

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX020819\
 Data File : VX007452.D
 Acq On : 08 Feb 2019 19:42
 Operator : JC/SP
 Sample : K1451-01
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :

Quant Time: Feb 08 23:01:33 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X012519W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Mon Jan 28 10:35:22 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.02	128	74081	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.86	114	398281	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.12	117	348691	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.07	65	146883	30.21	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	100.70%
60) 4-Bromofluorobenzene	11.13	95	152563	28.35	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	94.50%
63) Toluene-d8	8.71	98	466258	29.67	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	98.90%

Target Compounds

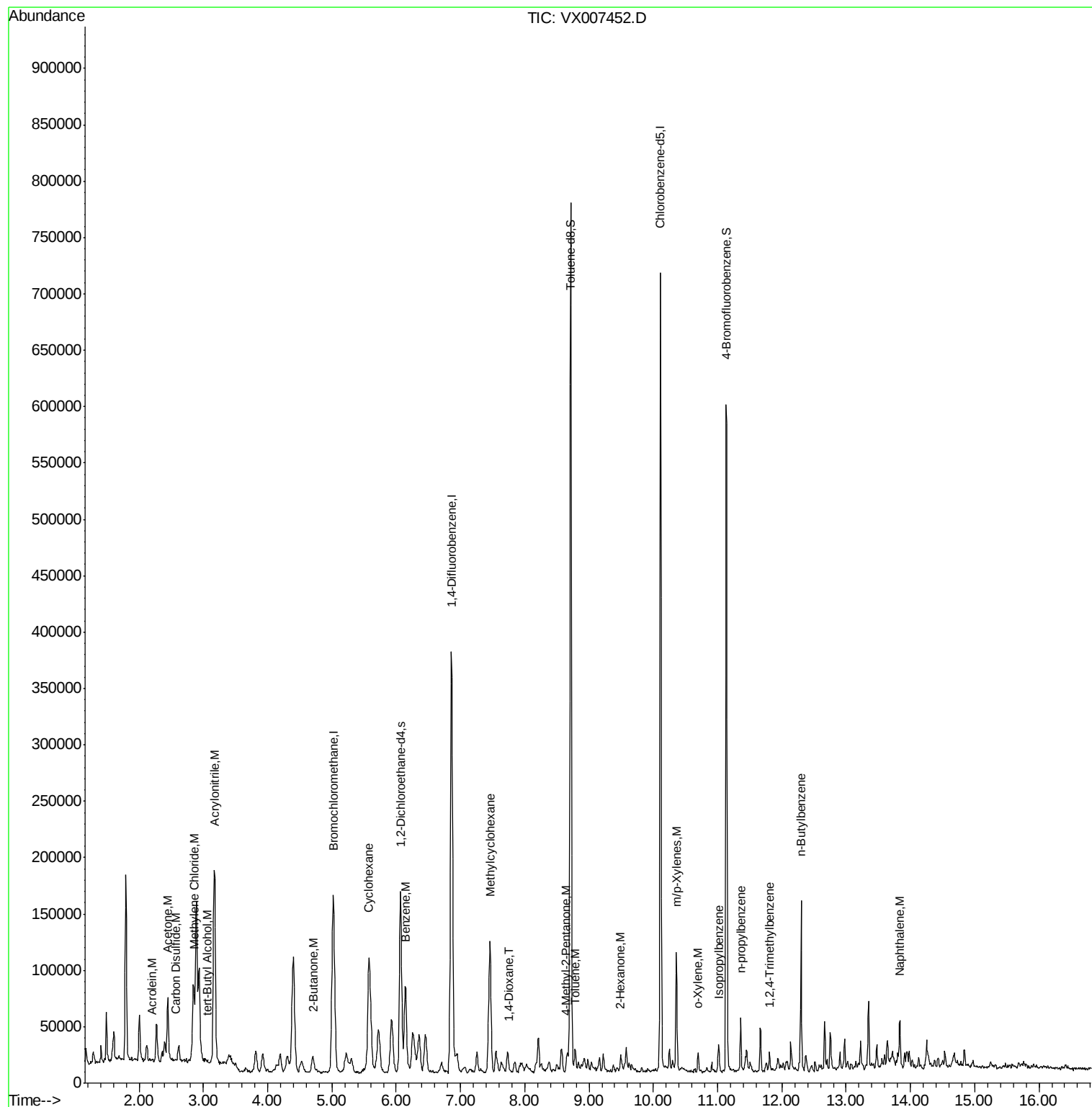
					Ovalue
13) Acrolein	2.19	56	300	0.636 ug/l	83
14) Acrylonitrile	3.17	53	4614	1.893 ug/l #	29
15) Acetone	2.45	58	19189	27.692 ug/l	93
16) Carbon Disulfide	2.57	76	2473	0.268 ug/l #	94
18) Methylene Chloride	2.86	84	3271	0.742 ug/l #	57
23) tert-Butyl Alcohol	3.06	59	1245	1.215 ug/l #	84
26) Cyclohexane	5.57	56	68237	11.462 ug/l #	94
30) 2-Butanone	4.71	43	25272	8.146 ug/l #	94
34) Benzene	6.14	78	93046	5.810 ug/l	95
38) Methylcyclohexane	7.46	83	52424	7.967 ug/l	90
45) 1,4-Dioxane	7.76	88	78	0.712 ug/l #	1
58) 4-Methyl-2-Pentanone	8.64	43	4501	0.772 ug/l	96
59) 2-Hexanone	9.49	43	6392	1.417 ug/l	95
62) Toluene	8.78	91	12161	0.693 ug/l	97
67) m/p-Xylenes	10.36	106	25609	3.410 ug/l	96
68) o-Xylene	10.69	106	3989	0.542 ug/l	89
70) Isopropylbenzene	11.02	105	12709	0.653 ug/l	98
74) n-propylbenzene	11.36	91	26901	1.227 ug/l	97
80) 1,2,4-Trimethylbenzene	11.80	105	7167	0.435 ug/l	94
85) n-Butylbenzene	12.30	91	9168	0.607 ug/l	57
91) Naphthalene	13.83	128	25894	1.306 ug/l	96

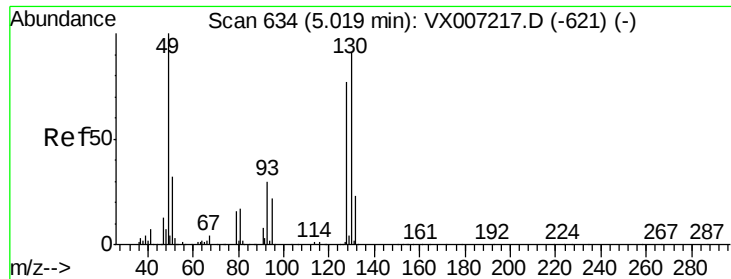
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA X\METHOD\624X012519W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Mon Jan 28 10:35:22 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 5.02 min Scan# 634

Delta R.T. -0.00 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :
MSVOA_X
ClientSampled :

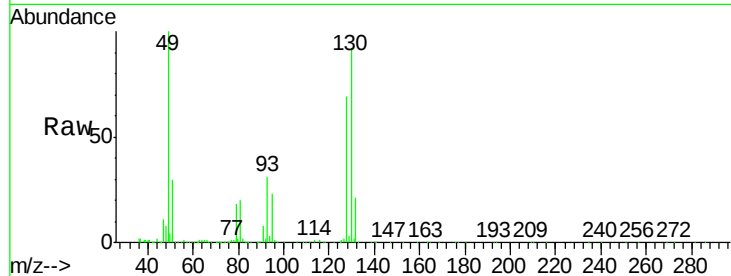
Tot Ion:128 Resp: 74081

Ion Ratio Lower Upper

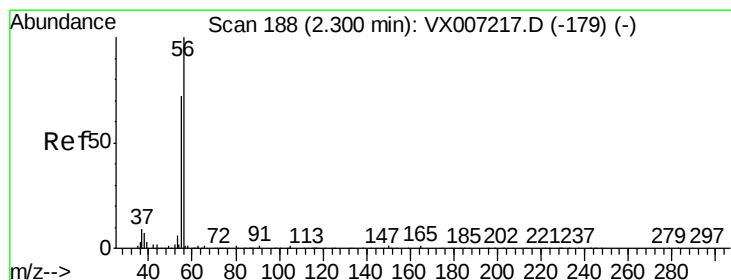
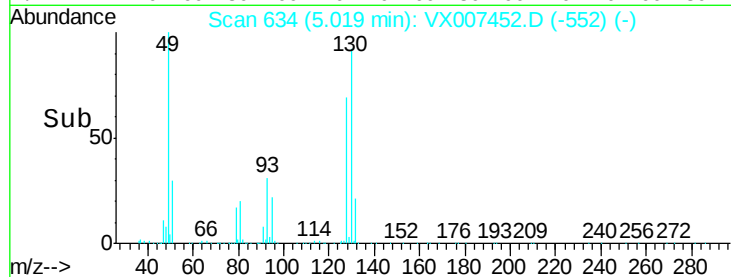
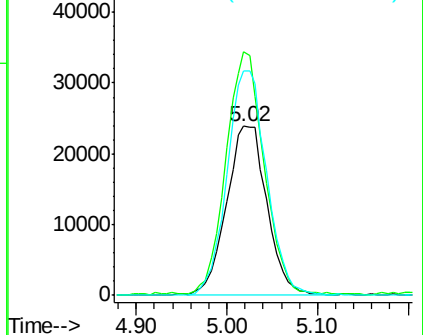
128 100

49 136.1 0.0 345.5

130 129.4 0.0 320.0



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



#13

Acrolein

Concen: 0.636 ug/l

RT: 2.19 min Scan# 170

Delta R.T. -0.11 min

Lab File: VX007452.D

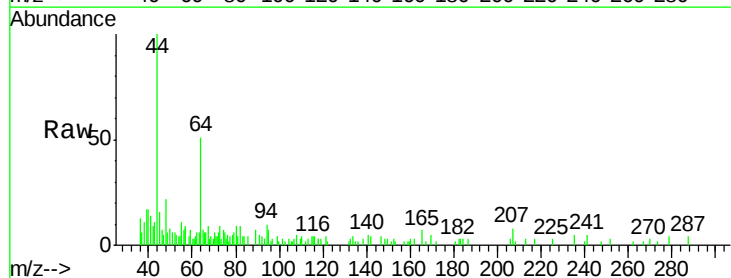
Acq: 08 Feb 2019 19:42

Tgt Ion: 56 Resp: 300

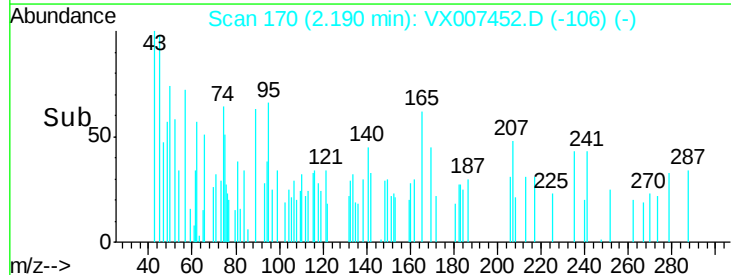
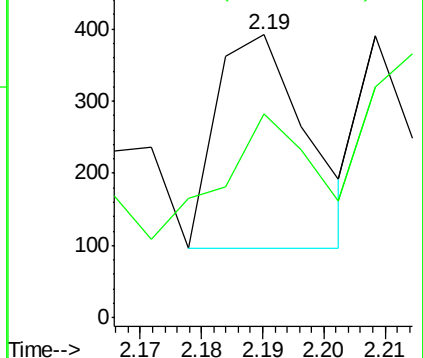
Ion Ratio Lower Upper

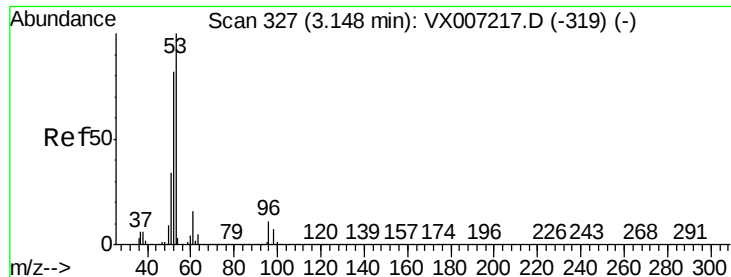
56 100

55 59.0 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: 1.893 ug/l

RT: 3.17 min Scan# 330

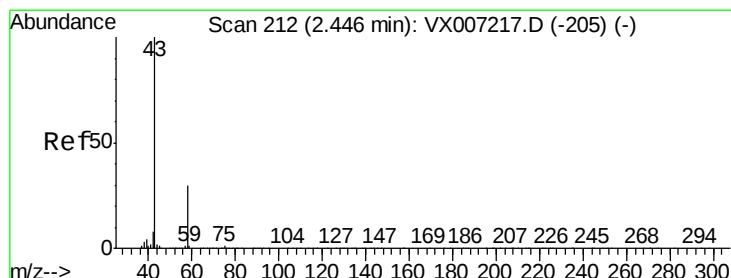
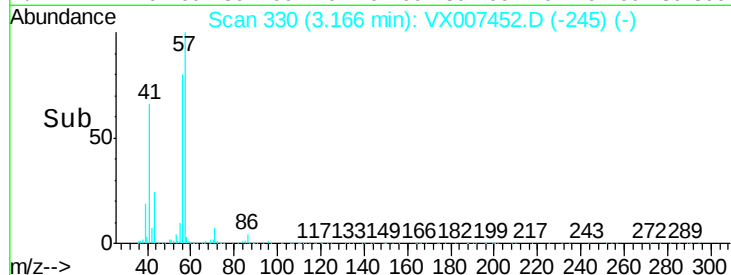
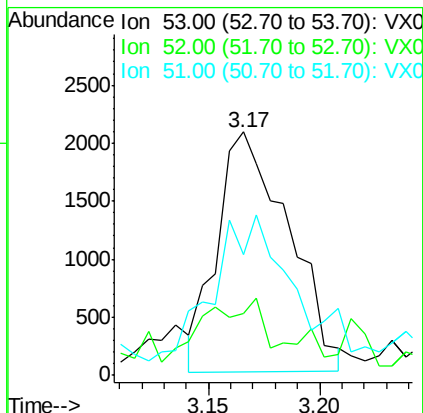
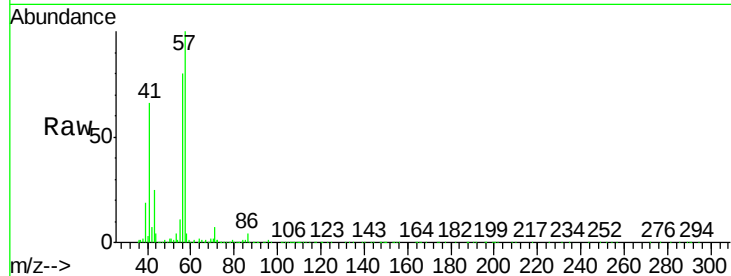
Delta R.T. 0.02 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :
MSVOA_X
ClientSampled :

Tot Ion: 53 Resp: 4614
Ion Ratio Lower Upper
53 100
52 8.3 41.3 124.1#
51 9.2 17.9 53.8#



#15

Acetone

Concen: 27.692 ug/l

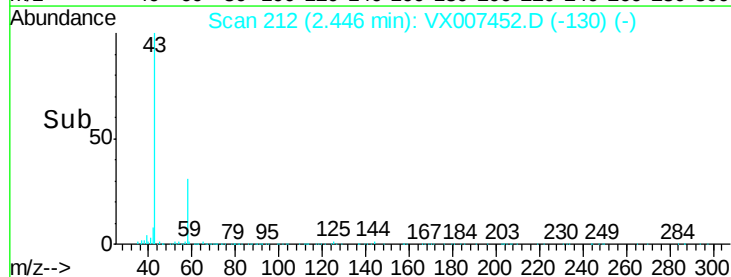
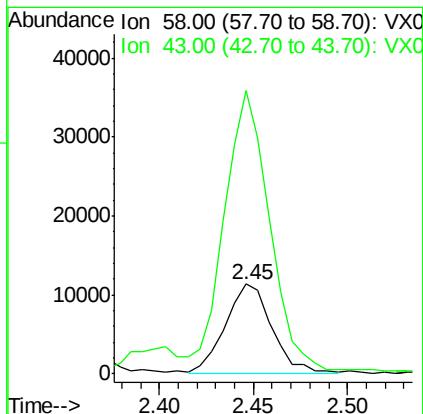
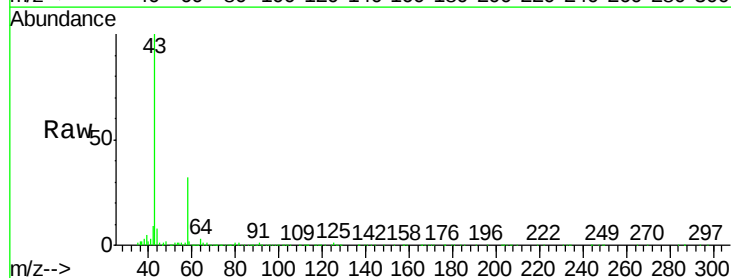
RT: 2.45 min Scan# 212

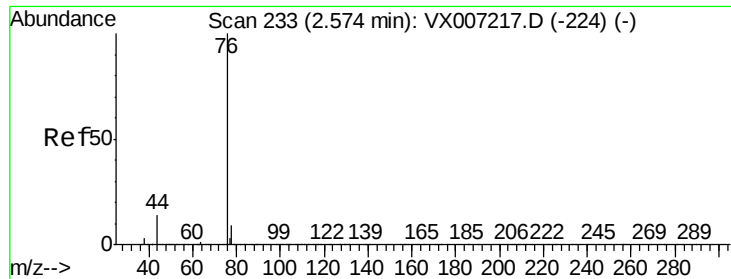
Delta R.T. -0.00 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Tgt Ion: 58 Resp: 19189
Ion Ratio Lower Upper
58 100
43 318.4 265.9 398.9

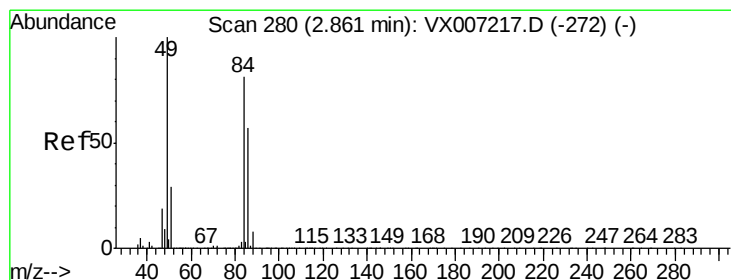
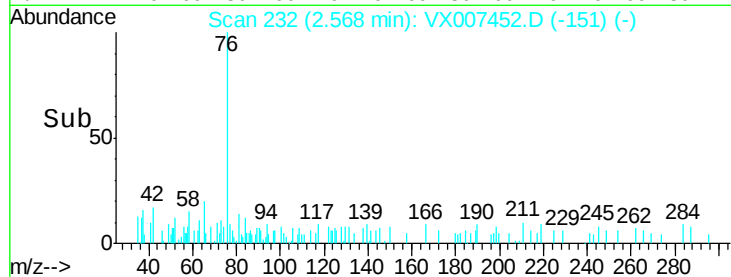
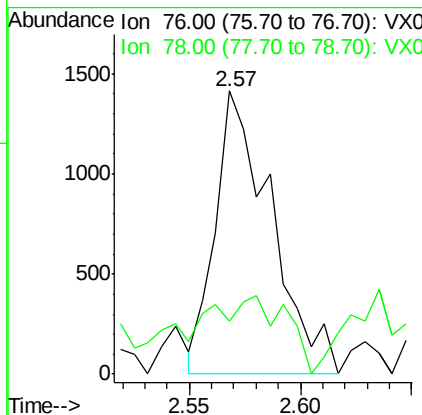
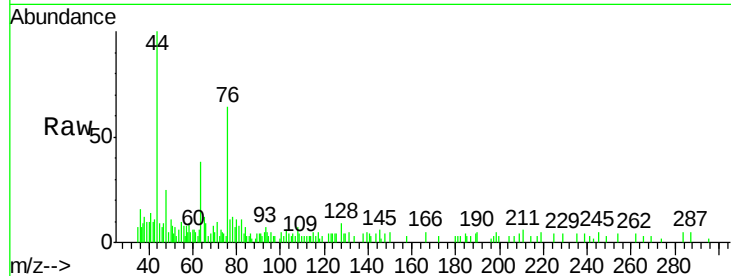




#16
Carbon Disulfide
Concen: 0.268 ug/l
RT: 2.57 min Scan# 232
Delta R.T. -0.01 min
Lab File: VX007452.D
Acq: 08 Feb 2019 19:42

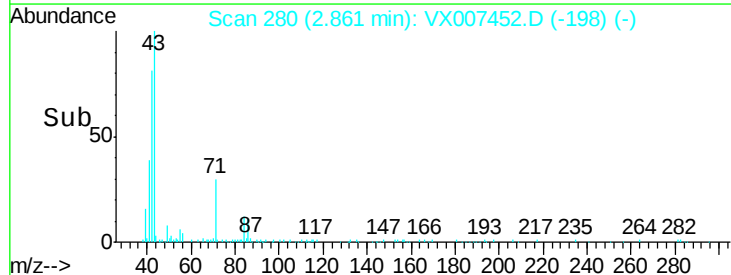
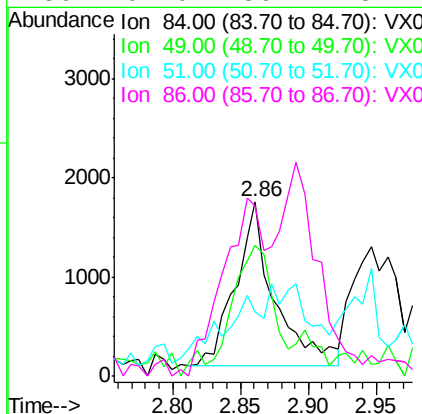
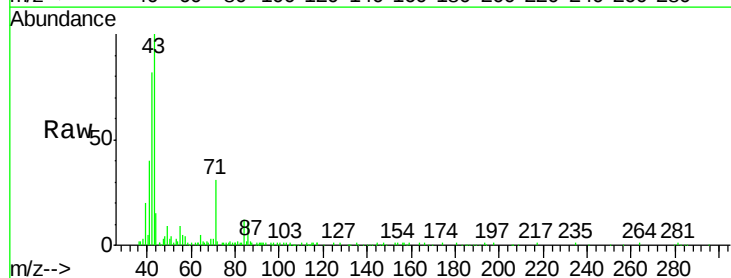
Instrument :
MSVOA_X
ClientSampleId :

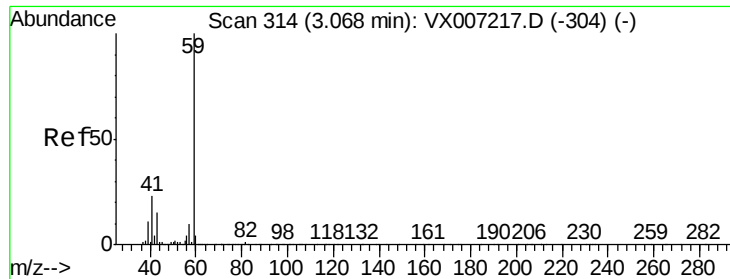
Tot Ion: 76 Resp: 2473
Ion Ratio Lower Upper
76 100
78 7.2 7.7 11.5#



#18
Methylene Chloride
Concen: 0.742 ug/l
RT: 2.86 min Scan# 280
Delta R.T. -0.00 min
Lab File: VX007452.D
Acq: 08 Feb 2019 19:42

Tgt Ion: 84 Resp: 3271
Ion Ratio Lower Upper
84 100
49 72.4 98.4 147.6#
51 14.4 28.9 43.3#
86 104.0 56.1 84.1#



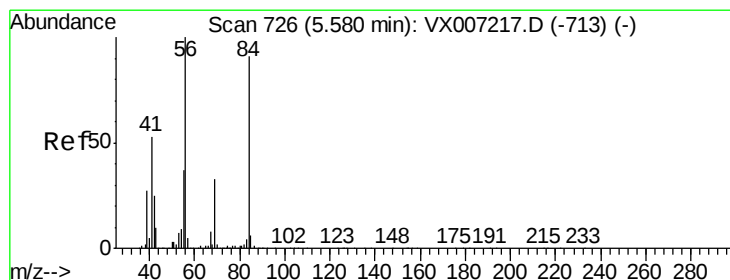
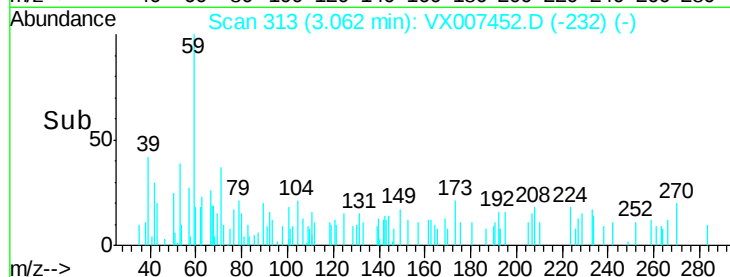
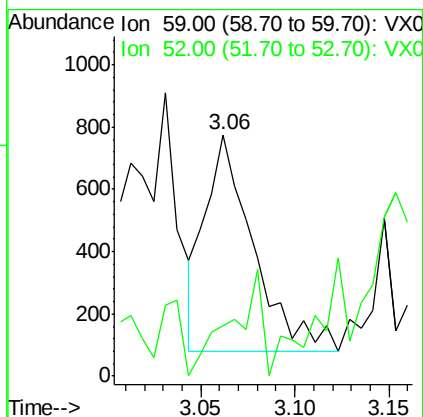
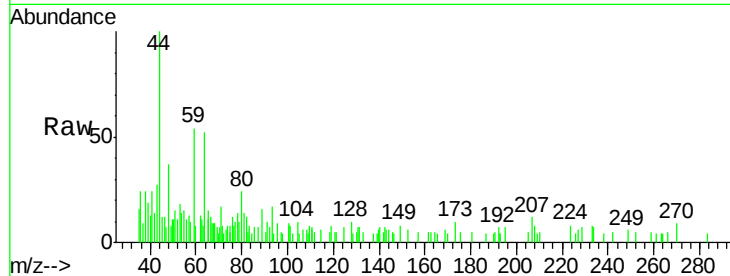


#23

tert-Butyl Alcohol
 Concen: 1.215 ug/l
 RT: 3.06 min Scan# 313
 Delta R.T. -0.01 min
 Lab File: VX007452.D
 Acq: 08 Feb 2019 19:42

Instrument :
 MSVOA_X
 ClientSampleId :

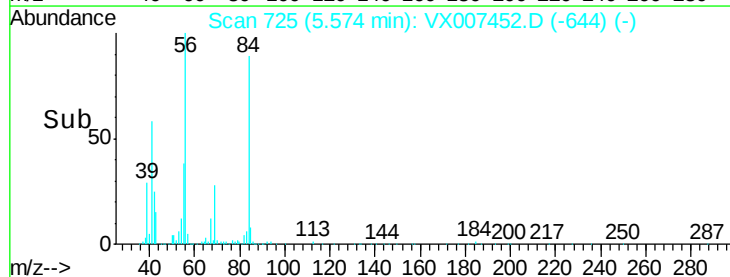
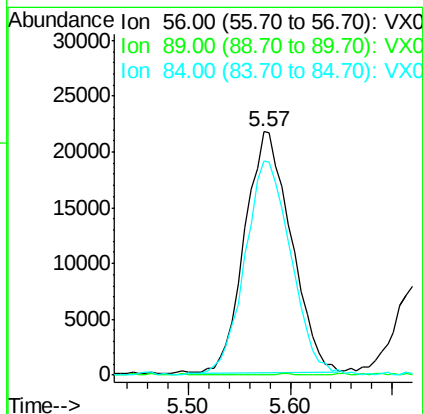
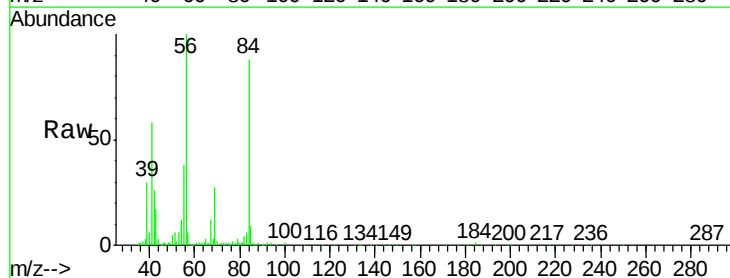
Tot Ion: 59 Resp: 1245
 Ion Ratio Lower Upper
 59 100
 52 20.7 0.2 0.2#

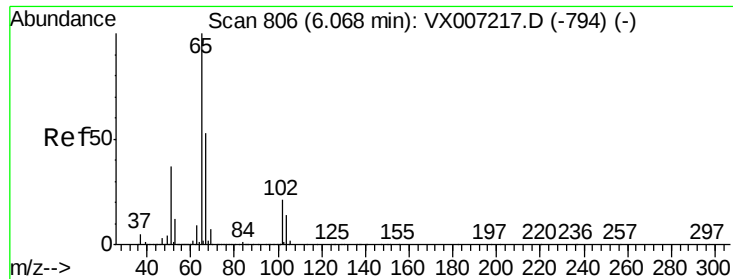


#26

Cyclohexane
 Concen: 11.462 ug/l
 RT: 5.57 min Scan# 725
 Delta R.T. -0.01 min
 Lab File: VX007452.D
 Acq: 08 Feb 2019 19:42

Tgt Ion: 56 Resp: 68237
 Ion Ratio Lower Upper
 56 100
 89 0.2 0.1 0.1#
 84 87.3 74.2 111.2





#27

1,2-Dichloroethane-d4

Concen: 30.205 ug/l

RT: 6.07 min Scan# 806

Delta R.T. 0.00 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :

MSVOA_X

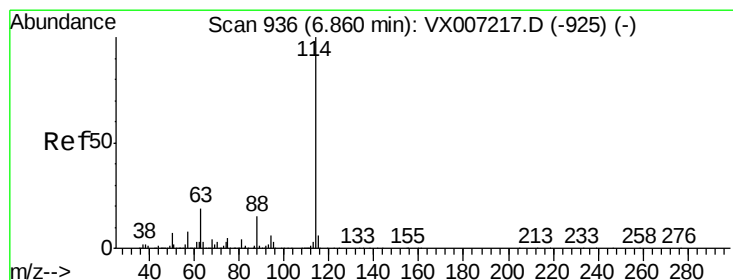
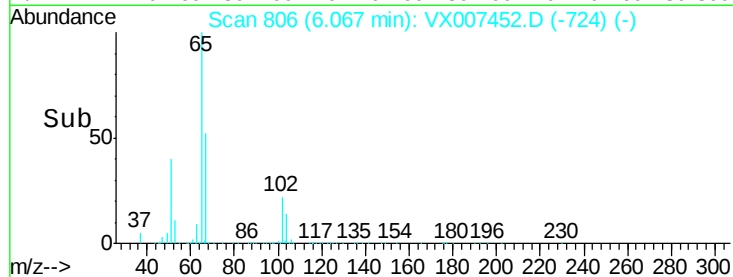
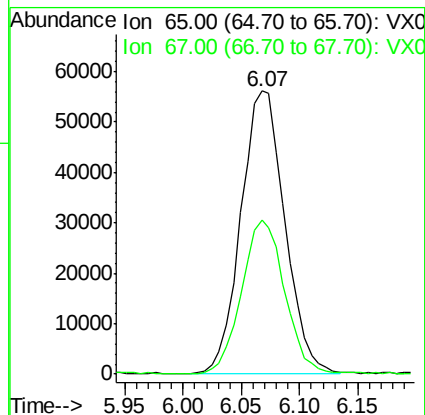
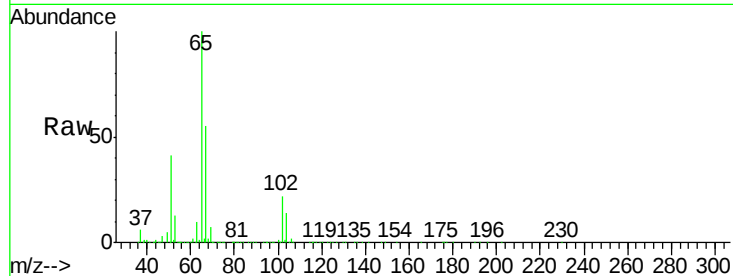
ClientSampleId :

Tot Ion: 65 Resp: 146883

Ion Ratio Lower Upper

65 100

67 53.5 42.0 63.0



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.86 min Scan# 936

Delta R.T. -0.00 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

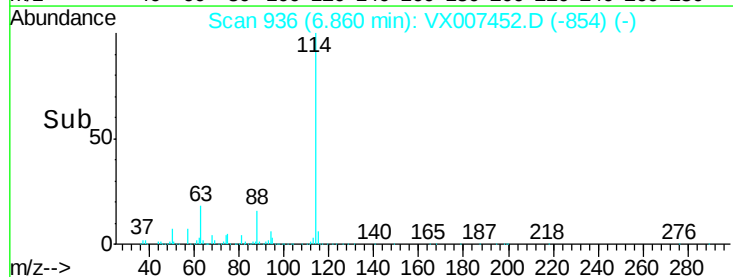
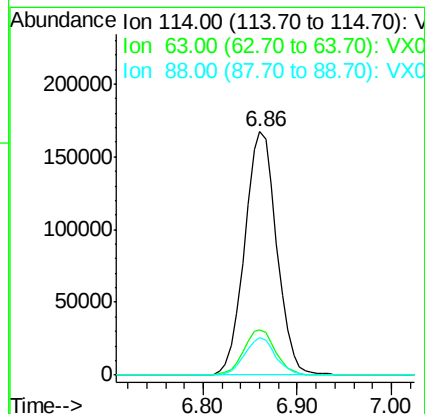
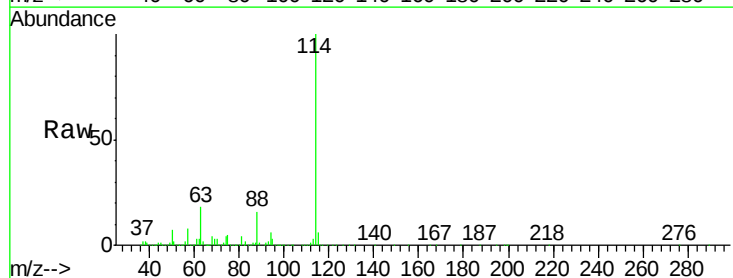
Tgt Ion: 114 Resp: 398281

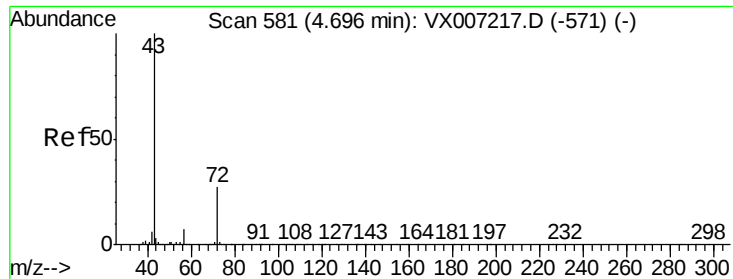
Ion Ratio Lower Upper

114 100

63 18.6 14.6 21.8

88 14.8 11.8 17.6





#30

2-Butanone

Concen: 8.146 ug/l

RT: 4.71 min Scan# 583

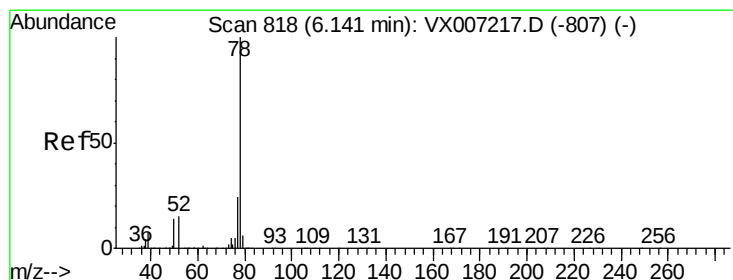
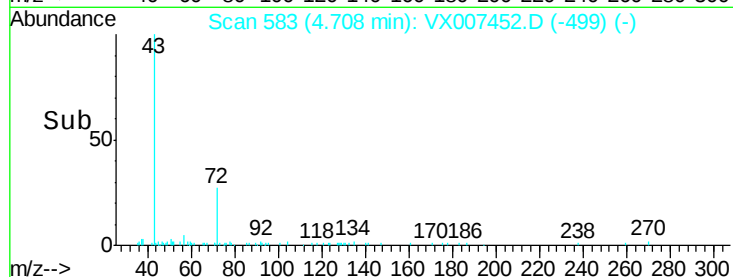
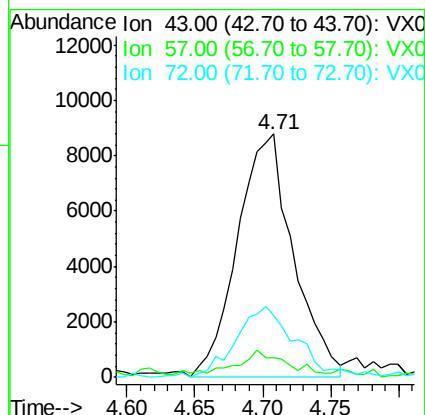
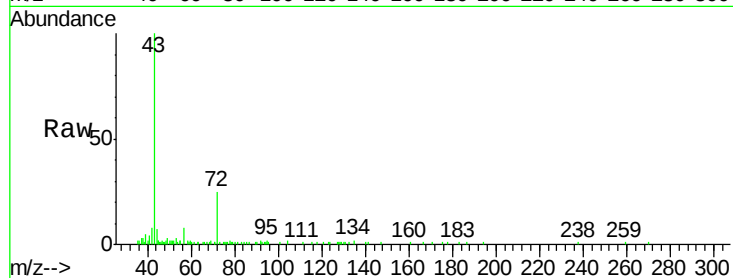
Delta R.T. 0.01 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion:	43	Resp:	25272
Ion	Ratio	Lower	Upper
43	100		
57	5.8	3.3	4.9#
72	24.5	22.0	33.0



#34

Benzene

Concen: 5.810 ug/l

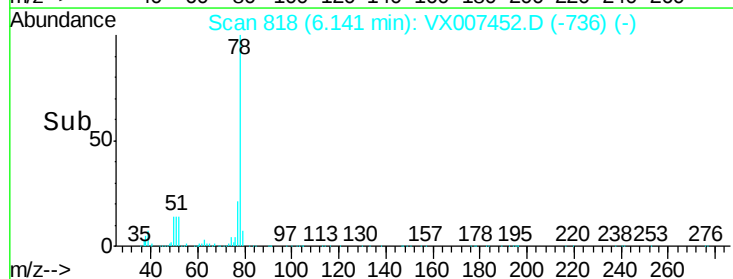
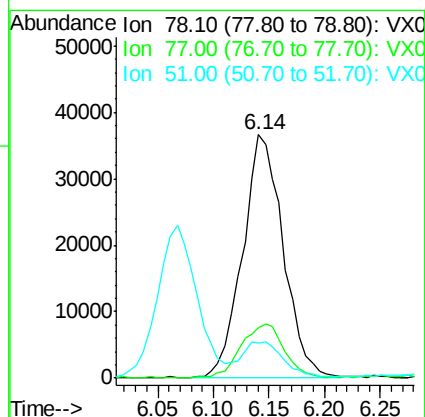
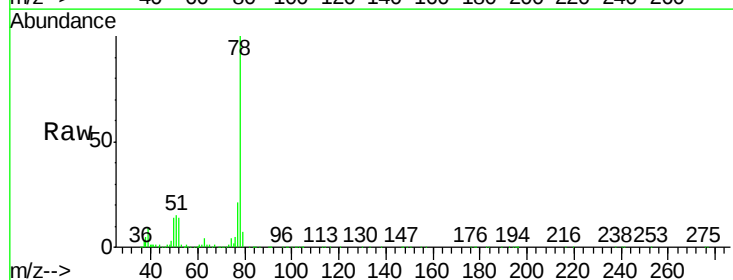
RT: 6.14 min Scan# 818

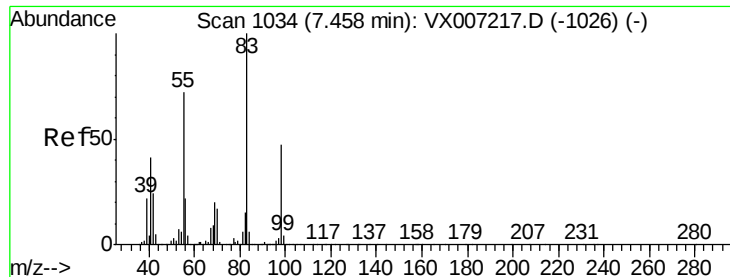
Delta R.T. -0.00 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Tgt Ion:	78	Resp:	93046
Ion	Ratio	Lower	Upper
78	100		
77	20.8	19.1	28.7
51	14.0	12.4	18.6





#38

Methylcyclohexane

Concen: 7.967 ug/l

RT: 7.46 min Scan# 1035

Delta R.T. 0.01 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :

MSVOA_X

ClientSampleId :

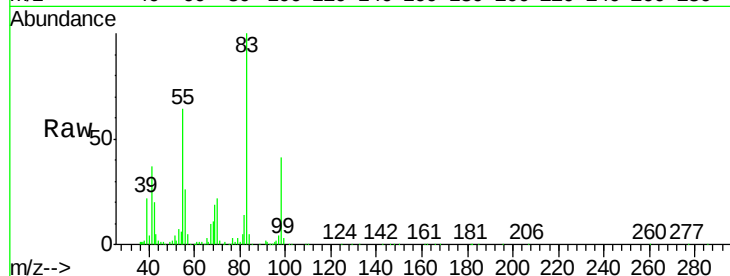
Tot Ion: 83 Resp: 52424

Ion Ratio Lower Upper

83 100

55 86.4 36.6 109.8

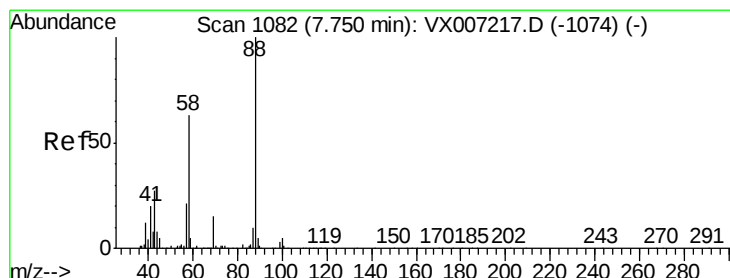
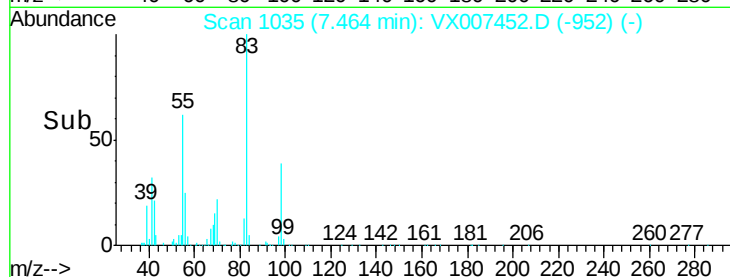
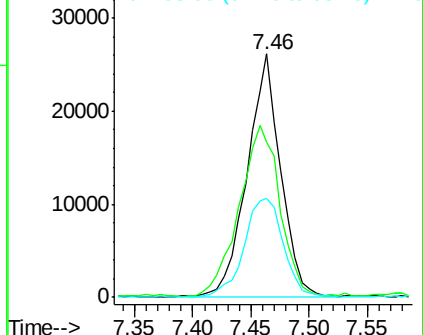
98 48.1 24.1 72.4



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



#45

1,4-Dioxane

Concen: 0.712 ug/l

RT: 7.76 min Scan# 1084

Delta R.T. 0.01 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

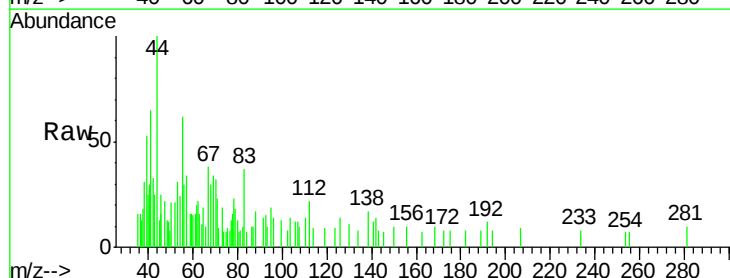
Tgt Ion: 88 Resp: 78

Ion Ratio Lower Upper

88 100

43 201.3 23.5 35.3#

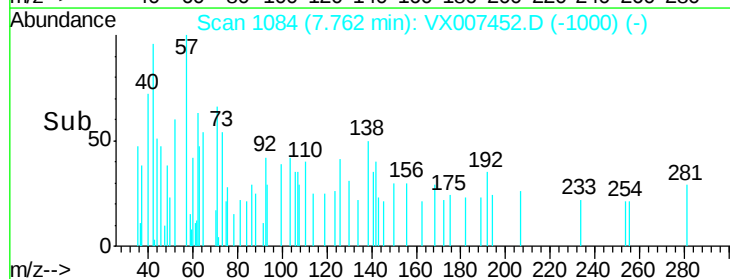
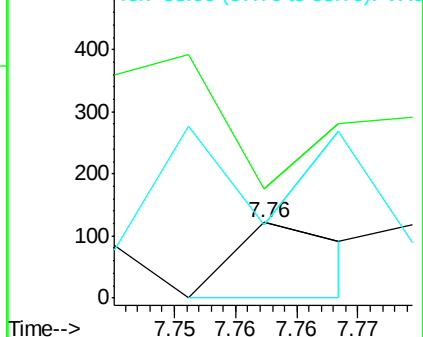
58 230.8 51.6 77.4#

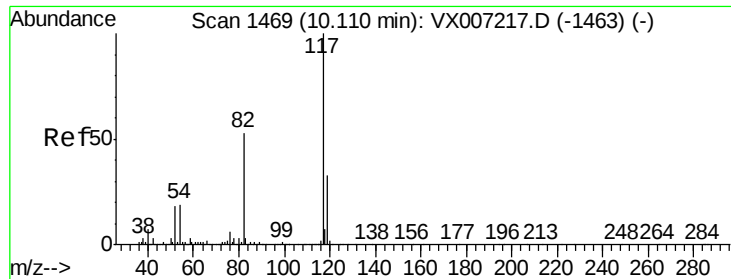


Abundance Ion 88.00 (87.70 to 88.70): VX0

Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

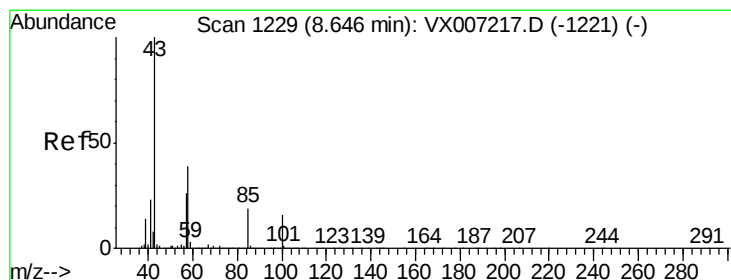
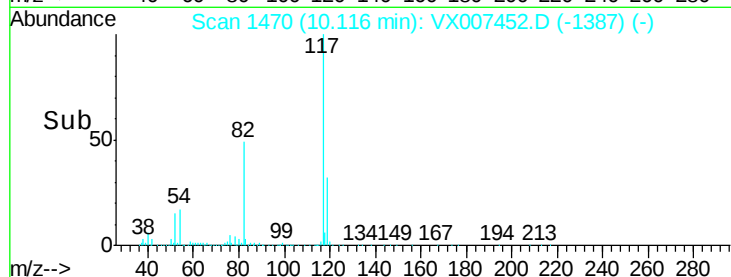
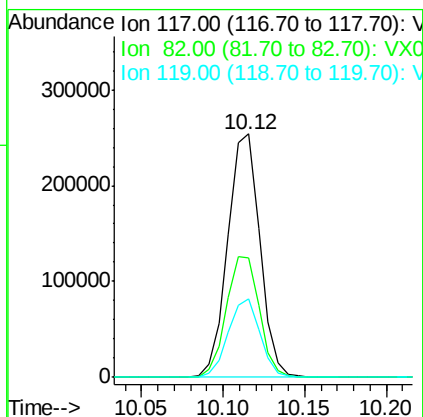
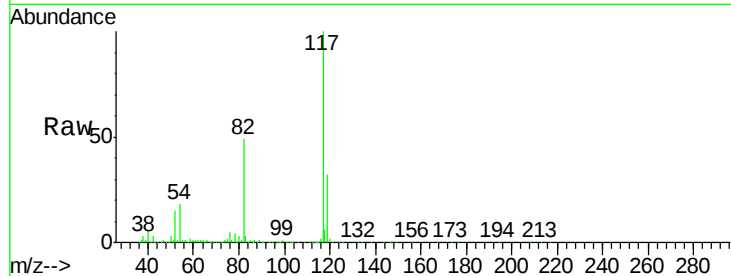




#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.12 min Scan# 1470
Delta R.T. 0.01 min
Lab File: VX007452.D
Acq: 08 Feb 2019 19:42

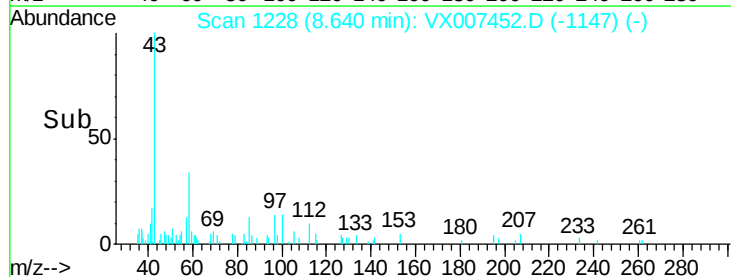
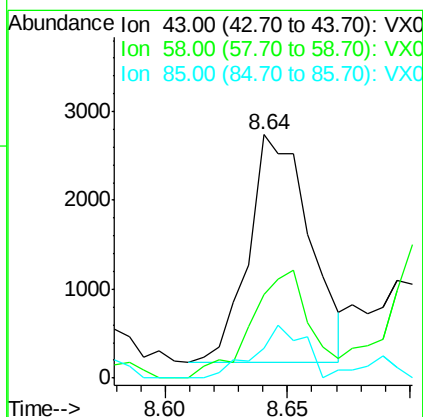
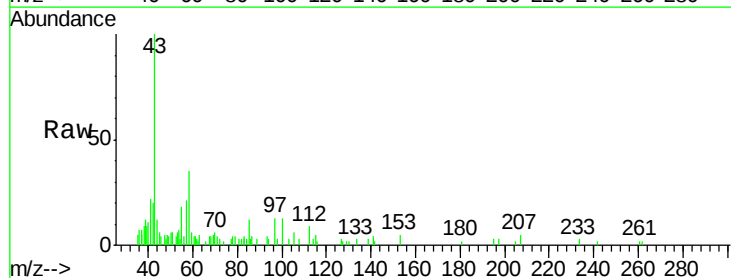
Instrument :
MSVOA_X
ClientSampleId :

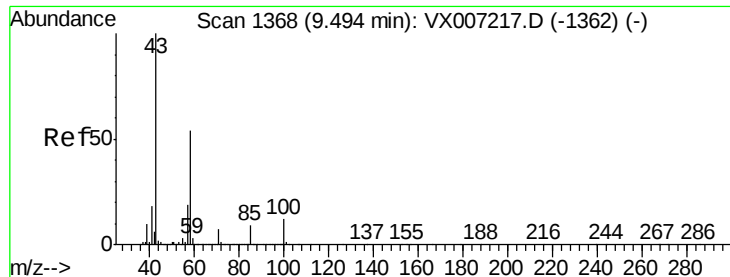
Tot Ion	Ratio	Lower	Upper
117	100		
82	51.0	41.4	62.0
119	31.9	25.7	38.5



#58
4-Methyl-2-Pentanone
Concen: 0.772 ug/l
RT: 8.64 min Scan# 1228
Delta R.T. -0.01 min
Lab File: VX007452.D
Acq: 08 Feb 2019 19:42

Tgt Ion	Ratio	Lower	Upper
43	100		
58	35.8	31.6	47.4
85	18.4	14.9	22.3

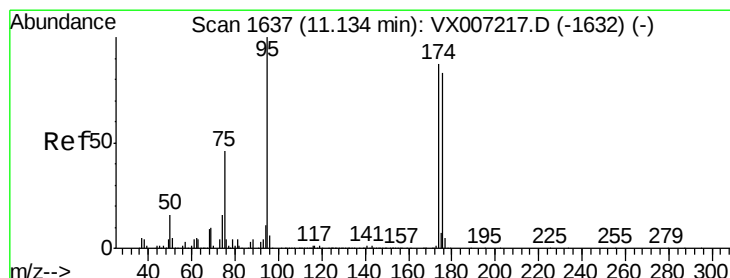
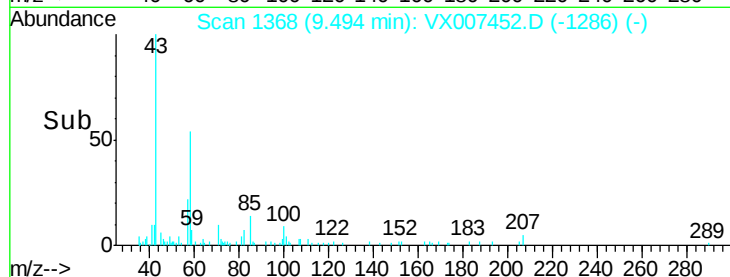
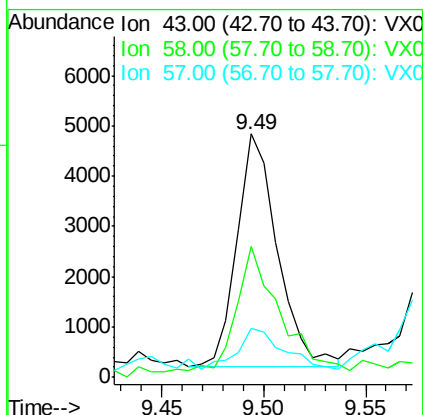
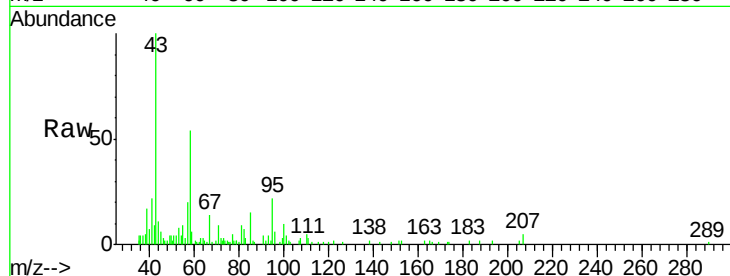




#59
2-Hexanone
Concen: 1.417 ug/l
RT: 9.49 min Scan# 1368
Delta R.T. -0.00 min
Lab File: VX007452.D
Acq: 08 Feb 2019 19:42

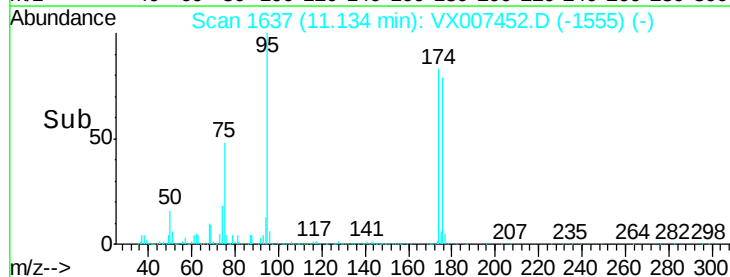
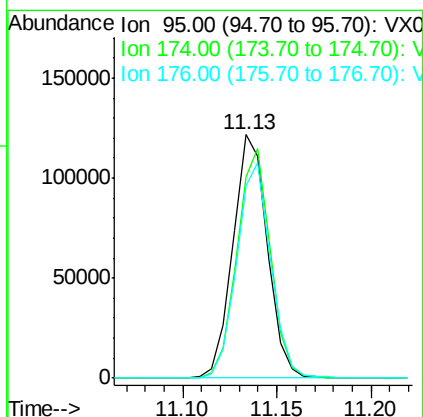
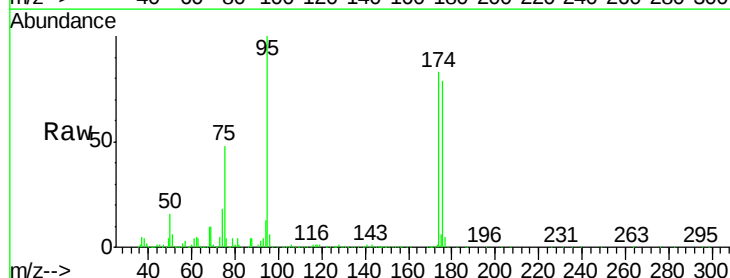
Instrument :
MSVOA_X
ClientSampleId :

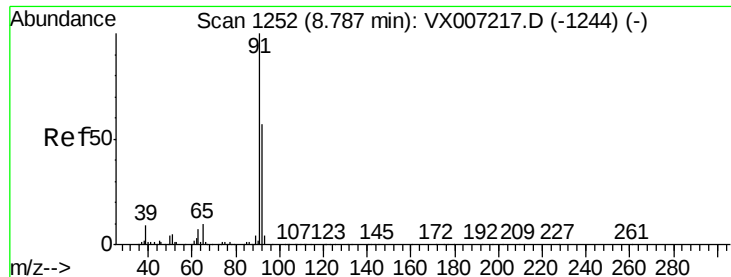
Tot Ion: 43 Resp: 6392
Ion Ratio Lower Upper
43 100
58 57.5 42.8 64.2
57 20.2 14.8 22.2



#60
4-Bromofluorobenzene
Concen: 28.348 ug/l
RT: 11.13 min Scan# 1637
Delta R.T. -0.00 min
Lab File: VX007452.D
Acq: 08 Feb 2019 19:42

Tgt Ion: 95 Resp: 152563
Ion Ratio Lower Upper
95 100
174 93.0 74.8 112.2
176 88.6 72.5 108.7





#62

Toluene

Concen: 0.693 ug/l

RT: 8.78 min Scan# 1251

Delta R.T. -0.01 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :

MSVOA_X

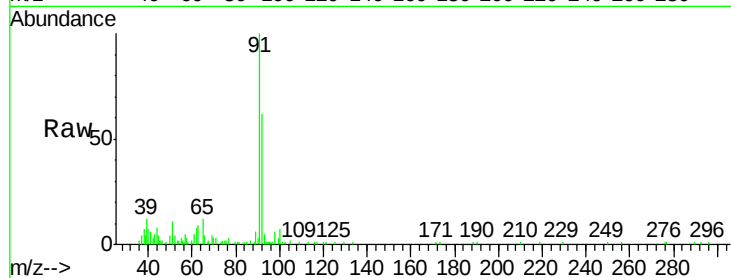
ClientSampleId :

Tot Ion: 91 Resp: 12161

Ion Ratio Lower Upper

91 100

92 59.8 46.0 69.0



Abundance Ion 91.00 (90.70 to 91.70): VX0

Ion 92.00 (91.70 to 92.70): VX0

8.78

8000

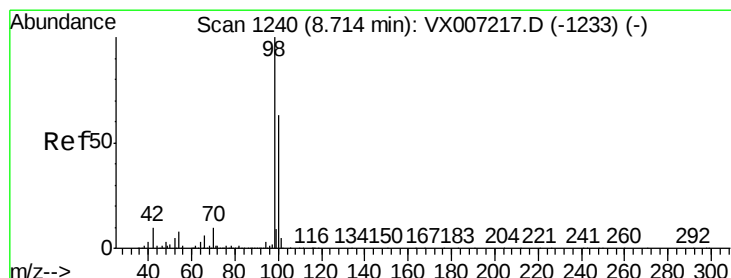
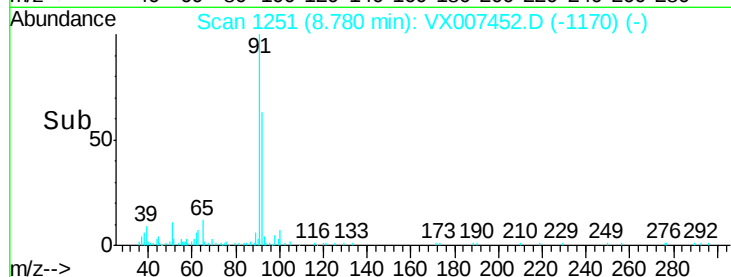
6000

4000

2000

0

Time--> 8.70 8.75 8.80



#63

Toluene-d8

Concen: 29.666 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. -0.00 min

Lab File: VX007452.D

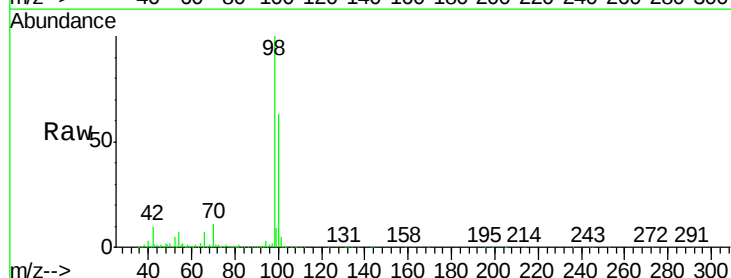
Acq: 08 Feb 2019 19:42

Tgt Ion: 98 Resp: 466258

Ion Ratio Lower Upper

98 100

100 64.1 49.9 74.9



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

8.71

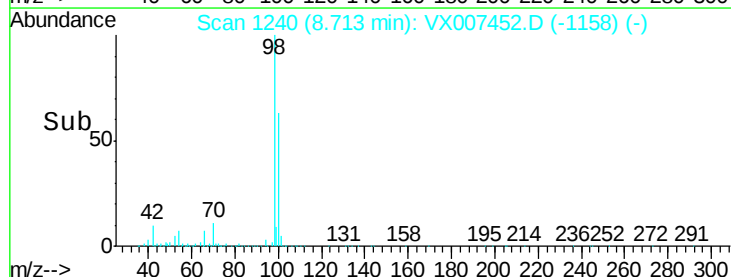
300000

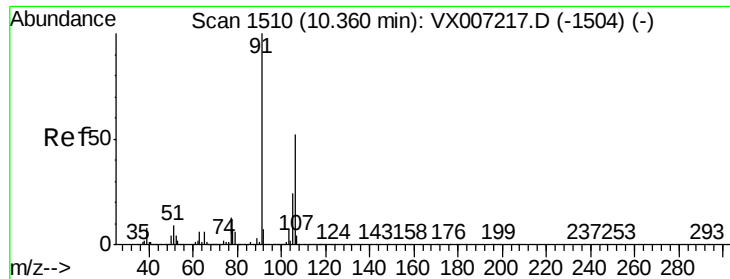
200000

100000

0

Time--> 8.70 8.80





#67

m/p-Xylenes

Concen: 3.410 ug/l

RT: 10.36 min Scan# 1510

Delta R.T. -0.00 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :

MSVOA_X

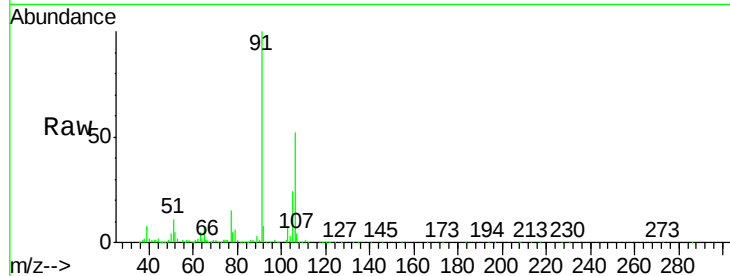
ClientSampleId :

Tot Ion:106 Resp: 25609

Ion Ratio Lower Upper

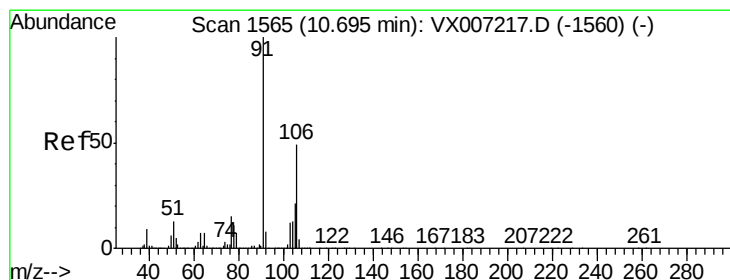
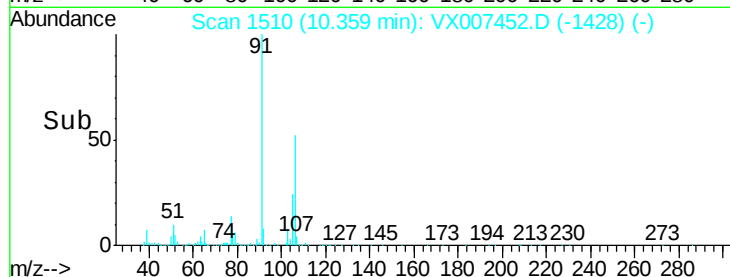
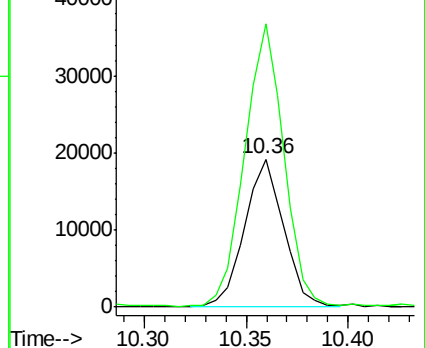
106 100

91 191.0 157.6 236.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0



#68

o-Xylene

Concen: 0.542 ug/l

RT: 10.69 min Scan# 1565

Delta R.T. -0.00 min

Lab File: VX007452.D

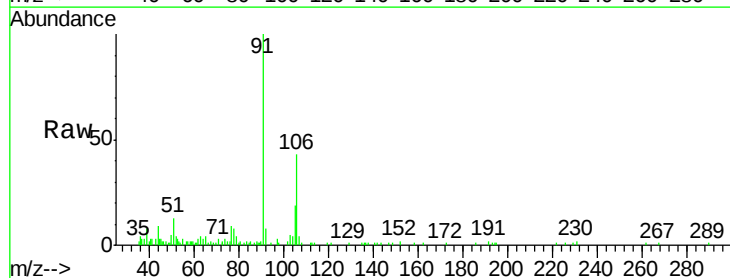
Acq: 08 Feb 2019 19:42

Tgt Ion:106 Resp: 3989

Ion Ratio Lower Upper

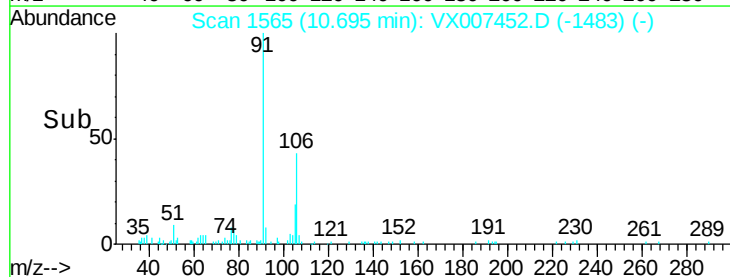
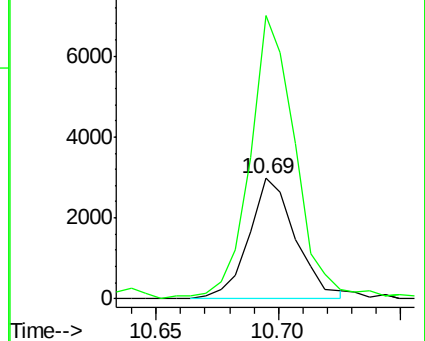
106 100

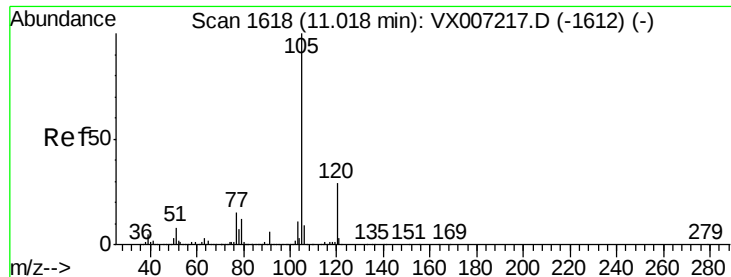
91 224.5 103.6 310.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VX0





#70

Isopropylbenzene

Concen: 0.653 ug/l

RT: 11.02 min Scan# 1618

Delta R.T. -0.00 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :

MSVOA_X

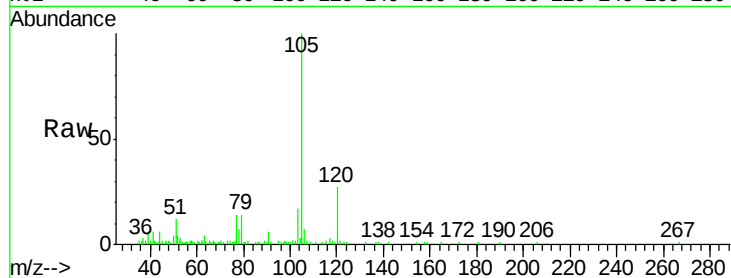
ClientSampled :

Tot Ion:105 Resp: 12709

Ion Ratio Lower Upper

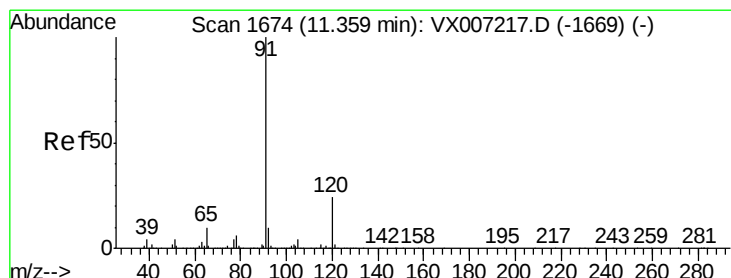
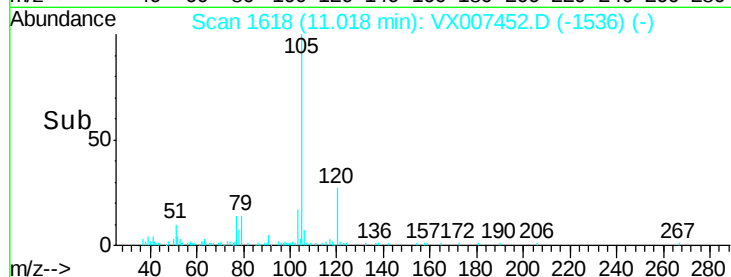
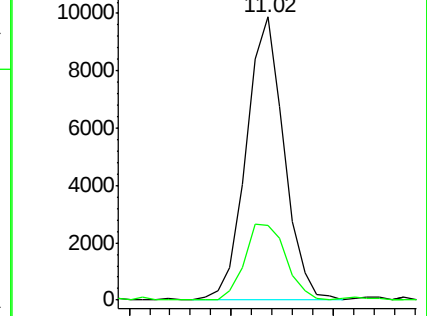
105 100

120 29.3 19.9 36.9



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#74

n-propylbenzene

Concen: 1.227 ug/l

RT: 11.36 min Scan# 1674

Delta R.T. -0.00 min

Lab File: VX007452.D

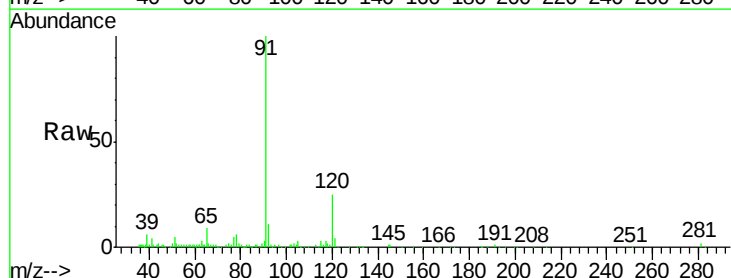
Acq: 08 Feb 2019 19:42

Tgt Ion: 91 Resp: 26901

Ion Ratio Lower Upper

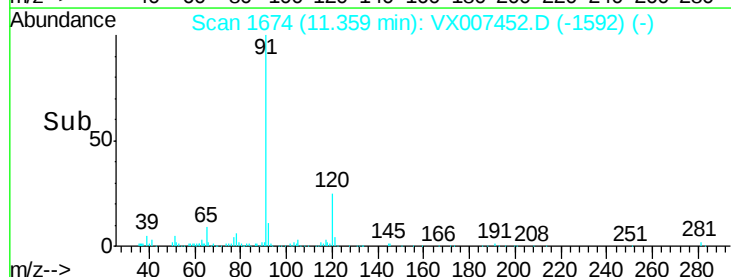
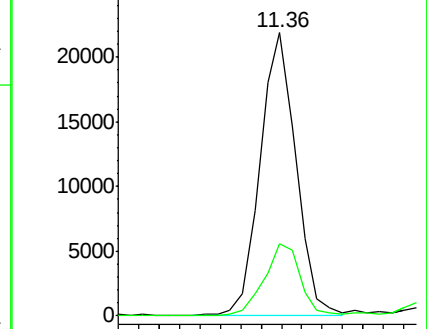
91 100

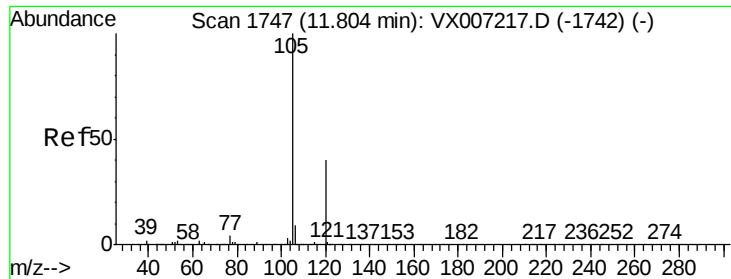
120 25.7 0.0 48.0



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: 0.435 ug/l

RT: 11.80 min Scan# 1747

Delta R.T. -0.00 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :

MSVOA_X

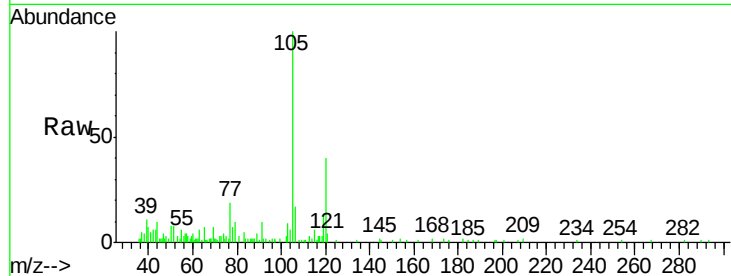
ClientSampleId :

Tot Ion: 105 Resp: 7167

Ion Ratio Lower Upper

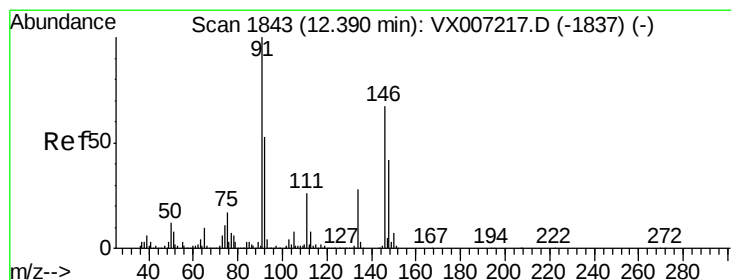
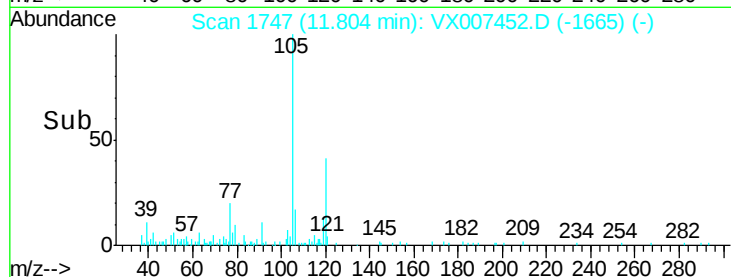
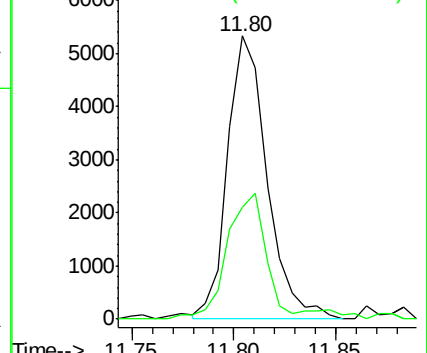
105 100

120 43.2 0.0 94.4



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#85

n-Butylbenzene

Concen: 0.607 ug/l

RT: 12.30 min Scan# 1828

Delta R.T. -0.09 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

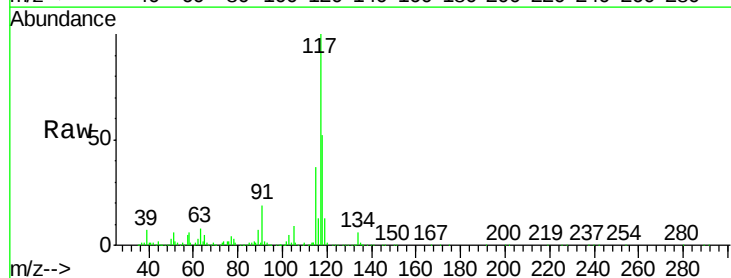
Tgt Ion: 91 Resp: 9168

Ion Ratio Lower Upper

91 100

92 11.0 0.0 106.2

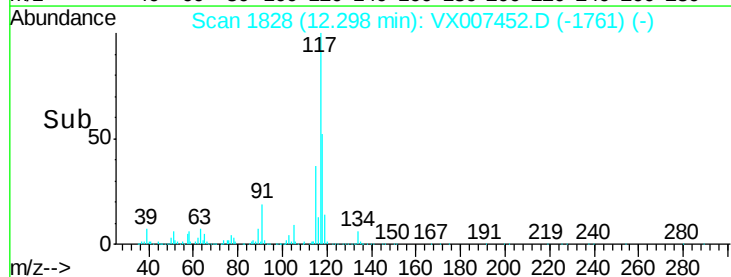
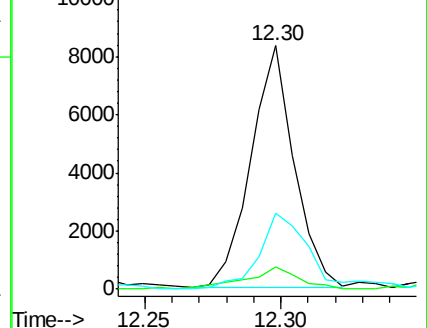
134 34.2 0.0 55.4

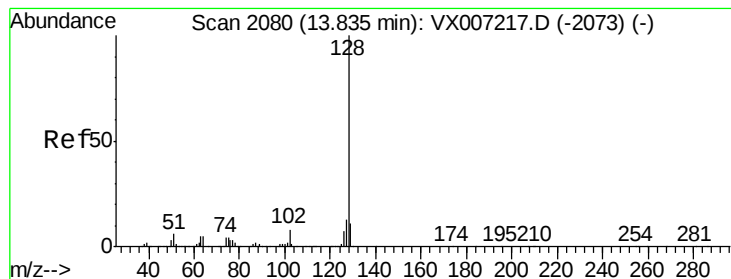


Abundance Ion 91.00 (90.70 to 91.70): VX0

Ion 92.00 (91.70 to 92.70): VX0

Ion 134.00 (133.70 to 134.70): V





#91

Naphthalene

Concen: 1.306 ug/l

RT: 13.83 min Scan# 2080

Delta R.T. -0.00 min

Lab File: VX007452.D

Acq: 08 Feb 2019 19:42

Instrument :

MSVOA_X

ClientSampleId :

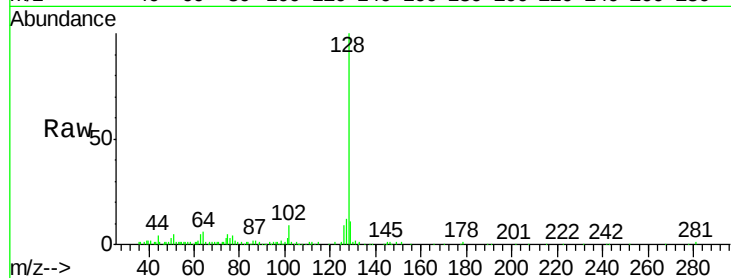
Tot Ion:128 Resp: 25894

Ion Ratio Lower Upper

128 100

127 14.7 10.6 16.0

129 12.5 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

