

MBC WELL LOGGING LLC

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

Well Name: WICKED WITCH # 4 D & J OIL CO
 Location: HODGEMAN COUNTY, KANSAS USA
 Licence Number: 34839
 Spud Date: 1-28-2014
 Surface Coordinates: 330fnl 330fel SEC 2- T21s R26w
 MURFIN RIG 16 30606
 Bottom Hole API-15-083-21902-00
 Coordinates: ROGER MARTIN CONSULTANT GEOLOGIST
 Ground Elevation (ft): 2419' K.B. Elevation (ft): 2422'
 Logged Interval (ft): 3300 To: 4440 Total Depth (ft):
 Formation: MISS/DOLO PRODUCTION PIPE RAN BY ROGER MARTIN
 Type of Drilling Fluid: ANDY'S MUD& CHEMICAL

Region:

Drilling Completed: 2-5-2014

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






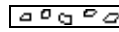
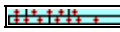


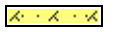






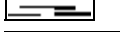

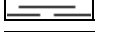








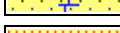


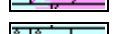

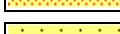


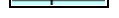


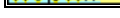

OPERATOR

Company: D&J OIL CO
 Address: CRAIG ROBERTS%GEOLOGY
 4720 W. GARRIOTT
 ENID. OKLAHOMA 73703

MUDLOGGER

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

ROCK TYPES

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

DSTs

DIAMOND TESTING HOISINGTON, KS, JAKE FAHRENBRUCH TESTER
 3 DST'S RAN MISS DOLOMITE

Curve Track 1

ROP (min/ft) ———
 Gamma (API) - - - - -

TG, C1-C5

TG (Units)
 C1 (units) ———
 C2 (units) - - - - -
 C3 (units)
 C4 (units)
 C5 (units)

Depth

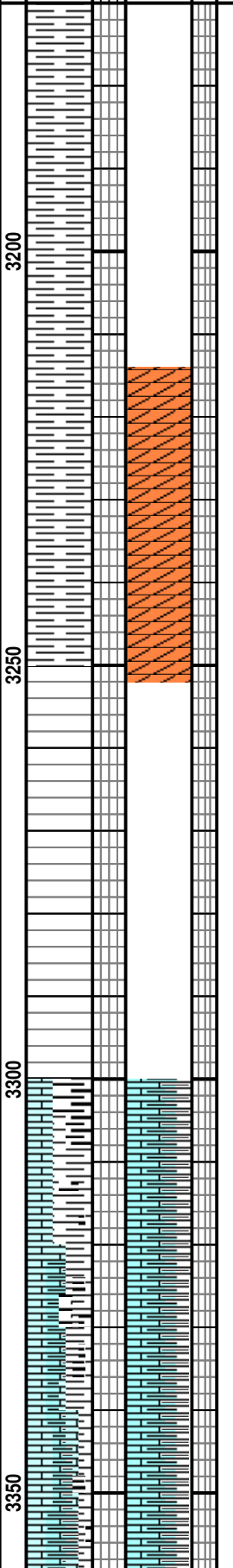
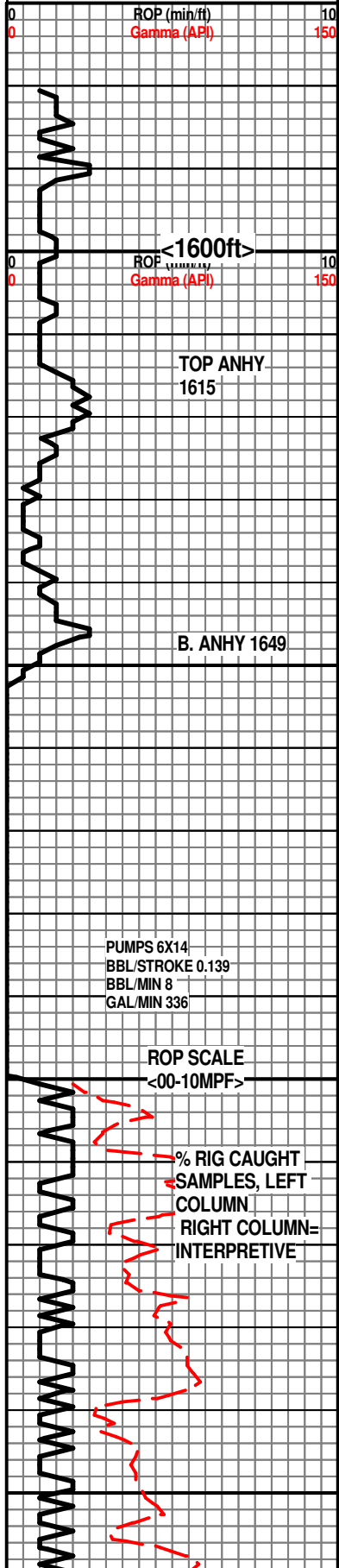
% Lithology

Porosity

Litholog-O

Oil Shows

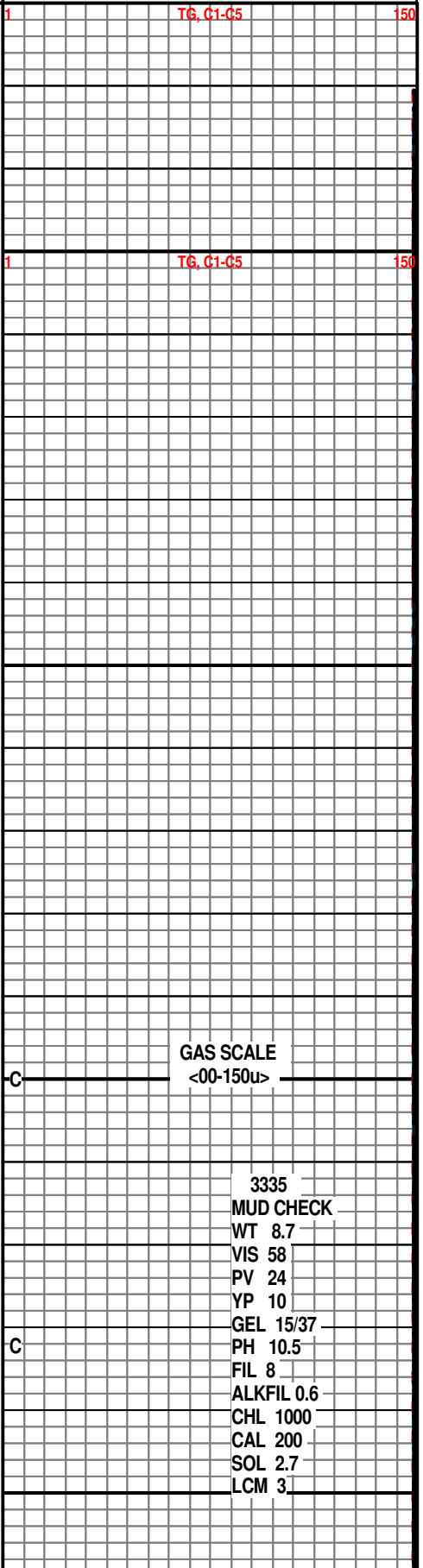
Geological Descriptions



START ONE MAN LOGGING UNIT,
 1-31-2014, 85/8' SFC 220, DRLG W/BIT
 NR 2 HTC 77/8', 6X20C, TRICONE, JETS
 16/16/18, RIG CAUGHT SAMPLES, UNIT
 RIGGED UP 3545,

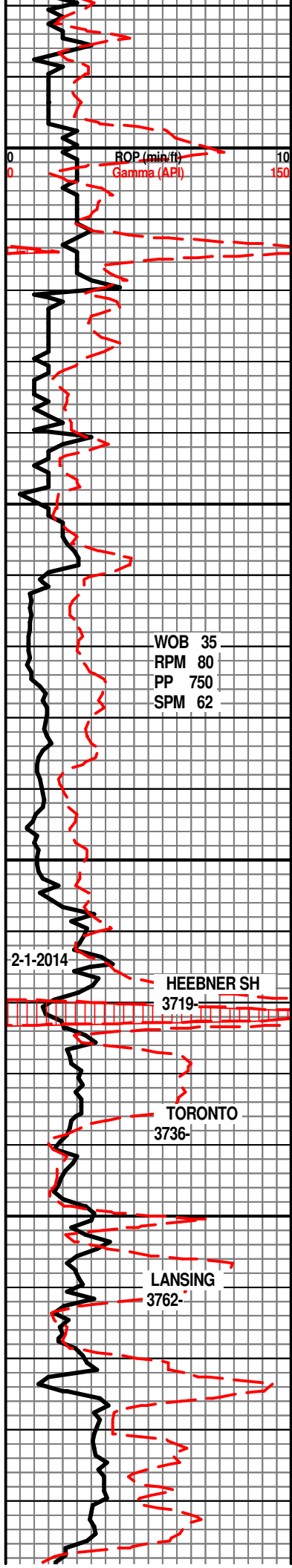
LS; PALE TN RGH TXT, DULL
 LUSTRE, BIOSPARTIC/VF-OOL, ABDT
 DK GY BRN HD DNS VF XLN, SHLY
 W/FOSS PCES

LS; BRN GY PRED HD DNS VF XLN,
 SHLY, SME FOSS PRINTS, SME DK GY
 PELL, SCATT SH CLST



GAS SCALE
 <00-150u>

3335
 MUD CHECK
 WT 8.7
 VIS 58
 PV 24
 YP 10
 GEL 15/37
 PH 10.5
 FIL 8
 ALKFIL 0.6
 CHL 1000
 CAL 200
 SOL 2.7
 LCM 3



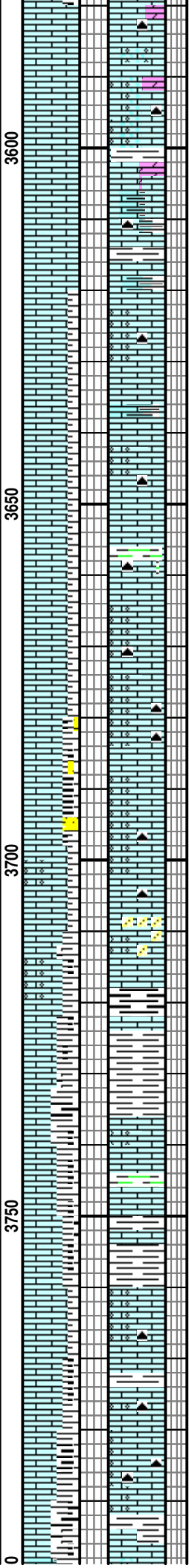
ROP (min/ft)
Gamma (API)

WOB 35
RPM 80
PP 750
SPM 62

2-1-2014
HEEBNER SH
3719

TORONTO
3736

LANSING
3762



SEMI VIT FOSS GY WH CHT, PURPL FLOF NSOC NO ODOR

LS; LT BUFF/DOLOMITIC IP, RGH TXT, VF GRNY/SPARITIC, CHT RELCD FOSS, SHADOW VF OOL, COMNGLD GY CHT, TYR CLR ANG F-GR SPAR CLSTRS, FAINT WEAK FOLD FLOF, NO ODOR, NSOC

SH; LT GY SFT GUMMY LMY

LS; LT BUFF VF GRNY/SPARITIC, INCRS DK GY BRN, CHT REPLCD FOSS, FAINT GOLD FLOF, NO ODOR, NSOC

LS; BRN/GY, GRITTY VF SPARITIC, FUS-FOSS, SHLY, PURPL SME GOLD FLOF NO ODOR, NSOC

LS; BRN- DK GY BRN HD DNS, SILIC, SME MOTT BRN/GY SILIC W/FOSS, FUS-FOSS, PURPL FLOF NO ODOR, NSOC

LS; DK BRBN, SHADOW VF OOL, SILIC-FOSS IP, BRN CARB MATL, TR MED GY CALC VF GR SHLY SS, WEAK GOLD FLOF, NO ODOR, NSOC

SHL BLK, PYRITIC IP, COALY

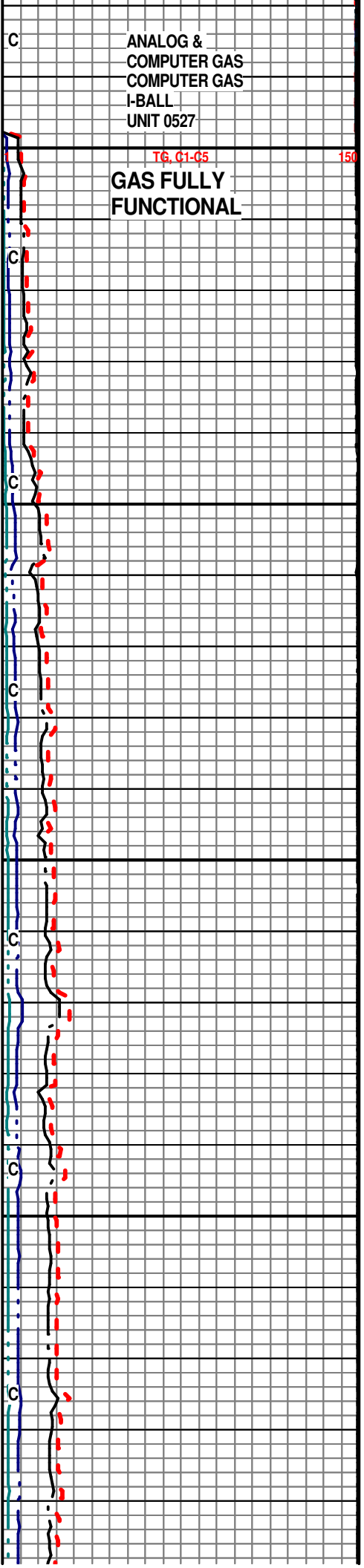
SH; GY DK GY W/CARB MATL

LS; BRN GY HD DNS, SME SHLY W/PELL, SILIC IP, INCRS LT GY-CRM, WH HD DNS SHADOW FOSS, V/FAINT GOLD FLOF, NO OODOR, NSOC

SH; LT GY SFT, PUDDING, TO GY-GRN GUMMY

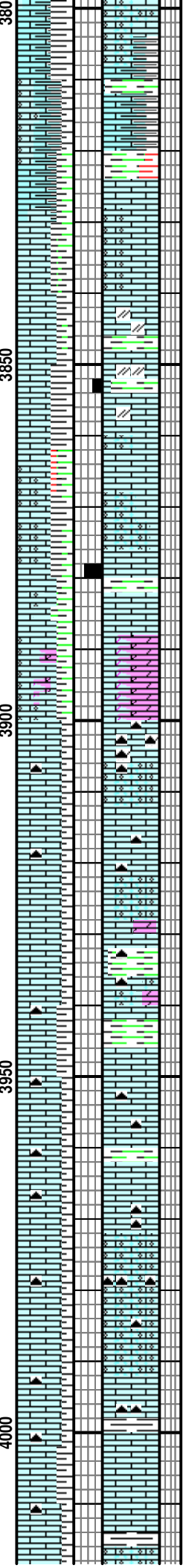
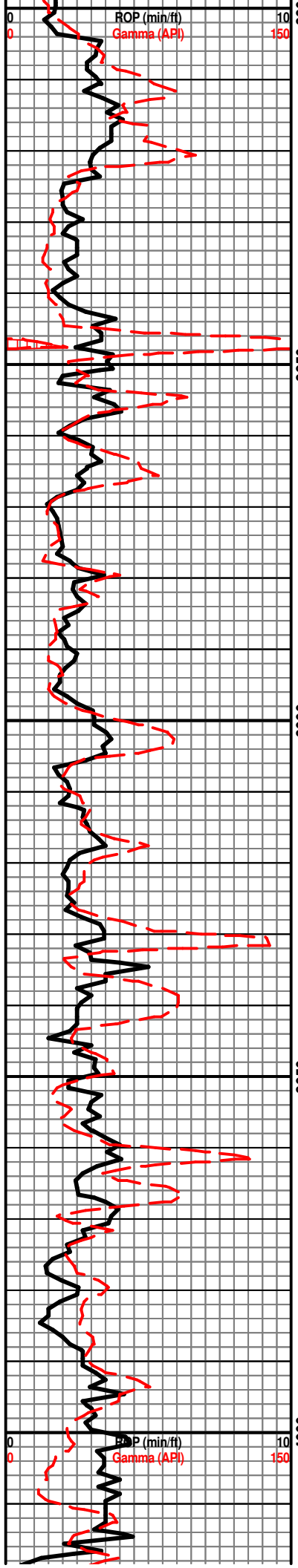
LS; LT BUFF SPARITIC SHADOW VF OOL, WH CHT REPLCD FOSS, FRAC SPAR REPLACED FOSS, CRM TO WH CHLK, NO ODOR, LT PURPL SLI GOLD TINT NSOC

LS; OFF WH BRN DULL L USTRE, VF GRNY SPARITIC, SHADOW VF OOL, TRACE-FOSS, BRN CHT, PURPL FLOF NO ODOR, NSOC



ANALOG &
COMPUTER GAS
COMPUTER GAS
I-BALL
UNIT 0527

TG, C1-C5
150
GAS FULLY FUNCTIONAL



LS; CRM-BUFF, BRTL VF GRNY SPARRY, SHADOW VF OOL, TR GLAU, CRM-BUFF-WH OOL CHT VITY, CRM CHLK, NO ODOR, PURPL W/SME GOLD FLOR, NSOC

SH; BRN, MED GY-GRN, SME SFT PUDDING RED

LS; LGYISH TINT, LT TN, SPAR CMTD, VF OOL & FOSS, MICRO PYR, SME CHT, NO ODOR, PURPL TO GOLD FLOR NSOC

SH GY TO GRN SPLNTY SME RED

LS; BRN TN GY HD DNS SME W/IMBD ORNG ANHY NOD

LS; LT TN TO GY TN, HD WETHD APPR, GRNY SPARITIC, VF OOL & FOSS, SME FUS-FOSS, TN CHT, NO ODOR, PRED PURPL FLOR NSOC

DOLO; & DOLO/LS, LT BRN VF DIVIDED

CHT; BRN FOSS CONCORD FRAC VIT

LS; LT BUFF SPARRY VF OOL, SLILC IP, PRFED DULL LUSTRE GRITTY, WEATHD APPR, SHADOW VF OOL FAINT GOLD FLOR, NO ODOR, NSOC

ABDT FOSS CHT

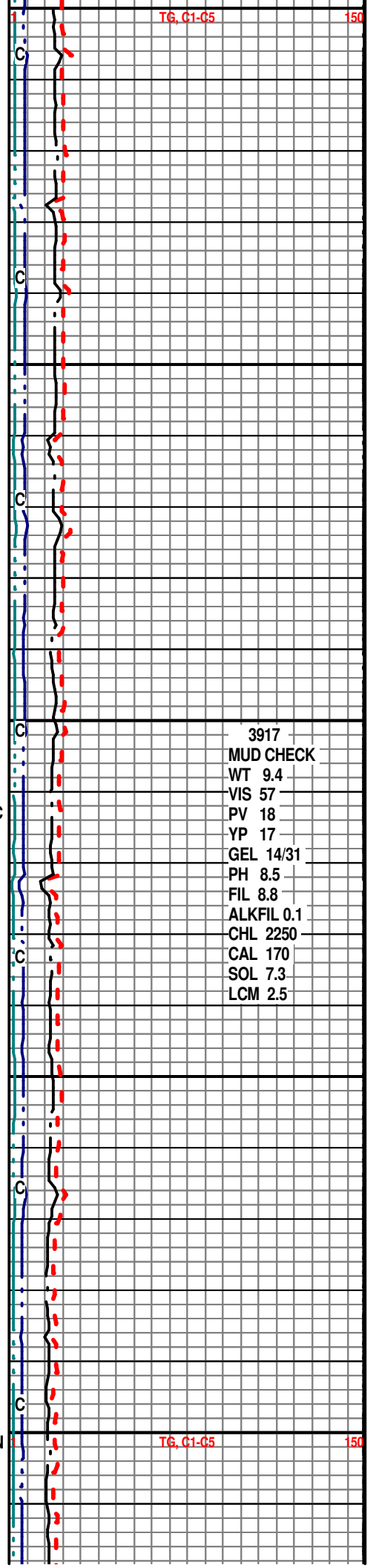
LS; LT TN BRN, SPARITIC W/SME OOL, TR DOLOMITIC, WH CHT, MFNSOC

SH; B LK DK GRN

LS; WH BUFF HD DNS SHADOW OOL & FOSS, WH VIT CHT, INTD GRN MOTT YEL TO RED STRKS SH NO SHOW

LS; BRN LT TN GY SPAR CMTED, POOR SORTD OOL & FOSS, CRM CHLK, BRN VIT FOSS CHT, GOLD FAINT GOLD & PURPL FLOR NSWOC

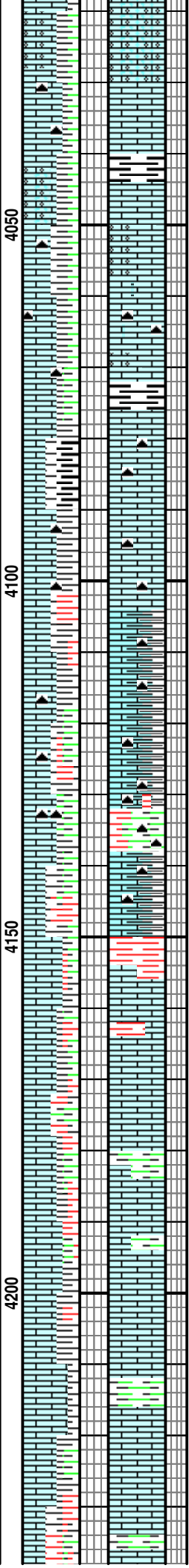
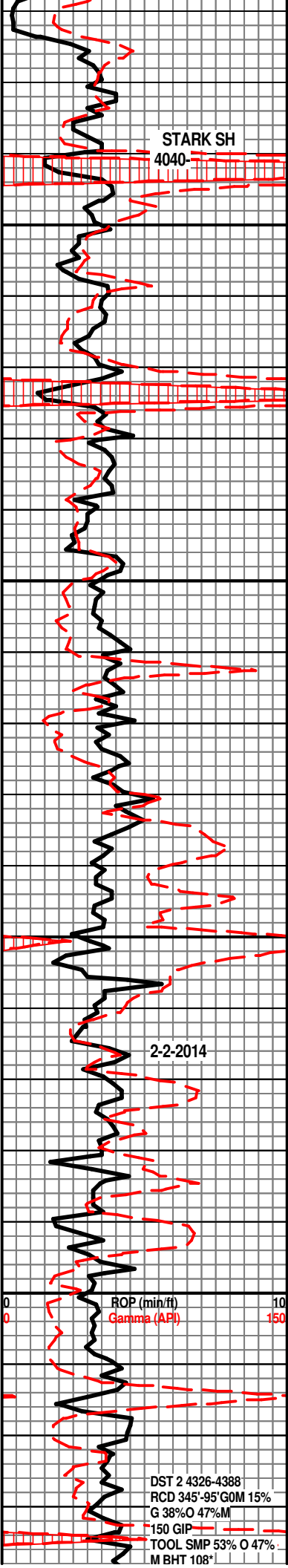
LS; DK BRN V/FOSS SME DK GY BRN FOSS/OOL CHT



3917
MUD CHECK
WT 9.4
VIS 57
PV 18
YP 17
GEL 14/31
PH 8.5
FIL 8.8
ALKFIL 0.1
CHL 2250
CAL 170
SOL 7.3
LCM 2.5

TG, C1-C5 150

TG, C1-C5 150



LS; GY WH TN SPARRY VF F OOL & OOLMOL, SME FOSS, COMNGLD GRN SH, TR FAINT GOLD FLOR, NO ODOR, NSOC

SH; BLK CARB PYR FREE PYR

LS; LT TN SME GY WH SPAR CMTD VF F OOL, SHALOLW OOLMOL, SPAAR REPLCD OOIIDS, IP, NO ODOR, MFNSOC

DK; BRN HD XLN LS

SH; BLK BLKY CARB, FREE PYR

LS; GY SPARRY VF OOL, INCRS TO GY WH HD DNS SLI SHLY

LS; MED BRN GY HD FOSS XLN FRAGMENTL

LS; DIRTY GY BRN, SHOLY FOSS, COMNGLD GRN CLAY, CLR CHT, SCATT FAINT TO MED GOLD FLOR NSOC'

SH; RED BRN DK GY

LS; TN BRN HD DNS FRAC-FOSS

SH; LT GY TO REDS. SFT PUDDING, TO GRN & BLK SH

LS; TN GY TN BRN SPARRY FOSS VF XLN
LS; TN GY TN, HD XLN, SHADOW FODD

SH; GRN PURPL BLK

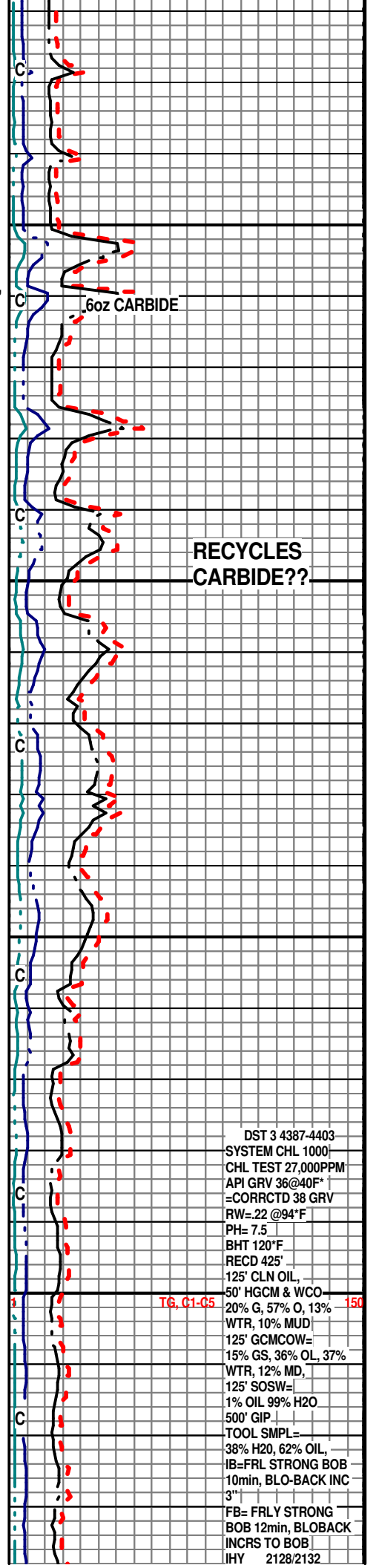
LS; LT BUFF TN PRED HD DNS VF XLN, SHADOW FOSS, VIT BRN CHT

SH; MOTT GY-GRN, GY

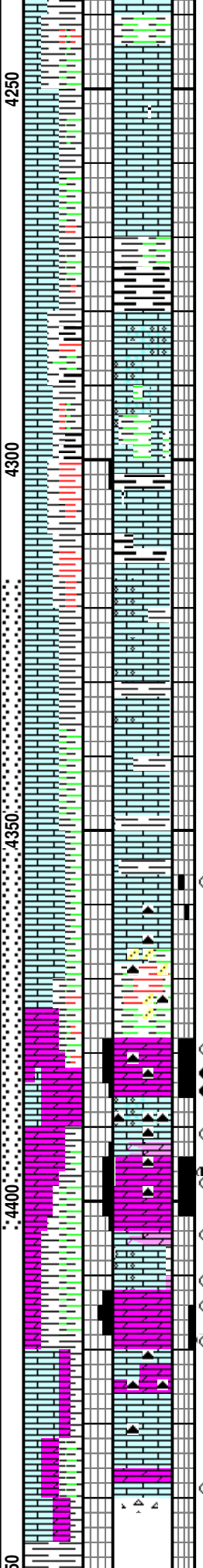
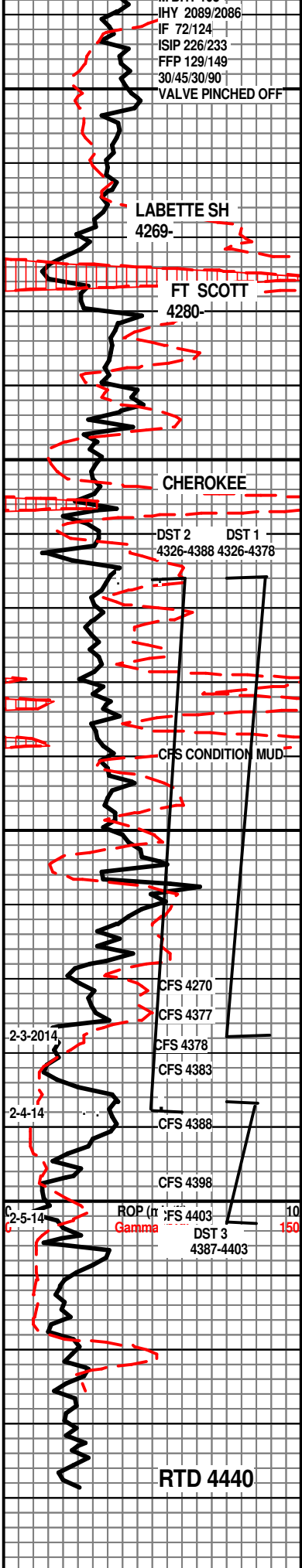
SAMPLES INCRS POOR

SH; MOTT GY-GRN SFT

LS; TN LTTN HD CRYP XLN



DST 3 4387-4403
SYSTEM CHL 1000-
CHL TEST 27,000PPM
API GRV 36@40F
=CORRCTD 38 GRV
RW=.22 @94°F
PH= 7.5
BHT 120°F
RECD 425'
125' CLN OIL,
50' HGCM & WCO
20% G, 57% O, 13%
WTR, 10% MUD
125' GCMCOW=
15% GS, 36% OL, 37%
WTR, 12% MD,
125' SOSW=
1% OIL 99% H2O
500' GIP
TOOL SMPL=
38% H2O, 62% OIL,
IB=FRL STRONG BOB
10min, BLO-BACK INC
3"
FB= FRLY STRONG
BOB 12min, BLOBACK
INCRS TO BOB
IHY 2128/2132



SH; GY TO GRN SFT

LS; PALE TN, BRN VF XLN

LS; GY TN HD XLN, COMNGLD CHLK

SH; BLK PLATY PYR FREE PYR,
ABDT LT GY TO GRN & RED SH

LS; LTN FRAC XLN W/OPAQ VF XTL
CMT & FILL, CHT REPLCD FUS-FOSS,
INCRS SPAR CMTD HEAVY RIM COATD
VF OOL XLN-MISHMASH OF LITH

YEL-GRN SFT SH, ABDT DK GY TR
SLICKENSIDE

SH BLK CARB

LS; BRN, TN GY HD DNS XLN SHLY
SME CARB MATL

LS; BRN MOTT BRTL CMTD W/ TN
F-PELL, OPAQ VF XL CMT SME CHT,
TR FAINT GOLD FLOR, NSOC

LS; OFF WH TN HD DNS XLN, SME WH VF
SUCROSIC W/CARB MATL, NO ODOR, FAINT
GOLD FLOR NSOC

LS; PALE TN WH SPARITIC, FRAGMTL, PYR,
CLR VF XTL FILL & CMT, TR YEL FLOR, TR (1
PCE) TRIPOLITIC CHT V/LT BRN SPLITCH
STNG, NO ODOR, FLASH SLO MILKY-STRMG
CUT

DOLO; GY- LT TN - BRN, OIL STYN, MICRO
XLN- F XLN SME FOSS, FR-GD POR, VUG &
FOSS, MOLD & INTR X- POR, FR-GD SFO W/GAS
BUBLES, SUBSAT-SAT FLOR, & STN, FR-GD
CUT, FRLY STRONG ODOR, FREE DK BRN OIL,
OIL IN VUGS AFTER 20min UNDER HEAT

PKST WKST W/ CLR VIT CHT

DOLO; LT GYISH WH, BRN, VF SUGARY, IMBD
FOSS, SME MOLD, SME VUG, STRONG ODOR,
PALE GOLD FLOR, BRN W/SME BLK INTR XLN
POR, FLASH THICK MILKY/STRMG CUT, FREE
OIL

CRM-BUFF OOL LS

DOLO; GY/OPAQ, BRN, F XTL, VF SUCRO INTR
XTL & PART, FOSS PCES, FOSS MOLD, PP TO F
VG POR, DULL FAINT GOLD, SME BRITE YEL,
FREE DK BRN OIL, GOOD ODOR, FLASH THIN
MILKY BECOMG STRMG CUT

BUFF BIOSPARITIC/OOL LS

4440 CFS DOLO, GY BRN, SH MOTT, VUGGY, TR
OIL STNG, TR FREE OIL, WEAK FLOR, SLOW
MILKEY CUT

THANKS FOR USING
MBC WELL LOGGING LLC
AUSTIN & MARLA GARNER

