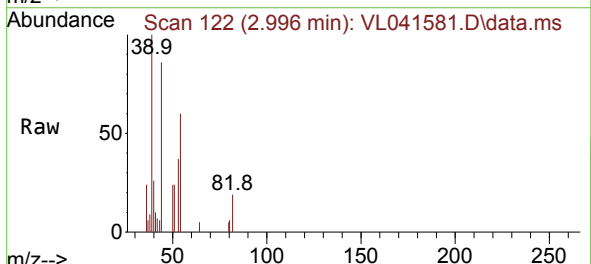
RT: 2.996 min Scan# 122

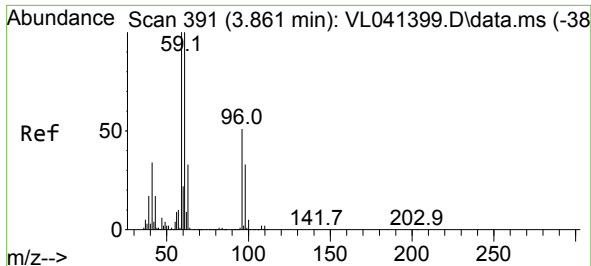
Delta R.T. 0.000 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

Tgt Ion:	39	Resp:	4205
Ion	Ratio	Lower	Upper
39	100		
54	87.0	62.5	93.7





#18

1,1-Dichloroethene

Concen: 0.069 ppbv

RT: 3.890 min Scan# 40

Delta R.T. 0.003 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

Instrument :

MSVOA_L

ClientSampleId :

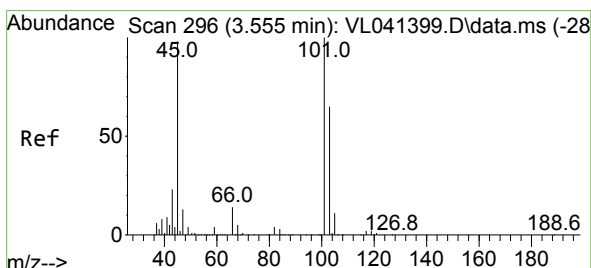
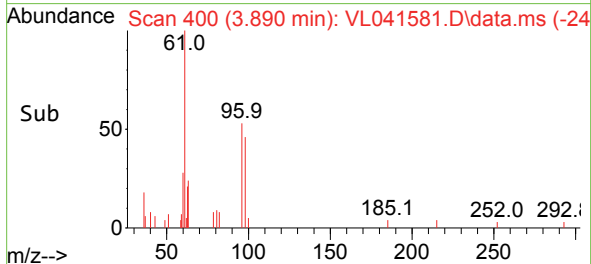
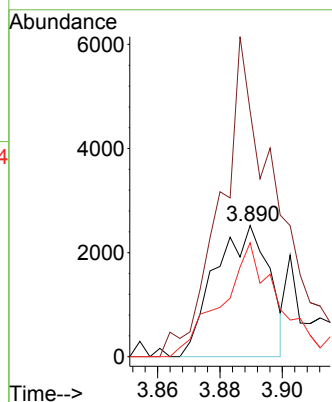
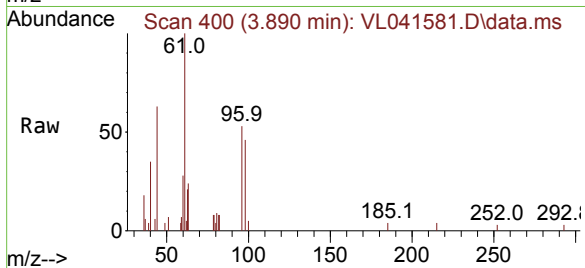
Tgt Ion: 96 Resp: 3043

Ion Ratio Lower Upper

96 100

61 173.4 157.5 236.3

98 79.8 51.2 76.8#



#19

Isopropyl Alcohol

Concen: 0.115 ppbv

RT: 3.616 min Scan# 315

Delta R.T. 0.032 min

Lab File: VL041581.D

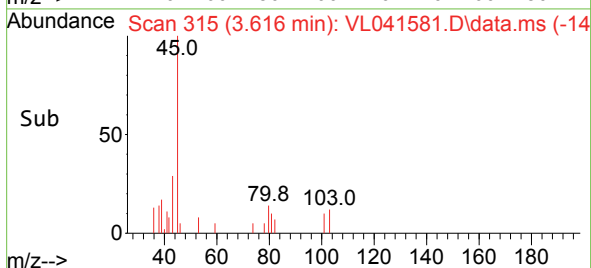
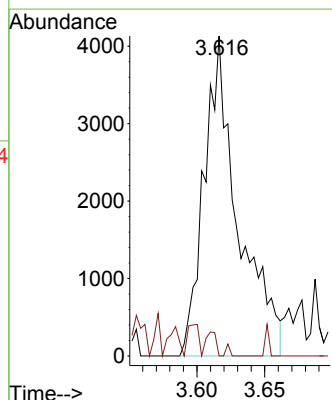
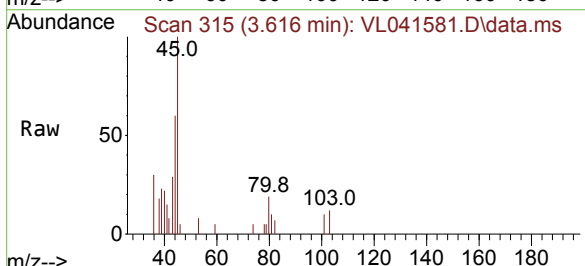
Acq: 22 Aug 2024 10:52

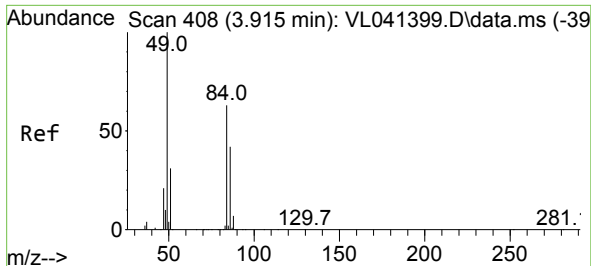
Tgt Ion: 45 Resp: 7200

Ion Ratio Lower Upper

45 100

58 5.9 1.9 2.9#





#20

Methylene Chloride

Concen: 0.117 ppbv

RT: 3.941 min Scan# 416

Delta R.T. 0.003 min

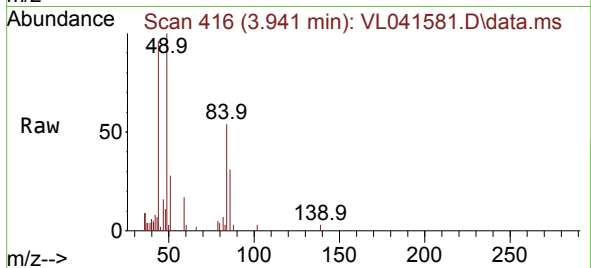
Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion: 84 Resp: 4643

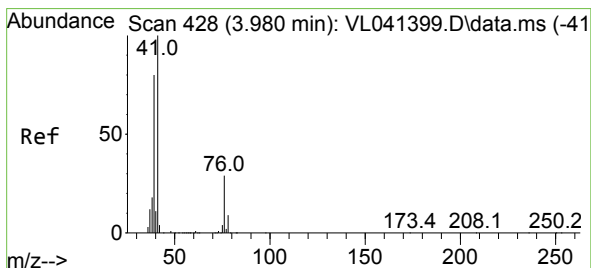
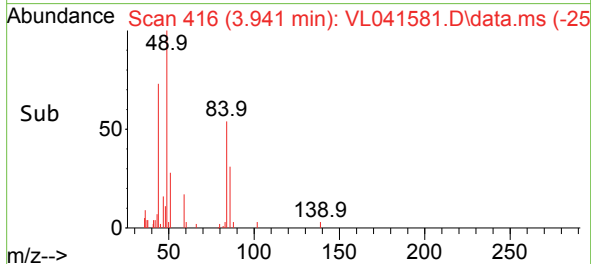
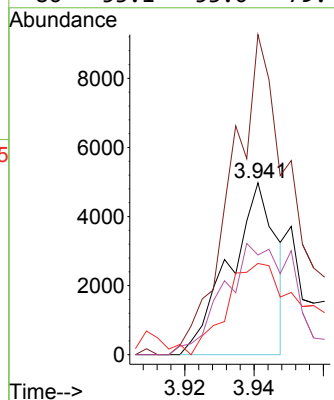
Ion Ratio Lower Upper

84 100

49 180.8 126.6 190.0

51 47.1 38.6 58.0

86 53.1 53.0 79.4



#21

Allyl Chloride

Concen: 0.045 ppbv

RT: 4.002 min Scan# 435

Delta R.T. 0.000 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

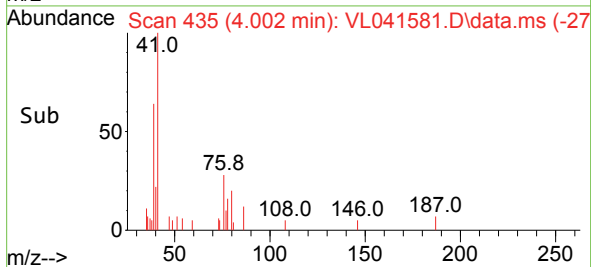
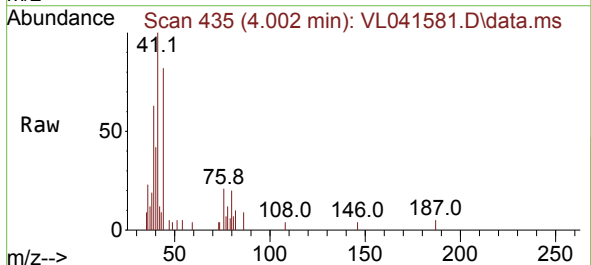
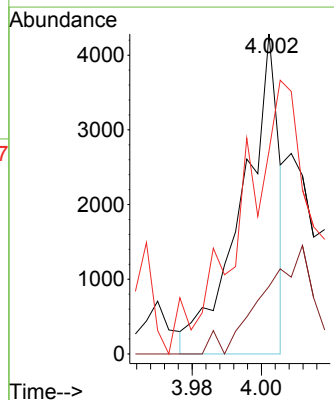
Tgt Ion: 41 Resp: 3140

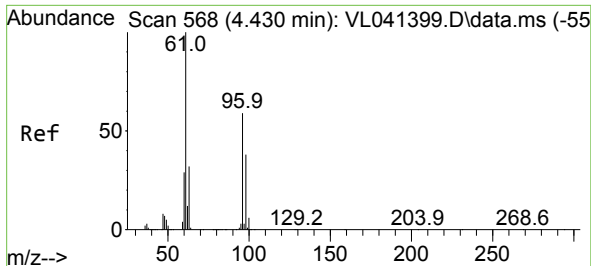
Ion Ratio Lower Upper

41 100

76 0.0 23.7 35.5#

39 0.0 64.3 96.5#

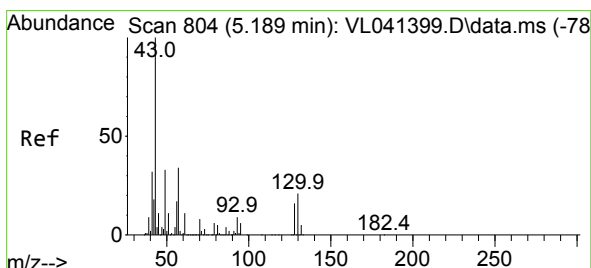
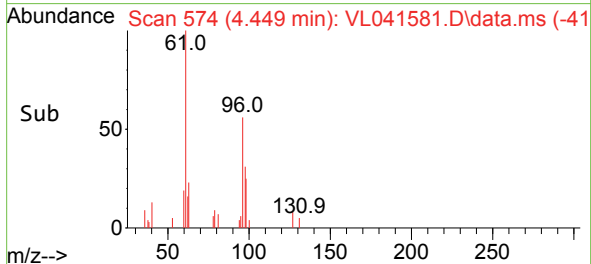
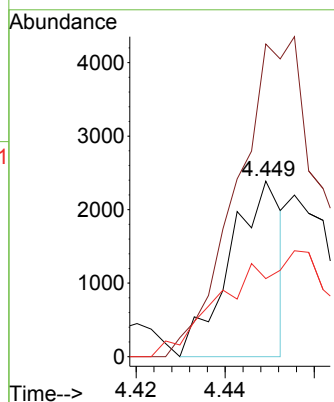
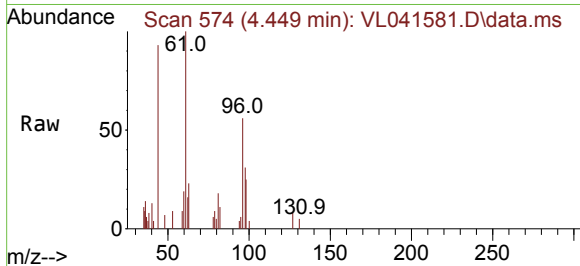




#22
trans-1,2-Dichloroethene
Concen: 0.044 ppbv
RT: 4.449 min Scan# 51
Delta R.T. 0.000 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

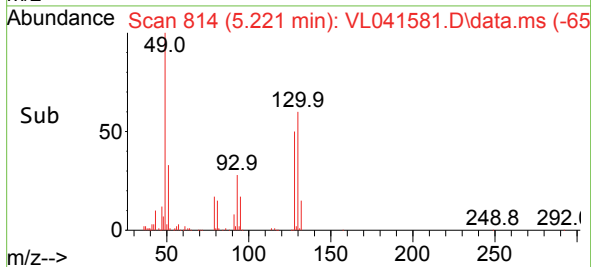
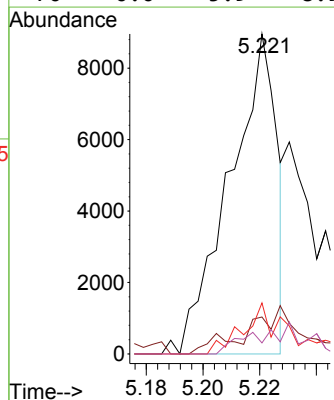
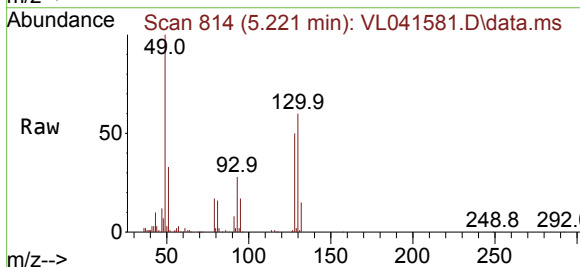
Instrument :
MSVOA_L
ClientSampleId :

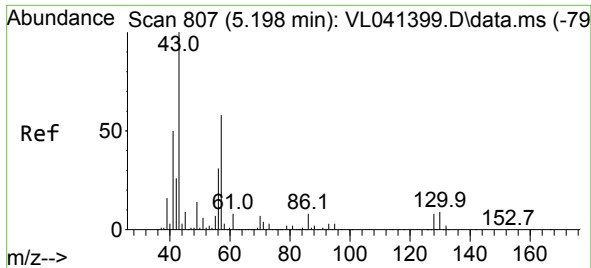
Tgt Ion: 96 Resp: 1933
Ion Ratio Lower Upper
96 100
61 167.3 135.4 203.2
98 37.8 51.0 76.4#



#25
Ethyl Acetate
Concen: 0.048 ppbv
RT: 5.221 min Scan# 814
Delta R.T. 0.016 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

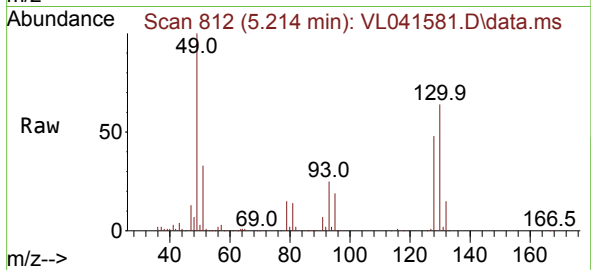
Tgt Ion: 43 Resp: 10269
Ion Ratio Lower Upper
43 100
45 0.0 8.5 12.7#
61 16.3 8.0 12.0#
70 0.0 5.9 8.9#



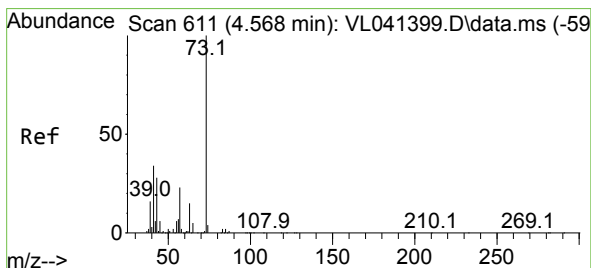
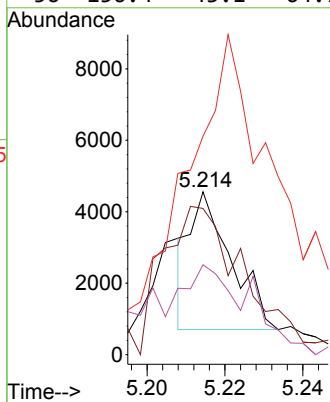
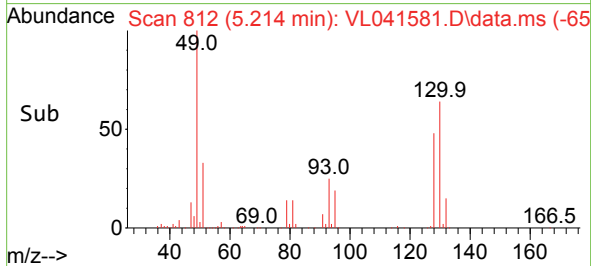


#26
Hexane
Concen: 0.032 ppbv
RT: 5.214 min Scan# 812
Delta R.T. 0.000 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

Instrument :
MSVOA_L
ClientSampleId :

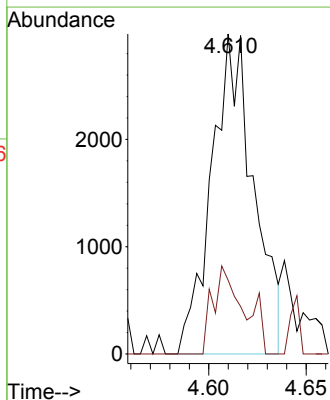
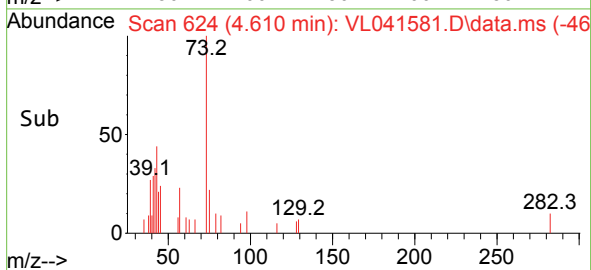
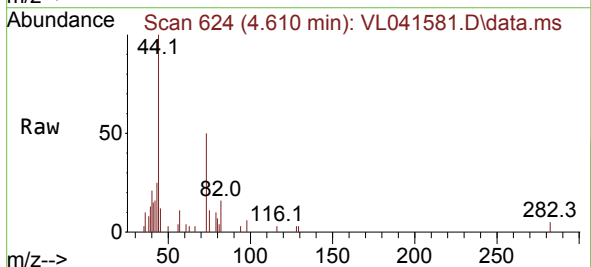


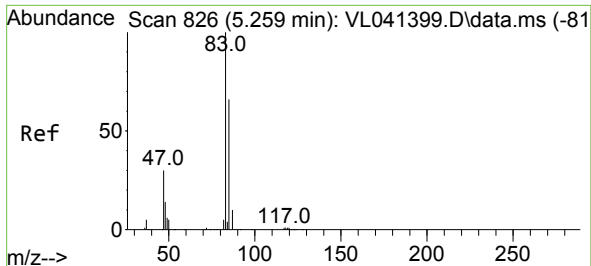
Tgt Ion: 57 Resp: 2825
Ion Ratio Lower Upper
57 100
41 244.6 74.0 111.0#
43 611.4 193.6 290.4#
56 156.4 43.1 64.7#



#28
Methyl tert-Butyl Ether
Concen: 0.081 ppbv
RT: 4.610 min Scan# 624
Delta R.T. 0.023 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

Tgt Ion: 73 Resp: 4477
Ion Ratio Lower Upper
73 100
57 20.3 18.9 28.3





#29

Chloroform

Concen: 0.054 ppbv

RT: 5.272 min Scan# 81

Delta R.T. 0.000 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

Instrument :

MSVOA_L

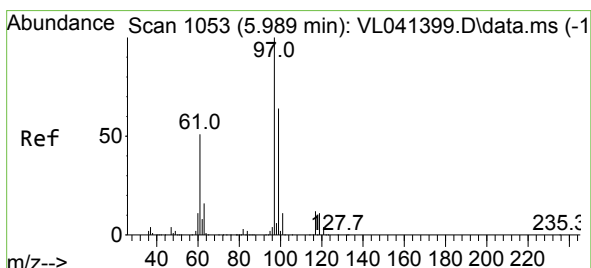
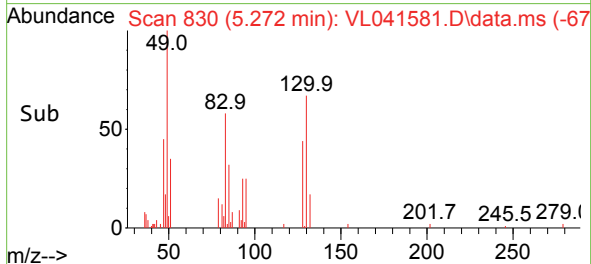
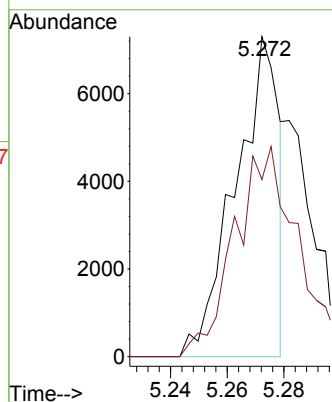
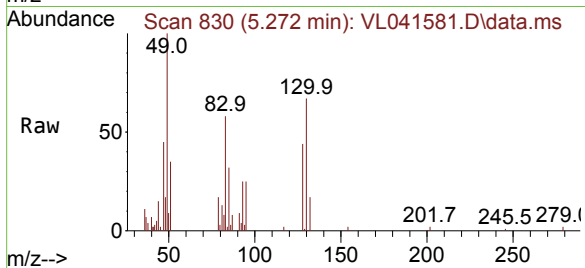
ClientSampleId :

Tgt Ion: 83 Resp: 7779

Ion Ratio Lower Upper

83 100

85 55.4 53.1 79.7



#32

1,1,1-Trichloroethane

Concen: 0.067 ppbv

RT: 5.996 min Scan# 1055

Delta R.T. -0.006 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

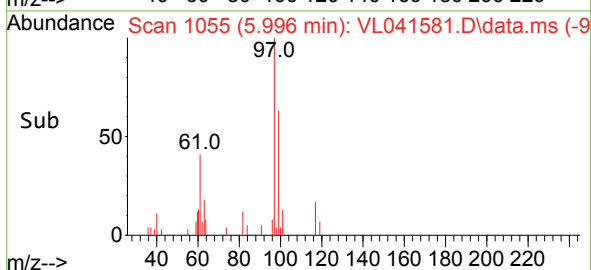
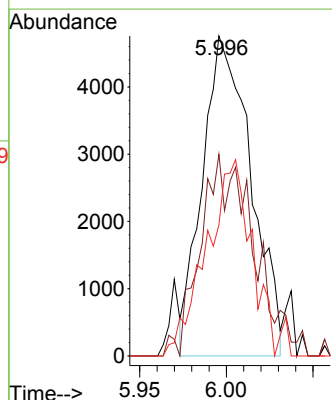
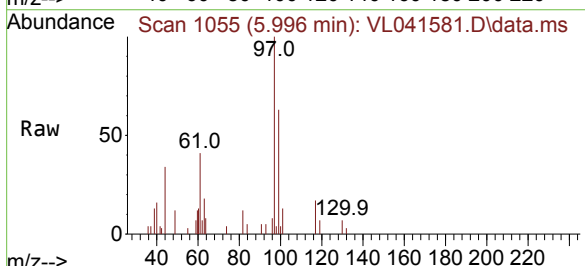
Tgt Ion: 97 Resp: 9310

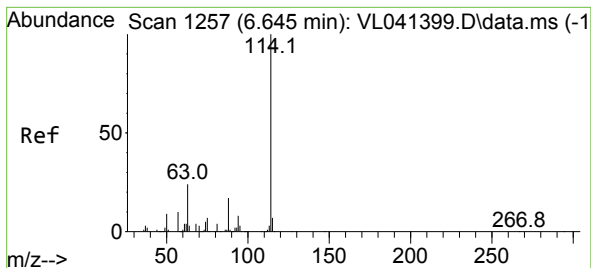
Ion Ratio Lower Upper

97 100

99 69.7 52.0 78.0

61 58.2 41.8 62.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.648 min Scan# 1171

Delta R.T. 0.000 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

Instrument :

MSVOA_L

ClientSampleId :

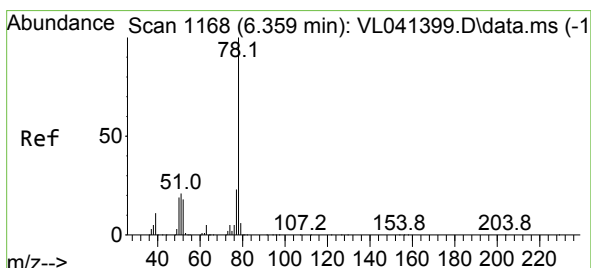
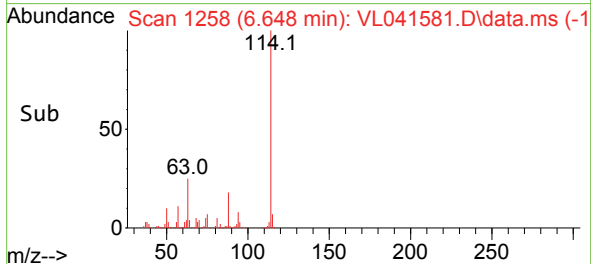
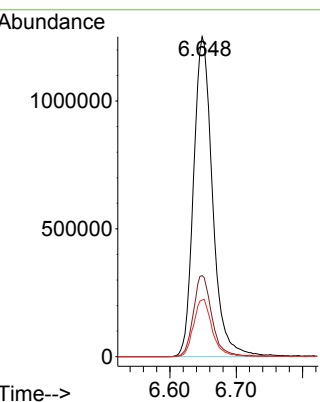
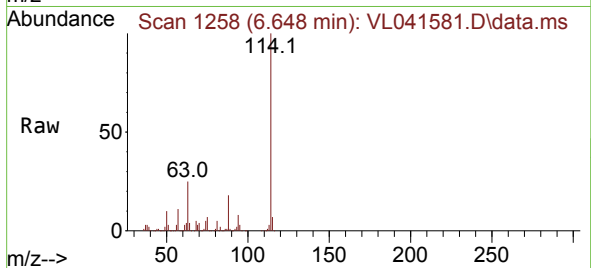
Tgt Ion:114 Resp: 2485961

Ion Ratio Lower Upper

114 100

63 25.2 20.3 30.5

88 17.8 14.3 21.5



#36

Benzene

Concen: 0.030 ppbv

RT: 6.369 min Scan# 1171

Delta R.T. 0.000 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

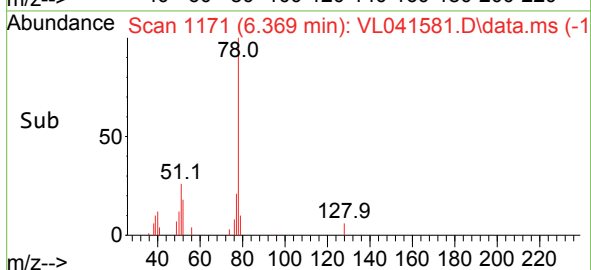
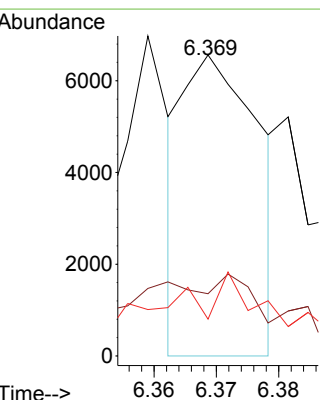
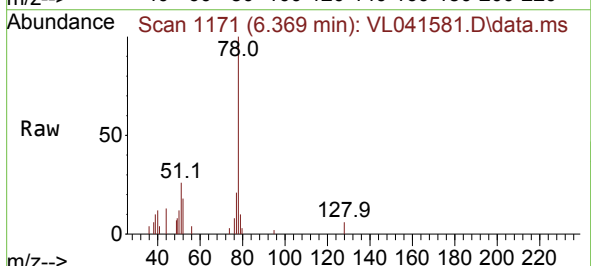
Tgt Ion: 78 Resp: 5521

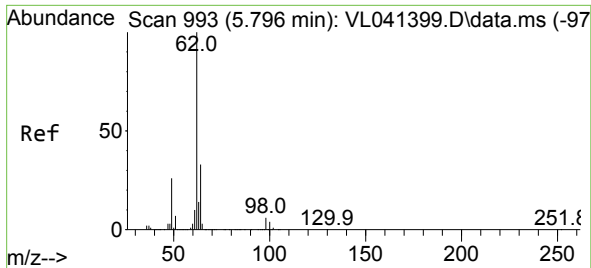
Ion Ratio Lower Upper

78 100

77 36.6 18.1 27.1#

50 0.0 15.5 23.3#





#37

1,2-Dichloroethane

Concen: 0.046 ppbv

RT: 5.806 min Scan# 993

Delta R.T. 0.000 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

Instrument :

MSVOA_L

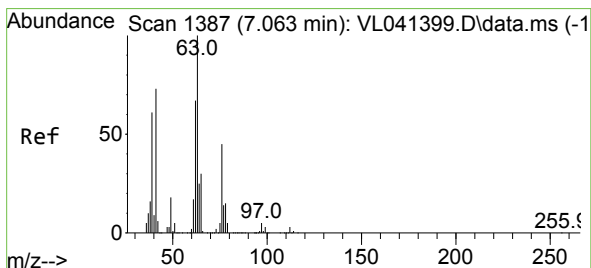
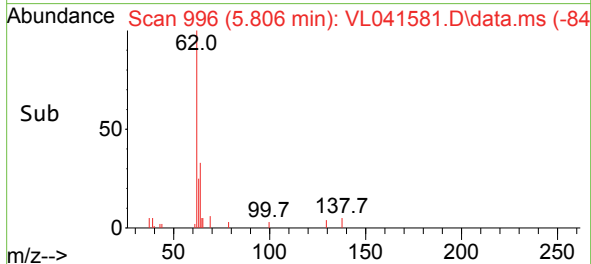
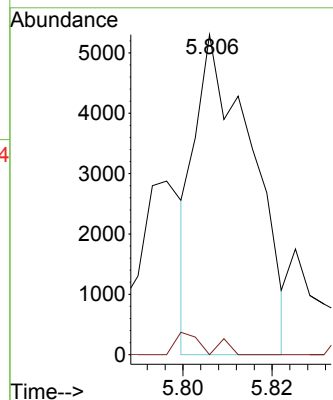
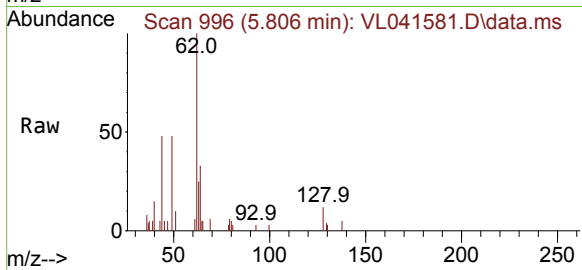
ClientSampleId :

Tgt Ion: 62 Resp: 4675

Ion Ratio Lower Upper

62 100

98 0.0 5.0 7.4#



#39

1,2-Dichloropropane

Concen: 8.844 ppbv

RT: 6.648 min Scan# 1258

Delta R.T. -0.421 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

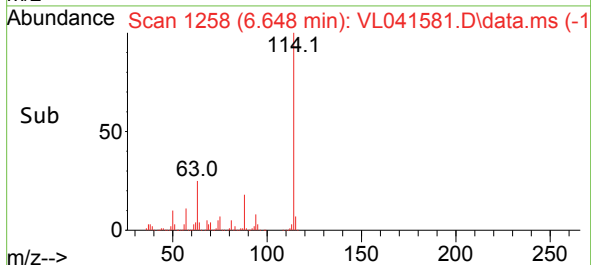
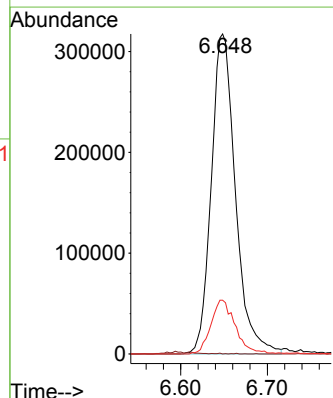
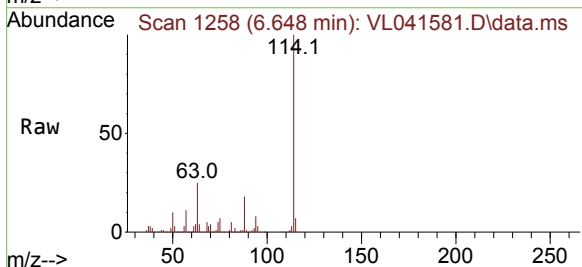
Tgt Ion: 63 Resp: 615024

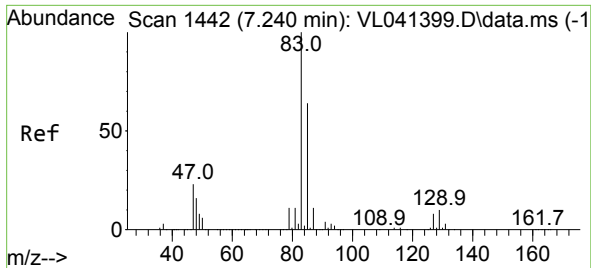
Ion Ratio Lower Upper

63 100

41 0.0 58.3 87.5#

62 16.8 53.9 80.9#

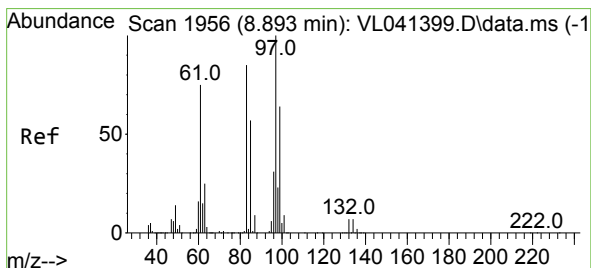
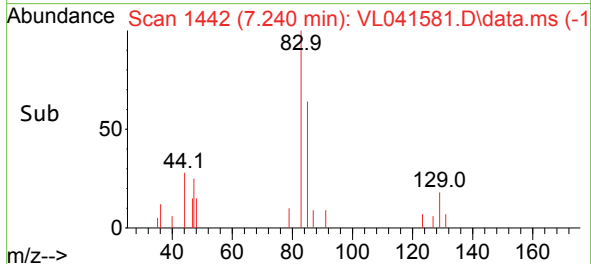
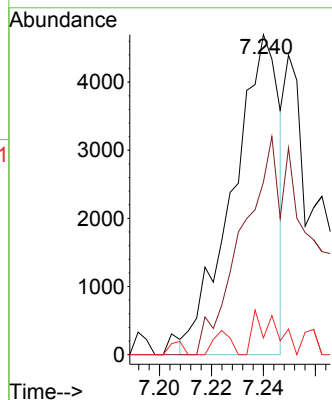
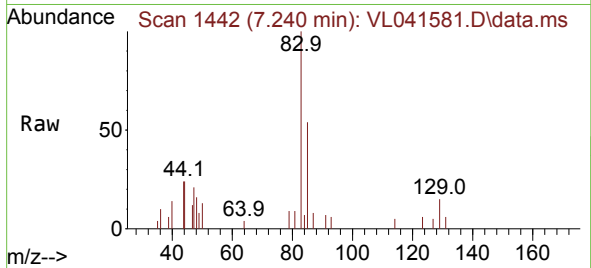




#42
Bromodichloromethane
Concen: 0.040 ppbv
RT: 7.240 min Scan# 1442
Delta R.T. -0.003 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

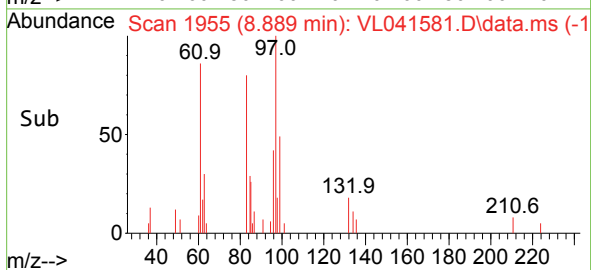
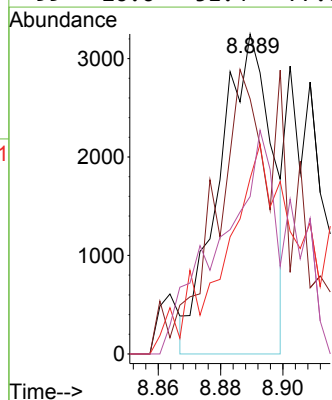
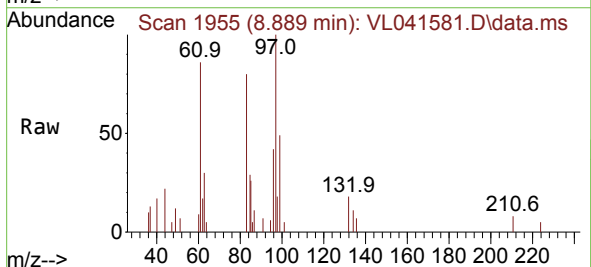
Instrument :
MSVOA_L
ClientSampleId :

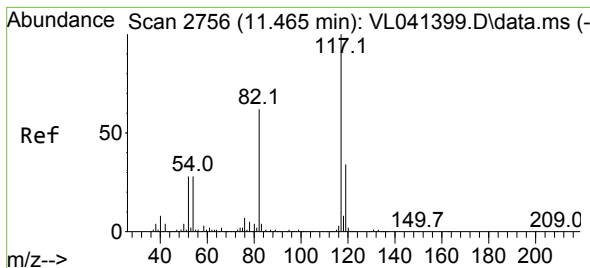
Tgt Ion: 83 Resp: 5836
Ion Ratio Lower Upper
83 100
85 56.6 51.4 77.0
127 1.1 6.7 10.1#



#47
1,1,2-Trichloroethane
Concen: 0.050 ppbv
RT: 8.889 min Scan# 1955
Delta R.T. 0.000 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

Tgt Ion: 97 Resp: 3824
Ion Ratio Lower Upper
97 100
83 60.6 67.6 101.4#
85 46.9 45.9 68.9
99 26.6 51.4 77.0#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.455 min Scan# 21

Delta R.T. 0.000 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

Instrument :

MSVOA_L

ClientSampleId :

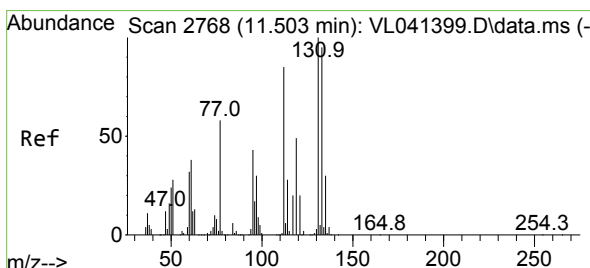
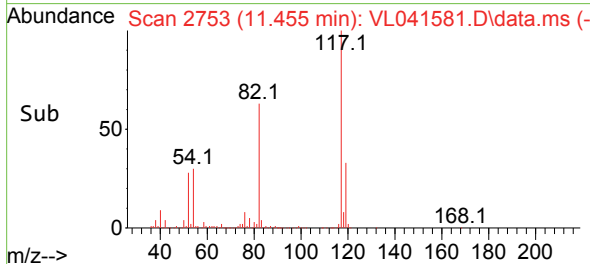
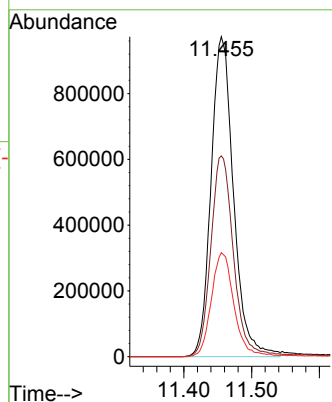
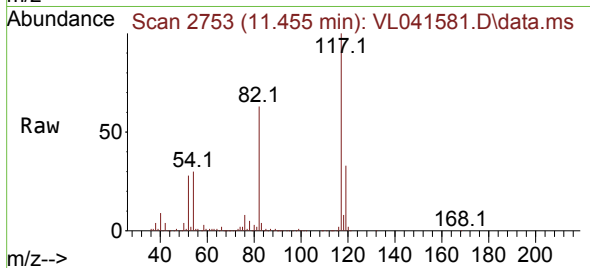
Tgt Ion:117 Resp: 2242537

Ion Ratio Lower Upper

117 100

82 64.6 51.0 76.6

119 33.4 45.2 67.8#



#56

1,1,1,2-Tetrachloroethane

Concen: 0.038 ppbv

RT: 11.500 min Scan# 2767

Delta R.T. 0.003 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

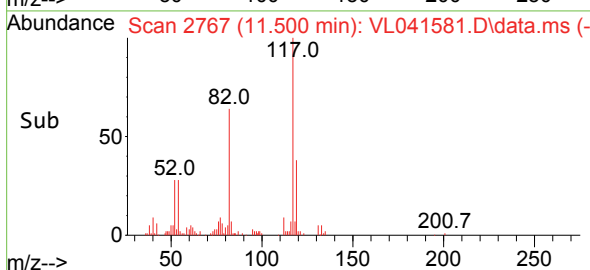
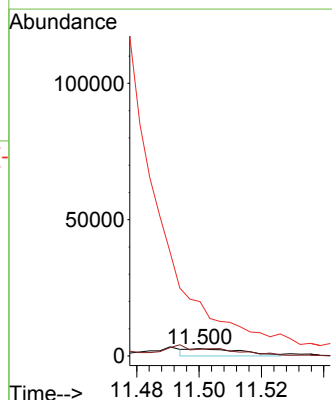
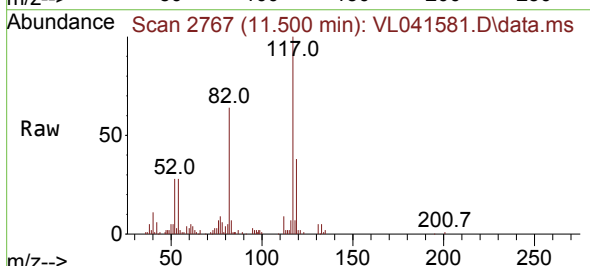
Tgt Ion:131 Resp: 3319

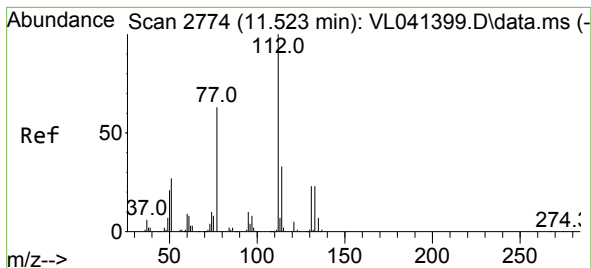
Ion Ratio Lower Upper

131 100

133 0.0 77.0 115.4#

119 0.0 121.5 182.3#





#57

Chlorobenzene

Concen: 0.052 ppbv

RT: 11.520 min Scan# 21

Delta R.T. 0.003 min

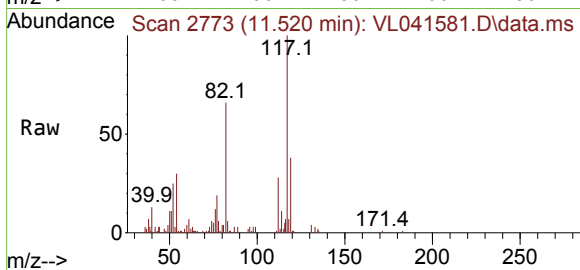
Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

Instrument :

MSVOA_L

ClientSampleId :



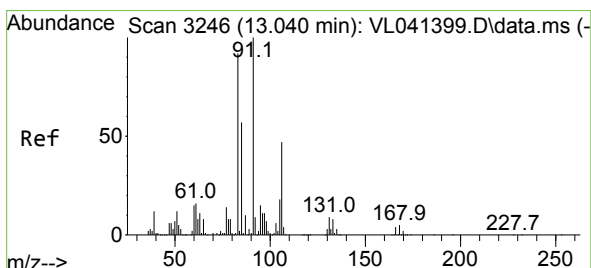
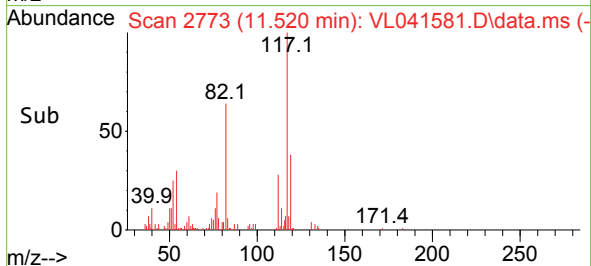
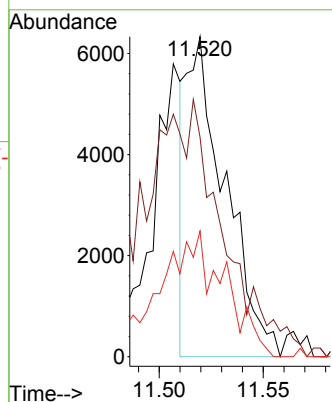
Tgt Ion:112 Resp: 8261

Ion Ratio Lower Upper

112 100

77 60.7 51.1 76.7

114 39.3 29.5 36.1#



#63

1,1,2,2-Tetrachloroethane

Concen: 0.033 ppbv

RT: 13.034 min Scan# 3244

Delta R.T. 0.000 min

Lab File: VL041581.D

Acq: 22 Aug 2024 10:52

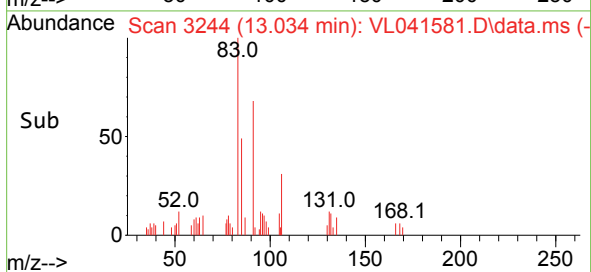
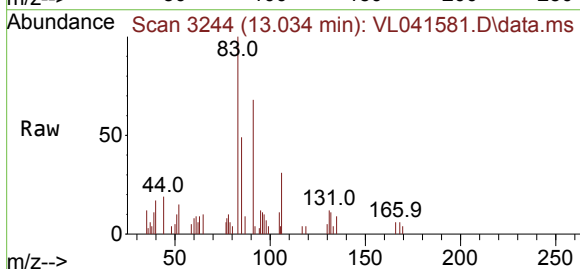
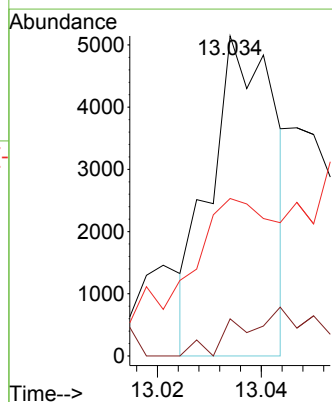
Tgt Ion: 83 Resp: 4415

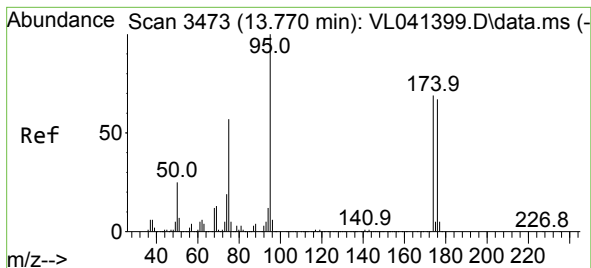
Ion Ratio Lower Upper

83 100

131 0.0 4.8 14.4#

85 0.0 32.6 98.0#

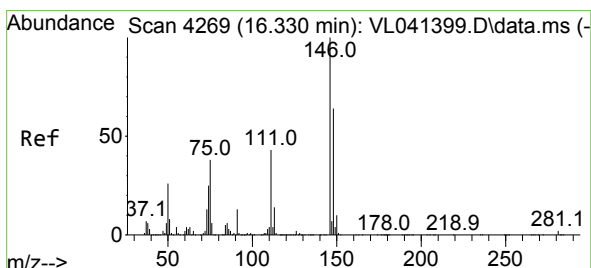
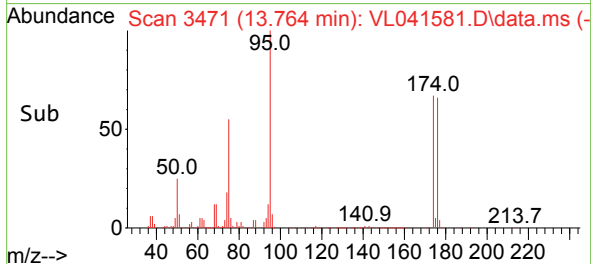
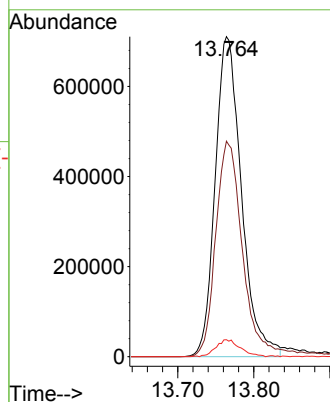
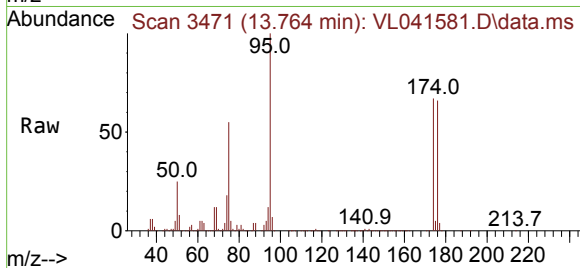




#68
1-Bromo-4-Fluorobenzene
Concen: 9.886 ppbv
RT: 13.764 min Scan# 3471
Delta R.T. 0.000 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

Instrument :
MSVOA_L
ClientSampleId :

Tgt Ion: 95 Resp: 1706036
Ion Ratio Lower Upper
95 100
174 71.0 56.3 84.5
175 5.1 4.0 6.0



#75
1,3-Dichlorobenzene
Concen: 0.042 ppbv
RT: 16.326 min Scan# 4268
Delta R.T. 0.007 min
Lab File: VL041581.D
Acq: 22 Aug 2024 10:52

Tgt Ion: 146 Resp: 6601
Ion Ratio Lower Upper
146 100
111 109.4 22.6 67.8#
148 136.9 32.3 96.8#

