

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_X\DATA\VX062520\
 Data File : VX016958.D
 Acq On : 25 Jun 2020 16:59
 Operator : JC/SP
 Sample : L3125-01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 TW-2

Quant Time: Jun 26 09:08:54 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\624X062520W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jun 26 09:03:25 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	4.98	128	38060	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.83	114	219890	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.10	117	190722	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.04	65	88102	29.74	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	99.13%
60) 4-Bromofluorobenzene	11.12	95	89290	28.07	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	93.57%
63) Toluene-d8	8.70	98	254004	30.21	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	100.70%

Target Compounds

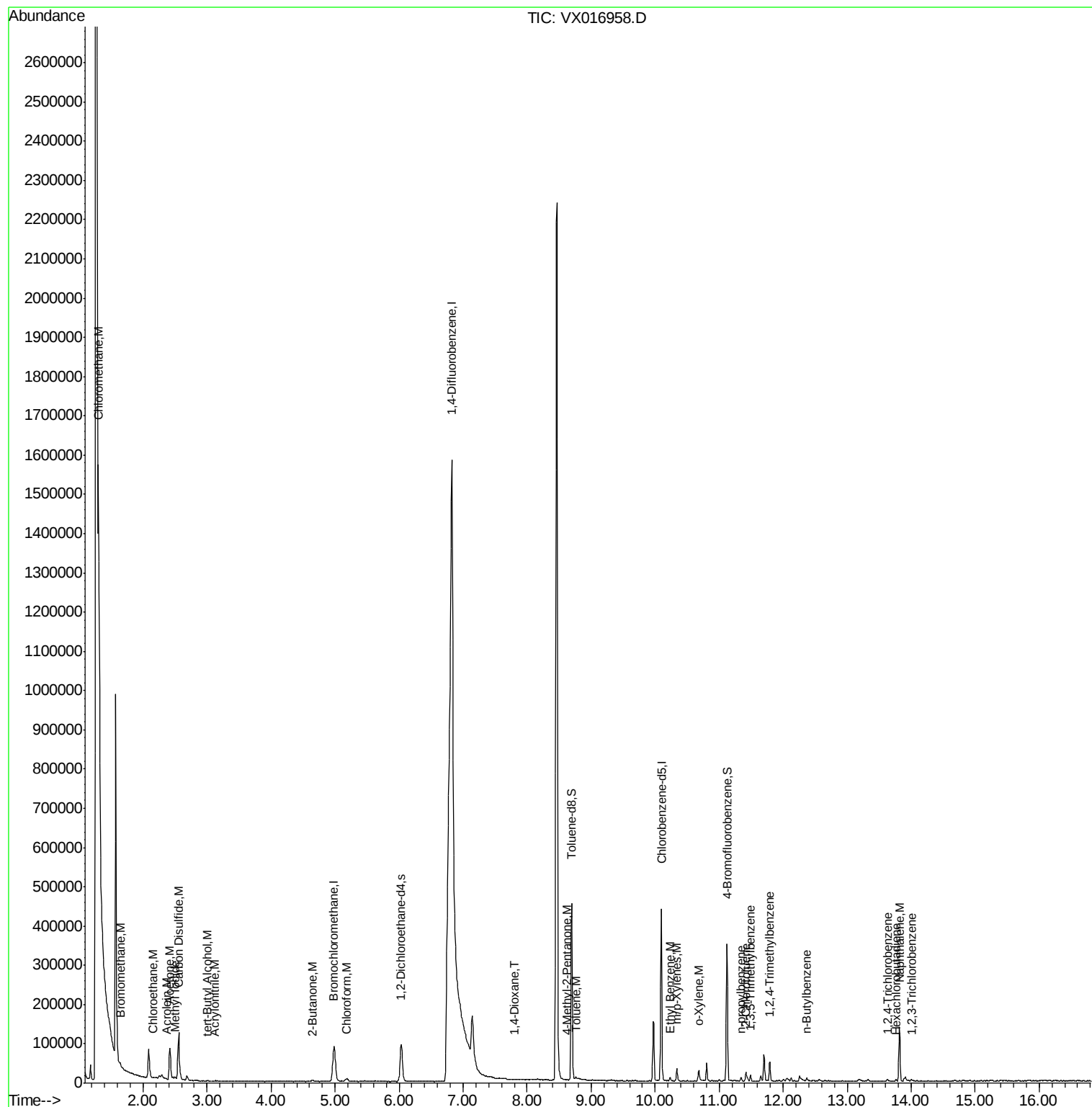
					Qvalue	
3) Chloromethane	1.30	50	46157	18.391	ug/l	# 42
5) Bromomethane	1.64	94	3343	1.814	ug/l	92
6) Chloroethane	2.16	64	474	0.287	ug/l	# 42
11) Methyl Iodide	2.50	142	7555	2.597	ug/l	98
13) Acrolein	2.37	56	238	0.549	ug/l	89
14) Acrylonitrile	3.12	53	304	0.234	ug/l	# 50
15) Acetone	2.42	58	27987	83.080	ug/l	98
16) Carbon Disulfide	2.55	76	150290	21.942	ug/l	98
23) tert-Butyl Alcohol	3.00	59	408	0.708	ug/l	# 100
25) Chloroform	5.18	83	9231	2.026	ug/l	# 79
30) 2-Butanone	4.64	43	4874	2.610	ug/l	# 58
45) 1,4-Dioxane	7.80	88	44	0.684	ug/l	# 1
58) 4-Methyl-2-Pentanone	8.62	43	871	0.248	ug/l	# 84
62) Toluene	8.76	91	4817	0.462	ug/l	96
66) Ethyl Benzene	10.23	91	3966	0.343	ug/l	# 85
67) m/p-Xylenes	10.34	106	7374	1.690	ug/l	96
68) o-Xylene	10.68	106	5210	1.243	ug/l	97
74) n-propylbenzene	11.34	91	5117	0.379	ug/l	100
75) 2-Chlorotoluene	11.42	91	2828	0.359	ug/l	59
76) 1,3,5-Trimethylbenzene	11.49	105	5691	0.596	ug/l	99
80) 1,2,4-Trimethylbenzene	11.79	105	20667	2.157	ug/l	99
85) n-Butylbenzene	12.37	91	2032	0.220	ug/l	87
89) 1,2,4-Trichlorobenzene	13.63	180	982	0.302	ug/l	# 90
90) Hexachlorobutadiene	13.77	225	519	0.420	ug/l	79
91) Naphthalene	13.82	128	79925	7.509	ug/l	99
92) 1,2,3-Trichlorobenzene	14.01	180	797	0.252	ug/l	97

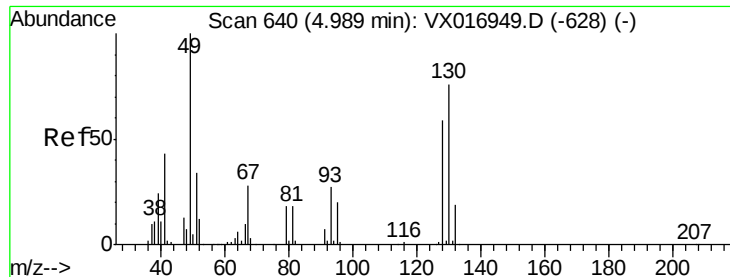
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_X\DATA\VX062520\
Data File : VX016958.D
Acq On : 25 Jun 2020 16:59
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Instrument :
MSVOA_X
ClientSampleId :
TW-2

Quant Time: Jun 26 09:08:54 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_X\METHOD\624X062520W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jun 26 09:03:25 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 4.98 min Scan# 639

Delta R.T. -0.01 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampleId :

TW-2

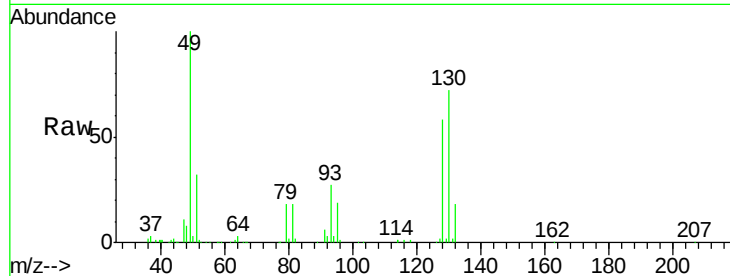
Tgt Ion:128 Resp: 38060

Ion Ratio Lower Upper

128 100

49 167.4 0.0 428.0

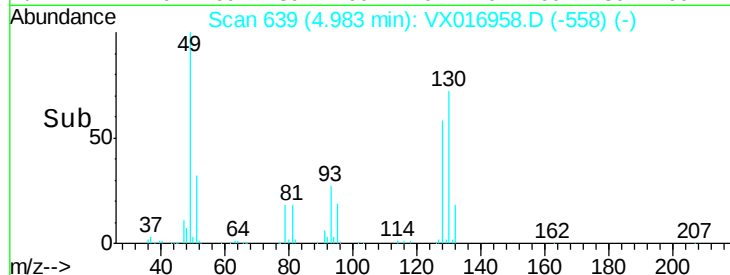
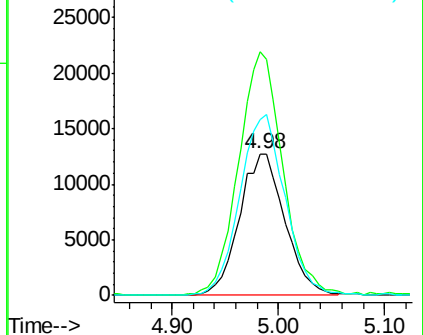
130 127.1 0.0 318.0



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 49.00 (48.70 to 49.70): VX0

Ion 130.00 (129.70 to 130.70): V



#3

Chloromethane

Concen: 18.391 ug/l

RT: 1.30 min Scan# 35

Delta R.T. -0.02 min

Lab File: VX016958.D

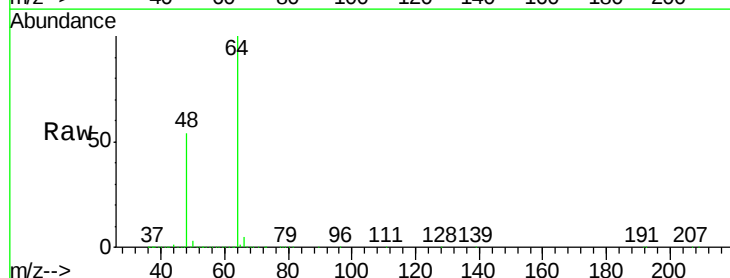
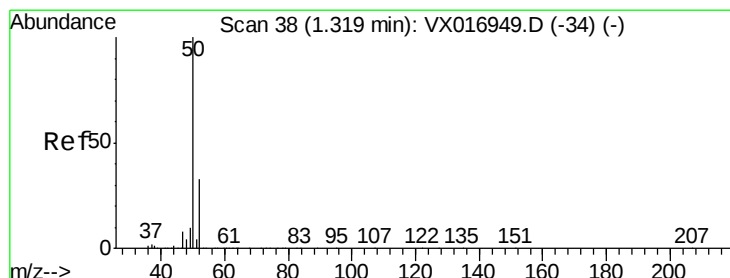
Acq: 25 Jun 2020 16:59

Tgt Ion: 50 Resp: 46157

Ion Ratio Lower Upper

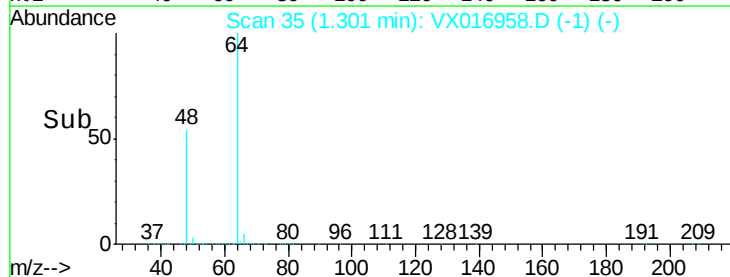
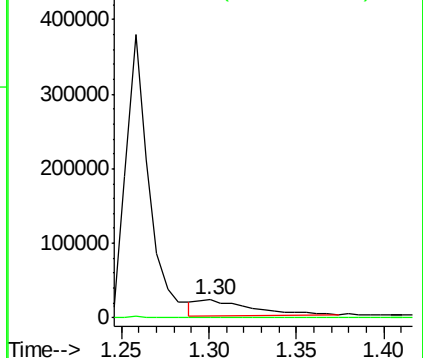
50 100

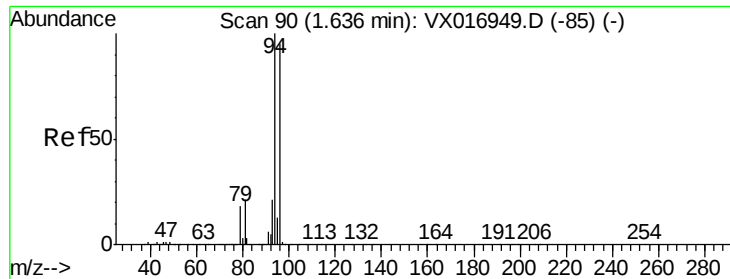
52 0.0 26.5 39.7#



Abundance Ion 50.00 (49.70 to 50.70): VX0

Ion 52.00 (51.70 to 52.70): VX0





#5

Bromomethane

Concen: 1.814 ug/l

RT: 1.64 min Scan# 91

Delta R.T. 0.01 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampleId :

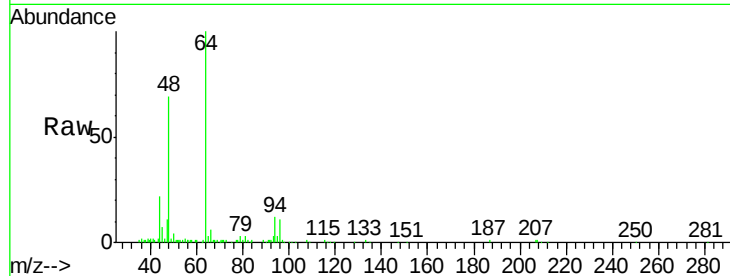
TW-2

Tgt Ion: 94 Resp: 3343

Ion Ratio Lower Upper

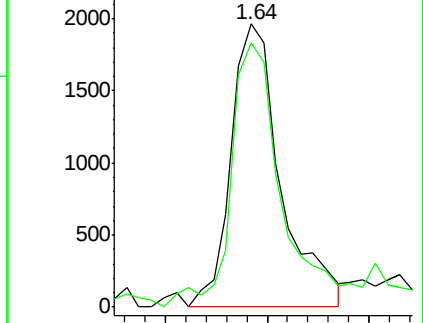
94 100

96 86.2 75.5 113.3

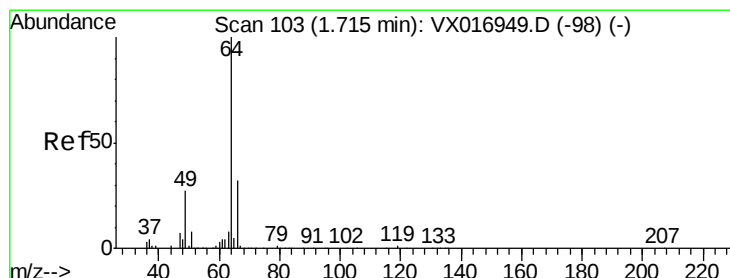
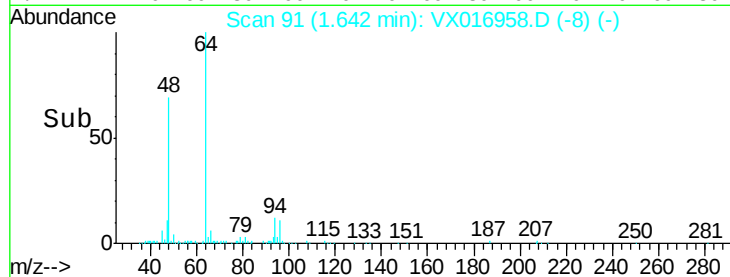


Abundance Ion 94.00 (93.70 to 94.70): VX0

Ion 96.00 (95.70 to 96.70): VX0



Time-->



#6

Chloroethane

Concen: 0.287 ug/l

RT: 2.16 min Scan# 176

Delta R.T. 0.45 min

Lab File: VX016958.D

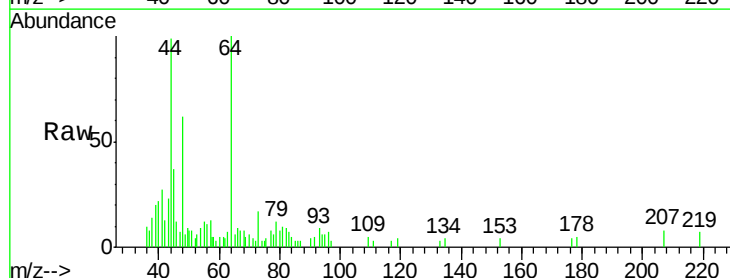
Acq: 25 Jun 2020 16:59

Tgt Ion: 64 Resp: 474

Ion Ratio Lower Upper

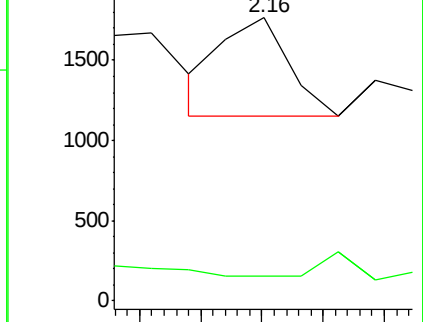
64 100

66 0.0 26.1 39.1#

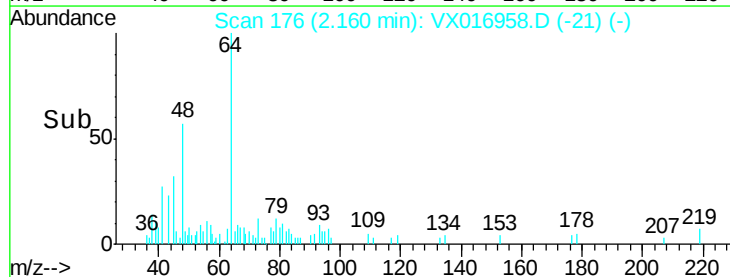


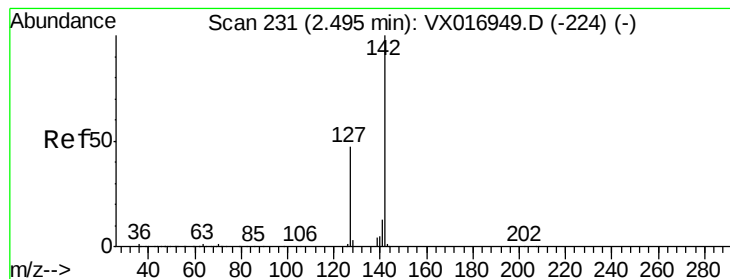
Abundance Ion 64.00 (63.70 to 64.70): VX0

Ion 66.00 (65.70 to 66.70): VX0



Time-->





#11

Methyl Iodide

Concen: 2.597 ug/l

RT: 2.50 min Scan# 231

Delta R.T. 0.00 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampleId :

TW-2

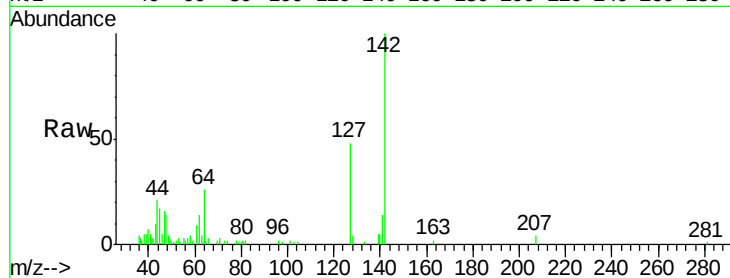
Tgt Ion:142 Resp: 7555

Ion Ratio Lower Upper

142 100

127 48.1 23.3 69.9

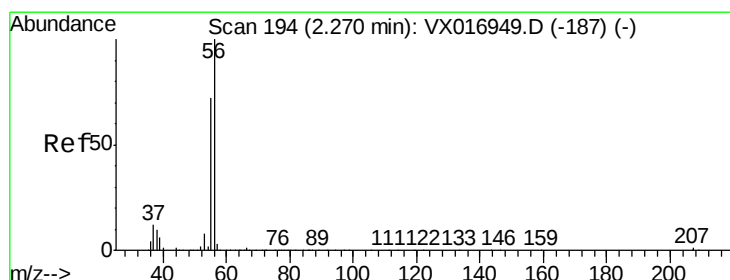
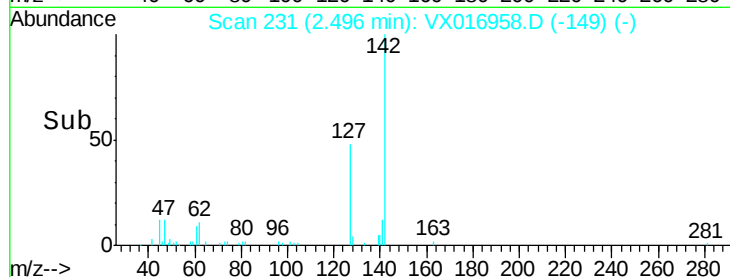
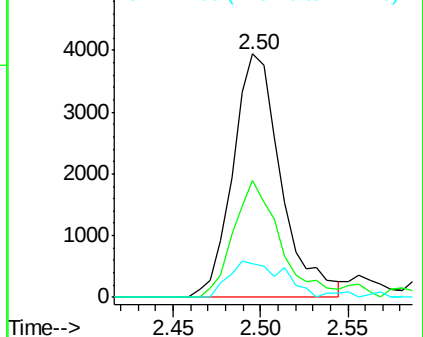
141 13.4 6.7 20.1



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 141.00 (140.70 to 141.70): V



#13

Acrolein

Concen: 0.549 ug/l

RT: 2.37 min Scan# 210

Delta R.T. 0.10 min

Lab File: VX016958.D

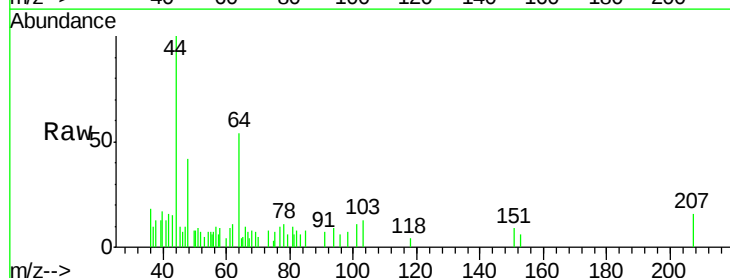
Acq: 25 Jun 2020 16:59

Tgt Ion: 56 Resp: 238

Ion Ratio Lower Upper

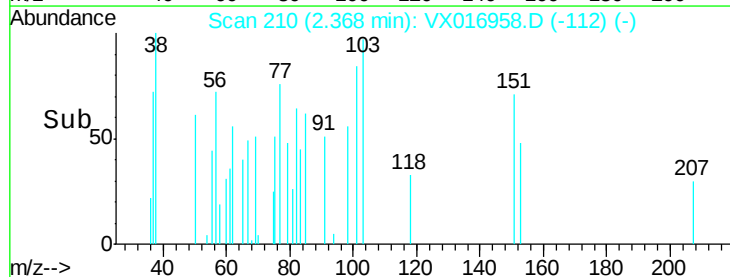
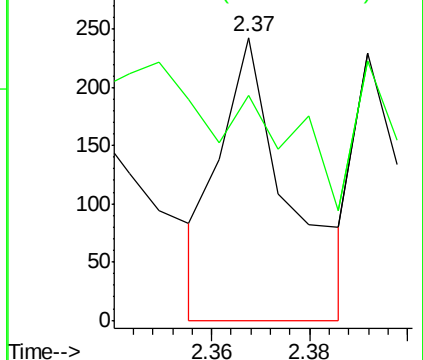
56 100

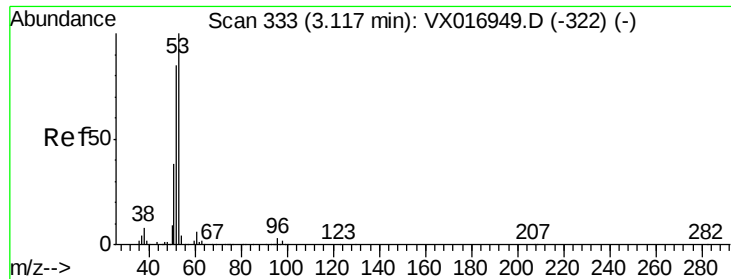
55 60.9 56.2 84.4



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0





#14

Acrylonitrile

Concen: 0.234 ug/l

RT: 3.12 min Scan# 333

Delta R.T. 0.00 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampled :

TW-2

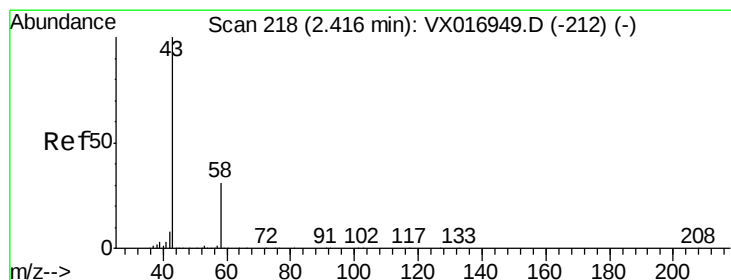
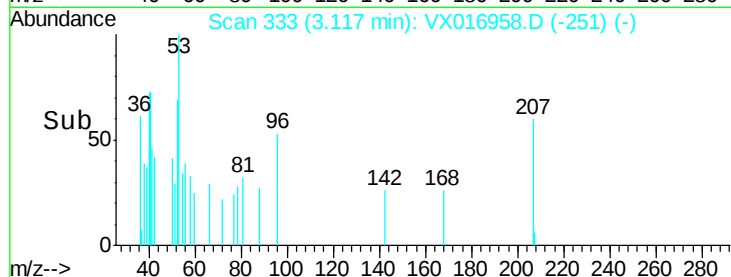
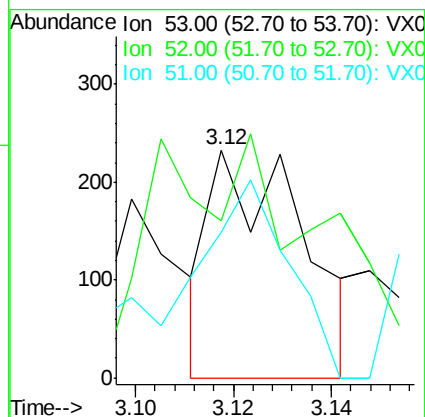
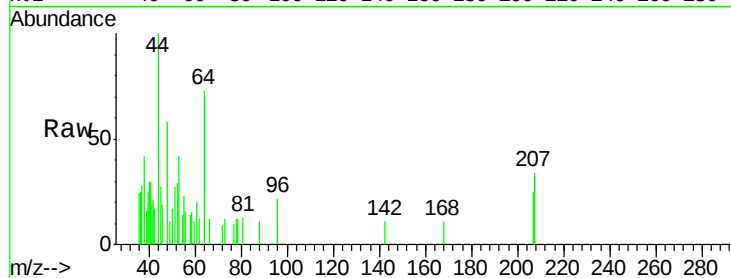
Tgt Ion: 53 Resp: 304

Ion Ratio Lower Upper

53 100

52 45.7 40.6 121.8

51 80.6 18.4 55.4#



#15

Acetone

Concen: 83.080 ug/l

RT: 2.42 min Scan# 218

Delta R.T. 0.00 min

Lab File: VX016958.D

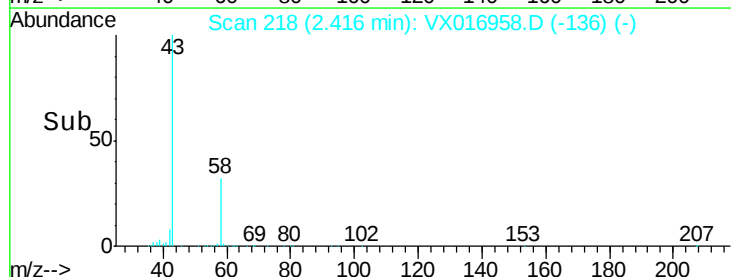
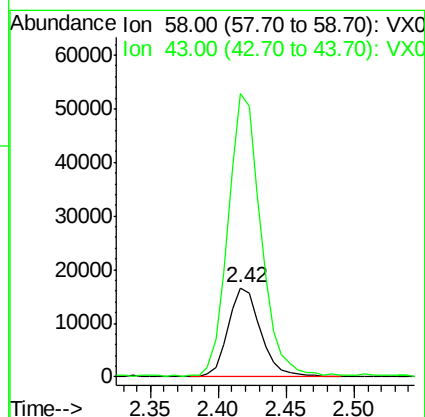
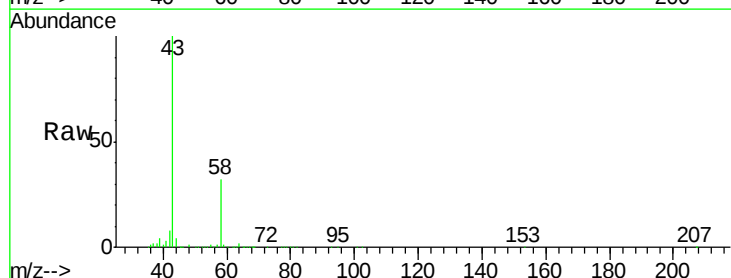
Acq: 25 Jun 2020 16:59

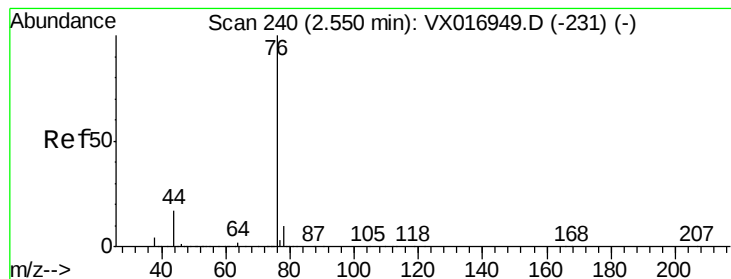
Tgt Ion: 58 Resp: 27987

Ion Ratio Lower Upper

58 100

43 317.8 257.6 386.4





#16

Carbon Disulfide

Concen: 21.942 ug/l

RT: 2.55 min Scan# 240

Delta R.T. 0.00 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampled :

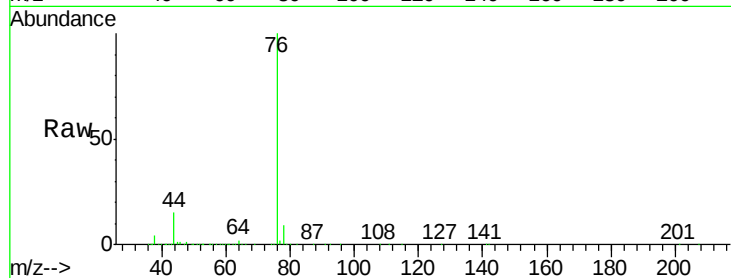
TW-2

Tgt Ion: 76 Resp: 150290

Ion Ratio Lower Upper

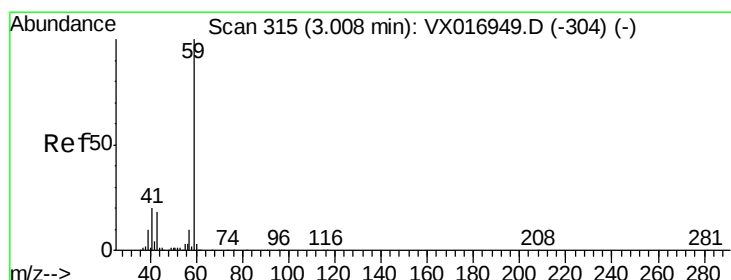
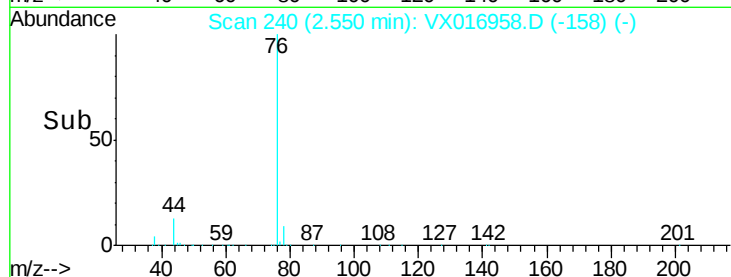
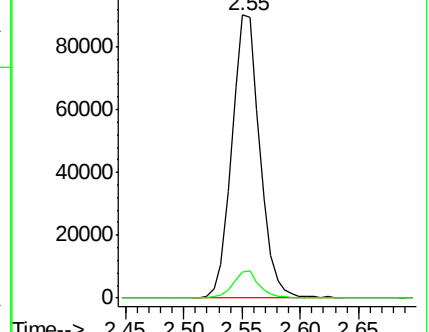
76 100

78 8.8 7.6 11.4



Abundance Ion 76.00 (75.70 to 76.70): VX0

Ion 78.00 (77.70 to 78.70): VX0



#23

tert-Butyl Alcohol

Concen: 0.708 ug/l

RT: 3.00 min Scan# 314

Delta R.T. -0.01 min

Lab File: VX016958.D

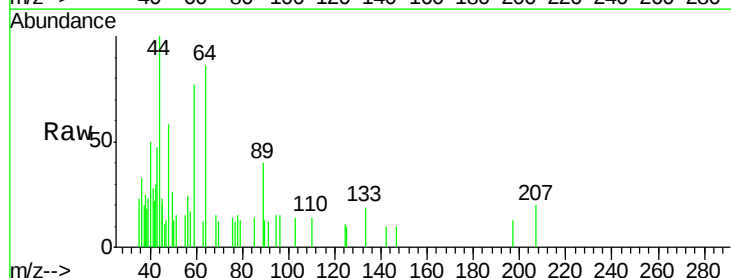
Acq: 25 Jun 2020 16:59

Tgt Ion: 59 Resp: 408

Ion Ratio Lower Upper

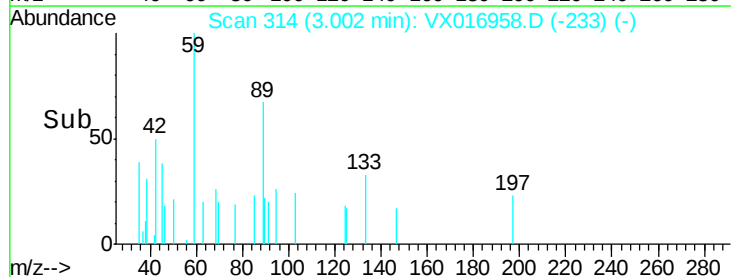
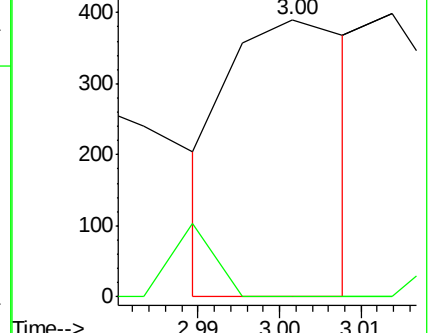
59 100

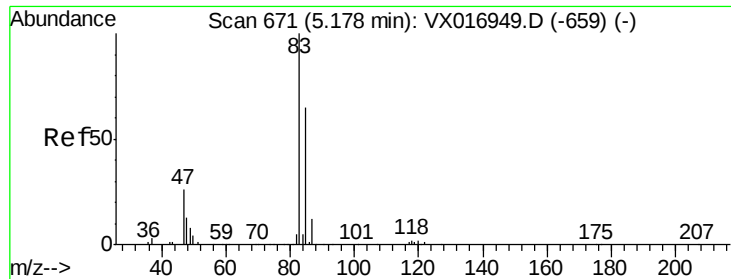
52 0.0 0.1 0.1#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 52.00 (51.70 to 52.70): VX0





#25

Chloroform

Concen: 2.026 ug/l

RT: 5.18 min Scan# 671

Delta R.T. 0.00 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampled :

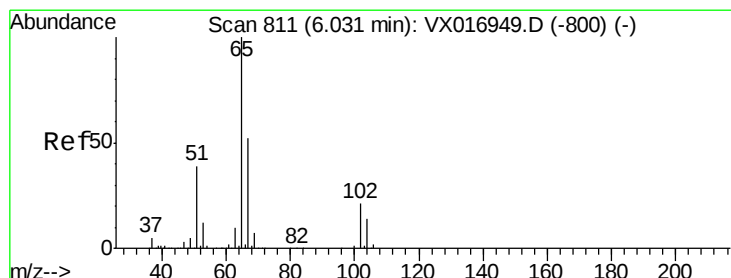
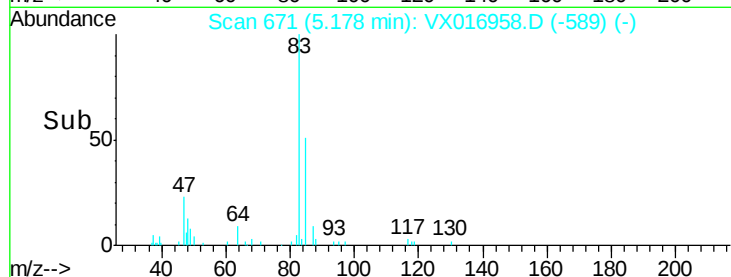
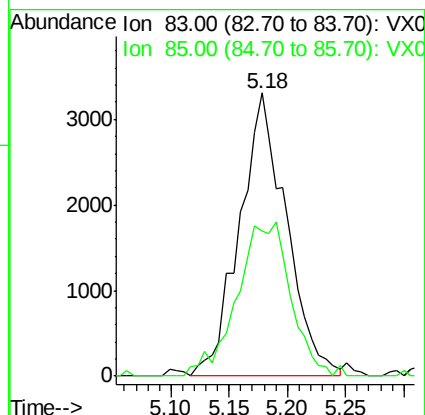
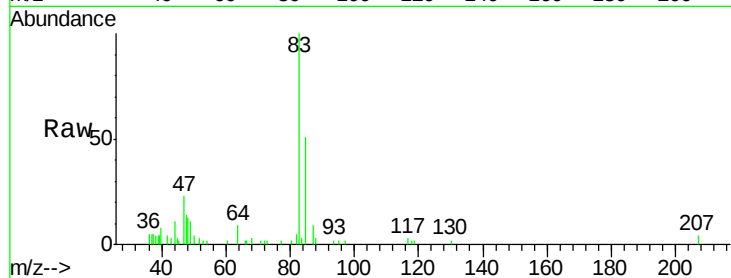
TW-2

Tgt Ion: 83 Resp: 9231

Ion Ratio Lower Upper

83 100

85 48.2 52.1 78.1#



#27

1,2-Dichloroethane-d4

Concen: 29.740 ug/l

RT: 6.04 min Scan# 812

Delta R.T. 0.01 min

Lab File: VX016958.D

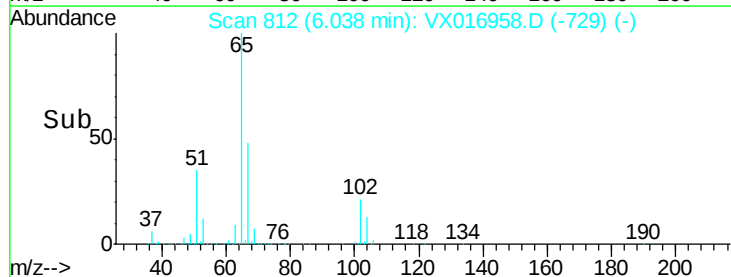
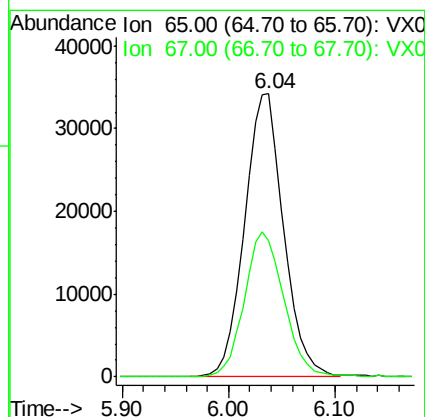
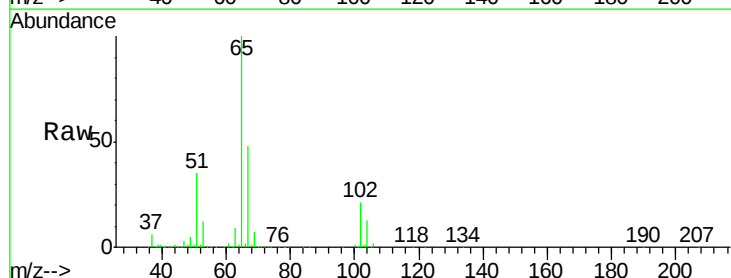
Acq: 25 Jun 2020 16:59

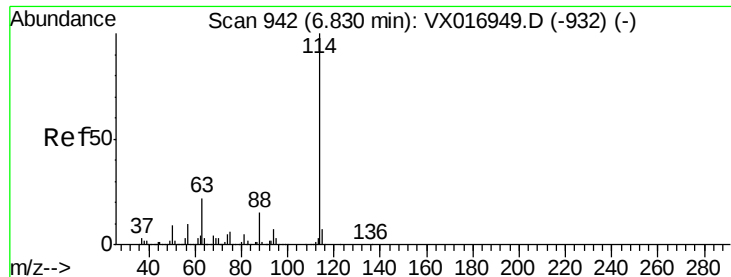
Tgt Ion: 65 Resp: 88102

Ion Ratio Lower Upper

65 100

67 51.8 41.5 62.3

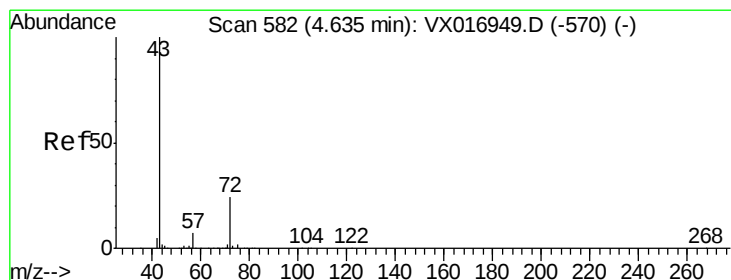
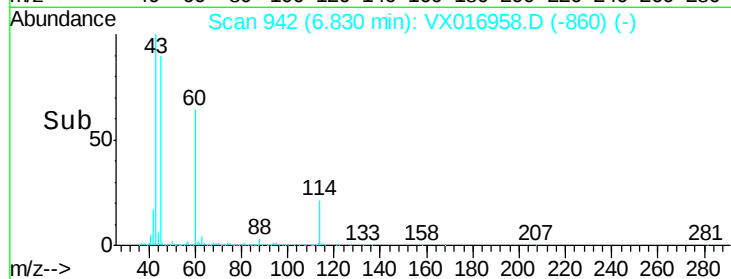
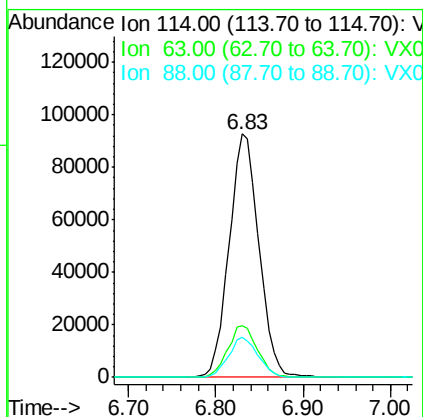
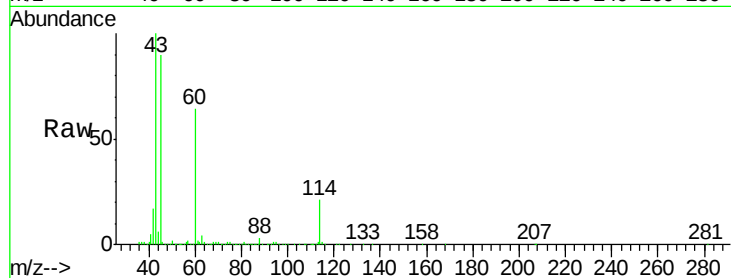




#28
 1,4-Difluorobenzene
 Concen: 30.000 ug/l
 RT: 6.83 min Scan# 942
 Delta R.T. 0.00 min
 Lab File: VX016958.D
 Acq: 25 Jun 2020 16:59

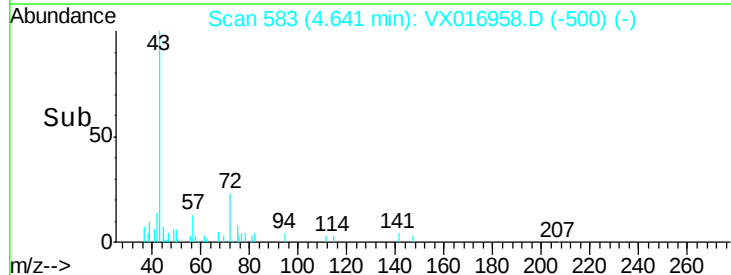
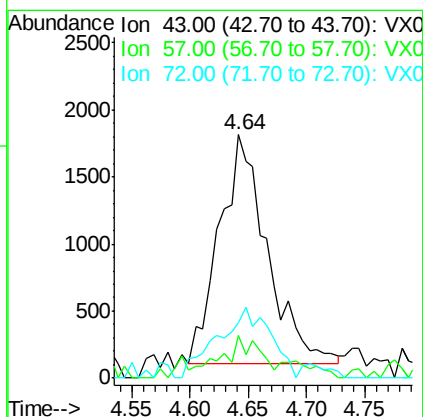
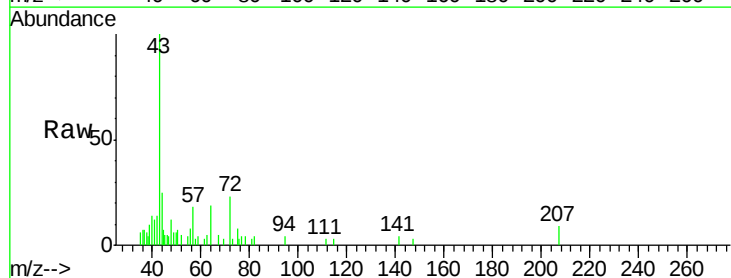
Instrument :
 MSVOA_X
 ClientSampleId :
 TW-2

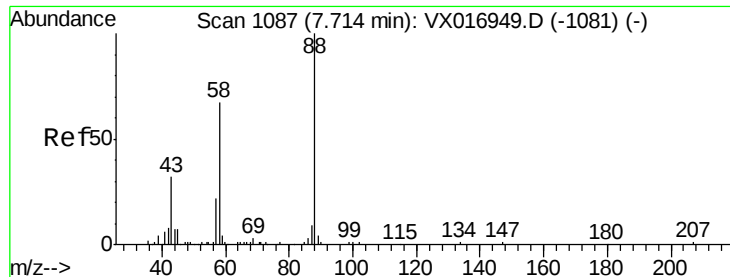
Tgt Ion: 114 Resp: 219890
 Ion Ratio Lower Upper
 114 100
 63 21.4 17.4 26.2
 88 16.3 13.0 19.6



#30
 2-Butanone
 Concen: 2.610 ug/l
 RT: 4.64 min Scan# 583
 Delta R.T. 0.01 min
 Lab File: VX016958.D
 Acq: 25 Jun 2020 16:59

Tgt Ion: 43 Resp: 4874
 Ion Ratio Lower Upper
 43 100
 57 3.4 6.2 9.4#
 72 0.0 20.6 31.0#

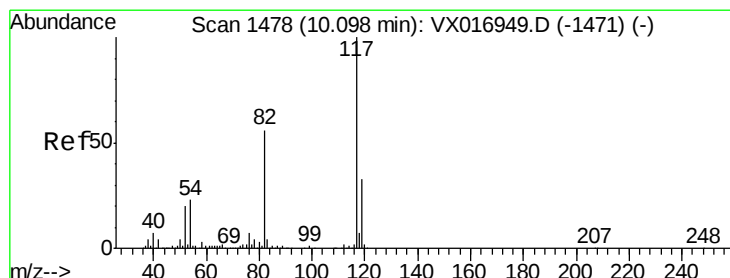
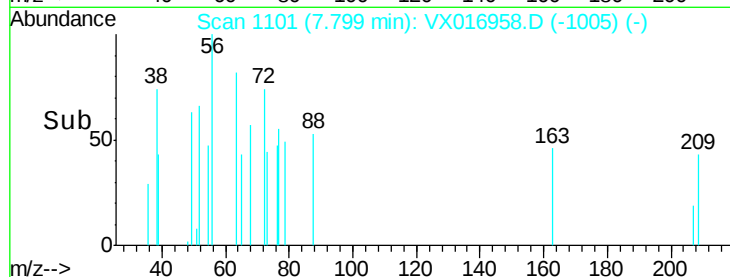
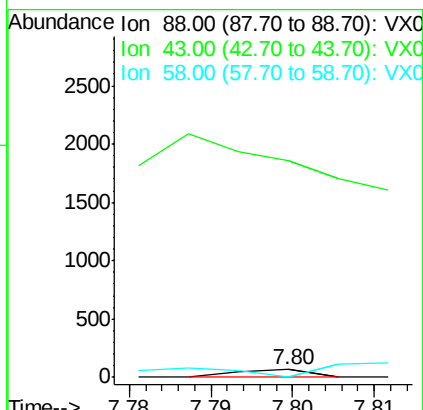
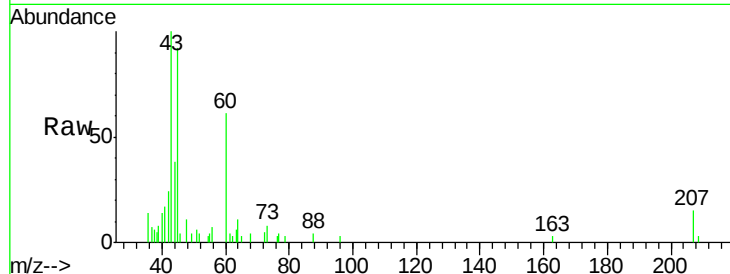




#45
1,4-Dioxane
Concen: 0.684 ug/l
RT: 7.80 min Scan# 1101
Delta R.T. 0.09 min
Lab File: VX016958.D
Acq: 25 Jun 2020 16:59

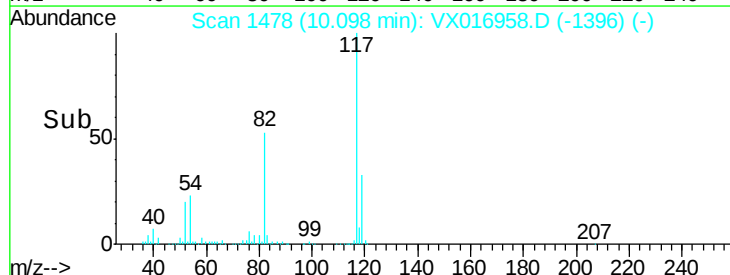
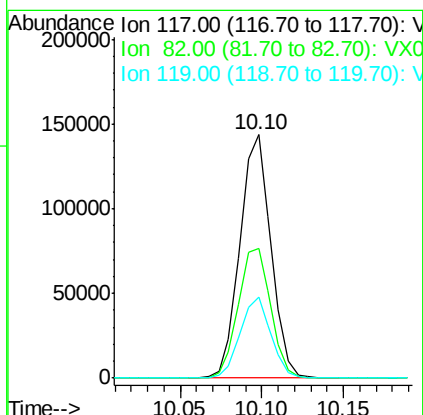
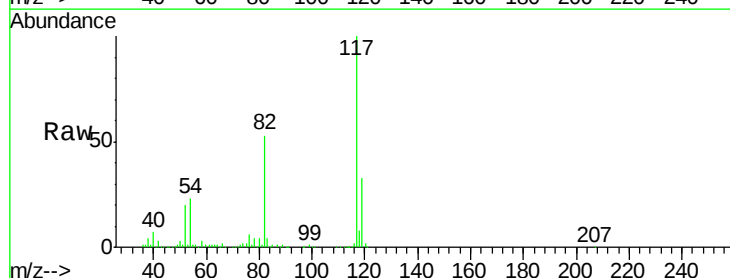
Instrument :
MSVOA_X
ClientSampled :
TW-2

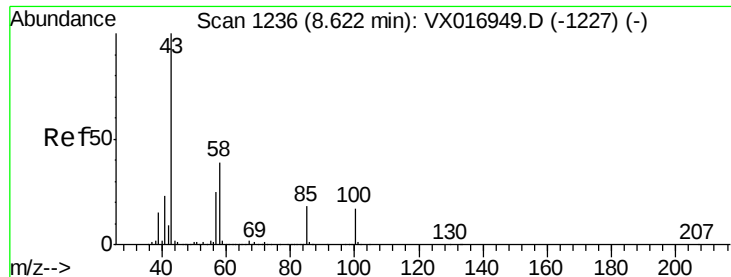
Tgt Ion: 88 Resp: 44
Ion Ratio Lower Upper
88 100
43 1165.9 28.9 43.3#
58 161.4 56.7 85.1#



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.10 min Scan# 1478
Delta R.T. 0.00 min
Lab File: VX016958.D
Acq: 25 Jun 2020 16:59

Tgt Ion: 117 Resp: 190722
Ion Ratio Lower Upper
117 100
82 56.2 44.9 67.3
119 32.8 25.8 38.8

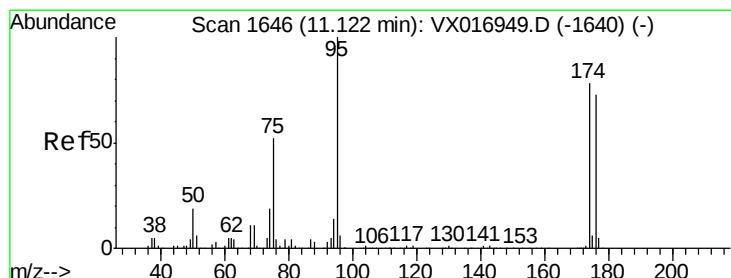
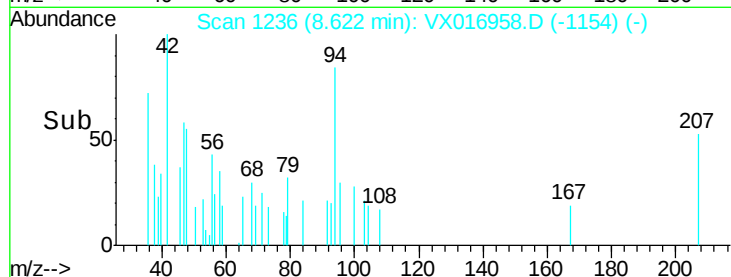
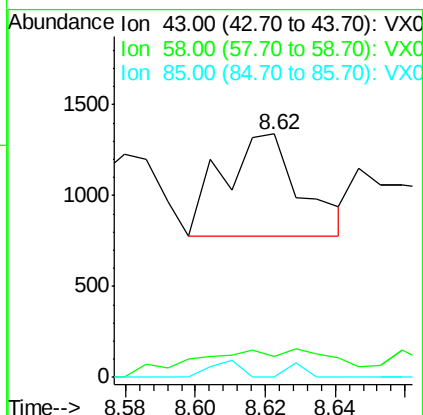
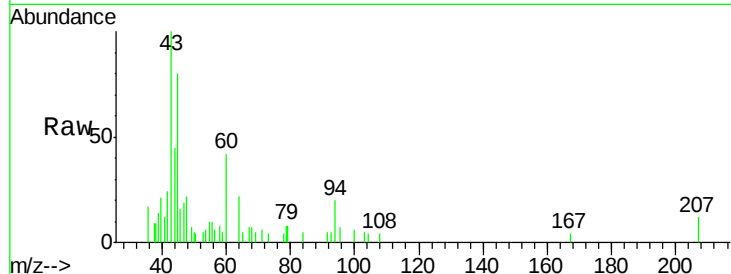




#58
4-Methyl-2-Pentanone
Concen: 0.248 ug/l
RT: 8.62 min Scan# 1236
Delta R.T. 0.00 min
Lab File: VX016958.D
Acq: 25 Jun 2020 16:59

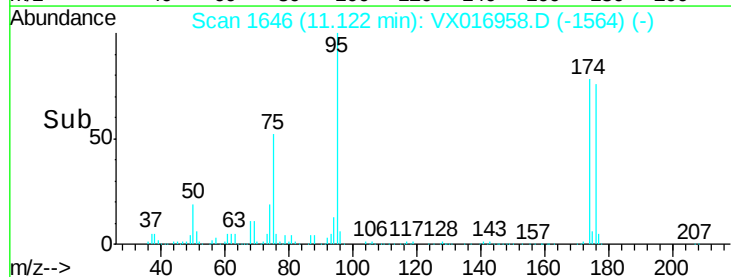
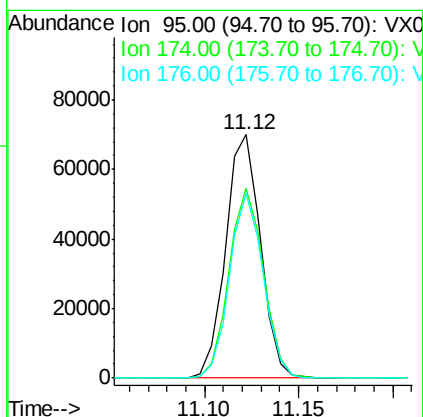
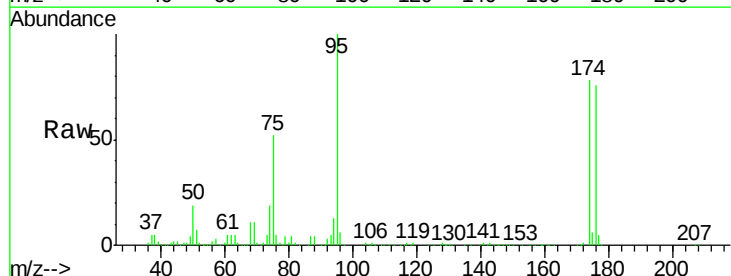
Instrument :
MSVOA_X
ClientSampled :
TW-2

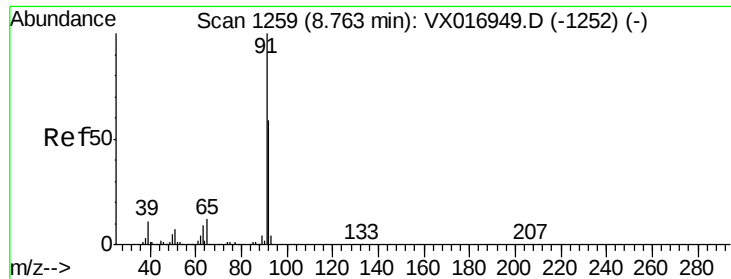
Tgt Ion: 43 Resp: 871
Ion Ratio Lower Upper
43 100
58 30.7 30.4 45.6
85 6.3 13.5 20.3#



#60
4-Bromofluorobenzene
Concen: 28.072 ug/l
RT: 11.12 min Scan# 1646
Delta R.T. 0.00 min
Lab File: VX016958.D
Acq: 25 Jun 2020 16:59

Tgt Ion: 95 Resp: 89290
Ion Ratio Lower Upper
95 100
174 77.9 62.2 93.4
176 73.6 58.9 88.3





#62

Toluene

Concen: 0.462 ug/l

RT: 8.76 min Scan# 1259

Delta R.T. 0.00 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampled :

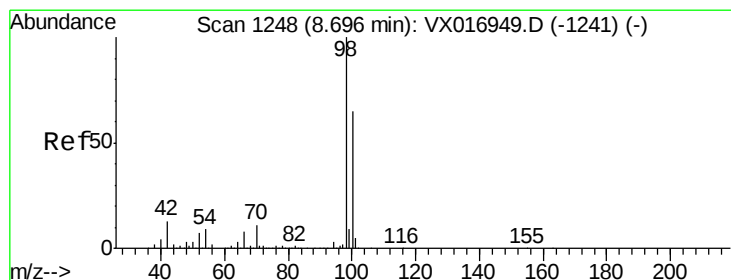
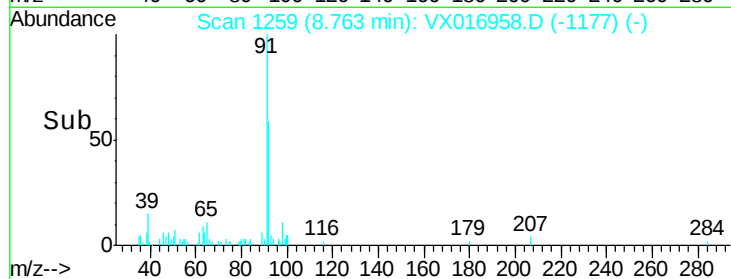
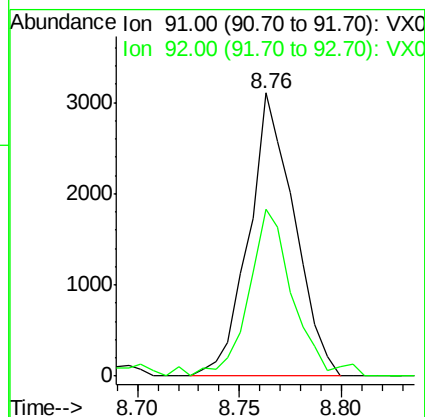
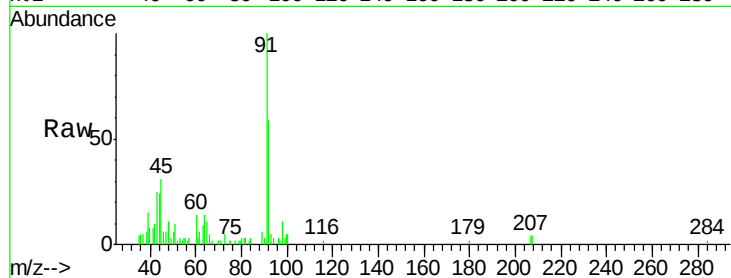
TW-2

Tgt Ion: 91 Resp: 4817

Ion Ratio Lower Upper

91 100

92 55.5 46.8 70.2



#63

Toluene-d8

Concen: 30.213 ug/l

RT: 8.70 min Scan# 1248

Delta R.T. 0.00 min

Lab File: VX016958.D

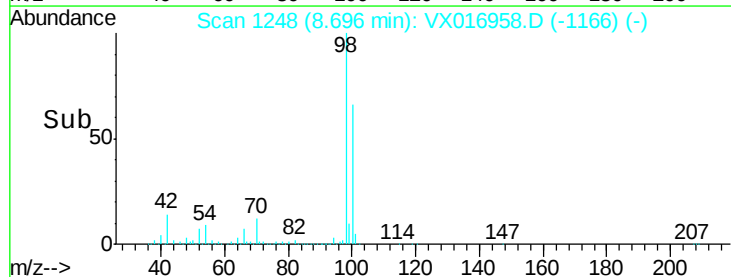
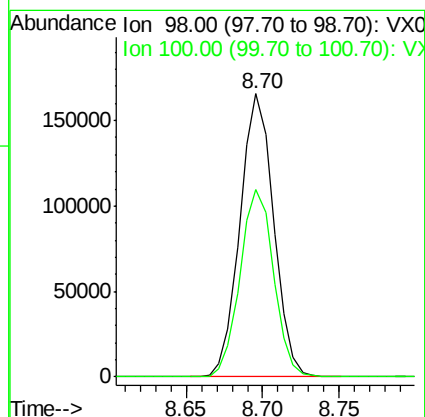
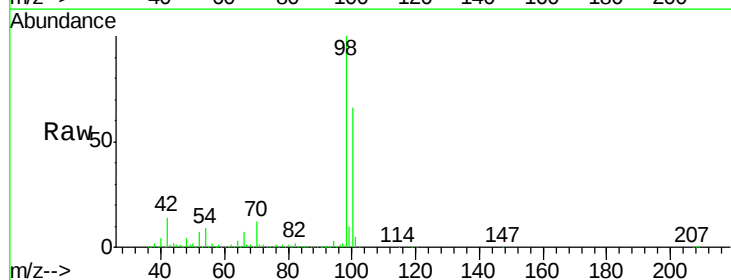
Acq: 25 Jun 2020 16:59

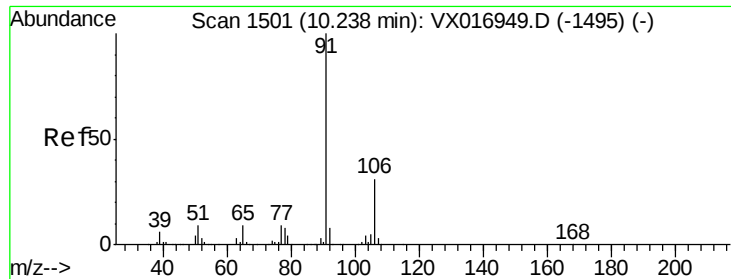
Tgt Ion: 98 Resp: 254004

Ion Ratio Lower Upper

98 100

100 65.5 52.3 78.5





#66

Ethyl Benzene

Concen: 0.343 ug/l

RT: 10.23 min Scan# 1500

Delta R.T. -0.01 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampled :

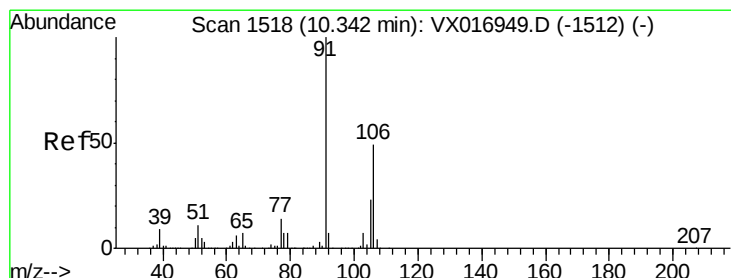
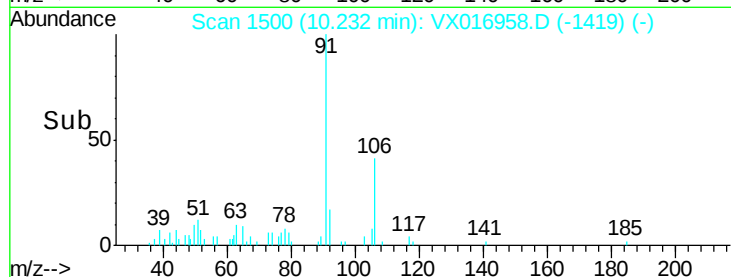
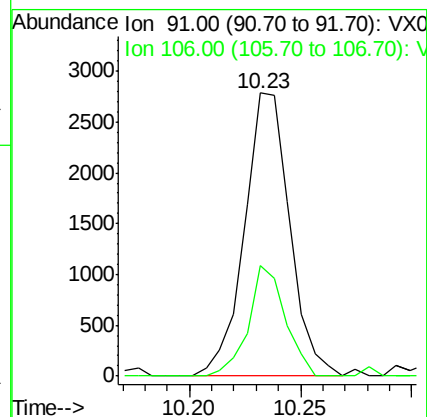
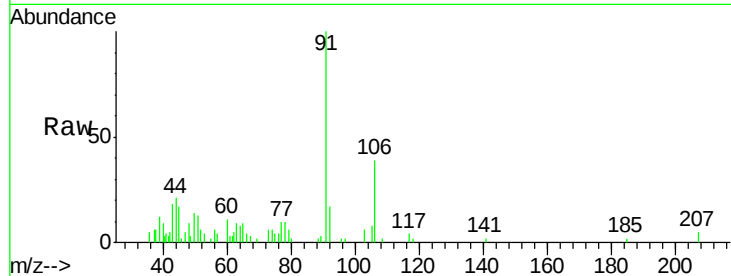
TW-2

Tgt Ion: 91 Resp: 3966

Ion Ratio Lower Upper

91 100

106 39.1 24.8 37.2#



#67

m/p-Xylenes

Concen: 1.690 ug/l

RT: 10.34 min Scan# 1518

Delta R.T. 0.00 min

Lab File: VX016958.D

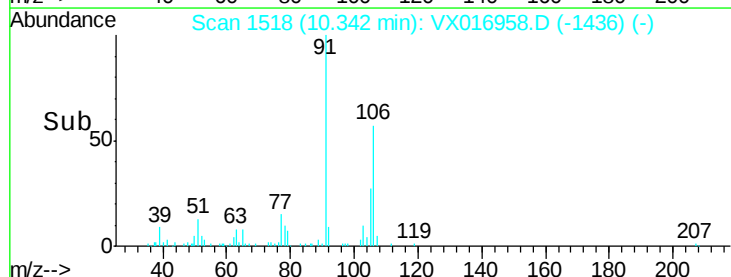
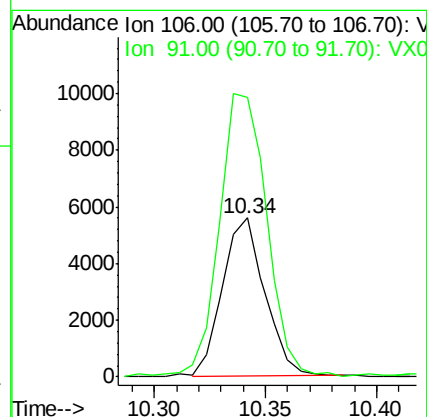
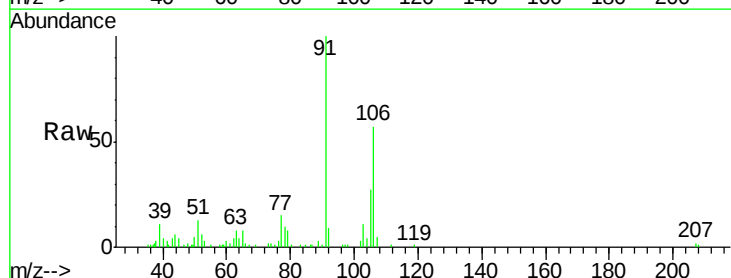
Acq: 25 Jun 2020 16:59

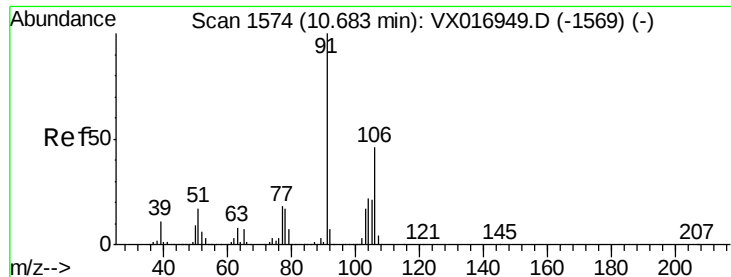
Tgt Ion: 106 Resp: 7374

Ion Ratio Lower Upper

106 100

91 200.1 164.5 246.7





#68

o-Xylene

Concen: 1.243 ug/l

RT: 10.68 min Scan# 1574

Delta R.T. 0.00 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampled :

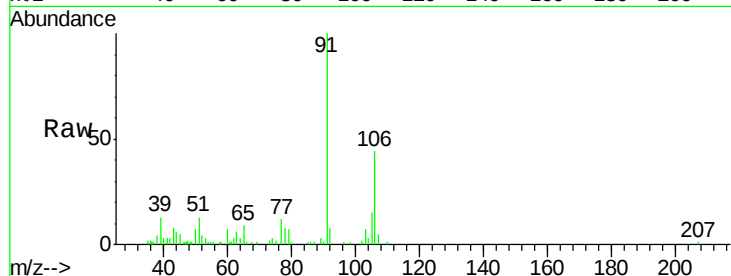
TW-2

Tgt Ion:106 Resp: 5210

Ion Ratio Lower Upper

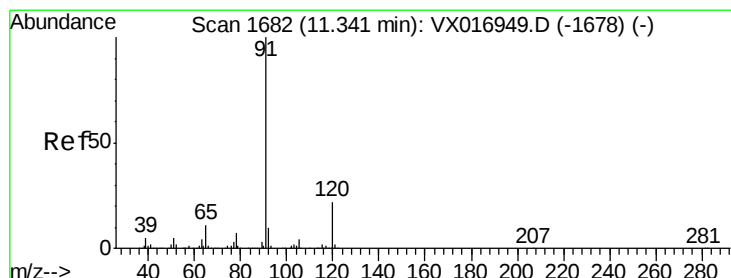
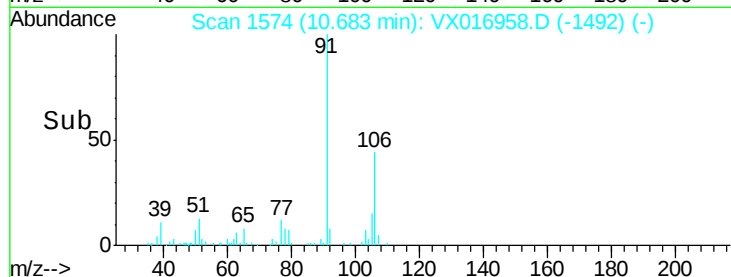
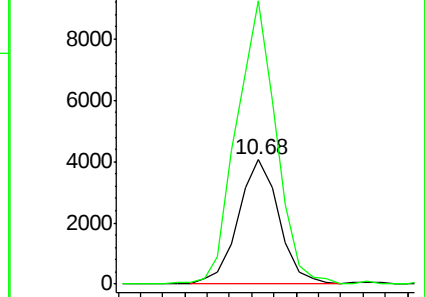
106 100

91 218.9 107.3 321.9



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0



#74

n-propylbenzene

Concen: 0.379 ug/l

RT: 11.34 min Scan# 1682

Delta R.T. 0.00 min

Lab File: VX016958.D

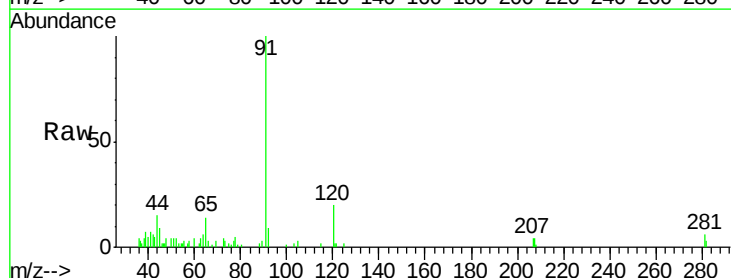
Acq: 25 Jun 2020 16:59

Tgt Ion: 91 Resp: 5117

Ion Ratio Lower Upper

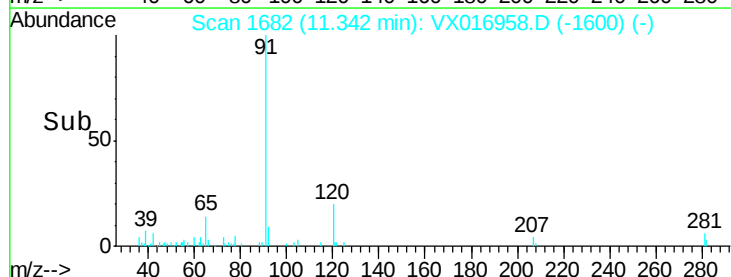
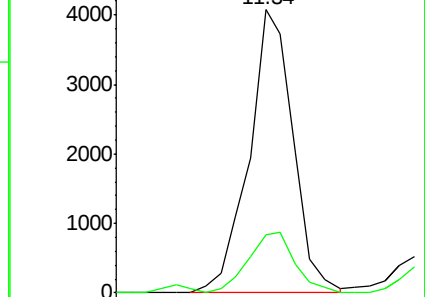
91 100

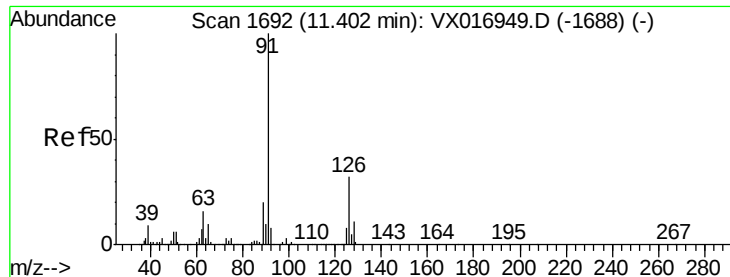
120 22.6 0.0 45.6



Abundance Ion 91.00 (90.70 to 91.70): VX0

Ion 120.00 (119.70 to 120.70): V





#75

2-Chlorotoluene

Concen: 0.359 ug/l

RT: 11.42 min Scan# 1695

Delta R.T. 0.02 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampleId :

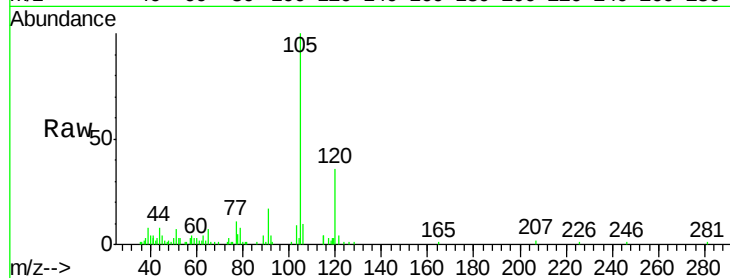
TW-2

Tgt Ion: 91 Resp: 2828

Ion Ratio Lower Upper

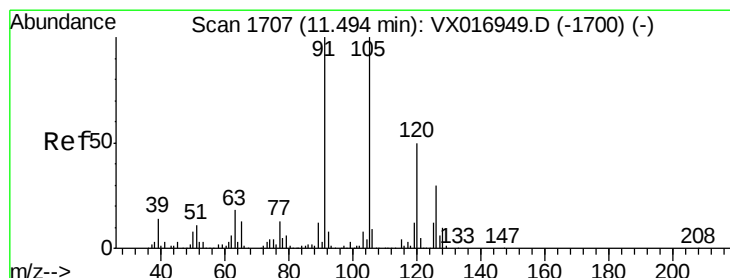
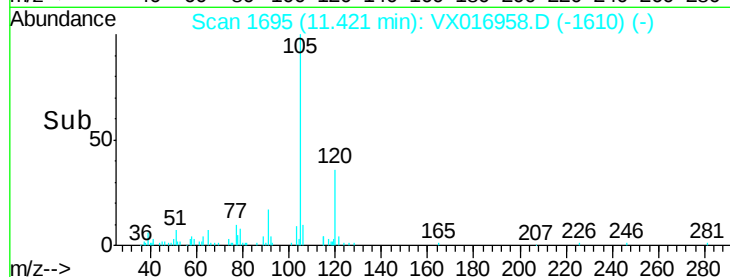
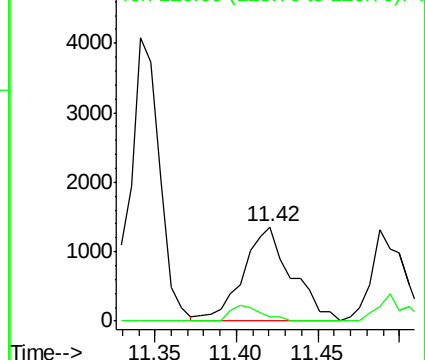
91 100

126 10.3 0.0 68.0



Abundance Ion 91.00 (90.70 to 91.70): VX016949.D (-1688) (-)

Ion 126.00 (125.70 to 126.70): VX016949.D (-1688) (-)



#76

1,3,5-Trimethylbenzene

Concen: 0.596 ug/l

RT: 11.49 min Scan# 1706

Delta R.T. -0.01 min

Lab File: VX016958.D

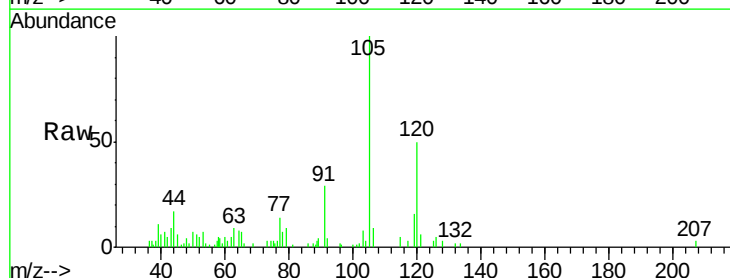
Acq: 25 Jun 2020 16:59

Tgt Ion: 105 Resp: 5691

Ion Ratio Lower Upper

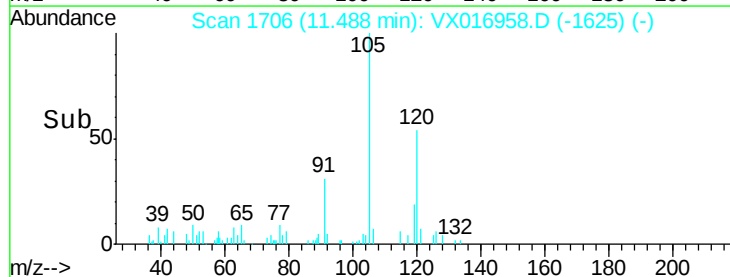
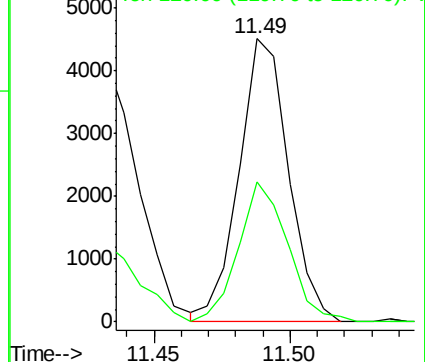
105 100

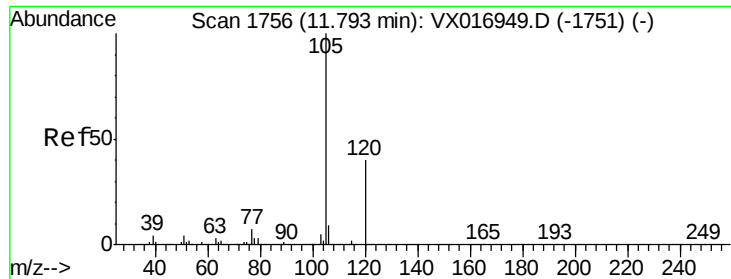
120 49.2 0.0 99.4



Abundance Ion 105.00 (104.70 to 105.70): VX016949.D (-1700) (-)

Ion 120.00 (119.70 to 120.70): VX016949.D (-1700) (-)

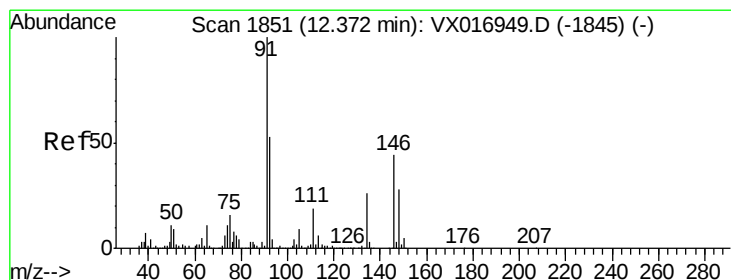
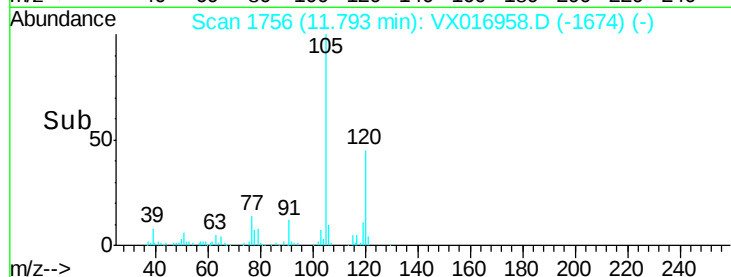
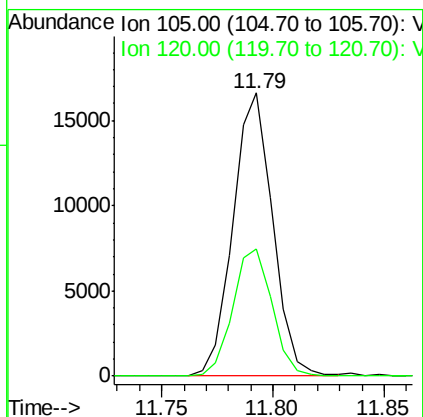
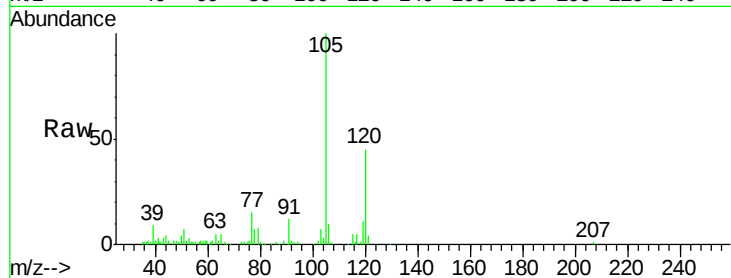




#80
 1,2,4-Trimethylbenzene
 Concen: 2.157 ug/l
 RT: 11.79 min Scan# 1756
 Delta R.T. 0.00 min
 Lab File: VX016958.D
 Acq: 25 Jun 2020 16:59

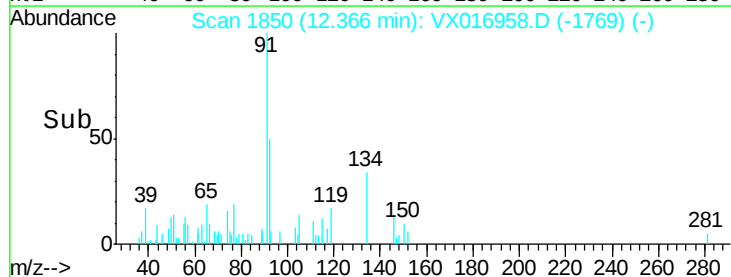
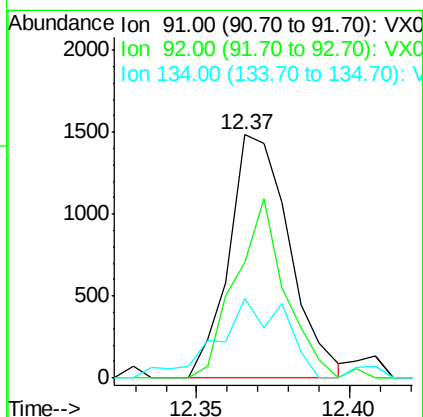
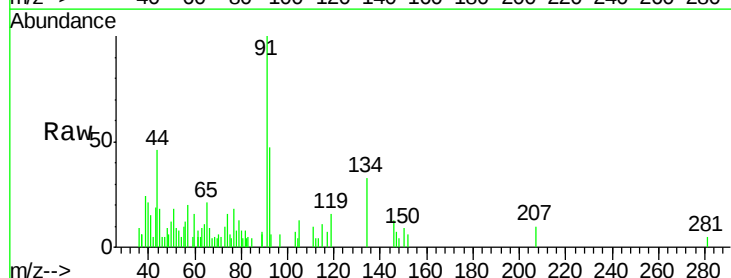
Instrument :
 MSVOA_X
 ClientSampled :
 TW-2

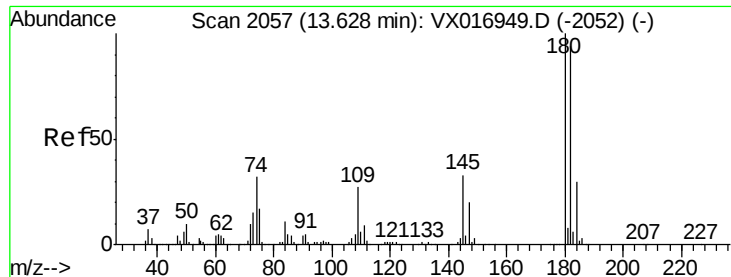
Tgt Ion: 105 Resp: 20667
 Ion Ratio Lower Upper
 105 100
 120 44.5 0.0 89.8



#85
 n-Butylbenzene
 Concen: 0.220 ug/l
 RT: 12.37 min Scan# 1850
 Delta R.T. -0.01 min
 Lab File: VX016958.D
 Acq: 25 Jun 2020 16:59

Tgt Ion: 91 Resp: 2032
 Ion Ratio Lower Upper
 91 100
 92 60.2 0.0 105.8
 134 34.8 0.0 52.2

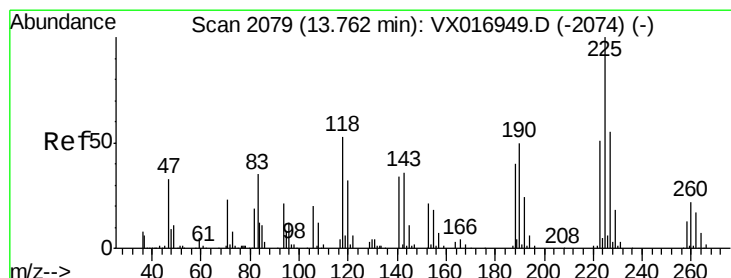
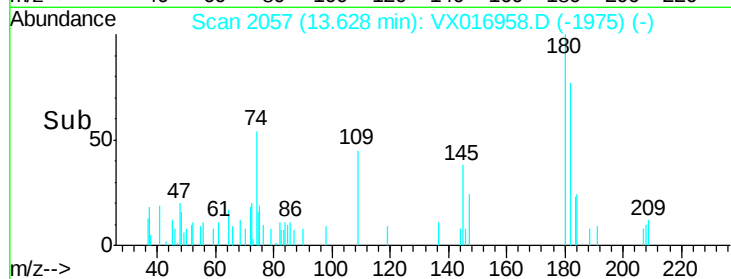
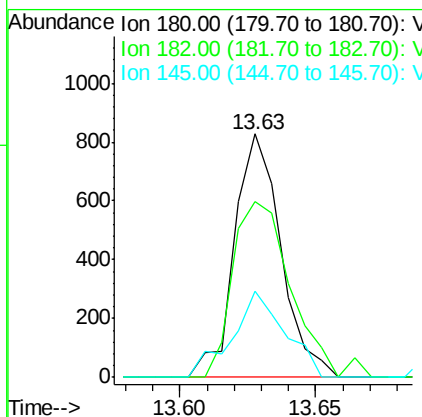
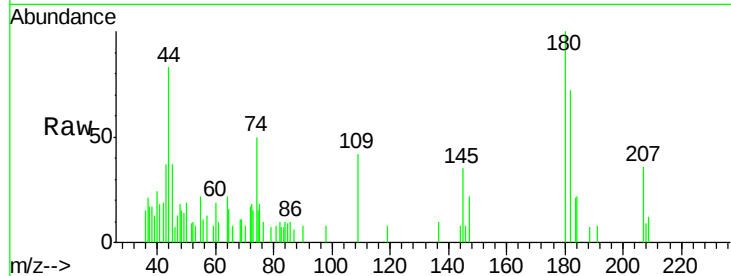




#89
 1,2,4-Trichlorobenzene
 Concen: 0.302 ug/l
 RT: 13.63 min Scan# 2057
 Delta R.T. 0.00 min
 Lab File: VX016958.D
 Acq: 25 Jun 2020 16:59

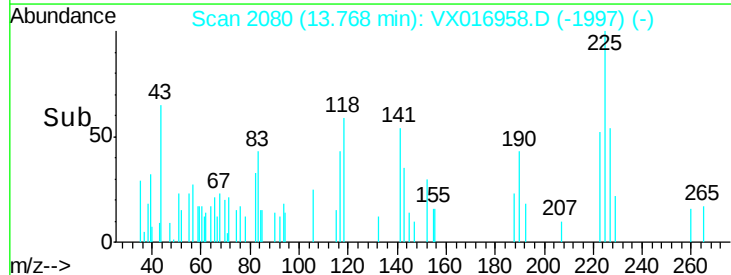
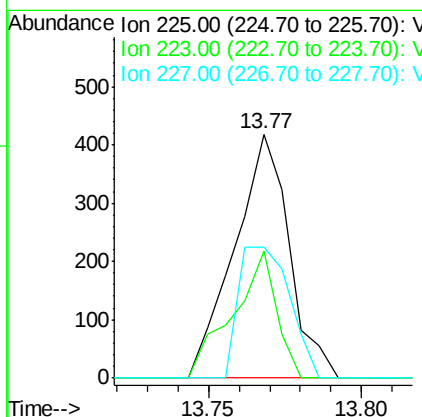
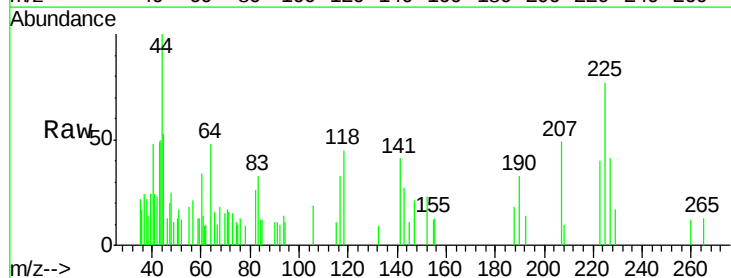
Instrument :
 MSVOA_X
 ClientSampled :
 TW-2

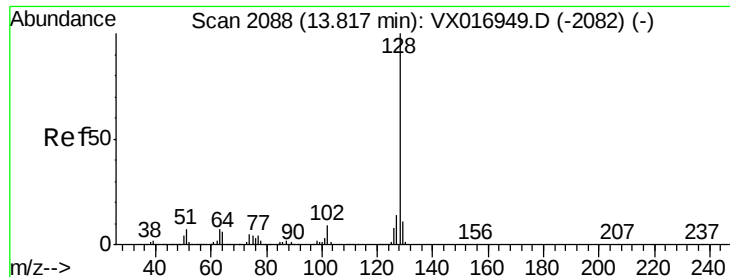
Tgt Ion:180 Resp: 982
 Ion Ratio Lower Upper
 180 100
 182 88.5 77.7 116.5
 145 39.9 26.2 39.2#



#90
 Hexachlorobutadiene
 Concen: 0.420 ug/l
 RT: 13.77 min Scan# 2080
 Delta R.T. 0.01 min
 Lab File: VX016958.D
 Acq: 25 Jun 2020 16:59

Tgt Ion:225 Resp: 519
 Ion Ratio Lower Upper
 225 100
 223 41.8 0.0 125.0
 227 50.1 0.0 124.0





#91

Naphthalene

Concen: 7.509 ug/l

RT: 13.82 min Scan# 2088

Delta R.T. 0.00 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

Instrument :

MSVOA_X

ClientSampleId :

TW-2

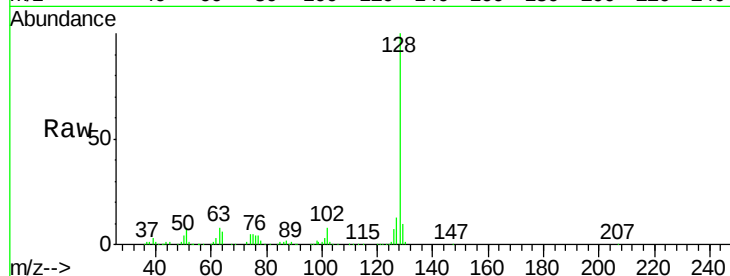
Tgt Ion:128 Resp: 79925

Ion Ratio Lower Upper

128 100

127 13.2 10.5 15.7

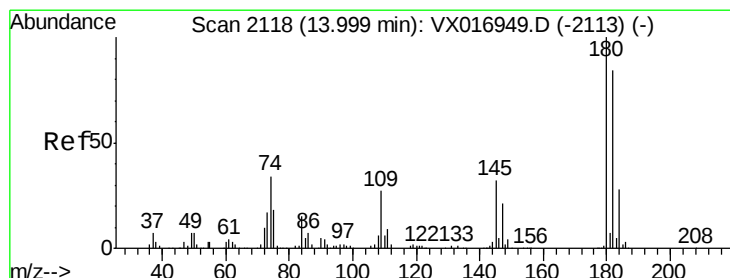
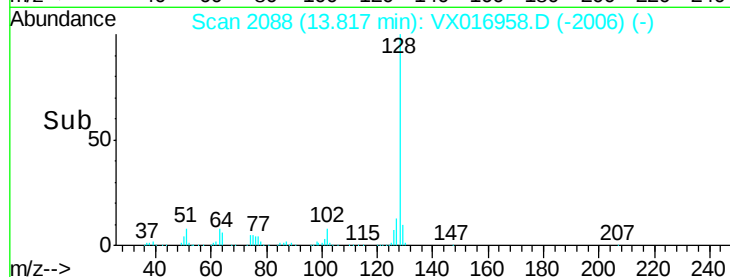
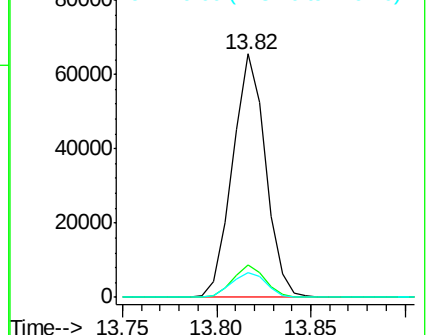
129 10.7 9.0 13.4



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: 0.252 ug/l

RT: 14.01 min Scan# 2119

Delta R.T. 0.01 min

Lab File: VX016958.D

Acq: 25 Jun 2020 16:59

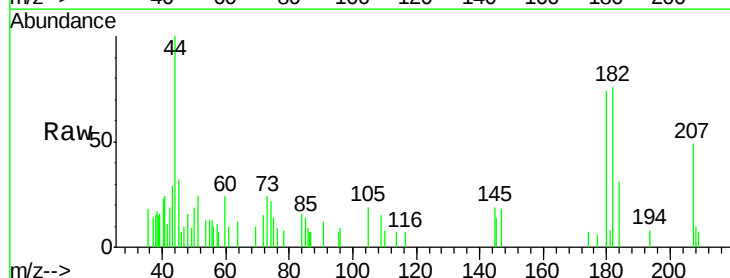
Tgt Ion:180 Resp: 797

Ion Ratio Lower Upper

180 100

182 92.3 0.0 184.8

145 39.6 0.0 68.0



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

