

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_X\DATA\VX081219\
 Data File : VX011509.D
 Acq On : 13 Aug 2019 02:00
 Operator : JC/SP
 Sample : K4230-21
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 41 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 2S-A4-(1)

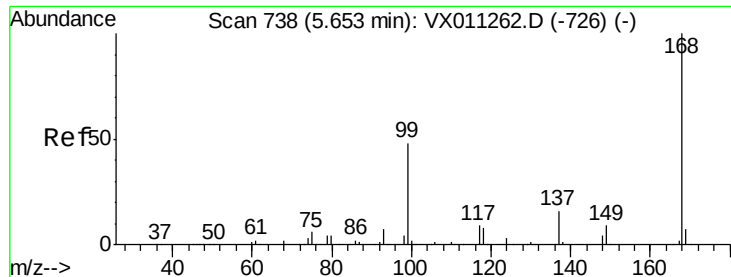
Quant Time: Aug 13 07:47:32 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_X\METHOD\82X080119W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 02 01:55:00 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	5.66	168	187378	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	6.85	114	284183	50.00	ug/l	0.00
63) Chlorobenzene-d5	10.11	117	263095	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	12.08	152	114697	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	6.06	65	105481	55.90	ug/l	0.00
Spiked Amount 50.000			Recovery	=	111.80%	
35) Dibromofluoromethane	5.49	113	87143	46.97	ug/l	0.00
Spiked Amount 50.000			Recovery	=	93.94%	
50) Toluene-d8	8.71	98	338890	48.39	ug/l	0.00
Spiked Amount 50.000			Recovery	=	96.78%	
62) 4-Bromofluorobenzene	11.13	95	113050	45.21	ug/l	0.00
Spiked Amount 50.000			Recovery	=	90.42%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chloromethane	1.32	50	379	0.233	ug/l #	42
5) Bromomethane	1.64	94	422	0.331	ug/l #	60
6) Chloroethane	1.75	64	385	Below Cal	#	49
11) Tert butyl alcohol	3.01	59	1911	5.101	ug/l #	75
16) Acetone	2.43	43	10588	11.788	ug/l	94
18) Methyl Acetate	2.77	43	1407	0.685	ug/l	96
20) Methylene Chloride	2.85	84	6909	3.512	ug/l	99
25) 2-Butanone	4.69	43	1040	0.814	ug/l #	82
29) Tetrahydrofuran	5.13	42	393	0.502	ug/l #	53
31) Cyclohexane	5.65	56	3762	1.548	ug/l #	11
36) 1,1-Dichloropropene	5.65	75	13150	5.300	ug/l #	49
38) Carbon Tetrachloride	5.66	117	18066	7.237	ug/l #	14
43) Isopropyl Acetate	6.44	43	26267	6.601	ug/l	98
48) Methyl methacrylate	7.67	41	1488	0.795	ug/l #	10
49) 1,4-Dioxane	7.86	88	124	2.284	ug/l #	1
51) 4-Methyl-2-Pentanone	8.61	43	26060	10.148	ug/l #	51
53) t-1,3-Dichloropropene	9.02	75	63	2.860	ug/l #	43
54) cis-1,3-Dichloropropene	8.61	75	12888	4.655	ug/l #	69
57) 1,3-Dichloropropane	9.54	76	2360	0.741	ug/l #	41
59) 2-Hexanone	9.54	43	29832	14.998	ug/l #	49
74) N-amyl acetate	10.82	43	1128	0.398	ug/l #	53
76) 1,2,3-Trichloropropane	11.13	75	58006	27.770	ug/l #	35
81) trans-1,4-Dichloro-2-buten	11.13	75	58006	71.967	ug/l #	10

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 5.66 min Scan# 739

Delta R.T. 0.01 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

Instrument :

MSVOA_X

ClientSampleId :

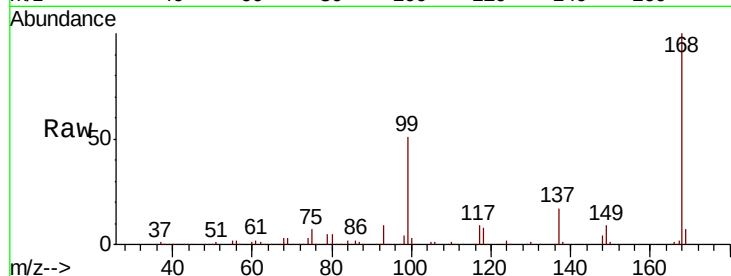
2S-A4-(1)

Tgt Ion: 168 Resp: 187378

Ion Ratio Lower Upper

168 100

99 50.8 38.5 57.7



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VX0

5.66

60000

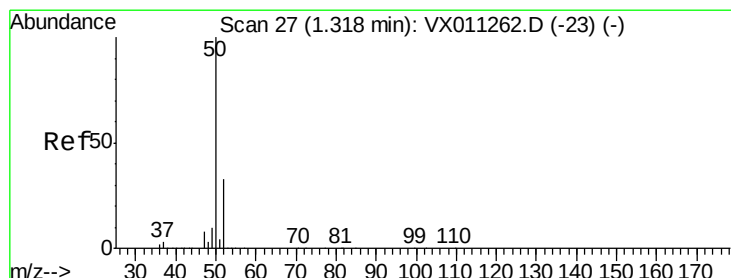
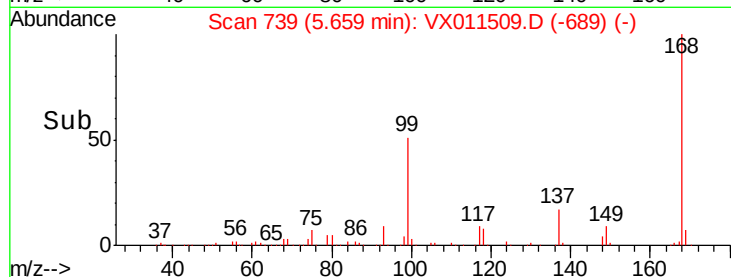
40000

20000

0

5.60 5.70

Time-->



#3

Chloromethane

Concen: 0.233 ug/l

RT: 1.32 min Scan# 27

Delta R.T. 0.00 min

Lab File: VX011509.D

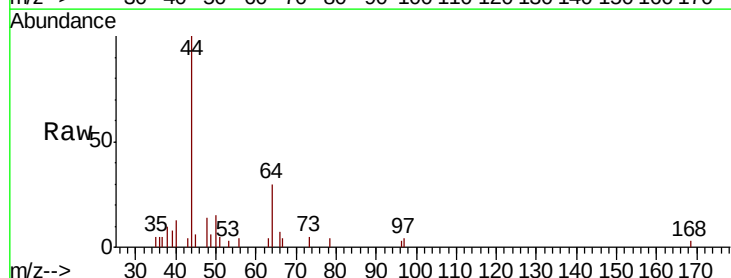
Acq: 13 Aug 2019 02:00

Tgt Ion: 50 Resp: 379

Ion Ratio Lower Upper

50 100

52 0.0 26.4 39.6#



Abundance Ion 49.90 (49.60 to 50.60): VX0

Ion 51.90 (51.60 to 52.60): VX0

1.32

250

200

150

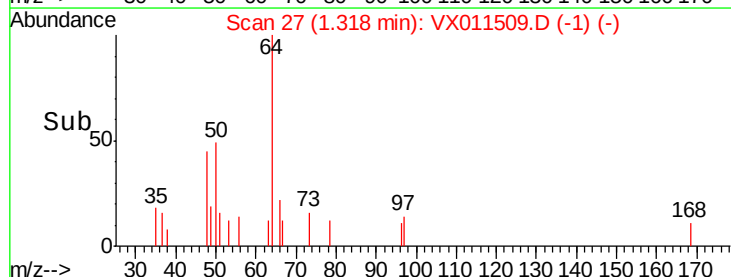
100

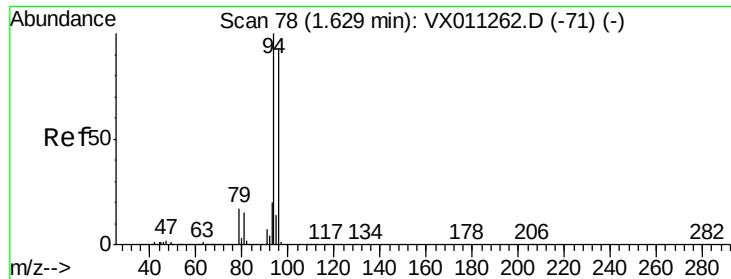
50

0

1.30 1.35

Time-->





#5

Bromomethane

Concen: 0.331 ug/l

RT: 1.64 min Scan# 80

Delta R.T. 0.01 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

Instrument :

MSVOA_X

ClientSampled :

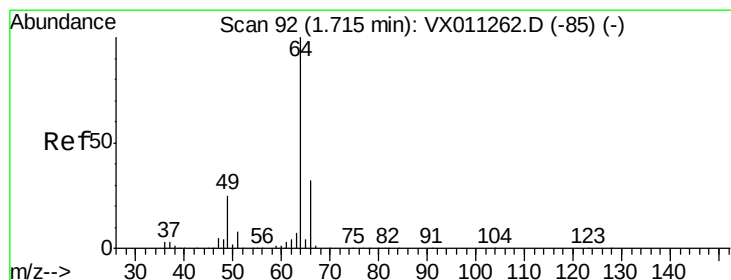
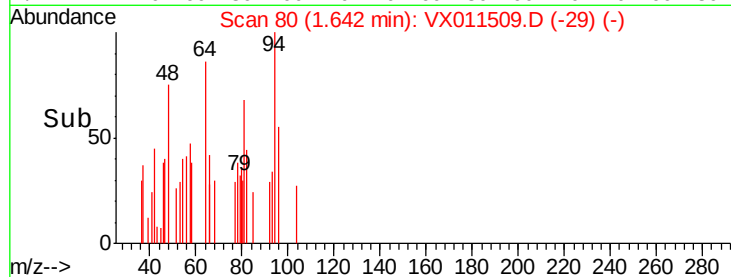
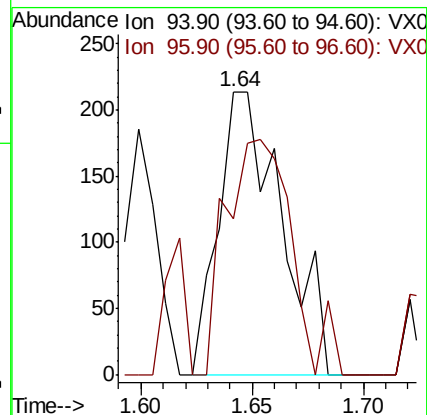
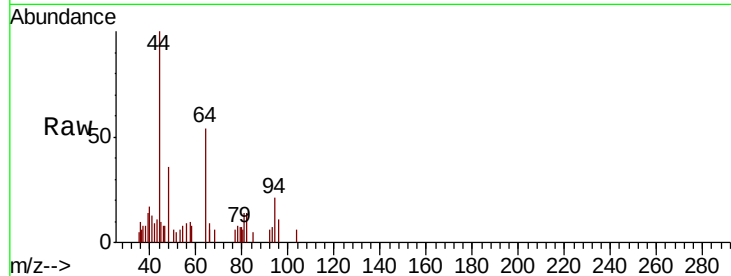
2S-A4-(1)

Tgt Ion: 94 Resp: 422

Ion Ratio Lower Upper

94 100

96 55.1 74.6 112.0#



#6

Chloroethane

Concen: Below Cal

RT: 1.75 min Scan# 98

Delta R.T. 0.04 min

Lab File: VX011509.D

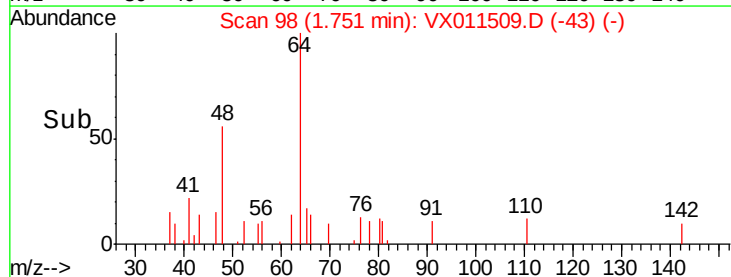
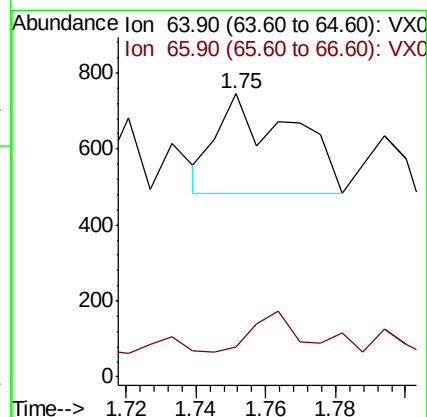
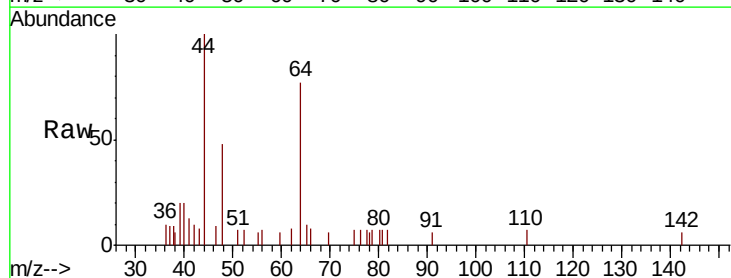
Acq: 13 Aug 2019 02:00

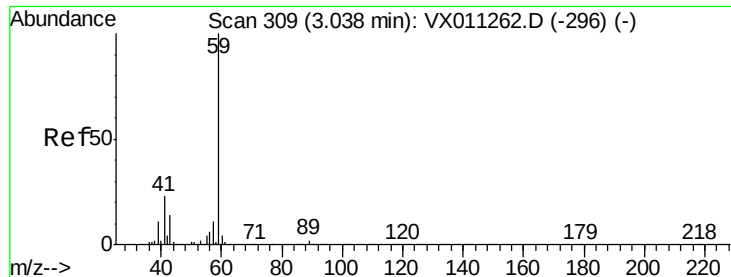
Tgt Ion: 64 Resp: 385

Ion Ratio Lower Upper

64 100

66 3.1 25.1 37.7#





#11

Tert butyl alcohol

Concen: 5.101 ug/l

RT: 3.01 min Scan# 304

Delta R.T. -0.03 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

Instrument :

MSVOA_X

ClientSampled :

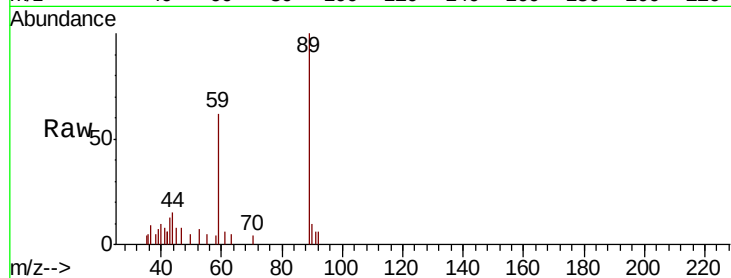
2S-A4-(1)

Tgt Ion: 59 Resp: 1911

Ion Ratio Lower Upper

59 100

57 1.2 8.3 12.5#



Abundance Ion 59.00 (58.70 to 59.70): VX0

Ion 57.00 (56.70 to 57.70): VX0

3.01

800

600

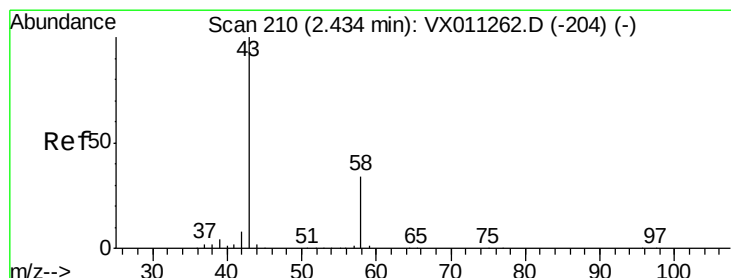
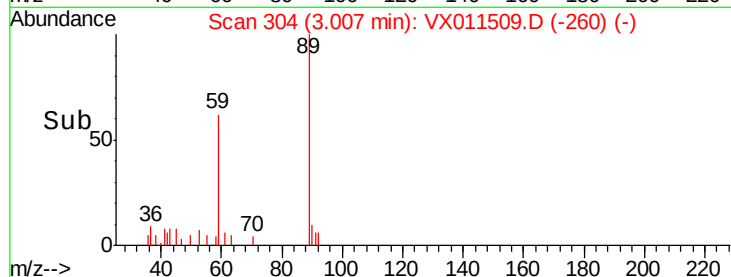
400

200

0

2.95 3.00 3.05 3.10

Time-->



#16

Acetone

Concen: 11.788 ug/l

RT: 2.43 min Scan# 210

Delta R.T. 0.00 min

Lab File: VX011509.D

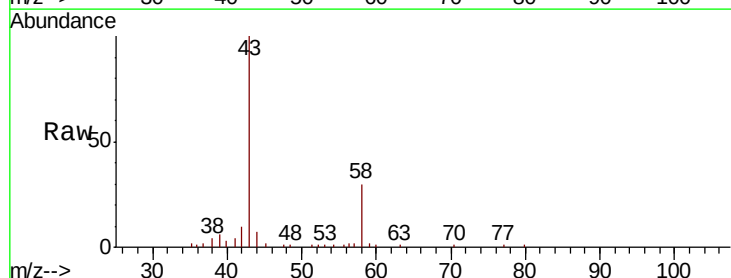
Acq: 13 Aug 2019 02:00

Tgt Ion: 43 Resp: 10588

Ion Ratio Lower Upper

43 100

58 30.8 27.4 41.0



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0

2.43

6000

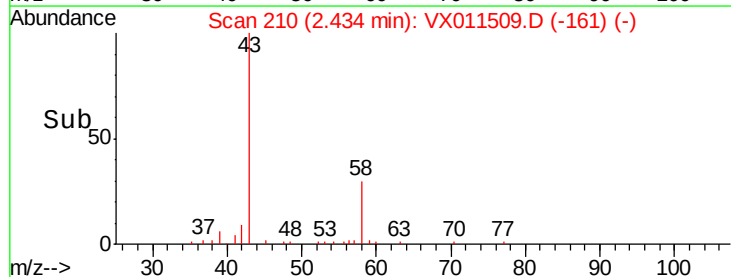
4000

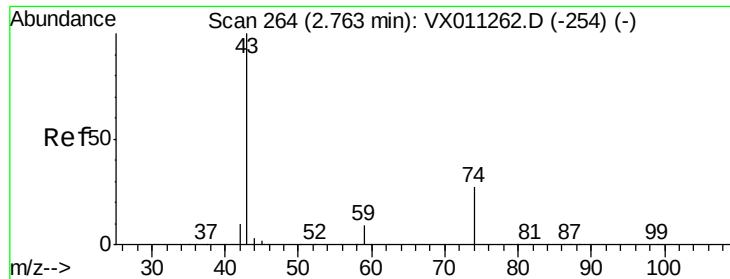
2000

0

2.35 2.40 2.45 2.50

Time-->

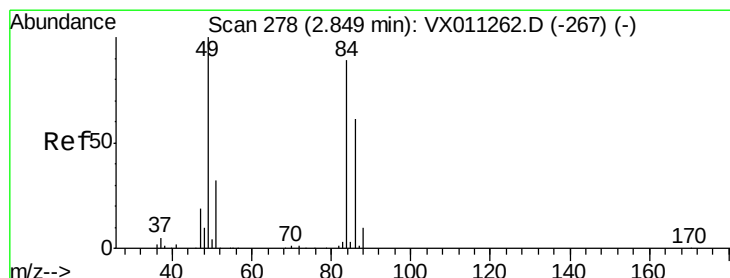
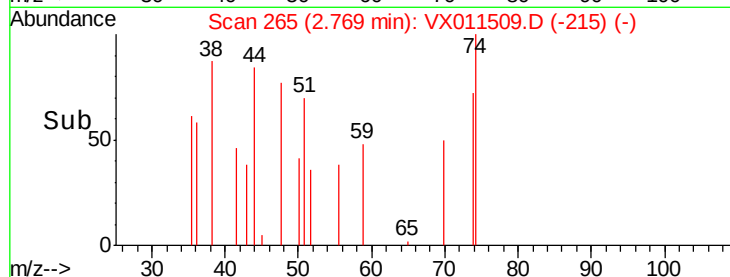
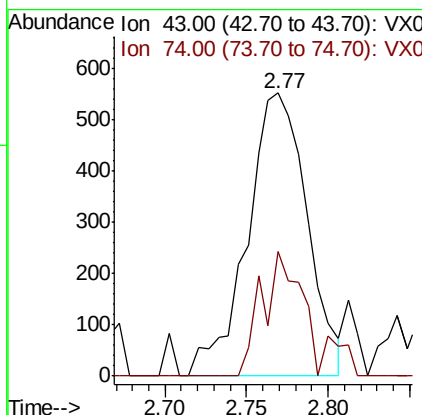
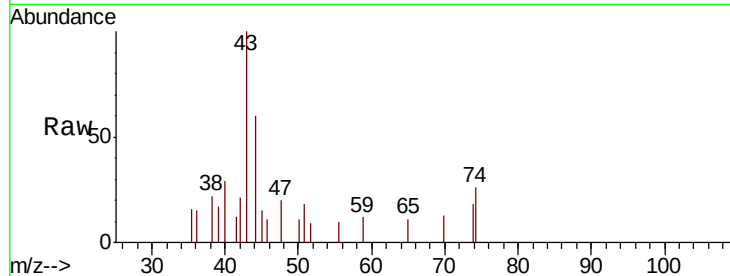




#18
Methyl Acetate
Concen: 0.685 ug/l
RT: 2.77 min Scan# 265
Delta R.T. 0.01 min
Lab File: VX011509.D
Acq: 13 Aug 2019 02:00

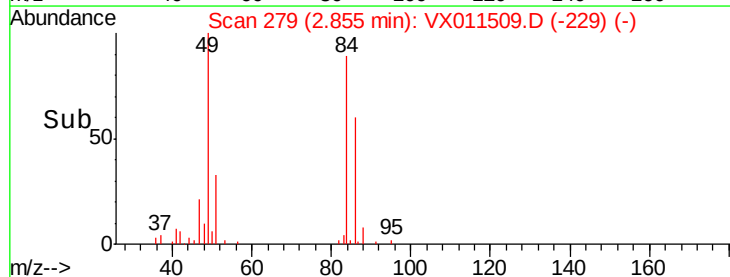
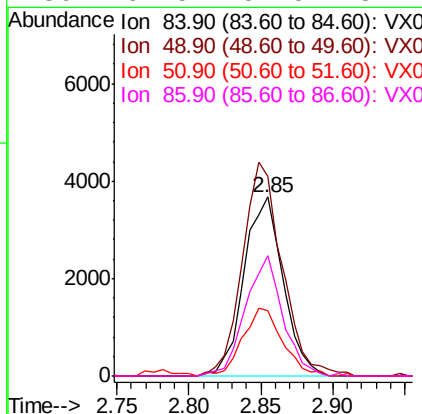
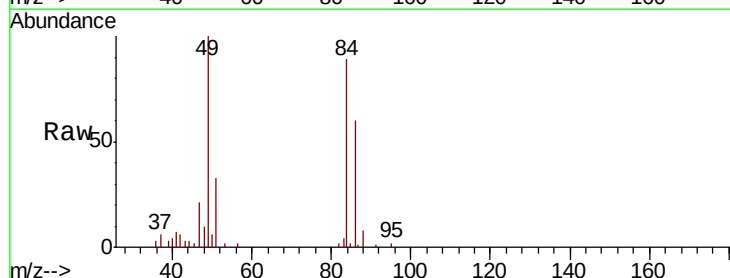
Instrument :
MSVOA_X
ClientSampled :
2S-A4-(1)

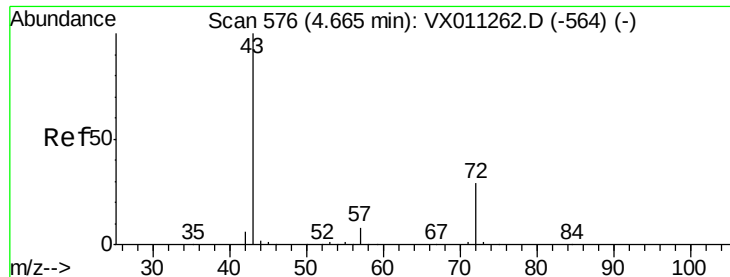
Tgt Ion: 43 Resp: 1407
Ion Ratio Lower Upper
43 100
74 28.5 21.0 31.6



#20
Methylene Chloride
Concen: 3.512 ug/l
RT: 2.85 min Scan# 279
Delta R.T. 0.01 min
Lab File: VX011509.D
Acq: 13 Aug 2019 02:00

Tgt Ion: 84 Resp: 6909
Ion Ratio Lower Upper
84 100
49 111.8 89.3 133.9
51 36.5 28.3 42.5
86 67.5 54.5 81.7





#25

2-Butanone

Concen: 0.814 ug/l

RT: 4.69 min Scan# 580

Delta R.T. 0.02 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

Instrument :

MSVOA_X

ClientSampled :

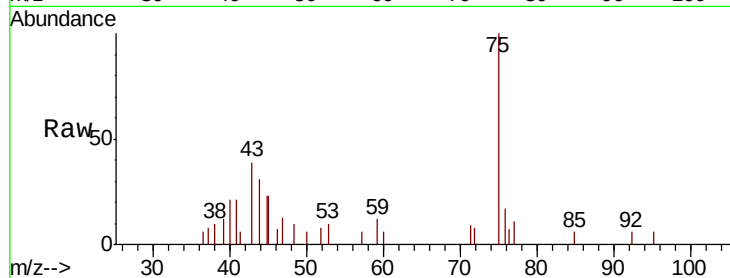
2S-A4-(1)

Tgt Ion: 43 Resp: 1040

Ion Ratio Lower Upper

43 100

72 19.3 23.2 34.8#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

4.69

300

200

100

0

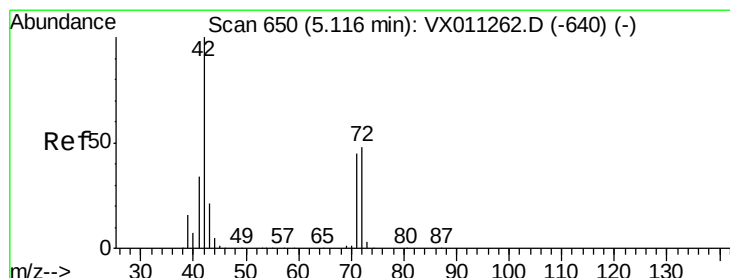
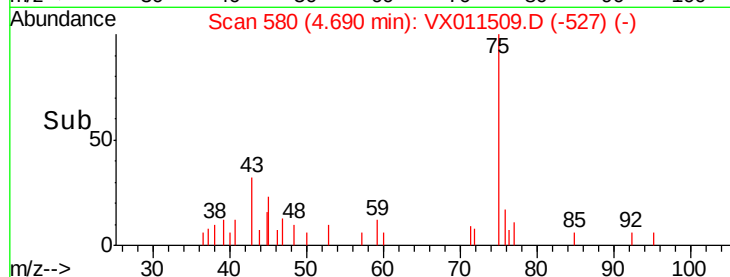
4.60

4.65

4.70

4.75

Time-->



#29

Tetrahydrofuran

Concen: 0.502 ug/l

RT: 5.13 min Scan# 653

Delta R.T. 0.02 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

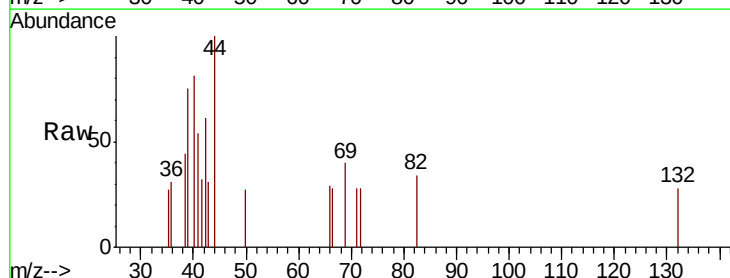
Tgt Ion: 42 Resp: 393

Ion Ratio Lower Upper

42 100

72 22.4 39.9 59.9#

71 10.4 36.9 55.3#



Abundance Ion 42.00 (41.70 to 42.70): VX0

Ion 72.00 (71.70 to 72.70): VX0

Ion 71.00 (70.70 to 71.70): VX0

5.13

200

150

100

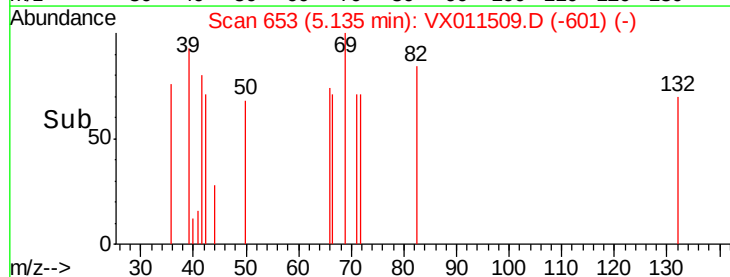
50

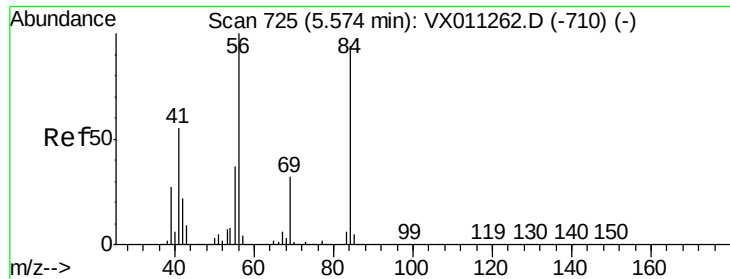
0

5.10

5.15

Time-->

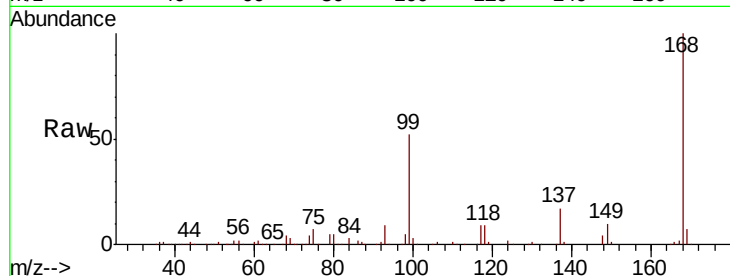




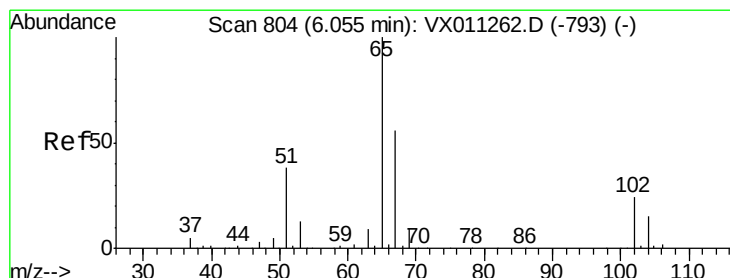
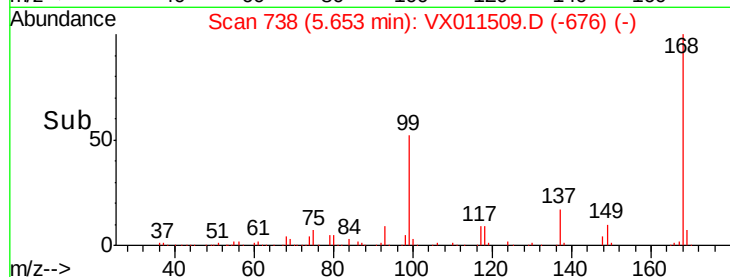
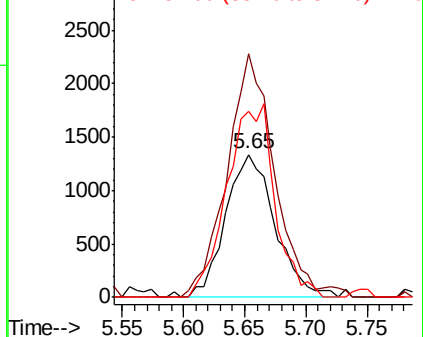
#31
Cyclohexane
Concen: 1.548 ug/l
RT: 5.65 min Scan# 738
Delta R.T. 0.08 min
Lab File: VX011509.D
Acq: 13 Aug 2019 02:00

Instrument :
MSVOA_X
ClientSampleId :
2S-A4-(1)

Tgt Ion: 56 Resp: 3762
Ion Ratio Lower Upper
56 100
69 165.3 25.5 38.3#
84 129.9 75.0 112.4#

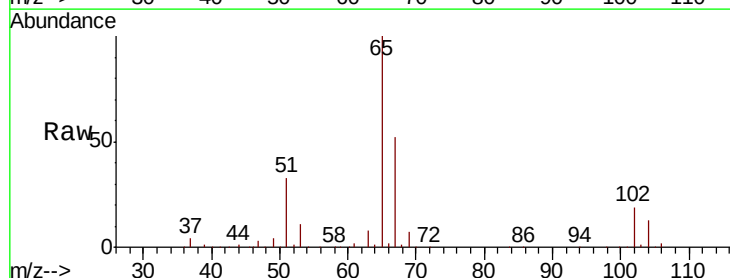


Abundance Ion 56.00 (55.70 to 56.70): VX0
Ion 69.00 (68.70 to 69.70): VX0
Ion 84.00 (83.70 to 84.70): VX0

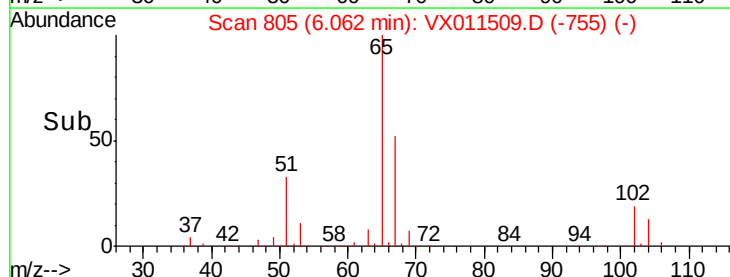
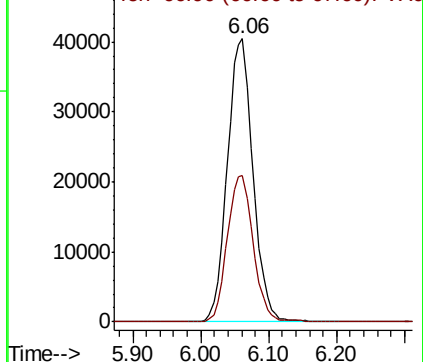


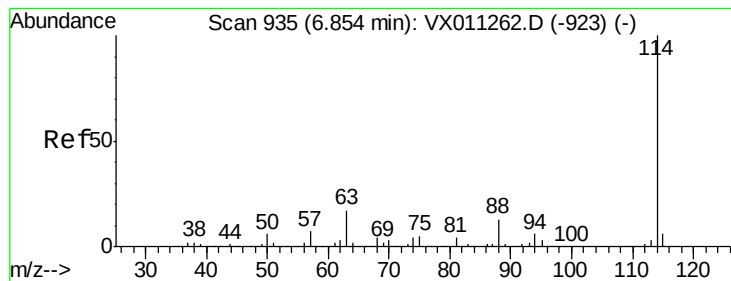
#33
1,2-Dichloroethane-d4
Concen: 55.899 ug/l
RT: 6.06 min Scan# 805
Delta R.T. 0.01 min
Lab File: VX011509.D
Acq: 13 Aug 2019 02:00

Tgt Ion: 65 Resp: 105481
Ion Ratio Lower Upper
65 100
67 52.4 0.0 110.6



Abundance Ion 64.90 (64.60 to 65.60): VX0
Ion 66.90 (66.60 to 67.60): VX0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 6.85 min Scan# 935

Delta R.T. 0.00 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

Instrument :

MSVOA_X

ClientSampleId :

2S-A4-(1)

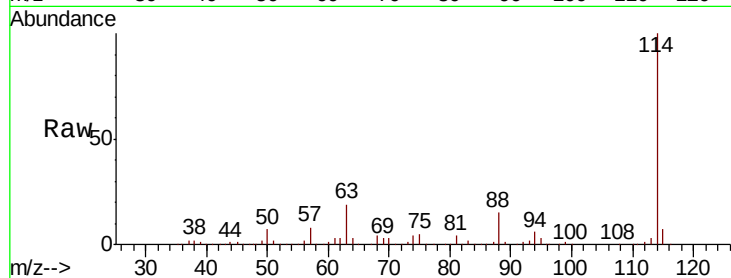
Tgt Ion:114 Resp: 284183

Ion Ratio Lower Upper

114 100

63 19.1 0.0 34.0

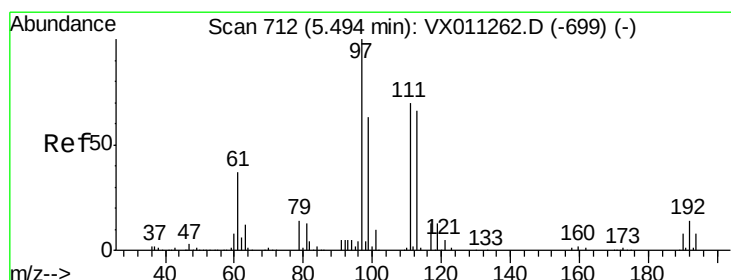
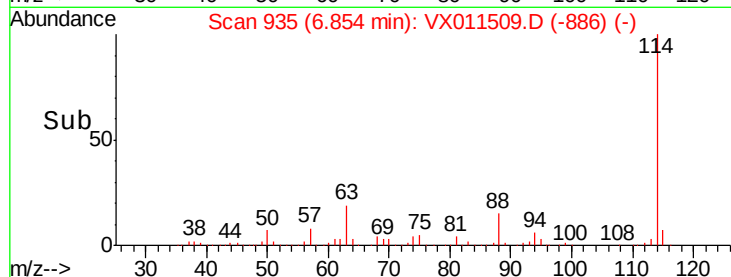
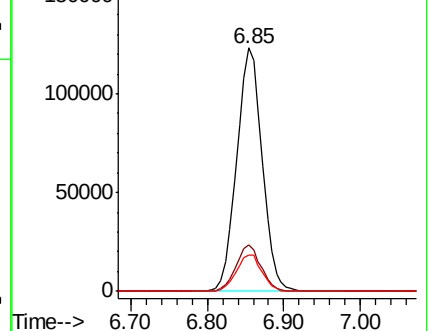
88 15.0 0.0 26.4



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: 46.968 ug/l

RT: 5.49 min Scan# 712

Delta R.T. 0.00 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

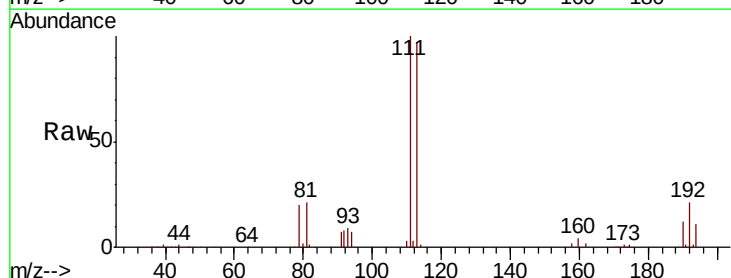
Tgt Ion:113 Resp: 87143

Ion Ratio Lower Upper

113 100

111 102.9 81.9 122.9

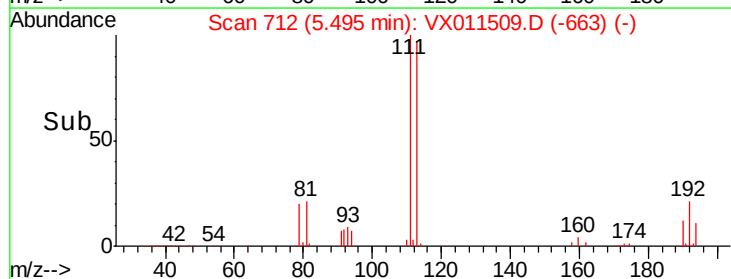
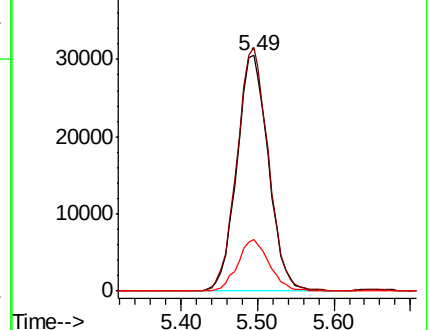
192 21.8 17.8 26.8

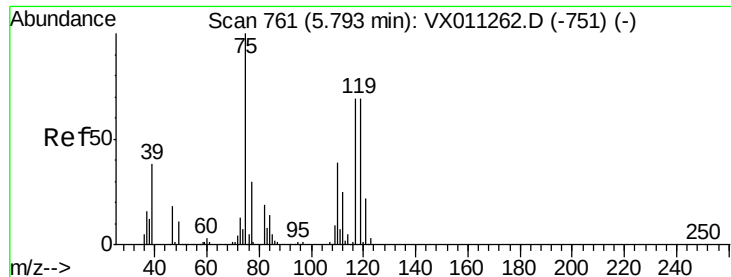


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

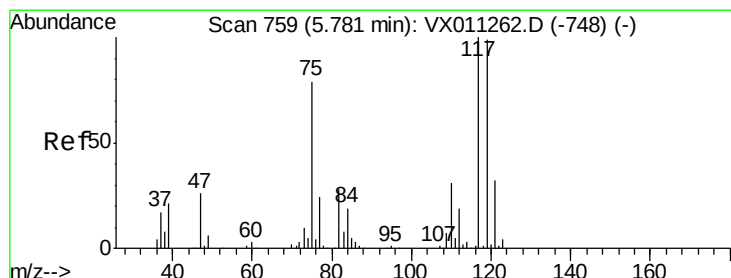
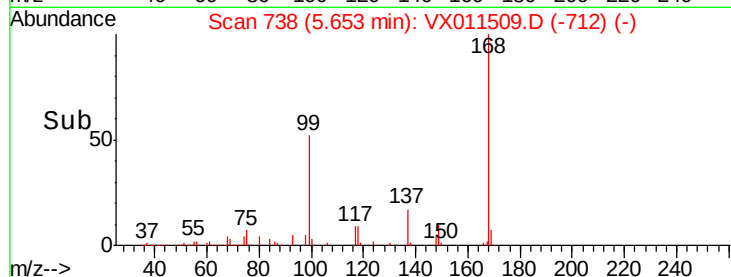
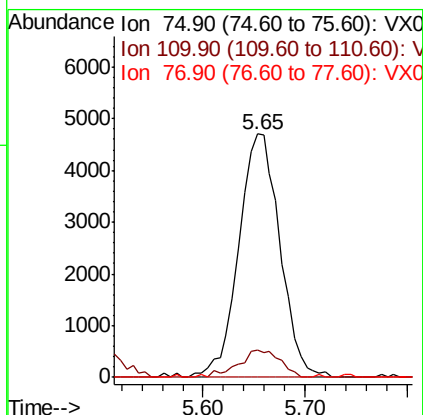
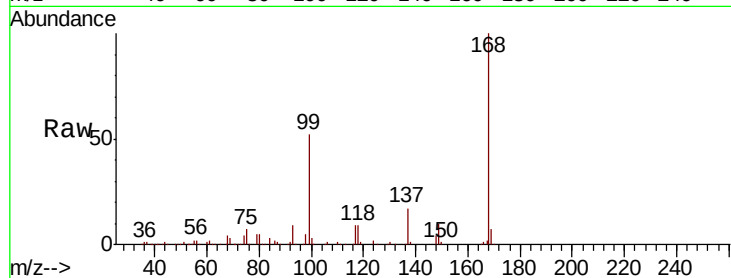




#36
 1,1-Dichloropropene
 Concen: 5.300 ug/l
 RT: 5.65 min Scan# 738
 Delta R.T. -0.14 min
 Lab File: VX011509.D
 Acq: 13 Aug 2019 02:00

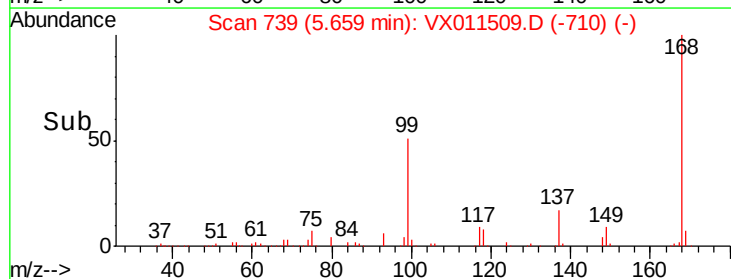
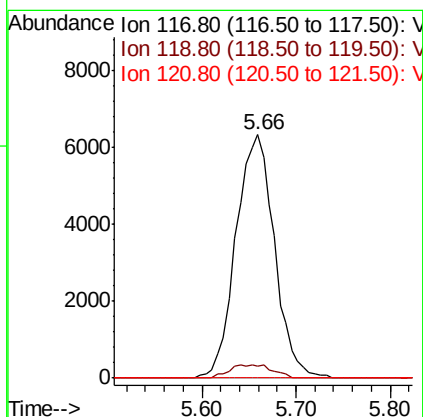
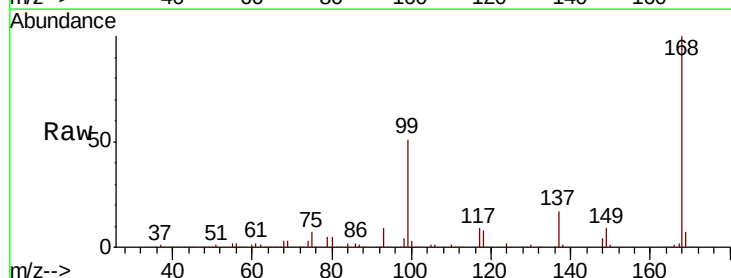
Instrument :
 MSVOA_X
 ClientSampleId :
 2S-A4-(1)

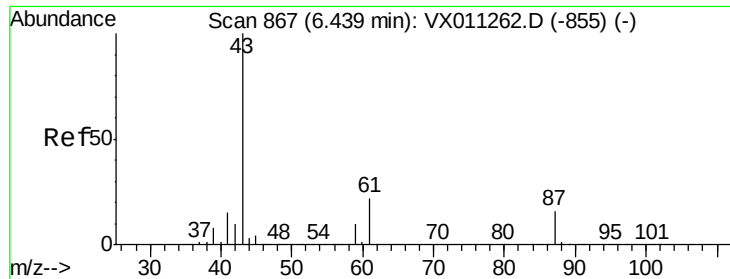
Tgt Ion: 75 Resp: 13150
 Ion Ratio Lower Upper
 75 100
 110 11.2 20.0 59.9#
 77 0.0 24.8 37.2#



#38
 Carbon Tetrachloride
 Concen: 7.237 ug/l
 RT: 5.66 min Scan# 739
 Delta R.T. -0.12 min
 Lab File: VX011509.D
 Acq: 13 Aug 2019 02:00

Tgt Ion: 117 Resp: 18066
 Ion Ratio Lower Upper
 117 100
 119 4.6 79.0 118.4#
 121 0.0 25.9 38.9#





#43

Isopropyl Acetate

Concen: 6.601 ug/l

RT: 6.44 min Scan# 867

Delta R.T. 0.00 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

Instrument :

MSVOA_X

ClientSampled :

2S-A4-(1)

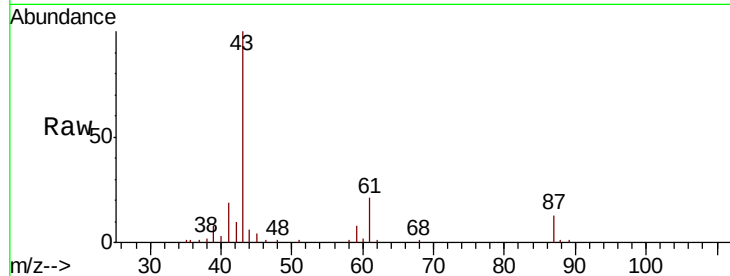
Tgt Ion: 43 Resp: 26267

Ion Ratio Lower Upper

43 100

61 21.8 16.5 24.7

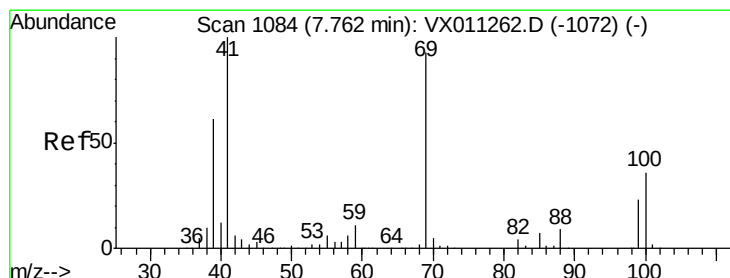
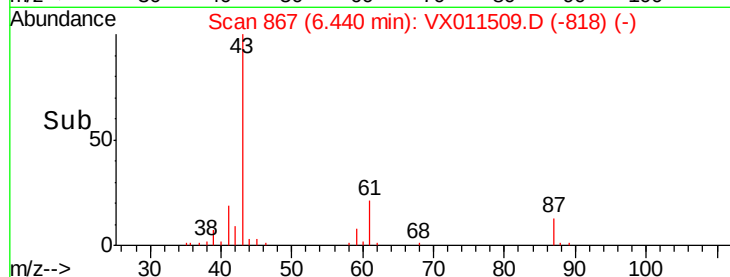
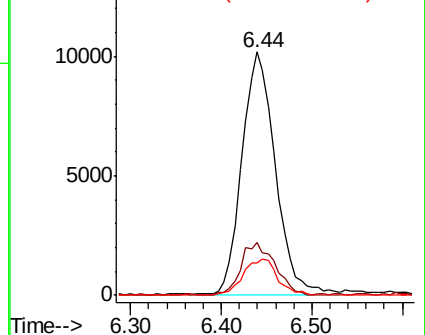
87 15.2 12.1 18.1



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



#48

Methyl methacrylate

Concen: 0.795 ug/l

RT: 7.67 min Scan# 1069

Delta R.T. -0.09 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

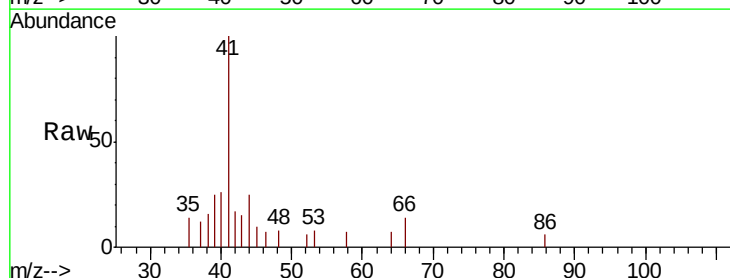
Tgt Ion: 41 Resp: 1488

Ion Ratio Lower Upper

41 100

69 0.0 74.5 111.7#

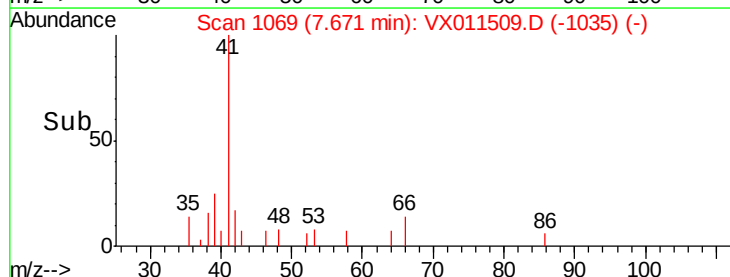
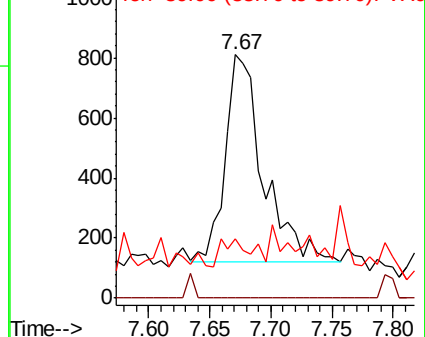
39 0.0 48.6 72.8#

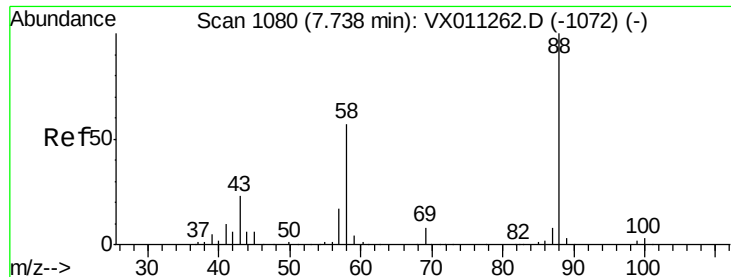


Abundance Ion 41.00 (40.70 to 41.70): VX0

Ion 69.00 (68.70 to 69.70): VX0

Ion 39.00 (38.70 to 39.70): VX0

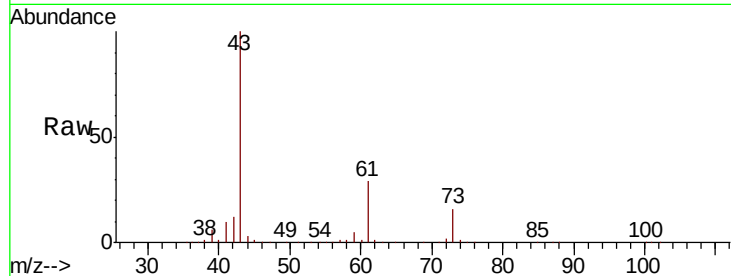




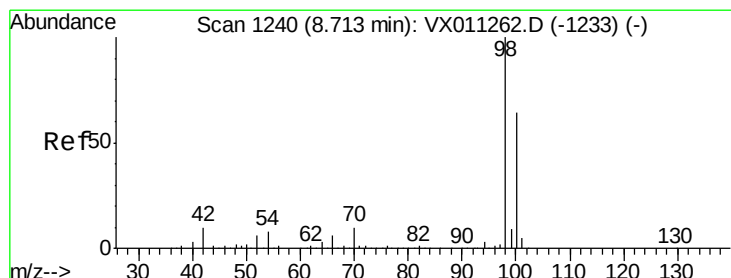
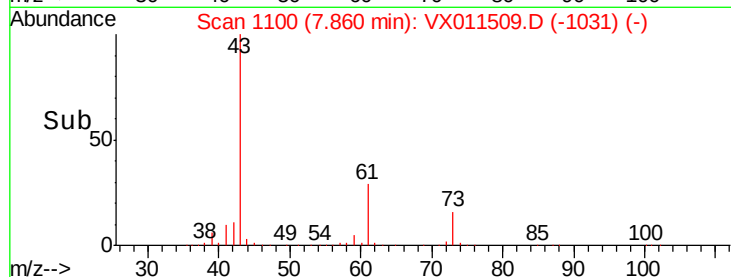
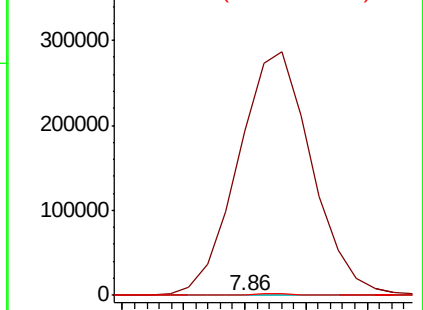
#49
 1,4-Dioxane
 Concen: 2.284 ug/l
 RT: 7.86 min Scan# 1100
 Delta R.T. 0.12 min
 Lab File: VX011509.D
 Acq: 13 Aug 2019 02:00

Instrument :
 MSVOA_X
 ClientSampleId :
 2S-A4-(1)

Tgt Ion: 88 Resp: 124
 Ion Ratio Lower Upper
 88 100
 43 388633.9 22.2 33.2#
 58 1979.8 47.8 71.8#

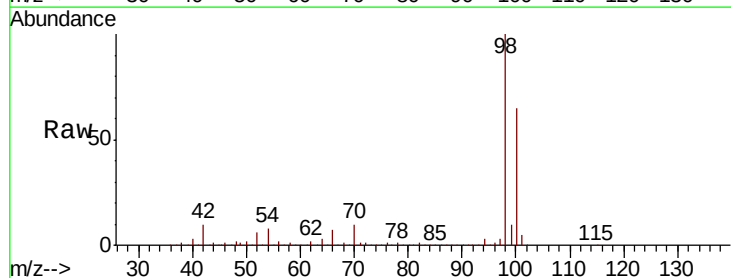


Abundance Ion 88.00 (87.70 to 88.70): VX0
 Ion 43.00 (42.70 to 43.70): VX0
 Ion 58.00 (57.70 to 58.70): VX0

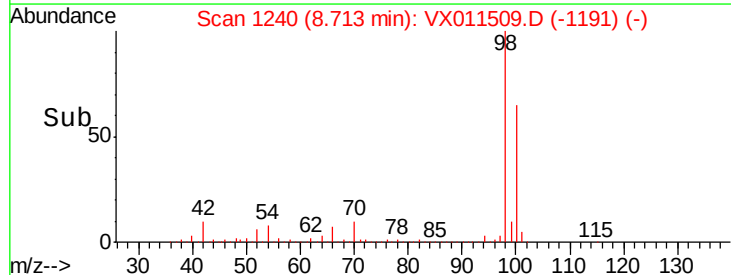
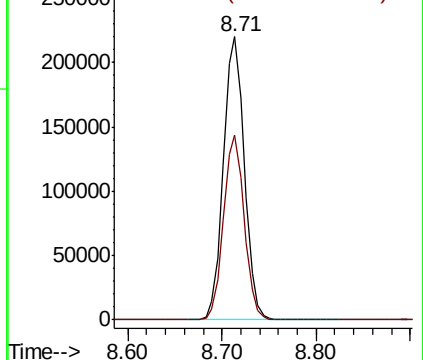


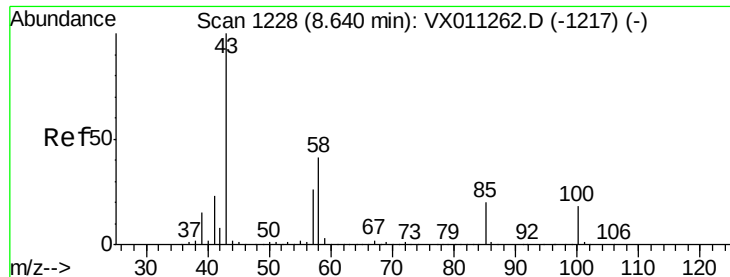
#50
 Toluene-d8
 Concen: 48.389 ug/l
 RT: 8.71 min Scan# 1240
 Delta R.T. 0.00 min
 Lab File: VX011509.D
 Acq: 13 Aug 2019 02:00

Tgt Ion: 98 Resp: 338890
 Ion Ratio Lower Upper
 98 100
 100 64.2 51.7 77.5



Abundance Ion 98.00 (97.70 to 98.70): VX0
 Ion 100.00 (99.70 to 100.70): VX0





#51

4-Methyl-2-Pentanone

Concen: 10.148 ug/l

RT: 8.61 min Scan# 1223

Delta R.T. -0.03 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

Instrument :

MSVOA_X

ClientSampleId :

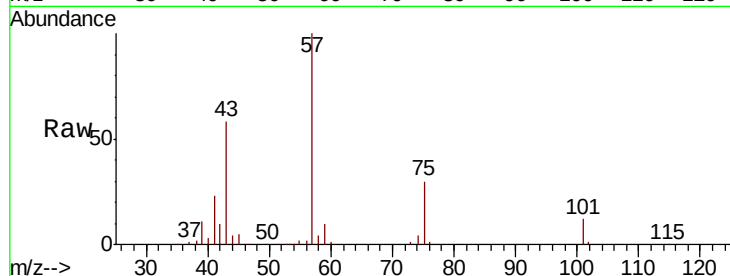
2S-A4-(1)

Tgt Ion: 43 Resp: 26060

Ion Ratio Lower Upper

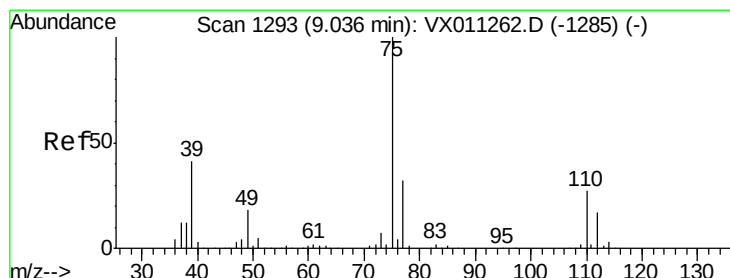
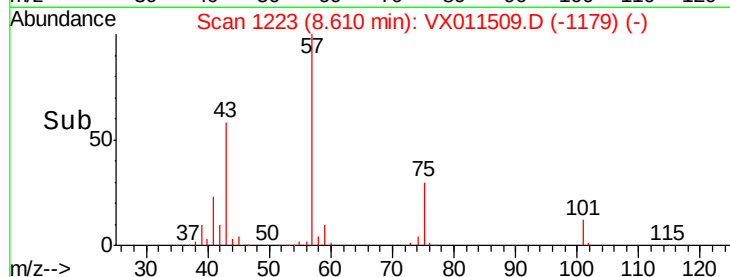
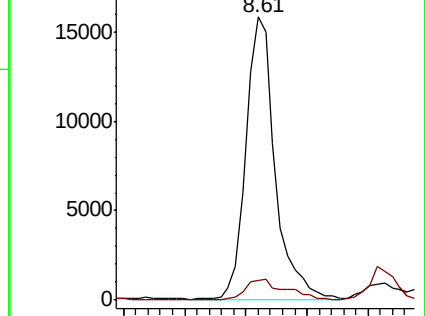
43 100

58 10.2 32.3 48.5#



Abundance Ion 43.00 (42.70 to 43.70): VX0

Ion 58.00 (57.70 to 58.70): VX0



#53

t-1,3-Dichloropropene

Concen: 2.860 ug/l

RT: 9.02 min Scan# 1290

Delta R.T. -0.02 min

Lab File: VX011509.D

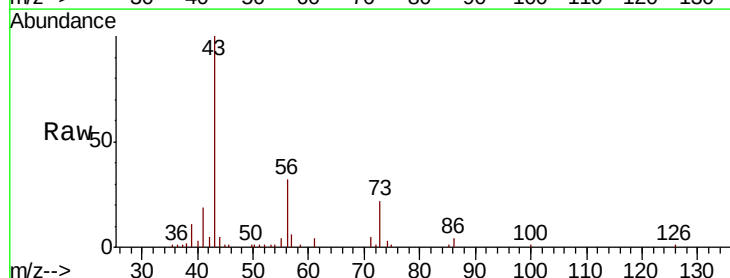
Acq: 13 Aug 2019 02:00

Tgt Ion: 75 Resp: 63

Ion Ratio Lower Upper

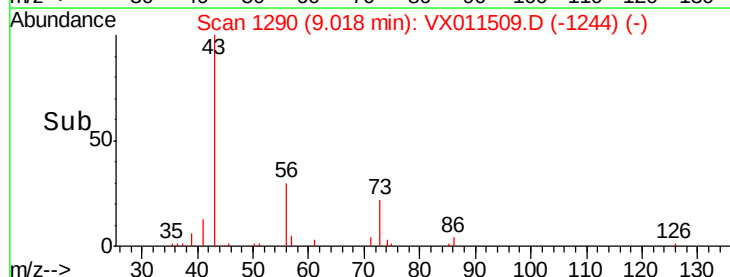
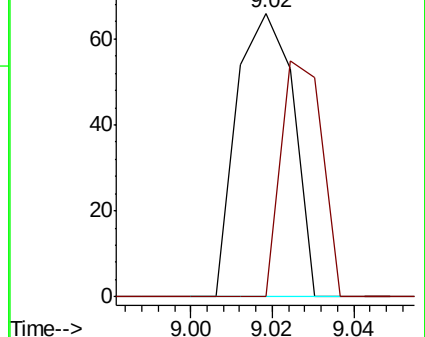
75 100

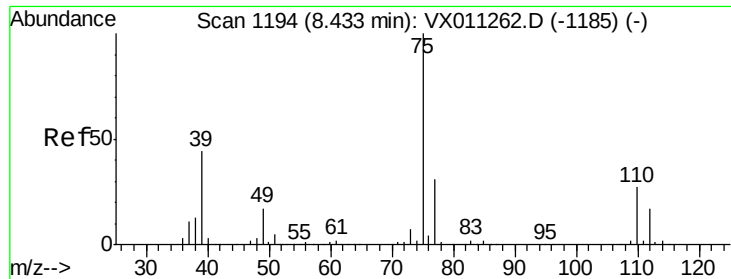
77 0.0 25.4 38.0#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 76.90 (76.60 to 77.60): VX0



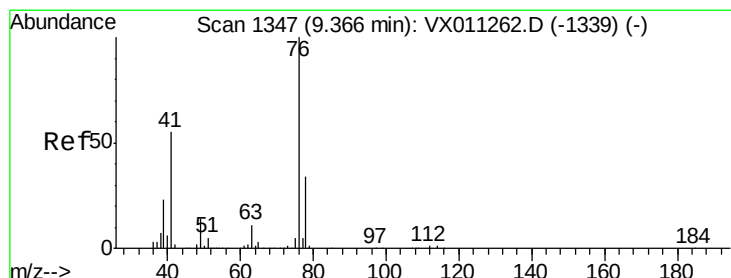
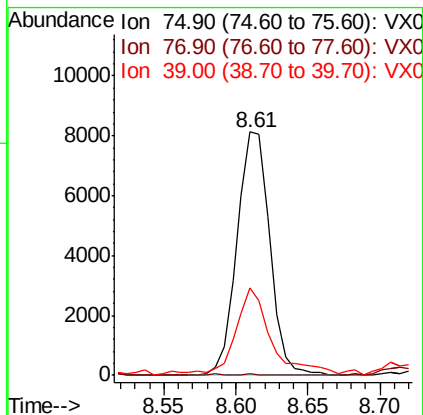
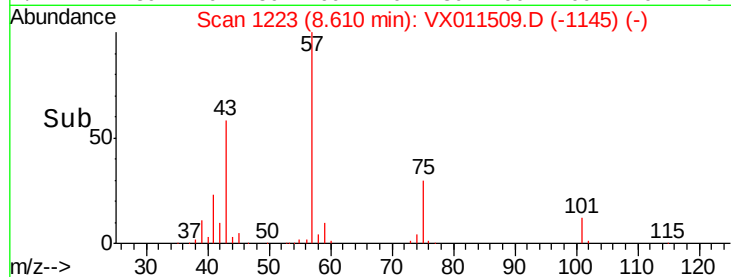
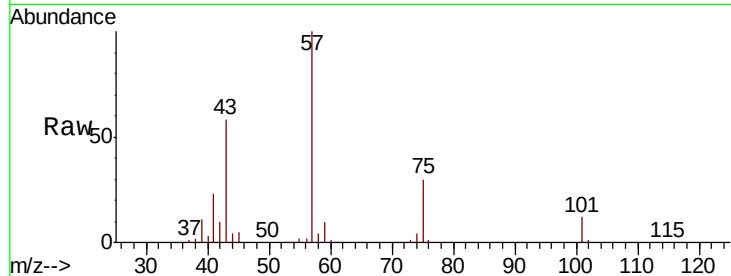


#54

cis-1,3-Dichloropropene
 Concen: 4.655 ug/l
 RT: 8.61 min Scan# 1223
 Delta R.T. 0.18 min
 Lab File: VX011509.D
 Acq: 13 Aug 2019 02:00

Instrument :
 MSVOA_X
 ClientSampled :
 2S-A4-(1)

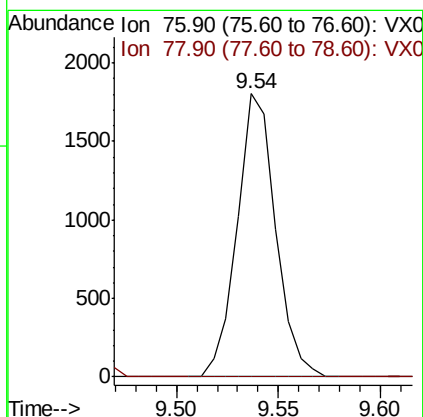
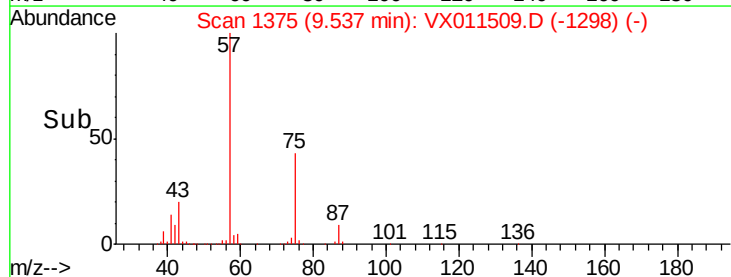
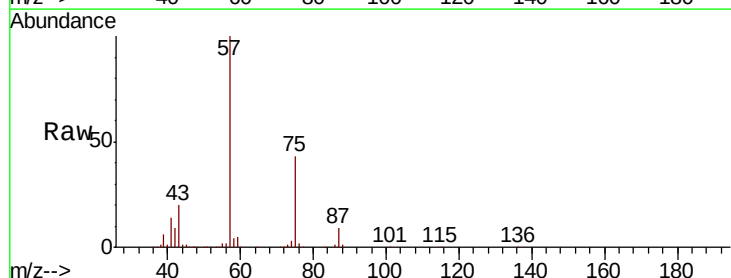
Tgt Ion: 75 Resp: 12888
 Ion Ratio Lower Upper
 75 100
 77 0.9 25.0 37.6#
 39 35.4 35.3 52.9

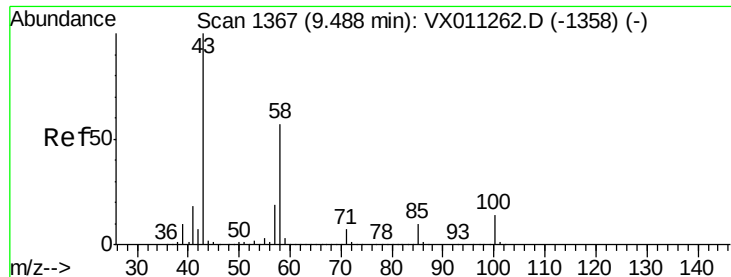


#57

1,3-Dichloropropane
 Concen: 0.741 ug/l
 RT: 9.54 min Scan# 1375
 Delta R.T. 0.17 min
 Lab File: VX011509.D
 Acq: 13 Aug 2019 02:00

Tgt Ion: 76 Resp: 2360
 Ion Ratio Lower Upper
 76 100
 78 0.0 26.6 40.0#

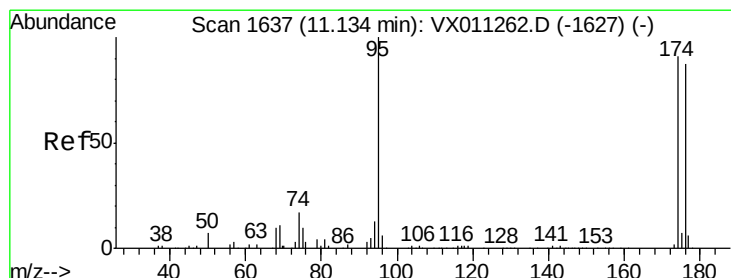
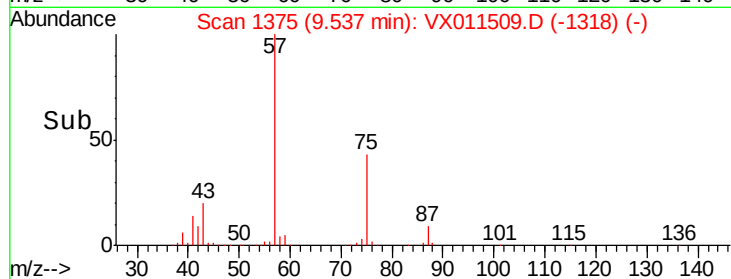
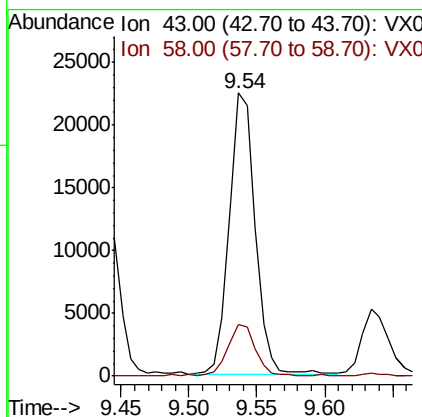
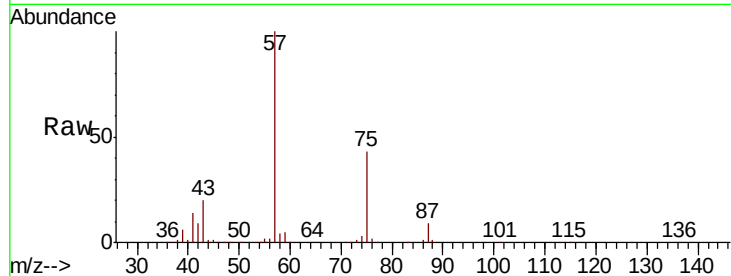




#59
2-Hexanone
Concen: 14.998 ug/l
RT: 9.54 min Scan# 1375
Delta R.T. 0.05 min
Lab File: VX011509.D
Acq: 13 Aug 2019 02:00

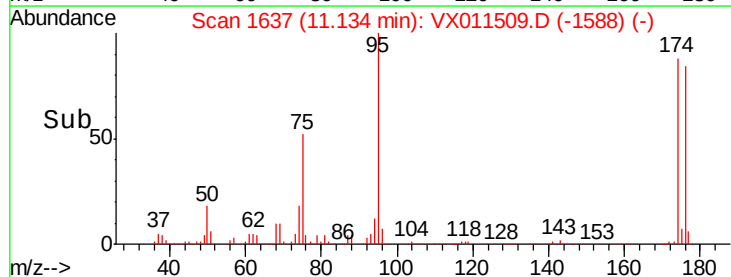
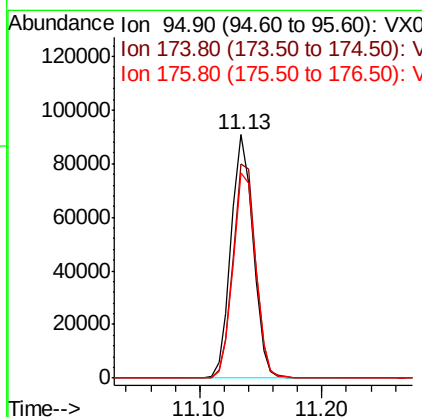
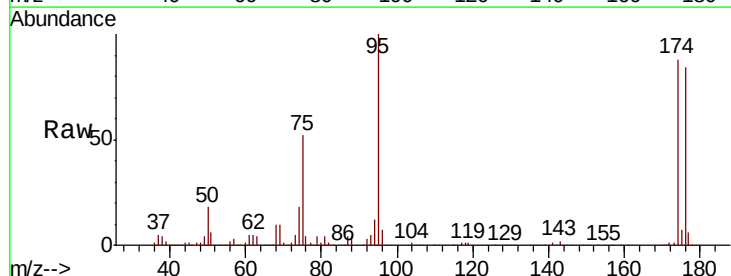
Instrument :
MSVOA_X
ClientSampled :
2S-A4-(1)

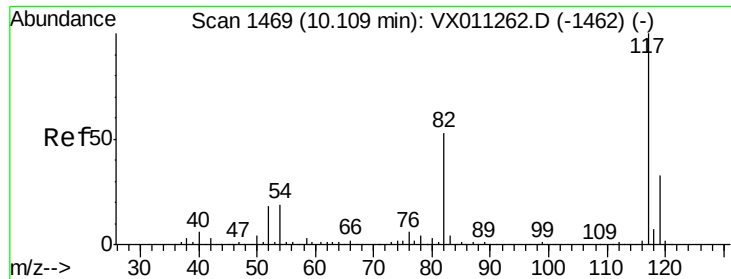
Tgt Ion: 43 Resp: 29832
Ion Ratio Lower Upper
43 100
58 19.4 28.2 84.6#



#62
4-Bromofluorobenzene
Concen: 45.212 ug/l
RT: 11.13 min Scan# 1637
Delta R.T. 0.00 min
Lab File: VX011509.D
Acq: 13 Aug 2019 02:00

Tgt Ion: 95 Resp: 113050
Ion Ratio Lower Upper
95 100
174 90.1 0.0 191.2
176 86.2 0.0 184.8

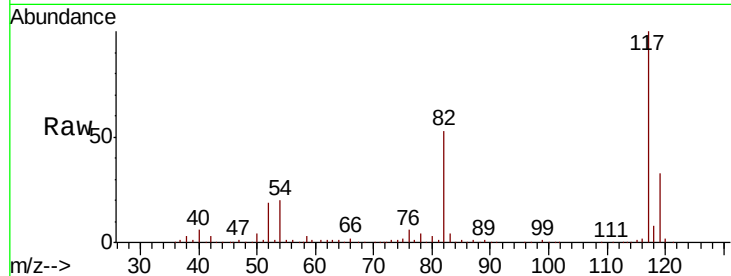




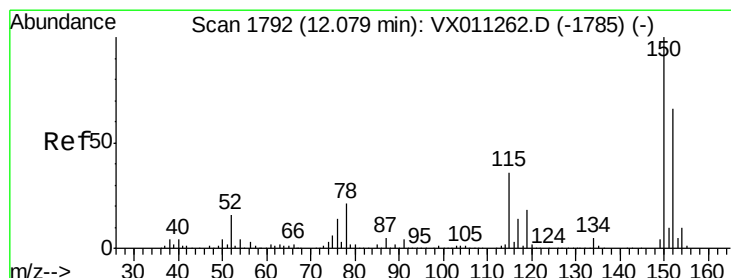
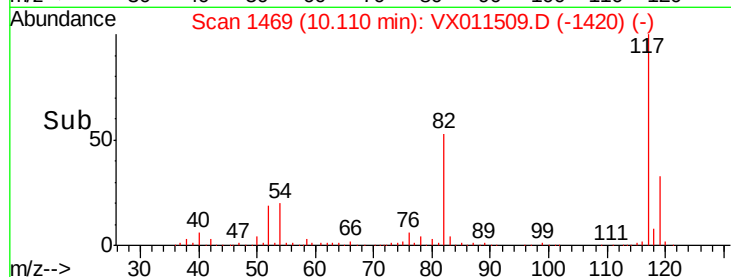
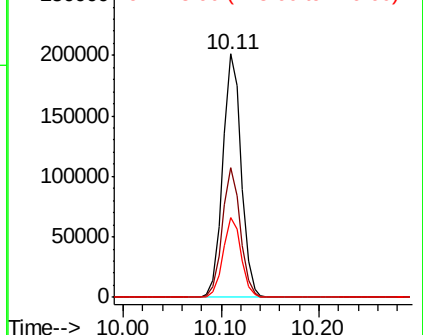
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 10.11 min Scan# 1469
Delta R.T. 0.00 min
Lab File: VX011509.D
Acq: 13 Aug 2019 02:00

Instrument :
MSVOA_X
ClientSampled :
2S-A4-(1)

Tgt Ion:117 Resp: 263095
Ion Ratio Lower Upper
117 100
82 53.0 42.2 63.2
119 32.5 26.6 39.8

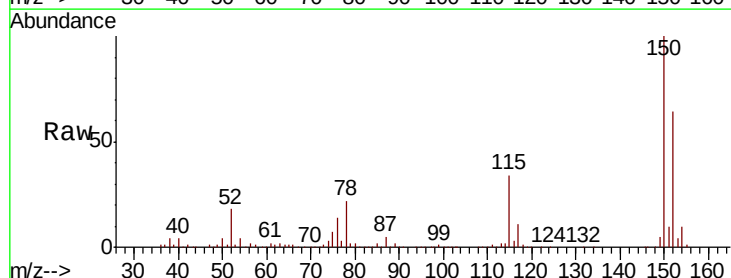


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VX0
Ion 118.90 (118.60 to 119.60): V

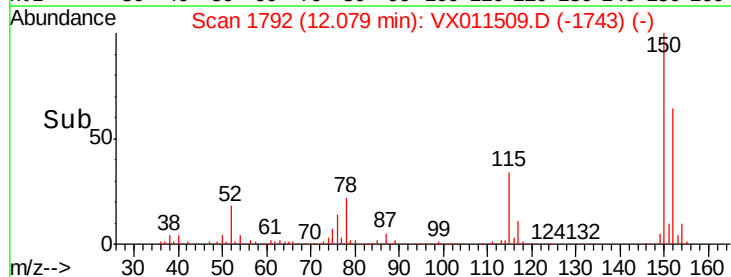
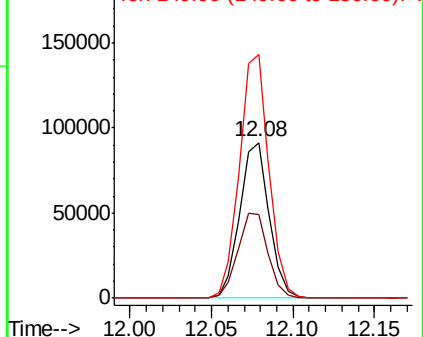


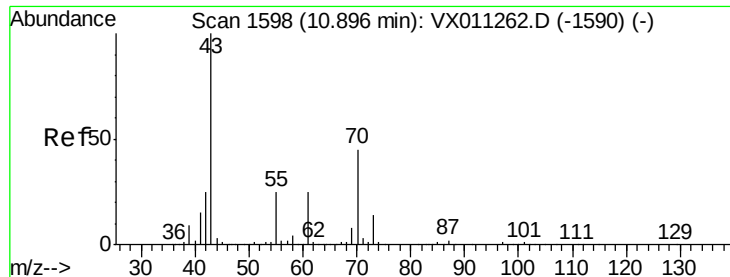
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 12.08 min Scan# 1792
Delta R.T. 0.00 min
Lab File: VX011509.D
Acq: 13 Aug 2019 02:00

Tgt Ion:152 Resp: 114697
Ion Ratio Lower Upper
152 100
115 56.3 40.0 119.9
150 157.4 0.0 350.4



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-ethyl acetate

Concen: 0.398 ug/l

RT: 10.82 min Scan# 1586

Delta R.T. -0.07 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

Instrument :

MSVOA_X

ClientSampled :

2S-A4-(1)

Tgt Ion: 43 Resp: 1128

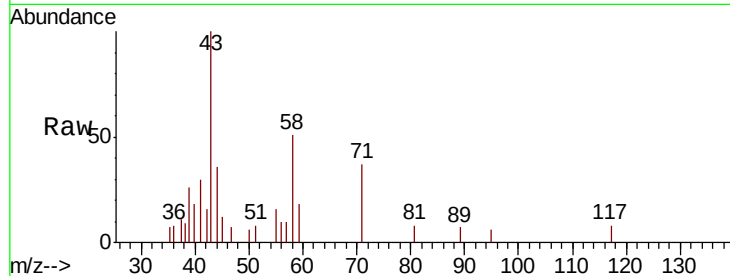
Ion Ratio Lower Upper

43 100

70 4.1 35.9 53.9#

55 16.0 19.8 29.6#

61 0.0 19.7 29.5#

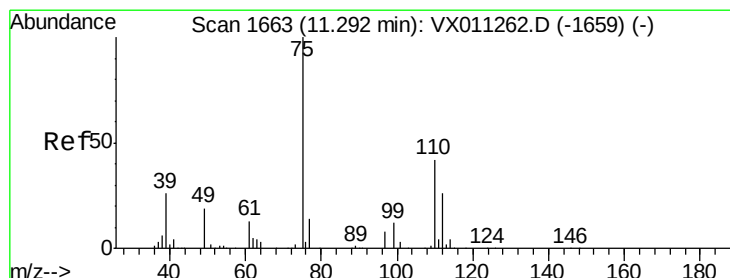
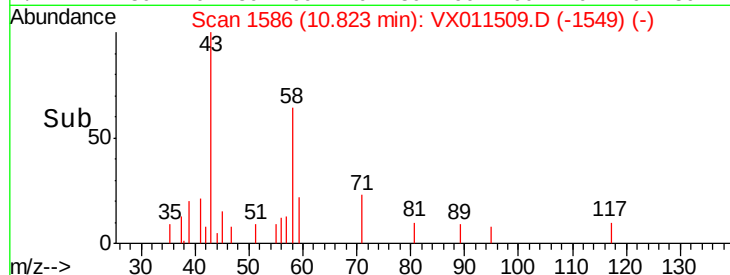
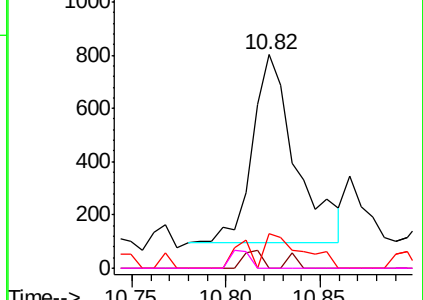


Abundance Ion 43.00 (42.70 to 43.70): VX0

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: 27.770 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. -0.16 min

Lab File: VX011509.D

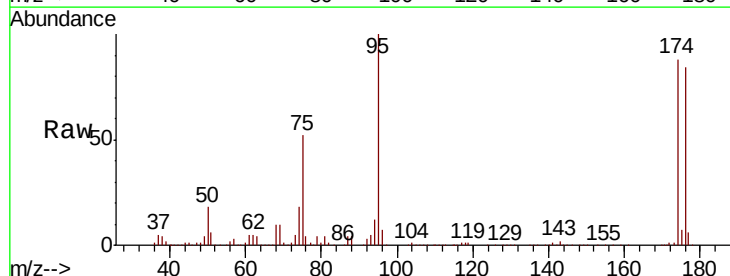
Acq: 13 Aug 2019 02:00

Tgt Ion: 75 Resp: 58006

Ion Ratio Lower Upper

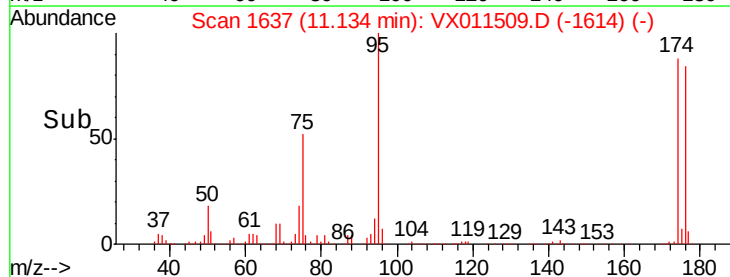
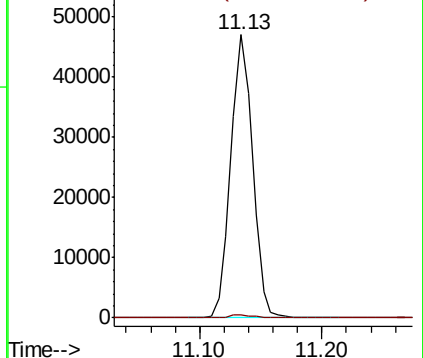
75 100

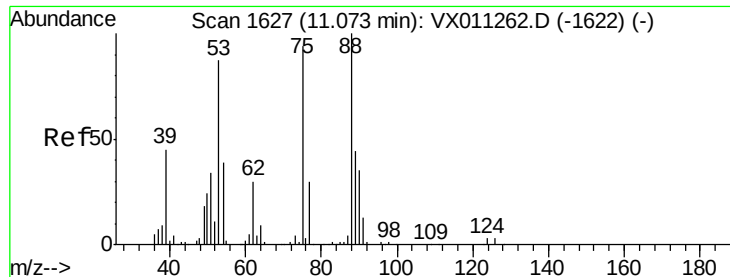
77 1.3 21.1 63.4#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 77.00 (76.70 to 77.70): VX0





#81

trans-1,4-Dichloro-2-butene

Concen: 71.967 ug/l

RT: 11.13 min Scan# 1637

Delta R.T. 0.06 min

Lab File: VX011509.D

Acq: 13 Aug 2019 02:00

Instrument :

MSVOA_X

ClientSampleId :

2S-A4-(1)

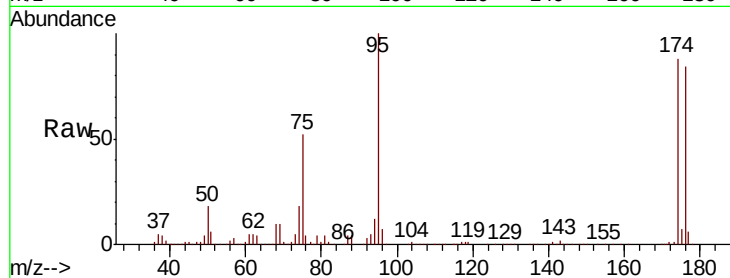
Tgt Ion: 75 Resp: 58006

Ion Ratio Lower Upper

75 100

53 0.1 78.2 117.4#

89 0.1 37.9 56.9#



Abundance Ion 74.90 (74.60 to 75.60): VX0

Ion 53.00 (52.70 to 53.70): VX0

Ion 88.90 (88.60 to 89.60): VX0

