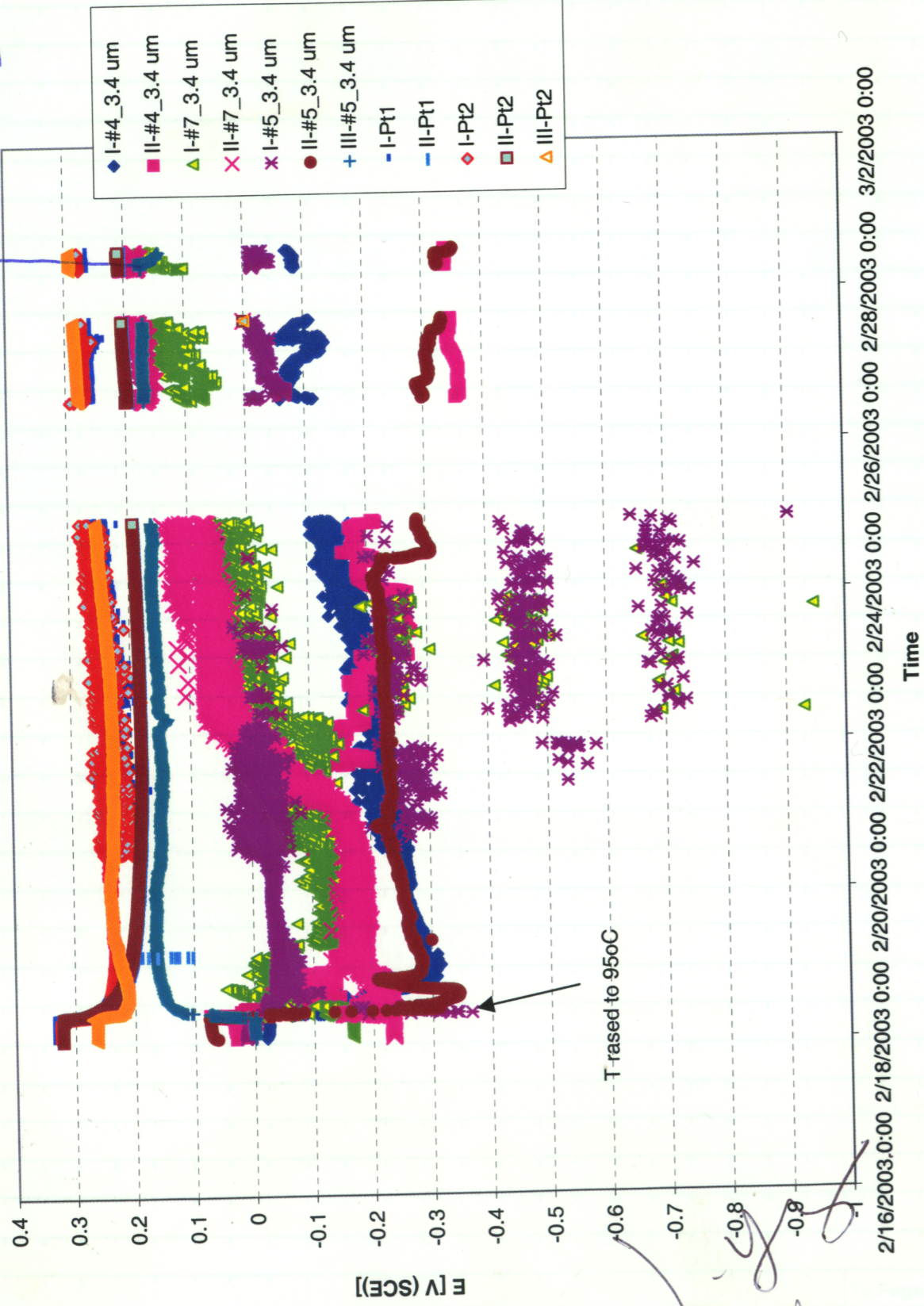


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Paused by #7 and #5



Witnessed & Understood by me, _____

Date _____

Invented by _____

Recorded by _____

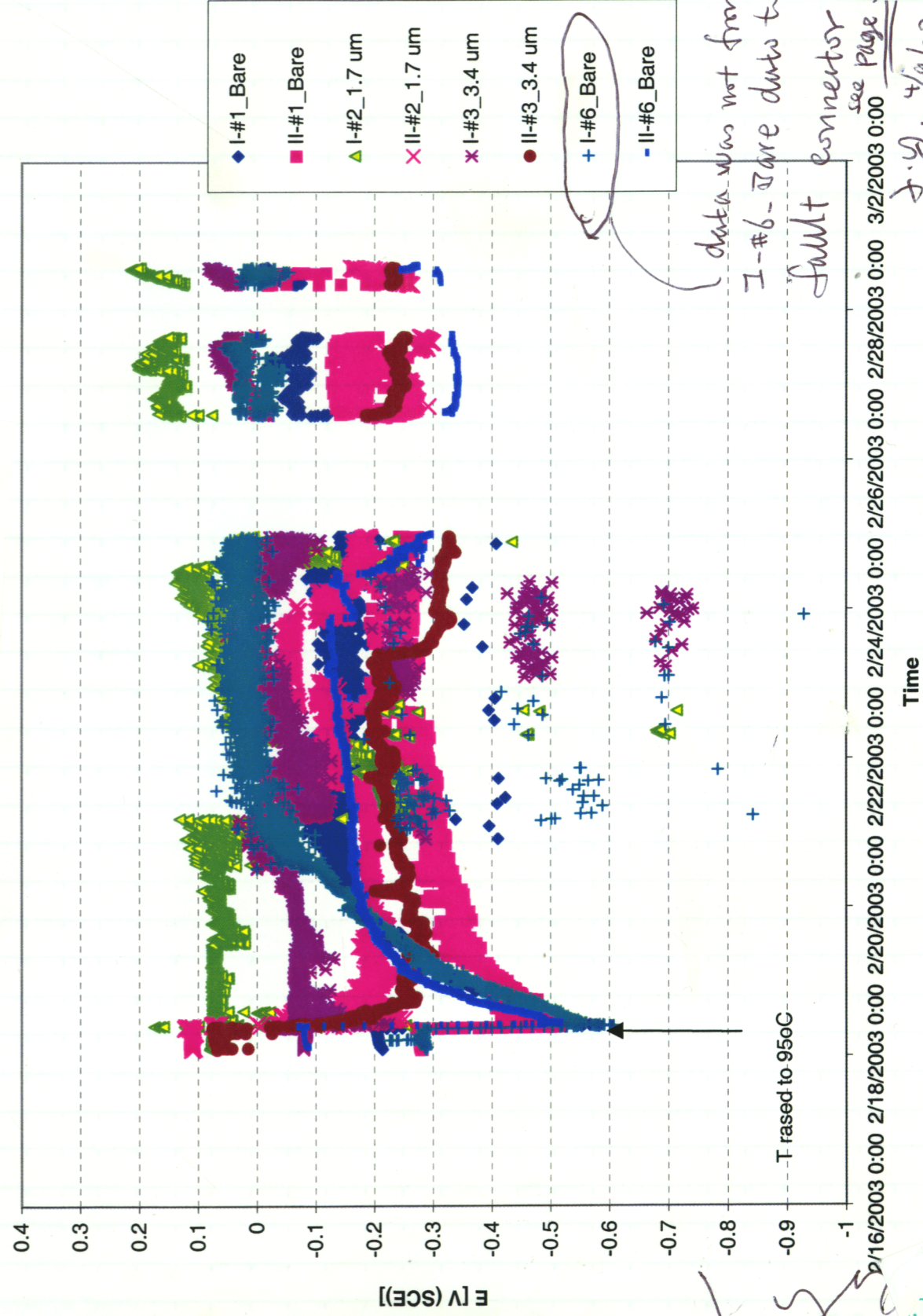
Date _____

3/3/03

TITLE _____

From Page No. _____

Feb13a03_030228a00 / Current



Witnessed & Understood by me, _____

Date _____

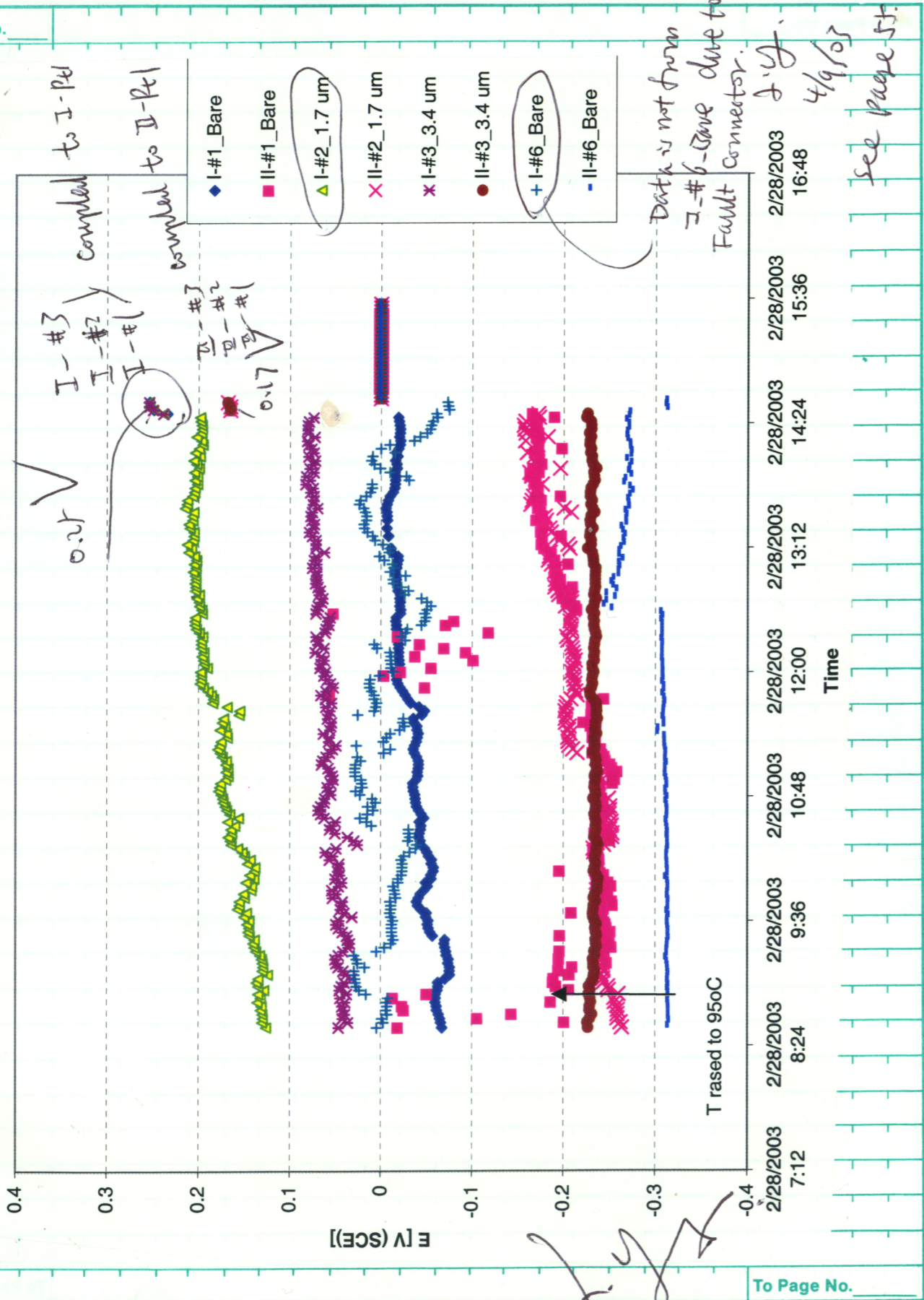
Invented by _____

Recorded by _____

Date _____

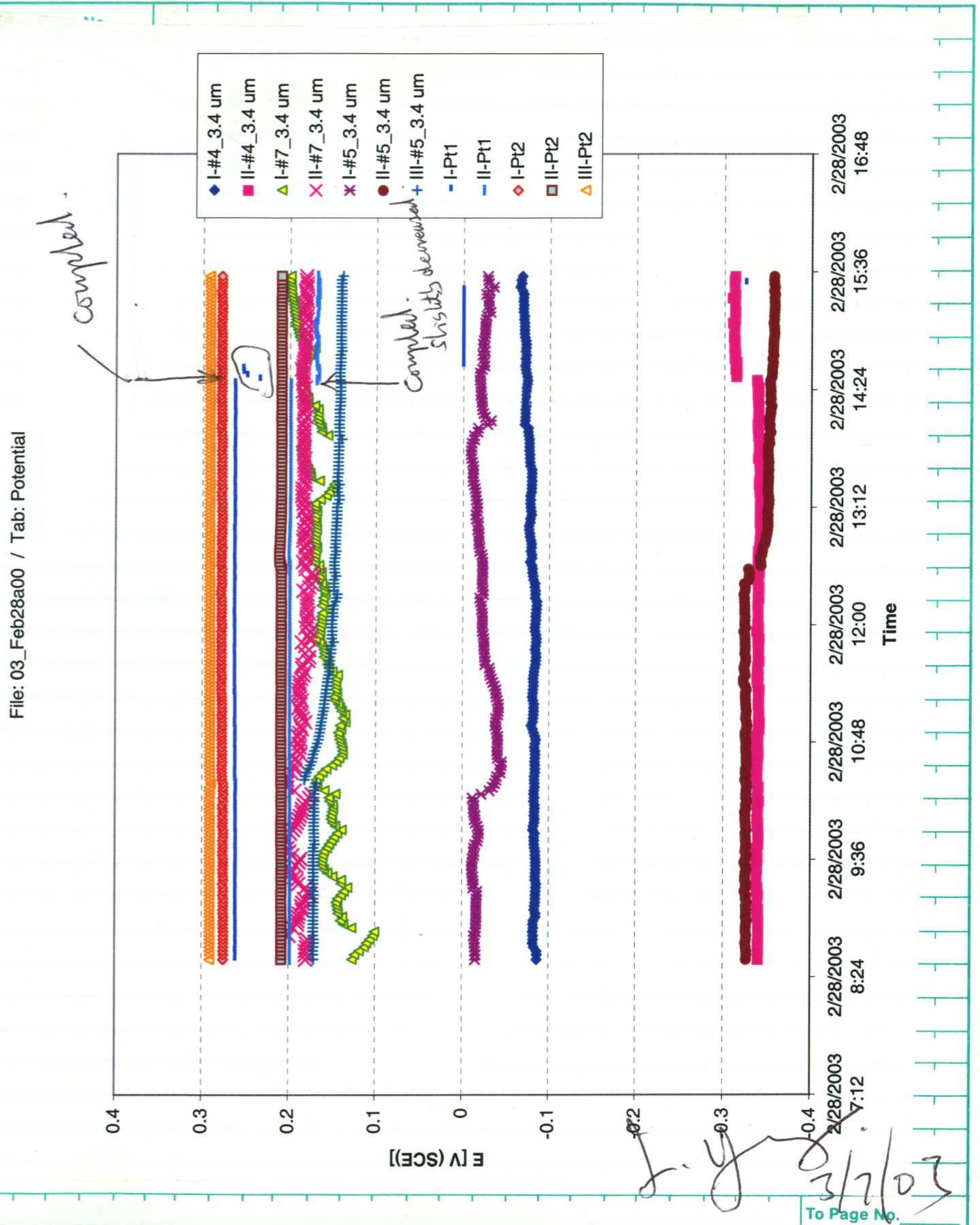
3/3/03

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Witnessed & Understood by me, _____ Date _____
 Invented by _____ Date _____
 Recorded by _____ Date 3/3/03

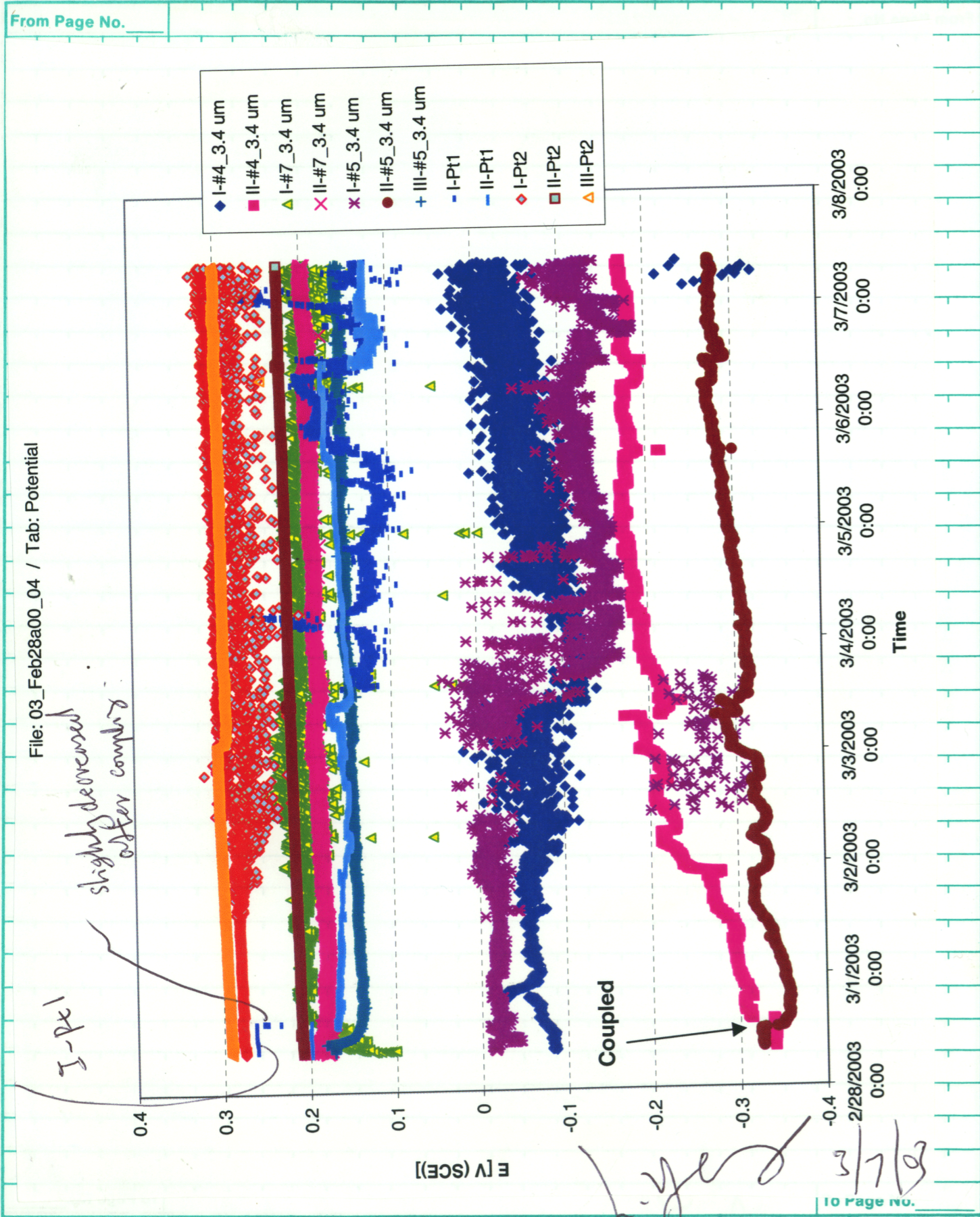
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Witnessed & Understood by me, _____ Date _____
 Invented by _____ Date _____
 Recorded by _____ Date 2/28/03

From Page No. _____

File: 03_Feb28a00_04 / Tab: Potential



Witnessed & Understood by me, _____

Date _____

Invented by _____

Date _____

Recorded by _____

Handwritten signature and date: 3/1/03

10 Page no.

Witnessed & Understood by me, _____

Date _____

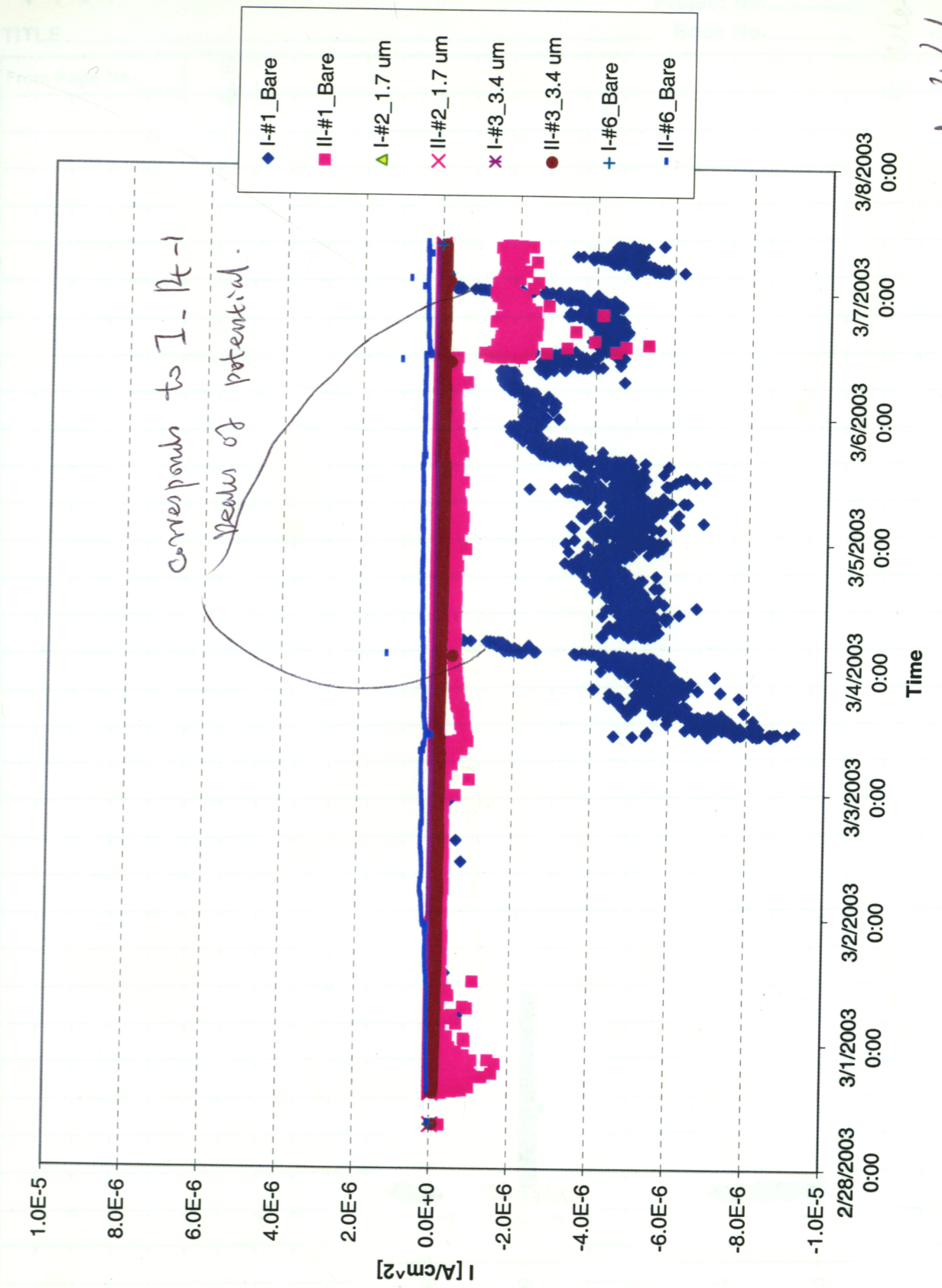
Invented by _____

Date _____

Recorded by _____

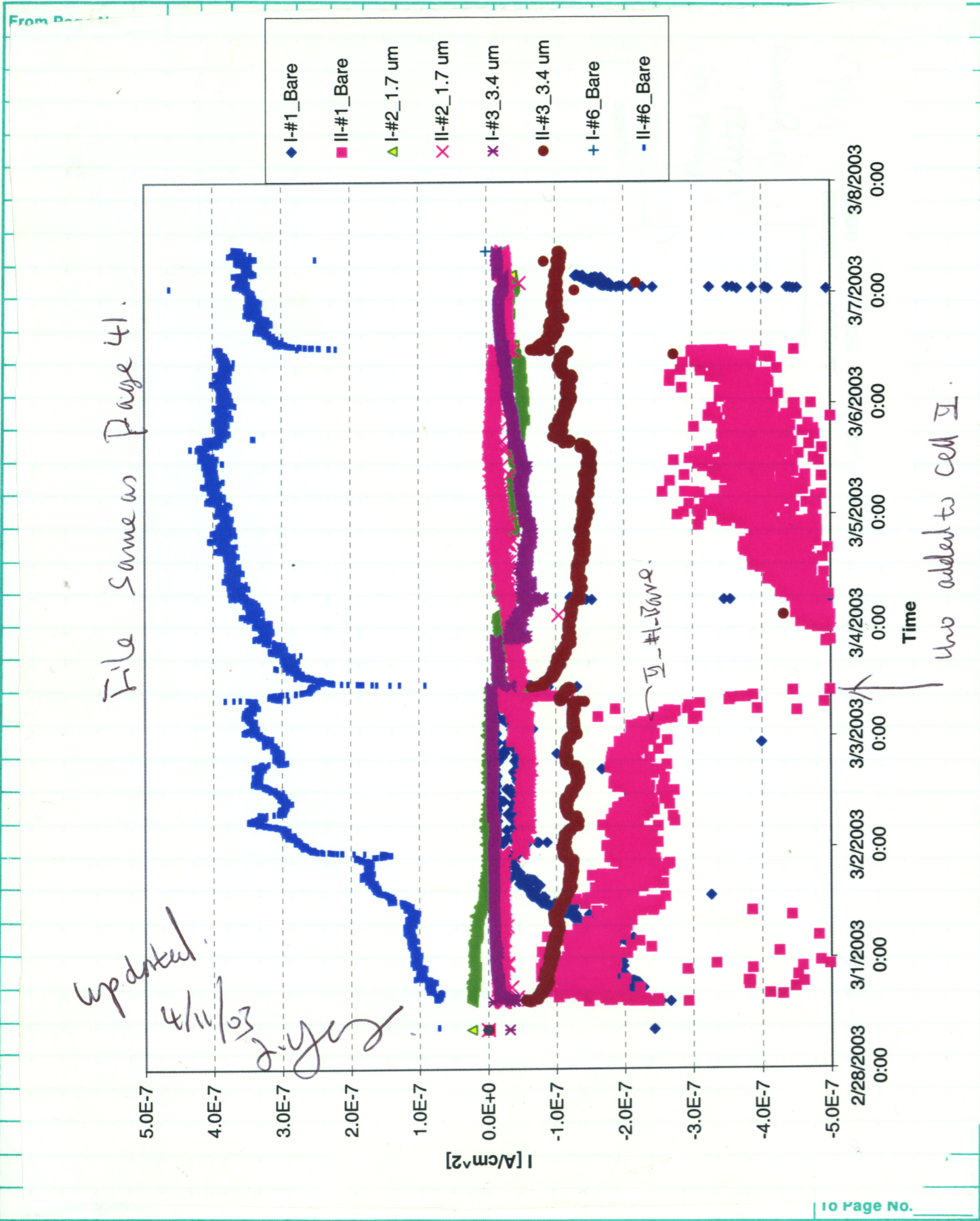
Handwritten signature and date: 3/1/03

No. _____



Handwritten notes: updated 4/9/03, 2 y., 4/9/03

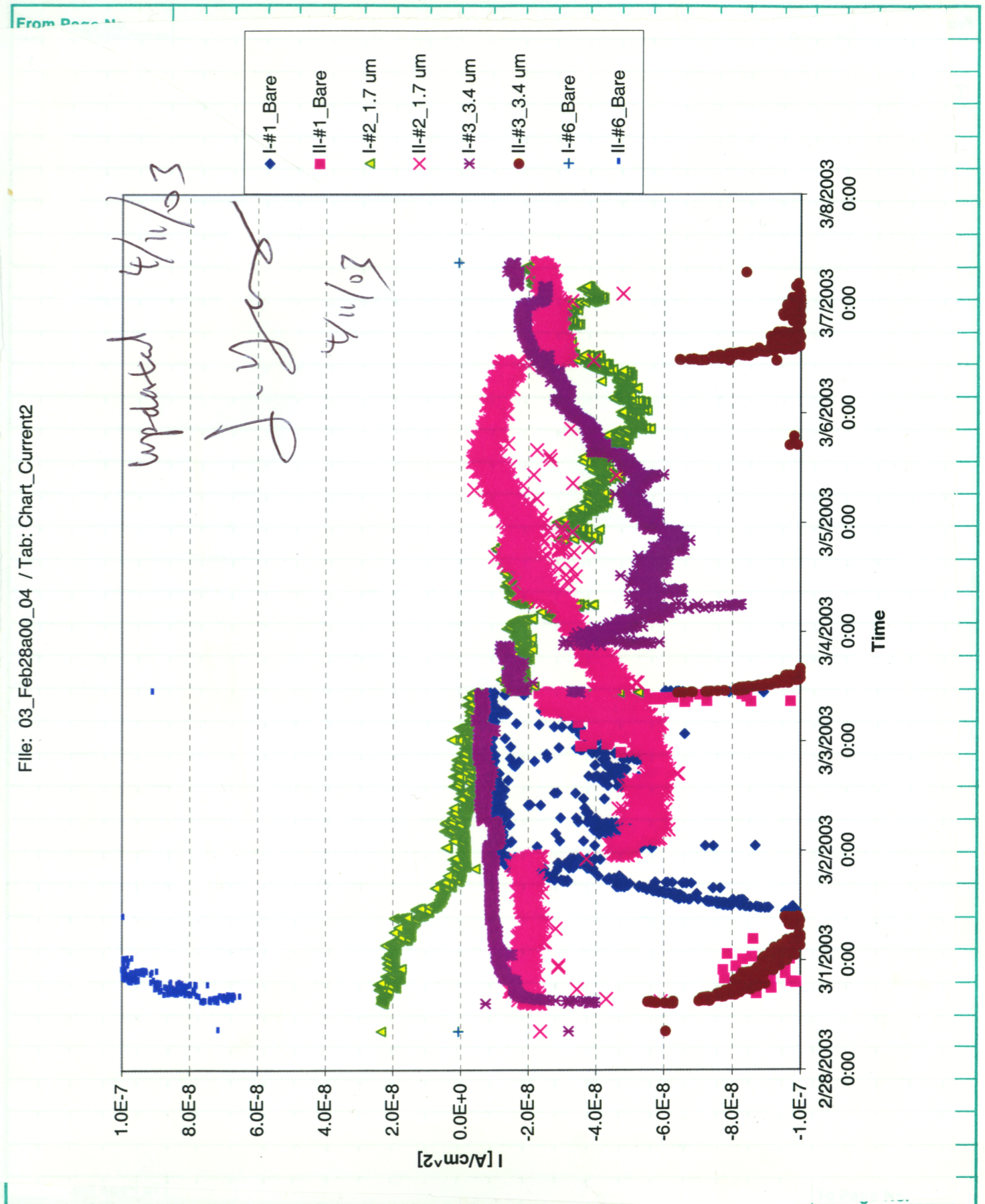
Handwritten date: 3/1/03



Witnessed & Understood by me, _____ Date _____

Invented by _____ Date 3/4/03

Recorded by J. J. J.



File: 03_Feb28a00_04 / Tab: Chart_Current2

Witnessed & Understood by me, _____ Date _____

Invented by _____ Date 3/4/03

Recorded by J. J. J.

From Page No. _____

3/25/03 16:16 program stopped.
16:18 program restarted 03-Mar-03a

Pages 9 - 44 copied for QA records.

4/3/03
J. Yang

File: Test_Matrix_Zr-4_C / Tab: Connections

J. Yang 6/30/03

Electrodes in Each Cells										
Electrodes		NaCl+ 5 mM FeCl3, pH=5 Cell I			NaCl+ 5 mM H2O2 Cell II			Plain NaCl Cell III		
Types	Elect. ID	Connections	I Chan	V Chan	Connections	I Chan	V Chan		I Chan	V Chan
Type III, bare Zr	I-#1, II-#1	to I-Pt1	I-1 Ch1	-	to II-Pt1	I-3 Ch17	-	-	-	-
Type III, bare Zr	I-#6, II-#6	to Large Zr (I-#4)	I-2 Ch9	-	to Large Zr (II-#4)	I-2 Ch10	-	-	-	-
Type I, 1.17 um Zr	I-#2, II-#2	to I-Pt1	I-1 Ch2	-	to II-Pt1	I-3 Ch18	-	-	-	-
Type I, 3.4 um Zr	I-#3, II-#3	to I-Pt1	I-1 Ch3	-	to II-Pt1	I-3 Ch19	-	-	-	-
Type II, 3.4 um Zr	I-#4, II-#4	for coupling	Return, I-2	45 (II-1)	for coupling	Return, I-2	34	-	-	-
Type II, 3.4 um Zr	I-#5, II-#5	as control	-	44 (II-1)	as control	-	33	as control	-	36
Type II, 3.4 um Zr with Polished End (simulate scratch)	I-#7, II-#7	internally coupled	-	43 (II-1)	internally coupled	-	48 (II-1)	-	-	-
large Pt	I-Pt1, II-Pt1	for coupling	Return, I-1	42 (II-1)	for coupling	Return, I-3	47 (II-1)	-	-	-
large Pt	I-Pt2, II-Pt2	as control for ECP	-	41 (II-1)	as control for ECP	-	46 (II-1)	as control for ECP	-	35
SCE Ref. Electrode		Referen	-	Return	Referen	-	Return	Referen	-	Return

Witnessed & Understood by me,

Date

Invented by

Date

Recorded by

J. Yang

6/30/03

To Page No. _____

From Page No. _____

4/3/03 15:21 program Restarted. 03-April03a

4/7/03 09:23 new file started at 11:08. 03-April03a.

4/8/03 2:22 p.m. Combined connectors I-2 and I-4.
I-#6
use I-2(1) to measure large Zr
I-2(2) to measure II-#6 large Zr.
still lower coupling.
Return of I-2 connected to I-#4 & II-#4
Note: Reference Electrodes in cells I and II are also connected together.
Saved I-4 for other use. see pages 13+ 15
Also noted: R of I-3 is 10 Ω.
15:11 program restarted 03-April03a J. Yang 4/8/03 d.g.

See page 44

Witnessed & Understood by me,

Date

Invented by

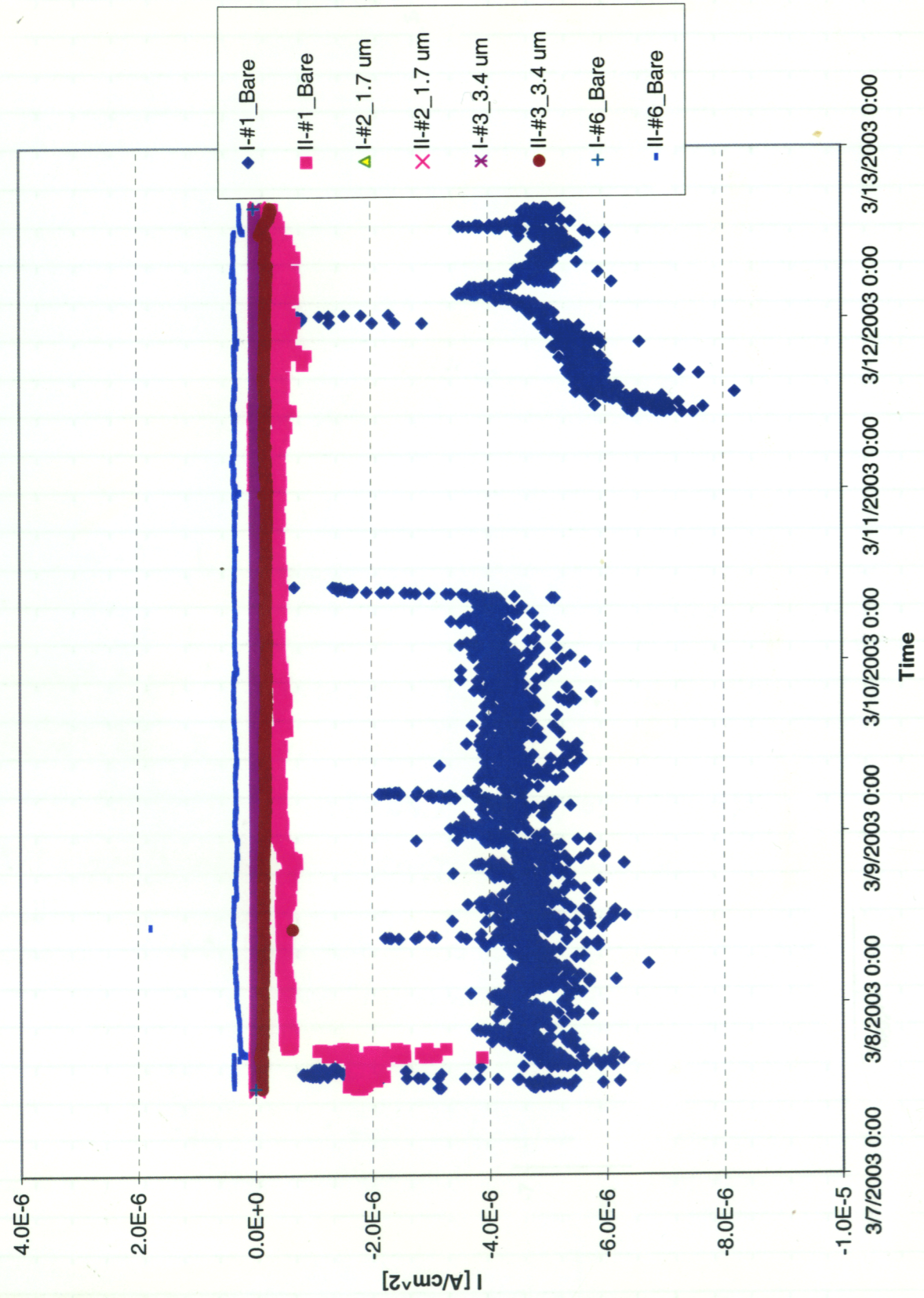
Date

Recorded by

J. Yang

4/8/03

From Page No. _____



Witnessed & Understood by me, _____

Date _____

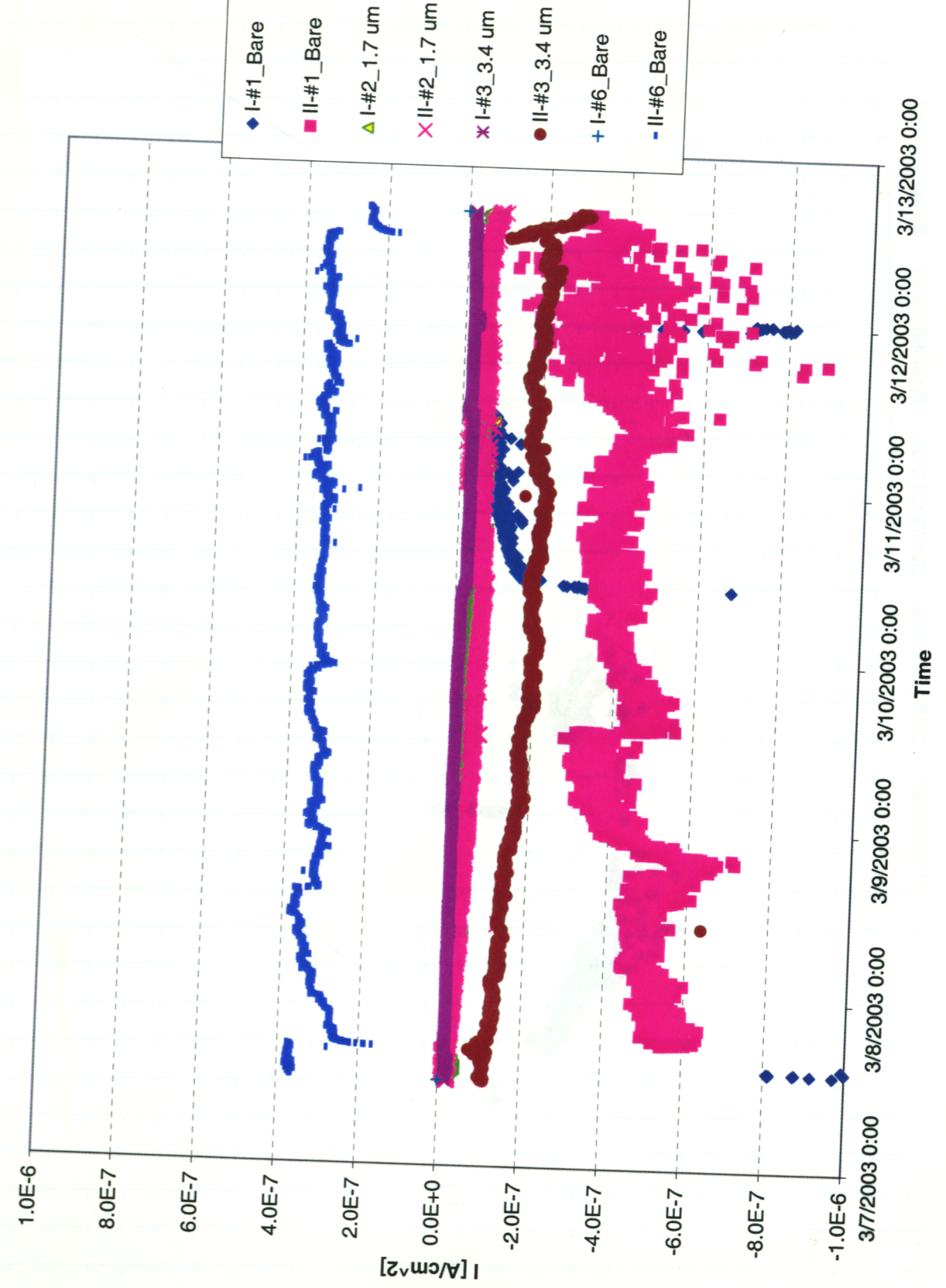
Invented by _____

Date _____

Recorded by *L. J. ...*

4/8/03

File: 03_0307a00_03 /Tab: Chart_Current12



Witnessed & Understood by me, _____

Date _____

Invented by _____

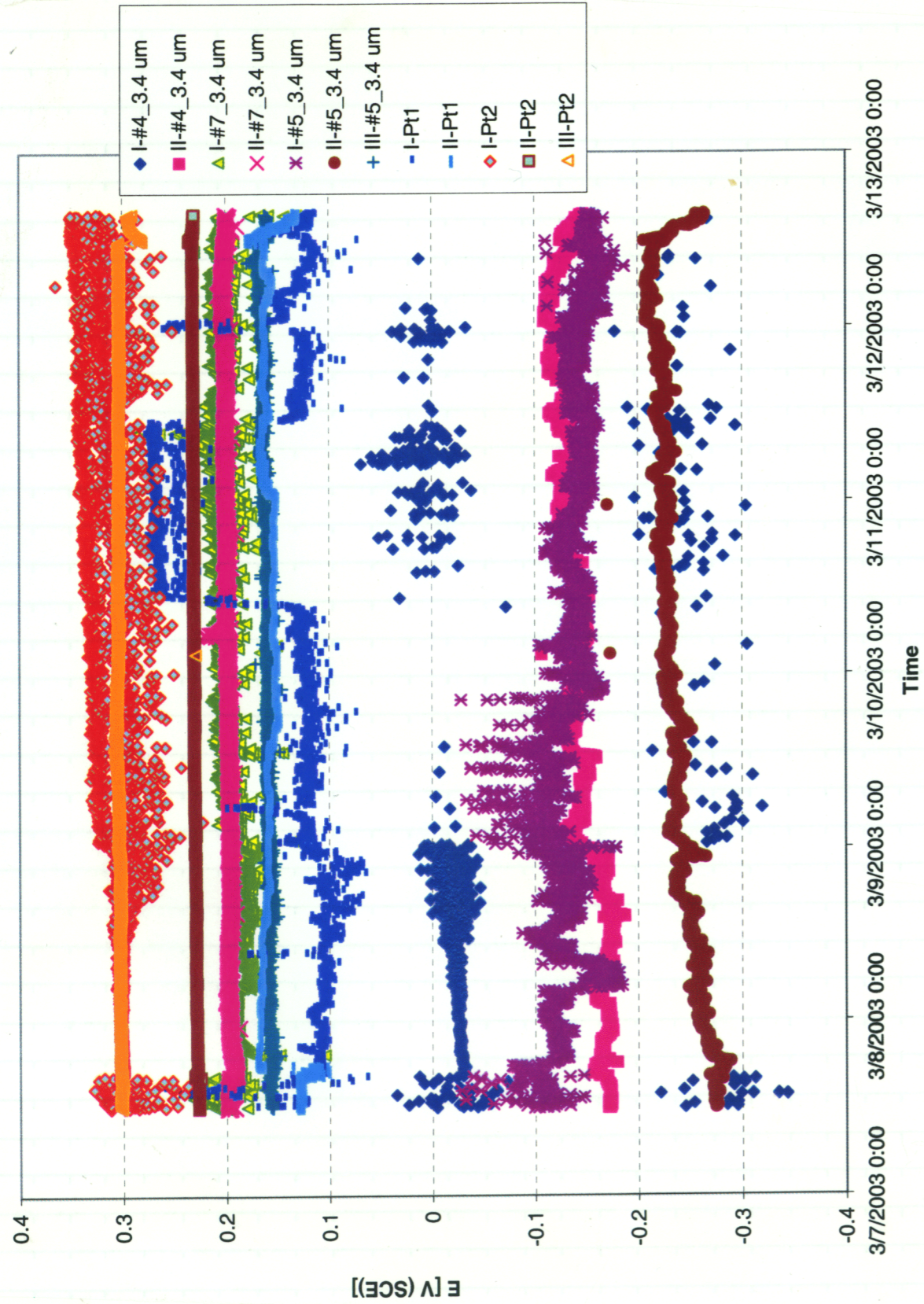
Date _____

Recorded by *L. J. ...*

4/8/03

To Page No. _____

From Page No. _____



To Page No. _____

Witnessed & Understood by me, _____

Date _____

Invented by _____

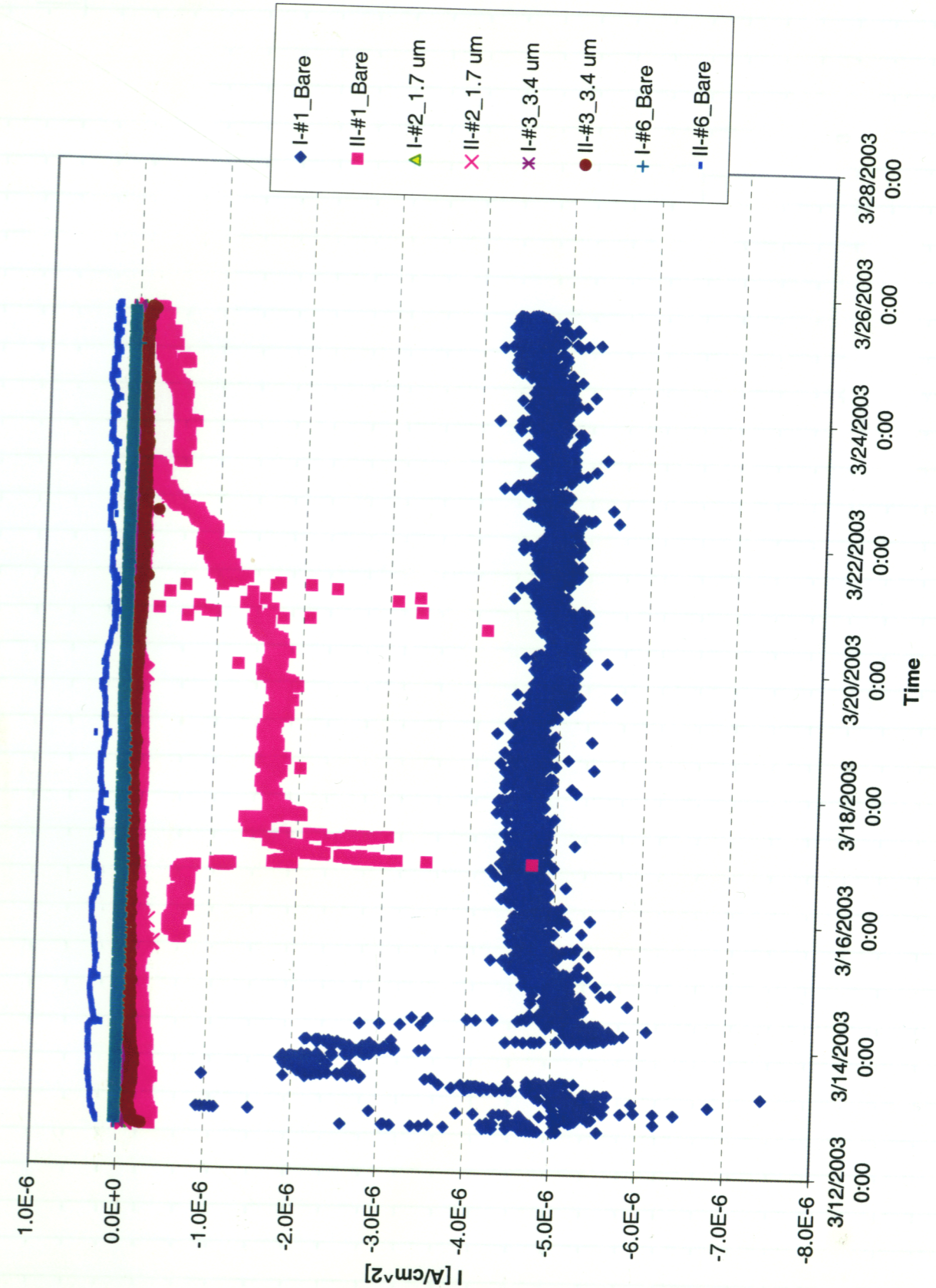
Date _____

Recorded by *J. Y. J.*

4/2/03

From Page No. _____

03_Mar12a00_03Mar14b03a / Current



To Page No. _____

Witnessed & Understood by me, _____

Date _____

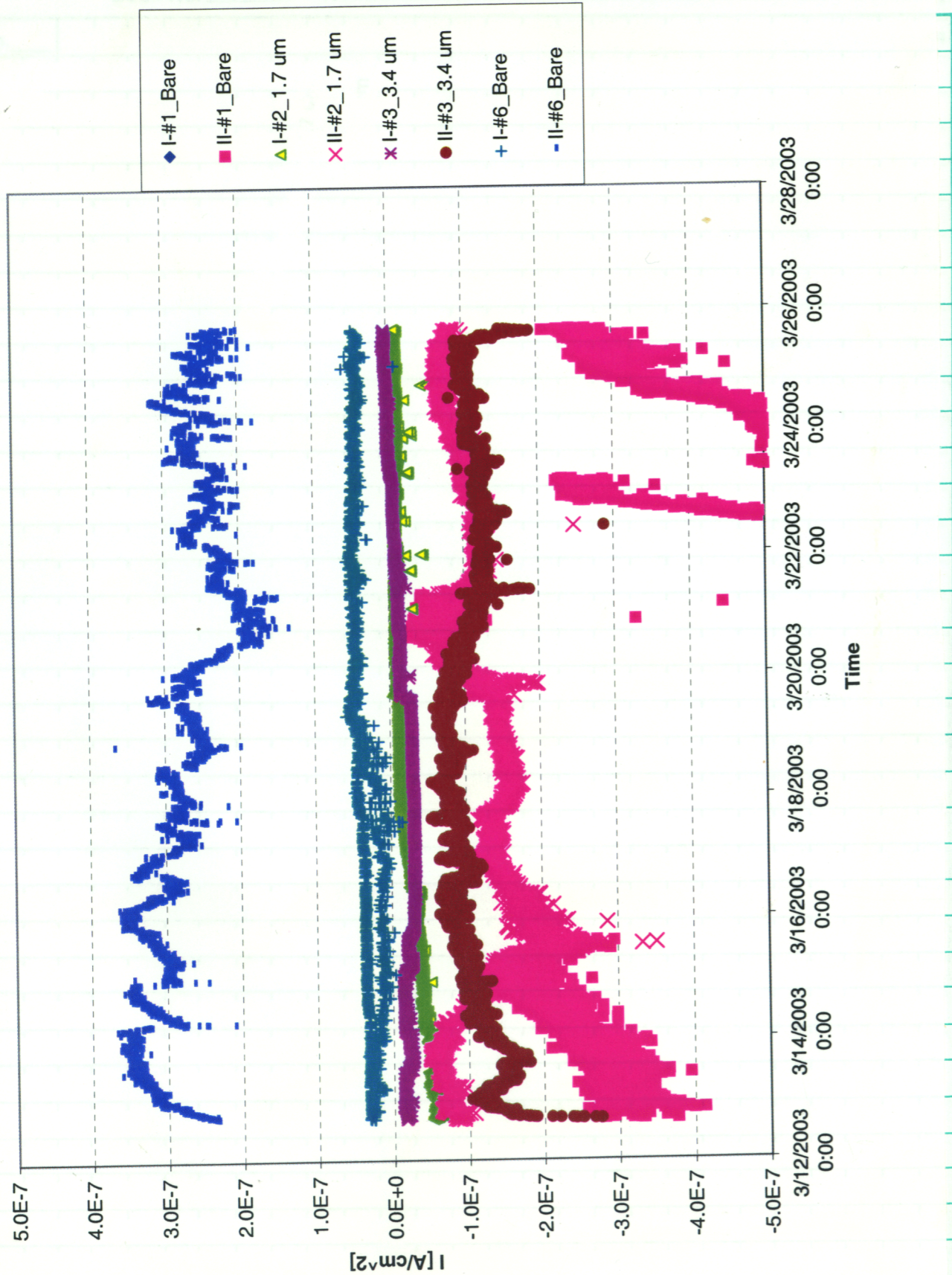
Invented by _____

Date _____

Recorded by *J. Y. J.*

4/2/03

File: 03_Mar12a00_03Mar14b03a / Tab: Chart_Current2



To Page No. _____

Witnessed & Understood by me, _____

Date _____

Invented by _____

Date _____

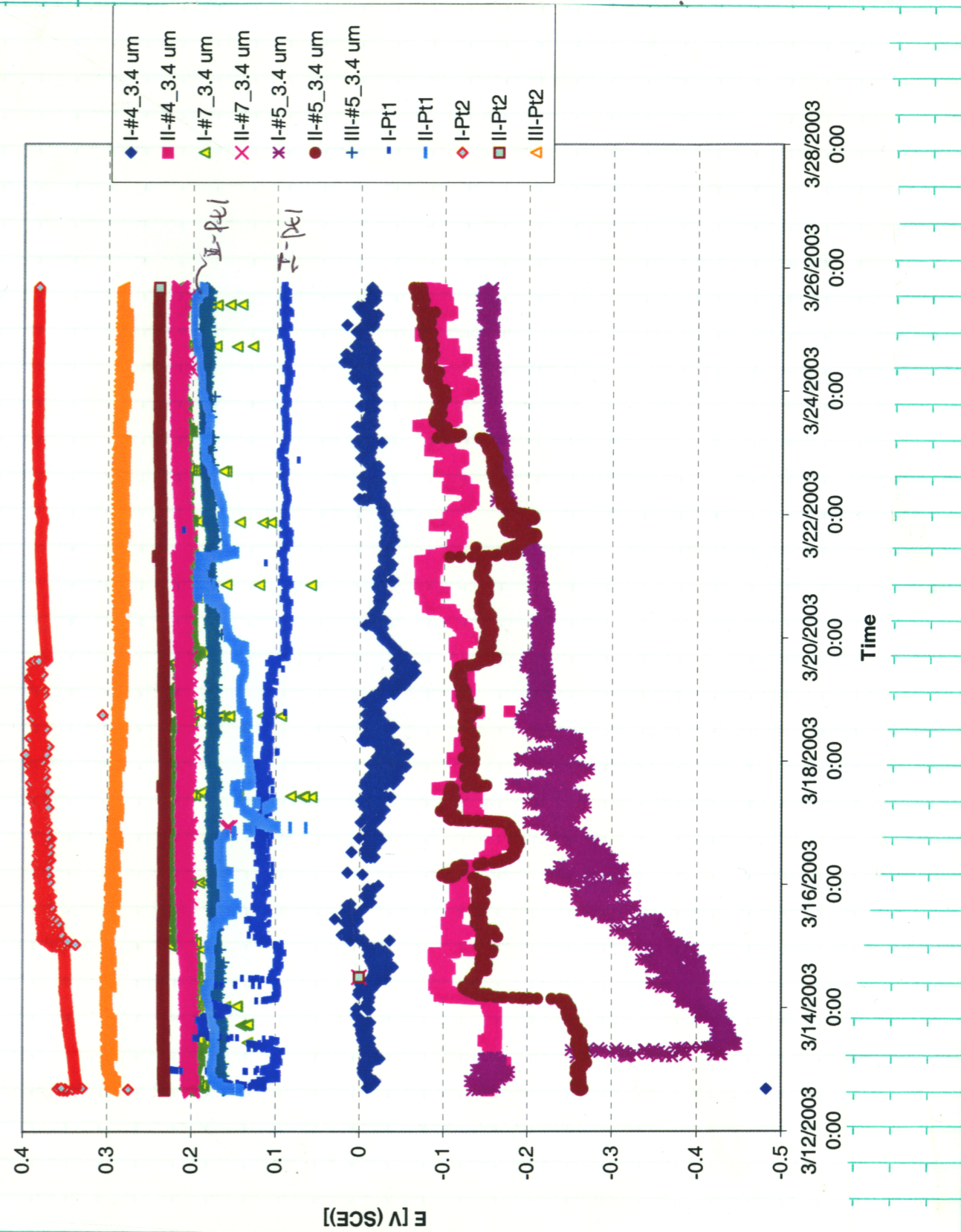
Recorded by *J. J. J.*

4/13/03

TITLE _____

From Page No. _____

File: 03_Mar12a00_03Mar14b03a / Tab: Potential



To Page No. _____

Witnessed & Understood by me, _____

Date _____

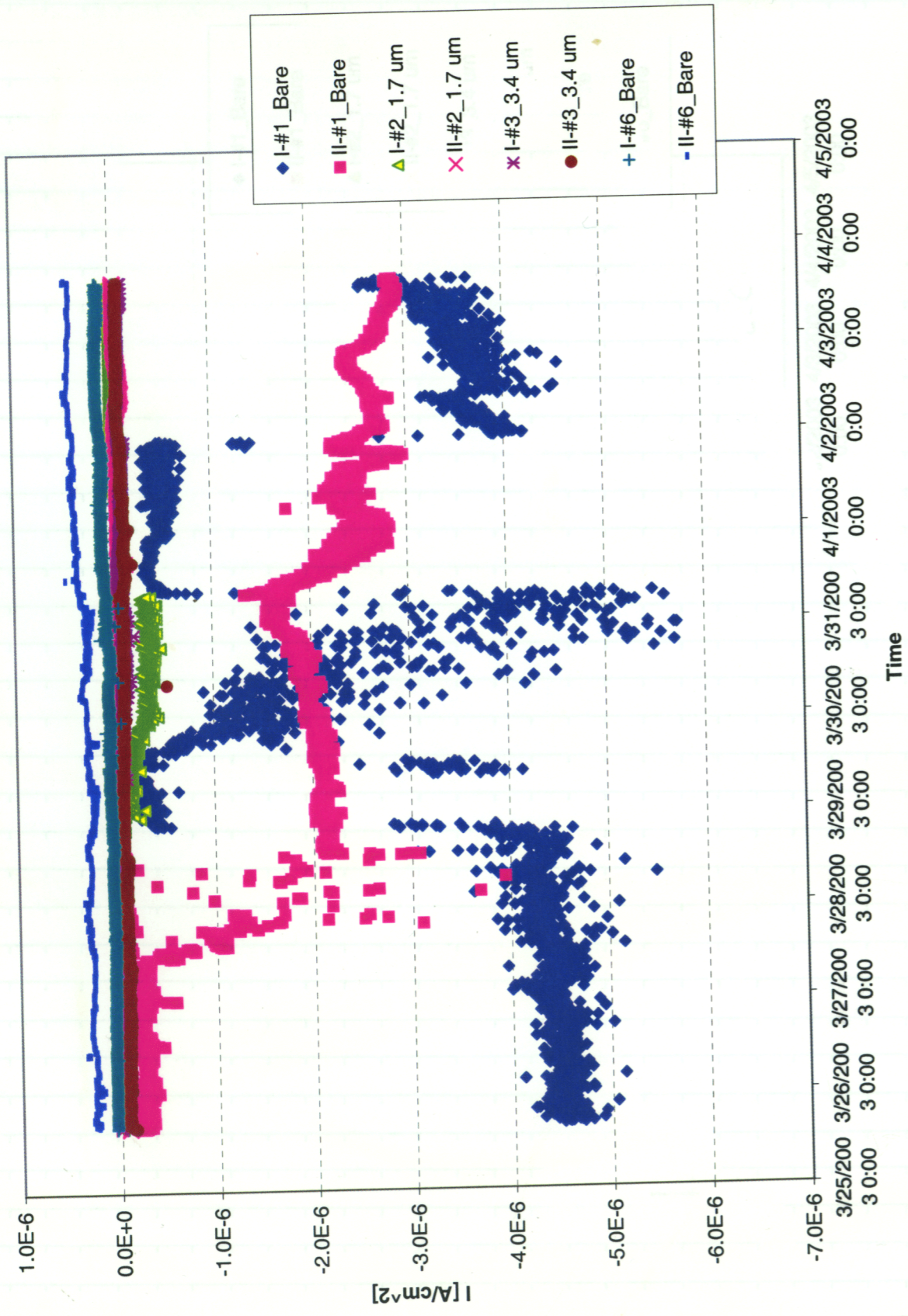
Invented by _____

Date _____

Recorded by *J. J. J.*

4/13/03

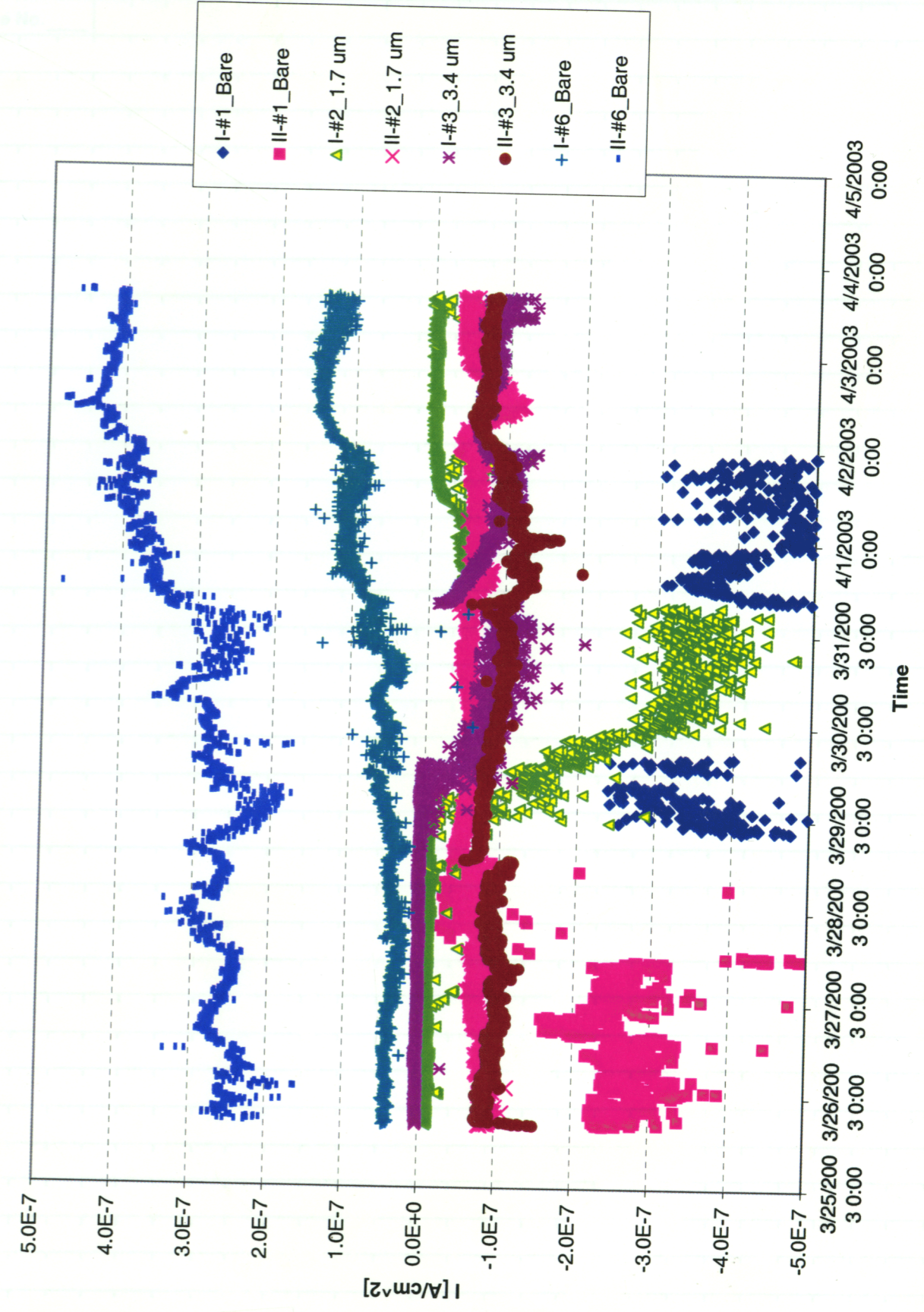
03_Mar25a00_02_Zr / Current



To Page No. _____

Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by <i>J. R. F.</i>	<i>4/9/03</i>

File: 03_Mar25a00_02_Zr / Tab: Chart_Current2

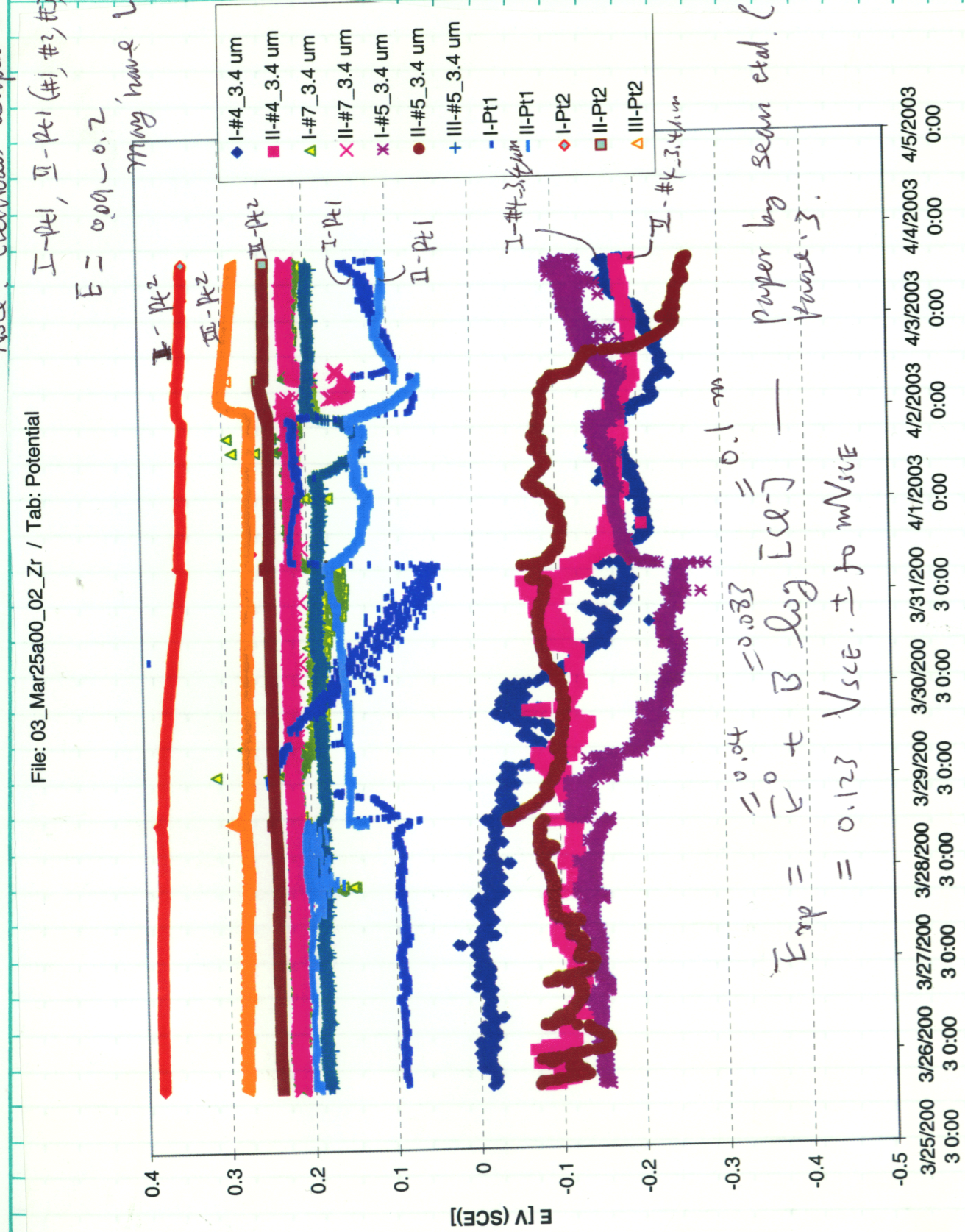


To Page No. _____

Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by <i>J. R. F.</i>	<i>4/9/03</i>

From Page No. 70

File: 03_Mar25a00_02_Zr / Tab: Potential



Time

Note: Electrode to II-#4, II-#5, II-#6, II-#7, II-#8, II-#9, II-#10, II-#11, II-#12, II-#13, II-#14, II-#15, II-#16, II-#17, II-#18, II-#19, II-#20 may not have C.S.

Witnessed & Understood by me, _____ Date _____
Invented by _____ Date _____
Recorded by *J. J.* 4/9/03

TITLE _____

From Page No. _____

4/9/03
11:58 connected 1.8 mV to #2 of I-2 leads
12:20 got 8.8 mV response on #3 of I-2!
12:20 #1 of I-2 connected to 8 mV, disconnected I-6, I-4.
Connected II-6, II-4.
12:33 Removed the 8.8 mV source.
13:09 Found that the connector that has been used has the wrong pin connections.
9 (cell) - 1 (to I-2)
1 (cell end) - 2 (I-2 end)
2 (cell end) - 3 (I-2 end)
Chan. 10 has been missing for I-#6 bare means Chan. 9 for I-#6 bare
Chan. 10 for I-#6 bare
13:17 use a new resistor kit (10k) for I-2
14:12 I-3 connected changed to a 1k Resistor kit (from 10k one)
16:00 Found water level in II, I cells just touch the bare metal electrodes, add to have 1/4" depth

Witnessed & Understood by me, _____ Date _____
Invented by _____ Date _____
Recorded by *J. J.* 4/14/03