

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL072924\
 Data File : VL041433.D
 Acq On : 29 Jul 2024 17:40
 Operator : SY/MD
 Sample : P3342-11 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jul 30 02:52:06 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 : Tue Jul 30 02:42:20 2024
 Response via : Initial Calibration

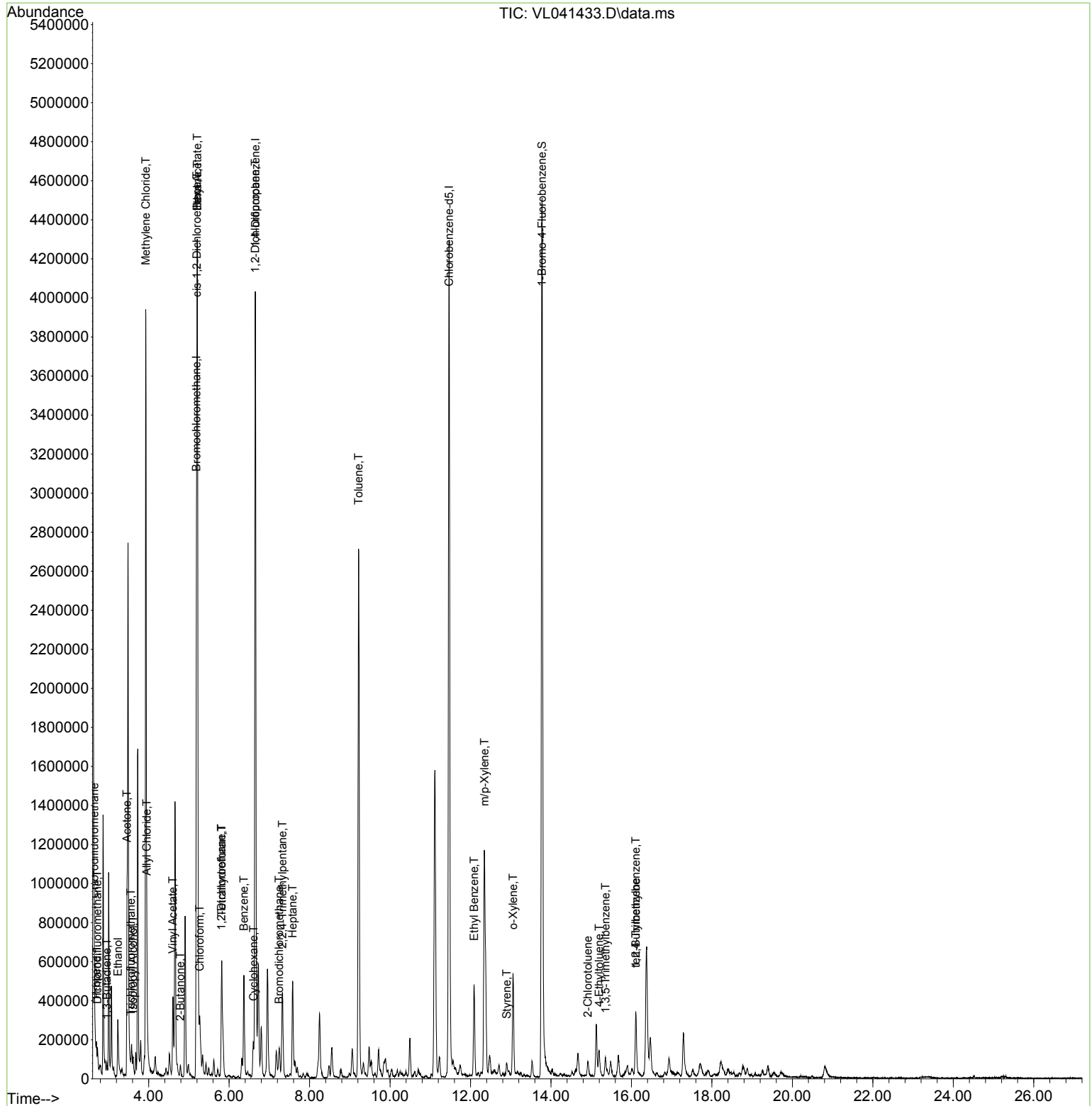
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

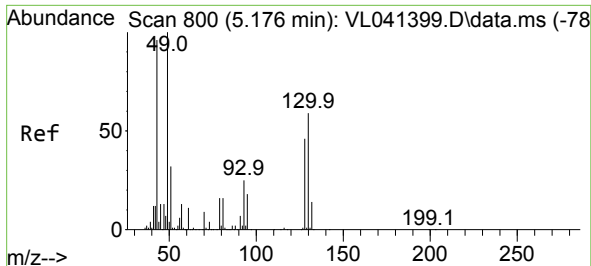
Internal Standards						
1) Bromochloromethane	5.189	49	1109829	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.652	114	3030276	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.468	117	2865022	10.000	ppbv	# 0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.777	95	2215160	10.047	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	= 100.500%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.726	85	24312	0.127	ppbv	95
3) Chlorodifluoromethane	2.649	51	45761	0.346	ppbv #	66
9) Propene	2.697	41	23518	0.387	ppbv	84
10) Heptane	7.581	43	195591	1.434	ppbv	98
11) Trichlorofluoromethane	3.558	101	9034	0.053	ppbv	92
13) Ethanol	3.237	45	323535	59.642	ppbv	93
15) Acetone	3.462	43	788707	6.255	ppbv #	80
16) 1,3-Butadiene	2.957	39	13072	0.194	ppbv #	19
19) Isopropyl Alcohol	3.610	45	6556	0.089	ppbv #	93
20) Methylene Chloride	3.928	84	1298661	27.618	ppbv	98
21) Allyl Chloride	3.954	41	30545	0.369	ppbv #	1
23) Vinyl Acetate	4.600	43	147890	1.536	ppbv #	1
25) Ethyl Acetate	5.211	43	1090193	4.352	ppbv #	78
26) Hexane	5.211	57	1481979	14.261	ppbv #	38
29) Chloroform	5.269	83	123192	0.727	ppbv	93
30) Cyclohexane	6.607	84	22909	0.271	ppbv #	1
31) cis-1,2-Dichloroethene	5.198	61	5927	0.058	ppbv #	29
34) 2-Butanone	4.790	43	59334	0.405	ppbv	93
36) Benzene	6.365	78	419381	1.894	ppbv	97
37) 1,2-Dichloroethane	5.809	62	6274	0.051	ppbv #	82
39) 1,2-Dichloropropane	6.648	63	754248	8.897	ppbv #	25
41) Tetrahydrofuran	5.816	42	73246	0.874	ppbv #	37
42) Bromodichloromethane	7.246	83	13441	0.075	ppbv #	54
44) 2,2,4-Trimethylpentane	7.324	57	315376	0.853	ppbv #	78
53) Toluene	9.217	91	2162966	8.770	ppbv	100
58) Ethyl Benzene	12.089	91	420678	1.274	ppbv	94
59) m/p-Xylene	12.346	91	1212994	4.255	ppbv	95
60) o-Xylene	13.056	91	417372	1.548	ppbv	98
61) Styrene	12.902	104	37585	0.309	ppbv	97
65) tert-Butylbenzene	16.108	119	31299	0.085	ppbv #	62
71) 2-Chlorotoluene	14.918	91	77612	0.257	ppbv #	43
72) 4-Ethyltoluene	15.198	105	49040	0.154	ppbv #	48
73) 1,3,5-Trimethylbenzene	15.355	105	60745	0.222	ppbv	93
74) 1,2,4-Trimethylbenzene	16.108	105	259580	0.816	ppbv #	72

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

Instrument :
MSVOA_L
ClientSampleId :

Instrument :
MSVOA_L
ClientSampleId :





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.189 min Scan# 80

Delta R.T. 0.010 min

Lab File: VL041433.D

Acq: 29 Jul 2024 17:40

Instrument :

MSVOA_L

ClientSampleId :

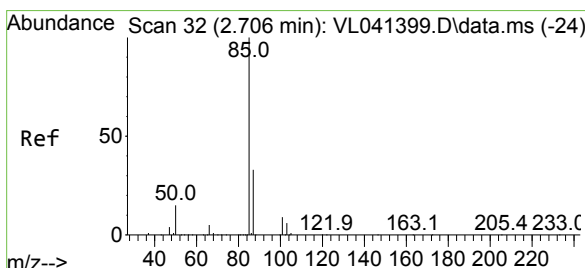
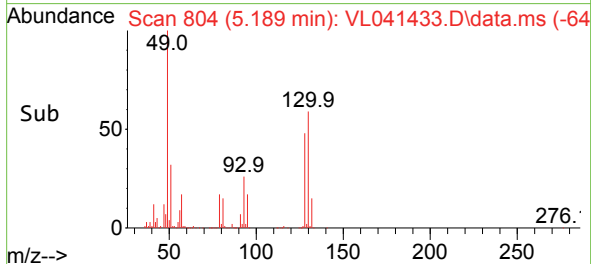
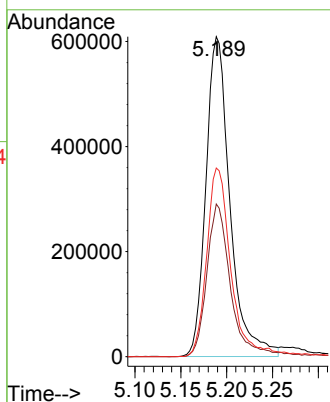
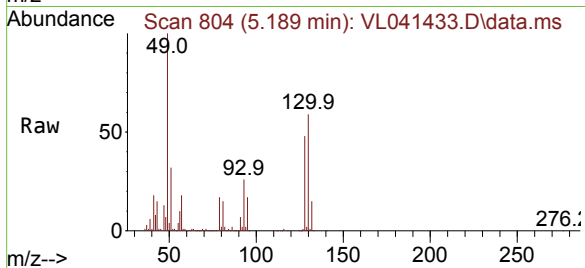
Tgt Ion: 49 Resp: 1109829

Ion Ratio Lower Upper

49 100

128 48.6 23.8 71.4

130 61.5 30.8 92.4



#2

Dichlorodifluoromethane

Concen: 0.127 ppbv

RT: 2.726 min Scan# 38

Delta R.T. 0.016 min

Lab File: VL041433.D

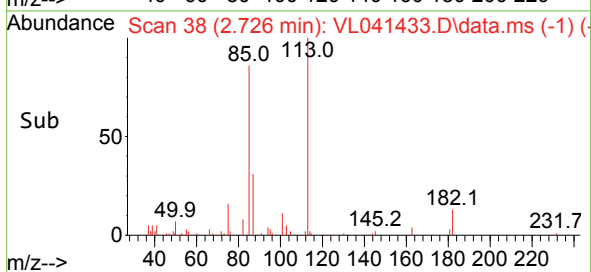
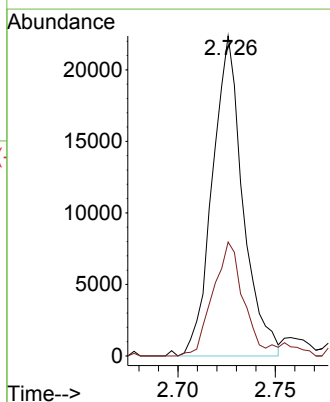
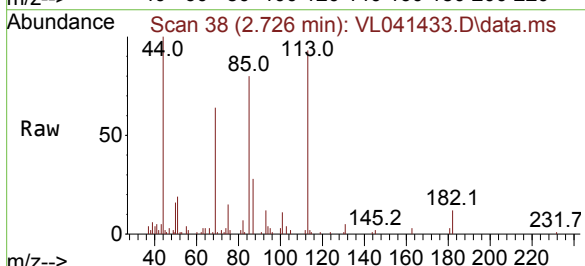
Acq: 29 Jul 2024 17:40

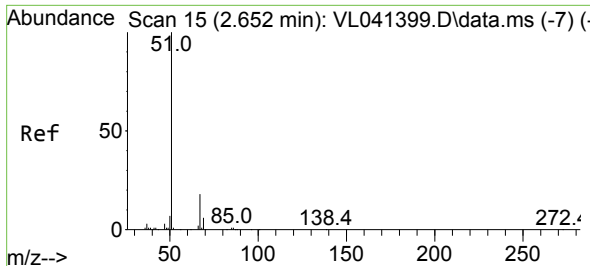
Tgt Ion: 85 Resp: 24312

Ion Ratio Lower Upper

85 100

87 35.6 26.0 39.0

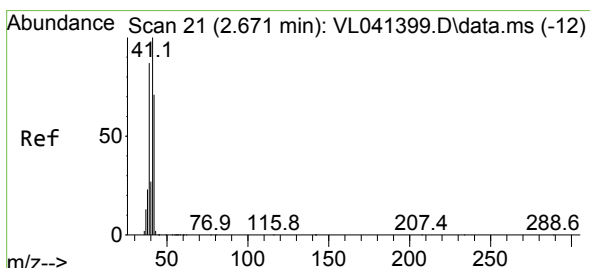
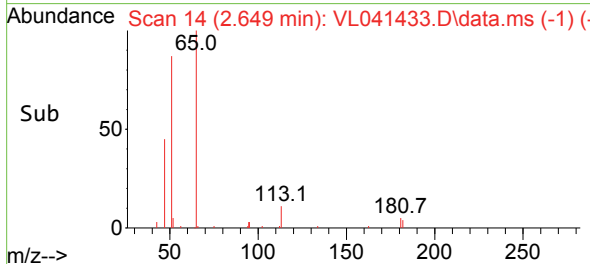
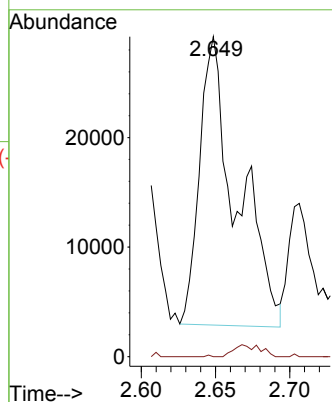
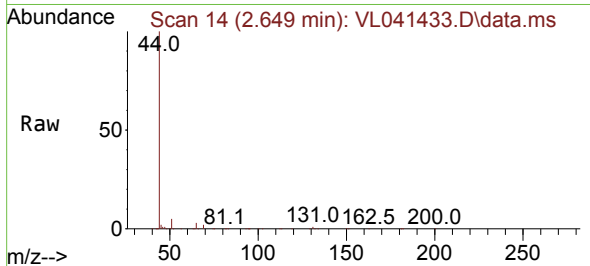




#3
Chlorodifluoromethane
Concen: 0.346 ppbv
RT: 2.649 min Scan# 14
Delta R.T. -0.006 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

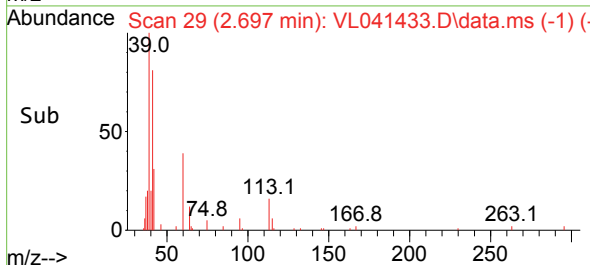
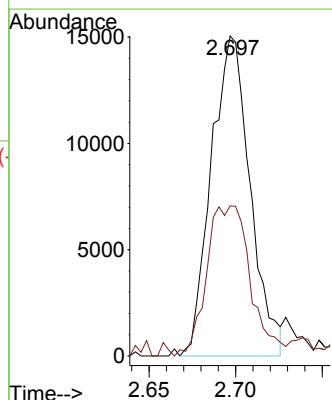
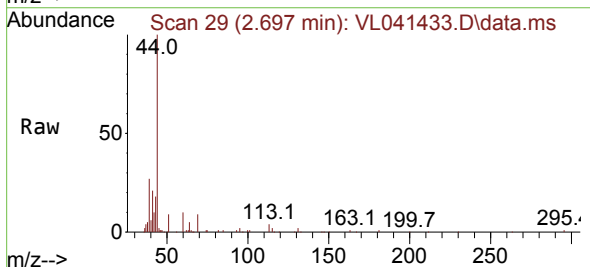
Instrument :
MSVOA_L
ClientSampleId :

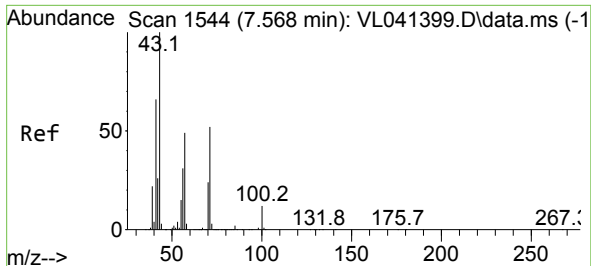
Tgt Ion: 51 Resp: 45761
Ion Ratio Lower Upper
51 100
67 3.1 14.5 21.7#



#9
Propene
Concen: 0.387 ppbv
RT: 2.697 min Scan# 29
Delta R.T. 0.026 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 41 Resp: 23518
Ion Ratio Lower Upper
41 100
42 56.9 55.9 83.9

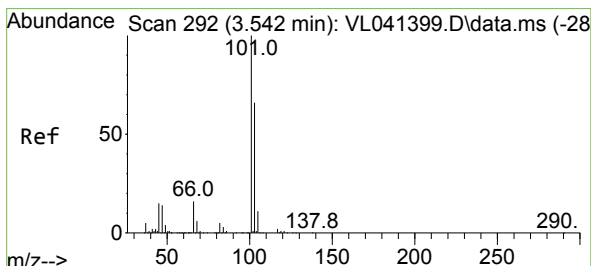
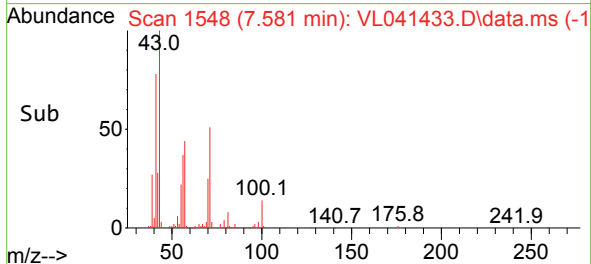
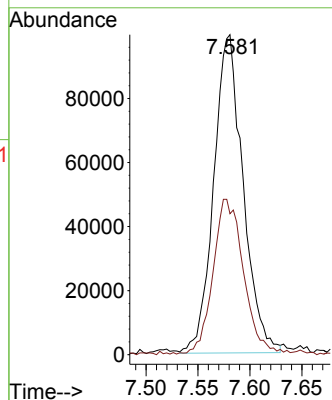
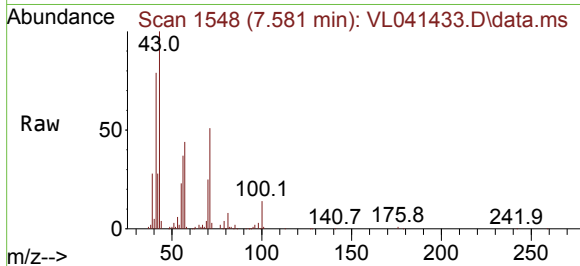




#10
Heptane
Concen: 1.434 ppbv
RT: 7.581 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

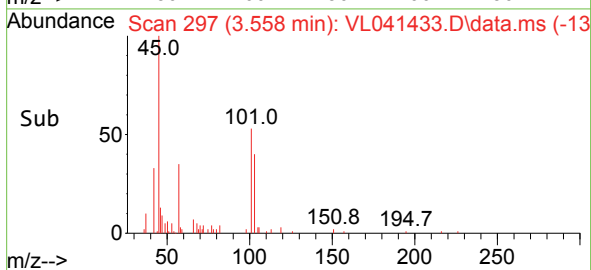
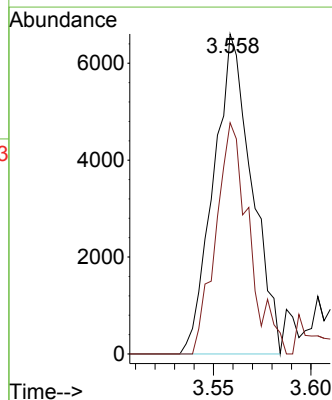
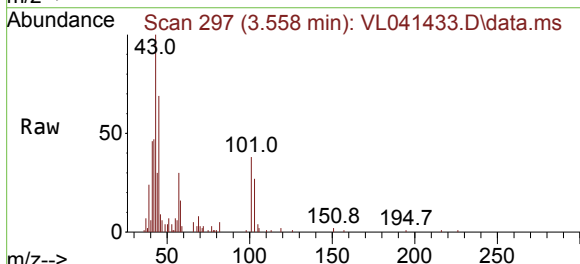
Instrument :
MSVOA_L
ClientSampleId :

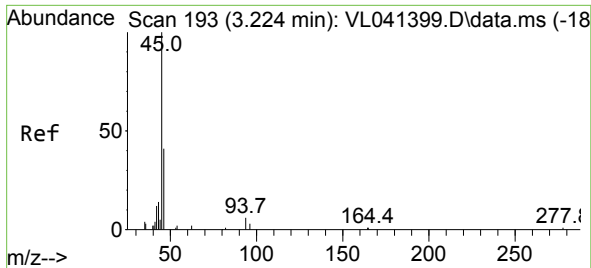
Tgt Ion: 43 Resp: 195591
Ion Ratio Lower Upper
43 100
57 51.9 40.5 60.7



#11
Trichlorofluoromethane
Concen: 0.053 ppbv
RT: 3.558 min Scan# 297
Delta R.T. 0.013 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 101 Resp: 9034
Ion Ratio Lower Upper
101 100
103 72.2 52.6 79.0

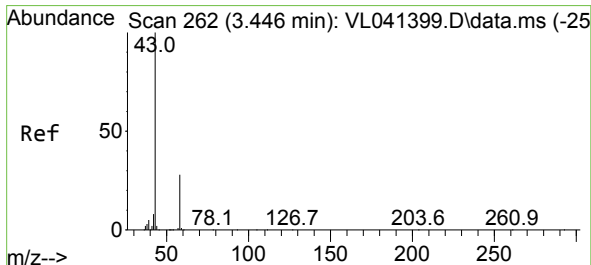
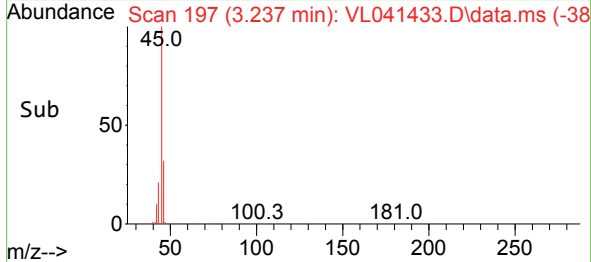
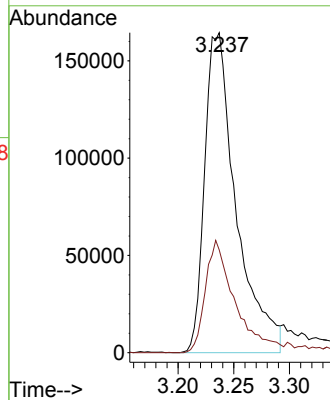
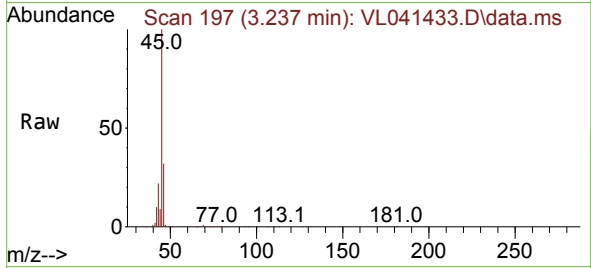




#13
Ethanol
Concen: 59.642 ppbv
RT: 3.237 min Scan# 193
Delta R.T. 0.010 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

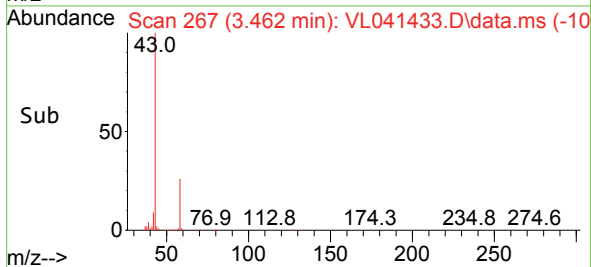
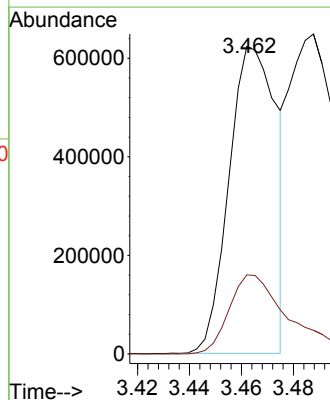
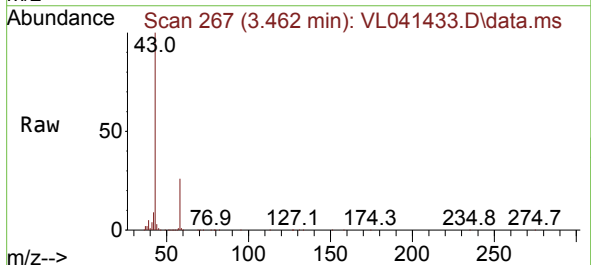
Instrument :
MSVOA_L
ClientSampleId :

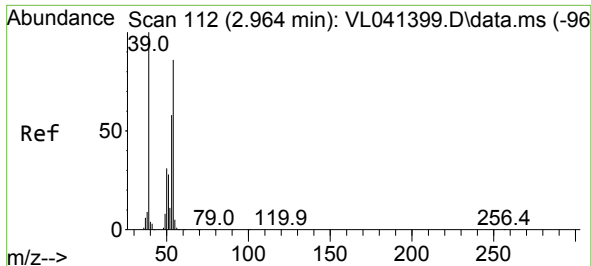
Tgt Ion: 45 Resp: 323535
Ion Ratio Lower Upper
45 100
46 37.4 13.4 53.4



#15
Acetone
Concen: 6.255 ppbv
RT: 3.462 min Scan# 267
Delta R.T. 0.010 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 43 Resp: 788707
Ion Ratio Lower Upper
43 100
58 36.9 21.4 32.2#

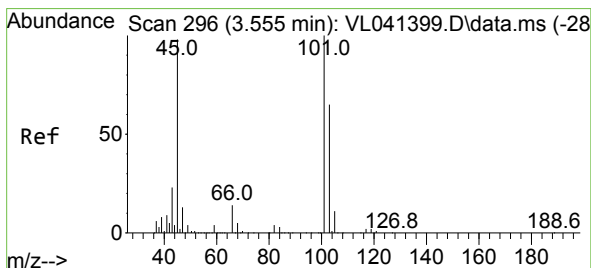
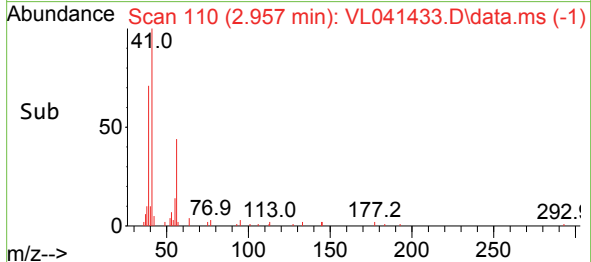
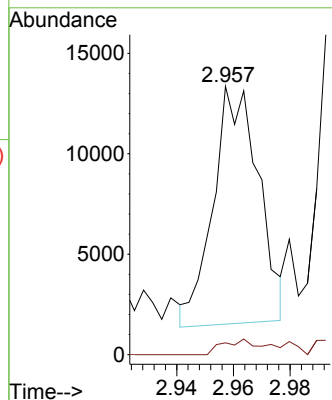
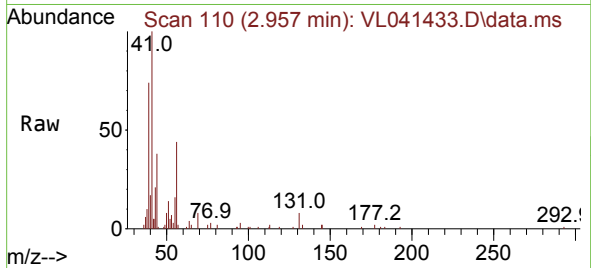




#16
1,3-Butadiene
Concen: 0.194 ppbv
RT: 2.957 min Scan# 11
Delta R.T. -0.010 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

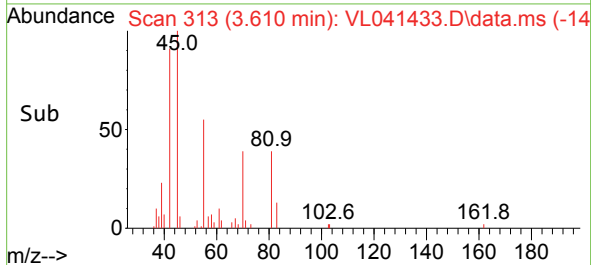
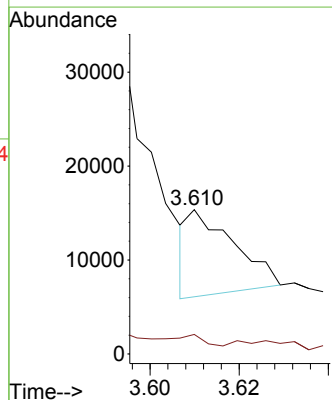
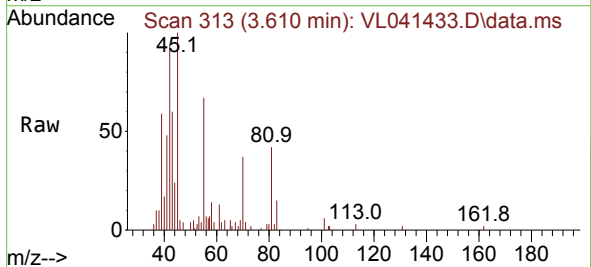
Instrument :
MSVOA_L
ClientSampleId :

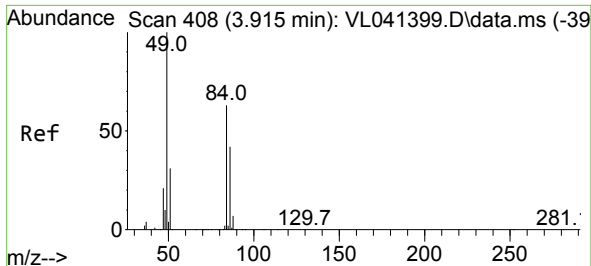
Tgt Ion: 39 Resp: 13072
Ion Ratio Lower Upper
39 100
54 7.5 62.5 93.7#



#19
Isopropyl Alcohol
Concen: 0.089 ppbv
RT: 3.610 min Scan# 313
Delta R.T. 0.048 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 45 Resp: 6556
Ion Ratio Lower Upper
45 100
58 0.0 1.9 2.9#



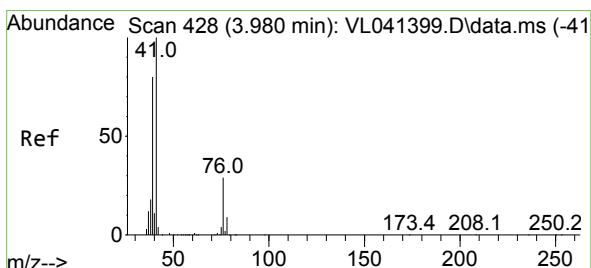
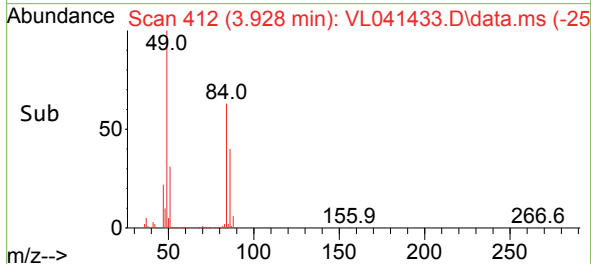
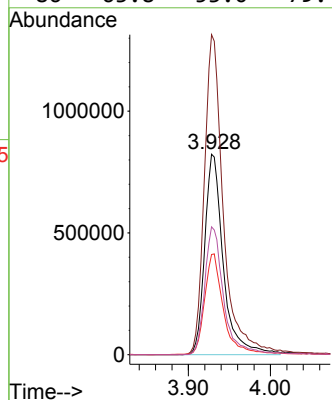
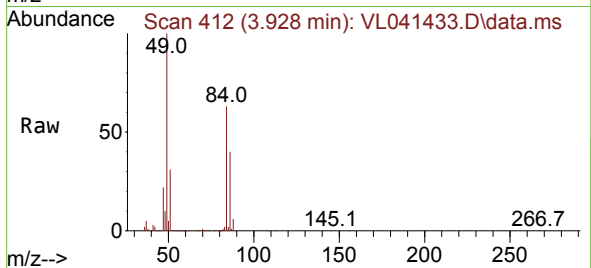


#20
Methylene Chloride
Concen: 27.618 ppbv
RT: 3.928 min Scan# 412
Delta R.T. 0.010 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Instrument :
MSVOA_L
ClientSampleId :

Tgt Ion: 84 Resp: 1298661

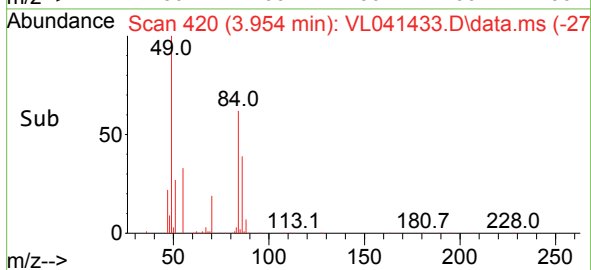
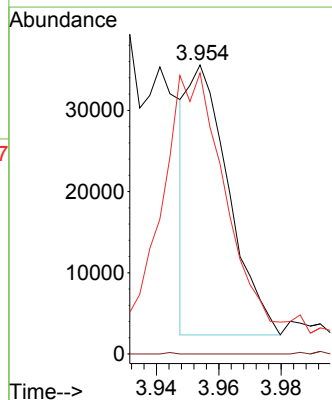
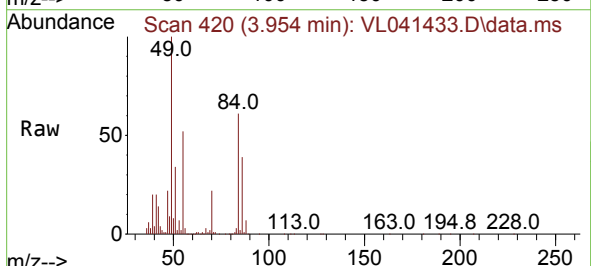
Ion	Ratio	Lower	Upper
84	100		
49	159.6	126.6	190.0
51	49.8	38.6	58.0
86	63.8	53.0	79.4

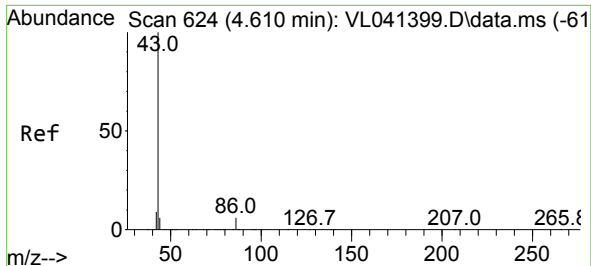


#21
Allyl Chloride
Concen: 0.369 ppbv
RT: 3.954 min Scan# 420
Delta R.T. -0.026 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 41 Resp: 30545

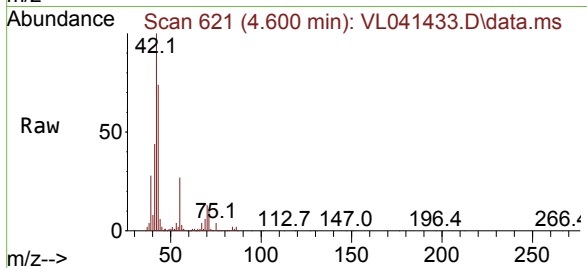
Ion	Ratio	Lower	Upper
41	100		
76	0.0	23.7	35.5#
39	186.7	64.3	96.5#



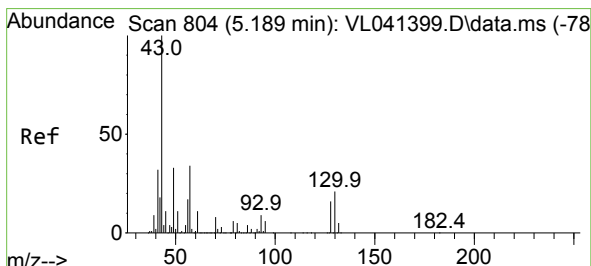
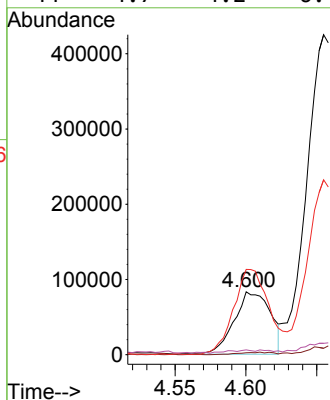
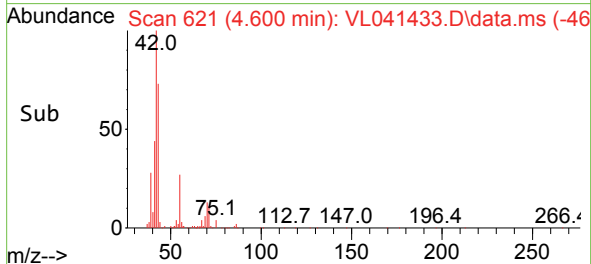


#23
 Vinyl Acetate
 Concen: 1.536 ppbv
 RT: 4.600 min Scan# 61
 Delta R.T. -0.013 min
 Lab File: VL041433.D
 Acq: 29 Jul 2024 17:40

Instrument :
 MSVOA_L
 ClientSampleId :

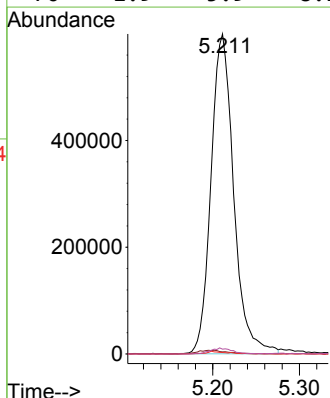
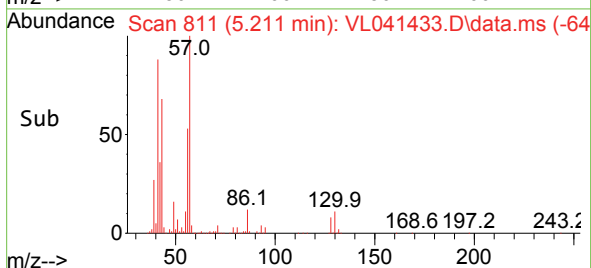
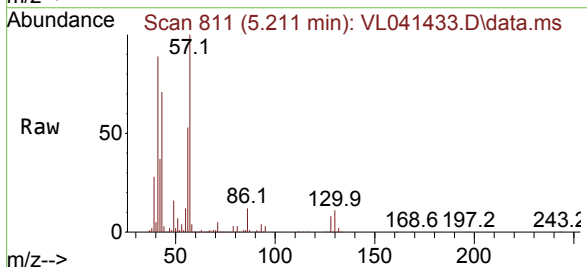


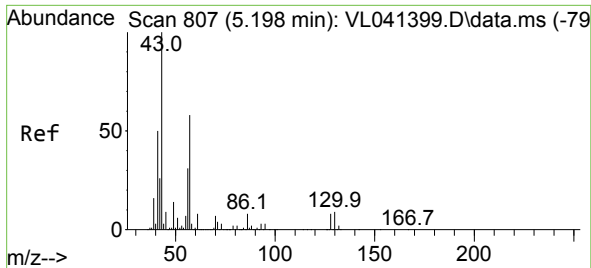
Tgt Ion: 43 Resp: 147890
 Ion Ratio Lower Upper
 43 100
 86 3.0 4.6 6.8#
 42 135.2 7.9 11.9#
 44 4.7 4.2 6.4



#25
 Ethyl Acetate
 Concen: 4.352 ppbv
 RT: 5.211 min Scan# 811
 Delta R.T. 0.019 min
 Lab File: VL041433.D
 Acq: 29 Jul 2024 17:40

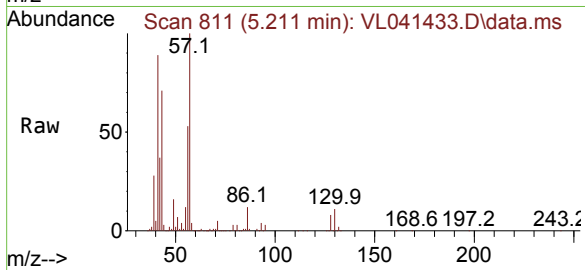
Tgt Ion: 43 Resp: 1090193
 Ion Ratio Lower Upper
 43 100
 45 1.6 8.5 12.7#
 61 0.8 8.0 12.0#
 70 1.9 5.9 8.9#





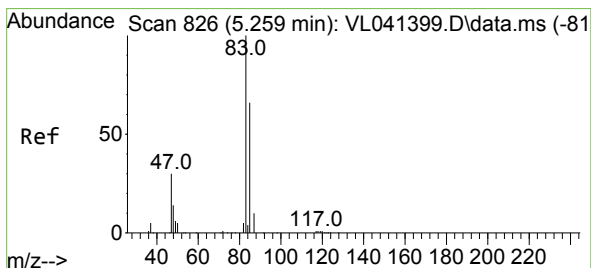
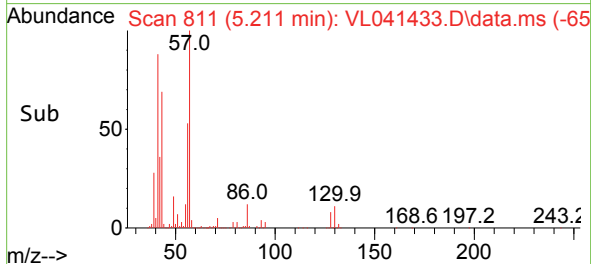
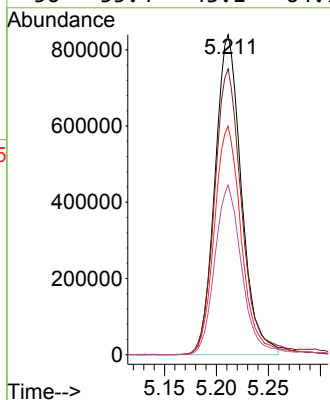
#26
Hexane
Concen: 14.261 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.013 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion: 57 Resp: 1481979

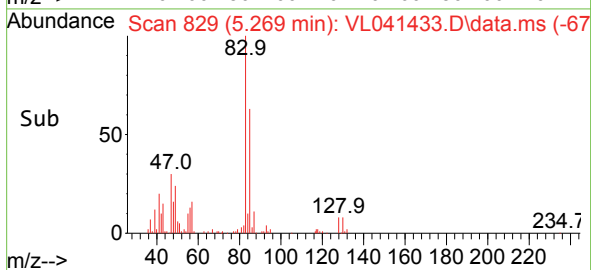
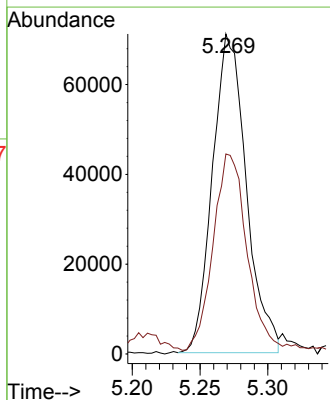
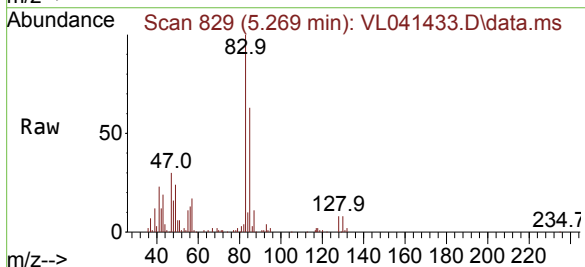
Ion	Ratio	Lower	Upper
57	100		
41	94.6	74.0	111.0
43	74.5	193.6	290.4
56	55.4	43.1	64.7

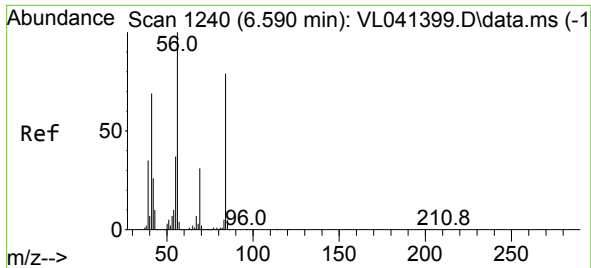


#29
Chloroform
Concen: 0.727 ppbv
RT: 5.269 min Scan# 829
Delta R.T. 0.006 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 83 Resp: 123192

Ion	Ratio	Lower	Upper
83	100		
85	60.9	53.1	79.7

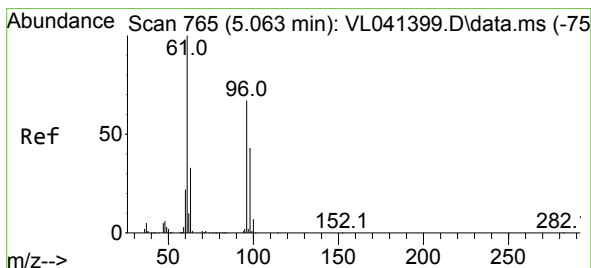
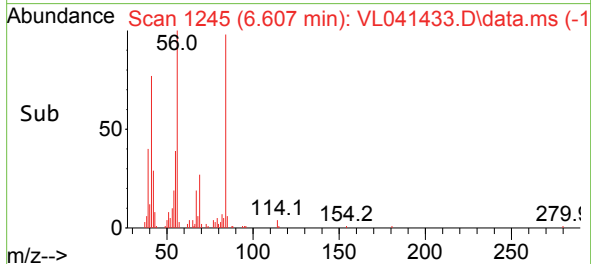
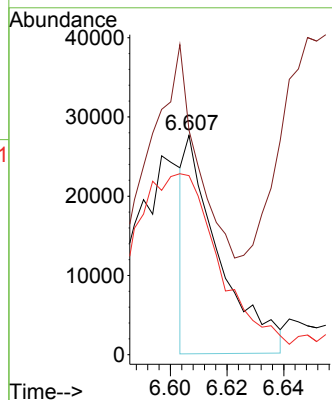
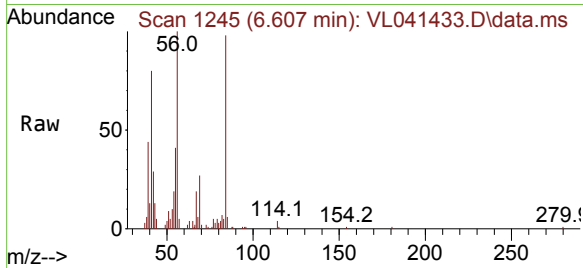




#30
Cyclohexane
Concen: 0.271 ppbv
RT: 6.607 min Scan# 11
Delta R.T. 0.013 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

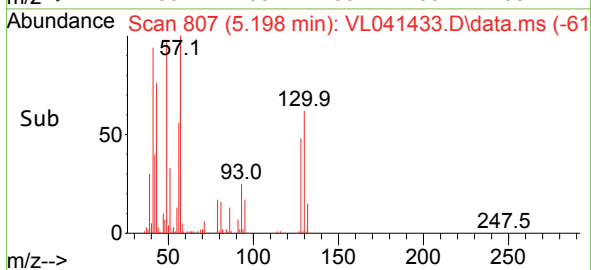
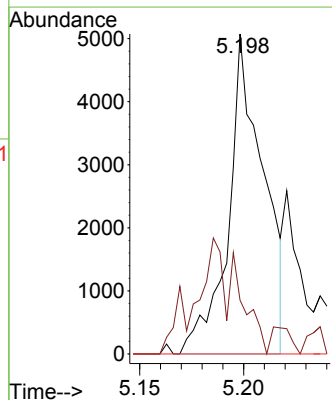
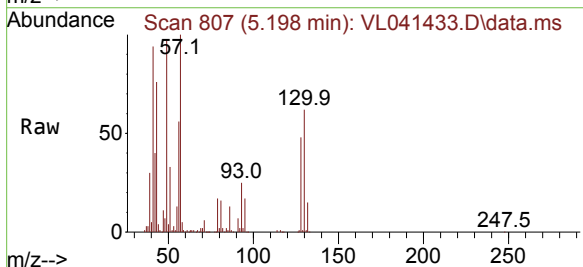
Instrument :
MSVOA_L
ClientSampleId :

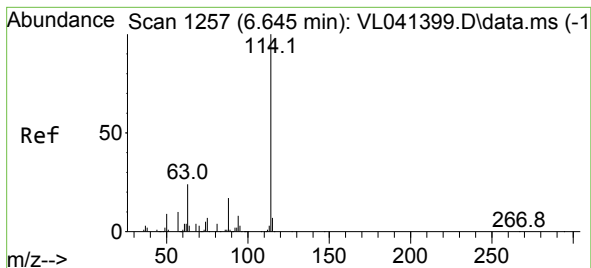
Tgt Ion: 84 Resp: 22909
Ion Ratio Lower Upper
84 100
56 283.5 111.2 166.8#
41 206.1 70.3 105.5#



#31
cis-1,2-Dichloroethene
Concen: 0.058 ppbv
RT: 5.198 min Scan# 807
Delta R.T. 0.132 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 61 Resp: 5927
Ion Ratio Lower Upper
61 100
96 8.6 53.4 80.2#
98 0.0 34.4 51.6#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.652 min Scan# 1

Delta R.T. 0.006 min

Lab File: VL041433.D

Acq: 29 Jul 2024 17:40

Instrument :

MSVOA_L

ClientSampleId :

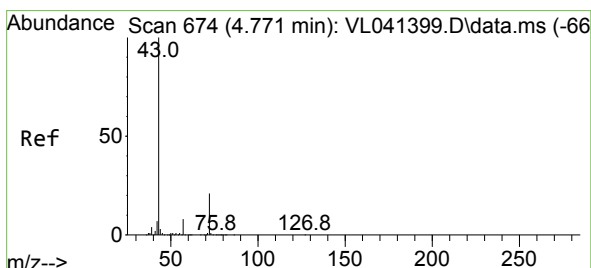
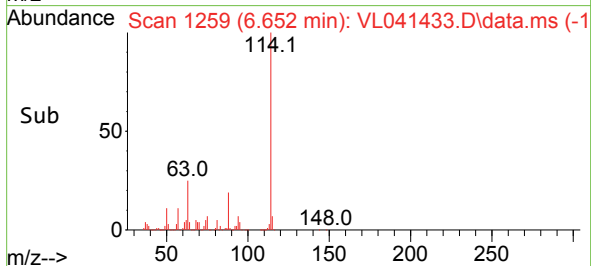
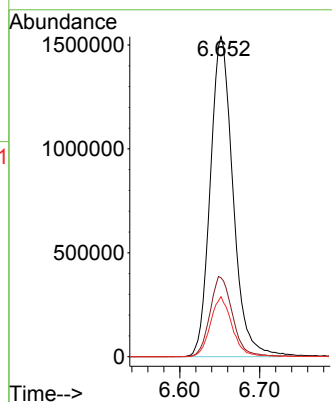
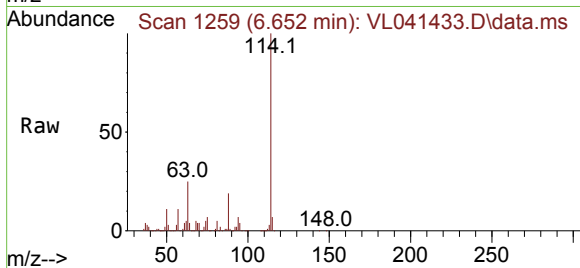
Tgt Ion:114 Resp: 3030276

Ion Ratio Lower Upper

114 100

63 25.3 20.3 30.5

88 18.1 14.3 21.5



#34

2-Butanone

Concen: 0.405 ppbv

RT: 4.790 min Scan# 680

Delta R.T. 0.016 min

Lab File: VL041433.D

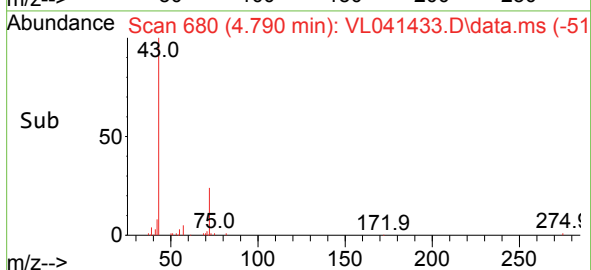
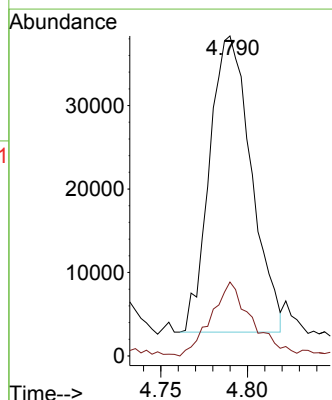
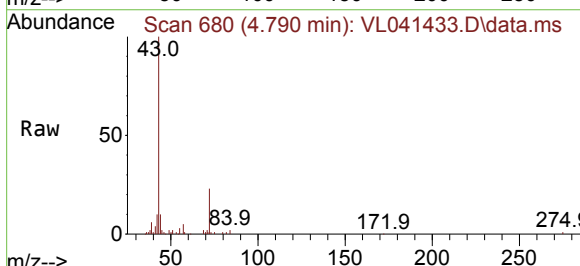
Acq: 29 Jul 2024 17:40

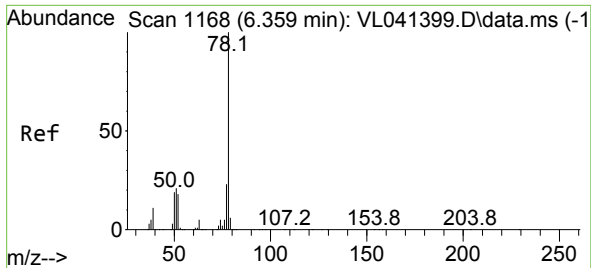
Tgt Ion: 43 Resp: 59334

Ion Ratio Lower Upper

43 100

72 25.0 17.3 25.9

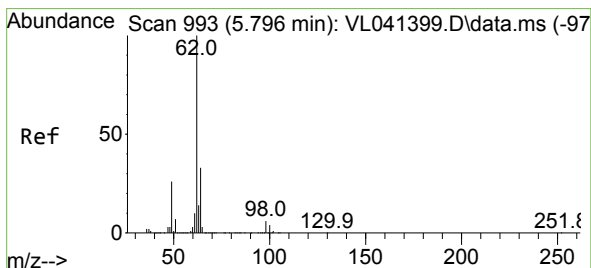
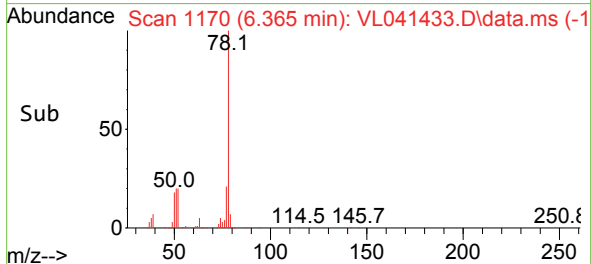
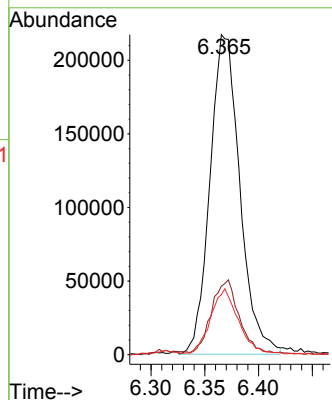
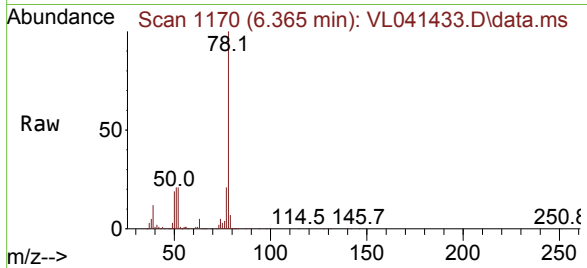




#36
Benzene
Concen: 1.894 ppbv
RT: 6.365 min Scan# 1168
Delta R.T. 0.006 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

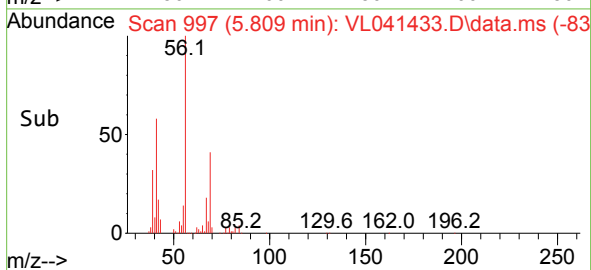
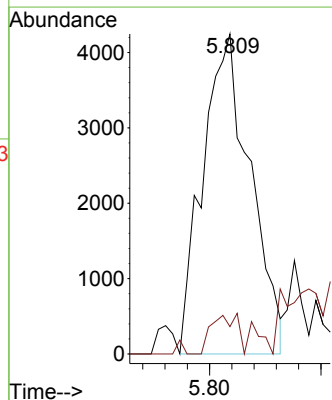
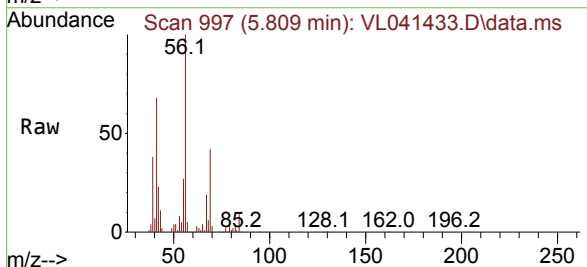
Instrument :
MSVOA_L
ClientSampleId :

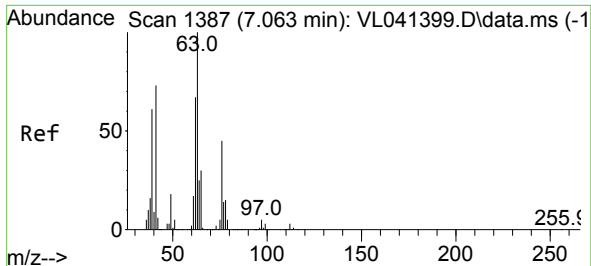
Tgt Ion: 78 Resp: 419381
Ion Ratio Lower Upper
78 100
77 20.6 18.1 27.1
50 18.3 15.5 23.3



#37
1,2-Dichloroethane
Concen: 0.051 ppbv
RT: 5.809 min Scan# 997
Delta R.T. 0.013 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 62 Resp: 6274
Ion Ratio Lower Upper
62 100
98 0.0 5.0 7.4#





#39

1,2-Dichloropropane

Concen: 8.897 ppbv

RT: 6.648 min Scan# 11

Delta R.T. -0.415 min

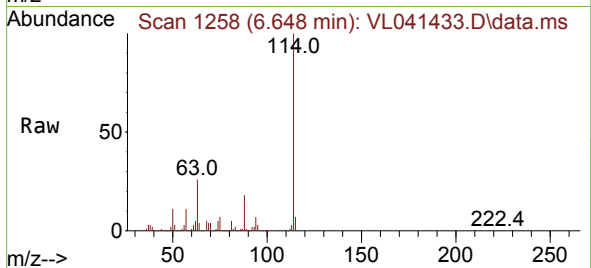
Lab File: VL041433.D

Acq: 29 Jul 2024 17:40

Instrument :

MSVOA_L

ClientSampleId :



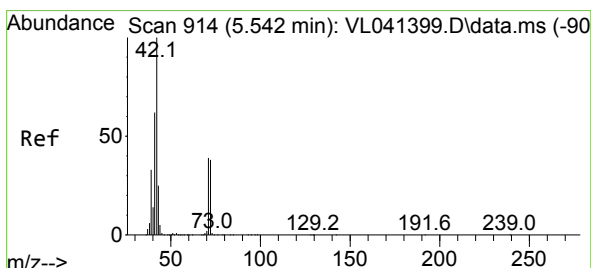
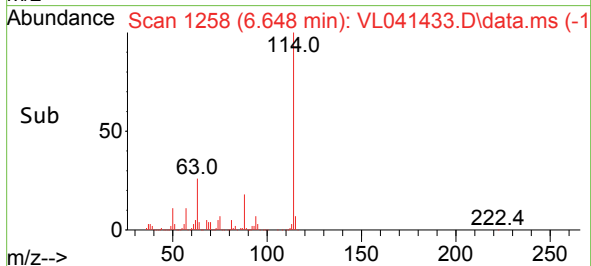
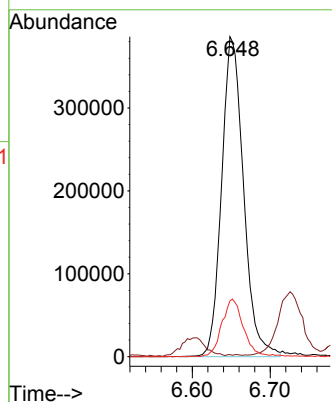
Tgt Ion: 63 Resp: 754248

Ion Ratio Lower Upper

63 100

41 0.0 58.3 87.5#

62 17.4 53.9 80.9#



#41

Tetrahydrofuran

Concen: 0.874 ppbv

RT: 5.816 min Scan# 999

Delta R.T. 0.270 min

Lab File: VL041433.D

Acq: 29 Jul 2024 17:40

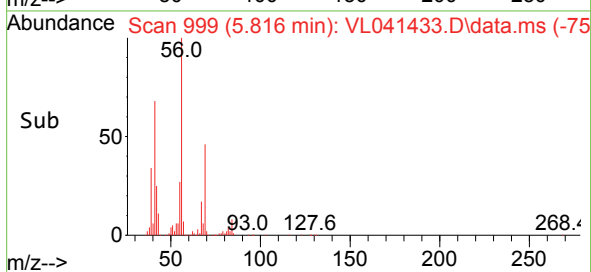
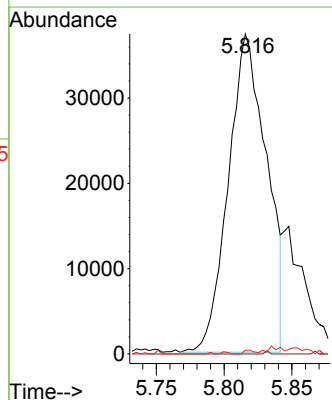
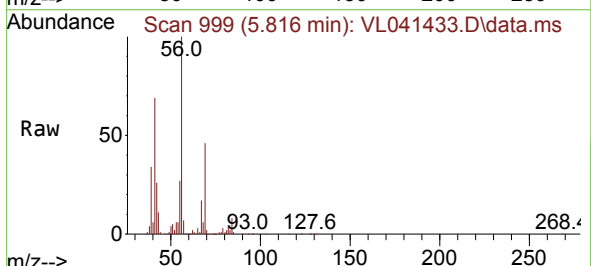
Tgt Ion: 42 Resp: 73246

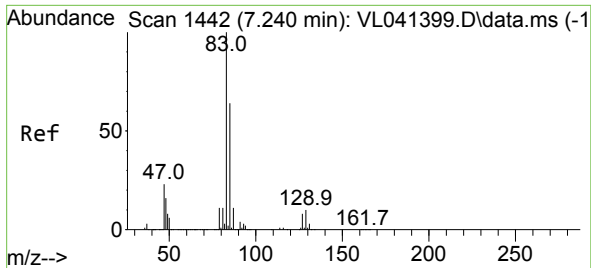
Ion Ratio Lower Upper

42 100

72 0.6 31.2 46.8#

71 0.0 30.5 45.7#

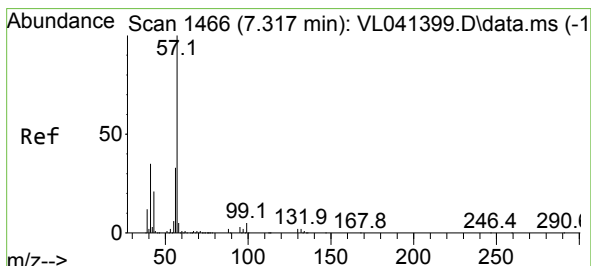
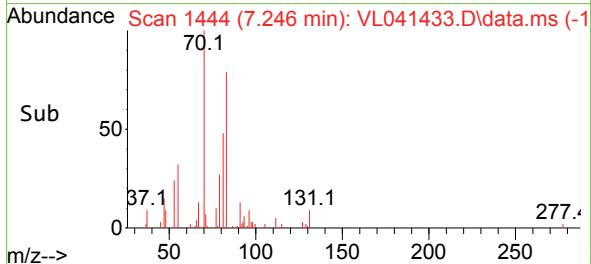
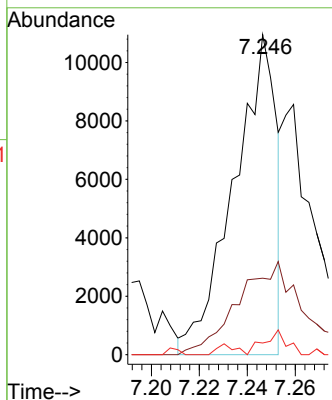
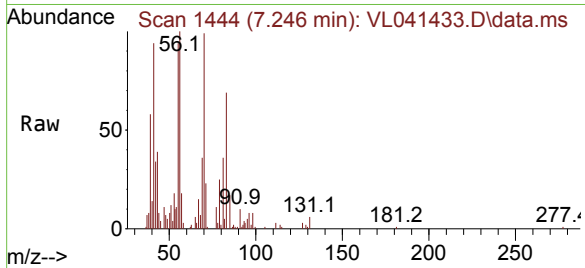




#42
 Bromodichloromethane
 Concen: 0.075 ppbv
 RT: 7.246 min Scan# 1444
 Delta R.T. 0.006 min
 Lab File: VL041433.D
 Acq: 29 Jul 2024 17:40

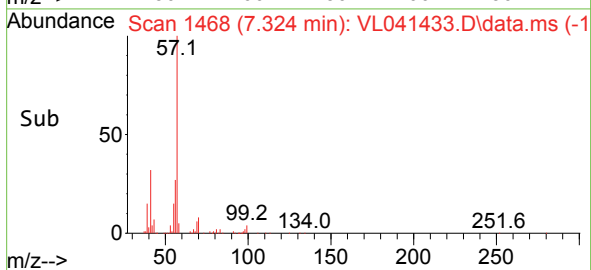
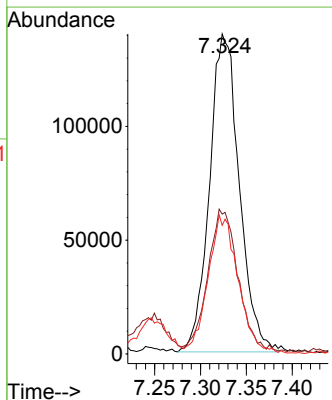
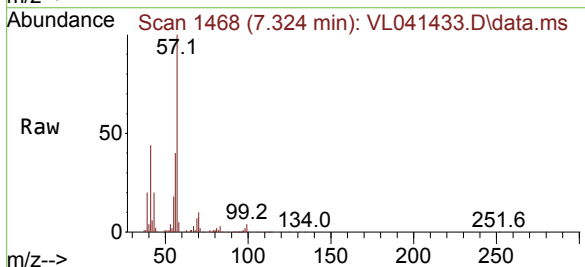
Instrument :
 MSVOA_L
 ClientSampleId :

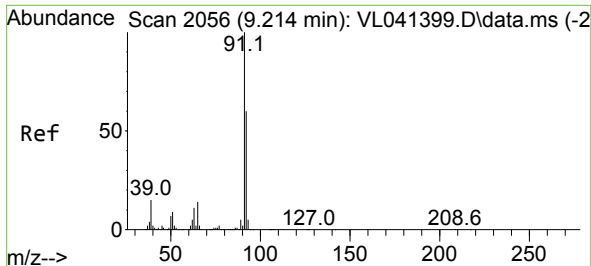
Tgt Ion: 83 Resp: 13441
 Ion Ratio Lower Upper
 83 100
 85 25.2 51.4 77.0#
 127 2.2 6.7 10.1#



#44
 2,2,4-Trimethylpentane
 Concen: 0.853 ppbv
 RT: 7.324 min Scan# 1468
 Delta R.T. 0.006 min
 Lab File: VL041433.D
 Acq: 29 Jul 2024 17:40

Tgt Ion: 57 Resp: 315376
 Ion Ratio Lower Upper
 57 100
 41 46.1 27.0 40.6#
 56 44.3 25.2 37.8#

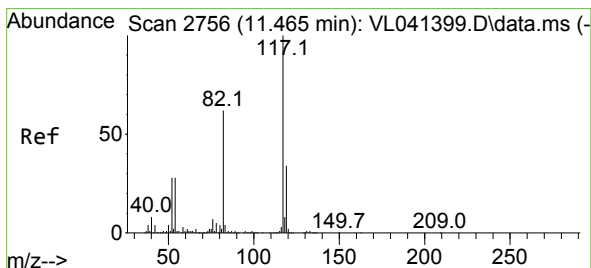
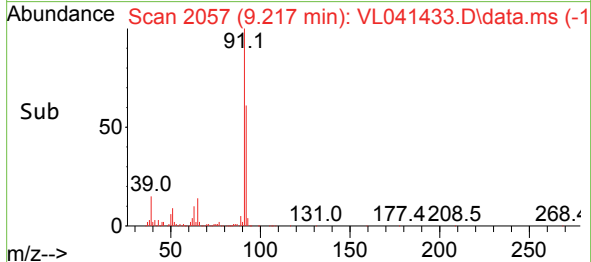
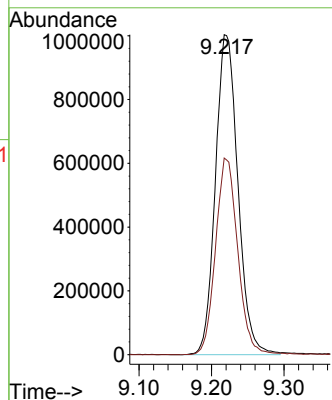
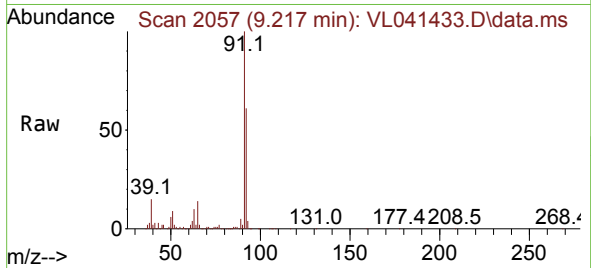




#53
Toluene
Concen: 8.770 ppbv
RT: 9.217 min Scan# 2056
Delta R.T. 0.000 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

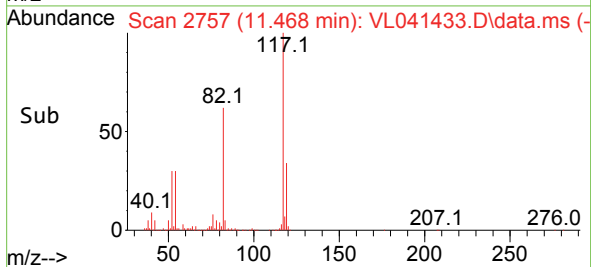
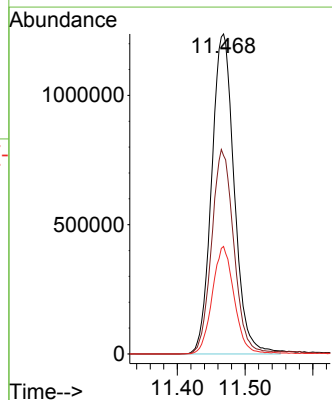
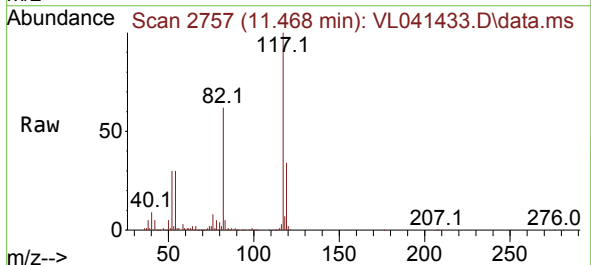
Instrument :
MSVOA_L
ClientSampleId :

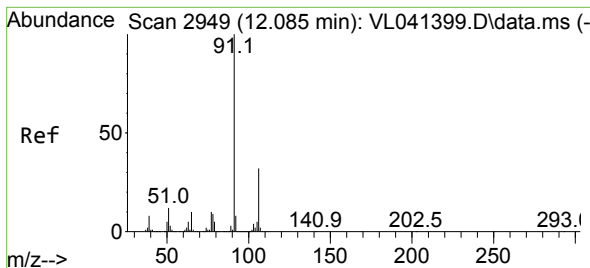
Tgt Ion: 91 Resp: 2162966
Ion Ratio Lower Upper
91 100
92 61.0 48.7 73.1



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.468 min Scan# 2757
Delta R.T. 0.003 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 117 Resp: 2865022
Ion Ratio Lower Upper
117 100
82 64.5 51.0 76.6
119 32.8 45.2 67.8#





#58

Ethyl Benzene

Concen: 1.274 ppbv

RT: 12.089 min Scan# 2949

Delta R.T. 0.003 min

Lab File: VL041433.D

Acq: 29 Jul 2024 17:40

Instrument :

MSVOA_L

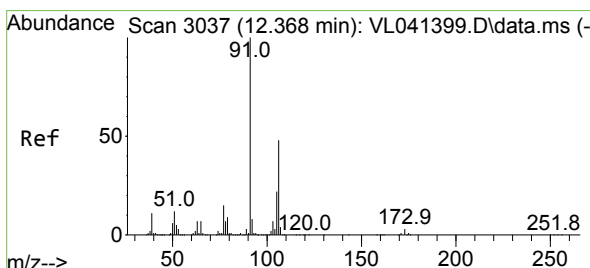
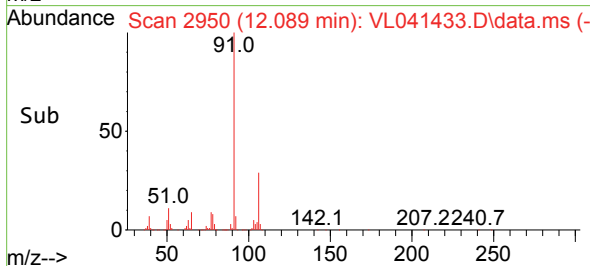
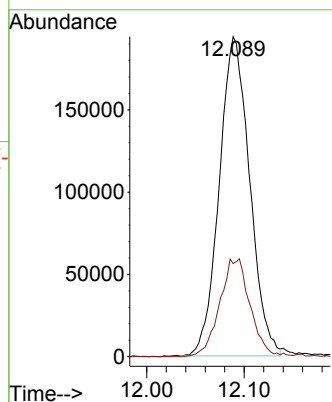
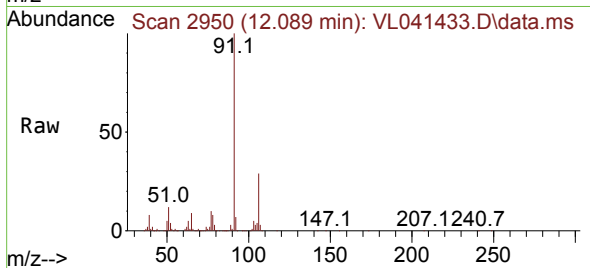
ClientSampleId :

Tgt Ion: 91 Resp: 420678

Ion Ratio Lower Upper

91 100

106 29.0 25.8 38.8



#59

m/p-Xylene

Concen: 4.255 ppbv

RT: 12.346 min Scan# 3030

Delta R.T. -0.022 min

Lab File: VL041433.D

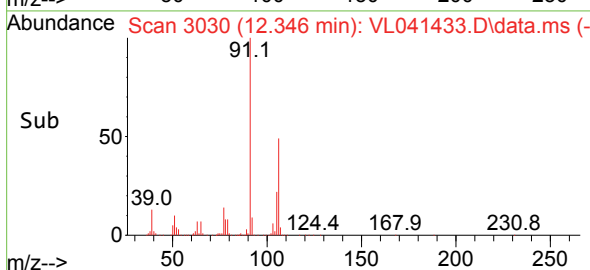
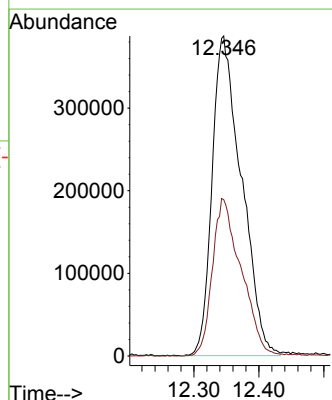
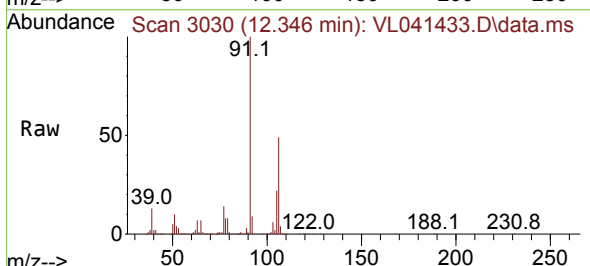
Acq: 29 Jul 2024 17:40

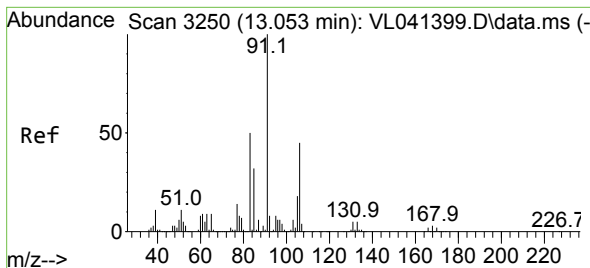
Tgt Ion: 91 Resp: 1212994

Ion Ratio Lower Upper

91 100

106 48.9 36.3 54.5





#60

o-Xylene

Concen: 1.548 ppbv

RT: 13.056 min Scan# 31

Delta R.T. 0.000 min

Lab File: VL041433.D

Acq: 29 Jul 2024 17:40

Instrument :

MSVOA_L

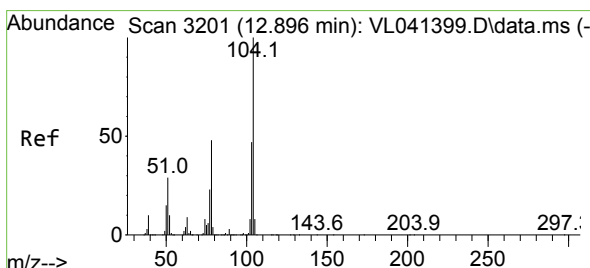
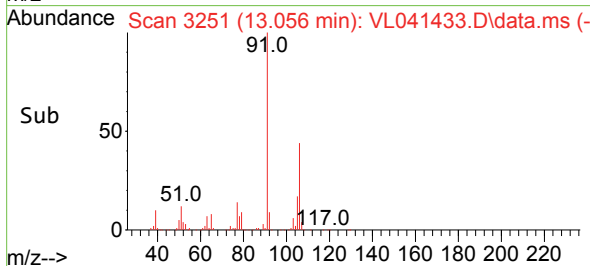
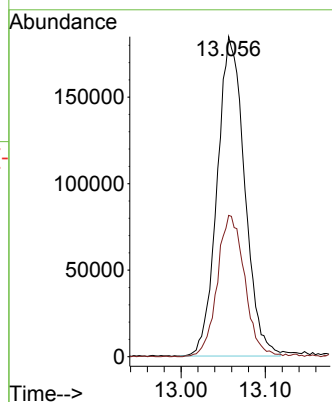
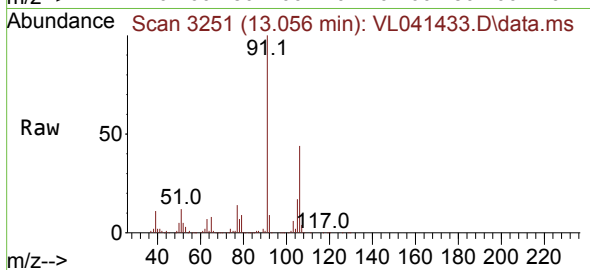
ClientSampleId :

Tgt Ion: 91 Resp: 417372

Ion Ratio Lower Upper

91 100

106 44.7 23.1 69.3



#61

Styrene

Concen: 0.309 ppbv

RT: 12.902 min Scan# 3203

Delta R.T. 0.007 min

Lab File: VL041433.D

Acq: 29 Jul 2024 17:40

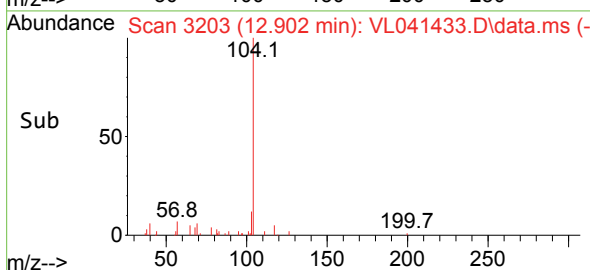
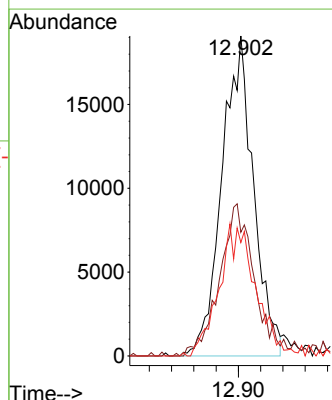
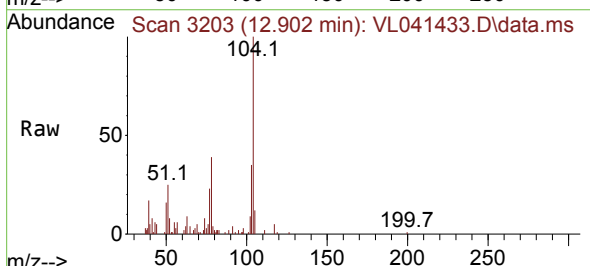
Tgt Ion:104 Resp: 37585

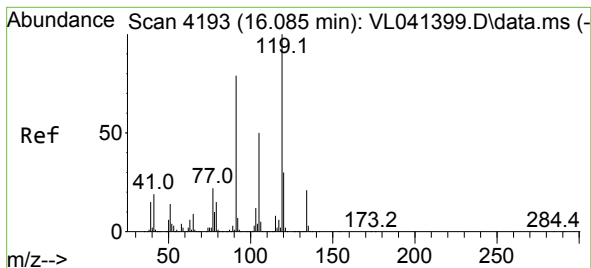
Ion Ratio Lower Upper

104 100

78 55.0 40.8 61.2

103 47.8 38.2 57.4

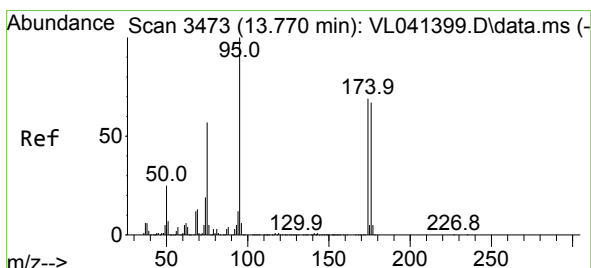
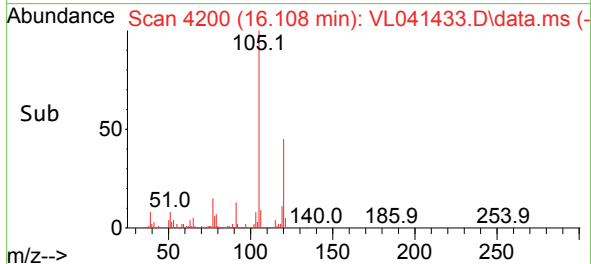
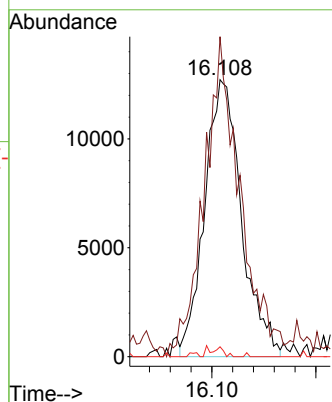
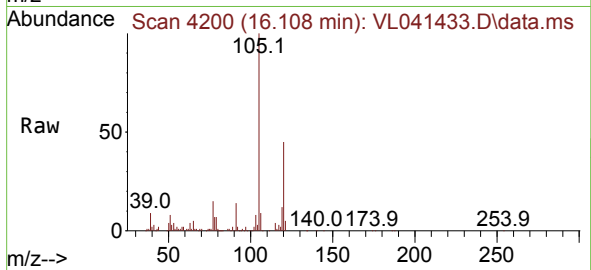




#65
tert-Butylbenzene
Concen: 0.085 ppbv
RT: 16.108 min Scan# 4193
Delta R.T. 0.016 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

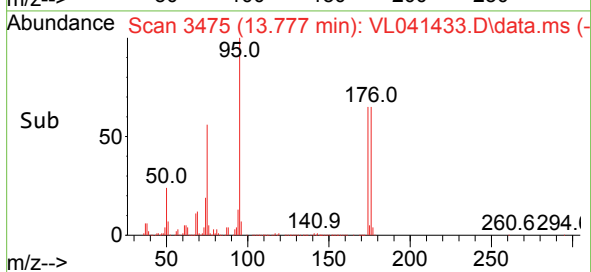
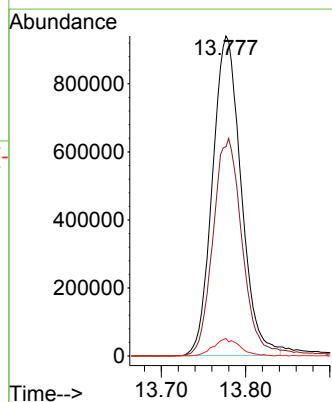
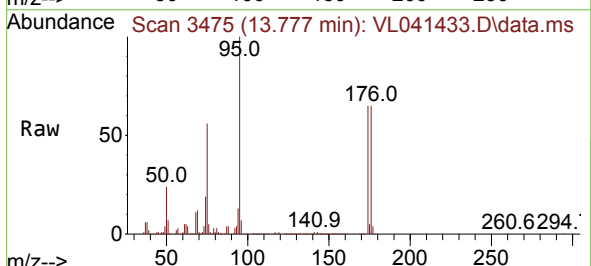
Instrument :
MSVOA_L
ClientSampleId :

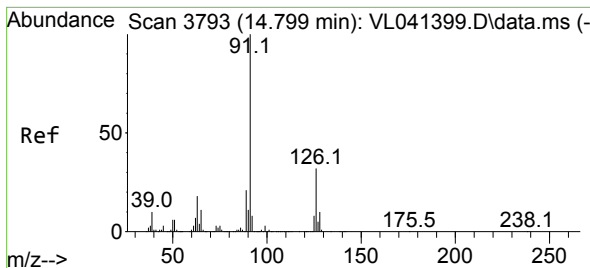
Tgt Ion:119 Resp: 31299
Ion Ratio Lower Upper
119 100
91 113.8 64.2 96.2#
134 1.7 15.7 23.5#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.047 ppbv
RT: 13.777 min Scan# 3475
Delta R.T. 0.003 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 95 Resp: 2215160
Ion Ratio Lower Upper
95 100
174 71.7 56.3 84.5
175 5.2 4.0 6.0

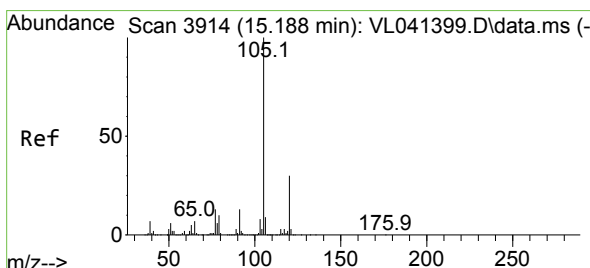
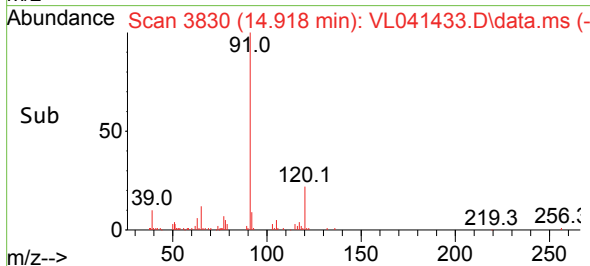
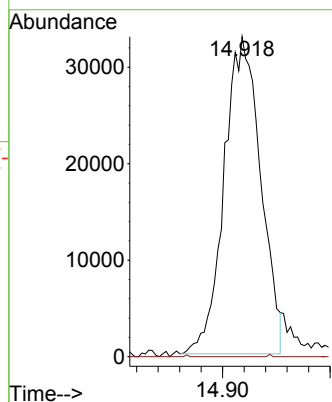
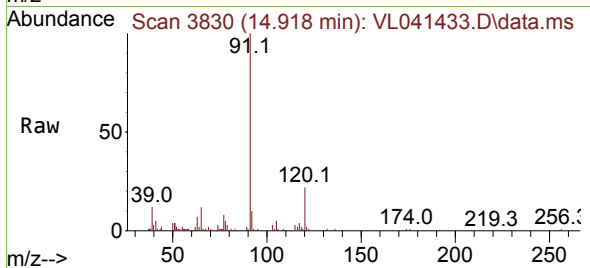




#71
2-Chlorotoluene
Concen: 0.257 ppbv
RT: 14.918 min Scan# 3830
Delta R.T. 0.119 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

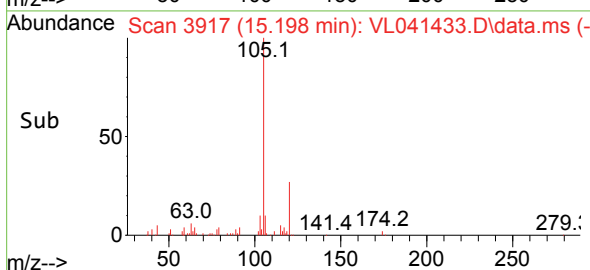
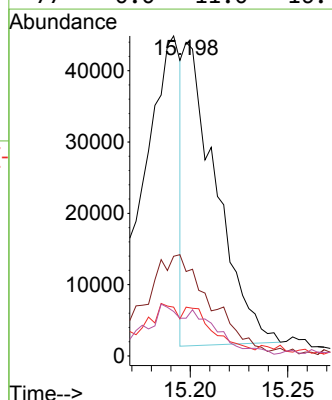
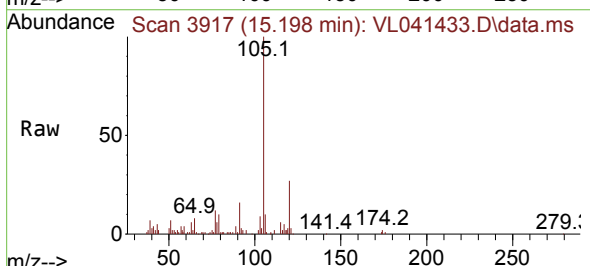
Instrument :
MSVOA_L
ClientSampleId :

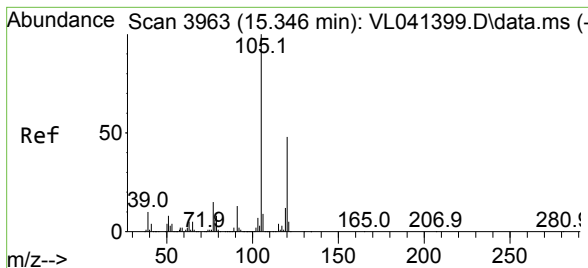
Tgt Ion: 91 Resp: 77612
Ion Ratio Lower Upper
91 100
126 0.0 12.7 50.9#



#72
4-Ethyltoluene
Concen: 0.154 ppbv
RT: 15.198 min Scan# 3917
Delta R.T. 0.006 min
Lab File: VL041433.D
Acq: 29 Jul 2024 17:40

Tgt Ion: 105 Resp: 49040
Ion Ratio Lower Upper
105 100
120 67.7 24.2 36.2#
91 0.0 10.4 15.6#
77 0.0 11.0 16.4#





#73

1,3,5-Trimethylbenzene

Concen: 0.222 ppbv

RT: 15.355 min Scan# 3966

Delta R.T. 0.007 min

Lab File: VL041433.D

Acq: 29 Jul 2024 17:40

Instrument :

MSVOA_L

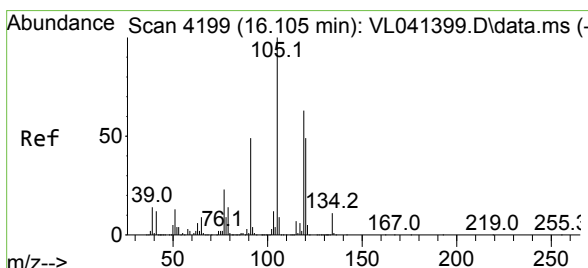
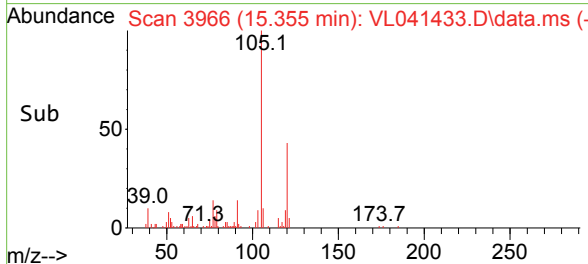
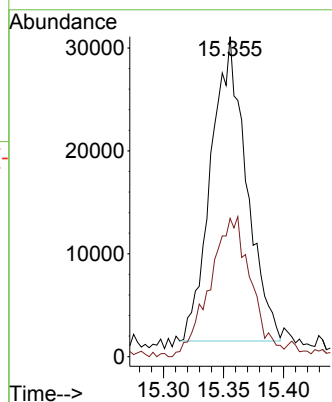
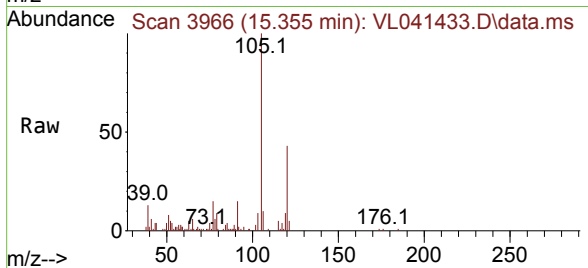
ClientSampleId :

Tgt Ion:105 Resp: 60745

Ion Ratio Lower Upper

105 100

120 43.8 38.6 57.8



#74

1,2,4-Trimethylbenzene

Concen: 0.816 ppbv

RT: 16.108 min Scan# 4200

Delta R.T. 0.000 min

Lab File: VL041433.D

Acq: 29 Jul 2024 17:40

Tgt Ion:105 Resp: 259580

Ion Ratio Lower Upper

105 100

120 44.7 39.5 59.3

91 13.1 39.8 59.8#

77 14.7 18.2 27.4#

