

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX022219\
 Data File : VX007655.D
 Acq On : 22 Feb 2019 13:09
 Operator : JC/SP
 Sample : K1570-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 50-50

Quant Time: Feb 23 00:30:52 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X021319W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Feb 13 07:51:18 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.03	128	67642	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.86	114	362625	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.11	117	312547	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.07	65	136475	31.19	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	103.97%
60) 4-Bromofluorobenzene	11.13	95	134215	27.98	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	93.27%
63) Toluene-d8	8.71	98	423046	29.95	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	99.83%

Target Compounds

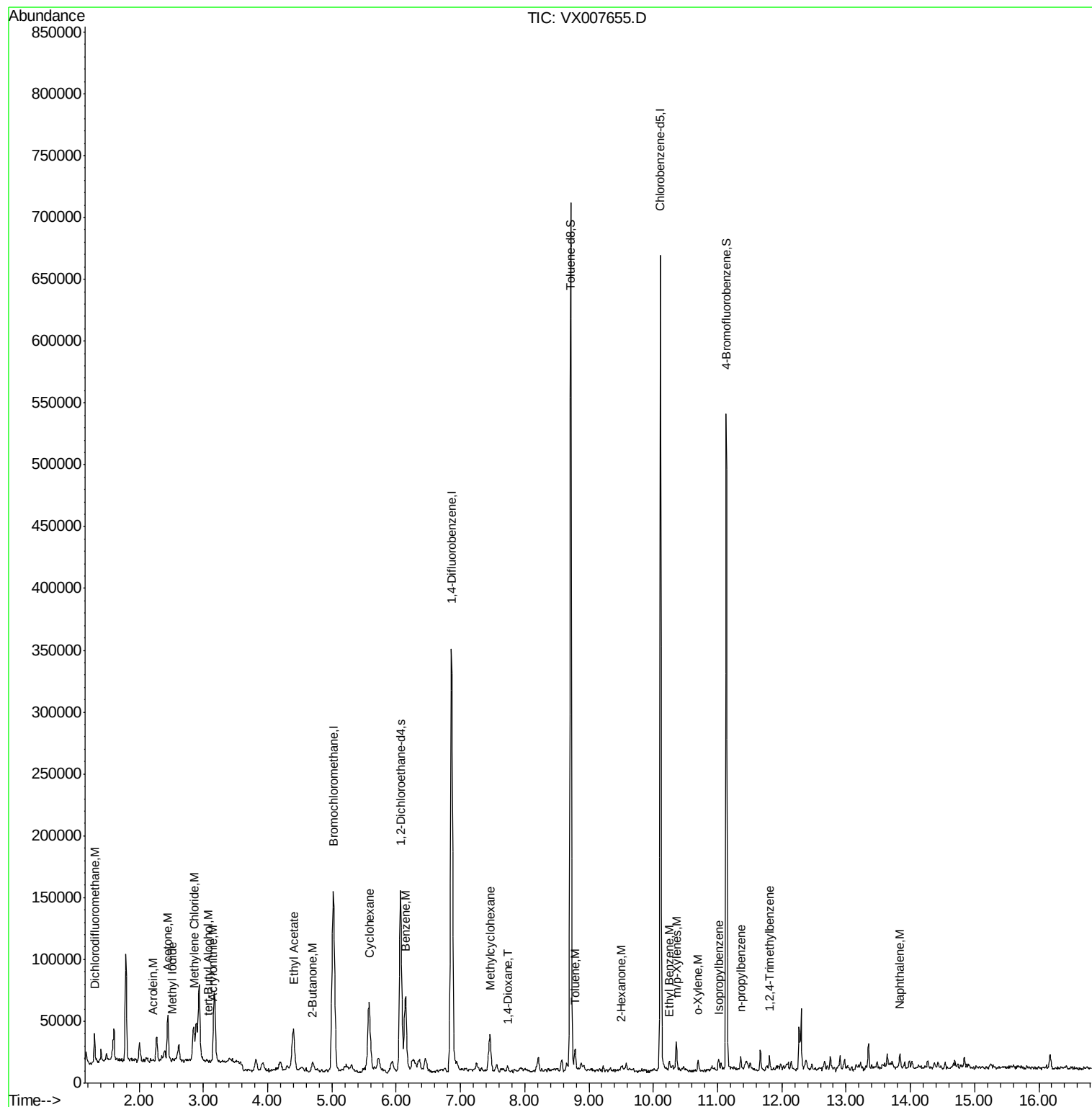
					Ovalue	
2) Dichlorodifluoromethane	1.31	85	1847	0.539	ug/l	93
11) Methyl Iodide	2.52	142	1488	0.279	ug/l #	53
13) Acrolein	2.21	56	193	0.216	ug/l	84
14) Acrylonitrile	3.14	53	512	0.217	ug/l #	34
15) Acetone	2.45	58	14069	21.954	ug/l	92
18) Methylene Chloride	2.86	84	1337	0.320	ug/l #	86
23) tert-Butyl Alcohol	3.07	59	1639	1.651	ug/l #	98
26) Cyclohexane	5.58	56	34774	6.148	ug/l #	98
30) 2-Butanone	4.70	43	13724	4.585	ug/l #	89
34) Benzene	6.15	78	73681	4.621	ug/l	97
38) Methylcyclohexane	7.46	83	11751	2.007	ug/l	82
43) Ethyl Acetate	4.40	43	2028	0.354	ug/l	98
45) 1,4-Dioxane	7.75	88	32	0.306	ug/l #	1
59) 2-Hexanone	9.50	43	1322	0.310	ug/l #	88
62) Toluene	8.79	91	9556	0.561	ug/l	92
66) Ethyl Benzene	10.25	91	4397	0.243	ug/l	90
67) m/p-Xylenes	10.36	106	5931	0.837	ug/l	89
68) o-Xylene	10.69	106	2040	0.295	ug/l	78
70) Isopropylbenzene	11.02	105	4307	0.236	ug/l	94
74) n-propylbenzene	11.35	91	5517	0.273	ug/l	90
80) 1,2,4-Trimethylbenzene	11.80	105	4359	0.289	ug/l	97
91) Naphthalene	13.83	128	7783	0.423	ug/l #	92

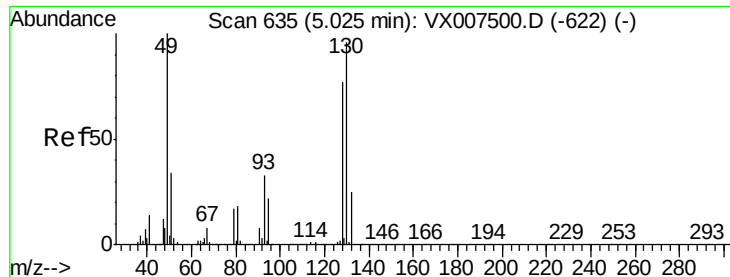
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Feb 13 07:51:18 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 5.03 min Scan# 635

Delta R.T. 0.00 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

Instrument :

MSVOA_X

ClientSampleId :

50-50

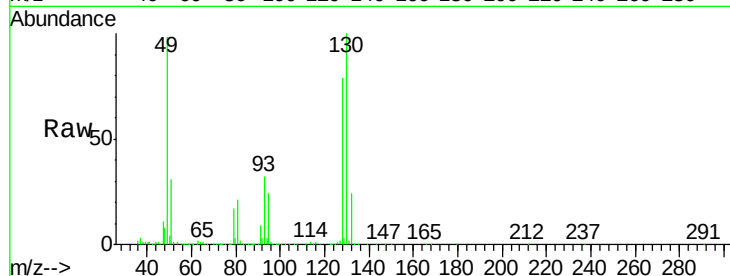
Tot Ion:128 Resp: 67642

Ion Ratio Lower Upper

128 100

49 139.3 0.0 350.8

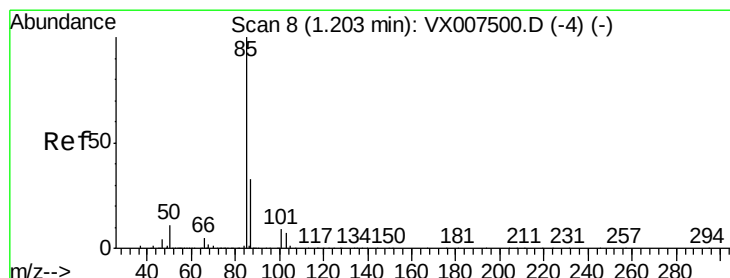
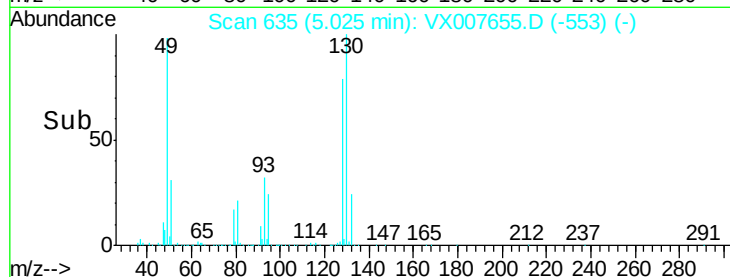
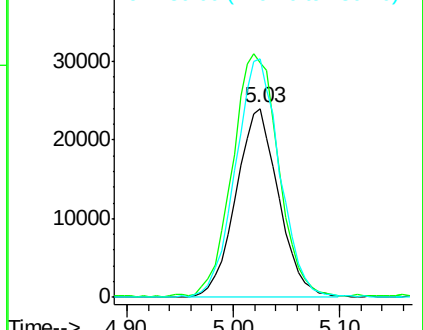
130 130.7 0.0 325.8



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



#2

Dichlorodifluoromethane

Concen: 0.539 ug/l

RT: 1.31 min Scan# 25

Delta R.T. 0.10 min

Lab File: VX007655.D

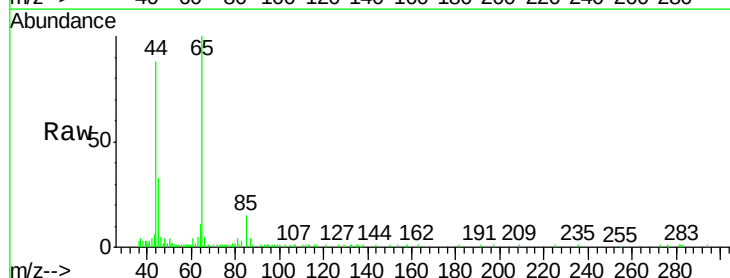
Acq: 22 Feb 2019 13:09

Tgt Ion: 85 Resp: 1847

Ion Ratio Lower Upper

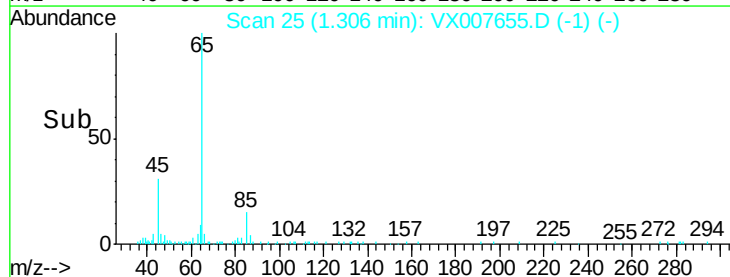
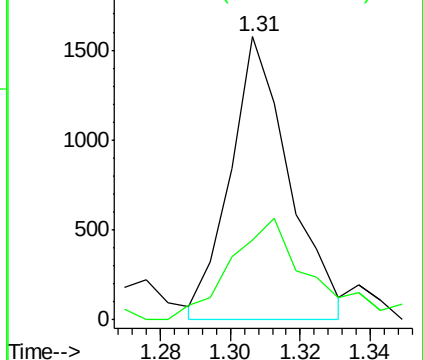
85 100

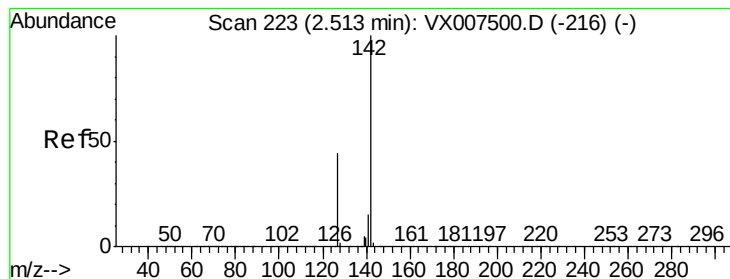
87 29.0 16.6 49.8



Abundance Ion 85.00 (84.70 to 85.70): VX0

Ion 87.00 (86.70 to 87.70): VX0





#11

Methvl Iodide

Concen: 0.279 ug/l

RT: 2.52 min Scan# 224

Delta R.T. 0.01 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

Instrument :

MSVOA_X

ClientSampleId :

50-50

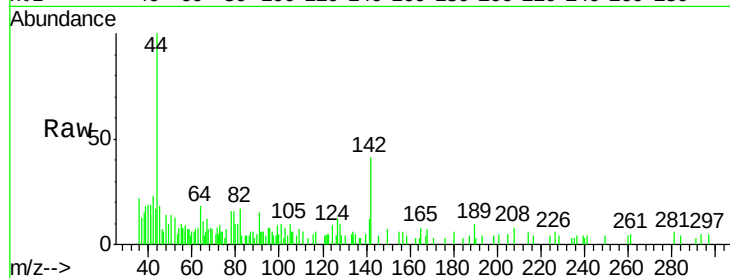
Tot Ion:142 Resp: 1488

Ion Ratio Lower Upper

142 100

127 9.3 22.1 66.5#

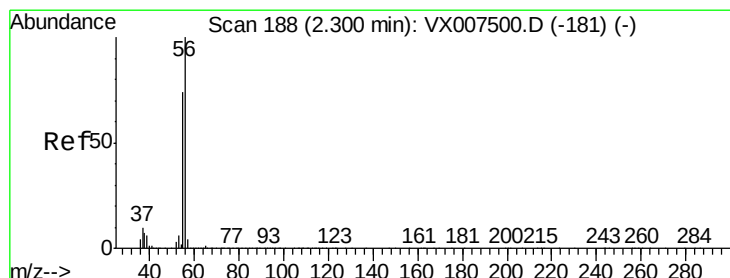
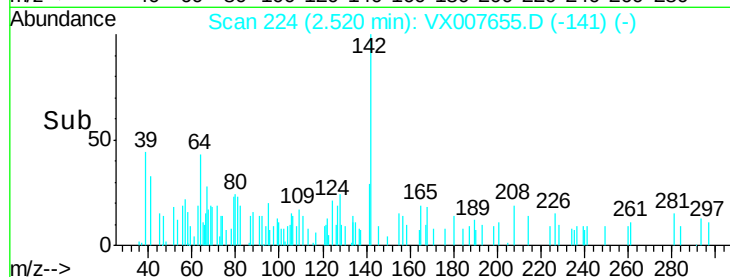
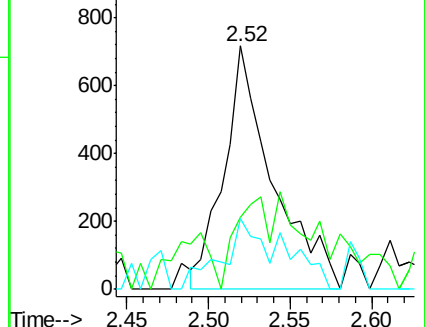
141 25.8 7.4 22.3#



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: 0.216 ug/l

RT: 2.21 min Scan# 173

Delta R.T. -0.09 min

Lab File: VX007655.D

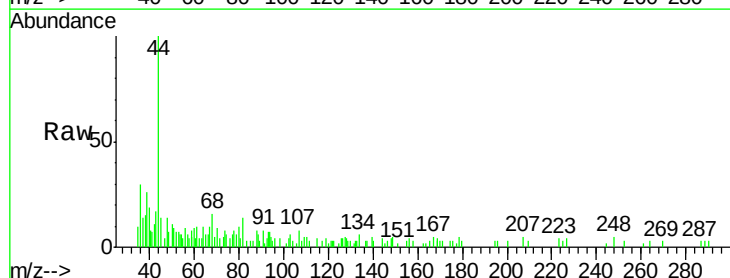
Acq: 22 Feb 2019 13:09

Tgt Ion: 56 Resp: 193

Ion Ratio Lower Upper

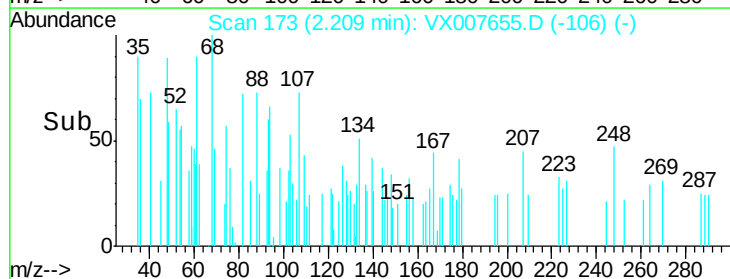
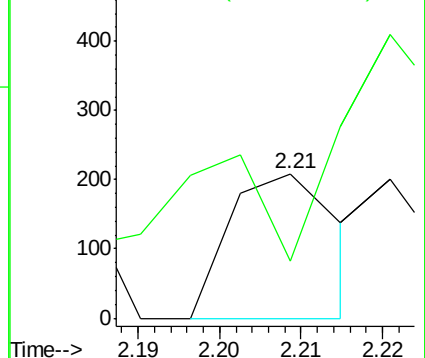
56 100

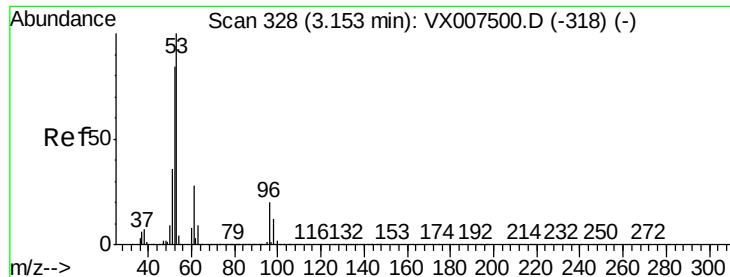
55 59.6 58.6 87.8



Abundance Ion 56.00 (55.70 to 56.70): VX0

Ion 55.00 (54.70 to 55.70): VX0





#14

Acrylonitrile

Concen: 0.217 ug/l

RT: 3.14 min Scan# 326

Delta R.T. -0.01 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

Instrument :

MSVOA_X

ClientSampled :

50-50

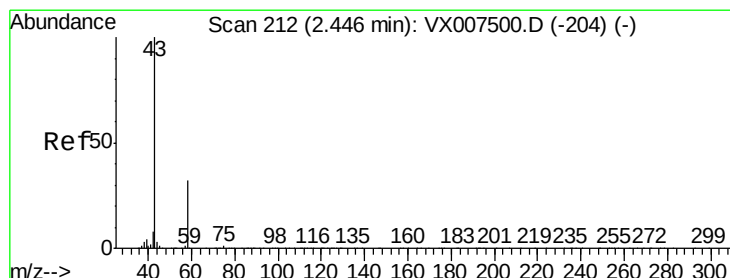
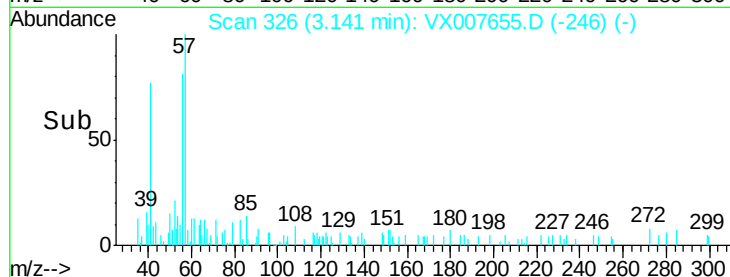
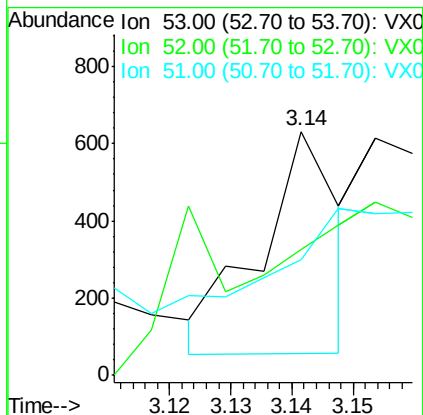
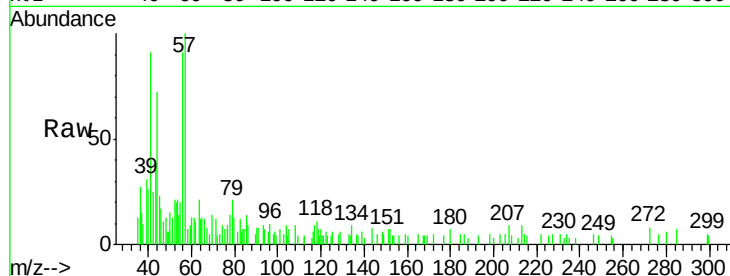
Tot Ion: 53 Resp: 512

Ion Ratio Lower Upper

53 100

52 137.1 41.3 124.1#

51 80.7 17.5 52.6#



#15

Acetone

Concen: 21.954 ug/l

RT: 2.45 min Scan# 212

Delta R.T. 0.00 min

Lab File: VX007655.D

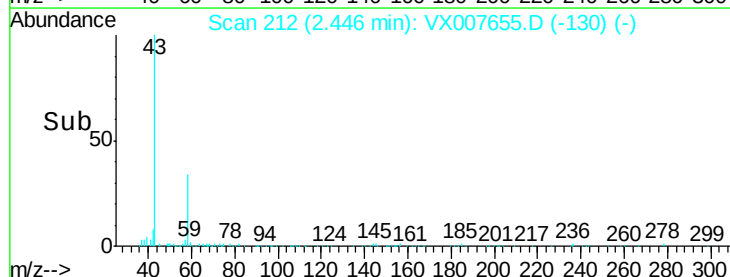
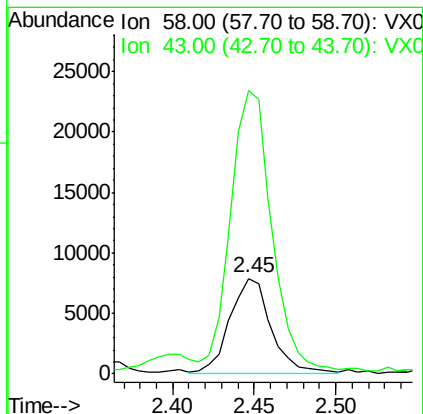
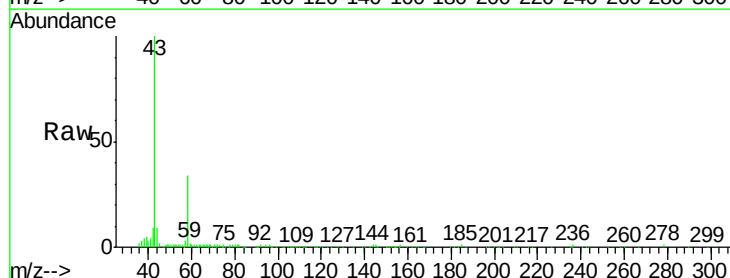
Acq: 22 Feb 2019 13:09

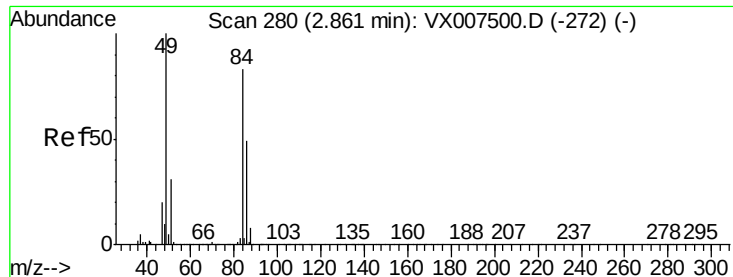
Tgt Ion: 58 Resp: 14069

Ion Ratio Lower Upper

58 100

43 296.4 249.8 374.6

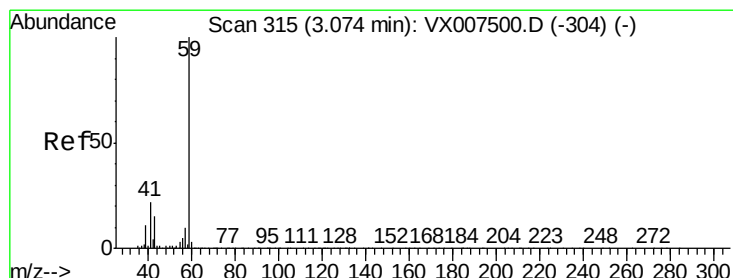
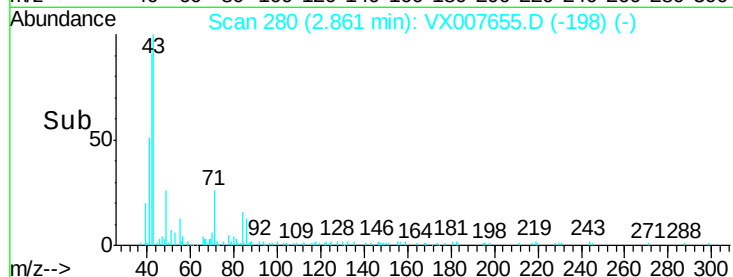
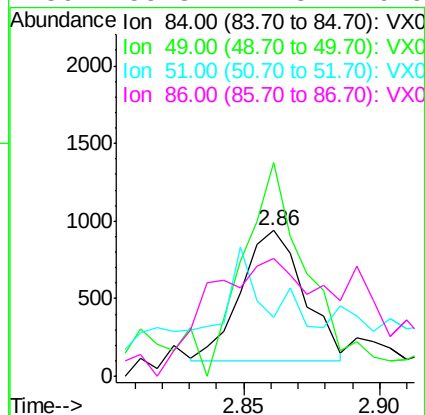
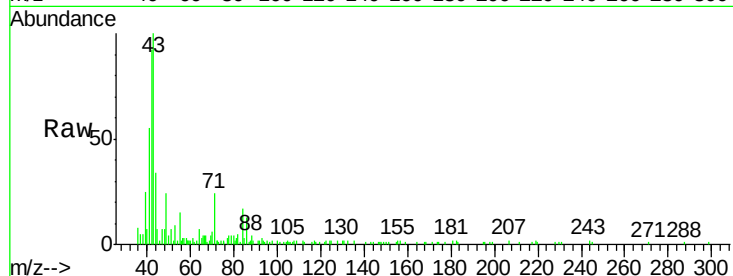




#18
Methylene Chloride
Concen: 0.320 ug/l
RT: 2.86 min Scan# 280
Delta R.T. 0.00 min
Lab File: VX007655.D
Acq: 22 Feb 2019 13:09

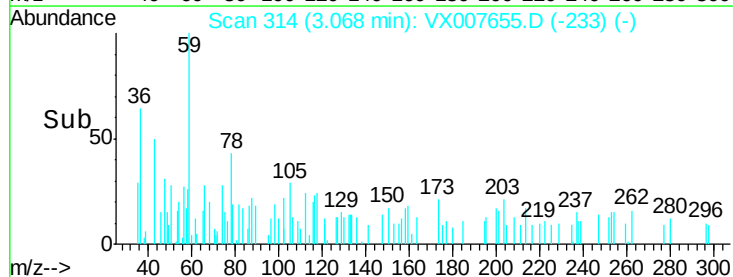
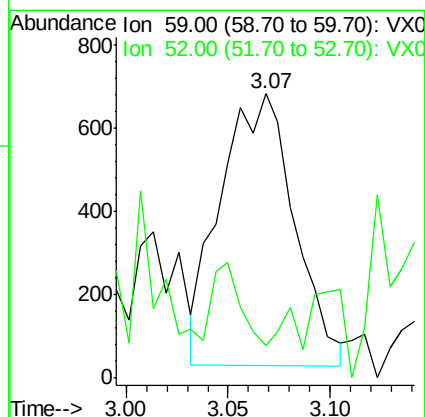
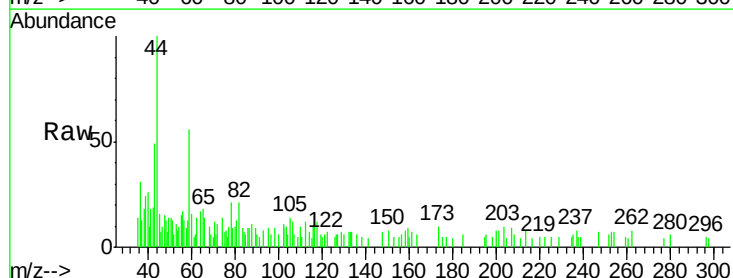
Instrument :
MSVOA_X
ClientSampleId :
50-50

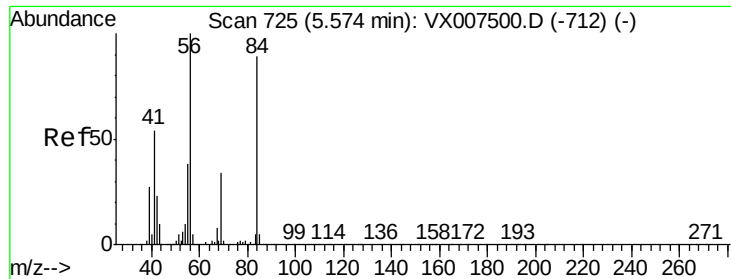
Tot Ion:	84	Resp:	1337
Ion	Ratio	Lower	Upper
84	100		
49	129.4	96.1	144.1
51	9.5	29.1	43.7#
86	55.8	47.3	70.9



#23
tert-Butyl Alcohol
Concen: 1.651 ug/l
RT: 3.07 min Scan# 314
Delta R.T. -0.01 min
Lab File: VX007655.D
Acq: 22 Feb 2019 13:09

Tgt Ion:	59	Resp:	1639
Ion	Ratio	Lower	Upper
59	100		
52	3.2	0.2	0.2#

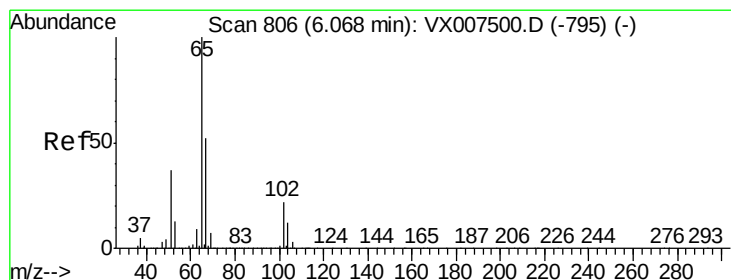
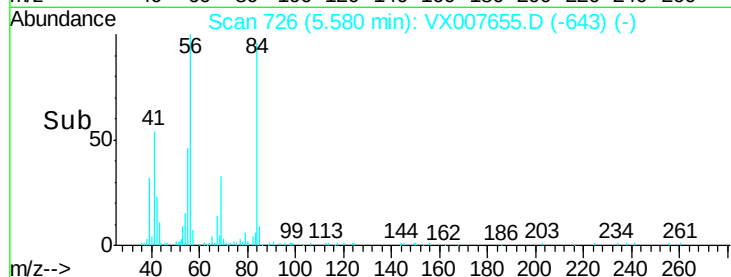
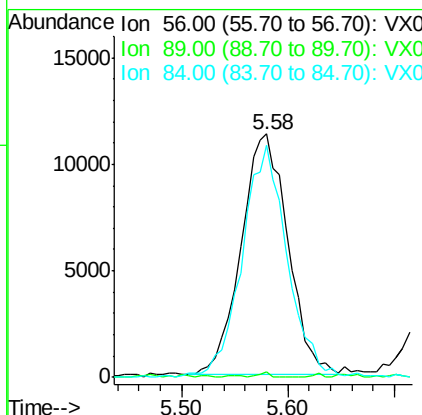
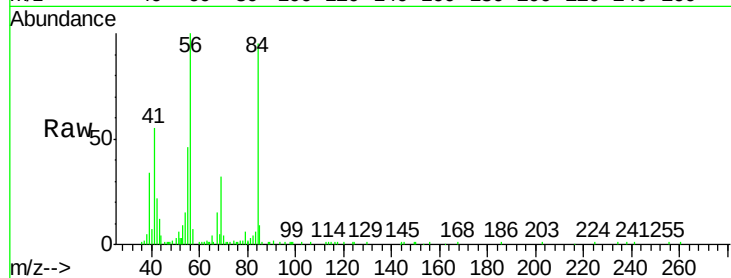




#26
Cyclohexane
Concen: 6.148 ug/l
RT: 5.58 min Scan# 726
Delta R.T. 0.01 min
Lab File: VX007655.D
Acq: 22 Feb 2019 13:09

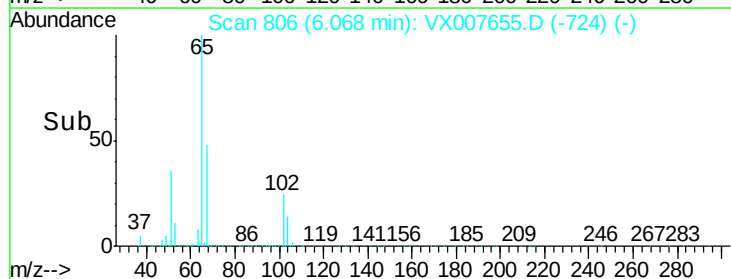
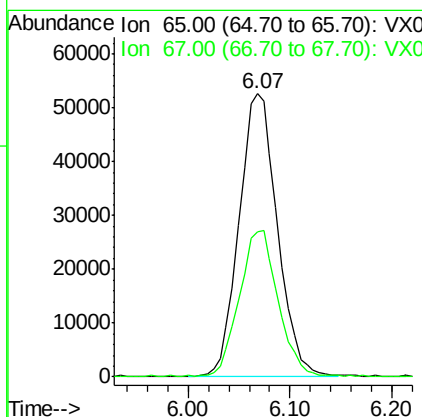
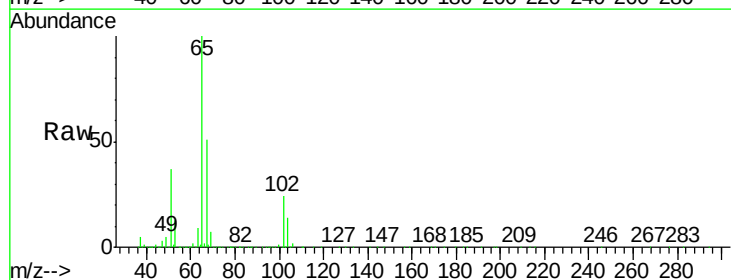
Instrument :
MSVOA_X
ClientSampled :
50-50

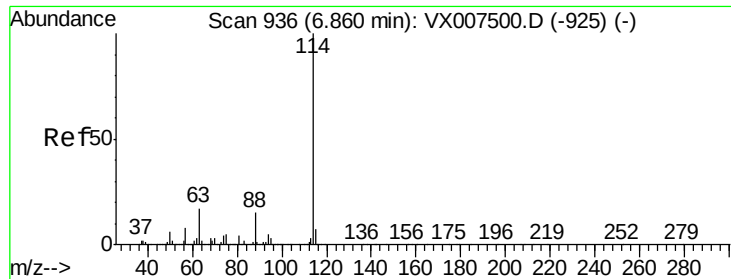
Tot Ion: 56 Resp: 34774
Ion Ratio Lower Upper
56 100
89 0.5 0.0 0.0#
84 91.0 73.9 110.9



#27
1,2-Dichloroethane-d4
Concen: 31.190 ug/l
RT: 6.07 min Scan# 806
Delta R.T. 0.00 min
Lab File: VX007655.D
Acq: 22 Feb 2019 13:09

Tgt Ion: 65 Resp: 136475
Ion Ratio Lower Upper
65 100
67 52.0 42.9 64.3

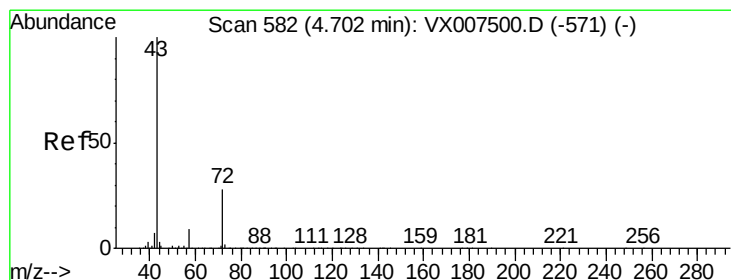
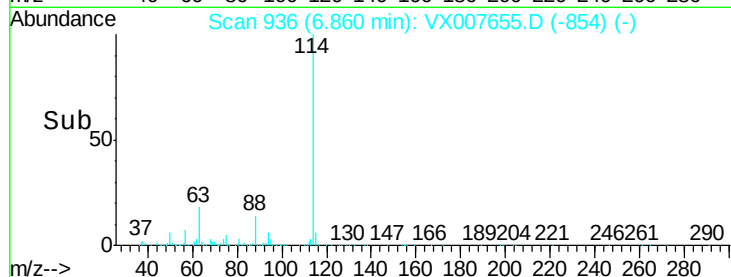
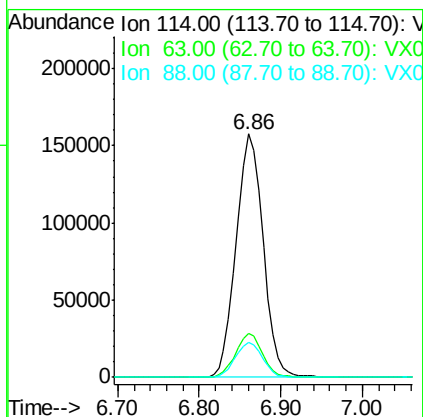
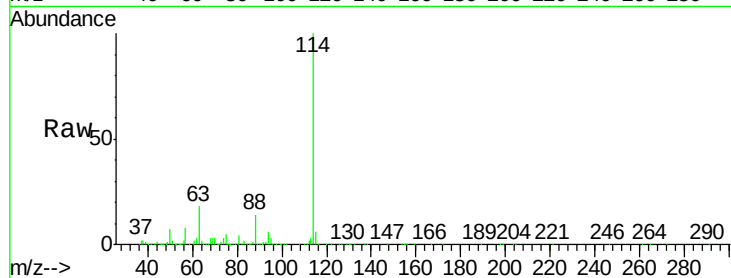




#28
 1,4-Difluorobenzene
 Concen: 30.000 ug/l
 RT: 6.86 min Scan# 936
 Delta R.T. 0.00 min
 Lab File: VX007655.D
 Acq: 22 Feb 2019 13:09

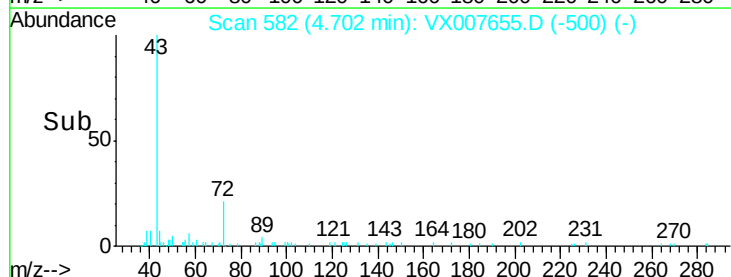
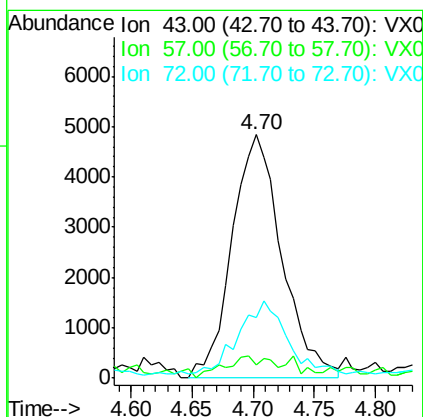
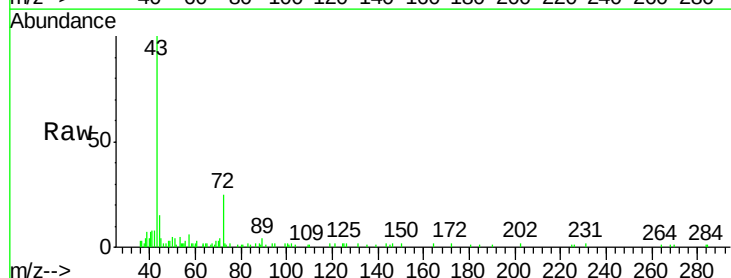
Instrument :
 MSVOA_X
 ClientSampleId :
 50-50

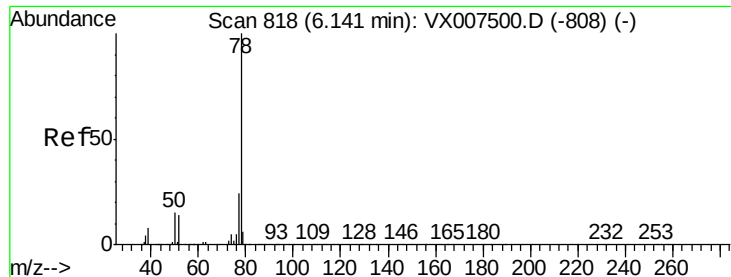
Tot Ion	Ratio	Lower	Upper
114	100		
63	18.0	14.2	21.4
88	14.6	11.9	17.9



#30
 2-Butanone
 Concen: 4.585 ug/l
 RT: 4.70 min Scan# 582
 Delta R.T. 0.00 min
 Lab File: VX007655.D
 Acq: 22 Feb 2019 13:09

Tgt Ion	Ratio	Lower	Upper
43	100		
57	2.0	7.0	10.6#
72	31.5	21.5	32.3





#34

Benzene

Concen: 4.621 ug/l

RT: 6.15 min Scan# 819

Delta R.T. 0.01 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

Instrument :

MSVOA_X

ClientSampleId :

50-50

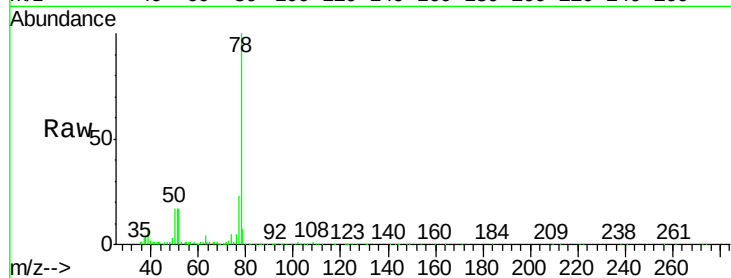
Tot Ion: 78 Resp: 73681

Ion Ratio Lower Upper

78 100

77 23.0 19.1 28.7

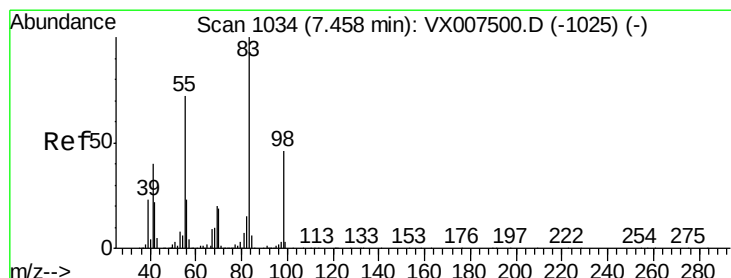
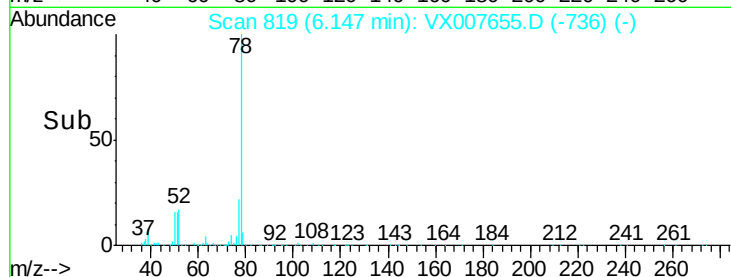
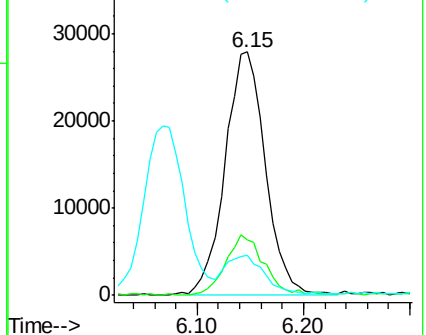
51 16.0 10.8 16.2



Abundance Ion 78.10 (77.80 to 78.80): VX0

Ion 77.00 (76.70 to 77.70): VX0

Ion 51.00 (50.70 to 51.70): VX0



#38

Methylcyclohexane

Concen: 2.007 ug/l

RT: 7.46 min Scan# 1034

Delta R.T. 0.00 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

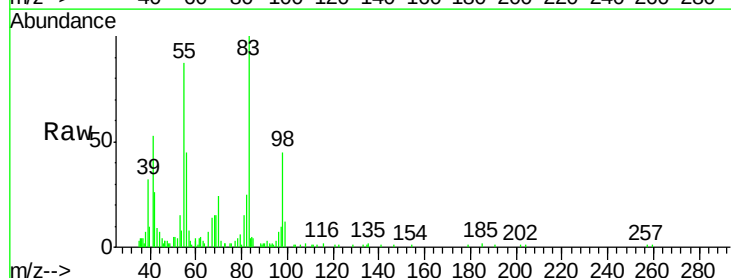
Tgt Ion: 83 Resp: 11751

Ion Ratio Lower Upper

83 100

55 90.7 36.0 108.0

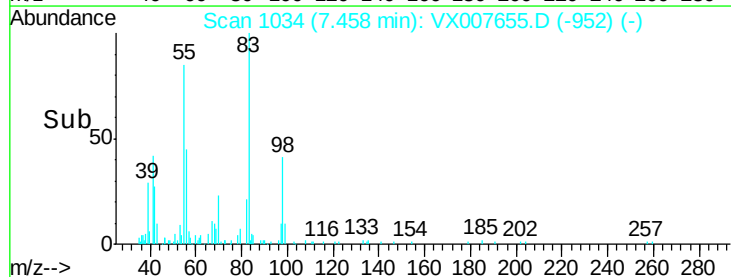
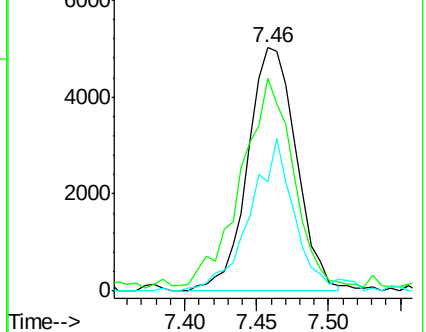
98 55.6 23.8 71.4

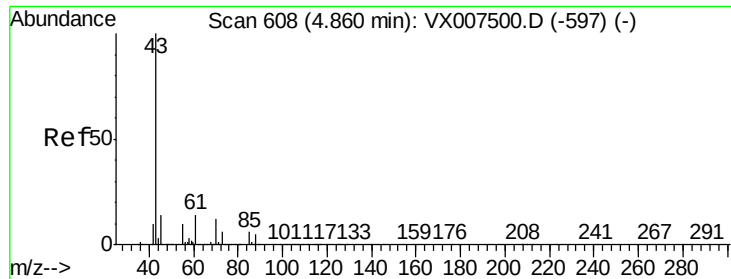


Abundance Ion 83.00 (82.70 to 83.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 98.00 (97.70 to 98.70): VX0

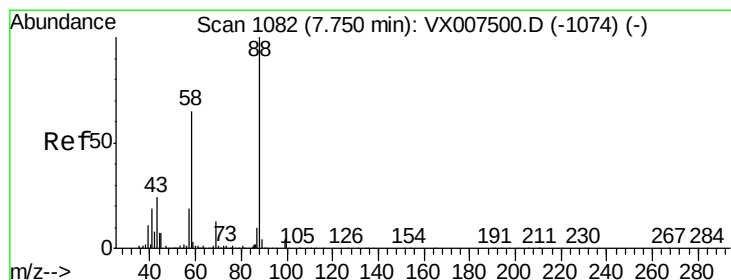
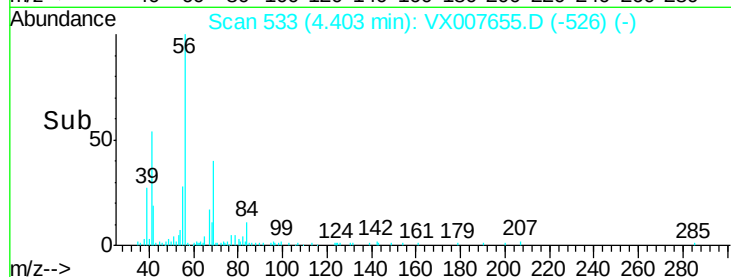
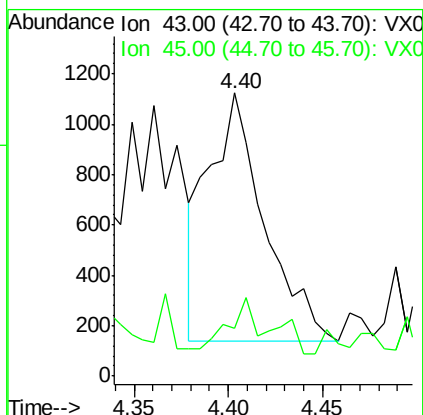
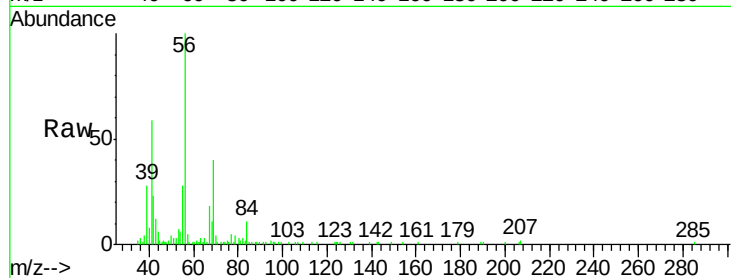




#43
Ethyl Acetate
Concen: 0.354 ug/l
RT: 4.40 min Scan# 533
Delta R.T. -0.46 min
Lab File: VX007655.D
Acq: 22 Feb 2019 13:09

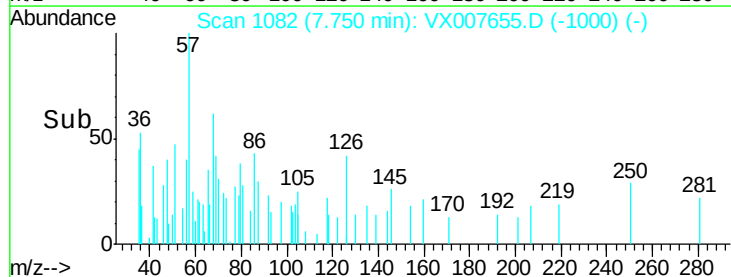
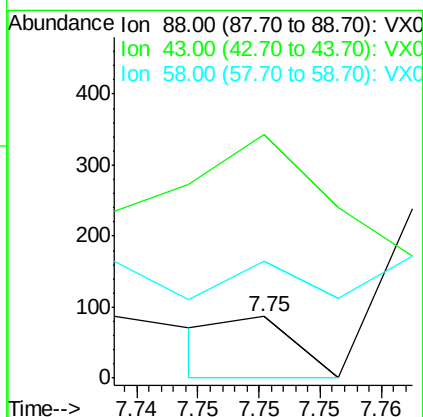
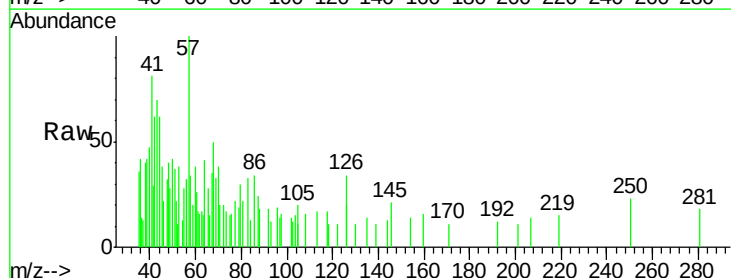
Instrument :
MSVOA_X
ClientSampled :
50-50

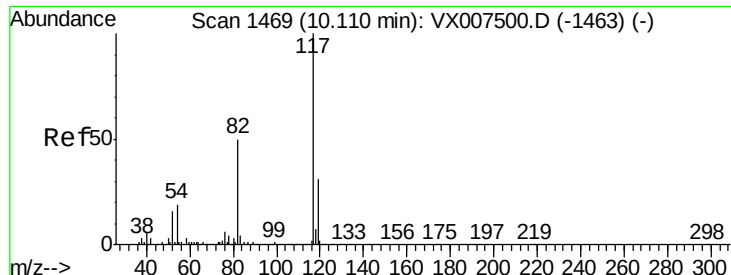
Tot Ion: 43 Resp: 2028
Ion Ratio Lower Upper
43 100
45 9.3 6.9 10.3



#45
1,4-Dioxane
Concen: 0.306 ug/l
RT: 7.75 min Scan# 1082
Delta R.T. 0.00 min
Lab File: VX007655.D
Acq: 22 Feb 2019 13:09

Tgt Ion: 88 Resp: 32
Ion Ratio Lower Upper
88 100
43 462.5 23.6 35.4#
58 0.0 51.6 77.4#

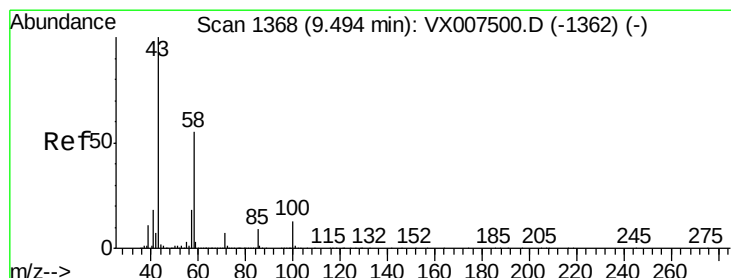
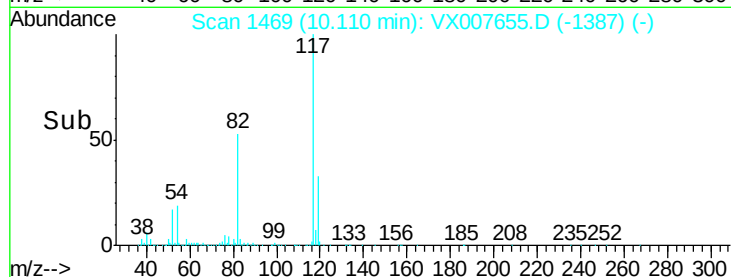
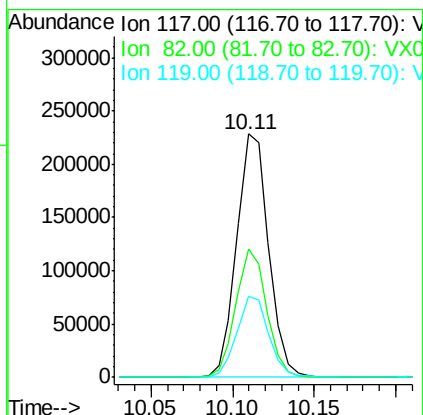
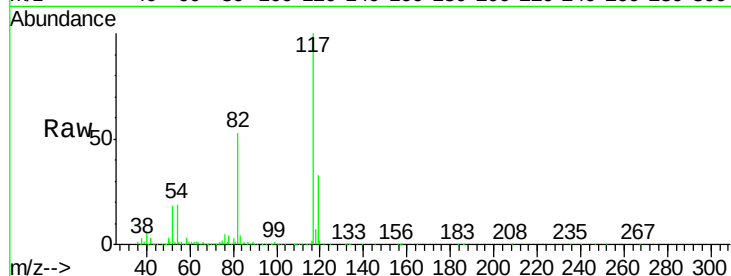




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.11 min Scan# 1469
Delta R.T. 0.00 min
Lab File: VX007655.D
Acq: 22 Feb 2019 13:09

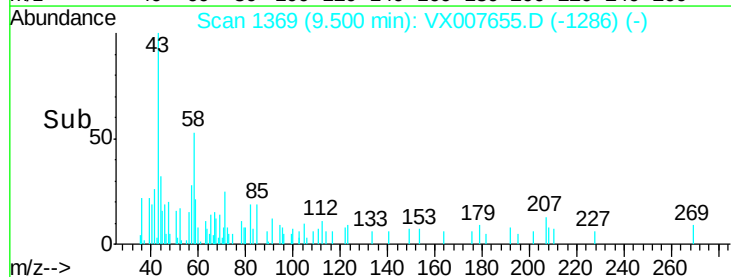
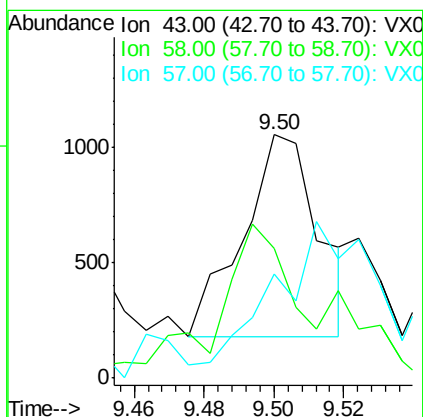
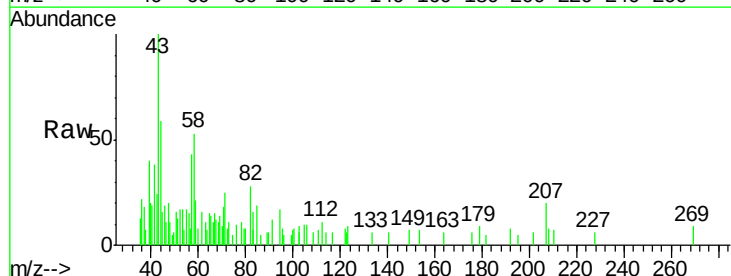
Instrument :
MSVOA_X
ClientSampled :
50-50

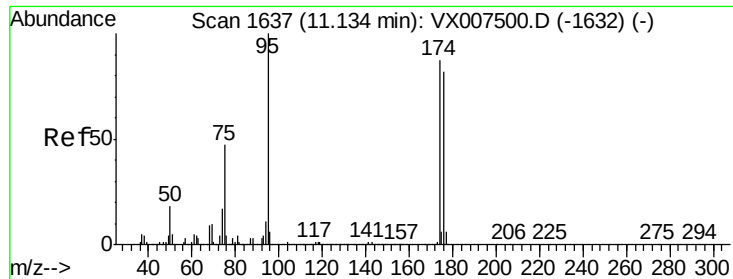
Tot Ion	Ratio	Lower	Upper
117	100		
82	51.2	40.4	60.6
119	33.1	25.8	38.6



#59
2-Hexanone
Concen: 0.310 ug/l
RT: 9.50 min Scan# 1369
Delta R.T. 0.01 min
Lab File: VX007655.D
Acq: 22 Feb 2019 13:09

Tgt Ion	Ratio	Lower	Upper
43	100		
58	56.3	43.9	65.9
57	0.0	14.9	22.3#





#60

4-Bromofluorobenzene

Concen: 27.979 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.00 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

Instrument :

MSVOA_X

ClientSampled :

50-50

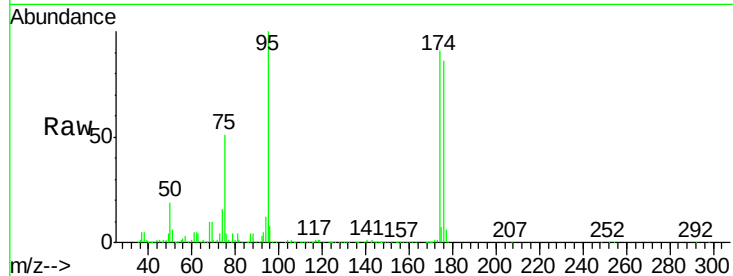
Tot Ion: 95 Resp: 134215

Ion Ratio Lower Upper

95 100

174 92.4 74.9 112.3

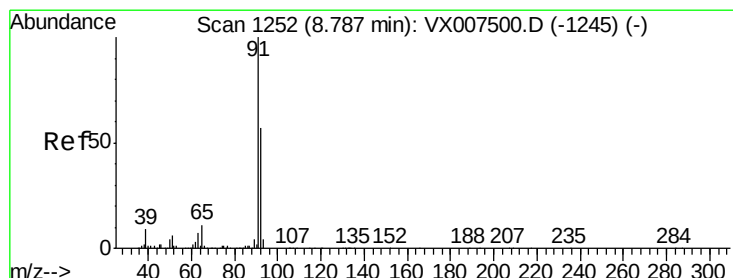
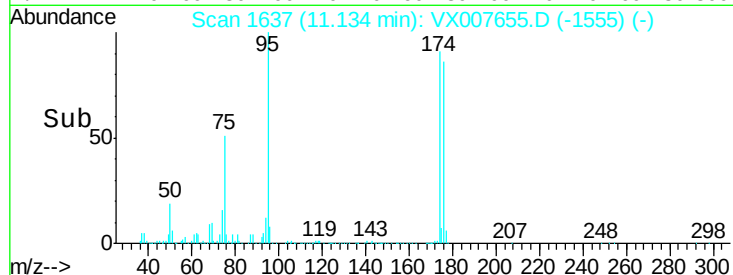
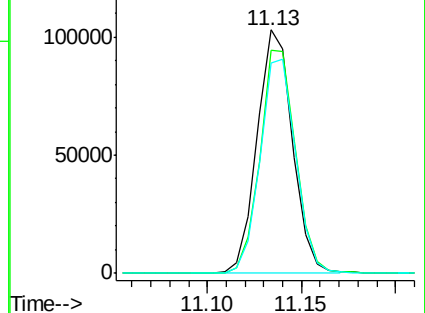
176 88.5 70.7 106.1



Abundance Ion 95.00 (94.70 to 95.70): VX0

Ion 174.00 (173.70 to 174.70): V

Ion 176.00 (175.70 to 176.70): V



#62

Toluene

Concen: 0.561 ug/l

RT: 8.79 min Scan# 1252

Delta R.T. 0.00 min

Lab File: VX007655.D

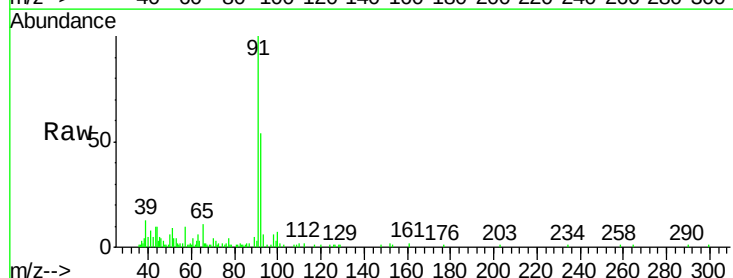
Acq: 22 Feb 2019 13:09

Tgt Ion: 91 Resp: 9556

Ion Ratio Lower Upper

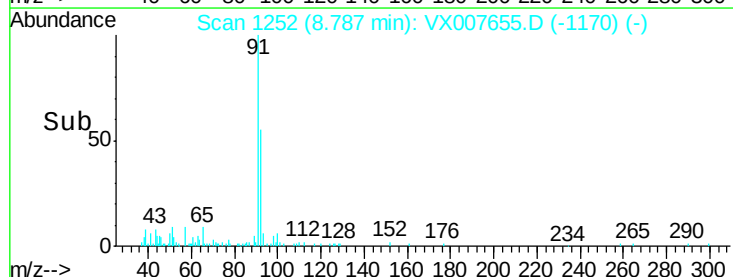
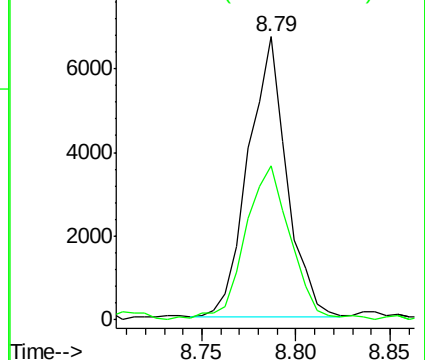
91 100

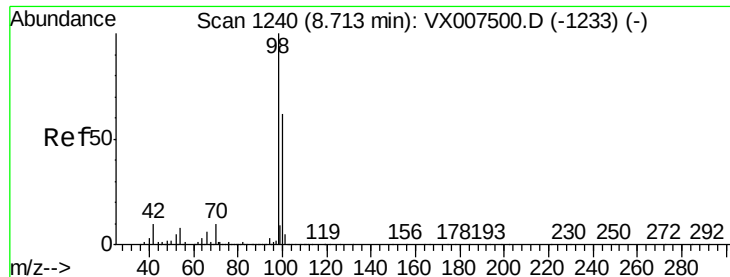
92 64.3 46.4 69.6



Abundance Ion 91.00 (90.70 to 91.70): VX0

Ion 92.00 (91.70 to 92.70): VX0





#63

Toluene-d8

Concen: 29.947 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

Instrument :

MSVOA_X

ClientSampled :

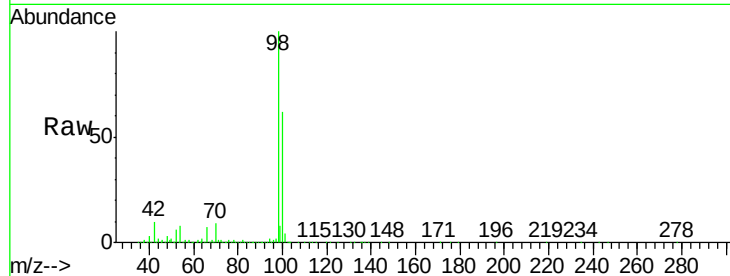
50-50

Tot Ion: 98 Resp: 423046

Ion Ratio Lower Upper

98 100

100 62.8 50.9 76.3



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): V

8.71

300000

250000

200000

150000

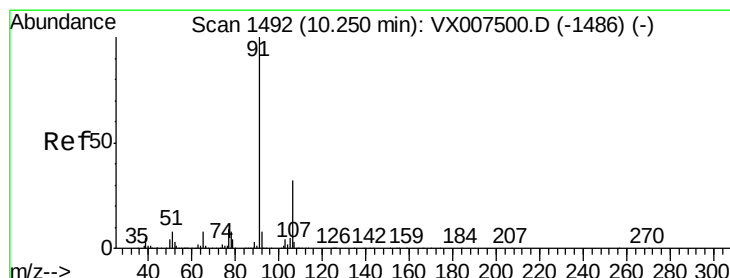
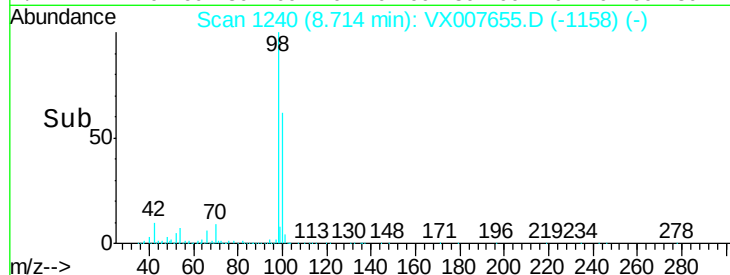
100000

50000

0

Time-->

8.60 8.70 8.80



#66

Ethyl Benzene

Concen: 0.243 ug/l

RT: 10.25 min Scan# 1492

Delta R.T. 0.00 min

Lab File: VX007655.D

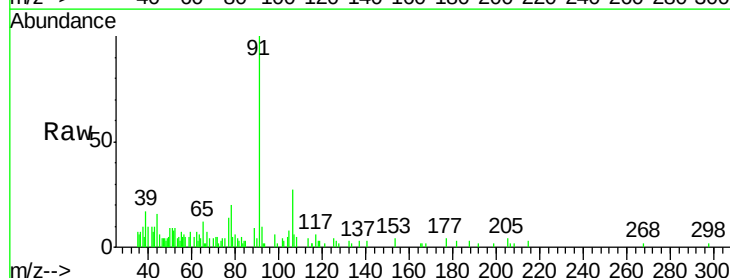
Acq: 22 Feb 2019 13:09

Tgt Ion: 91 Resp: 4397

Ion Ratio Lower Upper

91 100

106 26.7 26.0 39.0



Abundance Ion 91.00 (90.70 to 91.70): VX0

Ion 106.00 (105.70 to 106.70): V

10.25

3000

2500

2000

1500

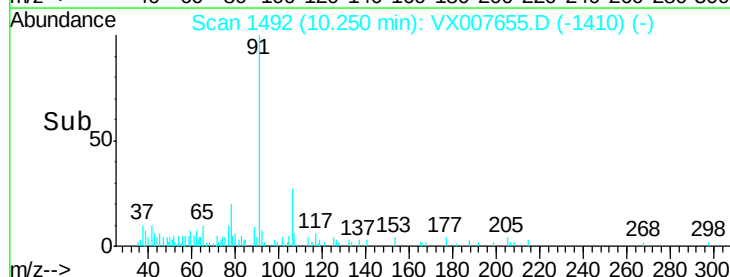
1000

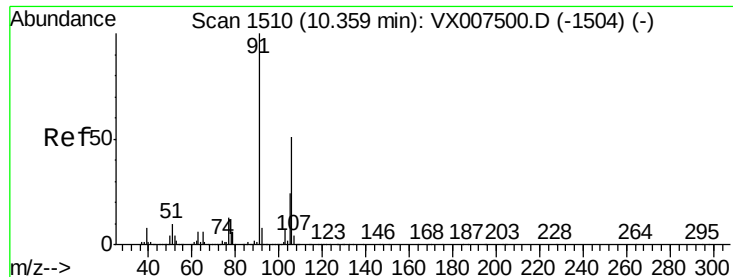
500

0

Time-->

10.20 10.25 10.30





#67

m/p-Xylenes

Concen: 0.837 ug/l

RT: 10.36 min Scan# 1510

Delta R.T. 0.00 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

Instrument :

MSVOA_X

ClientSampleId :

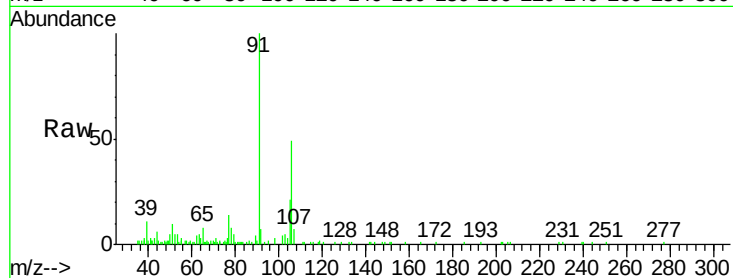
50-50

Tot Ion:106 Resp: 5931

Ion Ratio Lower Upper

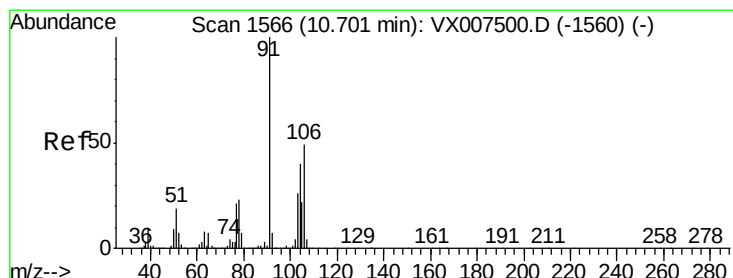
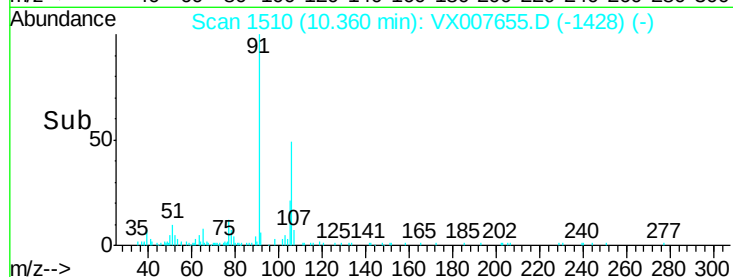
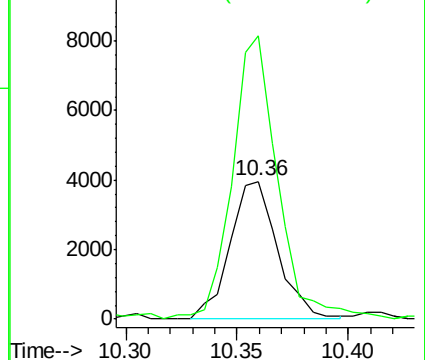
106 100

91 180.0 157.0 235.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0



#68

o-Xylene

Concen: 0.295 ug/l

RT: 10.69 min Scan# 1565

Delta R.T. -0.01 min

Lab File: VX007655.D

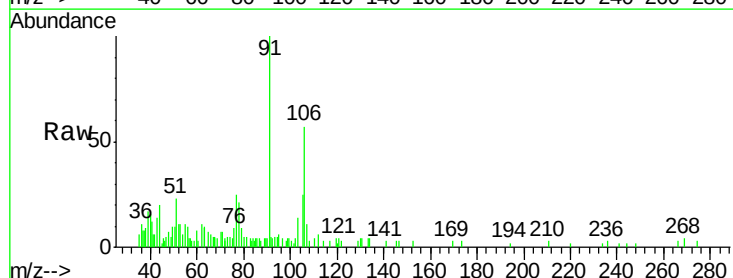
Acq: 22 Feb 2019 13:09

Tgt Ion:106 Resp: 2040

Ion Ratio Lower Upper

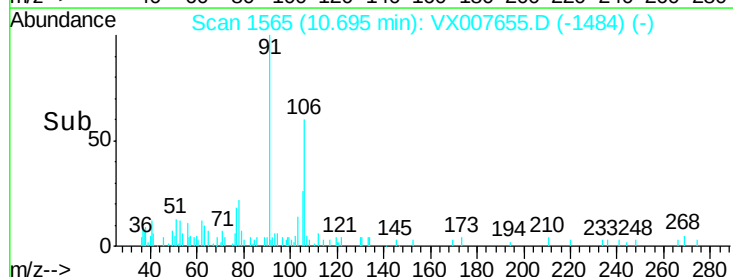
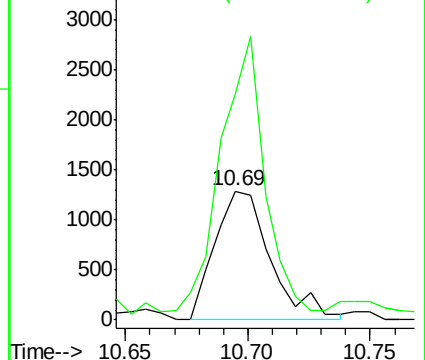
106 100

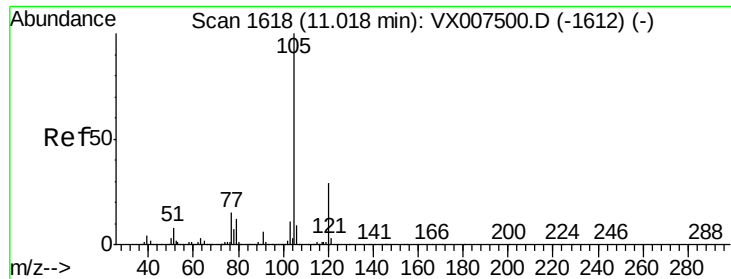
91 174.2 104.4 313.2



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0





#70

Isopropylbenzene

Concen: 0.236 ug/l

RT: 11.02 min Scan# 1618

Delta R.T. 0.00 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

Instrument :

MSVOA_X

ClientSampleId :

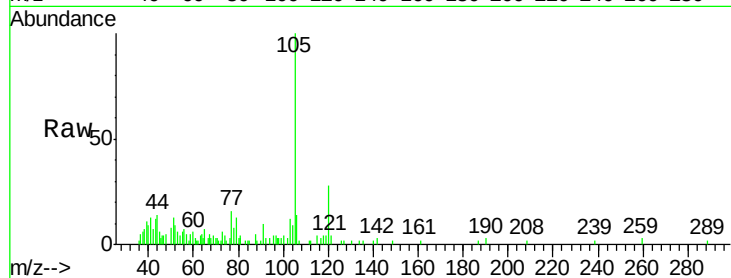
50-50

Tot Ion:105 Resp: 4307

Ion Ratio Lower Upper

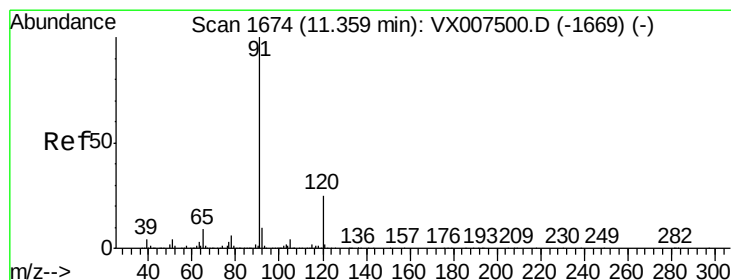
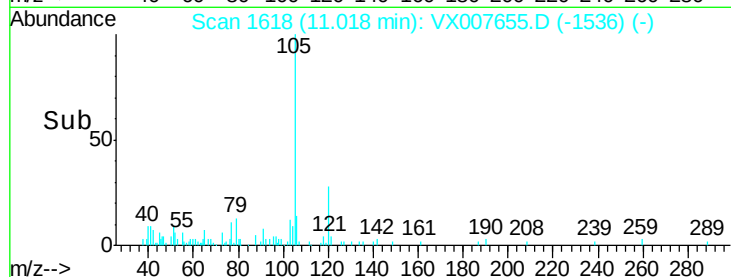
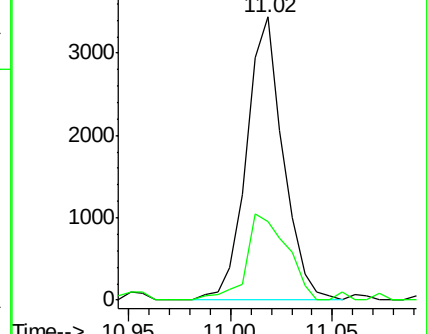
105 100

120 31.4 19.8 36.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#74

n-propylbenzene

Concen: 0.273 ug/l

RT: 11.35 min Scan# 1673

Delta R.T. -0.01 min

Lab File: VX007655.D

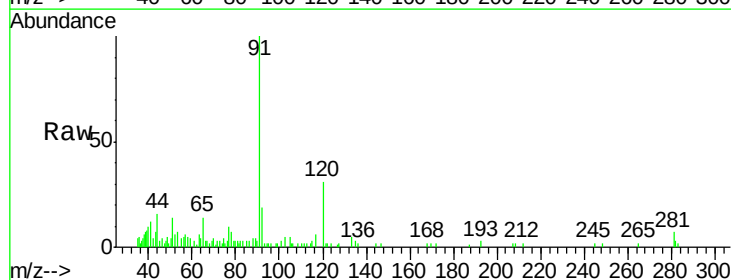
Acq: 22 Feb 2019 13:09

Tgt Ion: 91 Resp: 5517

Ion Ratio Lower Upper

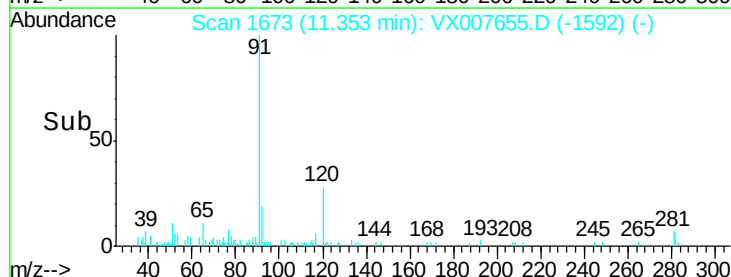
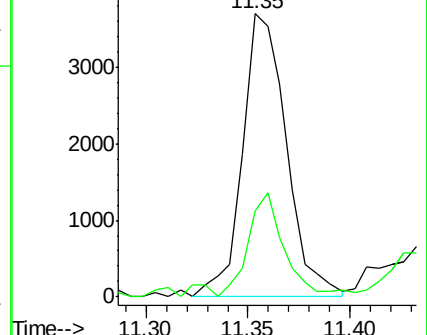
91 100

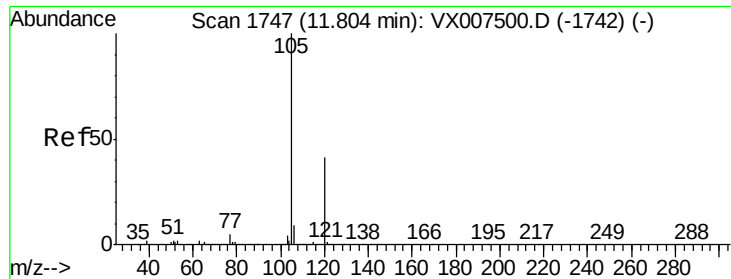
120 29.3 0.0 48.6



Abundance Ion 91.00 (90.70 to 91.70): VX0

Ion 120.00 (119.70 to 120.70): V





#80

1,2,4-Trimethylbenzene

Concen: 0.289 ug/l

RT: 11.80 min Scan# 1747

Delta R.T. 0.00 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

Instrument :

MSVOA_X

ClientSampleId :

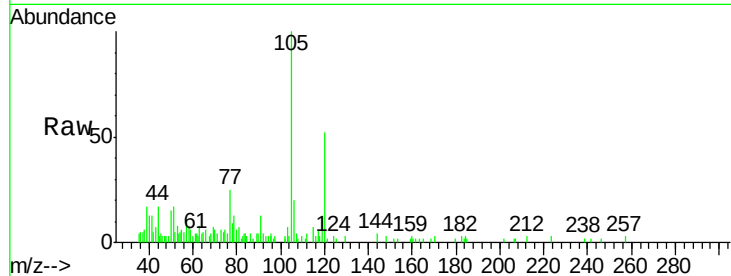
50-50

Tot Ion:105 Resp: 4359

Ion Ratio Lower Upper

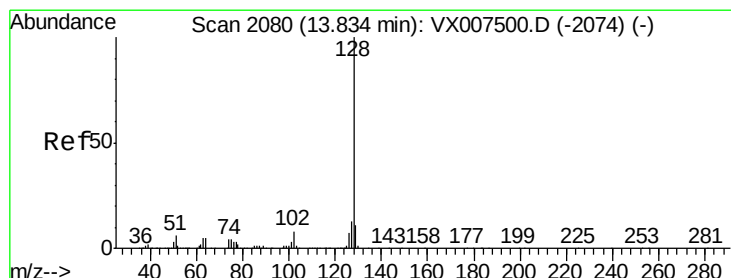
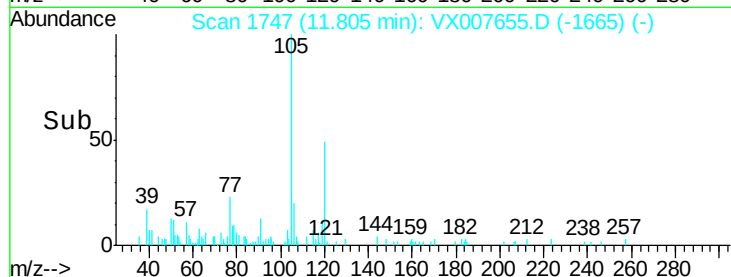
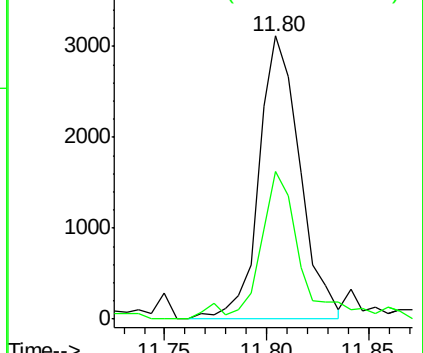
105 100

120 44.8 0.0 94.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#91

Naphthalene

Concen: 0.423 ug/l

RT: 13.83 min Scan# 2080

Delta R.T. 0.00 min

Lab File: VX007655.D

Acq: 22 Feb 2019 13:09

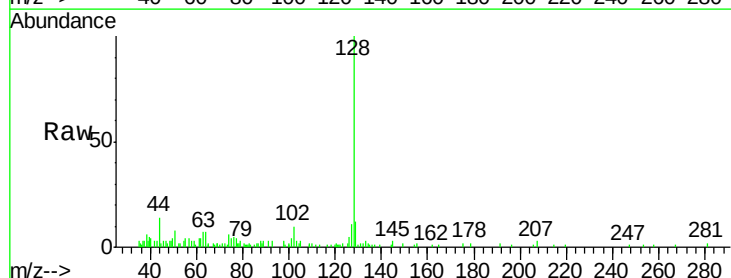
Tgt Ion:128 Resp: 7783

Ion Ratio Lower Upper

128 100

127 14.5 10.5 15.7

129 16.0 8.9 13.3#



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

