



Scale 1:240 (5"=100') Imperial

Well Name: Castelli Exploration, Inc. Gallup Ranch #1-13  
Location: Sec. 13-30S-16W Kiowa Co. Kansas  
Licence Number: Region: U.S.A.  
Spud Date: 7/28/2014 Drilling Completed: 8/6/2014  
Surface Coordinates: 1,650' FSL & 1,485' FWL  
Bottom Hole Coordinates: 1,650' FSL & 1,485' FWL  
Ground Elevation (ft): 1,774' K.B. Elevation (ft): 1,787'  
Logged Interval (ft): 2,688' To: T.D. Total Depth (ft): 4,900'  
Formation: Viola/Simpson  
Type of Drilling Fluid: Chemical

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

#### OPERATOR

Company: Castelli Exploration, Inc.  
Address: 6908 N.W. 112th  
Oklahoma City, Oklahoma 73162

#### GEOLOGIST

Name: Mr. Tom Castelli  
Company: Castelli Exploration, Inc.  
Address: 6908 N.W. 112th  
Oklahoma City, Oklahoma 73162

#### DSTs

DST#1 4,513' - 4,560', 30-45-30-60, IH=2,223, IF20, FF=25, FSI=226, FH=2,181, REC=140' GAS, SOCM=40'

DST #2 4,670-4700', 30-60-60-90, IH=2,329, IF=50, FF=118,  
ISI=1,625, SF=153, SF=234, FSI=1,566, FH= 2,242

REC=70' MW, 365' SW, IF weak to fair blow, . Increase to 6 1/2', ISI; No blow, FF; Weak to fair blow, Increase to 10', FSI; No blow

#### Comments

Duke Rig #7 Samples  
logging Unit #08  
Logger Tiger Mitchell  
580-689-2272

### ROCK TYPES

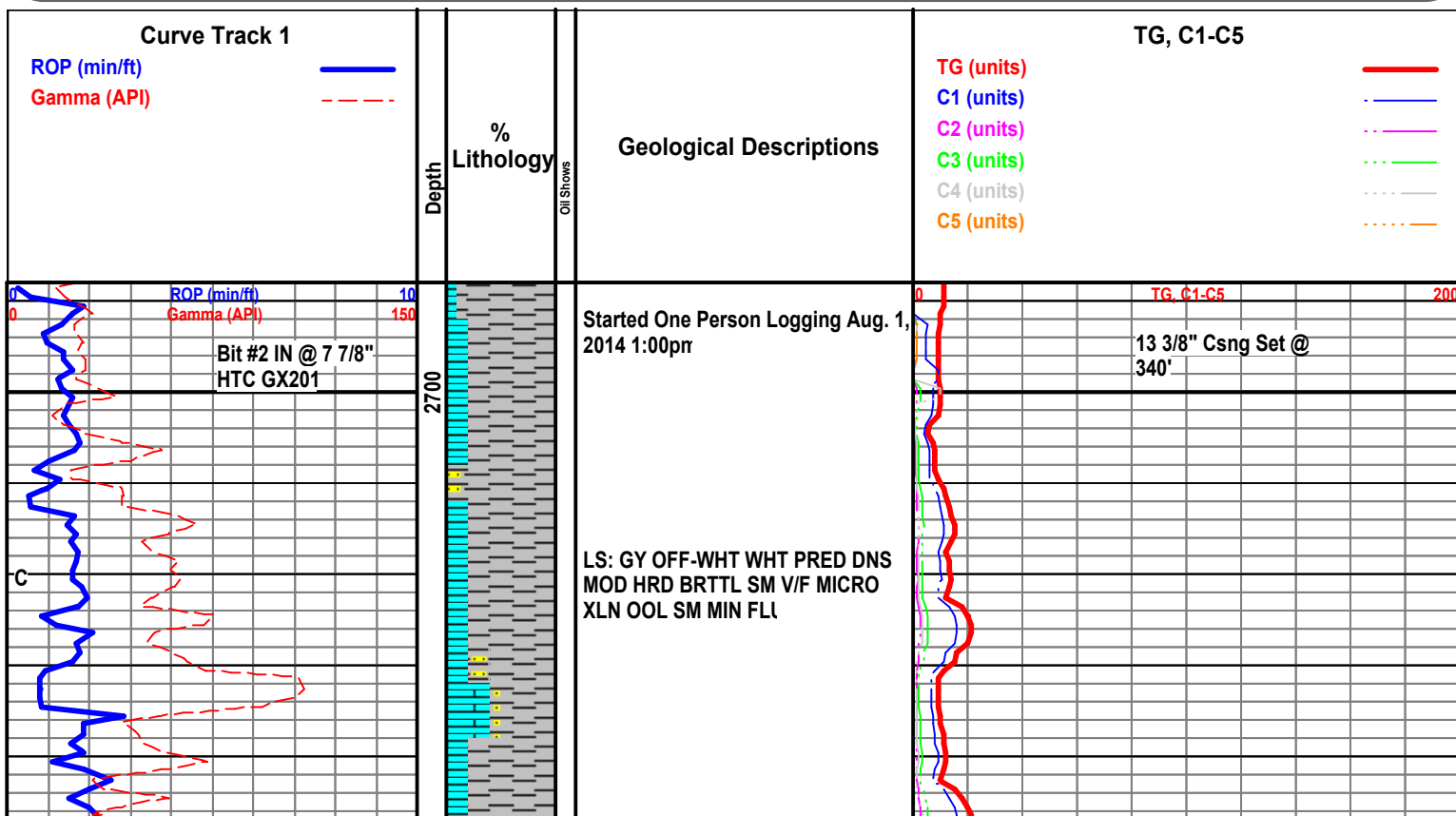
Anhy	Coal	Lmst	Shcol	sdy sh
Bent	Congl	Meta	Shgy	calc sh
Brec	Dol	Mrlst	Slstst	shale
Cht	Gyp	Salt	Ss	carb sh
Clyst	Igne	Shale	Till	

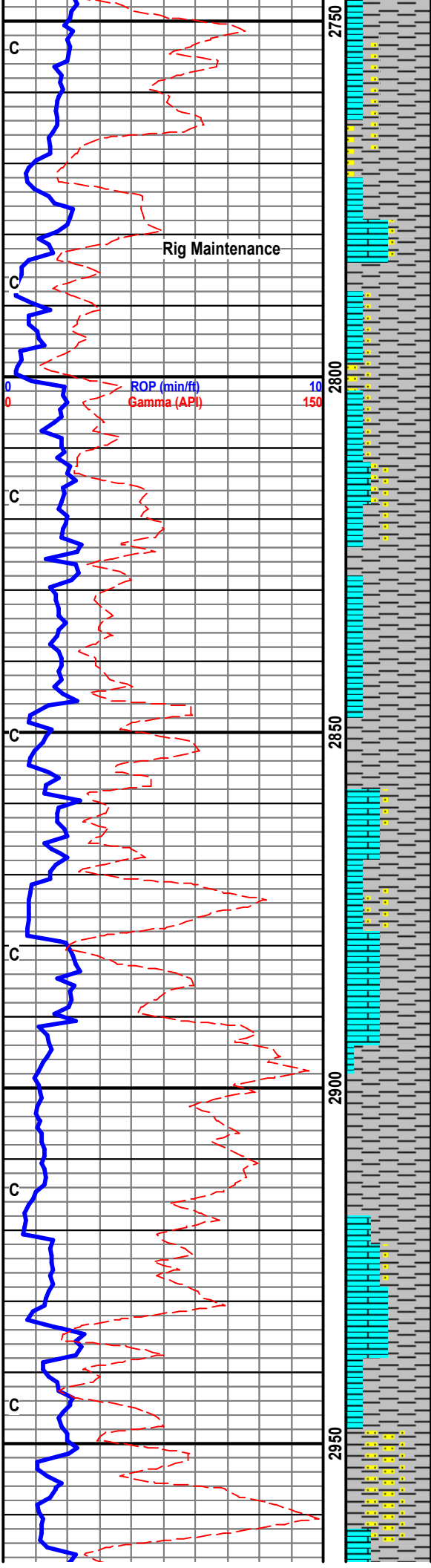
### ACCESSORIES

<b>FOSSIL</b>	Ostra	Chtdk	Sandy	Ssstrg
Algae	Pelec	Chtlt	Silt	<b>TEXTURE</b>
Amph	Pellet	Dol	Sil	Boundst
Belm	Pisolite	Feldspar	Sulphur	Chalky
Bioclst	Plant	Ferrpel	Tuff	Cryxln
Brach	<b>MINERAL</b>	Ferr	<b>STRINGER</b>	Earthy
Bryozoa	Anhy	Glau	Anhy	Finexln
Cephal	Arggrn	Gyp	Arg	Grainst
Coral	Arg	Hvymin	Bent	Lithogr
Crin	Bent	Kaol	Coal	Microxln
Echin	Bit	Marl	Dol	Mudst
Fish	Brecfrag	Minxl	Gyp	Packst
Foram	Calc	Nodule	Ls	Wackest
Fossil	Carb	Phos	Mrst	
Gastro		Pyr	Slststrg	
Oolite		Salt		

### OTHER SYMBOLS

<b>INTERVALS</b>	<b>POROSITY TYPE</b>	Pinpoint	<b>ROUNDING</b>	<b>OIL SHOWS</b>
Core	Earthy	Vuggy	Rounded	Even
Dst	Fenest	<b>SORTING</b>	Subrnd	Spotted
<b>EVENTS</b>	Fracture	Well	Subang	Ques
Rft	Inter	Moderate	Angular	Dead
Sidewall	Moldic	Poor		
	Organic			





SH: GY MD-GY DK-GY TR BLK FRM  
V/F TXT BLKY PLTY I.P. SLI SNDY  
W/ SM GY OFF-WHT WHT LS DNS  
BRTTL

LS: OFF- WHT WHT GY V/F  
MICRO-XLN PRED DNS FRM-MD SM  
SNDY TXT YELL FLU NO CUT NO  
STN NO ODOR

LS: OFF-WHT WHT CRM GY DNS  
SNDY TXT I.P. FMD-HD SM BRTTL  
SM YELL FLU NO STN NO CUT NO  
ODOR

LS: AAB

LS: OFF-WHT WHT CRM GY DNS  
SNDY TXT I.P. V/F MICRO-XLN SM  
P.P. POR FMR-MD SM YELL FLU NO  
STN NO CUT NO ODOR W/ SH  
DK-GY GY BLK FRM SMTH PLTY  
BLKY CARB I.P.

SH: GY MD-GY FRM V/F TXT SM  
SNDY TXT BLKY PLTY I.P.

LS: OFF-WHT WHT CRM LT-GY V/F  
MICRO-XLN SCTTRD P.P. SM DNS  
FRM- MD NO FLU

SH: GY MD-GY FRM V/F TXT BLKY  
PLTY I.P. PRED SNDY

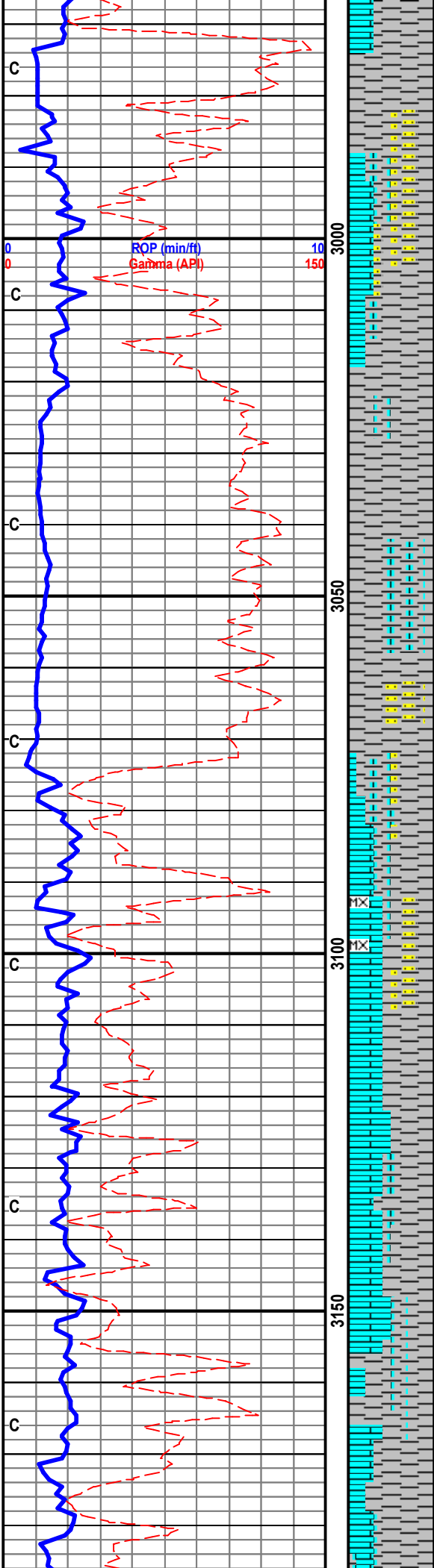
D.T. Gas 57 u

TG, C1-C5

64 U.

60 U.

200



SH:AAB

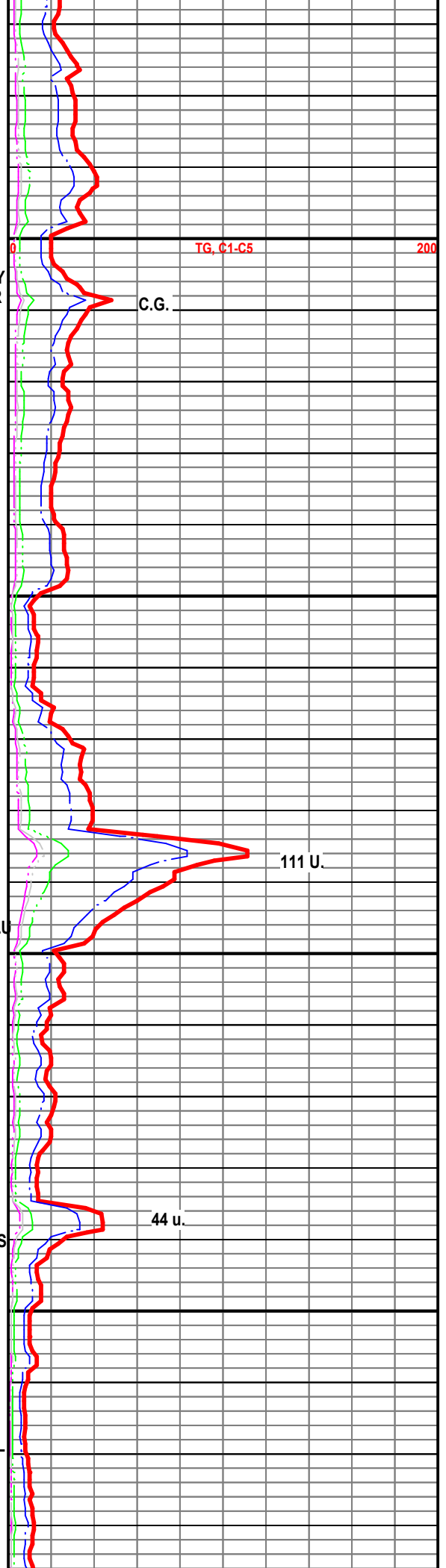
LS: OFF-WHT WHT LT- GY GY V/F  
MICRO-XLN SFT-FRM ABDT CHLKY  
TR FLU NO VIS CUT STN OR ODOR

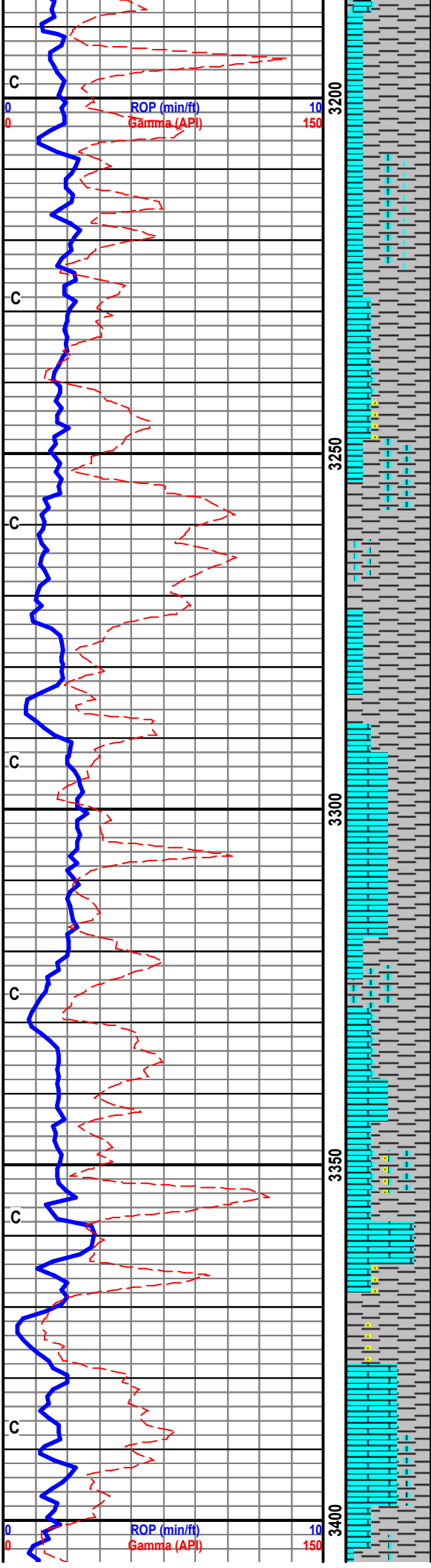
SH: GY MD-GY FRM V/F TXT BLKY  
PLTY I.P. CALC'C

LS: WHT CRM LT-GY V/F-F MICRO  
XLN SCTTRD P.P. POR LT-YELL FLU  
NO VIS CUT OR STN

LS: WHT CRM LT-GY V/F-F MICRO  
XLN TR P.P. POR YELL FLU NO VIS  
CUT OR STN

LS: WHT TN BUFF FRM DNS BRRTL  
I.P. ARG NO FLU





LS: WHT TN BUFF FRM SM DNS  
 ABNDT CHLKY SFT ARG NO FLU

LS: GY OFF-WHT WHT PRED DNS  
 FRM-MD SM ARG TR FLU NO VIS  
 CUT NO STN NO ODOF

SH: MD-GY DRK-GY V/F TXT SFT-MD  
 PLTY SM SPLNTY MICA SM SNDY

LS: CRM OFF-WHT WHT GY DNS  
 MD- BRRTL SM CHLKY I.P. SCTTRD  
 MIN FLU

SH: MD-GY DRK-GY V/F TXT SFT-MD  
 PLTY V/ LMY MICA

LS: OFF-WHT WHT LT-GY V/F F  
 MICRO-XLN PRED DNS FRM-MD  
 SHLY ARG NO FLU

SH: GY MD-GY V/F TXT FRM  
 SPLNTY PYR'C V/F MICA

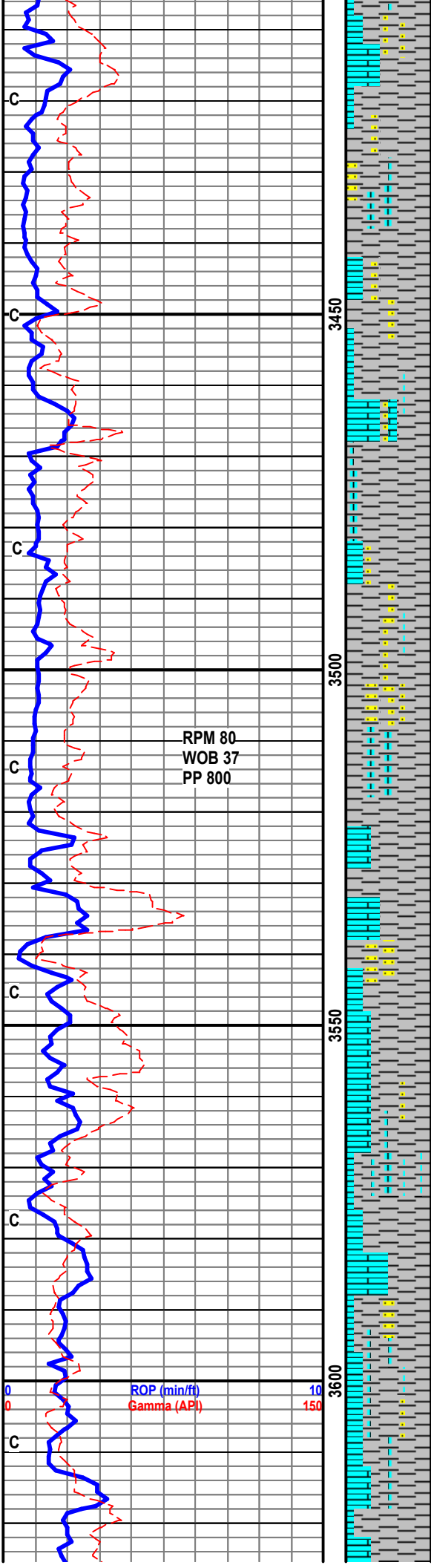
LS- WHT OFF-WHT CRM LT-GY  
 PRED DNS SM HD BRRTL FRM-MD  
 YELL FLU W/ NO STN NO ODOR NO  
 NUT

TG, C1-C5

200

TG, C1-C5

200



SH: MD-GY DRK-GY V/F TXT SFT-MD  
 PLTY SM SPLNTY MICA CAL'C SM  
 SNDY

SH: AAB W/LS WHT CRM BUFF  
 V/F-F MICRO XLN SNDY TXT  
 FRM-MD HD BRTTL I.P. YELL FLU  
 W/ NO VIVS STN NO ODOR NO CUT

SH: GY DRK-GY V/F-F TXT SMTH I.P  
 PLTY FRM -MD SNDY SM CAL'C

LS: WHT BUFF OFF-WHT V/F-F  
 MICRO-XLN FRM-MD SM HD DNS  
 YELL FLU W/ NO VIS STN CUT OR  
 ODOR

SH: MD-GY DRK-GY V/F-SNDY TXT  
 MD PLTY SM SPLNTY V/F MICA  
 CAL'C

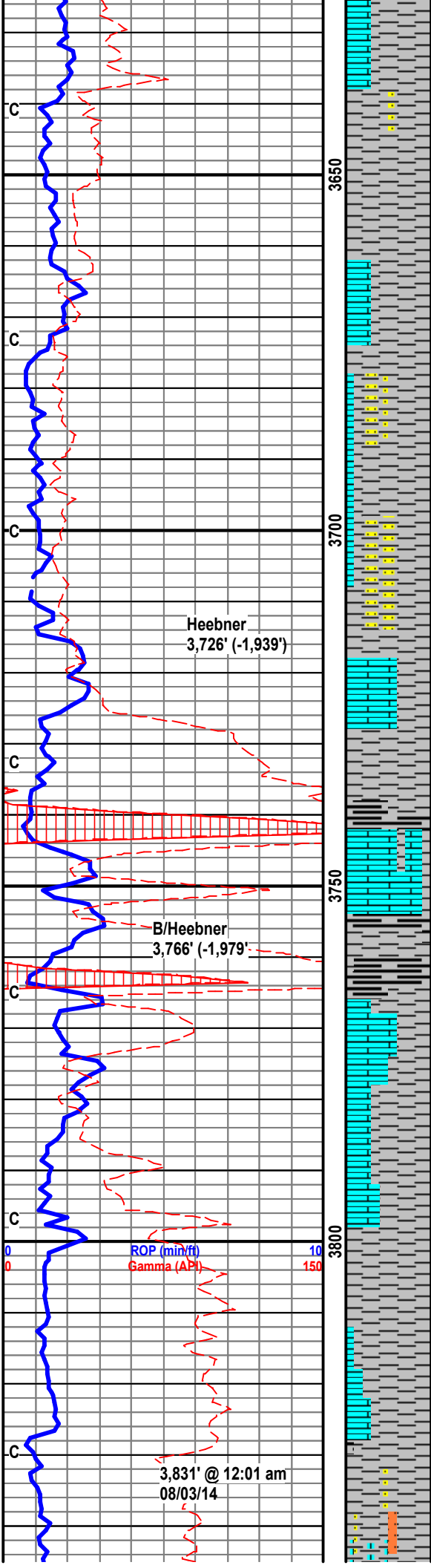
SH: GY DK-GY SNDY TXT MOD-FRM  
 PLTY ABDT CALC PYR'C

RPM 80  
 WOB 37  
 PP 800

WT. 9.2  
 VIS 30  
 SPM 56

ROP (min/ft) 10  
 Gamma (API) 150

TG, C1-C5 200



LS: OFF-WHT WHT CRM BUFF V/F  
MICRO-XLN MD CHLKY SHLY SM  
FLU NO STN NO CUT NO ODOI

LS: OFF-WHT WHT BUFF DNS HD  
BRTTL TR MICRO-XLN ARG YELL  
FLU W/ NO STN NO ODOR

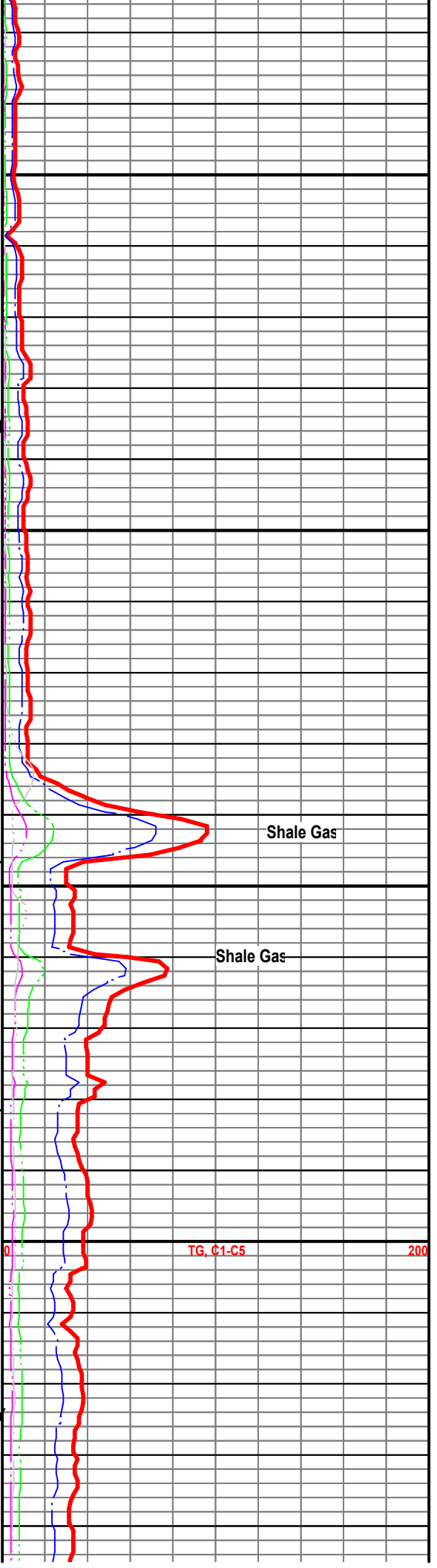
SH: LT GY-GY-SM GRN PLTY BLKY  
FRM MOD FRM PRED SMTH TXT SM  
VRY SLI SLTY IP SM SCTTRD OFF  
WHT-WHT LS- DNS HD BRTTL

LS: WHT BUFF OFF-PRED DNS HD  
WHT V/F-F MICRO-XLN I.P. FRM-MD  
SM HD DNS YELL FLU W/ NO VIS  
STN CUT OR ODOR

SH: GY-MD GY-DK GY-BLK SFT  
MOD FRM PLTY BLKY SM SPLNTR  
CARB SM SLI SLTY TXT IP W/ ABDT  
OFF WHT CRM -BUFF LS AAB

LS: OFF WHT-CRM-BUFF-TN-BRN  
V/F XLN SM MICRO XLN DNS BRTTL  
SM SLI CHKY SM SLI MOTT IP ARG  
SHLY SM SLI TR POR W/SCTTRD  
DULL YEL FLU NO VIS CUT OR STN  
NO ODOR

SH: GY-MD GY-DK GY MOD  
FRM-FRM SM SFT SMTH PLTY BLKY  
SM SLTY-SNDY TXT I.P. SM VRY SL  
TR CARB W/ SM LS AAB SCTTRD  
TR OFF WHT-WHT SS



Heebner  
3,726' (-1,939')

B/Heebner  
3,766' (-1,979')

ROP (min/ft)  
Gamma (API)

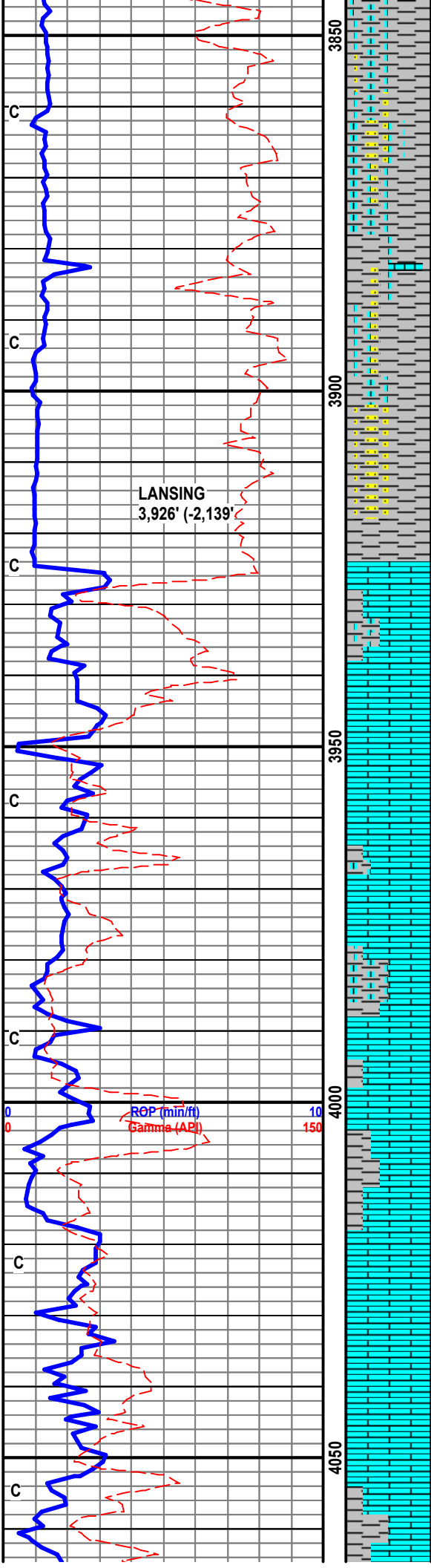
3,831' @ 12:01 am  
08/03/14

Shale Gas

Shale Gas

TG, C1-C5

200



SH: AAB

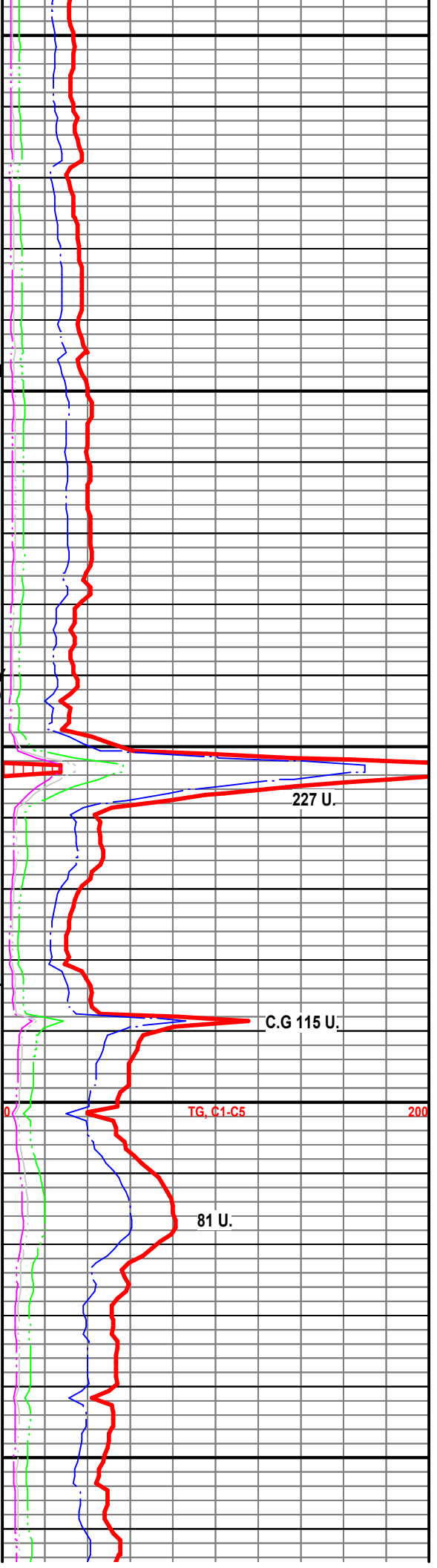
SH: LT GY-GY-SM GRN PLTY BLKY  
FRM MOD FRM PRED SMTH TXT SM  
VRY SLI SLTY IP SM SCTTRD OFF  
WHT-WHT LS- DNS HD BRTTL

LS: OFF WHT-CRM-BUFF-TN DNS  
BRTTL SM SLI HRD W/ SM SLI CHKY  
FOSS'C SM SUC TXT I.P. V/F MICRO  
XLN ARG W/ SM SLI XLN POR IP SM  
SLI TR VUGGY POR YELL FLU NO  
VIS CUT NO STN NO ODOR

LS: OFF WHT CRM CRM BUFF TN  
LT-BRN CHKY SUC TXT SM DNS  
BRTTL ARG W/SH GY MD GY DK G  
BLKY V/F TXT CALC SM DULL YELL  
FLU NO VIS CUT OR STN

LS: WHT OFF-WHT CRM BUFF TN  
LT-BRN DNS BRTTL SCTTRD P.P  
POR TR VUGGY ARG SM SLI CHKY  
SH GY-MD GY DK GY PLTY V/F TXT  
CALC SM DULL YEL FLU NO VIS  
CUT OR STN

LS: OFF-WHT WHT CRM BUFF ARG  
SM MOTTL PRED DNS V/F  
MICRO-XLN YELL FLU W/ NO VIS  
STN CUT OR ODOR



227 U.

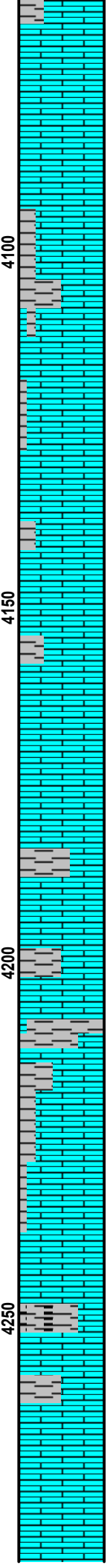
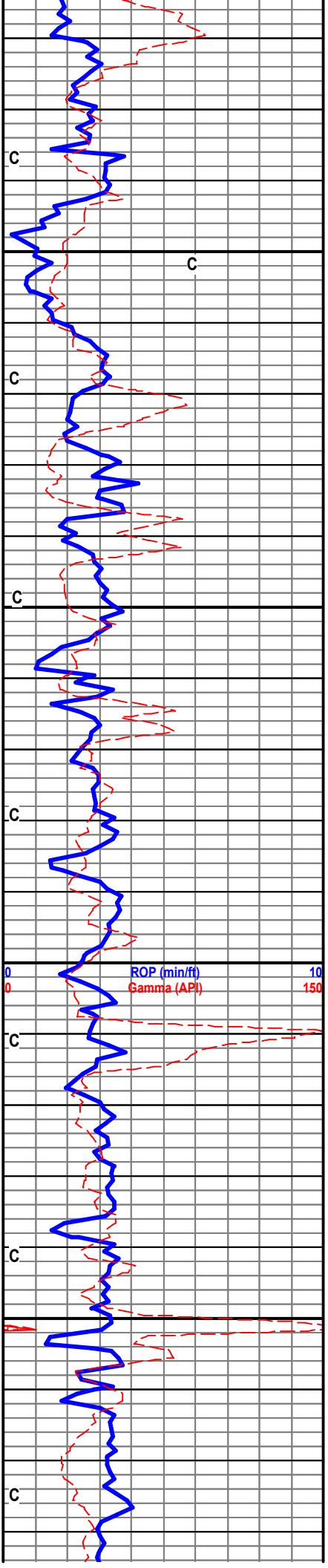
C.G 115 U.

TG, C1-C5

81 U.

LANSING  
3,926' (-2,139')

ROP (min/ft) 10  
Gamma (API) 150



LS: CRM OFF-WHT V/F-F  
 MICRO-XLN FRM-MD PRED DNS HD  
 BRTTL MOTTLD TR FLU W/ NO VIS  
 STN CUT OR ODOR

LS: OFF-WHT WHT CRM BUFF DNS  
 SM SUC TXT V/F-F MICRO-XLN FRM  
 MD SM CHLKY I.P. FOSS'C P.P.  
 YELL FLU W/ NO VIS CUT NO STN  
 NO ODOR

LS: OFF-WHT WHT CRM BUFF DNS  
 SM SUC TXT V/F-F MICRO-XLN FRM  
 MD SM CHLKY I.P. YELL FLU W/ NO  
 VIS CUT NO STN NO ODOR W/ SH  
 GY DK-GY V/F TXT PLTY SM BLKY  
 PYR

LS: OFF-WHT WHT CRM BUFF SMD  
 V/F-F MICRO-XLN FRM MD HD  
 BRTTL YELL FLU W/ NO VIS CUT  
 NO STN NO ODOR W/ SH GY DK-GY  
 V/F TXT PLTY SM BLKY PYR'C W/  
 DRK-GY BLK SMTH CARB

LS: OFF-WHT WHT CRM BUFF SMD  
 V/F-F MICRO-XLN FRM MD HD  
 BRTTL YELL FLU W/ NO VIS CUT  
 NO STN NO ODOF

LS: GY OFF-WHT WHT PRED DNS  
 SM V/F MICRO-XLN POR FRM-MD  
 SM ARG TR FLU NO VIS CUT NO  
 STN NO ODOR W/ SH GY DK-GY  
 BLK PLTY SMTH SM SNDY TXT  
 CARB I.P.

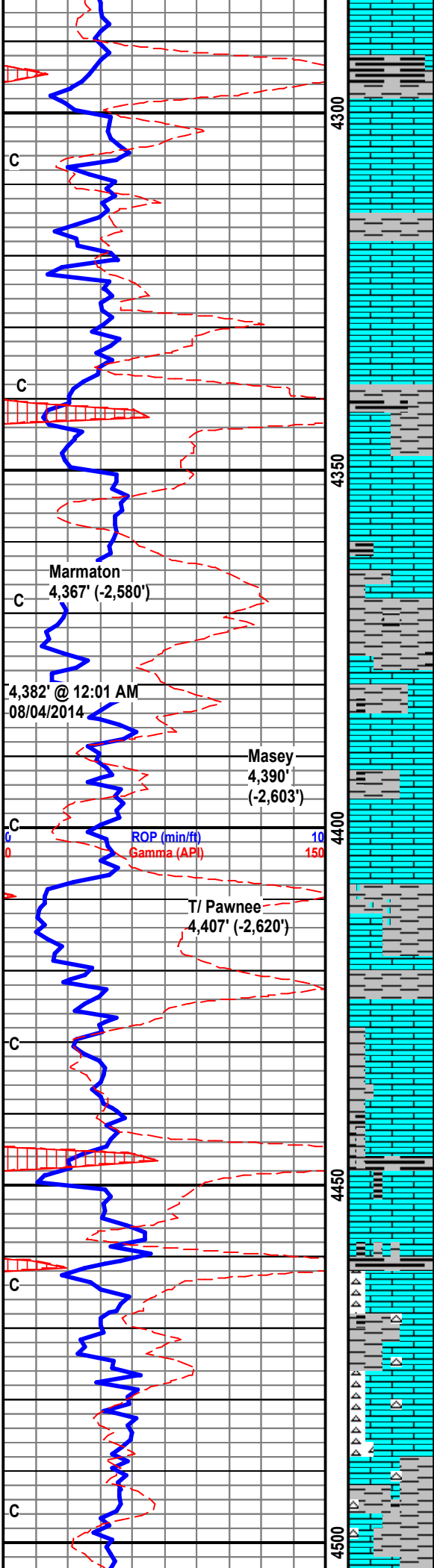
LS: GY OFF-WHT WHT PRED DNS  
 HD BRTTLVF MICRO-XLN YELL FLU  
 NO VIS CUT NO STN NO ODOR

Vis 52  
 WT. 9.1

Rig repaired mud  
 pump

TG, C1-C5

200



SH; GY MD GY MD DK GY DK GY  
SM BLK MOD/F TX MOD FRM CALC  
CARB

LS; OFF WH WH BUFF CRM LT TN  
V/F MICRO-XLN MOD FRM-FRM DNS  
LS SM DULL YELL FLU NO ODOR  
STN OR CUT

LS; OFF WH BUFF LT GY CRM LT  
TN V/F MICRO XLN, MOD FRM-FRM  
SM ARGL SM DULL YELL FLU NO  
ODOR STN OR CUT

SH: GY-MD GY-DK GY-BLK SFT  
MOD FRM PLTY BLKY SM SPLNTY

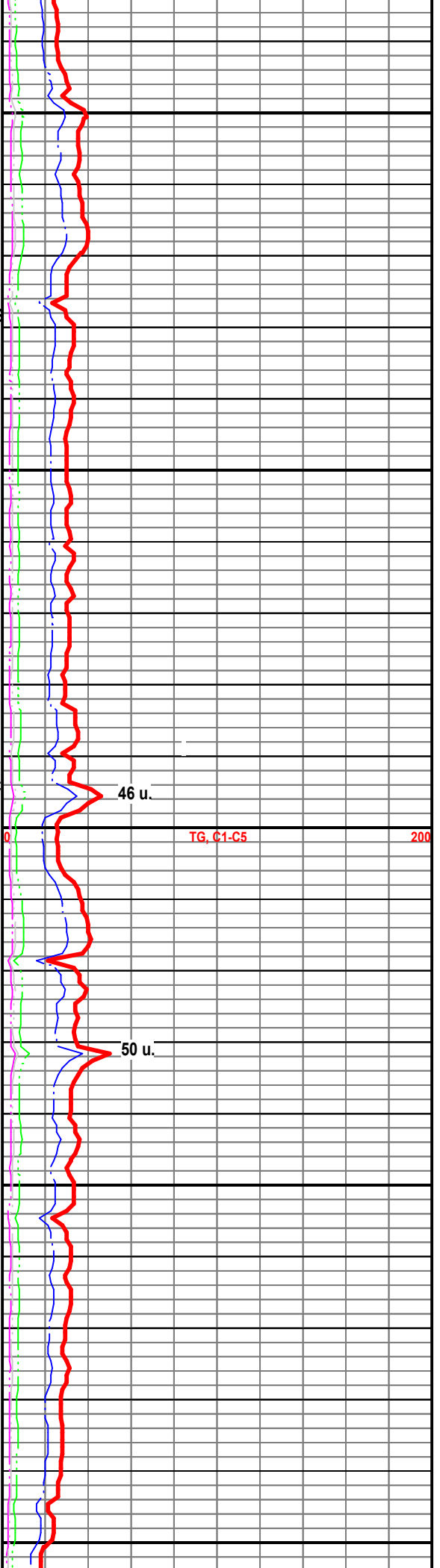
LS: OFF WH BUFF LT GY CRM LT  
TN V/F MICRO XLN MOD SM  
INTRA-XLN POR TR P.P. SM /W SUC  
TXT POR FRM-FRM SM ARGL SM  
YELL FLU W/ NO VIS CUT ODOR OF  
STN

LS: OFF-WHT WHT CRM BUFF DNS  
HD V/F-F MICRO-XLN FRM MD  
YELL FLU W/ NO VIS CUT NO STN  
NO ODOR W/ SH GY DK-GY V/F TXT  
PLTY SM BLKY BLK CARB

LS: OFF-WHT WHT CRM LT-GY V/F  
MICRO-XLN SCTTRD P.P. SM DNS  
FRM HD BRITL W/ CHRT CRM WHT  
HD SM YELL FLU NO VIS CUT NO  
STN NO ODOR W/ BLK SMTH BLKY  
PLTY CARB

Survey 1/2 Degree

LS: OFF WHT WHT CRM BUFF PNK  
I.P. PRED DNS SM SUC TXT MD-HD  
MOD BRITL W/ GRN GY MD-G V/F  
TX SLTY W/ DULL YELL FLU NO

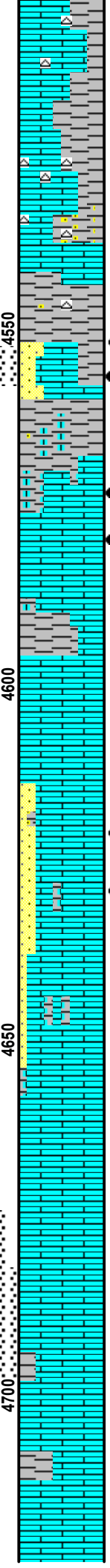
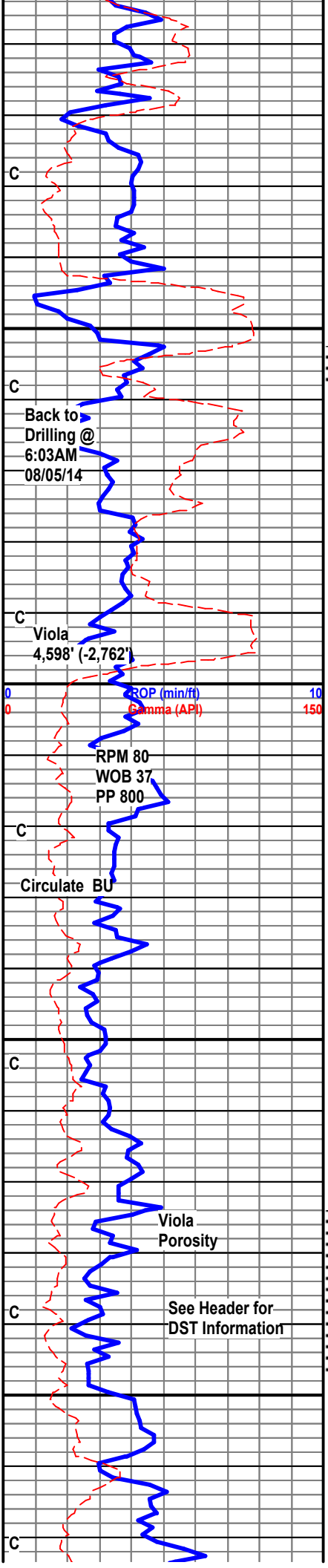


46 u.

TG, C1-C5

200

50 u.



STN NO ODOF

LS: OFF-WHT CRM BUFF TN SM  
DNS V/F-MICO-XLN TR SUC TXT  
DULL YELL FLU

LS: OFF WHT CRM BUFF FRM -MD  
SM F-MICO-XLN SUC TXT VUGGY  
INTR-XLN W/ WHT YELL FLU W/  
EXCELLENT STRM CUT FNT ODOR  
SLI STN W/ SS CRM BRN PRD RND  
GRN W/ FR I.G. POR MD TT V/SLI  
ODOR STN W/ FLSH CUT

See Header for DST Information

LS: OFF WWHT CRM TN BRN  
MICRO-XLN SM INTRA-XLN POR TR  
SUC W/ GREEN FLU W/ SLW STRM  
CUT V/FNT ODOR SLI STN

SH: LT GY-GY-SM GRN PLTY BLKY  
FRM MOD FRM PRED SMTH TXT

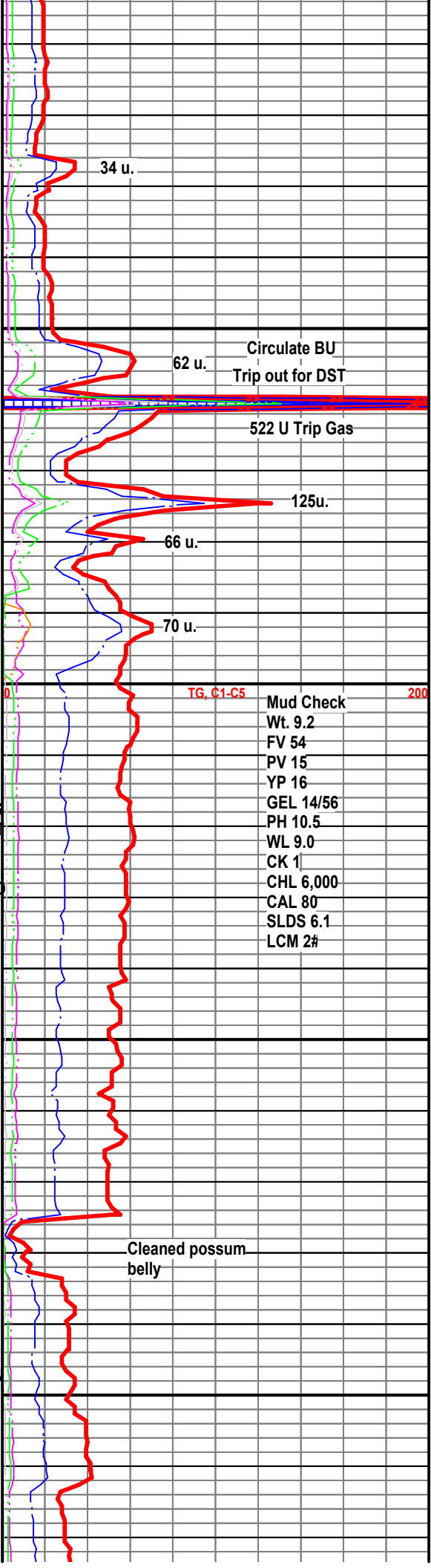
LS: GY OFF-WHT CRM FRM HD DNS  
BRRTL I.P. MICRO-XLN SM SUC TXT  
YELL WHT FLU W/ SLW STRM CUT  
W/ SS WHT CLR BRN F/MG W/ FR  
IG POR CONSD SM ABTD UNCONSD  
SHLY

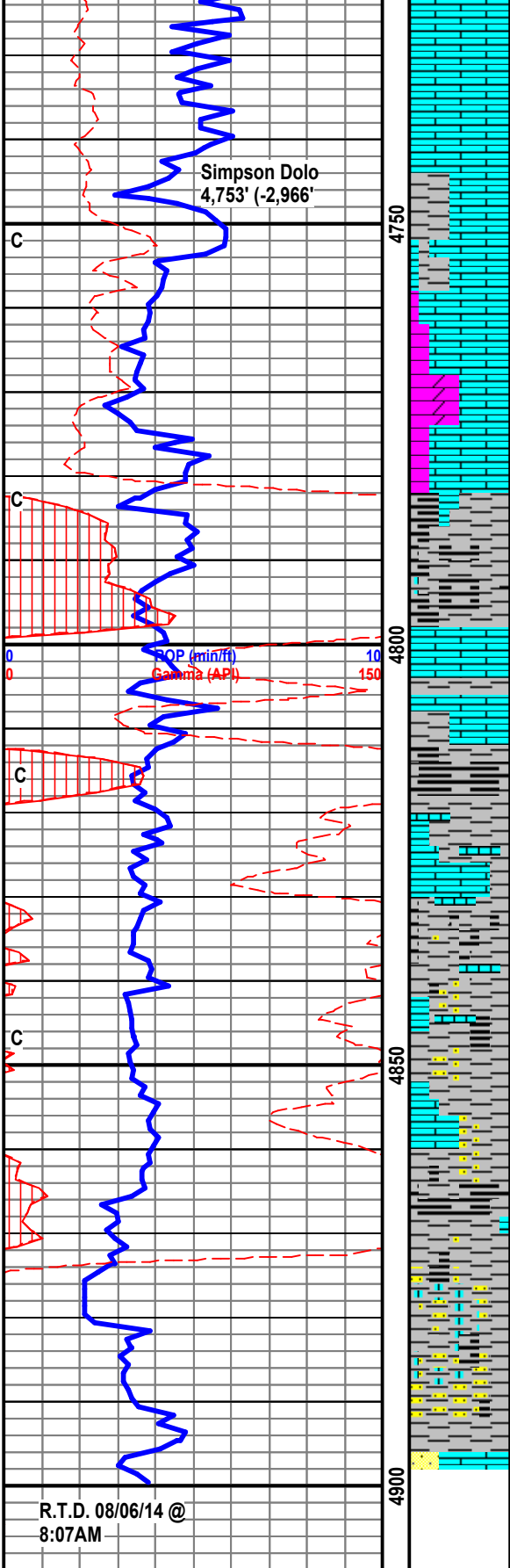
LS: GY OFF WHT WHT BUFF PRED  
DNS HD BRRTL TR CHLKY V/F  
MICRO-XLN TR INTRA-XLN POR  
YELL FLU NO ODOR TR STN SLOW  
STRM CUT W/ SS WHT MSTLY FRI  
ABDT F-MED UNCONSD S/RND-RNI  
ANG GRNS

LS: OFF WH WH BUFF CRM LT TN  
V/F MICRO-XLN DNS SM BRRTL  
INTRA-XLN POR SCTTRD SUC TXT  
YELL FLU NO ODOR STN OR CU

LS: OFF WH WH BUFF CRM LT TN  
V/F MICRO-XLN SM SUC DNS HD  
BRRTL I.P. YELL FLU NO ODOR STN  
OR CUT

LS: OFF-WHT CRM BUFF DNS HD  
BRRTL MOTTL ARG SM MIN FLU  
W/SH LT-GY GY FRM-MD V/F TXT  
SMTH WXY I.P. PYR'C





LS: OFF-WHT CRM BUFF DNS HD  
BRTTL ARG YELL FLU W/ NO STN  
CUT OR ODOR

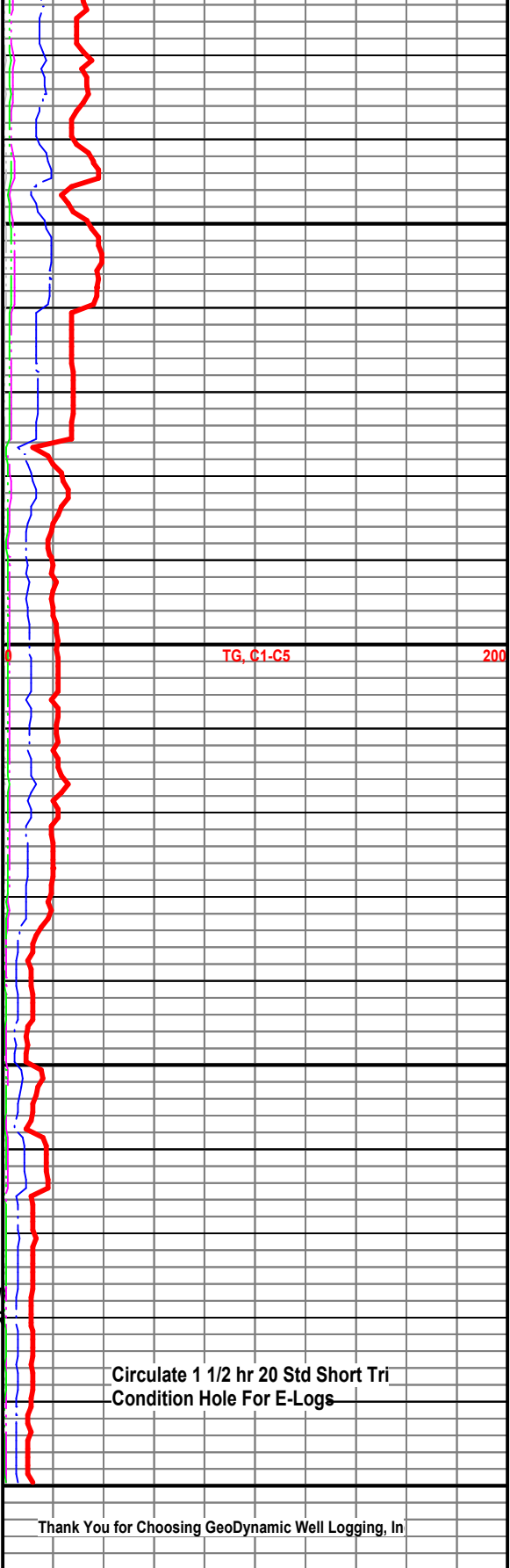
LS: OFF-WHT CRM GY PRED DNS  
HD BRTTL TR V/F MICRO-XLN W/  
DOLO WHT OFF-WHT MD FRM SUC  
TXT SCTTRD INTRA-XLN POR TR  
YELL FLU W/ NO VIS CUT NO STN  
NO ODOR

SH: GY GRN SMTH PLTY BLKY I.P.  
MD-MOD HD W/BLK CARB SMTH  
BLKY

SH: GY GRN SMTH PLTY BLKY I.P.  
MD-MOD HD W/BLK CARB SMTH  
BLKY

SH: GY GRN SMTH PLTY MD HD  
BLK CARB SMTH BLKY PYR

SH: AAB W/ SCTTRD SS CLR GY  
OPAQ V/FG SM UNCONSD MG TT W/  
SM FI SHLY W/ YELL FLU NO ODOR  
NO CUT NO STN



Circulate 1 1/2 hr 20 Std Short Tri  
Condition Hole For E-Logs

R.T.D. 08/06/14 @  
8:07AM

Thank You for Choosing GeoDynamic Well Logging, In