

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX090420\
 Data File : VX018258.D
 Acq On : 04 Sep 2020 14:28
 Operator : JC/SP
 Sample : L3910-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 LPBH-01

Quant Time: Sep 05 06:32:30 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X090420W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Sep 04 12:13:41 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	4.99	128	83759	30.00	ug/l	0.01
28) 1,4-Difluorobenzene	6.83	114	428031	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.10	117	394160	30.00	ug/l	0.00

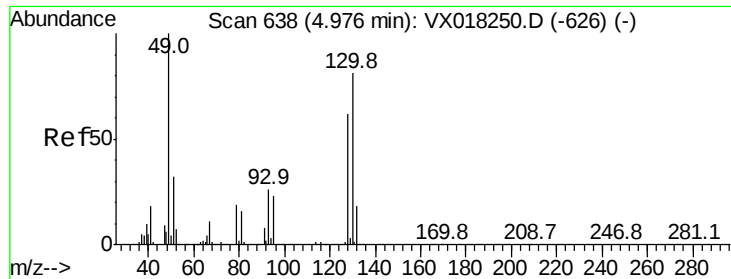
System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.04	65	204197	30.90	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	103.00%
60) 4-Bromofluorobenzene	11.12	95	181741	26.60	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	88.67%
63) Toluene-d8	8.70	98	510306	29.37	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	97.90%

Target Compounds

					Ovalue
11) Methyl Iodide	2.49	142	1519	7.793 ug/l #	62
13) Acrolein	2.67	56	277	0.619 ug/l	86
14) Acrylonitrile	3.12	53	804	0.320 ug/l #	33
15) Acetone	2.42	58	1827	2.674 ug/l #	63
16) Carbon Disulfide	2.55	76	5635	0.459 ug/l	98
18) Methylene Chloride	2.83	84	1573	0.318 ug/l #	87
23) tert-Butyl Alcohol	3.02	59	539	0.495 ug/l #	62
40) Dibromomethane	7.65	93	726	0.201 ug/l	44
45) 1,4-Dioxane	7.72	88	229	2.391 ug/l #	75
55) 2-Chloroethyl vinyl ether	8.29	63	863	0.227 ug/l #	78
61) Tetrachloroethene	9.32	164	1134	0.231 ug/l #	59
83) 1,3-Dichlorobenzene	12.01	146	2908	0.270 ug/l	92
84) 1,4-Dichlorobenzene	12.09	146	2692	0.250 ug/l	84
85) n-Butylbenzene	12.37	91	3825	0.216 ug/l	94
87) 1,2-Dichlorobenzene	12.09	146	2692	0.266 ug/l	88
89) 1,2,4-Trichlorobenzene	13.63	180	3004	0.440 ug/l #	89
90) Hexachlorobutadiene	13.76	225	1692	0.585 ug/l	80
91) Naphthalene	13.82	128	6551	0.307 ug/l #	89
92) 1,2,3-Trichlorobenzene	14.01	180	2712	0.401 ug/l	97

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

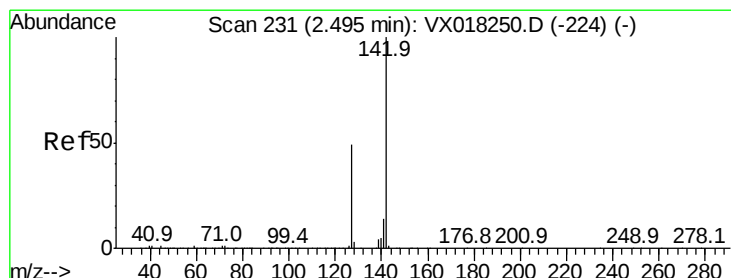
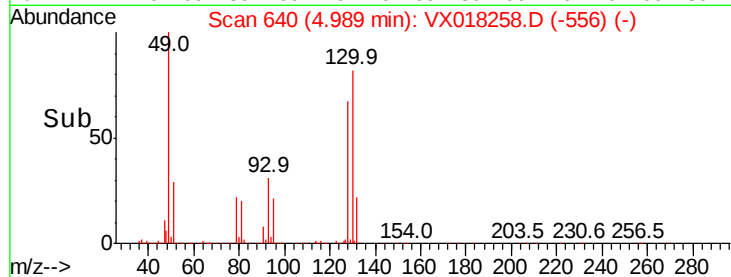
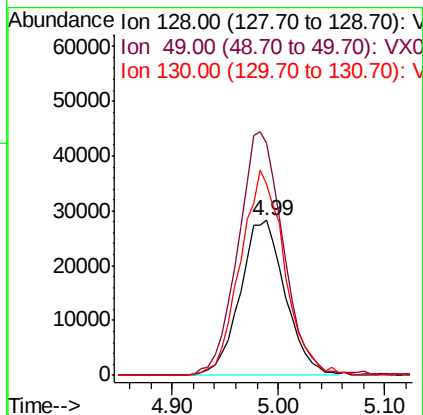
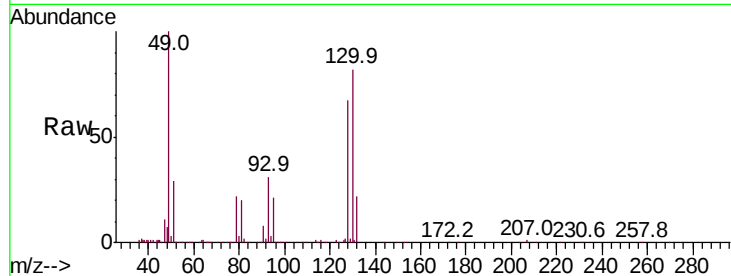


#1

Bromochloromethane
 Concen: 30.000 ug/l
 RT: 4.99 min Scan# 640
 Delta R.T. 0.01 min
 Lab File: VX018258.D
 Acq: 04 Sep 2020 14:28

Instrument :
 MSVOA_X
 ClientSampleId :
 LPBH-01

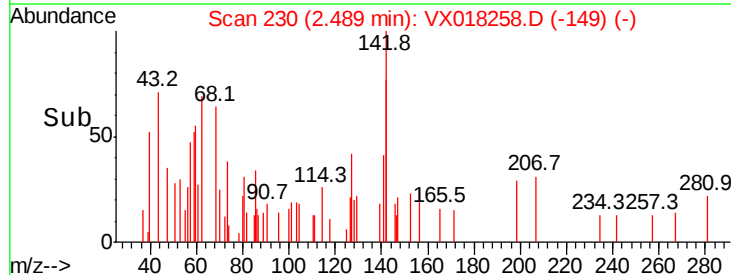
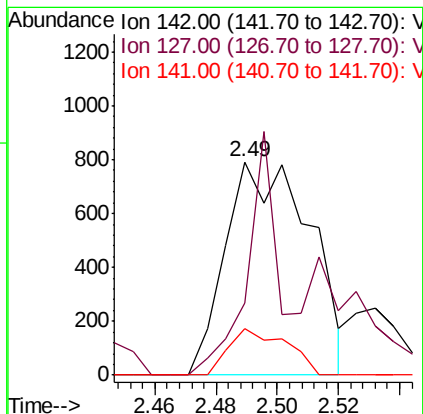
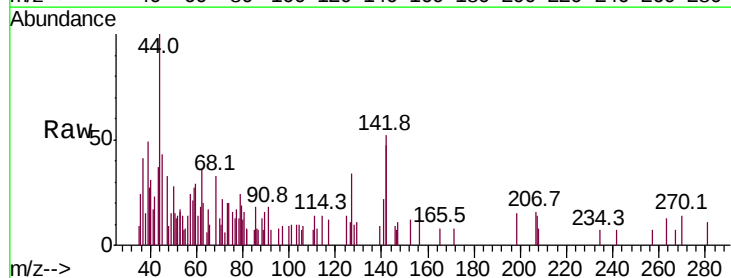
Tot Ion:128 Resp: 83759
 Ion Ratio Lower Upper
 128 100
 49 157.2 0.0 392.0
 130 129.0 0.0 320.2

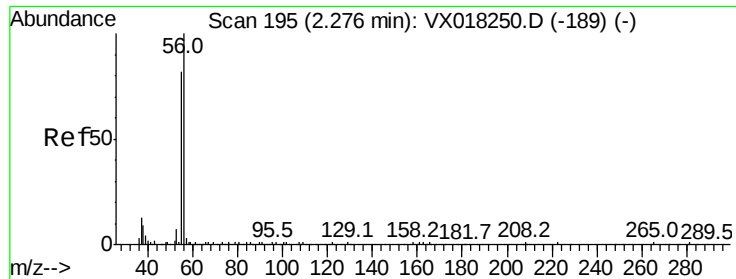


#11

Methyl Iodide
 Concen: 7.793 ug/l
 RT: 2.49 min Scan# 230
 Delta R.T. -0.01 min
 Lab File: VX018258.D
 Acq: 04 Sep 2020 14:28

Tgt Ion:142 Resp: 1519
 Ion Ratio Lower Upper
 142 100
 127 21.2 24.6 74.0#
 141 24.4 7.0 21.0#





#13

Acrolein

Concen: 0.619 ug/l

RT: 2.67 min Scan# 259

Delta R.T. 0.39 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Instrument :

MSVOA_X

ClientSampled :

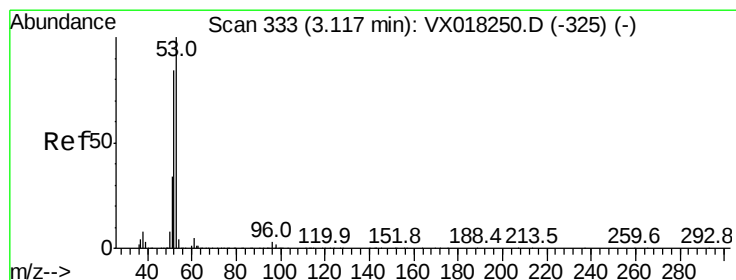
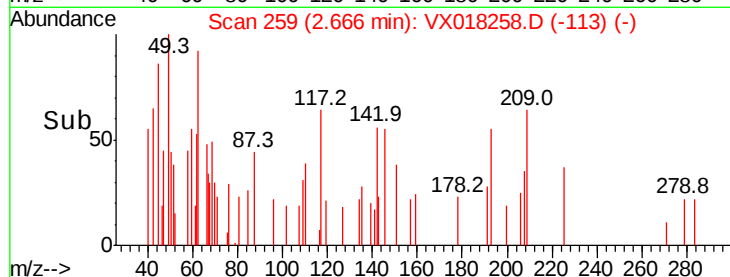
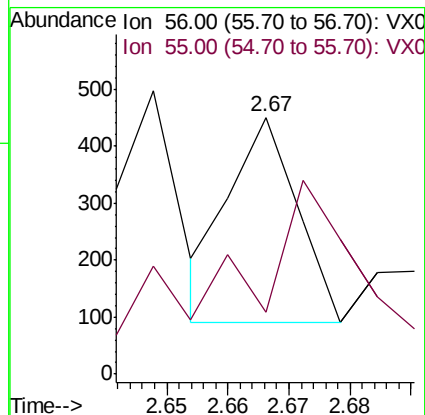
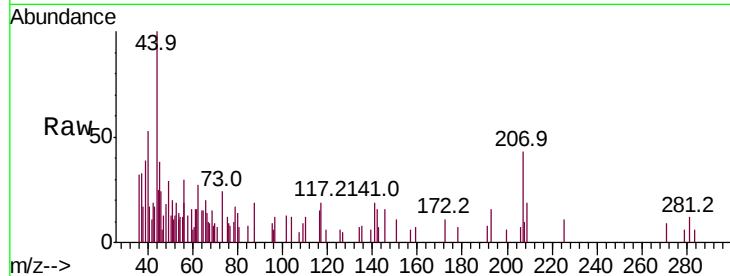
LPBH-01

Tot Ion: 56 Resp: 277

Ion Ratio Lower Upper

56 100

55 62.5 59.7 89.5



#14

Acrylonitrile

Concen: 0.320 ug/l

RT: 3.12 min Scan# 334

Delta R.T. 0.01 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

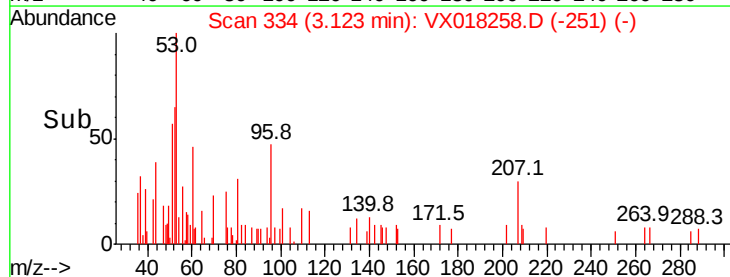
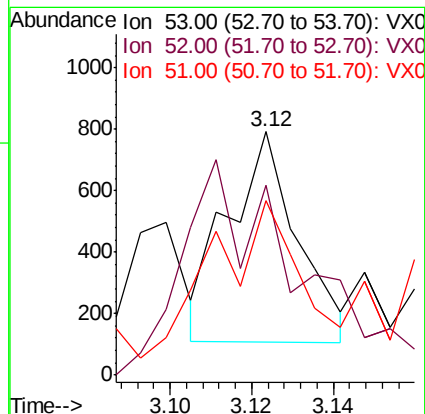
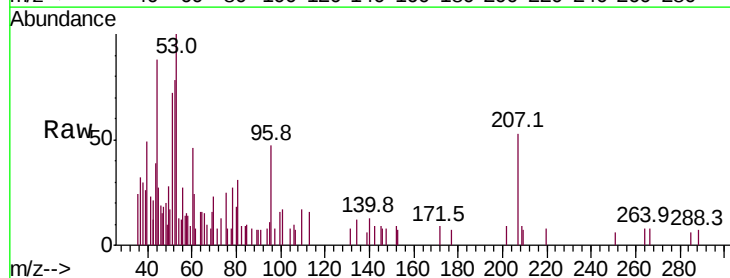
Tgt Ion: 53 Resp: 804

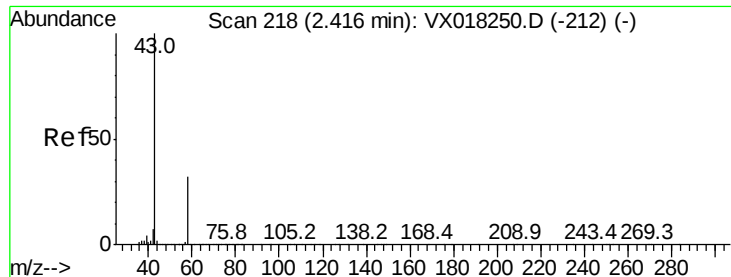
Ion Ratio Lower Upper

53 100

52 0.0 41.9 125.7#

51 40.9 18.3 54.8





#15

Acetone

Concen: 2.674 ug/l

RT: 2.42 min Scan# 218

Delta R.T. 0.00 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Instrument :

MSVOA_X

ClientSampleId :

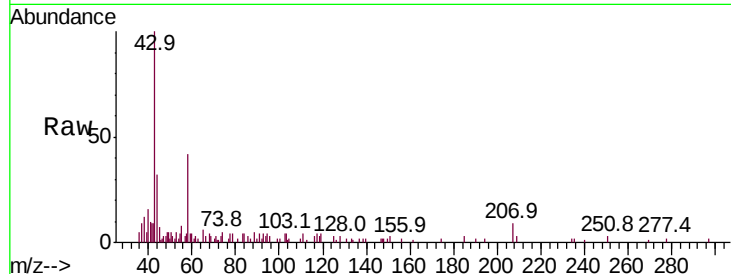
LPBH-01

Tot Ion: 58 Resp: 1827

Ion Ratio Lower Upper

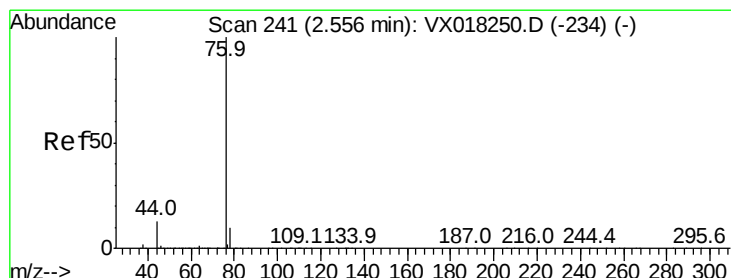
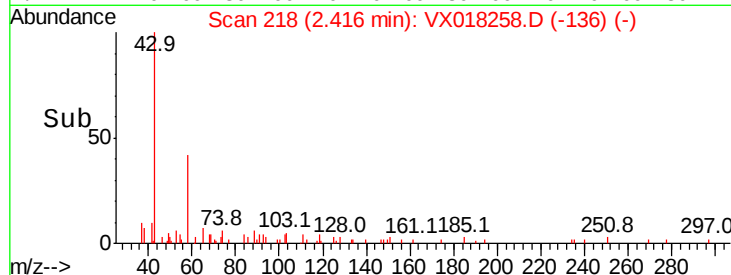
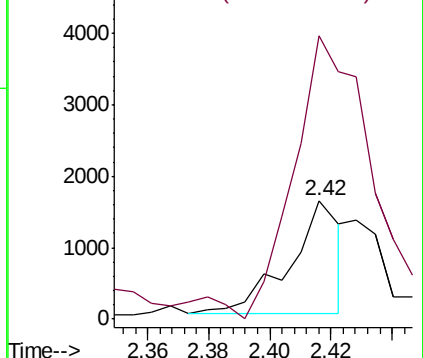
58 100

43 235.8 248.2 372.2#



Abundance Ion 58.00 (57.70 to 58.70): VX0

Ion 43.00 (42.70 to 43.70): VX0



#16

Carbon Disulfide

Concen: 0.459 ug/l

RT: 2.55 min Scan# 240

Delta R.T. -0.01 min

Lab File: VX018258.D

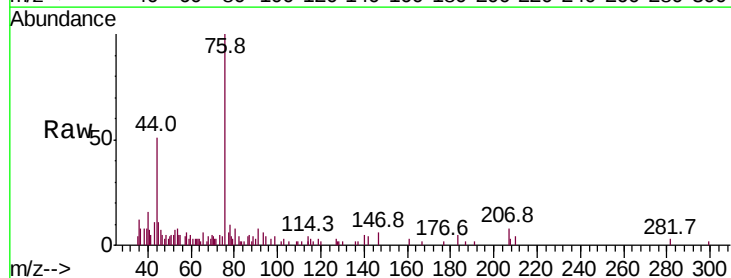
Acq: 04 Sep 2020 14:28

Tgt Ion: 76 Resp: 5635

Ion Ratio Lower Upper

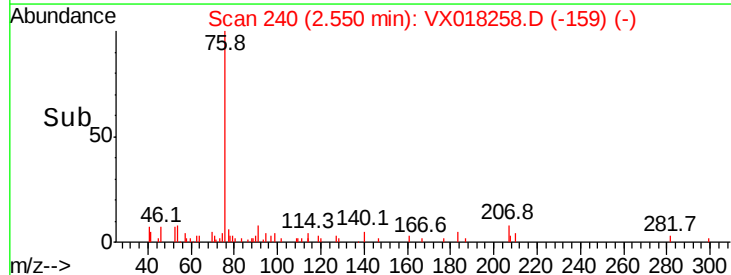
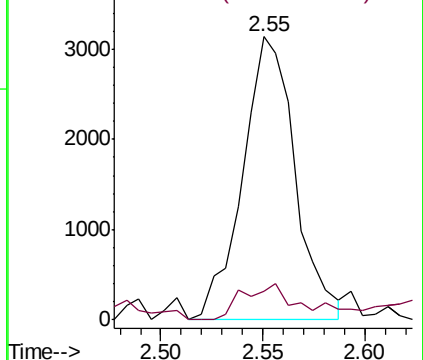
76 100

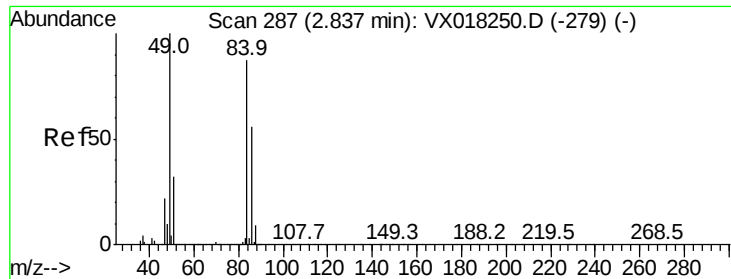
78 10.3 7.8 11.6



Abundance Ion 76.00 (75.70 to 76.70): VX0

Ion 78.00 (77.70 to 78.70): VX0

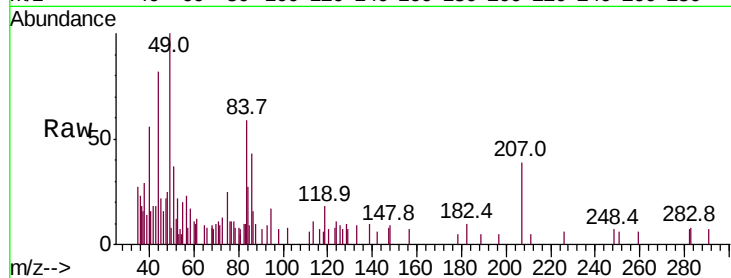




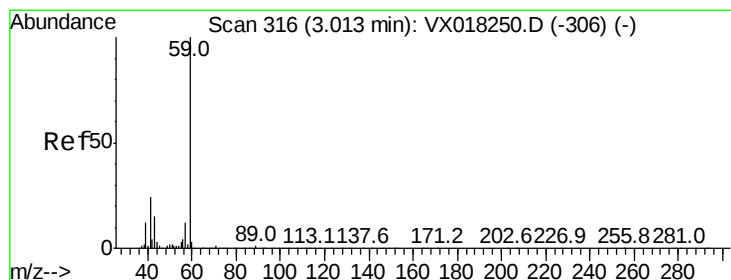
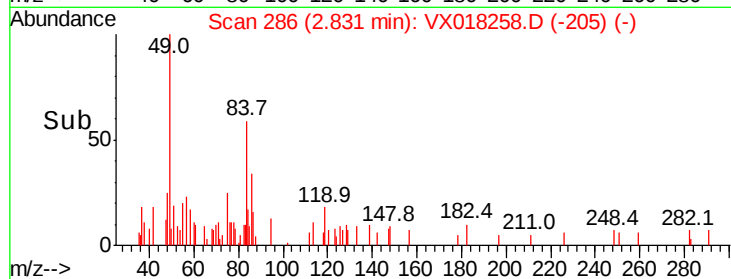
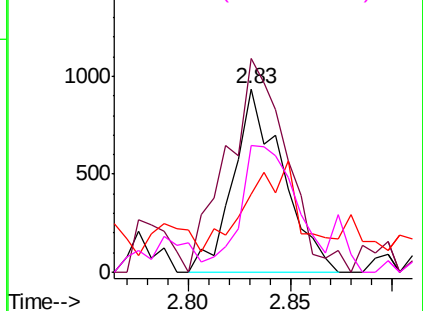
#18
Methvlene Chloride
Concen: 0.318 ug/l
RT: 2.83 min Scan# 286
Delta R.T. -0.01 min
Lab File: VX018258.D
Acq: 04 Sep 2020 14:28

Instrument :
MSVOA_X
ClientSampleId :
LPBH-01

Tot Ion: 84 Resp: 1573
Ion Ratio Lower Upper
84 100
49 104.8 91.6 137.4
51 24.6 29.4 44.0#
86 53.2 51.5 77.3

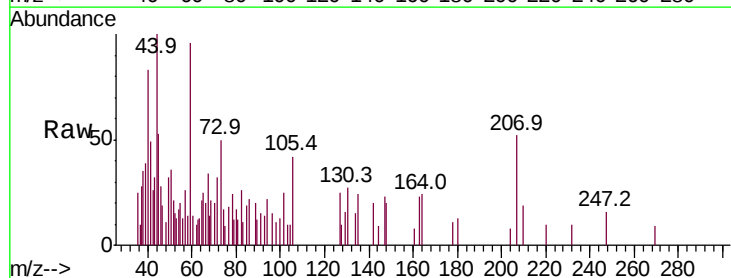


Abundance Ion 84.00 (83.70 to 84.70): VX0
Ion 49.00 (48.70 to 49.70): VX0
Ion 51.00 (50.70 to 51.70): VX0
Ion 86.00 (85.70 to 86.70): VX0

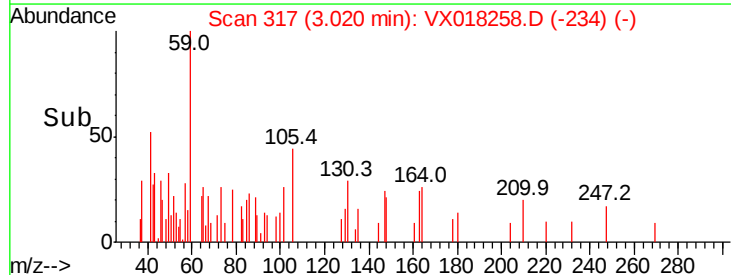
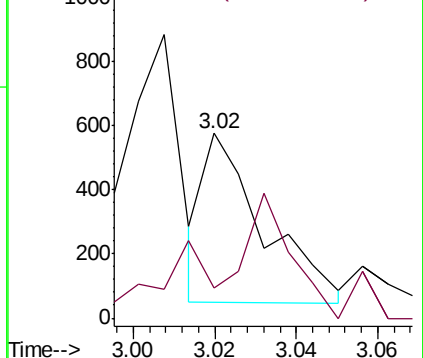


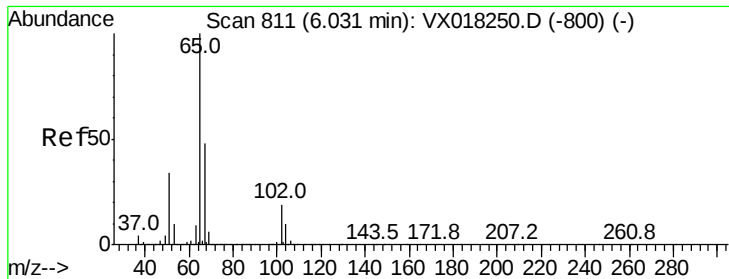
#23
tert-Butyl Alcohol
Concen: 0.495 ug/l
RT: 3.02 min Scan# 317
Delta R.T. 0.01 min
Lab File: VX018258.D
Acq: 04 Sep 2020 14:28

Tgt Ion: 59 Resp: 539
Ion Ratio Lower Upper
59 100
52 25.0 0.4 0.6#



Abundance Ion 59.00 (58.70 to 59.70): VX0
Ion 52.00 (51.70 to 52.70): VX0





#27

1,2-Dichloroethane-d4

Concen: 30.901 ug/l

RT: 6.04 min Scan# 812

Delta R.T. 0.01 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Instrument :

MSVOA_X

ClientSampleId :

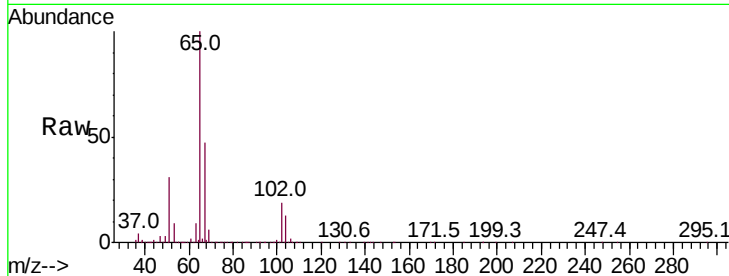
LPBH-01

Tot Ion: 65 Resp: 204197

Ion Ratio Lower Upper

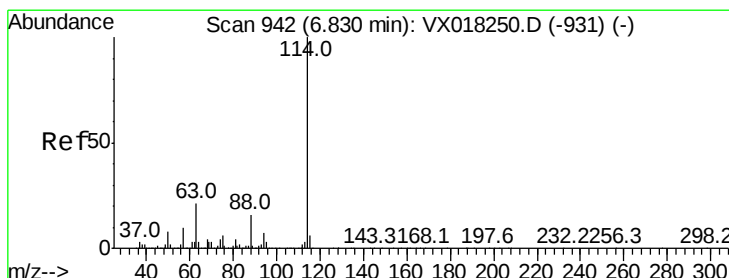
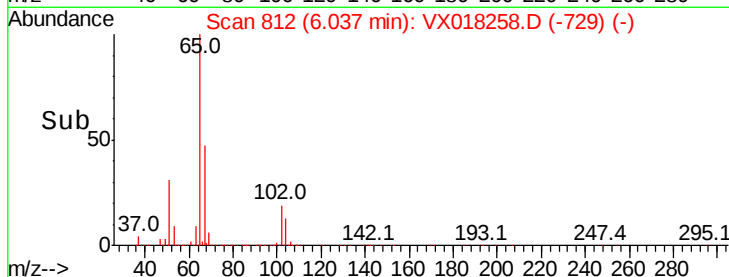
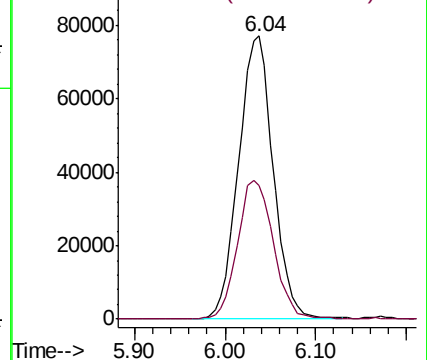
65 100

67 50.4 39.9 59.9



Abundance Ion 65.00 (64.70 to 65.70): VX0

Ion 67.00 (66.70 to 67.70): VX0



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.83 min Scan# 942

Delta R.T. 0.00 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

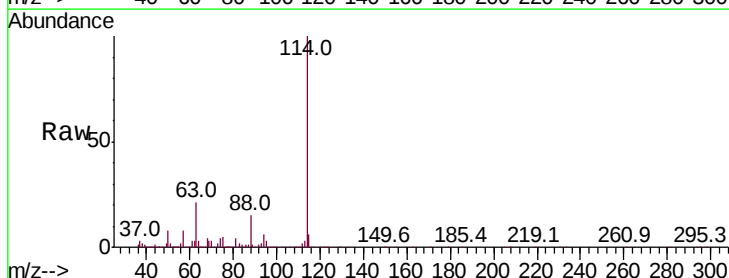
Tgt Ion:114 Resp: 428031

Ion Ratio Lower Upper

114 100

63 21.0 16.7 25.1

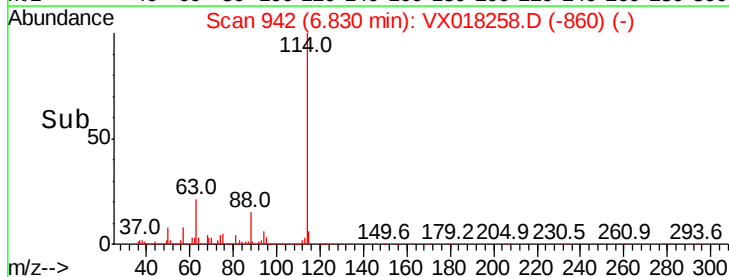
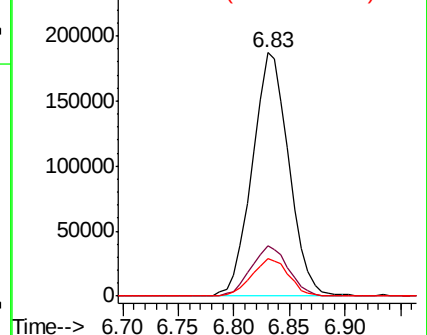
88 15.5 12.6 18.8

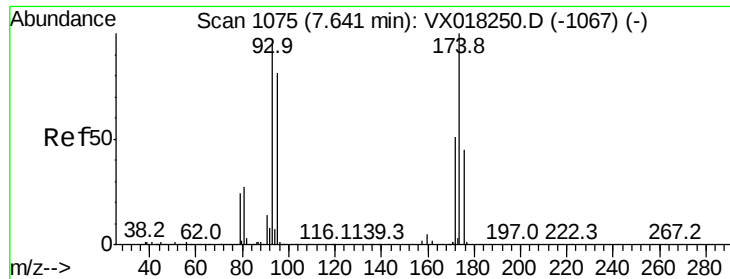


Abundance Ion 114.00 (113.70 to 114.70): V

Ion 63.00 (62.70 to 63.70): VX0

Ion 88.00 (87.70 to 88.70): VX0





#40

Dibromomethane

Concen: 0.201 ug/l

RT: 7.65 min Scan# 1076

Delta R.T. 0.01 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Instrument :

MSVOA_X

ClientSampled :

LPBH-01

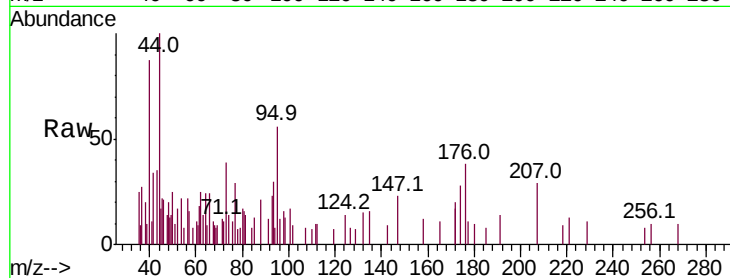
Tot Ion: 93 Resp: 726

Ion Ratio Lower Upper

93 100

95 21.2 0.0 167.0

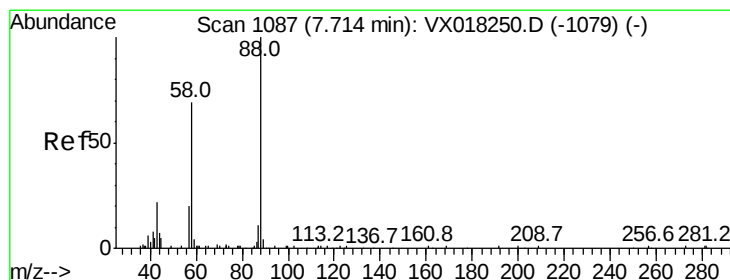
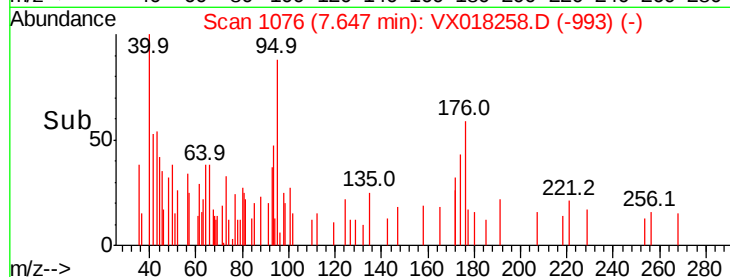
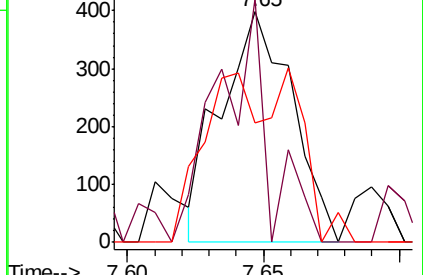
174 54.8 0.0 202.0



Abundance Ion 93.00 (92.70 to 93.70): VX0

Ion 95.00 (94.70 to 95.70): VX0

Ion 174.00 (173.70 to 174.70): V



#45

1,4-Dioxane

Concen: 2.391 ug/l

RT: 7.72 min Scan# 1088

Delta R.T. 0.01 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

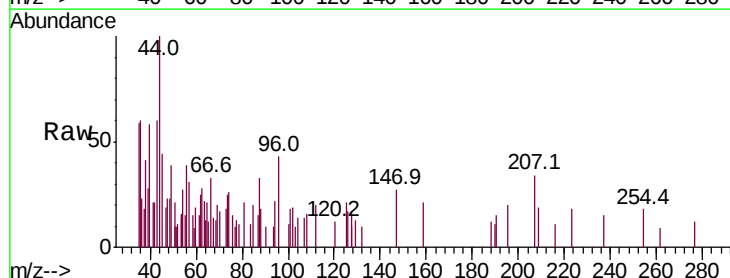
Tgt Ion: 88 Resp: 229

Ion Ratio Lower Upper

88 100

43 41.0 13.6 20.4#

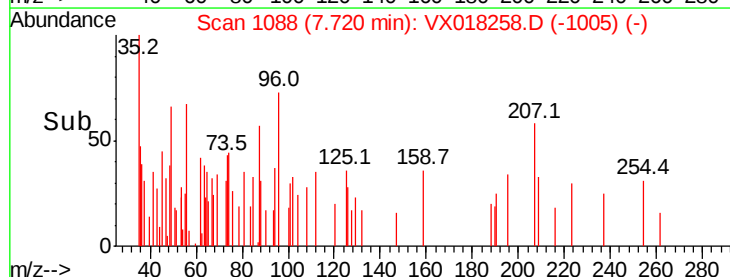
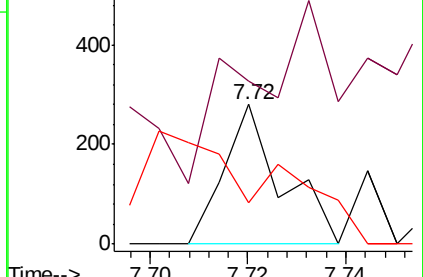
58 57.6 58.2 87.4#

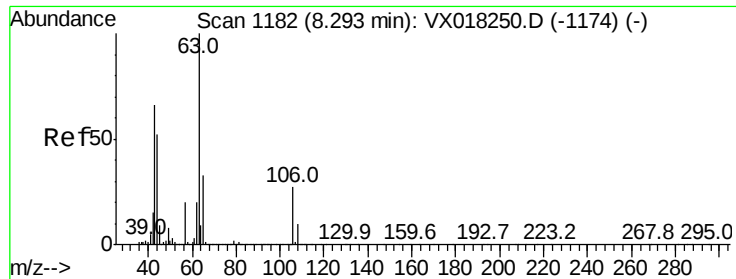


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

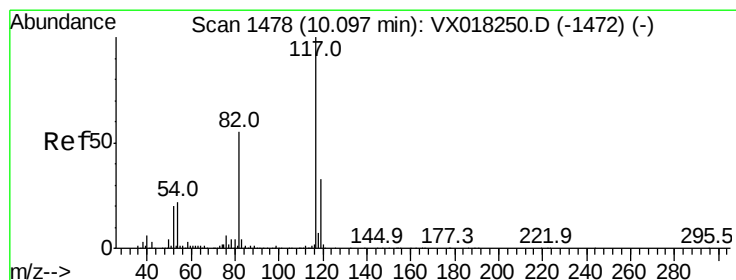
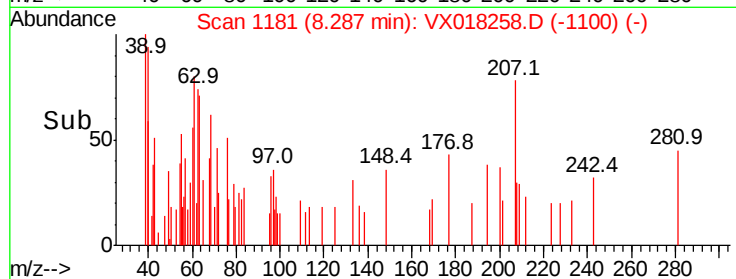
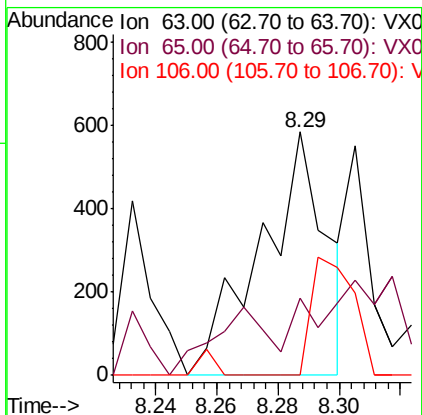
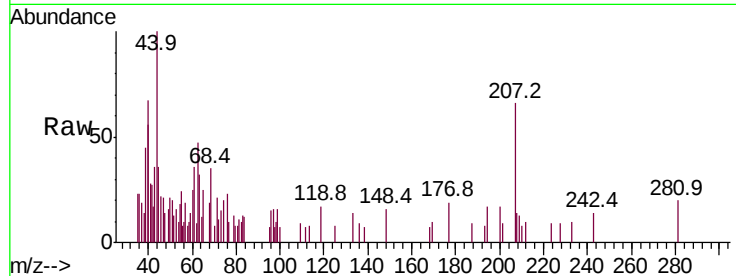




#55
2-Chloroethyl vinyl ether
Concen: 0.227 ug/l
RT: 8.29 min Scan# 1181
Delta R.T. -0.01 min
Lab File: VX018258.D
Acq: 04 Sep 2020 14:28

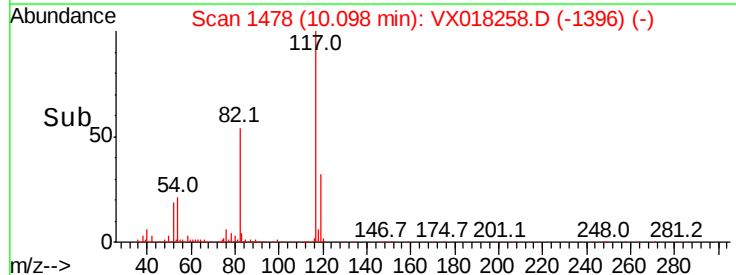
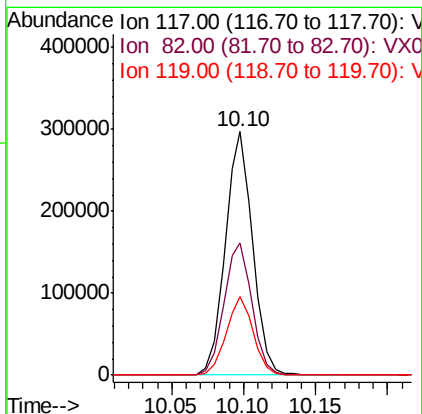
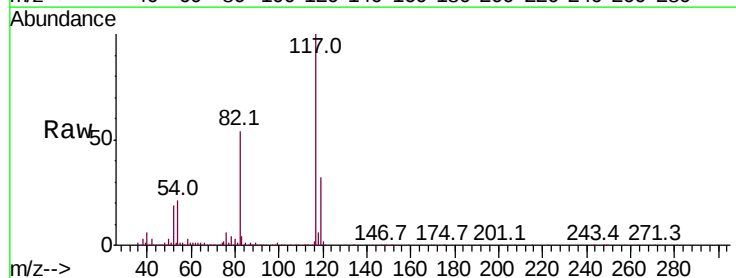
Instrument :
MSVOA_X
ClientSampleId :
LPBH-01

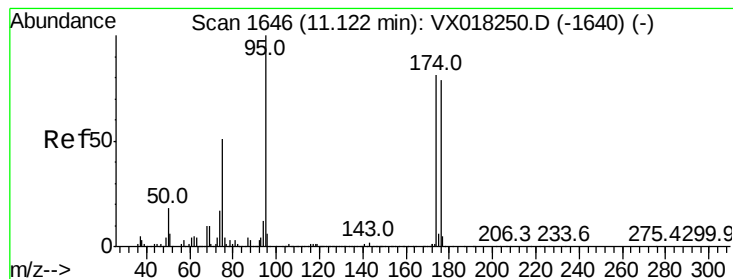
Tot Ion: 63 Resp: 863
Ion Ratio Lower Upper
63 100
65 12.6 26.0 39.0#
106 31.3 22.3 33.5



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.10 min Scan# 1478
Delta R.T. 0.00 min
Lab File: VX018258.D
Acq: 04 Sep 2020 14:28

Tgt Ion:117 Resp: 394160
Ion Ratio Lower Upper
117 100
82 55.5 44.2 66.4
119 32.1 26.1 39.1





#60

4-Bromofluorobenzene

Concen: 26.602 ug/l

RT: 11.12 min Scan# 1646

Delta R.T. 0.00 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Instrument :

MSVOA_X

ClientSampleId :

LPBH-01

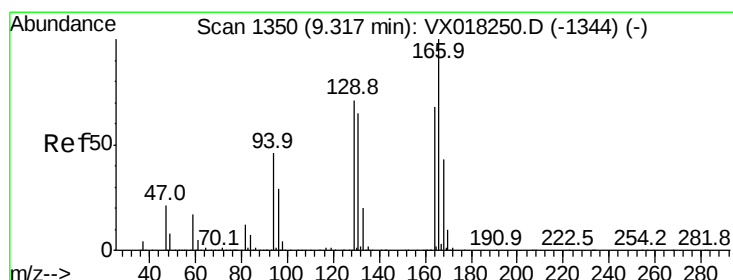
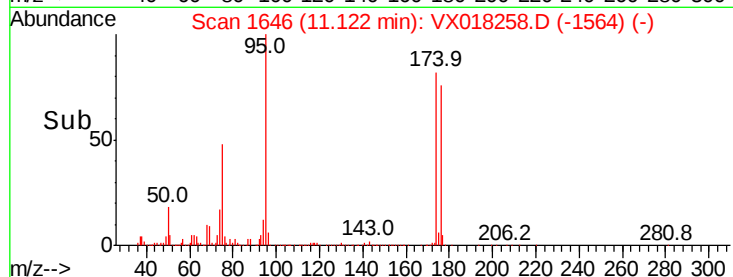
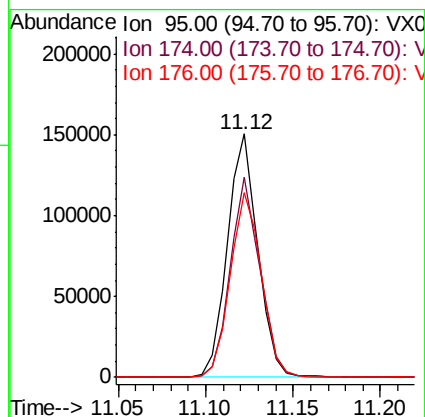
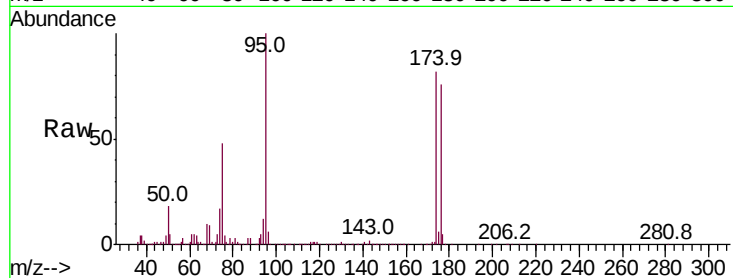
Tot Ion: 95 Resp: 181741

Ion Ratio Lower Upper

95 100

174 80.6 64.2 96.4

176 78.1 62.2 93.4



#61

Tetrachloroethene

Concen: 0.231 ug/l

RT: 9.32 min Scan# 1350

Delta R.T. 0.00 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Tgt Ion: 164 Resp: 1134

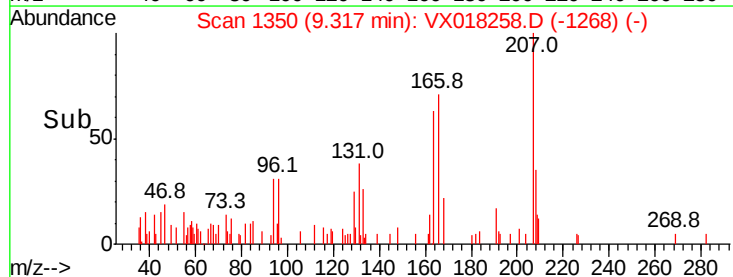
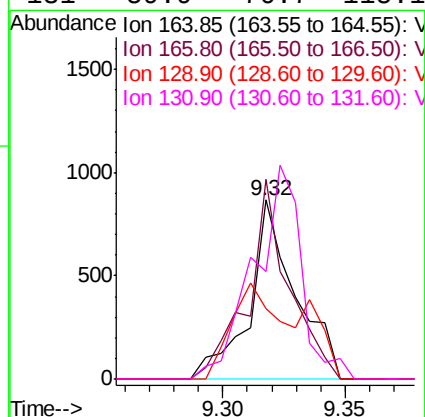
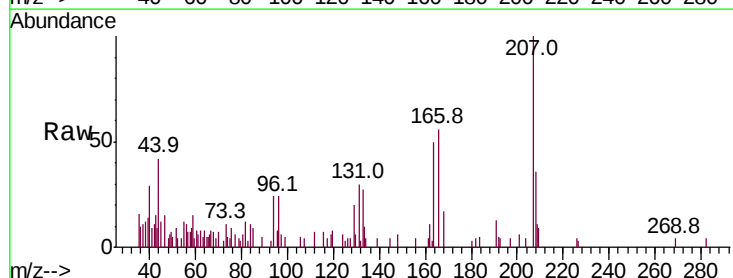
Ion Ratio Lower Upper

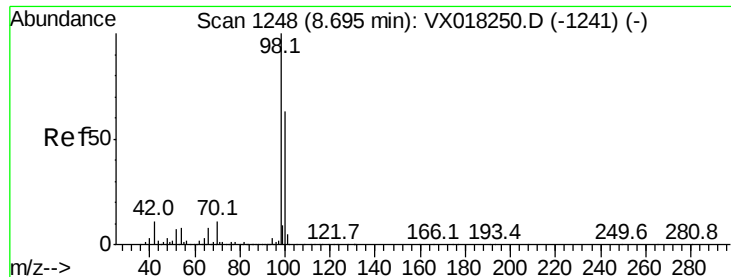
164 100

166 111.3 117.4 176.0#

129 39.7 82.7 124.1#

131 59.9 76.7 115.1#





#63

Toluene-d8

Concen: 29.374 ug/l

RT: 8.70 min Scan# 1248

Delta R.T. 0.00 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Instrument :

MSVOA_X

ClientSampleId :

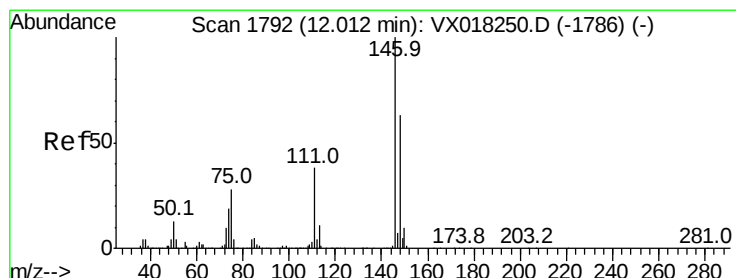
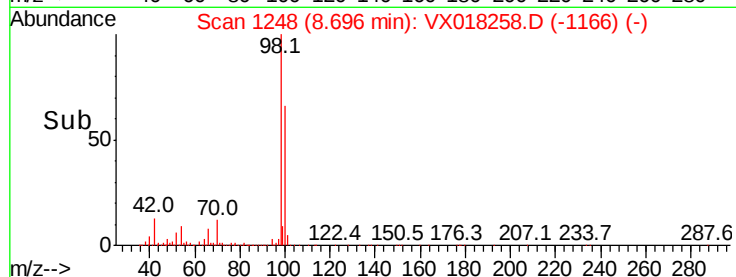
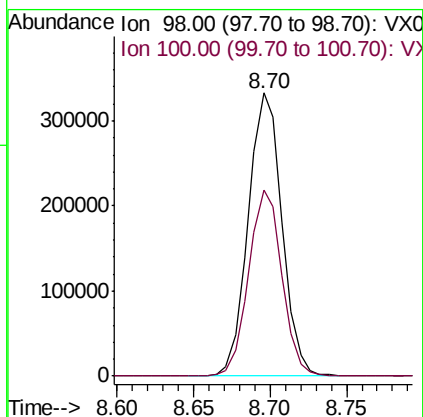
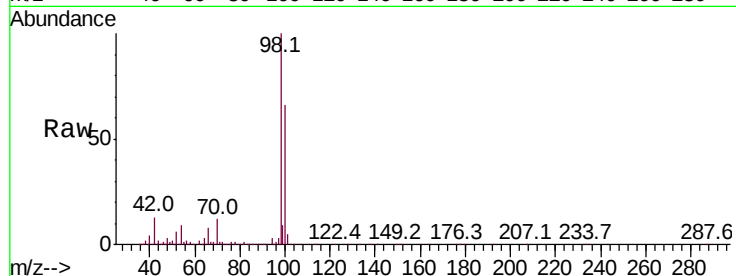
LPBH-01

Tot Ion: 98 Resp: 510306

Ion Ratio Lower Upper

98 100

100 64.8 51.4 77.0



#83

1,3-Dichlorobenzene

Concen: 0.270 ug/l

RT: 12.01 min Scan# 1792

Delta R.T. 0.00 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

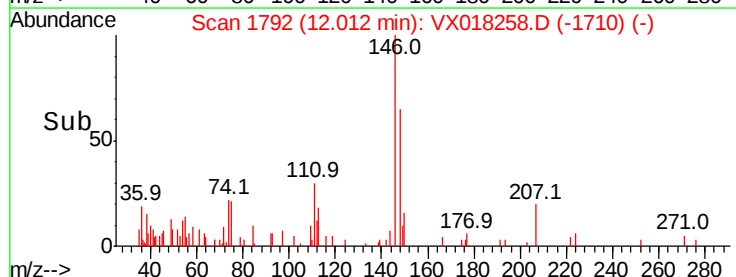
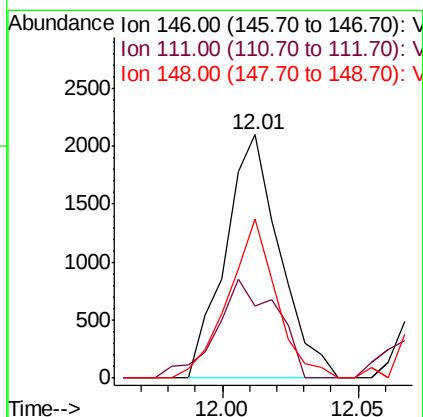
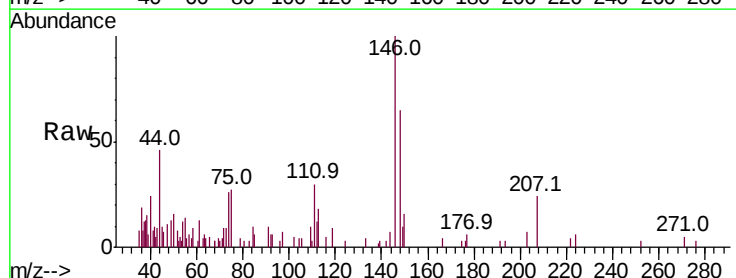
Tgt Ion: 146 Resp: 2908

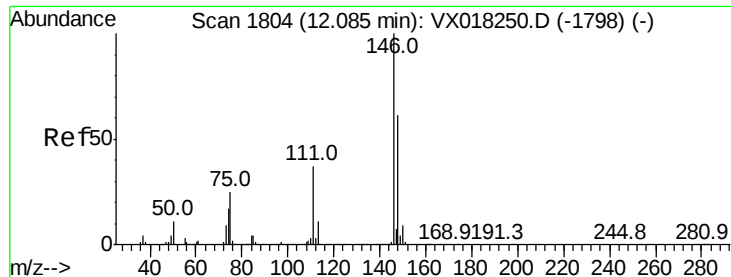
Ion Ratio Lower Upper

146 100

111 44.8 20.0 59.9

148 58.0 32.1 96.3





#84

1,4-Dichlorobenzene

Concen: 0.250 ug/l

RT: 12.09 min Scan# 1804

Delta R.T. 0.00 min

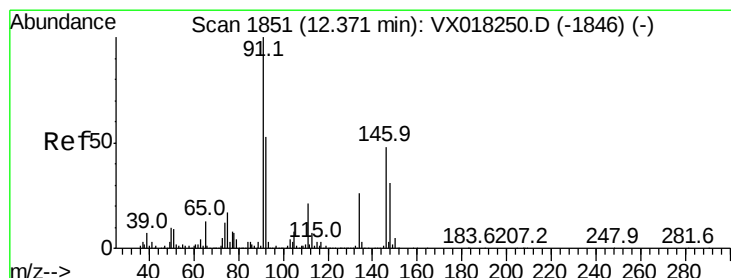
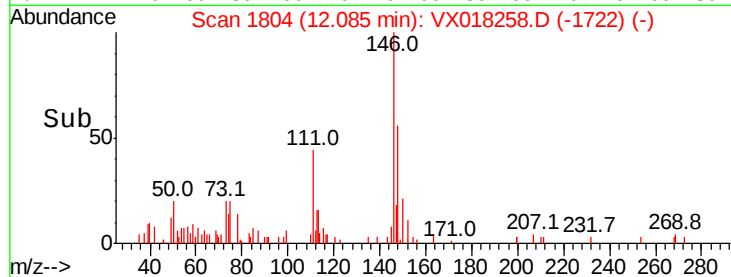
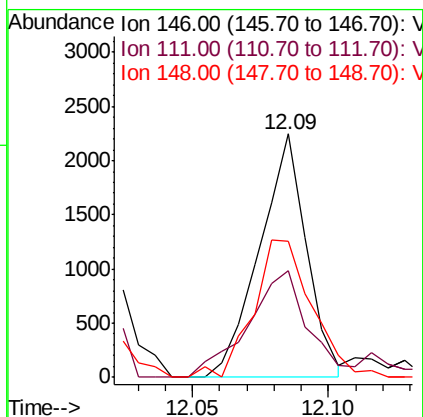
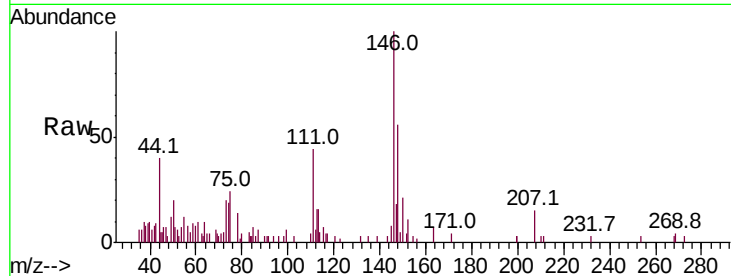
Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Instrument :
MSVOA_X
ClientSampleId :
LPBH-01

Tot Ion:146 Resp: 2692

Ion	Ratio	Lower	Upper
146	100		
111	56.3	19.3	57.8
148	69.1	31.7	95.1



#85

n-Butylbenzene

Concen: 0.216 ug/l

RT: 12.37 min Scan# 1851

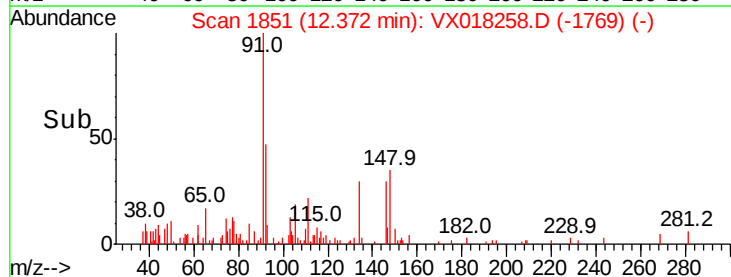
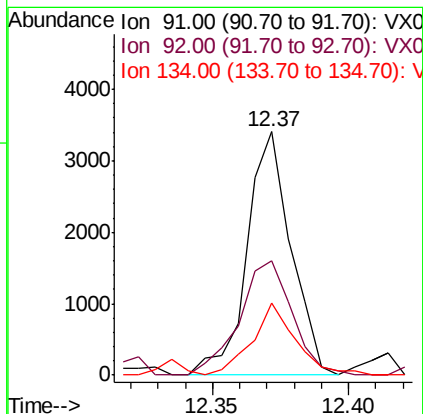
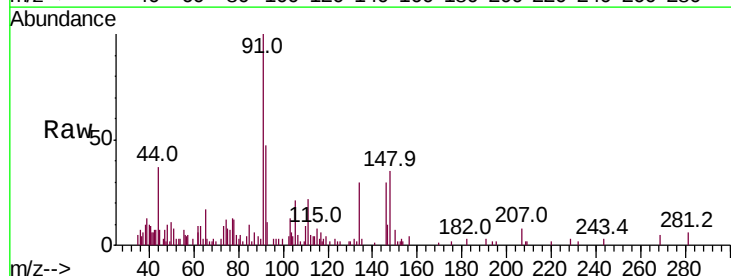
Delta R.T. 0.00 min

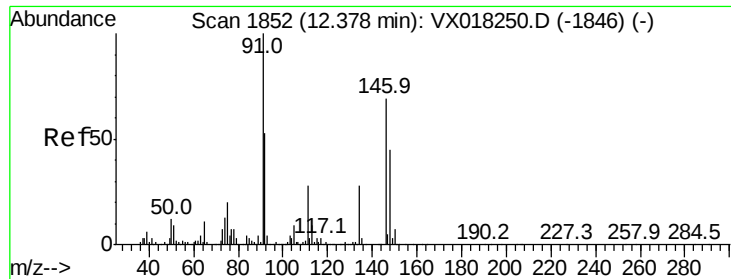
Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Tgt Ion: 91 Resp: 3825

Ion	Ratio	Lower	Upper
91	100		
92	56.6	0.0	105.0
134	29.3	0.0	51.0

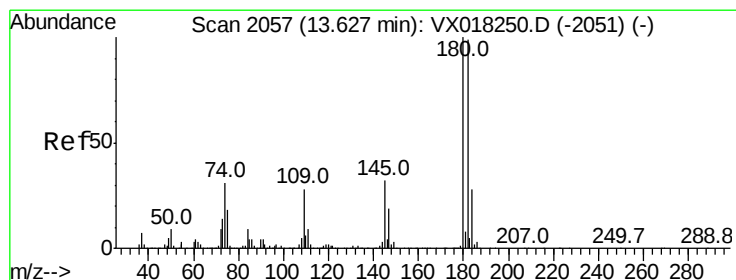
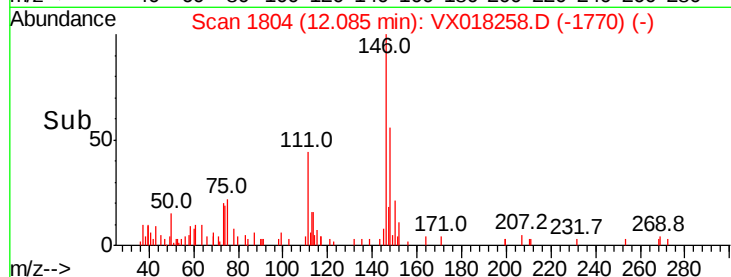
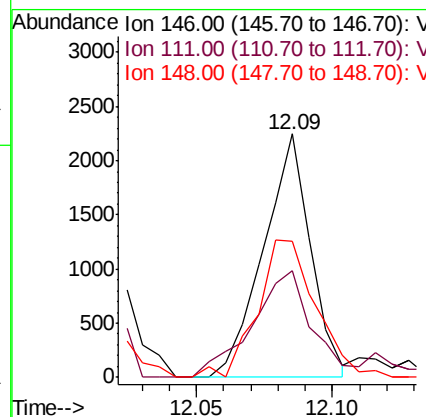
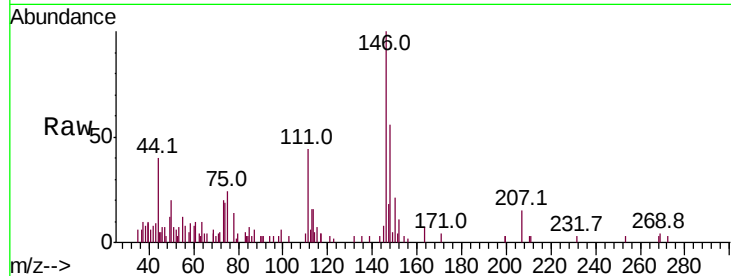




#87
 1,2-Dichlorobenzene
 Concen: 0.266 ug/l
 RT: 12.09 min Scan# 1804
 Delta R.T. -0.29 min
 Lab File: VX018258.D
 Acq: 04 Sep 2020 14:28

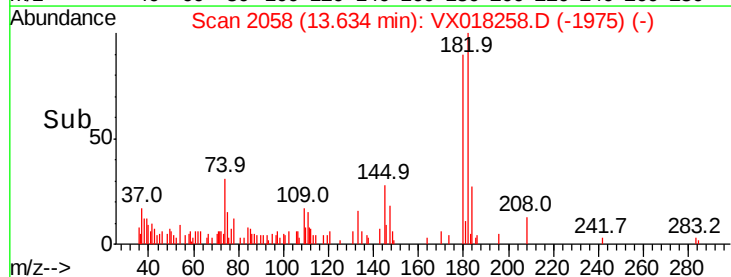
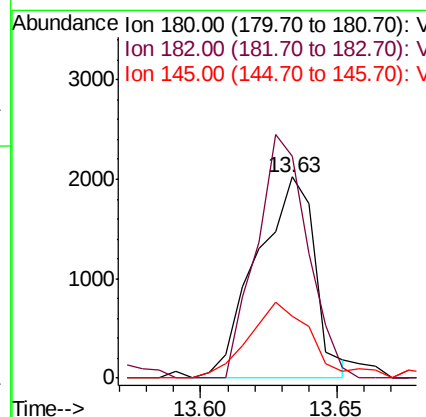
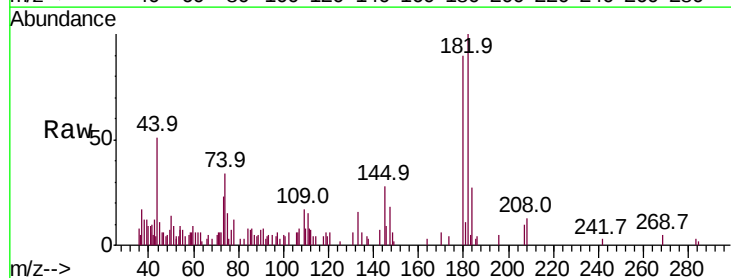
Instrument :
 MSVOA_X
 ClientSampleId :
 LPBH-01

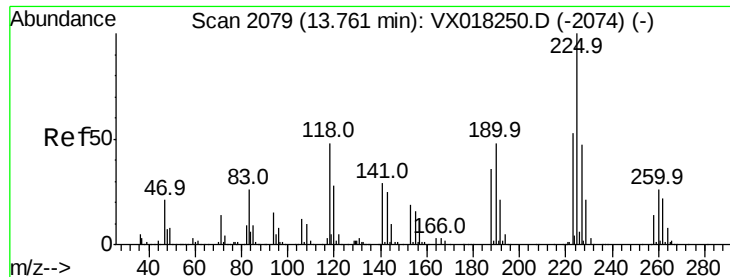
Tot Ion:146 Resp: 2692
 Ion Ratio Lower Upper
 146 100
 111 56.3 21.4 64.3
 148 69.1 32.0 96.2



#89
 1,2,4-Trichlorobenzene
 Concen: 0.440 ug/l
 RT: 13.63 min Scan# 2058
 Delta R.T. 0.01 min
 Lab File: VX018258.D
 Acq: 04 Sep 2020 14:28

Tgt Ion:180 Resp: 3004
 Ion Ratio Lower Upper
 180 100
 182 106.7 77.1 115.7
 145 38.9 25.0 37.6#





#90

Hexachlorobutadiene

Concen: 0.585 ug/l

RT: 13.76 min Scan# 2079

Delta R.T. 0.00 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

Instrument :

MSVOA_X

ClientSampleId :

LPBH-01

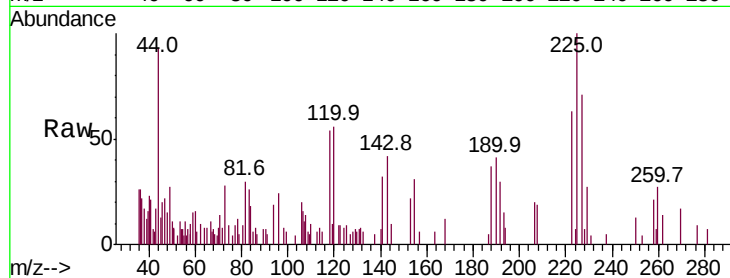
Tot Ion:225 Resp: 1692

Ion Ratio Lower Upper

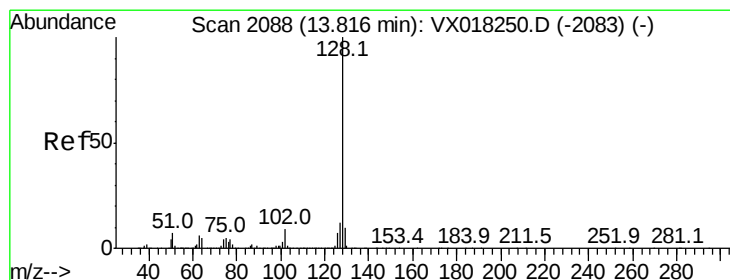
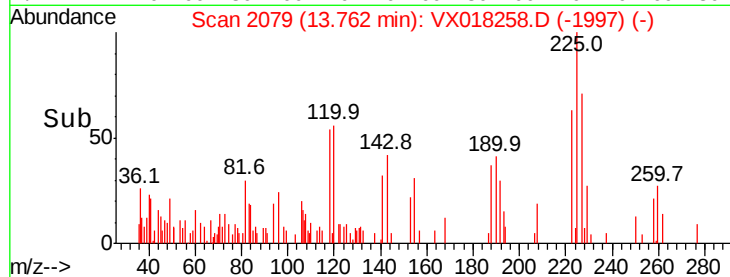
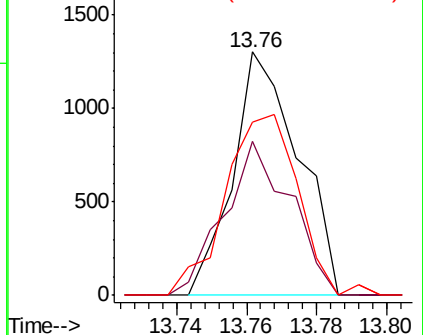
225 100

223 64.2 0.0 115.8

227 81.8 0.0 117.0



Abundance Ion 225.00 (224.70 to 225.70): V
Ion 223.00 (222.70 to 223.70): V
Ion 227.00 (226.70 to 227.70): V



#91

Naphthalene

Concen: 0.307 ug/l

RT: 13.82 min Scan# 2088

Delta R.T. 0.00 min

Lab File: VX018258.D

Acq: 04 Sep 2020 14:28

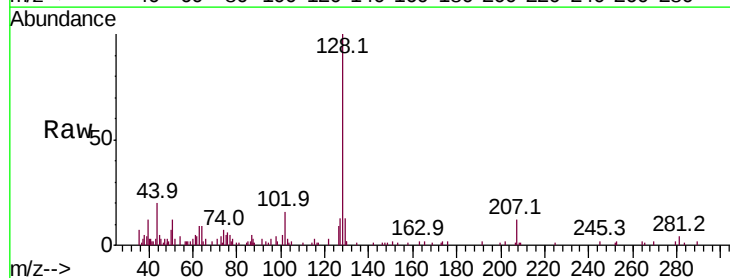
Tgt Ion:128 Resp: 6551

Ion Ratio Lower Upper

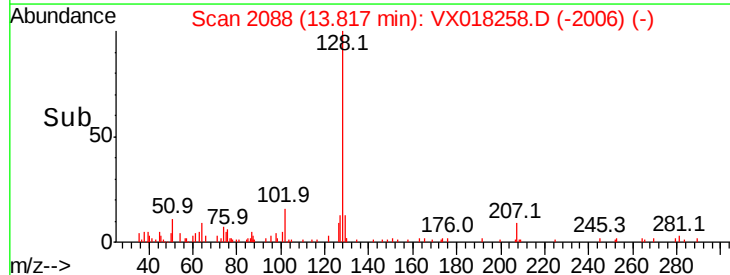
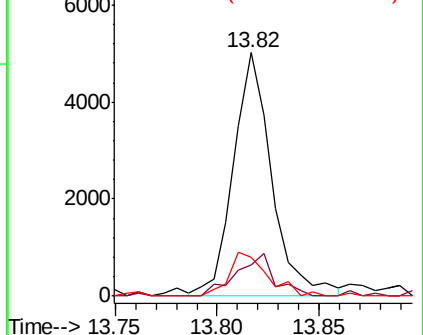
128 100

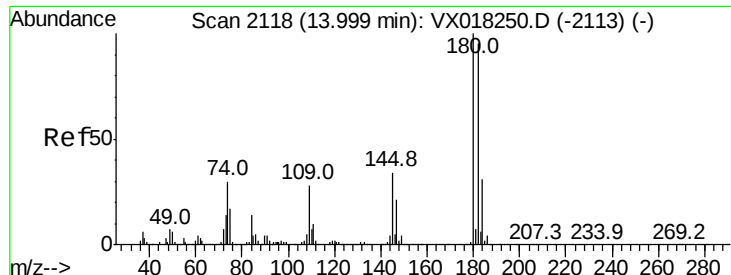
127 15.1 10.2 15.4

129 17.1 8.7 13.1#



Abundance Ion 128.00 (127.70 to 128.70): V
Ion 127.00 (126.70 to 127.70): V
Ion 129.00 (128.70 to 129.70): V





#92
 1,2,3-Trichlorobenzene
 Concen: 0.401 ug/l
 RT: 14.01 min Scan# 2119
 Delta R.T. 0.01 min
 Lab File: VX018258.D
 Acq: 04 Sep 2020 14:28

Instrument :
 MSVOA_X
 ClientSampleId :
 LPBH-01

Tot Ion	Ratio	Lower	Upper
180	100		
182	96.5	0.0	191.6
145	39.7	0.0	67.4

