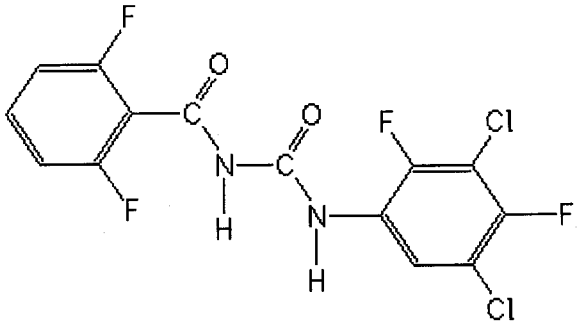
Risiken erkennen – Gesundheit schützen

MS/MS Parameters of Pesticides

Analyte: Teflubenzuron

CAS No.: 83121-18-0
Formula: C14H6Cl2F4N2O2
Molecular mass (lowest isotopes): 379,97 amu

Structure:



Ionisation: ESI - Quasimolecular ion: 379,0 amu = [M-H]-

Analyte sensitive parameter set (API 2000)

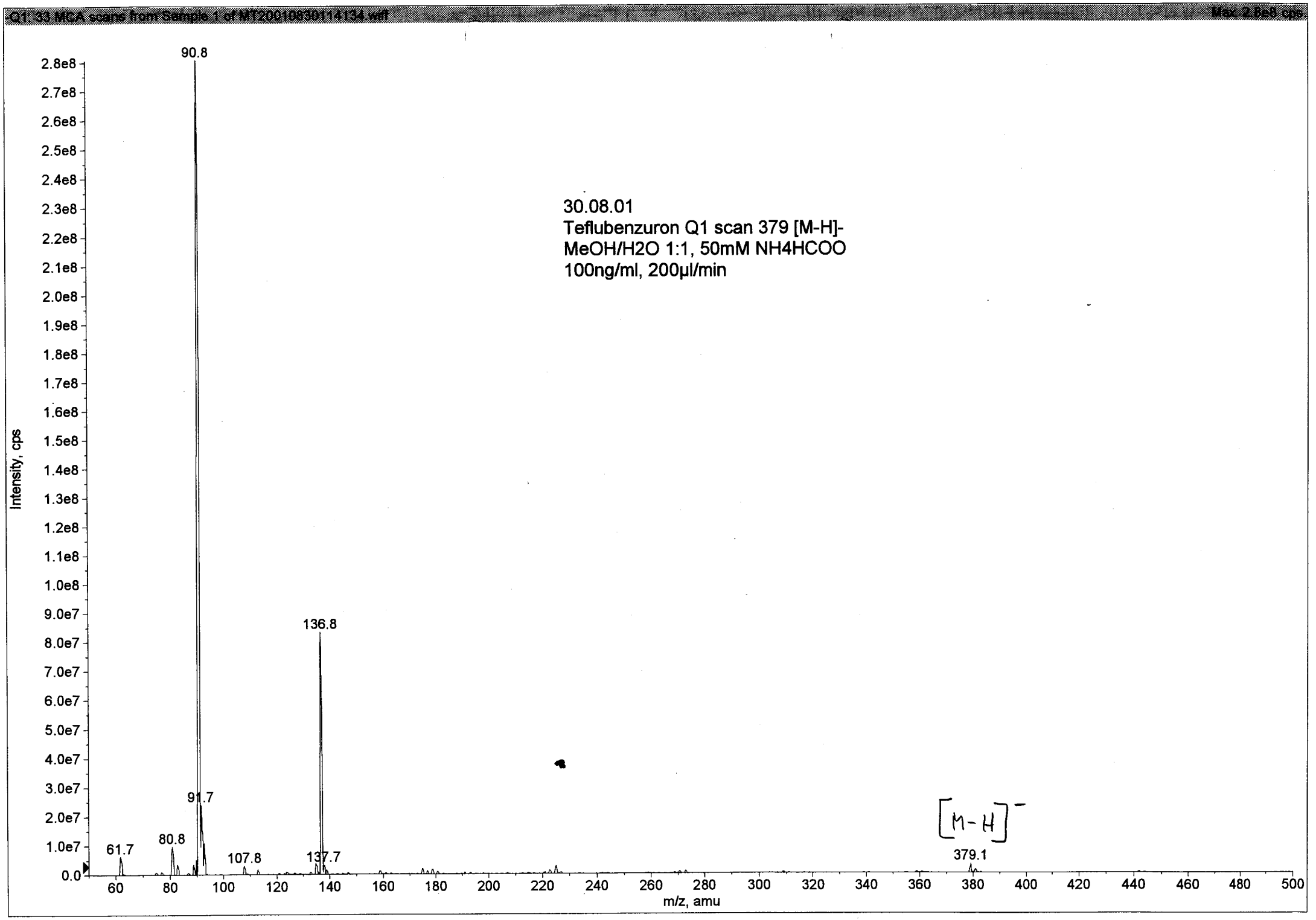
Transition	379,0 → 338,9	379,0 → 358,8
Declustering potential (DP)*)	-9V	-9 V
Focusing potential (FP)	-350 V	-350 V
Entrance potential (EP)	– 5,0 V	– 5,0 V
Collision cell entrance potential (CEP)	-32 V	-30 V
Collision energy (CE)	-12 V	-8 V
Collision cell exit potential (CXP)	-22 V	-22 V

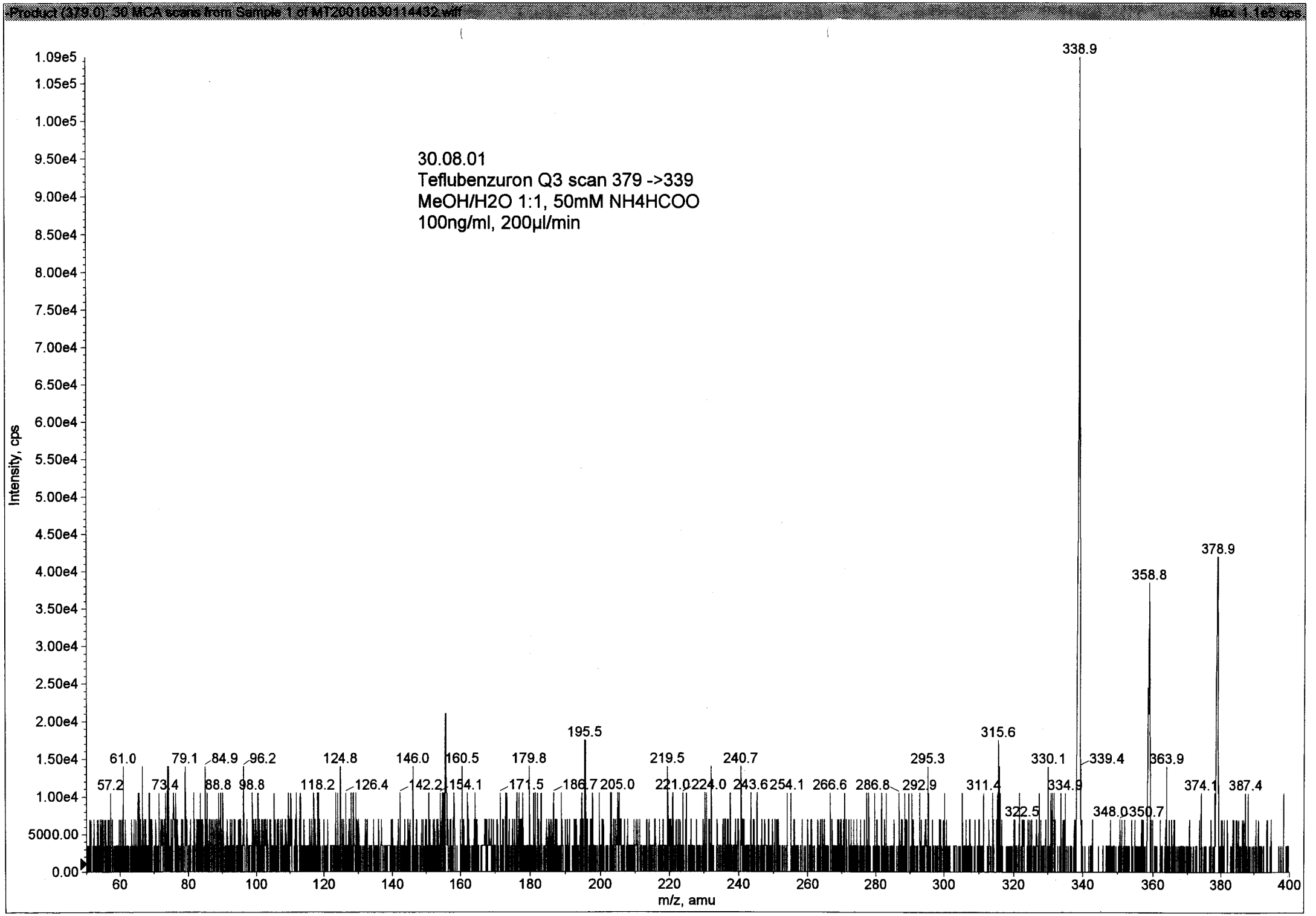
*) For API 3000 and 4000 enhance DP by 20V

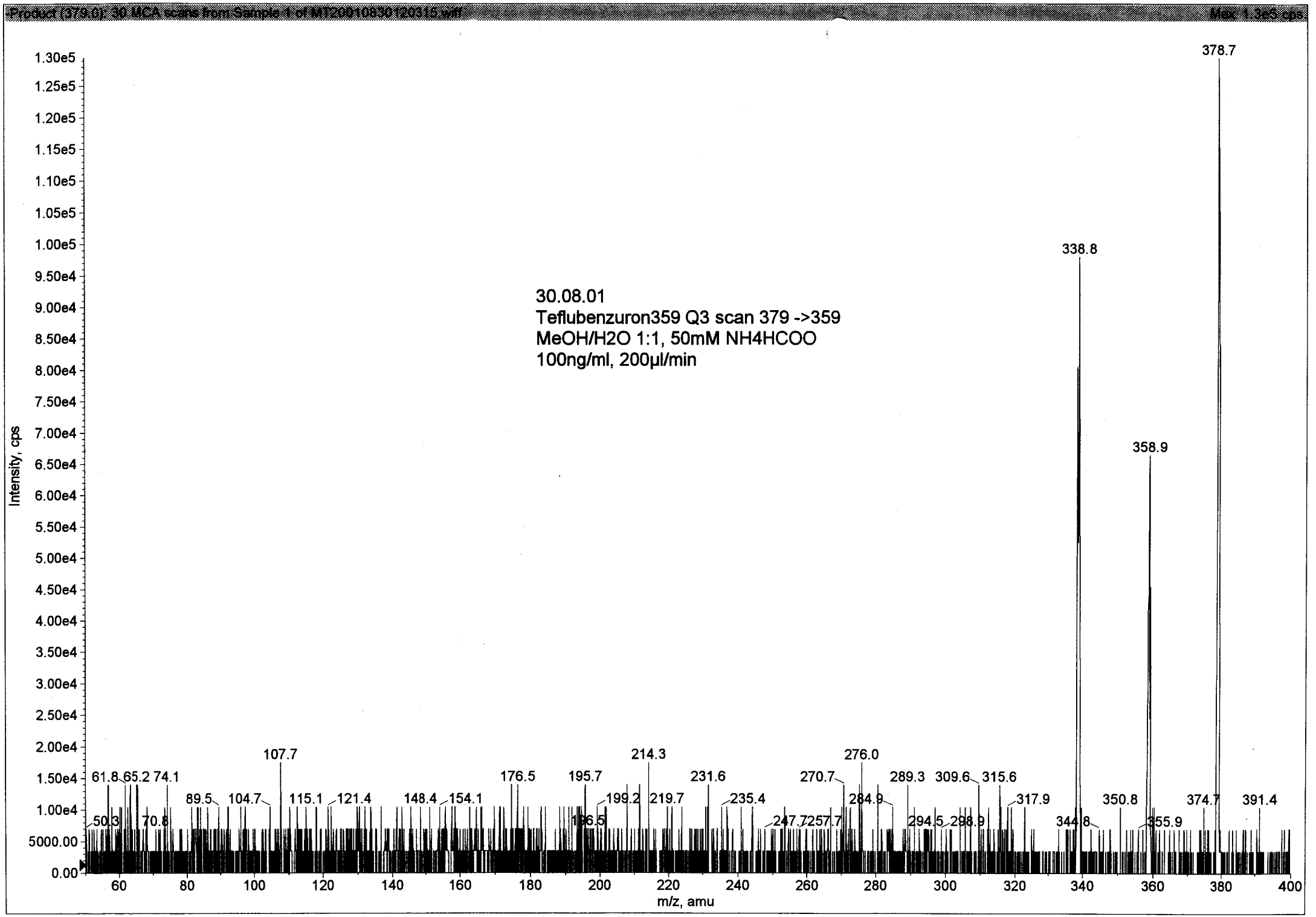
Fragmentation

$[M-H]^- \xrightarrow{-HF}$ m/z 359

$[M-H]^- \xrightarrow{-2\times HF}$ m/z 339


Q1: 33 MCA scans from Sample 1 of MT20010830114134.wiff
Max: 2.8e8 cps
90.8
30.08.01
Teflubenzuron Q1 scan 379 [M-H]-
MeOH/H2O 1:1, 50mM NH4HCOO
100ng/ml, 200µl/min
136.8
91.7
80.8
61.7
107.8
137.7
379.1
[M-H]-
Intensity, cps
m/z, amu


Product (379.0): 30 MCA scans from Sample 1 of MT20010830114432.wiff
Max 1.1e5 cps
30.08.01
Teflubenzuron Q3 scan 379 ->339
MeOH/H2O 1:1, 50mM NH4HCOO
100ng/ml, 200µl/min
Intensity, cps
m/z, amu
338.9
378.9
358.8
195.5
315.6
61.0
79.1
84.9
96.2
124.8
146.0
160.5
179.8
219.5
240.7
295.3
330.1
339.4
363.9
57.2
73.4
88.8
98.8
118.2
126.4
142.2
154.1
171.5
186.7
205.0
221.0
224.0
243.6
254.1
266.6
286.8
292.9
311.4
334.9
374.1
387.4
322.5
348.0
350.7


Product (379.0): 30 MCA scans from Sample 1 of MT20010930120315.wiff
Max. 1.3e5 cps
30.08.01
Teflubenzuron359 Q3 scan 379 ->359
MeOH/H2O 1:1, 50mM NH4HCOO
100ng/ml, 200µl/min
Intensity, cps
m/z, amu
1.30e5
1.25e5
1.20e5
1.15e5
1.10e5
1.05e5
1.00e5
9.50e4
9.00e4
8.50e4
8.00e4
7.50e4
7.00e4
6.50e4
6.00e4
5.50e4
5.00e4
4.50e4
4.00e4
3.50e4
3.00e4
2.50e4
2.00e4
1.50e4
1.00e4
5000.00
0.00
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
400
378.7
338.8
358.9
107.7
214.3
276.0
61.8
65.2
74.1
176.5
195.7
231.6
270.7
289.3
309.6
315.6
89.5
104.7
115.1
121.4
148.4
154.1
199.2
219.7
235.4
284.9
317.9
350.8
374.7
391.4
50.3
70.8
196.5
247.7
257.7
294.5
298.9
344.8
355.9