LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name:	**NGL Water Solutions C9_TD_FINAL_CURVES.sl6**
Location:	**Sec. 13 T. 10 N., R. 61W, Weld Co., CO**
License Number:	**API: 05-123--40194**
Region:	**Wattenberg**
Spud Date:	**Sept. 22, 2014**
Drilling Completed:	**Oct. 9,2014**
Surface Coordinates:	
	SWNW 1987' FNL, 992' FWL
Bottom Hole Coordinates:	**Same**
Ground Elevation (ft):	**5058'**
K.B. Elevation (ft):	**5073'**
Logged Interval (ft):	**6430' +/- To: 10,152'LTL**
Total Depth (ft):	**10,200 'DTD**
Formation:	**Morrow Fm**
Type of Drilling Fluid:	**Water based mud to int. csg pt; polymer chemical-gel below int csg pt to TD.**

OPERATOR

Company: NGL Water Solutions DJ, LLC
Address: 8207 W. 20th St., Ste. B,
Greeley, CO 80634

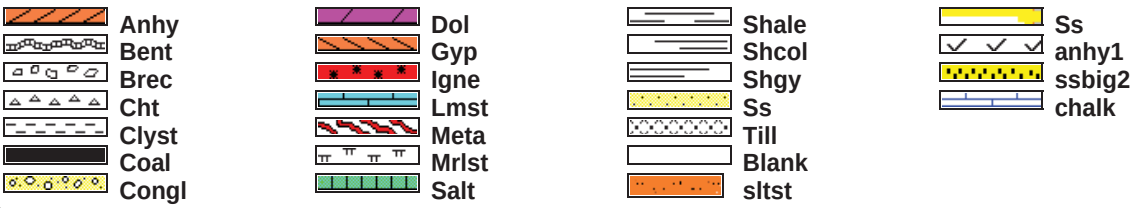
GEOLOGIST

Name: Louise M. Kiteley PG-1715 (WY)
Company: Professional Geologist
Address: 5221 WCR 16 3/4
Firestone, CO 80504
(l.kiteley@gmail.com)

Comments

1) Mud data in Geologic Descriptions Track. Format: mw-vis-wl-pH-chlor-%solids.
2) Open hole logs by PIONEER (PSI) (INTERMED CSG PT) GR, DCAL, SP, RLL3, RILM, RILD, DPOR, CNPOR & SWS (TD) (GR, HCAL, SP, AHT10, AHT30, AHT90, DPHZ, NPOR, PEFZ)
3) Vertical Injection Well, ROP ____shifted and is on depth with open hole logs, which is on depth with this striplog. Formation tops correlate with formations and E-log curves identified in nearby wells.
4) Contractor: Ensign #138 drilling rig.

ROCK TYPES



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

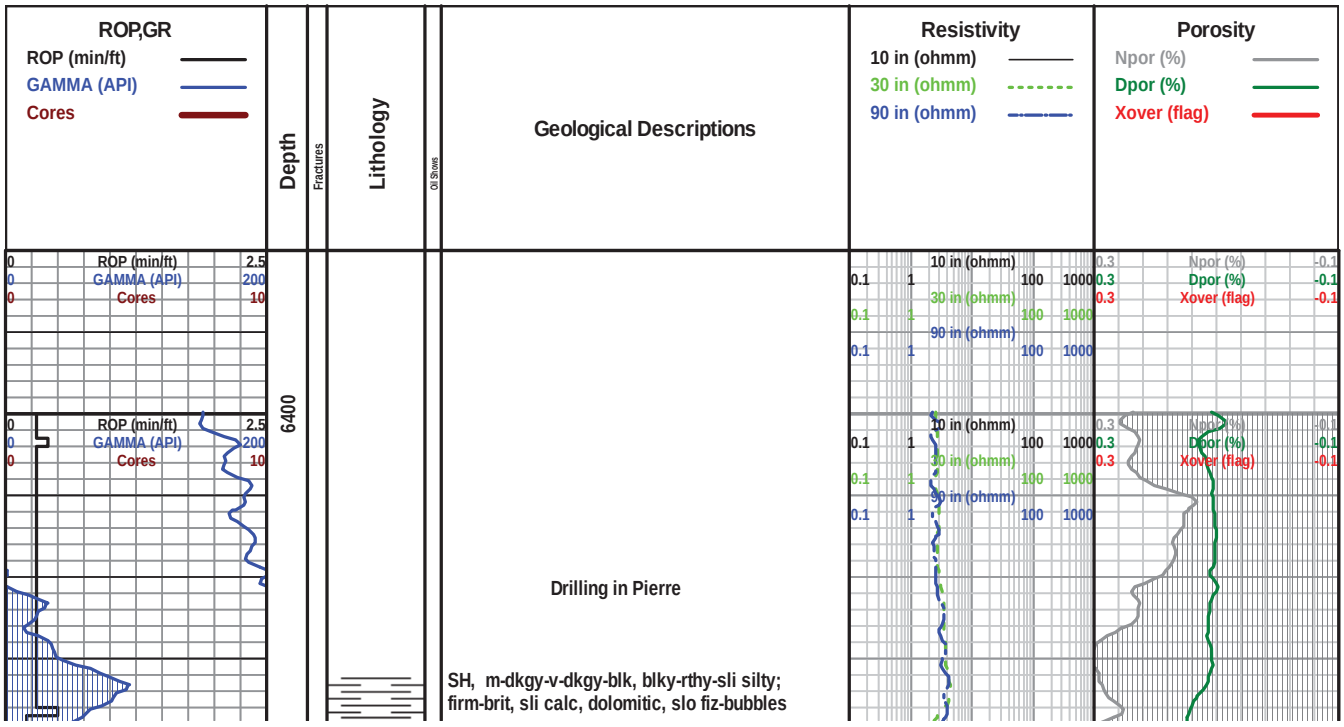
SORTING
- Well
- Moderate
- Poor

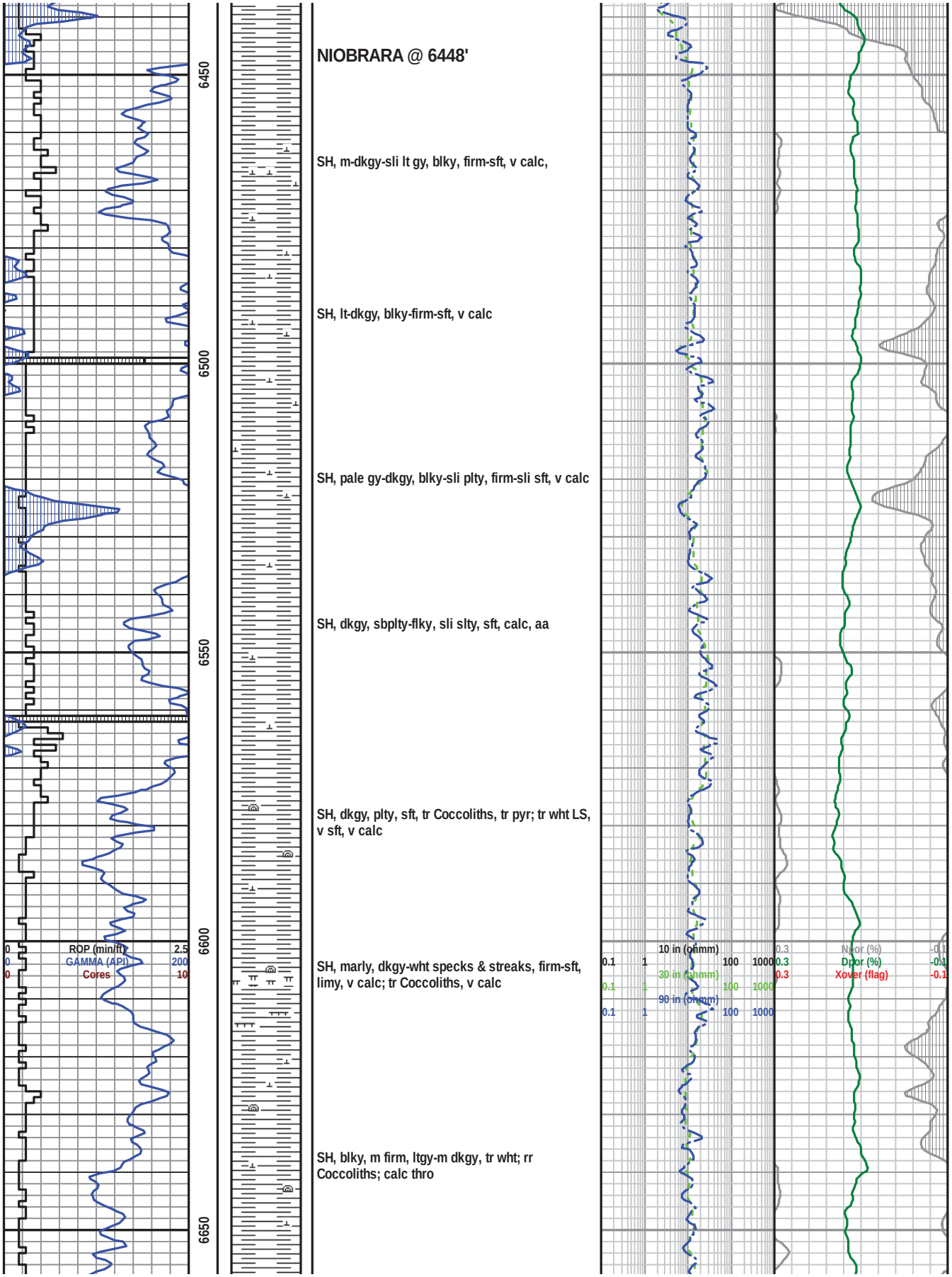
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

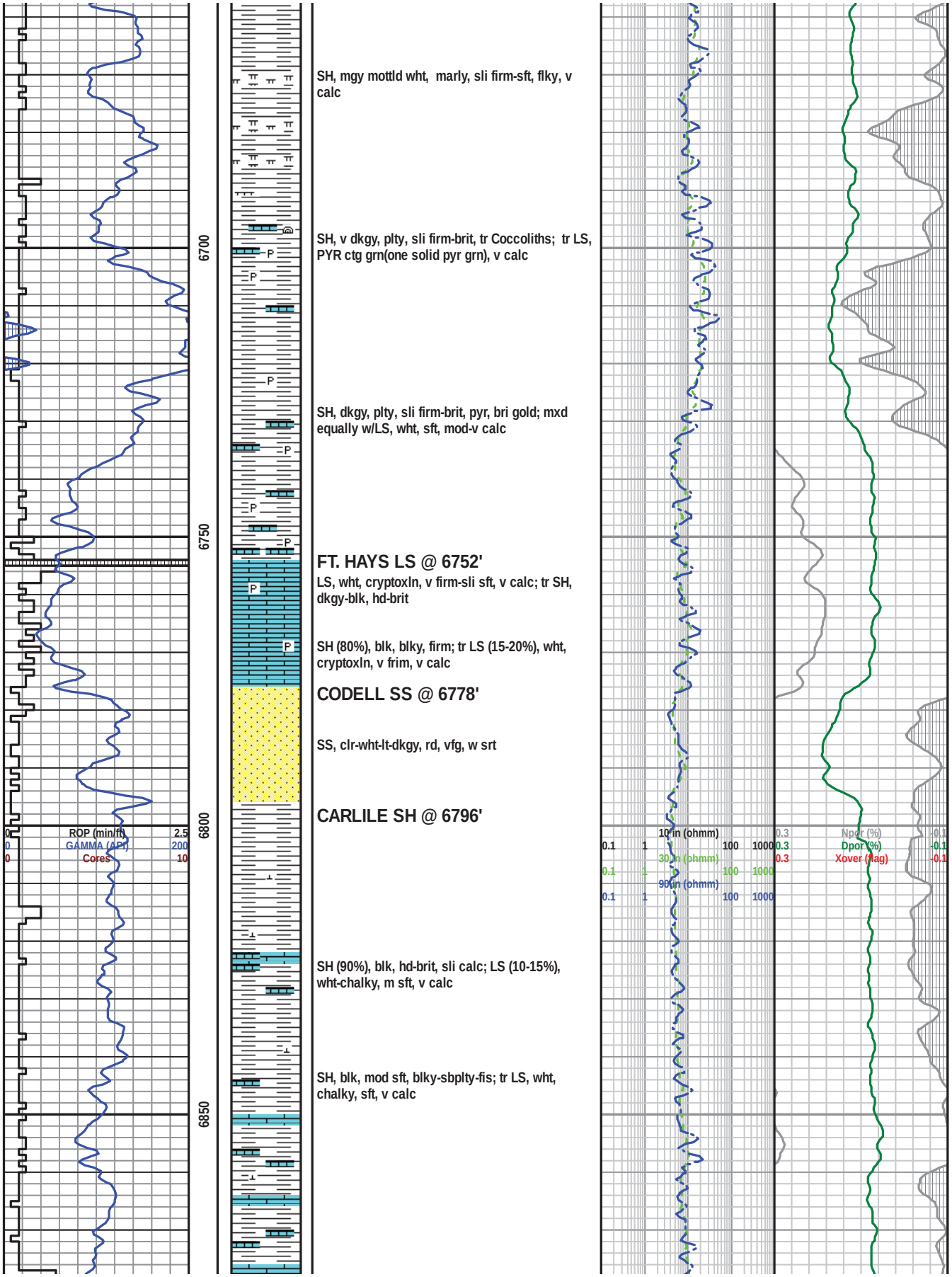
OIL SHOWS
- Even
- Spotted
- near even
- Ques
- Dead
- vspotty
- Stain
- Oil in fracture
- Bubbling
- Bleeding

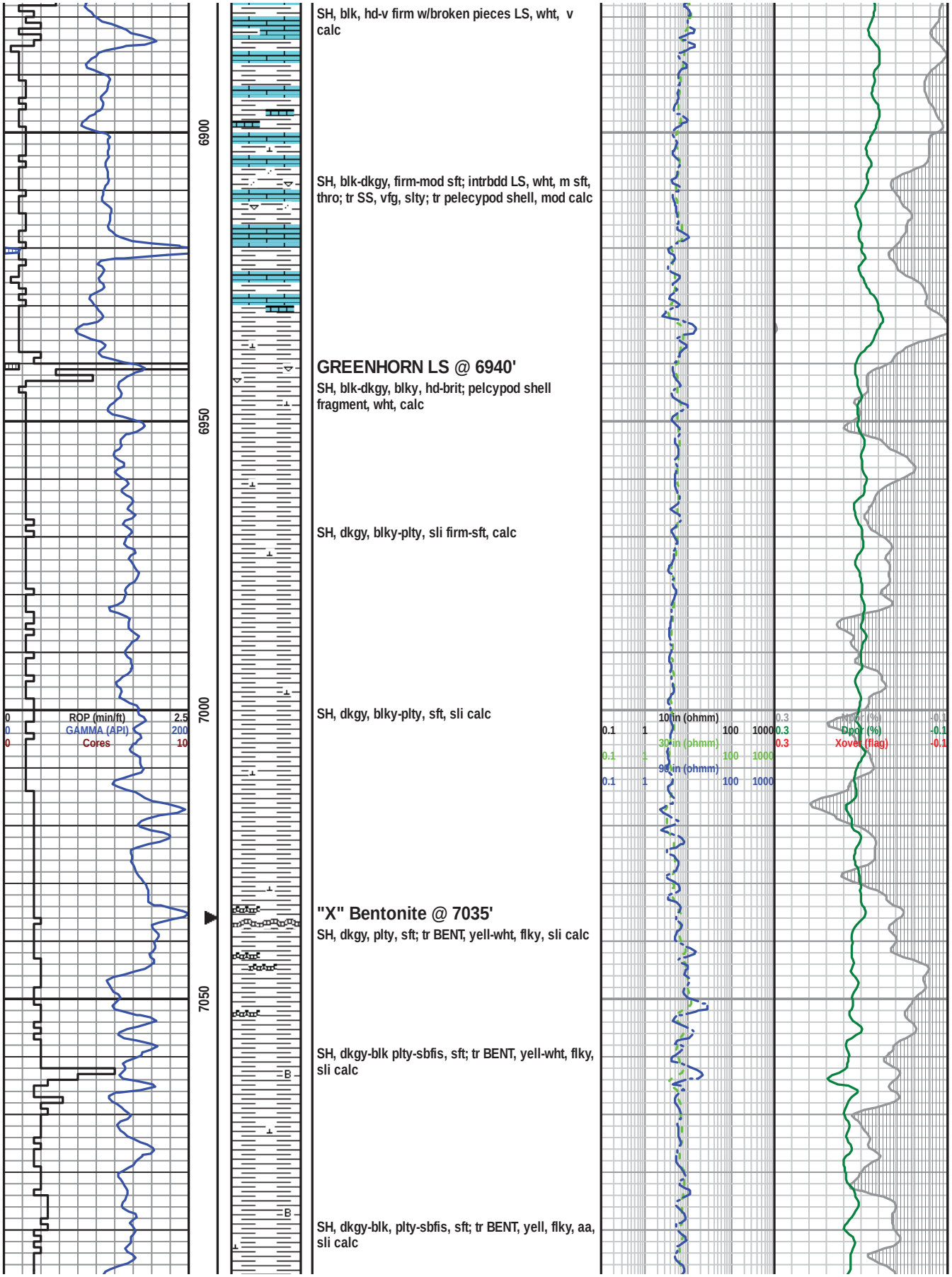
INTERVALS
- Core
- Dst
- casing

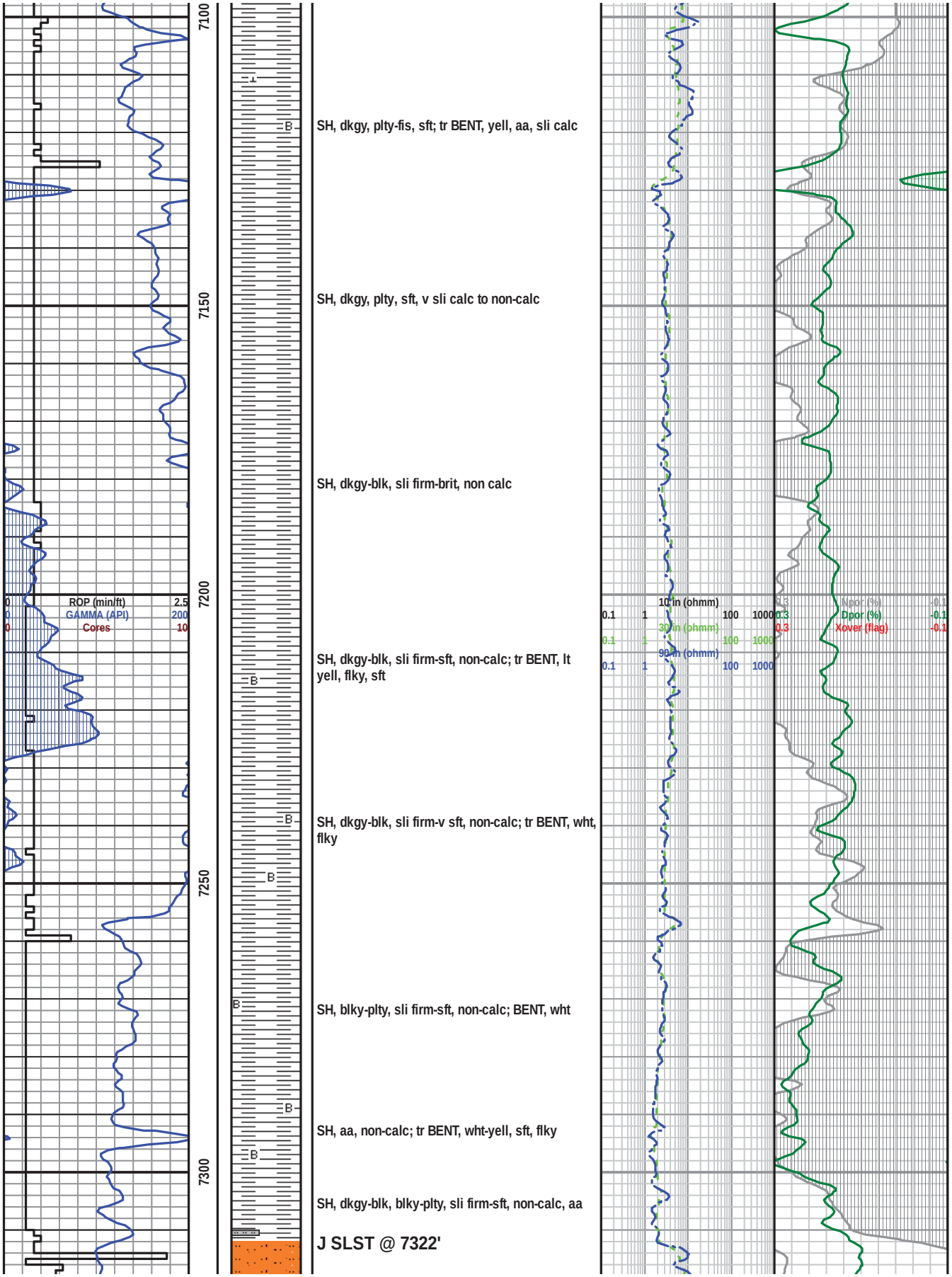
EVENTS
- Rft
- Sidewall
- New bit
- casingr
- casing
- Survey
- Off bottom
- conn
- Survey(red)

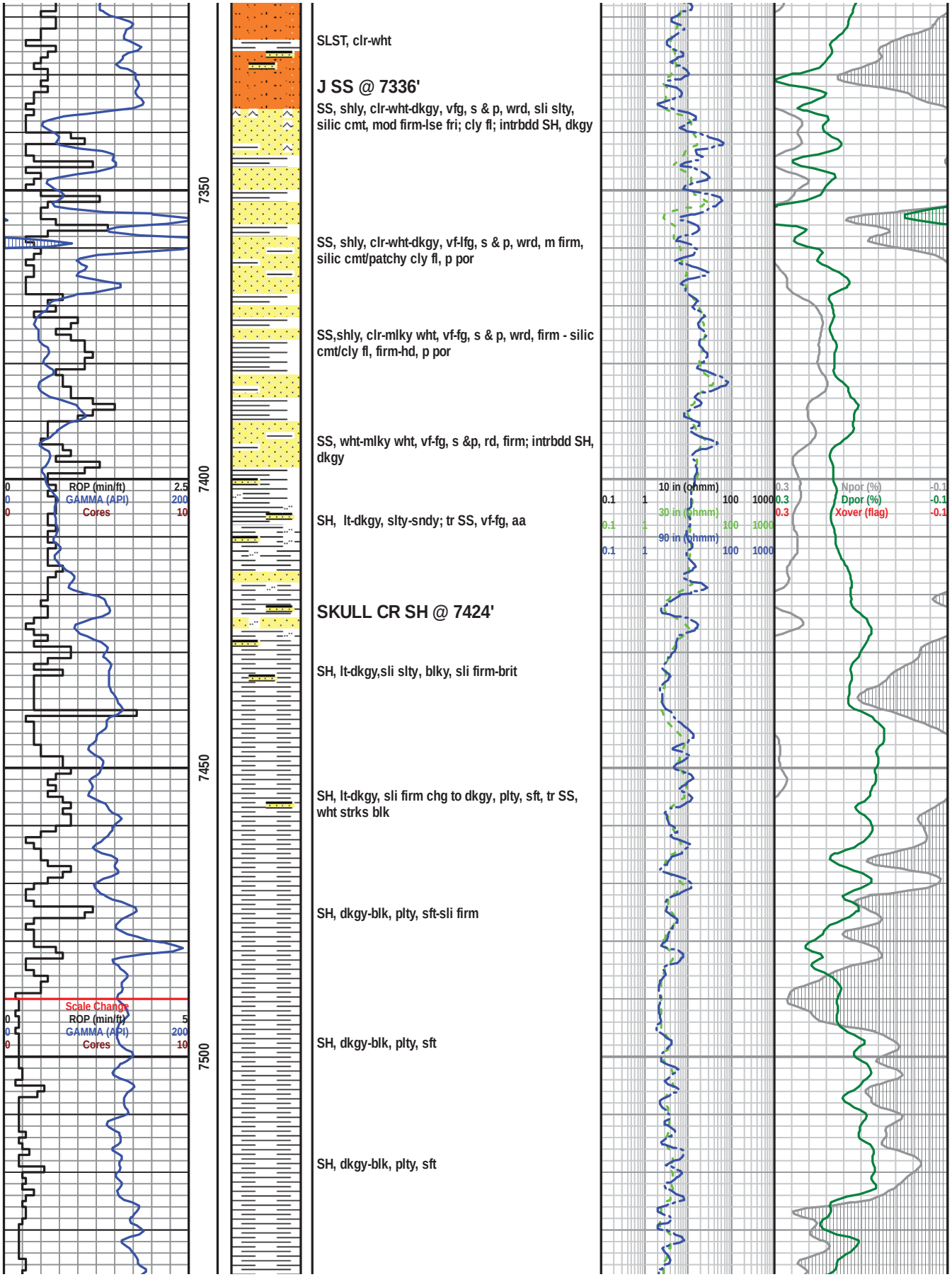


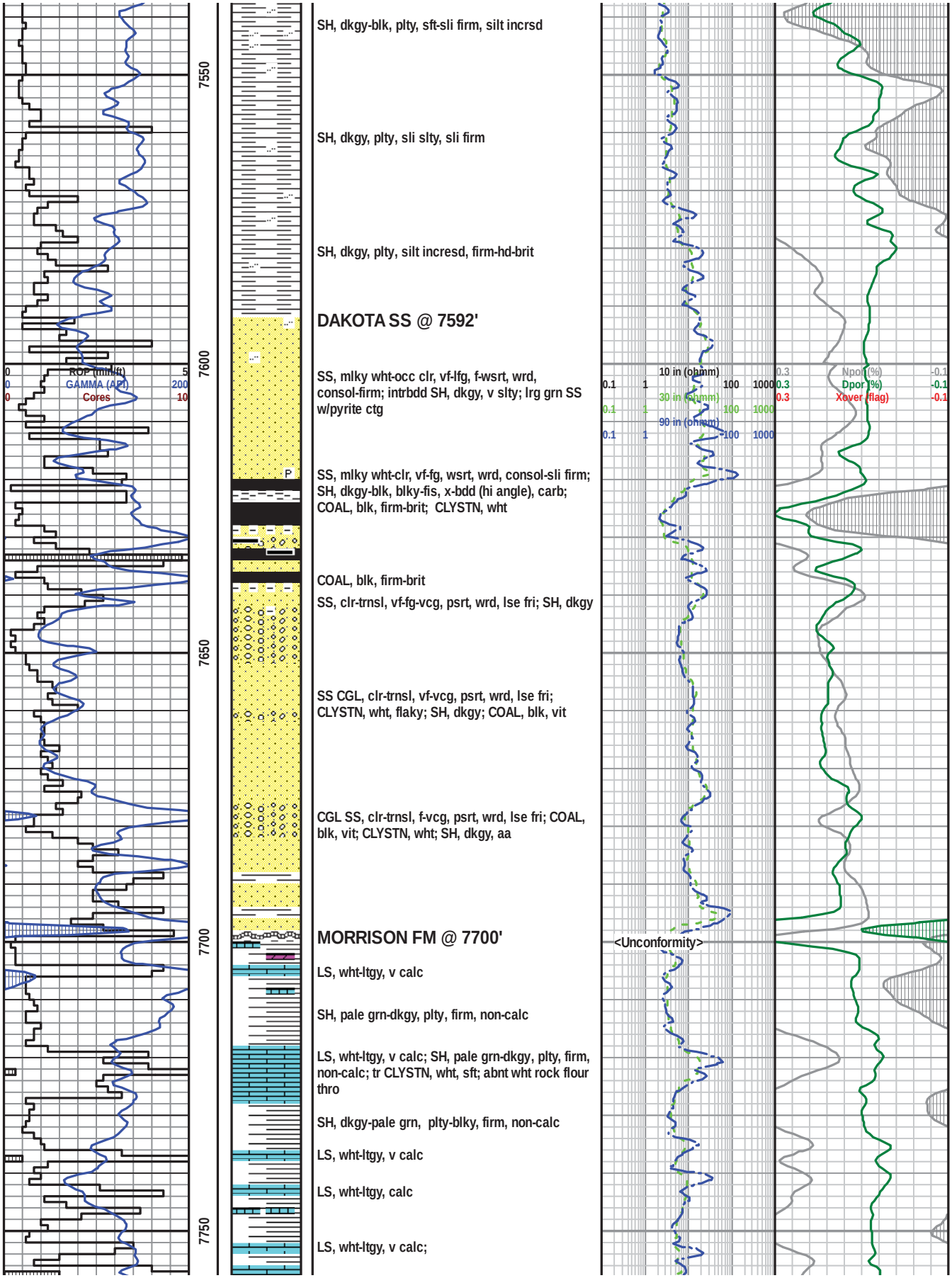

NIOBRARA @ 6448'
SH, m-dkgy-sli lt gy, blky, firm-sft, v calc,
SH, lt-dkgy, blky-firm-sft, v calc
SH, pale gy-dkgy, blky-sli plty, firm-sli sft, v calc
SH, dkgy, sbplty-flky, sli slty, sft, calc, aa
SH, dkgy, plty, sft, tr Coccoliths, tr pyr; tr wht LS, v sft, v calc
SH, marly, dkgy-wht specks & streaks, firm-sft, limy, v calc; tr Coccoliths, v calc
SH, blky, m firm, ltgy-m dkgy, tr wht; rr Coccoliths; calc thro
6450
6500
6550
6600
6650
0
ROP (min/ft)
2.5
0
GAMMA (API)
200
0
Cores
10
10 in (ohmm)
0.1
1
100
1000
30 in (ohmm)
0.1
1
100
1000
90 in (ohmm)
0.1
1
100
1000
0.3
Nnor (%)
-0.1
0.3
Dnor (%)
-0.1
0.3
Xover (flag)
-0.1

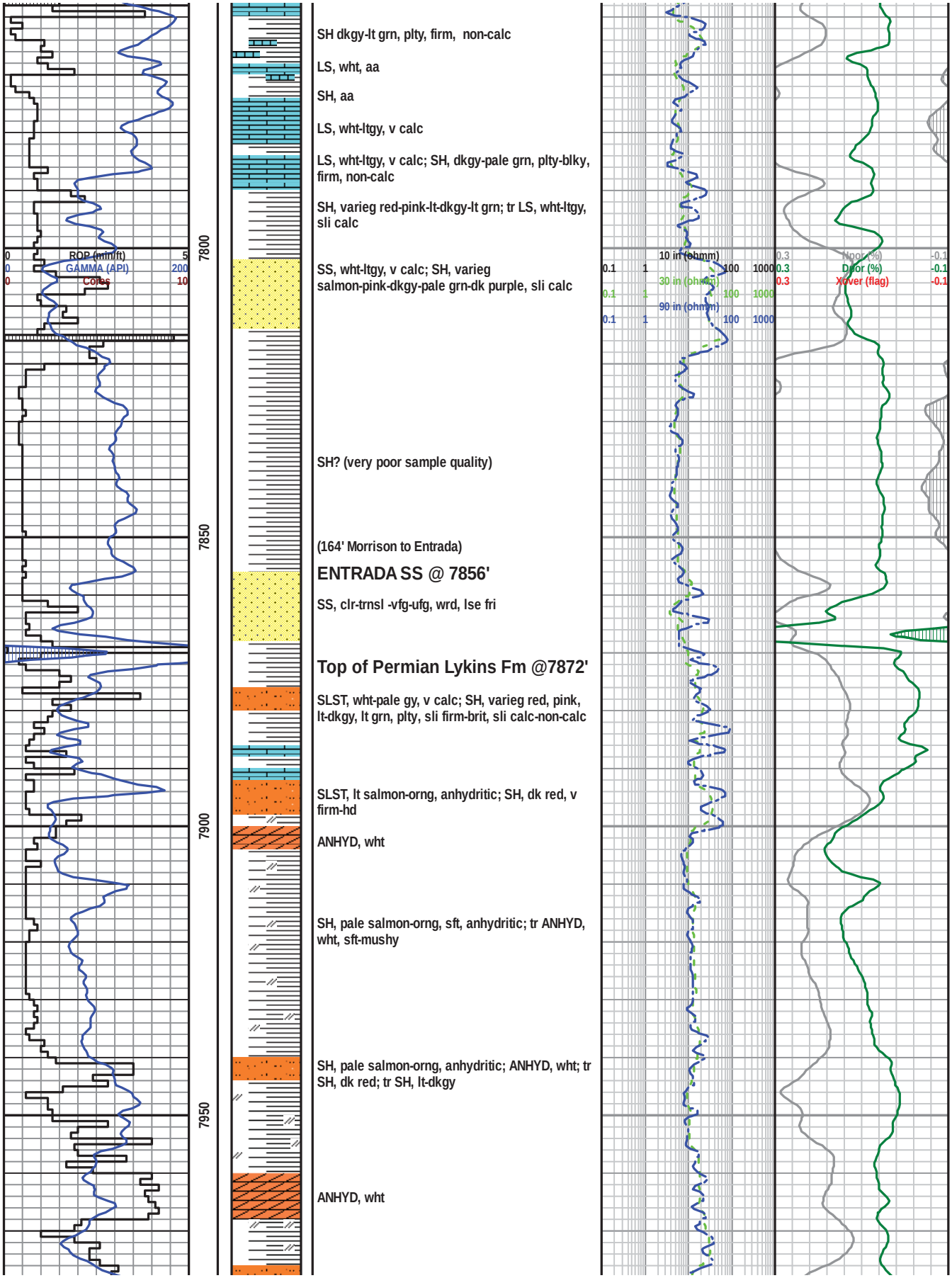

ROP (min/ft)
2.5
0
GAMMA (API)
200
0
Cores
10
6700
6750
6800
6850
SH, mgy mottld wht, marly, sli firm-sft, flky, v calc
SH, v dkgy, plty, sli firm-brit, tr Coccoliths; tr LS, PYR ctg grn(one solid pyr grn), v calc
SH, dkgy, plty, sli firm-brit, pyr, bri gold; mxd equally w/LS, wht, sft, mod-v calc
FT. HAYS LS @ 6752'
LS, wht, cryptoxln, v firm-sli sft, v calc; tr SH, dkgy-blk, hd-brit
SH (80%), blk, blky, firm; tr LS (15-20%), wht, cryptoxln, v frim, v calc
CODELL SS @ 6778'
SS, clr-wht-lt-dkgy, rd, vfg, w srt
CARLILE SH @ 6796'
SH (90%), blk, hd-brit, sli calc; LS (10-15%), wht-chalky, m sft, v calc
SH, blk, mod sft, blky-sbplty-fis; tr LS, wht, chalky, sft, v calc
10in (ohmm)
0.1
1
100
1000
30in (ohmm)
0.1
1
100
1000
90in (ohmm)
0.1
1
100
1000
0.3
Npor (%)
-0.1
0.3
Dpor (%)
-0.1
0.3
Xover (mag)
-0.1

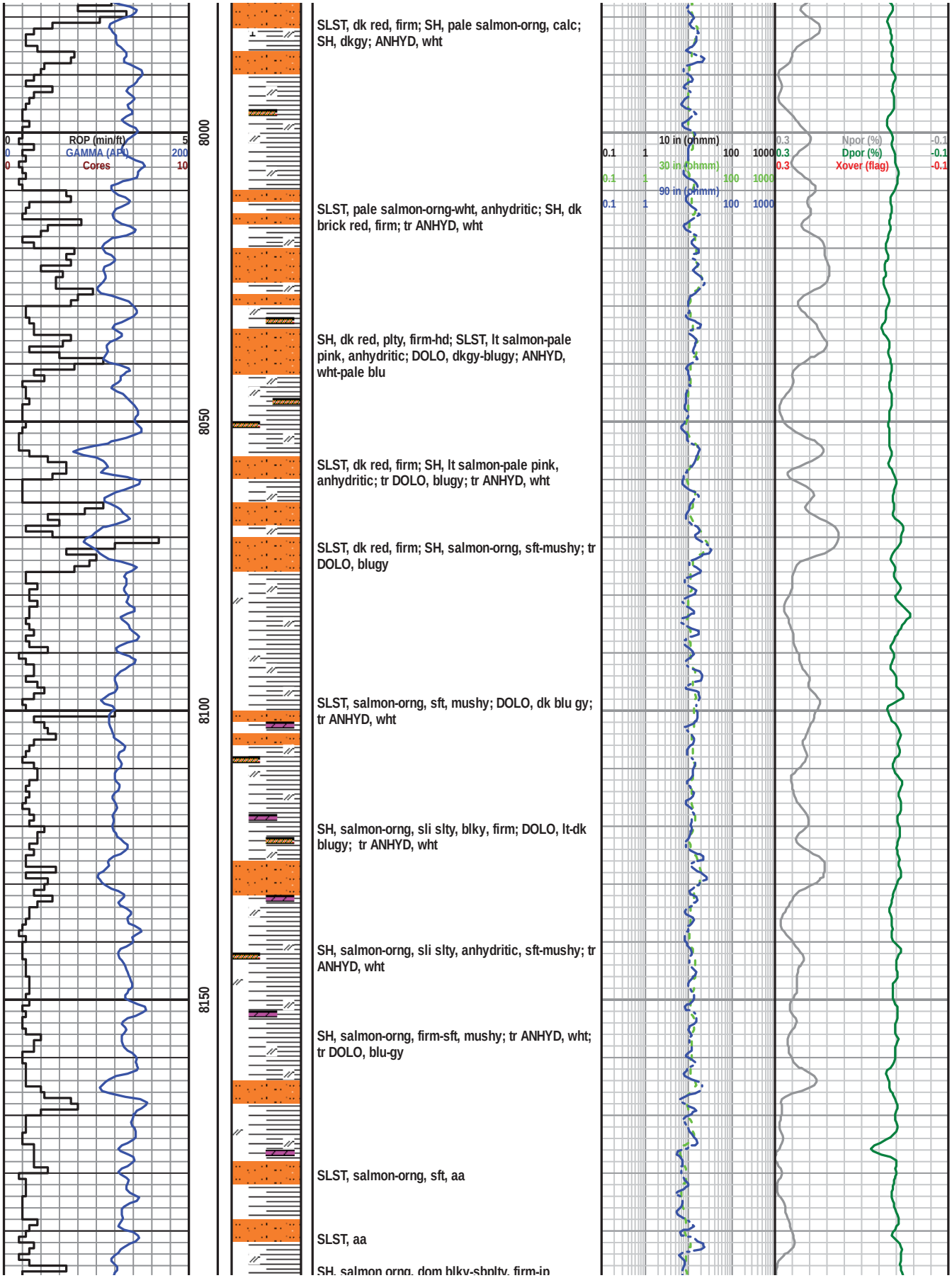

0
ROP (min/ft)
2.5
0
GAMMA (API)
200
0
Cores
10
6900
6950
7000
7050
SH, blk, hd-v firm w/broken pieces LS, wht, v calc
SH, blk-dkgy, firm-mod sft; intrbdd LS, wht, m sft, thro; tr SS, vfg, slty; tr pelecypod shell, mod calc
GREENHORN LS @ 6940'
SH, blk-dkgy, blky, hd-brit; pelcypod shell fragment, wht, calc
SH, dkgy, blky-plty, sli firm-sft, calc
SH, dkgy, blky-plty, sft, sli calc
"X" Bentonite @ 7035'
SH, dkgy, plty, sft; tr BENT, yell-wht, flky, sli calc
SH, dkgy-blk plty-sbfis, sft; tr BENT, yell-wht, flky, sli calc
SH, dkgy-blk, plty-sbfis, sft; tr BENT, yell, flky, aa, sli calc
10in (ohmm)
0.1
1
100
1000
30in (ohmm)
0.1
1
100
1000
90in (ohmm)
0.1
1
100
1000
0.3
0.3
0.3
Dpor (%)
-0.1
Xover (flag)
-0.1

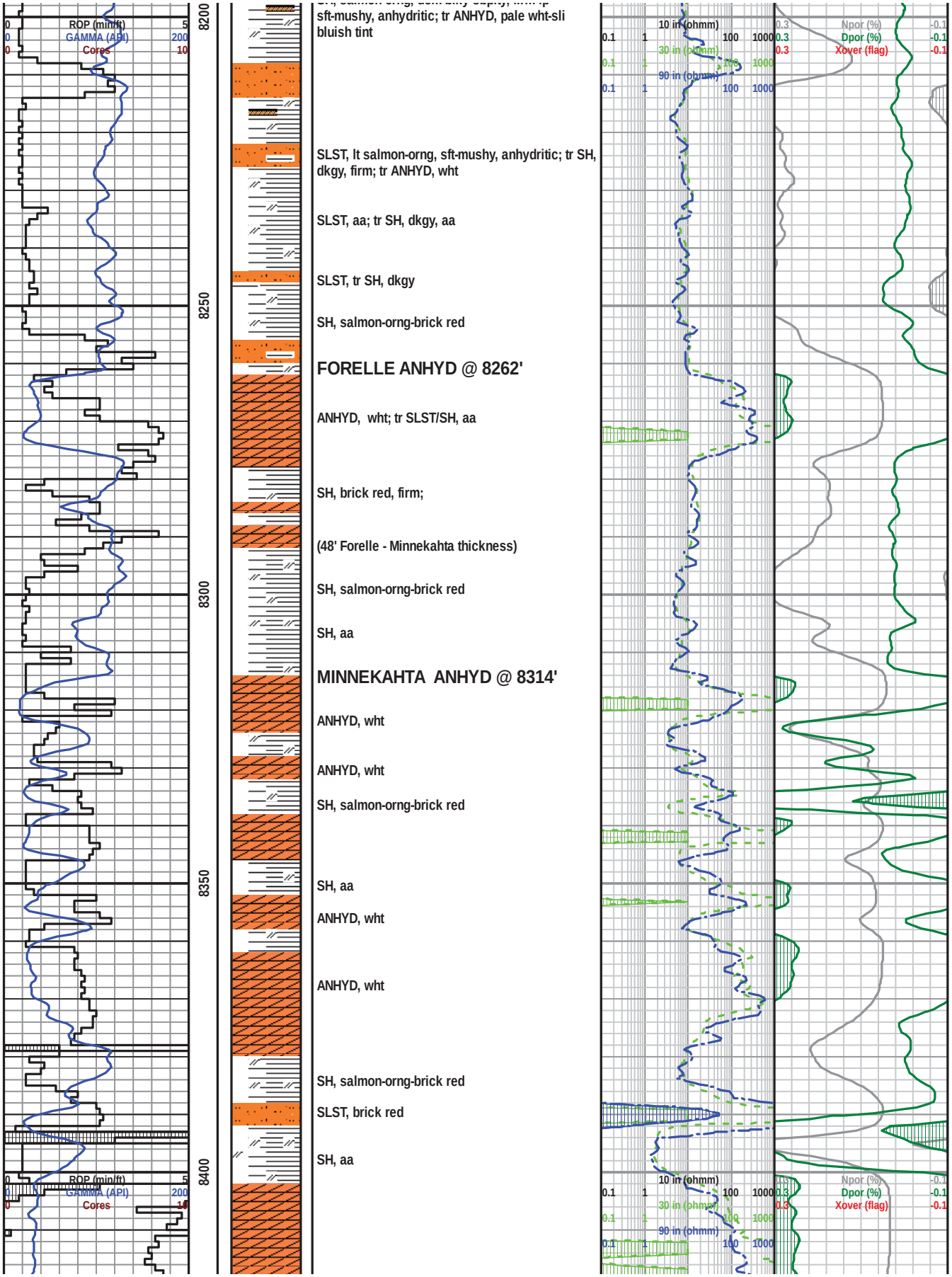

7100
7150
7200
7250
7300
ROP (min/ft)
2.5
GAMMA (API)
200
Cores
10
10 in (ohmm)
30 in (ohmm)
90 in (ohmm)
0.1
1
100
1000
Npor (%)
Dpor (%)
Xover (flag)
0.3
-0.1
SH, dkgy, plty-fis, sft; tr BENT, yell, aa, sli calc
SH, dkgy, plty, sft, v sli calc to non-calc
SH, dkgy-blk, sli firm-brit, non calc
SH, dkgy-blk, sli firm-sft, non-calc; tr BENT, lt yell, flky, sft
SH, dkgy-blk, sli firm-v sft, non-calc; tr BENT, wht, flky
SH, blky-plty, sli firm-sft, non-calc; BENT, wht
SH, aa, non-calc; tr BENT, wht-yell, sft, flky
SH, dkgy-blk, blky-plty, sli firm-sft, non-calc, aa
J SLST @ 7322'

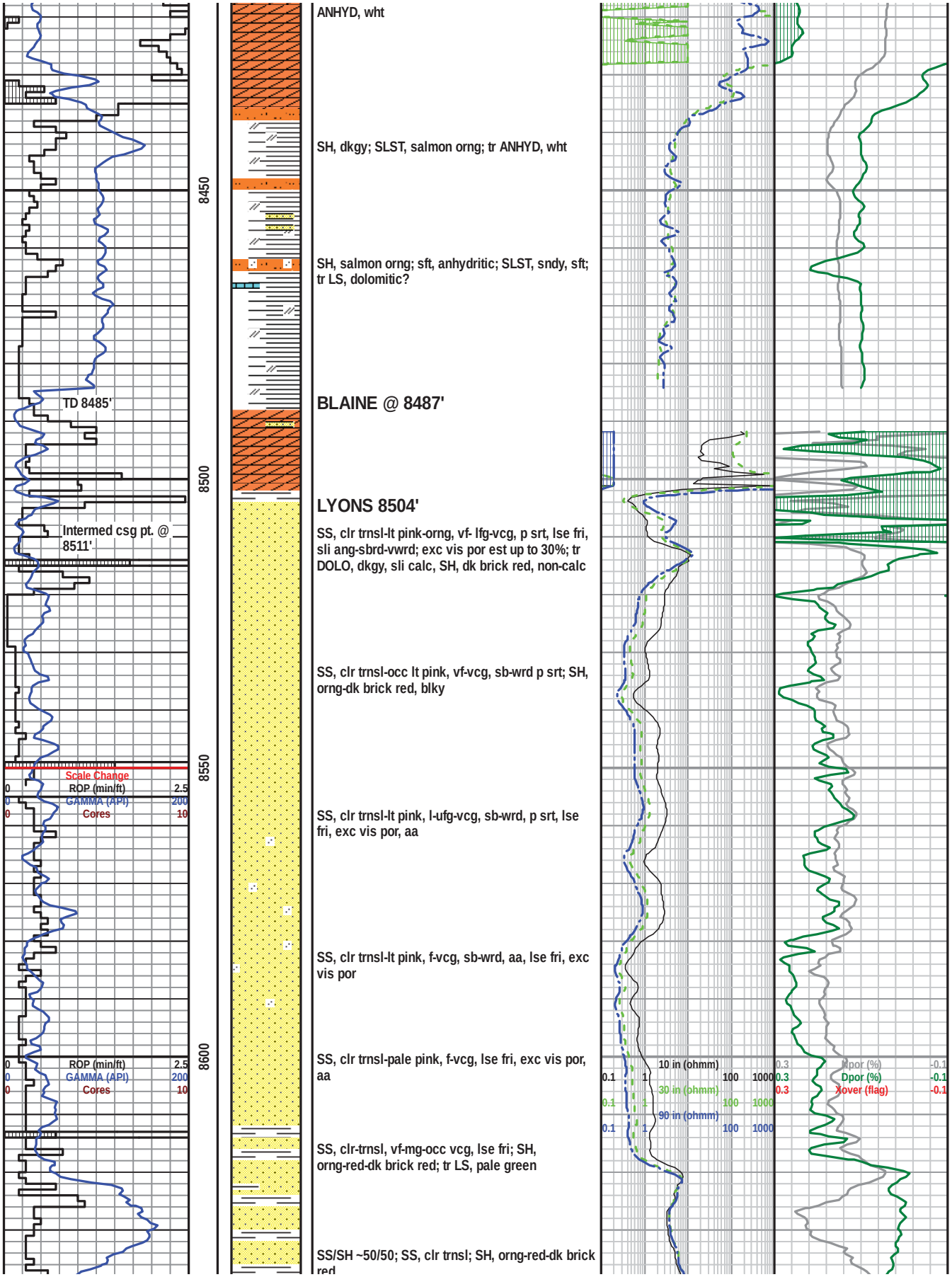

0 ROP (min/ft) 2.5
0 GAMMA (API) 200
0 Cores 10
7350
7400
7450
Scale Change
0 ROP (min/ft) 5
0 GAMMA (API) 200
0 Cores 10
7500
SLST, clr-wht
J SS @ 7336'
SS, shly, clr-wht-dkgy, vfg, s & p, wrd, sli slty, silic cmt, mod firm-lse fri; cly fl; intrbdd SH, dkgy
SS, shly, clr-wht-dkgy, vf-lfg, s & p, wrd, m firm, silic cmt/patchy cly fl, p por
SS,shly, clr-mlky wht, vf-fg, s & p, wrd, firm - silic cmt/cly fl, firm-hd, p por
SS, wht-mlky wht, vf-fg, s &p, rd, firm; intrbdd SH, dkgy
SH, lt-dkgy, slty-sndy; tr SS, vf-fg, aa
SKULL CR SH @ 7424'
SH, lt-dkgy,sli slty, blky, sli firm-brit
SH, lt-dkgy, sli firm chg to dkgy, plty, sft, tr SS, wht strks blk
SH, dkgy-blk, plty, sft-sli firm
SH, dkgy-blk, plty, sft
SH, dkgy-blk, plty, sft
10 in (ohmm)
0.1 1 100 1000
30 in (ohmm)
0.1 1 100 1000
90 in (ohmm)
0.1 1 100 1000
0.3 Npor (%) -0.1
0.3 Dpor (%) -0.1
0.3 Xover (flag) -0.1

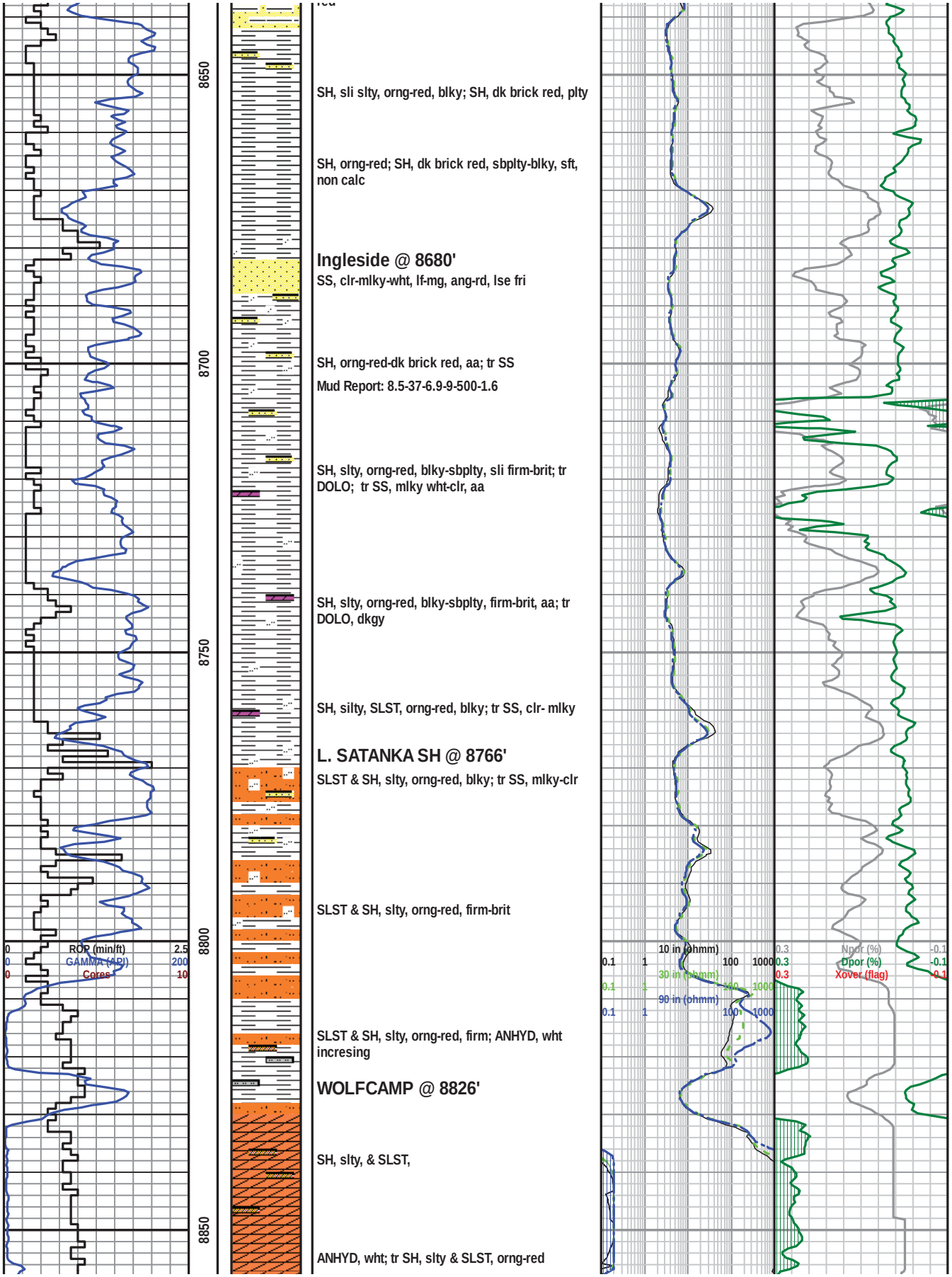

0
ROP (min/ft)
5
0
GAMMA (API)
200
0
Cores
10
7550
7600
7650
7700
7750
P
10 in (ohmm)
0.1
1
100
1000
30 in (ohmm)
0.1
1
100
1000
90 in (ohmm)
0.1
1
100
1000
0.3
Npor (%)
-0.1
0.3
Dpor (%)
-0.1
0.3
Xover (flag)
-0.1
SH, dkgy-blk, plty, sft-sli firm, silt incrsd
SH, dkgy, plty, sli slty, sli firm
SH, dkgy, plty, silt incresd, firm-hd-brit
DAKOTA SS @ 7592'
SS, mlky wht-occ clr, vf-lfg, f-wsrt, wrd, consol-firm; intrbdd SH, dkgy, v slty; lrg grn SS w/pyrite ctg
SS, mlky wht-clr, vf-fg, wsrt, wrd, consol-sli firm; SH, dkgy-blk, blky-fis, x-bdd (hi angle), carb; COAL, blk, firm-brit; CLYSTN, wht
COAL, blk, firm-brit
SS, clr-trnsl, vf-fg-vcg, psrt, wrd, lse fri; SH, dkgy
SS CGL, clr-trnsl, vf-vcg, psrt, wrd, lse fri; CLYSTN, wht, flaky; SH, dkgy; COAL, blk, vit
CGL SS, clr-trnsl, f-vcg, psrt, wrd, lse fri; COAL, blk, vit; CLYSTN, wht; SH, dkgy, aa
MORRISON FM @ 7700'
<Unconformity>
LS, wht-ltgy, v calc
SH, pale grn-dkgy, plty, firm, non-calc
LS, wht-ltgy, v calc; SH, pale grn-dkgy, plty, firm, non-calc; tr CLYSTN, wht, sft; abnt wht rock flour thro
SH, dkgy-pale grn, plty-blky, firm, non-calc
LS, wht-ltgy, v calc
LS, wht-ltgy, calc
LS, wht-ltgy, v calc;

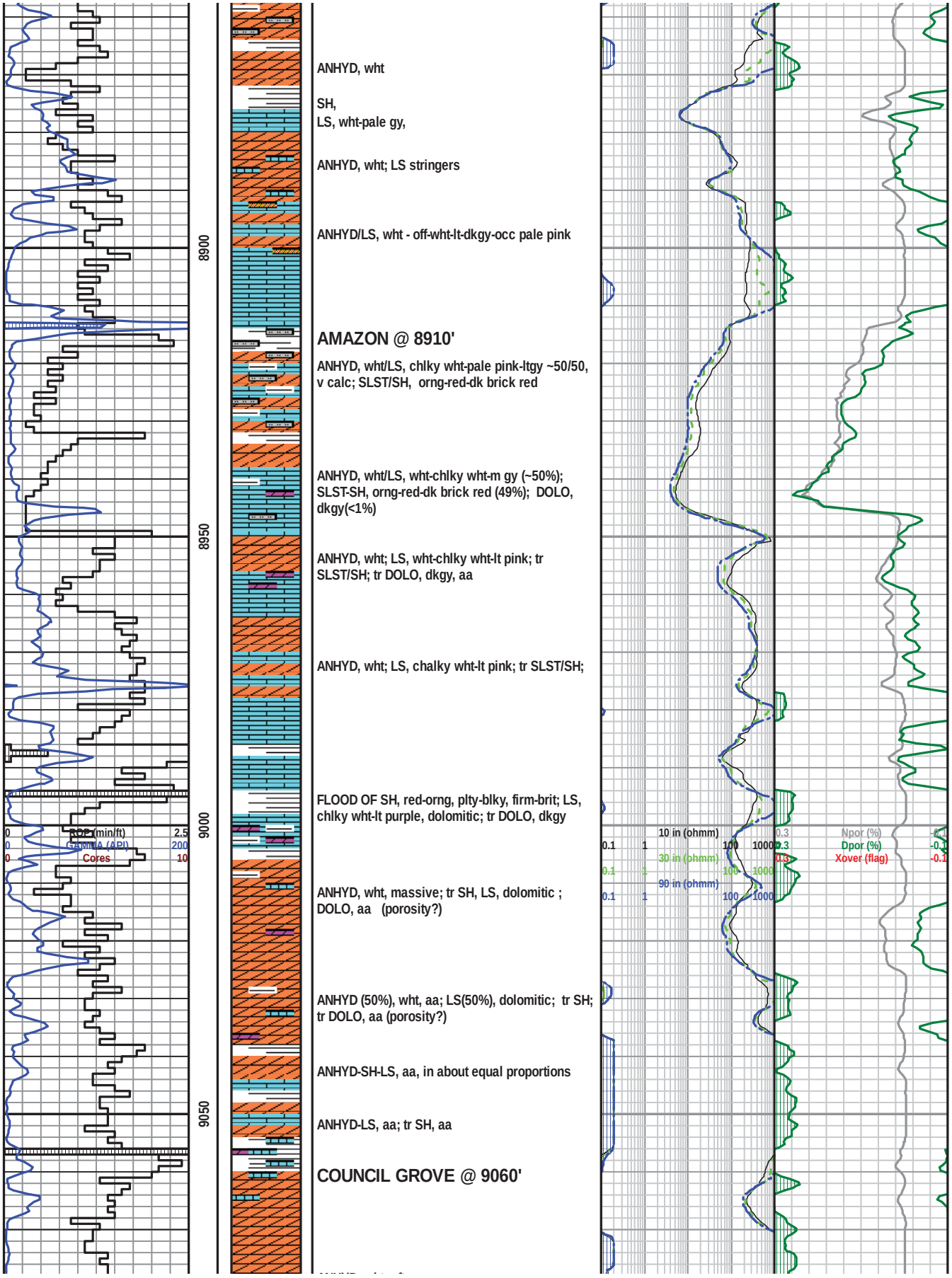

0
ROP (min/ft)
5
0
GAMMA (API)
200
0
Coles
10
7800
7850
7900
7950
10 in (ohmm)
0.1
1
100
1000
30 in (ohmm)
0.1
1
100
1000
90 in (ohmm)
0.1
1
100
1000
0.3
Npor (%)
-0.1
0.3
Dpor (%)
-0.1
0.3
Xover (flag)
-0.1
SH dkgy-lt grn, plty, firm, non-calc
LS, wht, aa
SH, aa
LS, wht-ltgy, v calc
LS, wht-ltgy, v calc; SH, dkgy-pale grn, plty-blky, firm, non-calc
SH, varieg red-pink-lt-dkgy-lt grn; tr LS, wht-ltgy, sli calc
SS, wht-ltgy, v calc; SH, varieg salmon-pink-dkgy-pale grn-dk purple, sli calc
SH? (very poor sample quality)
(164' Morrison to Entrada)
ENTRADA SS @ 7856'
SS, clr-trnsl -vfg-ufg, wrd, lse fri
Top of Permian Lykins Fm @7872'
SLST, wht-pale gy, v calc; SH, varieg red, pink, lt-dkgy, lt grn, plty, sli firm-brit, sli calc-non-calc
SLST, lt salmon-orng, anhydritic; SH, dk red, v firm-hd
ANHYD, wht
SH, pale salmon-orng, sft, anhydritic; tr ANHYD, wht, sft-mushy
SH, pale salmon-orng, anhydritic; ANHYD, wht; tr SH, dk red; tr SH, lt-dkgy
ANHYD, wht

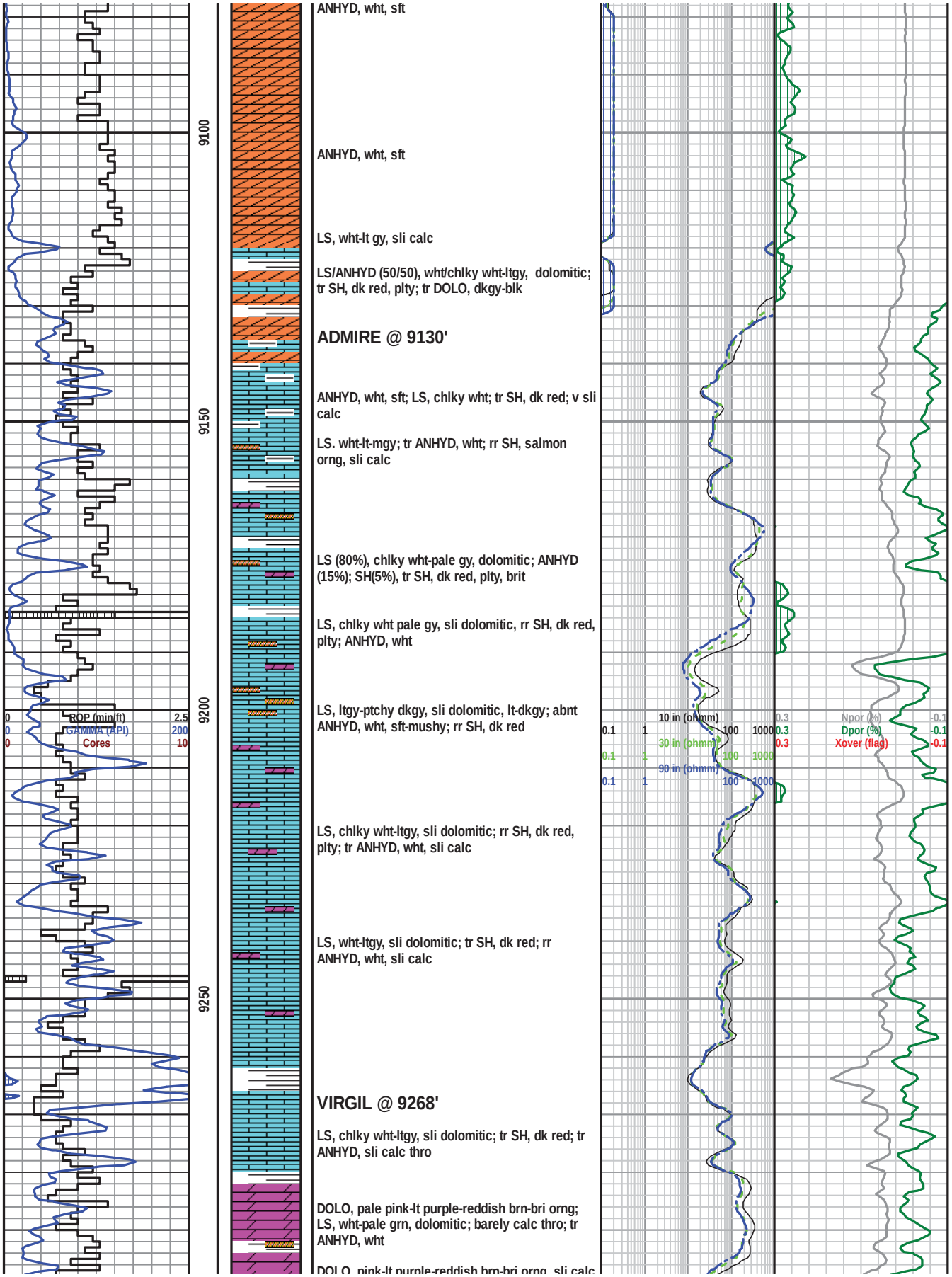

0 ROP (min/ft) 5
0 GAMMA (API) 200
0 Cores 10
8000
8050
8100
8150
10 in (ohmm)
0.1 1 100 1000
30 in (ohmm)
0.1 1 100 1000
90 in (ohmm)
0.1 1 100 1000
0.3 Npor (%) -0.1
0.3 Dpor (%) -0.1
0.3 Xover (flag) -0.1
SLST, dk red, firm; SH, pale salmon-orng, calc; SH, dkgy; ANHYD, wht
SLST, pale salmon-orng-wht, anhydritic; SH, dk brick red, firm; tr ANHYD, wht
SH, dk red, plty, firm-hd; SLST, lt salmon-pale pink, anhydritic; DOLO, dkgy-blugy; ANHYD, wht-pale blu
SLST, dk red, firm; SH, lt salmon-pale pink, anhydritic; tr DOLO, blugy; tr ANHYD, wht
SLST, dk red, firm; SH, salmon-orng, sft-mushy; tr DOLO, blugy
SLST, salmon-orng, sft, mushy; DOLO, dk blu gy; tr ANHYD, wht
SH, salmon-orng, sli slty, blky, firm; DOLO, lt-dk blugy; tr ANHYD, wht
SH, salmon-orng, sli slty, anhydritic, sft-mushy; tr ANHYD, wht
SH, salmon-orng, firm-sft, mushy; tr ANHYD, wht; tr DOLO, blu-gy
SLST, salmon-orng, sft, aa
SLST, aa
SH, salmon orng, dom blky-sbplty, firm-in

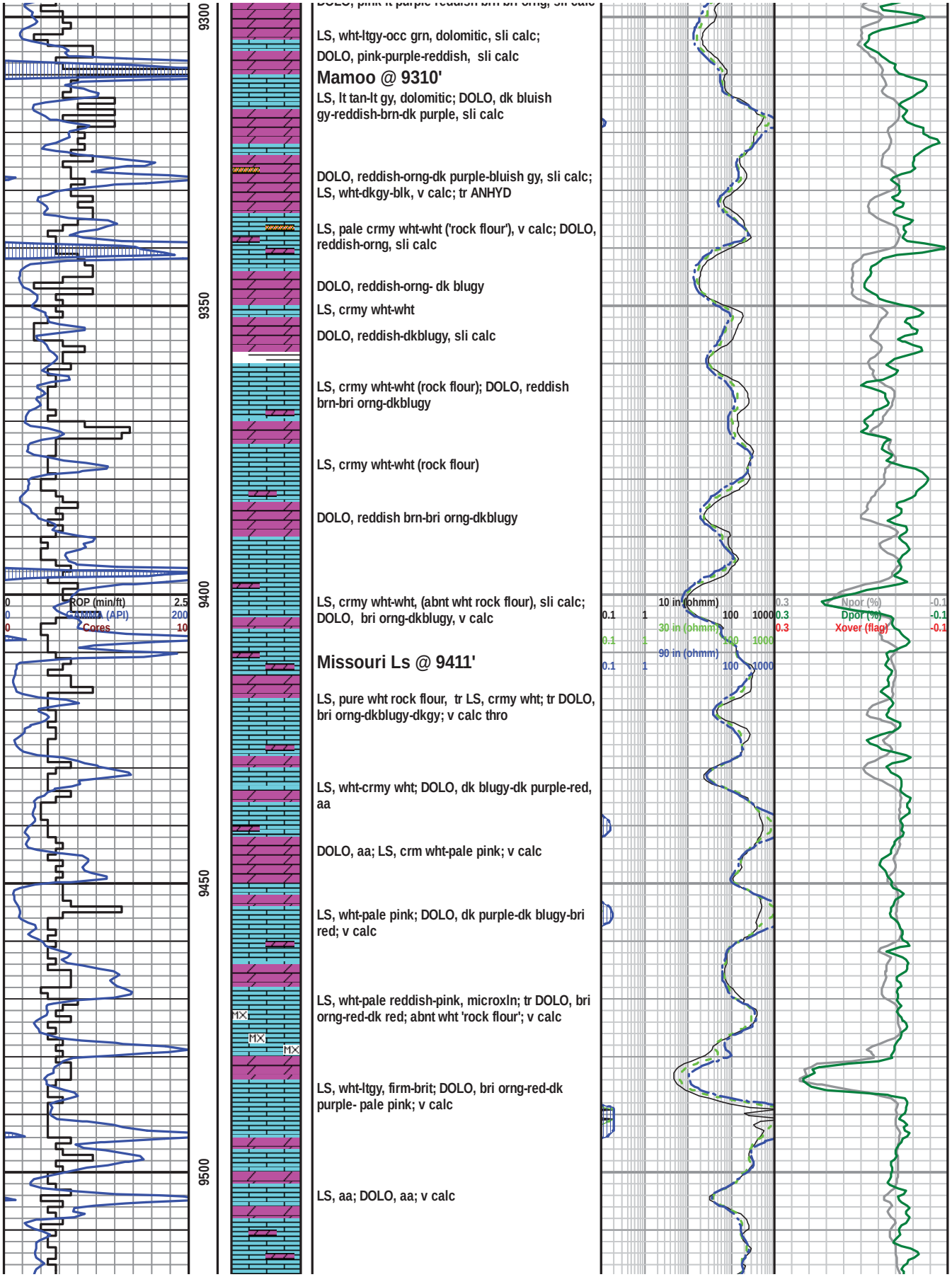

0
ROP (min/ft)
5
0
GAMMA (API)
200
0
Cores
10
8200
8250
8300
8350
8400
sft-mushy, anhydritic; tr ANHYD, pale wht-sli bluish tint
SLST, lt salmon-orng, sft-mushy, anhydritic; tr SH, dkgy, firm; tr ANHYD, wht
SLST, aa; tr SH, dkgy, aa
SLST, tr SH, dkgy
SH, salmon-orng-brick red
FORELLE ANHYD @ 8262'
ANHYD, wht; tr SLST/SH, aa
SH, brick red, firm;
(48' Forelle - Minnekahta thickness)
SH, salmon-orng-brick red
SH, aa
MINNEKAHTA ANHYD @ 8314'
ANHYD, wht
ANHYD, wht
SH, salmon-orng-brick red
SH, aa
ANHYD, wht
ANHYD, wht
SH, salmon-orng-brick red
SLST, brick red
SH, aa
10 in (ohmm)
0.1
1
100
1000
30 in (ohmm)
90 in (ohmm)
0.3
Npor (%)
-0.1
Dpor (%)
Xover (flag)

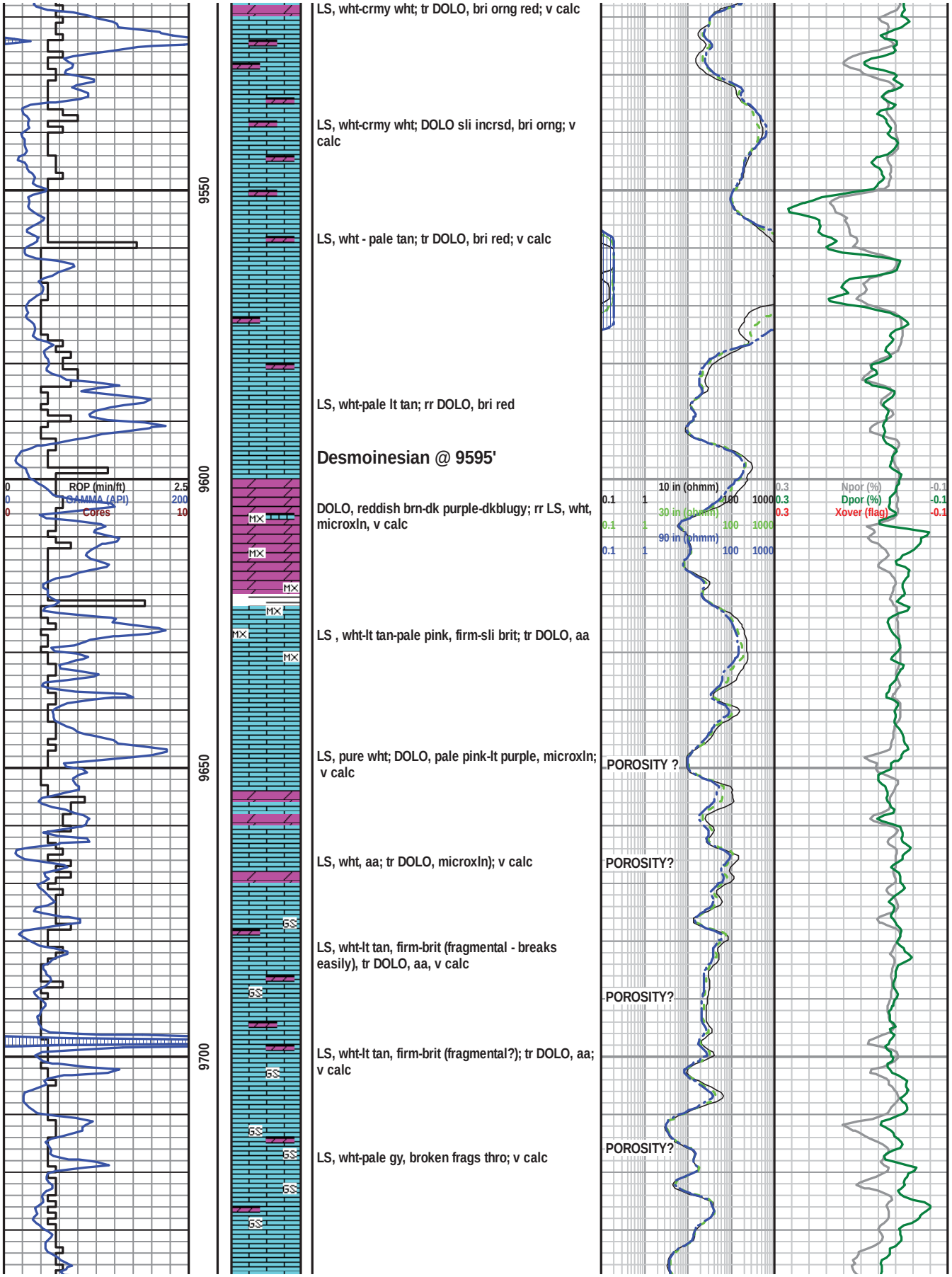

8450
8500
8550
8600
TD 8485'
Intermed csg pt. @ 8511'
Scale Change
0 ROP (min/ft) 2.5
0 GAMMA (API) 200
0 Cores 10
0 ROP (min/ft) 2.5
0 GAMMA (API) 200
0 Cores 10
ANHYD, wht
SH, dkgy; SLST, salmon orng; tr ANHYD, wht
SH, salmon orng; sft, anhydritic; SLST, sndy, sft; tr LS, dolomitic?
BLAINE @ 8487'
LYONS 8504'
SS, clr trnsl-lt pink-orng, vf- lfg-vcg, p srt, lse fri, sli ang-sbrd-vwrd; exc vis por est up to 30%; tr DOLO, dkgy, sli calc, SH, dk brick red, non-calc
SS, clr trnsl-occ lt pink, vf-vcg, sb-wrd p srt; SH, orng-dk brick red, blky
SS, clr trnsl-lt pink, l-ufg-vcg, sb-wrd, p srt, lse fri, exc vis por, aa
SS, clr trnsl-lt pink, f-vcg, sb-wrd, aa, lse fri, exc vis por
SS, clr trnsl-pale pink, f-vcg, lse fri, exc vis por, aa
SS, clr-trnsl, vf-mg-occ vcg, lse fri; SH, orng-red-dk brick red; tr LS, pale green
SS/SH ~50/50; SS, clr trnsl; SH, orng-red-dk brick red
0.1 1 10 in (ohmm) 100 1000
0.1 1 30 in (ohmm) 100 1000
0.1 1 90 in (ohmm) 100 1000
0.3 Npor (%) -0.1
0.3 Dpor (%) -0.1
0.3 Xover (flag) -0.1


8650
8700
8750
8800
8850
0 ROP (min/ft) 2.5
0 GAMMA (API) 200
0 Cores 10
SH, sli slty, orng-red, blky; SH, dk brick red, plty
SH, orng-red; SH, dk brick red, sbplty-blky, sft, non calc
Ingleside @ 8680'
SS, clr-mlky-wht, lf-mg, ang-rd, lse fri
SH, orng-red-dk brick red, aa; tr SS
Mud Report: 8.5-37-6.9-9-500-1.6
SH, slty, orng-red, blky-sbplty, sli firm-brit; tr DOLO; tr SS, mlky wht-clr, aa
SH, slty, orng-red, blky-sbplty, firm-brit, aa; tr DOLO, dkgy
SH, silty, SLST, orng-red, blky; tr SS, clr- mlky
L. SATANKA SH @ 8766'
SLST & SH, slty, orng-red, blky; tr SS, mlky-clr
SLST & SH, slty, orng-red, firm-brit
SLST & SH, slty, orng-red, firm; ANHYD, wht incresing
WOLFCAMP @ 8826'
SH, slty, & SLST,
ANHYD, wht; tr SH, slty & SLST, orng-red
10 in (ohmm)
0.1 1 100 1000
30 in (ohmm)
0.1 1 100 1000
90 in (ohmm)
0.1 1 100 1000
0.3 Npor (%) -0.1
0.3 Dpor (%) -0.1
0.3 Xover (flag) -0.1


8900
8950
9000
9050
0
ROP (min/ft)
2.5
0
GAMMA (API)
200
0
Cores
10
10 in (ohmm)
0.1
1
100
1000
30 in (ohmm)
0.1
1
100
1000
90 in (ohmm)
0.1
1
100
1000
0.3
Npor (%)
0.3
Dpor (%)
-0.1
0.3
Xover (flag)
-0.1
ANHYD, wht
SH,
LS, wht-pale gy,
ANHYD, wht; LS stringers
ANHYD/LS, wht - off-wht-lt-dkgy-occ pale pink
AMAZON @ 8910'
ANHYD, wht/LS, chlky wht-pale pink-ltgy ~50/50, v calc; SLST/SH, orng-red-dk brick red
ANHYD, wht/LS, wht-chlky wht-m gy (~50%); SLST-SH, orng-red-dk brick red (49%); DOLO, dkgy(<1%)
ANHYD, wht; LS, wht-chlky wht-lt pink; tr SLST/SH; tr DOLO, dkgy, aa
ANHYD, wht; LS, chalky wht-lt pink; tr SLST/SH;
FLOOD OF SH, red-orng, plty-blky, firm-brit; LS, chlky wht-lt purple, dolomitic; tr DOLO, dkgy
ANHYD, wht, massive; tr SH, LS, dolomitic ; DOLO, aa (porosity?)
ANHYD (50%), wht, aa; LS(50%), dolomitic; tr SH; tr DOLO, aa (porosity?)
ANHYD-SH-LS, aa, in about equal proportions
ANHYD-LS, aa; tr SH, aa
COUNCIL GROVE @ 9060'


ANHYD, wht, sft
ANHYD, wht, sft
LS, wht-lt gy, sli calc
LS/ANHYD (50/50), wht/chlky wht-ltgy, dolomitic; tr SH, dk red, plty; tr DOLO, dkgy-blk
ADMIRE @ 9130'
ANHYD, wht, sft; LS, chlky wht; tr SH, dk red; v sli calc
LS. wht-lt-mgy; tr ANHYD, wht; rr SH, salmon orng, sli calc
LS (80%), chlky wht-pale gy, dolomitic; ANHYD (15%); SH(5%), tr SH, dk red, plty, brit
LS, chlky wht pale gy, sli dolomitic, rr SH, dk red, plty; ANHYD, wht
LS, ltgy-ptchy dkgy, sli dolomitic, lt-dkgy; abnt ANHYD, wht, sft-mushy; rr SH, dk red
LS, chlky wht-ltgy, sli dolomitic; rr SH, dk red, plty; tr ANHYD, wht, sli calc
LS, wht-ltgy, sli dolomitic; tr SH, dk red; rr ANHYD, wht, sli calc
VIRGIL @ 9268'
LS, chlky wht-ltgy, sli dolomitic; tr SH, dk red; tr ANHYD, sli calc thro
DOLO, pale pink-lt purple-reddish brn-bri orng; LS, wht-pale grn, dolomitic; barely calc thro; tr ANHYD, wht
DOLO, pink-lt purple-reddish brn-bri orng, sli calc
9100
9150
9200
9250
0 ROP (min/ft) 2.5
0 GAMMA (API) 200
0 Cores 10
10 in (ohmm)
30 in (ohmm)
90 in (ohmm)
0.1 1 100 1000
0.3 Npor (%) -0.1
0.3 Dpor (%) -0.1
0.3 Xover (flag) -0.1


9300
9350
9400
9450
9500
0
ROP (min/ft)
2.5
0
GR (API)
200
0
Cores
10
LS, wht-ltgy-occ grn, dolomitic, sli calc;
DOLO, pink-purple-reddish, sli calc
Mamoo @ 9310'
LS, lt tan-lt gy, dolomitic; DOLO, dk bluish gy-reddish-brn-dk purple, sli calc
DOLO, reddish-orng-dk purple-bluish gy, sli calc; LS, wht-dkgy-blk, v calc; tr ANHYD
LS, pale crmy wht-wht ('rock flour'), v calc; DOLO, reddish-orng, sli calc
DOLO, reddish-orng- dk blugy
LS, crmy wht-wht
DOLO, reddish-dkblugy, sli calc
LS, crmy wht-wht (rock flour); DOLO, reddish brn-bri orng-dkblugy
LS, crmy wht-wht (rock flour)
DOLO, reddish brn-bri orng-dkblugy
LS, crmy wht-wht, (abnt wht rock flour), sli calc; DOLO, bri orng-dkblugy, v calc
Missouri Ls @ 9411'
LS, pure wht rock flour, tr LS, crmy wht; tr DOLO, bri orng-dkblugy-dkgy; v calc thro
LS, wht-crmy wht; DOLO, dk blugy-dk purple-red, aa
DOLO, aa; LS, crm wht-pale pink; v calc
LS, wht-pale pink; DOLO, dk purple-dk blugy-bri red; v calc
LS, wht-pale reddish-pink, microxln; tr DOLO, bri orng-red-dk red; abnt wht 'rock flour'; v calc
LS, wht-ltgy, firm-brit; DOLO, bri orng-red-dk purple- pale pink; v calc
LS, aa; DOLO, aa; v calc
MX
MX
MX
10 in (ohmm)
0.1
1
100
1000
30 in (ohmm)
0.1
1
100
1000
90 in (ohmm)
0.1
1
100
1000
0.3
Dpor (%)
-0.1
0.3
Xover (flag)
-0.1
0.3
Npor (%)
-0.1



LS, wht-crmy wht; tr DOLO, bri orng red; v calc

LS, wht-crmy wht; DOLO sli incrsd, bri orng; v calc

LS, wht - pale tan; tr DOLO, bri red; v calc

LS, wht-pale lt tan; rr DOLO, bri red

Desmoinesian @ 9595'

DOLO, reddish brn-dk purple-dkblugy; rr LS, wht, microxln, v calc

LS , wht-lt tan-pale pink, firm-sli brit; tr DOLO, aa

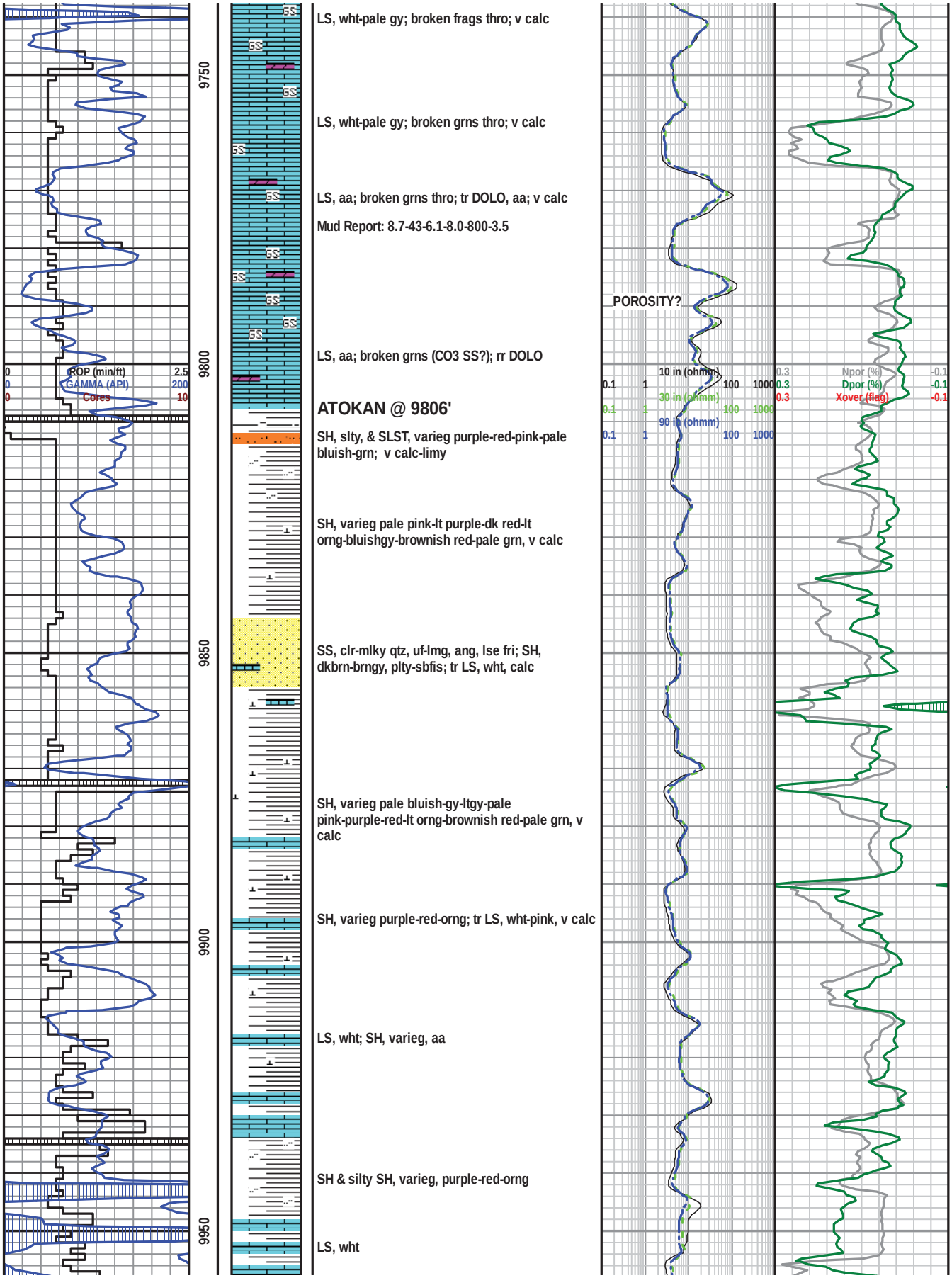
LS, pure wht; DOLO, pale pink-lt purple, microxln; v calc

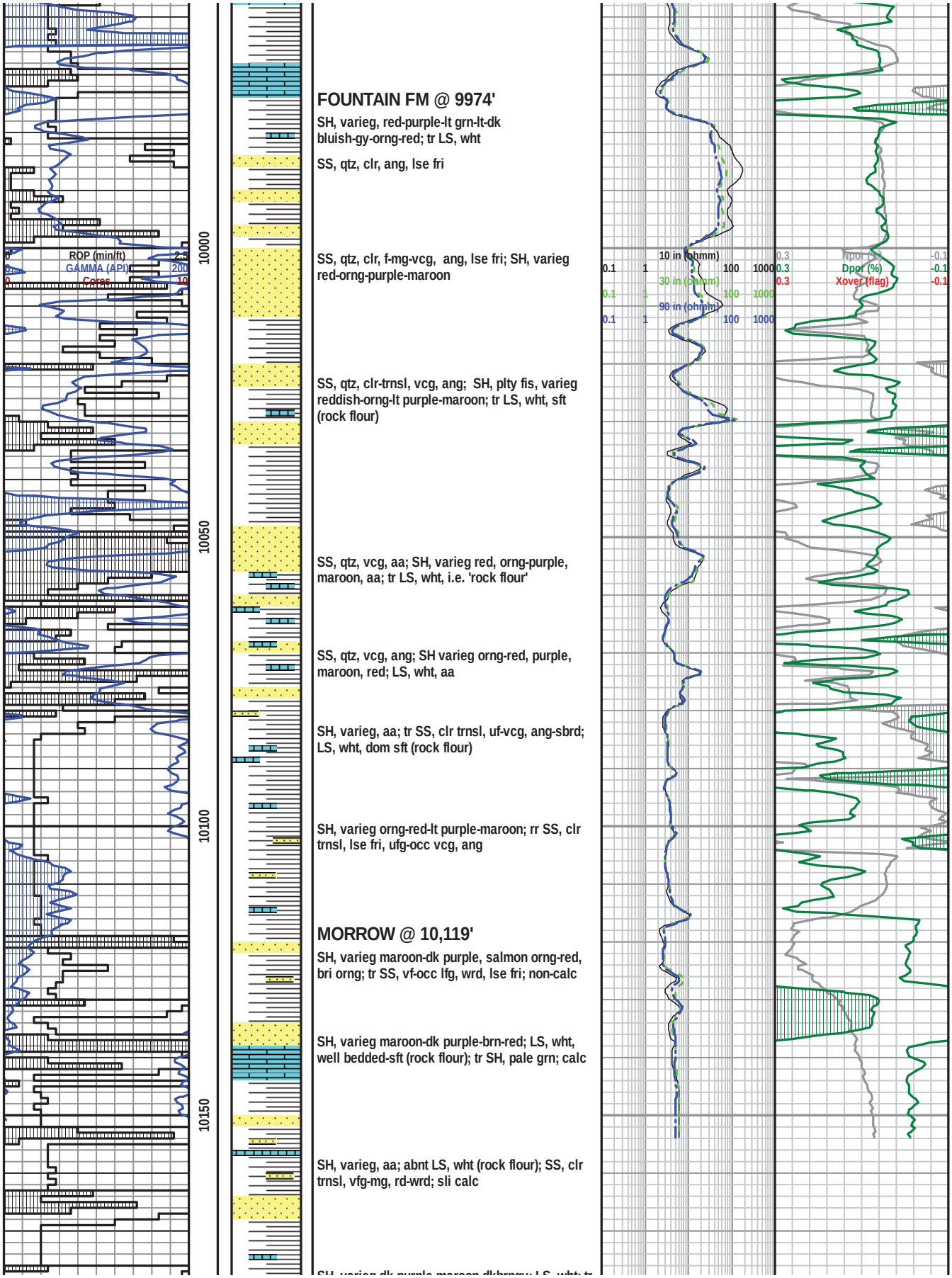
LS, wht, aa; tr DOLO, microxln); v calc

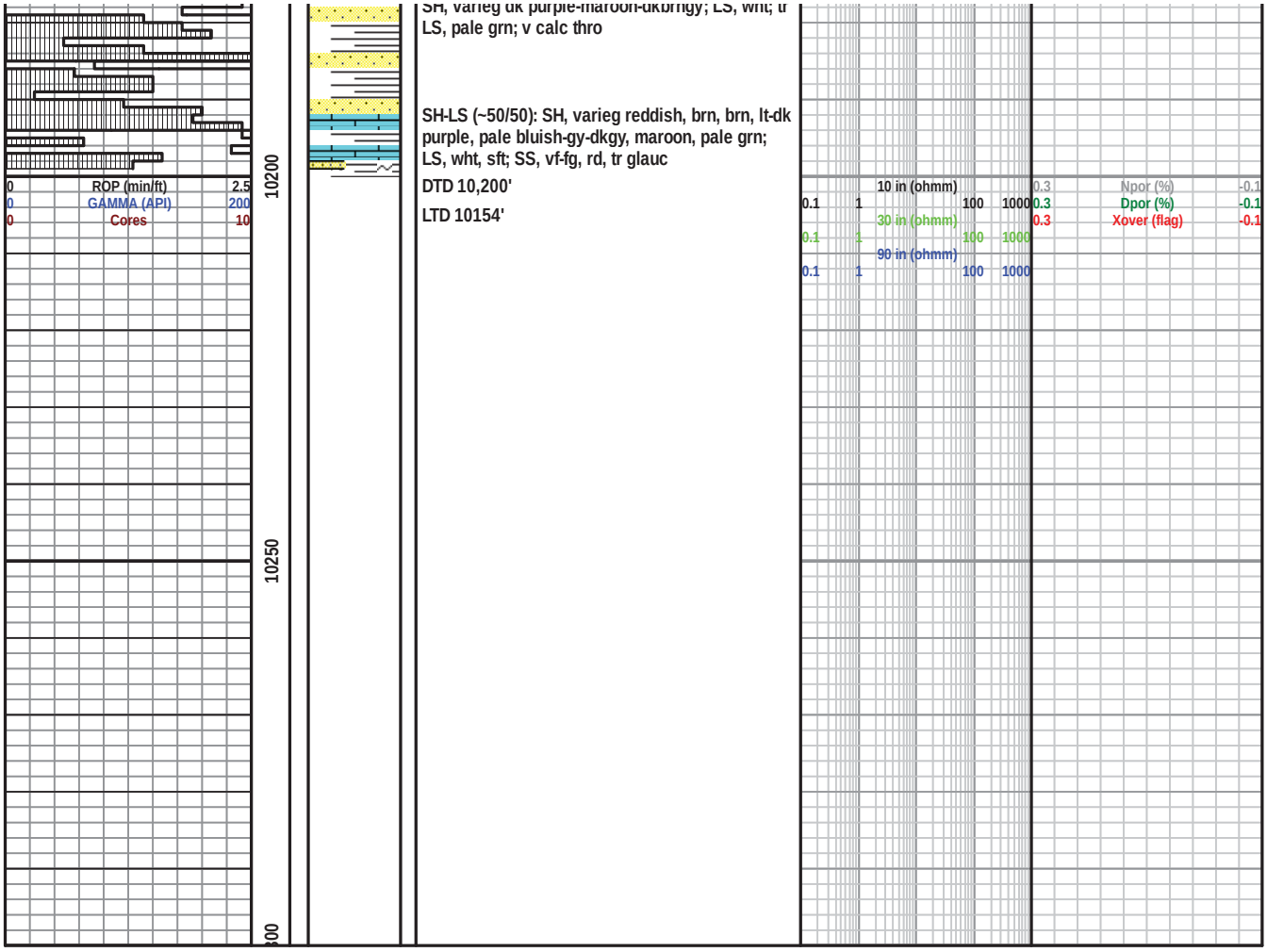
LS, wht-lt tan, firm-brit (fragmental - breaks easily), tr DOLO, aa, v calc

LS, wht-lt tan, firm-brit (fragmental?); tr DOLO, aa; v calc

LS, wht-pale gy, broken frags thro; v calc


0
ROP (min/ft)
2.5
0
GAMMA (API)
200
0
Cores
10
9750
9800
9850
9900
9950
LS, wht-pale gy; broken frags thro; v calc
LS, wht-pale gy; broken grns thro; v calc
LS, aa; broken grns thro; tr DOLO, aa; v calc
Mud Report: 8.7-43-6.1-8.0-800-3.5
POROSITY?
LS, aa; broken grns (CO3 SS?); rr DOLO
10 in (ohmm)
0.1
1
100
1000
0.3
Npor (%)
-0.1
Dpor (%)
Xover (flag)
30 in (ohmm)
90 in (ohmm)
ATOKAN @ 9806'
SH, slty, & SLST, varieg purple-red-pink-pale bluish-grn; v calc-limy
SH, varieg pale pink-lt purple-dk red-lt orng-bluishgy-brownish red-pale grn, v calc
SS, clr-mlky qtz, uf-lmg, ang, lse fri; SH, dkbrn-brngy, plty-sbfis; tr LS, wht, calc
SH, varieg pale bluish-gy-ltgy-pale pink-purple-red-lt orng-brownish red-pale grn, v calc
SH, varieg purple-red-orng; tr LS, wht-pink, v calc
LS, wht; SH, varieg, aa
SH & silty SH, varieg, purple-red-orng
LS, wht


ROP (min/ft)
GAMMA (API)
Cores
10 in (ohmm)
30 in (ohmm)
90 in (ohmm)
Dpor (%)
Xover (flag)
10000
10050
10100
10150
FOUNTAIN FM @ 9974'
SH, varieg, red-purple-lt grn-lt-dk bluish-gy-orng-red; tr LS, wht
SS, qtz, clr, ang, lse fri
SS, qtz, clr, f-mg-vcg, ang, lse fri; SH, varieg red-orng-purple-maroon
SS, qtz, clr-trnsl, vcg, ang; SH, plty fis, varieg reddish-orng-lt purple-maroon; tr LS, wht, sft (rock flour)
SS, qtz, vcg, aa; SH, varieg red, orng-purple, maroon, aa; tr LS, wht, i.e. 'rock flour'
SS, qtz, vcg, ang; SH varieg orng-red, purple, maroon, red; LS, wht, aa
SH, varieg, aa; tr SS, clr trnsl, uf-vcg, ang-sbrd; LS, wht, dom sft (rock flour)
SH, varieg orng-red-lt purple-maroon; rr SS, clr trnsl, lse fri, ufg-occ vcg, ang
MORROW @ 10,119'
SH, varieg maroon-dk purple, salmon orng-red, bri orng; tr SS, vf-occ lfg, wrd, lse fri; non-calc
SH, varieg maroon-dk purple-brn-red; LS, wht, well bedded-sft (rock flour); tr SH, pale grn; calc
SH, varieg, aa; abnt LS, wht (rock flour); SS, clr trnsl, vfg-mg, rd-wrd; sli calc


0
ROP (min/ft)
2.5
0
GAMMA (API)
200
0
Cores
10
10200
10250
SH, varieg dk purple-maroon-dkbrngy; LS, wht; tr
LS, pale grn; v calc thro
SH-LS (~50/50): SH, varieg reddish, brn, brn, lt-dk
purple, pale bluish-gy-dkgy, maroon, pale grn;
LS, wht, sft; SS, vf-fg, rd, tr glauc
DTD 10,200'
LTD 10154'
10 in (ohmm)
0.1
1
100
1000
30 in (ohmm)
0.1
1
100
1000
90 in (ohmm)
0.1
1
100
1000
0.3
Npor (%)
-0.1
0.3
Dpor (%)
-0.1
0.3
Xover (flag)
-0.1