

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN091419\
 Data File : VN058034.D
 Acq On : 13 Sep 2019 21:57
 Operator : JC/SP
 Sample : K4694-23
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 34 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 T1-2-(0)

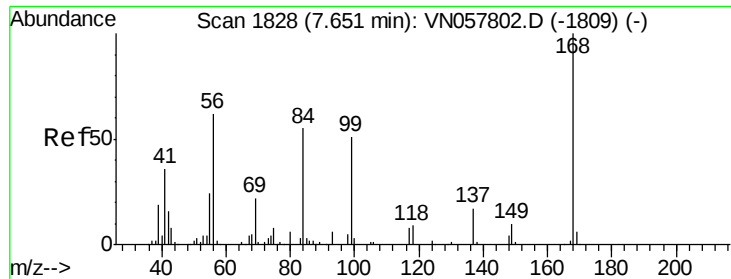
Quant Time: Sep 14 03:40:18 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091019W.M
 Quant Title : SW846 8260
 QLast Update : Tue Sep 10 03:02:13 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	307712	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.58	114	536687	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	499875	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	253816	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.01	65	344835	55.33	ug/l	0.00
Spiked Amount			Recovery	=	110.66%	
35) Dibromofluoromethane	7.58	113	238700	48.19	ug/l	0.00
Spiked Amount			Recovery	=	96.38%	
50) Toluene-d8	10.09	98	904991	47.06	ug/l	0.00
Spiked Amount			Recovery	=	94.12%	
62) 4-Bromofluorobenzene	12.41	95	317681	43.35	ug/l	0.00
Spiked Amount			Recovery	=	86.70%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.50	94	32	Below Cal	#	2
16) Acetone	3.80	43	15347	7.512	ug/l	91
18) Methyl Acetate	4.31	43	2804	0.515	ug/l #	90
20) Methylene Chloride	4.53	84	3778	Below Cal		95
25) 2-Butanone	6.84	43	2898	0.980	ug/l #	78
31) Cyclohexane	7.65	56	7984	Below Cal	#	33
36) 1,1-Dichloropropene	7.65	75	27488	4.416	ug/l #	50
38) Carbon Tetrachloride	7.65	117	30958	5.448	ug/l #	16
43) Isopropyl Acetate	8.16	43	91429	8.454	ug/l #	87
45) 1,2-Dichloropropane	9.26	63	1192	0.219	ug/l #	44
48) Methyl methacrylate	9.17	41	7134	1.300	ug/l #	28
49) 1,4-Dioxane	9.25	88	32	0.345	ug/l #	1
51) 4-Methyl-2-Pentanone	9.98	43	6972	1.089	ug/l	96
54) cis-1,3-Dichloropropene	9.90	75	37729	4.932	ug/l #	69
56) Ethyl methacrylate	10.55	69	2003	0.266	ug/l #	1
57) 1,3-Dichloropropane	10.76	76	4928	0.572	ug/l #	43
59) 2-Hexanone	10.76	43	75445	15.728	ug/l #	55
71) Bromoform	12.41	173	2225	0.786	ug/l #	1
74) N-amyl acetate	12.03	43	4152	0.484	ug/l #	48
76) 1,2,3-Trichloropropane	12.41	75	172669	30.073	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.41	75	172669	105.826	ug/l #	6
95) Naphthalene	15.14	128	1227	Below Cal	#	69
96) 1,2,3-Trichlorobenzene	15.30	180	99	1.017	ug/l #	12

(#) = 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: VN058034.D

Acq: 13 Sep 2019 21:57

Instrument :

MSVOA_N

ClientSampleId :

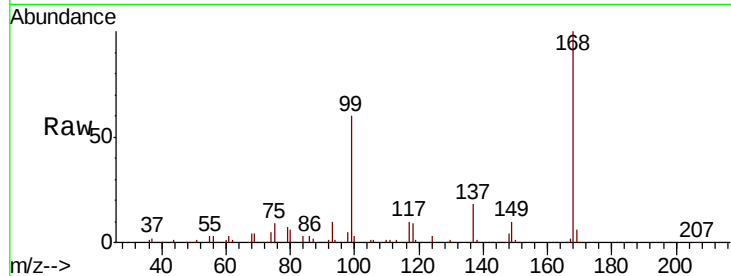
T1-2-(0)

Tgt Ion:168 Resp: 307712

Ion Ratio Lower Upper

168 100

99 60.2 48.0 72.0



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VN0

7.65

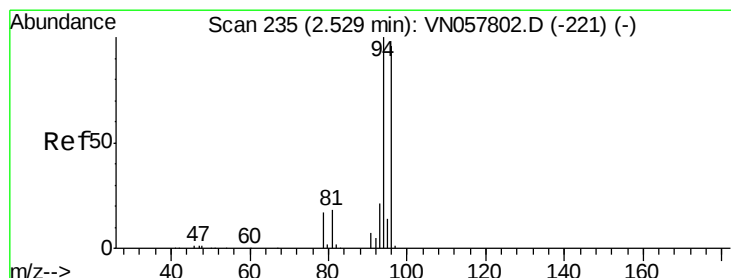
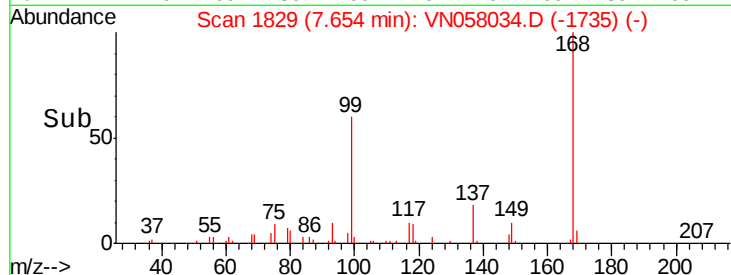
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 2.50 min Scan# 227

Delta R.T. -0.02 min

Lab File: VN058034.D

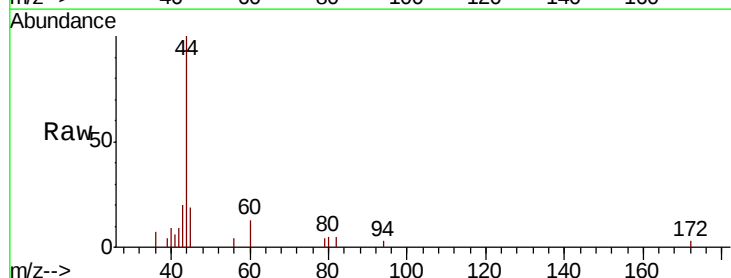
Acq: 13 Sep 2019 21:57

Tgt Ion: 94 Resp: 32

Ion Ratio Lower Upper

94 100

96 0.0 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VN0

Ion 95.90 (95.60 to 96.60): VN0

2.50

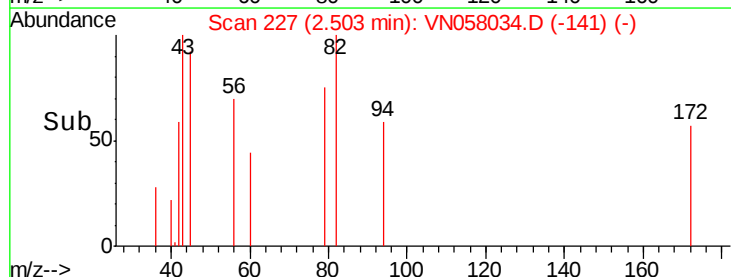
150

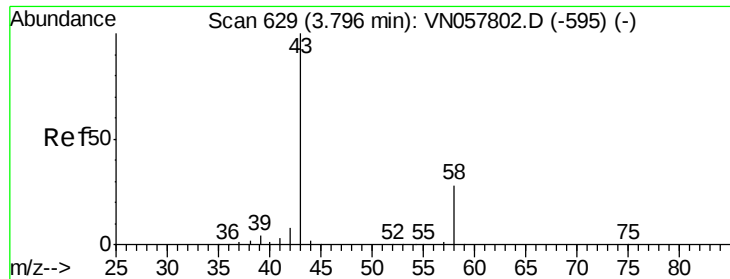
100

50

0

Time-->





#16

Acetone

Concen: 7.512 ug/l

RT: 3.80 min Scan# 630

Delta R.T. 0.00 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

Instrument :

MSVOA_N

ClientSampled :

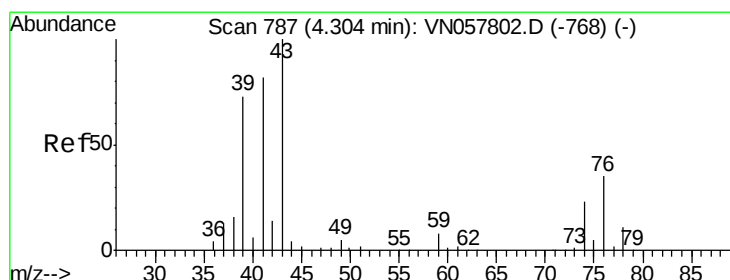
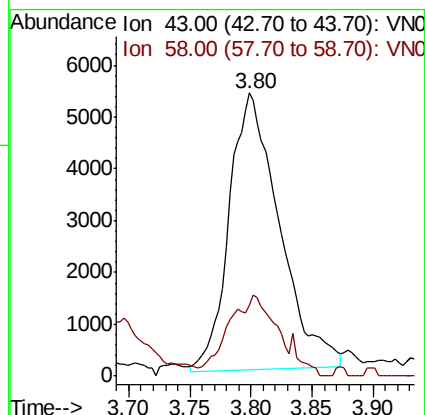
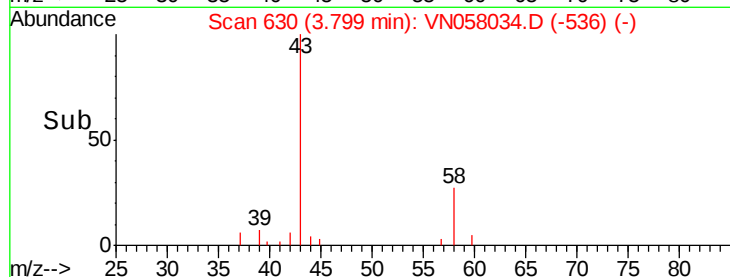
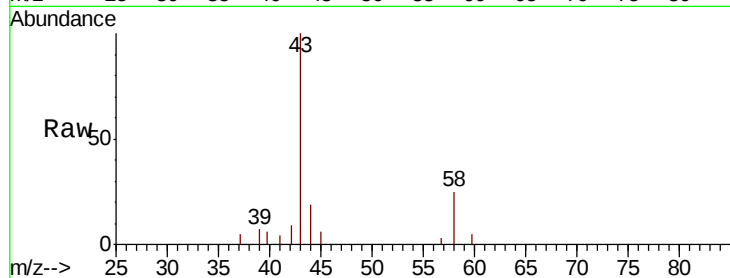
T1-2-(0)

Tgt Ion: 43 Resp: 15347

Ion Ratio Lower Upper

43 100

58 22.8 22.2 33.2



#18

Methyl Acetate

Concen: 0.515 ug/l

RT: 4.31 min Scan# 789

Delta R.T. 0.01 min

Lab File: VN058034.D

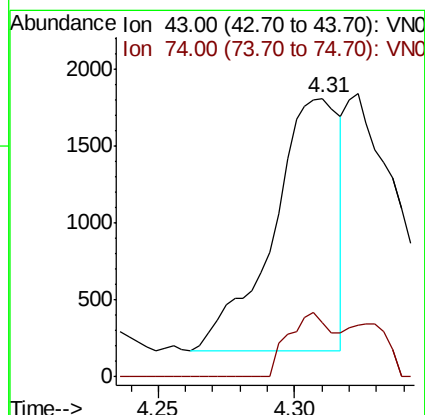
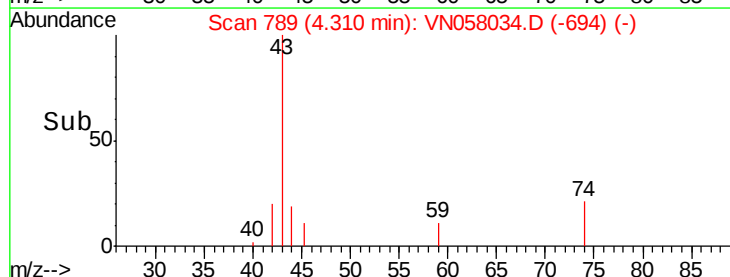
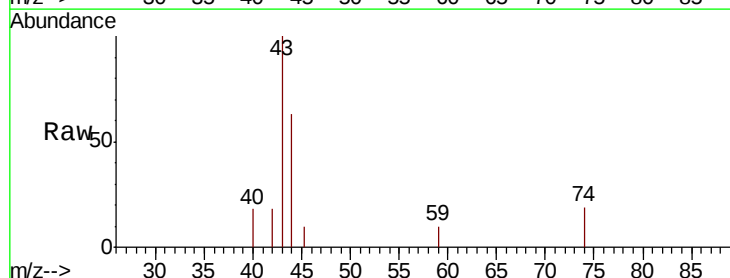
Acq: 13 Sep 2019 21:57

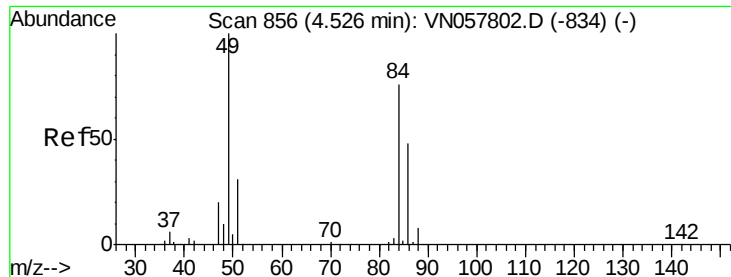
Tgt Ion: 43 Resp: 2804

Ion Ratio Lower Upper

43 100

74 17.4 17.9 26.9#

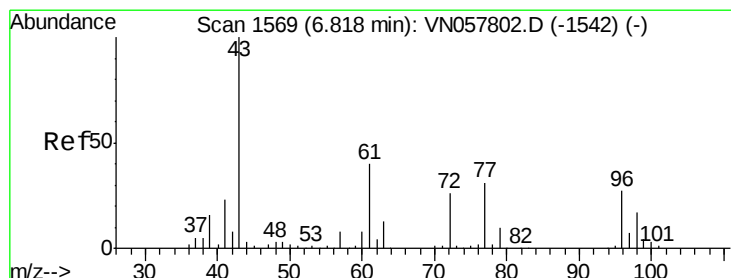
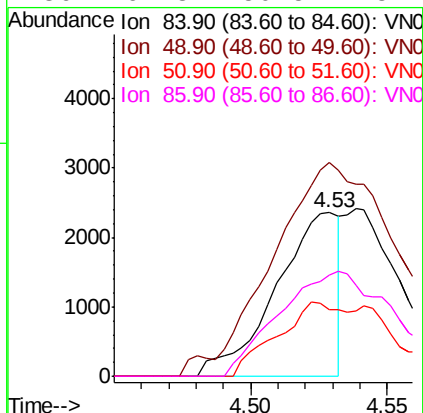
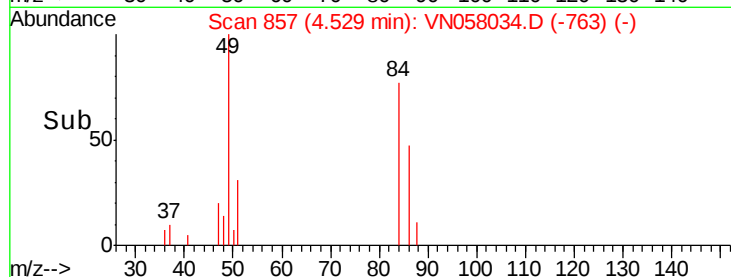
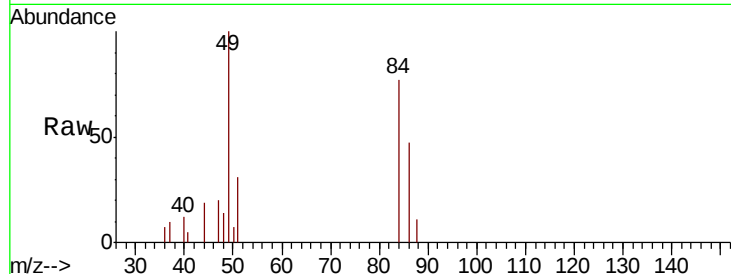




#20
Methylene Chloride
Concen: Below Cal
RT: 4.53 min Scan# 857
Delta R.T. 0.00 min
Lab File: VN058034.D
Acq: 13 Sep 2019 21:57

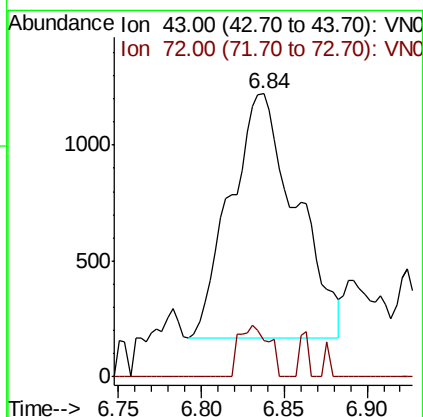
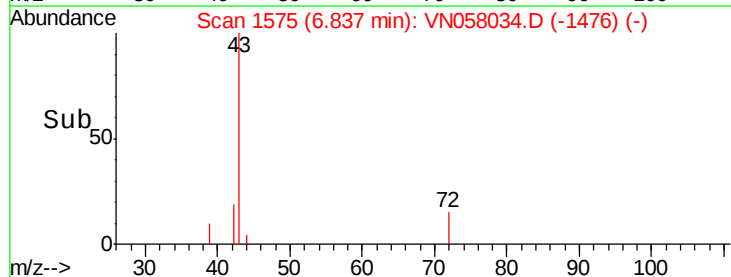
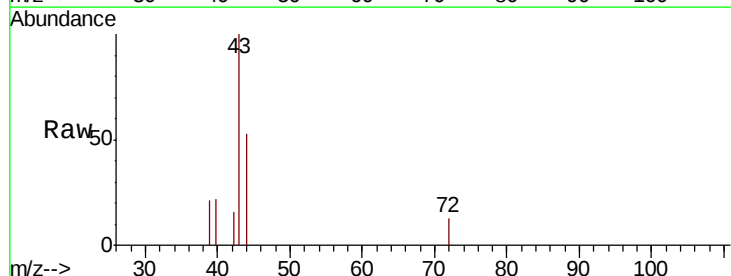
Instrument :
MSVOA_N
ClientSampleId :
T1-2-(0)

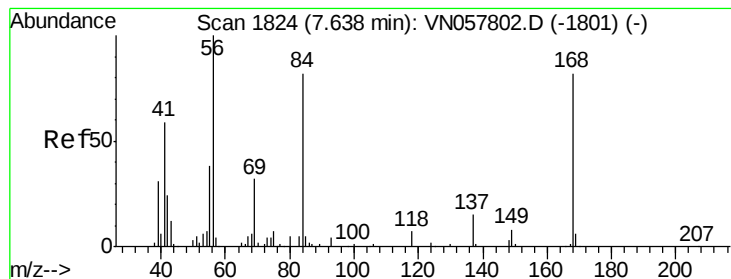
Tgt Ion: 84 Resp: 3778
Ion Ratio Lower Upper
84 100
49 120.8 104.8 157.2
51 40.5 33.0 49.4
86 61.8 50.5 75.7



#25
2-Butanone
Concen: 0.980 ug/l
RT: 6.84 min Scan# 1575
Delta R.T. 0.02 min
Lab File: VN058034.D
Acq: 13 Sep 2019 21:57

Tgt Ion: 43 Resp: 2898
Ion Ratio Lower Upper
43 100
72 14.7 20.6 30.8#





#31

Cyclohexane

Concen: Below Cal

RT: 7.65 min Scan# 1829

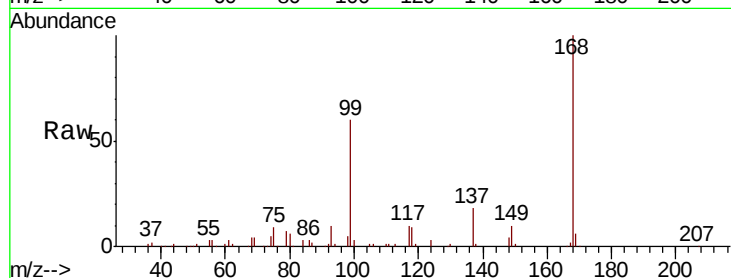
Delta R.T. 0.02 min

Lab File: VN058034.D

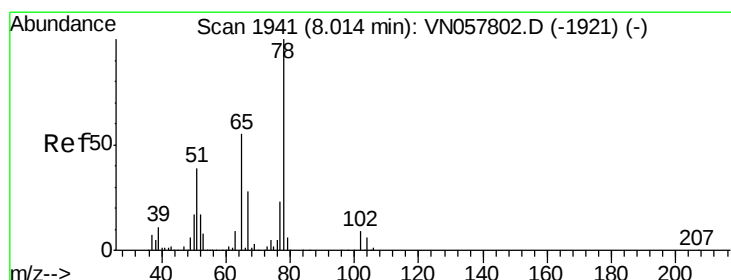
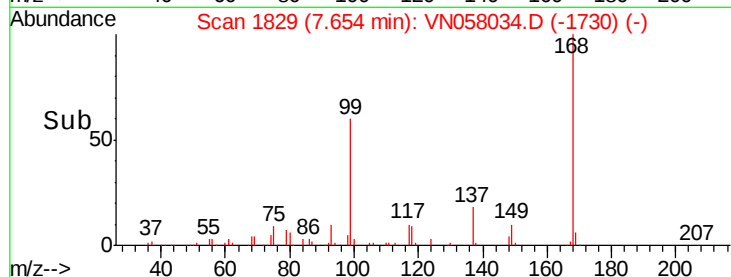
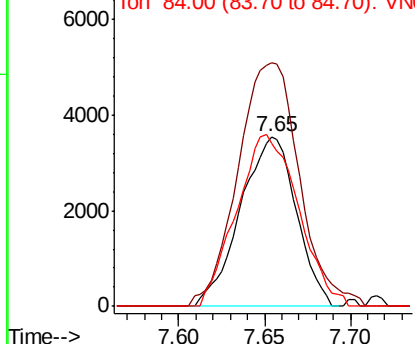
Acq: 13 Sep 2019 21:57

Instrument :
MSVOA_N
ClientSampled :
T1-2-(0)

Tgt Ion:	56	Resp:	7984
Ion	Ratio	Lower	Upper
56	100		
69	143.4	25.9	38.9#
84	96.1	65.6	98.4



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



#33

1,2-Dichloroethane-d4

Concen: 55.329 ug/l

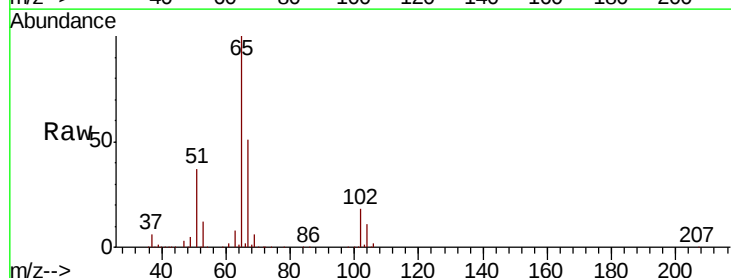
RT: 8.01 min Scan# 1941

Delta R.T. 0.00 min

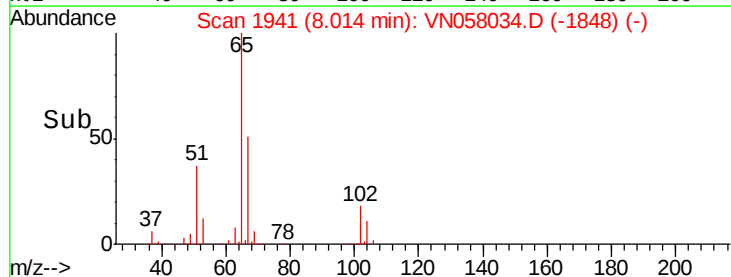
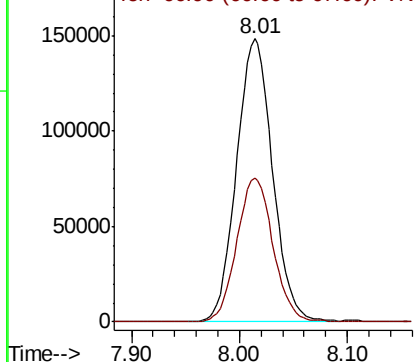
Lab File: VN058034.D

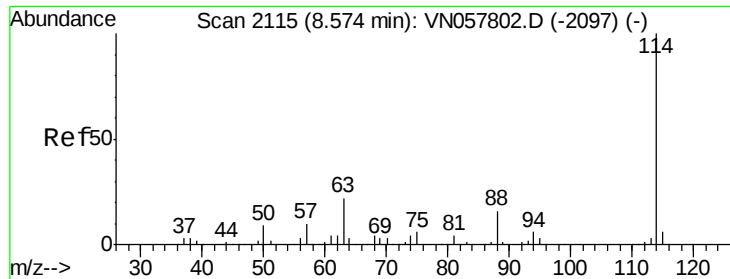
Acq: 13 Sep 2019 21:57

Tgt Ion:	65	Resp:	344835
Ion	Ratio	Lower	Upper
65	100		
67	51.2	0.0	104.0



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

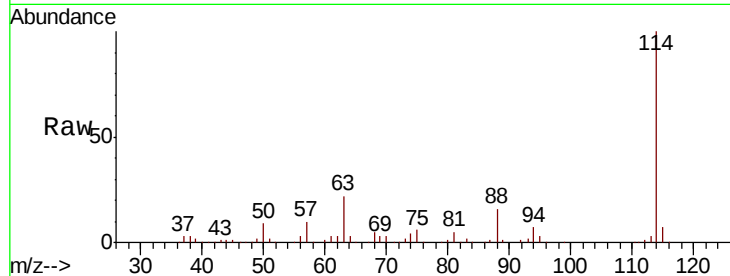




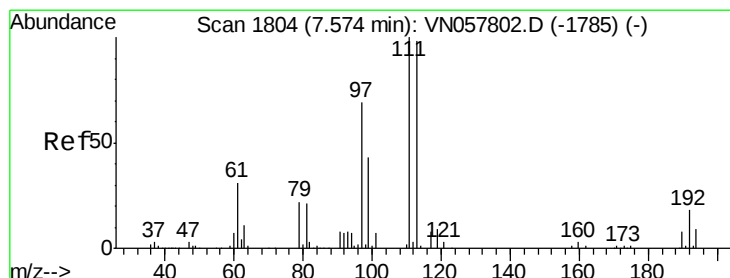
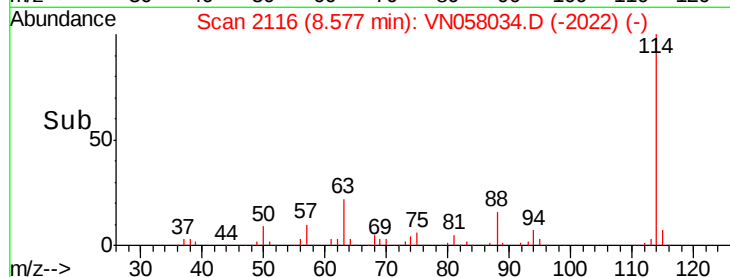
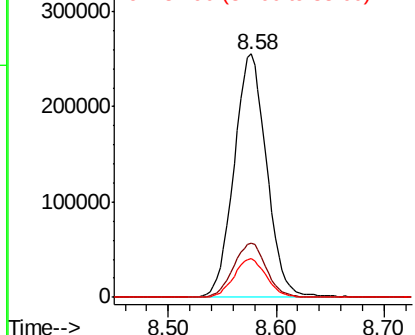
#34
1,4-Difluorobenzene
Concen: 50.000 ug/l
RT: 8.58 min Scan# 2116
Delta R.T. 0.00 min
Lab File: VN058034.D
Acq: 13 Sep 2019 21:57

Instrument :
MSVOA_N
ClientSampleId :
T1-2-(0)

Tgt Ion:114 Resp: 536687
Ion Ratio Lower Upper
114 100
63 22.2 0.0 44.0
88 15.7 0.0 31.4

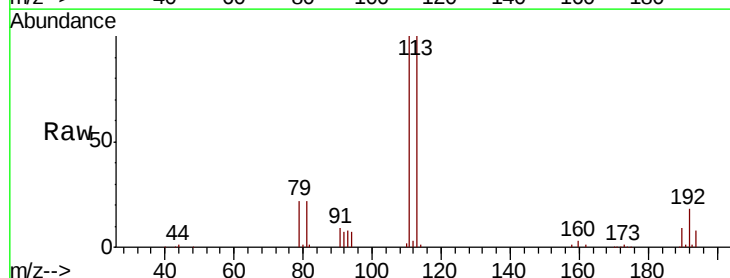


Abundance Ion 113.90 (113.60 to 114.60): V
Ion 63.00 (62.70 to 63.70): VN
Ion 87.90 (87.60 to 88.60): VN

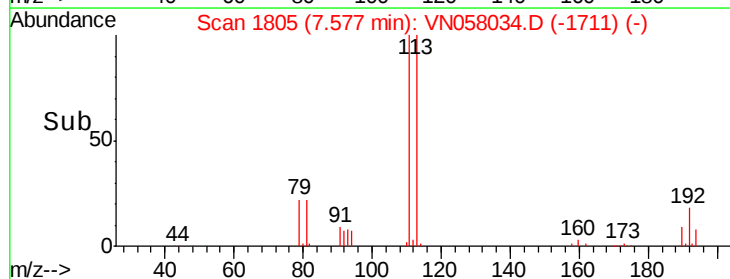
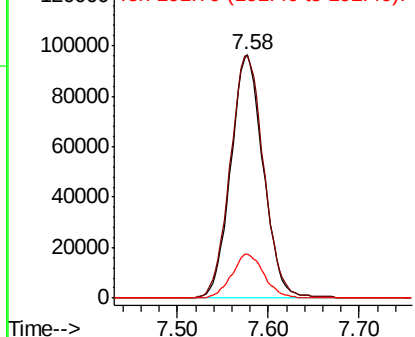


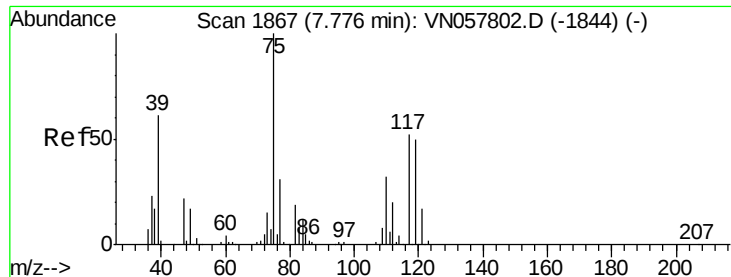
#35
Dibromofluoromethane
Concen: 48.189 ug/l
RT: 7.58 min Scan# 1805
Delta R.T. 0.00 min
Lab File: VN058034.D
Acq: 13 Sep 2019 21:57

Tgt Ion:113 Resp: 238700
Ion Ratio Lower Upper
113 100
111 103.5 81.3 121.9
192 18.1 14.6 22.0



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

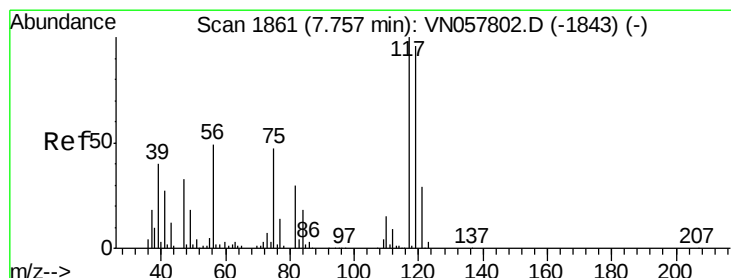
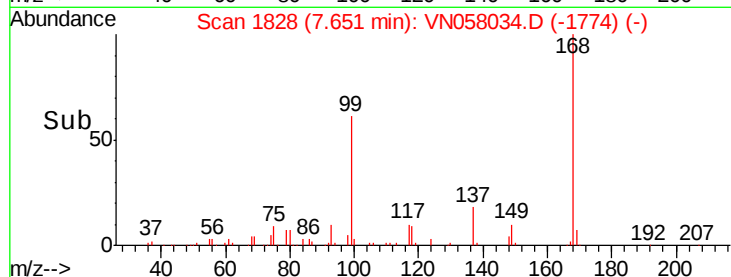
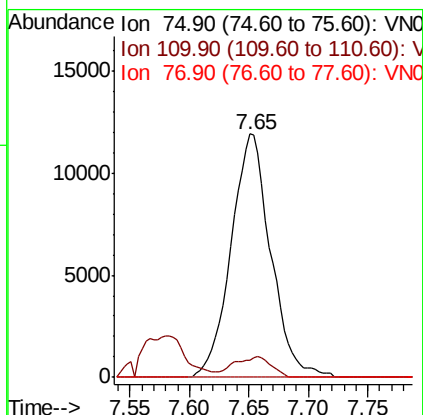
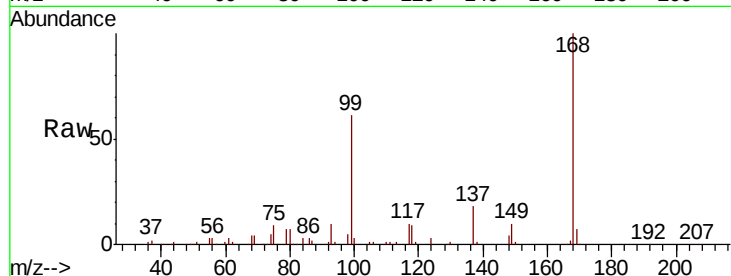




#36
 1,1-Dichloropropene
 Concen: 4.416 ug/l
 RT: 7.65 min Scan# 1828
 Delta R.T. -0.13 min
 Lab File: VN058034.D
 Acq: 13 Sep 2019 21:57

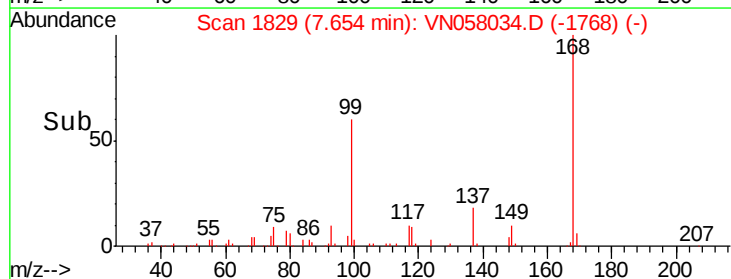
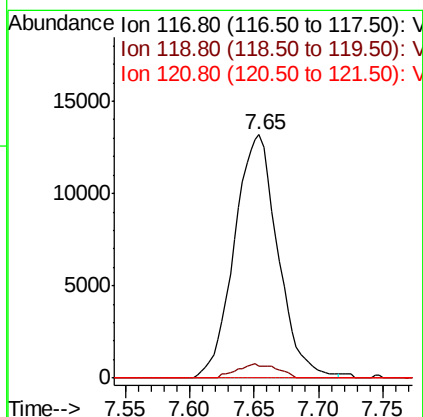
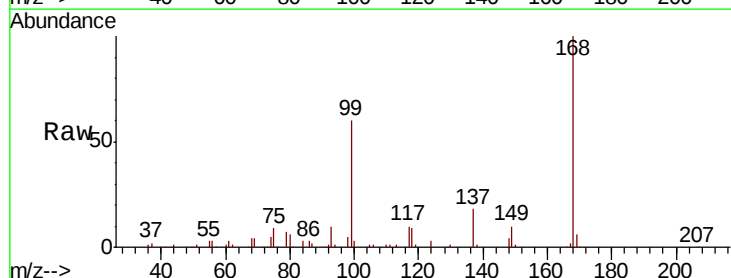
Instrument :
 MSVOA_N
 ClientSampleId :
 T1-2-(0)

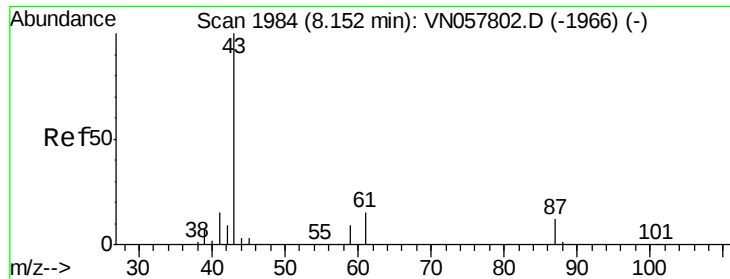
Tgt Ion: 75 Resp: 27488
 Ion Ratio Lower Upper
 75 100
 110 7.9 16.3 48.9#
 77 0.0 25.0 37.4#



#38
 Carbon Tetrachloride
 Concen: 5.448 ug/l
 RT: 7.65 min Scan# 1829
 Delta R.T. -0.10 min
 Lab File: VN058034.D
 Acq: 13 Sep 2019 21:57

Tgt Ion: 117 Resp: 30958
 Ion Ratio Lower Upper
 117 100
 119 5.1 76.9 115.3#
 121 0.0 23.4 35.2#





#43

Isopropyl Acetate

Concen: 8.454 ug/l

RT: 8.16 min Scan# 1985

Delta R.T. 0.00 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

Instrument :

MSVOA_N

ClientSampleId :

T1-2-(0)

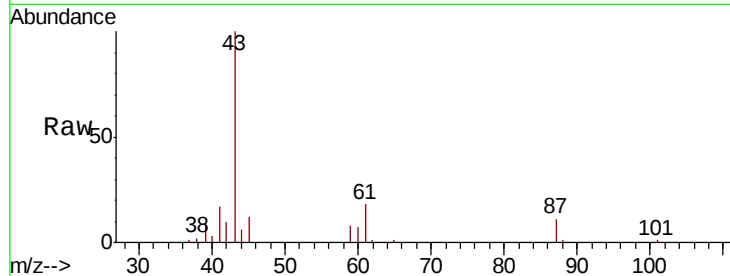
Tgt Ion: 43 Resp: 91429

Ion Ratio Lower Upper

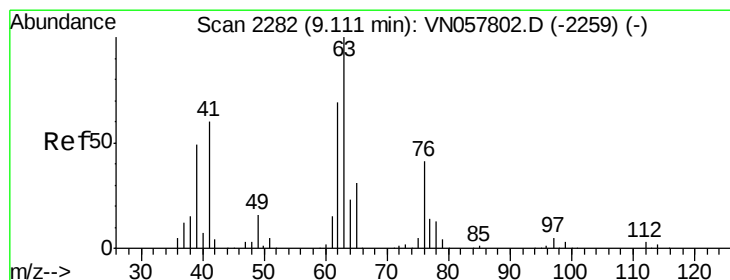
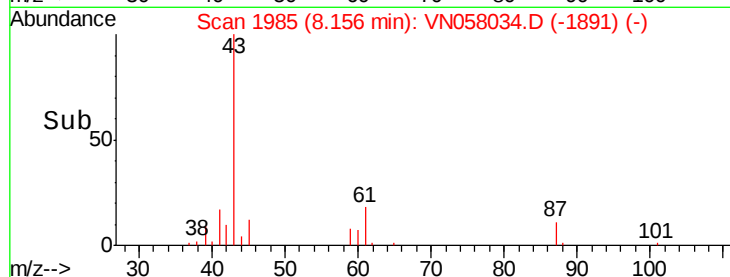
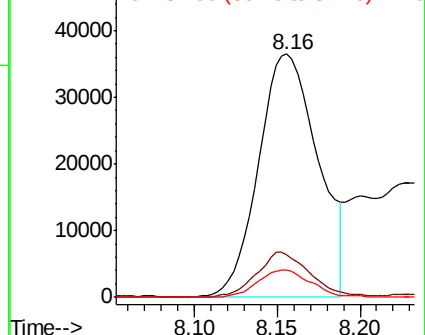
43 100

61 16.7 20.1 30.1#

87 9.8 9.5 14.3



Abundance Ion 43.00 (42.70 to 43.70): VNO
Ion 61.00 (60.70 to 61.70): VNO
Ion 87.00 (86.70 to 87.70): VNO



#45

1,2-Dichloropropane

Concen: 0.219 ug/l

RT: 9.26 min Scan# 2329

Delta R.T. 0.15 min

Lab File: VN058034.D

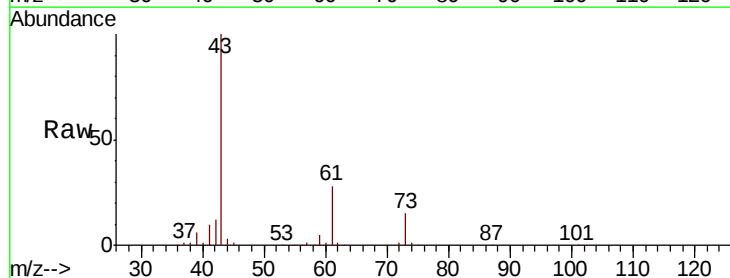
Acq: 13 Sep 2019 21:57

Tgt Ion: 63 Resp: 1192

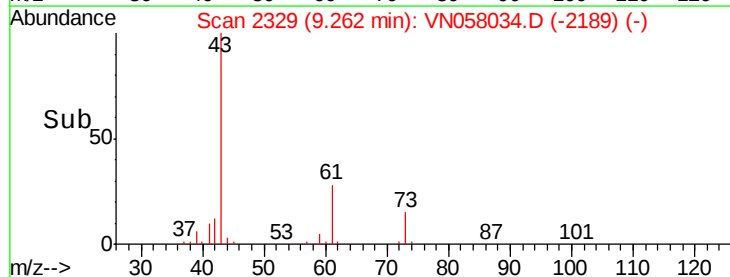
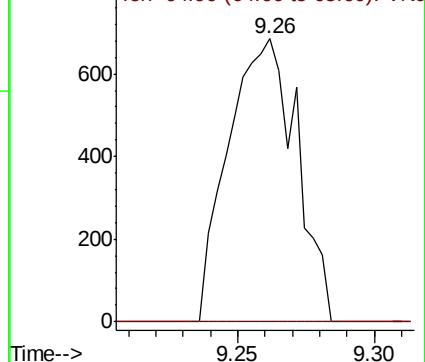
Ion Ratio Lower Upper

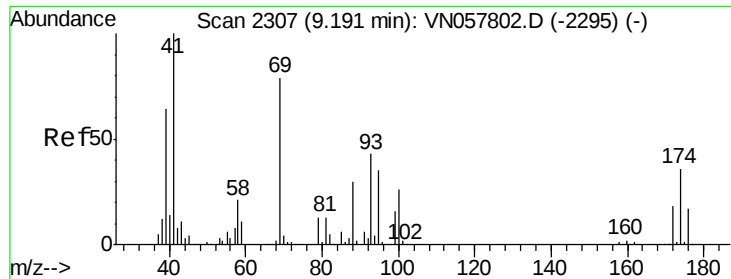
63 100

65 0.0 24.8 37.2#



Abundance Ion 62.90 (62.60 to 63.60): VNO
Ion 64.90 (64.60 to 65.60): VNO

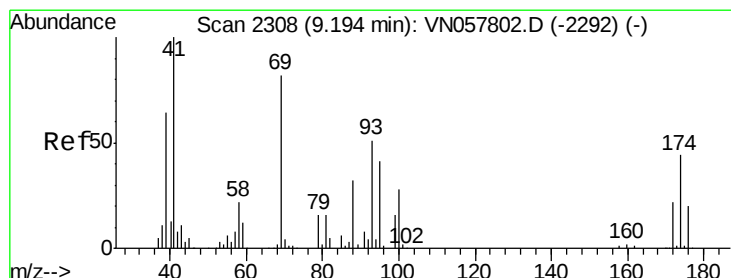
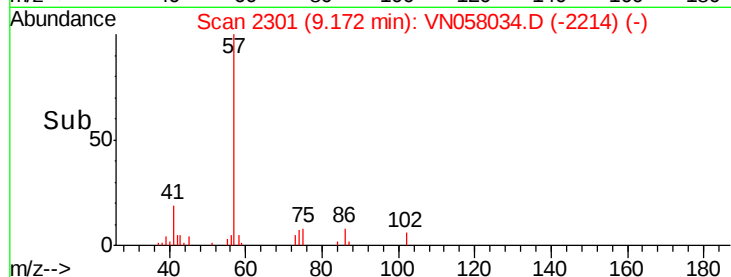
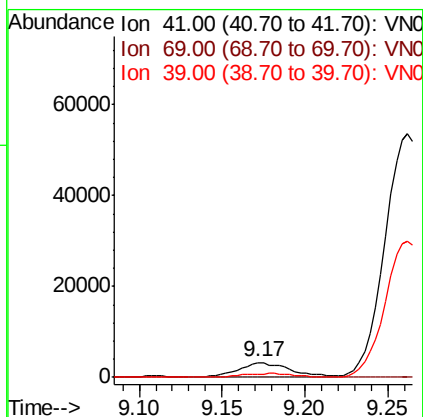
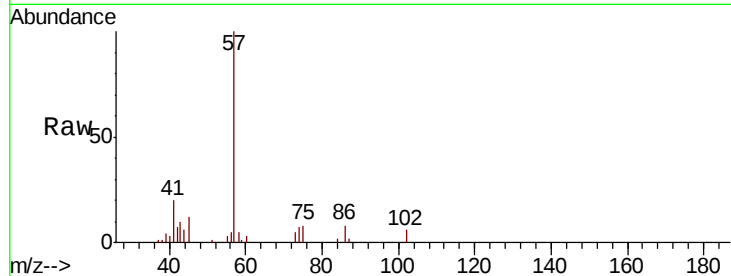




#48
Methyl methacrylate
Concen: 1.300 ug/l
RT: 9.17 min Scan# 2301
Delta R.T. -0.02 min
Lab File: VN058034.D
Acq: 13 Sep 2019 21:57

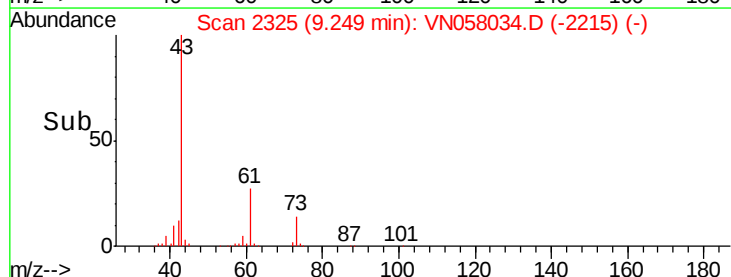
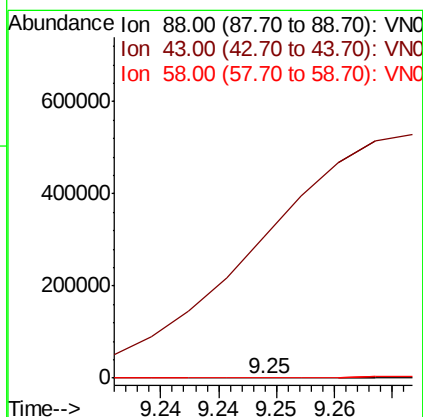
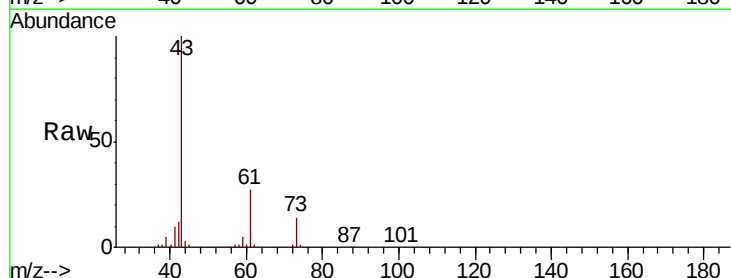
Instrument :
MSVOA_N
ClientSampleId :
T1-2-(0)

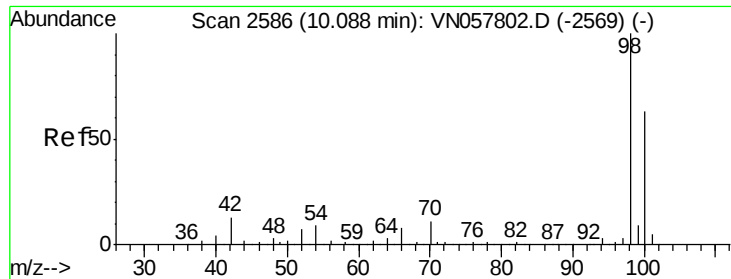
Tgt Ion: 41 Resp: 7134
Ion Ratio Lower Upper
41 100
69 0.0 62.7 94.1#
39 26.3 52.7 79.1#



#49
1,4-Dioxane
Concen: 0.345 ug/l
RT: 9.25 min Scan# 2325
Delta R.T. 0.05 min
Lab File: VN058034.D
Acq: 13 Sep 2019 21:57

Tgt Ion: 88 Resp: 32
Ion Ratio Lower Upper
88 100
43 3061643.8 28.5 42.7#
58 14684.4 55.8 83.6#





#50

Toluene-d8

Concen: 47.057 ug/l

RT: 10.09 min Scan# 2586

Delta R.T. 0.00 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

Instrument :

MSVOA_N

ClientSampled :

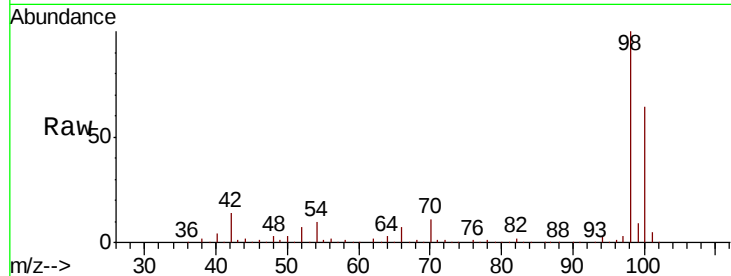
T1-2-(0)

Tgt Ion: 98 Resp: 904991

Ion Ratio Lower Upper

98 100

100 63.5 50.3 75.5



Abundance Ion 98.00 (97.70 to 98.70): VN057802.D (-2569) (-)

Ion 100.00 (99.70 to 100.70): VN057802.D (-2569) (-)

10.09

500000

400000

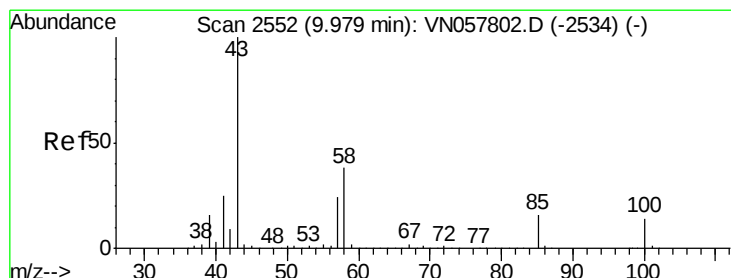
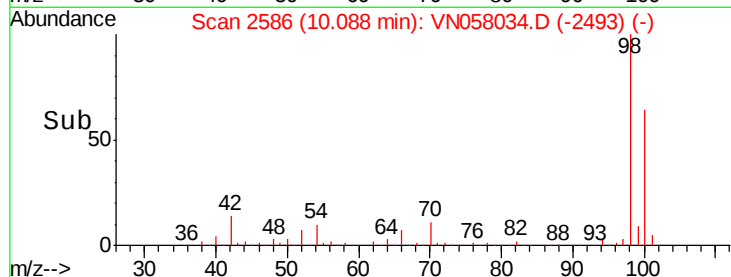
300000

200000

100000

0

Time-->



#51

4-Methyl-2-Pentanone

Concen: 1.089 ug/l

RT: 9.98 min Scan# 2552

Delta R.T. 0.00 min

Lab File: VN058034.D

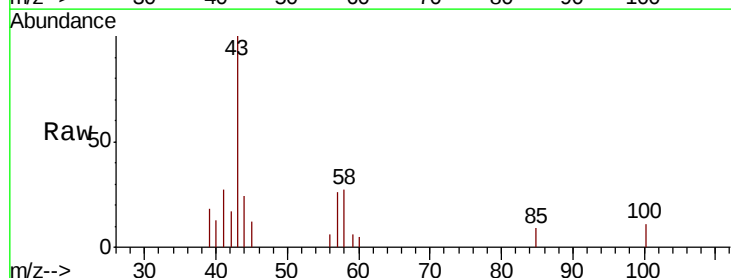
Acq: 13 Sep 2019 21:57

Tgt Ion: 43 Resp: 6972

Ion Ratio Lower Upper

43 100

58 35.0 29.8 44.6



Abundance Ion 43.00 (42.70 to 43.70): VN057802.D (-2534) (-)

Ion 58.00 (57.70 to 58.70): VN057802.D (-2534) (-)

9.98

5000

4000

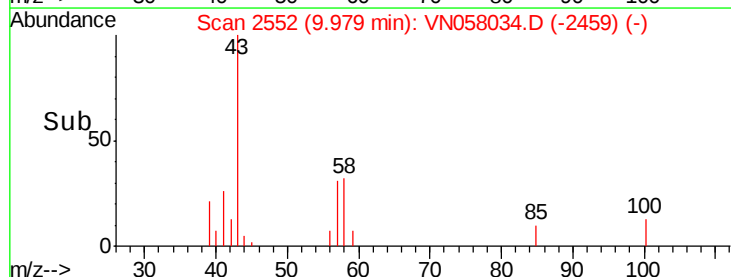
3000

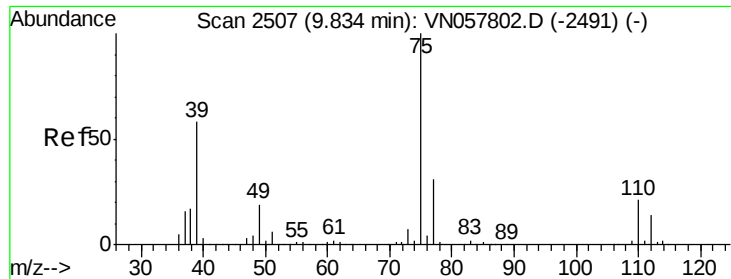
2000

1000

0

Time-->



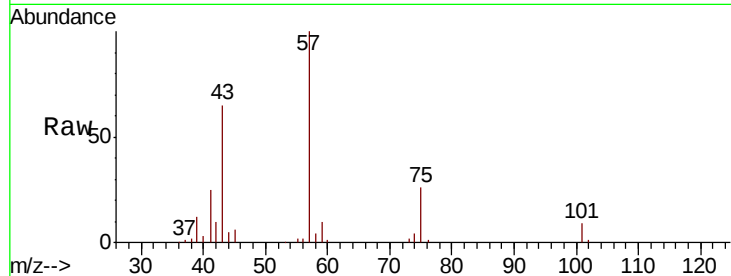


#54

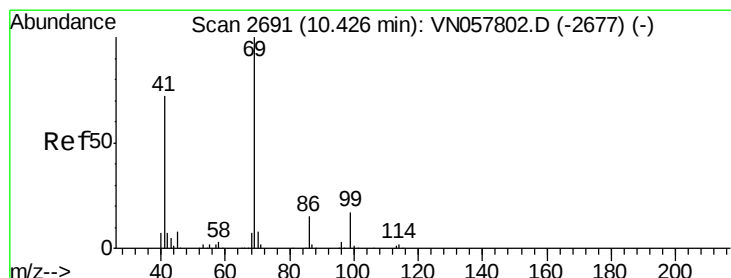
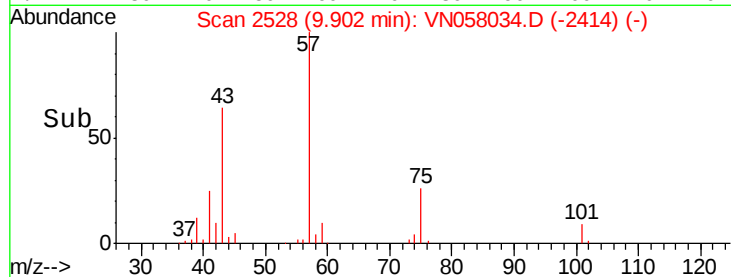
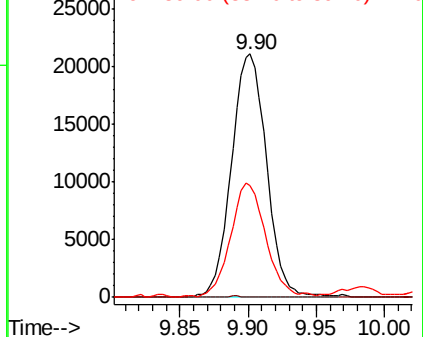
cis-1,3-Dichloropropene
Concen: 4.932 ug/l
RT: 9.90 min Scan# 2528
Delta R.T. 0.07 min
Lab File: VN058034.D
Acq: 13 Sep 2019 21:57

Instrument :
MSVOA_N
ClientSampled :
T1-2-(0)

Tgt Ion: 75 Resp: 37729
Ion Ratio Lower Upper
75 100
77 0.0 24.8 37.2#
39 45.2 46.2 69.4#



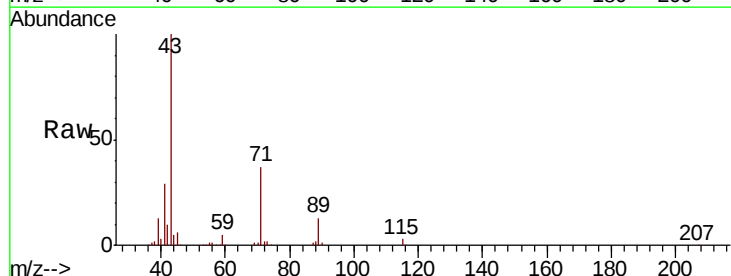
Abundance Ion 74.90 (74.60 to 75.60): VNO
Ion 76.90 (76.60 to 77.60): VNO
Ion 39.00 (38.70 to 39.70): VNO



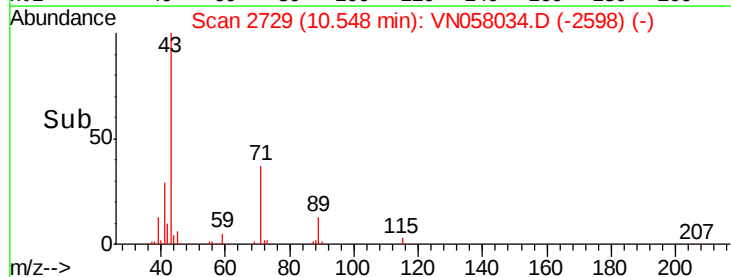
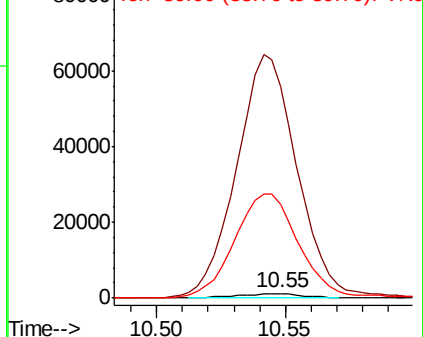
#56

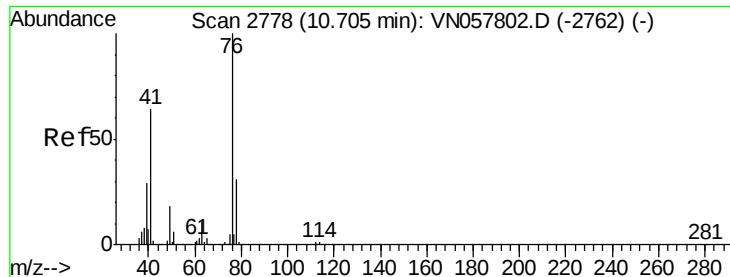
Ethyl methacrylate
Concen: 0.266 ug/l
RT: 10.55 min Scan# 2729
Delta R.T. 0.12 min
Lab File: VN058034.D
Acq: 13 Sep 2019 21:57

Tgt Ion: 69 Resp: 2003
Ion Ratio Lower Upper
69 100
41 5297.3 56.7 85.1#
39 2408.2 36.3 54.5#



Abundance Ion 69.00 (68.70 to 69.70): VNO
Ion 41.00 (40.70 to 41.70): VNO
Ion 39.00 (38.70 to 39.70): VNO

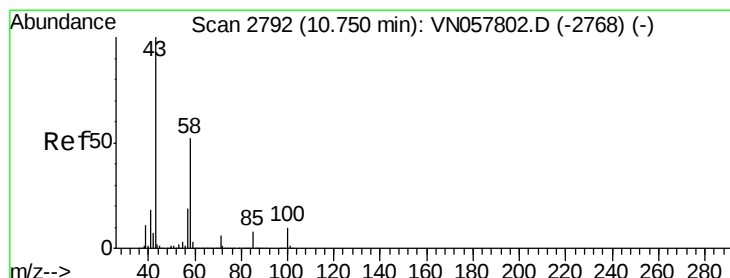
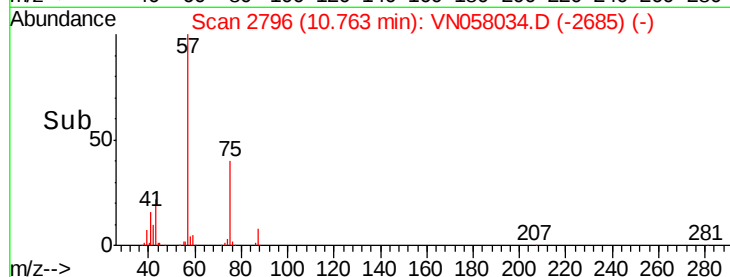
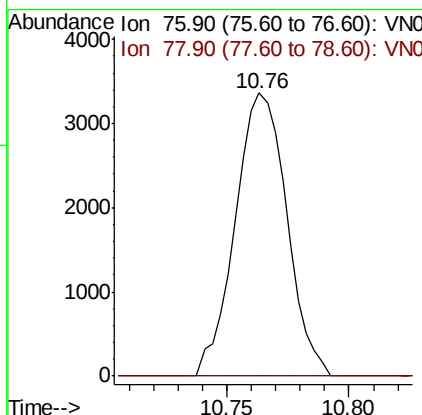
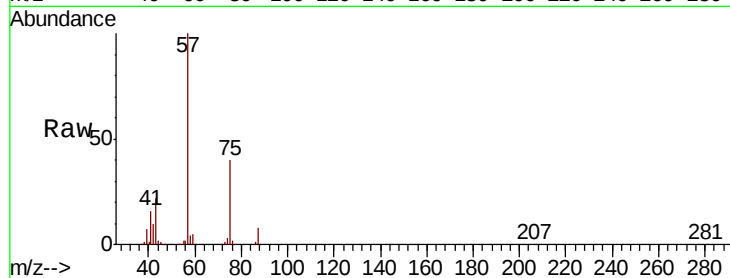




#57
 1,3-Dichloropropane
 Concen: 0.572 ug/l
 RT: 10.76 min Scan# 2796
 Delta R.T. 0.06 min
 Lab File: VN058034.D
 Acq: 13 Sep 2019 21:57

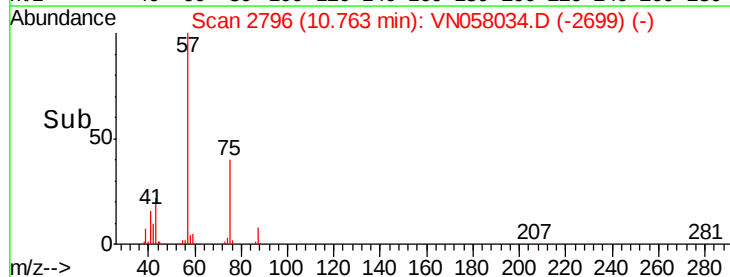
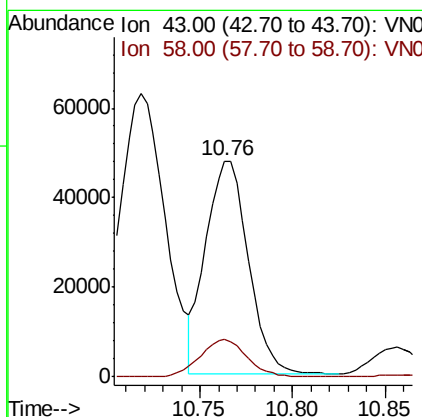
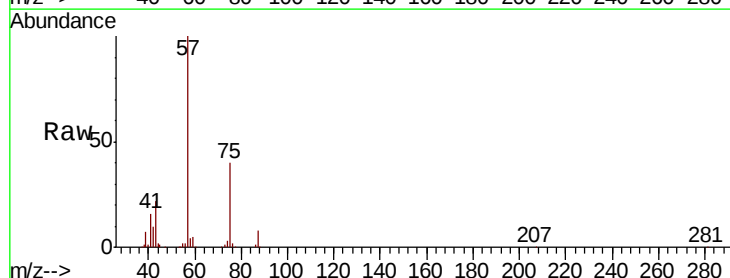
Instrument :
 MSVOA_N
 ClientSampleId :
 T1-2-(0)

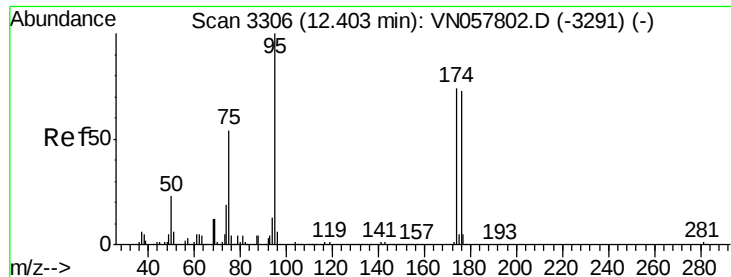
Tgt Ion: 76 Resp: 4928
 Ion Ratio Lower Upper
 76 100
 78 0.0 25.4 38.2#



#59
 2-Hexanone
 Concen: 15.728 ug/l
 RT: 10.76 min Scan# 2796
 Delta R.T. 0.01 min
 Lab File: VN058034.D
 Acq: 13 Sep 2019 21:57

Tgt Ion: 43 Resp: 75445
 Ion Ratio Lower Upper
 43 100
 58 19.5 25.6 76.8#





#62

4-Bromofluorobenzene

Concen: 43.346 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.00 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

Instrument :

MSVOA_N

ClientSampleId :

T1-2-(0)

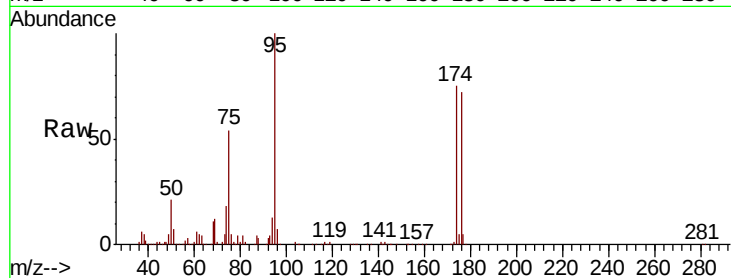
Tgt Ion: 95 Resp: 317681

Ion Ratio Lower Upper

95 100

174 74.6 0.0 150.2

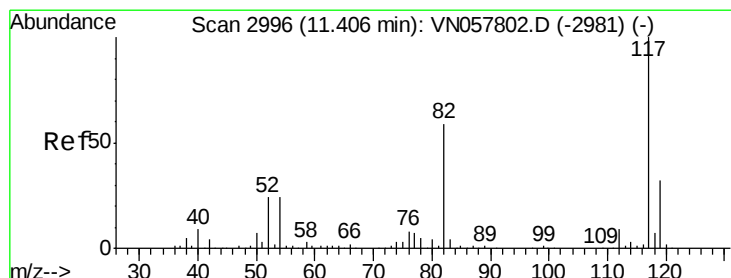
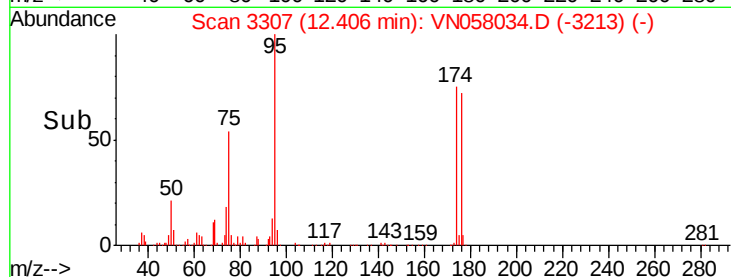
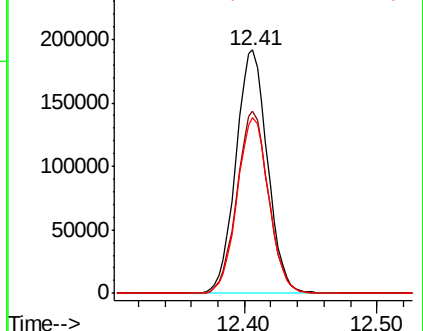
176 72.3 0.0 146.0



Abundance Ion 94.90 (94.60 to 95.60): VN057802.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN057802.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN057802.D (-3291) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

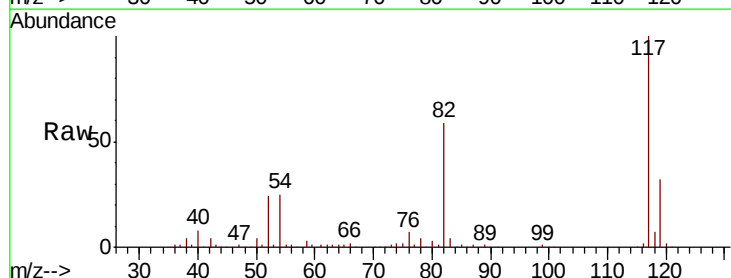
Tgt Ion: 117 Resp: 499875

Ion Ratio Lower Upper

117 100

82 58.9 47.2 70.8

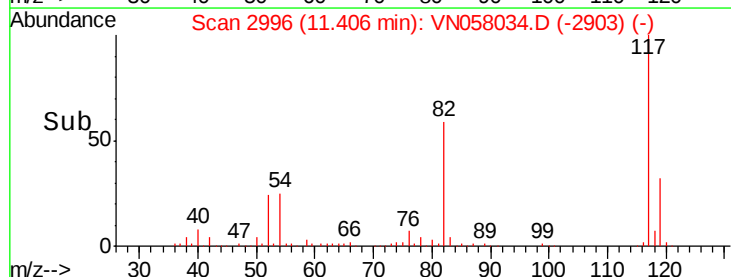
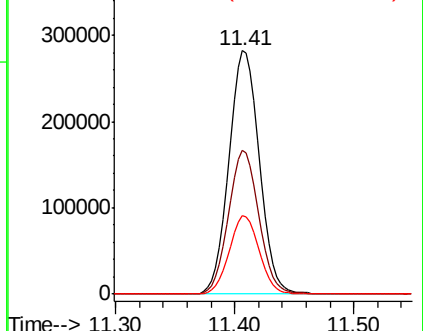
119 32.2 25.3 37.9

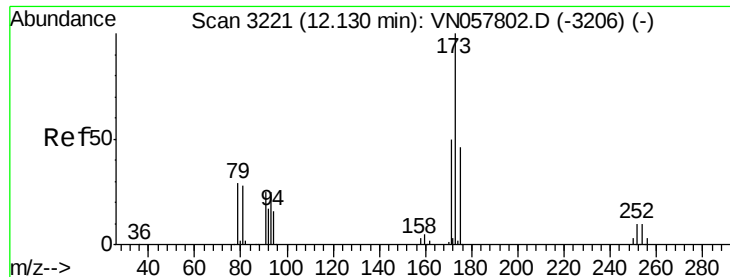


Abundance Ion 116.90 (116.60 to 117.60): VN057802.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN057802.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN057802.D (-2981) (-)





#71

Bromoform

Concen: 0.786 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.28 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

Instrument :

MSVOA_N

ClientSampled :

T1-2-(0)

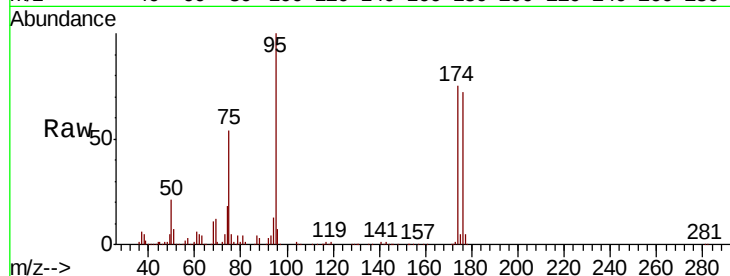
Tgt Ion:173 Resp: 2225

Ion Ratio Lower Upper

173 100

175 639.2 23.5 70.6#

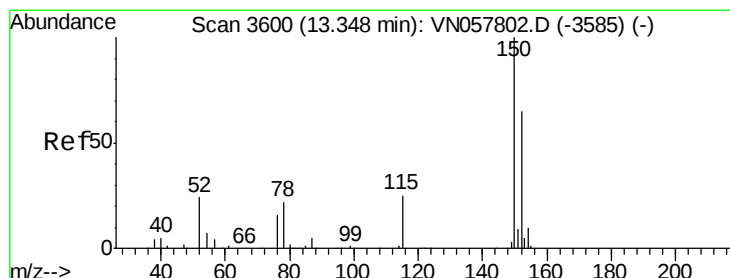
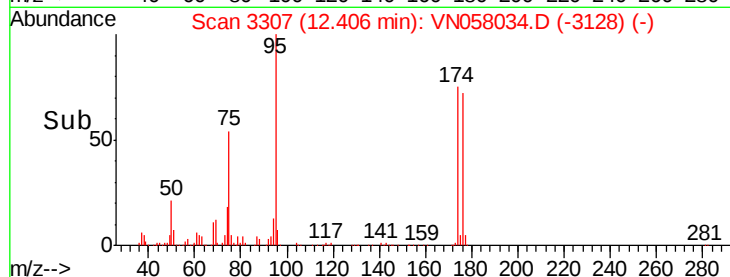
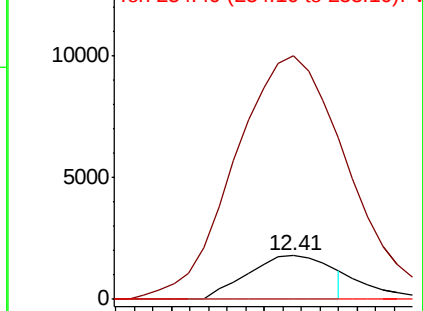
254 0.0 0.1 0.1#



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# 3600

Delta R.T. 0.00 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

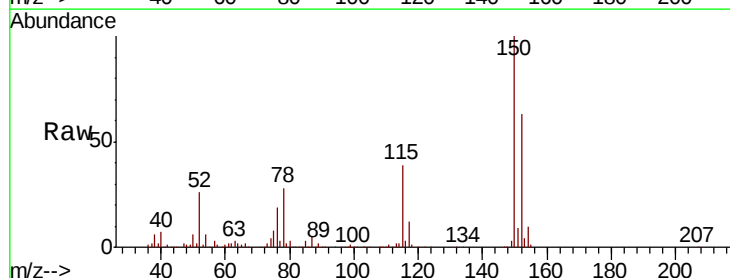
Tgt Ion:152 Resp: 253816

Ion Ratio Lower Upper

152 100

115 60.6 30.3 91.0

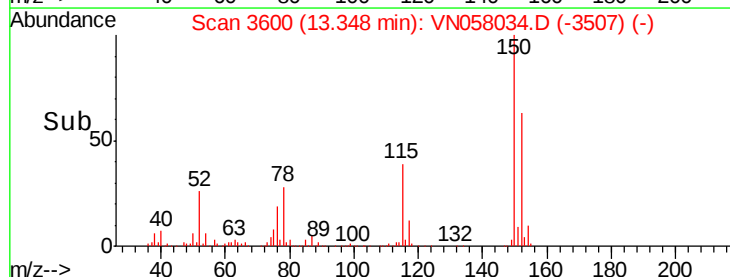
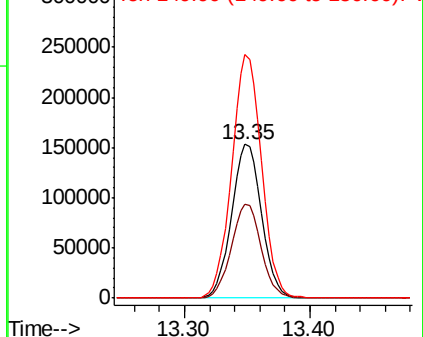
150 157.6 0.0 352.4

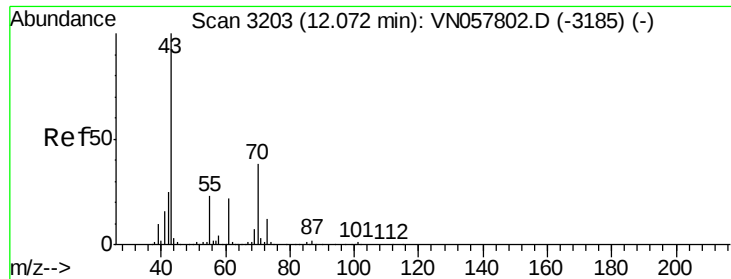


Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V





#74

N-ethyl acetate

Concen: 0.484 ug/l

RT: 12.03 min Scan# 3191

Delta R.T. -0.04 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

Instrument :

MSVOA_N

ClientSampleId :

T1-2-(0)

Tgt Ion: 43 Resp: 4152

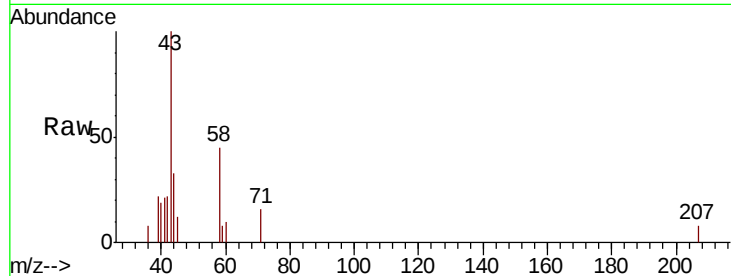
Ion Ratio Lower Upper

43 100

70 0.0 30.6 45.8#

55 3.9 18.6 27.8#

61 0.0 17.4 26.2#

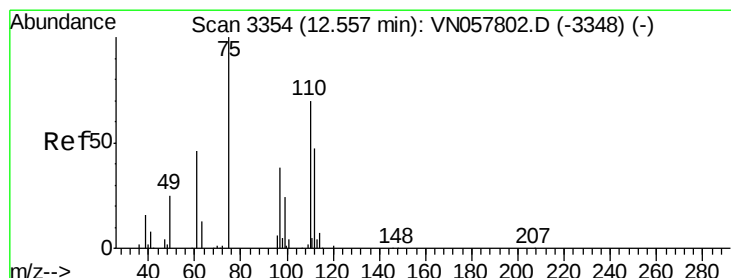
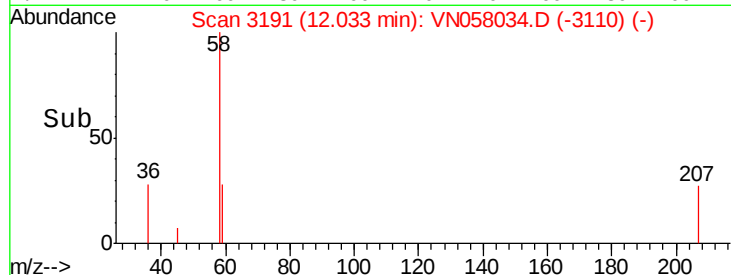
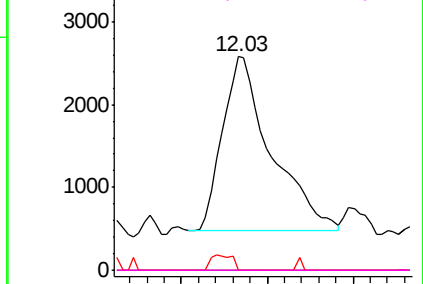


Abundance Ion 43.00 (42.70 to 43.70): VN057802.D (-3185) (-)

Ion 70.00 (69.70 to 70.70): VN057802.D (-3185) (-)

Ion 55.00 (54.70 to 55.70): VN057802.D (-3185) (-)

Ion 61.00 (60.70 to 61.70): VN057802.D (-3185) (-)



#76

1,2,3-Trichloropropane

Concen: 30.073 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN058034.D

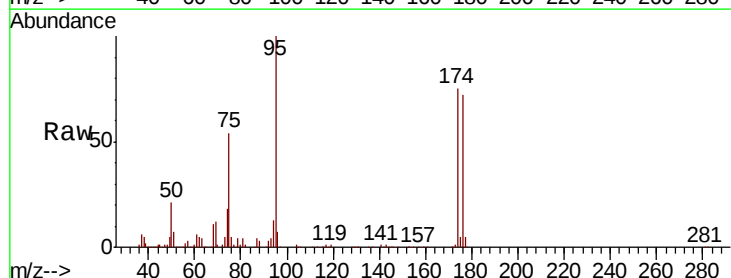
Acq: 13 Sep 2019 21:57

Tgt Ion: 75 Resp: 172669

Ion Ratio Lower Upper

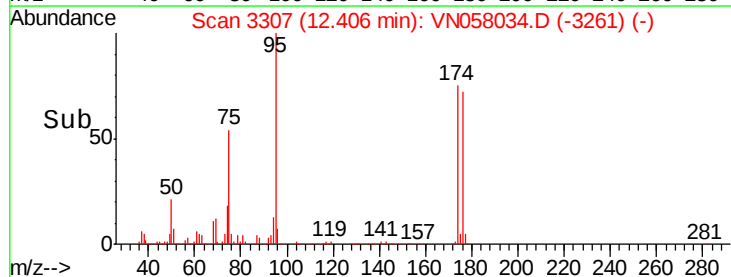
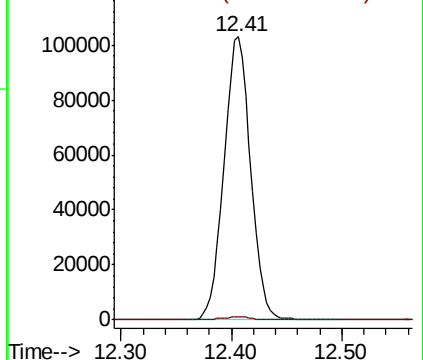
75 100

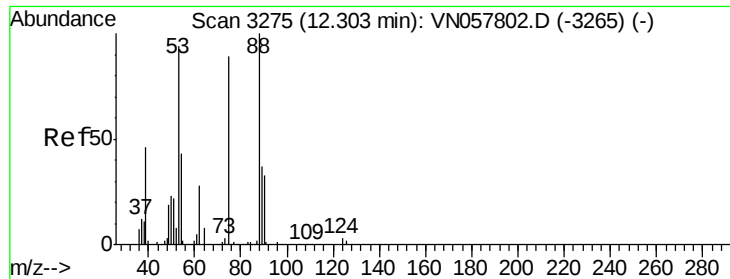
77 1.1 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN057802.D (-3348) (-)

Ion 77.00 (76.70 to 77.70): VN057802.D (-3348) (-)





#81

trans-1,4-Dichloro-2-butene

Concen: 105.826 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.10 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

Instrument :

MSVOA_N

ClientSampled :

T1-2-(0)

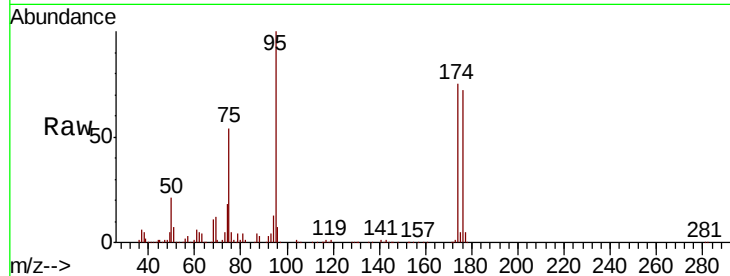
Tgt Ion: 75 Resp: 172669

Ion Ratio Lower Upper

75 100

53 0.0 88.4 132.6#

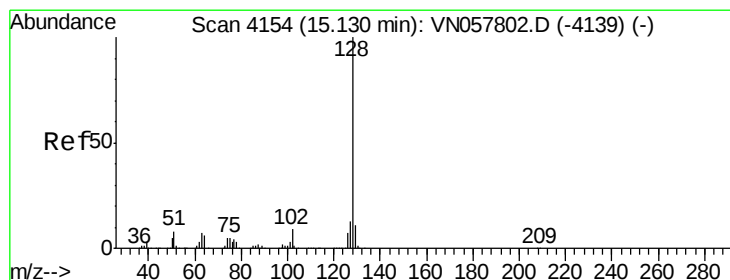
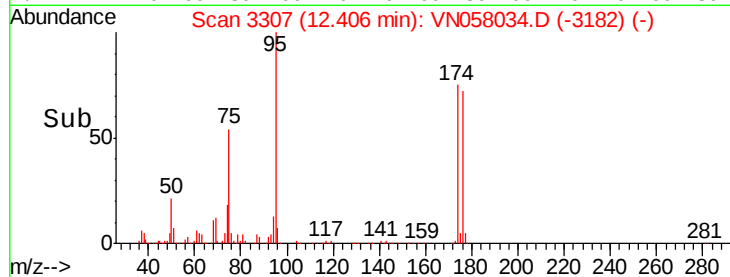
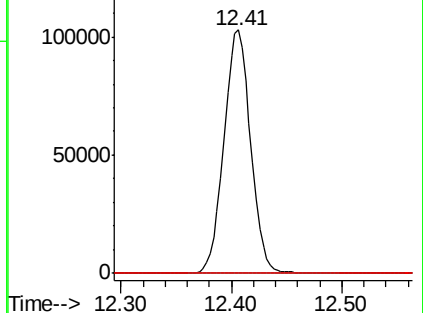
89 0.0 35.3 52.9#



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



#95

Naphthalene

Concen: Below Cal

RT: 15.14 min Scan# 4157

Delta R.T. 0.01 min

Lab File: VN058034.D

Acq: 13 Sep 2019 21:57

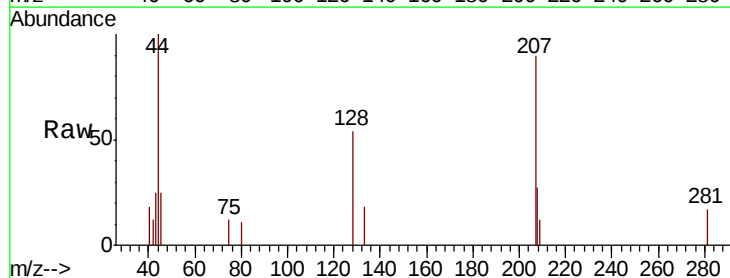
Tgt Ion: 128 Resp: 1227

Ion Ratio Lower Upper

128 100

127 0.0 10.3 15.5#

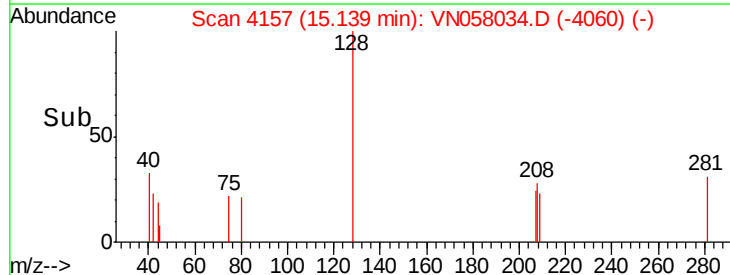
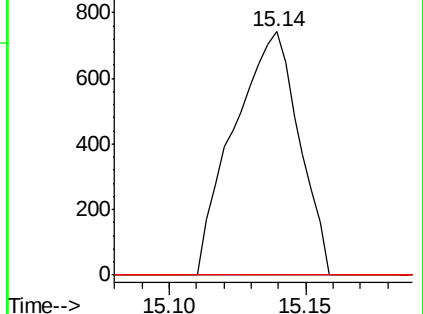
129 0.0 8.6 12.8#

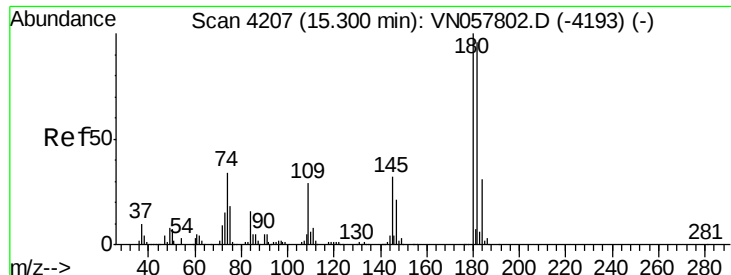


Abundance Ion 128.00 (127.70 to 128.70): V

Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

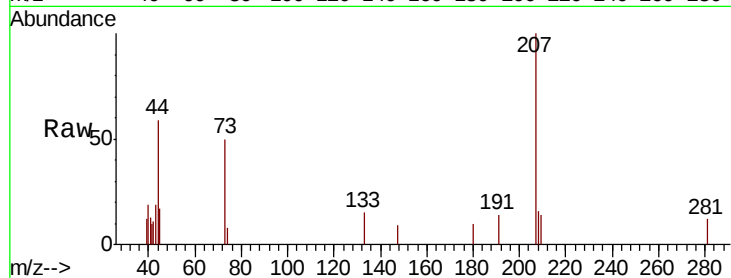




#96
 1,2,3-Trichlorobenzene
 Concen: 1.017 ug/l
 RT: 15.30 min Scan# 4206
 Delta R.T. -0.00 min
 Lab File: VN058034.D
 Acq: 13 Sep 2019 21:57

Instrument :
 MSVOA_N
 ClientSampleId :
 T1-2-(0)

Tgt Ion	Ratio	Lower	Upper
180	100		
182	0.0	48.3	144.8#
145	0.0	16.3	48.8#



Abundance Ion 179.80 (179.50 to 180.50): V
 Ion 181.80 (181.50 to 182.50): V
 Ion 144.90 (144.60 to 145.60): V

