

Data Path : Z:\voasrv\HPCHEM1\MSVOA_U\Data\VU110122\
 Data File : VU051656.D
 Acq On : 01 Nov 2022 16:00
 Operator : JC/MD
 Sample : N5301-03
 Misc : 25.0mL/MSVOA_U/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_U
 ClientSampleId :
 DBXC4

Quant Time: Nov 02 02:03:30 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_U\Method\SFAMUTR102822WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Wed Nov 02 01:48:00 2022
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Difluorobenzene	6.247	114	209784	5.000	ug/L	0.00
28) Chlorobenzene-d5	9.414	117	220651	5.000	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.809	152	113199	5.000	ug/L	0.00
System Monitoring Compounds						
4) Vinyl Chloride-d3	1.597	65	86019	5.444	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	108.800%
7) Chloroethane-d5	1.906	69	72965	4.428	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	88.600%
11) 1,1-Dichloroethene-d2	2.562	65	34626	6.038	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	120.800%
20) 2-Butanone-d5	4.620	46	183851	32.130	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	64.260%
24) Chloroform-d	5.060	84	169441	4.583	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	91.600%
26) 1,2-Dichloroethane-d4	5.700	65	77157	3.863	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	77.200%
32) Benzene-d6	5.726	84	317887	4.565	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	91.400%
36) 1,2-Dichloropropane-d6	6.690	67	103354	4.245	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	84.800%
41) Toluene-d8	7.896	98	301746	5.511	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	110.200%
43) trans-1,3-Dichloroprop...	8.179	79	35540	4.774	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	95.400%
46) 2-Hexanone-d5	8.629	63	163883	36.568	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	73.140%
56) 1,1,2,2-Tetrachloroeth...	10.754	84	85233	3.820	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	76.400%
66) 1,2-Dichlorobenzene-d4	12.192	152	99382	4.783	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	95.600%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.385	85	88632	3.863	ug/L	100
5) Vinyl chloride	1.601	62	116357	4.200	ug/L #	66
8) Chloroethane	1.928	64	247183	14.694	ug/L	99
10) 1,1,2-Trichloro-1,2,2-...	2.578	101	227223	12.709	ug/L	98
12) 1,1-Dichloroethene	2.578	96	46200	2.533	ug/L #	82
13) Acetone	2.620	43	406617	140.054	ug/L	99
15) Methyl Acetate	2.944	43	78937	10.385	ug/L	96
16) Methylene chloride	3.047	84	8958	0.300	ug/L	91
18) trans-1,2-Dichloroethene	3.350	96	62133	3.174	ug/L	96
19) 1,1-Dichloroethane	3.867	63	82778	2.293	ug/L	99
22) cis-1,2-Dichloroethene	4.665	96	96436	4.453	ug/L	100
23) Bromochloromethane	4.970	128	54546	5.386	ug/L	96
25) Chloroform	5.086	83	323077	8.626	ug/L	100
27) 1,2-Dichloroethane	5.793	62	47282	2.051	ug/L	97
29) 1,1,1-Trichloroethane	5.314	97	63450	2.118	ug/L	97
31) Carbon tetrachloride	5.523	117	86348	3.370	ug/L	96
34) Trichloroethene	6.542	95	51065	2.430	ug/L	96
39) cis-1,3-Dichloropropene	7.607	75	139434	4.853	ug/L	98
40) 4-Methyl-2-pentanone	7.787	43	711031	63.296	ug/L	100

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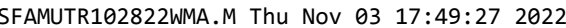
Quant Time: Nov 02 02:03:30 2022
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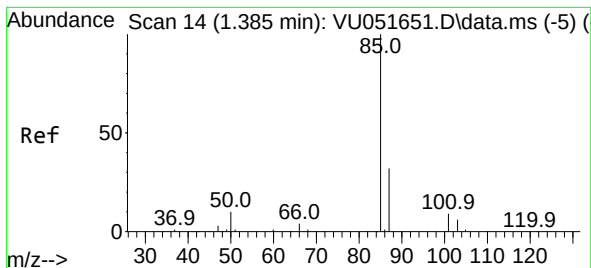
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

44) trans-1,3-Dichloropropene	8.208	75	58185	2.423	ug/L	100
45) 1,1,2-Trichloroethane	8.398	97	34058	2.075	ug/L	96
47) Tetrachloroethene	8.552	164	54582	3.392	ug/L	96
50) 1,2-Dibromoethane	8.922	107	76491	5.166	ug/L	97
51) Chlorobenzene	9.446	112	358487	6.369	ug/L	98
57) 1,1,2,2-Tetrachloroethane	10.780	83	32800	1.612	ug/L	98
59) Bromoform	10.288	173	31034	2.967	ug/L	98
63) 1,2,4-Trimethylbenzene	11.468	105	269988	4.209	ug/L	99
64) 1,3-Dichlorobenzene	11.745	146	129597	3.150	ug/L	98
65) 1,4-Dichlorobenzene	11.835	146	84517	2.049	ug/L	98
70) 1,2,4-trichlorobenzene	13.838	180	109043	4.844	ug/L	98
72) 1,2,3-Trichlorobenzene	14.327	180	62745	2.760	ug/L	99

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

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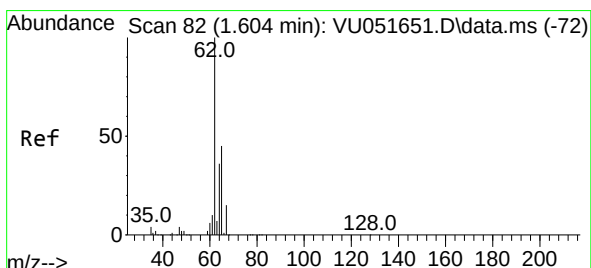
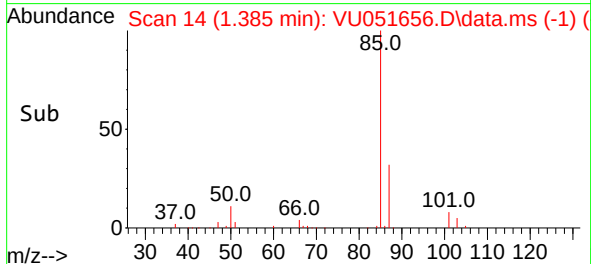
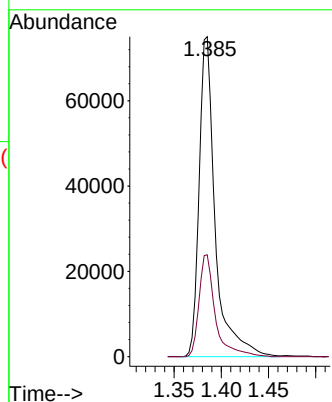
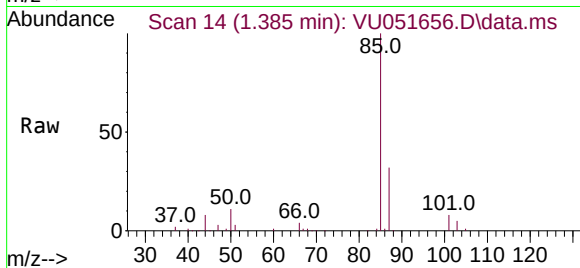




#2
Dichlorodifluoromethane
Concen: 3.863 ug/L
RT: 1.385 min Scan# 14
Delta R.T. 0.000 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

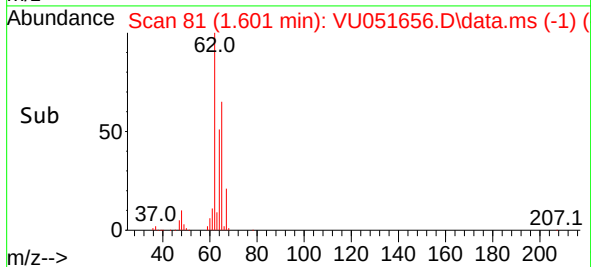
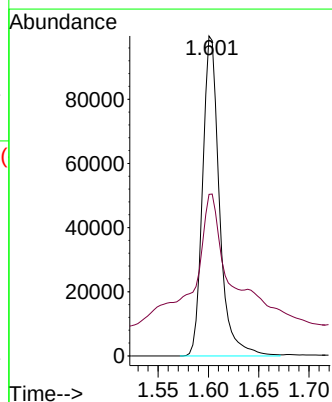
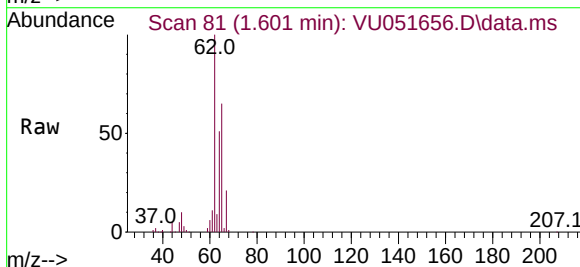
Instrument :
MSVOA_U
ClientSampleId :
DBXC4

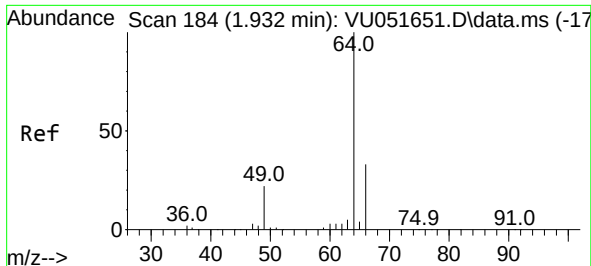
Tgt Ion: 85 Resp: 88632
Ion Ratio Lower Upper
85 100
87 32.2 25.7 38.5



#5
Vinyl chloride
Concen: 4.200 ug/L
RT: 1.601 min Scan# 81
Delta R.T. -0.003 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

Tgt Ion: 62 Resp: 116357
Ion Ratio Lower Upper
62 100
64 50.5 22.1 41.1#

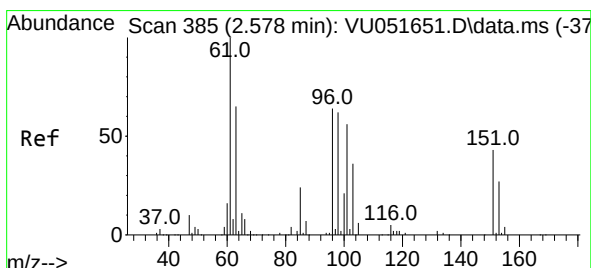
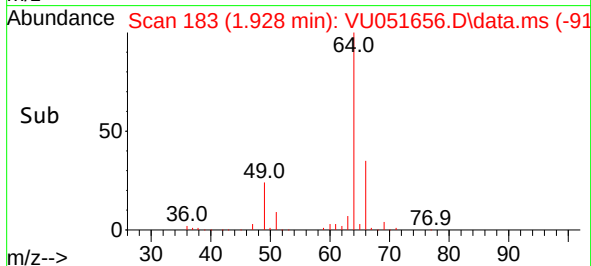
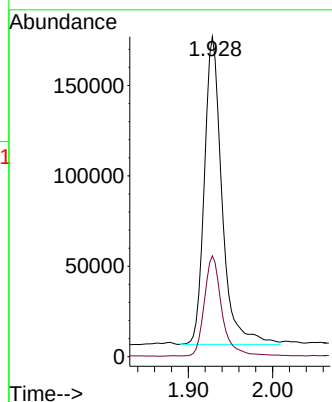
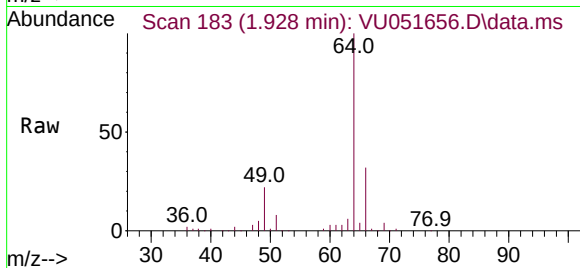




#8
Chloroethane
Concen: 14.694 ug/L
RT: 1.928 min Scan# 184
Delta R.T. -0.003 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

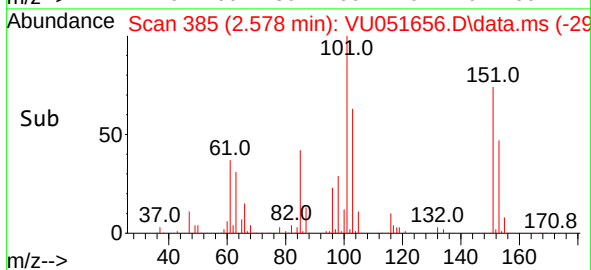
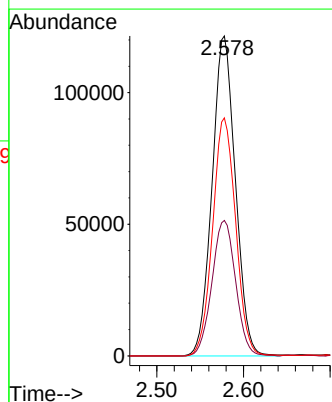
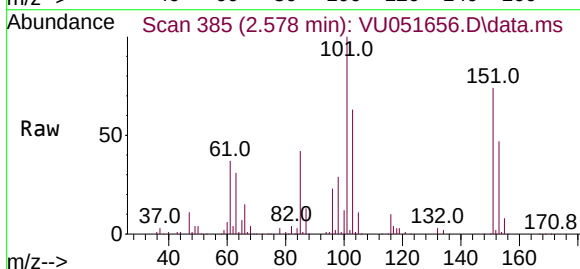
Instrument :
MSVOA_U
ClientSampleId :
DBXC4

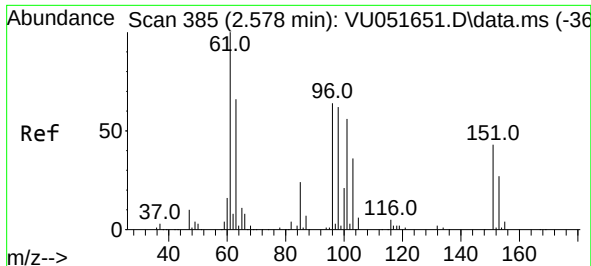
Tgt Ion: 64 Resp: 247183
Ion Ratio Lower Upper
64 100
66 31.5 22.3 41.5



#10
1,1,2-Trichloro-1,2,2-trifluoroethane
Concen: 12.709 ug/L
RT: 2.578 min Scan# 385
Delta R.T. 0.000 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

Tgt Ion: 101 Resp: 227223
Ion Ratio Lower Upper
101 100
85 42.9 35.6 53.4
151 73.6 59.6 89.4





#12

1,1-Dichloroethene

Concen: 2.533 ug/L

RT: 2.578 min Scan# 385

Delta R.T. 0.000 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

Instrument :

MSVOA_U

ClientSampleId :

DBXC4

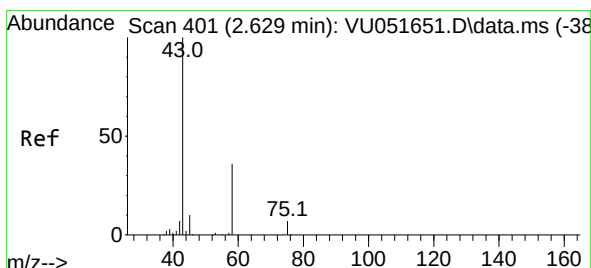
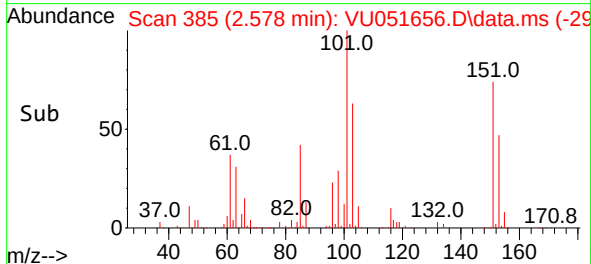
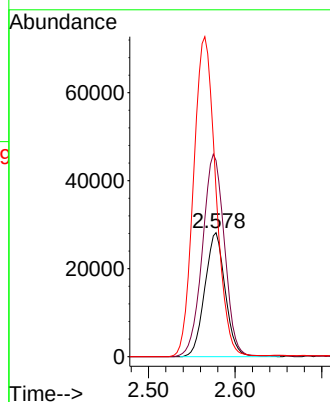
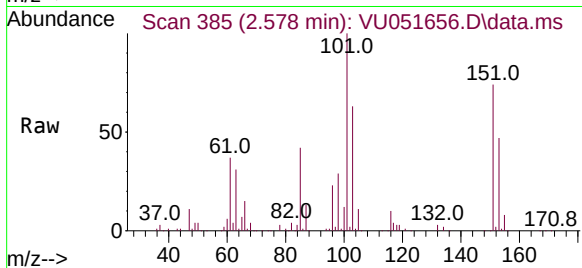
Tgt Ion: 96 Resp: 46200

Ion Ratio Lower Upper

96 100

61 158.2 108.8 202.0

63 134.4 64.9 120.5#



#13

Acetone

Concen: 140.054 ug/L

RT: 2.620 min Scan# 398

Delta R.T. -0.010 min

Lab File: VU051656.D

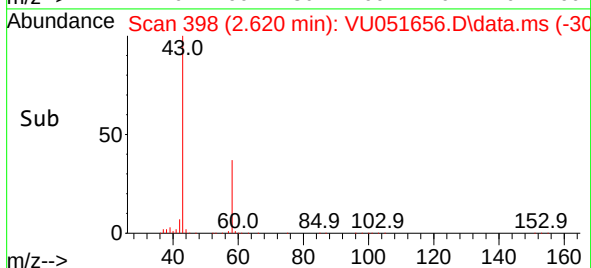
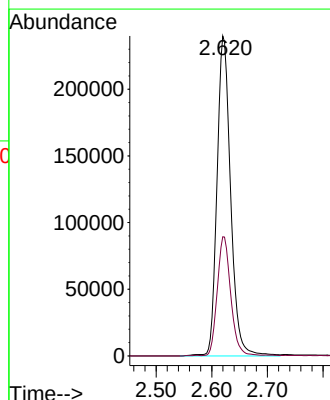
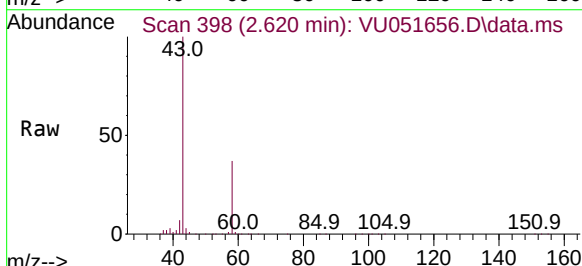
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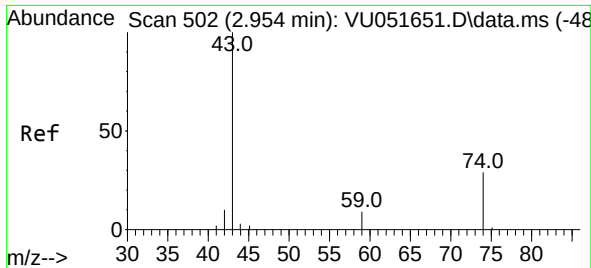
Tgt Ion: 43 Resp: 406617

Ion Ratio Lower Upper

43 100

58 36.6 0.0 73.8

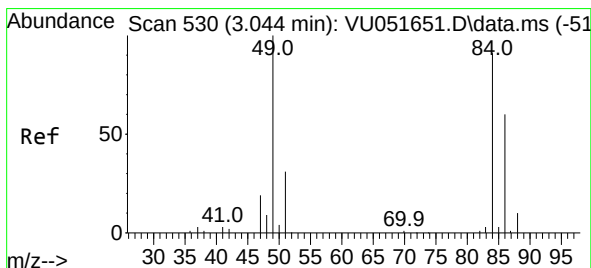
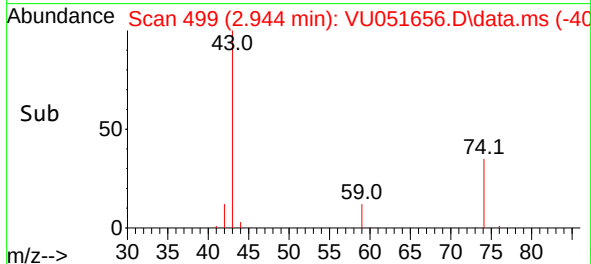
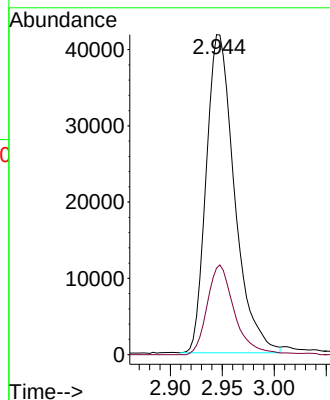
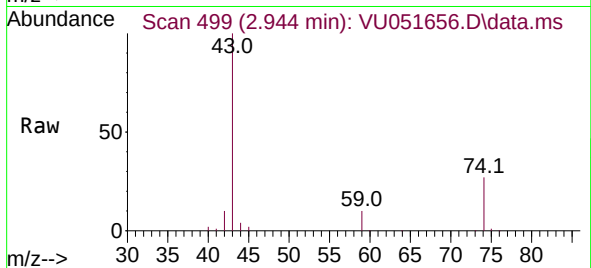




#15
Methyl Acetate
Concen: 10.385 ug/L
RT: 2.944 min Scan# 499
Delta R.T. -0.010 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

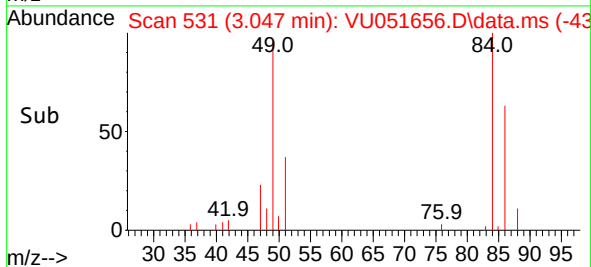
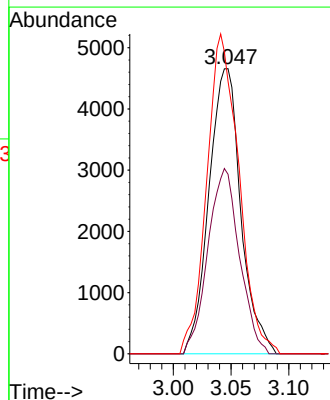
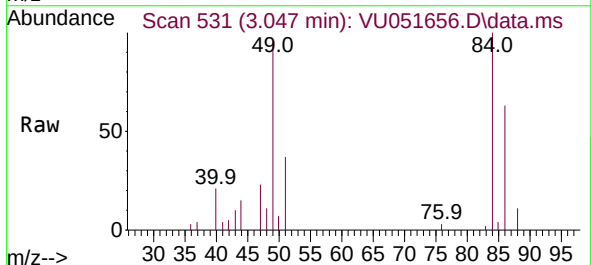
Instrument :
MSVOA_U
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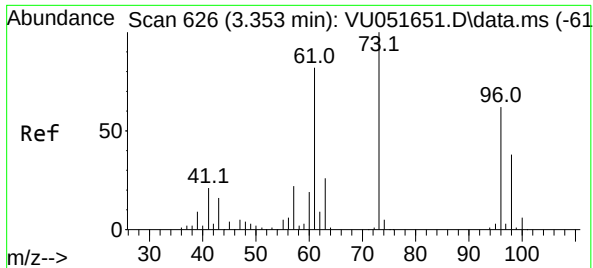
Tgt Ion: 43 Resp: 78937
Ion Ratio Lower Upper
43 100
74 27.2 20.2 30.4



#16
Methylene chloride
Concen: 0.300 ug/L
RT: 3.047 min Scan# 531
Delta R.T. 0.003 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

Tgt Ion: 84 Resp: 8958
Ion Ratio Lower Upper
84 100
86 62.9 46.3 85.9
49 95.6 76.0 141.2

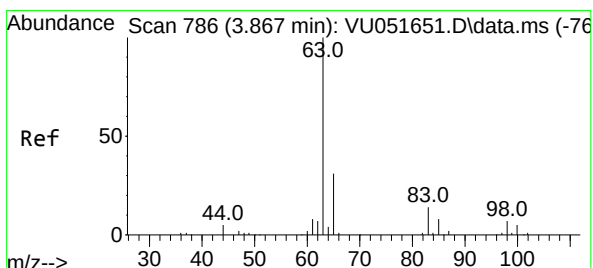
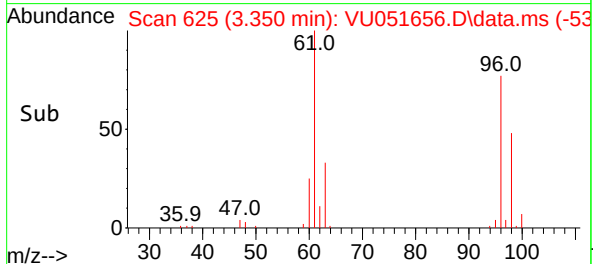
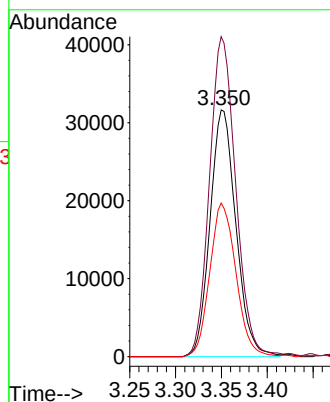
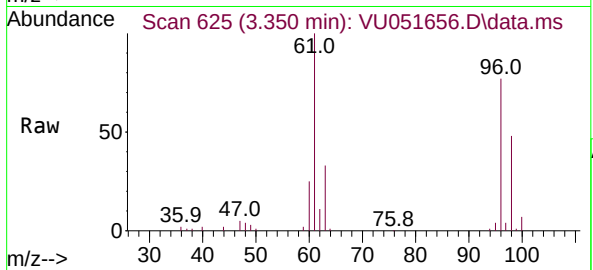




#18
trans-1,2-Dichloroethene
Concen: 3.174 ug/L
RT: 3.350 min Scan# 61
Delta R.T. -0.003 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

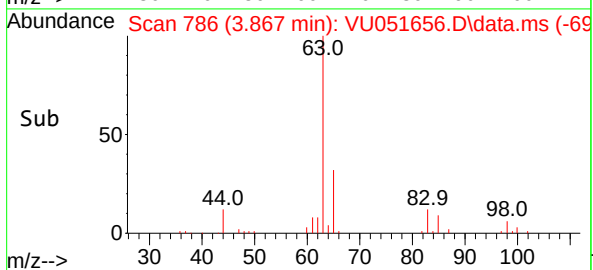
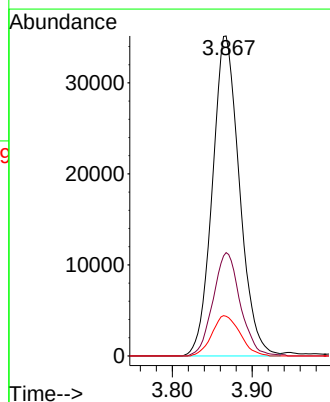
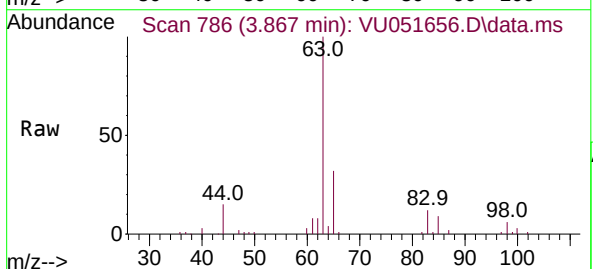
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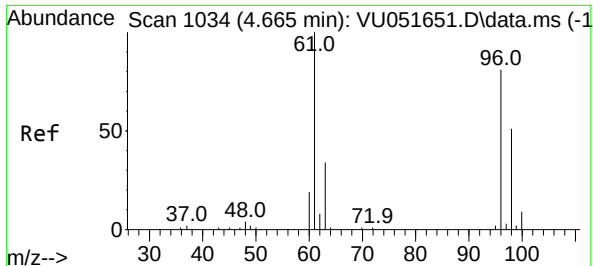
Tgt Ion: 96 Resp: 62133
Ion Ratio Lower Upper
96 100
61 129.7 94.7 175.9
98 62.2 44.2 82.0



#19
1,1-Dichloroethane
Concen: 2.293 ug/L
RT: 3.867 min Scan# 786
Delta R.T. 0.000 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

Tgt Ion: 63 Resp: 82778
Ion Ratio Lower Upper
63 100
65 32.3 22.7 42.1
83 12.4 9.2 17.0





#22

cis-1,2-Dichloroethene

Concen: 4.453 ug/L

RT: 4.665 min Scan# 1034

Delta R.T. 0.000 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

Instrument :

MSVOA_U

ClientSampleId :

DBXC4

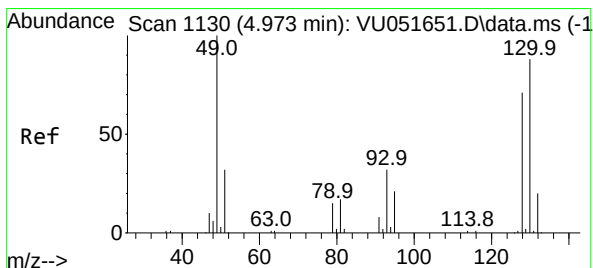
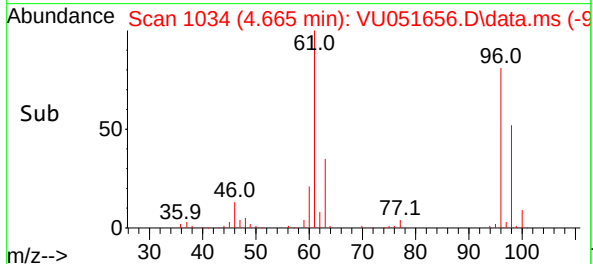
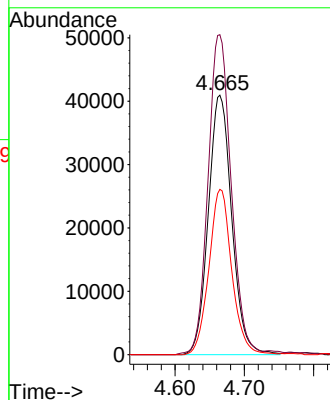
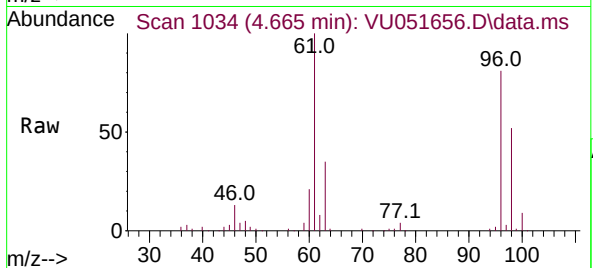
Tgt Ion: 96 Resp: 96436

Ion Ratio Lower Upper

96 100

61 123.3 86.4 160.4

98 63.7 44.2 82.2



#23

Bromochloromethane

Concen: 5.386 ug/L

RT: 4.970 min Scan# 1129

Delta R.T. -0.003 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

Tgt Ion:128 Resp: 54546

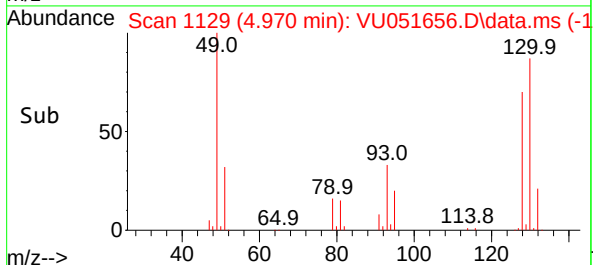
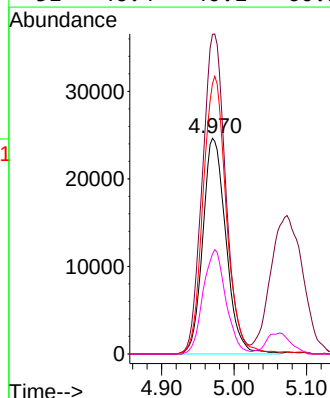
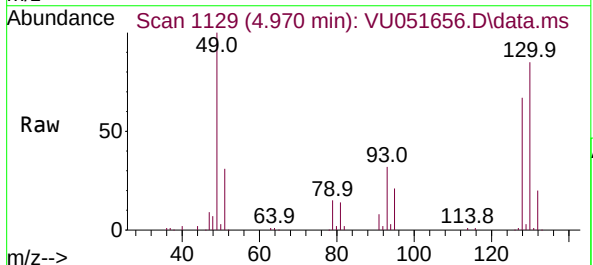
Ion Ratio Lower Upper

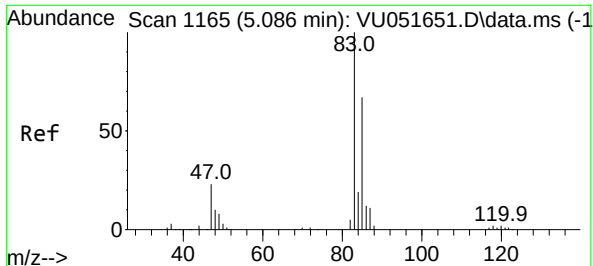
128 100

49 148.3 105.5 195.9

130 125.4 93.5 173.7

51 46.4 40.1 60.1





#25

Chloroform

Concen: 8.626 ug/L

RT: 5.086 min Scan# 1165

Delta R.T. 0.000 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

Instrument :

MSVOA_U

ClientSampleId :

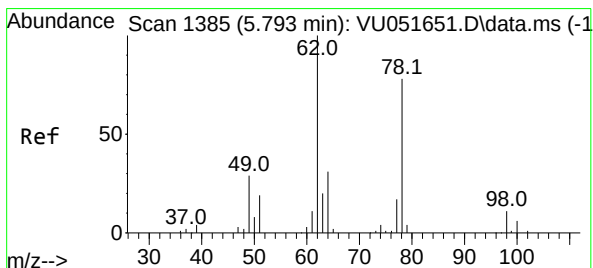
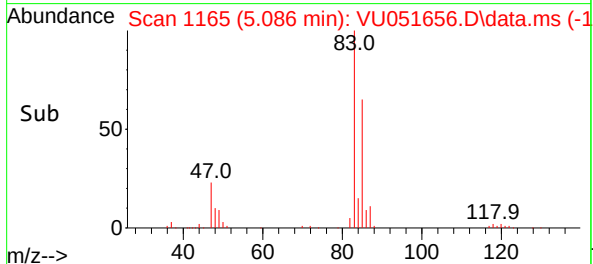
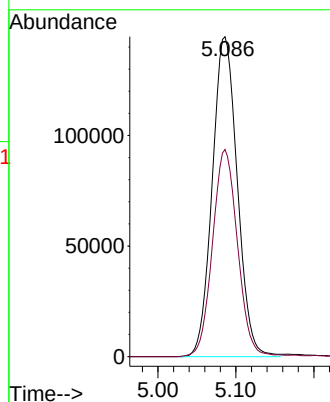
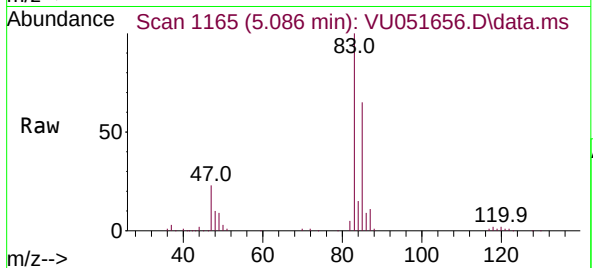
DBXC4

Tgt Ion: 83 Resp: 323077

Ion Ratio Lower Upper

83 100

85 64.7 45.2 84.0



#27

1,2-Dichloroethane

Concen: 2.051 ug/L

RT: 5.793 min Scan# 1385

Delta R.T. 0.000 min

Lab File: VU051656.D

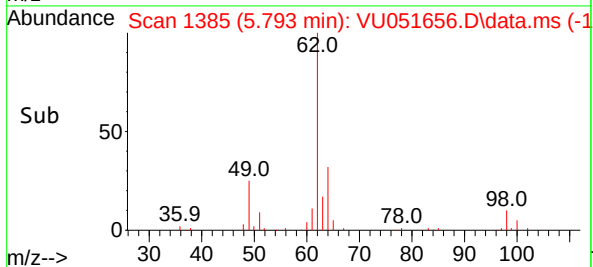
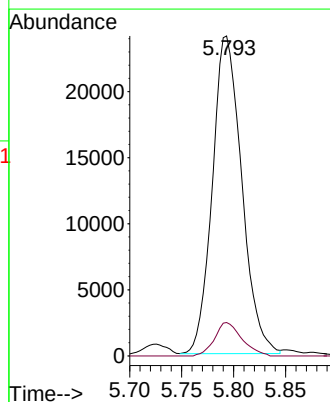
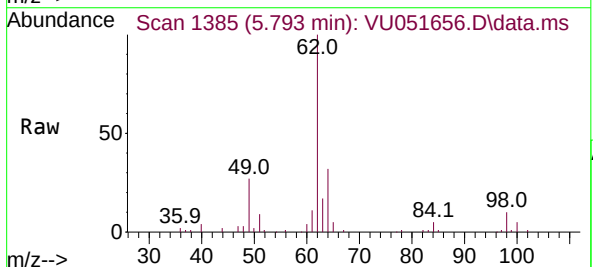
Acq: 01 Nov 2022 16:00

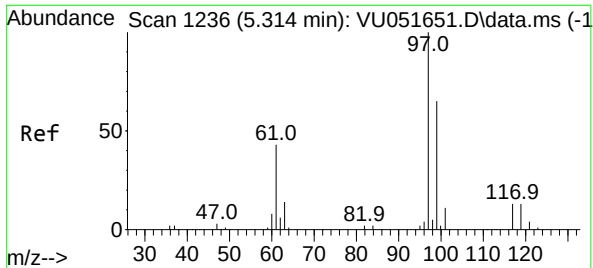
Tgt Ion: 62 Resp: 47282

Ion Ratio Lower Upper

62 100

98 10.4 7.4 11.0





#29

1,1,1-Trichloroethane

Concen: 2.118 ug/L

RT: 5.314 min Scan# 1236

Delta R.T. 0.000 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

Instrument :

MSVOA_U

ClientSampleId :

DBXC4

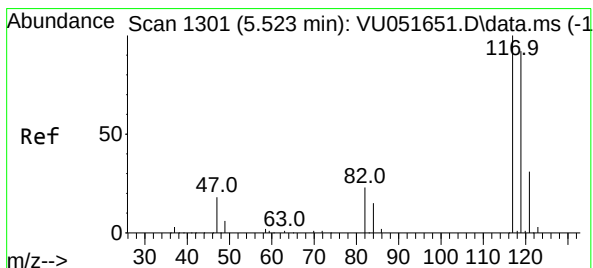
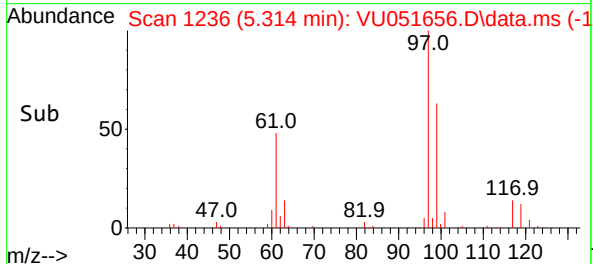
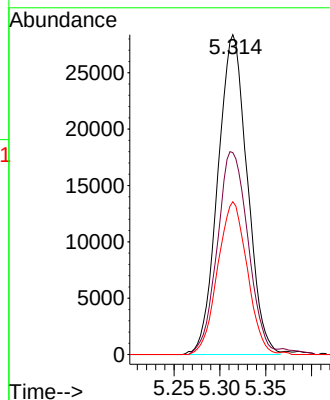
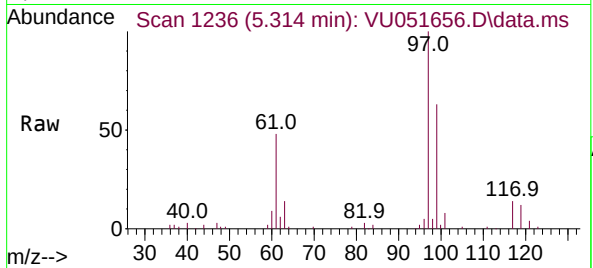
Tgt Ion: 97 Resp: 63450

Ion Ratio Lower Upper

97 100

99 66.3 51.1 76.7

61 47.9 37.4 56.0



#31

Carbon tetrachloride

Concen: 3.370 ug/L

RT: 5.523 min Scan# 1301

Delta R.T. 0.000 min

Lab File: VU051656.D

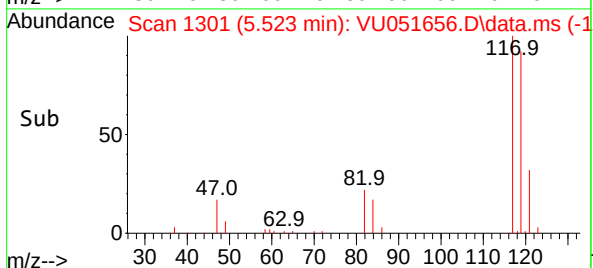
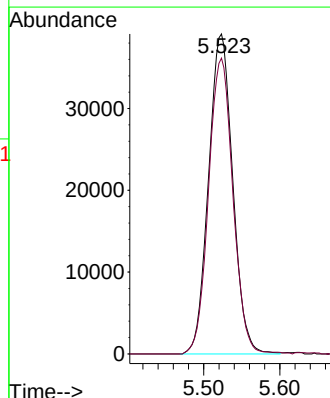
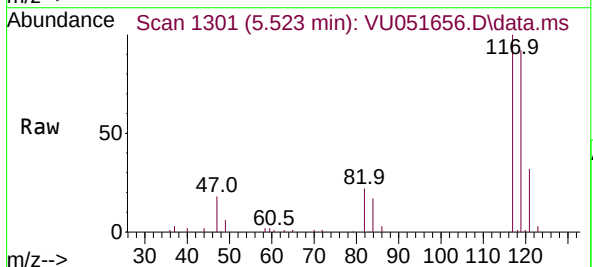
Acq: 01 Nov 2022 16:00

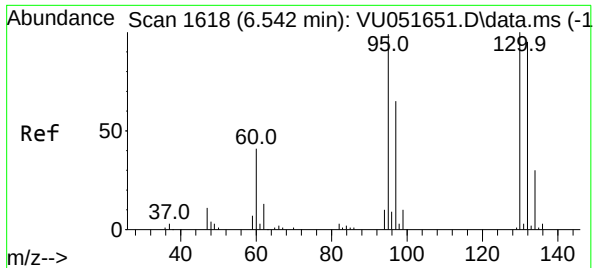
Tgt Ion: 117 Resp: 86348

Ion Ratio Lower Upper

117 100

119 92.9 77.5 116.3

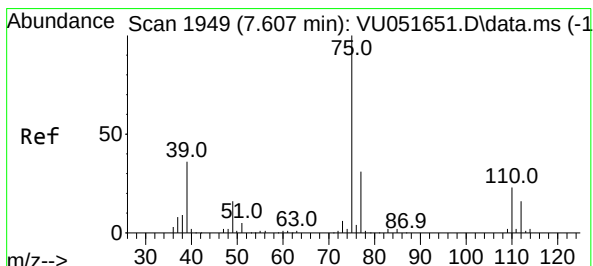
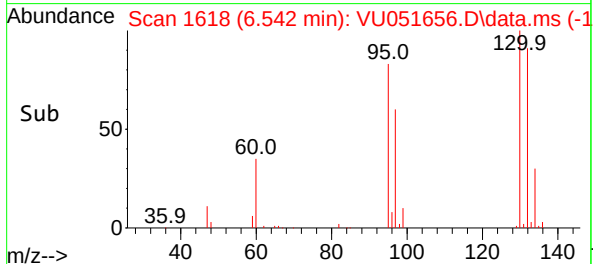
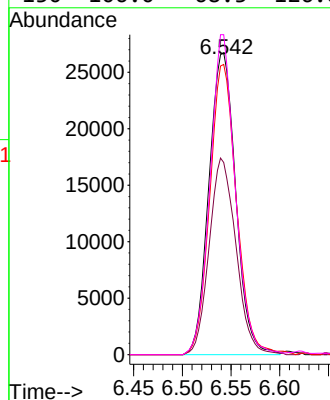
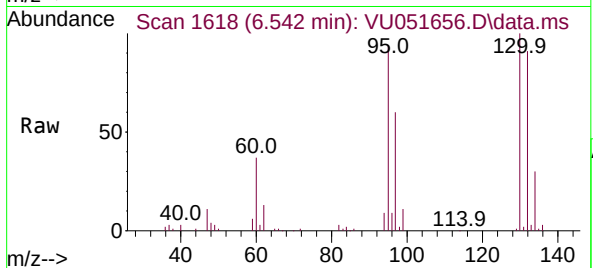




#34
Trichloroethene
Concen: 2.430 ug/L
RT: 6.542 min Scan# 1618
Delta R.T. 0.000 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

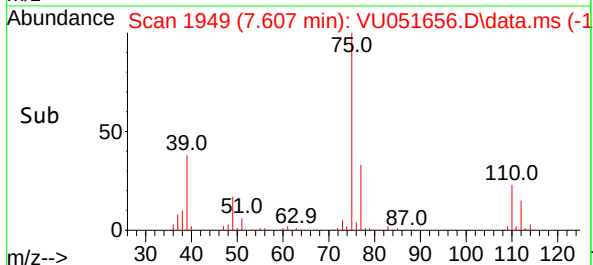
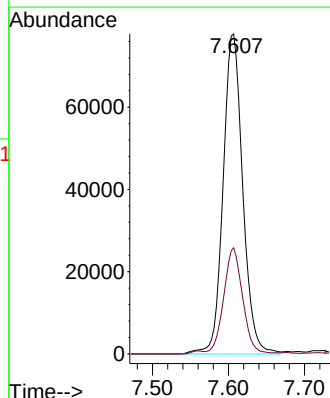
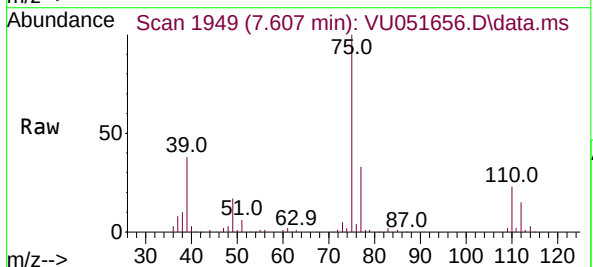
Instrument :
MSVOA_U
ClientSampleId :
DBXC4

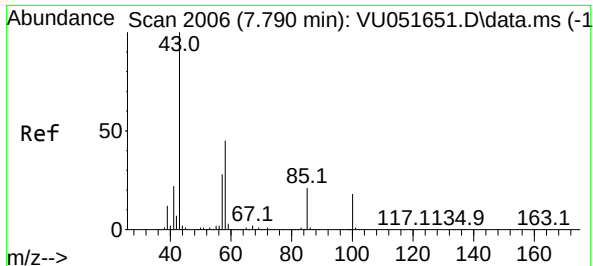
Tgt Ion: 95 Resp: 51065
Ion Ratio Lower Upper
95 100
97 63.6 45.2 84.0
132 96.1 66.5 123.5
130 106.0 68.3 126.8



#39
cis-1,3-Dichloropropene
Concen: 4.853 ug/L
RT: 7.607 min Scan# 1949
Delta R.T. 0.000 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

Tgt Ion: 75 Resp: 139434
Ion Ratio Lower Upper
75 100
77 33.1 22.5 41.9





#40

4-Methyl-2-pentanone

Concen: 63.296 ug/L

RT: 7.787 min Scan# 2005

Delta R.T. -0.003 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

Instrument :

MSVOA_U

ClientSampleId :

DBXC4

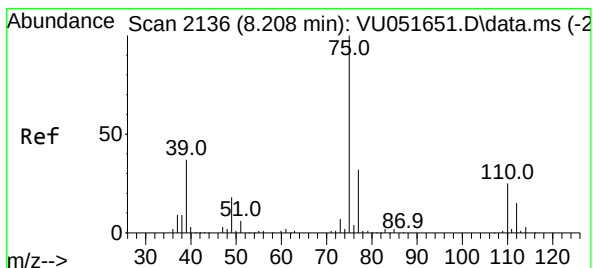
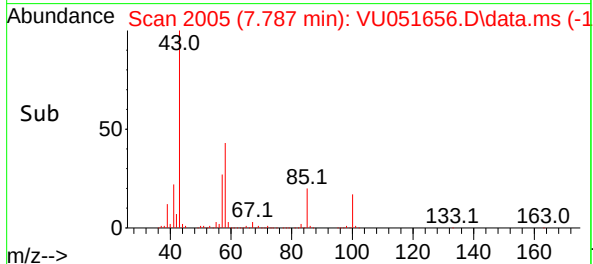
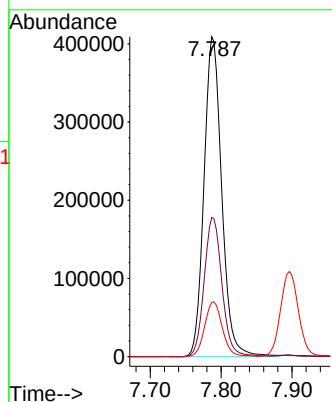
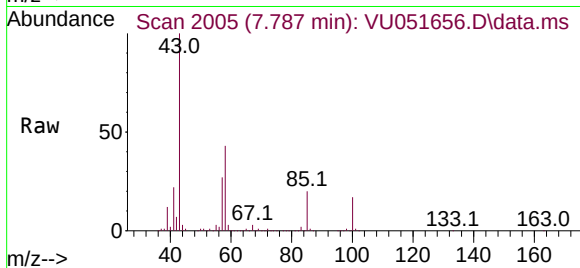
Tgt Ion: 43 Resp: 711031

Ion Ratio Lower Upper

43 100

58 43.6 35.0 52.6

100 17.1 13.4 20.0



#44

trans-1,3-Dichloropropene

Concen: 2.423 ug/L

RT: 8.208 min Scan# 2136

Delta R.T. 0.000 min

Lab File: VU051656.D

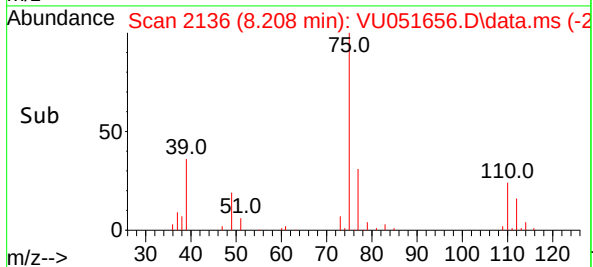
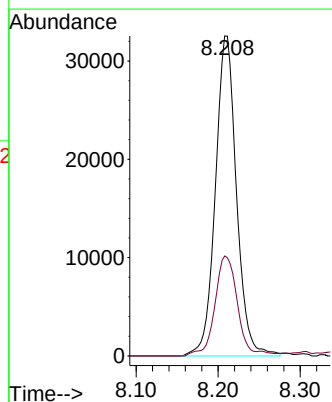
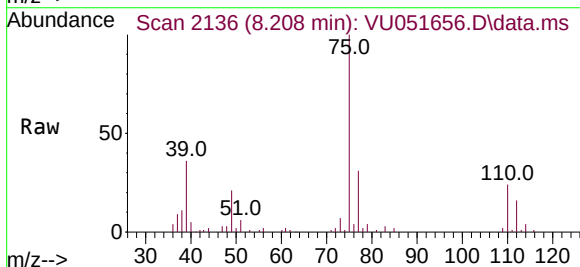
Acq: 01 Nov 2022 16:00

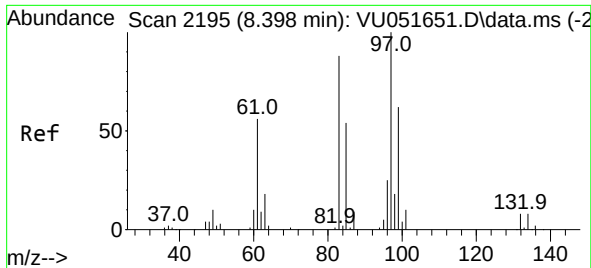
Tgt Ion: 75 Resp: 58185

Ion Ratio Lower Upper

75 100

77 31.2 21.8 40.6

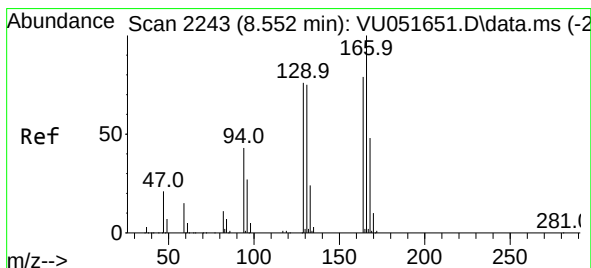
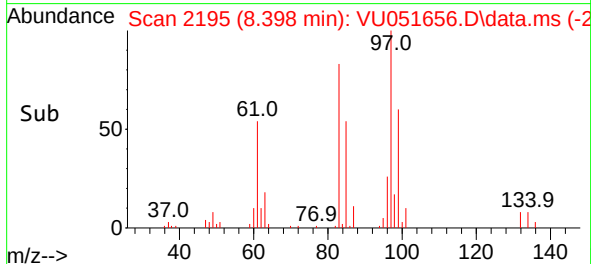
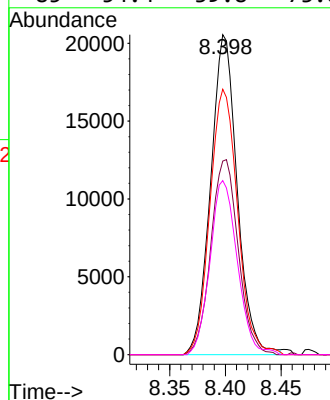
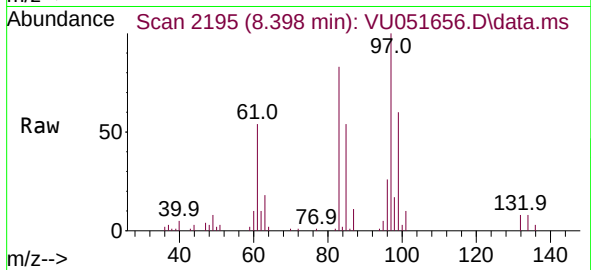




#45
1,1,2-Trichloroethane
Concen: 2.075 ug/L
RT: 8.398 min Scan# 2195
Delta R.T. 0.000 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

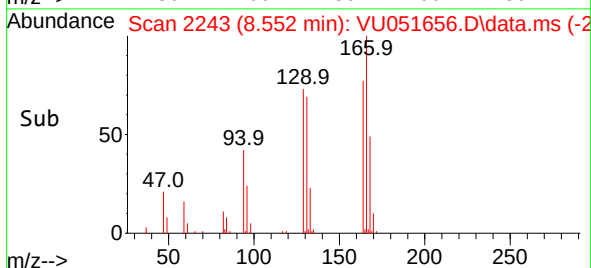
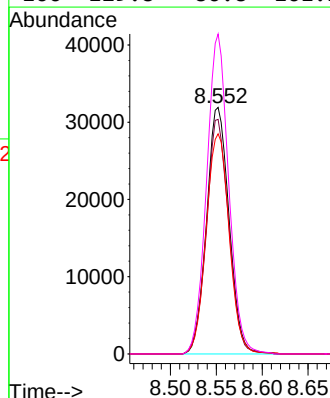
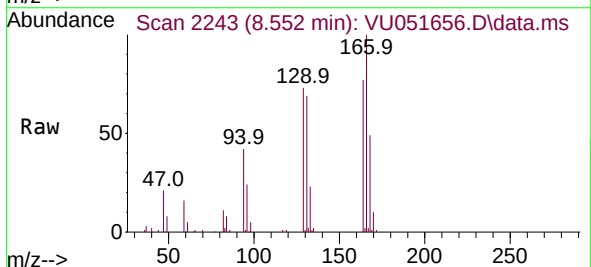
Instrument :
MSVOA_U
ClientSampleId :
DBXC4

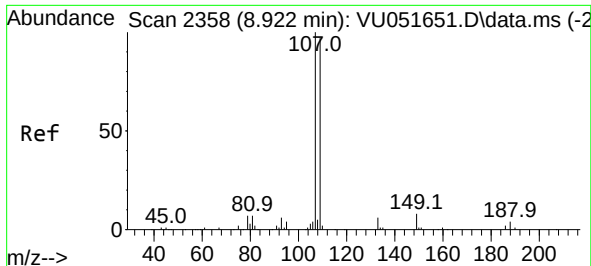
Tgt Ion:	97	Resp:	34058
Ion	Ratio	Lower	Upper
97	100		
99	60.5	43.4	80.6
83	82.9	61.3	113.9
85	54.4	39.8	73.8



#47
Tetrachloroethene
Concen: 3.392 ug/L
RT: 8.552 min Scan# 2243
Delta R.T. 0.000 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

Tgt Ion:	164	Resp:	54582
Ion	Ratio	Lower	Upper
164	100		
129	95.1	64.0	118.8
131	89.3	60.7	112.7
166	129.8	86.8	161.2





#50

1,2-Dibromoethane

Concen: 5.166 ug/L

RT: 8.922 min Scan# 2358

Delta R.T. 0.000 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

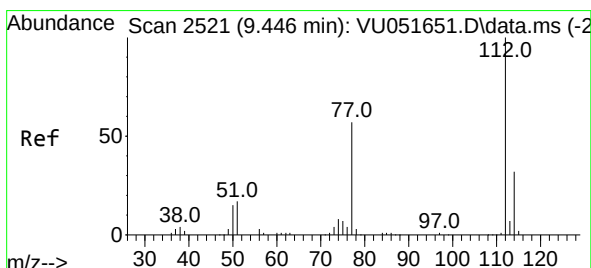
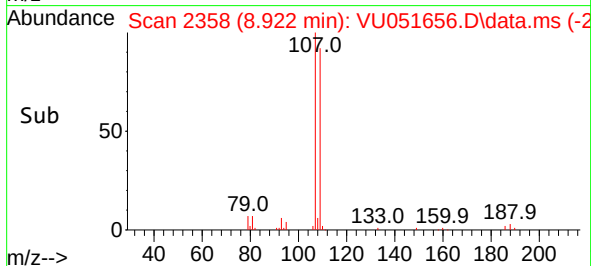
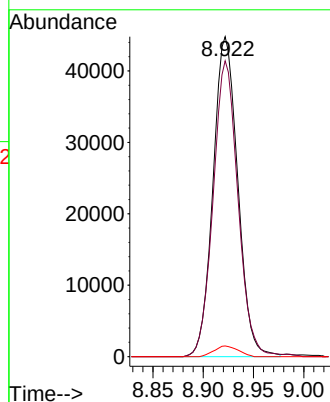
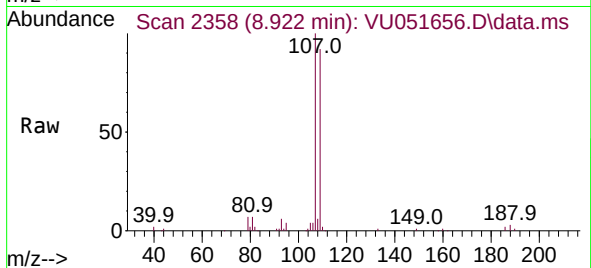
Instrument :

MSVOA_U

ClientSampleId :

DBXC4

Tgt Ion:107	Resp:	76491
Ion Ratio	Lower	Upper
107	100	
109	92.4	63.0 117.0
188	3.3	3.0 4.4



#51

Chlorobenzene

Concen: 6.369 ug/L

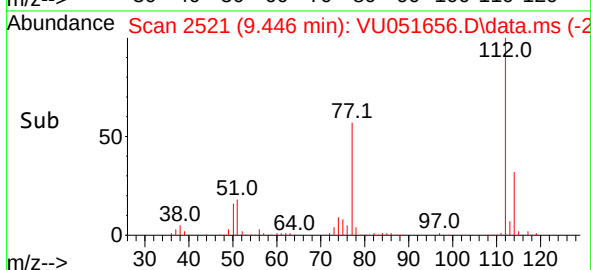
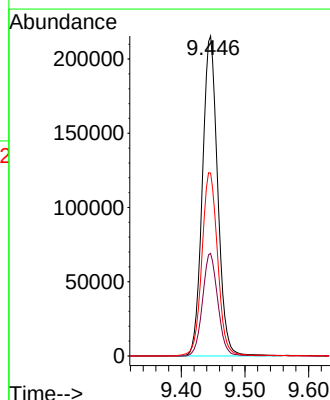
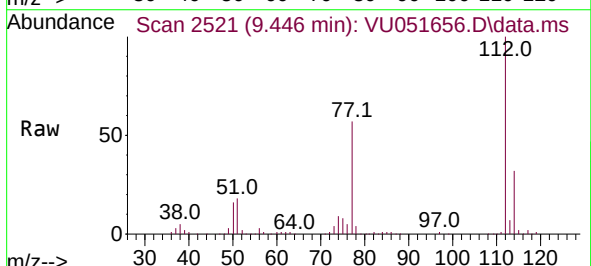
RT: 9.446 min Scan# 2521

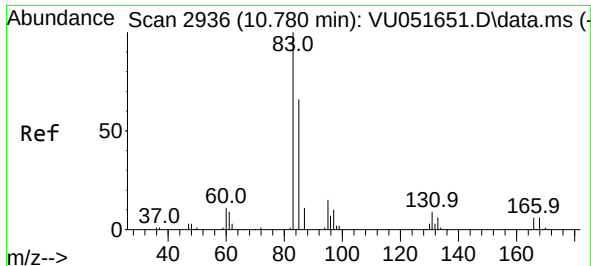
Delta R.T. 0.000 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

Tgt Ion:112	Resp:	358487
Ion Ratio	Lower	Upper
112	100	
114	32.0	22.0 40.8
77	57.1	46.7 70.1





#57

1,1,2,2-Tetrachloroethane

Concen: 1.612 ug/L

RT: 10.780 min Scan# 2936

Delta R.T. 0.000 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

Instrument :

MSVOA_U

ClientSampleId :

DBXC4

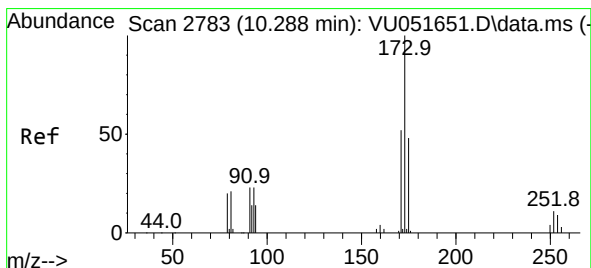
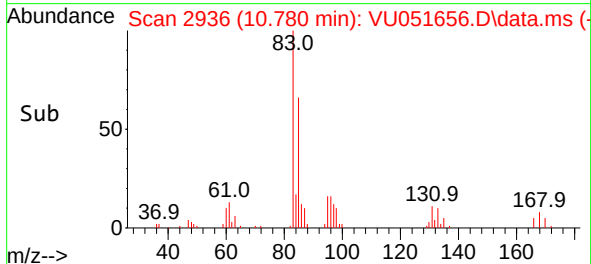
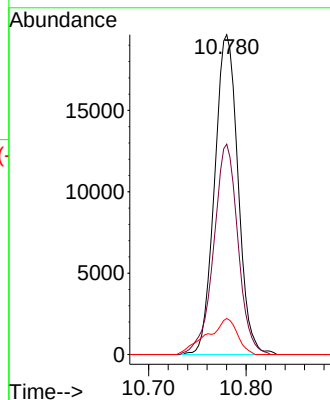
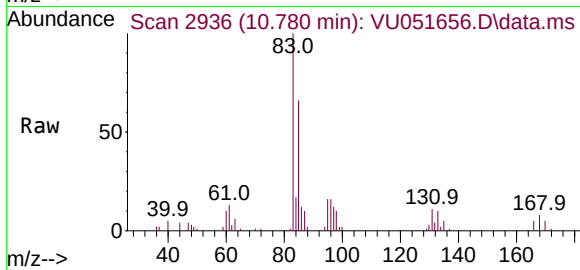
Tgt Ion: 83 Resp: 32800

Ion Ratio Lower Upper

83 100

85 65.8 44.9 83.5

131 11.3 7.8 11.8



#59

Bromoform

Concen: 2.967 ug/L

RT: 10.288 min Scan# 2783

Delta R.T. 0.000 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

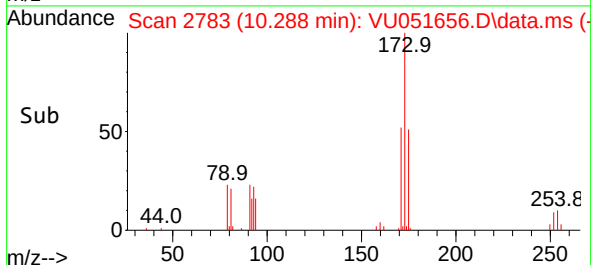
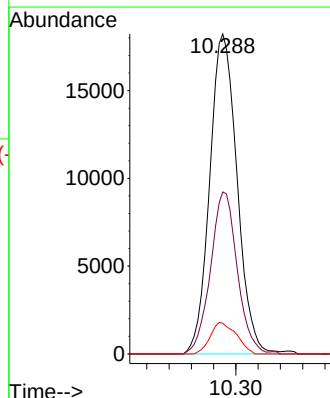
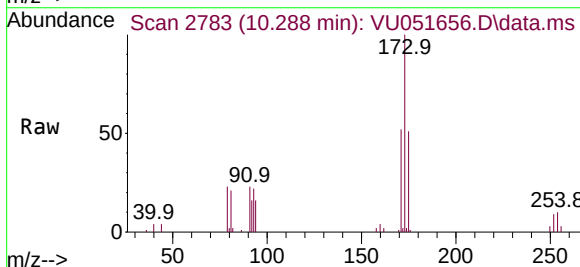
Tgt Ion: 173 Resp: 31034

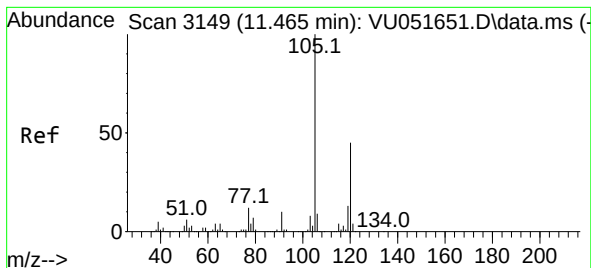
Ion Ratio Lower Upper

173 100

175 49.5 38.7 58.1

254 9.3 7.3 10.9





#63

1,2,4-Trimethylbenzene

Concen: 4.209 ug/L

RT: 11.468 min Scan# 3149

Delta R.T. 0.003 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

Instrument :

MSVOA_U

ClientSampleId :

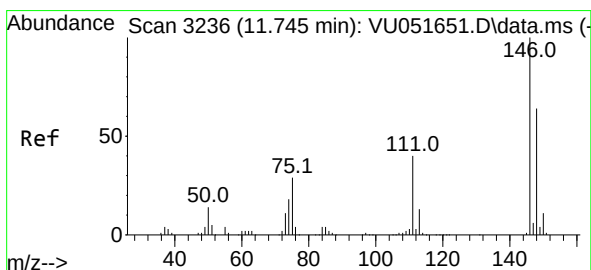
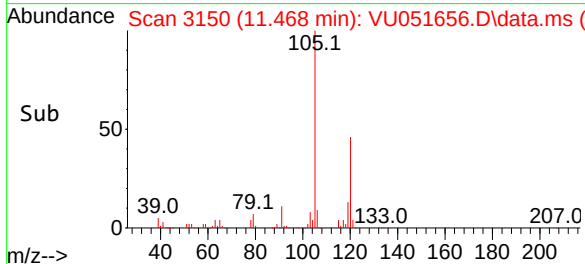
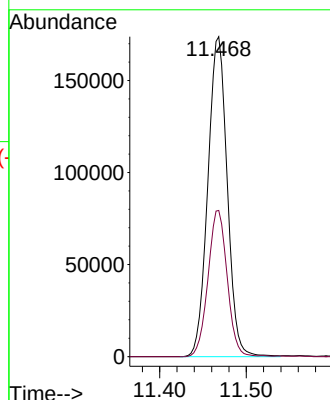
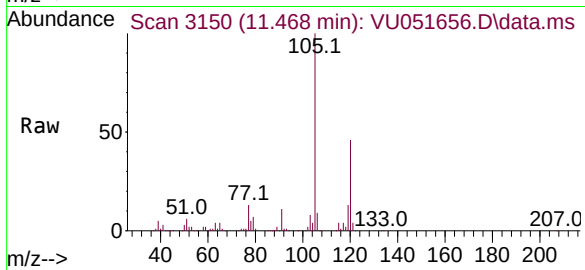
DBXC4

Tgt Ion:105 Resp: 269988

Ion Ratio Lower Upper

105 100

120 45.2 35.8 53.6



#64

1,3-Dichlorobenzene

Concen: 3.150 ug/L

RT: 11.745 min Scan# 3236

Delta R.T. 0.000 min

Lab File: VU051656.D

Acq: 01 Nov 2022 16:00

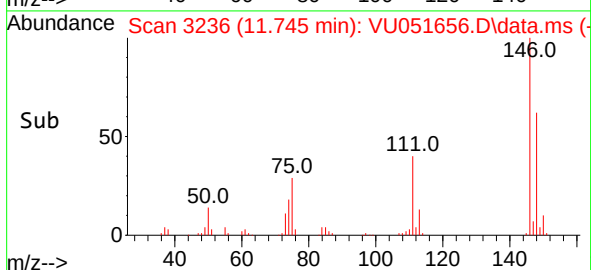
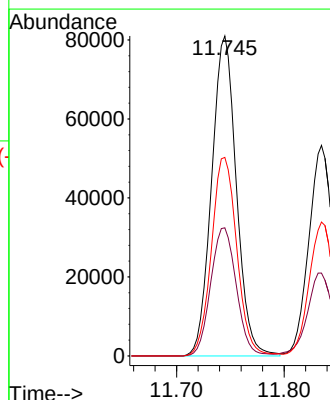
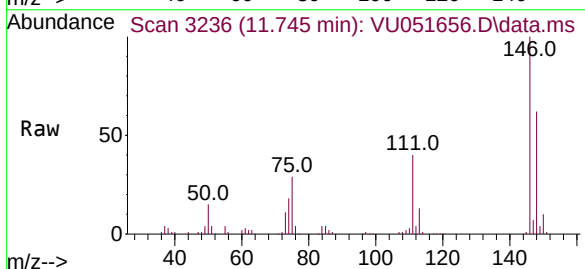
Tgt Ion:146 Resp: 129597

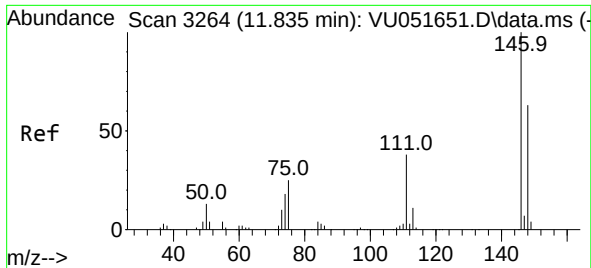
Ion Ratio Lower Upper

146 100

111 40.0 28.6 53.2

148 62.0 44.7 82.9

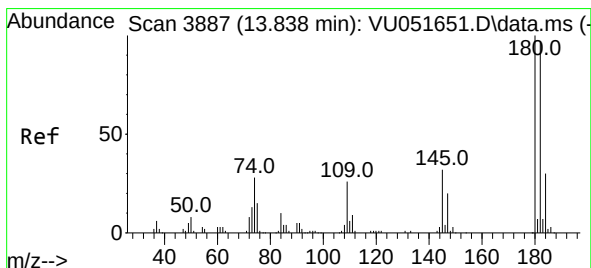
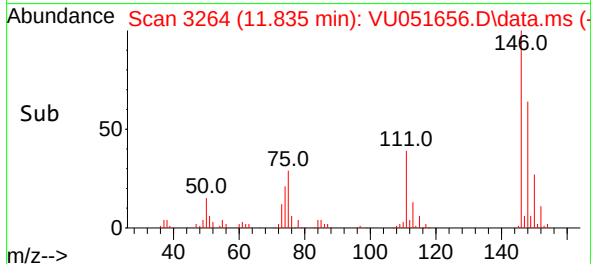
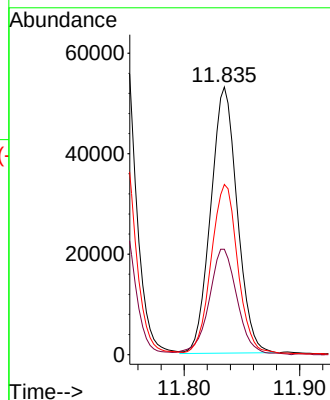
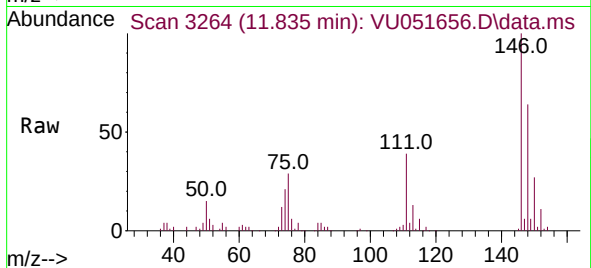




#65
1,4-Dichlorobenzene
Concen: 2.049 ug/L
RT: 11.835 min Scan# 31
Delta R.T. 0.000 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

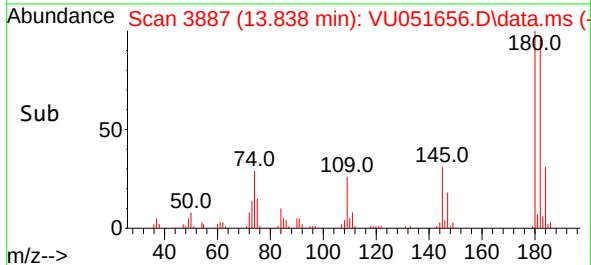
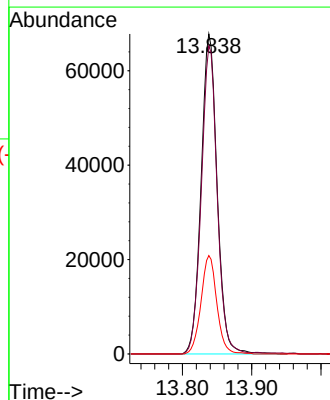
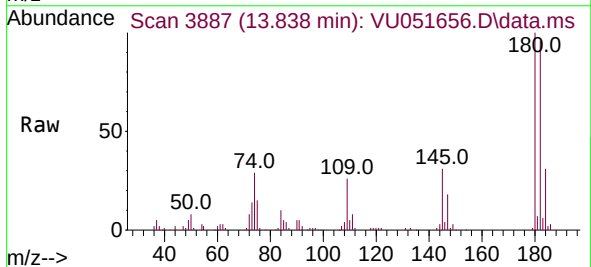
Instrument :
MSVOA_U
ClientSampleId :
DBXC4

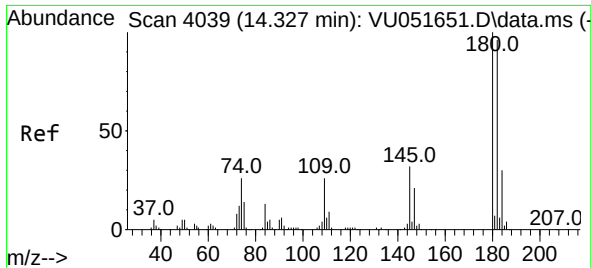
Tgt Ion:146 Resp: 84517
Ion Ratio Lower Upper
146 100
111 39.4 26.7 49.5
148 63.6 43.5 80.9



#70
1,2,4-trichlorobenzene
Concen: 4.844 ug/L
RT: 13.838 min Scan# 3887
Delta R.T. 0.000 min
Lab File: VU051656.D
Acq: 01 Nov 2022 16:00

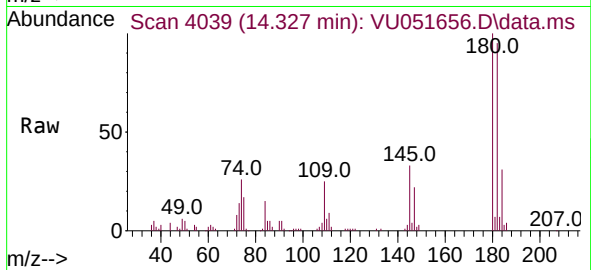
Tgt Ion:180 Resp: 109043
Ion Ratio Lower Upper
180 100
182 95.1 77.8 116.6
145 30.2 25.0 37.6





#72
 1,2,3-Trichlorobenzene
 Concen: 2.760 ug/L
 RT: 14.327 min Scan# 4039
 Delta R.T. 0.000 min
 Lab File: VU051656.D
 Acq: 01 Nov 2022 16:00

Instrument :
 MSVOA_U
 ClientSampleId :
 DBXC4



Tgt Ion:	180	Resp:	62745
Ion Ratio	Lower	Upper	
180	100		
182	94.0	76.1	114.1
145	31.7	25.6	38.4

