

MD 2733 TVD 2722.86
INC 9.58 AZ 32.23
VS 88.02

WOB 18.4K
PP 2840
RPM 75
SPM 77/77

ROP (ft/hr)
Gamma (API)

MD 2827 TVD 2815.69
INC 8.54 AZ 31.8
VS 96.78

MD 2922 TVD 2909.51
INC 9.48 AZ 35.43
VS 105.93

2750

2800

2850

2900

2700'- 2800': SLTST: 70% LTGY -
MEDLTGY, FRI, FN TO MED GRN, W
SRTD, CALC CMT, SANDY, IMBD
PYR, IMBD SS LAMN, INTGR POR,
NO STN, NO MIN FLOR, NO O
FLOR, NO CUT, NO RNG

PIERRE (2800' MD - 2900' MD)

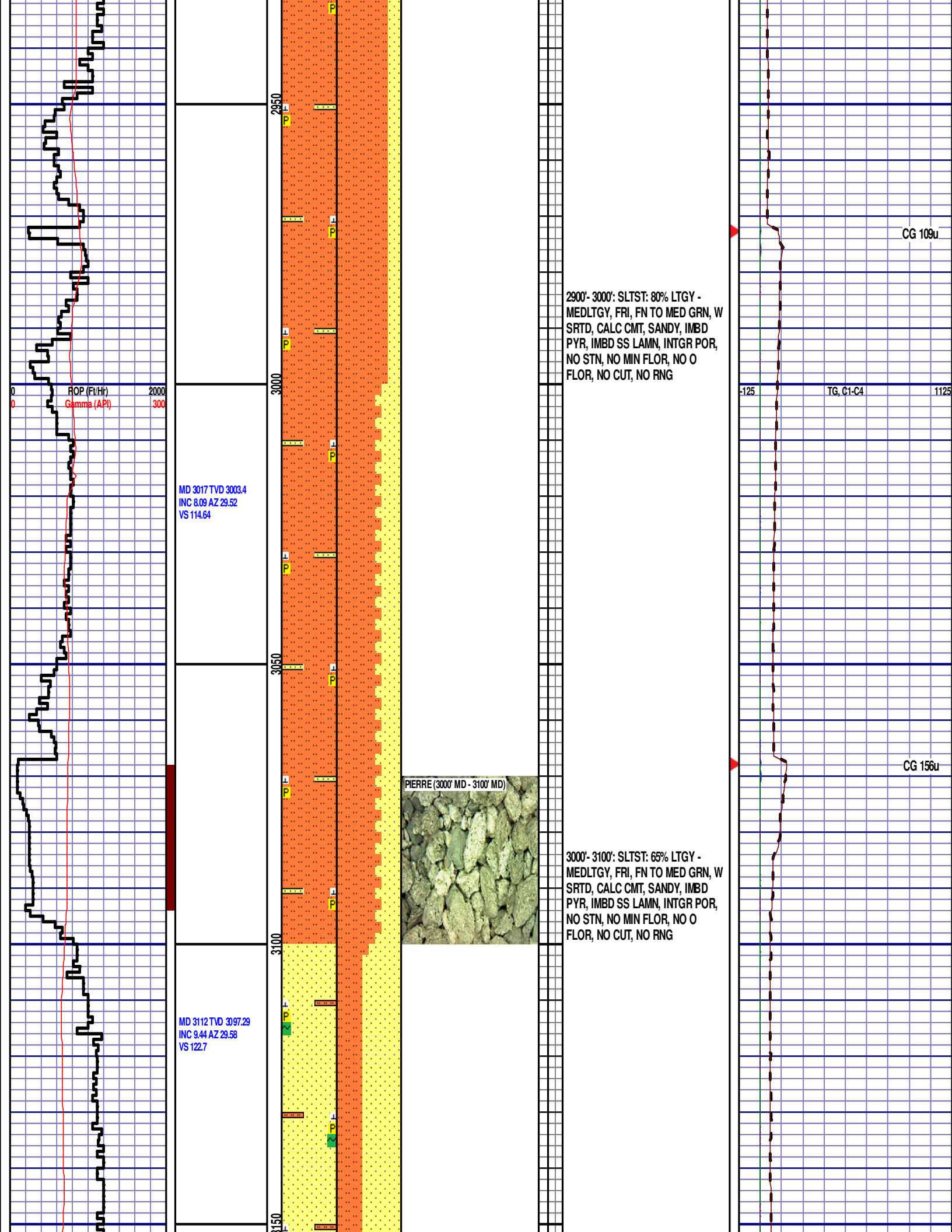


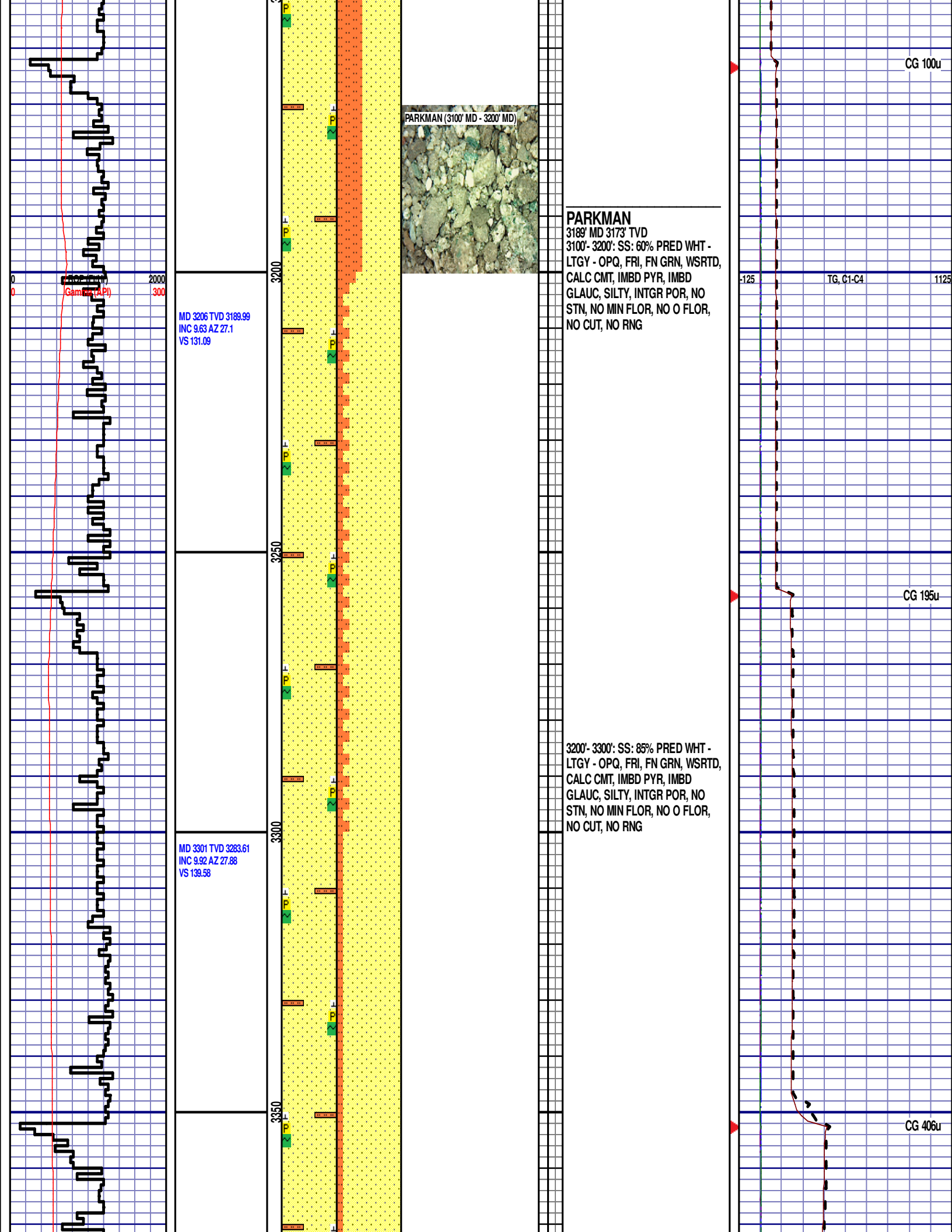
2800'- 2900': SLTST: 85% LTGY -
MEDLTGY, FRI, FN TO MED GRN, W
SRTD, CALC CMT, SANDY, IMBD
PYR, IMBD SS LAMN, INTGR POR,
NO STN, NO MIN FLOR, NO O
FLOR, NO CUT, NO RNG

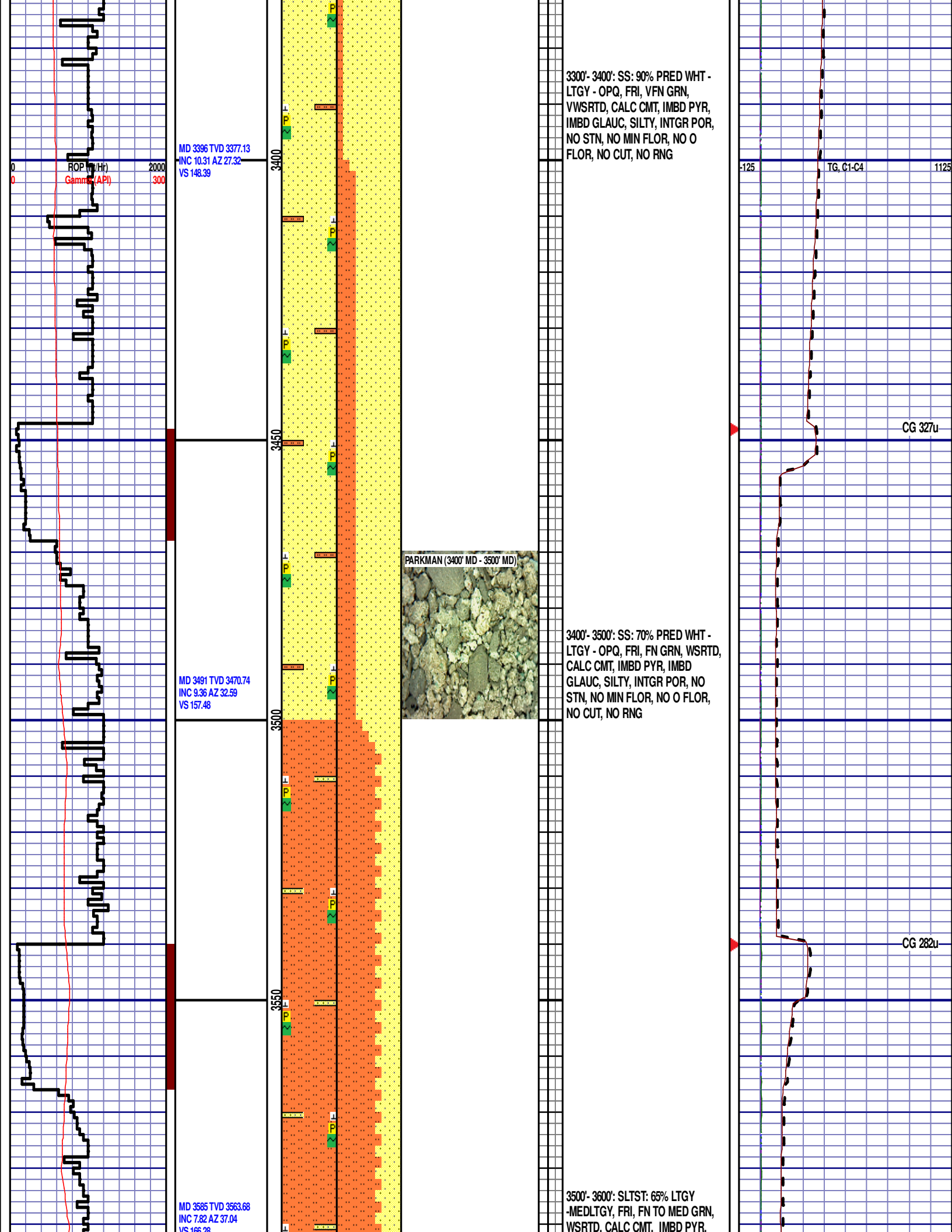
CG 102u

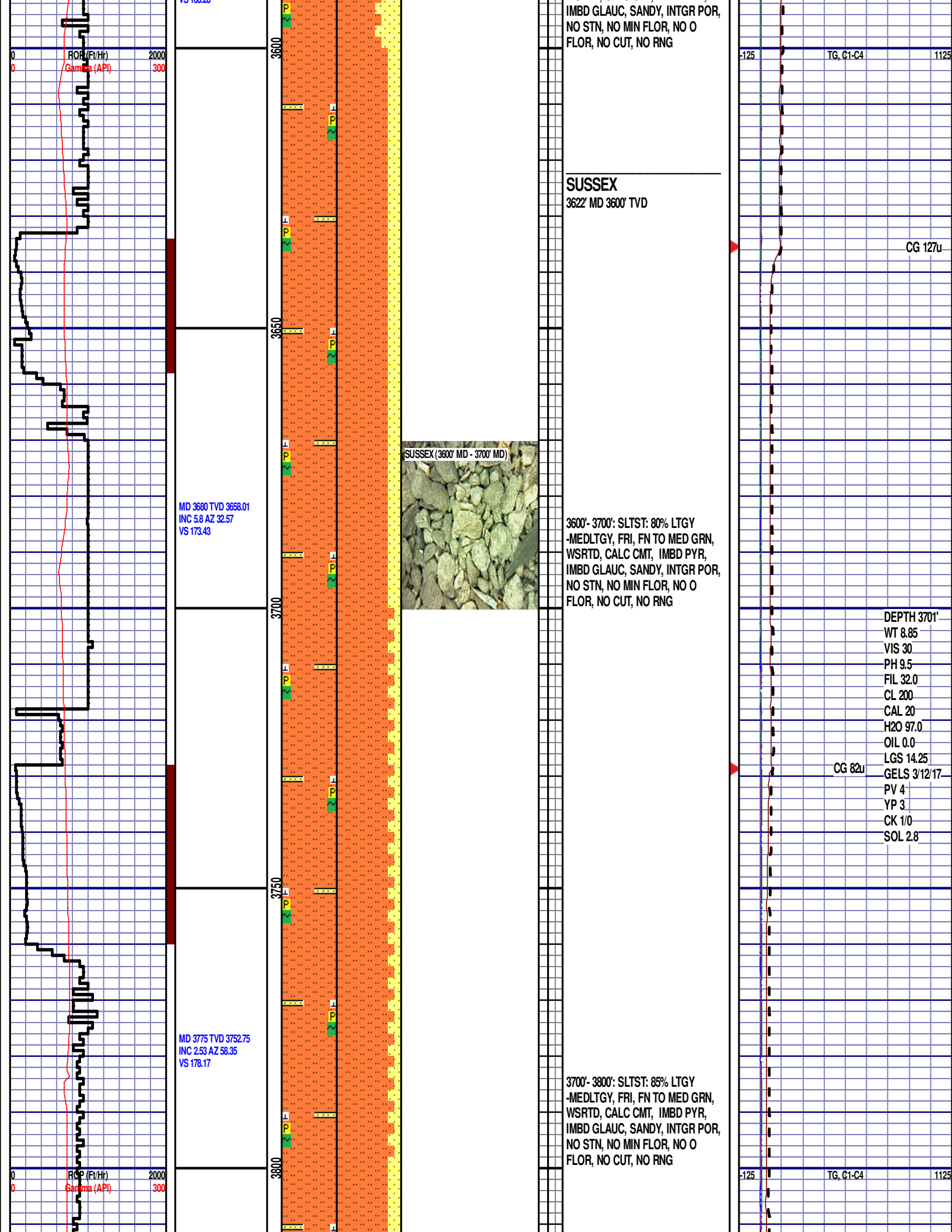
TG, C1-C4

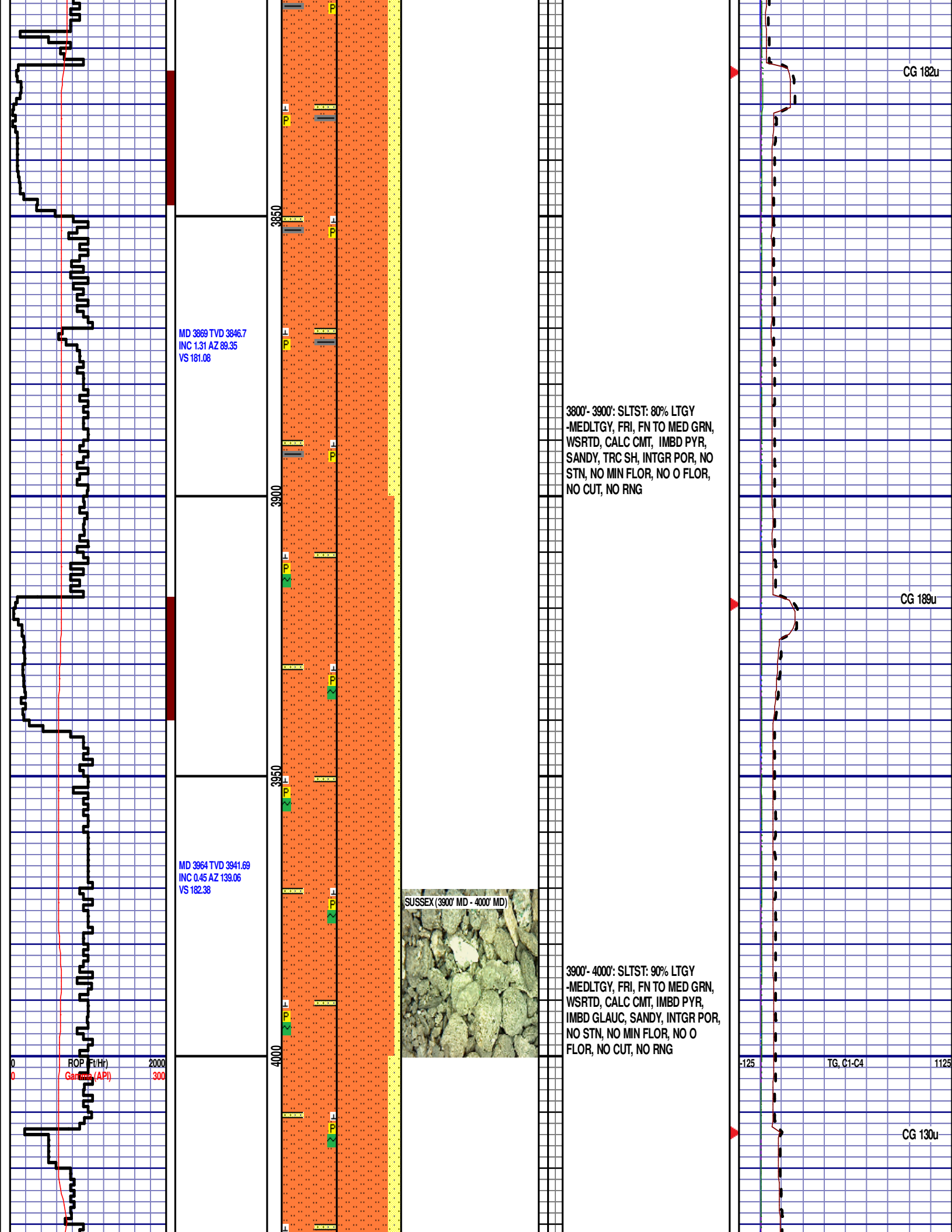
CG 94u

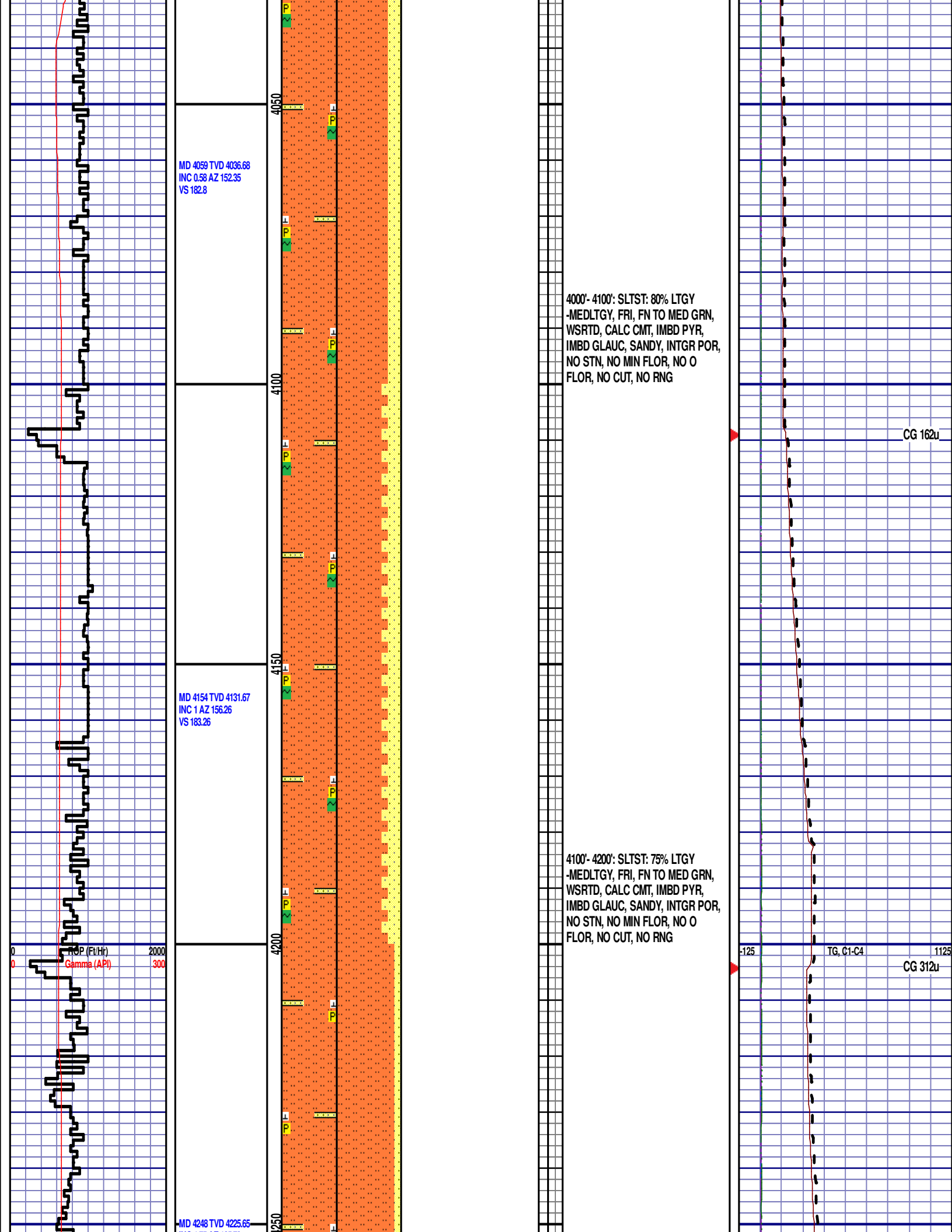


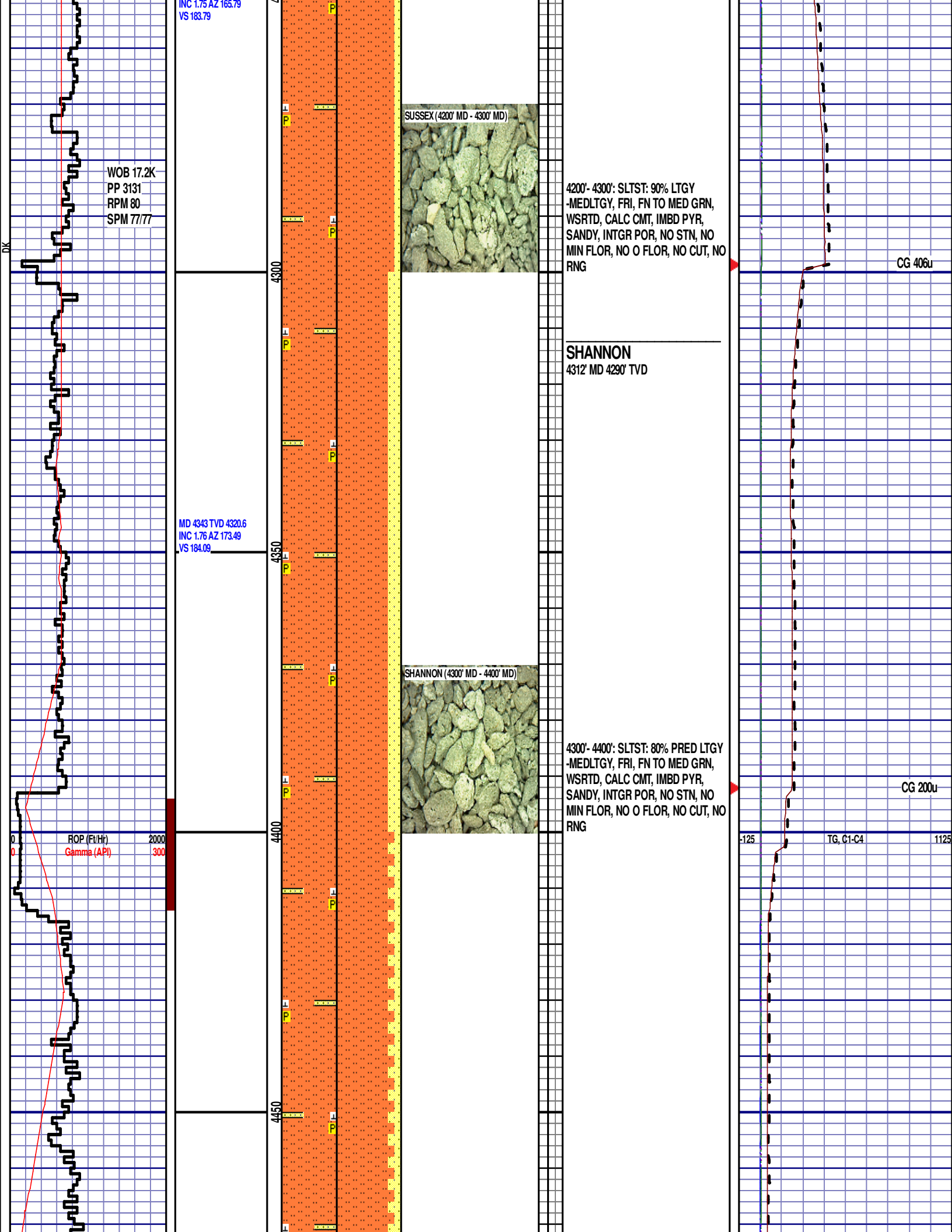


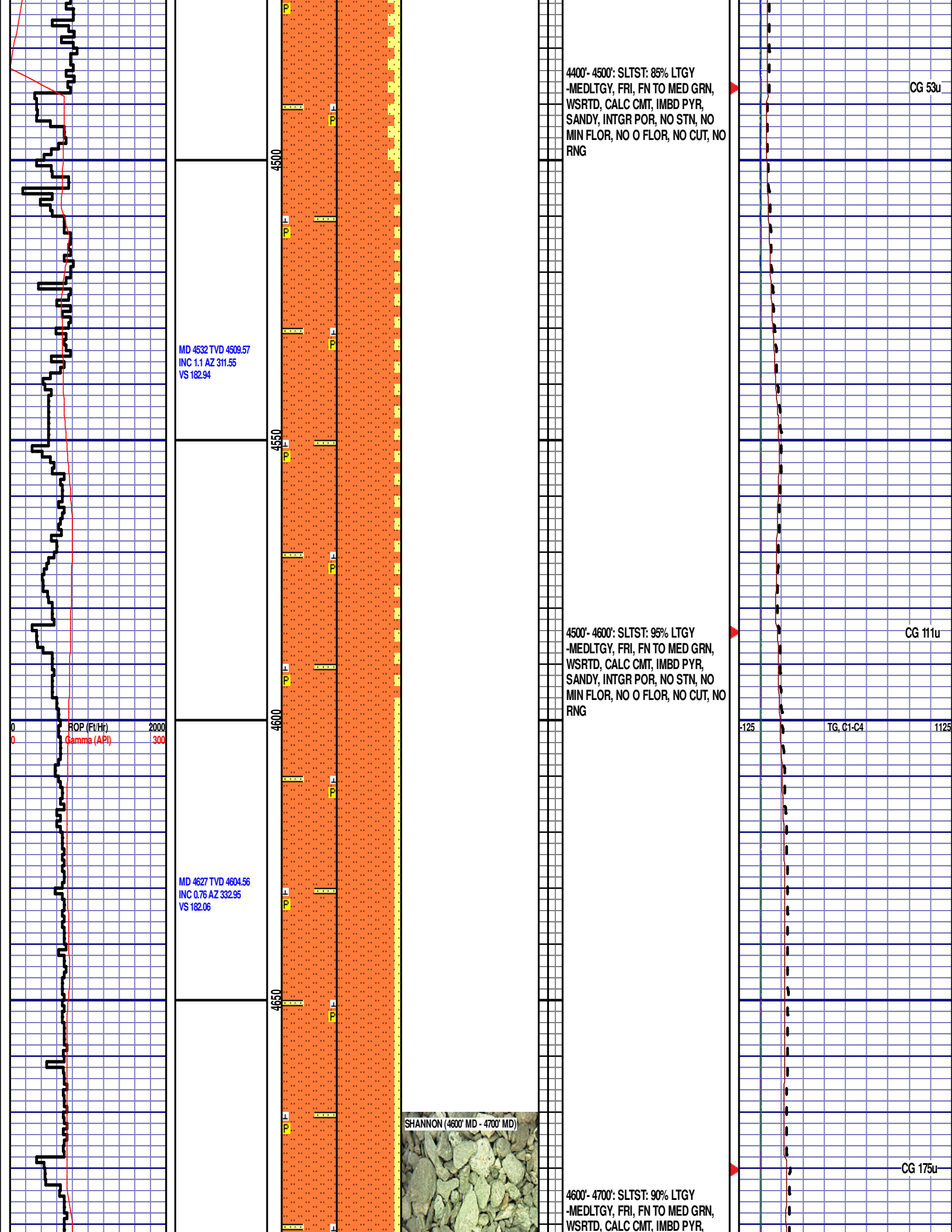


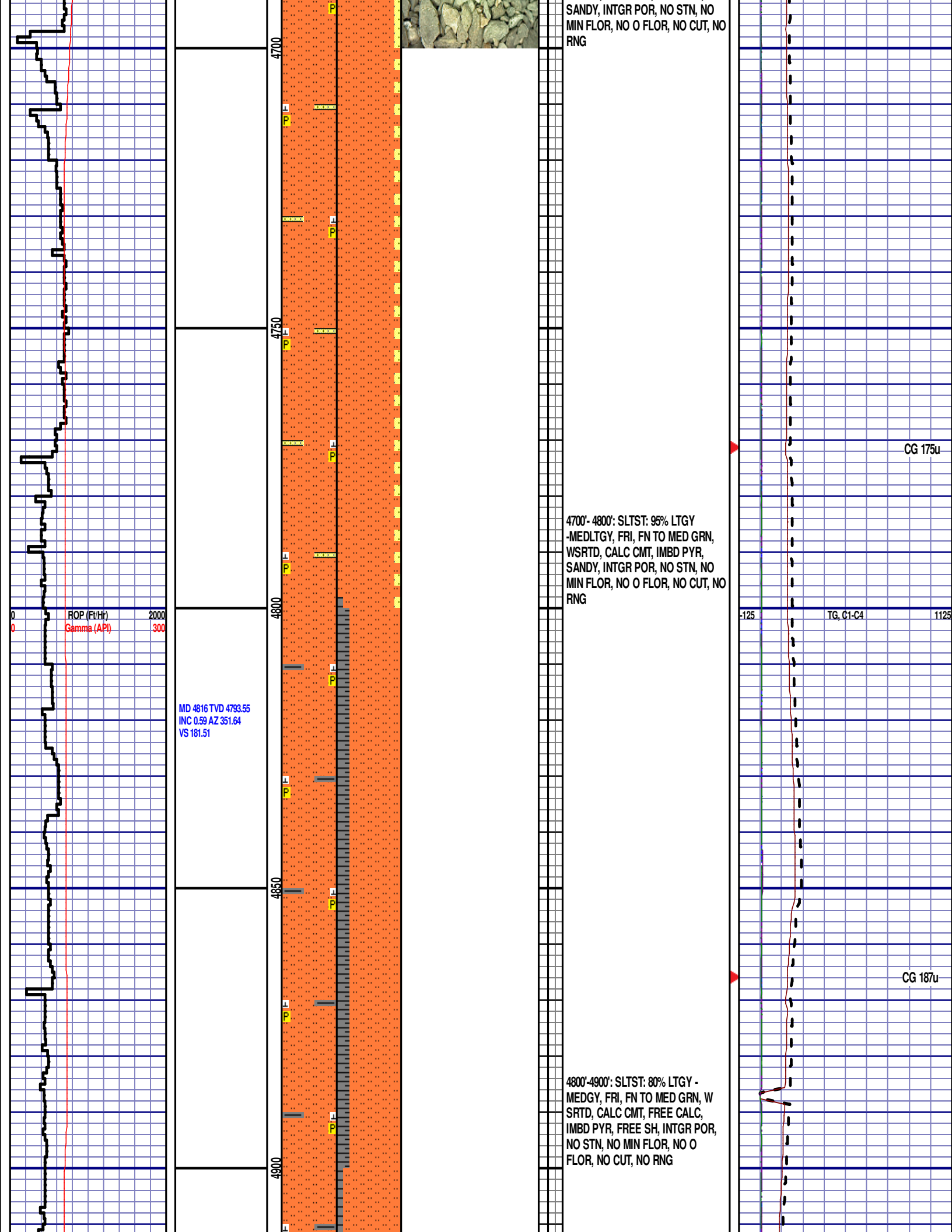


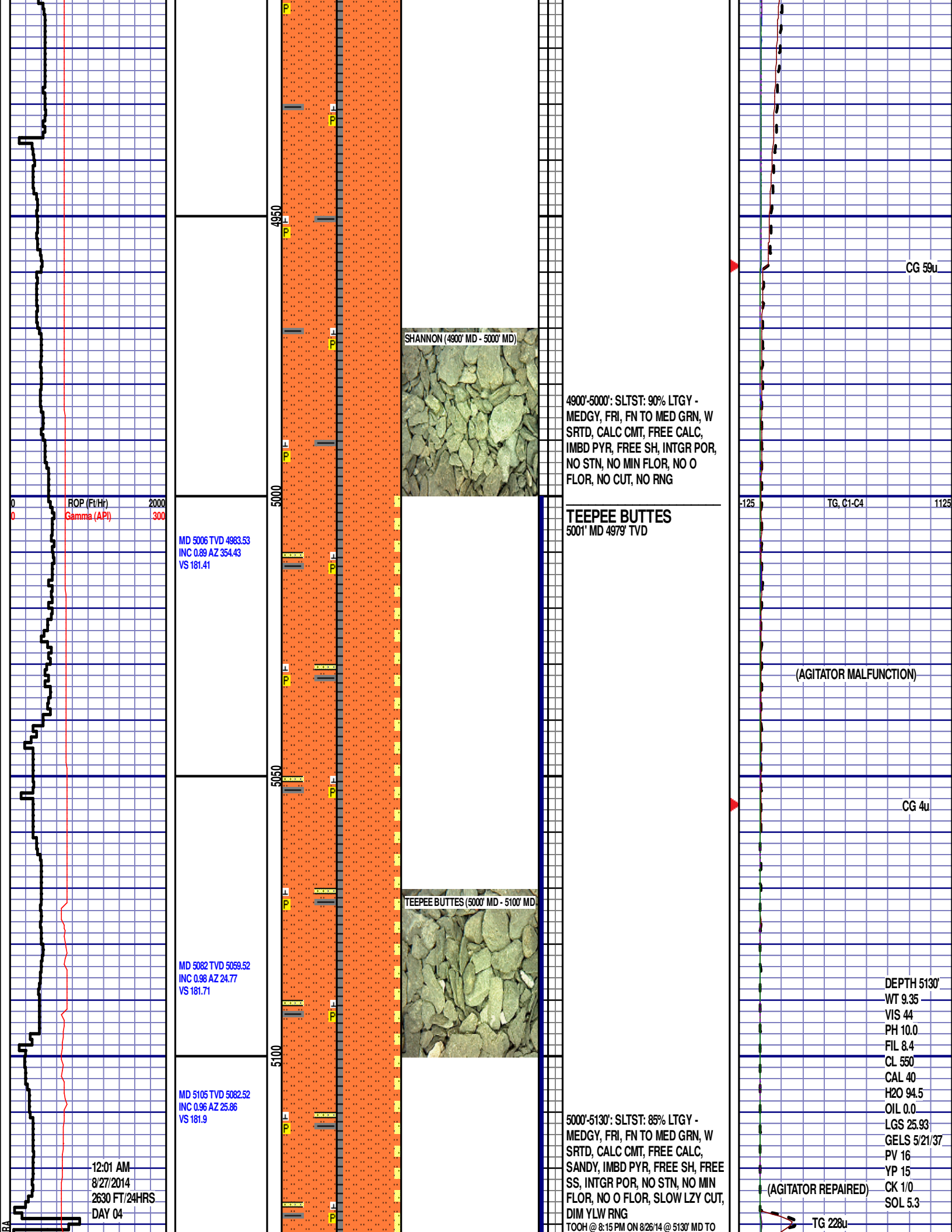












WOB 6.9K
PP 2870
RPM 0
SPM 77/77

ROP (Ft/Hr)
Gamma (API)

MD 5200 TVD 5176.96
INC 10.43 AZ 72.97
VS 190.71

MD 5295 TVD 5269.06
INC 17.67 AZ 76.71
VS 213.35

5150

5200

5250

5300

5350

PICK UP CURVE ASSEMBLY. TIH @ 3:30 AM
ON 8/27/14. RESUMED DRILLING @ 8:35 AM
ON 8/27/2014 W/ BIT #3, 8.75", SMITH SDI513,
(S/N) JH1256 IN @ 5130' MD

SWITCHING TO 30' SAMPLE
INTERVAL

5130'-5160': SLTST: 80% LTGY -
MEDGY, FRI, FN TO MED GRN, W
SRTD, CALC CMT, FREE CALC,
SANDY, IMBD PYR, FREE SH,
INTGR POR, NO STN, NO MIN
FLOR, NO O FLOR, SLOW LZY CUT,
DIM YLW RNG

5160'-5190': SLTST: 85% LTGY -
MEDGY, FRI, FN TO MED GRN, W
SRTD, CALC CMT, FREE CALC,
SANDY, IMBD PYR, TRC FREE SH,
INTGR POR, NO STN, NO MIN
FLOR, NO O FLOR, SLOW LZY CUT,
DIM YLW RNG

5190'-5220': SLTST: 80% LTGY -
MEDGY, FRI, FN TO MED GRN, W
SRTD, CALC CMT, FREE CALC,
SANDY, IMBD PYR, TRC FREE SH,
INTGR POR, NO STN, NO MIN
FLOR, NO O FLOR, SLOW LZY CUT,
DIM YLW RNG

5220'-5250': SLTST: 75% LTGY -
MEDGY, FRI, FN TO MED GRN, W
SRTD, CALC CMT, FREE CALC,
SANDY, IMBD PYR, TRC FREE SH,
INTGR POR, NO STN, NO MIN
FLOR, NO O FLOR, SLOW LZY CUT,
DIM YLW RNG

5250'-5280': SLTST: 85% LTGY -
MEDGY, FRI, FN TO MED GRN, W
SRTD, CALC CMT, FREE CALC,
SANDY, IMBD PYR, INTGR POR, NO
STN, NO MIN FLOR, NO O FLOR,
SLOW LZY CUT, DIM YLW RNG

5280'-5310': SLTST: 85% LTGY -
MEDGY, FRI, FN TO MED GRN, W
SRTD, CALC CMT, FREE CALC,
SANDY, IMBD PYR, INTGR POR, NO
STN, NO MIN FLOR, NO O FLOR,
SLOW LZY CUT, DIM YLW RNG

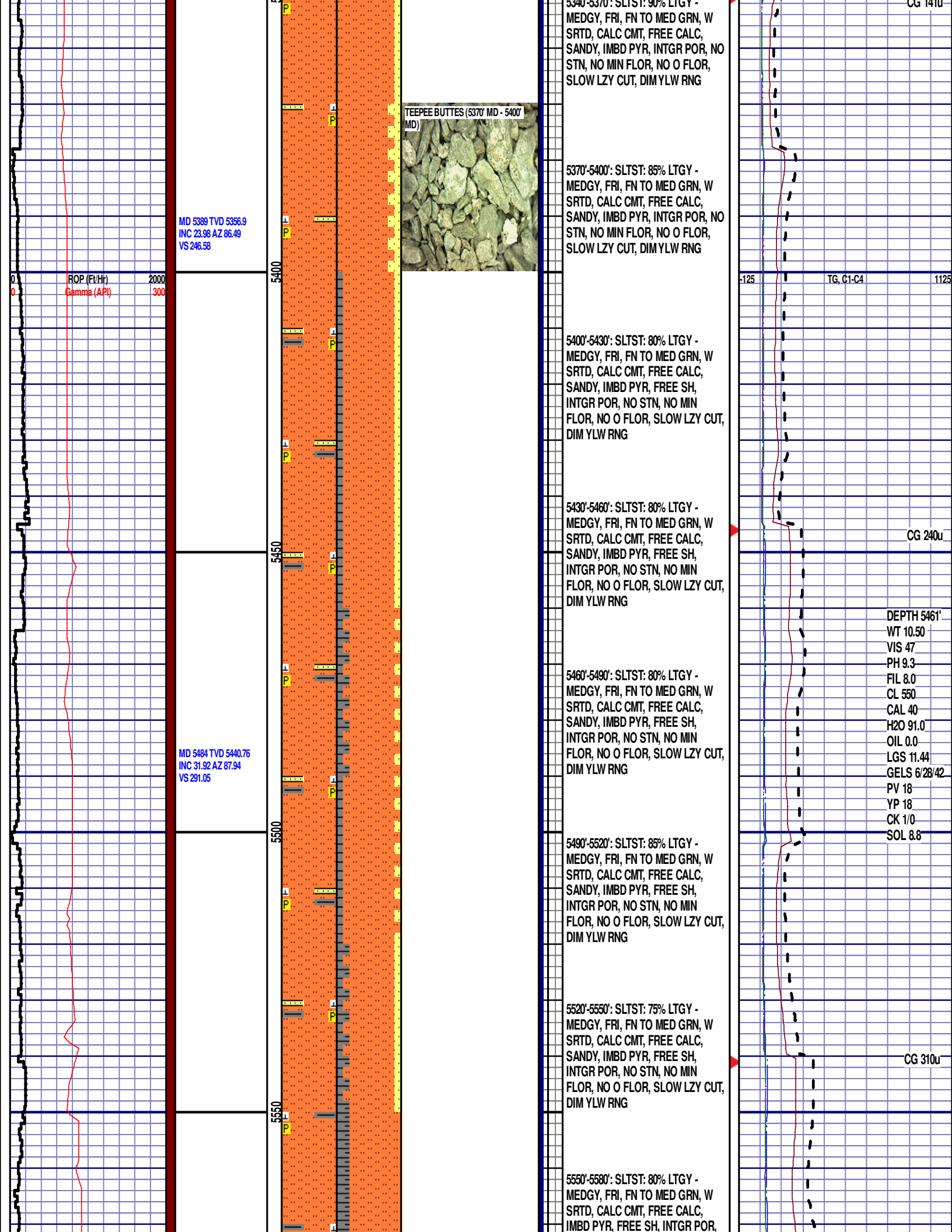
5310'-5340': SLTST: 85% LTGY -
MEDGY, FRI, FN TO MED GRN, W
SRTD, CALC CMT, FREE CALC,
SANDY, IMBD PYR, FREE SH,
INTGR POR, NO STN, NO MIN
FLOR, NO O FLOR, SLOW LZY CUT,
DIM YLW RNG

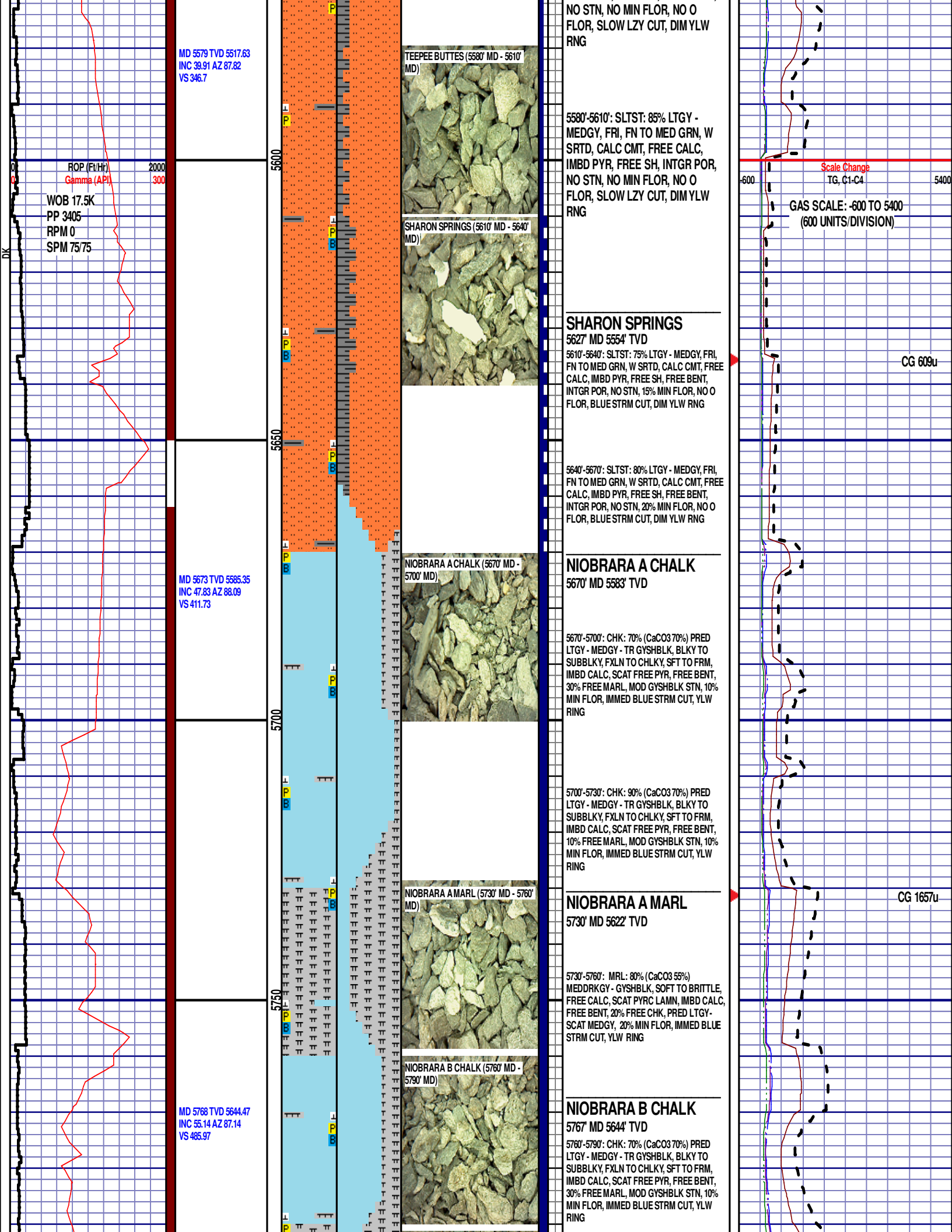
5340'-5370': SLTST: 80% LTGY -

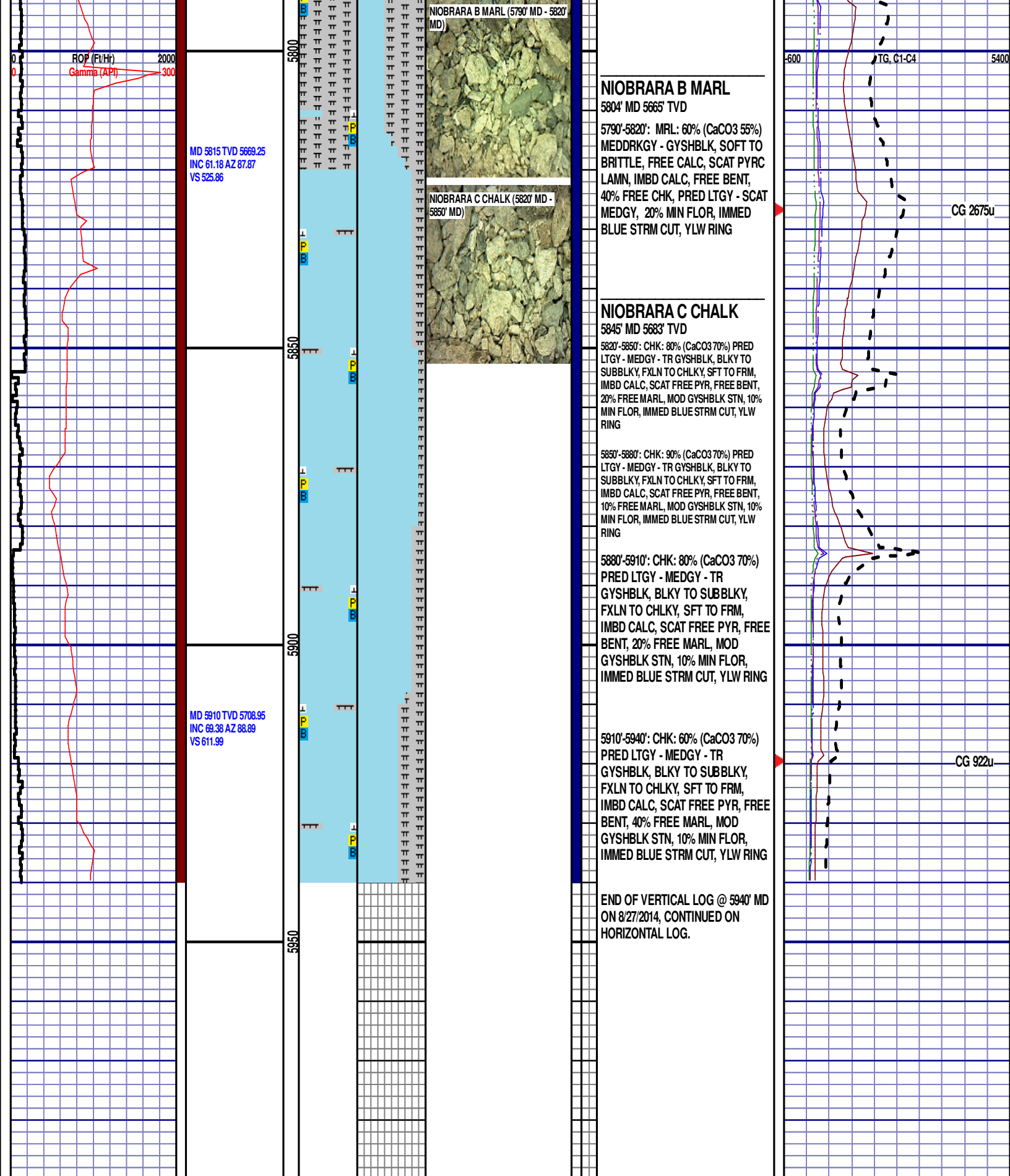
CG 75u

TG, C1-C4

CG 184u







ROP (Fe/Hr)
Gamma (API)

MD 5815 TVD 5669.25
INC 61.18 AZ 87.87
VS 525.86

MD 5910 TVD 5708.95
INC 69.38 AZ 88.89
VS 611.99

NIORARA B MARL (5790' MD - 5820' MD)

NIORARA C CHALK (5820' MD - 5850' MD)

NIORARA B MARL

5804' MD 5665' TVD
5790'-5820': MRL: 60% (CaCO3 55%)
MEDDRKGY - GYSHBLK, SOFT TO
BRITTLE, FREE CALC, SCAT PYRC
LAMN, IMBD CALC, FREE BENT,
40% FREE CHK, PRED LTGY - SCAT
MEDGY, 20% MIN FLOR, IMMED
BLUE STRM CUT, YLW RING

NIORARA C CHALK

5845' MD 5683' TVD
5820'-5850': CHK: 80% (CaCO3 70%) PRED
LTGY - MEDGY - TR GYSHBLK, BLKY TO
SUBBLKY, FXLN TO CHLKY, SFT TO FRM,
IMBD CALC, SCAT FREE PYR, FREE BENT,
20% FREE MARL, MOD GYSHBLK STN, 10%
MIN FLOR, IMMED BLUE STRM CUT, YLW
RING
5850'-5880': CHK: 90% (CaCO3 70%) PRED
LTGY - MEDGY - TR GYSHBLK, BLKY TO
SUBBLKY, FXLN TO CHLKY, SFT TO FRM,
IMBD CALC, SCAT FREE PYR, FREE BENT,
10% FREE MARL, MOD GYSHBLK STN, 10%
MIN FLOR, IMMED BLUE STRM CUT, YLW
RING
5880'-5910': CHK: 80% (CaCO3 70%)
PRED LTGY - MEDGY - TR
GYSHBLK, BLKY TO SUBBLKY,
FXLN TO CHLKY, SFT TO FRM,
IMBD CALC, SCAT FREE PYR, FREE
BENT, 20% FREE MARL, MOD
GYSHBLK STN, 10% MIN FLOR,
IMMED BLUE STRM CUT, YLW RING
5910'-5940': CHK: 60% (CaCO3 70%)
PRED LTGY - MEDGY - TR
GYSHBLK, BLKY TO SUBBLKY,
FXLN TO CHLKY, SFT TO FRM,
IMBD CALC, SCAT FREE PYR, FREE
BENT, 40% FREE MARL, MOD
GYSHBLK STN, 10% MIN FLOR,
IMMED BLUE STRM CUT, YLW RING

END OF VERTICAL LOG @ 5940' MD
ON 8/27/2014, CONTINUED ON
HORIZONTAL LOG.

600 TG, C1-C4 5400

CG 2675u

CG 922u