

Chavez, Carl J, EMNRD

From: Jones, Timothy <tjones@subsurfacegroup.com>
Sent: Monday, October 05, 2015 7:54 AM
To: Chavez, Carl J, EMNRD; Schultz, Michele
Subject: Navajo 2015 MIT (Annulus Pressure Tests) Report
Attachments: 2015 Navajo APT (MIT) Report (Final).pdf

Carl,

Please find attached the 2015 MIT Report for WDW-1, WDW-2, and WDW-3. Please let me know of any changes.

Thanks,

Tim Jones
Project Engineer/Project Manager
Subsurface Group, Inc.
A *Parsons Brinckerhoff* Company



16200 Park Row, Suite 200
Houston, TX 77084
281-589-5838 (office)
713-560-4905 (cell)
jonest1@pbworld.com

www.pbworld.com

NOTICE: This communication and any attachments ("this message") may contain confidential information for the sole use of the intended recipient(s). Any unauthorized use, disclosure, viewing, copying, alteration, dissemination or distribution of, or reliance on this message is strictly prohibited. If you have received this message in error, or you are not an authorized recipient, please notify the sender immediately by replying to this message, delete this message and all copies from your e-mail system and destroy any printed copies.

2015 ANNULUS PRESSURE TEST (MIT)
NAVAJO REFINING

WDW NO. 1 MEWBOURNE (30-015-27592)

WDW NO. 2 CHUKKA (30-015-20894)

WDW NO. 3 GAINES (30-015-26575)

ARTESIA, NM

SEPTEMBER 21, 2015

SUBSURFACE TECHNOLOGY, INC.

Houston, TX

A Company of



Project No. 185818-7176

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	iii
1.0 ANNULUS PRESSURE TEST FOR WDW-1.....	1
2.0 ANNULUS PRESSURE TEST FOR WDW-2.....	1
3.0 ANNULUS PRESSURE TEST FOR WDW-3.....	1
4.0 CONCLUSIONS	2

APPENDICES

APPENDIX A:	WDW-1 Pressure Chart
APPENDIX B:	WDW-2 Pressure Chart
APPENDIX C:	WDW-3 Pressure Chart
APPENDIX D:	Pressure Chart Calibration Sheet

EXECUTIVE SUMMARY

Subsurface Construction Corp. (Subsurface) conducted annulus pressure tests (MITs) on WDW-1 Mewbourne, WDW-2 Chukka, and WDW-3 Gaines on Monday, September 21, 2015. The tests were not witnessed by a NM OCD representative. The tests were witnessed by Hank Lichtenwaldt for Subsurface. All annulus pressure tests were successful.

1.0 ANNULUS PRESSURE TEST FOR WDW-1

On September 21, a 1000 psig chart recorder, with spring weight 0-1000 psig, was rigged up to the casing-tubing annulus via a 2 inch bull plug with ½" NPT connection. The annulus line from the well annulus monitoring system (WAMS) to the wellhead was blocked in and the annulus pressure was recorded from 1352 hours to 1423 hours. During this 30-minute test, the annulus pressure increased from 645 psig to 655 psig. The 10 psig change in annulus pressure is within the NM OCD maximum allowable $\pm 10\%$ annulus pressure change. The change in annulus pressure was 1.55%. This successful annulus pressure chart can be found in Appendix A. The chart calibration sheet can be found in Appendix D.

2.0 ANNULUS PRESSURE TEST FOR WDW-2

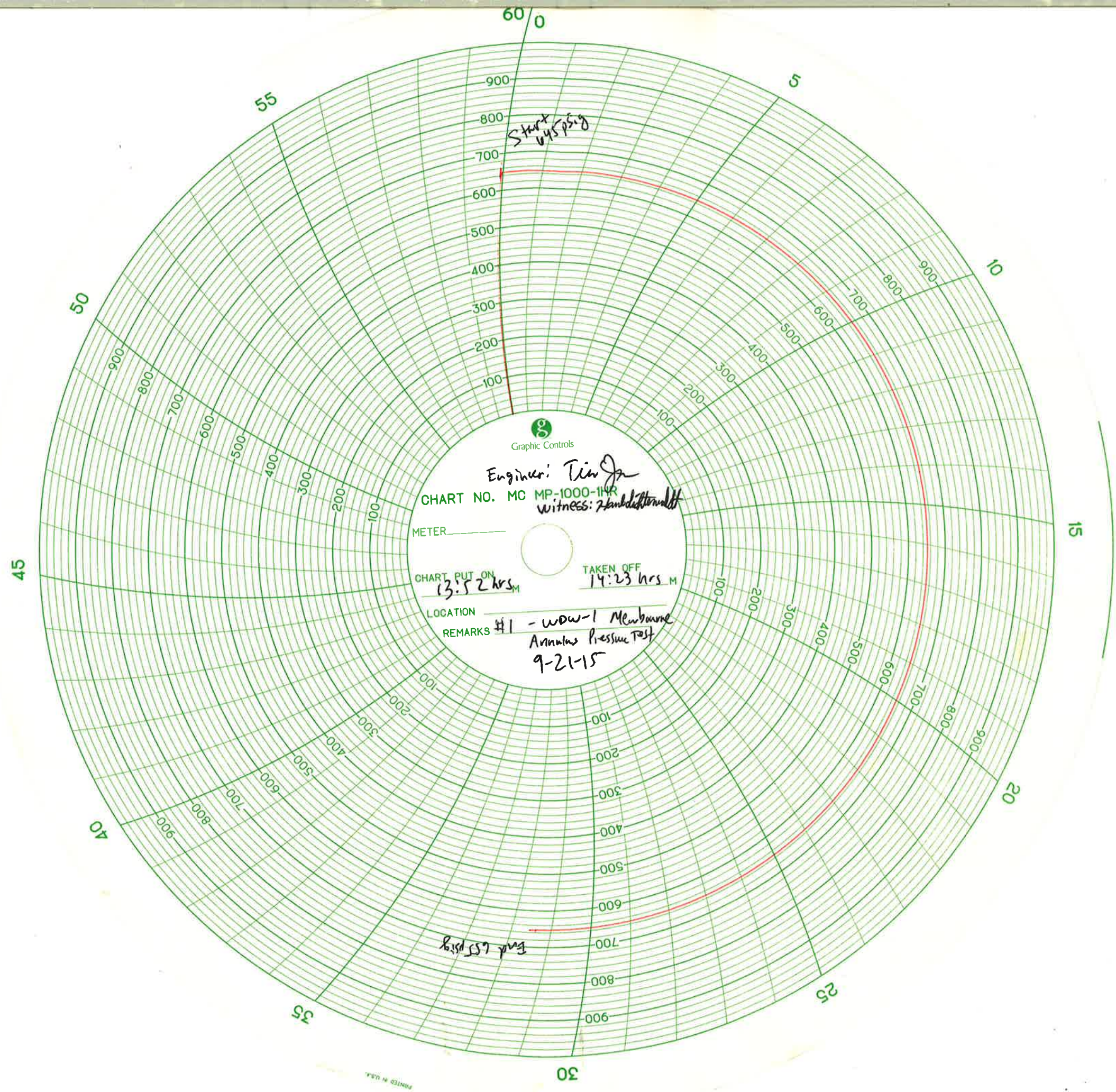
On September 21, a 1000 psig chart recorder, with spring weight 0 - 1000 psig, was rigged up to the casing-tubing annulus via a 2 inch bull plug with ½" NPT connection. The annulus line from the well annulus monitoring system (WAMS) to the wellhead was blocked in and the annulus pressure was recorded from 1502 hours to 1534 hours. During this 30 minute test, the annulus pressure decreased from 315 psig to 305 psig. The 10 psig change in annulus pressure is within the NM OCD maximum allowable $\pm 10\%$ annulus pressure change. The change in annulus pressure was 3.17%. This successful annulus pressure chart can be found in Appendix B. The chart calibration sheet can be found in Appendix D.

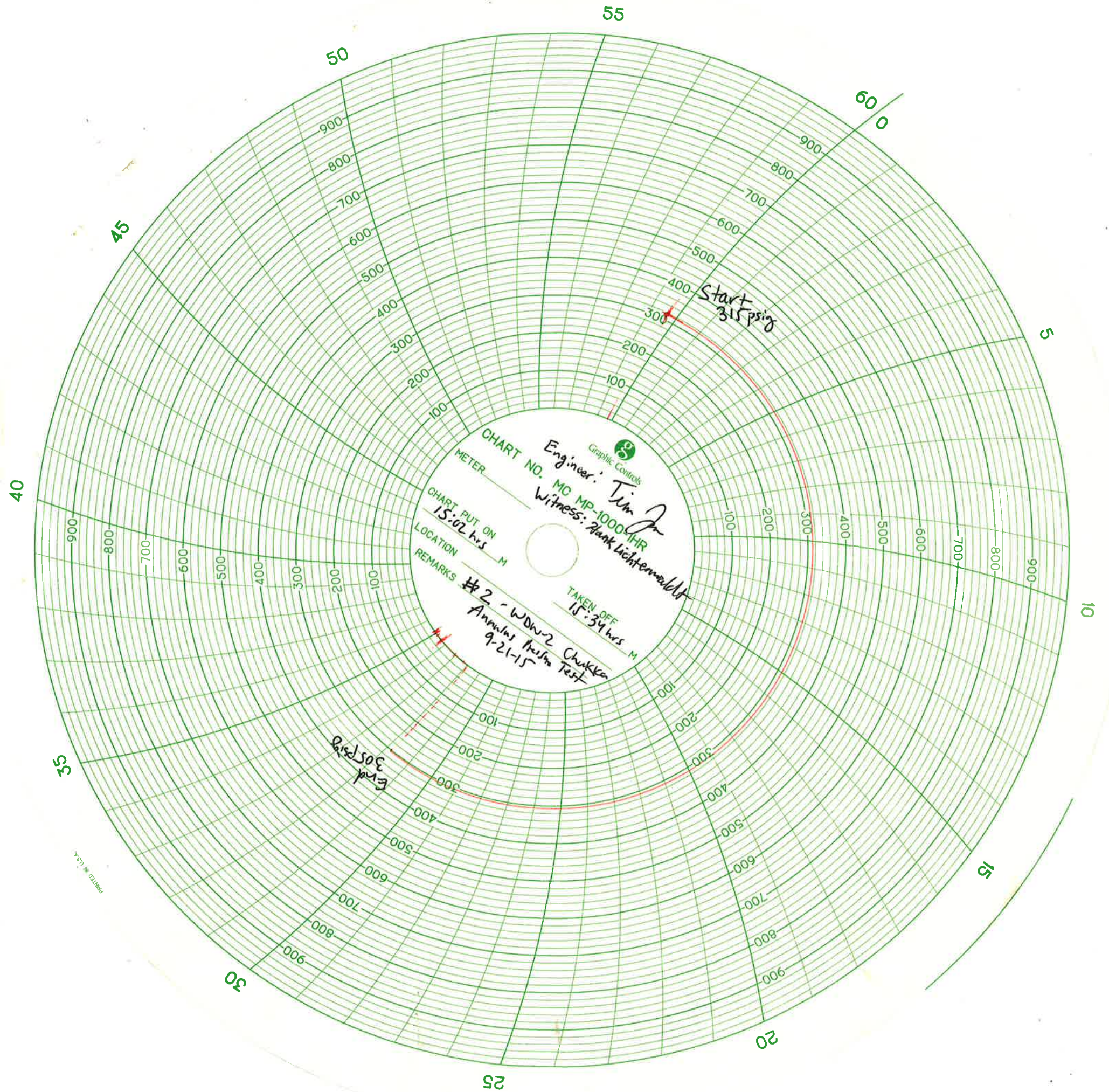
3.0 ANNULUS PRESSURE TEST FOR WDW-3

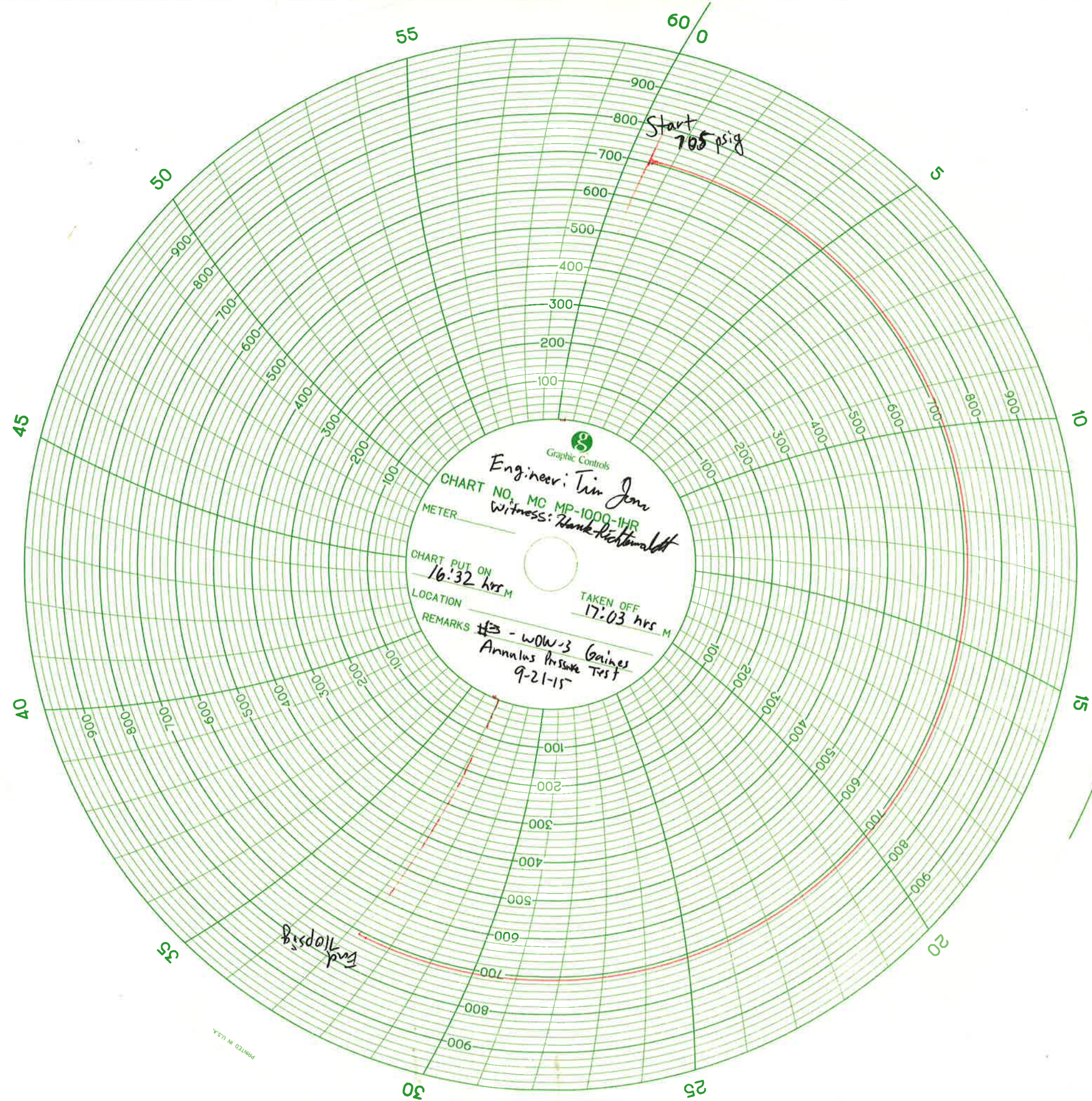
On September 21, a 1000 psig chart recorder, with spring weight 0 - 1000 psig, was rigged up to the casing-tubing annulus via a 2 inch bull plug with ½" NPT connection. The annulus line from the well annulus monitoring system (WAMS) to the wellhead was blocked in and the annulus pressure was recorded from 1632 hours to 1703 hours. During this 30 minute test, the annulus pressure increased from 705 psig to 710 psig. The 5 psig change in annulus pressure is within the NM OCD maximum allowable $\pm 10\%$ annulus pressure change. The change in annulus pressure was 0.71%. This successful annulus pressure chart can be found in Appendix C. The chart calibration sheet can be found in Appendix D.

4.0 CONCLUSIONS

The annulus pressure tests (MITs) were successful for all three disposal wells. Please refer to Appendix A-C for the pressure charts and Appendix D for the chart calibration sheet.







Wildcat Measurement Service, Inc.

416 East Main Street
P.O. Box 1836
Artesia, New Mexico 88211
Office: (575)746-3481
Toll Free: 1-888-421-9453

Calibration Certificate

Company Name: Globe Energy
Recorder Type: Barton
Recorder Serial#: 242A-8717

Recorder Pressure Range: 0-1000# Accuracy +/-: 0.2% PSIG
Temperature Range: _____ Deg F.

Increasing Pressure			Decreasing Pressure		
Applied Pressure	Indicated Pressure	Error%	Applied Pressure	Indicated Pressure	Error%
0.0#	0.0#	0	800#	800#	0
100#	100#	0	600#	600#	0
300#	300#	0	400#	400#	0
500#	500#	0	200#	200#	0
700#	700#	0	0.0#	0.0#	0
1000#	1000#	0			

Temperature Test		
Applied Temperature	Indicated Temperature	Error%

Certified Calibration Instrument Used Gauge: <u>Crystal</u> Deadweight: _____
--

Remarks: _____

Calibration Date: 08/11/2015

Technician: Jonnie Aldrich