

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name: TRITON #2

Location: Sec. 35, T6N, R65W, County, Nebraska

License Number: API No. 26-05-123-37808

Spud Date: 3/9/14

Surface Coordinates: 1164' FSL, 2044'FEL (SWSE)

Region: DJ Basin

Drilling Completed: 3/_/14

Bottom Hole Coordinates: SAME

Ground Elevation (ft): 4654'

K.B. Elevation (ft): 4671'

Logged Interval (ft): 6550'

To: 10,500 'DTTotal Depth (ft): ____' LTD

Formation: Pierre Sh - Precambrian Granite

Type of Drilling Fluid: Chemical-Gel

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

OPERATOR

Company: Triton Energy Services LLC

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Ft. Collins, CO 80525

GEOLOGIST

Name: Louise Kiteley

Company: Louise M. Kiteley, PG-1715, Professional Geologist (WY)

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l.kiteley@gmail.com

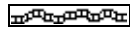
Comments

- 1) Mud data in Geologic Descriptions Track, Format: mw-vis-f-pH-chlor-%solids.
- 2) Open hole logs by SCHLUMBERGER (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 up 9' above intermediate casing pt (not shifted below casing pt), and are on depth with open hole log, which is on depth with this striplog. Formation tops correlate with formations and E-log curves identified in the High Sierra C8a well.
- 4) Contractor: Cade 22 drilling rig.

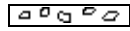
ROCK TYPES



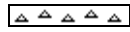
Anhy



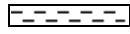
Bent



Brec



Cht



Clyst



Coal



Congl



Dol



Gyp



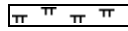
Igne



Lmst



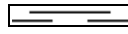
Meta



Mrlst



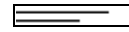
Salt



Shale



Shcol



Shgy



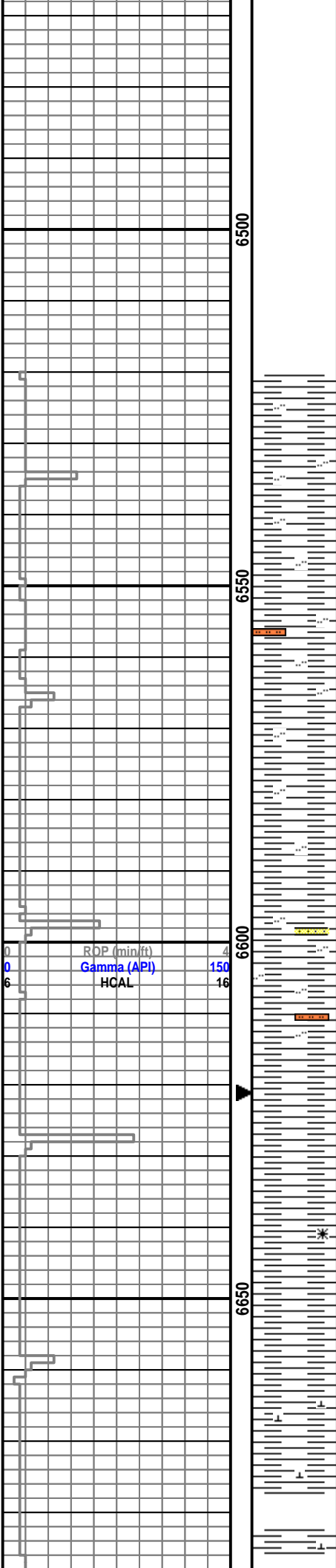
Sltst



Ss



Till



Geologist arrived on site 8:30 pm
3/14/14. First sample caught at 6550'
(1:57am, 3/15/14 - shifted log up 30' to
6520' to correct joint tally)

Mud Report: 9.0,31,11.2,9.0,550,5.0

Began drilling in Pierre Sh
(Catching 30' samples)

SH, dk-med brngy, v slty, blkly-sbplty;
dom firm-sli brittle-occ sft, v sli calc

SH, med brn-gy, slty, aa, blkly; tr SLST,
lt pink-wht, lvfg, wsrt

Base of Pierre Sh approx 6585'

SH, med brn-gy, slty, blkly, sft, sli-non
calc

SH, dkgy-sli brn, slty, blkly, sft, sli
calc-non calc; tr SLST, tr SS, clr, lvfg,
wrđ

SH, dkgy, sbplty, m sft-sli brit, non
calc; euhed qtz, clr, fracture(?)

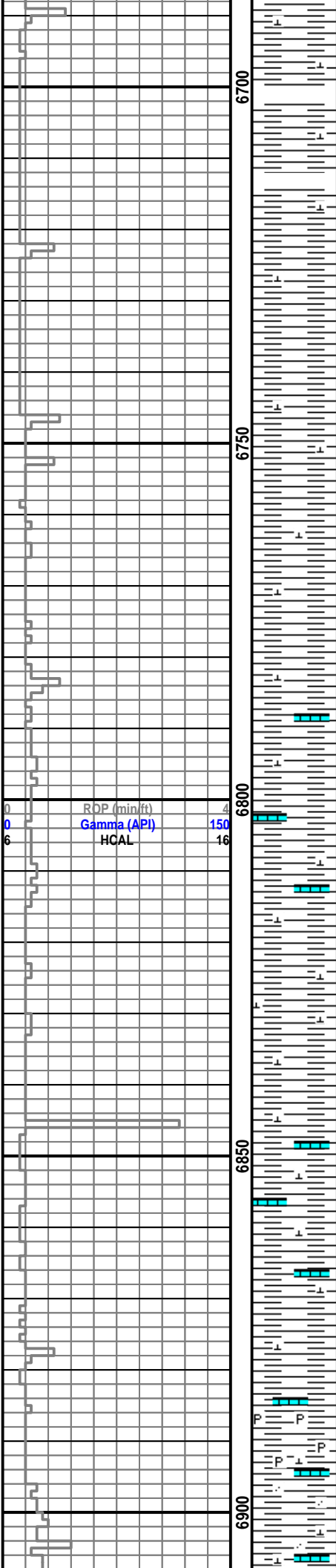
Base of Pierre Sh(?) approx

NIOBRARA FM @ 6663'

2.71 matrix

Samples missing, assume SH

| | | | | | |
|---|----|--------------|------|----------|------|
| | | RMLL | 0.3 | NPor (%) | -0.1 |
| 1 | 10 | 1000 | 10e4 | DPor (%) | -0.1 |
| | | 10 in (ohms) | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | |
| | | 20 in | | | |
| 1 | 10 | 1000 | 10e4 | | |
| | | 30 in (ohms) | | | |
| 1 | 10 | 1000 | 10e4 | | |
| | | 60 in | | | |
| 1 | 10 | 1000 | 10e4 | | |
| | | 90 in (ohms) | | | |
| 1 | 10 | 1000 | 10e4 | | |



Samples missing

Calc SH starts 6738'

SH, dkgy, plty, firm-hd, wxy, v calc

(Note change in ROP at 6789' (or 84'?)

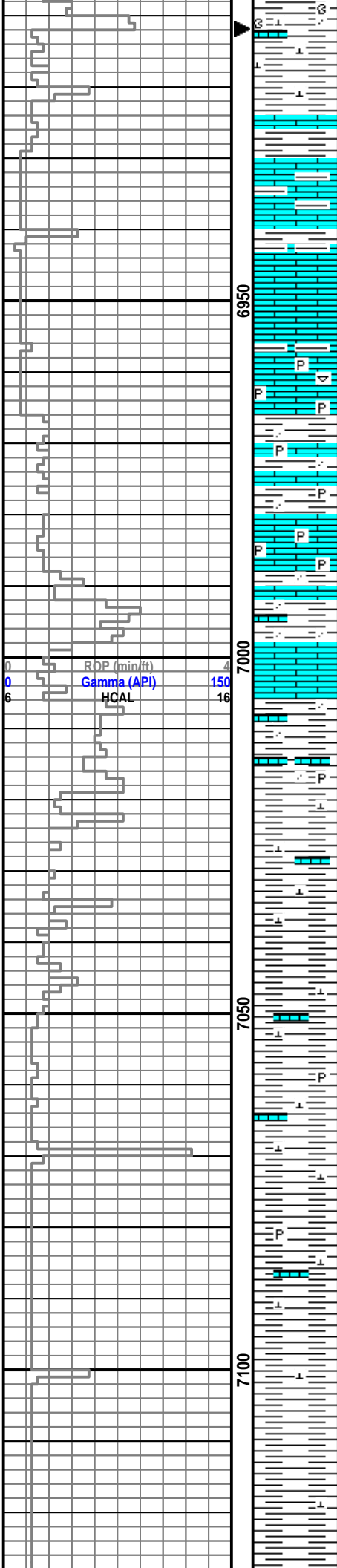
SH, dkgy-sli brngy, wxy, plty, calc; tr LS, wht, fracture filling (?), v calc

SH, dkgy-lt tan, wxy, plty, frm-hd, v calc

SH, dkgy-dkbrn, wxy, plty, frm, tr LS, wht, v calc

SH or Marl, dkgy-v dkbrn, wxy, plty-flky mod sft; tr LS, wht, v calc; clr qtz-some pyr ctg; abund pyr; calc thro'

| RMLL | | | | 0.3 | NPor (%) | -0.1 |
|--------------|----|------|------|-----|----------|------|
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 10 in (ohms) | | | | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |
| 20 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 30 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 60 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 90 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |



SH, med-dkbrn, wxy, thin plty-flky, sft;
tr LS, wht, tr qtz grns, aa, v calc

FT HAYES LS @ 6920'

Change @ 6990-7000'

LS & SH ~50/50%: LS, wht-lt tan ip
mottled, cryptxln; SH, dkgy-brngy,
wxy, plty-flky, sft; v calc thro; tr qtz
arns
Mud Report: 9.1, 38, 12.6, 8.0, 1200, 5.8

LS (80-90%)-SH (10-20%): LS, pure wht,
cryptxln, tan streaks and patches; SH,
dkgy-mbrn, v sndy, vfg-wrd gns of SS;
tr pyr; Inoc shell frag

LS/SH (50/50%), aa, thinly intrbdd; SH,
dkgy-mbrn, v sandy, aa; abund pyr
thro; calc

LS/SH (50/50%), aa, v calc

LS/SH, aa

7006'

SH (80-90%), dkgy-mdbn, wxy, mxd
with LS & vfg SS; tr pyr; calc

SH (90-95%), dkgy-mbrn, wxy; LS
(5-10%), crmy wht-lt tan, v calc

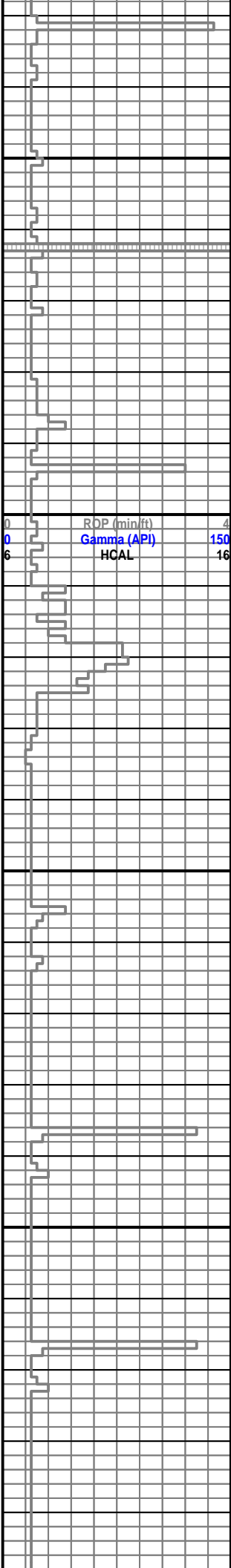
SH, mbrn, wxy, blkly-plty, firm- brittle; tr
LS, tr SS, v calc

SH, mbrn, aa, sft-firm-brittle; tr LS, aa,
calc

SH, mbrn-dkgy, plty changing to blkly;
sft, sli calc

CODELL SS @ 6932'

| RMLL | | | | 0.3 | NPor (%) | -0.1 |
|------|----|--------------|------|------|----------|------|
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 1 | 10 | 10 in (ohms) | 1000 | 0 | PEFZ | 10 |
| 1 | 10 | 20 in | 1000 | 10e4 | | |
| 1 | 10 | 30 in (ohms) | 1000 | 10e4 | | |
| 1 | 10 | 60 in | 1000 | 10e4 | | |
| 1 | 10 | 90 in (ohms) | 1000 | 10e4 | | |



SH, mdkbrn-dkgy, blk, firm-sli brittle, v calc

SH, mdkbrn-dkgy, wxy, plty, sft, v calc

SH, dkgy, wxy, blk-plty, mod sft, v cal

SH, dkgy, wxy, blk, sli firm-sft, v calc;
tr LS, wht, calc

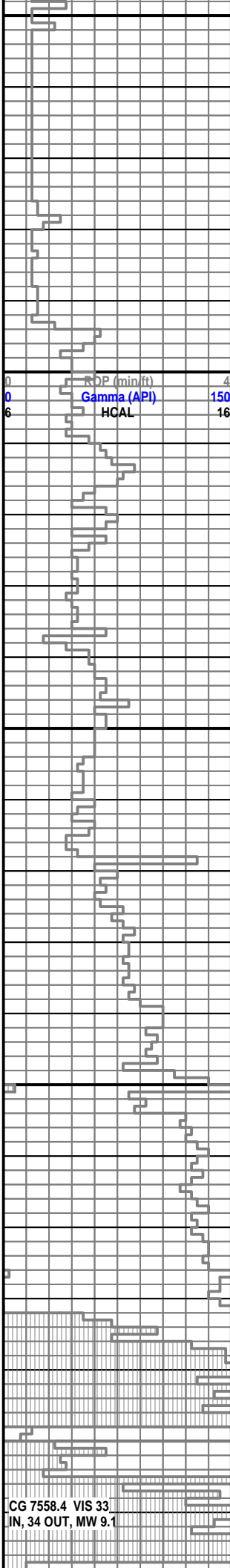
"X" BENTONITE @ 7260' approx
SH, dkgy-black, sb wxy-rthy, plty-sbfis,
non-calc; BENT, white,

SH, sli wxy-rthy, dkgy, sbfis, sft, non
calc; BENT, wht

SH, dkgy, rthy, plty-sbfis, sft, non calc

SH, dkgy, rthy-sli wxy, v sft, non calc; t
BENT, wht

| | | | | | | |
|--------------|----|------|------|-----|----------|------|
| RMLL | | | | 0.3 | NPor (%) | -0.1 |
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 10 in (ohms) | | | | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |
| 20 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 30 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 60 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 90 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |



7350
7400
7450
7500
7550

SH, lt-dkgy, wxy-rthy; BENT, crmy wht -
lt tan; pyr ctg on sndy SLST; scattered
crs clr xln qtz grns

J Silt @ 7379'

J SS @ 7394'

SS (90-100%), clr trnsf, lf-lmg, wsrt,
wrdsbrd, sli firm-lse fri, exc intrgran
por 10-20%+, bri yell F- NS or C; SH
(5-10%), dkgy-blk, plty-blky-occ fis, sft;
tr BENT

SS, clr trnsf, f-mg chg to vf-fg below,
wsrt, wrdsbrd, sli firm-lse fri, exc
por-perm, aa

SS (75%), clr trnsf, vf-fg-occ lmg, fsrt,
wrdsbrd, sbrd-sbang, dom lse fri, f
intrgran por 8-15%, bri yell min FNS or
C; SH (25%), dkgy-blk, plty-sbfis, sft;
BENT, wht, thro

SS(50%)/SH(50%): SS, clr, vf-lmg, psrt
sb-wrd, dom lse fri; SH, dkgy-blk,
plty-sbfis, sft, aa; BENT, wht thro

Mud Report: 9.3,32,10,8.5,1200,7.3

SS/SH, interbdd, aa

SH, dkgy-blk, rthy, plty-fis, sft-sli brit;
tr SS, clr, lf-lmg, p srt, sbrd-ang, sli
firm-lse fri, ip silic; few crs clr qtz grns;
tr BENT, lt yell-rust; pyr

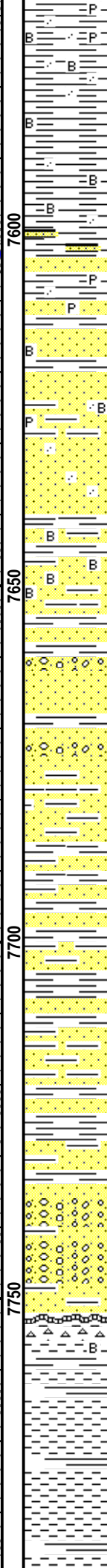
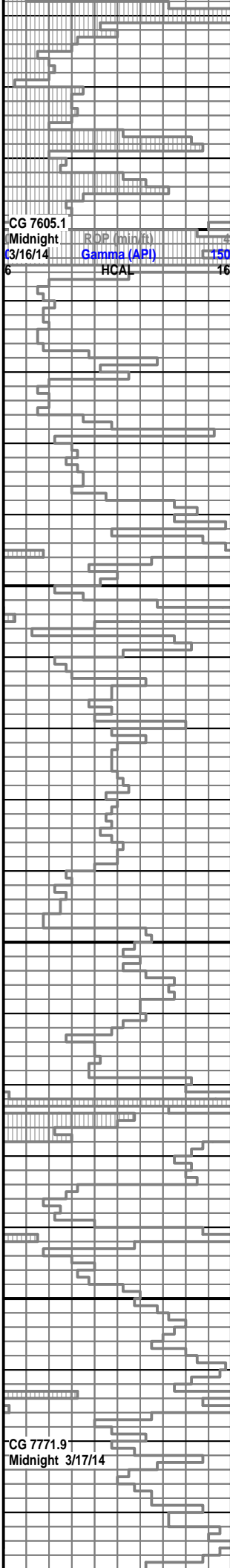
Mud Report: 9.1,35,9.2,9.0,1300, 5.8

SKULL CREEK SH @ 7550'

SH, mgy-dkgy, blk-plty, firm-sli brit,
non-calc; BENT, wht-lt tan; tr pyr

SH, lt-dkgy, plty, non-calc; SS, clr, vfg,
wsrt, wrd, lse fri; BENT, wht-lt tan; tr

| | | | | | | |
|--------------|----|------|------|-----|----------|------|
| RMLL | | | | 0.3 | NPor (%) | -0.1 |
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 10 in (ohms) | | | | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |
| 20 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 30 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 60 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 90 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |



pyr
SH, lt tan-dkgy, plty, sft; SS, clr, vfg, aa
rr SS, clr, vfg, rd, lse fri scattered thro;
BENT, wht-tan; pyr

SH, dkgy, plty-fis; rr BENT, wht

SH, lt-dkgy, fis, v sft, non-calc; rr BENT
wht

DAKOTA SS @ 7600-05'

SS clr-wht, vfg, wrd, lse fri & SH,
dkgy-blk, fis, sft, non-sli calc; tr BENT,
wht, tr pyr

SH, dkgy-blk, sft, non-sli calc; tr SS,
vfg, rd, lse; occ crs frags SS, ; BENT,
wht; pyr, aa

Mud Report: 0.1,38,9.6,8.5,1200, 5.8

SS(60%), clr-wht, vfg-ufg, wrd, lse fri
thro, f por; SH(40%), dkgy, fis, sft, sli
calc; BENT, pyr, aa

SS, clr-wht, vfg, wrd, lse fri, f por; SH,
mdk-gy-blk, plty-fis, sft, sli calc

SS, clr trns, lf-lmg-occ umg, p srt,
wrd-sbrd, lse fri, f-g por; SH; abund
BENT, wht; SH, dkgy, blk, sli slty, firm
dom non-calc

SS-SH ~50:50%; SS, clr-wht, lf-ufg,
m-wsrt, f por, sbrd-sbang; SH, dkgy,
blk, firm-brit

SS, aa, & CGL SS, clr (~80%), umg-lcg,
p srt, wrd-sbrd, lse fri, exc por est
15-25%; SH (~20%), lt-dkgy, poss carb,
plty, firm-brit

CGL SS(50%), clr trns, lf-ucg, p srt,
wrd-sbrd, exc vis por up to 30%; SH
(50%), dkgy, blk, firm-hd, non-calc

SS-SH (50/50%), vf-lcg, p srt, rd-sbang,
lse fri, exc por; SH, blk, dkgy-brn, m
sft; f por

SH-SS (70/30%), SS, m-cg, p srt,
rd-sbrd-sbang, lse fri; SH, aa, f por

SS-SH 60/40%, SS, clr trns, m-cg, p srt,
lse fri; f por, aa

SS, vf-fg, wrd, lse fri, mxd equally
w/SH, dkgy, p-f por

SS, vf-cg, p srt, lse fri; SH, dkgy, fis,
sft; p por

CGL SS, vf-vcg, p srt, lse fri, f por, aa;
SH, lt-dkgy

CGL SS, clr trns, vf-vcg, p srt, lse fri;

MORRISON FM @ 7754'

CLSTN, pale grn, hd-TITE; BENT, wht;
SH, -ltgy-dkredbrn-maroon, plty-fis; no
por; non calc

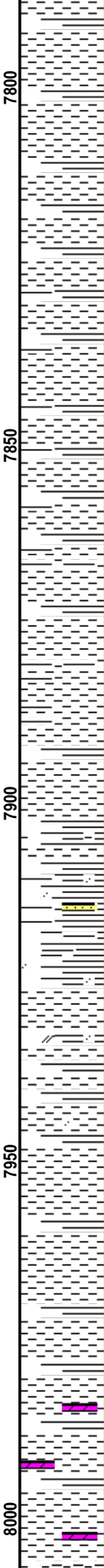
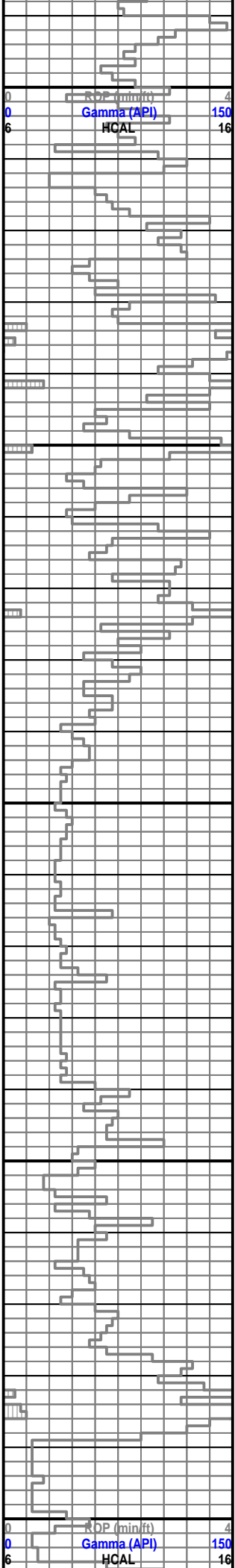
CLSTN, pale grn-crm-ltgy, hd; SH,
ltgy-dkgy, plty-flky, sft; no por

CLSTN, pale grn-wht, hd-tite; SH,
dkreddish-brn, pinkish-purple, plty-flky
no por, sli calc

| RMLL | | | | 0.3 | NPor (%) | -0.1 |
|------|----|------|------|-----|----------|------|
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 1 | 10 | 1000 | 10e4 | 0 | PEFZ | 10 |

| | | | | |
|---|----|--------------|------|------|
| 1 | 10 | 20 in | 1000 | 10e4 |
| 1 | 10 | 30 in (ohms) | 1000 | 10e4 |
| 1 | 10 | 60 in | 1000 | 10e4 |
| 1 | 10 | 90 in (ohms) | 1000 | 10e4 |

<<<< Unconformity >>>>



CLSTN, pale grn-lt brn-crmy wht, hd, aa; SH, pale pink-purple, tr orng-red, sli calc

CLSTN, pale grn-ltgy-crm; SH, dk, brn-purple, tr red, tr bri orng; no por, v calc

CLSTN, pale grn-ltgy-wht, sft; SH, dkreddish purple-dkgy, plty-fis; no por-TITE, sli calc

CLSTN, pale grn-wht; SH, dkreddish-brn, plty, firm-brit; no por, sli calc

CLYSTN, lt tan (mottled)-pale grn-wht; SH, dkgy-dkreddish brn-dk purple, firm v calc, no por

CLSTN, lt tan-wht; SH, dkreddishbrn, firm-brit; v calc

CLSTN, lt tan-wht-pale grn; SH, dk reddish-brnv, aa, v calc

CLSTN, lt tan changing to wht-pale grn; SH, dk red-brn, plty, firm-brit; v calc

CLSTN, lt tan-wht-pale grn; SH, red-brn plty, firm-brit, aa, sli calc

CLSTN, wht-lt tan, aa; SH decreased, dk-reddish-brn, plty, firm; v calc

SH, varieg redbrn-dkgy-lt pink-red incred; CLSTN, pale grn-lt tan-wht gone; calc

SH, pale pink-salmon-col, plty, hd; SS, ltgy, vfg-occ umg, lse fri thro; tr ANHYD, wht, sft

SH, lt Salmon-col, blk, sli firm-hd; tr ANHYD, wht, sft

CLSTN, lt-gry-wht, hd, v calc; SH, pale orng-brick-red, sft; SS, vfg, lse fri thro; tr ANHYD, aa

CLSTN, wht-ltgy, hd, v calc; SH, orng-red-dk purple-brn, sft;

CLSTN, wht-ltgy, hd, v calc; SH, dk red-dk red-purple-brn, sft-firm

CLSTN, aa, hd, calc; SH, dk red-purplish brn

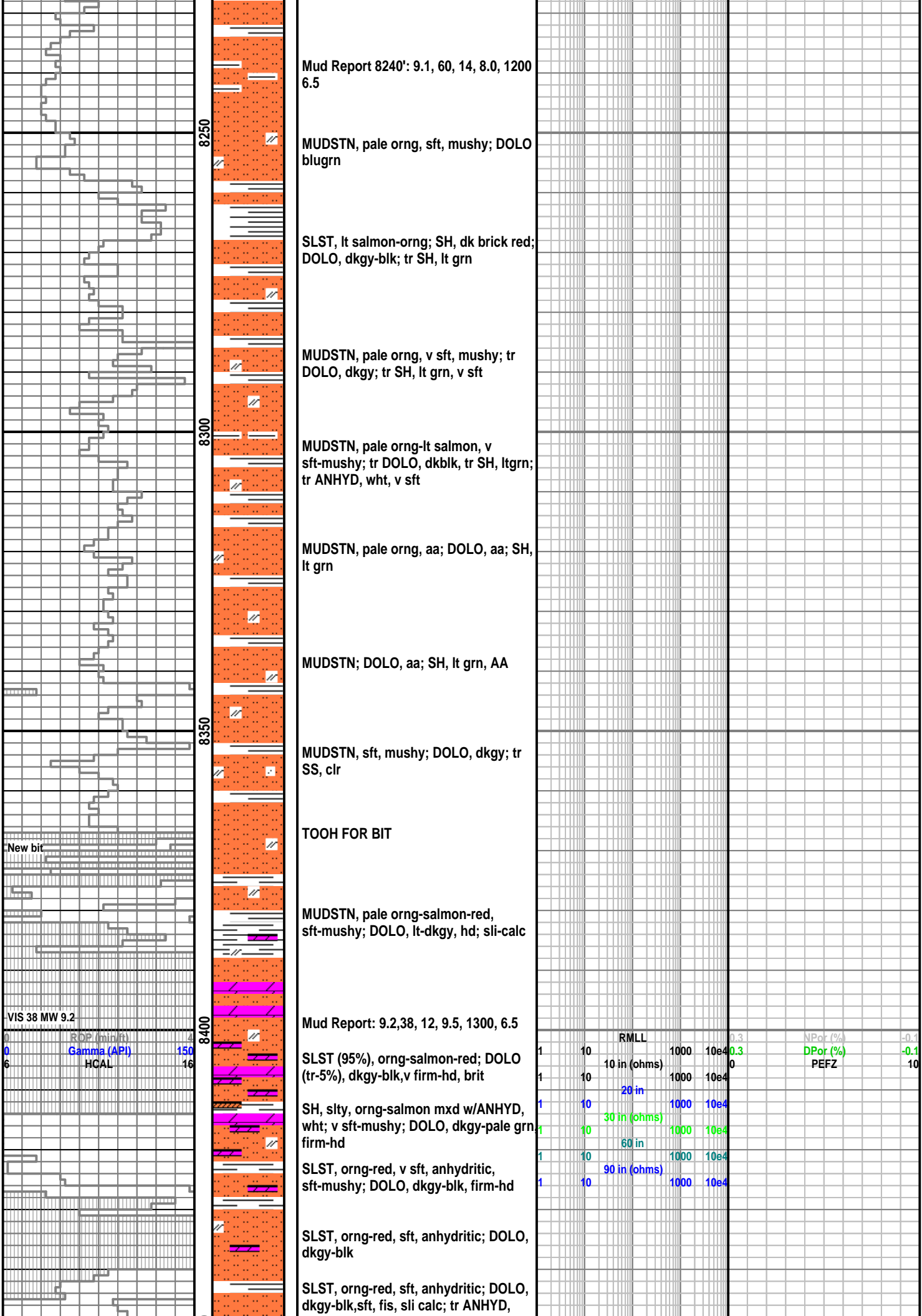
CLSTN, wht-ltgy, hd, calc; tr SH, bri rec sft; SH, dk purple-brn

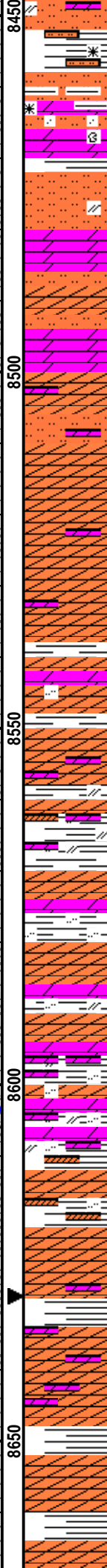
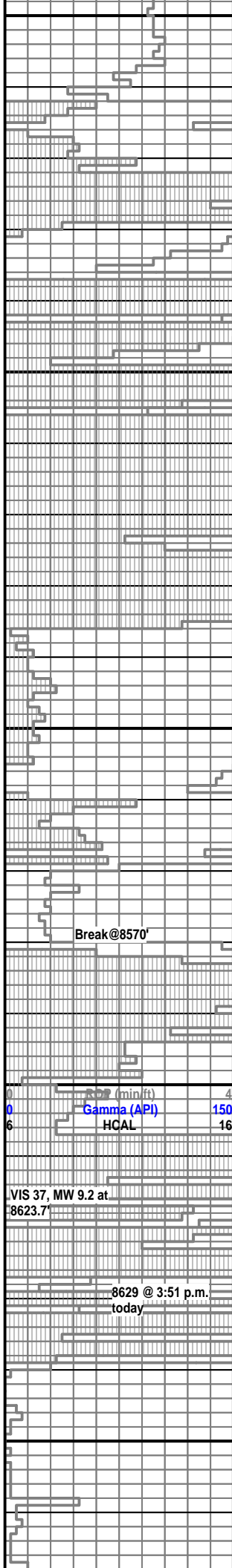
CLSTN, wht-ltgy, hd, wht; tr DOLO, dkgy-blk; tr SH, red, sft, flky

CLSTN, wht, aa; tr DOLO, dkgy, sli calc

CLSTN, DOLO, dk-gy-dkpurple-

| | | | | | | |
|----------------------------|----|------|------|-----|----------|------|
| RMLL | | | | 0.3 | NPor (%) | -0.1 |
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 10 in (ohms) | | | | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |
| 20 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 30 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 60 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 90 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| or Dolo? | | | | | | |
| Entrada Ss 7942' (log top) | | | | | | |
| | | | | | | |
| RMLL | | | | 0.3 | NPor (%) | -0.1 |
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 10 in (ohms) | | | | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |





wht, v sft

SH, slty, dkred-orng, sft, anhydritic;
DOLO, dkgy-blk, sli calc; tr clr cg
euhed qtz (fracture?); sli calc thro

SLST(50%), sndy, vfg, dk red-, DOLO
(50%), calc; abund euhed qtz, clr

DOLO, x-bedded, dkgy-blk, sli calc;
SLST, shly, lt pale-orng, v sft-mushy;
ANHYD, wht, v sft

ANHYD-DOLO-SLST, slty-shly, v sft;
intrbdd

ANHYD, wht, sft; SLST-shly, lt
orng-salmon; tr DOLO, dkgy-blk

ANHYD, wht, sft

ANHYD, wht; tr DOLO, dkgy-blk,
firm-brit

ANHYD, wht, tr DOLO, dkgy-blk

ANHYD, wht-DOLO, dkgrn-gy, sli calc
(50/50%), sft, anhydritic; tr slst-sh,
orng-salmon col, v sft

ANHYD (90%), wht, bedded; DOLO
(5-10%), blk, blk-thin plty, hd-brit

SH, slty, orng-salmon, v sft, anhydritic
tr ANHYD, wht, sft; tr DOLO, dk-gy-grn,
blk, hd

ANHYD, SH, slty, orng-salmon,
anhydritic, sft, mxed equally

Mud Report: 9.2, 40, 11.2, 11.5, 1600, 6.5

ANHYD, wht, DOLO, dkgy, hd (90-95%),
SH, slty, orng-salmon, anhydritic
(5-10%)

SH, orng-salmon, slty, anhydritic/
ANHYD, wht, sft; DOLO, dkgy-dkgrngy,
sli - v calc

SH, salmon-orng/FLOOD OF DOLO, dk
blugy; abund ANHYD, wht, sft

SH, salmon-orng-dk red, sft, anhydritic;
DOLO, blugy; tr ANHYD, wht, sft

SH, orng-red (60%); ANHYD, wht 40%);
tr DOLO, dkgy

BLAINE ANHYD @ 8630'
ANHYD (80%), wht, sft, bedded; SH
(20%), bri orng-dk brick red,
sft-firm-fiky; tr DOLO, lt grn-dkblugy,
sli calc

ANHYD, wht, sft; SH, salmon orng-bri
red, DOLO, dkblugy increased

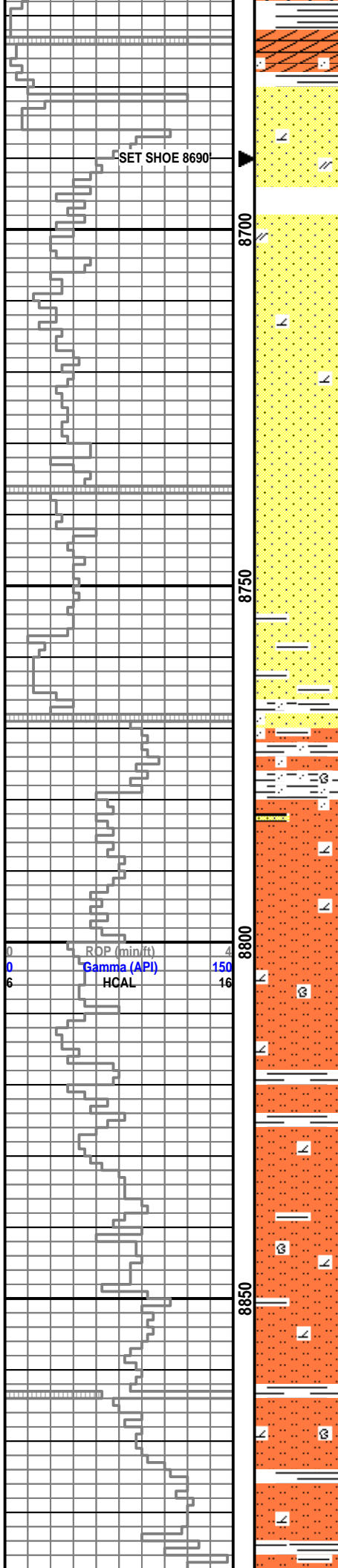
ANHYD (60%), wht, sft; SH (40%), dk
brick red, hd; tr DOLO, dkblugy

ANHYD & DOLO (50/50); SH, salmon
orng-dk red, m sft, plty thro; DOLO,
blugy, sli calc

Mud Report: 9.2, 46, 10.6, 9.5, 2000, 6.5

| RMI I | | | | NPor (%) | | DPor (%) | | PEFZ | |
|-----------------------|------|------|--------------|----------|------|----------|------|------|------|
| BU @ 8615': SH 80%; | 1000 | 10e4 | 0.3 | 0.3 | -0.1 | 0.3 | -0.1 | 10 | 10 |
| ANHYD 10%; abund DOLO | 1000 | 10e4 | 0 | 0 | 0 | 0 | 0 | 10 | 10 |
| 10% 10 | 1000 | 10e4 | 20 in | 1000 | 10e4 | 1000 | 10e4 | 1000 | 10e4 |
| BU smple 8620': | 1000 | 10e4 | 1000 | 10e4 | 1000 | 10e4 | 1000 | 10e4 | 10e4 |
| ~50% ANHYD:50%SH | 1000 | 10e4 | 1000 | 10e4 | 1000 | 10e4 | 1000 | 10e4 | 10e4 |
| SH, orng-red | 1000 | 10e4 | 60 in | 1000 | 10e4 | 1000 | 10e4 | 1000 | 10e4 |
| 1 10 | 1000 | 10e4 | 90 in (ohms) | 1000 | 10e4 | 1000 | 10e4 | 1000 | 10e4 |
| 1 10 | 1000 | 10e4 | 1000 | 10e4 | 1000 | 10e4 | 1000 | 10e4 | 10e4 |

(Depth/time at 8670' corrected



ANHYD, wht (50%); SH(50%), lt salmon-dk brick red , sli slty sandy; tr DOLO; tr SS, clr, vfg-umg, p srt, wrd-ang

LYONS SS @ 8683'

SS, clr-pale pink, vf-lm-occ cg, rd-ang, f srt, lse fri, exc vis por; tr DOLO, dkgy-ltblugy; tr ANHYD, wht, sft

(8695: cement csg)

SS, clr-pale pink, frstd, vf-uf, wsrt, sbrd-wrd, m firm-lse fri, exc por; tr DOLO, aa; tr ANHYD, aa

SS, clr-lt pink, frstd, f-mg, m-wsrt, rd-wrd, lse fri, exc por; tr DOLO, blugy-calc, rr ANHYD, aa

SS, clr-pale pink, uf-lmg, m-wsrt, rd-wrd, lse fri, exc por; tr DOLO, dkgy-blugy, aa; rr ANHYD, wht

SS, clr-pink, dom f-mg, m-wsrt, rd-v wrd, lse fri, exc por; tr SH, blk, flky

SS, clr trns-lt pink, uf-mg-occ cg, p-f srt, w-sbrd-ang, lse fri, exc por; tr SH, blk, flky

Mud Report: 8.7, 34, 16.5, 10.0, 1250, 2.8

SS, clr-pale pink, sndy, silic, alternating w/SH, blk, flaky, non-calc; SS, vf-cg, p srt; tr f-cg lse grns SS scattered thro

L. SATANKA SH @ 8780'

SH, dk brick red; tr SS, vf-cg, aa; tr SS-SLST, aa; tr DOLO, aa

SLST, lt salmon red-pale pink; tr DOLO, dkgy; rr grns SS, cg

SLST, lt salmon - pale pink, aa; tr DOLO, dkgy, aa; tr clr cg qtz, rd

SLST, lt salmon pink-wht; SH, dk brick red; DOLO, aa

SLST, lt salmon pink-occ wht; SH, brick red, tr SH, dkgy; tr DOLO, dkgy-blk

SLST, lt salmon pink-wht, firm-hd; SH, brick red; tr DOLO, dkgy; rr clr cg qtz, ang

SH, brick red-lt salmon, aa; DOLO, aa

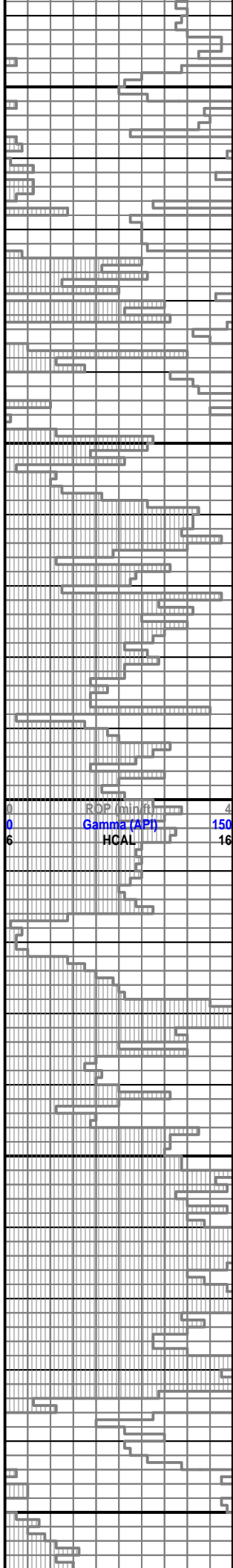
SLST, lt salmon-wht, aa; SH, brick red; DOLO, aa

SLST, lt salmon; SH, dk brick red; tr DOLO, blugy-dkgy; tr SH, pale grn; tr

(Depth time at 6070 corrected by driller 3/21/14)

CHK LTD
INTERMEDIATE
CSG PT 8692'

| | | RMLL | | 0.3 | NPor (%) | -0.1 |
|---|----|--------------|------|-----|----------|------|
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| | | 10 in (ohms) | | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |
| | | 20 in | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| | | 30 in (ohms) | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| | | 60 in | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| | | 90 in (ohms) | | | | |
| 1 | 10 | 1000 | 10e4 | | | |



clr qtz, rd-ang

SLST, lt salmon-wht- SH, dk brick red;
DOLO, blugy-dkgy; tr SH, pale grn,
non-calc; tr ANHYD, wht

SLST-ANHYD ~50/50, lt salmon, v
anhydritic, v sft mushy; tr ANHYD, wht;
DOLO, dkgy

SLST, pale salmon, anhydritic, sft; SH,
dk brick red; tr ANHYD, wht

SLST, lt salmon, sft, anhydritic; tr SH,
dk brick red; tr clr qtz; tr DOLO,
dkgy-blk

SLST-ANHYD ~50/50, lt salmon
orng-pink, v anhydritic, v sft-mushy; tr
ANHYD, wht, thro

SLST-ANHYD~50/50, lt salmon orng, v
anhydritic, sft-mushy; DOLO, blk; aa

Wolfcamp @ 9016'
SS, lt salmon wht-dk orng, vfg, wsrt,
sbrd-wrd, sli firm-silic cmt; tr SH, dk
orng-red; tr clr qtz gns; tr ANHYD, wht;
tr DOLO, dkgy-blk

LS, chalky wht-lt pink-ltgy, v calc; tr SS
lt salmon, SH, dk brick red; tr DOLO,
dkgy-blk, aa

ANHYD, wht, sft; tr SH, dk brick red

LS, chalky wht-pale pink-ltgy, hd & tite;
v calc; SH, dk red; tr DOLO, blk

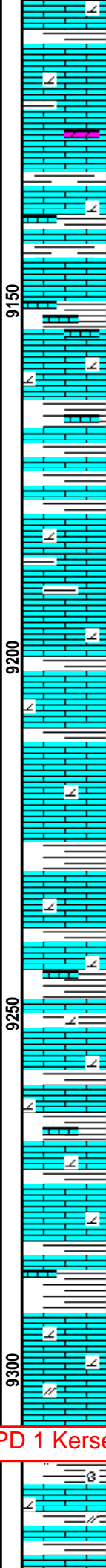
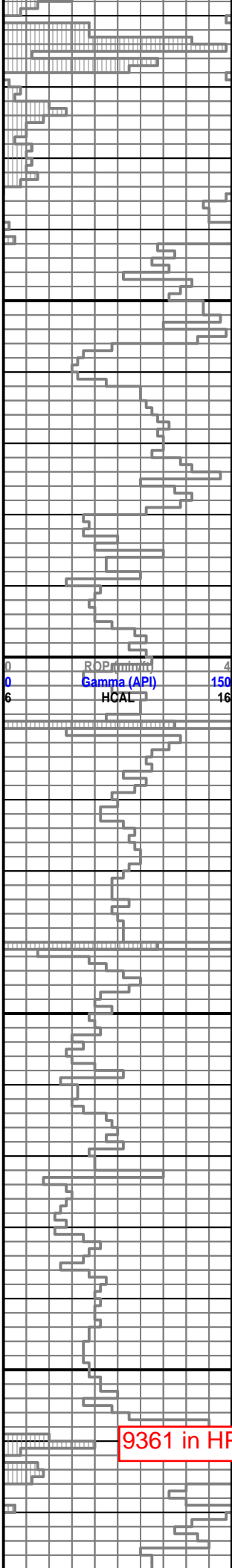
Mud Report: 8.5, 38, 8.4, 9.0, 1750, 1.3

Amazon 9074'
LS, chalky wht; ANHYD, wht, sft; dk red
SH; DOLO, dkgy

SH, dk red, slty, sft, v calc; tr DOLO,
pale grn, sli calc

LS, chalky wht-pale pink-ltgy; tr DOLO,

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pale grn

LS, chalky wht-pink-ltgy; tr DOLO, blk

LS, chalky wht-pale pink-ltgy, v calc;
SH, dk brick red; tr DOLO, blk

Council Grove @9156

LS, chalky wht-pink-ltgy, cryptoxn, tite
tr DOLO, pale grn, calc

LS, chalky wht-pink-ltgy, v calc, no por;
tr DOLO, pale grn, sli calc

LS, chalky wht-pale pink-ltgy,
cryptoxn, non porous; LS, wht-ltgy,
microxn, micro-porosity est 8-10%?

LS, chalky wht-ltgy, cryptoxn, no por;
tr DOLO, pale grn

LS, pale pink, cryptoxn, firm-hd,
brittle; tr DOLO

LS, chalky wht-pink-ltgy; SH, dk brick
red, sli firm; tr DOLO, blk

(Poor sample quality) Assume LS,
chalky wht-lt pink-ltgy; DOLO aa

LS, chalky wht-pale pink-ltgy, aa; SH,
dk brick red; DOLO, aa

Admire @ 9305'

"Red Shale Marker" @ 9309' SH
y, sbfis-plty, lt salmon orng - dk red
sft, sli calc; tr DOLO, blk; tr clr cg qtz;
tr ANHYD, wht

LS, chalky wht-pale pink, firm; SH,
salmon orng-dk red; tr ANHYD, wht

LS, chalky wht-pale pink; SH, orng - dk

| RMLL | | | | 0.3 | NPor (%) | -0.1 |
|--------------|----|------|------|-----|----------|------|
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 10 in (ohms) | | | | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |
| 20 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 30 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 60 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 90 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |

160' total Council
Grove

9361 in HPD 1 Kersey

LS, chalky wht-pale pink, SH, dk red; tr ANHYD, wht, v sft

Virgil @ 9340'

9384 in HPD 1 Kersey

ky wht-pink, mottled
ple-red, firm; SH, dk brick red,
silty, non-calc

LS chalky wht-mottled pink-gy, firm,
cryptoxln; SH, blk-ply, dk red, silty; tr
DOLO, blu-gy, sli calc

Mamoo (?) @ 9368'

LS, chalky wht-ltgy, firm; SH, dk red,
silty; tr clr qtz; DOLO, blu-gy, grn;
ANHYD, wht, sft

(CATCHING 10' SAMPLES @ 9400')

LS, pale pink-chalky wht, dolomitic,
microxln, ip detrital (broken frags); sli
react; tr SH, dk red; tr DOLO, blk

LS, chalky wht-pale pink, cryptoxln,
firm; DOLO, blk

LS, chalky, pale pink, cryptoxln, firm;
DOLO, blk, calc

LS, pale pink, aa; SH, dk brick red;
abund DOLO, blk

LS, pink-chalky wht; SH, dk brick red;
DOLO

LS, pink-chalky wht, aa; SH, dk brick
red

LS, chalky wht-pink; DOLO, blk, aa

LS, chalky wht-pink-purple-lt-dkgy,
mxd; tr SH, dk brick red, aa

LS, lt gy-pale pink-chalky wht mottled;
DOLO, blk

LS, pink-wht mottled; SH, dk salmon
red, v calc

LS, chalky wht-pale pink, cryptoxln; tr
SH, aa

LS, chalky wht, cryptoxln; LS, dk red,
microxln; tr SH, dk salmon red; p-f por

Missouri LS(?) @ 9546'

| | | RMLL | | 0.3 | NPor (%) | -0.1 |
|---|----|--------------|------|-----|----------|------|
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| | | 10 in (ohms) | | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |
| | | 20 in | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| | | 30 in (ohms) | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| | | 60 in | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| | | 90 in (ohms) | | | | |
| 1 | 10 | 1000 | 10e4 | | | |

Top Missouri CO3,
9616 in HPD 1 Kersey

LS, aa; SH, aa

LS, chalky wht-pale pink, cryptoxln, v
calc; SH, dk reddish brn, v firm

LS, chalky wht, cryptoxln; SH, dk
red-brn, sft

LS, pale pink-wht, cryptoxln, firm; tr
DOLO, dkgy-blu-grn

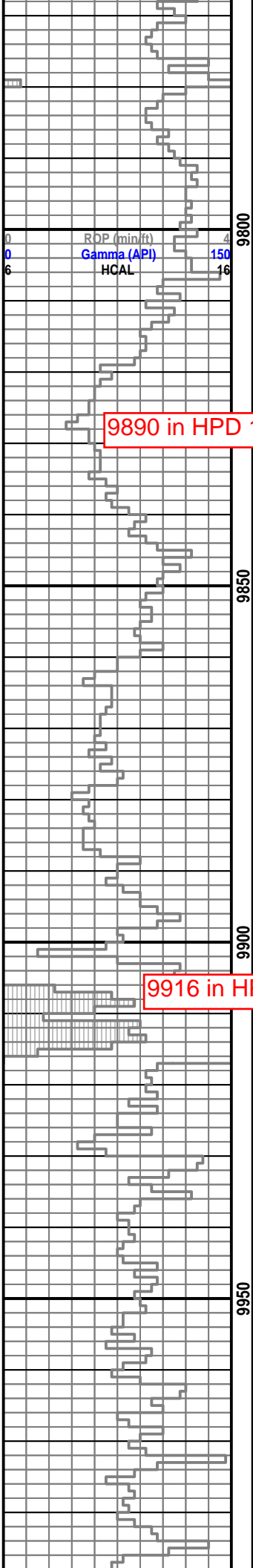
Fountain Fm @ 9625'

SS, clr-wht, vf-lmg, p srt, rd-abang, lse
fri; SH, silty, lt-dk red-maroon, firm

| | | | | | | |
|--------------|----|------|------|-----|----------|------|
| RMLL | | | | 0.3 | NPor (%) | -0.1 |
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 10 in (ohms) | | | | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |
| 20 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 30 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 60 in | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 90 in (ohms) | | | | | | |
| 1 | 10 | 1000 | 10e4 | | | |

Computer connection
lost

9778 in HPD 1 Kersey



9890 in HPD 1 Kersey

9916 in HPD 1 Kersey



SH, plty, salmon orng-red, firm;
ANHYD, wht

SH, plty, salmon orng-red, firm;
ANHYD, wht; no por

SH, plty, salmon red-orng, sft,
ritic

SH, dk red-orng, plty, hd; DOLO, dkgy;
ANHYD, wht, sft

SH, plty, firm-brittle, dk red-orng;
ANHYD, wht; tr DOLO, blk; no por

SH, plty, salmon red-orng-grn, firm-hd;
DOLO, blk; tr SS, clr; no por

SH mxd 50/50 w/ANHYD, plty, salmon
red-orng, hd; ANHYD, wht, sft

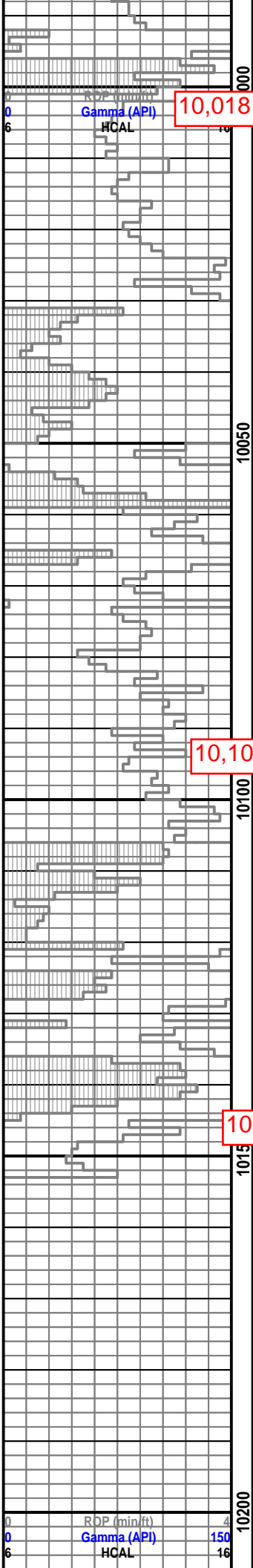
SS, clr trns, uf-lcg-occ vcg, poor srt,
wr-dsbg, lse fri; SH, brick red-salmon
orng, firm-brit; tr DOLO, blk

SH, blk-chunky, salmon orng-brick
red, v hd-brit; tr cg QTZ, clr-wht

SH, aa-ANHYD (50/50); tr cg QTZ, clr;
SS, clr, uf-lcg increasing

SH-ANHYD, aa (50/50); tr crs QTZ gns,
clr-mlky

| RMLL | | | | 0.3 | NPor (%) | -0.1 |
|------|----|------|------|-----|----------|------|
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 1 | 10 | 1000 | 10e4 | 0 | PEFZ | 10 |
| 1 | 10 | 1000 | 10e4 | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 1 | 10 | 1000 | 10e4 | | | |
| 1 | 10 | 1000 | 10e4 | | | |



SH, salmon, sft, anhydritic

10,018 in HPD 1 Kersey

y, uf-vcg, p srt, rd- ang; SH,
chunky, dk brick-maroon, flecks of
mica; ANHYD, wht, thro

Mud Report: 8.7, 41, 8.0, 10.5, 1800, 2.8

10,100 in HPD 1 Kersey

6:00 a.m. 3/29/14

10,150 in HPD 1 Kersey

| RMLL | | | | 0.3 | NPor (%) | -0.1 |
|------|----|--------------|------|------|----------|------|
| 1 | 10 | 1000 | 10e4 | 0.3 | DPor (%) | -0.1 |
| 1 | 10 | 10 in (ohms) | 1000 | 0 | PEFZ | 10 |
| 1 | 10 | 20 in | 1000 | 10e4 | | |
| 1 | 10 | 30 in (ohms) | 1000 | 10e4 | | |
| 1 | 10 | 60 in | 1000 | 10e4 | | |
| 1 | 10 | 90 in (ohms) | 1000 | 10e4 | | |
| 1 | 10 | | 1000 | 10e4 | | |

[illegible]