

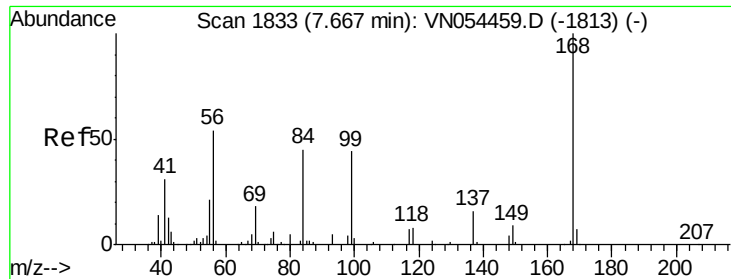
Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN032419\
 Data File : VN054642.D
 Acq On : 24 Mar 2019 12:36
 Operator : JC/SP
 Sample : K2047-02
 Misc : 6.58g/5mL/100uL/5.00mL/MSVOA_N/MEOH
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Mar 25 06:11:18 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N032019W.M
 Quant Title : SW846 8260
 QLast Update : Fri Mar 22 02:09:07 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.66	168	542583	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.58	114	849349	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	741780	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	309505	50.00	ug/l	0.00
System Monitoring Compounds						
33) 1,2-Dichloroethane-d4	8.02	65	339931	50.37	ug/l	0.00
Spiked Amount	50.000		Recovery	=	100.74%	
35) Dibromofluoromethane	7.59	113	256929	46.95	ug/l	0.00
Spiked Amount	50.000		Recovery	=	93.90%	
50) Toluene-d8	10.09	98	1035963	50.36	ug/l	0.00
Spiked Amount	50.000		Recovery	=	100.72%	
62) 4-Bromofluorobenzene	12.40	95	332378	47.48	ug/l	0.00
Spiked Amount	50.000		Recovery	=	94.96%	
Target Compounds						
					Qvalue	
4) Vinyl Chloride	2.19	62	35938	5.072	ug/l	95
11) Tert butyl alcohol	4.73	59	429	1.050	ug/l #	70
13) Acrolein	3.60	56	279	0.495	ug/l	99
16) Acetone	3.82	43	695	0.343	ug/l #	38
18) Methyl Acetate	4.32	43	1213	0.268	ug/l #	82
27) cis-1,2-Dichloroethene	6.82	96	26957	4.229	ug/l	98
29) Tetrahydrofuran	7.23	42	547	0.324	ug/l #	30
31) Cyclohexane	7.66	56	11926	Below Cal	#	23
36) 1,1-Dichloropropene	7.66	75	40439	5.092	ug/l #	47
38) Carbon Tetrachloride	7.66	117	49401	6.401	ug/l #	16
43) Isopropyl Acetate	8.27	43	8544	0.896	ug/l #	60
49) 1,4-Dioxane	9.21	88	29	0.501	ug/l #	1
53) t-1,3-Dichloropropene	10.35	75	31	2.236	ug/l #	42
67) Ethyl Benzene	11.51	91	8223	0.309	ug/l	95
68) m/p-Xylenes	11.61	106	2199	0.218	ug/l	92
69) o-Xylene	11.94	106	2497	0.253	ug/l	89
71) Bromoform	12.40	173	1983	2.728	ug/l #	1
74) N-amyl acetate	12.04	43	20840	2.906	ug/l #	64
76) 1,2,3-Trichloropropane	12.40	75	175459	35.725	ug/l #	100
78) n-propylbenzene	12.59	91	34181	1.264	ug/l	97
79) 2-Chlorotoluene	12.59	91	34181	2.027	ug/l #	38
81) trans-1,4-Dichloro-2-buten	12.40	75	175459	118.516	ug/l #	11
82) 4-Chlorotoluene	12.59	91	34181	2.091	ug/l #	39
90) Hexachloroethane	13.94	117	936	0.304	ug/l #	2
94) Hexachlorobutadiene	15.01	225	64	Below Cal	#	19
95) Naphthalene	15.13	128	4185	0.379	ug/l #	83

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.66 min Scan# 1831

Delta R.T. -0.01 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

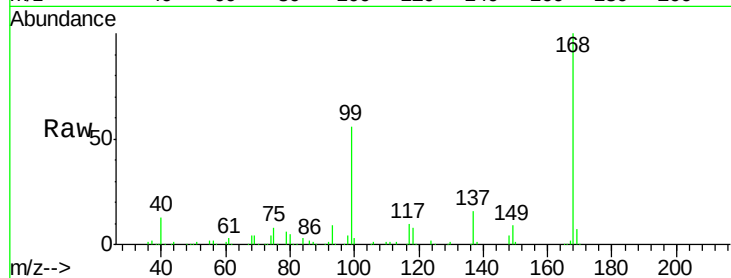
ClientSampleId :

Tot Ion:168 Resp: 542583

Ion Ratio Lower Upper

168 100

99 55.9 37.1 55.7#



Abundance Ion 167.90 (167.60 to 168.60): V

Ion 98.90 (98.60 to 99.60): VNO

7.66

250000

200000

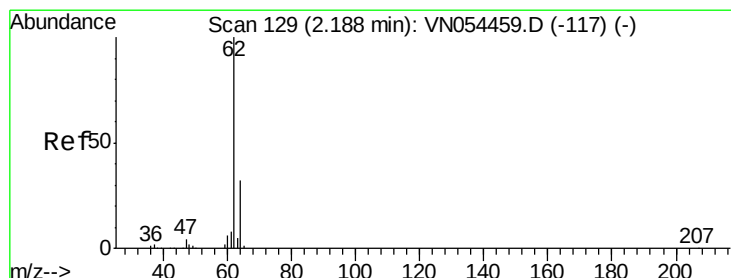
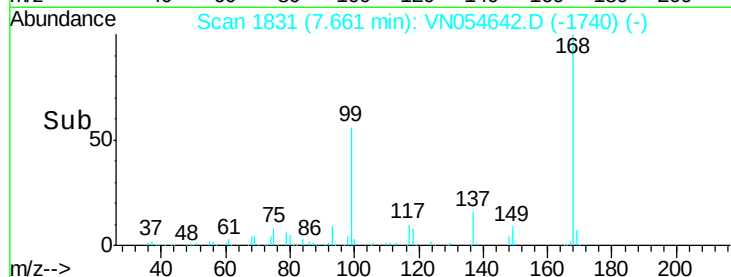
150000

100000

50000

0

Time-->



#4

Vinyl Chloride

Concen: 5.072 ug/l

RT: 2.19 min Scan# 129

Delta R.T. 0.00 min

Lab File: VN054642.D

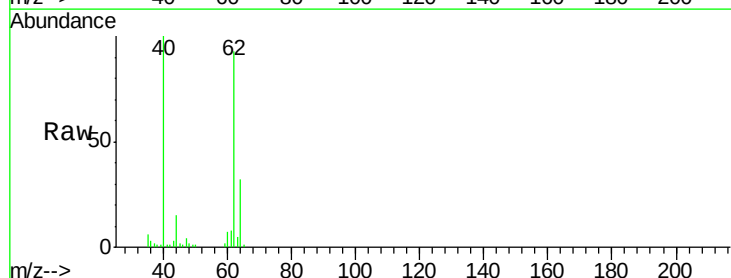
Acq: 24 Mar 2019 12:36

Tgt Ion: 62 Resp: 35938

Ion Ratio Lower Upper

62 100

64 34.4 25.5 38.3



Abundance Ion 61.90 (61.60 to 62.60): VNO

Ion 63.90 (63.60 to 64.60): VNO

2.19

25000

20000

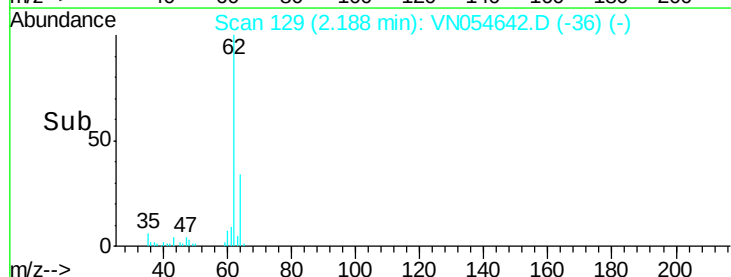
15000

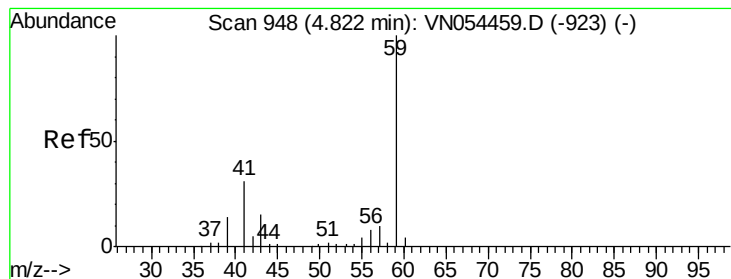
10000

5000

0

Time-->



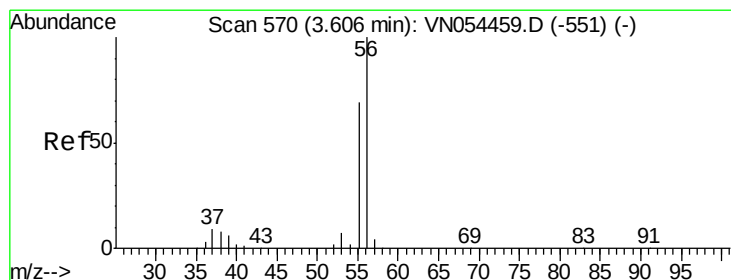
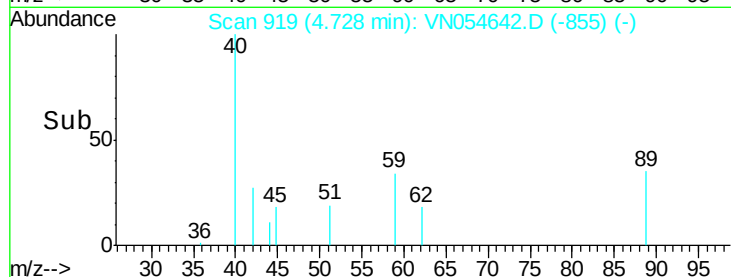
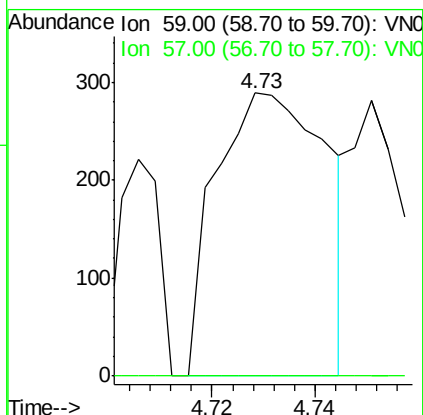
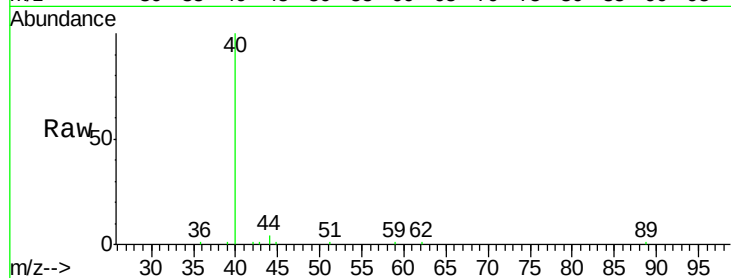


#11

Tert butyl alcohol
Concen: 1.050 ug/l
RT: 4.73 min Scan# 919
Delta R.T. -0.09 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

Instrument :
MSVOA_N
ClientSampleId :

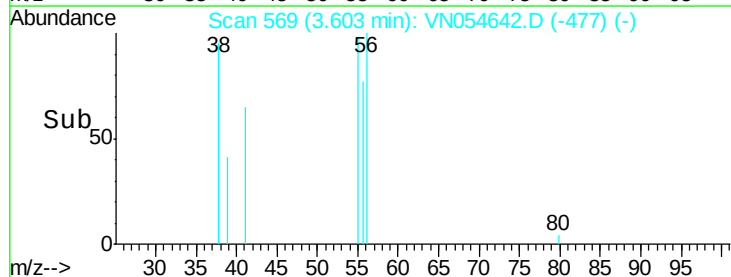
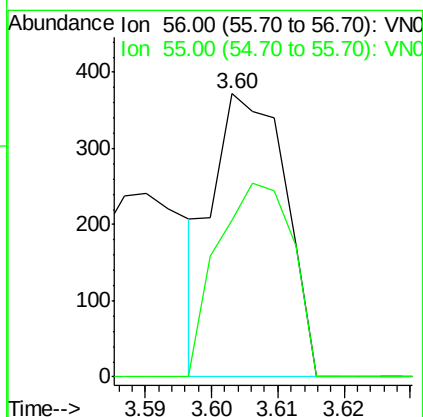
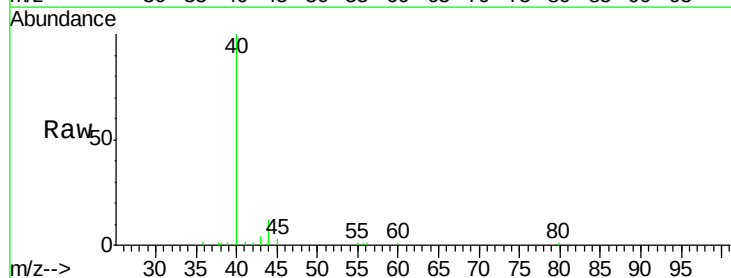
Tot Ion: 59 Resp: 429
Ion Ratio Lower Upper
59 100
57 0.0 9.0 13.6#

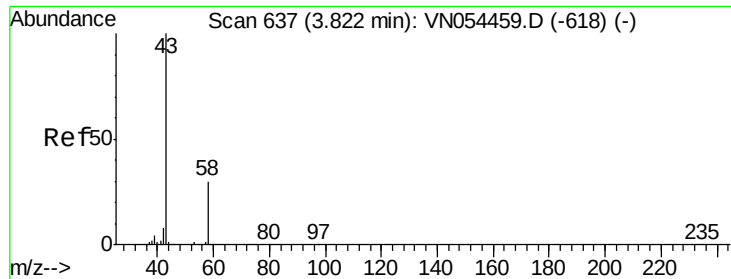


#13

Acrolein
Concen: 0.495 ug/l
RT: 3.60 min Scan# 569
Delta R.T. -0.00 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

Tgt Ion: 56 Resp: 279
Ion Ratio Lower Upper
56 100
55 71.3 56.7 85.1

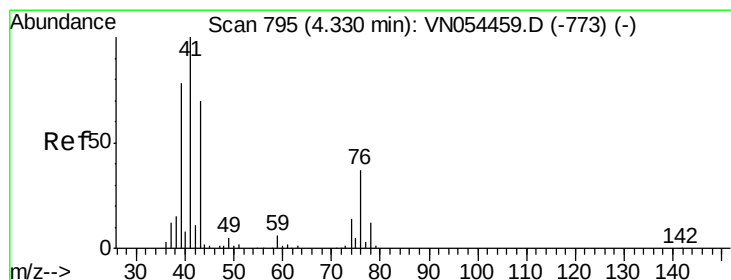
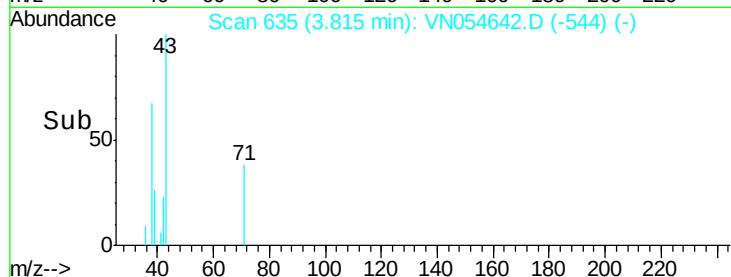
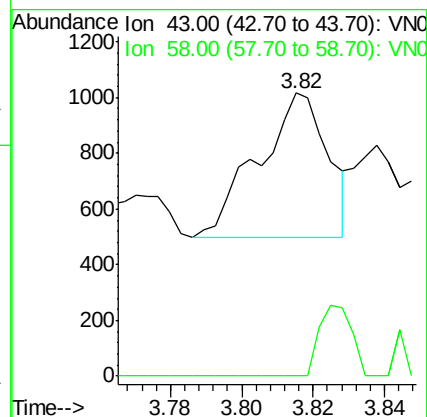
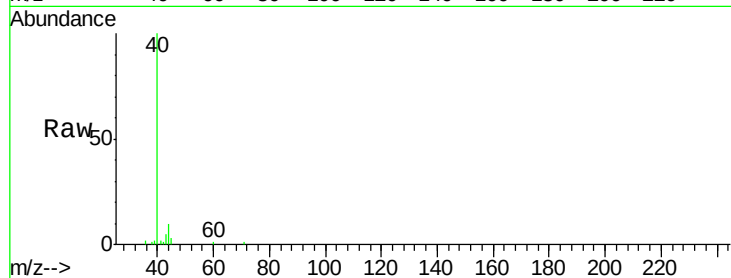




#16
Acetone
Concen: 0.343 ug/l
RT: 3.82 min Scan# 635
Delta R.T. -0.01 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

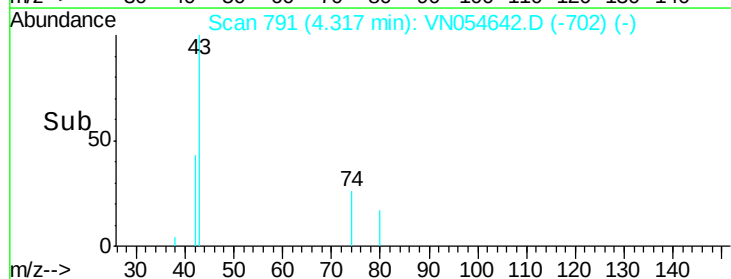
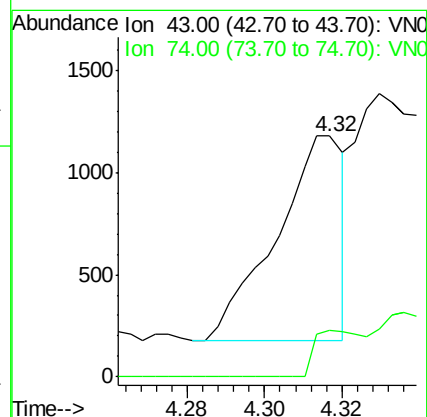
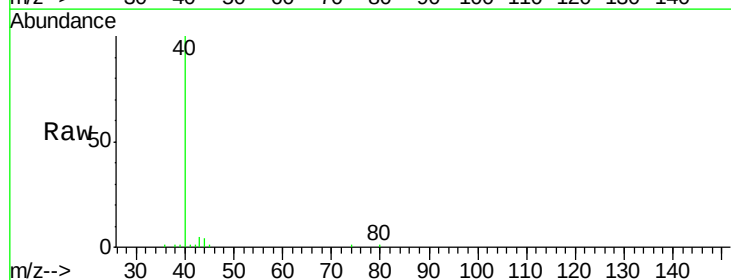
Instrument :
MSVOA_N
ClientSampled :

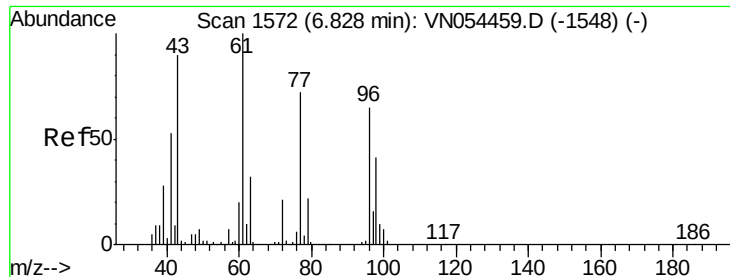
Tot Ion: 43 Resp: 695
Ion Ratio Lower Upper
43 100
58 0.0 29.9 44.9#



#18
Methyl Acetate
Concen: 0.268 ug/l
RT: 4.32 min Scan# 791
Delta R.T. -0.01 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

Tgt Ion: 43 Resp: 1213
Ion Ratio Lower Upper
43 100
74 17.0 20.8 31.2#





#27

cis-1,2-Dichloroethene

Concen: 4.229 ug/l

RT: 6.82 min Scan# 1569

Delta R.T. -0.01 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

ClientSampled :

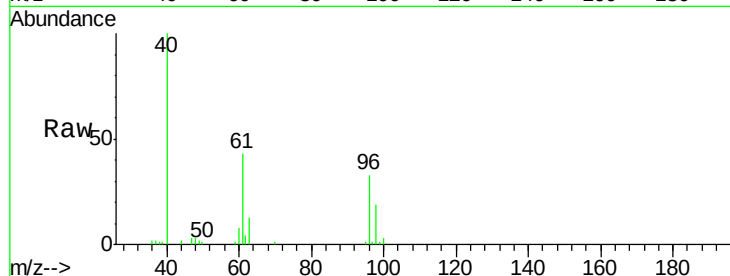
Tot Ion: 96 Resp: 26957

Ion Ratio Lower Upper

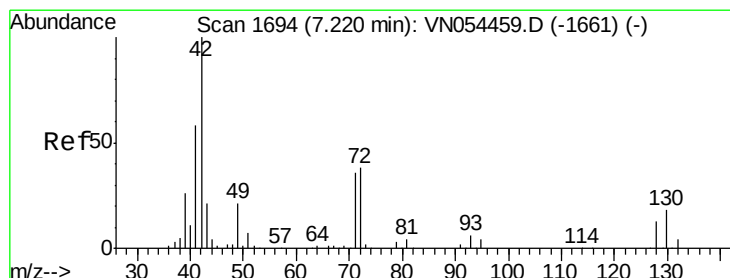
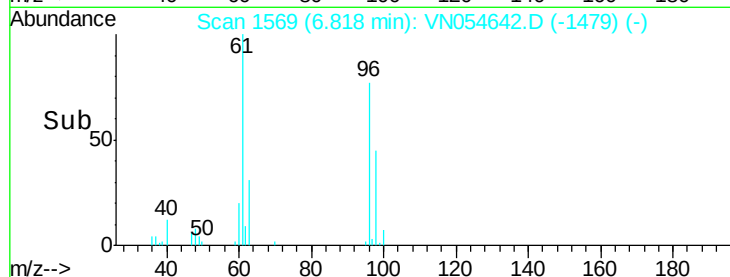
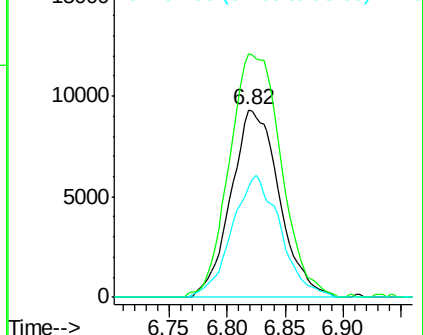
96 100

61 139.3 0.0 273.0

98 65.0 0.0 130.6



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



#29

Tetrahydrofuran

Concen: 0.324 ug/l

RT: 7.23 min Scan# 1698

Delta R.T. 0.01 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

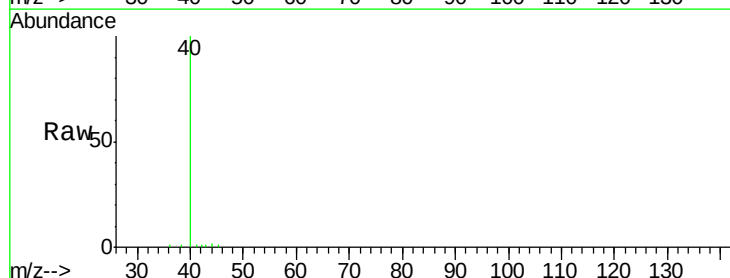
Tgt Ion: 42 Resp: 547

Ion Ratio Lower Upper

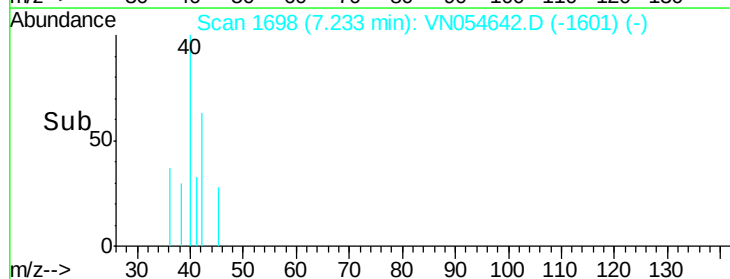
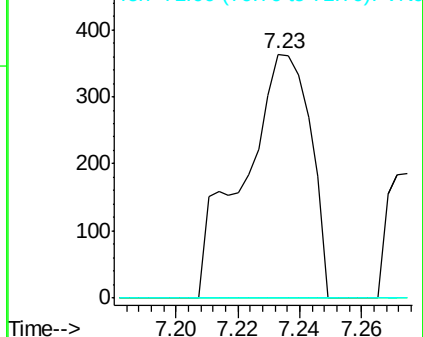
42 100

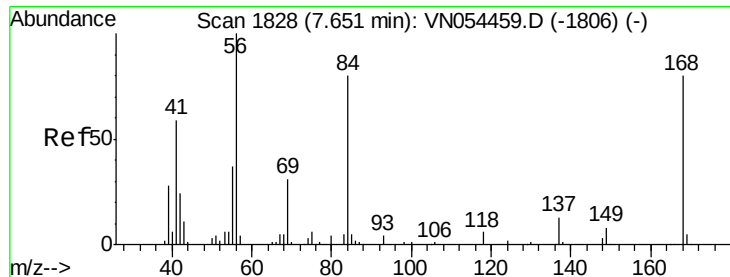
72 0.0 37.8 56.6#

71 0.0 36.2 54.2#



Abundance Ion 42.00 (41.70 to 42.70): VNO
Ion 72.00 (71.70 to 72.70): VNO
Ion 71.00 (70.70 to 71.70): VNO

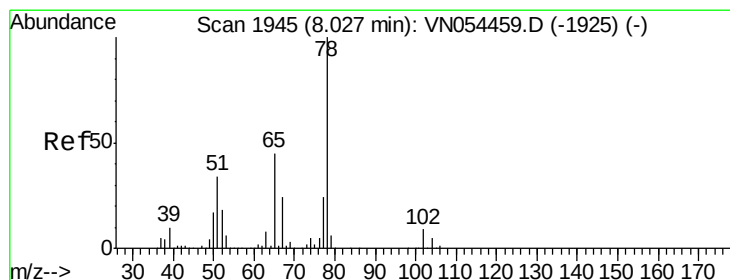
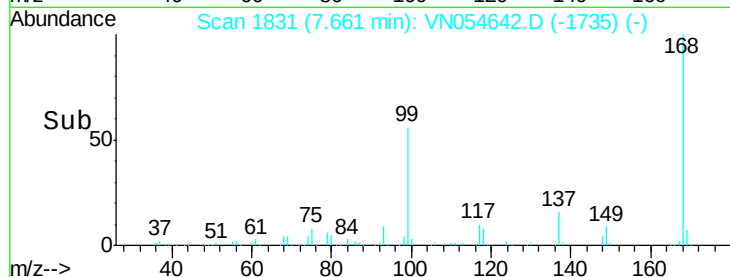
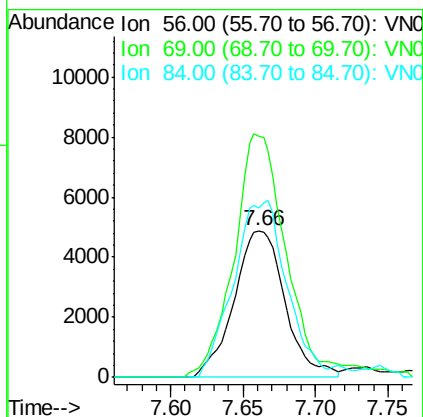
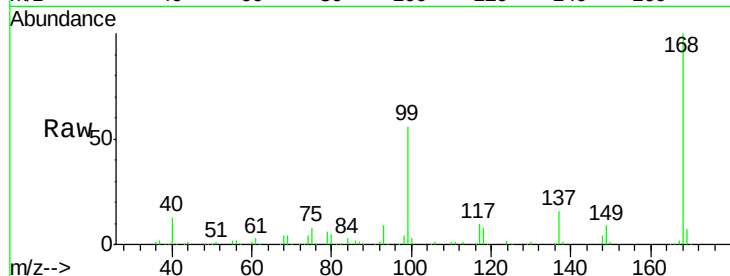




#31
Cyclohexane
Concen: Below Cal
RT: 7.66 min Scan# 1831
Delta R.T. 0.01 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

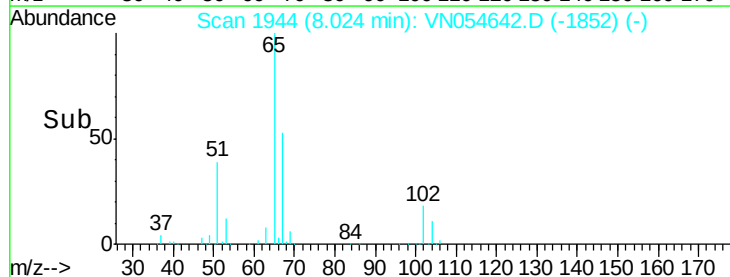
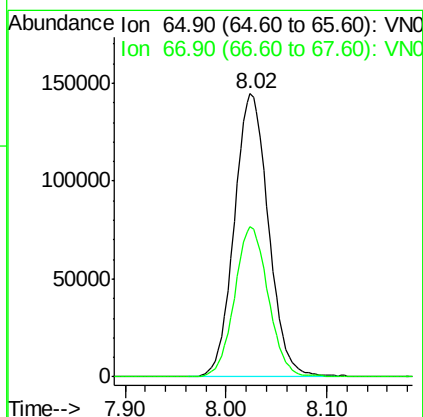
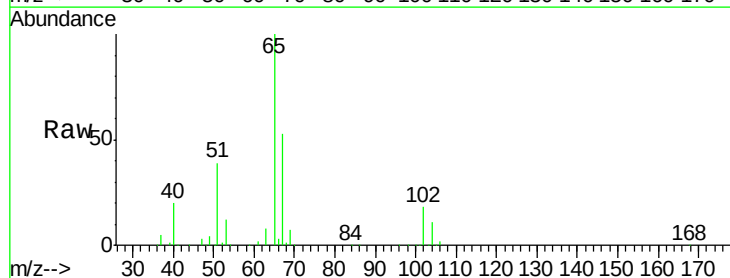
Instrument :
MSVOA_N
ClientSampled :

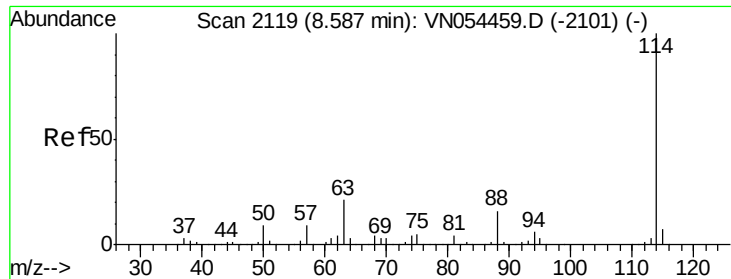
Tot Ion: 56 Resp: 11926
Ion Ratio Lower Upper
56 100
69 161.7 27.8 41.6#
84 115.7 74.6 111.8#



#33
1,2-Dichloroethane-d4
Concen: 50.369 ug/l
RT: 8.02 min Scan# 1944
Delta R.T. -0.00 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

Tgt Ion: 65 Resp: 339931
Ion Ratio Lower Upper
65 100
67 52.1 0.0 104.6





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.58 min Scan# 2119

Delta R.T. -0.00 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :
MSVOA_N
ClientSampled :

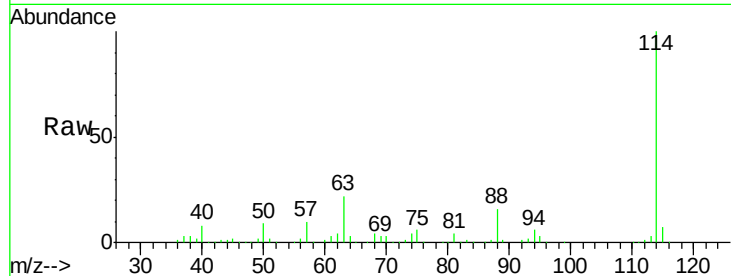
Tot Ion:114 Resp: 849349

Ion Ratio Lower Upper

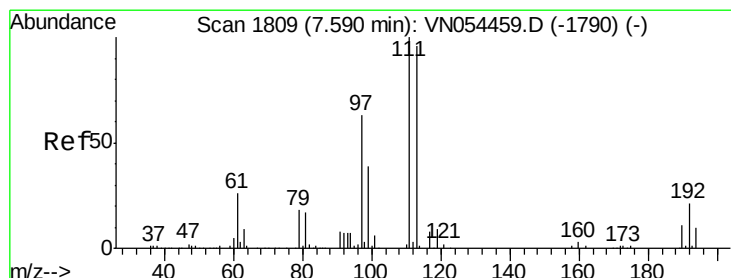
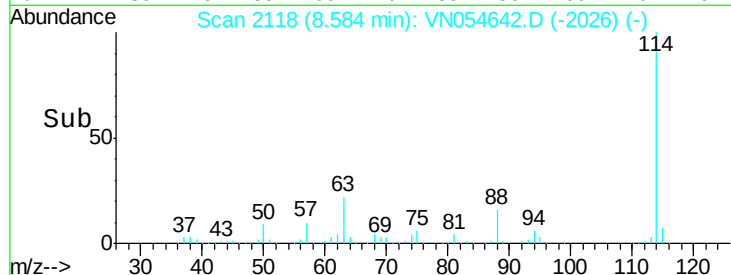
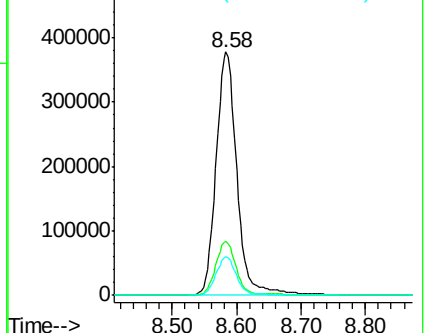
114 100

63 22.1 0.0 35.2

88 16.0 0.0 30.2



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



#35

Dibromofluoromethane

Concen: 46.954 ug/l

RT: 7.59 min Scan# 1809

Delta R.T. 0.00 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

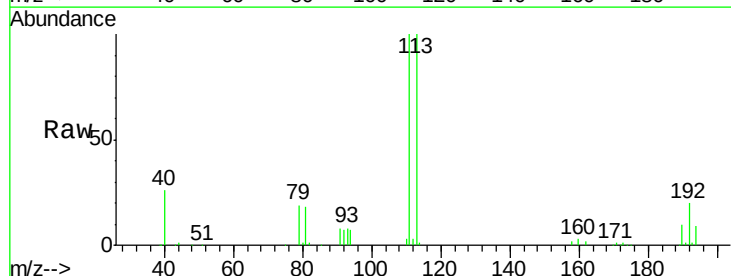
Tgt Ion:113 Resp: 256929

Ion Ratio Lower Upper

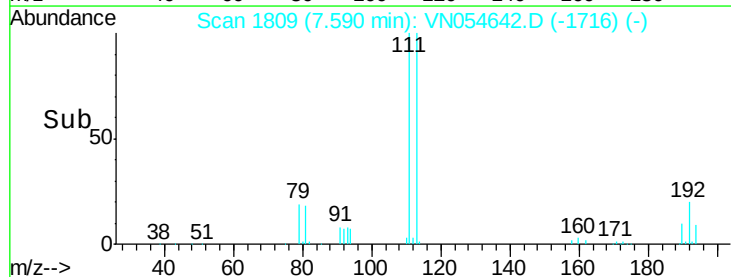
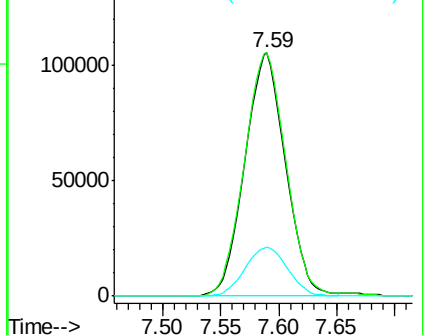
113 100

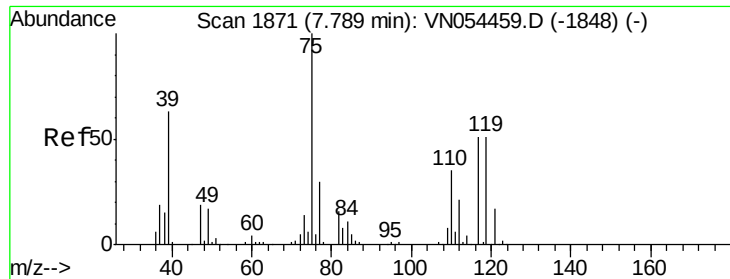
111 102.9 82.2 123.4

192 21.2 19.2 28.8



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

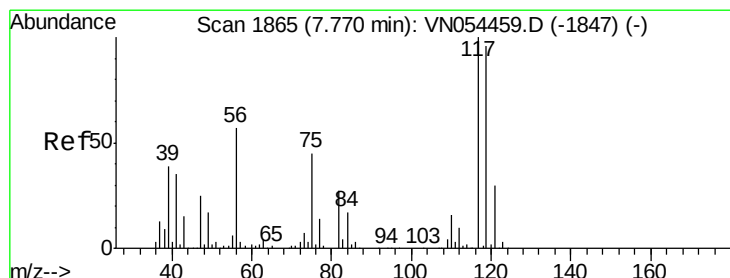
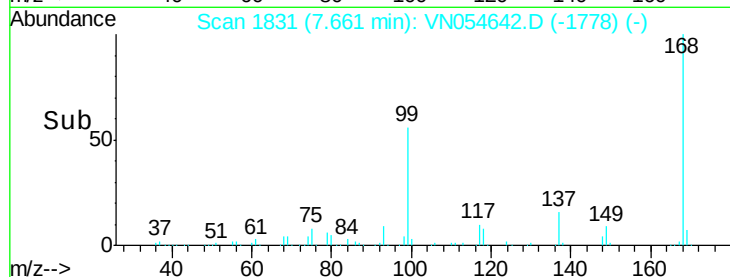
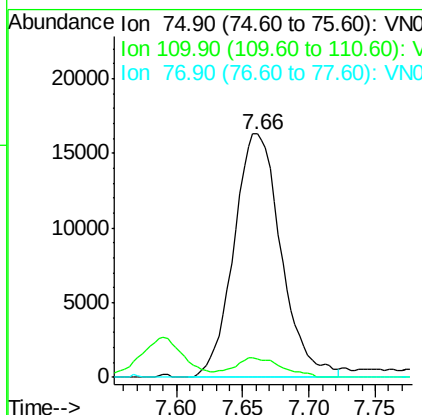
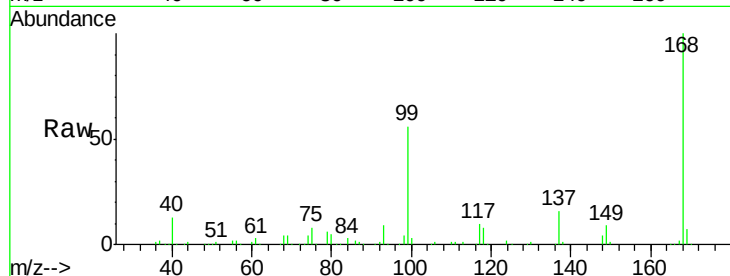




#36
 1,1-Dichloropropene
 Concen: 5.092 ug/l
 RT: 7.66 min Scan# 1831
 Delta R.T. -0.13 min
 Lab File: VN054642.D
 Acq: 24 Mar 2019 12:36

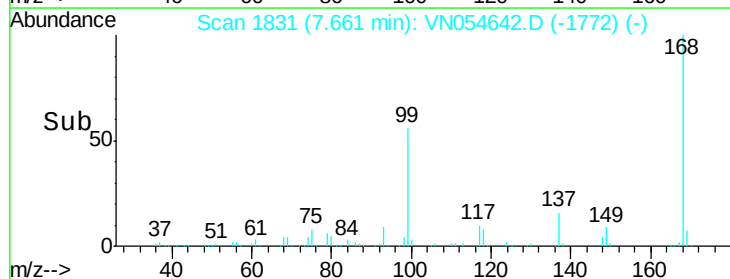
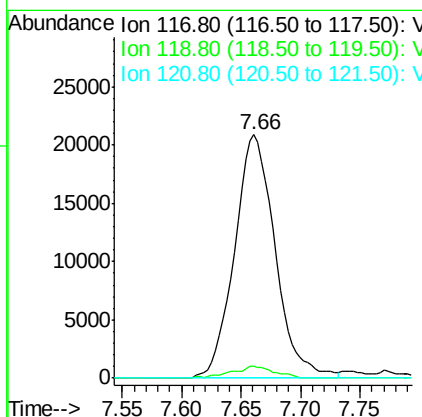
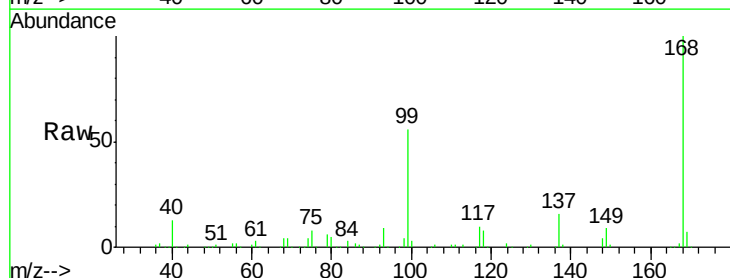
Instrument :
 MSVOA_N
 ClientSampleId :

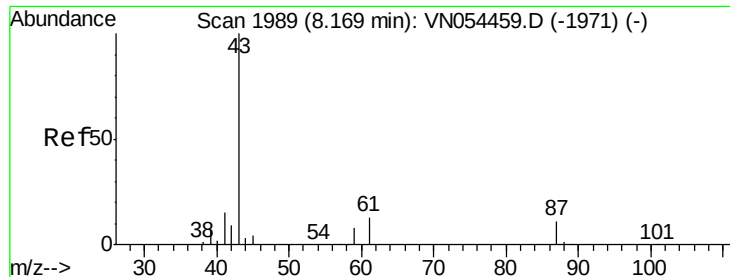
Tot Ion: 75 Resp: 40439
 Ion Ratio Lower Upper
 75 100
 110 8.1 19.1 57.5#
 77 0.0 25.0 37.4#



#38
 Carbon Tetrachloride
 Concen: 6.401 ug/l
 RT: 7.66 min Scan# 1831
 Delta R.T. -0.11 min
 Lab File: VN054642.D
 Acq: 24 Mar 2019 12:36

Tgt Ion: 117 Resp: 49401
 Ion Ratio Lower Upper
 117 100
 119 5.1 76.3 114.5#
 121 0.0 24.6 36.8#





#43

Isopropyl Acetate

Concen: 0.896 ug/l

RT: 8.27 min Scan# 2022

Delta R.T. 0.11 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

ClientSampled :

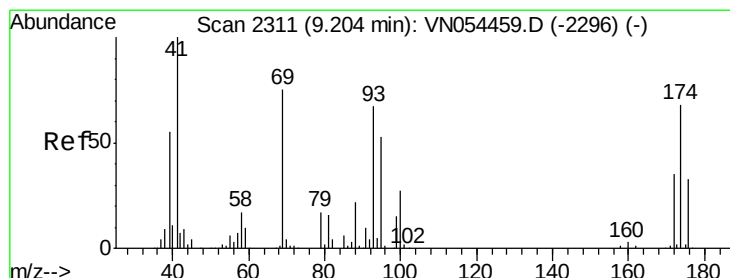
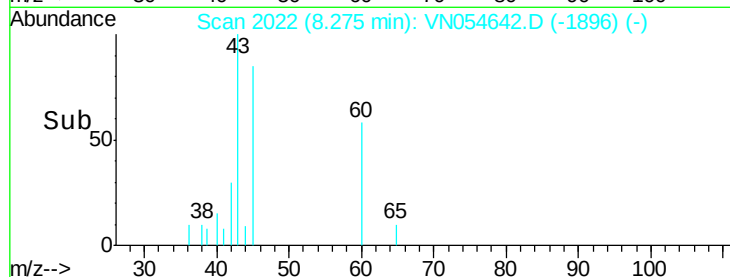
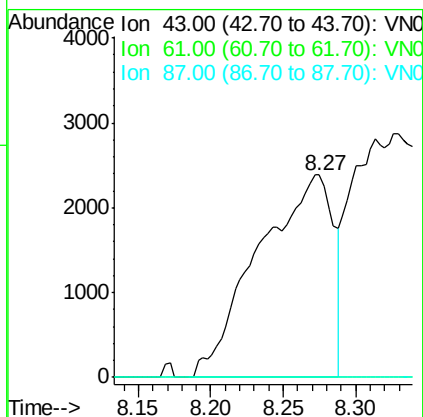
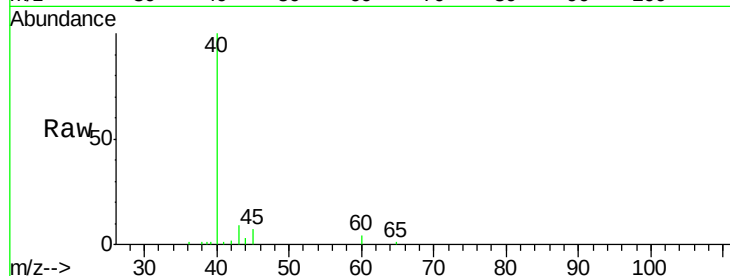
Tot Ion: 43 Resp: 8544

Ion Ratio Lower Upper

43 100

61 0.0 15.8 23.8#

87 0.0 12.0 18.0#



#49

1,4-Dioxane

Concen: 0.501 ug/l

RT: 9.21 min Scan# 2314

Delta R.T. 0.01 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

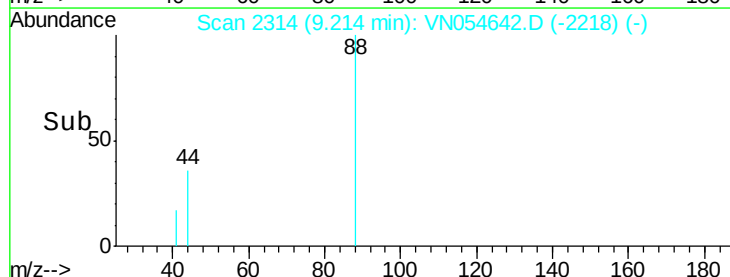
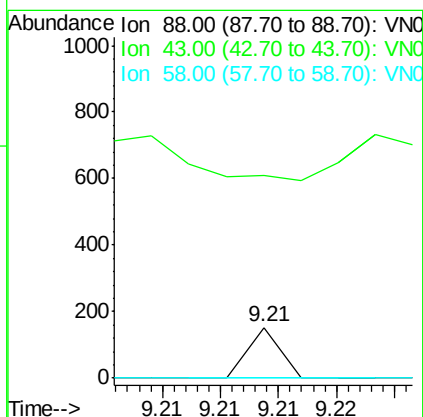
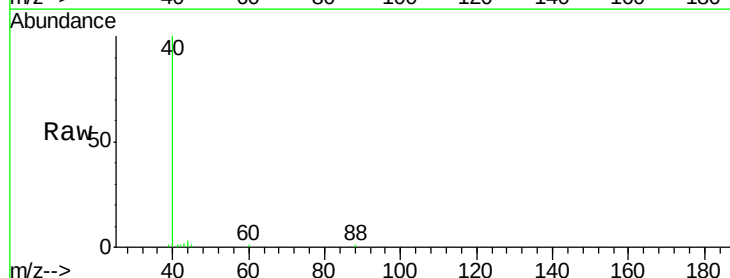
Tgt Ion: 88 Resp: 29

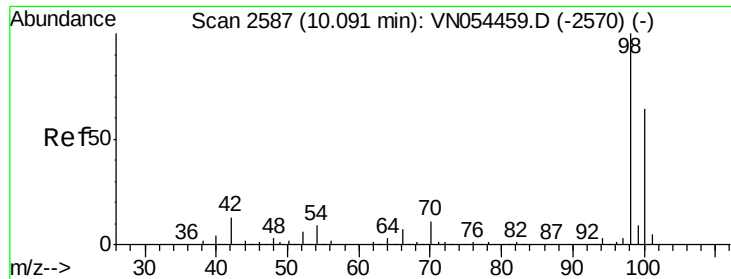
Ion Ratio Lower Upper

88 100

43 1137.9 24.1 36.1#

58 0.0 50.8 76.2#

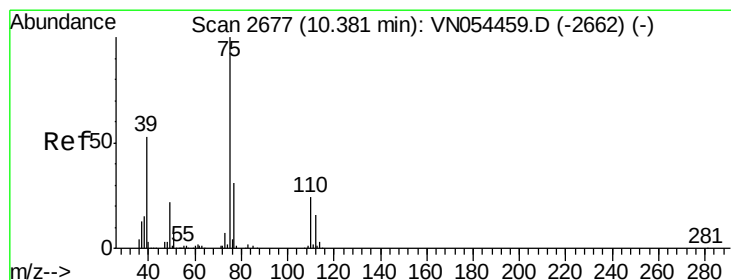
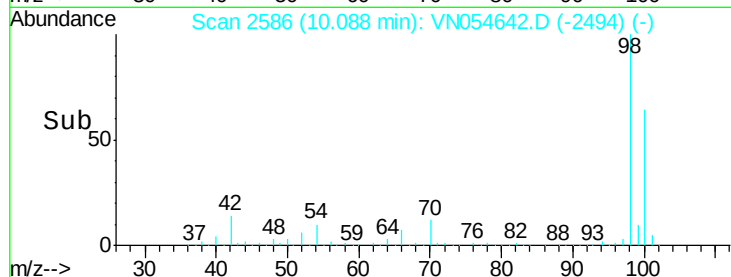
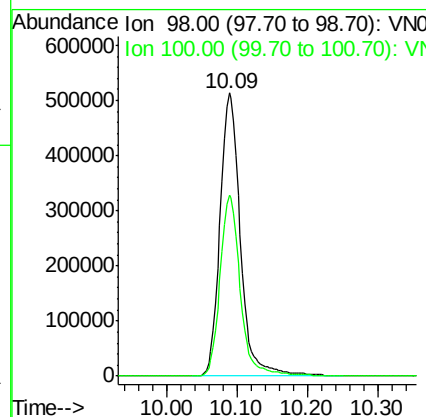
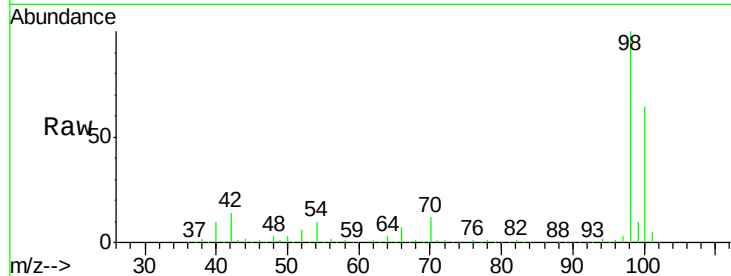




#50
Toluene-d8
Concen: 50.360 ug/l
RT: 10.09 min Scan# 2586
Delta R.T. -0.00 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

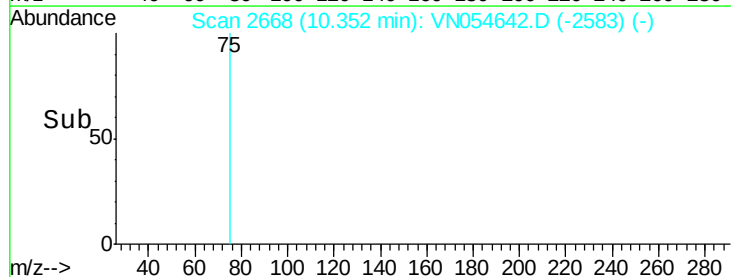
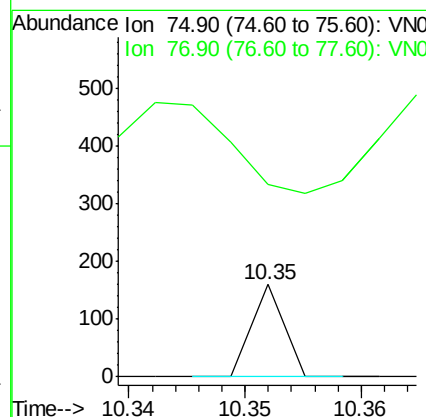
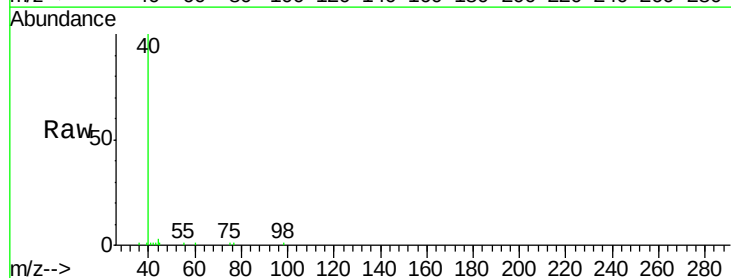
Instrument :
MSVOA_N
ClientSampled :

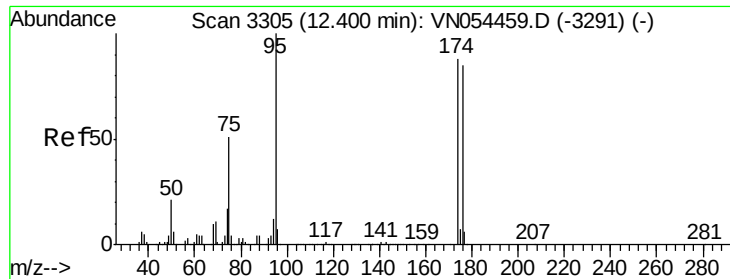
Tot Ion: 98 Resp: 1035963
Ion Ratio Lower Upper
98 100
100 63.5 51.2 76.8



#53
t-1,3-Dichloropropene
Concen: 2.236 ug/l
RT: 10.35 min Scan# 2668
Delta R.T. -0.03 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

Tgt Ion: 75 Resp: 31
Ion Ratio Lower Upper
75 100
77 0.0 25.8 38.8#





#62

4-Bromofluorobenzene

Concen: 47.483 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

ClientSampled :

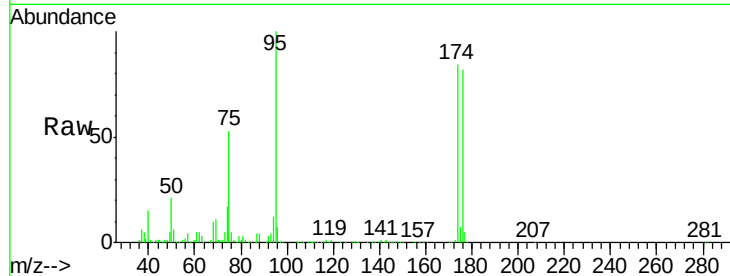
Tot Ion: 95 Resp: 332378

Ion Ratio Lower Upper

95 100

174 83.9 0.0 191.0

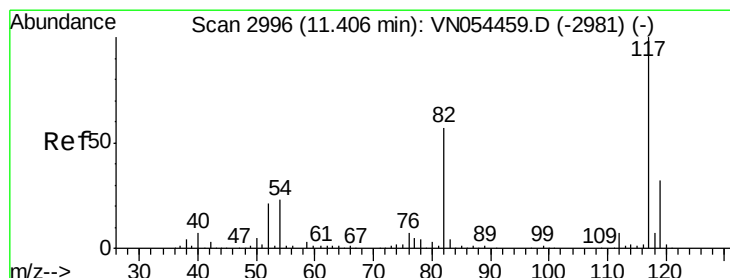
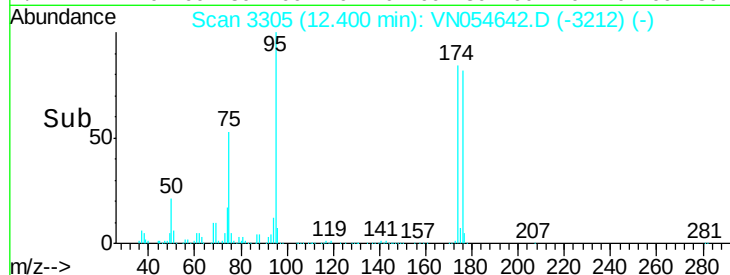
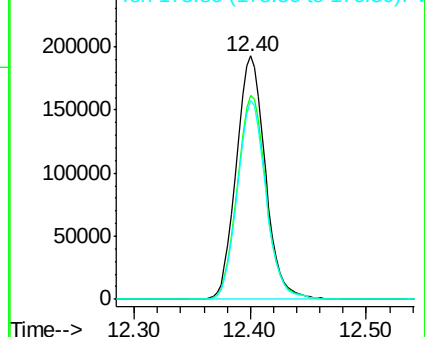
176 80.7 0.0 187.4



Abundance Ion 94.90 (94.60 to 95.60): VN054459.D (-3291) (-)

Ion 173.80 (173.50 to 174.50): VN054459.D (-3291) (-)

Ion 175.80 (175.50 to 176.50): VN054459.D (-3291) (-)



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. 0.00 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

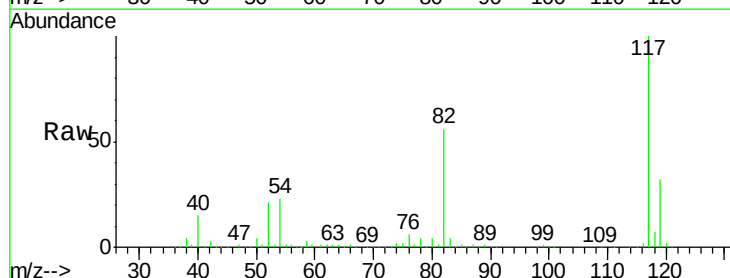
Tgt Ion: 117 Resp: 741780

Ion Ratio Lower Upper

117 100

82 55.7 40.0 60.0

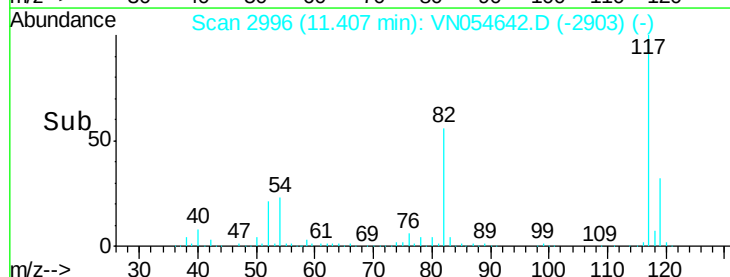
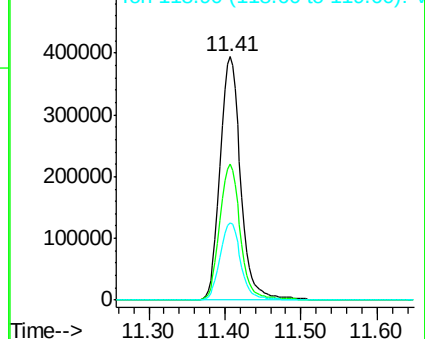
119 32.0 25.8 38.6

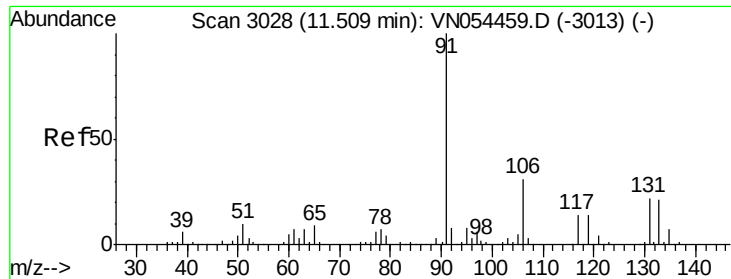


Abundance Ion 116.90 (116.60 to 117.60): VN054459.D (-2981) (-)

Ion 82.00 (81.70 to 82.70): VN054459.D (-2981) (-)

Ion 118.90 (118.60 to 119.60): VN054459.D (-2981) (-)





#67

Ethyl Benzene

Concen: 0.309 ug/l

RT: 11.51 min Scan# 3029

Delta R.T. 0.00 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

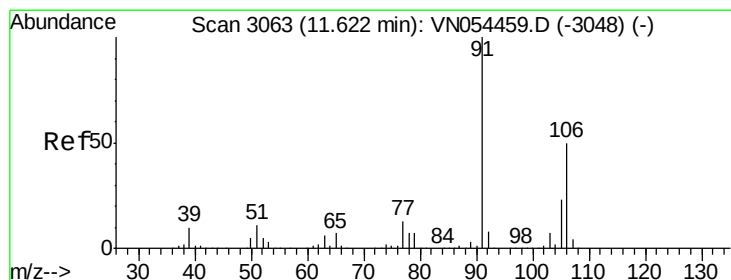
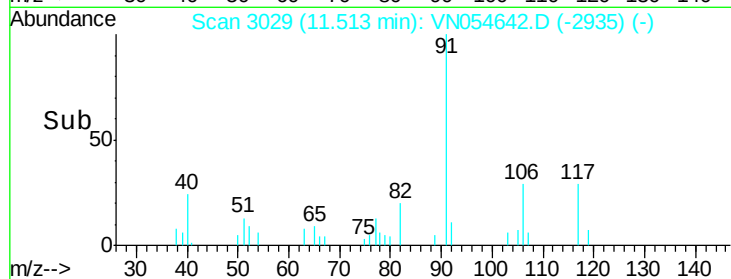
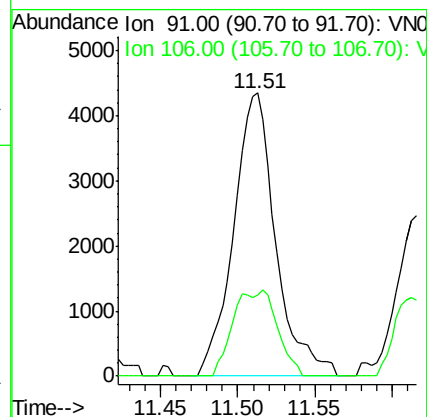
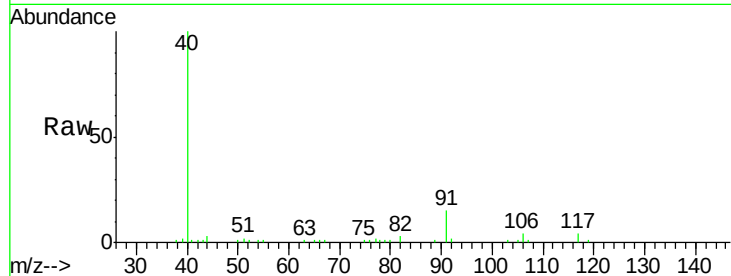
ClientSampleId :

Tot Ion: 91 Resp: 8223

Ion Ratio Lower Upper

91 100

106 28.9 25.5 38.3



#68

m/p-Xylenes

Concen: 0.218 ug/l

RT: 11.61 min Scan# 3060

Delta R.T. -0.01 min

Lab File: VN054642.D

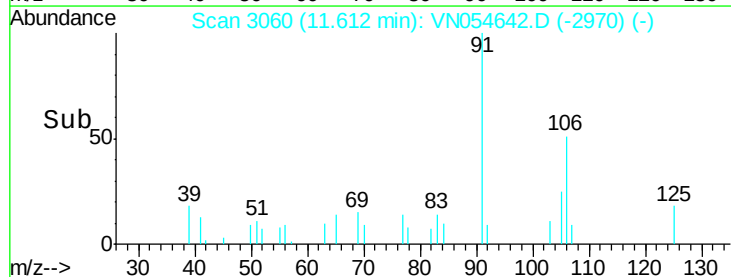
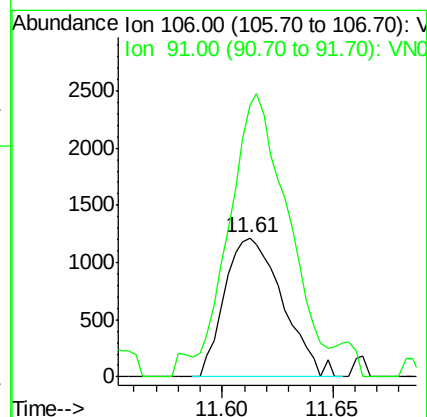
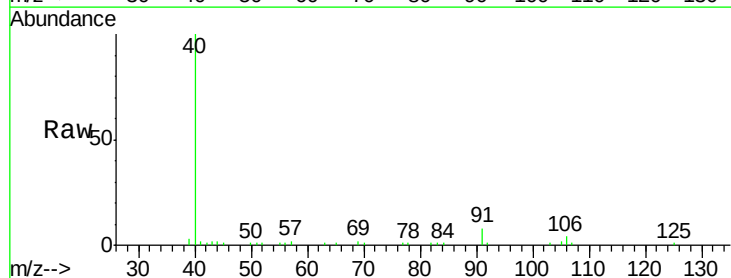
Acq: 24 Mar 2019 12:36

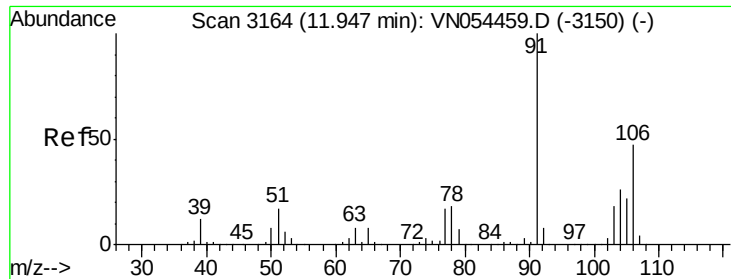
Tgt Ion: 106 Resp: 2199

Ion Ratio Lower Upper

106 100

91 211.1 159.4 239.2

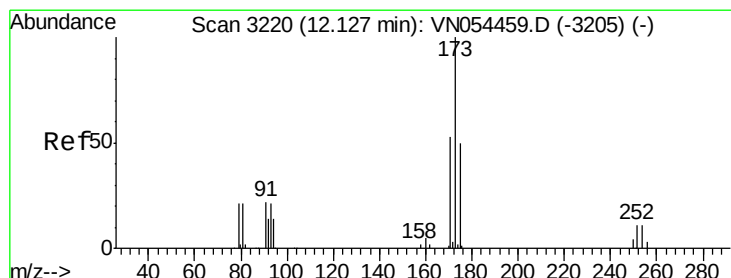
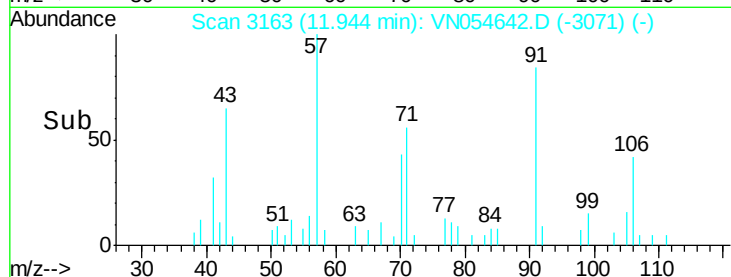
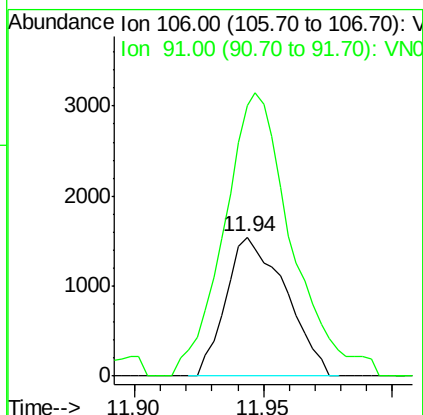
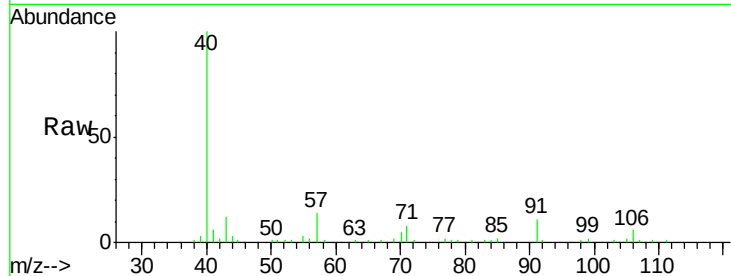




#69
o-Xylene
Concen: 0.253 ug/l
RT: 11.94 min Scan# 3163
Delta R.T. -0.00 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

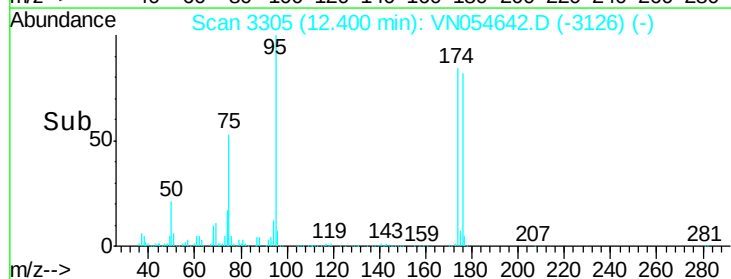
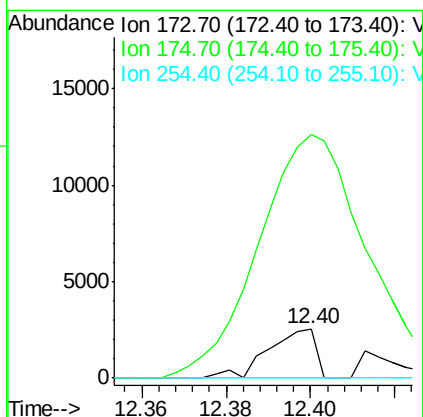
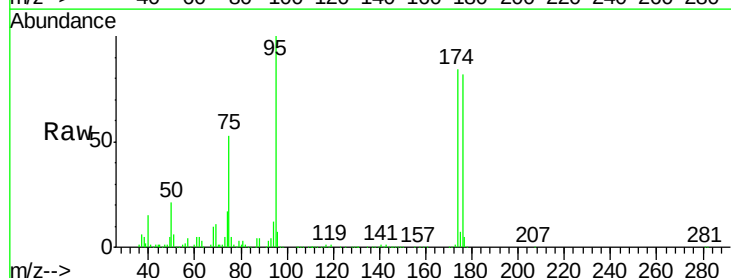
Instrument :
MSVOA_N
ClientSampled :

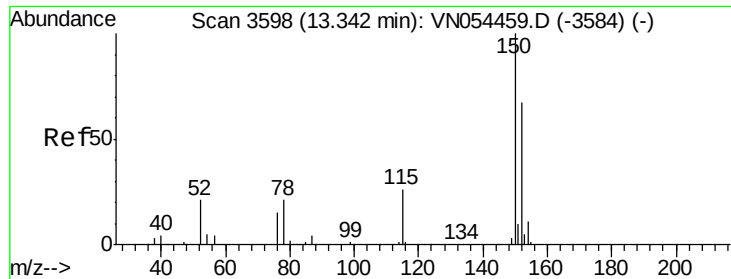
Tot Ion:106 Resp: 2497
Ion Ratio Lower Upper
106 100
91 229.1 105.7 317.1



#71
Bromoform
Concen: 2.728 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. 0.27 min
Lab File: VN054642.D
Acq: 24 Mar 2019 12:36

Tgt Ion:173 Resp: 1983
Ion Ratio Lower Upper
173 100
175 977.6 24.4 73.2#
254 0.0 0.1 0.1#





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3598

Delta R.T. 0.00 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

ClientSampleId :

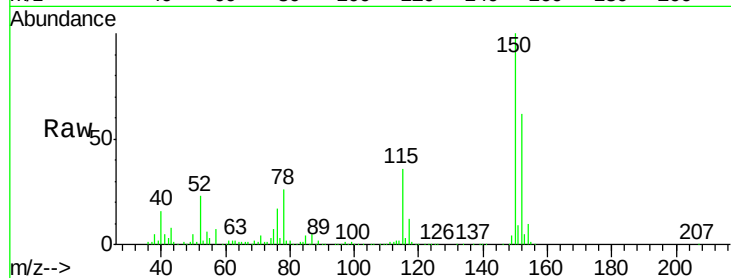
Tot Ion:152 Resp: 309505

Ion Ratio Lower Upper

152 100

115 57.7 27.2 81.6

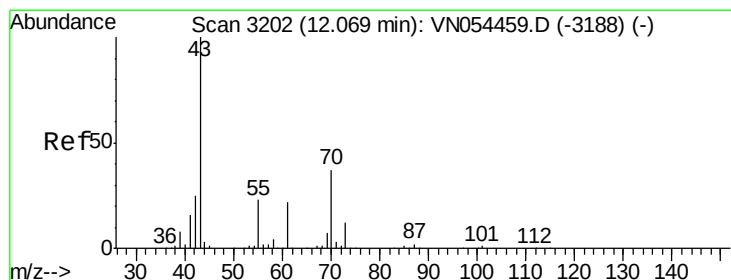
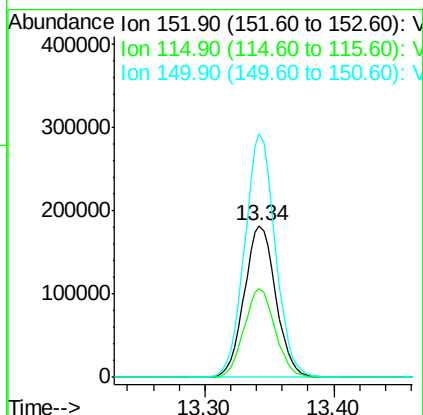
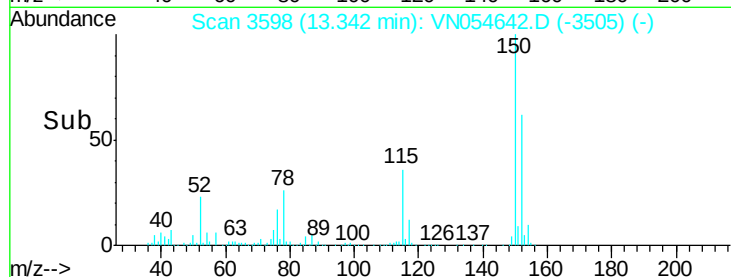
150 156.3 0.0 349.2



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: 2.906 ug/l

RT: 12.04 min Scan# 3193

Delta R.T. -0.03 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Tgt Ion: 43 Resp: 20840

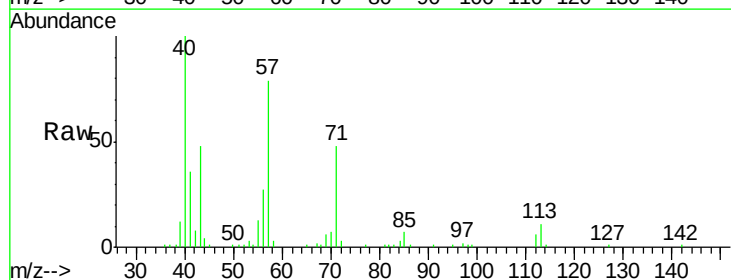
Ion Ratio Lower Upper

43 100

70 14.2 35.4 53.0#

55 26.7 19.8 29.6

61 0.0 19.8 29.6#

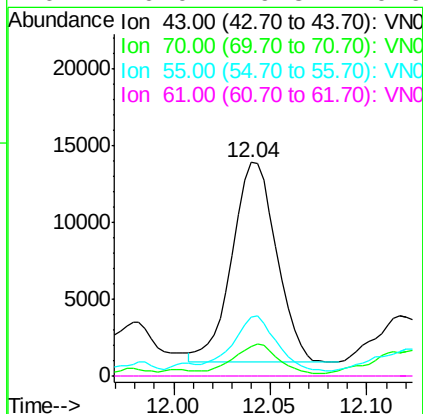
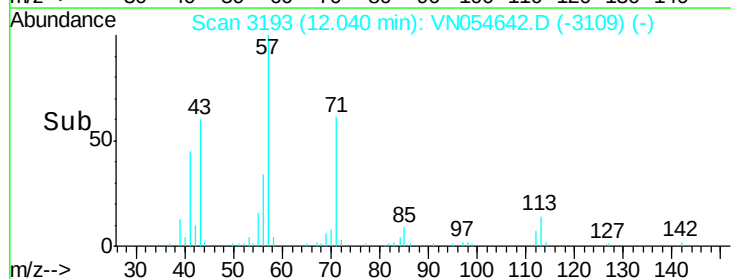


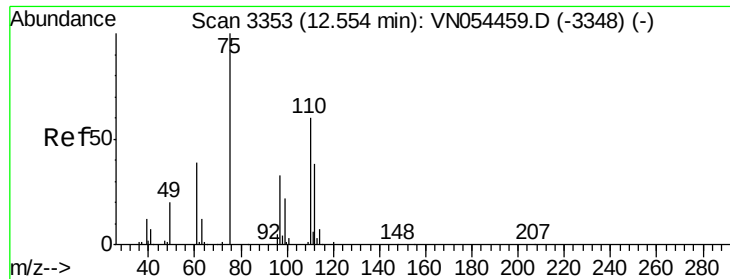
Abundance Ion 43.00 (42.70 to 43.70): V

Ion 70.00 (69.70 to 70.70): V

Ion 55.00 (54.70 to 55.70): V

Ion 61.00 (60.70 to 61.70): V





#76

1,2,3-Trichloropropane

Concen: 35.725 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

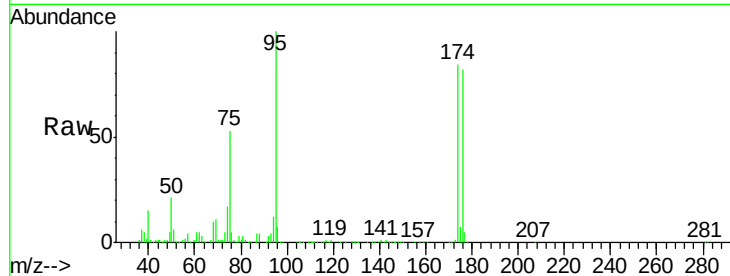
ClientSampled :

Tot Ion: 75 Resp: 175459

Ion Ratio Lower Upper

75 100

77 1.2 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0

120000

100000

80000

60000

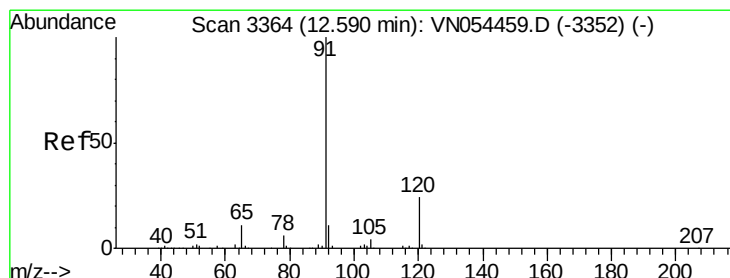
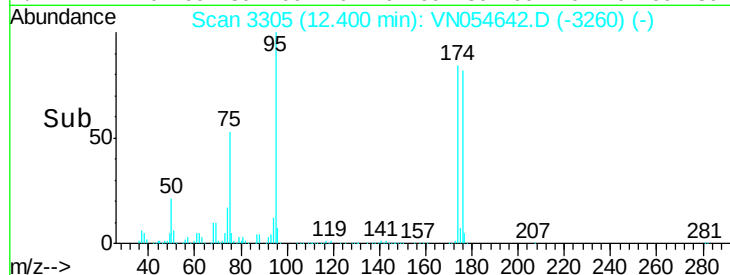
40000

20000

0

12.35 12.40 12.45 12.50

Time-->



#78

n-propylbenzene

Concen: 1.264 ug/l

RT: 12.59 min Scan# 3364

Delta R.T. 0.00 min

Lab File: VN054642.D

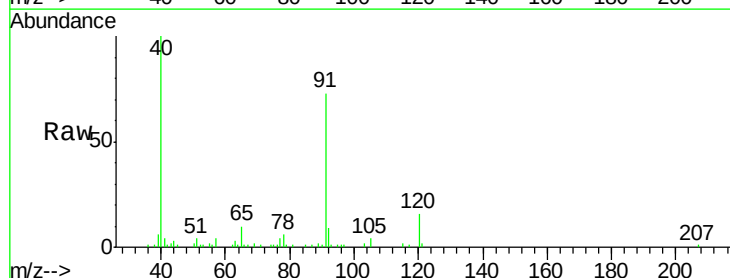
Acq: 24 Mar 2019 12:36

Tgt Ion: 91 Resp: 34181

Ion Ratio Lower Upper

91 100

120 23.0 12.3 36.9



Abundance Ion 91.00 (90.70 to 91.70): VN0

Ion 120.00 (119.70 to 120.70): V

20000

15000

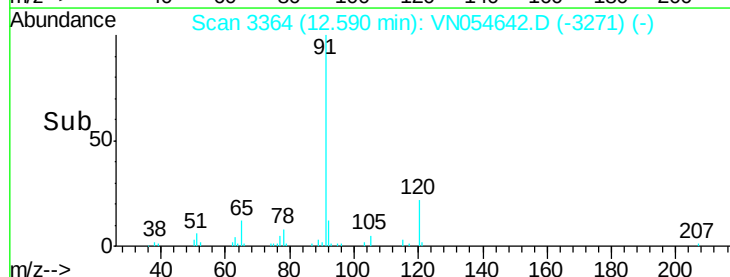
10000

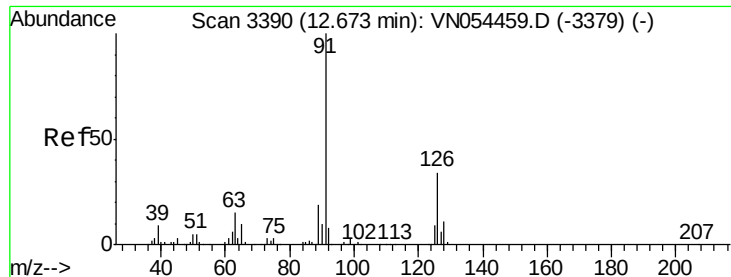
5000

0

12.55 12.60 12.65

Time-->





#79

2-Chlorotoluene

Concen: 2.027 ug/l

RT: 12.59 min Scan# 3364

Delta R.T. -0.08 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

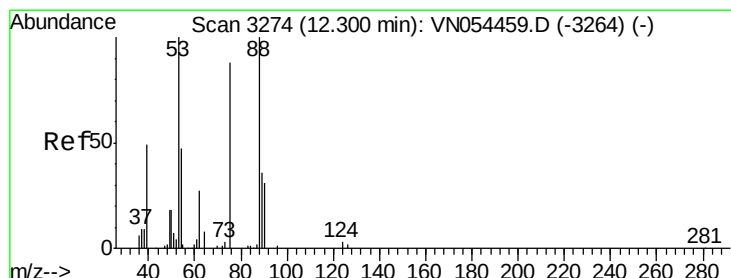
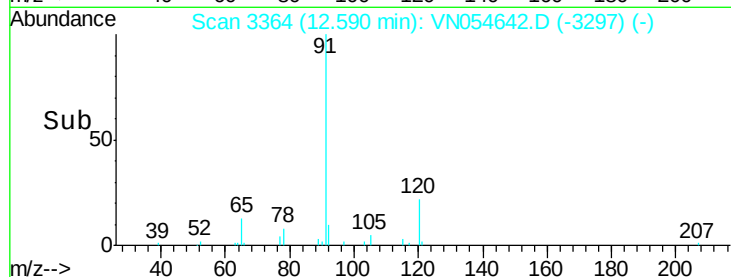
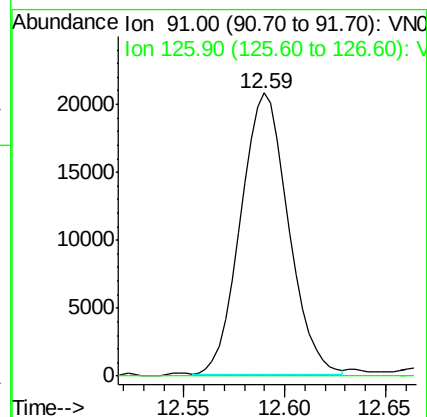
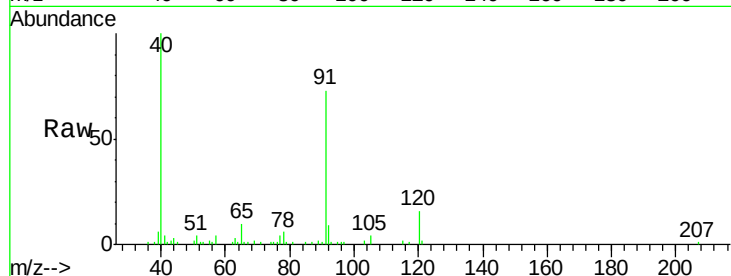
ClientSampled :

Tot Ion: 91 Resp: 34181

Ion Ratio Lower Upper

91 100

126 0.0 18.7 56.1#



#81

trans-1,4-Dichloro-2-butene

Concen: 118.516 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

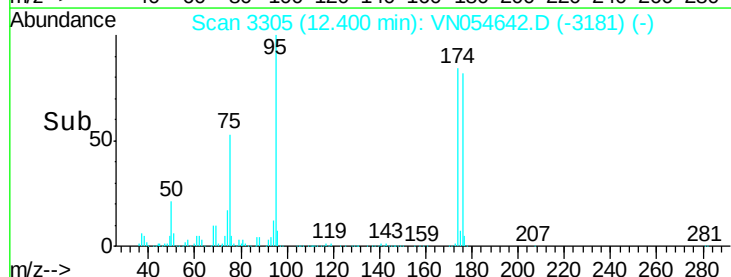
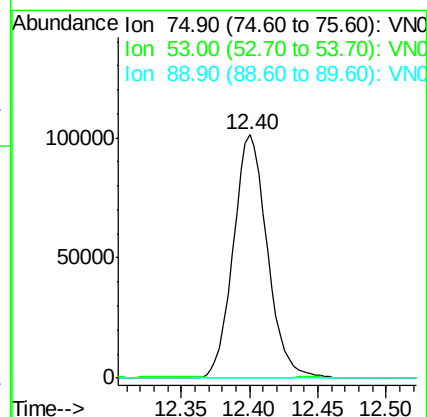
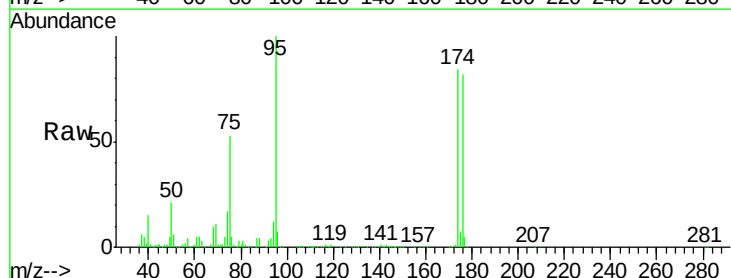
Tgt Ion: 75 Resp: 175459

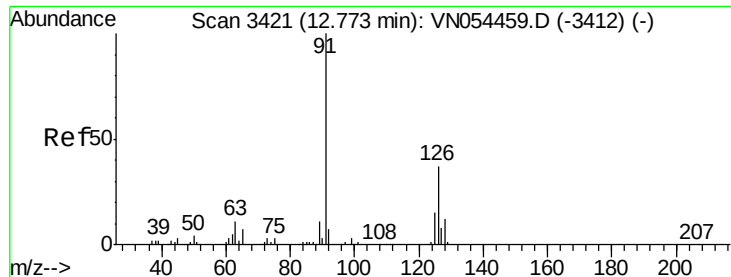
Ion Ratio Lower Upper

75 100

53 0.1 76.2 114.2#

89 0.0 39.2 58.8#





#82

4-Chlorotoluene

Concen: 2.091 ug/l

RT: 12.59 min Scan# 3364

Delta R.T. -0.18 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

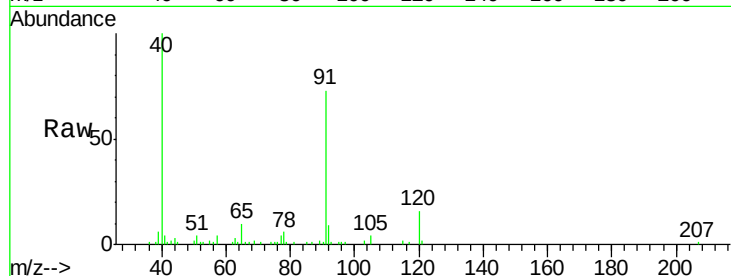
ClientSampleId :

Tot Ion: 91 Resp: 34181

Ion Ratio Lower Upper

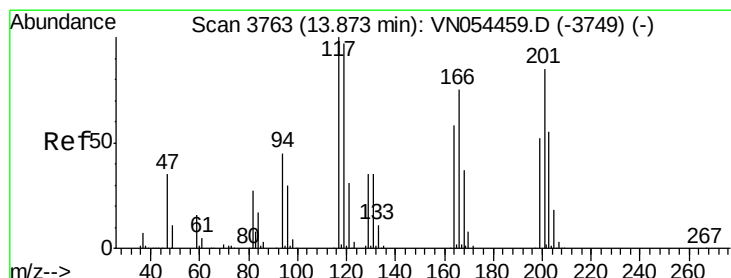
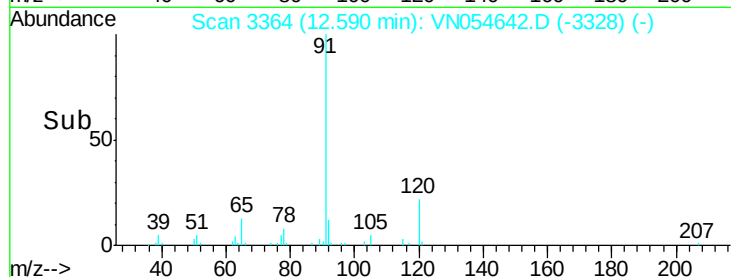
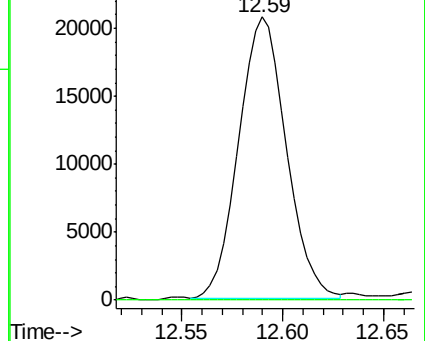
91 100

126 0.0 18.1 54.1#



Abundance Ion 91.00 (90.70 to 91.70): VN054459.D (-3412) (-)

Ion 125.90 (125.60 to 126.60): VN054459.D (-3412) (-)



#90

Hexachloroethane

Concen: 0.304 ug/l

RT: 13.94 min Scan# 3784

Delta R.T. 0.07 min

Lab File: VN054642.D

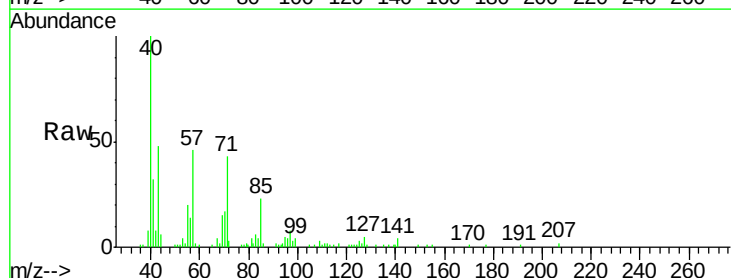
Acq: 24 Mar 2019 12:36

Tgt Ion: 117 Resp: 936

Ion Ratio Lower Upper

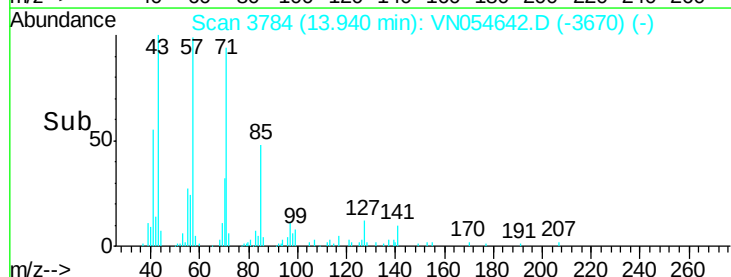
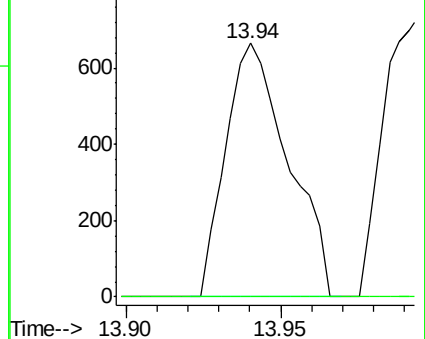
117 100

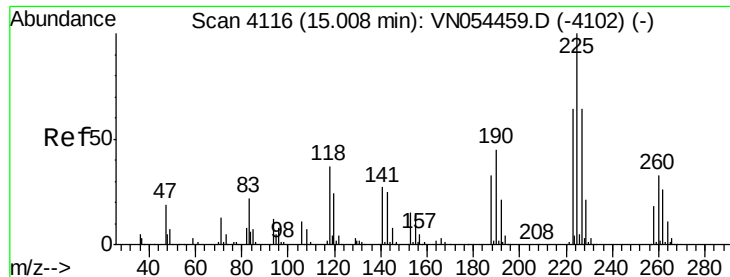
201 0.0 48.1 144.4#



Abundance Ion 116.80 (116.50 to 117.50): VN054459.D (-3749) (-)

Ion 200.70 (200.40 to 201.40): VN054459.D (-3749) (-)





#94

Hexachlorobutadiene

Concen: Below Cal

RT: 15.01 min Scan# 4117

Delta R.T. 0.00 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

Instrument :

MSVOA_N

ClientSampleId :

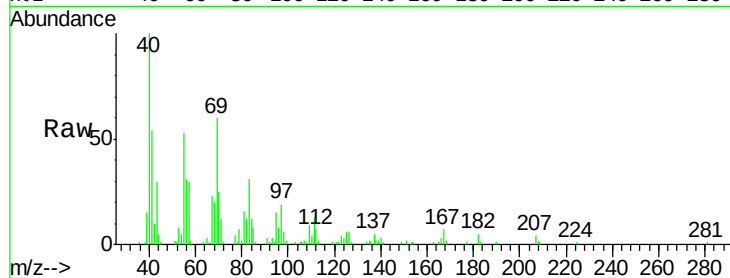
Tot Ion:225 Resp: 64

Ion Ratio Lower Upper

225 100

223 0.0 31.1 93.5#

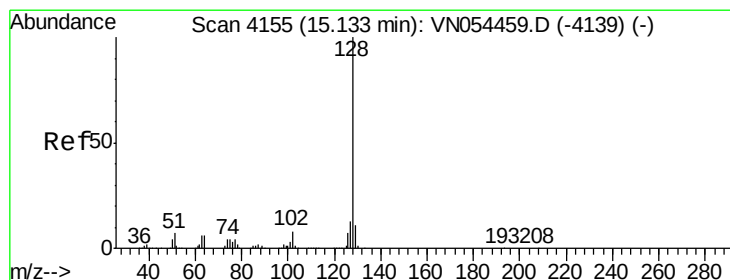
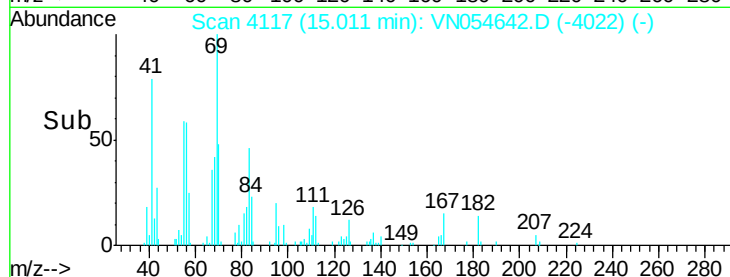
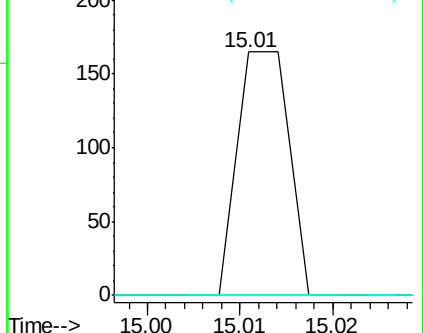
227 0.0 31.9 95.9#



Abundance Ion 224.70 (224.40 to 225.40): V

Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V



#95

Naphthalene

Concen: 0.379 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN054642.D

Acq: 24 Mar 2019 12:36

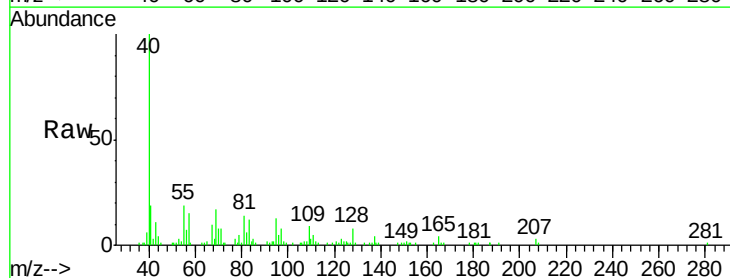
Tgt Ion:128 Resp: 4185

Ion Ratio Lower Upper

128 100

127 23.1 10.1 15.1#

129 8.7 8.7 13.1#



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

