

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN053019\
 Data File : VN055901.D
 Acq On : 30 May 2019 15:47
 Operator : JC/SP
 Sample : K3103-01
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: May 31 04:49:48 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N052219W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Thu May 23 05:54:54 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.19	128	50423	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.58	114	268869	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	216725	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.02	65	100796	30.58	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	101.93%
60) 4-Bromofluorobenzene	12.40	95	79374	23.54	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	78.47%
63) Toluene-d8	10.09	98	312953	31.60	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	105.33%

Target Compounds

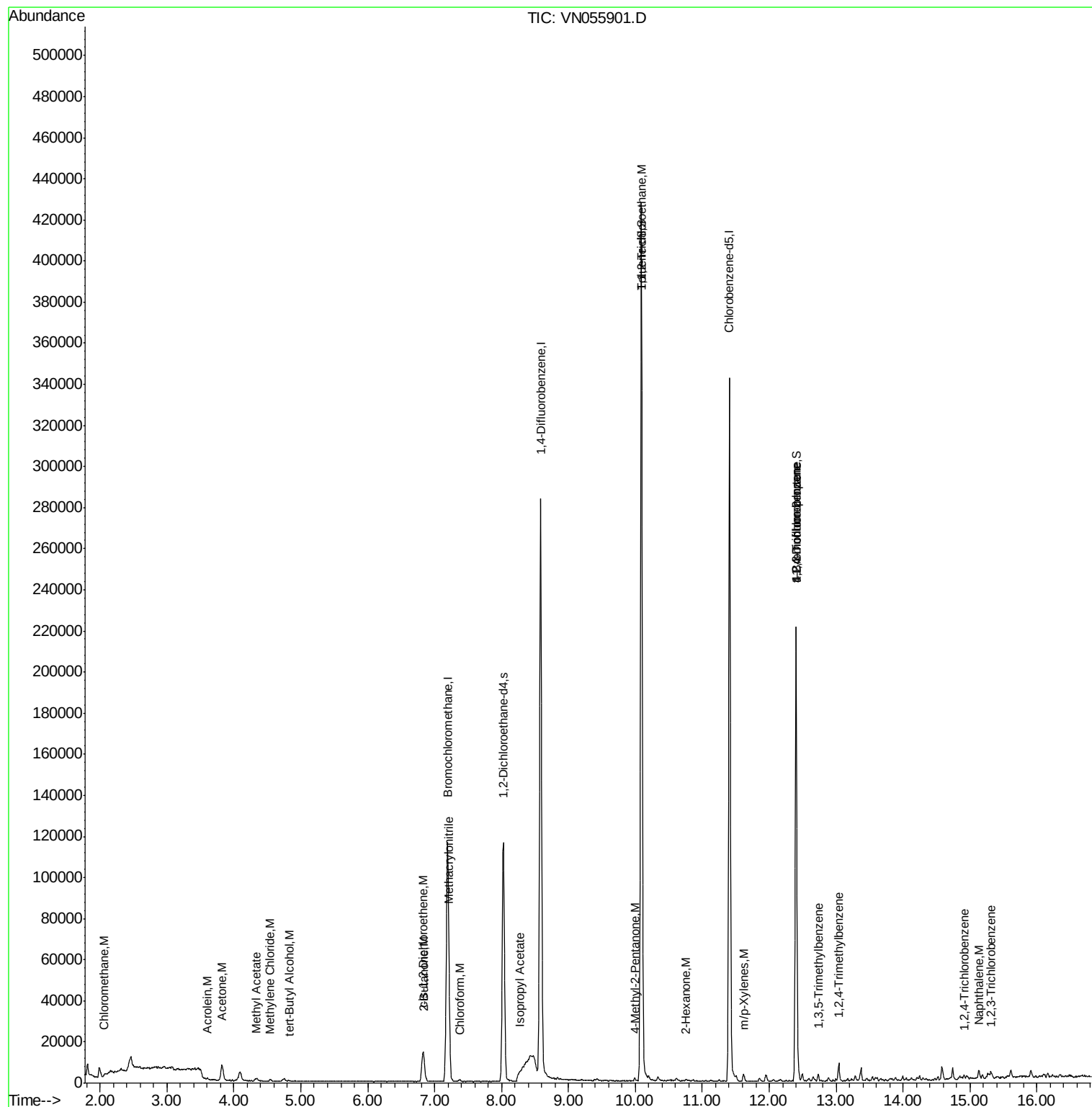
					Ovalue
3) Chloromethane	2.06	50	722	0.230 ug/l #	43
12) Methyl Acetate	4.34	43	2926	0.899 ug/l #	90
13) Acrolein	3.60	56	93	0.206 ug/l #	1
15) Acetone	3.82	58	3955	8.581 ug/l	88
18) Methylene Chloride	4.55	84	705	0.231 ug/l #	73
22) cis-1,2-Dichloroethene	6.82	96	10278	3.078 ug/l	87
23) tert-Butyl Alcohol	4.82	59	337	0.517 ug/l #	100
25) Chloroform	7.37	83	1147	0.221 ug/l	88
30) 2-Butanone	6.85	43	506	0.252 ug/l #	55
35) Methacrylonitrile	7.22	41	872	0.471 ug/l #	45
44) Isopropyl Acetate	8.27	43	4290	0.657 ug/l #	47
50) 1,1,2-Trichloroethane	10.10	97	8979	3.058 ug/l #	1
58) 4-Methyl-2-Pentanone	9.98	43	1012	0.282 ug/l #	80
59) 2-Hexanone	10.75	43	1087	0.424 ug/l #	79
67) m/p-Xylenes	11.62	106	1488	0.308 ug/l	90
72) 1,2,3-Trichloropropane	12.40	75	36489	10.999 ug/l	1
76) 1,3,5-Trimethylbenzene	12.73	105	2360	0.228 ug/l	97
77) t-1,4-Dichloro-2-butene	12.40	75	36489	27.691 ug/l #	17
80) 1,2,4-Trimethylbenzene	13.04	105	6530	0.635 ug/l	92
89) 1,2,4-Trichlorobenzene	14.91	180	1004	0.356 ug/l	94
91) Naphthalene	15.13	128	4446	0.576 ug/l #	89
92) 1,2,3-Trichlorobenzene	15.31	180	1450	0.491 ug/l	91

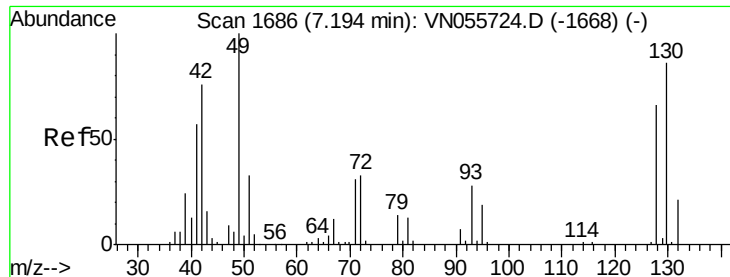
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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ClientSampleId :

Quant Time: May 31 04:49:48 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA N\METHODS\624N052219W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Thu May 23 05:54:54 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 7.19 min Scan# 1686

Delta R.T. 0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

Instrument :
MSVOA_N
ClientSampleId :

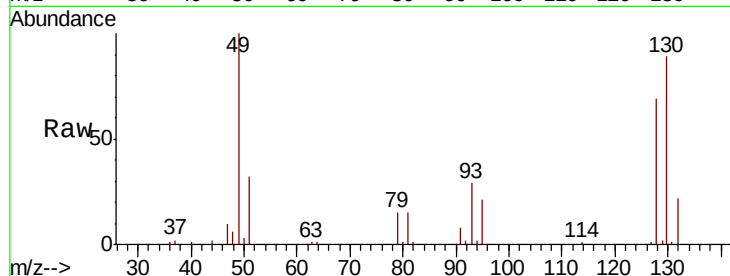
Tot Ion:128 Resp: 50423

Ion Ratio Lower Upper

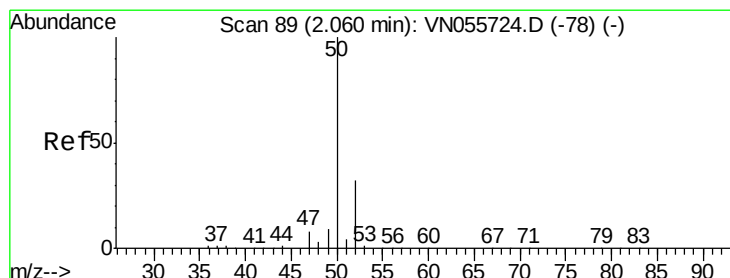
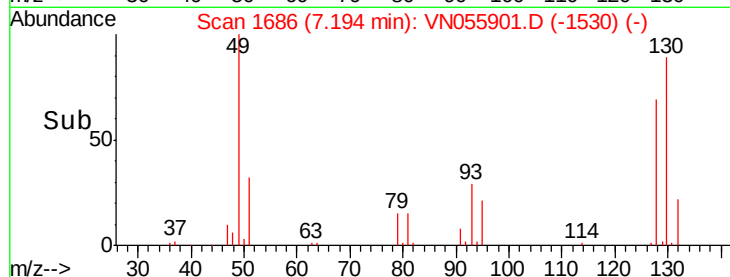
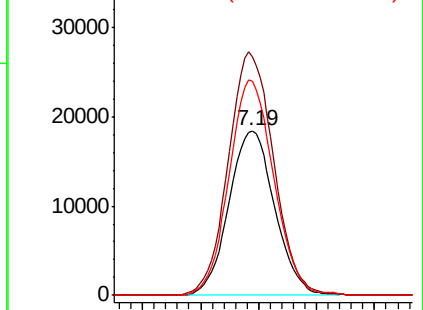
128 100

49 146.8 0.0 383.2

130 128.3 0.0 326.3



Abundance Ion 128.00 (127.70 to 128.70): V
Ion 49.00 (48.70 to 49.70): VN
Ion 130.00 (129.70 to 130.70): V



#3

Chloromethane

Concen: 0.230 ug/l

RT: 2.06 min Scan# 90

Delta R.T. 0.00 min

Lab File: VN055901.D

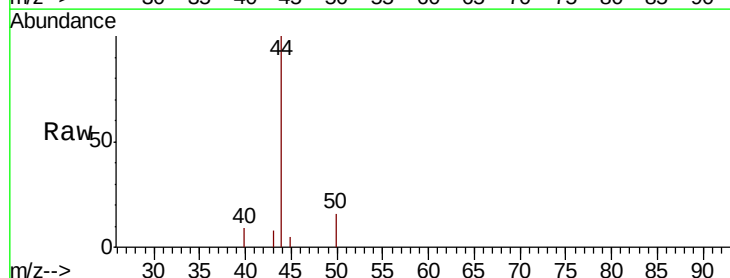
Acq: 30 May 2019 15:47

Tgt Ion: 50 Resp: 722

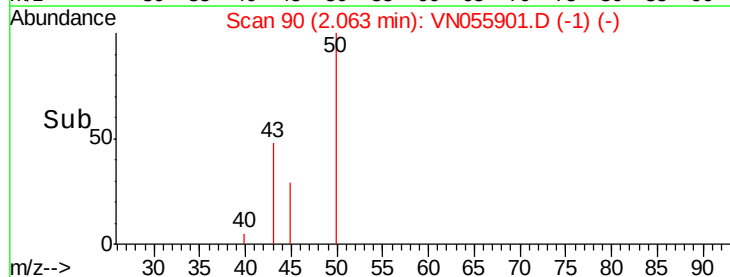
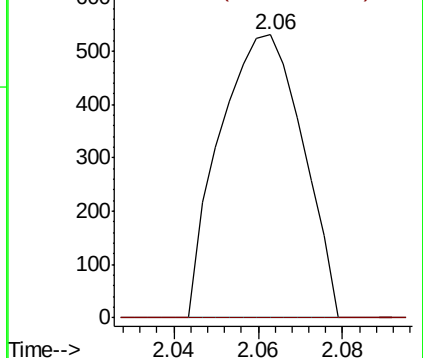
Ion Ratio Lower Upper

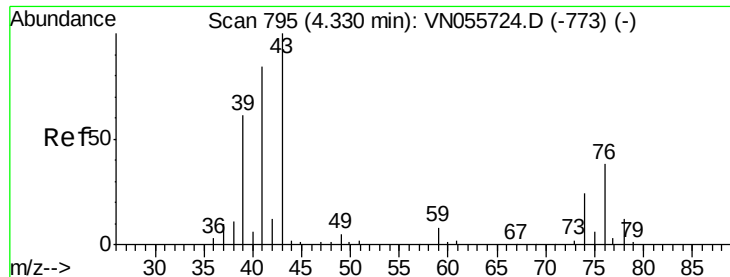
50 100

52 0.0 25.4 38.2#



Abundance Ion 50.00 (49.70 to 50.70): VN
Ion 52.00 (51.70 to 52.70): VN





#12

Methvl Acetate

Concen: 0.899 ug/l

RT: 4.34 min Scan# 798

Delta R.T. 0.01 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

Instrument :

MSVOA_N

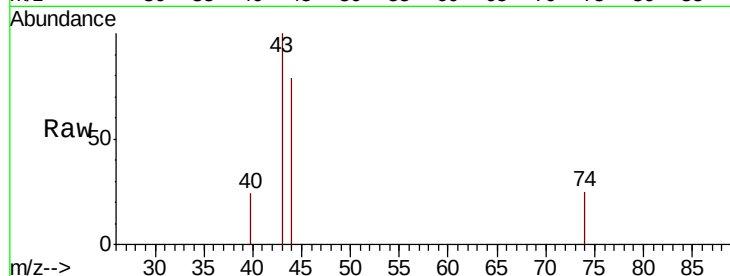
ClientSampled :

Tot Ion: 43 Resp: 2926

Ion Ratio Lower Upper

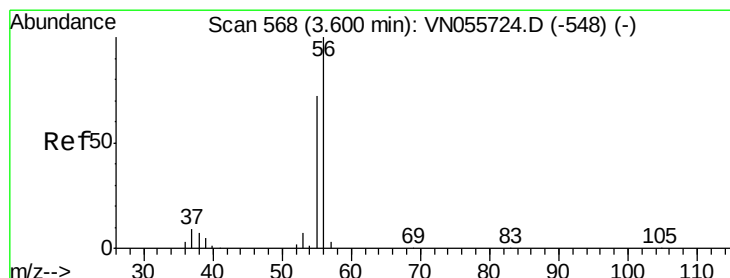
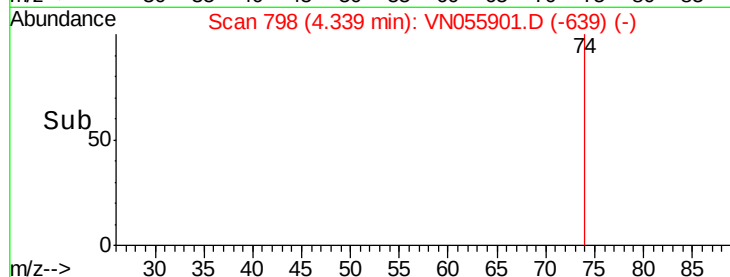
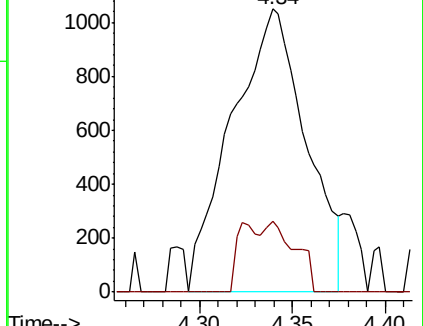
43 100

74 29.0 19.2 28.8#



Abundance Ion 43.00 (42.70 to 43.70): VN055724.D (-773) (-)

Ion 74.00 (73.70 to 74.70): VN055724.D (-773) (-)



#13

Acrolein

Concen: 0.206 ug/l

RT: 3.60 min Scan# 568

Delta R.T. 0.00 min

Lab File: VN055901.D

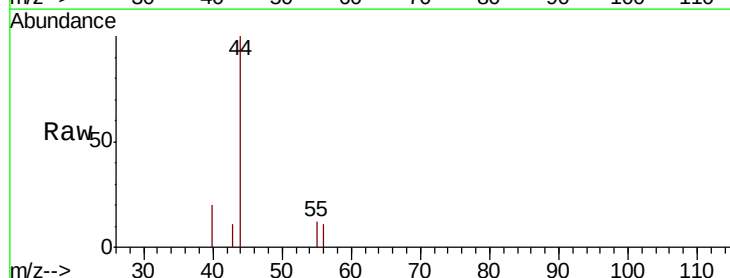
Acq: 30 May 2019 15:47

Tgt Ion: 56 Resp: 93

Ion Ratio Lower Upper

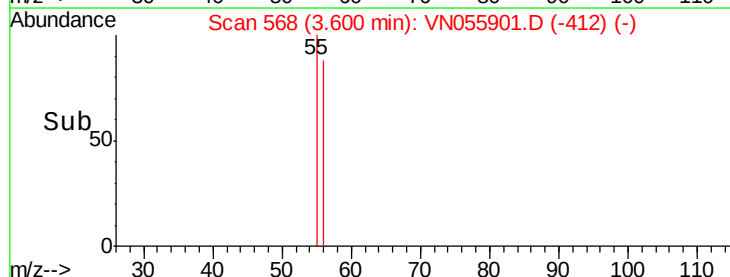
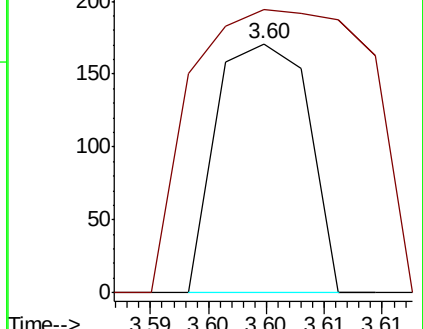
56 100

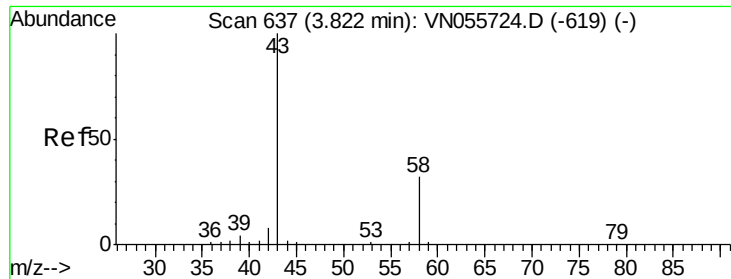
55 221.5 57.0 85.6#



Abundance Ion 56.00 (55.70 to 56.70): VN055724.D (-548) (-)

Ion 55.00 (54.70 to 55.70): VN055724.D (-548) (-)

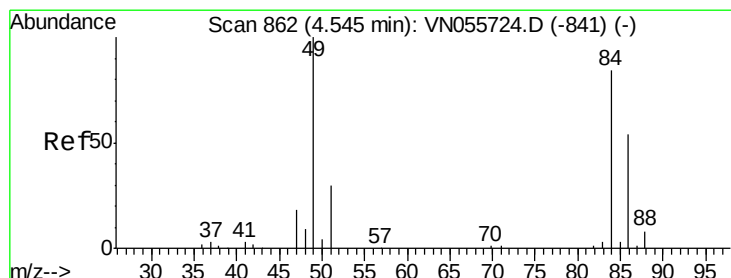
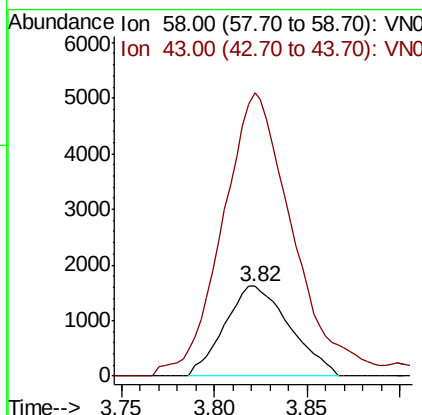
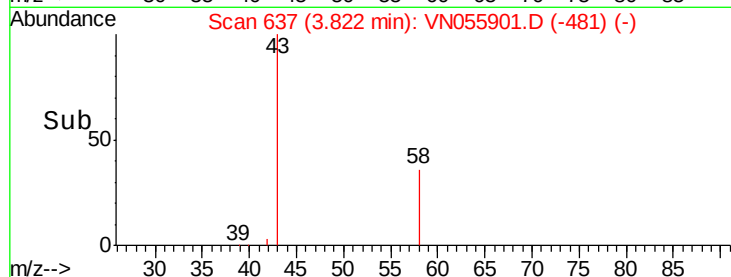
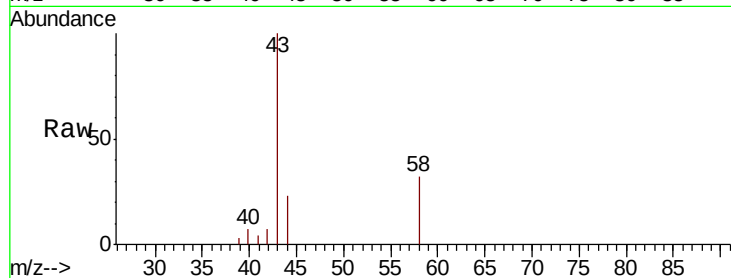




#15
Acetone
Concen: 8.581 ug/l
RT: 3.82 min Scan# 637
Delta R.T. 0.00 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

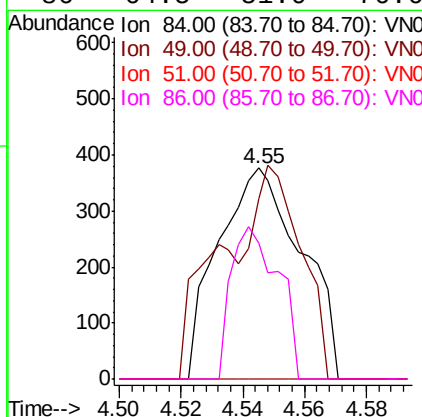
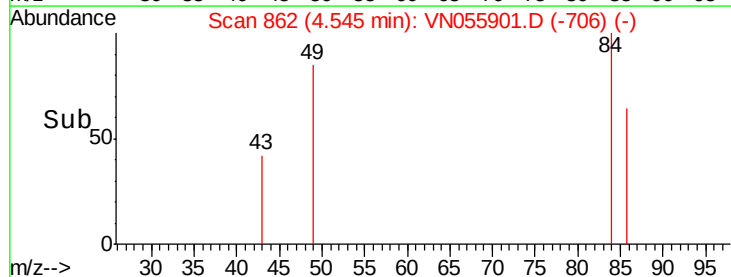
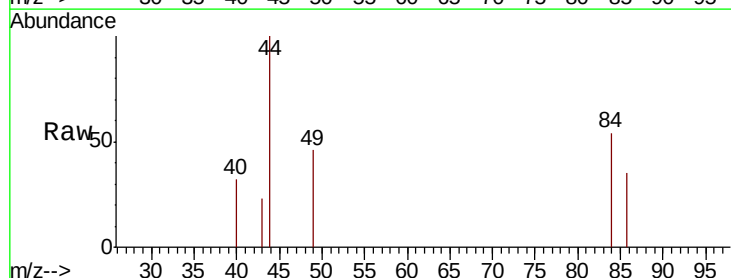
Instrument :
MSVOA_N
ClientSampled :

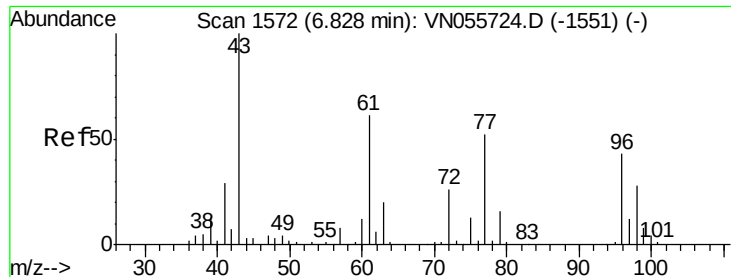
Tot Ion: 58 Resp: 3955
Ion Ratio Lower Upper
58 100
43 286.2 248.8 373.2



#18
Methylene Chloride
Concen: 0.231 ug/l
RT: 4.55 min Scan# 862
Delta R.T. 0.00 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

Tgt Ion: 84 Resp: 705
Ion Ratio Lower Upper
84 100
49 85.4 94.7 142.1#
51 0.0 28.6 43.0#
86 64.5 51.0 76.6





#22

cis-1,2-Dichloroethene

Concen: 3.078 ug/l

RT: 6.82 min Scan# 1571

Delta R.T. -0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

Instrument :

MSVOA_N

ClientSampled :

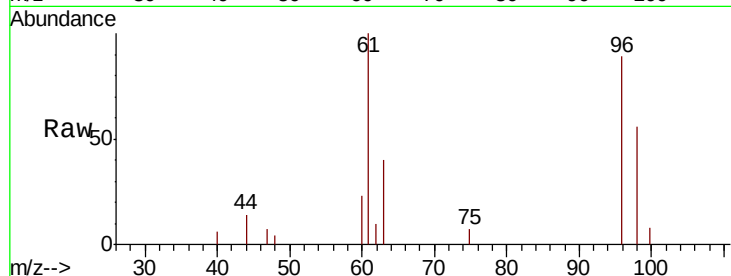
Tot Ion: 96 Resp: 10278

Ion Ratio Lower Upper

96 100

61 122.1 115.7 173.5

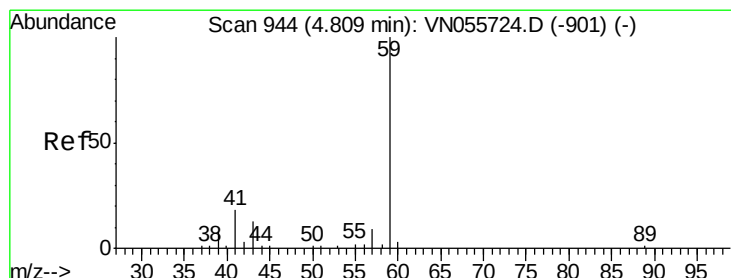
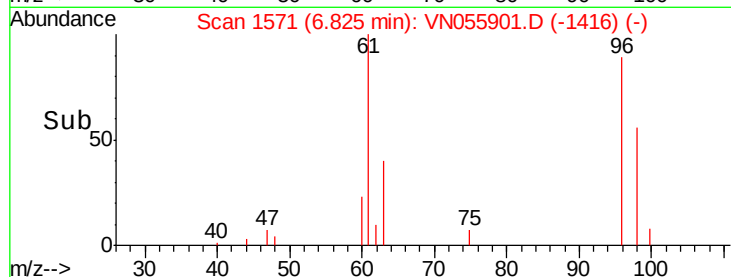
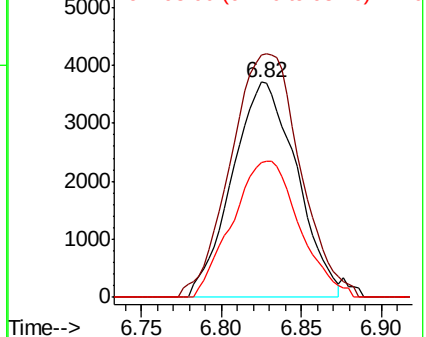
98 65.8 51.5 77.3



Abundance Ion 96.00 (95.70 to 96.70): VN0

Ion 61.00 (60.70 to 61.70): VN0

Ion 98.00 (97.70 to 98.70): VN0



#23

tert-Butyl Alcohol

Concen: 0.517 ug/l

RT: 4.82 min Scan# 948

Delta R.T. 0.01 min

Lab File: VN055901.D

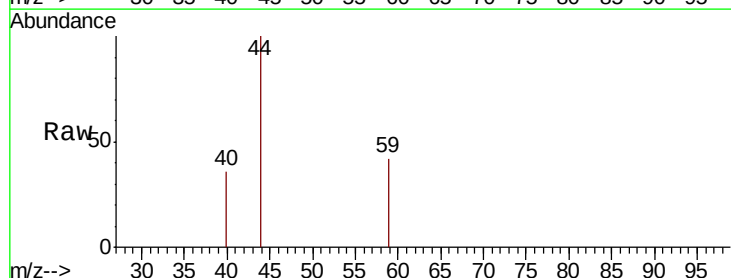
Acq: 30 May 2019 15:47

Tgt Ion: 59 Resp: 337

Ion Ratio Lower Upper

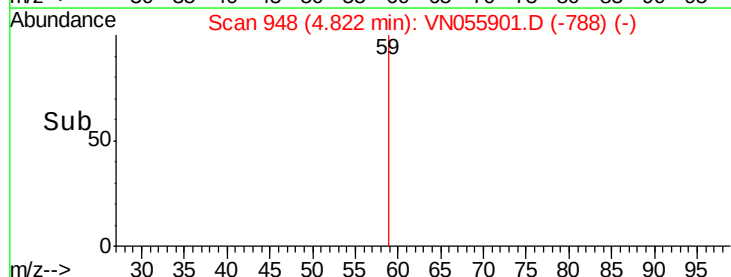
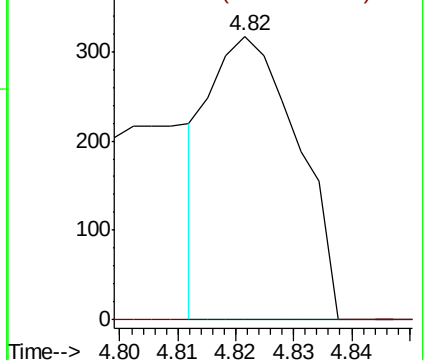
59 100

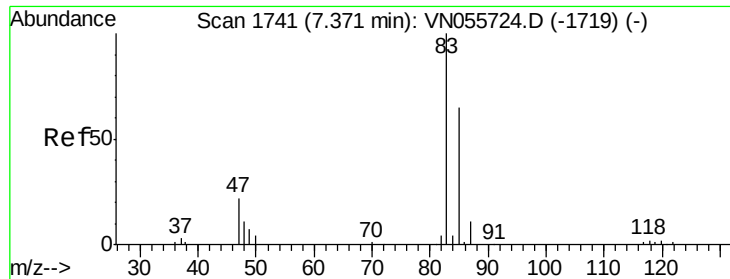
52 0.0 0.0 0.0



Abundance Ion 59.00 (58.70 to 59.70): VN0

Ion 52.00 (51.70 to 52.70): VN0

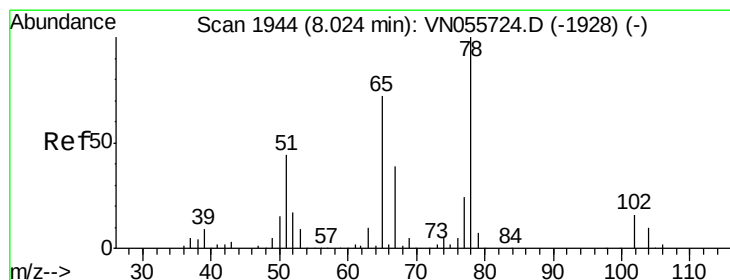
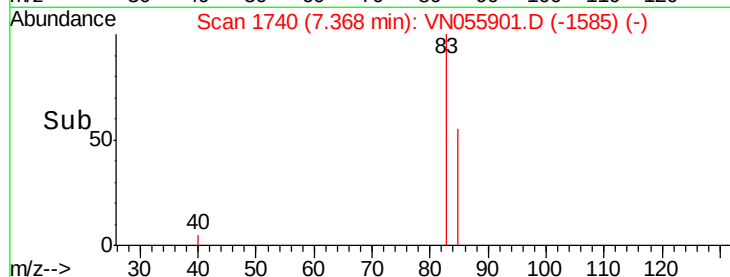
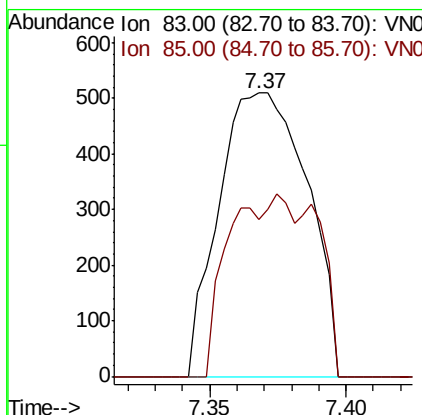
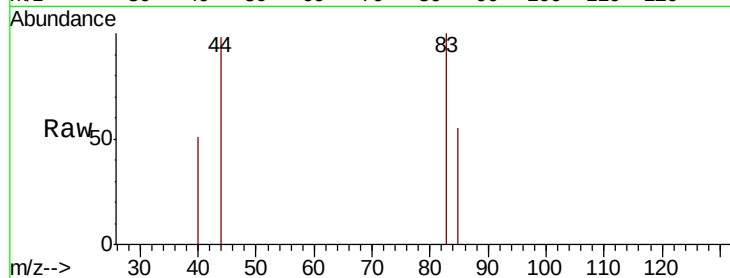




#25
Chloroform
Concen: 0.221 ug/l
RT: 7.37 min Scan# 1740
Delta R.T. -0.00 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

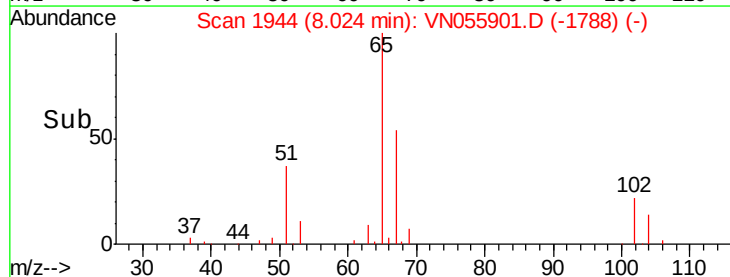
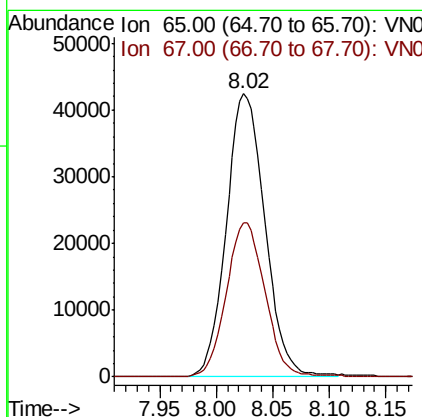
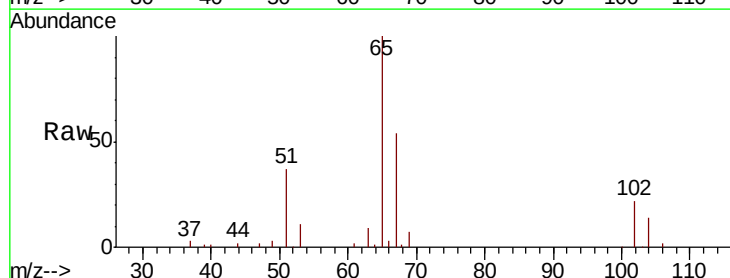
Instrument :
MSVOA_N
ClientSampled :

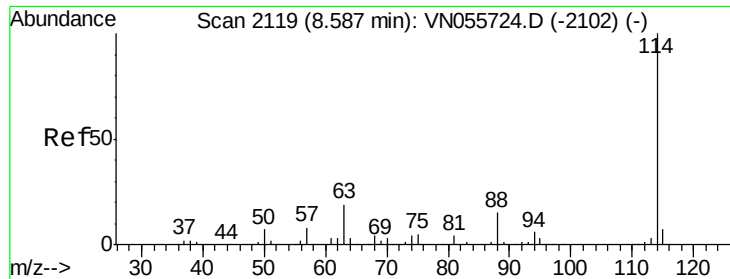
Tot Ion: 83 Resp: 1147
Ion Ratio Lower Upper
83 100
85 55.2 51.7 77.5



#27
1,2-Dichloroethane-d4
Concen: 30.583 ug/l
RT: 8.02 min Scan# 1944
Delta R.T. 0.00 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

Tgt Ion: 65 Resp: 100796
Ion Ratio Lower Upper
65 100
67 54.5 43.5 65.3





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 8.58 min Scan# 2118

Delta R.T. -0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

Instrument :

MSVOA_N

ClientSampleId :

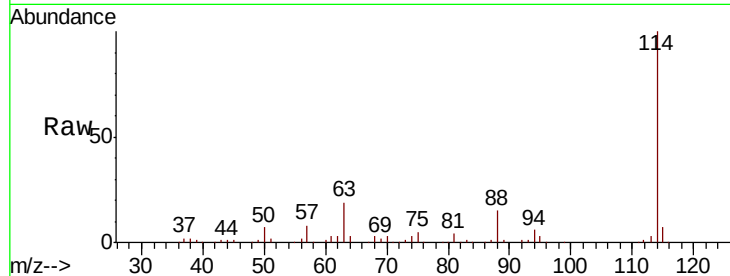
Tot Ion:114 Resp: 268869

Ion Ratio Lower Upper

114 100

63 19.8 15.6 23.4

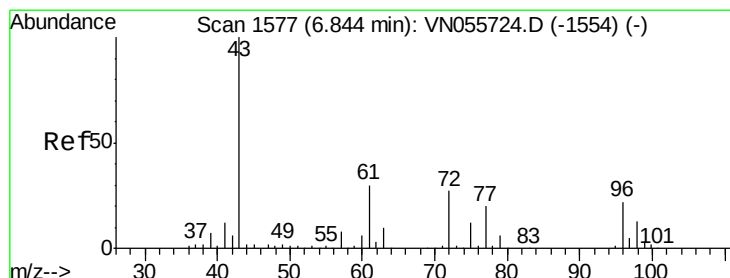
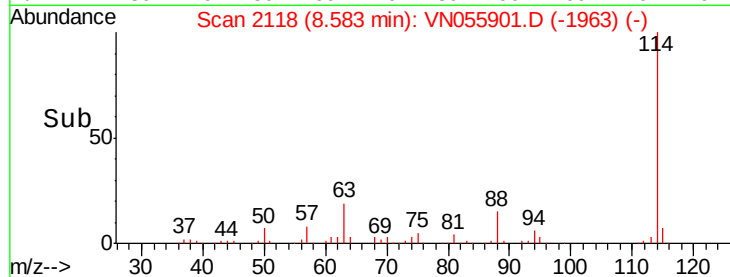
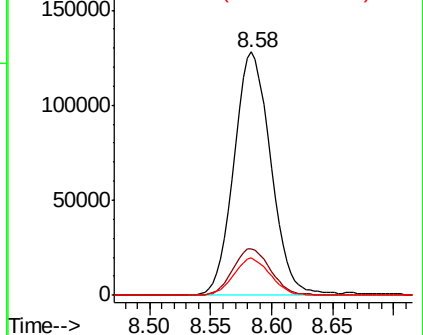
88 15.1 12.3 18.5



Abundance Ion 114.00 (113.70 to 114.70): VN0

Ion 63.00 (62.70 to 63.70): VN0

Ion 88.00 (87.70 to 88.70): VN0



#30

2-Butanone

Concen: 0.252 ug/l

RT: 6.85 min Scan# 1578

Delta R.T. 0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

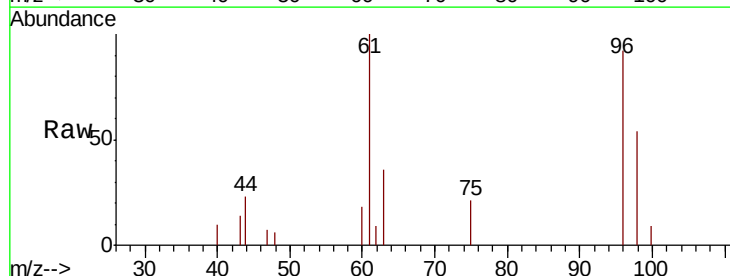
Tgt Ion: 43 Resp: 506

Ion Ratio Lower Upper

43 100

57 0.0 6.6 10.0#

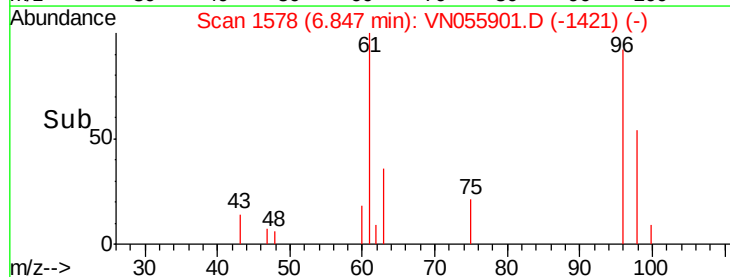
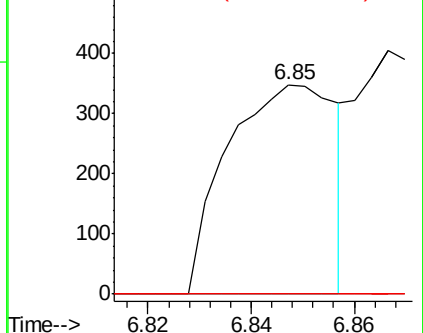
72 0.0 21.7 32.5#

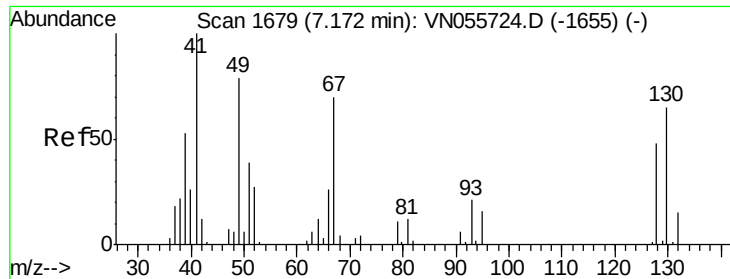


Abundance Ion 43.00 (42.70 to 43.70): VN0

Ion 57.00 (56.70 to 57.70): VN0

Ion 72.00 (71.70 to 72.70): VN0

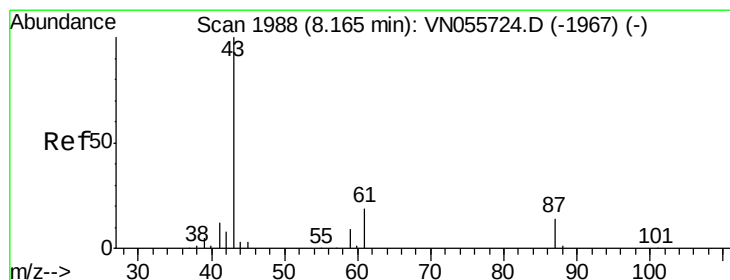
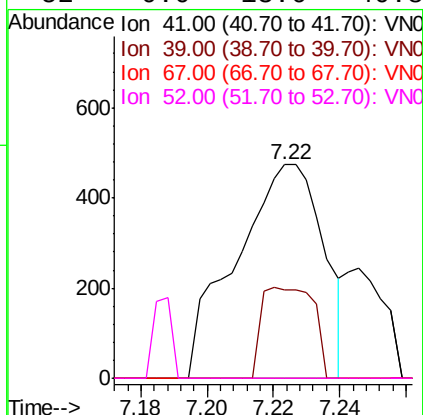
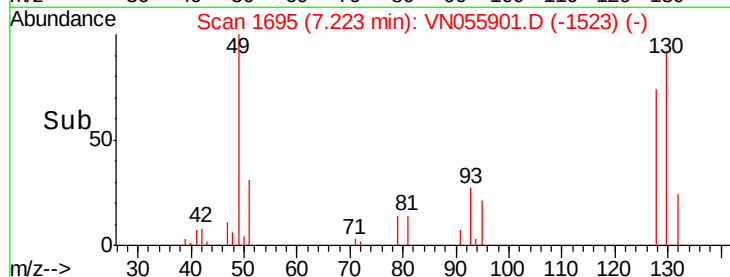
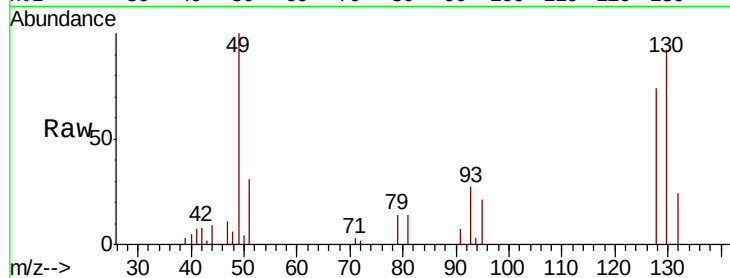




#35
Methacrylonitrile
Concen: 0.471 ug/l
RT: 7.22 min Scan# 1695
Delta R.T. 0.05 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

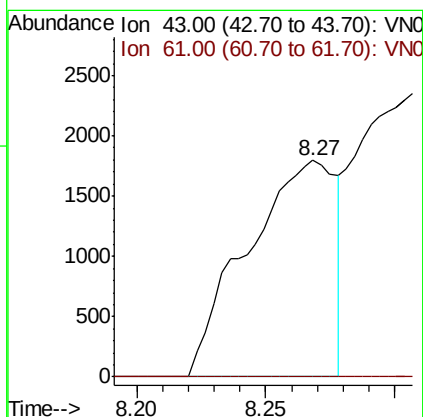
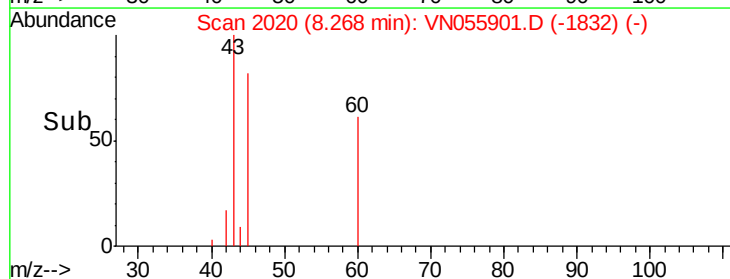
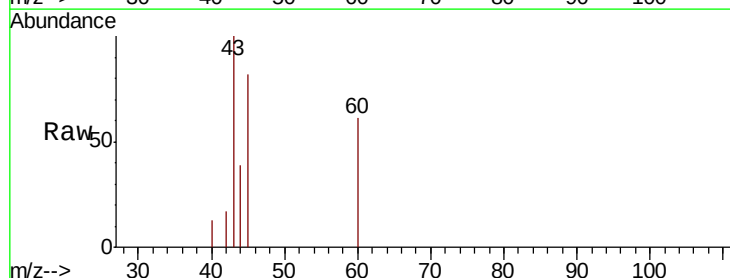
Instrument :
MSVOA_N
ClientSampleId :

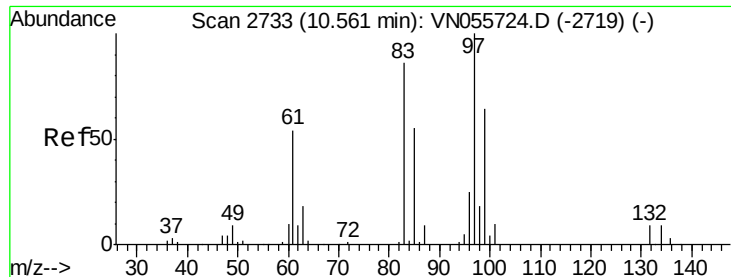
Tot Ion: 41 Resp: 872
Ion Ratio Lower Upper
41 100
39 41.6 26.7 80.1
67 0.0 34.9 104.7#
52 0.0 13.6 40.8#



#44
Isopropyl Acetate
Concen: 0.657 ug/l
RT: 8.27 min Scan# 2020
Delta R.T. 0.10 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

Tgt Ion: 43 Resp: 4290
Ion Ratio Lower Upper
43 100
61 0.0 22.1 33.1#

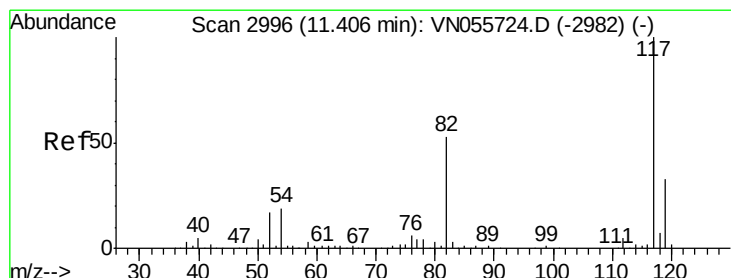
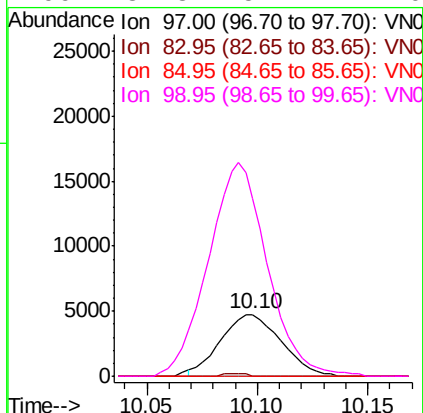
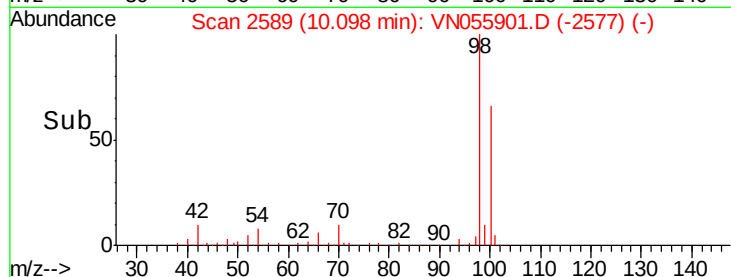
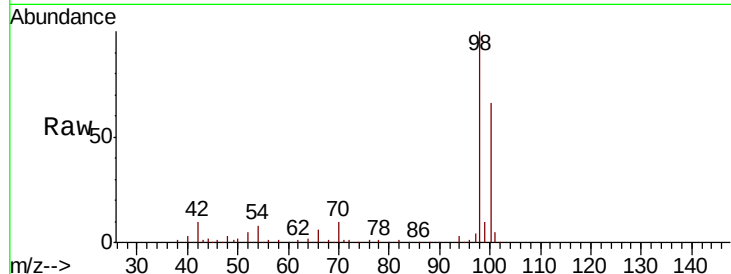




#50
1,1,2-Trichloroethane
Concen: 3.058 ug/l
RT: 10.10 min Scan# 2589
Delta R.T. -0.46 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

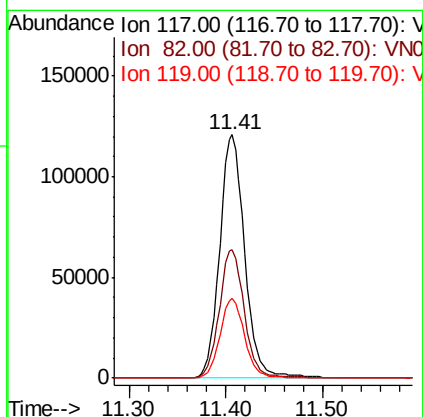
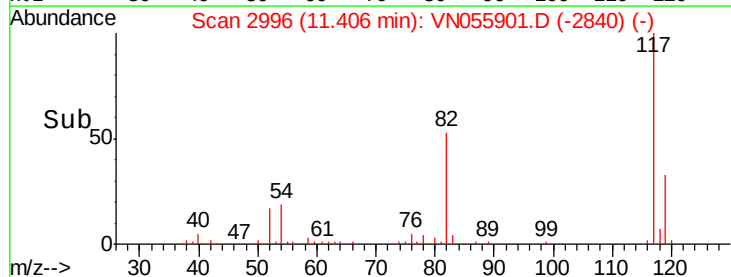
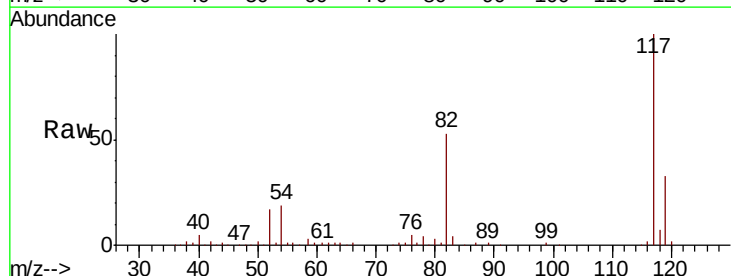
Instrument :
MSVOA_N
ClientSampled :

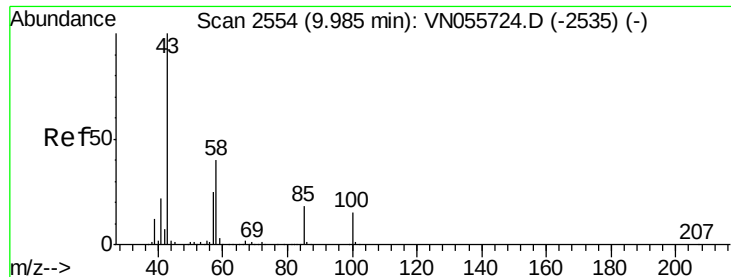
Tot Ion: 97 Resp: 8979
Ion Ratio Lower Upper
97 100
83 0.0 68.9 103.3#
85 0.0 44.3 66.5#
99 282.8 51.4 77.0#



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 11.41 min Scan# 2996
Delta R.T. 0.00 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

Tgt Ion: 117 Resp: 216725
Ion Ratio Lower Upper
117 100
82 53.0 42.6 64.0
119 32.2 25.9 38.9





#58

4-Methyl-2-Pentanone

Concen: 0.282 ug/l

RT: 9.98 min Scan# 2553

Delta R.T. -0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

Instrument :

MSVOA_N

ClientSampleId :

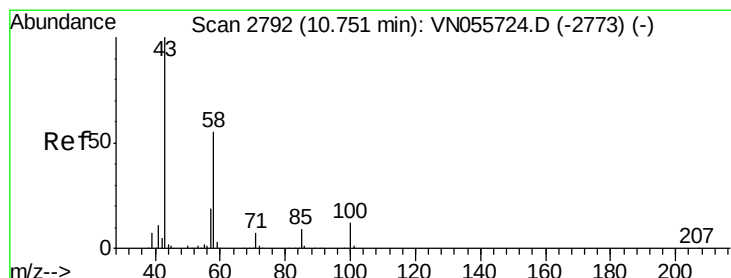
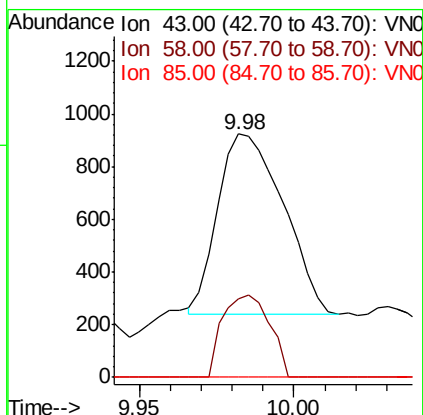
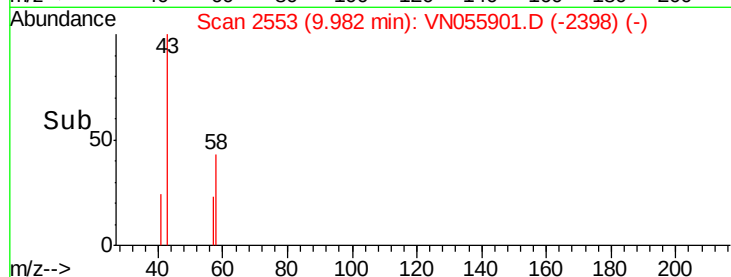
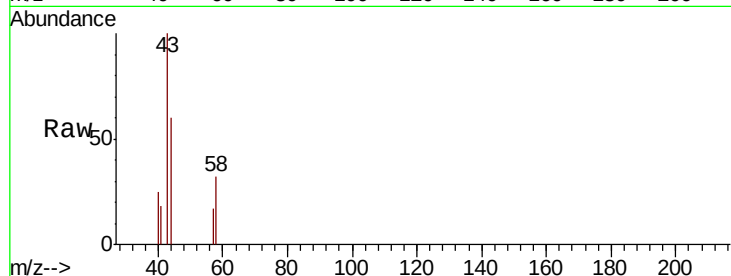
Tot Ion: 43 Resp: 1012

Ion Ratio Lower Upper

43 100

58 32.9 31.7 47.5

85 0.0 14.5 21.7#



#59

2-Hexanone

Concen: 0.424 ug/l

RT: 10.75 min Scan# 2793

Delta R.T. 0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

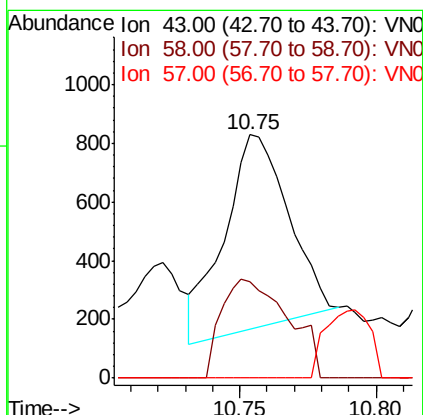
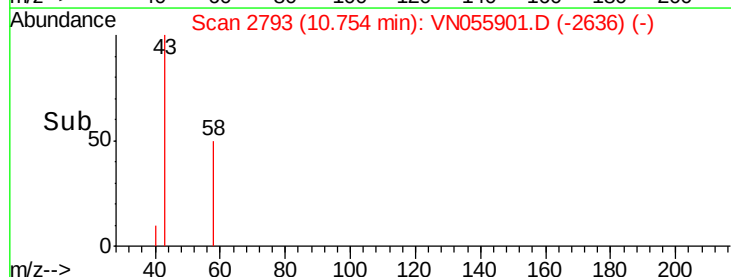
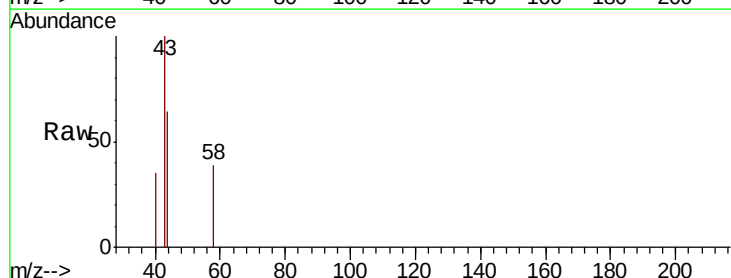
Tgt Ion: 43 Resp: 1087

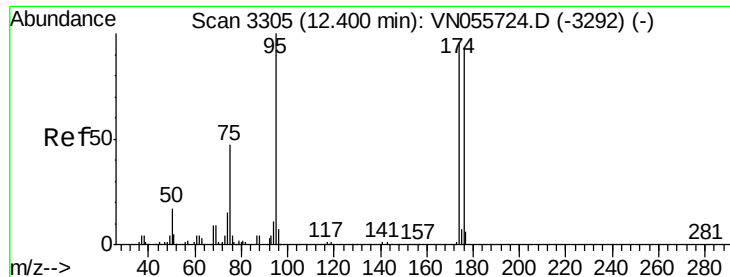
Ion Ratio Lower Upper

43 100

58 46.4 44.8 67.2

57 0.0 15.3 22.9#





#60

4-Bromofluorobenzene

Concen: 23.543 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

Instrument :

MSVOA_N

ClientSampleId :

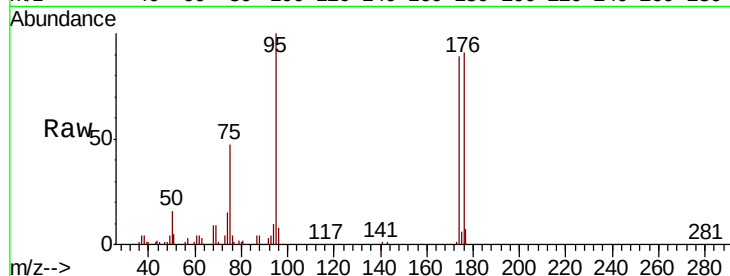
Tot Ion: 95 Resp: 79374

Ion Ratio Lower Upper

95 100

174 90.7 75.7 113.5

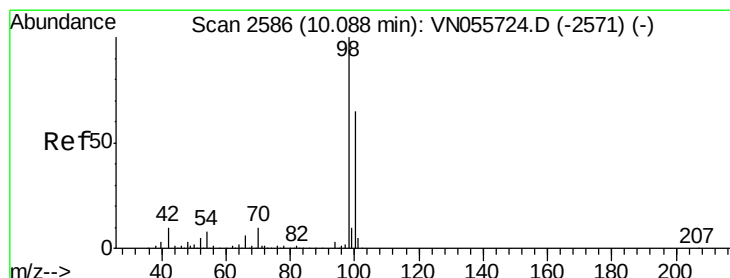
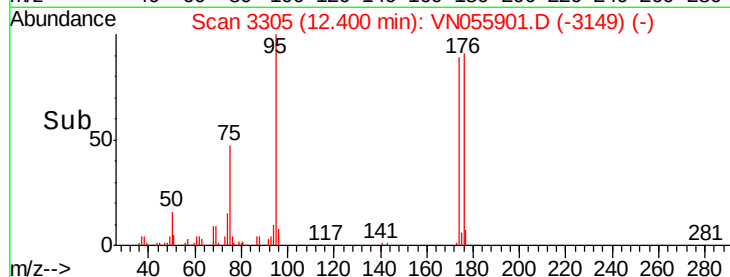
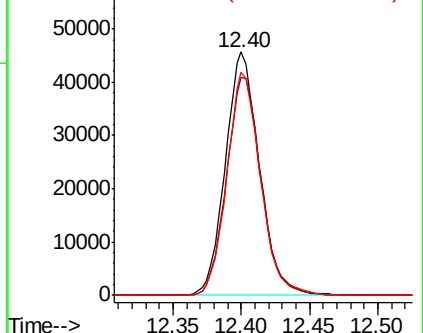
176 90.1 74.1 111.1



Abundance Ion 95.00 (94.70 to 95.70): VN055724.D (-3292) (-)

Ion 174.00 (173.70 to 174.70): VN055724.D (-3292) (-)

Ion 176.00 (175.70 to 176.70): VN055724.D (-3292) (-)



#63

Toluene-d8

Concen: 31.598 ug/l

RT: 10.09 min Scan# 2586

Delta R.T. 0.00 min

Lab File: VN055901.D

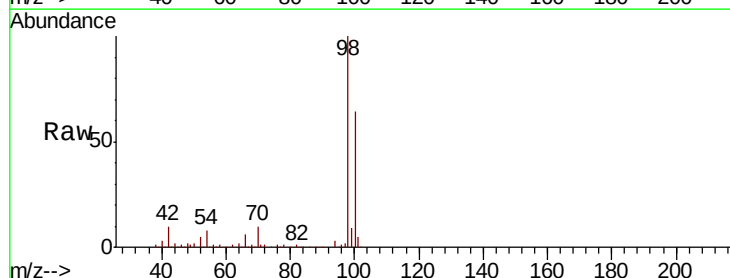
Acq: 30 May 2019 15:47

Tgt Ion: 98 Resp: 312953

Ion Ratio Lower Upper

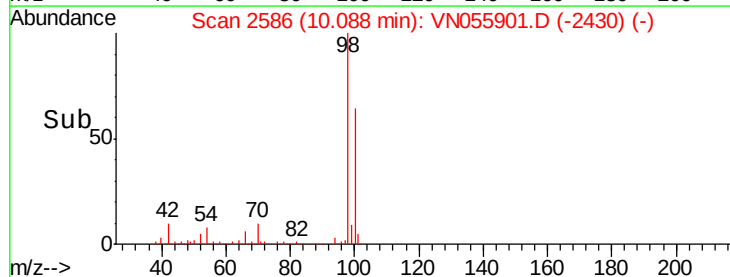
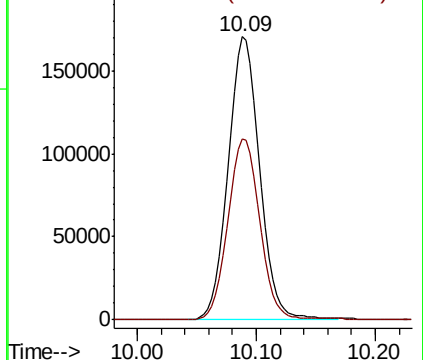
98 100

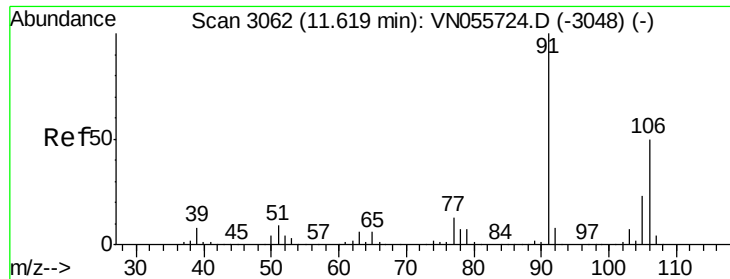
100 64.8 51.6 77.4



Abundance Ion 98.00 (97.70 to 98.70): VN055724.D (-2571) (-)

Ion 100.00 (99.70 to 100.70): VN055724.D (-2571) (-)

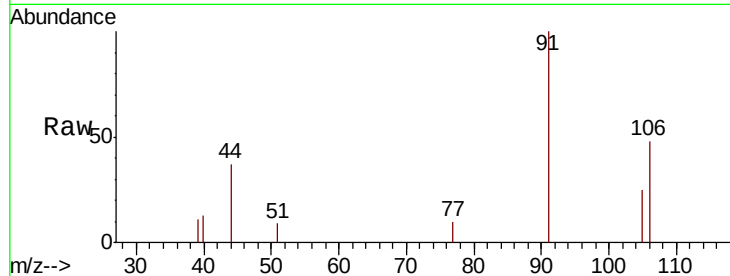




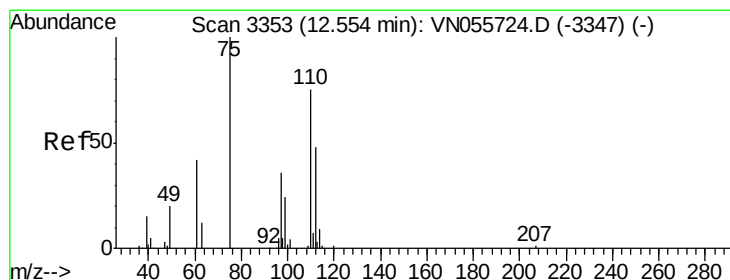
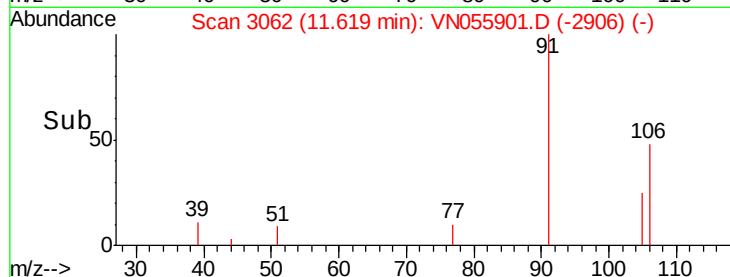
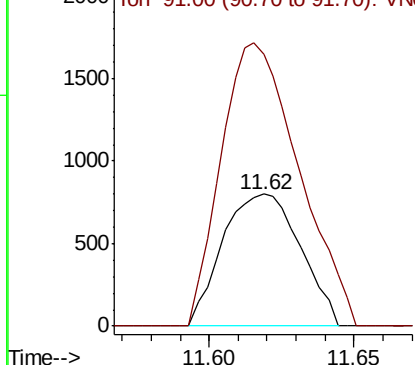
#67
m/p-Xylenes
Concen: 0.308 ug/l
RT: 11.62 min Scan# 3062
Delta R.T. 0.00 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

Instrument :
MSVOA_N
ClientSampled :

Tot Ion:106 Resp: 1488
Ion Ratio Lower Upper
106 100
91 214.7 159.5 239.3

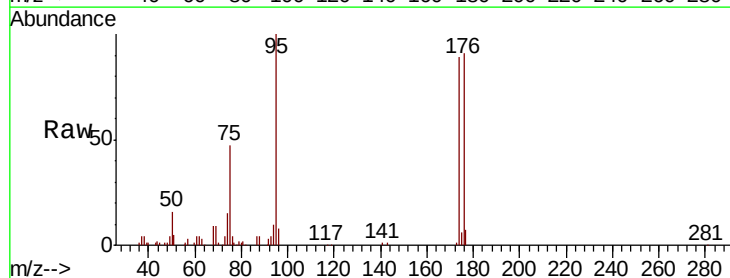


Abundance Ion 106.00 (105.70 to 106.70): V
Ion 91.00 (90.70 to 91.70): VNO

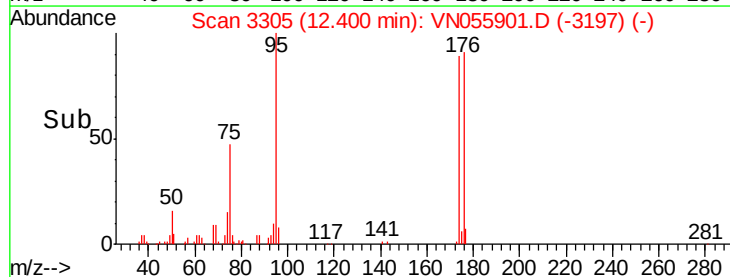
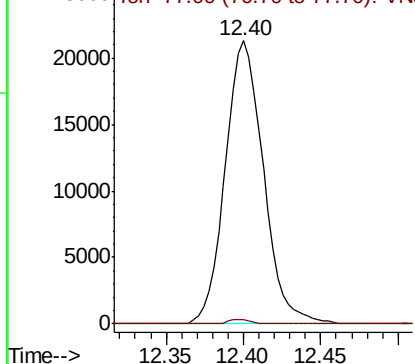


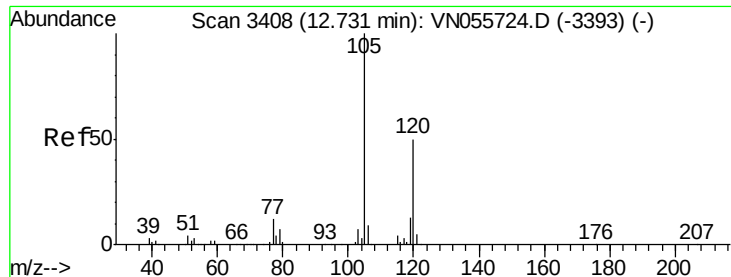
#72
1,2,3-Trichloropropane
Concen: 10.999 ug/l
RT: 12.40 min Scan# 3305
Delta R.T. -0.15 min
Lab File: VN055901.D
Acq: 30 May 2019 15:47

Tgt Ion: 75 Resp: 36489
Ion Ratio Lower Upper
75 100
77 0.8 0.0 349.8



Abundance Ion 75.00 (74.70 to 75.70): VNO
Ion 77.00 (76.70 to 77.70): VNO





#76

1,3,5-Trimethylbenzene

Concen: 0.228 ug/l

RT: 12.73 min Scan# 3409

Delta R.T. 0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

Instrument :

MSVOA_N

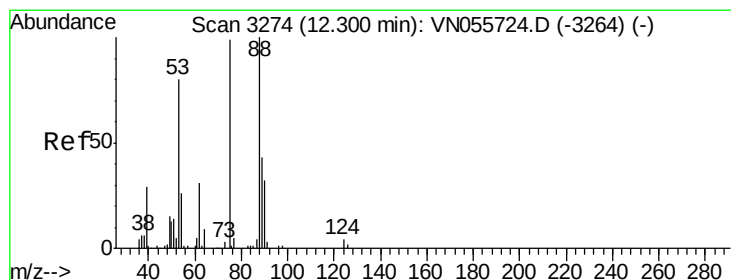
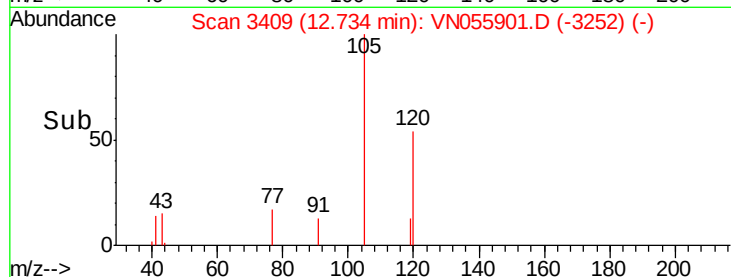
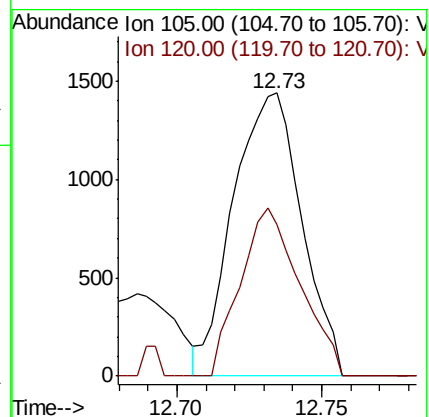
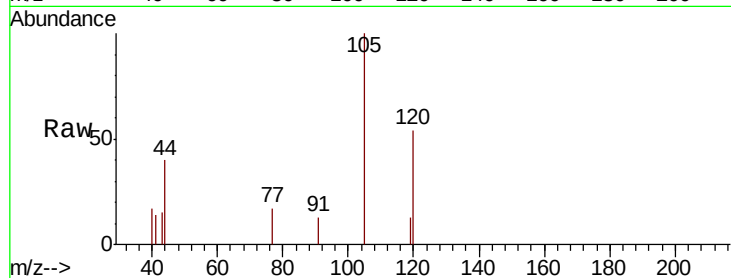
ClientSampled :

Tot Ion:105 Resp: 2360

Ion Ratio Lower Upper

105 100

120 51.6 0.0 99.2



#77

t-1,4-Dichloro-2-butene

Concen: 27.691 ug/l

RT: 12.40 min Scan# 3305

Delta R.T. 0.10 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

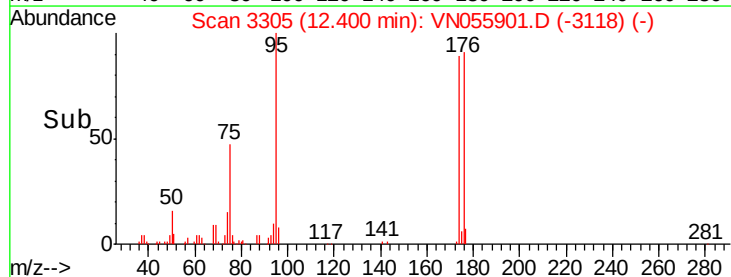
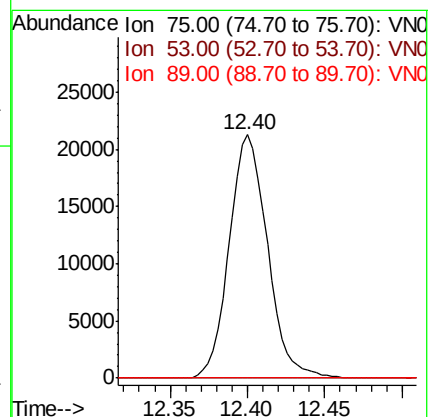
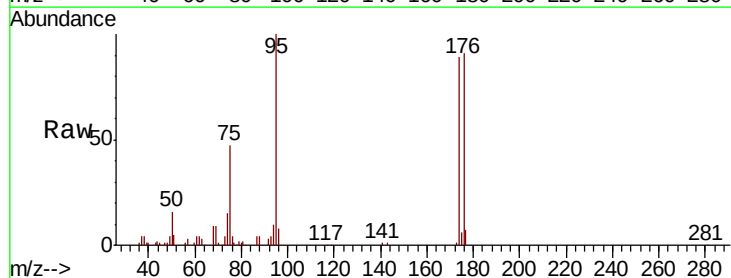
Tgt Ion: 75 Resp: 36489

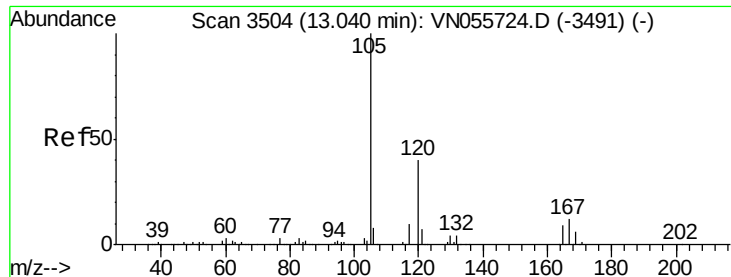
Ion Ratio Lower Upper

75 100

53 0.0 40.1 120.3#

89 0.0 22.6 67.8#





#80

1,2,4-Trimethylbenzene

Concen: 0.635 ug/l

RT: 13.04 min Scan# 3503

Delta R.T. -0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

Instrument :

MSVOA_N

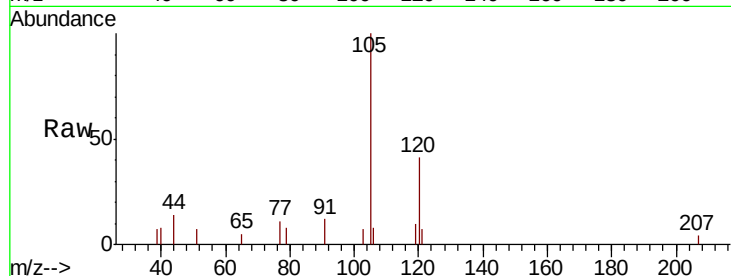
ClientSampled :

Tot Ion:105 Resp: 6530

Ion Ratio Lower Upper

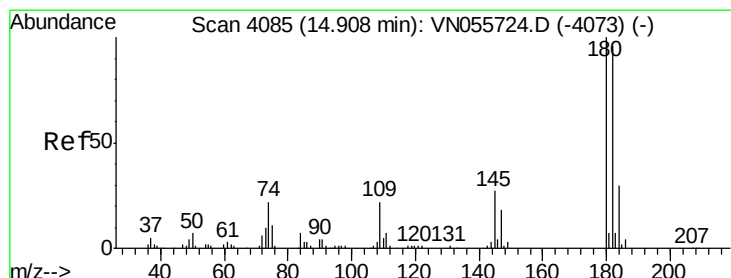
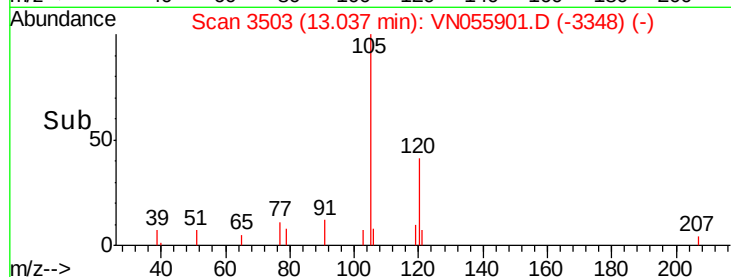
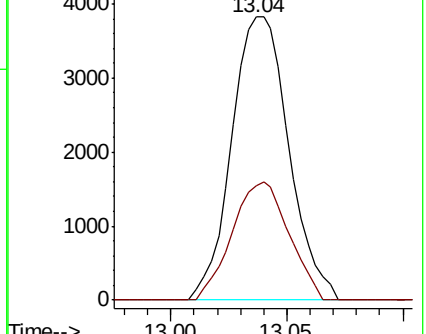
105 100

120 41.6 0.0 93.6



Abundance Ion 105.00 (104.70 to 105.70): V

Ion 120.00 (119.70 to 120.70): V



#89

1,2,4-Trichlorobenzene

Concen: 0.356 ug/l

RT: 14.91 min Scan# 4086

Delta R.T. 0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

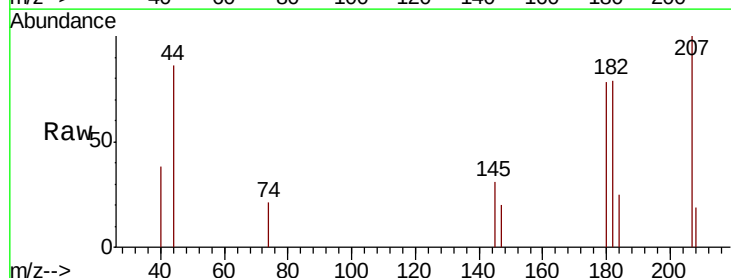
Tgt Ion:180 Resp: 1004

Ion Ratio Lower Upper

180 100

182 87.8 76.1 114.1

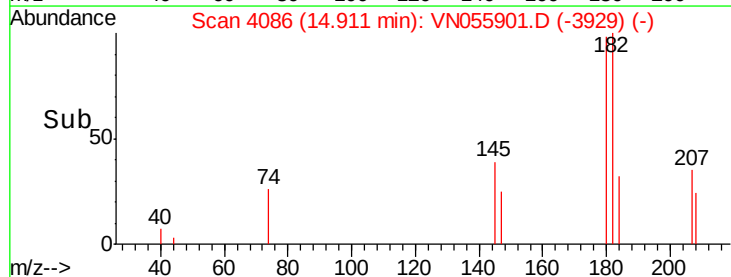
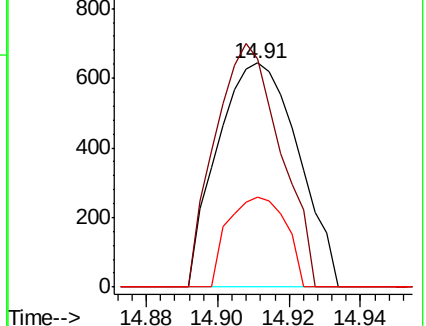
145 28.7 21.8 32.8

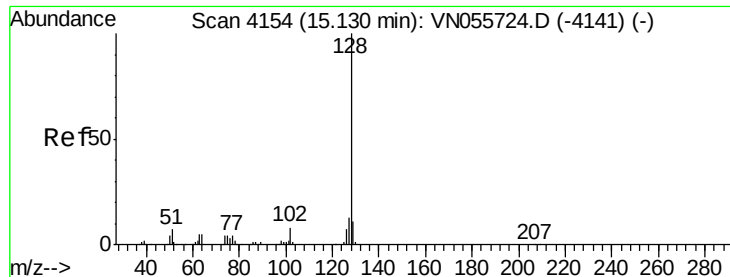


Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V





#91

Naphthalene

Concen: 0.576 ug/l

RT: 15.13 min Scan# 4155

Delta R.T. 0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

Instrument :

MSVOA_N

ClientSampleId :

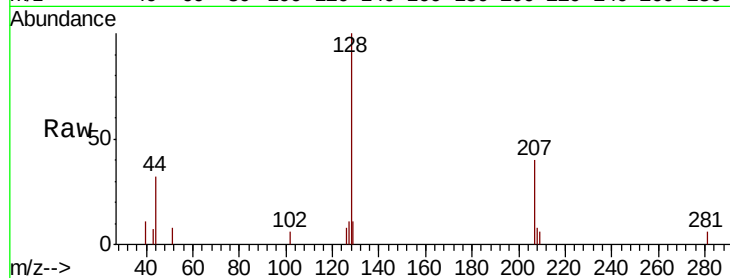
Tot Ion:128 Resp: 4446

Ion Ratio Lower Upper

128 100

127 9.3 10.0 15.0#

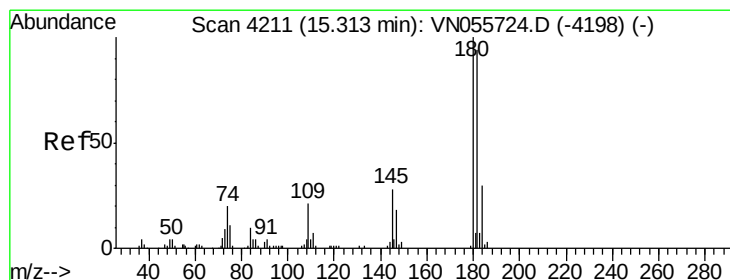
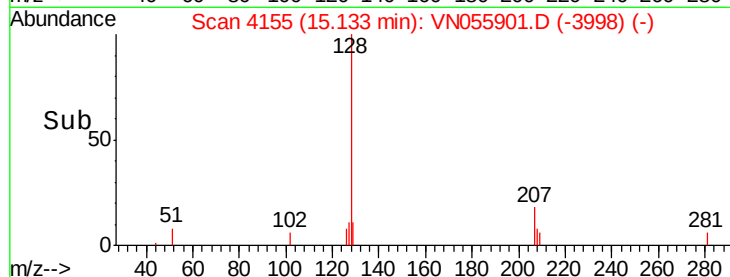
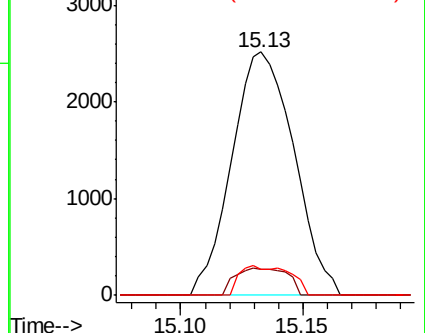
129 5.8 8.7 13.1#



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



#92

1,2,3-Trichlorobenzene

Concen: 0.491 ug/l

RT: 15.31 min Scan# 4210

Delta R.T. -0.00 min

Lab File: VN055901.D

Acq: 30 May 2019 15:47

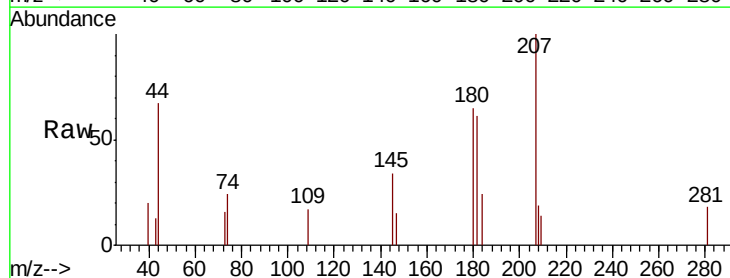
Tgt Ion:180 Resp: 1450

Ion Ratio Lower Upper

180 100

182 90.9 0.0 188.6

145 43.2 0.0 56.8



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

