

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN083119\
 Data File : VN057608.D
 Acq On : 30 Aug 2019 23:51
 Operator : JC/SP
 Sample : K4517-35
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 T4-S-E-(2.5)

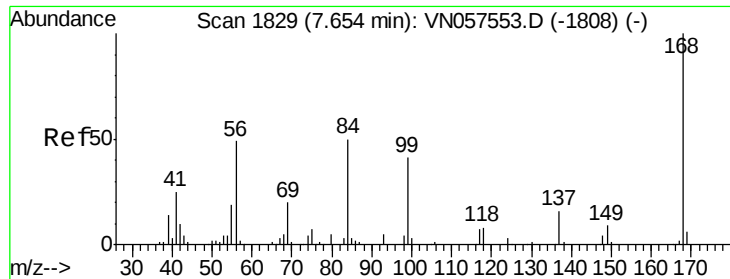
Quant Time: Aug 31 00:52:27 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N082919W.M
 Quant Title : SW846 8260
 QLast Update : Fri Aug 30 11:59:03 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	596266	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.58	114	938708	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	822802	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	231605	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.02	65	357408	36.62	ug/l	0.00
Spiked Amount	50.000		Recovery	=	73.24%	
35) Dibromofluoromethane	7.58	113	286959	34.20	ug/l	0.00
Spiked Amount	50.000		Recovery	=	68.40%	
50) Toluene-d8	10.08	98	1141198	38.45	ug/l	0.00
Spiked Amount	50.000		Recovery	=	76.90%	
62) 4-Bromofluorobenzene	12.40	95	318870	32.01	ug/l	0.00
Spiked Amount	50.000		Recovery	=	64.02%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
8) Diethyl Ether	3.41	74	1539	0.226	ug/l	71
11) Tert butyl alcohol	4.77	59	253	0.263	ug/l #	70
13) Acrolein	3.58	56	687	0.834	ug/l #	51
16) Acetone	3.81	43	13914	3.527	ug/l #	86
20) Methylene Chloride	4.52	84	6221	0.851	ug/l #	77
31) Cyclohexane	7.65	56	12798	1.129	ug/l #	25
36) 1,1-Dichloropropene	7.65	75	44060	4.339	ug/l #	52
38) Carbon Tetrachloride	7.65	117	57854	4.872	ug/l #	17
41) Methacrylonitrile	7.11	41	67	1.288	ug/l #	1
43) Isopropyl Acetate	8.16	43	68961	5.491	ug/l #	94
48) Methyl methacrylate	9.17	41	4235	0.714	ug/l #	15
49) 1,4-Dioxane	9.25	88	135	1.247	ug/l #	1
51) 4-Methyl-2-Pentanone	9.98	43	4786	0.713	ug/l	93
54) cis-1,3-Dichloropropene	9.90	75	37901	3.082	ug/l #	60
57) 1,3-Dichloropropane	10.76	76	5509	0.445	ug/l #	43
59) 2-Hexanone	10.76	43	64077	13.828	ug/l #	59
71) Bromoform	12.40	173	1810	0.333	ug/l #	1
73) Isopropylbenzene	12.41	105	337	Below Cal	#	50
74) N-amyl acetate	12.03	43	2332	Below Cal	#	48
75) 1,1,2,2-Tetrachloroethane	12.41	83	228	Below Cal	#	1
76) 1,2,3-Trichloropropane	12.40	75	172964	39.937	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	172964	112.294	ug/l #	8
83) tert-Butylbenzene	12.99	119	116	Below Cal	#	44

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1829

Delta R.T. 0.00 min

Lab File: VN057608.D

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Instrument :

MSVOA_N

ClientSampled :

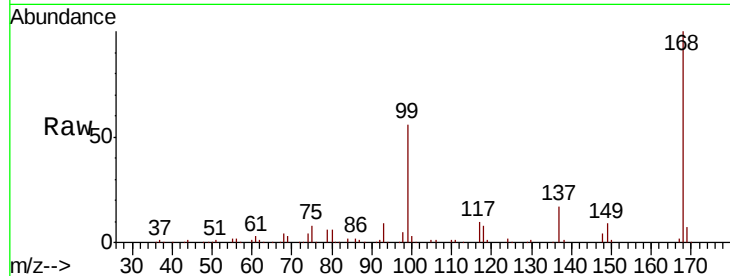
T4-S-E-(2.5)

Tgt Ion:168 Resp: 596266

Ion Ratio Lower Upper

168 100

99 55.8 50.6 76.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN

7.65

250000

200000

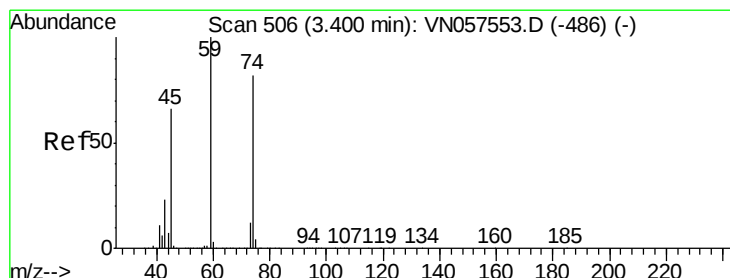
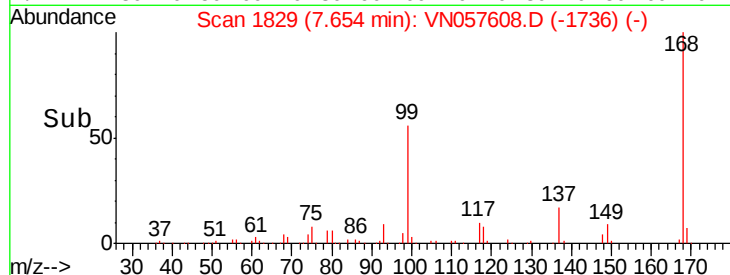
150000

100000

50000

0

Time-->



#8

Diethyl Ether

Concen: 0.226 ug/l

RT: 3.41 min Scan# 509

Delta R.T. 0.01 min

Lab File: VN057608.D

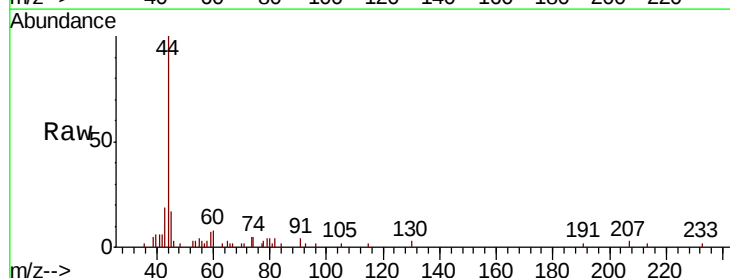
Acq: 30 Aug 2019 23:51

Tgt Ion: 74 Resp: 1539

Ion Ratio Lower Upper

74 100

45 84.7 57.9 173.6



Abundance Ion 74.00 (73.70 to 74.70): VN

Ion 45.00 (44.70 to 45.70): VN

3.41

2000

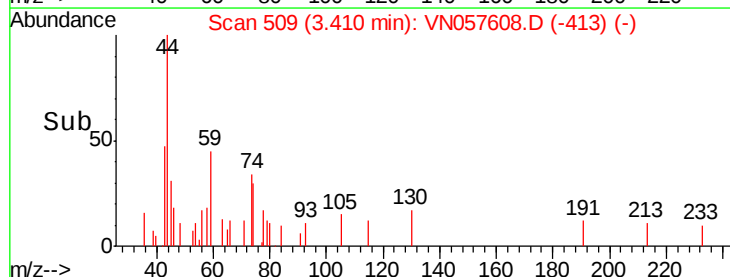
1500

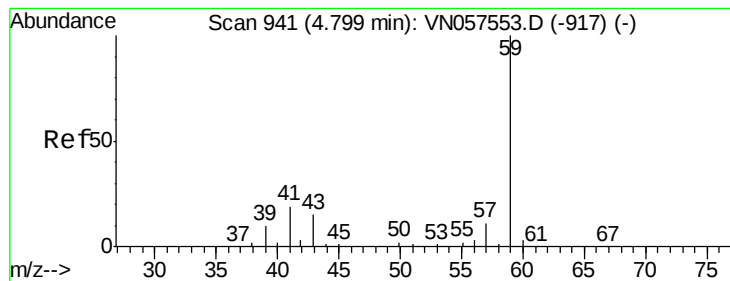
1000

500

0

Time-->





#11

Tert butyl alcohol

Concen: 0.263 ug/l

RT: 4.77 min Scan# 932

Delta R.T. -0.03 min

Lab File: VN057608.D

Acq: 30 Aug 2019 23:51

Instrument :

MSVOA_N

ClientSampleId :

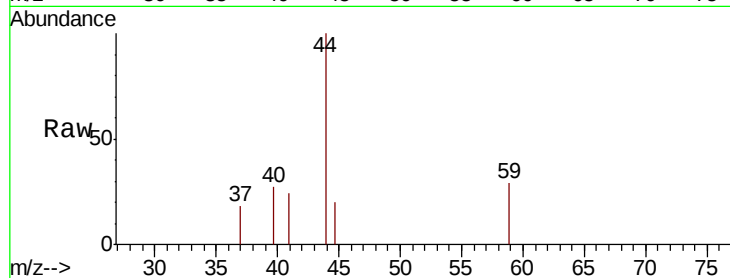
T4-S-E-(2.5)

Tgt Ion: 59 Resp: 253

Ion Ratio Lower Upper

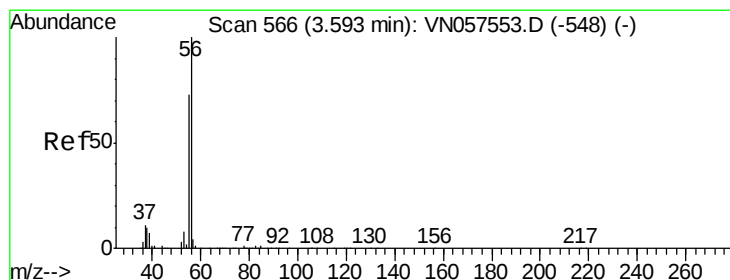
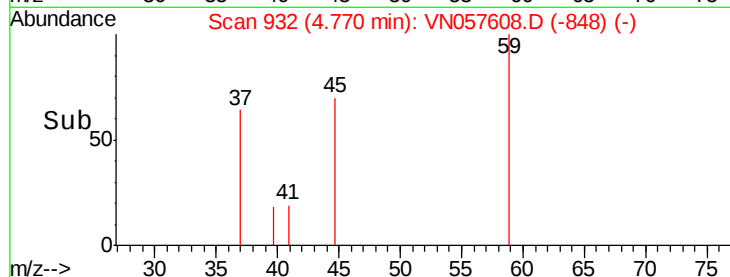
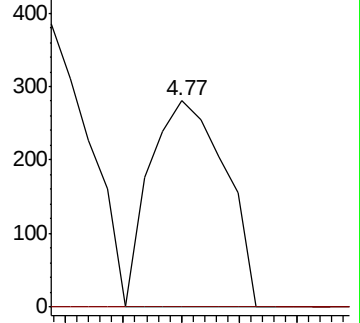
59 100

57 0.0 9.1 13.7#



Abundance Ion 59.00 (58.70 to 59.70): VN0

Ion 57.00 (56.70 to 57.70): VN0



#13

Acrolein

Concen: 0.834 ug/l

RT: 3.58 min Scan# 563

Delta R.T. -0.01 min

Lab File: VN057608.D

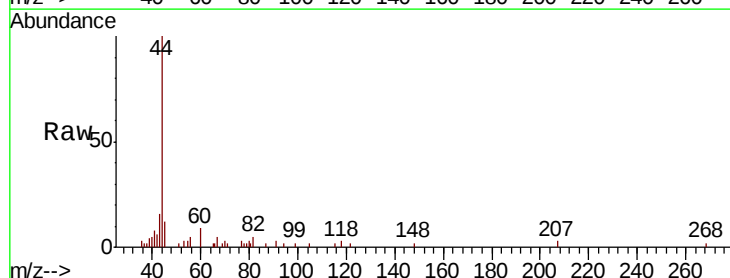
Acq: 30 Aug 2019 23:51

Tgt Ion: 56 Resp: 687

Ion Ratio Lower Upper

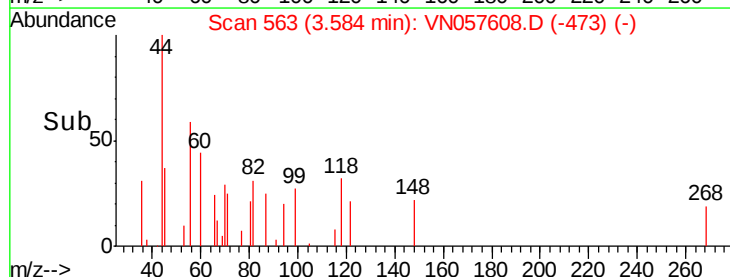
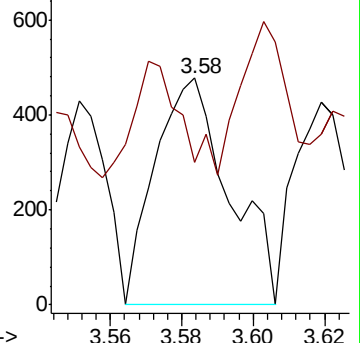
56 100

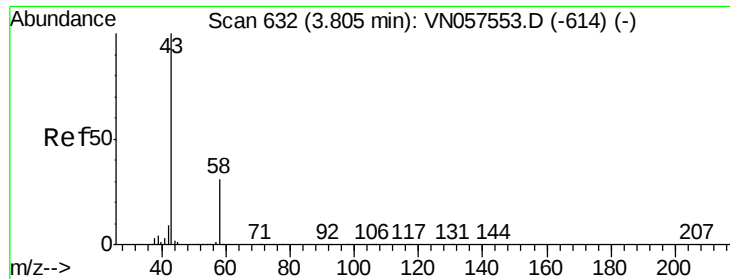
55 32.0 59.0 88.4#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0

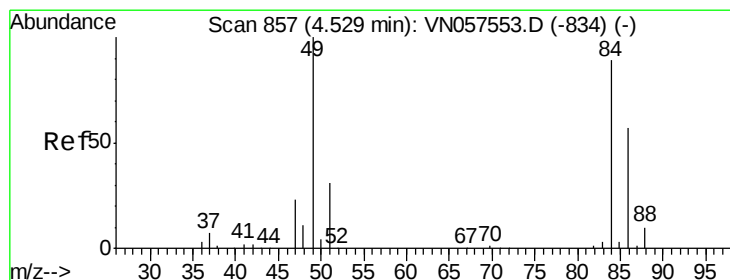
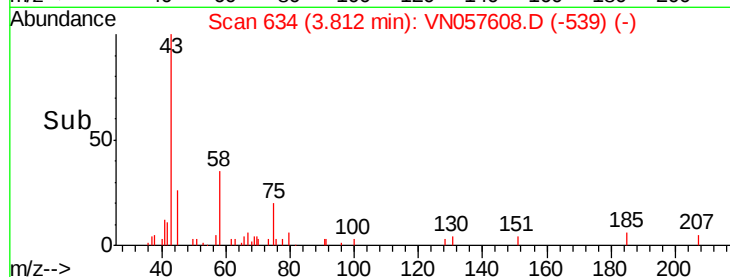
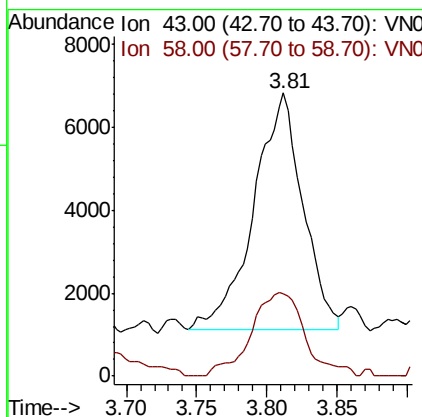
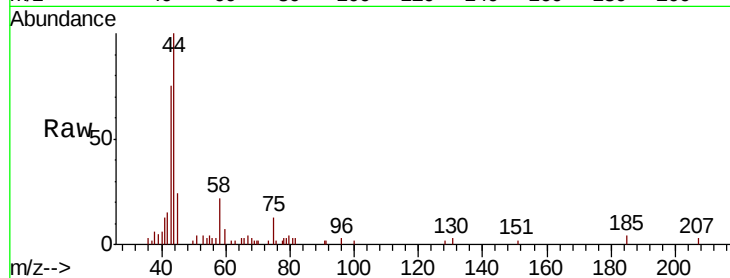




#16
Acetone
Concen: 3.527 ug/l
RT: 3.81 min Scan# 634
Delta R.T. 0.01 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

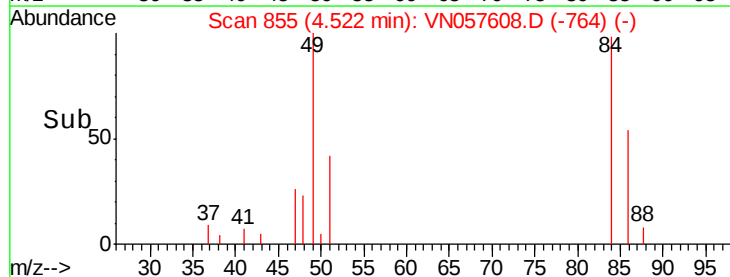
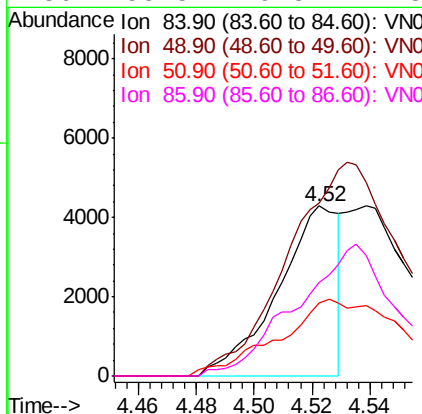
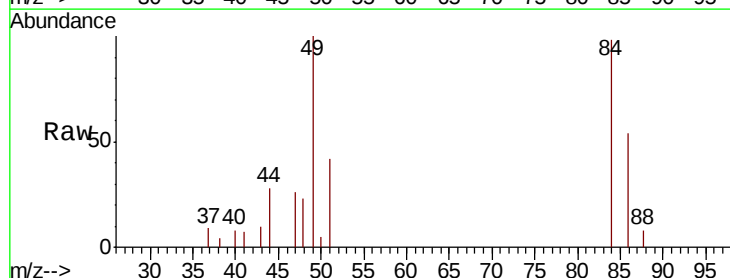
Instrument :
MSVOA_N
ClientSampleId :
T4-S-E-(2.5)

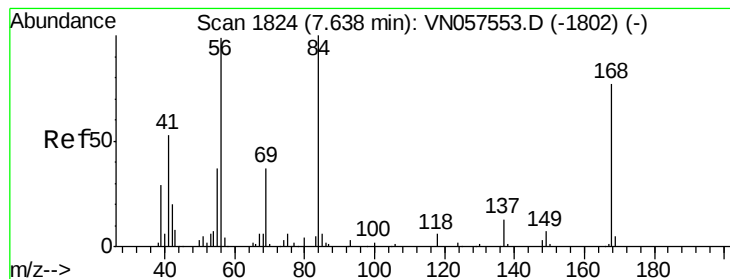
Tgt Ion: 43 Resp: 13914
Ion Ratio Lower Upper
43 100
58 35.0 22.1 33.1#



#20
Methylene Chloride
Concen: 0.851 ug/l
RT: 4.52 min Scan# 855
Delta R.T. -0.01 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

Tgt Ion: 84 Resp: 6221
Ion Ratio Lower Upper
84 100
49 102.0 117.0 175.4#
51 42.7 35.5 53.3
86 55.5 49.8 74.8





#31

Cyclohexane

Concen: 1.129 ug/l

RT: 7.65 min Scan# 1827

Delta R.T. 0.01 min

Lab File: VN057608.D

Acq: 30 Aug 2019 23:51

Instrument :

MSVOA_N

ClientSampleId :

T4-S-E-(2.5)

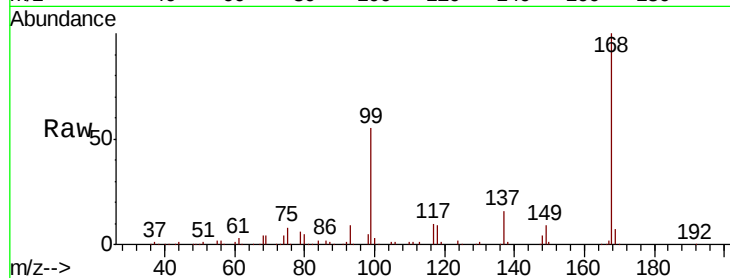
Tgt Ion: 56 Resp: 12798

Ion Ratio Lower Upper

56 100

69 170.7 25.0 37.6#

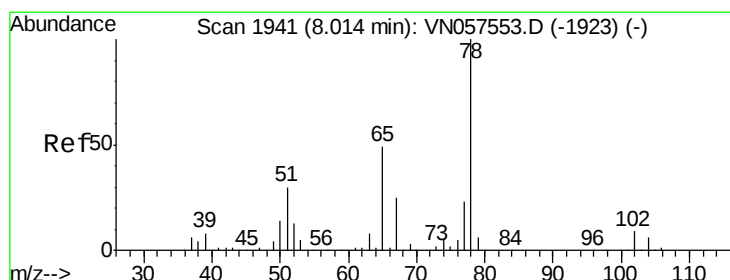
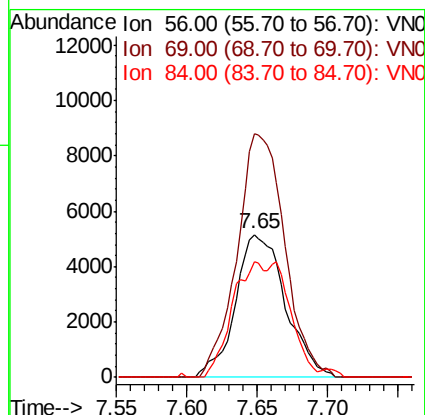
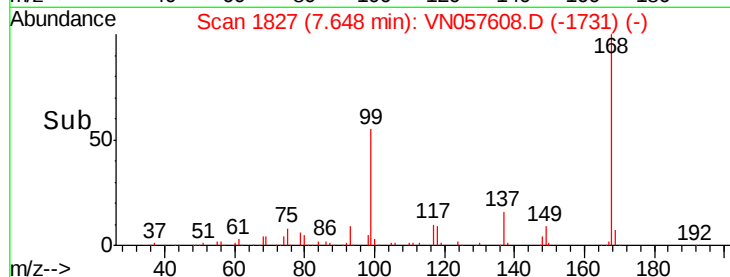
84 81.0 62.5 93.7



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 69.00 (68.70 to 69.70): VN0

Ion 84.00 (83.70 to 84.70): VN0



#33

1,2-Dichloroethane-d4

Concen: 36.622 ug/l

RT: 8.02 min Scan# 1942

Delta R.T. 0.00 min

Lab File: VN057608.D

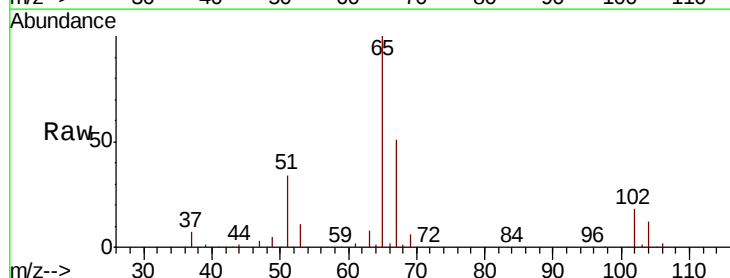
Acq: 30 Aug 2019 23:51

Tgt Ion: 65 Resp: 357408

Ion Ratio Lower Upper

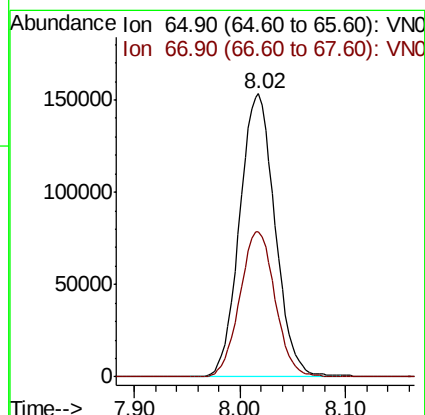
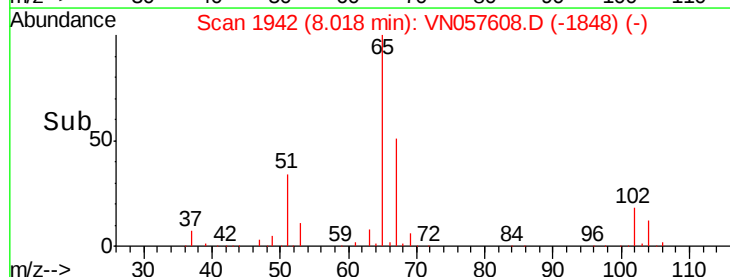
65 100

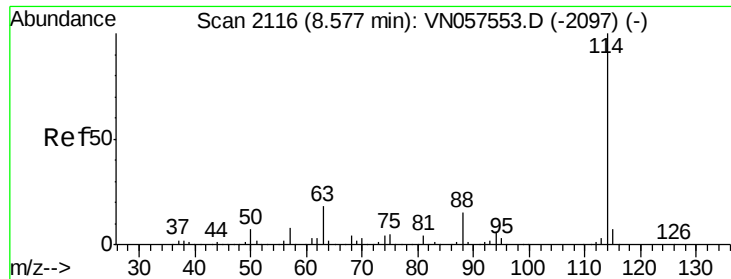
67 51.2 0.0 103.8



Abundance Ion 64.90 (64.60 to 65.60): VN0

Ion 66.90 (66.60 to 67.60): VN0

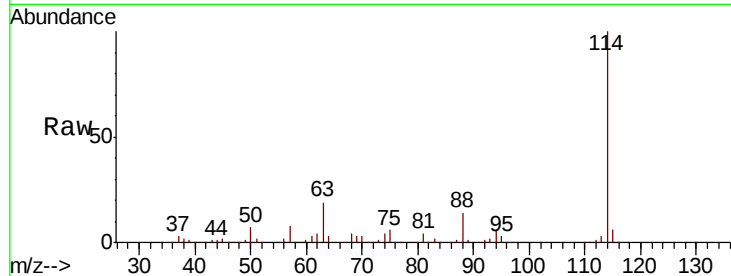




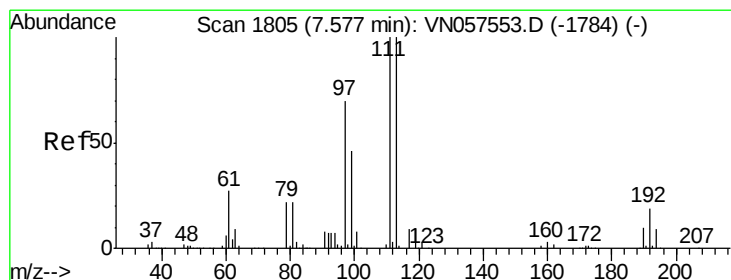
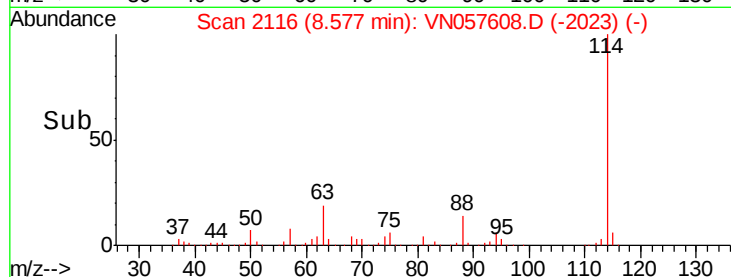
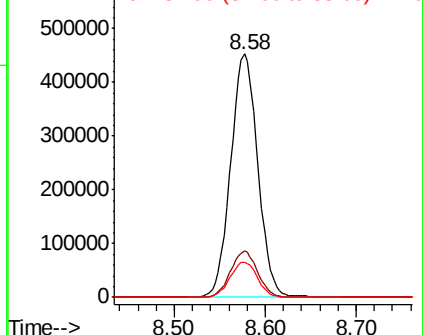
#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.58 min Scan# 2116
 Delta R.T. -0.00 min
 Lab File: VN057608.D
 Acq: 30 Aug 2019 23:51

Instrument :
 MSVOA_N
 ClientSampleId :
 T4-S-E-(2.5)

Tgt Ion:114 Resp: 938708
 Ion Ratio Lower Upper
 114 100
 63 18.9 0.0 50.2
 88 14.4 0.0 34.6

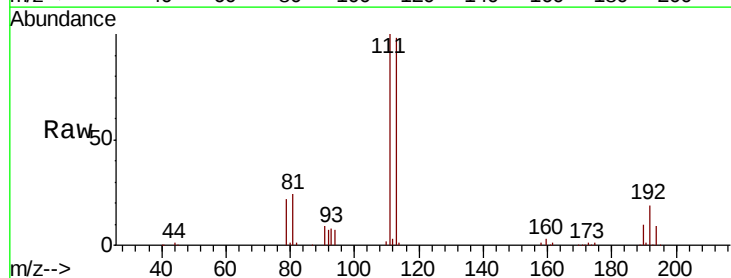


Abundance Ion 113.90 (113.60 to 114.60): V
 Ion 63.00 (62.70 to 63.70): VN
 Ion 87.90 (87.60 to 88.60): VN

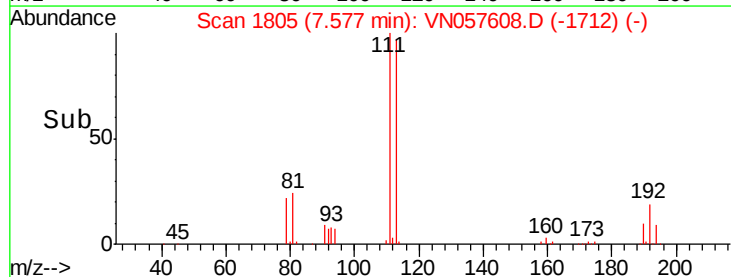
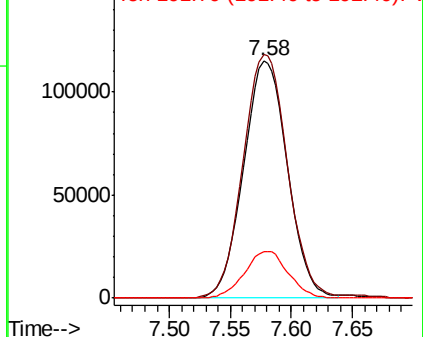


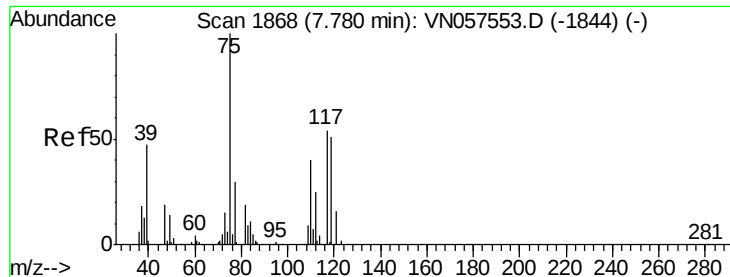
#35
 Dibromofluoromethane
 Concen: 34.202 ug/l
 RT: 7.58 min Scan# 1805
 Delta R.T. 0.00 min
 Lab File: VN057608.D
 Acq: 30 Aug 2019 23:51

Tgt Ion:113 Resp: 286959
 Ion Ratio Lower Upper
 113 100
 111 104.1 83.8 125.6
 192 19.8 13.5 20.3



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

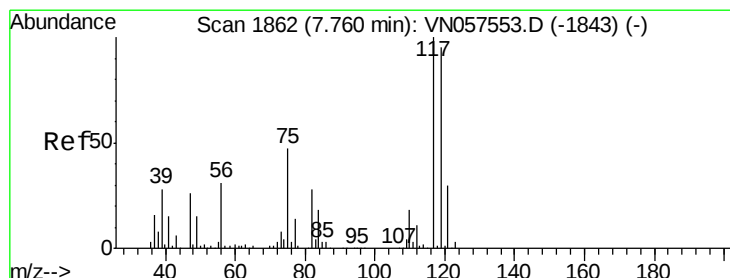
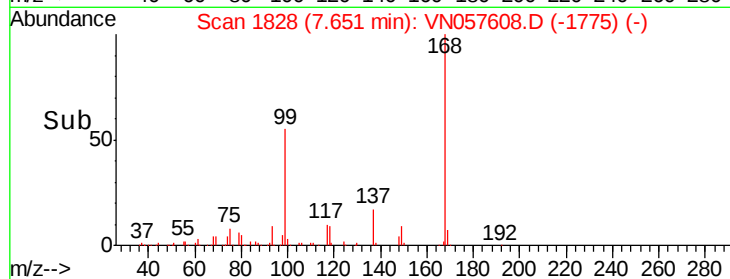
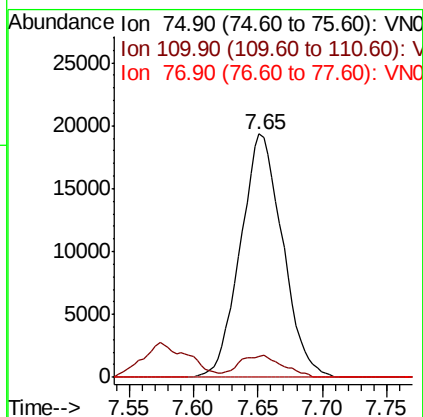
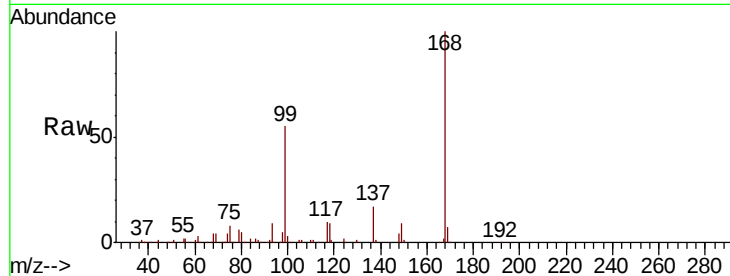




#36
 1,1-Dichloropropene
 Concen: 4.339 ug/l
 RT: 7.65 min Scan# 1828
 Delta R.T. -0.13 min
 Lab File: VN057608.D
 Acq: 30 Aug 2019 23:51

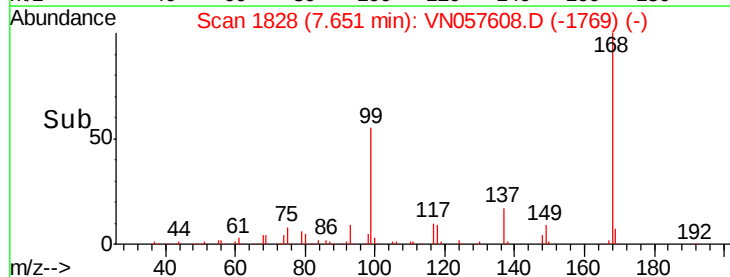
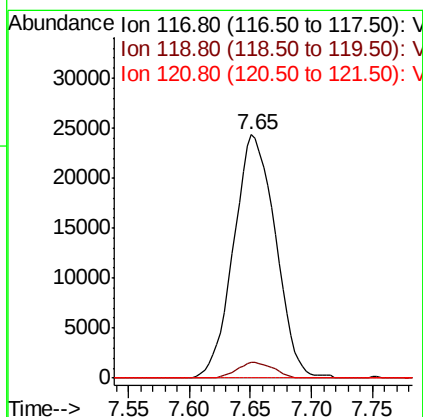
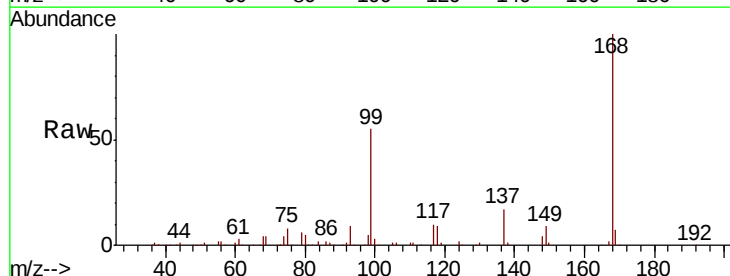
Instrument :
 MSVOA_N
 ClientSampled :
 T4-S-E-(2.5)

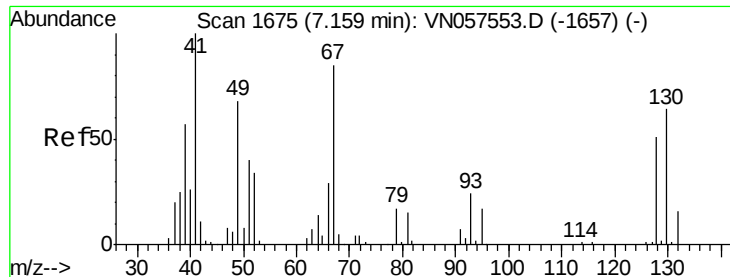
Tgt Ion	Ratio	Lower	Upper
75	100		
110	9.5	16.1	48.3#
77	0.0	24.8	37.2#



#38
 Carbon Tetrachloride
 Concen: 4.872 ug/l
 RT: 7.65 min Scan# 1828
 Delta R.T. -0.11 min
 Lab File: VN057608.D
 Acq: 30 Aug 2019 23:51

Tgt Ion	Ratio	Lower	Upper
117	100		
119	6.7	76.2	114.4#
121	0.0	23.8	35.6#

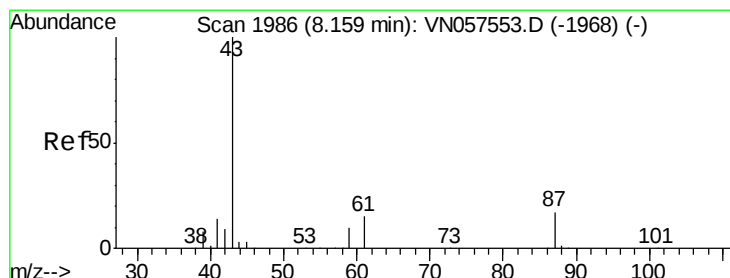
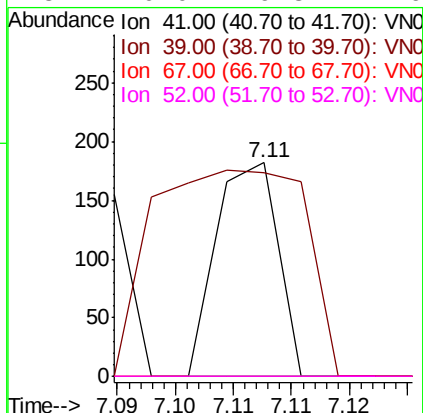
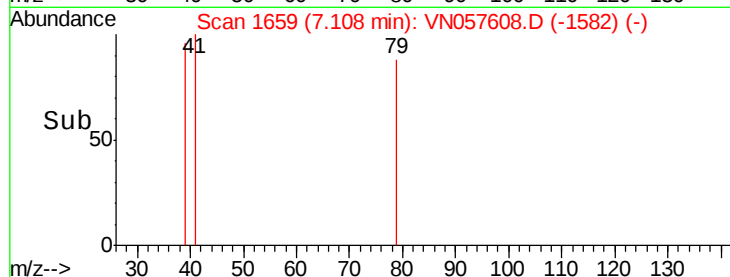
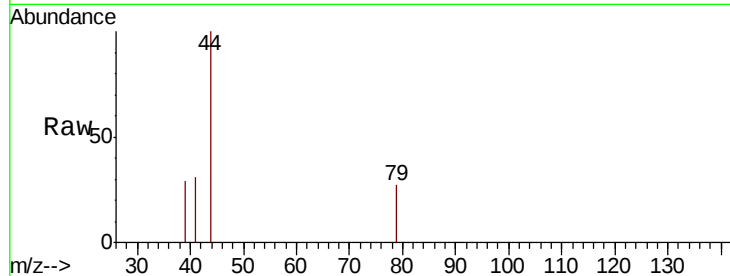




#41
Methacrylonitrile
Concen: 1.288 ug/l
RT: 7.11 min Scan# 1659
Delta R.T. -0.05 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

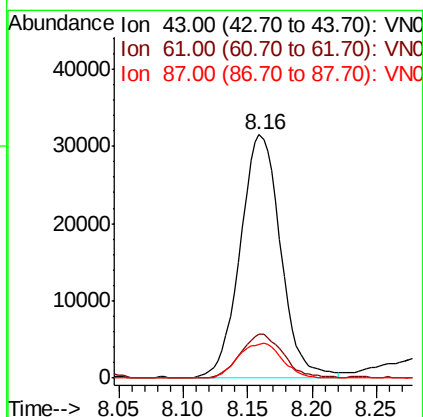
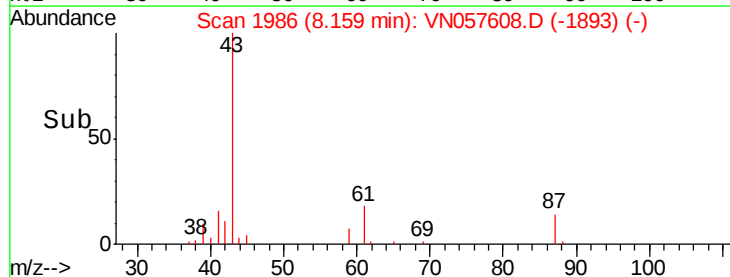
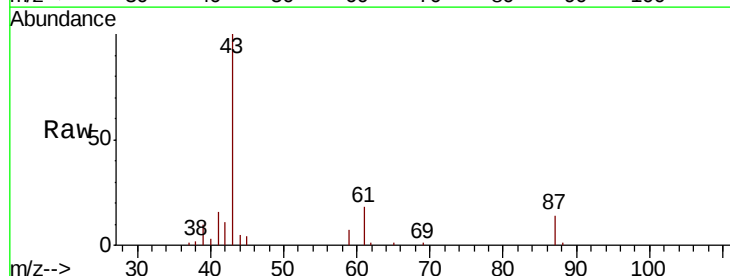
Instrument :
MSVOA_N
ClientSampled :
T4-S-E-(2.5)

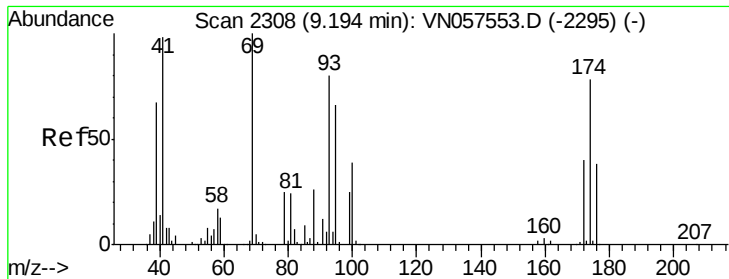
Tgt Ion: 41 Resp: 67
Ion Ratio Lower Upper
41 100
39 240.3 53.6 80.4#
67 0.0 65.4 98.2#
52 0.0 29.8 44.6#



#43
Isopropyl Acetate
Concen: 5.491 ug/l
RT: 8.16 min Scan# 1986
Delta R.T. -0.00 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

Tgt Ion: 43 Resp: 68961
Ion Ratio Lower Upper
43 100
61 19.1 14.5 21.7
87 15.3 8.6 12.8#

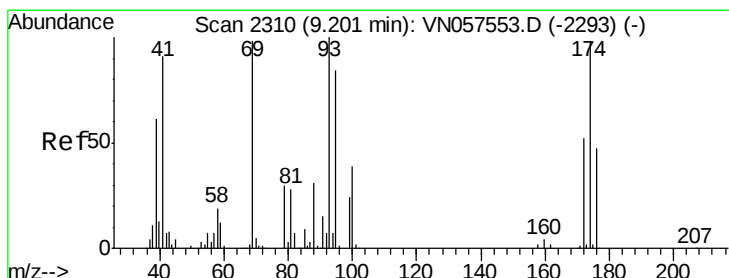
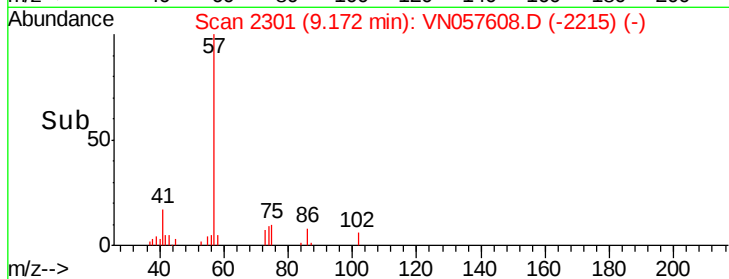
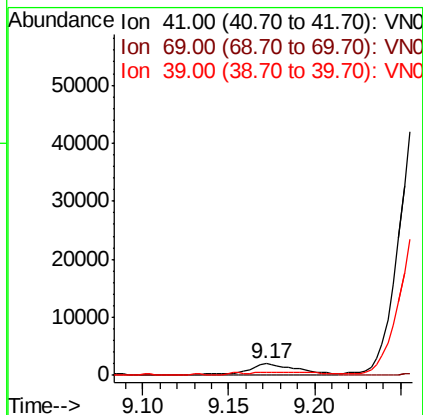
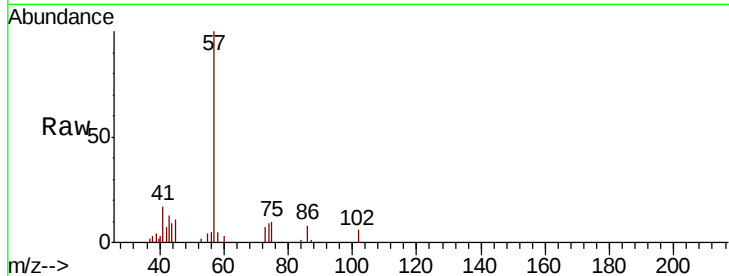




#48
Methyl methacrylate
Concen: 0.714 ug/l
RT: 9.17 min Scan# 2301
Delta R.T. -0.02 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

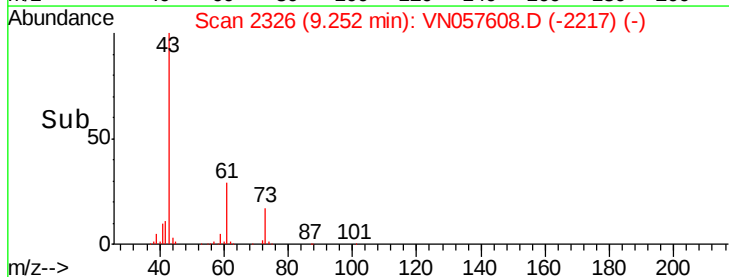
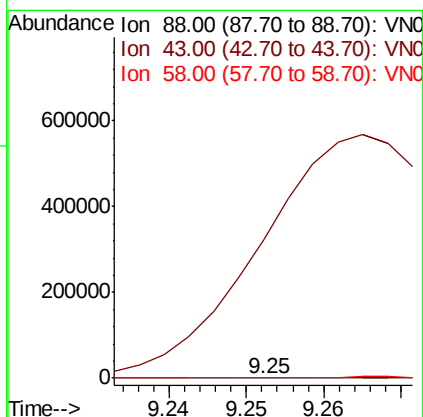
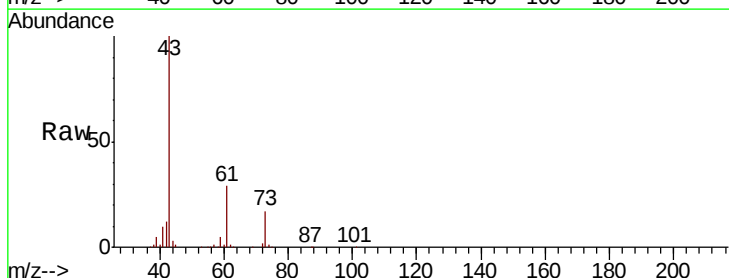
Instrument :
MSVOA_N
ClientSampled :
T4-S-E-(2.5)

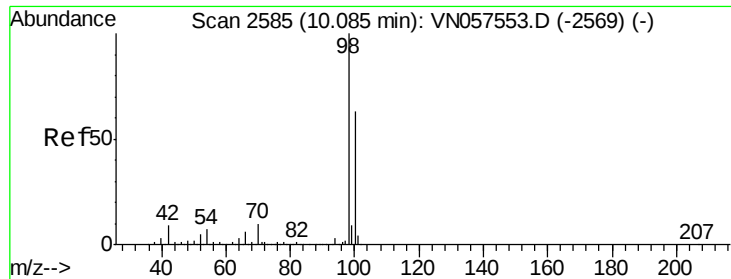
Tgt Ion: 41 Resp: 4235
Ion Ratio Lower Upper
41 100
69 0.0 59.3 88.9#
39 0.0 50.6 75.8#



#49
1,4-Dioxane
Concen: 1.247 ug/l
RT: 9.25 min Scan# 2326
Delta R.T. 0.05 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

Tgt Ion: 88 Resp: 135
Ion Ratio Lower Upper
88 100
43 777454.1 31.0 46.6#
58 3571.9 64.5 96.7#





#50

Toluene-d8

Concen: 38.453 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. 0.00 min

Lab File: VN057608.D

Acq: 30 Aug 2019 23:51

Instrument :

MSVOA_N

ClientSampled :

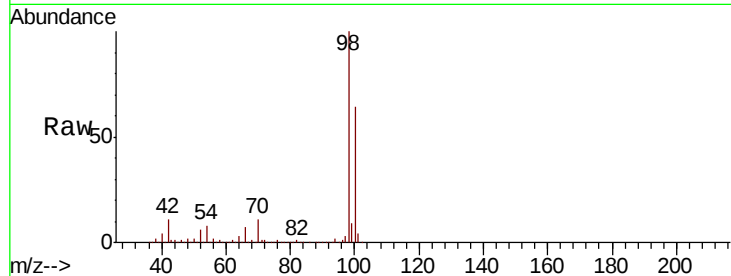
T4-S-E-(2.5)

Tgt Ion: 98 Resp: 1141198

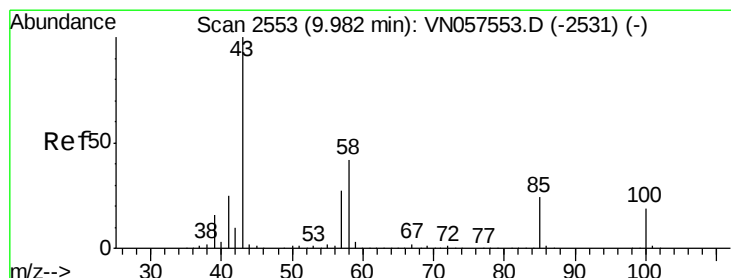
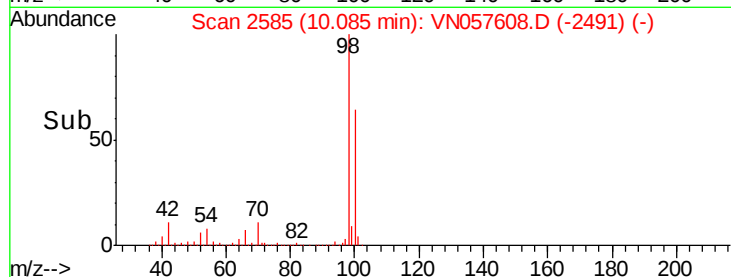
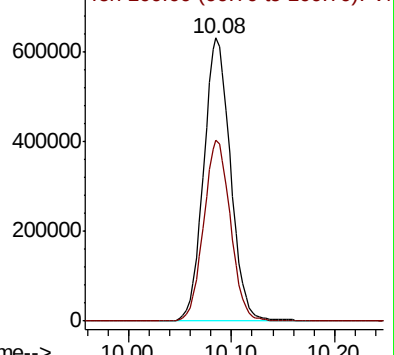
Ion Ratio Lower Upper

98 100

100 63.8 50.4 75.6



Abundance Ion 98.00 (97.70 to 98.70): VN057553.D (-2569) (-)



#51

4-Methyl-2-Pentanone

Concen: 0.713 ug/l

RT: 9.98 min Scan# 2552

Delta R.T. -0.00 min

Lab File: VN057608.D

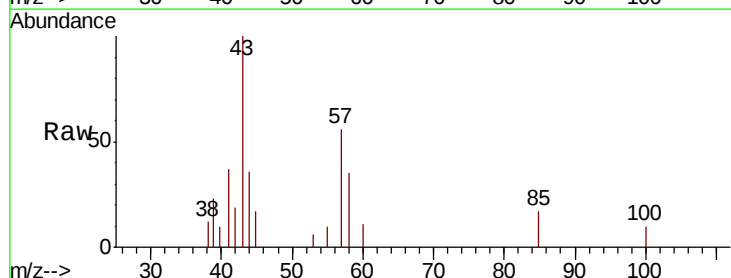
Acq: 30 Aug 2019 23:51

Tgt Ion: 43 Resp: 4786

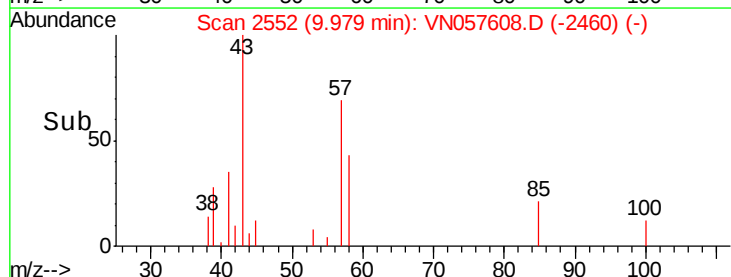
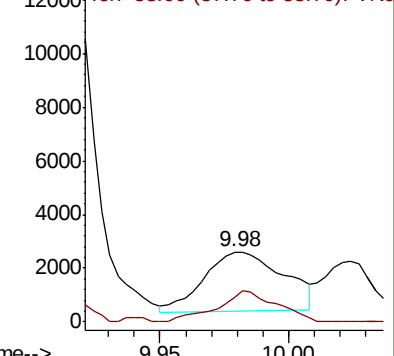
Ion Ratio Lower Upper

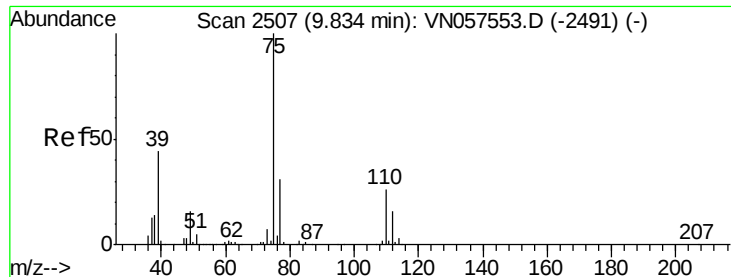
43 100

58 38.8 27.9 41.9



Abundance Ion 43.00 (42.70 to 43.70): VN057553.D (-2531) (-)





#54

cis-1,3-Dichloropropene

Concen: 3.082 ug/l

RT: 9.90 min Scan# 2528

Delta R.T. 0.07 min

Lab File: VN057608.D

Acq: 30 Aug 2019 23:51

Instrument :

MSVOA_N

ClientSampled :

T4-S-E-(2.5)

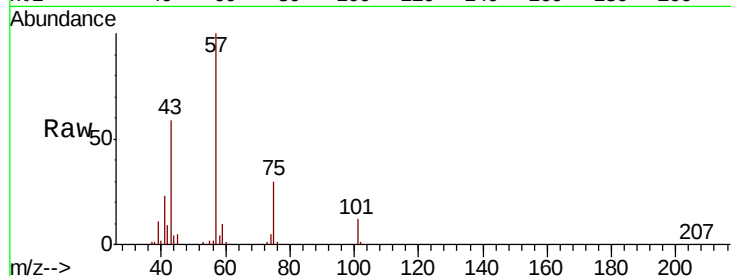
Tgt Ion: 75 Resp: 37901

Ion Ratio Lower Upper

75 100

77 0.0 25.0 37.6#

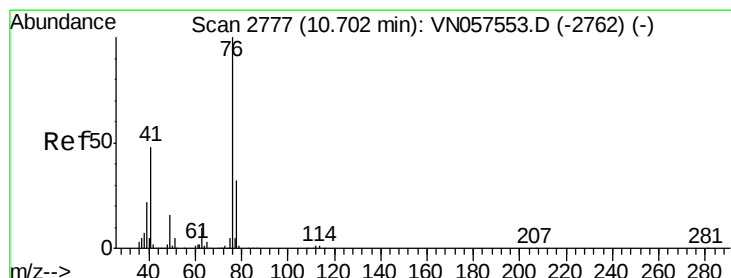
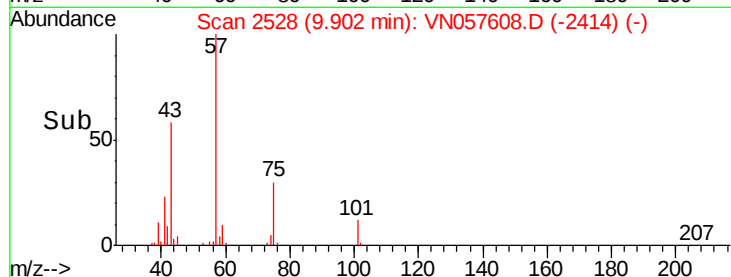
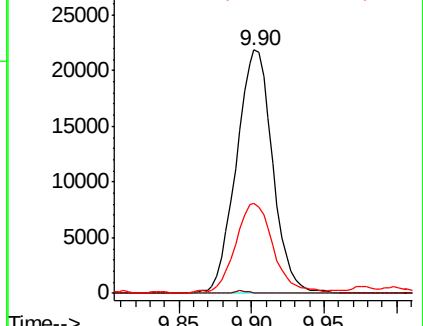
39 37.1 49.2 73.8#



Abundance Ion 74.90 (74.60 to 75.60): VN057553.D (-2491) (-)

Ion 76.90 (76.60 to 77.60): VN057553.D (-2491) (-)

Ion 39.00 (38.70 to 39.70): VN057553.D (-2491) (-)



#57

1,3-Dichloropropane

Concen: 0.445 ug/l

RT: 10.76 min Scan# 2794

Delta R.T. 0.05 min

Lab File: VN057608.D

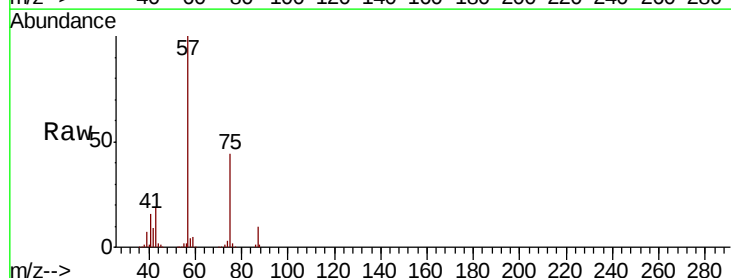
Acq: 30 Aug 2019 23:51

Tgt Ion: 76 Resp: 5509

Ion Ratio Lower Upper

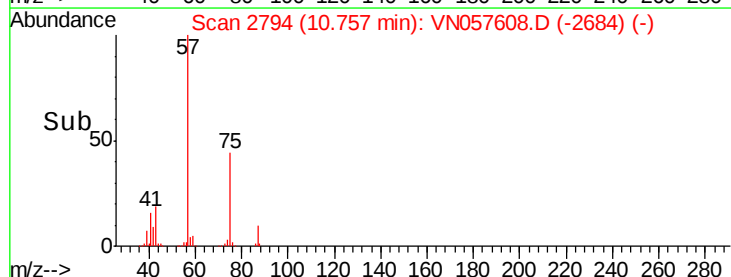
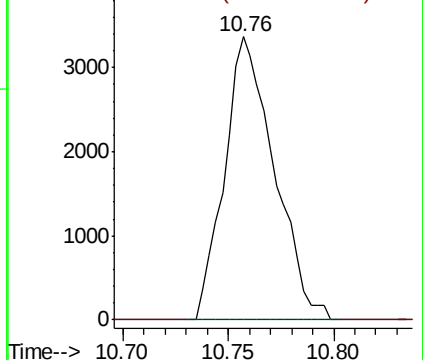
76 100

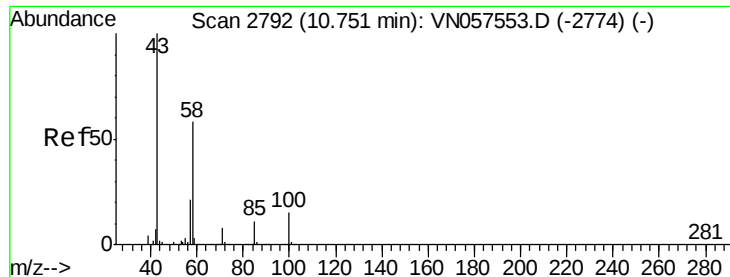
78 0.0 25.5 38.3#



Abundance Ion 75.90 (75.60 to 76.60): VN057553.D (-2762) (-)

Ion 77.90 (77.60 to 78.60): VN057553.D (-2762) (-)

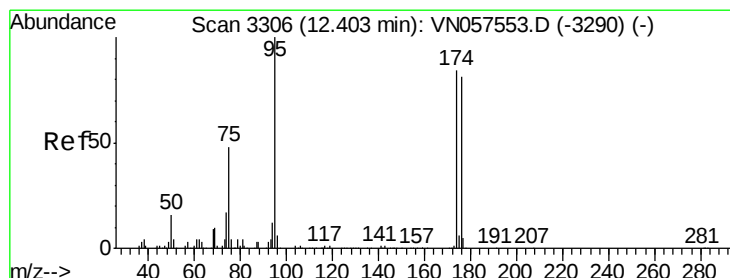
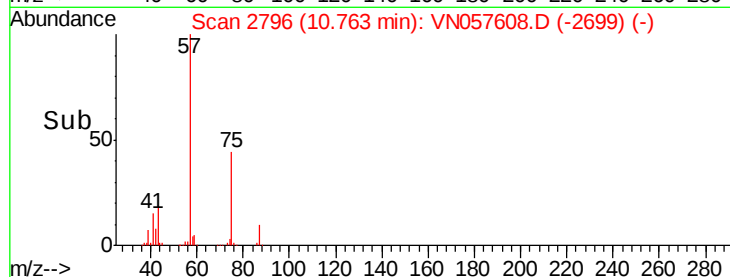
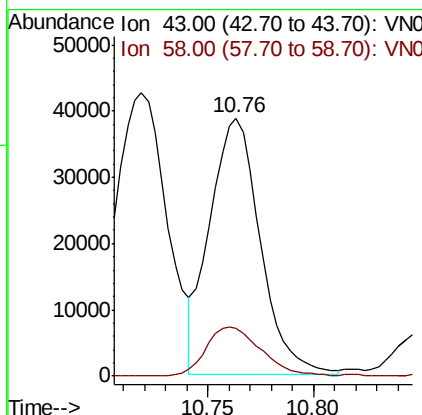
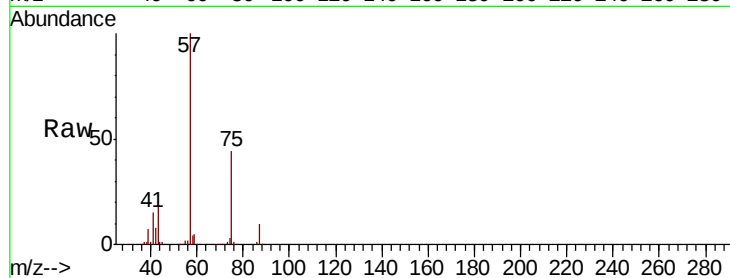




#59
2-Hexanone
Concen: 13.828 ug/l
RT: 10.76 min Scan# 2796
Delta R.T. 0.01 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

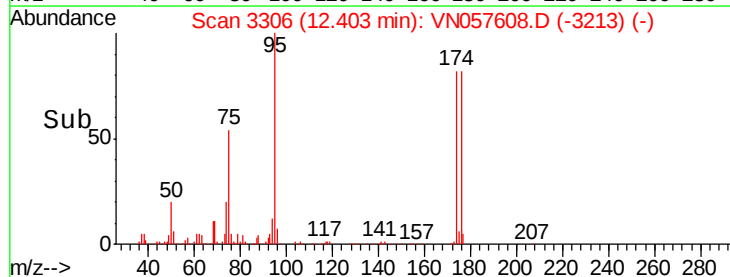
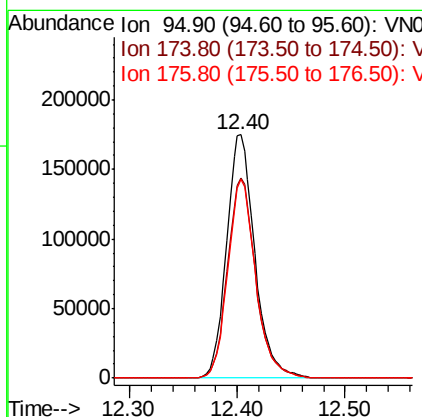
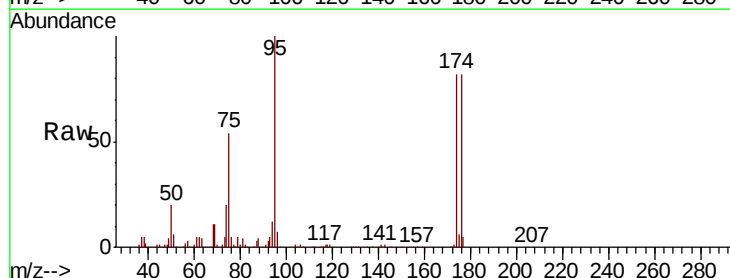
Instrument :
MSVOA_N
ClientSampleId :
T4-S-E-(2.5)

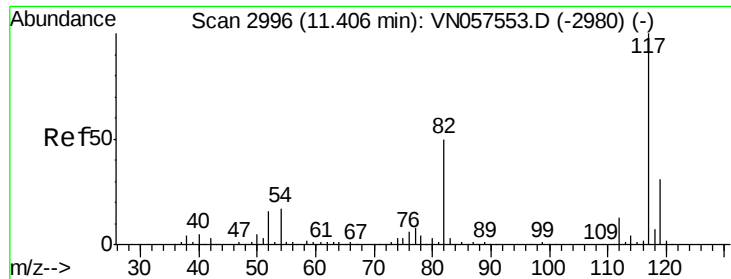
Tgt Ion: 43 Resp: 64077
Ion Ratio Lower Upper
43 100
58 21.0 24.6 73.6#



#62
4-Bromofluorobenzene
Concen: 32.008 ug/l
RT: 12.40 min Scan# 3306
Delta R.T. 0.00 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

Tgt Ion: 95 Resp: 318870
Ion Ratio Lower Upper
95 100
174 82.1 0.0 133.0
176 80.7 0.0 130.8

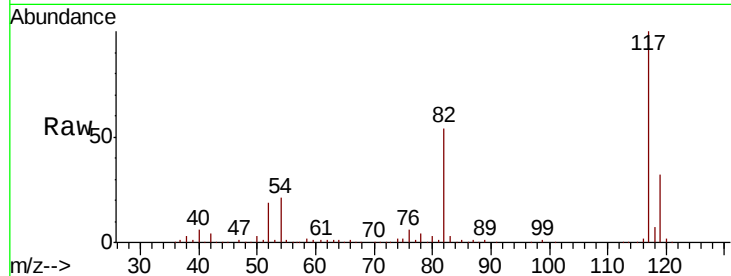




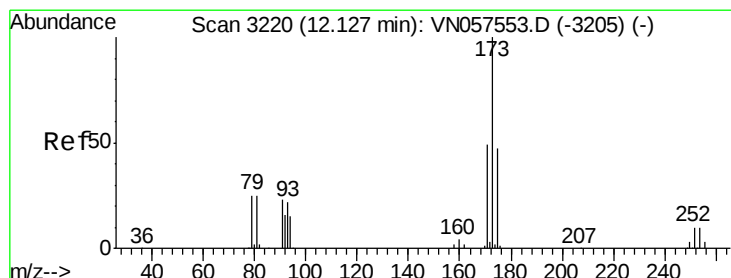
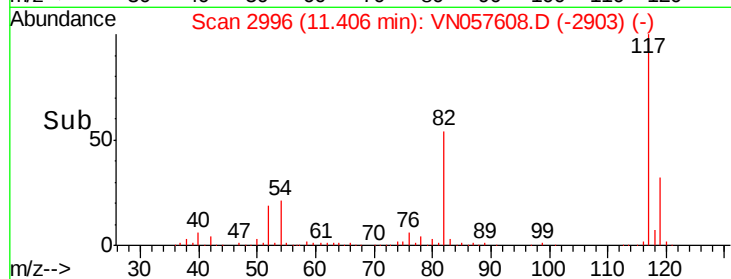
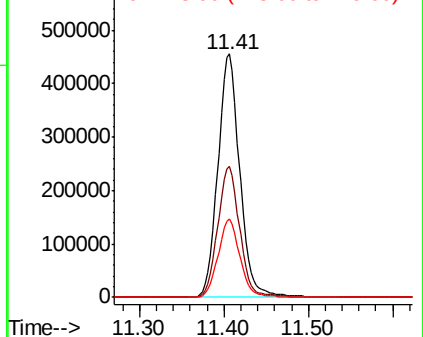
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. -0.00 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

Instrument :
MSVOA_N
ClientSampleId :
T4-S-E-(2.5)

Tgt Ion:117 Resp: 822802
Ion Ratio Lower Upper
117 100
82 53.7 50.6 75.8
119 32.0 24.6 36.8

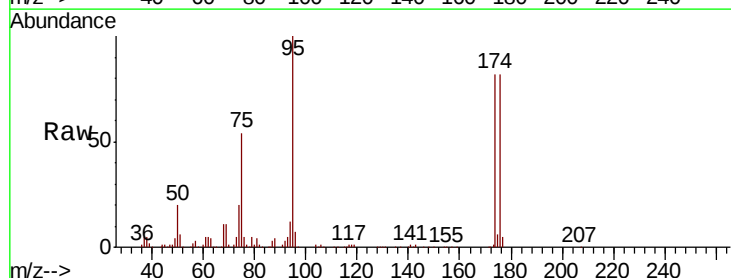


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): V
Ion 118.90 (118.60 to 119.60): V

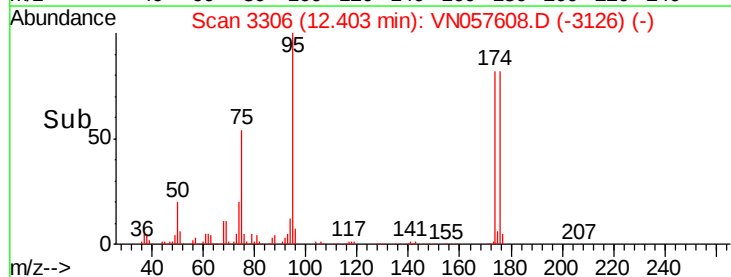
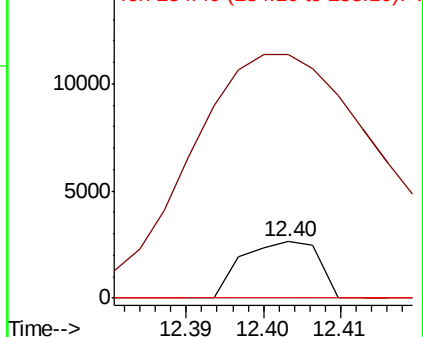


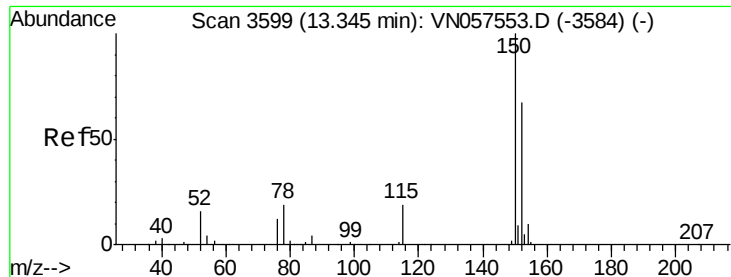
#71
Bromoform
Concen: 0.333 ug/l
RT: 12.40 min Scan# 3306
Delta R.T. 0.28 min
Lab File: VN057608.D
Acq: 30 Aug 2019 23:51

Tgt Ion:173 Resp: 1810
Ion Ratio Lower Upper
173 100
175 917.2 23.9 71.8#
254 0.0 0.1 0.1#



Abundance Ion 172.70 (172.40 to 173.40): V
Ion 174.70 (174.40 to 175.40): V
Ion 254.40 (254.10 to 255.10): V





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3599

Delta R.T. -0.00 min

Lab File: VN057608.D

Acq: 30 Aug 2019 23:51

Instrument :

MSVOA_N

ClientSampled :

T4-S-E-(2.5)

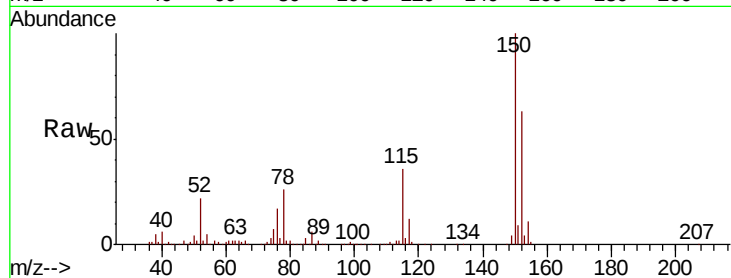
Tgt Ion:152 Resp: 231605

Ion Ratio Lower Upper

152 100

115 58.6 32.0 96.0

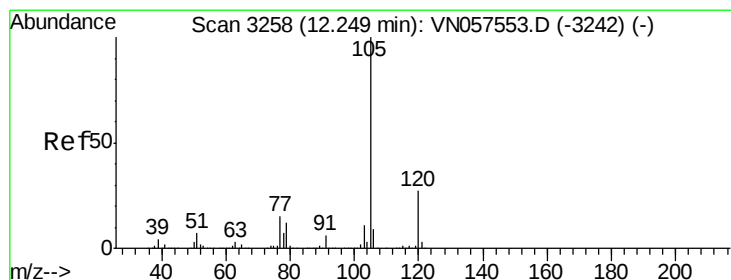
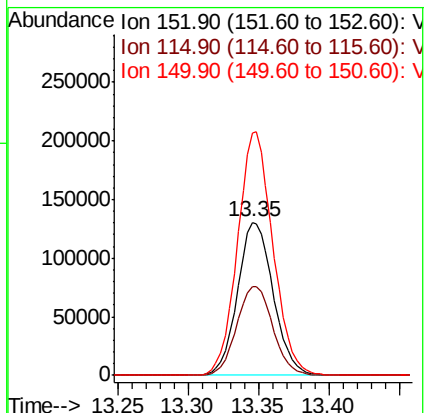
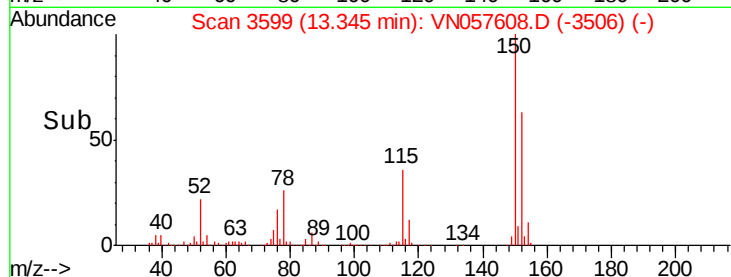
150 157.2 0.0 346.6



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



#73

Isopropylbenzene

Concen: Below Cal

RT: 12.41 min Scan# 3308

Delta R.T. 0.16 min

Lab File: VN057608.D

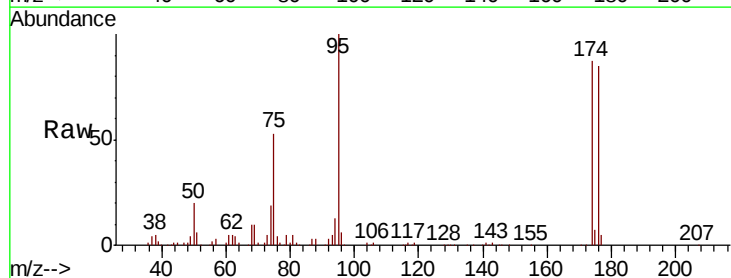
Acq: 30 Aug 2019 23:51

Tgt Ion:105 Resp: 337

Ion Ratio Lower Upper

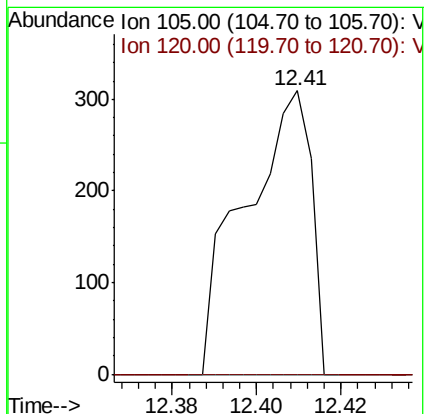
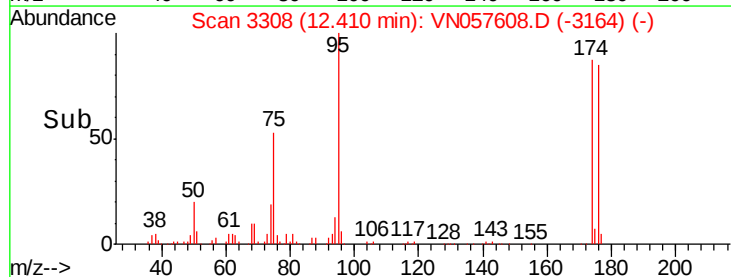
105 100

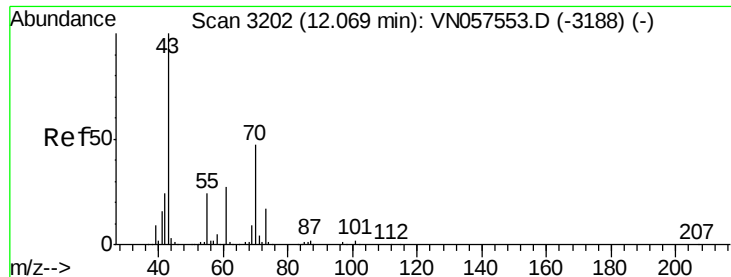
120 0.0 12.7 38.0#



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V





#74

N-amyI acetate

Concen: Below Cal

RT: 12.03 min Scan# 3191

Delta R.T. -0.03 min

Lab File: VN057608.D

Acq: 30 Aug 2019 23:51

Instrument :

MSVOA_N

ClientSampleId :

T4-S-E-(2.5)

Tgt Ion: 43 Resp: 2332

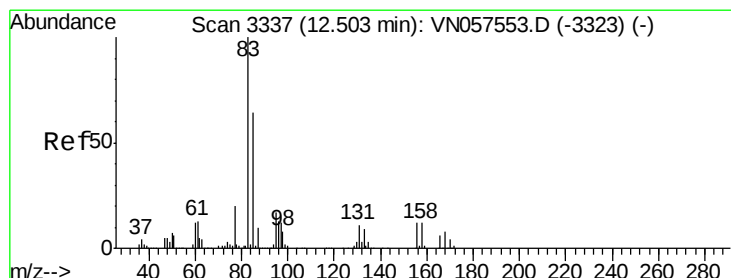
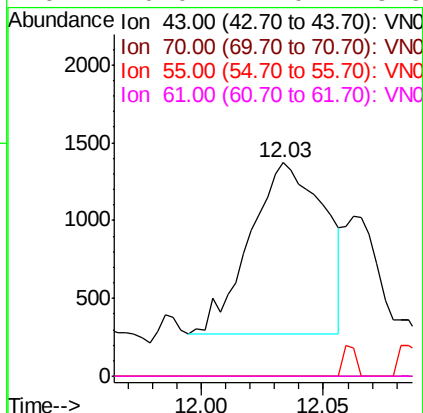
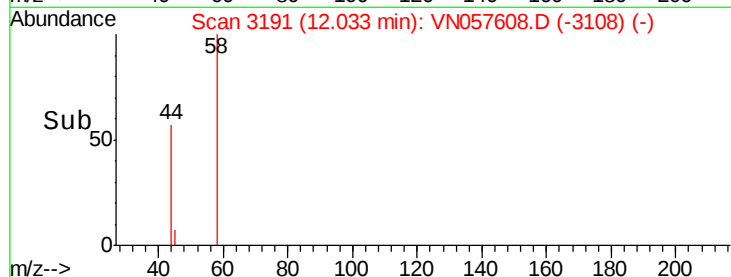
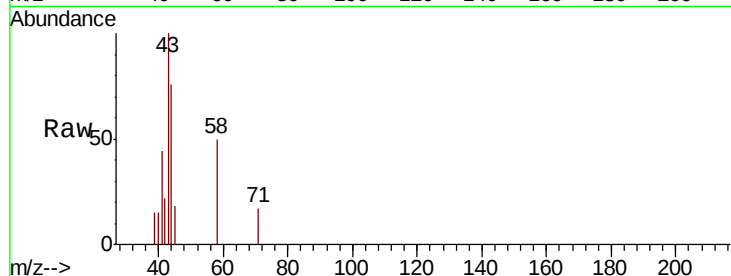
Ion Ratio Lower Upper

43 100

70 0.0 27.8 41.6#

55 0.0 17.0 25.4#

61 0.0 17.0 25.6#



#75

1,1,2,2-Tetrachloroethane

Concen: Below Cal

RT: 12.41 min Scan# 3309

Delta R.T. -0.09 min

Lab File: VN057608.D

Acq: 30 Aug 2019 23:51

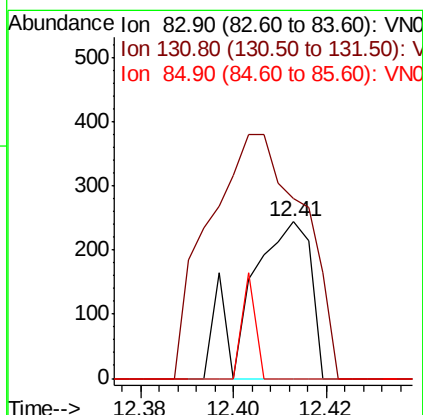
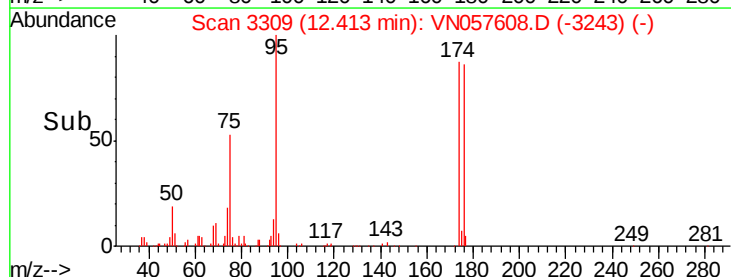
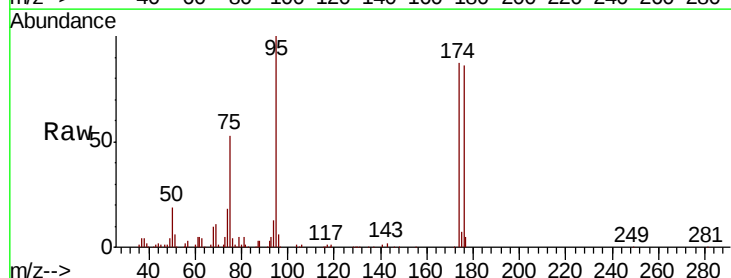
Tgt Ion: 83 Resp: 228

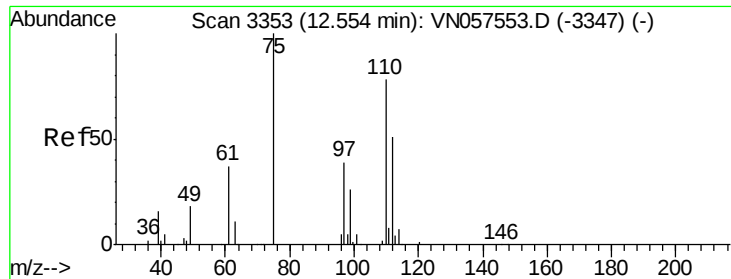
Ion Ratio Lower Upper

83 100

131 235.1 4.3 13.1#

85 14.0 32.3 96.8#





#76

1,2,3-Trichloropropane

Concen: 39.937 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. -0.15 min

Lab File: VN057608.D

Acq: 30 Aug 2019 23:51

Instrument :

MSVOA_N

ClientSampled :

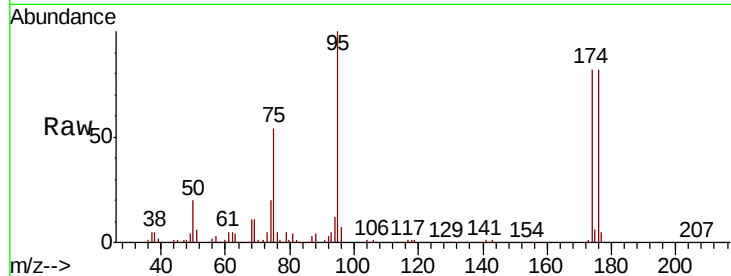
T4-S-E-(2.5)

Tgt Ion: 75 Resp: 172964

Ion Ratio Lower Upper

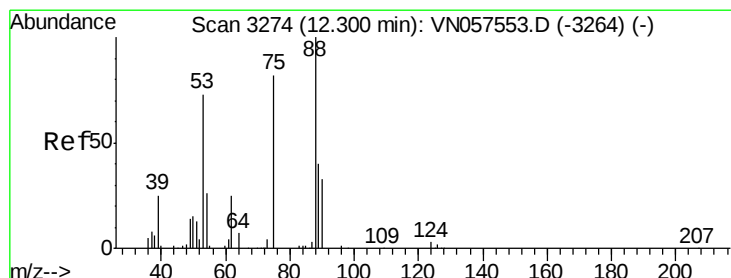
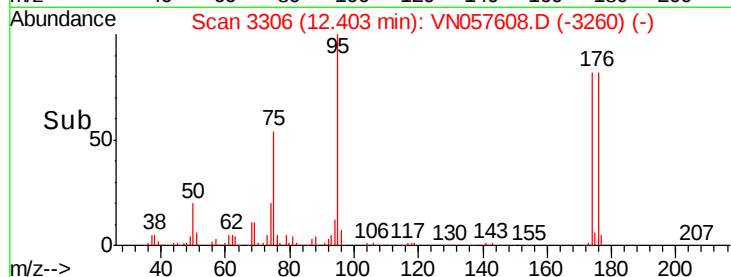
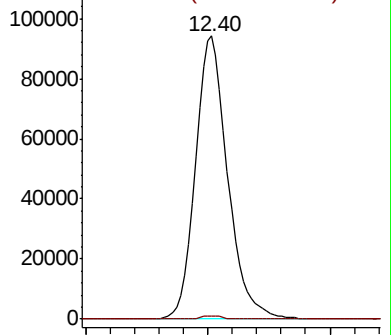
75 100

77 0.8 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0



#81

trans-1,4-Dichloro-2-butene

Concen: 112.294 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN057608.D

Acq: 30 Aug 2019 23:51

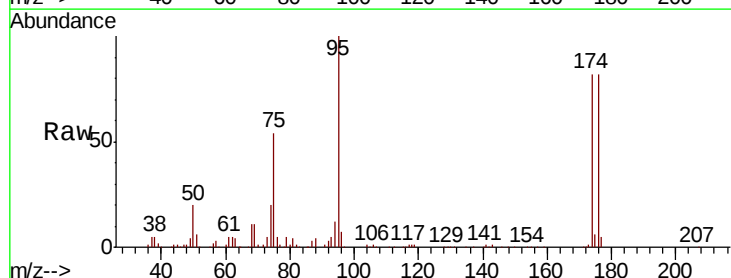
Tgt Ion: 75 Resp: 172964

Ion Ratio Lower Upper

75 100

53 0.0 82.7 124.1#

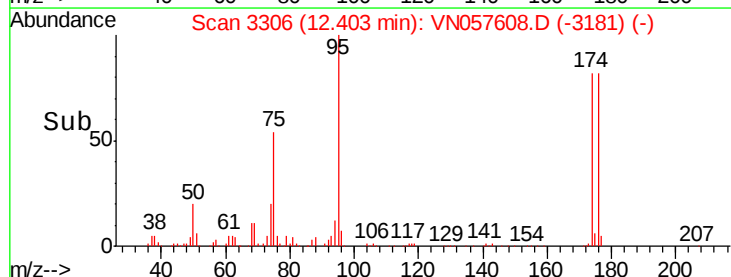
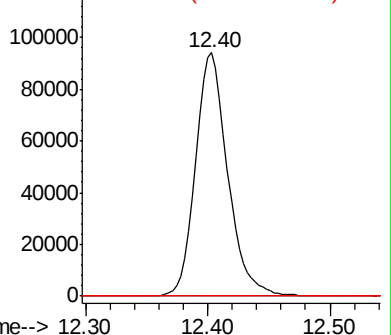
89 0.0 35.8 53.8#

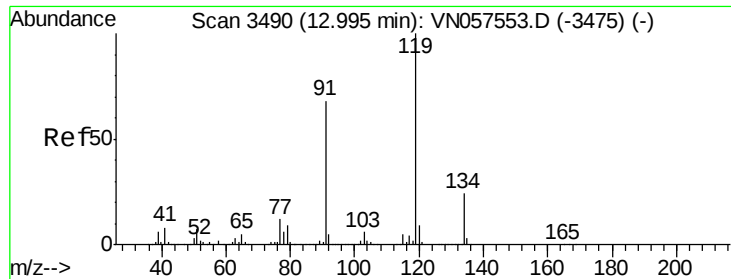


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 53.00 (52.70 to 53.70): VN0

Ion 88.90 (88.60 to 89.60): VN0





#83
 tert-Butylbenzene
 Concen: Below Cal
 RT: 12.99 min Scan# 3489
 Delta R.T. -0.00 min
 Lab File: VN057608.D
 Acq: 30 Aug 2019 23:51

Instrument :
 MSVOA_N
 ClientSampleId :
 T4-S-E-(2.5)

Tgt Ion	Ratio	Lower	Upper
119	100		
91	25.0	37.0	111.0#
134	0.0	12.2	36.6#

