

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022723\
 Data File : VL040237.D
 Acq On : 27 Feb 2023 15:54
 Operator : SY/MD
 Sample : 01705-02DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 02212023-EFFLUENTDUP

Quant Time: Feb 28 00:19:51 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL021523AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Feb 28 00:12:21 2023
 Response via : Initial Calibration

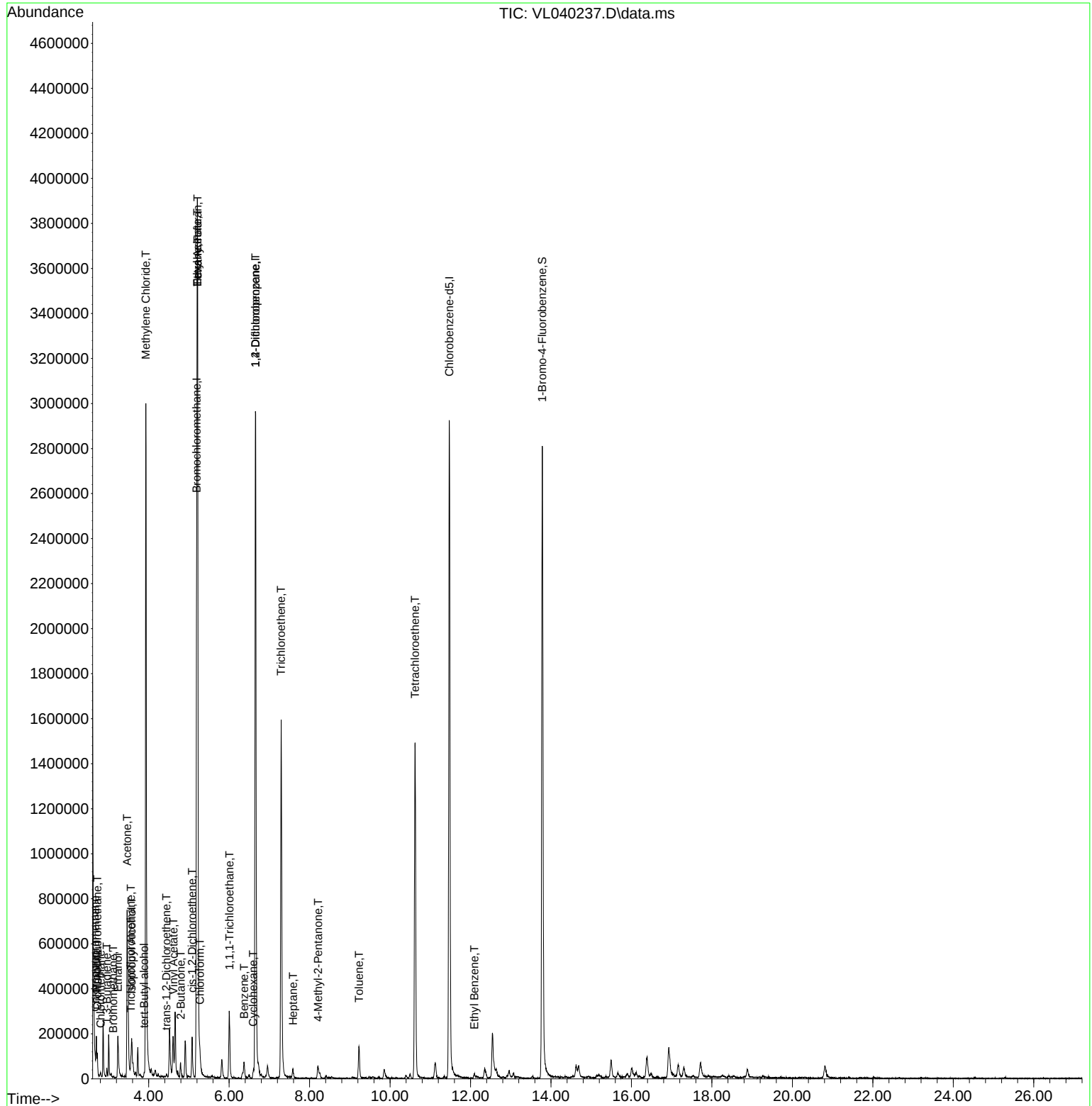
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

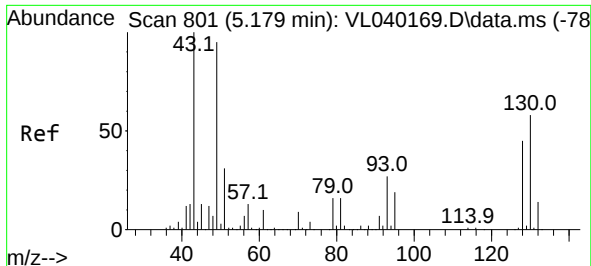
Internal Standards						
1) Bromochloromethane	5.192	49	870097	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.655	114	2163347	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.471	117	1808997	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.783	95	1428411	9.603	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.000%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.726	85	56267	0.347	ppbv	96
3) Chlorodifluoromethane	2.671	51	55193	0.531	ppbv #	82
4) Chloromethane	2.806	50	11958	0.183	ppbv	90
6) Bromomethane	3.118	94	938	0.050	ppbv #	52
9) Propene	2.700	41	40433	0.954	ppbv	85
10) Heptane	7.587	43	11963	0.119	ppbv #	83
11) Trichlorofluoromethane	3.559	101	42269	0.291	ppbv	90
13) Ethanol	3.234	45	200829	51.488	ppbv	91
15) Acetone	3.465	43	828894	7.913	ppbv	96
16) 1,3-Butadiene	2.960	39	11255	0.235	ppbv #	30
17) tert-Butyl alcohol	3.886	59	6691	0.070	ppbv #	72
19) Isopropyl Alcohol	3.578	45	153201	3.077	ppbv #	95
20) Methylene Chloride	3.931	84	1019332	18.692	ppbv	95
22) trans-1,2-Dichloroethene	4.443	96	3374	0.070	ppbv #	59
23) Vinyl Acetate	4.613	43	55644	1.750	ppbv #	28
25) Ethyl Acetate	5.211	43	1007122	5.172	ppbv #	78
26) Hexane	5.214	57	1384593	16.562	ppbv #	38
29) Chloroform	5.275	83	28476	0.198	ppbv	94
30) Cyclohexane	6.600	84	6178	0.094	ppbv #	1
31) cis-1,2-Dichloroethene	5.079	61	96044	1.209	ppbv	96
32) 1,1,1-Trichloroethane	6.005	97	171802	1.274	ppbv	98
34) 2-Butanone	4.796	43	26414	0.248	ppbv #	9
36) Benzene	6.375	78	50559	0.300	ppbv #	92
38) Trichloroethene	7.295	130	449322	4.843	ppbv	98
39) 1,2-Dichloropropane	6.655	63	555923	8.488	ppbv #	27
41) Tetrahydrofuran	5.214	42	527254	8.526	ppbv #	48
50) 4-Methyl-2-Pentanone	8.211	43	29740	0.179	ppbv #	38
52) Tetrachloroethene	10.623	164	185831	3.535	ppbv	96
53) Toluene	9.227	91	69726	0.387	ppbv #	65
58) Ethyl Benzene	12.098	91	8191	0.037	ppbv	99

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

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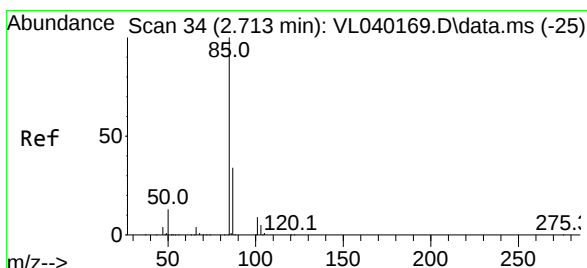
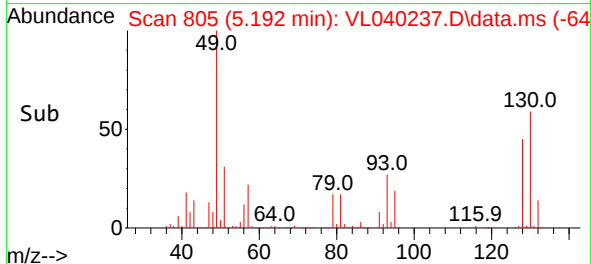
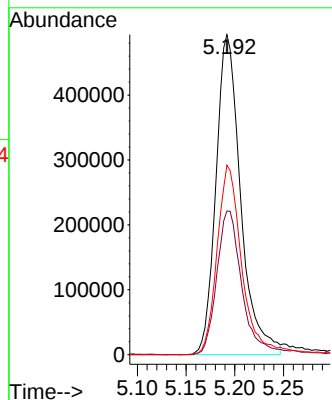
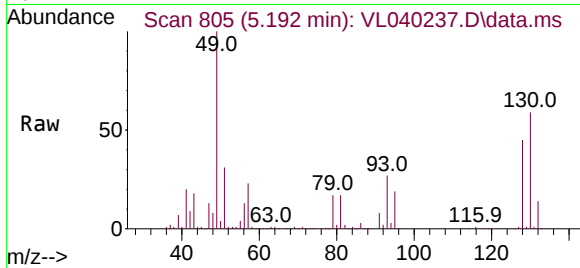




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 80
Delta R.T. 0.010 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

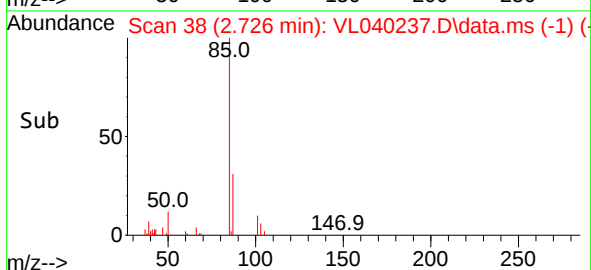
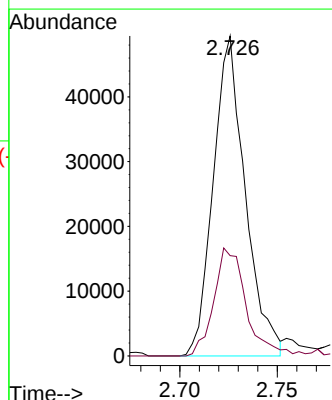
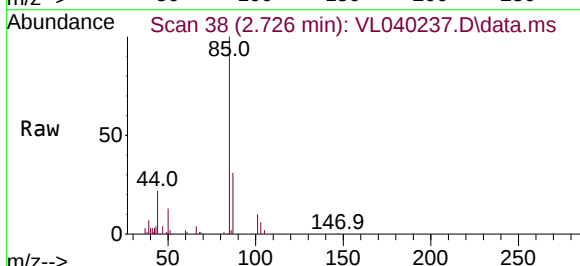
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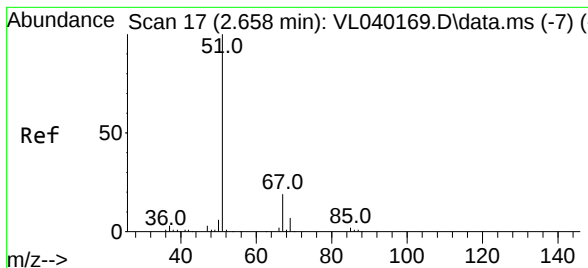
Tgt Ion: 49 Resp: 870097
Ion Ratio Lower Upper
49 100
128 47.3 24.1 72.3
130 61.1 30.9 92.8



#2
Dichlorodifluoromethane
Concen: 0.347 ppbv
RT: 2.726 min Scan# 38
Delta R.T. 0.010 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Tgt Ion: 85 Resp: 56267
Ion Ratio Lower Upper
85 100
87 31.4 27.0 40.6





#3

Chlorodifluoromethane

Concen: 0.531 ppbv

RT: 2.671 min Scan# 21

Delta R.T. 0.013 min

Lab File: VL040237.D

Acq: 27 Feb 2023 15:54

Instrument :

MSVOA_L

ClientSampleId :

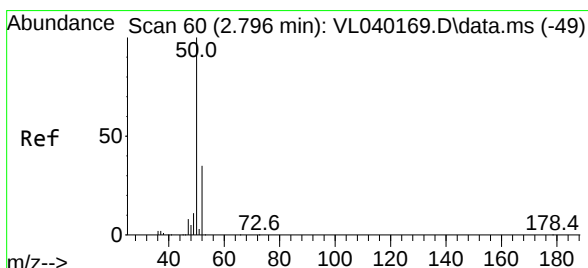
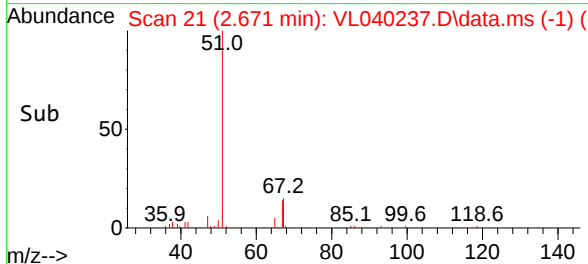
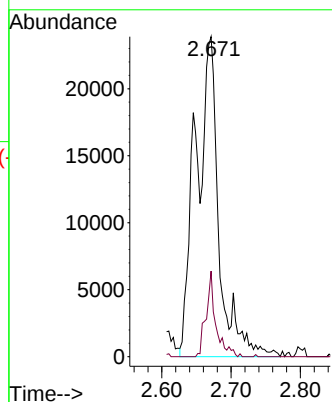
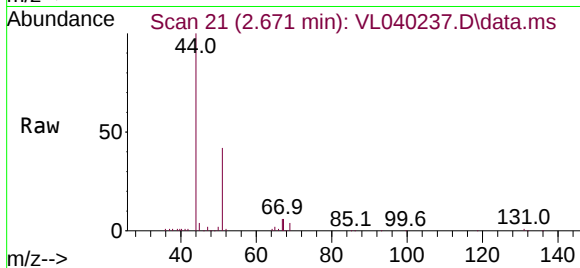
02212023-EFFLUENTDUP

Tgt Ion: 51 Resp: 55193

Ion Ratio Lower Upper

51 100

67 11.4 15.4 23.2#



#4

Chloromethane

Concen: 0.183 ppbv

RT: 2.806 min Scan# 63

Delta R.T. 0.010 min

Lab File: VL040237.D

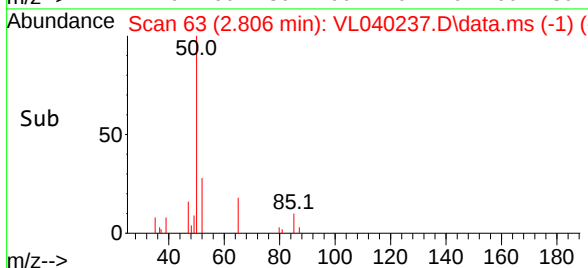
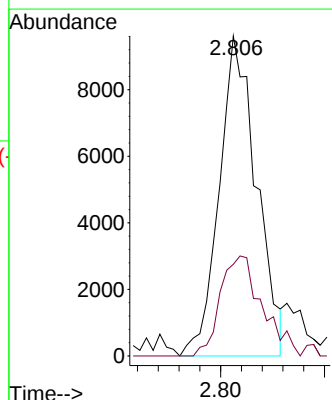
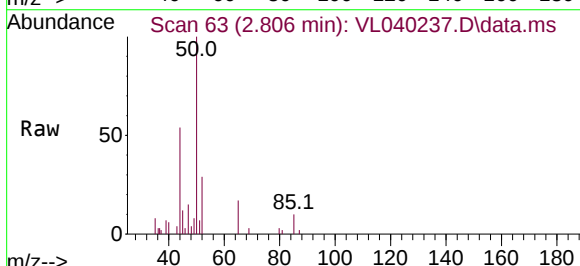
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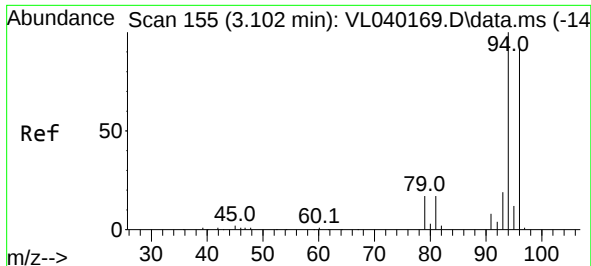
Tgt Ion: 50 Resp: 11958

Ion Ratio Lower Upper

50 100

52 29.4 28.3 42.5

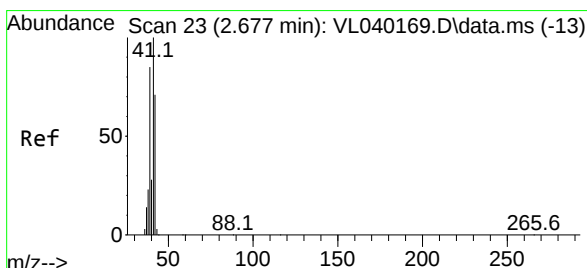
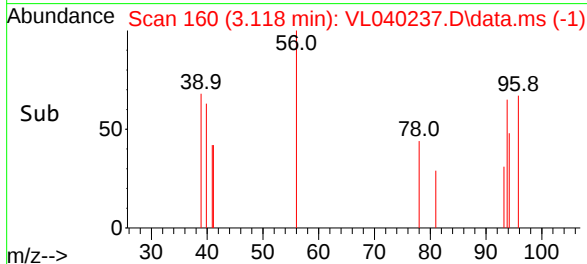
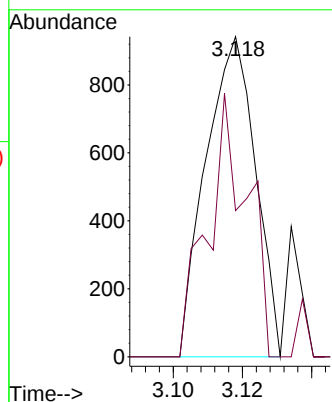
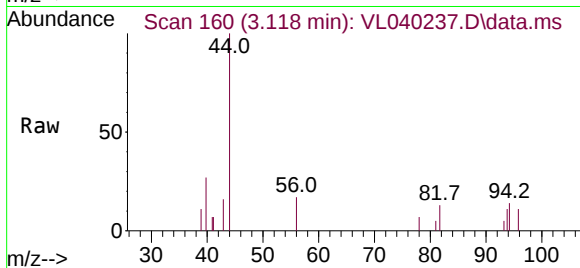




#6
Bromomethane
Concen: 0.050 ppbv
RT: 3.118 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

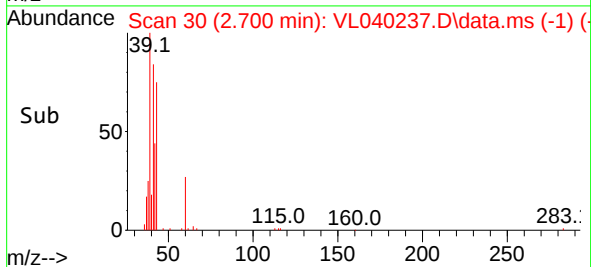
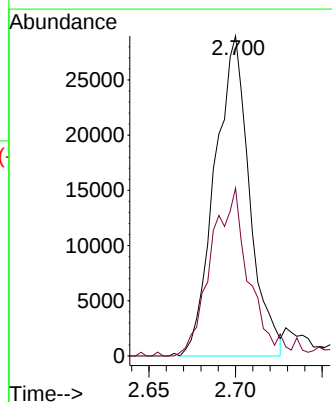
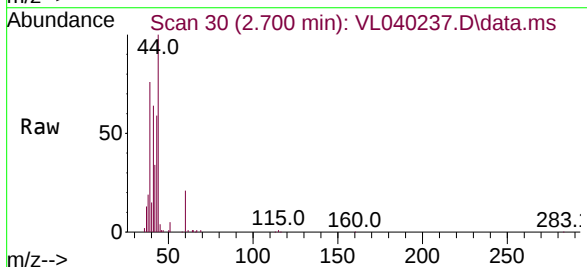
Instrument :
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ClientSampleId :
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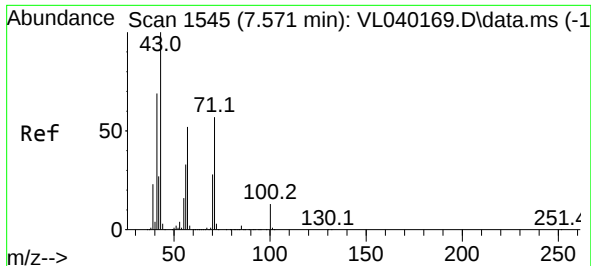
Tgt Ion: 94 Resp: 938
Ion Ratio Lower Upper
94 100
96 45.6 73.4 110.2#



#9
Propene
Concen: 0.954 ppbv
RT: 2.700 min Scan# 30
Delta R.T. 0.020 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Tgt Ion: 41 Resp: 40433
Ion Ratio Lower Upper
41 100
42 58.9 56.9 85.3

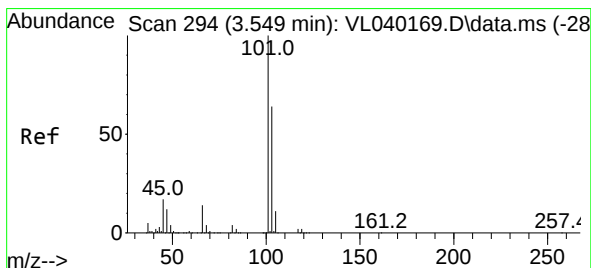
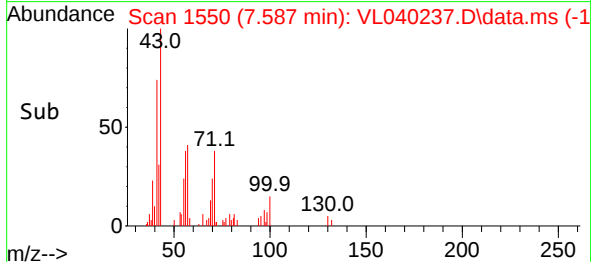
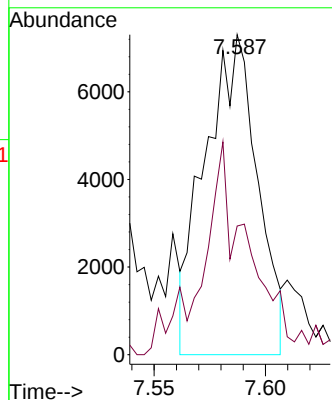
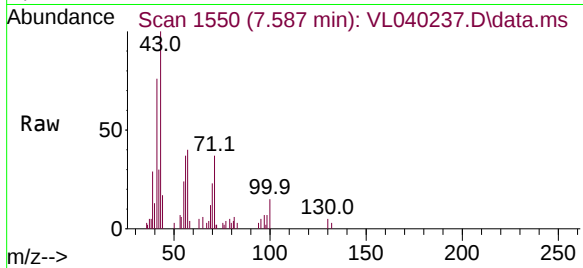




#10
Heptane
Concen: 0.119 ppbv
RT: 7.587 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

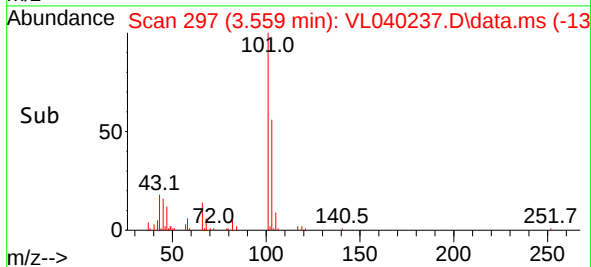
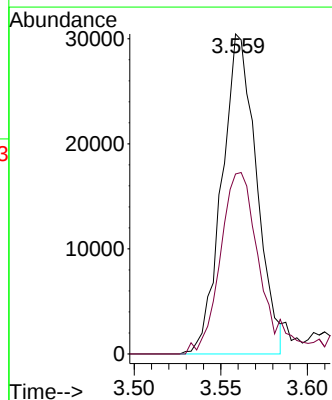
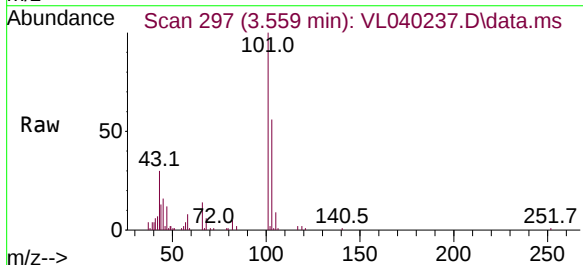
Instrument :
MSVOA_L
ClientSampleId :
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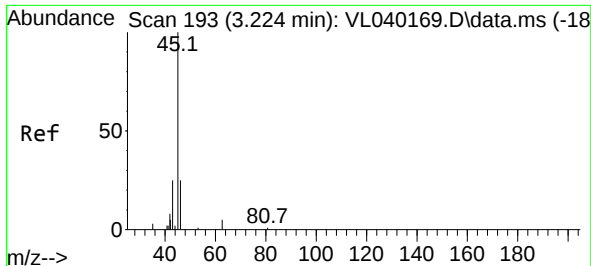
Tgt Ion: 43 Resp: 11963
Ion Ratio Lower Upper
43 100
57 63.5 41.4 62.2#



#11
Trichlorofluoromethane
Concen: 0.291 ppbv
RT: 3.559 min Scan# 297
Delta R.T. 0.010 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Tgt Ion:101 Resp: 42269
Ion Ratio Lower Upper
101 100
103 56.3 51.0 76.6

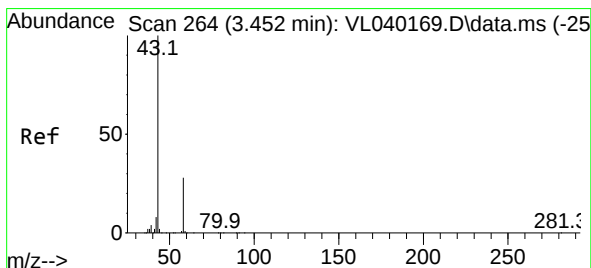
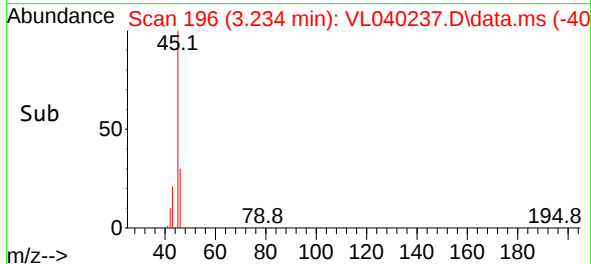
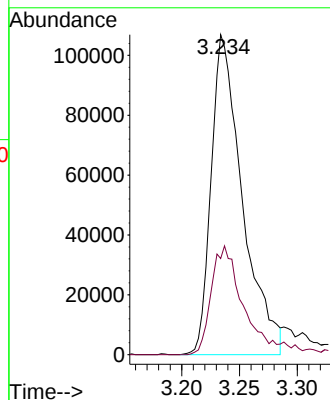
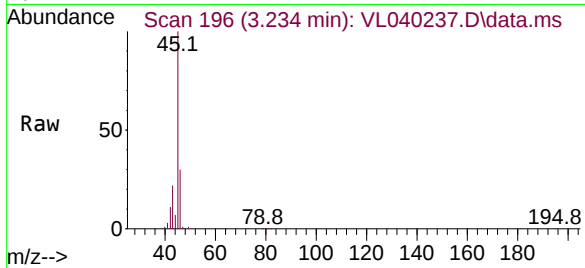




#13
Ethanol
Concen: 51.488 ppbv
RT: 3.234 min Scan# 193
Delta R.T. 0.000 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

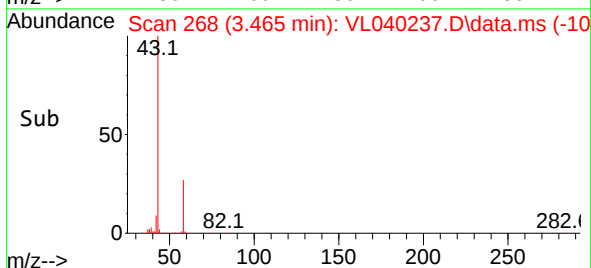
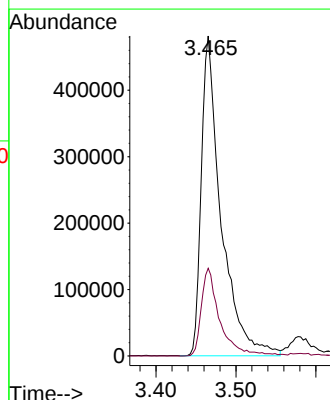
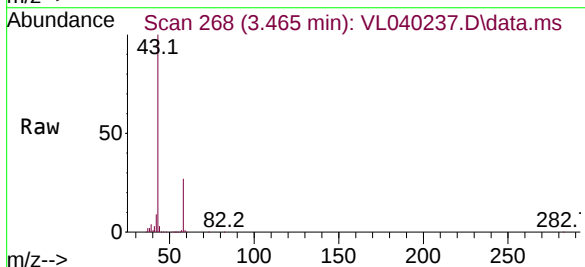
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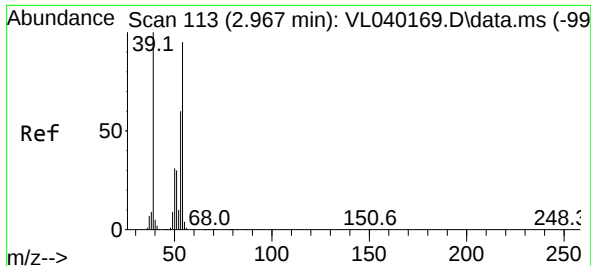
Tgt Ion: 45 Resp: 200829
Ion Ratio Lower Upper
45 100
46 38.2 13.3 53.1



#15
Acetone
Concen: 7.913 ppbv
RT: 3.465 min Scan# 268
Delta R.T. 0.010 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Tgt Ion: 43 Resp: 828894
Ion Ratio Lower Upper
43 100
58 25.7 22.4 33.6





#16

1,3-Butadiene

Concen: 0.235 ppbv

RT: 2.960 min Scan# 111

Delta R.T. -0.009 min

Lab File: VL040237.D

Acq: 27 Feb 2023 15:54

Instrument :

MSVOA_L

ClientSampleId :

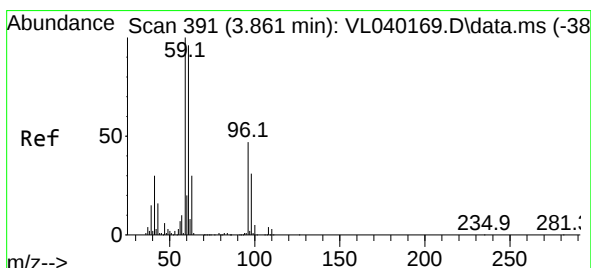
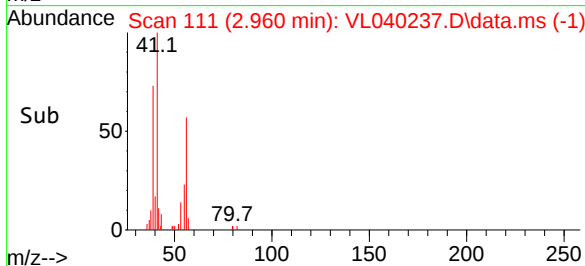
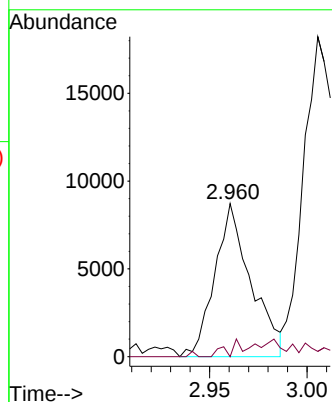
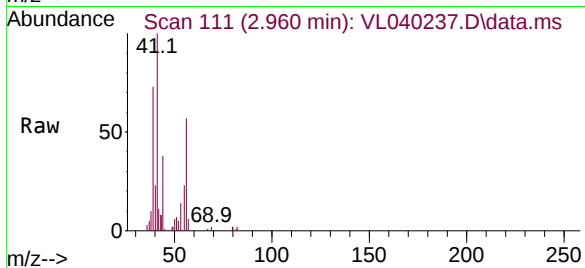
02212023-EFFLUENTDUP

Tgt Ion: 39 Resp: 11255

Ion Ratio Lower Upper

39 100

54 19.8 66.7 100.1#



#17

tert-Butyl alcohol

Concen: 0.070 ppbv

RT: 3.886 min Scan# 399

Delta R.T. 0.023 min

Lab File: VL040237.D

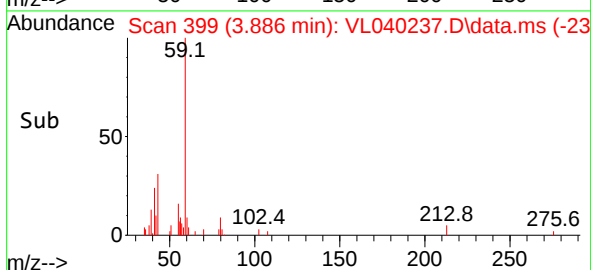
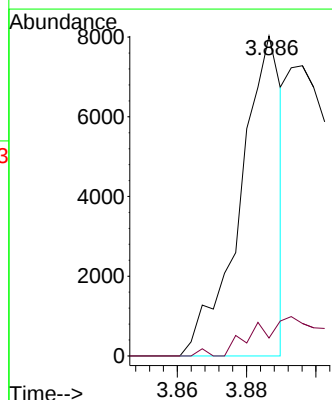
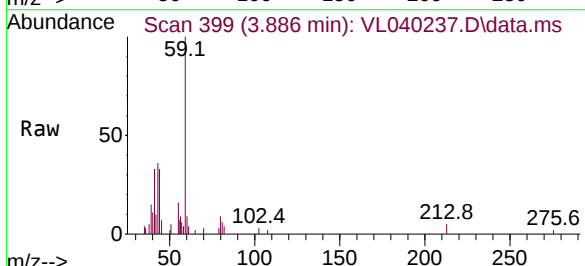
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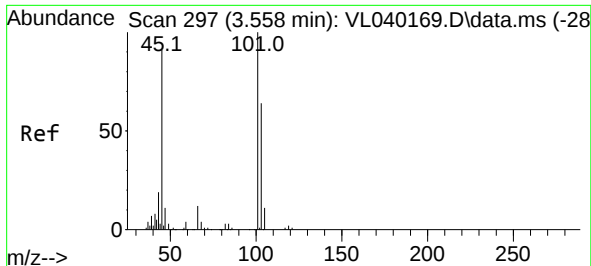
Tgt Ion: 59 Resp: 6691

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#

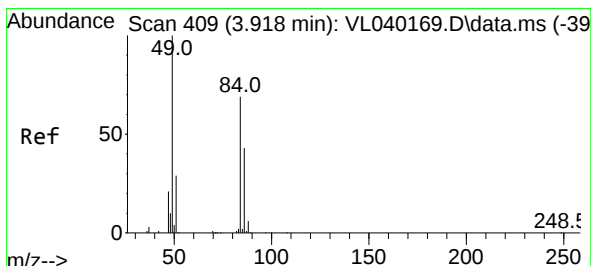
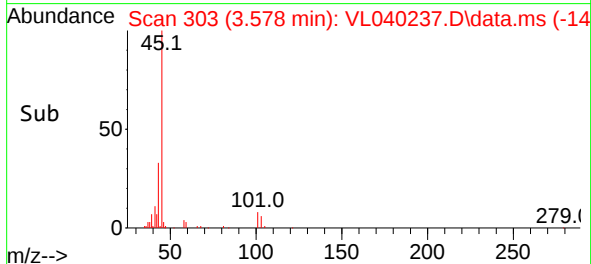
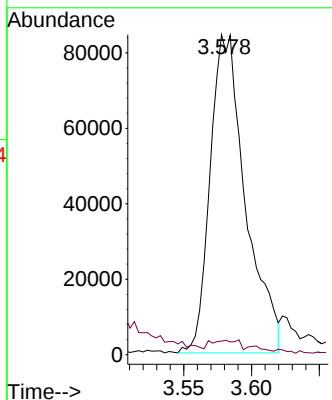
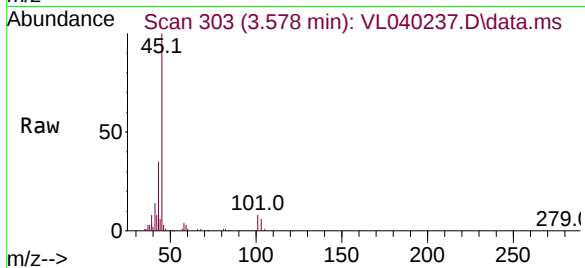




#19
Isopropyl Alcohol
Concen: 3.077 ppbv
RT: 3.578 min Scan# 303
Delta R.T. 0.013 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

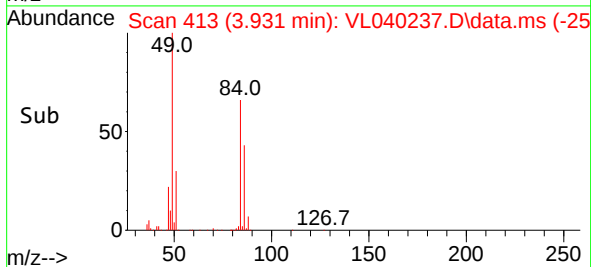
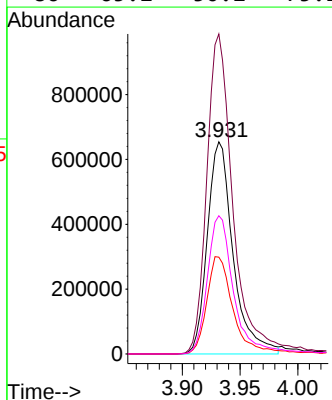
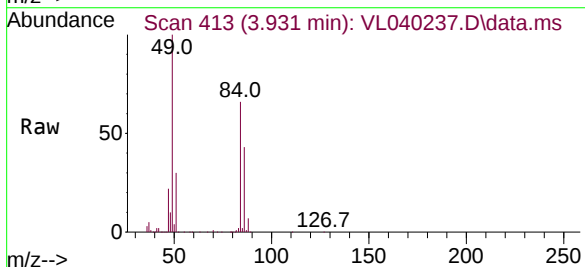
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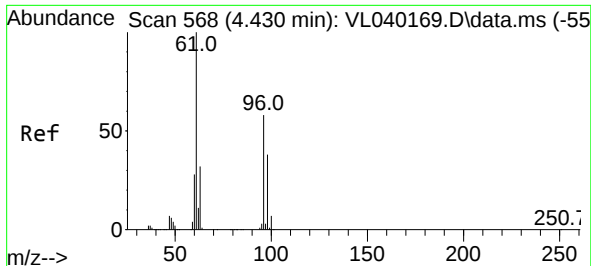
Tgt Ion: 45 Resp: 153201
Ion Ratio Lower Upper
45 100
58 4.9 2.6 3.8#



#20
Methylene Chloride
Concen: 18.692 ppbv
RT: 3.931 min Scan# 413
Delta R.T. 0.010 min
Lab File: VL040237.D
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Tgt Ion: 84 Resp: 1019332
Ion Ratio Lower Upper
84 100
49 150.8 115.5 173.3
51 45.5 33.1 49.7
86 65.2 50.2 75.2

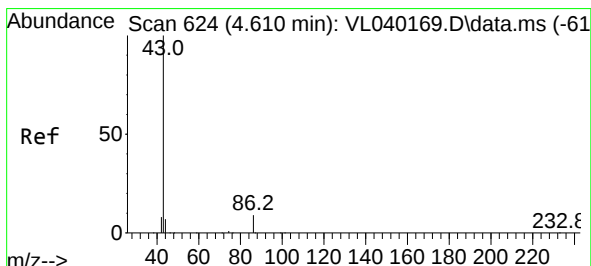
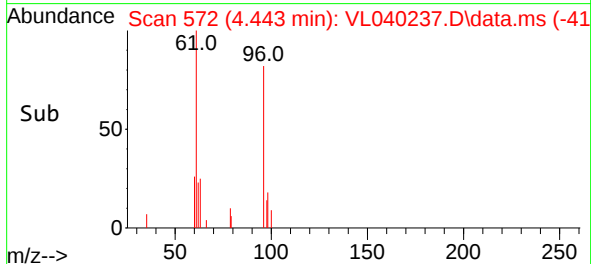
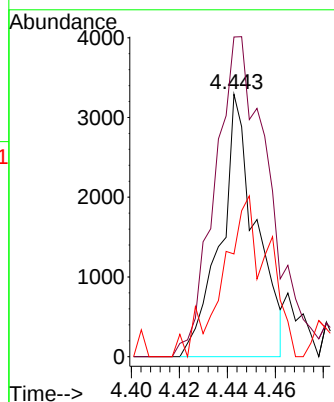
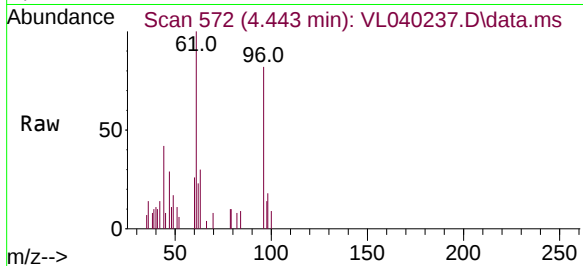




#22
trans-1,2-Dichloroethene
Concen: 0.070 ppbv
RT: 4.443 min Scan# 51
Delta R.T. 0.007 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

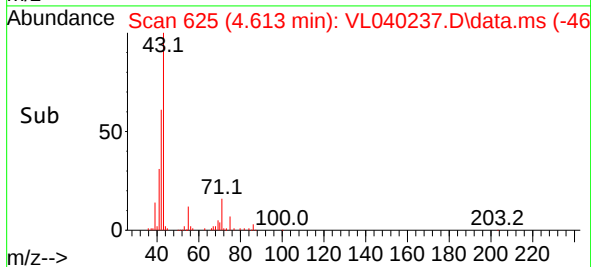
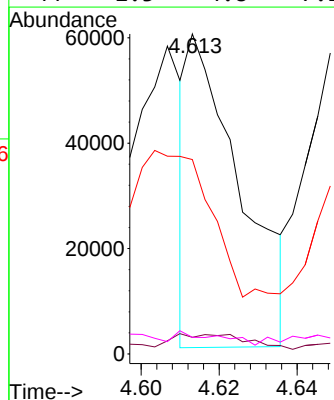
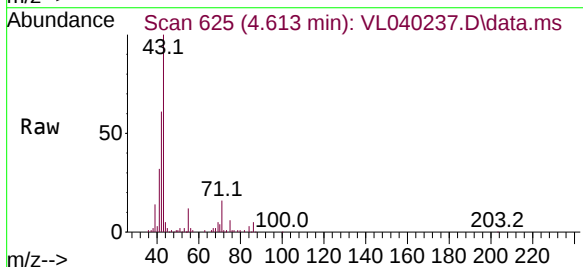
Instrument :
MSVOA_L
ClientSampleId :
02212023-EFFLUENTDUP

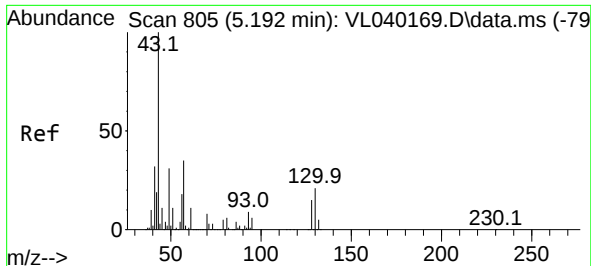
Tgt Ion: 96 Resp: 3374
Ion Ratio Lower Upper
96 100
61 116.8 137.5 206.3#
98 30.6 52.8 79.2#



#23
Vinyl Acetate
Concen: 1.750 ppbv
RT: 4.613 min Scan# 625
Delta R.T. 0.000 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Tgt Ion: 43 Resp: 55644
Ion Ratio Lower Upper
43 100
86 4.0 5.6 8.4#
42 66.8 7.6 11.4#
44 2.3 4.8 7.2#



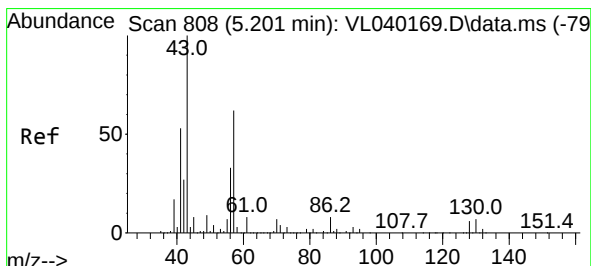
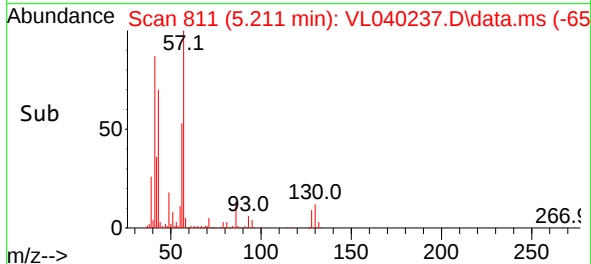
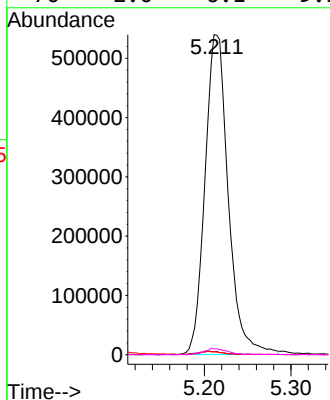
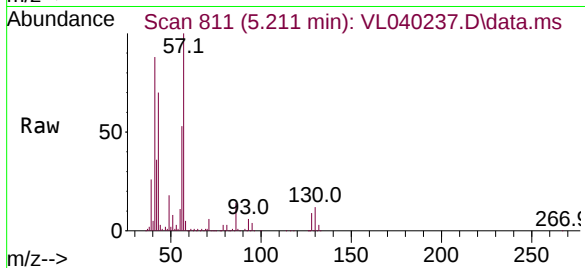


#25
Ethyl Acetate
Concen: 5.172 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.016 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Instrument :
MSVOA_L
ClientSampleId :
02212023-EFFLUENTDUP

Tgt Ion: 43 Resp: 1007122

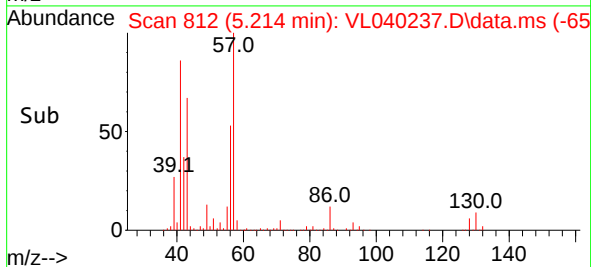
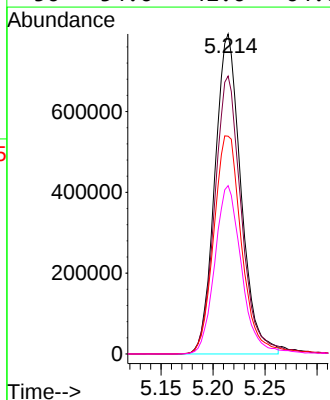
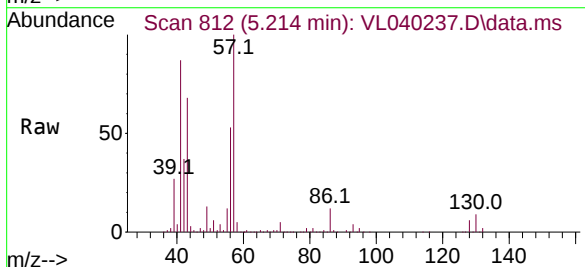
Ion	Ratio	Lower	Upper
43	100		
45	1.3	8.3	12.5#
61	1.2	8.4	12.6#
70	2.0	6.1	9.1#

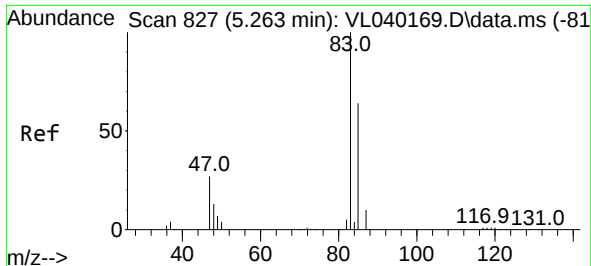


#26
Hexane
Concen: 16.562 ppbv
RT: 5.214 min Scan# 812
Delta R.T. 0.010 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Tgt Ion: 57 Resp: 1384593

Ion	Ratio	Lower	Upper
57	100		
41	89.7	74.3	111.5
43	73.7	193.0	289.4#
56	54.6	42.6	64.0





#29

Chloroform

Concen: 0.198 ppbv

RT: 5.275 min Scan# 81

Delta R.T. 0.010 min

Lab File: VL040237.D

Acq: 27 Feb 2023 15:54

Instrument :

MSVOA_L

ClientSampleId :

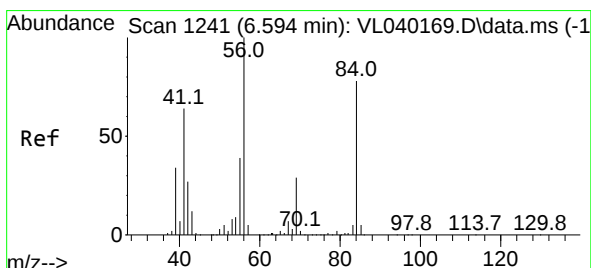
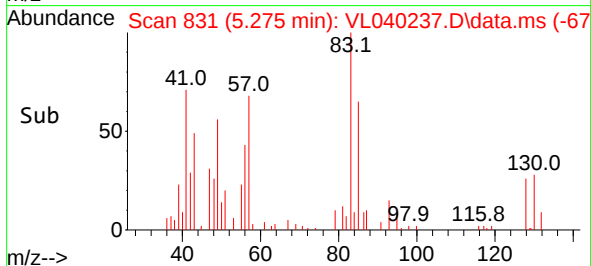
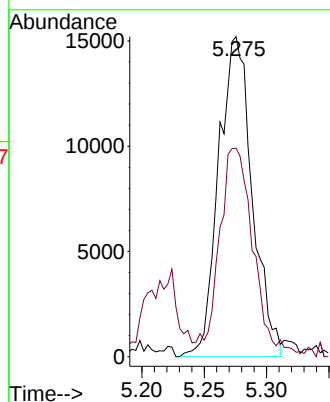
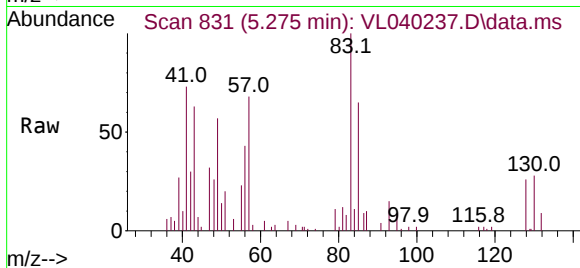
02212023-EFFLUENTDUP

Tgt Ion: 83 Resp: 28476

Ion Ratio Lower Upper

83 100

85 59.8 51.5 77.3



#30

Cyclohexane

Concen: 0.094 ppbv

RT: 6.600 min Scan# 1243

Delta R.T. 0.007 min

Lab File: VL040237.D

Acq: 27 Feb 2023 15:54

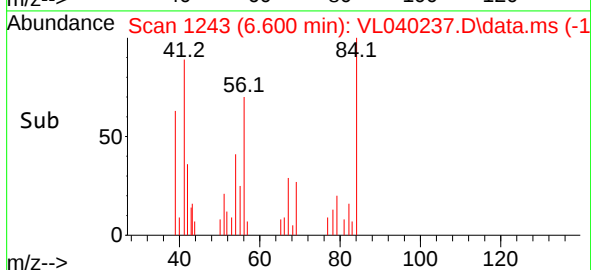
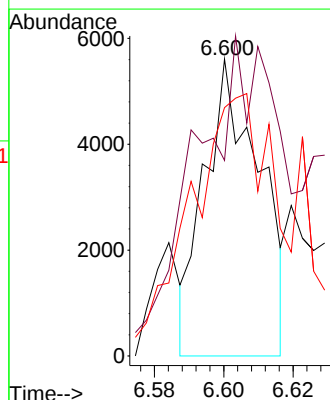
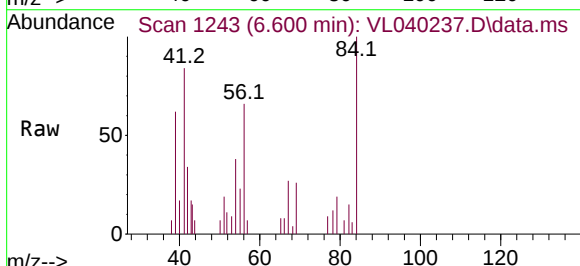
Tgt Ion: 84 Resp: 6178

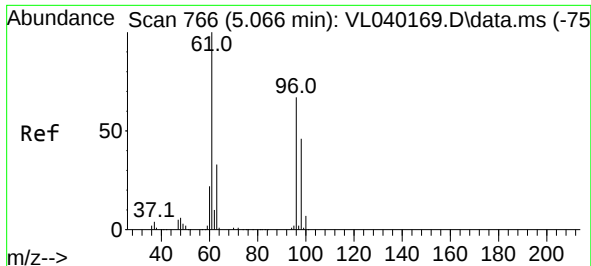
Ion Ratio Lower Upper

84 100

56 0.0 109.9 164.9#

41 185.4 67.8 101.6#

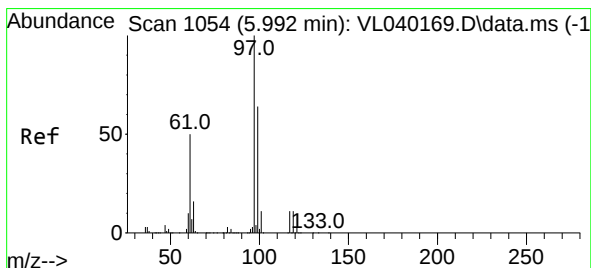
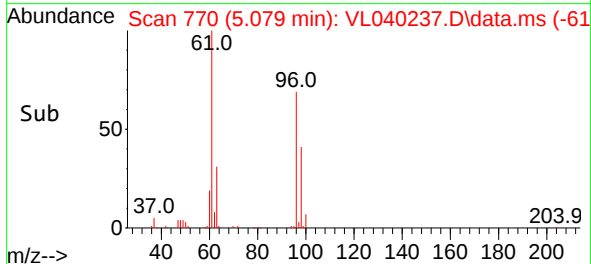
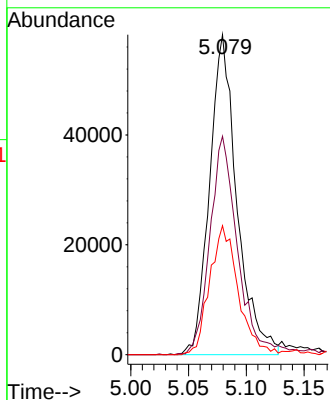
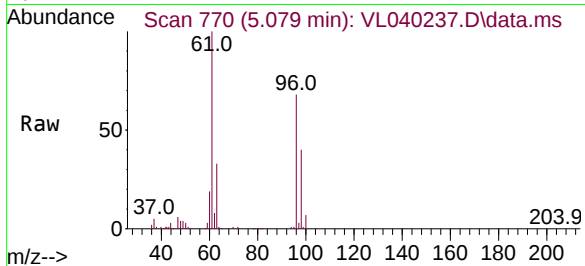




#31
 cis-1,2-Dichloroethene
 Concen: 1.209 ppbv
 RT: 5.079 min Scan# 71
 Delta R.T. 0.010 min
 Lab File: VL040237.D
 Acq: 27 Feb 2023 15:54

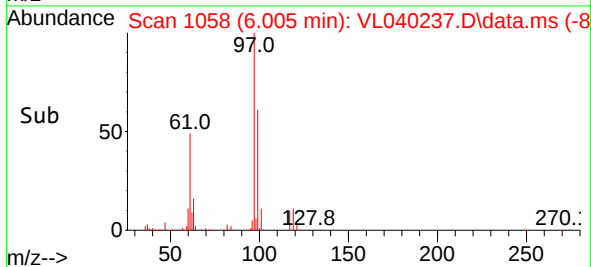
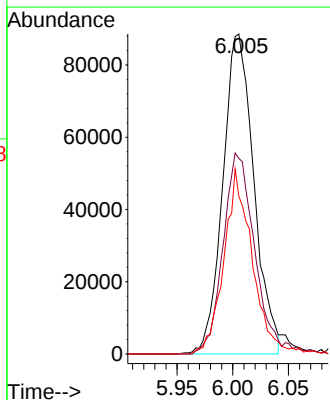
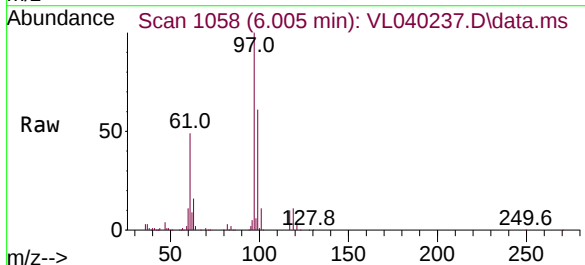
Instrument :
 MSVOA_L
 ClientSampleId :
 02212023-EFFLUENTDUP

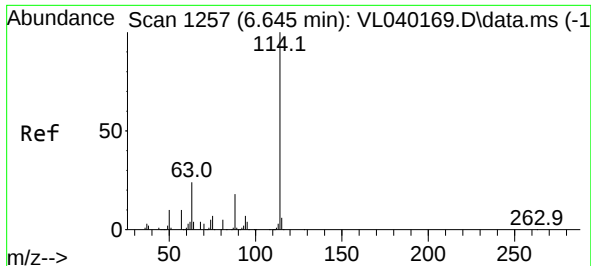
Tgt Ion: 61 Resp: 96044
 Ion Ratio Lower Upper
 61 100
 96 67.9 53.7 80.5
 98 40.3 36.4 54.6



#32
 1,1,1-Trichloroethane
 Concen: 1.274 ppbv
 RT: 6.005 min Scan# 1058
 Delta R.T. 0.010 min
 Lab File: VL040237.D
 Acq: 27 Feb 2023 15:54

Tgt Ion: 97 Resp: 171802
 Ion Ratio Lower Upper
 97 100
 99 64.7 51.5 77.3
 61 53.1 40.6 60.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.655 min Scan# 11

Delta R.T. 0.007 min

Lab File: VL040237.D

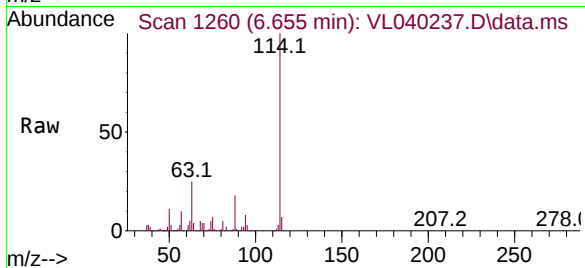
Acq: 27 Feb 2023 15:54

Instrument :

MSVOA_1

ClientSampleId :

02212023-EFFLUENTDUP



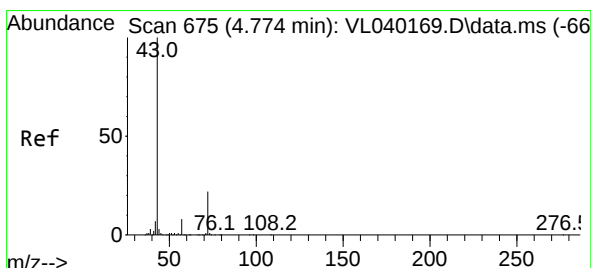
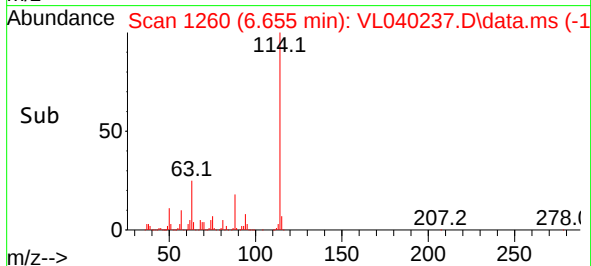
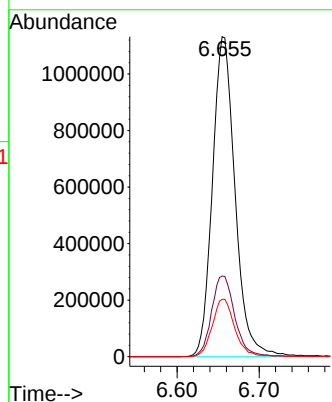
Tgt Ion:114 Resp: 2163347

Ion Ratio Lower Upper

114 100

63 26.2 20.4 30.6

88 18.1 14.3 21.5



#34

2-Butanone

Concen: 0.248 ppbv

RT: 4.796 min Scan# 682

Delta R.T. 0.023 min

Lab File: VL040237.D

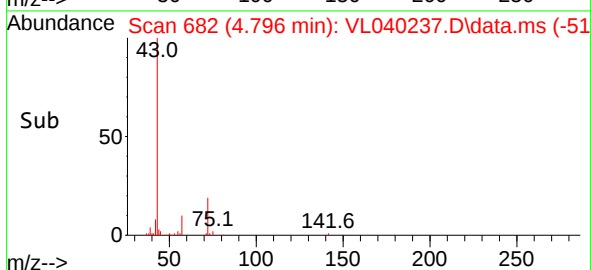
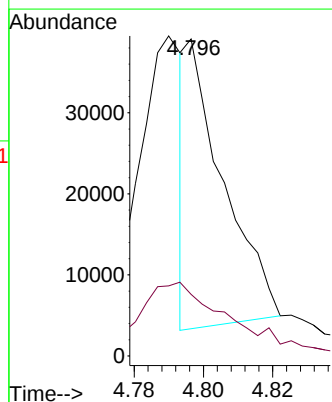
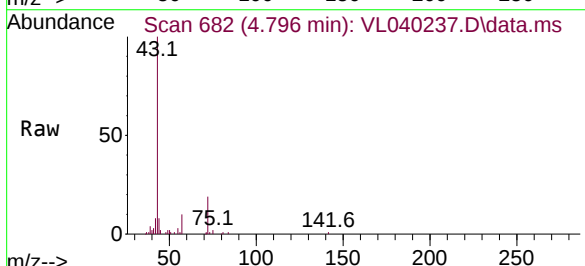
Acq: 27 Feb 2023 15:54

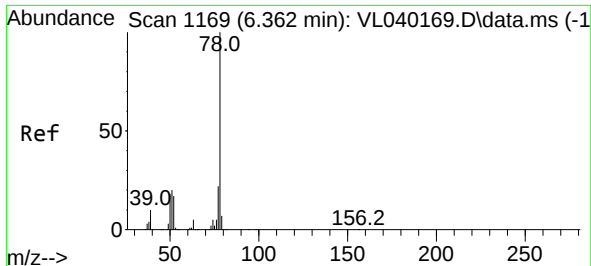
Tgt Ion: 43 Resp: 26414

Ion Ratio Lower Upper

43 100

72 65.9 17.8 26.8#

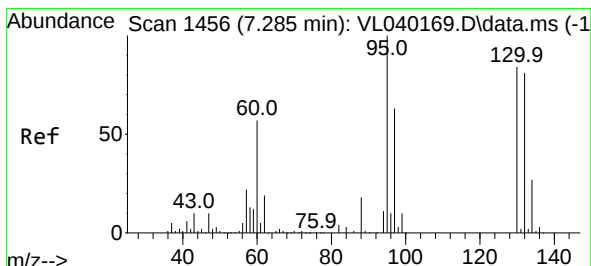
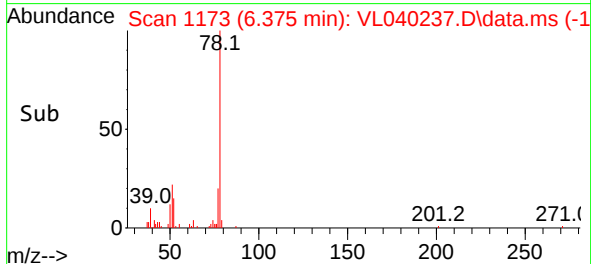
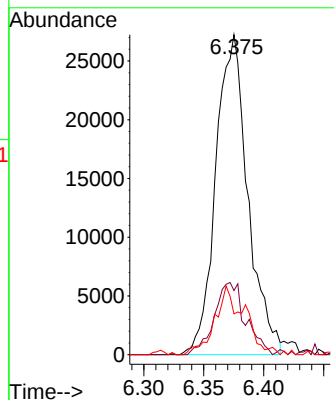
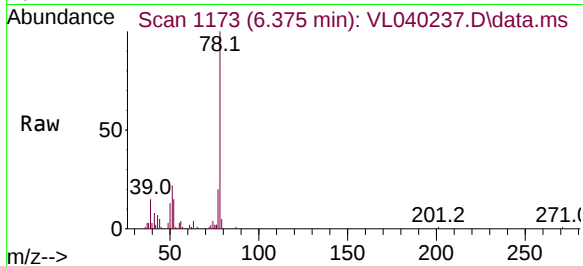




#36
Benzene
Concen: 0.300 ppbv
RT: 6.375 min Scan# 1169
Delta R.T. 0.010 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

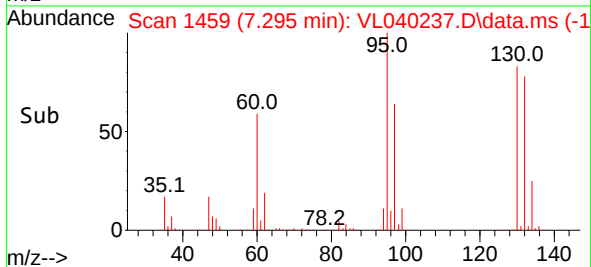
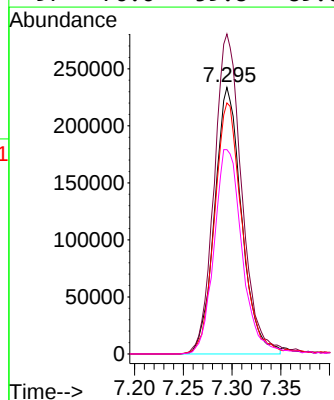
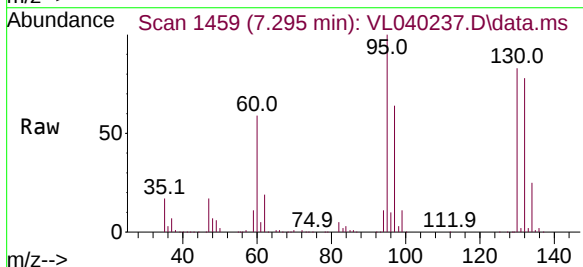
Instrument :
MSVOA_L
ClientSampleId :
02212023-EFFLUENTDUP

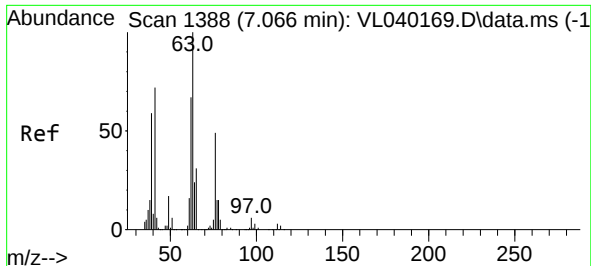
Tgt Ion: 78 Resp: 50559
Ion Ratio Lower Upper
78 100
77 20.0 17.5 26.3
50 12.8 14.6 22.0#



#38
Trichloroethene
Concen: 4.843 ppbv
RT: 7.295 min Scan# 1459
Delta R.T. 0.007 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Tgt Ion:130 Resp: 449322
Ion Ratio Lower Upper
130 100
95 120.0 94.7 142.1
132 94.2 76.4 114.6
97 76.6 59.8 89.6





#39

1,2-Dichloropropane

Concen: 8.488 ppbv

RT: 6.655 min Scan# 11

Delta R.T. -0.415 min

Lab File: VL040237.D

Acq: 27 Feb 2023 15:54

Instrument :

MSVOA_L

ClientSampleId :

02212023-EFFLUENTDUP

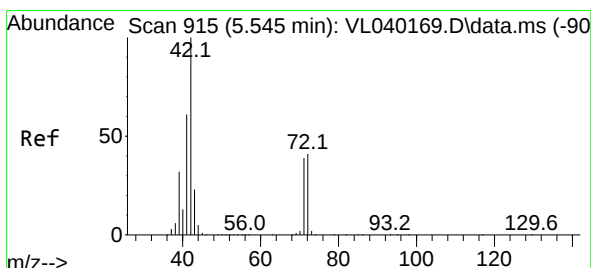
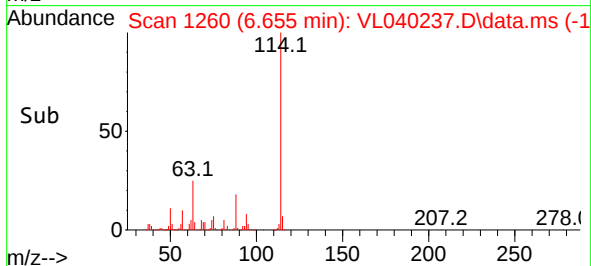
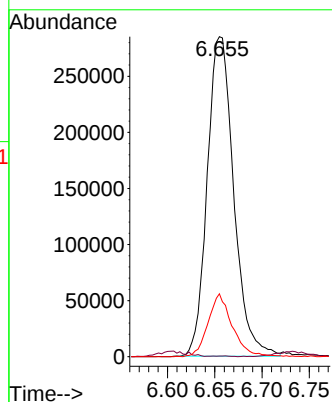
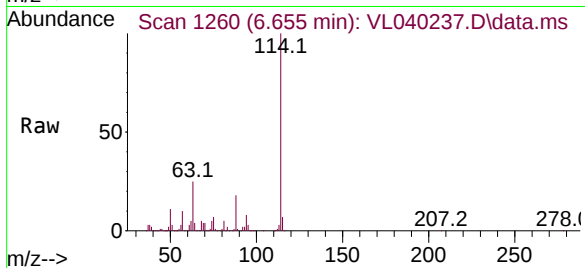
Tgt Ion: 63 Resp: 555923

Ion Ratio Lower Upper

63 100

41 0.0 57.6 86.4#

62 19.6 54.0 81.0#



#41

Tetrahydrofuran

Concen: 8.526 ppbv

RT: 5.214 min Scan# 812

Delta R.T. -0.334 min

Lab File: VL040237.D

Acq: 27 Feb 2023 15:54

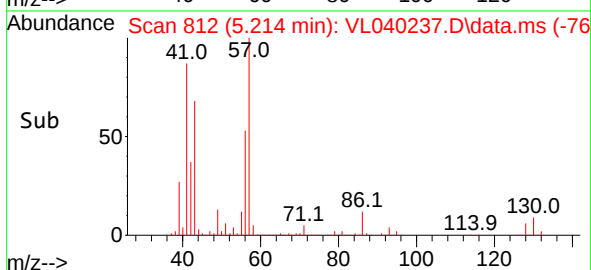
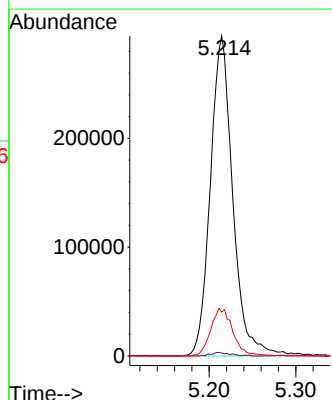
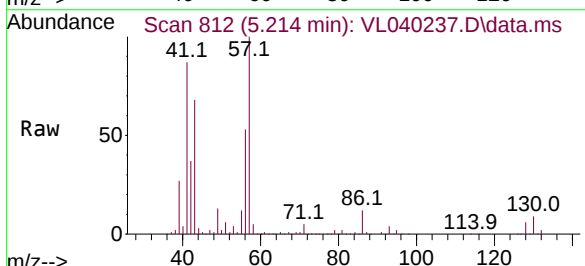
Tgt Ion: 42 Resp: 527254

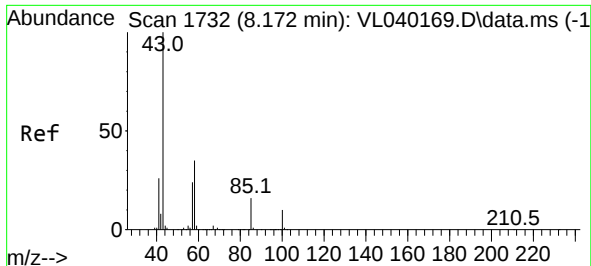
Ion Ratio Lower Upper

42 100

72 1.0 33.0 49.4#

71 14.9 31.4 47.2#

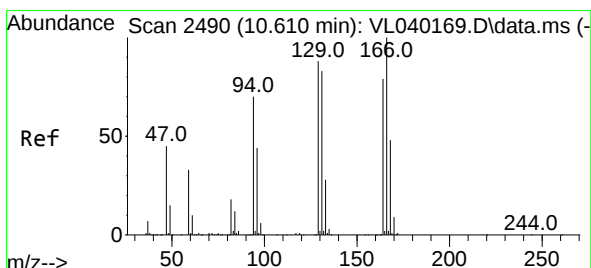
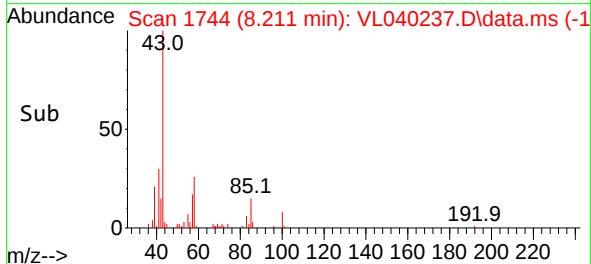
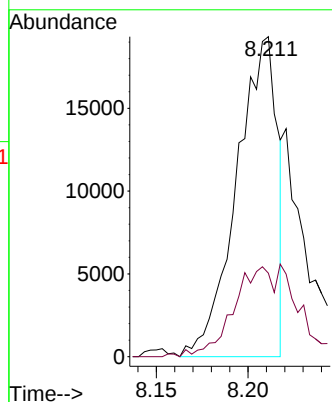
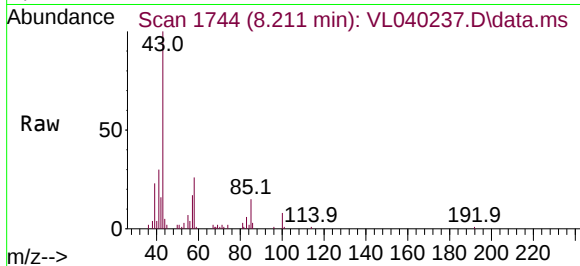




#50
4-Methyl-2-Pentanone
Concen: 0.179 ppbv
RT: 8.211 min Scan# 1732
Delta R.T. 0.036 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

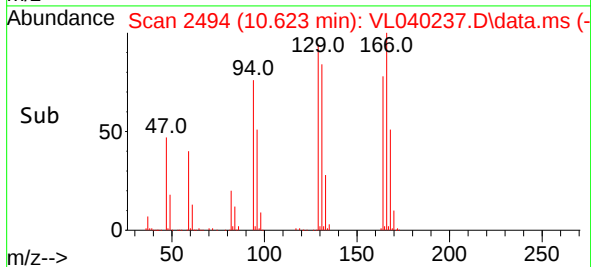
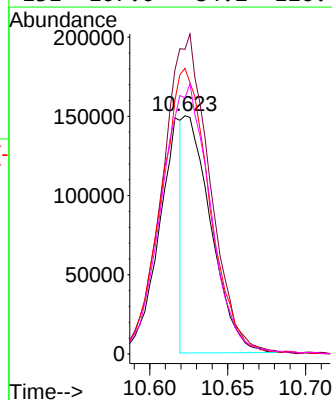
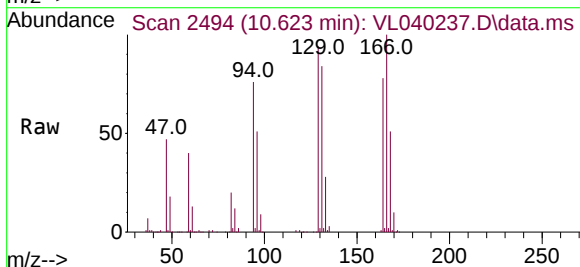
Instrument :
MSVOA_L
ClientSampleId :
02212023-EFFLUENTDUP

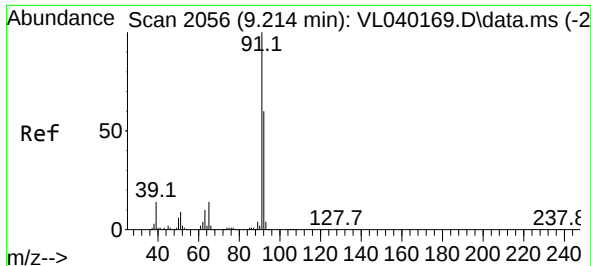
Tgt Ion: 43 Resp: 29740
Ion Ratio Lower Upper
43 100
58 0.0 29.2 43.8#



#52
Tetrachloroethene
Concen: 3.535 ppbv
RT: 10.623 min Scan# 2494
Delta R.T. 0.003 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Tgt Ion: 164 Resp: 185831
Ion Ratio Lower Upper
164 100
166 128.0 101.5 152.3
129 120.0 89.0 133.4
131 107.0 84.2 126.4





#53

Toluene

Concen: 0.387 ppbv

RT: 9.227 min Scan# 2056

Delta R.T. 0.010 min

Lab File: VL040237.D

Acq: 27 Feb 2023 15:54

Instrument :

MSVOA_1

ClientSampleId :

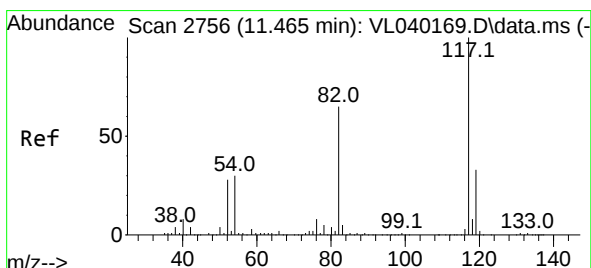
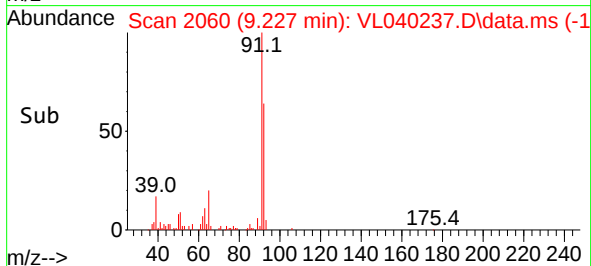
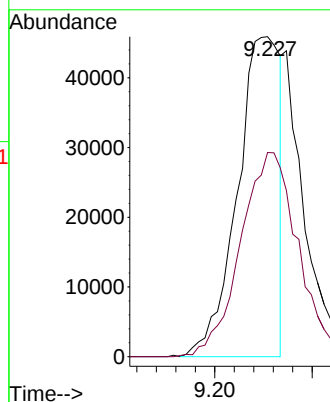
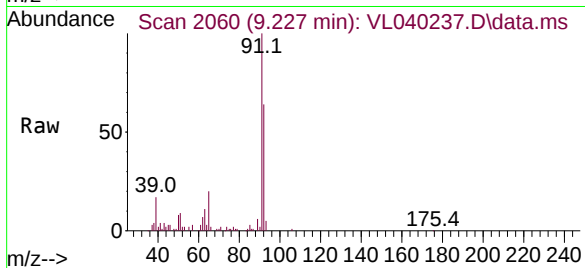
02212023-EFFLUENTDUP

Tgt Ion: 91 Resp: 69726

Ion Ratio Lower Upper

91 100

92 87.9 48.9 73.3#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.471 min Scan# 2758

Delta R.T. 0.003 min

Lab File: VL040237.D

Acq: 27 Feb 2023 15:54

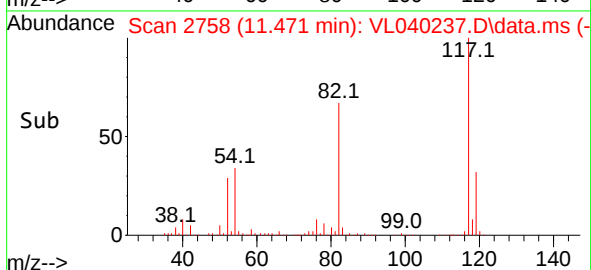
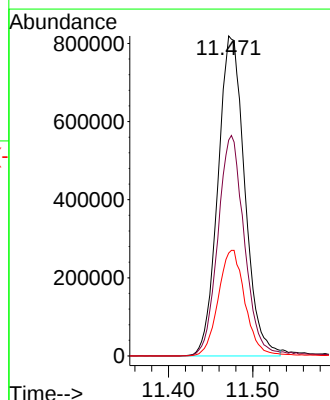
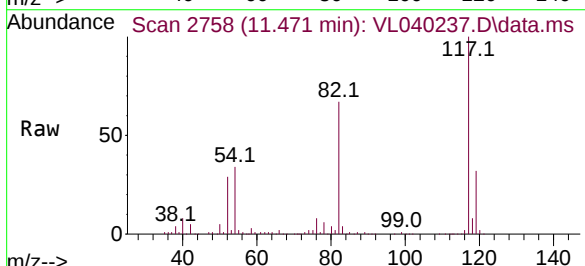
Tgt Ion: 117 Resp: 1808997

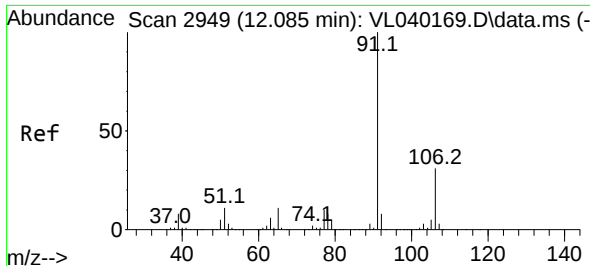
Ion Ratio Lower Upper

117 100

82 69.4 53.3 79.9

119 33.4 24.6 37.0

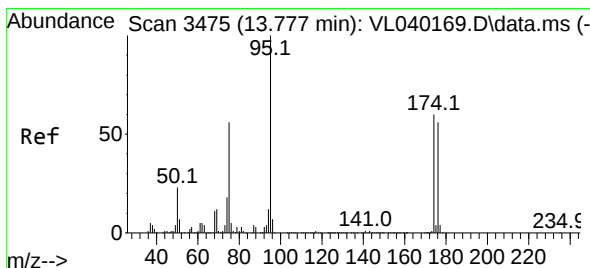
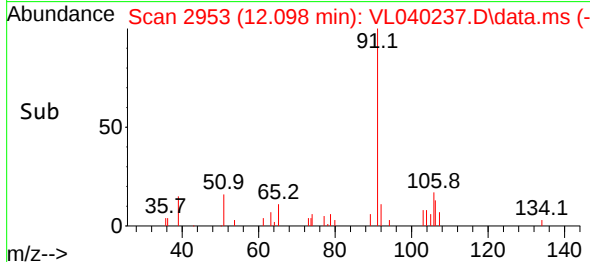
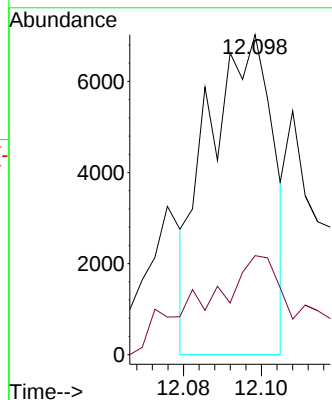
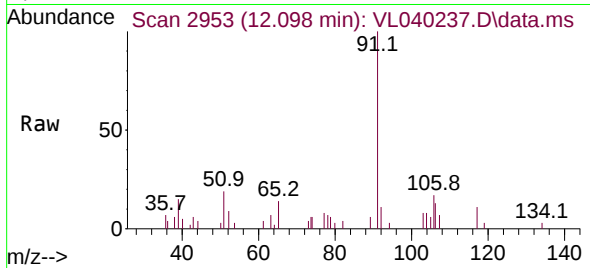




#58
Ethyl Benzene
Concen: 0.037 ppbv
RT: 12.098 min Scan# 2949
Delta R.T. 0.010 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Instrument :
MSVOA_1
ClientSampleId :
02212023-EFFLUENTDUP

Tgt Ion: 91 Resp: 8191
Ion Ratio Lower Upper
91 100
106 31.4 24.9 37.3



#68
1-Bromo-4-Fluorobenzene
Concen: 9.603 ppbv
RT: 13.783 min Scan# 3477
Delta R.T. 0.007 min
Lab File: VL040237.D
Acq: 27 Feb 2023 15:54

Tgt Ion: 95 Resp: 1428411
Ion Ratio Lower Upper
95 100
174 57.9 48.2 72.2
175 4.2 3.4 5.2

