

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN032619\
 Data File : VN054693.D
 Acq On : 26 Mar 2019 12:47
 Operator : JC/SP
 Sample : PB118524TB
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

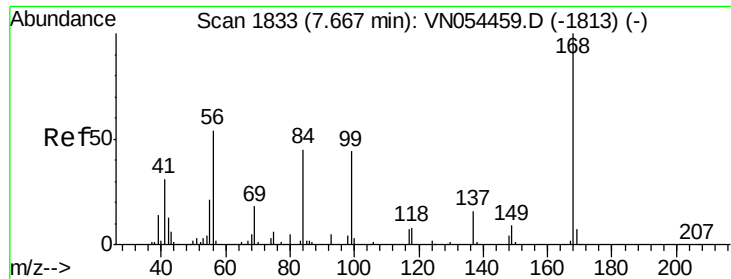
Quant Time: Mar 27 04:06:31 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N032019W.M
 Quant Title : SW846 8260
 QLast Update : Fri Mar 22 02:09:07 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.67	168	540170	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.59	114	863743	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.41	117	743650	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.34	152	272459	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	8.03	65	357751	53.25	ug/l	0.00
Spiked Amount			Recovery	=	106.50%	
35) Dibromofluoromethane	7.59	113	277223	49.82	ug/l	0.00
Spiked Amount			Recovery	=	99.64%	
50) Toluene-d8	10.09	98	1053695	50.37	ug/l	0.00
Spiked Amount			Recovery	=	100.74%	
62) 4-Bromofluorobenzene	12.40	95	325203	45.68	ug/l	0.00
Spiked Amount			Recovery	=	91.36%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
13) Acrolein	3.60	56	265	0.472	ug/l #	1
16) Acetone	3.83	43	11024	5.457	ug/l #	87
18) Methyl Acetate	4.34	43	1787	0.397	ug/l #	82
20) Methylene Chloride	4.55	84	10879	1.827	ug/l #	80
29) Tetrahydrofuran	7.21	42	993	0.591	ug/l #	71
31) Cyclohexane	7.66	56	12311	Below Cal	#	22
36) 1,1-Dichloropropene	7.66	75	40818	5.054	ug/l #	47
38) Carbon Tetrachloride	7.66	117	52604	6.703	ug/l #	16
43) Isopropyl Acetate	8.17	43	17151	1.768	ug/l #	81
48) Methyl methacrylate	9.18	41	7261	1.379	ug/l #	11
51) 4-Methyl-2-Pentanone	9.99	43	6451	1.200	ug/l	96
53) t-1,3-Dichloropropene	10.37	75	62	2.239	ug/l #	80
54) cis-1,3-Dichloropropene	9.91	75	58566	6.653	ug/l #	71
57) 1,3-Dichloropropane	10.76	76	10932	1.232	ug/l #	43
59) 2-Hexanone	10.77	43	191202	54.448	ug/l #	48
74) N-amyl acetate	12.08	43	1476	0.234	ug/l #	80
76) 1,2,3-Trichloropropane	12.40	75	167864	38.826	ug/l #	100
80) 1,3,5-Trimethylbenzene	12.73	105	14986	0.833	ug/l	97
81) trans-1,4-Dichloro-2-buten	12.40	75	167864	128.528	ug/l #	11
93) 1,2,4-Trichlorobenzene	14.90	180	2058	0.472	ug/l	93
94) Hexachlorobutadiene	15.01	225	657	Below Cal		96
95) Naphthalene	15.13	128	6656	0.685	ug/l	99
96) 1,2,3-Trichlorobenzene	15.31	180	2109	0.486	ug/l	88

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.67 min Scan# 1833

Delta R.T. -0.00 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

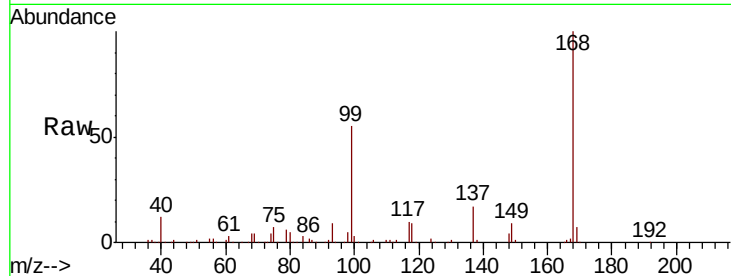
Instrument :
MSVOA_N
ClientSampleId :

Tot Ion:168 Resp: 540170

Ion Ratio Lower Upper

168 100

99 54.6 37.1 55.7



Abundance Ion 167.90 (167.60 to 168.60): VN054459.D (-1813) (-)

Ion 98.90 (98.60 to 99.60): VN054459.D (-1813) (-)

7.67

250000

200000

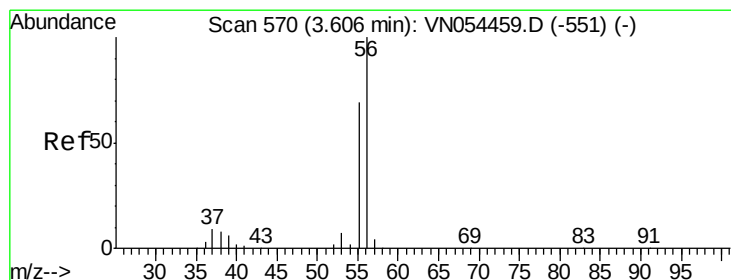
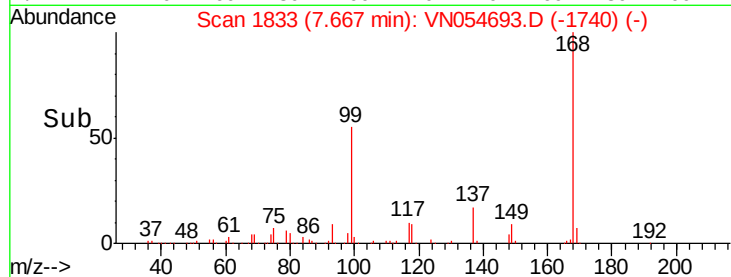
150000

100000

50000

0

Time-->



#13

Acrolein

Concen: 0.472 ug/l

RT: 3.60 min Scan# 567

Delta R.T. -0.01 min

Lab File: VN054693.D

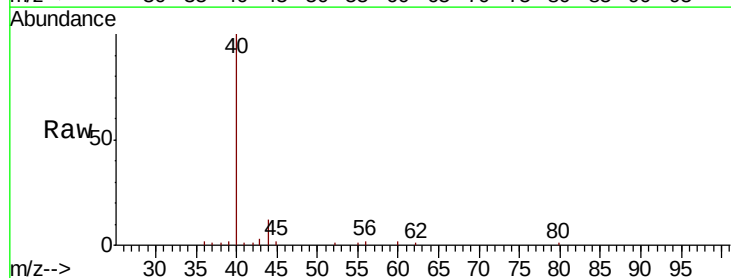
Acq: 26 Mar 2019 12:47

Tgt Ion: 56 Resp: 265

Ion Ratio Lower Upper

56 100

55 244.2 56.7 85.1#



Abundance Ion 56.00 (55.70 to 56.70): VN054459.D (-551) (-)

Ion 55.00 (54.70 to 55.70): VN054459.D (-551) (-)

3.60

600

500

400

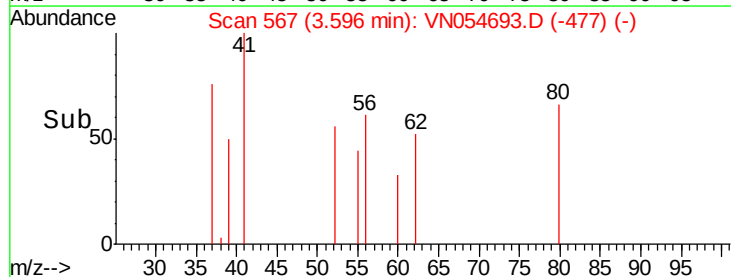
300

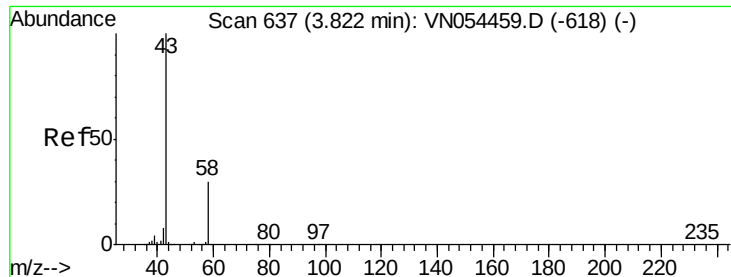
200

100

0

Time-->

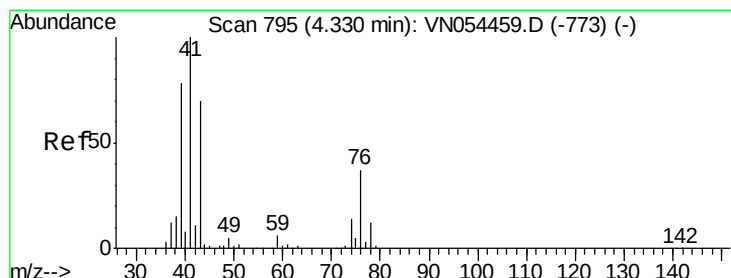
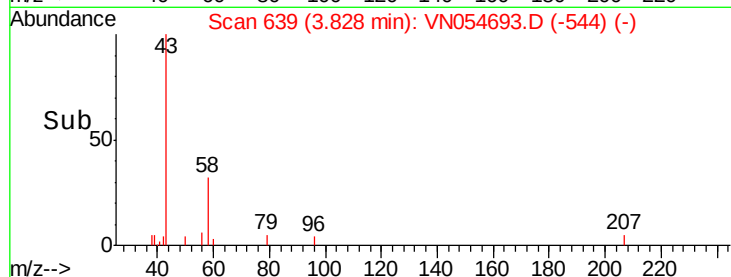
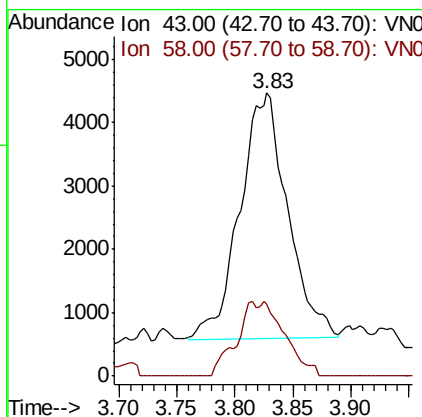
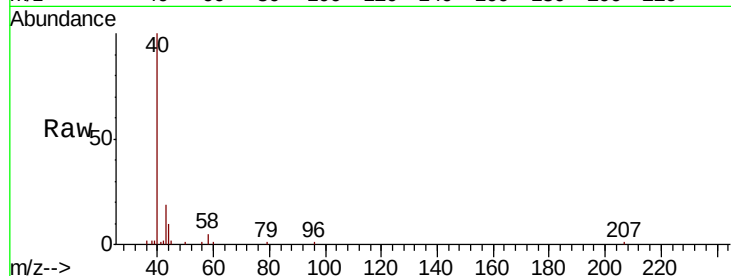




#16
Acetone
Concen: 5.457 ug/l
RT: 3.83 min Scan# 639
Delta R.T. 0.01 min
Lab File: VN054693.D
Acq: 26 Mar 2019 12:47

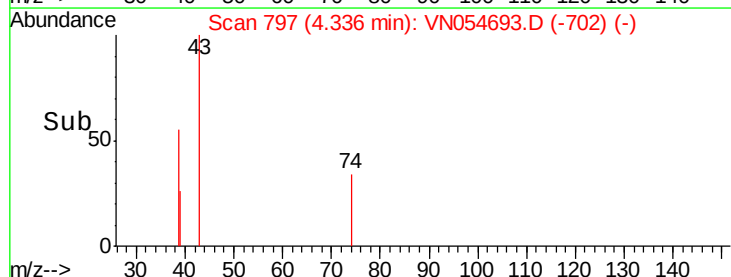
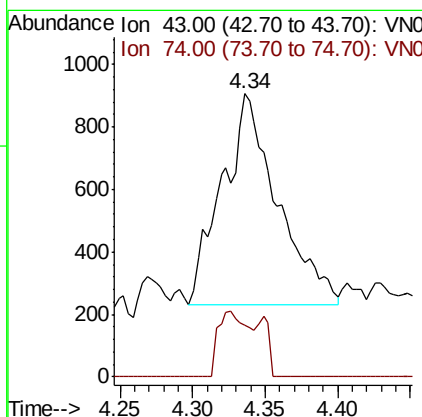
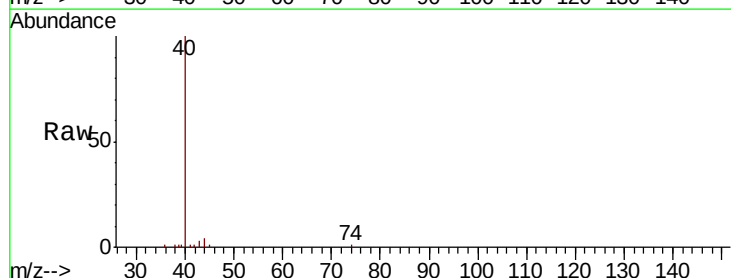
Instrument :
MSVOA_N
ClientSampleId :

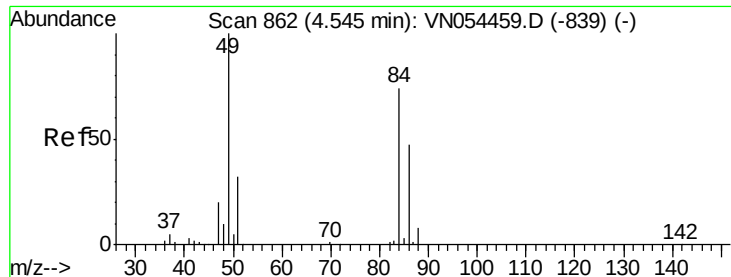
Tot Ion: 43 Resp: 11024
Ion Ratio Lower Upper
43 100
58 29.6 29.9 44.9#



#18
Methyl Acetate
Concen: 0.397 ug/l
RT: 4.34 min Scan# 797
Delta R.T. 0.01 min
Lab File: VN054693.D
Acq: 26 Mar 2019 12:47

Tgt Ion: 43 Resp: 1787
Ion Ratio Lower Upper
43 100
74 17.0 20.8 31.2#

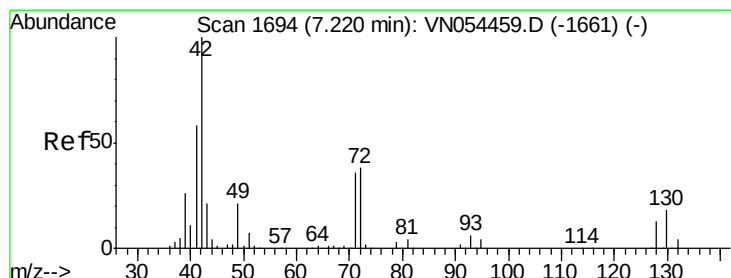
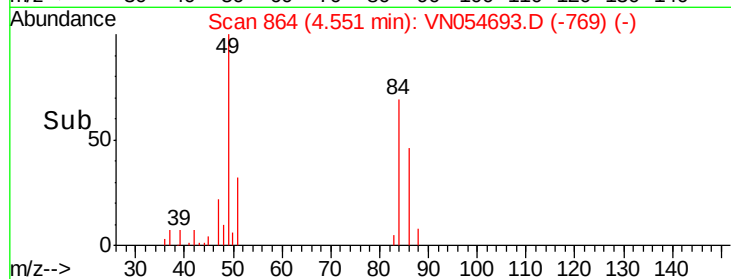
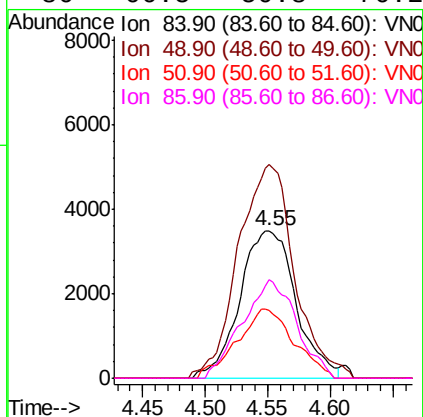
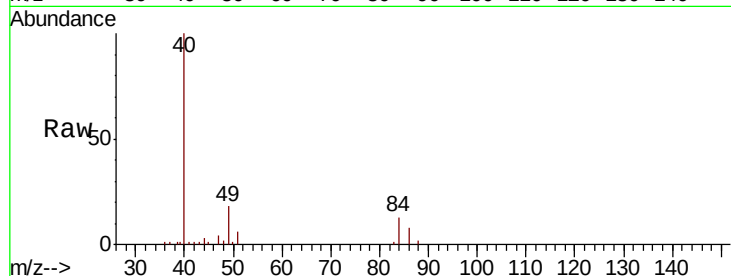




#20
Methvlene Chloride
Concen: 1.827 ug/l
RT: 4.55 min Scan# 864
Delta R.T. 0.01 min
Lab File: VN054693.D
Acq: 26 Mar 2019 12:47

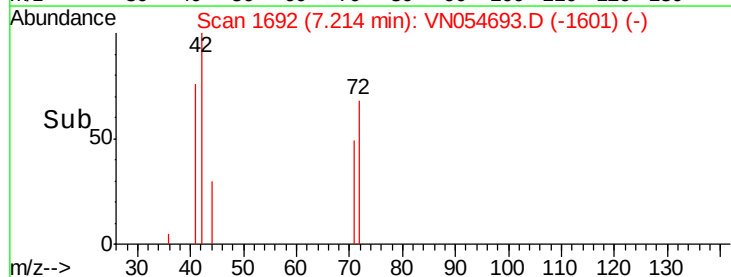
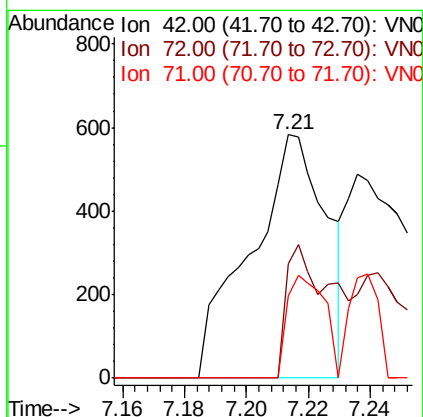
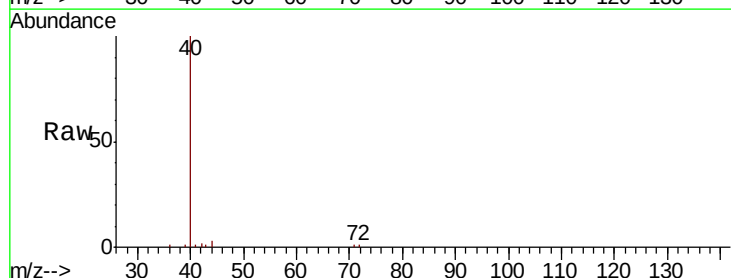
Instrument :
MSVOA_N
ClientSampleId :

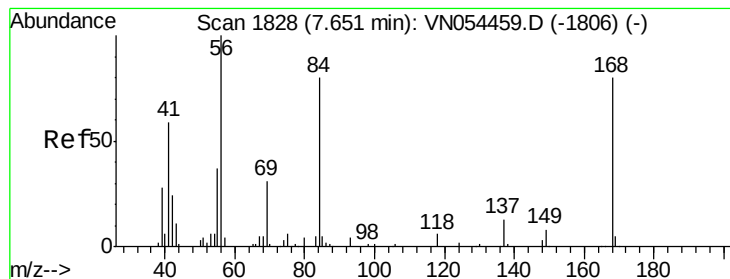
Tot Ion: 84 Resp: 10879
Ion Ratio Lower Upper
84 100
49 144.5 89.7 134.5#
51 45.8 28.2 42.4#
86 66.5 50.8 76.2



#29
Tetrahydrofuran
Concen: 0.591 ug/l
RT: 7.21 min Scan# 1692
Delta R.T. -0.01 min
Lab File: VN054693.D
Acq: 26 Mar 2019 12:47

Tgt Ion: 42 Resp: 993
Ion Ratio Lower Upper
42 100
72 32.8 37.8 56.6#
71 20.5 36.2 54.2#





#31

Cyclohexane

Concen: Below Cal

RT: 7.66 min Scan# 1832

Delta R.T. 0.01 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Instrument :
MSVOA_N
ClientSampled :

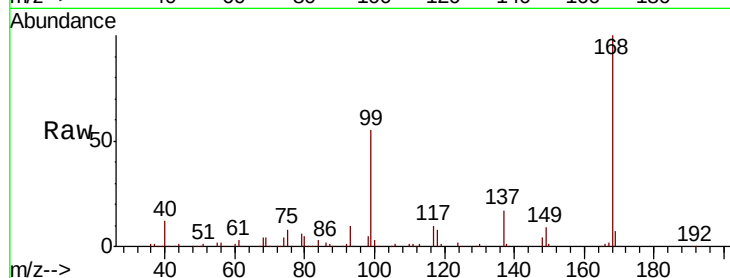
Tot Ion: 56 Resp: 12311

Ion Ratio Lower Upper

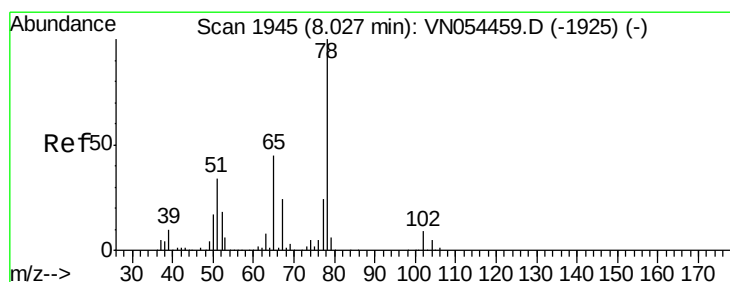
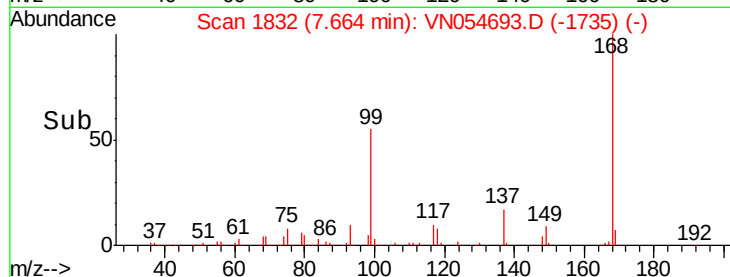
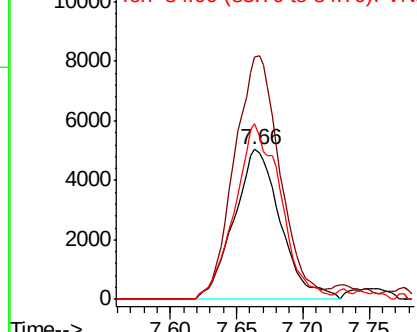
56 100

69 161.5 27.8 41.6#

84 117.0 74.6 111.8#



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



#33

1,2-Dichloroethane-d4

Concen: 53.246 ug/l

RT: 8.03 min Scan# 1945

Delta R.T. -0.00 min

Lab File: VN054693.D

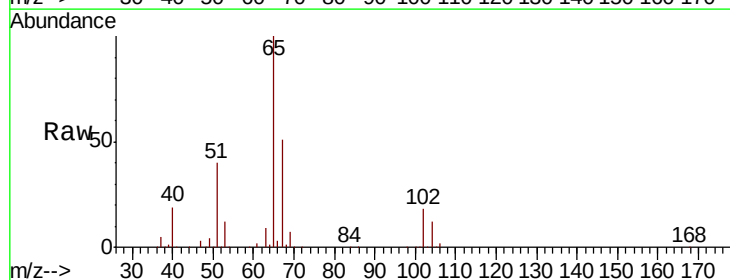
Acq: 26 Mar 2019 12:47

Tgt Ion: 65 Resp: 357751

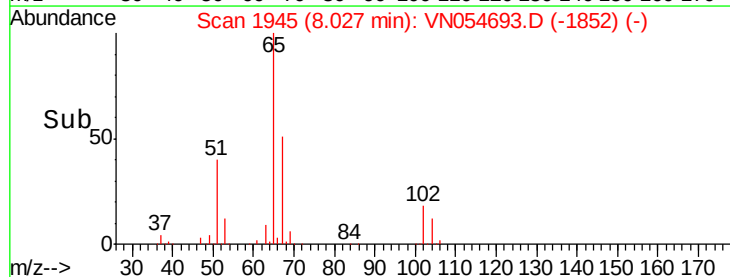
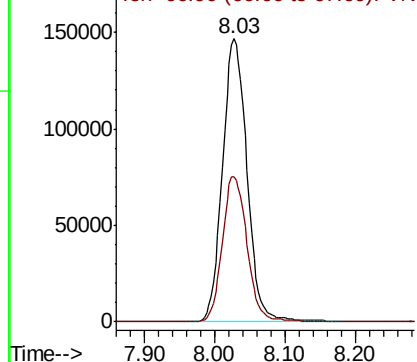
Ion Ratio Lower Upper

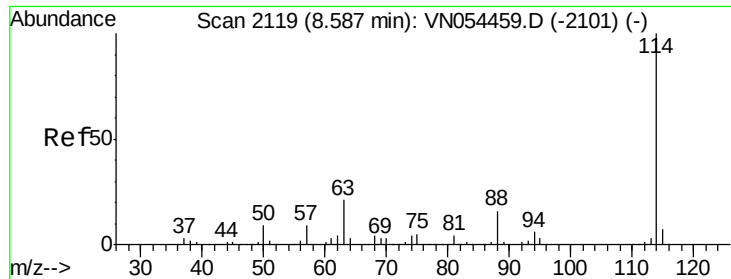
65 100

67 51.3 0.0 104.6



Abundance Ion 64.90 (64.60 to 65.60): VN0
Ion 66.90 (66.60 to 67.60): VN0





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.59 min Scan# 2119

Delta R.T. -0.00 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Instrument :

MSVOA_N

ClientSampleId :

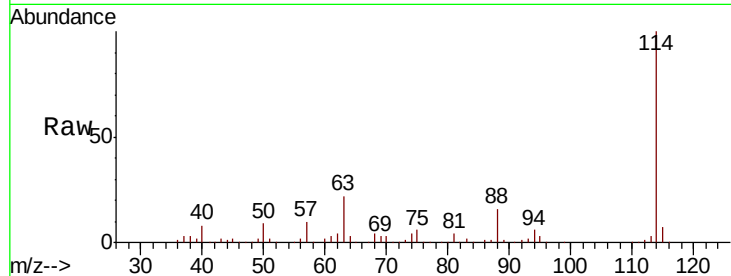
Tot Ion:114 Resp: 863743

Ion Ratio Lower Upper

114 100

63 22.3 0.0 35.2

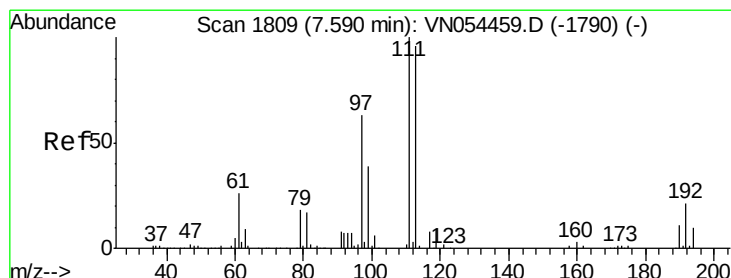
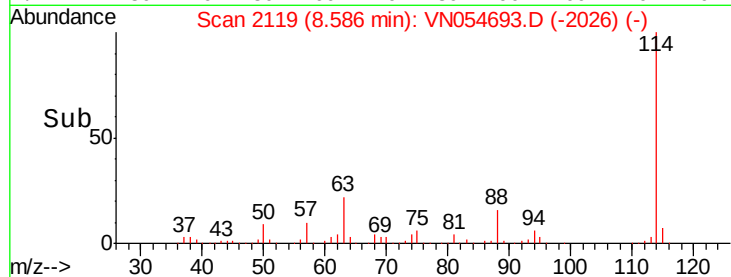
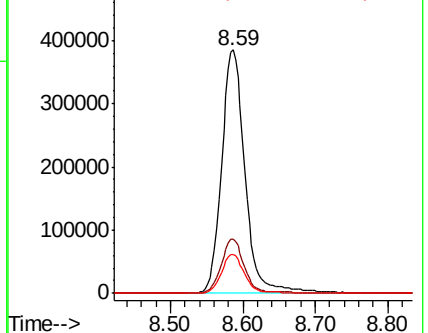
88 16.0 0.0 30.2



Abundance Ion 113.90 (113.60 to 114.60): V

Ion 63.00 (62.70 to 63.70): VN

Ion 87.90 (87.60 to 88.60): VN



#35

Dibromofluoromethane

Concen: 49.819 ug/l

RT: 7.59 min Scan# 1809

Delta R.T. -0.00 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

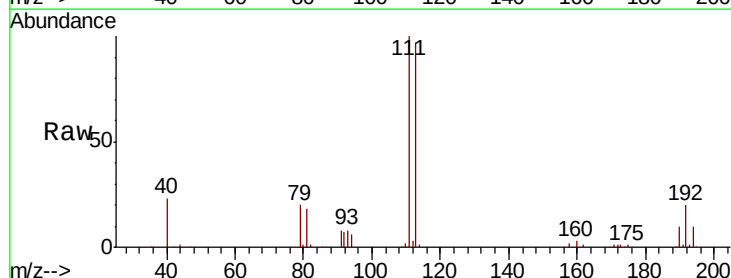
Tgt Ion:113 Resp: 277223

Ion Ratio Lower Upper

113 100

111 103.3 82.2 123.4

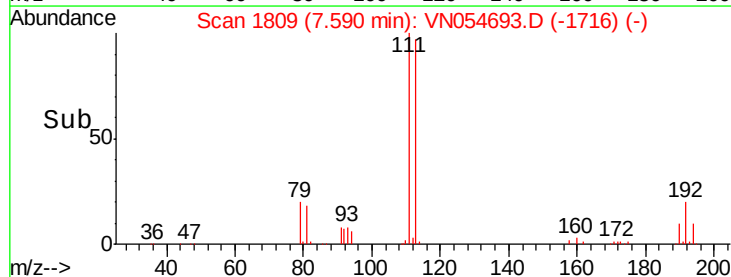
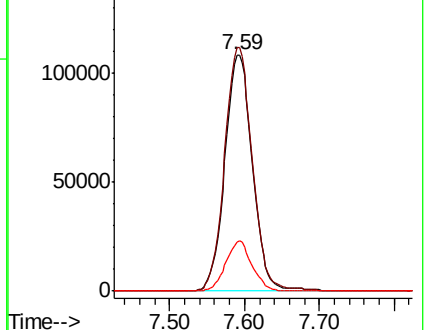
192 20.2 19.2 28.8

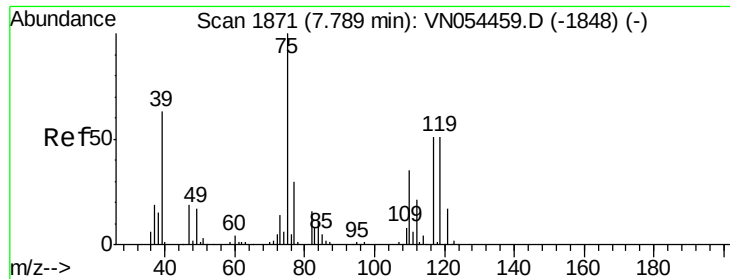


Abundance Ion 112.80 (112.50 to 113.50): V

Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V





#36

1,1-Dichloropropene

Concen: 5.054 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.13 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Instrument :

MSVOA_N

ClientSampleId :

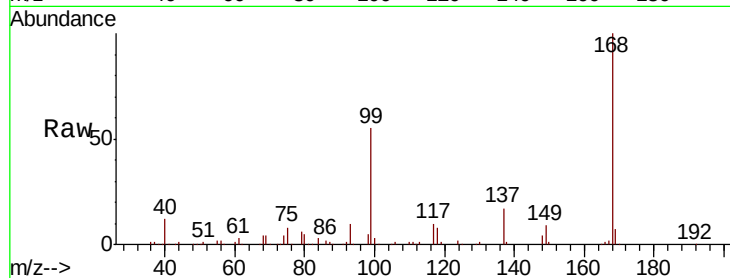
Tot Ion: 75 Resp: 40818

Ion Ratio Lower Upper

75 100

110 8.4 19.1 57.5#

77 0.0 25.0 37.4#

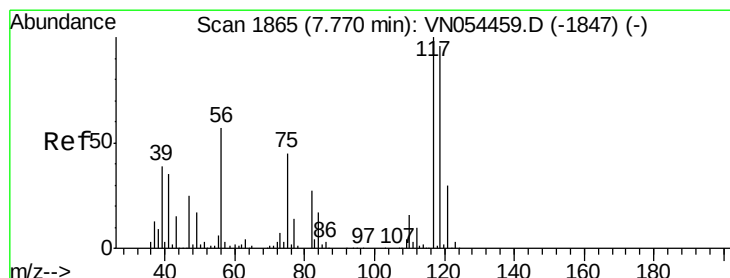
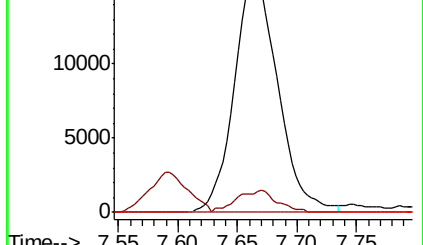
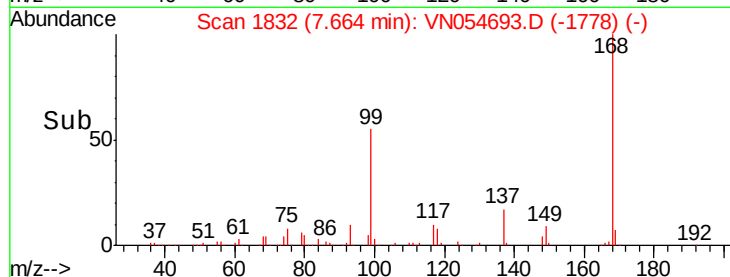


Abundance Ion 74.90 (74.60 to 75.60): VN054459.D (-1848) (-)

Ion 109.90 (109.60 to 110.60): VN054459.D (-1848) (-)

Ion 76.90 (76.60 to 77.60): VN054459.D (-1848) (-)

Time-->



#38

Carbon Tetrachloride

Concen: 6.703 ug/l

RT: 7.66 min Scan# 1832

Delta R.T. -0.11 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

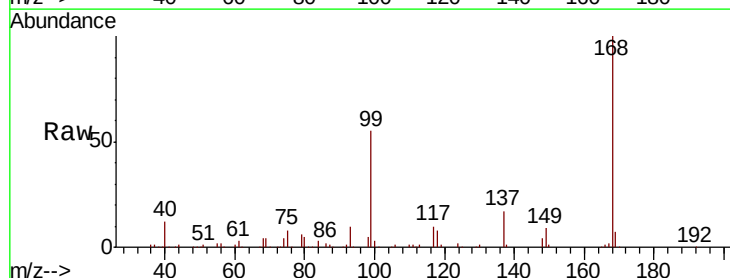
Tgt Ion: 117 Resp: 52604

Ion Ratio Lower Upper

117 100

119 5.0 76.3 114.5#

121 0.0 24.6 36.8#

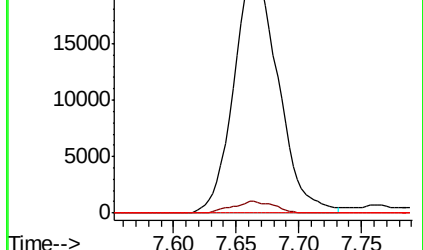
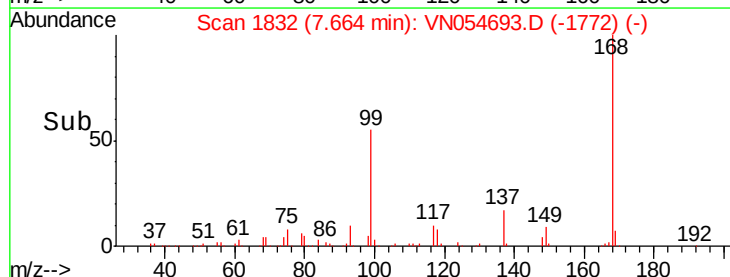


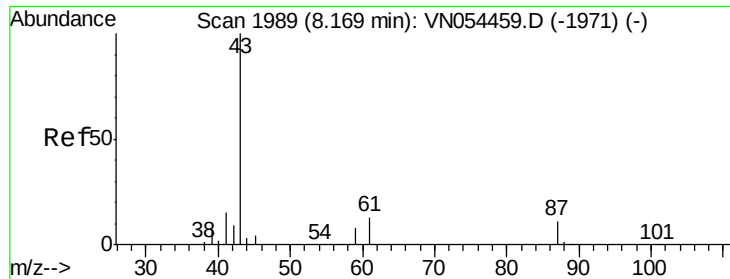
Abundance Ion 116.80 (116.50 to 117.50): VN054459.D (-1847) (-)

Ion 118.80 (118.50 to 119.50): VN054459.D (-1847) (-)

Ion 120.80 (120.50 to 121.50): VN054459.D (-1847) (-)

Time-->





#43

Isopropyl Acetate

Concen: 1.768 ug/l

RT: 8.17 min Scan# 1991

Delta R.T. 0.01 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Instrument :

MSVOA_N

ClientSampleId :

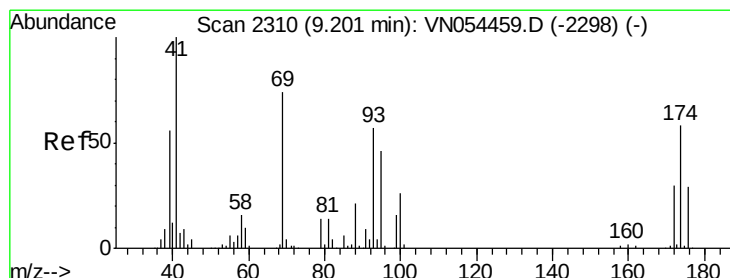
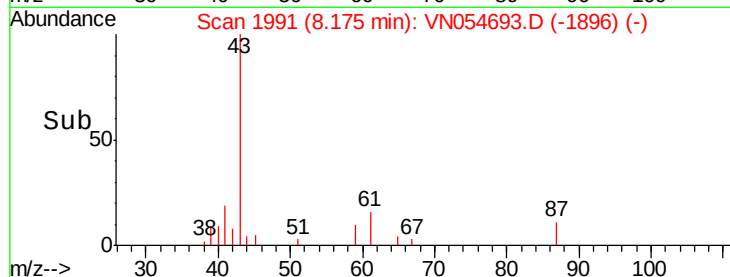
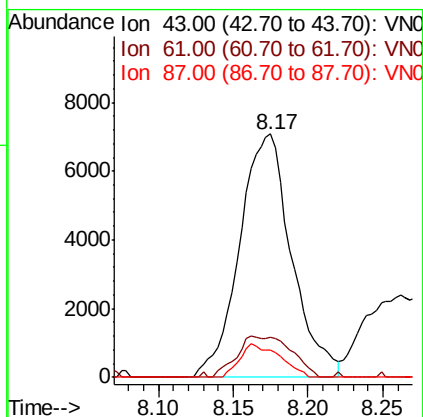
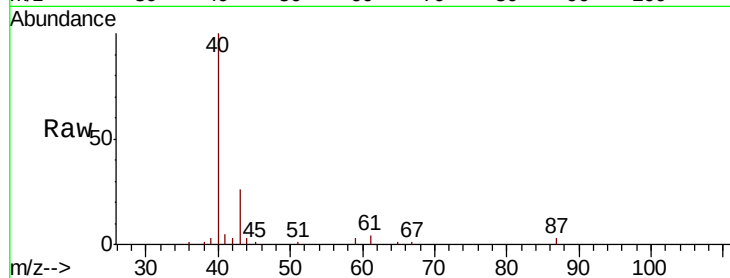
Tot Ion: 43 Resp: 17151

Ion Ratio Lower Upper

43 100

61 8.3 15.8 23.8#

87 10.6 12.0 18.0#



#48

Methyl methacrylate

Concen: 1.379 ug/l

RT: 9.18 min Scan# 2305

Delta R.T. -0.02 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

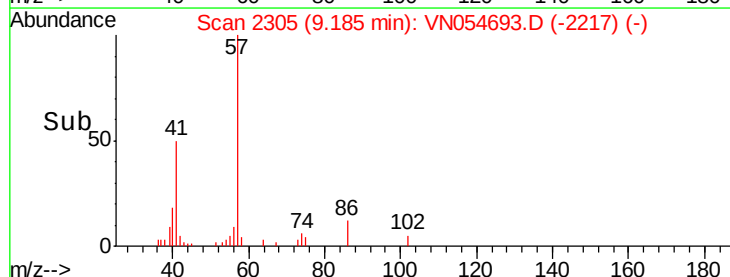
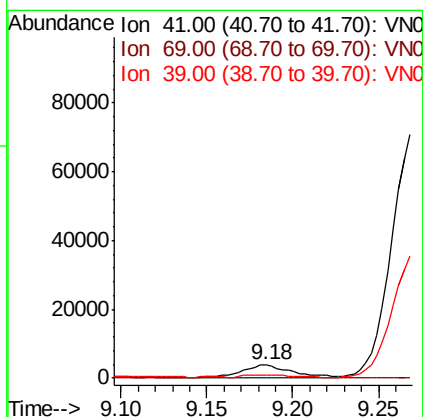
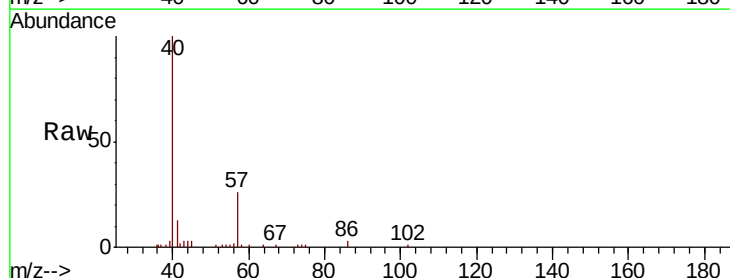
Tgt Ion: 41 Resp: 7261

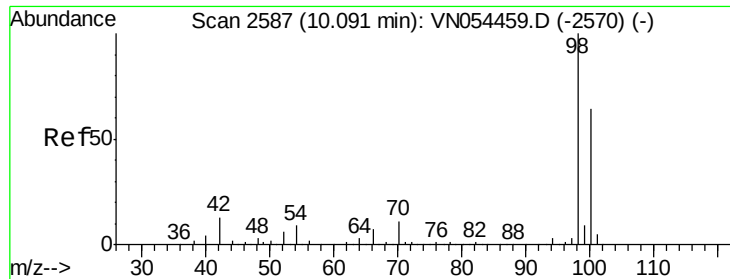
Ion Ratio Lower Upper

41 100

69 0.0 72.6 108.8#

39 0.0 47.5 71.3#

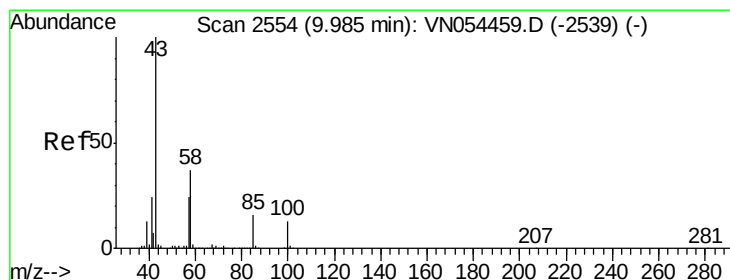
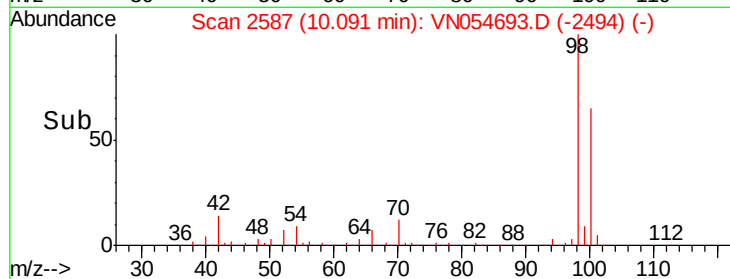
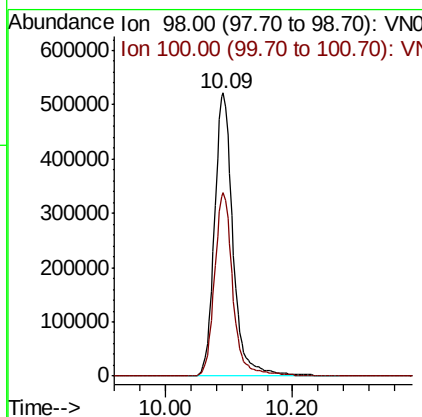
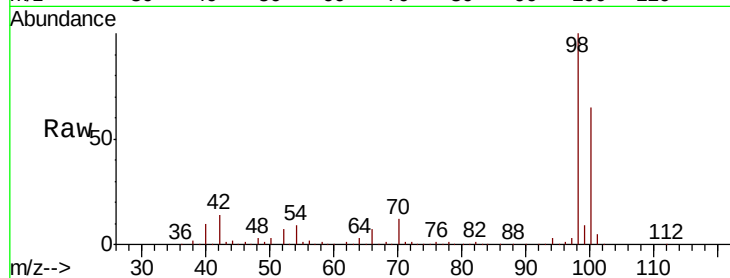




#50
Toluene-d8
Concen: 50.369 ug/l
RT: 10.09 min Scan# 2587
Delta R.T. -0.00 min
Lab File: VN054693.D
Acq: 26 Mar 2019 12:47

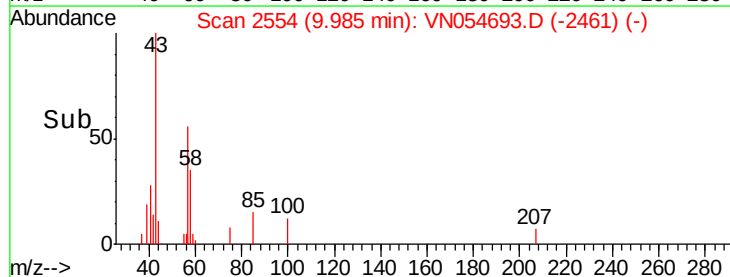
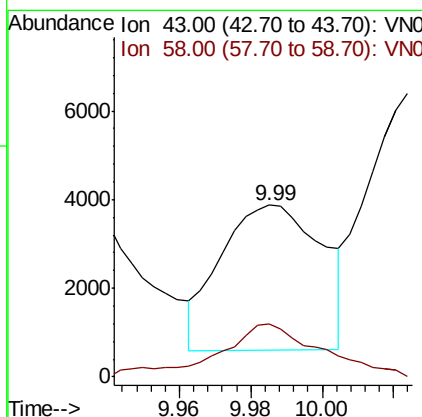
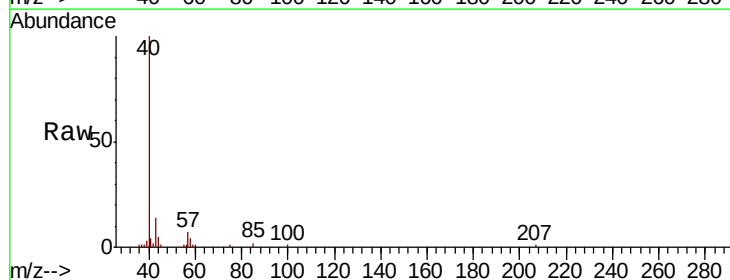
Instrument :
MSVOA_N
ClientSampled :

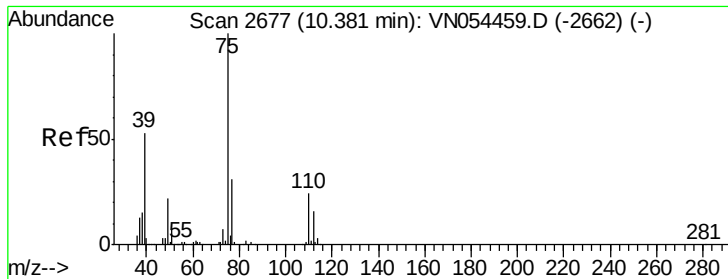
Tot Ion: 98 Resp: 1053695
Ion Ratio Lower Upper
98 100
100 64.4 51.2 76.8



#51
4-Methyl-2-Pentanone
Concen: 1.200 ug/l
RT: 9.99 min Scan# 2554
Delta R.T. -0.00 min
Lab File: VN054693.D
Acq: 26 Mar 2019 12:47

Tgt Ion: 43 Resp: 6451
Ion Ratio Lower Upper
43 100
58 37.1 31.8 47.6





#53

t-1,3-Dichloropropene

Concen: 2.239 ug/l

RT: 10.37 min Scan# 2675

Delta R.T. -0.01 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Instrument :

MSVOA_N

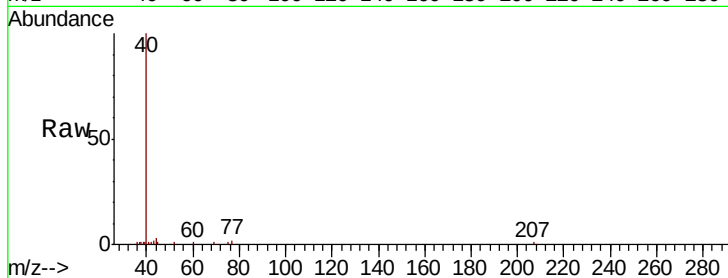
ClientSampleId :

Tot Ion: 75 Resp: 62

Ion Ratio Lower Upper

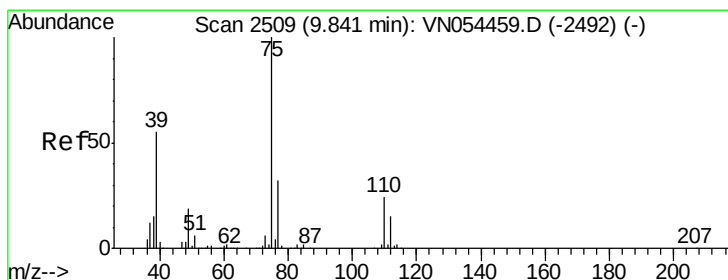
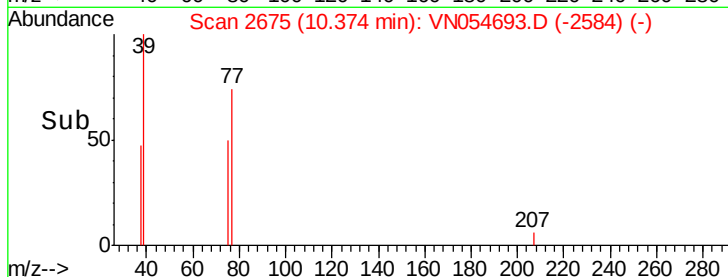
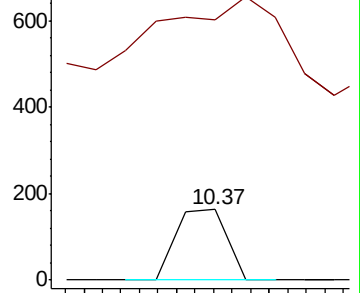
75 100

77 43.6 25.8 38.8#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 76.90 (76.60 to 77.60): VN0



#54

cis-1,3-Dichloropropene

Concen: 6.653 ug/l

RT: 9.91 min Scan# 2530

Delta R.T. 0.07 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

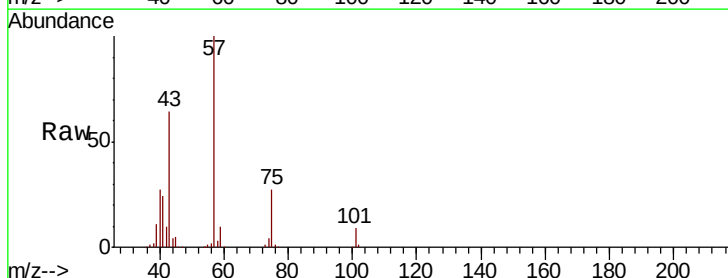
Tgt Ion: 75 Resp: 58566

Ion Ratio Lower Upper

75 100

77 0.9 25.4 38.0#

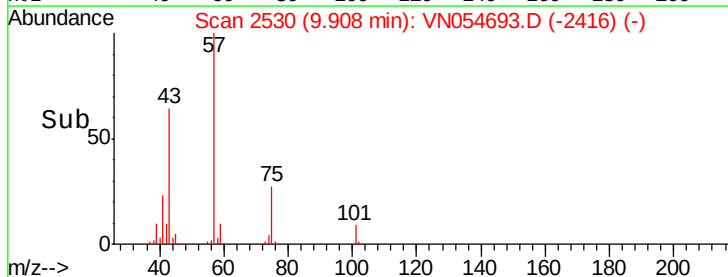
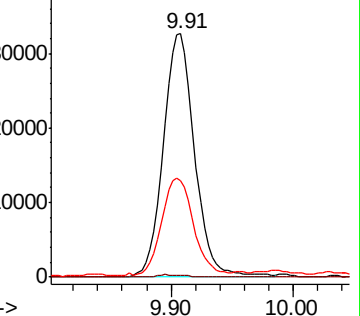
39 38.8 37.2 55.8

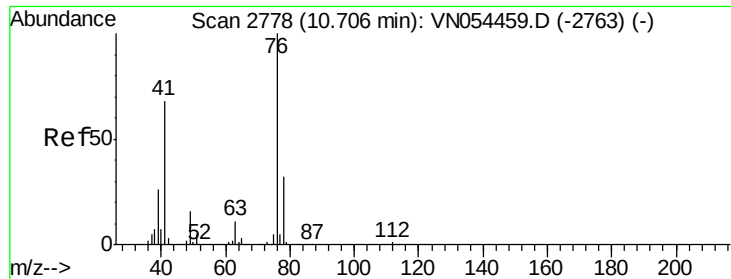


Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 76.90 (76.60 to 77.60): VN0

Ion 39.00 (38.70 to 39.70): VN0

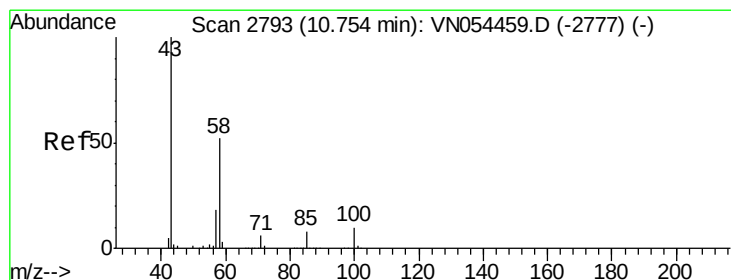
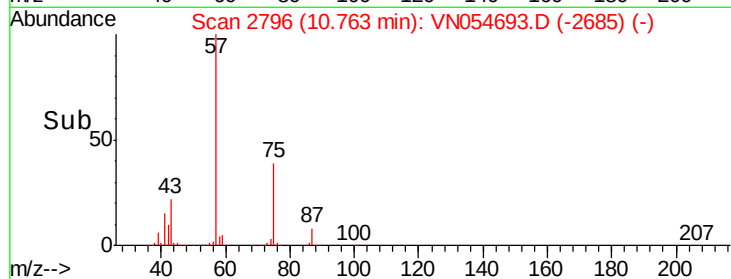
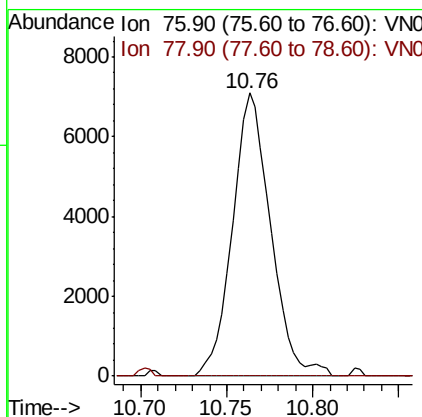
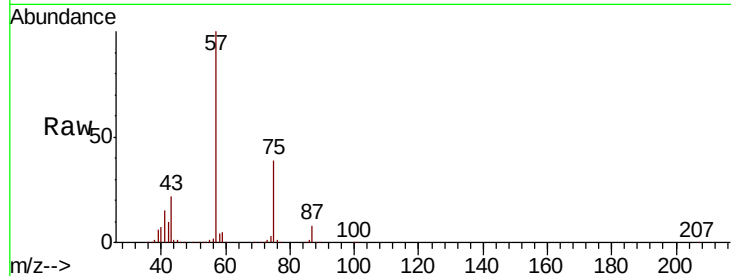




#57
 1,3-Dichloropropane
 Concen: 1.232 ug/l
 RT: 10.76 min Scan# 2796
 Delta R.T. 0.06 min
 Lab File: VN054693.D
 Acq: 26 Mar 2019 12:47

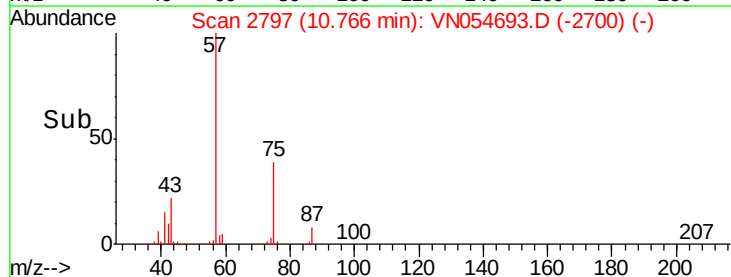
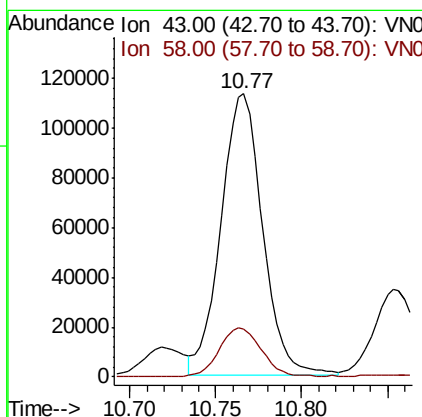
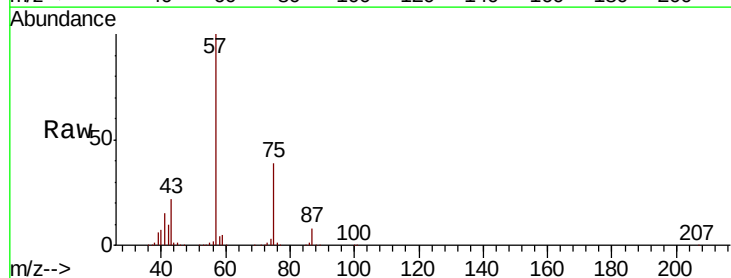
Instrument :
 MSVOA_N
 ClientSampleId :

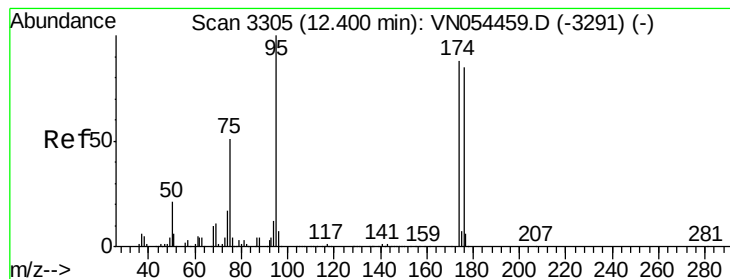
Tot Ion: 76 Resp: 10932
 Ion Ratio Lower Upper
 76 100
 78 0.0 25.7 38.5#



#59
 2-Hexanone
 Concen: 54.448 ug/l
 RT: 10.77 min Scan# 2797
 Delta R.T. 0.01 min
 Lab File: VN054693.D
 Acq: 26 Mar 2019 12:47

Tgt Ion: 43 Resp: 191202
 Ion Ratio Lower Upper
 43 100
 58 17.8 28.0 83.9#





#62

4-Bromofluorobenzene

Concen: 45.683 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.00 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Instrument :

MSVOA_N

ClientSampleId :

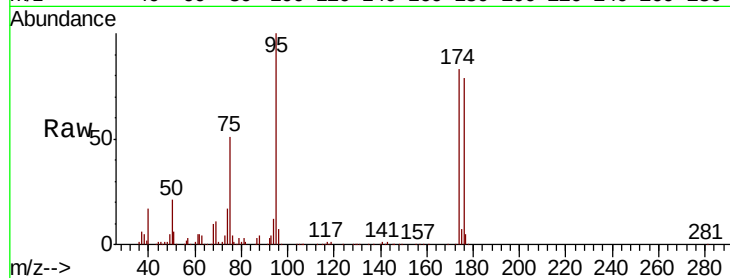
Tot Ion: 95 Resp: 325203

Ion Ratio Lower Upper

95 100

174 84.2 0.0 191.0

176 81.2 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) (-)

12.40

200000

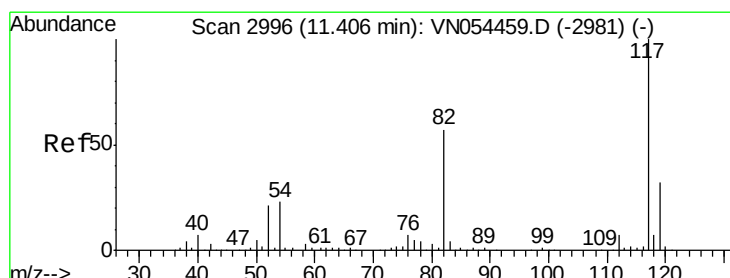
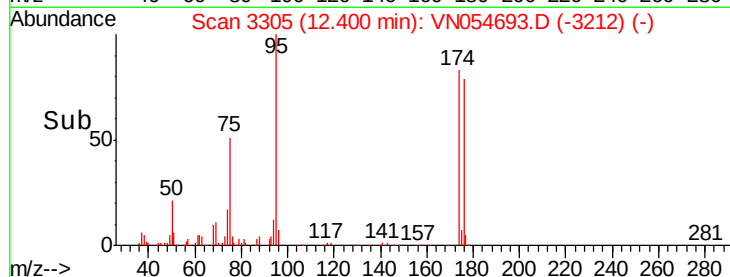
150000

100000

50000

0

Time--> 12.30 12.40 12.50



#63

Chlorobenzene-d5

Concen: 50.000 ug/l

RT: 11.41 min Scan# 2996

Delta R.T. -0.00 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

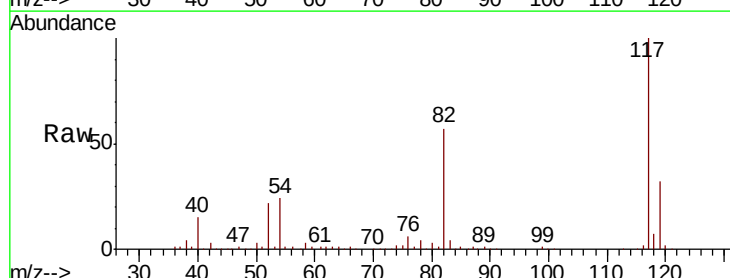
Tgt Ion: 117 Resp: 743650

Ion Ratio Lower Upper

117 100

82 56.9 40.0 60.0

119 32.1 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) (-)

11.41

500000

400000

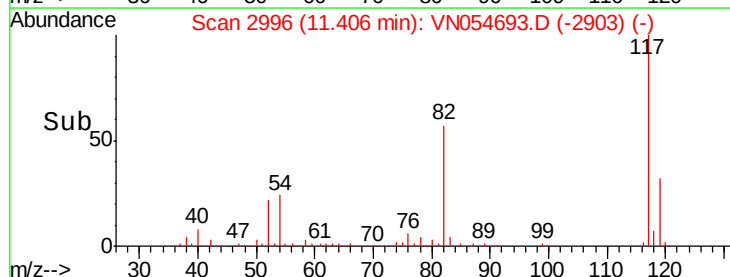
300000

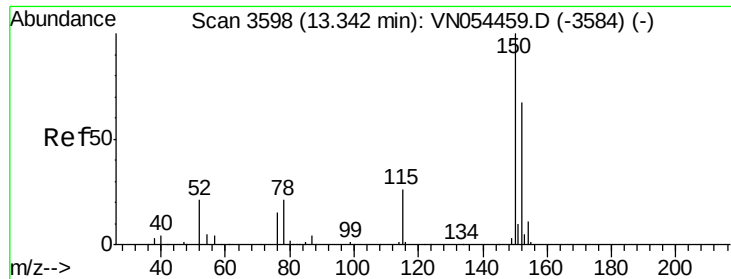
200000

100000

0

Time--> 11.30 11.40 11.50





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.34 min Scan# 3598

Delta R.T. -0.00 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Instrument :

MSVOA_N

ClientSampleId :

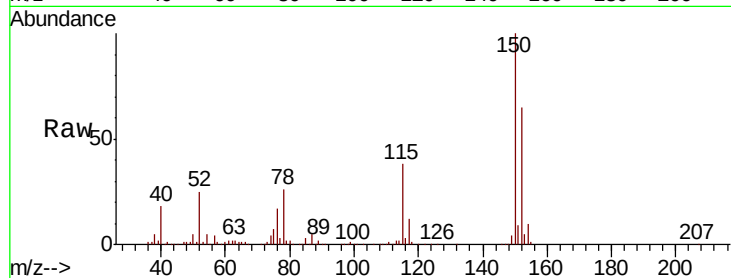
Tot Ion:152 Resp: 272459

Ion Ratio Lower Upper

152 100

115 57.5 27.2 81.6

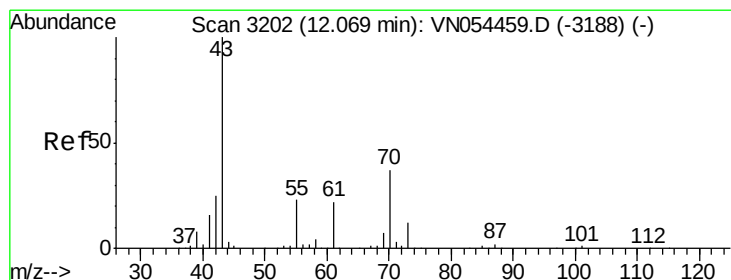
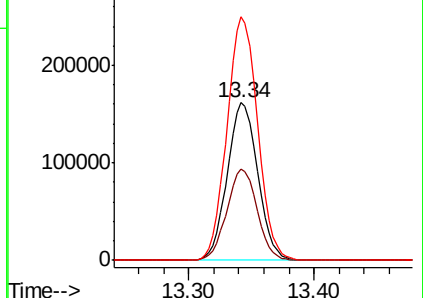
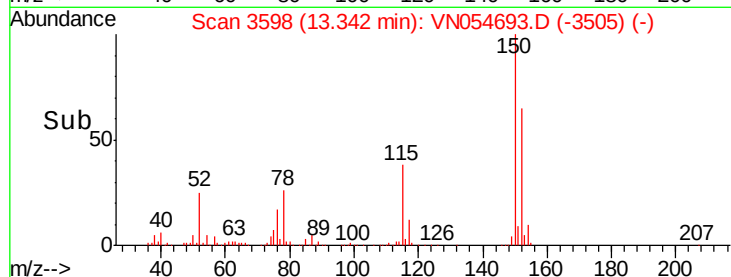
150 155.7 0.0 349.2



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: 0.234 ug/l

RT: 12.08 min Scan# 3204

Delta R.T. 0.01 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Tgt Ion: 43 Resp: 1476

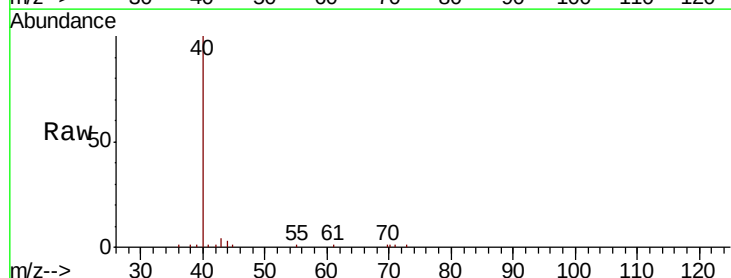
Ion Ratio Lower Upper

43 100

70 36.0 35.4 53.0

55 7.7 19.8 29.6#

61 16.1 19.8 29.6#

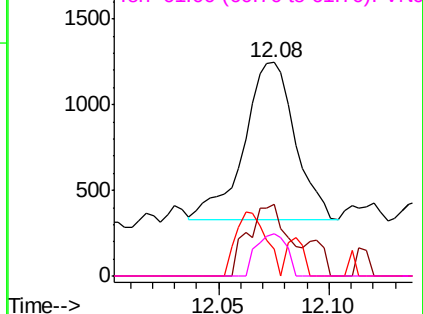
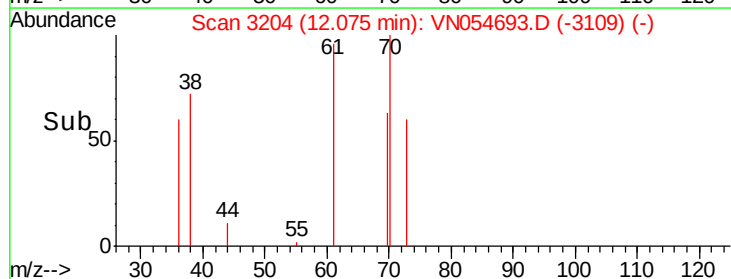


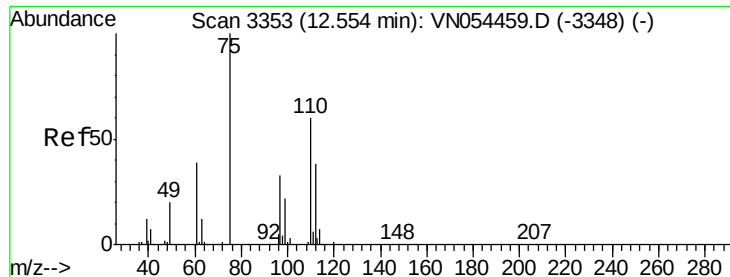
Abundance Ion 43.00 (42.70 to 43.70): V

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: 38.826 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. -0.15 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Instrument :

MSVOA_N

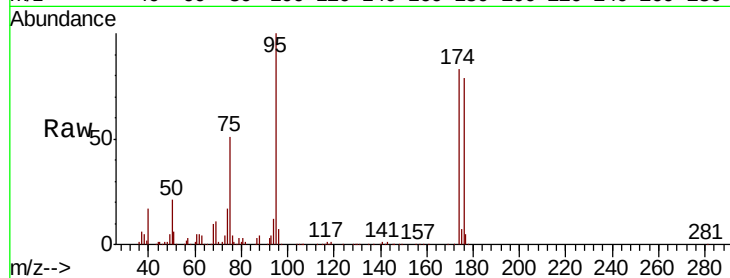
ClientSampled :

Tot Ion: 75 Resp: 167864

Ion Ratio Lower Upper

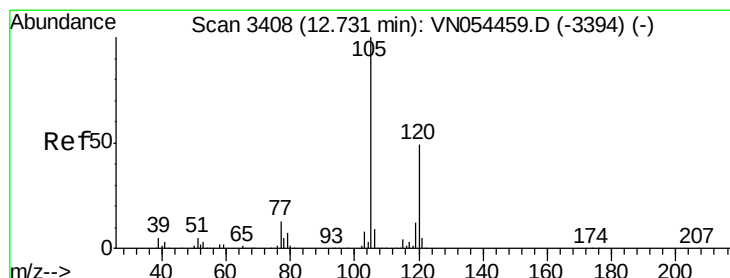
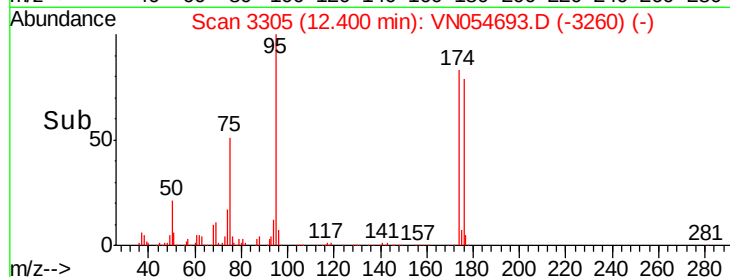
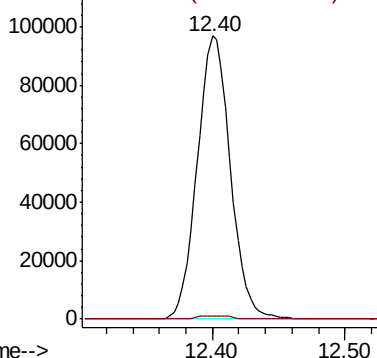
75 100

77 1.4 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): VN0

Ion 77.00 (76.70 to 77.70): VN0



#80

1,3,5-Trimethylbenzene

Concen: 0.833 ug/l

RT: 12.73 min Scan# 3409

Delta R.T. 0.00 min

Lab File: VN054693.D

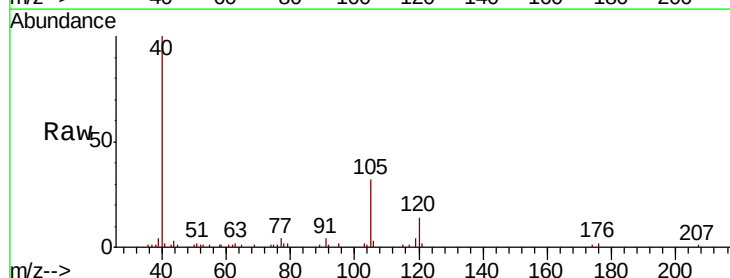
Acq: 26 Mar 2019 12:47

Tgt Ion: 105 Resp: 14986

Ion Ratio Lower Upper

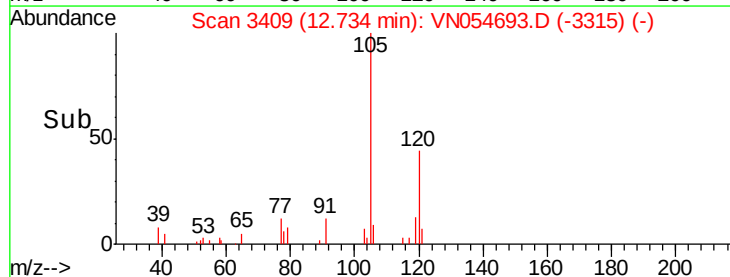
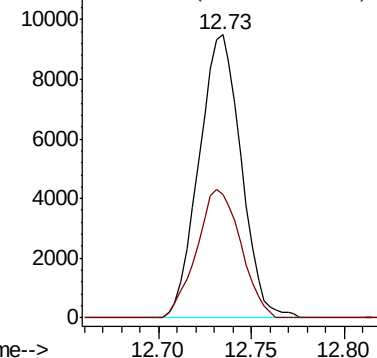
105 100

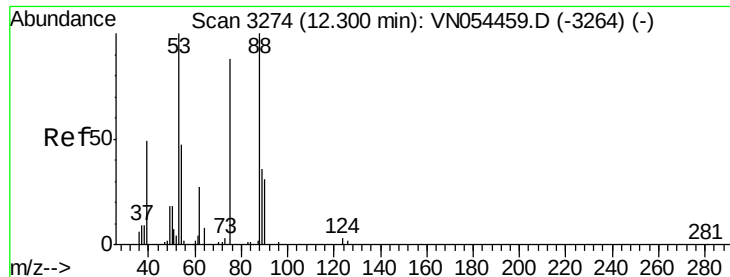
120 47.7 25.0 75.0



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V

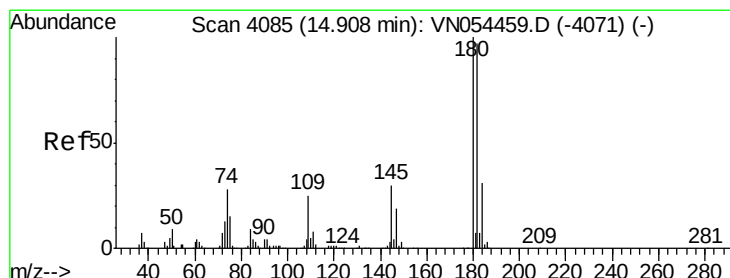
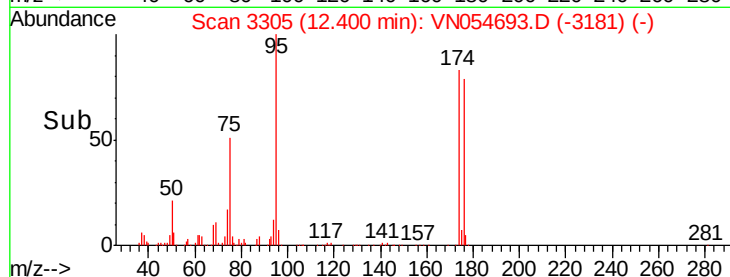
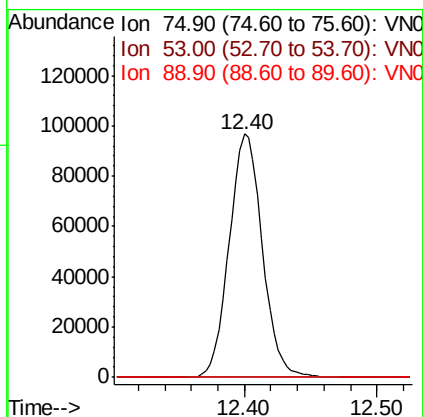
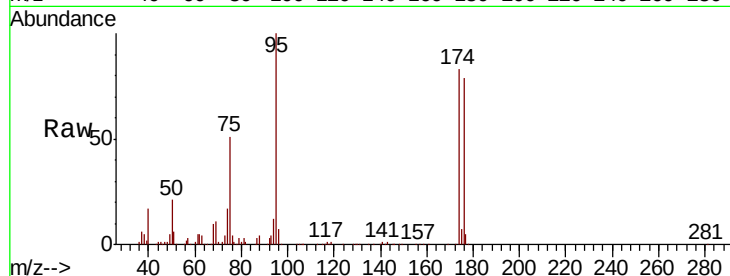




#81
 trans-1,4-Dichloro-2-butene
 Concen: 128.528 ug/l
 RT: 12.40 min Scan# 3305
 Delta R.T. 0.10 min
 Lab File: VN054693.D
 Acq: 26 Mar 2019 12:47

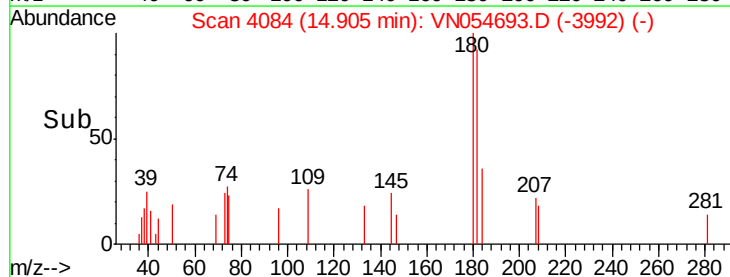
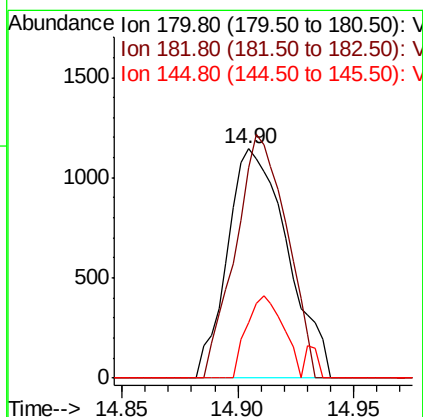
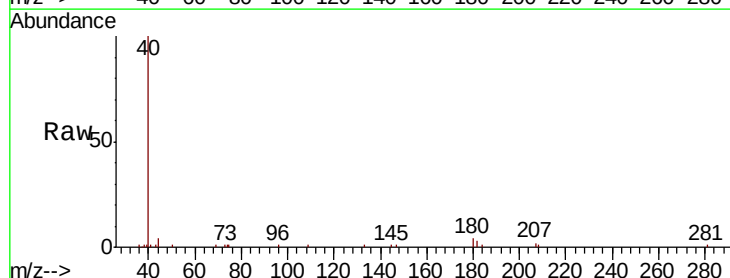
Instrument :
 MSVOA_N
 ClientSampleId :

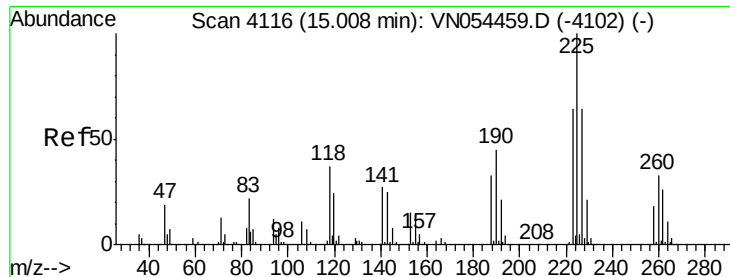
Tot Ion: 75 Resp: 167864
 Ion Ratio Lower Upper
 75 100
 53 0.0 76.2 114.2#
 89 0.0 39.2 58.8#



#93
 1,2,4-Trichlorobenzene
 Concen: 0.472 ug/l
 RT: 14.90 min Scan# 4084
 Delta R.T. -0.00 min
 Lab File: VN054693.D
 Acq: 26 Mar 2019 12:47

Tgt Ion: 180 Resp: 2058
 Ion Ratio Lower Upper
 180 100
 182 91.1 48.0 144.2
 145 21.8 14.2 42.8





#94

Hexachlorobutadiene

Concen: Below Cal

RT: 15.01 min Scan# 4118

Delta R.T. 0.01 min

Lab File: VN054693.D

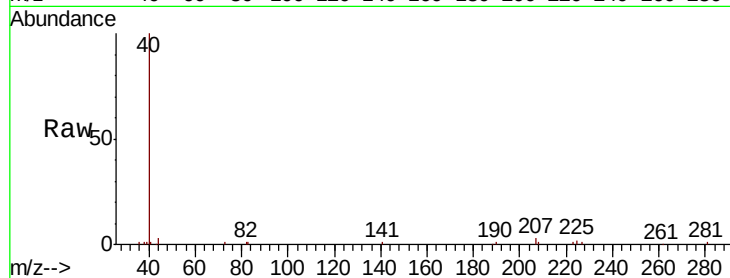
Acq: 26 Mar 2019 12:47

Instrument :

MSVOA_N

ClientSampleId :

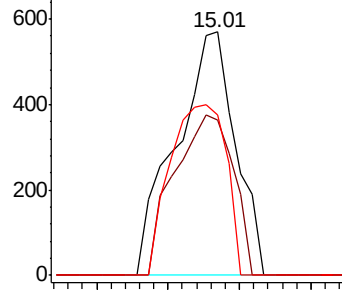
Tot Ion:	225	Resp:	657
Ion	Ratio	Lower	Upper
225	100		
223	65.6	31.1	93.5
227	66.1	31.9	95.9



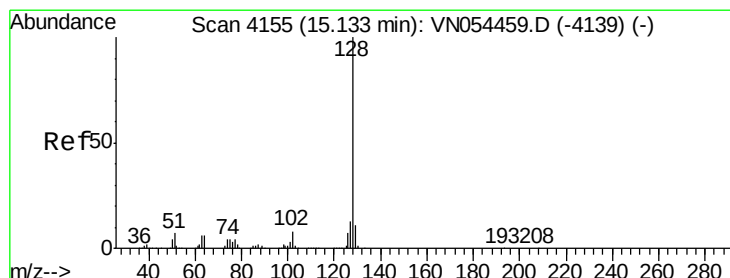
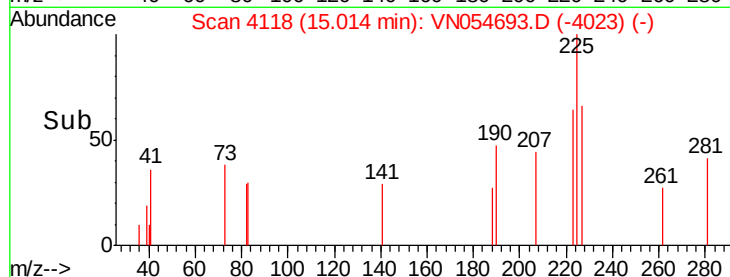
Abundance Ion 224.70 (224.40 to 225.40): V

Ion 222.70 (222.40 to 223.40): V

Ion 226.70 (226.40 to 227.40): V



Time-->



#95

Naphthalene

Concen: 0.685 ug/l

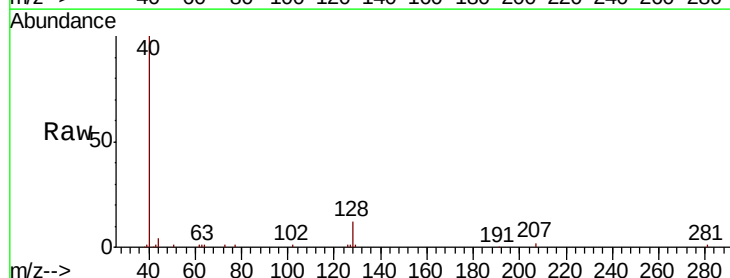
RT: 15.13 min Scan# 4155

Delta R.T. -0.00 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

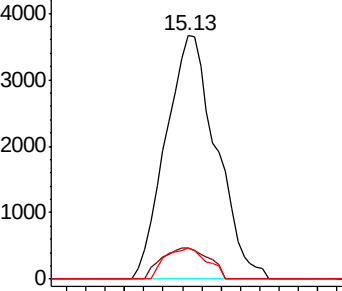
Tgt Ion:	128	Resp:	6656
Ion	Ratio	Lower	Upper
128	100		
127	12.0	10.1	15.1
129	10.6	8.7	13.1



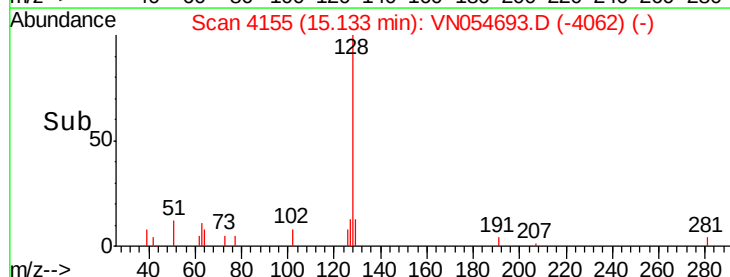
Abundance Ion 128.00 (127.70 to 128.70): V

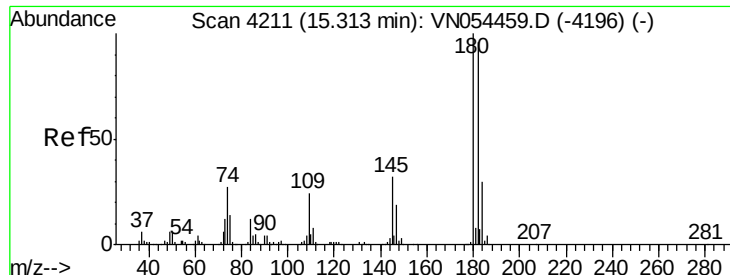
Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V



Time-->





#96

1,2,3-Trichlorobenzene

Concen: 0.486 ug/l

RT: 15.31 min Scan# 4210

Delta R.T. -0.00 min

Lab File: VN054693.D

Acq: 26 Mar 2019 12:47

Instrument :

MSVOA_N

ClientSampleId :

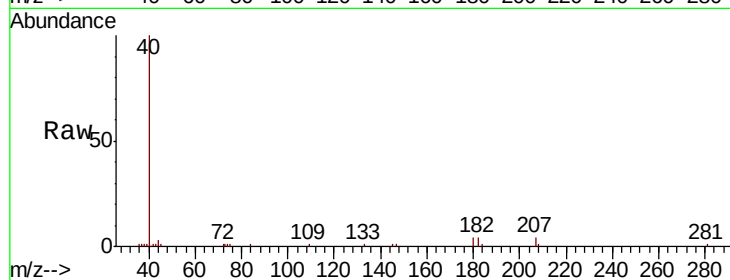
Tot Ion:180 Resp: 2109

Ion Ratio Lower Upper

180 100

182 81.4 47.5 142.6

145 31.7 14.8 44.3



Abundance Ion 179.80 (179.50 to 180.50): V

1500 Ion 181.80 (181.50 to 182.50): V

Ion 144.90 (144.60 to 145.60): V

