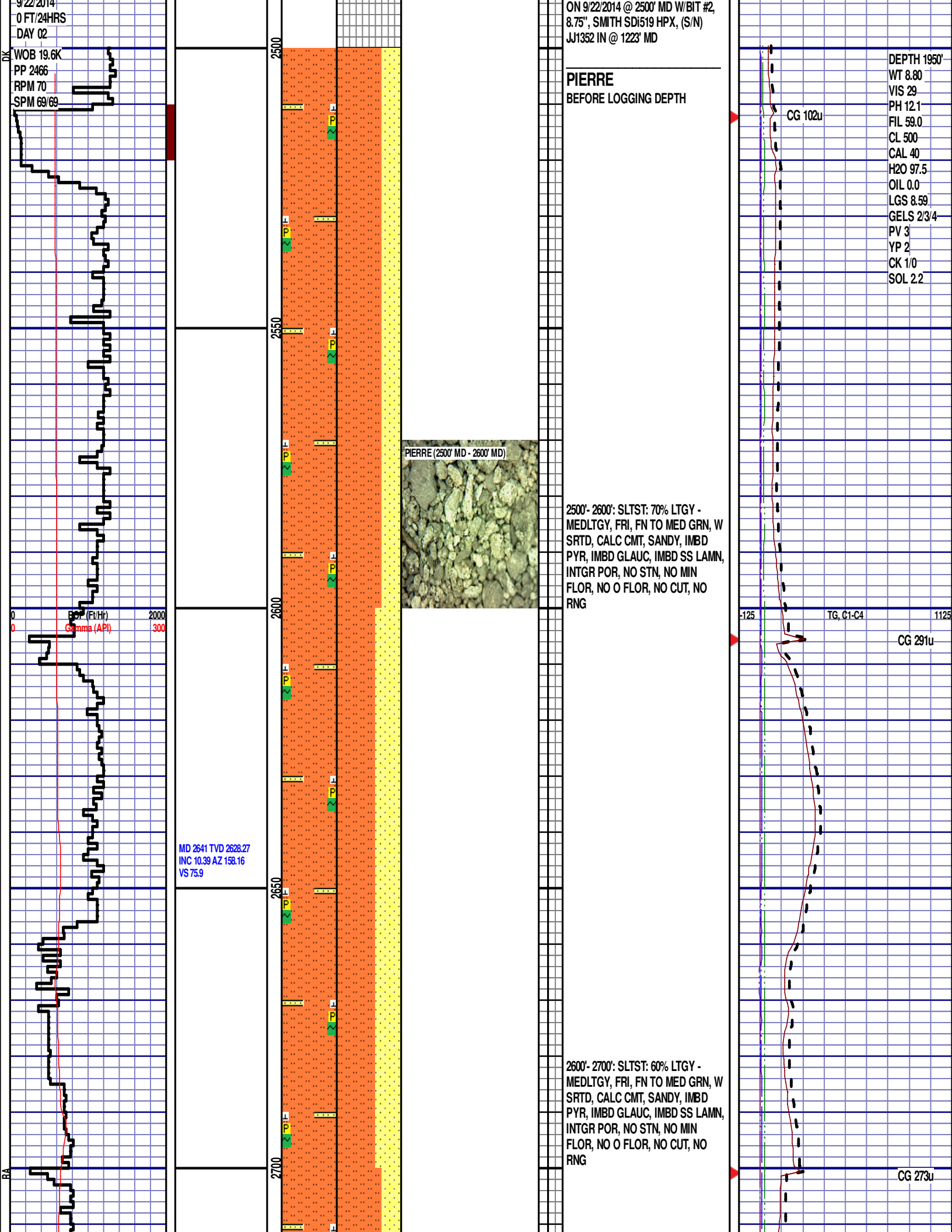


[illegible]



MD 2735 TVD 2720.85  
INC 9.56 AZ 154.21  
VS 83.93

2750

2800

2850

2900

ROP (Ft/Hr)  
Gamma (API)

2000  
300

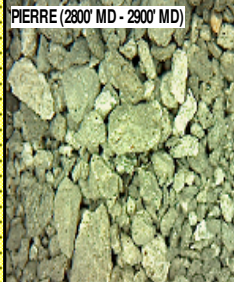
MD 2829 TVD 2813.54  
INC 9.61 AZ 159.11  
VS 91.56

MD 2924 TVD 2907.26  
INC 9.24 AZ 157.98  
VS 98.69

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

CG 215u

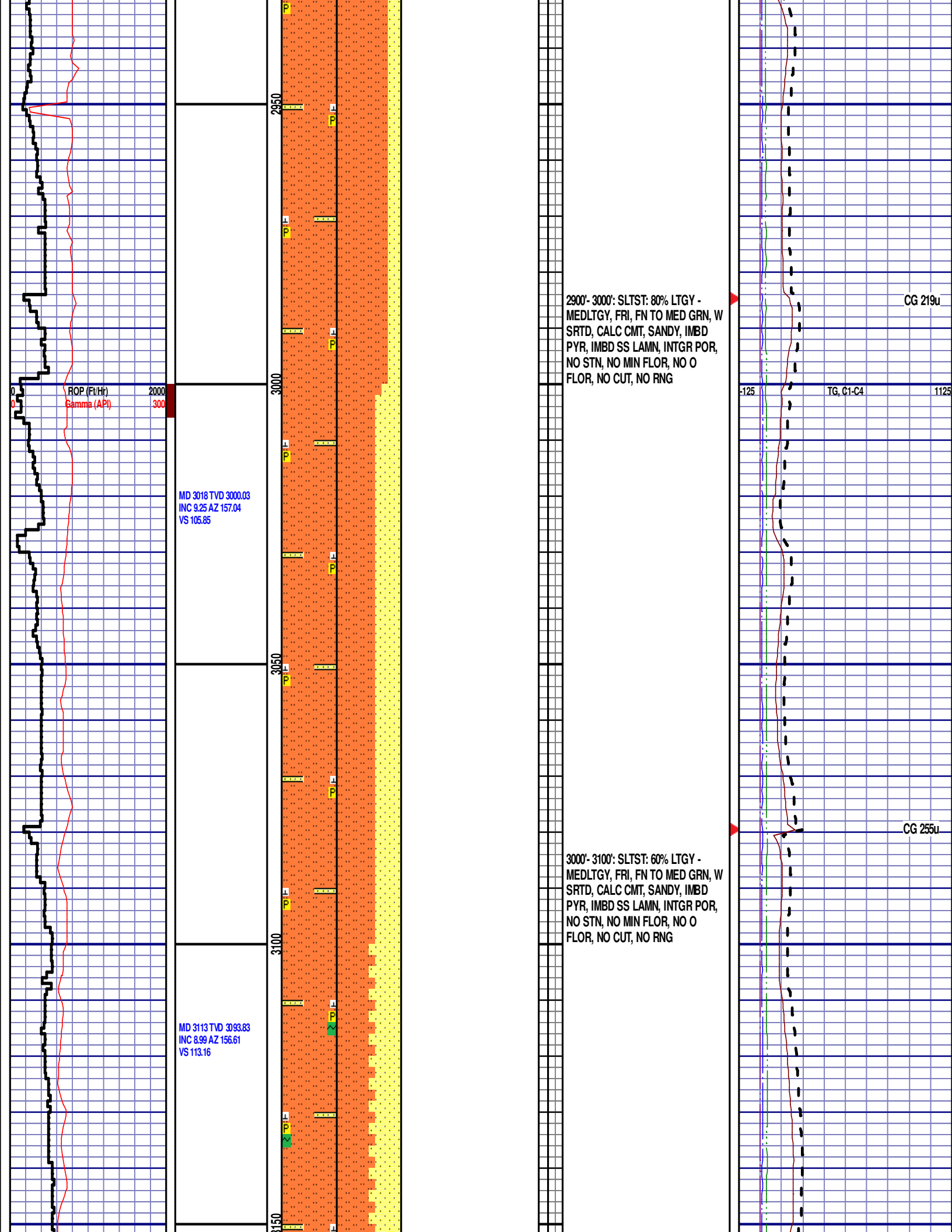
-125 TG, C1-C4 1125

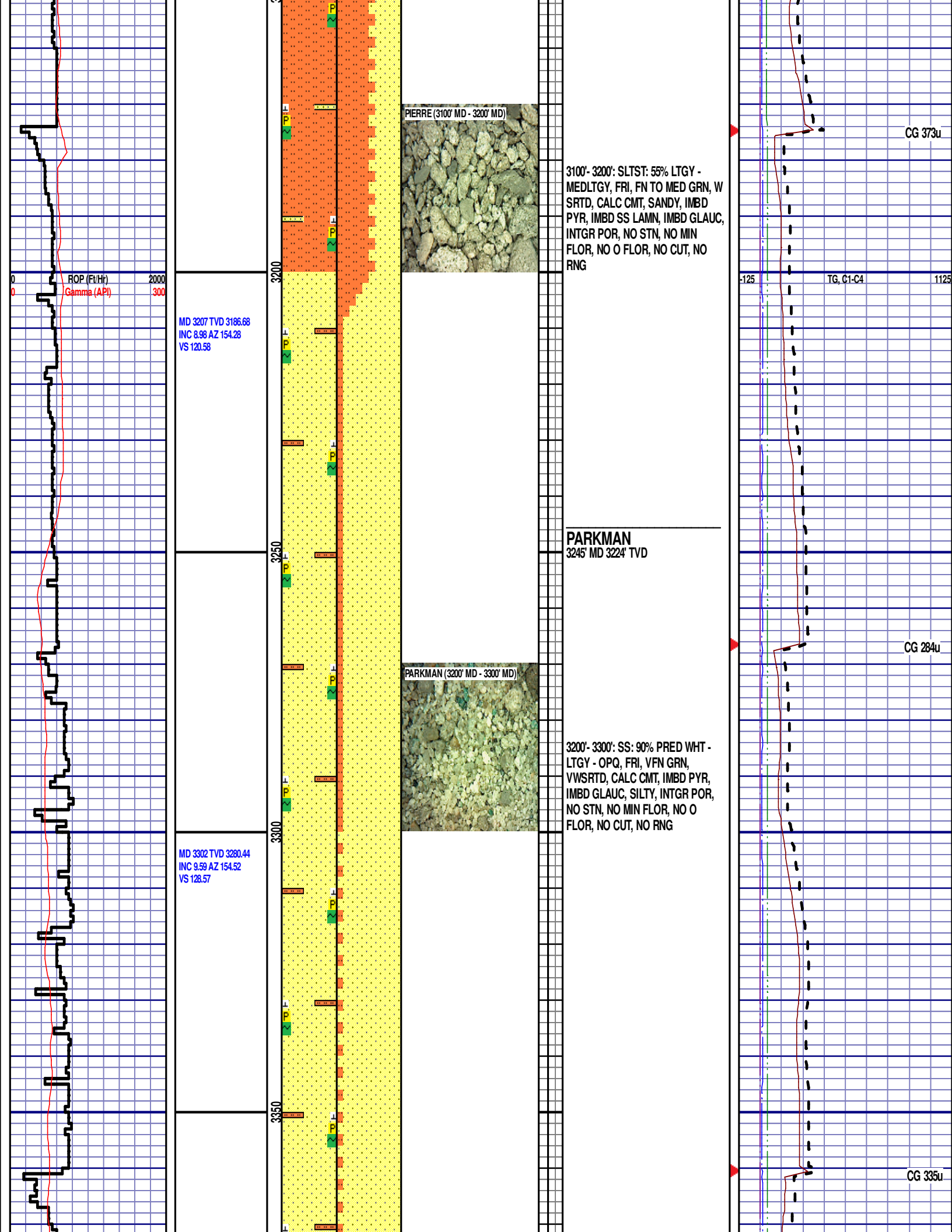


PIERRE (2800' MD - 2900' MD)

2800'- 2900': SLTST: 75% 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 205u





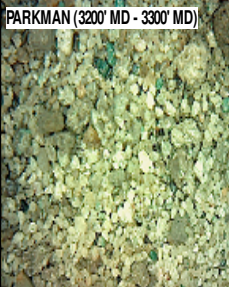
PIERRE (3100' MD - 3200' MD)



3100'- 3200': SLTST: 55% LTGY - MEDLTGY, FRI, FN TO MED GRN, W SRTD, CALC CMT, SANDY, IMBD PYR, IMBD SS LAMN, IMBD GLAUC, INTGR POR, NO STN, NO MIN FLOR, NO O FLOR, NO CUT, NO RNG

**PARKMAN**  
3245' MD 3224' TVD

PARKMAN (3200' MD - 3300' MD)



3200'- 3300': SS: 90% PRED WHT - LTGY - OPQ, FRI, VFN GRN, VWSRTD, CALC CMT, IMBD PYR, IMBD GLAUC, SILTY, INTGR POR, NO STN, NO MIN FLOR, NO O FLOR, NO CUT, NO RNG

CG 373u

TG, C1-C4

CG 284u

CG 335u

WOB 14.3K  
PP 2855  
RPM 70  
SPM 75/75

MD 3396 TVD 3373.01  
INC 10.38 AZ 155.74  
VS 136.89

MD 3491 TVD 3466.41  
INC 10.69 AZ 154.96  
VS 145.7

MD 3586 TVD 3559.75  
INC 10.77 AZ 156.29

3300'- 3400': SS: 95% PRED WHT -  
LTGY - OPQ, FRI, VFN GRN,  
VWSRTD, CALC CMT, IMBD PYR,  
IMBD GLAUC, SILTY, INTGR POR,  
NO STN, NO MIN FLOR, NO O  
FLOR, NO CUT, NO RNG

3400'- 3500': SS: 90% PRED WHT -  
LTGY - OPQ, FRI, VFN GRN,  
VWSRTD, CALC CMT, IMBD PYR,  
IMBD GLAUC, SILTY, INTGR POR,  
NO STN, NO MIN FLOR, NO O  
FLOR, NO CUT, NO RNG

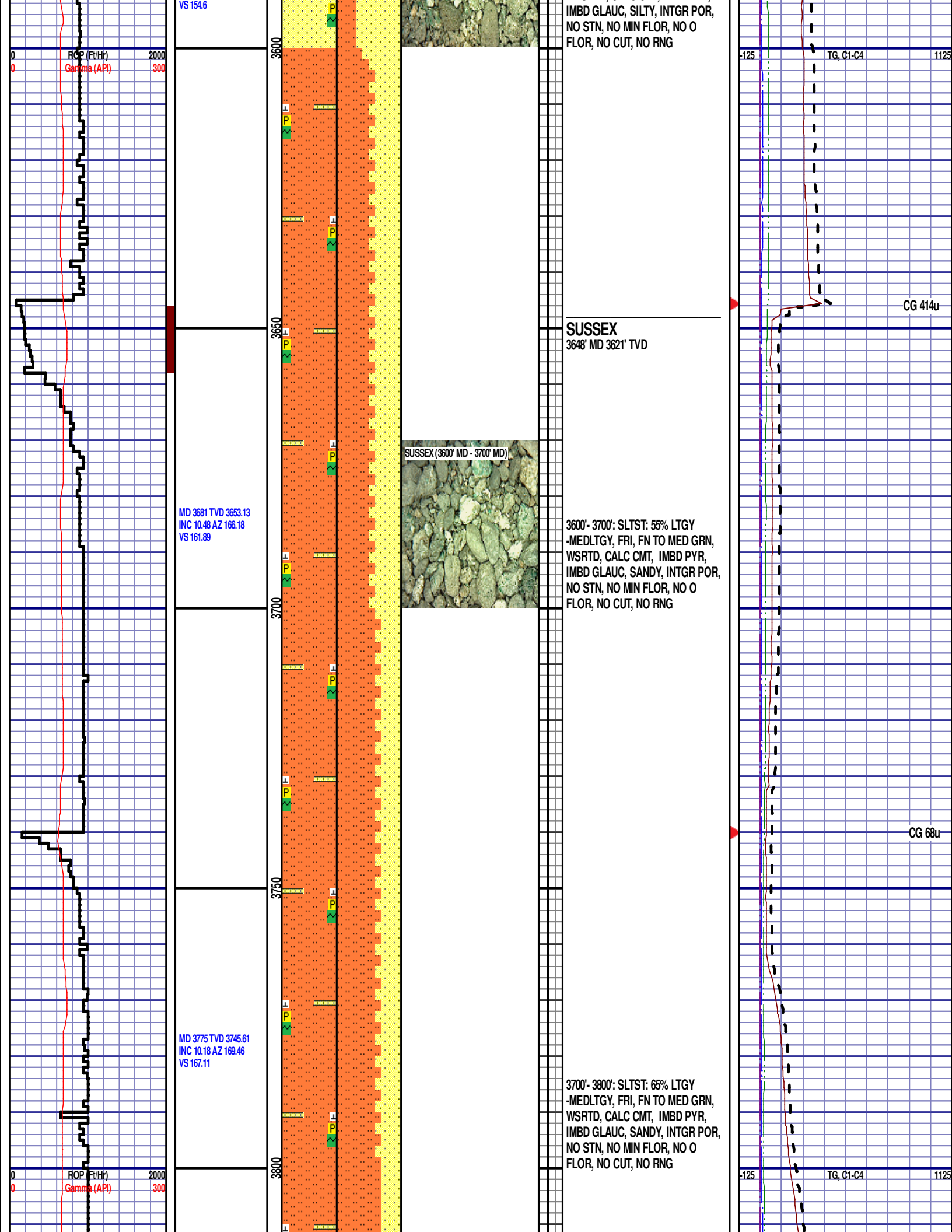
PARKMAN (3500' MD - 3600' MD)

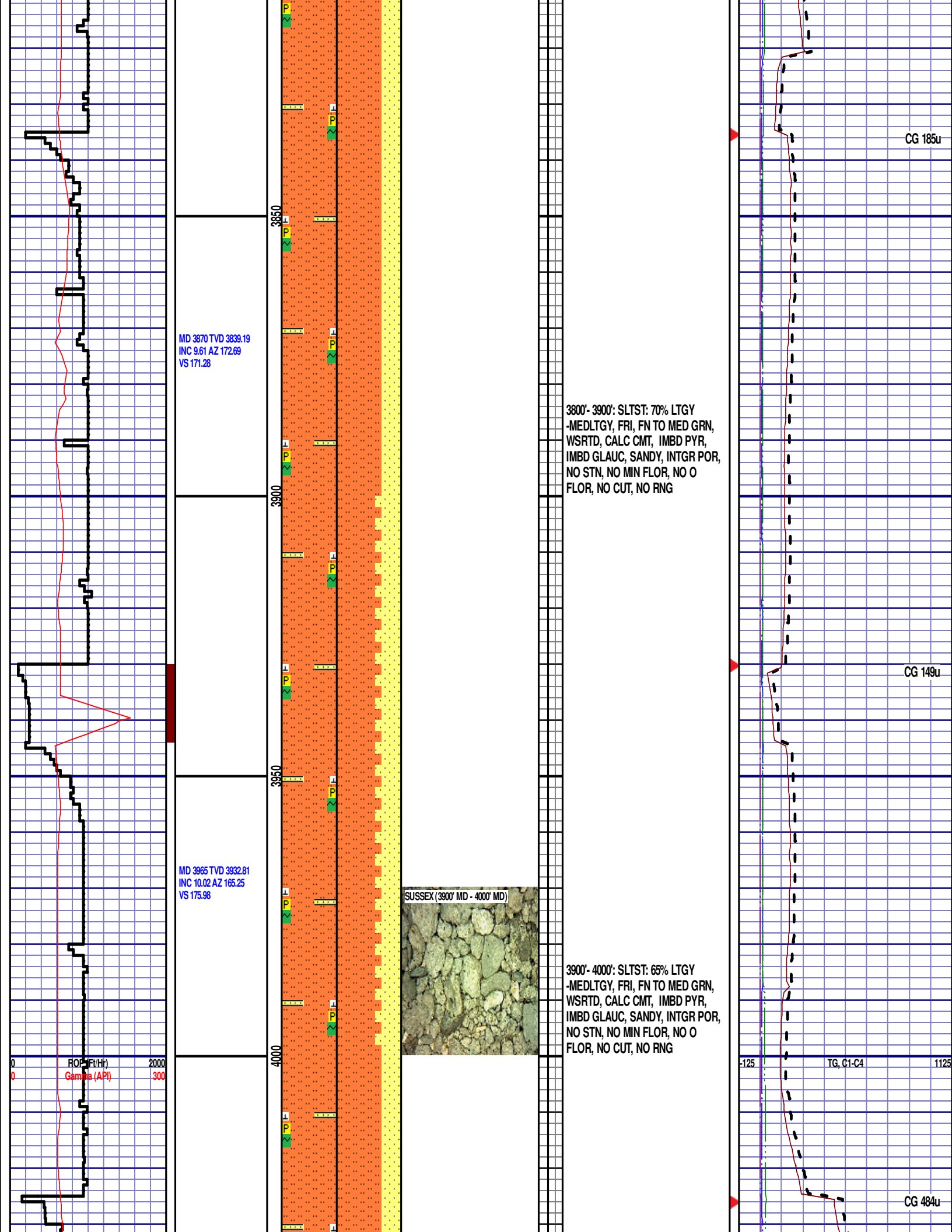
3500'- 3600': SS: 70% PRED WHT -  
LTGY - OPQ, FRI, VFN GRN,  
VWSRTD, CALC CMT, IMBD PYR,

-125 TG, C1-C4 1125

CG 372u

CG 382u





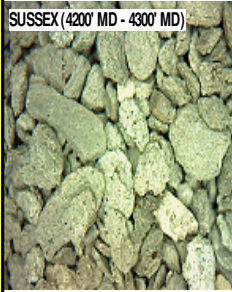


INC 8.01 AZ 163.73  
VS 192.82

MD 4344 TVD 4307.22  
INC 8.57 AZ 152.1  
VS 199.24

MD 4439 TVD 4400.93  
INC 10.32 AZ 149.73  
VS 208.18

SUSSEX (4200' MD - 4300' MD)



4200'- 4300': SLTST: 75% LTGY  
-MEDLTGY, FRI, VFN TO FN GRN,  
WSRTD, CALC CMT, IMBD PYR,  
IMBD GLAUC, SANDY, INTGR POR,  
NO STN, NO MIN FLOR, NO O  
FLOR, NO CUT, NO RNG

**SHANNON**  
4329' MD 4293' MD

SHANNON (4300' MD - 4400' MD)



4300'- 4400': SLTST: 80% LTGY  
-MEDLTGY, FRI, VFN TO FN GRN,  
WSRTD, CALC CMT, IMBD PYR,  
IMBD GLAUC, SANDY, INTGR POR,  
NO STN, NO MIN FLOR, NO O  
FLOR, NO CUT, NO RNG

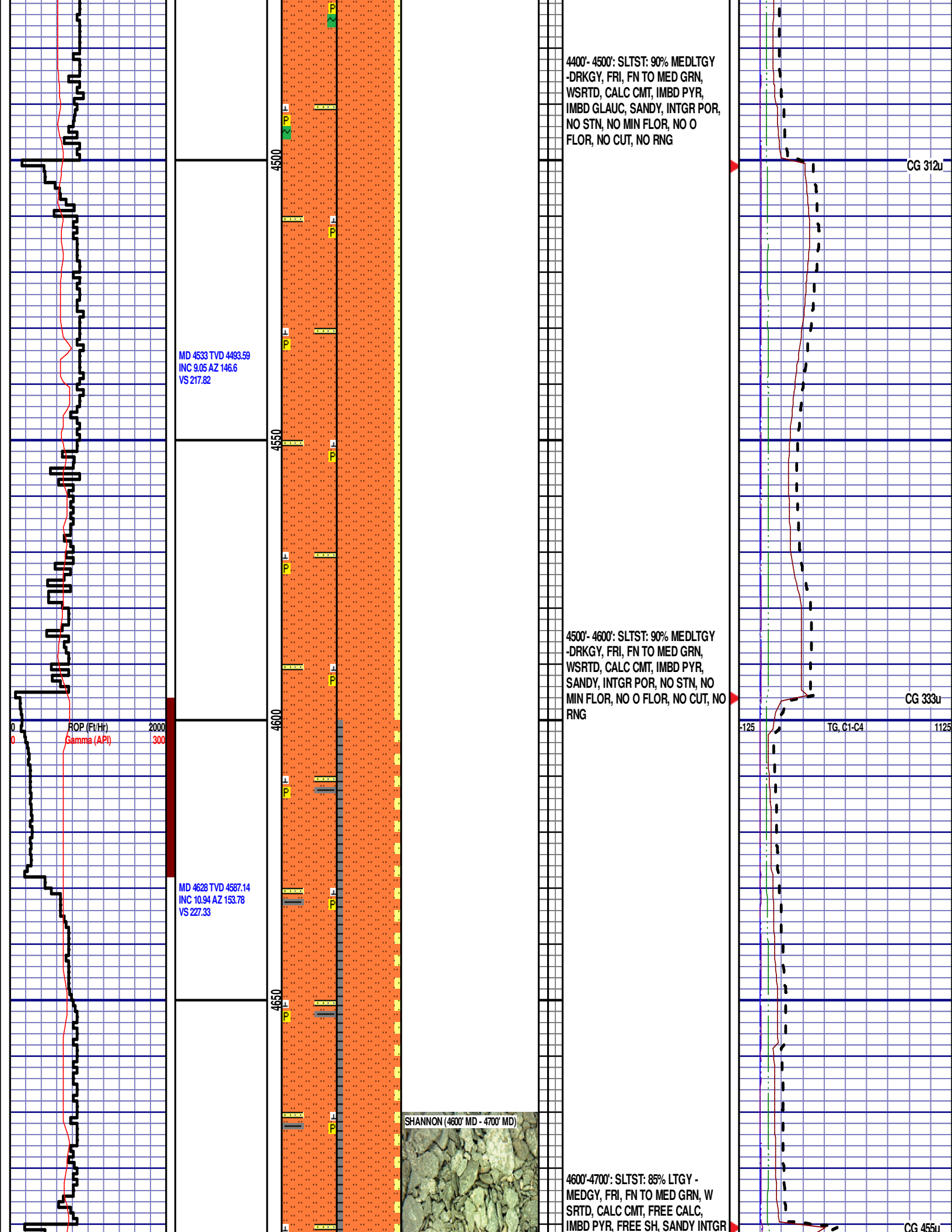
ROP (Ft/Hr)  
Gamma (API)

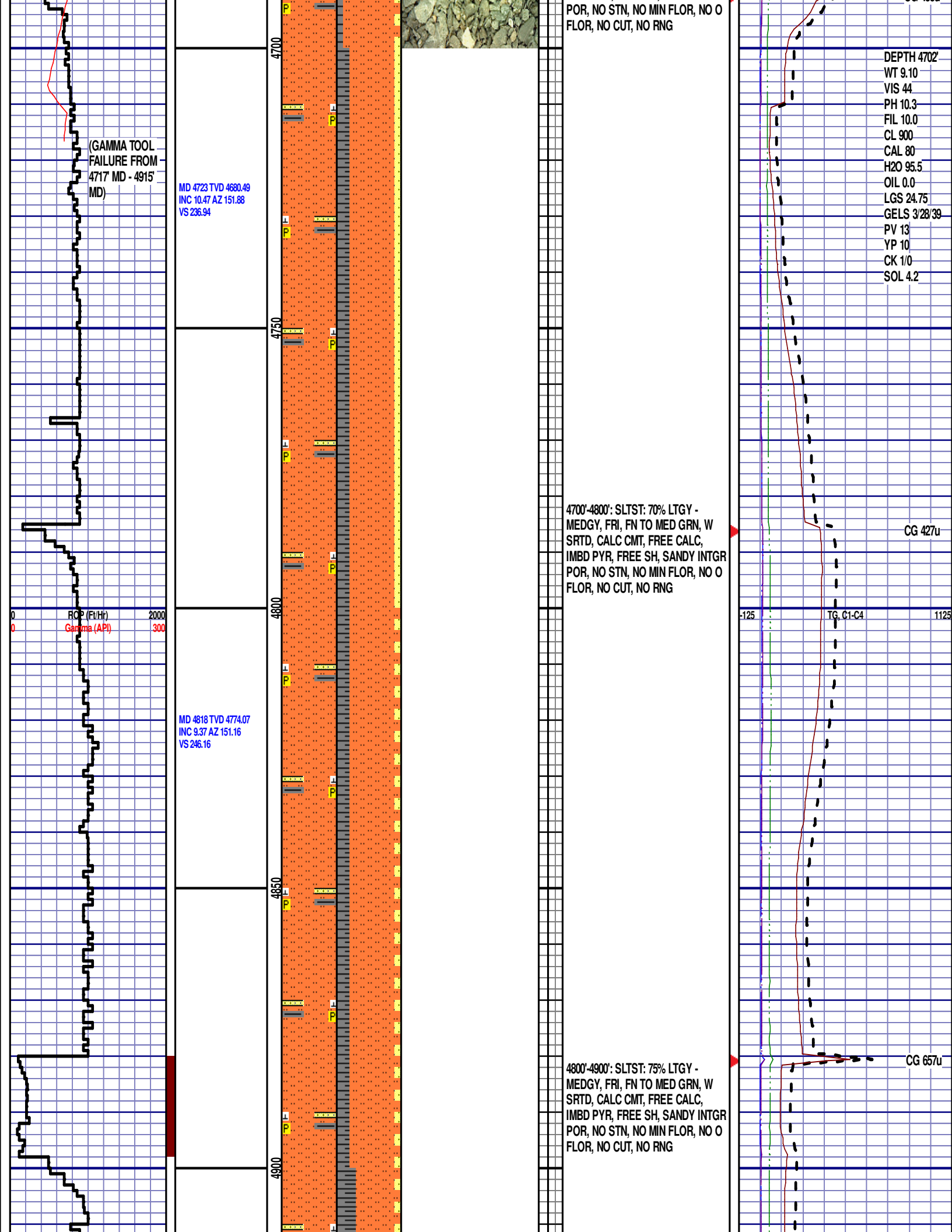
2000  
300

-125 TG, C1-C4 1125

CG 481u

CG 567u



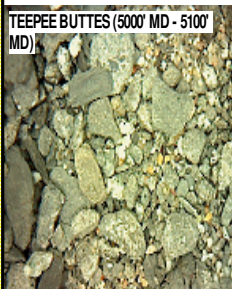
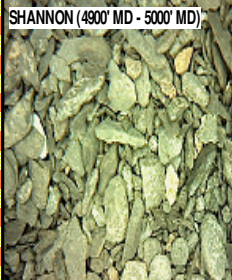


MD 4912 TVD 4866.83  
INC 9.27 AZ 149.25  
VS 255.03

MD 5007 TVD 4960.37  
INC 10.83 AZ 148.38  
VS 265.01

MD 5102 TVD 5053.78  
INC 10.17 AZ 139.14  
VS 276.55

12:01 AM  
9/23/2014  
2570 FT/24HRS  
DAY 03



4900'-5000': SLTST: 65% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, FREE SH, SANDY INTGR  
POR, NO STN, NO MIN FLOR, NO O  
FLOR, NO CUT, NO RNG

### TEEPEE BUTTES

5036' MD 4989' TVD

TOOH @ 3:00 PM ON 9/22/14 @ 5070'  
MD TO REPLACE GAMMA TOOL.  
TIH @ 10:00 PM ON 9/22/2014.  
RESUMED DRILLING @ 2:45 AM ON  
9/23/2014 W/ BIT #3, 8.75", SMITH  
SDi513, (S/N) JJ1749, IN @ 5070' MD.

5000'-5100': SLTST: 70% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, FREE SH, SANDY INTGR  
POR, NO STN, NO MIN FLOR, NO O  
FLOR, NO CUT, NO RNG

SWITCHING TO 30' SAMPLE  
INTERVAL

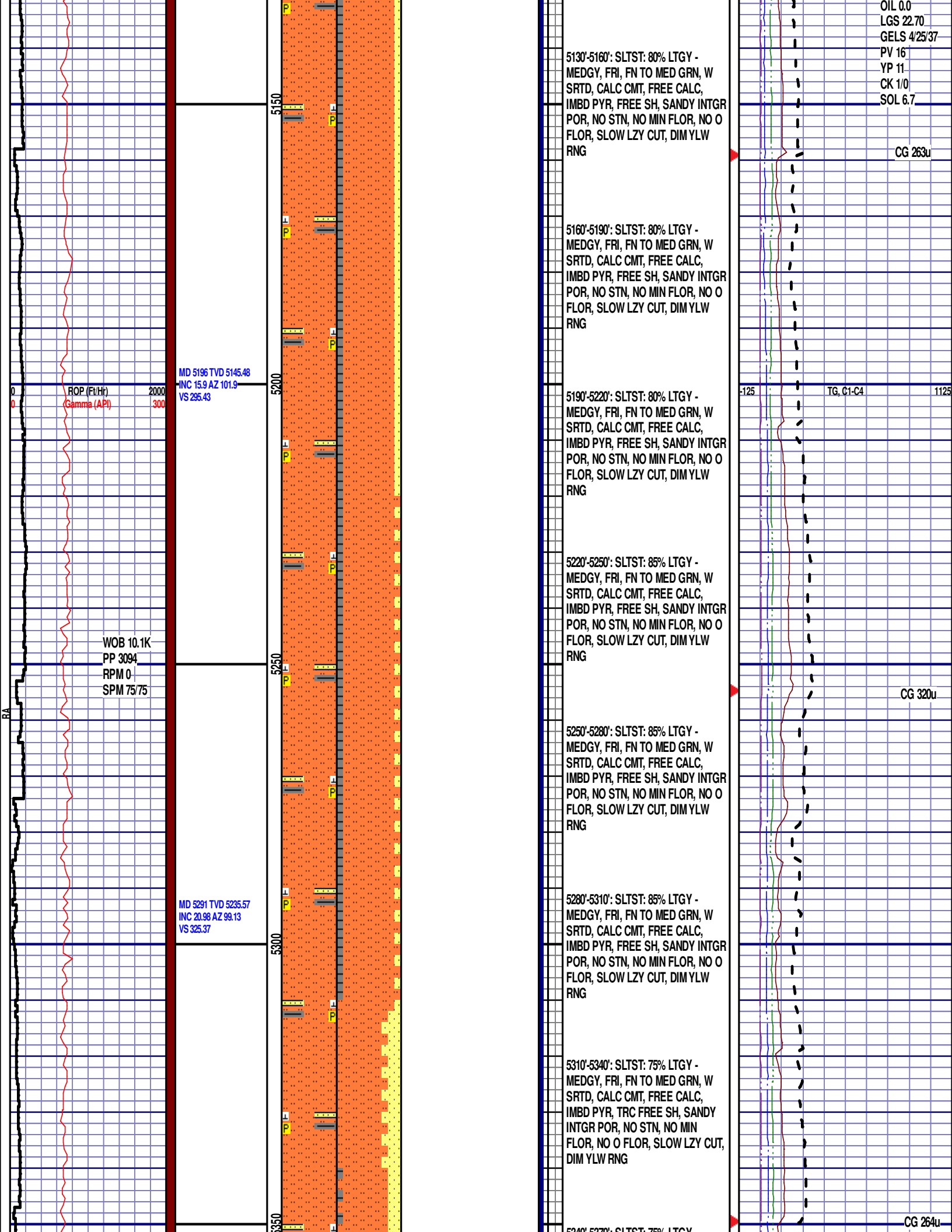
5100'-5130': SLTST: 70% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, FREE SH, SANDY INTGR  
POR, NO STN, NO MIN FLOR, NO O  
FLOR, NO CUT, NO RNG

CG 565u

TG, C1-C4

TG 480u (NEW PIPE TALLY)

DEPTH 5110'  
WT 9.80  
VIS 45  
PH 9.9  
FIL 7.0  
CL 1000  
CAL 40  
H2O 93.0



OIL 0.0  
LGS 22.70  
GELS 4/25/37  
PV 16  
YP 11  
CK 1/0  
SOL 6.7

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

CG 263u

5160'-5190': SLTST: 80% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, FREE SH, SANDY 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,  
IMBD PYR, FREE SH, SANDY INTGR  
POR, NO STN, NO MIN FLOR, NO O  
FLOR, SLOW LZY CUT, DIM YLW  
RNG

TG, C1-C4

5220'-5250': SLTST: 85% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, FREE SH, SANDY INTGR  
POR, NO STN, NO MIN FLOR, NO O  
FLOR, SLOW LZY CUT, DIM YLW  
RNG

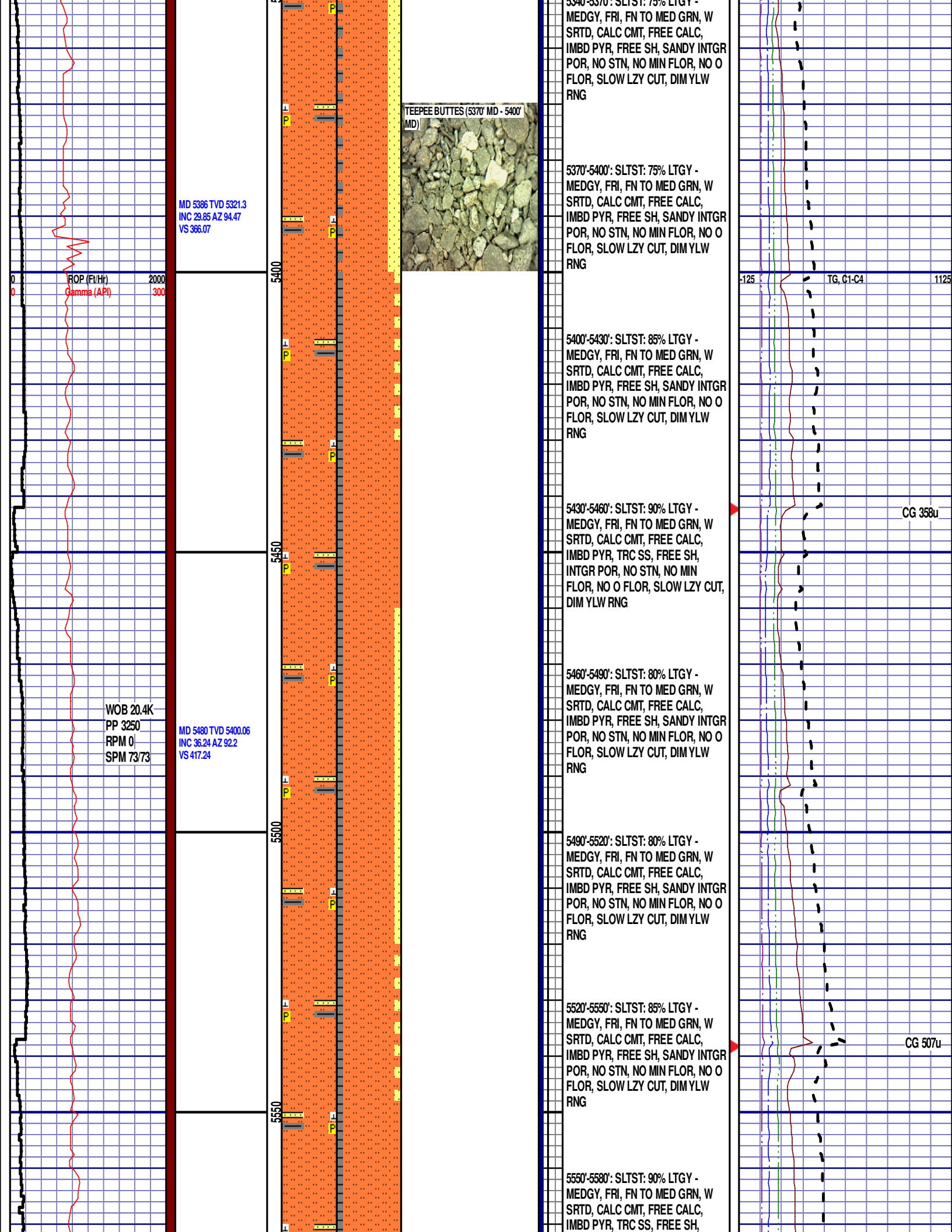
CG 320u

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

5310'-5340': SLTST: 75% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, TRC FREE SH, SANDY  
INTGR POR, NO STN, NO MIN  
FLOR, NO O FLOR, SLOW LZY CUT,  
DIM YLW RNG

CG 264u



MD 5675 TVD 5471.44  
INC 46.17 AZ 91.88  
VS 479.61

ROP (Ft/Hr)  
Gamma (API)

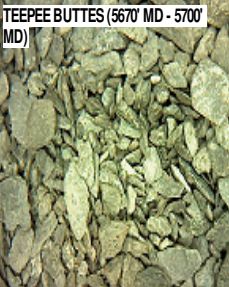
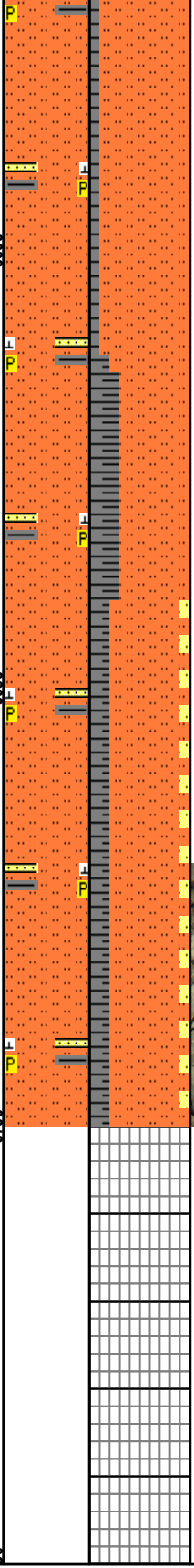
2000  
300

5600

5650

5700

50



INTGR POR, NO STN, NO MIN  
FLOR, NO O FLOR, SLOW LZ Y CUT,  
DIM YLW RNG

5580'-5610': SLTST: 90% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, TRC SS, FREE SH,  
INTGR POR, NO STN, NO MIN  
FLOR, NO O FLOR, SLOW LZ Y CUT,  
DIM YLW RNG

5610'-5640': SLTST: 70% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, TRC SS, FREE SH,  
INTGR POR, NO STN, NO MIN  
FLOR, NO O FLOR, SLOW LZ Y CUT,  
DIM YLW RNG

5640'-5670': SLTST: 75% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, FREE SH, SANDY,  
INTGR POR, NO STN, NO MIN  
FLOR, NO O FLOR, SLOW LZ Y CUT,  
DIM YLW RNG

5670'-5700': SLTST: 75% LTGY -  
MEDGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, FREE CALC,  
IMBD PYR, FREE SH, SANDY,  
INTGR POR, NO STN, NO MIN  
FLOR, NO O FLOR, SLOW LZ Y CUT,  
DIM YLW RNG

END OF VERTICAL LOG @ 5700' MD  
ON 9/23/2014, CONTINUED ON  
HORIZONTAL LOG.

-125

T0, C1-C4

1125

CG 701u