

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN081123\
 Data File : VN078866.D
 Acq On : 11 Aug 2023 16:27
 Operator : JC\MD
 Sample : 03988-01DL 5X
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 001-WILLETS-PT-BLVD(AUG)DL

Quant Time: Aug 12 01:42:17 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N080823W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Aug 09 05:05:47 2023
 Response via : Initial Calibration

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

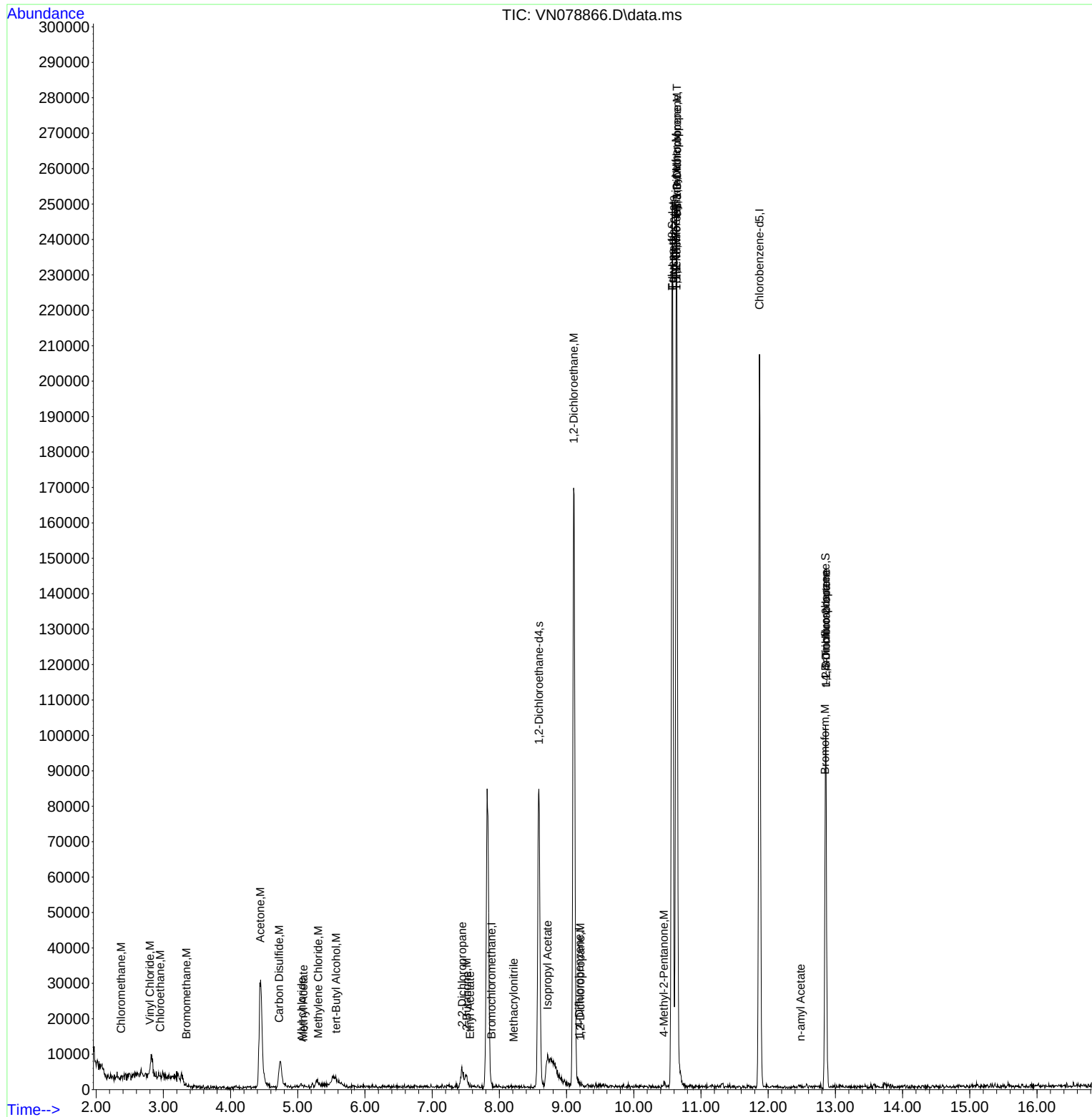
Internal Standards						
1) Bromochloromethane	7.883	128	77	30.000	ug/l	0.06
28) 1,4-Difluorobenzene	9.188	114	869	30.000	ug/l	# 0.08
57) Chlorobenzene-d5	11.871	117	110794	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.588	65	69609	11228.798	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	= 37429.333%#	
60) 4-Bromofluorobenzene	12.853	95	32997	21.217	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	= 70.733%	
63) Toluene-d8	10.571	98	166801	30.723	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	= 102.400%	
Target Compounds						Qvalue
3) Chloromethane	2.371	50	385	60.915	ug/l	# 62
4) Vinyl Chloride	2.801	62	126	20.950	ug/l	# 46
5) Bromomethane	3.342	94	122	27.886	ug/l	# 3
6) Chloroethane	2.953	64	365	85.437	ug/l	# 43
12) Methyl Acetate	5.083	43	232	24.891	ug/l	# 49
15) Acetone	4.442	58	16725	26430.668	ug/l	94
16) Carbon Disulfide	4.724	76	385	31.015	ug/l	# 74
17) Allyl chloride	5.059	41	138	18.410	ug/l	# 19
18) Methylene Chloride	5.306	84	376	70.263	ug/l	# 41
23) tert-Butyl Alcohol	5.571	59	520	569.804	ug/l	# 100
30) 2-Butanone	7.512	43	2080	300.586	ug/l	98
31) 2,2-Dichloropropane	7.447	77	131	8.998	ug/l	# 52
35) Methacrylonitrile	8.212	41	174	21.414	ug/l	# 14
36) 1,2-Dichloroethane	9.106	62	5961	396.956	ug/l	# 75
39) 1,2-Dichloropropane	9.206	63	151	13.286	ug/l	# 40
43) Ethyl Acetate	7.565	43	345	24.017	ug/l	# 66
44) Isopropyl Acetate	8.718	43	7522	291.613	ug/l	# 49
47) n-amyl Acetate	12.482	43	192	10.647	ug/l	# 48
48) t-1,3-Dichloropropene	10.641	75	1472	95.594	ug/l	# 1
49) cis-1,3-Dichloropropene	10.641	75	1472	85.958	ug/l	# 1
50) 1,1,2-Trichloroethane	10.635	97	75	7.293	ug/l	# 33
51) Ethyl methacrylate	10.577	69	507	35.173	ug/l	# 1
55) 2-Chloroethyl vinyl ether	10.629	63	10631	1999.831	ug/l	# 1
56) Bromoform	12.847	173	107	15.925	ug/l	# 1
58) 4-Methyl-2-Pentanone	10.447	43	790	0.371	ug/l	# 72
62) Toluene	10.635	91	185970	28.511	ug/l	100
72) 1,2,3-Trichloropropane	12.859	75	18978	10.506	ug/l	# 1
77) t-1,4-Dichloro-2-butene	12.859	75	18978	33.471	ug/l	# 15

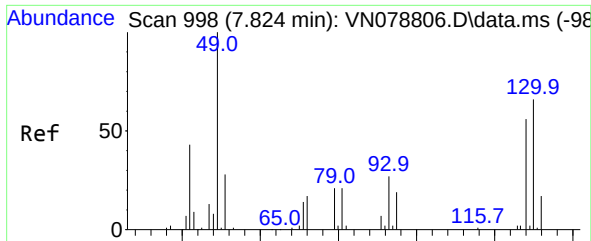
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Aug 09 05:05:47 2023
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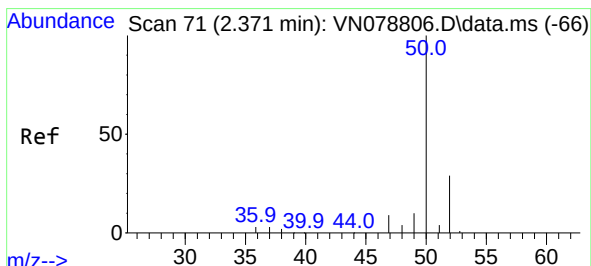
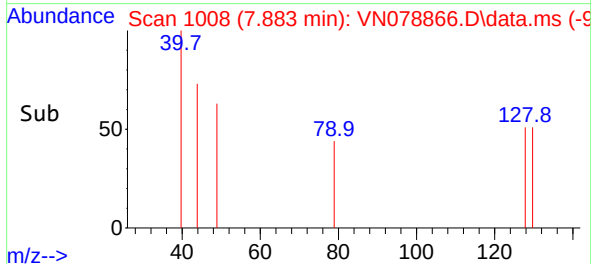
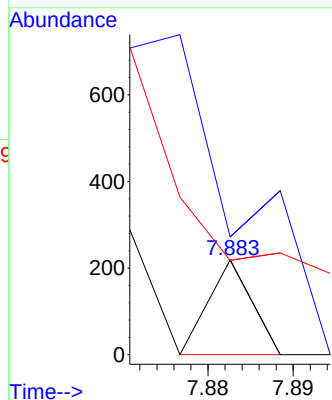
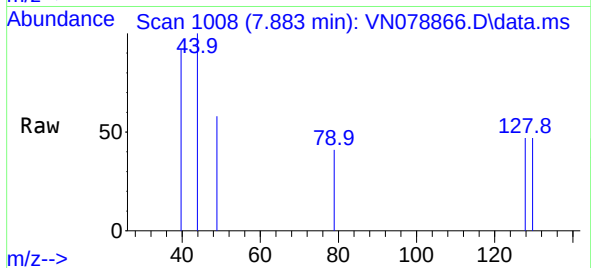




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.883 min Scan# 10
Delta R.T. 0.059 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

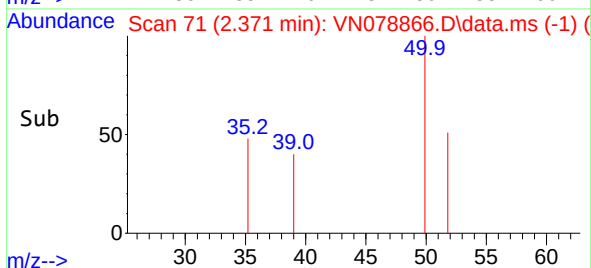
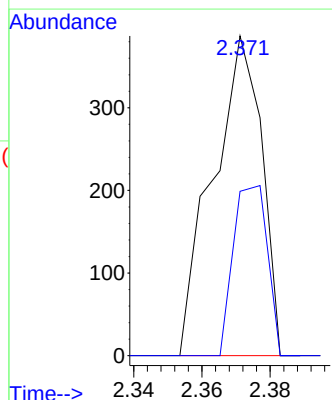
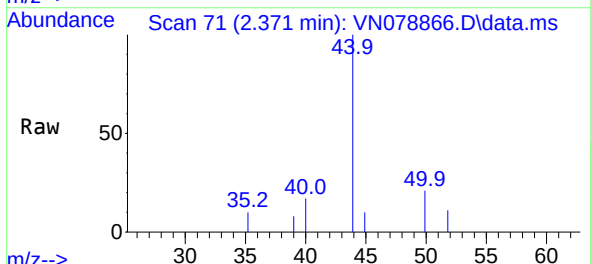
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(AUG)DL

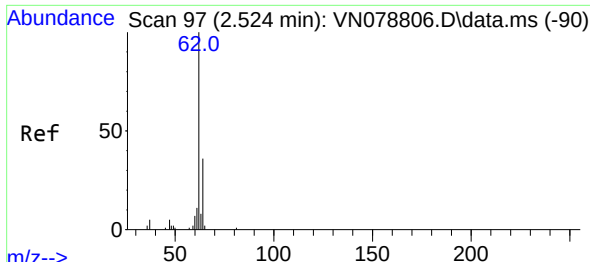
Tgt Ion:128 Resp: 77
Ion Ratio Lower Upper
128 100
49 94.8 0.0 370.8
130 133.8 0.0 307.0



#3
Chloromethane
Concen: 60.915 ug/l
RT: 2.371 min Scan# 71
Delta R.T. -0.000 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 50 Resp: 385
Ion Ratio Lower Upper
50 100
52 51.4 24.6 36.8#

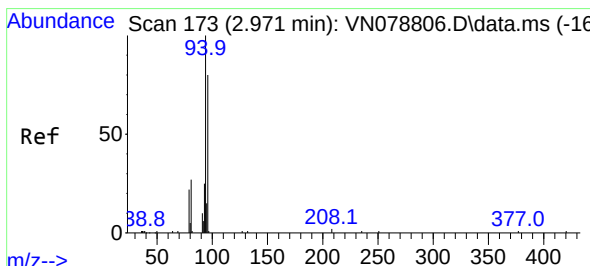
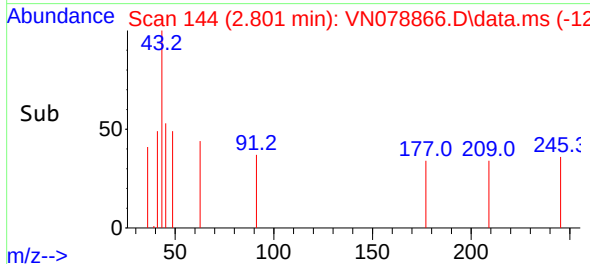
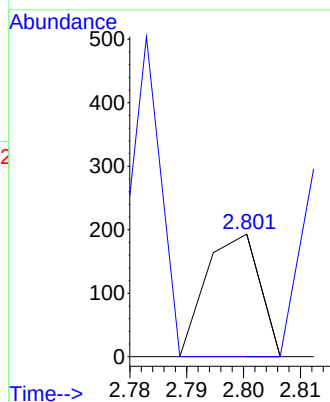
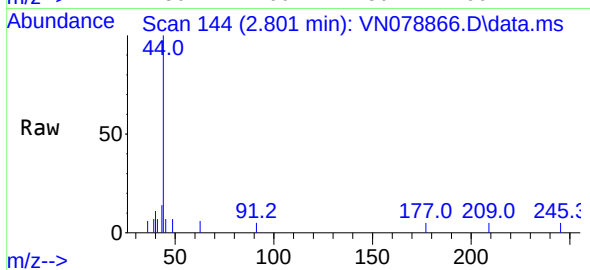




#4
Vinyl Chloride
Concen: 20.950 ug/l
RT: 2.801 min Scan# 14
Delta R.T. 0.276 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

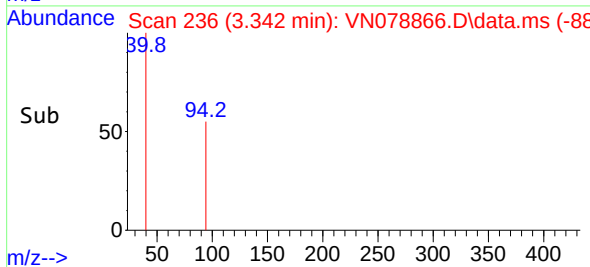
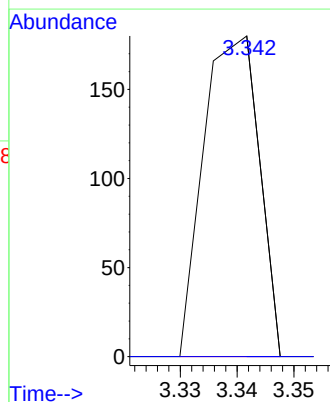
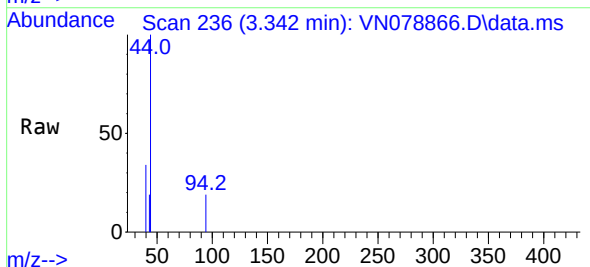
Instrument :
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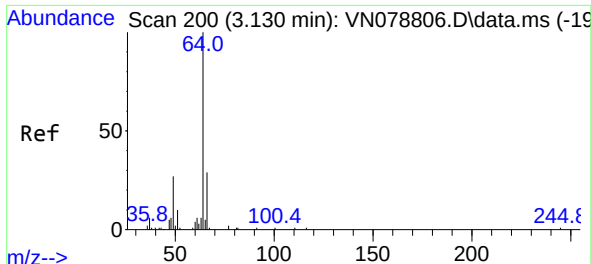
Tgt Ion: 62 Resp: 126
Ion Ratio Lower Upper
62 100
64 0.0 23.3 34.9#



#5
Bromomethane
Concen: 27.886 ug/l
RT: 3.342 min Scan# 236
Delta R.T. 0.370 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 94 Resp: 122
Ion Ratio Lower Upper
94 100
96 0.0 73.9 110.9#

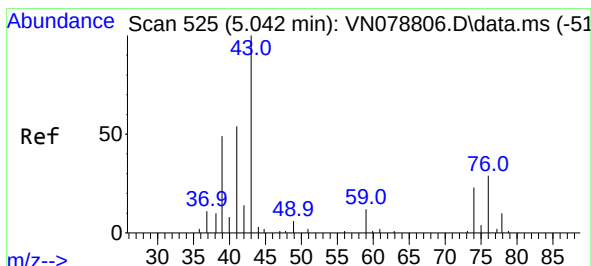
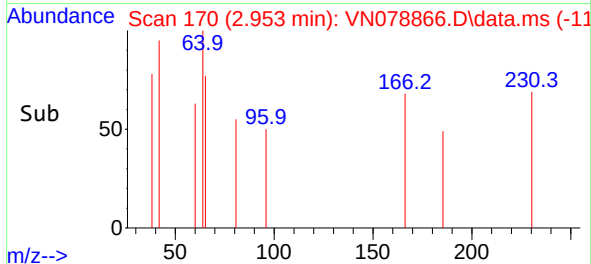
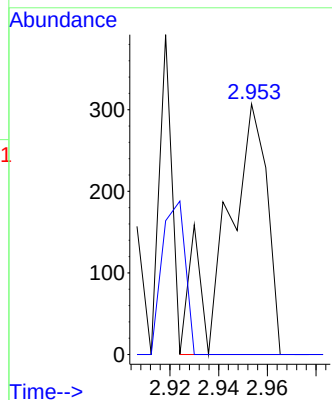
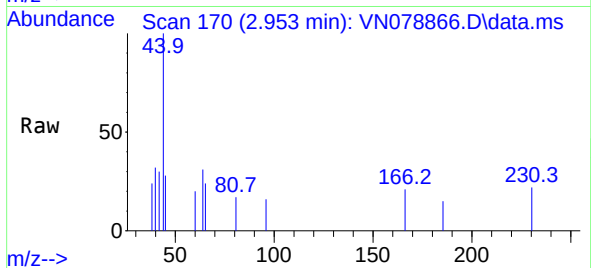




#6
Chloroethane
Concen: 85.437 ug/l
RT: 2.953 min Scan# 11
Delta R.T. -0.177 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

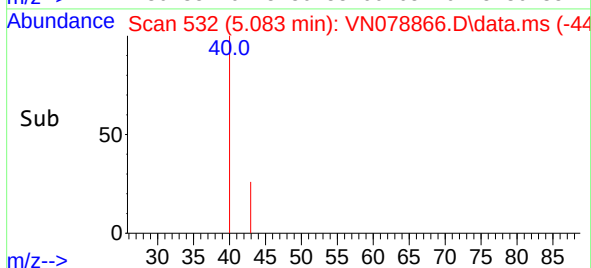
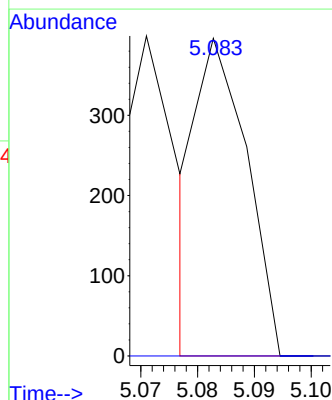
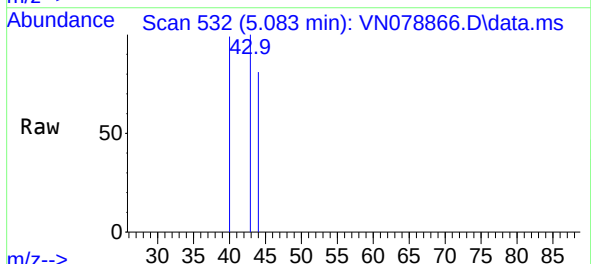
Instrument :
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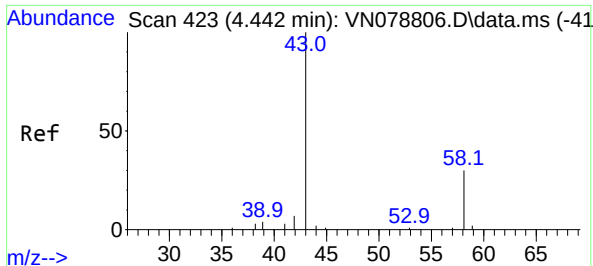
Tgt Ion: 64 Resp: 365
Ion Ratio Lower Upper
64 100
66 0.0 25.7 38.5#



#12
Methyl Acetate
Concen: 24.891 ug/l
RT: 5.083 min Scan# 532
Delta R.T. 0.041 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 43 Resp: 232
Ion Ratio Lower Upper
43 100
74 0.0 20.5 30.7#

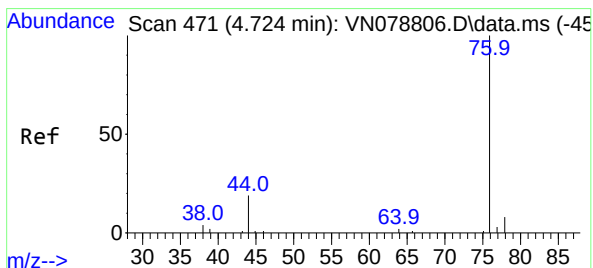
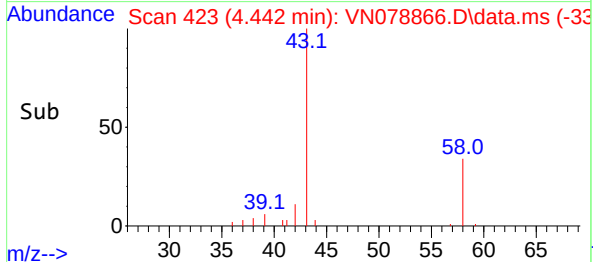
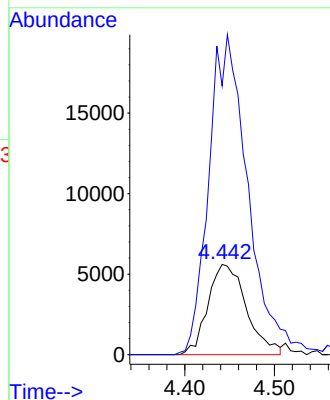
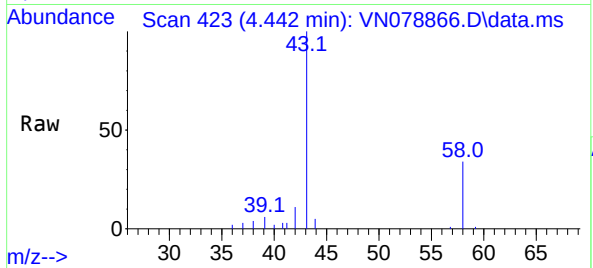




#15
Acetone
Concen: 26430.668 ug/l
RT: 4.442 min Scan# 41
Delta R.T. -0.000 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

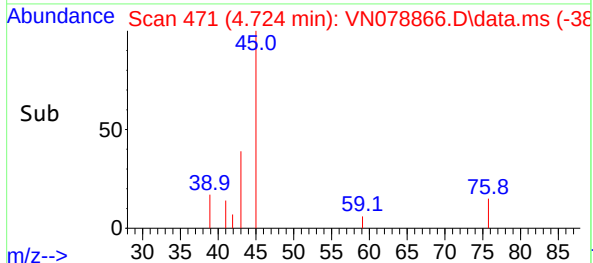
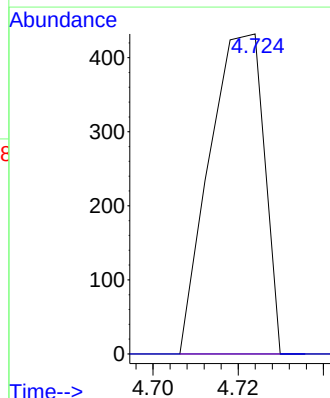
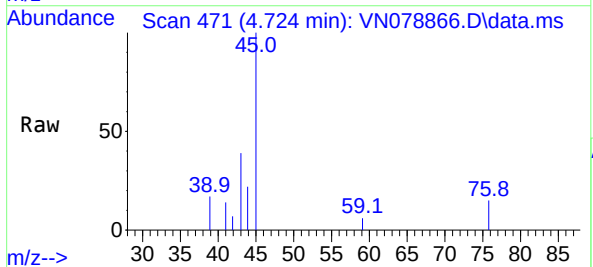
Instrument :
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ClientSampleId :
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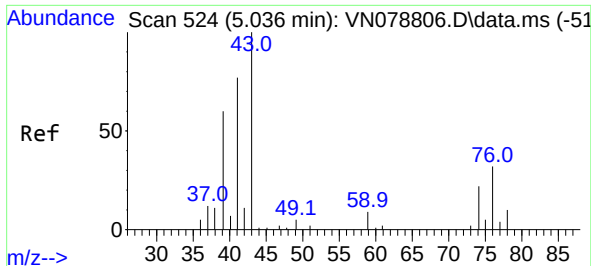
Tgt Ion: 58 Resp: 16725
Ion Ratio Lower Upper
58 100
43 295.0 227.5 341.3



#16
Carbon Disulfide
Concen: 31.015 ug/l
RT: 4.724 min Scan# 471
Delta R.T. -0.000 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 76 Resp: 385
Ion Ratio Lower Upper
76 100
78 0.0 7.7 11.5#

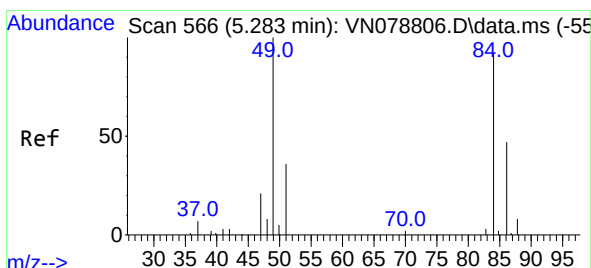
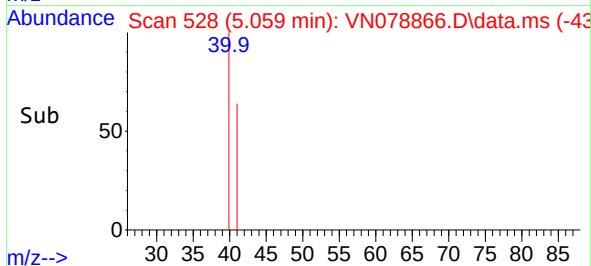
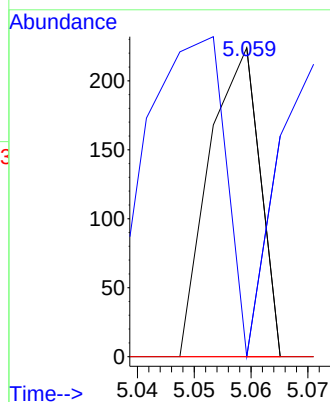
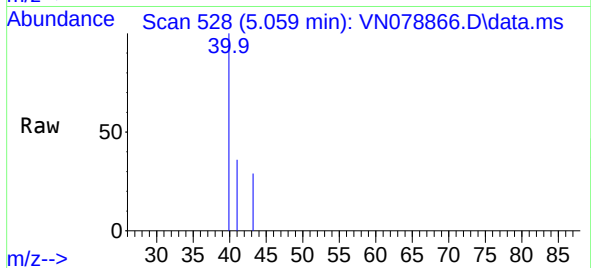




#17
 Allyl chloride
 Concen: 18.410 ug/l
 RT: 5.059 min Scan# 51
 Delta R.T. 0.023 min
 Lab File: VN078866.D
 Acq: 11 Aug 2023 16:27

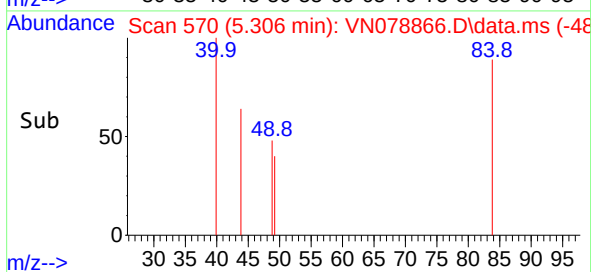
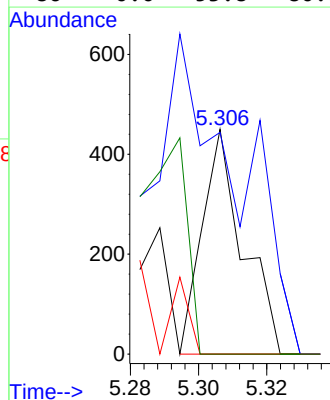
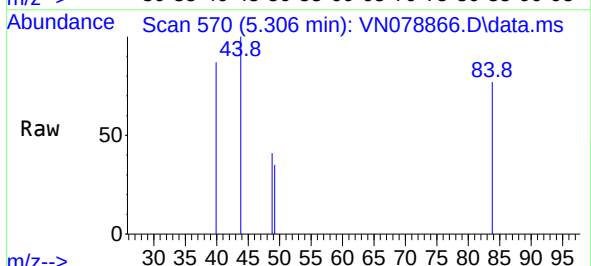
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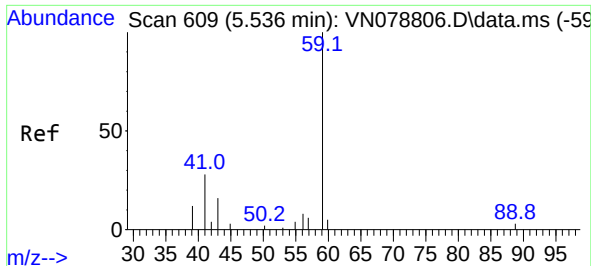
Tgt Ion: 41 Resp: 138
 Ion Ratio Lower Upper
 41 100
 39 0.0 37.6 112.8#
 76 0.0 23.8 71.4#



#18
 Methylene Chloride
 Concen: 70.263 ug/l
 RT: 5.306 min Scan# 570
 Delta R.T. 0.023 min
 Lab File: VN078866.D
 Acq: 11 Aug 2023 16:27

Tgt Ion: 84 Resp: 376
 Ion Ratio Lower Upper
 84 100
 49 62.9 88.1 132.1#
 51 0.0 24.0 36.0#
 86 0.0 53.8 80.8#

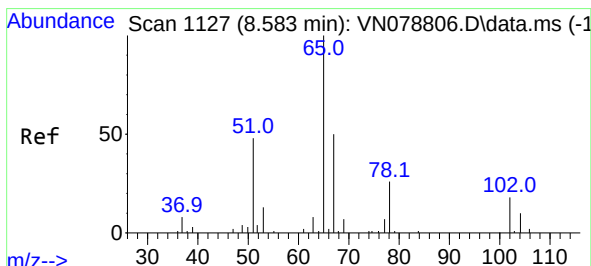
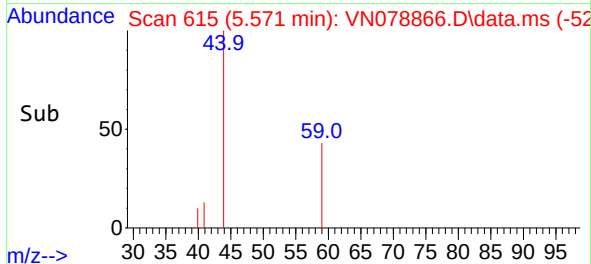
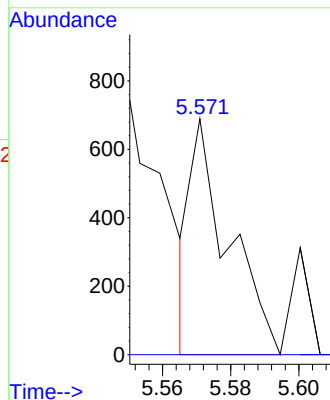
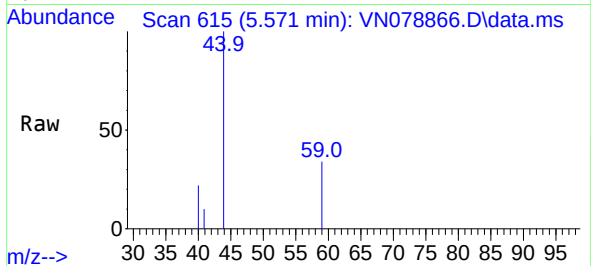




#23
tert-Butyl Alcohol
Concen: 569.804 ug/l
RT: 5.571 min Scan# 61
Delta R.T. 0.035 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

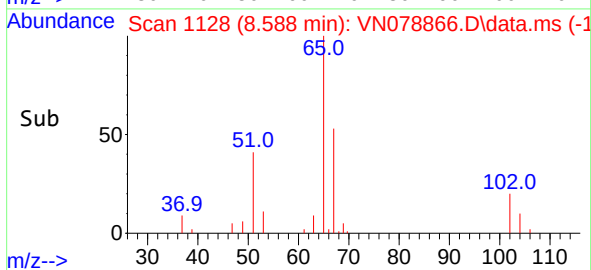
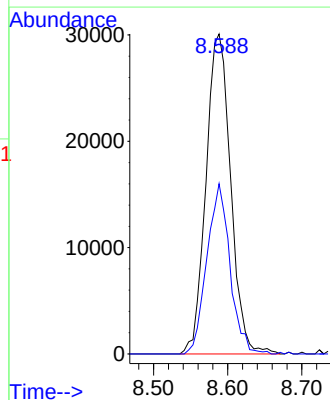
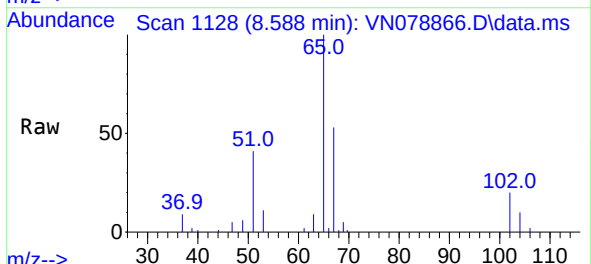
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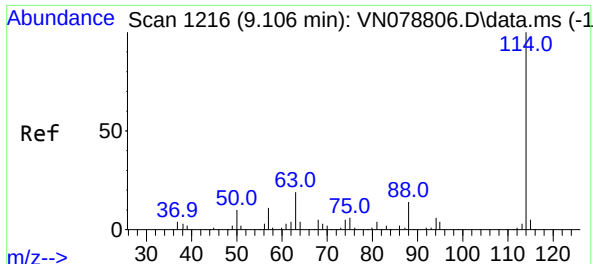
Tgt Ion: 59 Resp: 520
Ion Ratio Lower Upper
59 100
52 0.0 0.1 0.1#



#27
1,2-Dichloroethane-d4
Concen: 11228.798 ug/l
RT: 8.588 min Scan# 1128
Delta R.T. 0.006 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 65 Resp: 69609
Ion Ratio Lower Upper
65 100
67 49.5 42.9 64.3

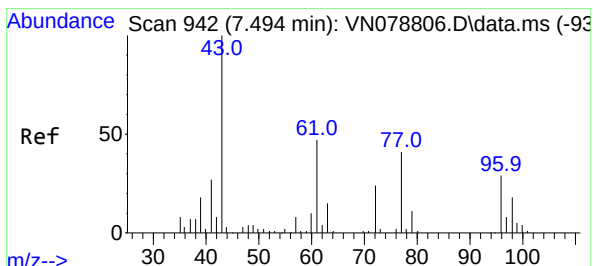
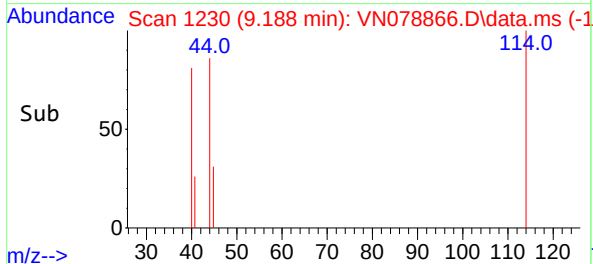
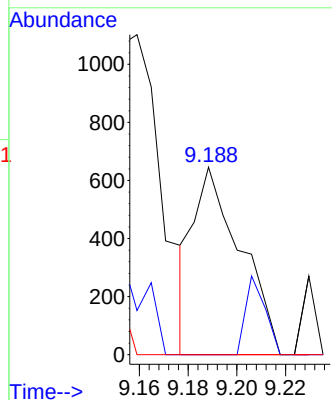
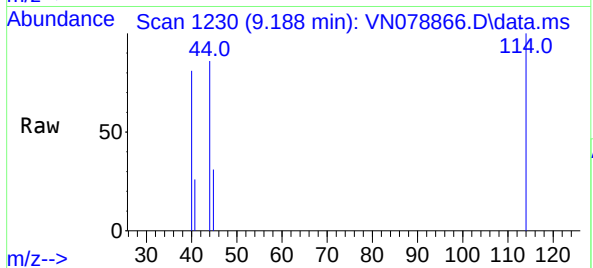




#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.188 min Scan# 11
Delta R.T. 0.082 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

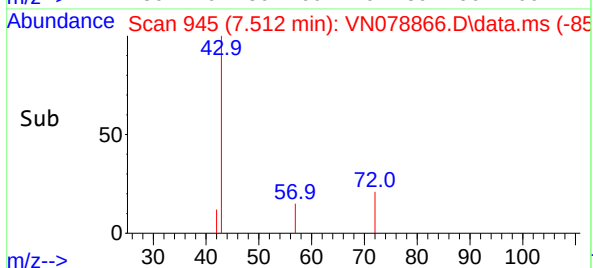
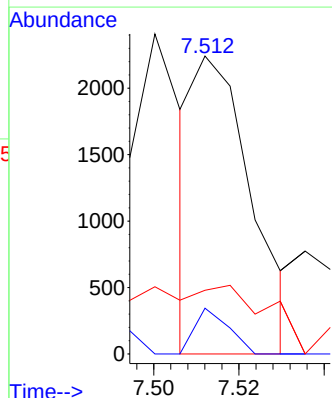
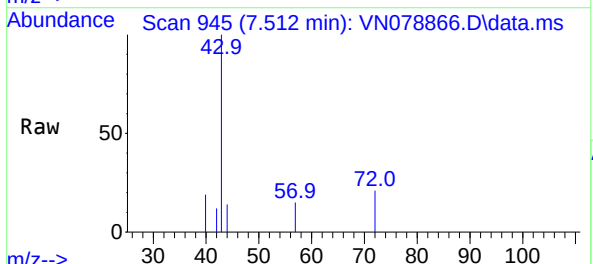
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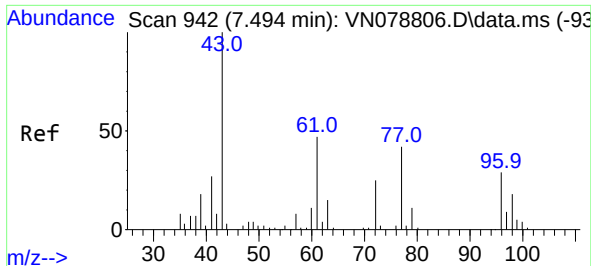
Tgt Ion:114 Resp: 869
Ion Ratio Lower Upper
114 100
63 17.4 15.2 22.8
88 0.0 12.5 18.7#



#30
2-Butanone
Concen: 300.586 ug/l
RT: 7.512 min Scan# 945
Delta R.T. 0.018 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 43 Resp: 2080
Ion Ratio Lower Upper
43 100
57 9.1 6.8 10.2
72 28.7 23.8 35.6

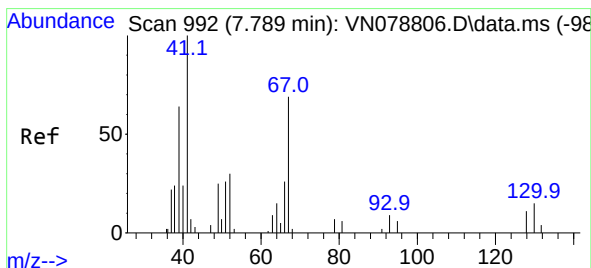
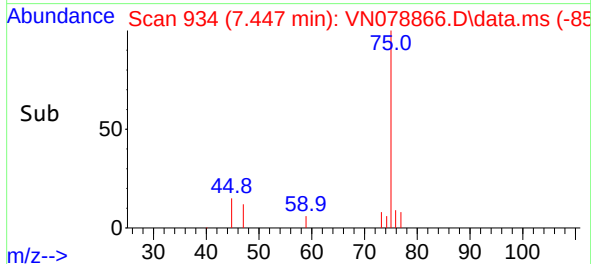
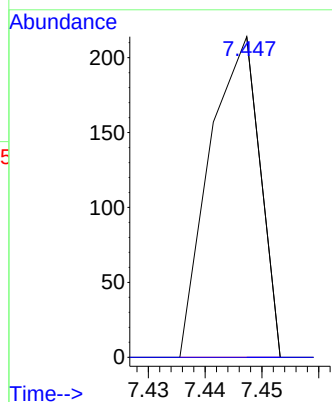
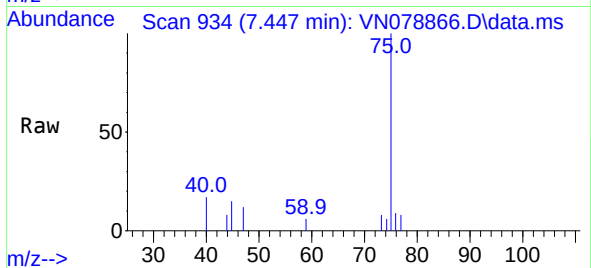




#31
2,2-Dichloropropane
Concen: 8.998 ug/l
RT: 7.447 min Scan# 91
Delta R.T. -0.047 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

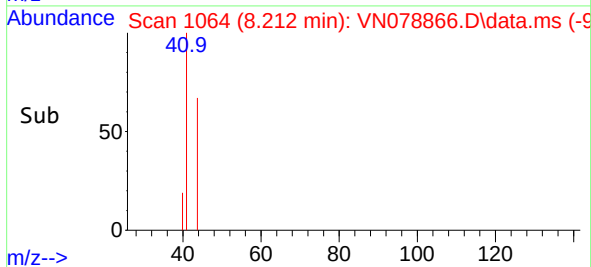
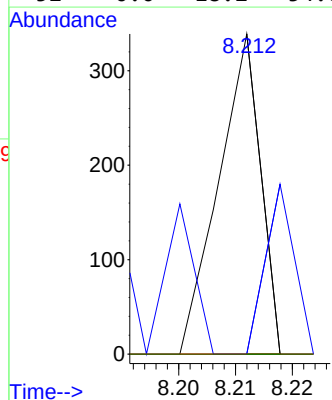
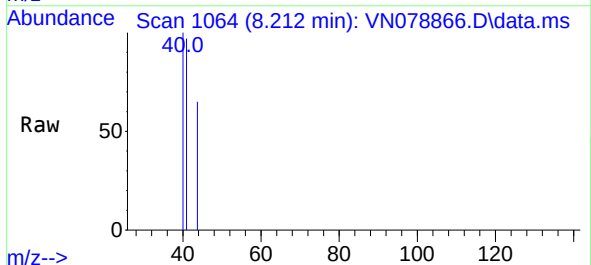
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(AUG)DL

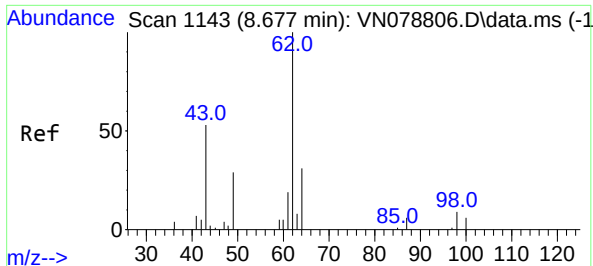
Tgt Ion: 77 Resp: 131
Ion Ratio Lower Upper
77 100
97 0.0 18.8 28.2#



#35
Methacrylonitrile
Concen: 21.414 ug/l
RT: 8.212 min Scan# 1064
Delta R.T. 0.423 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 41 Resp: 174
Ion Ratio Lower Upper
41 100
39 0.0 33.9 101.6#
67 0.0 45.9 137.6#
52 0.0 18.2 54.6#





#36

1,2-Dichloroethane

Concen: 396.956 ug/l

RT: 9.106 min Scan# 11

Delta R.T. 0.429 min

Lab File: VN078866.D

Acq: 11 Aug 2023 16:27

Instrument :

MSVOA_N

ClientSampleId :

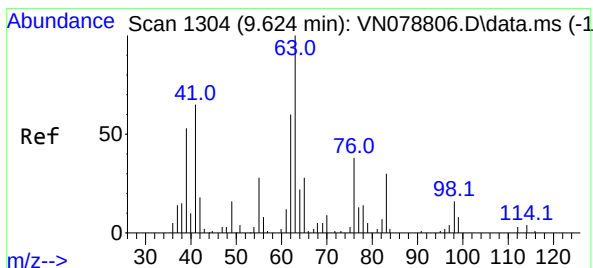
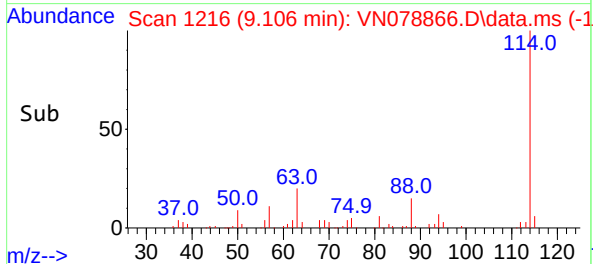
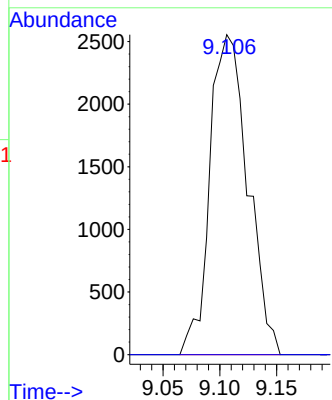
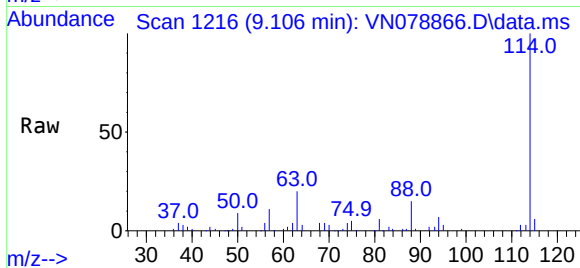
001-WILLETS-PT-BLVD(AUG)DL

Tgt Ion: 62 Resp: 5961

Ion Ratio Lower Upper

62 100

98 0.0 7.4 11.0#



#39

1,2-Dichloropropane

Concen: 13.286 ug/l

RT: 9.206 min Scan# 1233

Delta R.T. -0.418 min

Lab File: VN078866.D

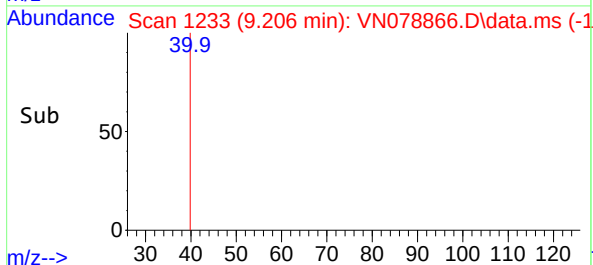
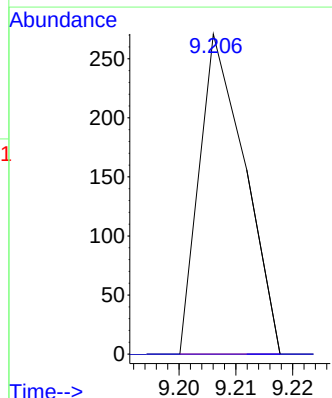
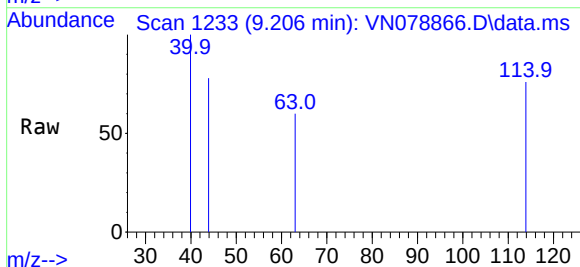
Acq: 11 Aug 2023 16:27

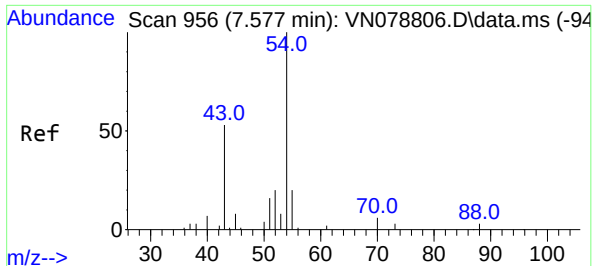
Tgt Ion: 63 Resp: 151

Ion Ratio Lower Upper

63 100

65 0.0 27.4 41.2#





#43

Ethyl Acetate

Concen: 24.017 ug/l

RT: 7.565 min Scan# 91

Delta R.T. -0.012 min

Lab File: VN078866.D

Acq: 11 Aug 2023 16:27

Instrument :

MSVOA_N

ClientSampleId :

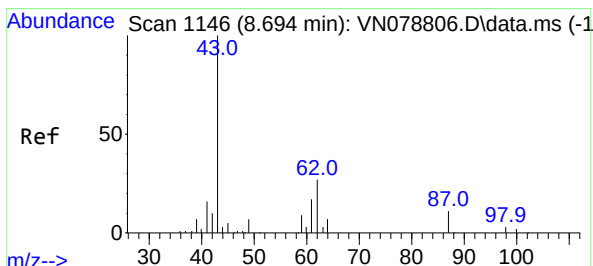
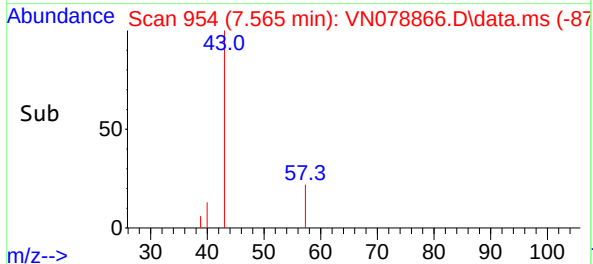
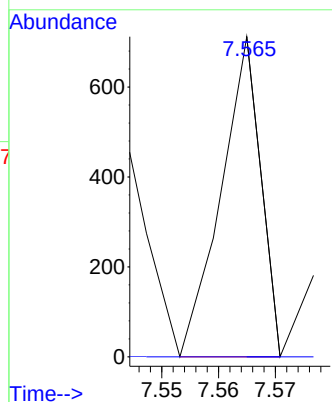
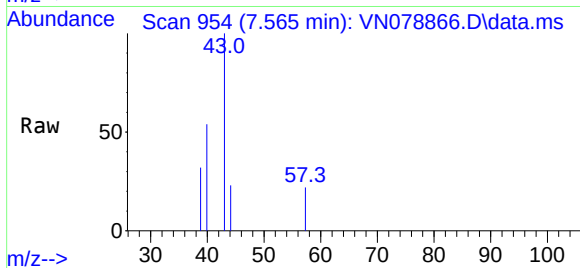
001-WILLETS-PT-BLVD(AUG)DL

Tgt Ion: 43 Resp: 345

Ion Ratio Lower Upper

43 100

45 0.0 10.9 16.3#



#44

Isopropyl Acetate

Concen: 291.613 ug/l

RT: 8.718 min Scan# 1150

Delta R.T. 0.023 min

Lab File: VN078866.D

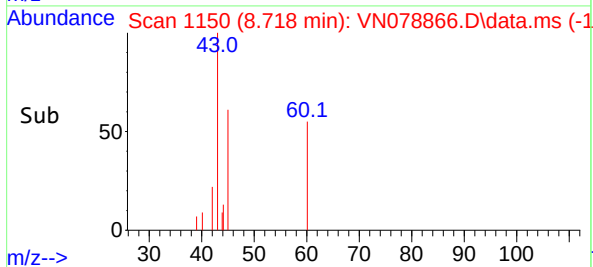
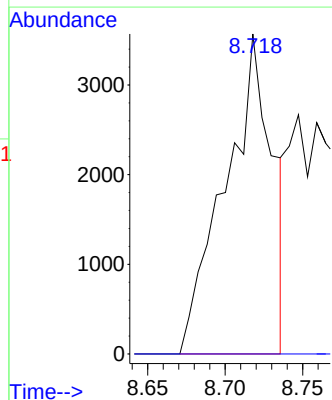
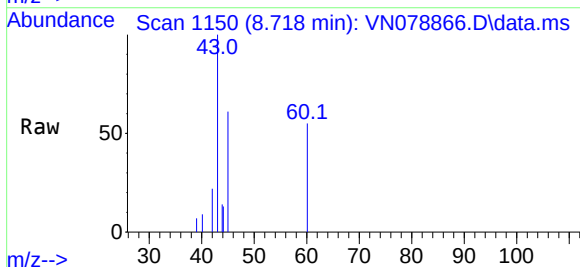
Acq: 11 Aug 2023 16:27

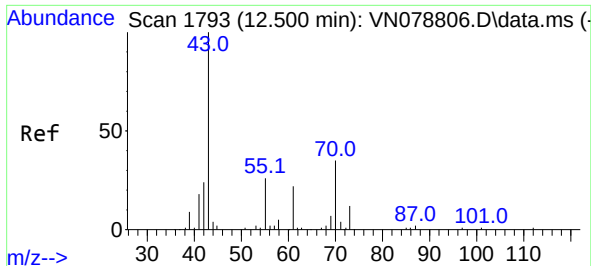
Tgt Ion: 43 Resp: 7522

Ion Ratio Lower Upper

43 100

61 1.8 23.0 34.6#

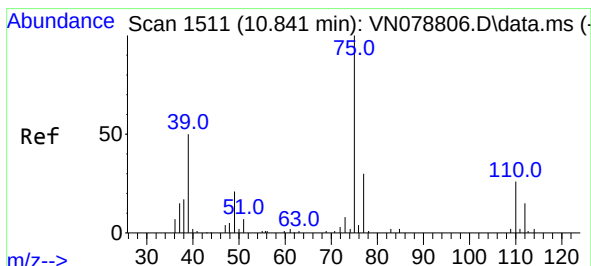
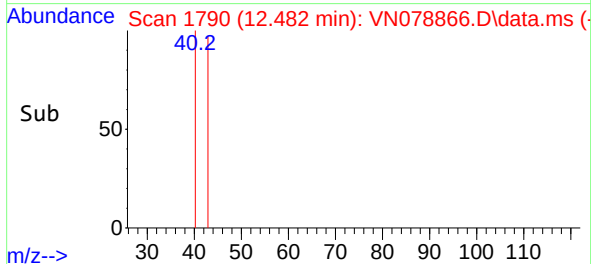
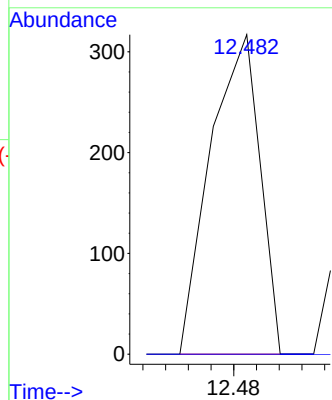
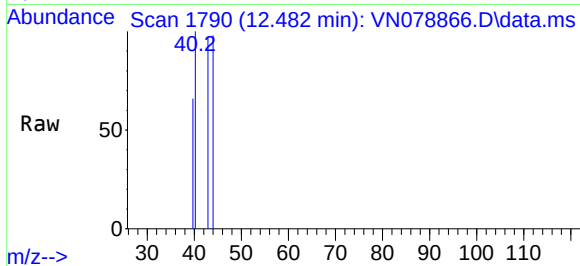




#47
n-amy1 Acetate
Concen: 10.647 ug/l
RT: 12.482 min Scan# 11
Delta R.T. -0.018 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

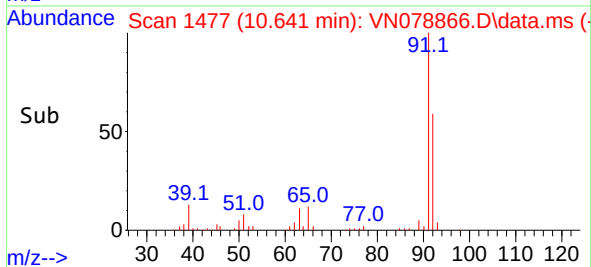
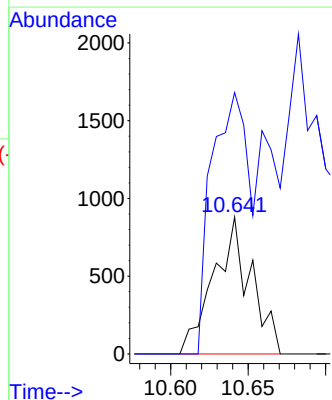
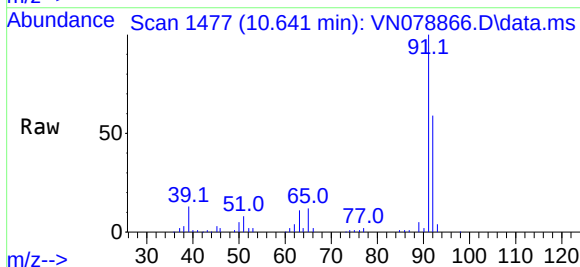
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(AUG)DL

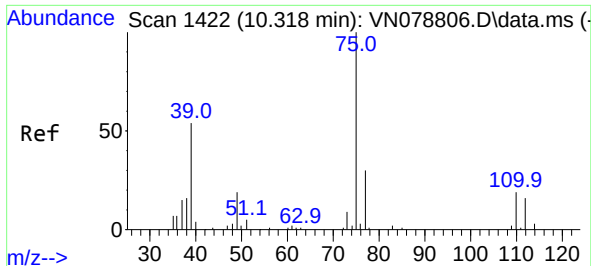
Tgt Ion: 43 Resp: 192
Ion Ratio Lower Upper
43 100
55 0.0 21.5 32.3#



#48
t-1,3-Dichloropropene
Concen: 95.594 ug/l
RT: 10.641 min Scan# 1477
Delta R.T. -0.200 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 75 Resp: 1472
Ion Ratio Lower Upper
75 100
77 190.8 26.1 39.1#





#49

cis-1,3-Dichloropropene

Concen: 85.958 ug/l

RT: 10.641 min Scan# 1477

Delta R.T. 0.323 min

Lab File: VN078866.D

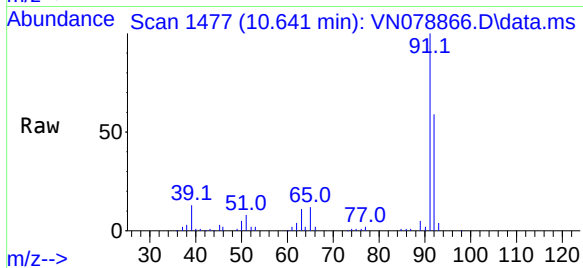
Acq: 11 Aug 2023 16:27

Instrument :

MSVOA_N

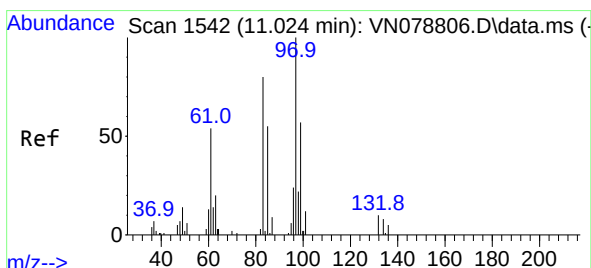
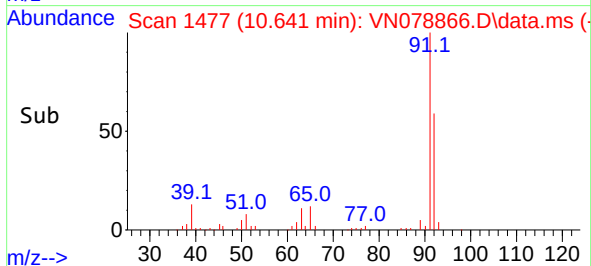
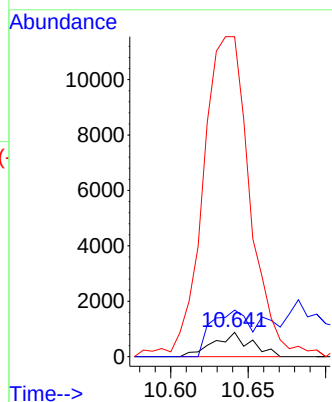
ClientSampleId :

001-WILLETS-PT-BLVD(AUG)DL



Tgt Ion: 75 Resp: 1472

Ion	Ratio	Lower	Upper
75	100		
77	190.8	24.0	36.0#
39	1241.7	35.1	52.7#



#50

1,1,2-Trichloroethane

Concen: 7.293 ug/l

RT: 10.635 min Scan# 1476

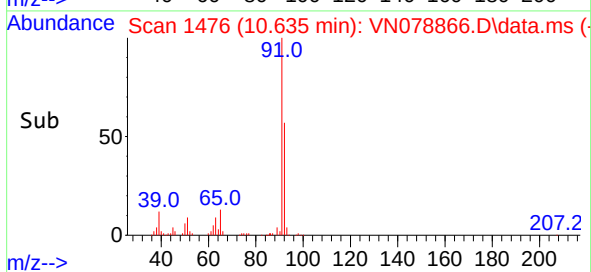
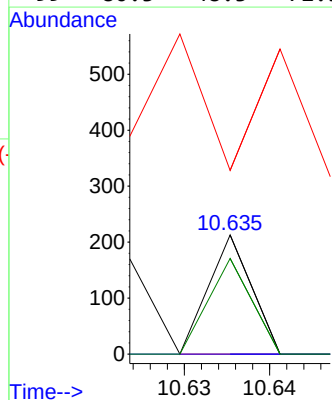
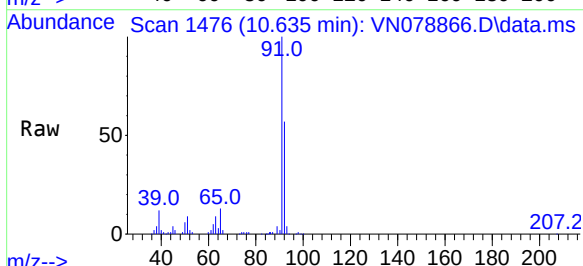
Delta R.T. -0.388 min

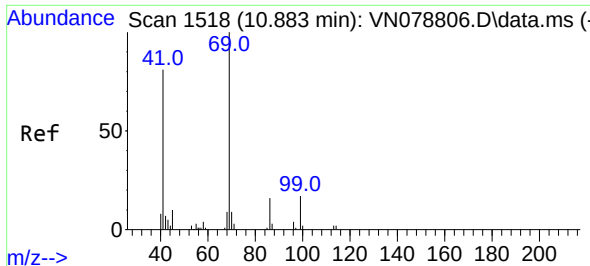
Lab File: VN078866.D

Acq: 11 Aug 2023 16:27

Tgt Ion: 97 Resp: 75

Ion	Ratio	Lower	Upper
97	100		
83	0.0	66.8	100.2#
85	0.0	42.5	63.7#
99	80.3	48.3	72.5#

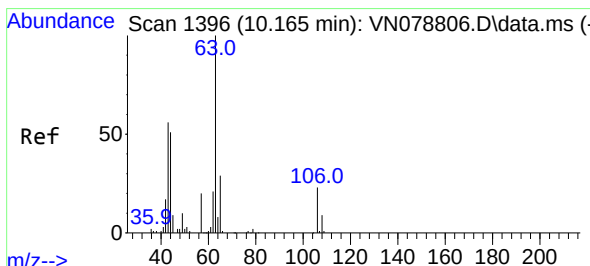
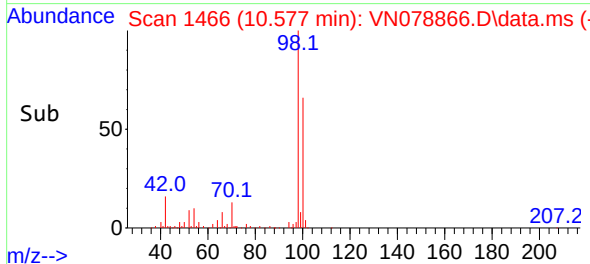
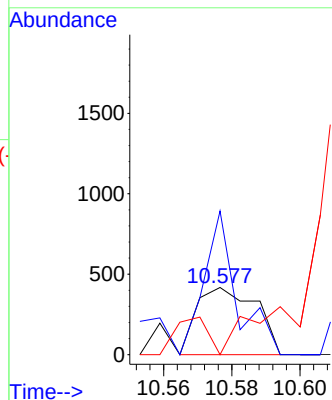
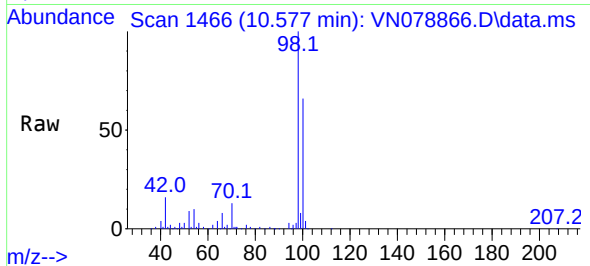




#51
Ethyl methacrylate
Concen: 35.173 ug/l
RT: 10.577 min Scan# 1466
Delta R.T. -0.306 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

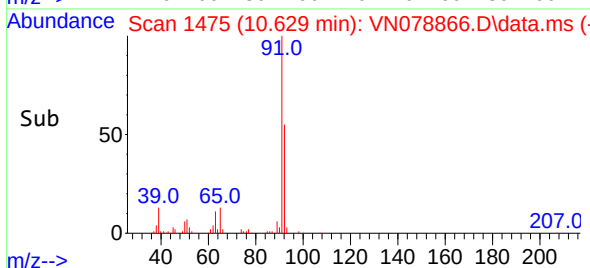
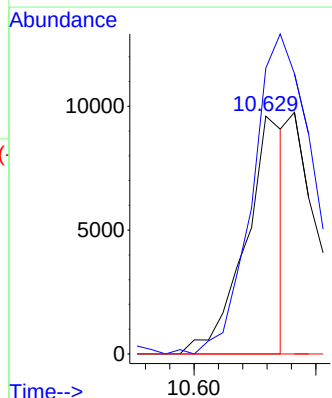
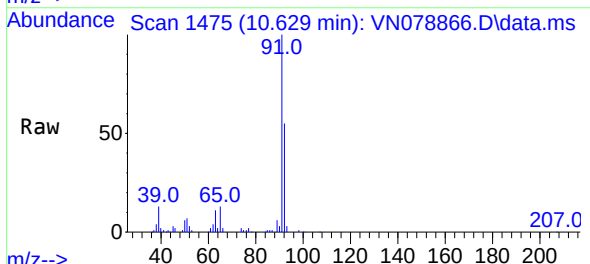
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(AUG)DL

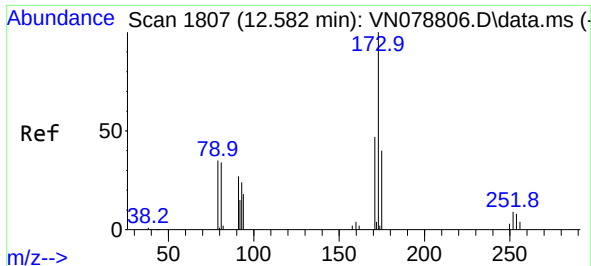
Tgt Ion: 69 Resp: 507
Ion Ratio Lower Upper
69 100
41 214.1 26.0 78.0#
39 0.0 16.3 48.9#



#55
2-Chloroethyl vinyl ether
Concen: 1999.831 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.465 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 63 Resp: 10631
Ion Ratio Lower Upper
63 100
65 153.7 26.3 39.5#
106 0.0 23.8 35.6#

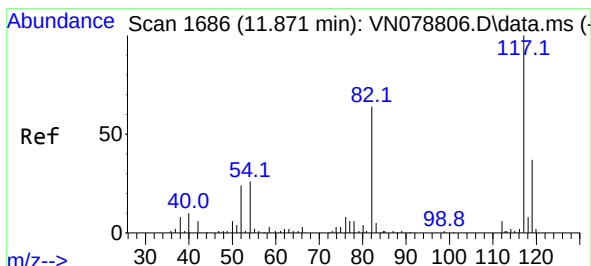
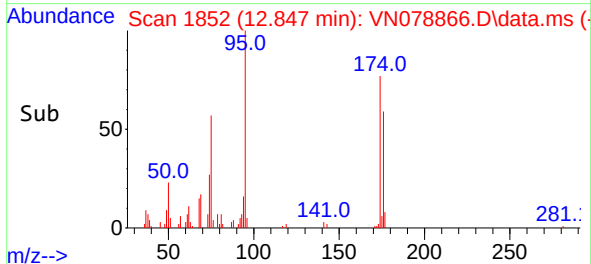
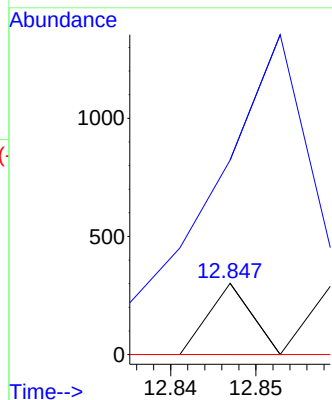
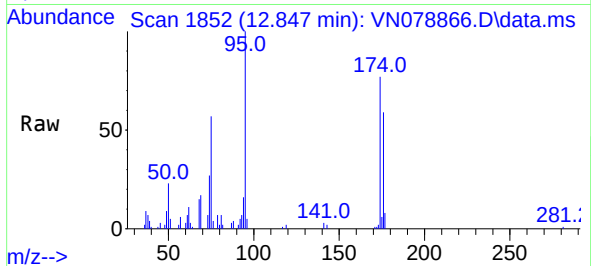




#56
Bromoform
Concen: 15.925 ug/l
RT: 12.847 min Scan# 1852
Delta R.T. 0.265 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

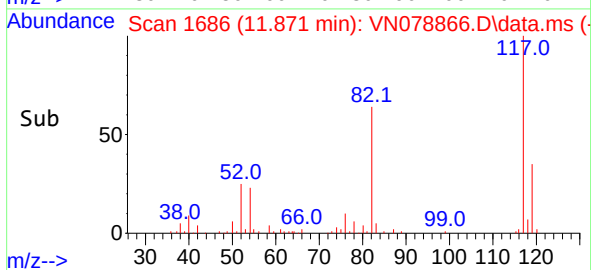
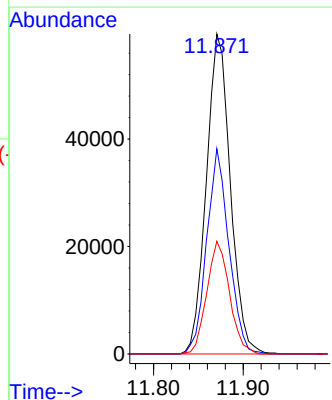
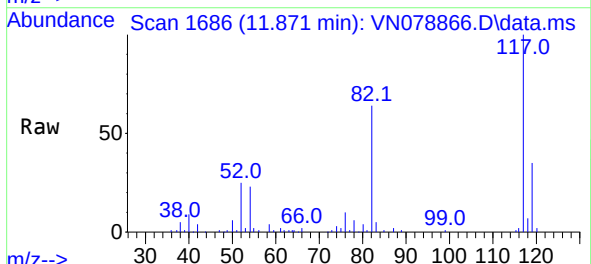
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(AUG)DL

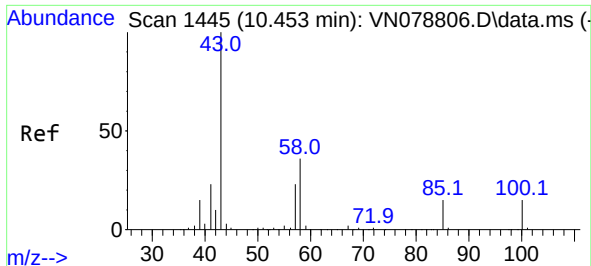
Tgt Ion:173 Resp: 107
Ion Ratio Lower Upper
173 100
175 1088.8 40.7 61.1#
254 0.0 6.5 9.7#



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.871 min Scan# 1686
Delta R.T. -0.000 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion:117 Resp: 110794
Ion Ratio Lower Upper
117 100
82 59.2 43.9 65.9
119 33.3 26.2 39.4

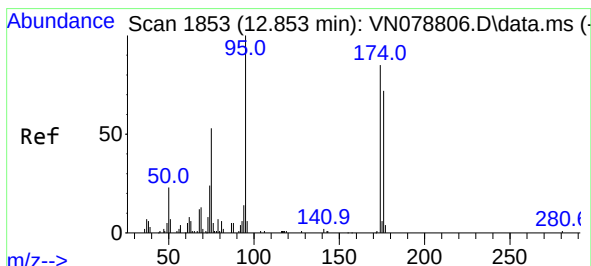
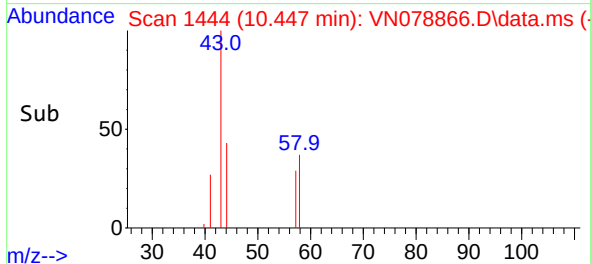
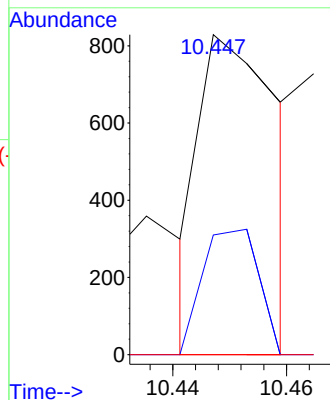
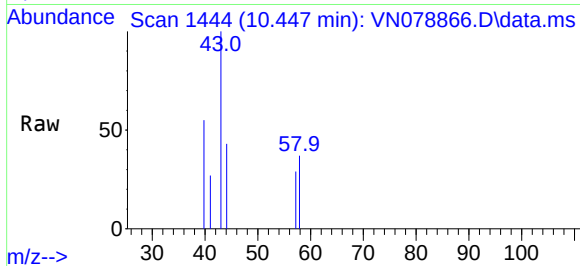




#58
4-Methyl-2-Pentanone
Concen: 0.371 ug/l
RT: 10.447 min Scan# 1444
Delta R.T. -0.006 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

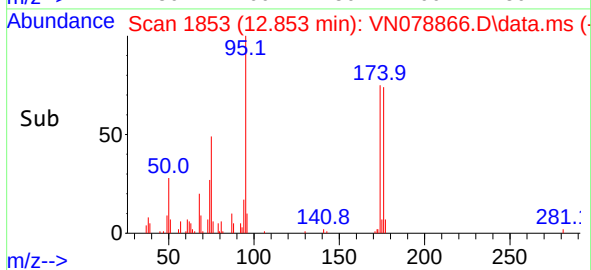
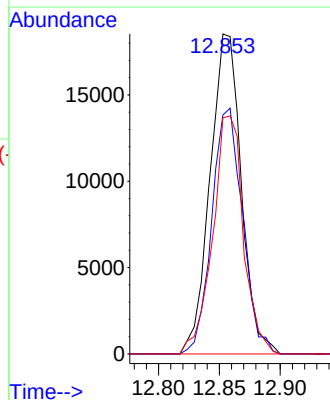
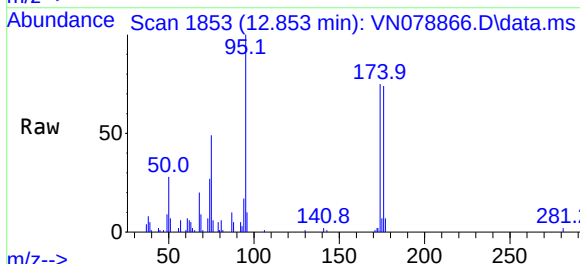
Instrument : MSVOA_N
ClientSampleId : 001-WILLETS-PT-BLVD(AUG)DL

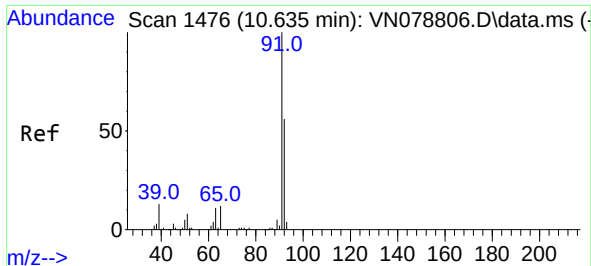
Tgt Ion:	43	Resp:	790
Ion	Ratio	Lower	Upper
43	100		
58	28.4	32.6	48.8#
85	0.0	16.2	24.2#



#60
4-Bromofluorobenzene
Concen: 21.217 ug/l
RT: 12.853 min Scan# 1853
Delta R.T. -0.000 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion:	95	Resp:	32997
Ion	Ratio	Lower	Upper
95	100		
174	76.0	61.7	92.5
176	73.1	58.1	87.1

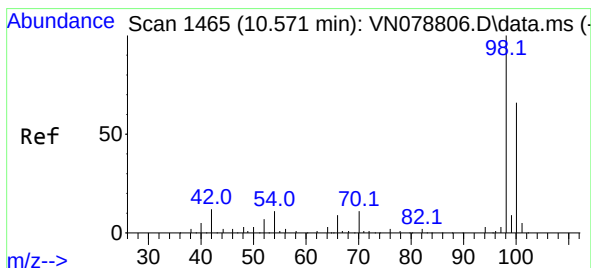
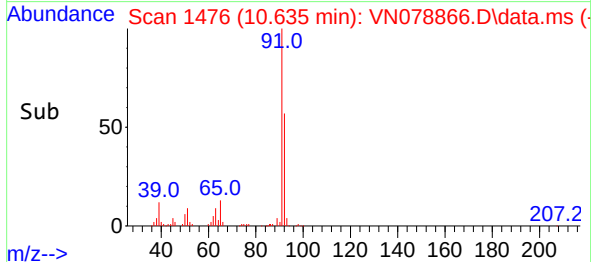
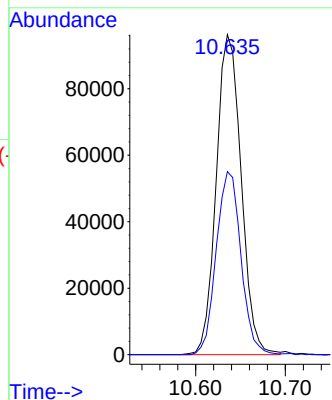
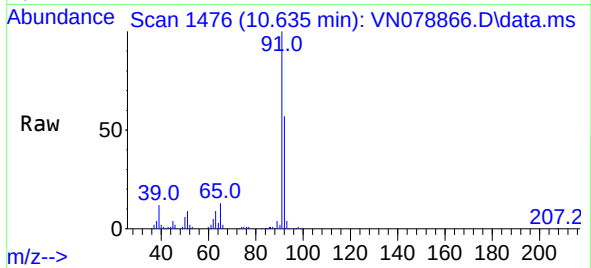




#62
Toluene
Concen: 28.511 ug/l
RT: 10.635 min Scan# 1476
Delta R.T. -0.000 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

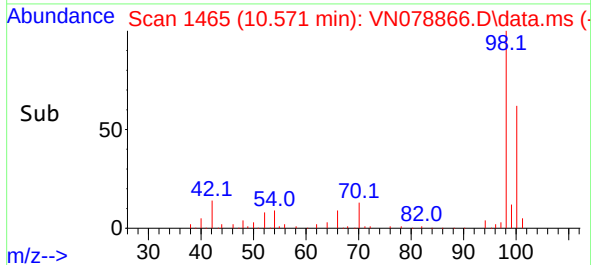
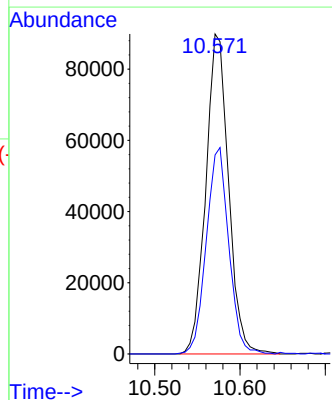
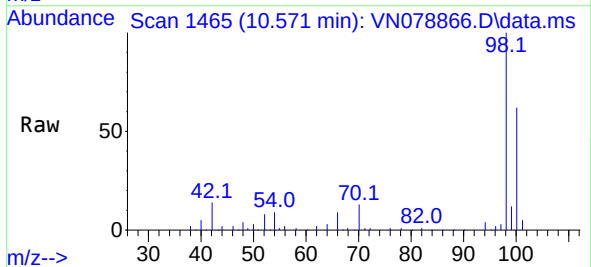
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(AUG)DL

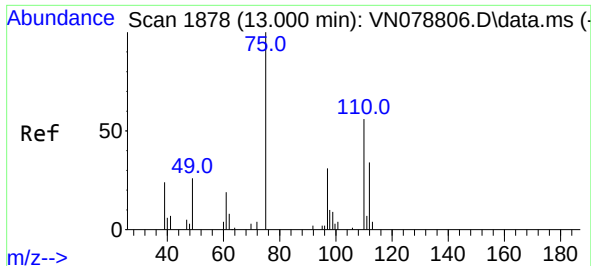
Tgt Ion: 91 Resp: 185970
Ion Ratio Lower Upper
91 100
92 56.6 45.2 67.8



#63
Toluene-d8
Concen: 30.723 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. -0.000 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 98 Resp: 166801
Ion Ratio Lower Upper
98 100
100 63.6 49.7 74.5

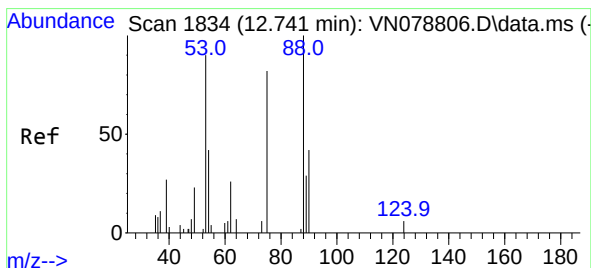
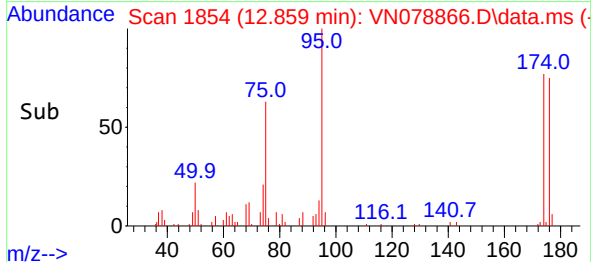
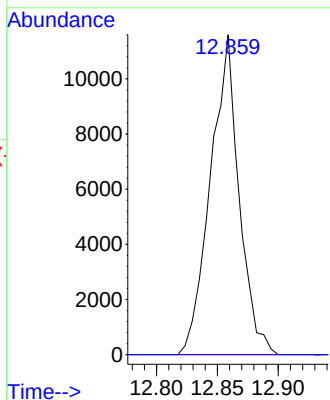
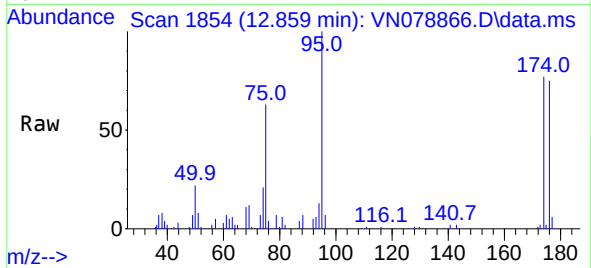




#72
1,2,3-Trichloropropane
Concen: 10.506 ug/l
RT: 12.859 min Scan# 1854
Delta R.T. -0.141 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(AUG)DL

Tgt Ion: 75 Resp: 18978
Ion Ratio Lower Upper
75 100
77 0.0 0.0 387.4



#77
t-1,4-Dichloro-2-butene
Concen: 33.471 ug/l
RT: 12.859 min Scan# 1854
Delta R.T. 0.118 min
Lab File: VN078866.D
Acq: 11 Aug 2023 16:27

Tgt Ion: 75 Resp: 18978
Ion Ratio Lower Upper
75 100
53 0.0 41.6 124.9#
89 0.0 25.1 75.4#

