



**Woolsey Operating Company, LLC**  
Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: Miller #7  
Location: Section 31 Township 34 South - Range 11 West  
License Number: 15-007-23707-0000 Region: Barber County, KS  
Spud Date: May 18, 2011 Drilling Completed: May 28, 2011  
Surface Coordinates: 330' FNL, 1930' FWL or Approx. N 1/2 NE NW  
Field: Stranathan  
Bottom Hole Coordinates: Verticle Hole

Ground Elevation (ft): 1394' K.B. Elevation (ft): 1405'  
Logged Interval (ft): 4000' To: 5315' Total Depth (ft): 5315'  
Formation: Douglas Group ----> Simpson Group  
Type of Drilling Fluid: Chemical Mud displaced at 3367'

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: Set 5 joints 10 3/4" X 32.75#/ft new casing at 220' KB with 240 sx Class A, 2% gel, 3% cc. Cement did circulate. Plug down 1:45 am on May 15, 2011.  
Production Casing: 5 1/2" X 17.5#/ft

Deviation Surveys: 1 at 220', 1/4 at 1178', 1/2 at 1707', 1/2 at 2212', 3/4 at 2711', 1 at 3738', 1 at 4206', 1 at 4707', 1 at 5315'

Pipe Strap: None taken

Duke Drilling Rig 10 Bit Record:

#1 14 3/4" HTC RR in at 0' out at 220'. 220' in 3 3/4 hours

#2 7 7/8 Varel HE-21 in at 220' out at 5315', 5095' in 155 1/2 hours. Average penetration of 32.7' ft/hour.

Gas Detector: Woolsey Operating Co. Gas Trailer #2

Mud System: Mud-Co. Brad Bortz, Aaron Rush, Engineers

DSTs: No tests were ran.

OH Logs: Superior Well Service, Dual Induction Laterolog w/SP, CNL-FDC w/PE, GR & Caliper. Jason Cappellucci, Engineer.

## DSTs

No formation tests were ran.

## CREWS

Joe Livingston, Tool Pusher

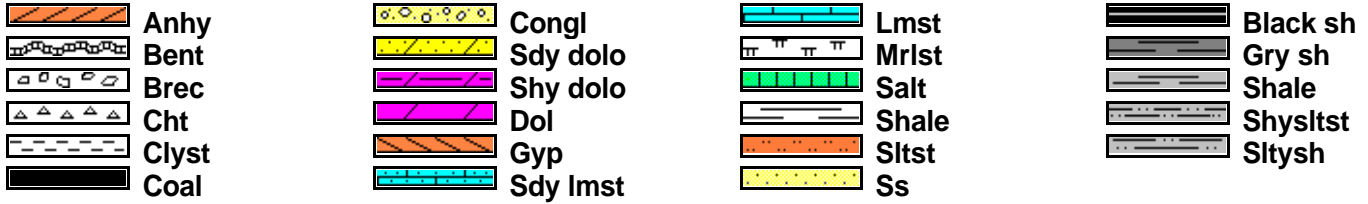
Scott Edwards, Days

Colby Crawford, Evening

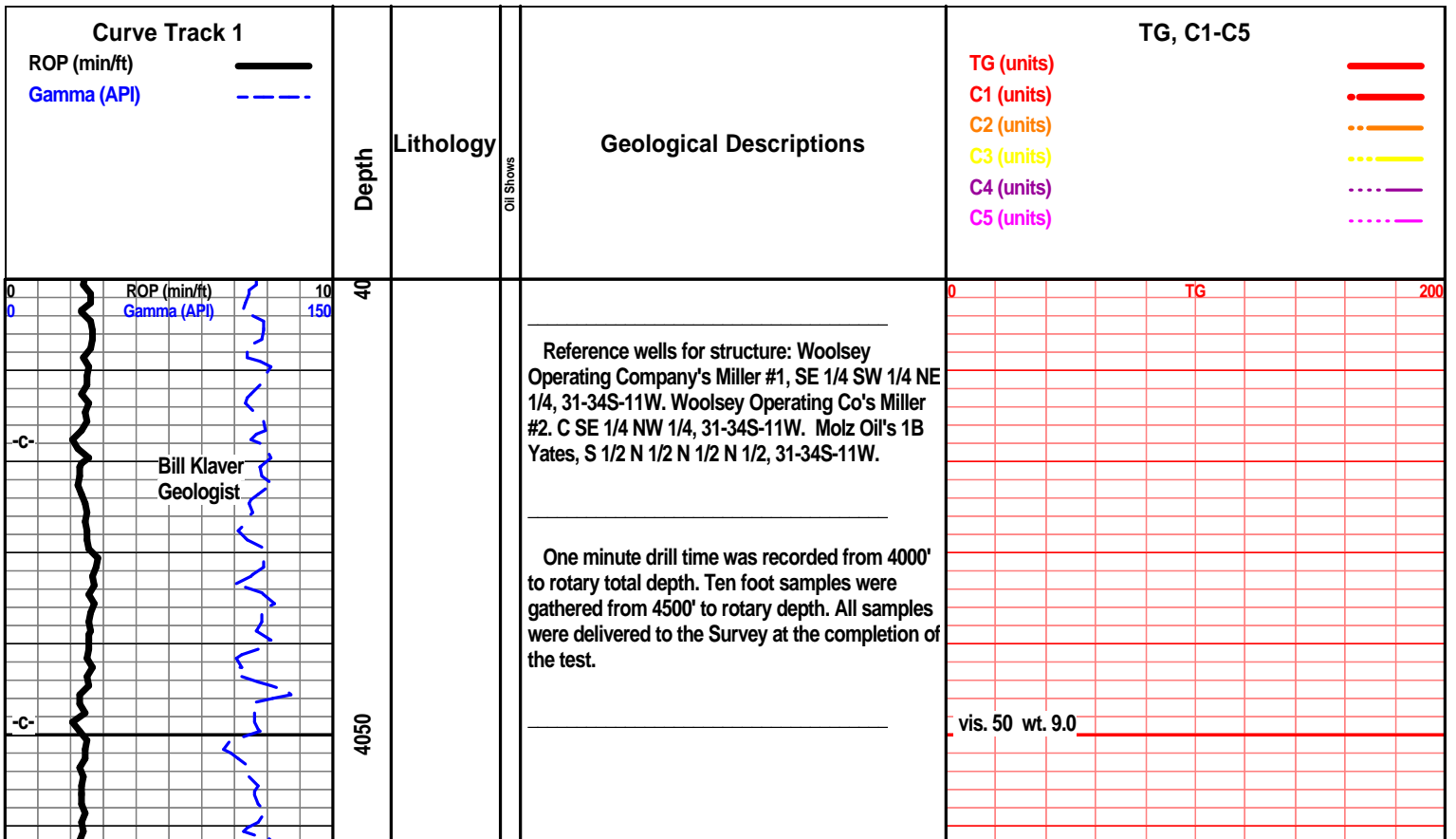
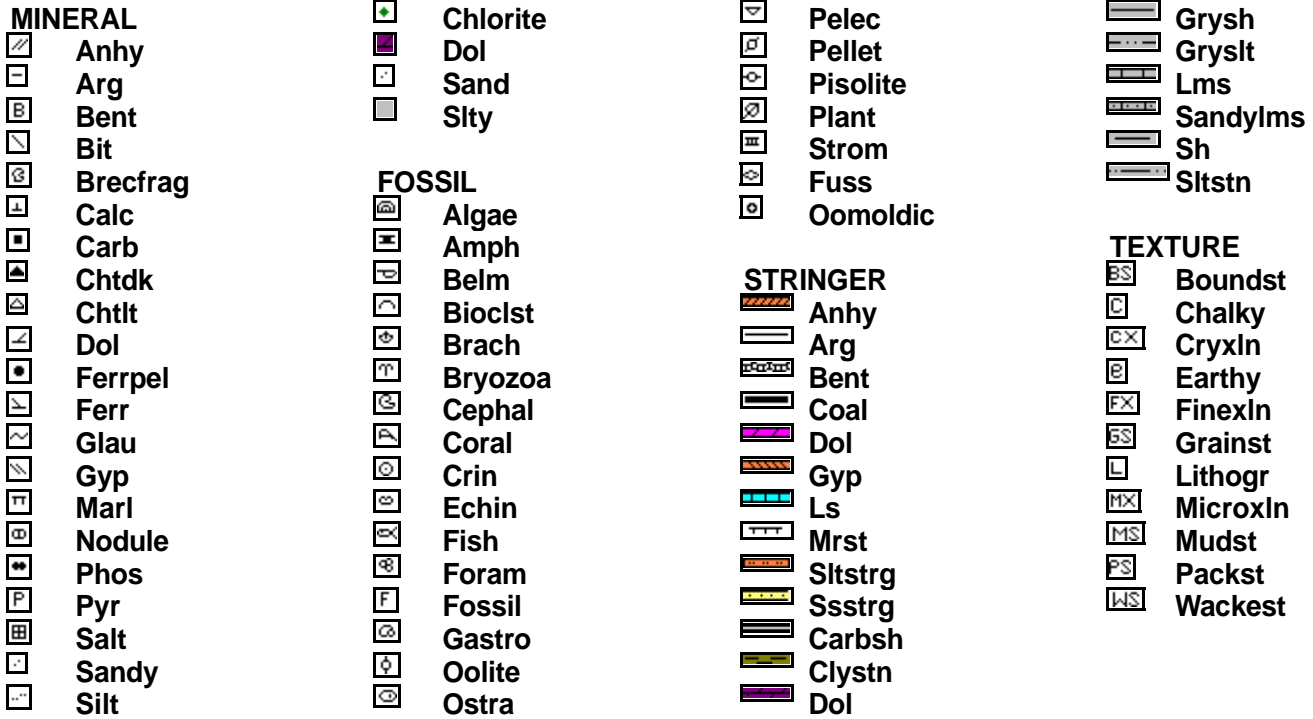
Alex Ordonez, Morning

Ron Burns, Relief

### ROCK TYPES



### ACCESSORIES



7 am Progress:  
 May 18, 2011 MIRT  
 May 19, 2011 WOC, plug down 1:45 am  
 May 20, 2011 Drilling at 1550'  
 May 21, 2011 Drilling at 2380'  
 May 22, 2011 Drilling at 3063'  
 May 23, 2011 Drilling at 3652'  
 May 24, 2011 Drilling at 4215'  
 May 25, 2011 Short trip at 4614'  
 May 26, 2011 Drilling at 4895'  
 May 27, 2011 Drilling at 5184'  
 May 28, 2011 TOOH for logs at 5315'

E-Log Tops:  
 Herington 1862 (-457)  
 Onaga 2713 (-1308)  
 Wabaunsee 2775 (-1370)  
 LeCompton 3554 (-2149)  
 Kanwaka 3574 (-2169)  
 Elgin Sand 3643 (-2238)  
 Heebner 3777 (-2372)  
 Toronto 3787 (-2382)  
 Douglas Group 3812 (-2407)  
 Douglas Shale 3879 (-2474)  
 Haskell 4202 (-2797)  
 Quindaro 4294 (-2889)  
 Kansas City 'F' 4315 (-2910)  
 Kansas City 'Iola' 4342 (-2937)  
 Dennis 4421 (-3016)  
 Stark 4463 (-3058)  
 Swope 4473 (-3068)  
 Hushpuckney 4493 (-3088)  
 Hertha 4510 (-3105)  
 B/Kansas City 4543 (-3138)  
 Pawnee 4642 (-3237)  
 Cherokee Grp 4686 (-3281)  
 Cherokee Sand 4712 (-3307)  
 Mississippi 4719 (-3314)  
 C3 4730 (-3325)  
 C2A 4763 (-3358)  
 C2 4795 (-3390)  
 C1 4893 (-3488)  
 Osage 4927 (-3522)  
 Northview Shale 4942 (-3537)  
 Compton 4945 (-3540)  
 Kinderhook 4955 (-3550)  
 Woodford 5034 (-3629)  
 Viola 5064 (-3659)  
 Simpson Group 5201 (-3796)  
 Wilcox 5232 (-3827)

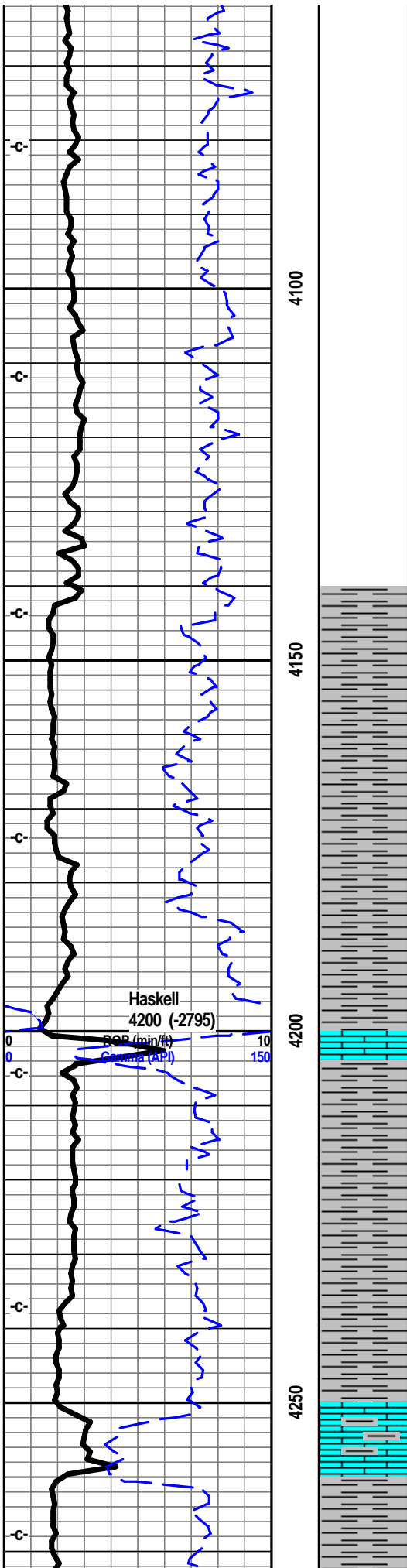
vis. 50 wt. 9.2

vis. 50 wt. 9.1

vis. 53 wt. 9.2

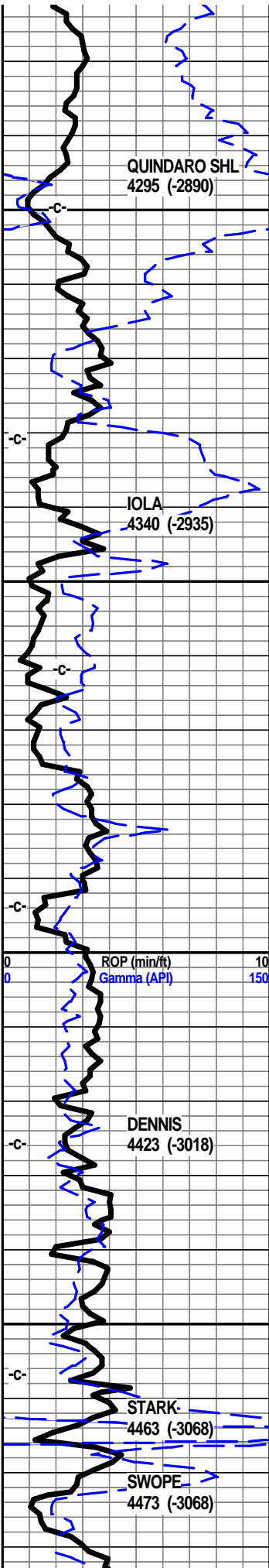
7 am 4225'  
 Tuesday  
 May 24, 2011

vis. 52 wt. 9.1

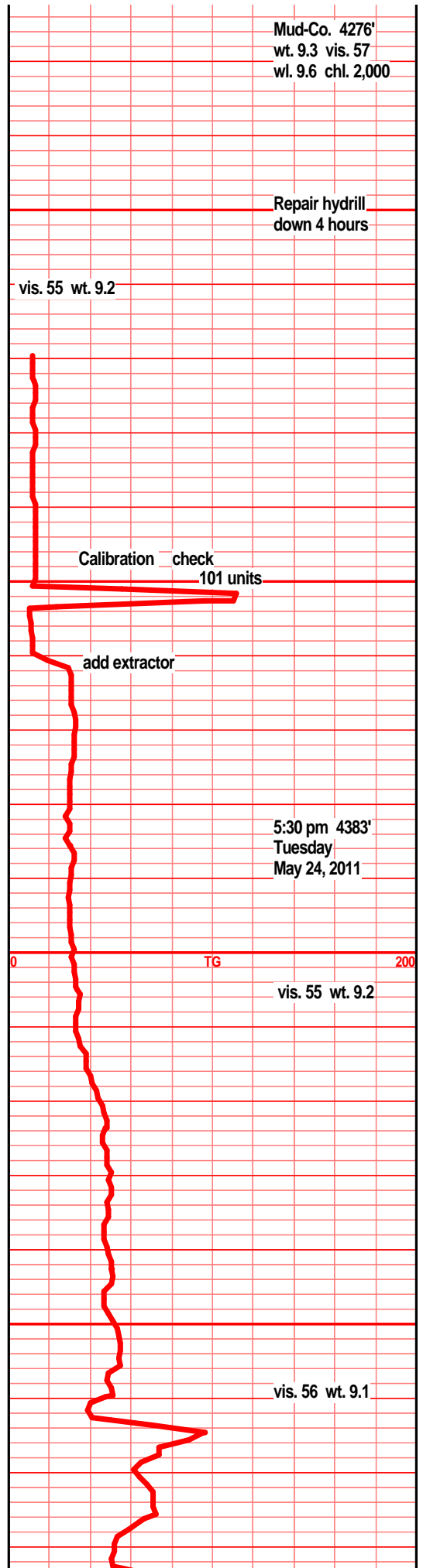
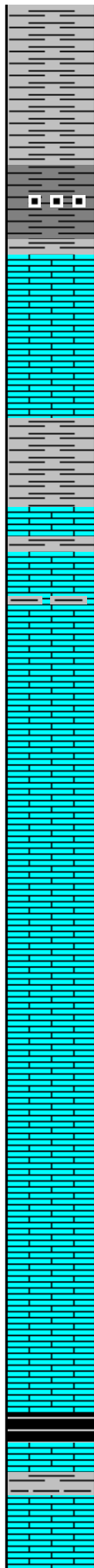


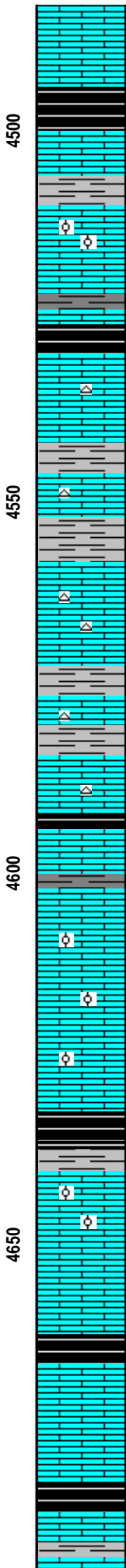
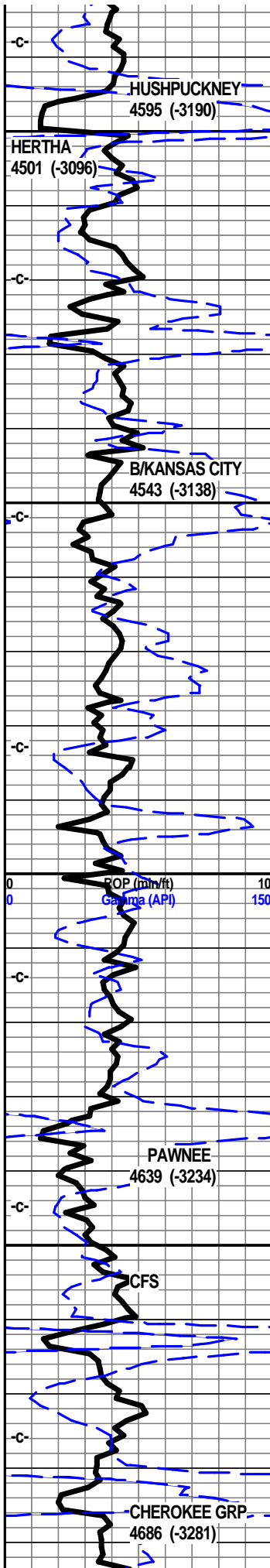
WILCOX 5202 (-3027)  
 McLish Shale 5272 (-3867)  
 LTD 5316 (-3911)

Oil & Gas Show Legend  
 Gas  
 ● Even Stain/Saturation  
 ○ Spotted Stain/Saturation  
 ○ Questionable  
 □ Dead/Gilsonitic



4300  
4350  
4400  
4450





lst tan buff f xln blk ang sub chlky foss frags, mslty dns hrd, micro foss frags, calc xln fill

shl drk gry/blk, blk carb, wxy grsy, abun gas bubs

shl gry, med gry calc, lst crm lt gry tan f xln blk ang sub chlky, foss frags, foss ool,

lst crm tan buff f xln blk ang sub chlky foss frags, foss ool, pelletal, calc xln fill, tr chrt tan lt brn shrp frsh

lst crm tan lt gry f vf xln dns hrd blk tr sub chlky, foss frags, arg, chrt tan lt brn shrp frsh, shl blk carb wxy grsy gas bub

lst crm buff tan f vf xln gran blk sub chlky tr foss frags, chrt, chrt wht shrp frsh

shl gry calc, silty gritty in prt, lst tan lt gry f vf xln dns hrd blk ang arg, tr micro foss frags, chrt tan wht shrp frsh

shls gry lt green brn silty gritty, lst tan brn f vf xln gran dns hrd arg silty, tr foss frags

shl blue/gry/green silty calc, lst tan buff lt gry f vf xln dns hrd blk ang arg silty, sub chlky tr foss frags

shls aa, lst tan buff lt brn in prt, f vf xln blk ang sub chlky in prt, calc fill, foss fras, tr micro ool, chrt tan lt brn shrp frsh ang opa

lst tan buff lt brn f xln blk ang mslty dns hrd, tr sub chlky, foss frags, micro foss frags, calc fill, tr gry blk shl, carb

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

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

lst buff crm tan f vf xln dns, hrd, blk, tr sub chlky, foss frags, micro ool, calc xln fill,

shl drk gry blk, blk carb, shl med gry calc, lst gry tan vf xln gran arg silty

lst crm tan buff f vf xln dns hrd blk ang, sub chlky, micro foss frags/ool, calc xln fill, tr gas bub, nodor, nsfo

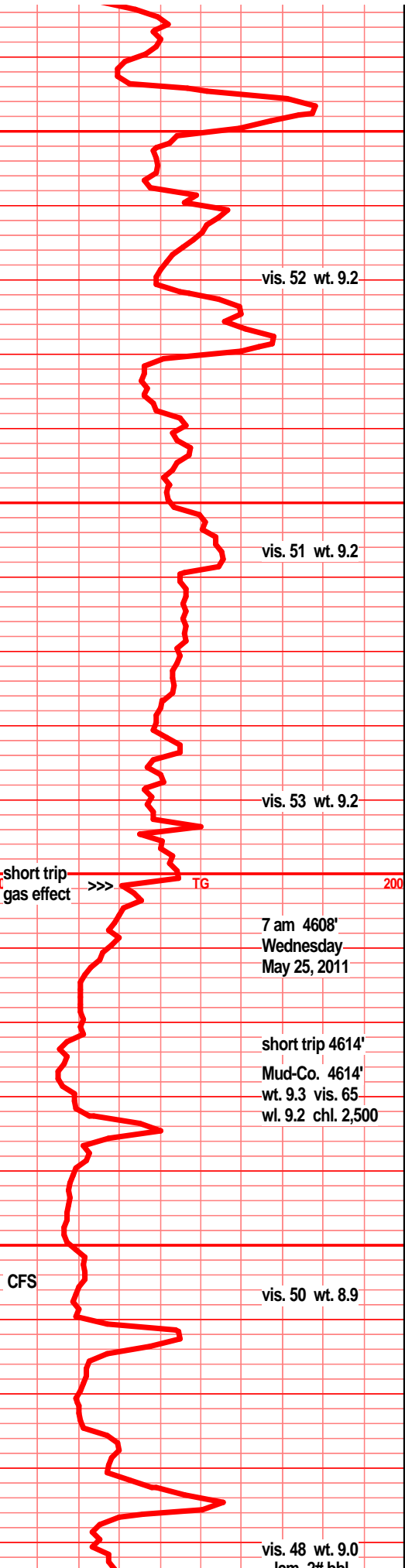
lst crm buff tan f vf xln hrd blk ang, calc xln fill, tr sub chlky, foss frag, micro ool,

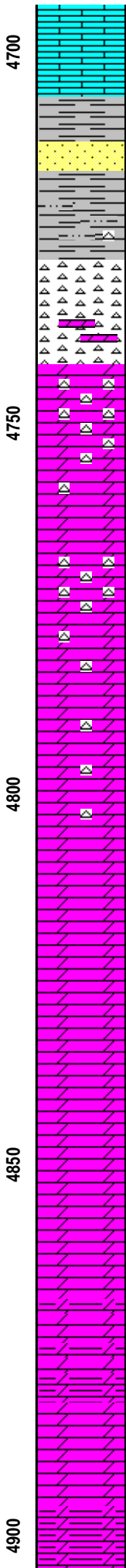
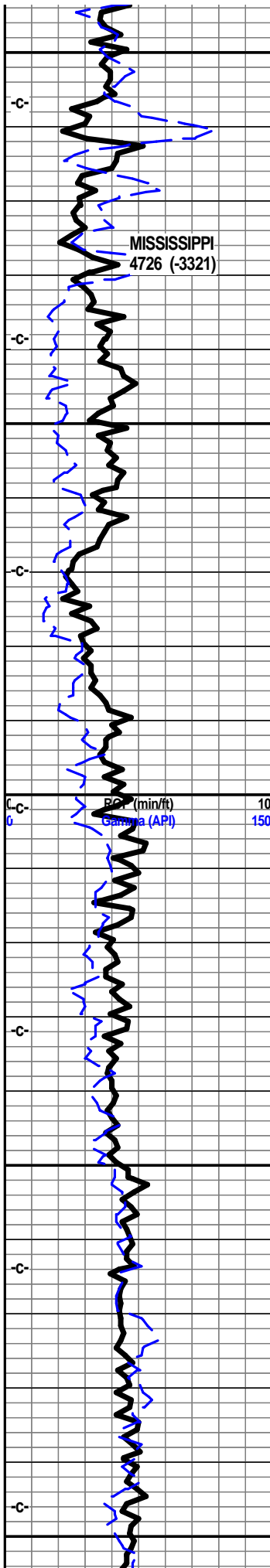
shl drk gry blk, blk carb wxy blk pcs, lst crm buff tan f vf xln blk dns hrd sub chlky foss frags

lst crm tan lt gry f vf xln dns hrd blk, foss frags micro frags, tr sub chlky, calc xln fill

shl drk gry, gry/blk, blk carb, lst tan lt gry/gry f vf xln dns hrd blk, calc xln fill, tr sub chlky, tr silty, arg

lst crm tan lt gry f vf xln dns hrd blk dns arg





lst gry tan lt gry f vf xln dns hrd blkly dns arg,  
silty, gritty, tr foss frags, shl gry med gry gritty  
calc

lst crm drk tan/gry f vf xln dns hrd blkly tr sub  
chlkly calc xln fill tr foss frags

sst drk tan brn clstrs vf grnd ang/sub ang grns,  
w/srtd, w/cem, mstly hrd blkly ang clstrs, limy  
calc in prt, tr glau, sli odor, gas bubs, filmy SFO

chrt wht, off wht, lt gry, shrp frsh, opa q blkly ang  
pcs, tr soft gran/crumbly in prt, tr brn stain,  
SSFO, tr gas bubs, faint odor

chrt wht lt gry off wht, shrp, frsh, opa q, transl, tr  
frac por, tr pp/moldic weath text por, blk stain,  
gas bubs, dolo, chrtly dolo tan lt brn f vf xln dns  
blkly hrd ang pcs, tr pp/inter xln por, lt tan/brn  
stain, gas bubs, VSSFO vry faint odor in all

dolo tan lt gry, green tint, f vf xln dns, hrd, fnly  
sucr text, glau, sli pp por, sli inter xln por,  
spotted brn stain, tr gas bubs, odor? lt gry green  
vf xln glau dolo, tite blkly hrd ang pcs NS

chrt tan lt gry shrp frsh opa q blkly, tr vis frac por,  
tr weath edge text, mstly frsh, dolo tan/gry green  
tint, vf xln dns hrd blkly glau, tr inter xln por, tr  
chrtly, tan/brn stain, gas bubs, fair odor, nsfo

dolo crm tan lt gry/tan f vf xln dns hrd blkly ang tr  
fnly sucr text, mstly blkly dns hrd, glau, chrt wht  
shrp frsh opa q transl, tr drk tan stain, odor?

dolo crm tan /tgry vf xln blkly hrd dns, glau, tr  
gritty/gran, tr fnly sucr text, mstly dns hrd

dolo crm tan lt gry/tan vf xn gran blkly dns, hrd, tr  
silic text, tr glau,

dolo tam lt gry f vf xln blkly dns ang hrd, tr silic  
text, incr silty text, gritty gran n prt

dolo tan gry, incr gry w/depth, f vf xln blkly dns  
incr arg, silty, gritty gran

dolo silty dolo, gry med gry f vf xln gran gritty  
silty, arg, tr silic text,

dolo silty dolo gry med drk gry, calc in prt, f vf  
xln blkly dns hrd arg, silty, gritty silic text,

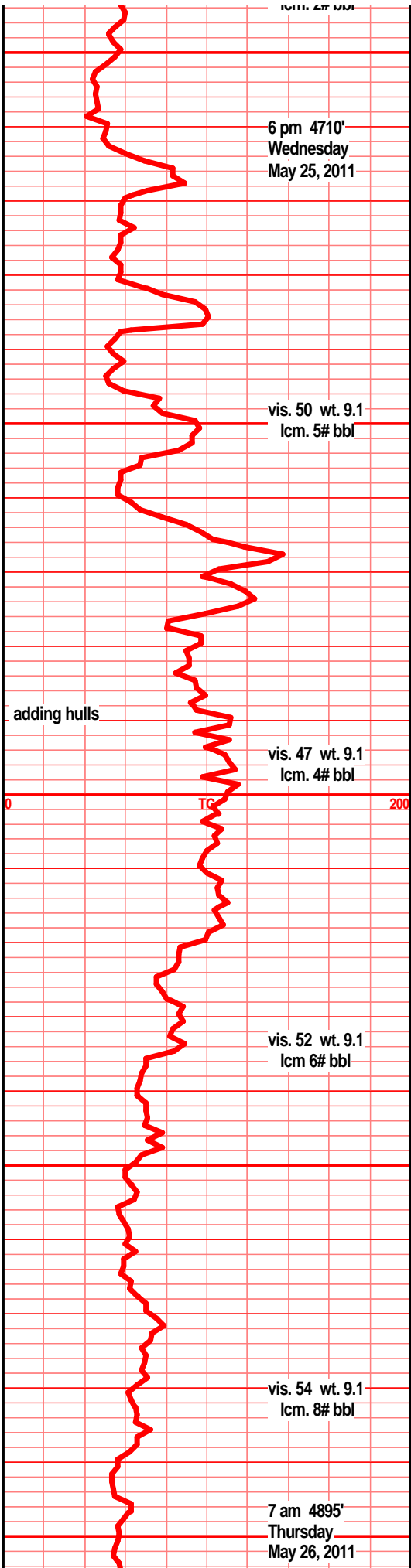
dolo, siltstn mdstn, drk gry med gry f vf xn gran  
gritty silty arg tr silic text, dns hrd

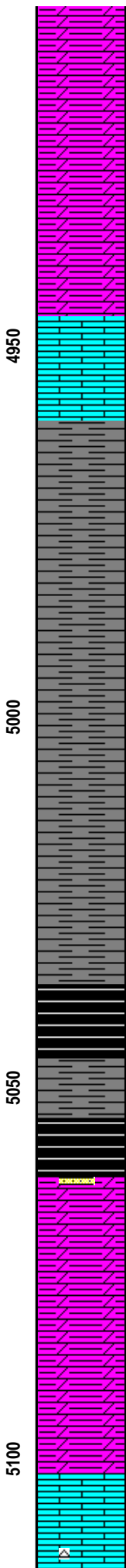
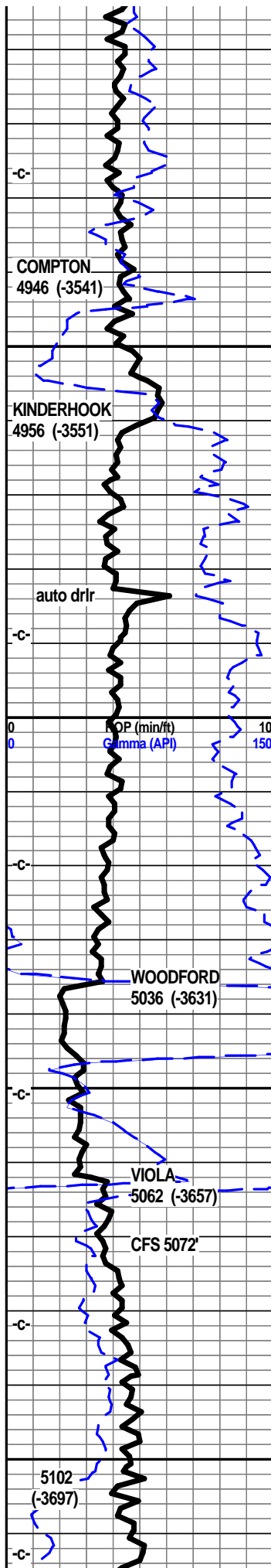
dolo silty dolo, med gry/dr k gry silty gritty, dns  
hrd arg,

dolo, silty shly dolo, med gry/dr k gry, f vf xln  
gran gritty silty shlky, blkly dns hrd arg

dolo shly dolo, drk gry f vf xln dns hrd blkly gritty  
gran, silty

dolo drk gry f vf xln gritty silty, shly, gran arg,  
dolo shls, silts, mudstone





dolo silty dolo, f vf xln gritty, gran, arg silty calc in prt, mdstns, silty gritty

dolo silty dolo, mdstn, silty gritty arg calc in prt, dolo off wht lt gry vf xln gritty gran, tr chrt wht lt gry shrp frsh opa

dolo silty shly dolo, f vf xln gran gritty silty, blkly flky pcs, arg

dolo med/drk gry, silty shly, gritty, gran, blkly ang flky pcs,

dolo gry med /drk gry silty, gritty, gran arg, blkly dns hrd pcs

lst wht off wht f sli med xln blkly ang flky pcs, tr foss frags, tr foss ool, pelletal, tr sub chlky text, tr chrt wht opa frsh

shl drk gry blk, platy, bedded, silty, gritty,

shl drk gry, blk, blk brn tint, silty gritty, bedded, tr pyritic

shl drk gry blk, brn blk tint, silty, gritty, tr gas bubs, pyritic

shl drk brn/blk, drk green/blk silty gritty tr gas bubs

shl drk gry/blk, drk brn/blk, gritty silty

shl gry drk gry blk, drk brn blk silty gritty pyritic in prt,

shl drk gry/blk, drk brn/blk, silty, gritty bedded, pyritic, tr gas bubs

shl blk, reddish drk brn/blk, blkly, ang, grsy wxy pcs, carb, abun gas bubs, tr silty gritty

shl drk gry blk, blk carb, drk reddish brn/blk, carb gritty gran grsy wxy, abun gas bubs

shl reddish brn/blk, gritty gran, pyritic, blk carb wxy grsy soft pcs, abun gas bubs, 3-4 clstrs sst, brn blk clstrs, f sli med grns, ang grns, prly srtl, sub fria, tite hrd blkly clstrs, hvy pyr/min fill, clay fill, tr grsy blk stain, nodor, dolo, shly dolo tan gry soft gran gritty mushy, tr snd grn inclu, NS

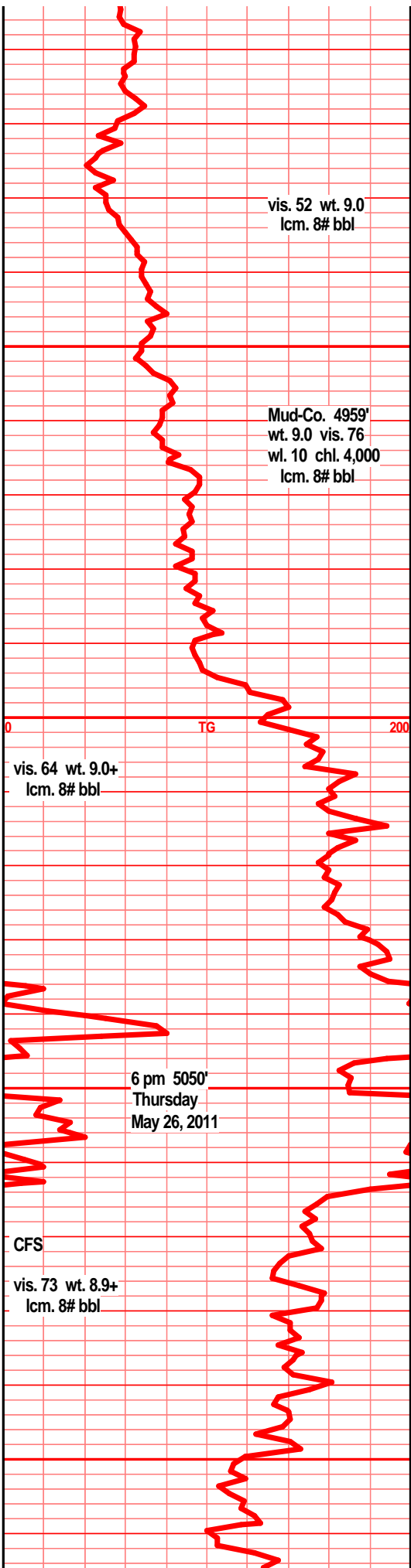
dolo shly dolo, crm tan lt gry soft gran gritty, tr sndy

dolo silty dolo, shly, arg gritty soft, gran, lst wht crm f xln bky, ang sli chlky pyritic, foss?

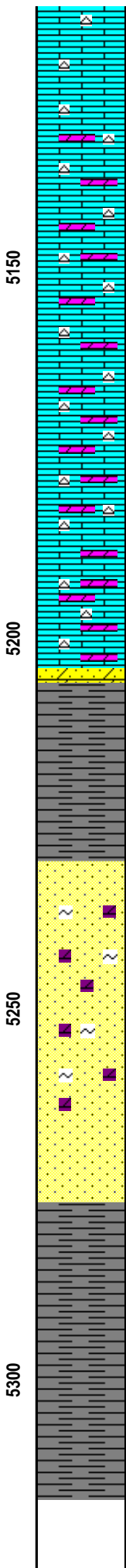
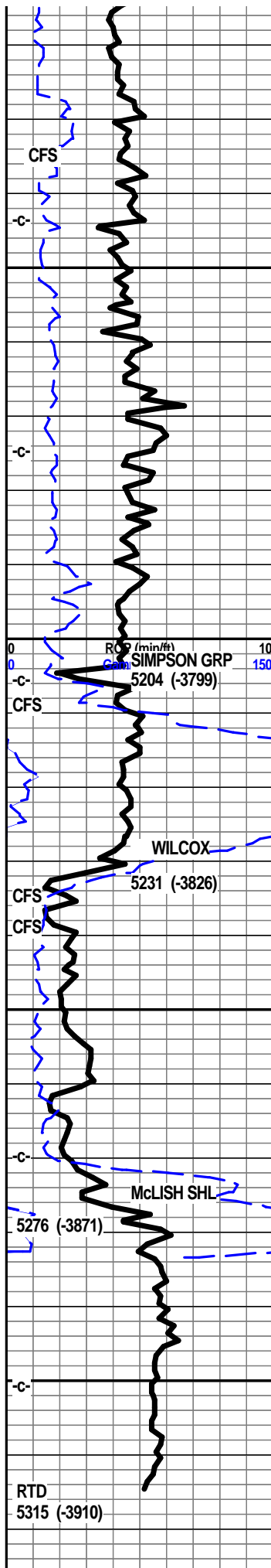
dolo shly silty dolo, tan gry soft mushy, gran, gritty, spls wsh gry/milky

dolo shly silty dolo, tan gry soft gran gritty, mushy

lst wth off wht tr lt gry tint, f sli med xln blkly flky,







tr sub chky, tr pyritic, tr foss, sli inter xln por, mstly hrd dns

lst wht off wht, gry wht mott, f med xln blkly ang flky pcs, pyritic, inter xln por, tr sub chky, tr foss, pelletal, lst wht marl, soft mushy chky, chrt gry tan shrp frsh opa pyritic

lst wht tan, orr wht gry mott f sli med xln, blkly ang flky sub chky tr foss, chrt wht opa, incr dolo dull tan f vf xln dns hrd blkly chrtly

lst off wht lt gry gry mott f sli med xln flky, blkly, ang, sub chky, pyritic, tr foss frags, gd inter xln por, inrc dolo, tan dull tan f xln gran gritty chrtly, chrt tan shrp frsh

lst off wht lt gry mott f sli med xln, flky blkly sub chky foss frags, inter xln por, pyritic, dolo tan lt brn f xln gran dns gritty chky chrtly, chrt dull tan shrp frsh

lst dolo in prt, f med xln gran blkly sub chky, tr foss frags chrtly, chrt dull tan shrp frsh foss, opa, transl,

lst dolo in mst, f sli med xln dns hrd blkly, ang, tr sub chky, tr foss, chrtly, chrt dull tan shrp frsh foss opa

lst dol aa, dolo tan brn f vf xln gran, sli suc text, sndy, gritty soft, sst/dolo sst tan brn f grnd, ang grns, silic cem, blkly dns tr gas bubs, sli stain, nsfo, nodor

shl drk gry, gry/green, teal green, silty, wxy grsy tr pyritic, sndy, gritty

shl gry green teal green silty wxy grsy gritty sndy, snd grn inclu

sst off wht clr clstrs, f grnd sub rded/rded grns w/srtd, prly cem, sub fria, NS, sst tan crm clstrs, dolo in prt, f grnd sub ang grns, w/srtd, fria, inter grn por, tr gas bubs, grsy stain, nodor

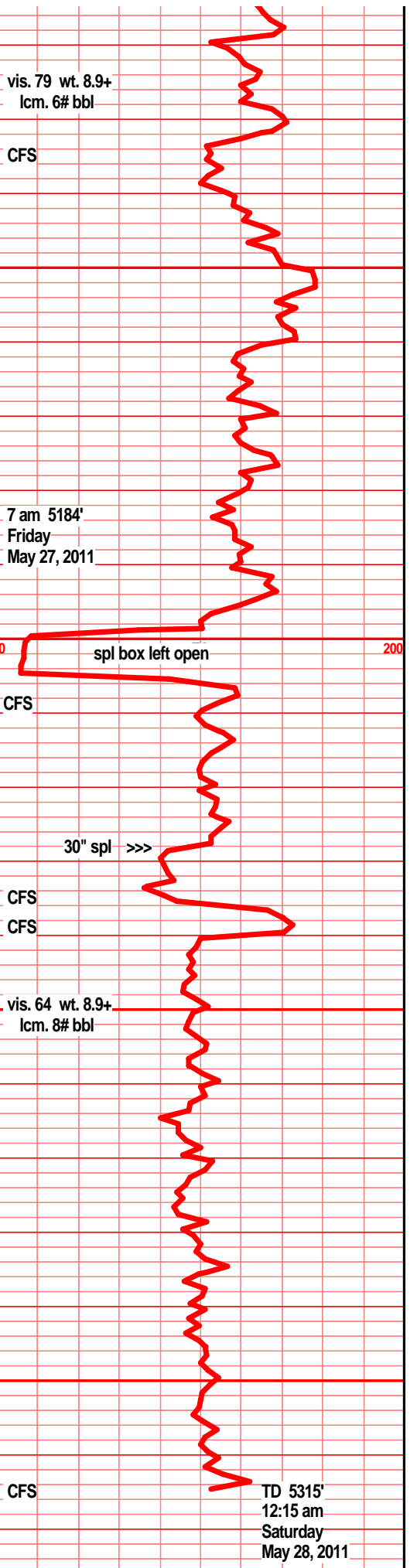
sst clr lt gry clstrs f grnd sub ang, sub rded grns, prly cem, silic cem, w/srtd, fria, soft, gran, tr glau tr min fill, tr pyritic in prt, sst tan lt brn f grnd sub rded grns, dolo/silic fill, dolo text in prt, sub fria, tr min fill, inter grn por, abun loose sd grns in spl tray

sst off wht clr clstrs, f grnd sub rded, w/srtd, prly cem, fria, silic cem, silic fill, min fill, tr glau, sst clr tan drk tan clstrs, f grnd, sub rded/rded grns, w/srtd, prly cem, silic cem, tr min fill, tr pyritic, abun loose clr rded snd grns in spl tray

shl gry, drk gry green, teal green, wxy grsy gritty, snd grn inclu, pyritic

shl gry drk gry/green, teal green, wxy grsy, gritty, pyritic, snd grn inclu

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



TD 5315'  
12:15 am  
Saturday  
May 28, 2011

