

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111723\
 Data File : VL040892.D
 Acq On : 17 Nov 2023 12:54
 Operator : SY/MD
 Sample : 05275-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 NT-IA-1

Quant Time: Nov 20 03:57:46 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111323AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Mon Nov 20 03:50:24 2023
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.214	49	916022	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.668	114	2174363	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.471	117	1917432	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.783	95	1530953	10.198	ppbv	0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	= 102.000%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.771	85	91711	0.494	ppbv	96
3) Chlorodifluoromethane	2.716	51	93831	0.642	ppbv #	84
4) Chloromethane	2.851	50	27269	0.519	ppbv	94
9) Propene	2.912	41	85357	1.732	ppbv	95
10) Heptane	7.594	43	21194	0.175	ppbv	86
12) 1,1,2-Trichlorotrifluo...	4.099	101	5929	0.058	ppbv #	81
13) Ethanol	3.279	45	4357801	455.327	ppbv #	100
15) Acetone	3.501	43	971026	9.953	ppbv	97
16) 1,3-Butadiene	3.005	39	15284	0.310	ppbv #	56
17) tert-Butyl alcohol	3.925	59	7391	0.089	ppbv #	71
19) Isopropyl Alcohol	3.620	45	304316	5.183	ppbv #	97
20) Methylene Chloride	3.964	84	2175437	54.032	ppbv	96
23) Vinyl Acetate	4.658	43	4753	0.038	ppbv #	1
25) Ethyl Acetate	5.237	43	1607577	7.958	ppbv #	77
26) Hexane	5.237	57	2250143	25.168	ppbv #	41
27) Carbon Disulfide	4.157	76	10319	0.091	ppbv #	13
30) Cyclohexane	6.613	84	4122	0.054	ppbv #	1
34) 2-Butanone	4.816	43	64345	0.581	ppbv	99
35) Carbon Tetrachloride	6.507	117	10499	0.079	ppbv #	97
36) Benzene	6.385	78	43950	0.249	ppbv	97
39) 1,2-Dichloropropane	6.668	63	567781	8.115	ppbv #	25
41) Tetrahydrofuran	5.234	42	854093	12.524	ppbv #	50
44) 2,2,4-Trimethylpentane	7.340	57	87635	0.299	ppbv #	83
53) Toluene	9.230	91	180347	0.929	ppbv	99
58) Ethyl Benzene	12.102	91	14279	0.057	ppbv	96
59) m/p-Xylene	12.368	91	34424	0.162	ppbv #	32
60) o-Xylene	13.069	91	15199	0.075	ppbv #	14
64) n-propylbenzene	14.921	120	3070	0.041	ppbv #	1
65) tert-Butylbenzene	16.114	119	15277	0.060	ppbv #	37
66) Benzyl Chloride	16.230	91	304	0.033	ppbv #	1
72) 4-Ethyltoluene	15.198	105	32799	0.147	ppbv #	84
73) 1,3,5-Trimethylbenzene	15.359	105	25610	0.130	ppbv	90
74) 1,2,4-Trimethylbenzene	16.111	105	80133	0.364	ppbv #	64

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

Quant Time: Nov 20 03:57:46 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111323AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Mon Nov 20 03:50:24 2023
Response via : Initial Calibration

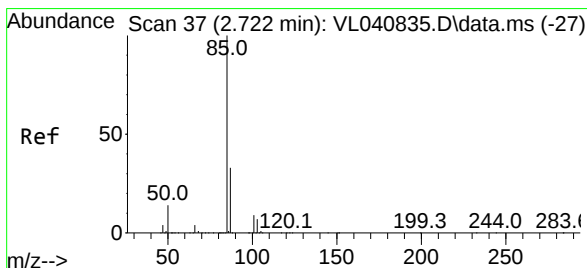
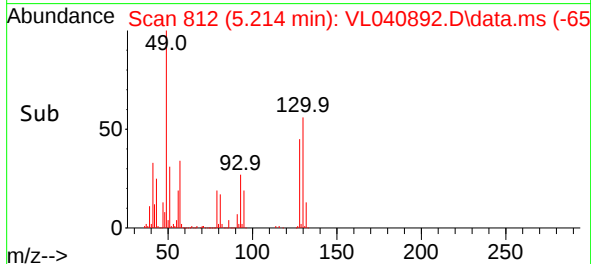
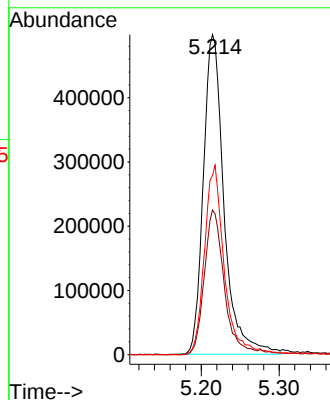
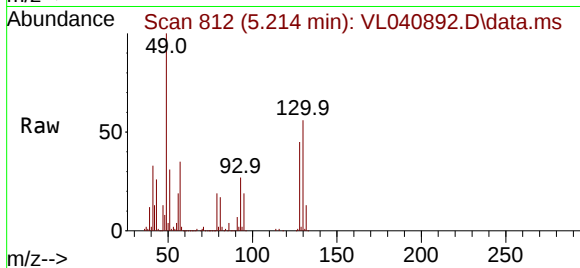




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.214 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

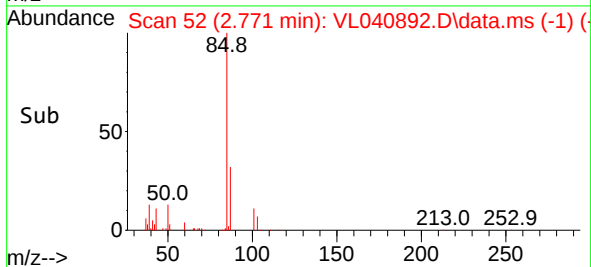
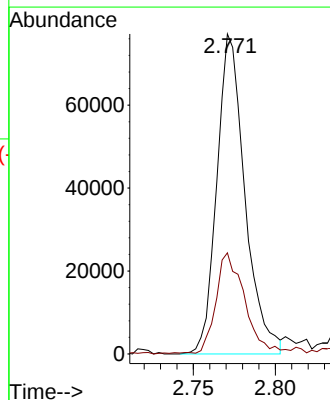
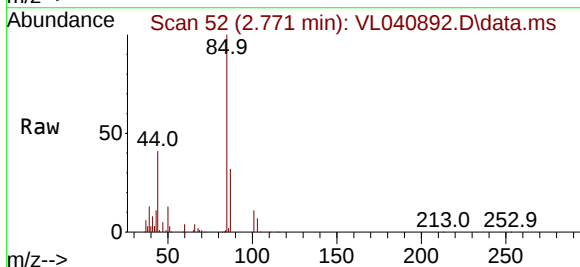
Instrument :
MSVOA_L
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NT-IA-1

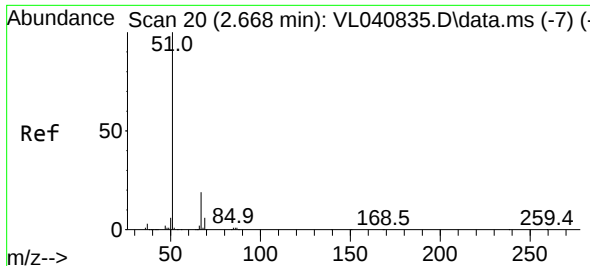
Tgt Ion: 49 Resp: 916022
Ion Ratio Lower Upper
49 100
128 44.7 23.8 71.2
130 57.7 30.9 92.8



#2
Dichlorodifluoromethane
Concen: 0.494 ppbv
RT: 2.771 min Scan# 52
Delta R.T. -0.003 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Tgt Ion: 85 Resp: 91711
Ion Ratio Lower Upper
85 100
87 31.3 26.7 40.1

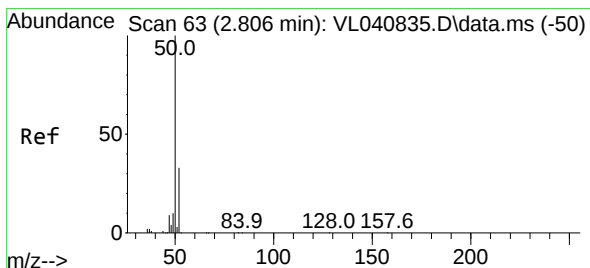
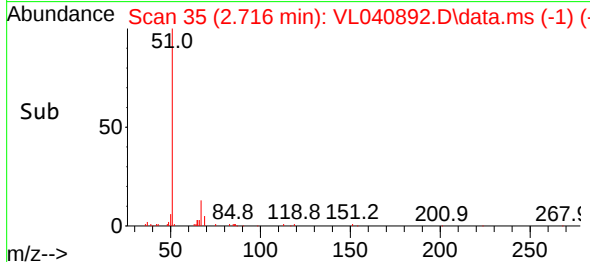
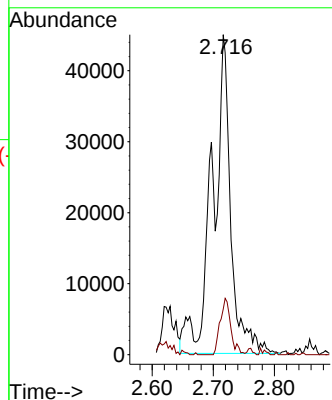
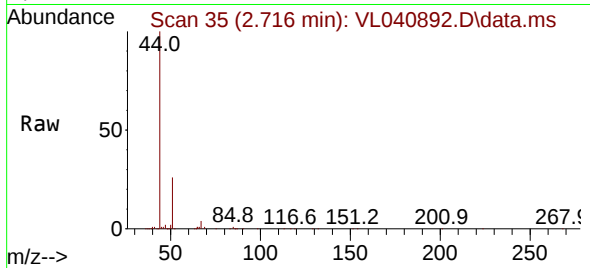




#3
Chlorodifluoromethane
Concen: 0.642 ppbv
RT: 2.716 min Scan# 31
Delta R.T. -0.003 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

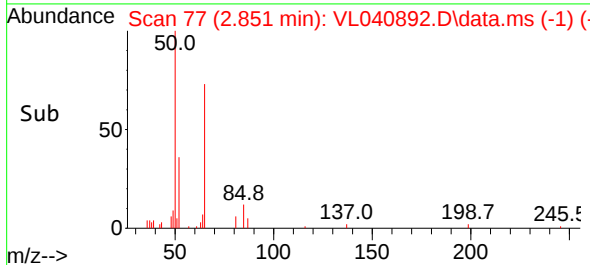
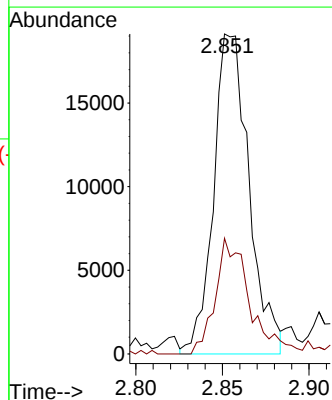
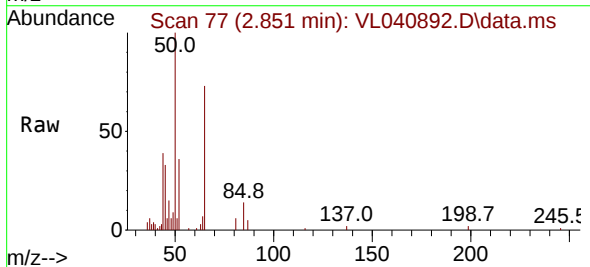
Instrument :
MSVOA_L
ClientSampleId :
NT-IA-1

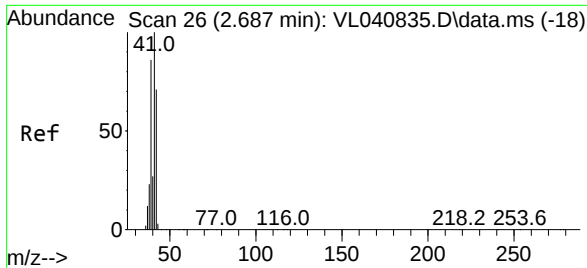
Tgt Ion: 51 Resp: 93831
Ion Ratio Lower Upper
51 100
67 11.4 15.0 22.4#



#4
Chloromethane
Concen: 0.519 ppbv
RT: 2.851 min Scan# 77
Delta R.T. -0.003 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Tgt Ion: 50 Resp: 27269
Ion Ratio Lower Upper
50 100
52 36.7 26.5 39.7





#9

Propene

Concen: 1.732 ppbv

RT: 2.912 min Scan# 9

Delta R.T. 0.174 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

Instrument :

MSVOA_L

ClientSampleId :

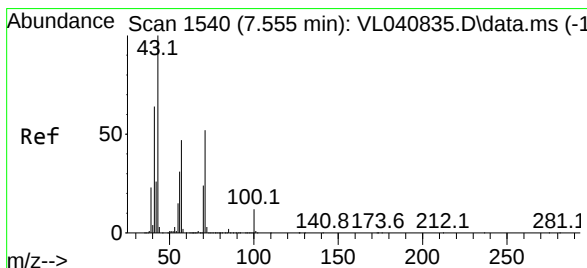
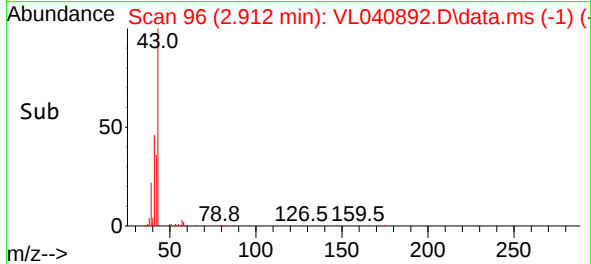
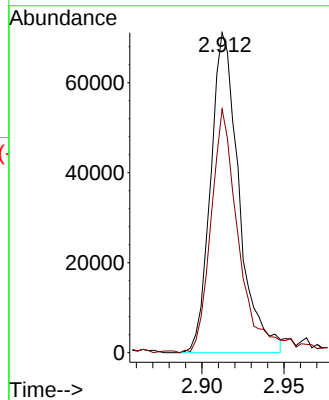
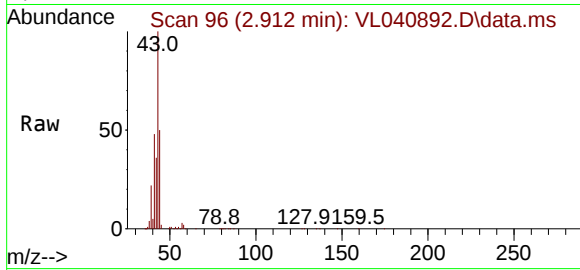
NT-IA-1

Tgt Ion: 41 Resp: 85357

Ion Ratio Lower Upper

41 100

42 74.7 56.5 84.7



#10

Heptane

Concen: 0.175 ppbv

RT: 7.594 min Scan# 1552

Delta R.T. 0.006 min

Lab File: VL040892.D

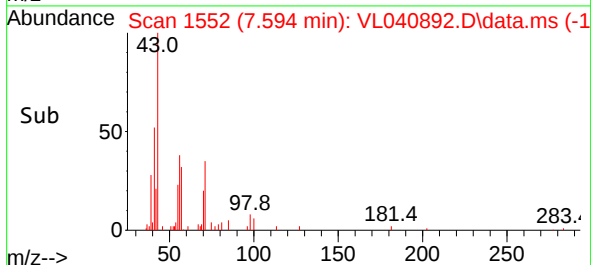
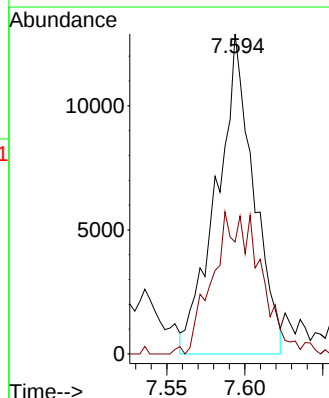
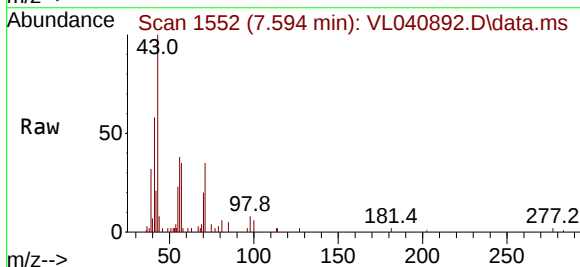
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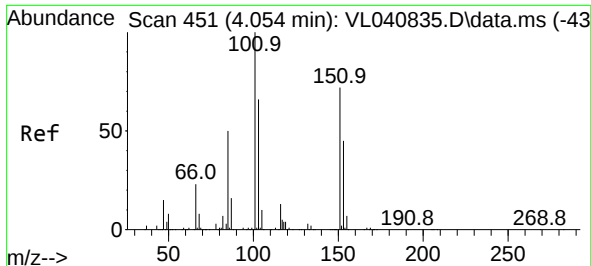
Tgt Ion: 43 Resp: 21194

Ion Ratio Lower Upper

43 100

57 58.7 39.4 59.0

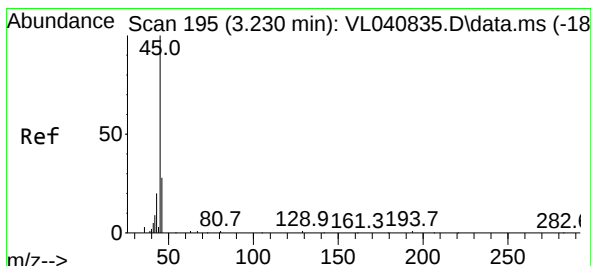
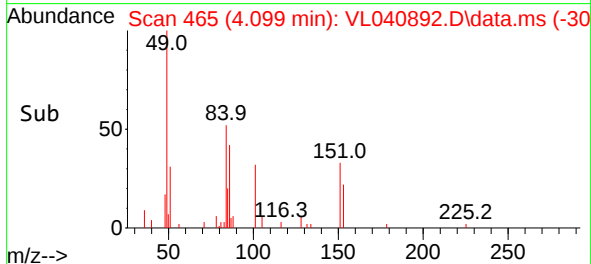
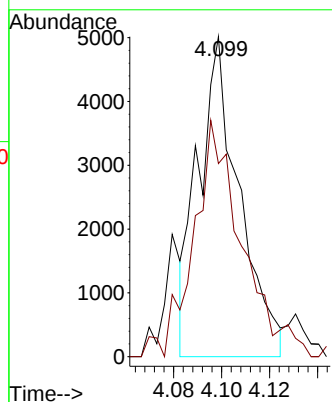
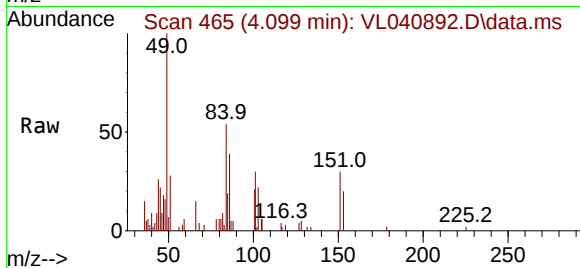




#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.058 ppbv
 RT: 4.099 min Scan# 40
 Delta R.T. 0.003 min
 Lab File: VL040892.D
 Acq: 17 Nov 2023 12:54

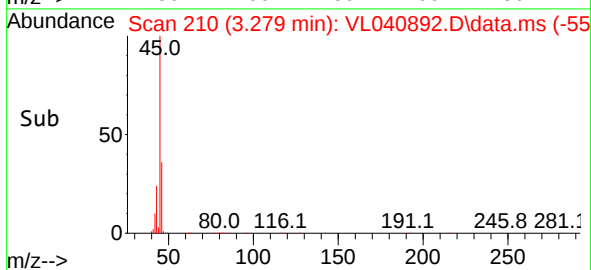
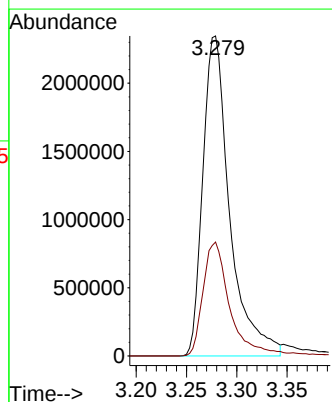
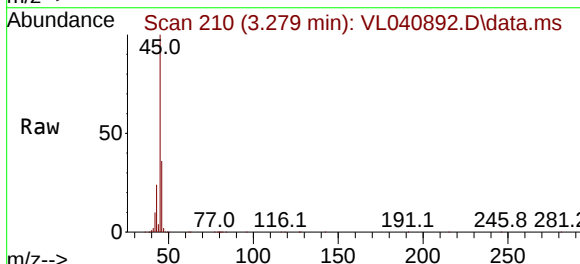
Instrument :
 MSVOA_L
 ClientSampleId :
 NT-IA-1

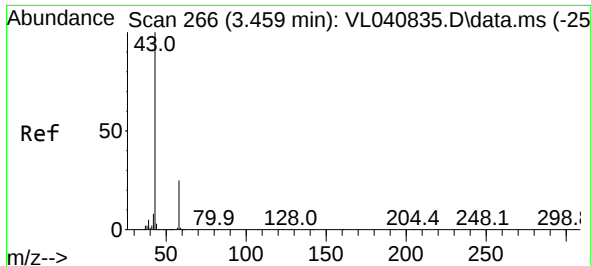
Tgt Ion:101 Resp: 5929
 Ion Ratio Lower Upper
 101 100
 151 87.9 57.8 86.6#



#13
 Ethanol
 Concen: 455.327 ppbv
 RT: 3.279 min Scan# 210
 Delta R.T. -0.000 min
 Lab File: VL040892.D
 Acq: 17 Nov 2023 12:54

Tgt Ion: 45 Resp: 4357801
 Ion Ratio Lower Upper
 45 100
 46 36.7 0.0 0.0#

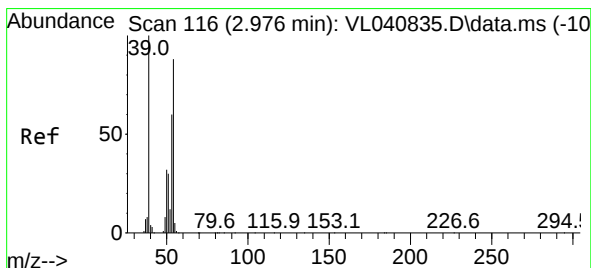
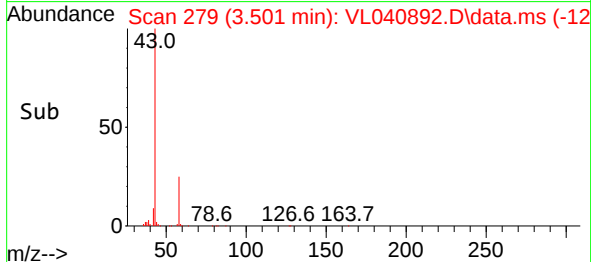
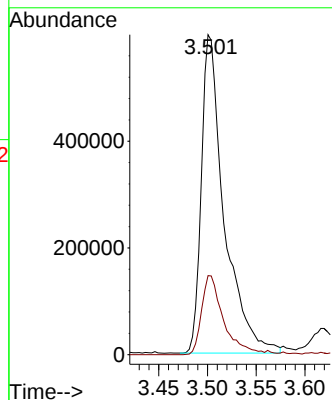
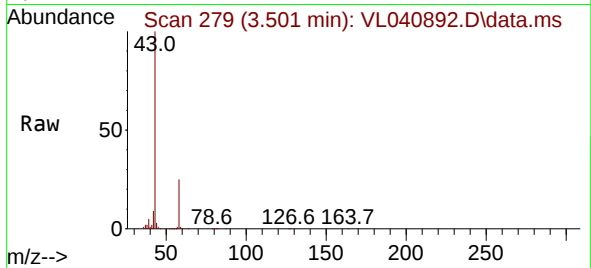




#15
Acetone
Concen: 9.953 ppbv
RT: 3.501 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

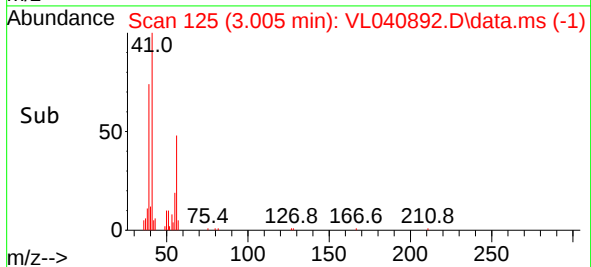
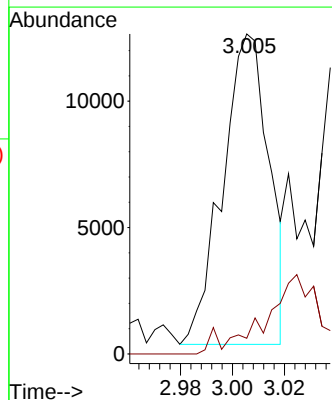
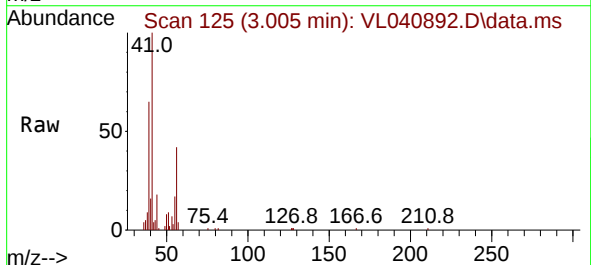
Instrument :
MSVOA_L
ClientSampleId :
NT-IA-1

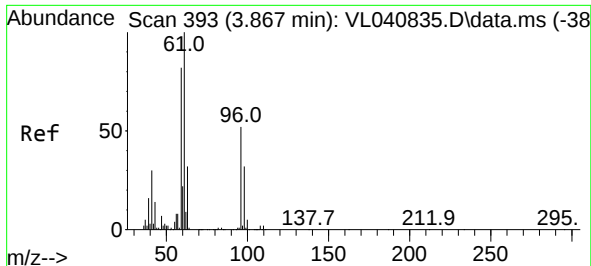
Tgt Ion: 43 Resp: 971026
Ion Ratio Lower Upper
43 100
58 24.5 20.9 31.3



#16
1,3-Butadiene
Concen: 0.310 ppbv
RT: 3.005 min Scan# 125
Delta R.T. -0.019 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Tgt Ion: 39 Resp: 15284
Ion Ratio Lower Upper
39 100
54 39.4 61.8 92.6#





#17

tert-Butyl alcohol

Concen: 0.089 ppbv

RT: 3.925 min Scan# 411

Delta R.T. 0.016 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

Instrument :

MSVOA_L

ClientSampleId :

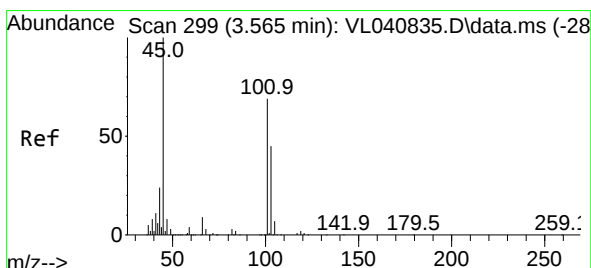
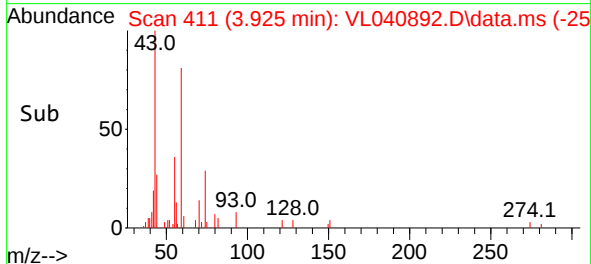
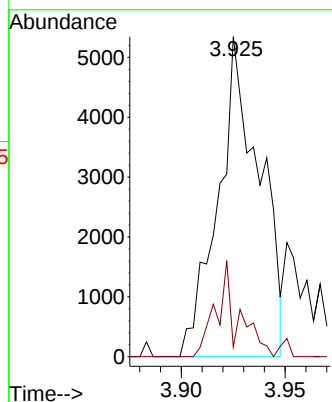
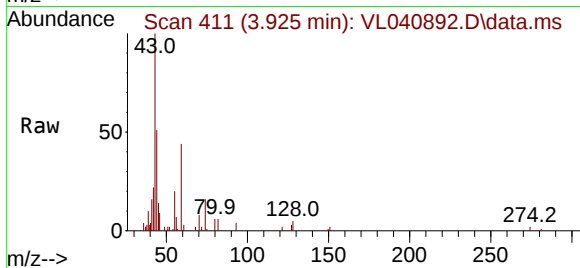
NT-IA-1

Tgt Ion: 59 Resp: 7391

Ion Ratio Lower Upper

59 100

57 0.0 9.0 13.4#



#19

Isopropyl Alcohol

Concen: 5.183 ppbv

RT: 3.620 min Scan# 316

Delta R.T. 0.010 min

Lab File: VL040892.D

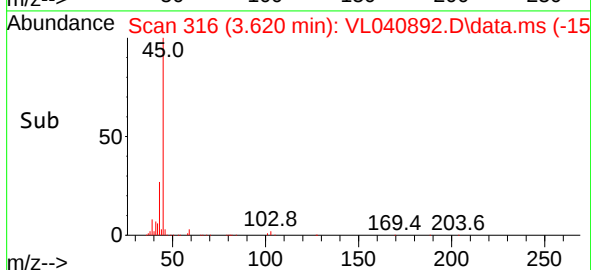
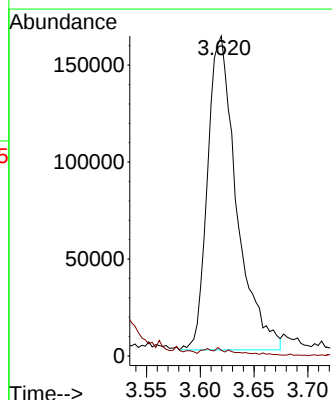
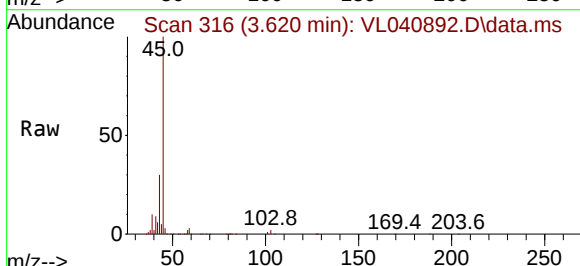
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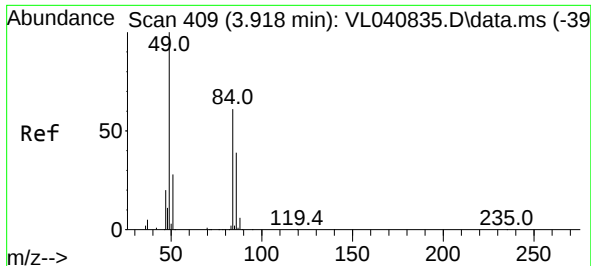
Tgt Ion: 45 Resp: 304316

Ion Ratio Lower Upper

45 100

58 2.9 1.6 2.4#





#20

Methylene Chloride

Concen: 54.032 ppbv

RT: 3.964 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

Instrument :

MSVOA_L

ClientSampleId :

NT-IA-1

Tgt Ion: 84 Resp: 2175437

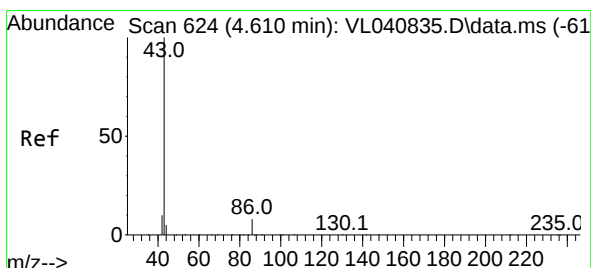
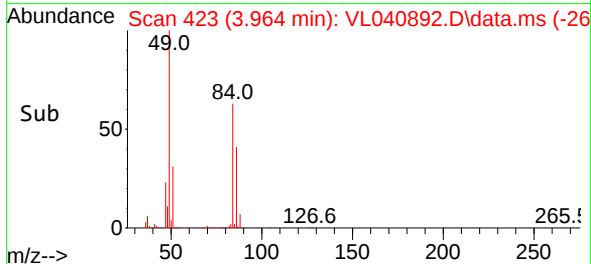
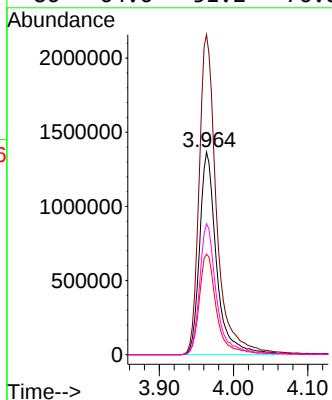
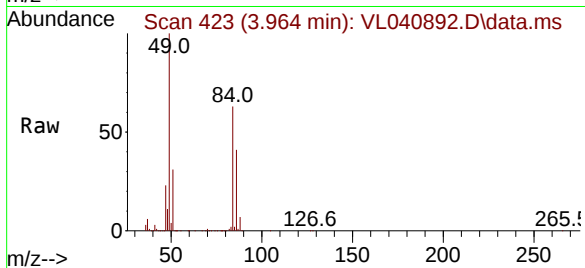
Ion Ratio Lower Upper

84 100

49 158.0 131.0 196.4

51 49.6 36.9 55.3

86 64.6 51.2 76.8



#23

Vinyl Acetate

Concen: 0.038 ppbv

RT: 4.658 min Scan# 639

Delta R.T. 0.010 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

Tgt Ion: 43 Resp: 4753

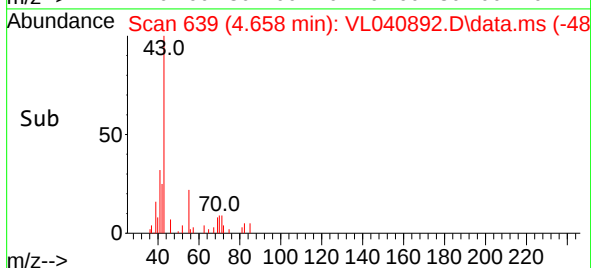
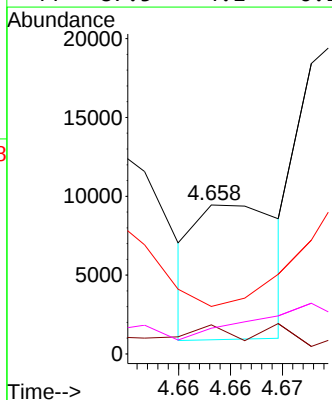
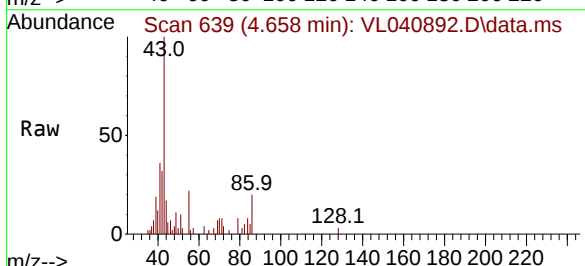
Ion Ratio Lower Upper

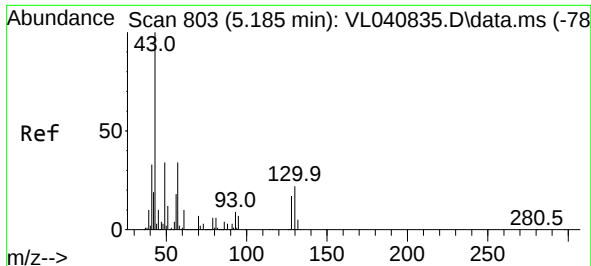
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86 49.9 5.5 8.3#

42 0.0 8.2 12.2#

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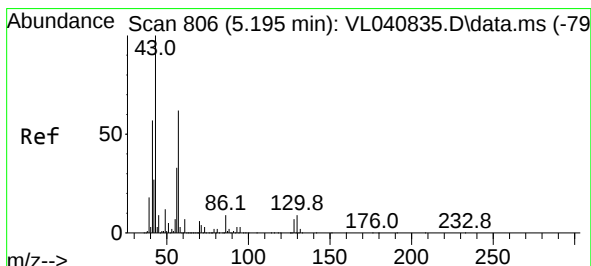
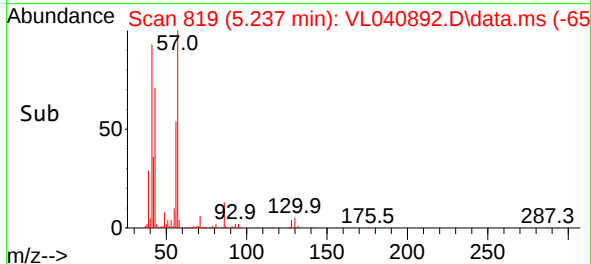
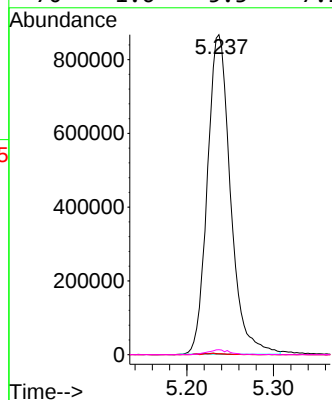
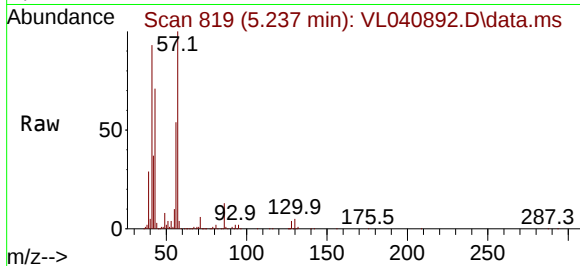


#25
Ethyl Acetate
Concen: 7.958 ppbv
RT: 5.237 min Scan# 819
Delta R.T. 0.016 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Instrument :
MSVOA_L
ClientSampleId :
NT-IA-1

Tgt Ion: 43 Resp: 1607577

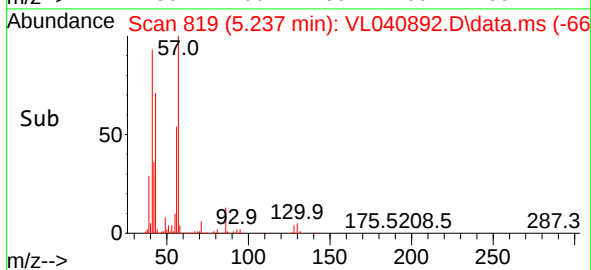
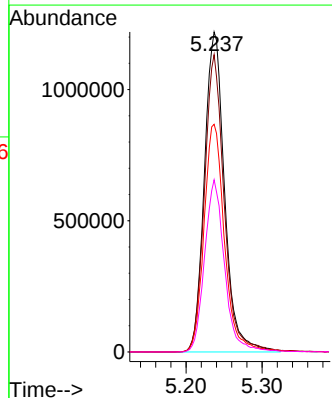
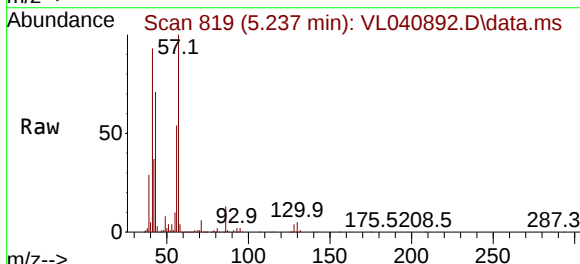
Ion	Ratio	Lower	Upper
43	100		
45	0.5	8.1	12.1#
61	0.4	7.8	11.6#
70	1.6	5.3	7.9#

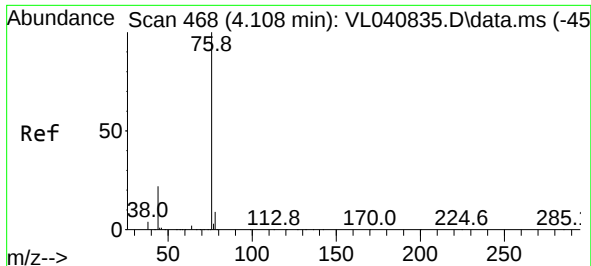


#26
Hexane
Concen: 25.168 ppbv
RT: 5.237 min Scan# 819
Delta R.T. 0.006 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Tgt Ion: 57 Resp: 2250143

Ion	Ratio	Lower	Upper
57	100		
41	91.7	75.4	113.0
43	72.6	185.9	278.9#
56	53.2	42.6	63.8

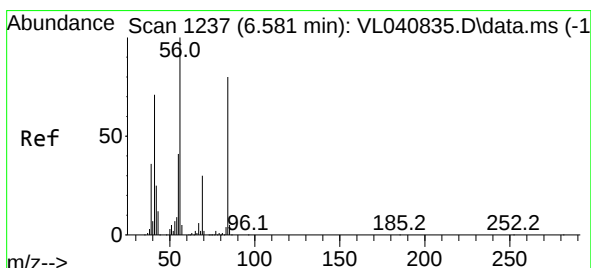
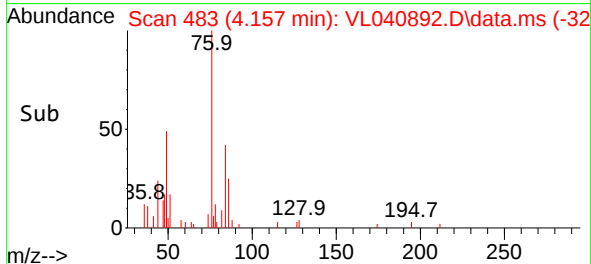
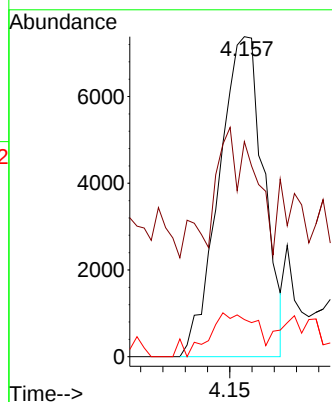
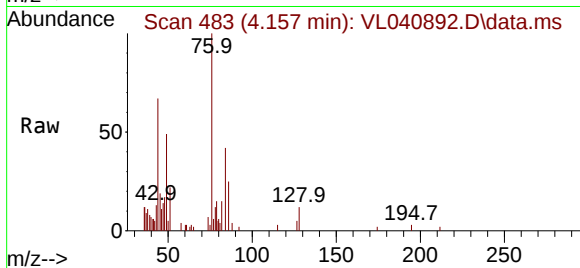




#27
Carbon Disulfide
Concen: 0.091 ppbv
RT: 4.157 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

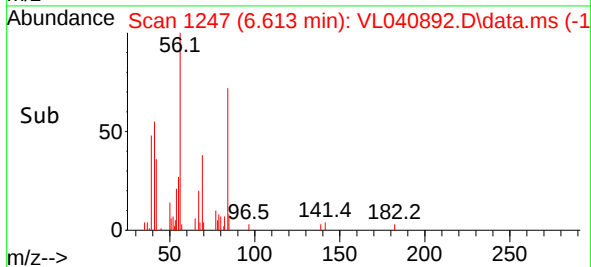
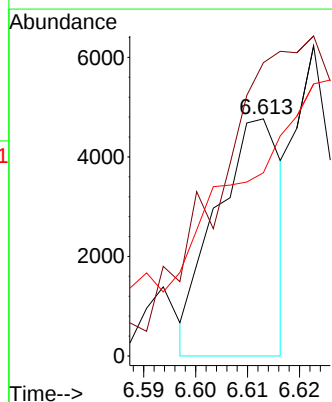
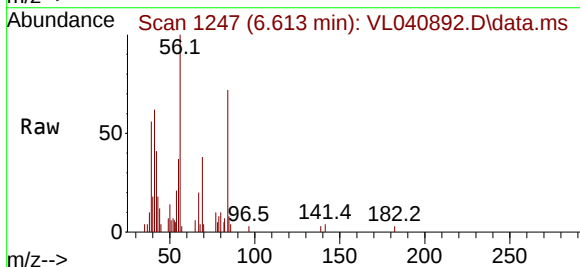
Instrument :
MSVOA_1
ClientSampleId :
NT-IA-1

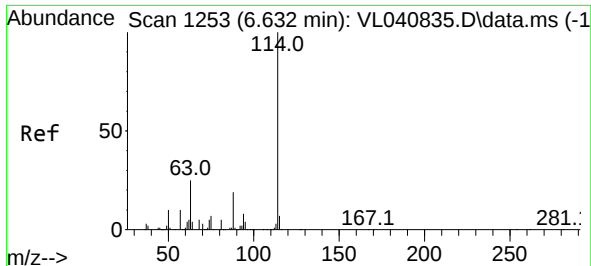
Tgt Ion: 76 Resp: 10319
Ion Ratio Lower Upper
76 100
44 77.0 16.7 25.1#
78 14.5 7.6 11.4#



#30
Cyclohexane
Concen: 0.054 ppbv
RT: 6.613 min Scan# 1247
Delta R.T. -0.000 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Tgt Ion: 84 Resp: 4122
Ion Ratio Lower Upper
84 100
56 0.0 109.3 163.9#
41 0.0 71.4 107.2#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.668 min Scan# 11

Delta R.T. 0.003 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

Instrument :

MSVOA_L

ClientSampleId :

NT-IA-1

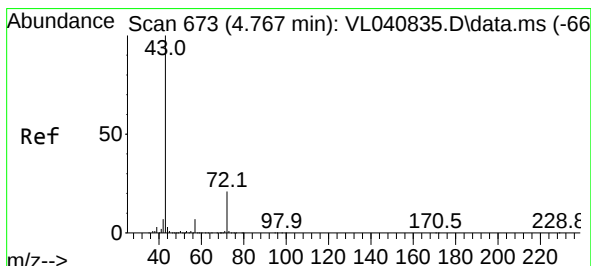
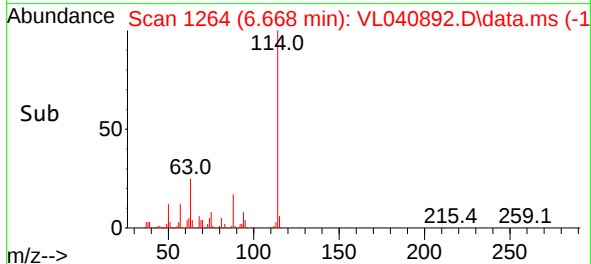
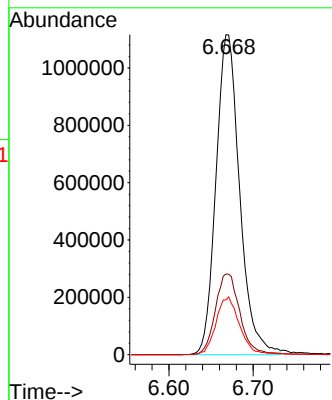
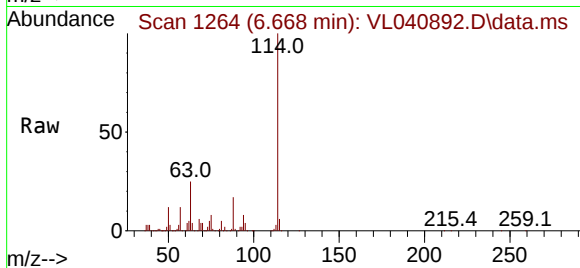
Tgt Ion:114 Resp: 2174363

Ion Ratio Lower Upper

114 100

63 26.5 20.9 31.3

88 18.2 14.3 21.5



#34

2-Butanone

Concen: 0.581 ppbv

RT: 4.816 min Scan# 688

Delta R.T. 0.010 min

Lab File: VL040892.D

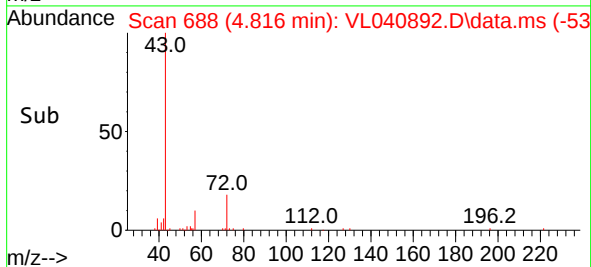
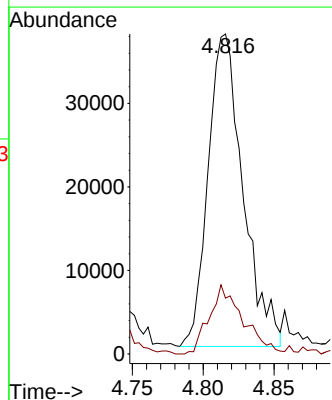
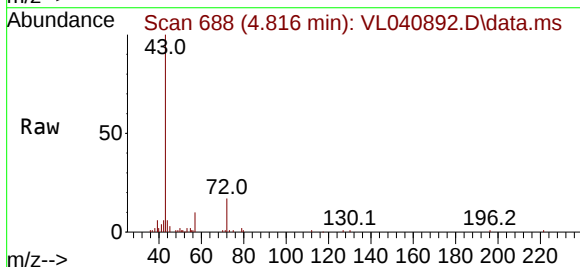
Acq: 17 Nov 2023 12:54

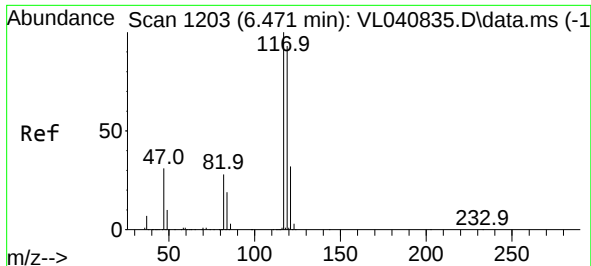
Tgt Ion: 43 Resp: 64345

Ion Ratio Lower Upper

43 100

72 21.7 17.2 25.8

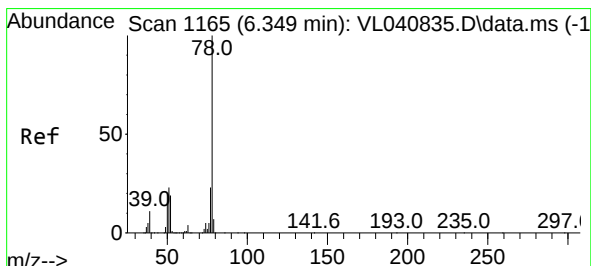
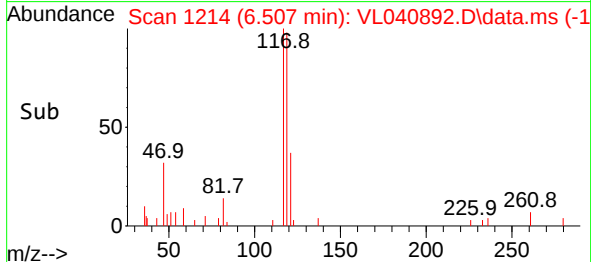
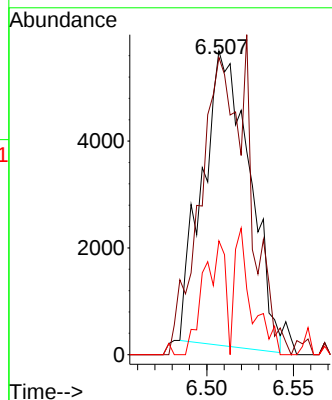
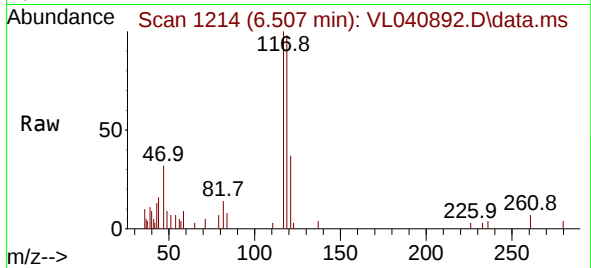




#35
Carbon Tetrachloride
Concen: 0.079 ppbv
RT: 6.507 min Scan# 1176
Delta R.T. -0.000 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

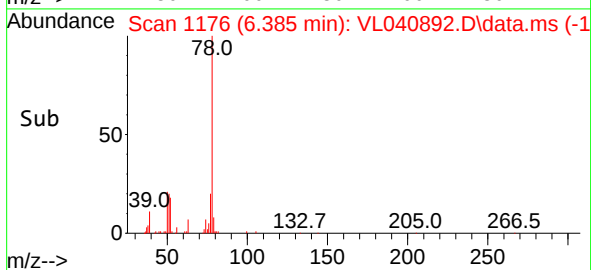
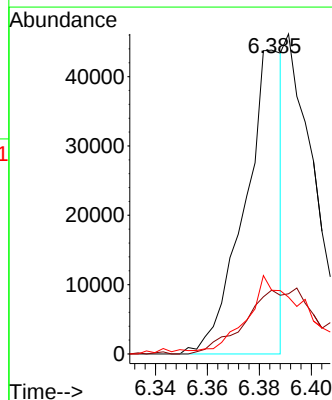
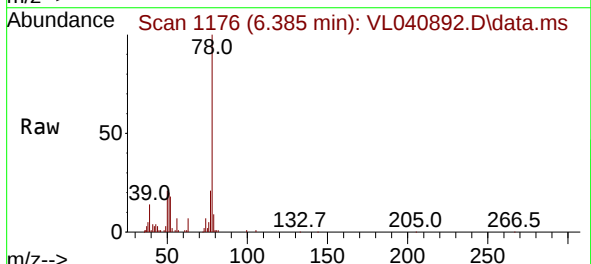
Instrument :
MSVOA_L
ClientSampleId :
NT-IA-1

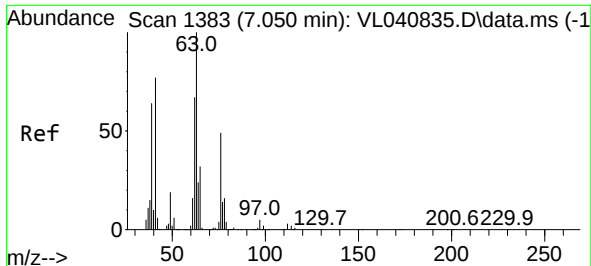
Tgt Ion:117 Resp: 10499
Ion Ratio Lower Upper
117 100
119 93.4 74.7 112.1
121 39.3 25.5 38.3#



#36
Benzene
Concen: 0.249 ppbv
RT: 6.385 min Scan# 1176
Delta R.T. -0.000 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Tgt Ion: 78 Resp: 43950
Ion Ratio Lower Upper
78 100
77 21.0 18.4 27.6
50 19.5 16.2 24.2





#39

1,2-Dichloropropane

Concen: 8.115 ppbv

RT: 6.668 min Scan# 1

Delta R.T. -0.415 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

Instrument :

MSVOA_L

ClientSampleId :

NT-IA-1

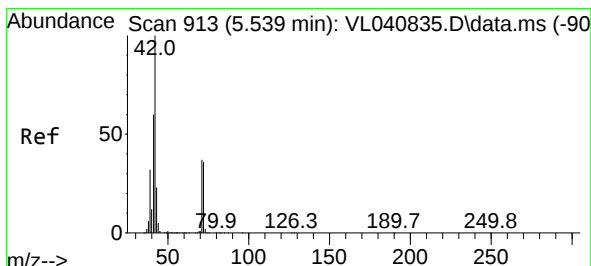
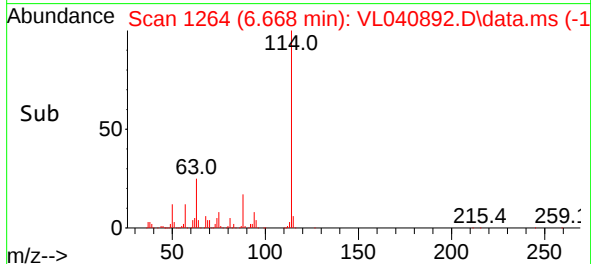
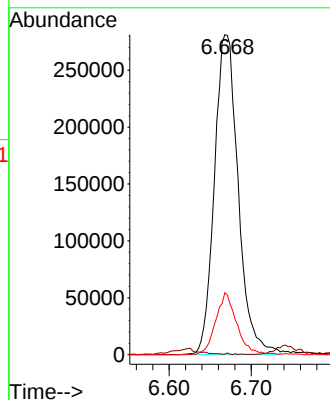
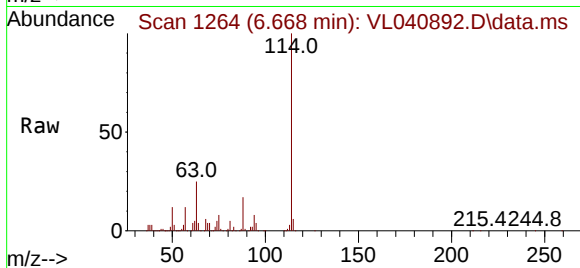
Tgt Ion: 63 Resp: 567781

Ion Ratio Lower Upper

63 100

41 0.0 61.5 92.3#

62 19.4 53.9 80.9#



#41

Tetrahydrofuran

Concen: 12.524 ppbv

RT: 5.234 min Scan# 818

Delta R.T. -0.341 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

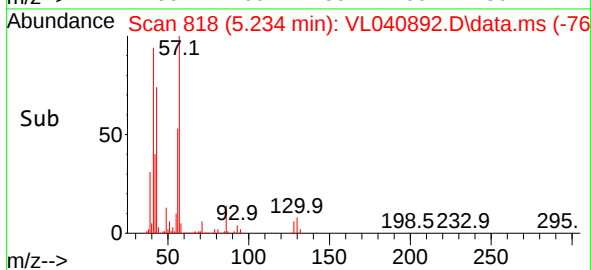
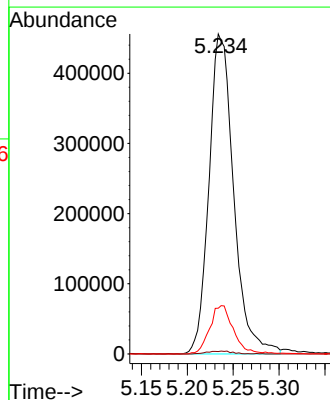
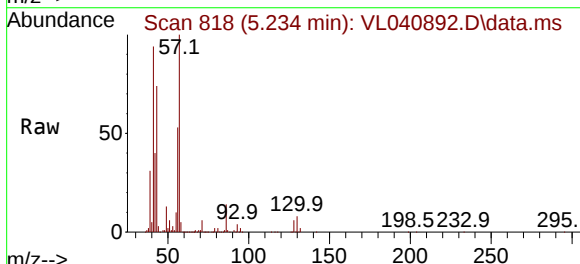
Tgt Ion: 42 Resp: 854093

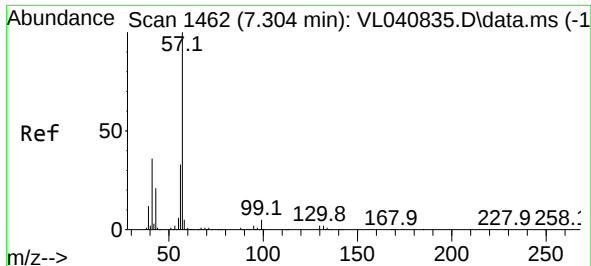
Ion Ratio Lower Upper

42 100

72 0.9 30.8 46.2#

71 14.6 30.0 45.0#





#44

2,2,4-Trimethylpentane

Concen: 0.299 ppbv

RT: 7.340 min Scan# 1462

Delta R.T. 0.006 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

Instrument :

MSVOA_1

ClientSampleId :

NT-IA-1

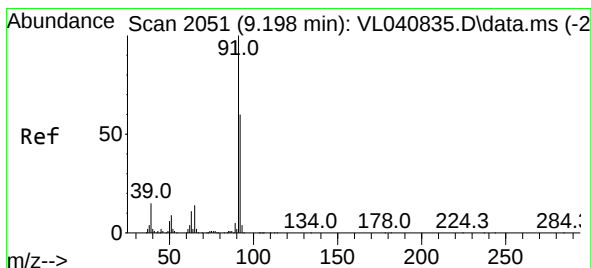
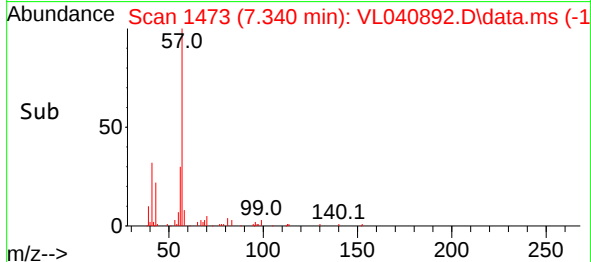
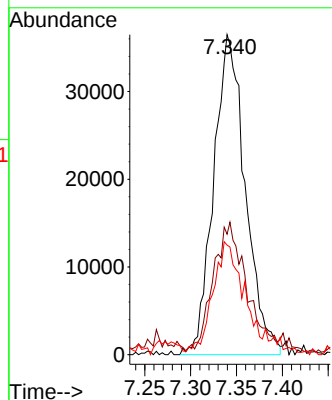
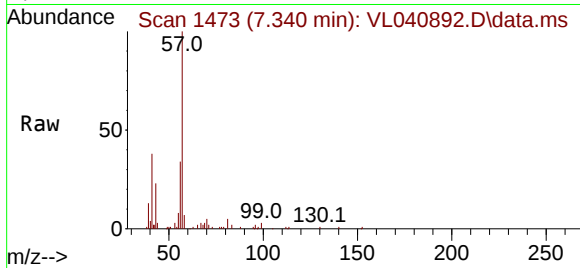
Tgt Ion: 57 Resp: 87635

Ion Ratio Lower Upper

57 100

41 47.5 29.0 43.6#

56 39.1 25.2 37.8#



#53

Toluene

Concen: 0.929 ppbv

RT: 9.230 min Scan# 2061

Delta R.T. 0.006 min

Lab File: VL040892.D

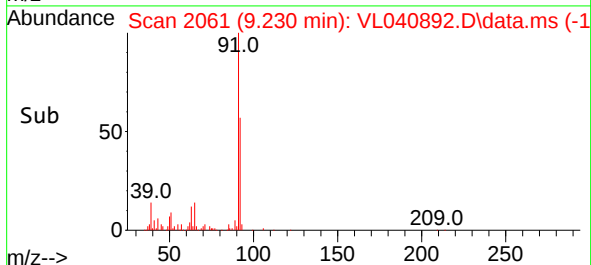
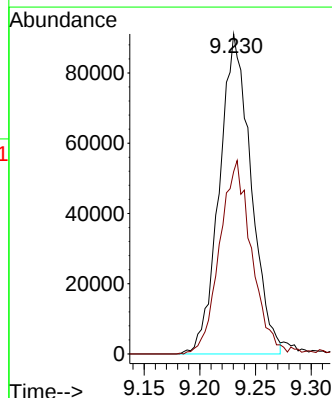
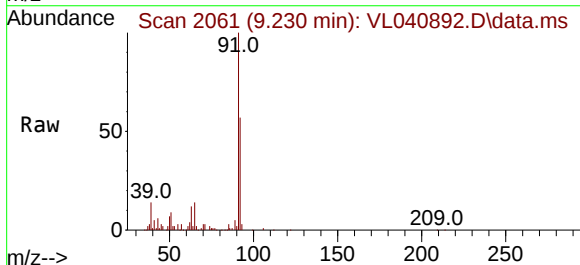
Acq: 17 Nov 2023 12:54

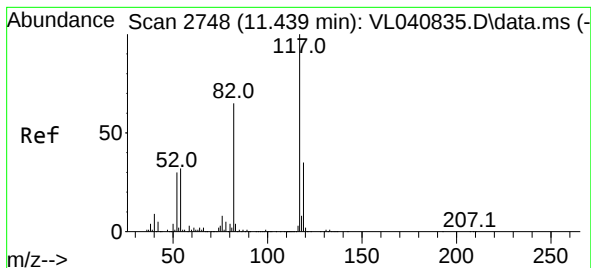
Tgt Ion: 91 Resp: 180347

Ion Ratio Lower Upper

91 100

92 62.6 49.4 74.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.471 min Scan# 21

Delta R.T. 0.010 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

Instrument :

MSVOA_L

ClientSampleId :

NT-IA-1

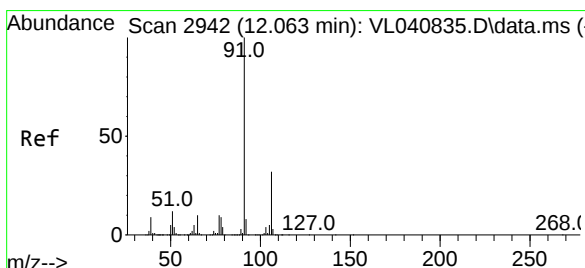
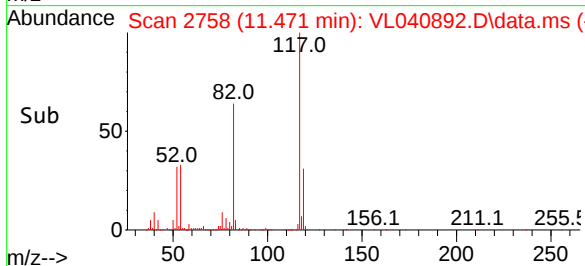
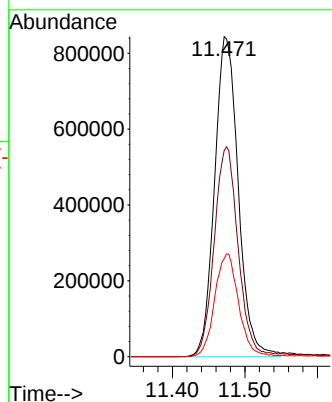
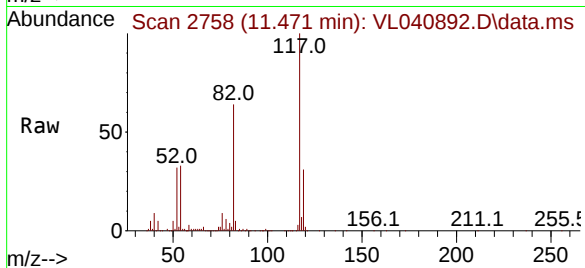
Tgt Ion:117 Resp: 1917432

Ion Ratio Lower Upper

117 100

82 67.6 50.6 75.8

119 32.7 23.3 34.9



#58

Ethyl Benzene

Concen: 0.057 ppbv

RT: 12.102 min Scan# 2954

Delta R.T. 0.016 min

Lab File: VL040892.D

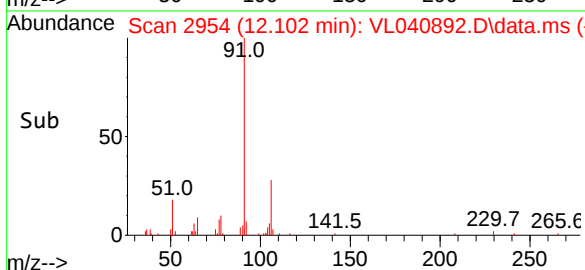
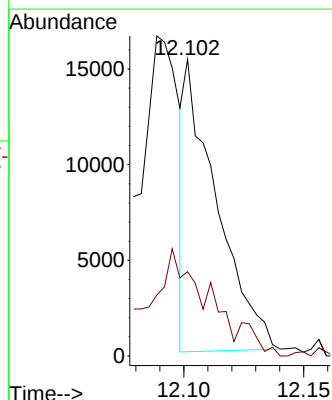
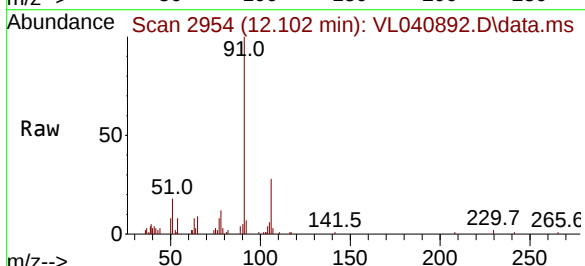
Acq: 17 Nov 2023 12:54

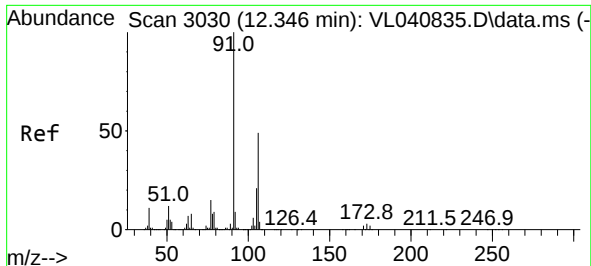
Tgt Ion: 91 Resp: 14279

Ion Ratio Lower Upper

91 100

106 29.1 25.2 37.8





#59

m/p-Xylene

Concen: 0.162 ppbv

RT: 12.368 min Scan# 3037

Delta R.T. -0.000 min

Lab File: VL040892.D

Acq: 17 Nov 2023 12:54

Instrument :

MSVOA_L

ClientSampleId :

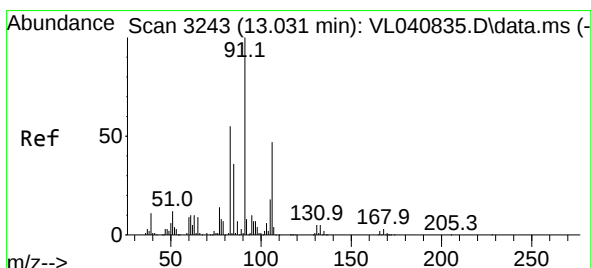
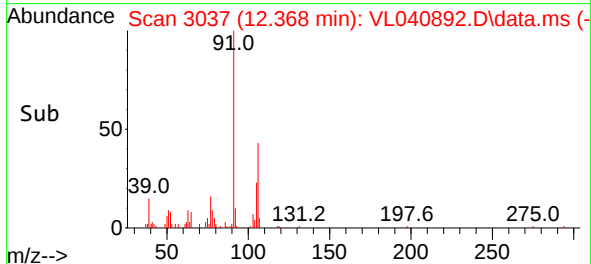
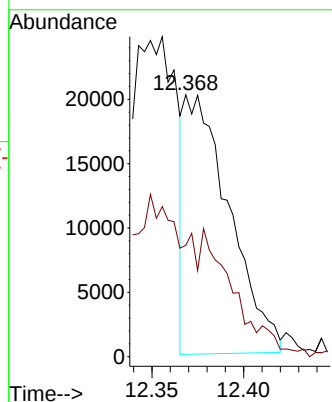
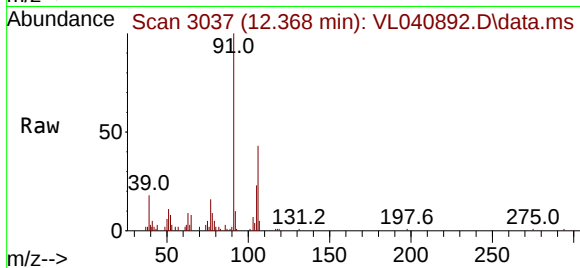
NT-IA-1

Tgt Ion: 91 Resp: 34424

Ion Ratio Lower Upper

91 100

106 0.0 35.4 53.0#



#60

o-Xylene

Concen: 0.075 ppbv

RT: 13.069 min Scan# 3255

Delta R.T. 0.016 min

Lab File: VL040892.D

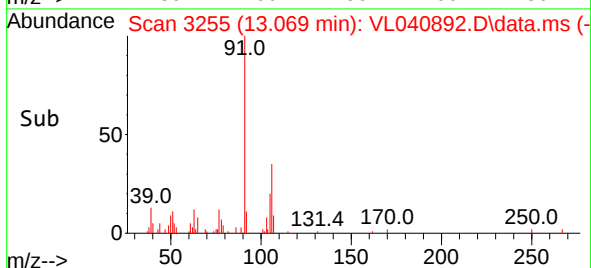
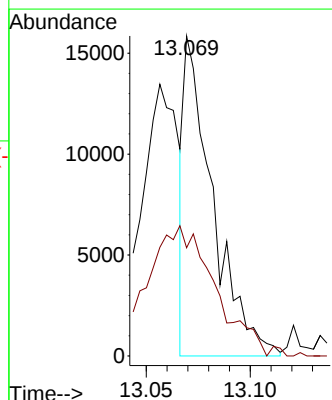
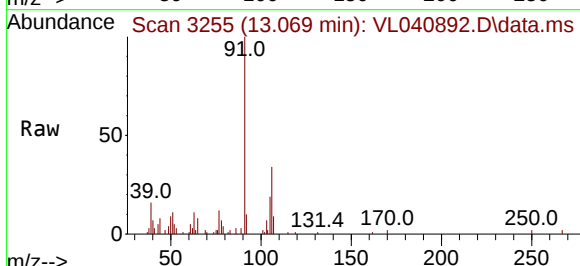
Acq: 17 Nov 2023 12:54

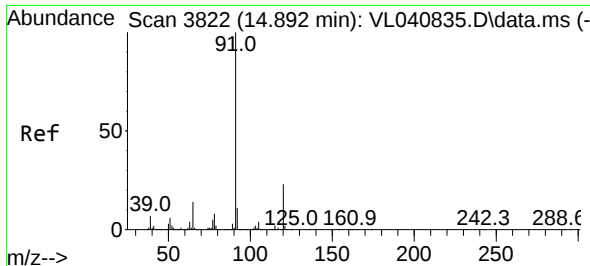
Tgt Ion: 91 Resp: 15199

Ion Ratio Lower Upper

91 100

106 102.1 22.9 68.5#

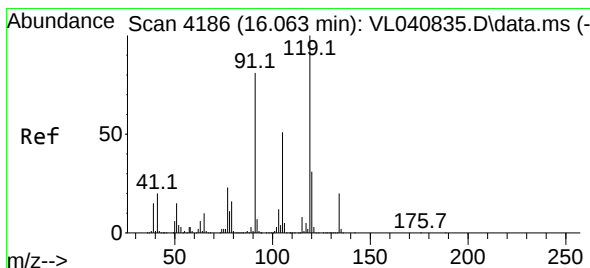
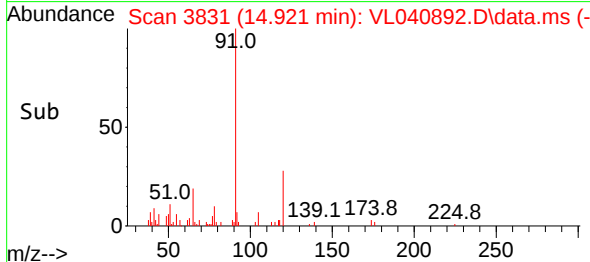
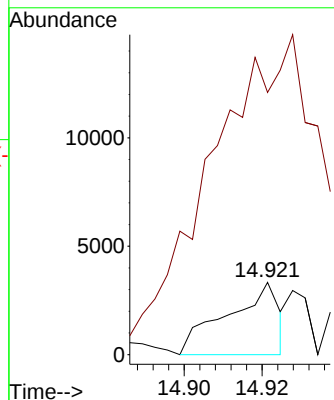
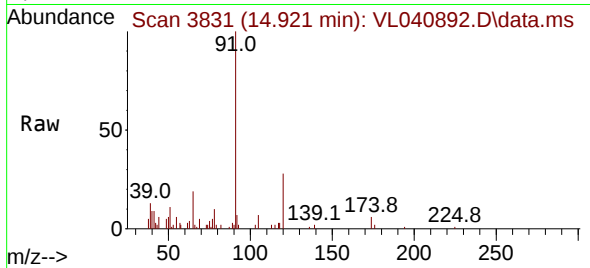




#64
n-propylbenzene
Concen: 0.041 ppbv
RT: 14.921 min Scan# 3822
Delta R.T. 0.013 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

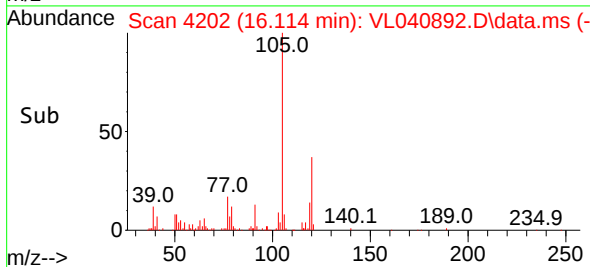
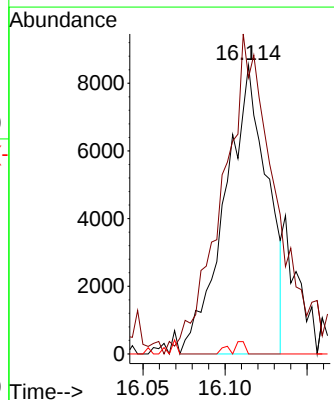
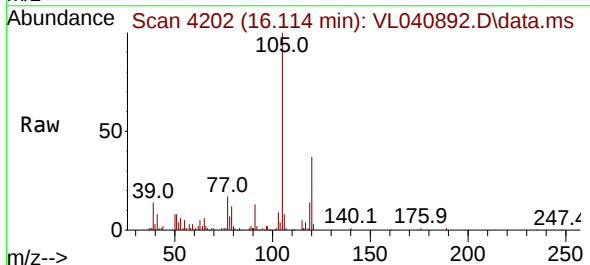
Instrument :
MSVOA_1
ClientSampleId :
NT-IA-1

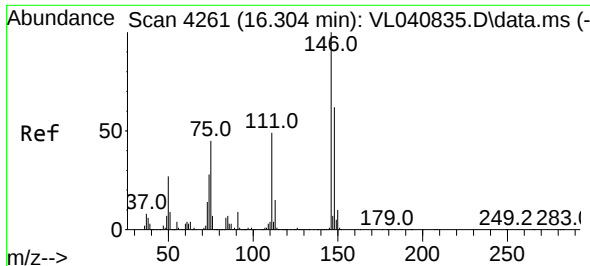
Tgt Ion:120 Resp: 3070
Ion Ratio Lower Upper
120 100
91 0.0 381.1 571.7#



#65
tert-Butylbenzene
Concen: 0.060 ppbv
RT: 16.114 min Scan# 4202
Delta R.T. 0.032 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Tgt Ion:119 Resp: 15277
Ion Ratio Lower Upper
119 100
91 147.0 67.5 101.3#
134 1.4 15.9 23.9#

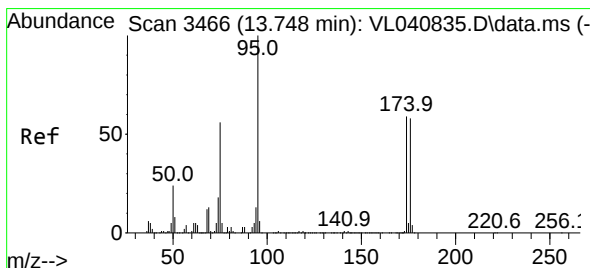
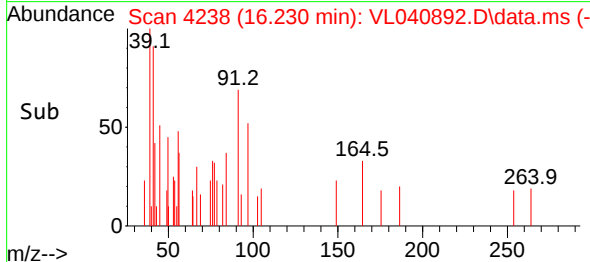
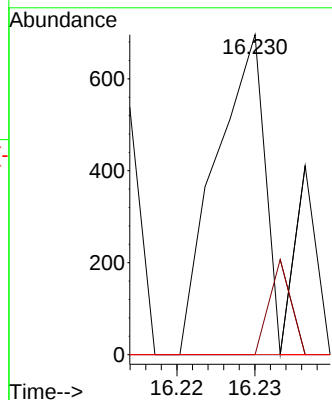
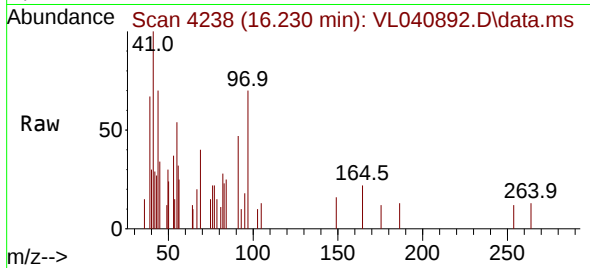




#66
Benzyl Chloride
Concen: 0.033 ppbv
RT: 16.230 min Scan# 41
Delta R.T. -0.096 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

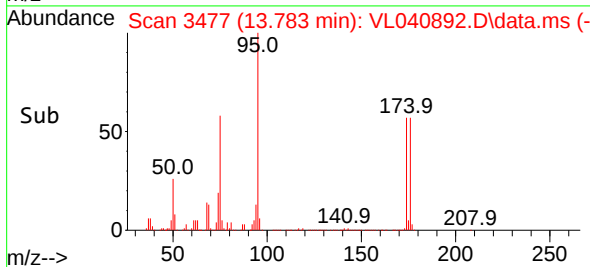
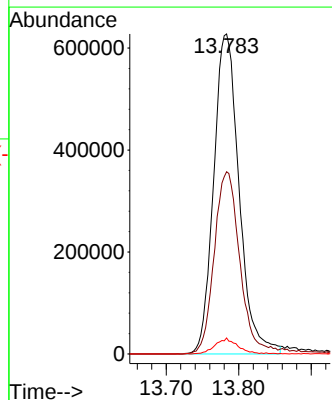
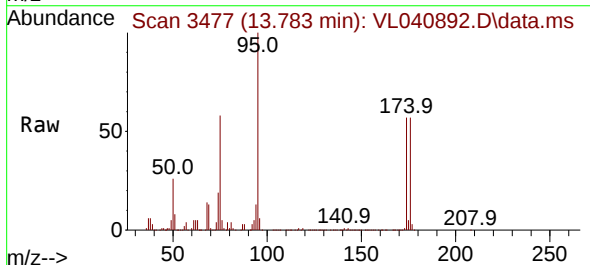
Instrument :
MSVOA_L
ClientSampleId :
NT-IA-1

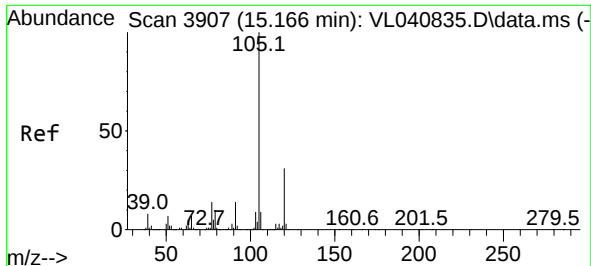
Tgt Ion: 91 Resp: 304
Ion Ratio Lower Upper
91 100
126 91.8 12.8 19.2#
128 0.0 0.0 0.0



#68
1-Bromo-4-Fluorobenzene
Concen: 10.198 ppbv
RT: 13.783 min Scan# 3477
Delta R.T. 0.013 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Tgt Ion: 95 Resp: 1530953
Ion Ratio Lower Upper
95 100
174 58.9 47.5 71.3
175 4.5 3.6 5.4

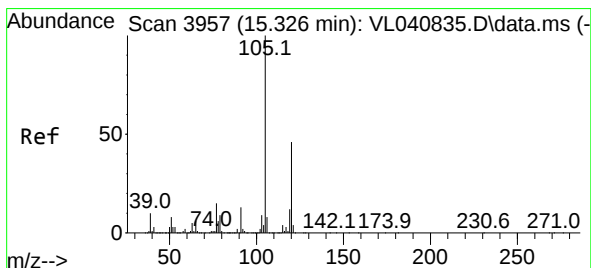
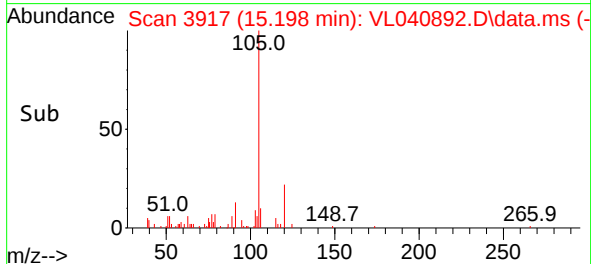
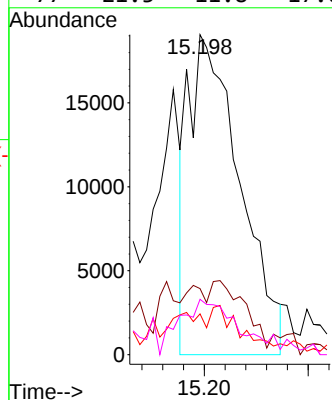
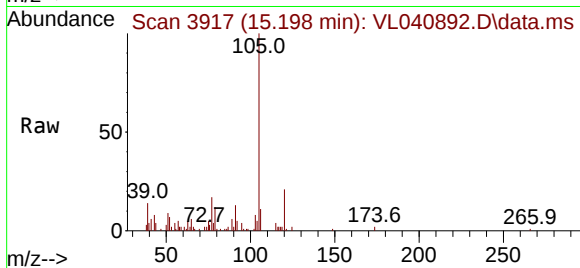




#72
4-Ethyltoluene
Concen: 0.147 ppbv
RT: 15.198 min Scan# 3917
Delta R.T. 0.013 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

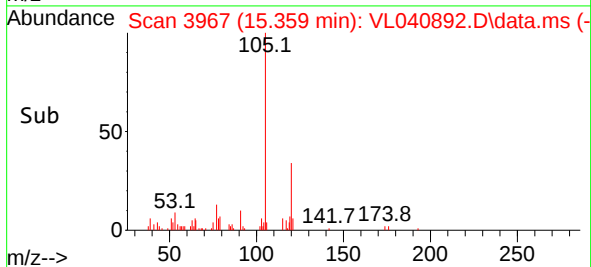
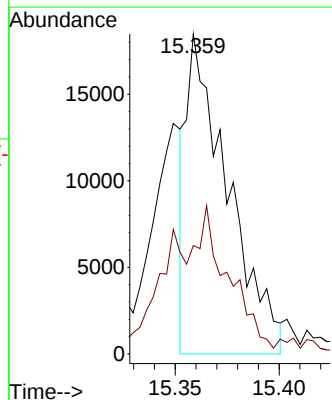
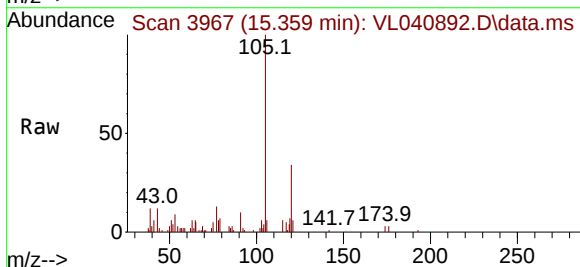
Instrument :
MSVOA_L
ClientSampleId :
NT-IA-1

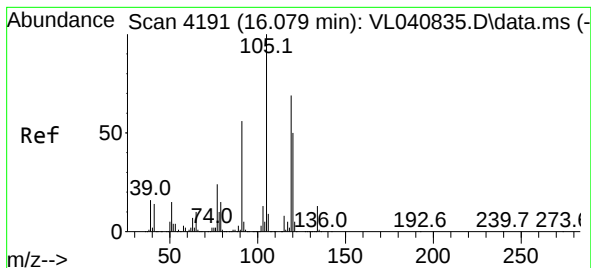
Tgt Ion:	105	Resp:	32799
Ion Ratio	Lower	Upper	
105	100		
120	37.1	24.5	36.7#
91	23.3	10.6	16.0#
77	21.3	11.8	17.6#



#73
1,3,5-Trimethylbenzene
Concen: 0.130 ppbv
RT: 15.359 min Scan# 3967
Delta R.T. 0.016 min
Lab File: VL040892.D
Acq: 17 Nov 2023 12:54

Tgt Ion:	105	Resp:	25610
Ion Ratio	Lower	Upper	
105	100		
120	39.2	36.8	55.2





#74

1,2,4-Trimethylbenzene

Concen: 0.364 ppbv

RT: 16.111 min Scan# 41

Delta R.T. 0.010 min

Lab File: VL040892.D

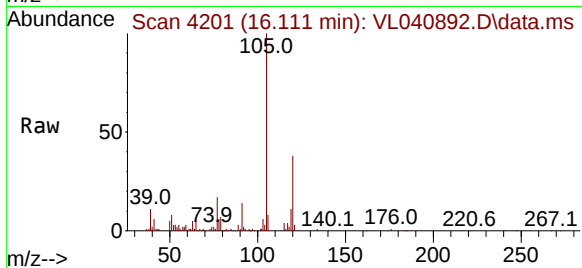
Acq: 17 Nov 2023 12:54

Instrument :

MSVOA_L

ClientSampleId :

NT-IA-1



Tgt Ion:105 Resp: 80133

Ion Ratio Lower Upper

105 100

120 37.6 40.2 60.2#

91 13.6 45.7 68.5#

77 15.8 19.2 28.8#

