



**Woolsey Operating Company, LLC**

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

Measured Depth Log

Well Name: Weckworth #3

Location: Section 9 - Township 35 South - Range 12 West

License Number: 15-007-23720-0000

Region: Barber County, KS

Spud Date: June 15, 2011

Drilling Completed:

Surface Coordinates: 990' FSL, 1980' FWL or C N 1/2 SE SW

Field: Hardtner

Bottom Hole Coordinates: Verticle

Ground Elevation (ft): 1409'

K.B. Elevation (ft): 1419'

Logged Interval (ft): 4000'

To:

Total Depth (ft):

Formation: Kansas City Group ---> Simpson Group

Type of Drilling Fluid: Chemical Mud Displaced at 3400'

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://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 8:15 pm on 6/15/2011, set 6 joints new 10 3/4" X 32.75#/ft casing at 220' KB (tally 217') with 200 sx Class A, 2% gel, 3% cc. Cement did circulate. Plug down 2:45 am on 6/16/2011.

Production Casing:

Deviation Surveys: 1/2 at 235', 1/2 at 1209', 1/2 at 1709', 1/4 at 2208', 1/4 at 2710, 1 at 3212', 1/4 at 3711, 1/4 at 4237, 1/2 at 4915',

Pipe Strap @ 4915'. Strap: 4922.64', Board: 4923.45'. Strap .81' short, no corrections were made to the board.

Duke Drilling Rig # 10 Bit Record:

#1 14 3/4" HTC RR in at 0', out at 235'. 235' in 2.5 hours

#2 7 7/8" Varel HE-29 in at 235' out at 4915'. 4680' in 119 3/4 hours. Average 39' per hour.

#3 7 7/8" Varel HE-21 in at 4915' out at

Gas Detector: Woolsey Operating Co. Gas Trailer #2

Mud System: Mud-Co. Brad Bortz, Engineer

DSTs: Trilobite Testing, Leal Cason, Tester

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

## DSTs

DST #1 Mississippi, 4807'-4915'. 30"-60"-60"-120", SB BOB in 45 seconds into IFP, GTS 2 minutes into FFP. Rec: 3990' GIP, 847' Gassy Oil (5% Gas, 95% Oil). 32 gravity. IHP 2403, IFP 142-170, ISIP 1660, FFP 172-306, FSIP 1615, FHP 2351. BHT 130 degrees.

DST #2 Simpson Wilcox Sand, 5380'-5410', 30"-60"-60"-90", Fair 12" blow both flow periods. Rec: 410' GIP, 60' SOCWM (2%O, 35%W, 63%M), 95' MW (25%M, 75%W), 190' MW (10%M,90%W), Chlorides: 110,000 ppm. Rw .75 at 100 degrees. IHP 2770, IFP 108-174, ISIP 2230, FFP 186-268, FSIP 2239, FHP 2685. BHT 141 degrees.

## CREWS

Joe Livingston, Tool Pusher

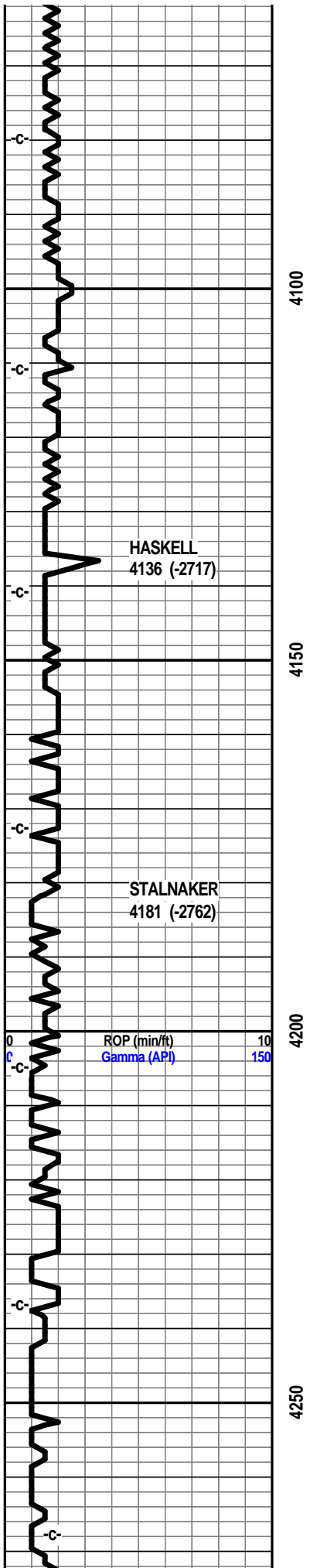
Scott Edwards, Daylights

Colby Crawford, Evening

Alex Ordonez, Morning

Ron Burns, Relief





**7 am Progress:**

- June 15, 2011 MIRT/Spud 8:15 pm
- June 16, 2011 WOC, plug down 2:45 am
- June 17, 2011 Drilling at 1350'
- June 18, 2011 Drilling at 2237'
- June 19, 2011 Drilling at 2888'
- June 20, 2011 Drilling at 3498'
- June 21, 2011 Drilling at 4120'
- June 22, 2011 Drilling at 4672'
- June 23, 2011 DST #1 at 4915'
- June 24, 2011 Drilling at 5111'
- June 25, 2011 CFS at 5410'
- June 26, 2011
- June 27, 2011
- June 28, 2011
- June 29, 2011
- June 30, 2011

7 am 4120'  
Tuesday  
June 21, 2011

**E-Log Tops:**

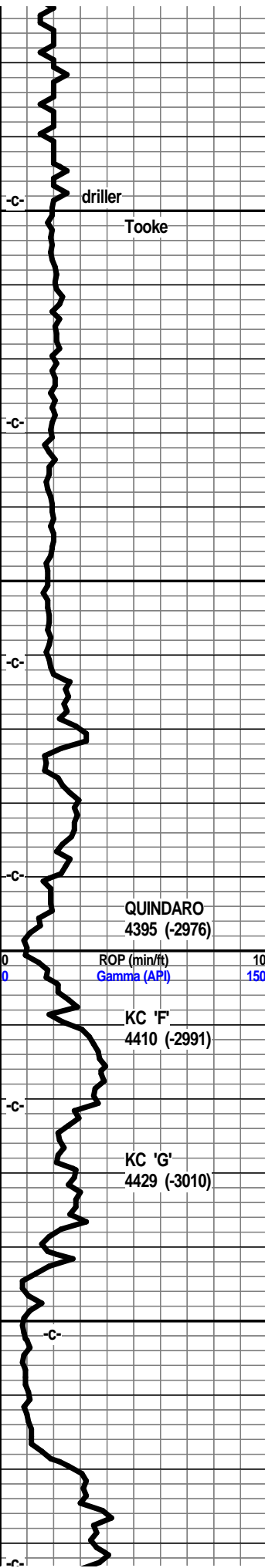
- Herington
- Onaga
- Wabaunsee
- Stotler
- Topeka
- LeCompton
- Kanwaka
- Elgin Sand
- Heebner
- Toronto
- Douglas Group
- Douglas Shale
- Ireland Sand
- Haskell
- Quindaro Shale
- Kansas City 'F'
- Kansas City 'G'
- Kansas City 'H'
- Kansas City 'I'
- Stark
- Swope
- Hushpuckney
- Hertha
- B/Kansas City
- Pawnee
- Cherokee Group
- Cherokee Sand
- Mississippi
- C3
- C2A
- C2
- C1
- Osage
- Northview Shale
- Compton
- Kinderhook
- Woodford
- Misener Sand

Mud-Co. 4175'  
wt. 9.2 vis. 50  
wl. 8.8 chl. 4,000

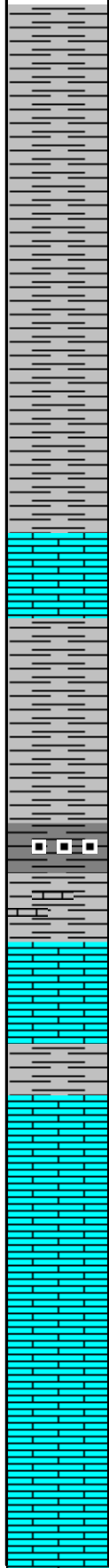
0 TG 200

wt. 9.2 vis. 50

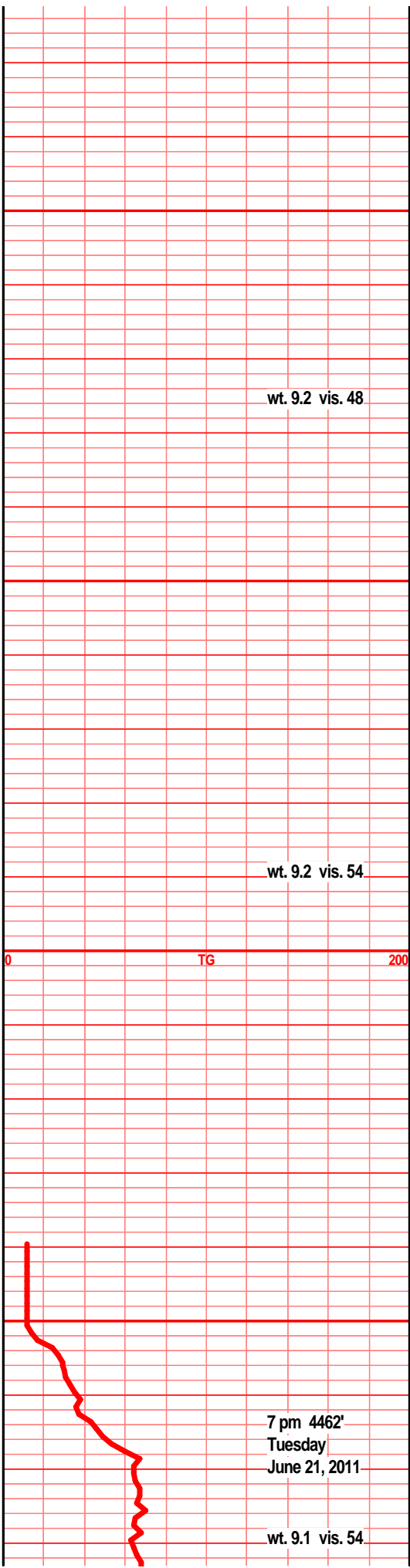
Viola  
Simpson Group  
Wilcox  
McLish Shale  
LTD

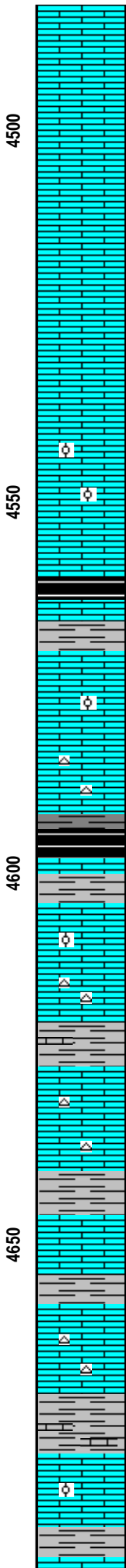
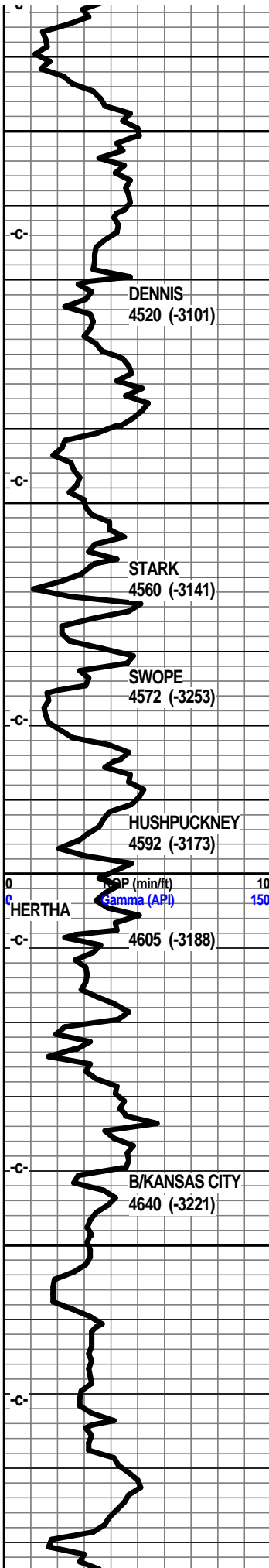


4300  
4350  
4400  
4450



Oil/Gas Show Legend  
Gas  
Even Stain/Saturation  
Spotted Stain/Saturation  
Questionable  
Dead/Gilsonitic





Ist crm buff tan f xln blk arg sub chky foss frags, calc xln fill,

Ist crm tan buff f sli med xln gran gritty sub chky, foss frags, tr foss ool/pelletal, cal xln fill

Ist crm buff tan f xln gran gritty sub chky foss frags tr foss ool, shl gry drk gry blk carb wxy grsy tr gas bubs

shl gry silty, calc, lst tan gry/tan f vf xln dns hrd blk arg, tr sub chky

Ist crm buff tan f sli med xln gran gritty sub chky foss frags, foss ool, tr pelletal, calc xln fill, tr chrt wht tan shrp frsh

Ist crm buff wht tan f xln sub chky foss frags, foss ool, pelletal, chrt wht tan shrp frsh opa, calc xln fill

shl gry, drk gry, blk carb, wxy grsy gas bubs, lst tan gry vf xln dns hrd blk arg silty, tr foss frags

Ist crm buff tan f sli med xln gran sub chky, calc xln fill, foss frags, foss ool, pelletal, tr chrt wht tan shrp frsh opa

shl gry med gry, silty calc, lst tan gry lt brn f vf xln dns hrd blk arg, silty, chrt tan gry shrp frsh opa

Ist tan lt gry tan f vf xln dn shrd blk arg tr arg, sub chky, foss frags, calc xln fill tr chrt tan lt gry shrp frsh opa

shl gry med gry tr blk, silty calc in prt, lst tan gry vf xln dns hrd blk arg, tr sub chky tr foss frags

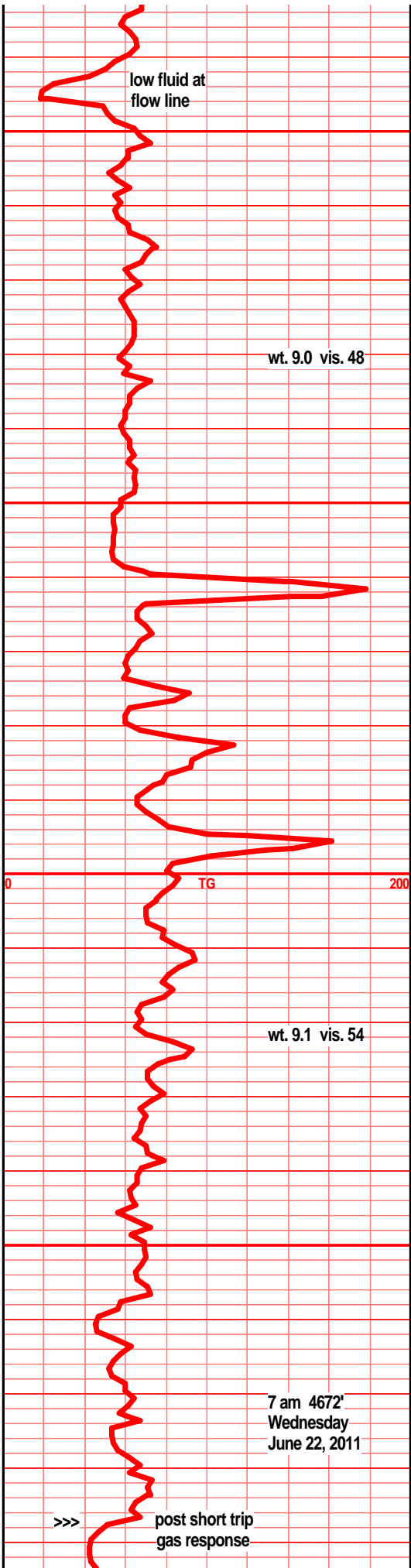
shl gry med gry silty calc, lst tan brn f vf xln dns hrd blk tr arg, sub chky, foss frags, pelletal, chrt lt gry wht shrp frsh

Ist tan brn f vf xln dn shrd blk arg, tr chky tr foss, foss frags, xln fill, chrt brn shrp frsh

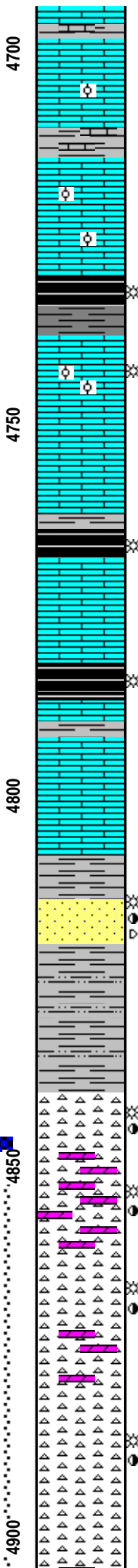
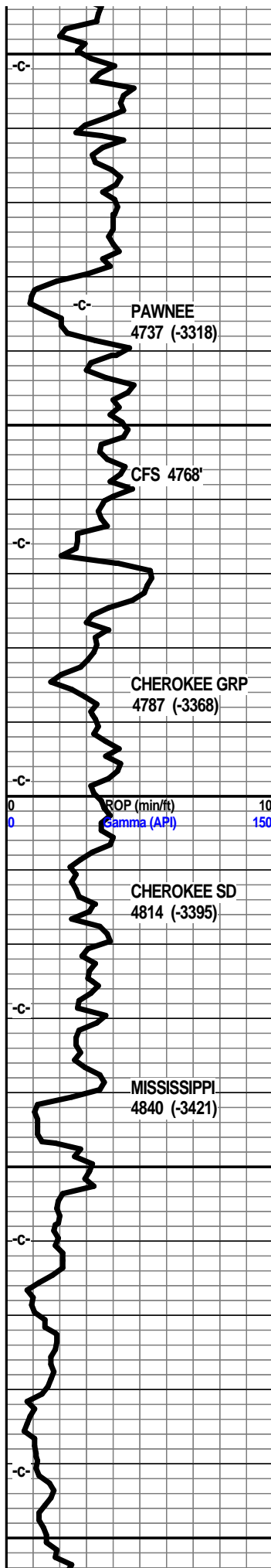
shl gry gry brn silty calc, lst tan lt brn f vf xln gran dnss hrd silty, gritty, arg

Ist buff crm f sli med xln blk flky tr sub chky foss frags, foss ool, micro foss ool, tr crsly foss/calc xln fill

shl gry calc, lst tan crm f sli med xn blk flky sub chky foss frags, micro foss ool, tr pelletal, tr crs



7 am 4672'  
Wednesday  
June 22, 2011



foss frags, xln fill

lst buff crm f xln blkly flky pcs, sub chlky, foss frags, micro foss, foss ool, tr crs foss w/calc xln fill

shl gry med gry gritty calc, lst crm buff f xln flky blkly, sub chlky, foss frags, micro foss ool, calc xln fill

lst crm tan buff f xln blkly ang, sub chlky, micro foss frags, foss ool, calc xln fill, tr foss frags/xln fill

shl gry med gry, blk, carb, wxy grsy, blkly ang pcs, abun gas bubs

lst crm buff tan f sli med xln, blkly flky ang pcs, tr sub chlky, foss frags, foss ool, inter xln por, tr foss mold por, nodor, f/good live gas bubs, "bleeding" gas in spl tray, bright UV

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

shl gry med gry blk, blk carb, wxy, grsy, lst tan brn vf xln dns hrd blkly ang arg,

lst buff tan lt brn f vf xln blkly dns hrd ang, foss frags, micro ool, calc xln fill, tr sub chlky, tr mic xln hrd blkly dns

shl gry med gry green, blk carb, gas bubs, lt brn silty gritty calc, lst tan gry brn vf xln dns hrd blkly ang, arg, tr gritty, some foss frags

lst tan lt gry lt gry/brn, f vf xln dns hrd blkly arg, silty, pyritic, shl gry gry brn calc pyritic,

sst tan brn clstrs, vf grnd, sub ang grns, w/srtd, prly cem, sub fria, calc cem, soft mushy in prt, sst tan brn, wht lst inclu, calc fill, vf grnd, sub ang w/srtd w/cem, blkly ang dns hrd, drk brn stain, tr gas bubs, filmy SFO, flky dead SFO, nodor

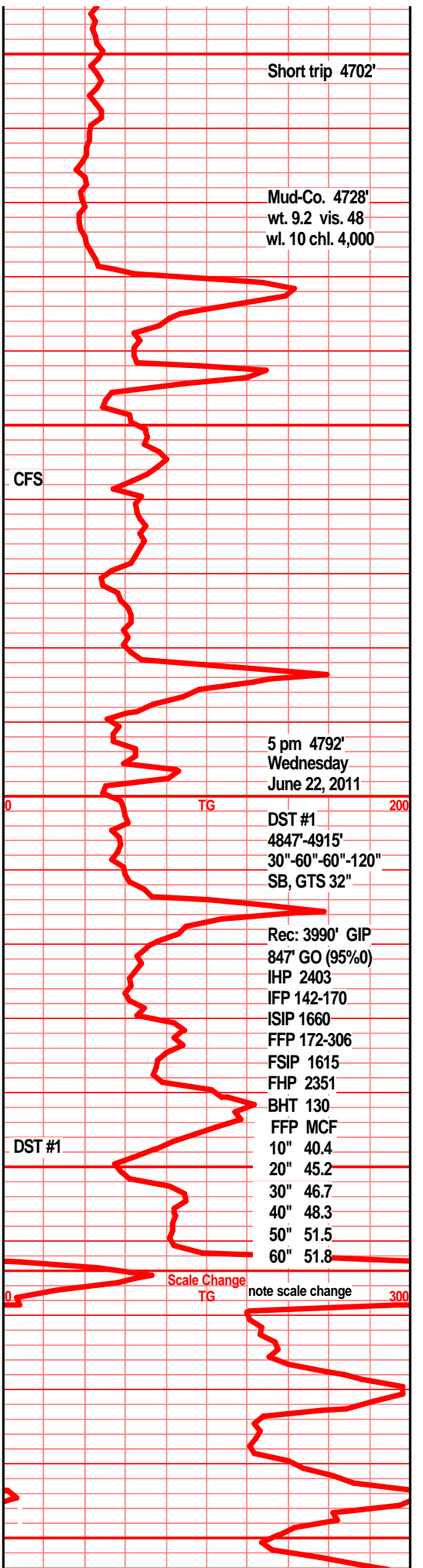
shl gry green. blue/green silty gritty sndy, pyritic, calc fill, fn grnd, sub ang grns,

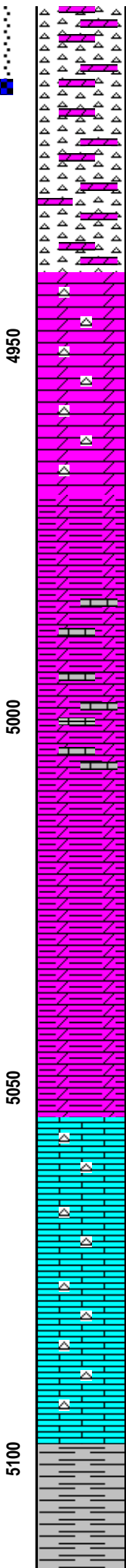
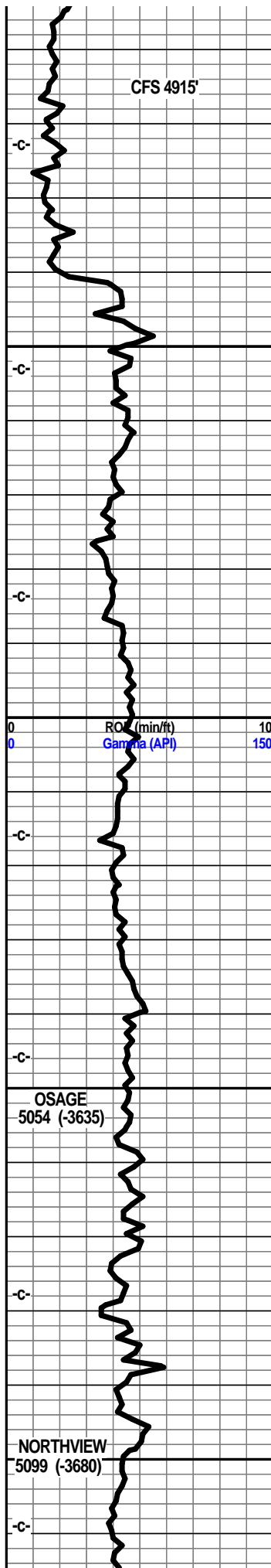
chrt wht tan lt yllw, lt orange, gry, shrp frsh opaqa, blkly, chrt wht shrp frsh, w/sli weath edge, soft, crumbly, pp/moldic, vug por, blk stain, tr gas bubs, nodor, drk brn SFO/on brk, chrt wht w/blk weath trip weath text, gd vug/moldic por, drk brn SFO, gas, nodor, tr dolo tan lt green vf grnd, blkly dns, tr chrtly

dolo wht lt blue, f vf xln dn shrd blkly, silic text, sndy, gritty, glau, chrty, chrt wht tan lt gry shrp frsh blkly, weath text, tr trip weath edge text, vug/moldic por, odor?, brn/blk SFO, lt brn SFO/brk, dull UV

chrt wht tan lt gry shrp frsh, weath trip text edge, vug/moldic por, sli odor, brn stain, brn SFO on brk, dull UV, filmy RBSFO on spl wtr, incr weath text, incr live sho w/depth

chrt tan lt gry, tan brn, weath trip weath edge text, pp, vug moldic por, brn stain, brn SFO, odor, gas bubs, dull UV, tan brn dolo w/weath text chrt inclu, vug/moldic por, brn stain, SFO, odor, gas bubs





odor, gas bubs

dolo lt gry tan, tr lt green, f vf xln blkly dns silic text, w/chrt inclu, tan brn weath trip edge, pp/moldic por, brn stain, brn SFO, odor, gas bubs, chrt aa

chrtly dolo lt gry green vf xln blkly dns silic text, tr glau, chrt wht lt gry shrp frsh, tr weath trip text edge, brn stain w/dolo and along chrt/dolo contact, pp, moldic por, odor, brn SFO gas bubs,

dolo crm tan tr lt gry/green tint vf xln blkly, ang pcs. tr sndy gritty text, chrtly in prt, chrt wht shrp frsh foss opaq, dolo edge aa, tr brn stain, tr gas bubs, nodor

spl all gry green tr red spintery shls, tr dolo crm lt tan incr med gry, tr gry green, vf xln dns hrd blkly sndy gritty text, tr chrtly, chrt w/gry dolo edge, tr stain, nsfo, nodor

dolo tan lt gry mix, vf xln gran arg silty gritty, tr silic text, shl gry med gry grai silic, pr spl, mslty gry ratty spintery shls

spintery shls drk gry, gritty silty calc, poor samples.....

dolo silty shly dolo, med gry, drk gry, calc in prt, tr silic text, f vf grd gritty gran arg, tr chrt med gry shrp frsh. spls remain poor

dolo, vf xln, silty shly, gritty gran, silic text, mstly calc mudstn, silty gritty arg, hrd blkly ang pcs,

dolo, silty calc mudstn, vf xln gran gritty, silty, tr silic text, hrd blkly platy pcs

dolo silty dolo, med/drk gry vf xln gritty gran, calc in prt, silic text, blkly ang pcs

dolo, silty dolo, gry med drk gry tr calc mdstn, vf xln gran gritty arg silty dns hrd blkly pcs

dolo silty dolo, med gry drk gry tr calc mdstn vf xln gran gritty arg, dns hrd pcs tr pyritic

dolo silty dolo, drk gry med gry, calc mdstn'siltstn, gran arg gritty dns hrd

lst wht f med xln blkly ang pcs, tr crs xln, chrtly in prt, chrt wht opaq, transl, tr chlky, spls wsh wht

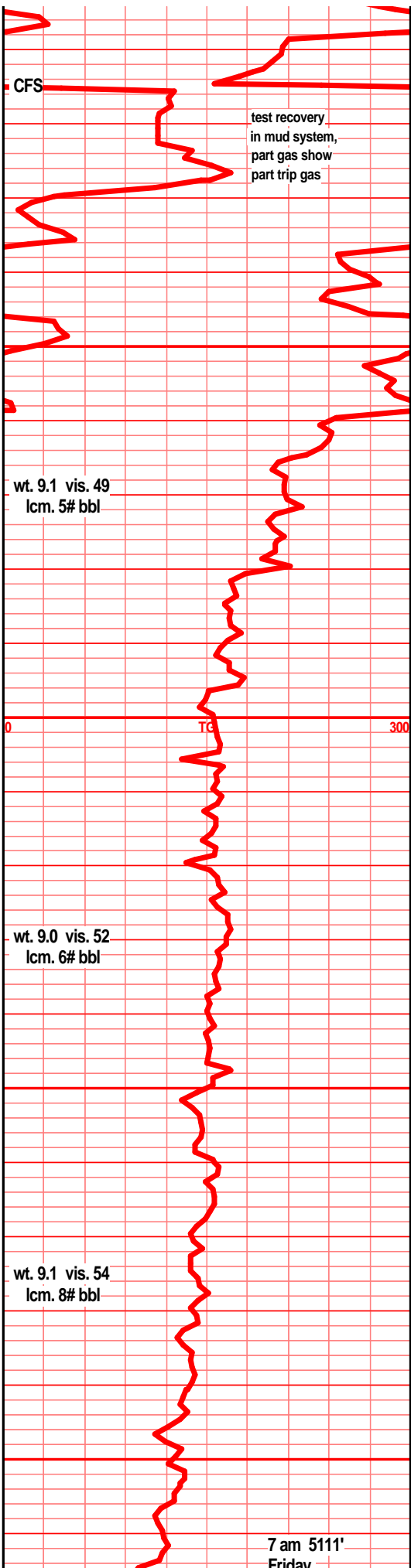
lst wht tr off wht f sli med xln blkly ang tr flky tr sub chlky, chrt in prt, chrt wht opaq, transl vit, shrp frsh

lst crm wht off wht f sli med xln blkly ang tr flky, tr sub chlky, spls wsh wht, chrtly in prt chrt wht cl, opaq vit, transl

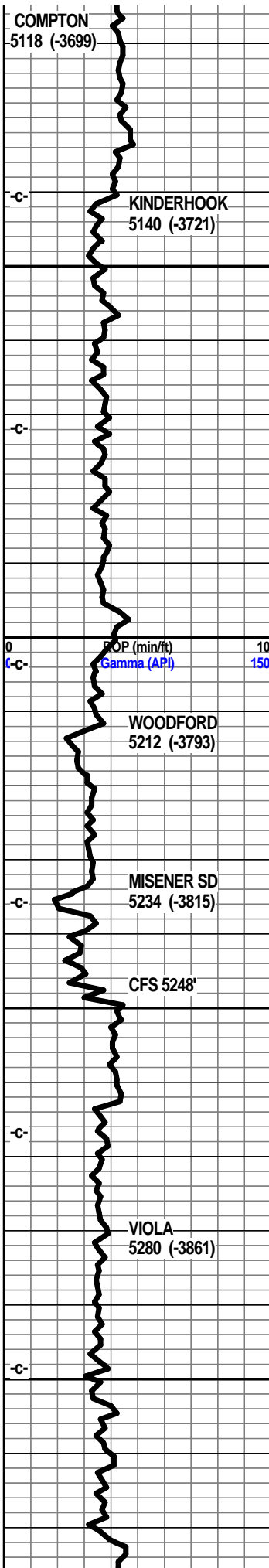
lst wht off wth tr crm, f sli med xln blkly ang flky sub chky, chrtly, chrt wht shrp frsh opaq transl, spls wsh wht

shl med gry/green, blue green, silty gritty, tr pyritic fill

shl gry, gry/blue/green silty, gritty, pyritic in prt, hrd blkly pcs







lst wht f med xln blkly flky, mstly dns hrd ang pcs, tr foss frags, micro foss in prt, tr glau

lst off wht, dull vry lt gry f vf lxn dns hrd massive, blkly, tr sub chlky, spls wsh semi wht, tr pyritic,

lst off wht, dull lt gry, f sli med xln, blkly ang tr flky, tr sub chky, pyritic, foss frags, massive in prt, tr blue green tint

shl drk blk, blkly ang pcs, bedded, pyritic

shl gry blk, drk gry blk fnly silty blkly ang pcs

shl gry, drk gry blk, reddish blk blklyang pcs, vis gas bubs

shl dkr gry blk, brn/reddish blk, fnly silty, tr pyritic, bedded, gas bubs

shl gry, dry gry, reddish blk, fnly silty

shl gry drk gry blk, reddish blk, tr gas, blkly ang pcs, fnly silty

shl blk carb, drk red/blk, platy, carb, wxy grsy, blkly ang pcs, abun gas bubs

shl drk red/brn blk, carb in prt, gritty, platy, blkly ang pcs, abun gas bubs

shl drk brn/red, gritty silty, gran, tr pyritic bedded, gas bubs, filmy SFO

sst clr semi frsted clstrs, f grnd, ang grns, f/poorly strd, f/poorly cem, silic cem, mstly fria, tr sub fria, inter grn por, tr min fill, tr gas bub?, VSSFO-lt transl SFO, brn droplets, nodor 60" spl aa, incr tite blkly clstrs, limy, clay clasts, min fill

dolo shls, drk gry, drk gry green silty gritty soft gran

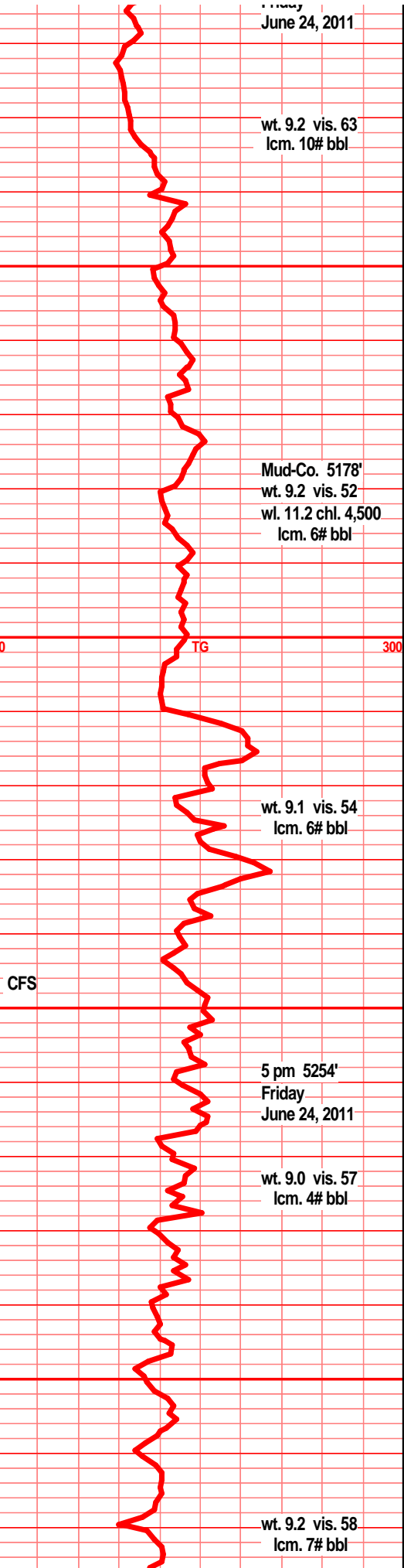
dolo shly dolo, gry med gry, drk gry/green silty gritty, soft, silic text in prt pyritic, mstly dns hrd ang

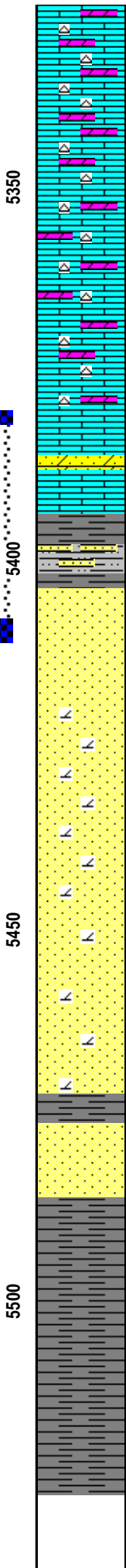
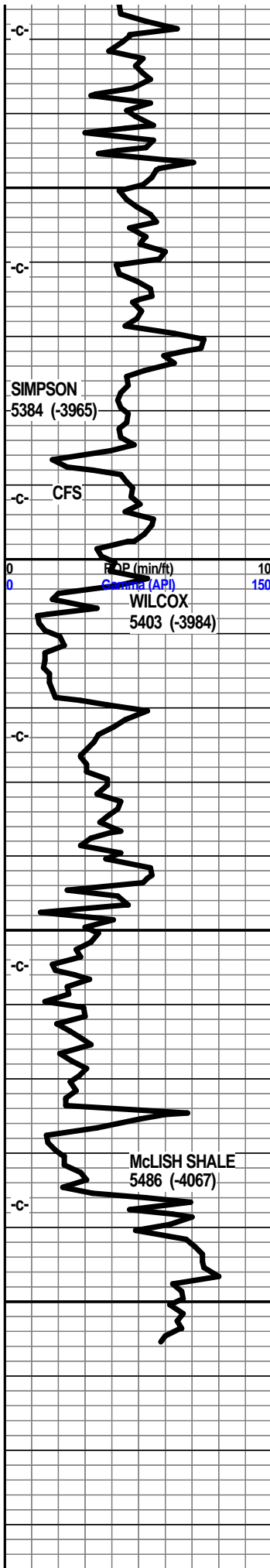
dolo shls, gry, gry brn f vf xln gran soft gritty, blkly ang pcs, tr pyritic,

lst wht off wht, off wht lt gry mott, f med xln, flky, blkly ang pcs, inter xln por, pyritic, tr soft sub chlky,

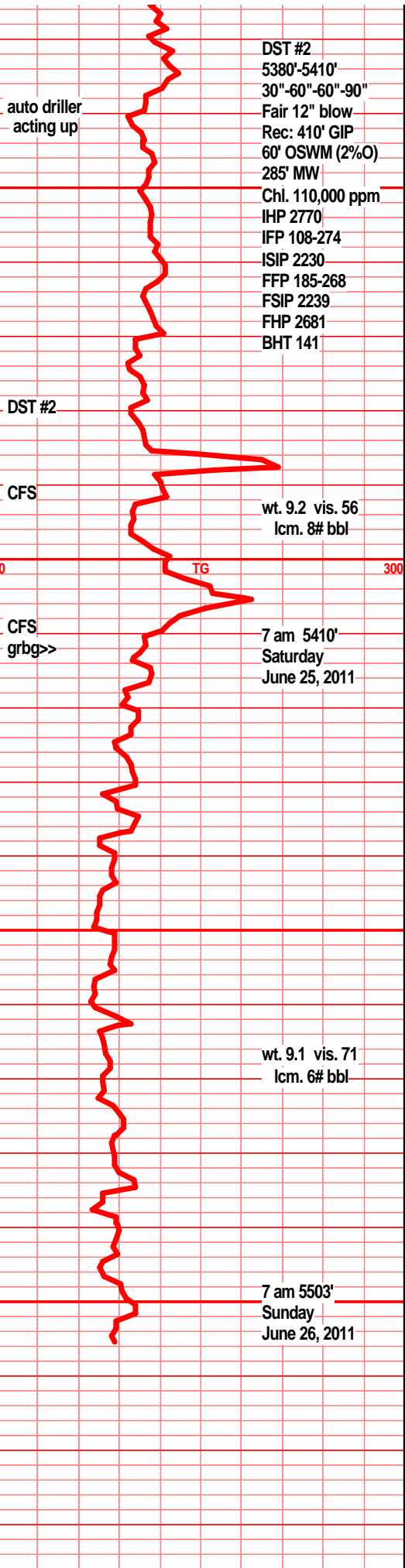
lst wht off wht, lt gry wht mott f med xln flky blkly ang sub chlky, tr foss frags, pyritic, chrt tan wht shrp frsh tr soft marl text

lst wht off wht lt gry mott f sli med xln, flky sub chlky, inter xln por, pyritic, chrt wht shrp frsh





opaq  
 Ist dolo in prt, tan lt brn f vf xln dn shr d blk ang trchly, chrt dull tan shrp frsh  
 Ist tan drk gry/tan vf xln, dns sub chly gran, dolo in prt, chrt in prt, chrt dull tan gry shrp frsh  
 Ist dolo in prt, f vf xln dull tan lt gry gran dns hrd, gritty, chrt dull gry tan shrp frsh opa  
 Ist dolo in prt tan lt brn tan gry vf xln dns hrd bky, chrt dull tan shrp frsh foss,  
 Ist dolo in prt drk tan gry vf xln dns hrd blk tr sub chly chrt tan shrp blk ang tr foss  
 Ist dolo in prt tan lt gry tan f vf xln gran sub chly, chrt dull tan shrp blk opa  
 dolo drk tan brn f vf xln, blk ang, chly, soft, tr inter xln por, sli sndy in prt, vf grnd sub rded grns, tr gas bubs, filmy SFO, sli odor/brkn  
 shl blue-green, teal green silty sndy, pyritic, snd grn inclu sst blue green f grnd prly srted, sub fria shl/clay fill  
 sst clr tan clstrs f grnd sub rded, w/srted, prly cem, v/fria, gd inter gran por, fair odor, fair SFO, lt transi SFO, fair gas bubs.  
 sst clr lt tan clstrs, f grnd sub rded grns, w/ srted, fair to pr cem, sub fria, tr calcitic cem, tr min fill, tr dolo xln fill, fair to gd inter gran por, nodor, SSFO, oil smears, RBSFO, tr gas bubs  
 sst clr tan clstrs, f grnd, sug ang/rded grns w/srted, fair/prly cem, silic cem, tr calc in prt, tr min fill, dolo xln fill, filmy SFO, brn oil smears, nodor  
 sst clr tan clstrs f grnd, sub ang/rded, w/srted, w/cem, sub fria, min fill, dolo xln fill, tr clay fill, arg, tr calc cem, blk ang hrd clstrs, abun loose snd grns in tray  
 sst wht f vf grnd, dolomitic, sub rded grns w/srted, sub fria to hrd, blk ang clstrs, min fill, pyritic fill,  
 shl gry blue gry green, teal green, sst wht tan clstrs, f grnd sub ang grns, w/cem, sub fria, ang blk clstrs, min fill, dolo xln fill, silic cem  
 shl gry teal green, slick fnly silty, pyritic  
 shl gry drk teal green slick, fnly silty, pyritic in prt, snd grain inclu



DST #2  
 5380'-5410'  
 30"-60"-60"-90"  
 Fair 12" blow  
 Rec: 410' GIP  
 60' OSWM (2%O)  
 285' MW  
 Chl. 110,000 ppm  
 IHP 2770  
 IFP 108-274  
 ISIP 2230  
 FFP 185-268  
 FSIP 2239  
 FHP 2681  
 BHT 141

wt. 9.2 vis. 56  
 lcm. 8# bbl

7 am 5410'  
 Saturday  
 June 25, 2011

wt. 9.1 vis. 71  
 lcm. 6# bbl

7 am 5503'  
 Sunday  
 June 26, 2011

