

MBC WELL LOGGING LLC

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

Well Name: HMU 208W AFE: 55333 MERIT ENERGY
 API: 15-055-22474
 Location: FINNEY CO. KS USA
 License Number: 5447 Region: REDWOOD
 Spud Date: 12-14-2017 Drilling Completed: 12-19-2017
 Surface Coordinates: 154'FWL 2361'FNL, SEC 30-T23S-R34W
 RODNEY GONZALES CO REP
 Bottom Hole Coordinates: HLS-DIL/SP/GR CNL/CAL/PE/BHV SONIC SFC
 Ground Elevation (ft): 2984' K.B. Elevation (ft): 2996'
 Logged Interval (ft): 3750' To: 5000' Total Depth (ft): ELOG 5010'
 Formation: MORROW
 Type of Drilling Fluid: WATER BASED MUD

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

OPERATOR

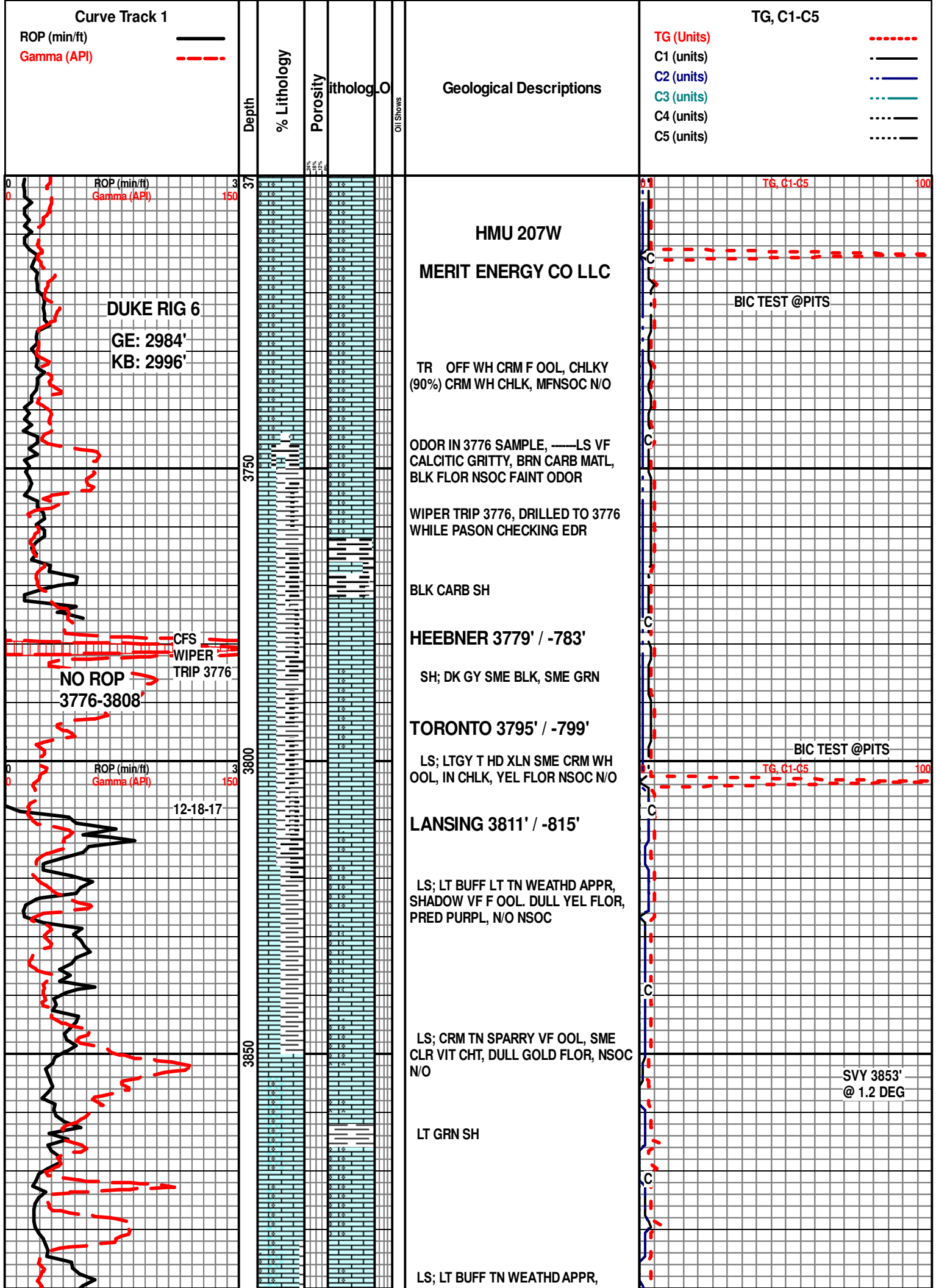
Company: MERIT ENERGY CO LLC
 Address: ATTN: MARTIN LANGE GEOLOGY
 13727 NOEL RD STE 1200
 DALLAS, TEXAS 75240

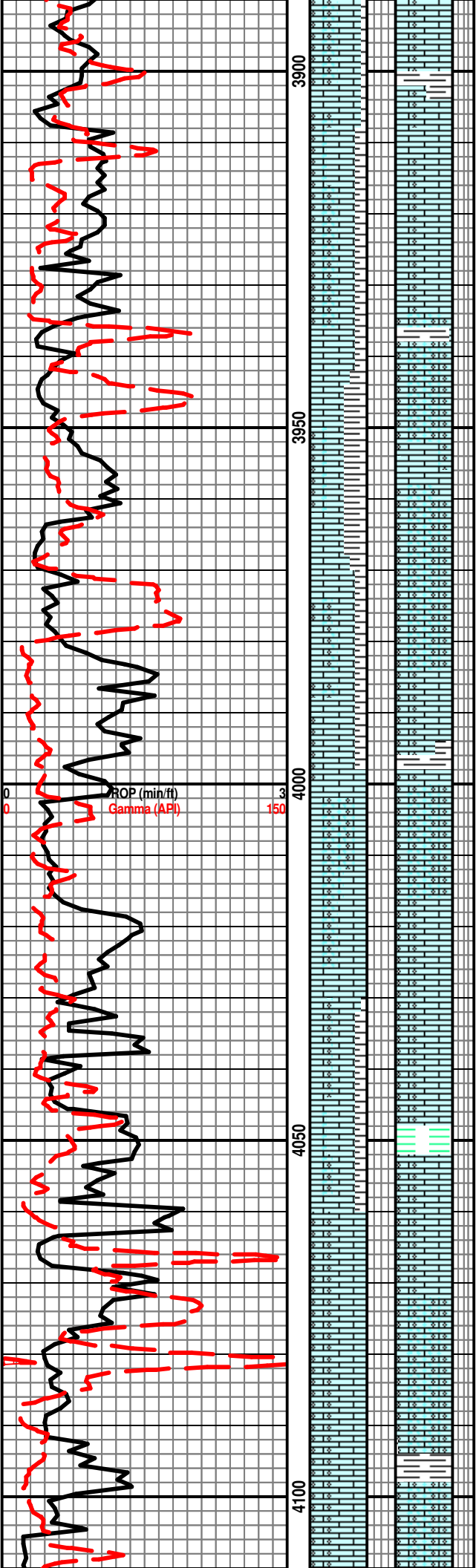
MUDLOGGER

Name: AUSTIN GARNER//TROY FOWLER
 Company: MBC WELL LOGGING LLC
 Address: 21156 RD 22
 MEADE, KANSAS 67864

ROCK TYPES

	Anhy		Stgensndy-arkos		Sltst-1		Stgensndy-arkos
	Brec		New ls-1		Sltly-shale		Sndy ool ls
	Cht		Carby shale		Lmy ss-1		Sndy-ls-1
	Coal		Lmy carby sh-3		Arkosic snd		Calc shale
	Congl		Carb sh		Ss		Granitewash
	New dolomite		Gyp		Grn sh strk		Ls shly-b
	Dolo new		Sltst		Lmy sh-2		Poor sortd ss
	Newdolo ls 2		Salt		Grn mott gy sh		Snd-ls-sh
	Ls & ooids		Sndy sh--red		Shale-1		
	Oolitic ls -1		Sndy sh		Red sh-1		





CHLKY SHADOW OOL, SME SPARITIC
 OOL & OOLCAS, ABDT CRM WH CHLK,
 SME GY SPKLD CHT, YEL FLOR, NSOC
 N/O

LS; LT TN WH HD DNS P/SRTD
 SPARRY OOL & OOLCAS, LT GOLD
 FLOR NSOC N/O

GY GRN SH

LS; LT TN SPARITC F OOL, SME IMBD
 CLR OPAQ CHT, ABDT CRM CHLK, YEL
 FLOR NSOC N/O

LS; GY TN BUFF VF OOL, CHLKY YEL
 MFNSOC, N/O

BLK TO GY SH

LS; GY LT GY HD XLN, SHADOW VF
 OOL, MFNSOC

LS; LT CRM F OOL, FREE F-OOIDS,
 VF F OOLCAS IP, CRM WH CHLK,
 MFNSOC N/O

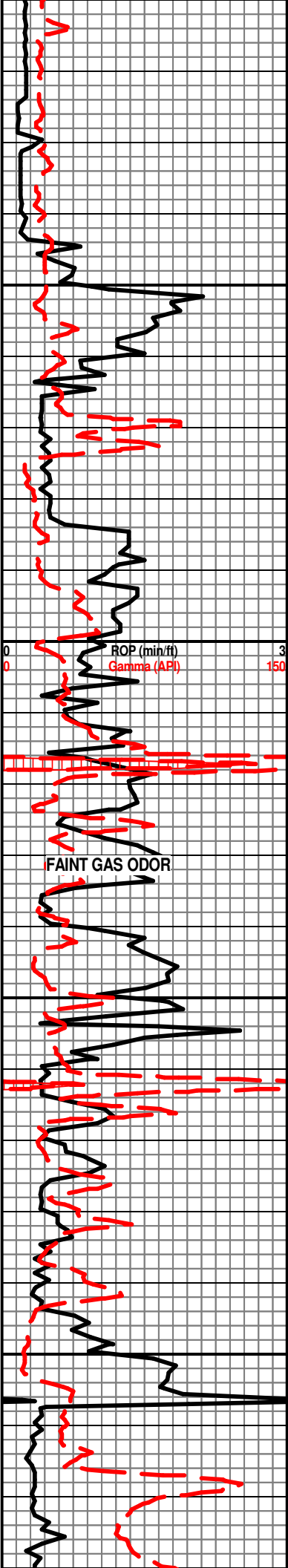
BRITE GRN SH W/ VF GLAU PELL

LS; LT TN BIOSPARITYIC/VF OOL TO
 VF F OOL, CHLKY SME OOLCAS, YEL
 FLOR NSOC N/O

TG, C1-C5

100

SVY 4015'
 @ 1.1 DEG



4150

4200

4250

4300

ROP (min/ft)
Gamma (API)

FAINT GAS ODOR

LS; LT TN BRN P/SRTD VF CRS
OOLCAS, SME OOL, SPARTIC, 50%
CRM WH CHLK, YEL GOLD FLOR NSOC
N/O

SH- GY DRK GY BLK, CARB

KSSC 4174' / -1178'

OOL LS- TN OFF WHT LT GY, HRD
BRITT, M/F-OOL GRNS FR SORTD,
SUCRO TO CHLKY, TRS OF SFT OFF
WHT CHLK, F/TRS OF LT TN CHRT, DLL
YELL TO SPOTTY YEL FLO, FR
OOLICASTIC POR, NO VIS CUT OR
SHOW, NO ODOR
LS- CRM OFF WHT LT TN, HRD DNS TO
BRITT, CHLKY, TRS OF LT TN CHRT,
DLL YEL MIN FLO, NO VIS CUT OR
SHOW

STARK SH 4216' / -1220'

SWOPE 4229' / -1233'

LS- OFF WHT LT TN, HRD BRITT, F-XLN,
CHLKY, TRS OF OOL IP, SME CARRY,
POSS WEATHRD, DLL YEL MIN FLO,
NO VIS CUT OR SHOW, FAINT GAS
ODOR

SH- GY DRK GY BLK TO GRN, FRM
CARB

HUSH SH 4261' / -1265'

LS- TN OFF WHT GY, HRD DNS TO
BRITT, F/VF-XLN, SUCRO TO V/CHLKY,
WEATHRD, ABNDT WHT OFF WHT
CHLK, TRS OF MICRO OOL IP, TRS OF
FOSS FRAGS, YEL MIN FLO, POSS PR
INTER-GRN POR, NO VIS CUT OR
SHOW, NO ODOR

SH- GY BLK, CARB, FRM

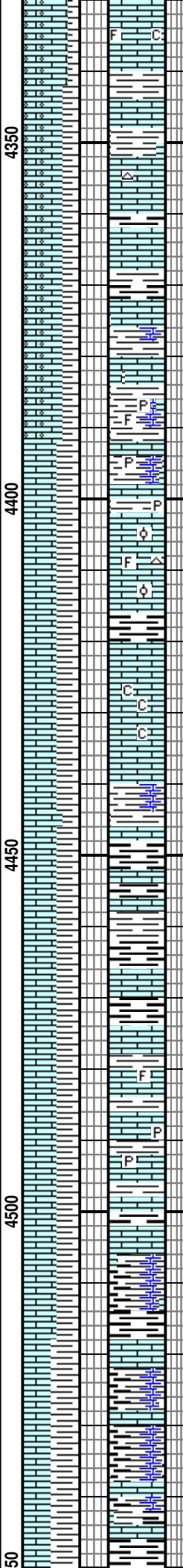
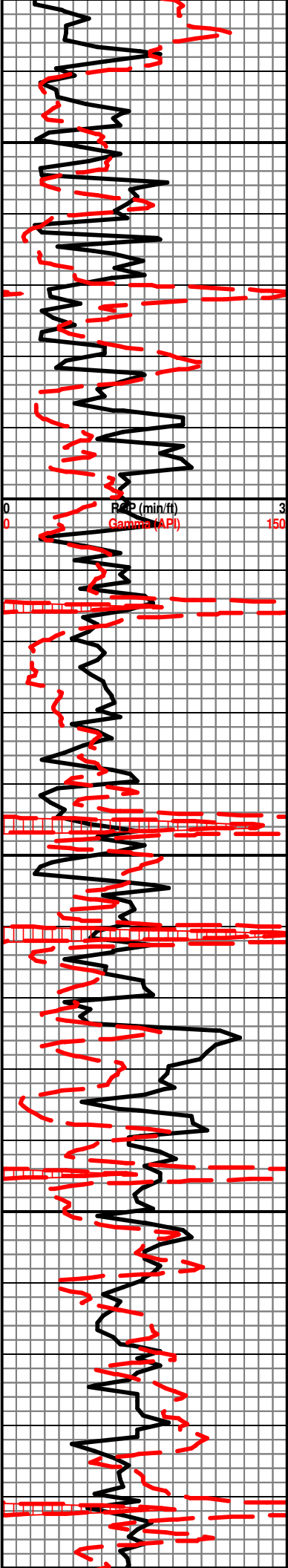
SH- SILTY GY BLK, CARB TO CALC

SVY 4170'
@ 0.7 DEG

TG, C1-C5

100

SVY 4327'
@ 1.1 DEG



MARMATON 4340' - 1344'

LS- CRM OFF WHT LT N TO LT GY, HRD DNS TO BRITT, F/VF-XLN, SUCRO TO CHLKY, TRS OF SFT OFF WHT CHLK, DLL YEL MIN FLO, NO VIS CUT OR SHOW

LS- GY DRK GY TN OFF WHT TO MOTT, HRD BRITT, F/VF-XLN TO RE-XLN, CHLKY, TRS OF CALC-XLS, TRS OF TN GY CHRT, DLL YEL MIN FLO, NO VIS CUT OR SHOW

SH- GY DRK GY TO BLK, FRM BRITT, SMTH SPLNTY, CARB, TRS OF PYR

SH- GY DRK GY BLK, FRM BRITT, SILTY/CALC, INTERBD LS STRNGS, CARBY IP, TRS OF FOSS FRAGS, SME QRTZ-XLS IP, TRS OF PYR

LS- CRM OFF WHT LT GY TO LT TN, HRD DNS, F-XLN, SUCRO TO CHLKY, TRS OF OFF WHT CHRT, TRS OF OOL, TRS OF FOSS FRAGS, YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

PAWNEE 4418' - 1422'

LS- GY DRK GY OFF WHT TO LT TN, HRD DNS TO BRITT, F-XLN, SUB-SUCRO TO CHLKY IP, TRS OF IMBD PYR, F/TRS OF OOL IN CHRT, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

SH- GY BRN TO BLK, FRM BRITT, SMTH BLKY TO SPLNTY, CALC TO CARB

CHEROKEE 4463' - 1467'

SH- DRK GY BLK, FRM BRITT, CARB

SH- GY DRK GY BLK, FRM BRITT TO SFT, SILTY TO INTERBD LS GY DRK GY OFF WHT, F-XLN, CHLKY, TRS OF FOSS FRAGS, PYR, DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

SH- GY DRK GY TO BLK, CARB, CALC IP, TRS OF PYR

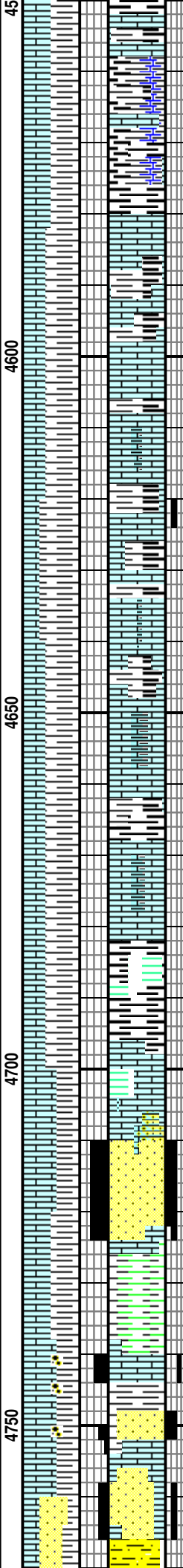
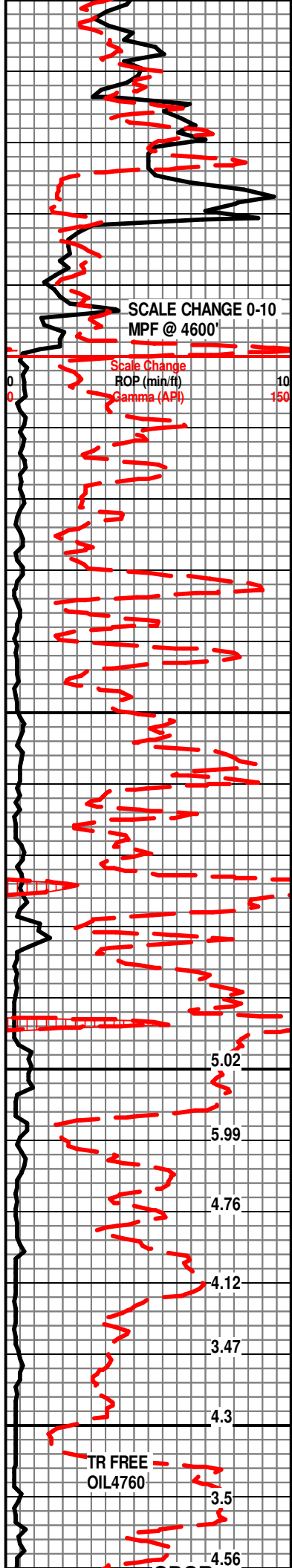
SH- GY DRK GY BLK, FRM BRITT, SMTH BLKY TO GRNY SILTY, CARB, TRS OF PYR, INTERBD LS

SH- SFT BLK CARB, PYR

4367
MUD CHECK
WT 9.2
VIS 55
PV 17
YP 18
GEL 14/34
PH 11.5
FIL 6.4
ALKFIL 1.3-
CHL 1,900
CAL 20
SOL 6.4
LCM 5

TG, C1-C5

SVY 4485'
@ 1.3 DEG



SILTY CARBY SH- GY DRK GY BLK, CALC, GRNY,

SH- SFT BLK CARB

4581' @ 3:30 PM CIRC FOR TOOH

SAMPLES POOR THRU OUT TO 4700

ATOKA 4598' / -1602'

BLK CARB SH

LS; GY MOTT GY WH HD DNS SHLY SME SLTY APPR, INTB BLK CARB TO GRN SH

LS; DK GY SHLY XLN, LAM BLK SH

LS; DIRTY GY BLK, MOTT WH, SHLY FOSS PCES,

MORROW 4685' / -1689'

SH; BLK CARB, TO LT GRN SFT SH

LS; PALE TN BRTL DETRT, TO GY SHLY, FOSS, PYR, FOSS, ABDST GRN CLAY, CHOR & GLAU PELL DK GOLD FLOR, SLOW MILKY CUT TR BRN INTR PART STNG

MRRW A 4707' / -1711'

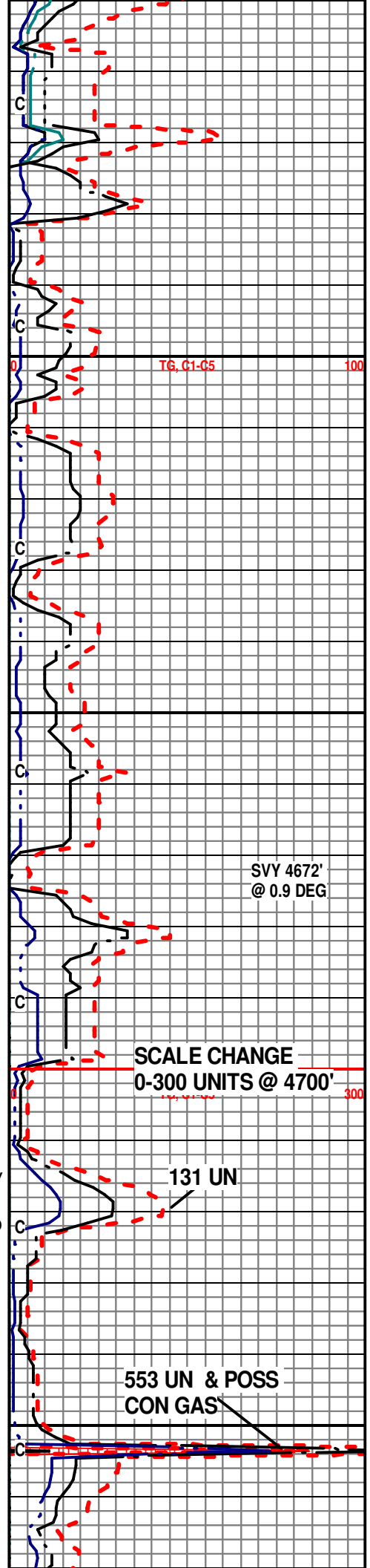
SS; LT BRN LOVER-ALL TO GYISH BRN, VF F GR, W/SRTD, MED-FRI, BLK CARB LENS, LAM DK GY SH IP, TRASHY GY SHLY IP, MICA, SME GLAU, ---PROB COMNGLDW/FOSS FRG & CHOR, LS, SNDY IPL, MUCH FREE DK BRN OIL, DULL GOLD FLOR, FLASH MILKY STGRMG CUT

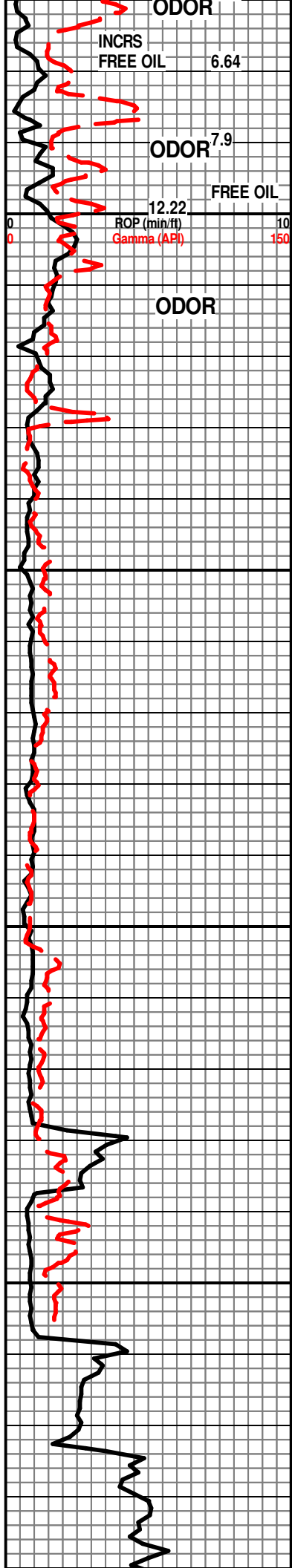
SH; BLKL FREE PYR CLCSTRS, ABDT GRN

MRRW B 4741' / -1745'

LS; CRM TN FOSS FRG, COR & GLAU, TR CHT, DULL GOLD LOFR, TR STNG ON FRGMTL FOSS, GOLD FLOR, FLASH THIN MILKY CUT

SS; V/LT BRN SME GY, VF GR, FRI, PALE WH MICRO PROB GLAU PELL, PYR, FREE DK BRN OIL, FAINT ODOR, FLASH MILKY STGRMG CUT, GOLD FLOR





MRRW C 4771' / -1775'

SS; VLT GY WH BRN STND, SME ALMOST CLR CLSTRS, CALC IP, TRASHY, N/O GOLD FLOR, FLASH THIN MILKY STRMG CUT

ST GEN 4798' / -1802'

LS; WH GY WH AREN SME W/CRM INCLUS, TR OOL, GOLD FLOR, NSOC

SAMPLES INCRS VF GROUND UP V/TRASHY THRU OUT TO RTD

ST LOUIS 4830' / -1834'

LS; CRM WH F SNDY, SME TN OOL W/QTZ, CRM WH CHLKY, TR CHOR, GOLD FLOR, NSOC N/O

LS; LT CRM CRM CHLKY SHADOW VF OOL, SME QTZ, HEAVY COATED GRNS, GOLD MFNSOC N/O

LS; CRM SPAR CMTE F-OOL, CRM CHLKY PALE GOLD FLOR N/O NSOC

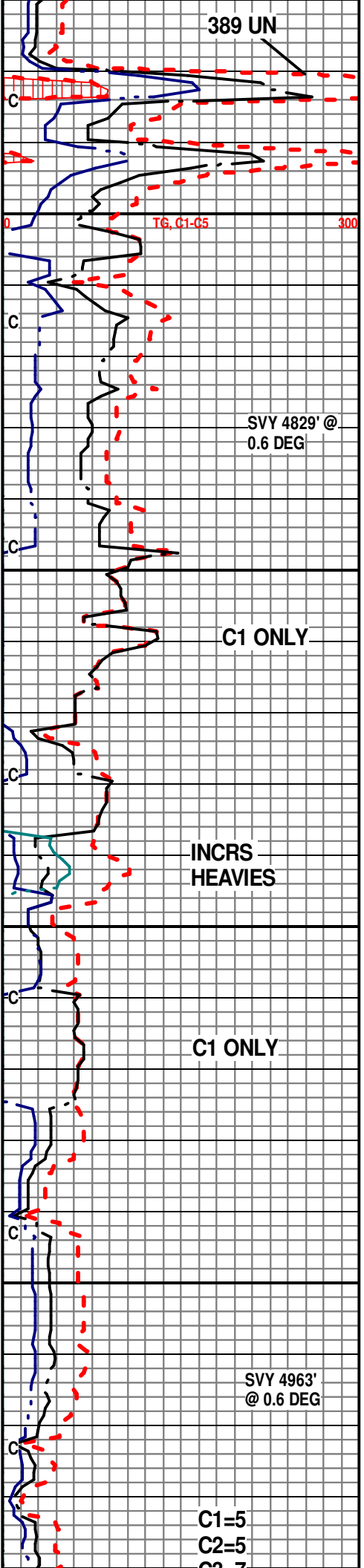
LS; GYISH CRM W/F-CLR QTZ, SME SPARRY F-ROUND TO ELIP OOL CLSTRS, HEAVY RIM COAT, TR CHOR, GOLD MFNSOC N/O

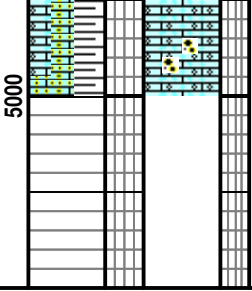
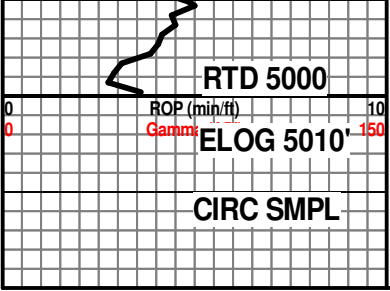
LS; TN HD DNS SPARITIC F OOL, ABDT CRM CHLK, INTBD BRITE GRN SH PALE YEL MFNSOC N/O

SAMPLES GROUND UP VF-TRASHY

LS; LT TN HD DNS XLN W/ LT GY-TN SME TRIP CHT, DULL GOLD MFNSOC, N/O

LS; TN HD DNS VF XLN, ABDT CHLK,





DK GOLD FLOR NSOC N/O

THANKS FOR USING
MBC WELL LOGGING
AUSTIN & MARLA GARNER
& TROY FLOWLER

