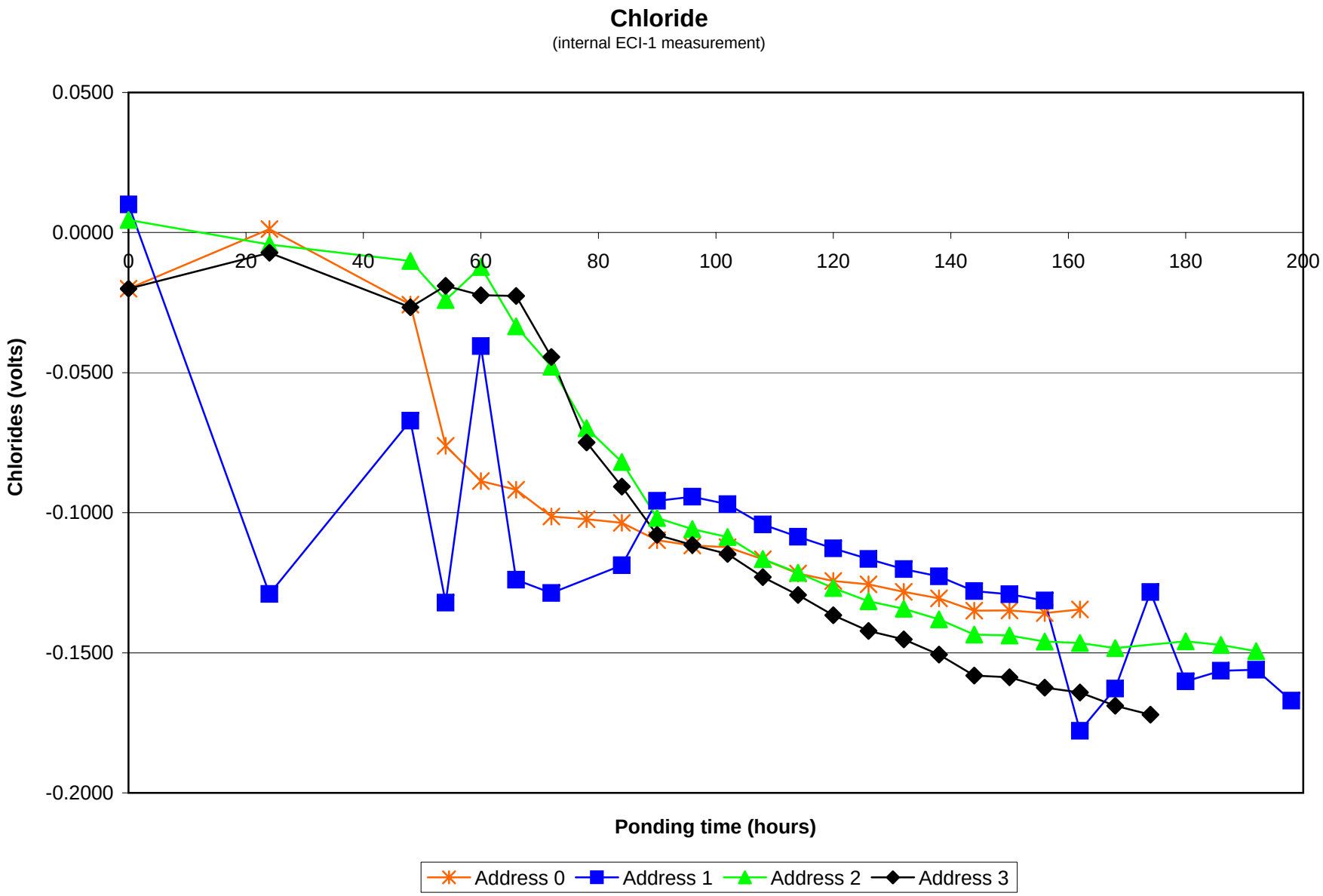
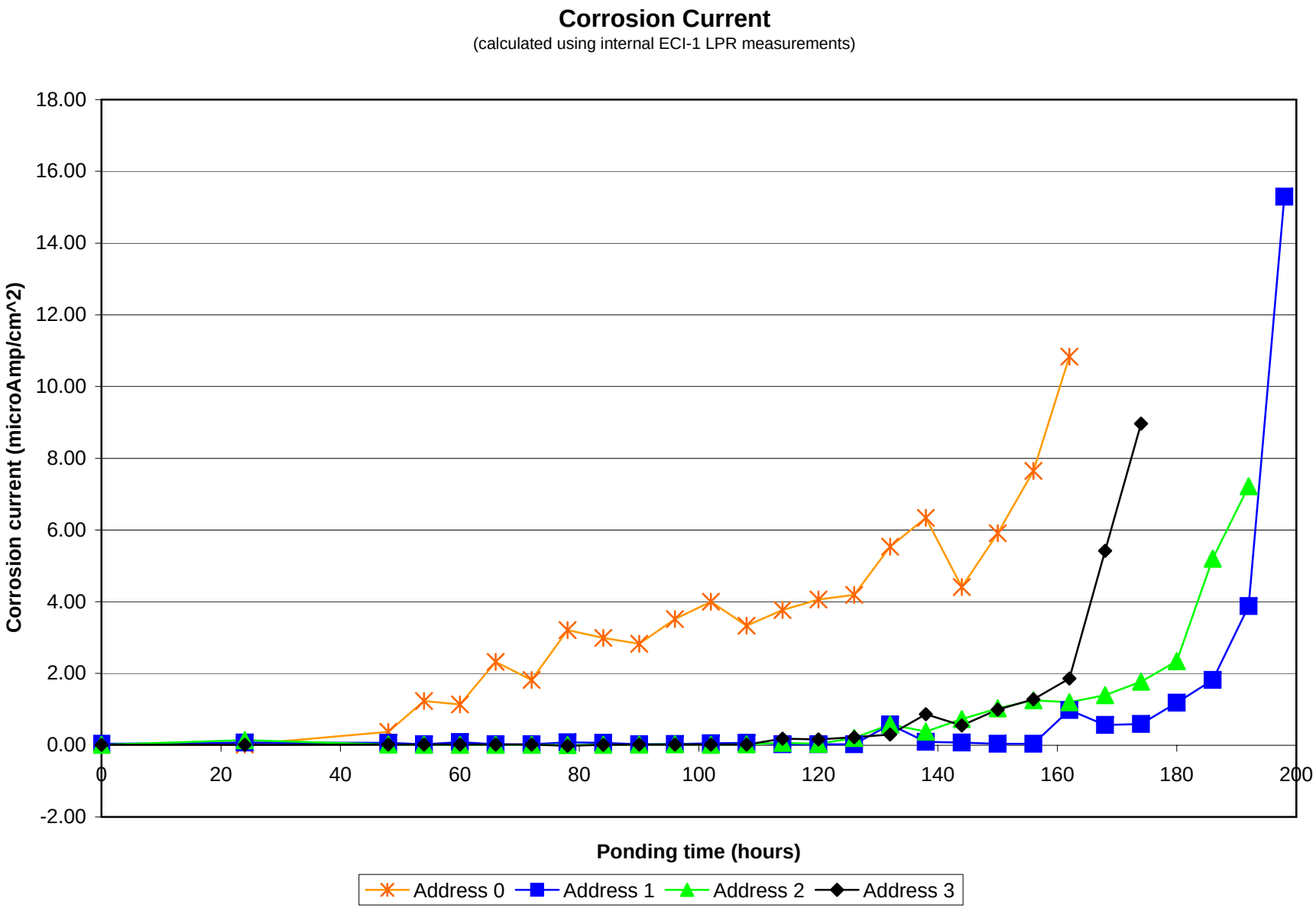
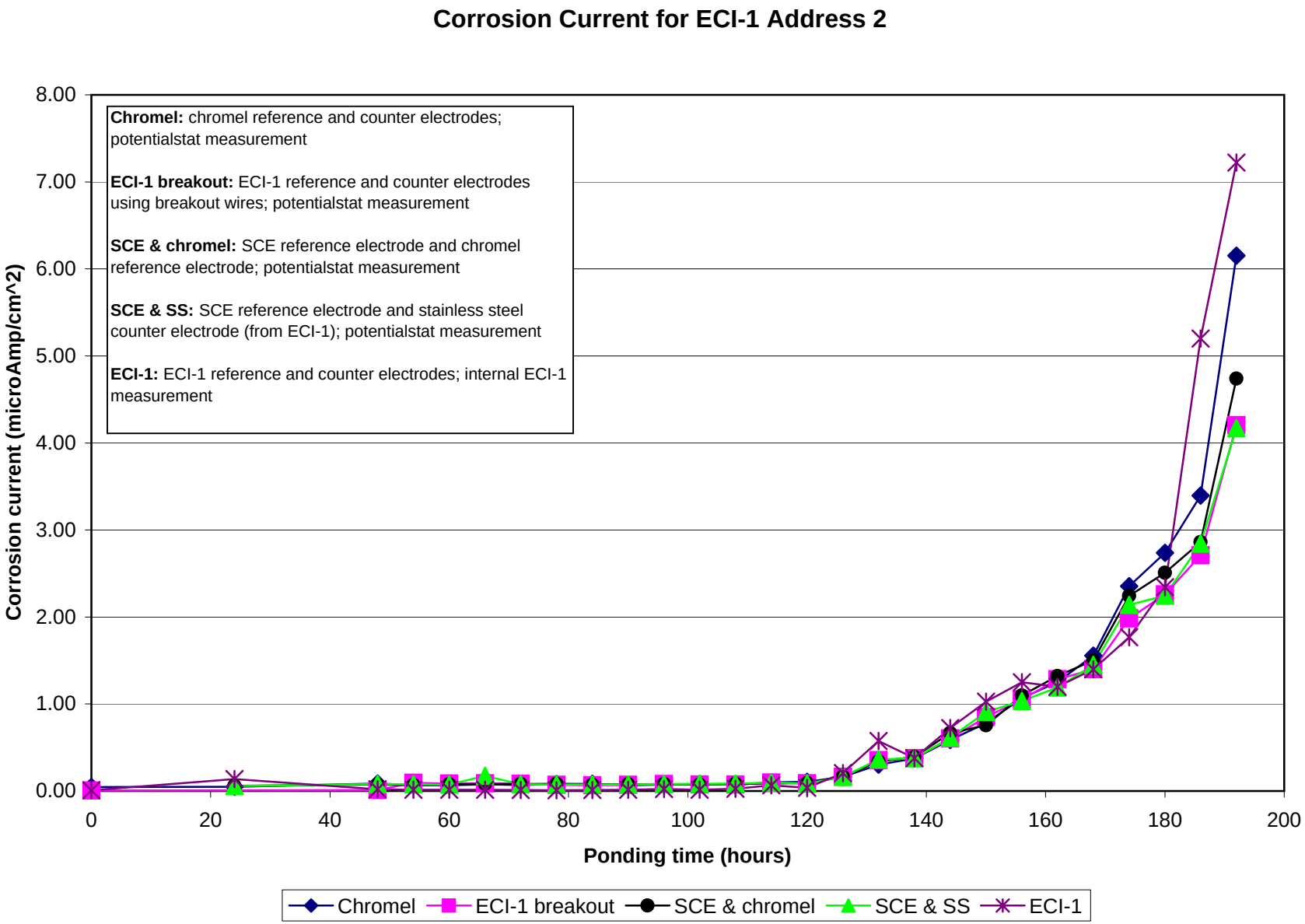
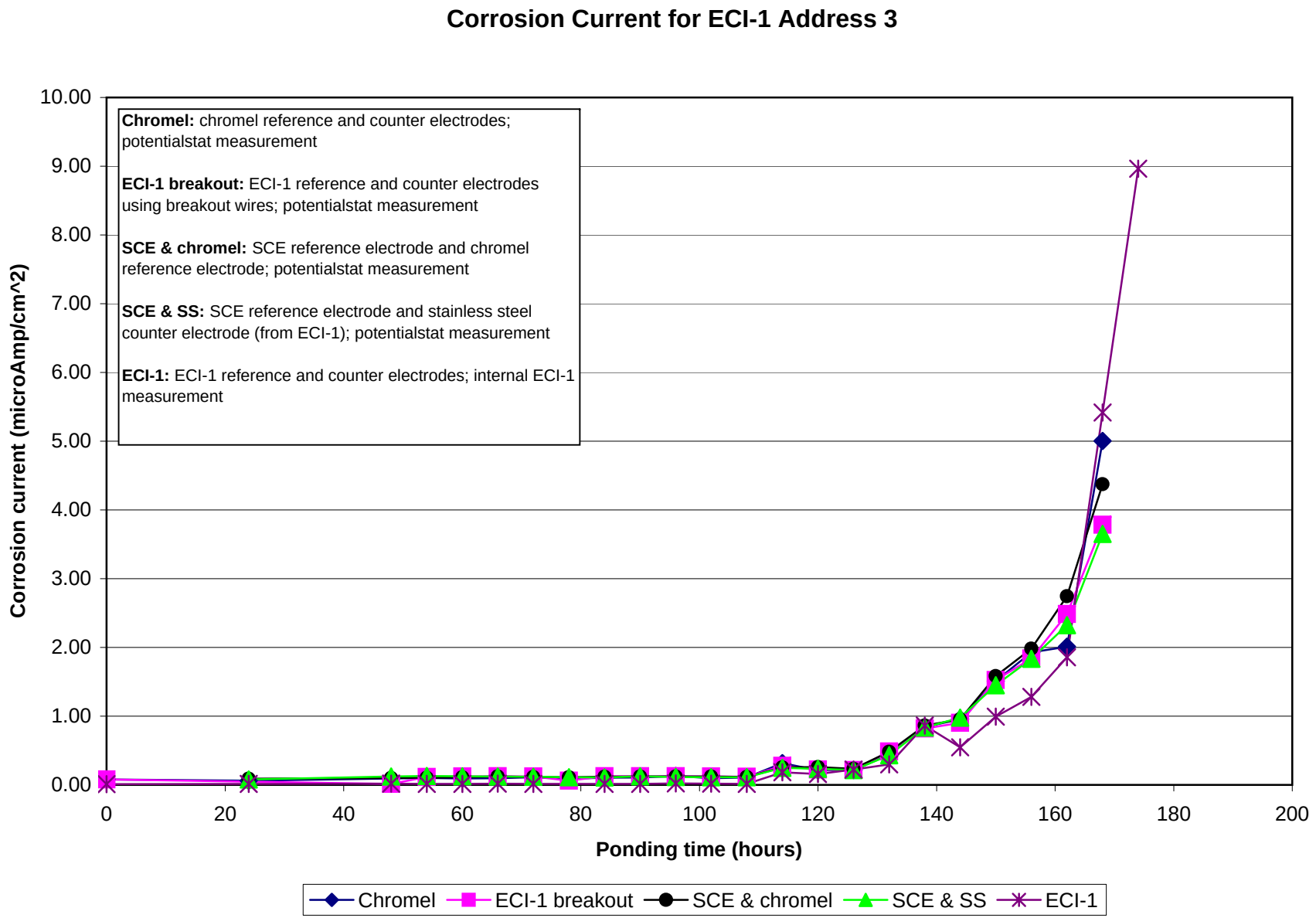
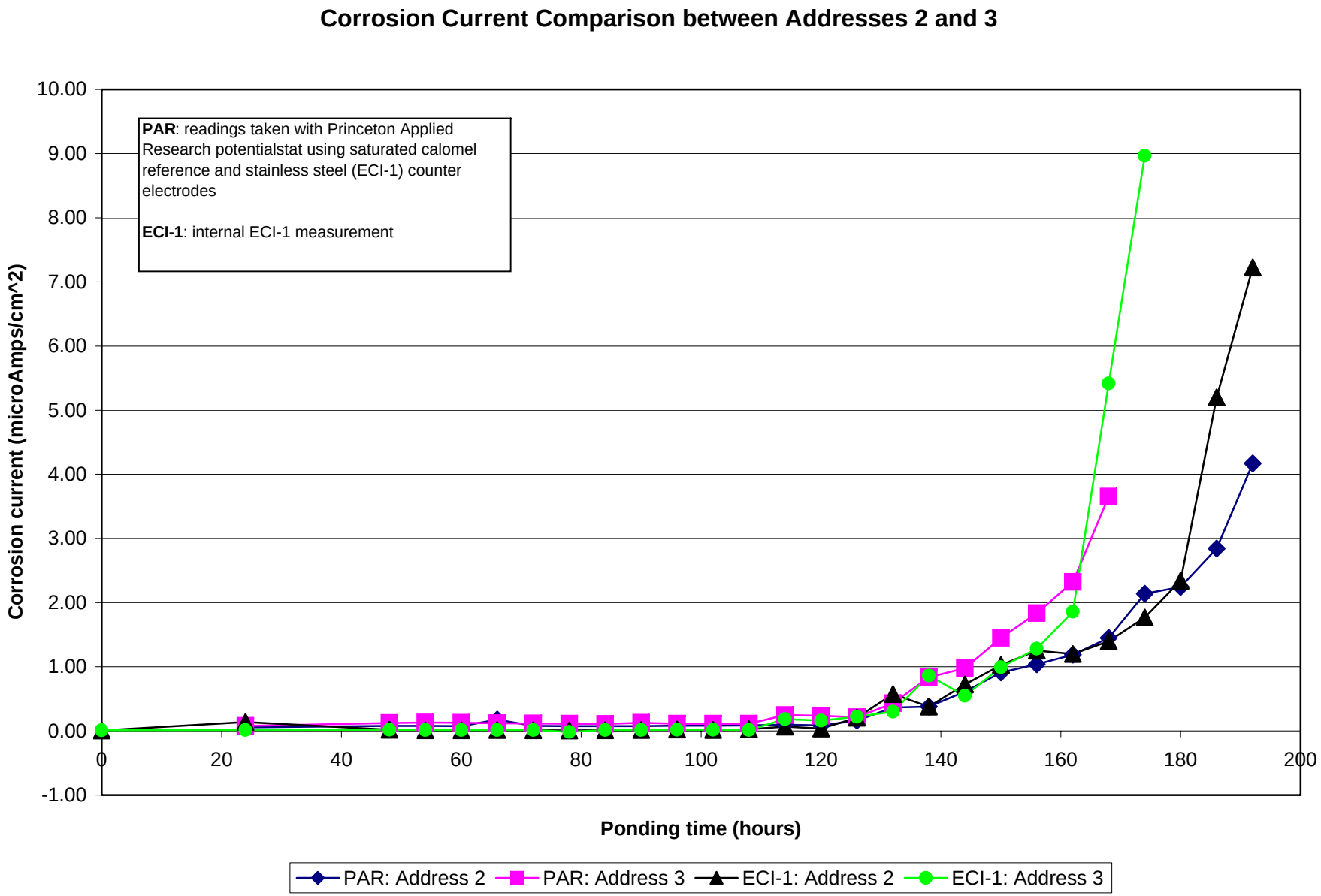
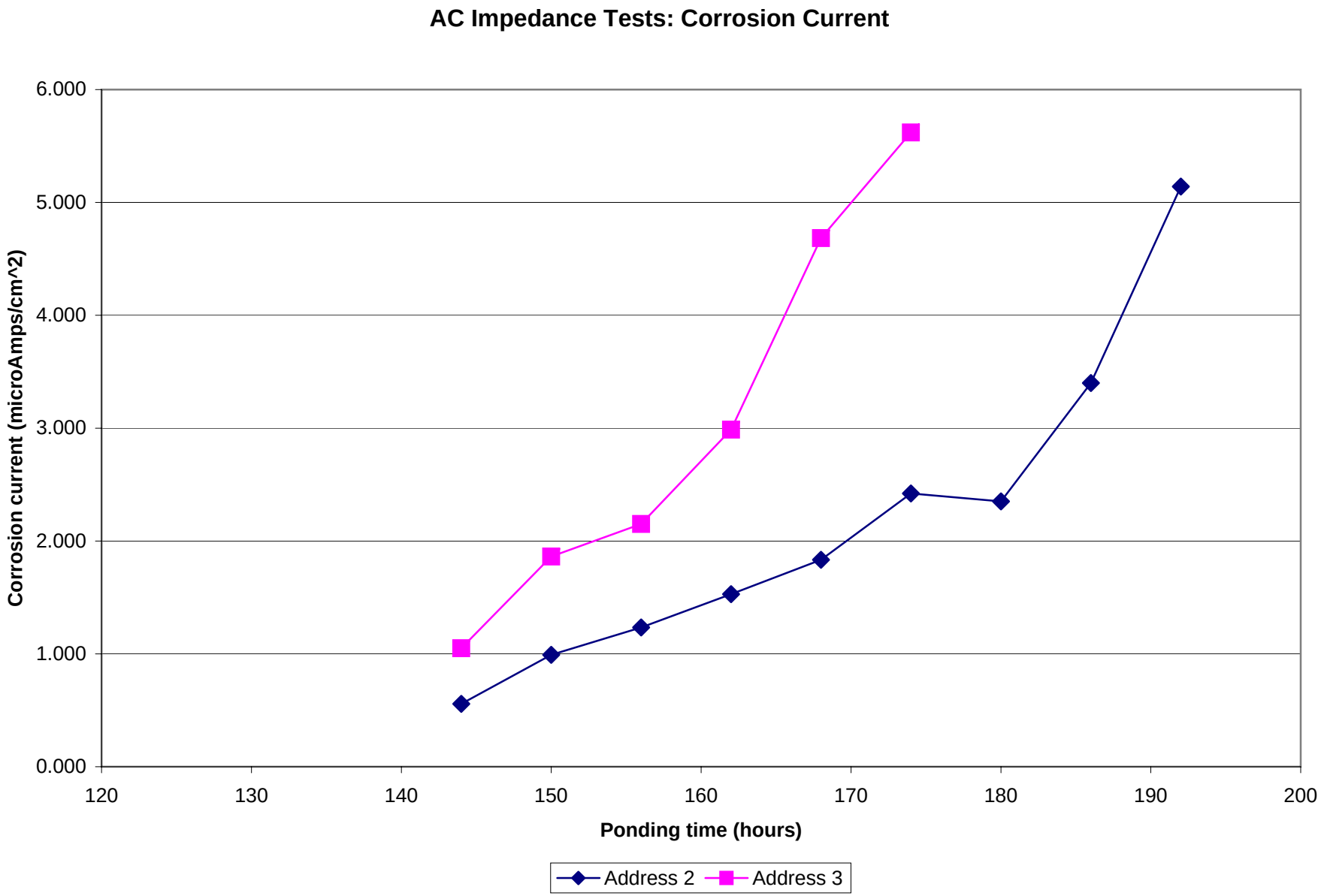

Chloride
(internal ECI-1 measurement)
0.0500
0.0000
-0.0500
-0.1000
-0.1500
-0.2000
0
20
40
60
80
100
120
140
160
180
200
Chlorides (volts)
Ponding time (hours)
Address 0
Address 1
Address 2
Address 3


Corrosion Current
(calculated using internal ECI-1 LPR measurements)
Corrosion current (microAmp/cm^2)
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
0
20
40
60
80
100
120
140
160
180
200
Ponding time (hours)
Address 0
Address 1
Address 2
Address 3


Corrosion Current for ECI-1 Address 2
Chromel: chromel reference and counter electrodes; potentialstat measurement
ECI-1 breakout: ECI-1 reference and counter electrodes using breakout wires; potentialstat measurement
SCE & chromel: SCE reference electrode and chromel reference electrode; potentialstat measurement
SCE & SS: SCE reference electrode and stainless steel counter electrode (from ECI-1); potentialstat measurement
ECI-1: ECI-1 reference and counter electrodes; internal ECI-1 measurement
Corrosion current (microAmp/cm^2)
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0
20
40
60
80
100
120
140
160
180
200
Ponding time (hours)
Chromel
ECI-1 breakout
SCE & chromel
SCE & SS
ECI-1


Corrosion Current for ECI-1 Address 3
Chromel: chromel reference and counter electrodes; potentialstat measurement
ECI-1 breakout: ECI-1 reference and counter electrodes using breakout wires; potentialstat measurement
SCE & chromel: SCE reference electrode and chromel reference electrode; potentialstat measurement
SCE & SS: SCE reference electrode and stainless steel counter electrode (from ECI-1); potentialstat measurement
ECI-1: ECI-1 reference and counter electrodes; internal ECI-1 measurement
Corrosion current (microAmp/cm^2)
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0
20
40
60
80
100
120
140
160
180
200
Ponding time (hours)
Chromel
ECI-1 breakout
SCE & chromel
SCE & SS
ECI-1


Corrosion Current Comparison between Addresses 2 and 3
PAR: readings taken with Princeton Applied Research potentialstat using saturated calomel reference and stainless steel (ECI-1) counter electrodes
ECI-1: internal ECI-1 measurement
Corrosion current (microAmps/cm^2)
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
0
20
40
60
80
100
120
140
160
180
200
Ponding time (hours)
PAR: Address 2
PAR: Address 3
ECI-1: Address 2
ECI-1: Address 3


AC Impedance Tests: Corrosion Current
Corrosion current (microAmps/cm^2)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
120
130
140
150
160
170
180
190
200
Ponding time (hours)
Address 2
Address 3