

LITHOLOGY STRIP LOG

WellSight Systems

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

Measured Depth Log

Well Name: Peterson Energy Operating, Inc. #4-23 Nielsen

Location: Section 23, T1N, R62W, Weld County, Colorado

License Number: API No. 0512334431

Region: D-J Basin

Spud Date: 4/7/13

Drilling Completed: 4/14/13

Surface Coordinates: NWNW Section 23, T1N, R62W, Weld County, Colorado

Bottom Hole 662' FNL, 662' FWL

Coordinates:

Ground Elevation (ft): 4974'

K.B. Elevation (ft): 4987'

Logged Interval (ft): 6150'

To: 8500' DTD Total Depth (ft): 8,___'

Formation: Niobrara - PreCambrian

Type of Drilling Fluid: Polymer Mud

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

OPERATOR

Company: Peterson Energy Operating, Inc.

Address: Peterson Energy Operating, Inc., 2154 W. Eisenhower Blvd, Loveland, CO 80537,
President/Owner Andy Peterson

GEOLOGIST

Name: Louise Kiteley PG-1715 (WY)

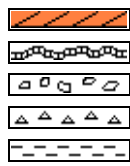
Company: Professional Geologist

Address: 5221 WCR 16 3/4, Longmont, CO 80504. Tele.: 303-263-5122; Email:
l.kiteley@gmail.com

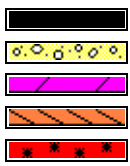
Comments

- 1) Mud data in Geologic Descriptions Track, Format mw-vis-pH-filtrate-chlor-%sol.
- 2) Contractor: Ensign # 226.
- 3) Open hole logs by SWS (GR, HCAL, RM_HRLT, RT_HRLT, RXO_HRLT, DPHZ, NPOR, PEFZ)
- 5) Straight drilled hole, ROP shifted 8' up, on depth with open hole log, which is on depth with this striplog.

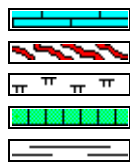
ROCK TYPES



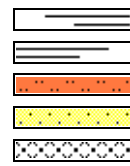
Anhy
Bent
Brec
Cht
Clyst



Coal
Congl
Dol
Gyp
Igne



Lmst
Meta
Mrlst
Salt
Shale



Shcol
Shgy
Sltst
Ss
Till

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

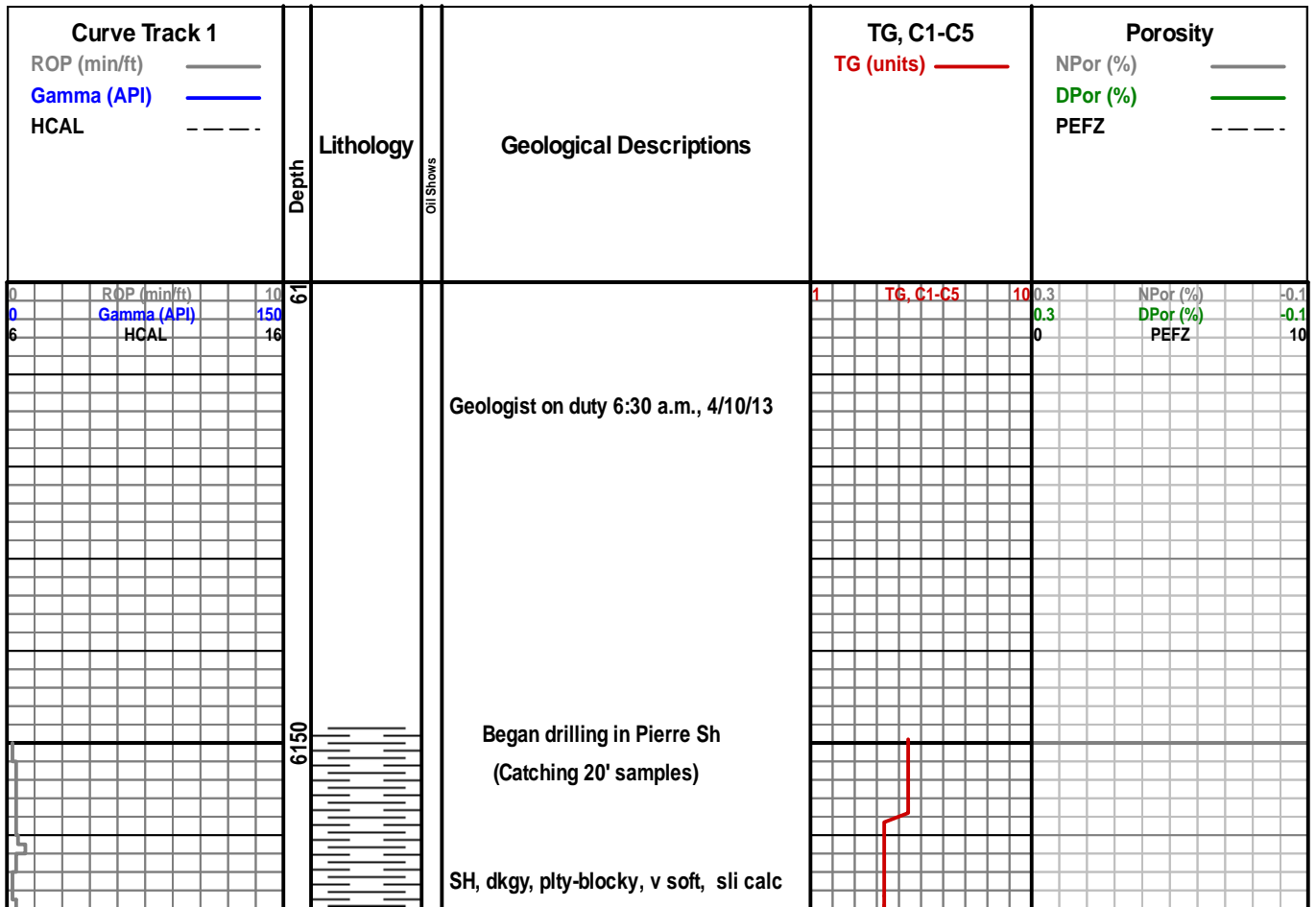
Even
 Spotted
 Ques
 Dead

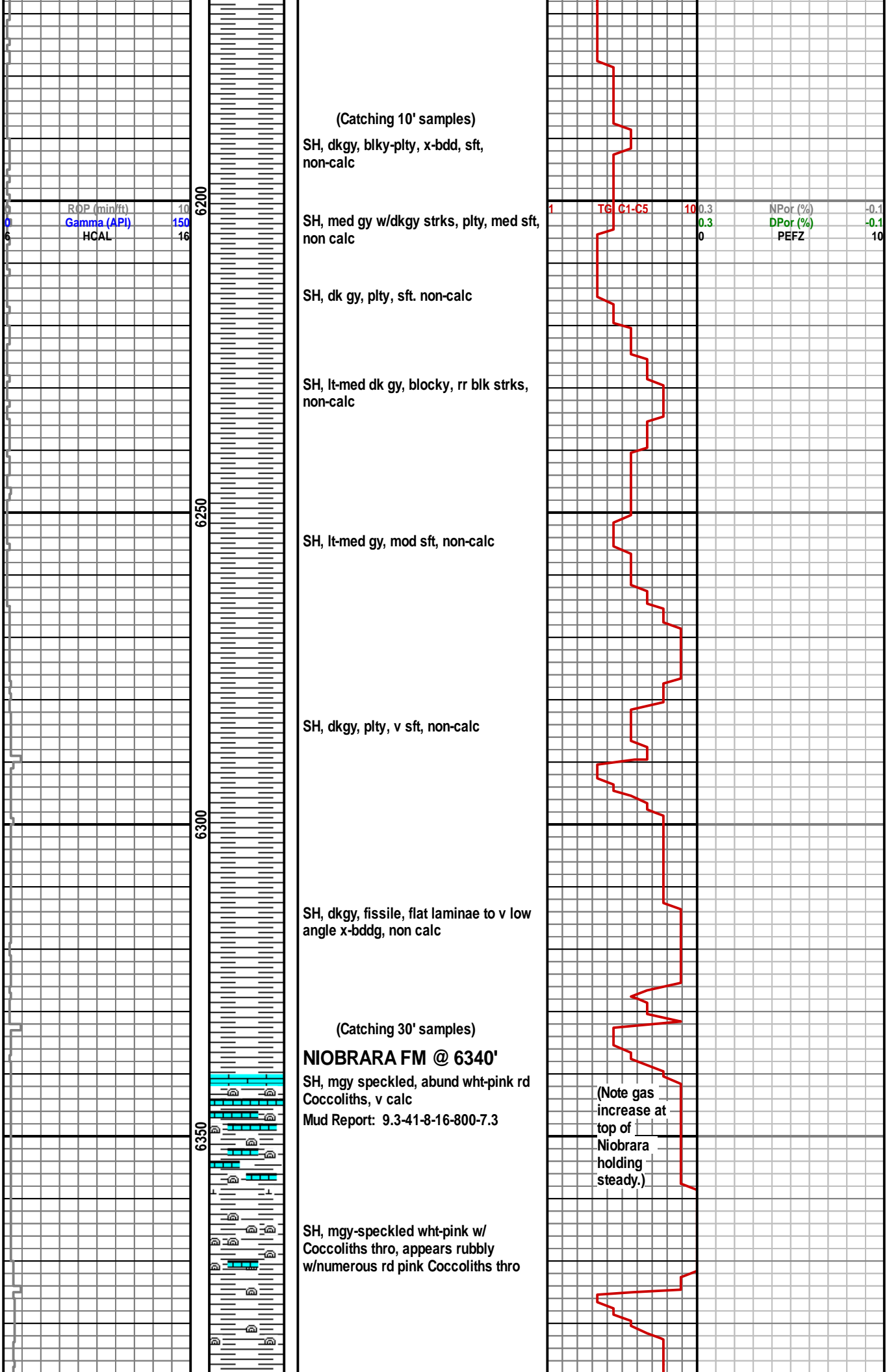
INTERVALS

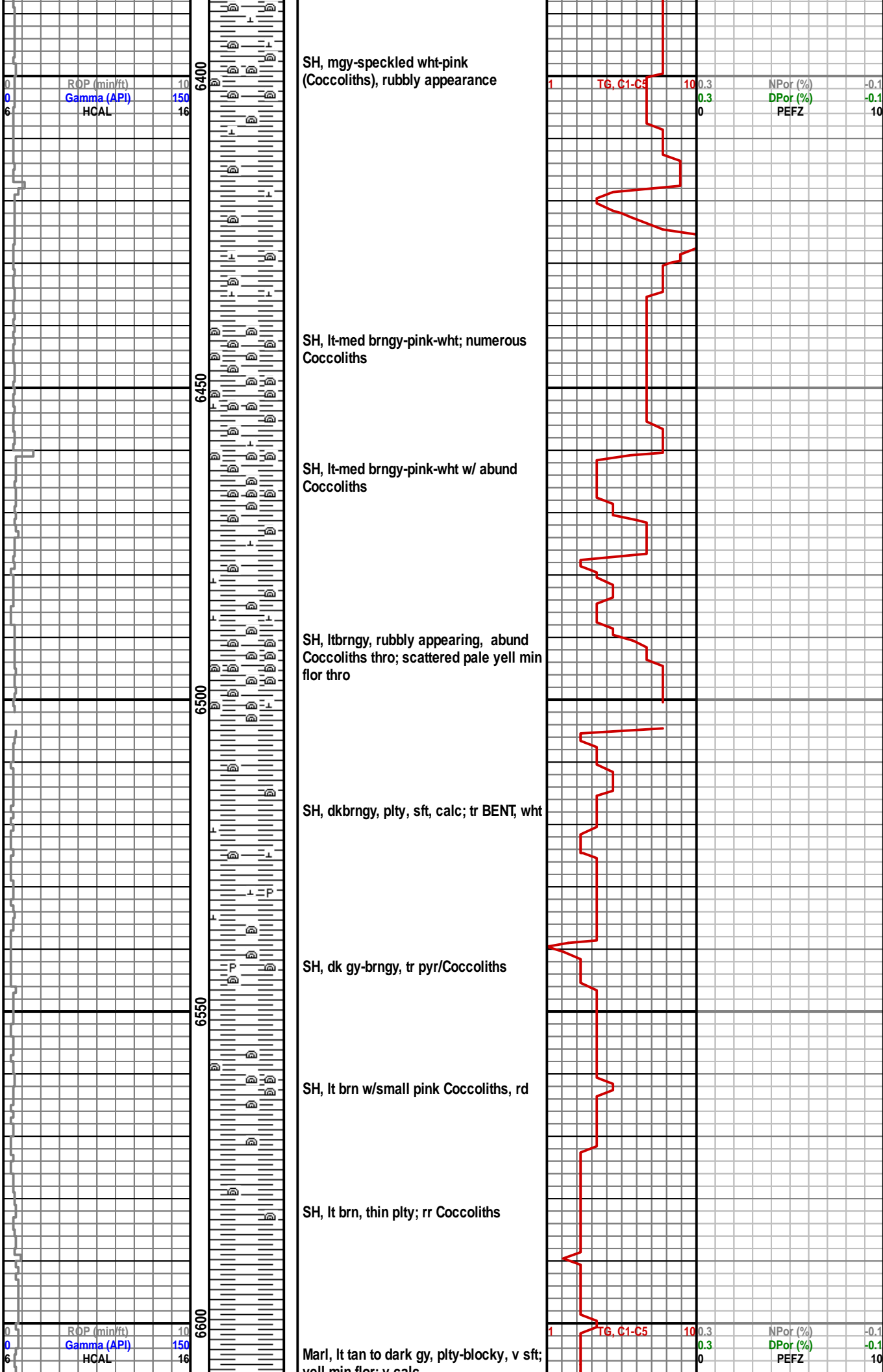
Core
 Dst

EVENTS

Rft
 Sidewall







yeil min hoi, v calc

Marl, aa

FT. HAYS LS @ 6640'

LS, ltgy, sft, calc

LS, wht, firm-hd, calc

LS, wht aa

CARLILE SH @ 6680'

SH, med gy, plty, sft, calc

SH, dkgy, plty-blky, sft, calc; tr SH, salmon pink, sft; BENT, wht; Inoc shell frag

SH, lt-med brn-gy & dk gy, plty-blky, sft, calc; BENT, wht

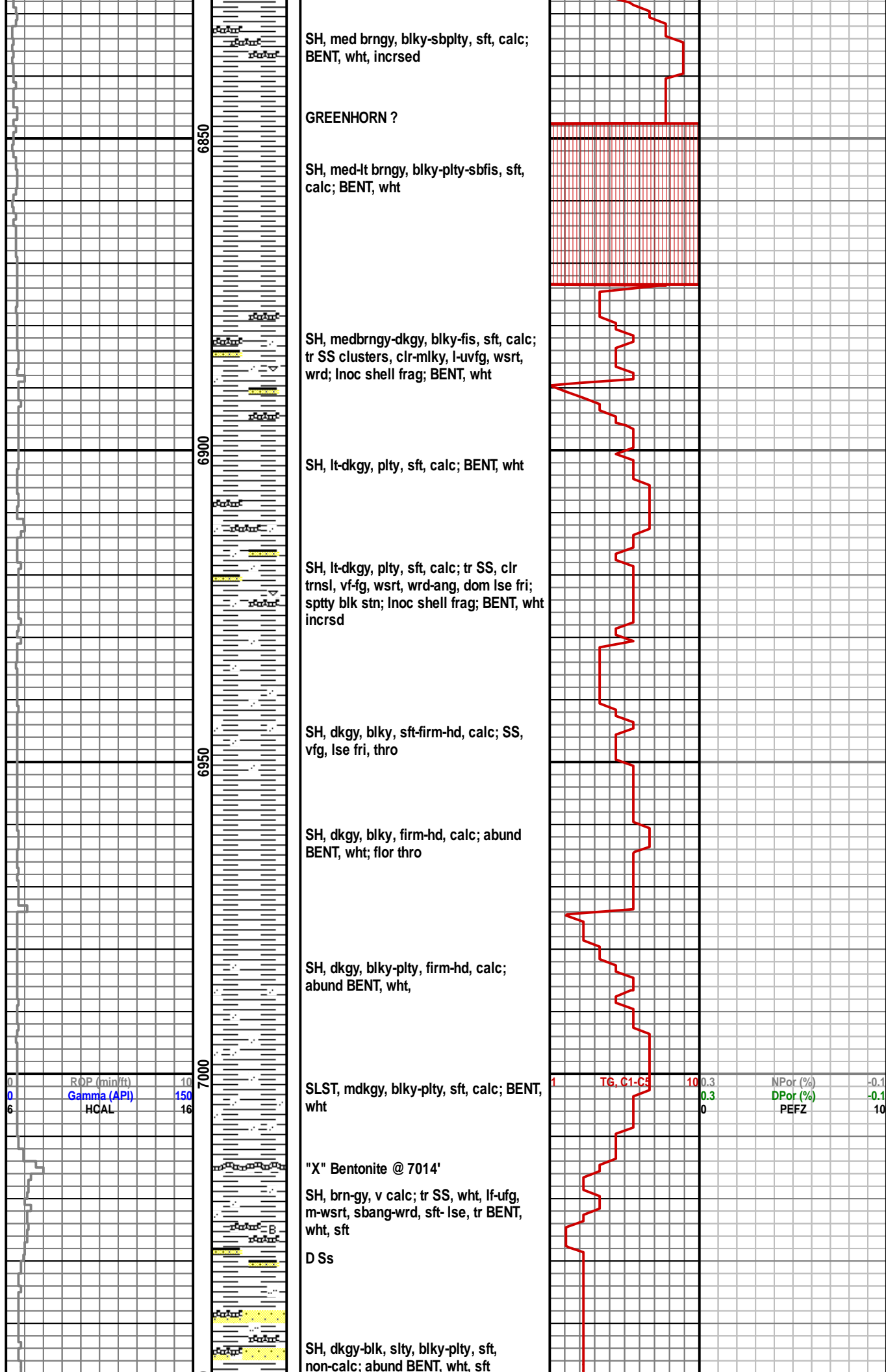
SH, dkgy-med brn-gy, aa, plty-blky, sft, calc; BENT, wht

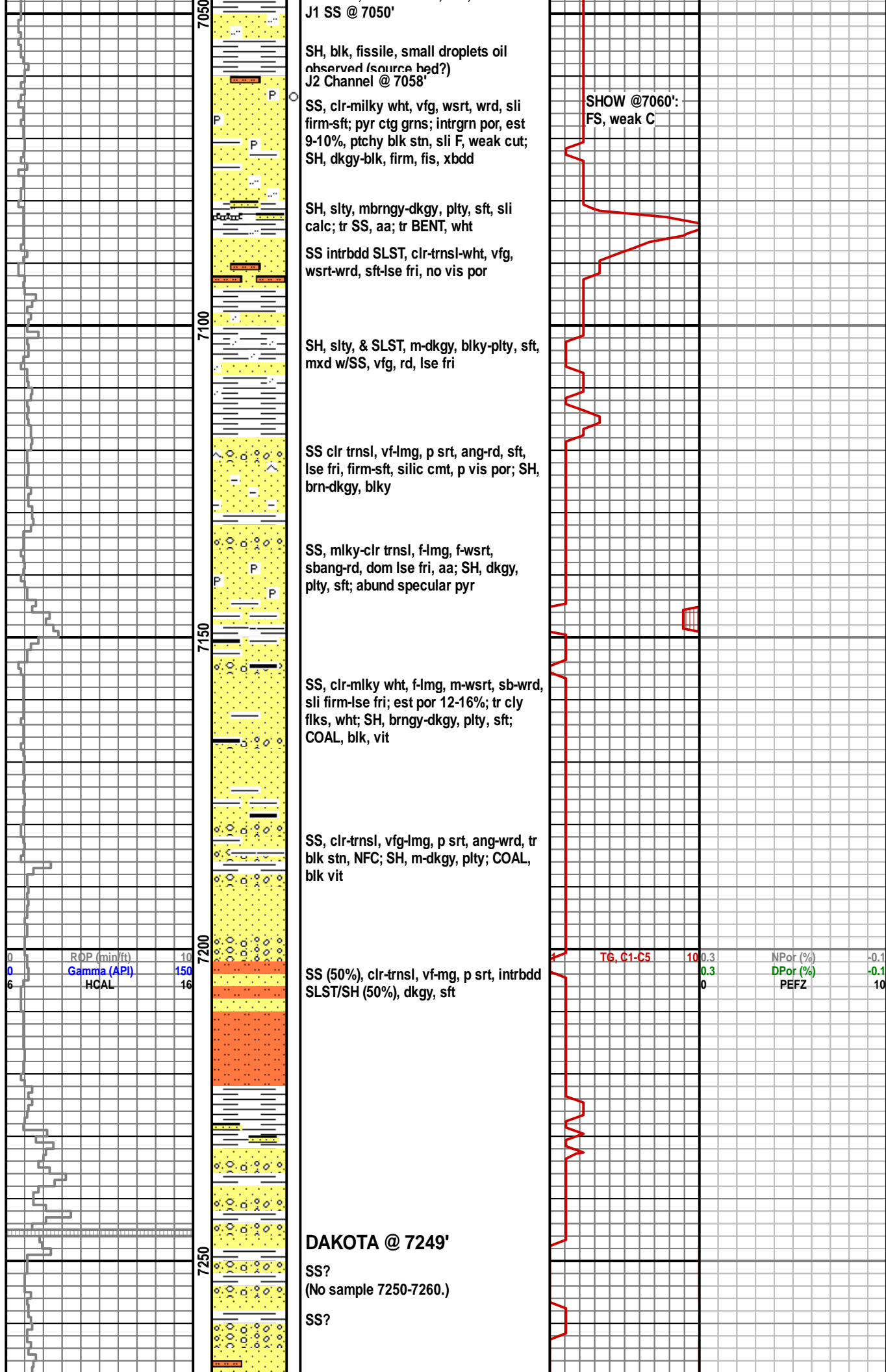
SH, med brngy-dkgy, slty-sndy, plty-blky, sft, calc; vf-fg wrd grns clr-mlky SS; BENT, wht, v sft

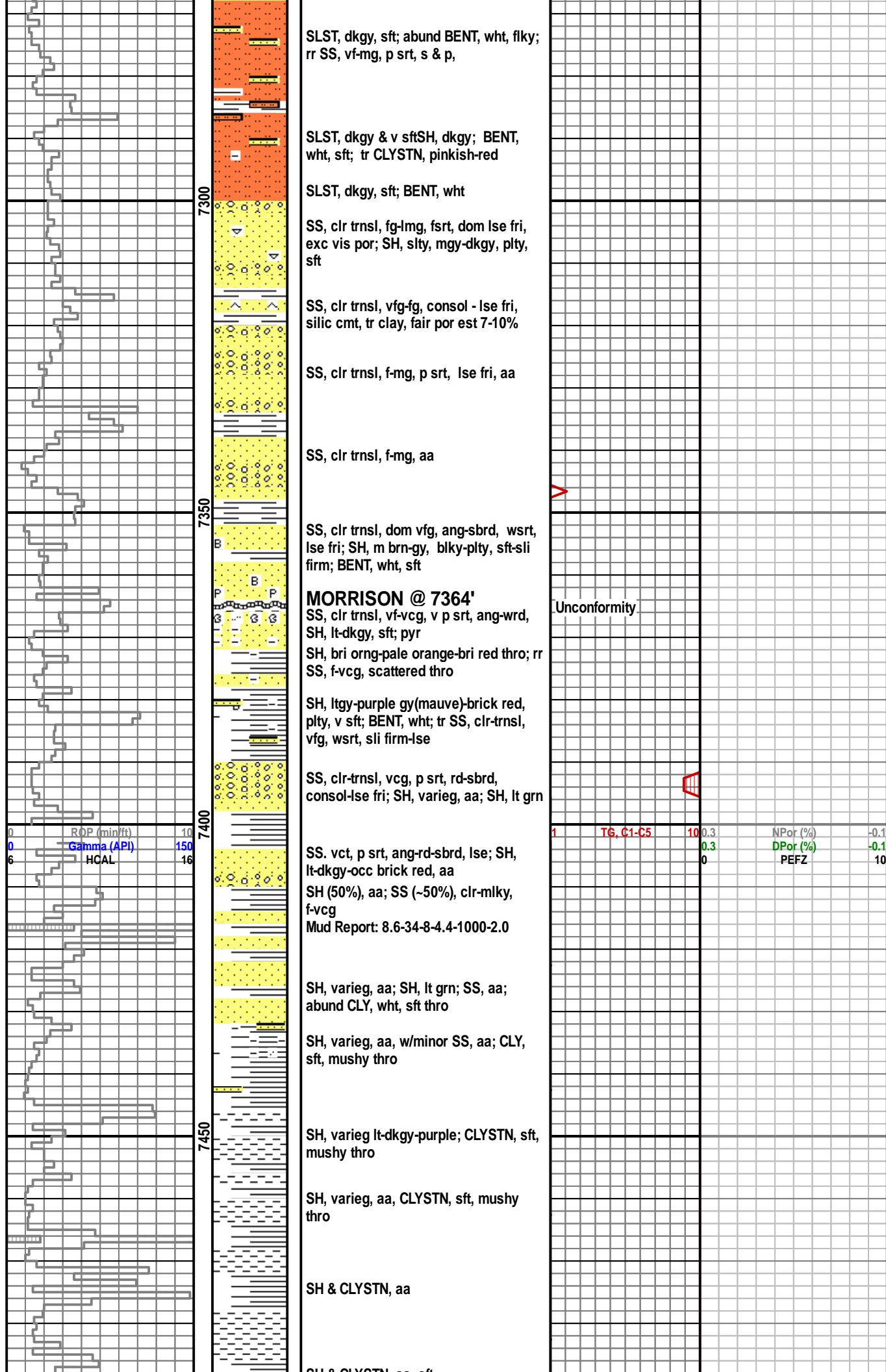
SH, med brngy-dkgy, blky-sbplty, sft, calc; BENT, wht

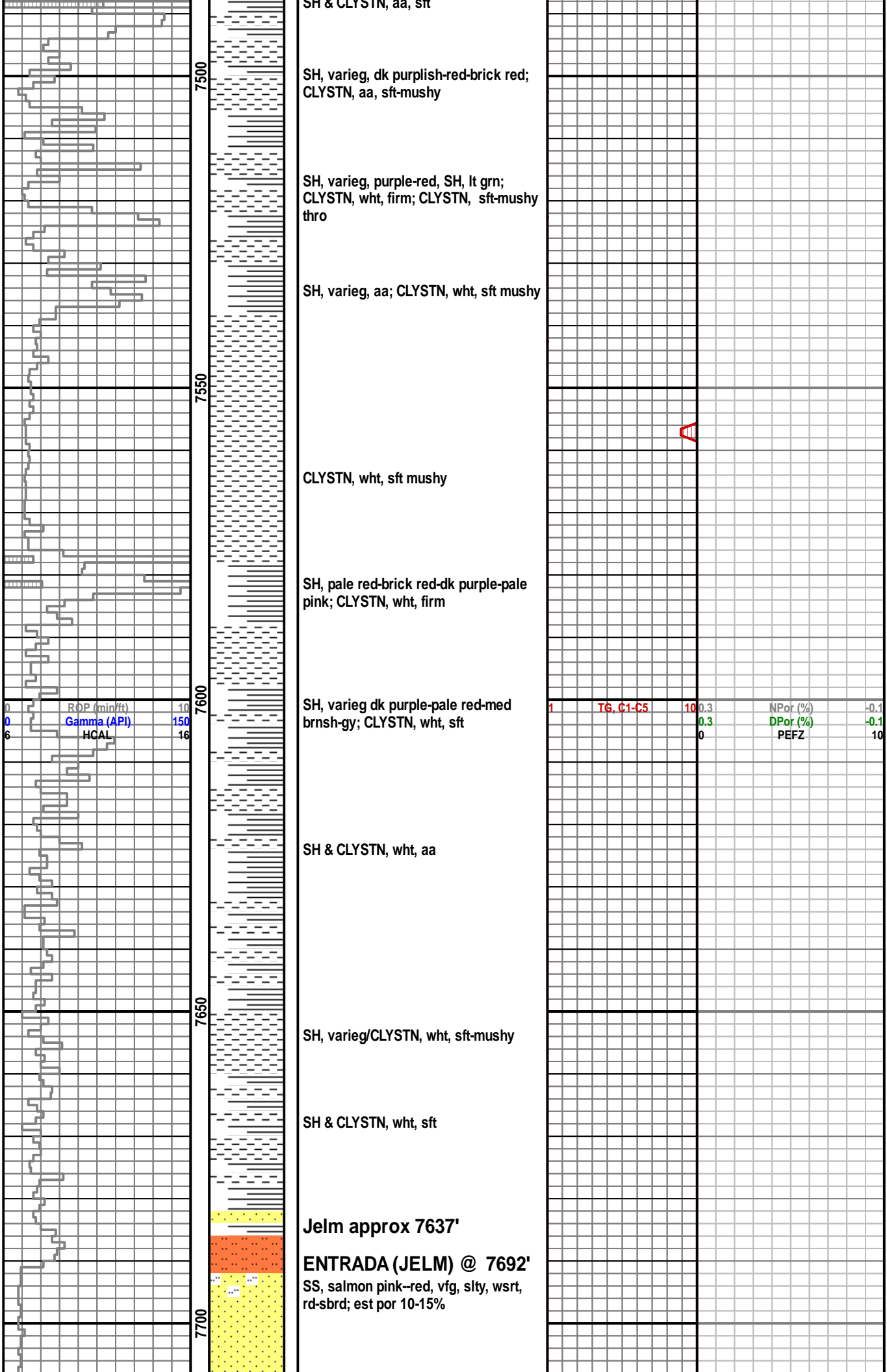
ROP (min/ft) 10
Gamma (API) 150
HCAL 16

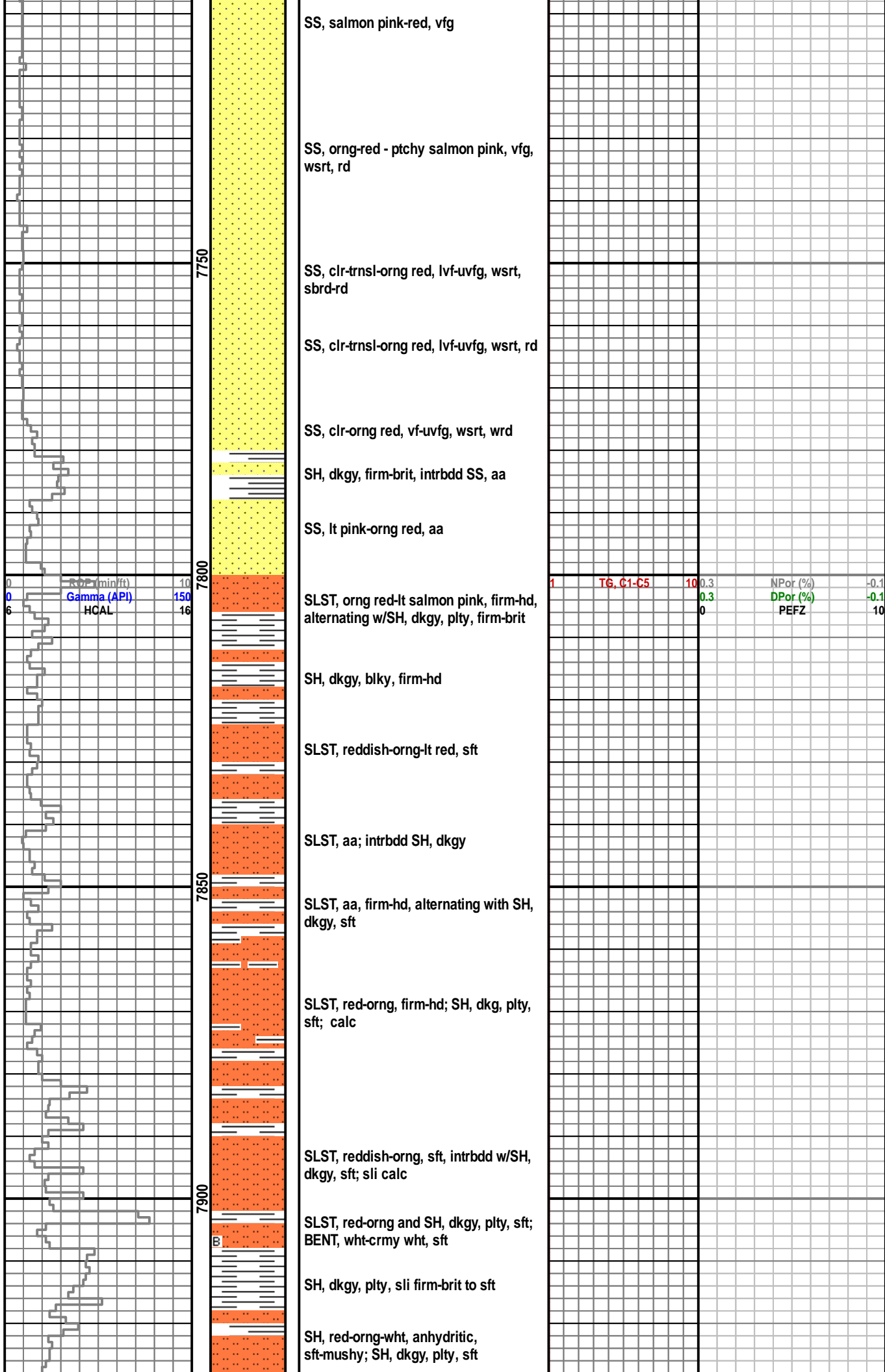
1 TG, C1-C5 10 0.3
0.3
0
NPor (%) -0.1
DPor (%) -0.1
PEFZ 10

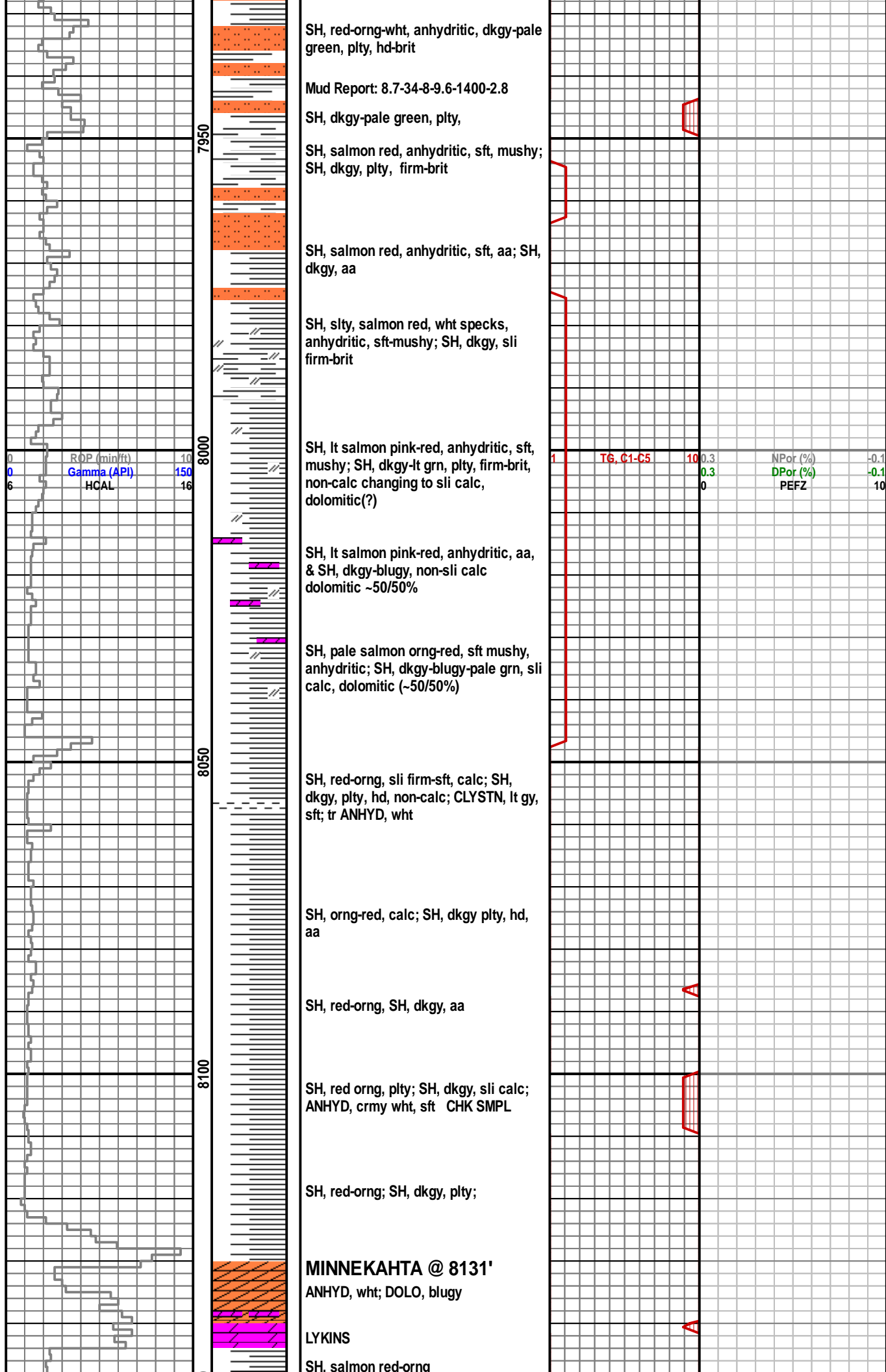


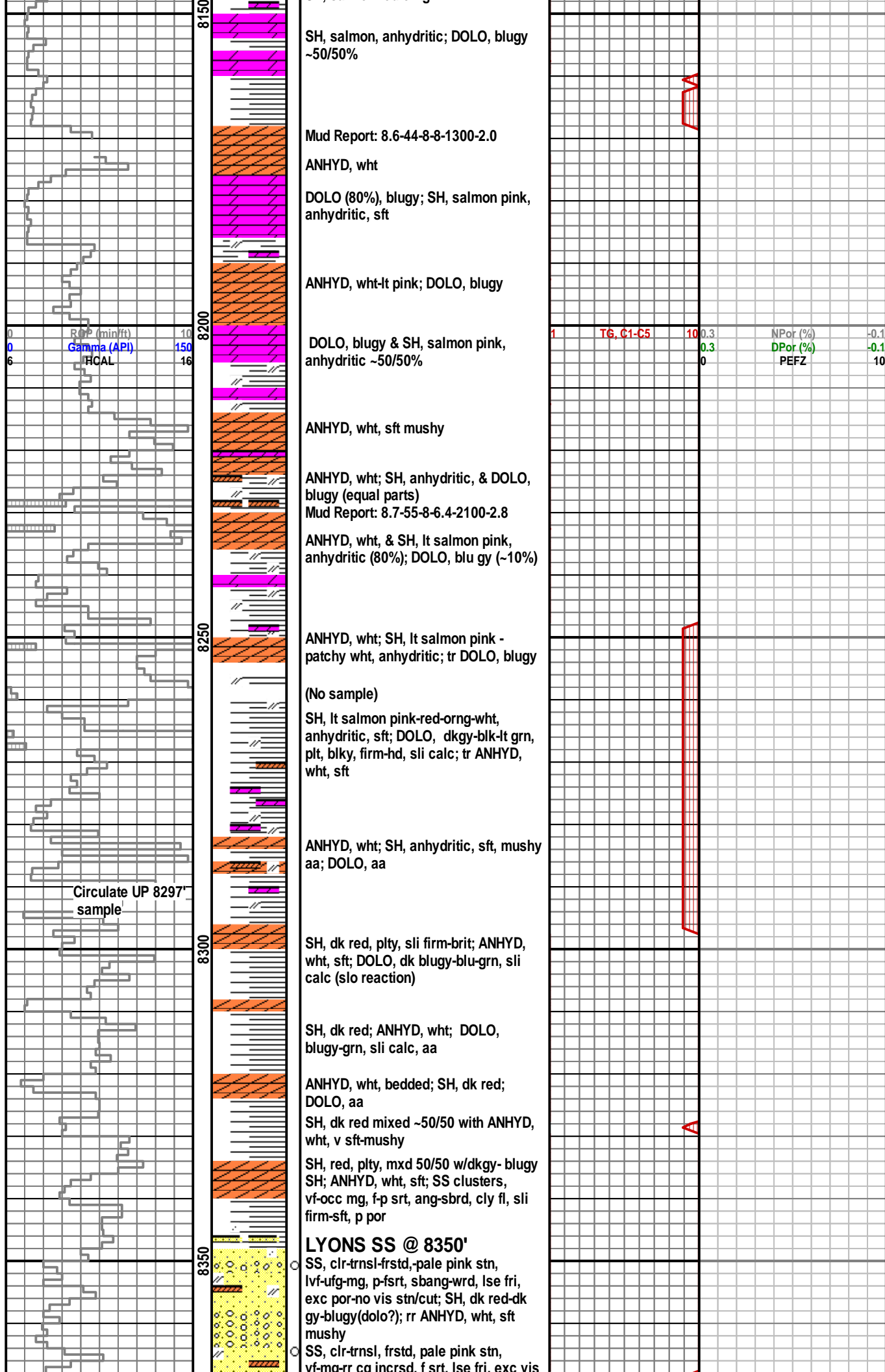


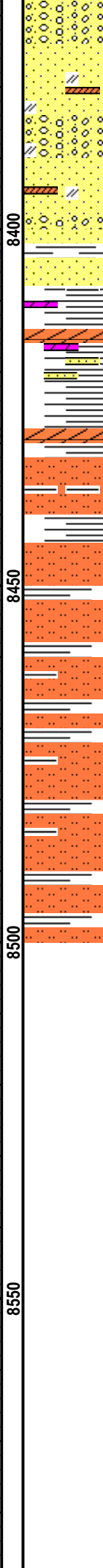
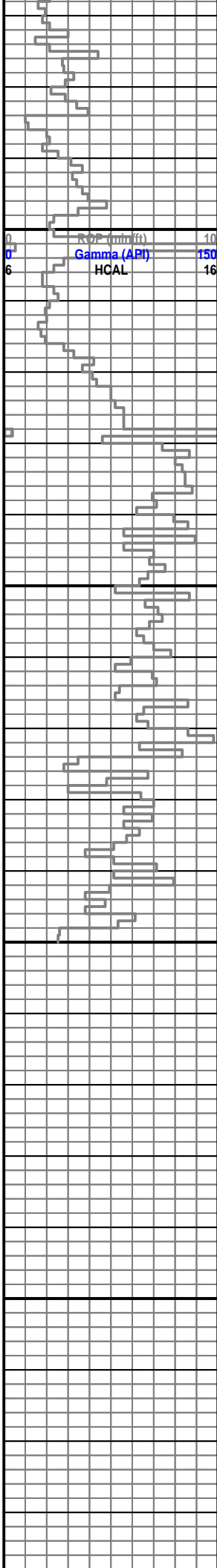












por NFSC; SH, dk red-dkgy/ANHYD, wht-pink, decrsd

SS, clr-trnsl-pink stn, f-mg-occ cg, f-wsrt, sb-wrd, lse, exc por; SH, red-dkgy; tr ANHYD. aa

SS, clr-frstd-pink, vf-cg, f-psrt; rr lrg clr ang qtz grns; ANHYD, wht chg to pink thro; SH, dk red-dkgy

SS, clr-frstd-pale pink, dom fg-cg; abd dkgy-blugy SH; tr ANHYD, wht, pwdry

SS (~30%), clr trnsl, vf-mg, m-wsrt, sbdrd-rd; SLST-SH (~70%), dkgy-dk red

Satanka Sh @ 8408

ANHYD, pale pink-wht; SH, slty, red-dkgy; SS clusters, vfg, DOLO, blugy, sli calc

ANHYD, SH, SS, aa

SLST, salmon orng-red, sft, calc, cly fl; SH, dkgy, blocky-sbplty, sft; tr SS, clr-trnsl, uf-lmg, rd, lse fri

SLST, dk red; SH, dkgy, plty; ANHYD, wht

Mud Report: 8.7-55-6.4-6.4-2200-2.8

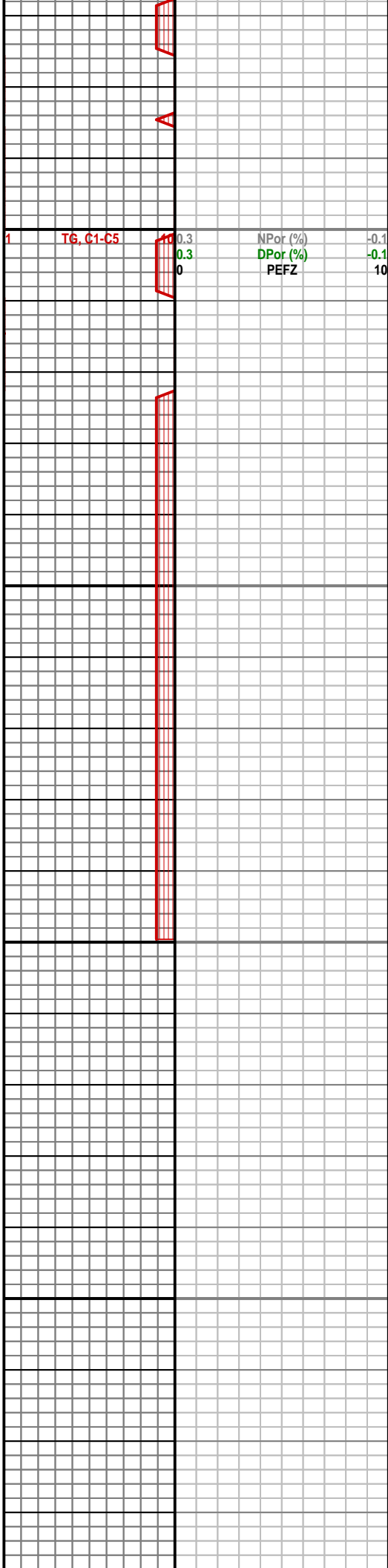
SLST, salmon orng-red, sft, calc; SH, dkgy-blk, plty, sli calc; tr ANHYD, wht

SLST, salmon orng-red; SH, dkgy, blocky, sft, calc

SLST, aa; SH, dkgy, aa; tr ANHYD, wht

DTD @ 8500'

Mud Report: 8.8-52-8-6.4-2200-3.5



[illegible]