

HALLIBURTON

Casing Inspection Evaluation Report

Client: Kinder Morgan
Well: Sand Canyon 8
Field: McElmo Dome
County: Montezuma
State: Colorado

Analyst: Chris McIlroy
Date: 10/05/2010
Location: Denver RES
Phone: (303) 899-4694

Chris.Mcilroy@Halliburton.com

DATA, RECOMMENDATIONS, INTERPRETATIONS LIMITATIONS

Because of the uncertainty of variable well conditions the necessity of relying on facts and supporting services furnished by others, Halliburton IS UNABLE TO GUARANTEE THE EFFECTIVENESS OF THE PRODUCTS, SUPPLIES OR MATERIALS, NOR THE RESULTS OF ANY TREATMENT OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and Customer SHALL RELEASE, DEFEND AND INDEMNIFY Halliburton against any damages or liability arising from the use of such information even if such damages are contributed to or caused by the negligence, fault or strict liability of Halliburton.

Table of Contents

Table of Contents	4
Executive Summary	5
1. Well Intervention Objectives	5
2. Well Information.....	5
3. Logging Information.....	6
4. Case Log Display	6
5. Evaluation Result.....	7

Executive Summary

1. Well Intervention Objectives

- **Casing Inspection**

Tools: CENT/TTTC-B/CAST-M

2. Well Information

- Spud Date: N/A
- Depth-Driller: 7942'
- Bit Size: 20" Surface To 102'
 14.75" 102' To 2962'
 9.875" 2962' To 7942'
- Casing Size / Weight: 16" - 65# Surface To 102'
 10.75" - 40.5# Surface To 2943'
 7.625" - 26 to 39# Surface To Bottom
- Type Fluid In Hole: Water
- Date/Time Cemented: N/A
- Primary Squeeze: N/A
- Cement Volume: N/A
- Cement Type/Weight: N/A
- Mud Type/Mud Weight: N/A

3. Logging Information

- Logged Date: August 27th, 2010
- Logged Interval: 200-7734'
- Log Engineer: Gilbert

4. Case Log Display

- GR--Gamma Ray
- ECTY--Eccentricity
- AVTHIK--Average Thickness
- AVRAD--Average Radius
- PAMP--Pipe Amplitude Image
- TOTDAMG--Total Casing Damage
- INTDAMG--Internal Damage
- FTT--Fluid Travel Time

- AVRADN—Normalized Average Radius
- MXRADN—Normalized Maximum Radius
- MNRADN—Normalized Minimum Radius
- PRADN—Normalized Casing Radius
- AVTHIKN—Normalized Average Thickness
- MXTHIKN—Normalized Maximum Thickness
- MNTHIKN—Normalized Minimum Thickness
- THKPN—Normalized Pipe Thickness
- DAMAGEP—Damage Image
- BLUE COLOR—Internal Damage
- MAGENTA COLOR—External Damage

5. Evaluation Result

The logs on this well indicate the following by Zone:

1125 17th Street, Denver, CO 80202

Confidential

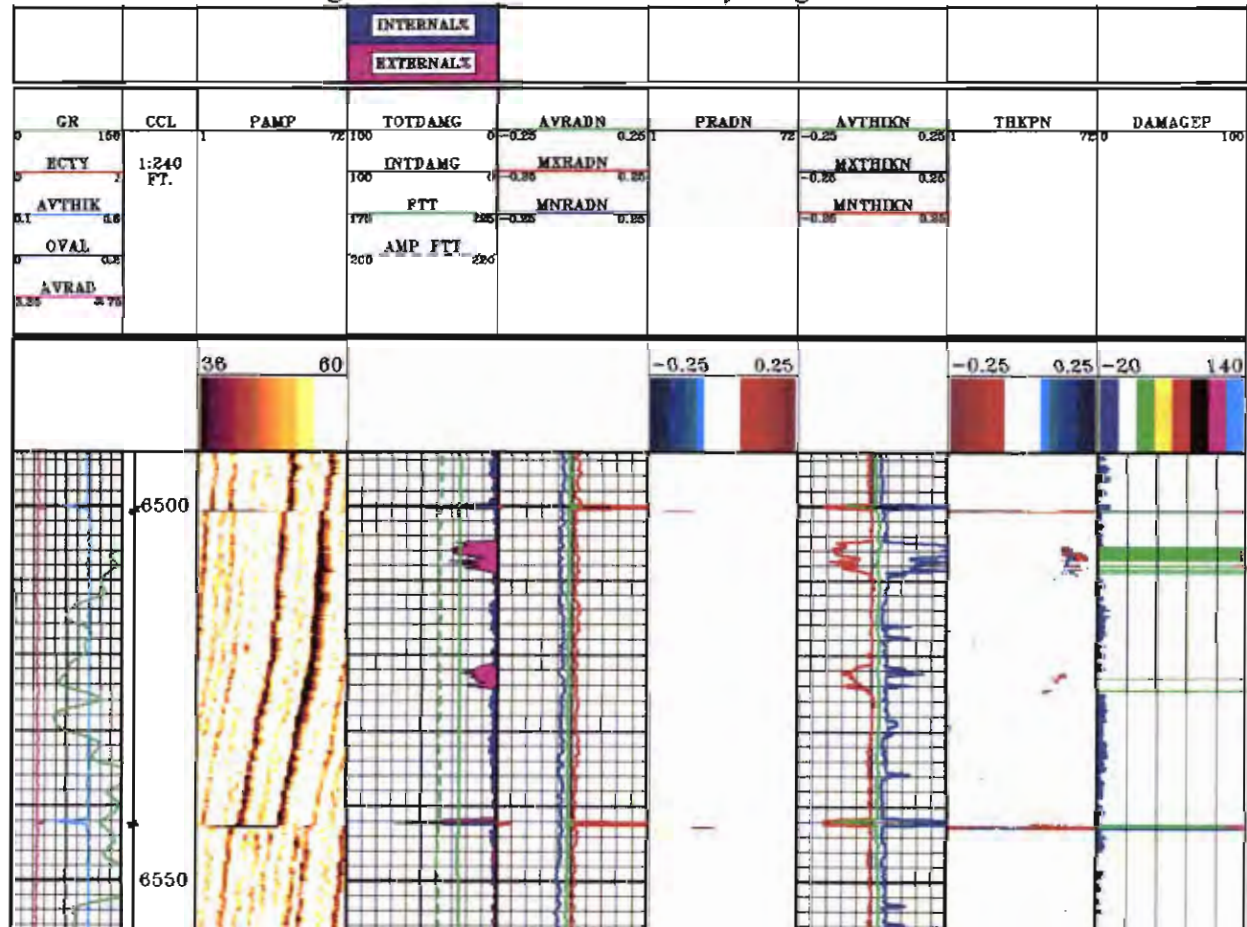
Page 5

10/18/2010

6500-6542

Looking at pipe amplitude in track 2 we notice some scarring on the inside of casing.

In track 3 we see both internal and external damage. This is corroborated by the thickness curves in track 6. Track 8, the total damage track, tells us that at its worst this damage is less than 20% as shown by the green color.

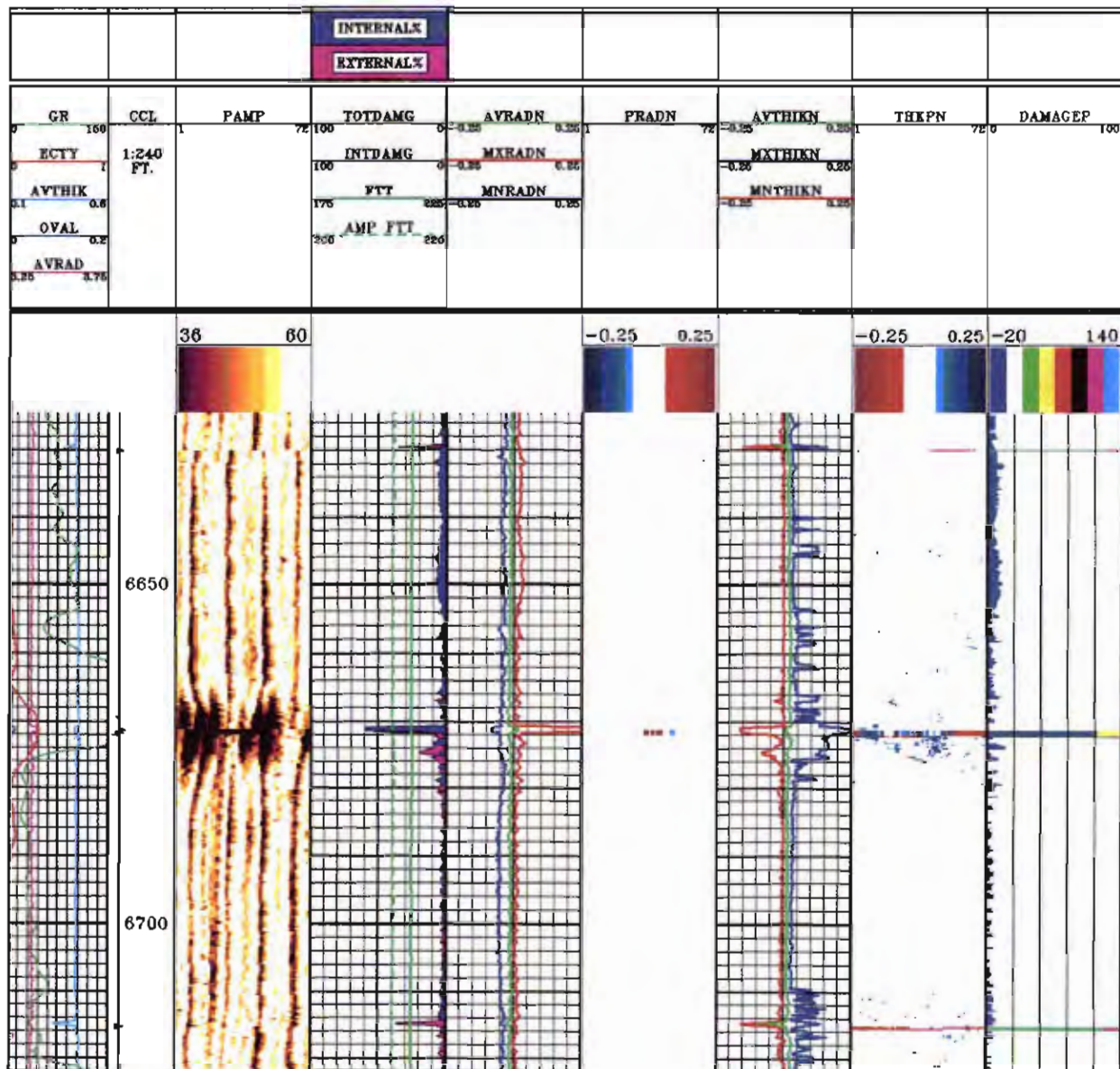


1125 17th Street, Denver, CO 80202
Confidential

Page 6

10/18/2010

6664-6678 Looking at track 2 the amplitude curve points to the area around 6570' that we need to look at. The eccentricity in track 1 could be due to pipe damage at the joint or hole problems highlighting the overall poor condition of this collar.



1125 17th Street, Denver, CO 80202

Confidential

Page 7

10/18/2010

7228-7235 Starting in the depth track, the CCL shows a 5' color. Track 2 shows the collar at 7230' appears over a 5 foot interval. Tracks 4 and 5 show enlarged radius, tracks 6 and 7 show small thickness. Track 8 shows damage greater than 20% and is a cause for concern.

