

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name: M&M Exploration, Inc.

Z-Bar 5-9

Location: Sec. 5-34S-14W

License Number: 150-07-24150

Spud Date: 3-21-14

Region: Aetna

Drilling Completed: 3-29-14

Surface Coordinates: 1,515' FSL & 735', SE/4

Bottom Hole As Above

Coordinates:

Ground Elevation (ft): 1,651'

K.B. Elevation (ft): 1,661'

Logged Interval (ft): 3,860' To: 5,200' Total Depth (ft): 5,200'

Formation: Pennsylvania & Mississippi

Type of Drilling Fluid: Chemical

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: M&M Exploration, Inc.

Address: 4257 Main St.

Ste # 230

Westminster, CO. 80031

GEOLOGIST

Name: Mr. Mike Pollok

Company: MAP Exploration, Inc.

Address: PO Box 106

Purcell, OK 73080

Comments

Hardt Drilling Rig 1: Samples

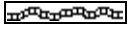
Mudlogging Unit 2

Mudlogger: Bill Busch

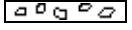
ROCK TYPES



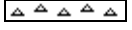
Anhy



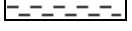
Bent



Brec



Cht



Cyst



Coal



Congl



Dol



Gyp



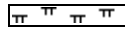
Igne



Lmst



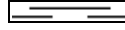
Meta



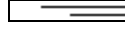
Mrlst



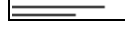
Salt



Shale



Shcol



Shgy



Sltst



Ss



Till



sdv sh



calc sh



shale



carb sh

ACCESSORIES

MINERAL

Anhy
 Arggrn
 Arg
 Bent
 Bit
 Brecfrag
 Calc
 Carb
 Chtdk
 Chtlt
 Dol
 Feldspar
 Ferrpel
 Ferr
 Glau
 Gyp
 Hvymin
 Kaol
 Marl



Minxl
 Nodule
 Phos
 Pyr
 Salt
 Sandy
 Silt
 Sil
 Sulphur
 Tuff

FOSSIL

Algae
 Amph
 Belm
 Bioclst
 Brach
 Bryozoa
 Cephal
 Coral



Crin
 Echin
 Fish
 Foram
 Fossil
 Gastro
 Oolite
 Ostra
 Pelec
 Pellet
 Pisolite
 Plant
 Strom

STRINGER

Anhy
 Arg
 Bent
 Coal
 Dol



Gyp
 Ls
 Mrst
 Sltstrg
 Ssstrg

TEXTURE

Boundst
 Chalky
 Cryxln
 Earthy
 Finexln
 Grainst
 Lithogr
 Microxln
 Mudst
 Packst
 Wackest

OTHER SYMBOLS

POROSITY TYPE

Earthy
 Fenest
 Fracture
 Inter
 Moldic
 Organic
 Pinpoint
 Vuggy

SORTING

Well
 Moderate
 Poor

ROUNDING

Rounded
 Subrnd
 Subang



Angular

OIL SHOWS

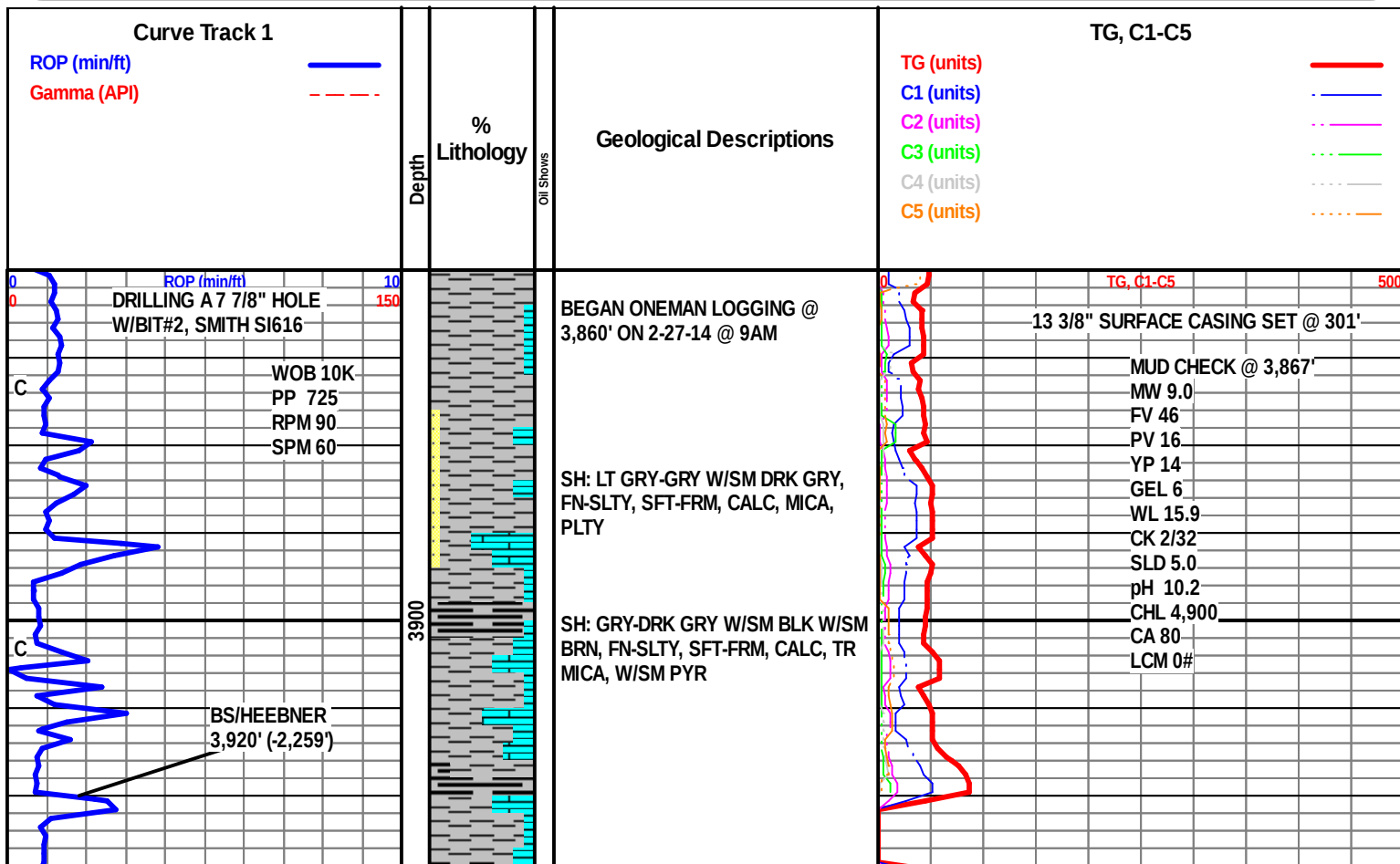
Even
 Spotted
 Ques
 Dead

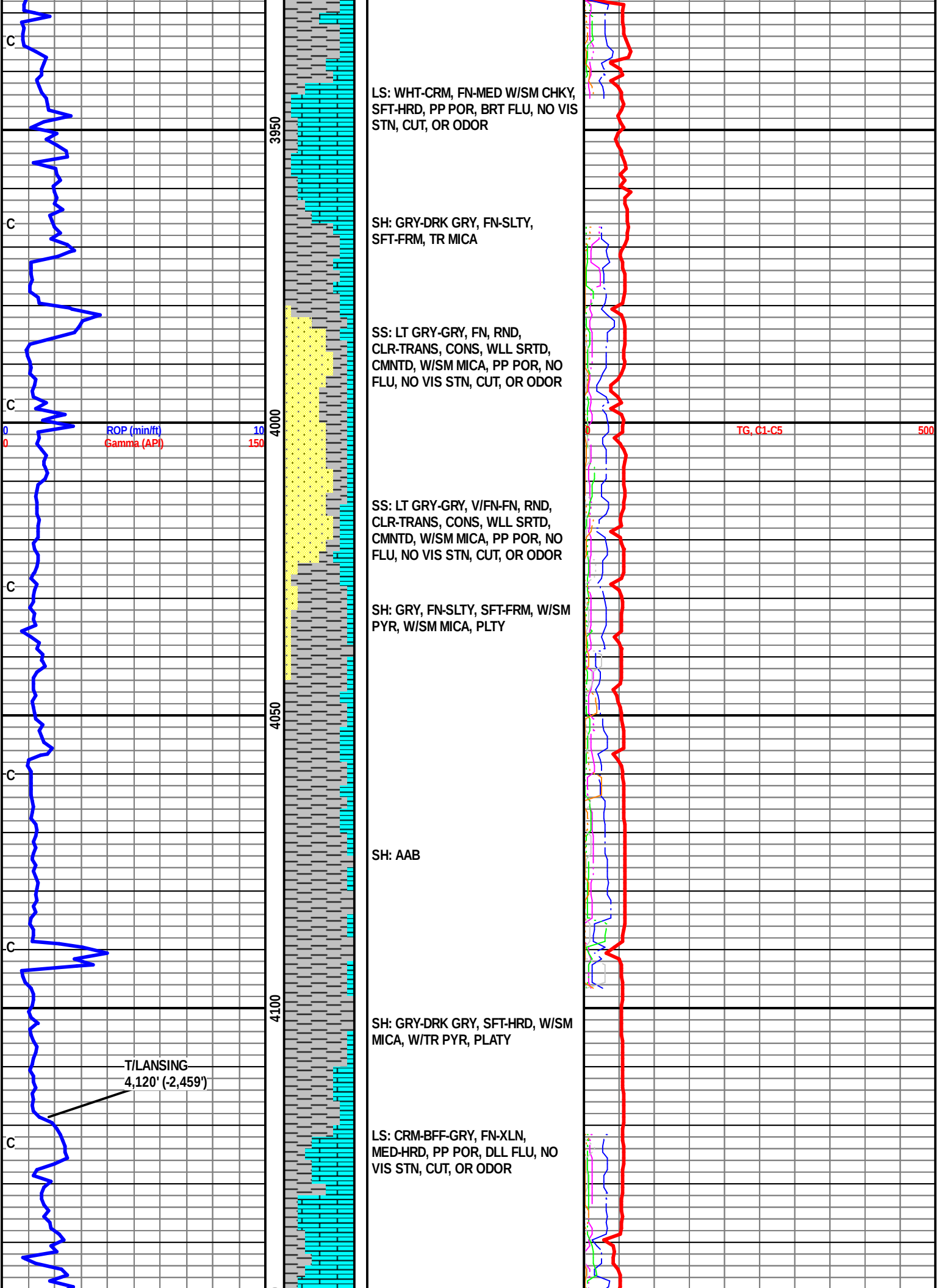
INTERVALS

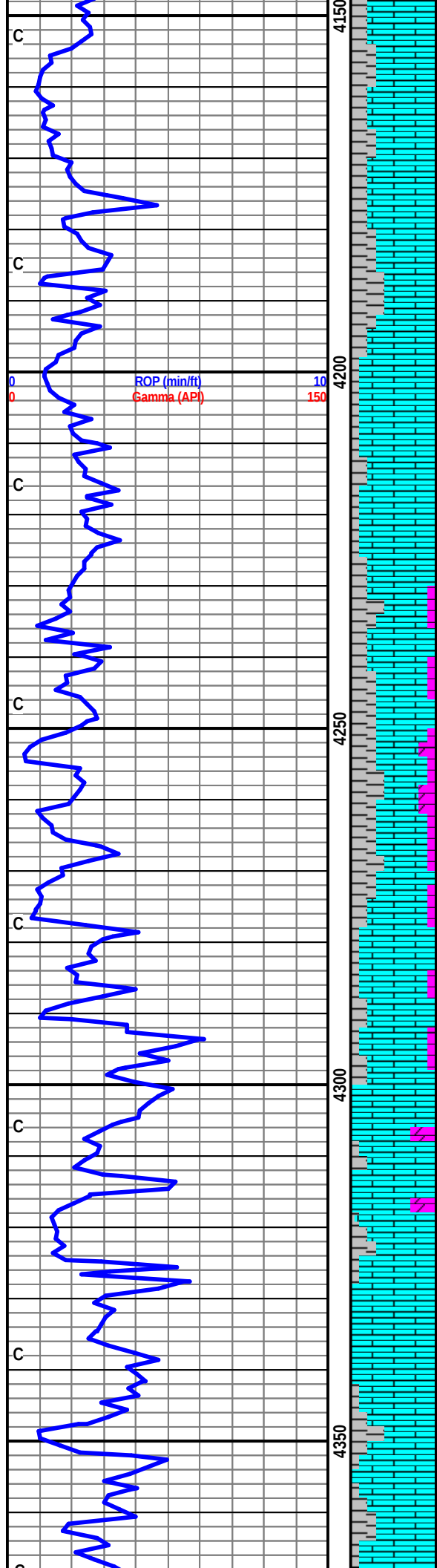
Core
 Dst

EVENTS

Rft
 Sidewall







LS: WHT-CRM-BFF, FN-MED,
MED-HRD, PP POR, DLL FLU, NO
VIS STN, CUT, OR ODOR

LS: W/SM DOLO, WHT-CRM-BFF,
FN-MED, SFT-HRD, PP POR, DLL
FLU, NO VIS STN, CUT, OR ODOR

LS: W/SM BRN SUCR DOLO,
CRM-BFF-BRN, FN-MED, MED-HRD,
PP POR W/SM SUCR, W/SM FOSS,
W/SM CHRT, DLL FLU, NO VIS STN,
CUT OR ODOR

LS: AAB W/SM VUG POR

LS: CRM-BFF-BRN-GRY,
FN-MED-MCRO XLN, HRD-BRTL-FRI,
ERTY, DOLO'C I.P., FOSS, ARG I.P.,
GD PP-INTR XLN W/SM VUG POR,
DLL W/TR BRT FLU, NO VIS STN,
CUT, OR ODOR

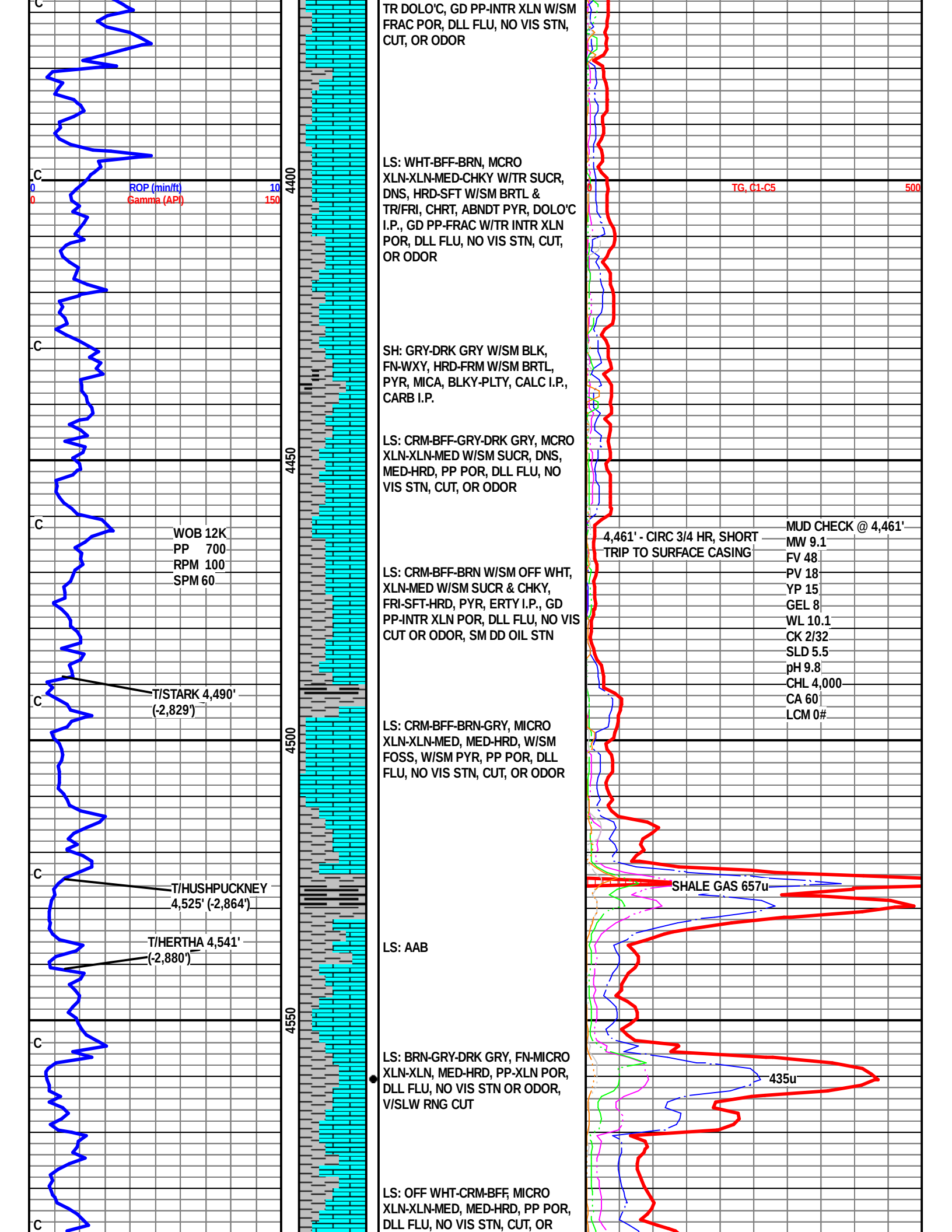
LS: OFF WHT-CRM-BRN W/SM WHT,
SUCR-MED, FRI-FRM-HRD, ERTY,
CHKY I.P., DOLO'C I.P., FOSS, GD
PP-INTR XLN POR, DLL FLU, NO VIS
STN, CUT, OR ODOR

LS: CRM-BRN-GRY, MCRO
XLN-SUCR-MED W/SM XLN,
HRD-FRM W/SM FRI & BRTL, CHRT,

TG, C1-C5

500

4,316' ON 3-28-14 @ 12AM



TR DOLO'C, GD PP-INTR XLN W/SM
FRAC POR, DLL FLU, NO VIS STN,
CUT, OR ODOR

LS: WHT-BFF-BRN, MCRO
XLN-XLN-MED-CHKY W/TR SUCR,
DNS, HRD-SFT W/SM BRTL &
TR/FRI, CHRT, ABNDT PYR, DOLO'C
I.P., GD PP-FRAC W/TR INTR XLN
POR, DLL FLU, NO VIS STN, CUT,
OR ODOR

SH: GRY-DRK GRY W/SM BLK,
FN-WXY, HRD-FRM W/SM BRTL,
PYR, MICA, BLKY-PLTY, CALC I.P.,
CARB I.P.

LS: CRM-BFF-GRY-DRK GRY, MCRO
XLN-XLN-MED W/SM SUCR, DNS,
MED-HRD, PP POR, DLL FLU, NO
VIS STN, CUT, OR ODOR

WOB 12K
PP 700
RPM 100
SPM 60

LS: CRM-BFF-BRN W/SM OFF WHT,
XLN-MED W/SM SUCR & CHKY,
FRI-SFT-HRD, PYR, ERTY I.P., GD
PP-INTR XLN POR, DLL FLU, NO VIS
CUT OR ODOR, SM DD OIL STN

4,461' - CIRC 3/4 HR, SHORT
TRIP TO SURFACE CASING

MUD CHECK @ 4,461'
MW 9.1
FV 48
PV 18
YP 15
GEL 8
WL 10.1
CK 2/32
SLD 5.5
pH 9.8
CHL 4,000
CA 60
LCM 0#

LS: CRM-BFF-BRN-GRY, MICRO
XLN-XLN-MED, MED-HRD, W/SM
FOSS, W/SM PYR, PP POR, DLL
FLU, NO VIS STN, CUT, OR ODOR

T/STARK 4,490'
(-2,829')

T/HUSHPUCKNEY
4,525' (-2,864')

T/HERTHA 4,541'
(-2,880')

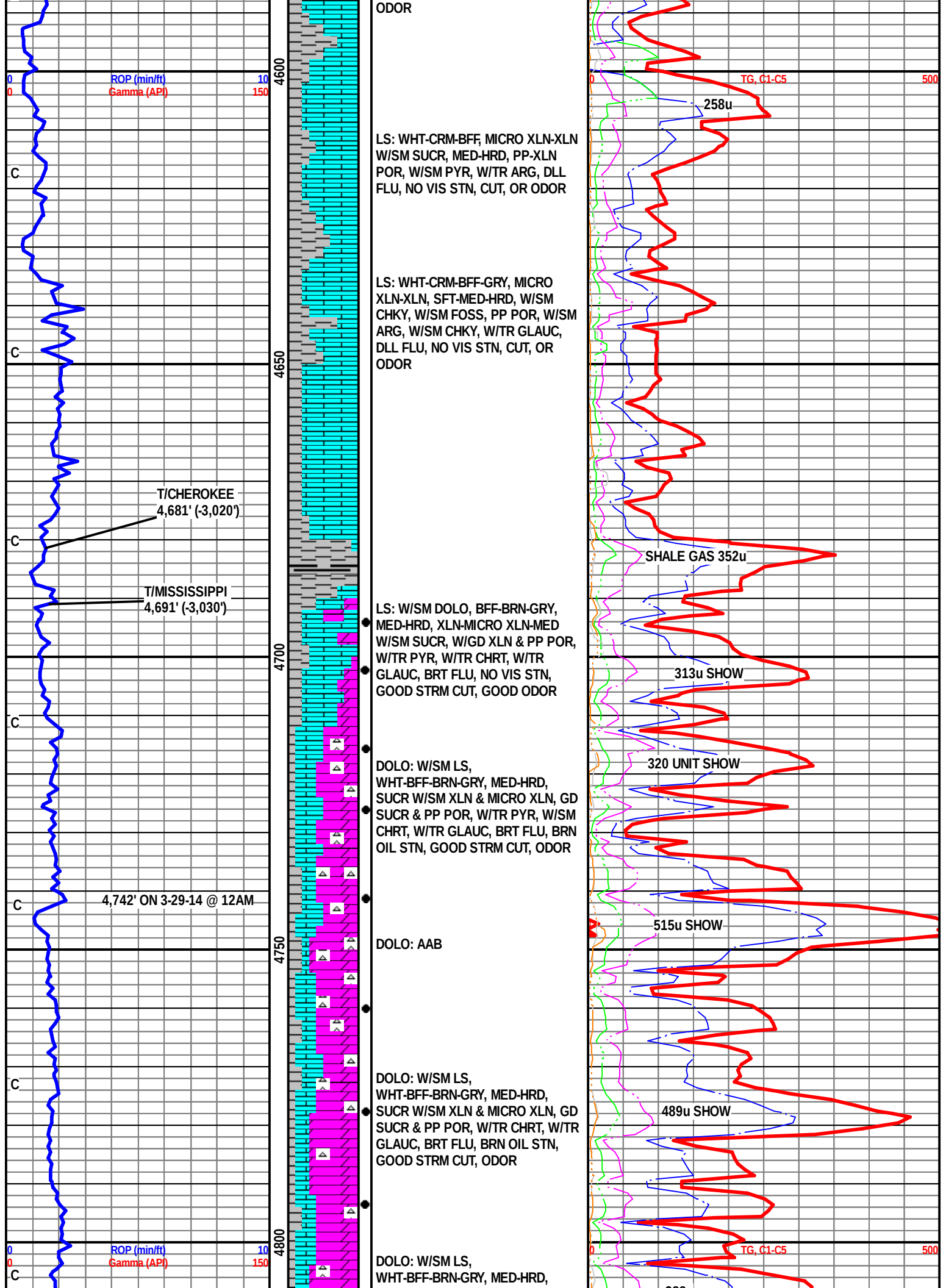
SHALE GAS 657u

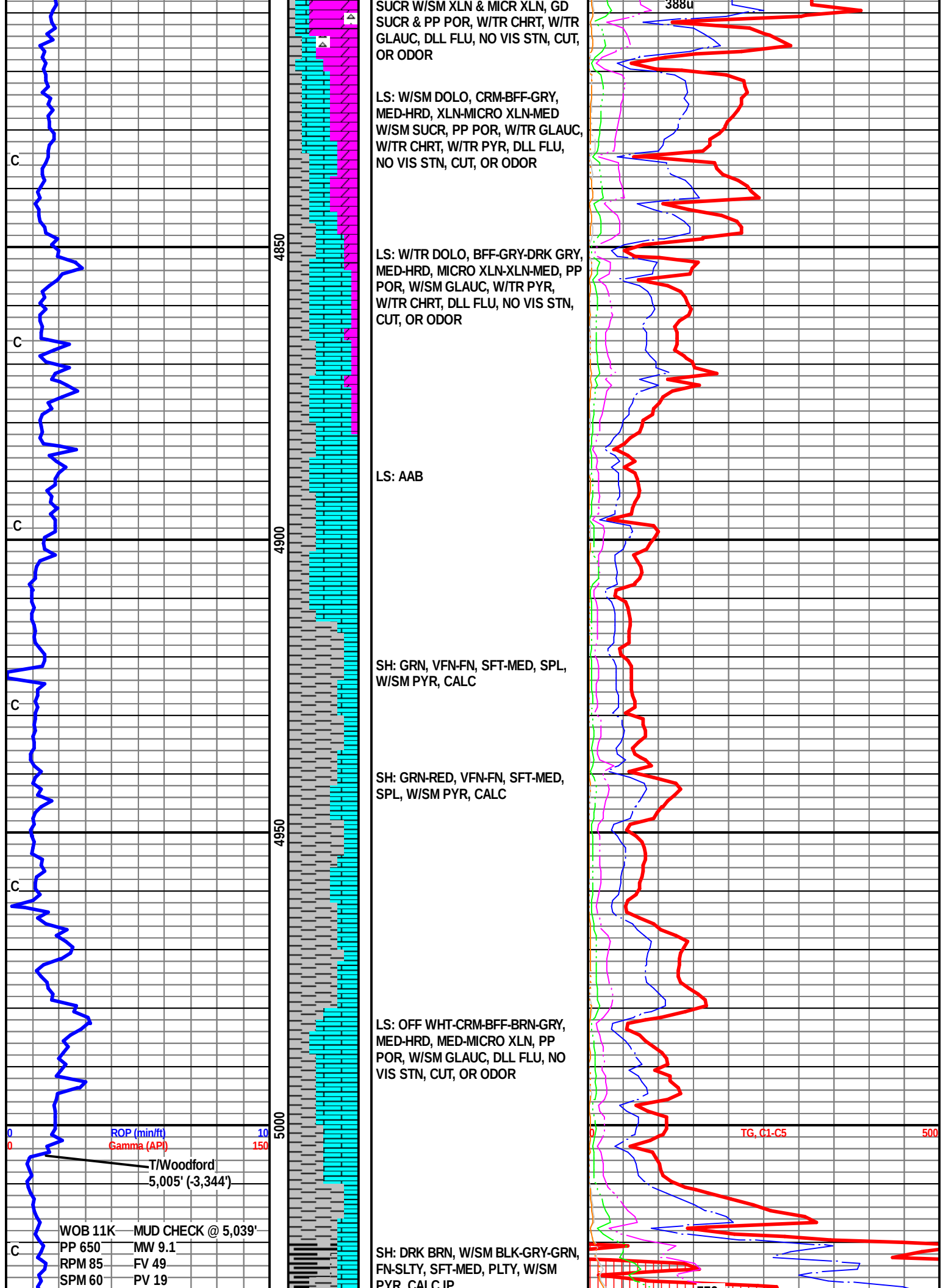
LS: AAB

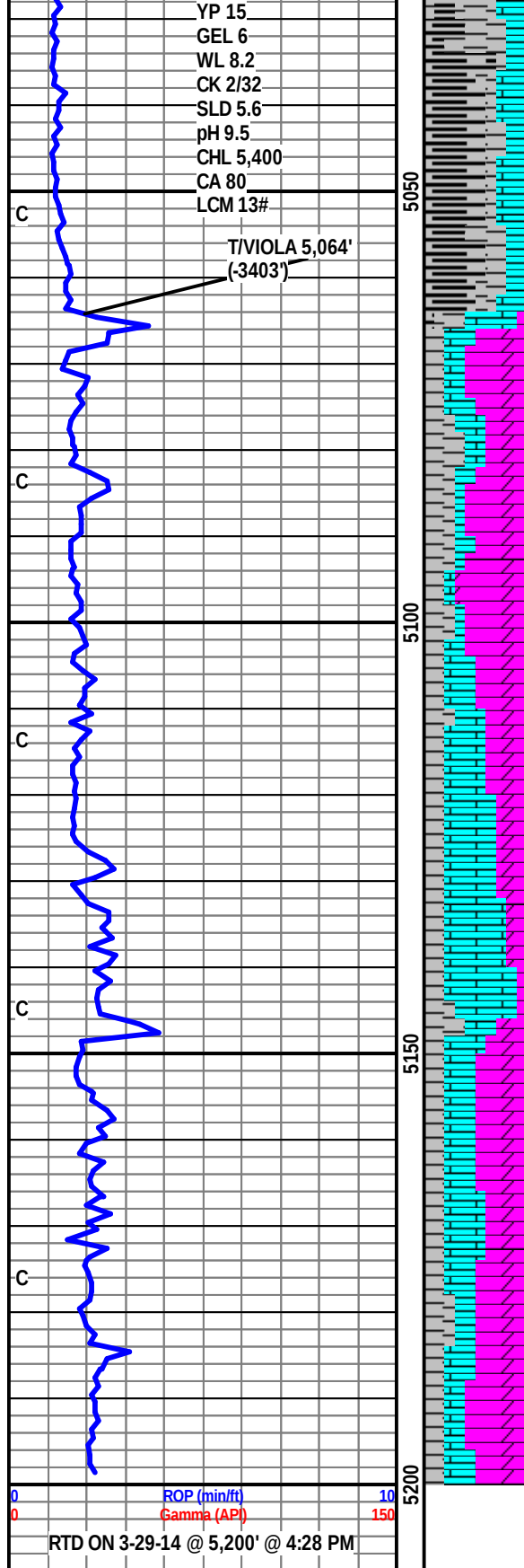
LS: BRN-GRY-DRK GRY, FN-MICRO
XLN-XLN, MED-HRD, PP-XLN POR,
DLL FLU, NO VIS STN OR ODOR,
V/SLW RNG CUT

435u

LS: OFF WHT-CRM-BFF, MICRO
XLN-XLN-MED, MED-HRD, PP POR,
DLL FLU, NO VIS STN, CUT, OR







DOLO: CRM-BFF-BRN-GRY,
SFT-HRD, SUCR-DNS-FN, PP-SUCR
POR, W/SM GLAUC, W/SM CHRT,
DLL FLU, NO VIS STN, CUT, OR
ODOR

LS: W/SM DOLO,
WHT-BFF-BRN-GRY, SFT-HRD,
SUCR-DNS-FN, PP-SUCR POR,
W/SM GLAUC, W/SM CHKY, W/SM
CHRT, W/SM FOSS, W/SM PYR, DLL
FLU, NO VIS STN, CUT, OR ODOR

LS: AAB W/VSLW RNG CUT

DOLO: WHT-OFF WHT-LT GRY,
FN-SUCR W/SM MED, HRD-BRTL,
GLAU'C SPKS, CHRT, PP-INTR XLN
W/SM FRAC POR, DLL FLU, NO STN,
V/SL RNG CUT, NO ODOR

CIRC 3/4HR, SHROT TRIP TO 4,461',
SURVEY, TOH FOR E-LOGS

