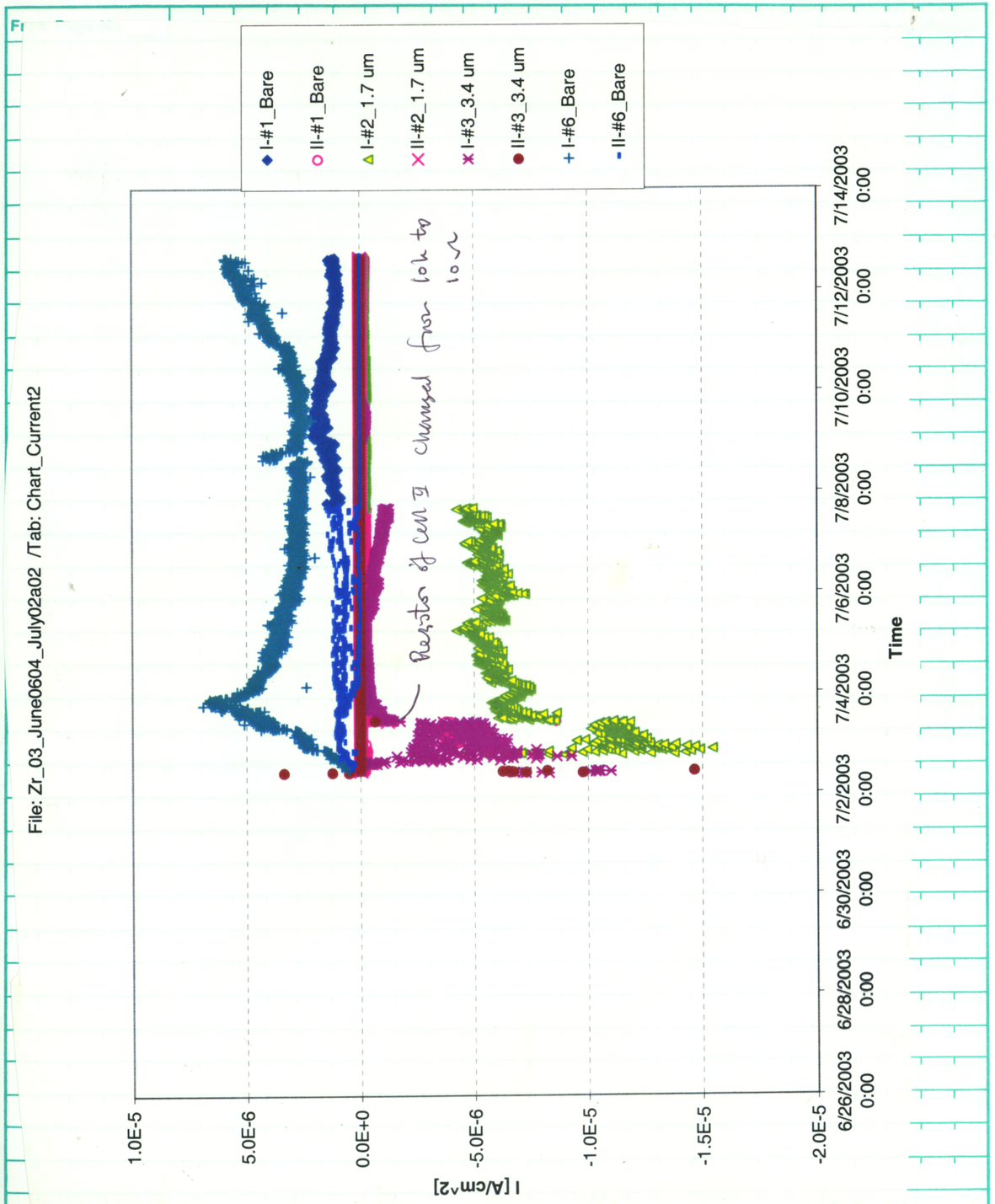
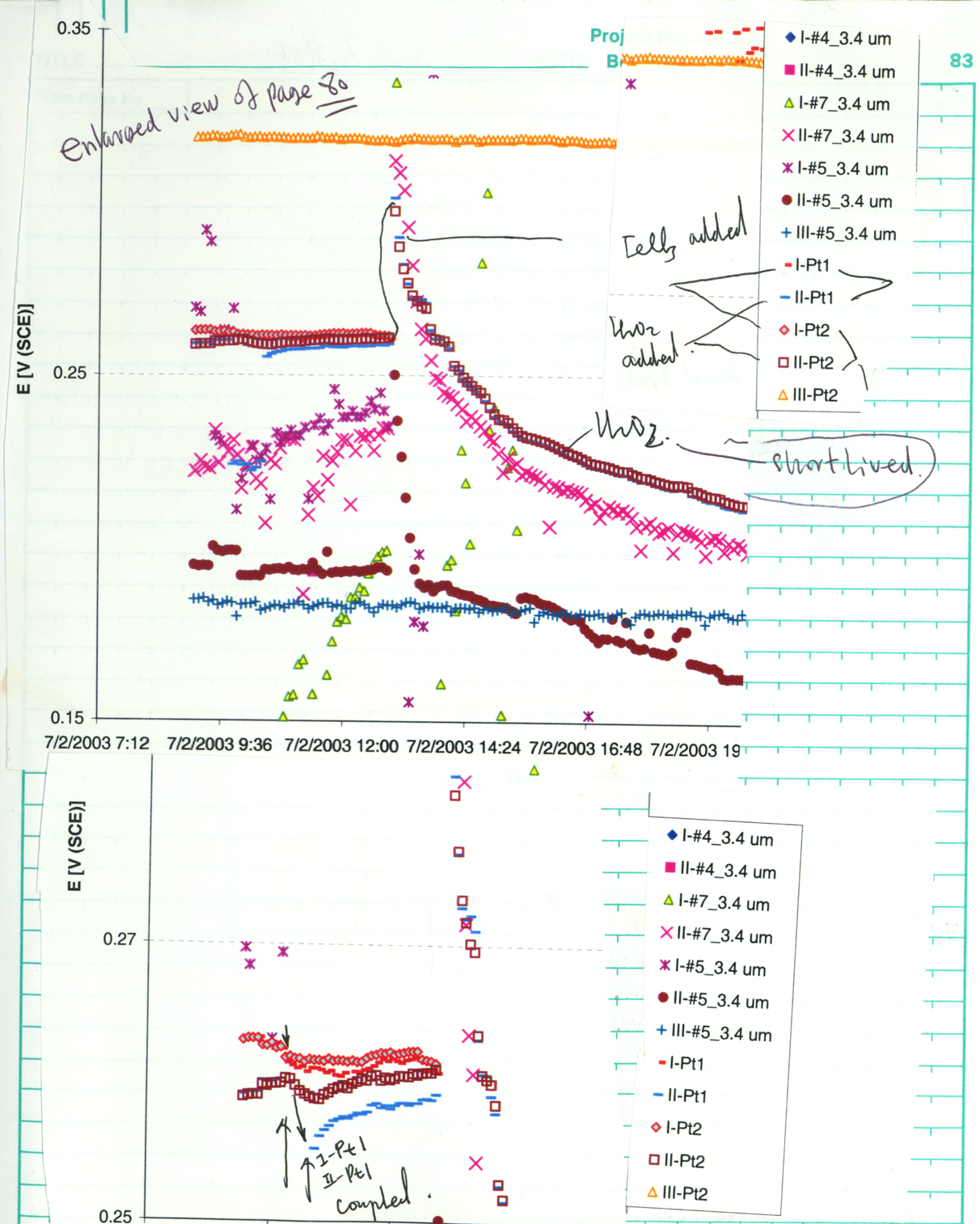
Project No.
Book No.
TITLE



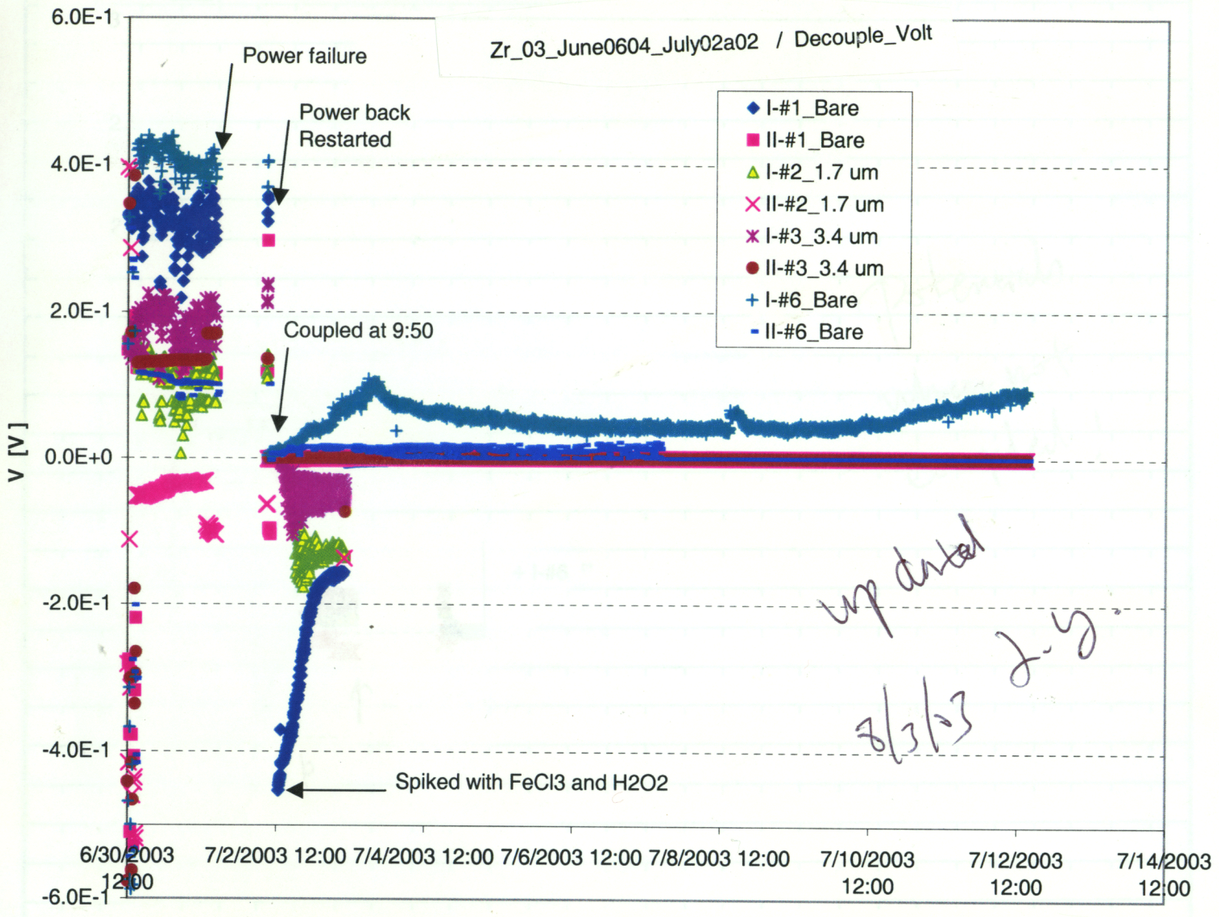
Witnessed & Understood by me,
Date
Invented by
Recorded by
Date 2/14/06

Proj
B



To Page No.

Recorded by
Date 2/14/06



updated 8/3/03 J.Y.

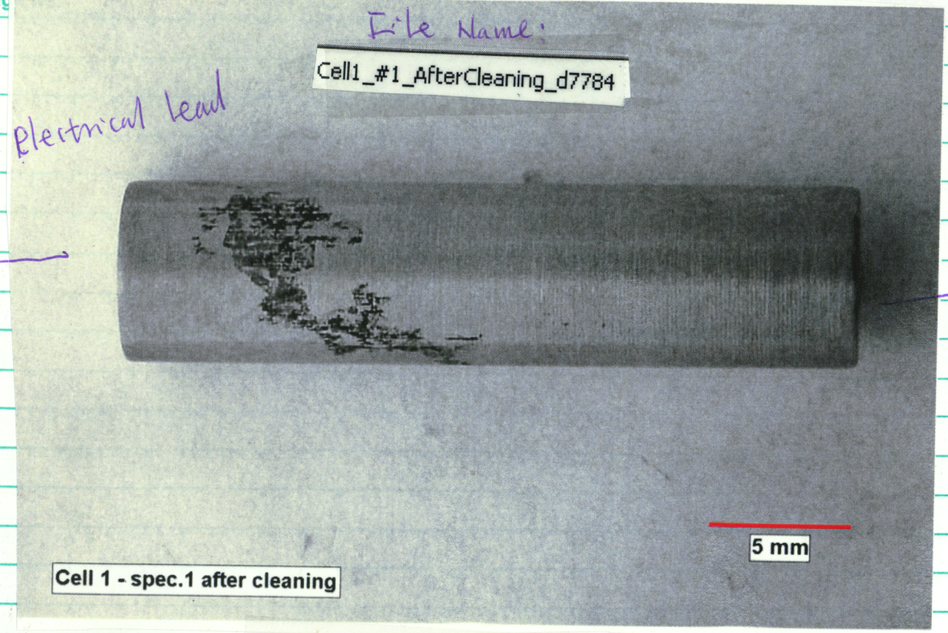
7/7/03 Spiked both cells #1 & #2
Cell #1 spiked with 2.719 g $FeCl_3 \cdot 6H_2O$ lot# 897791 with drawn 100 ml of test solution pH = 1.807
Added $FeCl_3$ then returned to cell once $FeCl_3$ was solvable
cell #2 spiked with 1080 ul of Hydrogen proxide 30% lot# 010839. Before spike withdrew ~ 40 mL of test solution pH: 5.461. returned solution to test cell along with Hydrogen proxide.
Cell #3 withdrew 40 mL pH: 5.719 returned to test cell.

To Page No.

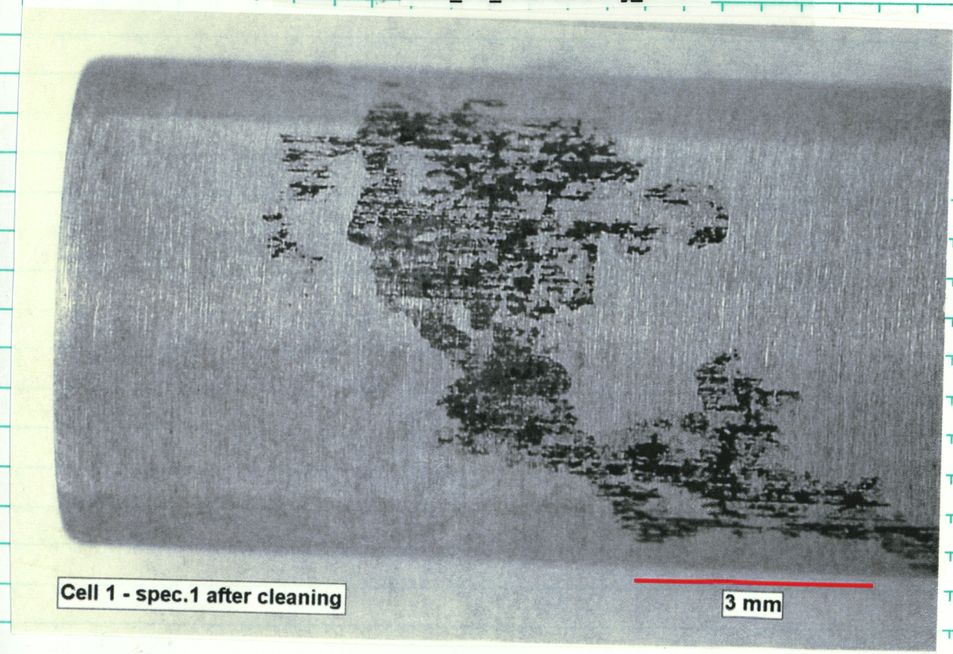
Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by J. Yoo	7/4/06

From Page

File Name:
Cell1_#1_AfterCleaning_d7784



Cell1_#1_AfterCleaning_d7785



To Page No.

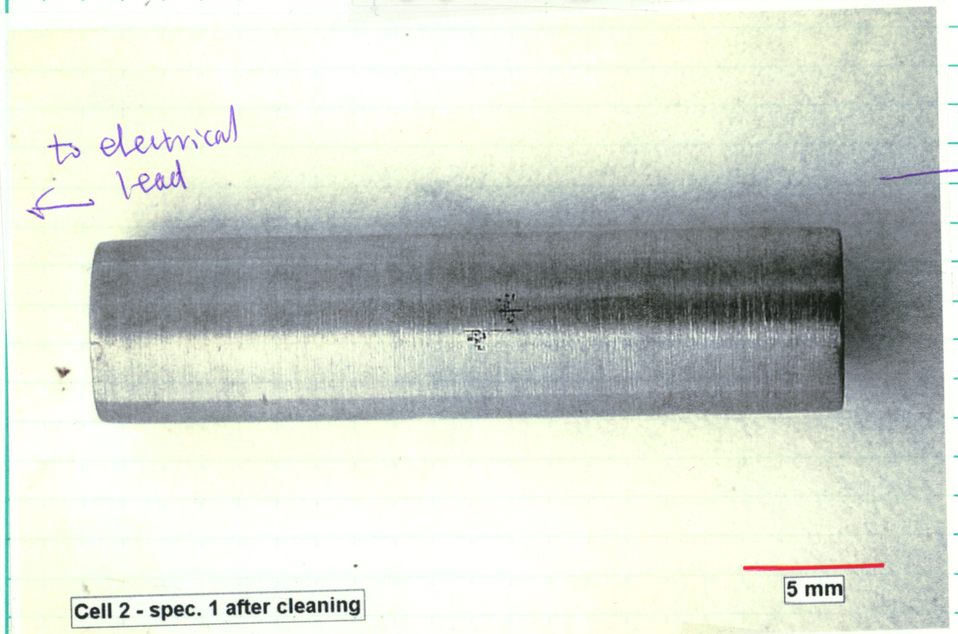
Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by J. Yoo	8/1/03

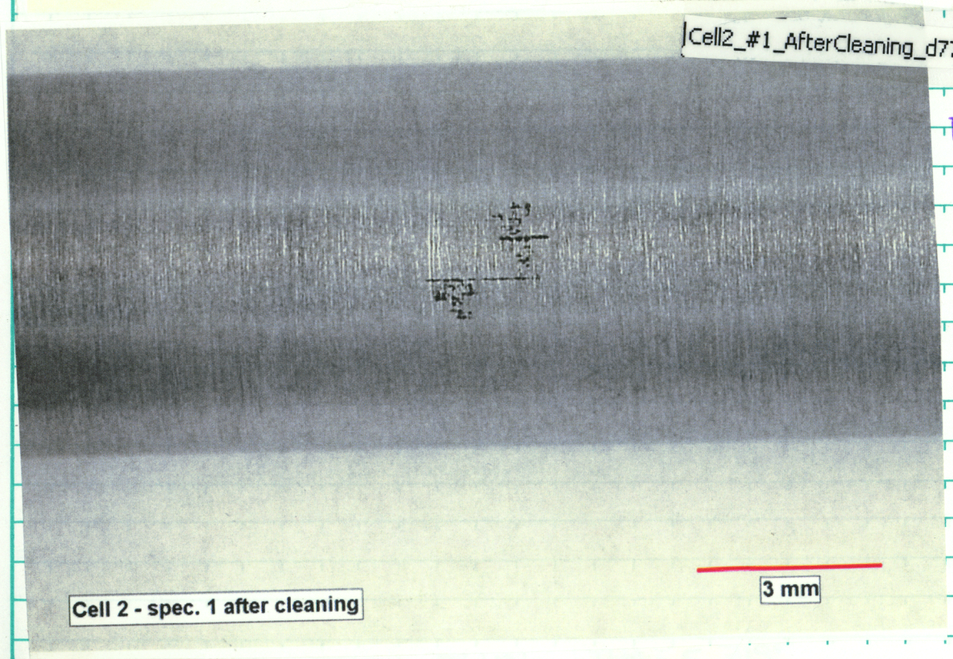
From Page No.

File Name:

From page 68

Cell2_#1_AfterCleaning_d7790





To Page No.

Witnessed & Understood by me,

Date

Invented by

Recorded by J.Y.S

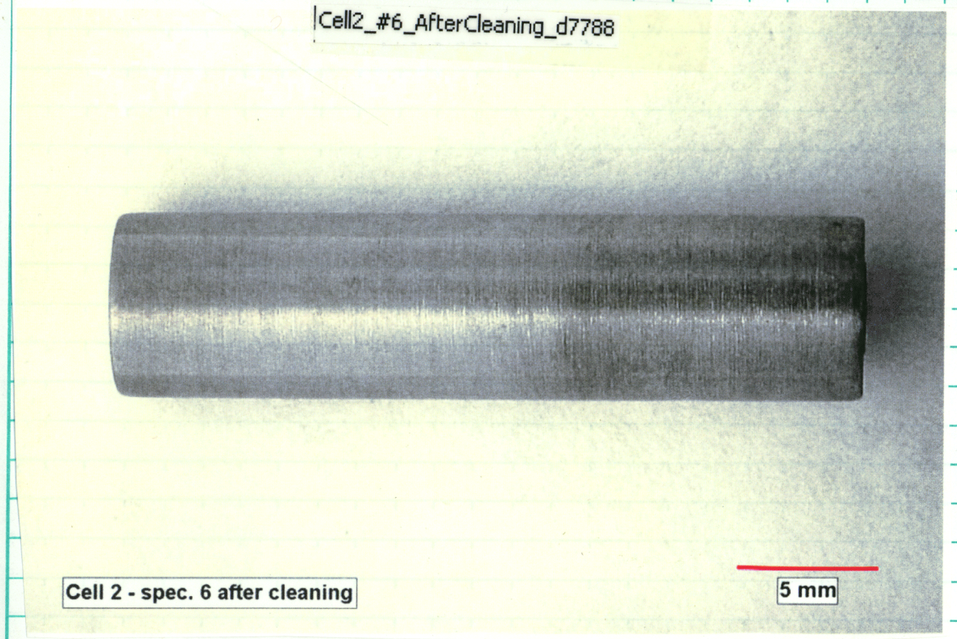
Date 8/1/03

From Page No.

File Name:

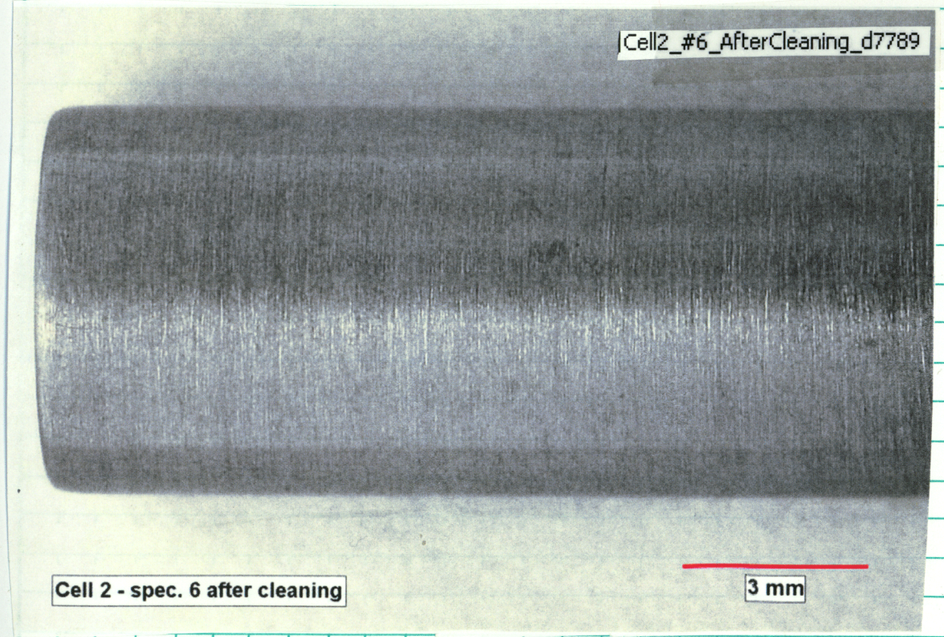
From page 68.

Cell2_#6_AfterCleaning_d7788



No localized corrosion.

Cell2_#6_AfterCleaning_d7789



No apparent localized Corrosion.

To Page No.

Witnessed & Understood by me,

Date

Invented by

Recorded by J.Y.S

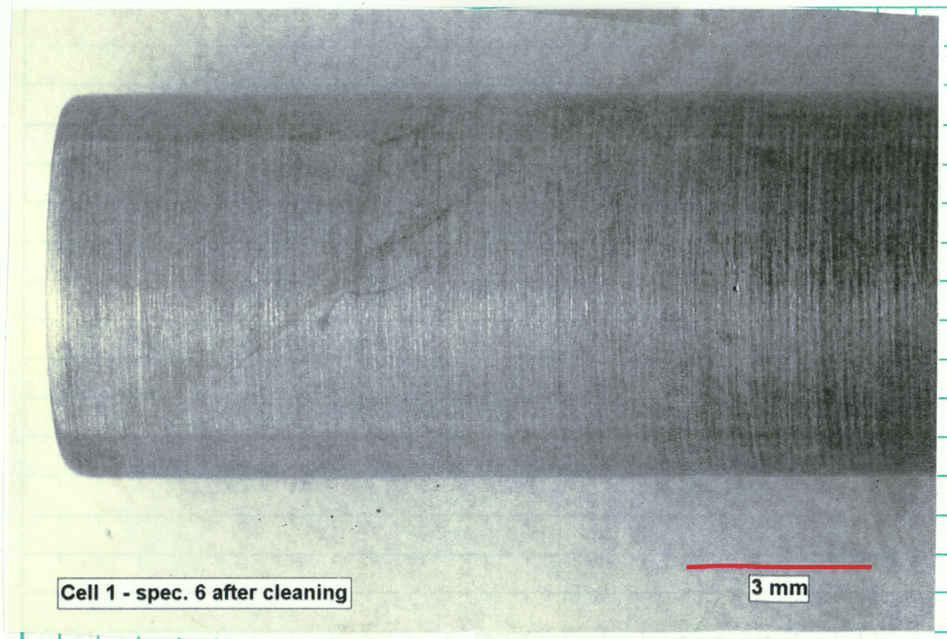
Date 8/1/03

From Page No.

File Name:

from page 68

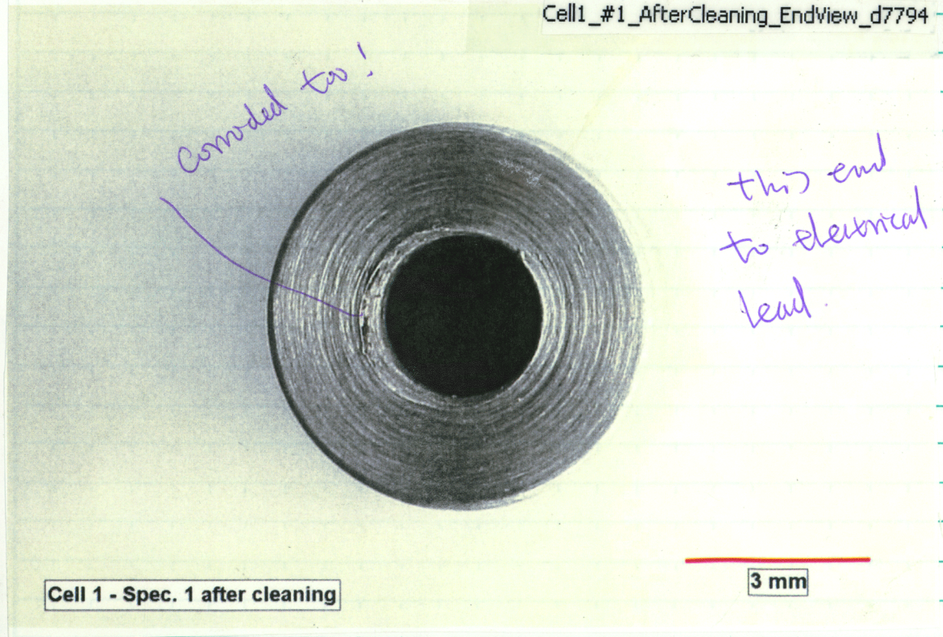
Cell1_#6_AfterCleaning_d7787



Cell 1 - spec. 6 after cleaning

No apparent pitting

Cell1_#1_AfterCleaning_EndView_d7794



Corroded too!

this end to electrical lead.

Cell 1 - Spec. 1 after cleaning

To Page No.

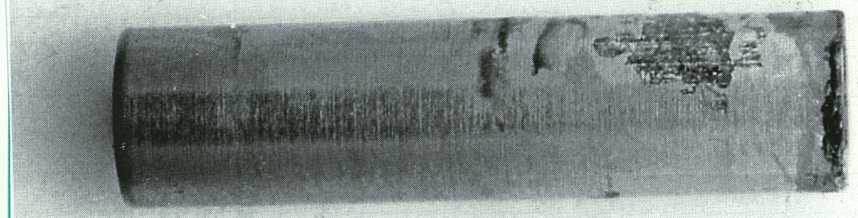
Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by J. Yur	8/1/03

From Page No.

from page 68.

File:

Cell1_#1_BeforeCleaning_d7775

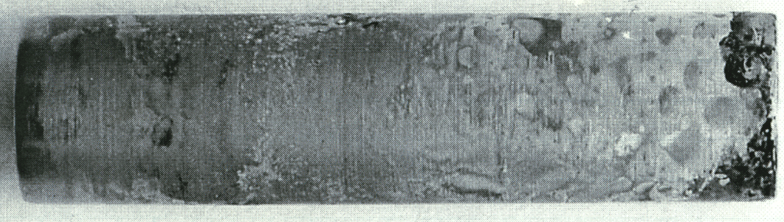


Cell 1 - spec. 1

electrical lead

File:

Cell2_#1_BeforeCleaning_d7780



Cell 2 - spec. 1

electrical lead

To Page No.

Witnessed & Understood by me,	Date	Invented by	Date
		Recorded by J. Yur	8/1/03

Project No.____
Book No.____ TITLE____

From Page No.____

8/04/03. I-#6 current is positive!

checked connections, No unusual found.

II-#6 is decoupled. (not connected to anywhere)

measure $\varphi_{\substack{\text{I-}\#6 \\ \text{I-}}} - \varphi_{\text{I-}\#4} = +98.4$ mV!

$\varphi_{\text{I-}\#4} - \varphi_{ref} = -278$ mV$_{SCE}$.

$\varphi_{\text{I-}\#6} - \varphi_{ref} = -160$ mV$_{SCE}$

Decouple I-#4 from I-#6.

$\varphi_{\text{I-}\#4} - \varphi_{ref} = -20$ mV$_{SCE}$ (within 30sec)

$\varphi_{\text{I-}\#6} - \varphi_{ref} = -320$ mV$_{SCE}$! why so low!!

$\varphi_{\text{I-}\#7} - \varphi_{ref} = -148$ mV$_{SCE}$

$\varphi_{\underline{\text{I}}\text{-}\#4} - \varphi_{ref} = -330$ mV$_{SCE}$

↳ connected to common of I-2 (to I-#4)

I-#6 connected to I-#4 (and I-#4 too). back.

8/6/03.

I-#7 = -65.8 mV$_{SCE}$, not stable, remove pin #7 connector does not make difference

II-#7 = +242 mV$_{SCE}$, but dropped to +192 mV$_{SCE}$ within 5min.

disconnect pin #8 has no effect

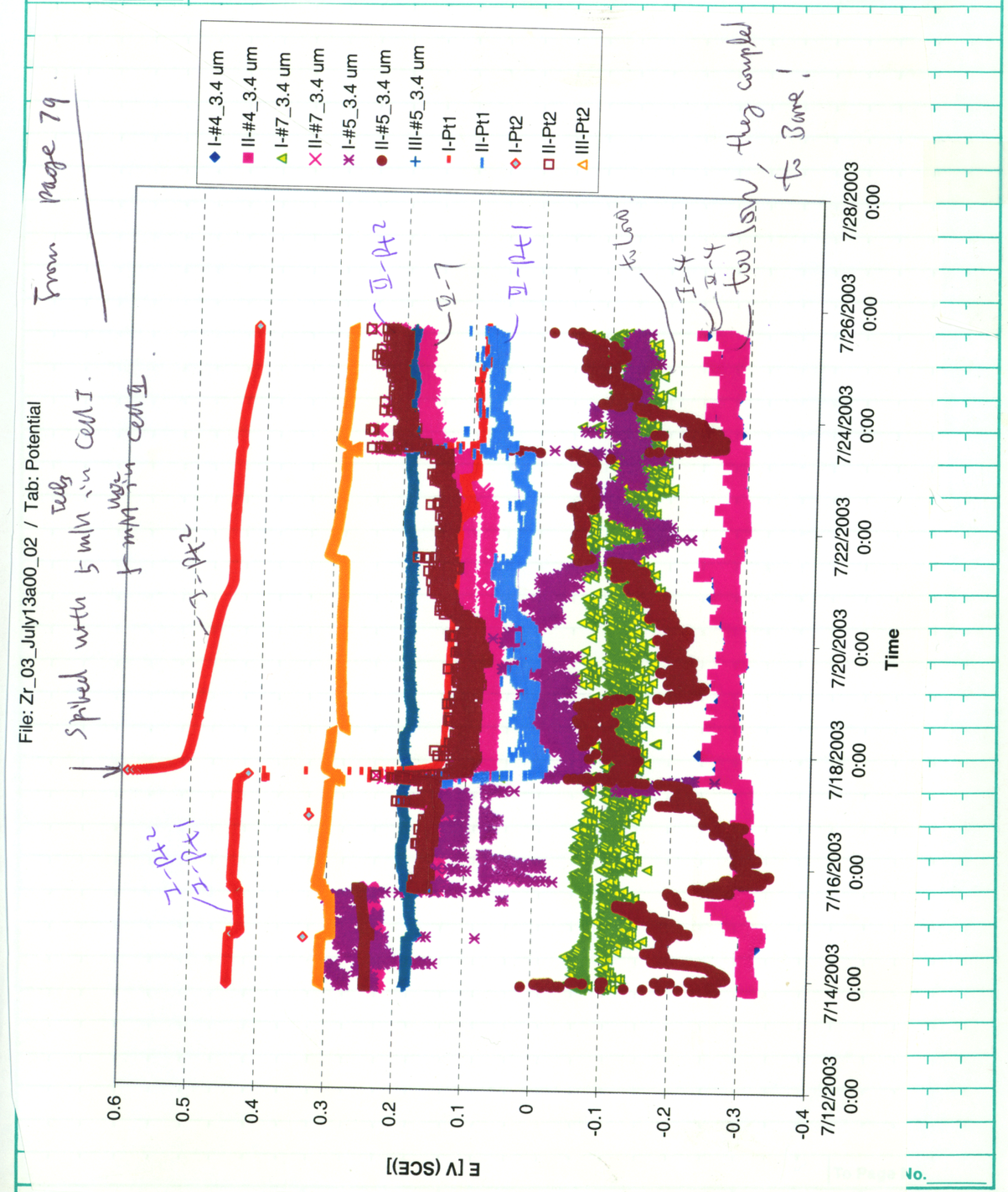
To Page No.____

Witnessed & Understood by me, | Date | Invented by | Date

Recorded by Li yao | 8/6/03

TITLE____
Project No.____
Book No.____

From Page No.____



Witnessed & Understood by me, | Date | Invented by | Date

Recorded by | 8/6/03

Witnessed & Understood by me,

Date

Recorded by

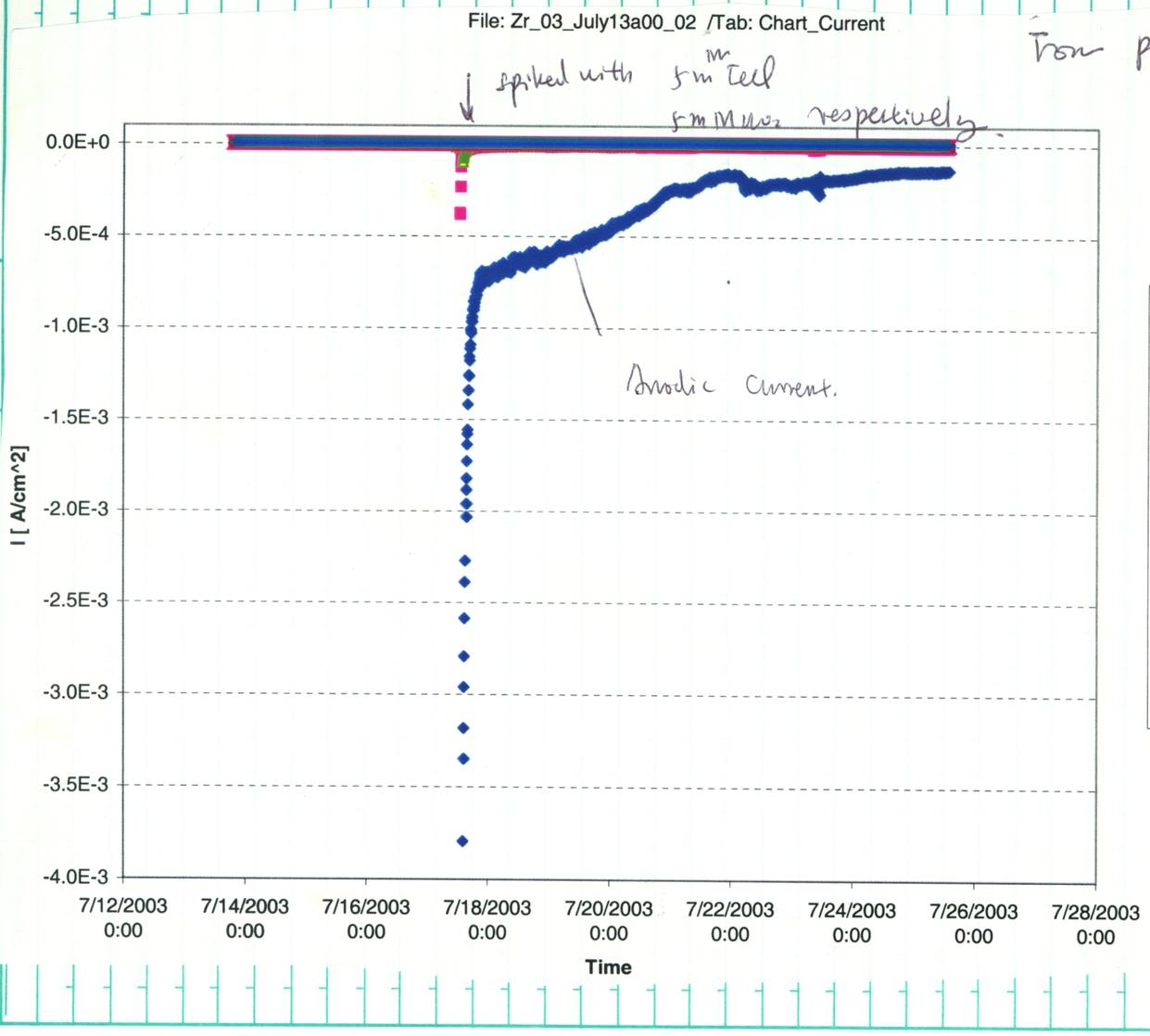
Invented by

Date

From Page No.

Project No.
Book No.

TITLE



From page 79

Anodic Current.

Witnessed & Understood by me,

Date

Recorded by

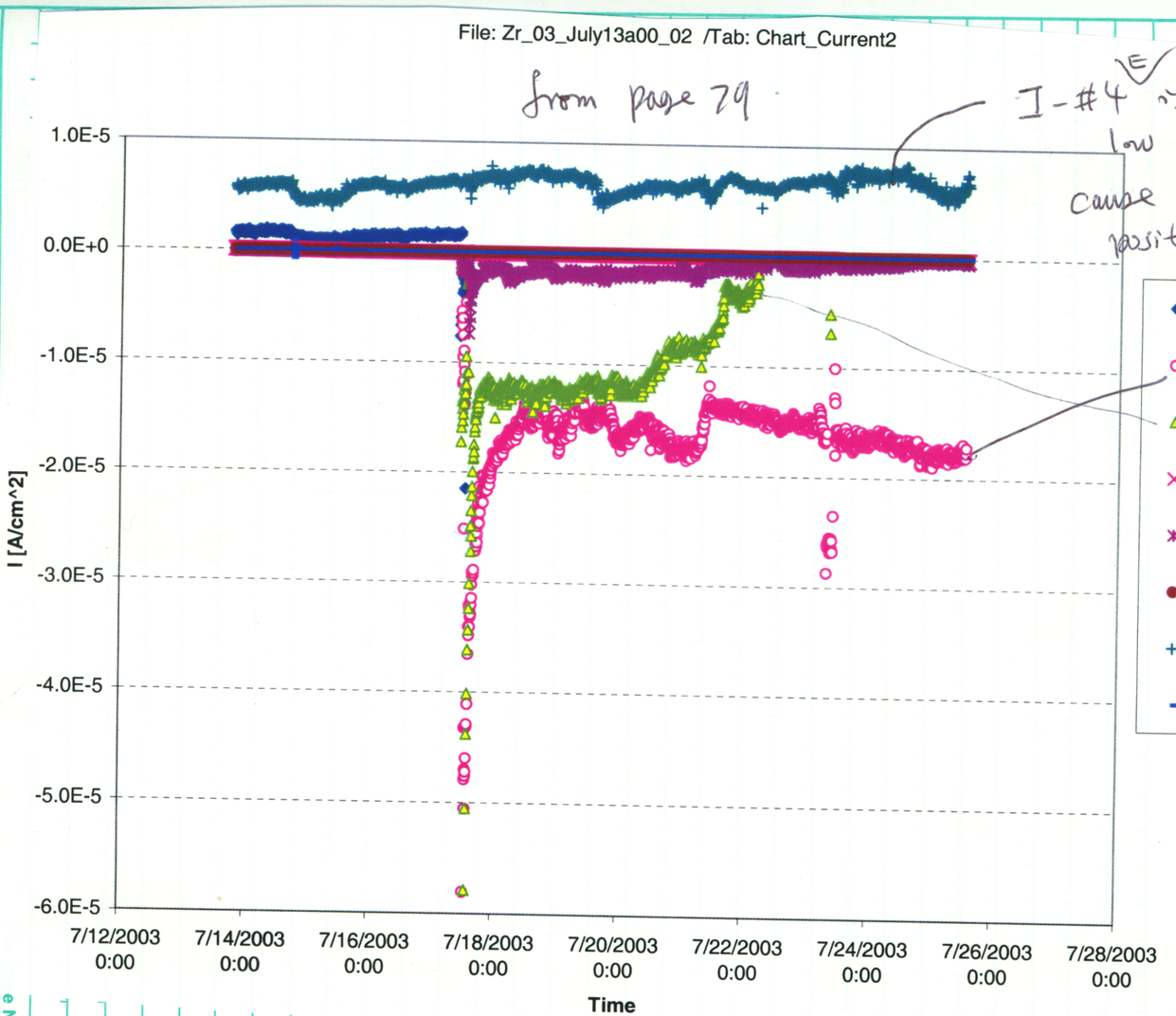
Invented by

Date

From Page No.

TITLE

Project No.
Book No.



from page 79

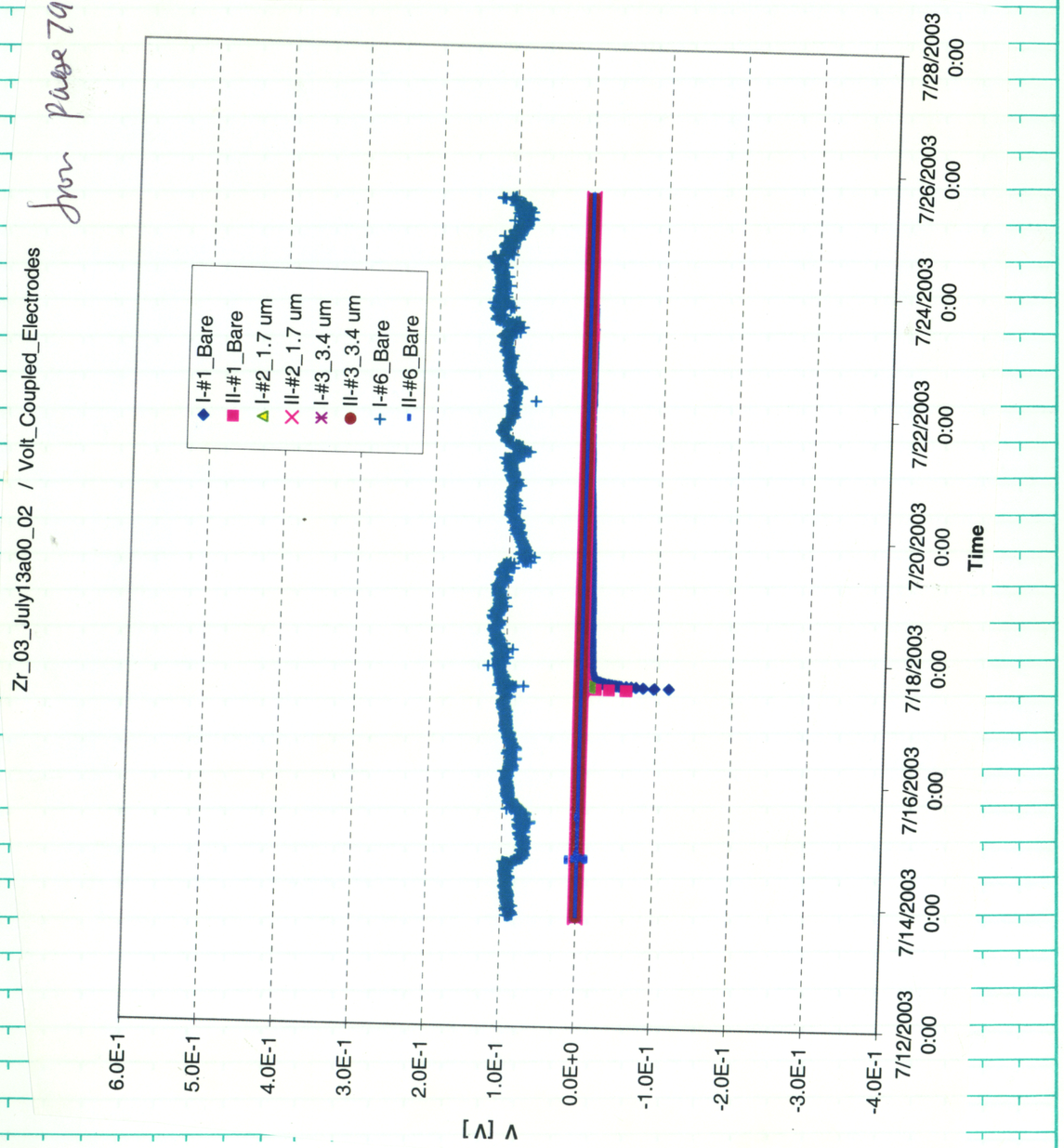
I-#4 => too low and cause this positive current!

e No.

Project No.
Book No.
TITLE

From Page No.

from page 79.



To Page No.

Witnessed & Understood by me, | Date | Invented by | Date
Recorded by J. Yao | 8/6/03

Project No.
TITLE
Book No.

From Page No.

8/18/03

9:33. Water levels in each cell good.
Reference electrode connector found off the connection to other reference electrodes.

9/17/03.

Noticed a lot of water at joints between leads and specimen for electrode I-7; II-7 III-7

The joints of I-7, II-7 are 0.8 cm from liquid level; III-7 from liquide level: 2.4 cm

Raised I-7 II-7 joints above Teflon Drip and have 0.8 in of Length in solution.

Ch. I-3 found not connected.
connected it to II-#3-3.4 um.
II-#6 Bare not connected.

Pages 44 to 95 copied for QA records
J.Y. 10/3/03

Continued in Book 60. J.Y. 10/7/03

To Page No.

Witnessed & Understood by me, | Date | Invented by | Date
Recorded by J. Yao | 10/3/03

Project No._____

Book No._____ TITLE _____

1111

From Page No.____

No report or paper written based on this Notebook.

J.Y.S. 4/7/06 4/7/06

Continue Testing In

Notebook

605

I have reviewed this scientific notebook and find it in compliance with QAP-001. There is sufficient information regarding procedures used for conducting tests, acquiring and analyzing data so that another qualified individual could repeat the activity.

4/24/06

To Page No.____

Witnessed & Understood by me,	Date	Invented by	Date 2/24/06
		Recorded by	

ADDITIONAL INFORMATION FOR SCIENTIFIC NOTEBOOK NO. 549

Document Date:	10/07/2002
Availability:	Southwest Research Institute® Center for Nuclear Waste Regulatory Analyses 6220 Culebra Road San Antonio, Texas 78228
Contact:	Southwest Research Institute® Center for Nuclear Waste Regulatory Analyses 6220 Culebra Road San Antonio, TX 78228-5166 Attn.: Director of Administration 210.522.5054
Data Sensitivity:	■"Non-Sensitive" □ Sensitive □"Non-Sensitive - Copyright" □ Sensitive - Copyright
Date Generated:	02/28/2006
Operating System: (including version number)	Windows
Application Used: (including version number)	Microsoft Excel, Word, PowerPoint
Media Type: (CDs, 3 1/2, 5 1/4 disks, etc.)	2 - CDs
File Types: (.exe, .bat, .zip, etc.)	xls, doc, txt, ppt, xls, jpg
Remarks: (computer runs, etc.)	Media contains: associated data files.