

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN111425\
 Data File : VN088289.D
 Acq On : 14 Nov 2025 12:15
 Operator : JC\MD
 Sample : Q3551-01
 Misc : 5.0mL/MSVOA_N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MANHOLE

Quant Time: Nov 14 21:49:47 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N111325W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Nov 14 00:49:21 2025
 Response via : Initial Calibration

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

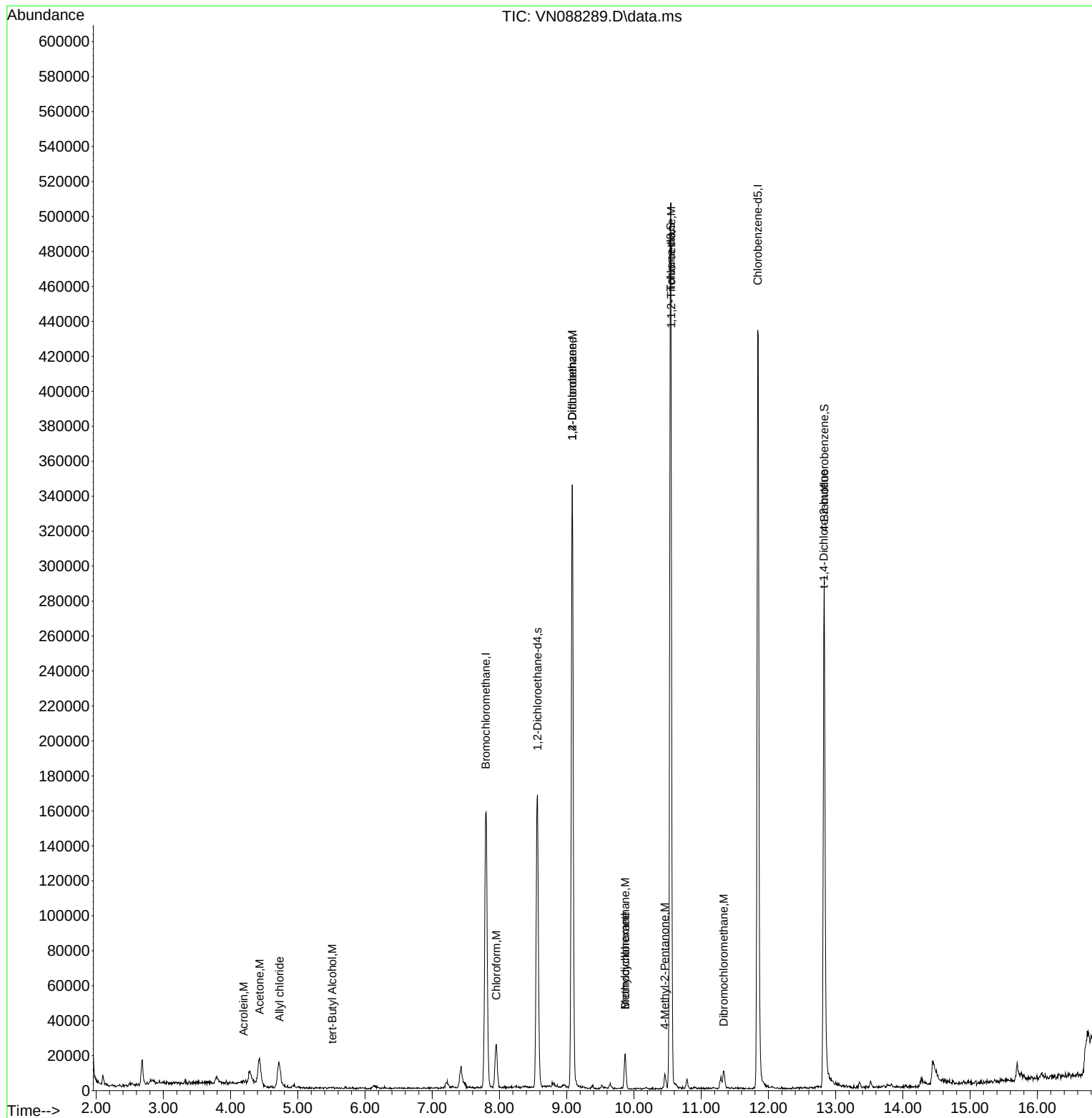
Internal Standards						
1) Bromochloromethane	7.794	128	53480	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	9.083	114	279713	30.000	ug/l	0.00
57) Chlorobenzene-d5	11.841	117	245018	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	8.565	65	138545	28.361	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	94.533%		
60) 4-Bromofluorobenzene	12.829	95	107636	25.987	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	86.633%		
63) Toluene-d8	10.547	98	340690	29.370	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	97.900%		
Target Compounds						
					Qvalue	
13) Acrolein	4.195	56	473	0.678	ug/l #	80
15) Acetone	4.430	58	8772	13.914	ug/l	90
17) Allyl chloride	4.730	41	1202	0.210	ug/l	81
23) tert-Butyl Alcohol	5.512	59	303	0.382	ug/l #	100
25) Chloroform	7.953	83	23375	3.429	ug/l	97
36) 1,2-Dichloroethane	9.083	62	12223	2.251	ug/l #	76
38) Methylcyclohexane	9.871	83	13403	2.505	ug/l #	16
41) Bromodichloromethane	9.871	83	13403	2.575	ug/l #	99
50) 1,1,2-Trichloroethane	10.553	97	13298	4.159	ug/l #	1
53) Dibromochloromethane	11.335	129	4606	1.254	ug/l	92
58) 4-Methyl-2-Pentanone	10.459	43	11466	2.069	ug/l #	47
77) t-1,4-Dichloro-2-butene	12.823	75	61441	39.352	ug/l #	10

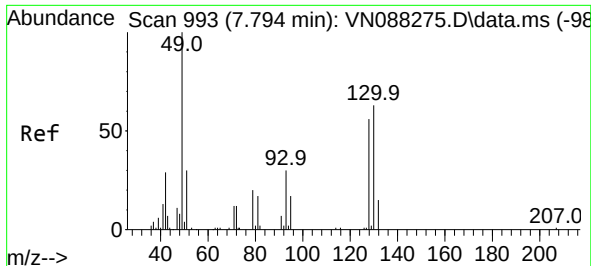
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Time: Nov 14 21:49:47 2025
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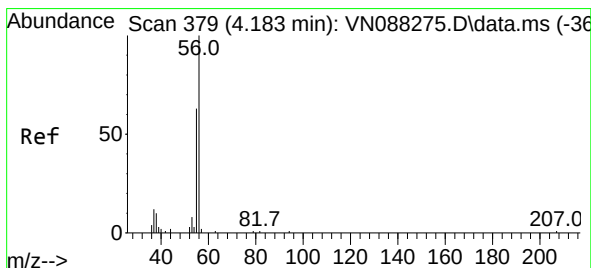
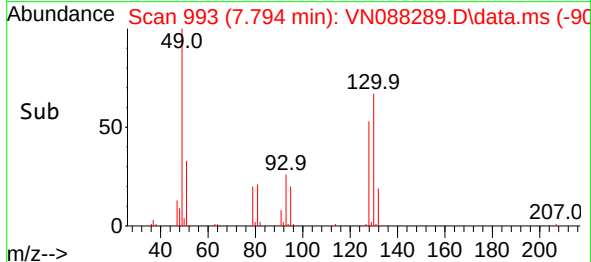
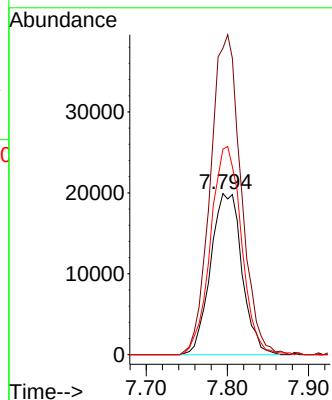
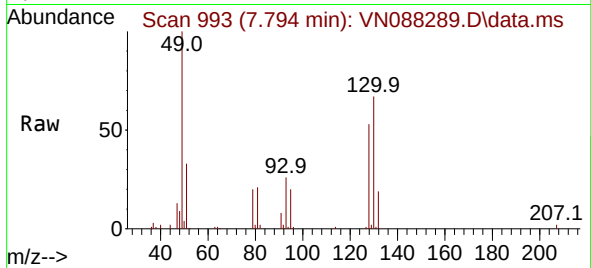




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 7.794 min Scan# 993
Delta R.T. 0.000 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

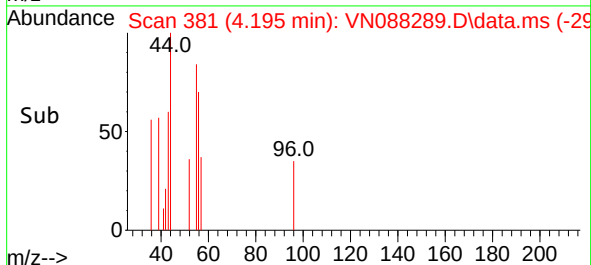
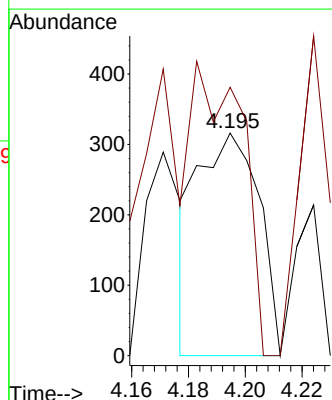
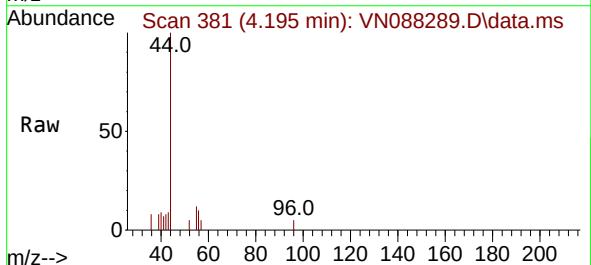
Instrument :
MSVOA_N
ClientSampleId :
MANHOLE

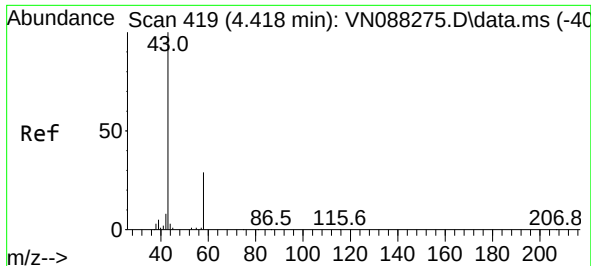
Tgt Ion:128 Resp: 53480
Ion Ratio Lower Upper
128 100
49 193.9 0.0 501.2
130 127.3 0.0 320.2



#13
Acrolein
Concen: 0.678 ug/l
RT: 4.195 min Scan# 381
Delta R.T. 0.012 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

Tgt Ion: 56 Resp: 473
Ion Ratio Lower Upper
56 100
55 56.0 57.9 86.9#

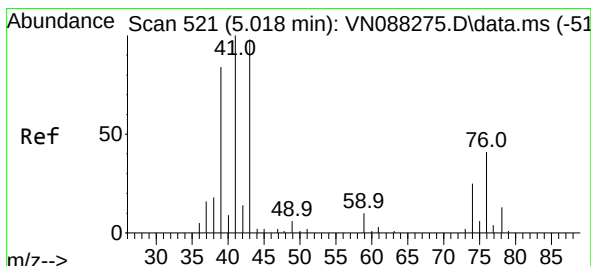
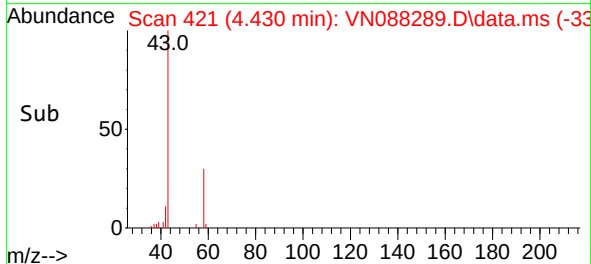
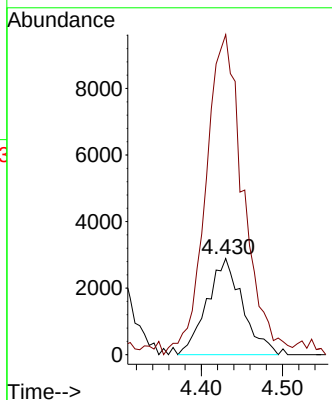
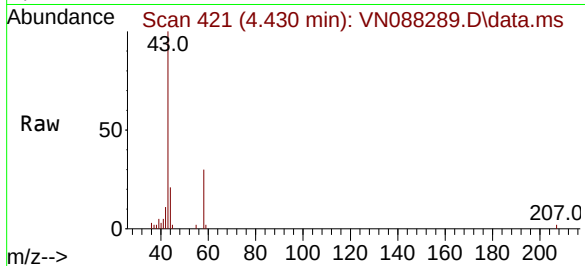




#15
Acetone
Concen: 13.914 ug/l
RT: 4.430 min Scan# 419
Delta R.T. 0.012 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

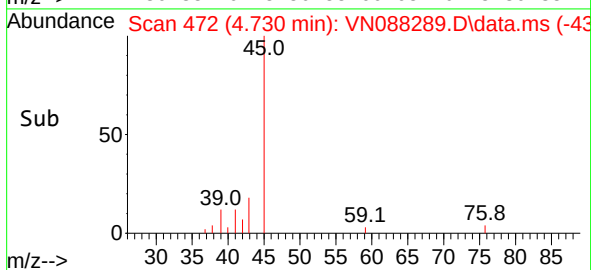
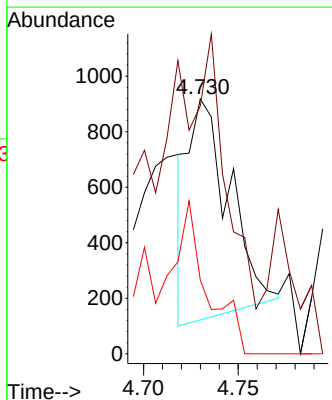
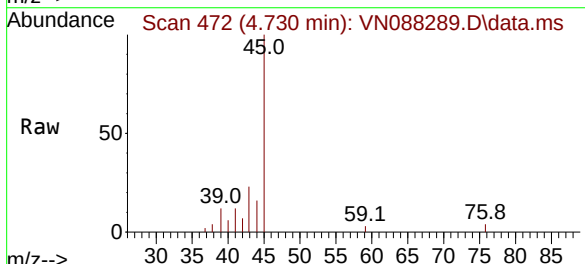
Instrument :
MSVOA_N
ClientSampleId :
MANHOLE

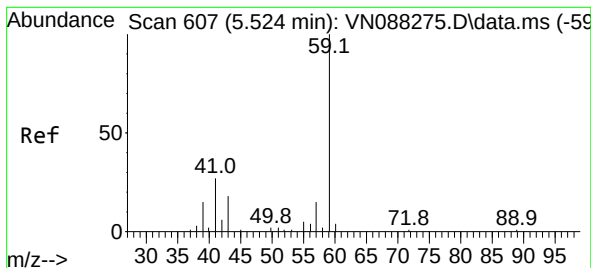
Tgt Ion: 58 Resp: 8772
Ion Ratio Lower Upper
58 100
43 321.2 273.9 410.9



#17
Allyl chloride
Concen: 0.210 ug/l
RT: 4.730 min Scan# 472
Delta R.T. -0.288 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

Tgt Ion: 41 Resp: 1202
Ion Ratio Lower Upper
41 100
39 53.1 38.3 114.9
76 37.8 18.5 55.5





#23

tert-Butyl Alcohol

Concen: 0.382 ug/l

RT: 5.512 min Scan# 60

Delta R.T. -0.012 min

Lab File: VN088289.D

Acq: 14 Nov 2025 12:15

Instrument :

MSVOA_N

ClientSampleId :

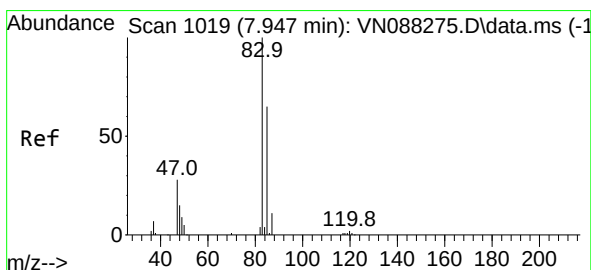
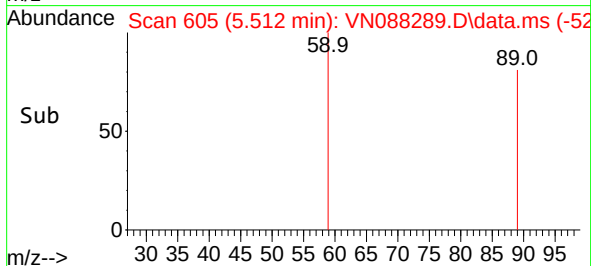
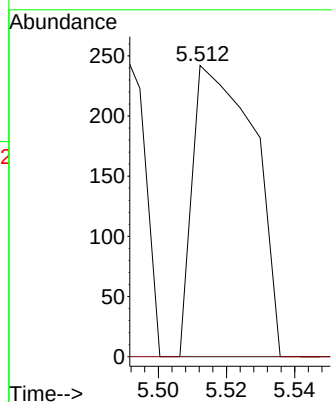
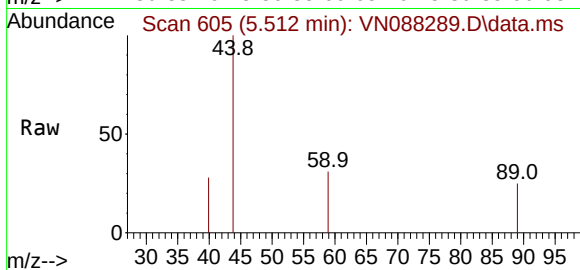
MANHOLE

Tgt Ion: 59 Resp: 303

Ion Ratio Lower Upper

59 100

52 0.0 0.0 0.0



#25

Chloroform

Concen: 3.429 ug/l

RT: 7.953 min Scan# 1020

Delta R.T. 0.006 min

Lab File: VN088289.D

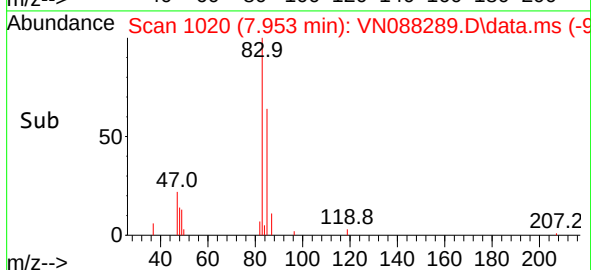
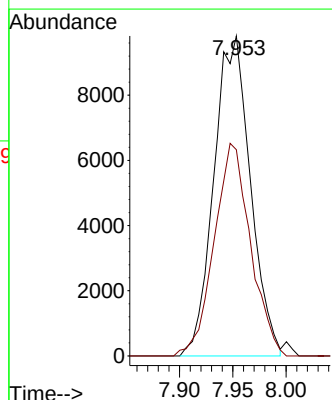
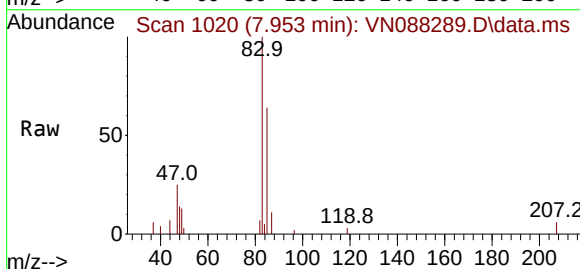
Acq: 14 Nov 2025 12:15

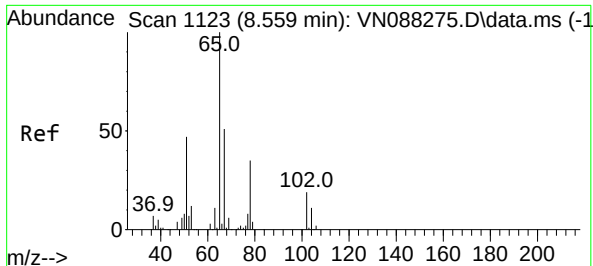
Tgt Ion: 83 Resp: 23375

Ion Ratio Lower Upper

83 100

85 62.7 52.2 78.4

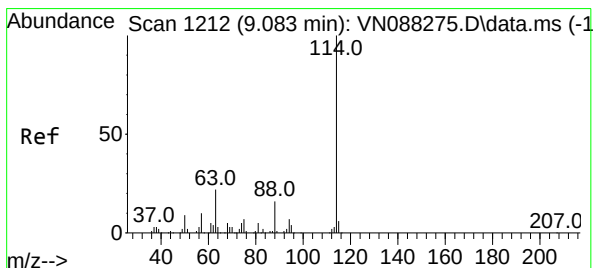
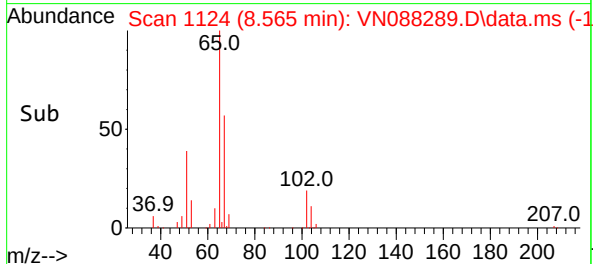
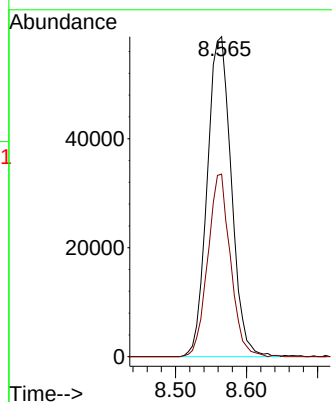
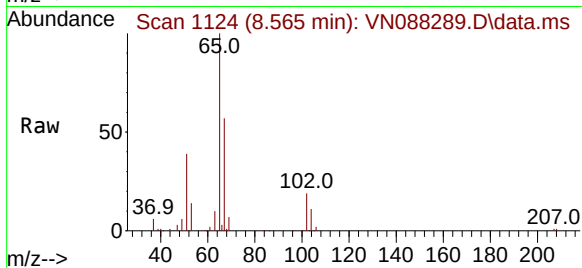




#27
1,2-Dichloroethane-d4
Concen: 28.361 ug/l
RT: 8.565 min Scan# 1123
Delta R.T. 0.006 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

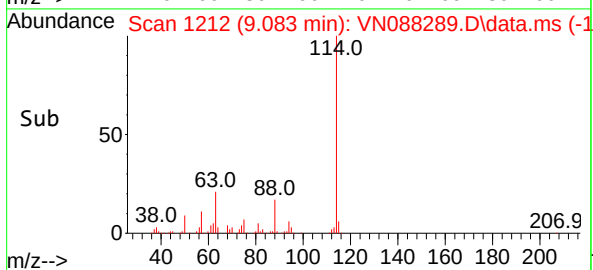
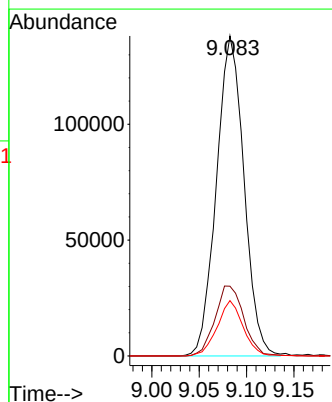
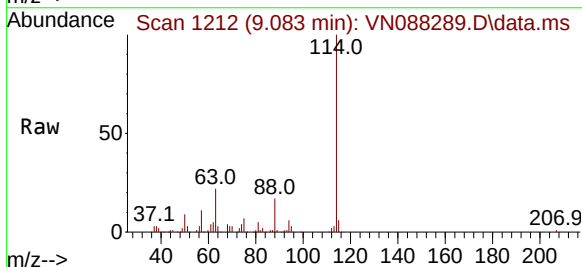
Instrument :
MSVOA_N
ClientSampleId :
MANHOLE

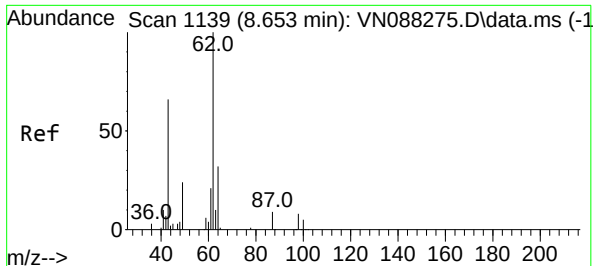
Tgt Ion: 65 Resp: 138545
Ion Ratio Lower Upper
65 100
67 53.6 40.2 60.2



#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 9.083 min Scan# 1212
Delta R.T. 0.000 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

Tgt Ion: 114 Resp: 279713
Ion Ratio Lower Upper
114 100
63 22.9 18.9 28.3
88 16.3 12.8 19.2





#36

1,2-Dichloroethane

Concen: 2.251 ug/l

RT: 9.083 min Scan# 1139

Delta R.T. 0.429 min

Lab File: VN088289.D

Acq: 14 Nov 2025 12:15

Instrument :

MSVOA_N

ClientSampleId :

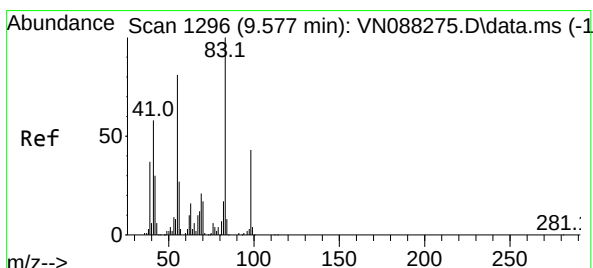
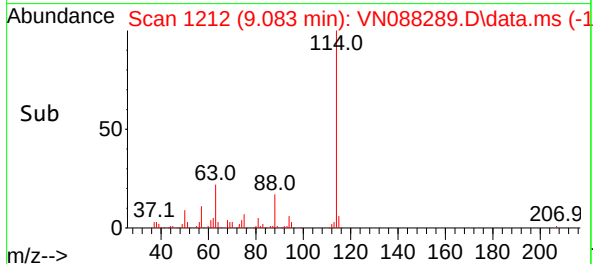
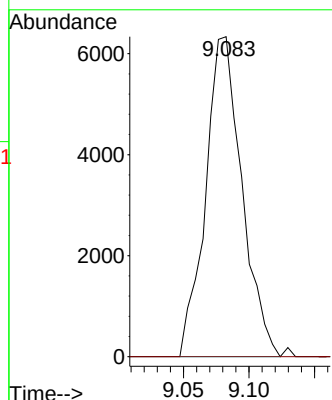
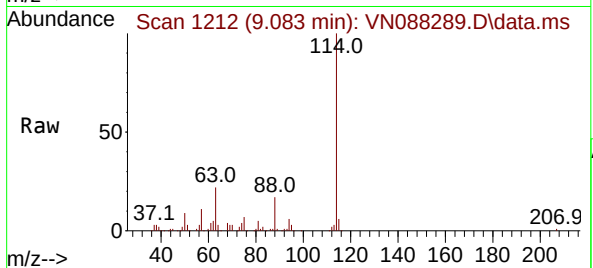
MANHOLE

Tgt Ion: 62 Resp: 12223

Ion Ratio Lower Upper

62 100

98 0.0 6.8 10.2#



#38

Methylcyclohexane

Concen: 2.505 ug/l

RT: 9.871 min Scan# 1346

Delta R.T. 0.294 min

Lab File: VN088289.D

Acq: 14 Nov 2025 12:15

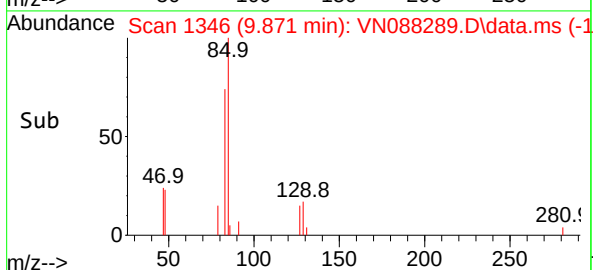
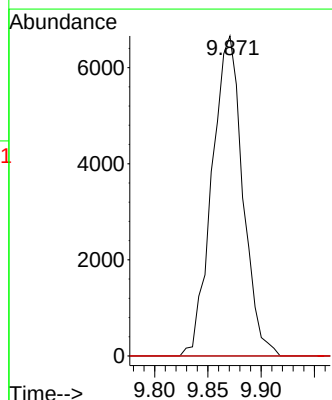
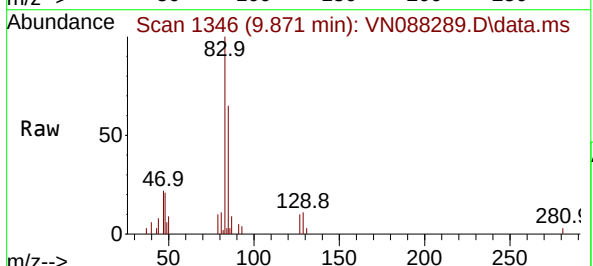
Tgt Ion: 83 Resp: 13403

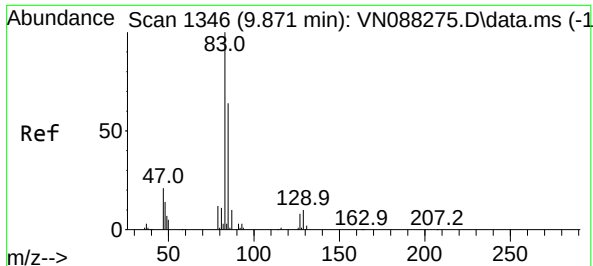
Ion Ratio Lower Upper

83 100

55 0.0 40.8 122.5#

98 0.0 23.4 70.3#

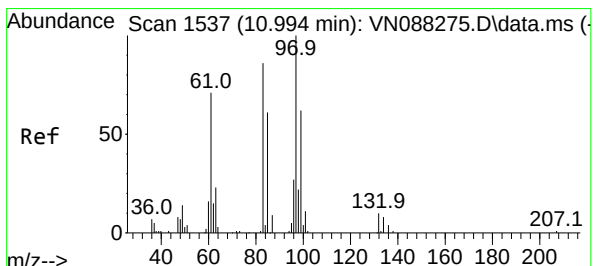
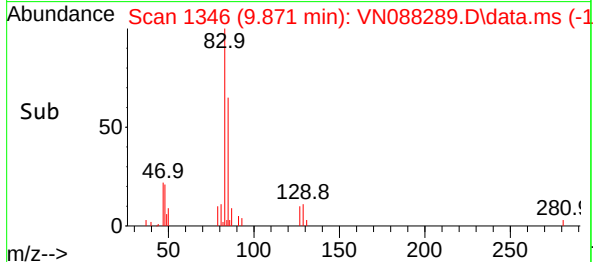
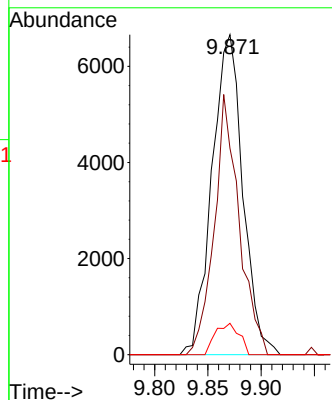
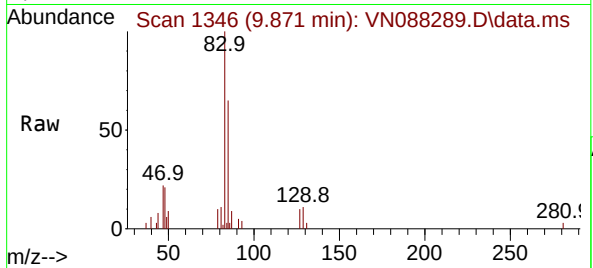




#41
Bromodichloromethane
Concen: 2.575 ug/l
RT: 9.871 min Scan# 11
Delta R.T. 0.000 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

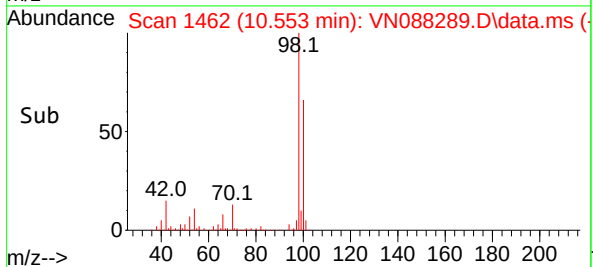
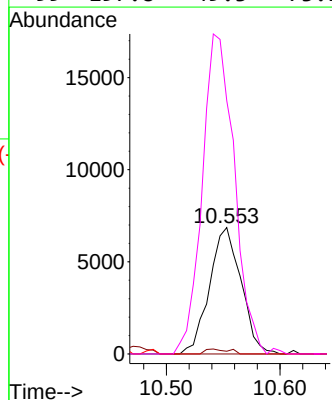
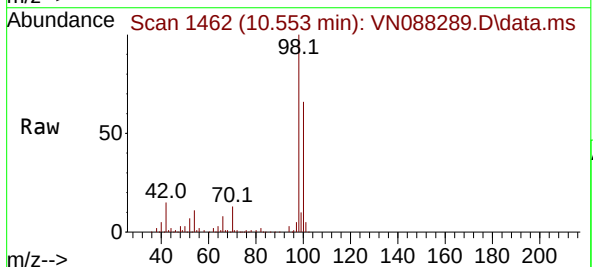
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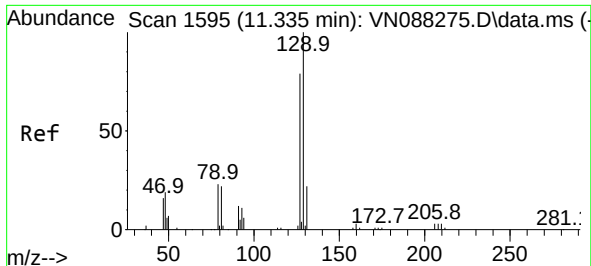
Tgt Ion: 83 Resp: 13403
Ion Ratio Lower Upper
83 100
85 64.5 51.4 77.2
127 9.8 6.4 9.6#



#50
1,1,2-Trichloroethane
Concen: 4.159 ug/l
RT: 10.553 min Scan# 1462
Delta R.T. -0.441 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

Tgt Ion: 97 Resp: 13298
Ion Ratio Lower Upper
97 100
83 2.2 68.6 102.8#
85 0.0 49.0 73.6#
99 197.8 49.3 73.9#

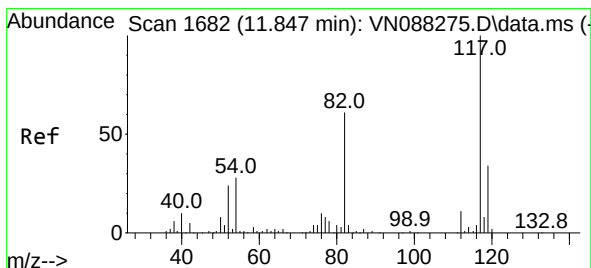
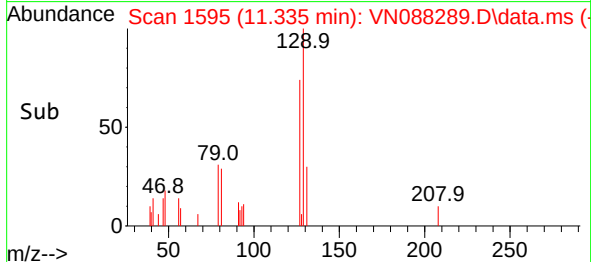
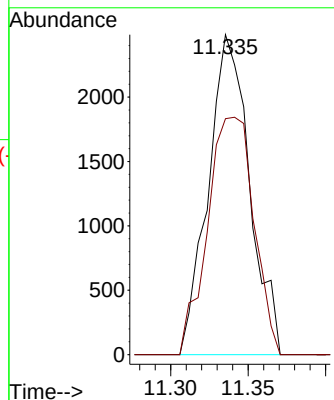
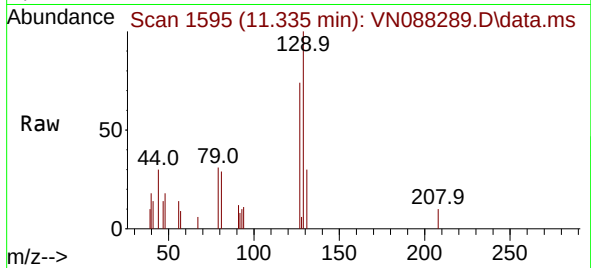




#53
Dibromochloromethane
Concen: 1.254 ug/l
RT: 11.335 min Scan# 1595
Delta R.T. 0.000 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

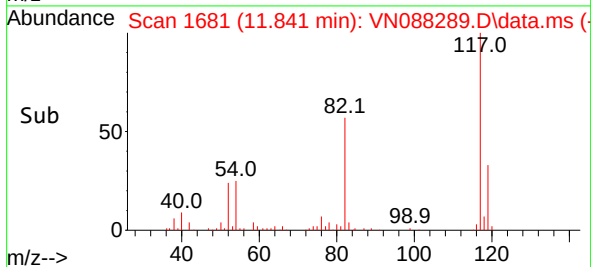
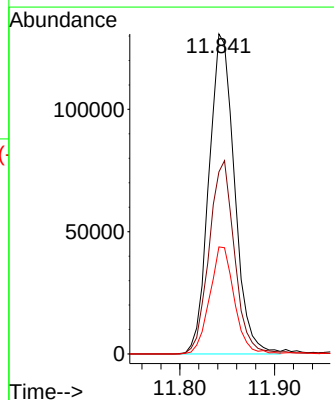
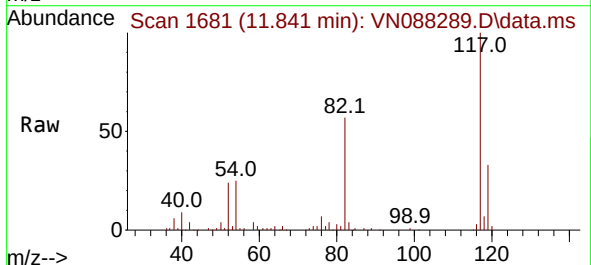
Instrument :
MSVOA_N
ClientSampleId :
MANHOLE

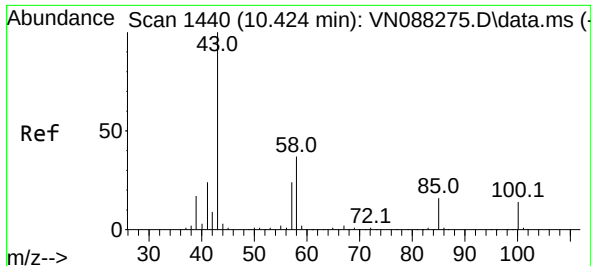
Tgt Ion:129 Resp: 4606
Ion Ratio Lower Upper
129 100
127 83.1 38.2 114.6



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.841 min Scan# 1681
Delta R.T. -0.006 min
Lab File: VN088289.D
Acq: 14 Nov 2025 12:15

Tgt Ion:117 Resp: 245018
Ion Ratio Lower Upper
117 100
82 59.9 49.3 73.9
119 32.3 26.4 39.6

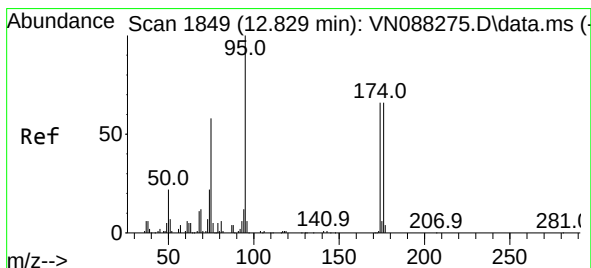
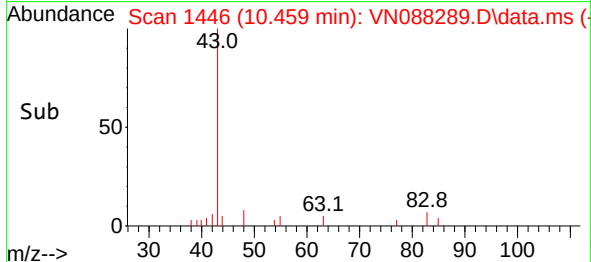
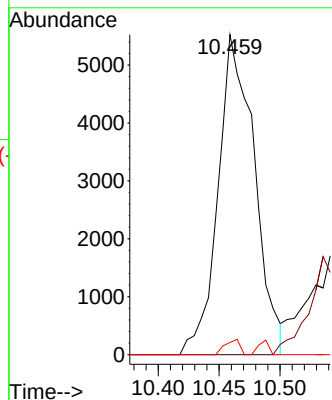
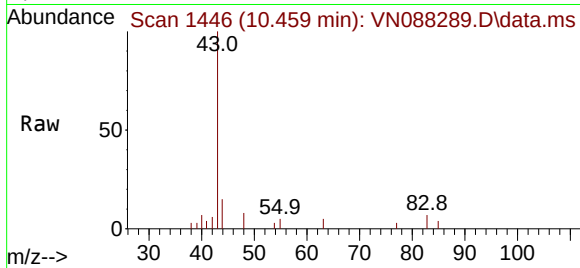




#58
 4-Methyl-2-Pentanone
 Concen: 2.069 ug/l
 RT: 10.459 min Scan# 1446
 Delta R.T. 0.035 min
 Lab File: VN088289.D
 Acq: 14 Nov 2025 12:15

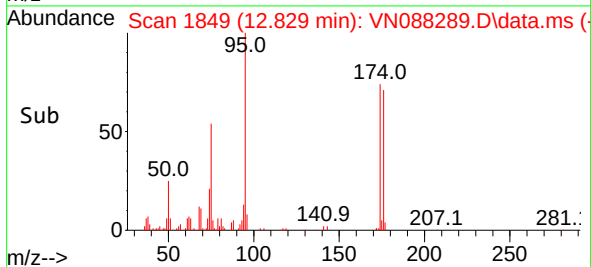
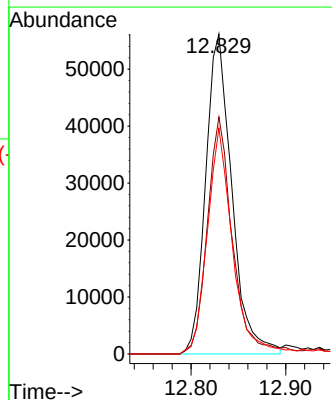
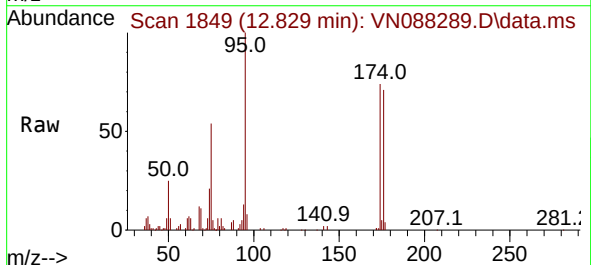
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 MSVOA_N
 ClientSampleId :
 MANHOLE

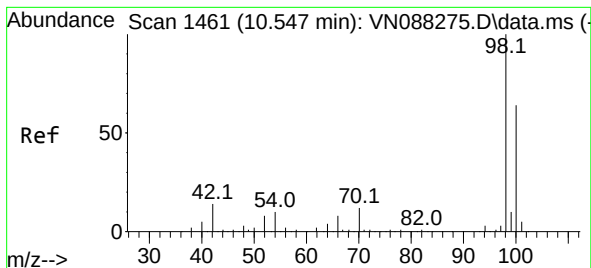
Tgt Ion: 43 Resp: 11466
 Ion Ratio Lower Upper
 43 100
 58 0.0 29.2 43.8#
 85 1.9 12.6 19.0#



#60
 4-Bromofluorobenzene
 Concen: 25.987 ug/l
 RT: 12.829 min Scan# 1849
 Delta R.T. 0.000 min
 Lab File: VN088289.D
 Acq: 14 Nov 2025 12:15

Tgt Ion: 95 Resp: 107636
 Ion Ratio Lower Upper
 95 100
 174 70.8 54.5 81.7
 176 68.0 53.8 80.6





#63

Toluene-d8

Concen: 29.370 ug/l

RT: 10.547 min Scan# 1461

Delta R.T. 0.000 min

Lab File: VN088289.D

Acq: 14 Nov 2025 12:15

Instrument :

MSVOA_N

ClientSampleId :

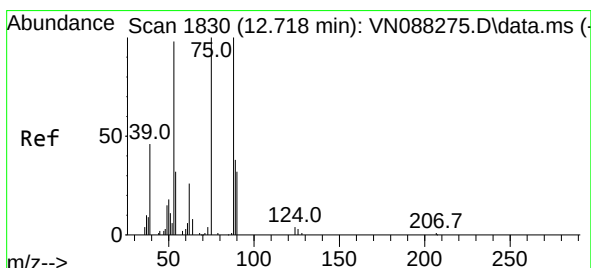
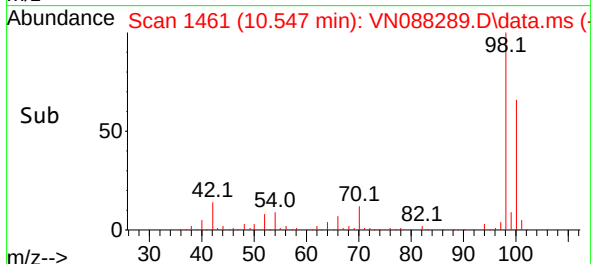
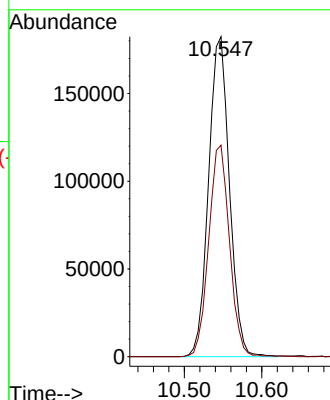
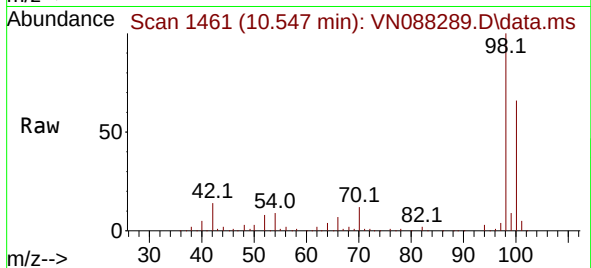
MANHOLE

Tgt Ion: 98 Resp: 340690

Ion Ratio Lower Upper

98 100

100 65.8 51.6 77.4



#77

t-1,4-Dichloro-2-butene

Concen: 39.352 ug/l

RT: 12.823 min Scan# 1848

Delta R.T. 0.106 min

Lab File: VN088289.D

Acq: 14 Nov 2025 12:15

Tgt Ion: 75 Resp: 61441

Ion Ratio Lower Upper

75 100

53 0.0 50.0 150.0#

89 0.0 22.3 66.9#

