

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL060524\
 Data File : VL041328.D
 Acq On : 5 Jun 2024 15:31
 Operator : SY/MD
 Sample : P2716-03DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Jun 06 04:40:10 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL060424AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Jun 05 04:42:10 2024
 Response via : Initial Calibration

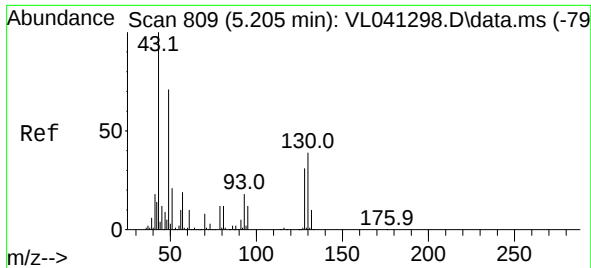
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.214	49	802451	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.671	114	2087746	10.000	ppbv	0.01
55) Chlorobenzene-d5	11.478	117	1952572	10.000	ppbv	0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.786	95	1508362	10.005	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.100%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.767	85	43006	0.336	ppbv	89
3) Chlorodifluoromethane	2.713	51	101790	0.803	ppbv #	81
4) Chloromethane	2.848	50	30503	0.639	ppbv	98
9) Propene	2.739	41	76424	1.692	ppbv #	80
10) Heptane	7.594	43	31169	0.291	ppbv #	72
11) Trichlorofluoromethane	3.594	101	28368	0.241	ppbv	96
12) 1,1,2-Trichlorotrifluo...	4.089	101	3657	0.044	ppbv #	34
13) Ethanol	3.269	45	488495	41.570	ppbv	97
15) Acetone	3.494	43	1338121	14.605	ppbv	99
16) 1,3-Butadiene	2.999	39	13929	0.302	ppbv #	54
17) tert-Butyl alcohol	3.928	59	599206	7.104	ppbv #	77
19) Isopropyl Alcohol	3.607	45	196098	3.407	ppbv #	89
20) Methylene Chloride	3.960	84	193665	5.816	ppbv	96
23) Vinyl Acetate	4.639	43	51616	0.551	ppbv #	57
25) Ethyl Acetate	5.230	43	221826	1.224	ppbv #	87
26) Hexane	5.234	57	248239	3.046	ppbv #	48
30) Cyclohexane	6.619	84	84584	1.280	ppbv	93
34) 2-Butanone	4.816	43	108501	1.085	ppbv	95
36) Benzene	6.391	78	73956	0.457	ppbv	95
39) 1,2-Dichloropropane	6.674	63	538571	8.358	ppbv #	25
41) Tetrahydrofuran	5.584	42	8524	0.131	ppbv #	37
44) 2,2,4-Trimethylpentane	7.343	57	102094	0.367	ppbv #	85
50) 4-Methyl-2-Pentanone	8.198	43	5184	0.031	ppbv #	40
53) Toluene	9.237	91	194808	1.047	ppbv #	17
58) Ethyl Benzene	12.102	91	53002	0.212	ppbv #	87
59) m/p-Xylene	12.381	91	9825	0.046	ppbv #	31
60) o-Xylene	13.069	91	73316	0.359	ppbv	96
74) 1,2,4-Trimethylbenzene	16.117	105	33403	0.143	ppbv #	69
76) 1,4-Dichlorobenzene	16.487	146	5260	0.038	ppbv #	1

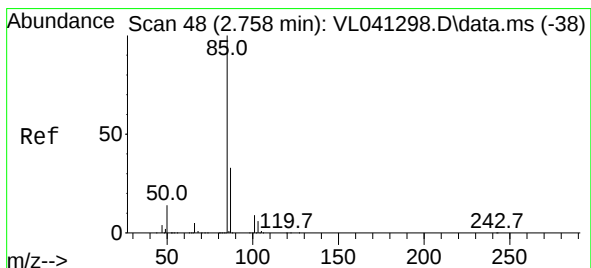
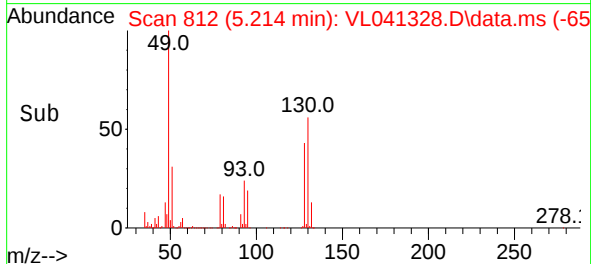
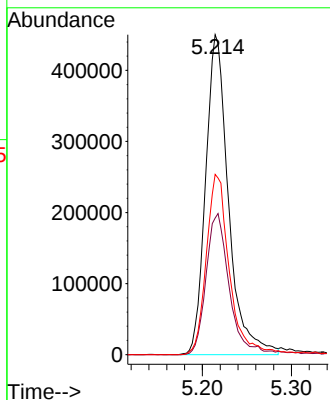
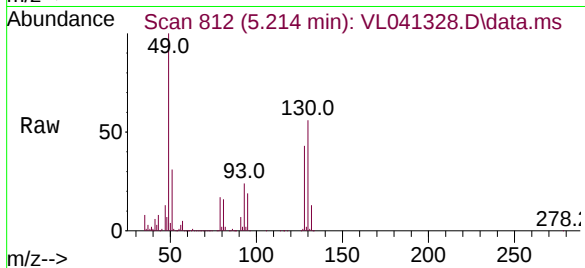
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.214 min Scan# 81
 Delta R.T. 0.009 min
 Lab File: VL041328.D
 Acq: 5 Jun 2024 15:31

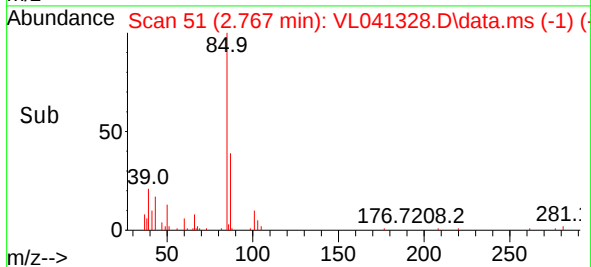
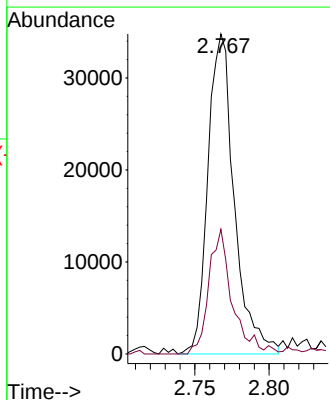
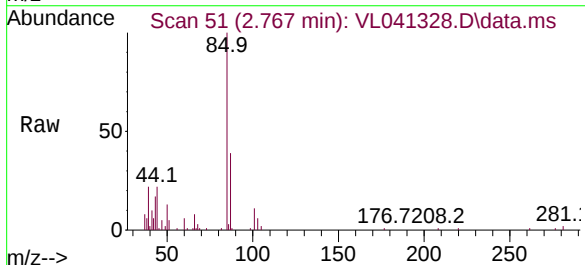
Instrument :
 MSVOA_L
 ClientSampleId :

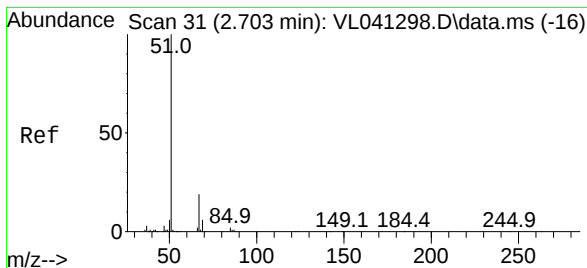
Tgt Ion: 49 Resp: 802451
 Ion Ratio Lower Upper
 49 100
 128 45.5 22.8 68.3
 130 57.8 28.4 85.3



#2
 Dichlorodifluoromethane
 Concen: 0.336 ppbv
 RT: 2.767 min Scan# 51
 Delta R.T. 0.010 min
 Lab File: VL041328.D
 Acq: 5 Jun 2024 15:31

Tgt Ion: 85 Resp: 43006
 Ion Ratio Lower Upper
 85 100
 87 39.2 26.5 39.7





#3

Chlorodifluoromethane

Concen: 0.803 ppbv

RT: 2.713 min Scan# 34

Delta R.T. 0.010 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

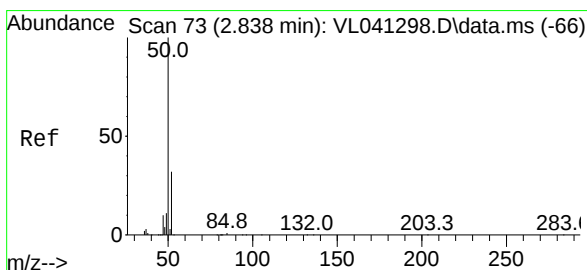
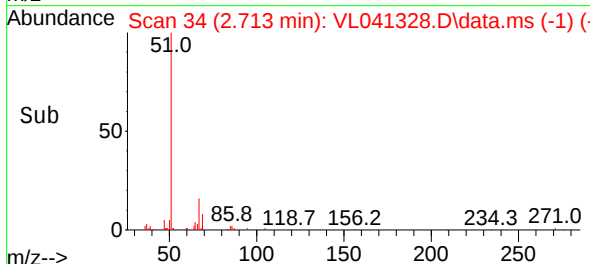
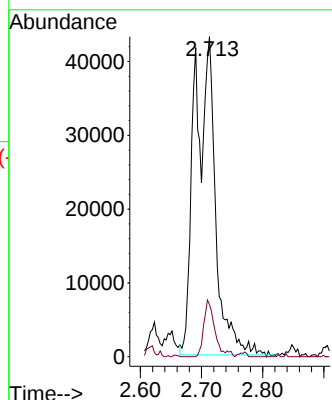
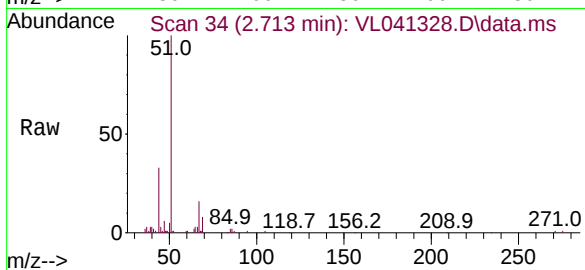
ClientSampleId :

Tgt Ion: 51 Resp: 101790

Ion Ratio Lower Upper

51 100

67 9.9 14.7 22.1#



#4

Chloromethane

Concen: 0.639 ppbv

RT: 2.848 min Scan# 76

Delta R.T. 0.010 min

Lab File: VL041328.D

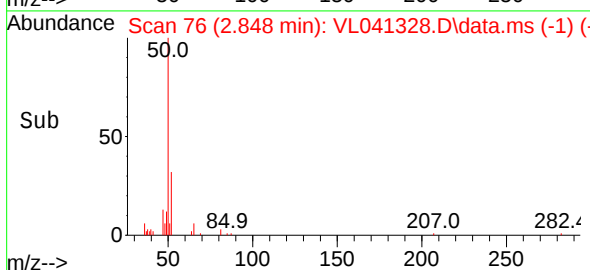
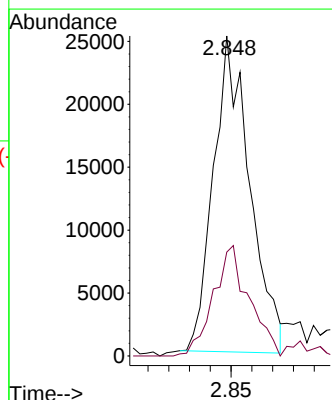
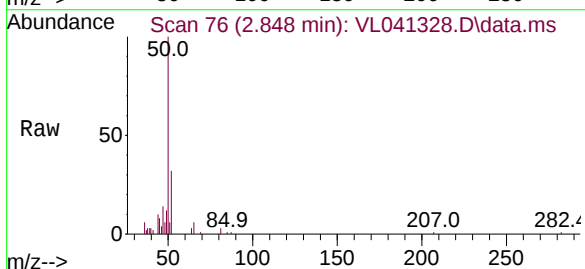
Acq: 5 Jun 2024 15:31

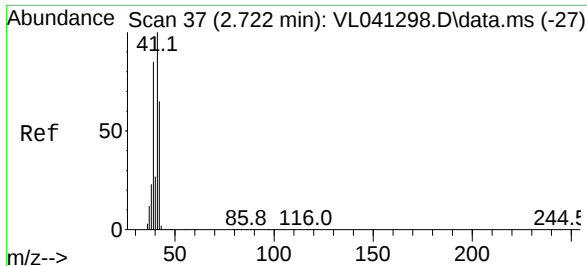
Tgt Ion: 50 Resp: 30503

Ion Ratio Lower Upper

50 100

52 33.3 25.6 38.4





#9

Propene

Concen: 1.692 ppbv

RT: 2.739 min Scan# 41

Delta R.T. 0.016 min

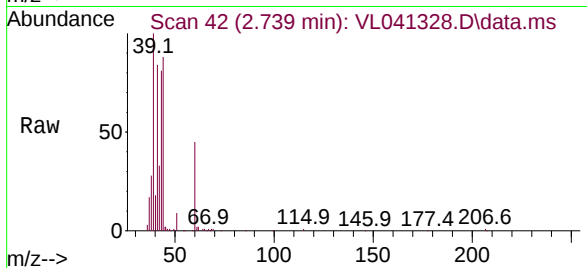
Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

ClientSampleId :

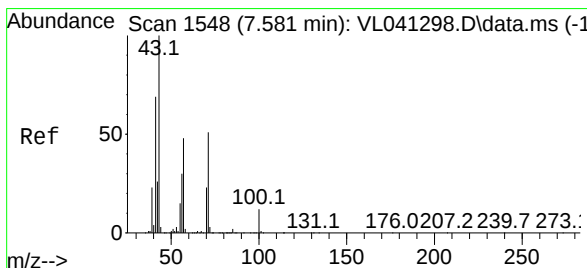
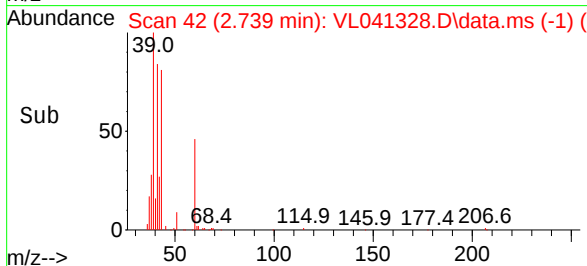
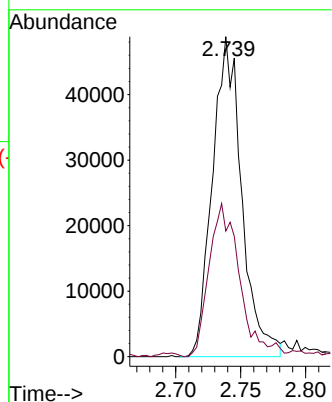


Tgt Ion: 41 Resp: 76424

Ion Ratio Lower Upper

41 100

42 52.9 55.2 82.8#



#10

Heptane

Concen: 0.291 ppbv

RT: 7.594 min Scan# 1552

Delta R.T. 0.013 min

Lab File: VL041328.D

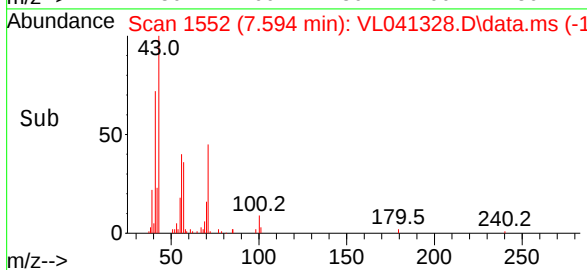
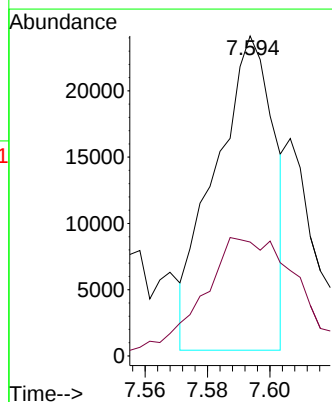
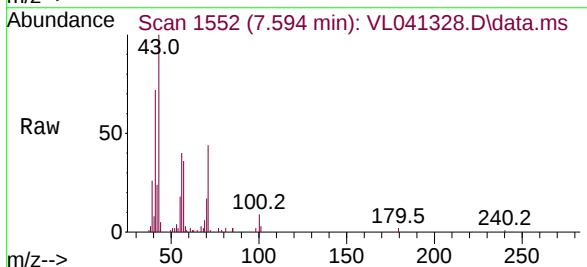
Acq: 5 Jun 2024 15:31

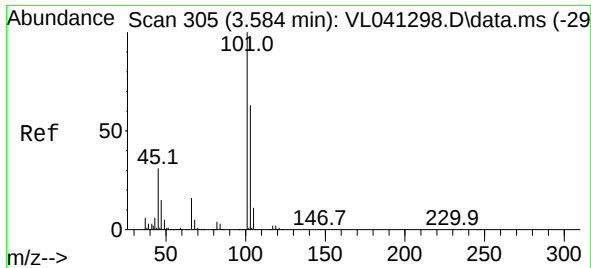
Tgt Ion: 43 Resp: 31169

Ion Ratio Lower Upper

43 100

57 67.7 39.0 58.4#





#11

Trichlorofluoromethane

Concen: 0.241 ppbv

RT: 3.594 min Scan# 305

Delta R.T. 0.010 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

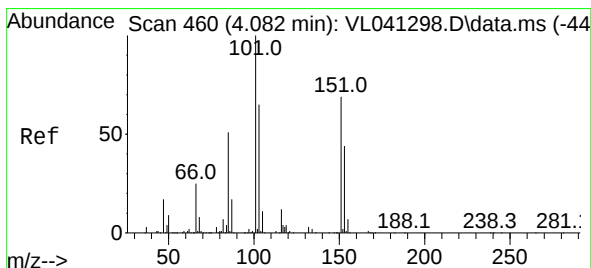
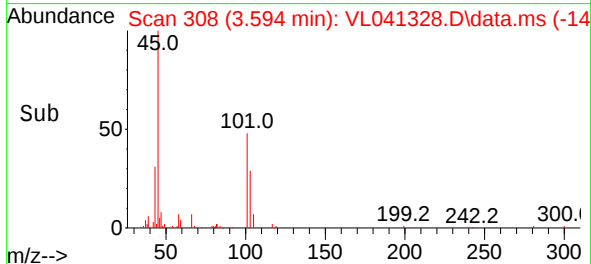
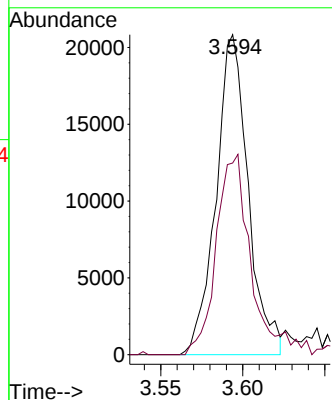
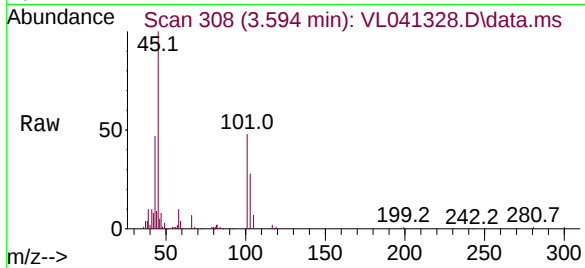
ClientSampleId :

Tgt Ion:101 Resp: 28368

Ion Ratio Lower Upper

101 100

103 59.9 50.6 76.0



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.044 ppbv

RT: 4.089 min Scan# 462

Delta R.T. 0.006 min

Lab File: VL041328.D

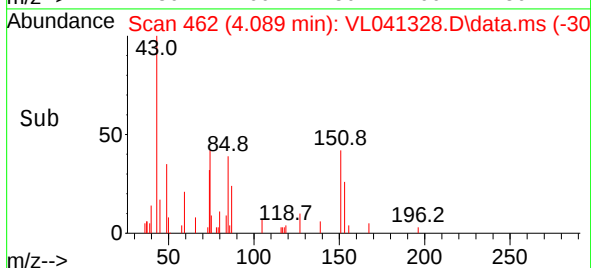
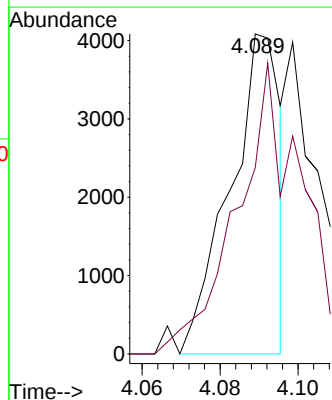
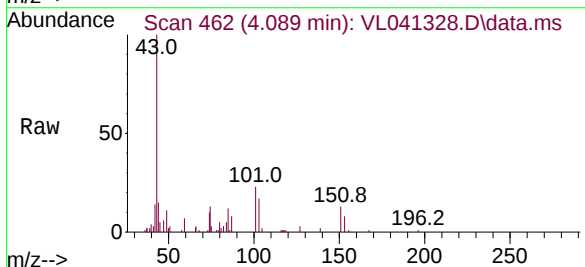
Acq: 5 Jun 2024 15:31

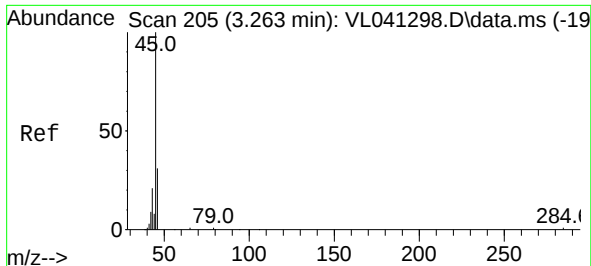
Tgt Ion:101 Resp: 3657

Ion Ratio Lower Upper

101 100

151 122.4 54.8 82.2#





#13

Ethanol

Concen: 41.570 ppbv

RT: 3.269 min Scan# 205

Delta R.T. 0.006 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

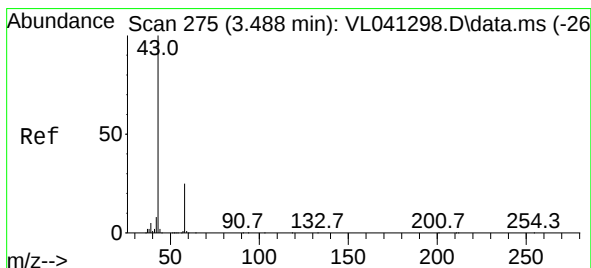
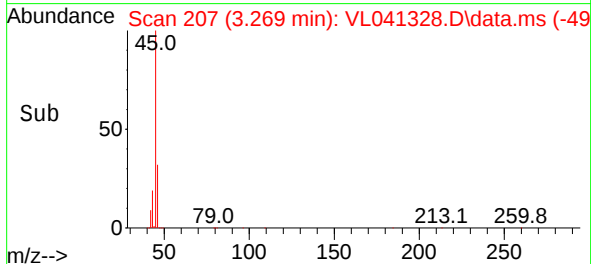
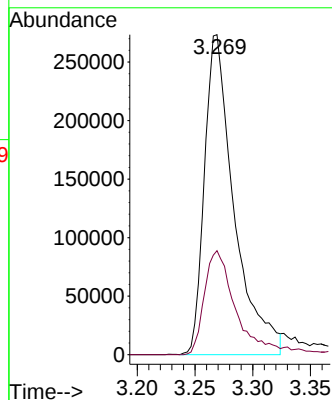
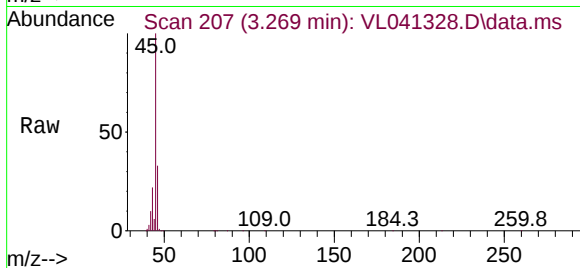
ClientSampleId :

Tgt Ion: 45 Resp: 488495

Ion Ratio Lower Upper

45 100

46 36.9 14.2 56.6



#15

Acetone

Concen: 14.605 ppbv

RT: 3.494 min Scan# 277

Delta R.T. 0.006 min

Lab File: VL041328.D

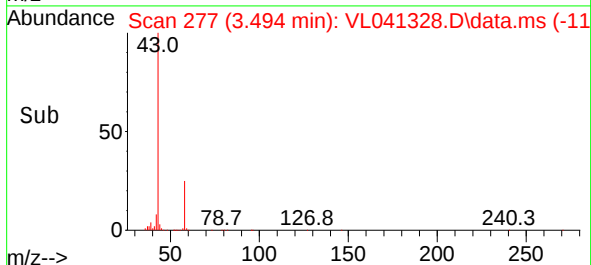
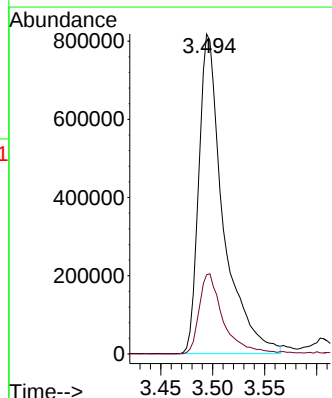
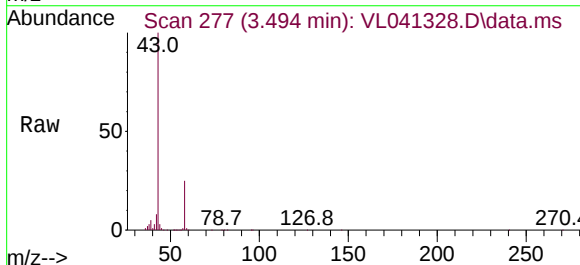
Acq: 5 Jun 2024 15:31

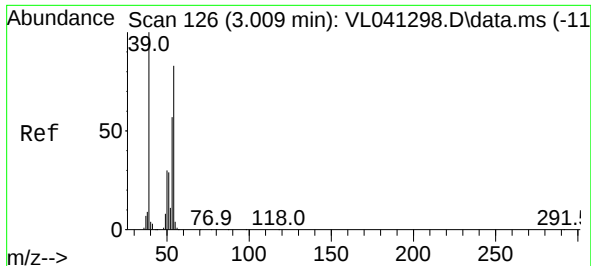
Tgt Ion: 43 Resp: 1338121

Ion Ratio Lower Upper

43 100

58 25.1 20.6 31.0





#16

1,3-Butadiene

Concen: 0.302 ppbv

RT: 2.999 min Scan# 11

Delta R.T. -0.010 min MSVOA_L

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

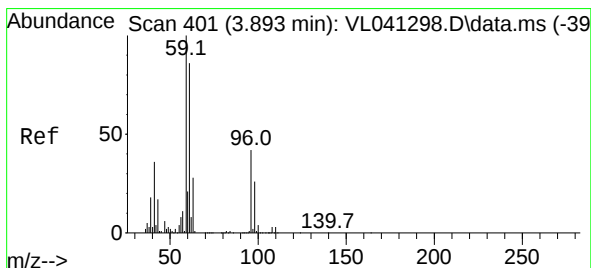
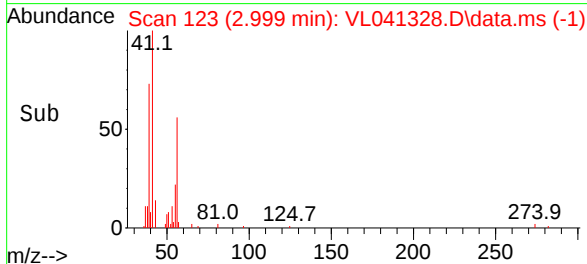
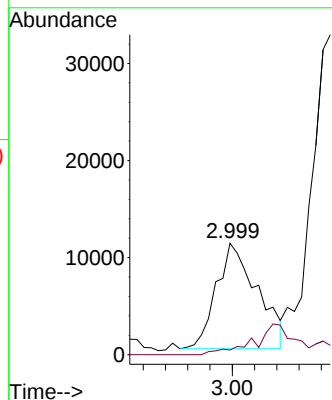
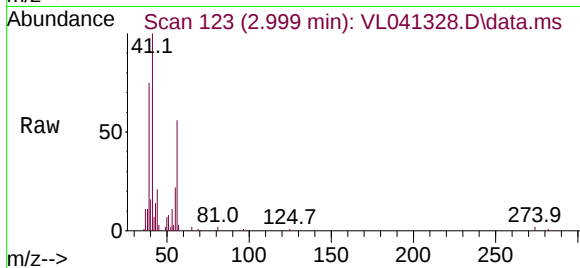
ClientSampleId :

Tgt Ion: 39 Resp: 13929

Ion Ratio Lower Upper

39 100

54 36.2 60.5 90.7#



#17

tert-Butyl alcohol

Concen: 7.104 ppbv

RT: 3.928 min Scan# 412

Delta R.T. 0.035 min

Lab File: VL041328.D

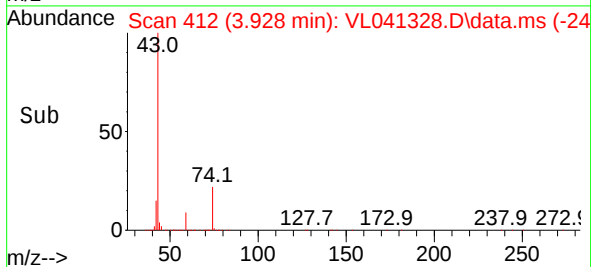
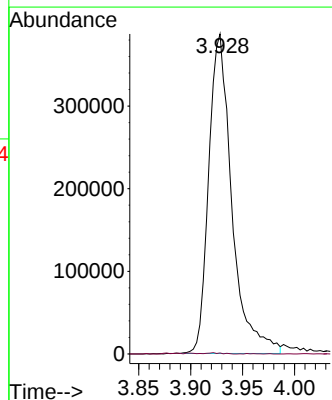
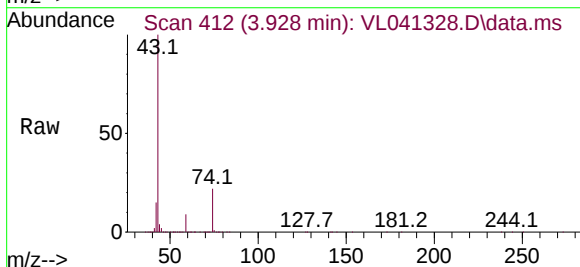
Acq: 5 Jun 2024 15:31

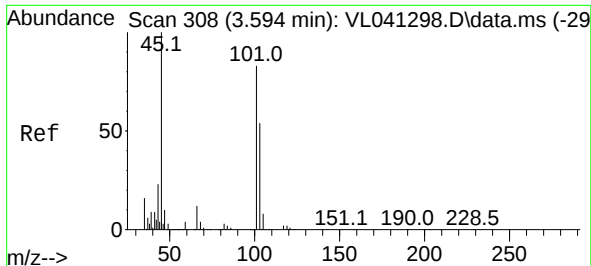
Tgt Ion: 59 Resp: 599206

Ion Ratio Lower Upper

59 100

57 2.6 9.0 13.4#





#19

Isopropyl Alcohol

Concen: 3.407 ppbv

RT: 3.607 min Scan# 312

Delta R.T. 0.013 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

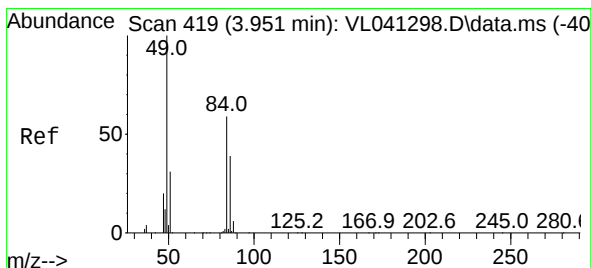
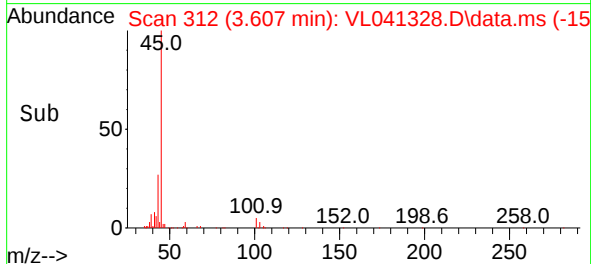
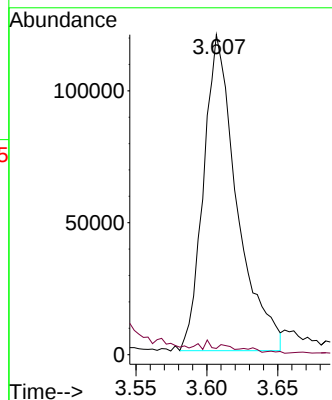
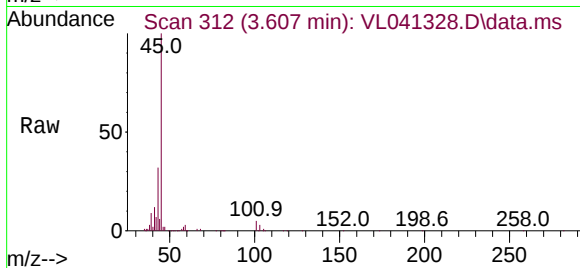
ClientSampleId :

Tgt Ion: 45 Resp: 196098

Ion Ratio Lower Upper

45 100

58 5.7 1.4 2.2#



#20

Methylene Chloride

Concen: 5.816 ppbv

RT: 3.960 min Scan# 422

Delta R.T. 0.010 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Tgt Ion: 84 Resp: 193665

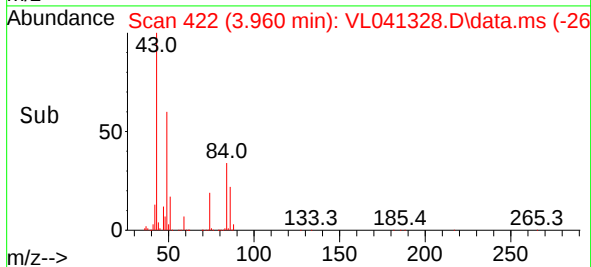
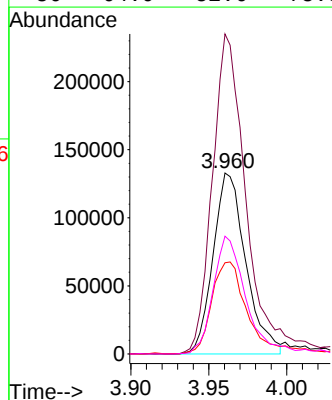
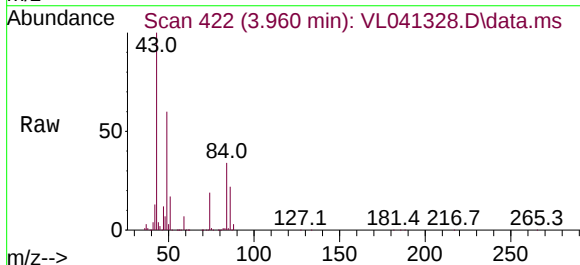
Ion Ratio Lower Upper

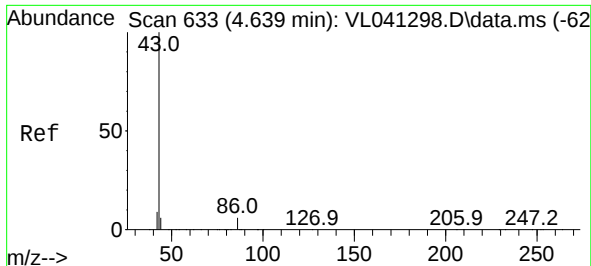
84 100

49 176.5 136.2 204.2

51 50.0 41.9 62.9

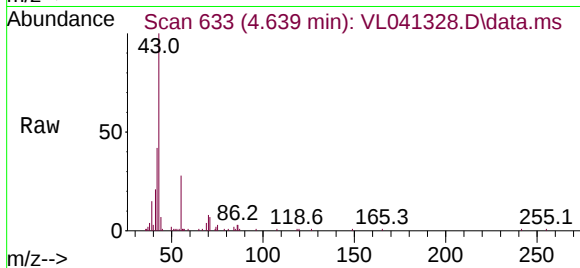
86 64.9 52.6 78.8



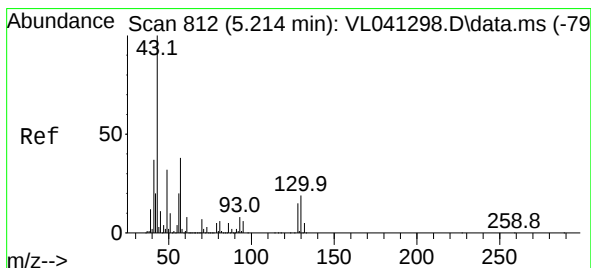
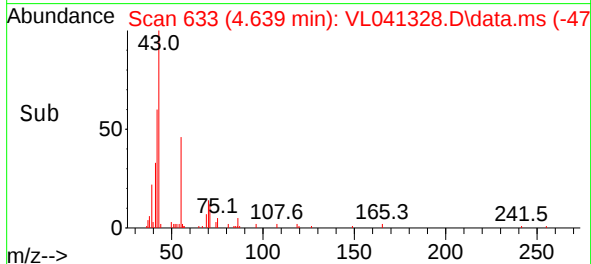
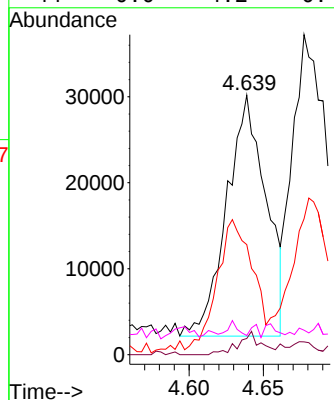


#23
Vinyl Acetate
Concen: 0.551 ppbv
RT: 4.639 min Scan# 61
Delta R.T. 0.000 min
Lab File: VL041328.D
Acq: 5 Jun 2024 15:31

Instrument :
MSVOA_L
ClientSampleId :

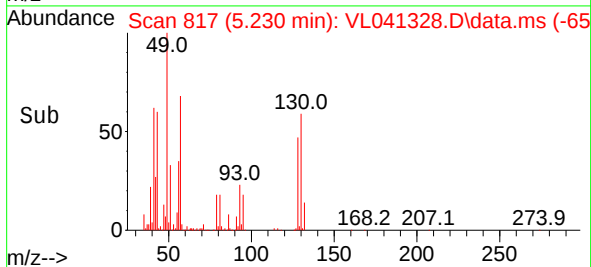
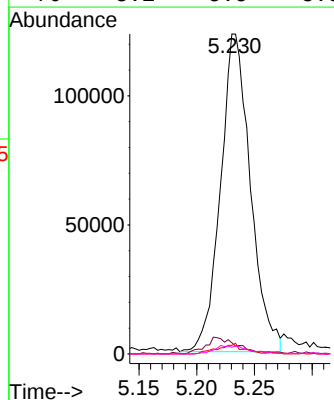
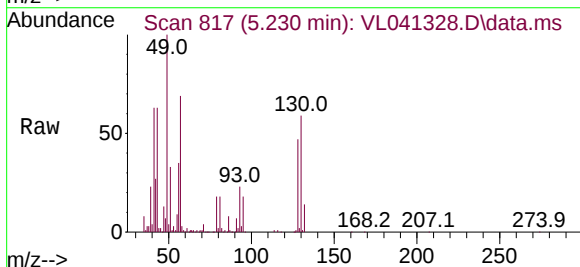


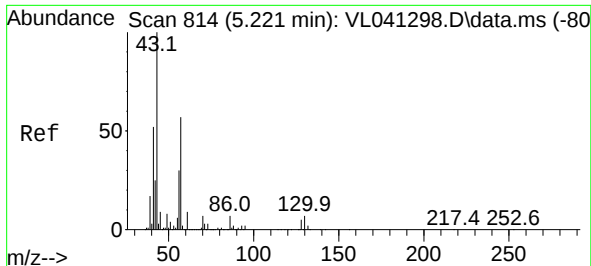
Tgt Ion: 43 Resp: 51616
Ion Ratio Lower Upper
43 100
86 6.7 4.7 7.1
42 40.0 8.0 12.0#
44 0.0 4.2 6.4#



#25
Ethyl Acetate
Concen: 1.224 ppbv
RT: 5.230 min Scan# 817
Delta R.T. 0.016 min
Lab File: VL041328.D
Acq: 5 Jun 2024 15:31

Tgt Ion: 43 Resp: 221826
Ion Ratio Lower Upper
43 100
45 6.4 8.1 12.1#
61 2.9 7.4 11.0#
70 3.1 5.5 8.3#

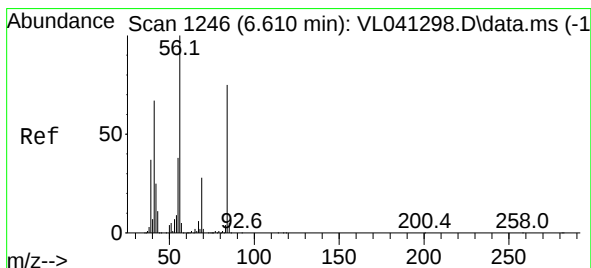
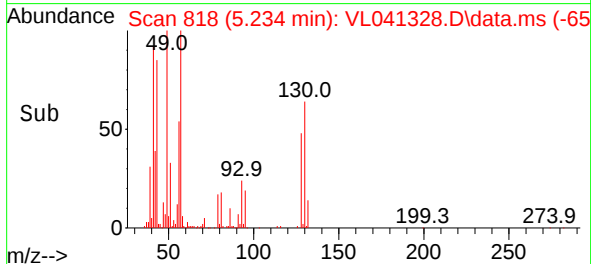
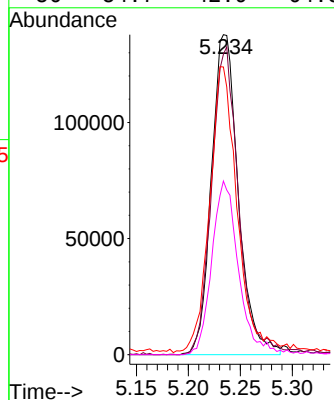
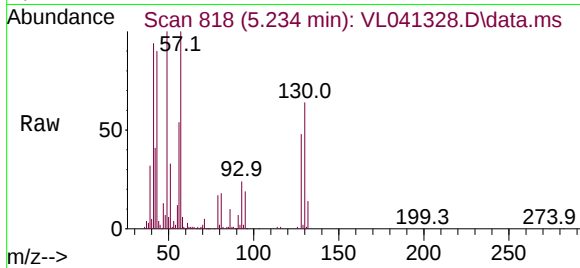




#26
Hexane
Concen: 3.046 ppbv
RT: 5.234 min Scan# 814
Delta R.T. 0.013 min
Lab File: VL041328.D
Acq: 5 Jun 2024 15:31

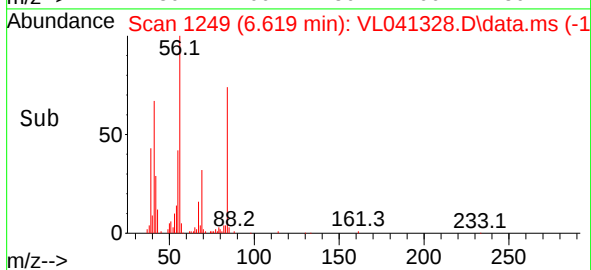
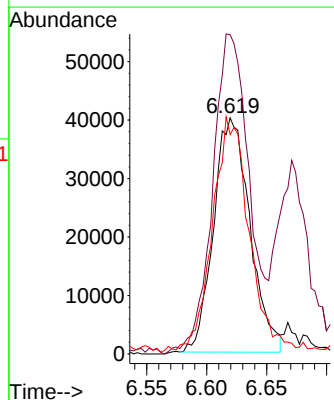
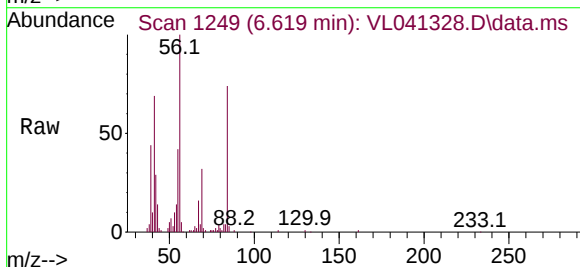
Instrument :
MSVOA_L
ClientSampleId :

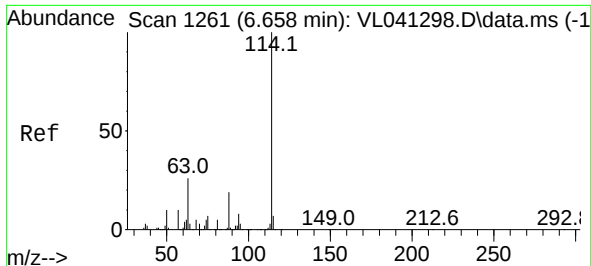
Tgt Ion: 57 Resp: 248239
Ion Ratio Lower Upper
57 100
41 98.0 77.1 115.7
43 91.1 186.1 279.1#
56 54.7 42.9 64.3



#30
Cyclohexane
Concen: 1.280 ppbv
RT: 6.619 min Scan# 1249
Delta R.T. 0.010 min
Lab File: VL041328.D
Acq: 5 Jun 2024 15:31

Tgt Ion: 84 Resp: 84584
Ion Ratio Lower Upper
84 100
56 138.2 114.9 172.3
41 102.9 74.4 111.6





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.671 min Scan# 11

Delta R.T. 0.013 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

ClientSampleId :

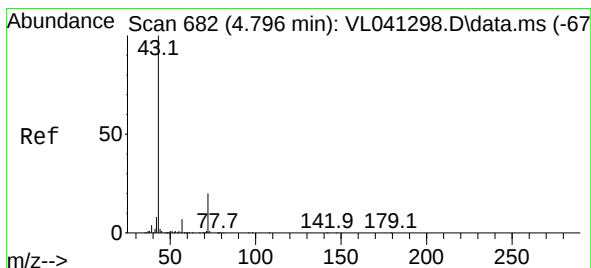
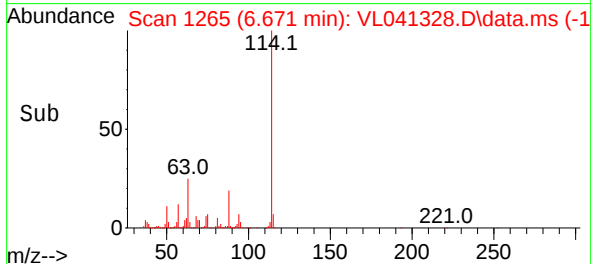
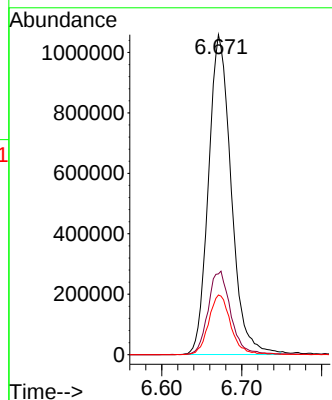
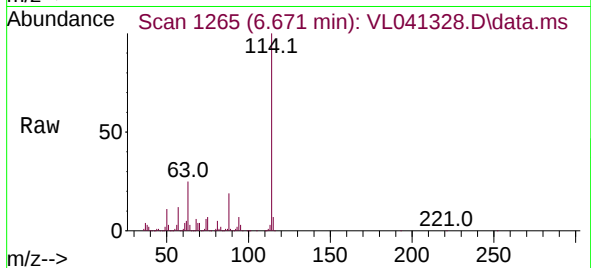
Tgt Ion:114 Resp: 2087746

Ion Ratio Lower Upper

114 100

63 26.4 20.6 30.8

88 18.3 14.5 21.7



#34

2-Butanone

Concen: 1.085 ppbv

RT: 4.816 min Scan# 688

Delta R.T. 0.019 min

Lab File: VL041328.D

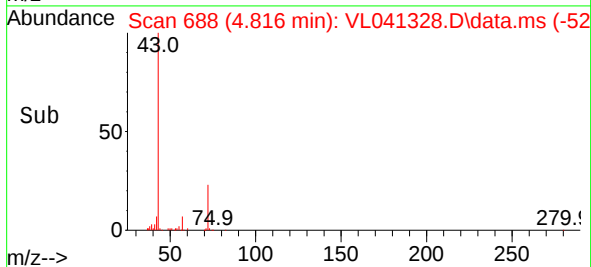
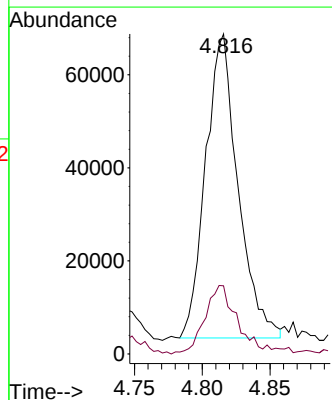
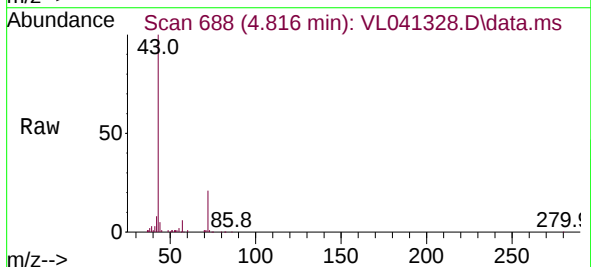
Acq: 5 Jun 2024 15:31

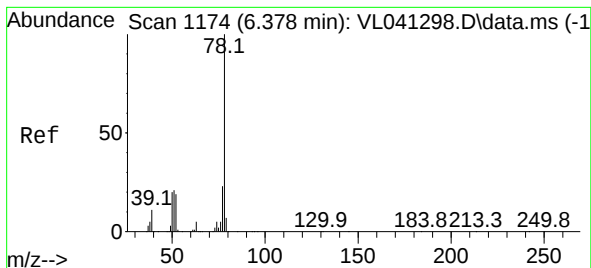
Tgt Ion: 43 Resp: 108501

Ion Ratio Lower Upper

43 100

72 23.9 17.4 26.0





#36

Benzene

Concen: 0.457 ppbv

RT: 6.391 min Scan# 1178

Delta R.T. 0.013 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

ClientSampleId :

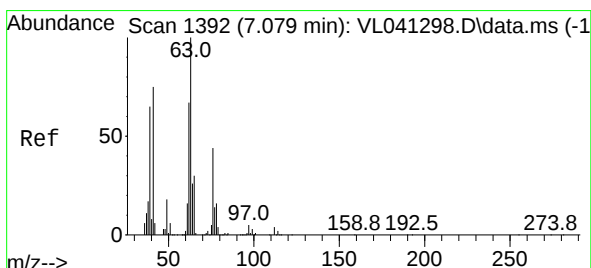
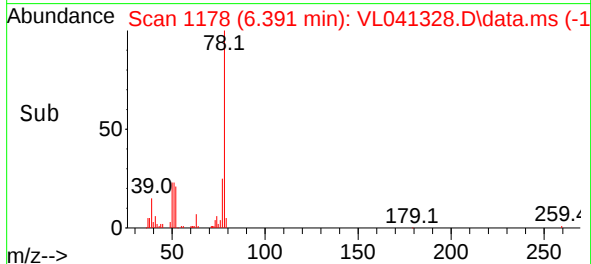
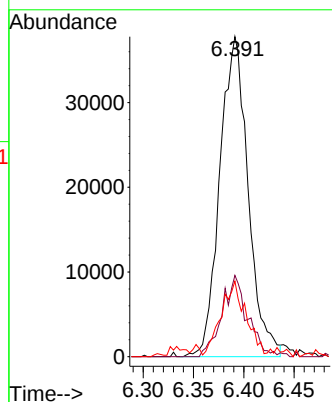
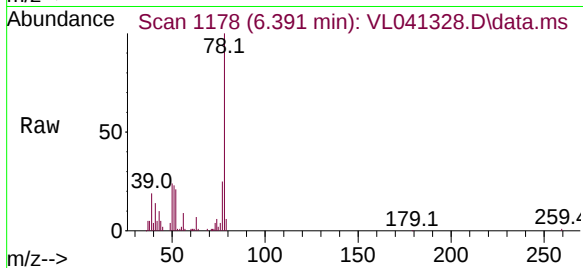
Tgt Ion: 78 Resp: 73956

Ion Ratio Lower Upper

78 100

77 25.4 18.6 28.0

50 22.2 16.0 24.0



#39

1,2-Dichloropropane

Concen: 8.358 ppbv

RT: 6.674 min Scan# 1266

Delta R.T. -0.405 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

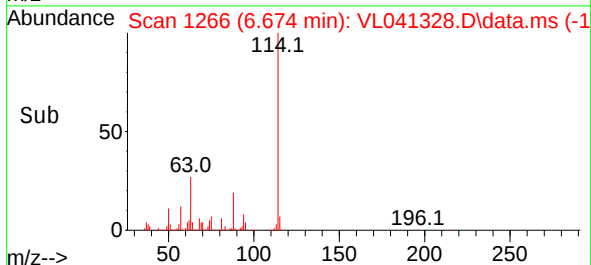
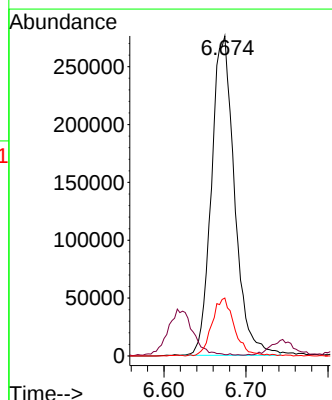
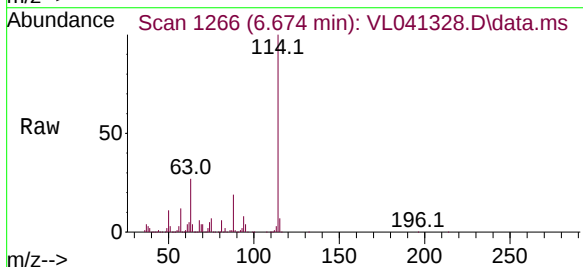
Tgt Ion: 63 Resp: 538571

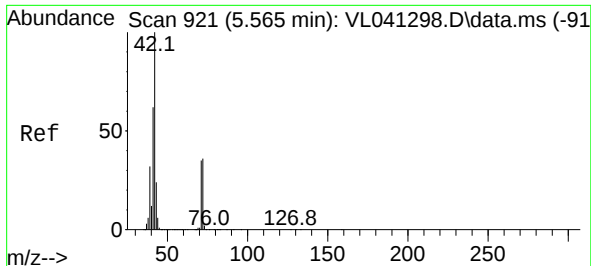
Ion Ratio Lower Upper

63 100

41 0.0 59.9 89.9#

62 17.9 53.8 80.6#





#41

Tetrahydrofuran

Concen: 0.131 ppbv

RT: 5.584 min Scan# 91

Delta R.T. 0.019 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

ClientSampleId :

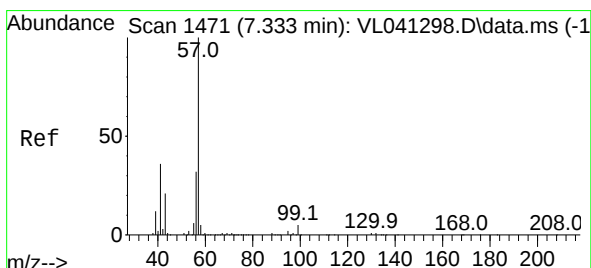
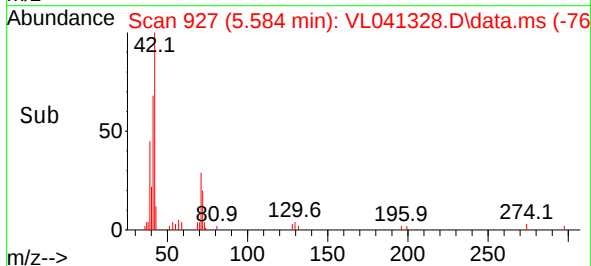
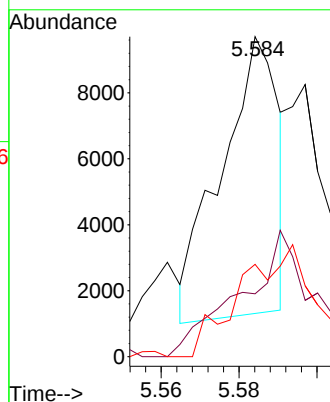
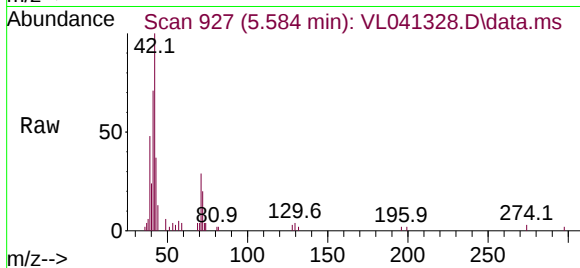
Tgt Ion: 42 Resp: 8524

Ion Ratio Lower Upper

42 100

72 0.0 30.2 45.4#

71 0.0 30.3 45.5#



#44

2,2,4-Trimethylpentane

Concen: 0.367 ppbv

RT: 7.343 min Scan# 1474

Delta R.T. 0.010 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

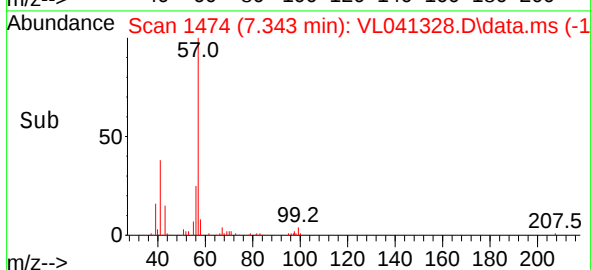
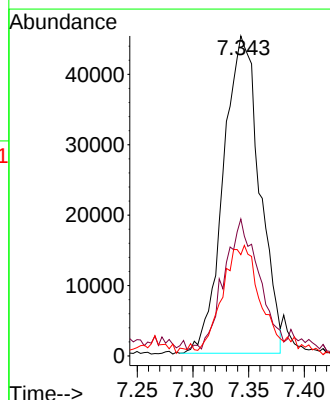
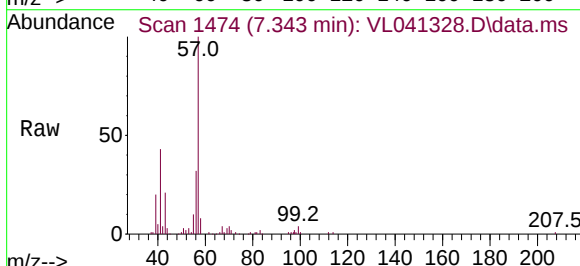
Tgt Ion: 57 Resp: 102094

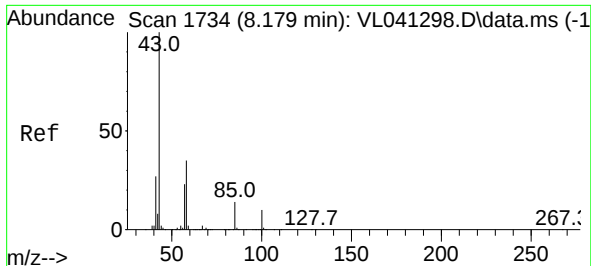
Ion Ratio Lower Upper

57 100

41 44.9 29.4 44.2#

56 40.6 25.0 37.4#





#50

4-Methyl-2-Pentanone

Concen: 0.031 ppbv

RT: 8.198 min Scan# 1

Delta R.T. 0.019 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

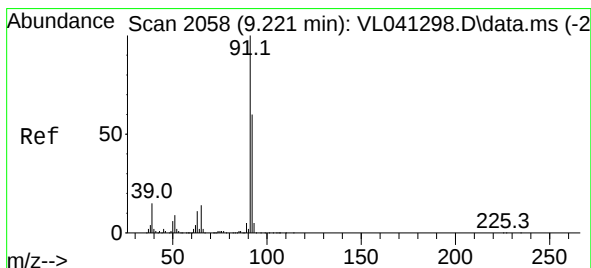
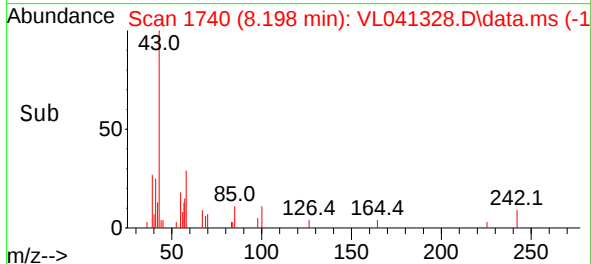
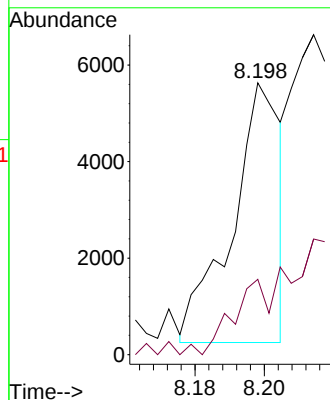
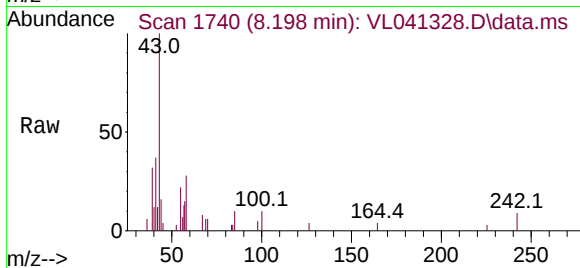
ClientSampleId :

Tgt Ion: 43 Resp: 5184

Ion Ratio Lower Upper

43 100

58 0.0 27.7 41.5#



#53

Toluene

Concen: 1.047 ppbv

RT: 9.237 min Scan# 2063

Delta R.T. 0.016 min

Lab File: VL041328.D

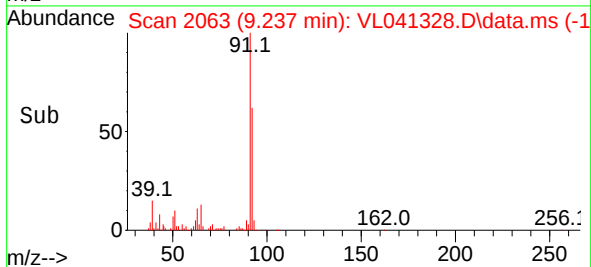
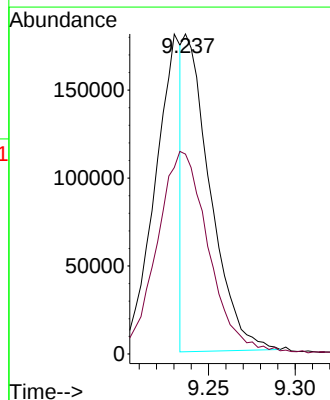
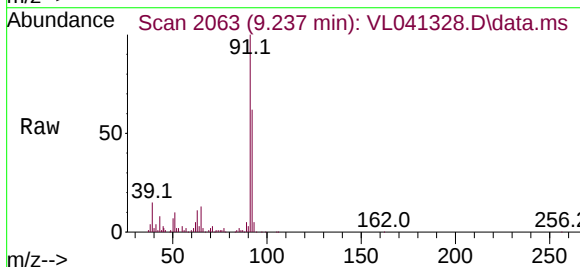
Acq: 5 Jun 2024 15:31

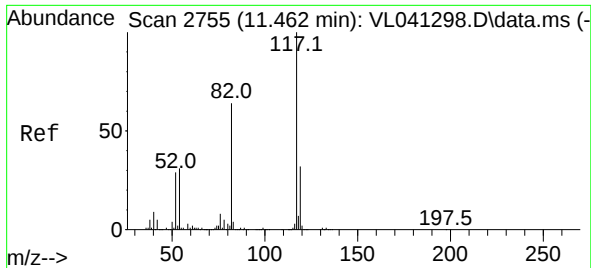
Tgt Ion: 91 Resp: 194808

Ion Ratio Lower Upper

91 100

92 124.9 49.2 73.8#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.478 min Scan# 21

Delta R.T. 0.016 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

ClientSampleId :

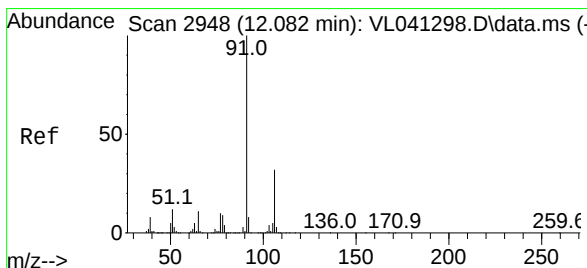
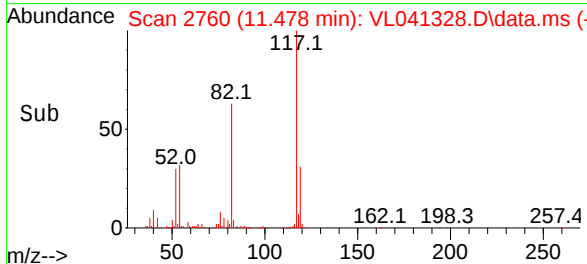
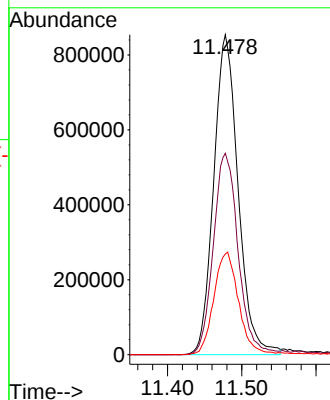
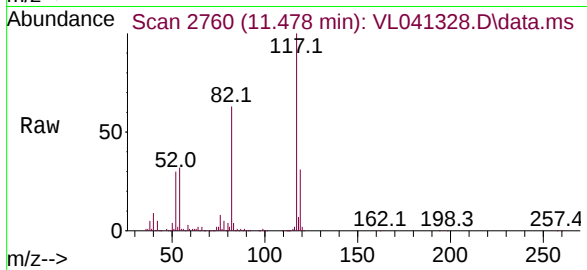
Tgt Ion:117 Resp: 1952572

Ion Ratio Lower Upper

117 100

82 65.9 52.3 78.5

119 33.3 26.2 39.2



#58

Ethyl Benzene

Concen: 0.212 ppbv

RT: 12.102 min Scan# 2954

Delta R.T. 0.019 min

Lab File: VL041328.D

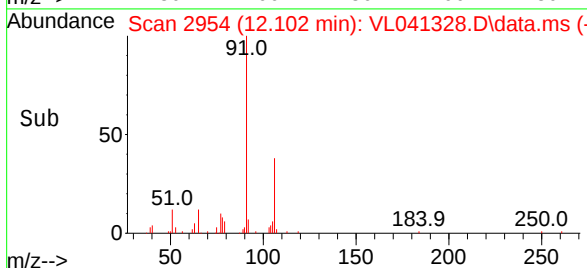
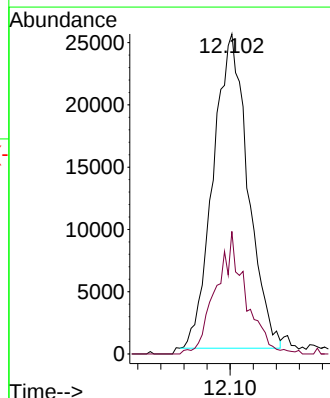
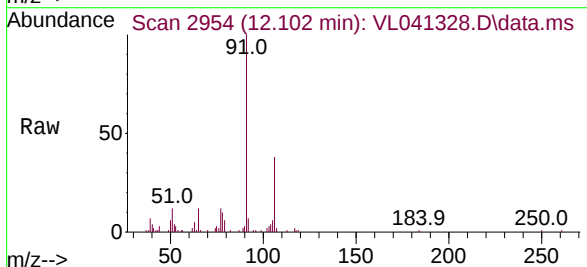
Acq: 5 Jun 2024 15:31

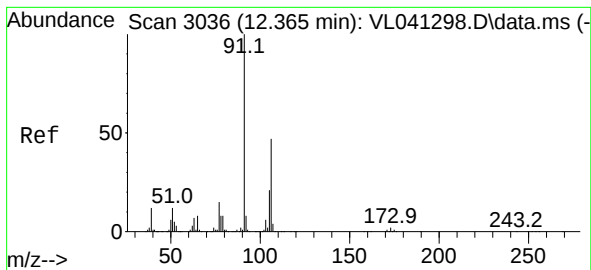
Tgt Ion: 91 Resp: 53002

Ion Ratio Lower Upper

91 100

106 39.0 25.5 38.3#





#59

m/p-Xylene

Concen: 0.046 ppbv

RT: 12.381 min Scan# 3036

Delta R.T. 0.016 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

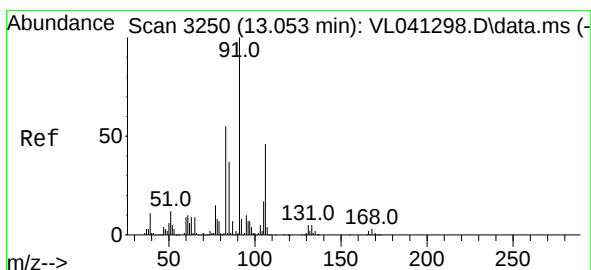
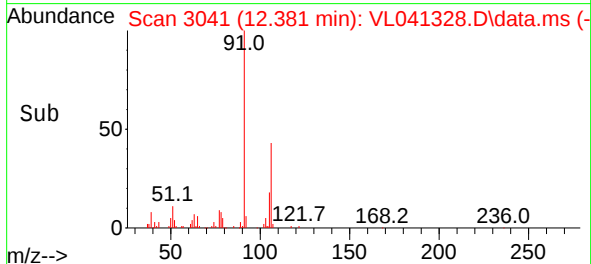
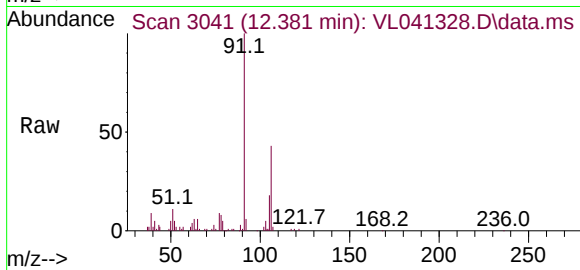
ClientSampleId :

Tgt Ion: 91 Resp: 9825

Ion Ratio Lower Upper

91 100

106 0.0 35.7 53.5#



#60

o-Xylene

Concen: 0.359 ppbv

RT: 13.069 min Scan# 3255

Delta R.T. 0.016 min

Lab File: VL041328.D

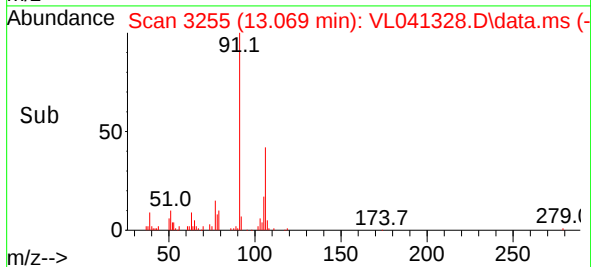
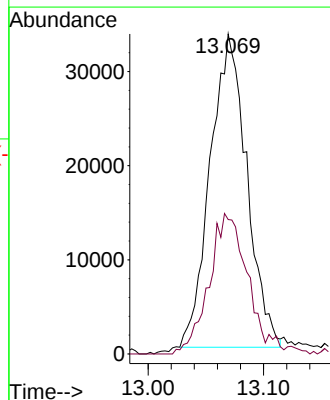
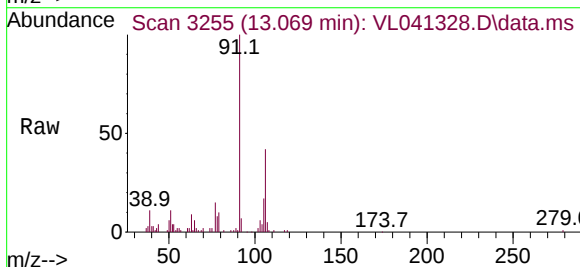
Acq: 5 Jun 2024 15:31

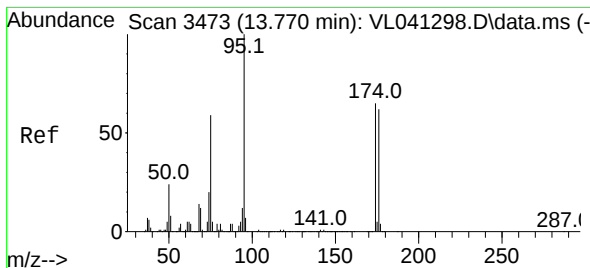
Tgt Ion: 91 Resp: 73316

Ion Ratio Lower Upper

91 100

106 47.9 22.8 68.4





#68

1-Bromo-4-Fluorobenzene

Concen: 10.005 ppbv

RT: 13.786 min Scan# 3473

Delta R.T. 0.016 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

ClientSampleId :

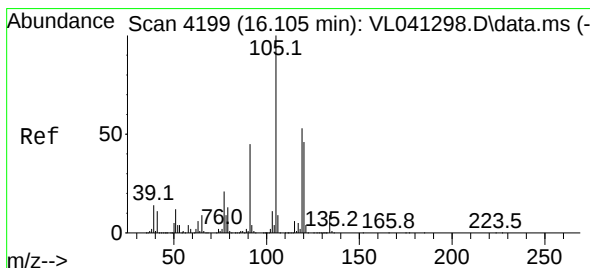
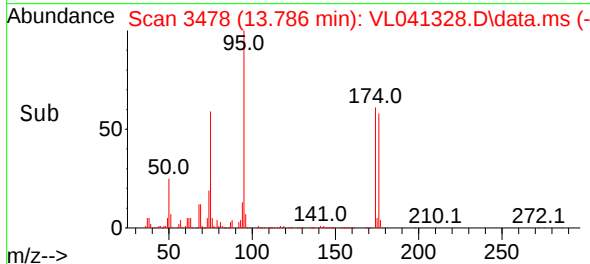
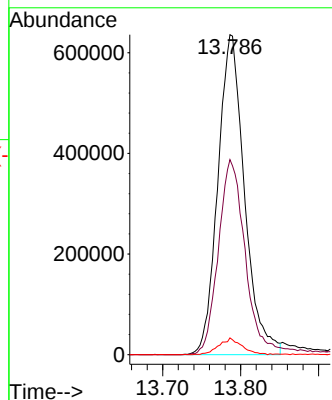
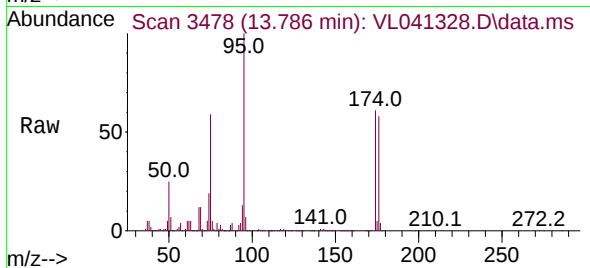
Tgt Ion: 95 Resp: 1508362

Ion Ratio Lower Upper

95 100

174 64.2 52.2 78.2

175 4.8 4.1 6.1



#74

1,2,4-Trimethylbenzene

Concen: 0.143 ppbv

RT: 16.117 min Scan# 4203

Delta R.T. 0.013 min

Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Tgt Ion:105 Resp: 33403

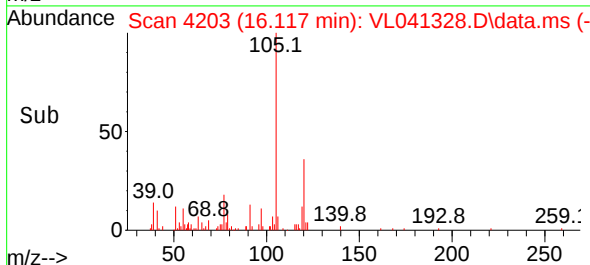
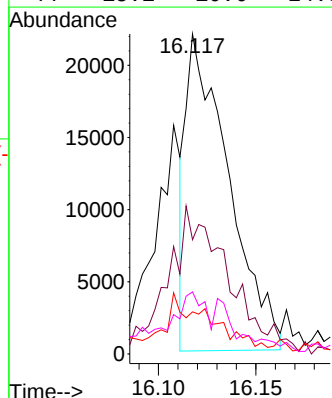
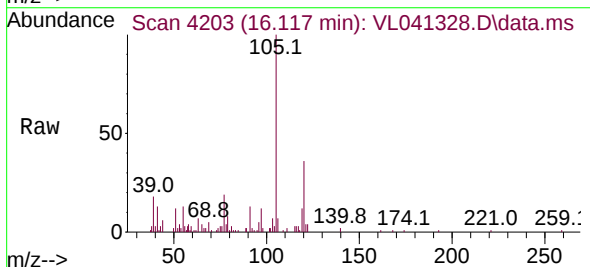
Ion Ratio Lower Upper

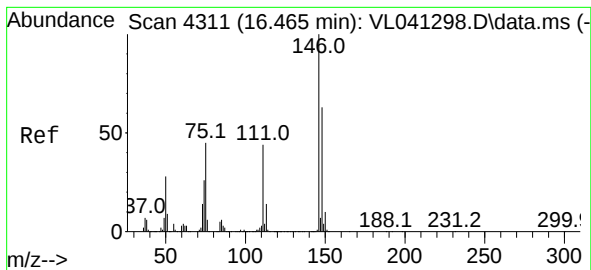
105 100

120 33.4 37.0 55.6#

91 9.2 36.2 54.4#

77 18.1 16.6 24.8





#76

1,4-Dichlorobenzene

Concen: 0.038 ppbv

RT: 16.487 min Scan# 4311

Delta R.T. 0.023 min

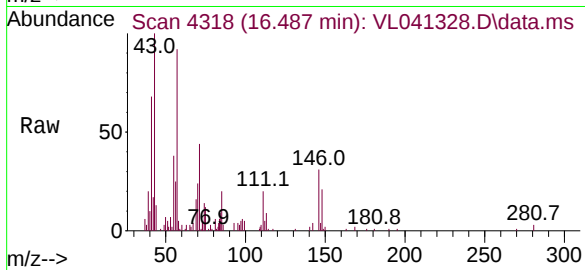
Lab File: VL041328.D

Acq: 5 Jun 2024 15:31

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion:146 Resp: 5260

Ion Ratio Lower Upper

146 100

111 158.3 23.3 69.9#

148 170.1 32.9 98.6#

