

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL072924\
 Data File : VL041425.D
 Acq On : 29 Jul 2024 12:14
 Operator : SY/MD
 Sample : P3342-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jul 30 02:48:14 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)

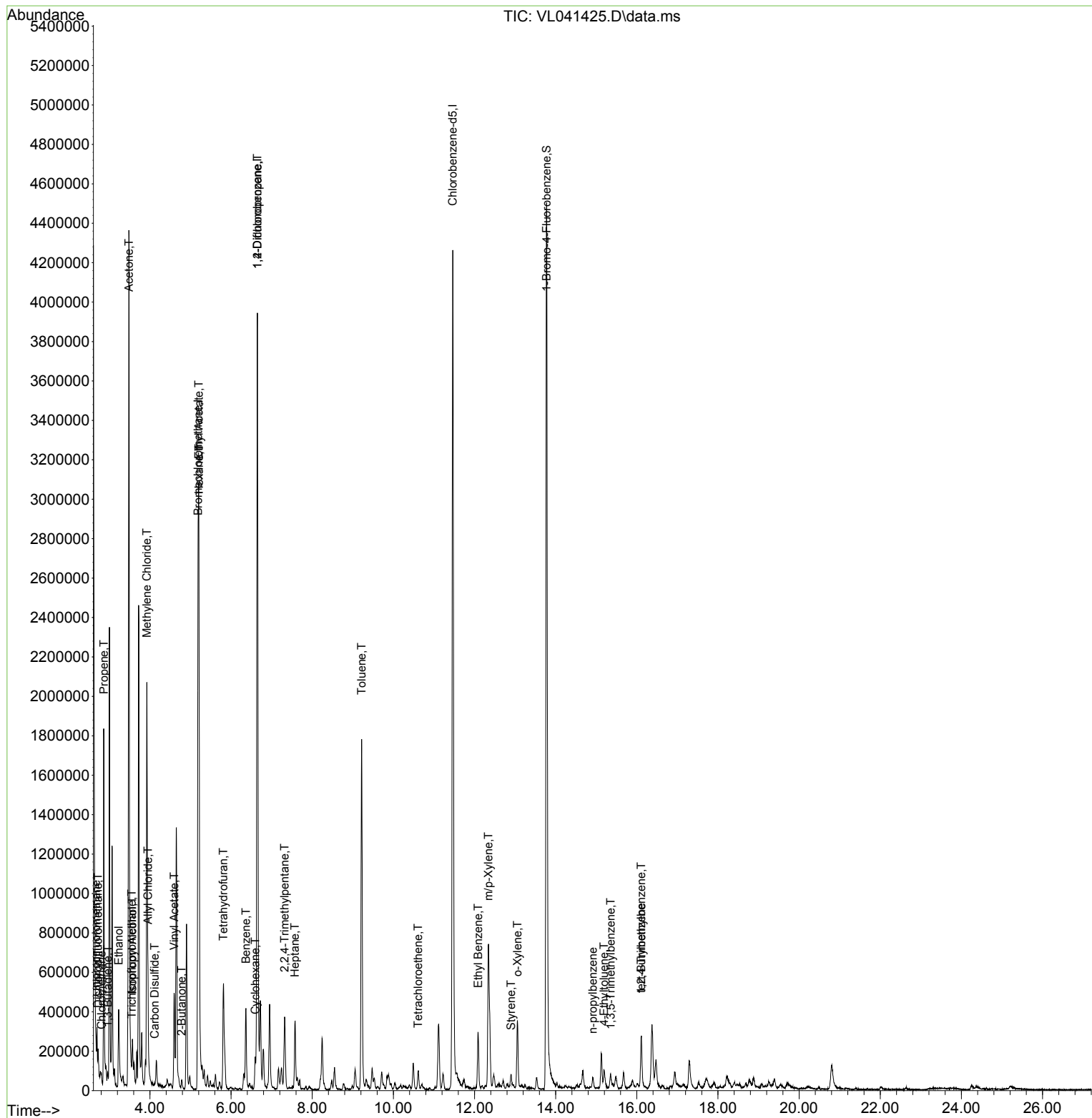
Internal Standards						
1) Bromochloromethane	5.185	49	1070449	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.648	114	2985146	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.465	117	2858080	10.000	ppbv	# 0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.773	95	2225855	10.120	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.200%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.719	85	13299	0.072	ppbv	92
3) Chlorodifluoromethane	2.671	51	16099	0.126	ppbv #	78
4) Chloromethane	2.806	50	4048	0.060	ppbv	90
9) Propene	2.864	41	482192	8.237	ppbv	97
10) Heptane	7.574	43	126005	0.958	ppbv	94
11) Trichlorofluoromethane	3.552	101	9261	0.057	ppbv	100
13) Ethanol	3.230	45	441048	84.296	ppbv	93
15) Acetone	3.481	43	1898827	15.612	ppbv #	67
16) 1,3-Butadiene	2.957	39	11934	0.184	ppbv #	10
19) Isopropyl Alcohol	3.568	45	204895	2.882	ppbv #	1
20) Methylene Chloride	3.925	84	643075	14.179	ppbv	97
21) Allyl Chloride	3.951	41	26611	0.334	ppbv #	19
23) Vinyl Acetate	4.600	43	168338	1.812	ppbv #	1
25) Ethyl Acetate	5.205	43	696446	2.882	ppbv #	80
26) Hexane	5.208	57	933952	9.318	ppbv #	39
27) Carbon Disulfide	4.115	76	4942	0.042	ppbv #	1
30) Cyclohexane	6.600	84	46166	0.566	ppbv	88
34) 2-Butanone	4.780	43	40623	0.281	ppbv #	84
36) Benzene	6.365	78	310599	1.424	ppbv	96
39) 1,2-Dichloropropane	6.648	63	723372	8.662	ppbv #	26
41) Tetrahydrofuran	5.809	42	64284	0.778	ppbv #	37
44) 2,2,4-Trimethylpentane	7.320	57	255126	0.700	ppbv #	76
52) Tetrachloroethene	10.610	164	11440	0.136	ppbv	92
53) Toluene	9.217	91	1370088	5.639	ppbv	100
58) Ethyl Benzene	12.089	91	246069	0.747	ppbv	93
59) m/p-Xylene	12.343	91	766157	2.694	ppbv	97
60) o-Xylene	13.060	91	263146	0.978	ppbv	99
61) Styrene	12.899	104	40558	0.334	ppbv	95
64) n-propylbenzene	14.918	120	9653	0.090	ppbv #	40
65) tert-Butylbenzene	16.105	119	13412	0.036	ppbv #	1
72) 4-Ethyltoluene	15.195	105	39016	0.123	ppbv #	50
73) 1,3,5-Trimethylbenzene	15.355	105	45631	0.167	ppbv	87
74) 1,2,4-Trimethylbenzene	16.108	105	211883	0.668	ppbv #	70

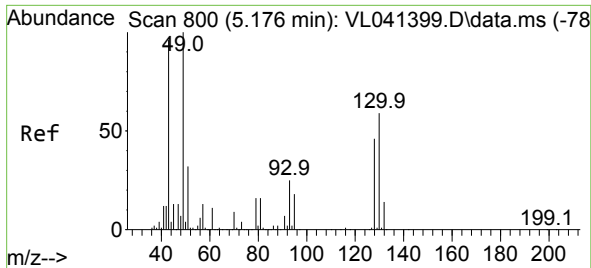
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL072924\
Data File : VL041425.D
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Instrument :
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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

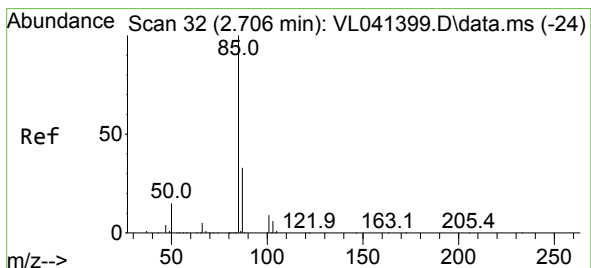
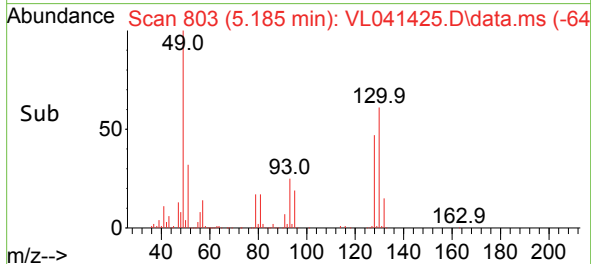
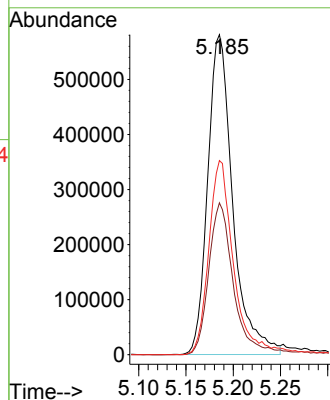
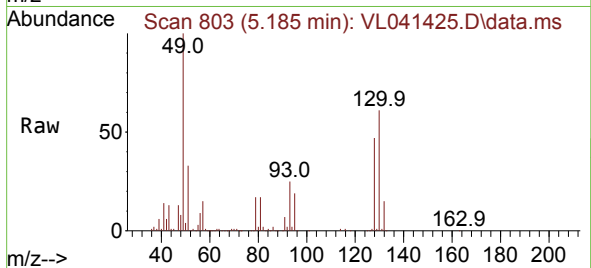




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.185 min Scan# 80
Delta R.T. 0.006 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

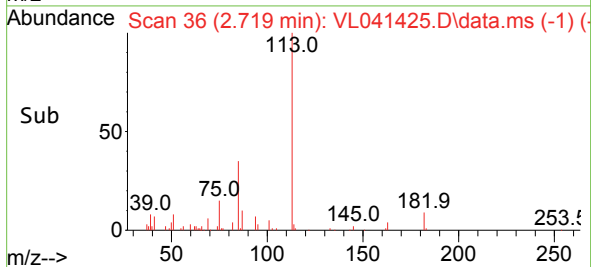
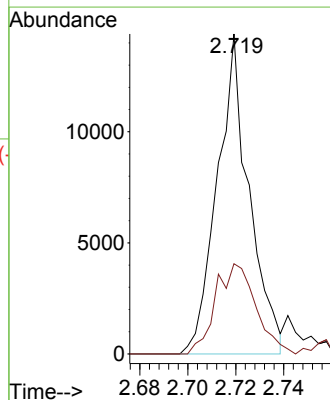
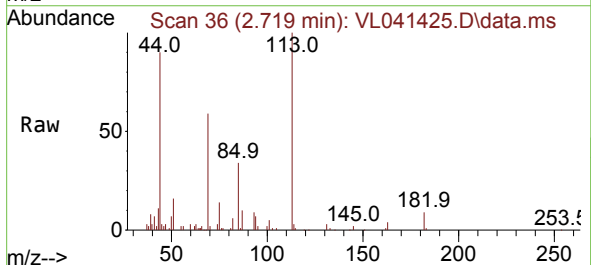
Instrument :
MSVOA_L
ClientSampleId :

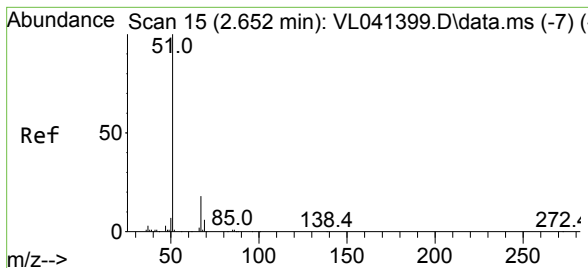
Tgt Ion: 49 Resp: 1070449
Ion Ratio Lower Upper
49 100
128 48.2 23.8 71.4
130 62.2 30.8 92.4



#2
Dichlorodifluoromethane
Concen: 0.072 ppbv
RT: 2.719 min Scan# 36
Delta R.T. 0.010 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

Tgt Ion: 85 Resp: 13299
Ion Ratio Lower Upper
85 100
87 28.2 26.0 39.0





#3

Chlorodifluoromethane

Concen: 0.126 ppbv

RT: 2.671 min Scan# 21

Delta R.T. 0.016 min

Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Instrument :

MSVOA_L

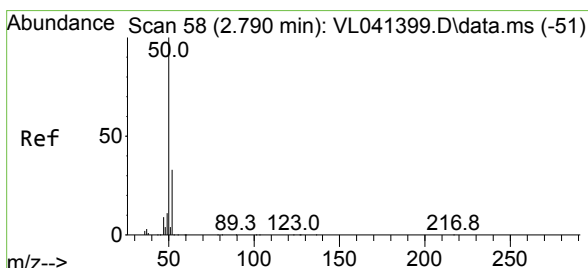
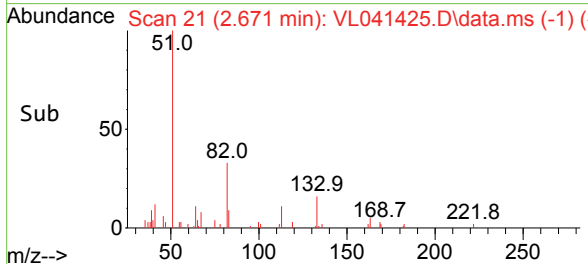
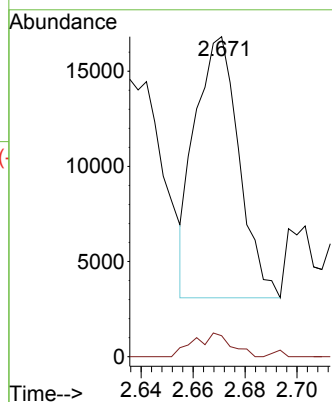
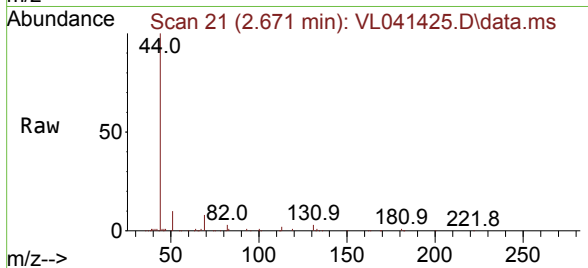
ClientSampleId :

Tgt Ion: 51 Resp: 16099

Ion Ratio Lower Upper

51 100

67 8.3 14.5 21.7#



#4

Chloromethane

Concen: 0.060 ppbv

RT: 2.806 min Scan# 63

Delta R.T. 0.013 min

Lab File: VL041425.D

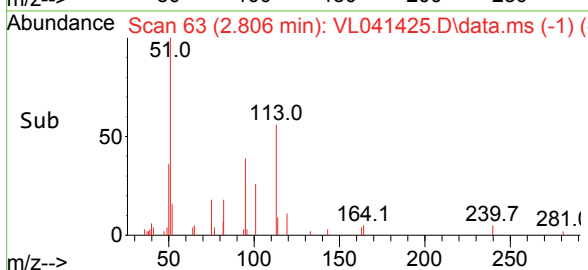
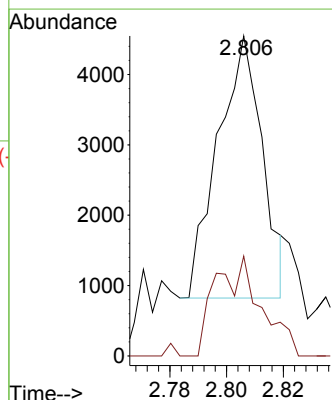
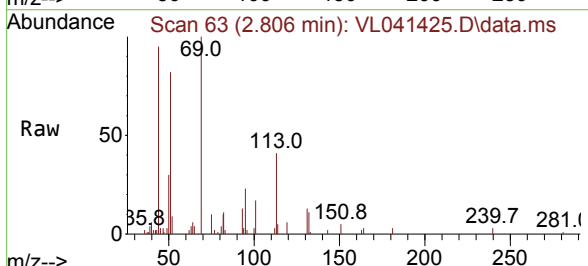
Acq: 29 Jul 2024 12:14

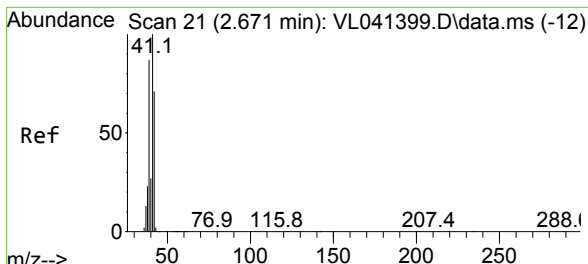
Tgt Ion: 50 Resp: 4048

Ion Ratio Lower Upper

50 100

52 38.1 26.1 39.1

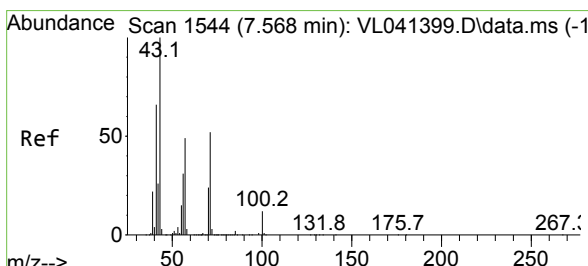
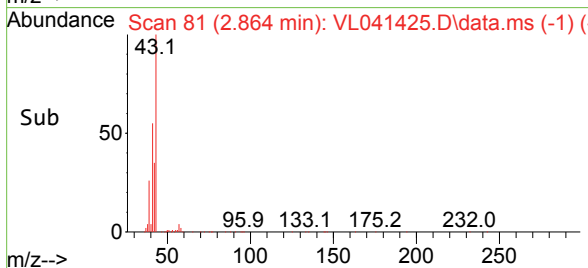
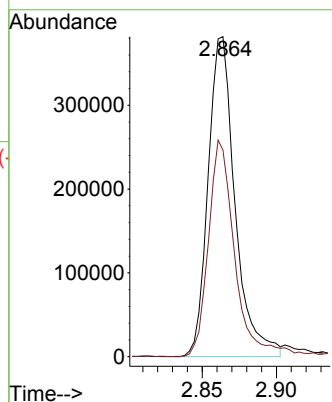
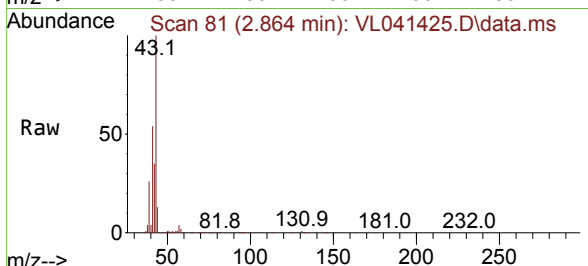




#9
 Propene
 Concen: 8.237 ppbv
 RT: 2.864 min Scan# 81
 Delta R.T. 0.193 min
 Lab File: VL041425.D
 Acq: 29 Jul 2024 12:14

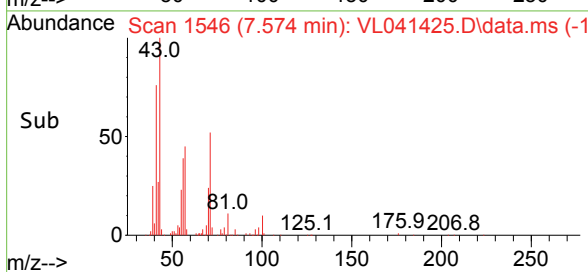
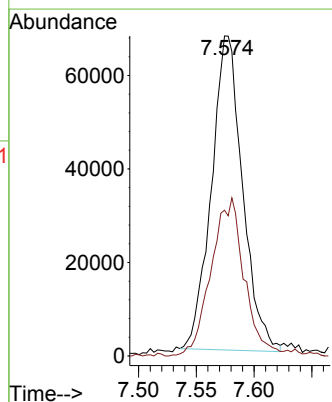
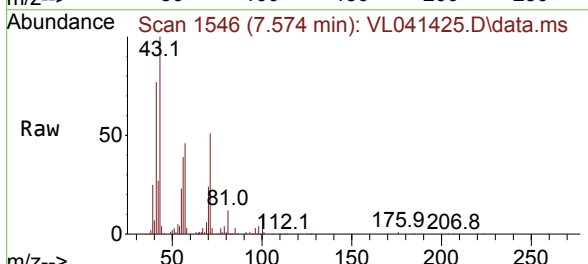
Instrument :
 MSVOA_L
 ClientSampleId :

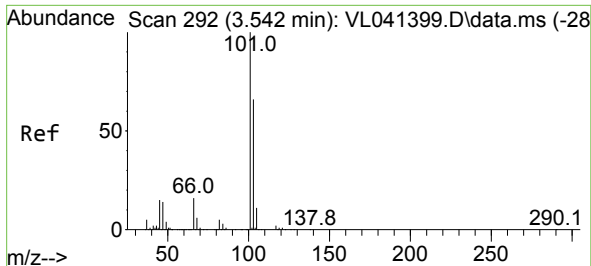
Tgt Ion: 41 Resp: 482192
 Ion Ratio Lower Upper
 41 100
 42 67.7 55.9 83.9



#10
 Heptane
 Concen: 0.958 ppbv
 RT: 7.574 min Scan# 1546
 Delta R.T. 0.003 min
 Lab File: VL041425.D
 Acq: 29 Jul 2024 12:14

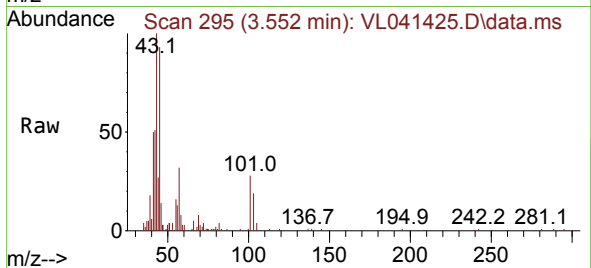
Tgt Ion: 43 Resp: 126005
 Ion Ratio Lower Upper
 43 100
 57 54.7 40.5 60.7



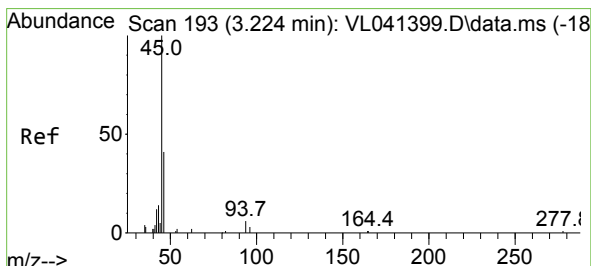
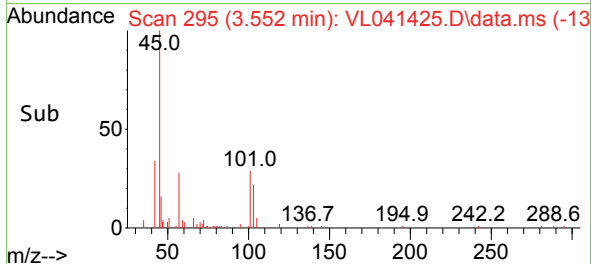
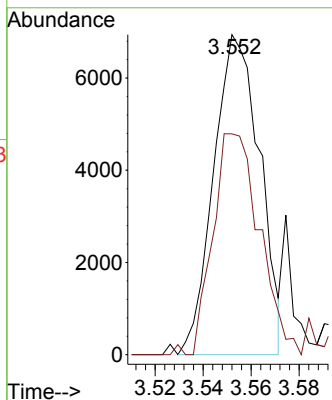


#11
 Trichlorofluoromethane
 Concen: 0.057 ppbv
 RT: 3.552 min Scan# 292
 Delta R.T. 0.006 min
 Lab File: VL041425.D
 Acq: 29 Jul 2024 12:14

Instrument :
 MSVOA_L
 ClientSampleId :

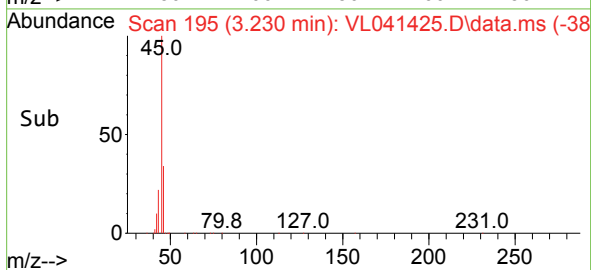
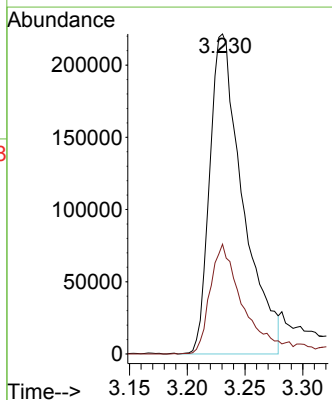
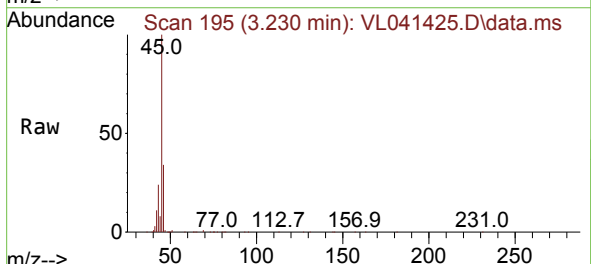


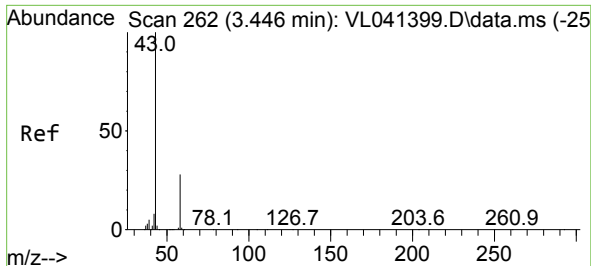
Tgt Ion:101 Resp: 9261
 Ion Ratio Lower Upper
 101 100
 103 65.8 52.6 79.0



#13
 Ethanol
 Concen: 84.296 ppbv
 RT: 3.230 min Scan# 195
 Delta R.T. 0.003 min
 Lab File: VL041425.D
 Acq: 29 Jul 2024 12:14

Tgt Ion: 45 Resp: 441048
 Ion Ratio Lower Upper
 45 100
 46 37.5 13.4 53.4

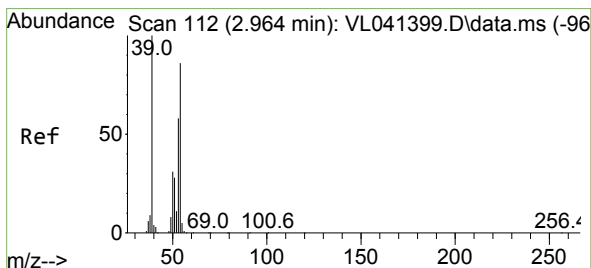
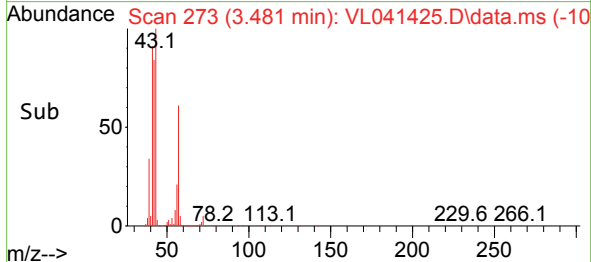
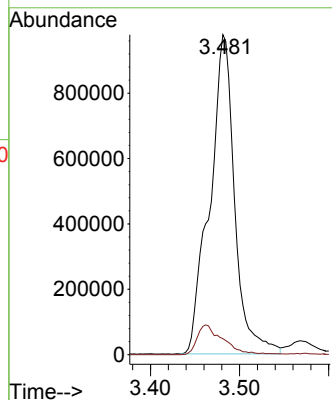
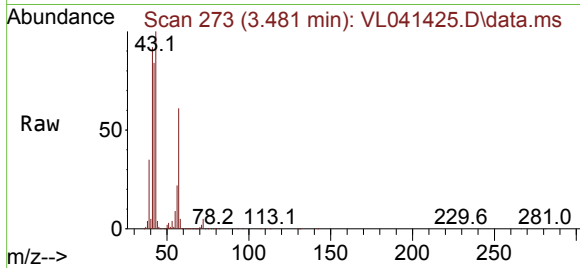




#15
Acetone
Concen: 15.612 ppbv
RT: 3.481 min Scan# 21
Delta R.T. 0.029 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

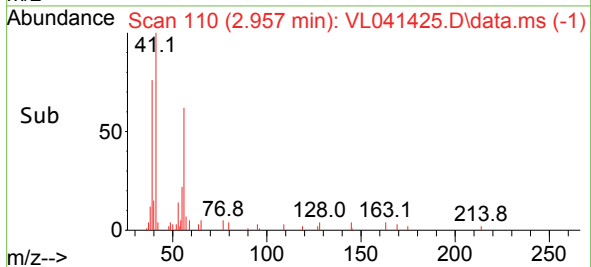
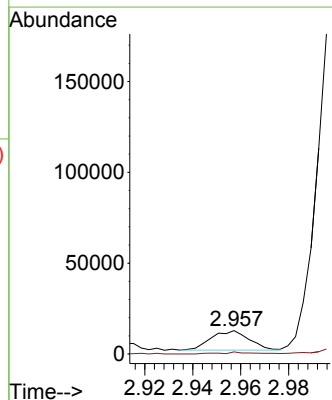
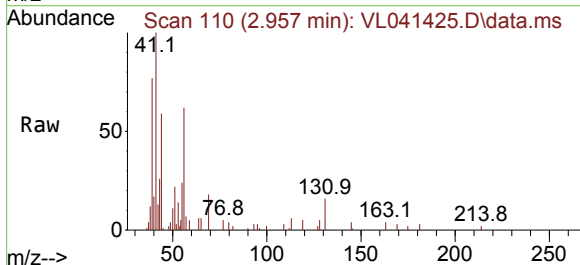
Instrument :
MSVOA_L
ClientSampleId :

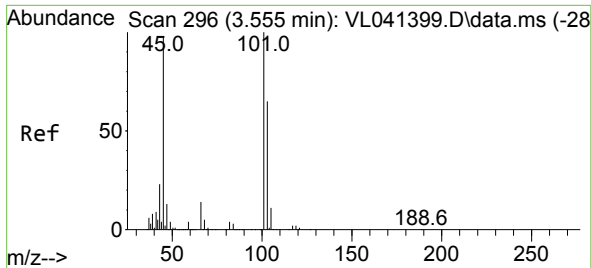
Tgt Ion: 43 Resp: 1898827
Ion Ratio Lower Upper
43 100
58 9.8 21.4 32.2#



#16
1,3-Butadiene
Concen: 0.184 ppbv
RT: 2.957 min Scan# 110
Delta R.T. -0.010 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

Tgt Ion: 39 Resp: 11934
Ion Ratio Lower Upper
39 100
54 0.0 62.5 93.7#





#19

Isopropyl Alcohol

Concen: 2.882 ppbv

RT: 3.568 min Scan# 30

Delta R.T. 0.006 min

Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Instrument :

MSVOA_L

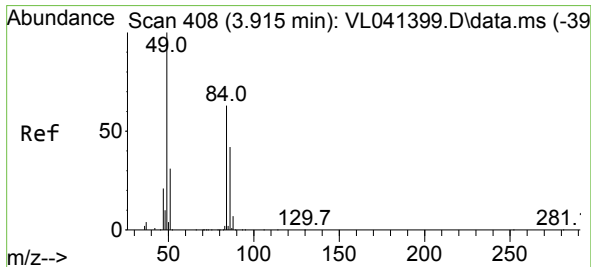
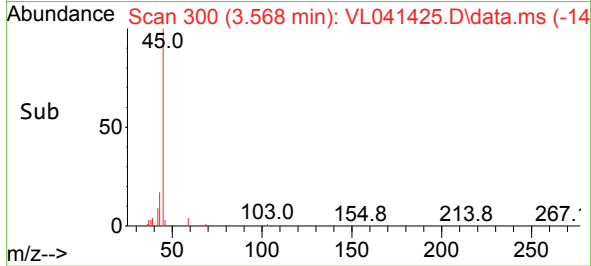
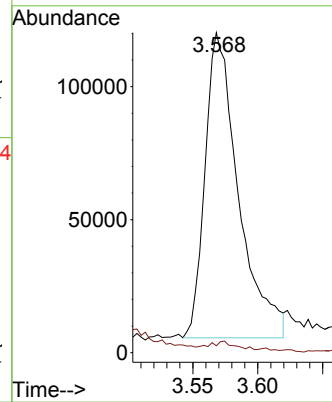
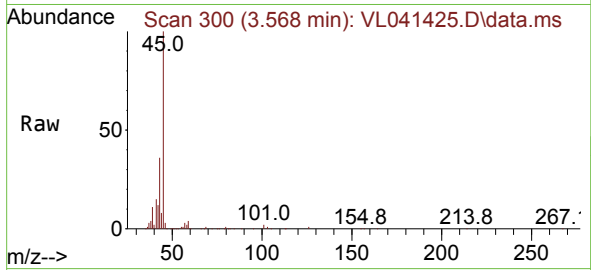
ClientSampleId :

Tgt Ion: 45 Resp: 204895

Ion Ratio Lower Upper

45 100

58 95.6 1.9 2.9#



#20

Methylene Chloride

Concen: 14.179 ppbv

RT: 3.925 min Scan# 411

Delta R.T. 0.006 min

Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Tgt Ion: 84 Resp: 643075

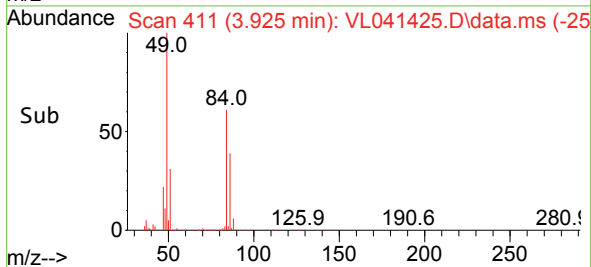
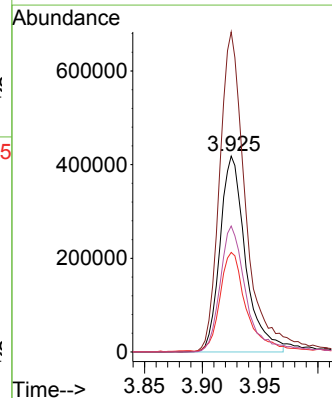
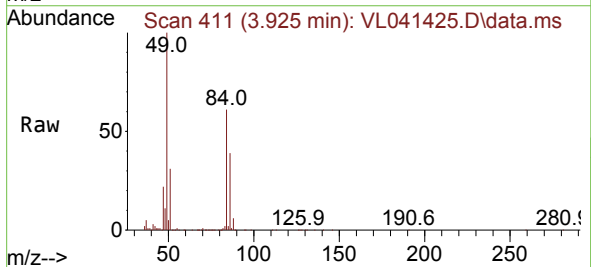
Ion Ratio Lower Upper

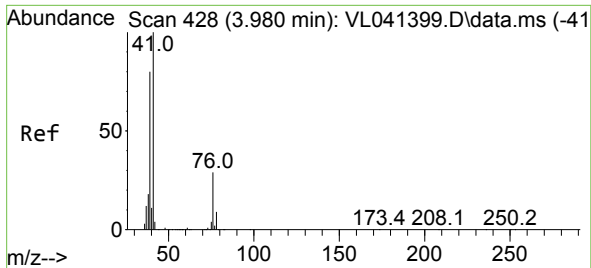
84 100

49 163.3 126.6 190.0

51 50.2 38.6 58.0

86 64.3 53.0 79.4

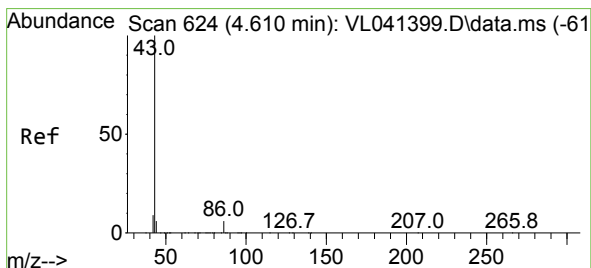
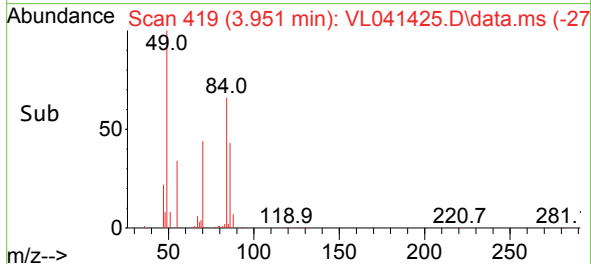
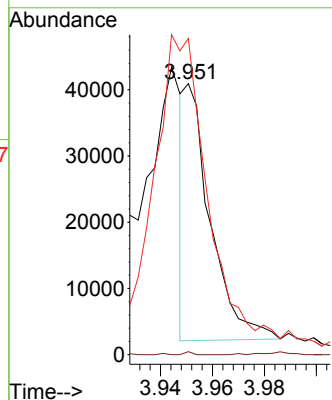
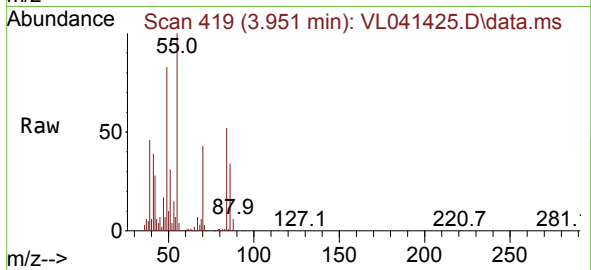




#21
 Allyl Chloride
 Concen: 0.334 ppbv
 RT: 3.951 min Scan# 41
 Delta R.T. -0.029 min
 Lab File: VL041425.D
 Acq: 29 Jul 2024 12:14

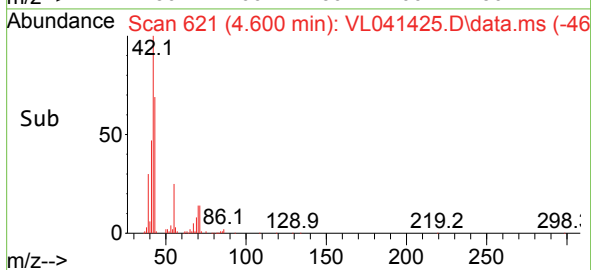
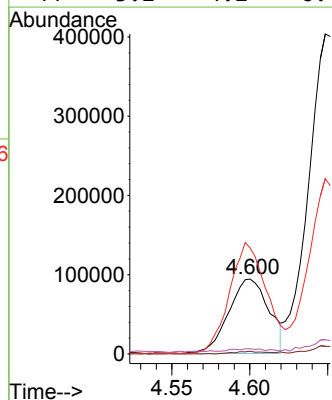
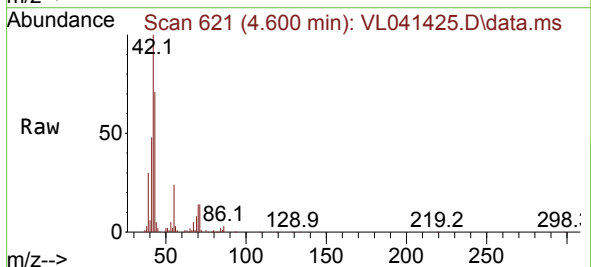
Instrument :
 MSVOA_L
 ClientSampleId :

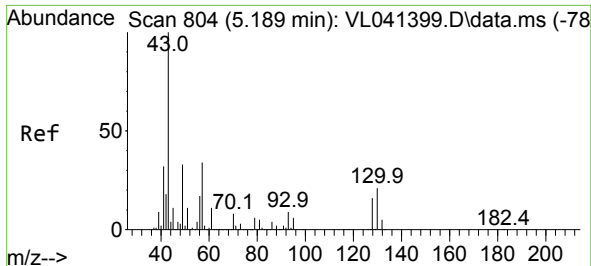
Tgt Ion: 41 Resp: 26611
 Ion Ratio Lower Upper
 41 100
 76 1.1 23.7 35.5#
 39 0.0 64.3 96.5#



#23
 Vinyl Acetate
 Concen: 1.812 ppbv
 RT: 4.600 min Scan# 621
 Delta R.T. -0.013 min
 Lab File: VL041425.D
 Acq: 29 Jul 2024 12:14

Tgt Ion: 43 Resp: 168338
 Ion Ratio Lower Upper
 43 100
 86 3.6 4.6 6.8#
 42 141.9 7.9 11.9#
 44 3.2 4.2 6.4#

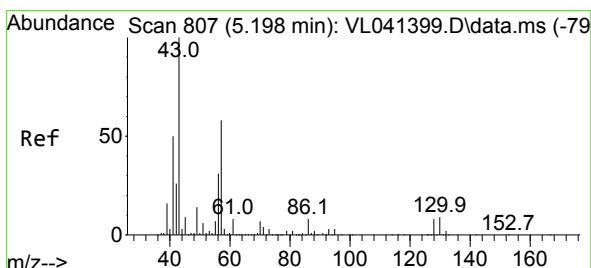
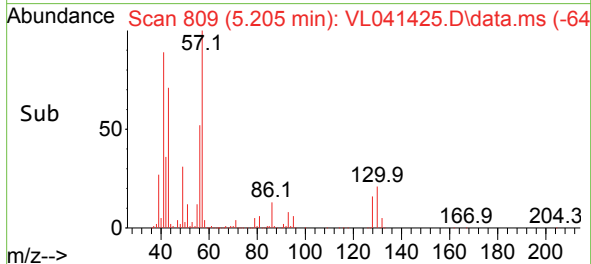
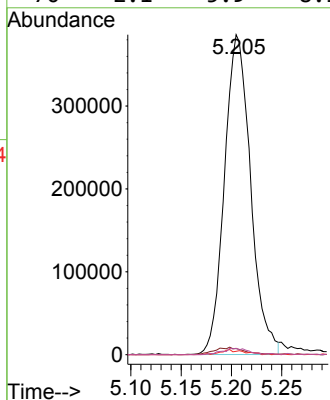
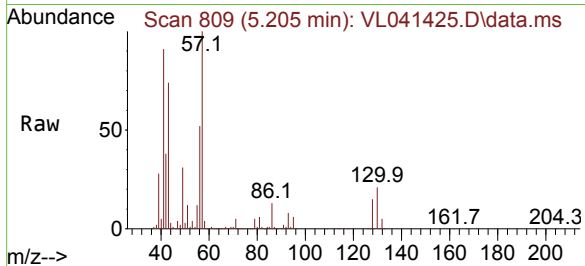




#25
Ethyl Acetate
Concen: 2.882 ppbv
RT: 5.205 min Scan# 80
Delta R.T. 0.013 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

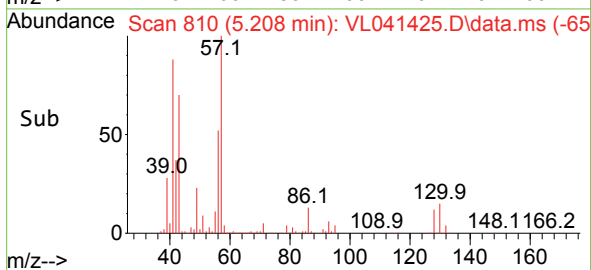
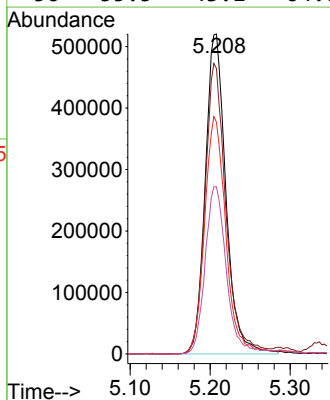
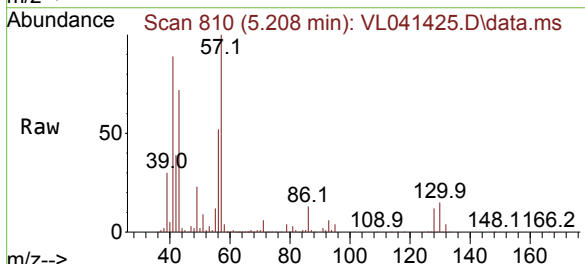
Instrument :
MSVOA_L
ClientSampleId :

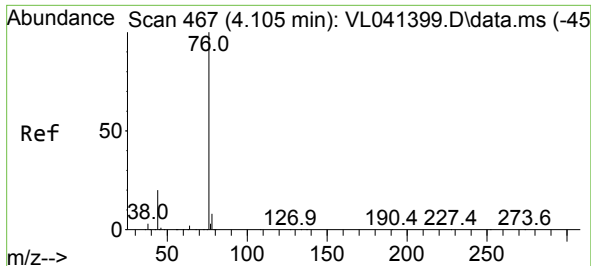
Tgt Ion: 43 Resp: 696446
Ion Ratio Lower Upper
43 100
45 2.9 8.5 12.7#
61 1.6 8.0 12.0#
70 2.1 5.9 8.9#



#26
Hexane
Concen: 9.318 ppbv
RT: 5.208 min Scan# 810
Delta R.T. 0.010 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

Tgt Ion: 57 Resp: 933952
Ion Ratio Lower Upper
57 100
41 94.2 74.0 111.0
43 77.2 193.6 290.4#
56 55.5 43.1 64.7





#27

Carbon Disulfide

Concen: 0.042 ppbv

RT: 4.115 min Scan# 41

Delta R.T. 0.006 min

Lab File: VL041425.D

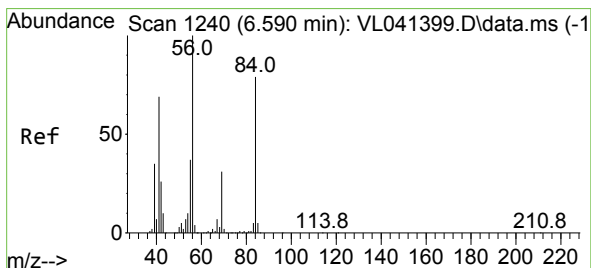
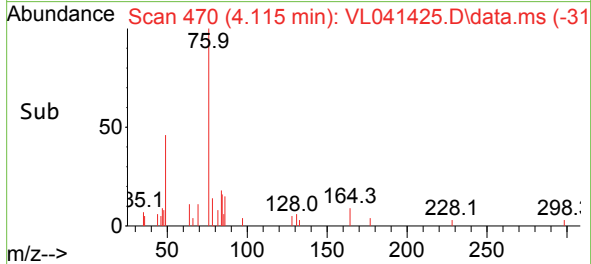
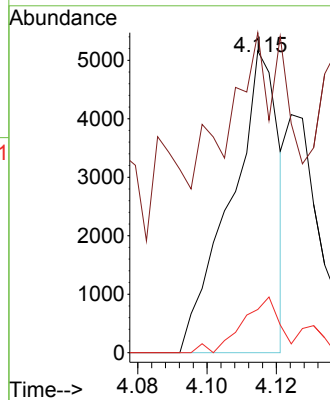
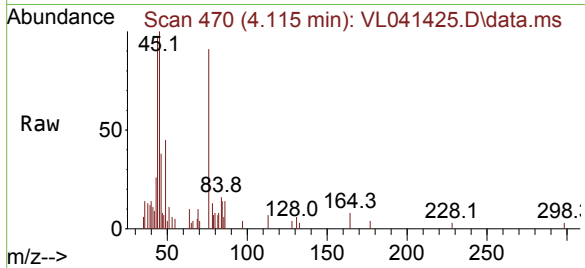
Acq: 29 Jul 2024 12:14

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 76	Resp: 4942
Ion Ratio	Lower Upper
76	100
44	136.5 15.6 23.4#
78	20.7 7.7 11.5#



#30

Cyclohexane

Concen: 0.566 ppbv

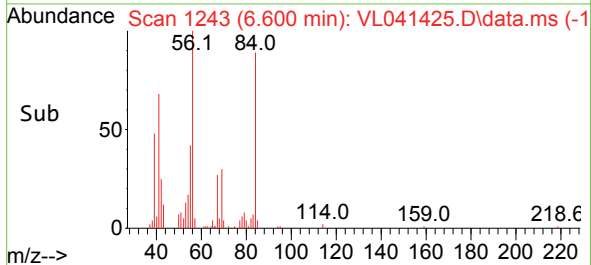
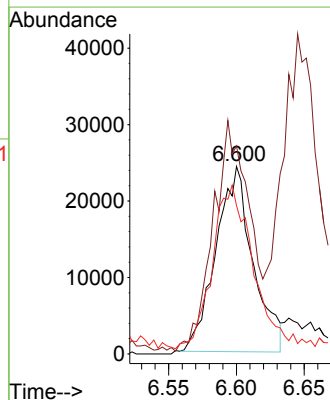
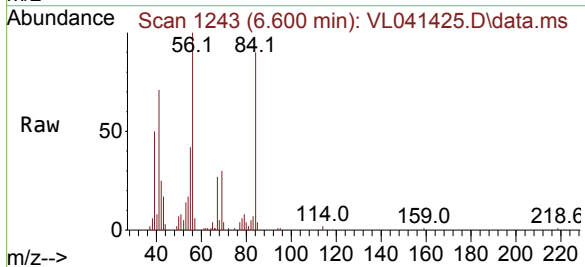
RT: 6.600 min Scan# 1243

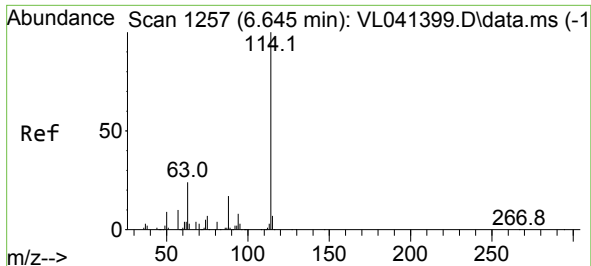
Delta R.T. 0.006 min

Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Tgt Ion: 84	Resp: 46166
Ion Ratio	Lower Upper
84	100
56	125.5 111.2 166.8
41	100.6 70.3 105.5





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.648 min Scan# 114

Delta R.T. 0.003 min

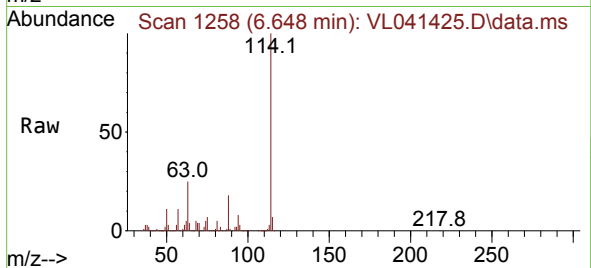
Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Instrument :

MSVOA_L

ClientSampleId :



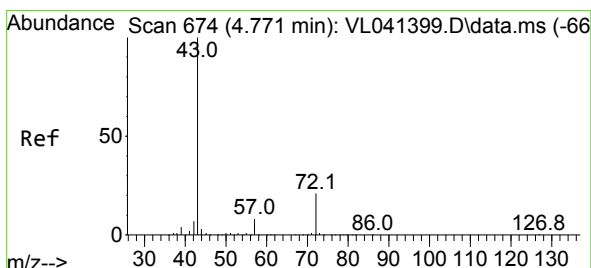
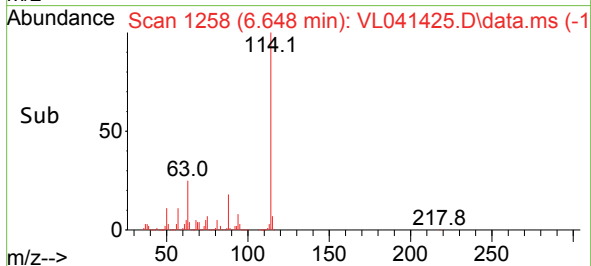
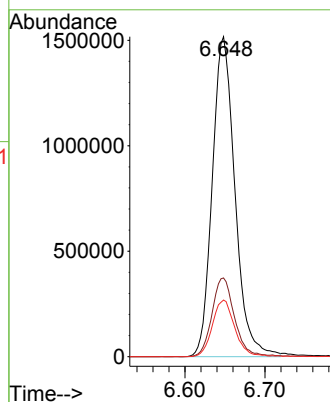
Tgt Ion:114 Resp: 2985146

Ion Ratio Lower Upper

114 100

63 24.8 20.3 30.5

88 17.8 14.3 21.5



#34

2-Butanone

Concen: 0.281 ppbv

RT: 4.780 min Scan# 677

Delta R.T. 0.006 min

Lab File: VL041425.D

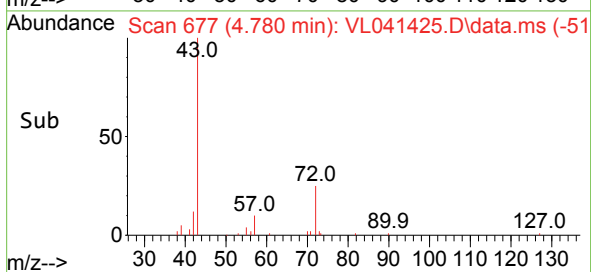
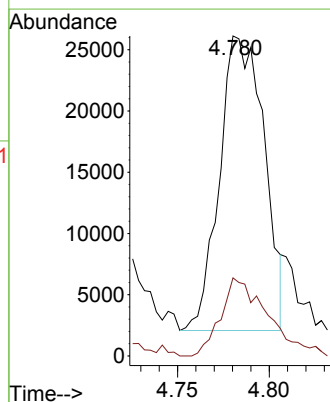
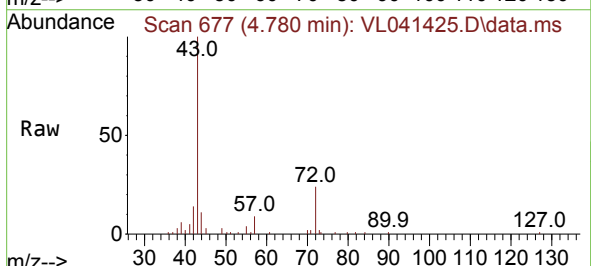
Acq: 29 Jul 2024 12:14

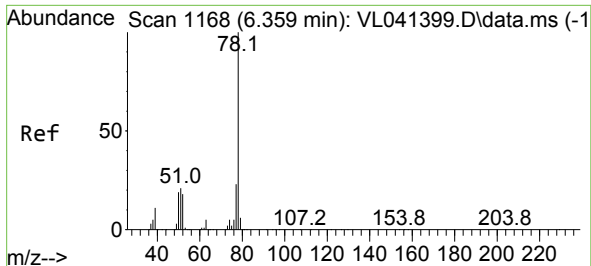
Tgt Ion: 43 Resp: 40623

Ion Ratio Lower Upper

43 100

72 29.2 17.3 25.9#

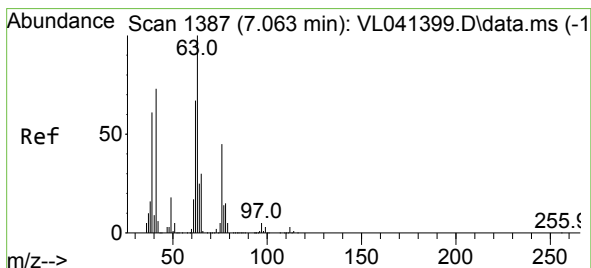
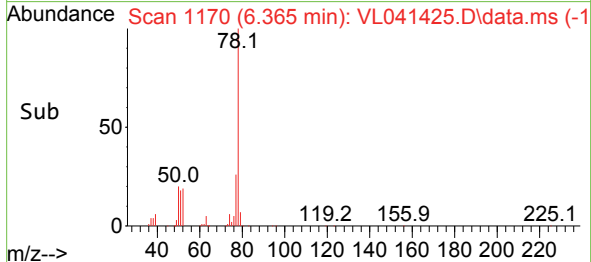
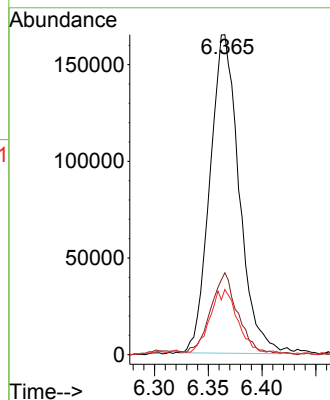
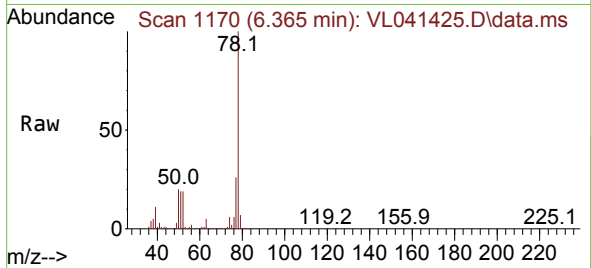




#36
Benzene
Concen: 1.424 ppbv
RT: 6.365 min Scan# 1168
Delta R.T. 0.006 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

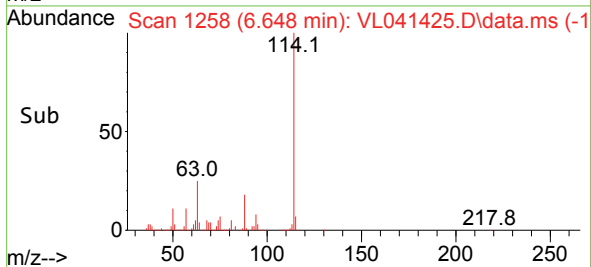
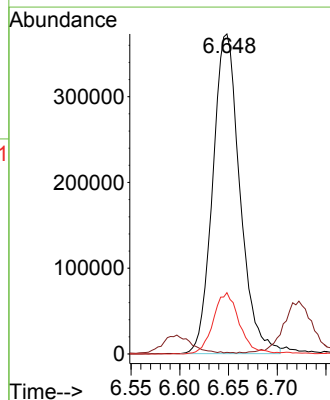
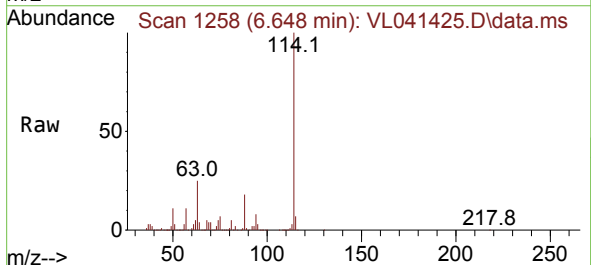
Instrument :
MSVOA_L
ClientSampleId :

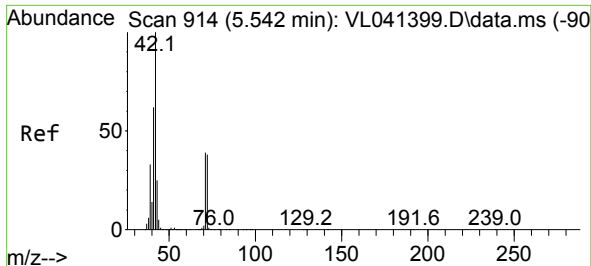
Tgt Ion: 78 Resp: 310599
Ion Ratio Lower Upper
78 100
77 25.2 18.1 27.1
50 20.0 15.5 23.3



#39
1,2-Dichloropropane
Concen: 8.662 ppbv
RT: 6.648 min Scan# 1258
Delta R.T. -0.415 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

Tgt Ion: 63 Resp: 723372
Ion Ratio Lower Upper
63 100
41 0.0 58.3 87.5#
62 19.0 53.9 80.9#





#41

Tetrahydrofuran

Concen: 0.778 ppbv

RT: 5.809 min Scan# 914

Delta R.T. 0.264 min

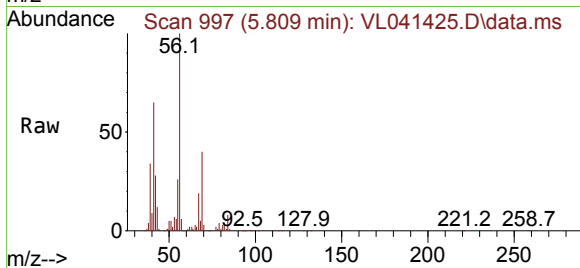
Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

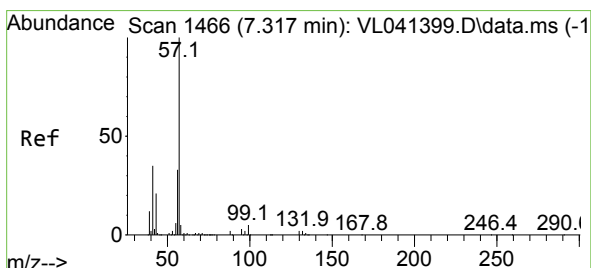
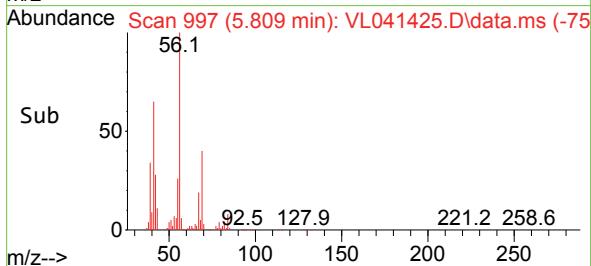
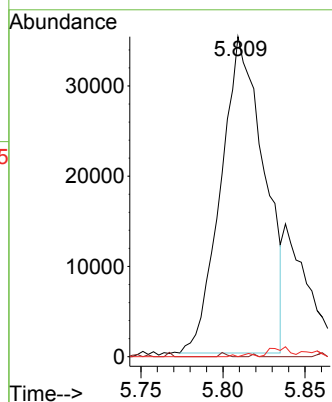
Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion:	42	Resp:	64284
Ion	Ratio	Lower	Upper
42	100		
72	0.3	31.2	46.8#
71	0.0	30.5	45.7#



#44

2,2,4-Trimethylpentane

Concen: 0.700 ppbv

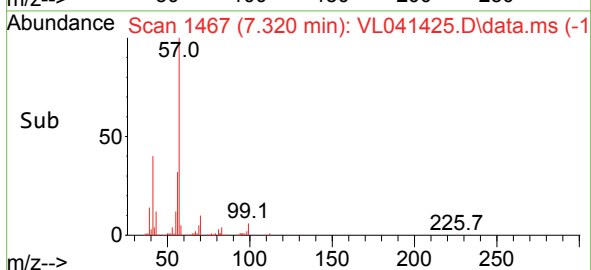
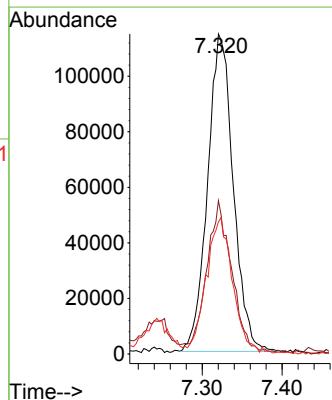
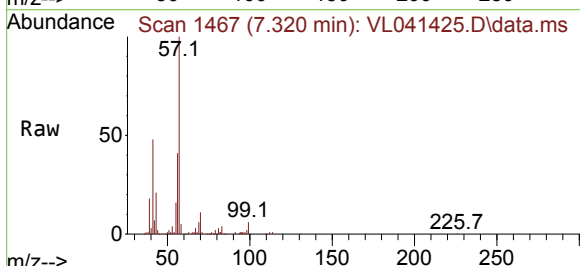
RT: 7.320 min Scan# 1467

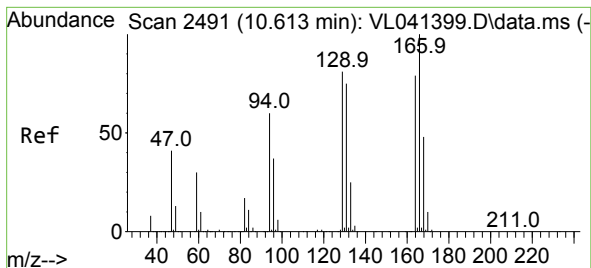
Delta R.T. 0.003 min

Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Tgt Ion:	57	Resp:	255126
Ion	Ratio	Lower	Upper
57	100		
41	47.2	27.0	40.6#
56	45.3	25.2	37.8#





#52

Tetrachloroethene

Concen: 0.136 ppbv

RT: 10.610 min Scan# 2491

Delta R.T. 0.000 min

Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:164 Resp: 11440

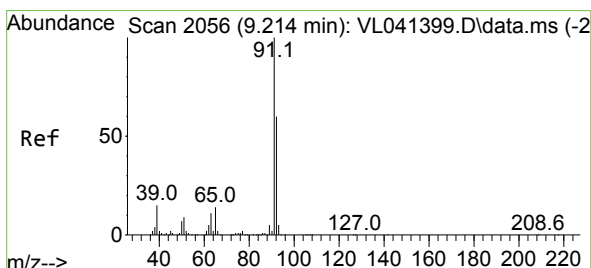
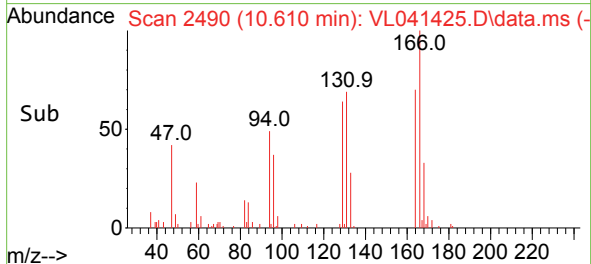
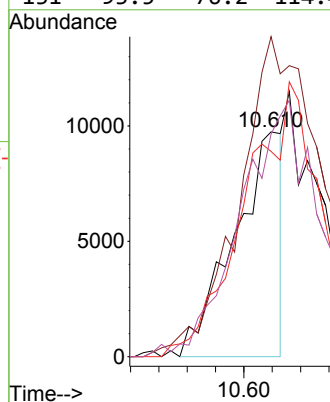
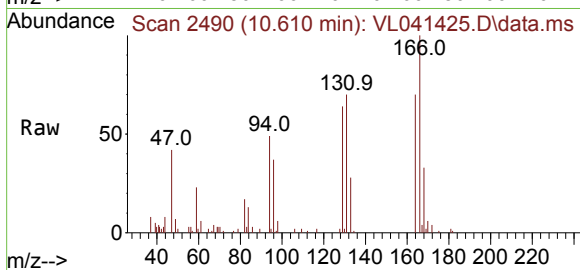
Ion Ratio Lower Upper

164 100

166 133.0 101.1 151.7

129 85.6 81.7 122.5

131 93.5 76.2 114.4



#53

Toluene

Concen: 5.639 ppbv

RT: 9.217 min Scan# 2057

Delta R.T. 0.000 min

Lab File: VL041425.D

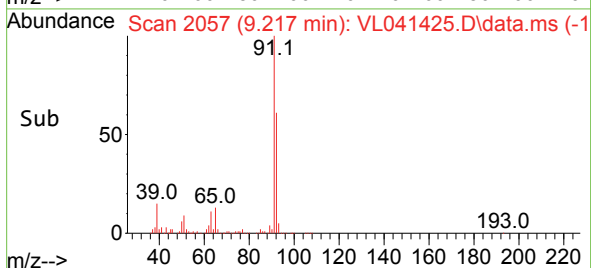
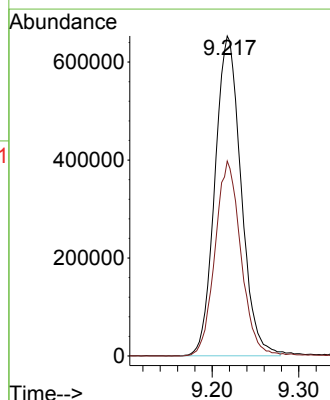
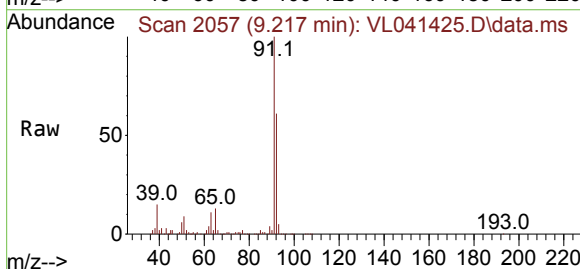
Acq: 29 Jul 2024 12:14

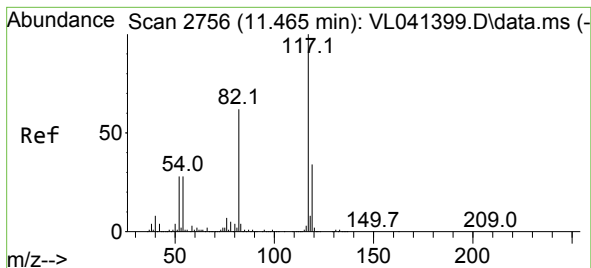
Tgt Ion: 91 Resp: 1370088

Ion Ratio Lower Upper

91 100

92 60.7 48.7 73.1

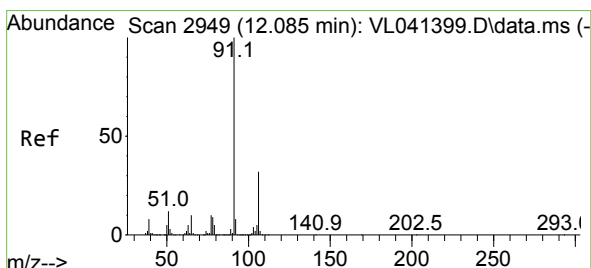
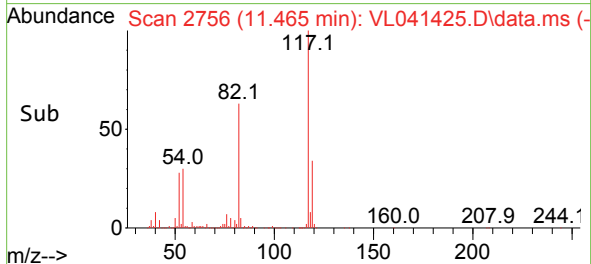
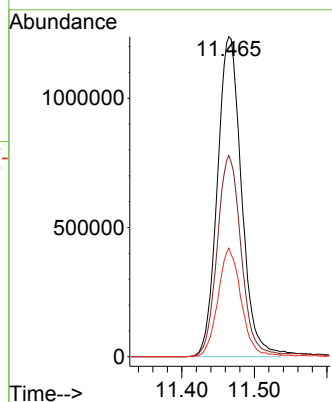
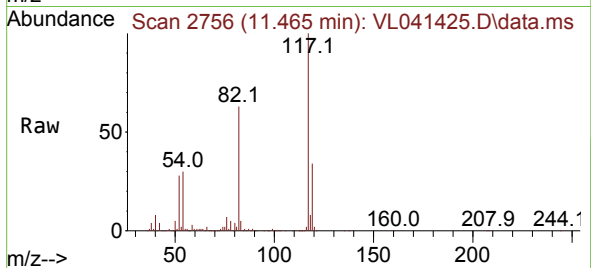




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.465 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

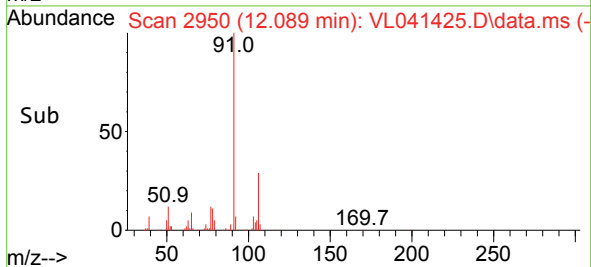
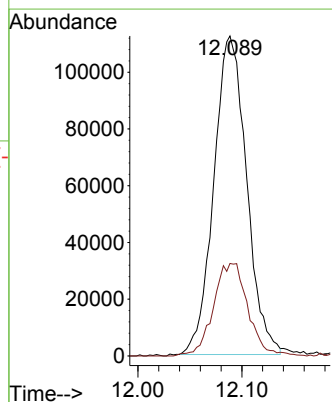
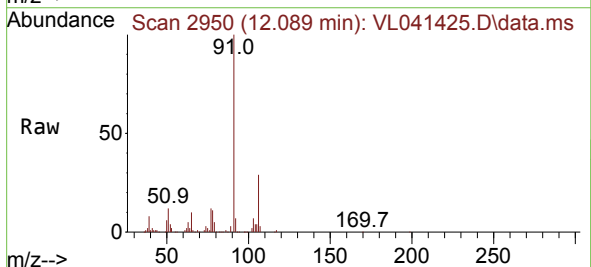
Instrument :
MSVOA_L
ClientSampleId :

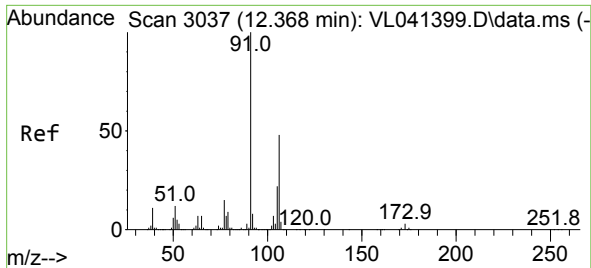
Tgt Ion:117 Resp: 2858080
Ion Ratio Lower Upper
117 100
82 64.4 51.0 76.6
119 33.3 45.2 67.8#



#58
Ethyl Benzene
Concen: 0.747 ppbv
RT: 12.089 min Scan# 2950
Delta R.T. 0.003 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

Tgt Ion: 91 Resp: 246069
Ion Ratio Lower Upper
91 100
106 28.4 25.8 38.8





#59

m/p-Xylene

Concen: 2.694 ppbv

RT: 12.343 min Scan# 3037

Delta R.T. -0.026 min

Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Instrument :

MSVOA_L

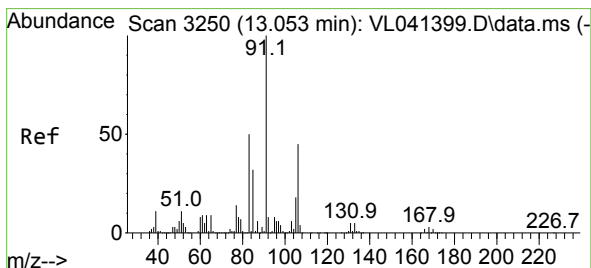
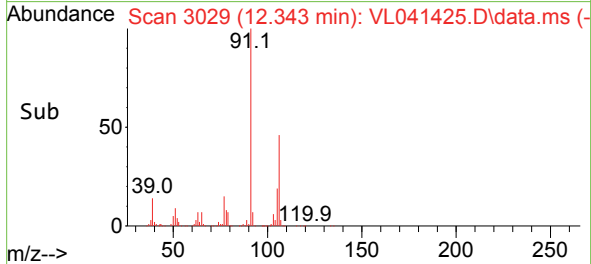
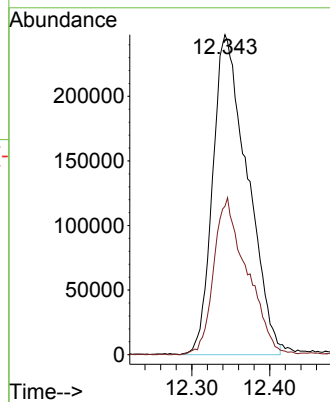
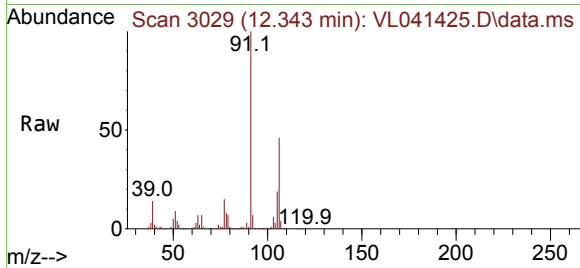
ClientSampleId :

Tgt Ion: 91 Resp: 766157

Ion Ratio Lower Upper

91 100

106 47.1 36.3 54.5



#60

o-Xylene

Concen: 0.978 ppbv

RT: 13.060 min Scan# 3252

Delta R.T. 0.003 min

Lab File: VL041425.D

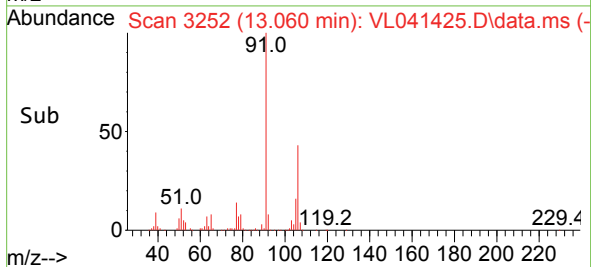
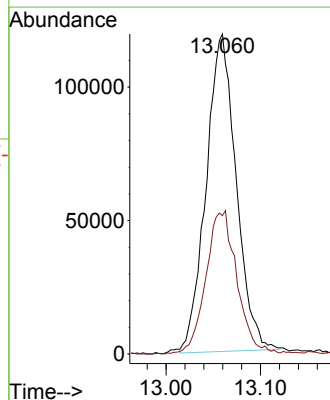
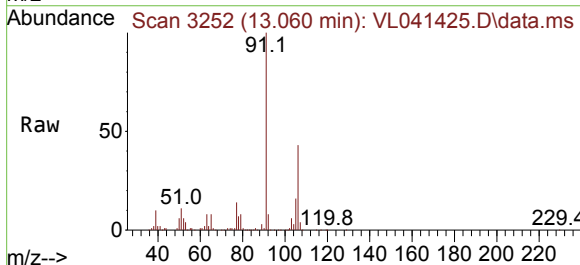
Acq: 29 Jul 2024 12:14

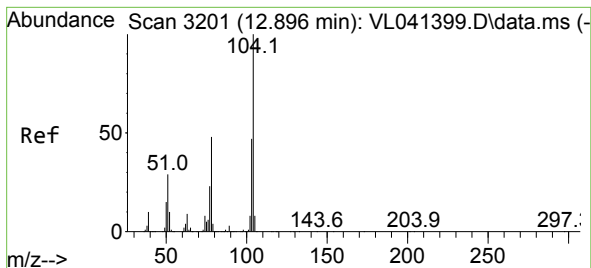
Tgt Ion: 91 Resp: 263146

Ion Ratio Lower Upper

91 100

106 46.8 23.1 69.3





#61

Styrene

Concen: 0.334 ppbv

RT: 12.899 min Scan# 31

Delta R.T. 0.003 min

Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Instrument :

MSVOA_L

ClientSampleId :

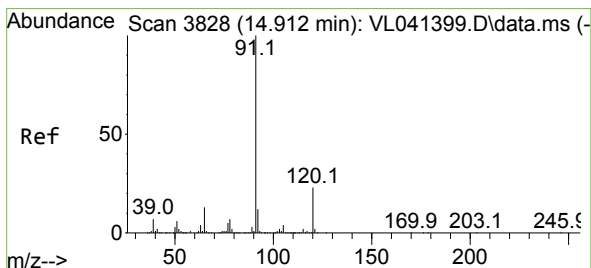
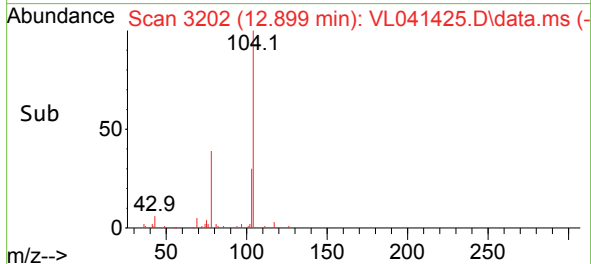
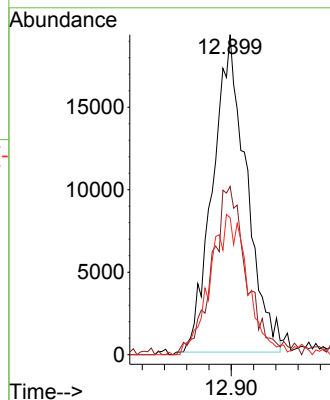
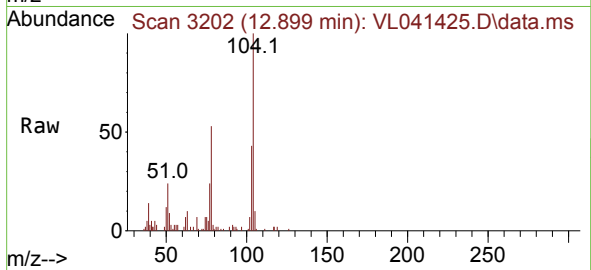
Tgt Ion:104 Resp: 40558

Ion Ratio Lower Upper

104 100

78 55.1 40.8 61.2

103 50.9 38.2 57.4



#64

n-propylbenzene

Concen: 0.090 ppbv

RT: 14.918 min Scan# 3830

Delta R.T. 0.003 min

Lab File: VL041425.D

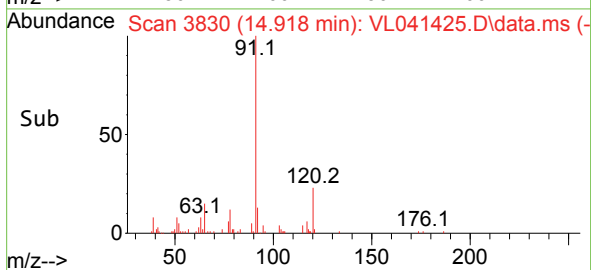
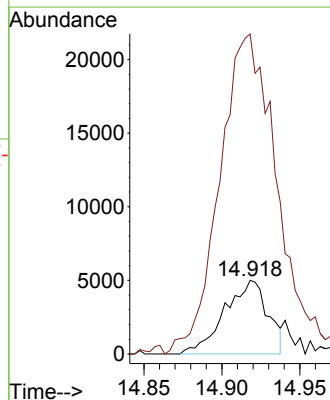
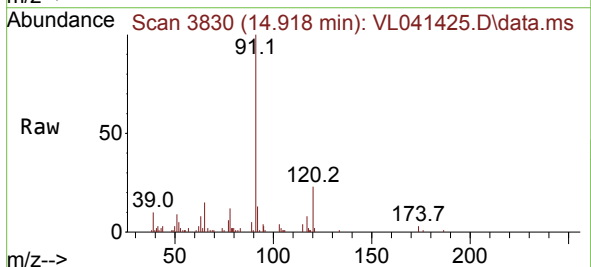
Acq: 29 Jul 2024 12:14

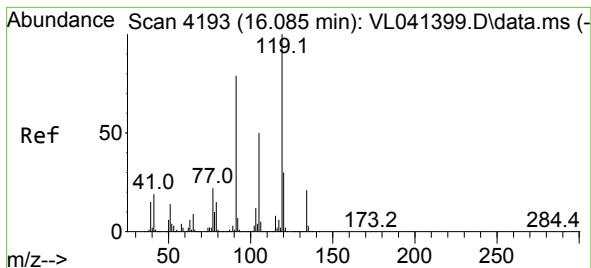
Tgt Ion:120 Resp: 9653

Ion Ratio Lower Upper

120 100

91 605.4 361.4 542.0#

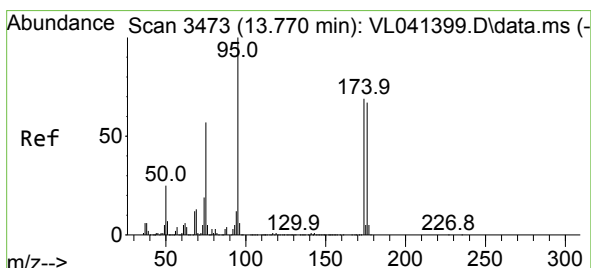
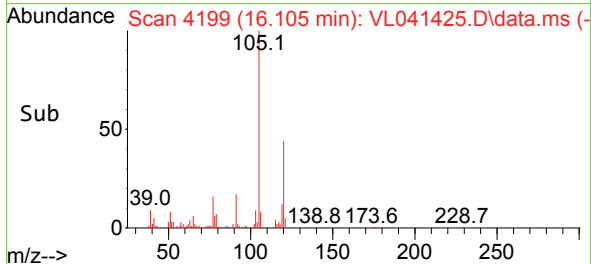
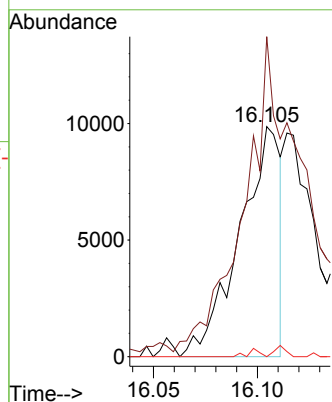
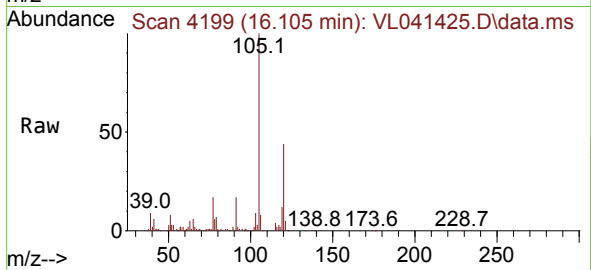




#65
tert-Butylbenzene
Concen: 0.036 ppbv
RT: 16.105 min Scan# 4193
Delta R.T. 0.013 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

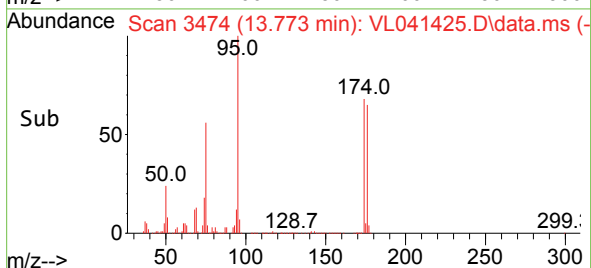
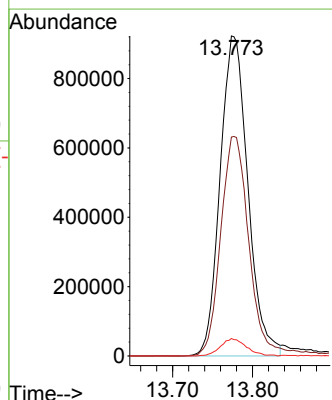
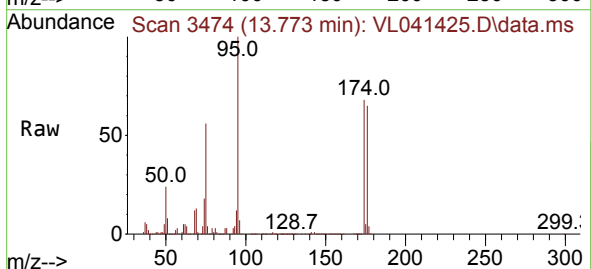
Instrument :
MSVOA_L
ClientSampleId :

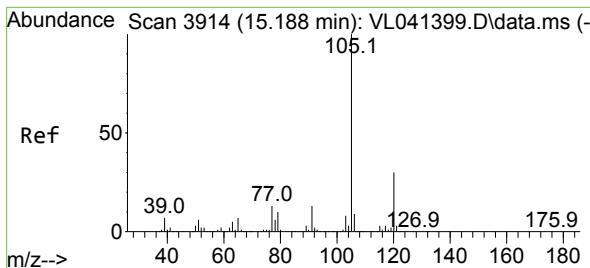
Tgt Ion:119 Resp: 13412
Ion Ratio Lower Upper
119 100
91 212.2 64.2 96.2#
134 0.0 15.7 23.5#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.120 ppbv
RT: 13.773 min Scan# 3474
Delta R.T. 0.000 min
Lab File: VL041425.D
Acq: 29 Jul 2024 12:14

Tgt Ion: 95 Resp: 2225855
Ion Ratio Lower Upper
95 100
174 71.8 56.3 84.5
175 5.1 4.0 6.0





#72

4-Ethyltoluene

Concen: 0.123 ppbv

RT: 15.195 min Scan# 3916

Delta R.T. 0.003 min

Lab File: VL041425.D

Acq: 29 Jul 2024 12:14

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:105 Resp: 39016

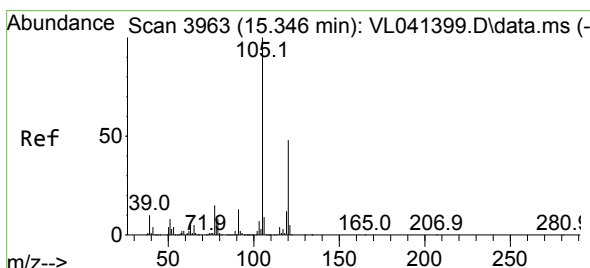
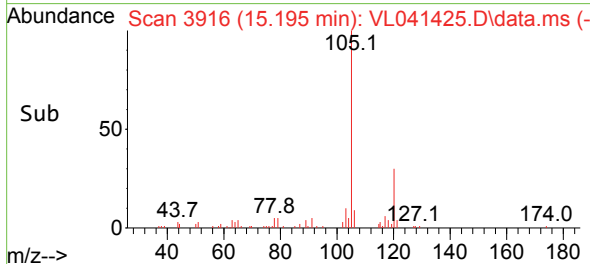
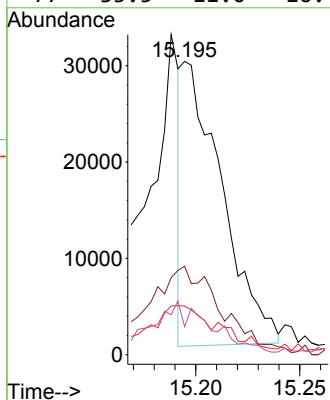
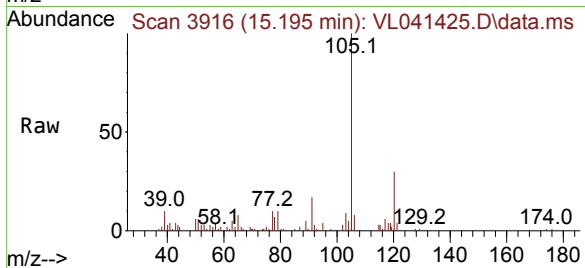
Ion Ratio Lower Upper

105 100

120 56.8 24.2 36.2#

91 34.0 10.4 15.6#

77 33.5 11.0 16.4#



#73

1,3,5-Trimethylbenzene

Concen: 0.167 ppbv

RT: 15.355 min Scan# 3966

Delta R.T. 0.006 min

Lab File: VL041425.D

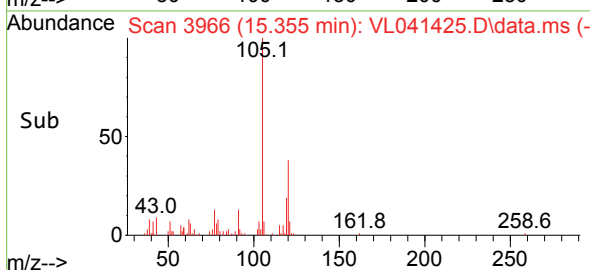
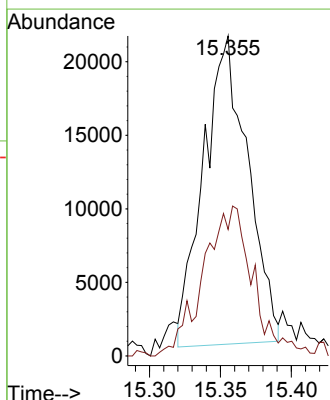
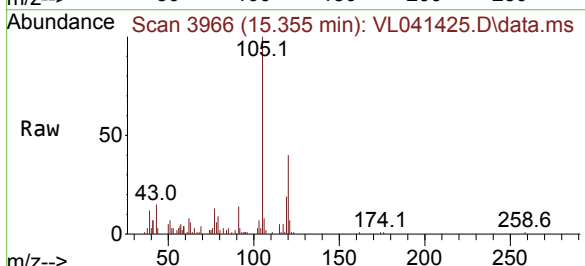
Acq: 29 Jul 2024 12:14

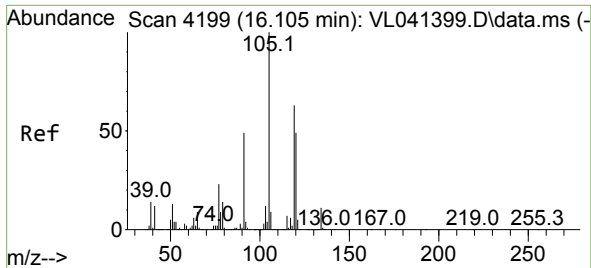
Tgt Ion:105 Resp: 45631

Ion Ratio Lower Upper

105 100

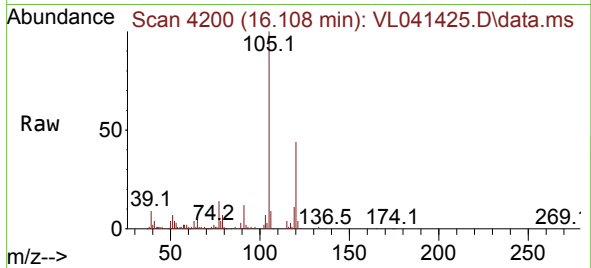
120 39.3 38.6 57.8





#74
 1,2,4-Trimethylbenzene
 Concen: 0.668 ppbv
 RT: 16.108 min Scan# 4199
 Delta R.T. 0.000 min
 Lab File: VL041425.D
 Acq: 29 Jul 2024 12:14

Instrument :
 MSVOA_L
 ClientSampleId :



Tgt Ion:	105	Resp:	211883
Ion	Ratio	Lower	Upper
105	100		
120	44.5	39.5	59.3
91	11.0	39.8	59.8#
77	13.5	18.2	27.4#

