

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040424\
 Data File : VL041137.D
 Acq On : 4 Apr 2024 22:53
 Operator : SY/MD
 Sample : P1953-04 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV4

Quant Time: Apr 05 03:47:11 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL040424AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Apr 05 03:20:09 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.211	49	1436651	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.677	114	3929266	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.490	117	3604914	10.000	ppbv	-0.02

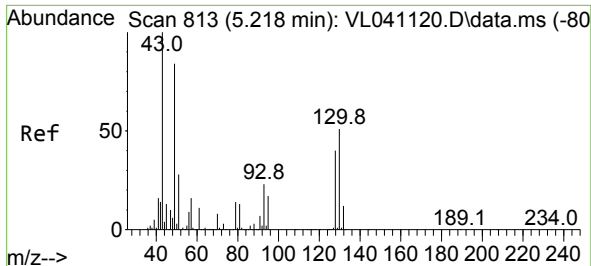
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.802	95	2781925	9.558	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.600%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.735	85	27759	0.113	ppbv	91
3) Chlorodifluoromethane	2.661	51	54981	0.248	ppbv #	69
4) Chloromethane	2.822	50	3629	0.043	ppbv	90
9) Propene	2.703	41	50756	0.721	ppbv	97
10) Heptane	7.603	43	6154	0.037	ppbv #	26
13) Ethanol	3.256	45	176532	10.767	ppbv	96
15) Acetone	3.478	43	1115422	7.170	ppbv #	82
16) 1,3-Butadiene	2.980	39	230059	3.013	ppbv #	16
17) tert-Butyl alcohol	3.906	59	47190	0.334	ppbv #	89
19) Isopropyl Alcohol	3.597	45	4460	0.047	ppbv #	92
20) Methylene Chloride	3.947	84	401816	6.263	ppbv	88
21) Allyl Chloride	3.947	41	10831	0.114	ppbv #	1
23) Vinyl Acetate	4.732	43	39537	0.245	ppbv #	14
25) Ethyl Acetate	5.233	43	108631	0.372	ppbv #	79
26) Hexane	5.233	57	168700	1.287	ppbv #	37
27) Carbon Disulfide	4.140	76	16888	0.106	ppbv #	66
34) 2-Butanone	4.799	43	2722298	16.040	ppbv	100
36) Benzene	6.388	78	10290	0.036	ppbv	94
39) 1,2-Dichloropropane	6.674	63	944512	8.256	ppbv #	24
51) 2-Hexanone	9.581	43	478291	2.369	ppbv #	95
53) Toluene	9.243	91	119409	0.392	ppbv	99
58) Ethyl Benzene	12.114	91	23292	0.059	ppbv	99
59) m/p-Xylene	12.371	91	60836	0.170	ppbv #	42
60) o-Xylene	13.082	91	50710	0.149	ppbv	97
72) 4-Ethyltoluene	15.223	105	18166	0.048	ppbv #	74
74) 1,2,4-Trimethylbenzene	16.133	105	109802	0.285	ppbv #	70

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

Quant Time: Apr 05 03:47:11 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL040424AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 05 03:20:09 2024
Response via : Initial Calibration

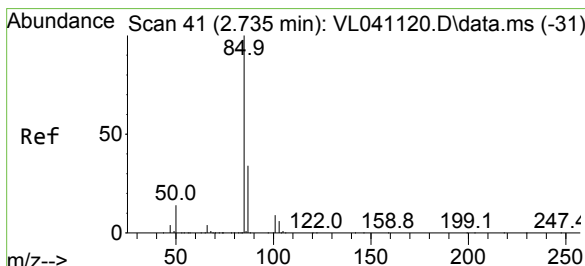
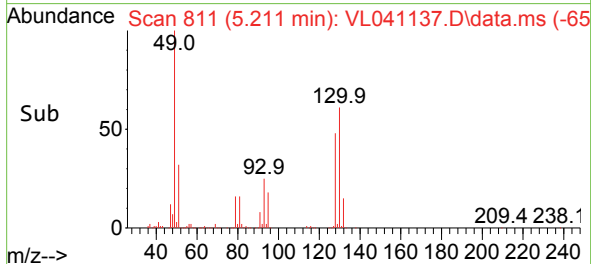
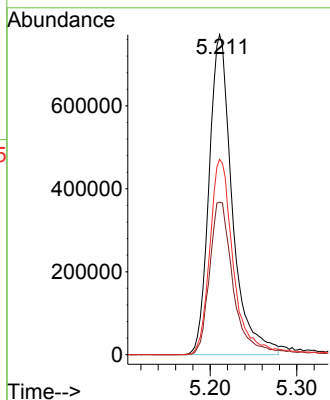
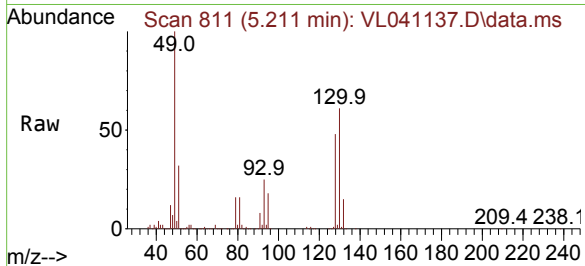




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.211 min Scan# 81
 Delta R.T. -0.007 min
 Lab File: VL041137.D
 Acq: 4 Apr 2024 22:53

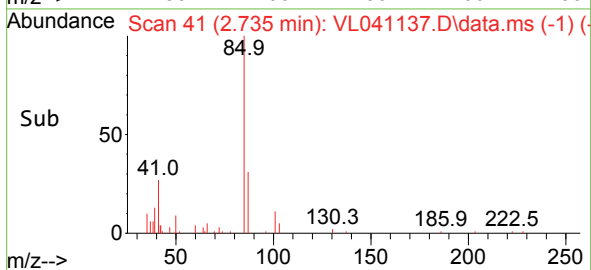
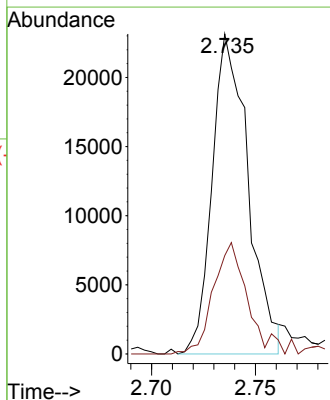
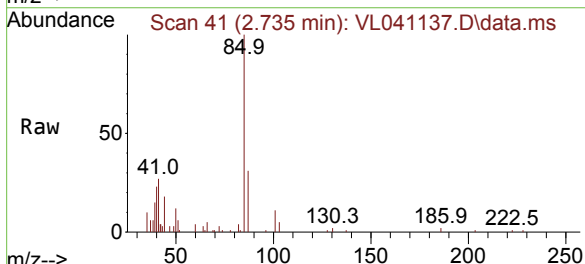
Instrument :
 MSVOA_L
 ClientSampleId :
 SV4

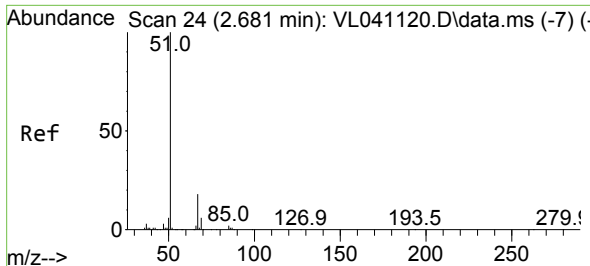
Tgt Ion: 49 Resp: 1436651
 Ion Ratio Lower Upper
 49 100
 128 49.7 23.8 71.5
 130 63.6 30.3 90.9



#2
 Dichlorodifluoromethane
 Concen: 0.113 ppbv
 RT: 2.735 min Scan# 41
 Delta R.T. -0.000 min
 Lab File: VL041137.D
 Acq: 4 Apr 2024 22:53

Tgt Ion: 85 Resp: 27759
 Ion Ratio Lower Upper
 85 100
 87 30.0 28.1 42.1

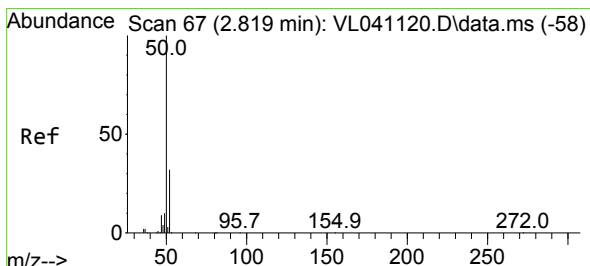
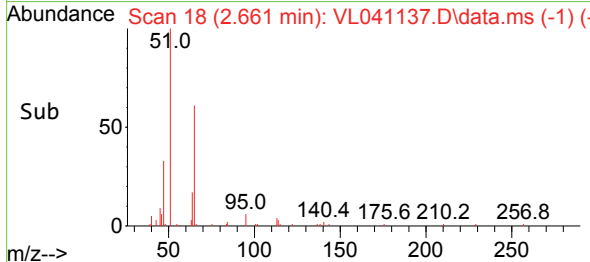
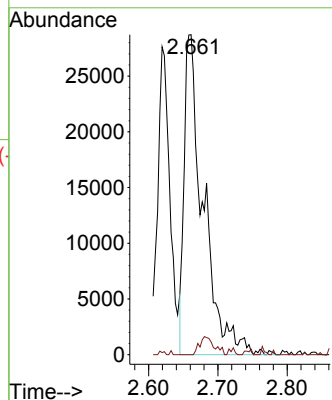
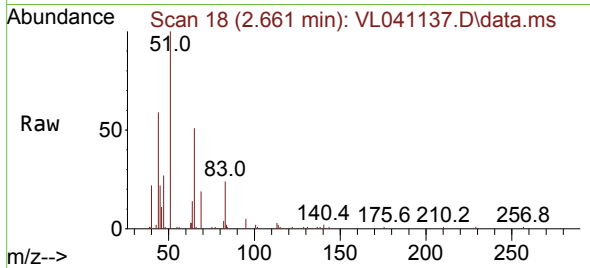




#3
Chlorodifluoromethane
Concen: 0.248 ppbv
RT: 2.661 min Scan# 11
Delta R.T. -0.019 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

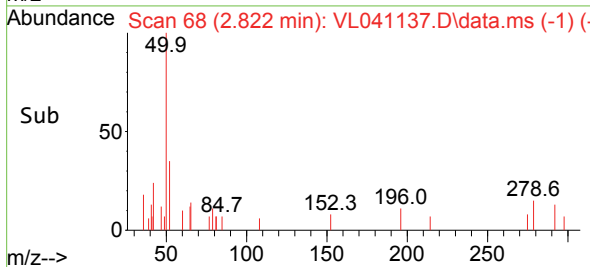
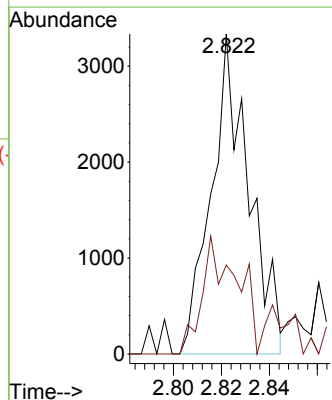
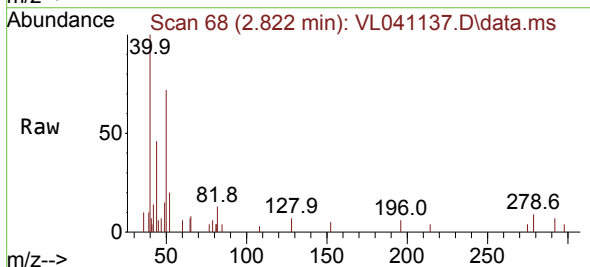
Instrument :
MSVOA_L
ClientSampleId :
SV4

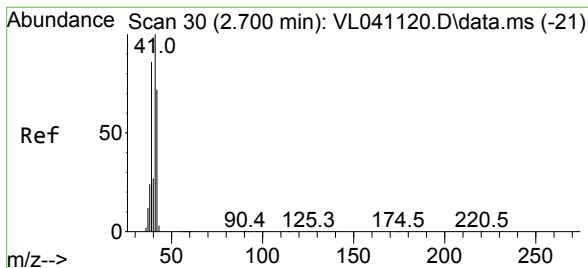
Tgt Ion: 51 Resp: 54981
Ion Ratio Lower Upper
51 100
67 4.3 14.5 21.7#



#4
Chloromethane
Concen: 0.043 ppbv
RT: 2.822 min Scan# 68
Delta R.T. 0.003 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

Tgt Ion: 50 Resp: 3629
Ion Ratio Lower Upper
50 100
52 27.8 26.6 40.0





#9

Propene

Concen: 0.721 ppbv

RT: 2.703 min Scan# 31

Delta R.T. 0.003 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

Instrument :

MSVOA_L

ClientSampleId :

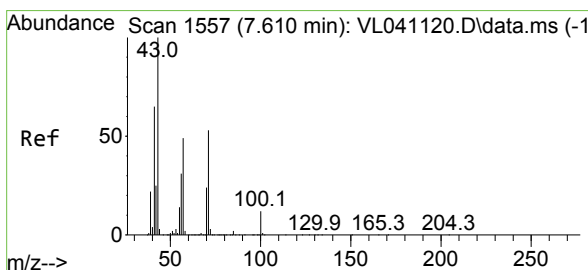
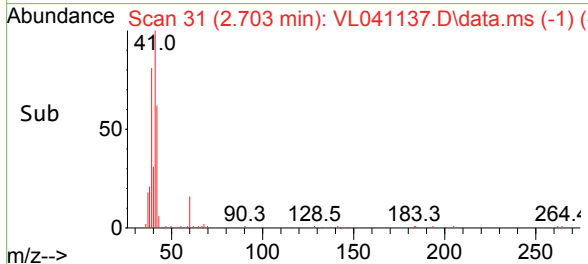
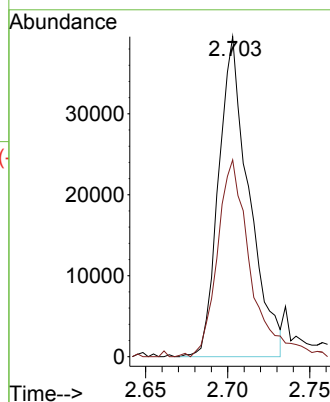
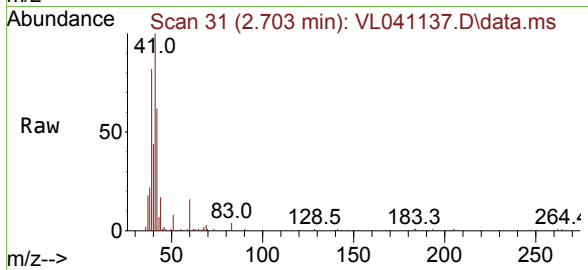
SV4

Tgt Ion: 41 Resp: 50756

Ion Ratio Lower Upper

41 100

42 67.2 55.9 83.9



#10

Heptane

Concen: 0.037 ppbv

RT: 7.603 min Scan# 1555

Delta R.T. -0.007 min

Lab File: VL041137.D

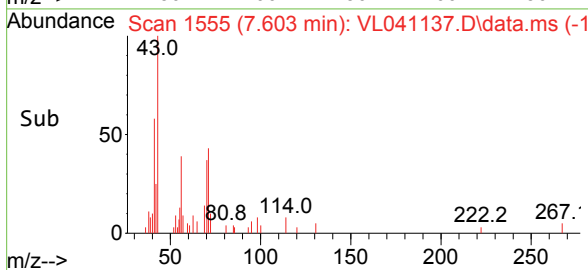
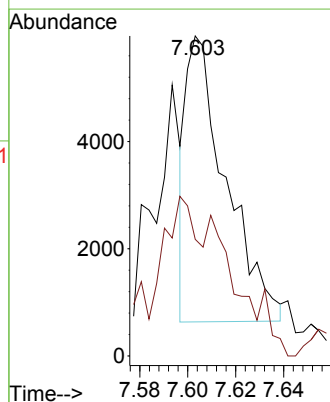
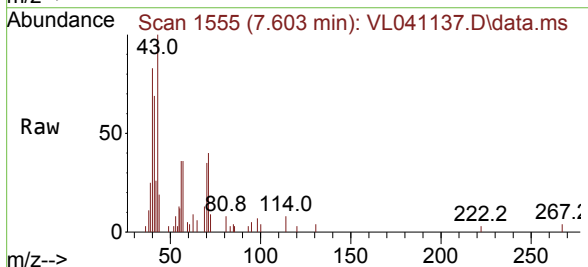
Acq: 4 Apr 2024 22:53

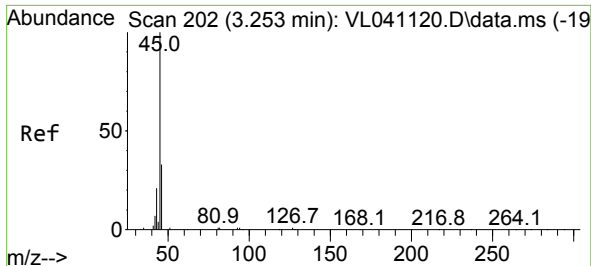
Tgt Ion: 43 Resp: 6154

Ion Ratio Lower Upper

43 100

57 0.0 41.0 61.6#

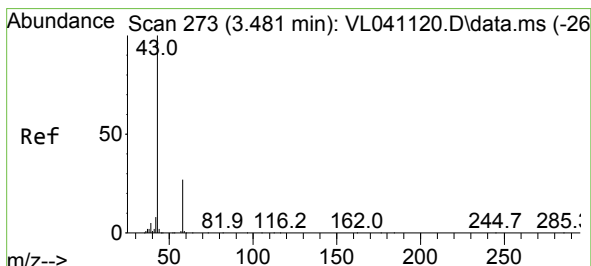
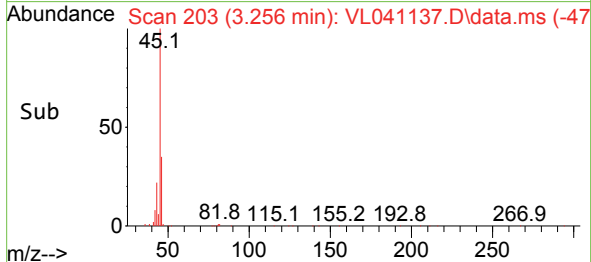
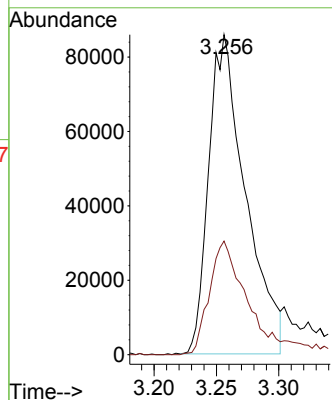
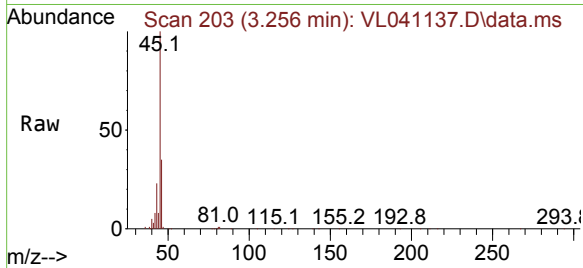




#13
Ethanol
Concen: 10.767 ppbv
RT: 3.256 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

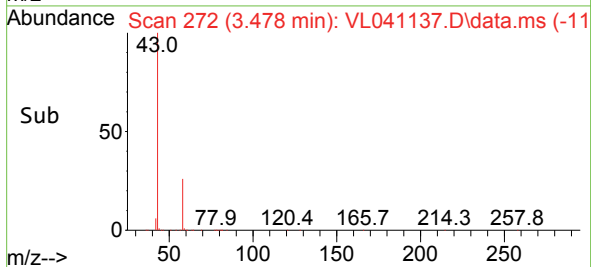
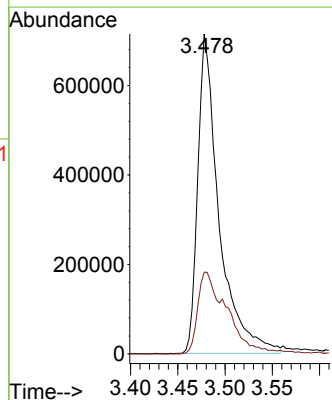
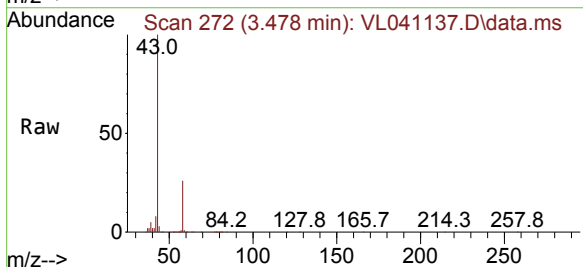
Instrument :
MSVOA_L
ClientSampleId :
SV4

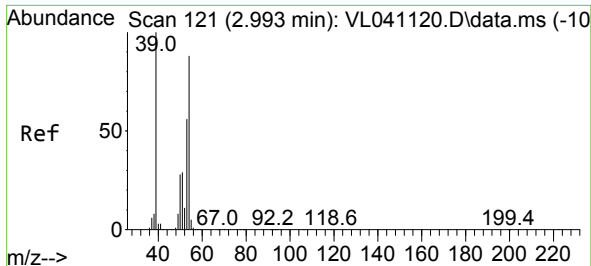
Tgt Ion: 45 Resp: 176532
Ion Ratio Lower Upper
45 100
46 38.9 14.6 58.2



#15
Acetone
Concen: 7.170 ppbv
RT: 3.478 min Scan# 272
Delta R.T. -0.003 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

Tgt Ion: 43 Resp: 1115422
Ion Ratio Lower Upper
43 100
58 36.5 21.7 32.5#

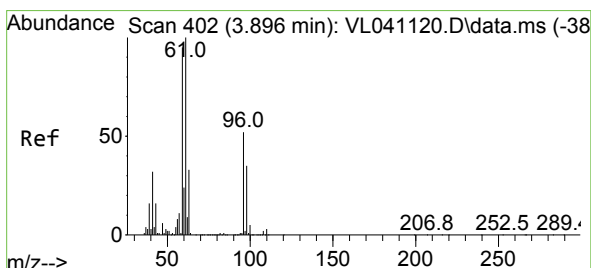
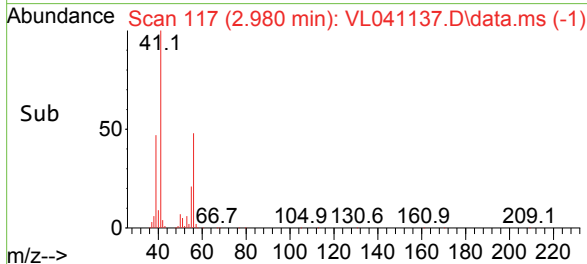
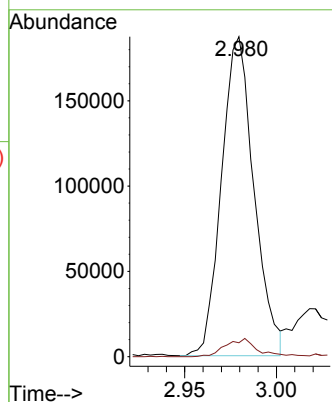
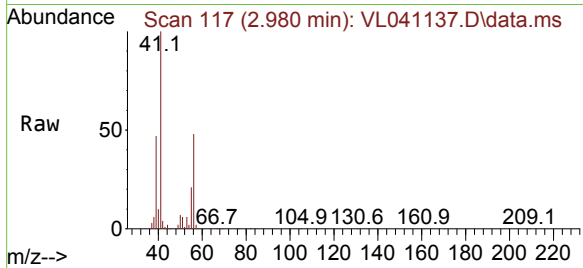




#16
1,3-Butadiene
Concen: 3.013 ppbv
RT: 2.980 min Scan# 117
Delta R.T. -0.013 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

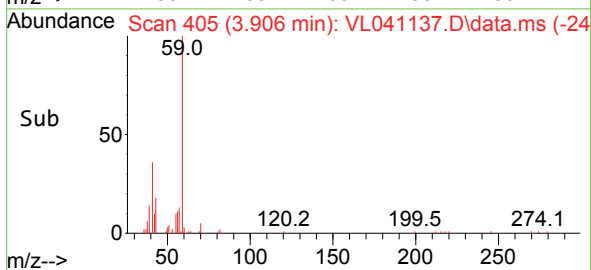
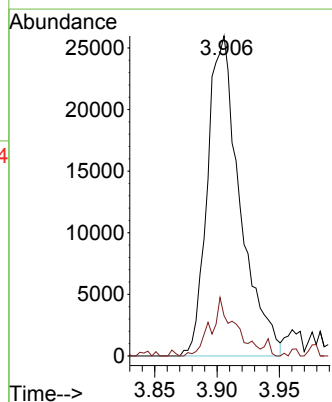
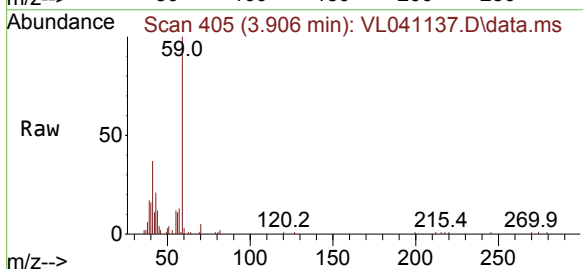
Instrument :
MSVOA_L
ClientSampleId :
SV4

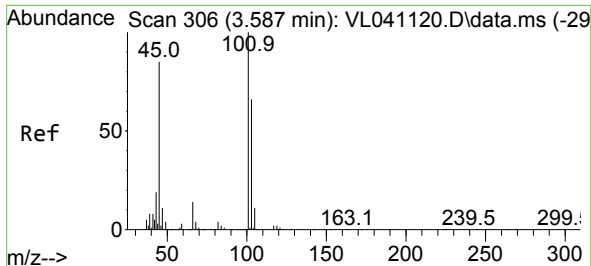
Tgt Ion: 39 Resp: 230059
Ion Ratio Lower Upper
39 100
54 6.1 64.0 96.0#



#17
tert-Butyl alcohol
Concen: 0.334 ppbv
RT: 3.906 min Scan# 405
Delta R.T. 0.009 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

Tgt Ion: 59 Resp: 47190
Ion Ratio Lower Upper
59 100
57 15.4 9.0 13.6#





#19

Isopropyl Alcohol

Concen: 0.047 ppbv

RT: 3.597 min Scan# 306

Delta R.T. 0.009 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

Instrument :

MSVOA_L

ClientSampleId :

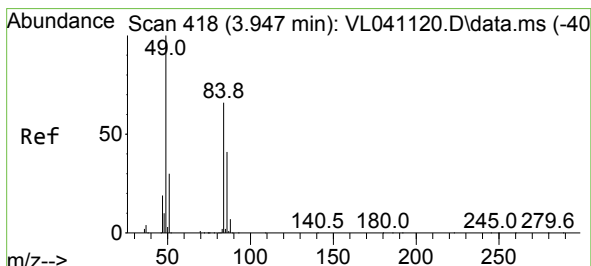
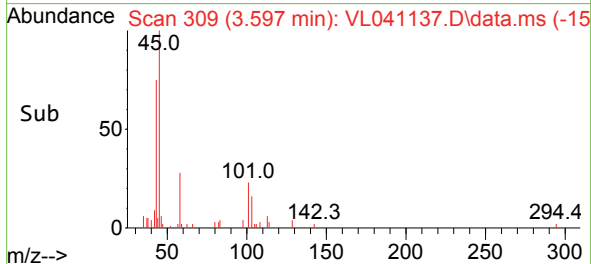
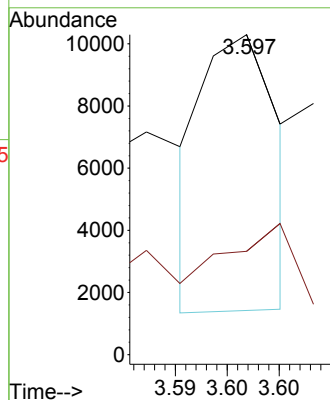
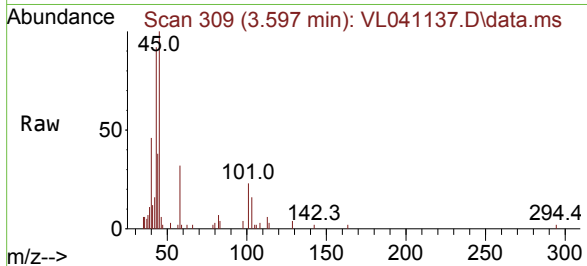
SV4

Tgt Ion: 45 Resp: 4460

Ion Ratio Lower Upper

45 100

58 0.0 2.2 3.4#



#20

Methylene Chloride

Concen: 6.263 ppbv

RT: 3.947 min Scan# 418

Delta R.T. -0.000 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

Tgt Ion: 84 Resp: 401816

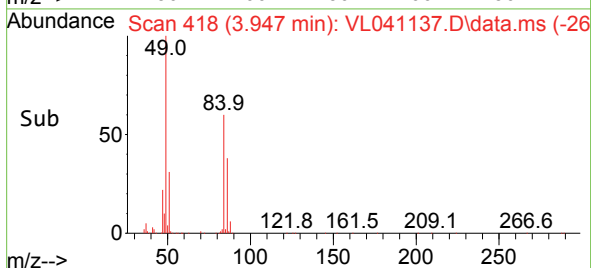
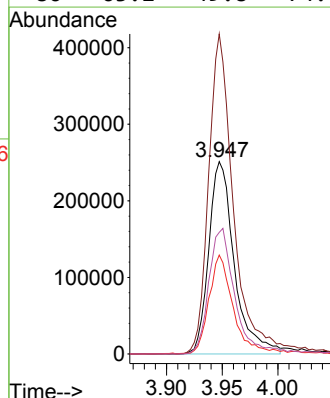
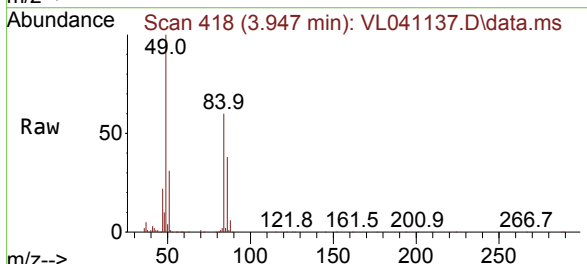
Ion Ratio Lower Upper

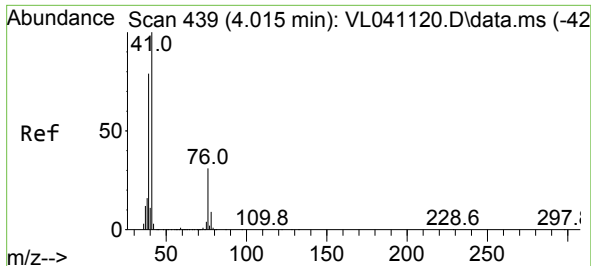
84 100

49 166.2 117.0 175.6

51 51.2 34.9 52.3

86 63.2 49.8 74.6





#21

Allyl Chloride

Concen: 0.114 ppbv

RT: 3.947 min Scan# 41

Delta R.T. -0.068 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

Instrument :

MSVOA_L

ClientSampleId :

SV4

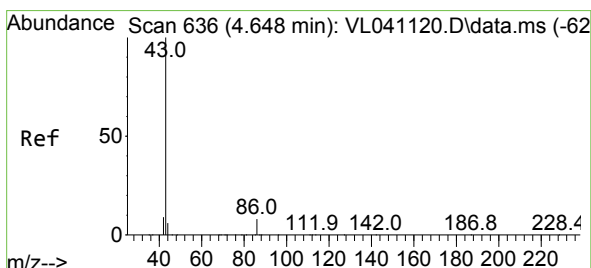
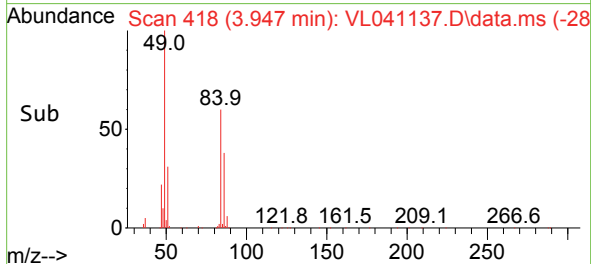
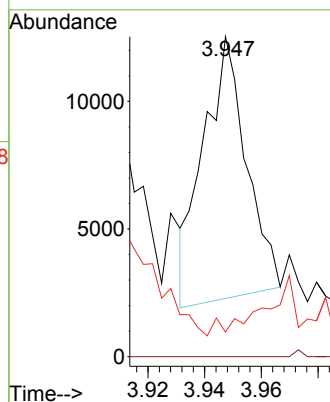
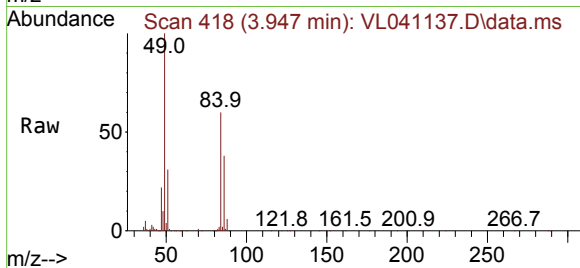
Tgt Ion: 41 Resp: 10831

Ion Ratio Lower Upper

41 100

76 165.1 25.5 38.3#

39 0.0 67.4 101.2#



#23

Vinyl Acetate

Concen: 0.245 ppbv

RT: 4.732 min Scan# 662

Delta R.T. 0.083 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

Tgt Ion: 43 Resp: 39537

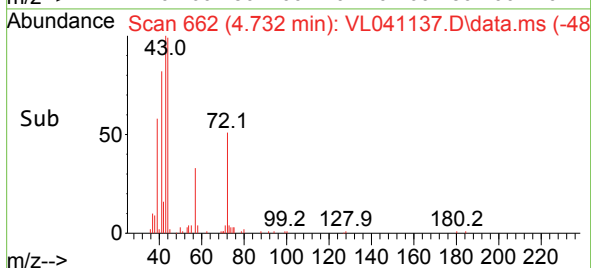
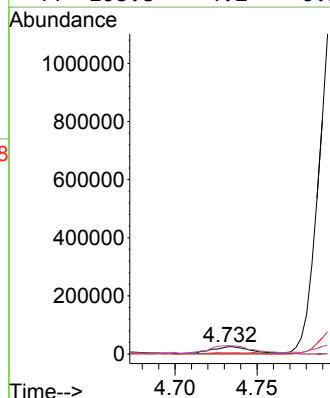
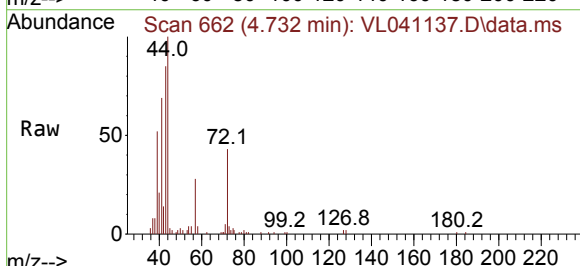
Ion Ratio Lower Upper

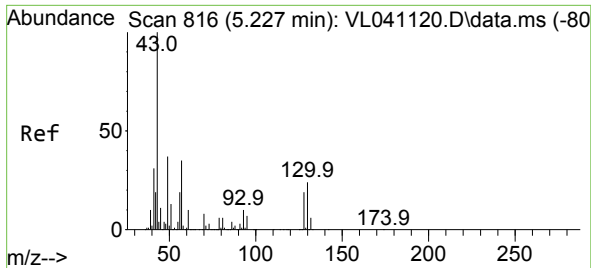
43 100

86 0.0 5.4 8.2#

42 14.7 8.0 12.0#

44 108.8 4.2 6.2#

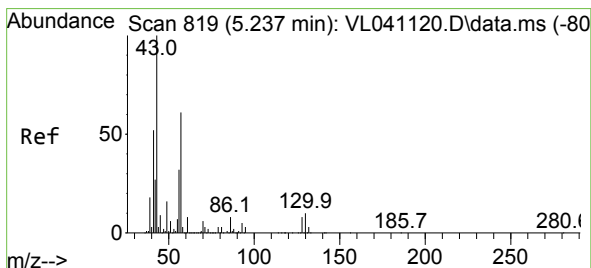
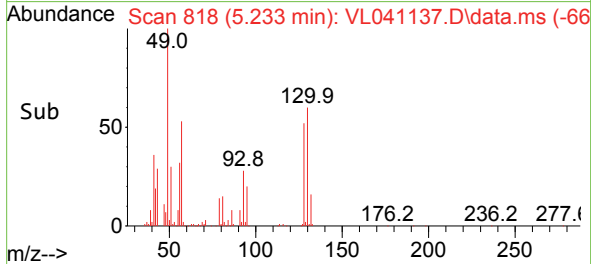
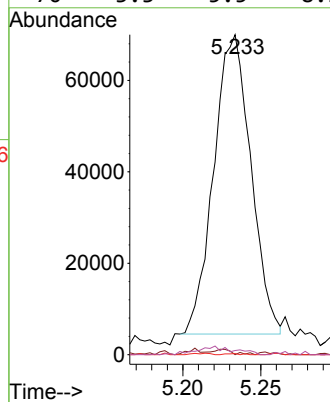
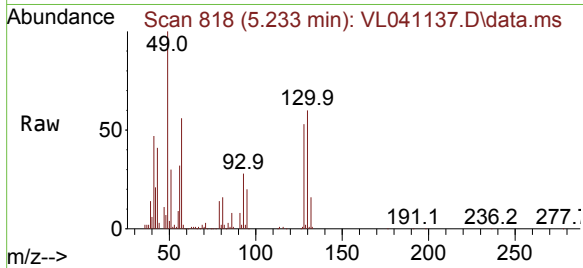




#25
Ethyl Acetate
Concen: 0.372 ppbv
RT: 5.233 min Scan# 816
Delta R.T. 0.006 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

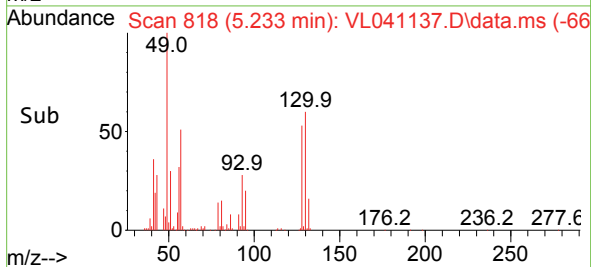
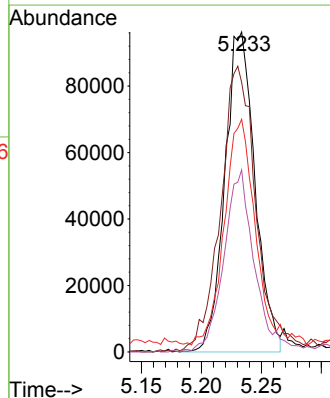
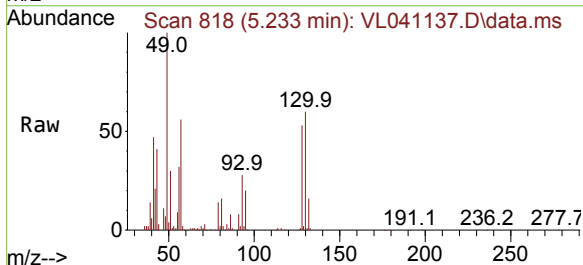
Instrument :
MSVOA_L
ClientSampleId :
SV4

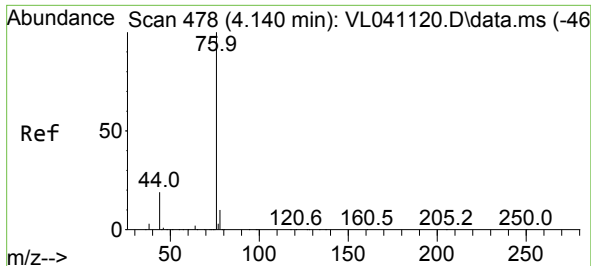
Tgt Ion: 43 Resp: 108631
Ion Ratio Lower Upper
43 100
45 1.7 8.2 12.2#
61 0.4 8.2 12.2#
70 3.3 5.5 8.3#



#26
Hexane
Concen: 1.287 ppbv
RT: 5.233 min Scan# 818
Delta R.T. -0.003 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

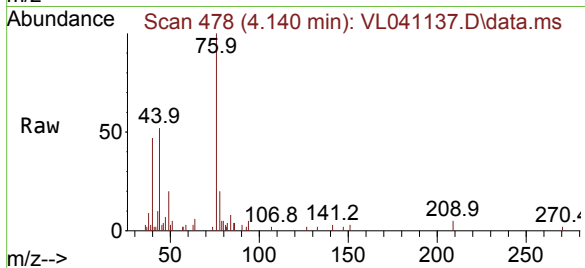
Tgt Ion: 57 Resp: 168700
Ion Ratio Lower Upper
57 100
41 107.2 73.8 110.6
43 73.4 184.2 276.2#
56 58.2 43.1 64.7



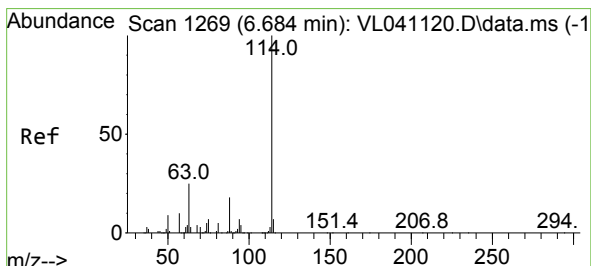
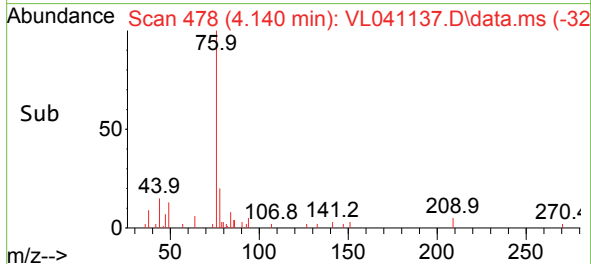
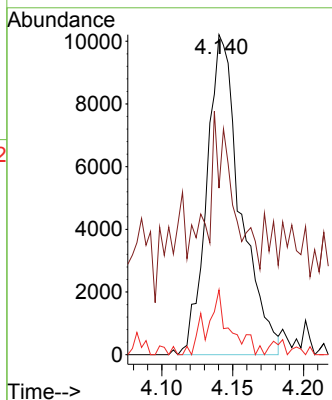


#27
Carbon Disulfide
Concen: 0.106 ppbv
RT: 4.140 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

Instrument :
MSVOA_L
ClientSampleId :
SV4

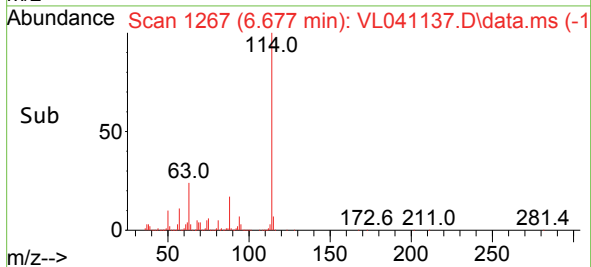
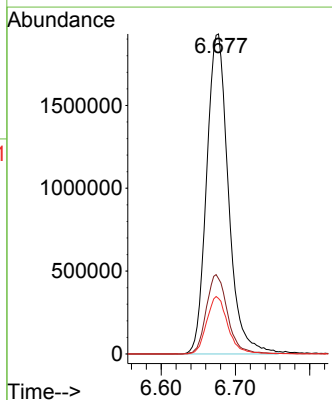
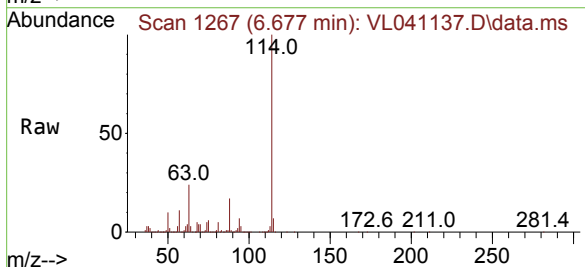


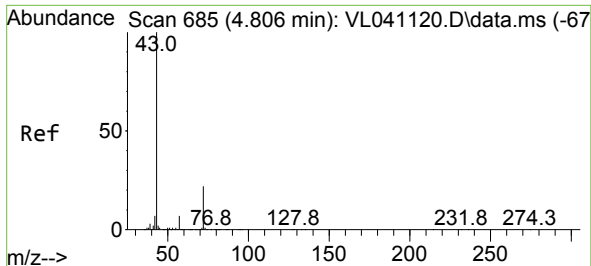
Tgt Ion: 76 Resp: 16888
Ion Ratio Lower Upper
76 100
44 40.8 16.0 24.0#
78 13.5 7.5 11.3#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.677 min Scan# 1267
Delta R.T. -0.007 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

Tgt Ion: 114 Resp: 3929266
Ion Ratio Lower Upper
114 100
63 24.5 21.0 31.6
88 17.5 14.6 22.0

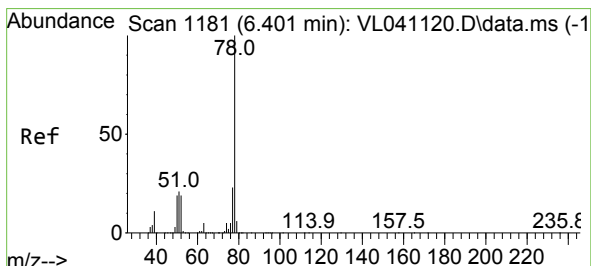
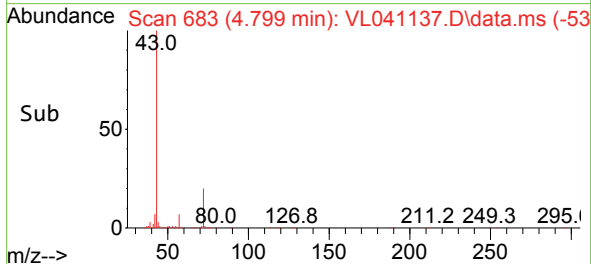
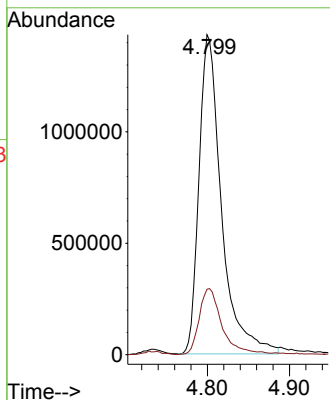
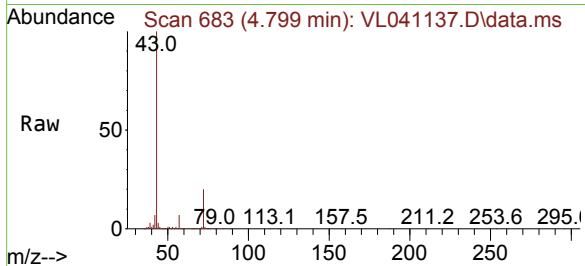




#34
2-Butanone
Concen: 16.040 ppbv
RT: 4.799 min Scan# 61
Delta R.T. -0.007 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

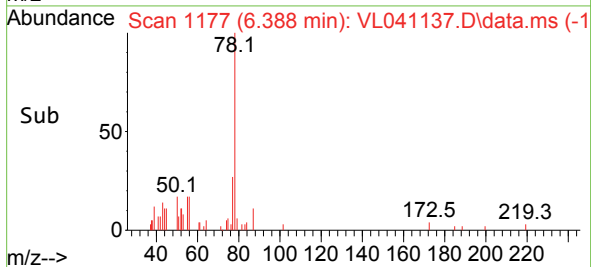
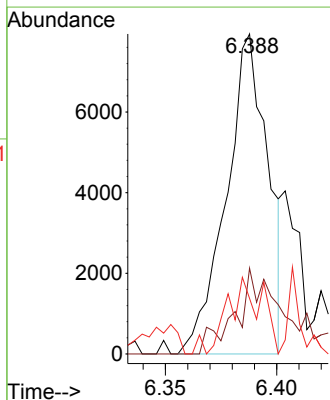
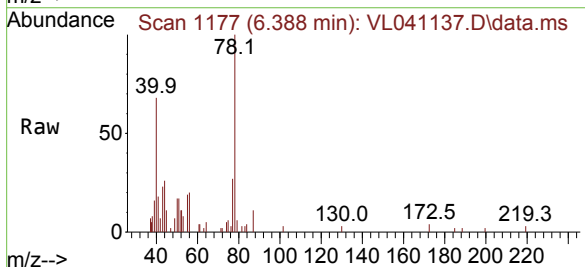
Instrument :
MSVOA_L
ClientSampleId :
SV4

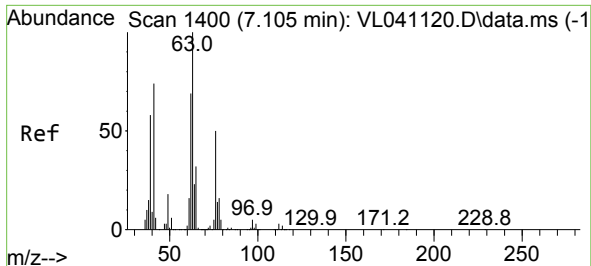
Tgt Ion: 43 Resp: 2722298
Ion Ratio Lower Upper
43 100
72 21.7 17.4 26.0



#36
Benzene
Concen: 0.036 ppbv
RT: 6.388 min Scan# 1177
Delta R.T. -0.013 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

Tgt Ion: 78 Resp: 10290
Ion Ratio Lower Upper
78 100
77 26.8 18.8 28.2
50 17.3 15.5 23.3





#39

1,2-Dichloropropane

Concen: 8.256 ppbv

RT: 6.674 min Scan# 11

Delta R.T. -0.431 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

Instrument :

MSVOA_L

ClientSampleId :

SV4

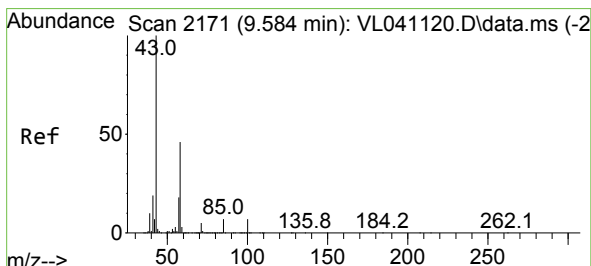
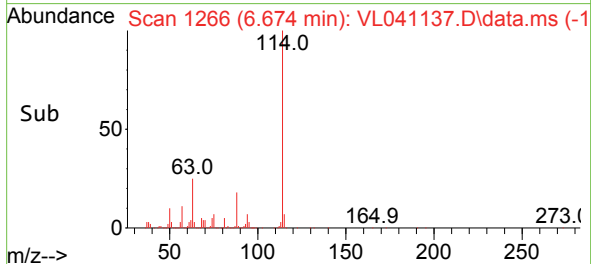
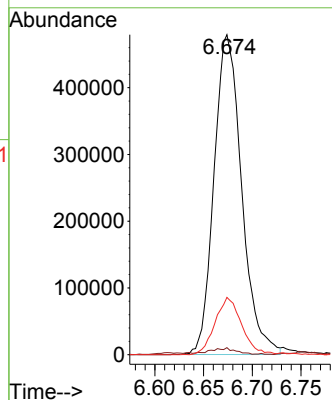
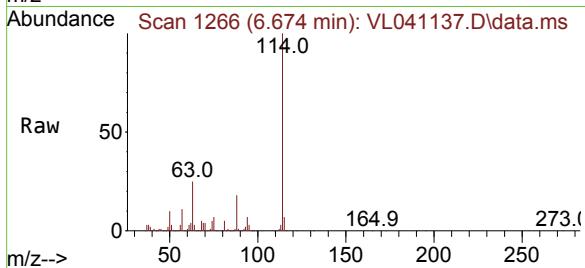
Tgt Ion: 63 Resp: 944512

Ion Ratio Lower Upper

63 100

41 1.9 62.2 93.4#

62 17.9 57.0 85.4#



#51

2-Hexanone

Concen: 2.369 ppbv

RT: 9.581 min Scan# 2170

Delta R.T. -0.003 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

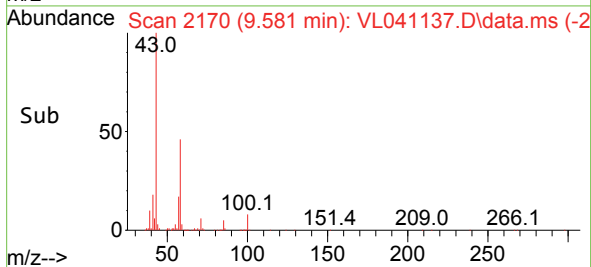
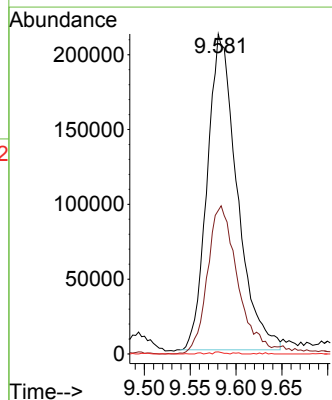
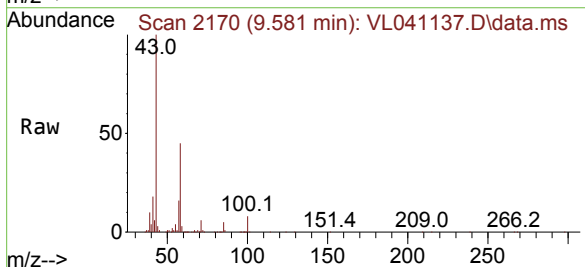
Tgt Ion: 43 Resp: 478291

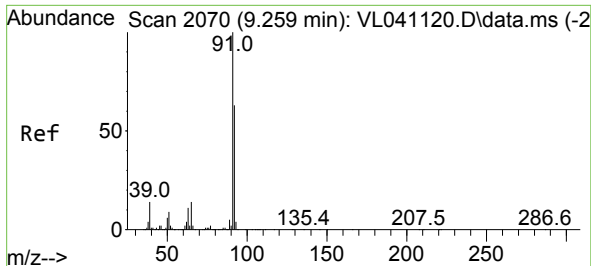
Ion Ratio Lower Upper

43 100

58 50.4 37.4 56.2

98 0.4 0.4 0.6#

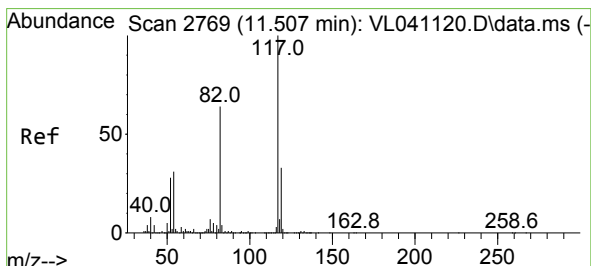
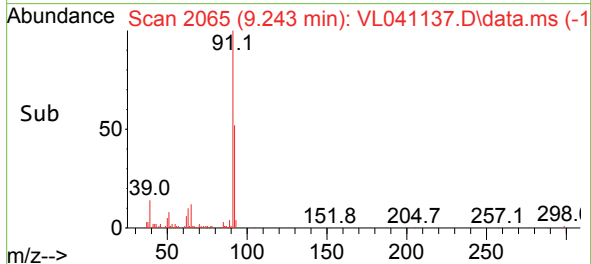
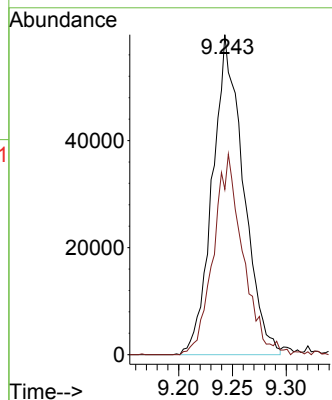
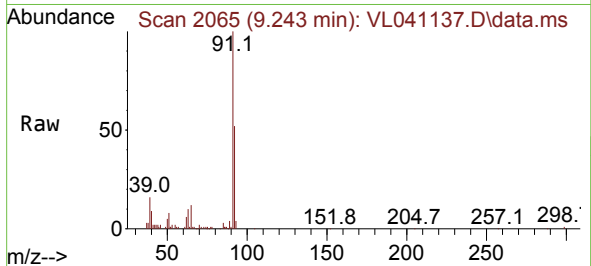




#53
Toluene
Concen: 0.392 ppbv
RT: 9.243 min Scan# 2070
Delta R.T. -0.016 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

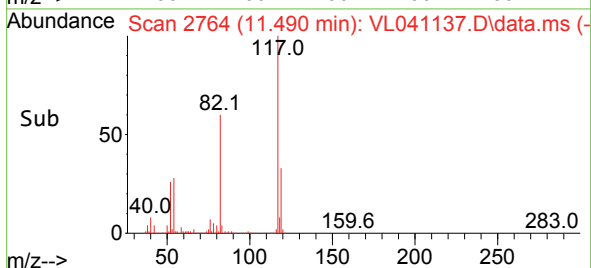
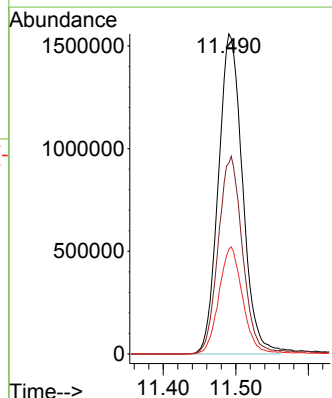
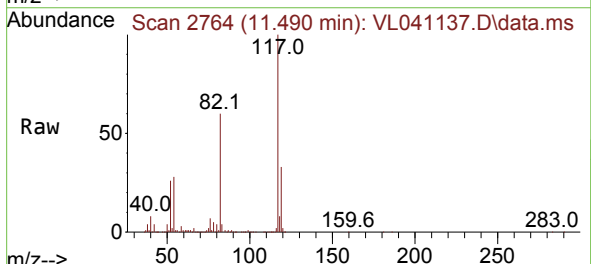
Instrument :
MSVOA_L
ClientSampleId :
SV4

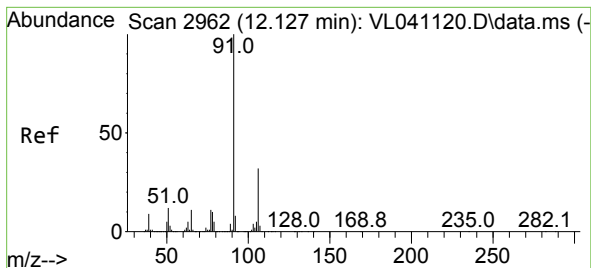
Tgt Ion: 91 Resp: 119409
Ion Ratio Lower Upper
91 100
92 60.5 48.9 73.3



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.490 min Scan# 2764
Delta R.T. -0.016 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

Tgt Ion: 117 Resp: 3604914
Ion Ratio Lower Upper
117 100
82 63.0 51.4 77.2
119 33.3 23.7 35.5





#58

Ethyl Benzene

Concen: 0.059 ppbv

RT: 12.114 min Scan# 2958

Delta R.T. -0.013 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

Instrument :

MSVOA_L

ClientSampleId :

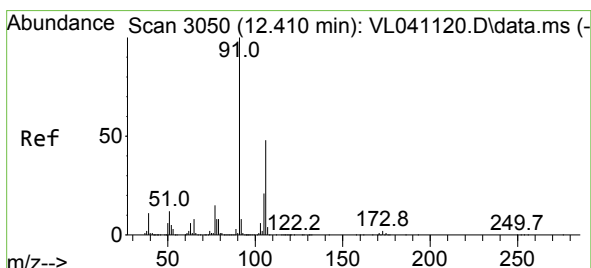
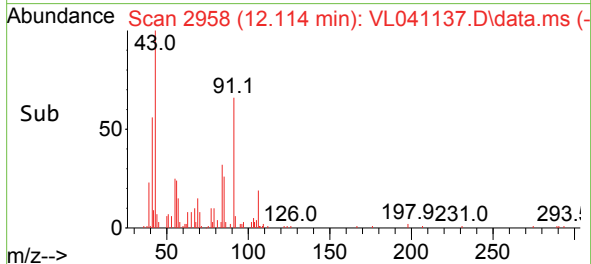
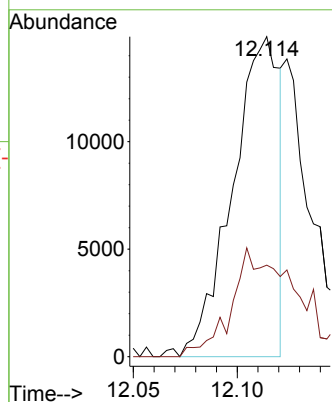
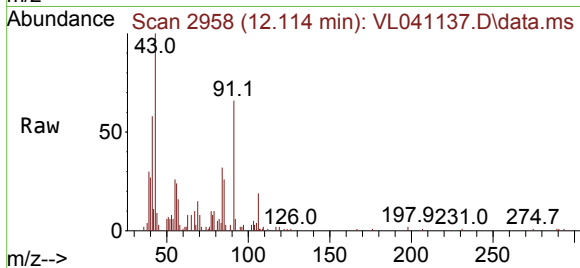
SV4

Tgt Ion: 91 Resp: 23292

Ion Ratio Lower Upper

91 100

106 30.0 24.6 36.8



#59

m/p-Xylene

Concen: 0.170 ppbv

RT: 12.371 min Scan# 3038

Delta R.T. -0.039 min

Lab File: VL041137.D

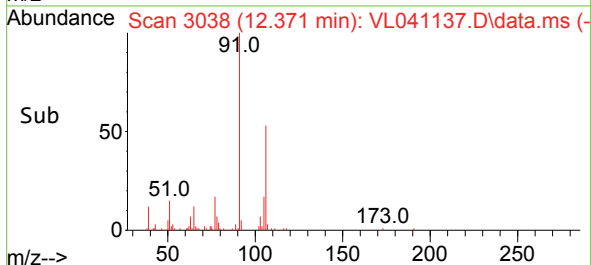
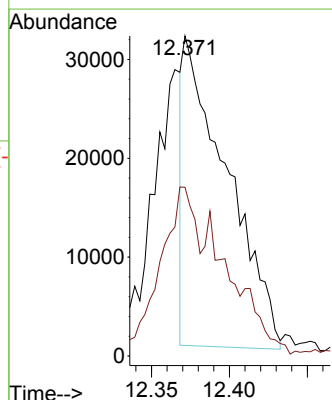
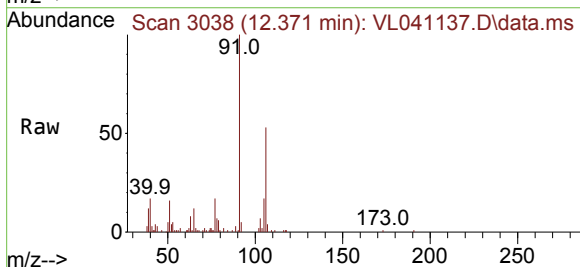
Acq: 4 Apr 2024 22:53

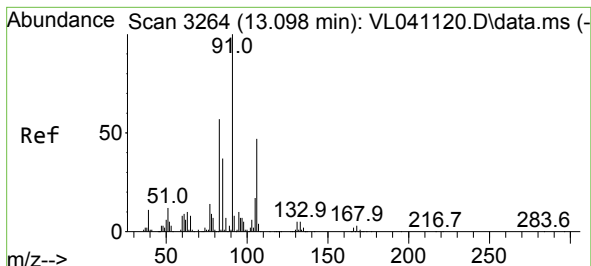
Tgt Ion: 91 Resp: 60836

Ion Ratio Lower Upper

91 100

106 82.0 35.4 53.2#





#60

o-Xylene

Concen: 0.149 ppbv

RT: 13.082 min Scan# 31

Delta R.T. -0.016 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

Instrument :

MSVOA_L

ClientSampleId :

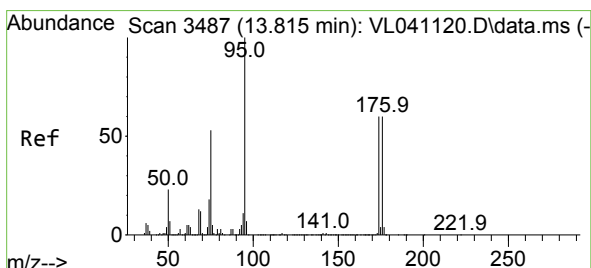
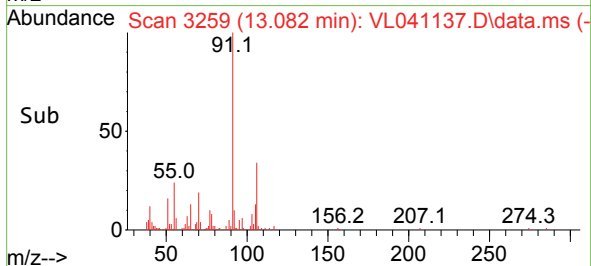
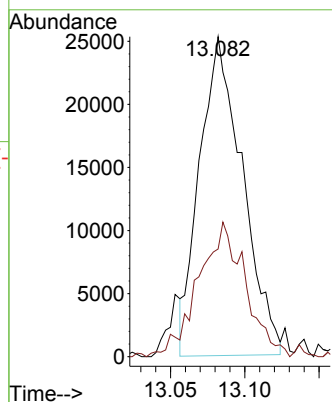
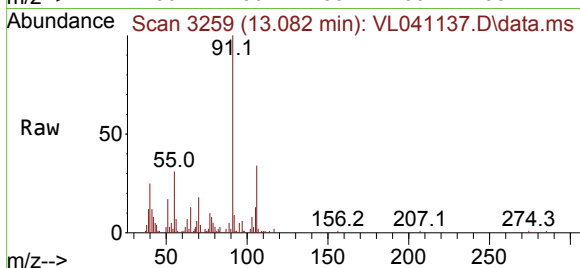
SV4

Tgt Ion: 91 Resp: 50710

Ion Ratio Lower Upper

91 100

106 46.9 22.4 67.3



#68

1-Bromo-4-Fluorobenzene

Concen: 9.558 ppbv

RT: 13.802 min Scan# 3483

Delta R.T. -0.013 min

Lab File: VL041137.D

Acq: 4 Apr 2024 22:53

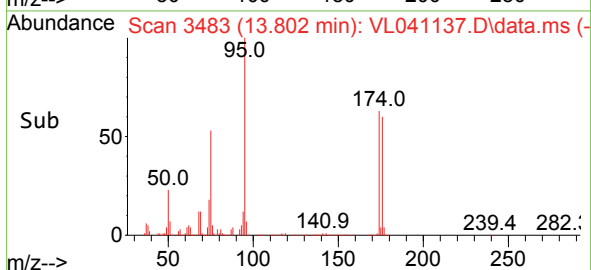
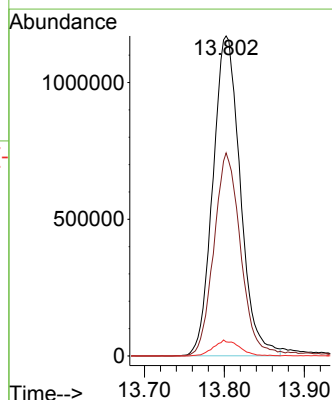
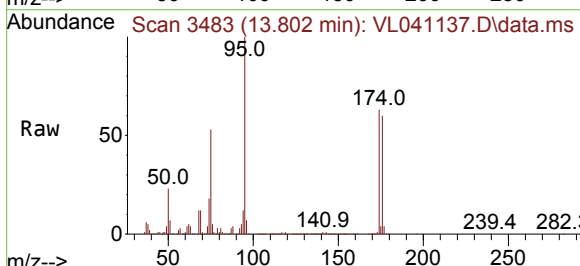
Tgt Ion: 95 Resp: 2781925

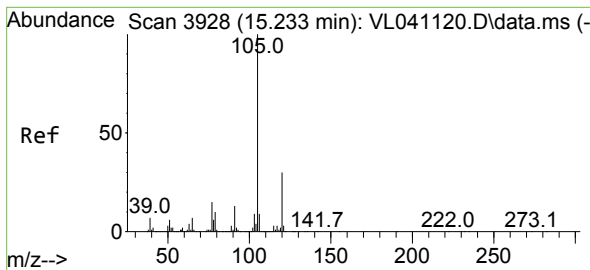
Ion Ratio Lower Upper

95 100

174 64.2 47.8 71.8

175 4.9 3.5 5.3

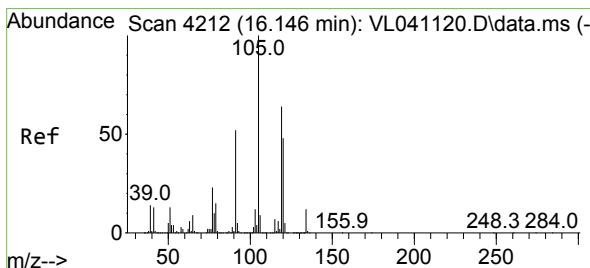
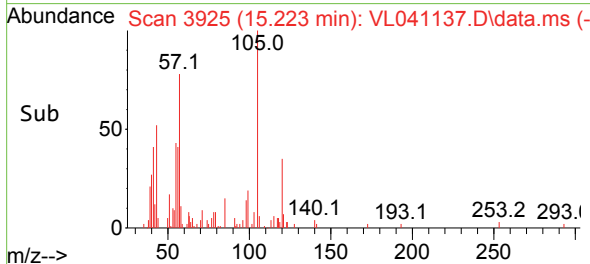
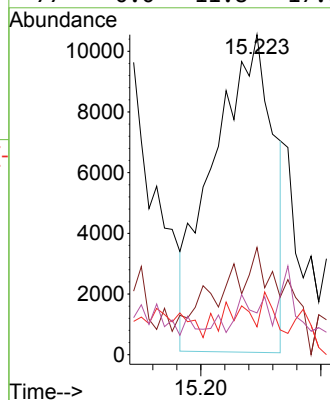
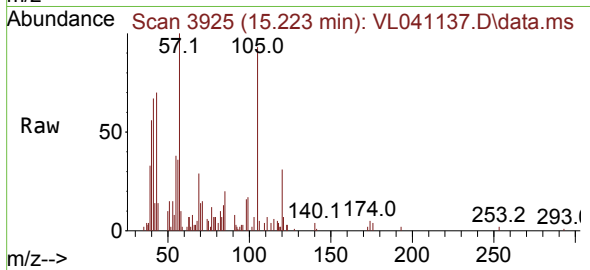




#72
4-Ethyltoluene
Concen: 0.048 ppbv
RT: 15.223 min Scan# 3928
Delta R.T. -0.010 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

Instrument :
MSVOA_L
ClientSampleId :
SV4

Tgt Ion:105	Resp:	18166
Ion Ratio	Lower	Upper
105	100	
120	39.6	23.8 35.8#
91	0.0	10.9 16.3#
77	0.0	11.8 17.6#



#74
1,2,4-Trimethylbenzene
Concen: 0.285 ppbv
RT: 16.133 min Scan# 4208
Delta R.T. -0.013 min
Lab File: VL041137.D
Acq: 4 Apr 2024 22:53

Tgt Ion:105	Resp:	109802
Ion Ratio	Lower	Upper
105	100	
120	44.0	40.4 60.6
91	12.7	41.4 62.0#
77	14.7	19.0 28.4#

