

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022723\
 Data File : VL040233.D
 Acq On : 27 Feb 2023 13:11
 Operator : SY/MD
 Sample : 01705-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 02212023-EFFLUENT

Quant Time: Feb 28 00:18:21 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

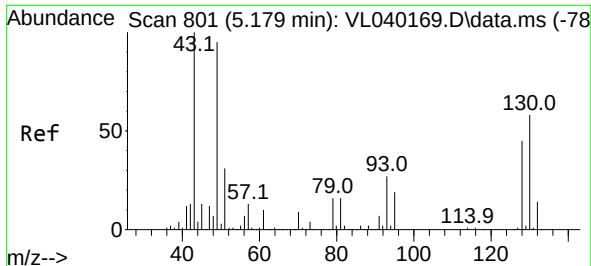
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.185	49	849982	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.651	114	2189999	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.471	117	1843992	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.783	95	1446474	9.539	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.400%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.716	85	35876	0.226	ppbv	91
3) Chlorodifluoromethane	2.661	51	51611	0.508	ppbv #	86
4) Chloromethane	2.806	50	11938	0.187	ppbv	96
9) Propene	2.690	41	38088	0.920	ppbv #	82
10) Heptane	7.577	43	7938	0.081	ppbv #	50
11) Trichlorofluoromethane	3.555	101	43445	0.306	ppbv	95
12) 1,1,2-Trichlorotrifluo...	4.060	101	5567	0.053	ppbv #	46
13) Ethanol	3.227	45	199527	52.365	ppbv	93
15) Acetone	3.459	43	703073	6.870	ppbv	96
16) 1,3-Butadiene	2.960	39	3752	0.080	ppbv #	57
17) tert-Butyl alcohol	3.886	59	10477	0.112	ppbv #	72
19) Isopropyl Alcohol	3.574	45	163529	3.362	ppbv #	93
20) Methylene Chloride	3.925	84	588932	11.055	ppbv	96
21) Allyl Chloride	3.925	41	19536	0.311	ppbv #	32
22) trans-1,2-Dichloroethene	4.433	96	2120	0.045	ppbv #	76
23) Vinyl Acetate	4.607	43	120635	3.884	ppbv #	38
25) Ethyl Acetate	5.208	43	551401	2.899	ppbv #	80
26) Hexane	5.208	57	722251	8.844	ppbv #	39
29) Chloroform	5.266	83	28077	0.200	ppbv	95
30) Cyclohexane	6.597	84	3398	0.053	ppbv #	1
31) cis-1,2-Dichloroethene	5.073	61	94519	1.218	ppbv	96
32) 1,1,1-Trichloroethane	5.996	97	175025	1.328	ppbv	96
34) 2-Butanone	4.790	43	70923	0.657	ppbv	96
35) Carbon Tetrachloride	6.487	117	5470	0.042	ppbv	88
36) Benzene	6.365	78	29031	0.170	ppbv	98
38) Trichloroethene	7.288	130	480645	5.118	ppbv	97
39) 1,2-Dichloropropane	6.648	63	562276	8.481	ppbv #	26
41) Tetrahydrofuran	5.809	42	4385	0.070	ppbv #	35
44) 2,2,4-Trimethylpentane	7.327	57	9725	0.034	ppbv #	1
52) Tetrachloroethene	10.619	164	353178	6.636	ppbv	98
53) Toluene	9.224	91	105581	0.578	ppbv	100
59) m/p-Xylene	12.378	91	10228	0.052	ppbv #	33

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

Quant Time: Feb 28 00:18:21 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL021523AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Feb 28 00:12:21 2023
Response via : Initial Calibration

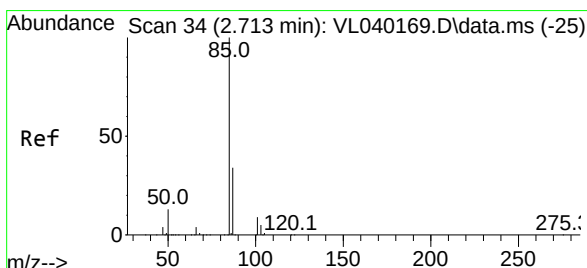
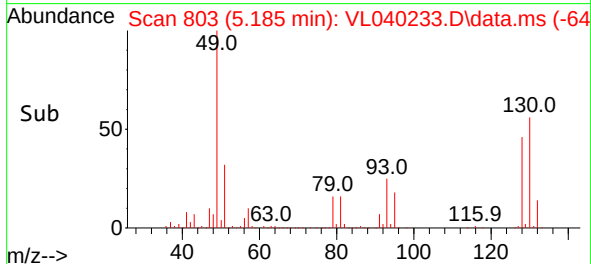
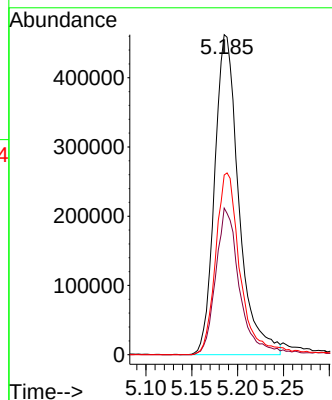
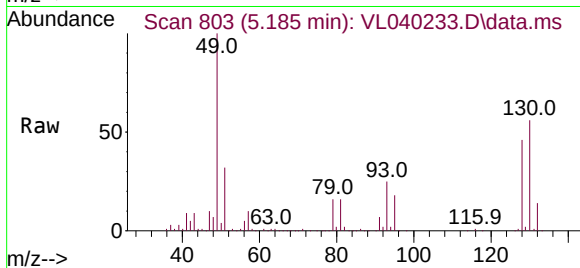




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.185 min Scan# 80
Delta R.T. 0.003 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

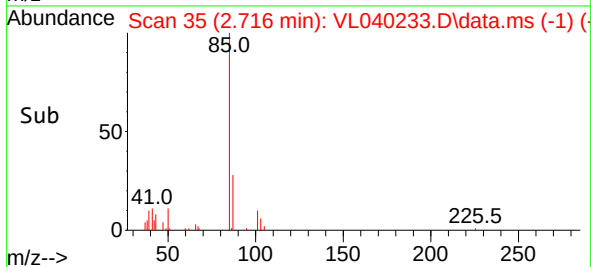
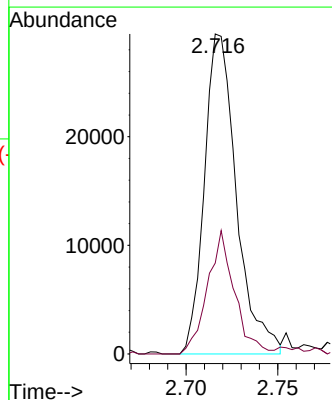
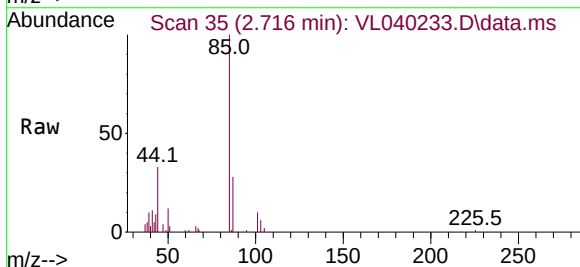
Instrument :
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02212023-EFFLUENT

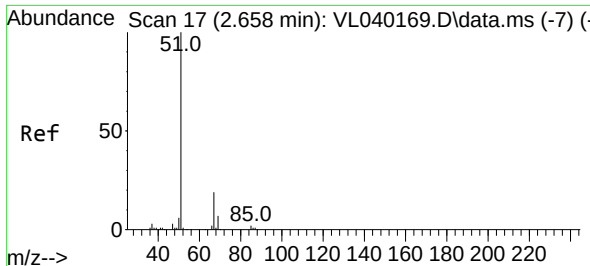
Tgt Ion: 49 Resp: 849982
Ion Ratio Lower Upper
49 100
128 46.2 24.1 72.3
130 58.9 30.9 92.8



#2
Dichlorodifluoromethane
Concen: 0.226 ppbv
RT: 2.716 min Scan# 35
Delta R.T. 0.000 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

Tgt Ion: 85 Resp: 35876
Ion Ratio Lower Upper
85 100
87 28.4 27.0 40.6

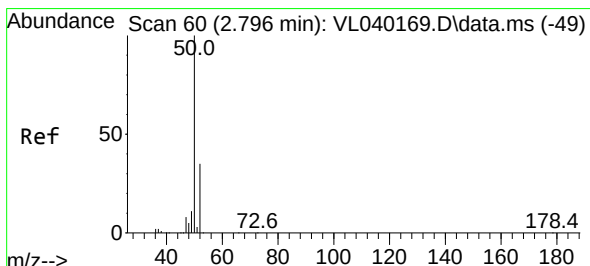
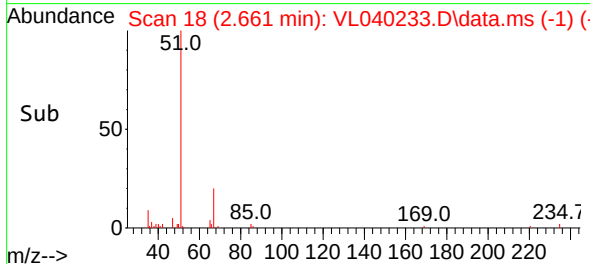
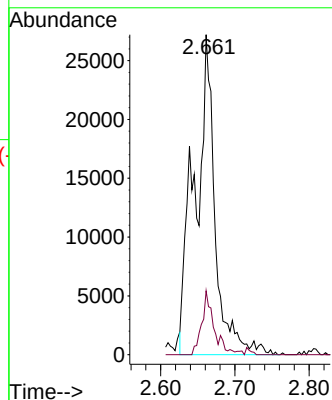
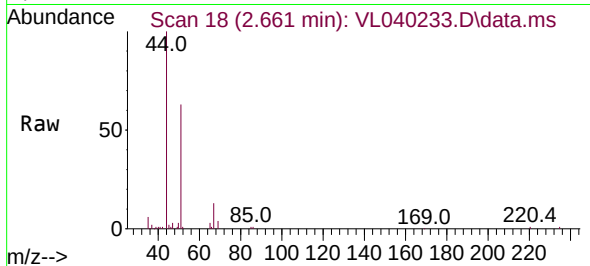




#3
Chlorodifluoromethane
Concen: 0.508 ppbv
RT: 2.661 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

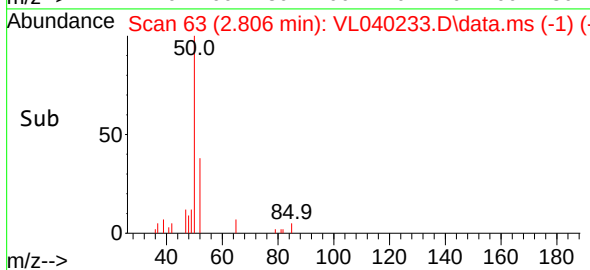
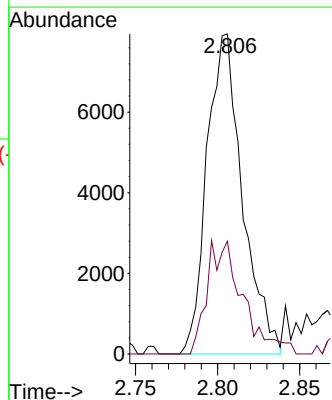
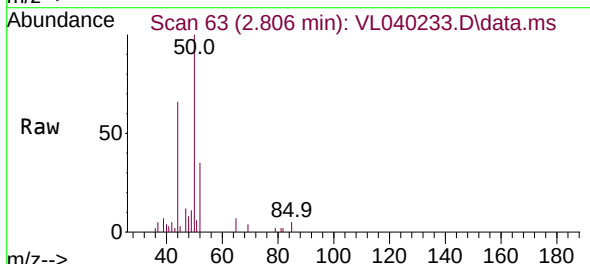
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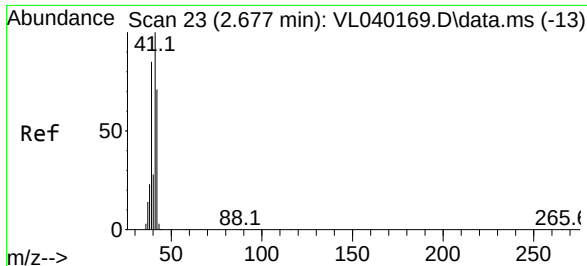
Tgt Ion: 51 Resp: 51611
Ion Ratio Lower Upper
51 100
67 12.8 15.4 23.2#



#4
Chloromethane
Concen: 0.187 ppbv
RT: 2.806 min Scan# 63
Delta R.T. 0.010 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

Tgt Ion: 50 Resp: 11938
Ion Ratio Lower Upper
50 100
52 33.1 28.3 42.5

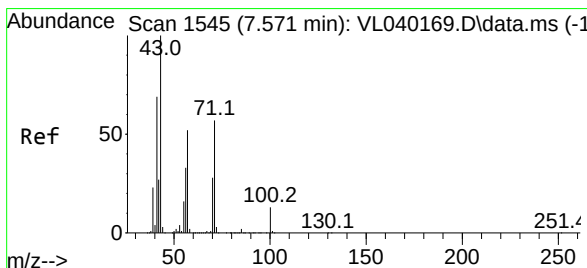
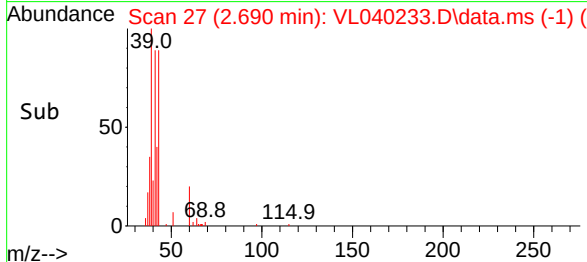
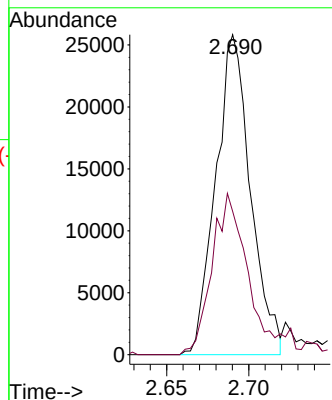
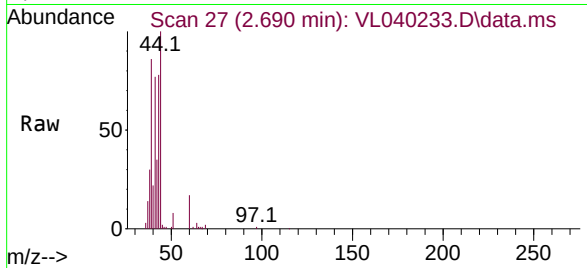




#9
 Propene
 Concen: 0.920 ppbv
 RT: 2.690 min Scan# 21
 Delta R.T. 0.010 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

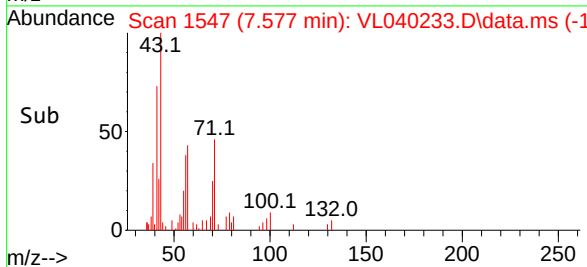
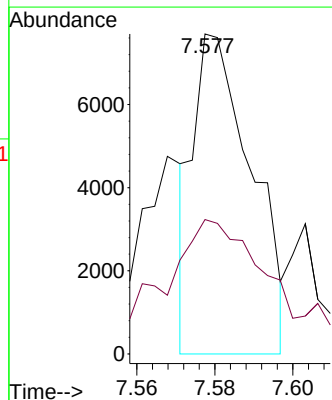
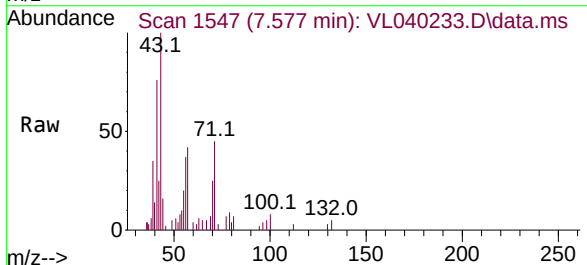
Instrument :
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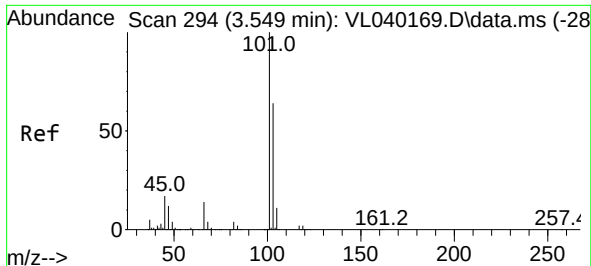
Tgt Ion: 41 Resp: 38088
 Ion Ratio Lower Upper
 41 100
 42 56.6 56.9 85.3#



#10
 Heptane
 Concen: 0.081 ppbv
 RT: 7.577 min Scan# 1547
 Delta R.T. 0.000 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

Tgt Ion: 43 Resp: 7938
 Ion Ratio Lower Upper
 43 100
 57 86.9 41.4 62.2#

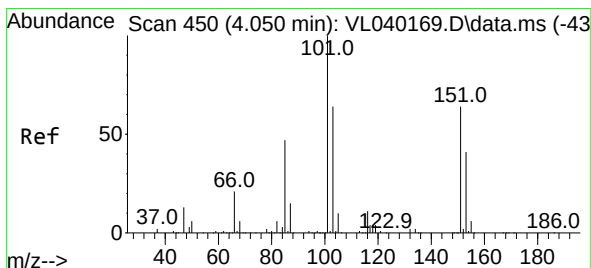
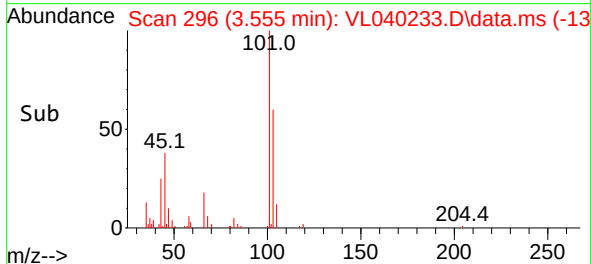
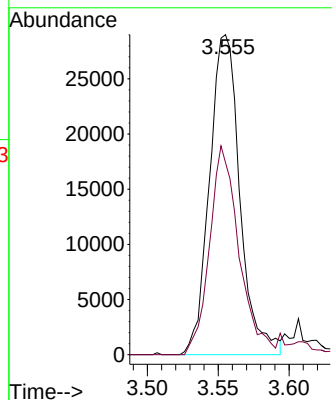
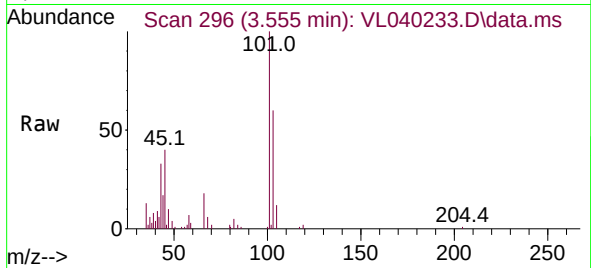




#11
 Trichlorofluoromethane
 Concen: 0.306 ppbv
 RT: 3.555 min Scan# 294
 Delta R.T. 0.006 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

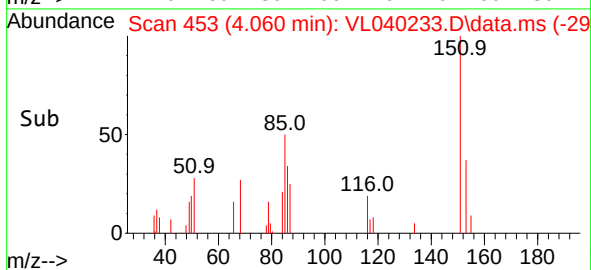
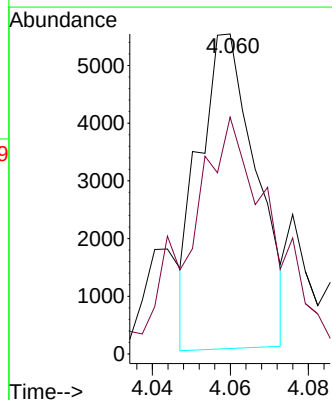
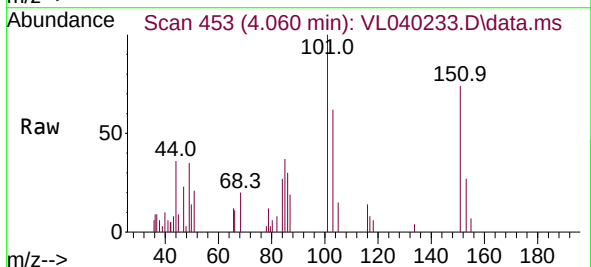
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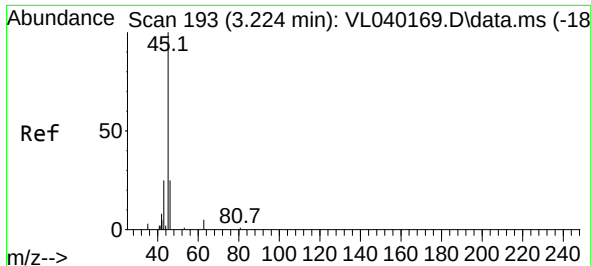
Tgt Ion:101 Resp: 43445
 Ion Ratio Lower Upper
 101 100
 103 60.1 51.0 76.6



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.053 ppbv
 RT: 4.060 min Scan# 453
 Delta R.T. 0.003 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

Tgt Ion:101 Resp: 5567
 Ion Ratio Lower Upper
 101 100
 151 112.1 54.7 82.1#

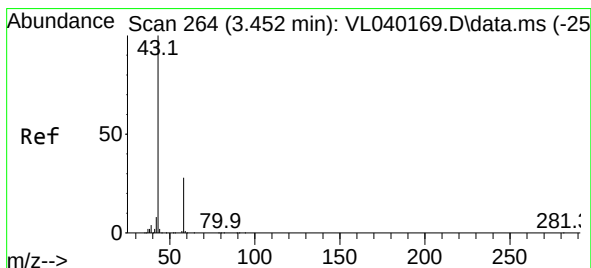
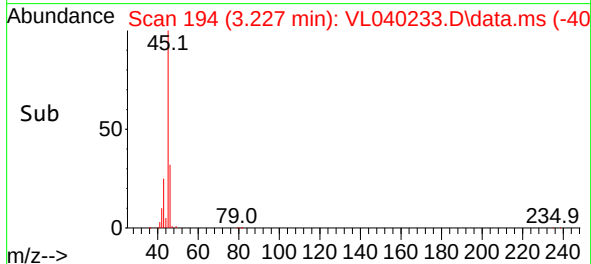
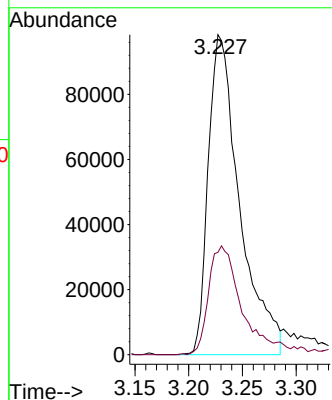
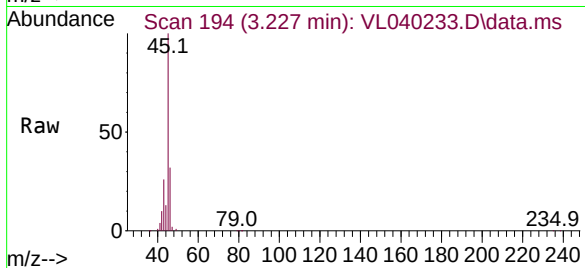




#13
Ethanol
Concen: 52.365 ppbv
RT: 3.227 min Scan# 193
Delta R.T. -0.006 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

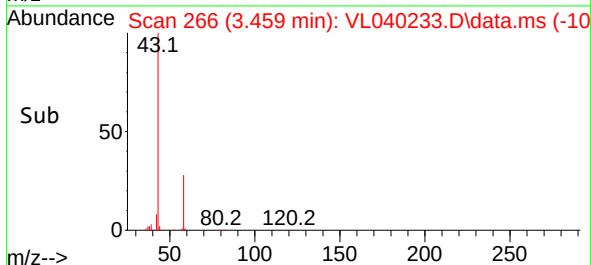
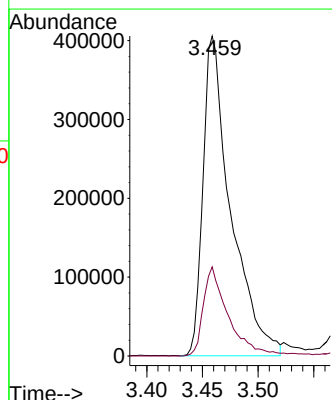
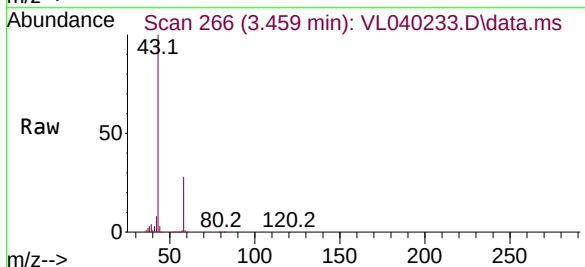
Instrument :
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ClientSampleId :
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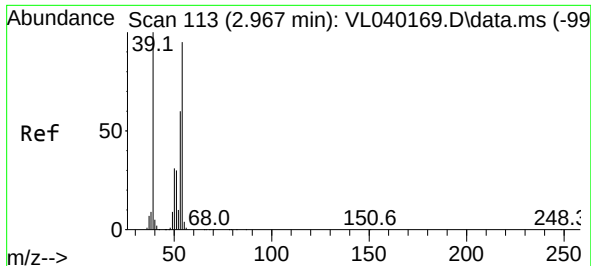
Tgt Ion: 45 Resp: 199527
Ion Ratio Lower Upper
45 100
46 37.4 13.3 53.1



#15
Acetone
Concen: 6.870 ppbv
RT: 3.459 min Scan# 266
Delta R.T. 0.003 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

Tgt Ion: 43 Resp: 703073
Ion Ratio Lower Upper
43 100
58 25.7 22.4 33.6





#16

1,3-Butadiene

Concen: 0.080 ppbv

RT: 2.960 min Scan# 111

Delta R.T. -0.010 min

Lab File: VL040233.D

Acq: 27 Feb 2023 13:11

Instrument :

MSVOA_L

ClientSampleId :

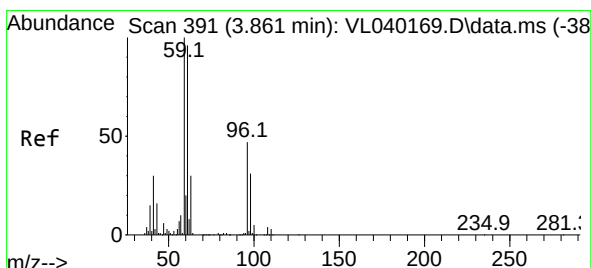
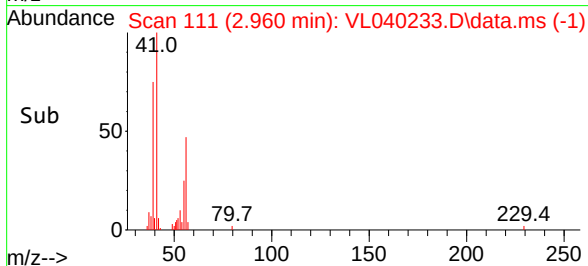
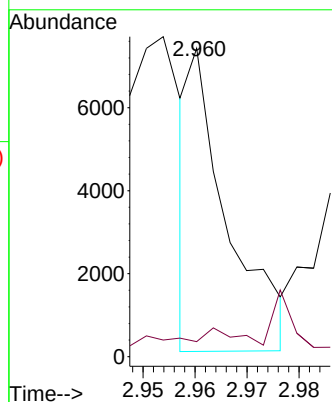
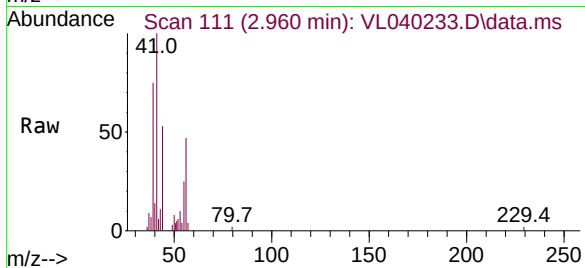
02212023-EFFLUENT

Tgt Ion: 39 Resp: 3752

Ion Ratio Lower Upper

39 100

54 44.9 66.7 100.1#



#17

tert-Butyl alcohol

Concen: 0.112 ppbv

RT: 3.886 min Scan# 399

Delta R.T. 0.023 min

Lab File: VL040233.D

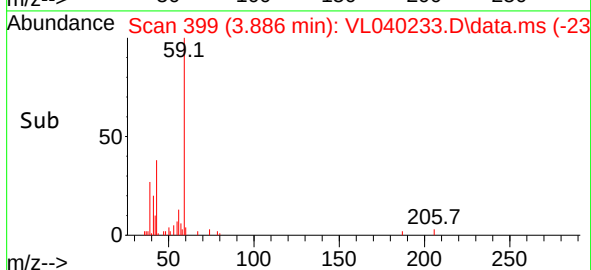
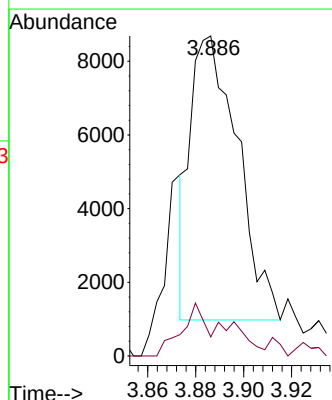
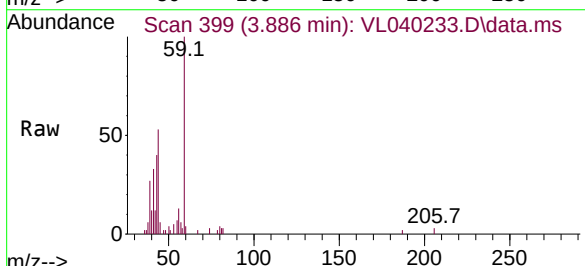
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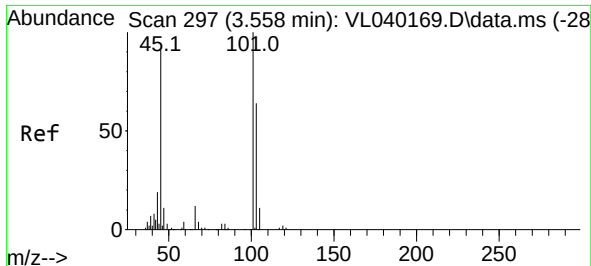
Tgt Ion: 59 Resp: 10477

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#

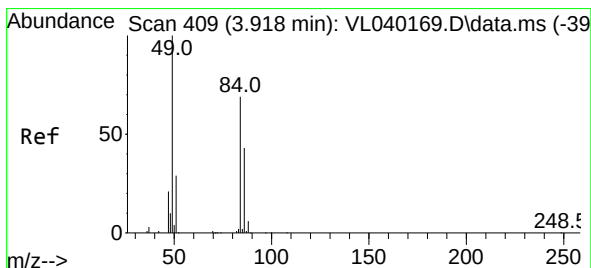
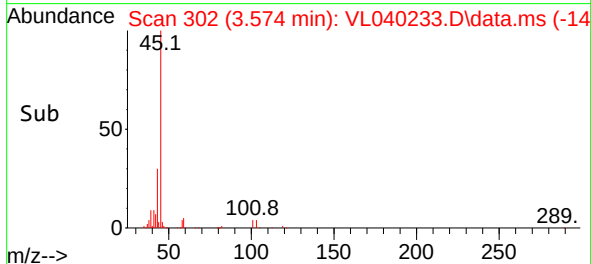
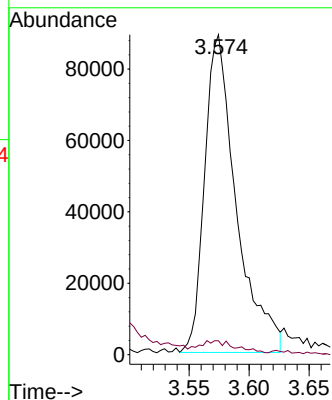
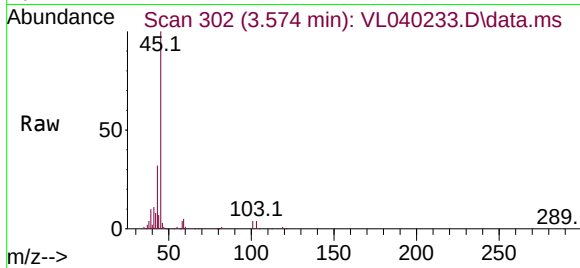




#19
Isopropyl Alcohol
Concen: 3.362 ppbv
RT: 3.574 min Scan# 302
Delta R.T. 0.010 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

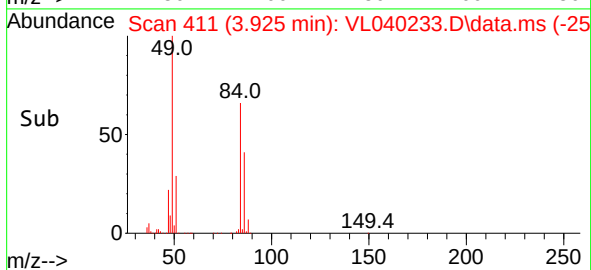
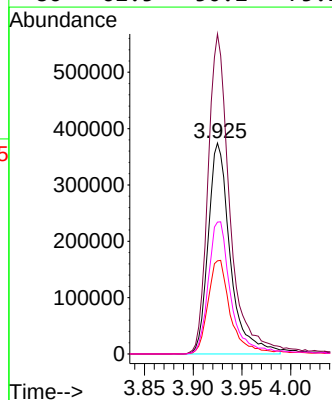
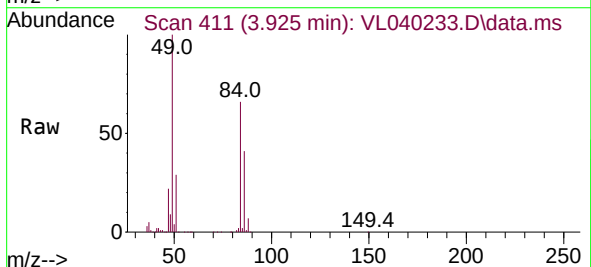
Instrument :
MSVOA_L
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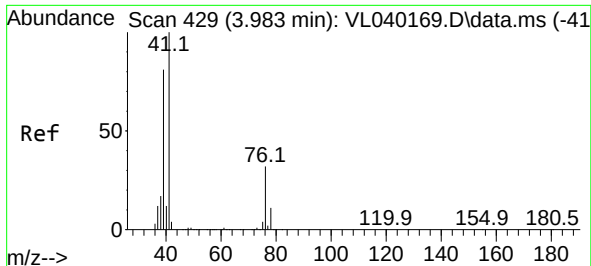
Tgt Ion: 45 Resp: 163529
Ion Ratio Lower Upper
45 100
58 5.6 2.6 3.8#



#20
Methylene Chloride
Concen: 11.055 ppbv
RT: 3.925 min Scan# 411
Delta R.T. 0.003 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

Tgt Ion: 84 Resp: 588932
Ion Ratio Lower Upper
84 100
49 151.7 115.5 173.3
51 44.1 33.1 49.7
86 62.5 50.2 75.2

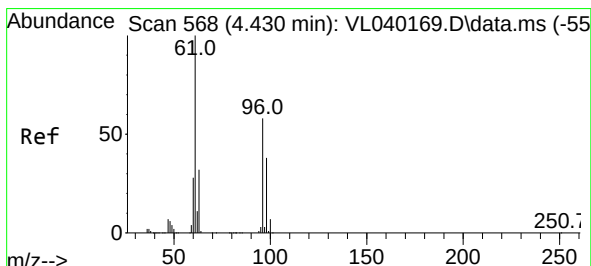
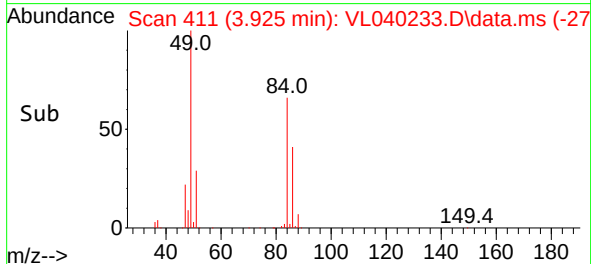
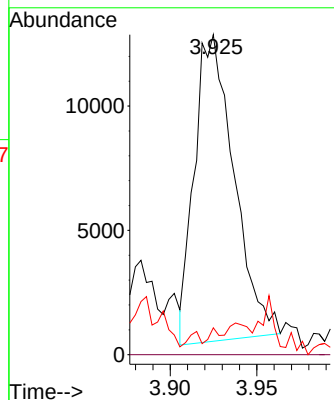
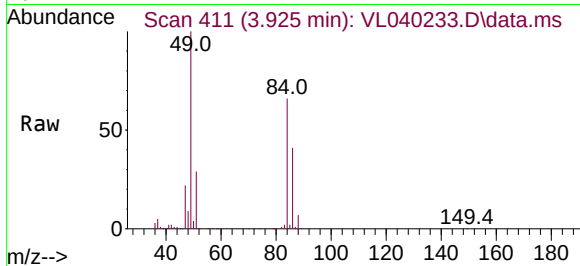




#21
 Allyl Chloride
 Concen: 0.311 ppbv
 RT: 3.925 min Scan# 41
 Delta R.T. -0.061 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

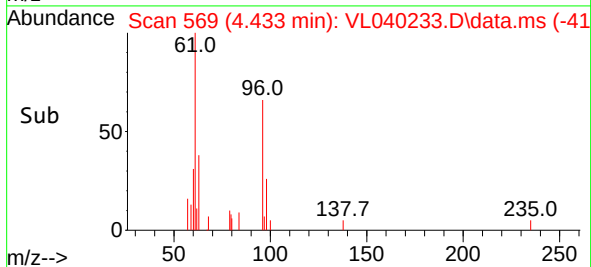
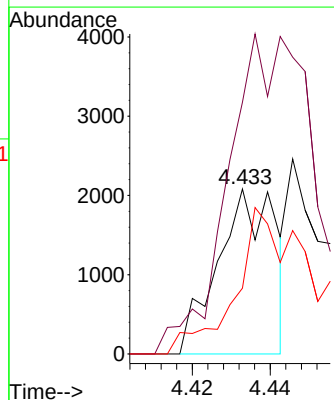
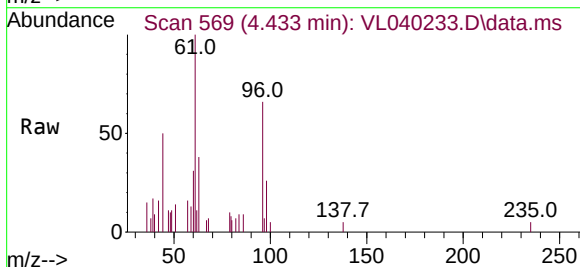
Instrument :
 MSVOA_L
 ClientSampleId :
 02212023-EFFLUENT

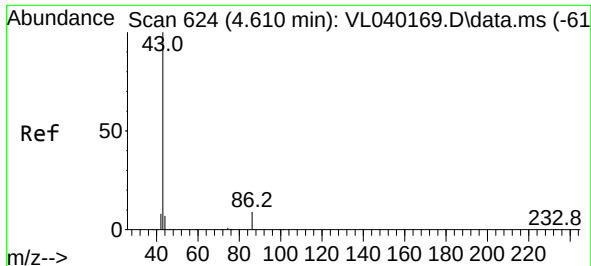
Tgt Ion: 41 Resp: 19536
 Ion Ratio Lower Upper
 41 100
 76 0.0 25.5 38.3#
 39 16.3 64.5 96.7#



#22
 trans-1,2-Dichloroethene
 Concen: 0.045 ppbv
 RT: 4.433 min Scan# 569
 Delta R.T. -0.003 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

Tgt Ion: 96 Resp: 2120
 Ion Ratio Lower Upper
 96 100
 61 153.0 137.5 206.3
 98 26.9 52.8 79.2#



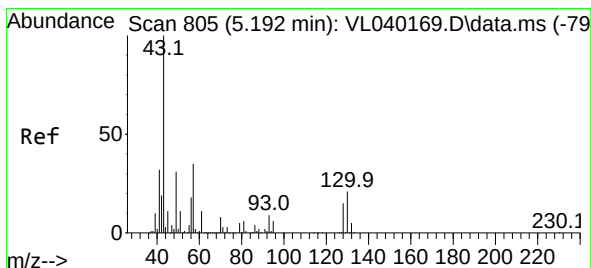
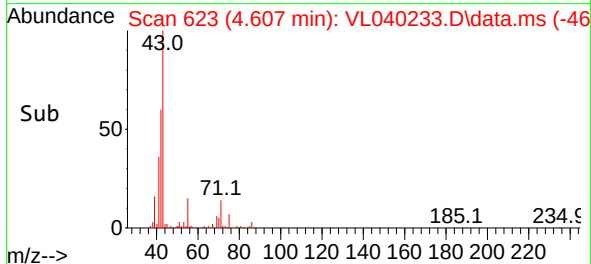
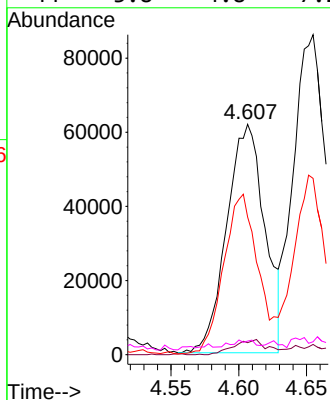
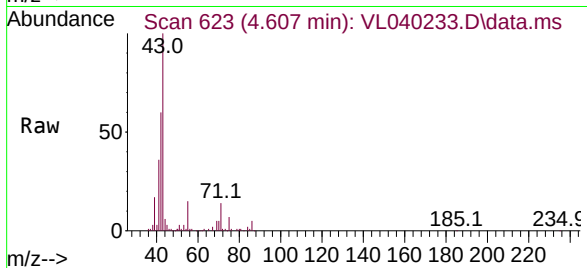


#23
 Vinyl Acetate
 Concen: 3.884 ppbv
 RT: 4.607 min Scan# 61
 Delta R.T. -0.006 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

Instrument :
 MSVOA_1
 ClientSampleId :
 02212023-EFFLUENT

Tgt Ion: 43 Resp: 120635

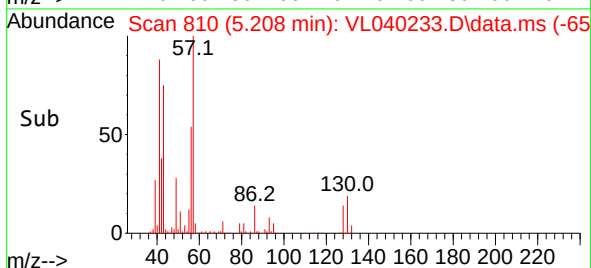
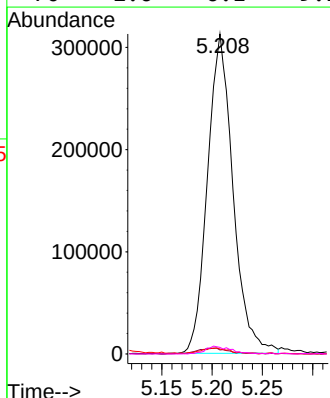
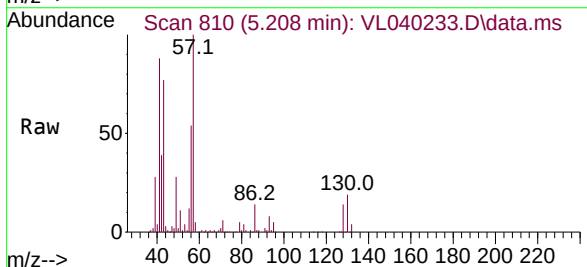
Ion	Ratio	Lower	Upper
43	100		
86	5.0	5.6	8.4#
42	59.9	7.6	11.4#
44	3.8	4.8	7.2#

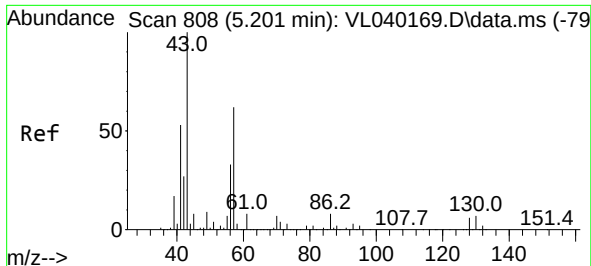


#25
 Ethyl Acetate
 Concen: 2.899 ppbv
 RT: 5.208 min Scan# 810
 Delta R.T. 0.013 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

Tgt Ion: 43 Resp: 551401

Ion	Ratio	Lower	Upper
43	100		
45	2.5	8.3	12.5#
61	2.3	8.4	12.6#
70	2.6	6.1	9.1#

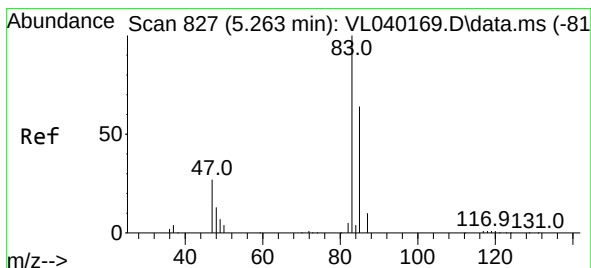
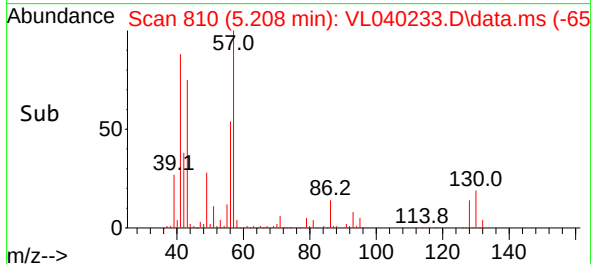
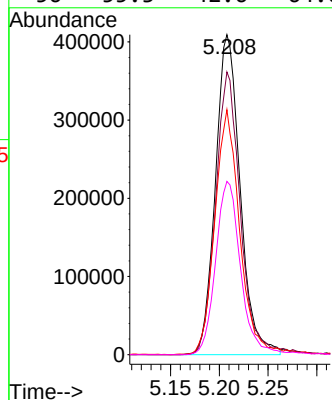
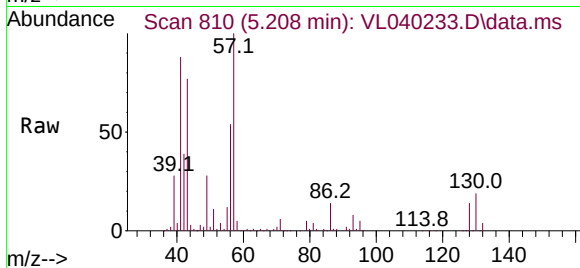




#26
Hexane
Concen: 8.844 ppbv
RT: 5.208 min Scan# 810
Delta R.T. 0.003 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

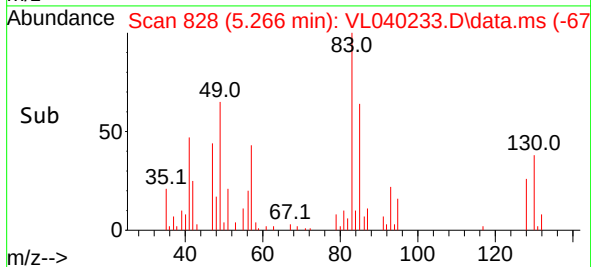
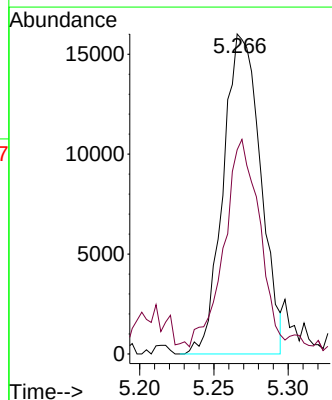
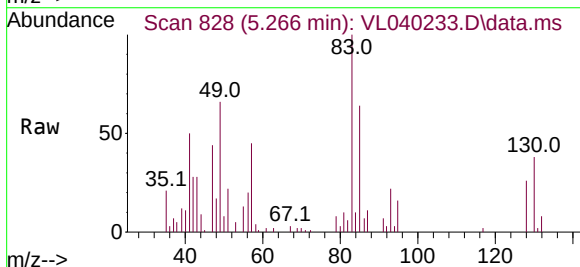
Instrument :
MSVOA_L
ClientSampleId :
02212023-EFFLUENT

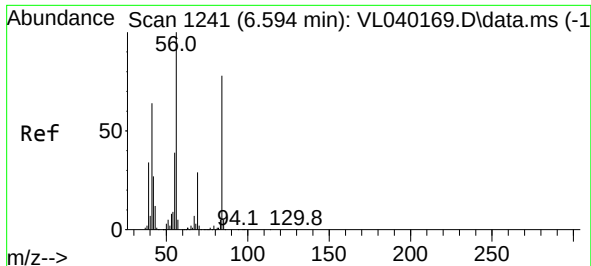
Tgt Ion: 57 Resp: 722251
Ion Ratio Lower Upper
57 100
41 89.7 74.3 111.5
43 78.6 193.0 289.4#
56 55.3 42.6 64.0



#29
Chloroform
Concen: 0.200 ppbv
RT: 5.266 min Scan# 828
Delta R.T. 0.000 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

Tgt Ion: 83 Resp: 28077
Ion Ratio Lower Upper
83 100
85 60.6 51.5 77.3

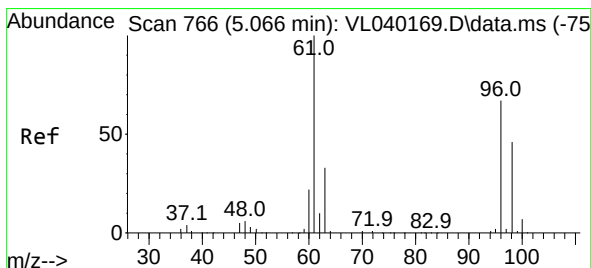
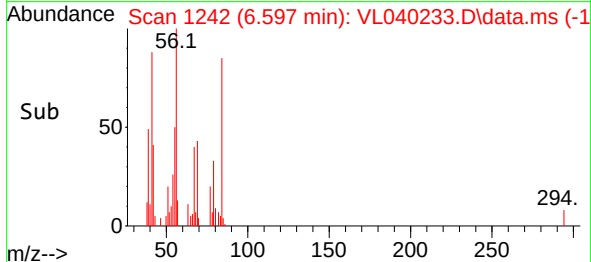
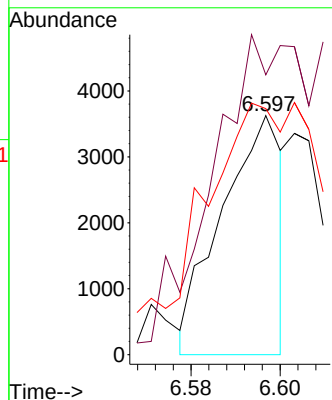
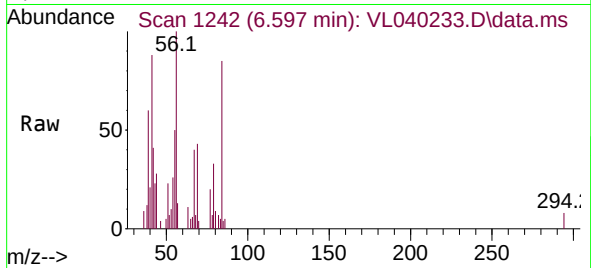




#30
Cyclohexane
Concen: 0.053 ppbv
RT: 6.597 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

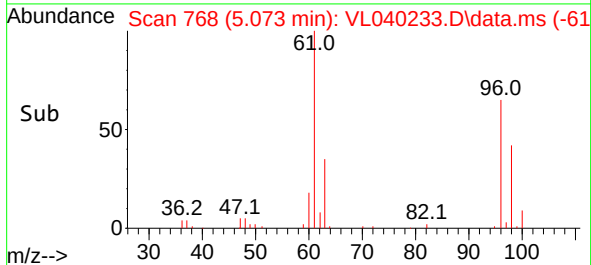
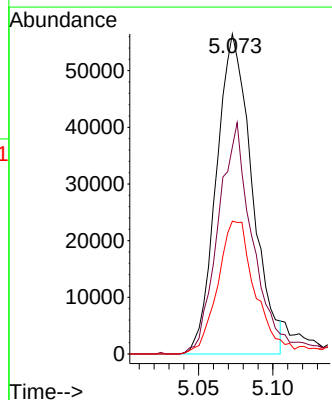
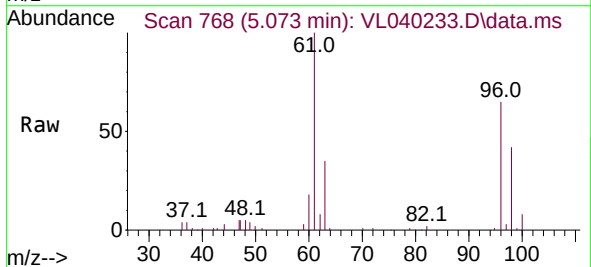
Instrument :
MSVOA_L
ClientSampleId :
02212023-EFFLUENT

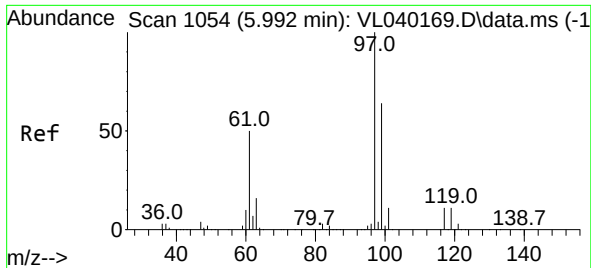
Tgt Ion: 84 Resp: 3398
Ion Ratio Lower Upper
84 100
56 0.0 109.9 164.9#
41 0.0 67.8 101.6#



#31
cis-1,2-Dichloroethene
Concen: 1.218 ppbv
RT: 5.073 min Scan# 768
Delta R.T. 0.003 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

Tgt Ion: 61 Resp: 94519
Ion Ratio Lower Upper
61 100
96 64.6 53.7 80.5
98 41.5 36.4 54.6

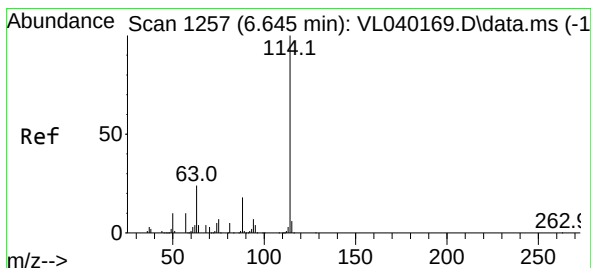
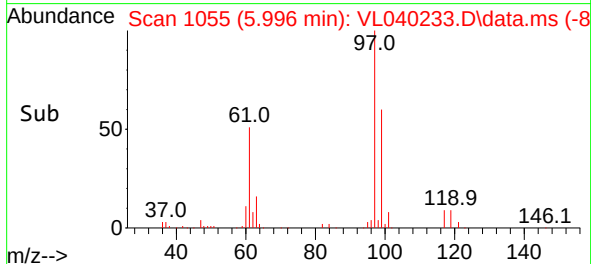
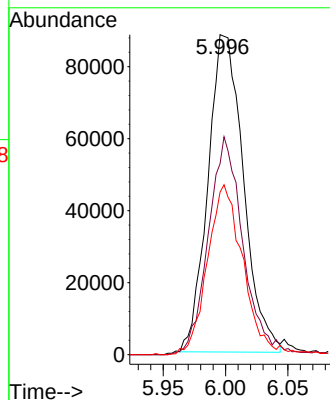
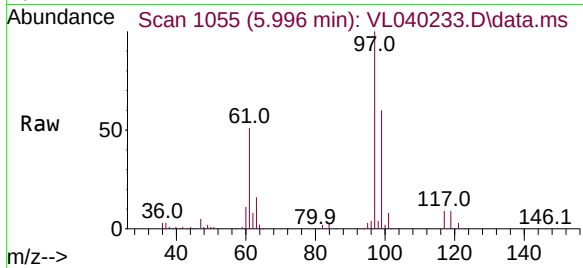




#32
 1,1,1-Trichloroethane
 Concen: 1.328 ppbv
 RT: 5.996 min Scan# 1054
 Delta R.T. 0.000 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

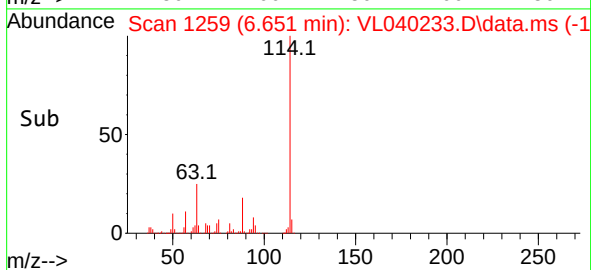
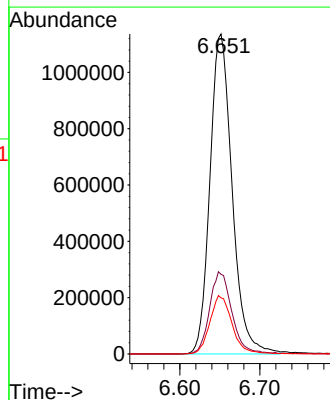
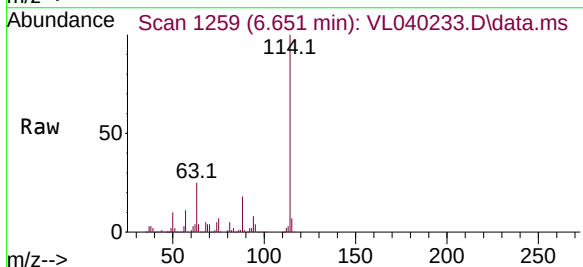
Instrument :
 MSVOA_L
 ClientSampleId :
 02212023-EFFLUENT

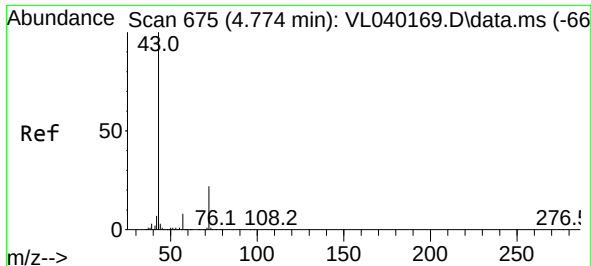
Tgt Ion: 97 Resp: 175025
 Ion Ratio Lower Upper
 97 100
 99 67.4 51.5 77.3
 61 54.1 40.6 60.8



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 6.651 min Scan# 1259
 Delta R.T. 0.003 min
 Lab File: VL040233.D
 Acq: 27 Feb 2023 13:11

Tgt Ion: 114 Resp: 2189999
 Ion Ratio Lower Upper
 114 100
 63 26.1 20.4 30.6
 88 18.3 14.3 21.5

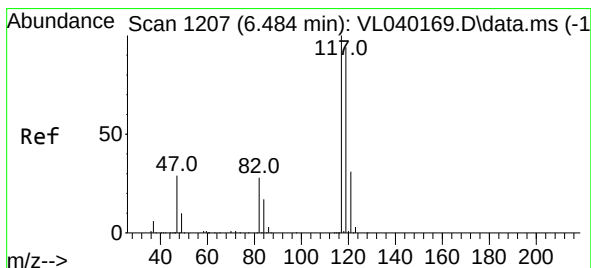
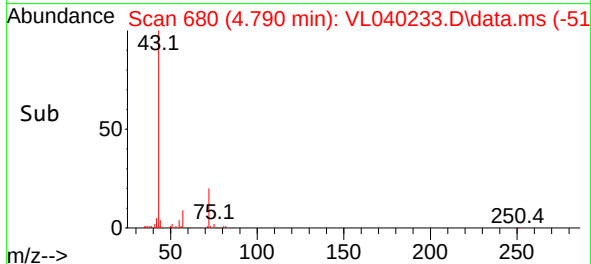
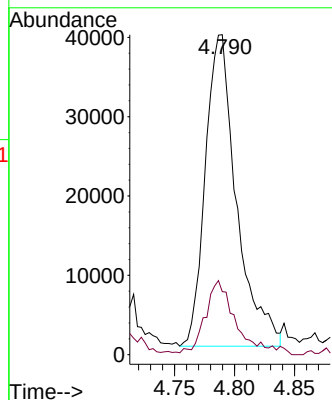
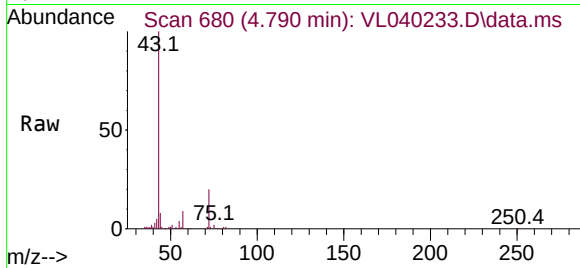




#34
2-Butanone
Concen: 0.657 ppbv
RT: 4.790 min Scan# 61
Delta R.T. 0.016 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

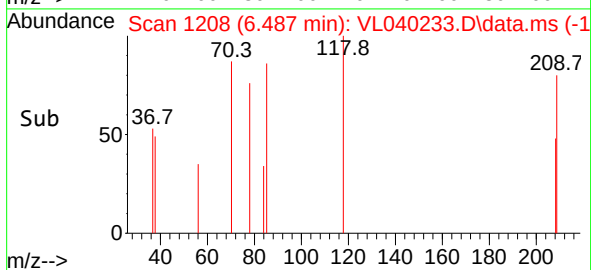
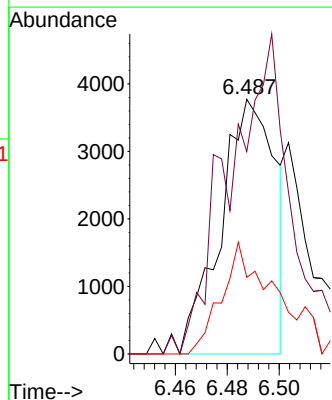
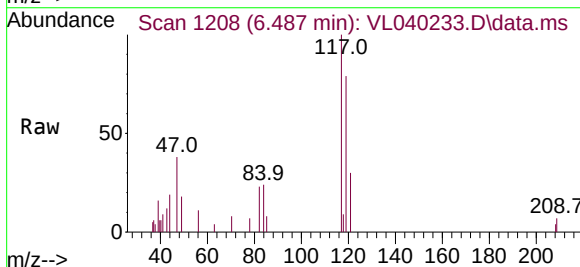
Instrument :
MSVOA_L
ClientSampleId :
02212023-EFFLUENT

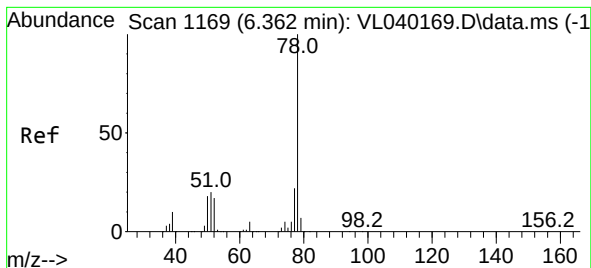
Tgt Ion: 43 Resp: 70923
Ion Ratio Lower Upper
43 100
72 24.2 17.8 26.8



#35
Carbon Tetrachloride
Concen: 0.042 ppbv
RT: 6.487 min Scan# 1208
Delta R.T. 0.000 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

Tgt Ion: 117 Resp: 5470
Ion Ratio Lower Upper
117 100
119 79.5 75.0 112.6
121 30.1 25.0 37.4





#36

Benzene

Concen: 0.170 ppbv

RT: 6.365 min Scan# 1169

Delta R.T. 0.000 min

Lab File: VL040233.D

Acq: 27 Feb 2023 13:11

Instrument :

MSVOA_L

ClientSampleId :

02212023-EFFLUENT

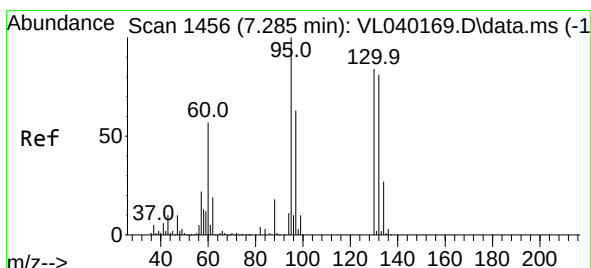
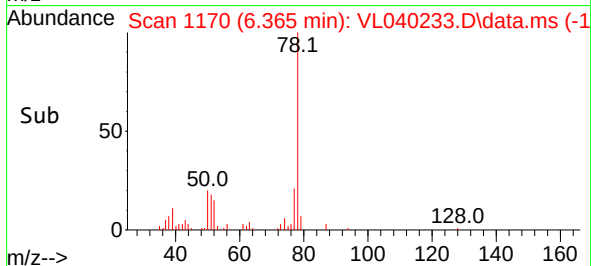
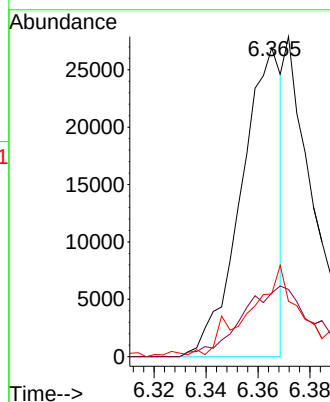
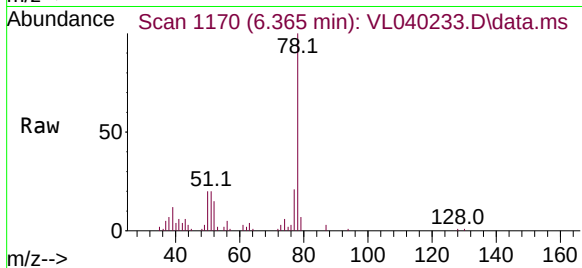
Tgt Ion: 78 Resp: 29031

Ion Ratio Lower Upper

78 100

77 20.6 17.5 26.3

50 19.2 14.6 22.0



#38

Trichloroethene

Concen: 5.118 ppbv

RT: 7.288 min Scan# 1457

Delta R.T. 0.000 min

Lab File: VL040233.D

Acq: 27 Feb 2023 13:11

Tgt Ion:130 Resp: 480645

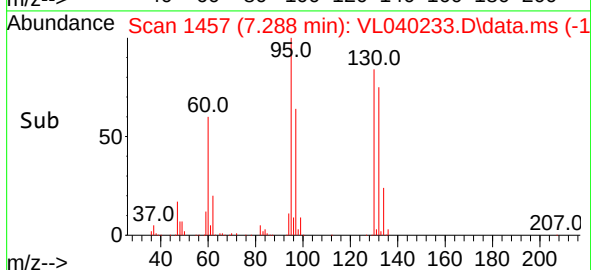
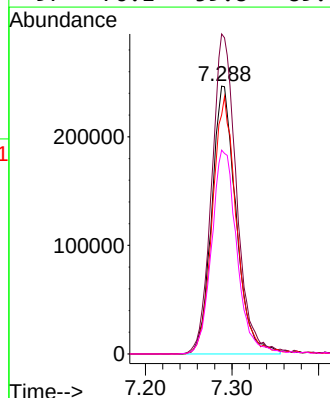
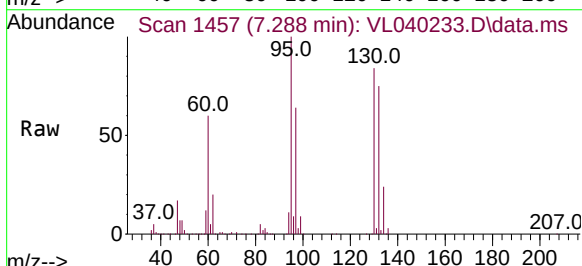
Ion Ratio Lower Upper

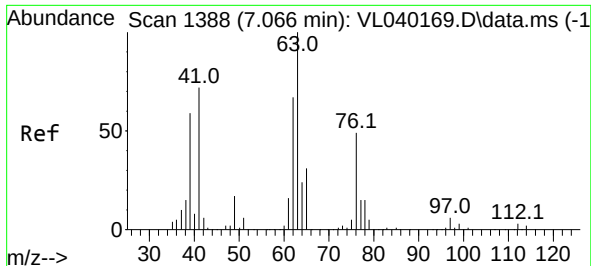
130 100

95 119.5 94.7 142.1

132 89.1 76.4 114.6

97 76.1 59.8 89.6





#39

1,2-Dichloropropane

Concen: 8.481 ppbv

RT: 6.648 min Scan# 11

Delta R.T. -0.421 min

Lab File: VL040233.D

Acq: 27 Feb 2023 13:11

Instrument :

MSVOA_1

ClientSampleId :

02212023-EFFLUENT

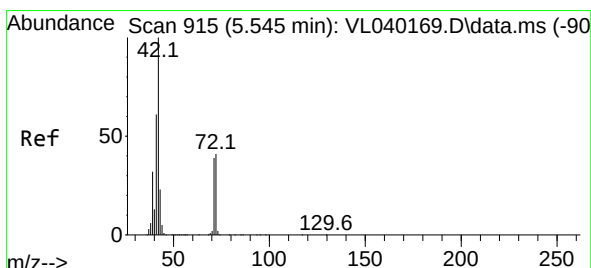
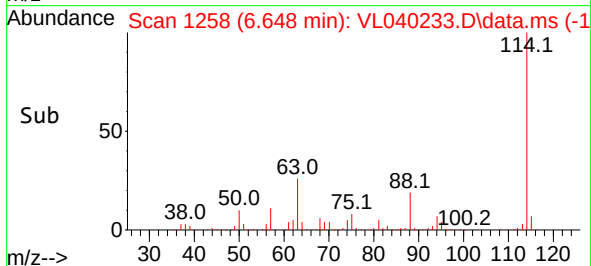
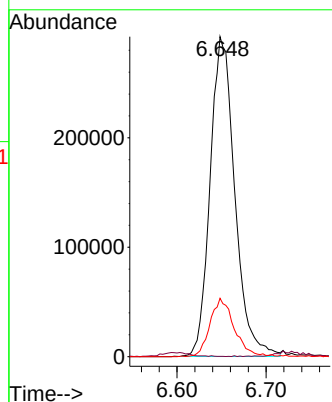
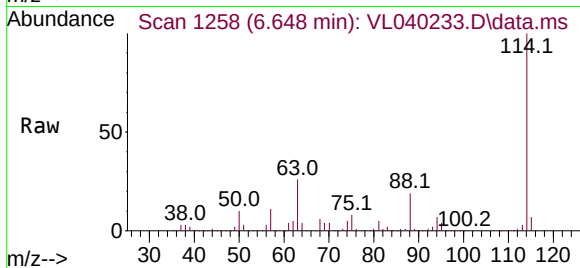
Tgt Ion: 63 Resp: 562276

Ion Ratio Lower Upper

63 100

41 0.0 57.6 86.4#

62 18.1 54.0 81.0#



#41

Tetrahydrofuran

Concen: 0.070 ppbv

RT: 5.809 min Scan# 997

Delta R.T. 0.260 min

Lab File: VL040233.D

Acq: 27 Feb 2023 13:11

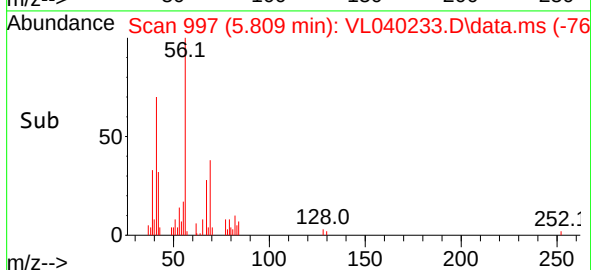
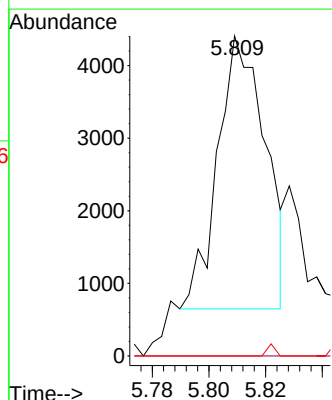
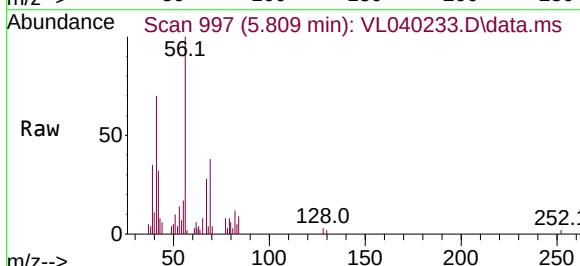
Tgt Ion: 42 Resp: 4385

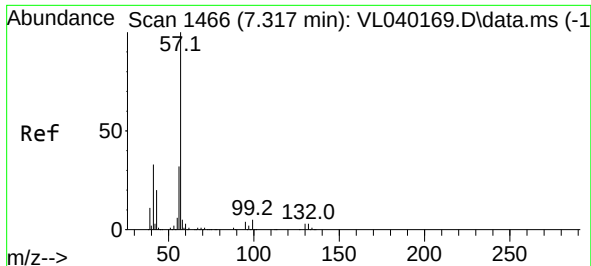
Ion Ratio Lower Upper

42 100

72 0.0 33.0 49.4#

71 0.0 31.4 47.2#

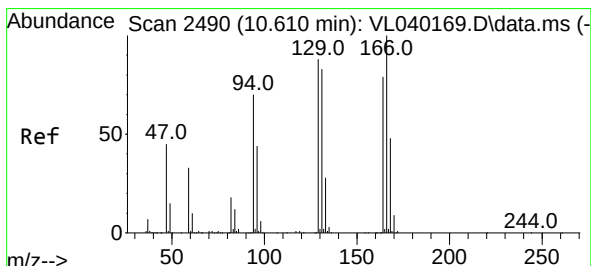
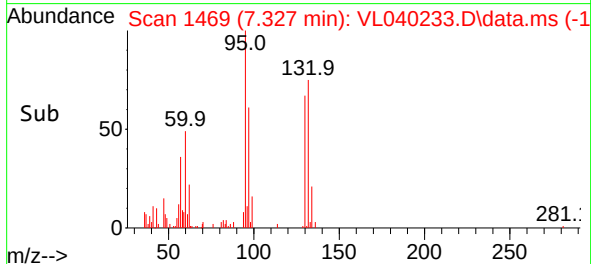
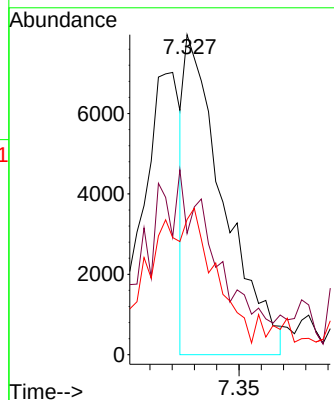
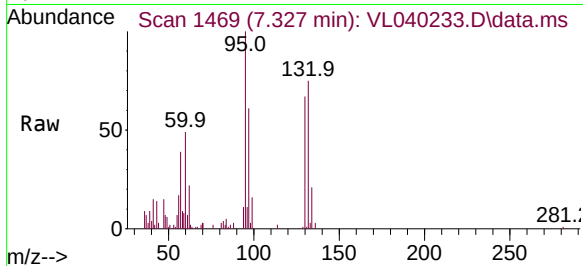




#44
2,2,4-Trimethylpentane
Concen: 0.034 ppbv
RT: 7.327 min Scan# 1466
Delta R.T. 0.006 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

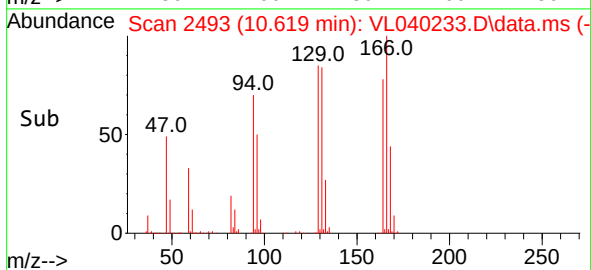
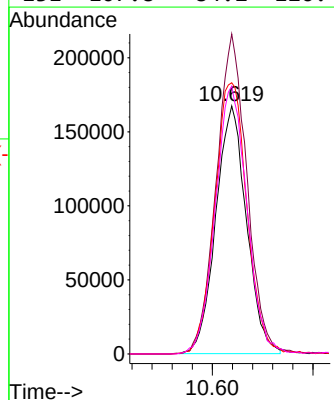
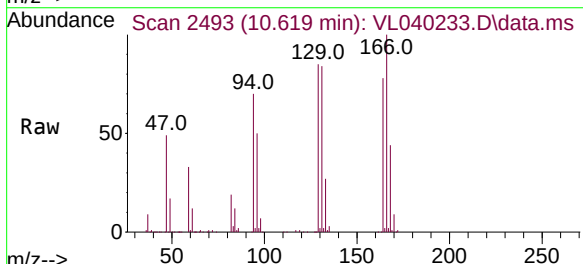
Instrument :
MSVOA_L
ClientSampleId :
02212023-EFFLUENT

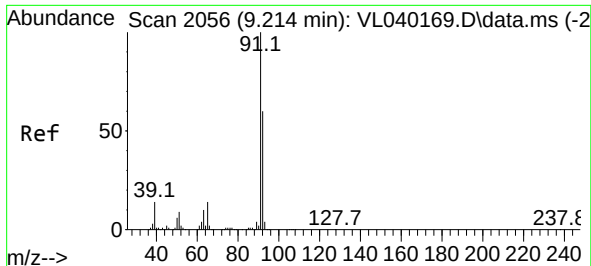
Tgt Ion: 57 Resp: 9725
Ion Ratio Lower Upper
57 100
41 145.9 26.2 39.4#
56 99.8 24.9 37.3#



#52
Tetrachloroethene
Concen: 6.636 ppbv
RT: 10.619 min Scan# 2493
Delta R.T. 0.000 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

Tgt Ion: 164 Resp: 353178
Ion Ratio Lower Upper
164 100
166 129.0 101.5 152.3
129 109.1 89.0 133.4
131 107.8 84.2 126.4

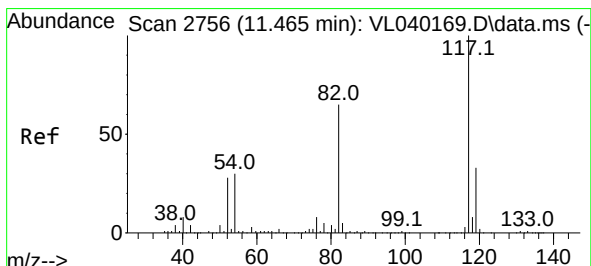
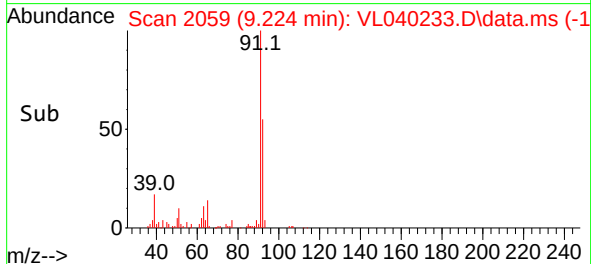
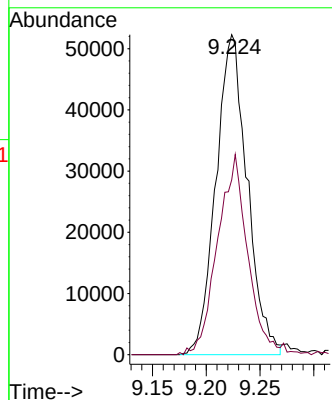
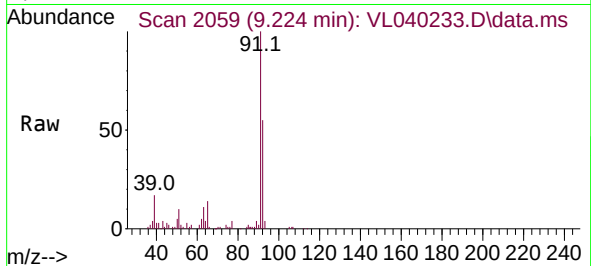




#53
Toluene
Concen: 0.578 ppbv
RT: 9.224 min Scan# 2056
Delta R.T. 0.006 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

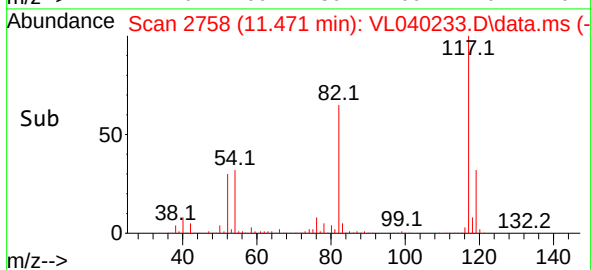
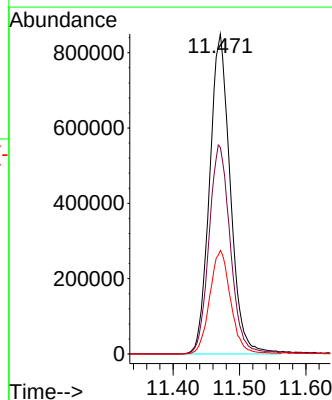
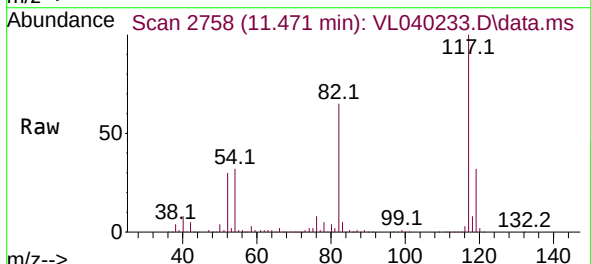
Instrument :
MSVOA_L
ClientSampleId :
02212023-EFFLUENT

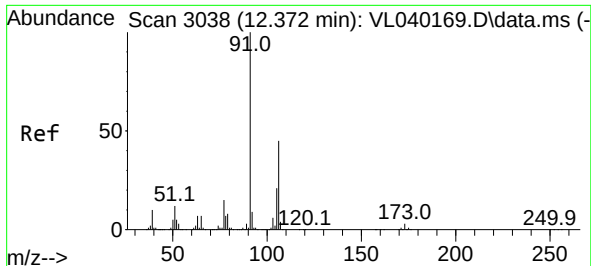
Tgt Ion: 91 Resp: 105581
Ion Ratio Lower Upper
91 100
92 61.1 48.9 73.3



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.471 min Scan# 2758
Delta R.T. 0.003 min
Lab File: VL040233.D
Acq: 27 Feb 2023 13:11

Tgt Ion: 117 Resp: 1843992
Ion Ratio Lower Upper
117 100
82 68.1 53.3 79.9
119 32.8 24.6 37.0





#59

m/p-Xylene

Concen: 0.052 ppbv

RT: 12.378 min Scan# 3038

Delta R.T. 0.003 min

Lab File: VL040233.D

Acq: 27 Feb 2023 13:11

Instrument :

MSVOA_1

ClientSampleId :

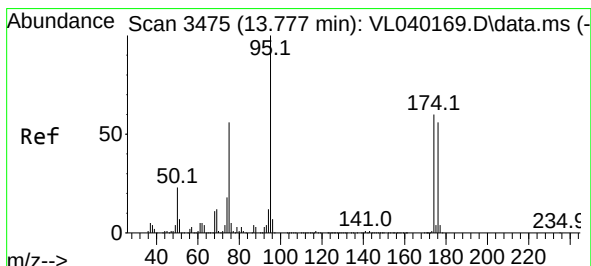
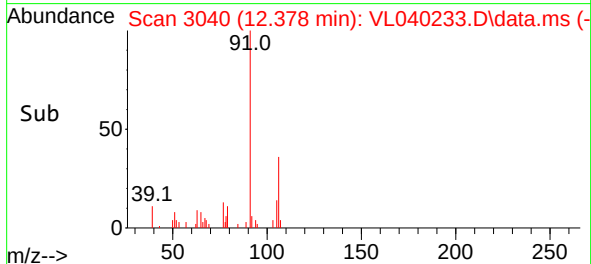
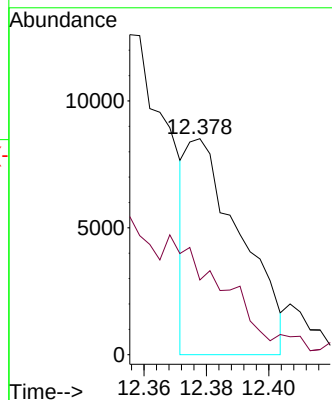
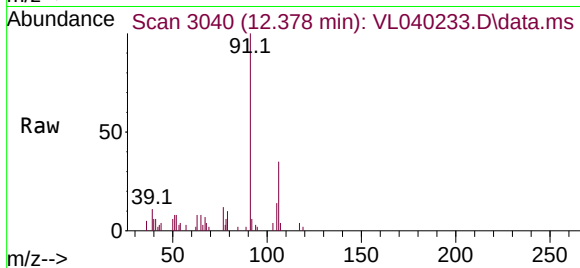
02212023-EFFLUENT

Tgt Ion: 91 Resp: 10228

Ion Ratio Lower Upper

91 100

106 0.0 34.6 51.8#



#68

1-Bromo-4-Fluorobenzene

Concen: 9.539 ppbv

RT: 13.783 min Scan# 3477

Delta R.T. 0.006 min

Lab File: VL040233.D

Acq: 27 Feb 2023 13:11

Tgt Ion: 95 Resp: 1446474

Ion Ratio Lower Upper

95 100

174 58.3 48.2 72.2

175 4.1 3.4 5.2

