

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN062525\
 Data File : VN087172.D
 Acq On : 25 Jun 2025 13:11
 Operator : JC\MD
 Sample : Q2349-01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 001-WILLETS-PT-BLVD(JUNE)

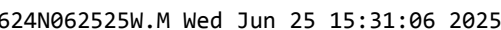
Quant Time: Jun 25 15:31:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Jun 25 10:49:56 2025
 Response via : Initial Calibration

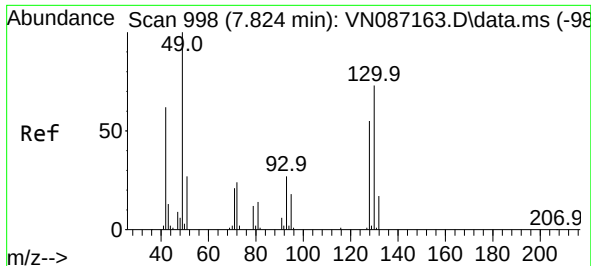
Compound	R.T. QIon		Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	7.824	128	35391	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.106	114	192737	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.865	117	179463	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.582	65	80767	30.289	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	= 100.967%	
60) 4-Bromofluorobenzene	12.853	95	81723	29.510	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	= 98.367%	
63) Toluene-d8	10.571	98	242100	30.045	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	= 100.167%	
Target Compounds						Qvalue
13) Acrolein	4.218	56	111	0.215	ug/l	85
15) Acetone	4.442	58	178007	389.050	ug/l	88
16) Carbon Disulfide	4.742	76	8208	1.309	ug/l	97
18) Methylene Chloride	5.294	84	519	0.209	ug/l #	60
23) tert-Butyl Alcohol	5.536	59	886	1.502	ug/l #	100
30) 2-Butanone	7.494	43	271947	134.201	ug/l	100
35) Methacrylonitrile	7.800	41	7878	3.858	ug/l #	45
36) 1,2-Dichloroethane	9.100	62	6347	2.064	ug/l #	75
46) Methyl methacrylate	9.665	41	3792	1.369	ug/l #	35
48) t-1,3-Dichloropropene	10.629	75	64653	17.690	ug/l #	1
49) cis-1,3-Dichloropropene	10.629	75	64653	16.640	ug/l #	1
50) 1,1,2-Trichloroethane	10.935	97	1135	0.492	ug/l #	15
51) Ethyl methacrylate	10.735	69	725	0.206	ug/l #	23
58) 4-Methyl-2-Pentanone	10.453	43	23149	6.416	ug/l	95
62) Toluene	10.635	91	9772413	964.150	ug/l	97
66) Ethyl Benzene	11.965	91	12071	1.088	ug/l	100
67) m/p-Xylenes	12.065	106	9844	2.316	ug/l	96
68) o-Xylene	12.400	106	3457	0.852	ug/l	87
70) Isopropylbenzene	13.094	105	4135	0.409	ug/l	99
76) 1,3,5-Trimethylbenzene	13.176	105	2508	0.305	ug/l	100
77) t-1,4-Dichloro-2-butene	12.847	75	40187	28.895	ug/l #	13
79) tert-butylbenzene	13.729	119	102396	14.813	ug/l	59
80) 1,2,4-Trimethylbenzene	13.482	105	7955	0.963	ug/l	98
81) sec-Butylbenzene	13.617	105	2651	0.264	ug/l	74
82) p-Isopropyltoluene	13.729	119	102396	12.245	ug/l	98
83) 1,3-Dichlorobenzene	13.806	146	973	0.206	ug/l	91
84) 1,4-Dichlorobenzene	13.806	146	973	0.205	ug/l	92
85) n-Butylbenzene	14.053	91	2216	0.290	ug/l	92
87) 1,2-Dichlorobenzene	13.806	146	973	0.219	ug/l	89
91) Naphthalene	15.641	128	7825	0.790	ug/l #	95

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

Quant Time: Jun 25 15:31:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N062525W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Wed Jun 25 10:49:56 2025
Response via : Initial Calibration

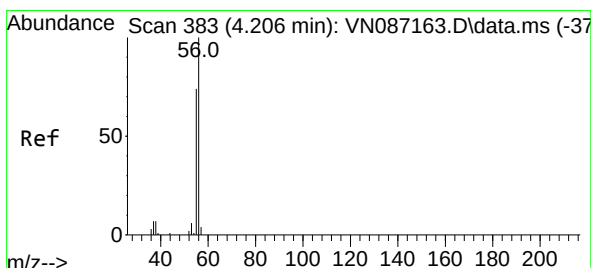
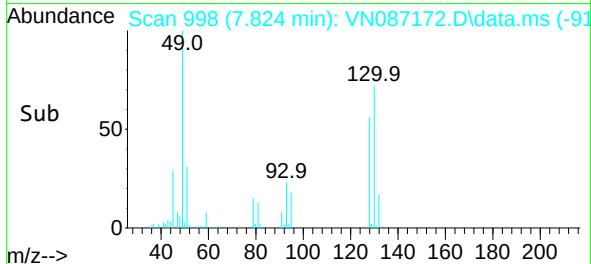
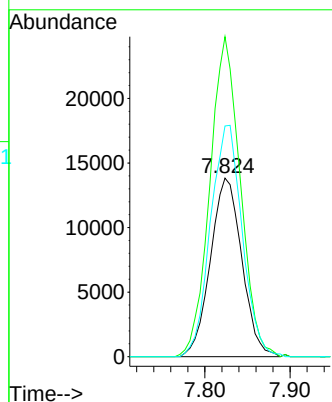
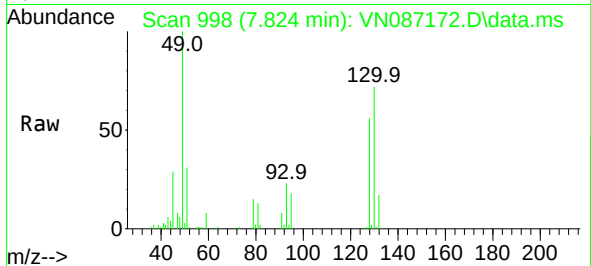




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.824 min Scan# 998
Delta R.T. -0.000 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

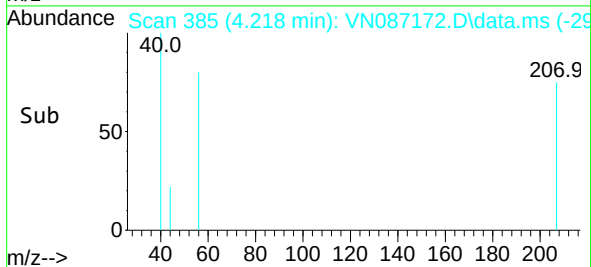
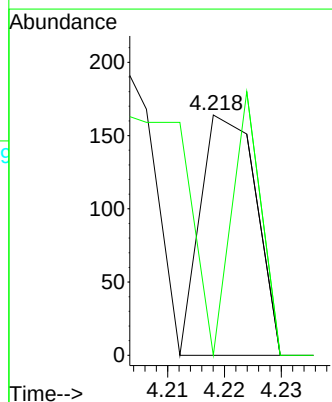
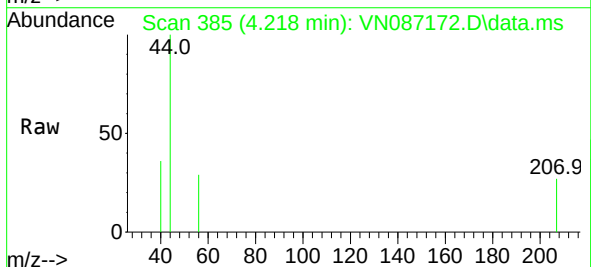
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

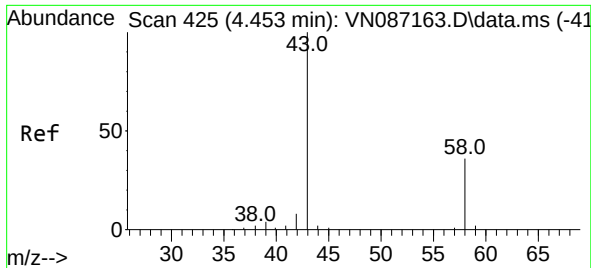
Tgt Ion:128 Resp: 35391
Ion Ratio Lower Upper
128 100
49 173.2 0.0 450.5
130 130.9 0.0 320.7



#13
Acrolein
Concen: 0.215 ug/l
RT: 4.218 min Scan# 385
Delta R.T. 0.012 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion: 56 Resp: 111
Ion Ratio Lower Upper
56 100
55 57.7 55.7 83.5





#15

Acetone

Concen: 389.050 ug/l

RT: 4.442 min Scan# 41

Delta R.T. -0.012 min

Lab File: VN087172.D

Acq: 25 Jun 2025 13:11

Instrument :

MSVOA_N

ClientSampleId :

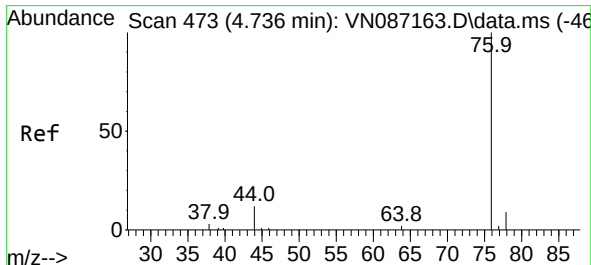
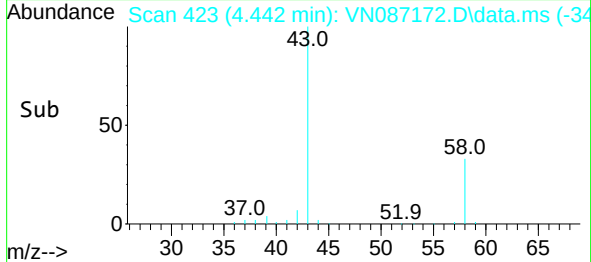
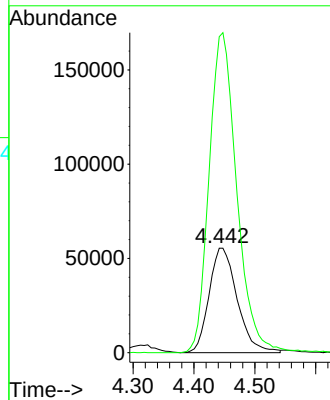
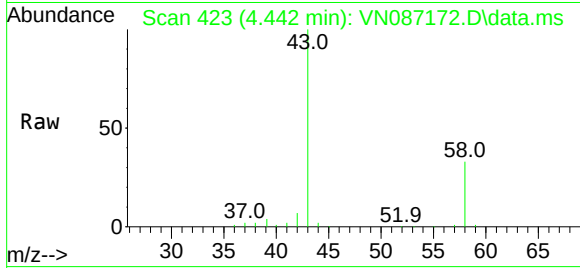
001-WILLETS-PT-BLVD(JUNE)

Tgt Ion: 58 Resp: 178007

Ion Ratio Lower Upper

58 100

43 302.5 224.3 336.5



#16

Carbon Disulfide

Concen: 1.309 ug/l

RT: 4.742 min Scan# 474

Delta R.T. 0.006 min

Lab File: VN087172.D

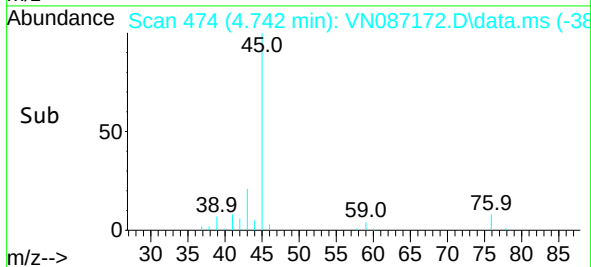
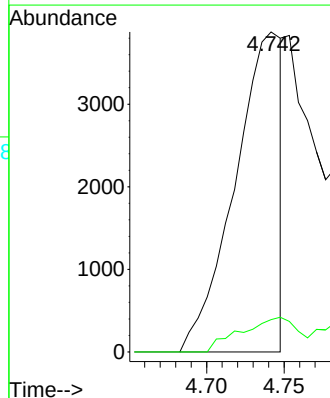
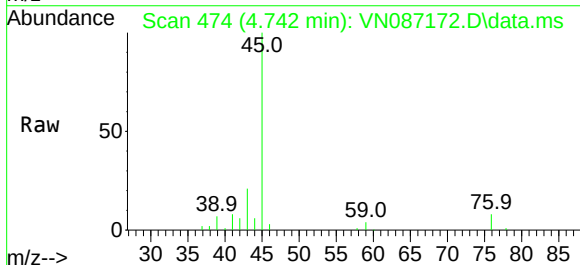
Acq: 25 Jun 2025 13:11

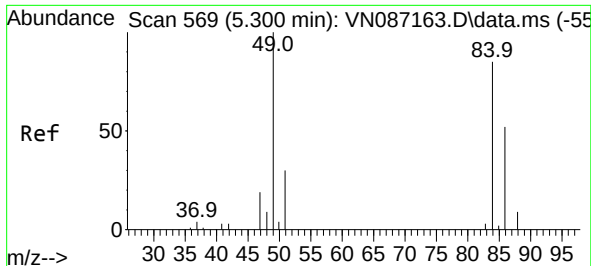
Tgt Ion: 76 Resp: 8208

Ion Ratio Lower Upper

76 100

78 10.1 7.2 10.8

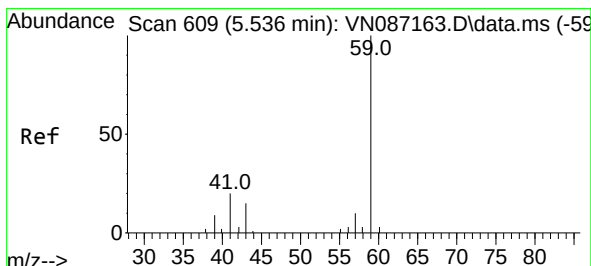
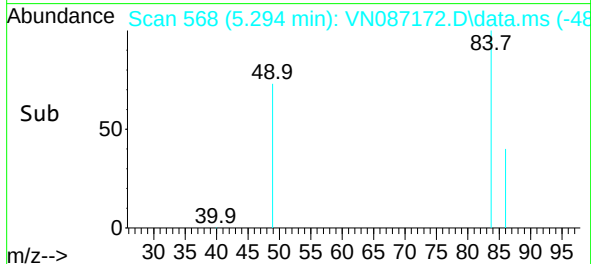
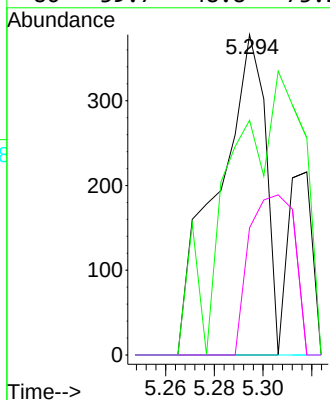
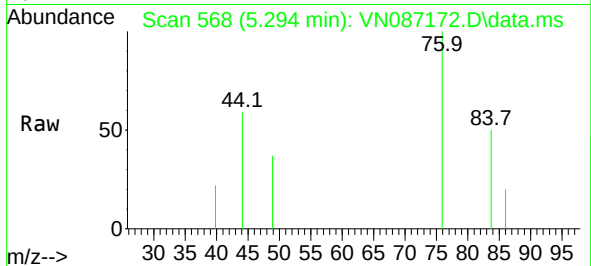




#18
Methylene Chloride
Concen: 0.209 ug/l
RT: 5.294 min Scan# 519
Delta R.T. -0.006 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

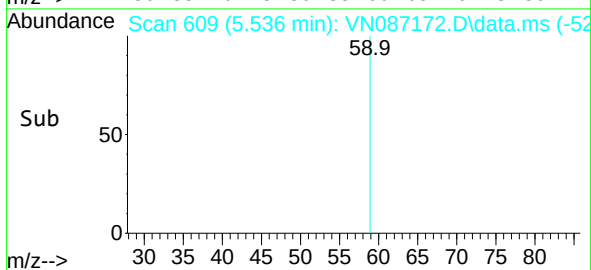
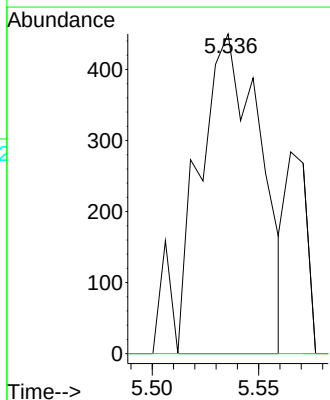
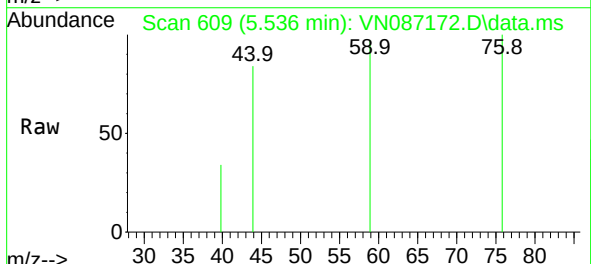
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

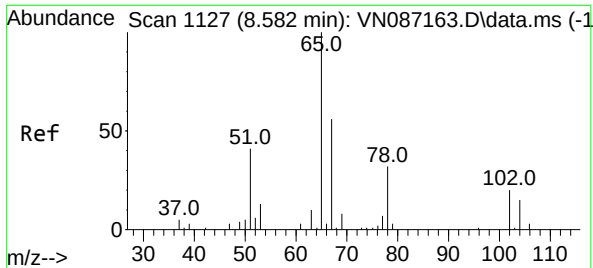
Tgt Ion: 84 Resp: 519
Ion Ratio Lower Upper
84 100
49 73.3 94.0 141.0#
51 0.0 28.3 42.5#
86 39.7 48.8 73.2#



#23
tert-Butyl Alcohol
Concen: 1.502 ug/l
RT: 5.536 min Scan# 609
Delta R.T. -0.000 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion: 59 Resp: 886
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0

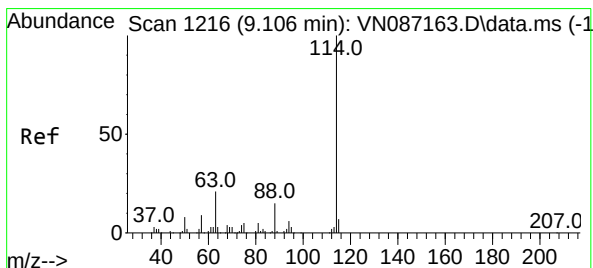
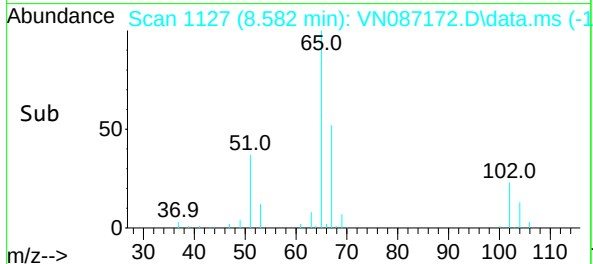
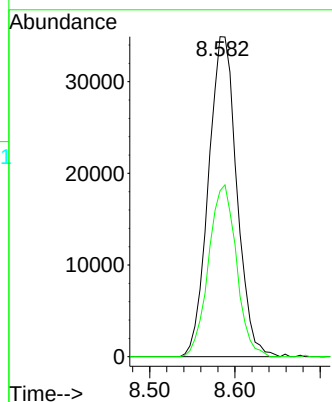
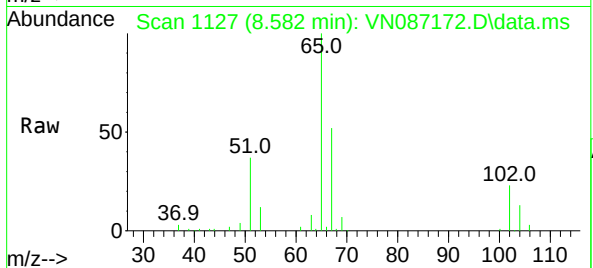




#27
1,2-Dichloroethane-d4
Concen: 30.289 ug/l
RT: 8.582 min Scan# 1127
Delta R.T. -0.000 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

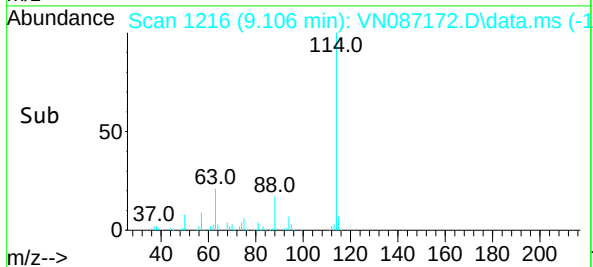
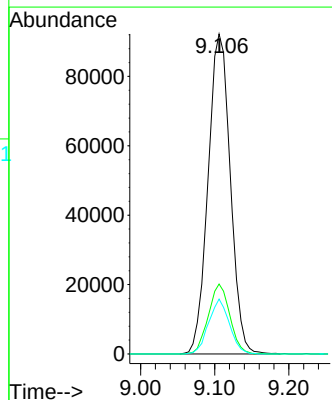
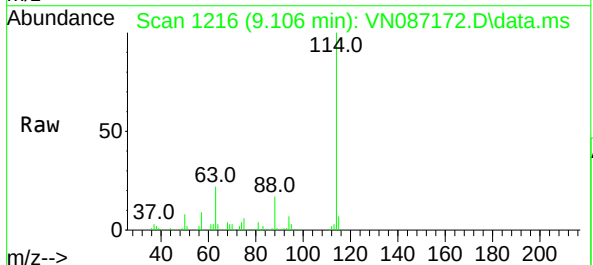
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

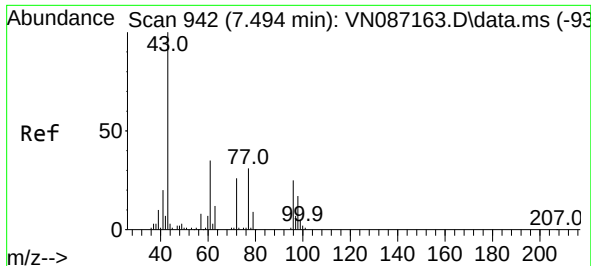
Tgt Ion: 65 Resp: 80767
Ion Ratio Lower Upper
65 100
67 52.7 41.9 62.9



#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.106 min Scan# 1216
Delta R.T. -0.000 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion: 114 Resp: 192737
Ion Ratio Lower Upper
114 100
63 21.0 17.0 25.4
88 16.0 12.6 19.0

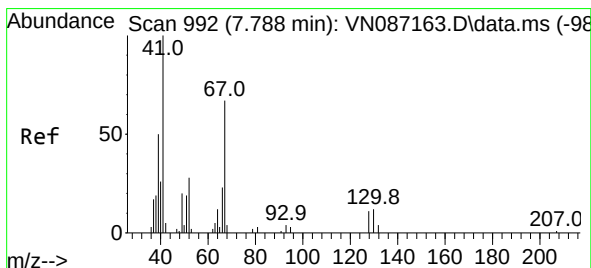
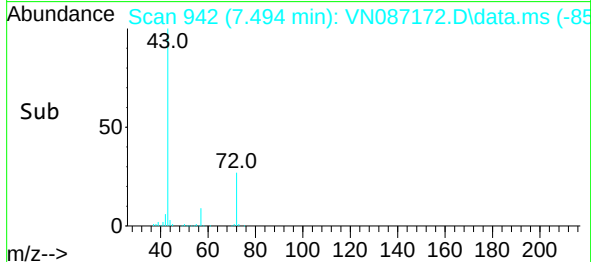
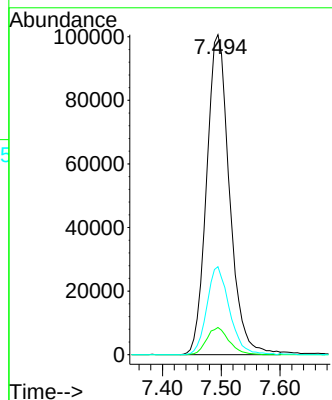
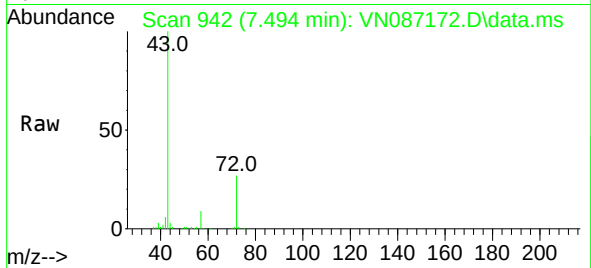




#30
2-Butanone
Concen: 134.201 ug/l
RT: 7.494 min Scan# 942
Delta R.T. -0.000 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

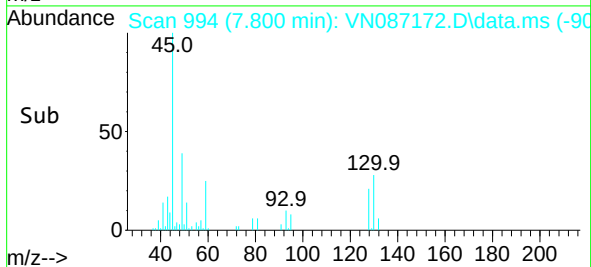
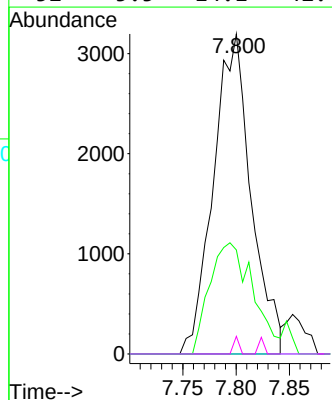
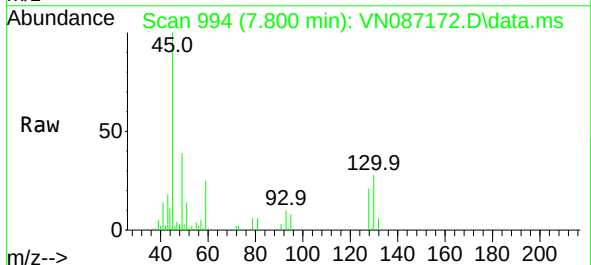
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

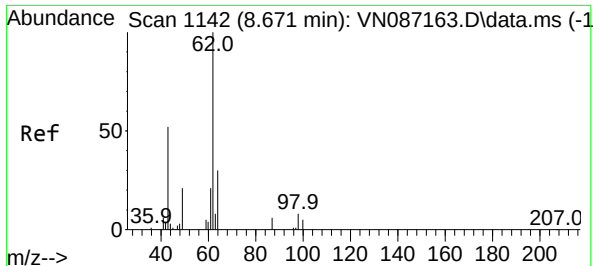
Tgt Ion: 43 Resp: 271947
Ion Ratio Lower Upper
43 100
57 8.3 6.3 9.5
72 27.2 21.8 32.6



#35
Methacrylonitrile
Concen: 3.858 ug/l
RT: 7.800 min Scan# 994
Delta R.T. 0.012 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion: 41 Resp: 7878
Ion Ratio Lower Upper
41 100
39 32.5 24.4 73.2
67 0.0 33.3 99.8#
52 5.5 14.1 42.4#





#36

1,2-Dichloroethane

Concen: 2.064 ug/l

RT: 9.100 min Scan# 1142

Delta R.T. 0.429 min

Lab File: VN087172.D

Acq: 25 Jun 2025 13:11

Instrument :

MSVOA_N

ClientSampleId :

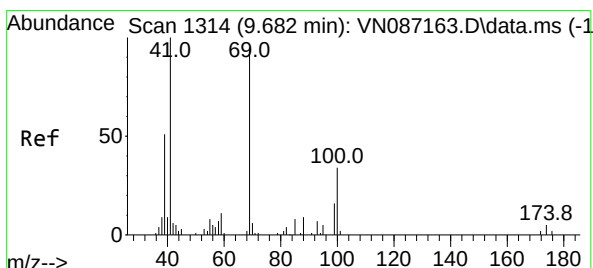
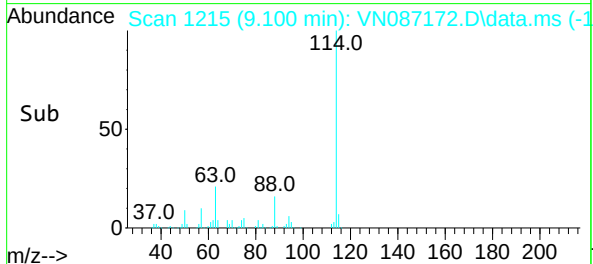
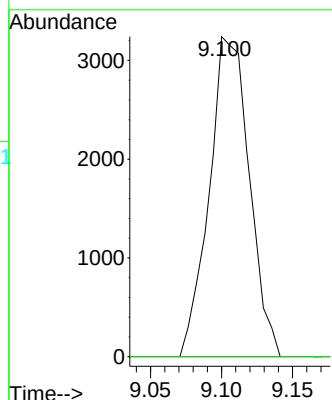
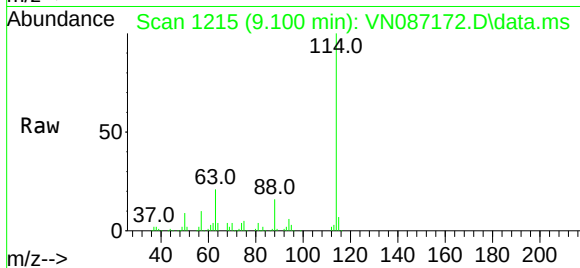
001-WILLETS-PT-BLVD(JUNE)

Tgt Ion: 62 Resp: 6347

Ion Ratio Lower Upper

62 100

98 0.0 7.2 10.8#



#46

Methyl methacrylate

Concen: 1.369 ug/l

RT: 9.665 min Scan# 1311

Delta R.T. -0.018 min

Lab File: VN087172.D

Acq: 25 Jun 2025 13:11

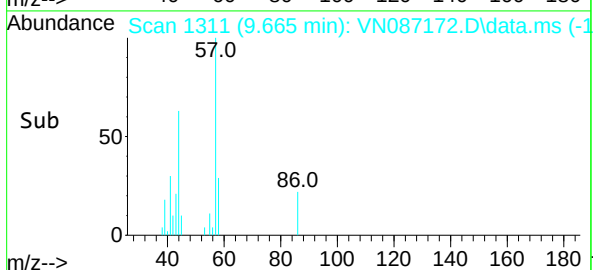
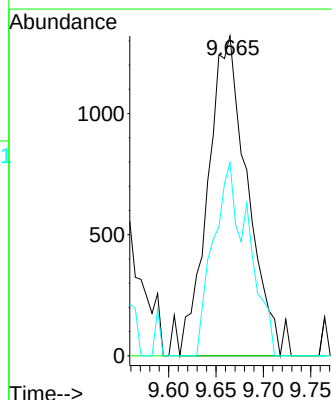
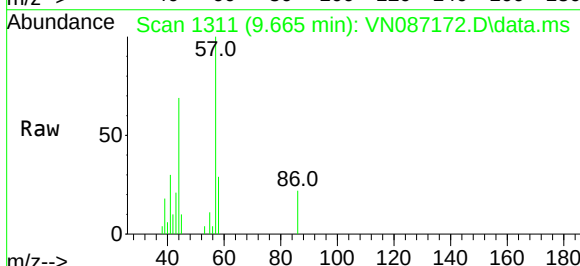
Tgt Ion: 41 Resp: 3792

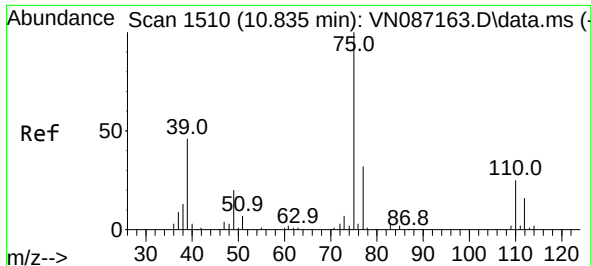
Ion Ratio Lower Upper

41 100

69 0.0 45.6 136.9#

39 60.4 26.2 78.5

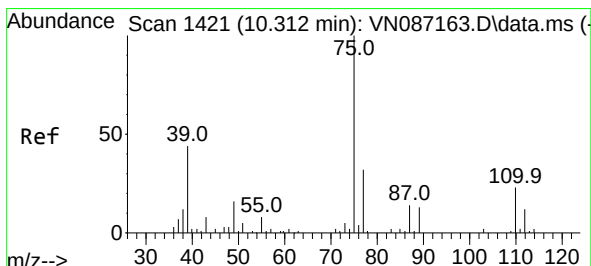
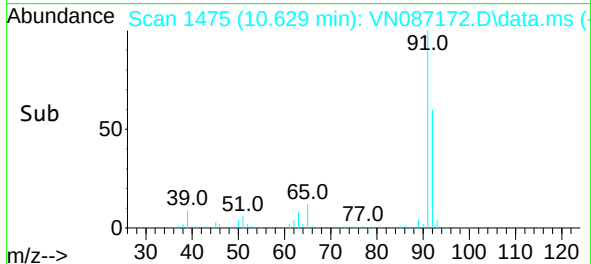
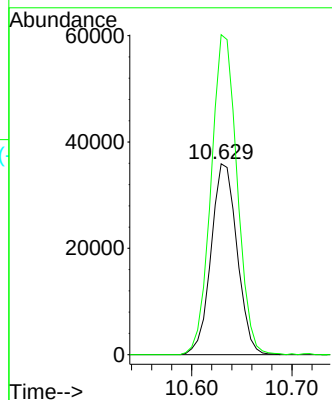
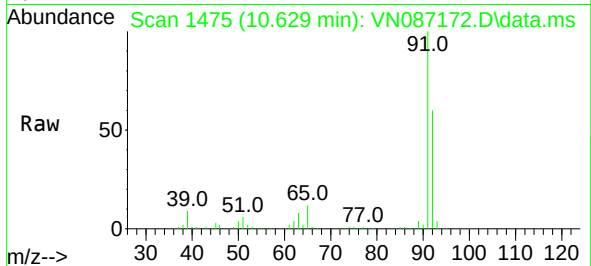




#48
t-1,3-Dichloropropene
Concen: 17.690 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. -0.206 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

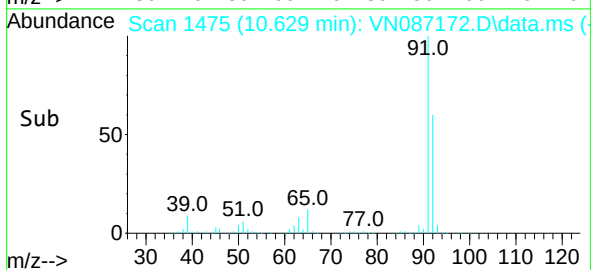
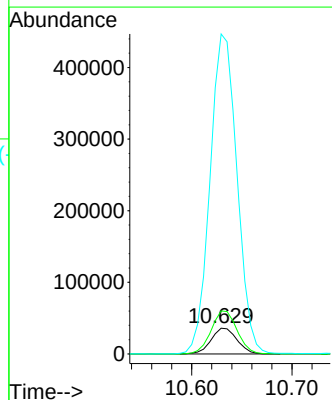
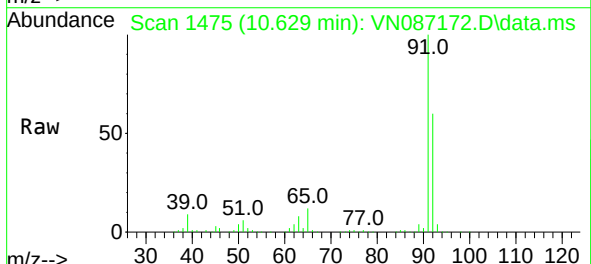
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

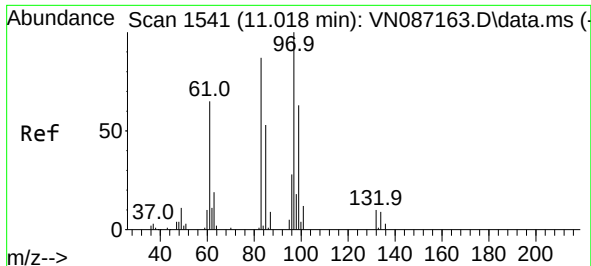
Tgt Ion: 75 Resp: 64653
Ion Ratio Lower Upper
75 100
77 167.6 25.4 38.0#



#49
cis-1,3-Dichloropropene
Concen: 16.640 ug/l
RT: 10.629 min Scan# 1475
Delta R.T. 0.318 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion: 75 Resp: 64653
Ion Ratio Lower Upper
75 100
77 167.6 25.4 38.2#
39 1242.2 35.3 52.9#

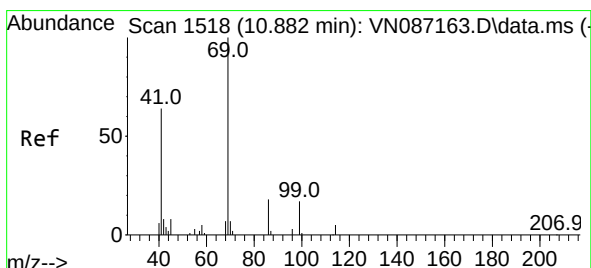
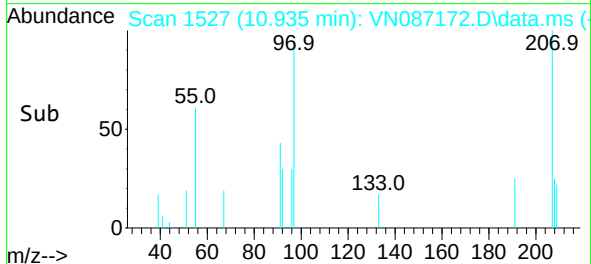
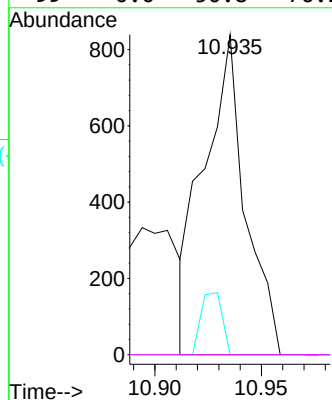
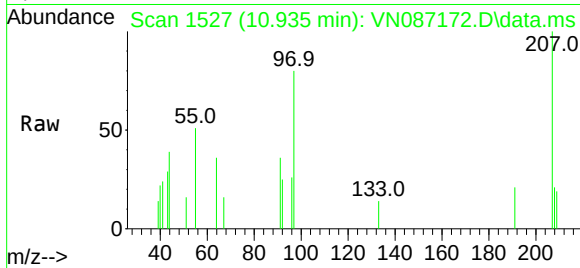




#50
1,1,2-Trichloroethane
Concen: 0.492 ug/l
RT: 10.935 min Scan# 1493
Delta R.T. -0.082 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

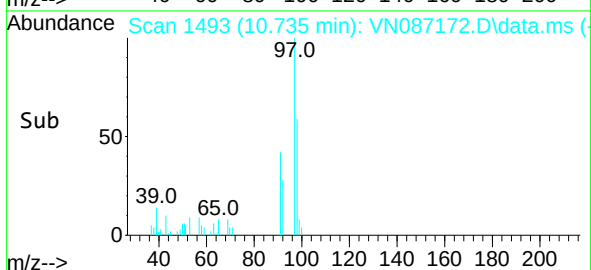
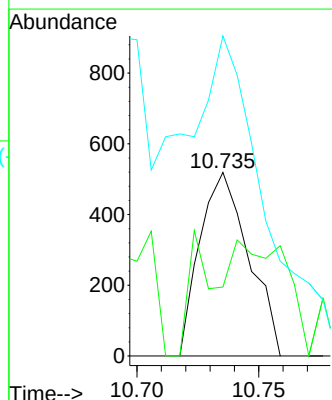
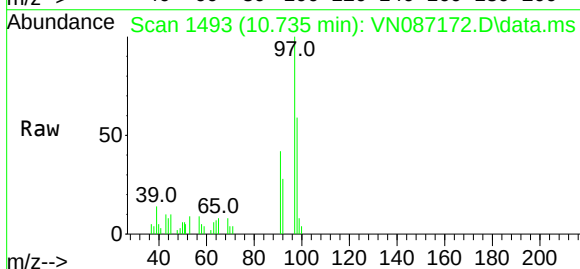
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

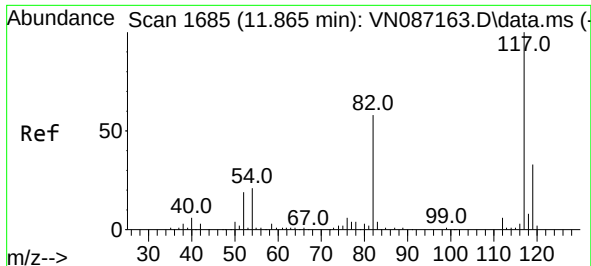
Tgt Ion:	97	Resp:	1135
Ion	Ratio	Lower	Upper
97	100		
83	0.0	69.6	104.4#
85	0.0	42.0	63.0#
99	0.0	50.8	76.2#



#51
Ethyl methacrylate
Concen: 0.206 ug/l
RT: 10.735 min Scan# 1493
Delta R.T. -0.147 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion:	69	Resp:	725
Ion	Ratio	Lower	Upper
69	100		
41	37.6	31.8	95.3
39	122.7	15.3	45.8#

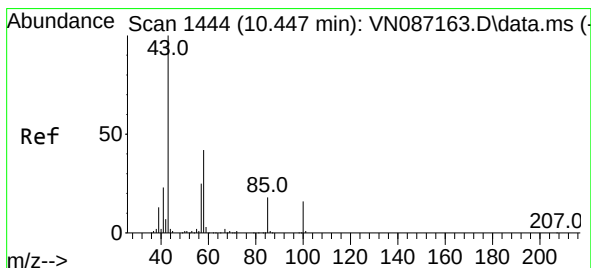
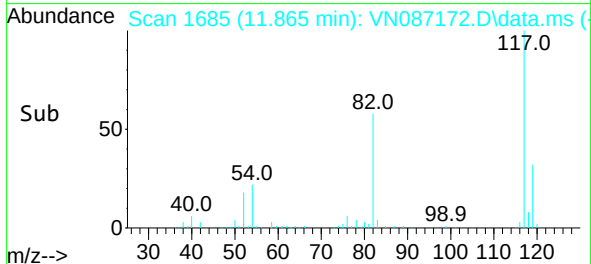
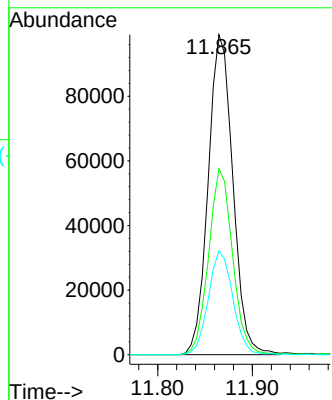
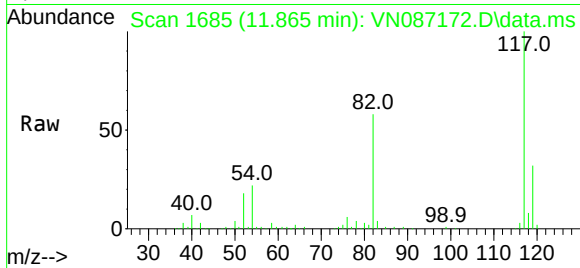




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.865 min Scan# 117
Delta R.T. -0.000 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

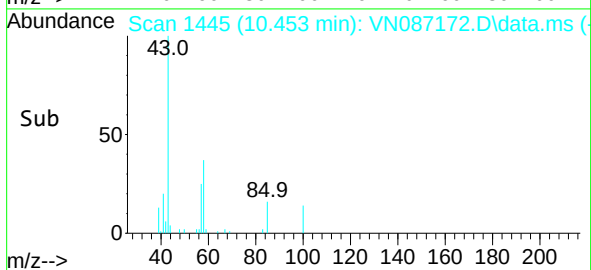
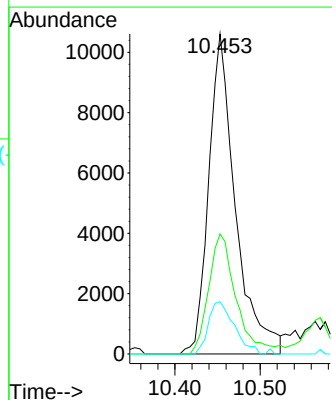
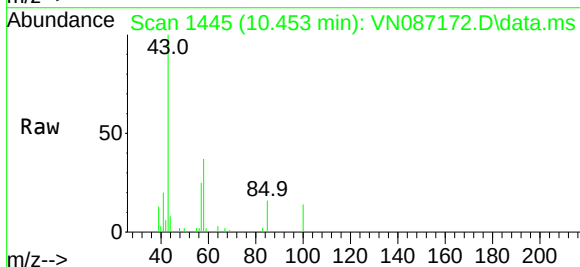
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

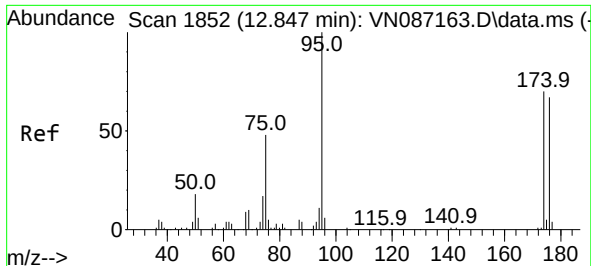
Tgt Ion:117 Resp: 179463
Ion Ratio Lower Upper
117 100
82 56.8 45.4 68.2
119 32.1 26.2 39.4



#58
4-Methyl-2-Pentanone
Concen: 6.416 ug/l
RT: 10.453 min Scan# 1445
Delta R.T. 0.006 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion: 43 Resp: 23149
Ion Ratio Lower Upper
43 100
58 38.2 32.6 49.0
85 15.4 14.6 22.0

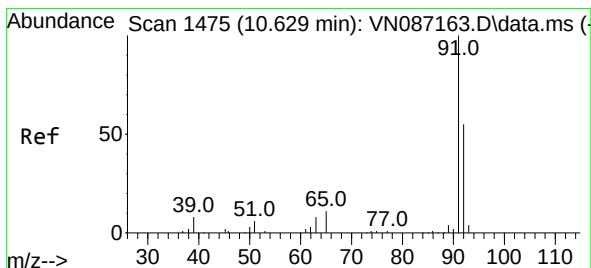
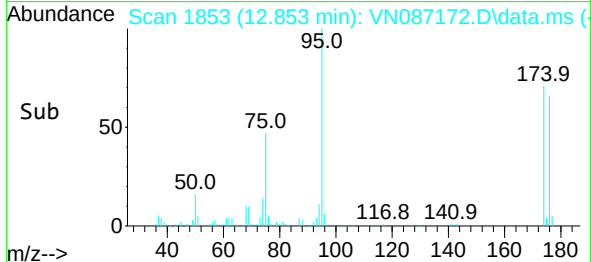
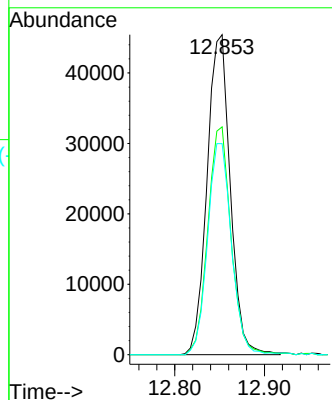
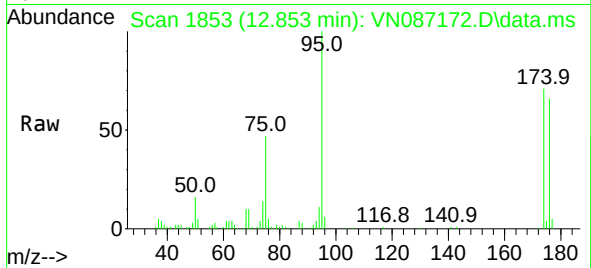




#60
4-Bromofluorobenzene
Concen: 29.510 ug/l
RT: 12.853 min Scan# 11
Delta R.T. 0.006 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

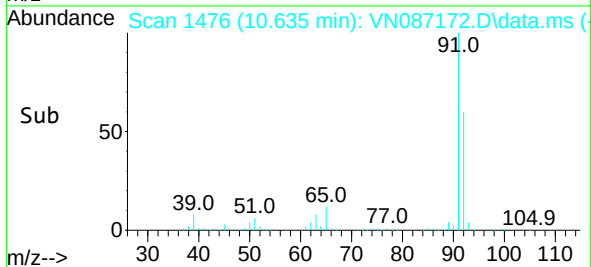
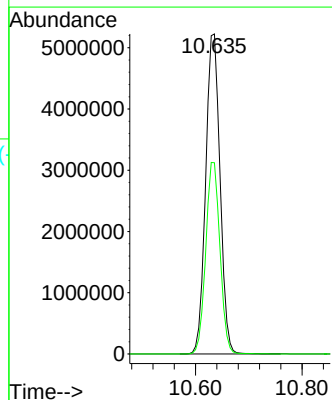
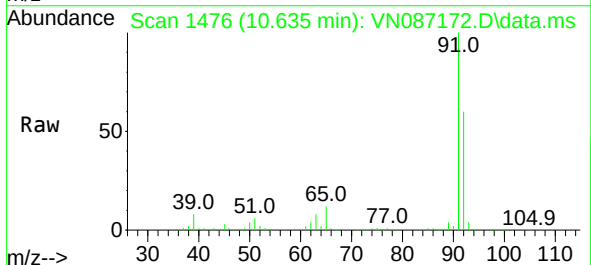
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

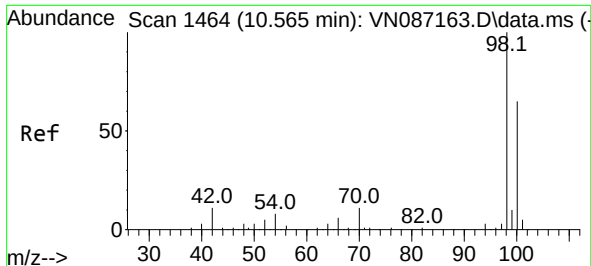
Tgt Ion: 95 Resp: 81723
Ion Ratio Lower Upper
95 100
174 71.2 54.5 81.7
176 67.2 51.9 77.9



#62
Toluene
Concen: 964.150 ug/l
RT: 10.635 min Scan# 1476
Delta R.T. 0.006 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion: 91 Resp: 9772413
Ion Ratio Lower Upper
91 100
92 59.2 45.8 68.8

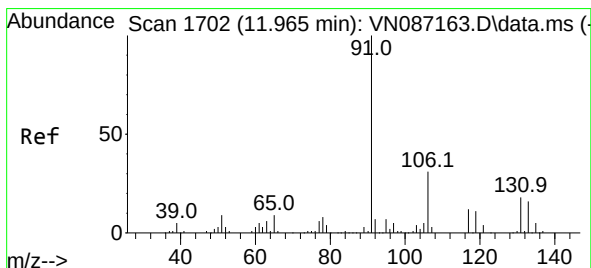
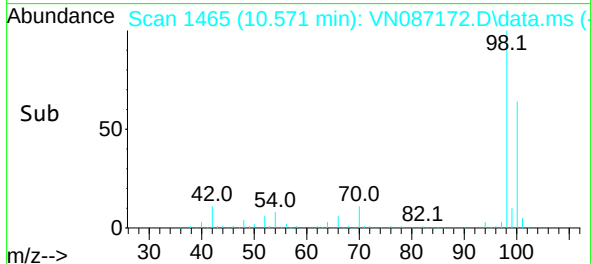
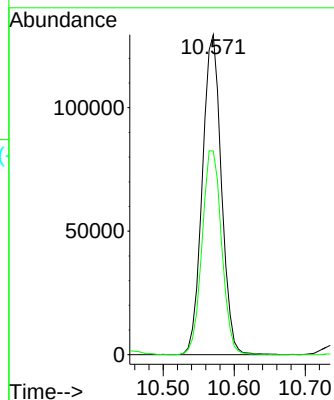
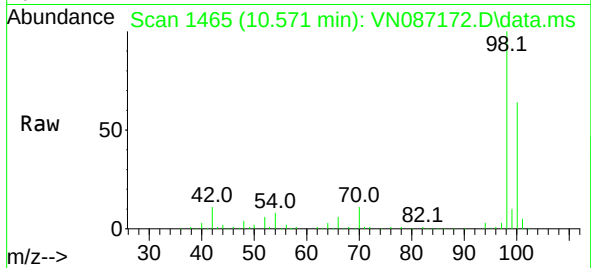




#63
Toluene-d8
Concen: 30.045 ug/l
RT: 10.571 min Scan# 1465
Delta R.T. 0.006 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

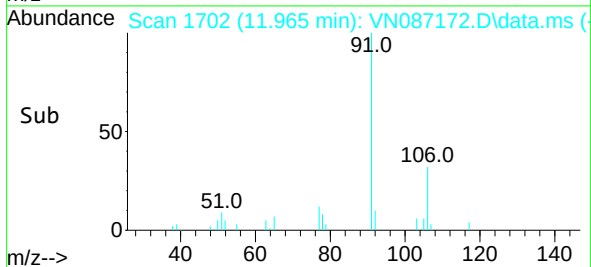
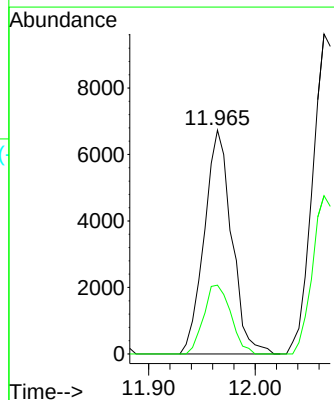
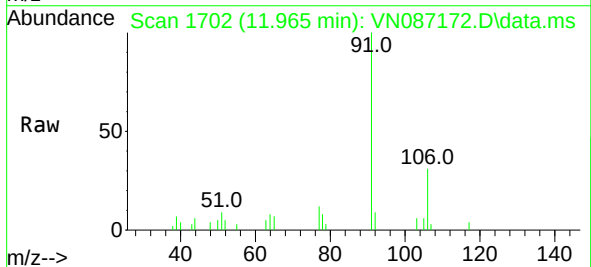
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

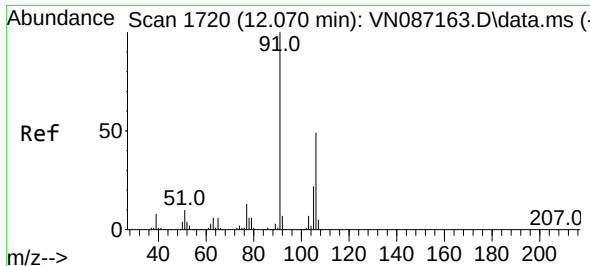
Tgt Ion: 98 Resp: 242100
Ion Ratio Lower Upper
98 100
100 65.5 52.5 78.7



#66
Ethyl Benzene
Concen: 1.088 ug/l
RT: 11.965 min Scan# 1702
Delta R.T. -0.000 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion: 91 Resp: 12071
Ion Ratio Lower Upper
91 100
106 30.7 24.8 37.2

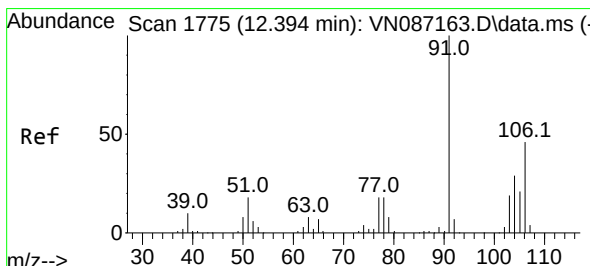
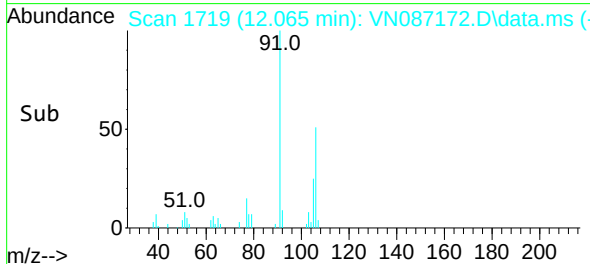
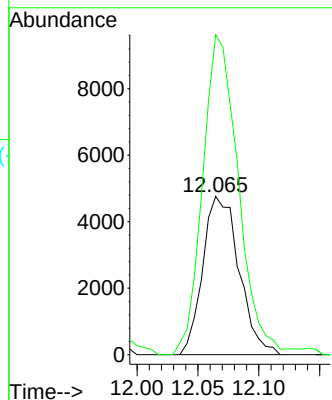
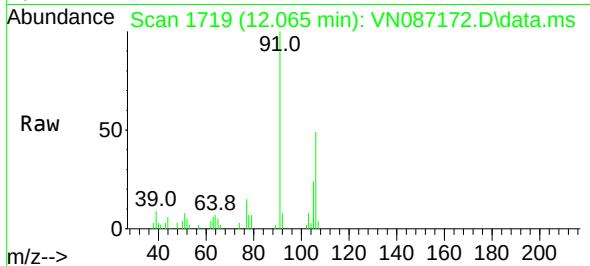




#67
m/p-Xylenes
Concen: 2.316 ug/l
RT: 12.065 min Scan# 1719
Delta R.T. -0.006 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

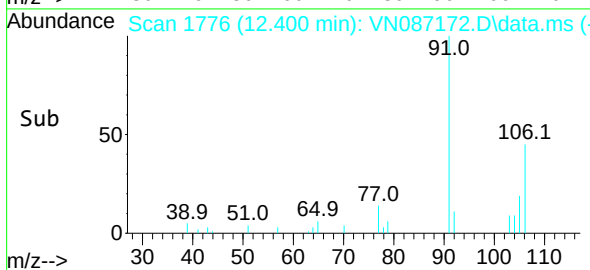
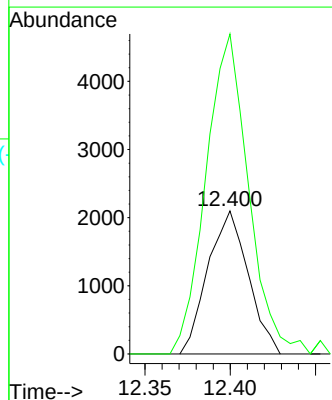
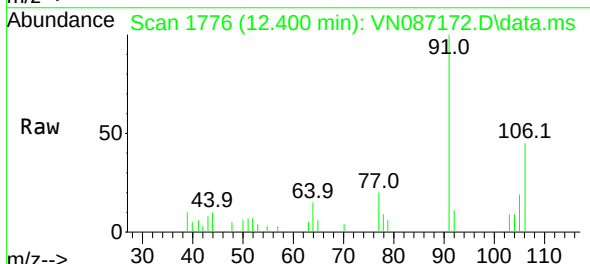
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

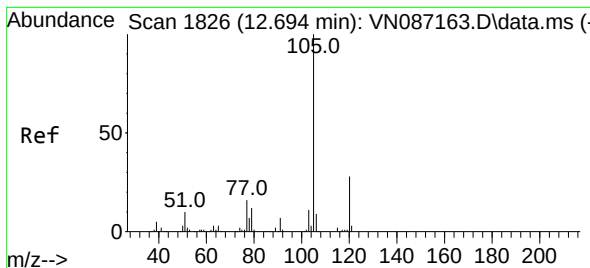
Tgt Ion:106 Resp: 9844
Ion Ratio Lower Upper
106 100
91 198.0 163.0 244.4



#68
o-Xylene
Concen: 0.852 ug/l
RT: 12.400 min Scan# 1776
Delta R.T. 0.006 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion:106 Resp: 3457
Ion Ratio Lower Upper
106 100
91 234.2 107.1 321.1





#70

Isopropylbenzene

Concen: 0.409 ug/l

RT: 13.094 min Scan# 11

Delta R.T. 0.400 min

Lab File: VN087172.D

Acq: 25 Jun 2025 13:11

Instrument :

MSVOA_N

ClientSampleId :

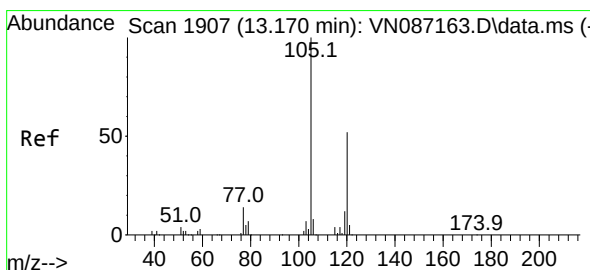
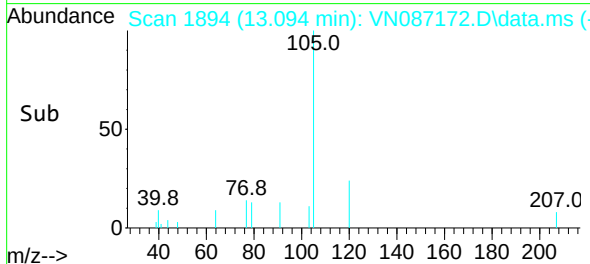
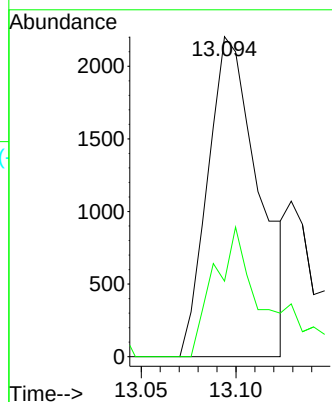
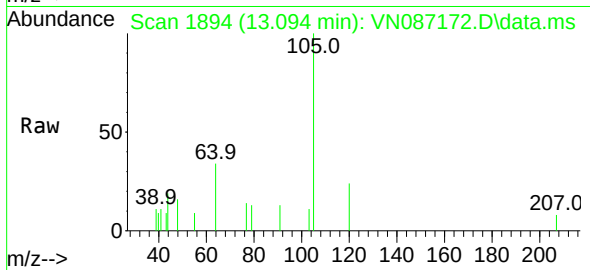
001-WILLETS-PT-BLVD(JUNE)

Tgt Ion:105 Resp: 4135

Ion Ratio Lower Upper

105 100

120 27.8 19.0 35.2



#76

1,3,5-Trimethylbenzene

Concen: 0.305 ug/l

RT: 13.176 min Scan# 1908

Delta R.T. 0.006 min

Lab File: VN087172.D

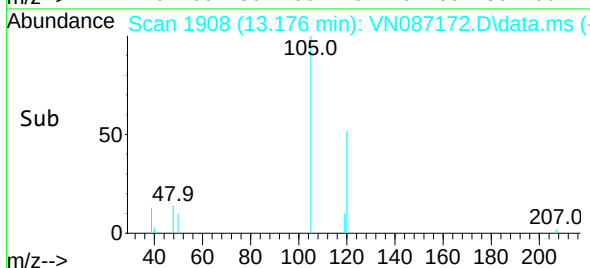
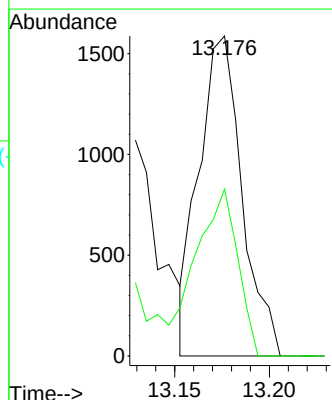
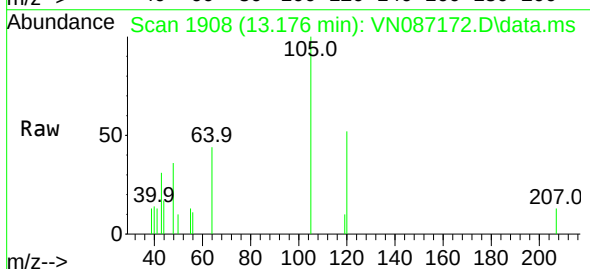
Acq: 25 Jun 2025 13:11

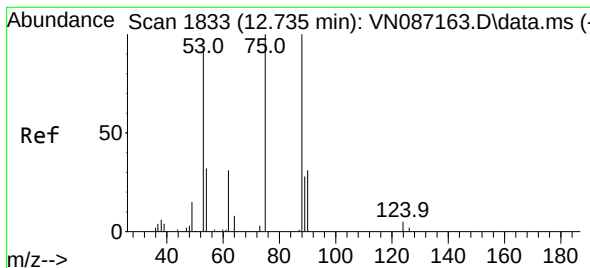
Tgt Ion:105 Resp: 2508

Ion Ratio Lower Upper

105 100

120 50.3 0.0 100.8

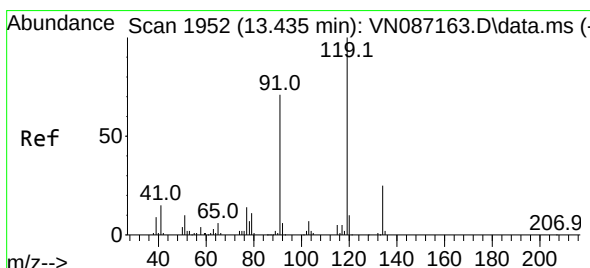
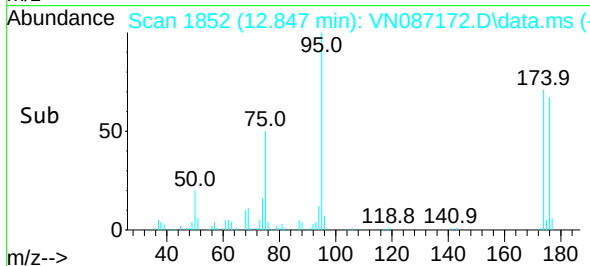
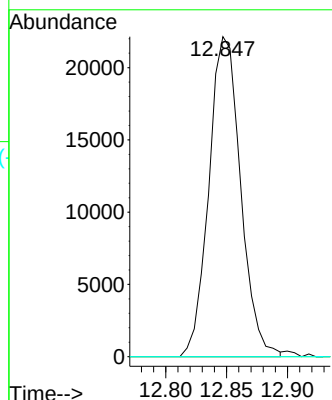
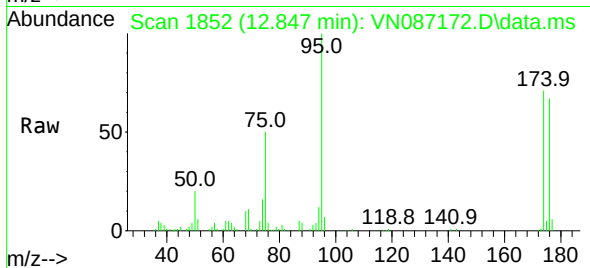




#77
t-1,4-Dichloro-2-butene
Concen: 28.895 ug/l
RT: 12.847 min Scan# 11
Delta R.T. 0.112 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

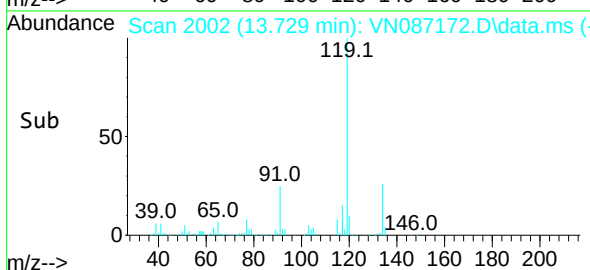
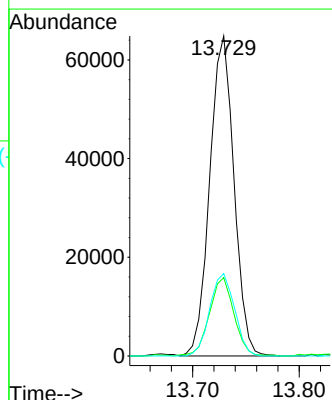
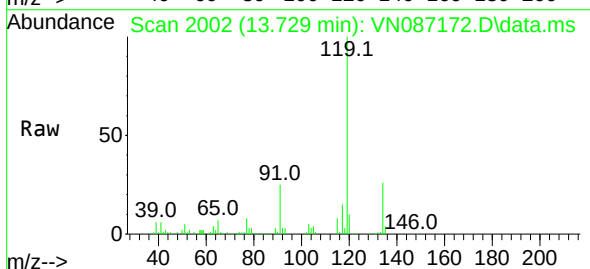
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

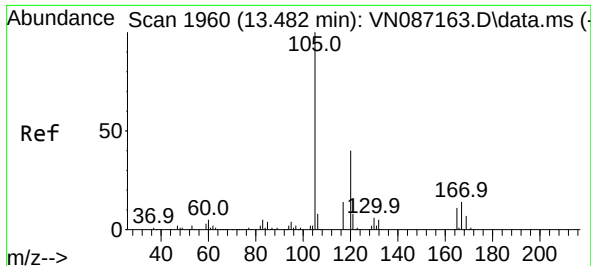
Tgt Ion: 75 Resp: 40187
Ion Ratio Lower Upper
75 100
53 0.0 45.9 137.6#
89 0.0 22.3 66.9#



#79
tert-butylbenzene
Concen: 14.813 ug/l
RT: 13.729 min Scan# 2002
Delta R.T. 0.294 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion: 119 Resp: 102396
Ion Ratio Lower Upper
119 100
91 24.8 0.0 137.0
134 26.4 0.0 49.4

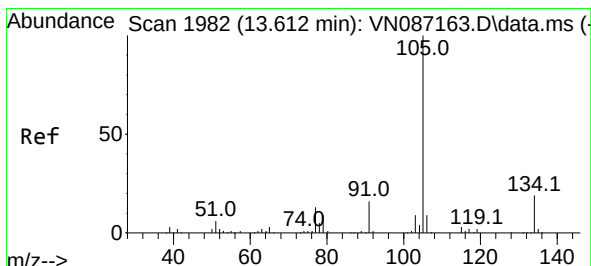
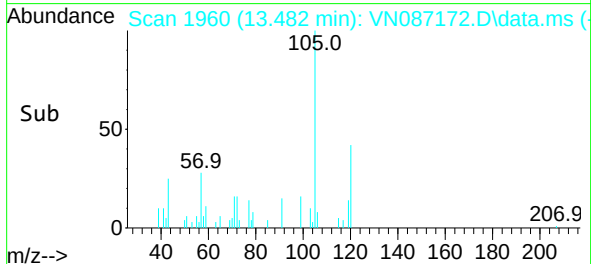
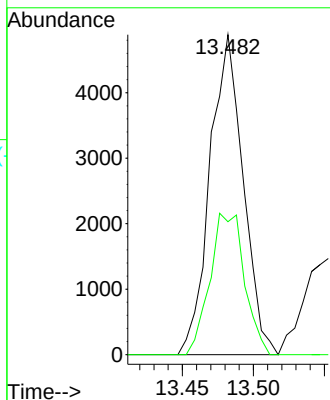
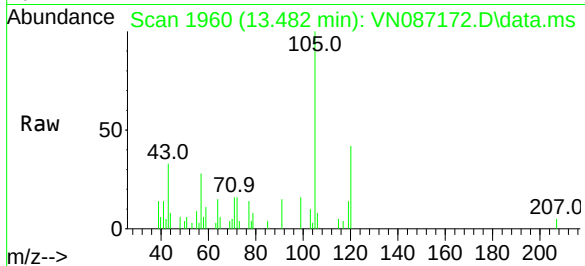




#80
1,2,4-Trimethylbenzene
Concen: 0.963 ug/l
RT: 13.482 min Scan# 1960
Delta R.T. -0.000 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

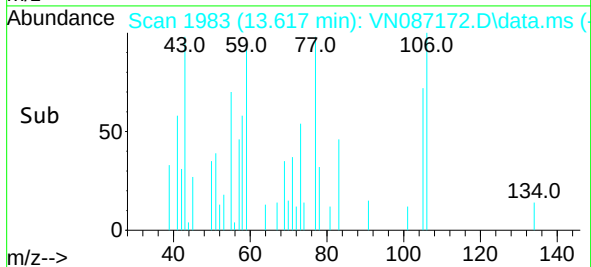
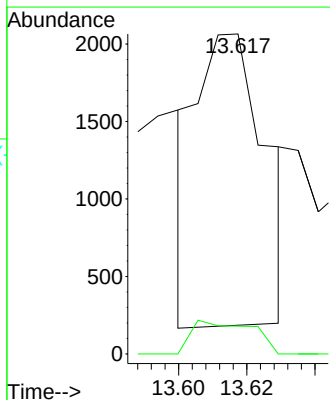
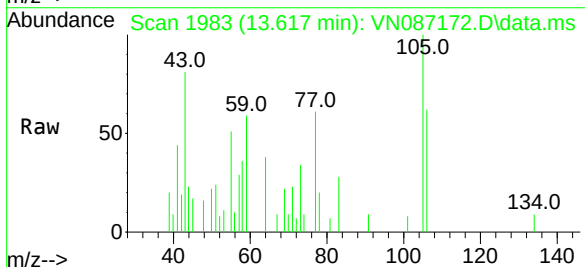
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)

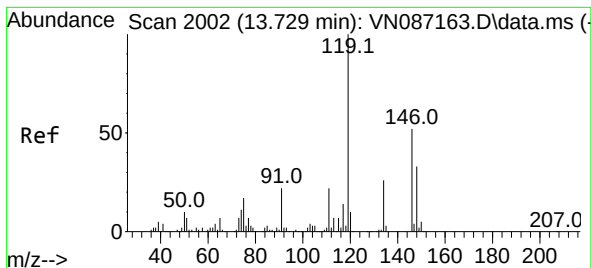
Tgt Ion:105 Resp: 7955
Ion Ratio Lower Upper
105 100
120 45.7 0.0 94.0



#81
sec-Butylbenzene
Concen: 0.264 ug/l
RT: 13.617 min Scan# 1983
Delta R.T. 0.006 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

Tgt Ion:105 Resp: 2651
Ion Ratio Lower Upper
105 100
134 7.7 0.0 39.4





#82

p-Isopropyltoluene

Concen: 12.245 ug/l

RT: 13.729 min Scan# 2002

Delta R.T. -0.000 min

Lab File: VN087172.D

Acq: 25 Jun 2025 13:11

Instrument :

MSVOA_N

ClientSampleId :

001-WILLETS-PT-BLVD(JUNE)

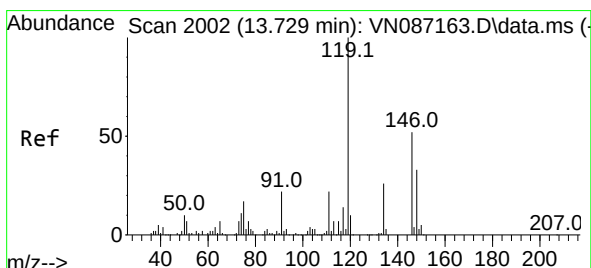
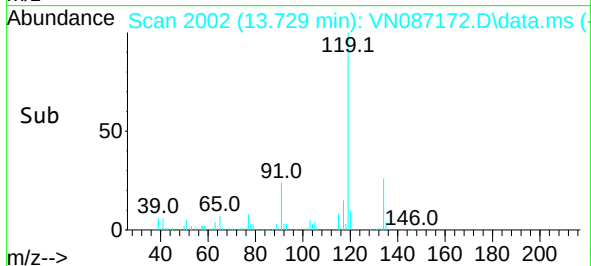
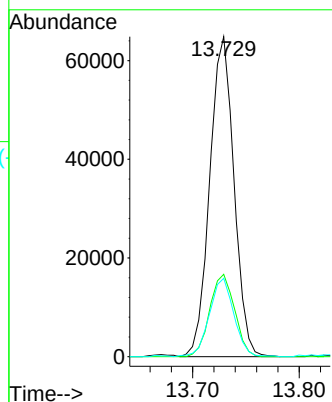
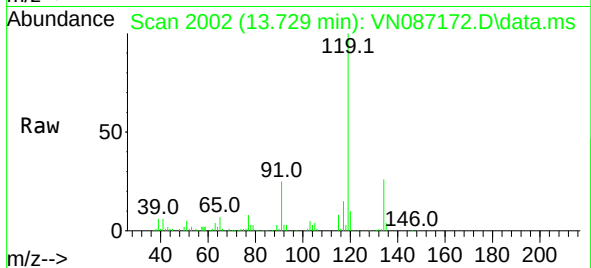
Tgt Ion:119 Resp: 102396

Ion Ratio Lower Upper

119 100

134 26.4 0.0 51.2

91 24.8 0.0 46.4



#83

1,3-Dichlorobenzene

Concen: 0.206 ug/l

RT: 13.806 min Scan# 2015

Delta R.T. 0.076 min

Lab File: VN087172.D

Acq: 25 Jun 2025 13:11

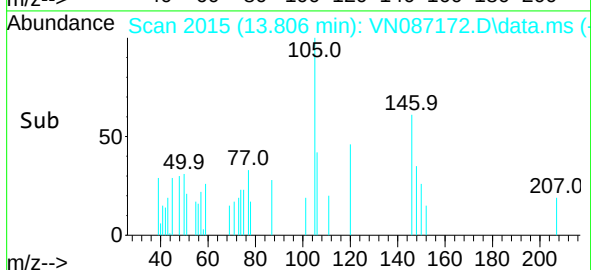
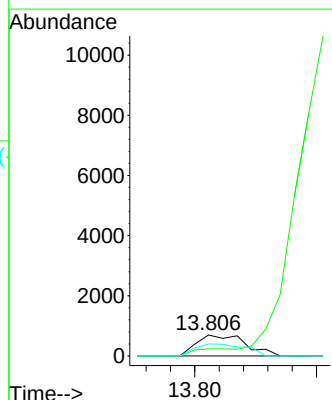
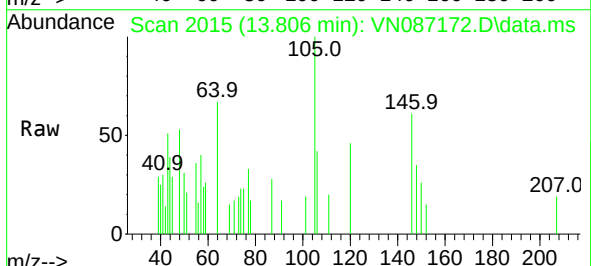
Tgt Ion:146 Resp: 973

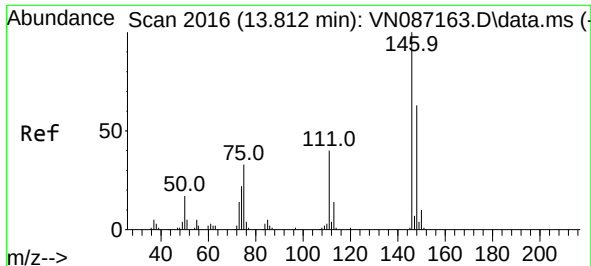
Ion Ratio Lower Upper

146 100

111 32.3 21.1 63.3

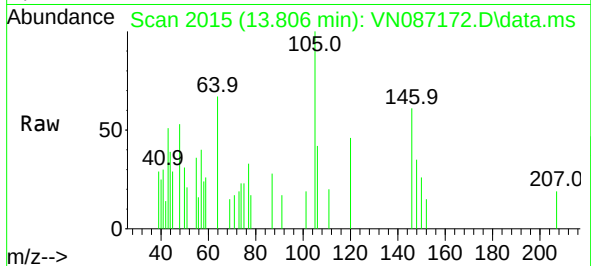
148 59.2 31.6 94.8



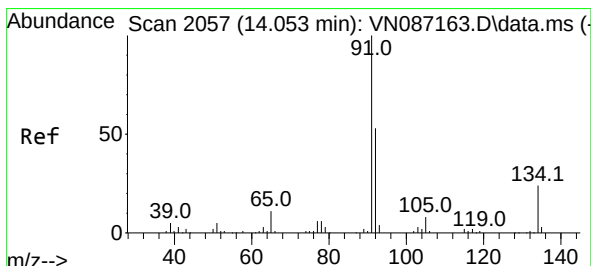
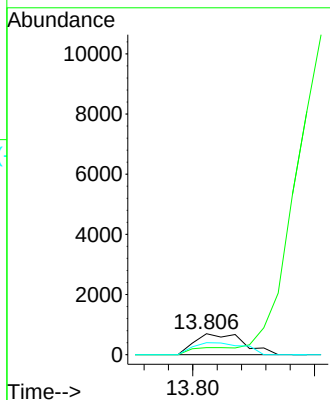
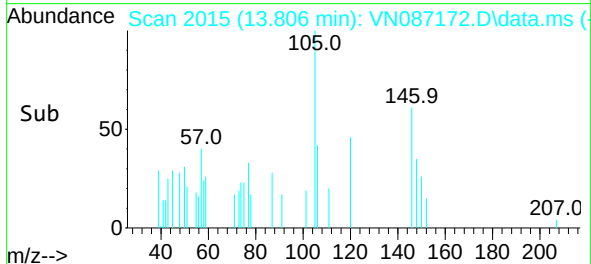


#84
1,4-Dichlorobenzene
Concen: 0.205 ug/l
RT: 13.806 min Scan# 2016
Delta R.T. -0.006 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11

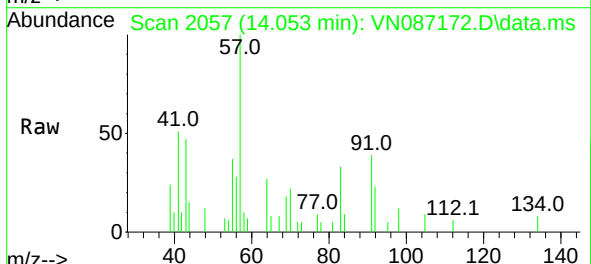
Instrument :
MSVOA_N
ClientSampleId :
001-WILLETS-PT-BLVD(JUNE)



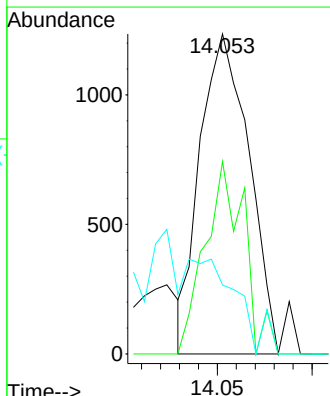
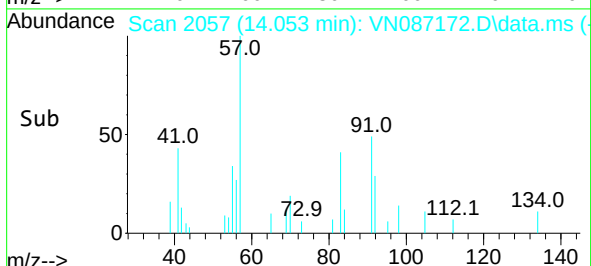
Tgt Ion:146 Resp: 973
Ion Ratio Lower Upper
146 100
111 32.3 20.1 60.2
148 59.2 31.4 94.2

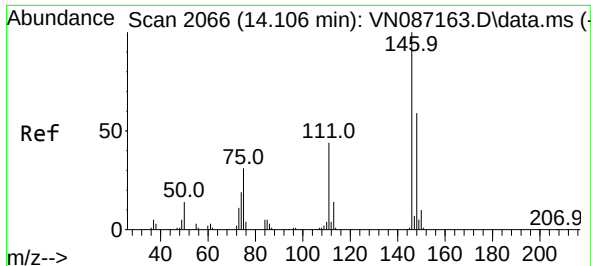


#85
n-Butylbenzene
Concen: 0.290 ug/l
RT: 14.053 min Scan# 2057
Delta R.T. -0.000 min
Lab File: VN087172.D
Acq: 25 Jun 2025 13:11



Tgt Ion: 91 Resp: 2216
Ion Ratio Lower Upper
91 100
92 45.5 0.0 106.4
134 25.4 0.0 48.8





#87

1,2-Dichlorobenzene

Concen: 0.219 ug/l

RT: 13.806 min Scan# 2066

Delta R.T. -0.300 min

Lab File: VN087172.D

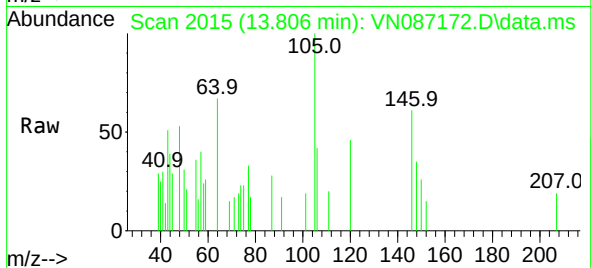
Acq: 25 Jun 2025 13:11

Instrument :

MSVOA_N

ClientSampleId :

001-WILLETS-PT-BLVD(JUNE)



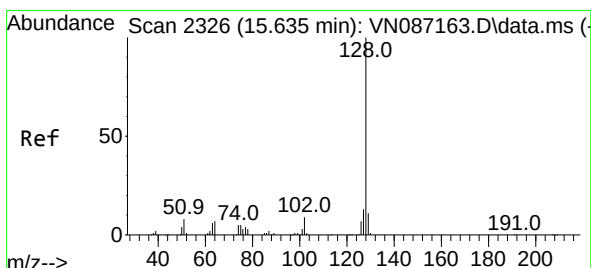
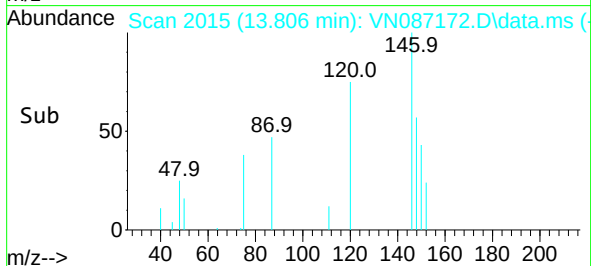
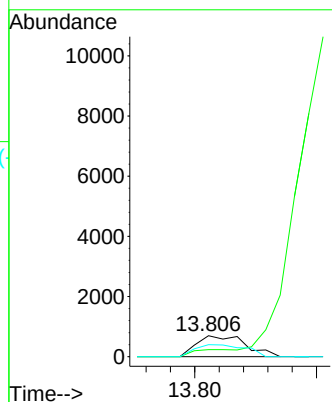
Tgt Ion:146 Resp: 973

Ion Ratio Lower Upper

146 100

111 32.3 22.1 66.1

148 59.2 31.6 95.0



#91

Naphthalene

Concen: 0.790 ug/l

RT: 15.641 min Scan# 2327

Delta R.T. 0.006 min

Lab File: VN087172.D

Acq: 25 Jun 2025 13:11

Tgt Ion:128 Resp: 7825

Ion Ratio Lower Upper

128 100

127 12.4 10.6 15.8

129 7.5 8.8 13.2#

