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WWW.HZMUD.COM/25

Customer Information

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

Geologist: Holly Duncan
Noble Energy Inc.

Mud Logging Details

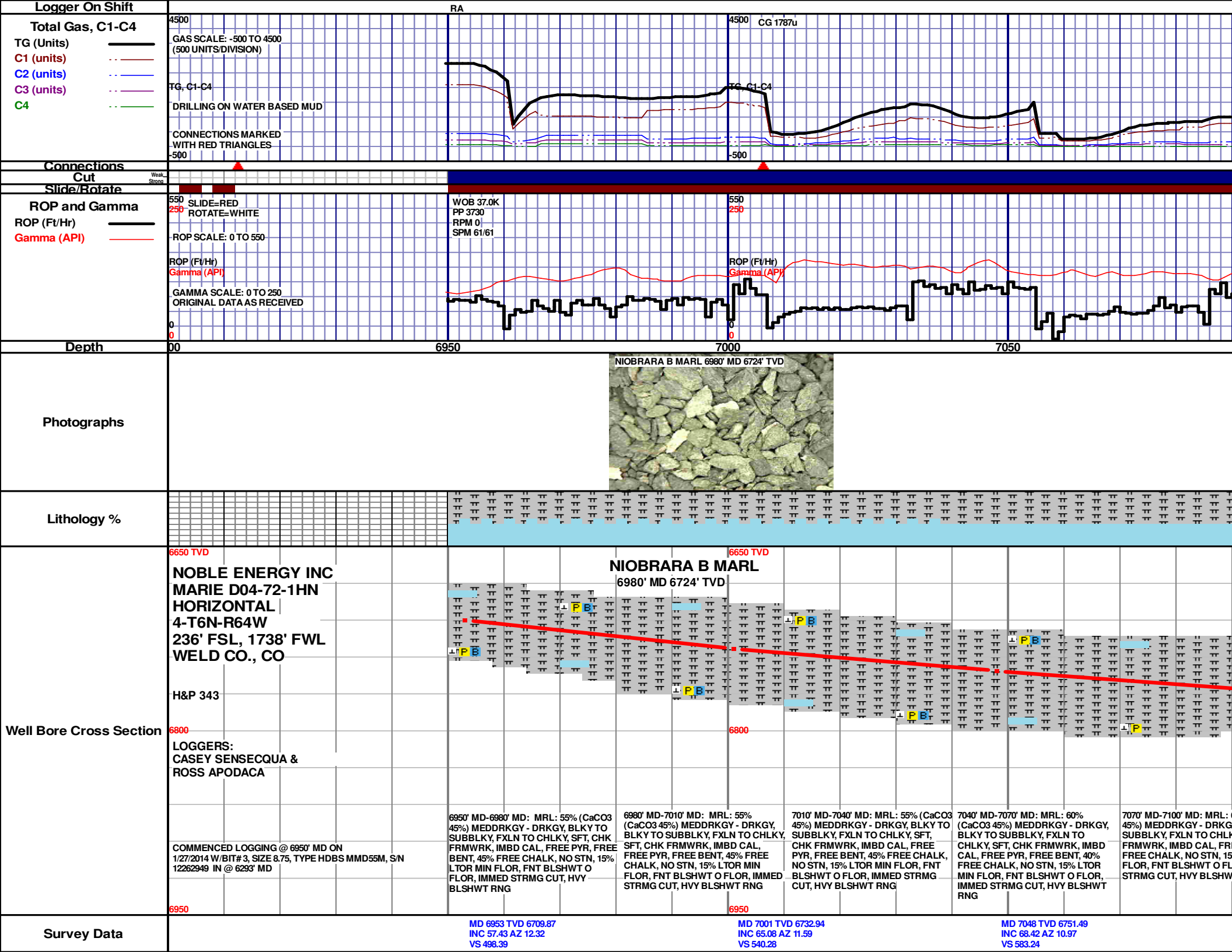
Logger: Casey Sensecqua &
Ross Apodaca
Log Interval: 6950' MD to 11395' MD
Start Date: January 27, 2014
Release Date: January 30, 2014

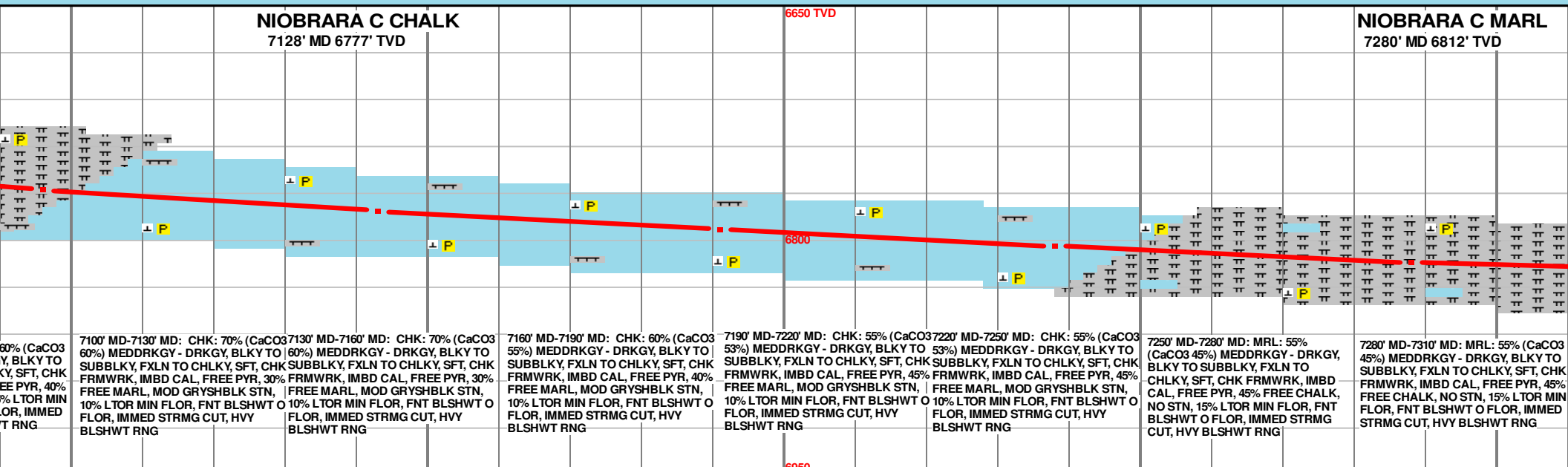
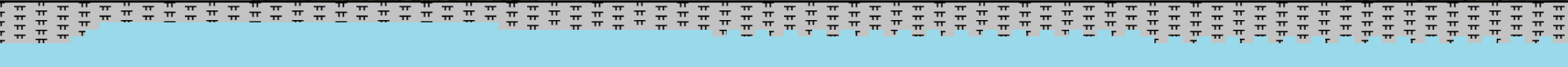
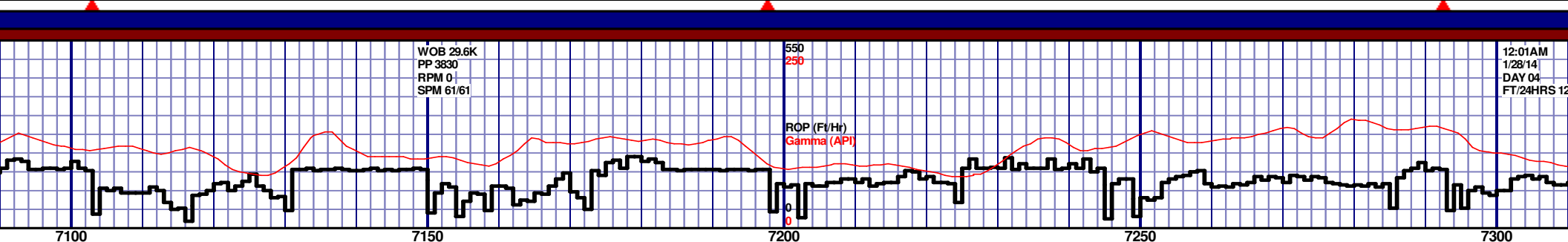
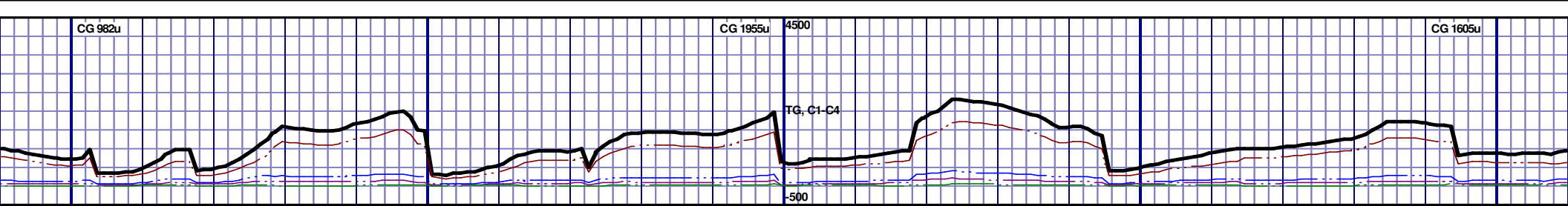
Well Information

Well Name: Marie D04-72-1HN
Horizontal
Location: 4-T6N-R64W
236' FSL, 1738' FWL

County: Weld
State: Colorado

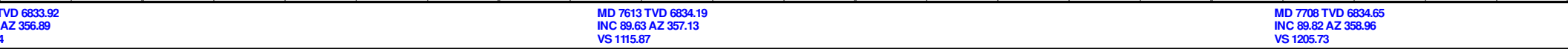
Drilling Rig: H&P 343
Total Depth: 11395' MD
TD Date: January 30, 2014
Formation: Niobrara C Marl
KB Elevation: 4744'
GR Elevation: 4720'
API Number: 05-123-38306-0000

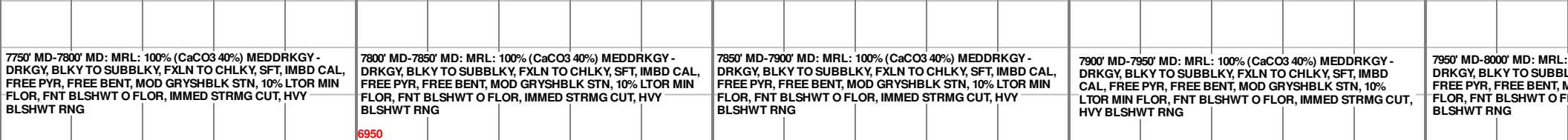
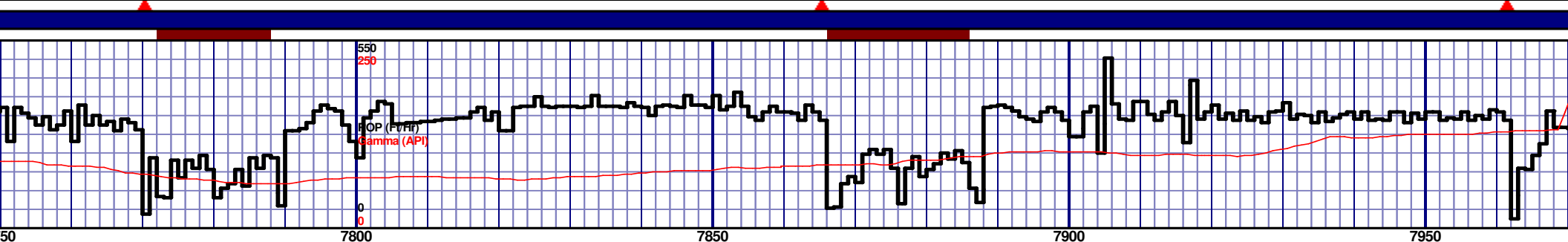




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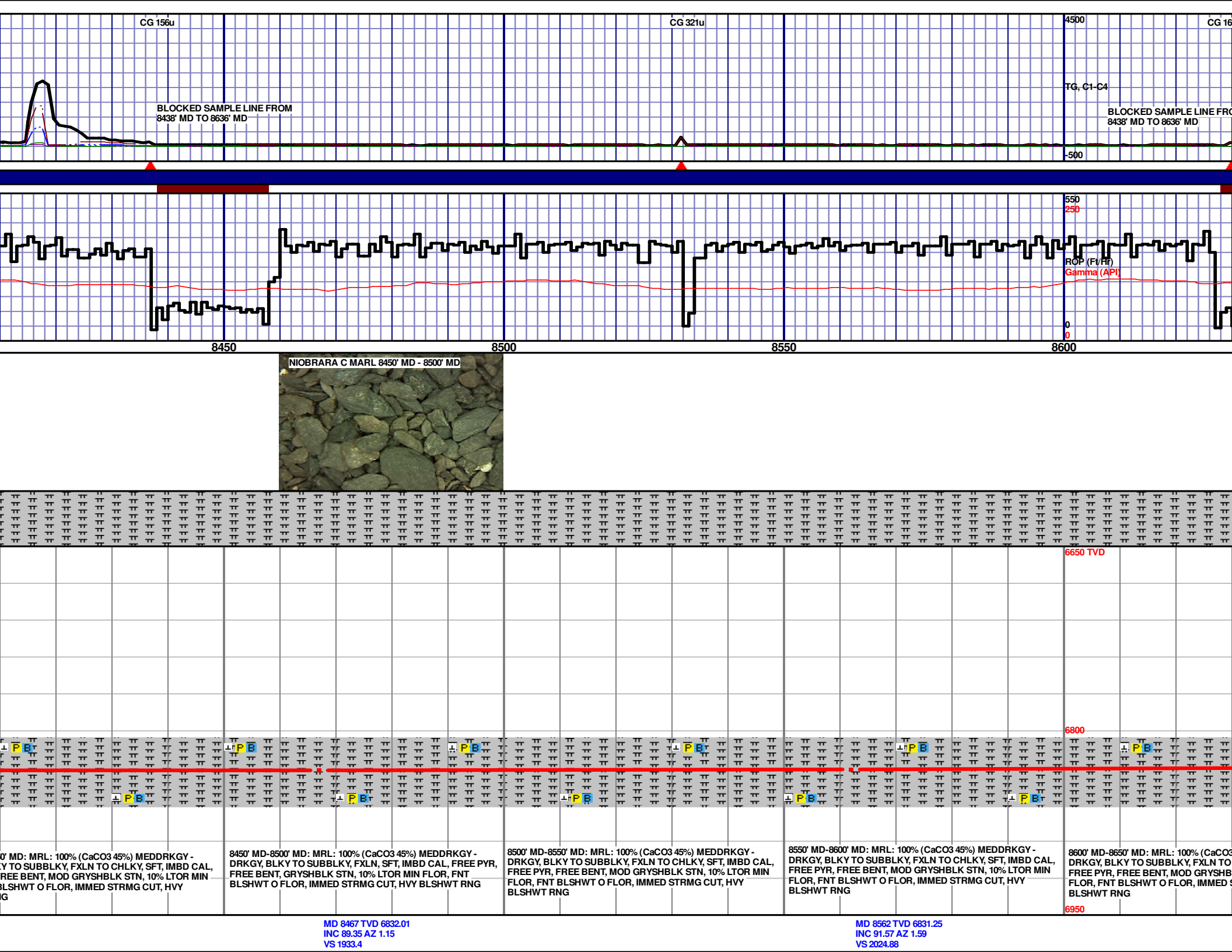
CG 2042u

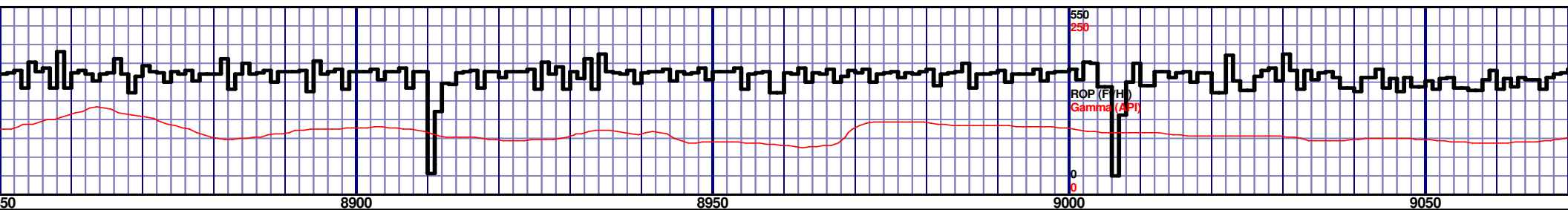


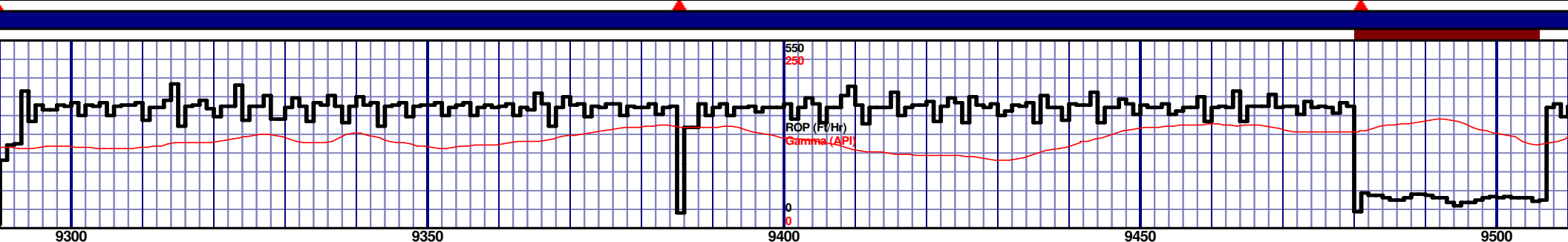


7950' MD-8000' MD: MRL:
DRKGY, BLKY TO SUBBL
FREE PYR, FREE BENT, M
FLOR, FNT BLSHWT O F
BLSHWT RNG

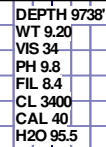
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INC 89.2 AZ 0.9
VS 1387.8



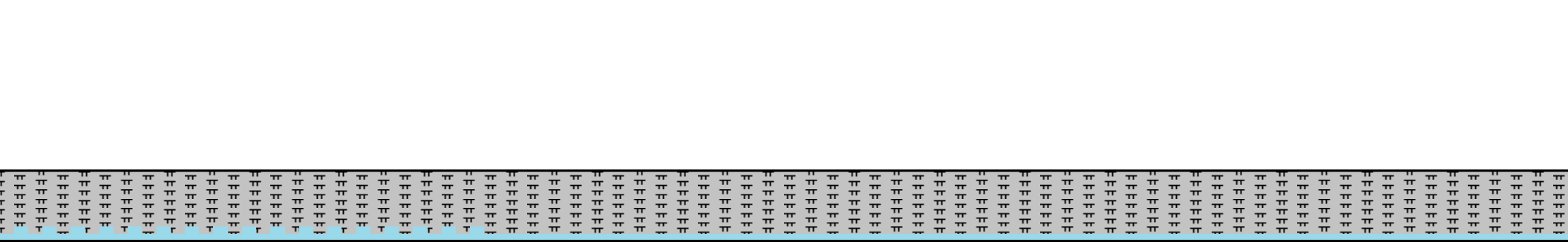
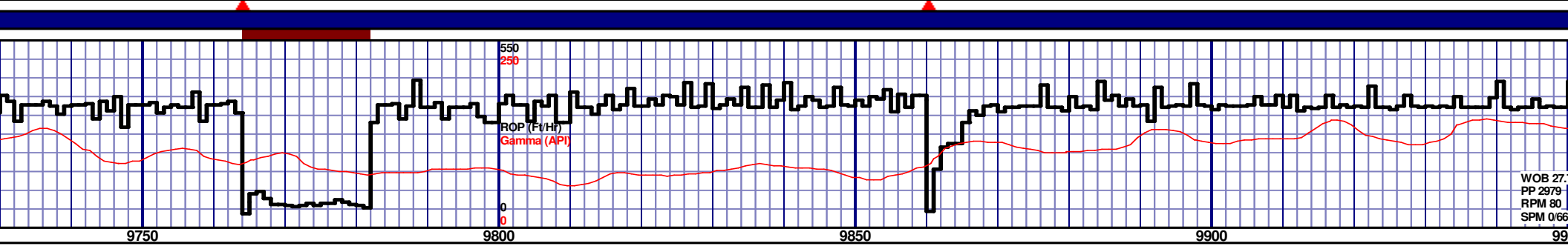
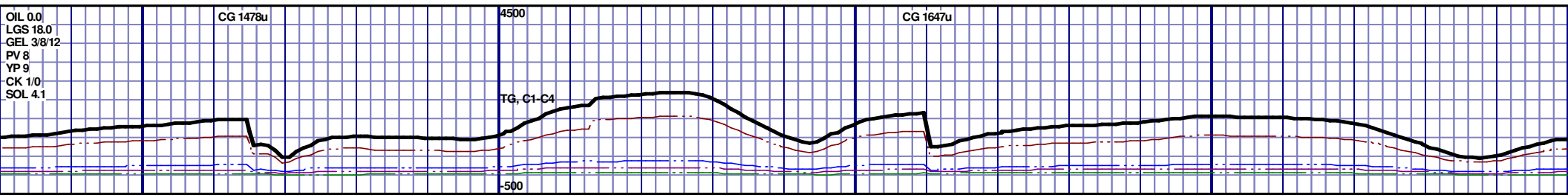
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MD 9321 TVD 6829.96 INC 90.12 AZ 359.31 VS 2747.65	MD 9416 TVD 6828.55 INC 91.6 AZ 358.97 VS 2838.07
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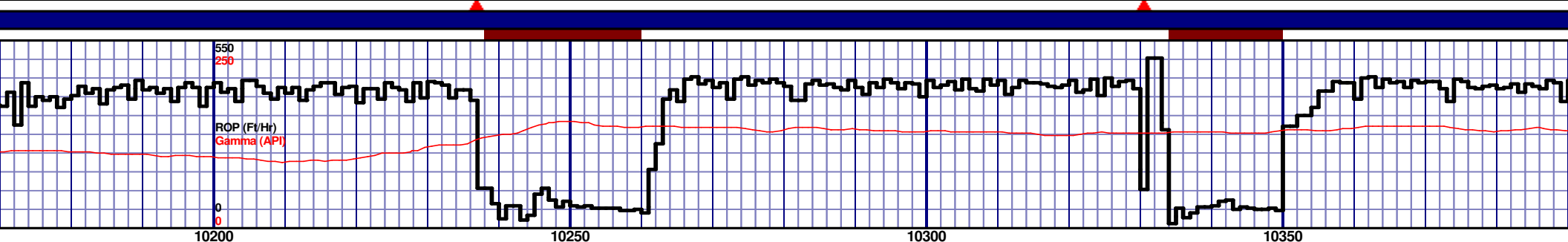
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INC 90.52 AZ 0.22	INC 89.54 AZ 0.27	INC 90.46 AZ 0.68
VS 2927.76	VS 3018.73	VS 3109.82

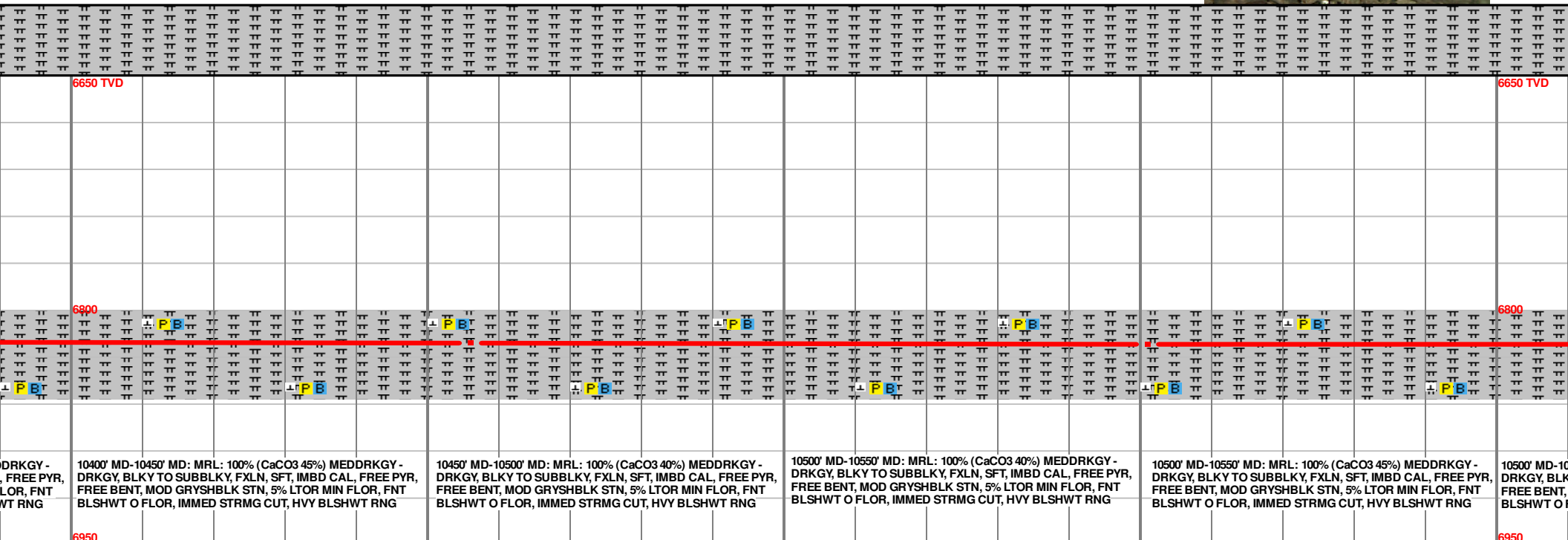
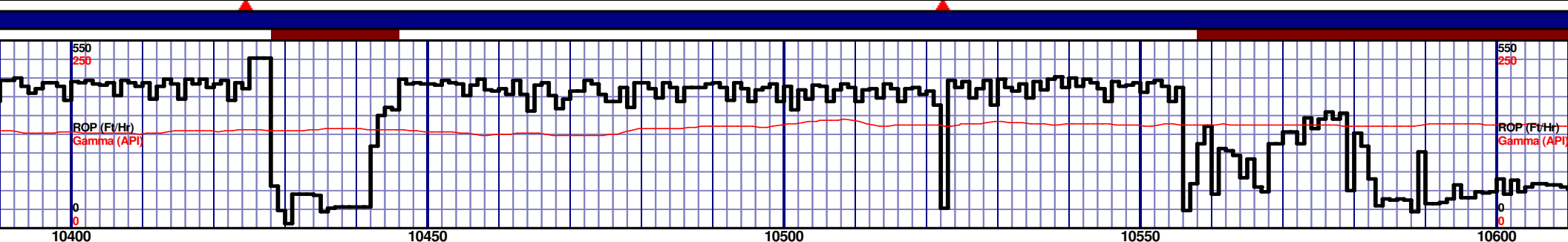


6650 TVD									
6890									
6950									
40%) MEDDRKGY - T, IMBD CAL, FREE PYR, GRYSHBLK STN, 10% R, IMMED STRMG CUT,									
9750' MD-9800' MD: MRL: 85% (CaCO3 40%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, 15% FREE CHALK, MOD GRYSHBLK STN, 10% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG									
9800' MD-9850' MD: MRL: 90% (CaCO3 43%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN TO CHLKY, SFT, IMBD CAL, FREE PYR, FREE BENT, 10% FREE CHALK, MOD GRYSHBLK STN, 10% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG									
9850' MD-9900' MD: 90% (CaCO3 43%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN TO CHLKY, SFT, IMBD CAL, FREE PYR, FREE BENT, 10% FREE CHALK, MOD GRYSHBLK STN, 10% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG									
9900' MD-9950' MD: 90% (CaCO3 43%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN TO CHLKY, SFT, IMBD CAL, FREE PYR, FREE BENT, 10% FREE CHALK, MOD GRYSHBLK STN, 10% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG									

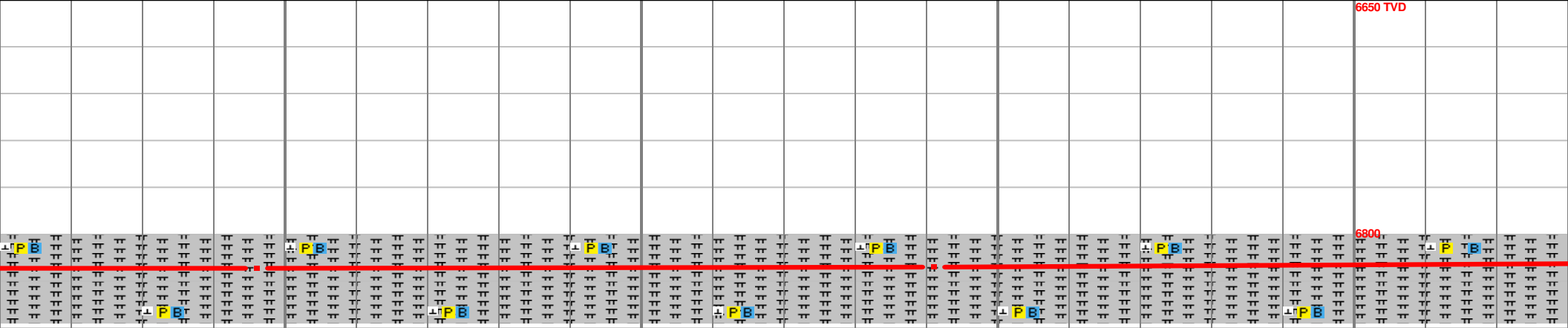
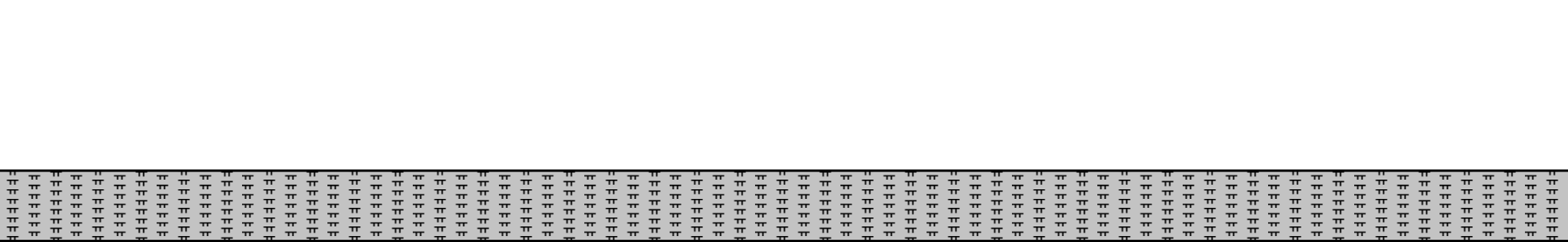
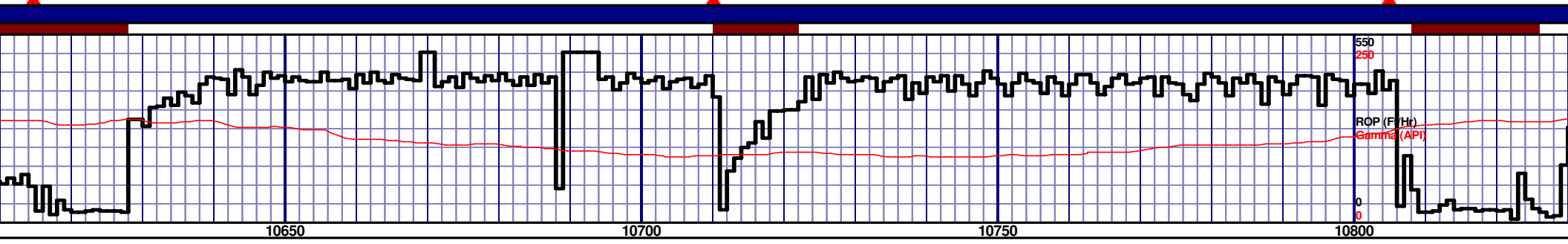
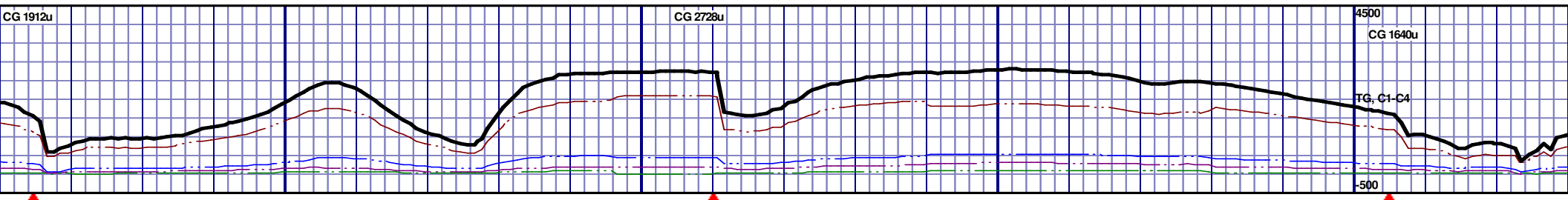
MD 9794 TVD 6826.7
INC 89.6 AZ 359.57
VS 3199.78

MD 9889 TVD 6826.78
INC 90.31 AZ 359.66
VS 3290.44

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MD 10551 TVD 6821.74
INC 90.18 AZ 0.25
VS 3923.6

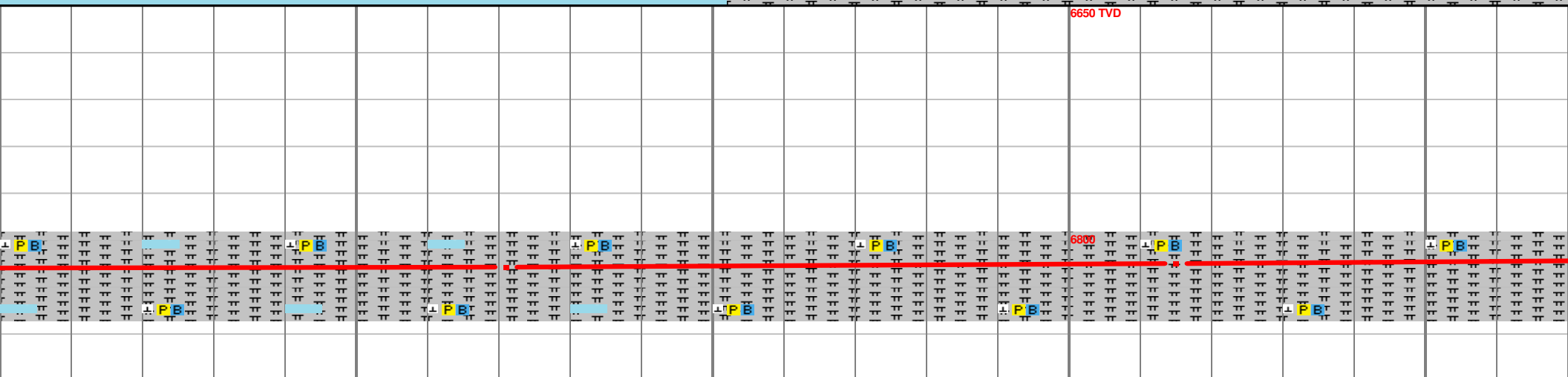
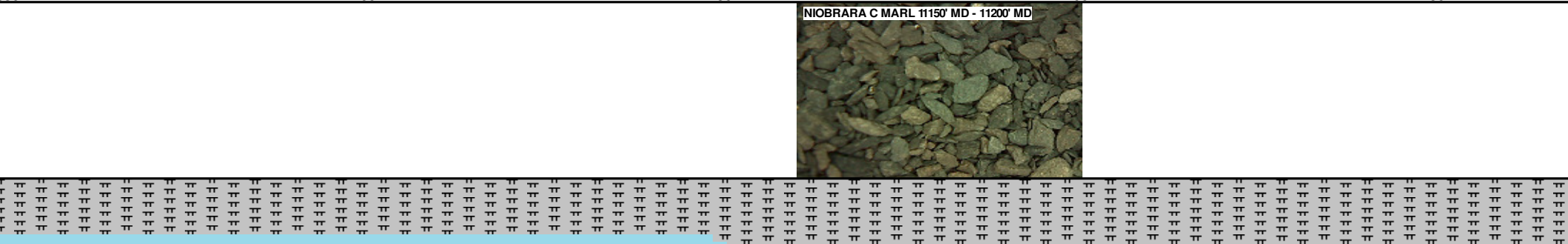
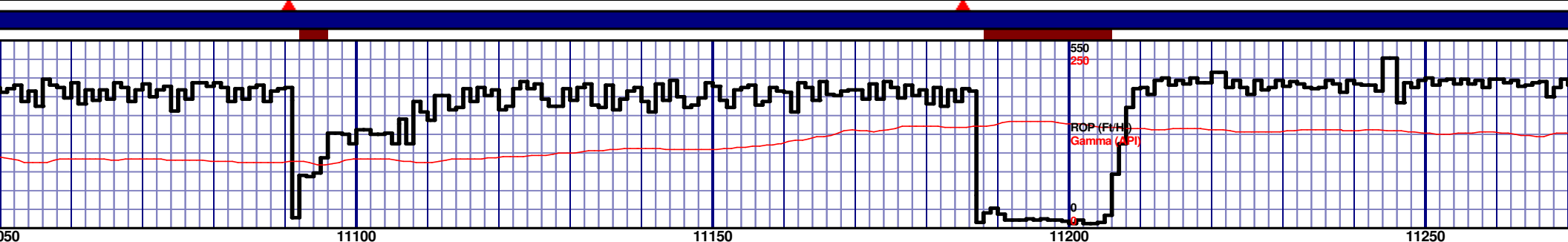


10650' MD: MRL: 100% (CaCO3 40%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, MOD GRYSBLK STN, 5% LTOR MIN FLOR, FNT FLOR, IMMED STRMG CUT, HVY BLSHWT RNG	10650' MD-10700' MD: MRL: 100% (CaCO3 40%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, MOD GRYSBLK STN, 5% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG	10700' MD-10750' MD: MRL: 100% (CaCO3 40%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, MOD GRYSBLK STN, 5% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG	10750' MD-10800' MD: MRL: 100% (CaCO3 45%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, MOD GRYSBLK STN, 5% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG	10800' MD-10850' MD: MRL: 100% (CaCO3 45%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, MOD GRYSBLK STN, 5% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG
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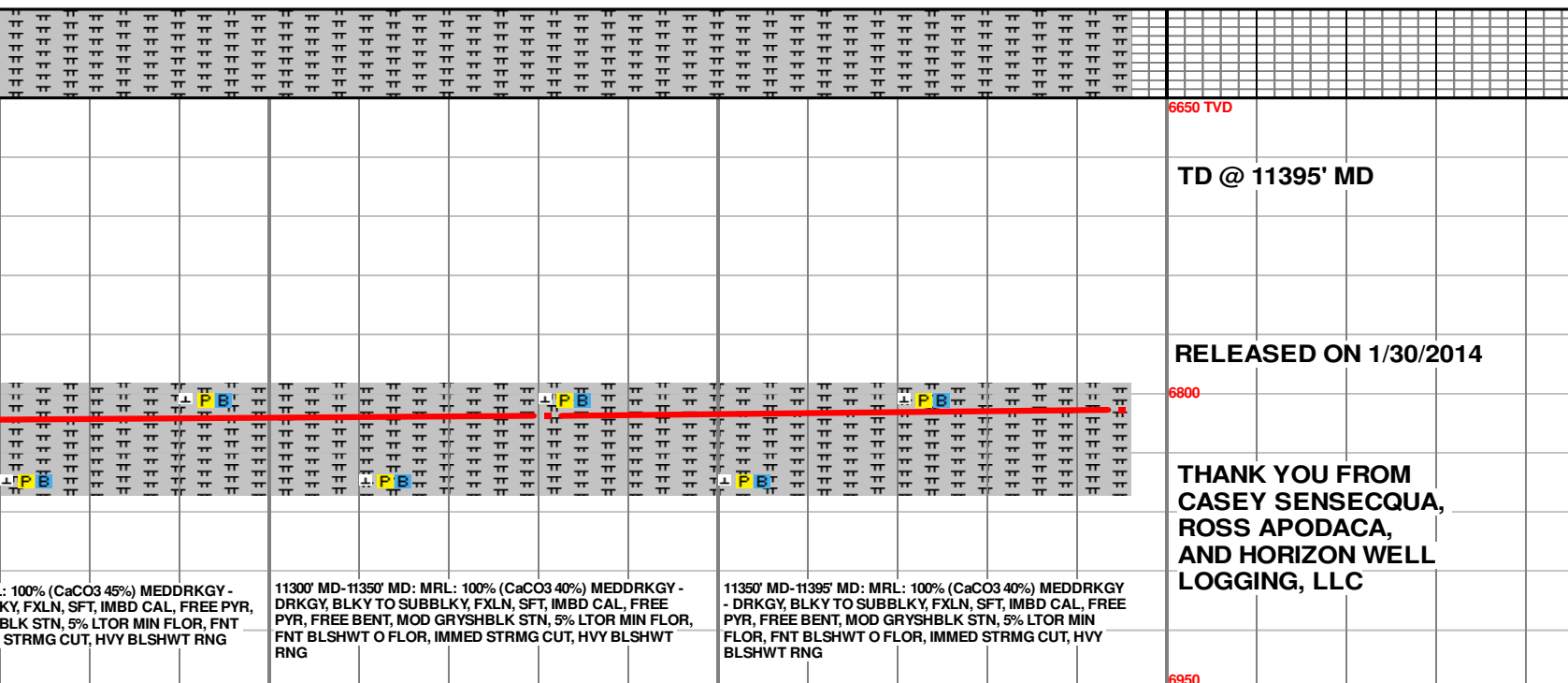
MD 10646 TVD 6821.85
INC 89.69 AZ 0.01
VS 4014.52

MD 10741 TVD 6820.72
INC 91.66 AZ 0.29
VS 4105.44

6950



11050' MD-11100' MD: MRL: 80% (CaCO3 45%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, 20% FREE CHALK, MOD GRYSHLBK STN, 5% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG	11100' MD-11150' MD: MRL: 80% (CaCO3 45%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, 20% FREE CHALK, MOD GRYSHLBK STN, 5% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG	11150' MD-11200' MD: MRL: 100% (CaCO3 40%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, MOD GRYSHLBK STN, 5% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG	11200' MD-11250' MD: MRL: 100% (CaCO3 40%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, MOD GRYSHLBK STN, 5% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG	11250' MD-11300' MD: MRL: 100% (CaCO3 40%) MEDDRKGY - DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE PYR, FREE BENT, MOD GRYSHLBK STN, 5% LTOR MIN FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY BLSHWT RNG
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6950

11350' MD-11395' MD: MRL: 100% (CaCO₃ 40%) MEDDRKGY
- DRKGY, BLKY TO SUBBLKY, FXLN, SFT, IMBD CAL, FREE
PYR, FREE BENT, MOD GRYSHLK STN, 5% LTOR MIN
FLOR, FNT BLSHWT O FLOR, IMMED STRMG CUT, HVY
BLSHWT RNG

MD 11395 TVD 6807.92
INC 92.65 AZ 358.03
VS 4727.12