

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX062719\
 Data File : VX010519.D
 Acq On : 28 Jun 2019 04:57
 Operator : JC/SP
 Sample : K3159-10
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 50 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :

Quant Time: Jun 28 06:57:39 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X061919W.M
 Quant Title : SW846 8260
 QLast Update : Thu Jun 20 03:31:56 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.67	168	261887	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.86	114	402554	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	372605	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	169192	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.07	65	123396	50.25	ug/l	0.00
Spiked Amount			Recovery	=	100.50%	
35) Dibromofluoromethane	5.50	113	120927	49.10	ug/l	0.00
Spiked Amount			Recovery	=	98.20%	
50) Toluene-d8	8.71	98	478450	50.78	ug/l	0.00
Spiked Amount			Recovery	=	101.56%	
62) 4-Bromofluorobenzene	11.13	95	158261	46.52	ug/l	0.00
Spiked Amount			Recovery	=	93.04%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	1.65	94	416	0.368	ug/l #	59
6) Chloroethane	1.71	64	557	0.407	ug/l #	42
11) Tert butyl alcohol	3.05	59	746	1.161	ug/l #	55
13) Acrolein	2.32	56	550	1.290	ug/l #	14
16) Acetone	2.44	43	8422	6.844	ug/l	94
18) Methyl Acetate	2.78	43	2312	0.943	ug/l #	83
20) Methylene Chloride	2.86	84	2825	1.115	ug/l	90
25) 2-Butanone	4.70	43	2108	1.168	ug/l #	87
29) Tetrahydrofuran	5.15	42	731	0.654	ug/l #	70
30) Chloroform	5.21	83	4014	0.958	ug/l	89
36) 1,1-Dichloropropene	5.67	75	16060	5.020	ug/l #	47
38) Carbon Tetrachloride	5.65	117	22368	6.457	ug/l #	14
43) Isopropyl Acetate	6.45	43	10877	1.998	ug/l	99
47) Bromodichloromethane	7.90	83	850	0.257	ug/l #	89
48) Methyl methacrylate	7.68	41	6538	2.583	ug/l #	10
49) 1,4-Dioxane	7.70	88	21	0.288	ug/l #	1
51) 4-Methyl-2-Pentanone	8.61	43	80694	23.173	ug/l #	47
54) cis-1,3-Dichloropropene	8.62	75	44879	11.131	ug/l #	59
57) 1,3-Dichloropropane	9.54	76	10504	2.500	ug/l #	42
59) 2-Hexanone	9.54	43	119970	43.774	ug/l #	51
74) N-amyl acetate	10.69	43	11973	2.762	ug/l #	53
76) 1,2,3-Trichloropropane	11.13	75	75305	24.425	ug/l #	33
80) 1,3,5-Trimethylbenzene	11.51	105	2182	0.231	ug/l	97
81) trans-1,4-Dichloro-2-buten	11.13	75	75305	56.981	ug/l #	16
95) Naphthalene	13.83	128	4898	0.414	ug/l	97

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.67 min Scan# 740

Delta R.T. 0.00 min

Lab File: VX010519.D

Acq: 28 Jun 2019 04:57

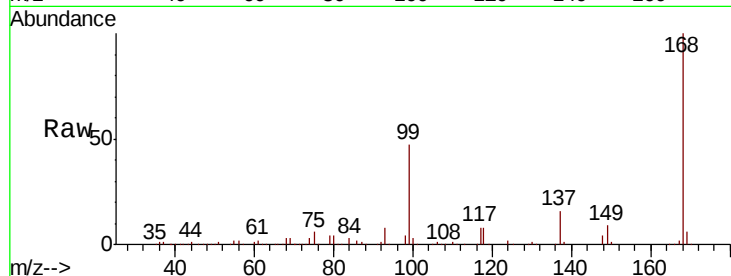
Instrument :
MSVOA_X
ClientSampleId :

Tot Ion:168 Resp: 261887

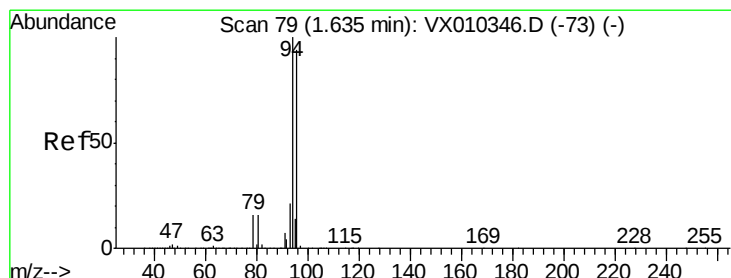
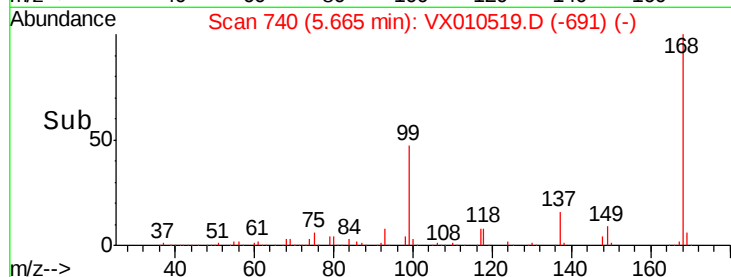
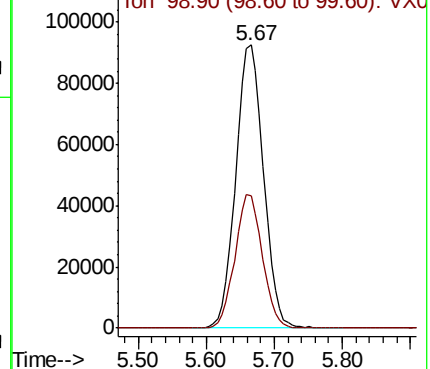
Ion Ratio Lower Upper

168 100

99 46.9 35.5 53.3



Abundance Ion 167.90 (167.60 to 168.60): V



#5

Bromomethane

Concen: 0.368 ug/l

RT: 1.65 min Scan# 81

Delta R.T. 0.01 min

Lab File: VX010519.D

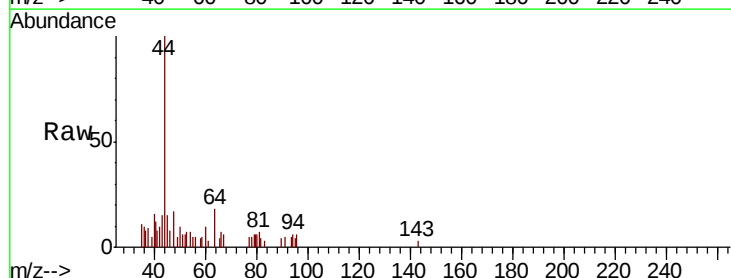
Acq: 28 Jun 2019 04:57

Tgt Ion: 94 Resp: 416

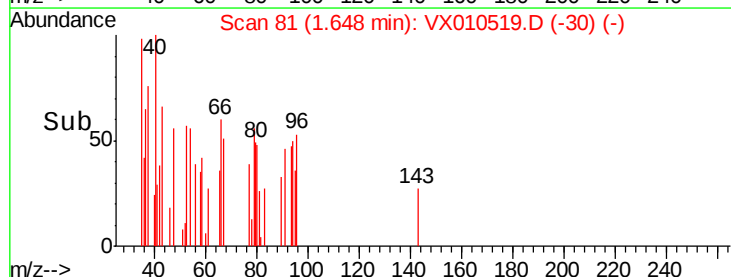
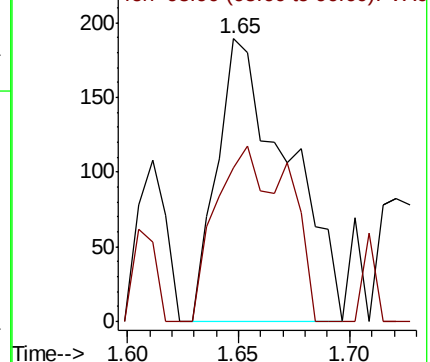
Ion Ratio Lower Upper

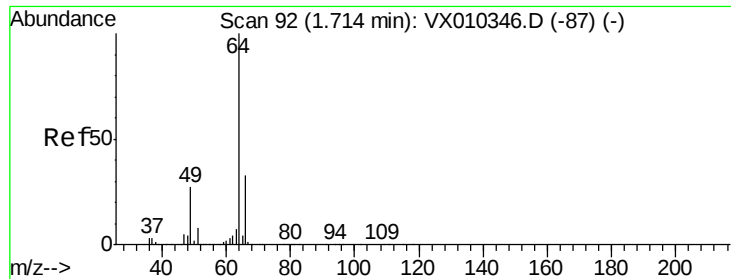
94 100

96 54.5 75.5 113.3#



Abundance Ion 93.90 (93.60 to 94.60): VX0





#6

Chloroethane

Concen: 0.407 ug/l

RT: 1.71 min Scan# 92

Delta R.T. 0.00 min

Lab File: VX010519.D

Acq: 28 Jun 2019 04:57

Instrument :

MSVOA_X

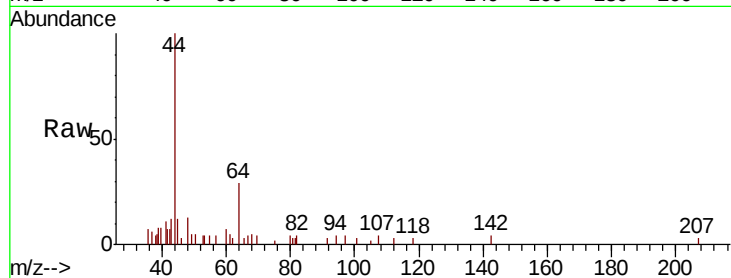
ClientSampleId :

Tot Ion: 64 Resp: 557

Ion Ratio Lower Upper

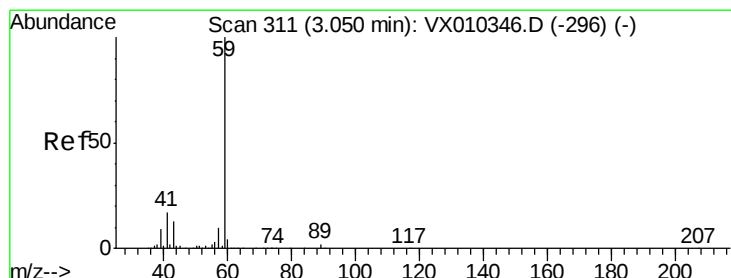
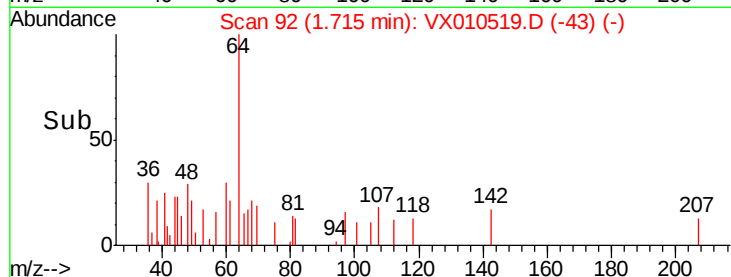
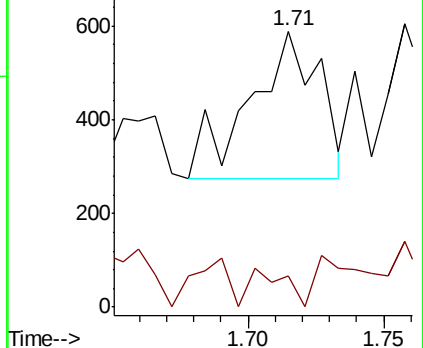
64 100

66 0.3 26.6 40.0#



Abundance Ion 63.90 (63.60 to 64.60): VX0

Ion 65.90 (65.60 to 66.60): VX0



#11

Tert butyl alcohol

Concen: 1.161 ug/l

RT: 3.05 min Scan# 311

Delta R.T. 0.00 min

Lab File: VX010519.D

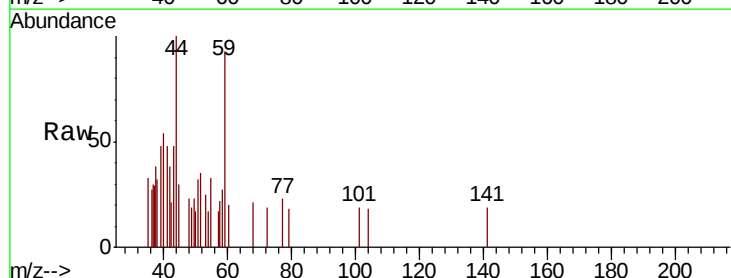
Acq: 28 Jun 2019 04:57

Tgt Ion: 59 Resp: 746

Ion Ratio Lower Upper

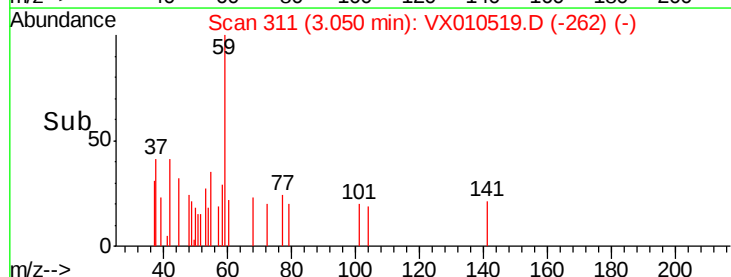
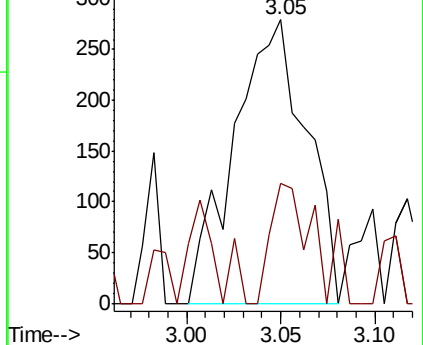
59 100

57 26.1 7.7 11.5#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0





#13

Acrolein

Concen: 1.290 ug/l

RT: 2.32 min Scan# 192

Delta R.T. 0.03 min

Lab File: VX010519.D

Acq: 28 Jun 2019 04:57

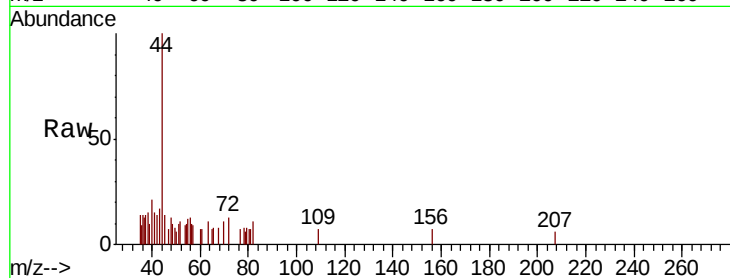
Instrument :
MSVOA_X
ClientSampled :

Tot Ion: 56 Resp: 550

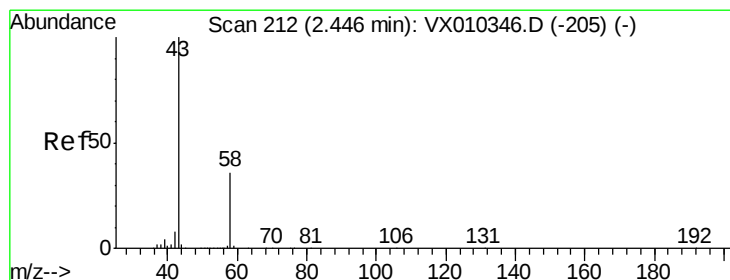
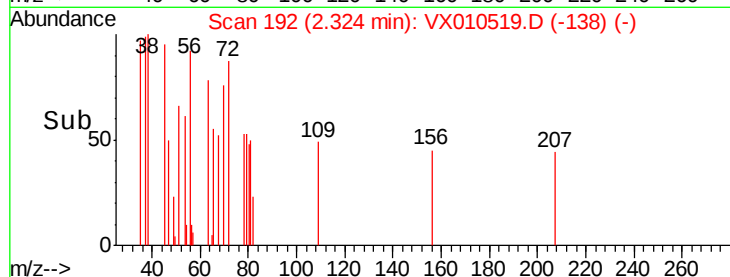
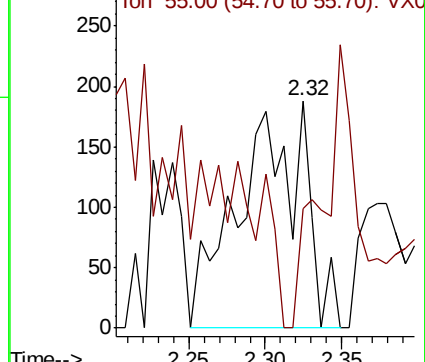
Ion Ratio Lower Upper

56 100

55 0.0 56.9 85.3#



Abundance Ion 56.00 (55.70 to 56.70): VX0



#16

Acetone

Concen: 6.844 ug/l

RT: 2.44 min Scan# 211

Delta R.T. -0.01 min

Lab File: VX010519.D

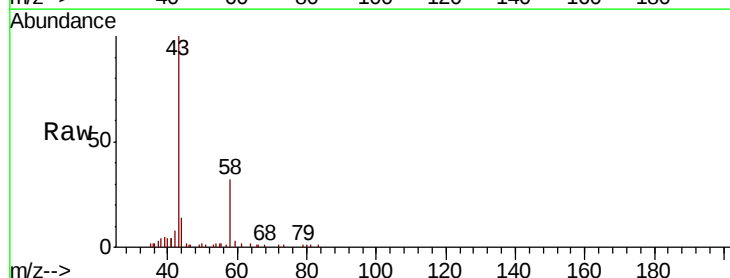
Acq: 28 Jun 2019 04:57

Tgt Ion: 43 Resp: 8422

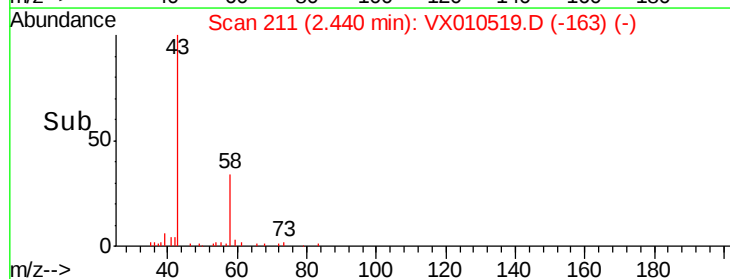
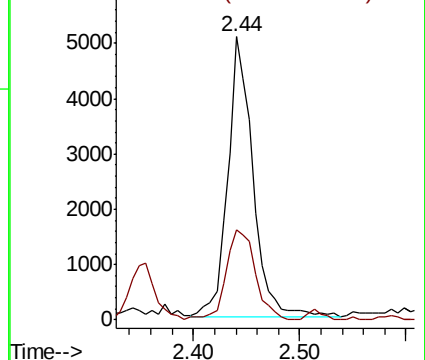
Ion Ratio Lower Upper

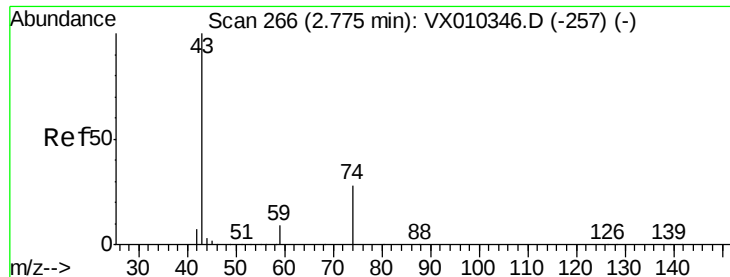
43 100

58 32.3 28.9 43.3



Abundance Ion 43.00 (42.70 to 43.70): VX0

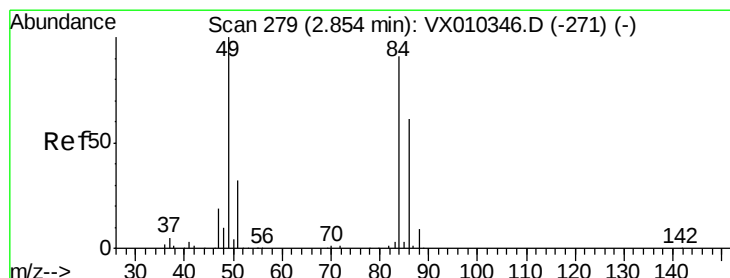
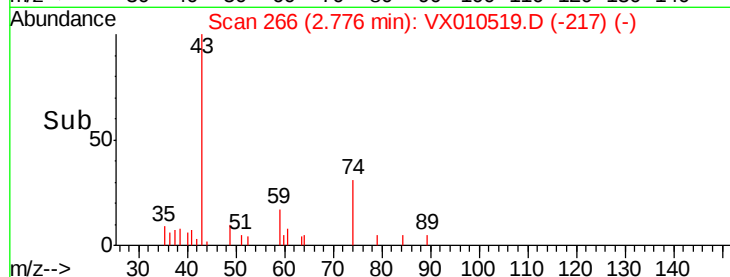
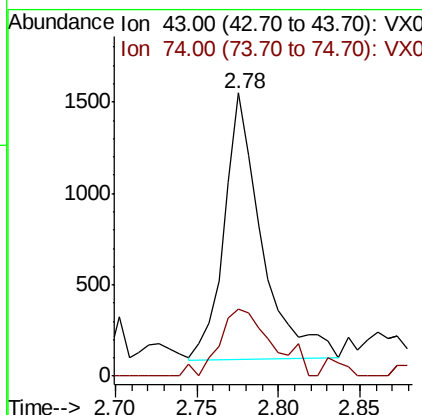
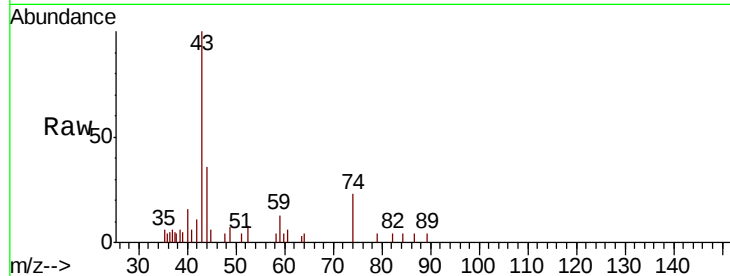




#18
Methyl Acetate
Concen: 0.943 ug/l
RT: 2.78 min Scan# 266
Delta R.T. 0.00 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

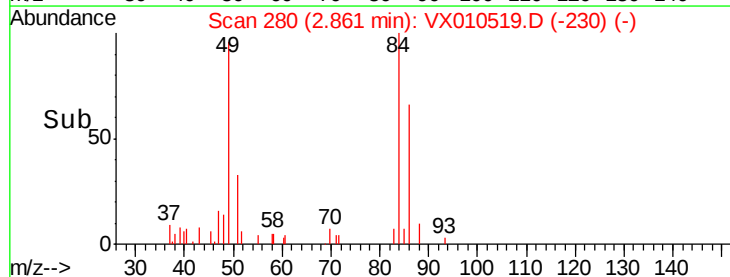
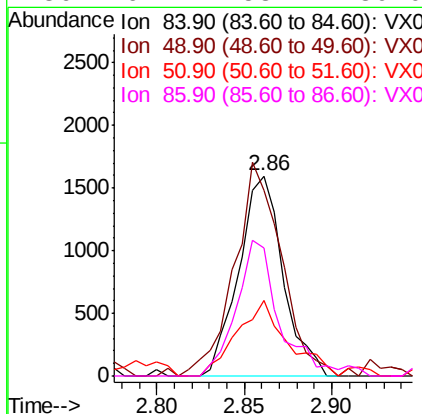
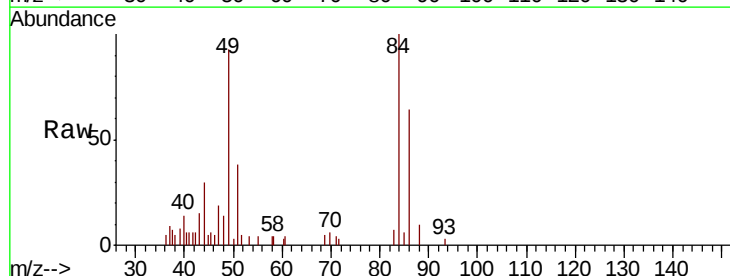
Instrument :
MSVOA_X
ClientSampleId :

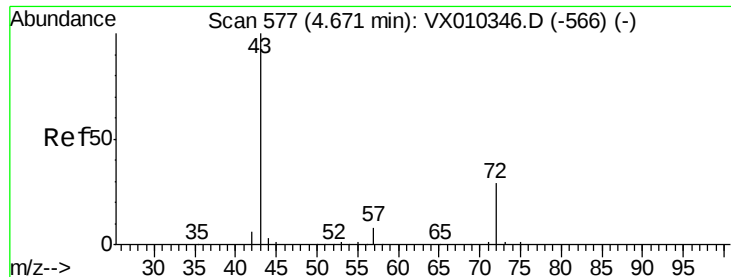
Tot Ion: 43 Resp: 2312
Ion Ratio Lower Upper
43 100
74 35.6 21.3 31.9#



#20
Methylene Chloride
Concen: 1.115 ug/l
RT: 2.86 min Scan# 280
Delta R.T. 0.01 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

Tgt Ion: 84 Resp: 2825
Ion Ratio Lower Upper
84 100
49 92.9 87.5 131.3
51 37.5 27.7 41.5
86 64.1 53.4 80.0





#25

2-Butanone

Concen: 1.168 ug/l

RT: 4.70 min Scan# 581

Delta R.T. 0.02 min

Lab File: VX010519.D

Acq: 28 Jun 2019 04:57

Instrument :

MSVOA_X

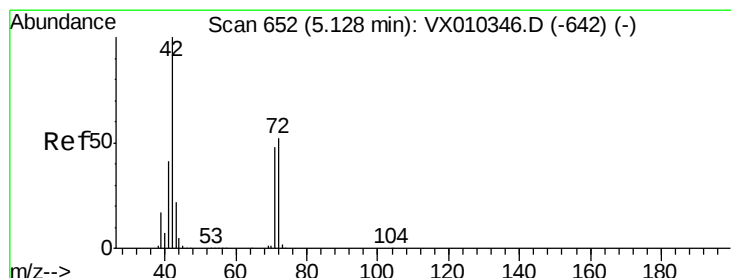
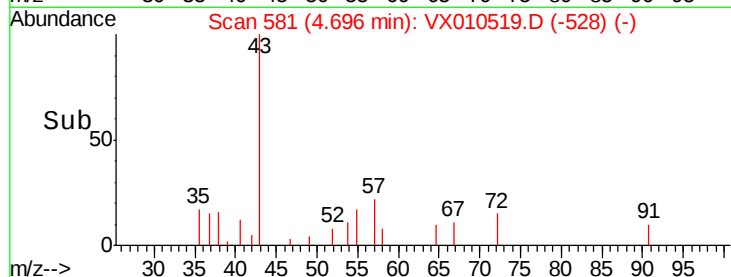
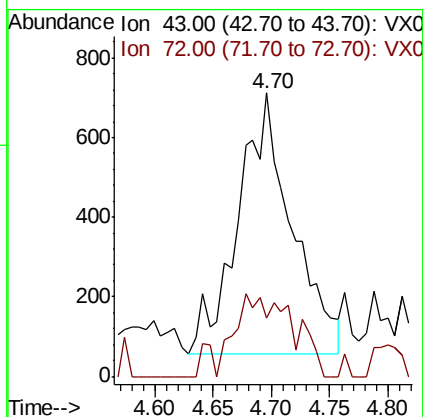
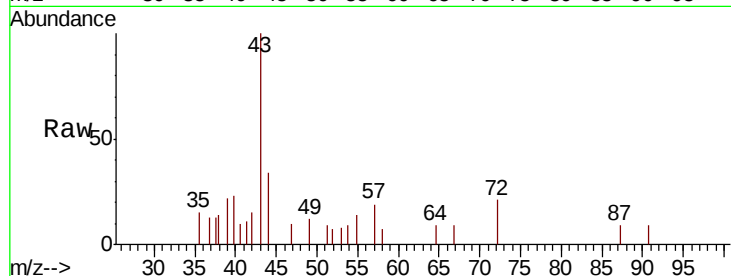
ClientSampleId :

Tot Ion: 43 Resp: 2108

Ion Ratio Lower Upper

43 100

72 22.4 23.3 34.9#



#29

Tetrahydrofuran

Concen: 0.654 ug/l

RT: 5.15 min Scan# 656

Delta R.T. 0.02 min

Lab File: VX010519.D

Acq: 28 Jun 2019 04:57

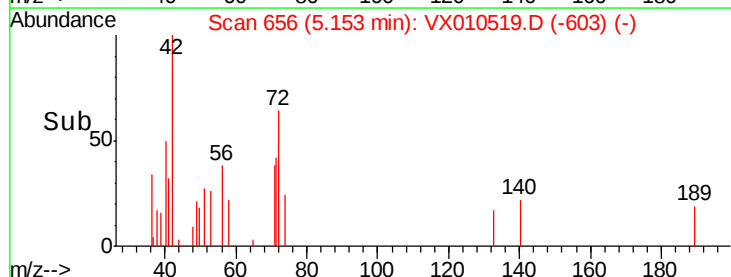
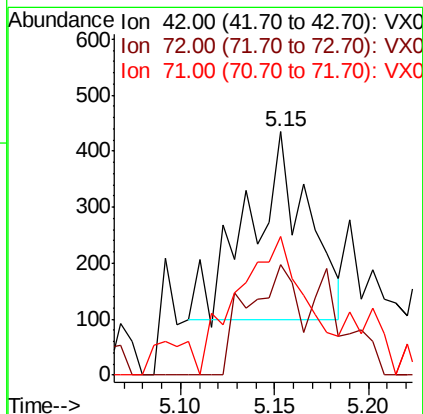
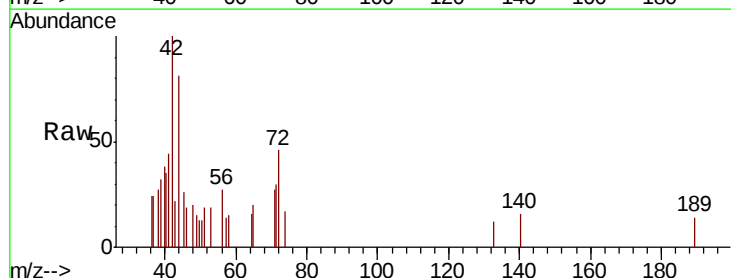
Tgt Ion: 42 Resp: 731

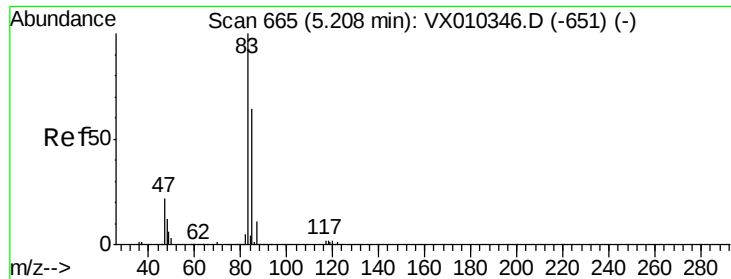
Ion Ratio Lower Upper

42 100

72 49.0 40.6 60.8

71 86.9 37.8 56.8#

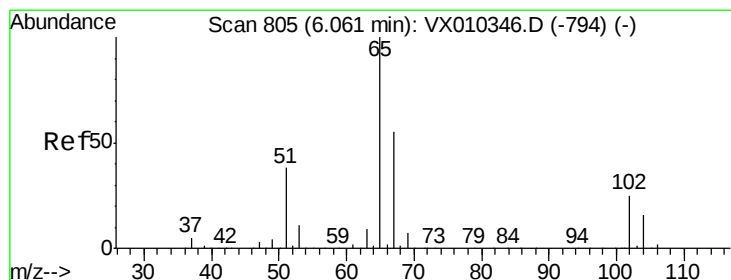
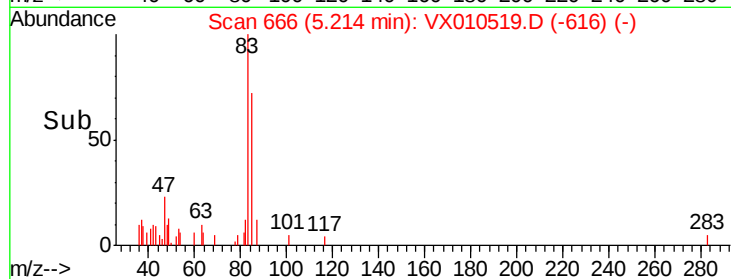
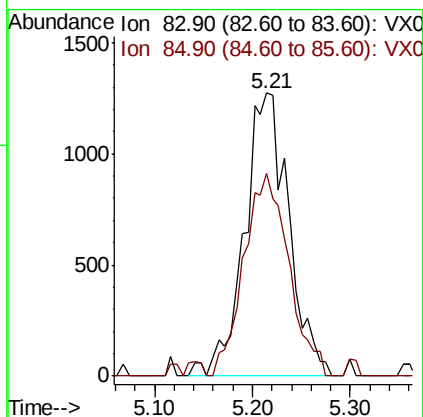
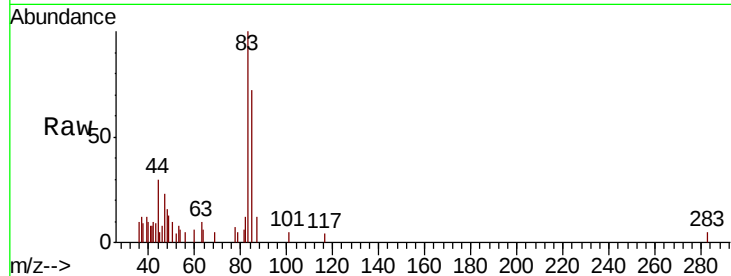




#30
Chloroform
Concen: 0.958 ug/l
RT: 5.21 min Scan# 666
Delta R.T. 0.01 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

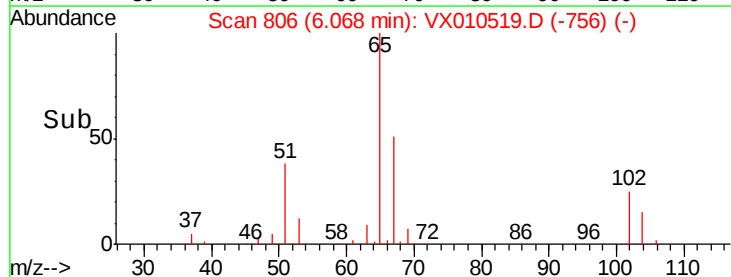
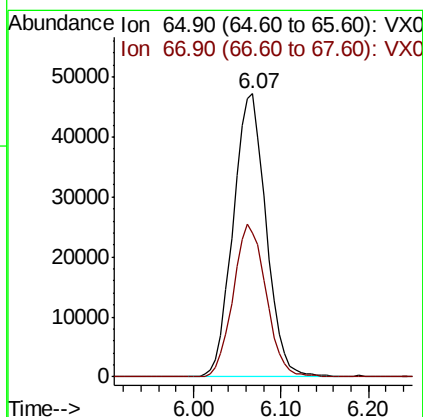
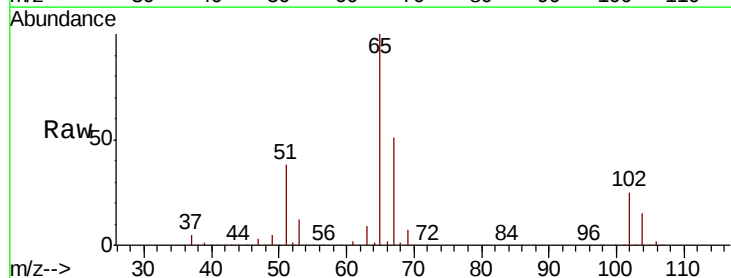
Instrument :
MSVOA_X
ClientSampled :

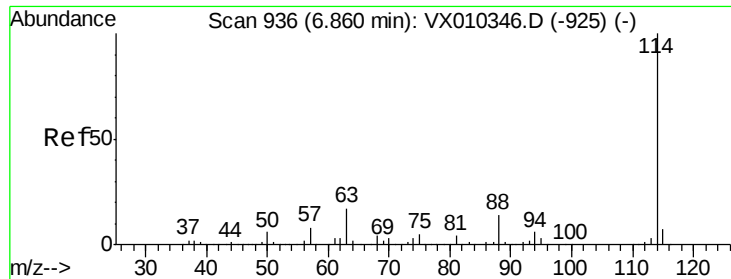
Tot Ion: 83 Resp: 4014
Ion Ratio Lower Upper
83 100
85 71.9 50.9 76.3



#33
1,2-Dichloroethane-d4
Concen: 50.254 ug/l
RT: 6.07 min Scan# 806
Delta R.T. 0.01 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

Tgt Ion: 65 Resp: 123396
Ion Ratio Lower Upper
65 100
67 53.9 0.0 110.2

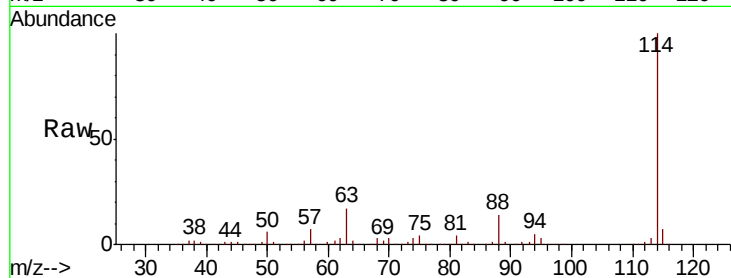




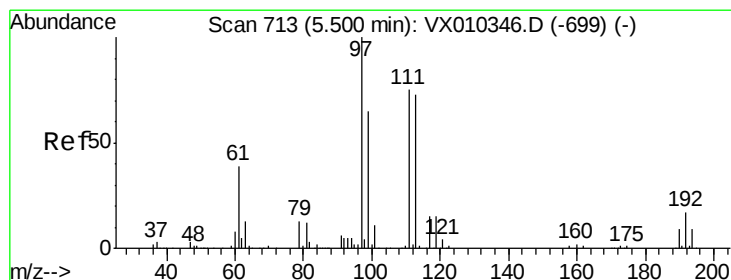
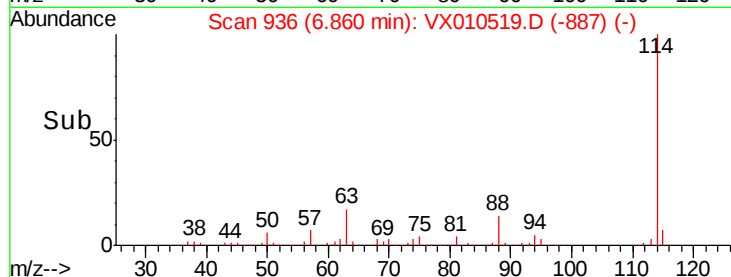
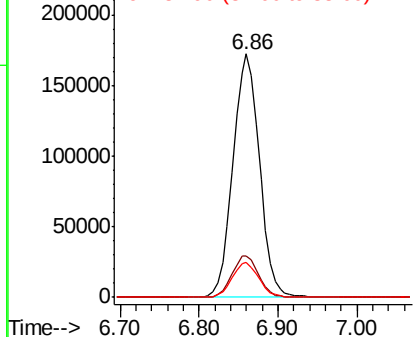
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 6.86 min Scan# 936
Delta R.T. 0.00 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion:114 Resp: 402554
Ion Ratio Lower Upper
114 100
63 17.0 0.0 33.8
88 14.5 0.0 27.6

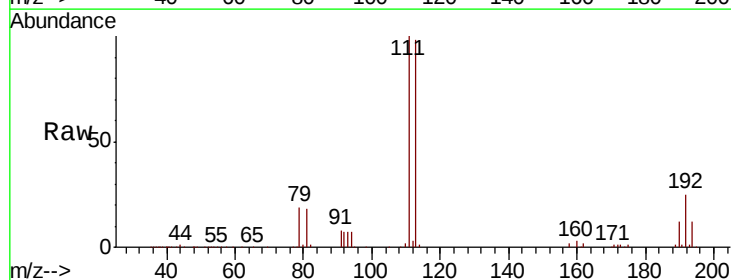


Abundance Ion 113.90 (113.60 to 114.60): V
Ion 63.00 (62.70 to 63.70): VX0
Ion 87.90 (87.60 to 88.60): VX0

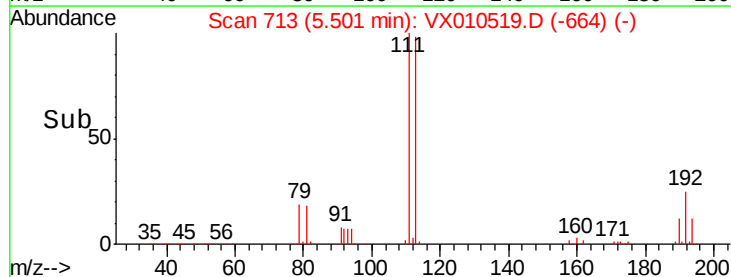
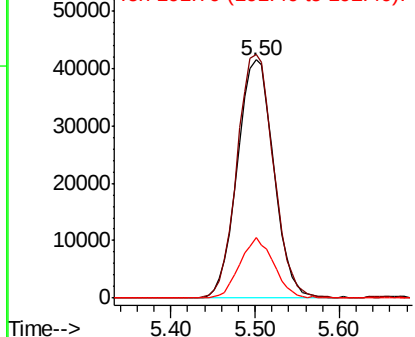


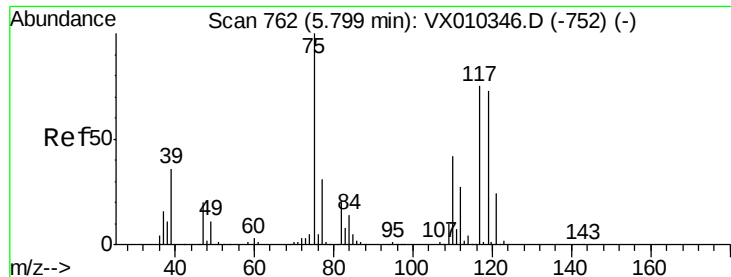
#35
Dibromofluoromethane
Concen: 49.098 ug/l
RT: 5.50 min Scan# 713
Delta R.T. 0.00 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

Tgt Ion:113 Resp: 120927
Ion Ratio Lower Upper
113 100
111 102.9 81.2 121.8
192 23.9 18.6 27.8



Abundance Ion 112.80 (112.50 to 113.50): V
Ion 110.80 (110.50 to 111.50): V
Ion 191.70 (191.40 to 192.40): V

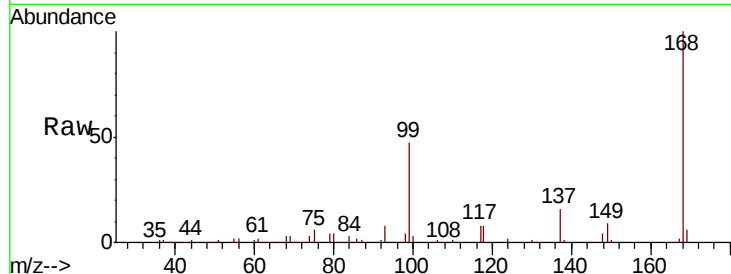




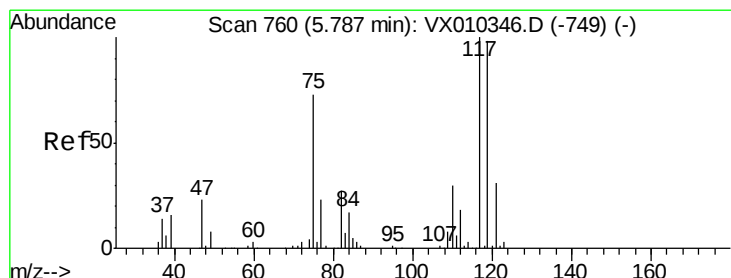
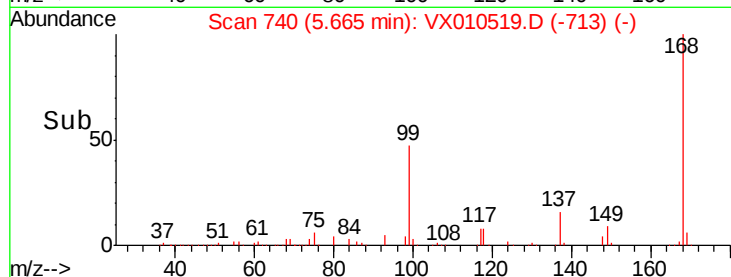
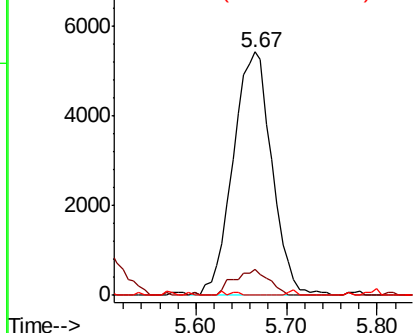
#36
 1,1-Dichloropropene
 Concen: 5.020 ug/l
 RT: 5.67 min Scan# 740
 Delta R.T. -0.13 min
 Lab File: VX010519.D
 Acq: 28 Jun 2019 04:57

Instrument :
 MSVOA_X
 ClientSampleId :

Tot Ion	75	Resp	16060
Ion Ratio	100	Lower	Upper
75	100		
110	9.6	20.8	62.2#
77	0.0	25.4	38.0#

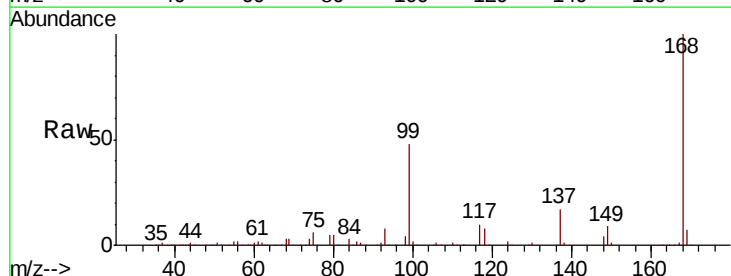


Abundance Ion 74.90 (74.60 to 75.60): VX0
 Ion 109.90 (109.60 to 110.60): V
 Ion 76.90 (76.60 to 77.60): VX0

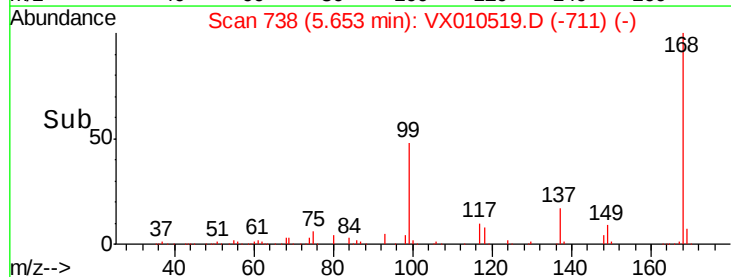
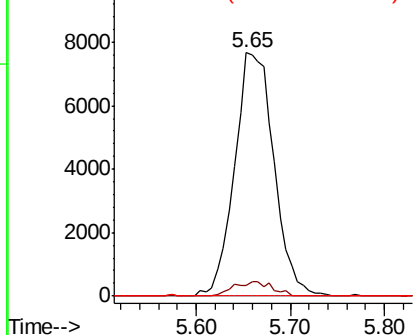


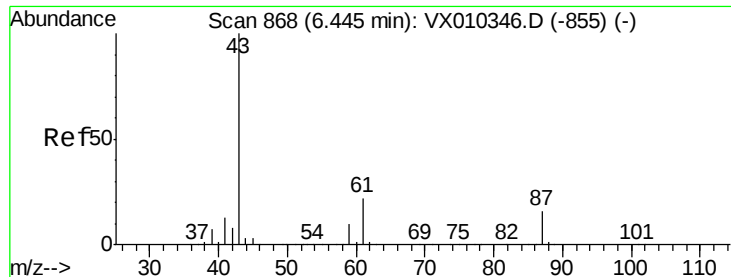
#38
 Carbon Tetrachloride
 Concen: 6.457 ug/l
 RT: 5.65 min Scan# 738
 Delta R.T. -0.13 min
 Lab File: VX010519.D
 Acq: 28 Jun 2019 04:57

Tgt Ion	117	Resp	22368
Ion Ratio <td>100</td> <td>Lower</td> <td>Upper</td>	100	Lower	Upper
117	100		
119	4.1	78.2	117.4#
121	0.0	24.7	37.1#



Abundance Ion 116.80 (116.50 to 117.50): V
 Ion 118.80 (118.50 to 119.50): V
 Ion 120.80 (120.50 to 121.50): V





#43

Isopropyl Acetate

Concen: 1.998 ug/l

RT: 6.45 min Scan# 869

Delta R.T. 0.01 min

Lab File: VX010519.D

Acq: 28 Jun 2019 04:57

Instrument :

MSVOA_X

ClientSampled :

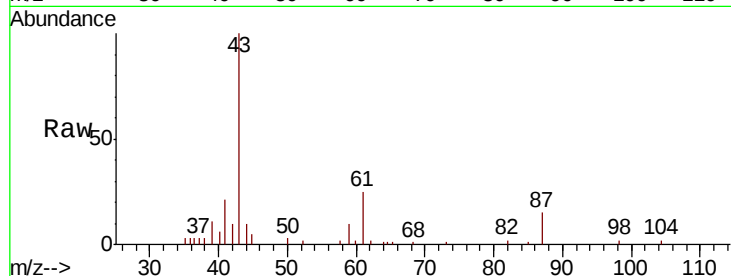
Tot Ion: 43 Resp: 10877

Ion Ratio Lower Upper

43 100

61 22.3 17.8 26.6

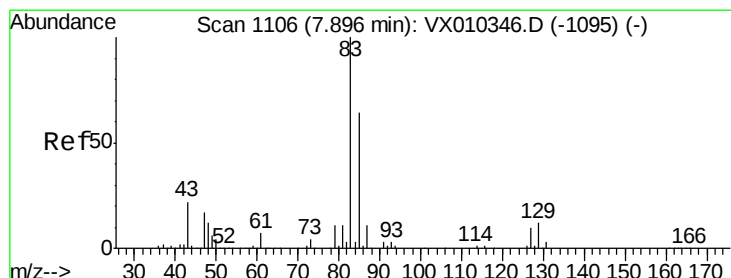
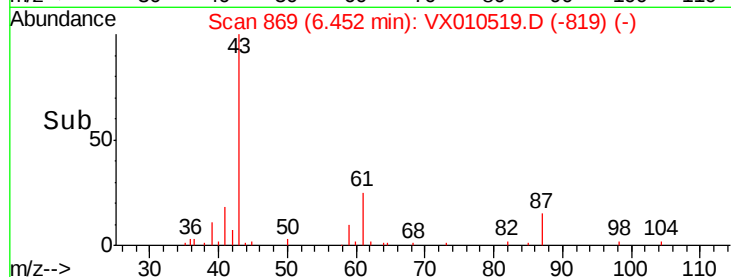
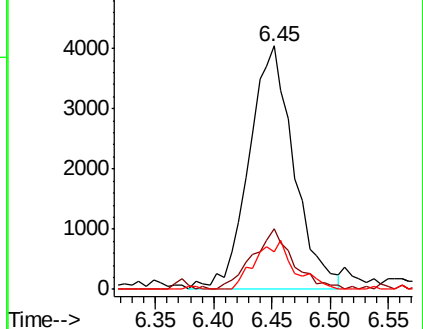
87 17.2 13.0 19.4



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 61.00 (60.70 to 61.70): VX0

Ion 87.00 (86.70 to 87.70): VX0



#47

Bromodichloromethane

Concen: 0.257 ug/l

RT: 7.90 min Scan# 1106

Delta R.T. 0.00 min

Lab File: VX010519.D

Acq: 28 Jun 2019 04:57

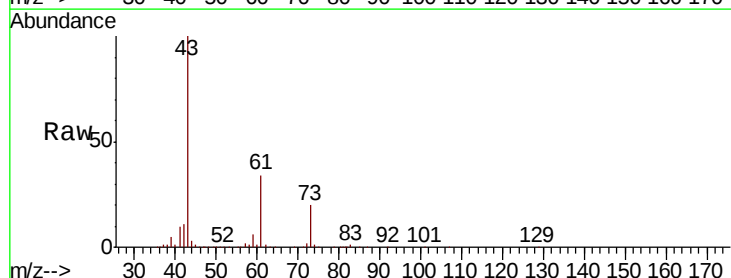
Tgt Ion: 83 Resp: 850

Ion Ratio Lower Upper

83 100

85 71.3 51.5 77.3

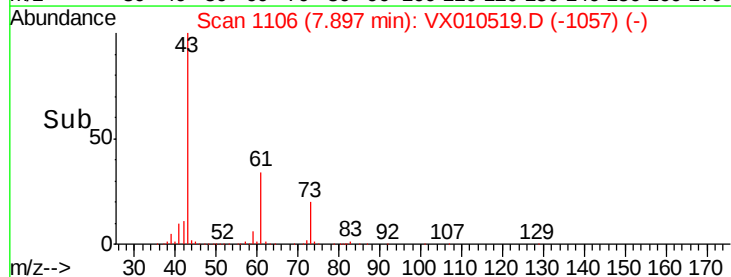
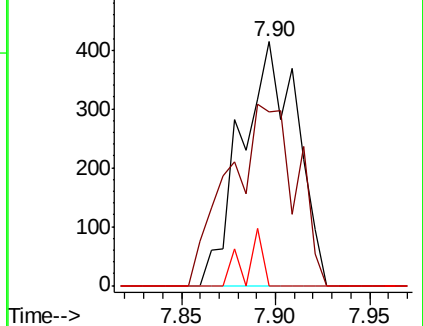
127 0.0 7.8 11.8#

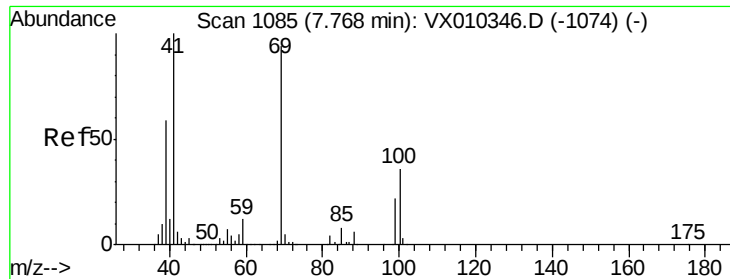


Abundance Ion 82.90 (82.60 to 83.60): VX0

Ion 84.90 (84.60 to 85.60): VX0

Ion 126.80 (126.50 to 127.50): V

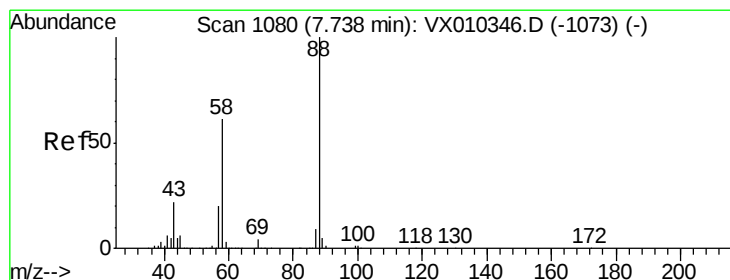
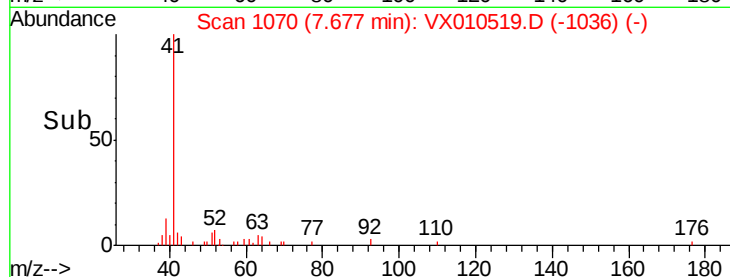
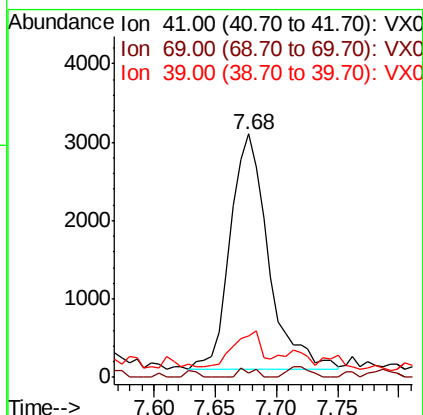
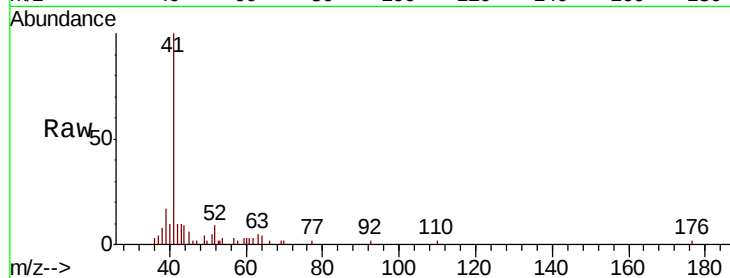




#48
Methvl methacrylate
Concen: 2.583 ug/l
RT: 7.68 min Scan# 1070
Delta R.T. -0.09 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

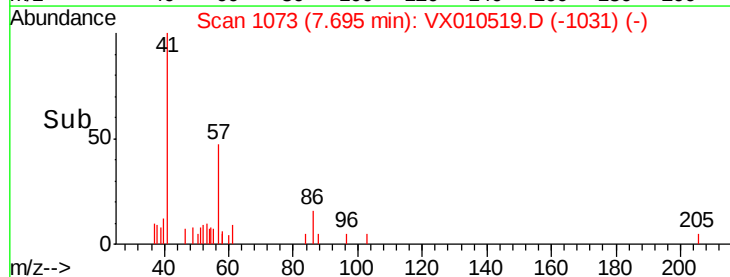
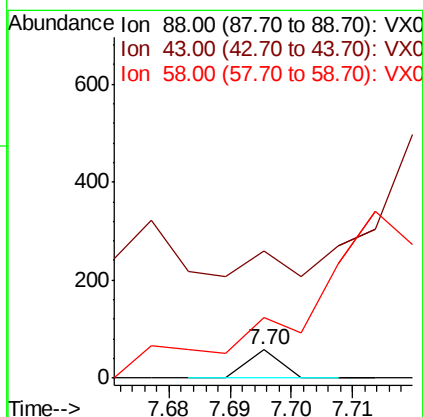
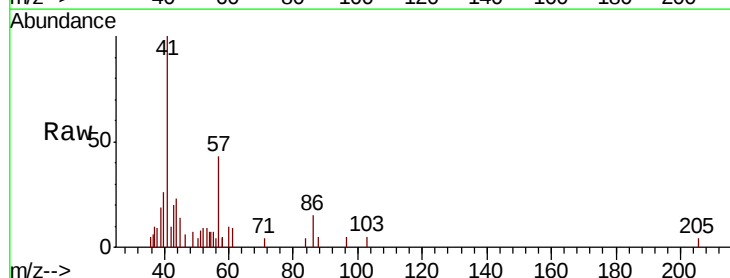
Instrument :
MSVOA_X
ClientSampleId :

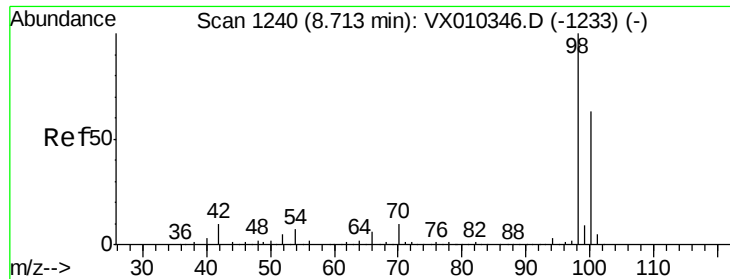
Tot Ion: 41 Resp: 6538
Ion Ratio Lower Upper
41 100
69 1.5 76.1 114.1#
39 0.0 47.6 71.4#



#49
1,4-Dioxane
Concen: 0.288 ug/l
RT: 7.70 min Scan# 1073
Delta R.T. -0.04 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

Tgt Ion: 88 Resp: 21
Ion Ratio Lower Upper
88 100
43 0.0 20.2 30.2#
58 2095.2 49.5 74.3#





#50

Toluene-d8

Concen: 50.776 ug/l

RT: 8.71 min Scan# 1240

Delta R.T. 0.00 min

Lab File: VX010519.D

Acq: 28 Jun 2019 04:57

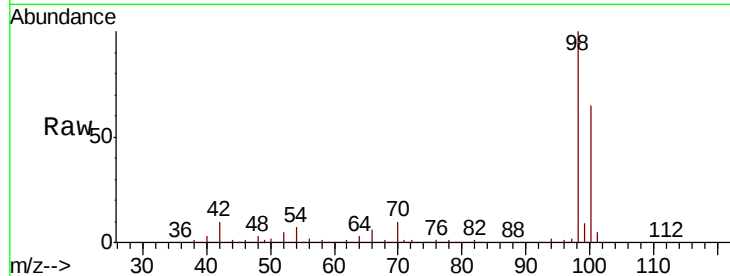
Instrument :
MSVOA_X
ClientSampleId :

Tot Ion: 98 Resp: 478450

Ion Ratio Lower Upper

98 100

100 64.8 51.6 77.4



Abundance Ion 98.00 (97.70 to 98.70): VX0

Ion 100.00 (99.70 to 100.70): VX0

8.71

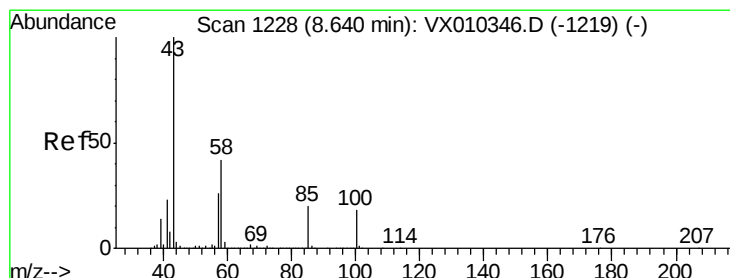
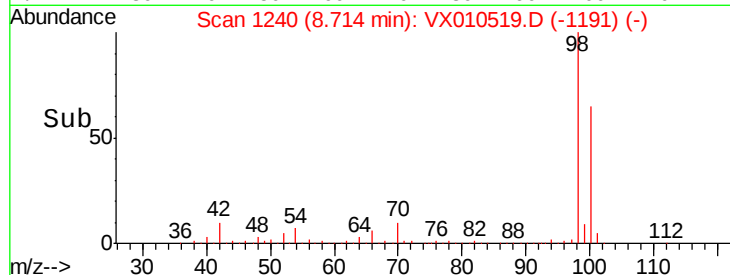
300000

200000

100000

0

Time--> 8.60 8.70 8.80



#51

4-Methyl-2-Pentanone

Concen: 23.173 ug/l

RT: 8.61 min Scan# 1223

Delta R.T. -0.03 min

Lab File: VX010519.D

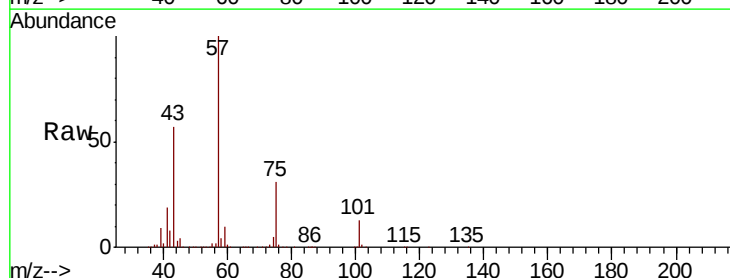
Acq: 28 Jun 2019 04:57

Tgt Ion: 43 Resp: 80694

Ion Ratio Lower Upper

43 100

58 8.6 33.5 50.3#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

8.61

60000

50000

40000

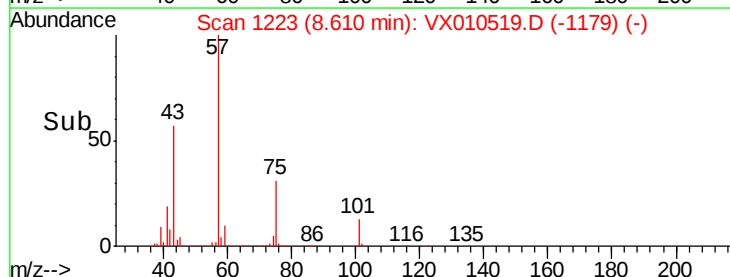
30000

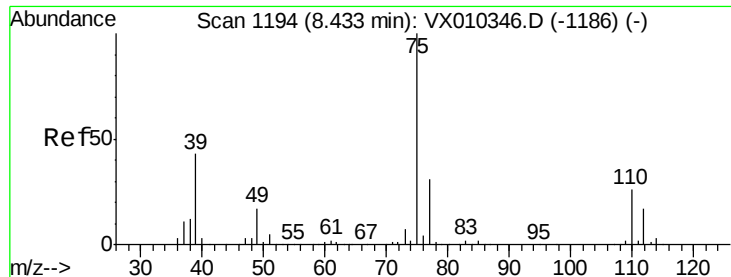
20000

10000

0

Time--> 8.55 8.60 8.65 8.70



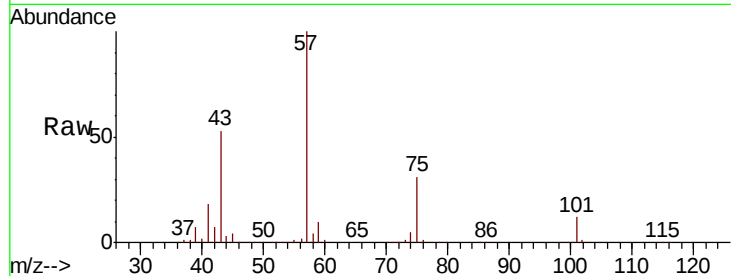


#54

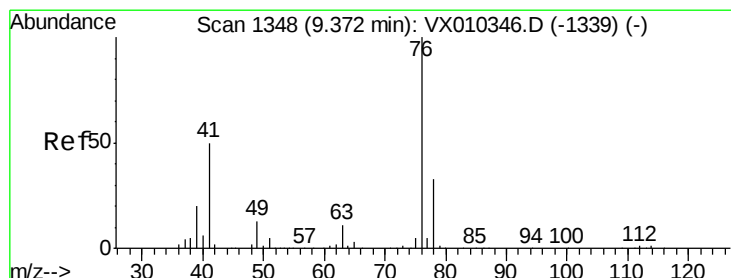
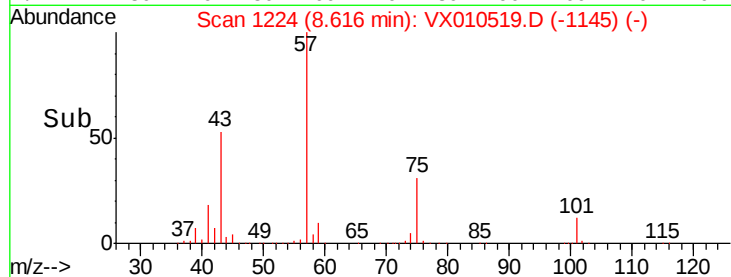
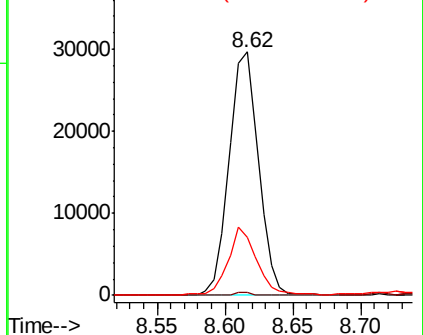
cis-1,3-Dichloropropene
 Concen: 11.131 ug/l
 RT: 8.62 min Scan# 1224
 Delta R.T. 0.18 min
 Lab File: VX010519.D
 Acq: 28 Jun 2019 04:57

Instrument :
 MSVOA_X
 ClientSampleId :

Tot Ion: 75 Resp: 44879
 Ion Ratio Lower Upper
 75 100
 77 1.0 25.2 37.8#
 39 23.5 34.5 51.7#



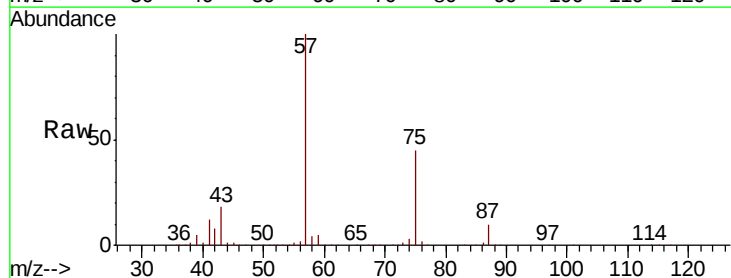
Abundance Ion 74.90 (74.60 to 75.60): VX0
 Ion 76.90 (76.60 to 77.60): VX0
 Ion 39.00 (38.70 to 39.70): VX0



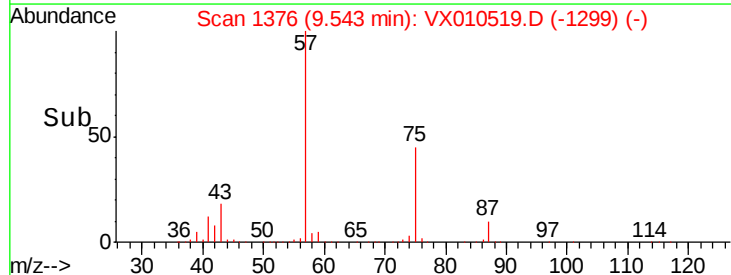
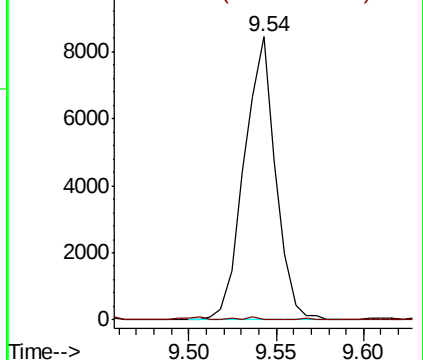
#57

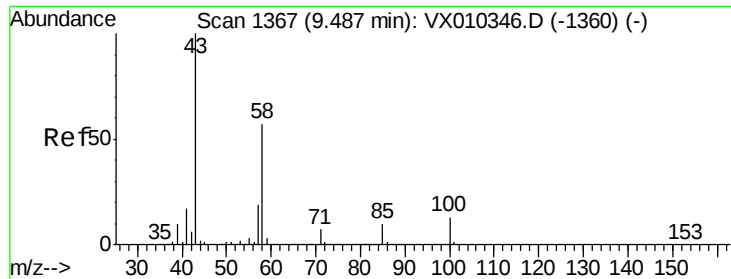
1,3-Dichloropropane
 Concen: 2.500 ug/l
 RT: 9.54 min Scan# 1376
 Delta R.T. 0.17 min
 Lab File: VX010519.D
 Acq: 28 Jun 2019 04:57

Tgt Ion: 76 Resp: 10504
 Ion Ratio Lower Upper
 76 100
 78 0.2 26.1 39.1#



Abundance Ion 75.90 (75.60 to 76.60): VX0
 Ion 77.90 (77.60 to 78.60): VX0

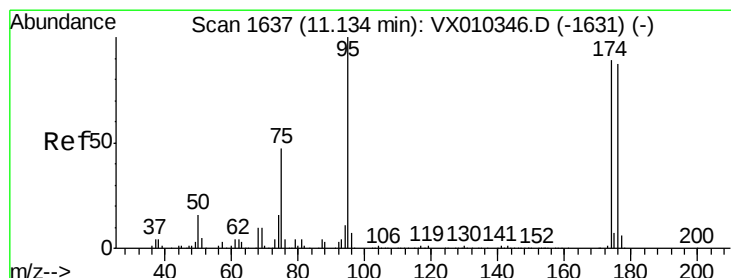
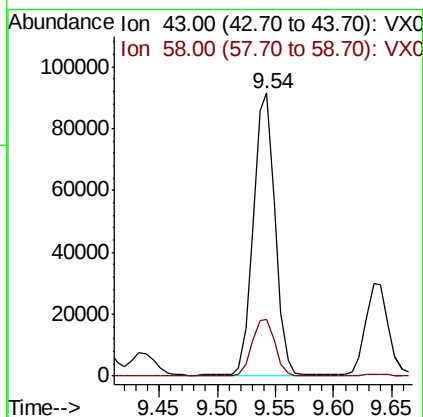
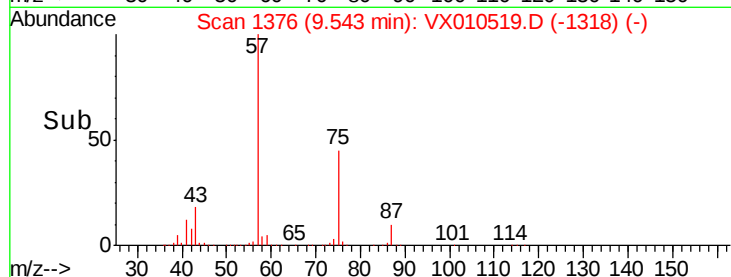
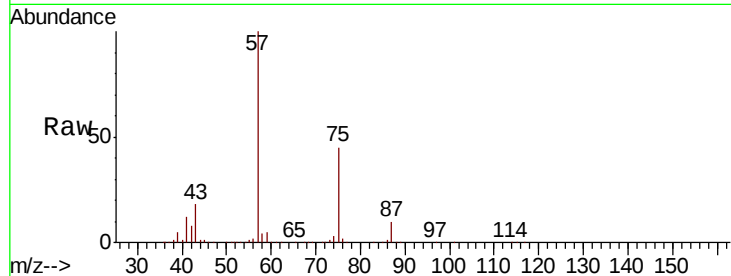




#59
2-Hexanone
Concen: 43.774 ug/l
RT: 9.54 min Scan# 1376
Delta R.T. 0.06 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

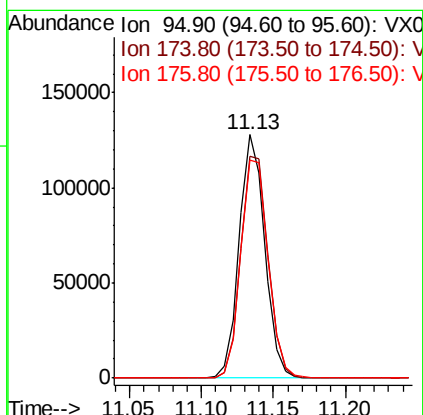
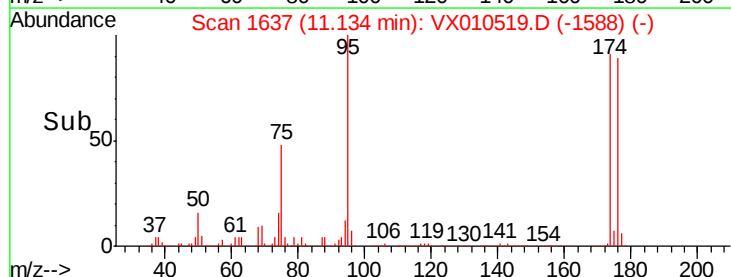
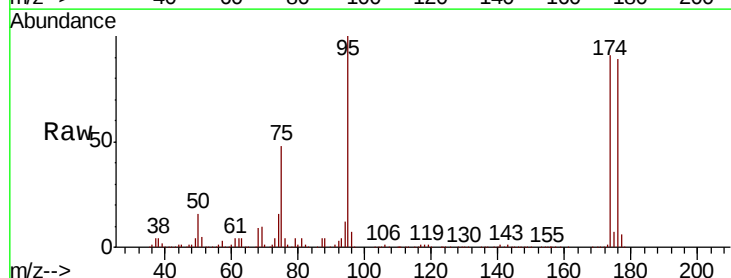
Instrument :
MSVOA_X
ClientSampleId :

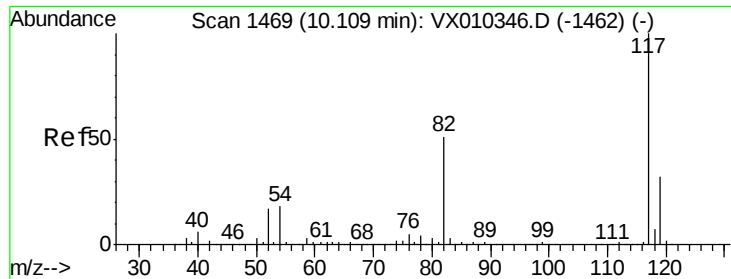
Tot Ion: 43 Resp: 119970
Ion Ratio Lower Upper
43 100
58 21.6 29.0 87.1#



#62
4-Bromofluorobenzene
Concen: 46.521 ug/l
RT: 11.13 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

Tgt Ion: 95 Resp: 158261
Ion Ratio Lower Upper
95 100
174 97.1 0.0 187.6
176 95.7 0.0 184.0

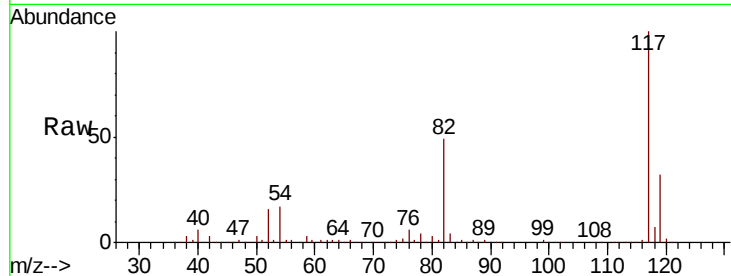




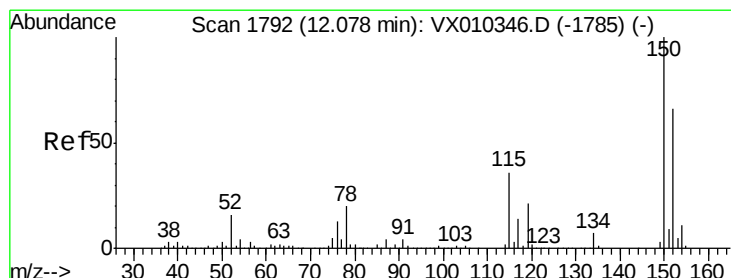
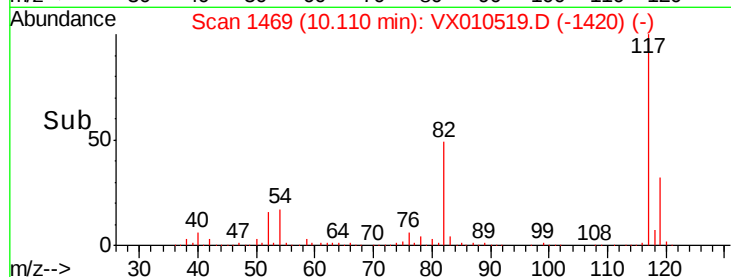
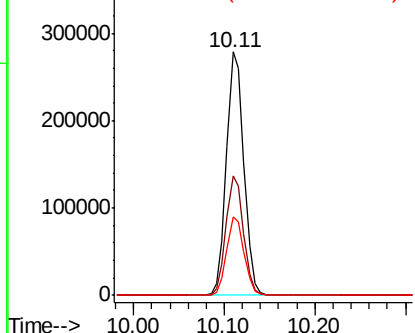
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.11 min Scan# 1469
Delta R.T. 0.00 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion:117 Resp: 372605
Ion Ratio Lower Upper
117 100
82 49.1 41.2 61.8
119 32.3 25.5 38.3

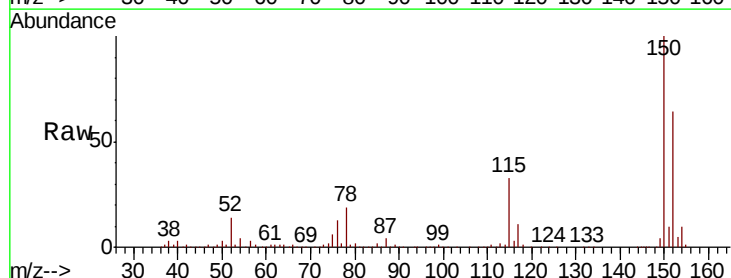


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VX0
Ion 118.90 (118.60 to 119.60): V

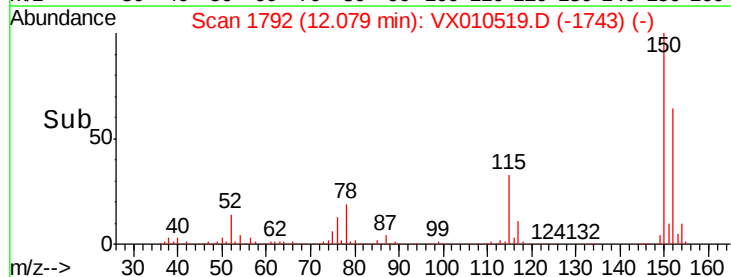
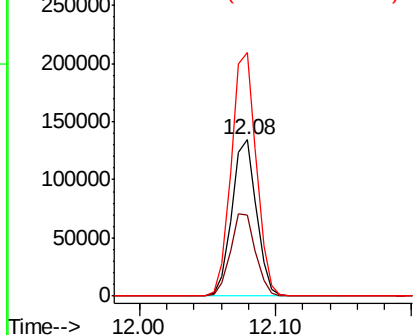


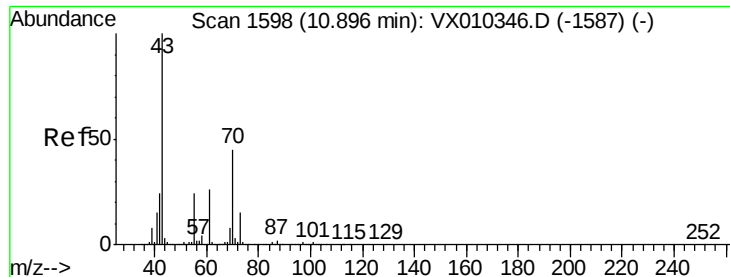
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.08 min Scan# 1792
Delta R.T. 0.00 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

Tgt Ion:152 Resp: 169192
Ion Ratio Lower Upper
152 100
115 53.8 38.6 115.7
150 157.9 0.0 347.4



Abundance Ion 151.90 (151.60 to 152.60): V
Ion 114.90 (114.60 to 115.60): V
Ion 149.90 (149.60 to 150.60): V





#74

N-amvl acetate

Concen: 2.762 ug/l

RT: 10.69 min Scan# 1564

Delta R.T. -0.21 min

Lab File: VX010519.D

Acq: 28 Jun 2019 04:57

Instrument :

MSVOA_X

ClientSampleId :

Tot Ion: 43 Resp: 11973

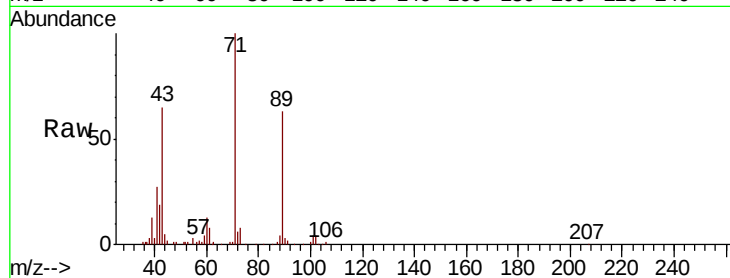
Ion Ratio Lower Upper

43 100

70 3.7 36.6 54.8#

55 5.2 18.7 28.1#

61 13.0 20.6 31.0#

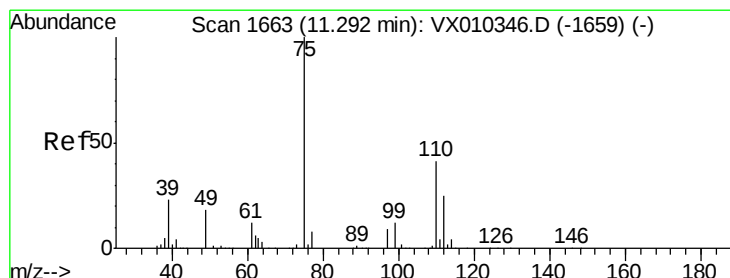
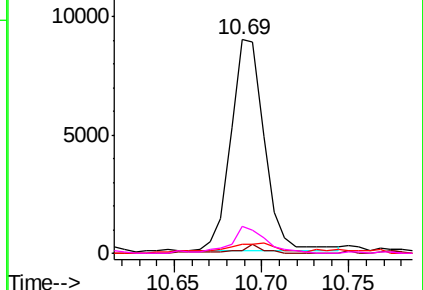
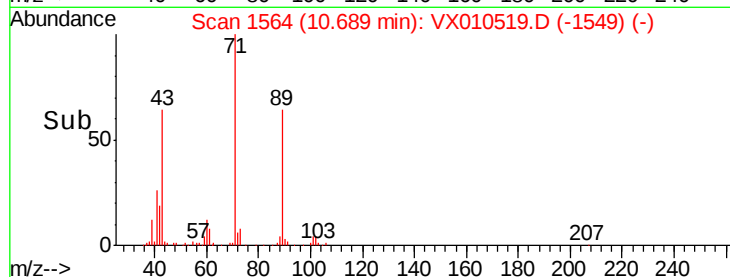


Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 70.00 (69.70 to 70.70): VX0

Ion 55.00 (54.70 to 55.70): VX0

Ion 61.00 (60.70 to 61.70): VX0



#76

1,2,3-Trichloropropane

Concen: 24.425 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX010519.D

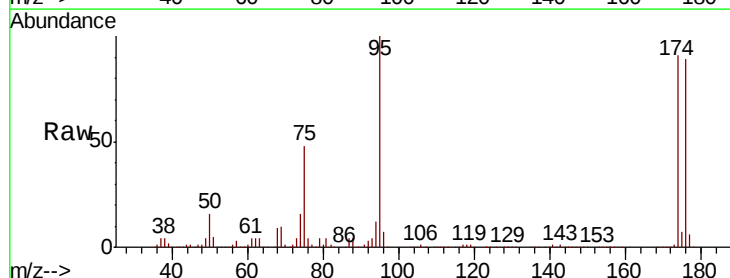
Acq: 28 Jun 2019 04:57

Tgt Ion: 75 Resp: 75305

Ion Ratio Lower Upper

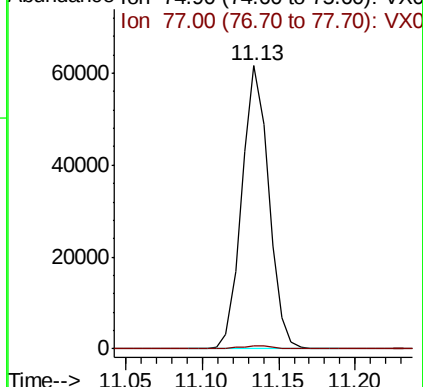
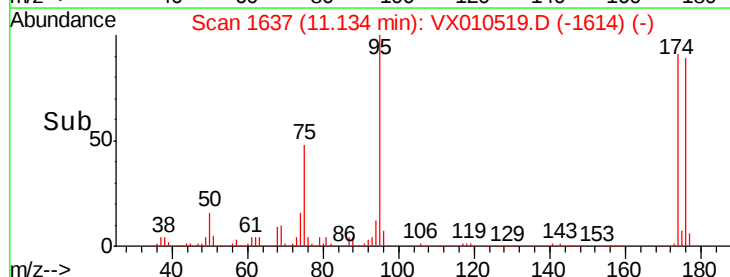
75 100

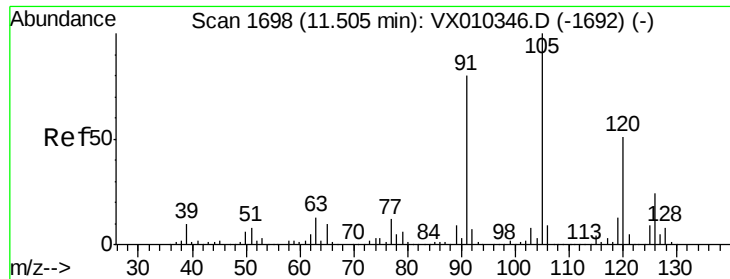
77 1.4 22.6 67.8#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0

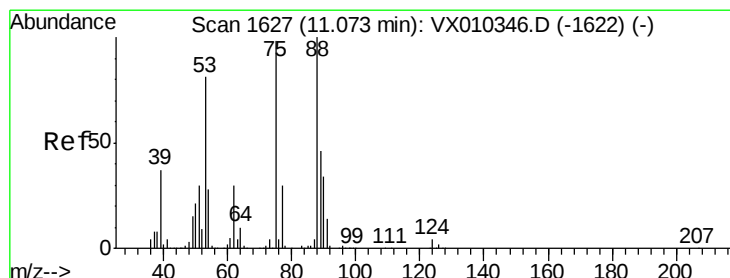
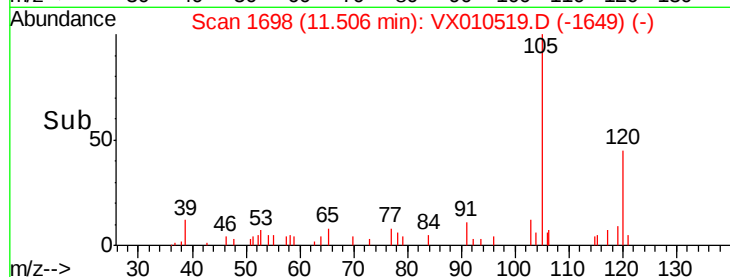
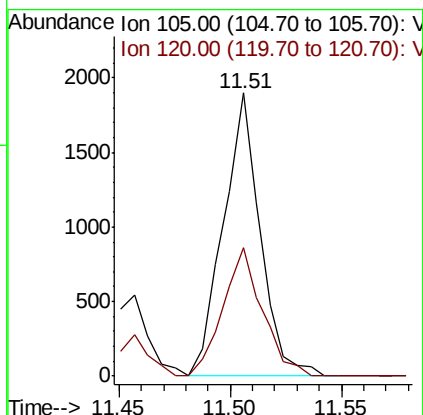
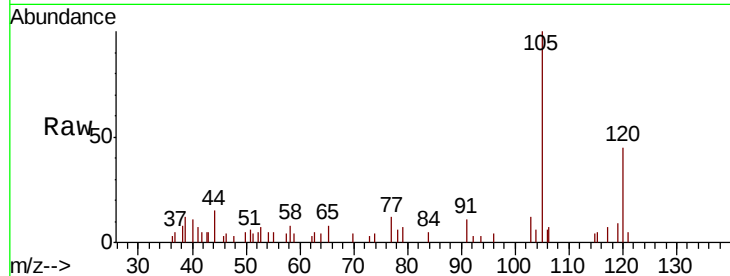




#80
 1,3,5-Trimethylbenzene
 Concen: 0.231 ug/l
 RT: 11.51 min Scan# 1698
 Delta R.T. 0.00 min
 Lab File: VX010519.D
 Acq: 28 Jun 2019 04:57

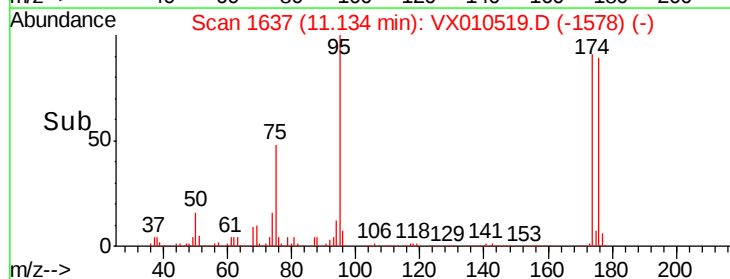
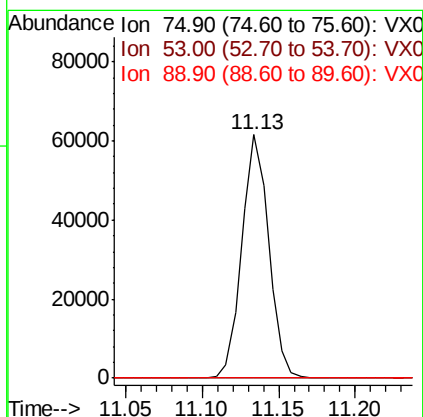
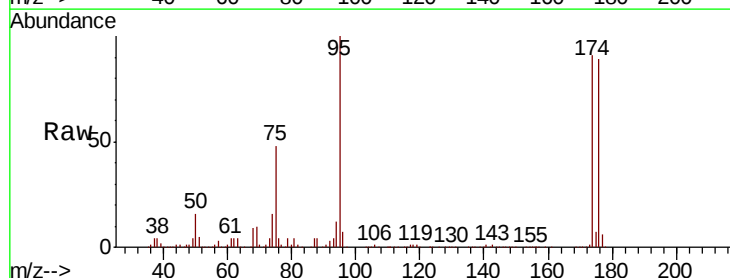
Instrument :
 MSVOA_X
 ClientSampled :

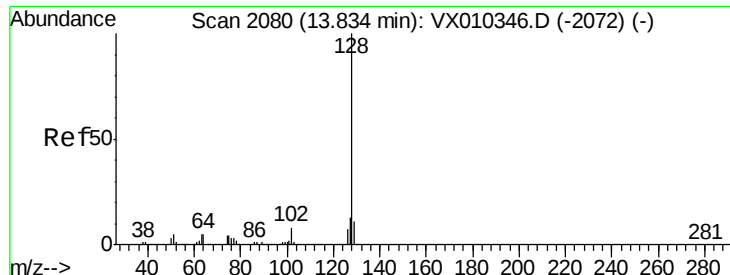
Tot Ion:105 Resp: 2182
 Ion Ratio Lower Upper
 105 100
 120 48.6 25.2 75.6



#81
 trans-1,4-Dichloro-2-butene
 Concen: 56.981 ug/l
 RT: 11.13 min Scan# 1637
 Delta R.T. 0.06 min
 Lab File: VX010519.D
 Acq: 28 Jun 2019 04:57

Tgt Ion: 75 Resp: 75305
 Ion Ratio Lower Upper
 75 100
 53 0.1 66.1 99.1#
 89 0.1 37.8 56.6#





#95
Naphthalene
Concen: 0.414 ug/l
RT: 13.83 min Scan# 2080
Delta R.T. 0.00 min
Lab File: VX010519.D
Acq: 28 Jun 2019 04:57

Instrument :
MSVOA_X
ClientSampleId :

Tot Ion	Ratio	Lower	Upper
128	100		
127	15.1	10.2	15.4
129	11.4	8.9	13.3

