

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN102120\
 Data File : VN064229.D
 Acq On : 21 Oct 2020 18:20
 Operator : JC/MD
 Sample : L4434-03 20X
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 40978-A

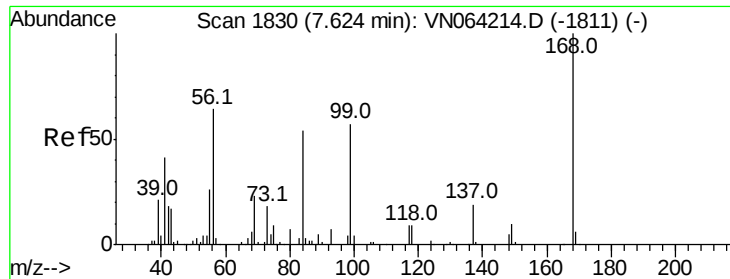
Quant Time: Oct 22 01:50:12 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N102120W.M
 Quant Title : SW846 8260
 QLast Update : Wed Oct 21 12:48:40 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.63	168	237089	50.00	ug/l	0.00
34) 1,4-Difluorobenzene	8.55	114	417137	50.00	ug/l	0.00
63) Chlorobenzene-d5	11.38	117	419987	50.00	ug/l	0.00
72) 1,4-Dichlorobenzene-d4	13.32	152	195555	50.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
33) 1,2-Dichloroethane-d4	7.99	65	184636	52.44	ug/l	0.00
Spiked Amount			Recovery	=	104.88%	
35) Dibromofluoromethane	7.55	113	135464	48.85	ug/l	0.00
Spiked Amount			Recovery	=	97.70%	
50) Toluene-d8	10.06	98	524660	52.15	ug/l	0.00
Spiked Amount			Recovery	=	104.30%	
62) 4-Bromofluorobenzene	12.38	95	241016	59.10	ug/l	0.00
Spiked Amount			Recovery	=	118.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
11) Tert butyl alcohol	4.74	59	3556	7.545	ug/l #	90
13) Acrolein	3.57	56	121	0.409	ug/l #	44
14) Allyl chloride	4.24	41	1063	0.239	ug/l #	74
16) Acetone	3.77	43	193819	192.390	ug/l	99
18) Methyl Acetate	4.28	43	635	0.247	ug/l #	53
20) Methylene Chloride	4.50	84	692	0.258	ug/l #	45
25) 2-Butanone	6.79	43	47996	29.987	ug/l #	90
26) 2,2-Dichloropropane	6.77	77	1508	0.316	ug/l #	55
29) Tetrahydrofuran	7.17	42	884	0.923	ug/l #	38
31) Cyclohexane	7.63	56	6038	1.447	ug/l #	1
36) 1,1-Dichloropropene	7.62	75	20958	5.040	ug/l #	51
37) Ethyl Acetate	6.79	43	47996	12.711	ug/l #	71
38) Carbon Tetrachloride	7.62	117	26587	5.619	ug/l #	16
40) Benzene	8.00	78	17660	1.538	ug/l	95
51) 4-Methyl-2-Pentanone	9.95	43	149790	39.829	ug/l	100
52) Toluene	10.13	92	14398	1.960	ug/l	95
56) Ethyl methacrylate	10.33	69	2045	0.477	ug/l #	27
59) 2-Hexanone	10.73	43	1000	0.364	ug/l	69
67) Ethyl Benzene	11.49	91	5880	0.368	ug/l	94
68) m/p-Xylenes	11.59	106	8927	1.508	ug/l	93
69) o-Xylene	11.92	106	6816	1.191	ug/l	86
76) 1,2,3-Trichloropropane	12.38	75	128773	31.236	ug/l #	100
81) trans-1,4-Dichloro-2-buten	12.38	75	128773	78.861	ug/l #	9
84) 1,2,4-Trimethylbenzene	13.03	105	3178	0.253	ug/l	74
95) Naphthalene	15.11	128	11538	1.118	ug/l	97

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



#1

Pentafluorobenzene

Concen: 50.000 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. 0.00 min

Lab File: VN064229.D

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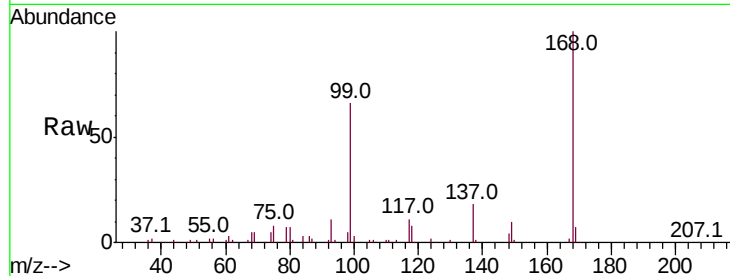
40978-A

Tot Ion:168 Resp: 237089

Ion Ratio Lower Upper

168 100

99 66.4 54.0 81.0



Abundance Ion 167.90 (167.60 to 168.60): VN064214.D (-1811) (-)

Ion 98.90 (98.60 to 99.60): VN064214.D (-1811) (-)

7.63

100000

80000

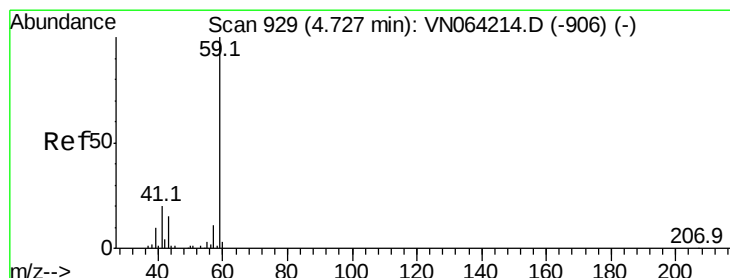
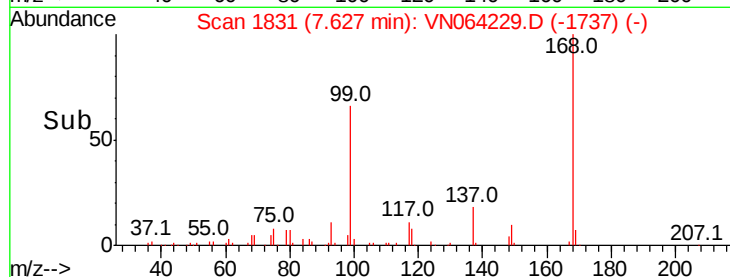
60000

40000

20000

0

Time-->



#11

Tert butyl alcohol

Concen: 7.545 ug/l

RT: 4.74 min Scan# 933

Delta R.T. 0.01 min

Lab File: VN064229.D

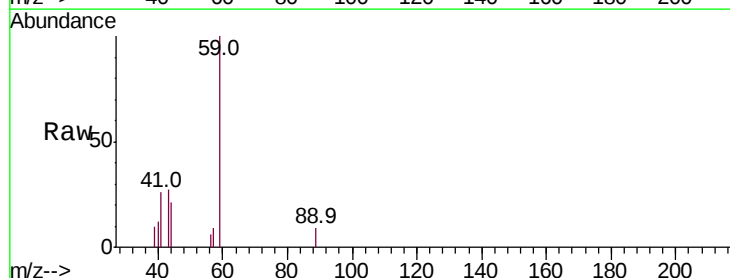
Acq: 21 Oct 2020 18:20

Tgt Ion: 59 Resp: 3556

Ion Ratio Lower Upper

59 100

57 15.3 9.2 13.8#



Abundance Ion 59.00 (58.70 to 59.70): VN064214.D (-906) (-)

Ion 57.00 (56.70 to 57.70): VN064214.D (-906) (-)

4.74

3000

2500

2000

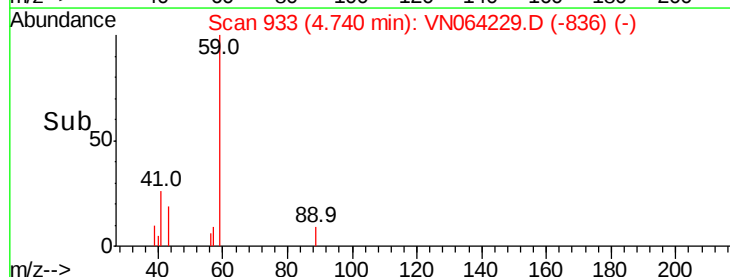
1500

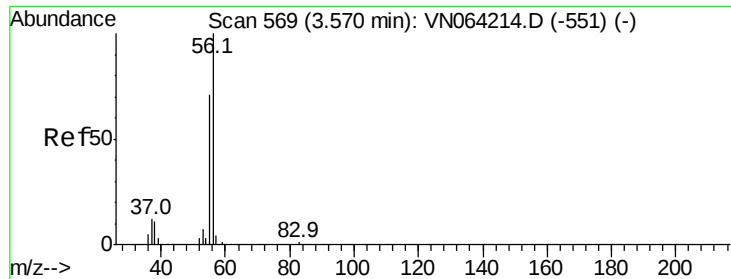
1000

500

0

Time-->





#13

Acrolein

Concen: 0.409 ug/l

RT: 3.57 min Scan# 570

Delta R.T. 0.00 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampled :

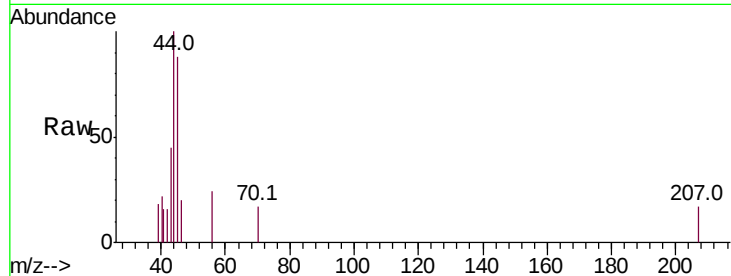
40978-A

Tot Ion: 56 Resp: 121

Ion Ratio Lower Upper

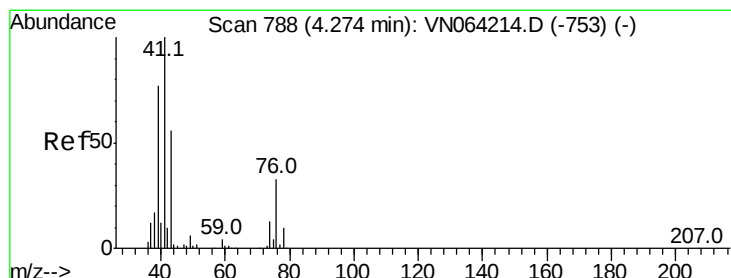
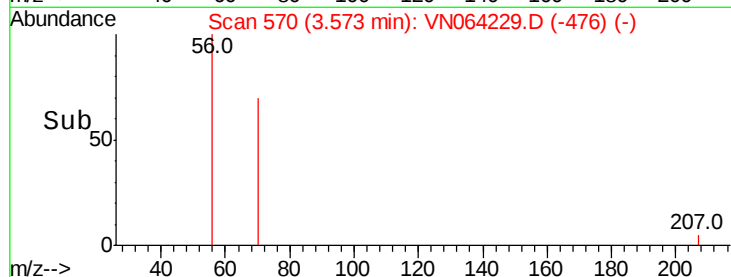
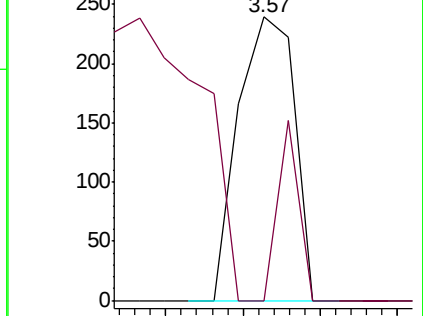
56 100

55 24.0 56.1 84.1#



Abundance Ion 56.00 (55.70 to 56.70): VN0

Ion 55.00 (54.70 to 55.70): VN0



#14

Allyl chloride

Concen: 0.239 ug/l

RT: 4.24 min Scan# 779

Delta R.T. -0.03 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

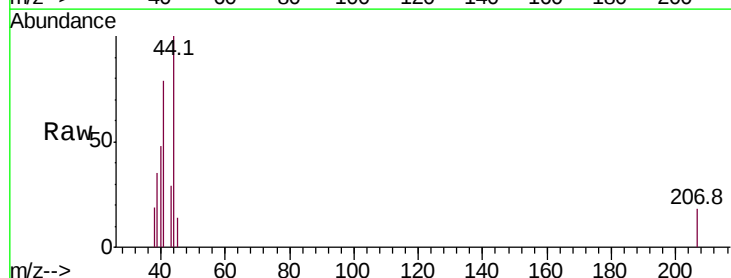
Tgt Ion: 41 Resp: 1063

Ion Ratio Lower Upper

41 100

39 62.3 58.6 88.0

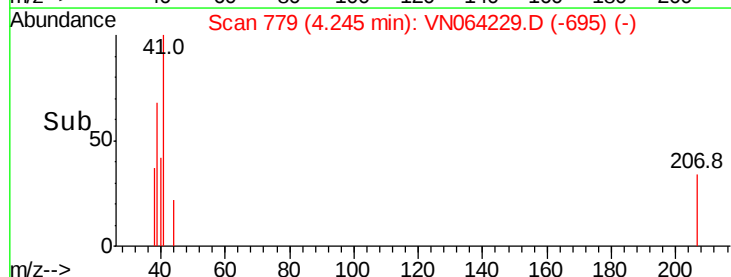
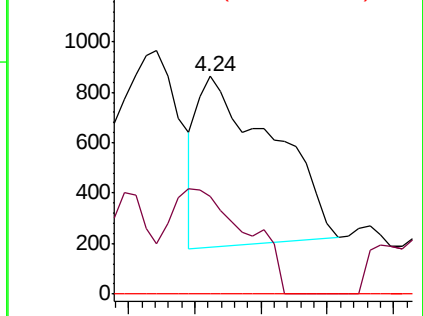
76 0.0 24.5 36.7#

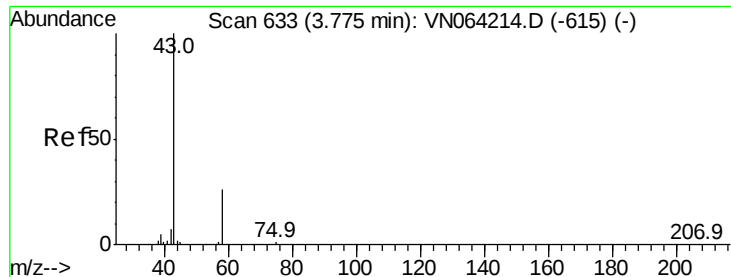


Abundance Ion 41.00 (40.70 to 41.70): VN0

Ion 39.00 (38.70 to 39.70): VN0

Ion 75.90 (75.60 to 76.60): VN0





#16

Acetone

Concen: 192.390 ug/l

RT: 3.77 min Scan# 632

Delta R.T. -0.00 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

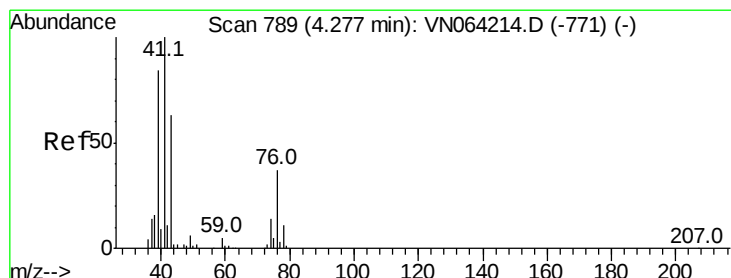
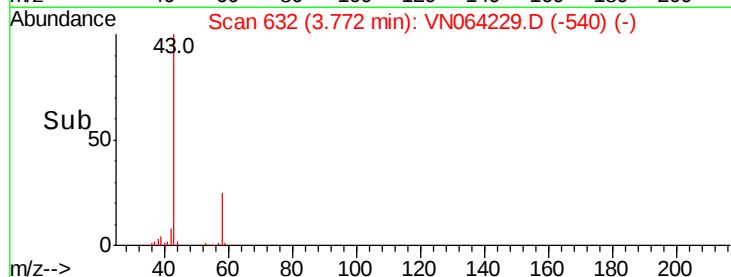
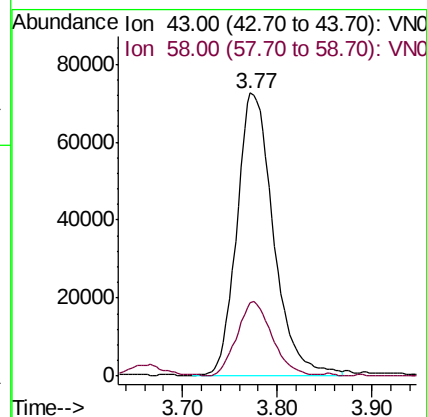
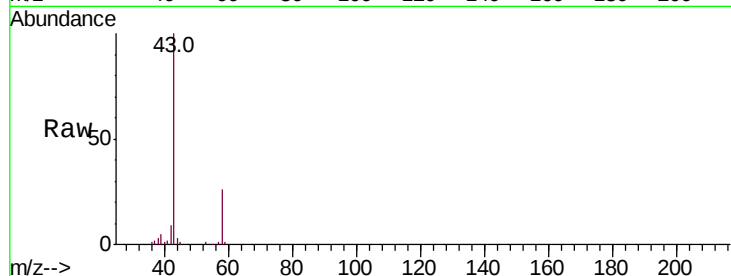
40978-A

Tot Ion: 43 Resp: 193819

Ion Ratio Lower Upper

43 100

58 25.5 21.0 31.4



#18

Methyl Acetate

Concen: 0.247 ug/l

RT: 4.28 min Scan# 790

Delta R.T. 0.00 min

Lab File: VN064229.D

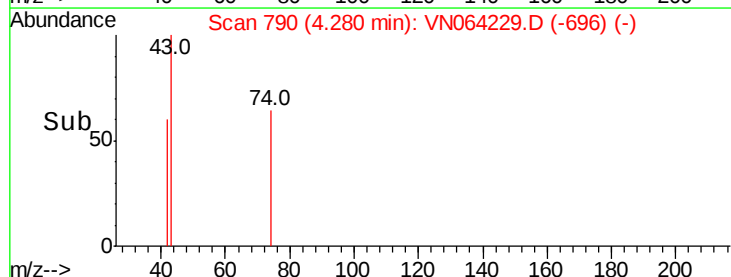
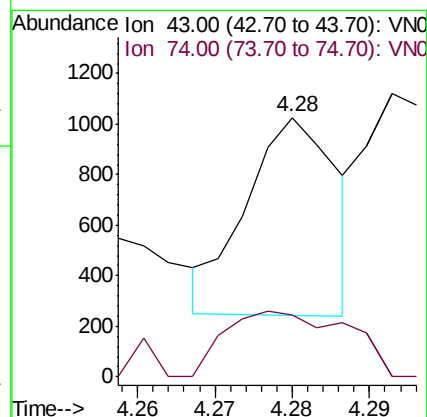
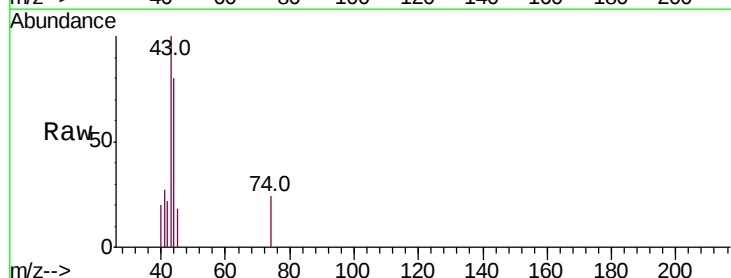
Acq: 21 Oct 2020 18:20

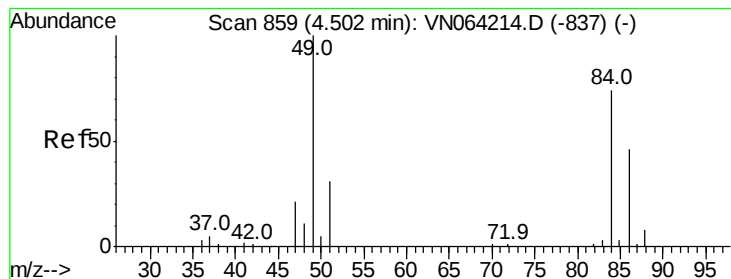
Tgt Ion: 43 Resp: 635

Ion Ratio Lower Upper

43 100

74 44.9 17.9 26.9#





#20

Methvlene Chloride

Concen: 0.258 ug/l

RT: 4.50 min Scan# 858

Delta R.T. -0.00 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

40978-A

Tot Ion: 84 Resp: 692

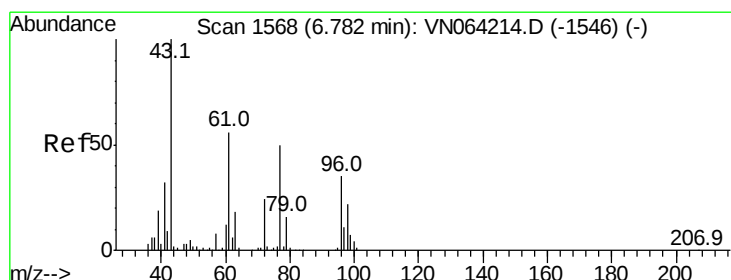
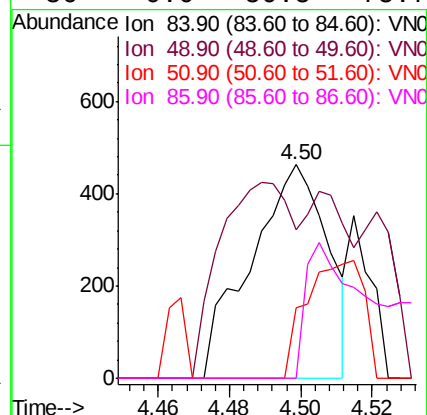
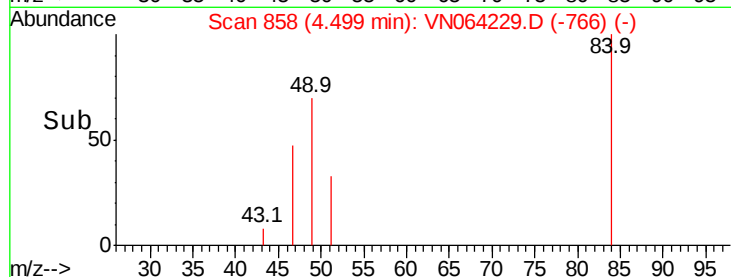
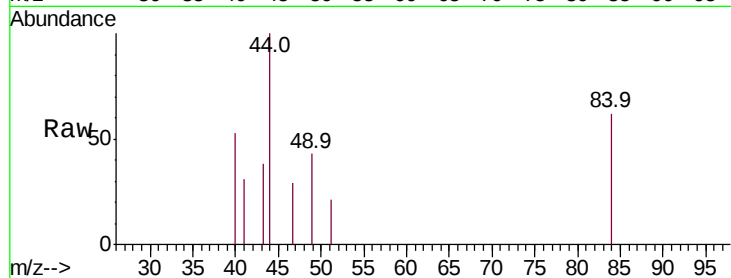
Ion Ratio Lower Upper

84 100

49 69.5 108.5 162.7#

51 33.0 33.8 50.8#

86 0.0 50.5 75.7#



#25

2-Butanone

Concen: 29.987 ug/l

RT: 6.79 min Scan# 1570

Delta R.T. 0.01 min

Lab File: VN064229.D

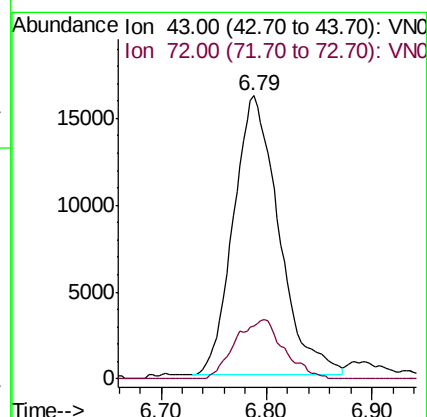
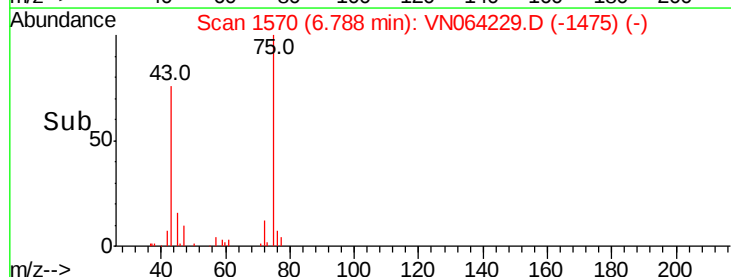
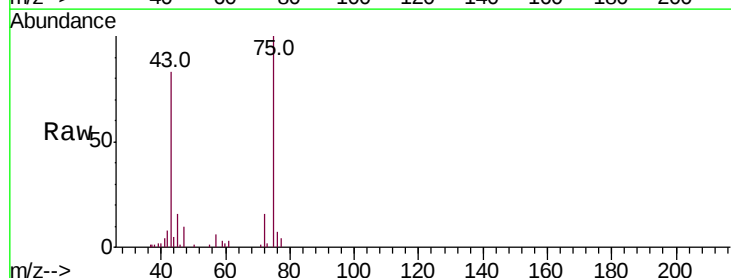
Acq: 21 Oct 2020 18:20

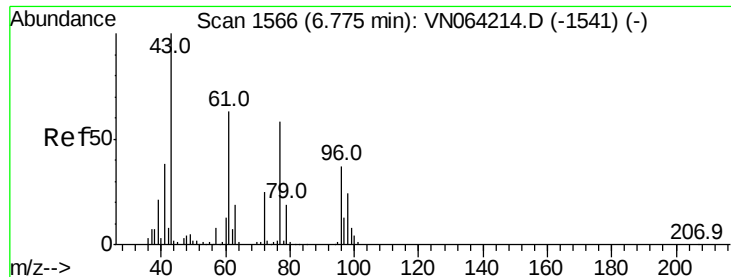
Tgt Ion: 43 Resp: 47996

Ion Ratio Lower Upper

43 100

72 19.2 19.4 29.0#

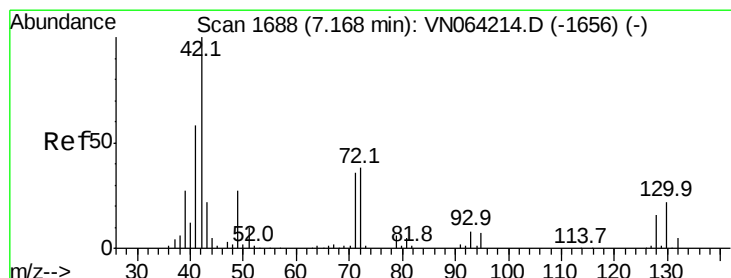
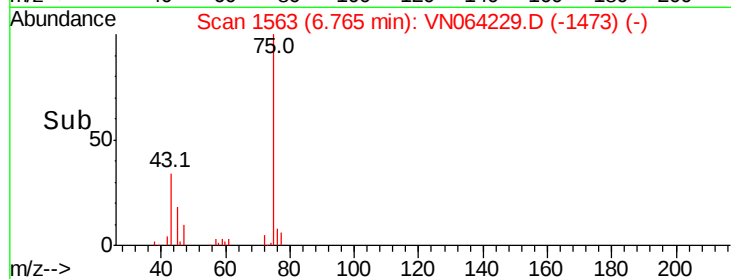
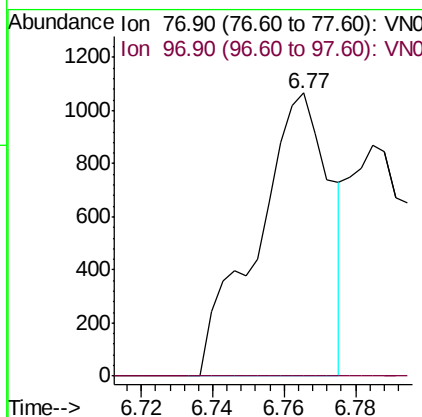
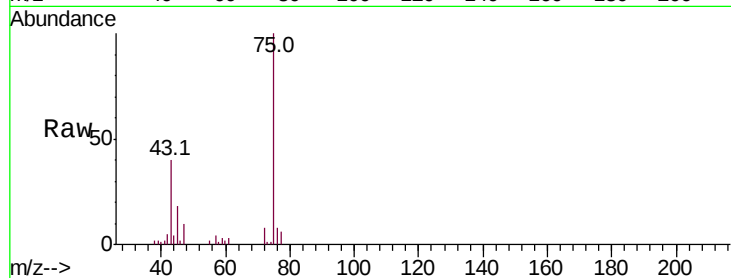




#26
 2,2-Dichloropropane
 Concen: 0.316 ug/l
 RT: 6.77 min Scan# 1563
 Delta R.T. -0.01 min
 Lab File: VN064229.D
 Acq: 21 Oct 2020 18:20

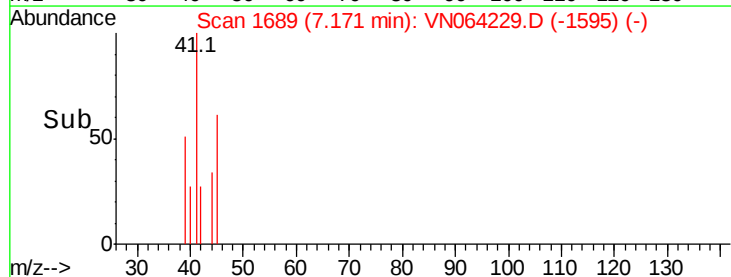
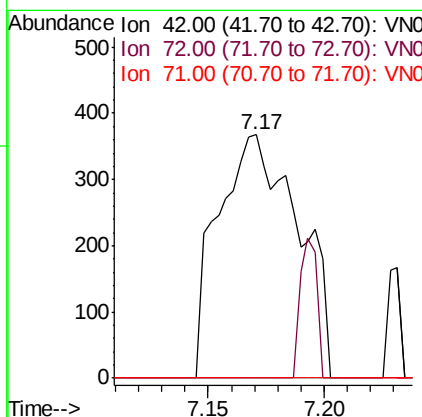
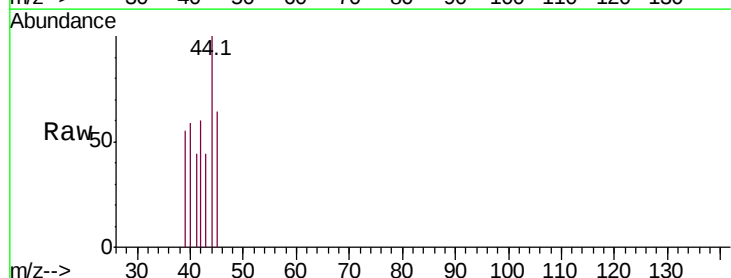
Instrument :
 MSVOA_N
 ClientSampled :
 40978-A

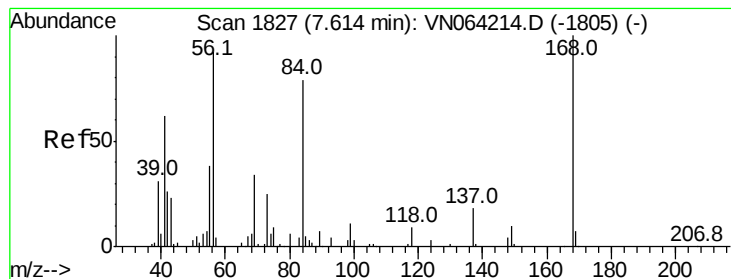
Tot Ion: 77 Resp: 1508
 Ion Ratio Lower Upper
 77 100
 97 0.0 10.4 31.4#



#29
 Tetrahydrofuran
 Concen: 0.923 ug/l
 RT: 7.17 min Scan# 1689
 Delta R.T. 0.00 min
 Lab File: VN064229.D
 Acq: 21 Oct 2020 18:20

Tgt Ion: 42 Resp: 884
 Ion Ratio Lower Upper
 42 100
 72 0.0 30.8 46.2#
 71 0.0 29.0 43.6#





#31

Cyclohexane

Concen: 1.447 ug/l

RT: 7.63 min Scan# 1831

Delta R.T. 0.01 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampled :

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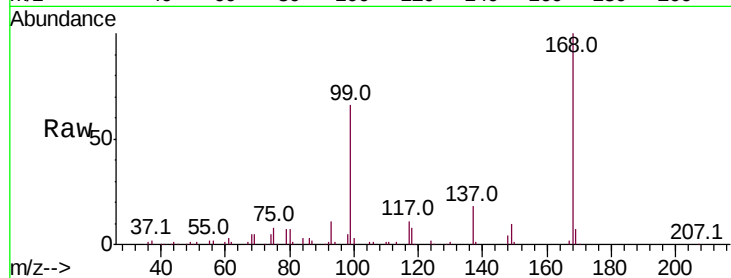
Tot Ion: 56 Resp: 6038

Ion Ratio Lower Upper

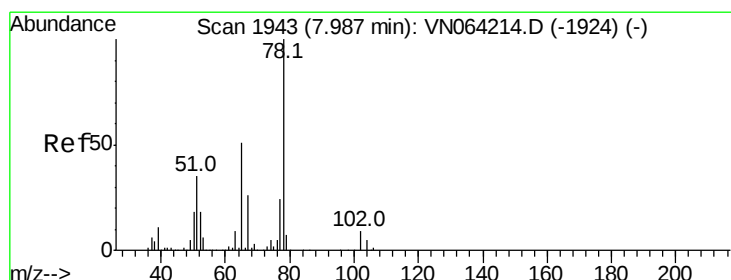
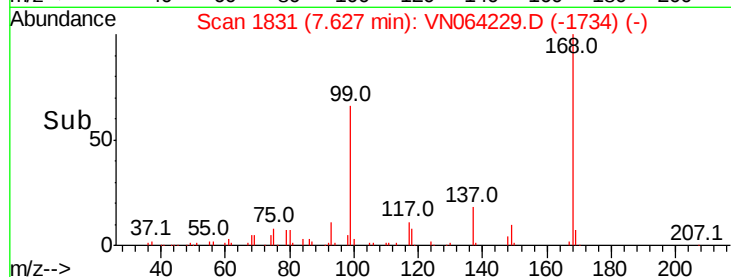
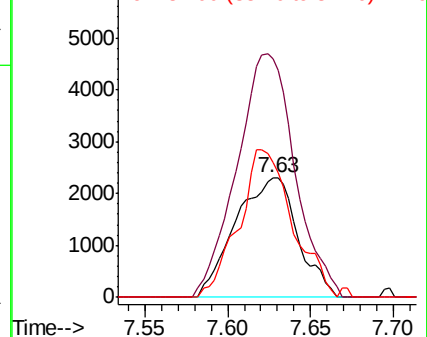
56 100

69 199.5 29.8 44.6#

84 113.0 68.1 102.1#



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



#33

1,2-Dichloroethane-d4

Concen: 52.440 ug/l

RT: 7.99 min Scan# 1943

Delta R.T. -0.00 min

Lab File: VN064229.D

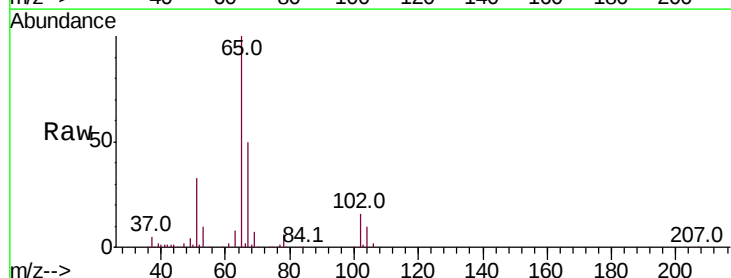
Acq: 21 Oct 2020 18:20

Tgt Ion: 65 Resp: 184636

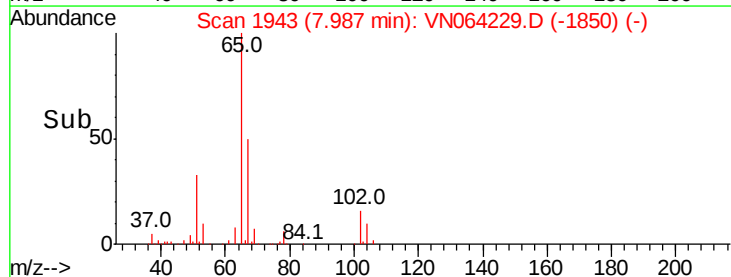
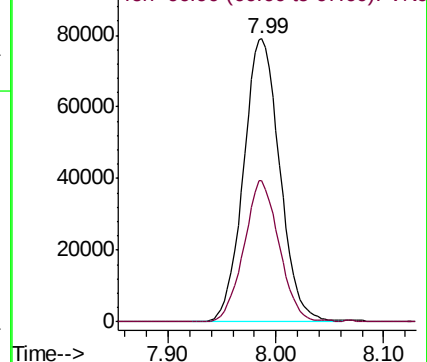
Ion Ratio Lower Upper

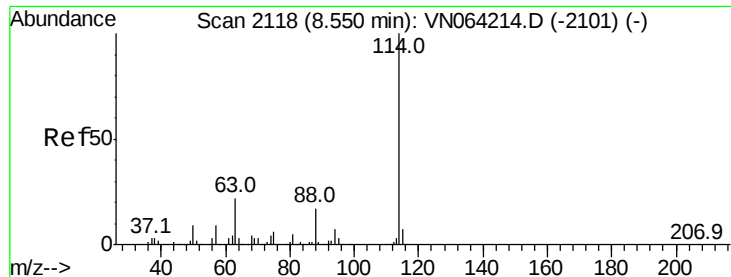
65 100

67 48.4 0.0 100.2



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





#34

1,4-Difluorobenzene

Concen: 50.000 ug/l

RT: 8.55 min Scan# 2118

Delta R.T. -0.00 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

40978-A

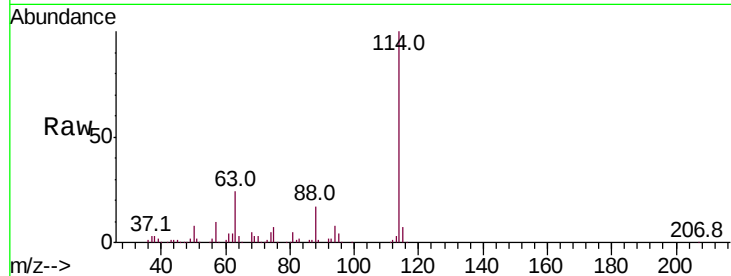
Tot Ion:114 Resp: 417137

Ion Ratio Lower Upper

114 100

63 23.8 0.0 44.0

88 17.3 0.0 34.2

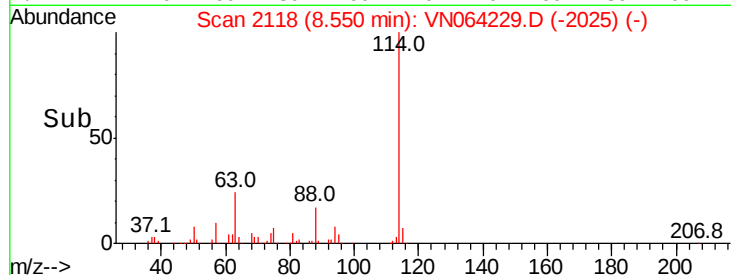


Abundance Ion 113.90 (113.60 to 114.60): V

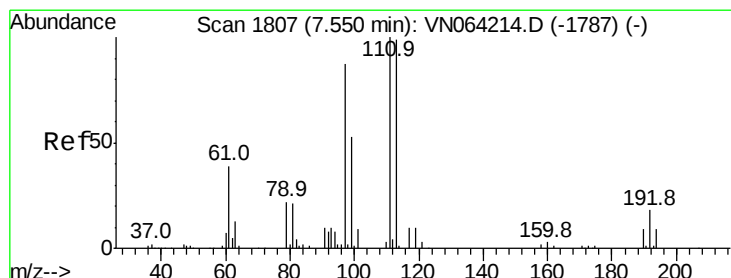
Ion 63.00 (62.70 to 63.70): VN

Ion 87.90 (87.60 to 88.60): VN

8.55



Time-->



#35

Dibromofluoromethane

Concen: 48.845 ug/l

RT: 7.55 min Scan# 1806

Delta R.T. -0.00 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

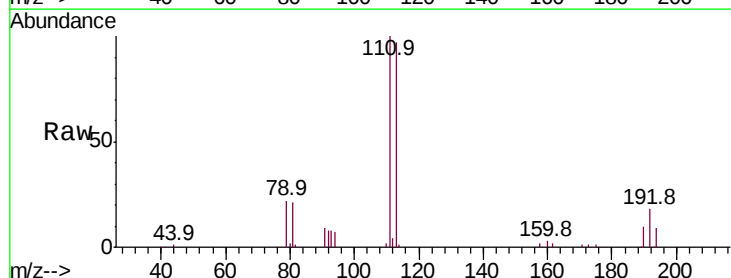
Tgt Ion:113 Resp: 135464

Ion Ratio Lower Upper

113 100

111 104.6 84.2 126.2

192 18.9 15.2 22.8

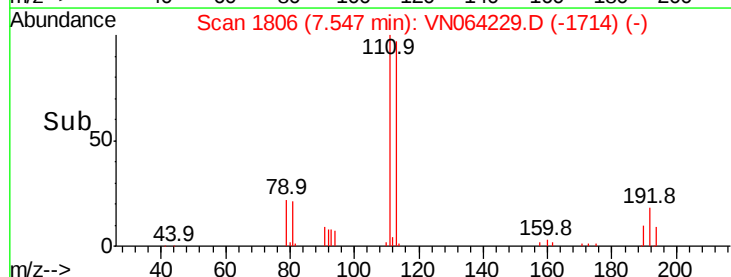


Abundance Ion 112.80 (112.50 to 113.50): V

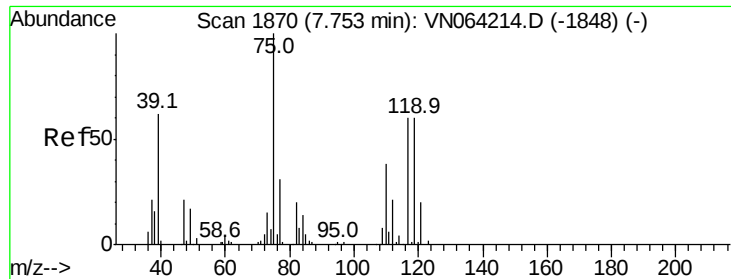
Ion 110.80 (110.50 to 111.50): V

Ion 191.70 (191.40 to 192.40): V

7.55



Time-->



#36

1,1-Dichloropropene

Concen: 5.040 ug/l

RT: 7.62 min Scan# 1829

Delta R.T. -0.13 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

40978-A

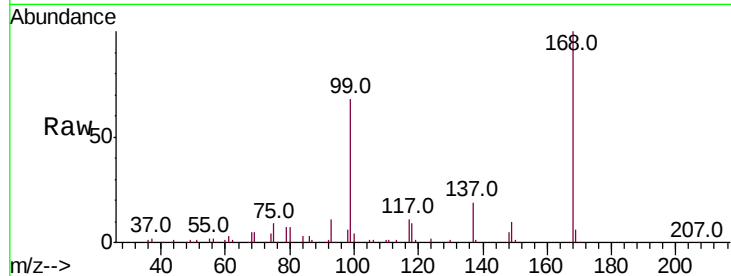
Tot Ion: 75 Resp: 20958

Ion Ratio Lower Upper

75 100

110 9.6 17.2 51.6#

77 0.0 24.9 37.3#



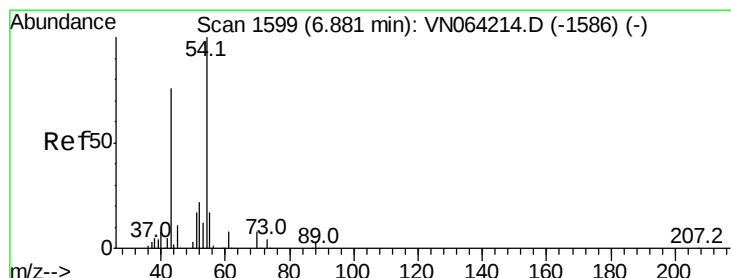
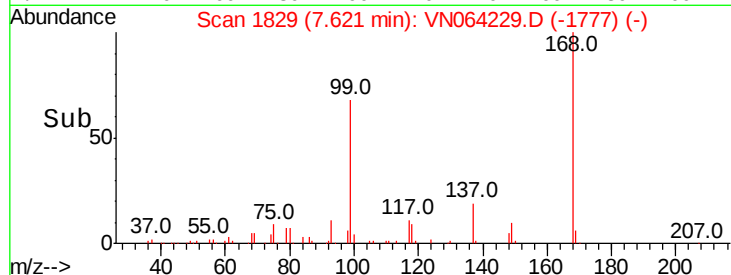
Abundance Ion 74.90 (74.60 to 75.60): VN064214.D (-1848) (-)

Ion 109.90 (109.60 to 110.60): VN064214.D (-1848) (-)

Ion 76.90 (76.60 to 77.60): VN064214.D (-1848) (-)

7.62

Time-->



#37

Ethyl Acetate

Concen: 12.711 ug/l

RT: 6.79 min Scan# 1570

Delta R.T. -0.09 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

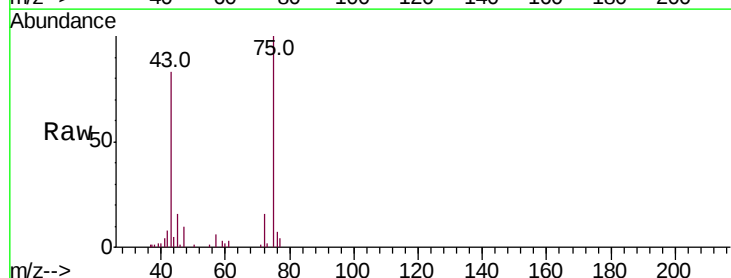
Tgt Ion: 43 Resp: 47996

Ion Ratio Lower Upper

43 100

61 0.0 10.0 15.0#

70 0.0 7.5 11.3#



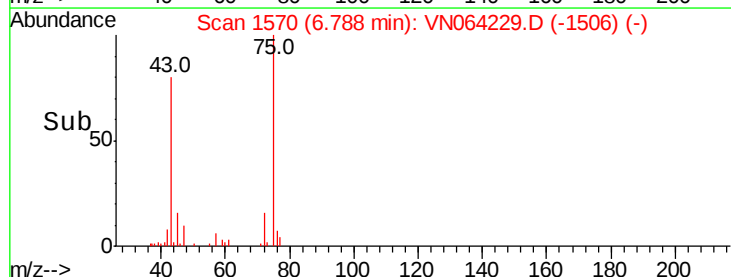
Abundance Ion 43.00 (42.70 to 43.70): VN064214.D (-1586) (-)

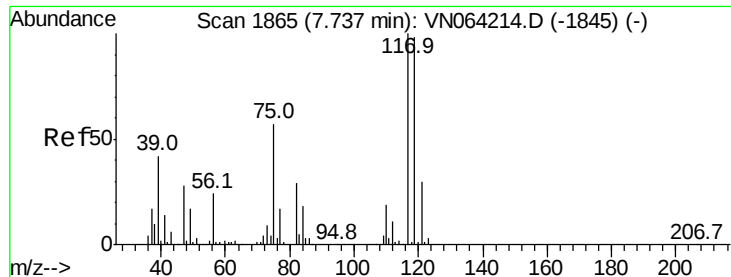
Ion 60.90 (60.60 to 61.60): VN064214.D (-1586) (-)

Ion 70.00 (69.70 to 70.70): VN064214.D (-1586) (-)

6.79

Time-->





#38

Carbon Tetrachloride

Concen: 5.619 ug/l

RT: 7.62 min Scan# 1829

Delta R.T. -0.12 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

40978-A

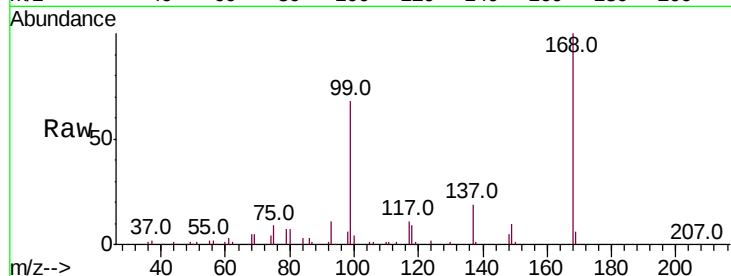
Tot Ion:117 Resp: 26587

Ion Ratio Lower Upper

117 100

119 6.7 78.5 117.7#

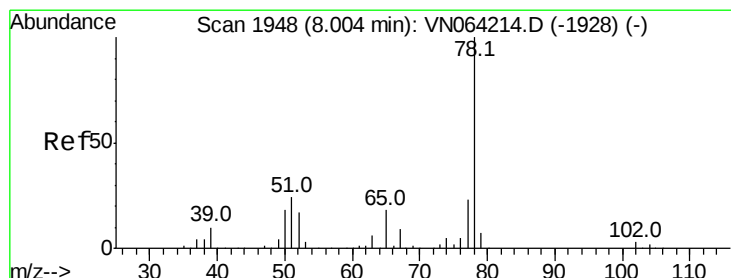
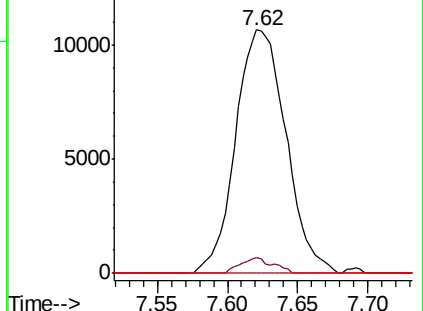
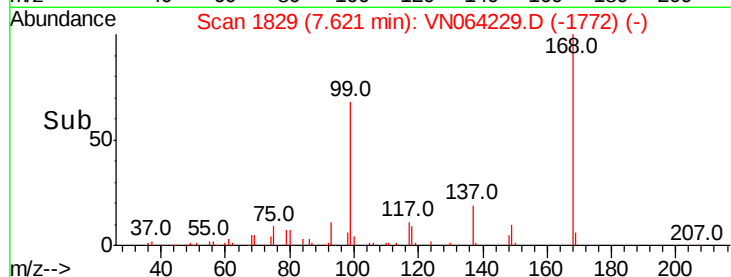
121 0.0 24.3 36.5#



Abundance Ion 116.80 (116.50 to 117.50): V

Ion 118.80 (118.50 to 119.50): V

Ion 120.80 (120.50 to 121.50): V



#40

Benzene

Concen: 1.538 ug/l

RT: 8.00 min Scan# 1948

Delta R.T. -0.00 min

Lab File: VN064229.D

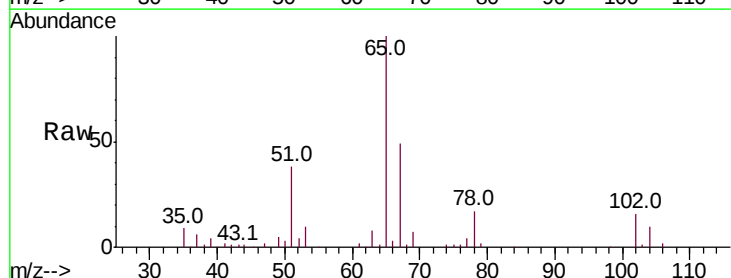
Acq: 21 Oct 2020 18:20

Tgt Ion: 78 Resp: 17660

Ion Ratio Lower Upper

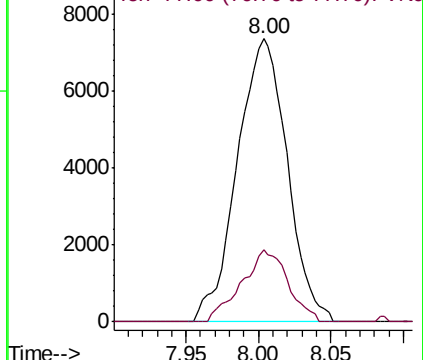
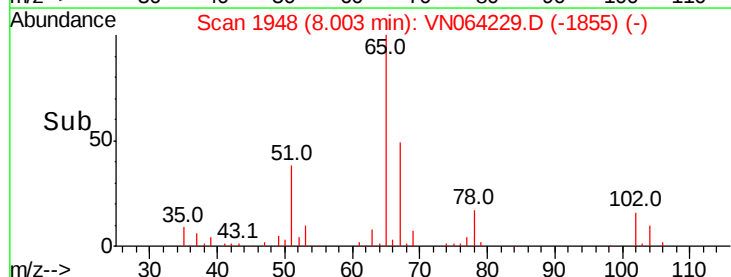
78 100

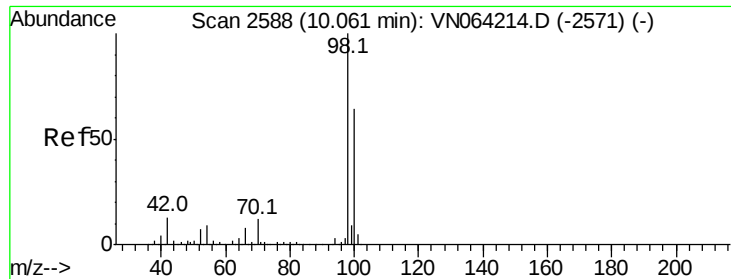
77 25.3 18.3 27.5



Abundance Ion 78.00 (77.70 to 78.70): VN0

Ion 77.00 (76.70 to 77.70): VN0





#50

Toluene-d8

Concen: 52.152 ug/l

RT: 10.06 min Scan# 2587

Delta R.T. -0.00 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

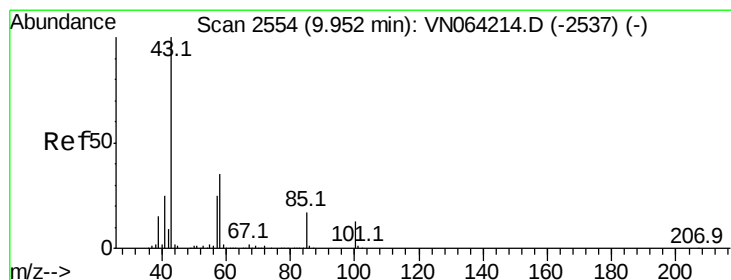
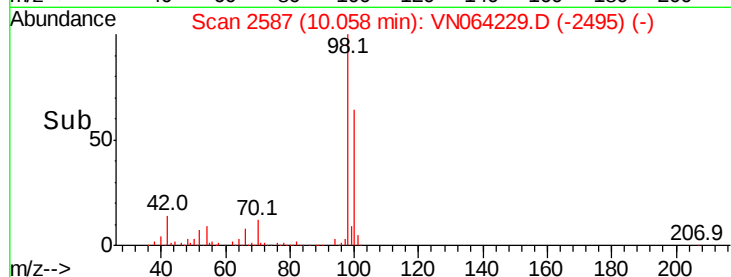
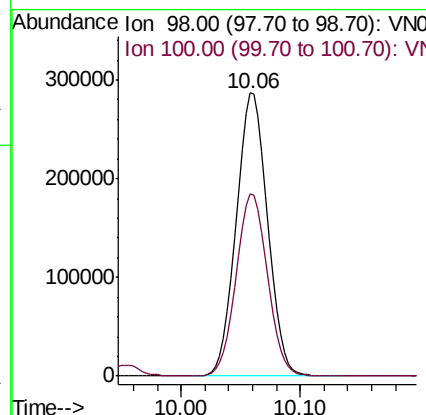
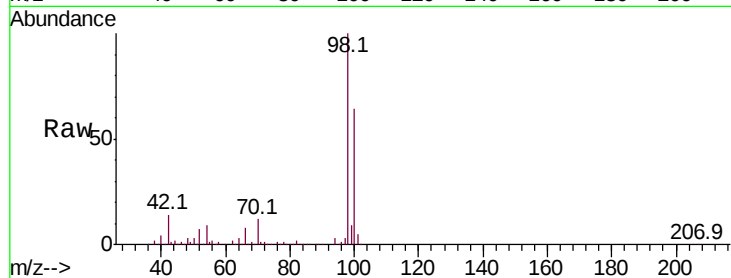
40978-A

Tot Ion: 98 Resp: 524660

Ion Ratio Lower Upper

98 100

100 64.5 50.8 76.2



#51

4-Methyl-2-Pentanone

Concen: 39.829 ug/l

RT: 9.95 min Scan# 2554

Delta R.T. -0.00 min

Lab File: VN064229.D

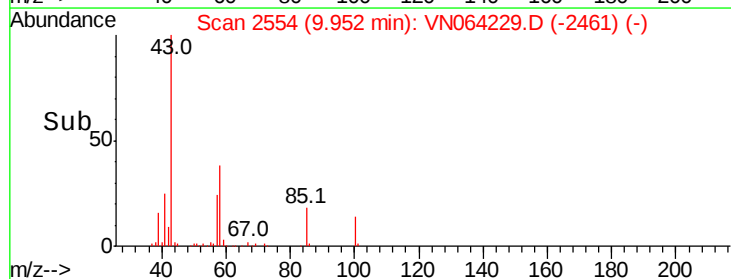
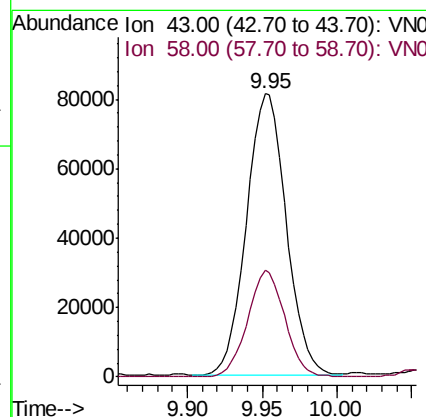
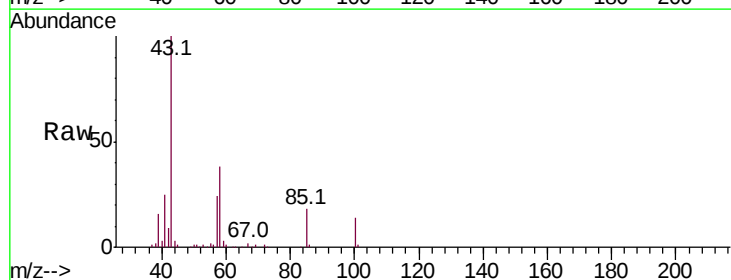
Acq: 21 Oct 2020 18:20

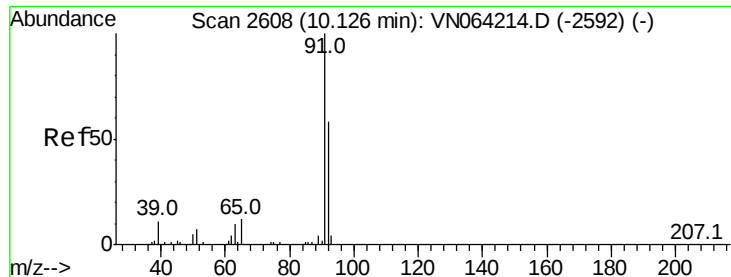
Tgt Ion: 43 Resp: 149790

Ion Ratio Lower Upper

43 100

58 35.6 28.6 42.8





#52

Toluene

Concen: 1.960 ug/l

RT: 10.13 min Scan# 2608

Delta R.T. -0.00 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

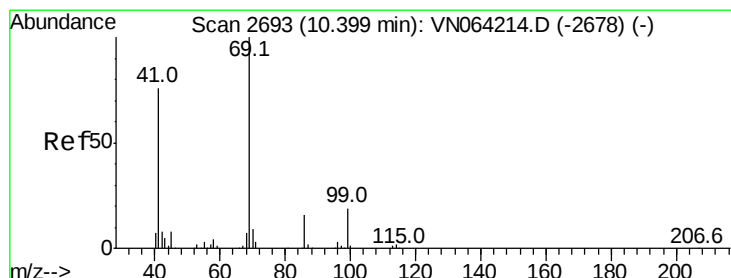
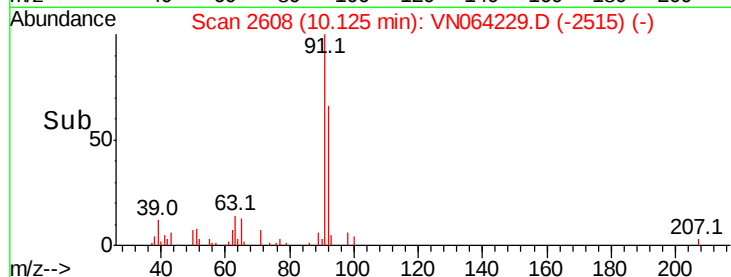
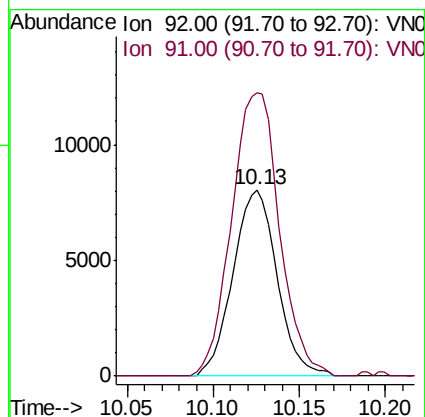
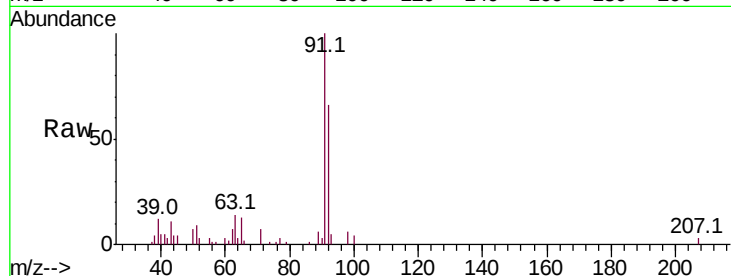
40978-A

Tot Ion: 92 Resp: 14398

Ion Ratio Lower Upper

92 100

91 165.3 137.4 206.2



#56

Ethyl methacrylate

Concen: 0.477 ug/l

RT: 10.33 min Scan# 2672

Delta R.T. -0.07 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

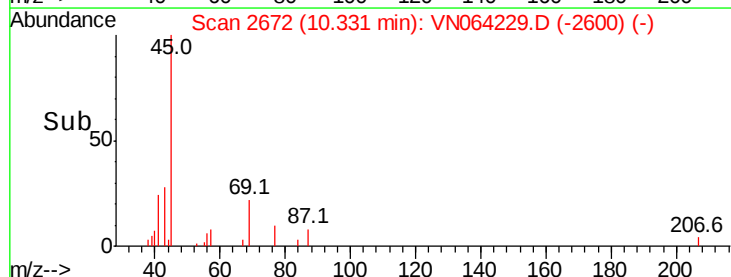
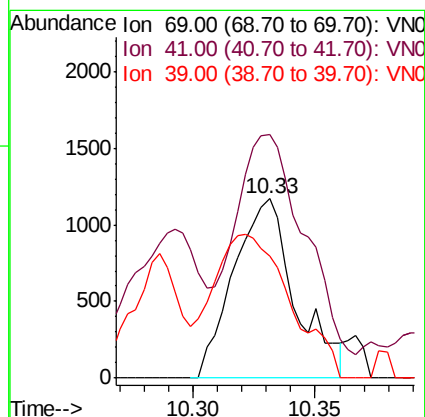
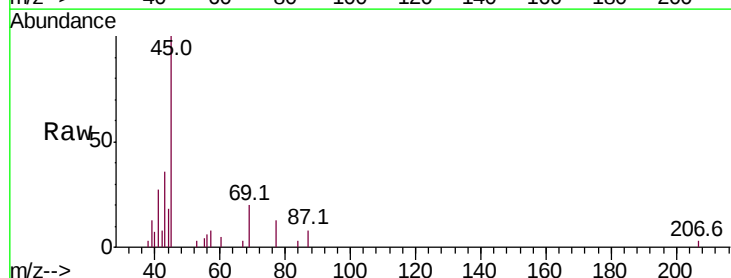
Tgt Ion: 69 Resp: 2045

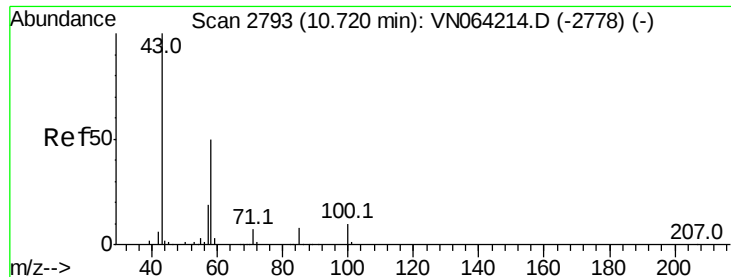
Ion Ratio Lower Upper

69 100

41 133.1 61.4 92.2#

39 100.7 36.0 54.0#

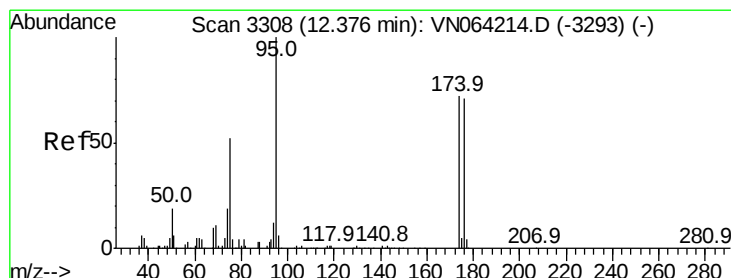
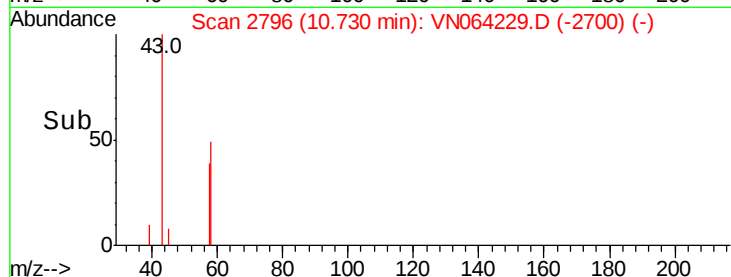
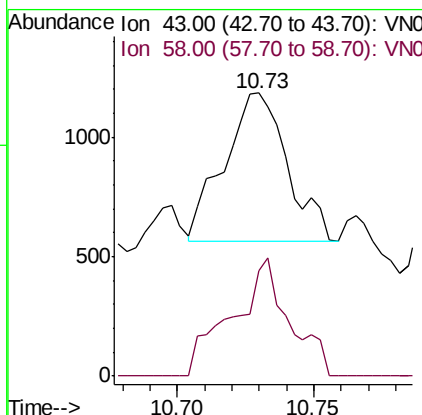
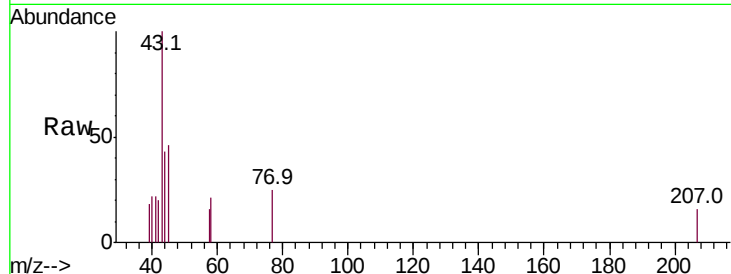




#59
2-Hexanone
Concen: 0.364 ug/l
RT: 10.73 min Scan# 2796
Delta R.T. 0.01 min
Lab File: VN064229.D
Acq: 21 Oct 2020 18:20

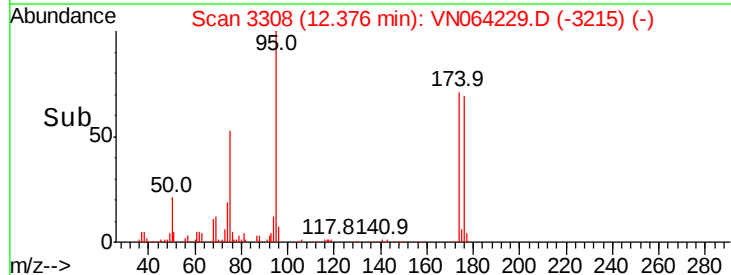
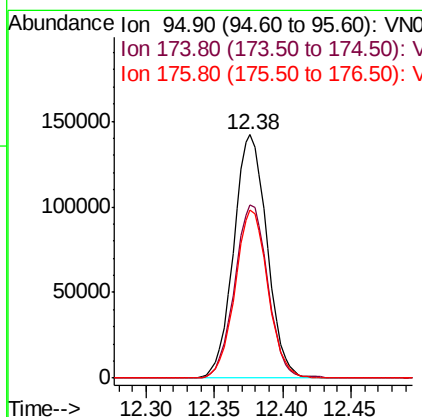
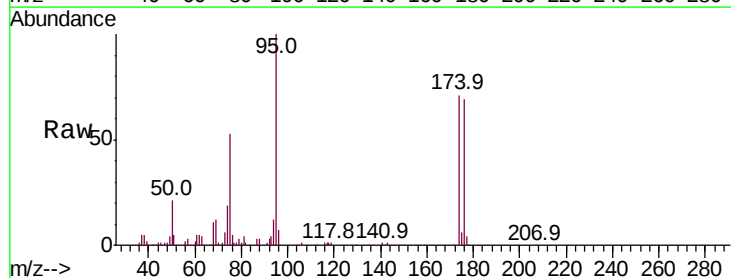
Instrument :
MSVOA_N
ClientSampled :
40978-A

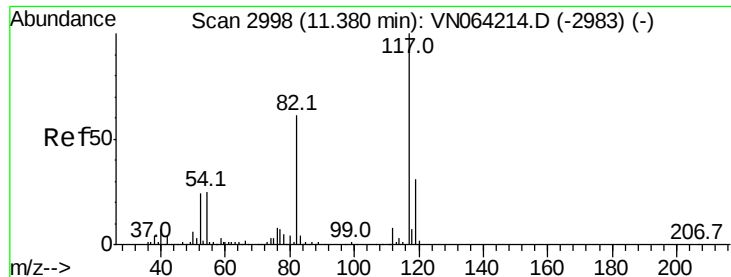
Tot Ion: 43 Resp: 1000
Ion Ratio Lower Upper
43 100
58 71.0 24.8 74.3



#62
4-Bromofluorobenzene
Concen: 59.097 ug/l
RT: 12.38 min Scan# 3308
Delta R.T. -0.00 min
Lab File: VN064229.D
Acq: 21 Oct 2020 18:20

Tgt Ion: 95 Resp: 241016
Ion Ratio Lower Upper
95 100
174 71.1 0.0 144.4
176 68.1 0.0 139.2

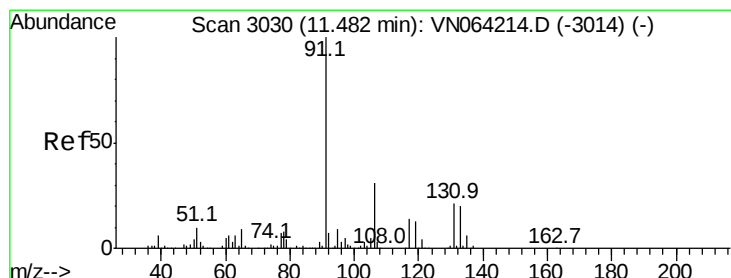
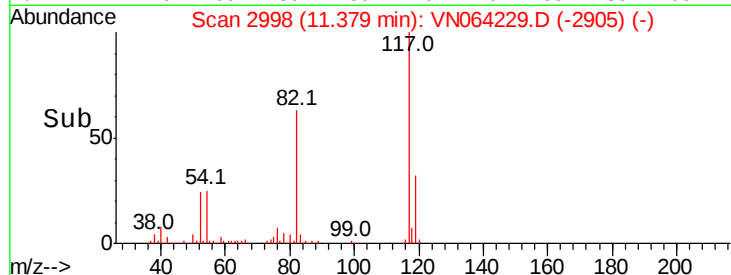
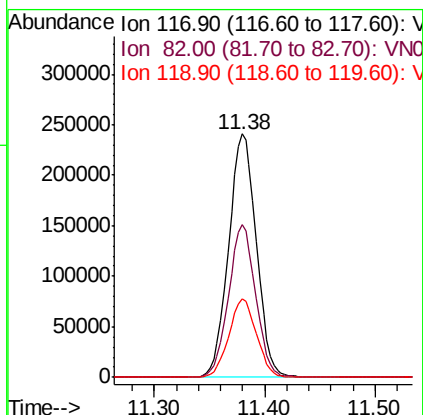
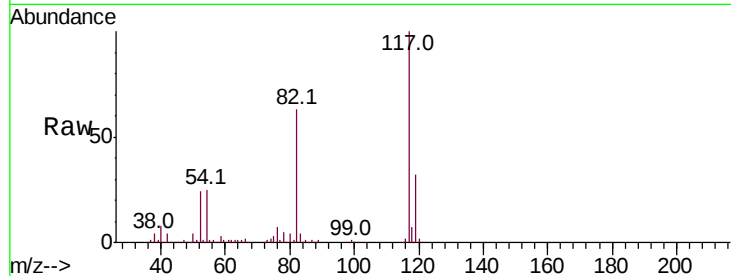




#63
Chlorobenzene-d5
Concen: 50.000 ug/l
RT: 11.38 min Scan# 2998
Delta R.T. -0.00 min
Lab File: VN064229.D
Acq: 21 Oct 2020 18:20

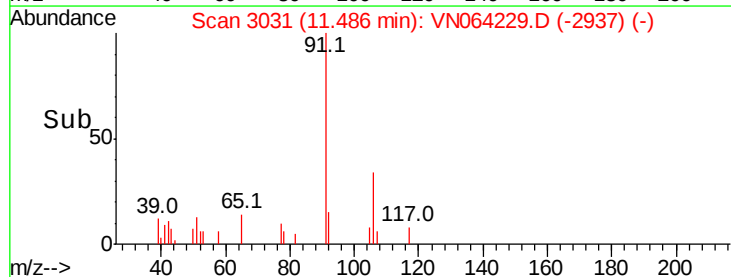
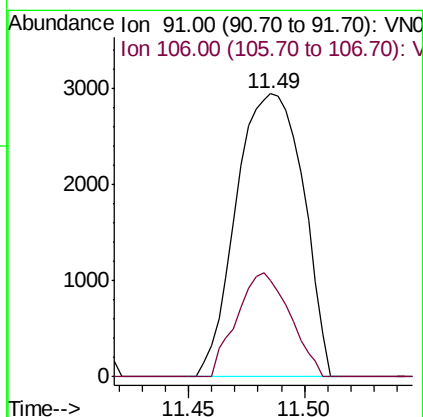
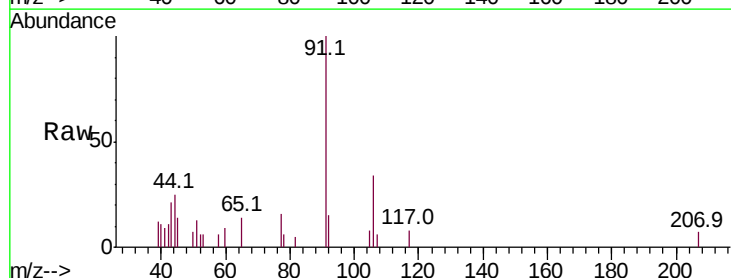
Instrument :
MSVOA_N
ClientSampleId :
40978-A

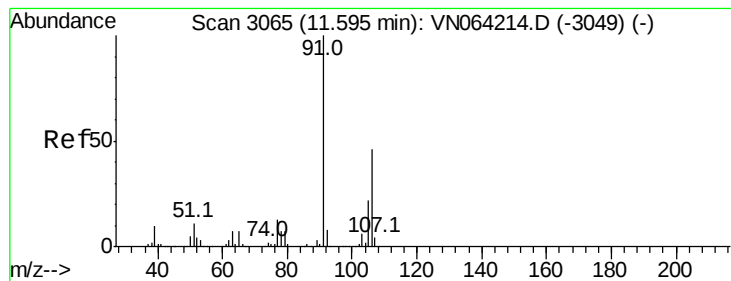
Tot Ion:117 Resp: 419987
Ion Ratio Lower Upper
117 100
82 62.6 48.8 73.2
119 32.1 24.7 37.1



#67
Ethyl Benzene
Concen: 0.368 ug/l
RT: 11.49 min Scan# 3031
Delta R.T. 0.00 min
Lab File: VN064229.D
Acq: 21 Oct 2020 18:20

Tgt Ion: 91 Resp: 5880
Ion Ratio Lower Upper
91 100
106 34.2 24.8 37.2





#68

m/p-Xylenes

Concen: 1.508 ug/l

RT: 11.59 min Scan# 3064

Delta R.T. -0.00 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

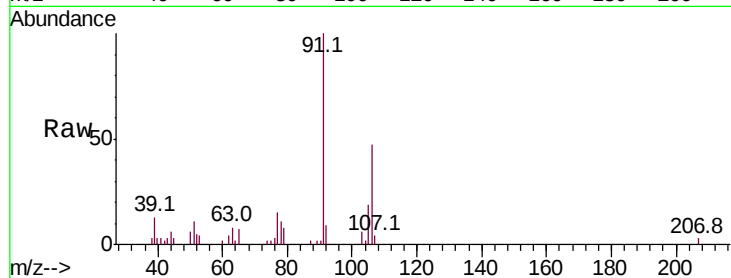
40978-A

Tot Ion:106 Resp: 8927

Ion Ratio Lower Upper

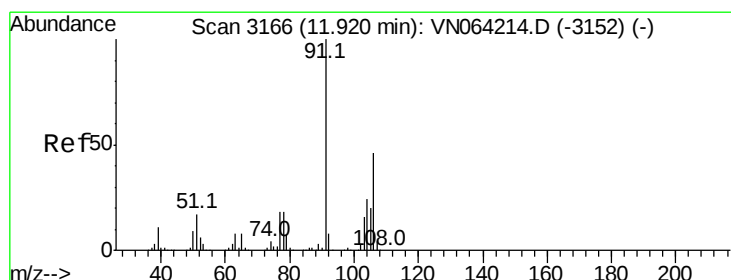
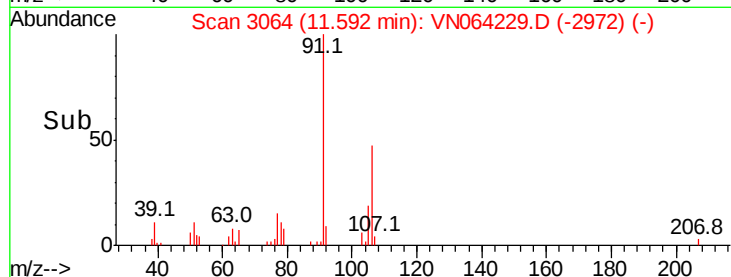
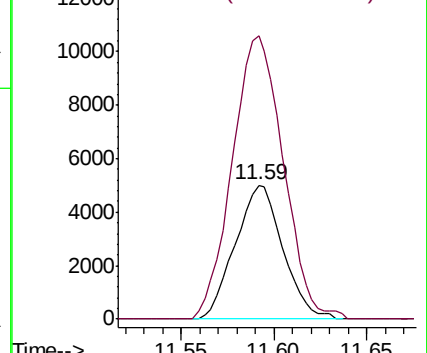
106 100

91 226.5 172.2 258.2



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN



#69

o-Xylene

Concen: 1.191 ug/l

RT: 11.92 min Scan# 3167

Delta R.T. 0.00 min

Lab File: VN064229.D

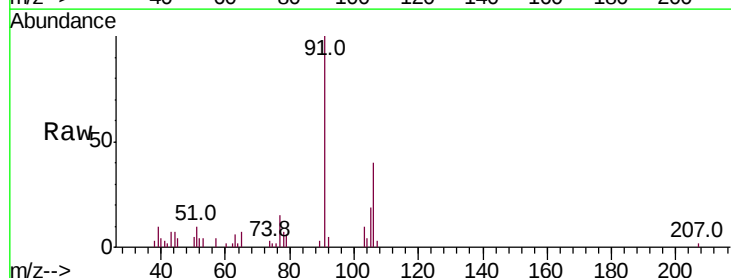
Acq: 21 Oct 2020 18:20

Tgt Ion:106 Resp: 6816

Ion Ratio Lower Upper

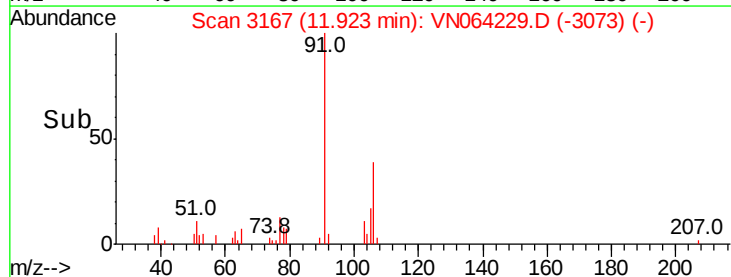
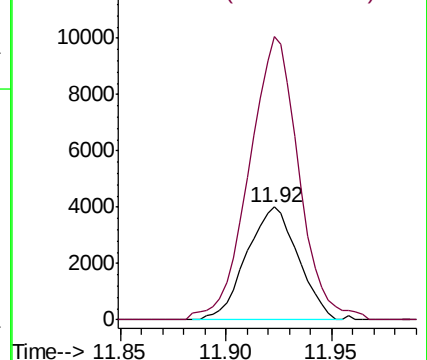
106 100

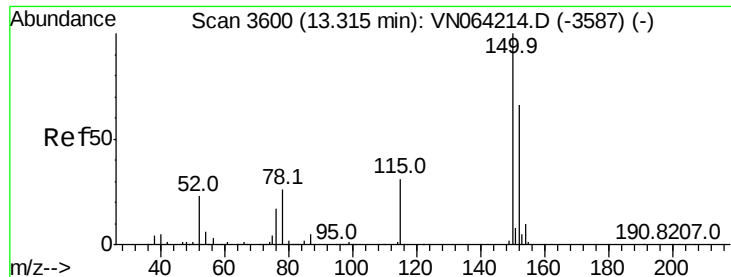
91 242.5 109.9 329.6



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VN





#72

1,4-Dichlorobenzene-d4

Concen: 50.000 ug/l

RT: 13.32 min Scan# 3601

Delta R.T. 0.00 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

40978-A

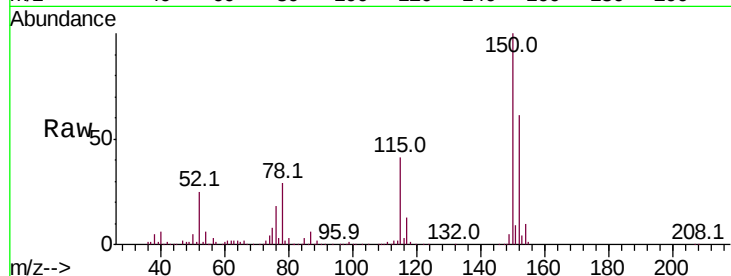
Tot Ion:152 Resp: 195555

Ion Ratio Lower Upper

152 100

115 66.8 32.0 96.2

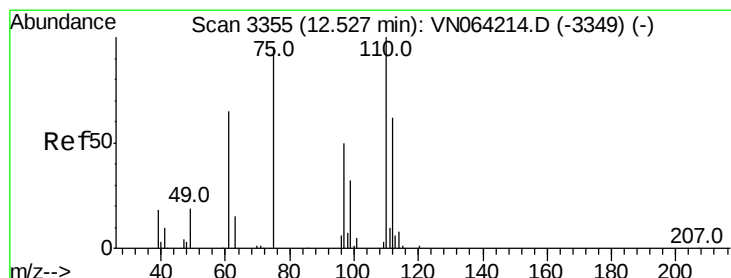
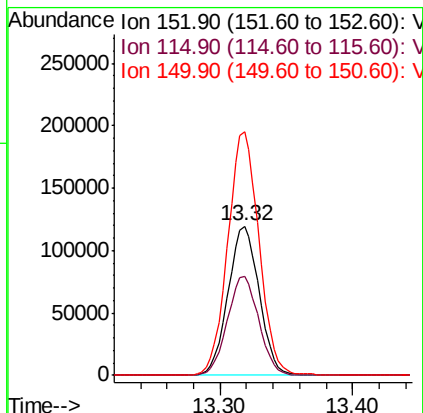
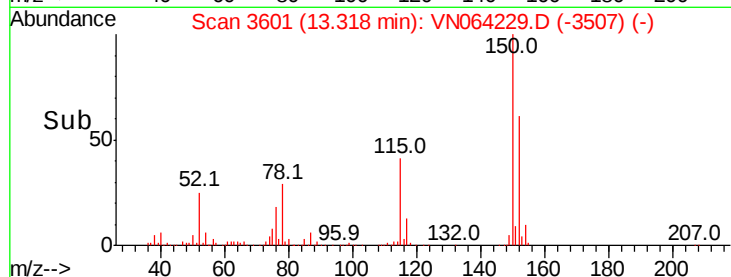
150 163.0 0.0 356.6



Abundance Ion 151.90 (151.60 to 152.60): V

Ion 114.90 (114.60 to 115.60): V

Ion 149.90 (149.60 to 150.60): V



#76

1,2,3-Trichloropropane

Concen: 31.236 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. -0.15 min

Lab File: VN064229.D

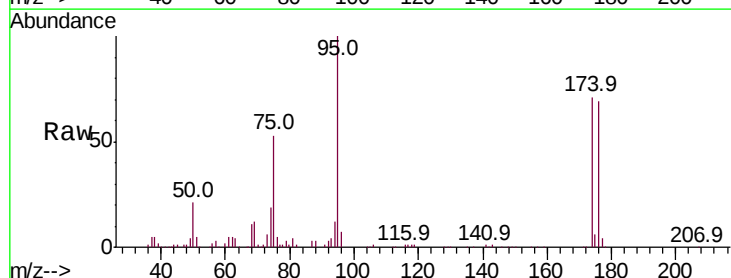
Acq: 21 Oct 2020 18:20

Tgt Ion: 75 Resp: 128773

Ion Ratio Lower Upper

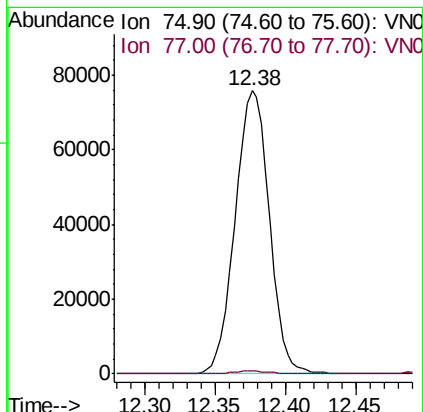
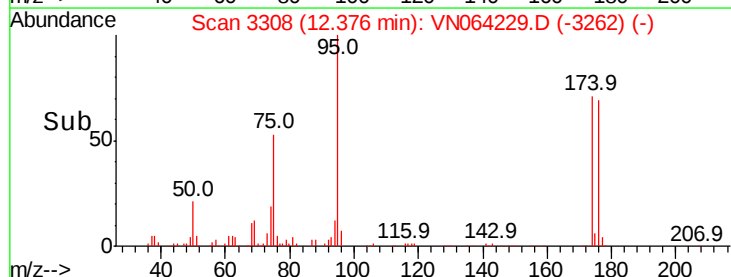
75 100

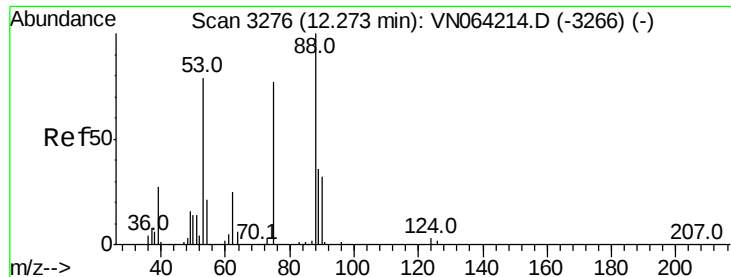
77 1.0 0.0 0.0#



Abundance Ion 74.90 (74.60 to 75.60): V

Ion 77.00 (76.70 to 77.70): V





#81

trans-1,4-Dichloro-2-butene

Concen: 78.861 ug/l

RT: 12.38 min Scan# 3308

Delta R.T. 0.10 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampled :

40978-A

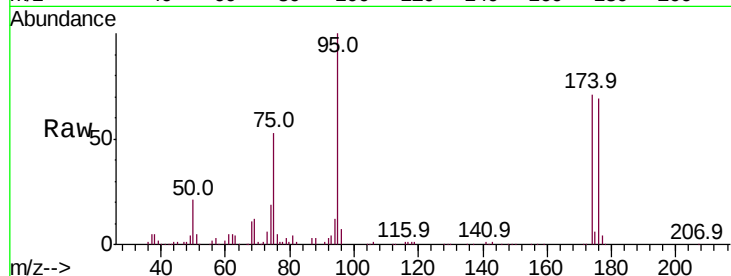
Tot Ion: 75 Resp: 128773

Ion Ratio Lower Upper

75 100

53 0.0 81.0 121.4#

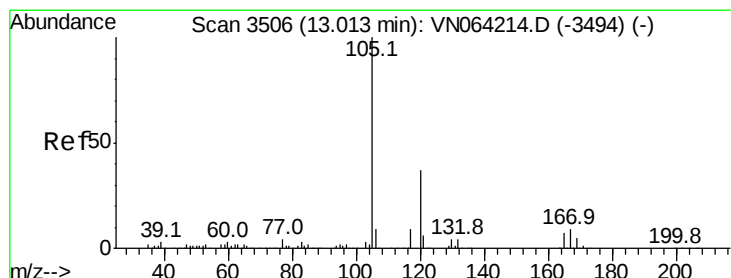
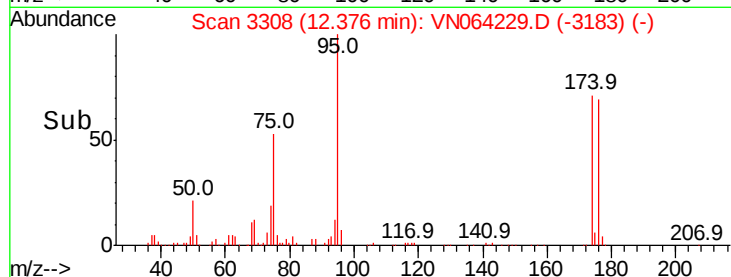
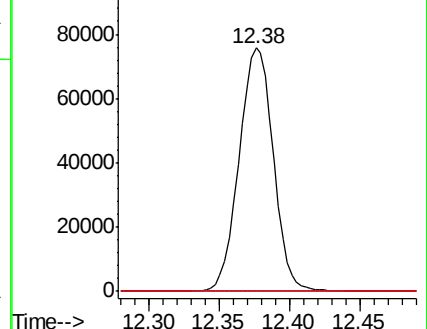
89 0.0 38.7 58.1#



Abundance Ion 74.90 (74.60 to 75.60): VN064229.D (-3183) (-)

Ion 53.00 (52.70 to 53.70): VN064229.D (-3183) (-)

Ion 88.90 (88.60 to 89.60): VN064229.D (-3183) (-)



#84

1,2,4-Trimethylbenzene

Concen: 0.253 ug/l

RT: 13.03 min Scan# 3510

Delta R.T. 0.01 min

Lab File: VN064229.D

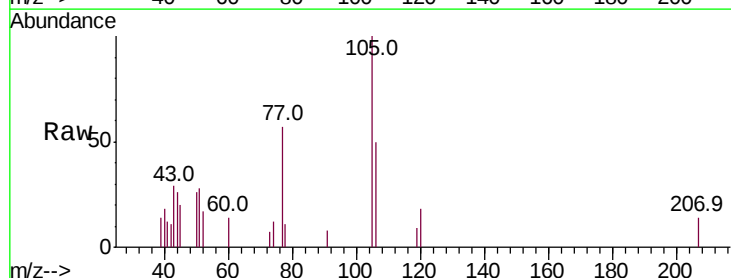
Acq: 21 Oct 2020 18:20

Tgt Ion: 105 Resp: 3178

Ion Ratio Lower Upper

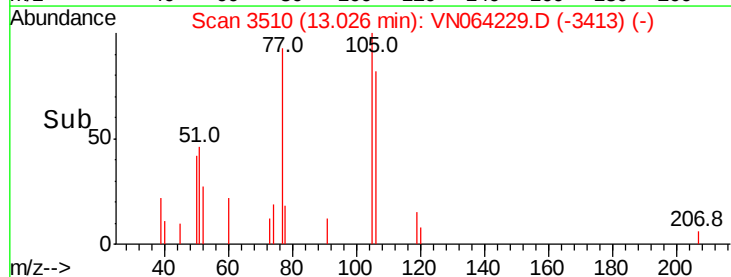
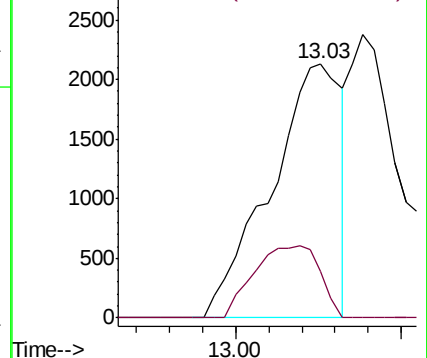
105 100

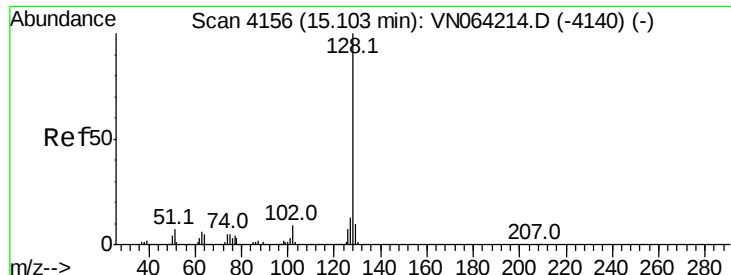
120 26.3 21.5 64.5



Abundance Ion 105.00 (104.70 to 105.70): VN064229.D (-3413) (-)

Ion 120.00 (119.70 to 120.70): VN064229.D (-3413) (-)





#95

Naphthalene

Concen: 1.118 ug/l

RT: 15.11 min Scan# 4158

Delta R.T. 0.01 min

Lab File: VN064229.D

Acq: 21 Oct 2020 18:20

Instrument :

MSVOA_N

ClientSampleId :

40978-A

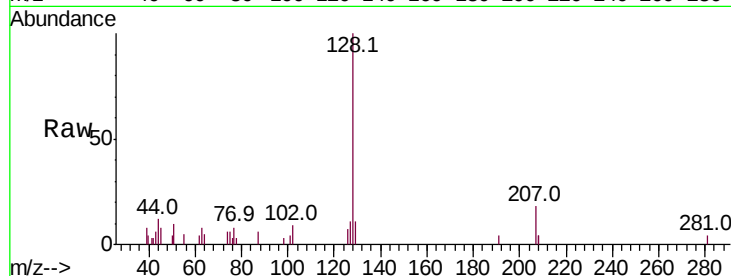
Tot Ion:128 Resp: 11538

Ion Ratio Lower Upper

128 100

127 13.6 10.5 15.7

129 8.6 8.6 12.8



Abundance Ion 128.00 (127.70 to 128.70): V

8000 Ion 127.00 (126.70 to 127.70): V

Ion 129.00 (128.70 to 129.70): V

