

MD 2964 TVD 2946.01  
INC 11.61 AZ 50.58  
VS 162.47

ROP (Feet)  
Gamma (API)

1500  
350

MD 3058 TVD 3038.09  
INC 11.6 AZ 50.33  
VS 177.24

2950

3000

3050

3100

3150

Pierre (2900' MD - 3000' MD)

2900'- 3000': SLTST: 60% LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, SANDY, SILTY,  
IMBD PYR, IMBD SS LAMN, INTGR  
POR, NO STN, NO FLOR, NO O  
FLOR, NO CUT

3000'- 3100': SLTST: 80% LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, SANDY, SILTY,  
IMBD PYR, IMBD SS LAMN, INTGR  
POR, NO STN, NO FLOR, NO O  
FLOR, NO CUT

30

TG, C1-C4

270

CG 56u

MD 3065'  
WT 9.05  
VIS 41.0  
PH 10.4  
FIL 7.4  
CL 1300  
CAL 60.0  
H2O 94.9  
OIL 0.0  
SOL 4.8  
CAKE 2/0  
GELS 3/18/29  
PV 8.0  
YP 11.0

CG 55u

MD 3153 TVD 3131.29  
INC 10.76 AZ 47.23  
VS 191.29

TOP (Fm)  
Gamma (G)

1500  
350

MD 3248 TVD 3224.68  
INC 10.39 AZ 49.38  
VS 204.48

WOB 11.3K  
PP 2756  
RPM 80  
SPM 78/78

MD 3343 TVD 3318.15  
INC 10.17 AZ 49.2  
VS 217.5

3200

3250

3300

3350

3100'- 3200': SLTST: 75% LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, SANDY, SILTY,  
IMBD PYR, IMBD SS LAMN, INTGR  
POR, NO STN, NO FLOR, NO O  
FLOR, NO CUT

Pierre (3200' MD - 3300' MD)

3200'- 3300': SLTST: 65% LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, SANDY, SILTY,  
IMBD PYR, IMBD SS LAMN, INTGR  
POR, NO STN, NO FLOR, NO O  
FLOR, NO CUT

30

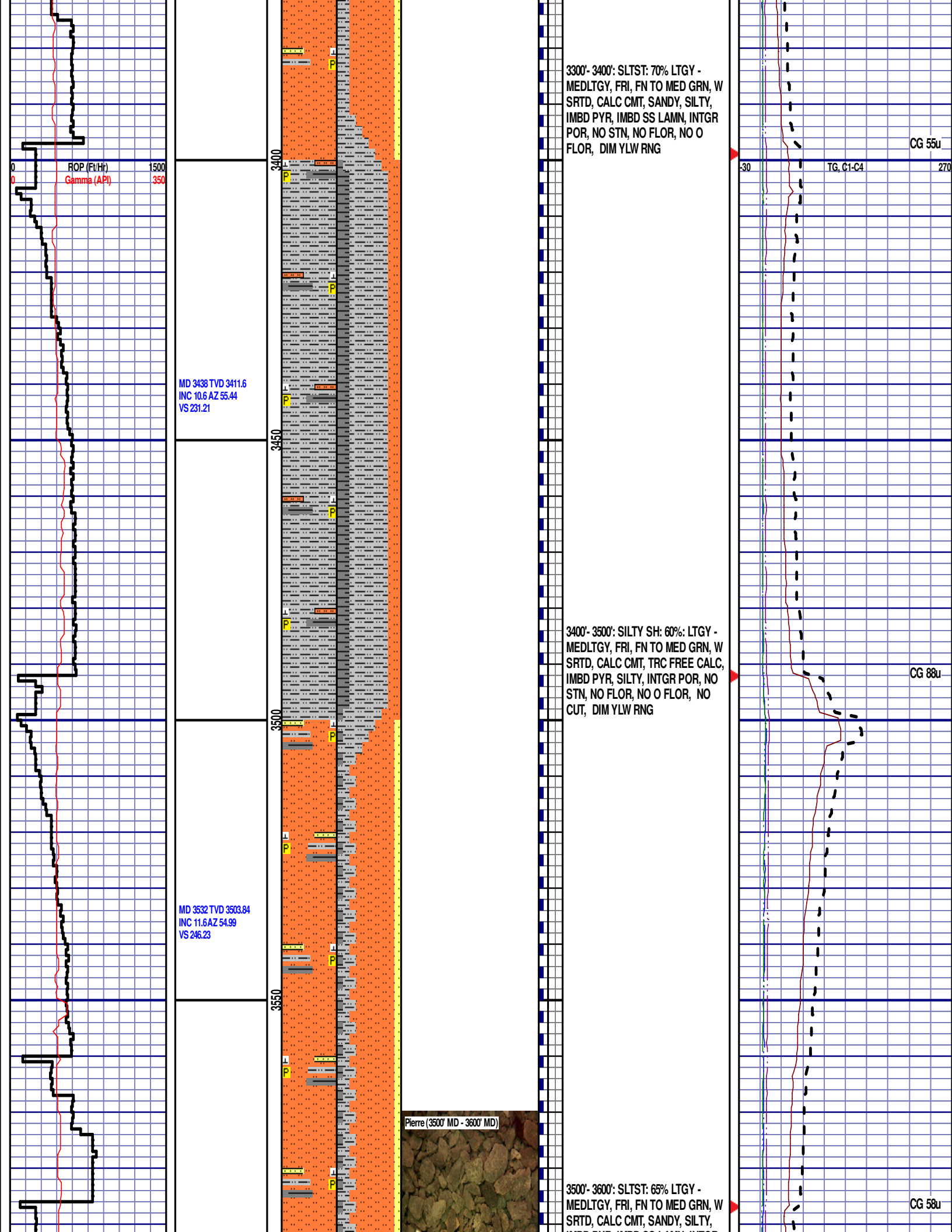
TG, C1-C4

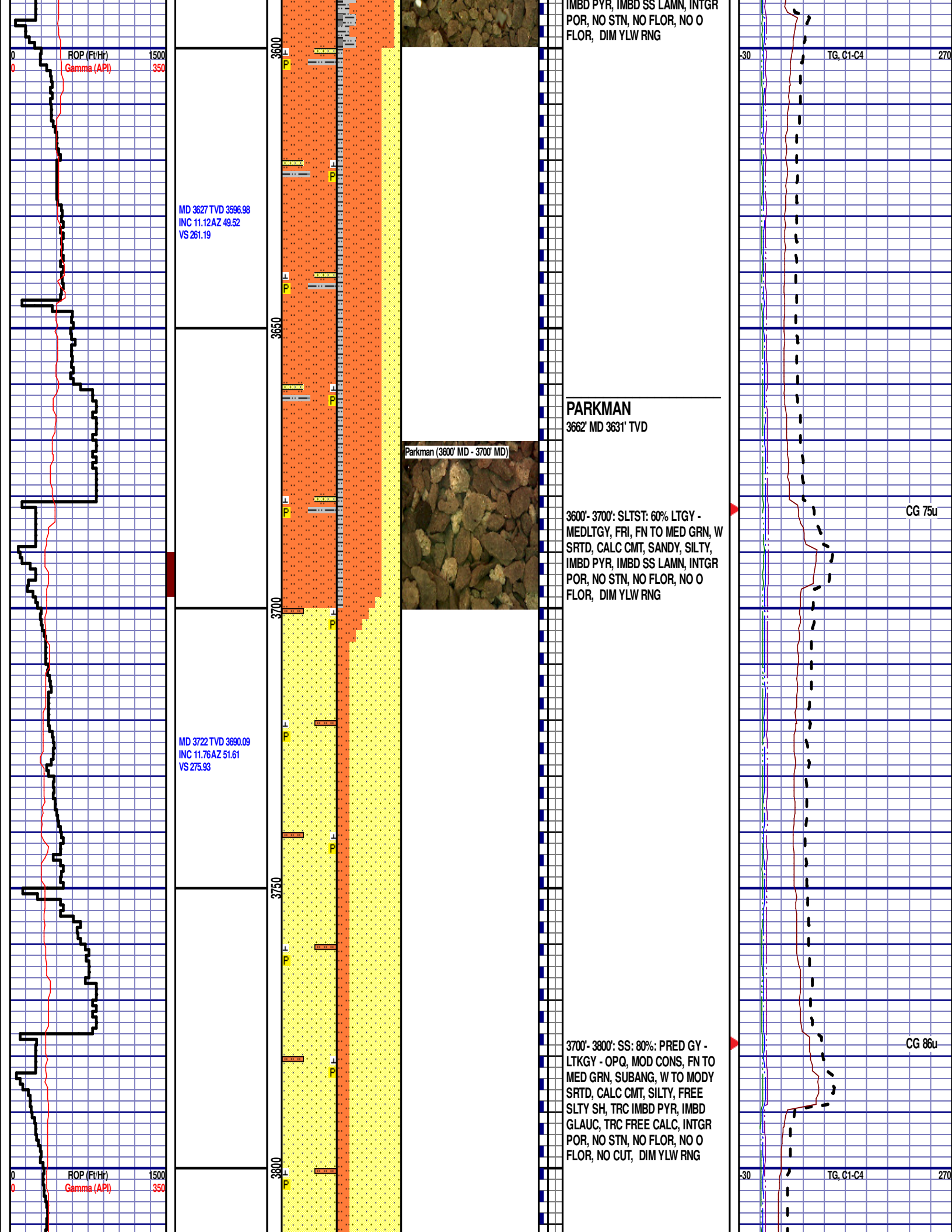
270

CG 48u

CG 56u







MD 3817 TVD 3782.76  
INC 13.65 AZ 50.35  
VS 292.36

MD 3911 TVD 3873.93  
INC 14.54 AZ 48.94  
VS 310.02

MD 4006 TVD 3966.23  
INC 12.86 AZ 46.63  
VS 326.93

ROP (ft/Hr)  
Gamma (API)

3850

3900

3950

4000

Parkman (3900' MD - 4000' MD)

3800'- 3900': SS: 80%: PRED GY -  
LTKGY - OPQ, MOD CONS, FN TO  
MED GRN, SUBANG, W TO MODY  
SRTD, CALC CMT, SILTY, FREE  
SLTY SH, TRC IMBD PYR, TRC  
FREE CALC, INTGR POR, NO STN,  
NO FLOR, NO O FLOR, NO CUT,  
DIM YLW RNG

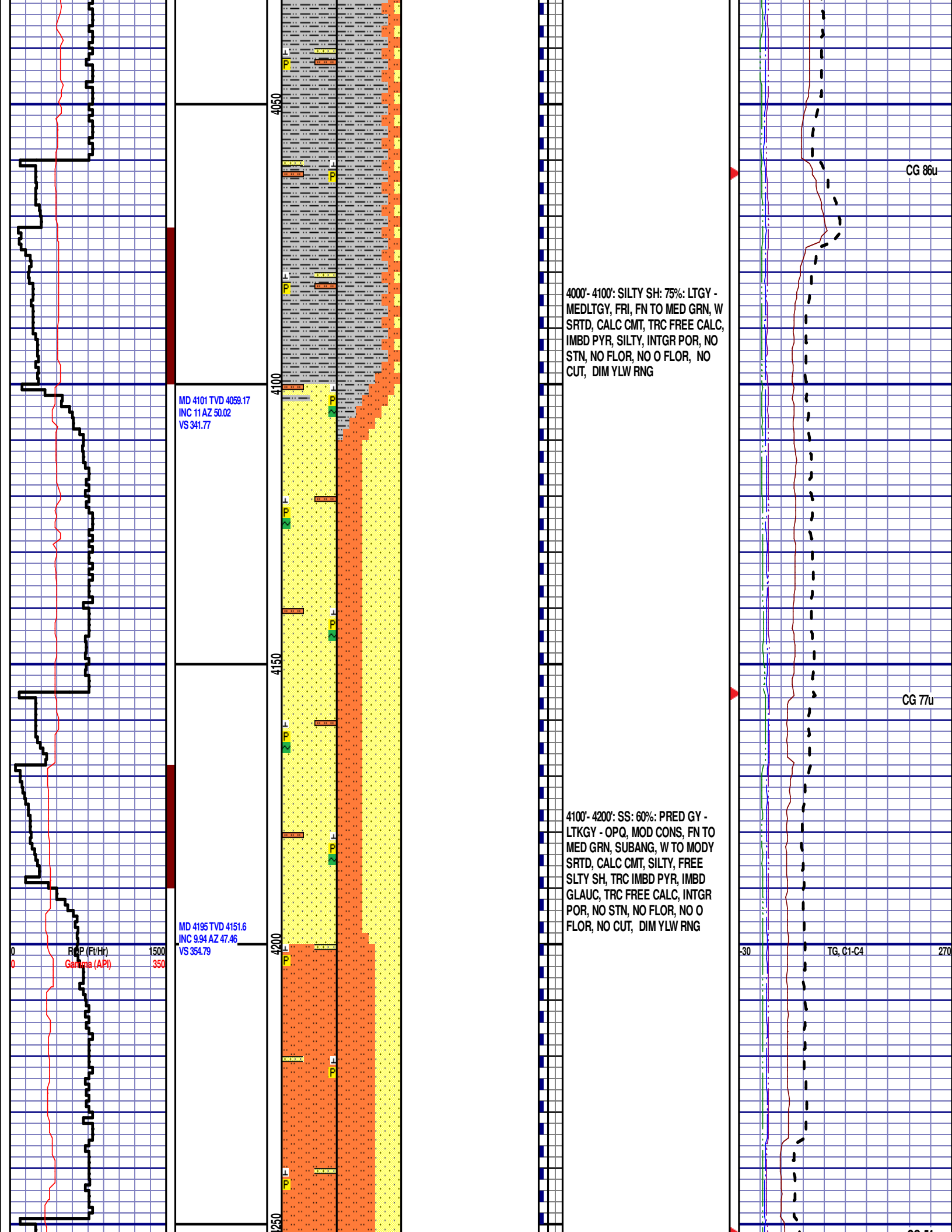
3900'- 4000': SLTST: 80% LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, SANDY, SILTY,  
IMBD PYR, IMBD SS LAMN, INTGR  
POR, NO STN, NO FLOR, NO O  
FLOR, DIM YLW RNG

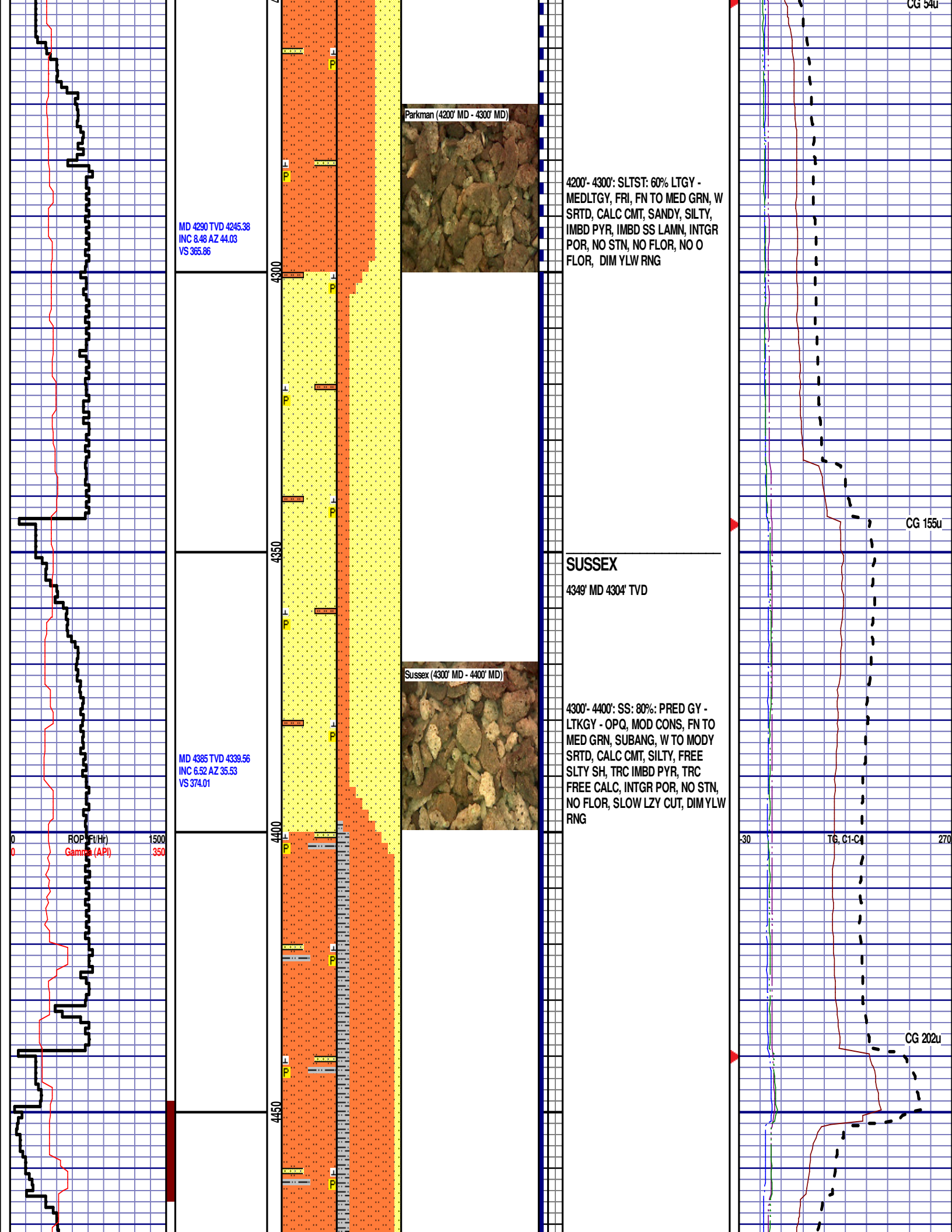
CG 76u

CG 100u

TG, C1-C4







MD 4479 TVD 4433.01  
INC 5.88 AZ 33.18  
VS 379.88

MD 4574 TVD 4527.63  
INC 4.42 AZ 41.15  
VS 385.06

MD 4669 TVD 4622.39  
INC 3.63 AZ 40.18  
VS 389.48

4400'- 4500': SLTST: 70% LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, SANDY, SILTY,  
IMBD PYR, IMBD SS LAMN, INTGR  
POR, NO STN, SLOW LZY CUT, DIM  
YLW RNG

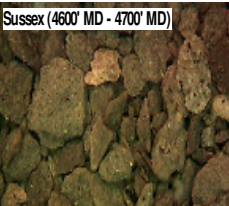
4500'- 4600': SLTST: 75% LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, SANDY, SILTY,  
IMBD PYR, IMBD SS LAMN, INTGR  
POR, NO STN, SLOW LZY CUT, DIM  
YLW RNG

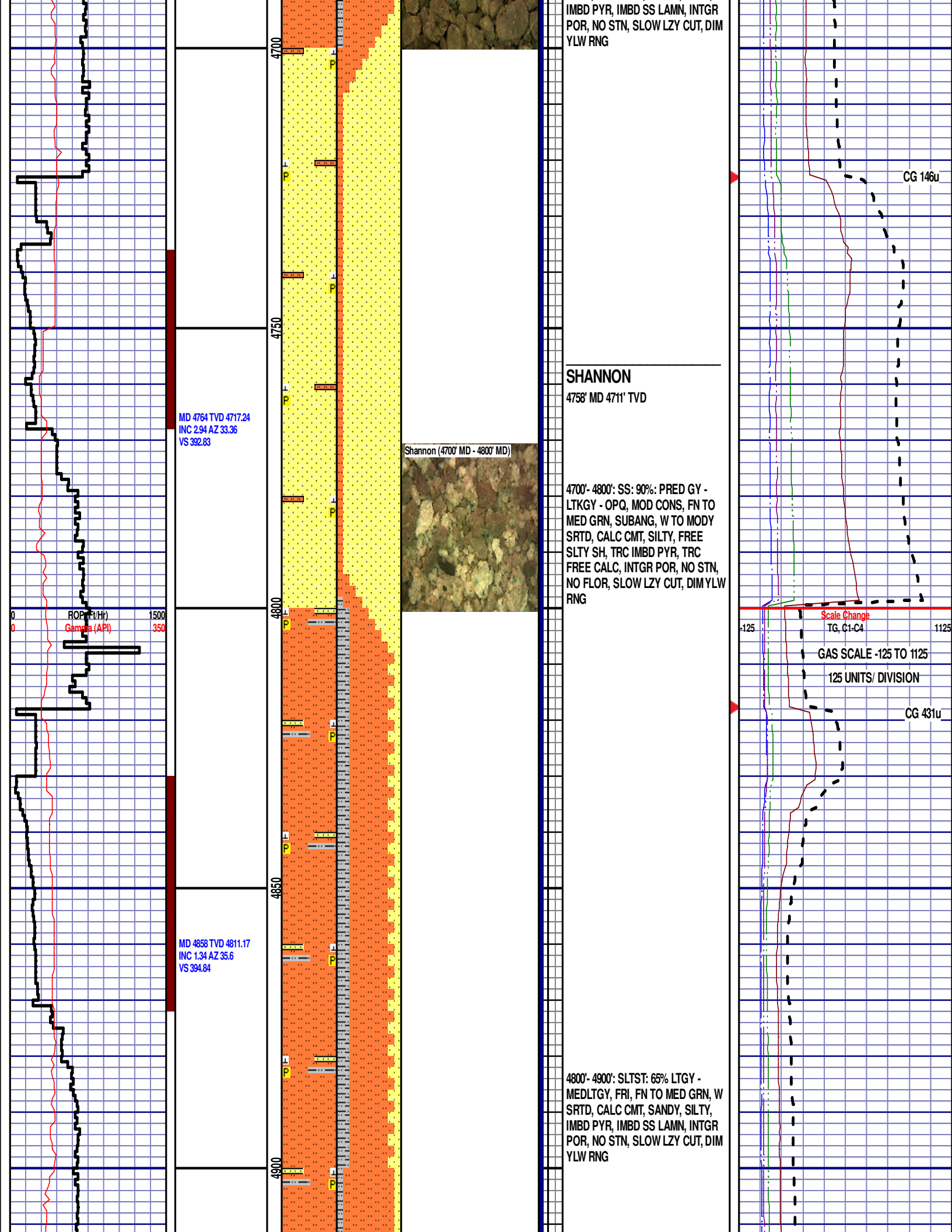
4600'- 4700': SLTST: 80% LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, SANDY, SILTY,

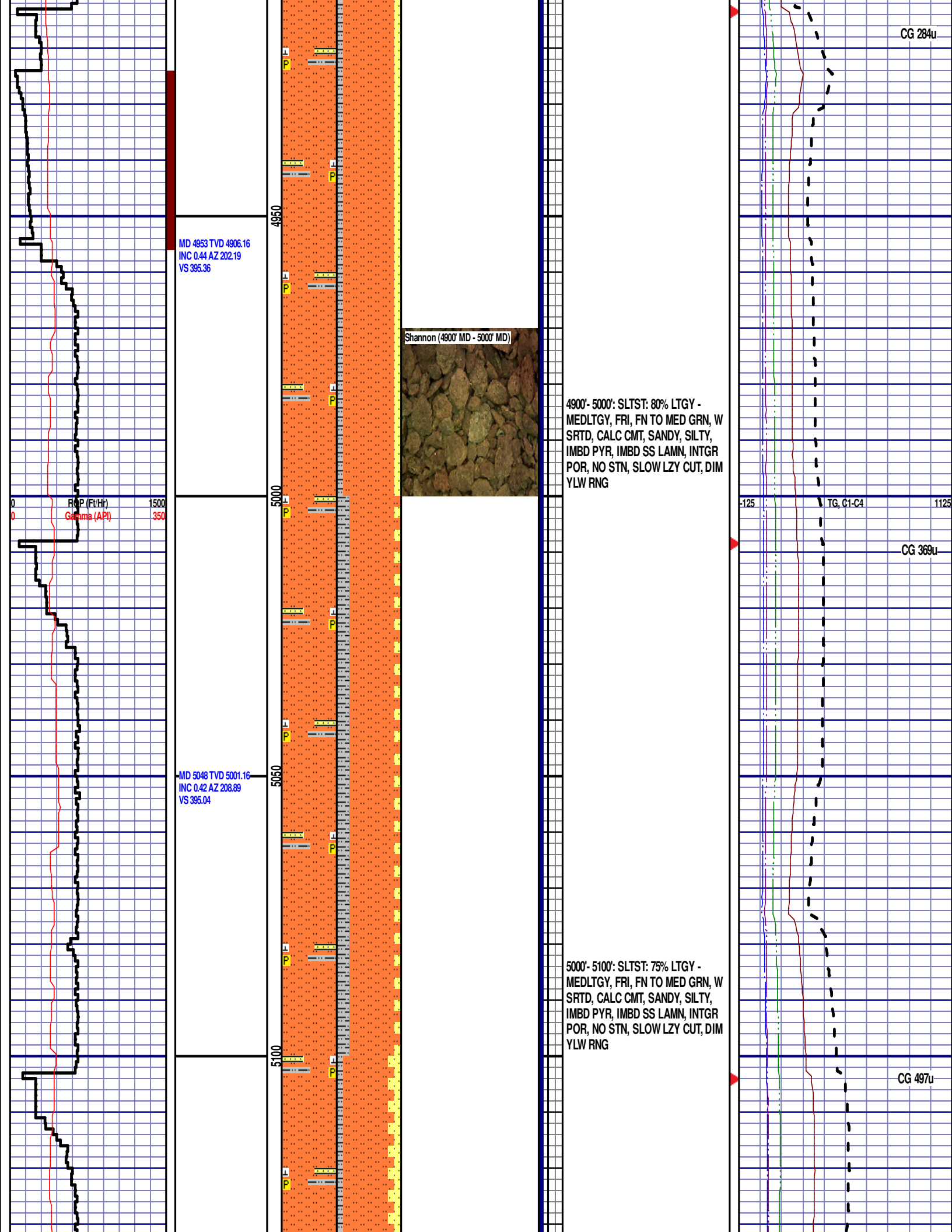
CG 98u

CG 89u

Sussex (4600' MD - 4700' MD)









MD 5143 TVD 5096.16  
INC 0.41 AZ 196.79  
VS 394.77

ROP (Ft/Hr)  
Gamma (API)

MD 5237 TVD 5190.15  
INC 0.65 AZ 196.7  
VS 394.5

MD 5332 TVD 5285.15  
INC 0.84 AZ 222.3  
VS 393.86

5150

5200

5250

5300

5350

5100'- 5200': SLTST: 75% LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, SANDY, SILTY,  
IMBD PYR, IMBD SS LAMN, INTGR  
POR, NO STN, SLOW LZ CUT, DIM  
YLW RNG

Shannon (5200' MD - 5300' MD)

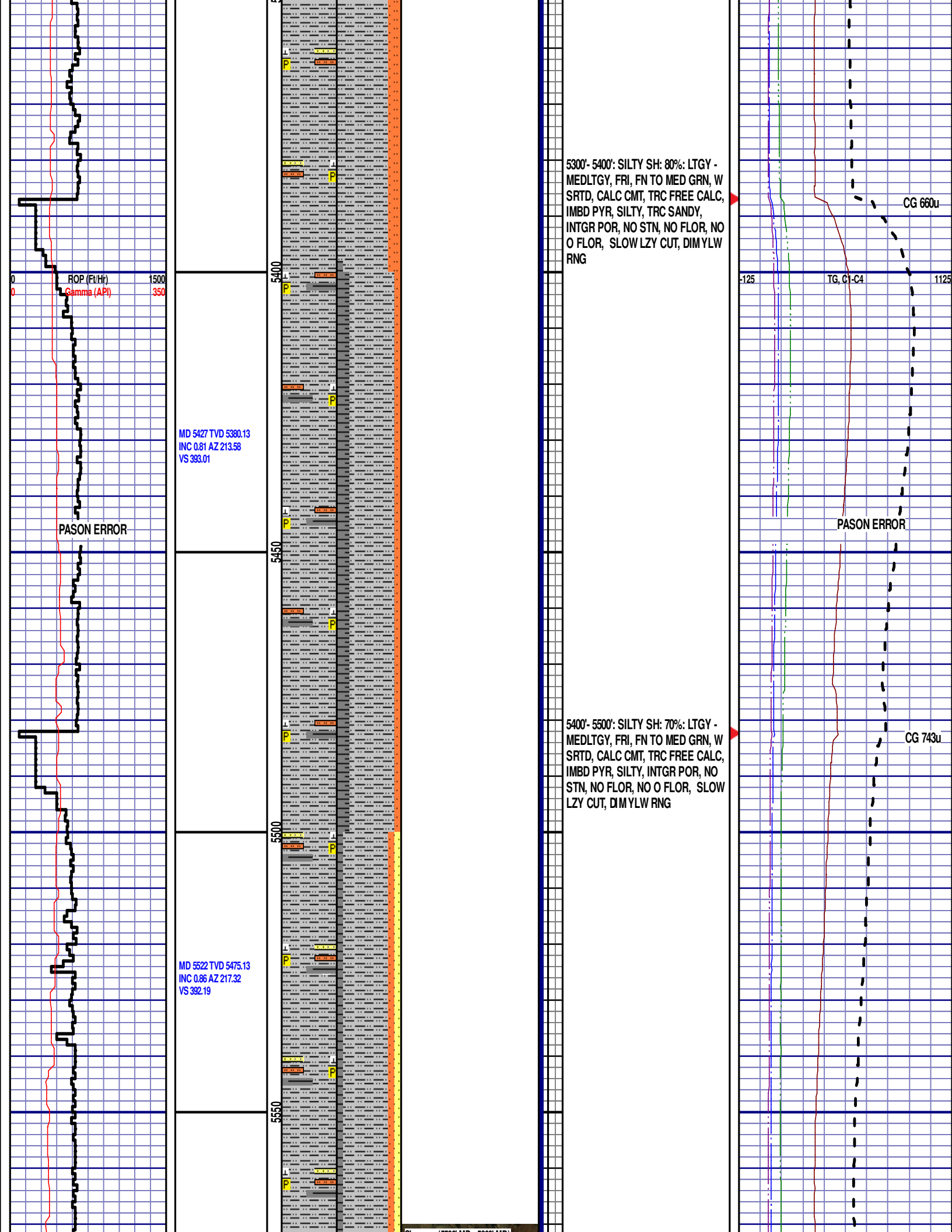


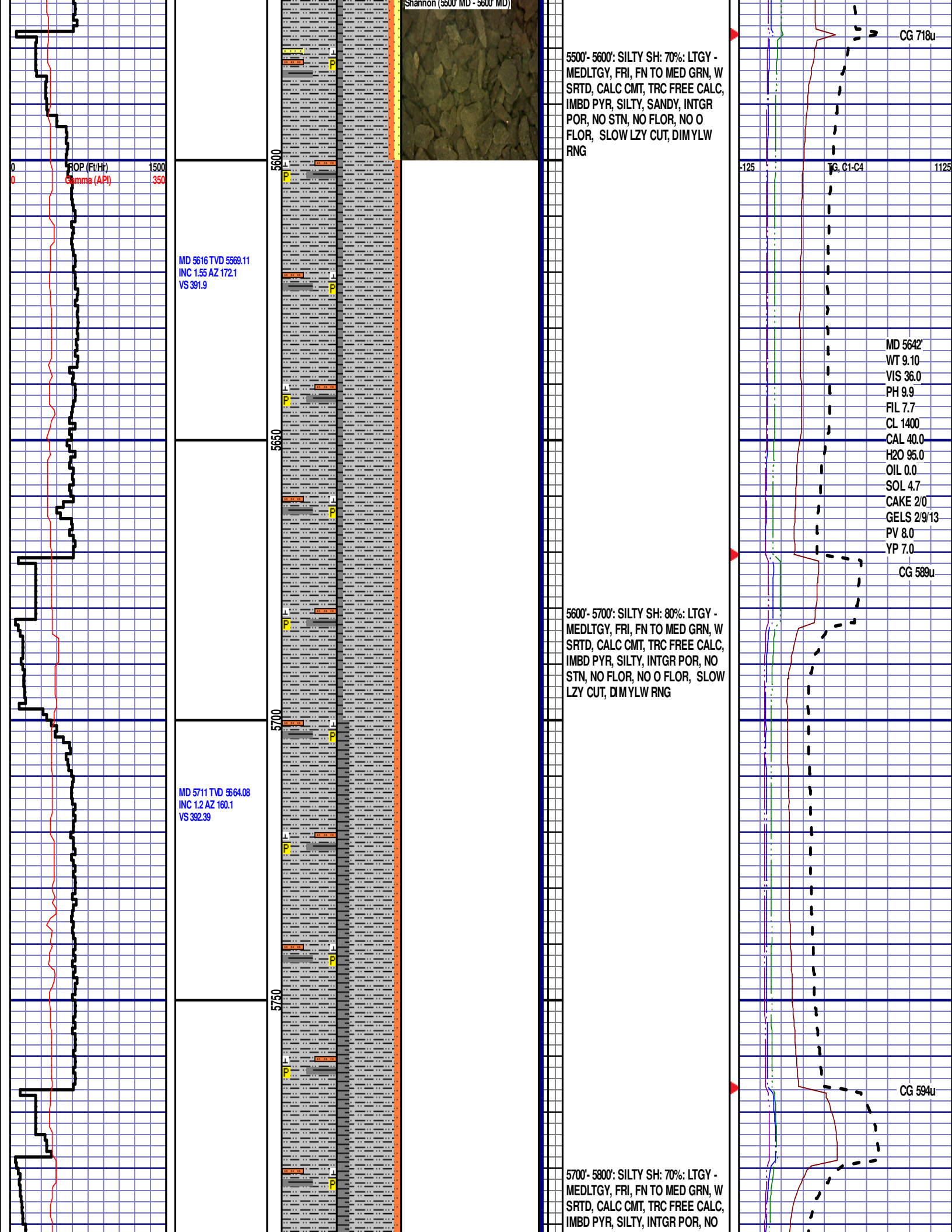
5200'- 5300': SILTY SH: 80%: LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, TRC FREE CALC,  
IMBD PYR, SILTY, TRC SANDY,  
INTGR POR, NO STN, NO FLOR, NO  
O FLOR, SLOW LZ CUT, DIM YLW  
RNG

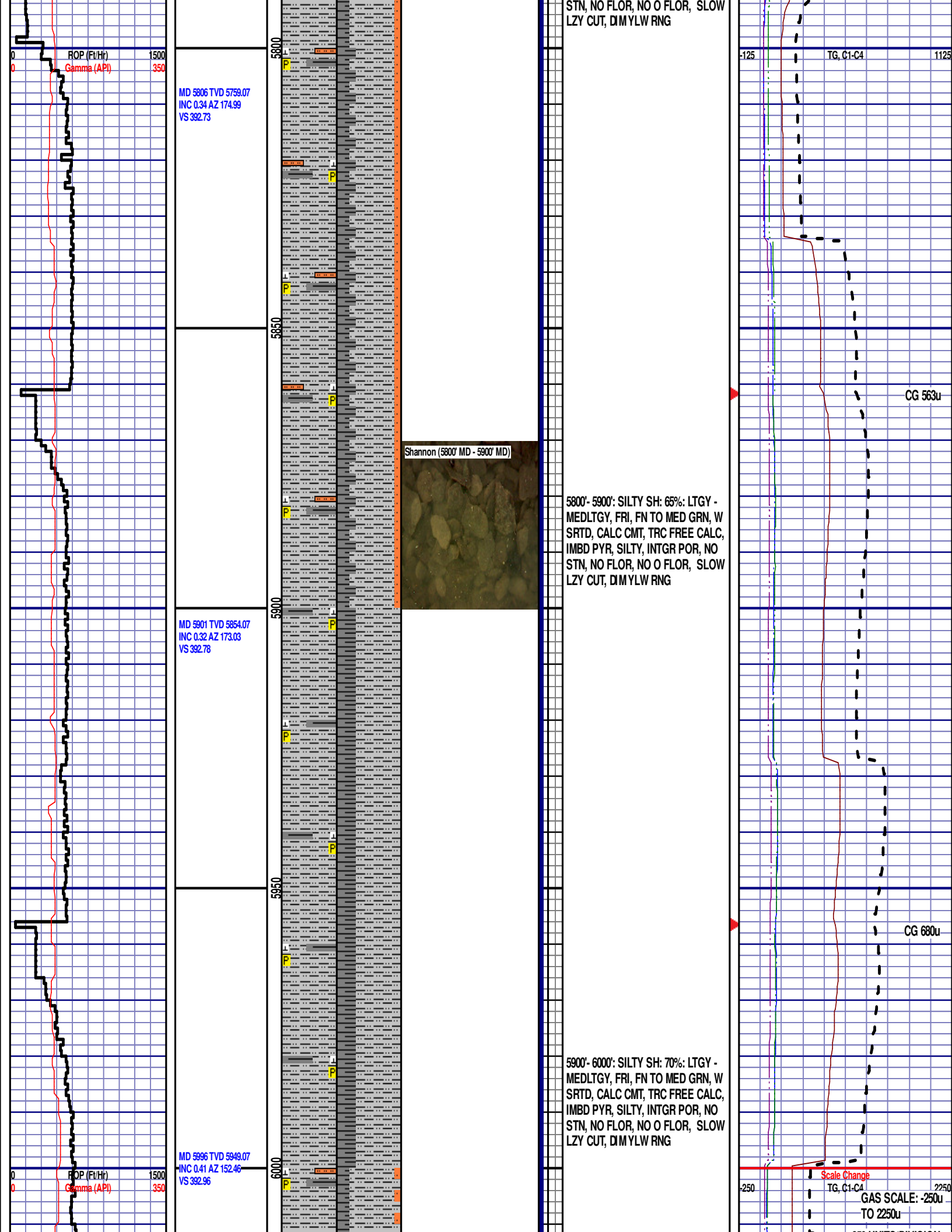
CG 586u

TG, C1-C4

CG 1001u







WOB 13.2K  
PP 3815  
RPM 80  
SPM 74/74

MD 6090 TVD 6043.06  
INC 0.28 AZ 169.94  
VS 393.15

MD 6185 TVD 6138.06  
INC 0.36 AZ 189.86  
VS 393.13

ROP (Ft/Hr) 1500  
Gamma (API) 350

6050

6100

6150

6200

Shannon (6000' MD - 6100' MD)

Teepee Buttes (6100' MD - 6200' MD)

6000'- 6100': SILTY SH: 75%: LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, TRC FREE CALC,  
IMBD PYR, SILTY, INTGR POR, NO  
STN, NO FLOR, NO O FLOR, SLOW  
LZY CUT, DIM YLW RNG

TEEPEE BUTTES  
6157' MD 6110' TVD

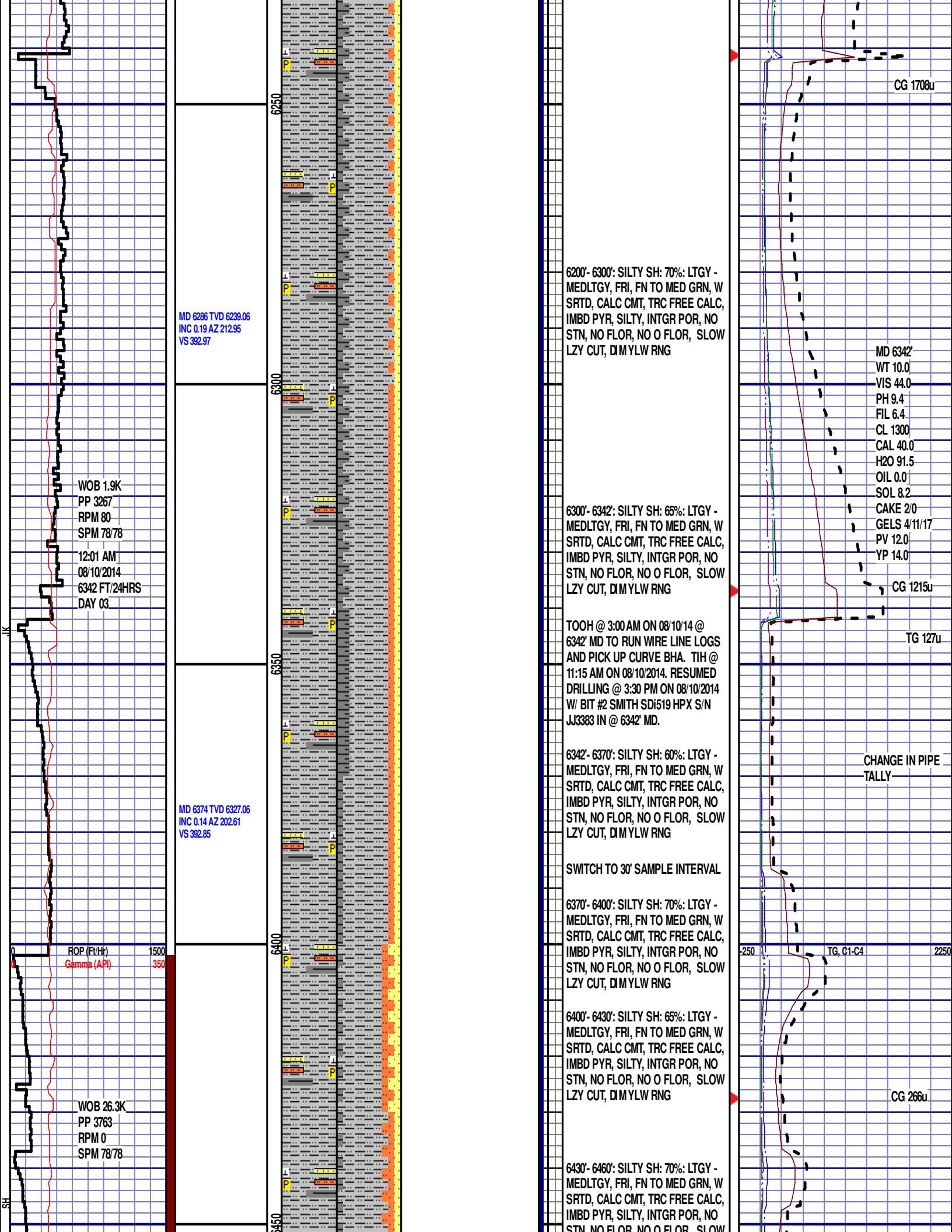
6100'- 6200': SILTY SH: 65%: LTGY -  
MEDLTGY, FRI, FN TO MED GRN, W  
SRTD, CALC CMT, TRC FREE CALC,  
IMBD PYR, SILTY, INTGR POR, NO  
STN, NO FLOR, NO O FLOR, SLOW  
LZY CUT, DIM YLW RNG

CG 910u

CG 1198u

FG, C1-C4





MD 6286 TVD 6239.06  
INC 0.19 AZ 212.95  
VS 392.97

WOB 1.9K  
PP 3267  
RPM 80  
SPM 78/78  
12:01 AM  
08/10/2014  
6342 FT/24HRS  
DAY 03

MD 6374 TVD 6327.06  
INC 0.14 AZ 202.61  
VS 392.85

ROP (Ft/Hr) 1500  
Gamma (API) 350

WOB 26.3K  
PP 3763  
RPM 0  
SPM 78/78

6200'- 6300': SILTY SH: 70%: LTGY - MEDLTGY, FRI, FN TO MED GRN, W SRTD, CALC CMT, TRC FREE CALC, IMBD PYR, SILTY, INTGR POR, NO STN, NO FLOR, NO O FLOR, SLOW LZ Y CUT, DIM YLW RNG

6300'- 6342': SILTY SH: 65%: LTGY - MEDLTGY, FRI, FN TO MED GRN, W SRTD, CALC CMT, TRC FREE CALC, IMBD PYR, SILTY, INTGR POR, NO STN, NO FLOR, NO O FLOR, SLOW LZ Y CUT, DIM YLW RNG

TOOH @ 3:00 AM ON 08/10/14 @ 6342' MD TO RUN WIRE LINE LOGS AND PICK UP CURVE BHA. TIH @ 11:15 AM ON 08/10/2014. RESUMED DRILLING @ 3:30 PM ON 08/10/2014 W/ BIT #2 SMITH SDI519 HPX S/N JJ3383 IN @ 6342' MD.

6342'- 6370': SILTY SH: 60%: LTGY - MEDLTGY, FRI, FN TO MED GRN, W SRTD, CALC CMT, TRC FREE CALC, IMBD PYR, SILTY, INTGR POR, NO STN, NO FLOR, NO O FLOR, SLOW LZ Y CUT, DIM YLW RNG

SWITCH TO 30' SAMPLE INTERVAL

6370'- 6400': SILTY SH: 70%: LTGY - MEDLTGY, FRI, FN TO MED GRN, W SRTD, CALC CMT, TRC FREE CALC, IMBD PYR, SILTY, INTGR POR, NO STN, NO FLOR, NO O FLOR, SLOW LZ Y CUT, DIM YLW RNG

6400'- 6430': SILTY SH: 65%: LTGY - MEDLTGY, FRI, FN TO MED GRN, W SRTD, CALC CMT, TRC FREE CALC, IMBD PYR, SILTY, INTGR POR, NO STN, NO FLOR, NO O FLOR, SLOW LZ Y CUT, DIM YLW RNG

6430'- 6460': SILTY SH: 70%: LTGY - MEDLTGY, FRI, FN TO MED GRN, W SRTD, CALC CMT, TRC FREE CALC, IMBD PYR, SILTY, INTGR POR, NO STN, NO FLOR, NO O FLOR, SLOW LZ Y CUT, DIM YLW RNG

CG 1708u

MD 6342'  
WT 10.0  
VIS 44.0  
PH 9.4  
FIL 6.4  
CL 1300  
CAL 40.0  
H2O 91.5  
OIL 0.0  
SOL 8.2  
CAKE 2/0  
GELS 4/11/17  
PV 12.0  
YP 14.0

CG 1215u

TG 127u

CHANGE IN PIPE TALLY

TG, C1-C4

CG 266u

