

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091823\
 Data File : VL040702.D
 Acq On : 18 Sep 2023 17:03
 Operator : SY/MD
 Sample : 04402-02DL 5X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ST-3DL

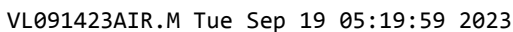
Quant Time: Sep 19 05:19:48 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091423AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 19 05:12:43 2023
 Response via : Initial Calibration

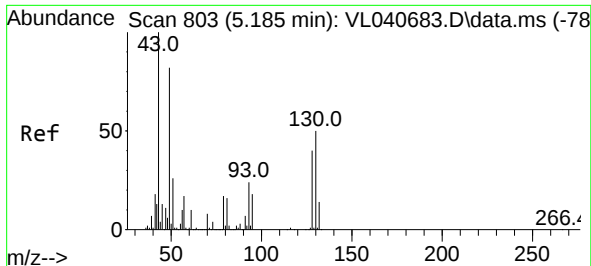
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.205	49	1253486	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.664	114	3359493	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.484	117	2735591	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.793	95	2105401	9.961	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.600%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.735	85	23866	0.086	ppbv	98
3) Chlorodifluoromethane	2.655	51	68760	0.337	ppbv #	62
4) Chloromethane	2.819	50	9131	0.117	ppbv #	80
9) Propene	2.706	41	2894	0.049	ppbv #	1
11) Trichlorofluoromethane	3.571	101	9377	0.039	ppbv	93
13) Ethanol	3.243	45	378959	21.764	ppbv	100
15) Acetone	3.478	43	617138	3.733	ppbv	95
17) tert-Butyl alcohol	3.909	59	6814	0.040	ppbv #	71
19) Isopropyl Alcohol	3.590	45	71311	0.716	ppbv #	77
20) Methylene Chloride	3.941	84	882452	9.916	ppbv	97
23) Vinyl Acetate	4.629	43	14325	0.084	ppbv #	45
25) Ethyl Acetate	5.224	43	407786	1.529	ppbv #	76
26) Hexane	5.227	57	617535	4.898	ppbv #	38
34) 2-Butanone	4.806	43	53136	0.315	ppbv #	79
36) Benzene	6.385	78	18591	0.075	ppbv #	94
38) Trichloroethene	7.304	130	7173	0.076	ppbv #	63
39) 1,2-Dichloropropane	6.664	63	824636	8.612	ppbv #	24
41) Tetrahydrofuran	5.581	42	14343	0.166	ppbv #	32
44) 2,2,4-Trimethylpentane	7.343	57	45576	0.115	ppbv #	62
53) Toluene	9.240	91	152563	0.581	ppbv	99

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

Quant Time: Sep 19 05:19:48 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091423AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 19 05:12:43 2023
Response via : Initial Calibration

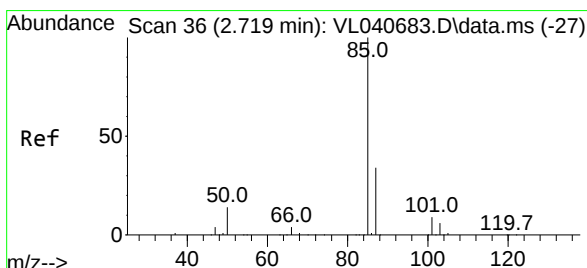
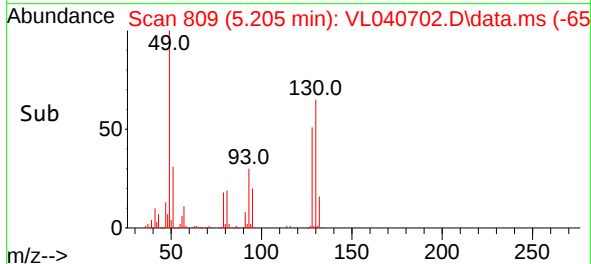
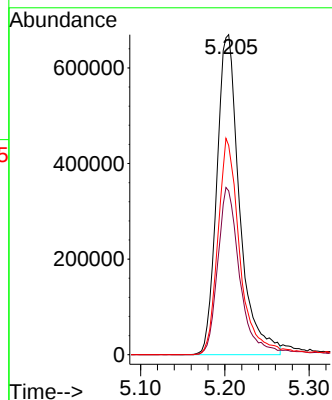
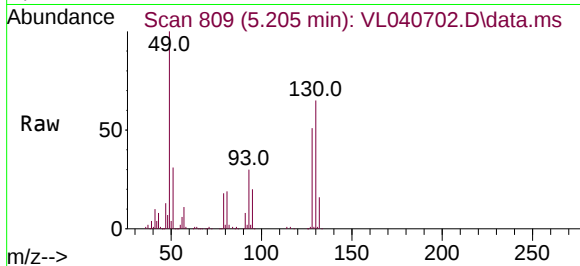




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.205 min Scan# 80
Delta R.T. 0.007 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

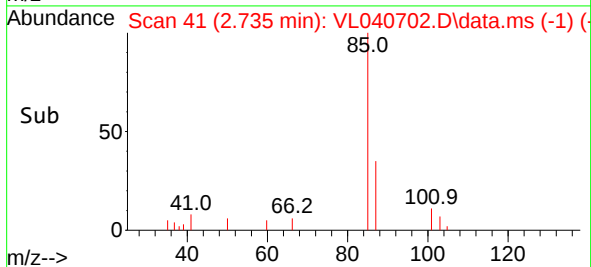
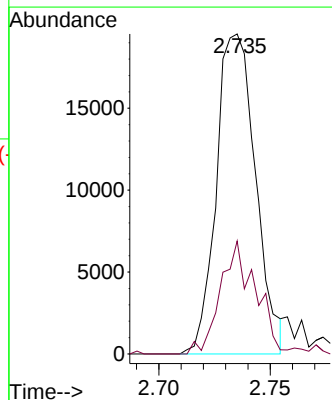
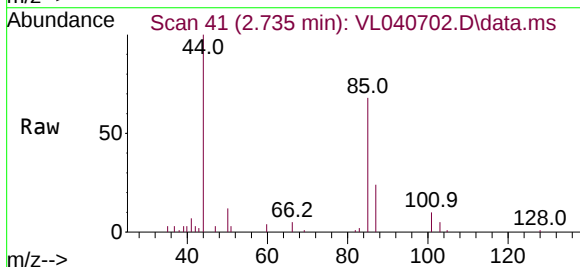
Instrument :
MSVOA_L
ClientSampleId :
ST-3DL

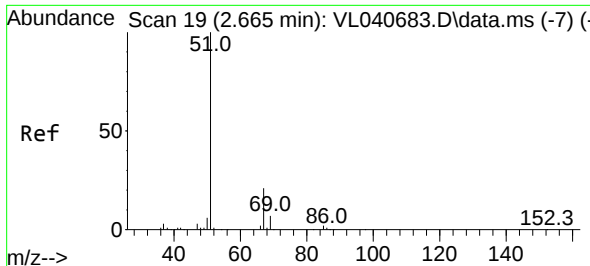
Tgt Ion: 49 Resp: 1253486
Ion Ratio Lower Upper
49 100
128 52.5 25.4 76.0
130 67.5 32.3 96.8



#2
Dichlorodifluoromethane
Concen: 0.086 ppbv
RT: 2.735 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

Tgt Ion: 85 Resp: 23866
Ion Ratio Lower Upper
85 100
87 35.3 27.2 40.8

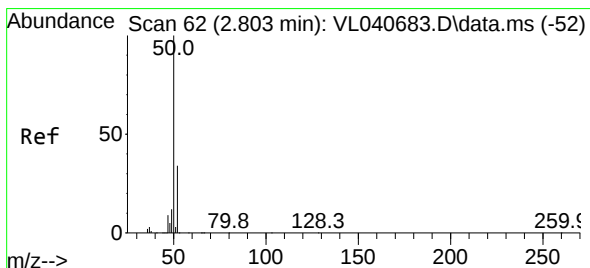
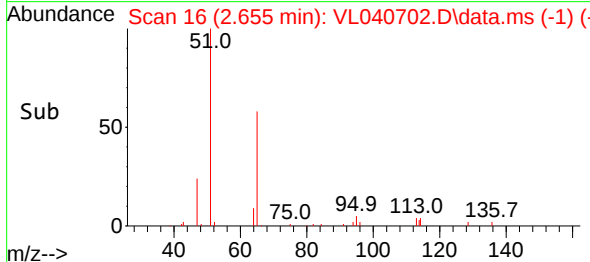
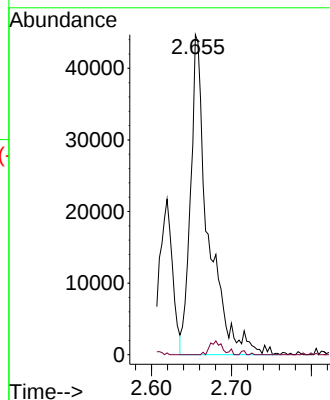
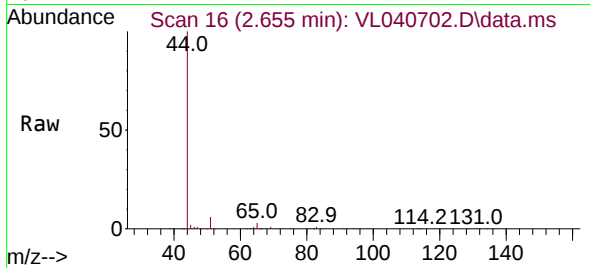




#3
Chlorodifluoromethane
Concen: 0.337 ppbv
RT: 2.655 min Scan# 11
Delta R.T. -0.023 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

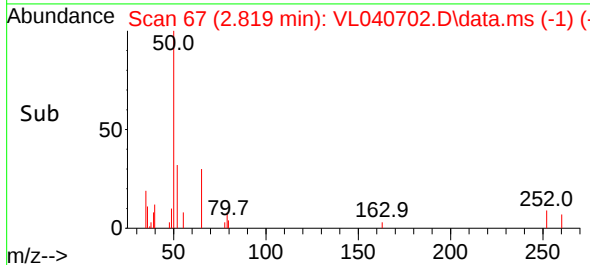
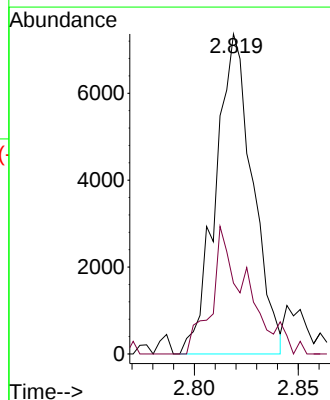
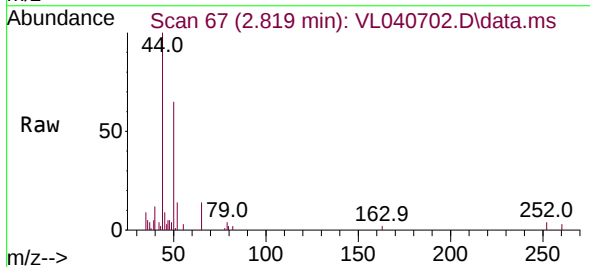
Instrument :
MSVOA_L
ClientSampleId :
ST-3DL

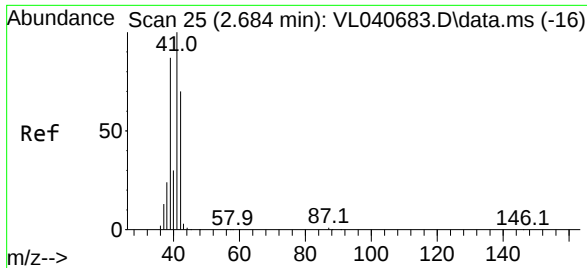
Tgt Ion: 51 Resp: 68760
Ion Ratio Lower Upper
51 100
67 3.1 16.7 25.1#



#4
Chloromethane
Concen: 0.117 ppbv
RT: 2.819 min Scan# 67
Delta R.T. 0.003 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

Tgt Ion: 50 Resp: 9131
Ion Ratio Lower Upper
50 100
52 22.2 27.1 40.7#





#9

Propene

Concen: 0.049 ppbv

RT: 2.706 min Scan# 301

Delta R.T. 0.010 min

Lab File: VL040702.D

Acq: 18 Sep 2023 17:03

Instrument :

MSVOA_L

ClientSampleId :

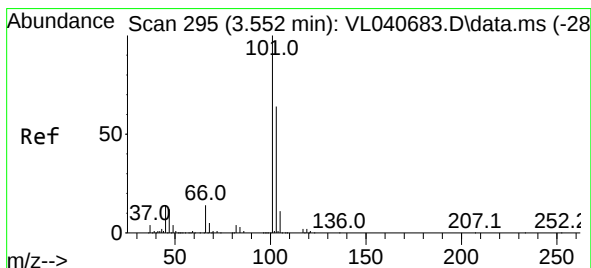
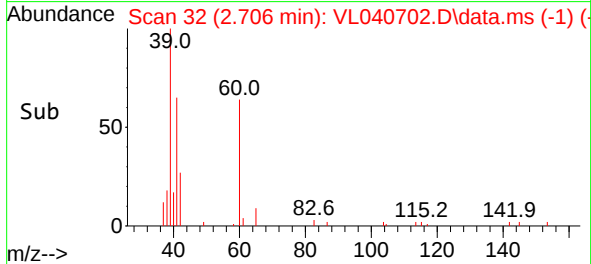
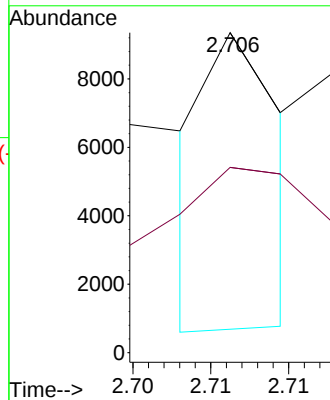
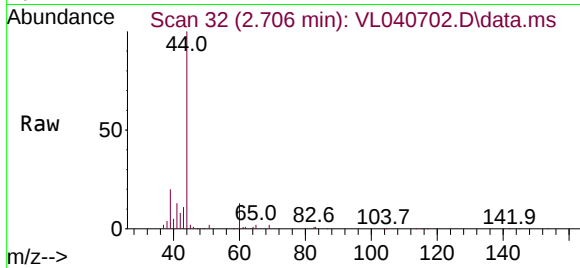
ST-3DL

Tgt Ion: 41 Resp: 2894

Ion Ratio Lower Upper

41 100

42 279.3 56.7 85.1#



#11

Trichlorofluoromethane

Concen: 0.039 ppbv

RT: 3.571 min Scan# 301

Delta R.T. 0.003 min

Lab File: VL040702.D

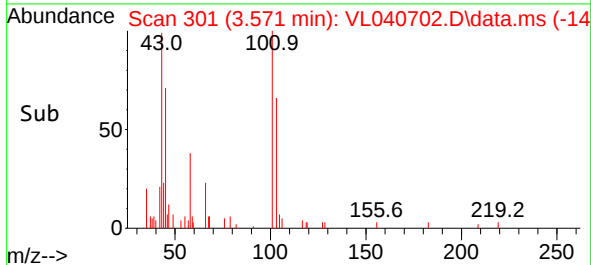
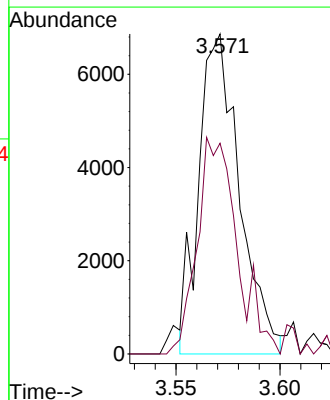
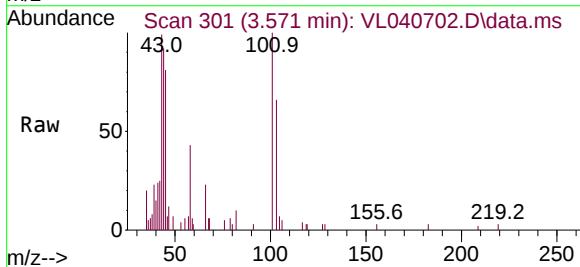
Acq: 18 Sep 2023 17:03

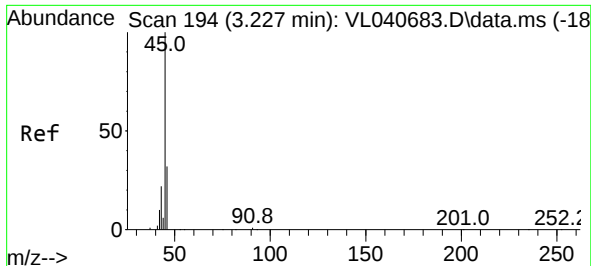
Tgt Ion: 101 Resp: 9377

Ion Ratio Lower Upper

101 100

103 69.9 51.3 76.9

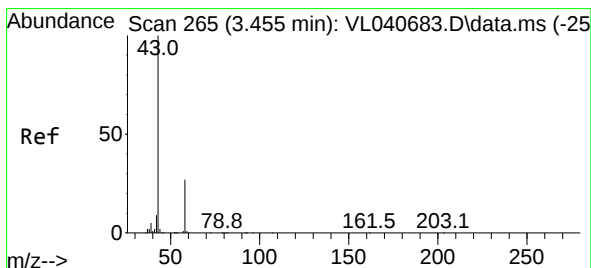
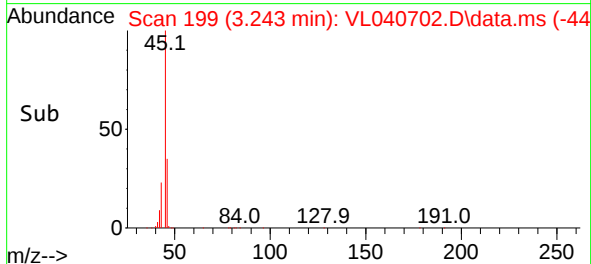
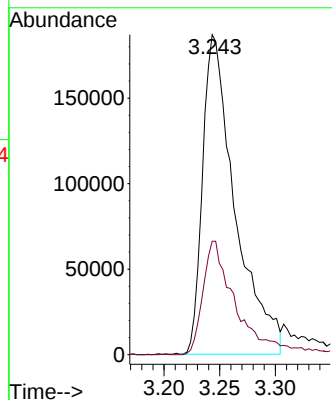
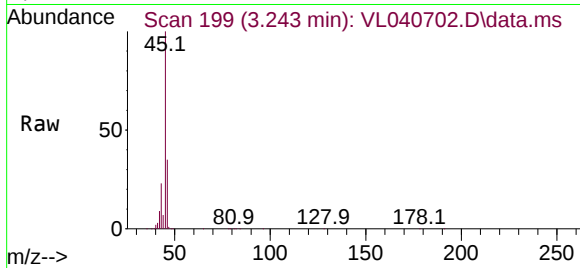




#13
Ethanol
Concen: 21.764 ppbv
RT: 3.243 min Scan# 194
Delta R.T. -0.000 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

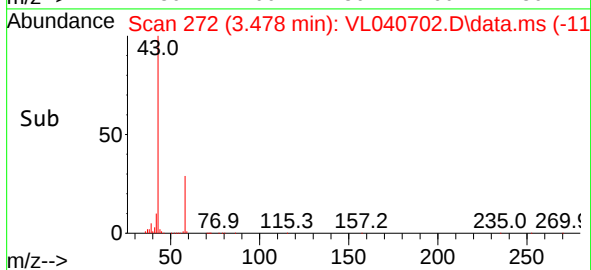
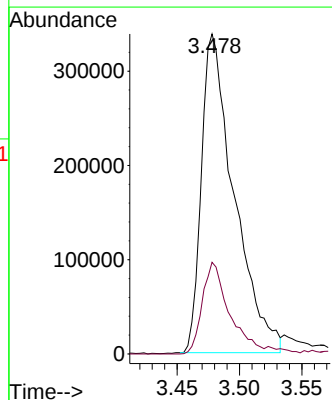
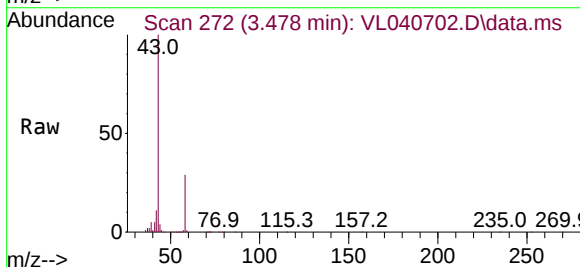
Instrument :
MSVOA_L
ClientSampleId :
ST-3DL

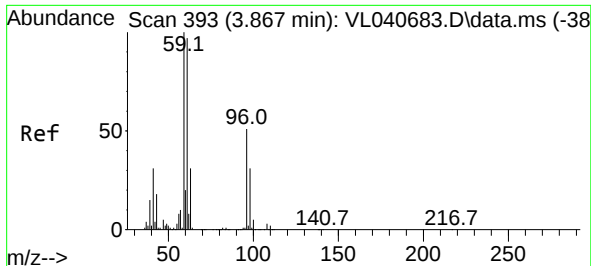
Tgt Ion: 45 Resp: 378959
Ion Ratio Lower Upper
45 100
46 38.2 15.2 61.0



#15
Acetone
Concen: 3.733 ppbv
RT: 3.478 min Scan# 272
Delta R.T. 0.006 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

Tgt Ion: 43 Resp: 617138
Ion Ratio Lower Upper
43 100
58 25.6 22.6 34.0





#17

tert-Butyl alcohol

Concen: 0.040 ppbv

RT: 3.909 min Scan# 406

Delta R.T. 0.026 min

Lab File: VL040702.D

Acq: 18 Sep 2023 17:03

Instrument :

MSVOA_L

ClientSampleId :

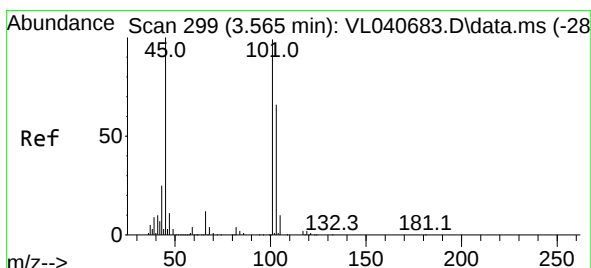
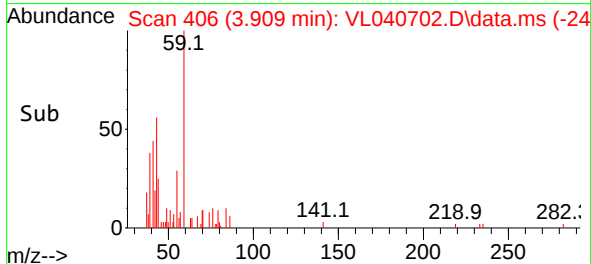
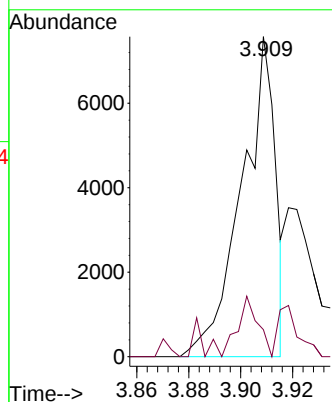
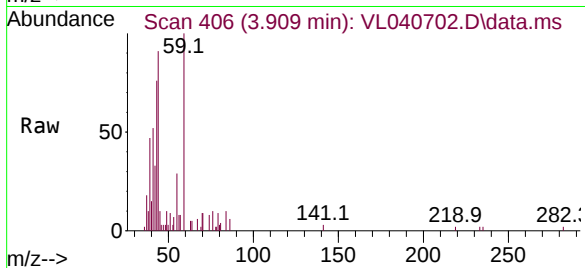
ST-3DL

Tgt Ion: 59 Resp: 6814

Ion Ratio Lower Upper

59 100

57 0.0 8.7 13.1#



#19

Isopropyl Alcohol

Concen: 0.716 ppbv

RT: 3.590 min Scan# 307

Delta R.T. 0.013 min

Lab File: VL040702.D

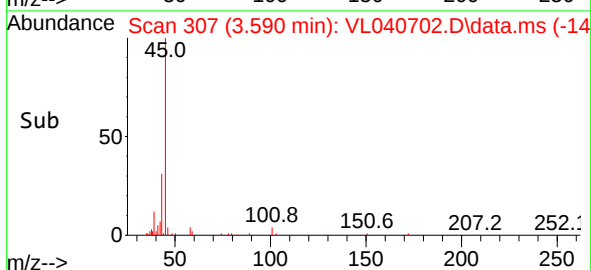
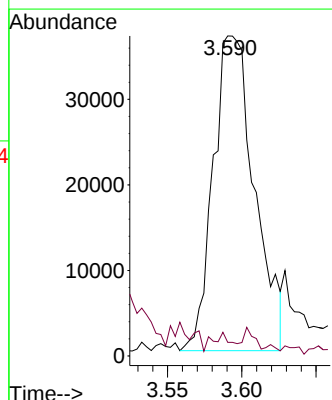
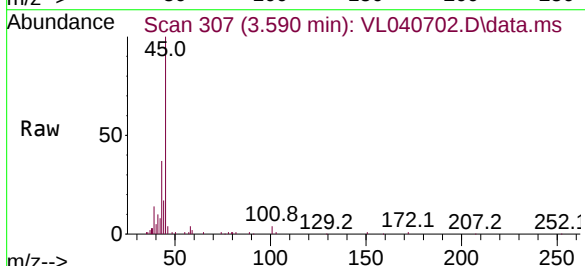
Acq: 18 Sep 2023 17:03

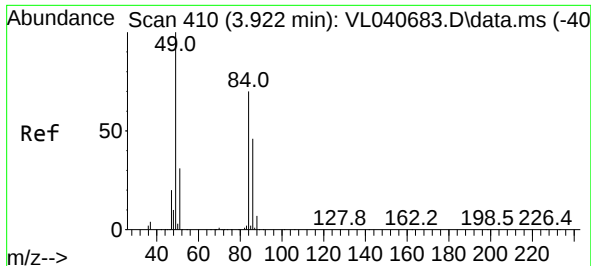
Tgt Ion: 45 Resp: 71311

Ion Ratio Lower Upper

45 100

58 10.4 1.9 2.9#

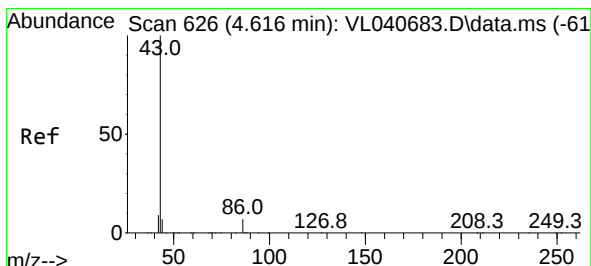
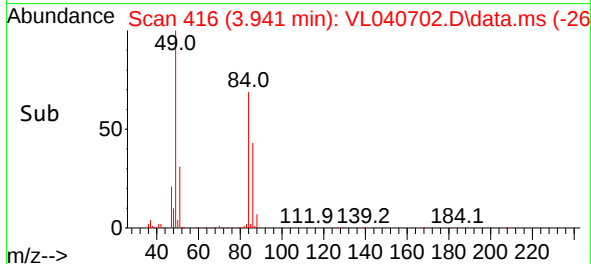
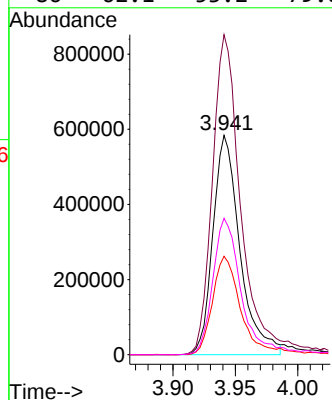
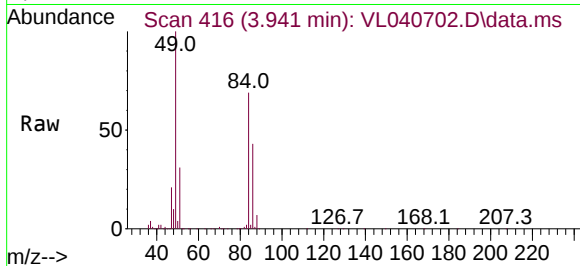




#20
Methylene Chloride
Concen: 9.916 ppbv
RT: 3.941 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

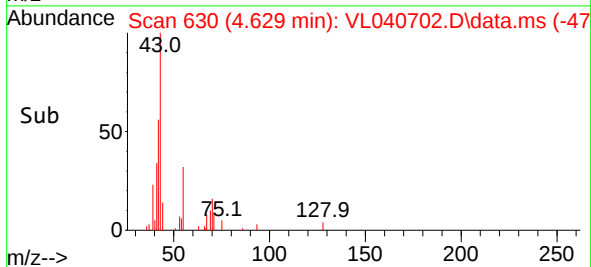
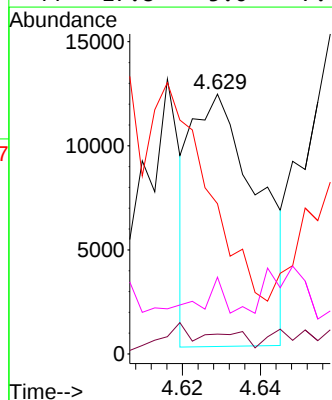
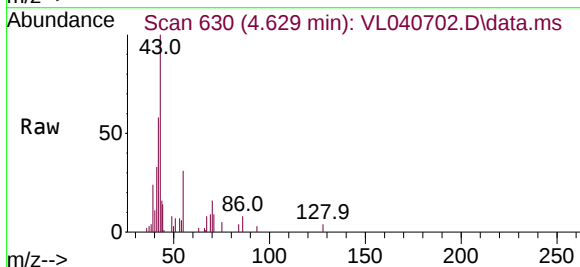
Instrument :
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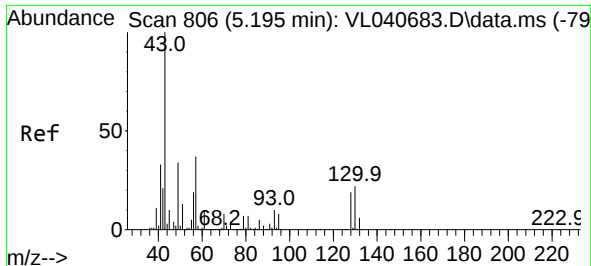
Tgt Ion: 84 Resp: 882452
Ion Ratio Lower Upper
84 100
49 145.8 114.4 171.6
51 44.8 35.5 53.3
86 62.1 53.2 79.8



#23
Vinyl Acetate
Concen: 0.084 ppbv
RT: 4.629 min Scan# 630
Delta R.T. -0.003 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

Tgt Ion: 43 Resp: 14325
Ion Ratio Lower Upper
43 100
86 0.0 5.6 8.4#
42 44.3 7.6 11.4#
44 17.8 5.0 7.4#





#25

Ethyl Acetate

Concen: 1.529 ppbv

RT: 5.224 min Scan# 815

Delta R.T. 0.013 min

Lab File: VL040702.D

Acq: 18 Sep 2023 17:03

Instrument :

MSVOA_L

ClientSampleId :

ST-3DL

Tgt Ion: 43 Resp: 407786

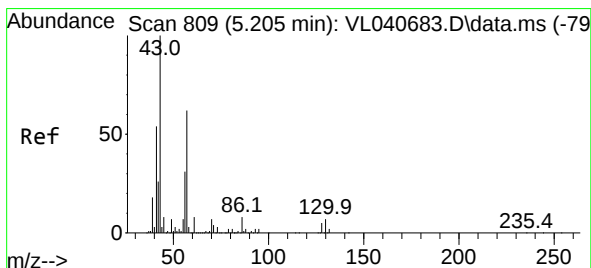
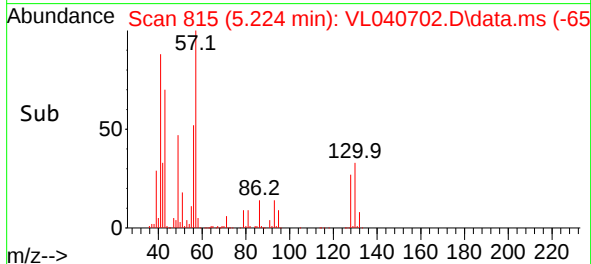
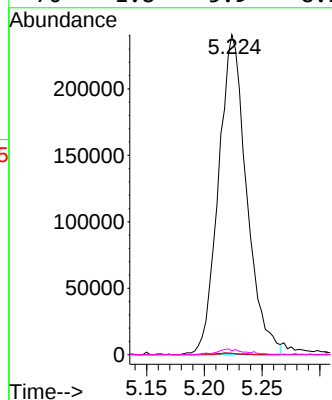
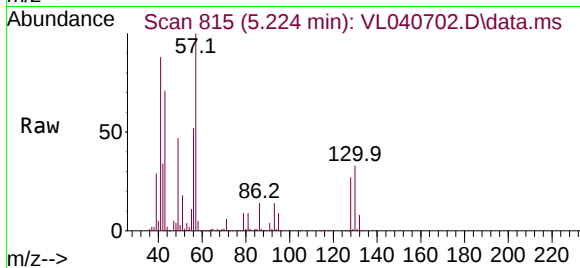
Ion Ratio Lower Upper

43 100

45 0.5 8.2 12.4#

61 0.4 8.2 12.4#

70 1.8 5.9 8.9#



#26

Hexane

Concen: 4.898 ppbv

RT: 5.227 min Scan# 816

Delta R.T. 0.006 min

Lab File: VL040702.D

Acq: 18 Sep 2023 17:03

Tgt Ion: 57 Resp: 617535

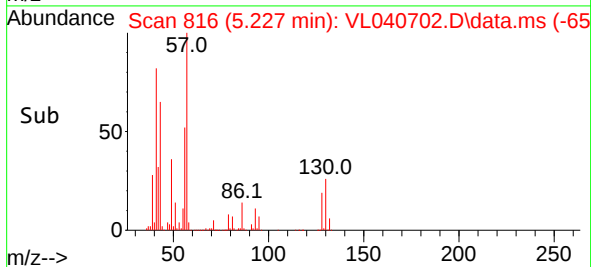
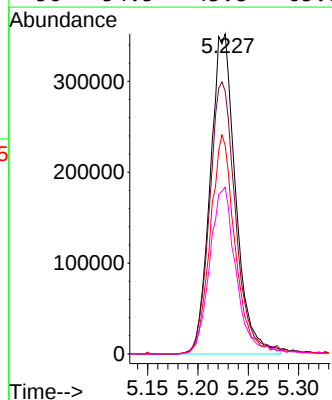
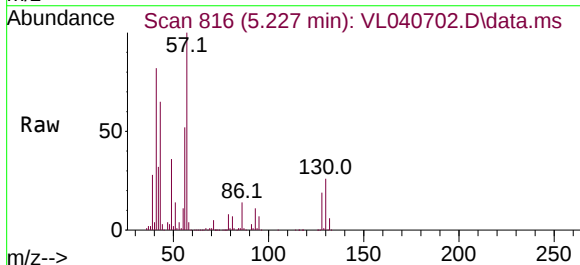
Ion Ratio Lower Upper

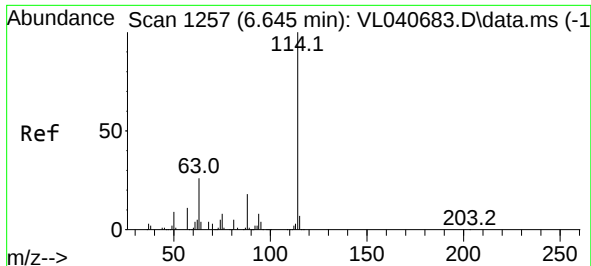
57 100

41 88.4 75.2 112.8

43 67.8 185.6 278.4#

56 54.5 43.8 65.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.664 min Scan# 11

Delta R.T. 0.003 min

Lab File: VL040702.D

Acq: 18 Sep 2023 17:03

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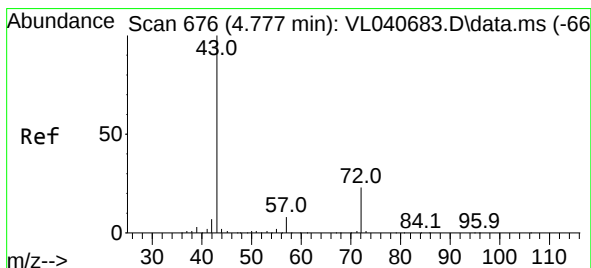
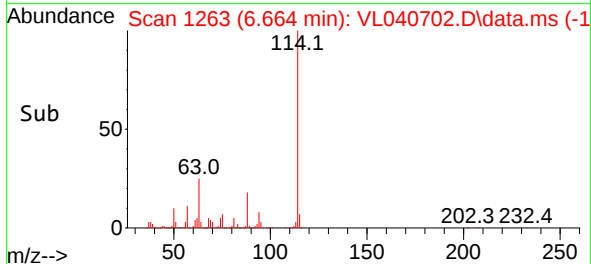
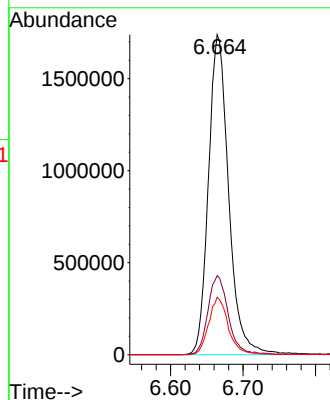
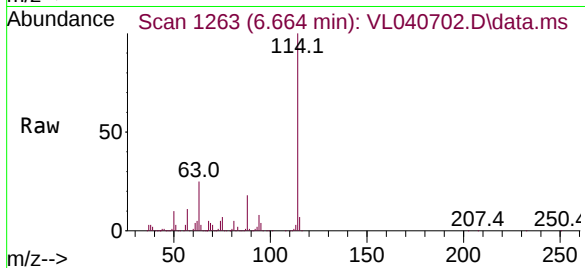
Tgt Ion:114 Resp: 3359493

Ion Ratio Lower Upper

114 100

63 25.3 21.1 31.7

88 17.5 14.5 21.7



#34

2-Butanone

Concen: 0.315 ppbv

RT: 4.806 min Scan# 685

Delta R.T. 0.016 min

Lab File: VL040702.D

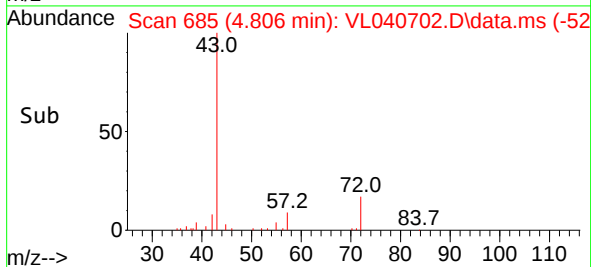
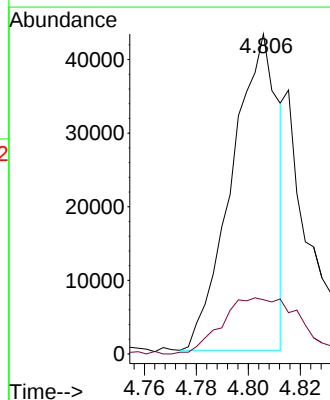
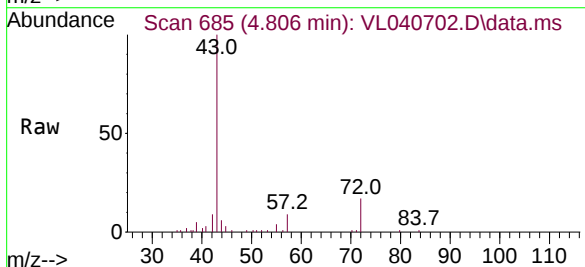
Acq: 18 Sep 2023 17:03

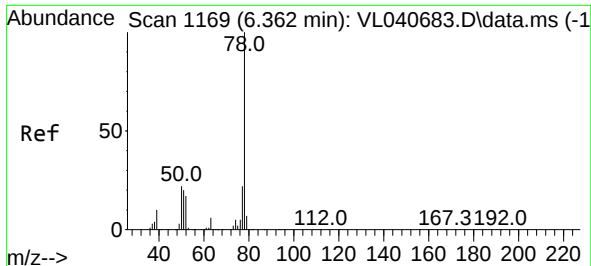
Tgt Ion: 43 Resp: 53136

Ion Ratio Lower Upper

43 100

72 33.6 18.6 27.8#

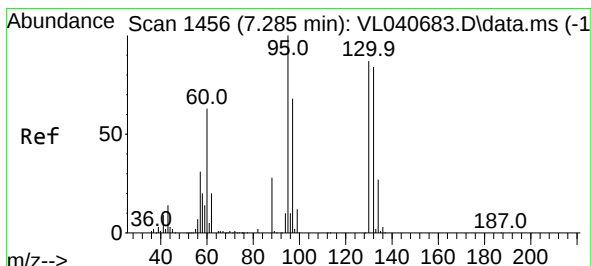
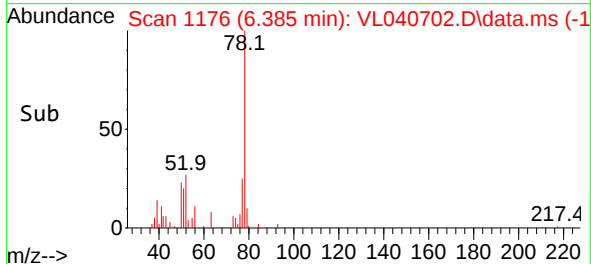
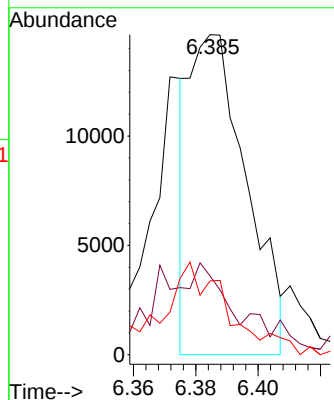
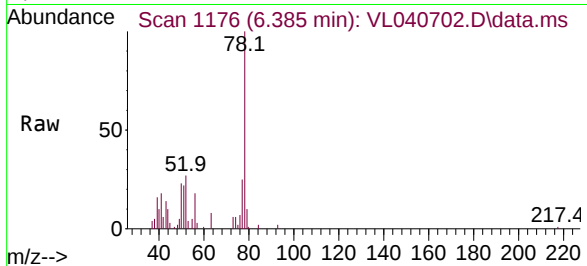




#36
Benzene
Concen: 0.075 ppbv
RT: 6.385 min Scan# 1169
Delta R.T. 0.003 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

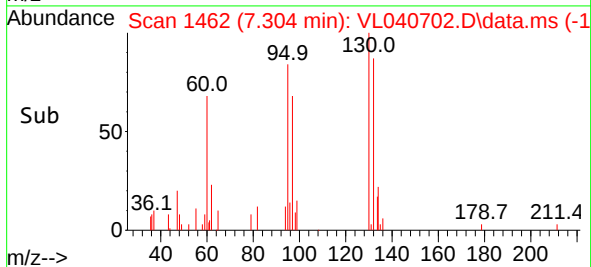
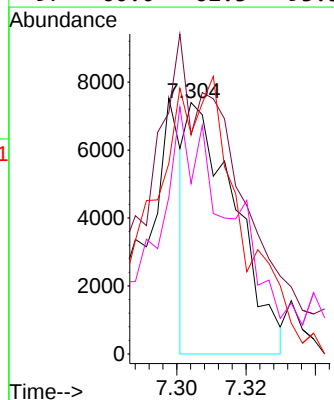
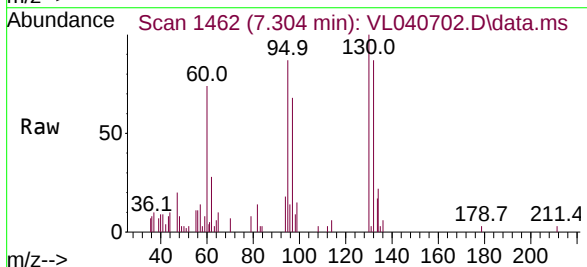
Instrument :
MSVOA_L
ClientSampleId :
ST-3DL

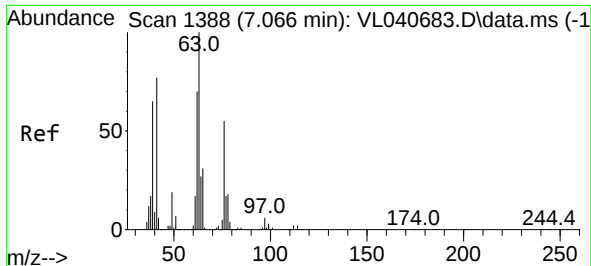
Tgt Ion: 78 Resp: 18591
Ion Ratio Lower Upper
78 100
77 17.6 17.9 26.9#
50 22.5 17.3 25.9



#38
Trichloroethene
Concen: 0.076 ppbv
RT: 7.304 min Scan# 1462
Delta R.T. 0.003 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

Tgt Ion:130 Resp: 7173
Ion Ratio Lower Upper
130 100
95 57.2 91.9 137.9#
132 67.5 77.3 115.9#
97 60.0 62.3 93.5#





#39

1,2-Dichloropropane

Concen: 8.612 ppbv

RT: 6.664 min Scan# 1

Delta R.T. -0.418 min

Lab File: VL040702.D

Acq: 18 Sep 2023 17:03

Instrument :

MSVOA_L

ClientSampleId :

ST-3DL

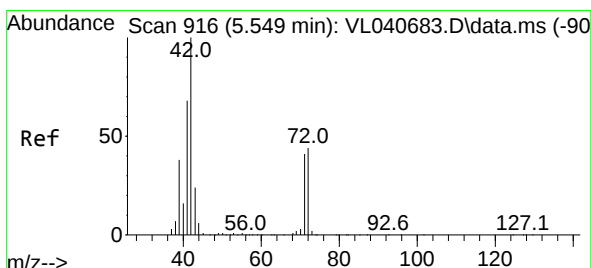
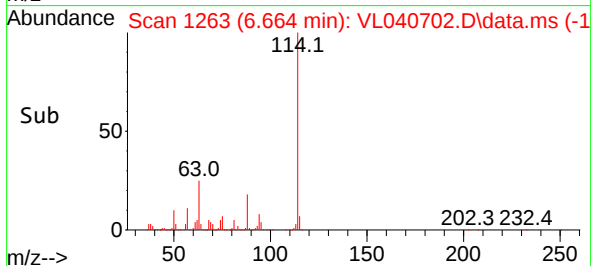
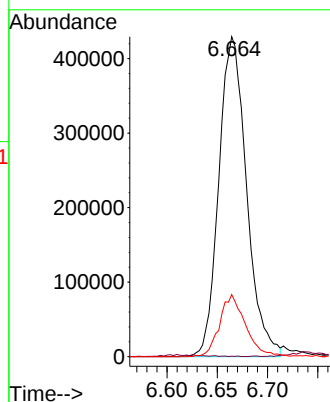
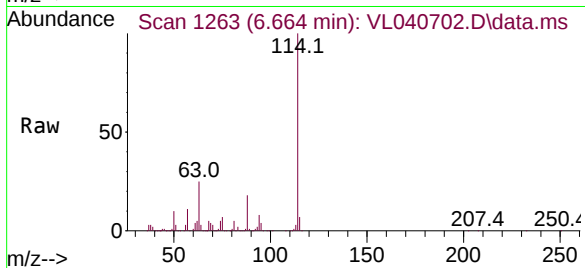
Tgt Ion: 63 Resp: 824636

Ion Ratio Lower Upper

63 100

41 0.0 61.6 92.4#

62 19.4 55.8 83.8#



#41

Tetrahydrofuran

Concen: 0.166 ppbv

RT: 5.581 min Scan# 926

Delta R.T. 0.019 min

Lab File: VL040702.D

Acq: 18 Sep 2023 17:03

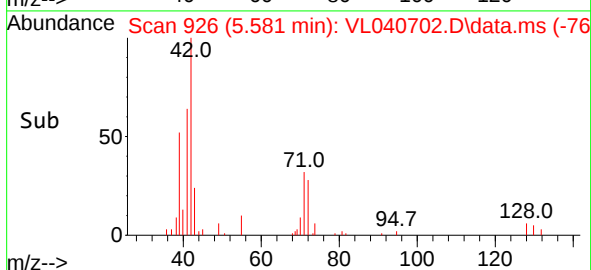
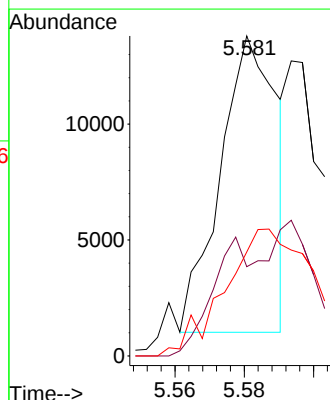
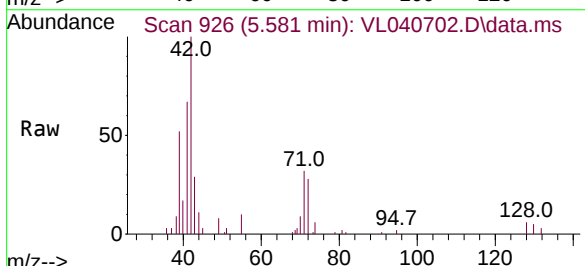
Tgt Ion: 42 Resp: 14343

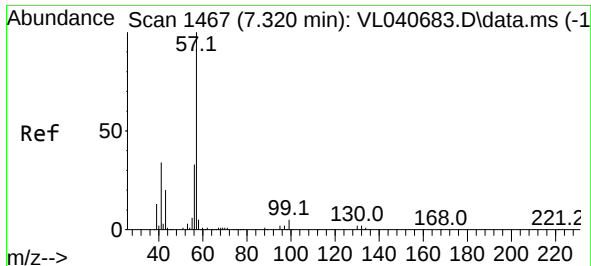
Ion Ratio Lower Upper

42 100

72 0.0 34.9 52.3#

71 85.6 33.8 50.8#





#44

2,2,4-Trimethylpentane

Concen: 0.115 ppbv

RT: 7.343 min Scan# 1467

Delta R.T. 0.006 min

Lab File: VL040702.D

Acq: 18 Sep 2023 17:03

Instrument :

MSVOA_L

ClientSampleId :

ST-3DL

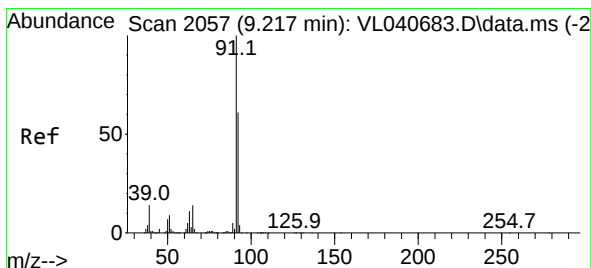
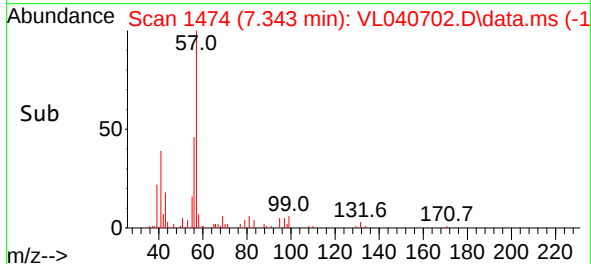
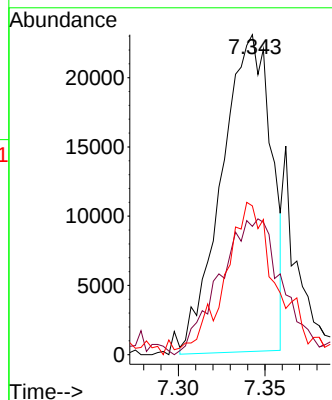
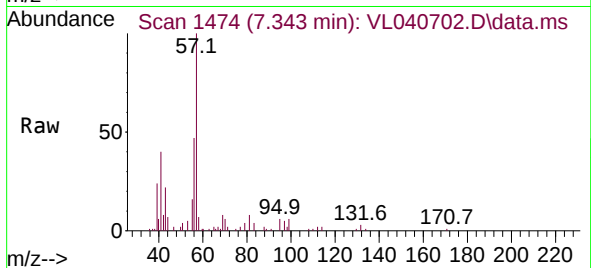
Tgt Ion: 57 Resp: 45576

Ion Ratio Lower Upper

57 100

41 56.9 28.5 42.7#

56 53.7 25.4 38.2#



#53

Toluene

Concen: 0.581 ppbv

RT: 9.240 min Scan# 2064

Delta R.T. 0.010 min

Lab File: VL040702.D

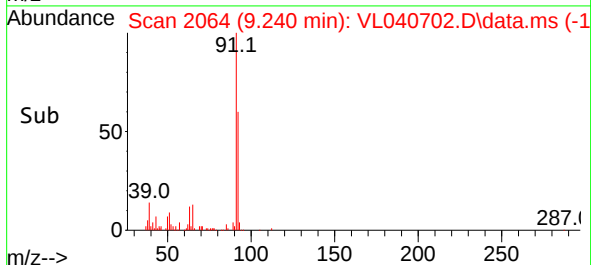
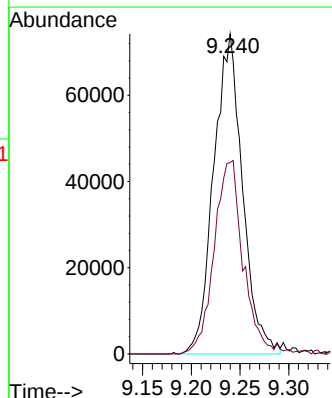
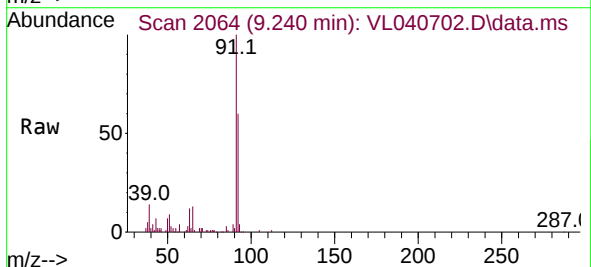
Acq: 18 Sep 2023 17:03

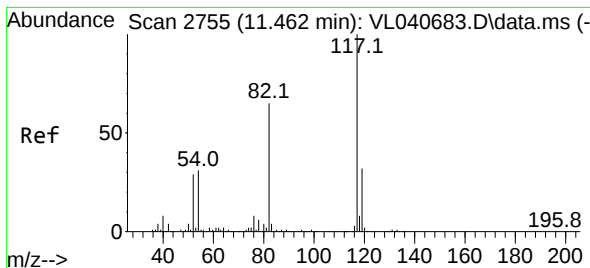
Tgt Ion: 91 Resp: 152563

Ion Ratio Lower Upper

91 100

92 61.7 48.5 72.7

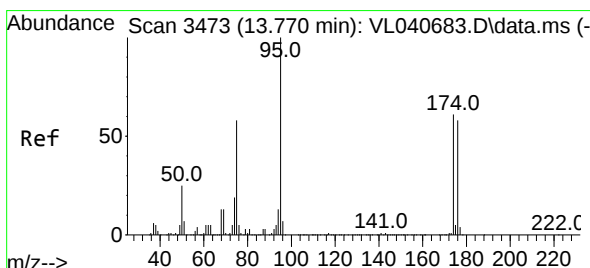
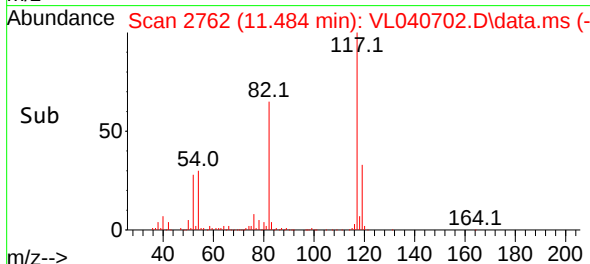
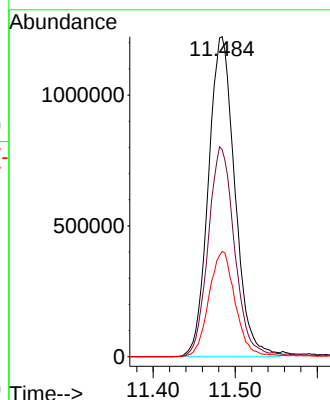
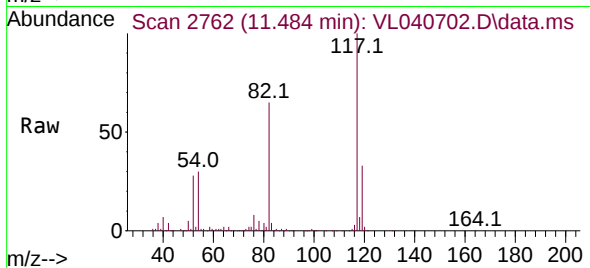




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.484 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

Instrument :
MSVOA_L
ClientSampleId :
ST-3DL

Tgt Ion:117 Resp: 2735591
Ion Ratio Lower Upper
117 100
82 66.6 51.4 77.0
119 33.2 24.7 37.1



#68
1-Bromo-4-Fluorobenzene
Concen: 9.961 ppbv
RT: 13.793 min Scan# 3480
Delta R.T. 0.006 min
Lab File: VL040702.D
Acq: 18 Sep 2023 17:03

Tgt Ion: 95 Resp: 2105401
Ion Ratio Lower Upper
95 100
174 62.4 48.9 73.3
175 4.1 3.5 5.3

