

MBC WELL LOGGING LLC

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

Well Name: ROCKING CHAIR RANCH # 3 BLACKSTONE EXPLORATION LLC
 Location: NAVAJO COUNTY, ARIZONIA USA
 Licence Number: Region: WILDCAT
 Spud Date: 4-15-16 Drilling Completed: 4-23-16
 Surface Coordinates: 1,980'fsl, 1990'fel SEC 21-T14N-R19E
 BLACKSTONE RIG 1 ROGER MARTIN CO-MAN/GEO
 Bottom Hole API-02-017-20113-00
 Coordinates: CASEHOLE SOLUTIONS HAYES KS
 Ground Elevation (ft): 5830 K.B. Elevation (ft): 5840
 Logged Interval (ft): 300 To: 2223 Total Depth (ft): ELOG 2220
 Formation:
 Type of Drilling Fluid: MUD-CO/SERVICE MUDCO TONY MAESTAS, LAMAR CO. (719)336-7006
 Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: BLACKSTONE EXPLORATION CO LLC
 Address: PO BOX 940 PH (928)-524-7786
 HOLBROOK, ARIZONIA 86025

MUDLOGGER

Name: AUSTIN GARNER (CELL- 620-655-2016)
 Company: MBC WELL LOGGING LLC OFF (620)873-2953
 Address: 21156 RD 22
 MEADE, KANSAS 67864

ROCK TYPES

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

ACCESSORIES

LITHOLOGY

 Anhy
 Brec
 Cht
 Coal
 Congl
 New dolomite
 Dolo new
 Newdolo ls 2
 Ls & ooids
 Oolitic ls -1
 Stgensndy-arkos
 New ls-1
 Carby shale
 Lmy carby sh-3
 Carb sh
 Gyp
 Sltst
 Salt
 Sndy sh--red
 Sndy sh
 Sltst-1
 Sltly-shale
 Lmy ss-1
 Arkosic snd
 Ss
 Grn sh strk

-  Lmy sh-2
-  Grn mott gy sh
-  Shale-1
-  Red sh-1
-  Stgensndy-arkos
-  Sndy ool ls
-  Sndy-ls-1
-  Calc shale
-  Granitewash
-  Ls shly-b
-  Poor sortd ss
-  Snd-ls-sh

FOSSIL

-  **Algae**
-  **Amph**
-  **Belm**
-  **Bioclst**
-  **Brach**
-  **Bryozoa**
-  **Cephal**
-  **Coral**
-  **Crin**
-  **Echin**
-  **Fish**
-  **Foram**
-  **Fossil**

☒ Gastro
☐ Oolite
☐ Ostra
☐ Pelec
☒ Pellet
☐ Pisolite
☐ Plant
☐ Strom

MINERAL

	Anhy
	Arggrn
	Arg
	Bent
	Bit
	Brecfrag
	Calc
	Carb
	Chtdk
	Chtlt
	New dolo
	Dol
	Fldspr-1
	Ferrpel
	Ferr
	Glau
	Gyp

	Hvymin
	Kaol
	Marl
	Minxl
	Nodule
	Phos
	Pyr
	Qtz
	New symbol
	Salt
	Sandy
	Silt
	Sil
	Sulphur
	Tuff
	Styolitic
	Slickenside

STRINGER

er

- Anhy
- Red sh stringer
- Arg
- Bent
- Coal
- Dol
- Gyp
- Oolls-1

 **Ls**
 **Mrst**
 **Slststrg**
 **Ssstrg**
 **Grn sh strk**

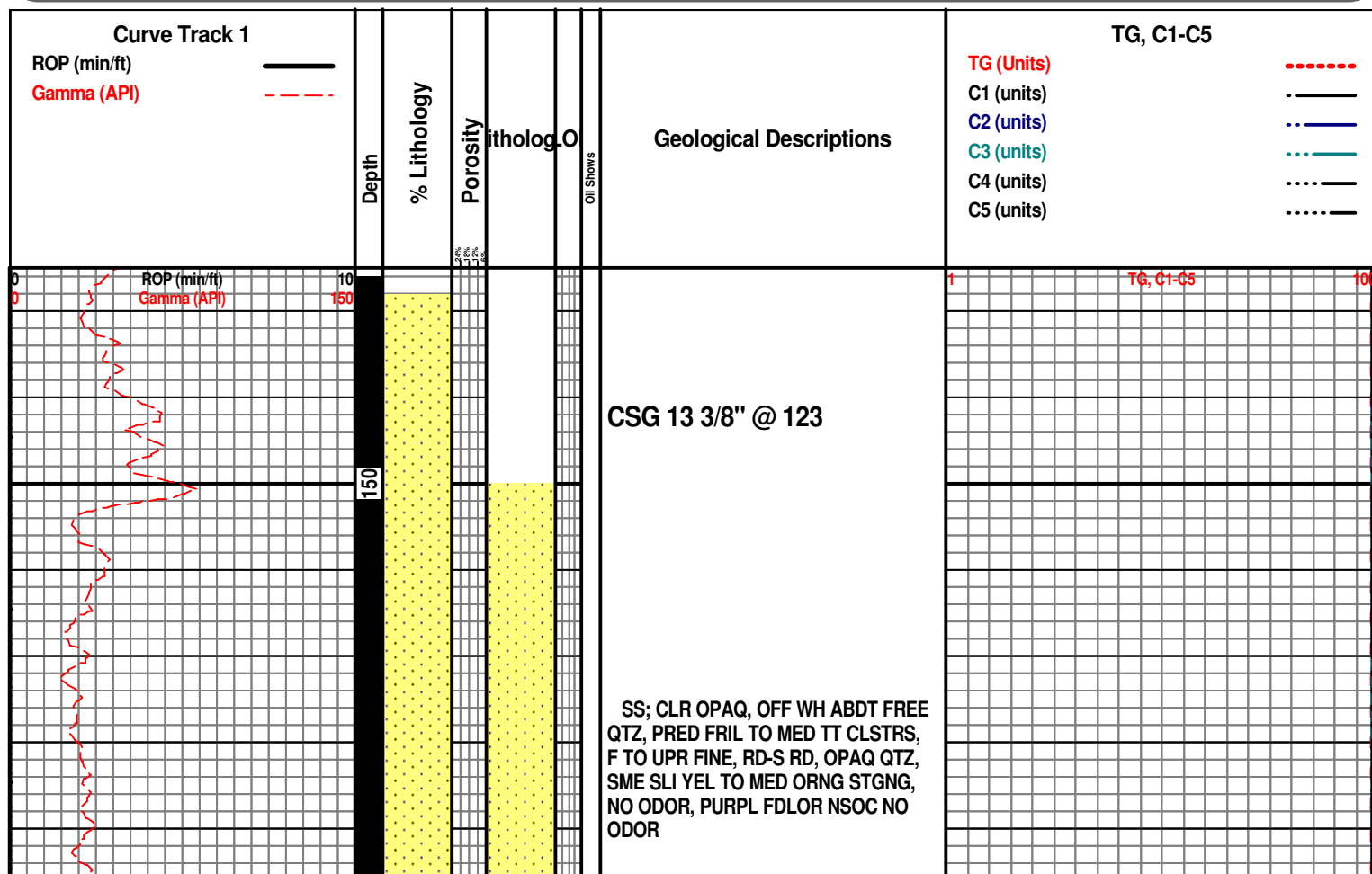
TEXTURE

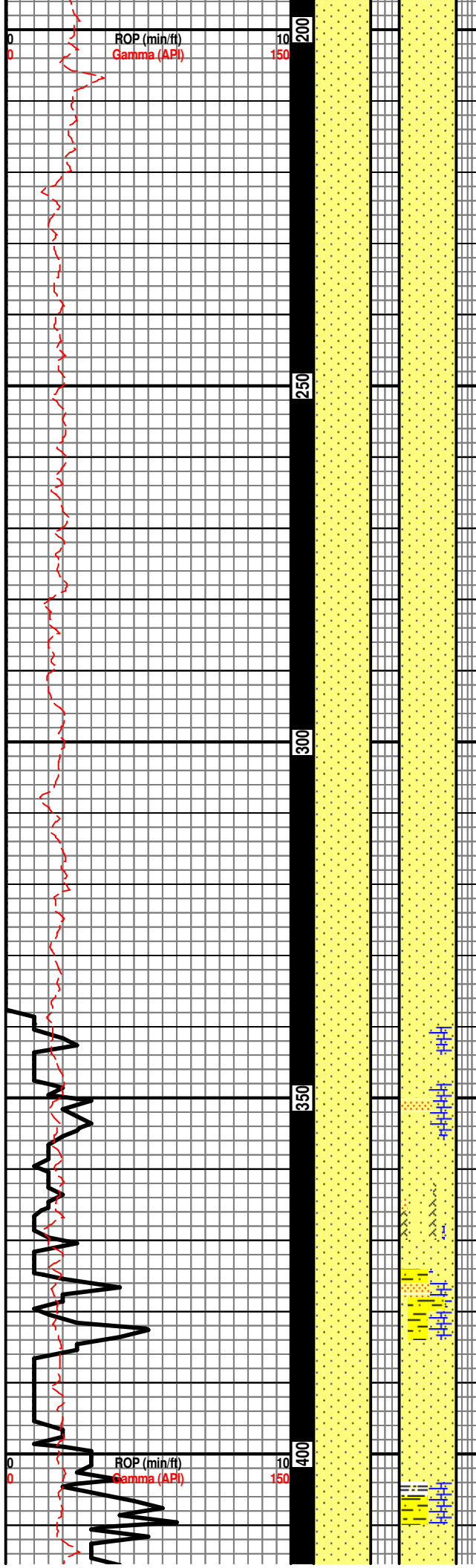
BS	Boundst
C	Chalky
CX	Cryxln
E	Earthy
FX	Finexln
GS	Grainst
L	Lithogr
MX	Microxln
MS	Mudst
PS	Packst
WS	Wackest

OIL SHOW

☐ Even
☐ Spotted
☐ Ques
☐ Dead

Comments





SS; OFF WH, WH, PRED FREE F TO
UPR FINE QTZ, SME MED TT CLSTRS,
TR YEL STNG, TR V/LT RED ORNG
GRITTY LS, STGRINGERS, NO ODOR,
PURPL FLOR NSOC

TR V/LT ORNG DNS LS
SME RED SLTY SNDY TR PYRITIC
GRITTY SH

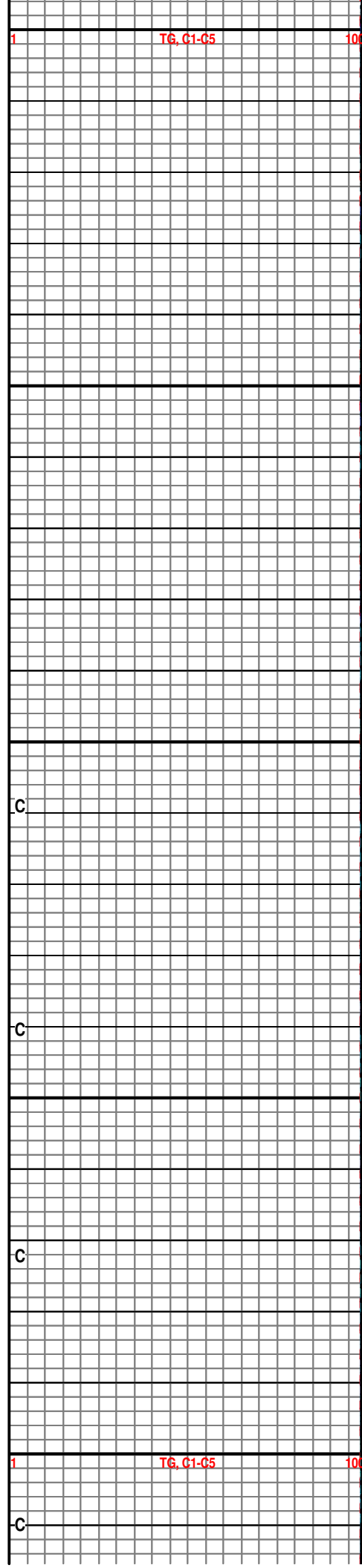
S; OFF WH CLR, OPAQ, FREE F- UPR
F- CLR, OPAQ QTZ, RD - S-RD SME
MED TT CLSTRS, SPOTTY YEL STNG,
NO ODOR, PURPL FLOR NSOC

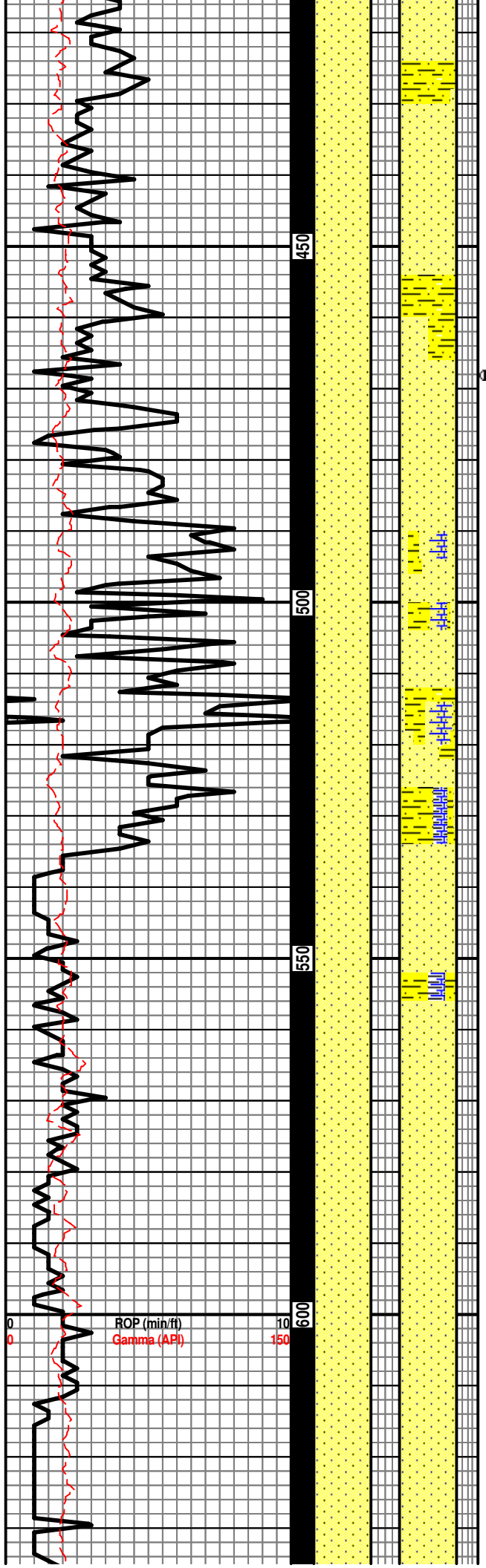
TR MED CLR TO ELIP, TO "RODS"
CLR GLASS, W/SS AAB, SME SLI
ORNG SLTY LS, PURPL FLOR NO
ODOR NSOC

SS; OFF WH, SME SLI YEL TRINT, VF
F TO F & UPR F CLSTER & FREE QTZ,
NO ODOR, PURPL FLOR NSOC

SS; DK RED BRN SNTD, VF F GR
SME UPR F, HD TT NFSOC ABDT
FREE F TO UPR F, RD, S-RD QTZ, TR
ORNG QTZ, HDTT CLSTRS, WH CLAY
MATRIX, FREE CRS S-RD FQWTZ, TR
ORNG POSS FLDSPR, PURPL FLOR
NSOC

SLTST MOTT GY BLK, P/SRTD
BLK MIN, LMY





FREE P/SRTD F- UPR F- RD S-RD
QTZ SME HD TT CLSTRS, W/IMB DK
NMED BRN TINT SME YEL PURPL FLOR
NSOC

80% FREE CLR-OPAQ, F- GR RD
S-RD, SME CYLINDER, SME FREE F
CLR GALSS BALLS, INTBD RUST RED
SLTST , PURPL FLOR NSOC

SLTST; RED BRN BRNS LMY , ABDT
SS ABB, 30% FREE QTZ

SS; CLR WH OPAQ W/SRTD VF F,
SME FAIR SRTD F TO UPR FINE FRI TO
HD TT, ABDT FREE RD TO S-RD QTZ,
ITBD DK BRNRED GRITTY LMY SLTST,
TR VF BLK SMO SHINEY F- PEBL, NO
ODOR, PURPL FLOR NSOC

SS AAB; SME RUST STND

SS; 75-80% FREE RD - S-RD VF TO
UPR F QTZ, TR MED GAS BALLS, TR
WH CLAY, SCATT BLK VF BLK SHINY
ROCK, PURPL FLOR NSOC NO ODOR

C

C

C

C

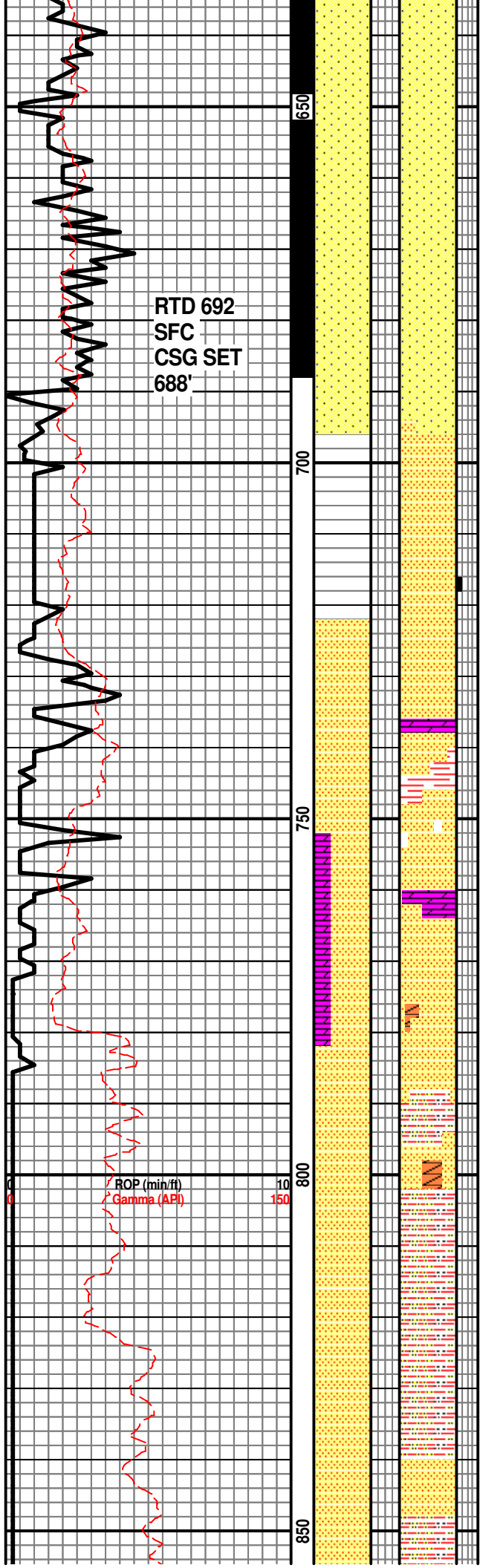
C

C

C

TG, C1-C5

100



RIG UP GAS DETECTOR,
ANALOG & COMPUTER
INFARED I-BALL UIT 5950

8 5/8 @ 675

DRLG W/BIT # 4 PDC 7 7/8,
PUMP # 1 LINER 6.5", STROKE 14",
BBL/STRK 0.163 SPM 54,
BBL/MIN 8.5. GPM 370

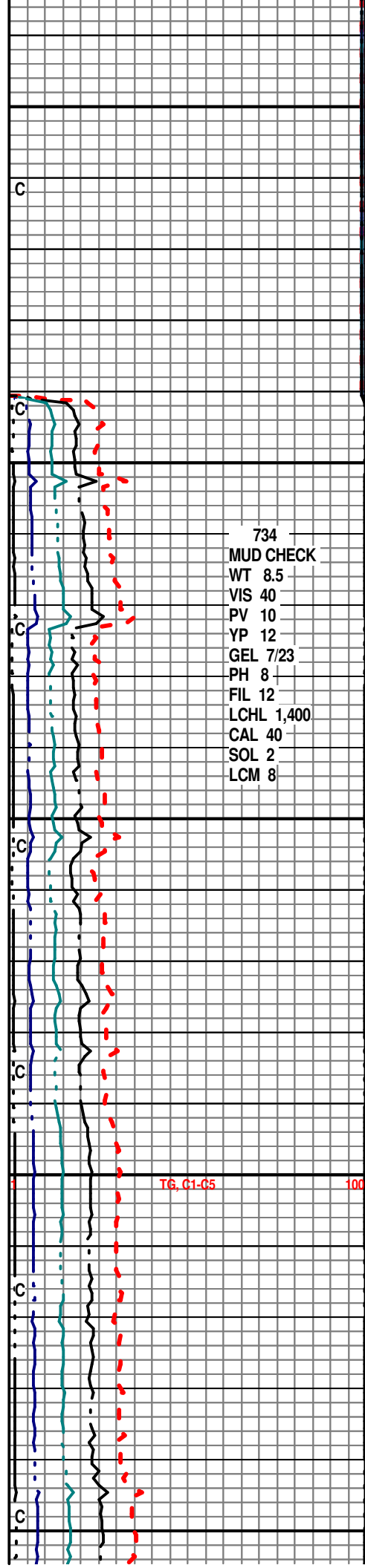
ARKOSIC SS SME OFF WH W/SRTD
VF F GR, PRED S-ANG, HD TT BLK MIN
SPKS, NFSOC INTBD RED SLTY SH

DOLO, V/LT ORNG TINT HD VF GRNY
XLN

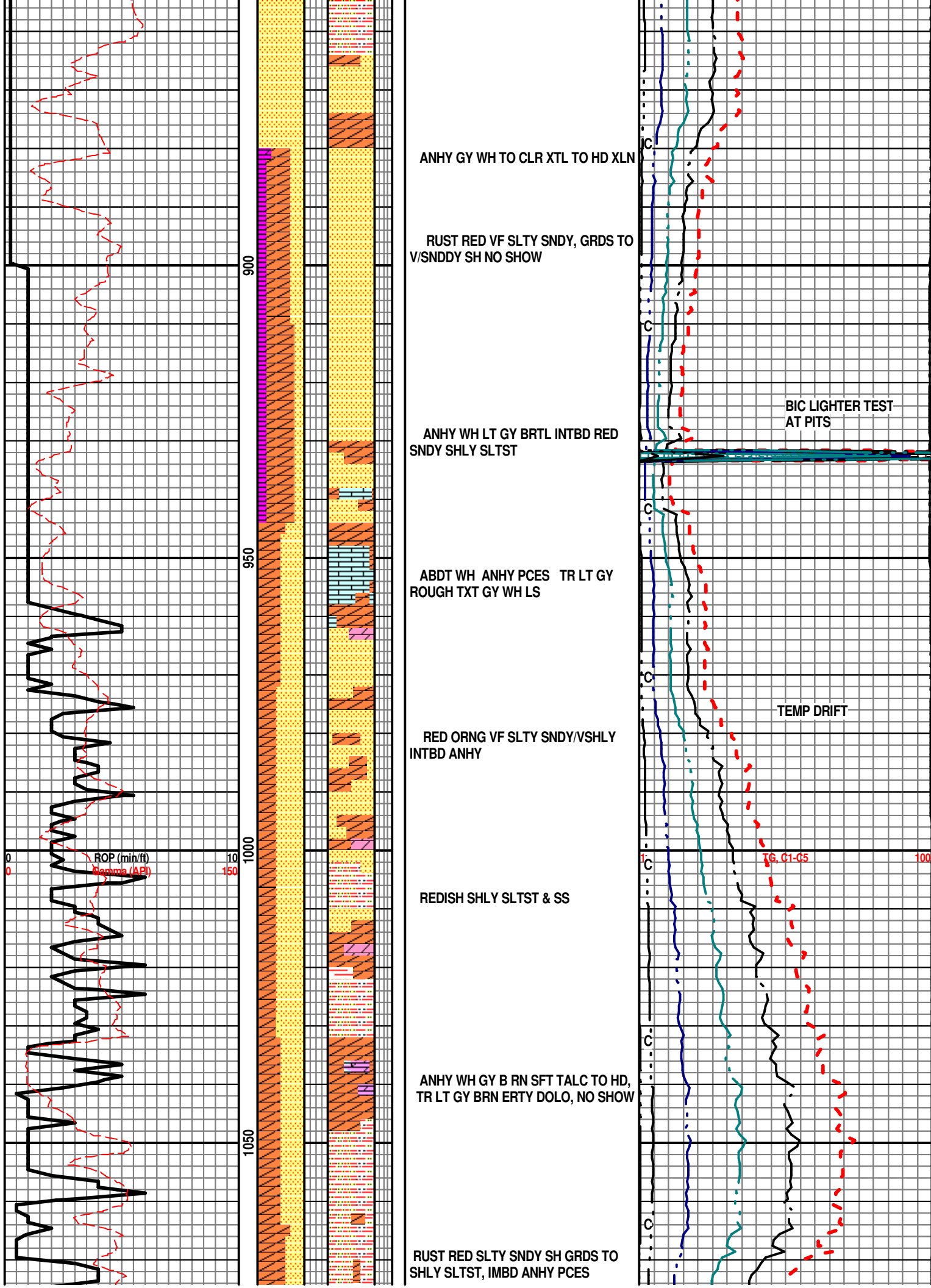
SS; ARKOSIC DK TO LT ORNG, VF F
GR, BLKY MIN INCRS RUST RRED
SLTST

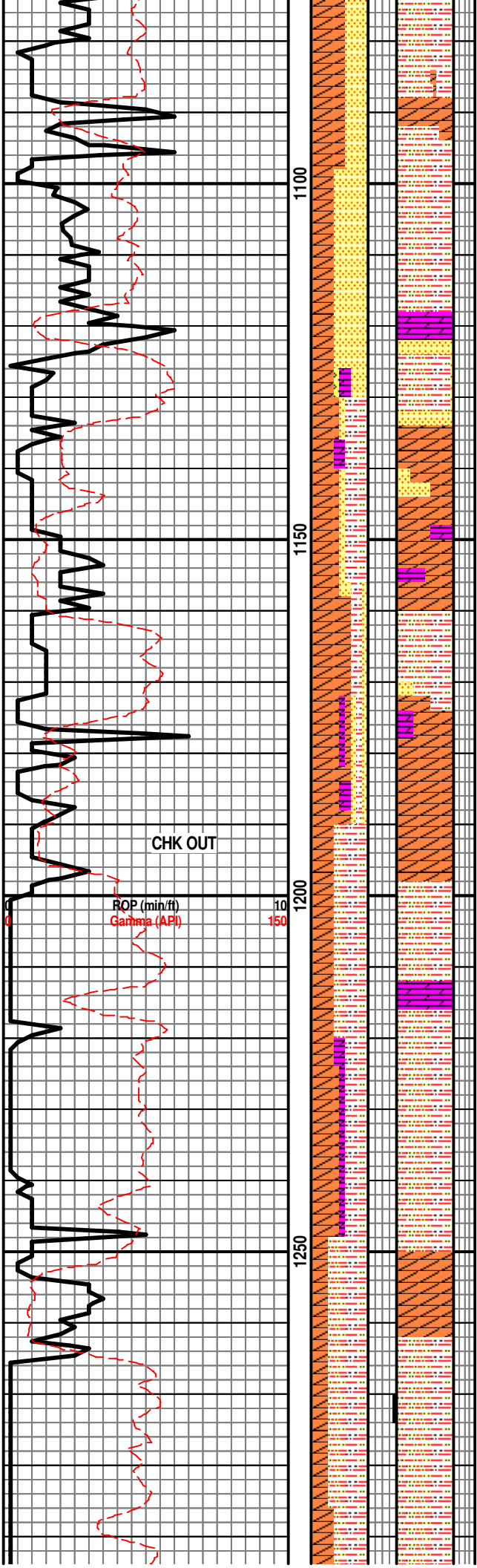
SS/SLTST; BRICK RED SLTY SNDY
V/SHLY MICA

SS; WH-/ORNG VF GR, SME RED
V/SHLY MICA, BLK MIN SPKS, SCATT
ANHY



734
MUD CHECK
WT 8.5
VIS 40
PV 10
YP 12
GEL 7/23
PH 8
FIL 12
LCHL 1,400
CAL 40
SOL 2
LCM 8





ANHY GY WH HD ANHY

DOLO DK BRN VF SUGARY, VF
OOLCAS, BRN SHLY, FAINT TRACE
GOLD FLOR, NSOC NO ODOR

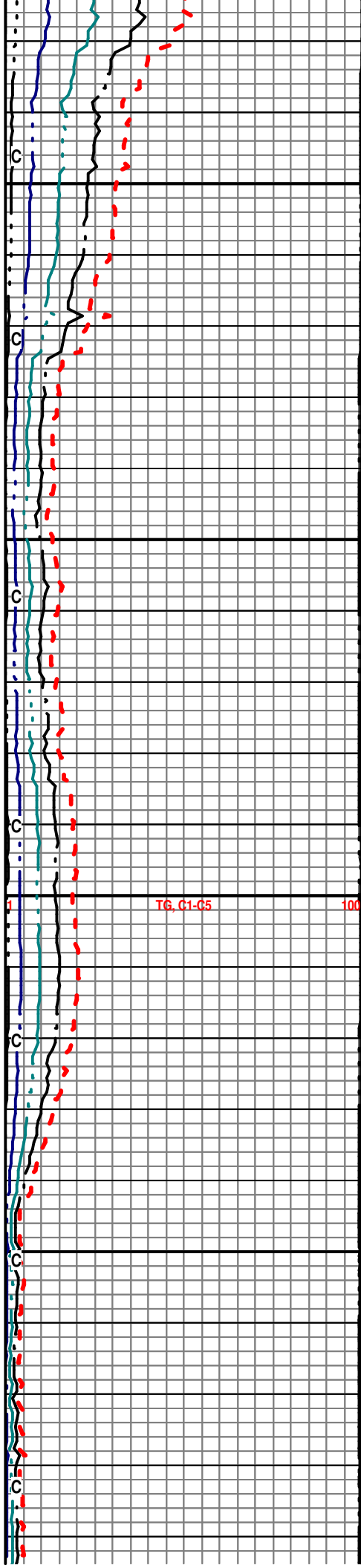
ANHY; WH GY HD DNS XLN INTBD
DOLOMITIC ANHY

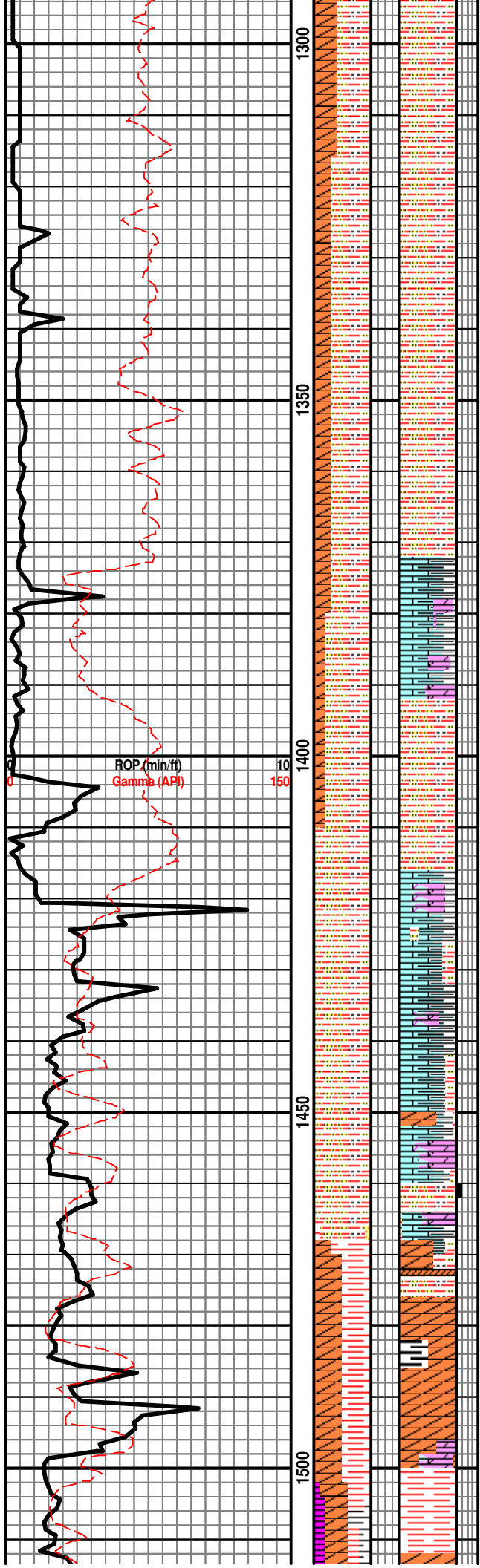
ANHY GY BRN WH HD XLN W/ SFT
EDGES

TR DOLO; GY WH GRITTY NO SHOW

LT ORNG SHLY VF GR SLTST& SS

ANHY LT GY WH HD DNS XLN FREE
SQUAARE FLAT FREE XTLS





SH; RED BRN VF GR SLTY SNDY
IMBD CLR XTLS

SHS RED BRN SLTY SNDY GRDS TO
SHLY SS & SLTST

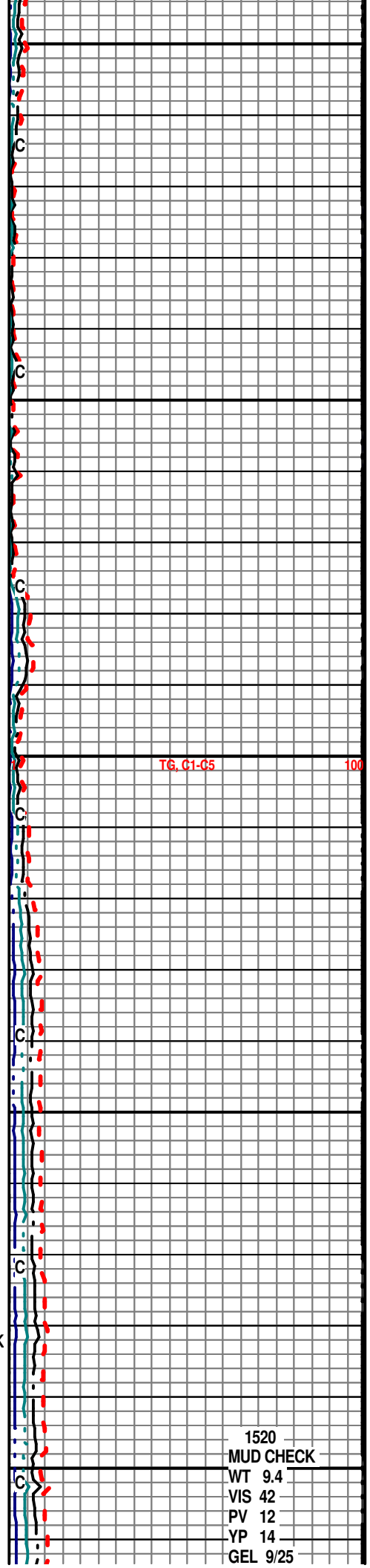
LS; LT BRN SME DK BRN SME BLK,
V/SHLY VF GRITTY SCATT PP VUG
POR, PRED DK PURPL FLOR, NO
ODOR, NO CUT

SH RED RUST. SLTY SNDY

LS; LT GY BRN TITE SHLY VF
GRITTY, INTBD ANHY STRKS, PURPL
FLOR, NO ODOR, NSOC

SH; BLK RGH TXT MICA, INCRS BRICK
RED RGH SLTY SNDY

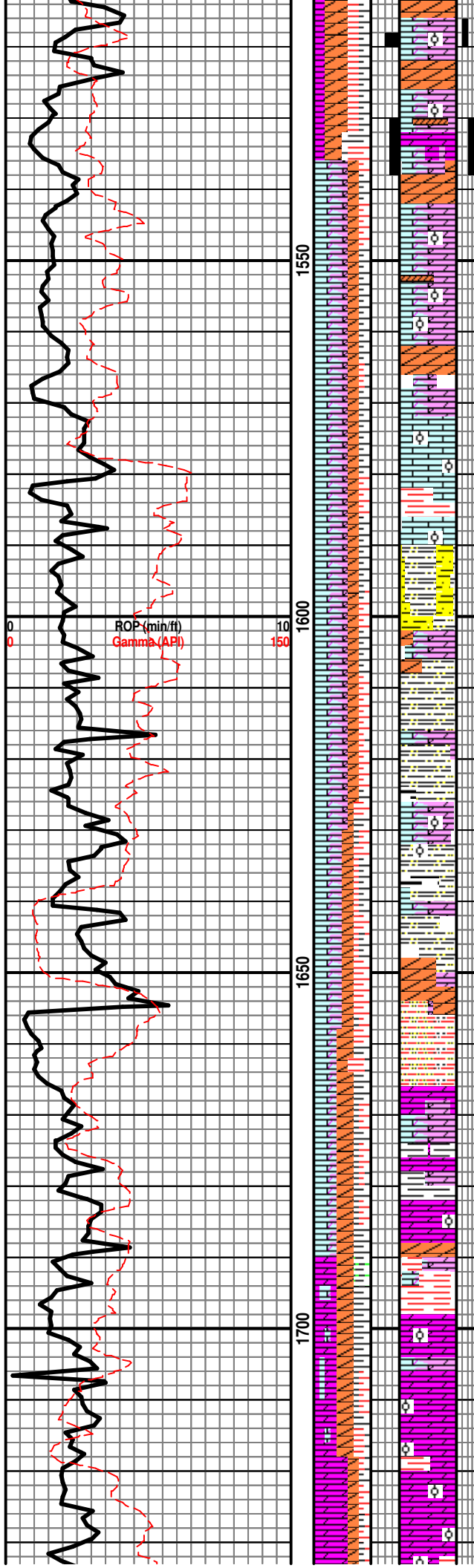
ANHY; BRN- GY, WH, HD DNS SME
DOLOMITIC, COMNG RED SH



TG, C1-C5

100

1520
MUD CHECK
WT 9.4
VIS 42
PV 12
YP 14
GEL 9/25



DOLO LT BRN VF GRNY THIN BLK
STRKS, MICA, FAINT PALE GOLD
FLOR NO ODOR, NSOC, INTR XLN POR,

LS & DOLOM/LS, LT TN BRN DK
BRN, TR BLACK, VF GRNY, SME
SHADOW VF OOL, TR BLK SH LENS,
SME GY FILL VF FOSS PCES, IMBD
ANHY NOD, MICA, SME MICRO PYR,
NO ODOR, WEAK DULL GOLD FLOR,
NSOC GOOD RESID CUT ON DRY
PCES INTR MICRO XLN POR, TR PP

DOLO/ DOLO/LS, VF GRNY TO HD
XLN, DK BRN SPOTS, MICA, MICRO
PYR, DK GY SPKS, N/O, 20%+-
WEAKAS GOLD FLOR NO RESID CUT

LS; & DOLOM/LS, BRN DK BRN SME
BLK, VF GRNY, TR SHADOW OOL,
MICA, MICRO BLK SPKS, MICRO PYR,
TR COMNGLD REDISH SH N/O, PALE
WEAK GOLD FLOR, NSOC

SS; WH OFF WH SLI GY VF GR,
MED TT, DOLOM CMT, PYR, MICA,
SHLY IP, SME COMNGLD RED, NO
SHOW

SH; GY DKS GY SME BLK, TO LT GY
DOLOMITIC VF SLTST, SCATT WH TO
GY ANHY W/BONDED LTN DOLO

DOLO & DOLO/LS, BRN TN VF GRNY
IMBD ANHY NOD, L SME SHADOW VF
OOL,, PYR, MICVA, 10%+- FAINT GOLD
FLOR NSOC N/O

ANHY TN TO WH, CLR HD XLN

SH; RED ORNG SLI SNDY, SHLY,
MICA,

DOLO; LT BRN, TO BRN SME GY
ERTY W/DK GY MATL, FAINT GOLD
FLOR N/O NSOC

LT GY WH HD XLN ANHY;

RED BRN SH
DOLO; BRN BRTL RGH SHLY,
SHADOW LVF OOL, BLK MATL LL TR
PYR, TR PP VUG POR, N/O, 10% FAINT
GOLD FLOR NSOC

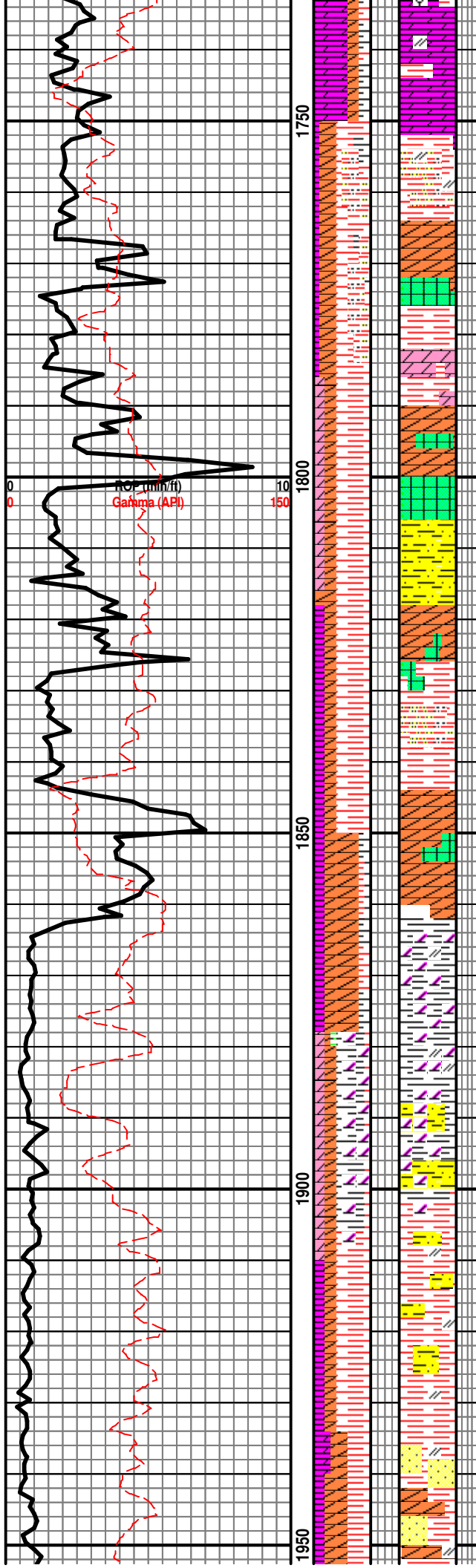
DOLO; LT TO DK TN & DOLO/LS, VF
ERTY SME F-XLT, SILIC NOD,
SHADOW OOL, LTR OOLCAS, N/O WK
GOLD FLOR NSOC

PH 7
FIL N/C
CHL 23,000
CAL HEAVY
SOL 6.4
LCM 8

TO C1-C5 100

RE-ZERO IBALL
UNIT

1690
MUD CHECK
WT 9.1
VIS 45
PV 12
YP 15
GEL
PH 7
FIL 7
CHL 30,000
CAL 1,520
SOL 3.9
LCM 8



SH; BRICK RED SLTY SNDY SME
ANHYDRITIC

ANHY; WH CLR HD DNS W/SALT
MOLDS

ANHY; GY WH HD W/SALT MOLDS
ABDT RED SLTY SH SME BRN ERTY
SFT DOLOM

SS/SLST; WH LT GRN, RED VF GR,
MICA, TR (1) VUG POR NO SHOW

ANHY; GY WH HD W/SALT MOLD

SH BRICK RED OFF WH VF SLTY
SNDY, ANHY PCES

ANHY; GY MOTT WH, SME BRN HD
DNS SHLY XLN

DOLO; LT GY VF, SFT GUMMY,
V/SHLY, MICA, SME ANHYDRITIC GY VF
GRNY DOLOM/SH, INCRS RED SLTY

ANHY; GY WH RED SH STNG

SH; RED ORNG SMO TO SLTY SNDY,
SME ANHYDRITIC, OCC ORNG SS
STRINGERS. ANHY NO ID SH

ANHY GY BRN OPAQ HD AB DT LT
GY TN SHLY DOLO INTBD ORNG SS
STGRINGERS

