

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN103119\
 Data File : VN059030.D
 Acq On : 31 Oct 2019 11:42
 Operator : JC/SP
 Sample : K5612-01
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Nov 01 01:09:31 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N101819W.M
 Quant Title : SW846 8260
 QLast Update : Sat Oct 19 00:16:20 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	441415	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.57	114	687121	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	602859	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	226833	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	295214	45.60	ug/l	0.00
Spiked Amount			Recovery	=	91.20%	
35) Dibromofluoromethane	7.57	113	219188	48.52	ug/l	0.00
Spiked Amount			Recovery	=	97.04%	
50) Toluene-d8	10.08	98	846925	48.29	ug/l	0.00
Spiked Amount			Recovery	=	96.58%	
62) 4-Bromofluorobenzene	12.41	95	269687	41.88	ug/l	0.00
Spiked Amount			Recovery	=	83.76%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	4.76	59	2448	2.279	ug/l #	72
16) Acetone	3.80	43	16366	5.116	ug/l	96
18) Methyl Acetate	4.31	43	3627	0.499	ug/l #	59
20) Methylene Chloride	4.54	84	4159	0.761	ug/l	87
25) 2-Butanone	6.82	43	1743	0.420	ug/l	98
31) Cyclohexane	7.65	56	9661	1.038	ug/l #	1
36) 1,1-Dichloropropene	7.65	75	35606	5.061	ug/l #	51
38) Carbon Tetrachloride	7.65	117	43178	5.958	ug/l #	17
51) 4-Methyl-2-Pentanone	9.98	43	53076	7.392	ug/l	100
52) Toluene	10.15	92	2896	0.236	ug/l	79
56) Ethyl methacrylate	10.35	69	261	2.127	ug/l #	1
59) 2-Hexanone	10.75	43	2089	0.376	ug/l #	58
67) Ethyl Benzene	11.51	91	4473	0.208	ug/l	98
68) m/p-Xylenes	11.62	106	5490	0.688	ug/l	95
69) o-Xylene	11.95	106	3013	0.396	ug/l	90
70) Styrene	11.97	104	555	1.752	ug/l #	24
71) Bromoform	12.41	173	1461	0.407	ug/l #	1
76) 1,2,3-Trichloropropane	12.41	75	136591	25.982	ug/l #	100
80) 1,3,5-Trimethylbenzene	12.74	105	3929	0.282	ug/l	92
81) trans-1,4-Dichloro-2-buten	12.41	75	136591	67.686	ug/l #	10
84) 1,2,4-Trimethylbenzene	13.05	105	12110	0.882	ug/l	99
93) 1,2,4-Trichlorobenzene	14.92	180	871	2.704	ug/l #	69
95) Naphthalene	15.14	128	7074	2.746	ug/l	96
96) 1,2,3-Trichlorobenzene	15.30	180	1093	2.631	ug/l #	69

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.65 min Scan# 1827

Delta R.T. 0.00 min

Lab File: VN059030.D

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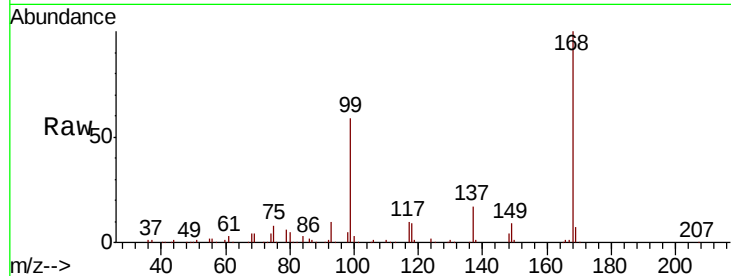
Instrument :
MSVOA_N
ClientSampled :

Tot Ion:168 Resp: 441415

Ion Ratio Lower Upper

168 100

99 58.6 48.1 72.1



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.65

200000

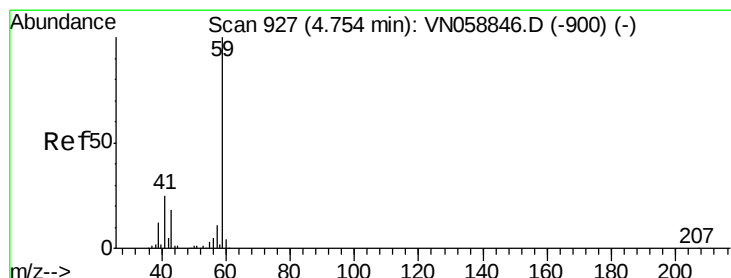
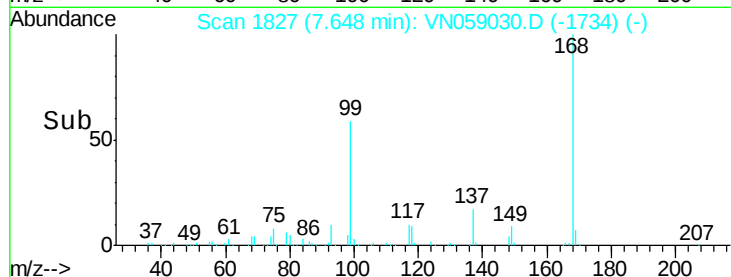
150000

100000

50000

0

Time-->



#11

Tert butyl alcohol

Concen: 2.279 ug/l

RT: 4.76 min Scan# 930

Delta R.T. 0.01 min

Lab File: VN059030.D

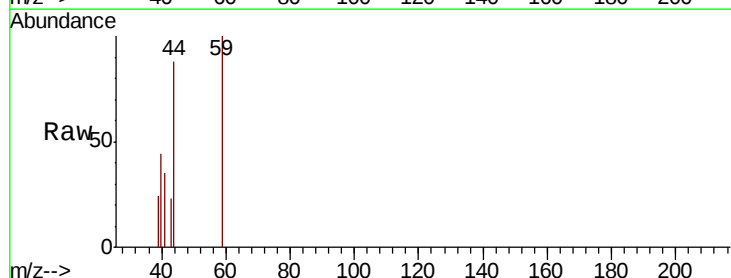
Acq: 31 Oct 2019 11:42

Tgt Ion: 59 Resp: 2448

Ion Ratio Lower Upper

59 100

57 0.0 8.6 12.8#



Abundance Ion 59.00 (58.70 to 59.70): VNO

Ion 57.00 (56.70 to 57.70): VNO

4.76

1000

800

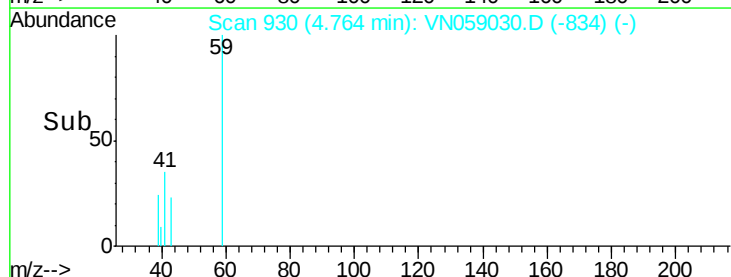
600

400

200

0

Time-->

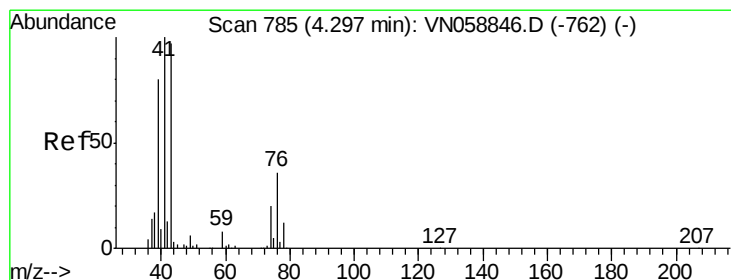
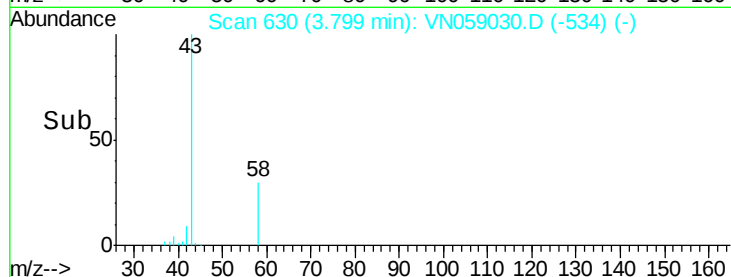
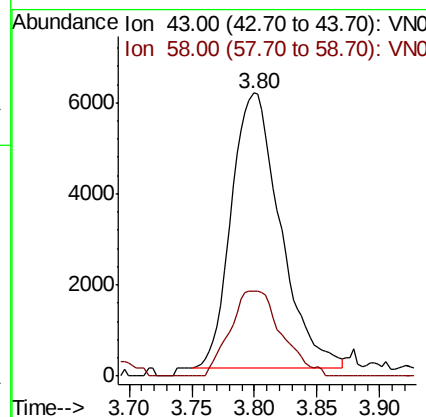
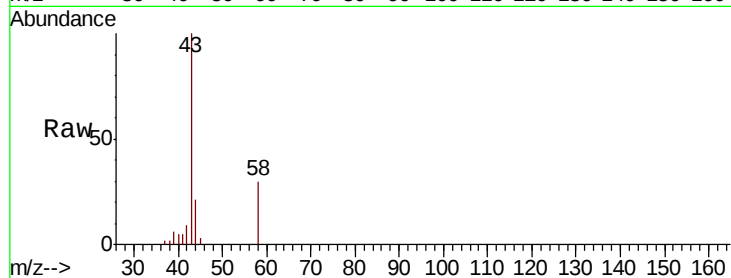




#16
Acetone
Concen: 5.116 ug/l
RT: 3.80 min Scan# 630
Delta R.T. 0.01 min
Lab File: VN059030.D
Acq: 31 Oct 2019 11:42

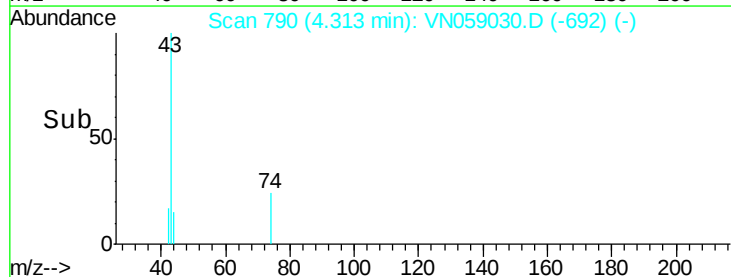
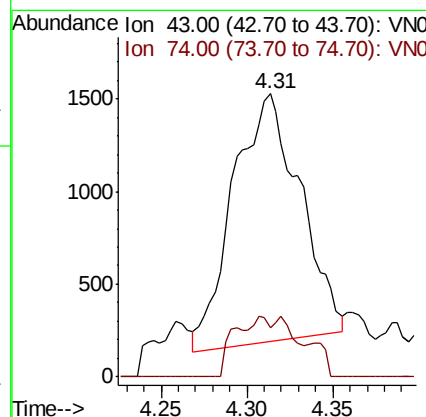
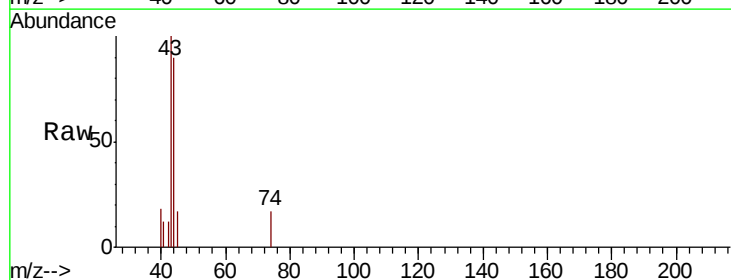
Instrument :
MSVOA_N
ClientSampleId :

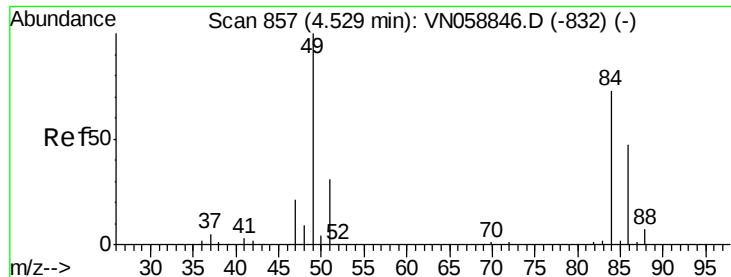
Tot Ion: 43 Resp: 16366
Ion Ratio Lower Upper
43 100
58 31.0 23.1 34.7



#18
Methyl Acetate
Concen: 0.499 ug/l
RT: 4.31 min Scan# 790
Delta R.T. 0.02 min
Lab File: VN059030.D
Acq: 31 Oct 2019 11:42

Tgt Ion: 43 Resp: 3627
Ion Ratio Lower Upper
43 100
74 2.0 17.1 25.7#

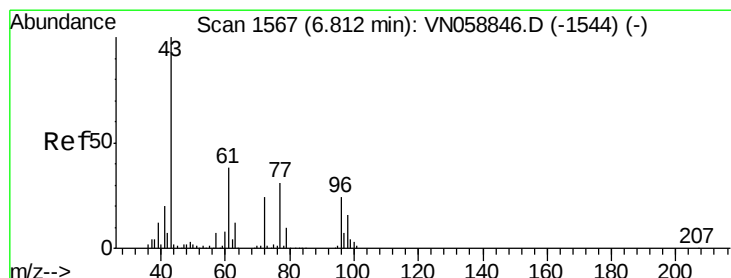
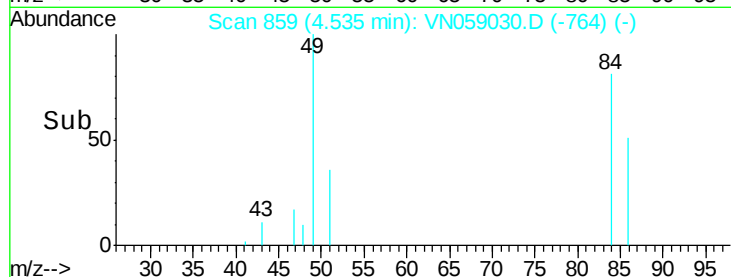
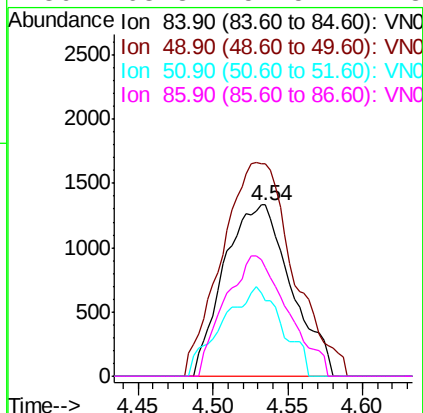
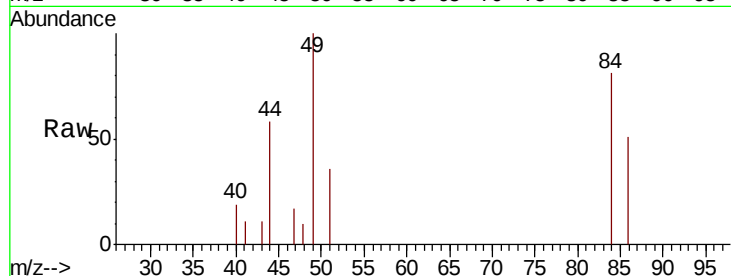




#20
Methvlene Chloride
Concen: 0.761 ug/l
RT: 4.54 min Scan# 859
Delta R.T. 0.01 min
Lab File: VN059030.D
Acq: 31 Oct 2019 11:42

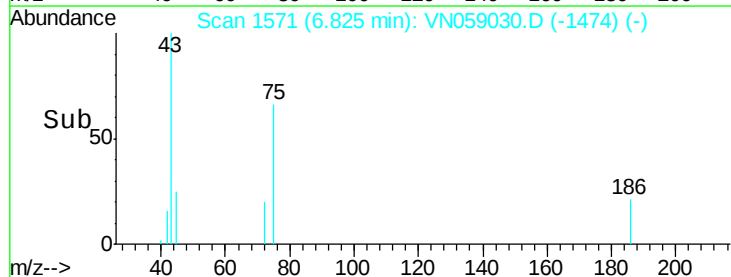
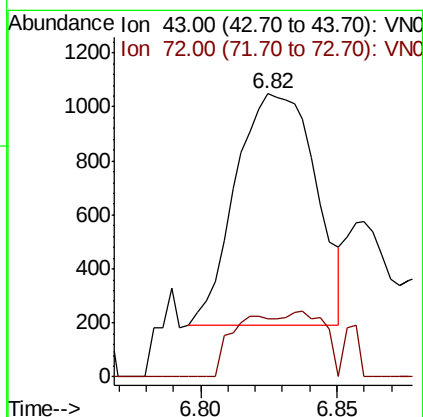
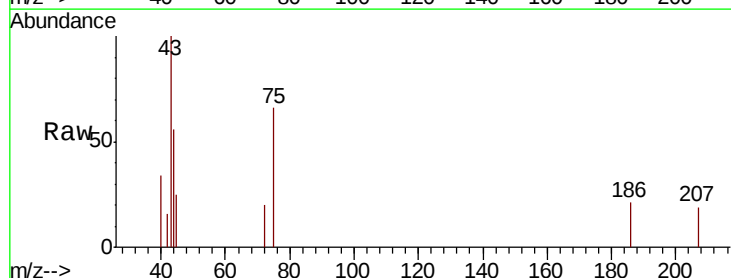
Instrument :
MSVOA_N
ClientSampled :

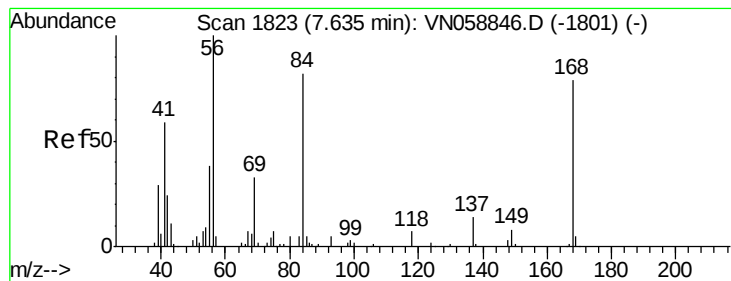
Tot Ion:	84	Resp:	4159
Ion	Ratio	Lower	Upper
84	100		
49	110.5	109.6	164.4
51	44.2	33.8	50.6
86	63.3	51.5	77.3



#25
2-Butanone
Concen: 0.420 ug/l
RT: 6.82 min Scan# 1571
Delta R.T. 0.01 min
Lab File: VN059030.D
Acq: 31 Oct 2019 11:42

Tgt Ion:	43	Resp:	1743
Ion	Ratio	Lower	Upper
43	100		
72	25.0	19.1	28.7





#31

Cyclohexane

Concen: 1.038 ug/l

RT: 7.65 min Scan# 1827

Delta R.T. 0.01 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

Instrument :

MSVOA_N

ClientSampled :

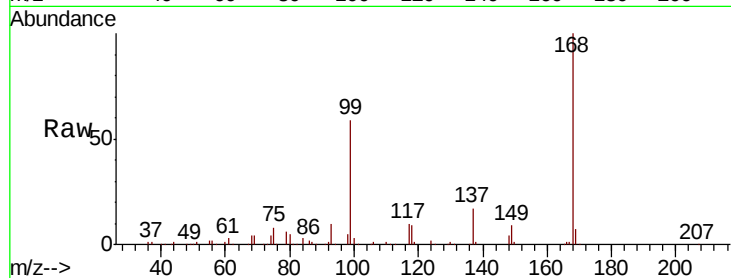
Tot Ion: 56 Resp: 9661

Ion Ratio Lower Upper

56 100

69 175.4 26.2 39.4#

84 127.3 65.6 98.4#



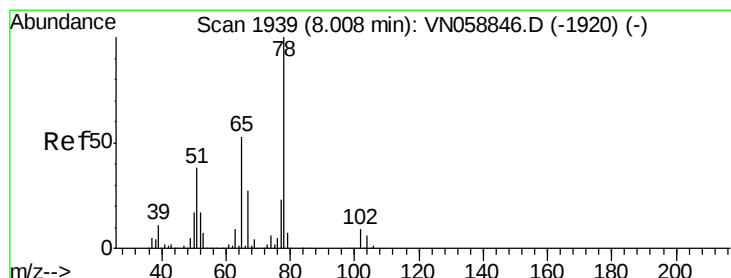
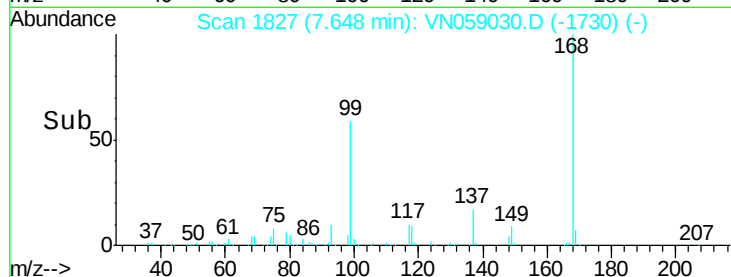
Abundance Ion 56.00 (55.70 to 56.70): VN058846.D (-1801) (-)

Ion 69.00 (68.70 to 69.70): VN058846.D (-1801) (-)

Ion 84.00 (83.70 to 84.70): VN058846.D (-1801) (-)

7.65

Time-->



#33

1,2-Dichloroethane-d4

Concen: 45.600 ug/l

RT: 8.01 min Scan# 1940

Delta R.T. 0.00 min

Lab File: VN059030.D

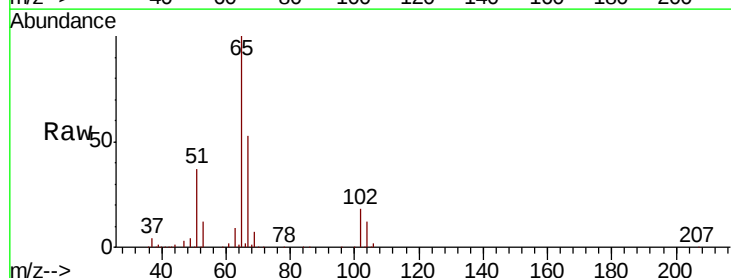
Acq: 31 Oct 2019 11:42

Tgt Ion: 65 Resp: 295214

Ion Ratio Lower Upper

65 100

67 52.9 0.0 103.2

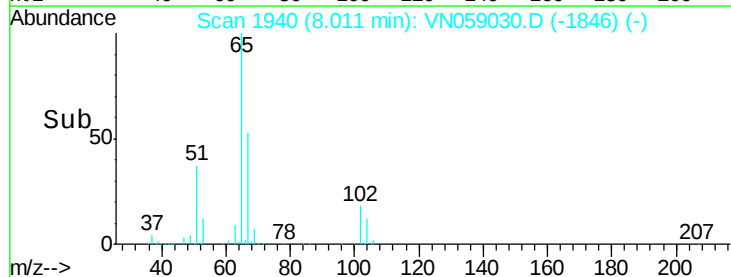


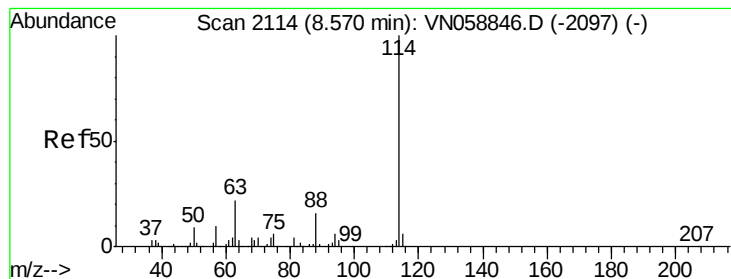
Abundance Ion 64.90 (64.60 to 65.60): VN058846.D (-1920) (-)

Ion 66.90 (66.60 to 67.60): VN058846.D (-1920) (-)

8.01

Time-->





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.57 min Scan# 2115

Delta R.T. 0.00 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

Instrument :

MSVOA_N

ClientSampleId :

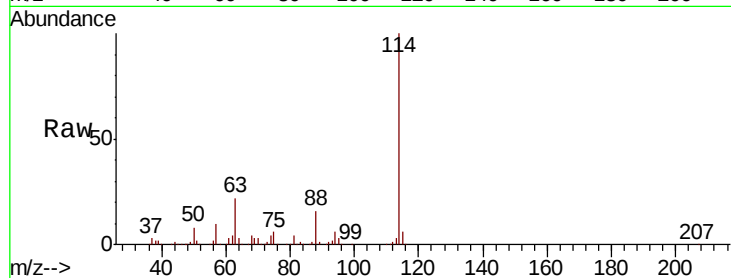
Tot Ion:114 Resp: 687121

Ion Ratio Lower Upper

114 100

63 22.2 0.0 44.4

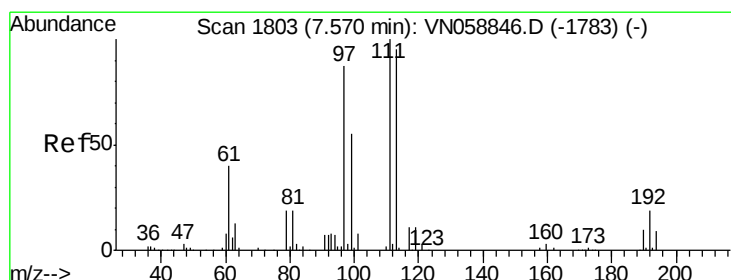
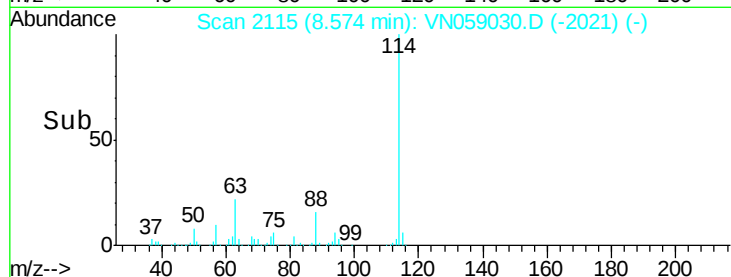
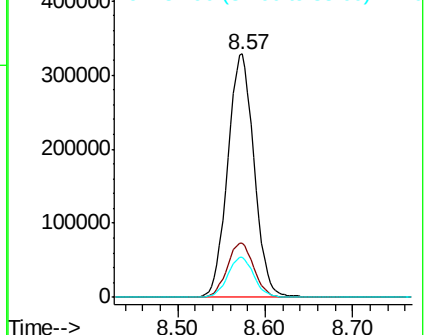
88 16.3 0.0 31.4



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: 48.518 ug/l

RT: 7.57 min Scan# 1804

Delta R.T. 0.00 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

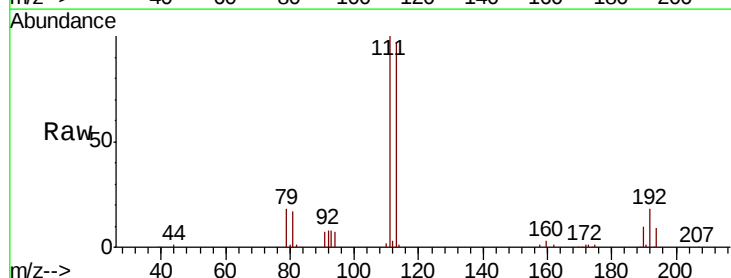
Tgt Ion:113 Resp: 219188

Ion Ratio Lower Upper

113 100

111 103.3 82.0 123.0

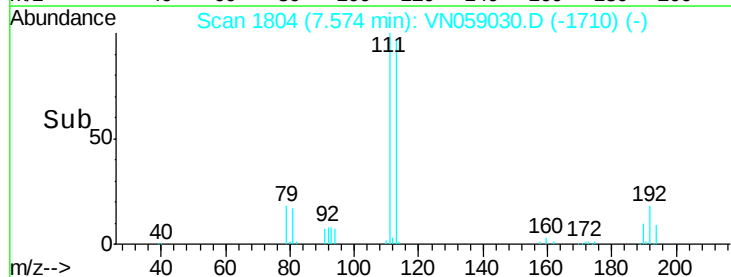
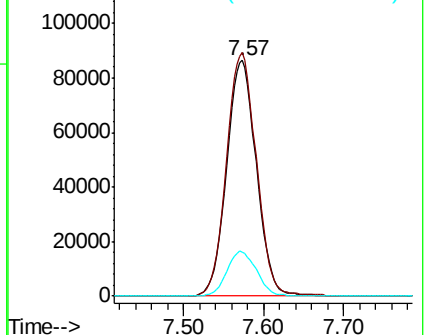
192 19.0 15.0 22.6

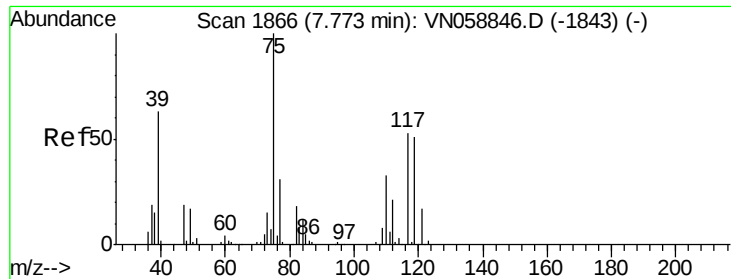


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

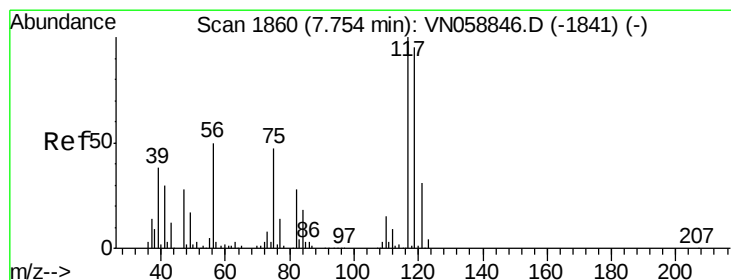
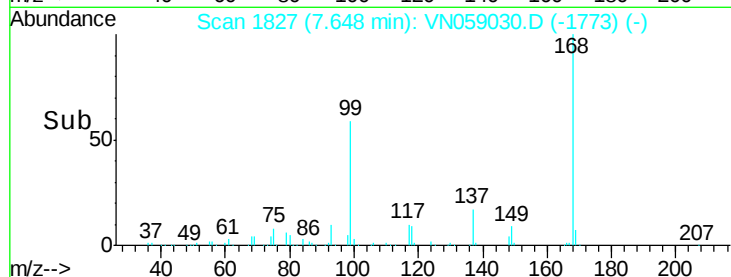
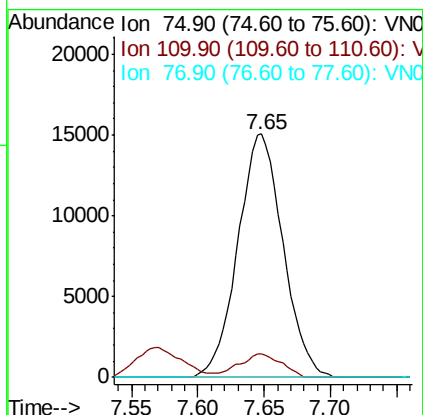
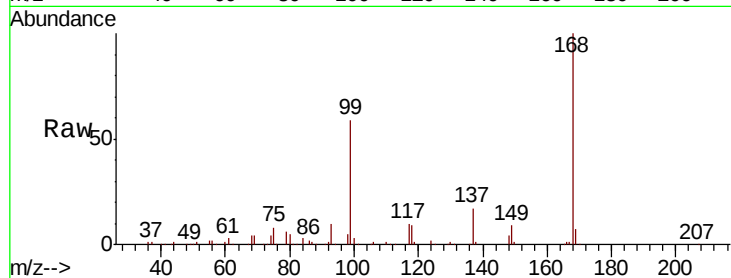




#36
 1,1-Dichloropropene
 Concen: 5.061 ug/l
 RT: 7.65 min Scan# 1827
 Delta R.T. -0.13 min
 Lab File: VN059030.D
 Acq: 31 Oct 2019 11:42

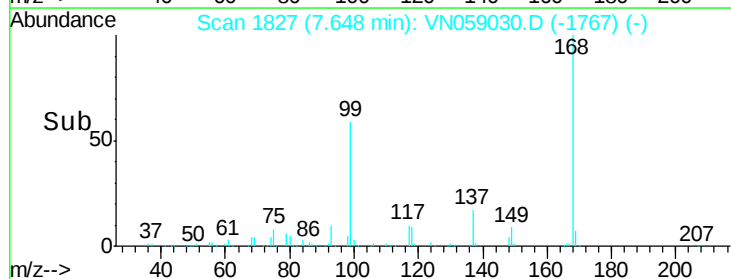
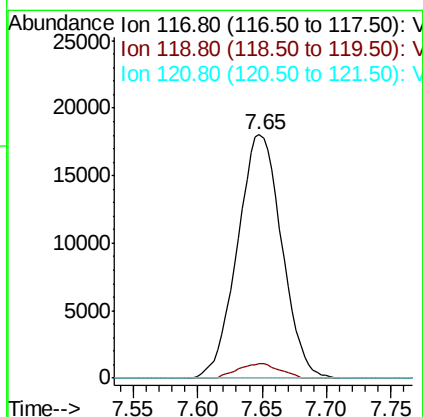
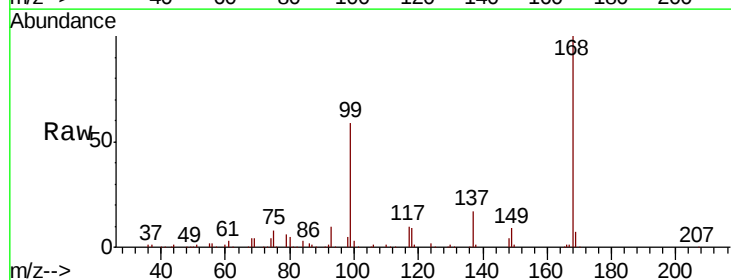
Instrument :
 MSVOA_N
 ClientSampled :

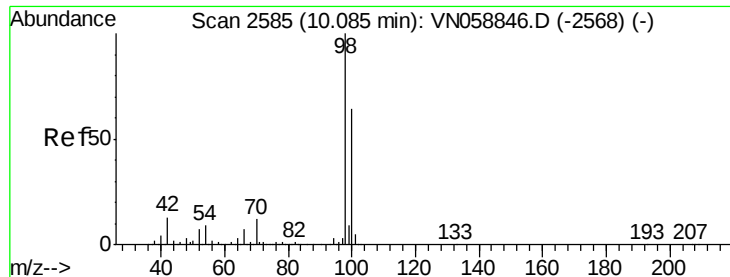
Tot Ion	Ratio	Lower	Upper
75	100		
110	8.9	16.3	48.9#
77	0.0	24.6	36.8#



#38
 Carbon Tetrachloride
 Concen: 5.958 ug/l
 RT: 7.65 min Scan# 1827
 Delta R.T. -0.11 min
 Lab File: VN059030.D
 Acq: 31 Oct 2019 11:42

Tgt Ion	Ratio	Lower	Upper
117	100		
119	5.9	75.7	113.5#
121	0.0	25.0	37.6#





#50

Toluene-d8

Concen: 48.294 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. 0.00 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

Instrument :

MSVOA_N

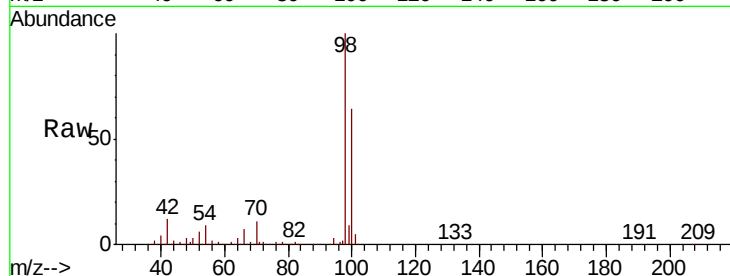
ClientSampleId :

Tot Ion: 98 Resp: 846925

Ion Ratio Lower Upper

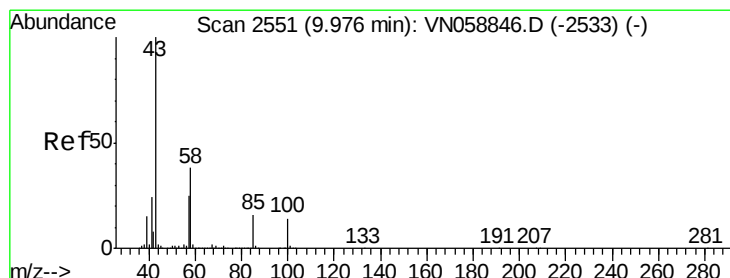
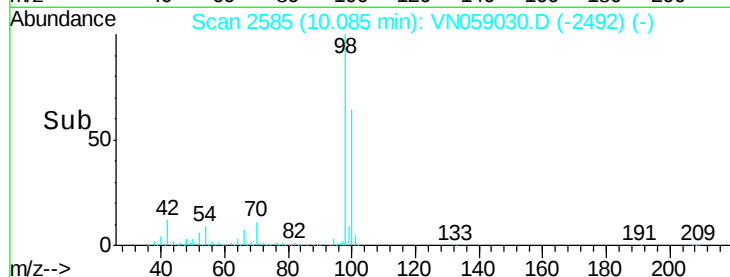
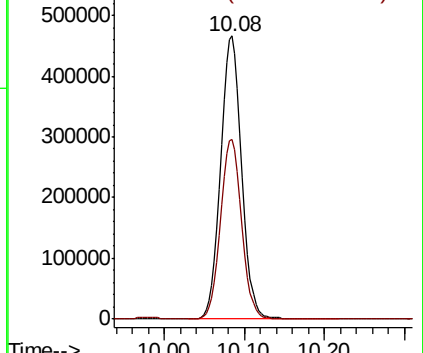
98 100

100 64.0 51.4 77.2



Abundance Ion 98.00 (97.70 to 98.70): VN0

Ion 100.00 (99.70 to 100.70): VN



#51

4-Methyl-2-Pentanone

Concen: 7.392 ug/l

RT: 9.98 min Scan# 2552

Delta R.T. 0.00 min

Lab File: VN059030.D

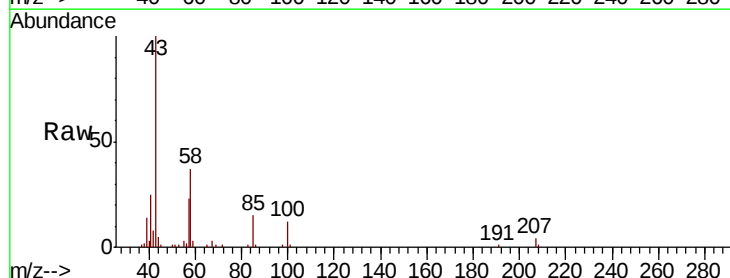
Acq: 31 Oct 2019 11:42

Tgt Ion: 43 Resp: 53076

Ion Ratio Lower Upper

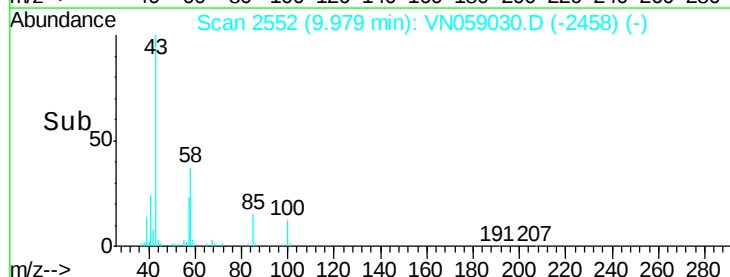
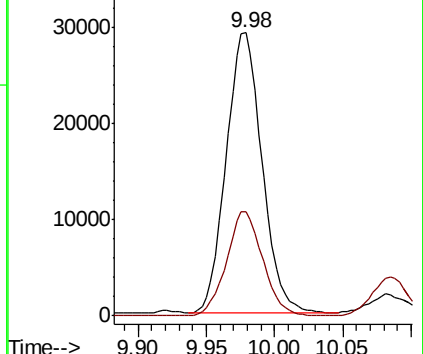
43 100

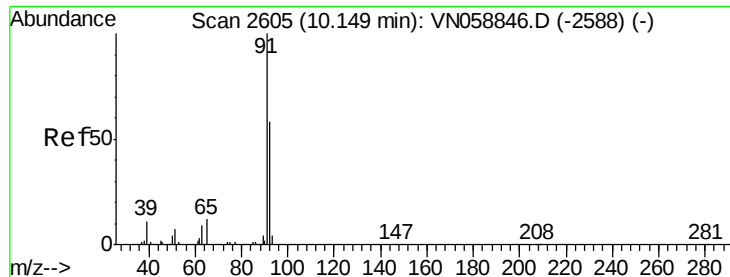
58 37.5 29.9 44.9



Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 58.00 (57.70 to 58.70): VN0





#52

Toluene

Concen: 0.236 ug/l

RT: 10.15 min Scan# 2604

Delta R.T. -0.00 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

Instrument :

MSVOA_N

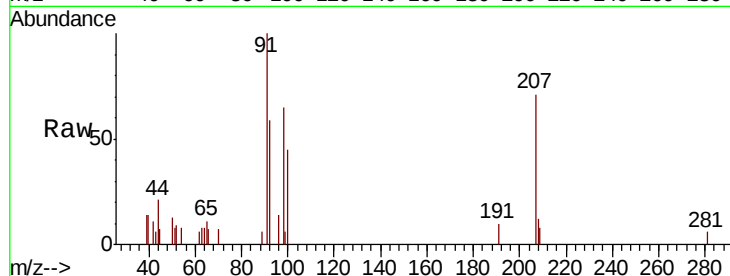
ClientSampled :

Tot Ion: 92 Resp: 2896

Ion Ratio Lower Upper

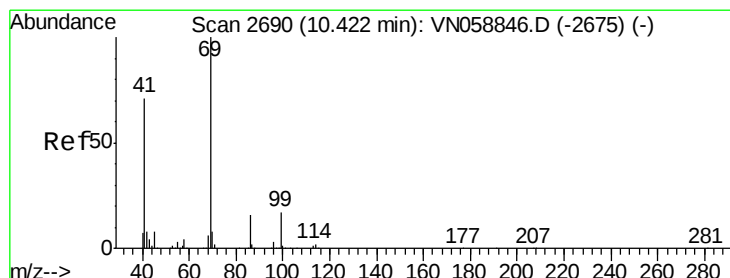
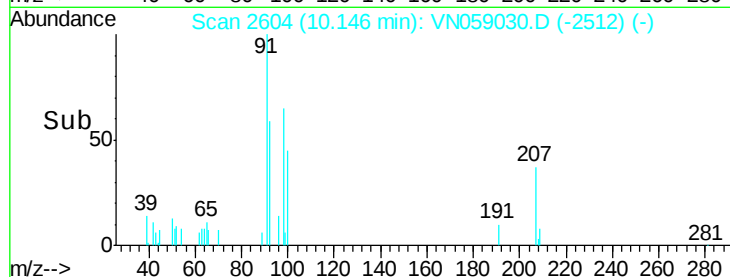
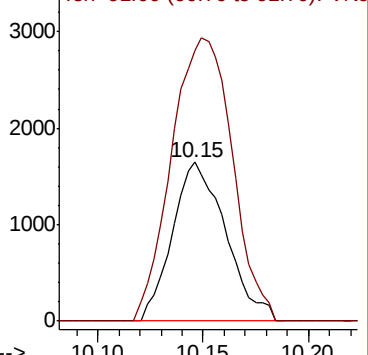
92 100

91 203.1 138.9 208.3



Abundance Ion 92.00 (91.70 to 92.70): VN058846.D (-2588) (-)

Ion 91.00 (90.70 to 91.70): VN058846.D (-2588) (-)



#56

Ethyl methacrylate

Concen: 2.127 ug/l

RT: 10.35 min Scan# 2668

Delta R.T. -0.07 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

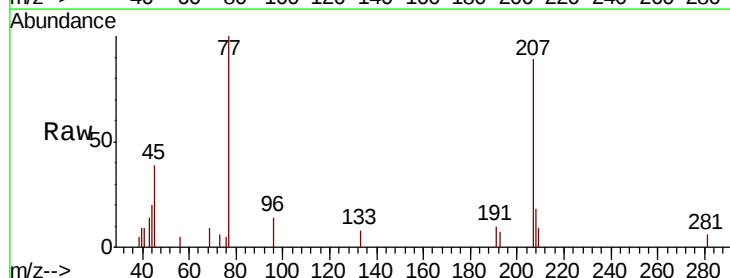
Tgt Ion: 69 Resp: 261

Ion Ratio Lower Upper

69 100

41 275.5 57.2 85.8#

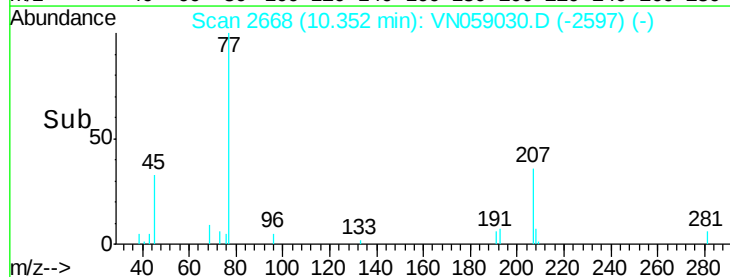
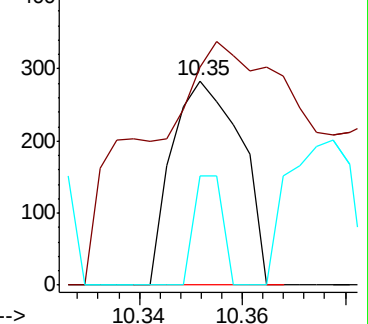
39 22.6 31.0 46.4#

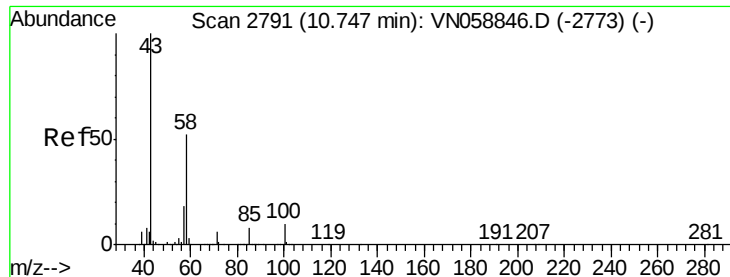


Abundance Ion 69.00 (68.70 to 69.70): VN058846.D (-2675) (-)

Ion 41.00 (40.70 to 41.70): VN058846.D (-2675) (-)

Ion 39.00 (38.70 to 39.70): VN058846.D (-2675) (-)

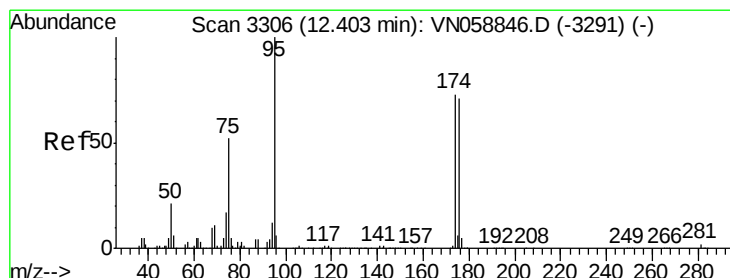
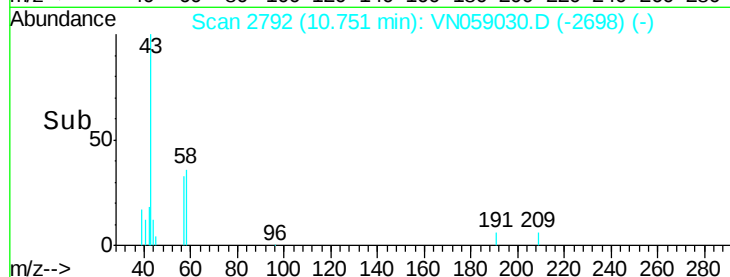
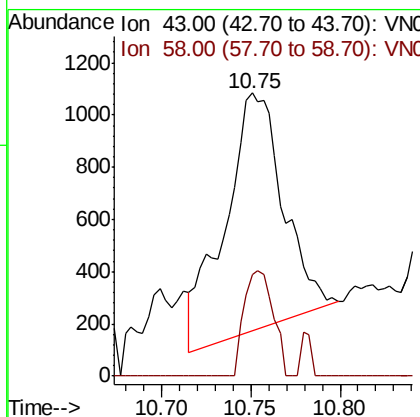
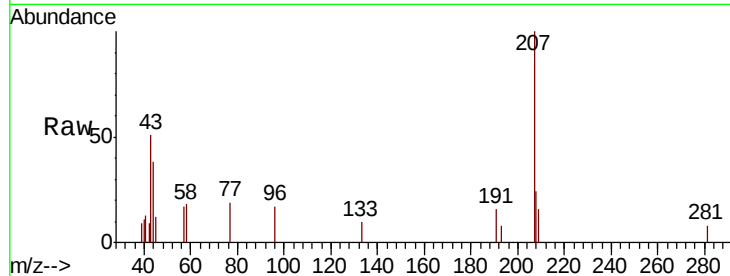




#59
2-Hexanone
Concen: 0.376 ug/l
RT: 10.75 min Scan# 2792
Delta R.T. 0.00 min
Lab File: VN059030.D
Acq: 31 Oct 2019 11:42

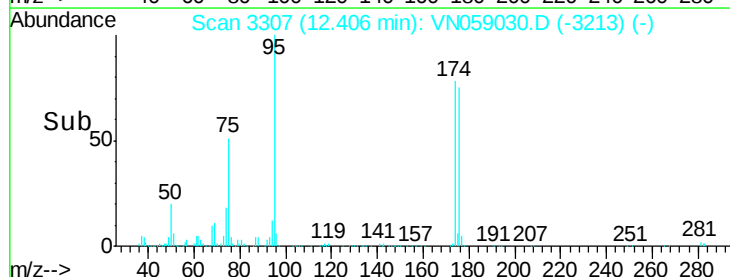
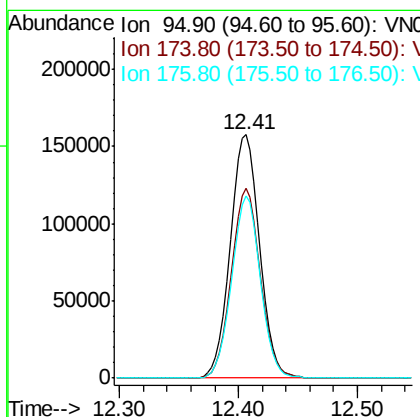
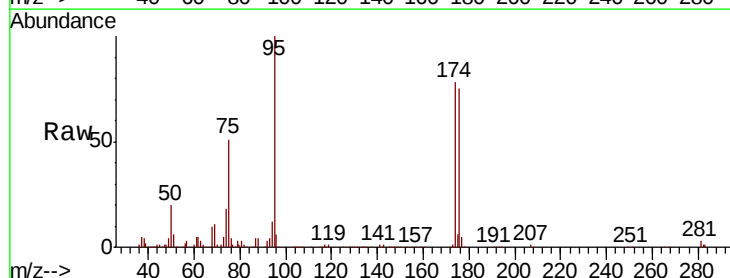
Instrument :
MSVOA_N
ClientSampled :

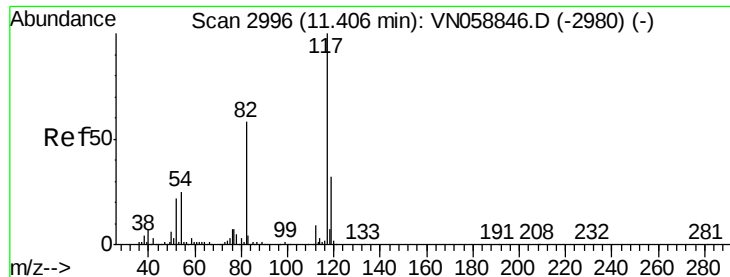
Tot Ion: 43 Resp: 2089
Ion Ratio Lower Upper
43 100
58 22.0 25.9 77.7#



#62
4-Bromofluorobenzene
Concen: 41.877 ug/l
RT: 12.41 min Scan# 3307
Delta R.T. 0.00 min
Lab File: VN059030.D
Acq: 31 Oct 2019 11:42

Tgt Ion: 95 Resp: 269687
Ion Ratio Lower Upper
95 100
174 76.8 0.0 147.6
176 73.2 0.0 143.2

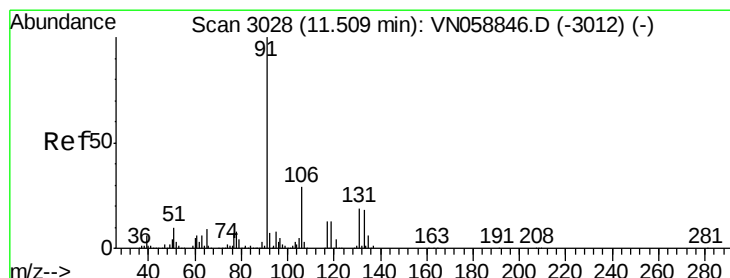
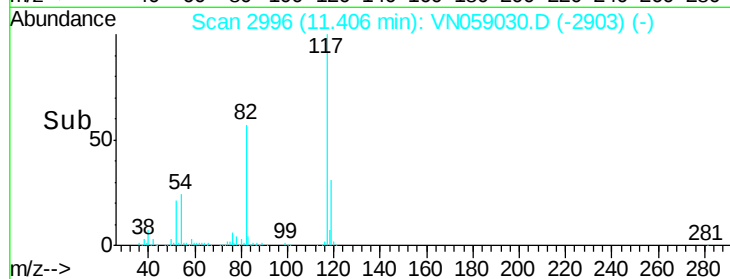
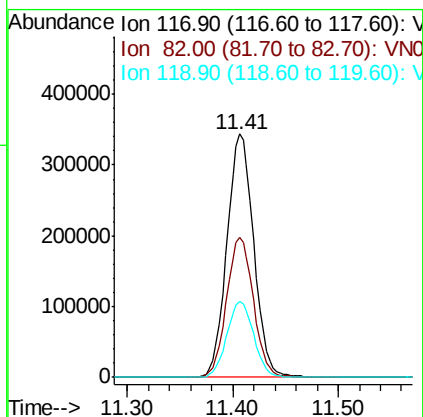
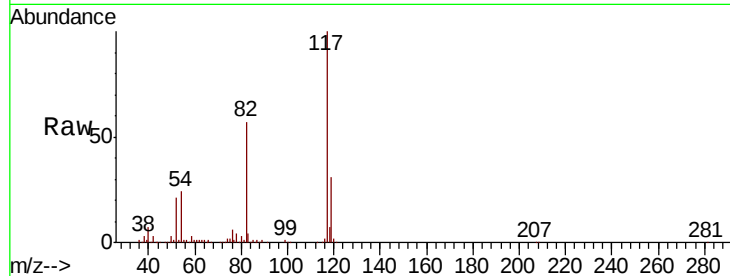




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN059030.D
Acq: 31 Oct 2019 11:42

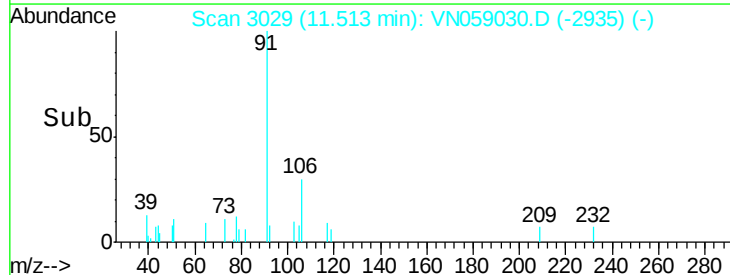
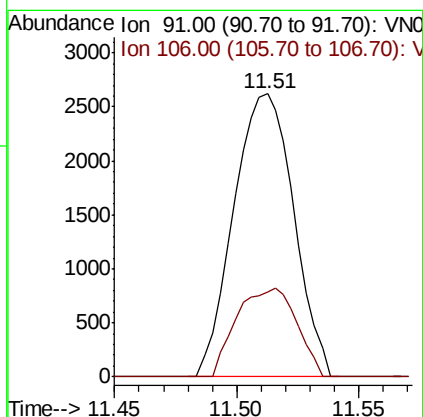
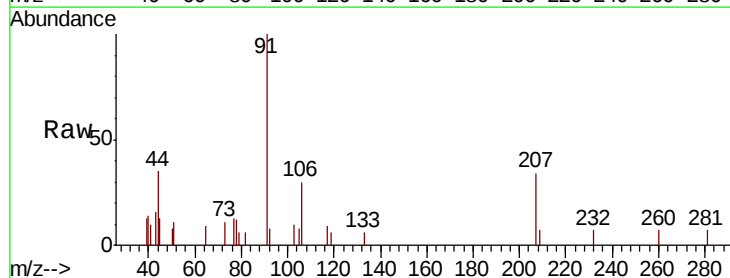
Instrument :
MSVOA_N
ClientSampled :

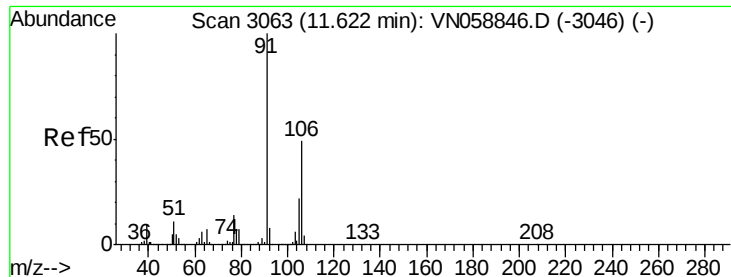
Tot Ion:117 Resp: 602859
Ion Ratio Lower Upper
117 100
82 57.5 46.6 69.8
119 31.0 25.6 38.4



#67
Ethyl Benzene
Concen: 0.208 ug/l
RT: 11.51 min Scan# 3029
Delta R.T. 0.00 min
Lab File: VN059030.D
Acq: 31 Oct 2019 11:42

Tgt Ion: 91 Resp: 4473
Ion Ratio Lower Upper
91 100
106 30.1 23.4 35.0





#68

m/p-Xylenes

Concen: 0.688 ug/l

RT: 11.62 min Scan# 3062

Delta R.T. -0.00 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

Instrument :

MSVOA_N

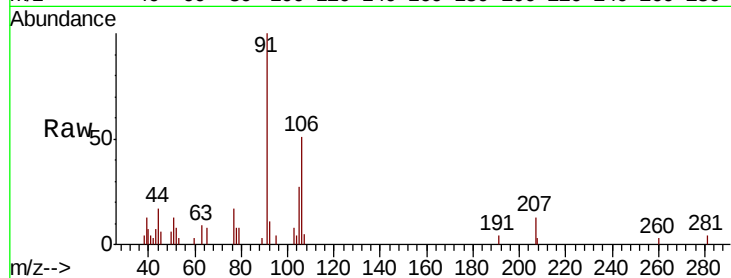
ClientSampleId :

Tot Ion:106 Resp: 5490

Ion Ratio Lower Upper

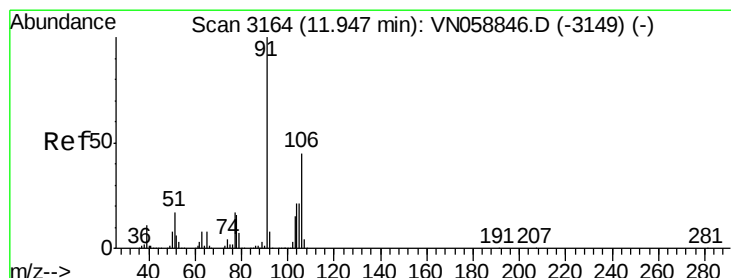
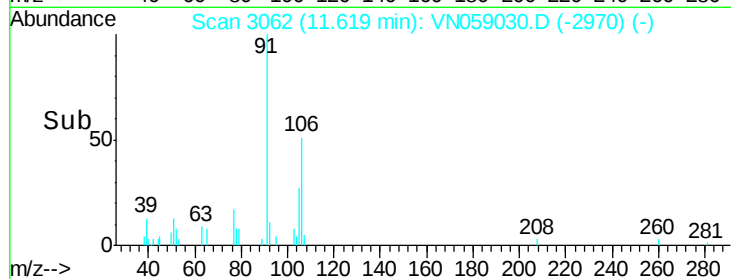
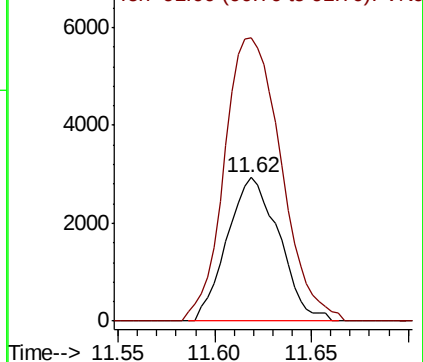
106 100

91 215.2 166.6 249.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN0



#69

o-Xylene

Concen: 0.396 ug/l

RT: 11.95 min Scan# 3164

Delta R.T. 0.00 min

Lab File: VN059030.D

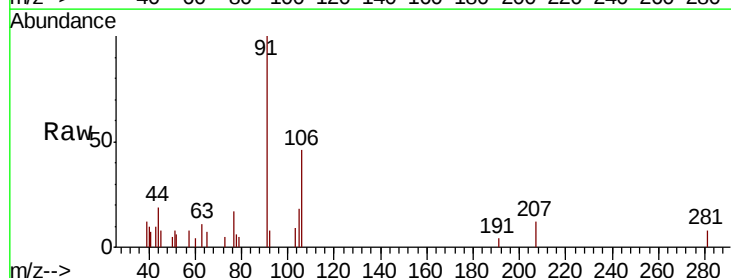
Acq: 31 Oct 2019 11:42

Tgt Ion:106 Resp: 3013

Ion Ratio Lower Upper

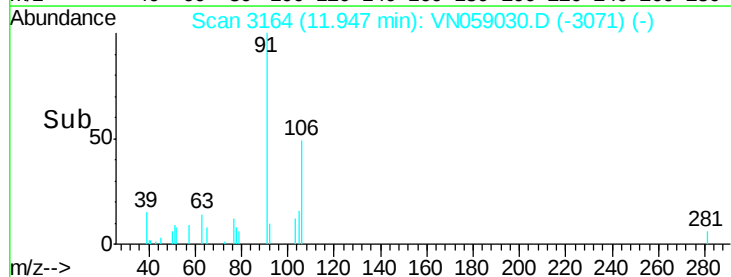
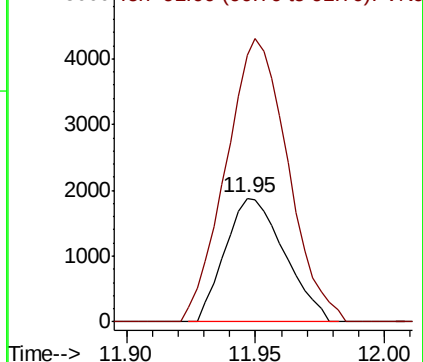
106 100

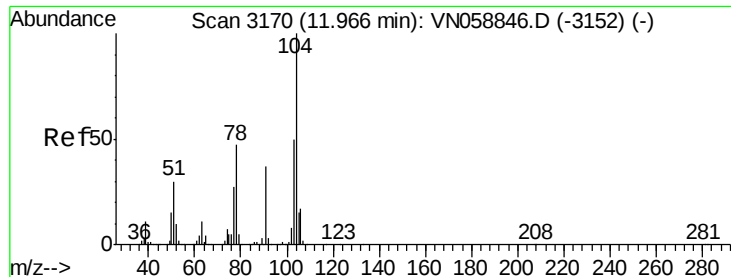
91 239.8 111.5 334.4



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN0





#70

Stvrene

Concen: 1.752 ug/l

RT: 11.97 min Scan# 3172

Delta R.T. 0.01 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

Instrument :

MSVOA_N

ClientSampled :

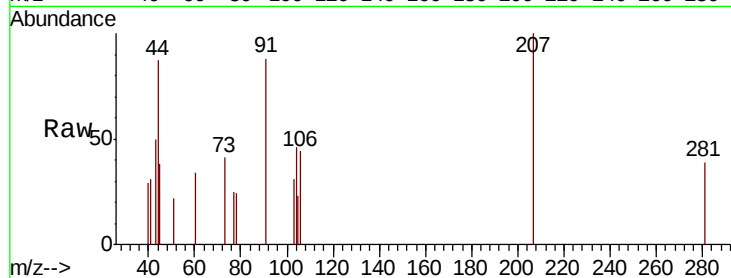
Tot Ion:104 Resp: 555

Ion Ratio Lower Upper

104 100

78 0.0 42.8 64.2#

103 0.0 44.3 66.5#

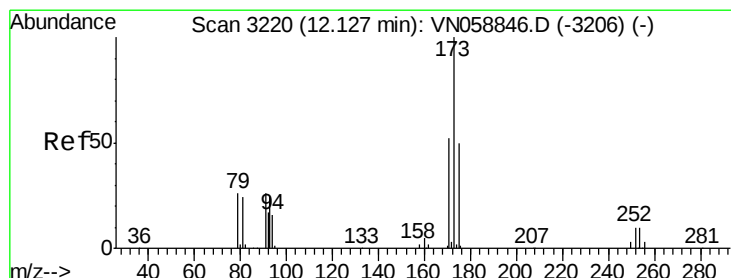
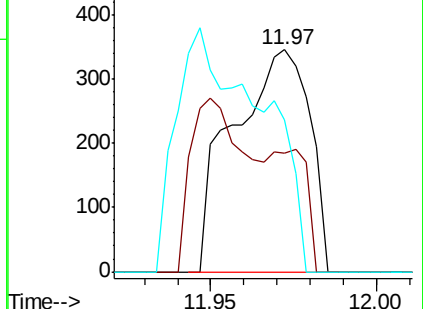
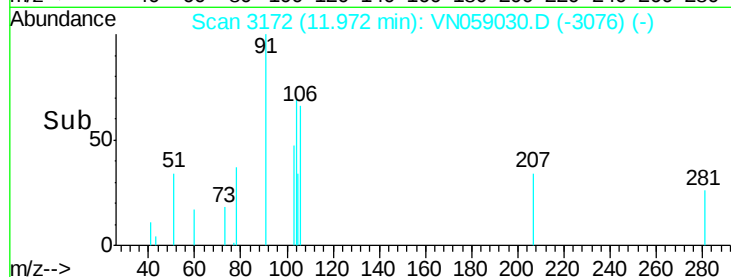


Abundance Ion 104.00 (103.70 to 104.70): V

Ion 78.00 (77.70 to 78.70): VN0

Ion 103.00 (102.70 to 103.70): V

Time-->



#71

Bromoform

Concen: 0.407 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.28 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

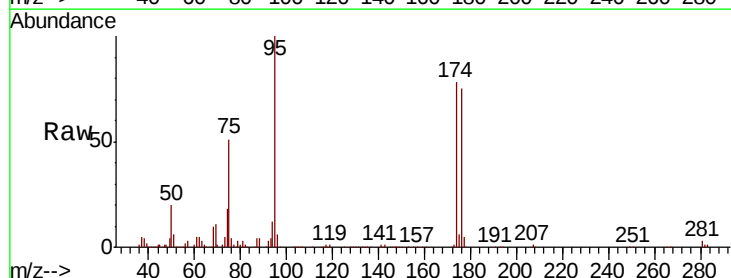
Tgt Ion:173 Resp: 1461

Ion Ratio Lower Upper

173 100

175 807.9 24.7 74.1#

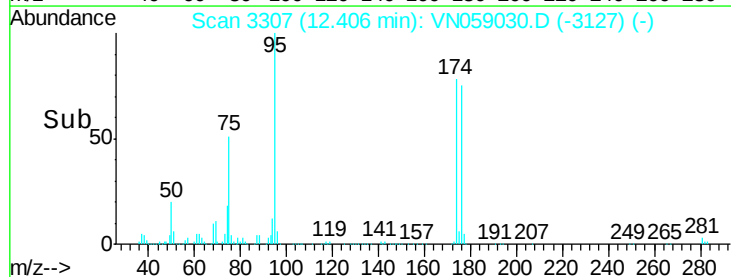
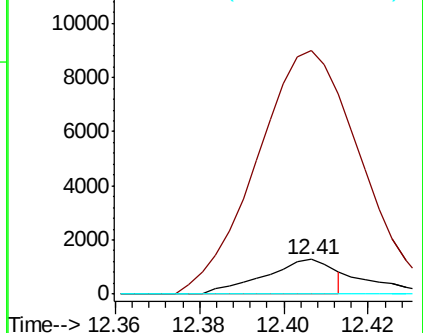
254 0.0 0.0 0.0

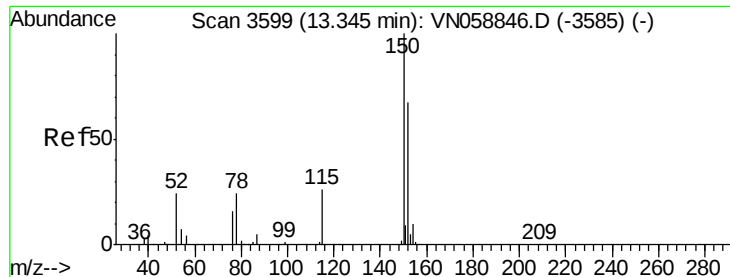


Abundance Ion 172.70 (172.40 to 173.40): V

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: VN059030.D

Acq: 31 Oct 2019 11:42

Instrument :

MSVOA_N

ClientSampleId :

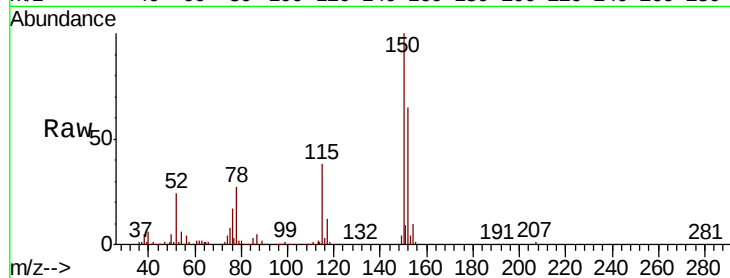
Tot Ion:152 Resp: 226833

Ion Ratio Lower Upper

152 100

115 58.9 30.5 91.5

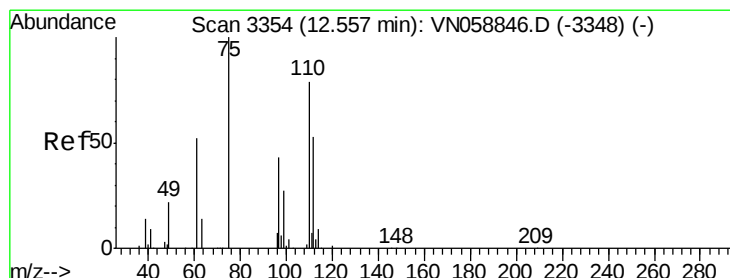
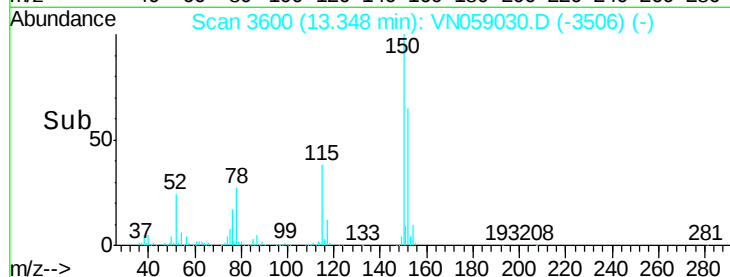
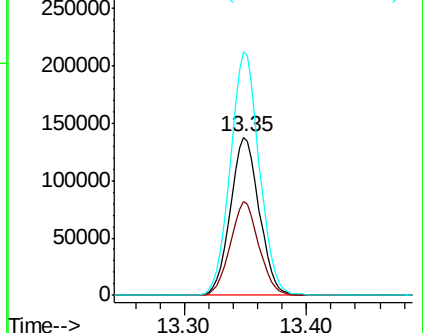
150 155.1 0.0 344.4



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



#76

1,2,3-Trichloropropane

Concen: 25.982 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN059030.D

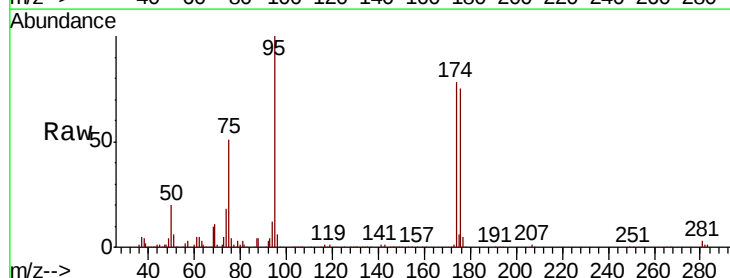
Acq: 31 Oct 2019 11:42

Tgt Ion: 75 Resp: 136591

Ion Ratio Lower Upper

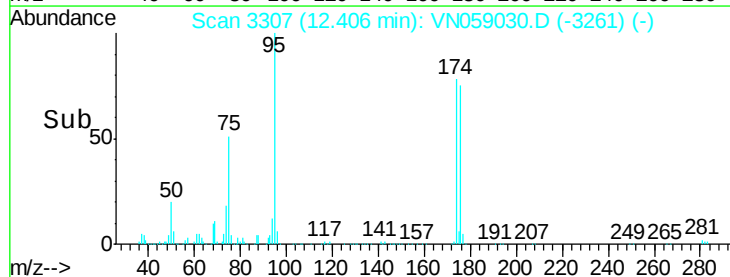
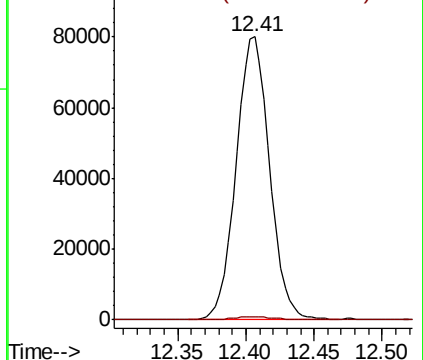
75 100

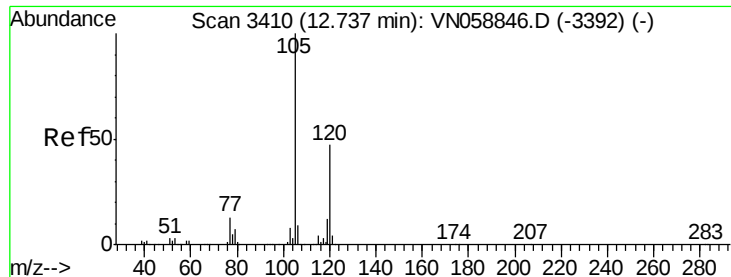
77 1.4 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V

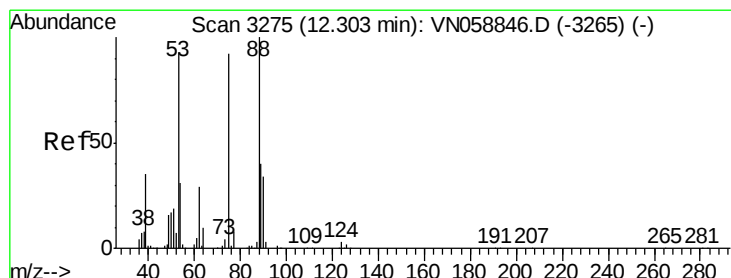
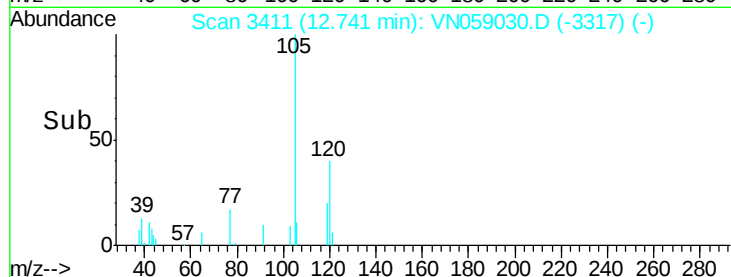
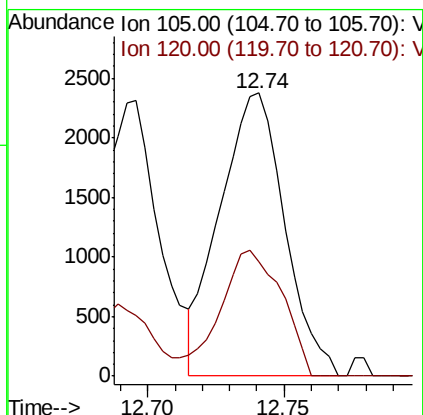
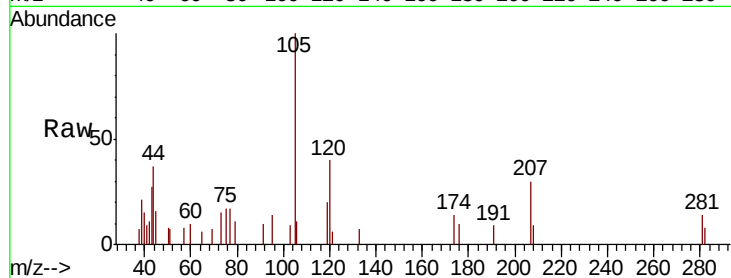




#80
 1,3,5-Trimethylbenzene
 Concen: 0.282 ug/l
 RT: 12.74 min Scan# 3411
 Delta R.T. 0.00 min
 Lab File: VN059030.D
 Acq: 31 Oct 2019 11:42

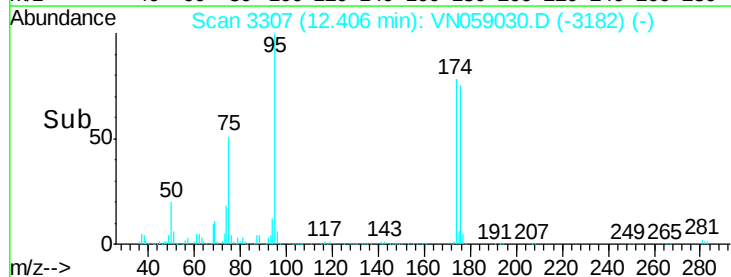
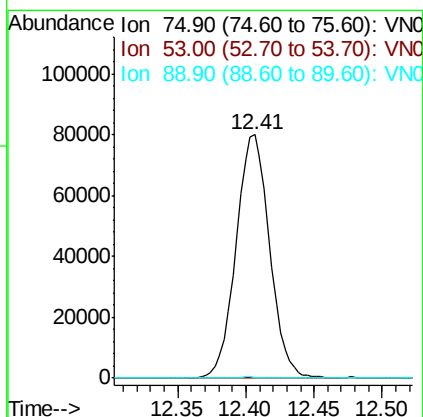
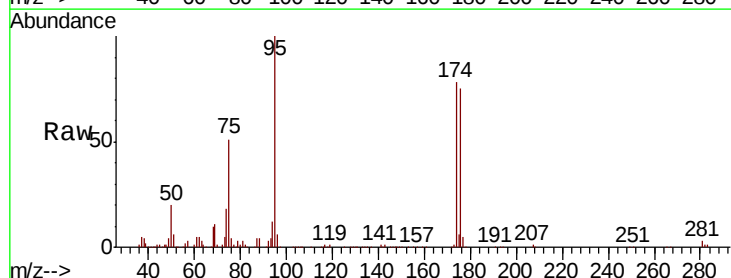
Instrument :
 MSVOA_N
 ClientSampled :

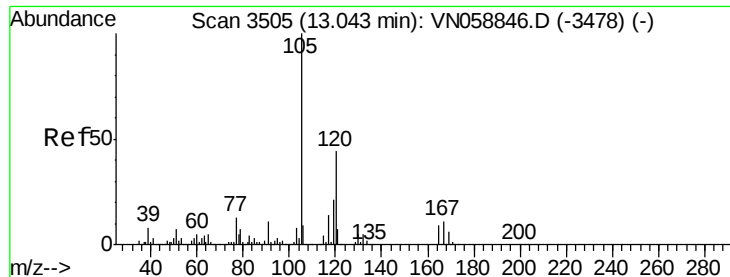
Tot Ion:105 Resp: 3929
 Ion Ratio Lower Upper
 105 100
 120 42.5 23.8 71.5



#81
 trans-1,4-Dichloro-2-butene
 Concen: 67.686 ug/l
 RT: 12.41 min Scan# 3307
 Delta R.T. 0.10 min
 Lab File: VN059030.D
 Acq: 31 Oct 2019 11:42

Tgt Ion: 75 Resp: 136591
 Ion Ratio Lower Upper
 75 100
 53 0.1 78.6 118.0#
 89 0.1 35.4 53.0#





#84

1,2,4-Trimethylbenzene

Concen: 0.882 ug/l

RT: 13.05 min Scan# 3506

Delta R.T. 0.00 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

Instrument :

MSVOA_N

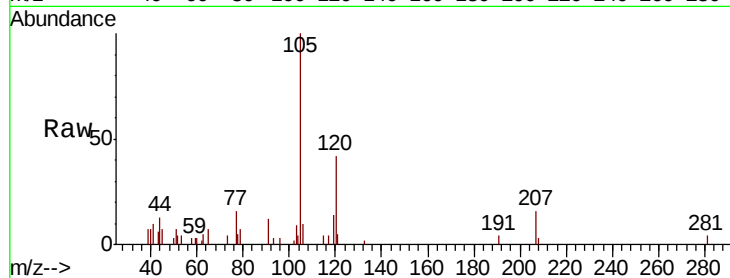
ClientSampleId :

Tot Ion:105 Resp: 12110

Ion Ratio Lower Upper

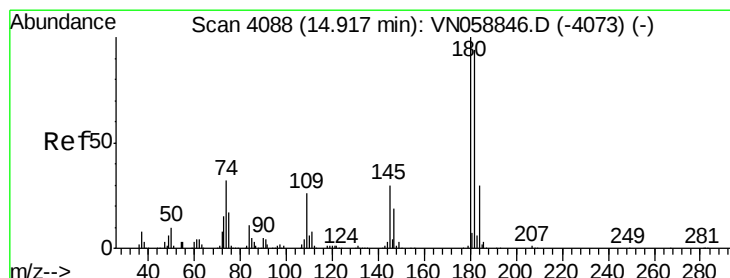
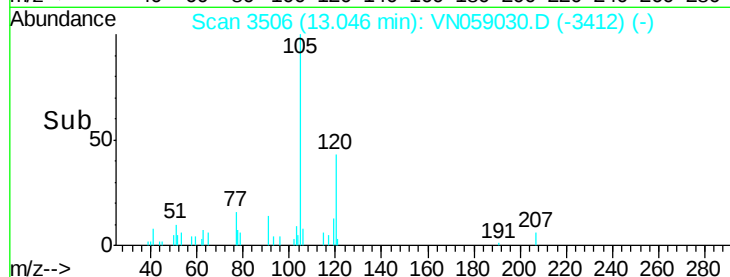
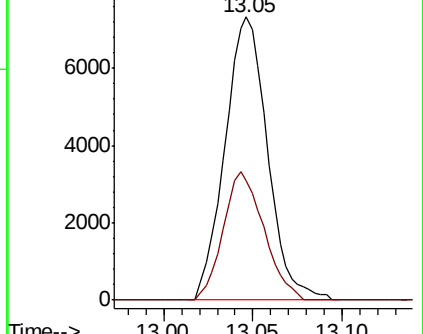
105 100

120 43.2 21.9 65.8



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#93

1,2,4-Trichlorobenzene

Concen: 2.704 ug/l

RT: 14.92 min Scan# 4089

Delta R.T. 0.00 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

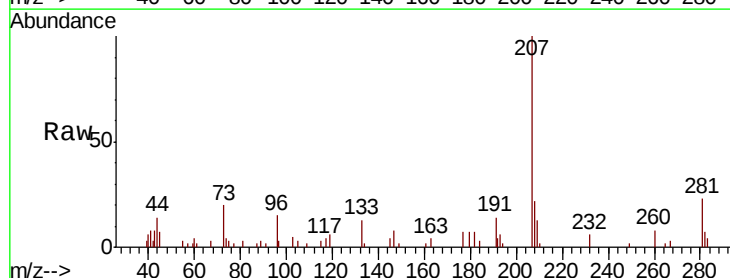
Tgt Ion:180 Resp: 871

Ion Ratio Lower Upper

180 100

182 89.1 47.3 142.0

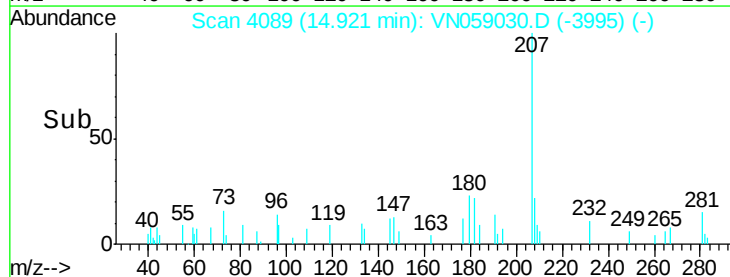
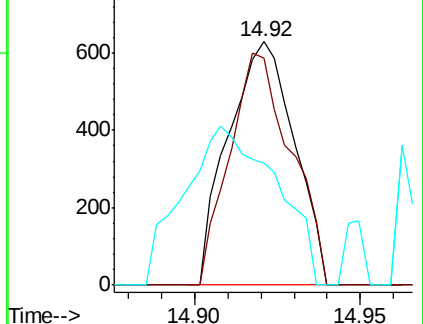
145 91.2 15.3 45.8#

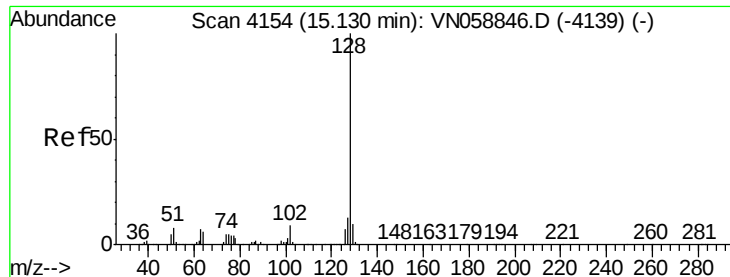


Abundance Ion 179.80 (179.50 to 180.50): V

Ion 181.80 (181.50 to 182.50): V

Ion 144.80 (144.50 to 145.50): V





#95

Naphthalene

Concen: 2.746 ug/l

RT: 15.14 min Scan# 4156

Delta R.T. 0.01 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

Instrument :

MSVOA_N

ClientSampled :

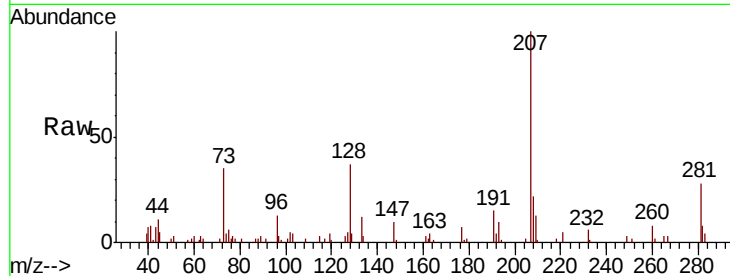
Tot Ion:128 Resp: 7074

Ion Ratio Lower Upper

128 100

127 10.8 10.2 15.2

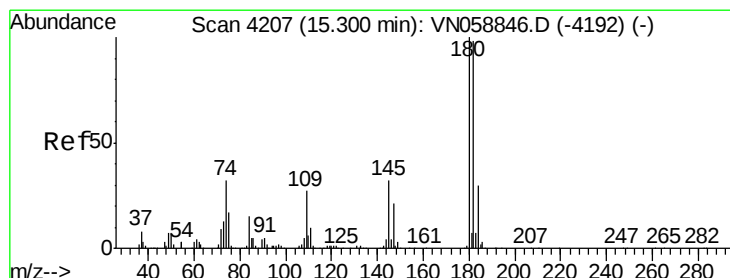
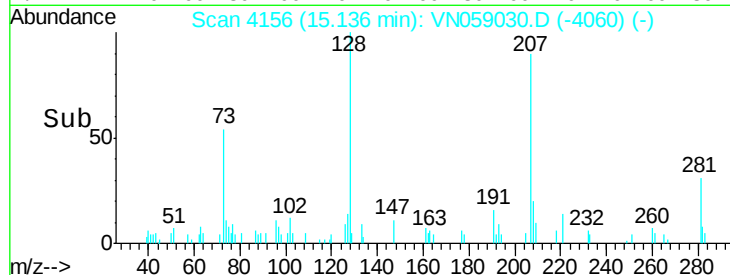
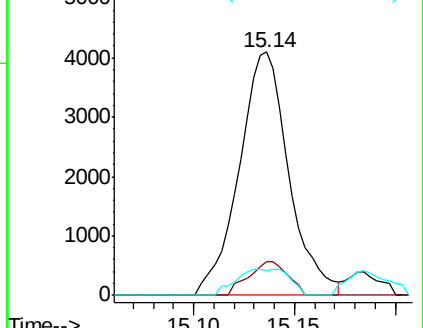
129 11.5 8.4 12.6



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: 2.631 ug/l

RT: 15.30 min Scan# 4208

Delta R.T. 0.00 min

Lab File: VN059030.D

Acq: 31 Oct 2019 11:42

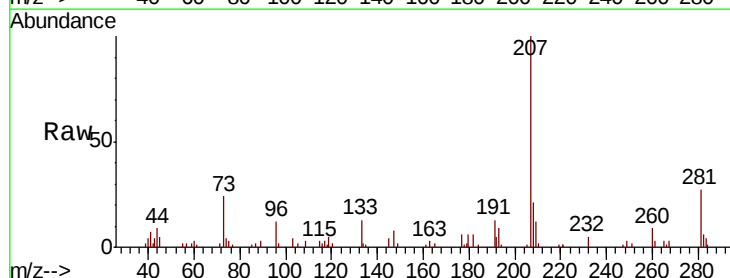
Tgt Ion:180 Resp: 1093

Ion Ratio Lower Upper

180 100

182 95.0 47.9 143.7

145 100.4 15.9 47.7#



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

