



Woolsey Operating Company, LLC

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

Well Name: Nusser #1
Location: Section 11 Township 35 South - Range 15 West
License Number: 15-007-23749 00 00
Spud Date: August 26, 2011
Surface Coordinates: 330' FSL, 330' FWL or SW1/4 SW1/4 SW1/4
Bottom Hole Coordinates: Verticle Hole
Stranathan Field
Region: Barber Co. KS
Drilling Completed:
Ground Elevation (ft): 1378' K.B. Elevation (ft): 1389'
Logged Interval (ft): 4000' To: Total Depth (ft):
Formation: Kansas City Group ----> Simpson Group
Type of Drilling Fluid: Chemical Mud Displaced at 3382'
Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Woolsey Operating Company,LLC
Address: 125 N. Market, Suite 1000
Wichita, KS 67202

GEOLOGIST

Name: Bill Klaver
Company: Woolsey Operating Co. LLC
Address: 125 N. Market, Wichita Kansas, 67202

COMMENTS

Surface Casing: Spud at 10 am on 8/26/2011. Set 5 joints of 10 3/4" X 32.75#/ft new casing at 220' KB (tally 207') w/240 sx Class A, 2% gel, 3% cc. Plug down at 6 pm on 8/26/2011. Cement did circulate.

Production Casing:

Deviation Surveys: 1/4 at 225', 1/4 at 1195', 1/2 at 1695', 1/4 at 2196', 1/2 at 2692', 1/2 at 3193', 1/2 at 3696', 1 at 4193', 1 at 4905',

Pipe Strap @ 4905', Strap: 4908.44', Board: 4909.89'. Strap 1.45' short, no correction was made to the board.

Duke Drilling Rig 10 Bit Record:

#1 14 3/4" HTC RR in at 0' out at 225', 225' in 2.5 hours.

#2 7 7/8" Varel HE 21 in at 225', out at

#3 7 7/8" Varel HE 29

Gas Detector: Woolsey Operating Co. Gas Trailer #2

Mud System: Mud-Co. Brad Bortz, Engineer

Open Hole Tests: Trilobite

OH Logs: Superior Well Service: Dual Induction Laterolog w/SP, CNL-FDC w/PE, Gamma Ray and Caliper.

In House Geologist: Brian Wilhite.

DSTs

DST #1 Mississippi, 4829'-4905', 30"-60"-60"-120". Strong blow, BOB one minute into IFP. Strong blow GTS 3 minutes into FFP. Rec: 85' SGCM w/SSO (5%G, 95%M), 95' SGCWM w/SSO (10%G, 65%M, 25%W). Recovery chlorides were 27,000 ppm. IHP 2337, IFP 83-96, ISIP 1842, FFP 94-130, FSIP 1870, FHP 2315. BHT 126 degrees. FFP: 5" 14.50 MCF, 10" 13.47 MCF, 20" 12.76 MCF, 30" 12.31 MCF, 40" 12.12 MCF, 50-60" 12.01 MCF

CREWS

Scott Edwards, Tool Pusher

Alex Ordonez, Days

Colby Crawford, Evening

Chad Hallmark, Morning

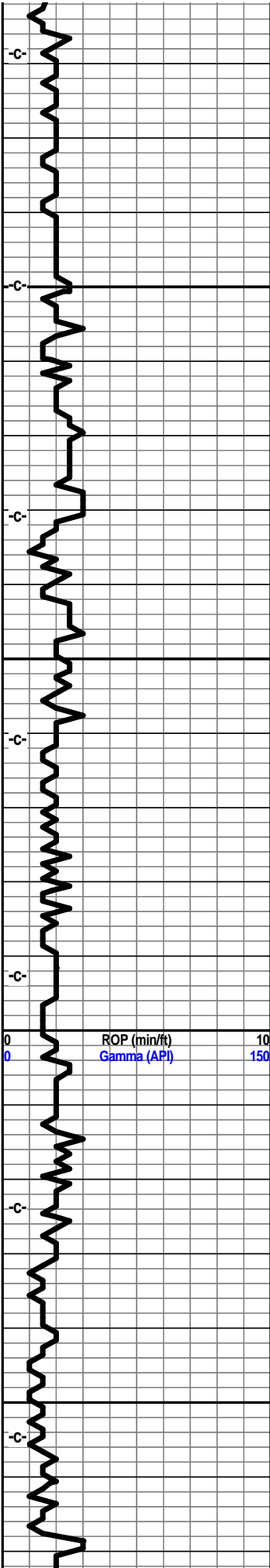
Ron Burns, Relief

Completion of the test.

7 am Prograss:

- August 25, 2011 MIRT
- August 26, 2011 SPUD 10 am
- August 27, 2011 Drilling at 452'
- August 28, 2011 Rig repairs at 1540'
- August 29, 2011 Down-rig repairs
- August 30, 2011 Down-rig repairs
- August 31, 2011 Drilling at 1638'
- September 1, 2011 Drilling at 2353'
- September 2, 2011 Drilling at 3105'
- September 3, 2011 Drilling at 3696'
- September 4, 2011 Drilling at 4311'
- September 5, 2011 Drilling at 4698'
- September 6, 2011 DST #1 at 4905'
- September 7, 2011 Drilling at 5118'
- September 8, 2011 CFS at 5370'
- September 9, 2011
- September 10, 2011

- E-Log Tops
- Herington
- Onaga
- Wabaunsee
- LeCompton
- Kanwaka
- Elgin Sand
- Heebner
- Toronto
- Douglas Grp
- Douglas Shl
- Haskell
- Stalnaker
- Quindaro
- Kansas City 'F'
- Kansas City 'G'
- Stark
- Swope
- Hushpuckney
- Hertha
- B/Kansas City
- Pawnee
- Cherokee Grp
- Cherokee Sand



4100

4150

4200

4250

vis. 50 wt. 9.0

Main hoisting clutch shaft, bearings and sprocket out.

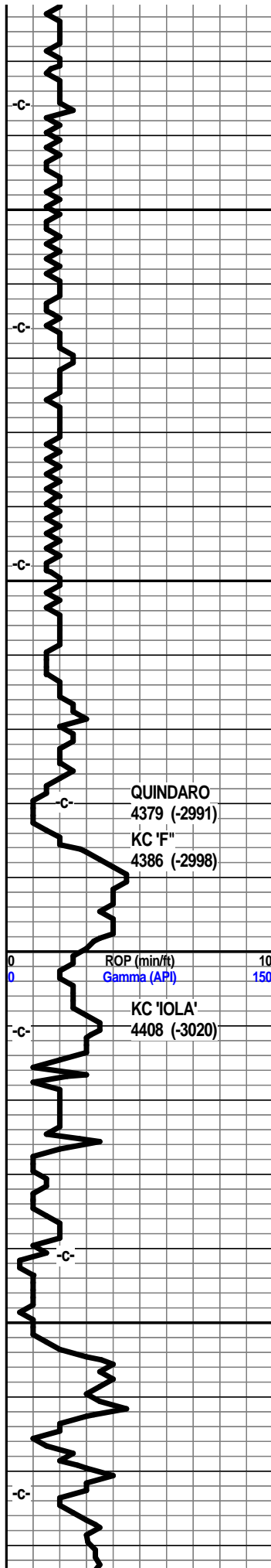
vis. 50 wt. 9.0

vis. 70 wt. 8.9

TG

vis. 58 wt 8.9

vis. 56 wt 9.0

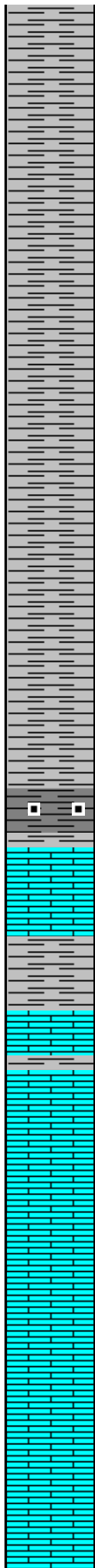


4300

4350

4400

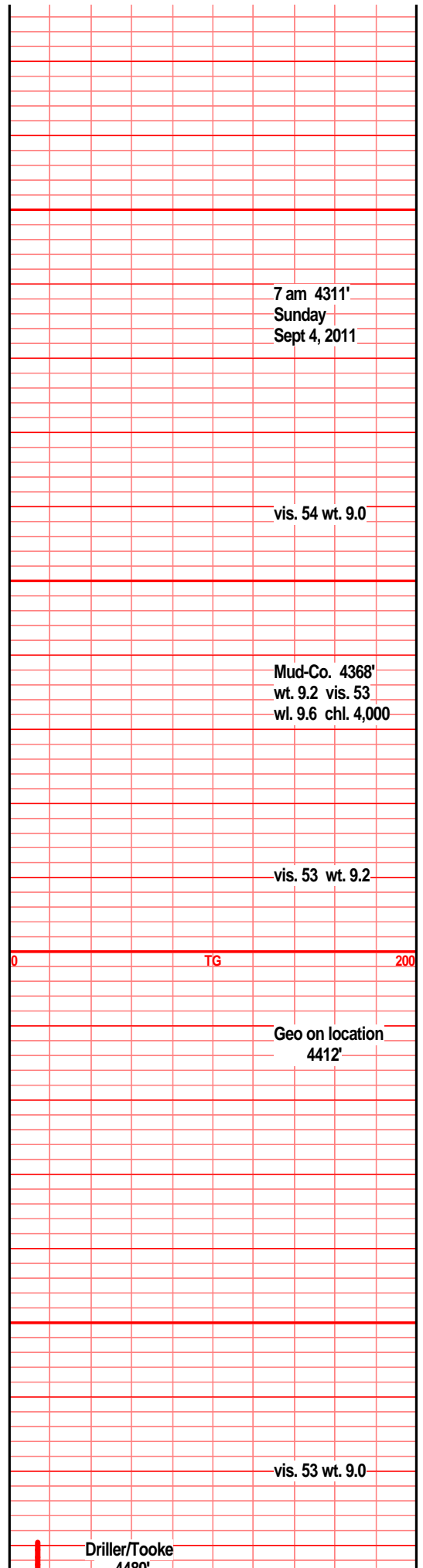
4450

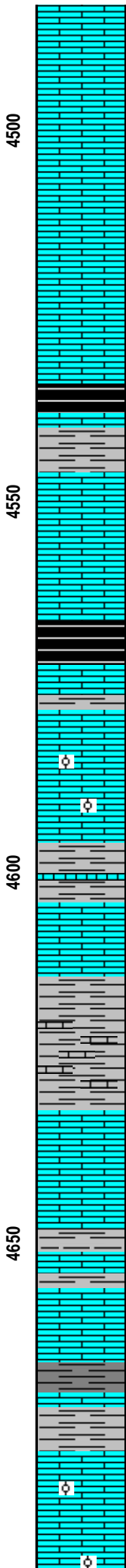
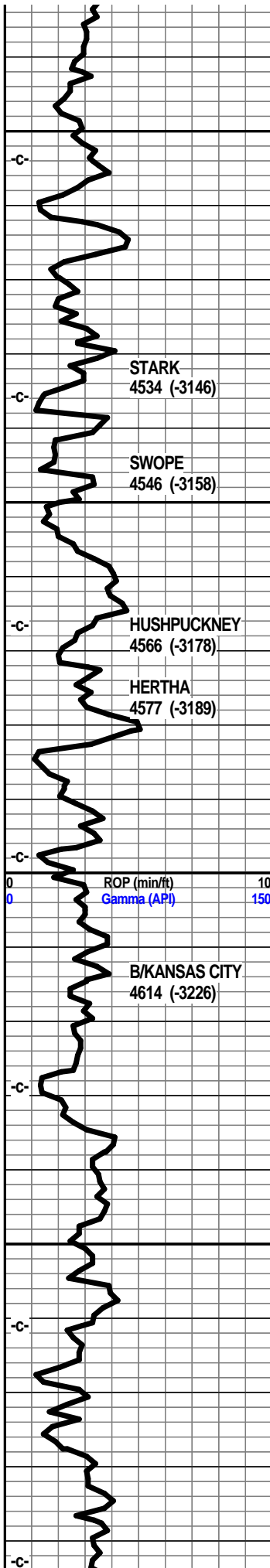


- Mississippi
- C4
- C3
- C2A
- C2
- C1
- Osage
- Northview Shl
- Compton
- Kinderhook
- Woodford
- Misener Sand
- Maquoketa
- Viola
- Simpson Grp
- Wilcox Sand
- McLish Shl

Oil & Gas Show Legend

- Gas
- Even Stain/Saturation
- Spotten Stain/Saturation
- Questionable
- Dead/Gilsonitic





lst crm tan lt brn in prt, f sli med xln gran sub
chlky calc xln fill, foss frags, micro ool, gritty
gran in prt

lst tan crm brn f med xln blk ang gran sub chlky
foss frags, calc xln fill crumbly, shl gry drk gry
brn calc

shl gry, gry brn, silty calc, lst tan gry brn f xln
dns hrd blk ang arg silty, gritty, sndy in prt

shl gry drk gry brn silty gritty calc, lst tan gry brn
vf xln dns hrd gran arg silty

shl gry blk, drk gry gritty calc, lst tan drk gry brn
vf xln dns hrd blk arg silty gritty gran

lst tan buff lt brn f vf xln dns hrd blk, tr sub
chlky, foss frags, calc xln fill, micro ool, sbun gry
gry blk brn gritty calc shls

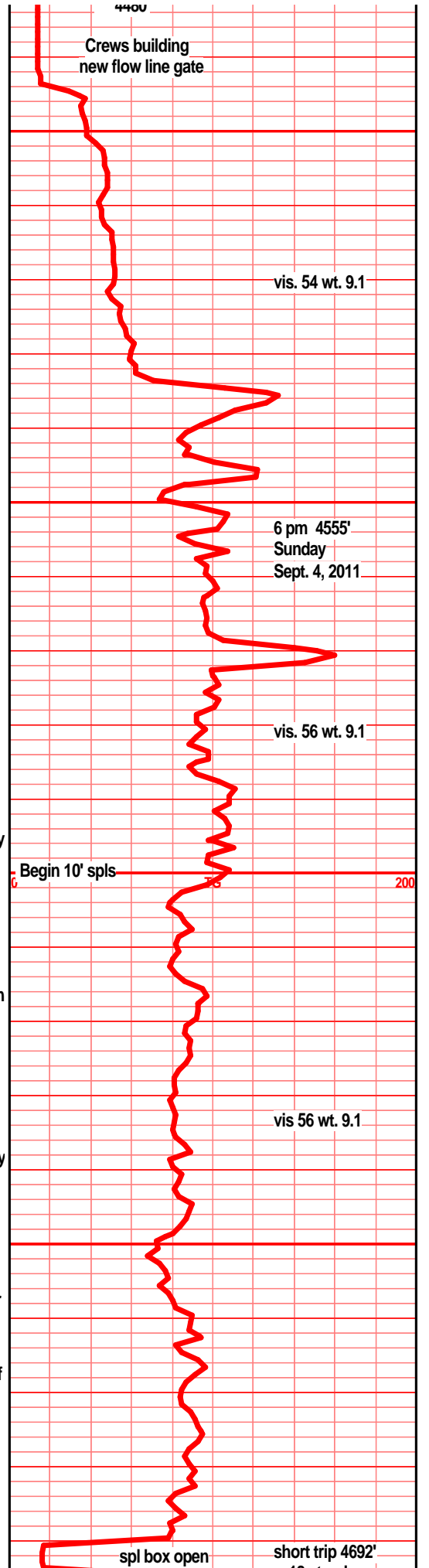
lst crm off wht tan, tr green tint, vf xln blk ang
hrd dns, sub chlky, arg, shl gry brn calc silty
gritty

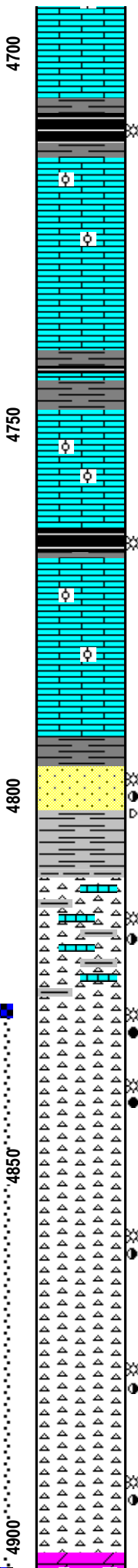
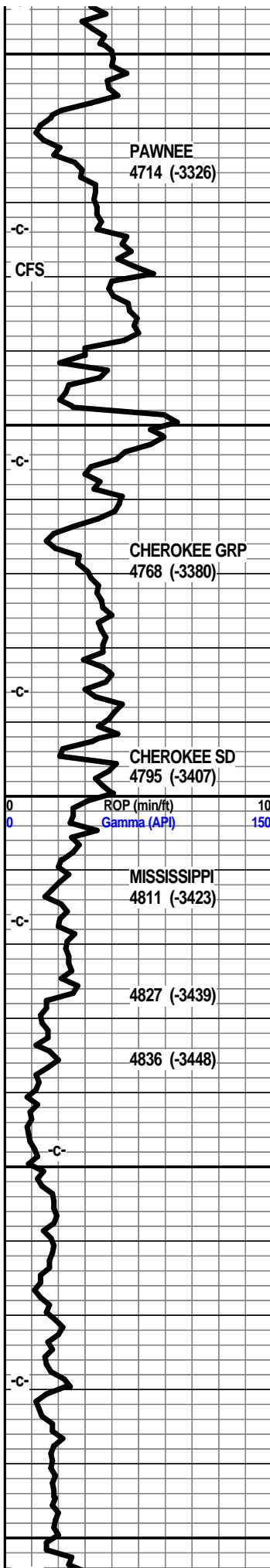
lst lt gry/green, tan buff, f vf xln arg silty gritty, tr
soft gran, shl gry green silty calc, soft mushy

shl gry drk gry blk semi carb, lst tan buff crm f vf
xln blk ang dns, sub chlky micro foss frags

shl gry drk gry calc silty, lst crm buff tan f vf xln
blk ang, sub chlky, foss frags, micro foss, tr
calc xln fill

lst crm buff tan f vf xln blk ang sub chlky, foss
frags, micro foss/ool oomoldic,





lst crm buff tan f vf xln bky ang dns hrd, sub chlky in prt, tr calc fill, micro foss frags, micro ool,
shl med gry, gry blk, silty gritty, shl blk semi carb, carb in prt, blk ang pcs, tr gas bubs

lst tan buff gry vf xln blk ang dns hrd, sub chlky tr calc xln fill, micro foss, micro ool,

lst crm buff off wht, f xln blk ang dns, tr sub chlky, foss frags, micro foss in prt, ool, pelletal, calc xln fill NS

shl gry, drk gry blk, carb in prt, lst tan buff off wht f xln dns hrd blk sub chlky foss frags, calc xln fill

shl gry silty calc, lst tanbrn f vf xln dns hrd blk dns arg silty, tr sub chlky gran gritty

lst crm buff gry f vf lxn blk dns hrd, micro foss frags, calc xln fill, mstly tan buff vf xln blk dns hrd

shl drk gry blk, blk carb, gas bubs, lst tan buff lt gry vf xln dns hrd blk sub chlky micro foss frags, calc xln fill

lst tan buff lt gry f vf xln ang blk pcs, tr sub chlky micro foss frags, calc fill, tr arg silty

lst tan buff lt gry f vf xln dns hrd sub chlky gritty gran, tr micro foss

shl gry drk gry blk, blk carb, wxy grsy, gas bubs, 4820' spl >> sst clr/drk brn-blk clstrs, vf grnd, sub ang grns, w/srtd, v-well cem, hrd blk clstrs, quartzitic, text, sst aa, wht brn mott, calc, hrd dns, tr blk flky stain, gas bubs, nodor

chrt wht off wht, lt gry, smokey, frsh shrp opa, transl, blk, tr weath edge, tr blk stain, tr gas bub, frac por, nodor, gry green silty gritty shls, lst tan wht green tint, vf xln blk ang dns tr chlky

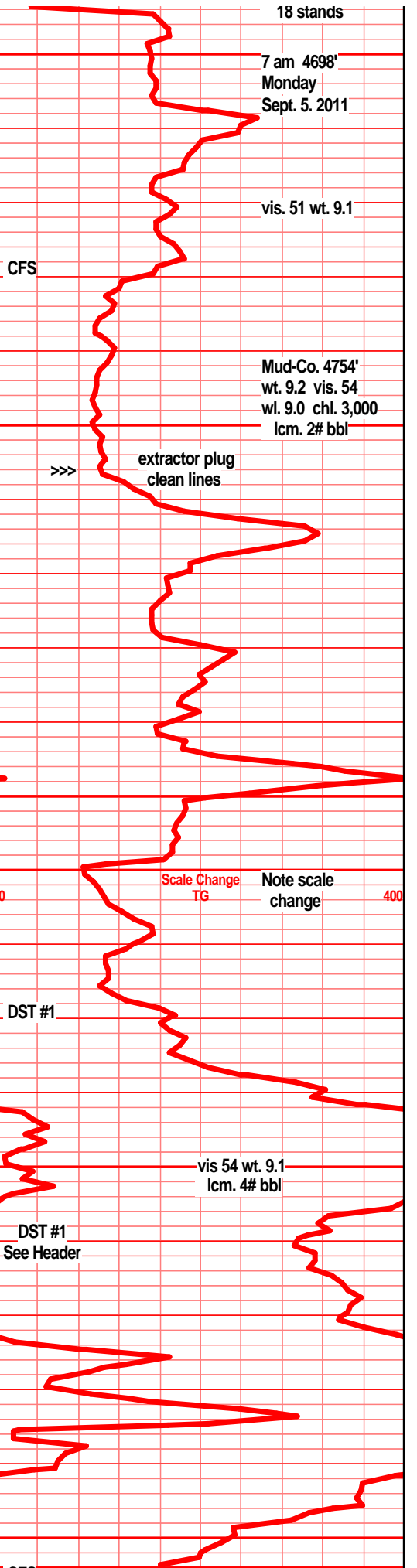
chrt wht off wht lt gry smokey, frsh shrp opa blk ang pcs, tr weath/text edge, sli pp/moldic por, frac por, sli odor, blk stain, gas bubs, gry green tint limy chrt, soft chlky

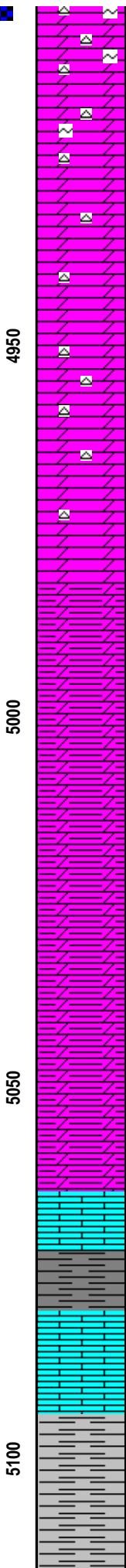
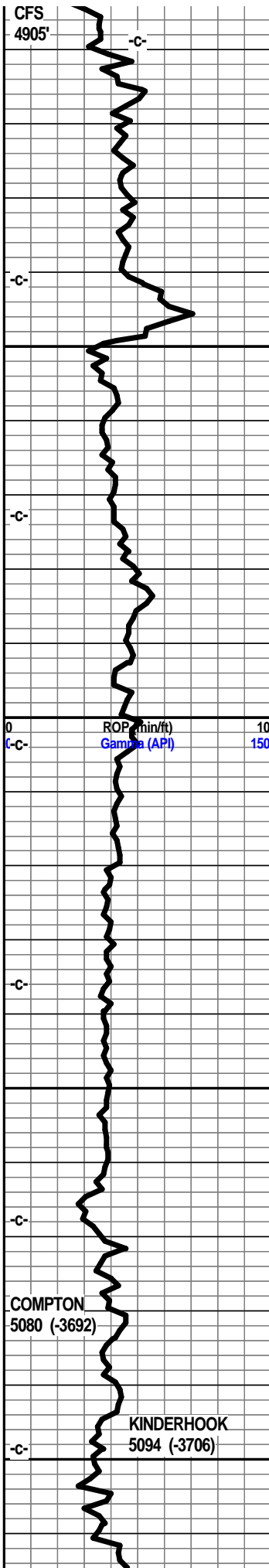
chrt off wht lt gry shrp frsh opa aa, weath text edge aa, chrt lt gry tan mottled, gran, tr spongy text, weath trip text, gd vug/moldic por, incr/gd odor, abun gas bubs, dull UV, filmy SFO on spl wtr, floating oil in spl cup

chrt wht tan lt gry, smokey, shrp frsh blk ang pcs, opa transl, weath trip text edge, pp/moldic por, frac por, even stain, SFO, abun gas bubs, fair/gd odor, dull UV,

chrt wht off wht lt gry smokey, shrp frsh opa, transl (incr frsh chrt in 4900' spl) w/weath trip text edge, w/gd pp/moldic por, frac por, fair to gd odor, SFO, gas bubs, dull UV, free oil in tray and spl cup

chrt wht off wht lt gry, shrp frsh opa, blk ang pcs, (incr frsh chrt w/depth), w/weath trip text edge, fair pp/moldic por, frac por, sli odor?, even stain, SFO, gas bubs, dull UV.





dolo sh with lt tan vlt xln gritty, shly text, dry ang pcs, tr glau, chrt wht shrp frsh opa, tr edge stain, SSFO, tr gas bubs nodor

dolo off wht lt gry/green tinted, f vf xln silic in prt, sndy gritty text, glau in prt, chrt wht shrp frsh opa, tr edge stain, VSSFO, tr gas nodor

dolo off wht bec lt gry/gry vf xln gran tr silic, blk ang pcs, tr glau, tr chrt wht shrp frsh opa

dolo drk tan lt gry f vf xln gran blk dn tr silty, tr silic text, gritty, calc/silty in prt, tr glau

dolo gry med gry vf xln gran gritty silty, shly in prt, arg, silic text in prt, mstly dns gritty hard

dolo gry med gry vf xln gran arg silty tr silc pcs, mstly silty shly gritty cacl dolostn

dolo gry med drk gry f vf xln gran hrd blk pcs, silty gritty, tr silic text, calc dolostn

dolo gry med/drk gry vf xln dilty gritty arg, calc dolostn in prt, tr chrt gry shrp frsh opa

dolo gry med/drk gry silty gritty gran arg shl dolo shl, drk gry silty gritty calc

dolo, drk gry silty shly gritty calc in prt, mstly dns silty dolostns

dolo, silty shly gritty dolostn, calc in prt, gry med to drk gry, tr silic text

shl, calc silty dolo shls, drk gry, silty gritty gran, silic in prt, arg

dolostn drk med to drk gry vf xln silty gritty arg, calc, chrt gry shrp frsh opa

dolostn, med gry to drk gry silty gritty silic in prt, calc, arg dns hrd

dolo, silty shly dolo, vf xln gran gritty silty, calc, calc silty gritty shl, silic text in prt, dns

dolostn, drk gry vf xln gritty calc dns hrd blk pcs, shl drk gry silty gritty calc

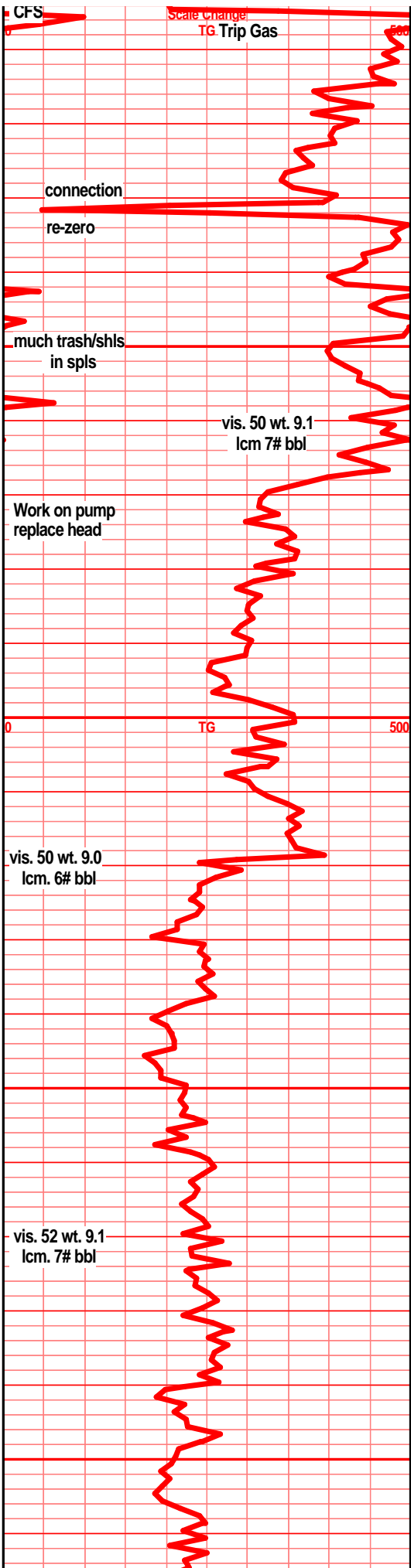
lst wht f xln blk ang dns hrd tr glau, tr calc inclu, tr chrt wht clr shrp frsh opa transl

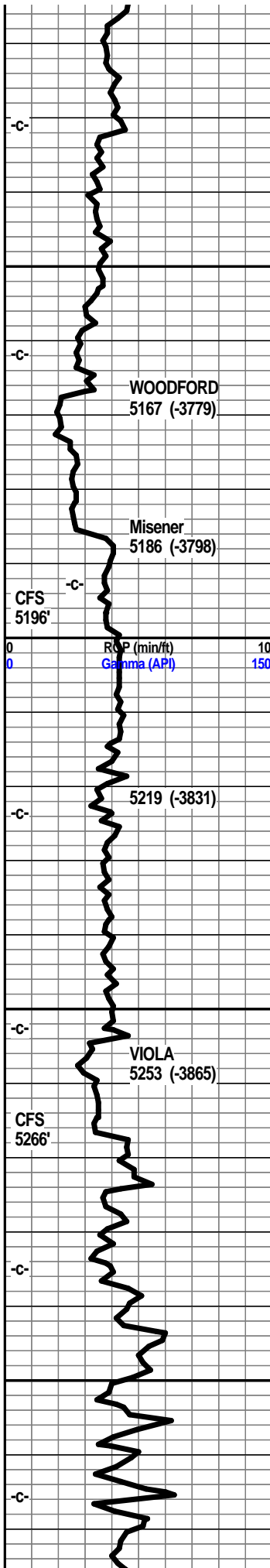
shl gry, gry/green drk green silty gritty calc in prt, lst wht off wht f vf xln dns hrd, blk calc inclu

lst wht off wht f sli med xln blk ang flky pcs, tr sub chky, foss frags, pelletal, tr ool, chrt wht shrp frsh opa transl in prt

shl drk gry blk, blk ang pcs, silty,

shl gry blk, gry drk green blk.





shl med gry, drk gry brn, drk brn blk, tr drk green tint, gritty, sndy in prt, tr gas bubs, filmy gilson stain

shl drk gry, drk reddish brn blk shls, silty gritty pyritic

shl drk gry, drk brn/reddish brn blk silty gritty pyritic, bedded, banded

shl drk gry/brn, brn/blk tr green tint silty gritty tr gas

shl gry dkr gry, gry drk green tint, reddish blk, platy, bedded, silty, pyritic

shl drk red/brn, drk red/blk in prt, silty gritty, carb in prt, abun gas bubs, copper/pyritic inclu

shl drk brn/blk, reddish brn/blk, silty gritty, carb in prt, abun gas, pyritic, filmy cond w/gas bubs

shl gry lt gry, silty, gritty, calc in prt, snd grn inclu, rded grns prly srted, soft, hvy pyrite fill, tr gas bubs, sst off wht lt gry clstrs f grnd prly srted, tite, calc fill, limy, pyritic, clay/min fill NS

shl gry, lt gry green, silty gritty, snd grn inclu, pyritic, tr sst wht off wht clstrs, f grnd, ang grns, sub fria to tite blk ang clstrs, prly srted, v pyritic, clay/min fill

sst lt gry, pale green clstrs, f grnd, ang grns, prly srted, fria to tiet, hvy clay fill, much pyrite, min fill

dolostn/dolo shls, gry drk gry green, silty gritty, sndy text, shls red brn, brn blk, silty gritty pyritic, silty semi carb text, gas bubs

dolo silty dolo, drk brn/red, drk red/blk, f vf xln blk ang dns hrd massive pcs, gritty sndy text, tr gas bubs NVP

dolo silty shly dolo, drk gry, brn/red/blk aa, f vf xln gritty sndy text, blk dns ang pcs, tr gas bubs

lst wht off wht, wht w/lt gry tint, f sli med xln blk flky, tr sub chlky tr foss frags, pelletal, inter xln por, NS, tr chrt wht opaq shrp frsh tr glau, tr pyritic

lst off wht wht/gry mott f sli med xln blk flky ang tr sub chlky, foss frags, inter xln por, pyritic, chrt wht shrp frsh

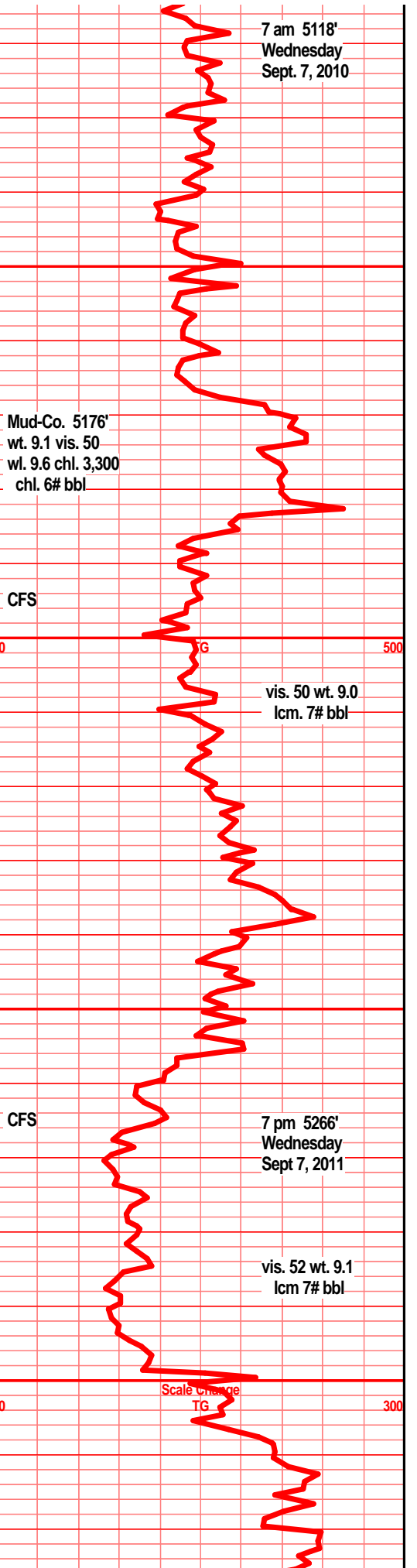
lst aa, lst/bec dolo in prt, tan off wht f vf xln gritty gran sub chlky chrty, tr foss frags tr min fill, chrt tan shrp frsh

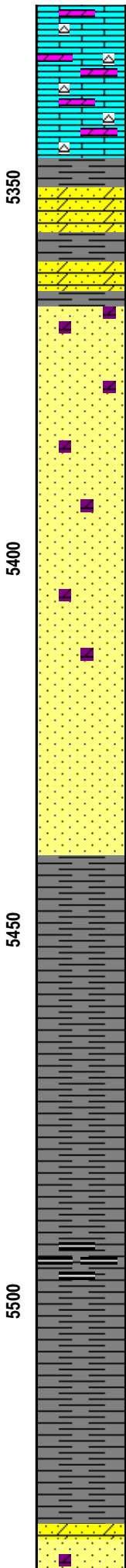
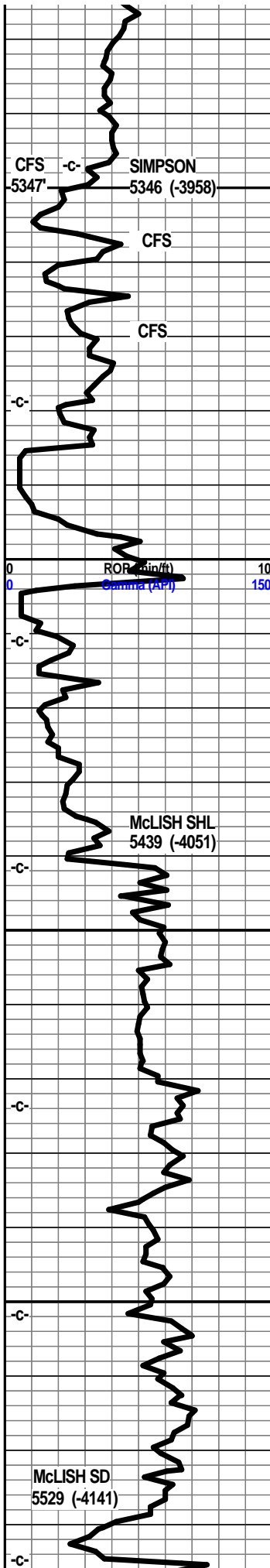
lst, dolo in prt, tan lt brn f vf xln gran gritty ang blk, tr sub chlky, chrty, chrt dull tan brn shrp frsh opaq foss

lst, dolo in prt, tan lt brn f vf xln gran gritty blk pcs, chrty, chrt dull tan gry shrp frsh opaq foss, incr chrt w/depth

lst dolo in prt, tan crm lt brn f vf xln gritty gran sub chlky tr foss, much chrt, dull tan gry shrp frsh

lst dolo aa no change incr dull tan, gry chrt, shrp frsh opaq foss





lst dolo in prt, f vf xln gritty sub chlky, gran, blkly ang chrt, chrt dull gry/tan shrp frsh foss opa

lst crm tan lt brn f med xln blkly ang pcs, crs xln in prt, dolo drk tan brn vf xln dns blkly hrd pcs, tr inter xln por, chrt tan brn shrp frsh, tr tan green mott calc lst f xln, w/clr snd grn inclu

sst clr lt grn clstrs f grnd, ang/sub ang grns, prly srted, w/cem, dolo fill, crs rhom xstl incu, gas bubs, lt brn oil smears, nodor, SSFO

sst off wht lt tan clstrs, f grnd, sub ang grns, prly srted, sub fria to tite, tr xln fill, tr clay fill, min fill, dolo in prt, tr inter grn por, nodor, gas bubs, lt brn oil smears, VSSFO, tr lt transi SFO

sst off wht tan clstrs, f grnd sub ang grns, fair to prly srted, sub fria to tite mstly w/cem, min fill clay fill, tr rhom xln fill, dolo in prt, pyritic

sst wht off wht tr lt tan clstrs, f grnd, sub rded grns, fair/well srted, well cem, mstly sub fria, w/silic cem, tr lt brn dolo xln fill, tr min fill

sst wht tan clstrs, f grnd sub rded grns, fair/poorly srted, f/cem, fria, tr well cem, tr min fill, tr clay fill

sst wht off wht clstrs, tr tan, f grnd sub rded grns, w/srted, sub fria, gran, prly to fair cem, silic cem, tr min fill tr pyritic, tr blk flky stain

sst aa, sst off wht wht clstrs, f vf grnd, sub rded grns, f/well srted, sub fria, gran, silic fill, tr min fill, mstly soft fria,

shl drk gry, gry/green teal green silty slick, snd grn inclu, pyritic

shl gry gry green, teal green silty slick, pyritic in prt tr snd grn inclu

shl gry lt gry green teal green, silty snd grn inclu, pyritic, bedded

shl gry gry green teal green silty wxy grsy, pyritic, snd grn inclu

shl lt gry, gry, gry green, teal green silty wxy grsy, slick, bedded, pyritic bands, snd grn inclu

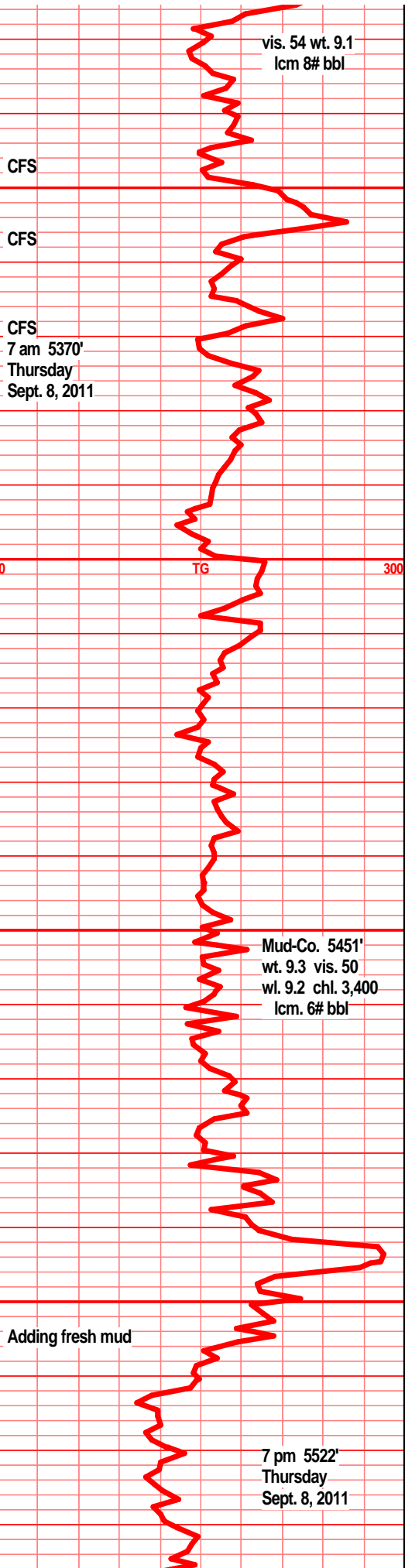
shl gry, drk gry silty, gritty, sndy, snd grn inclu, much glau fill

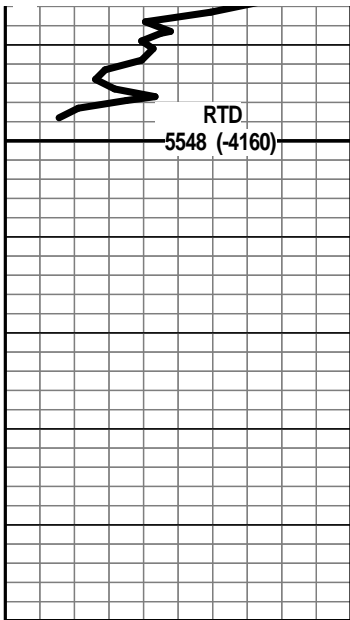
shl gry, drk gry silty gritty sndy, snd grn inclu, much glau fill, shl drk gry, blk semi carb, blkly ang pcs, abun gas bubs

shl gry drk gry tr green silty gritty ratty, pyritic, splintery, tr snd grn inclu, glau

shl gry drk gry, drk gry green, teal green, silty, wxy grsy in prt, splintery, snd grn inclu, glau

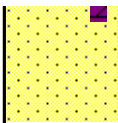
sst gry med gry clstrs, green tint in prt, f grnd, ang grns, prly srted, non-fria, blkly tite dns clstrs, qtz text, hvy min fill, clay fill, pyritic, glau





5550

00



sst lt gry gry clstrs f vf grnd sub ang grns, prly
srted, w/cem, tr fria, mstly non fria, silic cem,
dolo in prt, blkly ang hrd clstrs, tr pyritic, min fill,
glau

