

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_N\DATA\VN091619\
 Data File : VN058111.D
 Acq On : 16 Sep 2019 12:29
 Operator : JC/SP
 Sample : K4719-20
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 T4-2(0)-BRUCKNER

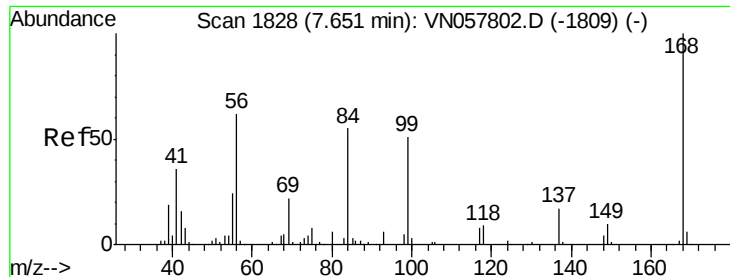
Quant Time: Sep 17 03:49:37 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091019W.M
 Quant Title : SW846 8260
 QLast Update : Tue Sep 10 03:02:13 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	314630	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	524387	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	480760	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	257666	50.00	ug/l	0.00

System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.01	65	354228	55.59	ug/l	0.00
Spiked Amount	50.000		Recovery	=	111.18%	
35) Dibromofluoromethane	7.58	113	244906	50.60	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.20%	
50) Toluene-d8	10.09	98	955328	50.84	ug/l	0.00
Spiked Amount	50.000		Recovery	=	101.68%	
62) 4-Bromofluorobenzene	12.40	95	321782	44.94	ug/l	0.00
Spiked Amount	50.000		Recovery	=	89.88%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
5) Bromomethane	2.54	94	107	Below Cal	#	2
16) Acetone	3.80	43	19747	9.453	ug/l	96
17) Carbon Disulfide	4.03	76	455	0.246	ug/l #	75
18) Methyl Acetate	4.31	43	2640	0.474	ug/l #	88
20) Methylene Chloride	4.54	84	12532	1.969	ug/l #	86
29) Tetrahydrofuran	7.20	42	748	0.401	ug/l #	49
31) Cyclohexane	7.65	56	8364	Below Cal	#	21
36) 1,1-Dichloropropene	7.65	75	26880	4.420	ug/l #	51
38) Carbon Tetrachloride	7.65	117	32007	5.765	ug/l #	16
43) Isopropyl Acetate	8.16	43	124902	11.821	ug/l #	86
45) 1,2-Dichloropropane	9.27	63	1830	0.343	ug/l #	44
48) Methyl methacrylate	9.17	41	6824	1.273	ug/l #	14
51) 4-Methyl-2-Pentanone	9.98	43	9133	1.461	ug/l	96
54) cis-1,3-Dichloropropene	9.90	75	46436	6.213	ug/l #	69
56) Ethyl methacrylate	10.54	69	2276	0.309	ug/l #	1
57) 1,3-Dichloropropane	10.76	76	6841	0.813	ug/l #	43
58) 2-Chloroethyl Vinyl ether	9.70	63	699	0.202	ug/l #	58
59) 2-Hexanone	10.76	43	101404	21.636	ug/l #	53
74) N-amyl acetate	12.03	43	5716	0.657	ug/l #	47
76) 1,2,3-Trichloropropane	12.40	75	177866	30.515	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.40	75	177866	107.382	ug/l #	6
95) Naphthalene	15.14	128	4139	Below Cal	#	94
96) 1,2,3-Trichlorobenzene	15.31	180	746	1.138	ug/l	66

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1828

Delta R.T. 0.00 min

Lab File: VN058111.D

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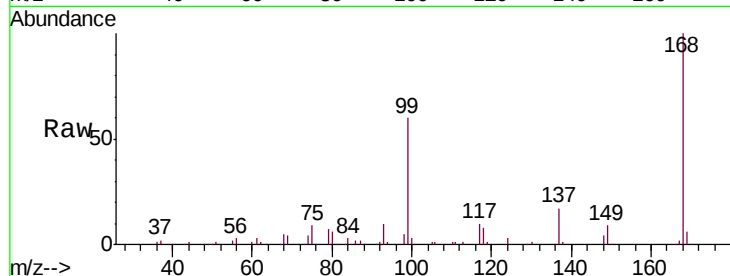
T4-2-(0)-BRUCKNER

Tgt Ion:168 Resp: 314630

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): VNO

7.65

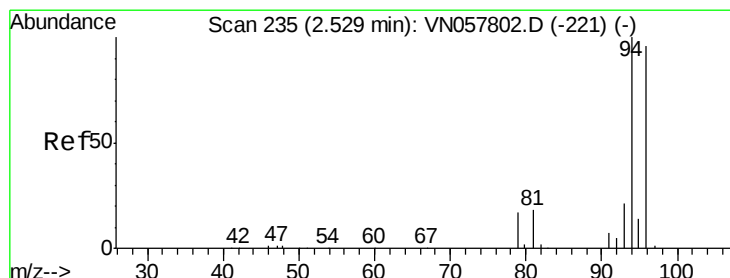
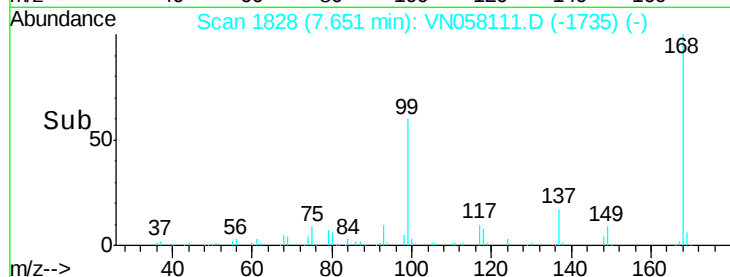
150000

100000

50000

0

Time-->



#5

Bromomethane

Concen: Below Cal

RT: 2.54 min Scan# 238

Delta R.T. 0.01 min

Lab File: VN058111.D

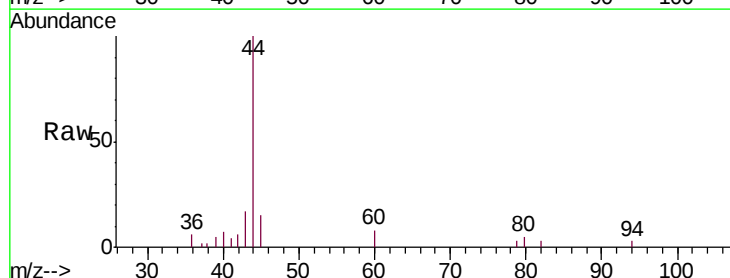
Acq: 16 Sep 2019 12:29

Tgt Ion: 94 Resp: 107

Ion Ratio Lower Upper

94 100

96 0.0 77.0 115.4#



Abundance Ion 93.90 (93.60 to 94.60): VNO

Ion 95.90 (95.60 to 96.60): VNO

2.54

300

250

200

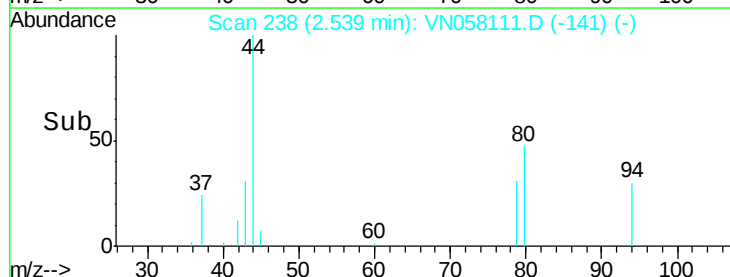
150

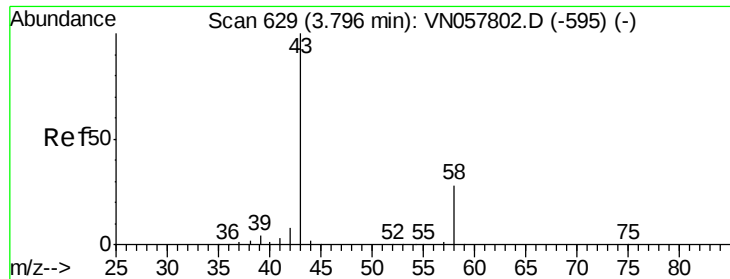
100

50

0

Time-->





#16

Acetone

Concen: 9.453 ug/l

RT: 3.80 min Scan# 630

Delta R.T. 0.00 min

Lab File: VN058111.D

Acq: 16 Sep 2019 12:29

Instrument :

MSVOA_N

ClientSampleId :

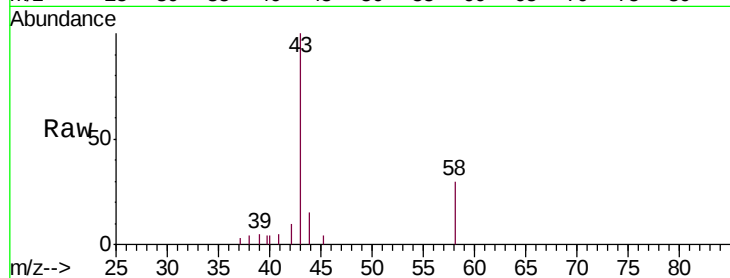
T4-2-(0)-BRUCKNER

Tgt Ion: 43 Resp: 19747

Ion Ratio Lower Upper

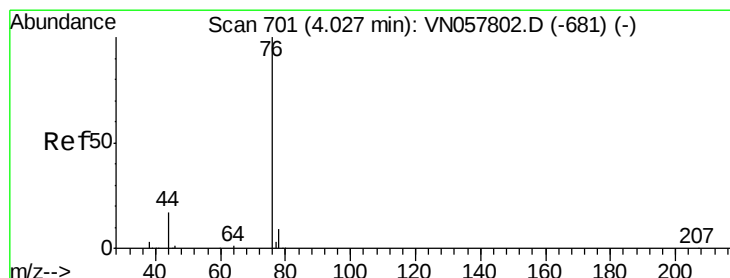
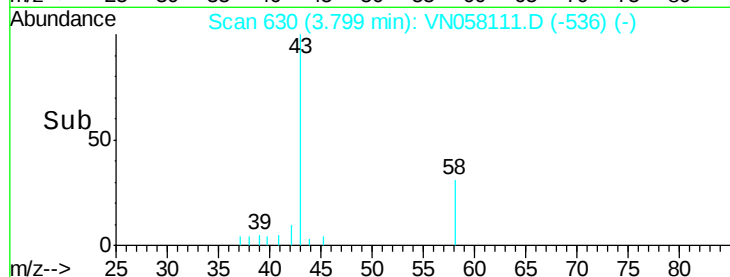
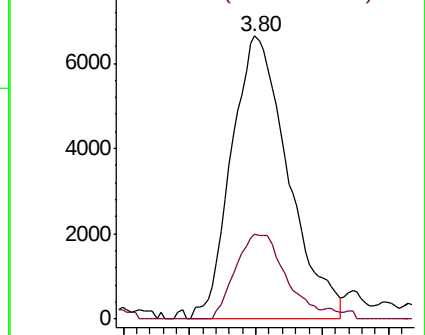
43 100

58 30.0 22.2 33.2



Abundance Ion 43.00 (42.70 to 43.70): VN058111.D (-536) (-)

Ion 58.00 (57.70 to 58.70): VN058111.D (-536) (-)



#17

Carbon Disulfide

Concen: 0.246 ug/l

RT: 4.03 min Scan# 702

Delta R.T. 0.00 min

Lab File: VN058111.D

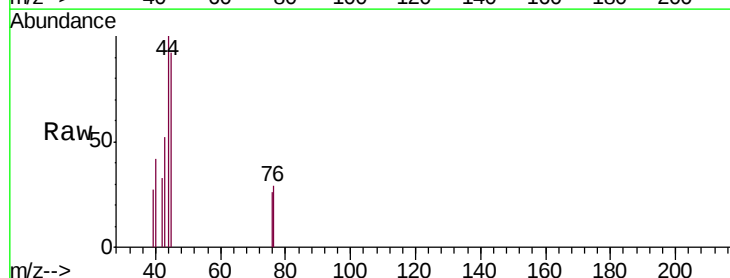
Acq: 16 Sep 2019 12:29

Tgt Ion: 76 Resp: 455

Ion Ratio Lower Upper

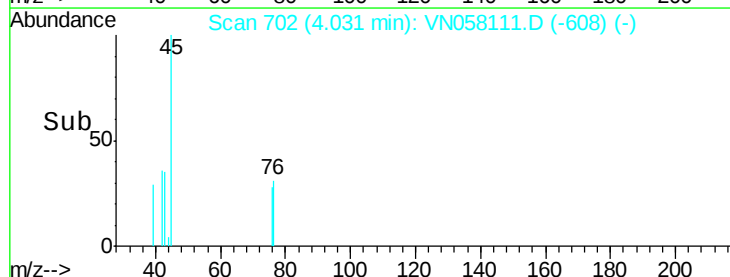
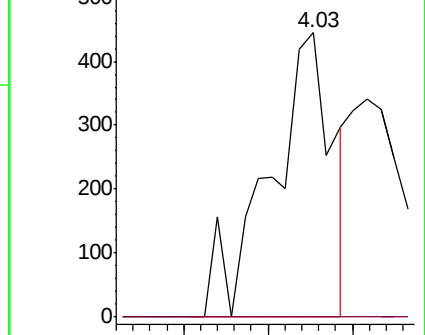
76 100

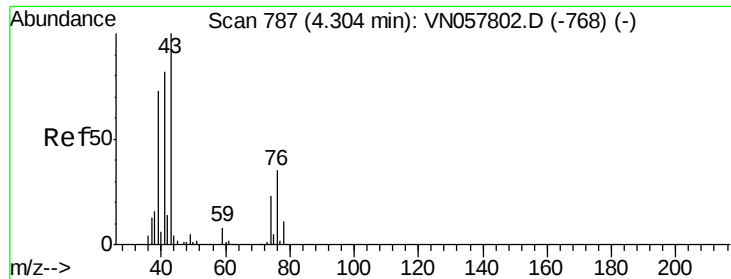
78 0.0 7.1 10.7#



Abundance Ion 75.90 (75.60 to 76.60): VN058111.D (-608) (-)

Ion 77.90 (77.60 to 78.60): VN058111.D (-608) (-)

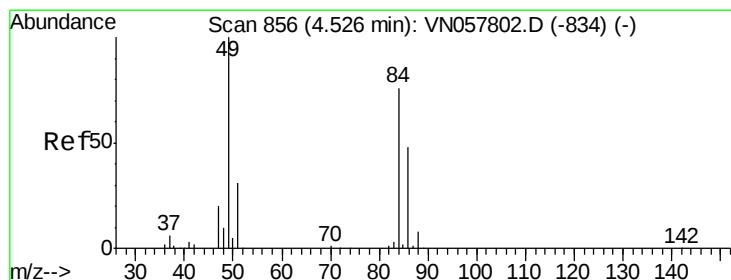
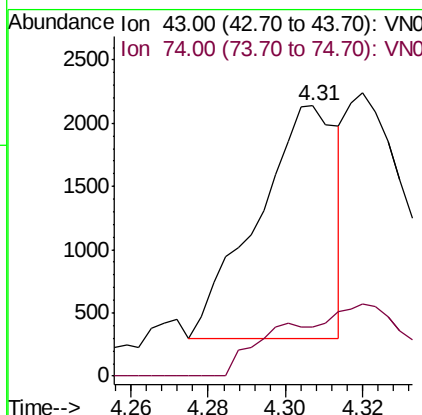
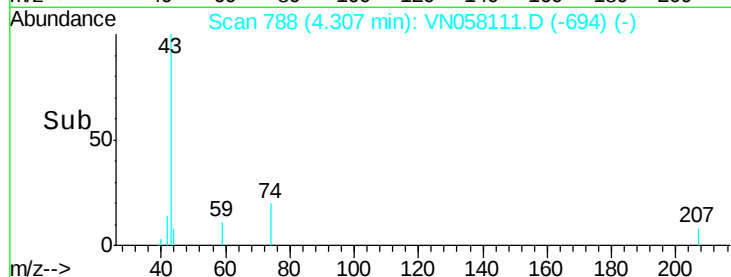
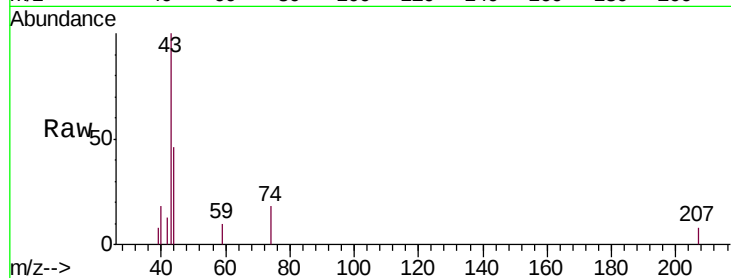




#18
Methyl Acetate
Concen: 0.474 ug/l
RT: 4.31 min Scan# 788
Delta R.T. 0.00 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

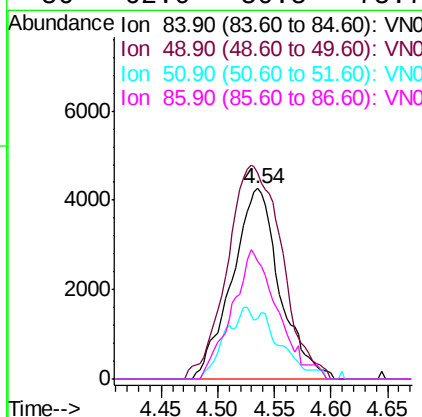
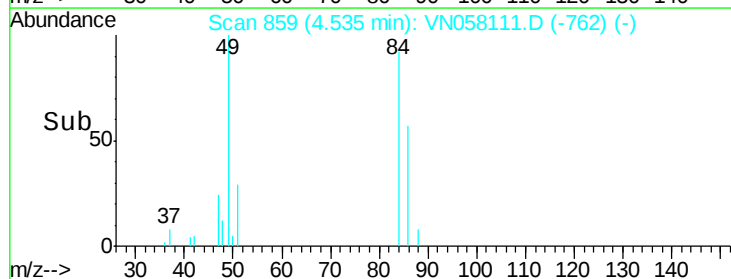
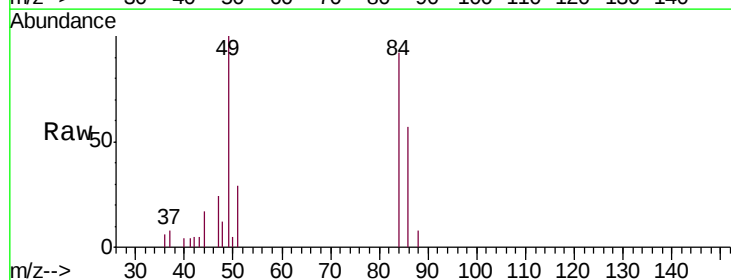
Instrument :
MSVOA_N
ClientSampleId :
T4-2-(0)-BRUCKNER

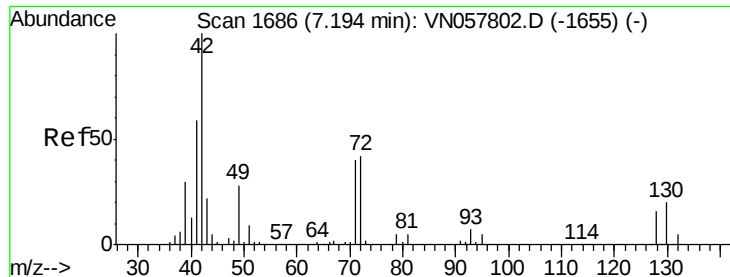
Tgt Ion: 43 Resp: 2640
Ion Ratio Lower Upper
43 100
74 16.8 17.9 26.9#



#20
Methylene Chloride
Concen: 1.969 ug/l
RT: 4.54 min Scan# 859
Delta R.T. 0.01 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

Tgt Ion: 84 Resp: 12532
Ion Ratio Lower Upper
84 100
49 108.1 104.8 157.2
51 31.8 33.0 49.4#
86 62.0 50.5 75.7





#29

Tetrahydrofuran

Concen: 0.401 ug/l

RT: 7.20 min Scan# 1689

Delta R.T. 0.01 min

Lab File: VN058111.D

Acq: 16 Sep 2019 12:29

Instrument :

MSVOA_N

ClientSampleId :

T4-2-(0)-BRUCKNER

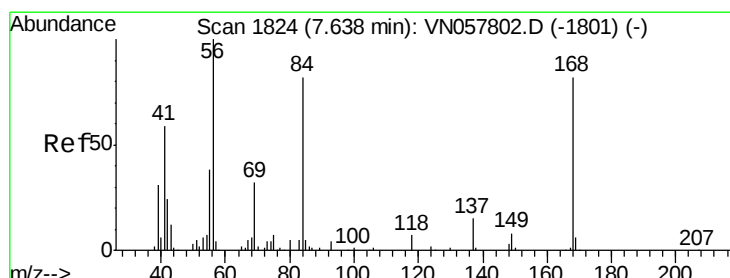
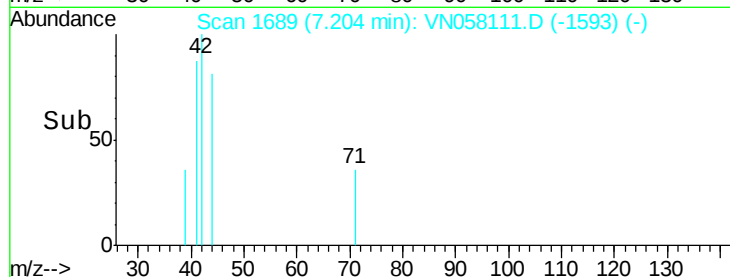
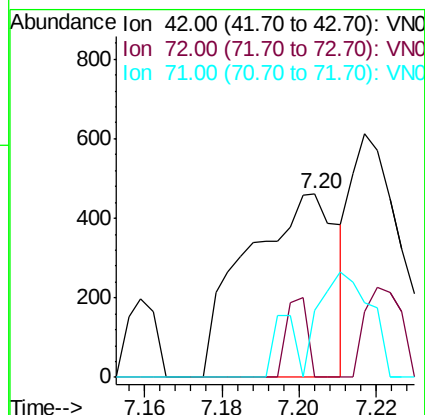
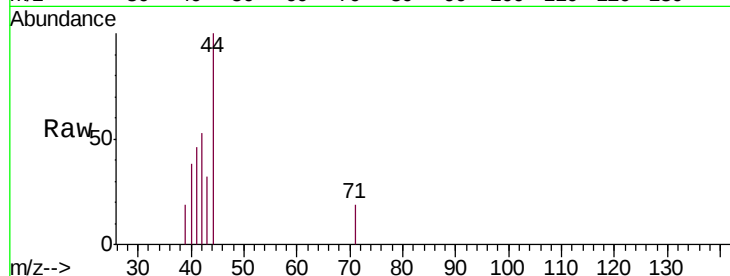
Tgt Ion: 42 Resp: 748

Ion Ratio Lower Upper

42 100

72 10.0 33.7 50.5#

71 8.0 31.9 47.9#



#31

Cyclohexane

Concen: Below Cal

RT: 7.65 min Scan# 1828

Delta R.T. 0.01 min

Lab File: VN058111.D

Acq: 16 Sep 2019 12:29

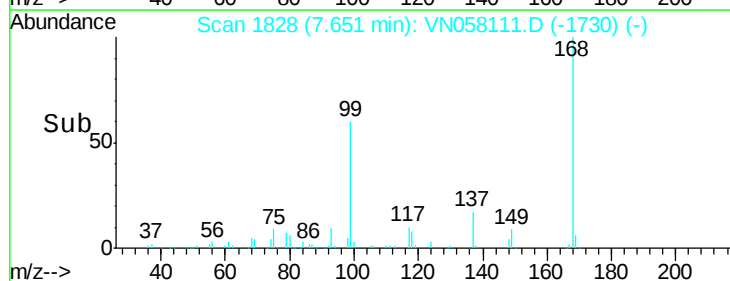
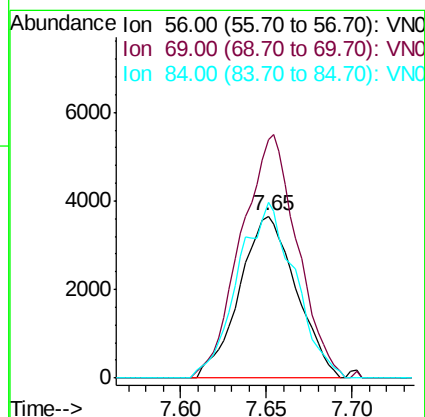
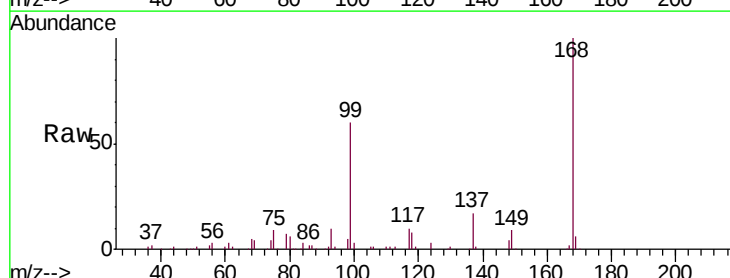
Tgt Ion: 56 Resp: 8364

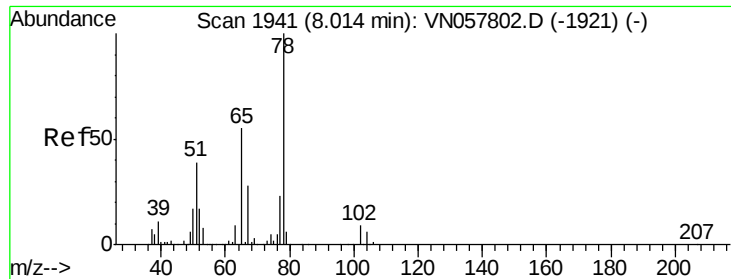
Ion Ratio Lower Upper

56 100

69 146.9 25.9 38.9#

84 108.1 65.6 98.4#

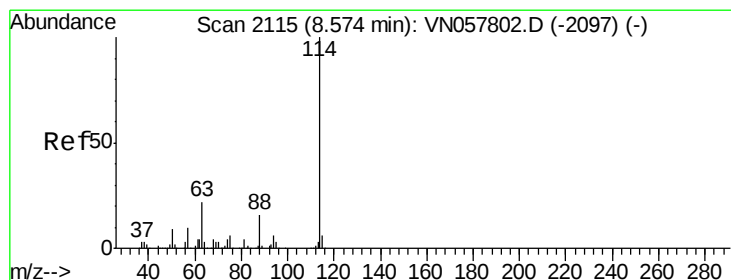
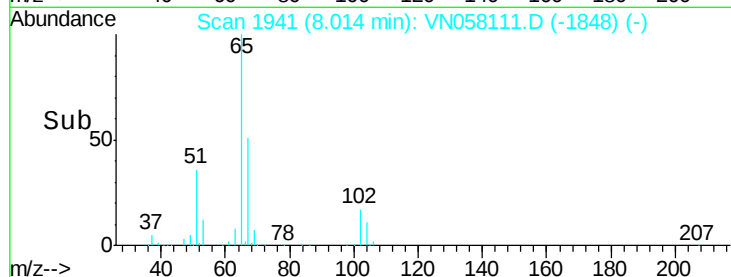
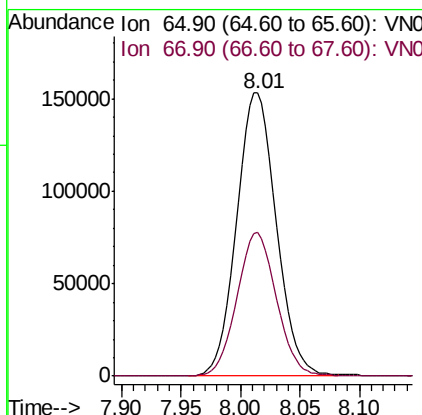
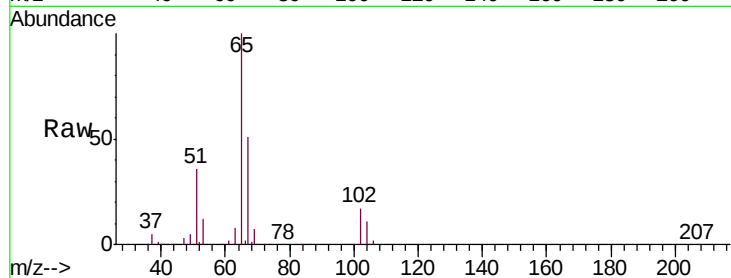




#33
 1,2-Dichloroethane-d4
 Concen: 55.586 ug/l
 RT: 8.01 min Scan# 1941
 Delta R.T. 0.00 min
 Lab File: VN058111.D
 Acq: 16 Sep 2019 12:29

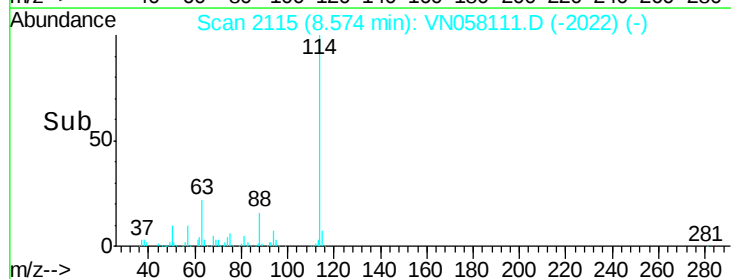
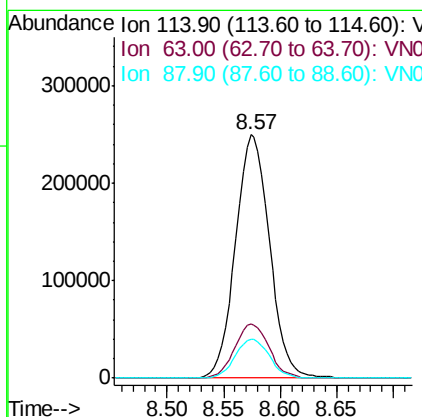
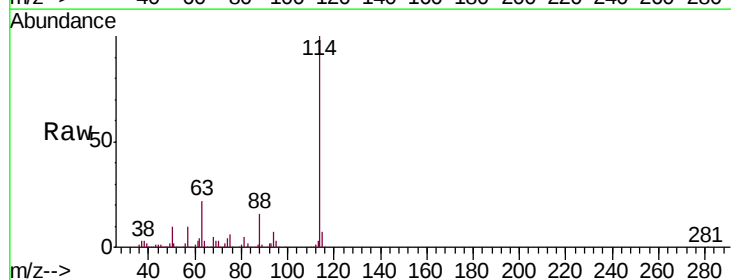
Instrument :
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 ClientSampleId :
 T4-2-(0)-BRUCKNER

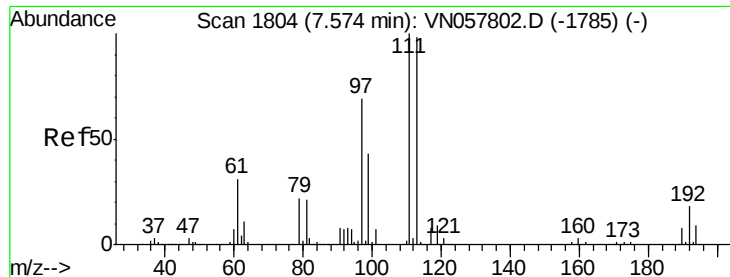
Tgt Ion: 65 Resp: 354228
 Ion Ratio Lower Upper
 65 100
 67 50.5 0.0 104.0



#34
 1,4-Difluorobenzene
 Concen: 50.000 ug/l
 RT: 8.57 min Scan# 2115
 Delta R.T. 0.00 min
 Lab File: VN058111.D
 Acq: 16 Sep 2019 12:29

Tgt Ion: 114 Resp: 524387
 Ion Ratio Lower Upper
 114 100
 63 22.1 0.0 44.0
 88 16.1 0.0 31.4

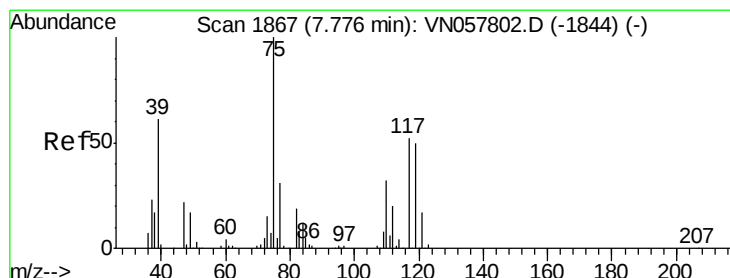
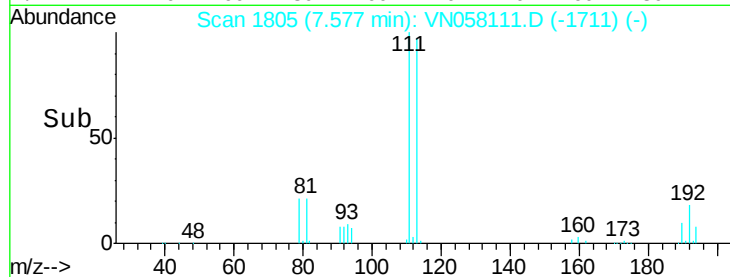
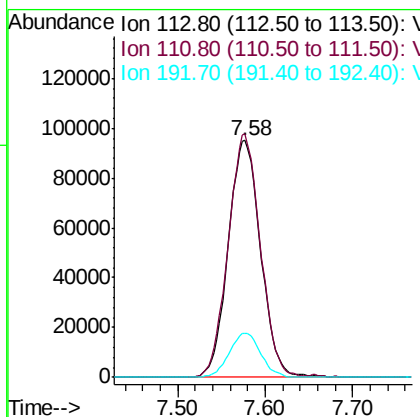
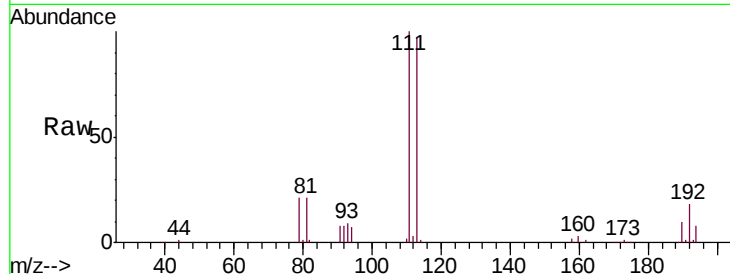




#35
 Dibromofluoromethane
 Concen: 50.602 ug/l
 RT: 7.58 min Scan# 1805
 Delta R.T. 0.00 min
 Lab File: VN058111.D
 Acq: 16 Sep 2019 12:29

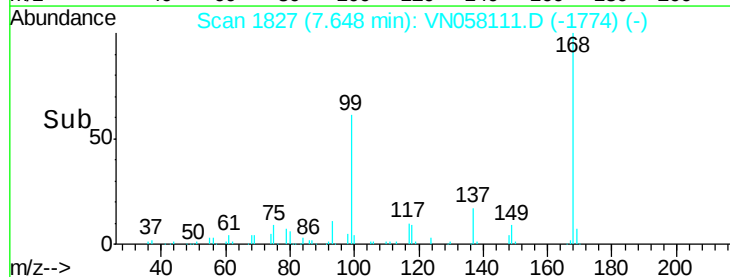
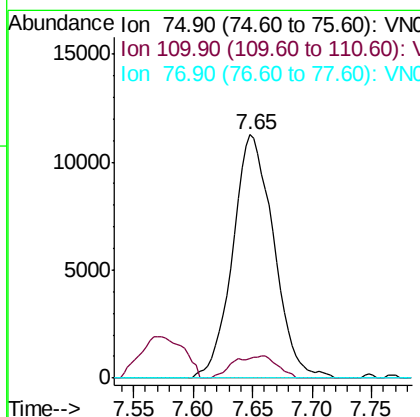
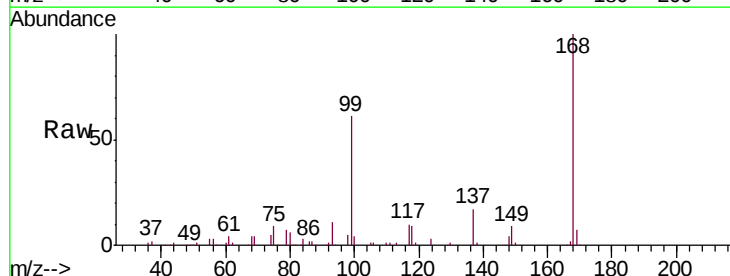
Instrument :
 MSVOA_N
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 T4-2-(0)-BRUCKNER

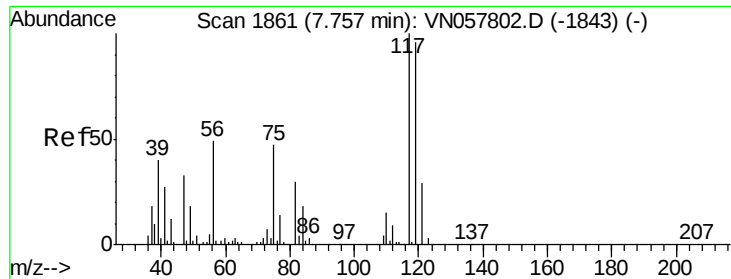
Tgt Ion	Ratio	Lower	Upper
113	100		
111	101.5	81.3	121.9
192	18.0	14.6	22.0



#36
 1,1-Dichloropropene
 Concen: 4.420 ug/l
 RT: 7.65 min Scan# 1827
 Delta R.T. -0.13 min
 Lab File: VN058111.D
 Acq: 16 Sep 2019 12:29

Tgt Ion	Ratio	Lower	Upper
75	100		
110	9.6	16.3	48.9#
77	0.0	25.0	37.4#

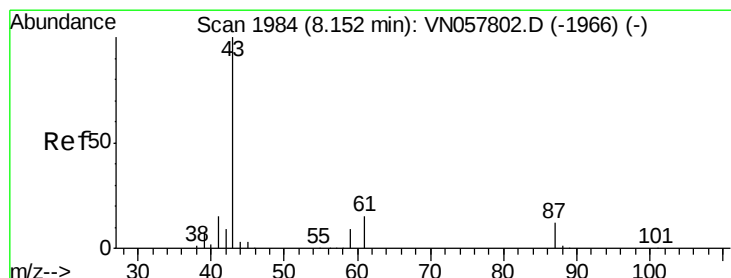
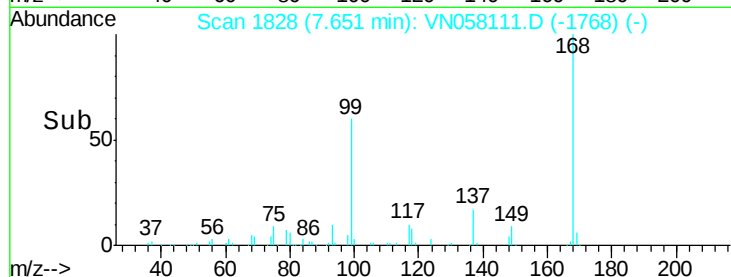
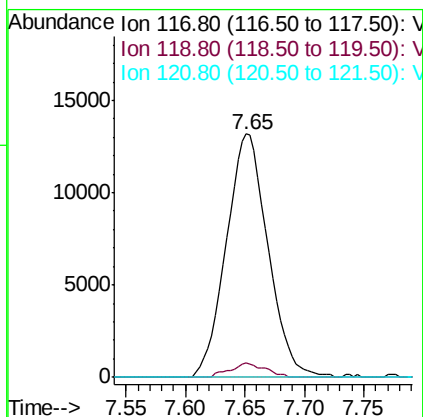
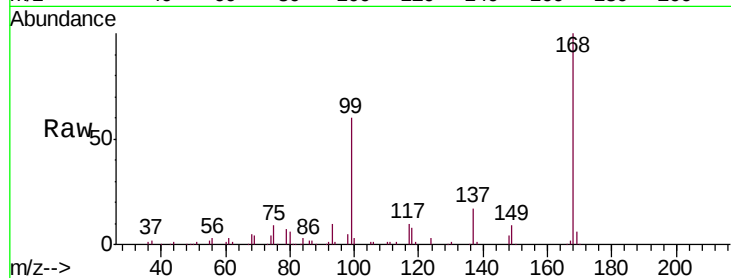




#38
Carbon Tetrachloride
Concen: 5.765 ug/l
RT: 7.65 min Scan# 1828
Delta R.T. -0.11 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

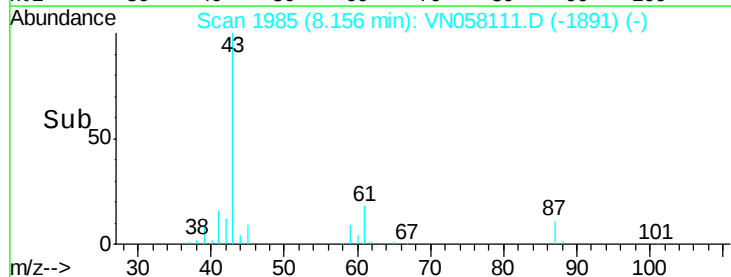
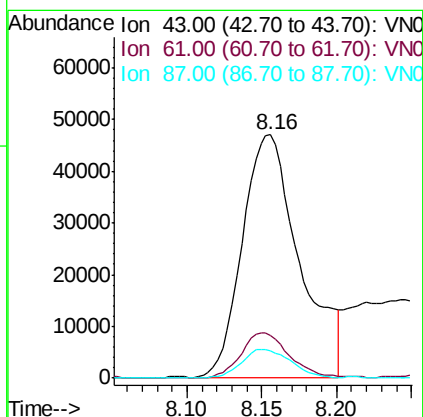
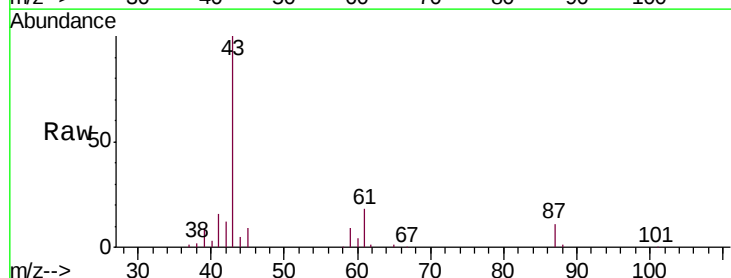
Instrument :
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T4-2(0)-BRUCKNER

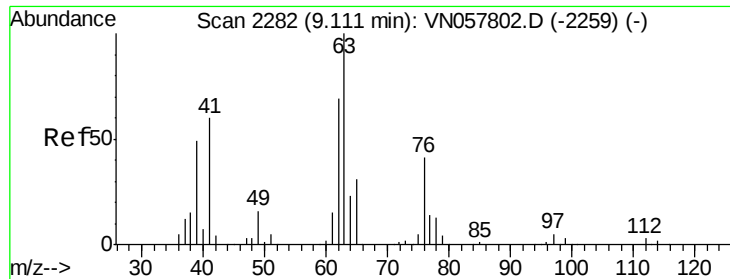
Tgt Ion:117 Resp: 32007
Ion Ratio Lower Upper
117 100
119 5.7 76.9 115.3#
121 0.0 23.4 35.2#



#43
Isopropyl Acetate
Concen: 11.821 ug/l
RT: 8.16 min Scan# 1985
Delta R.T. 0.00 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

Tgt Ion: 43 Resp: 124902
Ion Ratio Lower Upper
43 100
61 16.0 20.1 30.1#
87 10.1 9.5 14.3

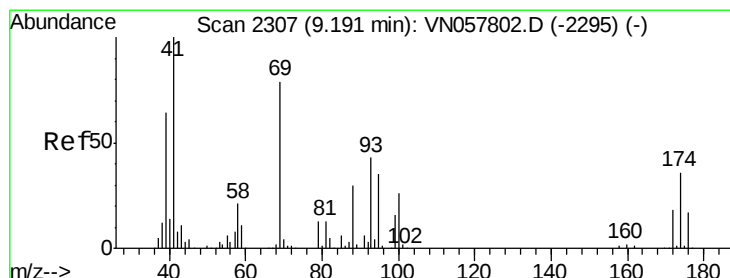
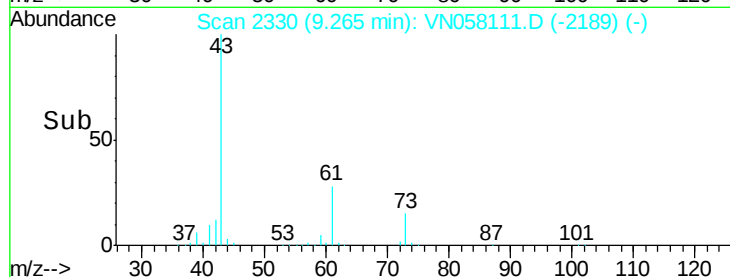
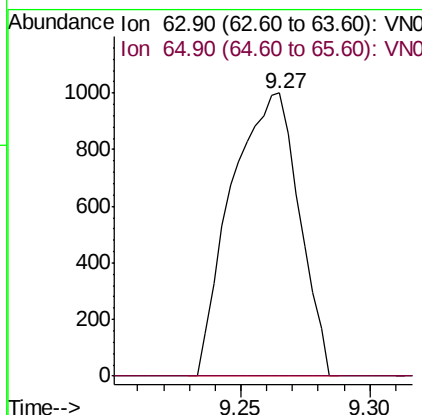
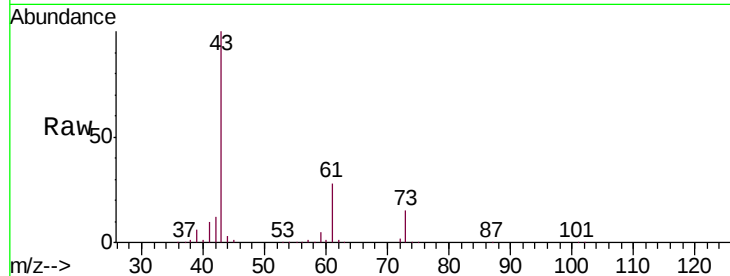




#45
 1,2-Dichloropropane
 Concen: 0.343 ug/l
 RT: 9.27 min Scan# 2330
 Delta R.T. 0.15 min
 Lab File: VN058111.D
 Acq: 16 Sep 2019 12:29

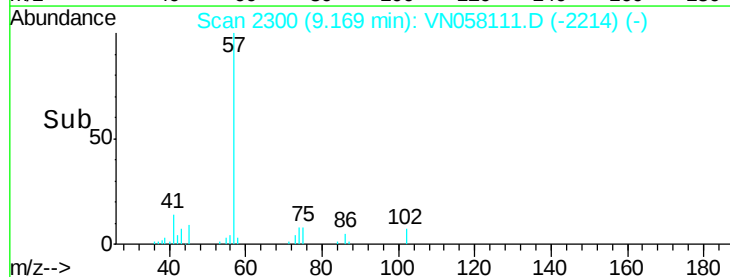
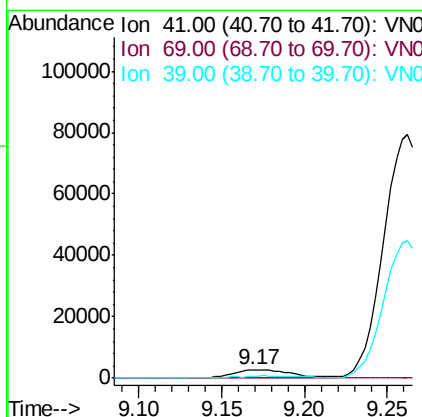
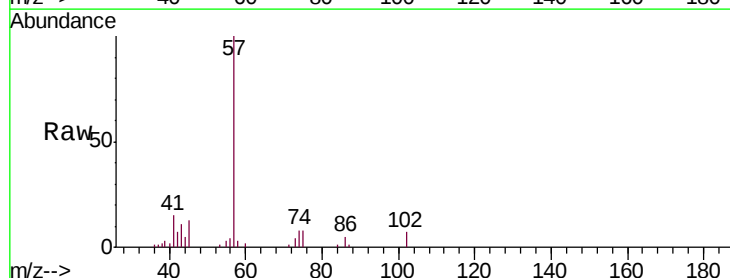
Instrument :
 MSVOA_N
 ClientSampleId :
 T4-2(0)-BRUCKNER

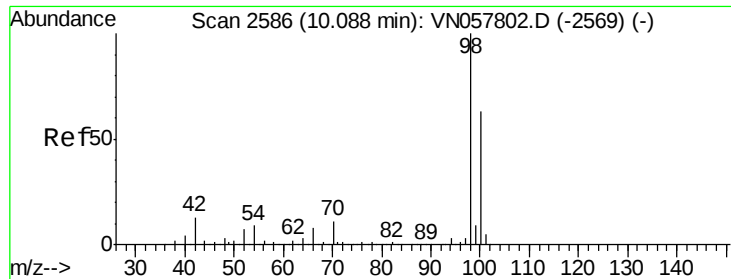
Tgt Ion: 63 Resp: 1830
 Ion Ratio Lower Upper
 63 100
 65 0.0 24.8 37.2#



#48
 Methyl methacrylate
 Concen: 1.273 ug/l
 RT: 9.17 min Scan# 2300
 Delta R.T. -0.02 min
 Lab File: VN058111.D
 Acq: 16 Sep 2019 12:29

Tgt Ion: 41 Resp: 6824
 Ion Ratio Lower Upper
 41 100
 69 1.1 62.7 94.1#
 39 0.0 52.7 79.1#





#50

Toluene-d8

Concen: 50.840 ug/l

RT: 10.09 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058111.D

Acq: 16 Sep 2019 12:29

Instrument :

MSVOA_N

ClientSampleId :

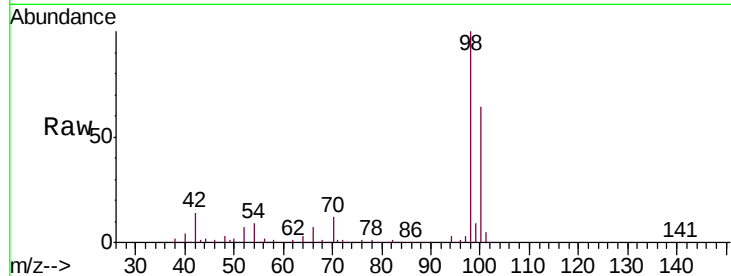
T4-2(0)-BRUCKNER

Tgt Ion: 98 Resp: 955328

Ion Ratio Lower Upper

98 100

100 63.4 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) (-)

600000

500000

400000

300000

200000

100000

0

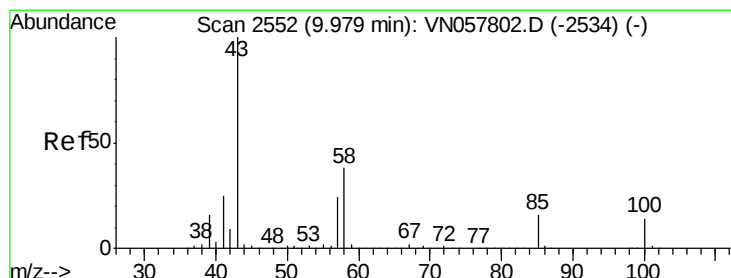
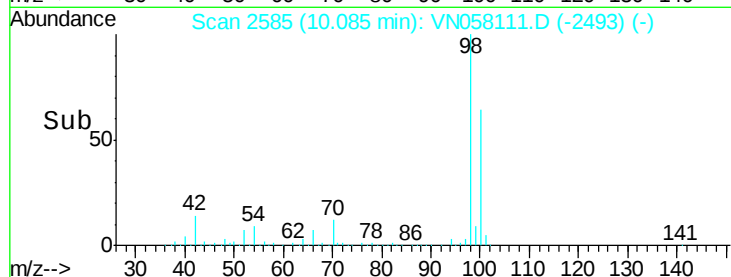
10.09

10.10

10.20

10.30

Time-->



#51

4-Methyl-2-Pentanone

Concen: 1.461 ug/l

RT: 9.98 min Scan# 2552

Delta R.T. 0.00 min

Lab File: VN058111.D

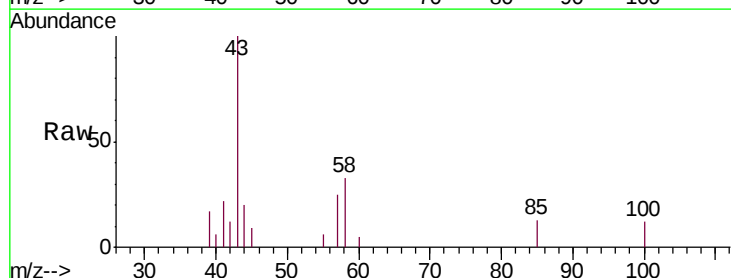
Acq: 16 Sep 2019 12:29

Tgt Ion: 43 Resp: 9133

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) (-)

6000

5000

4000

3000

2000

1000

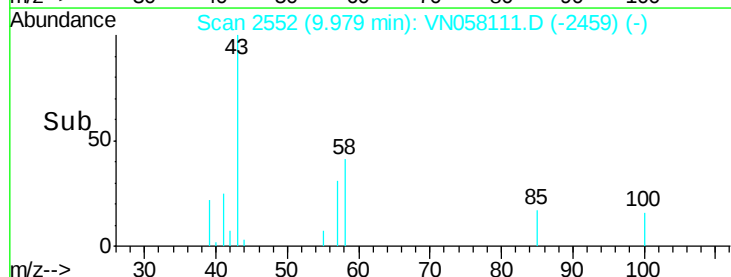
0

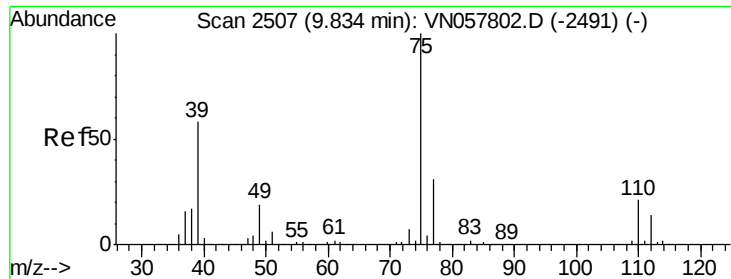
9.98

9.95

10.00

Time-->





#54

cis-1,3-Dichloropropene

Concen: 6.213 ug/l

RT: 9.90 min Scan# 2528

Delta R.T. 0.07 min

Lab File: VN058111.D

Acq: 16 Sep 2019 12:29

Instrument :

MSVOA_N

ClientSampleId :

T4-2(0)-BRUCKNER

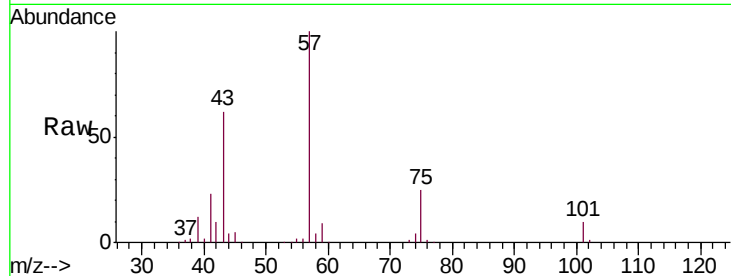
Tgt Ion: 75 Resp: 46436

Ion Ratio Lower Upper

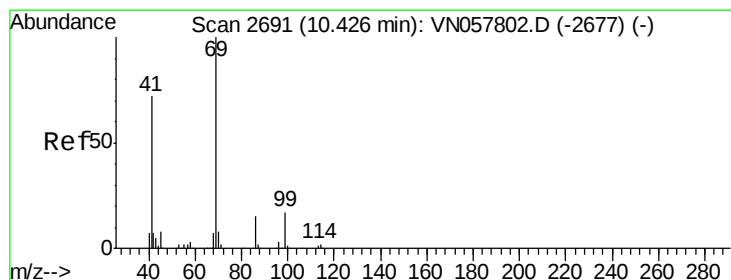
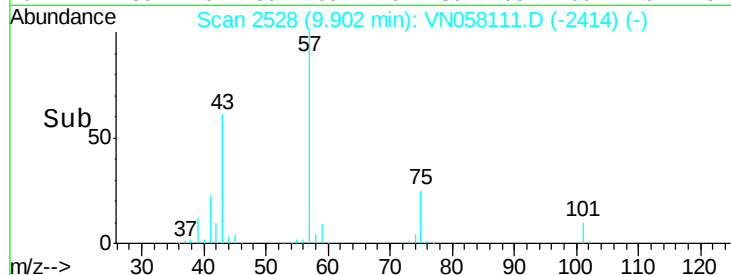
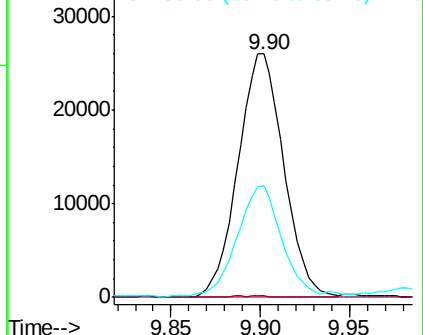
75 100

77 0.6 24.8 37.2#

39 45.0 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: 0.309 ug/l

RT: 10.54 min Scan# 2728

Delta R.T. 0.12 min

Lab File: VN058111.D

Acq: 16 Sep 2019 12:29

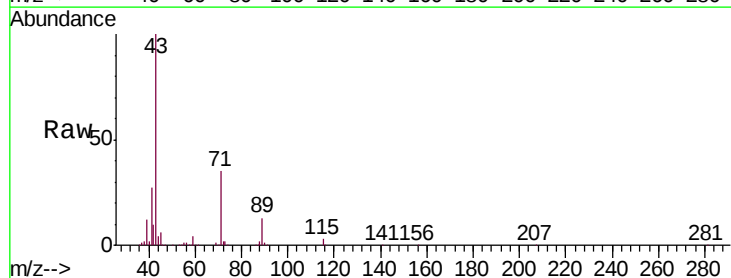
Tgt Ion: 69 Resp: 2276

Ion Ratio Lower Upper

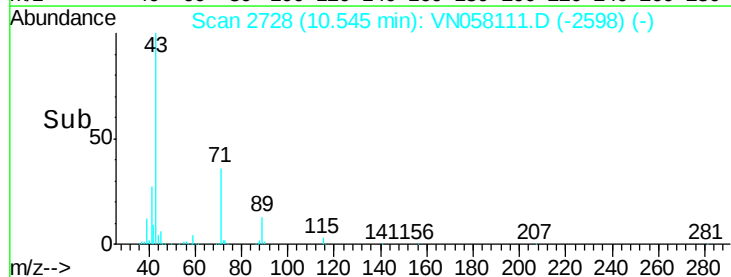
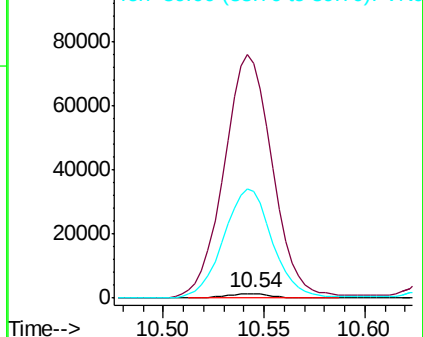
69 100

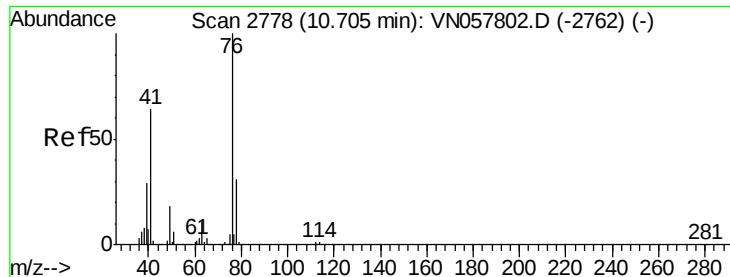
41 5627.9 56.7 85.1#

39 2542.3 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: 0.813 ug/l

RT: 10.76 min Scan# 2795

Delta R.T. 0.05 min

Lab File: VN058111.D

Acq: 16 Sep 2019 12:29

Instrument :

MSVOA_N

ClientSampleId :

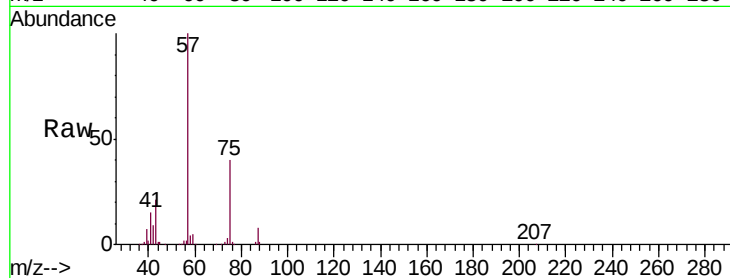
T4-2-(0)-BRUCKNER

Tgt Ion: 76 Resp: 6841

Ion Ratio Lower Upper

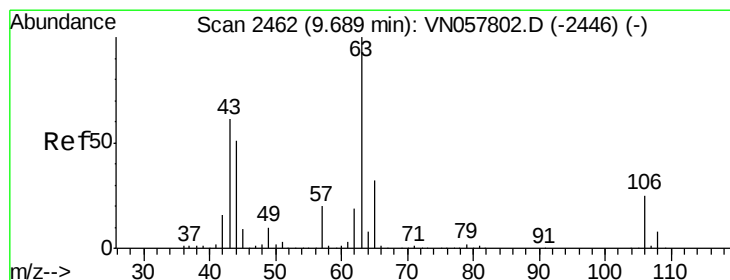
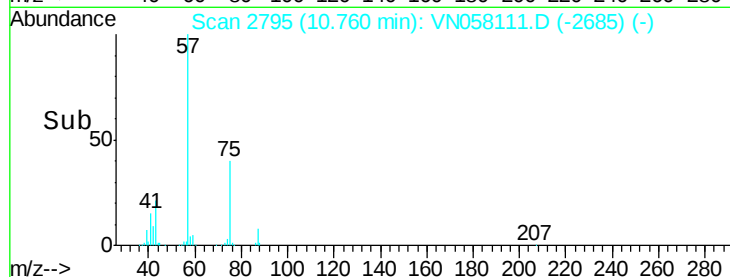
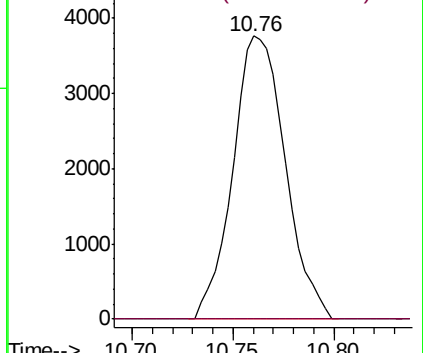
76 100

78 0.0 25.4 38.2#



Abundance Ion 75.90 (75.60 to 76.60): VN0

Ion 77.90 (77.60 to 78.60): VN0



#58

2-Chloroethyl Vinyl ether

Concen: 0.202 ug/l

RT: 9.70 min Scan# 2465

Delta R.T. 0.01 min

Lab File: VN058111.D

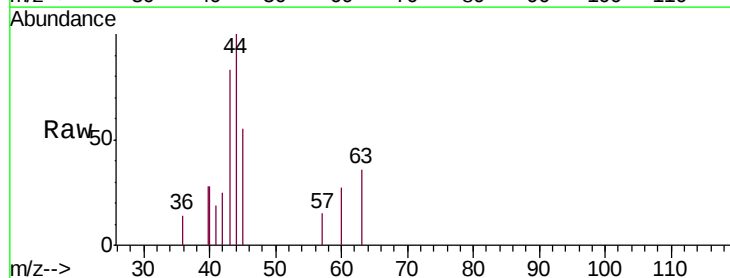
Acq: 16 Sep 2019 12:29

Tgt Ion: 63 Resp: 699

Ion Ratio Lower Upper

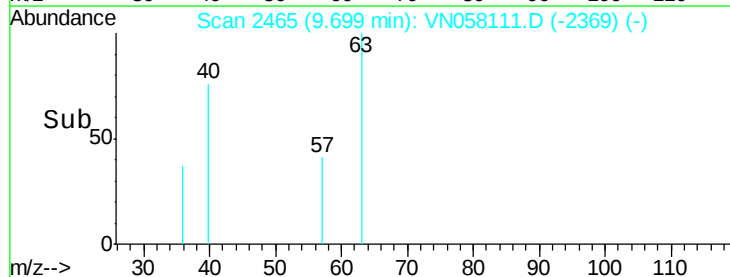
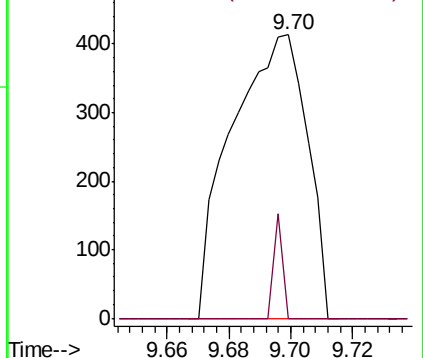
63 100

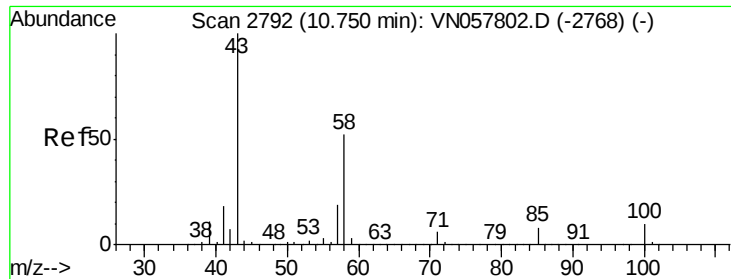
106 4.1 20.0 30.0#



Abundance Ion 62.90 (62.60 to 63.60): VN0

Ion 105.90 (105.60 to 106.60): V

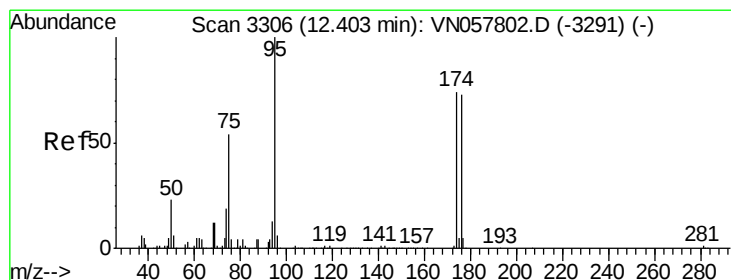
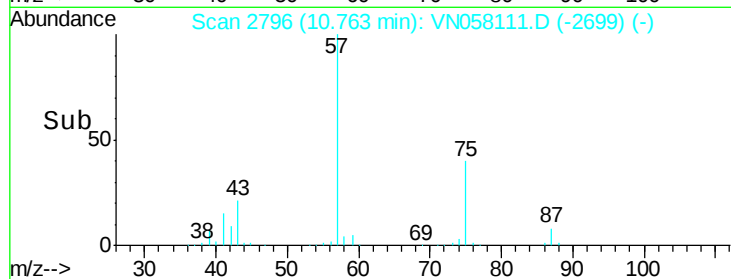
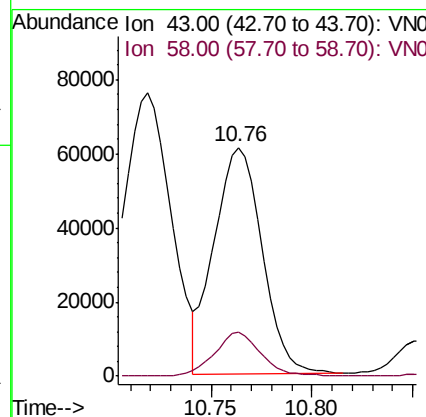
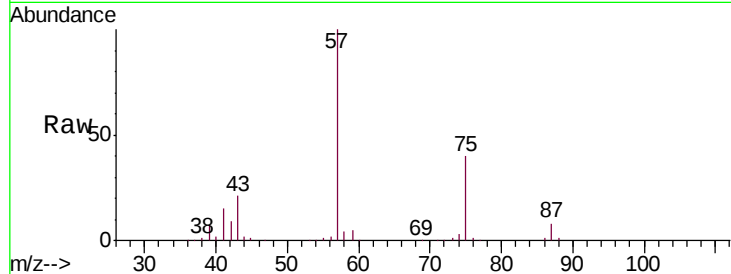




#59
2-Hexanone
Concen: 21.636 ug/l
RT: 10.76 min Scan# 2796
Delta R.T. 0.01 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

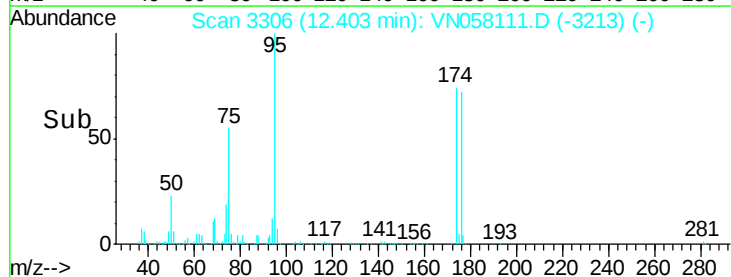
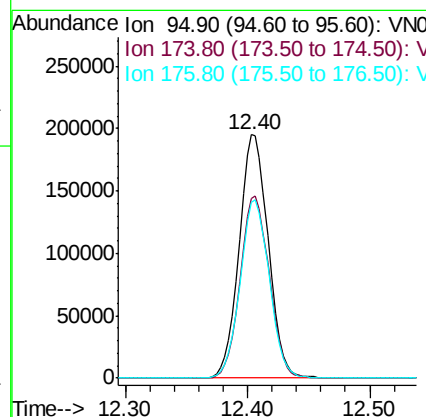
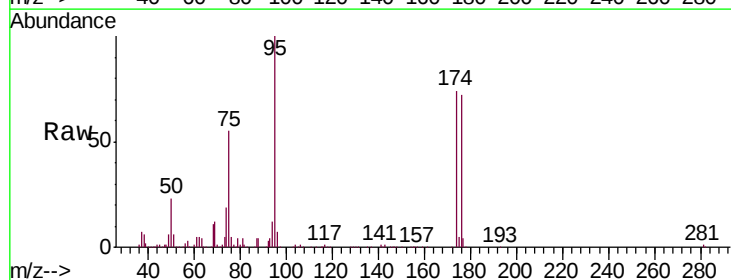
Instrument :
MSVOA_N
ClientSampleId :
T4-2-(0)-BRUCKNER

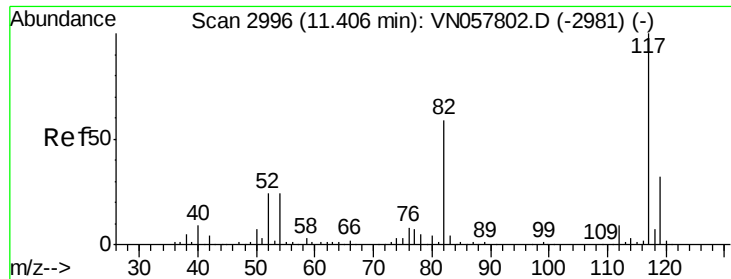
Tgt Ion: 43 Resp: 101404
Ion Ratio Lower Upper
43 100
58 18.7 25.6 76.8#



#62
4-Bromofluorobenzene
Concen: 44.935 ug/l
RT: 12.40 min Scan# 3306
Delta R.T. 0.00 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

Tgt Ion: 95 Resp: 321782
Ion Ratio Lower Upper
95 100
174 75.1 0.0 150.2
176 73.3 0.0 146.0

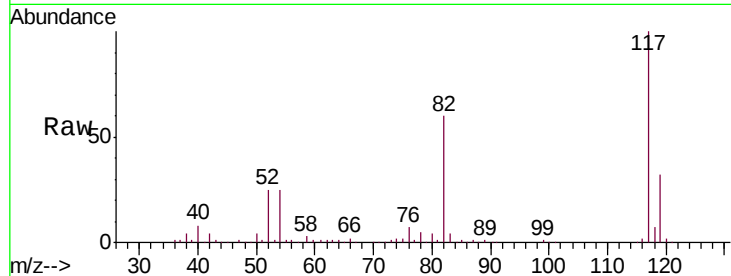




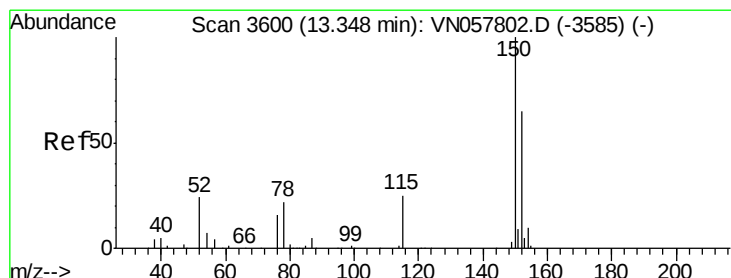
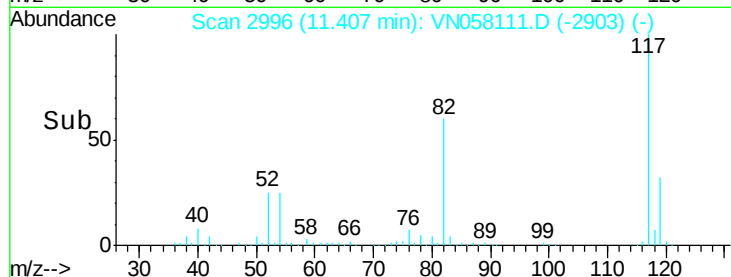
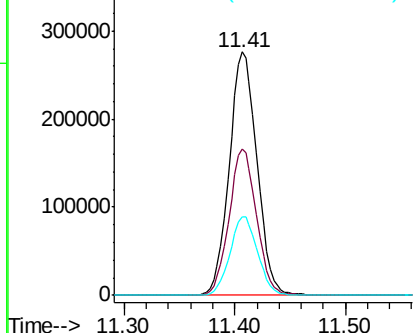
#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

Instrument :
MSVOA_N
ClientSampleId :
T4-2-(0)-BRUCKNER

Tgt Ion:117 Resp: 480760
Ion Ratio Lower Upper
117 100
82 60.2 47.2 70.8
119 32.4 25.3 37.9

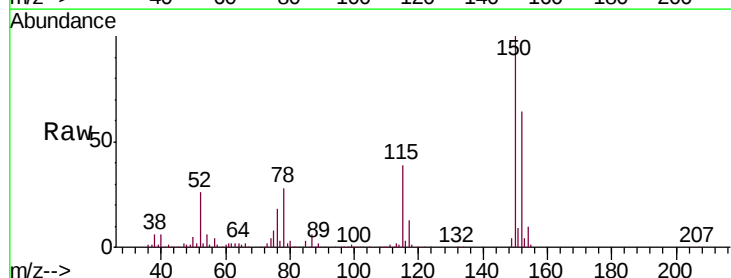


Abundance Ion 116.90 (116.60 to 117.60): V
Ion 82.00 (81.70 to 82.70): VN0
Ion 118.90 (118.60 to 119.60): V

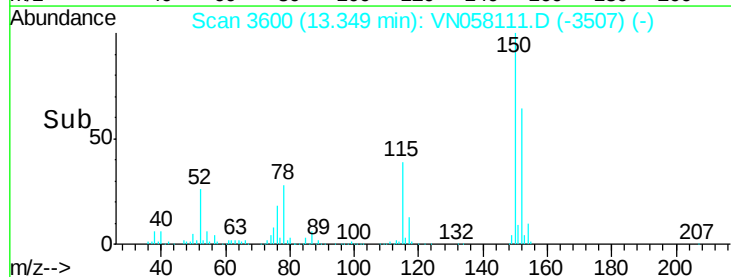
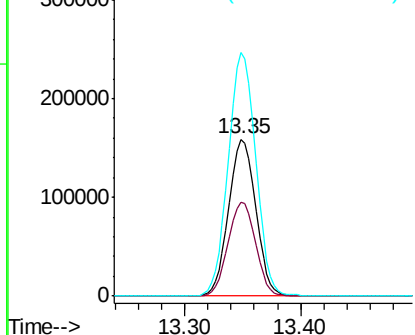


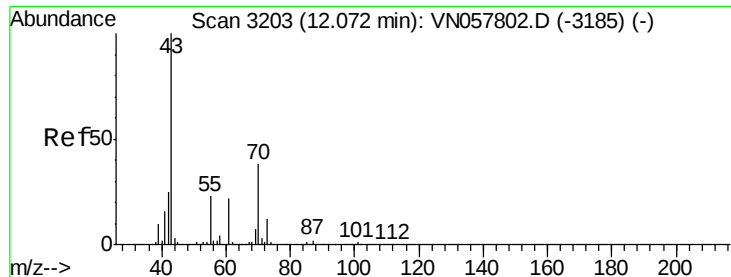
#72
1,4-Dichlorobenzene-d4
Concen: 50.000 ug/l
RT: 13.35 min Scan# 3600
Delta R.T. 0.00 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

Tgt Ion:152 Resp: 257666
Ion Ratio Lower Upper
152 100
115 60.4 30.3 91.0
150 157.3 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

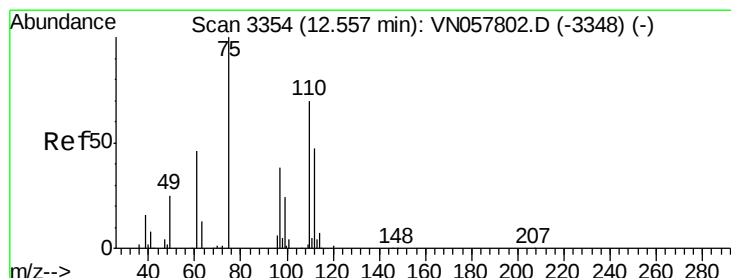
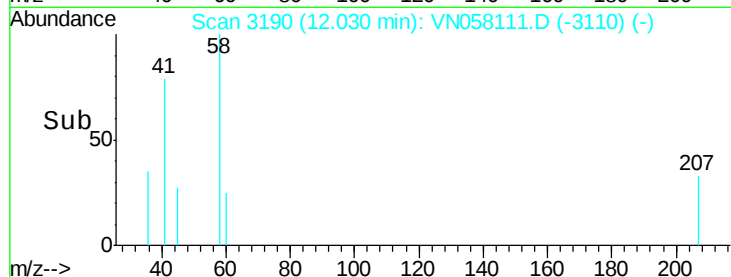
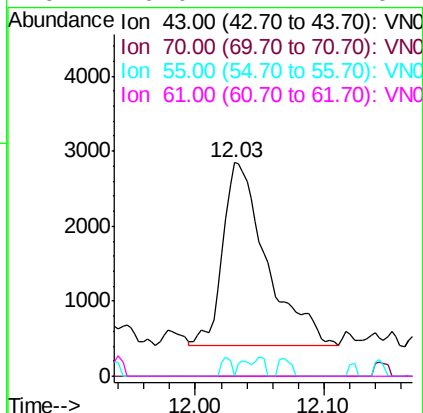
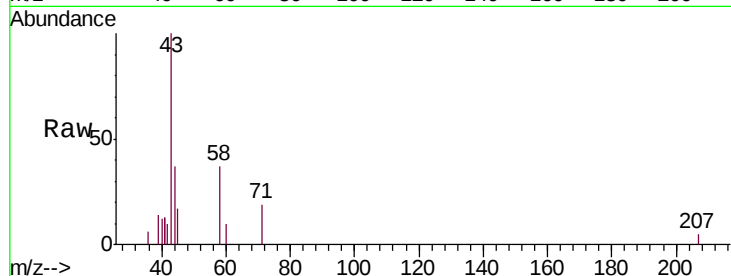




#74
N-ethyl acetate
Concen: 0.657 ug/l
RT: 12.03 min Scan# 3190
Delta R.T. -0.04 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

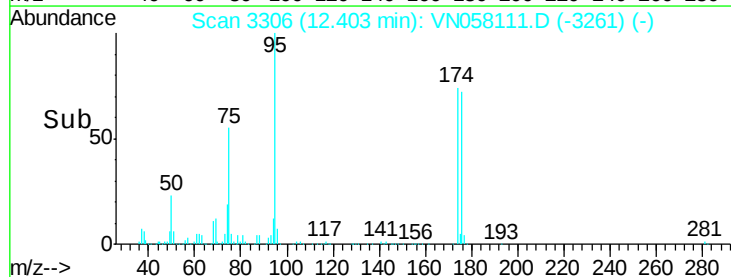
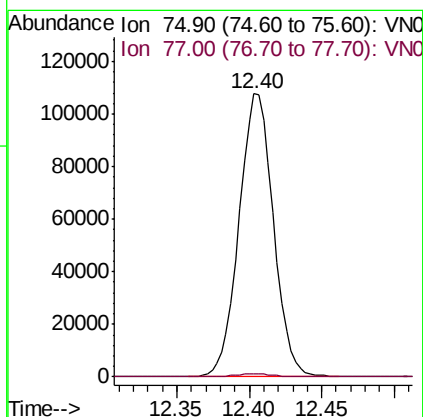
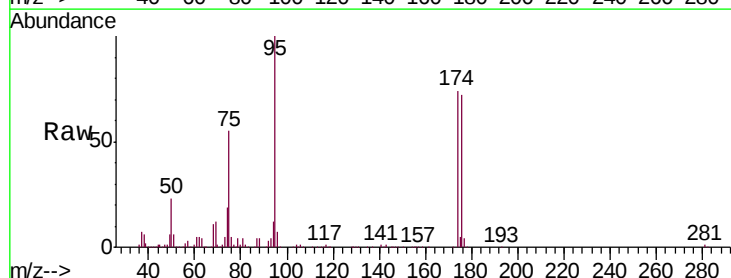
Instrument :
MSVOA_N
ClientSampleId :
T4-2-(0)-BRUCKNER

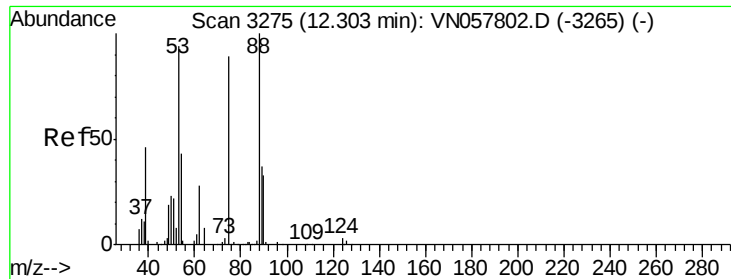
Tgt Ion: 43 Resp: 5716
Ion Ratio Lower Upper
43 100
70 0.0 30.6 45.8#
55 2.4 18.6 27.8#
61 0.0 17.4 26.2#



#76
1,2,3-Trichloropropane
Concen: 30.515 ug/l
RT: 12.40 min Scan# 3306
Delta R.T. -0.15 min
Lab File: VN058111.D
Acq: 16 Sep 2019 12:29

Tgt Ion: 75 Resp: 177866
Ion Ratio Lower Upper
75 100
77 1.2 0.0 0.0#





#81

trans-1,4-Dichloro-2-butene

Concen: 107.382 ug/l

RT: 12.40 min Scan# 3306

Delta R.T. 0.10 min

Lab File: VN058111.D

Acq: 16 Sep 2019 12:29

Instrument :

MSVOA_N

ClientSampleId :

T4-2(0)-BRUCKNER

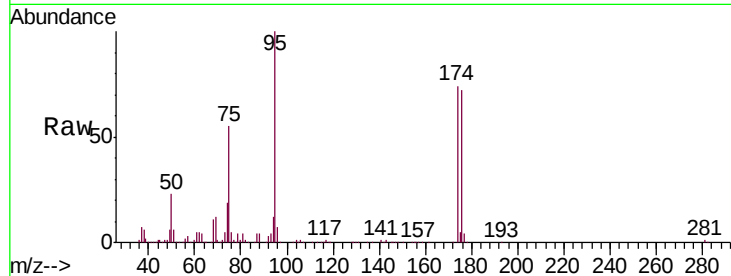
Tgt Ion: 75 Resp: 177866

Ion Ratio Lower Upper

75 100

53 0.1 88.4 132.6#

89 0.0 35.3 52.9#



Abundance Ion 74.90 (74.60 to 75.60): VN058111.D (-3182) (-)

Ion 53.00 (52.70 to 53.70): VN058111.D (-3182) (-)

Ion 88.90 (88.60 to 89.60): VN058111.D (-3182) (-)

12.40

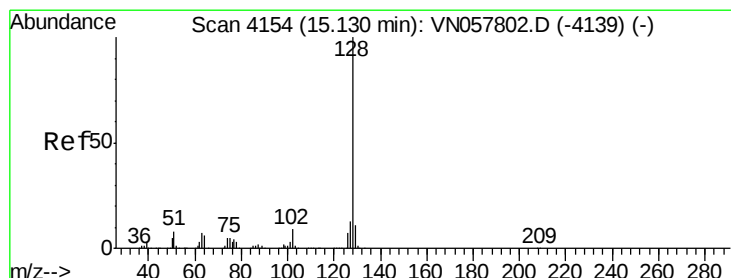
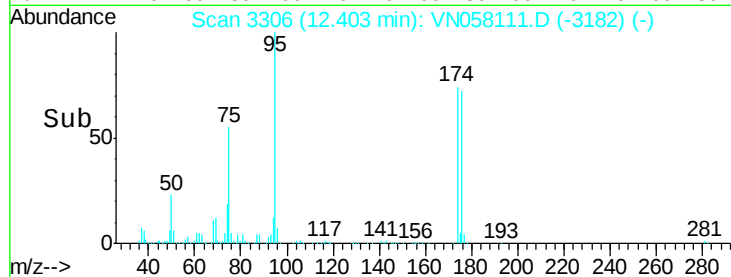
100000

50000

0

12.35 12.40 12.45

Time-->



#95

Naphthalene

Concen: Below Cal

RT: 15.14 min Scan# 4156

Delta R.T. 0.01 min

Lab File: VN058111.D

Acq: 16 Sep 2019 12:29

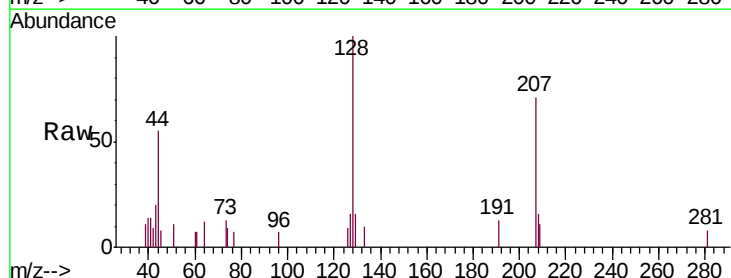
Tgt Ion: 128 Resp: 4139

Ion Ratio Lower Upper

128 100

127 10.2 10.3 15.5#

129 8.5 8.6 12.8#



Abundance Ion 128.00 (127.70 to 128.70): VN058111.D (-4060) (-)

Ion 127.00 (126.70 to 127.70): VN058111.D (-4060) (-)

Ion 129.00 (128.70 to 129.70): VN058111.D (-4060) (-)

15.14

3000

2500

2000

1500

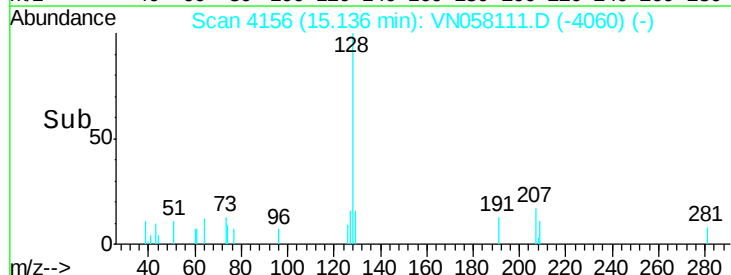
1000

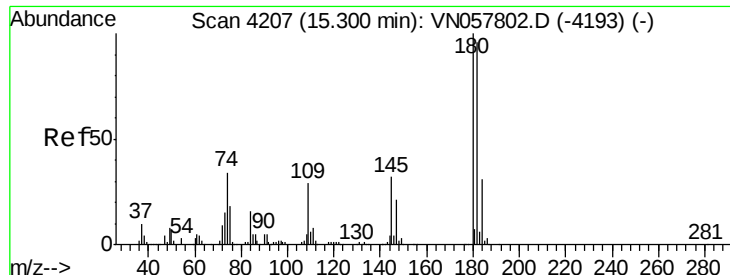
500

0

15.10 15.15

Time-->

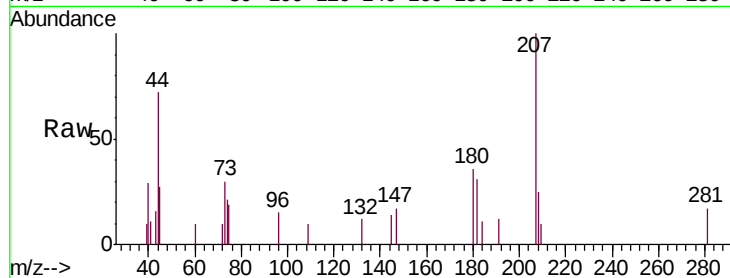




#96
 1,2,3-Trichlorobenzene
 Concen: 1.138 ug/l
 RT: 15.31 min Scan# 4209
 Delta R.T. 0.01 min
 Lab File: VN058111.D
 Acq: 16 Sep 2019 12:29

Instrument :
 MSVOA_N
 ClientSampleId :
 T4-2-(0)-BRUCKNER

Tgt Ion	Ratio	Lower	Upper
180	100		
182	135.0	48.3	144.8
145	42.4	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

