

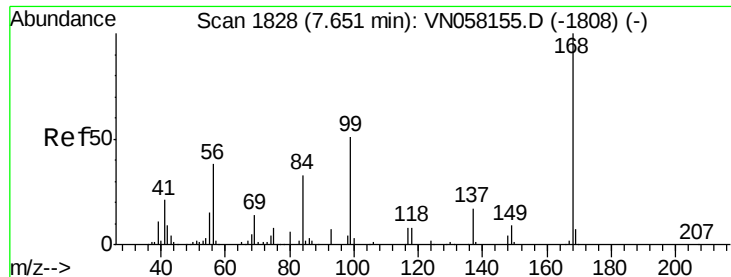
Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN092319\
 Data File : VN058296.D
 Acq On : 23 Sep 2019 16:36
 Operator : JC/SP
 Sample : K4975-15
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Sep 24 01:34:14 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N091819W.M
 Quant Title : SW846 8260
 QLast Update : Thu Sep 19 09:27:53 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.65	168	480070	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.58	114	782352	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	660158	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.35	152	259244	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.01	65	353542	52.87	ug/l	0.00
Spiked Amount	50.000		Recovery	=	105.74%	
35) Dibromofluoromethane	7.58	113	243337	51.16	ug/l	0.00
Spiked Amount	50.000		Recovery	=	102.32%	
50) Toluene-d8	10.08	98	973684	52.54	ug/l	0.00
Spiked Amount	50.000		Recovery	=	105.08%	
62) 4-Bromofluorobenzene	12.41	95	306859	44.58	ug/l	0.00
Spiked Amount	50.000		Recovery	=	89.16%	
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.83	85	1959	0.497	ug/l	87
3) Chloromethane	2.04	50	2459	Below Cal	#	87
5) Bromomethane	2.56	94	391	0.941	ug/l #	4
6) Chloroethane	2.44	64	212	Below Cal	#	44
7) Trichlorofluoromethane	3.01	101	1108	0.206	ug/l #	75
9) 1,1,2-Trichlorotrifluoroet	3.73	101	22346	5.758	ug/l	97
16) Acetone	3.80	43	11292	4.975	ug/l	99
17) Carbon Disulfide	4.03	76	156	0.308	ug/l #	74
20) Methylene Chloride	4.52	84	577	Below Cal	#	54
21) trans-1,2-Dichloroethene	5.02	96	193	Below Cal	#	1
27) cis-1,2-Dichloroethene	6.81	96	6947	1.427	ug/l	88
31) Cyclohexane	7.65	56	11824	Below Cal	#	11
32) 1,1,1-Trichloroethane	7.56	97	3089	0.438	ug/l #	42
36) 1,1-Dichloropropene	7.65	75	41480	7.352	ug/l #	50
38) Carbon Tetrachloride	7.77	117	2057	0.363	ug/l #	67
39) Methylcyclohexane	8.82	83	6686	1.295	ug/l #	1
41) Methacrylonitrile	7.27	41	97	0.943	ug/l #	100
44) Trichloroethene	8.83	130	502190	119.088	ug/l	99
49) 1,4-Dioxane	9.19	88	1422	17.445	ug/l #	69
60) Dibromochloromethane	10.63	129	1408	0.305	ug/l #	11
64) Tetrachloroethene	10.63	164	1495	0.465	ug/l #	87
71) Bromoform	12.39	173	185	3.650	ug/l #	1
76) 1,2,3-Trichloropropane	12.41	75	167783	36.163	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.41	75	167783	100.968	ug/l #	5

(#) = 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: VN058296.D

Acq: 23 Sep 2019 16:36

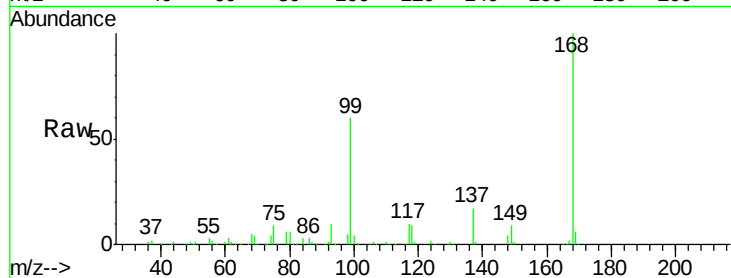
Instrument :
MSVOA_N
ClientSampled :

Tot Ion:168 Resp: 480070

Ion Ratio Lower Upper

168 100

99 59.8 47.4 71.2



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.65

200000

150000

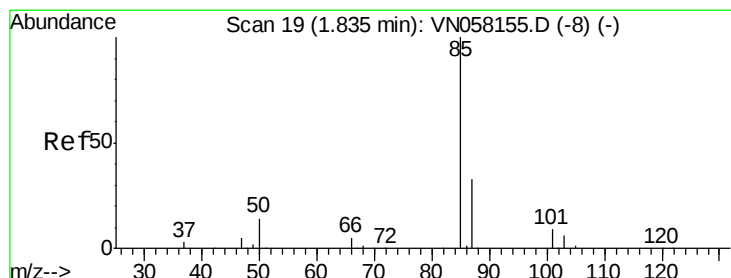
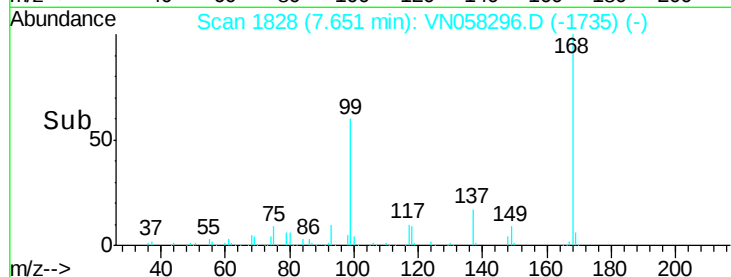
100000

50000

0

7.60 7.70

Time-->



#2

Dichlorodifluoromethane

Concen: 0.497 ug/l

RT: 1.83 min Scan# 19

Delta R.T. -0.00 min

Lab File: VN058296.D

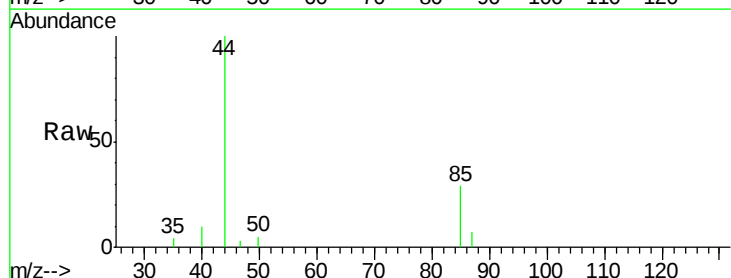
Acq: 23 Sep 2019 16:36

Tgt Ion: 85 Resp: 1959

Ion Ratio Lower Upper

85 100

87 25.5 16.3 48.9



Abundance Ion 84.90 (84.60 to 85.60): VNO

Ion 86.90 (86.60 to 87.60): VNO

1.83

1500

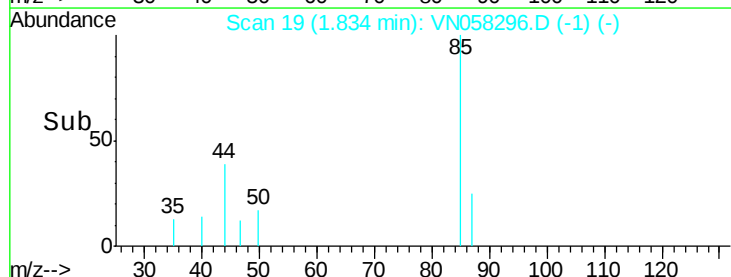
1000

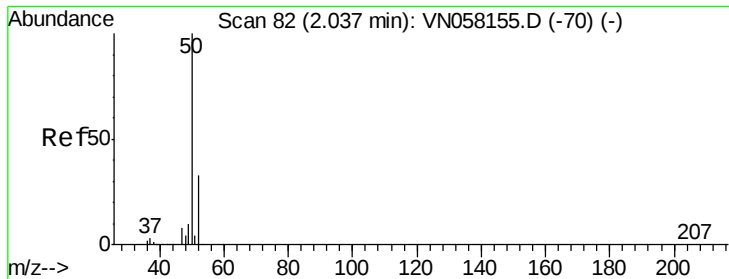
500

0

1.80 1.85

Time-->





#3

Chloromethane

Concen: Below Cal

RT: 2.04 min Scan# 82

Delta R.T. 0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

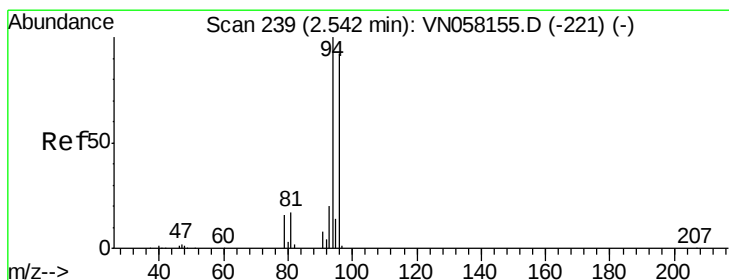
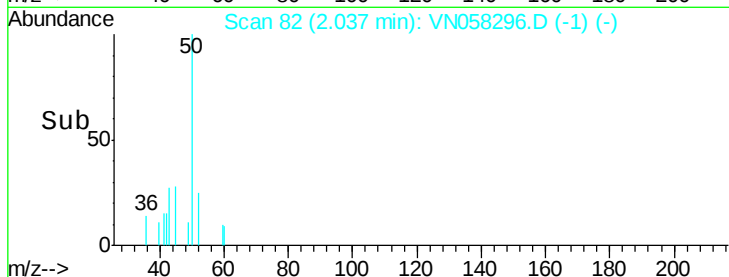
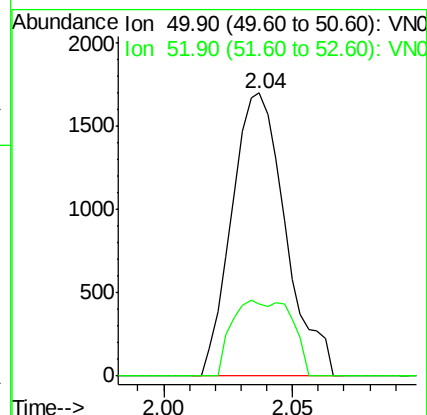
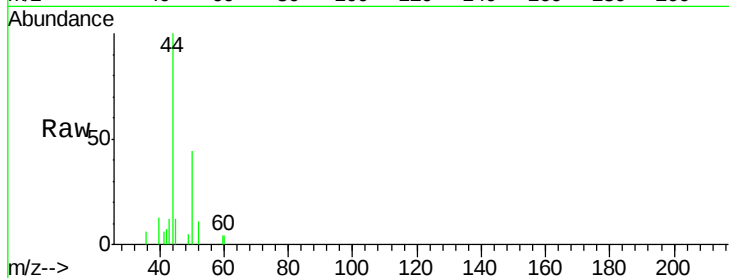
ClientSampleId :

Tot Ion: 50 Resp: 2459

Ion Ratio Lower Upper

50 100

52 25.3 26.3 39.5#



#5

Bromomethane

Concen: 0.941 ug/l

RT: 2.56 min Scan# 244

Delta R.T. 0.02 min

Lab File: VN058296.D

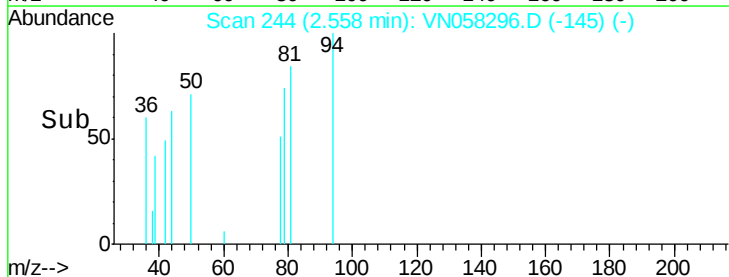
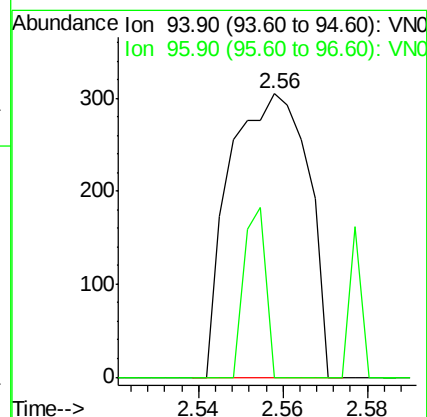
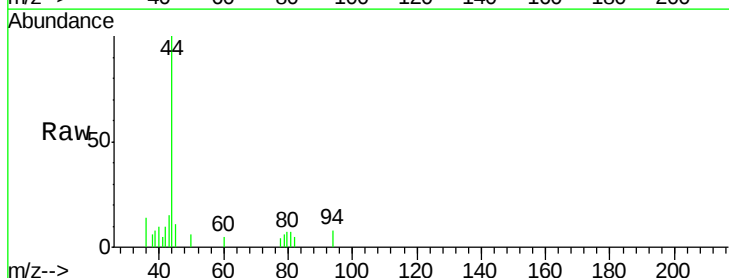
Acq: 23 Sep 2019 16:36

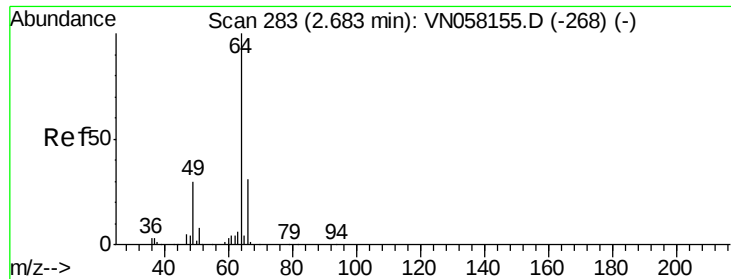
Tgt Ion: 94 Resp: 391

Ion Ratio Lower Upper

94 100

96 0.0 73.3 109.9#





#6

Chloroethane

Concen: Below Cal

RT: 2.44 min Scan# 206

Delta R.T. -0.25 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

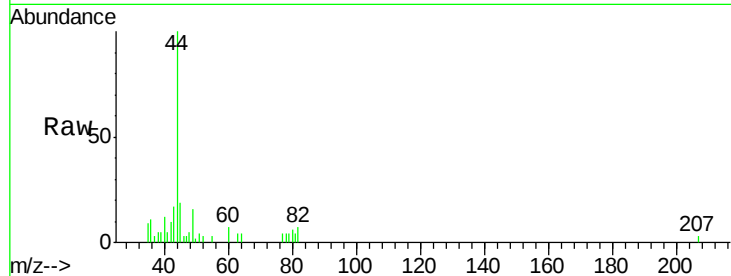
ClientSampleId :

Tot Ion: 64 Resp: 212

Ion Ratio Lower Upper

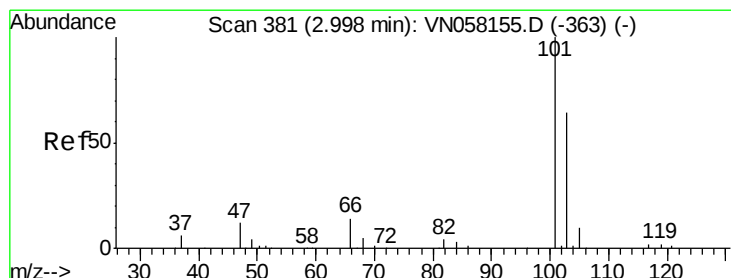
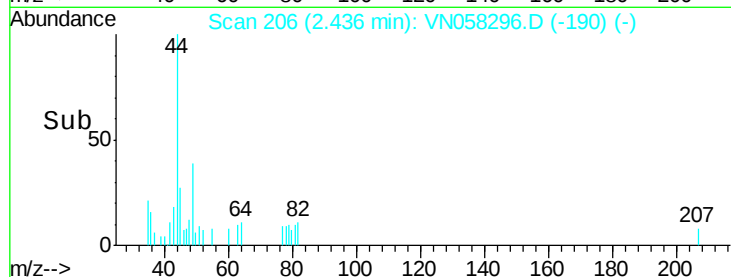
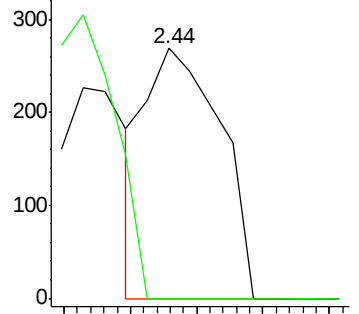
64 100

66 0.0 24.6 37.0#



Abundance Ion 63.90 (63.60 to 64.60): VN058155.D (-268) (-)

Ion 65.90 (65.60 to 66.60): VN058155.D (-268) (-)



#7

Trichlorofluoromethane

Concen: 0.206 ug/l

RT: 3.01 min Scan# 384

Delta R.T. 0.01 min

Lab File: VN058296.D

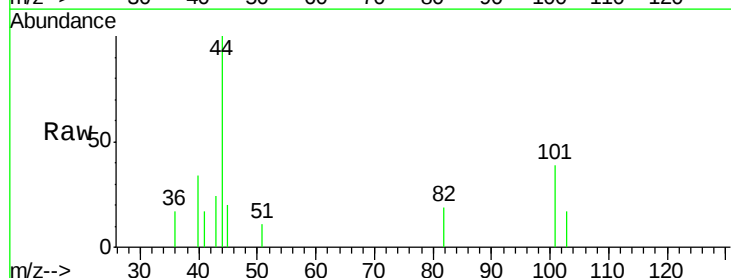
Acq: 23 Sep 2019 16:36

Tgt Ion:101 Resp: 1108

Ion Ratio Lower Upper

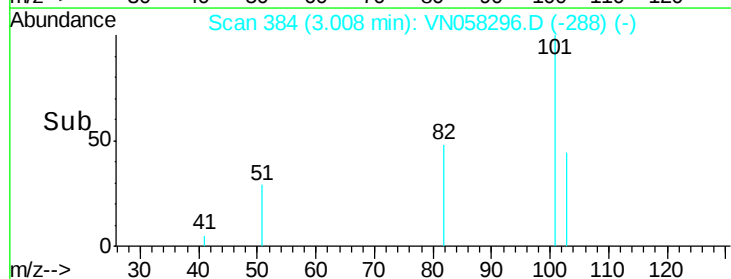
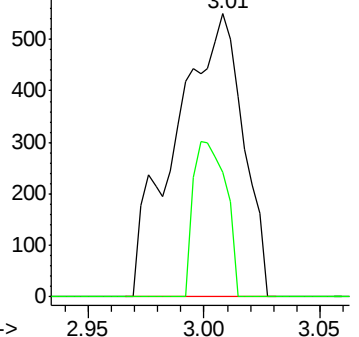
101 100

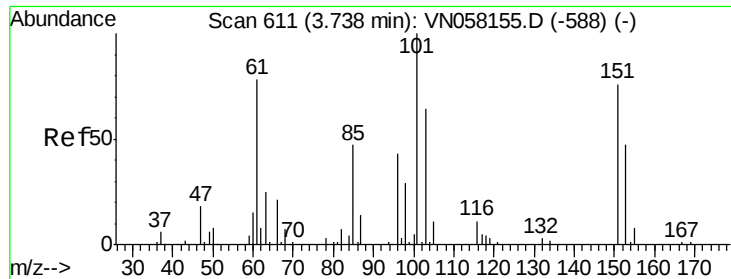
103 44.2 51.0 76.6#



Abundance Ion 100.90 (100.60 to 101.60): VN058155.D (-363) (-)

Ion 102.80 (102.50 to 103.50): VN058155.D (-363) (-)





#9

1,1,2-Trichlorotrifluoroethane

Concen: 5.758 ug/l

RT: 3.73 min Scan# 610

Delta R.T. -0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

ClientSampled :

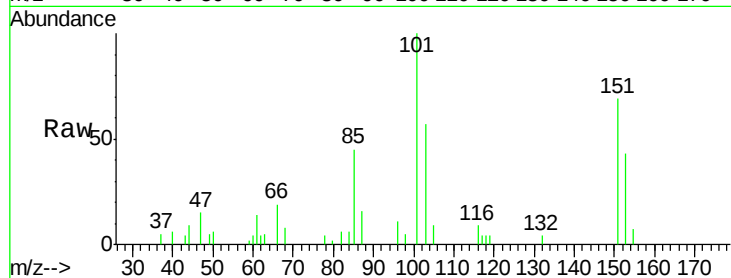
Tot Ion:101 Resp: 22346

Ion Ratio Lower Upper

101 100

85 47.7 37.3 55.9

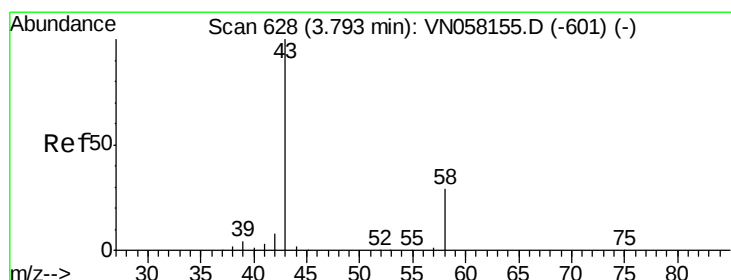
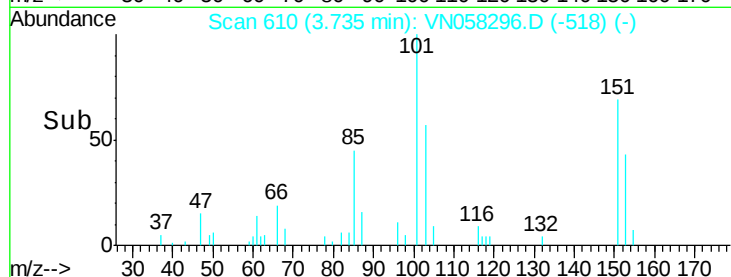
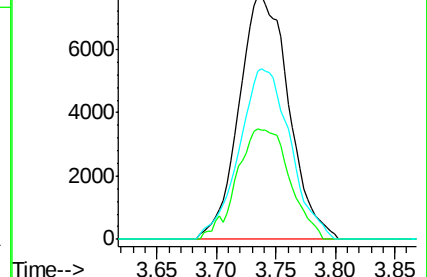
151 71.7 59.6 89.4



Abundance Ion 100.90 (100.60 to 101.60): V

Ion 84.90 (84.60 to 85.60): VNO

Ion 150.80 (150.50 to 151.50): V



#16

Acetone

Concen: 4.975 ug/l

RT: 3.80 min Scan# 631

Delta R.T. 0.01 min

Lab File: VN058296.D

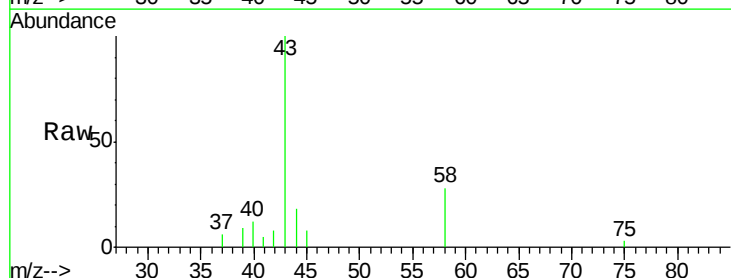
Acq: 23 Sep 2019 16:36

Tgt Ion: 43 Resp: 11292

Ion Ratio Lower Upper

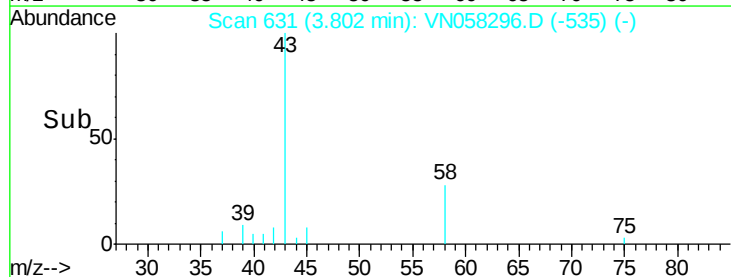
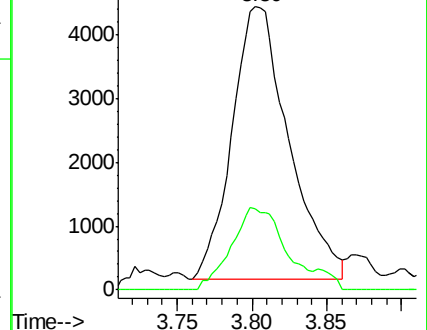
43 100

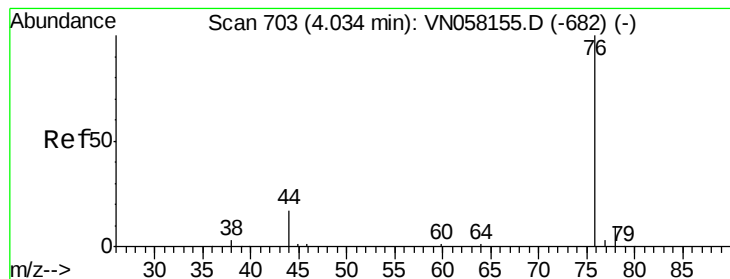
58 29.6 23.4 35.2



Abundance Ion 43.00 (42.70 to 43.70): VNO

Ion 58.00 (57.70 to 58.70): VNO





#17

Carbon Disulfide

Concen: 0.308 ug/l

RT: 4.03 min Scan# 703

Delta R.T. 0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

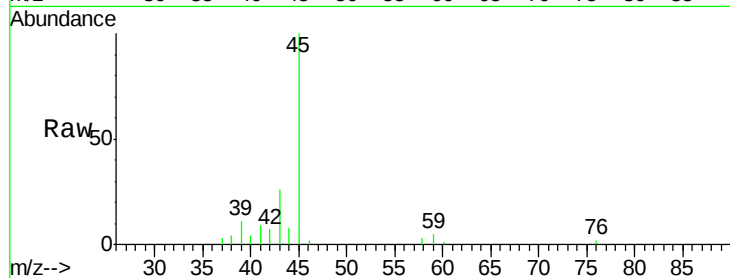
ClientSampled :

Tot Ion: 76 Resp: 156

Ion Ratio Lower Upper

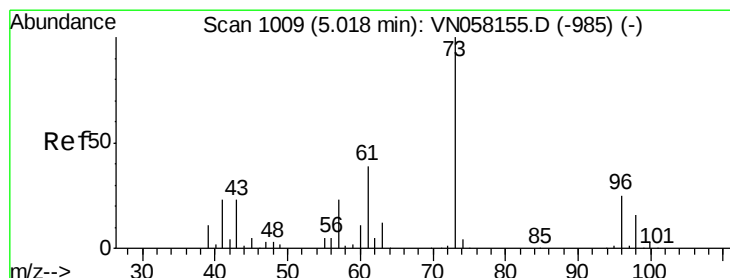
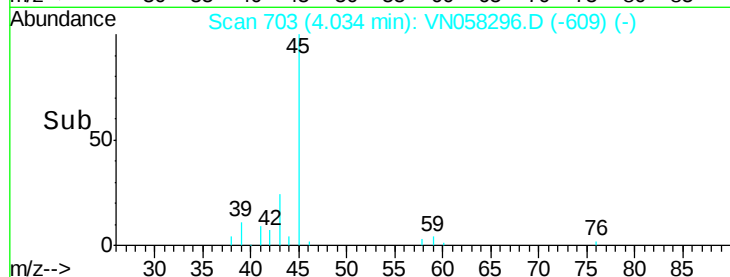
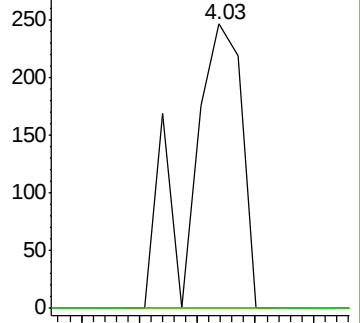
76 100

78 0.0 7.7 11.5#



Abundance Ion 75.90 (75.60 to 76.60): VNO

Ion 77.90 (77.60 to 78.60): VNO



#21

trans-1,2-Dichloroethene

Concen: Below Cal

RT: 5.02 min Scan# 1009

Delta R.T. 0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

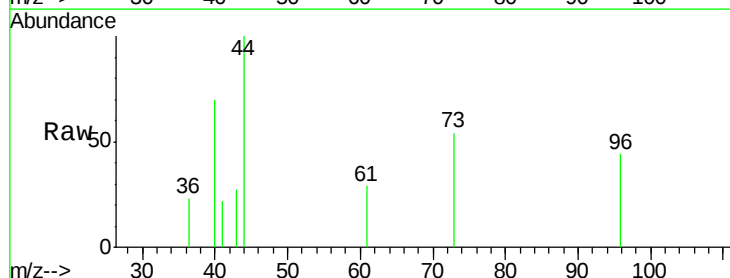
Tgt Ion: 96 Resp: 193

Ion Ratio Lower Upper

96 100

61 0.0 122.2 183.4#

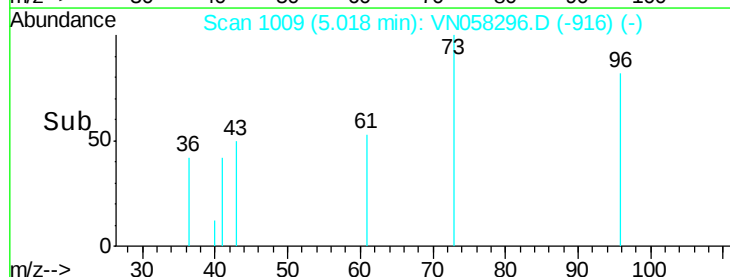
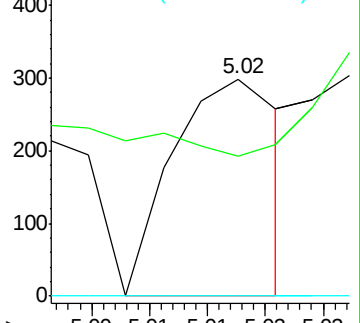
98 0.0 49.9 74.9#

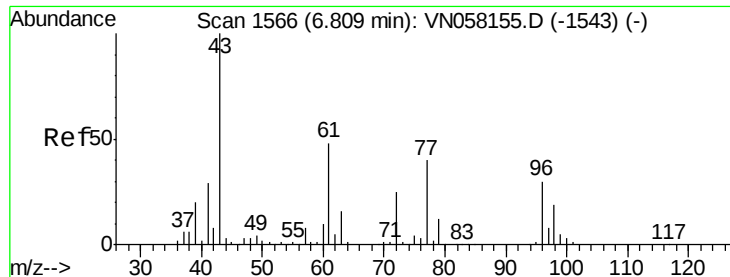


Abundance Ion 95.90 (95.60 to 96.60): VNO

Ion 60.90 (60.60 to 61.60): VNO

Ion 97.90 (97.60 to 98.60): VNO





#27

cis-1,2-Dichloroethene

Concen: 1.427 ug/l

RT: 6.81 min Scan# 1567

Delta R.T. 0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :
MSVOA_N
ClientSampleId :

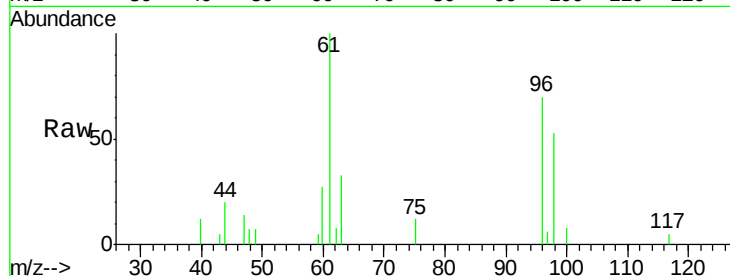
Tot Ion: 96 Resp: 6947

Ion Ratio Lower Upper

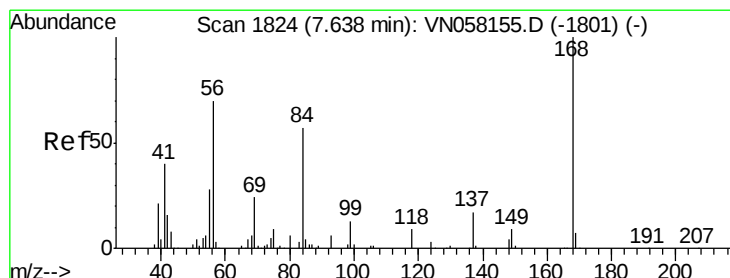
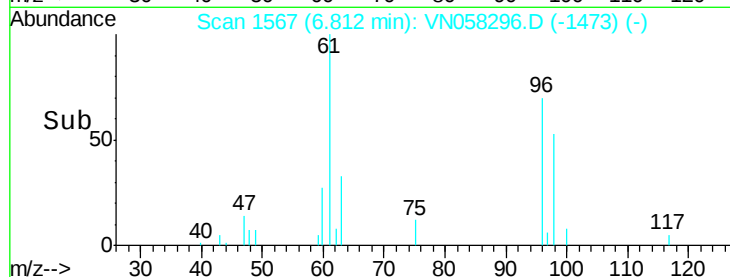
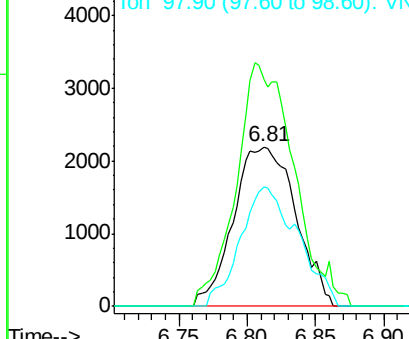
96 100

61 141.6 0.0 319.0

98 69.2 0.0 126.6



Abundance Ion 95.90 (95.60 to 96.60): VN0
Ion 60.90 (60.60 to 61.60): VN0
Ion 97.90 (97.60 to 98.60): VN0



#31

Cyclohexane

Concen: Below Cal

RT: 7.65 min Scan# 1827

Delta R.T. 0.01 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

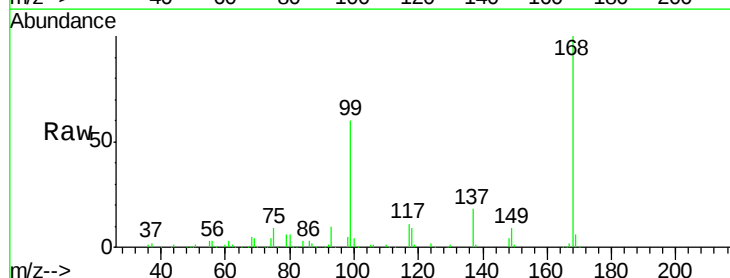
Tgt Ion: 56 Resp: 11824

Ion Ratio Lower Upper

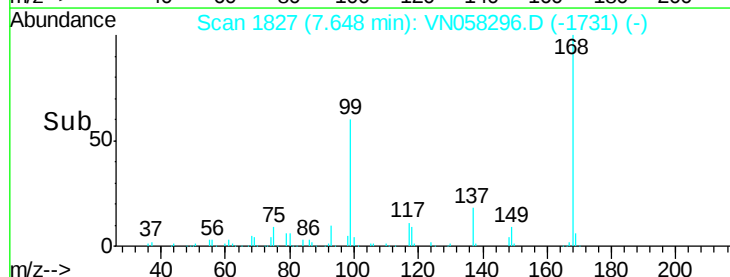
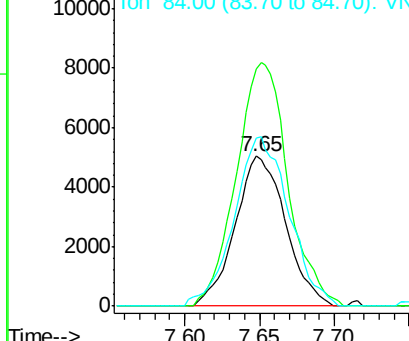
56 100

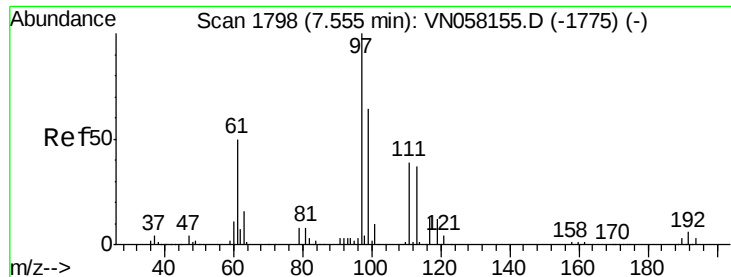
69 158.1 27.3 40.9#

84 112.3 65.0 97.4#



Abundance Ion 56.00 (55.70 to 56.70): VN0
Ion 69.00 (68.70 to 69.70): VN0
Ion 84.00 (83.70 to 84.70): VN0

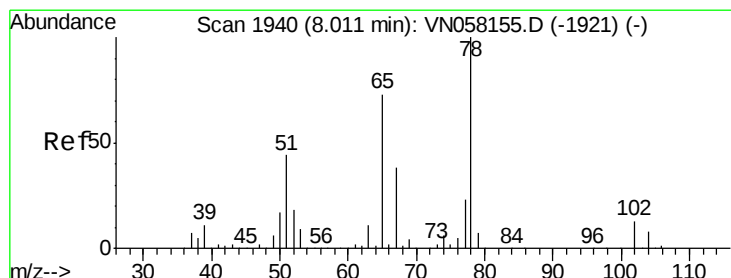
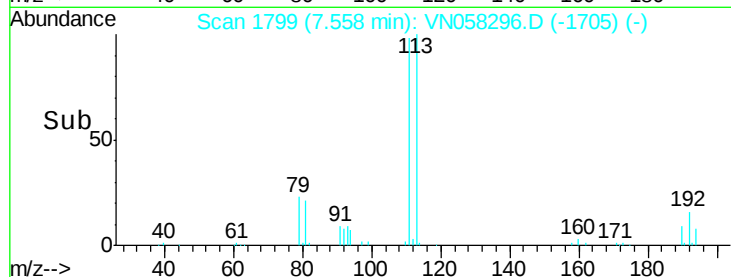
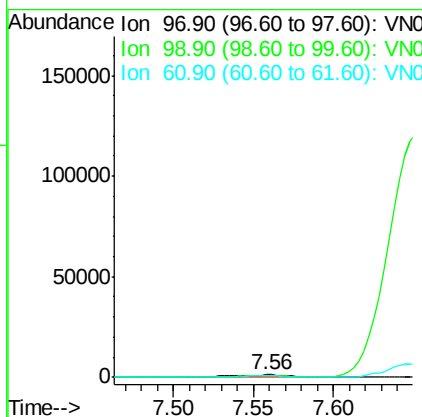
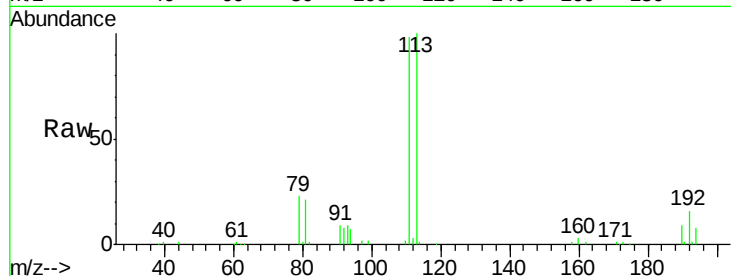




#32
 1,1,1-Trichloroethane
 Concen: 0.438 ug/l
 RT: 7.56 min Scan# 1799
 Delta R.T. 0.00 min
 Lab File: VN058296.D
 Acq: 23 Sep 2019 16:36

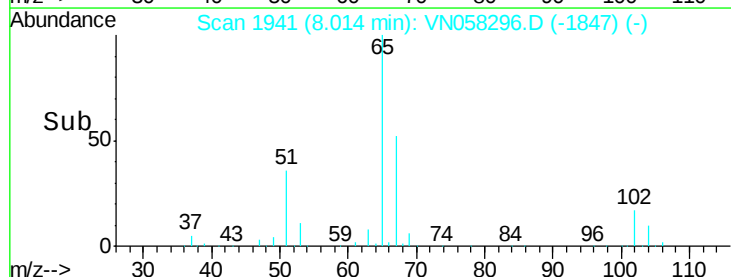
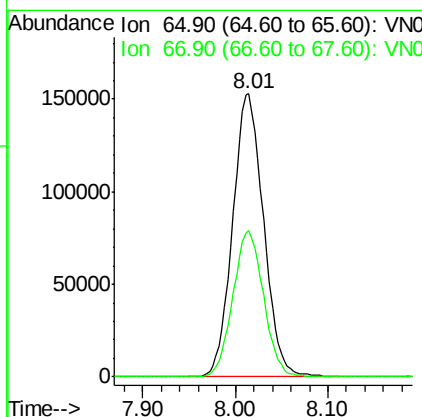
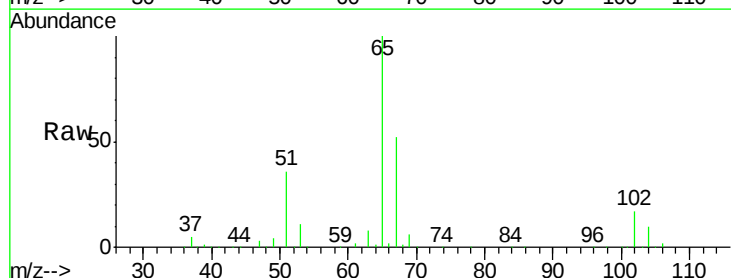
Instrument :
 MSVOA_N
 ClientSampleId :

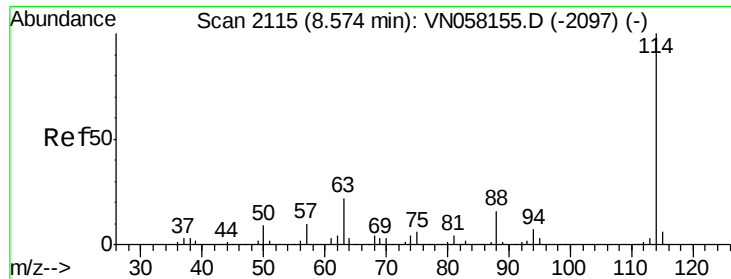
Tot Ion: 97 Resp: 3089
 Ion Ratio Lower Upper
 97 100
 99 0.0 50.9 76.3#
 61 30.9 39.2 58.8#



#33
 1,2-Dichloroethane-d4
 Concen: 52.875 ug/l
 RT: 8.01 min Scan# 1941
 Delta R.T. 0.00 min
 Lab File: VN058296.D
 Acq: 23 Sep 2019 16:36

Tgt Ion: 65 Resp: 353542
 Ion Ratio Lower Upper
 65 100
 67 51.4 0.0 103.4





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.58 min Scan# 2116

Delta R.T. 0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

ClientSampleId :

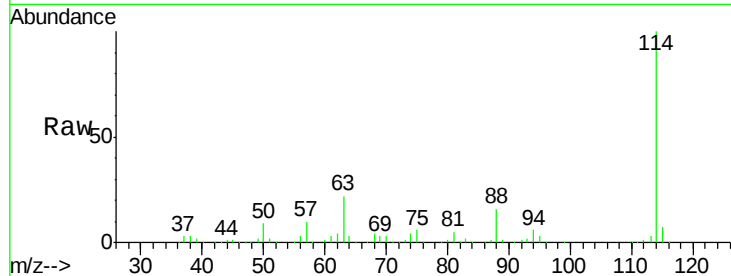
Tot Ion:114 Resp: 782352

Ion Ratio Lower Upper

114 100

63 22.2 0.0 44.2

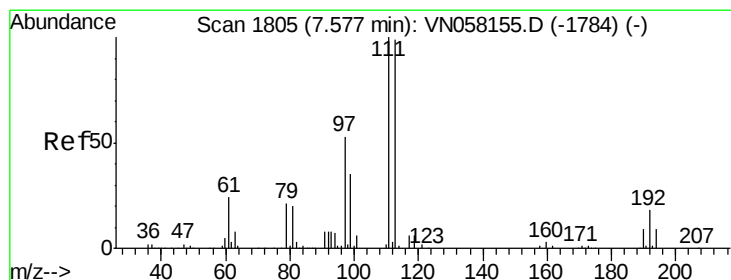
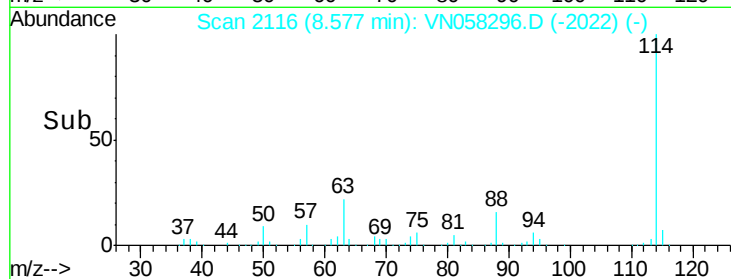
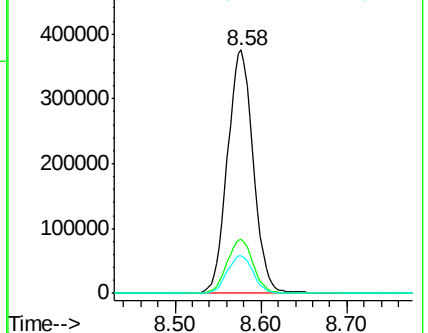
88 15.6 0.0 31.6



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN

Ion 87.90 (87.60 to 88.60): VN



#35

Dibromofluoromethane

Concen: 51.164 ug/l

RT: 7.58 min Scan# 1805

Delta R.T. -0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

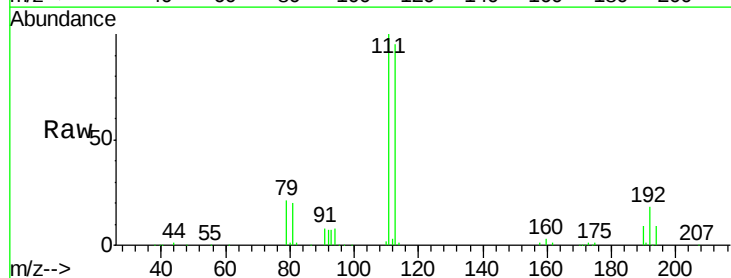
Tgt Ion:113 Resp: 243337

Ion Ratio Lower Upper

113 100

111 102.3 81.8 122.6

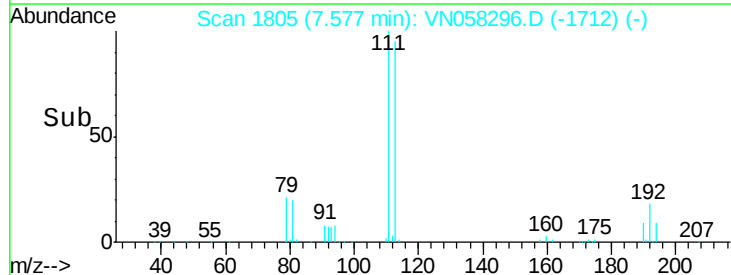
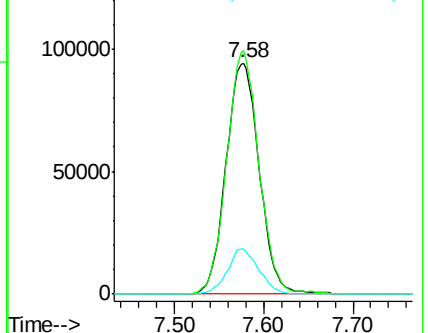
192 18.5 14.5 21.7

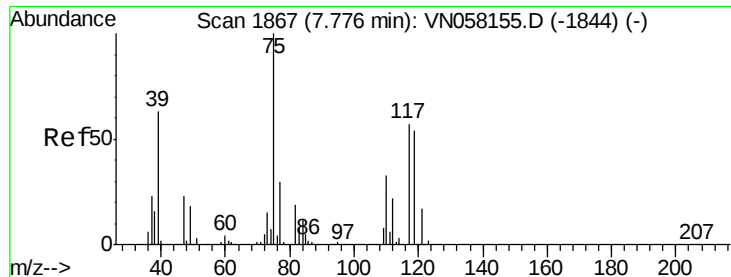


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

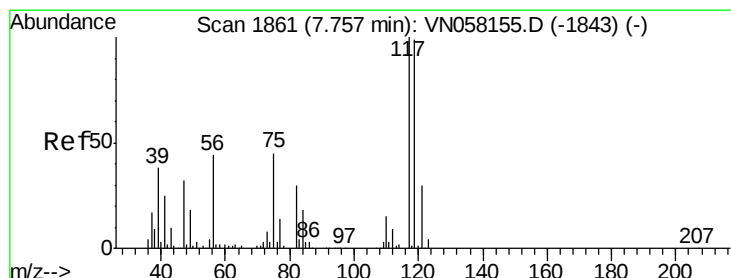
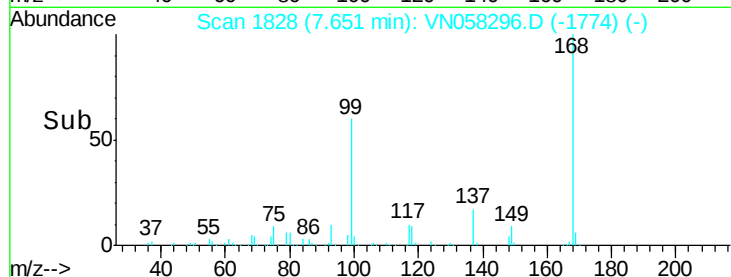
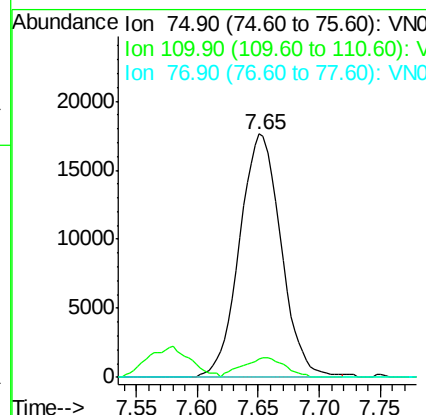
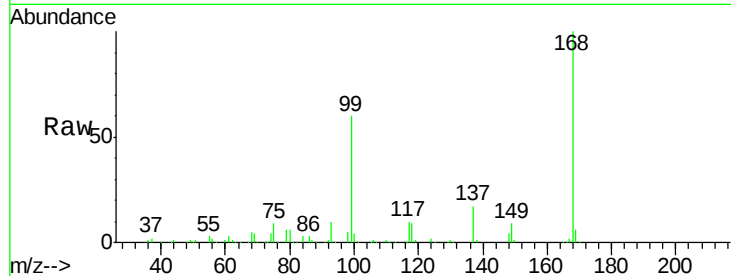




#36
 1,1-Dichloropropene
 Concen: 7.352 ug/l
 RT: 7.65 min Scan# 1828
 Delta R.T. -0.13 min
 Lab File: VN058296.D
 Acq: 23 Sep 2019 16:36

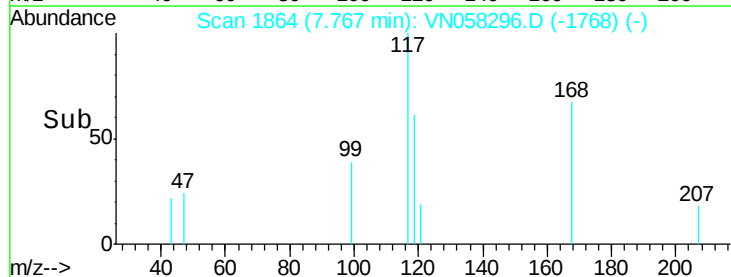
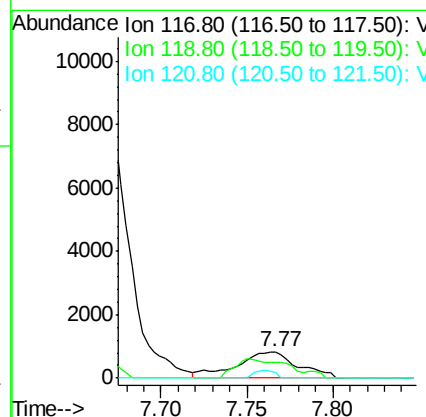
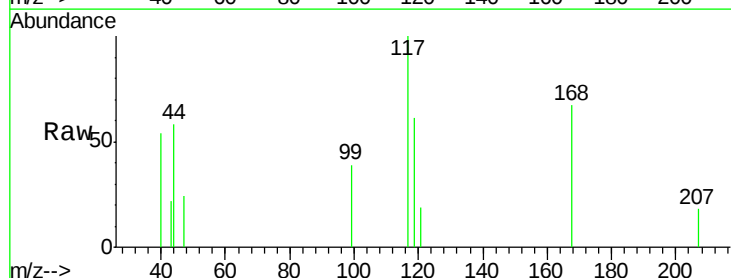
Instrument :
 MSVOA_N
 ClientSampled :

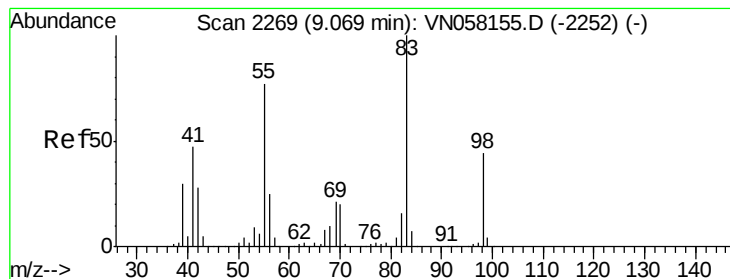
Tot Ion: 75 Resp: 41480
 Ion Ratio Lower Upper
 75 100
 110 8.2 16.6 49.7#
 77 0.0 24.3 36.5#



#38
 Carbon Tetrachloride
 Concen: 0.363 ug/l
 RT: 7.77 min Scan# 1864
 Delta R.T. 0.01 min
 Lab File: VN058296.D
 Acq: 23 Sep 2019 16:36

Tgt Ion: 117 Resp: 2057
 Ion Ratio Lower Upper
 117 100
 119 61.5 78.6 117.8#
 121 19.3 24.1 36.1#

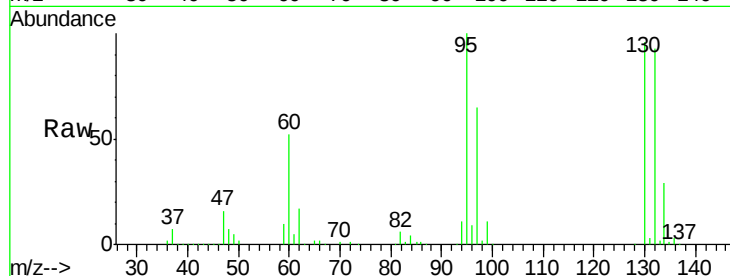




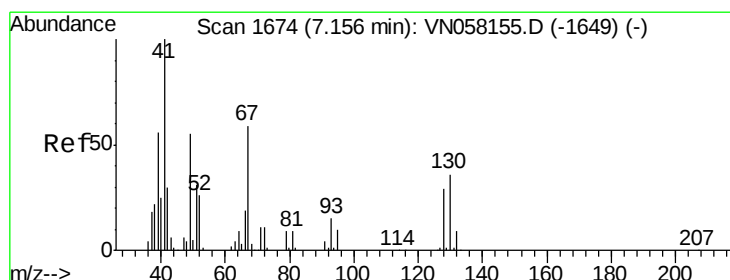
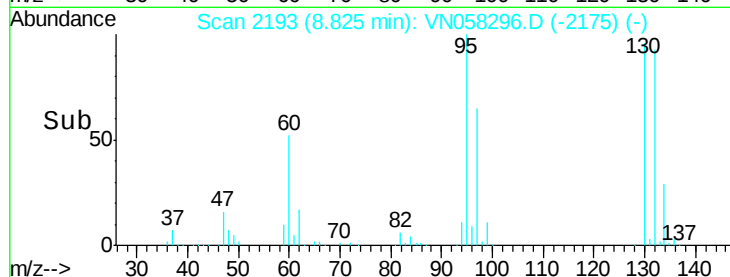
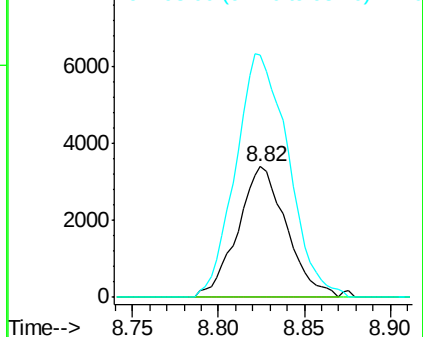
#39
Methvlcvclohexane
Concen: 1.295 ug/l
RT: 8.82 min Scan# 2193
Delta R.T. -0.24 min
Lab File: VN058296.D
Acq: 23 Sep 2019 16:36

Instrument :
MSVOA_N
ClientSampleId :

Tot Ion: 83 Resp: 6686
Ion Ratio Lower Upper
83 100
55 0.0 61.9 92.9#
98 185.2 35.4 53.2#



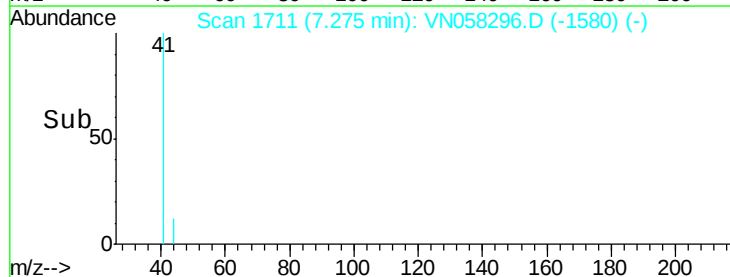
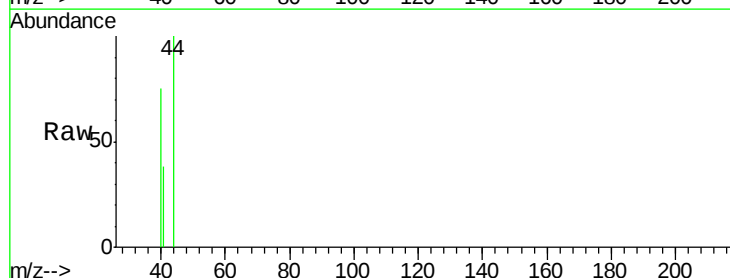
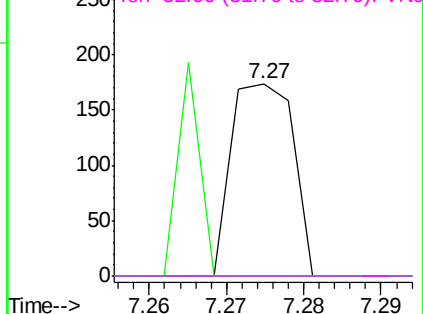
Abundance Ion 83.00 (82.70 to 83.70): VNC
Ion 55.00 (54.70 to 55.70): VNC
Ion 98.00 (97.70 to 98.70): VNC

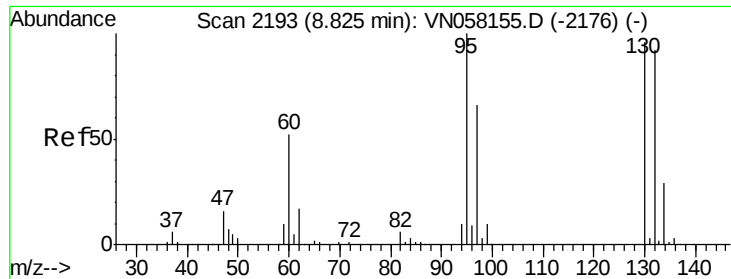


#41
Methacrylonitrile
Concen: 0.943 ug/l
RT: 7.27 min Scan# 1711
Delta R.T. 0.12 min
Lab File: VN058296.D
Acq: 23 Sep 2019 16:36

Tgt Ion: 41 Resp: 97
Ion Ratio Lower Upper
41 100
39 38.1 0.0 0.0#
67 0.0 0.0 0.0
52 0.0 0.0 0.0

Abundance Ion 41.00 (40.70 to 41.70): VNC
Ion 39.00 (38.70 to 39.70): VNC
Ion 67.00 (66.70 to 67.70): VNC
Ion 52.00 (51.70 to 52.70): VNC

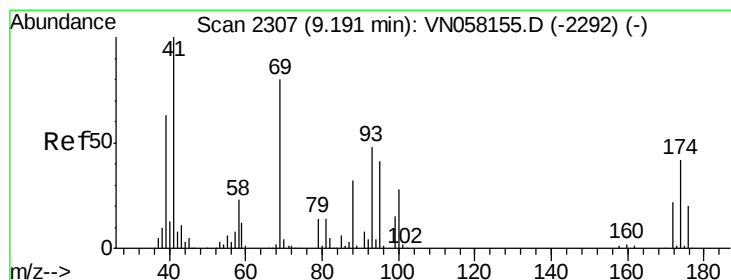
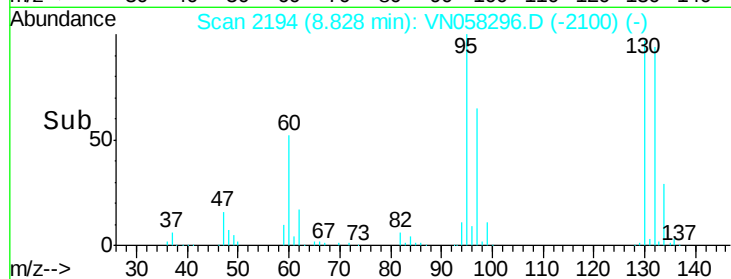
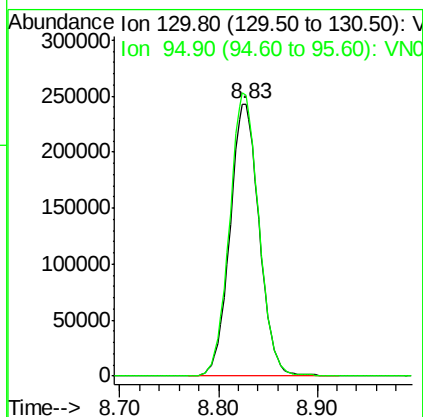
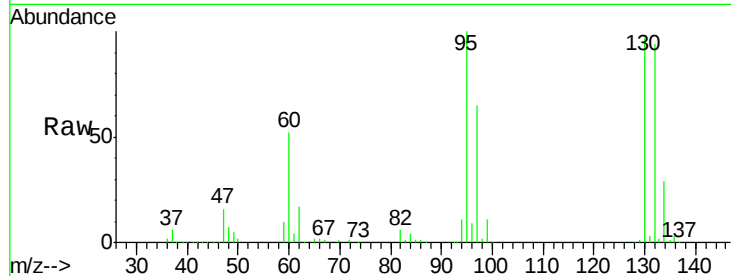




#44
 Trichloroethene
 Concen: 119.088 ug/l
 RT: 8.83 min Scan# 2194
 Delta R.T. 0.00 min
 Lab File: VN058296.D
 Acq: 23 Sep 2019 16:36

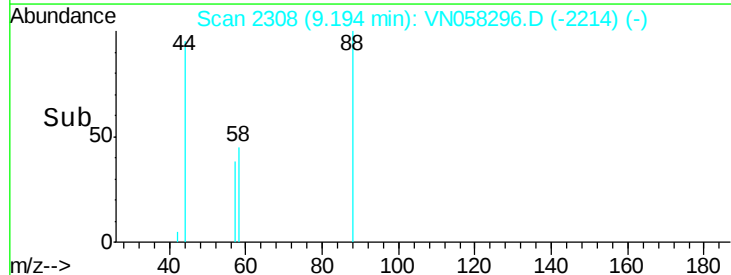
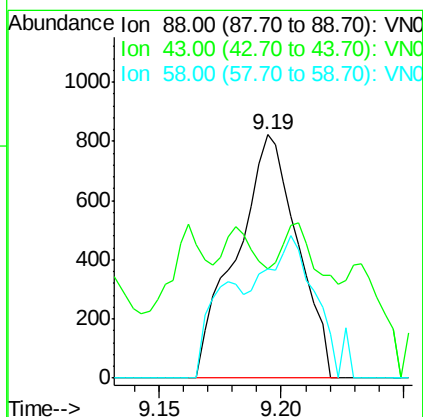
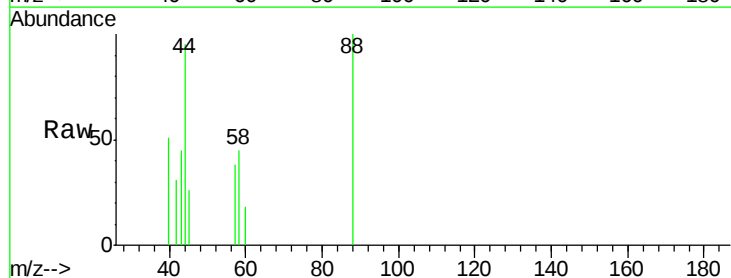
Instrument :
 MSVOA_N
 ClientSampleId :

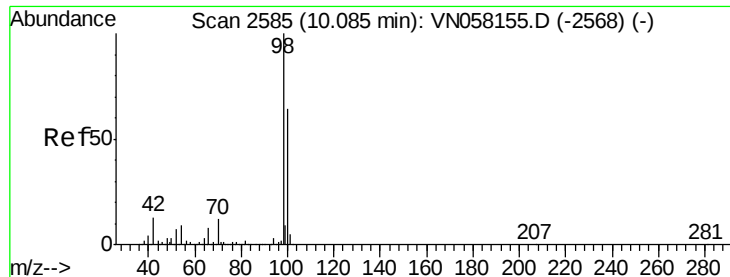
Tot Ion:130 Resp: 502190
 Ion Ratio Lower Upper
 130 100
 95 103.4 0.0 207.8



#49
 1,4-Dioxane
 Concen: 17.445 ug/l
 RT: 9.19 min Scan# 2308
 Delta R.T. 0.00 min
 Lab File: VN058296.D
 Acq: 23 Sep 2019 16:36

Tgt Ion: 88 Resp: 1422
 Ion Ratio Lower Upper
 88 100
 43 12.5 27.8 41.8#
 58 46.6 55.0 82.4#





#50

Toluene-d8

Concen: 52.545 ug/l

RT: 10.08 min Scan# 2585

Delta R.T. -0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

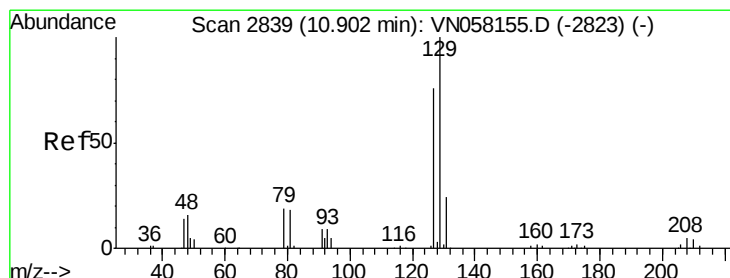
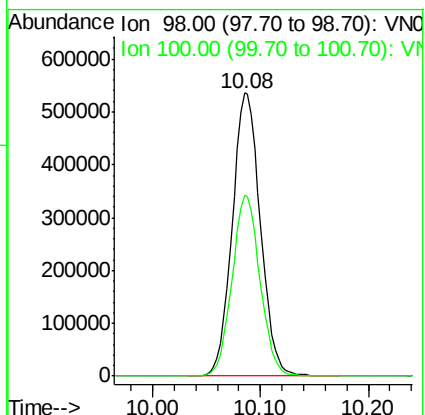
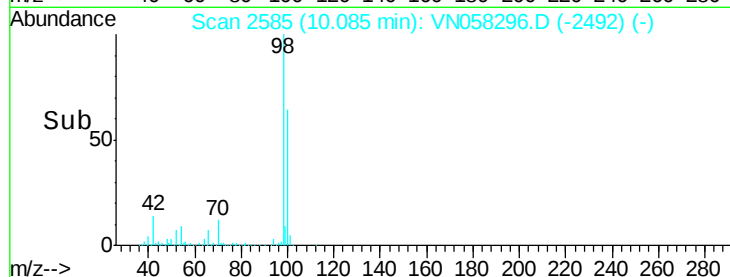
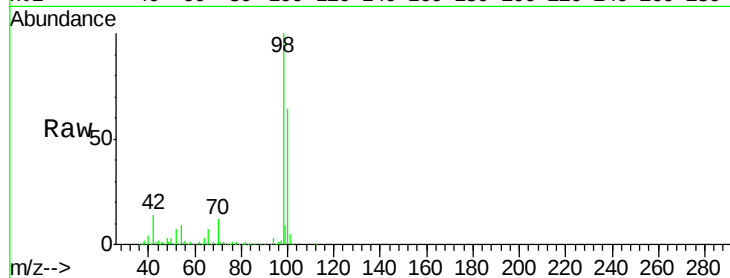
ClientSampled :

Tot Ion: 98 Resp: 973684

Ion Ratio Lower Upper

98 100

100 63.6 51.1 76.7



#60

Dibromochloromethane

Concen: 0.305 ug/l

RT: 10.63 min Scan# 2754

Delta R.T. -0.27 min

Lab File: VN058296.D

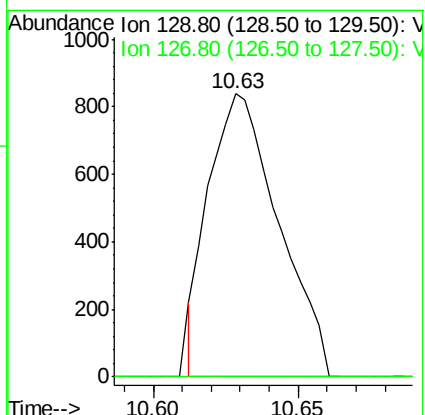
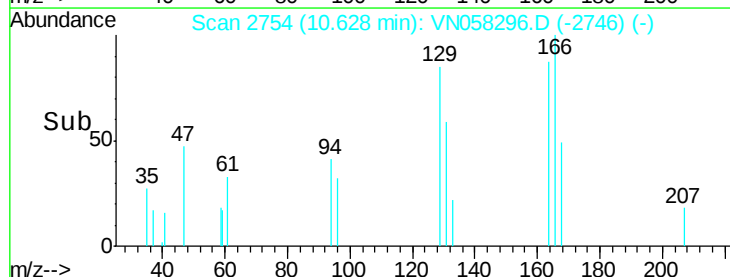
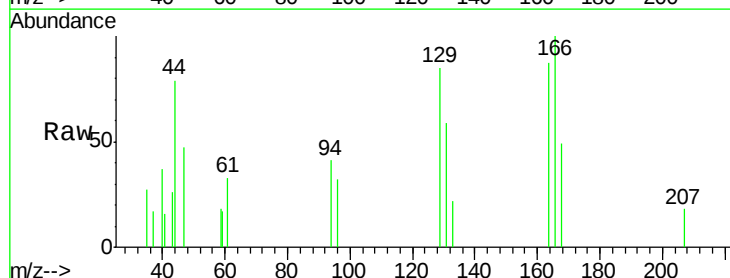
Acq: 23 Sep 2019 16:36

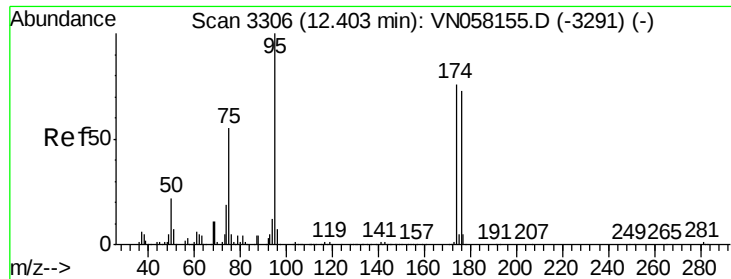
Tgt Ion: 129 Resp: 1408

Ion Ratio Lower Upper

129 100

127 0.0 38.7 116.1#





#62

4-Bromofluorobenzene

Concen: 44.580 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

ClientSampled :

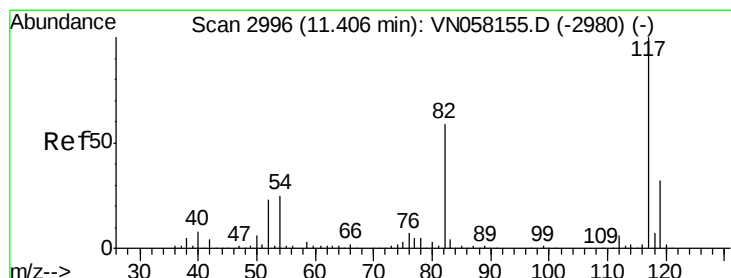
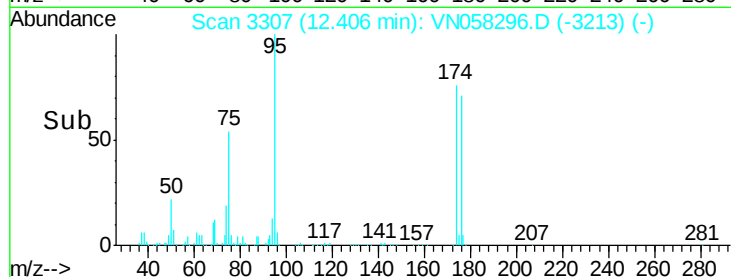
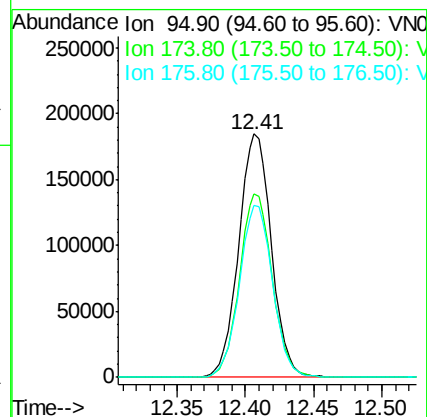
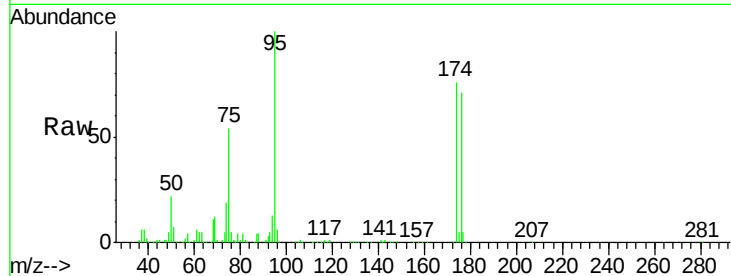
Tot Ion: 95 Resp: 306859

Ion Ratio Lower Upper

95 100

174 75.6 0.0 152.2

176 72.1 0.0 148.0



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2997

Delta R.T. 0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

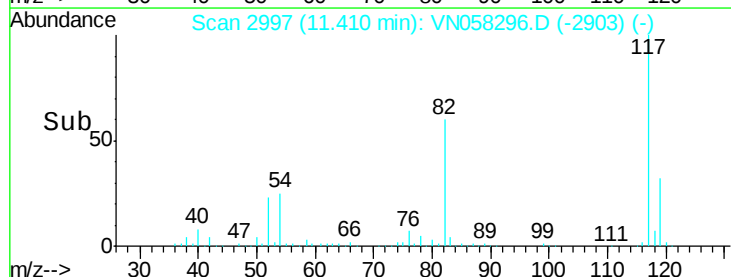
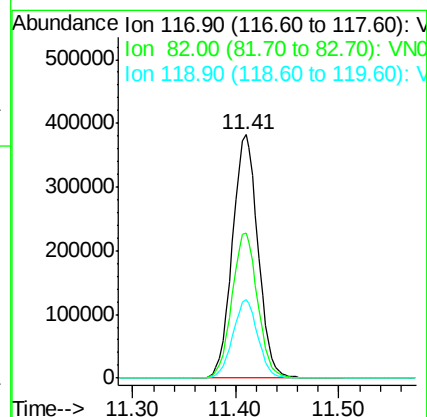
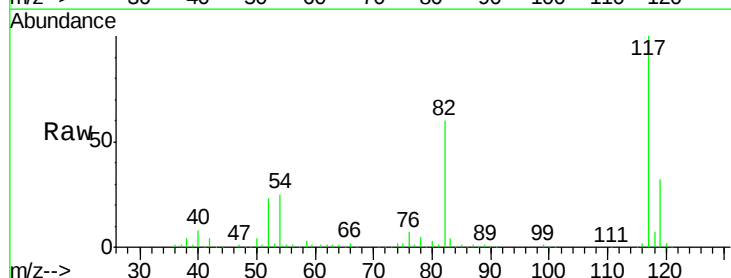
Tgt Ion: 117 Resp: 660158

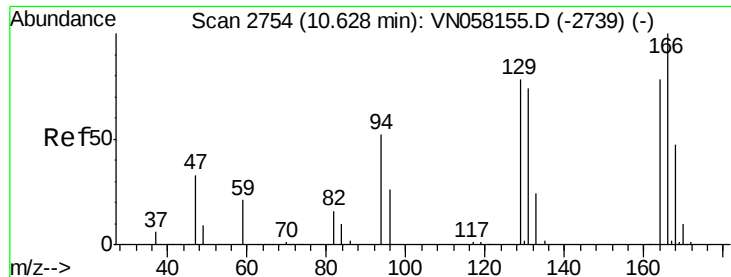
Ion Ratio Lower Upper

117 100

82 59.8 46.9 70.3

119 32.3 25.3 37.9





#64

Tetrachloroethene

Concen: 0.465 ug/l

RT: 10.63 min Scan# 2755

Delta R.T. 0.00 min

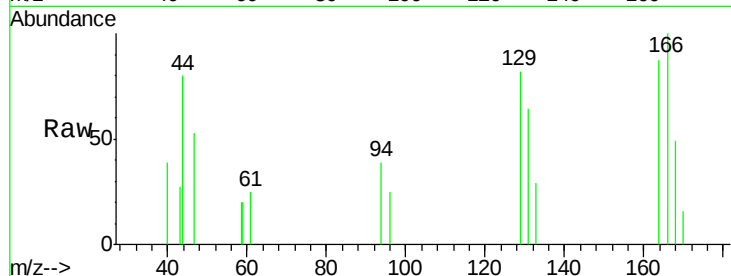
Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

ClientSampled :



Tot Ion:164 Resp: 1495

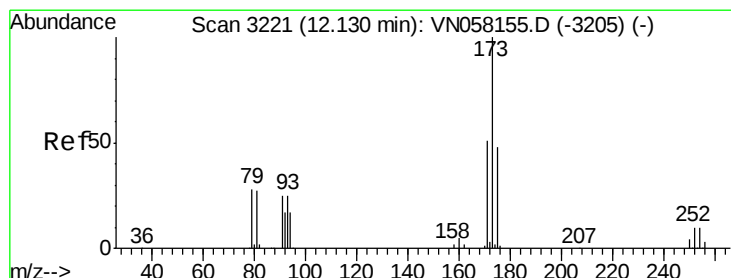
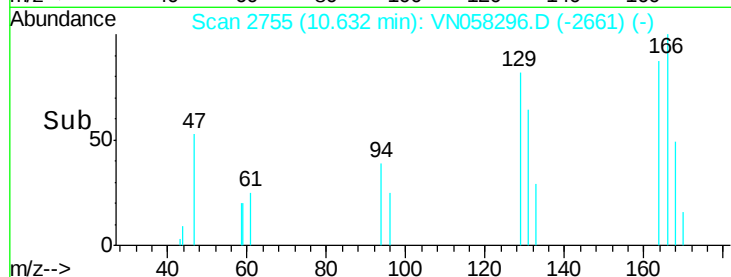
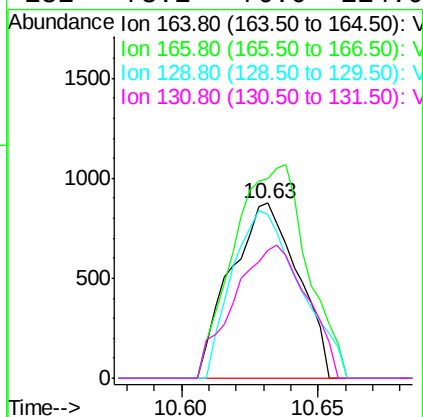
Ion Ratio Lower Upper

164 100

166 114.5 102.2 153.4

129 94.1 79.6 119.4

131 73.1 76.0 114.0#



#71

Bromoform

Concen: 3.650 ug/l

RT: 12.39 min Scan# 3302

Delta R.T. 0.26 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

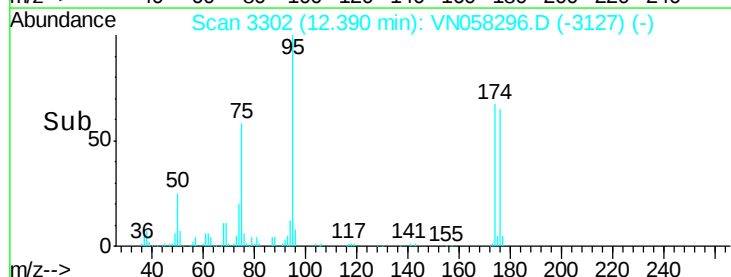
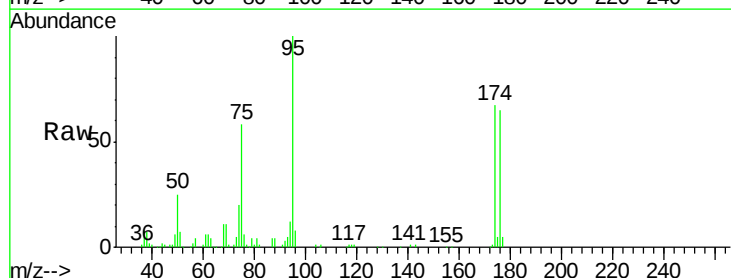
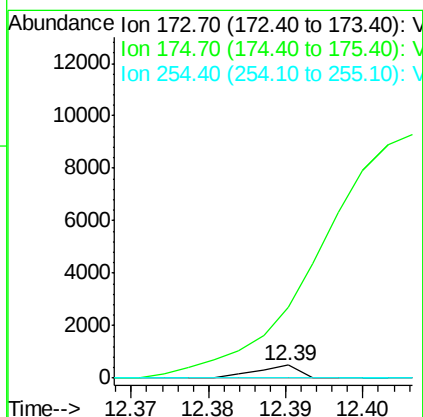
Tgt Ion:173 Resp: 185

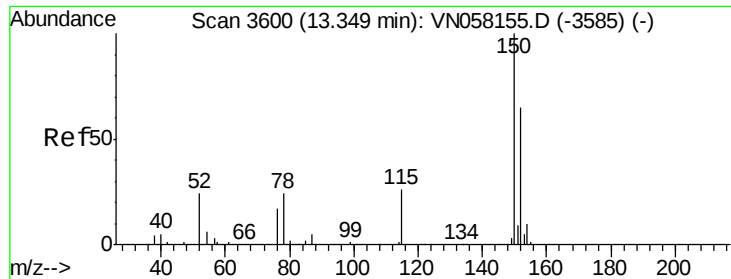
Ion Ratio Lower Upper

173 100

175 7138.9 24.2 72.6#

254 0.0 0.1 0.1#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.35 min Scan# 3601

Delta R.T. 0.00 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

ClientSampleId :

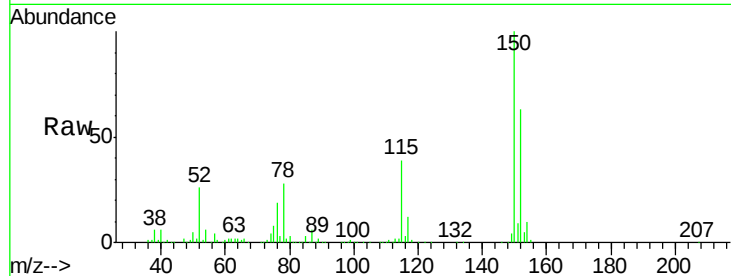
Tot Ion:152 Resp: 259244

Ion Ratio Lower Upper

152 100

115 61.5 30.1 90.3

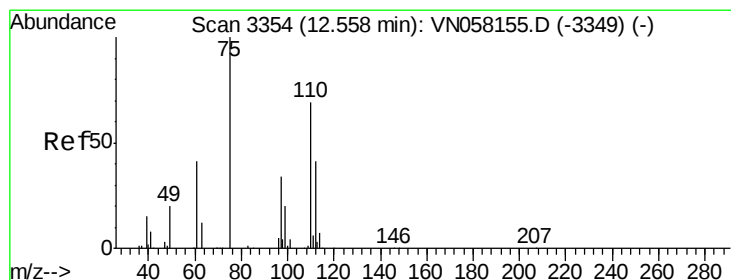
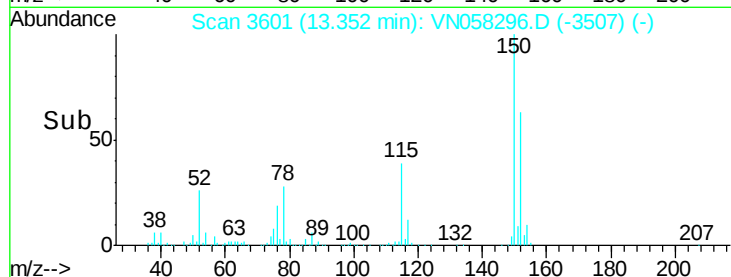
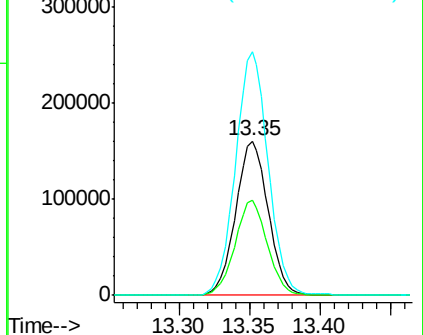
150 158.3 0.0 346.4



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: 36.163 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. -0.15 min

Lab File: VN058296.D

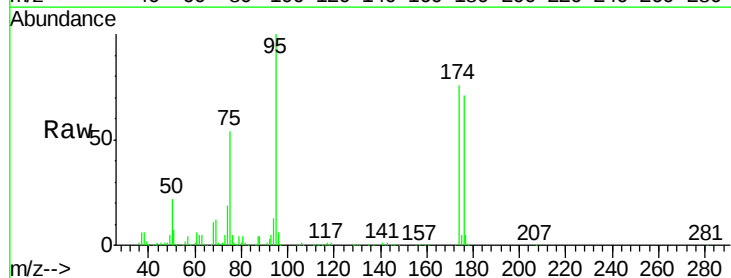
Acq: 23 Sep 2019 16:36

Tgt Ion: 75 Resp: 167783

Ion Ratio Lower Upper

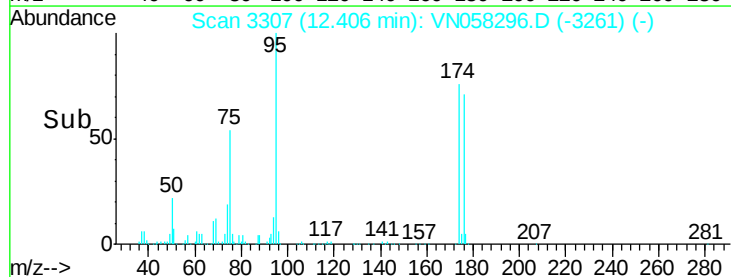
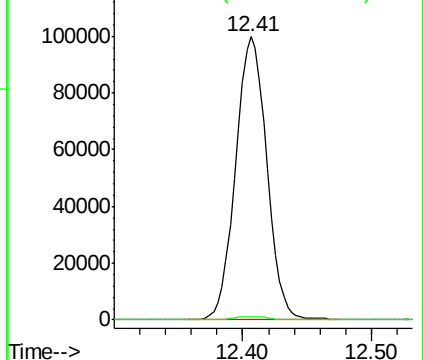
75 100

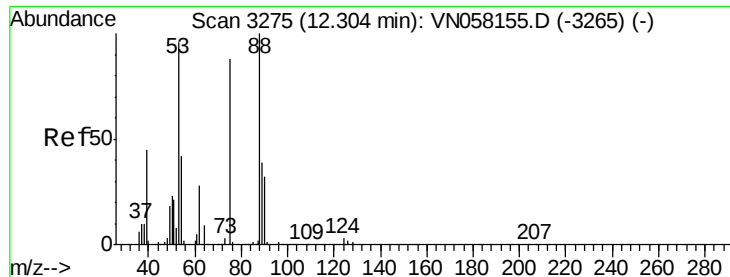
77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#81

trans-1,4-Dichloro-2-butene

Concen: 100.968 ug/l

RT: 12.41 min Scan# 3307

Delta R.T. 0.10 min

Lab File: VN058296.D

Acq: 23 Sep 2019 16:36

Instrument :

MSVOA_N

ClientSampleId :

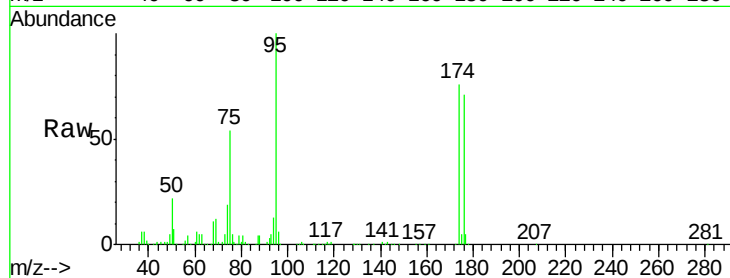
Tot Ion: 75 Resp: 167783

Ion Ratio Lower Upper

75 100

53 0.0 90.1 135.1#

89 0.0 36.2 54.2#



Abundance Ion 74.90 (74.60 to 75.60): VNO

Ion 53.00 (52.70 to 53.70): VNO

Ion 88.90 (88.60 to 89.60): VNO

