



**Woolsey Operating Company, LLC**

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

Measured Depth Log

Well Name: **ROGG #1**  
Location: **Section 7 - Township 35 South - Range 12 West**  
License Number: **15-007-24109-0000** Region: **Barber County, Kansas**  
Spud Date: **December 3, 2013** Drilling Completed: **December 14, 2013**  
Surface Coordinates: **N 1/2 N 1/2 NW 1/4**  
**2310' FSL & 1320' FWL**  
Bottom Hole  
Coordinates:  
Ground Elevation (ft): **1454'** K.B. Elevation (ft): **1466'**  
Logged Interval (ft): **3600'** To: **5560'** Total Depth (ft): **5560'**  
Formation: **Kansas City Group ----> Simpson Group**  
Type of Drilling Fluid: **Chemical Mud Displaced at 3434'**

Printed by WellSight Log Viewer 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, Blake Miller**  
Company: **Woolsey Operating Co. LLC**  
Address: **125 N. Market, Wichita Kansas, 67202**

## COMMENTS

Surface Casing: Spud at 3:00 pm on December 3, 2013, ran 5 joints of new 13 3/8" X 48#/ft casing to 221' KB (tally 207') with 300 sx Class A, 2% gel, 3% cc. Plug down at 11 pm on December 3, 2013. Cement did circulate. Production Casing: 5 1/2" X 15.5#/ft set at 5412' with 175 sx.

Deviation Surveys: 1 at 223', 3/4 at 1023', 1/2 at 1530', 3/4 at 2133', 1 at 2641', 1 at 3117', 3/4 at 3625', 1 at 4134', 3/4 at 4641', 3/4 at 4822'. 1 at 5560'.

Pipe Strap @ 4822'. Strap: 4832.47', Board: 4831.77'. Strap .70' long, no correction made to the board.

Fossil Drilling Rig 3 Bit Record:

- 1) 17 1/2" Reed RT RR in at 0' out at 223'. 221'/2.5 hours
- 2) 7 7/8" Varel HE-21 in at 221' out at 4822'. 4601'/91 3/4 hrs
- 3) 7 7/8" Varel HE-29 RT RR in at 4822', out at 5560'

Gas Detector: Woolsey Operating Co, Gas Trailer #2

Mud System: Chemical Mud, Mud-Co. Brad Bortz, Engineer

DSTs: Trilobite Testing, Ryan Reynolds, Tester

E-Logs: Nabors Completion and Production Services, Dual Induction Laterolog w/SP, CNL-FDC w/PE, Gamma Ray and Caliper. Jason Cappellucci, Logging Engineer.

## DSTs

DST #1 Cherokee Sand, 4756'-4822'. 30"-60"-60"-90", Weak blow building to 1" during IFP. FFP weak blow died, flush tool-no help. Rec: 20' Drilling mud. IHP 2396, IFP 19-24, ISIP 199, FFP 27-36, FSIP 153, FHP 2325. BHT 119 Degrees

DST #2 Mississippian, 4832'-4880'. 30"-60"-60"-120", SB BOB upon tool opening at IFP. Weak 1" blow throughout FFP. Rec: 60' GIP, 15' OCM (2% Oil, 98% Mud). Test declared a misrun, tool failure. Tool did not cycle.

## CREWS

Jim Wenrich, Tool Pusher

Daniel Orrantea, Days

Ron Burns, Evening

Andres Maestas, Morning

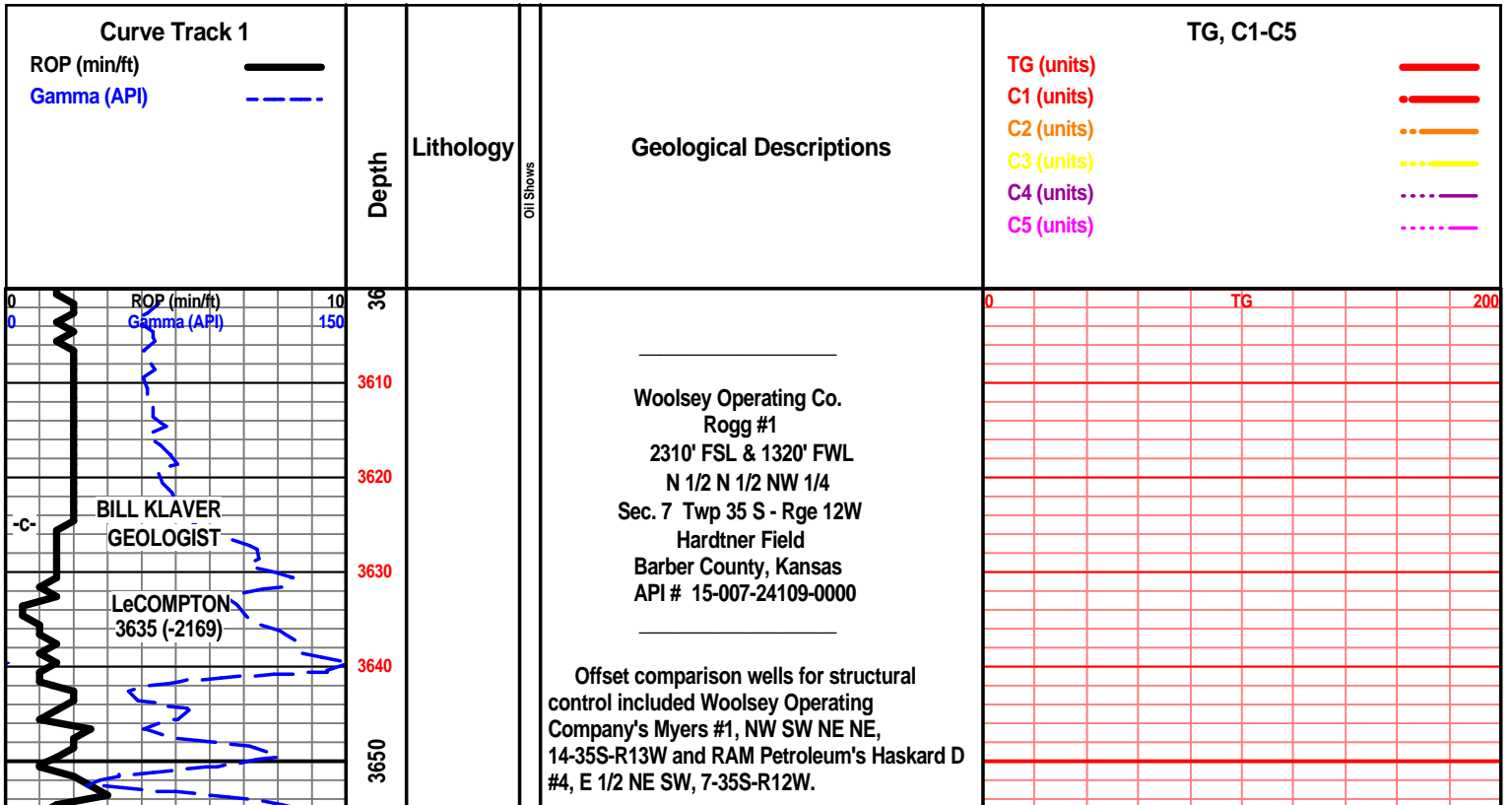
Terry Christenson, Relief

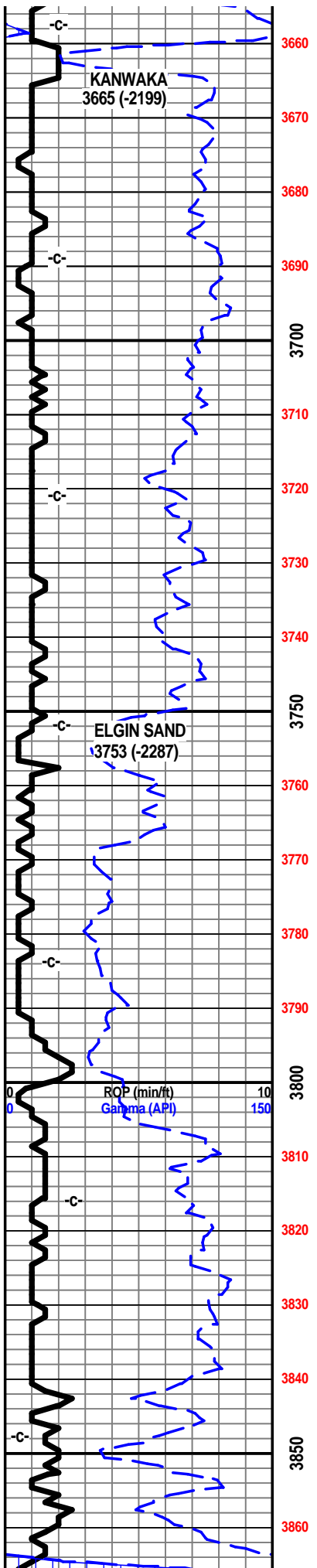
### ROCK TYPES

	Anhy		Shy dolo		Sltst		Shale 3
	Bent		Dol		Ss		Silty dol
	Brec		Gyp		Black sh		Dol lmst
	Cht		Sdy lmst		Gry sh		Dol 2
	Clyst		Lmst		Shale		Granite wash
	Coal		Mrlst		Shyslts		Lmst
	Congl		Salt		Sltys		Calc dol
	Sdy dolo		Shale		Ss 2		Shale 3

### ACCESSORIES

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





One minute drill time was recorded from 3600' to rotary total depth. Ten foot and circulating samples were gathered from 4500' to rotary total depth. All samples were delivered to the Survey at the completion of the test.

7 am progress:

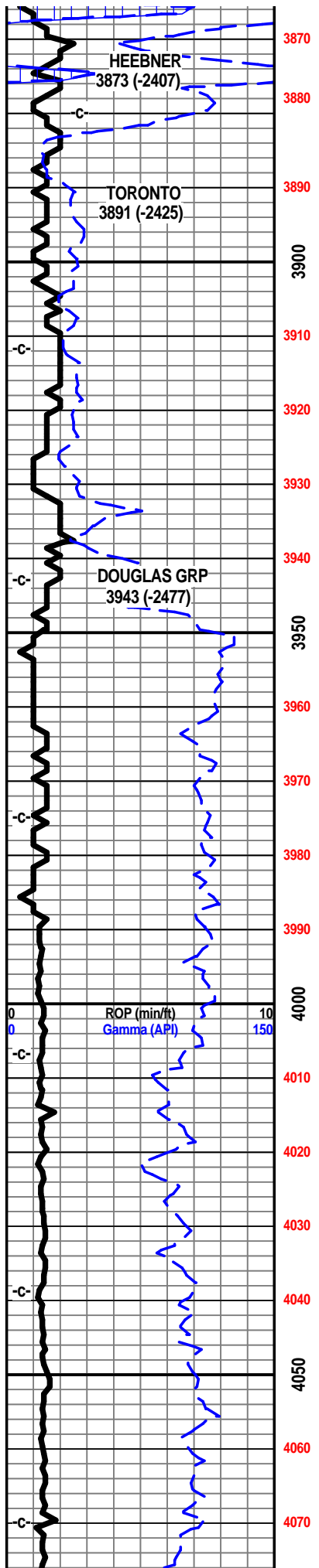
- December 3, 2013 MIRT/SPUD
- December 4, 2013 WOC.
- December 5, 2013 Drilling at 1865'
- December 6, 2013 Drilling at 2815'
- December 7, 2013 Drilling at 3600'
- December 8, 2013 Drilling at 4395'
- December 9, 2013 CFS at 4822' Cke Sd
- December 10, 2013 TOOH DST #2 @ 4880'
- December 11, 2013 Lost returns at 4949'
- December 12, 2013 Drilling at 5200'
- December 13, 2013 CFS @ 5470'
- December 14, 2013 E-logs out @ 5 am

Mud Co. 3690'  
wt. 8.7 vis. 50  
wl. 8 chl. 2,000

E- Logs Tops:

- Herington 1956 (-490)
- Onaga 2845 (-1379)
- Wabaunsee 2899 (-1433)
- LeCompton 3638 (-2172)
- Kanwaka 3660 (-2194)
- Elgin Sand 3748 (-2282)
- Heebner 3869 (-2403)
- Toronto 3879 (-2413)
- Douglas Grp 3944 (-2478)
- Douglas Shale 4033 (-2567)
- Brown Lime 4144 (-2678)
- Stalnaker 4233 (-2767)
- Quindaro 4378 (-2912)
- Kansas City 'F' 4396 (-2930)
- Kansas City 'G' (Iola) 4439 (-3026)
- Kansas City 'H' (Drum) 4492 (-3026)
- Kansas City 'I' (Dennis) 4525 (-3059)
- Stark Shale 4566 (-3100)
- Kansas City 'J' (Swope) 4575 (-3109)
- Hushpuckney Shale 4595 (-3109)
- Kansas City 'K' (Hertha) 4609 (-3143)
- B/Kansas City 4642 (-3176)
- Pawnee 4737 (-3271)
- Cherokee Group 4784 (-3318)
- Cherokee Sand 4805 (-3339)
- Mississippian Unc. 4826 (-3360)
- C3 4826 (-3360)
- C2A 4832 (-3366)
- C2 4885 (-3419)
- C1 4910 (-3444)
- Osage 4981 (-3515)
- Northview Shale 5147 (-3681)
- Compton 5169 (-3703)
- Kinderhook 5196 (-3730)
- Woodford 5264 (-3798)
- Misener 5304 (-3838)

0 TG 200



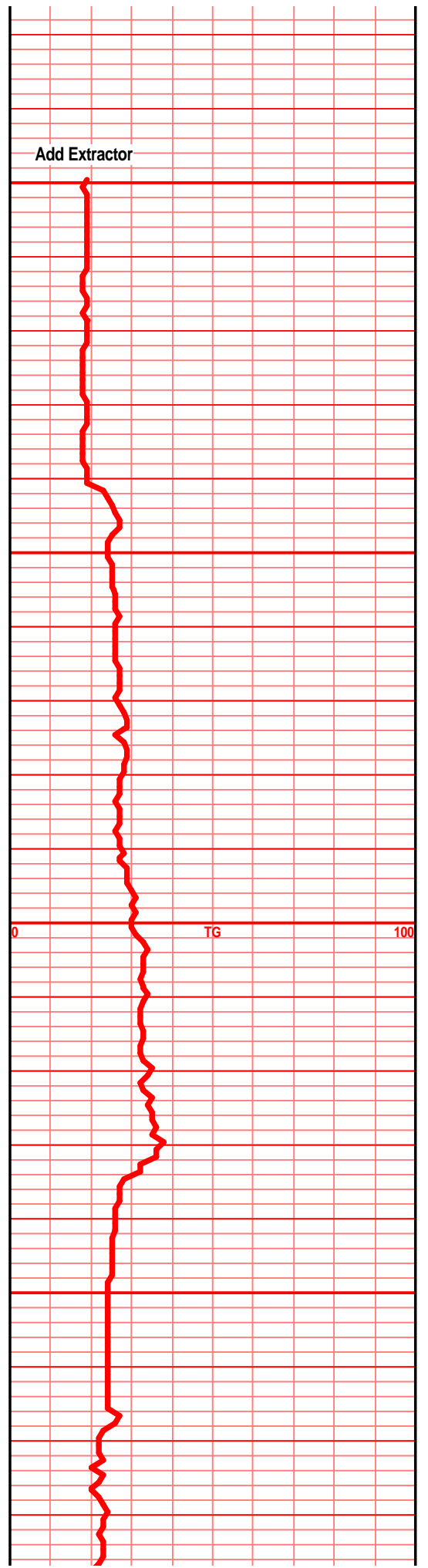
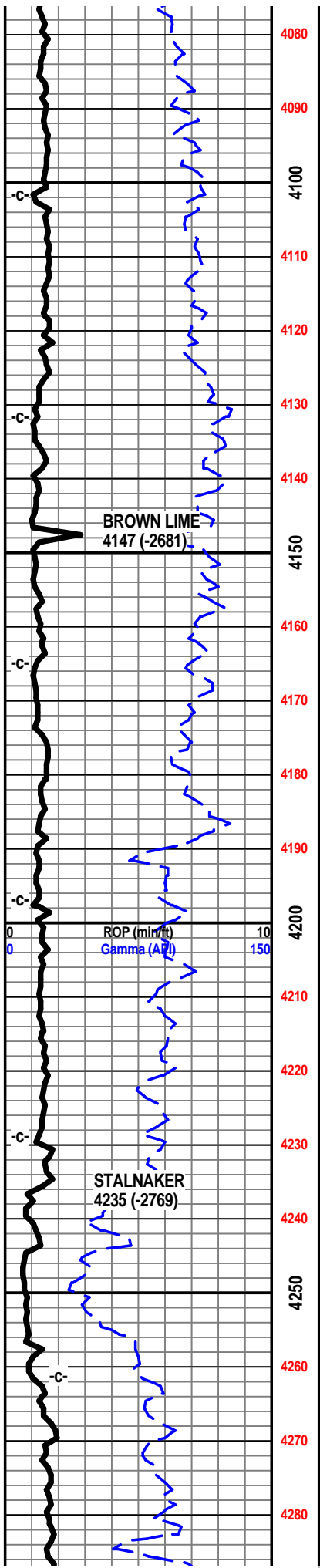
Viola 5318 (-3852)  
 Simpson Group 5445 (-3979)  
 Simpson 'F' 5448 (-3982)  
 Wilcox 5462 (-3996)  
 McLish Shale 5520 (-4054)  
 LTD 5560 (-4094)

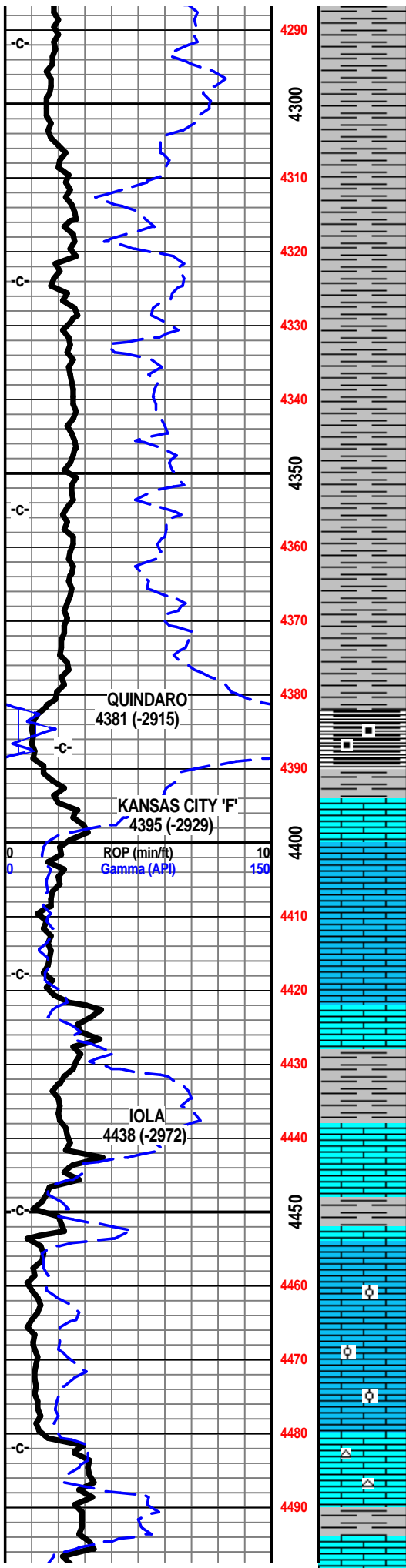
- Oil and Gas Show Legend
- ☒ Gas
  - Even Stain/Saturation
  - ◐ Spotted Stain/Saturation
  - Questionable Shows
  - ◻ Dead/Gilsonitic

Driller/Tooke  
 3990'

Scale Change  
 TG

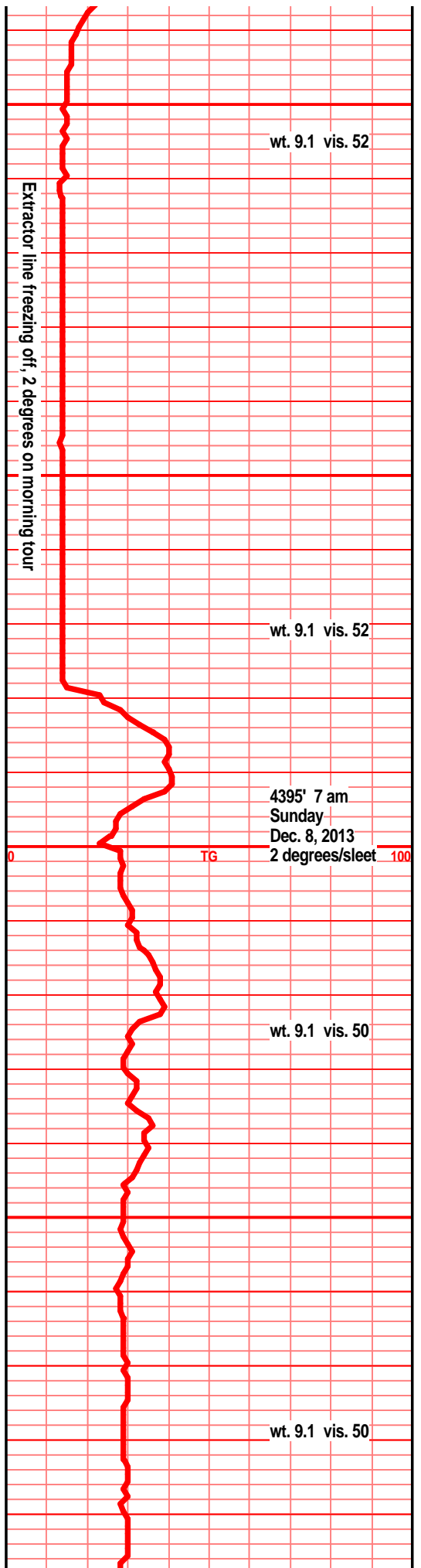
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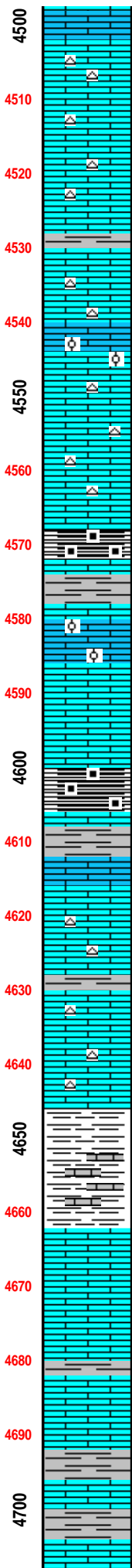
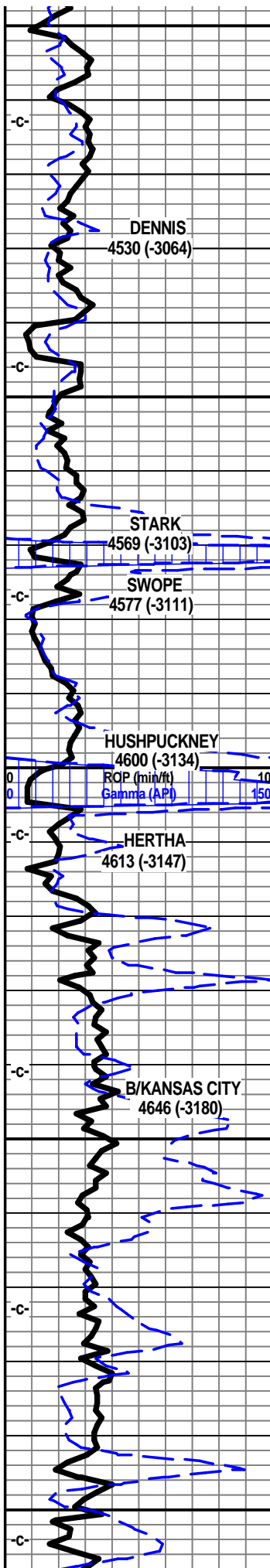




lst tan crm off wth f sli med xln gran blkly ang  
sub chlky, foss frags, pp foss mold por, tr chrt  
lt gry shrp frsh opa

lst tan gry f vf xln dns drn blkly ang foss, lst off





4500 wht tan f xln blkly ang gran soft sub chlky, foss frags, tr lt gry shrp chrt

4510 Ist crm tan off wht f sli med xln, blkly ang dns, foss frags, pp por, calc xln fill, pp, foss mold por

4520 Ist crm buff tan f xln blkly ang dns, sli sub chlky, foss frags, calc xln fill, chrt lt gry shrp frsh opa

4530 Ist tan buff off wht f xln dns hrd blkly ang pcs, foss frags, micro foss frags, sli sub chlky, chrt tan lt gry shrp frsh opa

4540 Ist tan cm f vf xln gran blkly ang dns hrd, foss frags, micro foss frags, calc xln fill, chrt tan gry shrp frsh opa

4550 Ist crm tan lt tan brn f sli med xln, gran blkly, foss frags, moldic por, inter xln por, calc xln fill, chrt tan brn shrp frsh opa

4560

4570 shl gry dkr gry blk, blk carb, wxy grsy text, Ist tan crm lt gry f vf xln blkly ang dns hrd, foss frags, tr foss mold por

4580 Ist crm tan buff f sli med xln blkly ang sub chlky foss frags, foss ool, pp inter xln por, tr some soft chlky

4590 Ist crn tan tr lt gry f tr vf xln dns hrd blkly ang foss frags, foss ool, chrt tan lt gry shrp frsh opa, much dns calc xln fill

4600 shl drk gry blk, blk cab, wxy grsy text, blkly ang pcs, abun gas bubs, Ist aa

4610 Ist crm buff tan f sli med xln blkly ang tr sub chlky, foss frags, foss ool, foss mold por, pp por,

4620 Ist crm tan lt gry/brn f xln blkly ang dns hrd, foss frags, tr sub chlky, chrt lt gry shrp frsh foss,

4630

4640 Ist crn tan lt gry f xln blkly ang dns hrd, foss frags, tr sub chlky mstly dns hrd, chrt tan lt gry shrp frsh foss,

4650 Ist aa, shls gry green brn drk red/brn silty calc, tr gritty,

4660 shl gry green, brn red gry, drk red/brn slick, silty, grsy, calc in prt, gritty limy

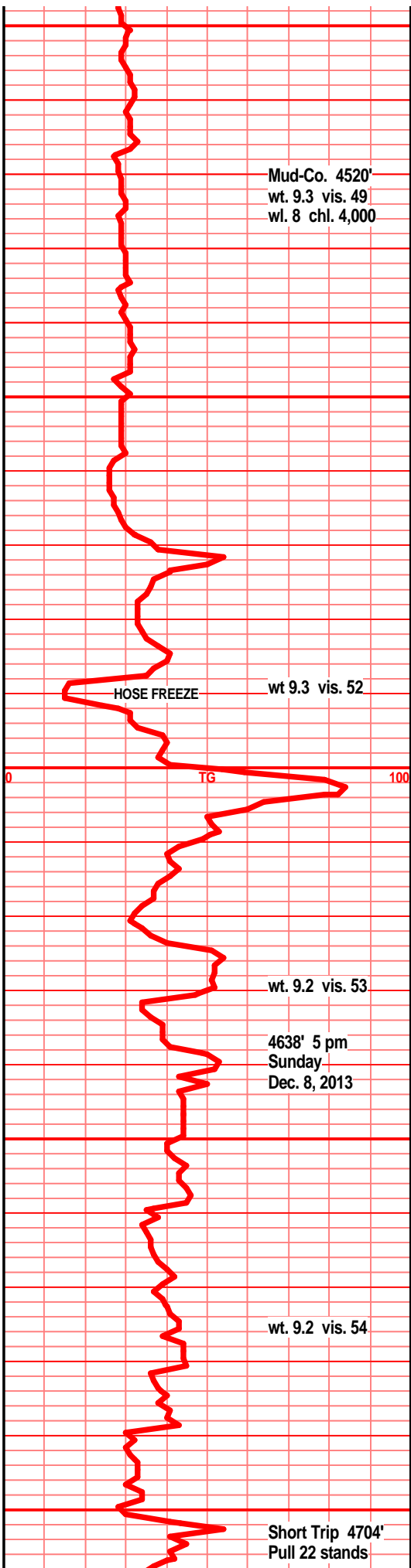
4670 Ist crm buff lt tan f vf xln blkly ang dns hrd, micro foss frags, tr micro sub chlky,

4680 Ist crm buff lt tan f vf xln dns hrd blkly ang pcs, tr sub chlky, micro foss frags, calc xln fill,

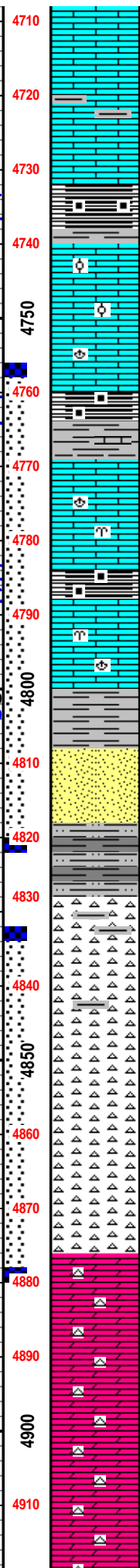
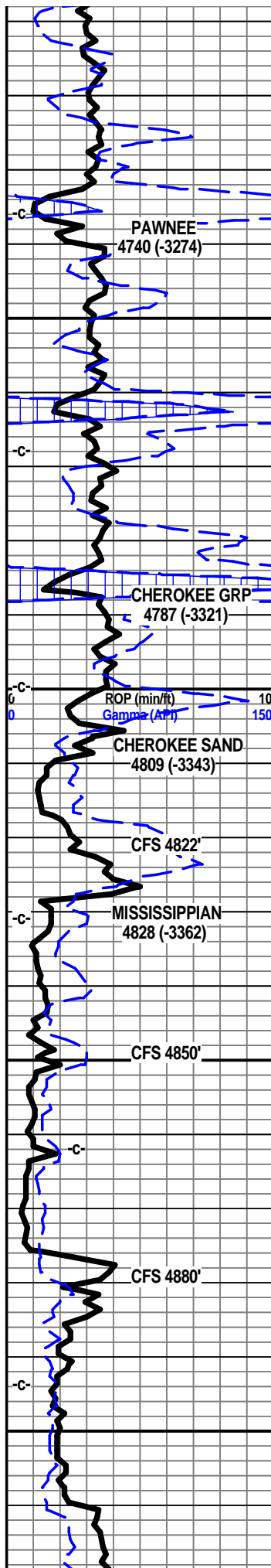
4690 Ist buff tan crm f vf xln dns hrd blkly ang, sub chlky in prt, mstly dns, calc xln fill, micro foss frags,

4700 shl gry drk med gry, silty, cacl, Ist tan buff f xln blkly ang dns hrd, micro foss

shl lt gry silty gritty, calc, Ist tan buff crm, f sli vf xln blkly ang, sub chlky in prt micro foss







frags, cal xln fill

lst crm buff f vf xln blk ang hrd, micro foss frags, micro ool/pelletal, calc xln fill, tr vry sli chlky

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

shl drk gry/blk, blk carb in prt, blkly ang pcs, sli wxy grsy text, tr gas bubs,

lst crm semi buff/tan f tr vfn xln blkly ang dns, hrd, tr sub chlky foss frags, micro ool/pelletal, tr inter xln por, mstly calc xln fill NS

lst crm buff off wht f vf xln dns hrd blkly ang pcs, micro foss, foss ool/pelletal, calc xln fill, sli sub chlky in prt

shl gry dkr gry blk blk carb in prt, wxy grsy text, tr vis gas bubs,

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

shl gry blk, drk gry/blk, blk carb wxy grsy text, tr gas bubs, lst tan crm buff f xln ang dns hrd, micro foss frags, ool/pelletal, calc xln fill

lst gry tan crm f xln dns hrd, sli arg, foss frags, micro ool/pelletal, tr sub chlky

shl gry med gry silty gritty, soft

sst vry drk tan, brn clstrs, f vf grnd, ang/sub ang grns, w/srtd, poorly to fair cem, fria to sub fria, mstly soft crumbly to vry fria, inter grain por, gd/strong odor, gd SFO, gd stain, fair UV, bleeding oil with gas bubs, floating drops in tray.

shl gry grn silty gritty, shls drk blue green, slick wxy, grsy text, silty gritty

chrt wht, bone wht, tan, tr orange, lt yellow, shrp frsh semi opa, blkly ang pcs, w/sli trace edge stain, chrt off wht crm brn, shrp frsh w/weath trip text edge, pp moldic por, drk brn/grsy blk stain, drk brn/blk SFO, gas bubs, fair/good odor. chrt drk gry/blue brn mottled, w/weath sli trip text, pp moldic por, drk brn oil stained, drk SFO, "spitting" gas in some. chrt wht off wht shrp frsh w/weath gran sli trip text edge, drk brn stained, SFO, gas bubs,

chrt wht off wht shrp frsh sub opa, blkly ang pcs w/tan brn drk brn mott weath trip text edges/sides, gd vis vug, pp, moldic por, drk tan brn stained weath por, fair/gd SFO, gd gas bubs, filmy RBSFO on spl water, gd odor in all, chrt drk gry/blue mottled w/weath trip text edge/side, gd vug moldic por, drk brn stain, SFO, gas bubs.

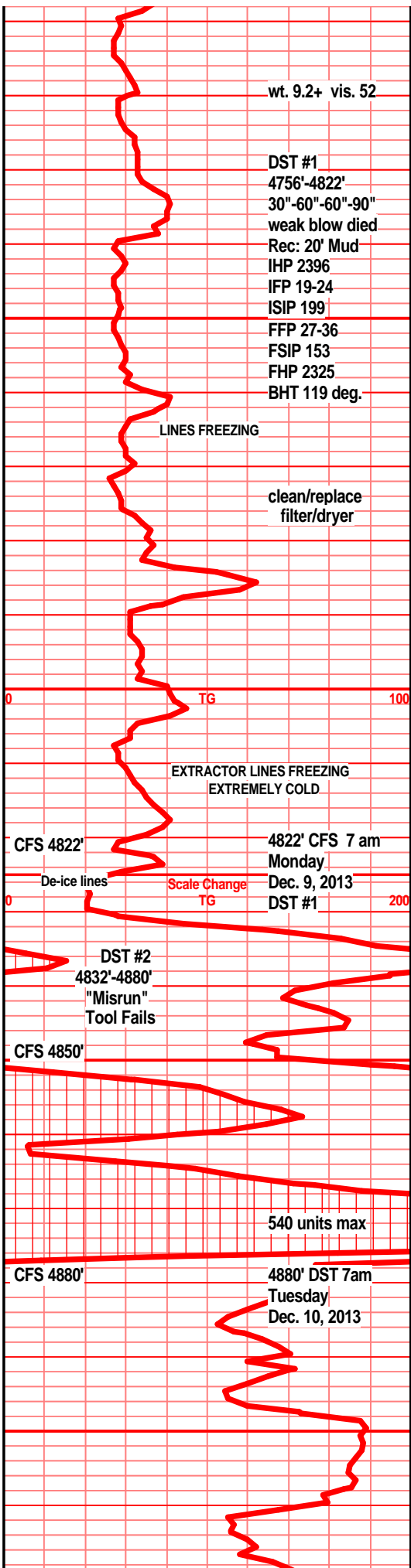
chrt off wht wht shrp frsh sub opa, w/gd weath gran sli spongy sli chlky trip text, drk tan brn stained in weath text, gd vug, pp, moldic por, gd stain SFO, gas bubs,

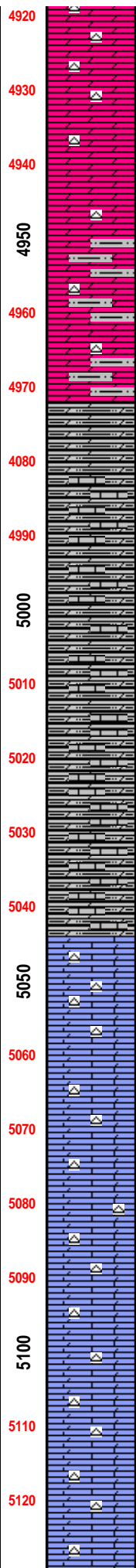
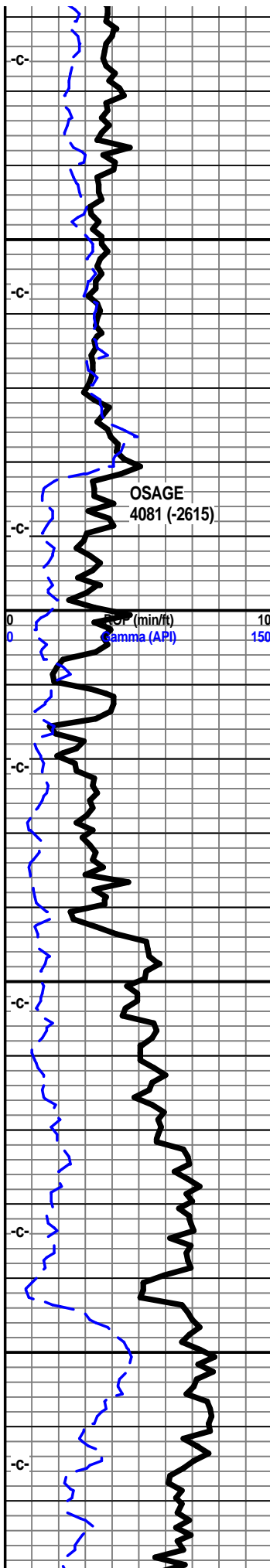
dolo off wht tan f vf xln blkly ang dns pcs, sndy gran text, glau, with tan wht chrt inclu, tr vry sli inter gran por, tr stain

dolo, chrt dolo, crm tan f vf xln blkly ang gran dns, tr glau, tr sndy, vf snd grn inclu, tr interxln por, brn stain, dull tan off wht frsh chrt inclu, tr with sli weath text edges, tan brn stain, ssfo, odor?

dolo, chrt dolo, crm tan f vf xln, gran, gritty sndy, tr glau, sli inter xln por, tan brn stain, off wht tan chrt inclu, tr with weath text pp moldic por, stain SSFO, tr gas, odor?

dolo chrt dolo f vf xln gran gritty, tr sndy text, snd grn inclu, chrt off wht lt gry shrp frsh





opaq, drk tan brn stain, SSFO, sli odor

dolo chrty dolo, crm gry bec mstly gry, f vf xln blky ang gran gritty sli sndy pc, snd grn inclu, chrt off wht gry, shrp frsh, tr weath edge, tr inter xln por, drk tan brn stain, SSFO, odor?

dolo gry bec drkr med gry, vf xln blky ang hrd pcs, sndy gritty text, bec arg, tr silty, chrt med gry shrp frsh sub opaq

dolo gry med gry f vf xln gritty sndy, snd grn inclu, inc silty shly arg tr chrt tan gry shrp frsh opaq

dolo gry bec drkr, f vf xln dns hrd blky ang, silty gritty, tr sndy text, snd grn inclu, chrt gry drk gry shrp frsh opaq

dolo silty shly, drk gry, f vf xln gritty silty blky ang, invt e/ftk gty/green shls

dolo, silty dolo, f vf xln gritty silty shly, hrd blky ang pcs, drk gry green silty gritty dolo flav shls

dolo, silty dolostn, f vf xln gran gritty silty shly, hrd blky ang pcs,

dolo, silty dolo, dolo shls, f vf xln gran gritty silty, tr lst wht wht/gry mott f vf xln dns hrd tr foss, pyritic, calc

dolo silty dolo, f vf xln gran gritty arg, silty, trwht lst/dolo crs calc xln inclu. drk gry silty dolo shls

lst crm wht off wht, tr off wht lt gry mott, f sli med xln, calc, blky ang calc fill, chrty, chrt inclu, chrt wht off wht lt gry, milky, shrp frsh opaq, foss frags inbeds,

shl gry drk gry green, lst wht off wht/gry mott, f sli med xln, sub chky in prt, chrty, chrt wht shrp frsh opaq foss frags

lst off wht, off wht gry mott, f sli med xln, blky ang, tr sub chky, tr foss frags, chrty, chrt off wht, milky, shrp frsh foss

lst wht off wht lt gry lt green tinted, f sli med xln blky ang jagged pcs, foss frags, crs calc pcs, chrty, chrt wht milky foss shrp frsh opaq

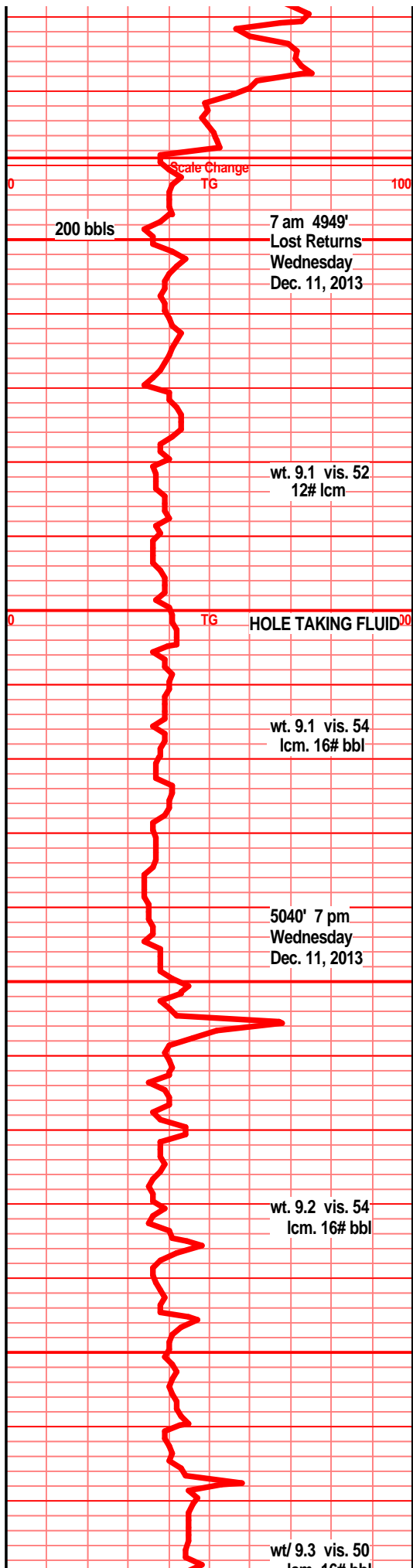
lst tr dolo, off wht lt gry/green tint in prt, f sli med xln blky ang jagged pcs tr sub chky foss frags, crs calc xln pcs, chrty, chrt wht milky shrp frsh foss opaq

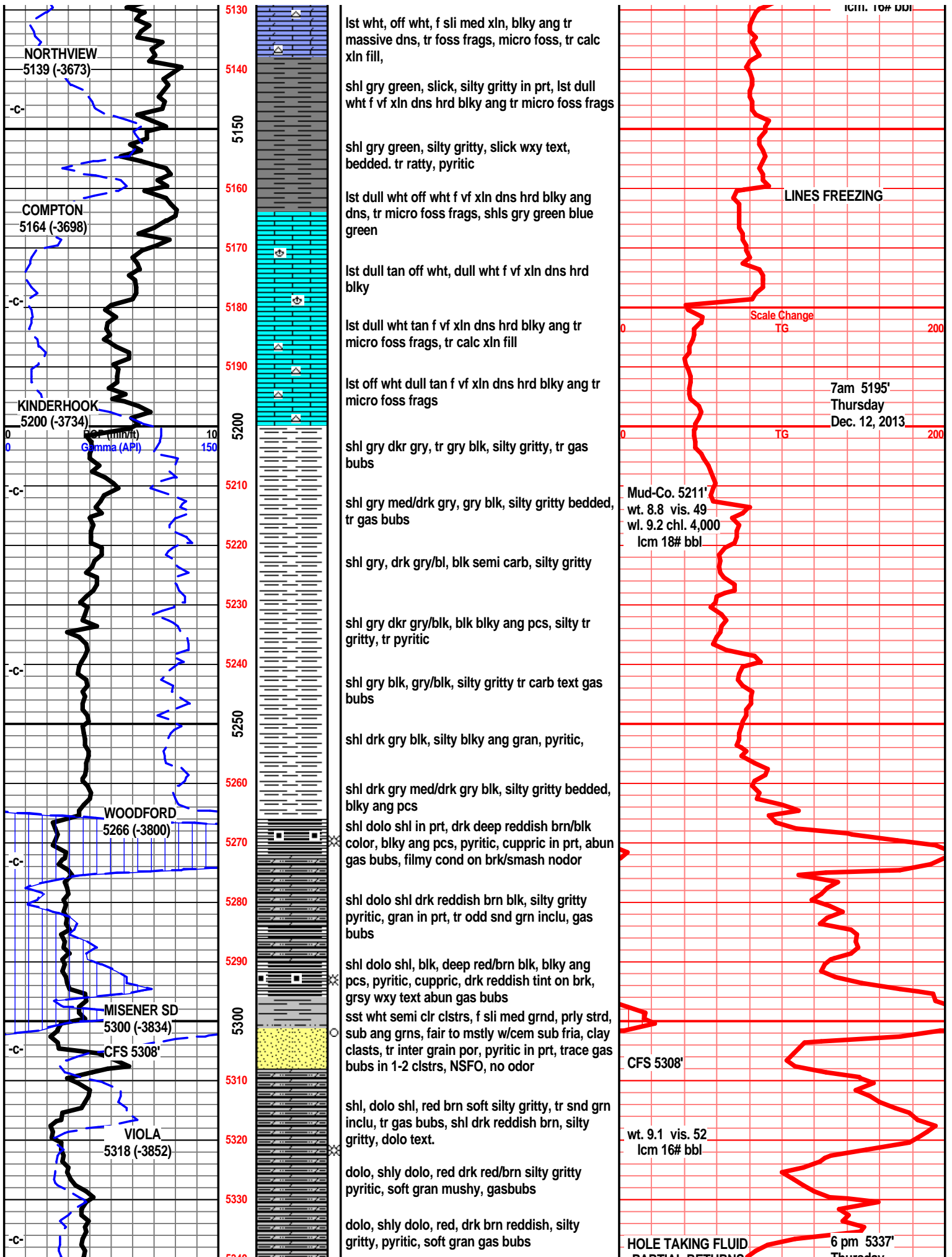
lst, tr dolo in prt, off wht lt gry green tint, f sli med xln blky ang tr sub chky, crs foss frags, crs calc xln pcs, chrty, chrt inclu, chrt wht off wht lt gry shrp frsh opaq

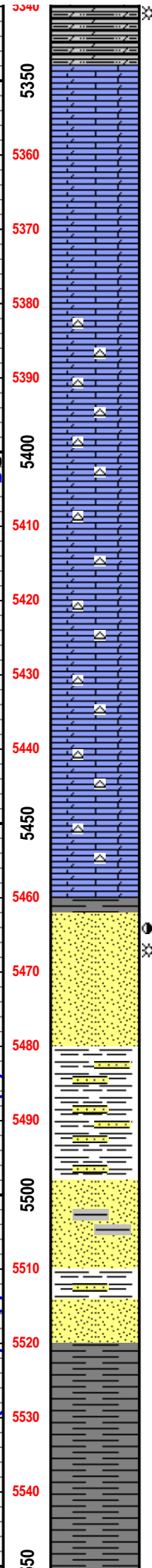
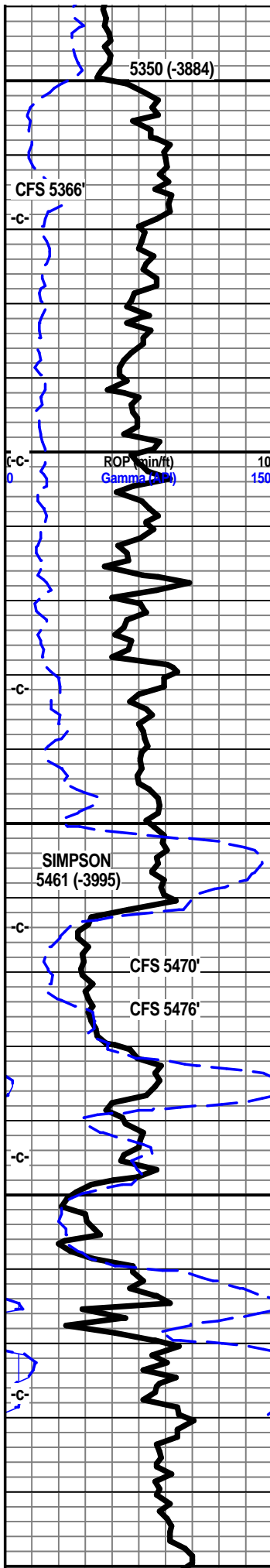
lst tr dolo in prt, off wht lt gry/green tinted, f sli med xln blky ang, tr sub chky. crs calc xln text, foss frag, crsly in prt, chrty, chrt off wht lt gry shrp frsh, foss, shl med gry/green silty gritty gran calc in prt

shl gry gry/blue/green, silty gritty, tr calc, lst tan crm gry tinted, f xln dns hrd blky ang, tr calc fill, sli sub chky

lst off wht crm tan, f vf xln dns hrd blky ang, tr foss frags, tr micro foss frags,







dolo, dolo shls, drk gry/blk, red brn, silty, gritty, gran soft pyritic gassy

Ist off wht gry mott f sli med xln, blk ang sub chlky inter xln por, tr foss frags, pyritic, dolo dull tan lt gry/brn, f xln dns hrd blk gran gritty, to soft sli chlky

Ist off wht lt gry mott f xli med xln blk ang, tr crs calc edges, foss frags, crsly foss in prt, inter foss/xln por, pyritic, dolo gry dull tan lt brn f xln gran gritty arg, tr foss frags

Ist wht tan brn mott f sli med xln, gran, blk chlky, Ist/dolo dull tan lt brn f vf xln dns hrd blk ang gritty, tr sndy text, chrt dull tan lt brn shrp frsh opa

Ist/dolo tan brn mott f sli med xln blk ang hrd, gritty, sub chlky, chrt, chrt dull tan/brn shrp frsh opa

Ist off wht tan f xln gran soft chlky, dolo dull tan brn f xln blk ang tr chlky, gritty chrt, chrt dull tan brn shrp frsh opa

dolo/Ist, tan drk tan dull brn f xln gran, tr sub chlky, gritty, tr snd grn inclu, chrt, chrt drk tan dull brn shrp frsh opa

dolo, dolo/Ist, drk crm tan, dull brn f xln gran sub chlky, tr foss frags, chrt, chrt tan dull brn shrp frsh opa

dolo w/Ist, off wht-dull tan lt brn f vf xln dns tr gran tr sub chlky, gritty, chrt in prt, chrt tan dull brn shrp frsh sub opa

dolo tan brn, wht/tan/brn mott f vf xln dns sub chlky, tr foss, chrt, chrt tan dull brn shrp frsh, much green, blue green teal green grsy wxy text shl in 5470' spl

shl gry green teal green wxy grsy, sst clr lt gry clstrs, f grnd, sub ang/ang grns, w/srted, w/cem sub fria, silic cem tr inter gran por, tr dolo/xln fill, hvy brn SFO, tr gas bubs on brk, hvy oil smears on brk, nodor, clstrs mstly blk sst wht clr some lt gry clstrs f grnd, sub ang/sub rded grns, w/srted, w/cem to sub fria, silic cem, tr min fill, tr clay fill mstly blk ang semi hard clstrs,

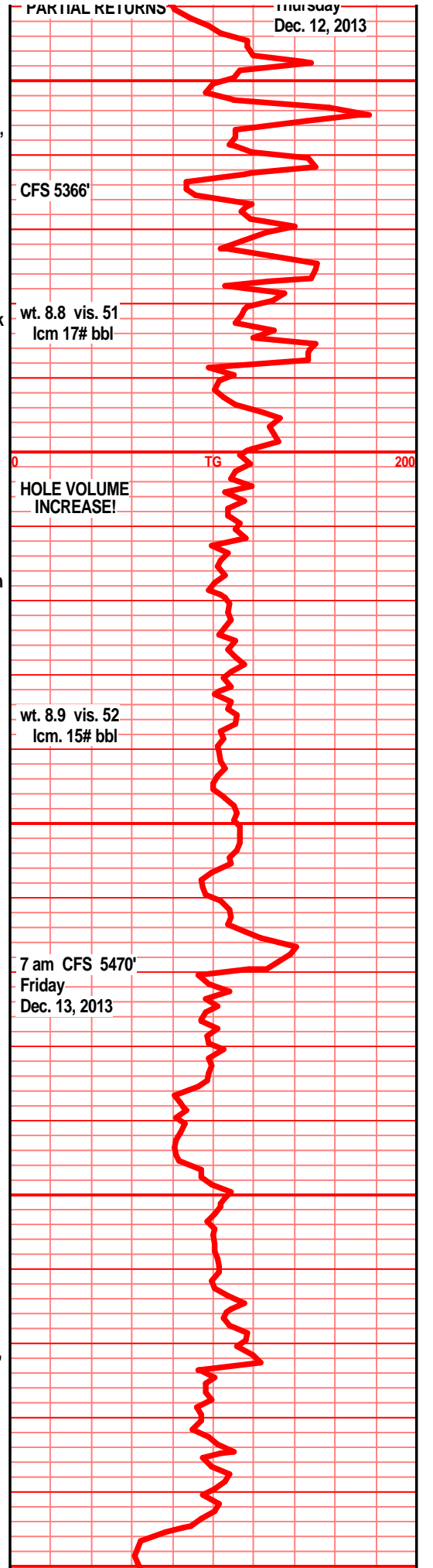
shl gry green teal green slick wxy grsy text, sd grn inclu, tr pyritic, sst/shl contact pcs, sst off tan gry clstrs, f grnd sub ang sub rded, w/srted w/cem, sub fria, mstly tite, min speck, NS

shl drk gry, gry blue green teal green, wxy, grsy text, snd grn, snd clstr inclu, sst gry green f grnd, sub rded grns, w/srted, w/cem, silic cem, sub fria, hvy gry blue, teal green shl inclusions/beds, clay clasts

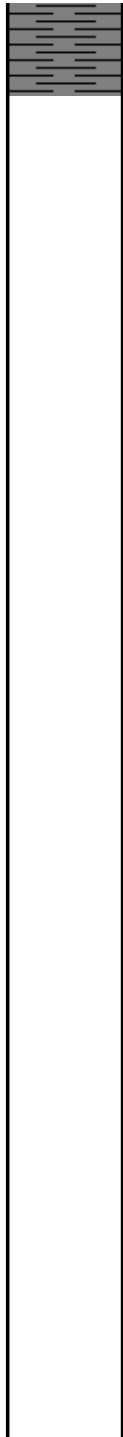
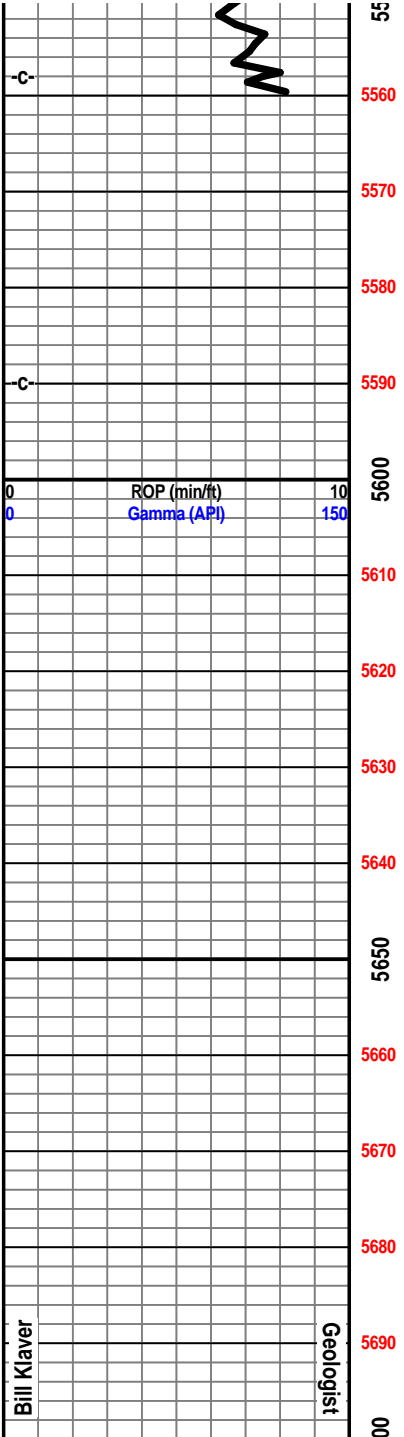
sst off wht lt tan clstrs, f grnd, sug ang, sub rded, w/srted, w/cem, silic cem, sub fria to tite, clay fill, teal green shale fill, mineral fill/specks, shls drk blue gry green teal green

shl deep green, blue green, teal green

shl green teal green, silty pyritic, snd grn inclu slick wxy grsy text



shl deep green blue green teal green pyritic,  
snd grn inclu



Woolsey Operating Company  
Grogg #1  
2310' FSL & 1320' FWL  
N 1/2 N 1/2 NW 1/4  
Sec. 7 - Twp 35 S - Rge 12 W  
Hardtner Field  
Barber County, Kansas  
API # 15-007-24109-0000

