

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL080824\
 Data File : VL041509.D
 Acq On : 8 Aug 2024 12:23
 Operator : SY/MD
 Sample : P3454-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

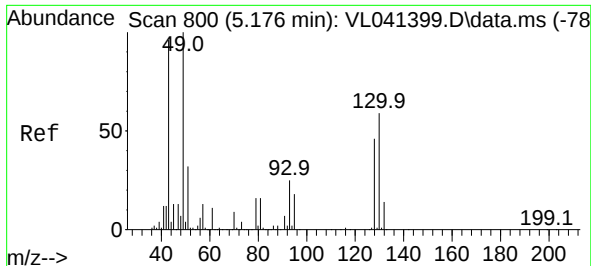
Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Aug 09 05:53:55 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL072524AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Aug 06 01:32:58 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.179	49	909622	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	6.642	114	2696343	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.452	117	2680067	10.000	ppbv	# 0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.767	95	2353246	11.410	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	114.100%
Target Compounds						
					Qvalue	
4) Chloromethane	2.800	50	1197454	20.791	ppbv	99
5) Vinyl Chloride	2.906	62	103440	1.822	ppbv	98
7) Chloroethane	2.954	64	830	0.042	ppbv #	44
11) Trichlorofluoromethane	3.549	101	2883594	20.749	ppbv	100
12) 1,1,2-Trichlorotrifluo...	3.623	101	18033	0.180	ppbv #	12
13) Ethanol	3.237	45	602	0.135	ppbv #	1
15) Acetone	3.472	43	43079	0.417	ppbv #	87
19) Isopropyl Alcohol	3.581	45	2784	0.046	ppbv #	93
20) Methylene Chloride	3.919	84	24949	0.647	ppbv	94
25) Ethyl Acetate	5.201	43	2852684	13.894	ppbv #	75
26) Hexane	5.198	57	4065522	47.732	ppbv #	36
34) 2-Butanone	5.201	43	2829656	21.695	ppbv #	54
36) Benzene	6.359	78	7809334	39.637	ppbv	95
37) 1,2-Dichloroethane	5.793	62	2432617	22.060	ppbv	100
39) 1,2-Dichloropropane	7.060	63	1680422	22.278	ppbv	96
41) Tetrahydrofuran	5.198	42	1553729	20.828	ppbv #	49
49) Bromoform	12.394	173	4209	0.037	ppbv	98
57) Chlorobenzene	11.513	112	3375761	17.691	ppbv	99
58) Ethyl Benzene	12.076	91	7258371	23.497	ppbv	98
59) m/p-Xylene	12.076	91	7258371	27.219	ppbv #	80
64) n-propylbenzene	15.339	120	4521002	45.094	ppbv #	1
65) tert-Butylbenzene	16.098	119	1020861	2.947	ppbv #	68
66) Benzyl Chloride	16.095	91	1056996	47.577	ppbv #	66
67) sec-Butylbenzene	16.195	105	19682	0.041	ppbv #	73
72) 4-Ethyltoluene	15.343	105	9395416	31.636	ppbv #	80
73) 1,3,5-Trimethylbenzene	15.343	105	9395416	36.723	ppbv	96
74) 1,2,4-Trimethylbenzene	16.098	105	8472323	28.483	ppbv #	75
77) 1,2-Dichlorobenzene	17.130	146	29925	0.161	ppbv	88

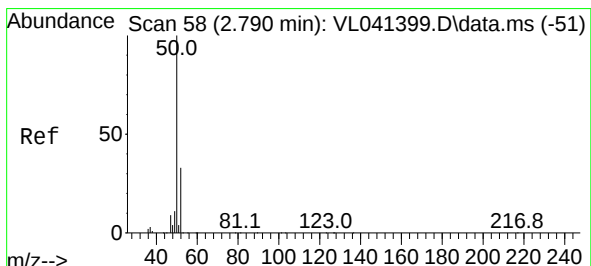
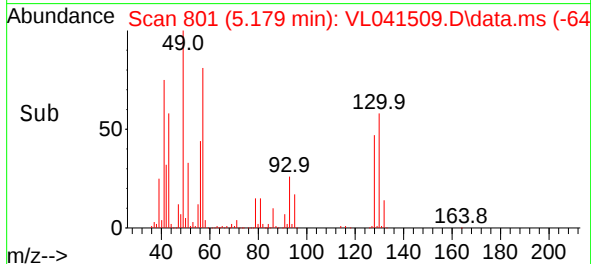
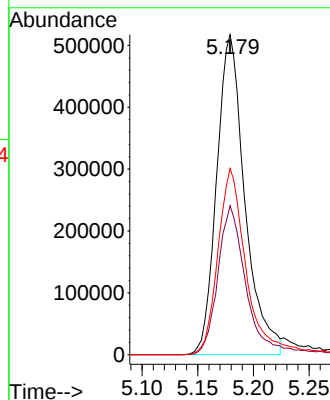
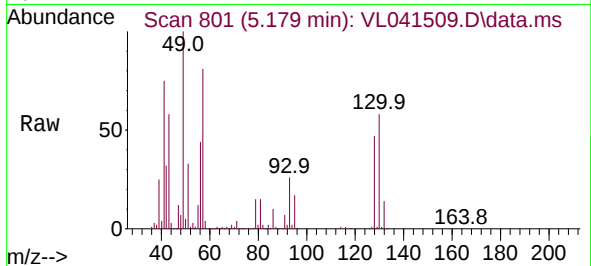
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.179 min Scan# 80
Delta R.T. -0.010 min
Lab File: VL041509.D
Acq: 8 Aug 2024 12:23

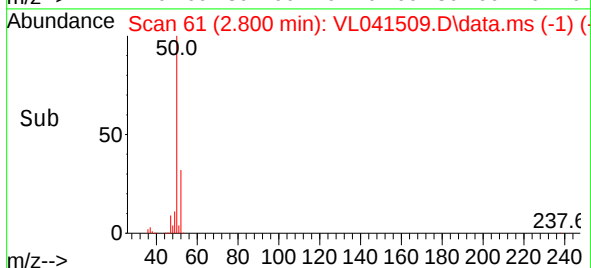
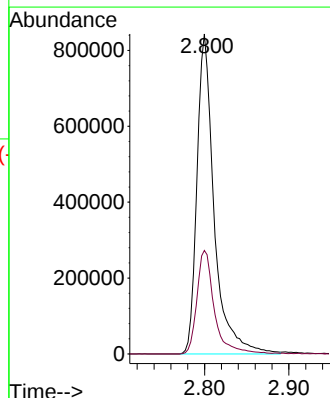
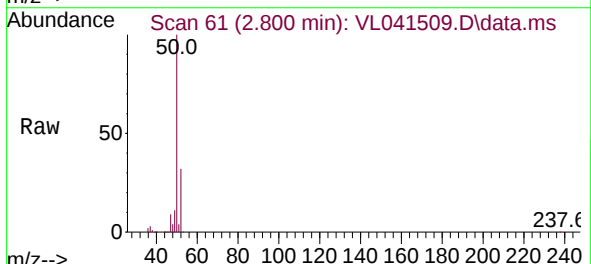
Instrument :
MSVOA_L
ClientSampleId :

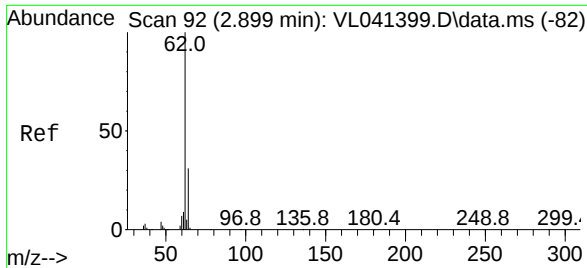
Tgt Ion: 49 Resp: 909622
Ion Ratio Lower Upper
49 100
128 48.0 23.8 71.4
130 60.4 30.8 92.4



#4
Chloromethane
Concen: 20.791 ppbv
RT: 2.800 min Scan# 61
Delta R.T. -0.016 min
Lab File: VL041509.D
Acq: 8 Aug 2024 12:23

Tgt Ion: 50 Resp: 1197454
Ion Ratio Lower Upper
50 100
52 32.3 26.1 39.1

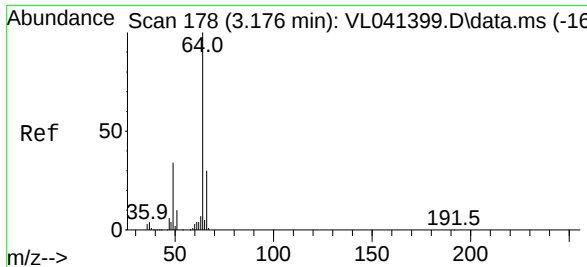
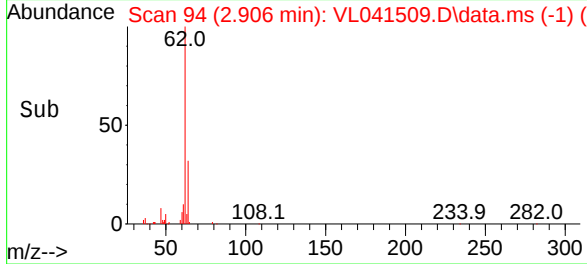
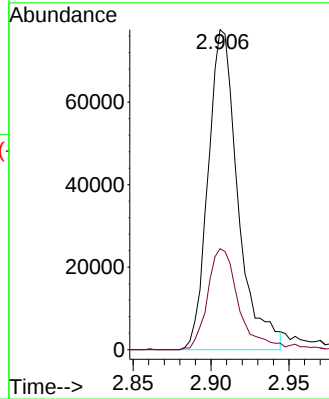
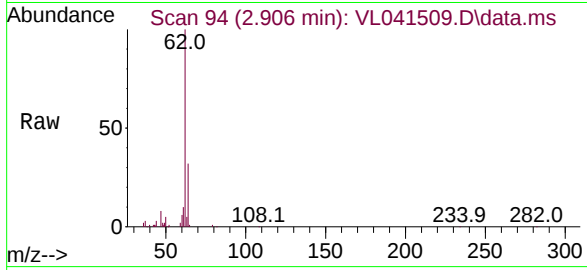




#5
 Vinyl Chloride
 Concen: 1.822 ppbv
 RT: 2.906 min Scan# 94
 Delta R.T. -0.016 min
 Lab File: VL041509.D
 Acq: 8 Aug 2024 12:23

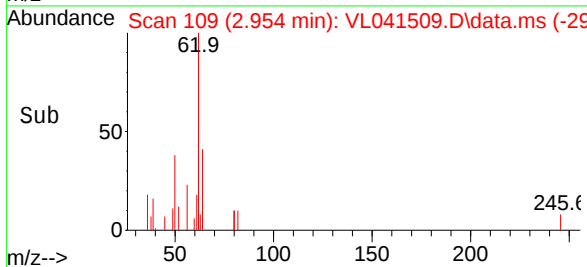
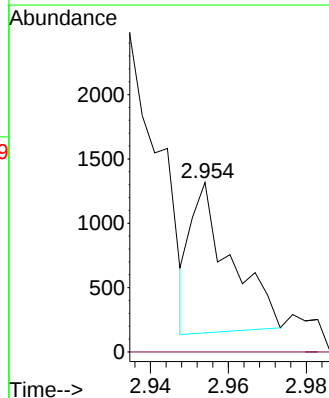
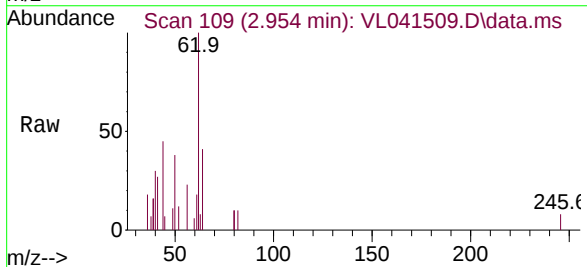
Instrument :
 MSVOA_L
 ClientSampleId :

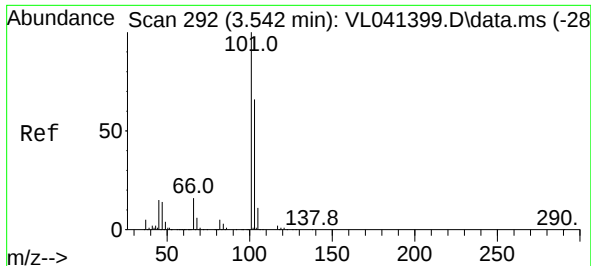
Tgt Ion: 62 Resp: 103440
 Ion Ratio Lower Upper
 62 100
 64 32.2 25.0 37.4



#7
 Chloroethane
 Concen: 0.042 ppbv
 RT: 2.954 min Scan# 109
 Delta R.T. -0.244 min
 Lab File: VL041509.D
 Acq: 8 Aug 2024 12:23

Tgt Ion: 64 Resp: 830
 Ion Ratio Lower Upper
 64 100
 66 0.0 24.2 36.2#





#11

Trichlorofluoromethane

Concen: 20.749 ppbv

RT: 3.549 min Scan# 20

Delta R.T. -0.013 min MSVOA_L

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

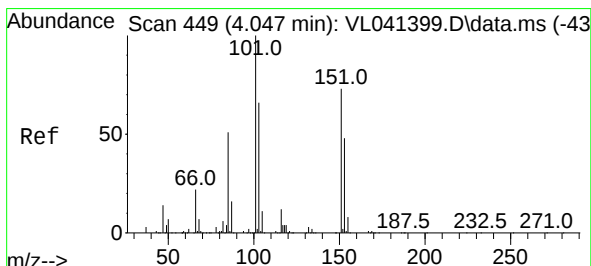
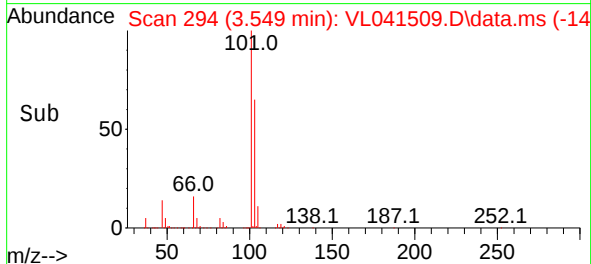
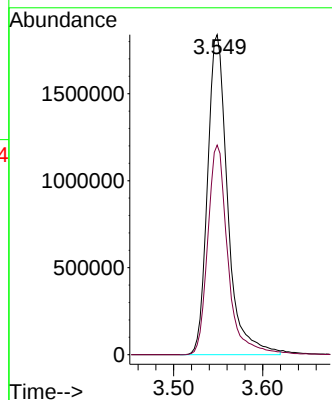
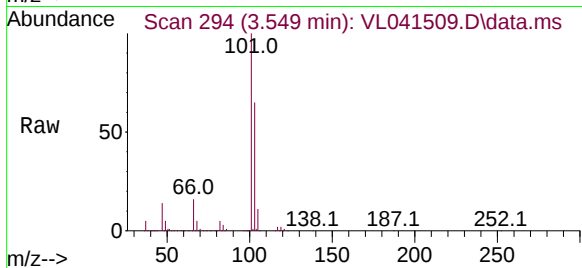
ClientSampleId :

Tgt Ion:101 Resp: 2883594

Ion Ratio Lower Upper

101 100

103 65.5 52.6 79.0



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.180 ppbv

RT: 3.623 min Scan# 317

Delta R.T. -0.440 min

Lab File: VL041509.D

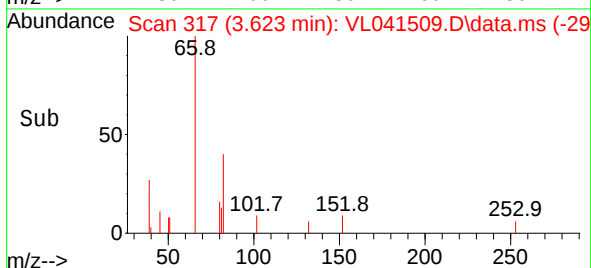
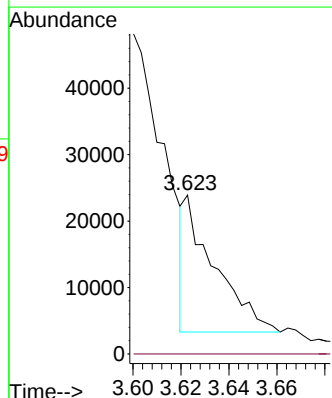
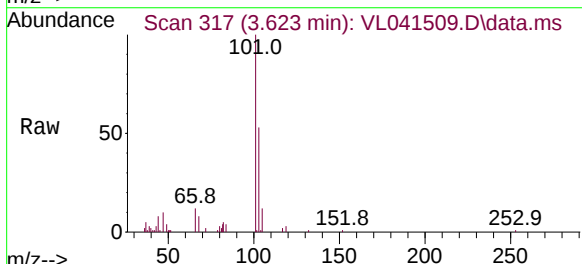
Acq: 8 Aug 2024 12:23

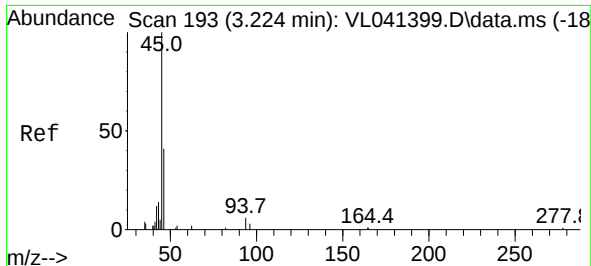
Tgt Ion:101 Resp: 18033

Ion Ratio Lower Upper

101 100

151 0.0 59.4 89.2#





#13

Ethanol

Concen: 0.135 ppbv

RT: 3.237 min Scan# 11

Delta R.T. -0.006 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

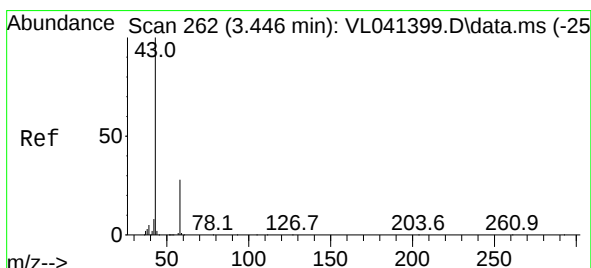
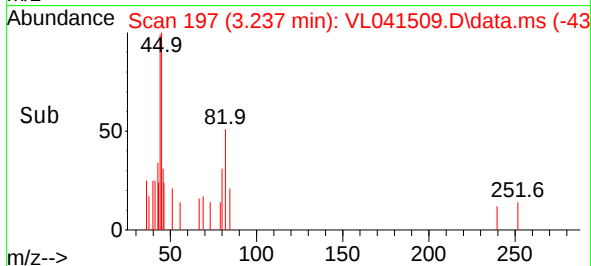
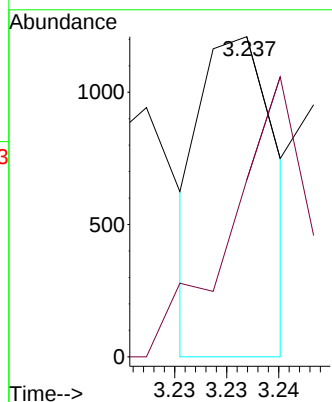
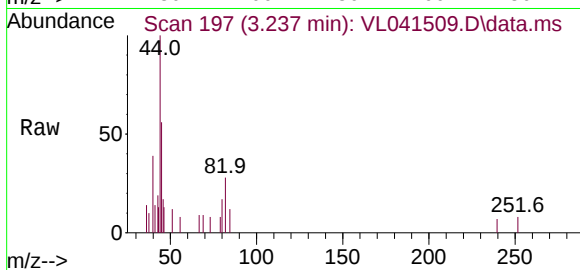
ClientSampleId :

Tgt Ion: 45 Resp: 602

Ion Ratio Lower Upper

45 100

46 167.9 13.4 53.4#



#15

Acetone

Concen: 0.417 ppbv

RT: 3.472 min Scan# 270

Delta R.T. 0.003 min

Lab File: VL041509.D

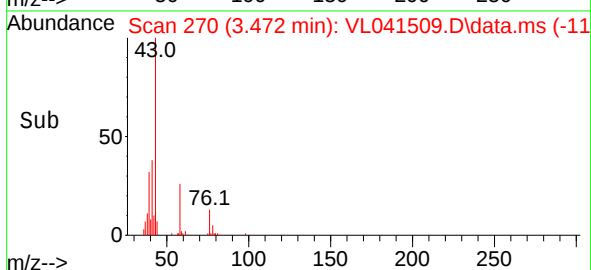
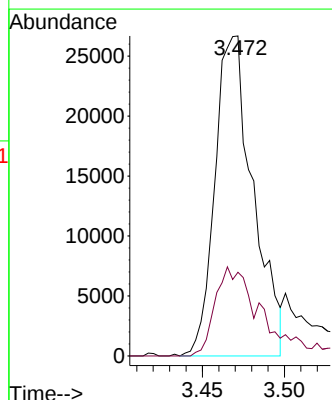
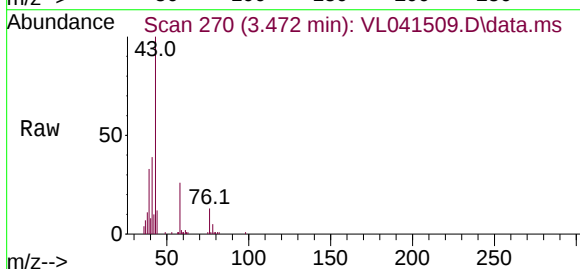
Acq: 8 Aug 2024 12:23

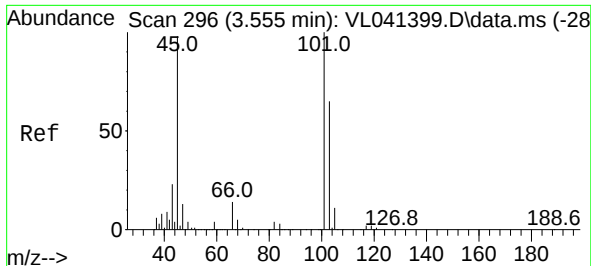
Tgt Ion: 43 Resp: 43079

Ion Ratio Lower Upper

43 100

58 33.5 21.4 32.2#





#19

Isopropyl Alcohol

Concen: 0.046 ppbv

RT: 3.581 min Scan# 304

Delta R.T. 0.007 min

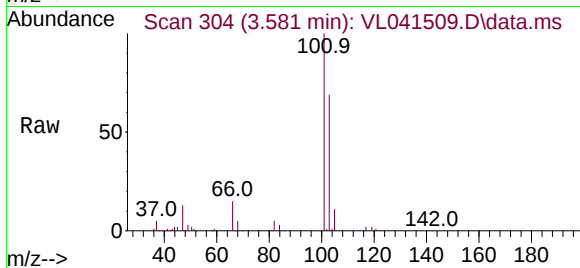
Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

ClientSampleId :

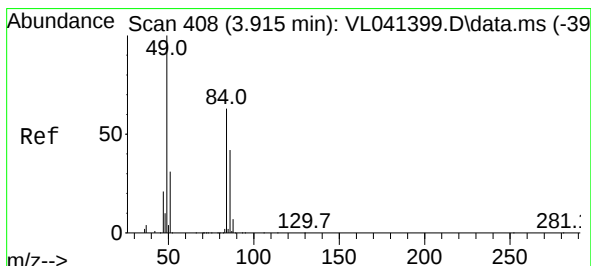
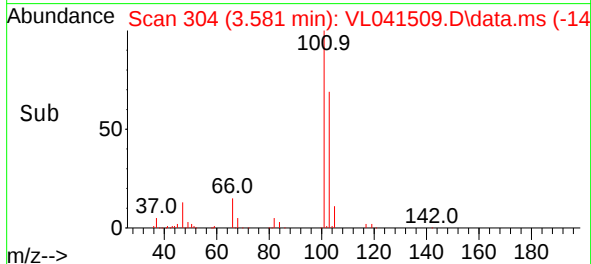
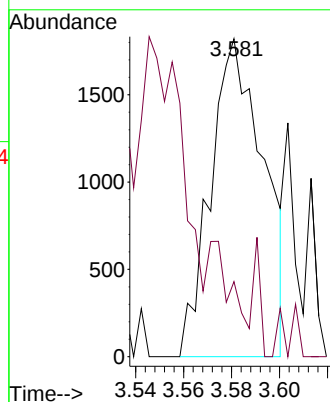


Tgt Ion: 45 Resp: 2784

Ion Ratio Lower Upper

45 100

58 0.0 1.9 2.9#



#20

Methylene Chloride

Concen: 0.647 ppbv

RT: 3.919 min Scan# 409

Delta R.T. -0.013 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Tgt Ion: 84 Resp: 24949

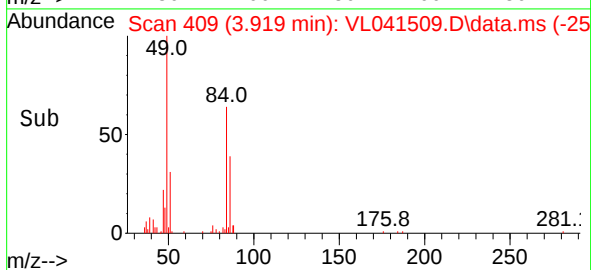
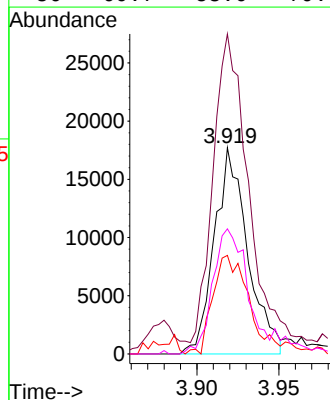
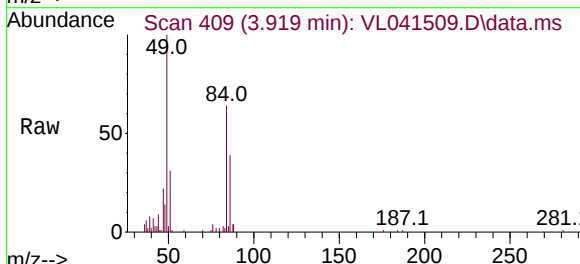
Ion Ratio Lower Upper

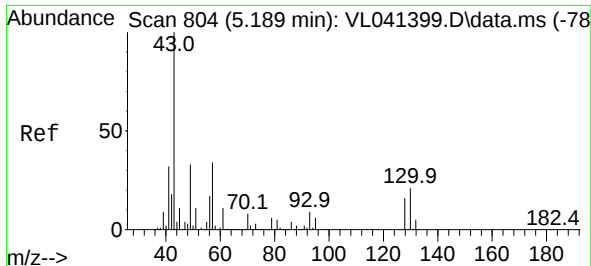
84 100

49 149.0 126.6 190.0

51 46.0 38.6 58.0

86 60.7 53.0 79.4





#25

Ethyl Acetate

Concen: 13.894 ppbv

RT: 5.201 min Scan# 808

Delta R.T. 0.000 min

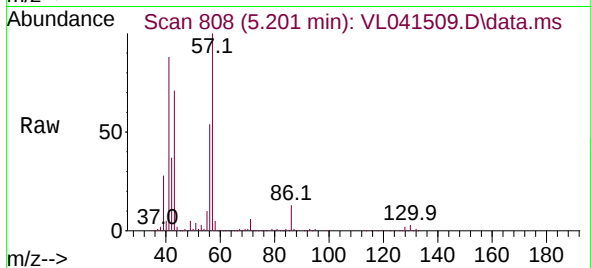
Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion: 43 Resp: 2852684

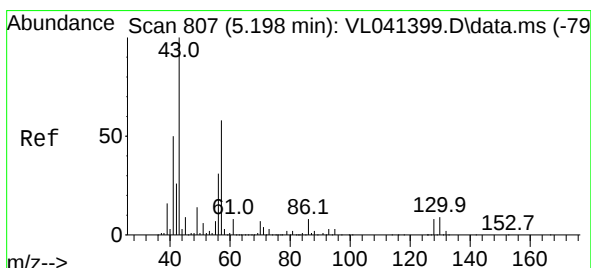
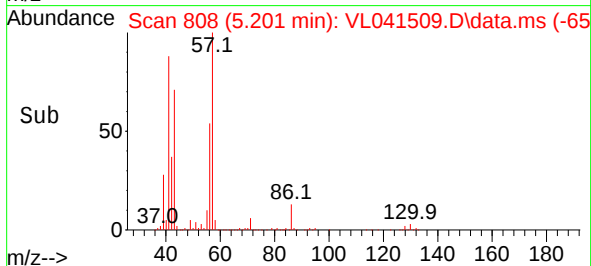
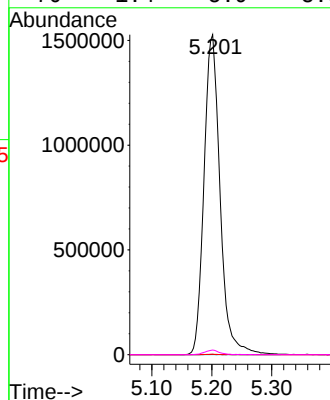
Ion Ratio Lower Upper

43 100

45 0.1 8.5 12.7#

61 0.1 8.0 12.0#

70 1.4 5.9 8.9#



#26

Hexane

Concen: 47.732 ppbv

RT: 5.198 min Scan# 807

Delta R.T. -0.013 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Tgt Ion: 57 Resp: 4065522

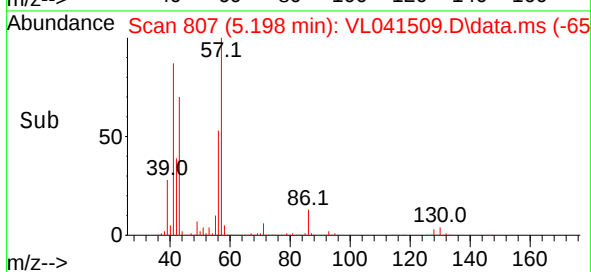
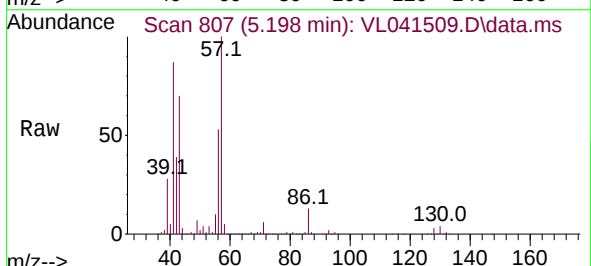
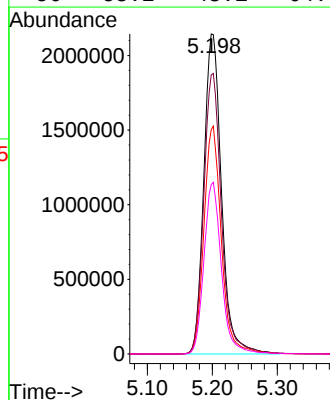
Ion Ratio Lower Upper

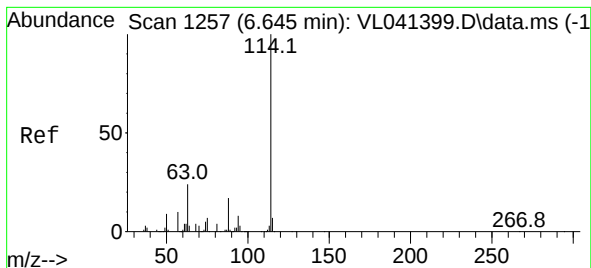
57 100

41 88.6 74.0 111.0

43 70.2 193.6 290.4#

56 53.2 43.1 64.7





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.642 min Scan# 11

Delta R.T. -0.006 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

ClientSampleId :

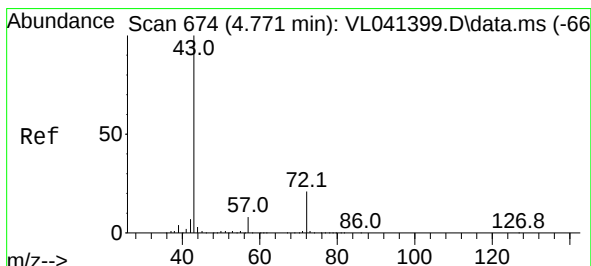
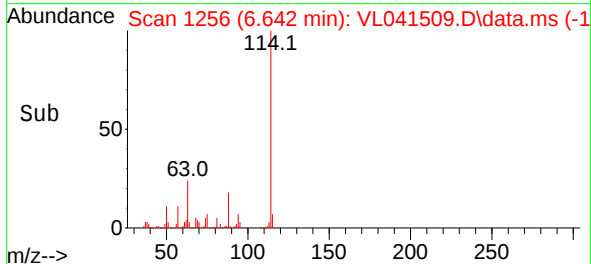
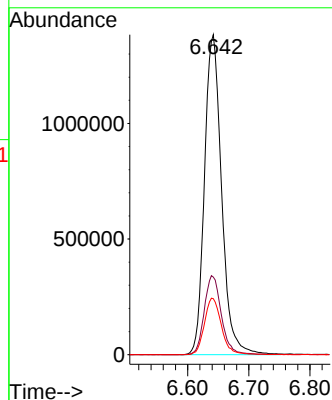
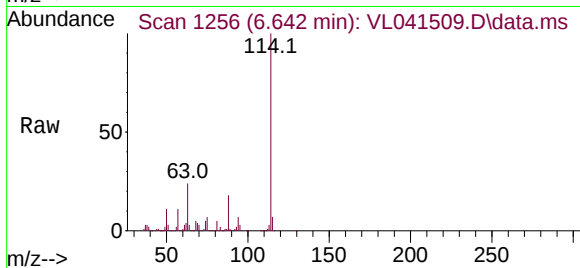
Tgt Ion:114 Resp: 2696343

Ion Ratio Lower Upper

114 100

63 24.8 20.3 30.5

88 17.5 14.3 21.5



#34

2-Butanone

Concen: 21.695 ppbv

RT: 5.201 min Scan# 808

Delta R.T. 0.418 min

Lab File: VL041509.D

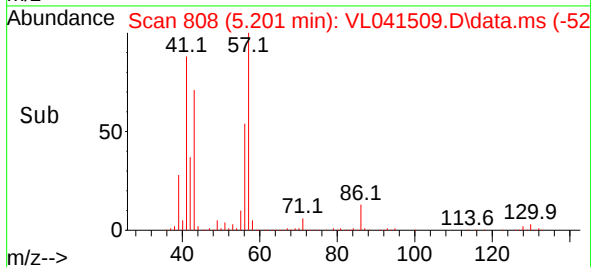
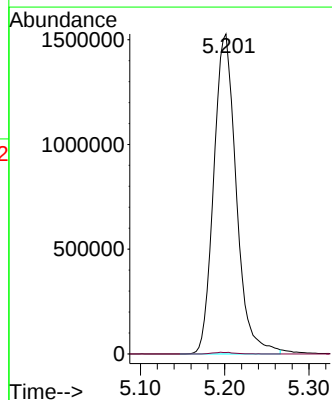
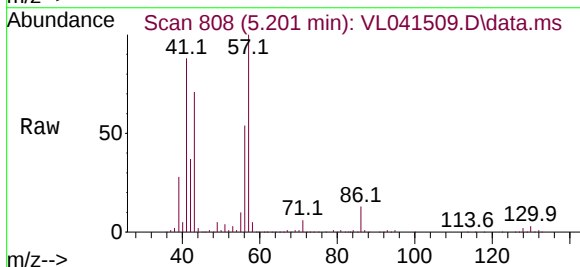
Acq: 8 Aug 2024 12:23

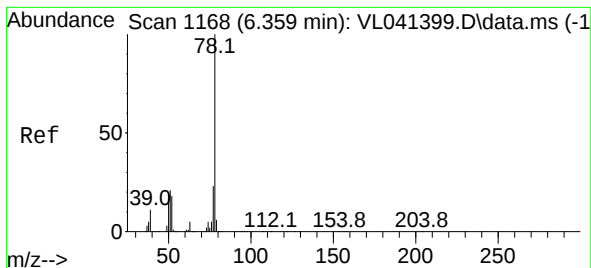
Tgt Ion: 43 Resp: 2829656

Ion Ratio Lower Upper

43 100

72 0.0 17.3 25.9#





#36

Benzene

Concen: 39.637 ppbv

RT: 6.359 min Scan# 1168

Delta R.T. -0.010 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

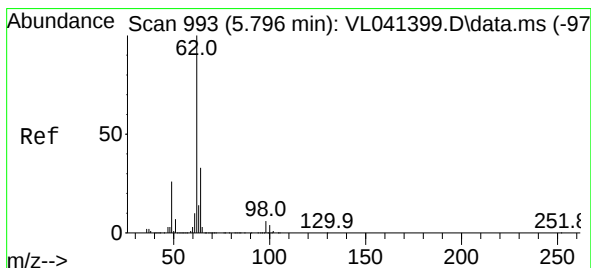
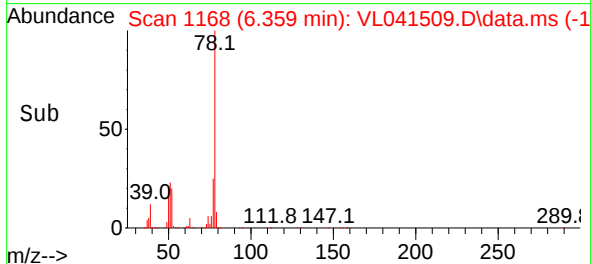
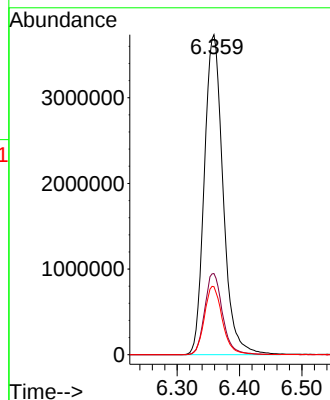
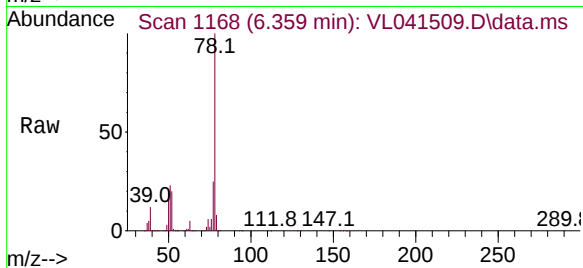
Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 78 Resp: 7809334

Ion	Ratio	Lower	Upper
78	100		
77	25.3	18.1	27.1
50	21.2	15.5	23.3



#37

1,2-Dichloroethane

Concen: 22.060 ppbv

RT: 5.793 min Scan# 992

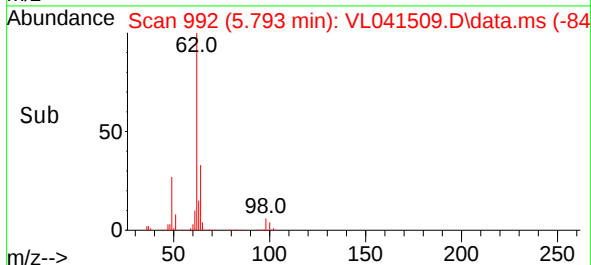
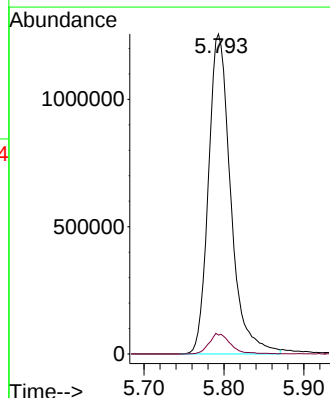
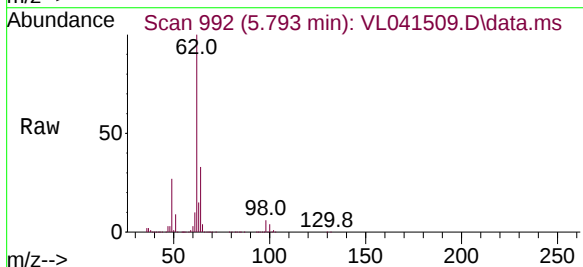
Delta R.T. -0.013 min

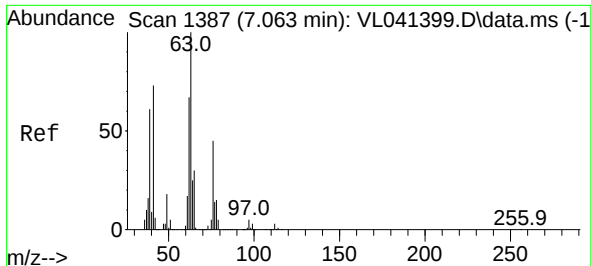
Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Tgt Ion: 62 Resp: 2432617

Ion	Ratio	Lower	Upper
62	100		
98	6.2	5.0	7.4





#39

1,2-Dichloropropane

Concen: 22.278 ppbv

RT: 7.060 min Scan# 11

Delta R.T. -0.010 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

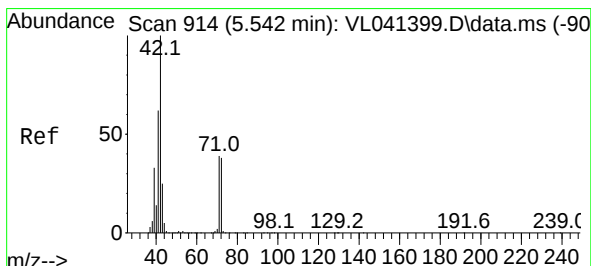
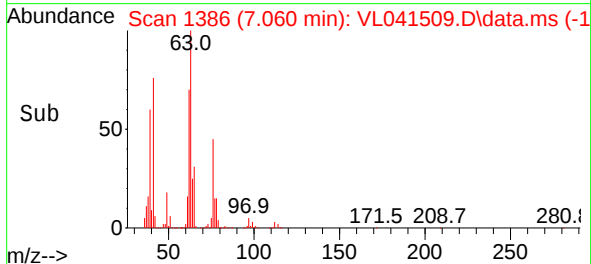
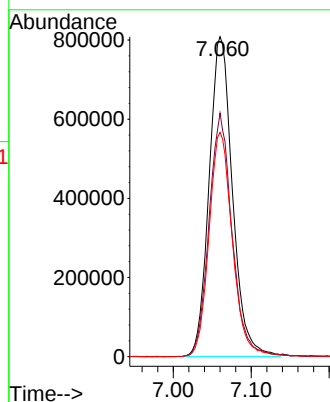
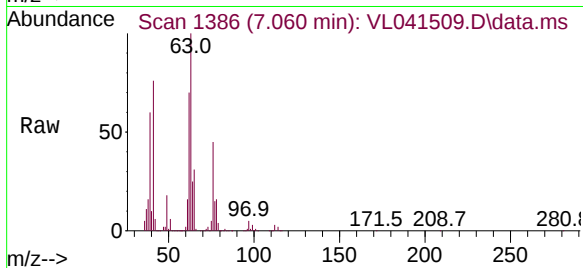
Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 63 Resp: 1680422

Ion	Ratio	Lower	Upper
63	100		
41	76.1	58.3	87.5
62	70.1	53.9	80.9



#41

Tetrahydrofuran

Concen: 20.828 ppbv

RT: 5.198 min Scan# 807

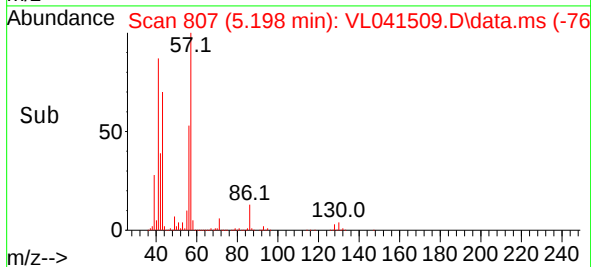
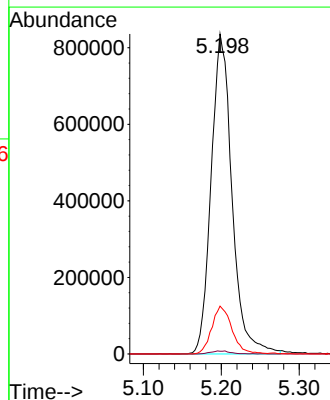
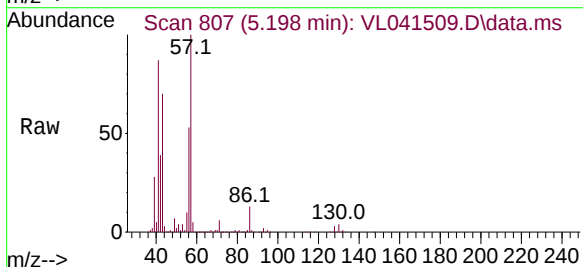
Delta R.T. -0.354 min

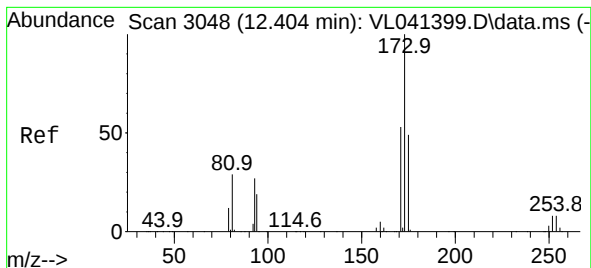
Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Tgt Ion: 42 Resp: 1553729

Ion	Ratio	Lower	Upper
42	100		
72	0.9	31.2	46.8#
71	14.7	30.5	45.7#





#49

Bromoform

Concen: 0.037 ppbv

RT: 12.394 min Scan# 3048

Delta R.T. -0.006 min

Lab File: VL041509.D

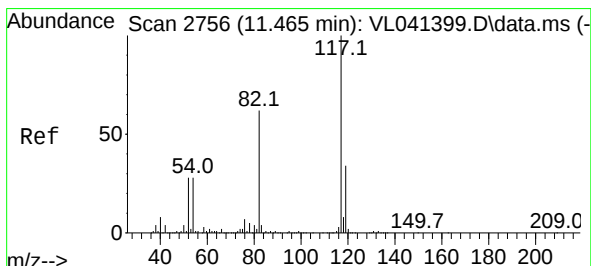
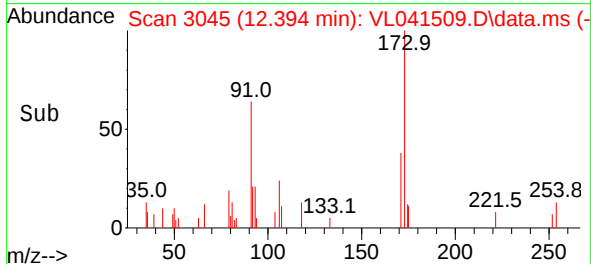
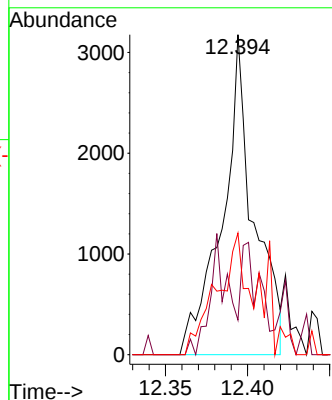
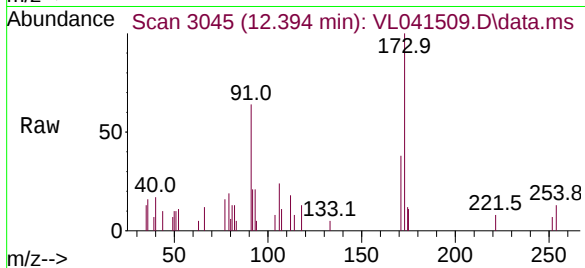
Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:173	Resp:	4209
Ion Ratio	Lower	Upper
173	100	
175	51.5	39.9 59.9
171	50.5	41.7 62.5



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

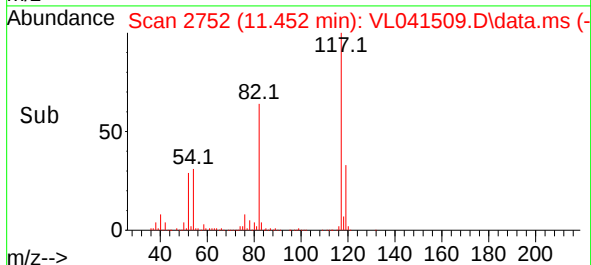
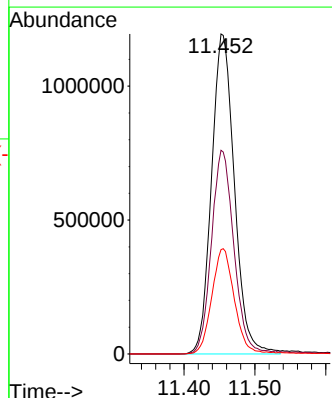
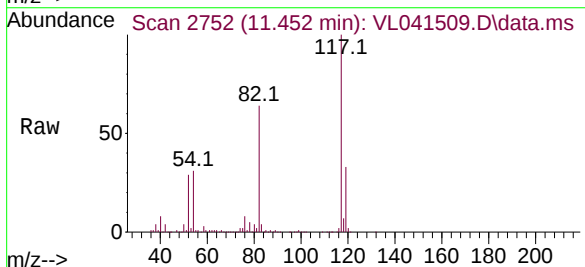
RT: 11.452 min Scan# 2752

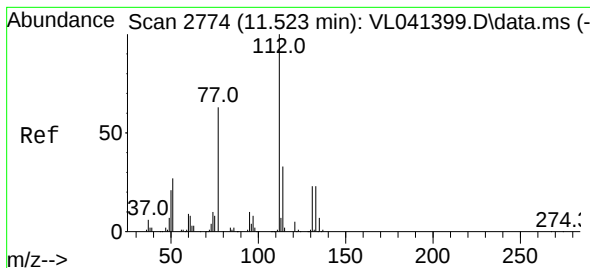
Delta R.T. -0.010 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Tgt Ion:117	Resp:	2680067
Ion Ratio	Lower	Upper
117	100	
82	63.9	51.0 76.6
119	33.1	45.2 67.8





#57

Chlorobenzene

Concen: 17.691 ppbv

RT: 11.513 min Scan# 21

Delta R.T. -0.006 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

ClientSampleId :

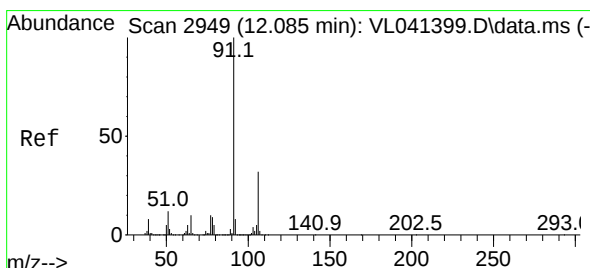
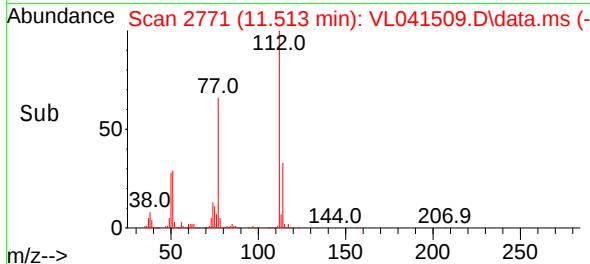
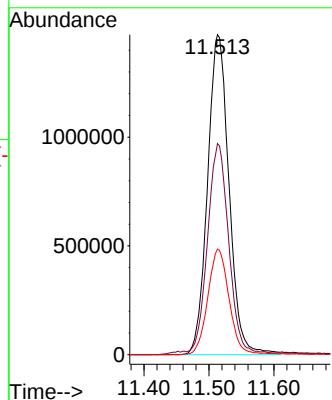
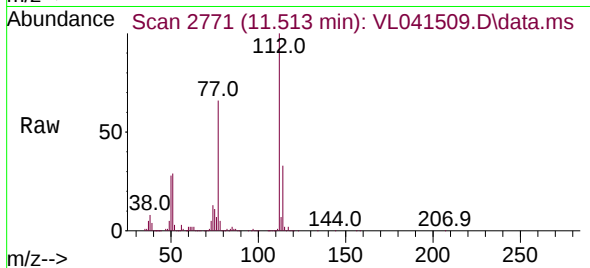
Tgt Ion:112 Resp: 3375761

Ion Ratio Lower Upper

112 100

77 65.5 51.1 76.7

114 33.0 29.5 36.1



#58

Ethyl Benzene

Concen: 23.497 ppbv

RT: 12.076 min Scan# 2946

Delta R.T. -0.010 min

Lab File: VL041509.D

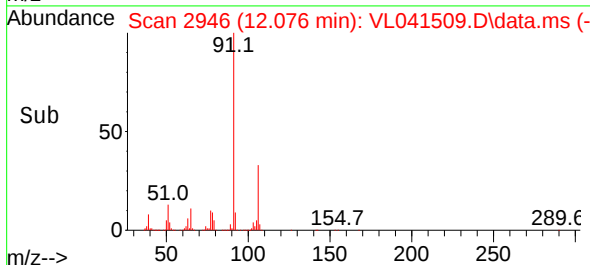
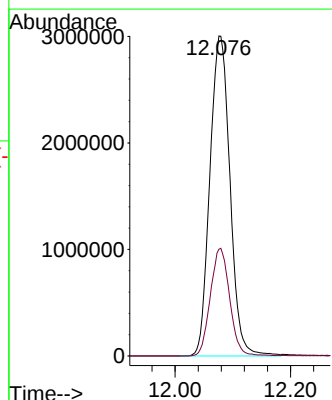
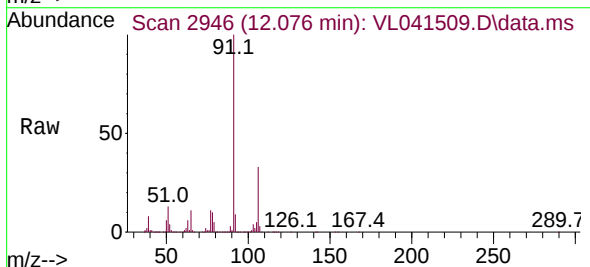
Acq: 8 Aug 2024 12:23

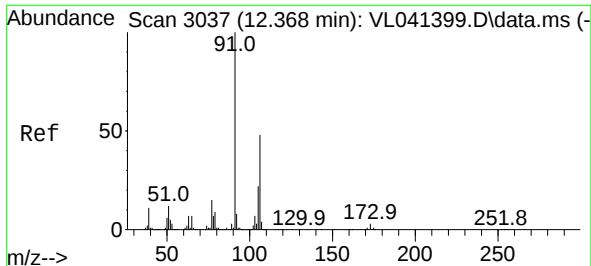
Tgt Ion: 91 Resp: 7258371

Ion Ratio Lower Upper

91 100

106 33.4 25.8 38.8





#59

m/p-Xylene

Concen: 27.219 ppbv

RT: 12.076 min Scan# 20

Delta R.T. -0.292 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

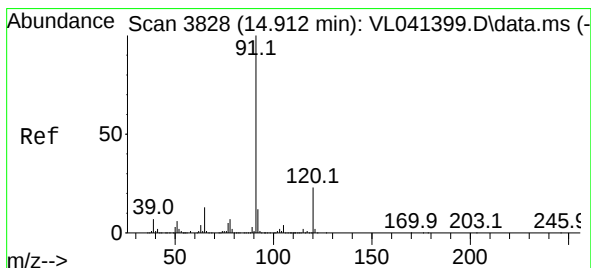
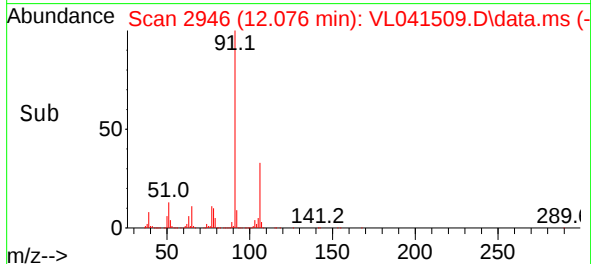
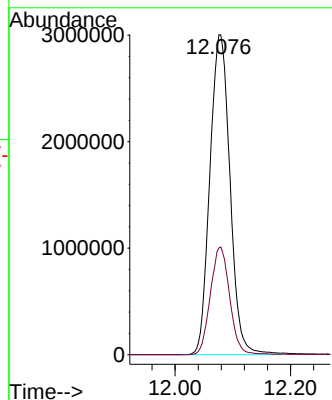
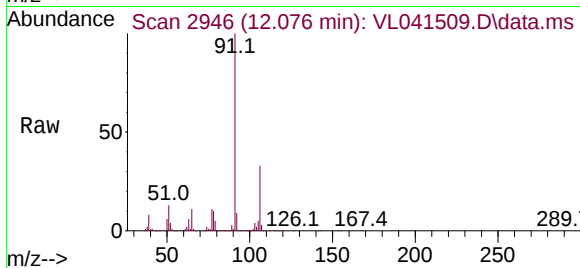
ClientSampleId :

Tgt Ion: 91 Resp: 7258371

Ion Ratio Lower Upper

91 100

106 32.6 36.3 54.5#



#64

n-propylbenzene

Concen: 45.094 ppbv

RT: 15.339 min Scan# 3961

Delta R.T. 0.428 min

Lab File: VL041509.D

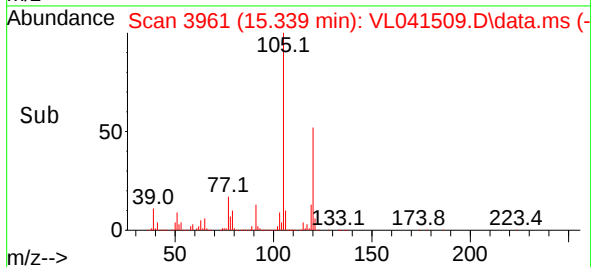
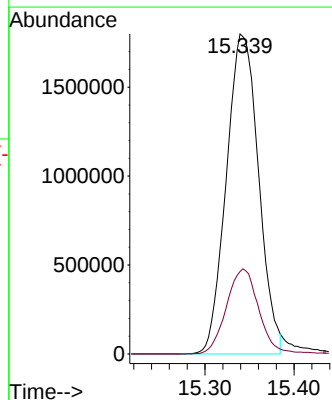
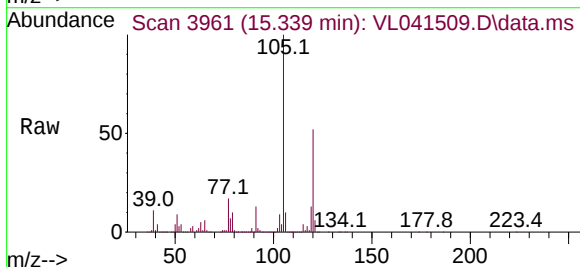
Acq: 8 Aug 2024 12:23

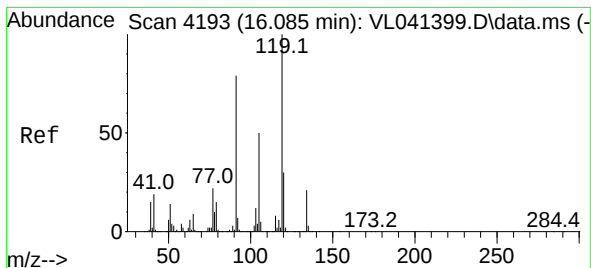
Tgt Ion:120 Resp: 4521002

Ion Ratio Lower Upper

120 100

91 0.0 361.4 542.0#

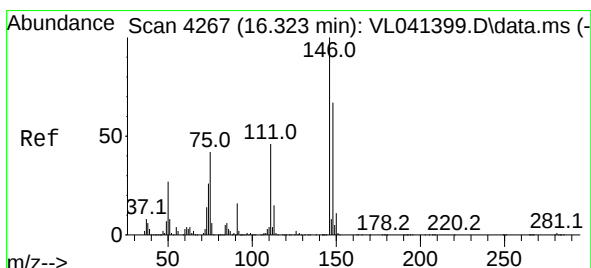
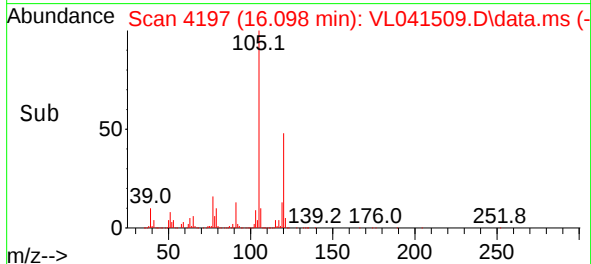
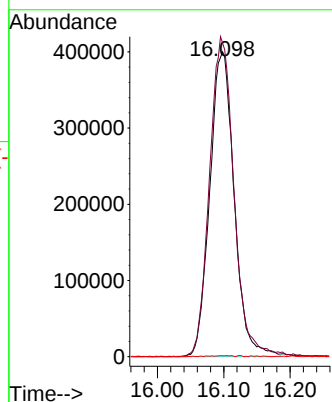
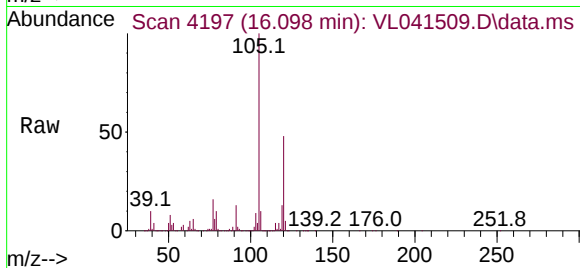




#65
tert-Butylbenzene
Concen: 2.947 ppbv
RT: 16.098 min Scan# 4196
Delta R.T. 0.016 min
Lab File: VL041509.D
Acq: 8 Aug 2024 12:23

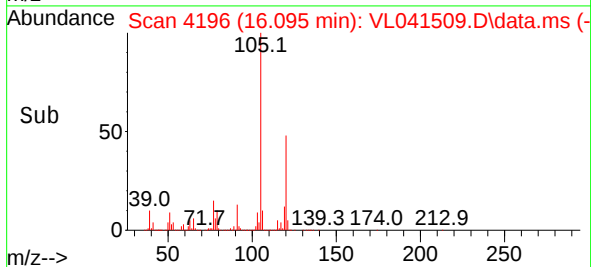
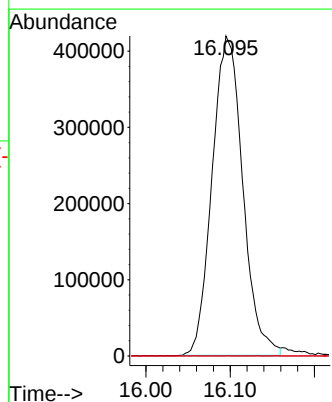
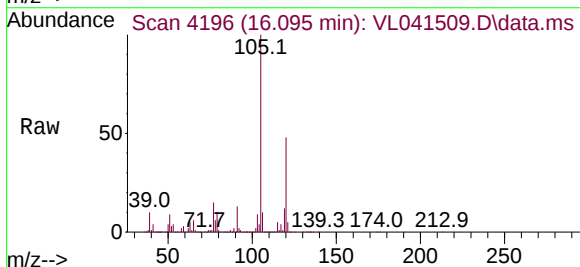
Instrument :
MSVOA_L
ClientSampleId :

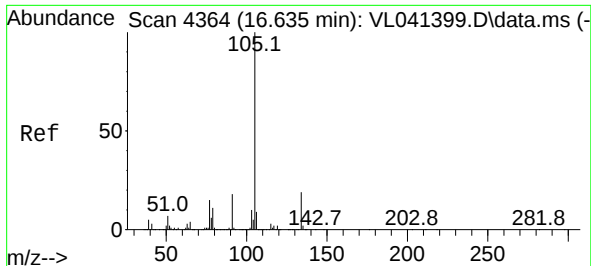
Tgt Ion:119 Resp: 1020861
Ion Ratio Lower Upper
119 100
91 106.3 64.2 96.2#
134 0.3 15.7 23.5#



#66
Benzyl Chloride
Concen: 47.577 ppbv
RT: 16.095 min Scan# 4196
Delta R.T. -0.225 min
Lab File: VL041509.D
Acq: 8 Aug 2024 12:23

Tgt Ion: 91 Resp: 1056996
Ion Ratio Lower Upper
91 100
126 0.0 13.8 20.8#
128 0.0 4.4 6.6#





#67

sec-Butylbenzene

Concen: 0.041 ppbv

RT: 16.195 min Scan# 41

Delta R.T. -0.434 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

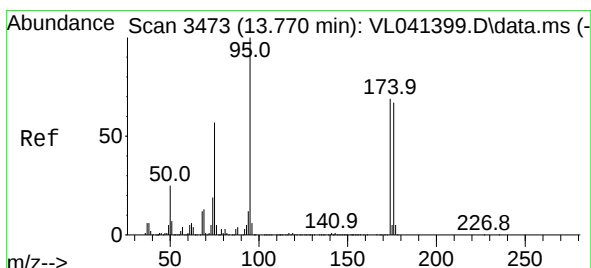
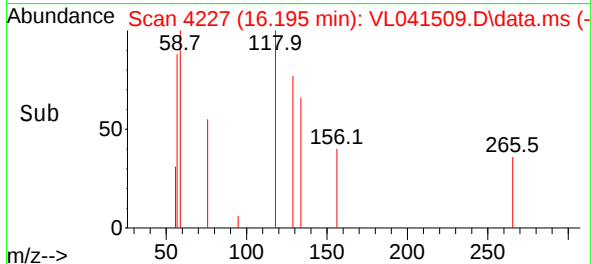
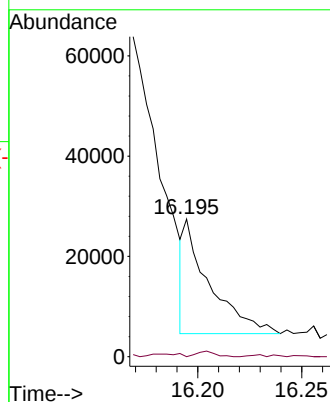
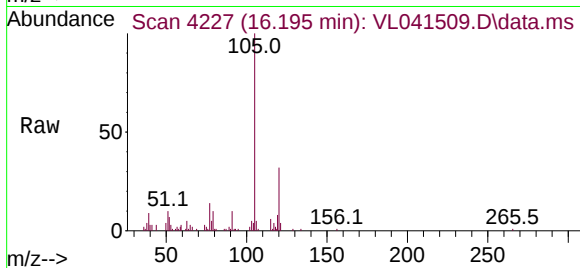
ClientSampleId :

Tgt Ion:105 Resp: 19682

Ion Ratio Lower Upper

105 100

134 6.0 14.5 21.7#



#68

1-Bromo-4-Fluorobenzene

Concen: 11.410 ppbv

RT: 13.767 min Scan# 3472

Delta R.T. 0.000 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

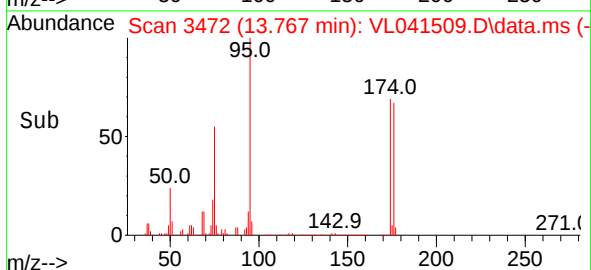
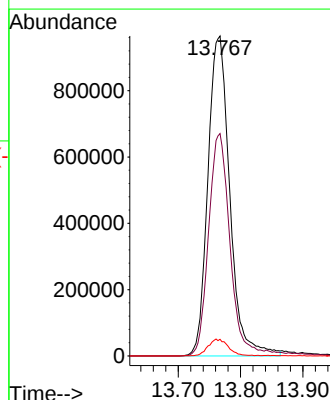
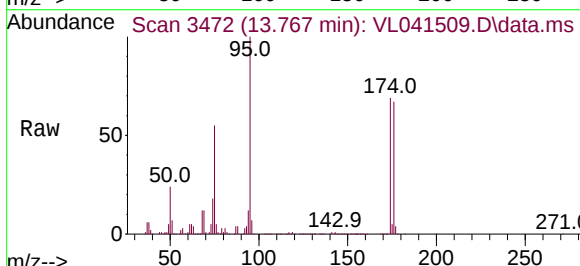
Tgt Ion: 95 Resp: 2353246

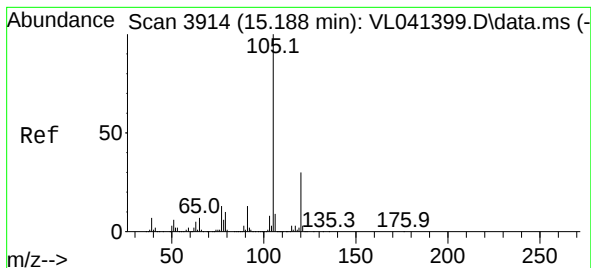
Ion Ratio Lower Upper

95 100

174 69.3 56.3 84.5

175 5.0 4.0 6.0





#72

4-Ethyltoluene

Concen: 31.636 ppbv

RT: 15.343 min Scan# 3962

Delta R.T. 0.154 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:105 Resp: 9395416

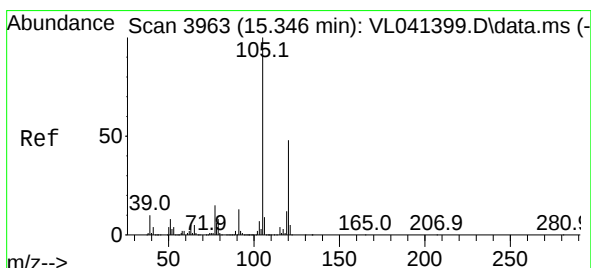
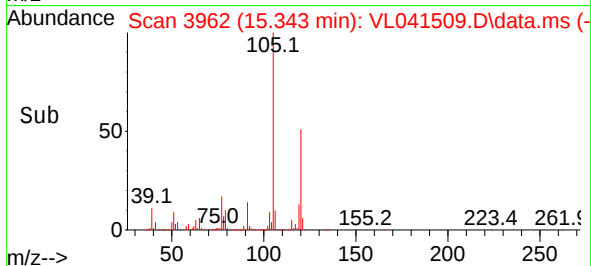
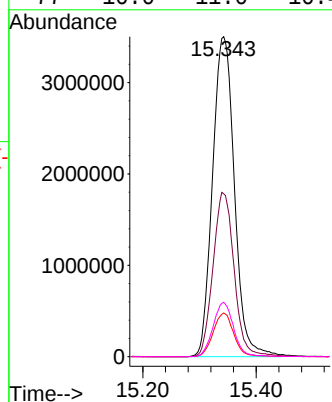
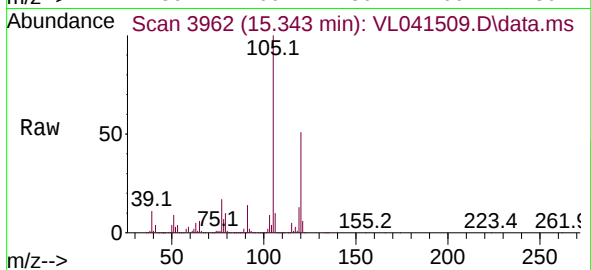
Ion Ratio Lower Upper

105 100

120 49.7 24.2 36.2#

91 13.0 10.4 15.6

77 16.0 11.0 16.4



#73

1,3,5-Trimethylbenzene

Concen: 36.723 ppbv

RT: 15.343 min Scan# 3962

Delta R.T. -0.003 min

Lab File: VL041509.D

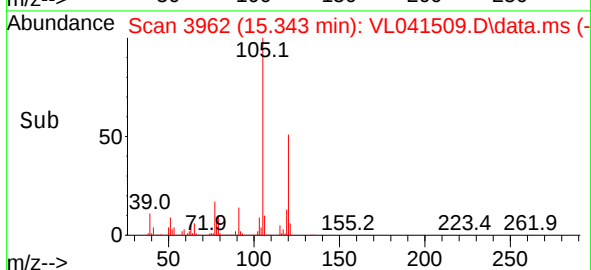
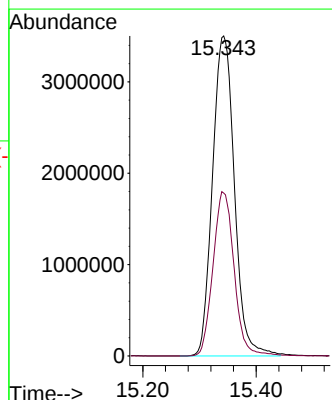
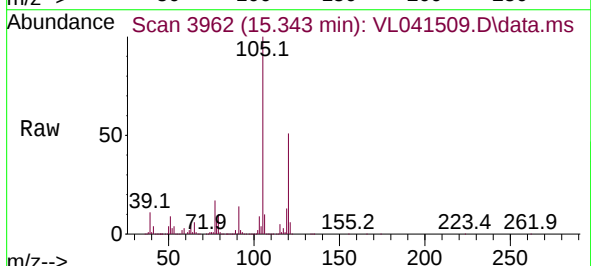
Acq: 8 Aug 2024 12:23

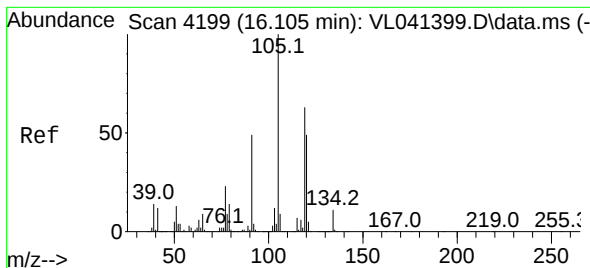
Tgt Ion:105 Resp: 9395416

Ion Ratio Lower Upper

105 100

120 50.9 38.6 57.8





#74

1,2,4-Trimethylbenzene

Concen: 28.483 ppbv

RT: 16.098 min Scan# 4199

Delta R.T. -0.003 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion:105 Resp: 8472323

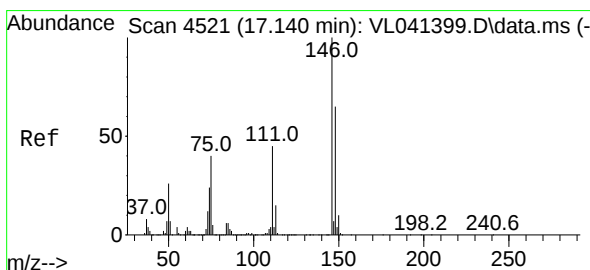
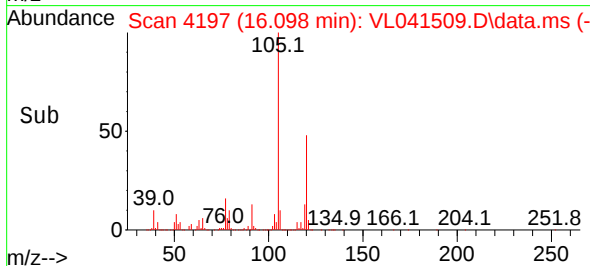
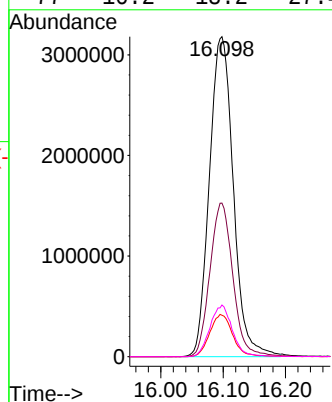
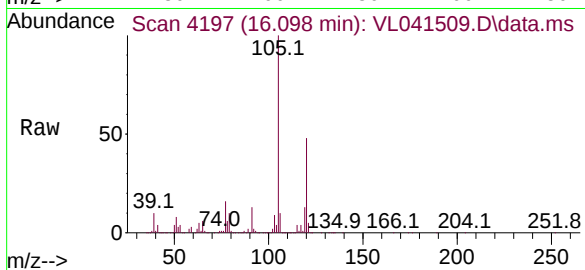
Ion Ratio Lower Upper

105 100

120 48.0 39.5 59.3

91 12.9 39.8 59.8#

77 16.2 18.2 27.4#



#77

1,2-Dichlorobenzene

Concen: 0.161 ppbv

RT: 17.130 min Scan# 4518

Delta R.T. -0.006 min

Lab File: VL041509.D

Acq: 8 Aug 2024 12:23

Tgt Ion:146 Resp: 29925

Ion Ratio Lower Upper

146 100

111 54.5 23.4 70.0

148 73.9 32.2 96.6

