

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX020222\
 Data File : VX026731.D
 Acq On : 02 Feb 2022 12:46
 Operator : JC/MD
 Sample : N1202-01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 MANHOLE

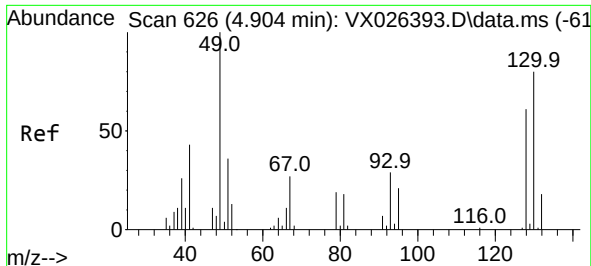
Quant Time: Feb 03 03:02:59 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011022W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Mon Jan 10 12:50:55 2022
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	4.910	128	17378	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.769	114	96998	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.055	117	82117	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.964	65	39117	27.993	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	93.300%
60) 4-Bromofluorobenzene	11.079	95	37634	27.461	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	91.533%
63) Toluene-d8	8.653	98	111333	29.513	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	98.367%
Target Compounds						
					Qvalue	
5) Bromomethane	1.624	94	108	0.237	ug/l #	61
11) Methyl Iodide	2.459	142	504	0.497	ug/l #	78
13) Acrolein	2.240	56	224	1.104	ug/l	88
15) Acetone	2.392	58	26215	152.886	ug/l	86
16) Carbon Disulfide	2.520	76	644	0.244	ug/l #	75
23) tert-Butyl Alcohol	2.959	59	80	0.404	ug/l #	100
25) Chloroform	5.105	83	2814	1.412	ug/l	94
30) 2-Butanone	4.574	43	5194	5.970	ug/l #	84
38) Methylcyclohexane	7.824	83	2226	1.240	ug/l #	17
41) Bromodichloromethane	7.824	83	2226	1.445	ug/l	99
46) Methyl methacrylate	7.580	41	415	0.324	ug/l #	33
47) n-amyl Acetate	10.854	43	1629	0.834	ug/l #	1
51) Ethyl methacrylate	8.647	69	421	0.257	ug/l	70
53) Dibromochloromethane	9.525	129	1553	1.393	ug/l	97
56) Bromoform	10.805	173	177	0.239	ug/l #	92
58) 4-Methyl-2-Pentanone	8.574	43	1021	0.667	ug/l #	59
62) Toluene	8.720	91	3671	0.837	ug/l	97
72) 1,2,3-Trichloropropane	11.079	75	18430	14.062	ug/l	39
77) t-1,4-Dichloro-2-butene	11.079	75	18430	46.755	ug/l #	3
79) tert-butylbenzene	12.012	119	2086	0.569	ug/l	68
82) p-Isopropyltoluene	12.012	119	2086	0.514	ug/l	94
86) Hexachloroethane	12.671	117	187	0.305	ug/l #	13
89) 1,2,4-Trichlorobenzene	13.963	180	265	0.209	ug/l	91
90) Hexachlorobutadiene	13.725	225	293	0.528	ug/l	77
91) Naphthalene	13.780	128	1062	0.242	ug/l #	83
92) 1,2,3-Trichlorobenzene	13.963	180	265	0.210	ug/l	91

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

Quant Time: Feb 03 03:02:59 2022
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011022W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Mon Jan 10 12:50:55 2022
Response via : Initial Calibration

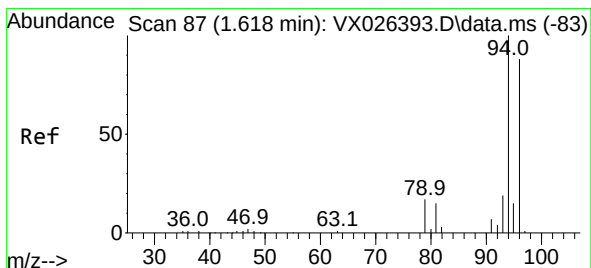
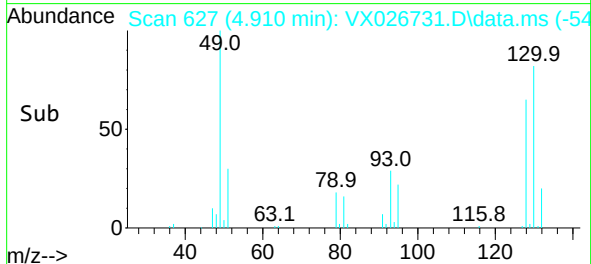
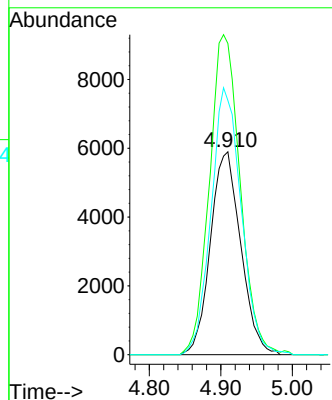
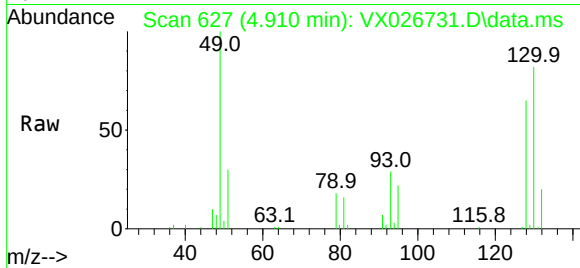




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.910 min Scan# 61
Delta R.T. 0.006 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

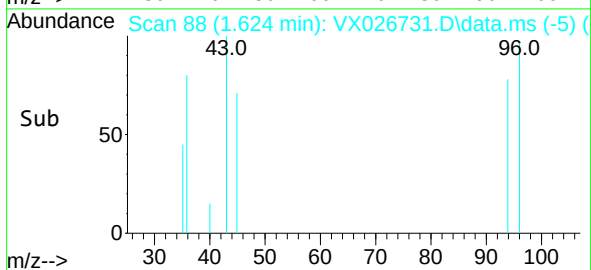
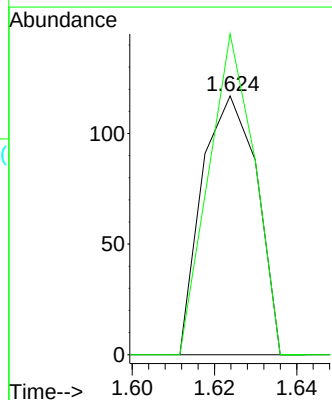
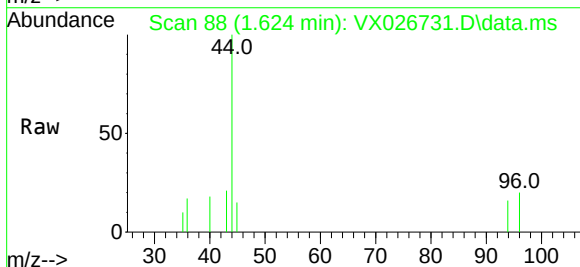
Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

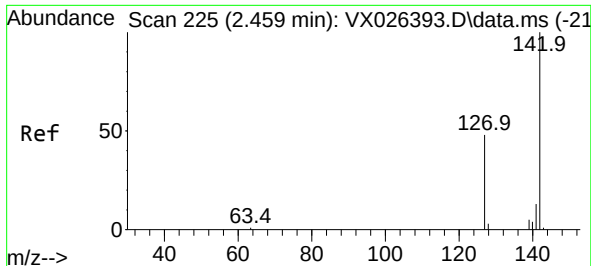
Tgt Ion:128 Resp: 17378
Ion Ratio Lower Upper
128 100
49 159.4 0.0 413.5
130 131.1 0.0 326.0



#5
Bromomethane
Concen: 0.237 ug/l
RT: 1.624 min Scan# 88
Delta R.T. 0.006 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

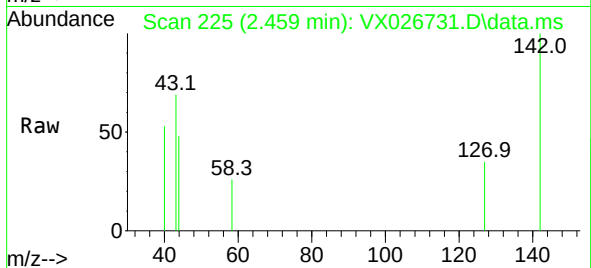
Tgt Ion: 94 Resp: 108
Ion Ratio Lower Upper
94 100
96 123.9 70.3 105.5#



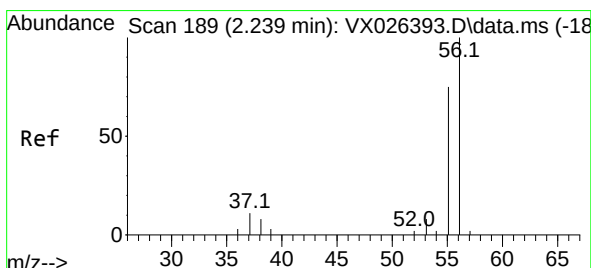
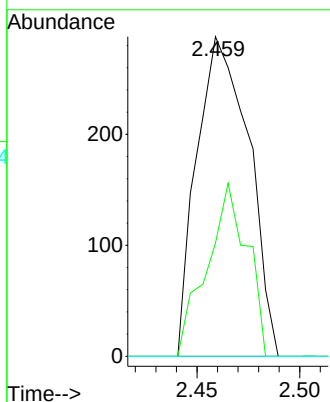
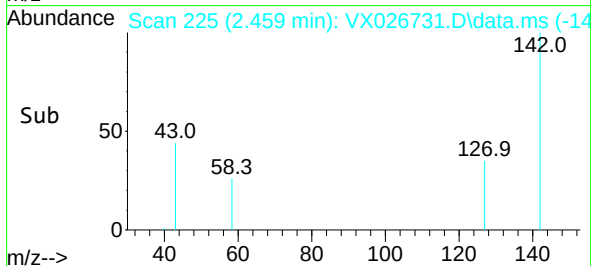


#11
Methyl Iodide
Concen: 0.497 ug/l
RT: 2.459 min Scan# 21
Delta R.T. 0.000 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

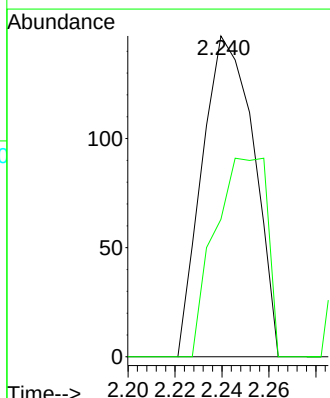
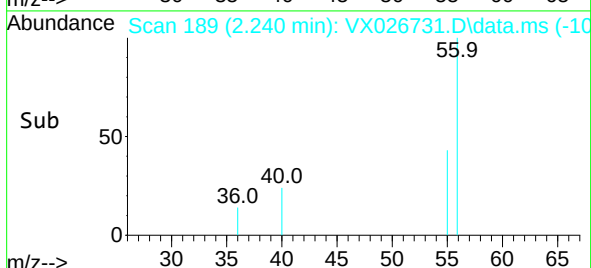
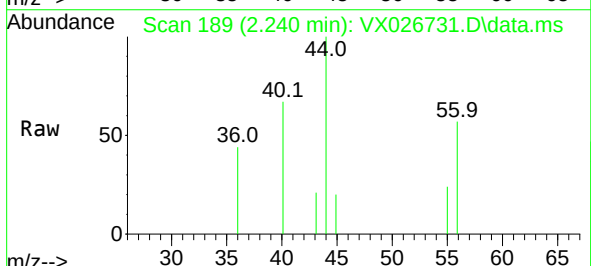


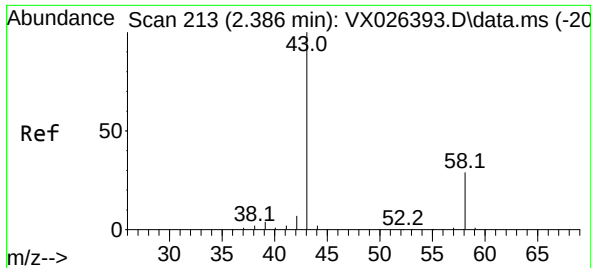
Tgt Ion:142 Resp: 504
Ion Ratio Lower Upper
142 100
127 35.4 23.9 71.7
141 0.0 6.7 20.1#



#13
Acrolein
Concen: 1.104 ug/l
RT: 2.240 min Scan# 189
Delta R.T. 0.000 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Tgt Ion: 56 Resp: 224
Ion Ratio Lower Upper
56 100
55 62.9 58.2 87.2





#15

Acetone

Concen: 152.886 ug/l

RT: 2.392 min Scan# 213

Delta R.T. 0.006 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

Instrument :

MSVOA_X

ClientSampleId :

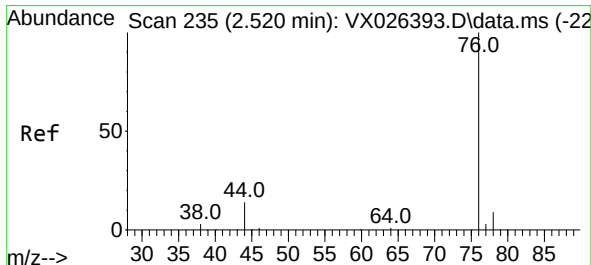
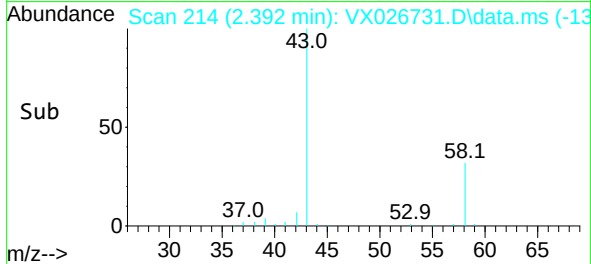
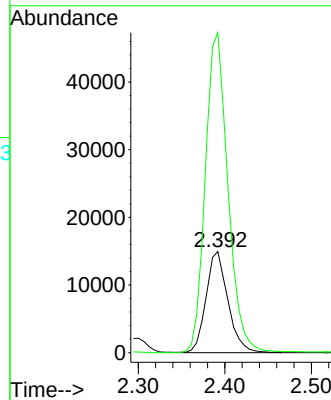
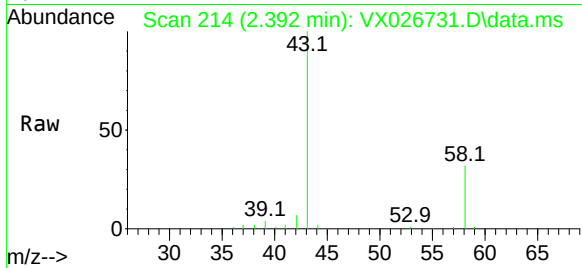
MANHOLE

Tgt Ion: 58 Resp: 26215

Ion Ratio Lower Upper

58 100

43 316.2 276.3 414.5



#16

Carbon Disulfide

Concen: 0.244 ug/l

RT: 2.520 min Scan# 235

Delta R.T. 0.000 min

Lab File: VX026731.D

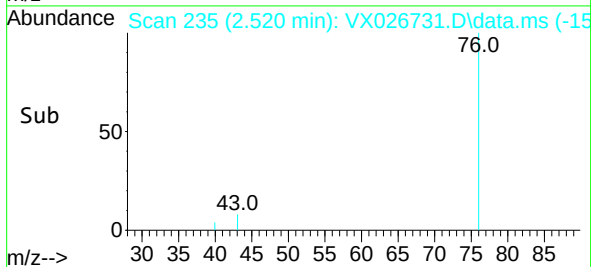
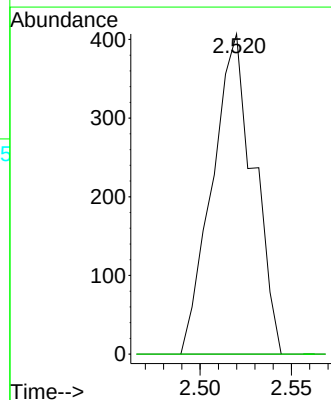
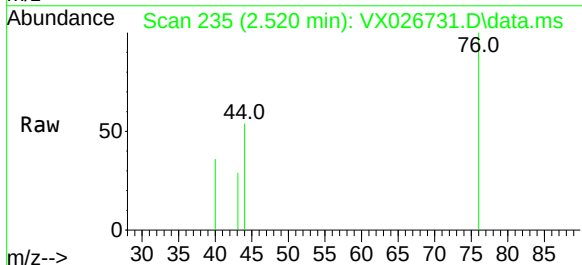
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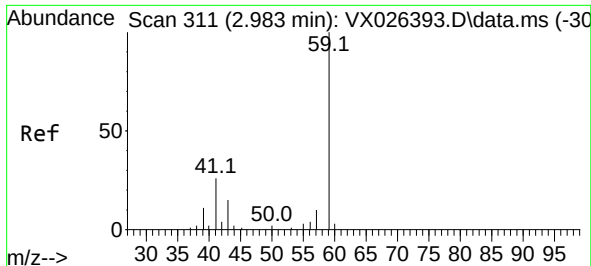
Tgt Ion: 76 Resp: 644

Ion Ratio Lower Upper

76 100

78 0.0 7.3 10.9#

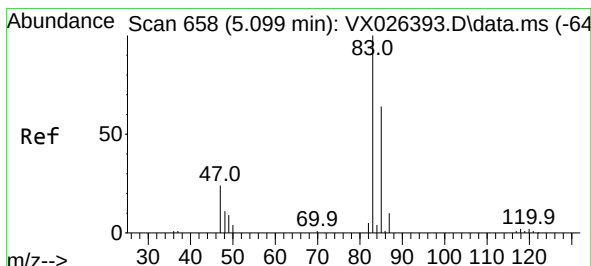
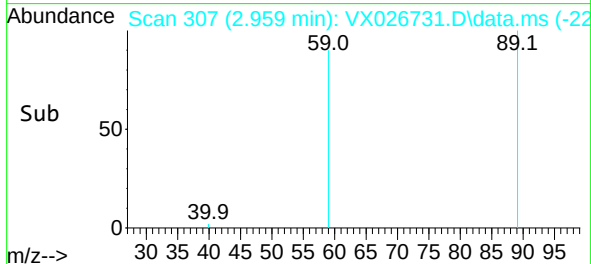
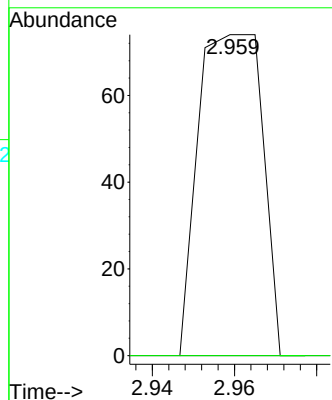
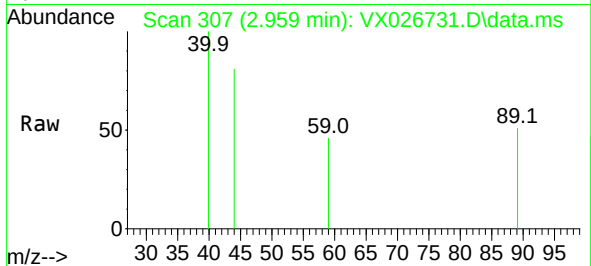




#23
tert-Butyl Alcohol
Concen: 0.404 ug/l
RT: 2.959 min Scan# 307
Delta R.T. -0.024 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

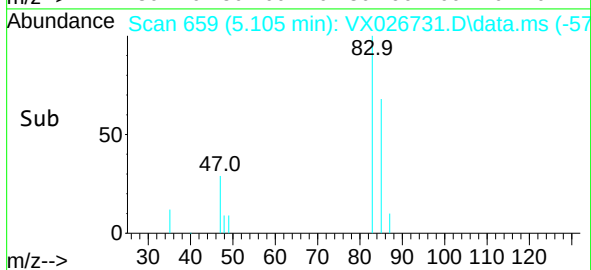
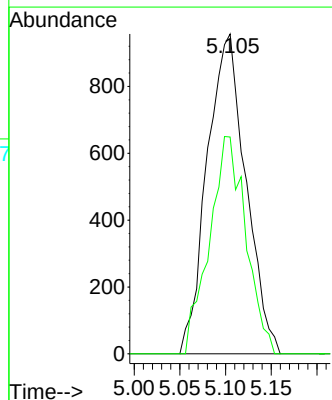
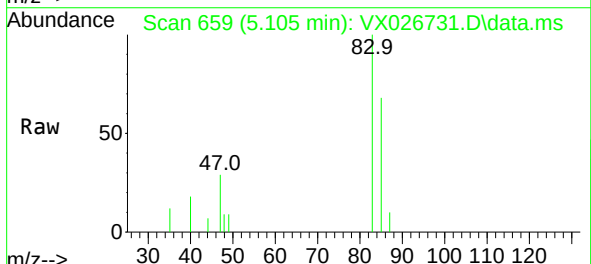
Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

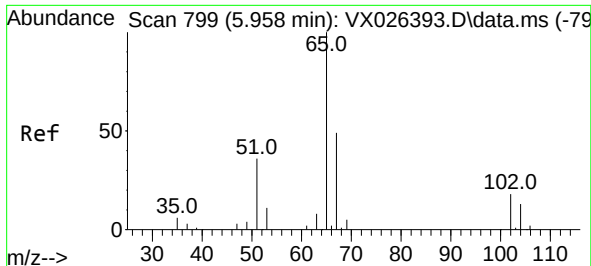
Tgt Ion: 59 Resp: 80
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0



#25
Chloroform
Concen: 1.412 ug/l
RT: 5.105 min Scan# 659
Delta R.T. 0.006 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Tgt Ion: 83 Resp: 2814
Ion Ratio Lower Upper
83 100
85 67.8 50.8 76.2





#27

1,2-Dichloroethane-d4

Concen: 27.993 ug/l

RT: 5.964 min Scan# 80

Delta R.T. 0.006 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

Instrument :

MSVOA_X

ClientSampleId :

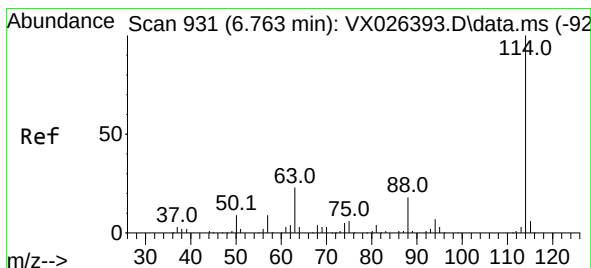
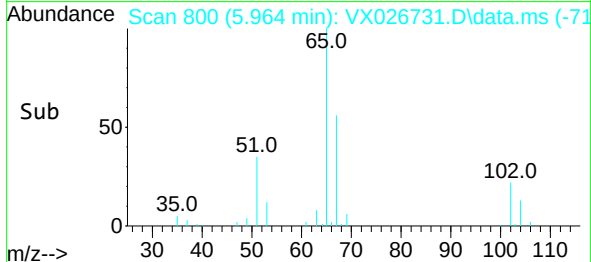
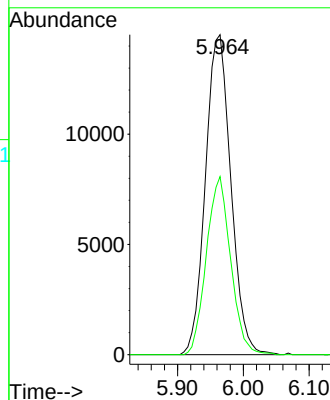
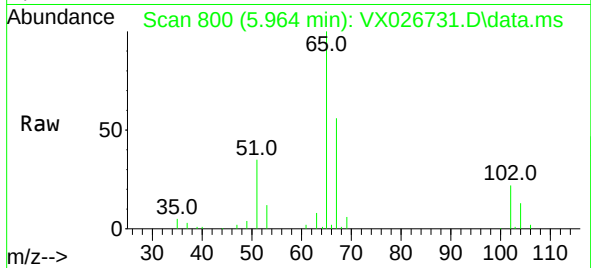
MANHOLE

Tgt Ion: 65 Resp: 39117

Ion Ratio Lower Upper

65 100

67 53.0 39.6 59.4



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.769 min Scan# 932

Delta R.T. 0.006 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

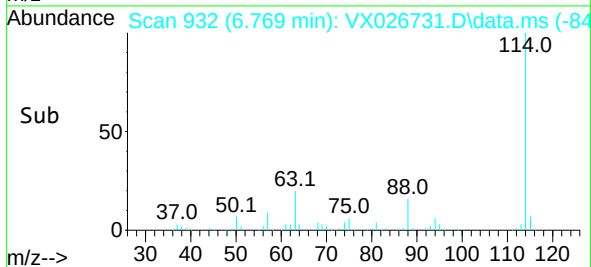
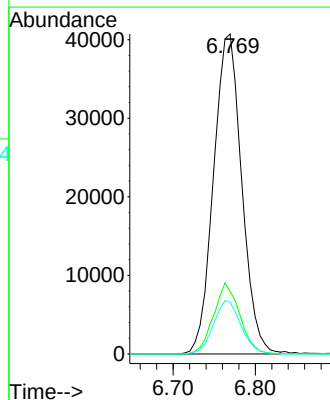
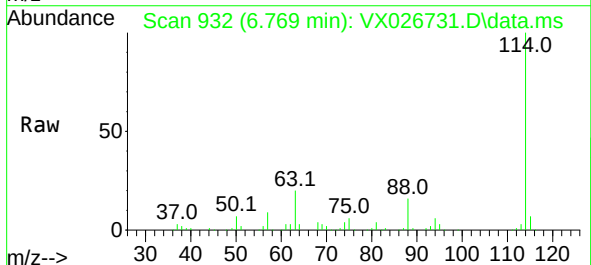
Tgt Ion: 114 Resp: 96998

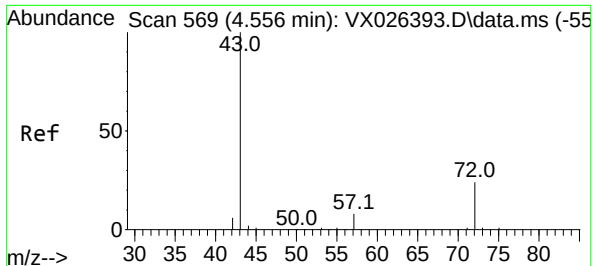
Ion Ratio Lower Upper

114 100

63 20.7 17.4 26.2

88 16.3 13.5 20.3





#30

2-Butanone

Concen: 5.970 ug/l

RT: 4.574 min Scan# 51

Delta R.T. 0.018 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

Instrument :

MSVOA_X

ClientSampleId :

MANHOLE

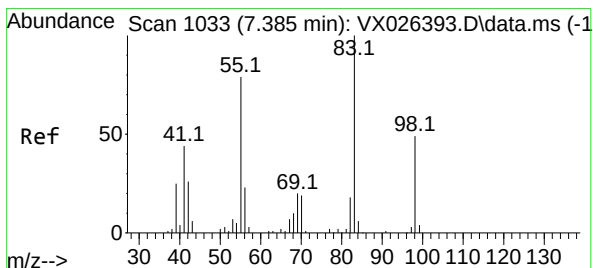
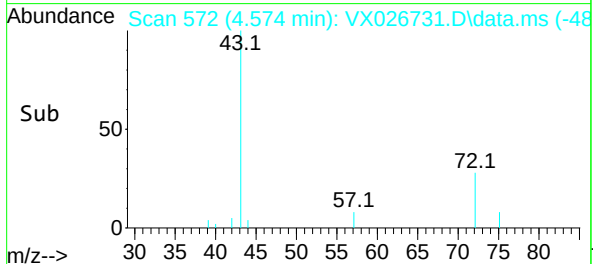
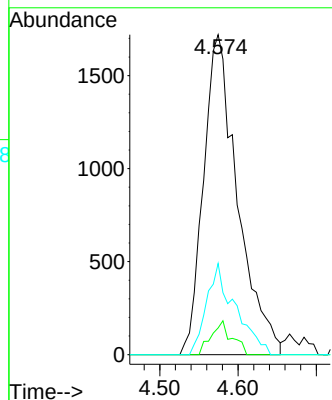
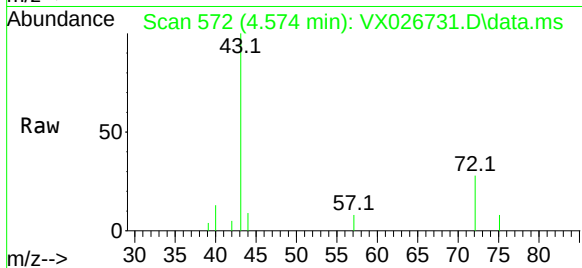
Tgt Ion: 43 Resp: 5194

Ion Ratio Lower Upper

43 100

57 4.7 6.3 9.5#

72 15.5 19.8 29.6#



#38

Methylcyclohexane

Concen: 1.240 ug/l

RT: 7.824 min Scan# 1105

Delta R.T. 0.439 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

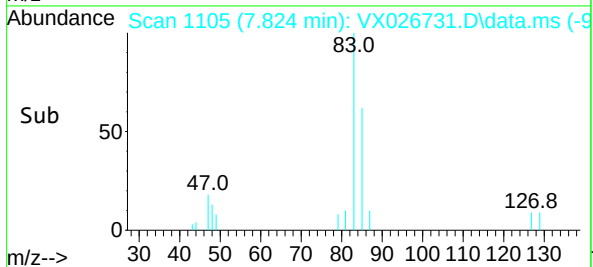
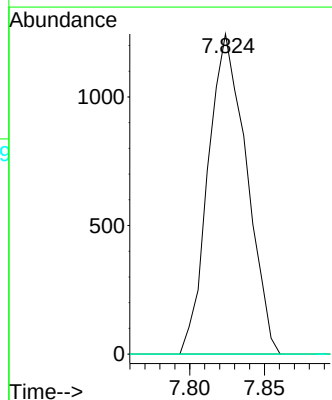
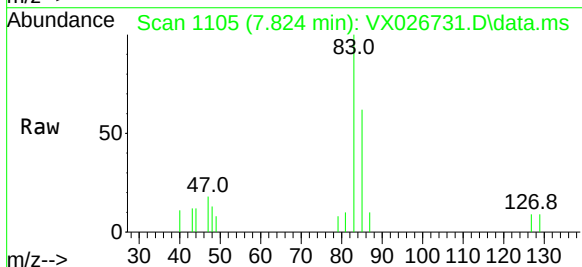
Tgt Ion: 83 Resp: 2226

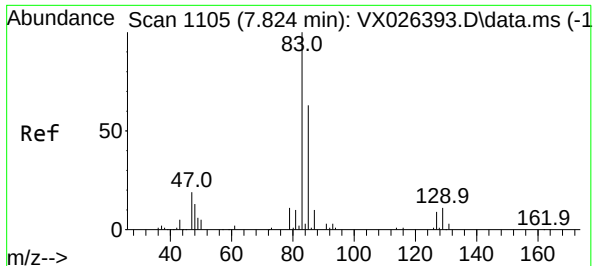
Ion Ratio Lower Upper

83 100

55 0.0 39.9 119.6#

98 0.0 24.6 73.6#

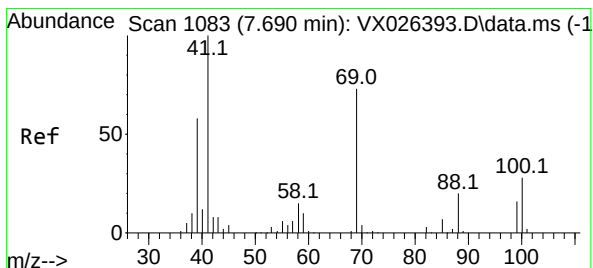
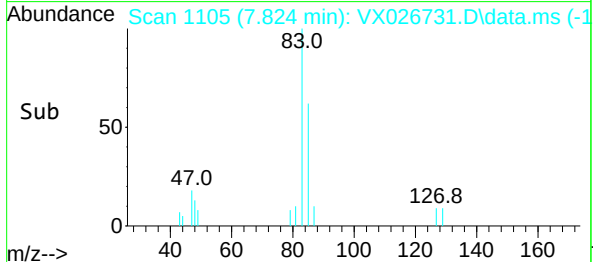
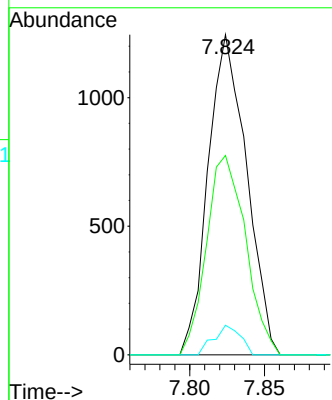
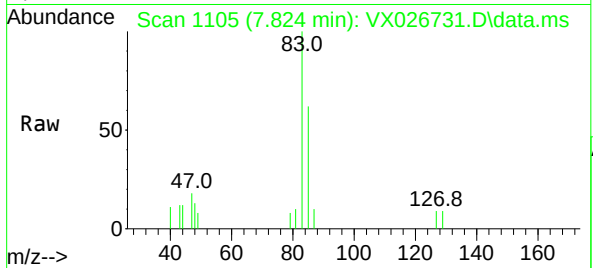




#41
Bromodichloromethane
Concen: 1.445 ug/l
RT: 7.824 min Scan# 1105
Delta R.T. 0.000 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

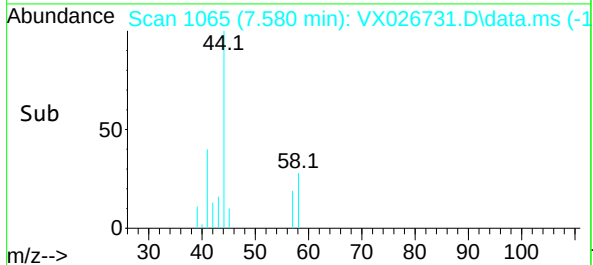
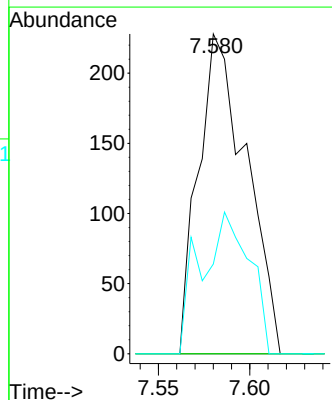
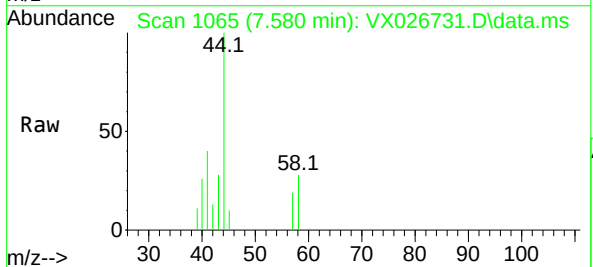
Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

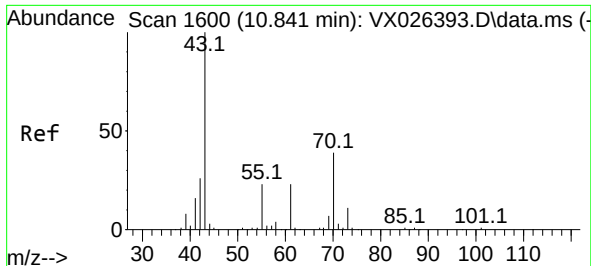
Tgt Ion: 83 Resp: 2226
Ion Ratio Lower Upper
83 100
85 62.2 50.6 76.0
127 9.2 7.0 10.6



#46
Methyl methacrylate
Concen: 0.324 ug/l
RT: 7.580 min Scan# 1065
Delta R.T. -0.110 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Tgt Ion: 41 Resp: 415
Ion Ratio Lower Upper
41 100
69 0.0 36.6 109.9#
39 28.1 29.3 87.8#





#47

n-amyl acetate

Concen: 0.834 ug/l

RT: 10.854 min Scan# 1602

Delta R.T. 0.012 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

Instrument :

MSVOA_X

ClientSampleId :

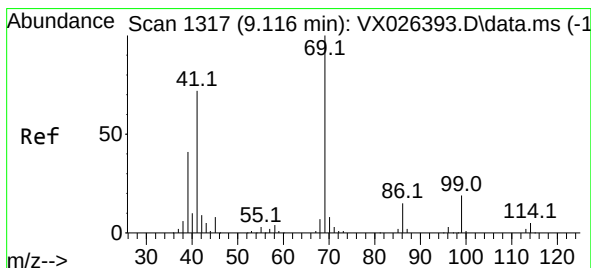
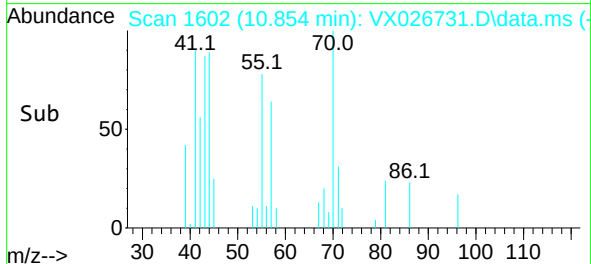
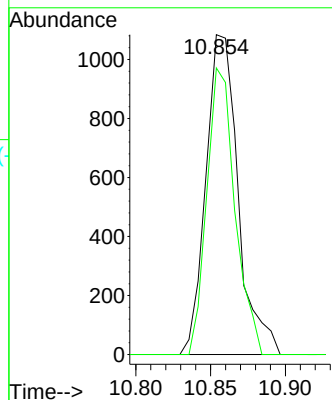
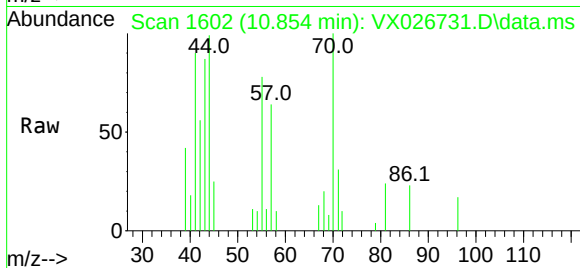
MANHOLE

Tgt Ion: 43 Resp: 1629

Ion Ratio Lower Upper

43 100

55 78.2 18.9 28.3#



#51

Ethyl methacrylate

Concen: 0.257 ug/l

RT: 8.647 min Scan# 1240

Delta R.T. -0.469 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

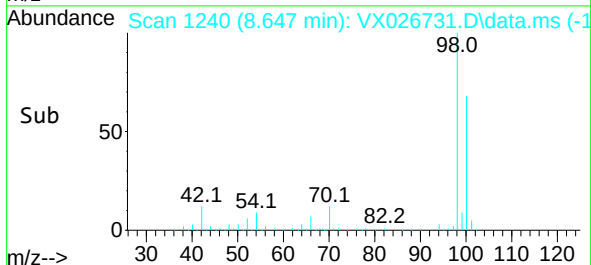
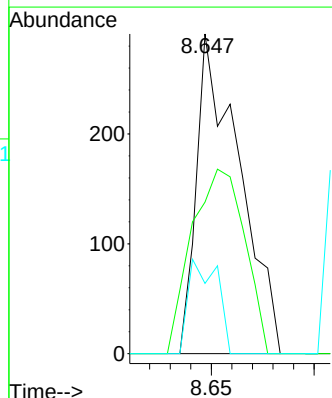
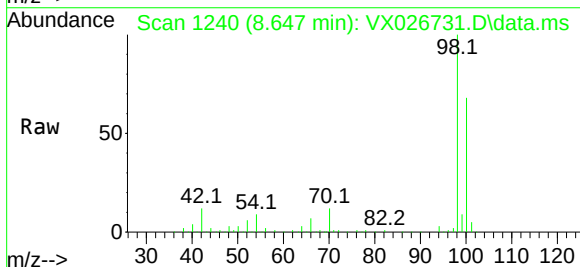
Tgt Ion: 69 Resp: 421

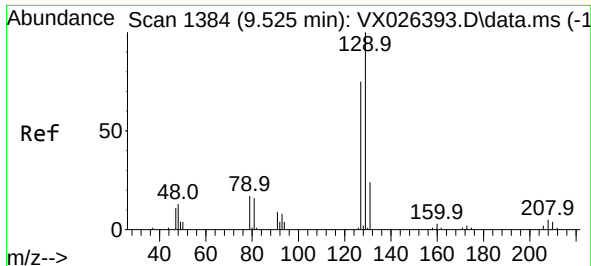
Ion Ratio Lower Upper

69 100

41 47.4 35.9 107.7

39 22.0 20.3 61.0

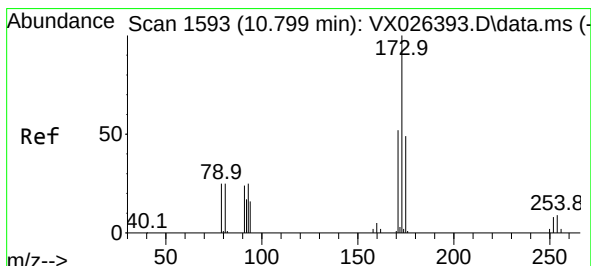
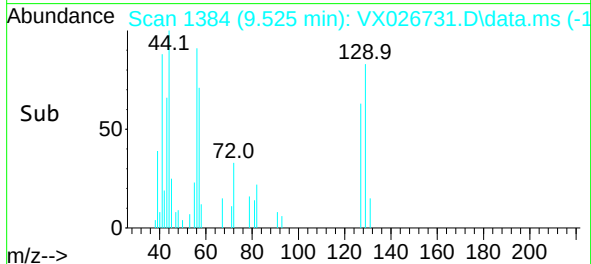
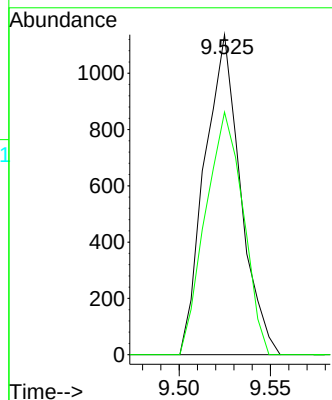
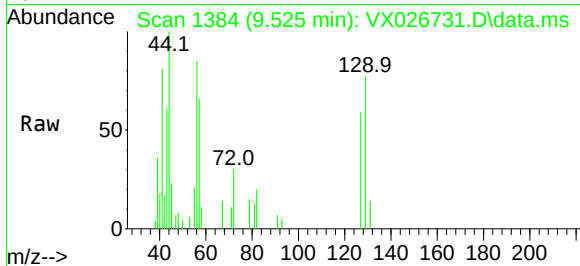




#53
Dibromochloromethane
Concen: 1.393 ug/l
RT: 9.525 min Scan# 11
Delta R.T. 0.000 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

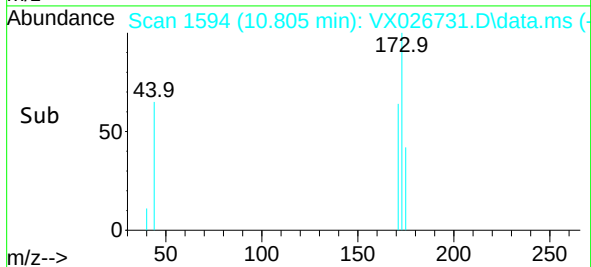
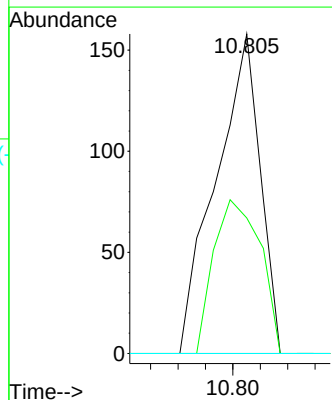
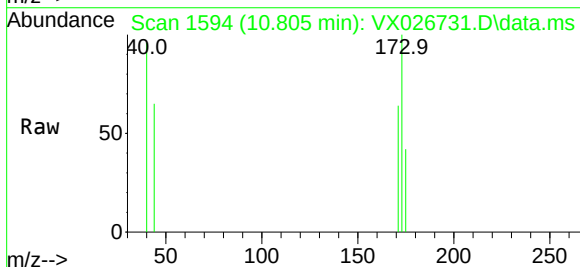
Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

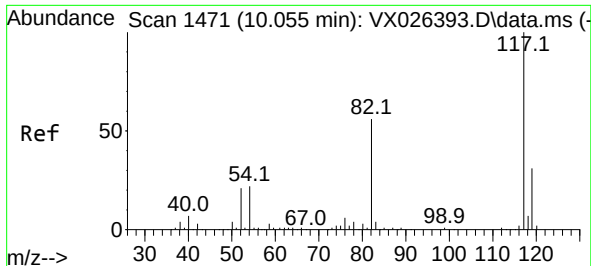
Tgt Ion:129 Resp: 1553
Ion Ratio Lower Upper
129 100
127 79.6 38.3 114.9



#56
Bromoform
Concen: 0.239 ug/l
RT: 10.805 min Scan# 1594
Delta R.T. 0.006 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Tgt Ion:173 Resp: 177
Ion Ratio Lower Upper
173 100
175 50.8 38.0 57.0
254 0.0 6.6 10.0#



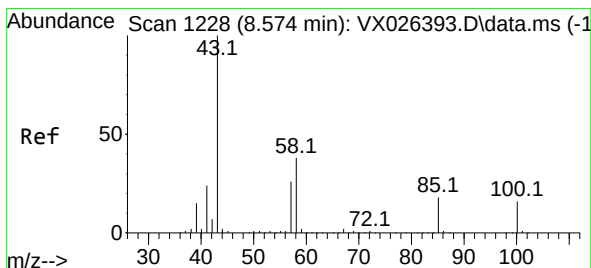
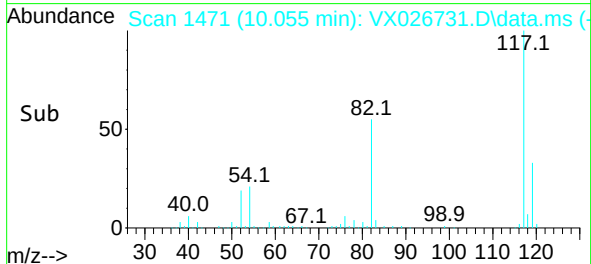
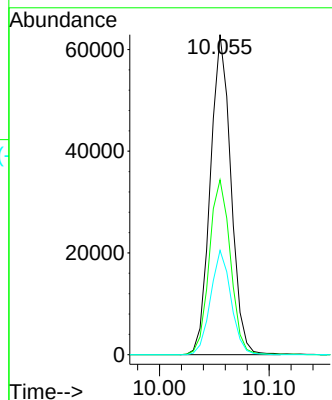
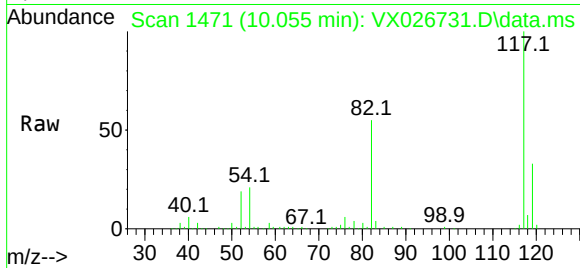


#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.000 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

Tgt Ion: 117 Resp: 82117

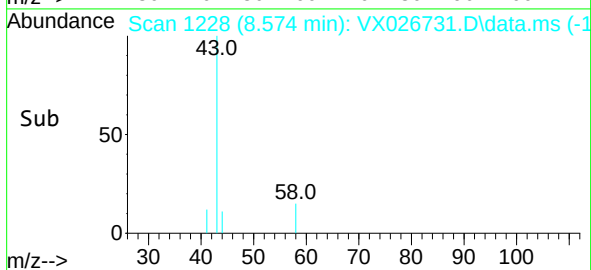
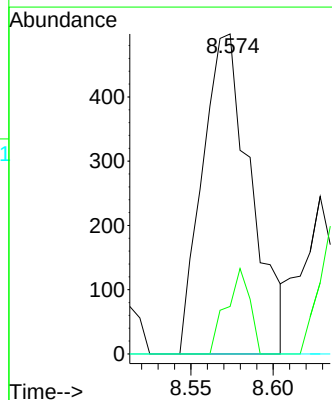
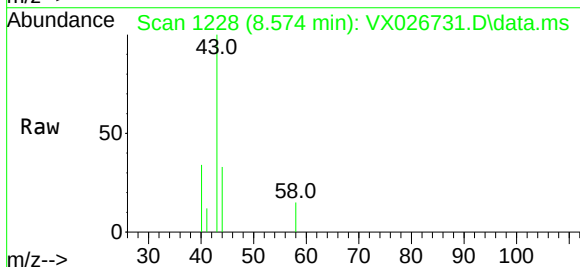
Ion	Ratio	Lower	Upper
117	100		
82	56.2	46.2	69.4
119	32.4	25.4	38.2

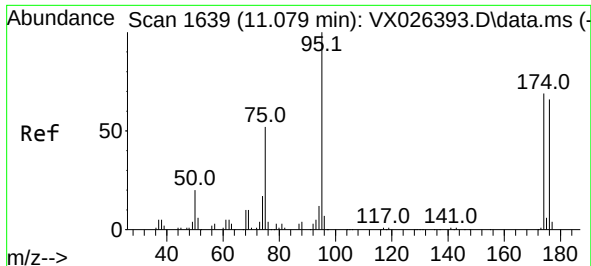


#58
4-Methyl-2-Pentanone
Concen: 0.667 ug/l
RT: 8.574 min Scan# 1228
Delta R.T. 0.000 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Tgt Ion: 43 Resp: 1021

Ion	Ratio	Lower	Upper
43	100		
58	12.9	30.2	45.4#
85	0.0	14.1	21.1#

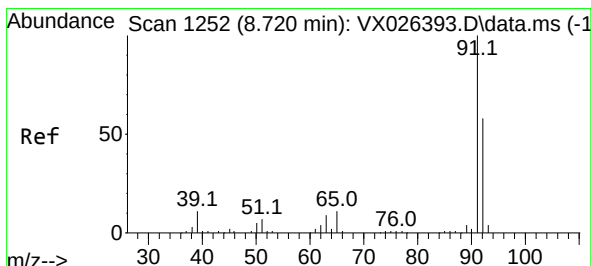
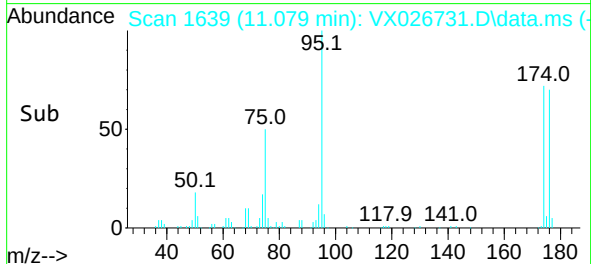
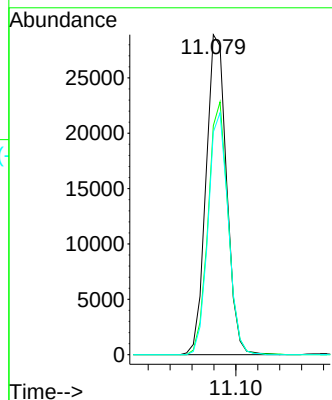
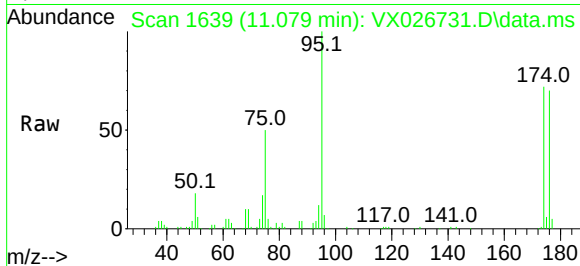




#60
4-Bromofluorobenzene
Concen: 27.461 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

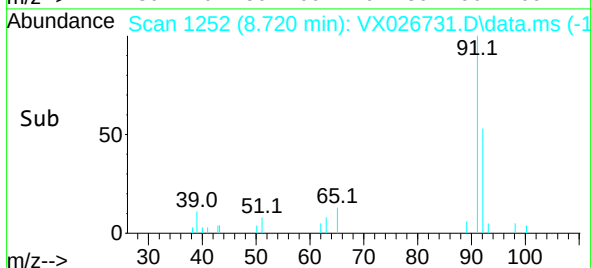
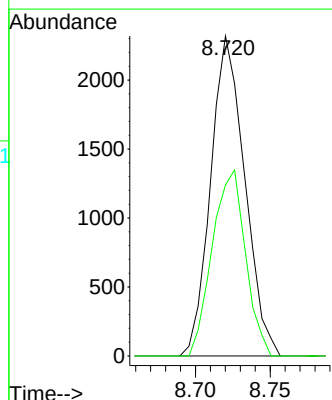
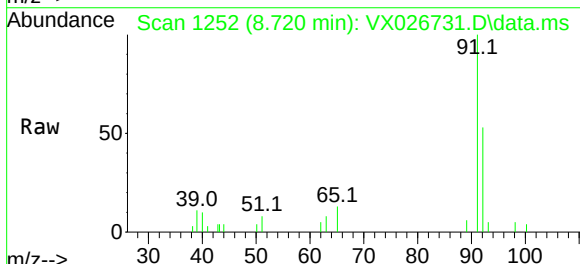
Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

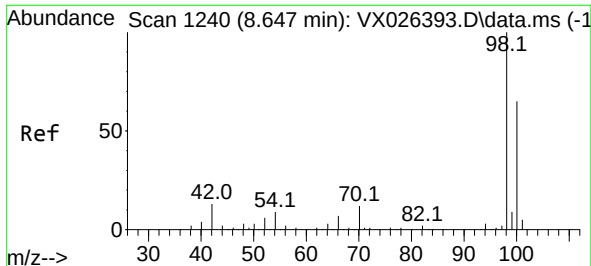
Tgt Ion: 95 Resp: 37634
Ion Ratio Lower Upper
95 100
174 76.5 58.0 87.0
176 73.8 56.5 84.7



#62
Toluene
Concen: 0.837 ug/l
RT: 8.720 min Scan# 1252
Delta R.T. 0.000 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Tgt Ion: 91 Resp: 3671
Ion Ratio Lower Upper
91 100
92 56.5 47.2 70.8

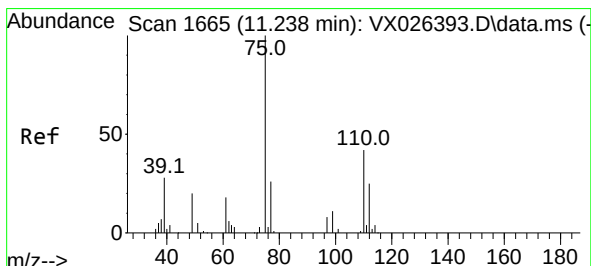
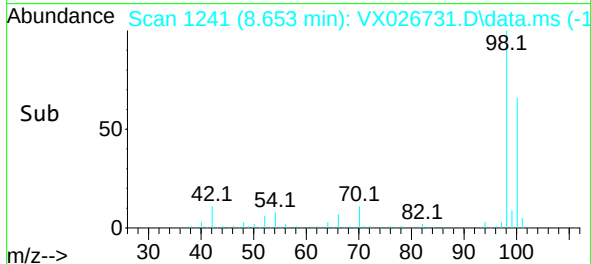
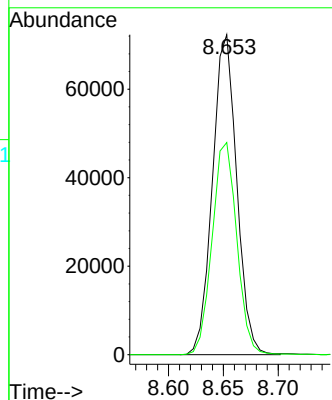
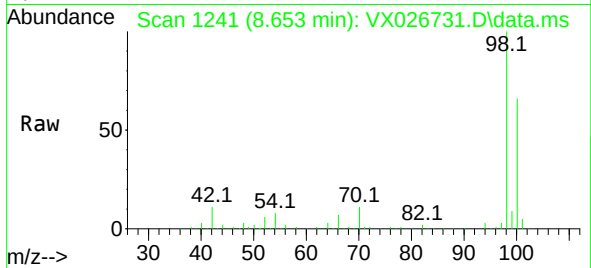




#63
Toluene-d8
Concen: 29.513 ug/l
RT: 8.653 min Scan# 11
Delta R.T. 0.006 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

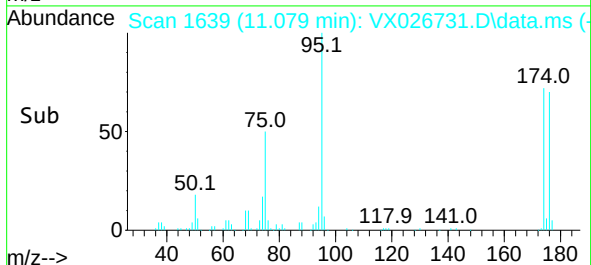
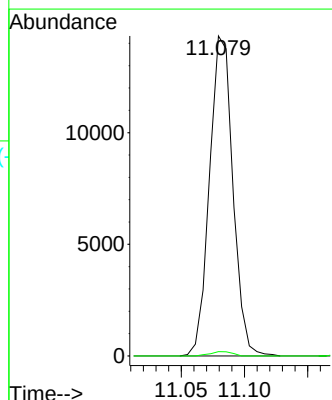
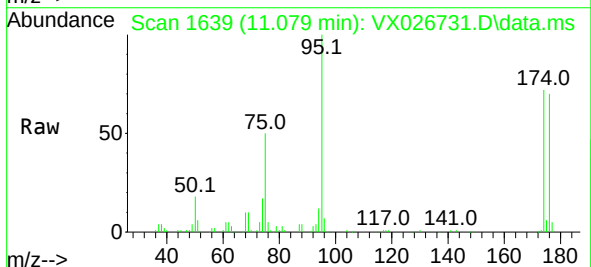
Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

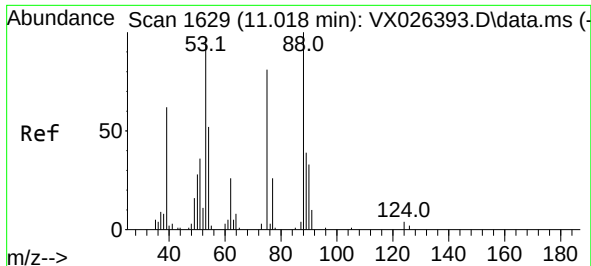
Tgt Ion: 98 Resp: 111333
Ion Ratio Lower Upper
98 100
100 67.5 52.5 78.7



#72
1,2,3-Trichloropropane
Concen: 14.062 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.158 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Tgt Ion: 75 Resp: 18430
Ion Ratio Lower Upper
75 100
77 1.3 0.0 76.2

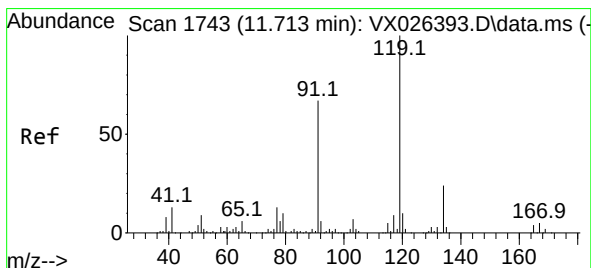
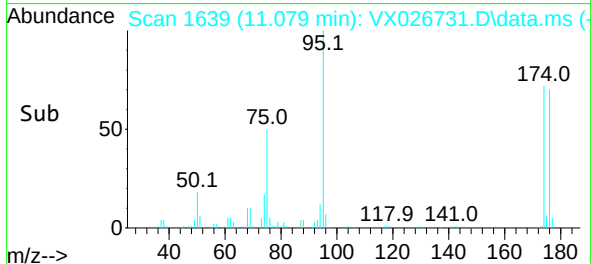
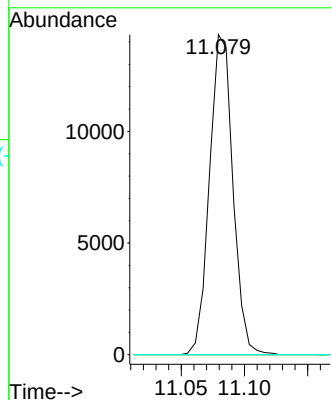
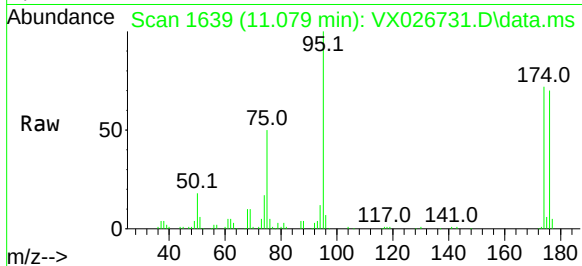




#77
t-1,4-Dichloro-2-butene
Concen: 46.755 ug/l
RT: 11.079 min Scan# 1
Delta R.T. 0.061 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

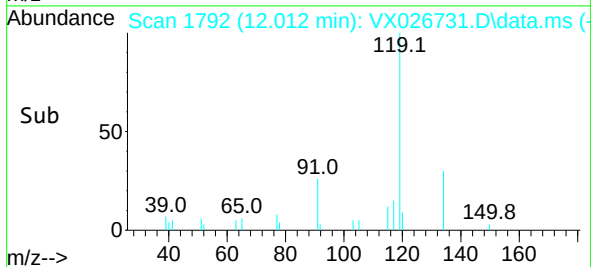
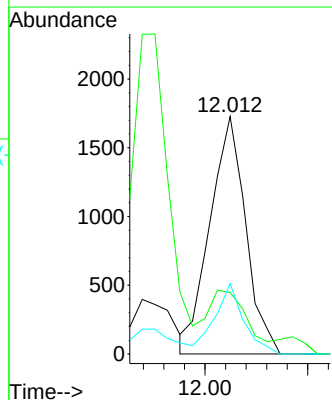
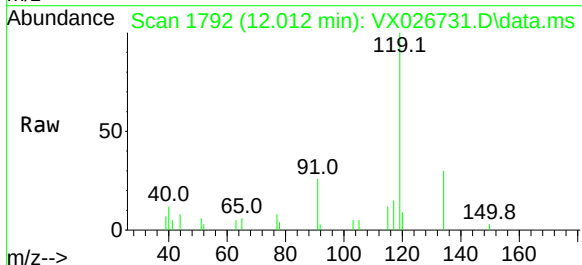
Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

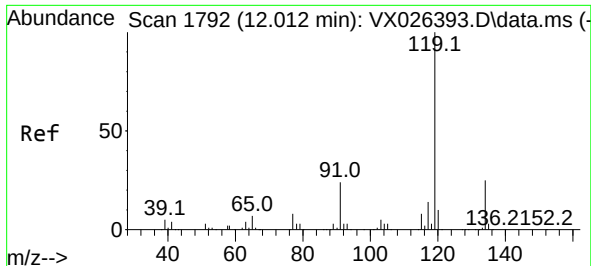
Tgt Ion: 75 Resp: 18430
Ion Ratio Lower Upper
75 100
53 0.0 59.0 176.8#
89 0.0 24.0 72.0#



#79
tert-butylbenzene
Concen: 0.569 ug/l
RT: 12.012 min Scan# 1792
Delta R.T. 0.299 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Tgt Ion: 119 Resp: 2086
Ion Ratio Lower Upper
119 100
91 30.2 0.0 129.0
134 24.1 0.0 47.8





#82

p-Isopropyltoluene

Concen: 0.514 ug/l

RT: 12.012 min Scan# 11

Delta R.T. 0.000 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

Instrument :

MSVOA_X

ClientSampleId :

MANHOLE

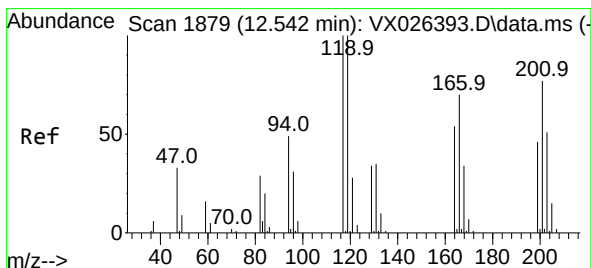
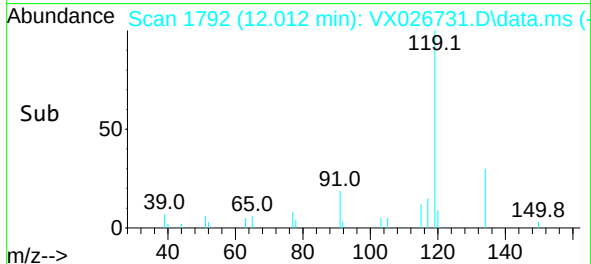
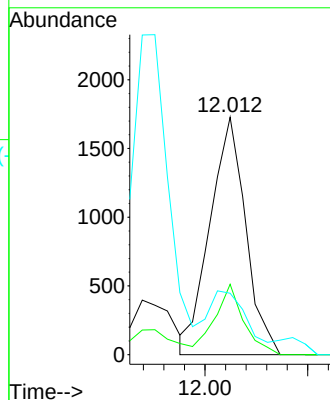
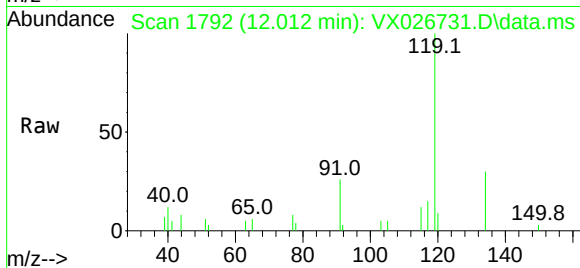
Tgt Ion:119 Resp: 2086

Ion Ratio Lower Upper

119 100

134 24.1 0.0 50.8

91 30.2 0.0 50.2



#86

Hexachloroethane

Concen: 0.305 ug/l

RT: 12.671 min Scan# 1900

Delta R.T. 0.128 min

Lab File: VX026731.D

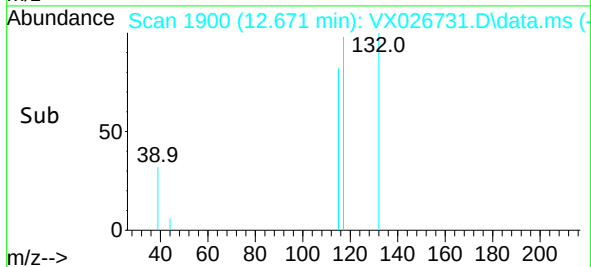
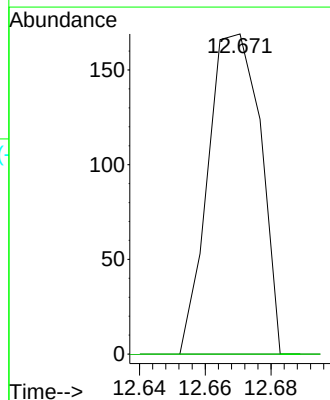
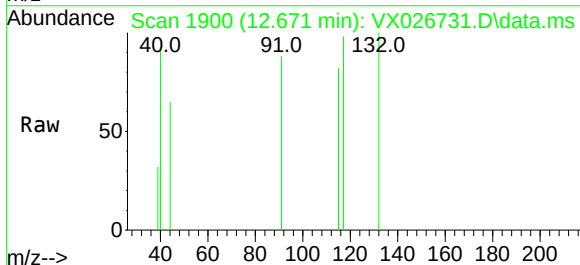
Acq: 02 Feb 2022 12:46

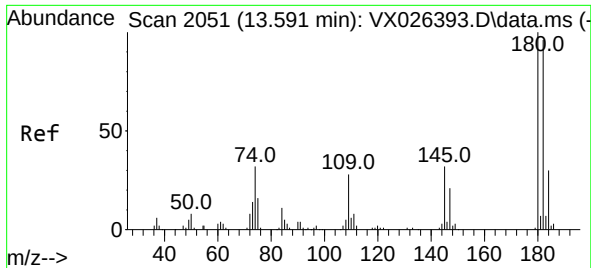
Tgt Ion:117 Resp: 187

Ion Ratio Lower Upper

117 100

201 0.0 36.3 108.7#

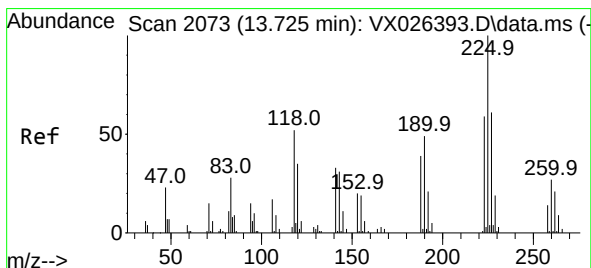
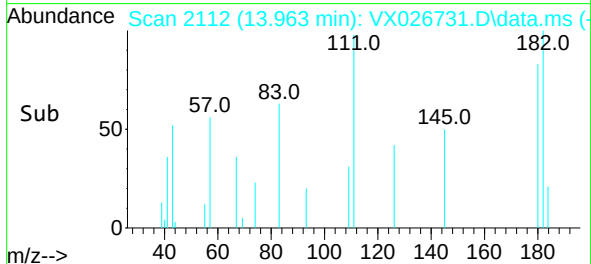
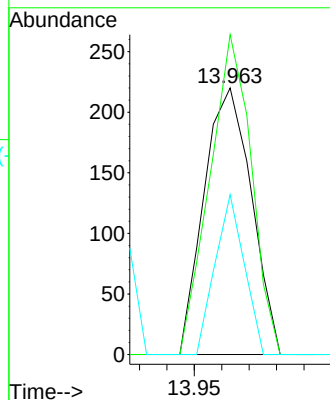
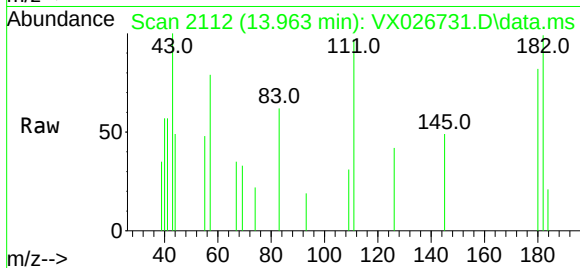




#89
1,2,4-Trichlorobenzene
Concen: 0.209 ug/l
RT: 13.963 min Scan# 2112
Delta R.T. 0.372 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

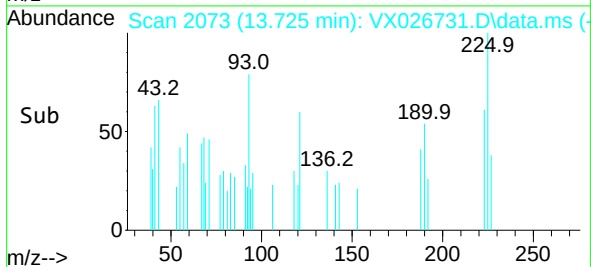
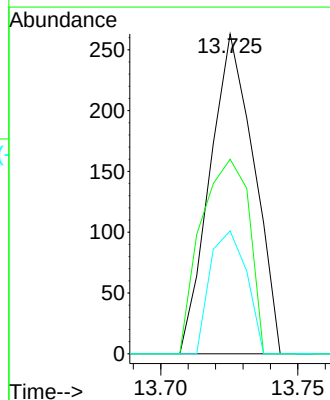
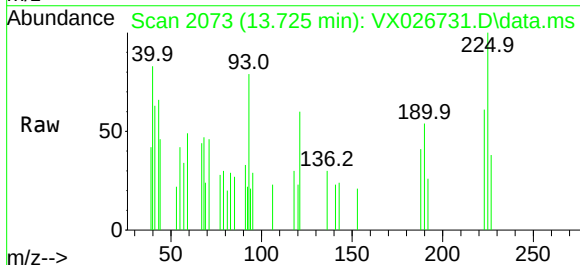
Instrument :
MSVOA_X
ClientSampleId :
MANHOLE

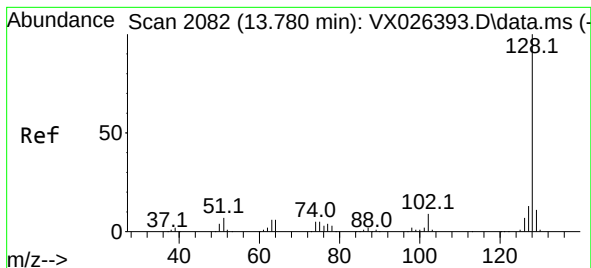
Tgt Ion:180	Resp:	265
Ion	Ratio	Lower Upper
180	100	
182	104.9	75.8 113.8
145	36.6	26.6 39.8



#90
Hexachlorobutadiene
Concen: 0.528 ug/l
RT: 13.725 min Scan# 2073
Delta R.T. 0.000 min
Lab File: VX026731.D
Acq: 02 Feb 2022 12:46

Tgt Ion:225	Resp:	293
Ion	Ratio	Lower Upper
225	100	
223	66.6	0.0 121.6
227	31.7	0.0 122.8





#91

Naphthalene

Concen: 0.242 ug/l

RT: 13.780 min Scan# 2082

Delta R.T. 0.000 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

Instrument :

MSVOA_X

ClientSampleId :

MANHOLE

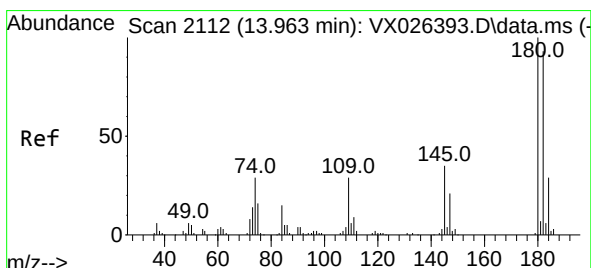
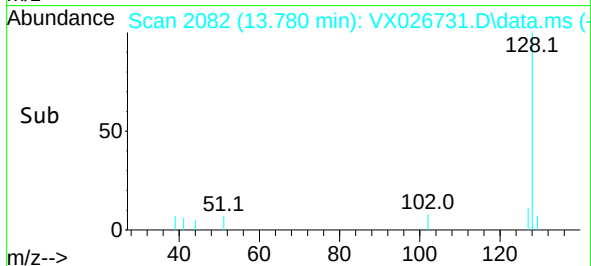
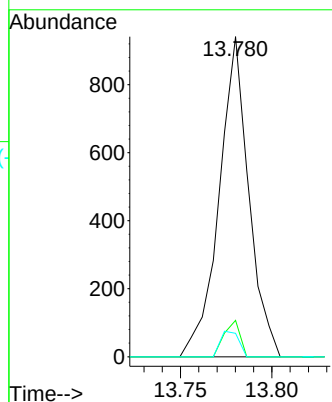
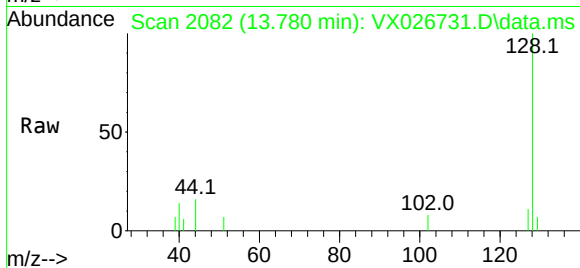
Tgt Ion:128 Resp: 1062

Ion Ratio Lower Upper

128 100

127 6.1 10.6 15.8#

129 5.0 8.8 13.2#



#92

1,2,3-Trichlorobenzene

Concen: 0.210 ug/l

RT: 13.963 min Scan# 2112

Delta R.T. 0.000 min

Lab File: VX026731.D

Acq: 02 Feb 2022 12:46

Tgt Ion:180 Resp: 265

Ion Ratio Lower Upper

180 100

182 104.9 0.0 187.4

145 36.6 0.0 70.2

