



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

Well Name: Ricke-Baier #1 H
Location: Section 31 - Township 33 South - Range 13 West
License Number: 15-007-23966-01-00 Region: Barber County, Kansas
Spud Date: November 13, 2012 Drilling Completed:
Surface Coordinates: App NW SW SE SE
450' FSL and 995' FWL

Bottom Hole Coordinates:

Ground Elevation (ft): 1879' K.B. Elevation (ft): 1886'
Logged Interval (ft): 3600' To: Total Depth (ft):
Formation: Topeka -----> Mississippi
Type of Drilling Fluid: Chemical Mud, Brine Water/Flozan

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

COMMENTS

Surface Casing: Ran 20" X 53#/ft conductor to 75' with 9 yards of grout. Ran 7 joints new 13 3/8" X 54.5#/ft casing to 317' KB with 300 sx Class A, 2% gel, 3% cc. Plug down 5:45 am on 11/22/12. Cement did circulate. Intermediate casing: ran 22 joints of new 9 5/8" X 36#/ft casing to 925' KB with 225 sx. Cement did not circulate.

Dan D Drilling Rig 11 Bit Record: 1) 17 1/2" STC RR out at 320', 2) 12 1/2" STC RR out at 954', 3) 8 3/4" RTC F-1100 PDC out at 4340',


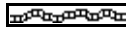
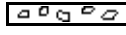











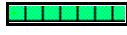
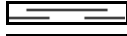







Gas Detector: Woolsey Operating Co, Gas Trailer #2
Mud System: Mud Co. Brad Bortz, Engineer

Drilling Info















































































CREWS

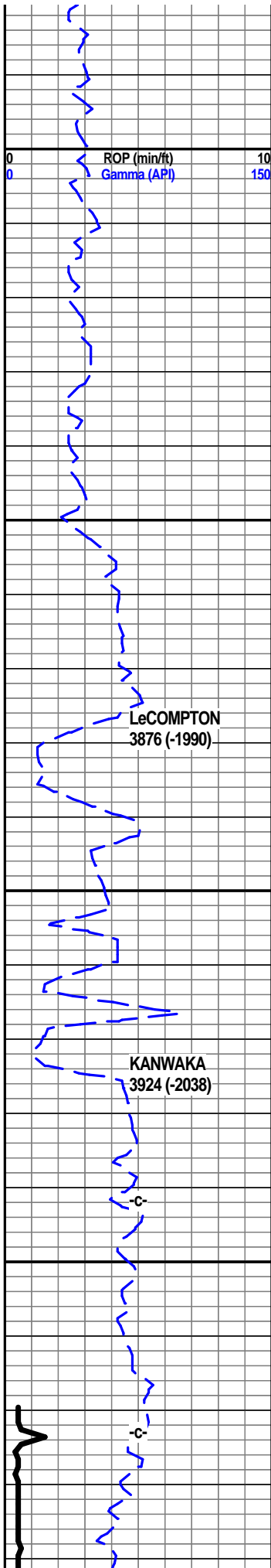
Steve Ellington-Tool Pusher, Sammy Fry-Relief Tool Pusher. Drillers: (12 hour-7 day). Johnnie Stone, David Herring, Jeffery Meyers, Terry Stark

ROCK TYPES

 Anhy  Bent  Brec  Cht  Clyst  Coal	 Congl  Sdy dolo  Shy dolo  Dol  Gyp  Sdy lmst	 Lmst  Mrlst  Salt  Shale  Sltst  Ss	 Black sh  Gry sh  Shale  Shyslstst  Sltysh
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ACCESSORIES

MINERAL  Anhy  Arg  Bent  Bit  Brecfrag  Calc  Carb  Chtdk  Chtlt  Dol  Ferrpel  Ferr  Glau  Gyp  Marl  Nodule  Phos  Pyr  Salt  Sandy  Silt	 Chlorite  Dol  Sand  Sltly FOSSIL  Algae  Amph  Belm  Bioclst  Brach  Bryozoa  Cephal  Coral  Crin  Echin  Fish  Foram  Fossil  Gastro  Oolite  Ostra	 Pelec  Pellet  Pisolite  Plant  Strom  Fuss  Oomoldic STRINGER  Anhy  Arg  Bent  Coal  Dol  Gyp  Ls  Mrst  Sltstrg  Ssstrg  Carbsh  Clystn  Dol	 Grysh  Gryslt  Lms  Sandylms  Sh  Sltstn TEXTURE  Boundst  Chalky  Cryxln  Earthy  Finexln  Grainst  Lithogr  Microxln  Mudst  Packst  Wackest
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3800

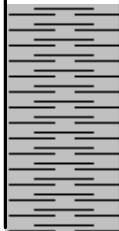
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3900

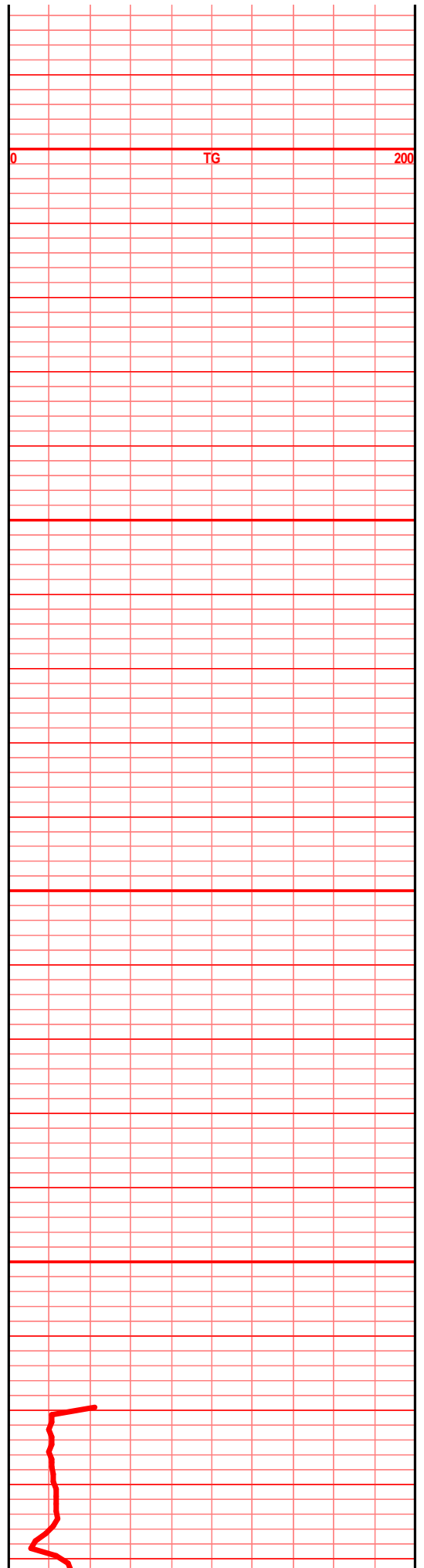
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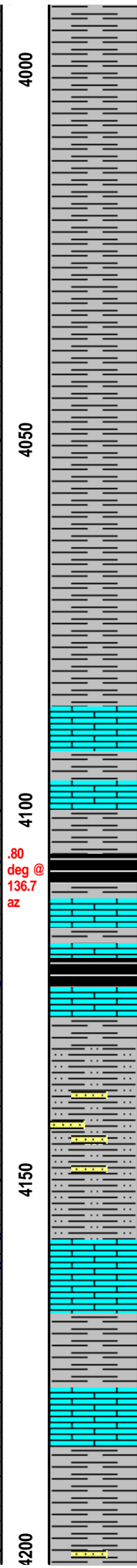
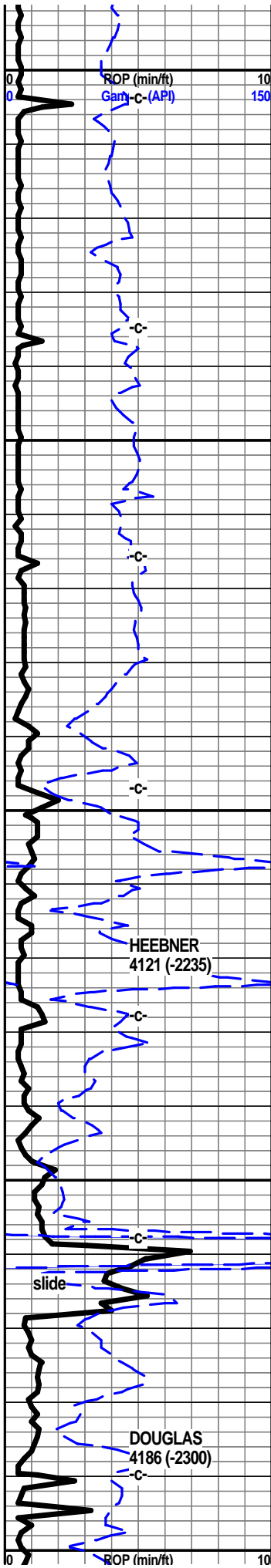
.80
deg @
145.1
az

.90
deg @
136.3
az



PDC spils, soft tatters and shards, mostly soft granular mush





shl gry lt med gry, tr sndy gritty, silty soft

shl gry lt med gry silty gritty soft, tr sndy

shl gry med, lt med gry silty sndy gritty soft

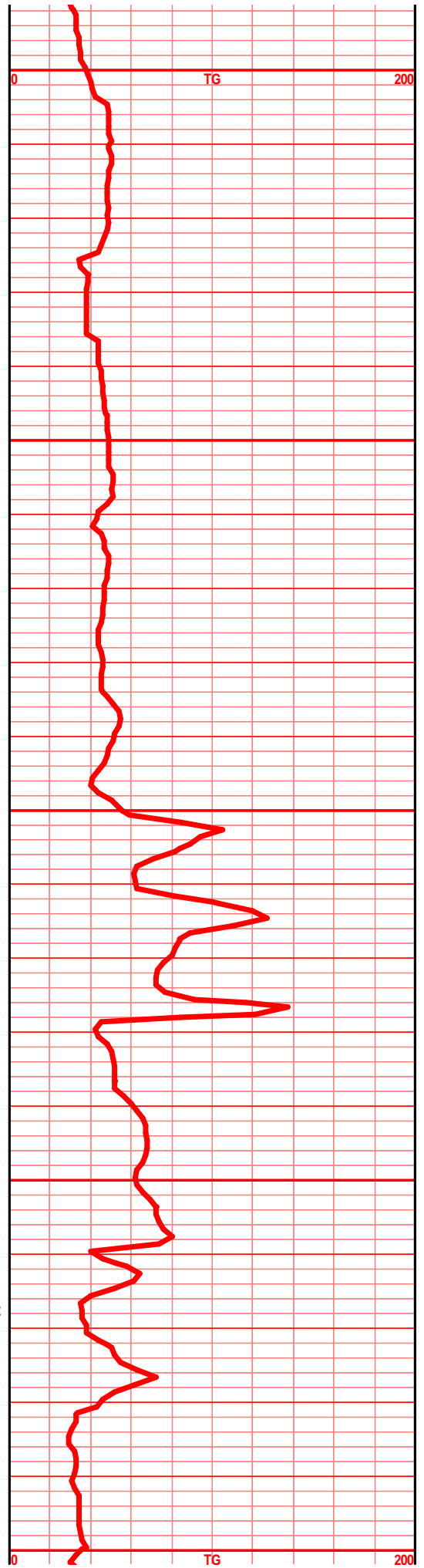
lst wht off with lt crm gry f xln gran soft sub
chky calc fill

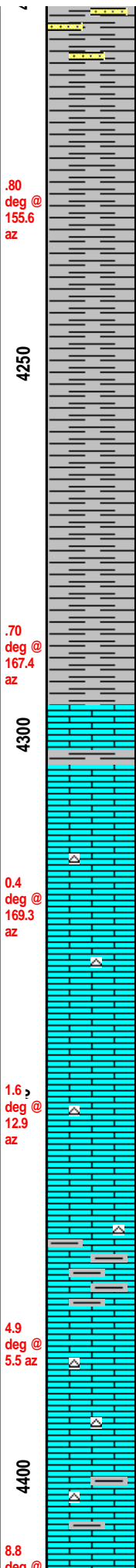
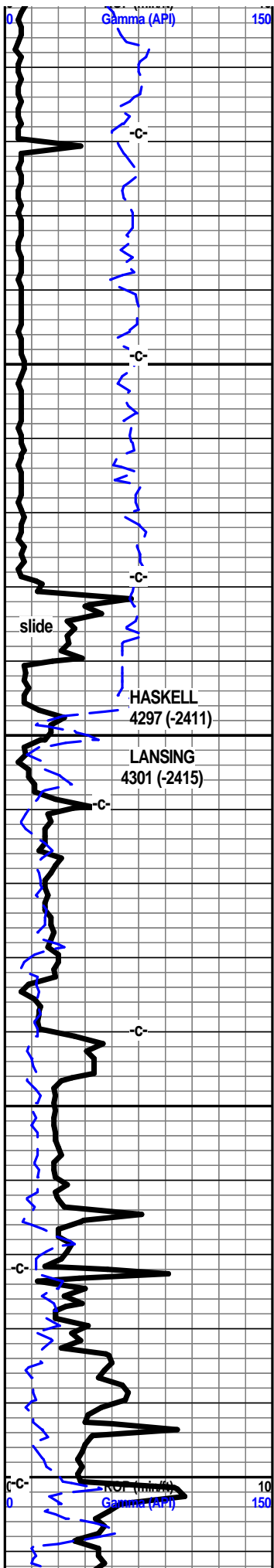
shl gry blk, blk carb, wxy grsy, gas bubs,

shl gry lt gry silty, tr sst off wht clr tan clstrs, f
grnd, arg, silty much clay fill, lst off wht lt gry
silty, sndy gritty sub chky

lst wht off with f xln gran soft sub chky spls soft
mush, TWBOW

shl gry med drk/lt gry silty soft gran, tr sst off





shl gry med drk gry silty soft gritty, a sst on
 wht lt gry, f grnd, sub ang grns, prly srted, arg,
 much clay fill poor spls

shl gry med drk gry silty soft gritty tr sndy

shl gry med lt drk gry, gry/green, silty soft

shl gry, gry/green silty soft gritty

shl gry med drk gry soft silty tr gritty

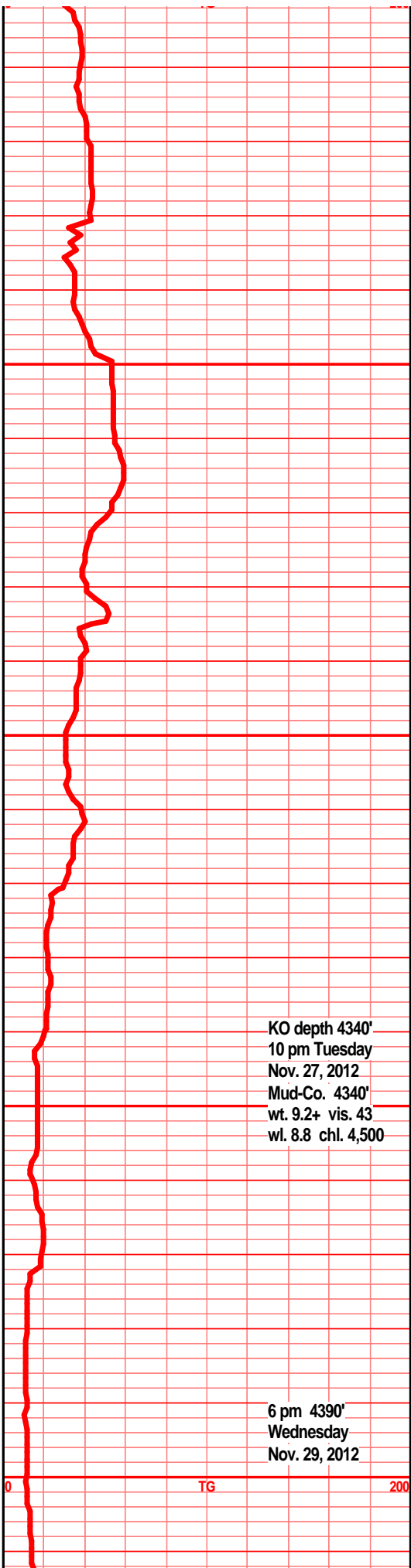
lst tan crm, lt tan brn f xln blkly ang hrd dns, tr
 sub chlky, calc xln fill, tr micro foss frags

lst off wht crm f xln gran soft sub chlky, tr calc
 xln fill, tr micro foss frags, chrt wht off wht lt gry
 shrp frsh

lst off wht lt gry f xln gran chlky to sub chlky
 soft, tr foss frags, spls wsh wht, tr calc xln fill,
 scatt pp small vug por, chrt lt gry shrp frsh opa

lst wht of wth lt gry f xl blkly ang gran dns hrd, tr
 foss frags, tr calc xln fill, sub chlky to chlky,
 scat pp, small vug por, chrt lt gry shrp frsh opa
 blkly ang pcs

lst crm off wht, lt gry brn f xln gran blkly ang hrd
 dns, sub chlky, pp vug por, calc xln fill, foss
 frags, chrt tan lt brn/gry shrp frsh opa

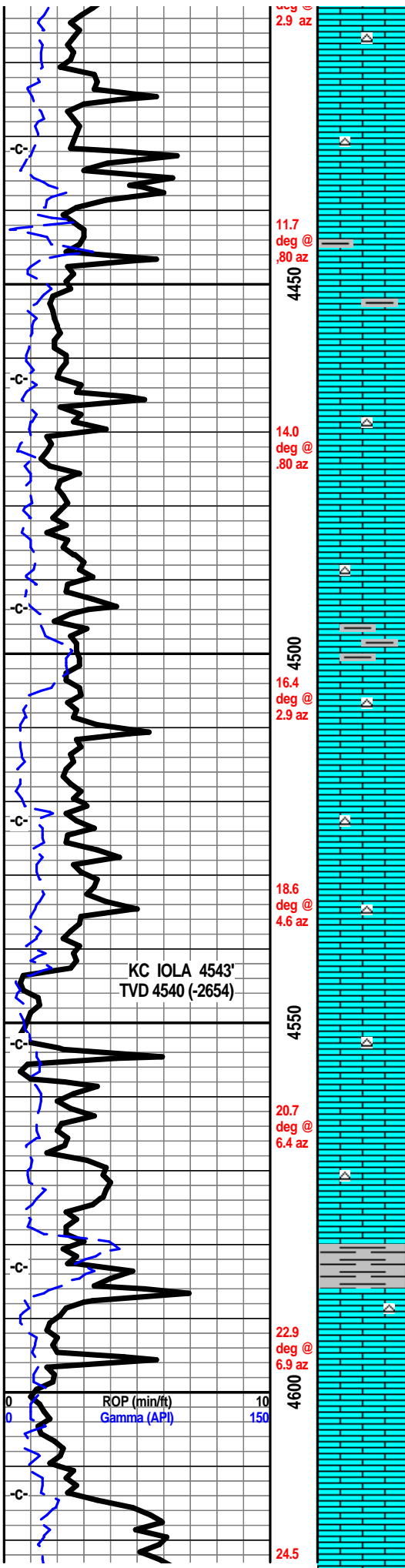


KO depth 4340'
 10 pm Tuesday
 Nov. 27, 2012
 Mud-Co. 4340'
 wt. 9.2+ vis. 43
 wl. 8.8 chl. 4,500

6 pm 4390'
 Wednesday
 Nov. 29, 2012

TG

200



lst crm tan lt buff f xln gran soft sub chlky foss frags, calc xln fill, inter xln por, pp por, chrt tan lt gry shrp frsh

lst tan off wht tr lt gry/brn f vf xln dns hrd blkly ang sub chlky foss frags, calc xln fill inter xln por, small vug por, chrt tan lt gry shrp frsh foss

lst off wht tan lt gry f vf xln dns hrd blkly ang sub chlky tr soft/chlky, foss frags, inter xln por, tr chrt tan lt gry shrp frsh opa, q,

lst, dolo in prt drk tan lt gry, f vf xln dns hrd blkly sub chlky foss frags, tr calc xln fill, chrt drk gry/brn shrp frsh opa, q

lst, dolo in prt, tan lt gry, off wht, f vf xln gran blkly ang dns pcs, sub chlky, foss frag, much calc xln fill, in ter xln por, foss frags, chrt tan gry shrp frsh

lst drk crm lt gry off wht f sli vf xln gran blkly ang dns sub chlky pcs, calc xln fill, inter xln por, mstly dns hrd, foss frags, tr chrt tan gry shrp frsh opa, q

lst lt gry, off wht, drk tan/crm f vf xln dns hrd blkly ang sub chlky pcs, foss frags, inter xln por, mstly soft chlky gran inter gran por, foss frags, chrt tan drk gry shrp frsh opa, q

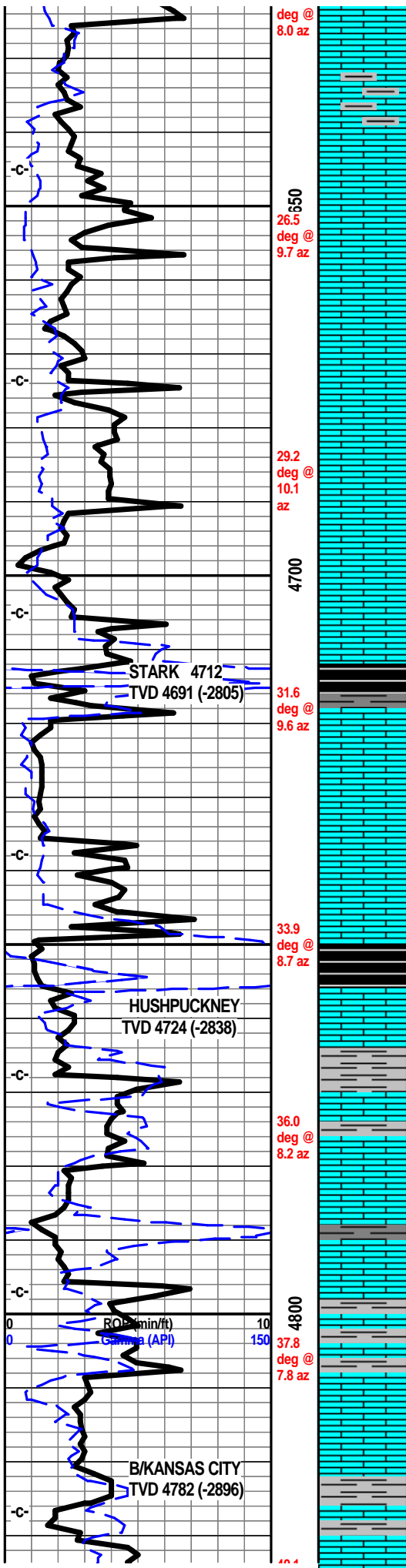
lst lt gry off wth drk crm f vf lxn blkly ang gran dns sub chlky pce, inter xln por, tr foss frags, calc xln fill, chrt tan gry shrp frsh opa, q

lst drk crm, tan/gry f vf xln dns blkly ang pcs, chlky/vry chlky in prt soft gran, pp inter xln por, calc fill, much chrt tan lt gry shrp frsh opa, q

Scale Change
TG

TG

4612' 7 am
Thursday
Nov. 29, 2012



lst crm tan drk crm, tr tan/gry f vf xln blk ang gran dns, hrd, chlky, foss frags, calc xln fill, inter xln por, pp por, some soft chlky earthy, chrt tan gry shrp frsh opaq

lst tan drk crm lt gry f vf xln dns hrd blk ang pcs, sub chlky to chlky foss frags, inter xln por, soft vry chlky in prt, chrt tan gry shrp frsh opaq

lst drk crm drk tan/gry f vf xln hrd dns blk ang pcs, sub chlky to vry chlky in prt, inter xln por, gran inter foss frag por, chrt tan gry drk brn shrp frsh opaq

lst drk tan drk crm gry f vf xln dns hrd blk ang, sub chlky foss frags. calc xln fill inter por, chrt tan drk gry blk shrp frsh opaq

lst drk crm tan, mstly gry f vf xln dns hrd blk ang, sub chlky, calc xln fill, tr foss frags, spls wsh wht, chrt tan drk gry shrp frsh opaq

blk carb shl in 4740' spl, lst tan lt gry, drk crm, f vf xln gran blk chlky, foss frags, micro foss, calc xln fill, chrt tan drk gry/blk shrp frsh opaq

lst drk gry brn f vf mic xln dns hrd blk ang pcs, micro foss, micro ool, hvy calc xln fill, chrt in prt, chrt drk gry, gry/blk shrp frsh opaq

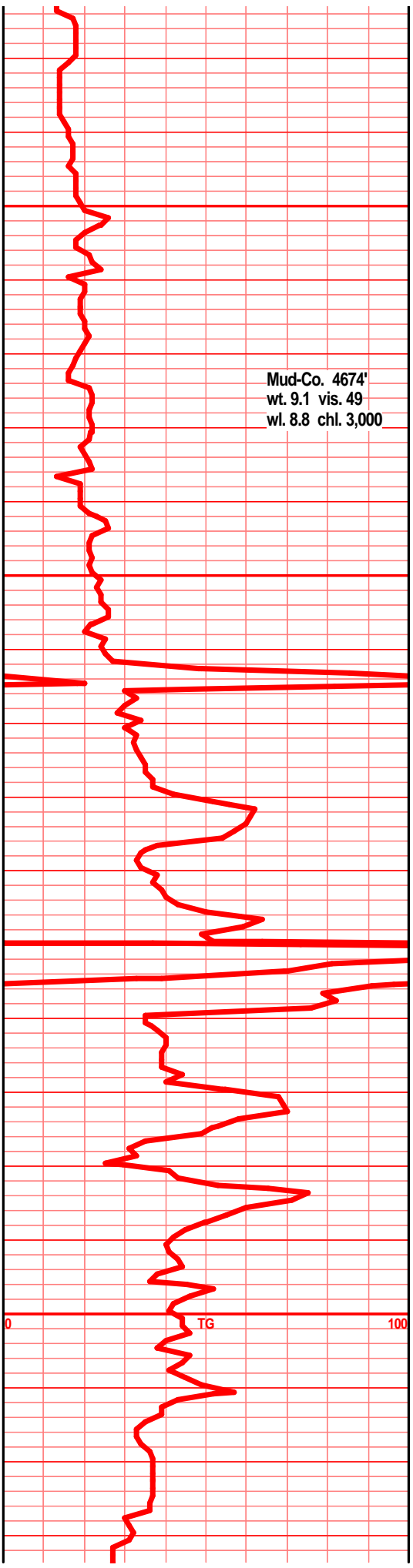
lst dull tan lt gry, gry/buff f vf xln hrd blk ang dns pcs, sli dolo in prt, sub chlky, tr vry chlky in prt, foss frags, inter xln por, chrt tan brn gry shrp frsh opaq, blk ang pcs, only a couple pcs gry blk, blk carb shl

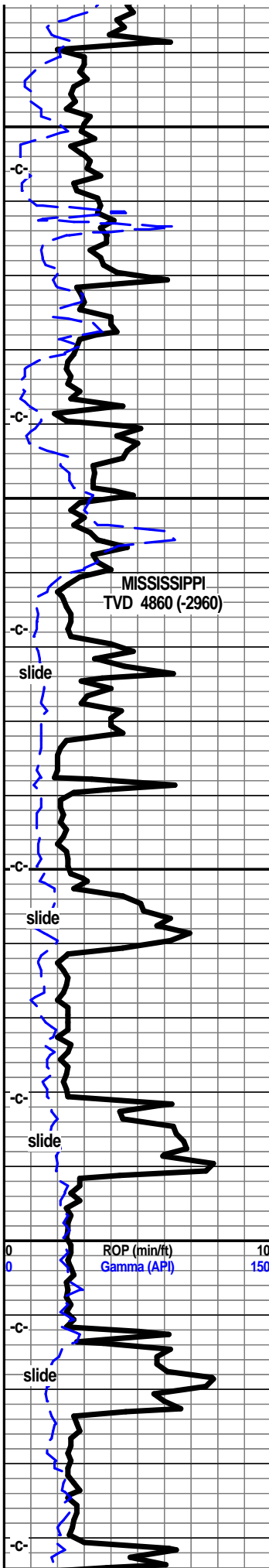
mucho gry blk, blk carb shl in 4800', lst dull crm/gry/tan aa, f vf xln blk ang dns hrd sub chlky calc fill, tr foss frags aa

shl gry drk gry brn, calc, lst tan gry gry brn f vf xln dns hrd blk ang arg, silts, sub chlky, micro foss frags, calc fill

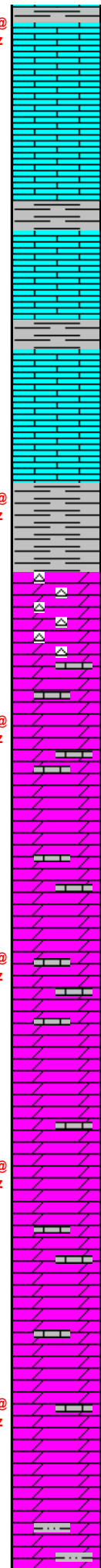
shl gry, gry drk green brn, silty gritty calc, lst tan gry/brn f vf xln dns hrd blk ang arg, sub chlky calc xln fill micro foss frags, mstly dns arg, chrt

Mud-Co. 4674'
wt. 9.1 vis. 49
wl. 8.8 chl. 3,000





40.1 deg @ 7.8 az
4850
42.6 deg @ 8.3 az
44.9 deg @ 8.5 az
MISSISSIPPI
TVD 4860 (-2960)
47.2 deg @ 8.0 az
4950
49.1 deg @ 7.5 az
50.2 deg @ 8.3 az
5000
51.5 deg @ 8.0 az



tan brn shrp frsh opa

lst drk tan/brn, tan gry f vf xln blk ang hrd dns, pyrtic, sub chlky tr foss frags, tr inter xln por, tr calc xln fill, mstly tite dns

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

shls, gry, gry green, blue/gry/green, lst tan crm buff off wht f vf xln dns hrd blk ang pcs, tr inter xln por, tr calc fill, micro foss frags

chrt lt gry, smokey, shrp frsh opa with crm tan brn dolo edge, tan brn stain, VSSFO, gas bubs, dull UV, pp tr moldic por, sli odor, dolo tan buff lt gry vf xln blk ang hrd pcs, chrt inclu, tr inter xln por, tan brn stain, tr gas bubs/brkn

dolo crm off wht lt gry, f vf xln, sub chlky silty sli sndy text, tr lt gry/smokey shrp frsh chrt inclu, tr inter xln por, mstly dns, NVP, tan brn stained, tr gas bub, sli odor

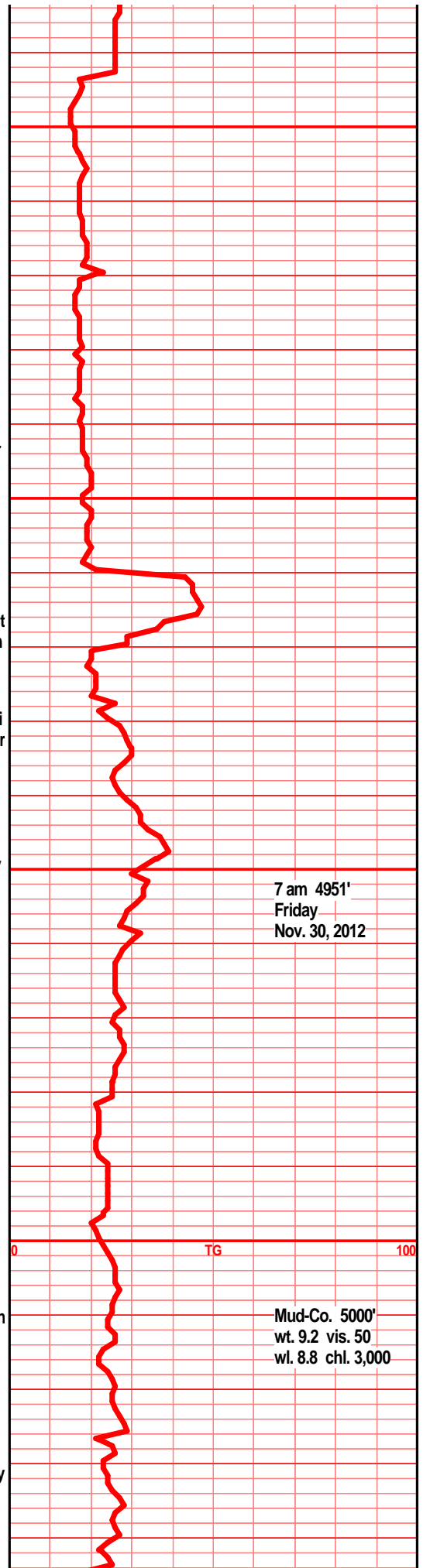
dolo off wht lt gry f vf xln gran dns hrd blk pcs, sub chlky in prt, silty, sli sndy text in prt, tr lt gry smokey shrp frsh chrt inclu, tr inter xln por?, mstly dns, tan brn stain, tr gas bubs, sli odor

dolo off wht lt gry, lt gry/green, vf xln, gran, sli chlky, silty, tr sndy text, blk ang hrd pcs, tr wht shrp frsh opa chrt, tr rare stain

dolo off wht lt gry, lt gry green, f vf xln dn shrd blk, tr sub chlky, tr calc, some sndy text/snd grn inclu, mstly dns hrd, tr wht/clr shrp frsh chrt

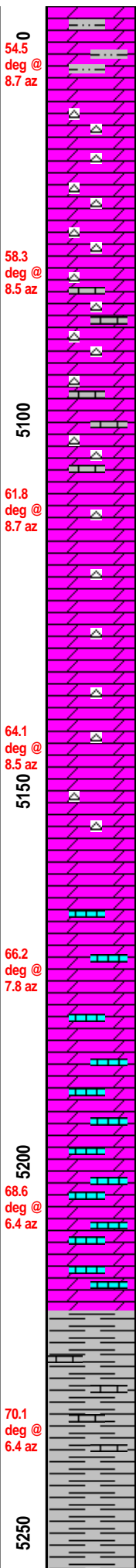
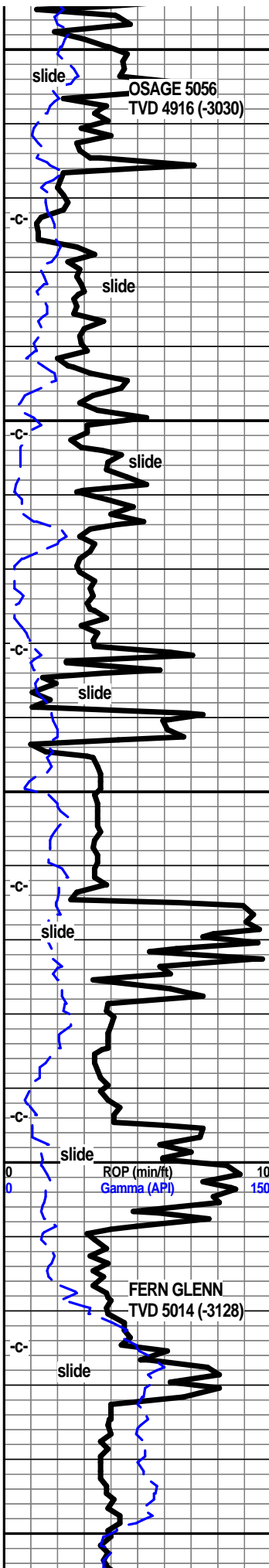
dolo drk crm tan gry, tr gry w/lt green tint, f vf xln gran tr sub chlky, sndy text in prt, tr snd gry inclu, mstly dns hrd, chrt clr shrp frsh opa, lst drk brn, micro xln, dns hrd blk chrt

dolo lt gry, lt gry/green, f vf xln gran dns hrd blk and pcs, sndy text in prt, tr snd grn inclu, mstly dns, tr inter xln por, silic in prt, chrt lt gry/clr shrp frsh opa



7 am 4951'
Friday
Nov. 30, 2012

Mud-Co. 5000'
wt. 9.2 vis. 50
wl. 8.8 chl. 3,000



dolo lt gry, lt gry/green f vf xln, silty, silic in prt, blk ang hrd, tr sndy text, tr snd grn inclu, sub chlky in prt, chrt clr shrp frsh opa, tr tan brn stained dolo, f xln blk ang gran in prt, tr inter xln por, tan brn stain, scatt dull UV

LOST RETURNS
5080' spl mstly trash and lcm, some tan gry brn dolo, f xln gran inter xln por, tan brn stain, tr gas bub? scat rare dull UV

dolo crm tan lt brn to brn f xln gran sli chlky, sli soft, pp inter xln por, tan brn stain, dull UV, tr chrt with tan gry frsh shrp chrt inclu, tan brn stain at chrt dolo contact

dolo/lst in prt, tan lt brn/brn f xln blk ang dns sli chlky pcs, pp inter xln por, tan brn stain, NSFO, tr gas bubs, clr lt gry chrt inclu, chrt gry drk gry shrp frsh foss sub opa

dolo tan lt gry/brn f xln gran sli chlky, calc, pp inter xln por, tan brn stain, chrt tan gry shrp frsh sub opa, dolo gry tan vf xln dns gran silic in prt

poor sample, dolo as above, lst off wht lt tan f sli med xln gran blk dns, sli chlky sli chrt in prt, sample mostly LCM and gry blk ratty shales

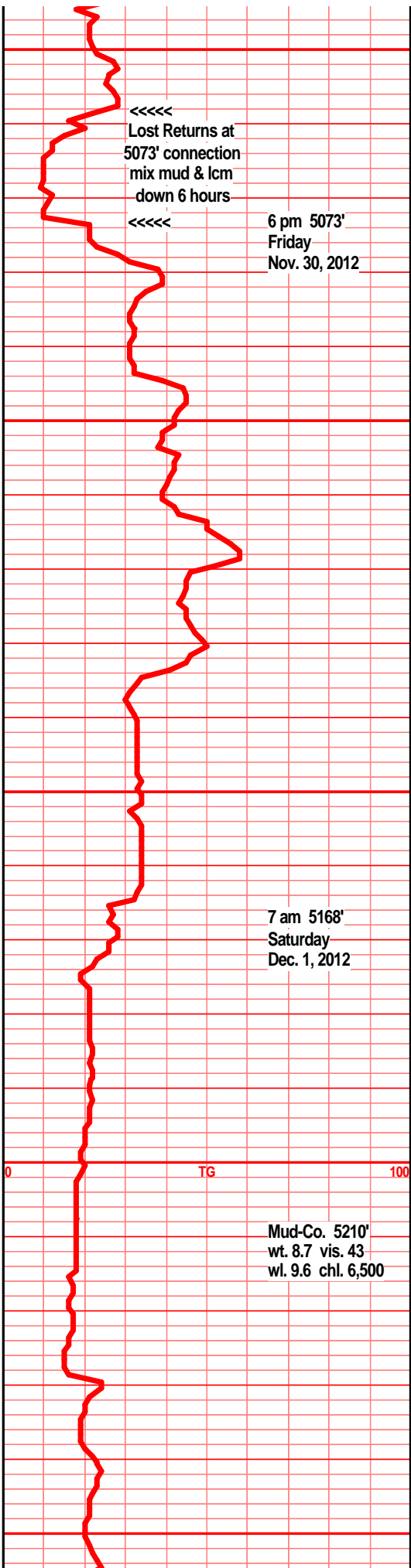
all nutplug, beads, flozan and cedar fill

dolo off wht lt gry f vf xln blk dns ang pcs, silic in prt, tr silty, calc in prt, tr snd grn inclu, lst wht off wth crm f xln blk ang sub chlky tr chrt wht shrp frsh opa

lst tan drk buff lt gry f vf xln dns hrd blk ang, tr sub chlky mstly dns, tr micro xln fill, dolo lt gry f xln gran blk silic, hrd dns

lst drk crm tan gry dolo in prt, f vf xln dns hrd blk silic in prt, sub chlky, dna hrd ang pcs, shls gry lt gry green silty gritty soft

shls gry, lt gry green silty soft, calc in prt, silty gritty, tan lt blk bedded with white streaks



gritty, lt gry lt blk bedded with pyrite streaks,

shl lt gry, lt gry/green silty gritty, silic in prt, dns hrd flky pcs, tr pyritic, tr lst wht off wht f xln blk ang dns, silic in prt, sub chlky

shl gry, lt gry/green silty, gritty, silic in prt, slick, tr pyritic

shl gry, lt gry, mstly lt gry greenish/blue, silty gritty, silic text in prt, pyritic

shl gry green silty gritty, silic text, lst wht off wht tan f xln gran blk chlky arg silty

lst off wht dull tan, f vf xln dns hrd blk ang pcs, tr sub chlky, same gry/green silty gritty silic text shls

lst off wht crm dull tan, f vf xln, blk ang hrd pcs, tr sub chlky, chrt tan lt gry frsh shrp opa, sub transp in prt,

lst off wht dull tan, dull buff, f micro xln dns hrd blk pcs, tr sub chlky, mstly tite dns hrd, chrt off wht tan dull tan shrp frsh opa, tr sub transl

lst off wht dull tan gry f micro xln dns hrd blk ang, chrt tan off wht, clr shrp frsh

lst off wht dull tan gry f vf micro xln dns hrd blk ang pcs, tr sli sub chlky, tr chrt wht off wht lt gry/clr shrp frsh semi opa, sub transl

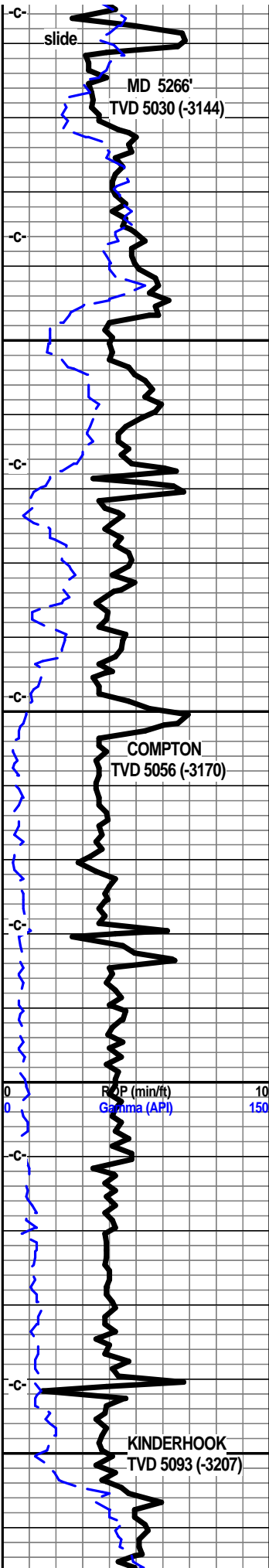
lst off wht dull buff tan f micro xln dns hrd blk ang, some sub chlky, mstly tite, chrt off wht clr shrp frsh opa, less chrt with depth

Compton ?

7 am 5374'
Sunday
Dec. 2, 2012

Calibration
Check

Mud-Co. 5426'
wt. 9.1 vis. 44
wl. 9.0 chl. 6,000



70.9 deg @ 6.2 az

71.3 deg @ 5.7 az

71.3 deg @ 5.9 az

5350

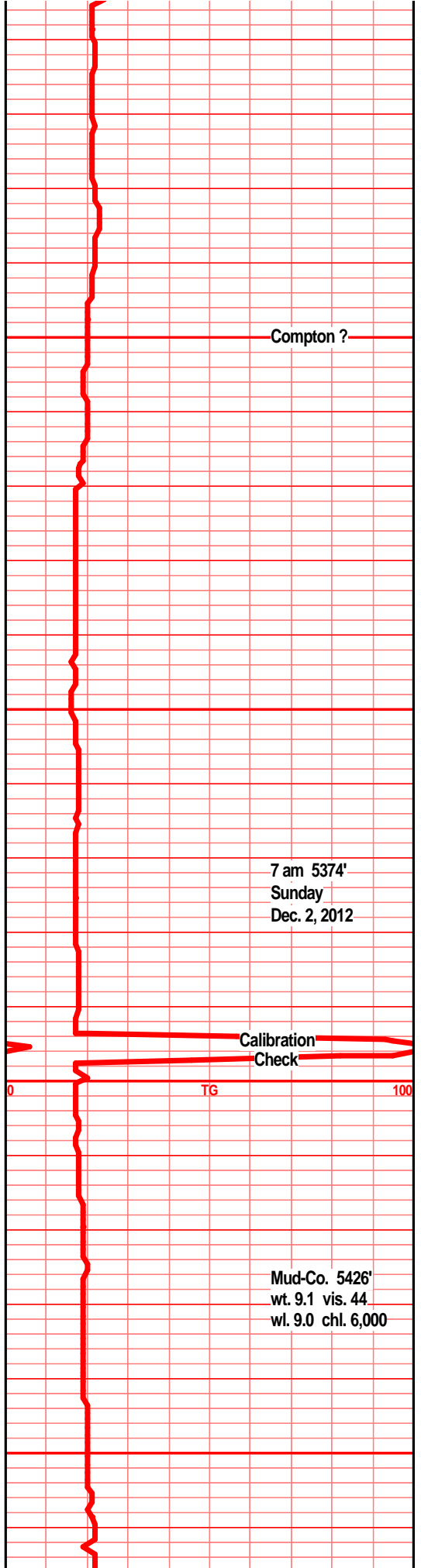
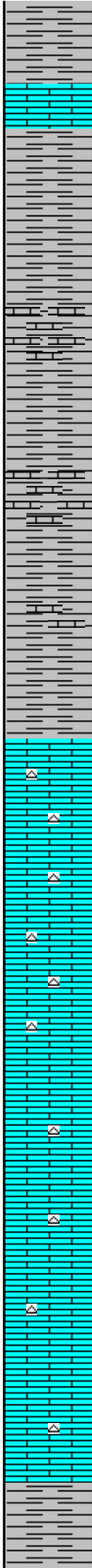
70.9 deg @ 4.6 az

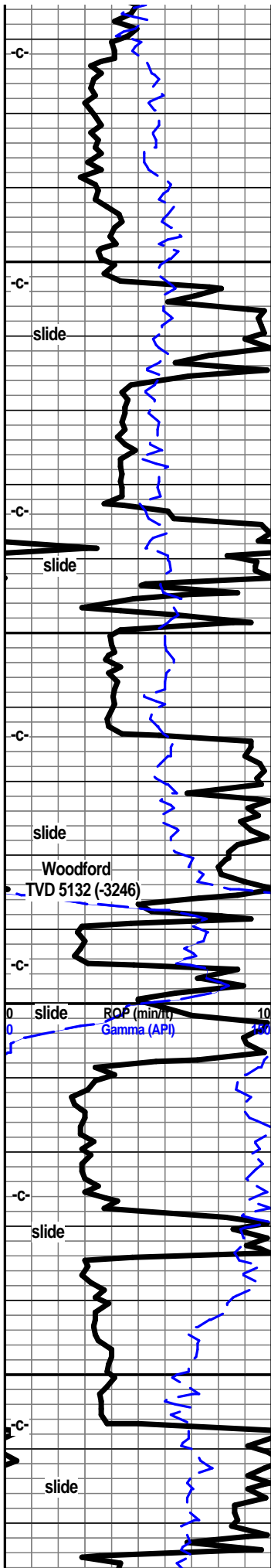
70.1 deg @ 4.6 az

5400

69.8 deg @ 4.6 az

69.7 deg @ 4.5 az





70.2 deg @ 4.6 az

5500

71.6 deg @ 4.3 az

73.9 deg @ 4.3 az

5550

77.1 deg @ 5.7 az

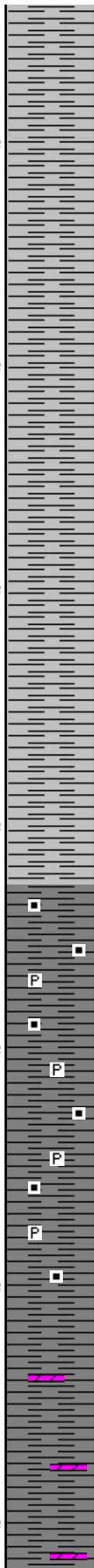
5600

80.0 deg @ 5.3 az

81.7 deg @ 6.6 az

5650

83.7 deg @ 7.5 az



shl gry drk med drk gry, gritty silty, bedded, some bands, tr drkr blk, platy, bedded, tr pyritic

shl gry med to drk gry silty gritty, platey, some bedded/bands, tr drkr gry/blk, tr pyritic

shl gry dkr gry blk, silty gritty, tr bedded, pyritic bands, tr drkr blk, semi carb, wxy grsy text some gas bubs

sh gry, med drk gry, silty, gritty tr bedded, pyrite bands, tr drkr blk sub carb, wxy grsy text

shl drk gry, blk with reddish tint, gritty, tr sndy text, wxy grsy text, blk ang pcs, gas bubs, pyritic specks

shl drk gry, drk gry/blk, silty gritty, vfny sndy, pritic poor sample

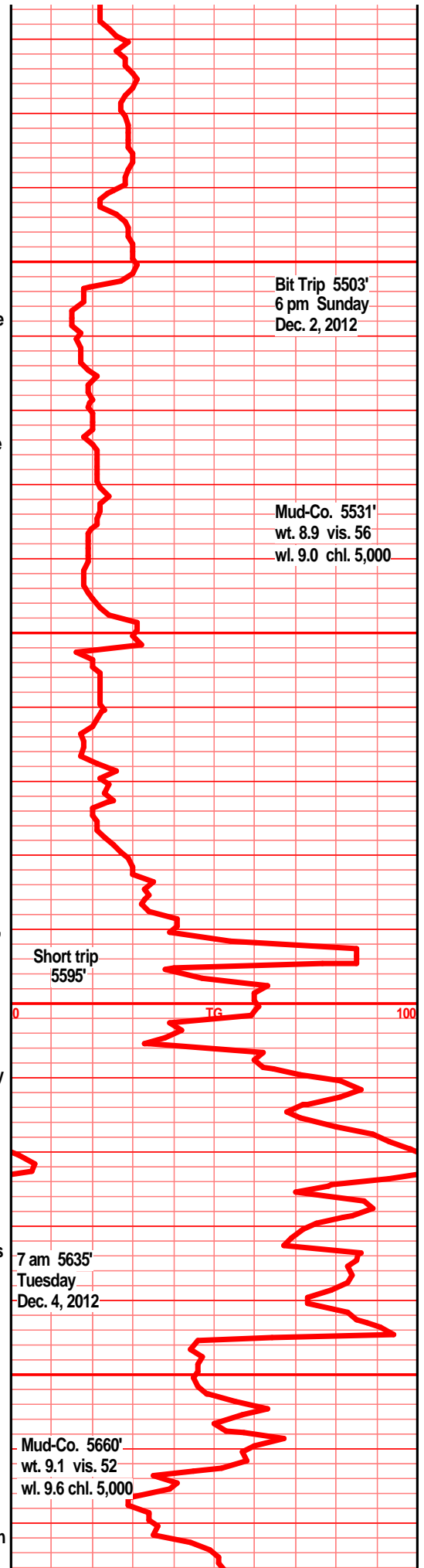
shl blk, drk reddish tint blk, wxy grsy text, gritty, sndy, f grnd sub ang/sub rded snd grn inclu, pyritic, abun gas bubs

shl drk gry blk, mstly blk, blk ang pcs, grsy wxy text, silty sndy, with clr f grnd sub ang/sub rded grains, much pyrtite, gas bubs, filmy cond, nodor

shl blk, tr drk gry blk, tr drk blk w/reddish tint, blk ang pcs, wxy grsy text, silty, sndy w/ f grnd sub ang/sub rded snd grns, pyritic in most, gas bubs, filmy show w/brkn

shl drk gry blk, silty gritty, mstly drk blk, carb text, wxy grsy, pyritic, sndy text, clr sub rded, sub ang sand grn inclu, gas bubs, filmy show

gry med gry silty gritty dolo shl, bedded, snd grn inclu, pyritic, fnly silic text in most, shl aa



Bit Trip 5503'
6 pm Sunday
Dec. 2, 2012

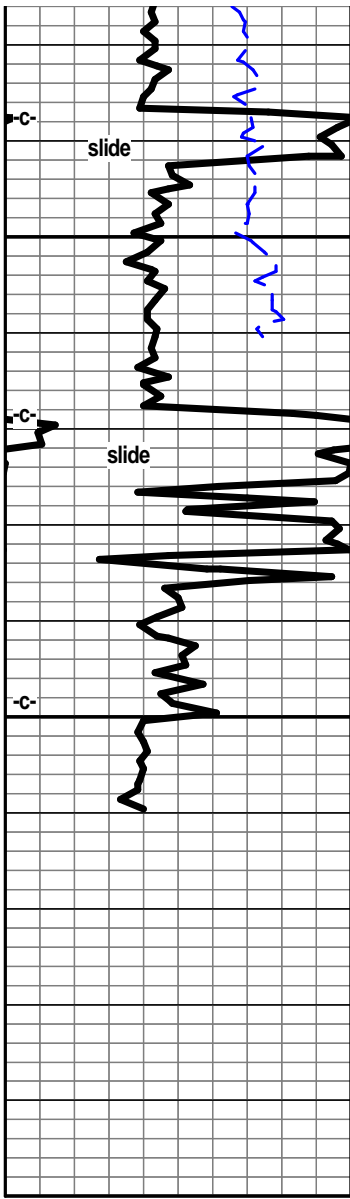
Mud-Co. 5531'
wt. 8.9 vis. 56
wl. 9.0 chl. 5,000

Short trip
5595'

0 TG 100

7 am 5635'
Tuesday
Dec. 4, 2012

Mud-Co. 5660'
wt. 9.1 vis. 52
wl. 9.6 chl. 5,000



5700
85.1
deg @
7.8 az

5750

00



shl gry med gry/brn silty gritty, fnly sndy text, silic in prt, vf grnd sub rded snd grn inclu, tr pyritic, bedded

shl med gry, med gry brn, silty gritty, silic text, vf grnd sub rded snd grn inclu, pyritic, soft mushy

shl gry brn, med brn silty gritty, silic text, sndy text, vf grnd sub ang/sub rded snd grn inclu, pyritic, soft mushy, tr filmy show, dry stain/brkn

