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### Customer Information

**Operator:** Noble Energy Inc.  
1625 Broadway  
Suite 2200  
Denver, Colorado 80202

**Geologist:** Renee Clackler  
Noble Energy Inc.

### Mud Logging Details

**Logger:** Kevin Brooks &  
Kaitlyn Bertram  
**Log Interval:** 6860' MD to 8396' MD  
**Start Date:** December 19, 2014  
**Release Date:** December 28, 2014

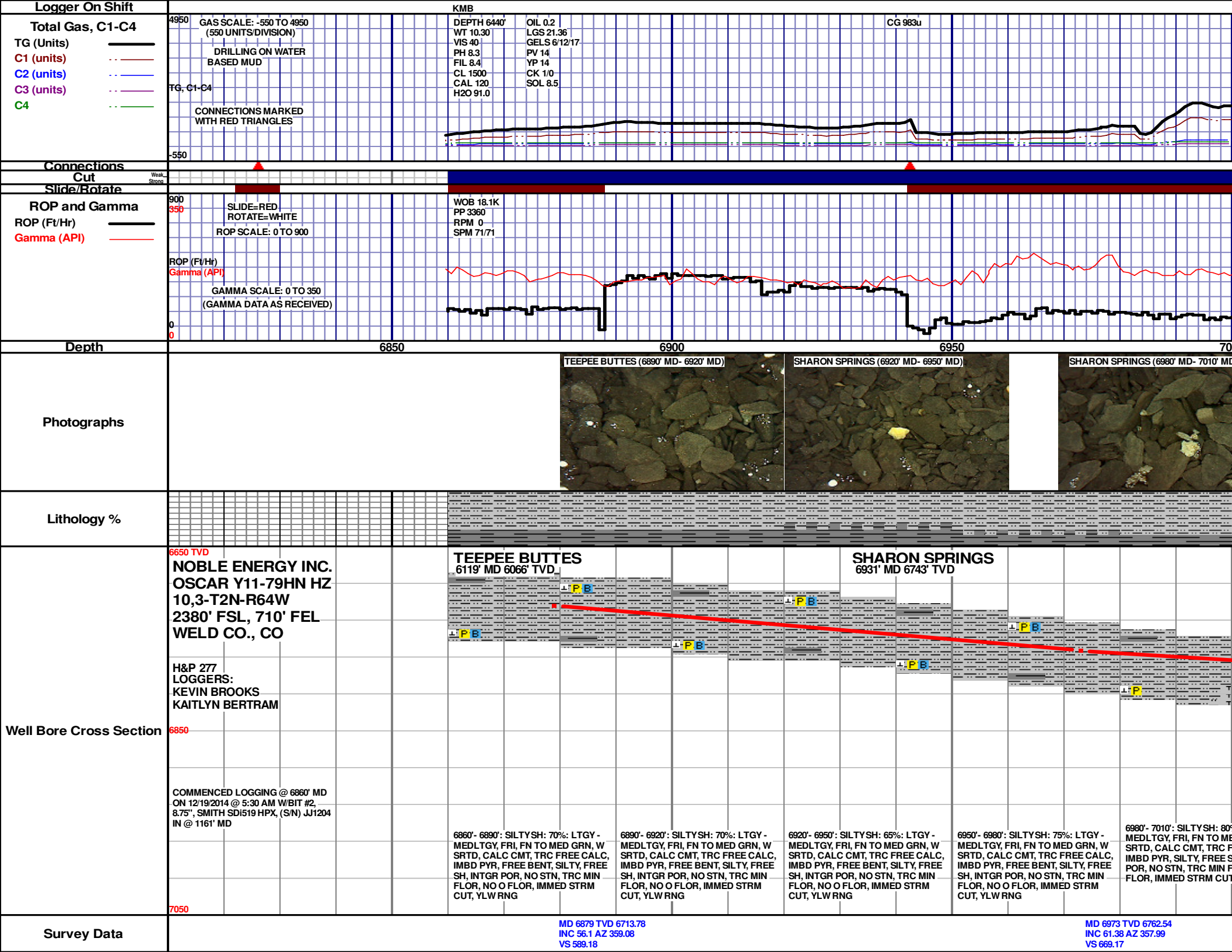
### Well Information

**Well Name:** Oscar Y11-79HN HZ

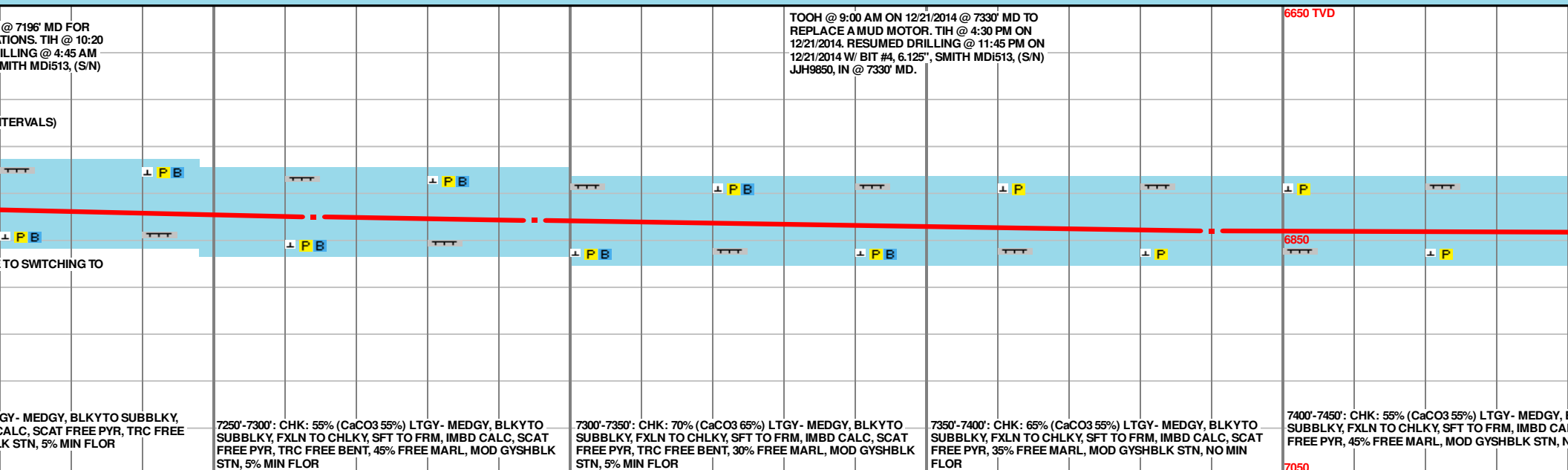
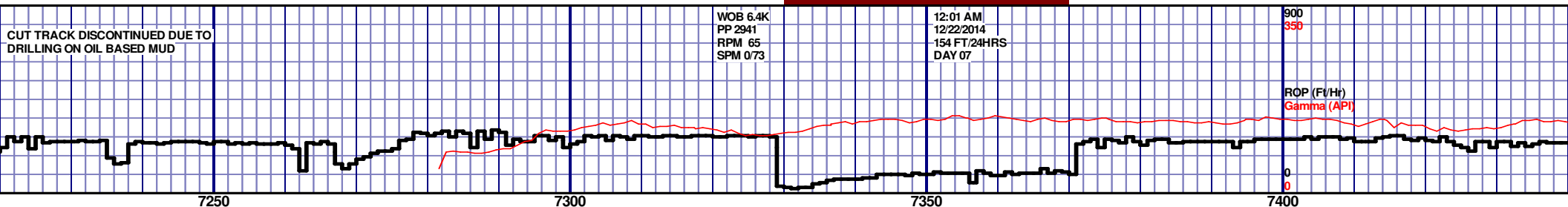
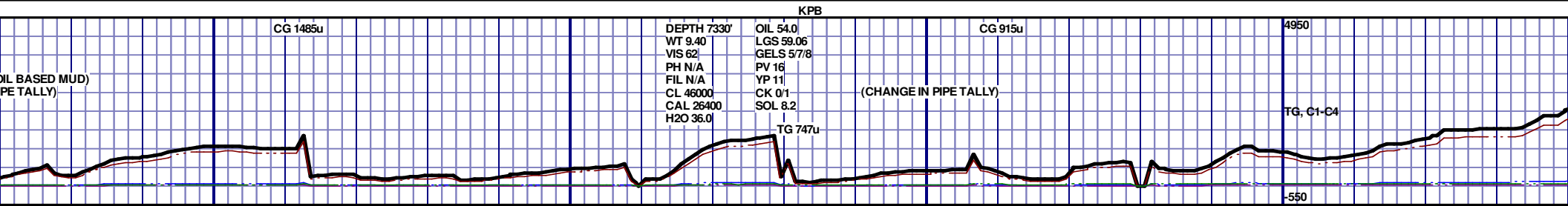
**Location:** 10,3-T2N-R64W  
2380' FSL, 710' FEL

**County:** Weld  
**State:** Colorado

**Drilling Rig:** H&P 277  
**Total Depth:** 14458' MD  
**TD Date:** December 28, 2014  
**Formation:** Niobrara B  
**KB Elevation:** 4953'  
**GR Elevation:** 4929'  
**API Number:** 05-123-37943-0000



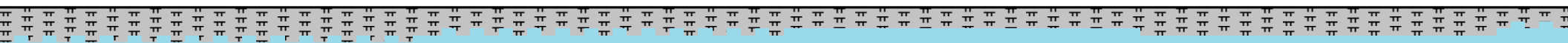
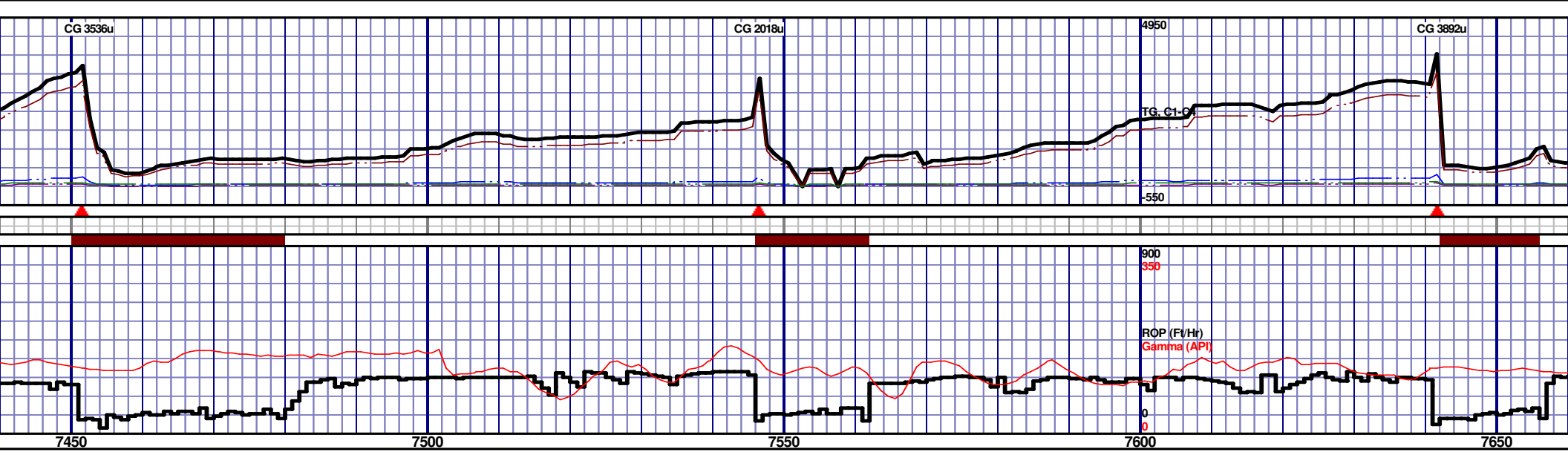




MD 7264 TVD 6829.59  
INC 82.75 AZ 350.52  
VS 944.45

MD 7295 TVD 6833.46  
INC 82.92 AZ 349.81  
VS 974.35

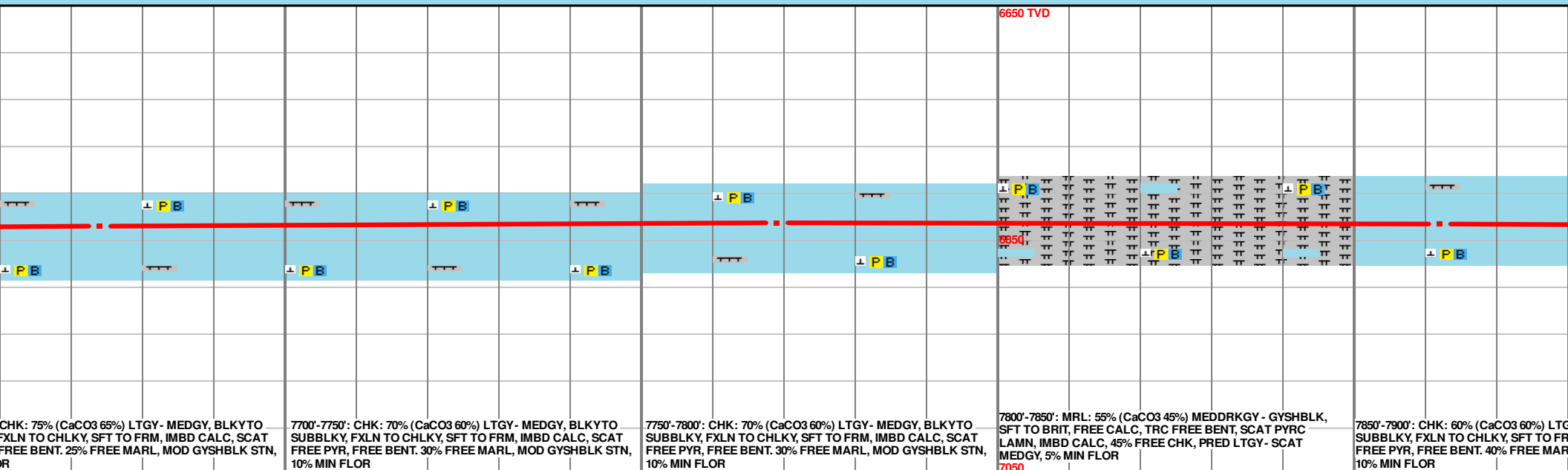
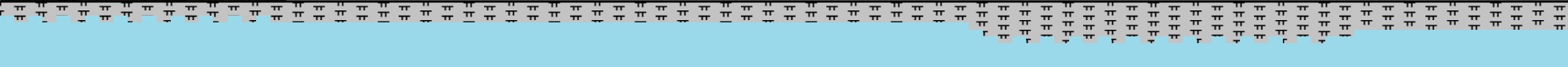
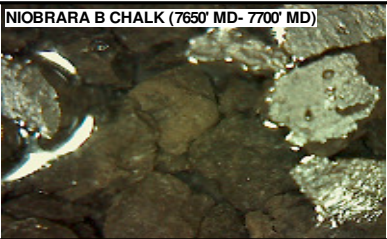
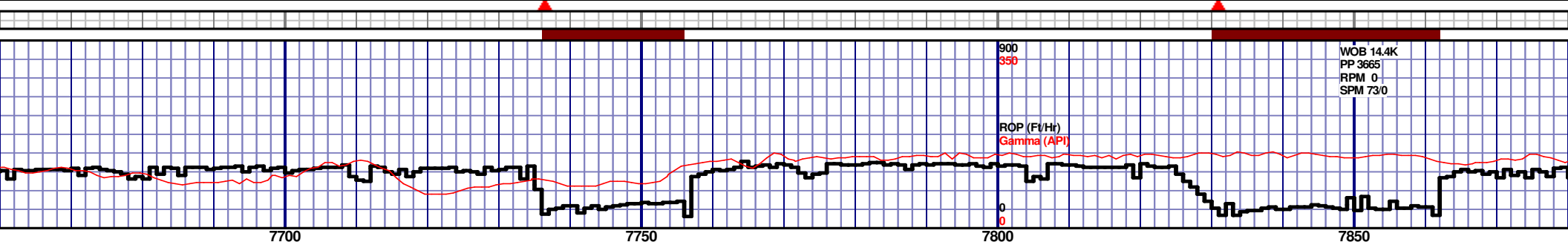
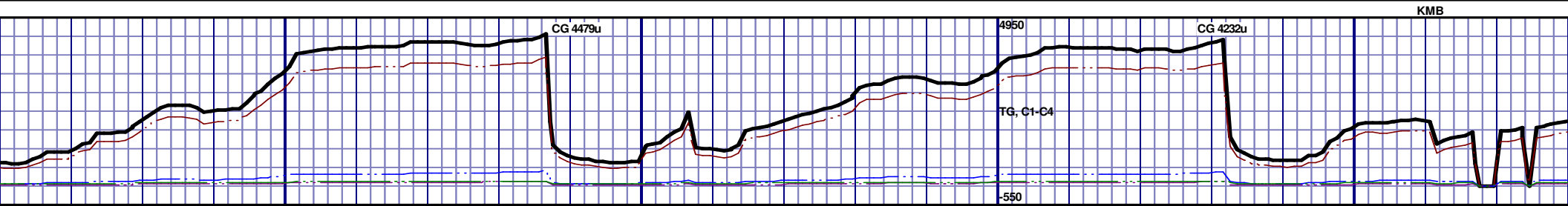
MD 7390 TVD 6841.77  
INC 87.05 AZ 353.66  
VS 1066.94



6650 TVD					
6850					
7050					
BLKTYO LC, SCAT NO MIN FLOR	7450'-7500': CHK: 55% (CaCO3 50%) LTGY- MEDGY, BLKTYO SUBBLKY, FXLN TO CHLKY, SFT TO FRM, IMBD CALC, SCAT FREE PYR, 45% FREE MARL, MOD GYSHBLK STN, NO MIN FLOR	7500'-7550': CHK: 65% (CaCO3 55%) LTGY- MEDGY, BLKTYO SUBBLKY, FXLN TO CHLKY, SFT TO FRM, IMBD CALC, SCAT FREE PYR, 35% FREE MARL, MOD GYSHBLK STN, NO MIN FLOR	7550'-7600': CHK: 70% (CaCO3 60%) LTGY- MEDGY, BLKTYO SUBBLKY, FXLN TO CHLKY, SFT TO FRM, IMBD CALC, SCAT FREE PYR, FREE BENT. 30% FREE MARL, MOD GYSHBLK STN, 5% MIN FLOR	7600'-7650': CHK: 60% (CaCO3 60%) LTGY- MEDGY, BLKTYO SUBBLKY, FXLN TO CHLKY, SFT TO FRM, IMBD CALC, SCAT FREE PYR, FREE BENT. 40% FREE MARL, MOD GYSHBLK STN, 5% MIN FLOR	7650'-7700': SUBBLKY, F FREE PYR, I 5% MIN FLO

MD 7485 TVD 6844.18  
INC 90.04 AZ 356.06  
VS 1160.74

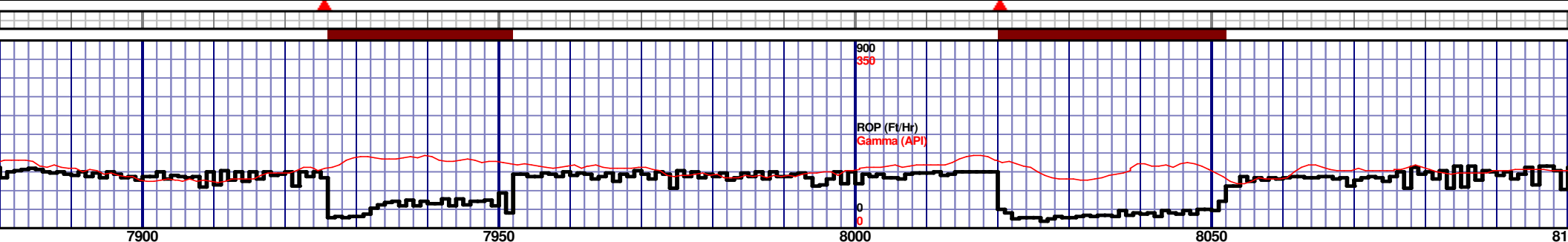
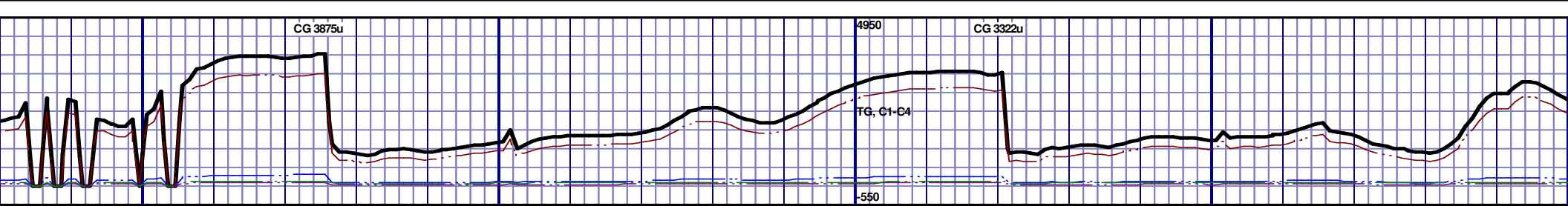
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INC 92.68 AZ 357.35  
VS 1255



MD 7674 TVD 6837.96  
INC 92.15 AZ 358.87  
VS 1348.47

MD 7769 TVD 6835.12  
INC 91.28 AZ 357.29  
VS 1442.97

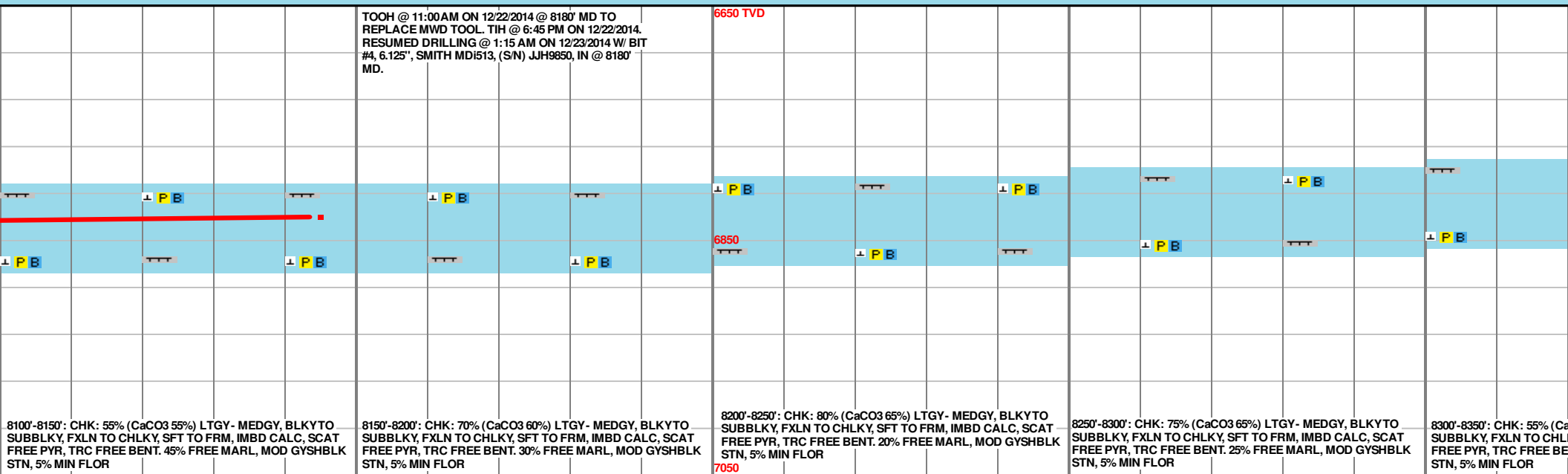
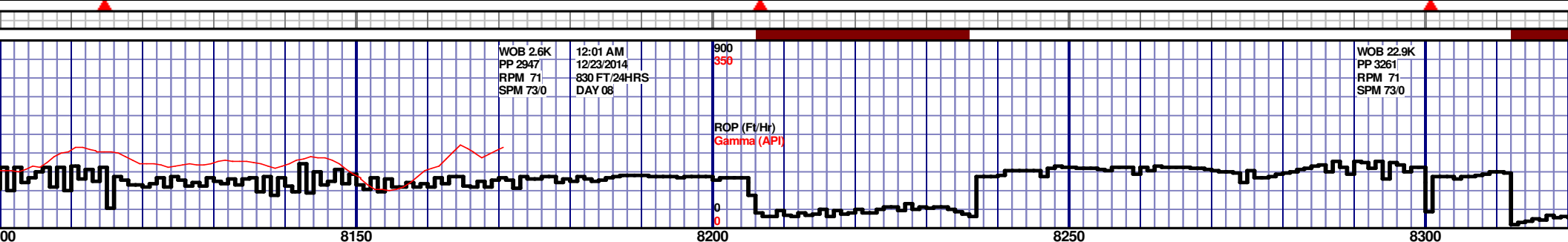
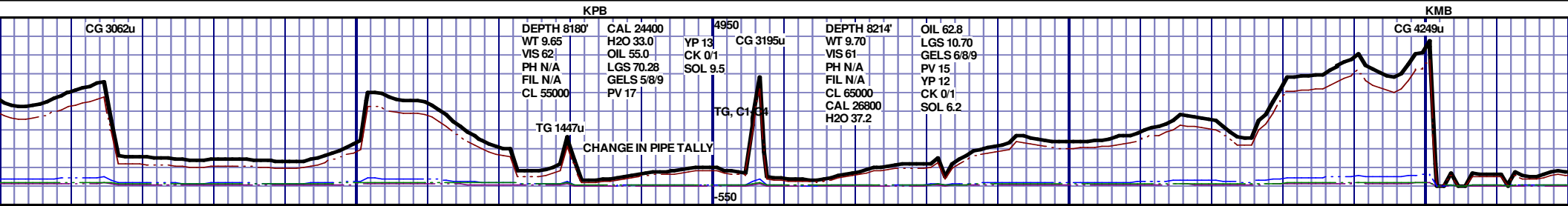
MD 7862 TVD 6836.41  
INC 87.41 AZ 2.46  
VS 1536.07



6650 TVD				6650			
7900'-7950': CHK: 75% (CaCO3 65%) LTGY - MEDGY, BLKYTO SUBBLKY, FXLN TO CHLKY, SFT TO FRM, IMBD CALC, SCAT FREE PYR, FREE BENT. 25% FREE MARL, MOD GYSHBLK STN, 10% MIN FLOR				7950'-8000': CHK: 70% (CaCO3 60%) LTGY - MEDGY, BLKYTO SUBBLKY, FXLN TO CHLKY, SFT TO FRM, IMBD CALC, SCAT FREE PYR, FREE BENT. 30% FREE MARL, MOD GYSHBLK STN, 10% MIN FLOR			
8000'-8050': CHK: 65% (CaCO3 60%) LTGY - MEDGY, BLKYTO SUBBLKY, FXLN TO CHLKY, SFT TO FRM, IMBD CALC, SCAT FREE PYR, FREE BENT. 35% FREE MARL, MOD GYSHBLK STN, 10% MIN FLOR				8050'-8100': CHK: 65% (CaCO3 60%) LTGY - MEDGY, BLKYTO SUBBLKY, FXLN TO CHLKY, SFT TO FRM, IMBD CALC, SCAT FREE PYR, FREE BENT. 35% FREE MARL, MOD GYSHBLK STN, 10% MIN FLOR			

MD 7956 TVD 6838.56  
INC 89.96 AZ 5.93  
VS 1630.02

MD 8051 TVD 6835.79  
INC 93.39 AZ 9.85  
VS 1724.69



MD 8145 TVD 6829.87  
INC 93.83 AZ 9.95  
VS 1817.95

