Woolsey Operating Company, LLC

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

Well Name:	GERBER #1		
Location:	Section 10 - Township 31 South - Range 7 West		
License Number:	33168	**Region:**	Harper County, Kansas
Spud Date:	November 2, 2018	**Drilling Completed:**	November 11, 2018
Surface Coordinates:	2450' FSL & 1250' FEL W/2 NW NE SE		
Bottom Hole Coordinates:			
Ground Elevation (ft):	1575'	**K.B. Elevation (ft):**	1587'
Logged Interval (ft):	2000' **To:** 4850'	**Total Depth (ft):**	4850'
Formation:	Topeka >>> Simpson		
Type of Drilling Fluid:	Chemical Mud		

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 7:15 pm on 11/2/2018, set 6 joints of 8 5/8" new casing at 268' KB (tally 254'), cement with 225 sx 60/40 poz mix. Plug down at 3 am on 11/3/2018. Cement did circulate.
Production Casing:

Deviation Surveys: 3/4 at 270', 3/4 at 999', 1/2 at 1504', 1/2 at 2013', 1.2 at 2300', 1/4 at 2459'. See detail for deeper surveys.
Pipe Strap @ 3851', Strap: 3853.09', Board: 3851.85', Strap 1.24' long. No corrrection was made to the board.
Fossil Drilling Rig 3 Bit Record:
1) 12 1/4" Varel RR in at 0' out at 270', 5 1/2 hours.
2) 7 7/8" Hughs Tool DP 605X PDC in at 270'

Gas Detector: Pason Systems
Mud System: Mud-Co. Brad Bortz, Engineer
DST's: Trilobite Testing,
E-Logs: ELI, Dual Induction Laterolog w/sp, CNL-FDC w/PE, GR & Caliper, Sonic w/GR, Gus Phanestiel Engineer
Directional Tools by Integrity Directional
Company Man: Alan Dick, WOC

DSTs

DST #1. Mississippi, 4351'-4361', 30"-60"-60"-90", IFP: weak 1" blow, FFP: feeble 1 1/2" blow, Recovered: 5' drilling mud. IHP 2333, IFP 37-237, ICIP 793, FFP 66-75, FCIP 421, FHP 2130. BHT N/A

DST #2, Mississippi, 4361'-4376', 30"-60"-60"-90", IFP: Weak 1 1/2' blow, FFP: Weak 4 1/2" blow (tool slid 22'), Recovered: 61' VSOGCM (<1%O, 10%G, 90%M). IHP 2100, IFP 1245-1258, ICIP 1259, FFP 1275-1257, FCIP 1257, FHP 2143. BHT N/A. Test considered a misrun, tool plugged throughout test.

DST #3, Simpson, 4740'-4757', 15"-30"-15"-30", Strong blow, Recovered: 1209' GIP, 250' OGCMW (25%G, 5%O, 45%W, 25%M), 248' OMCGW (20%G, 5%O, 70%W, 5%M), 248' MW/Scum of oil, 121' MW, API Rw 0.16 @ 41 deg, chl. 89,000 ppm, IHP 2389, IFP 736-773, ICIP 1764, FFP 296-444, FCIP 1764, FHP 2363, BHT 125 deg.

CREWS

Rick Barriger, Tool Pusher
Kevin Clifft, Morning
Pablo Luna, Days
Chris Staats, Evening

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
Shysltst
Sltysh
Ss 2

Shale 3
Silty dol
Dol lmst
Dol 2
Granite wash
Lmst
Calc dol
Shale 3

ACCESSORIES

MINERAL

Anhy
Arg
B Bent
Bit
Brecfrag
Calc
Carb
Chtdk
Chtlt
Dol
Ferrpel
Ferr
Glau
Gyp
Marl
Nodule
Phos
P Pyr
Salt

Chlorite
Dol
Sand
Slty

FOSSIL

Algae
Amph
Belm
Bioclst
Brach
Bryozoa
Cephal
Coral
Crin
Echin
Fish
Foram
F Fossil
Gastro

Pelec
Pellet
Pisolite
Plant
Strom
Fuss
Oomoldic

STRINGER

Anhy
Arg
Bent
Coal
Dol
Gyp
Ls
Mrst
Sltstrg
Ssstrg
Carbsh

Grysh
Gryslt
Lms
Sandylms
Sh
Sltstn

TEXTURE

BS Boundst
C Chalky
CX CryxIn
E Earthy
FX FinexIn
GS Grainst
L Lithogr
MX MicroxIn
MS Mudst
PS Packst
WS Wackest

Sandy
Silt
Oolite
Ostra
Clystn
Dol

Curve Track 1
ROP (min/ft)
Gamma (API)

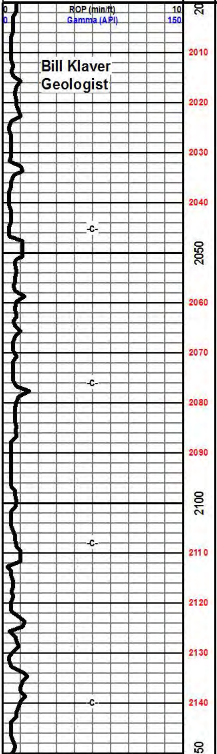
Depth

Lithology

Oil Shows

Geological Descriptions

TG, C1-C5
TG (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)



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Woolsey Operating Company LLC
Gerber #1
Sec. 10 - Twp 31S - Rge 7W
2450' FSL & 1250' FEL
W/2 NW NE SE
Harper County, Kansas
Field: DeQuoin
GL 1575' KB 1587'
AP # 15-077-22178-00-00

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Ten foot samples and one minute drill time were collected from 2700' to rotary total depth. Samples were delivered to the Survey at the completion of the test.

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The following tests were used for structural comparison: Colorado O&G Mathes #1, C SE NE, 10-T31S-R7W, Kathol Petroleum's Mathes #2, C SW NE, 10-T31S-R7W, B&H Petroleum's Mollohan 1-A OWWO, NW NW NE, 15-T31S-R7W.

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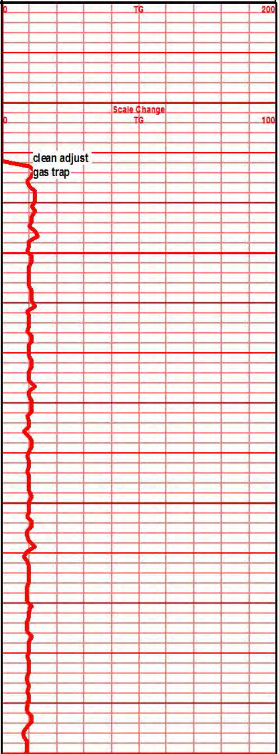
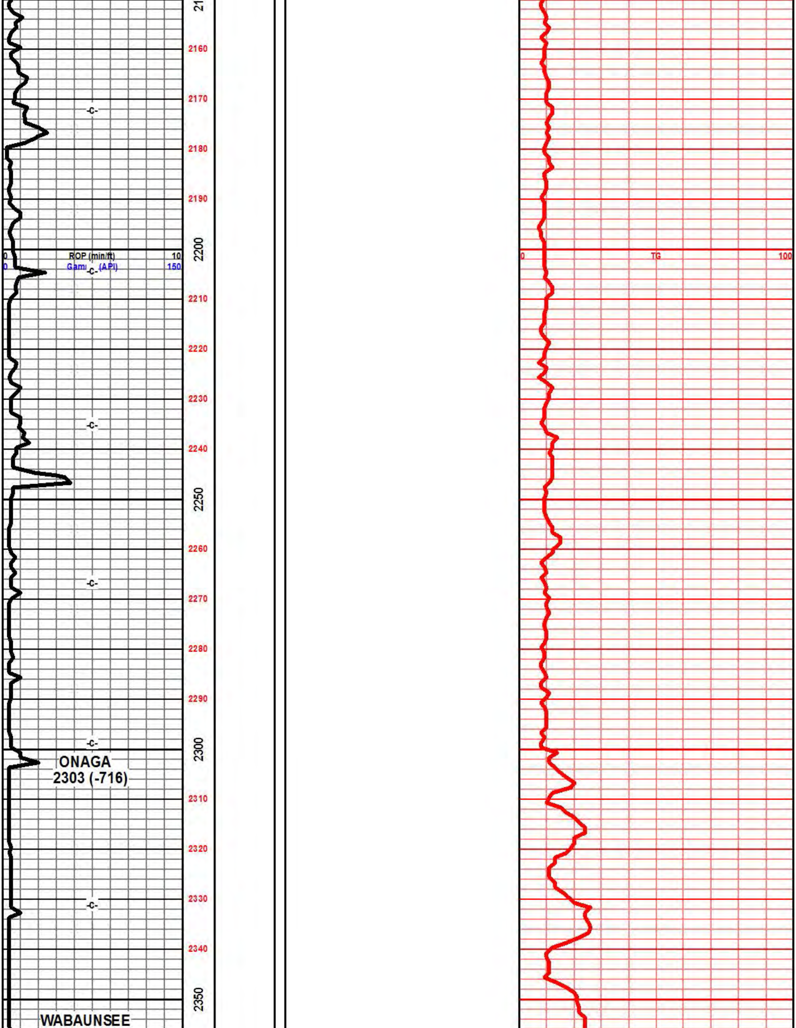
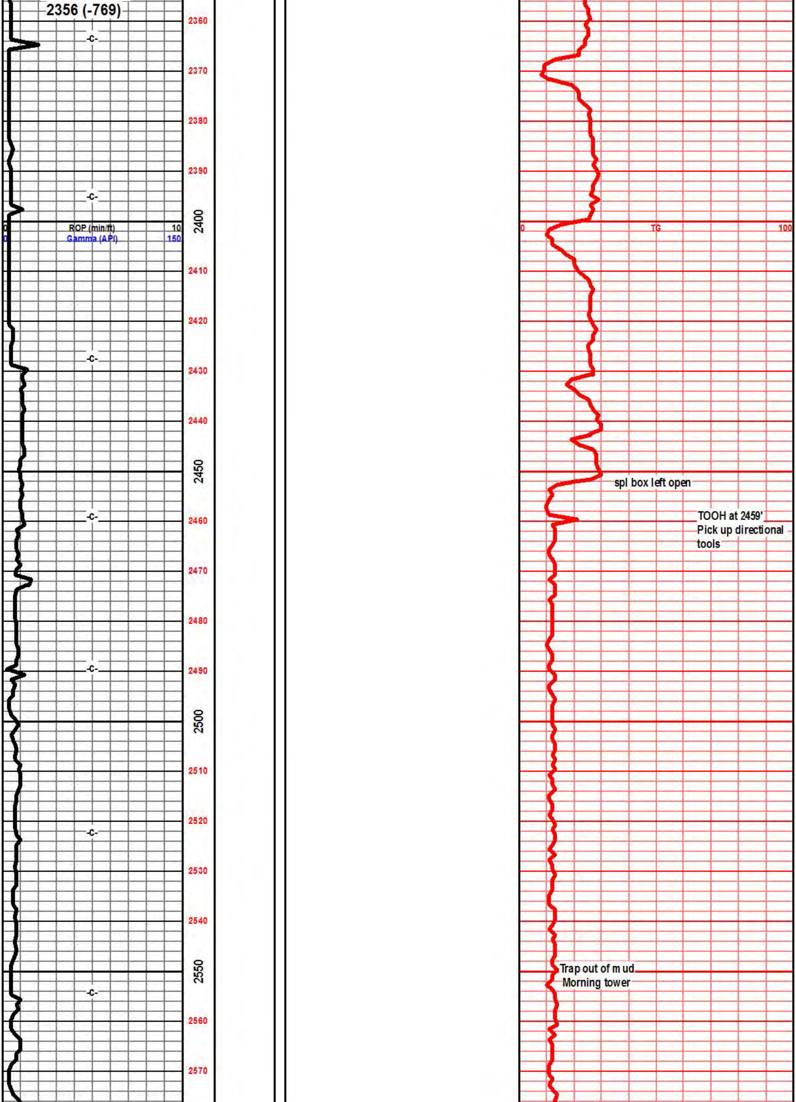
7 am Progress:
November 2, 2018 MIRT/Spud
November 3, 2018 WOC
November 4, 2018 Drilling at 1730'
November 5, 2018 Drilling at 2710'
November 6, 2018 Drilling at 3475'
November 7, 2018 Drilling at 3905'
November 8, 2018 TOOH for DST #1 4361'
November 9, 2018 TOOH with DST #2
November 10, 2018 CFS 4757'/Simpson
November 11, 2018 TOOH for e-logs at 4850'



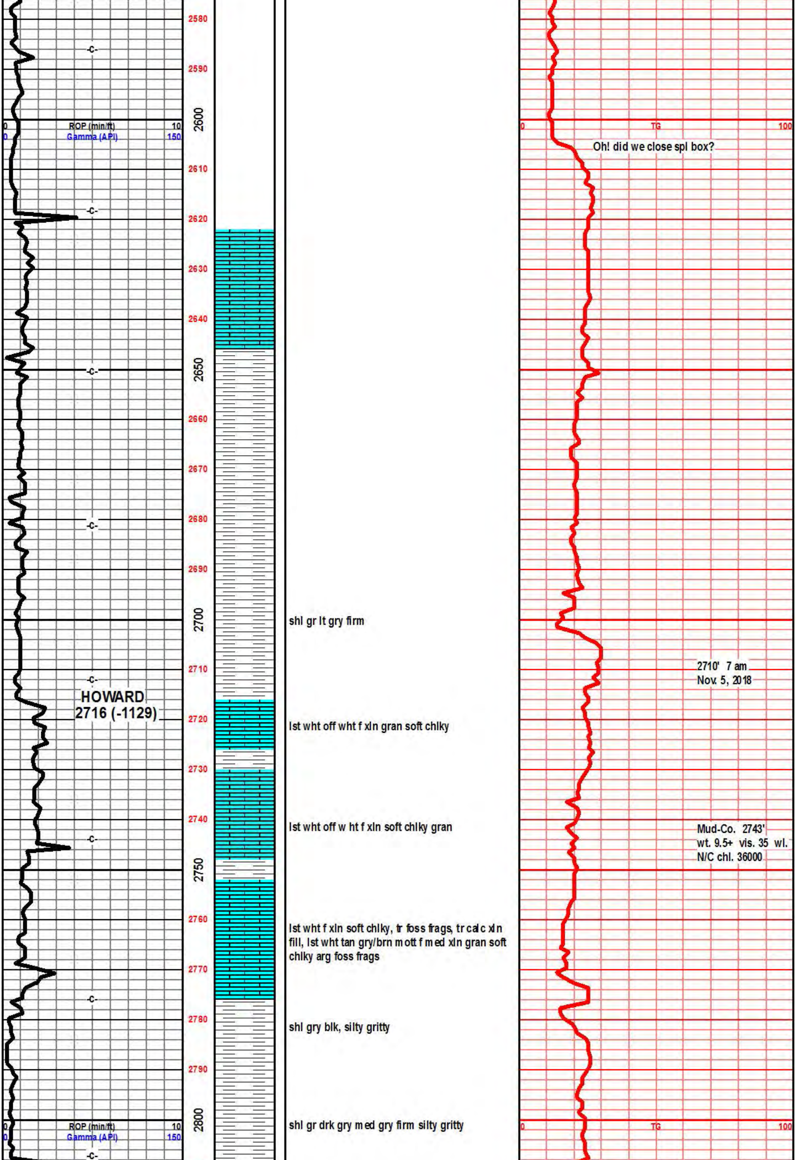




spl box left open

TOOH at 2459'
Pick up directional
tools

Trap out of m ud
Morning tower



HOWARD
2716 (-1129)

Oh! did we close spl box?

shl gr lt gry firm

2710' 7 am
Nov. 5, 2018

lst wht off wht f xln gran soft chlky

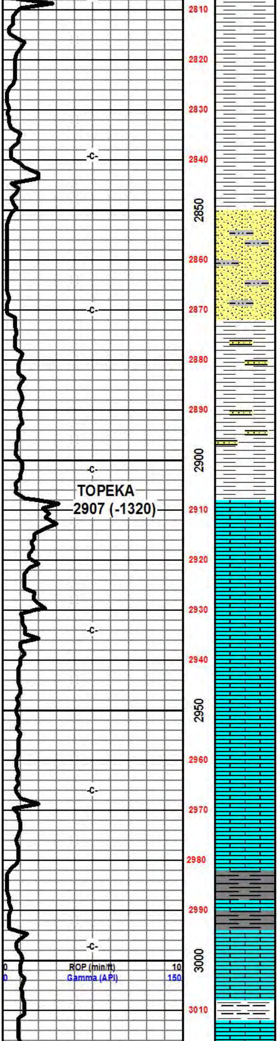
lst wht off w ht f xln soft chlky gran

Mud-Co. 2743'
wt. 9.5+ vis. 35 wl.
N/C chl. 36000

lst wht f xln soft chlky, tr foss frags, tr calc xln fill, lst wht tan gry/brn mott f med xln gran soft chlky arg foss frags

shl gry blk, silty gritty

shl gr drk gry med gry firm silty gritty



sh gry medrk gry silty gritty tr sndy

shl gry medk lt gry silty gritty tr sndy

sst lt gry clstrs, f vf grnd, sub ang ang grns, prly srtd, fria, soft crumbly, inter gran por, mic, arg silty, blk carb flecks

sst off wht gry lt gry f vf grnd sub ang grns prly srted, prly cem calc cem, sub fria to soft crumbly, mic silty, arg,

shl gry med gry soft, sst lt gry clstrs, f vf grnd sub ang grns, prly srtd, prly cem fria, arg silty mic

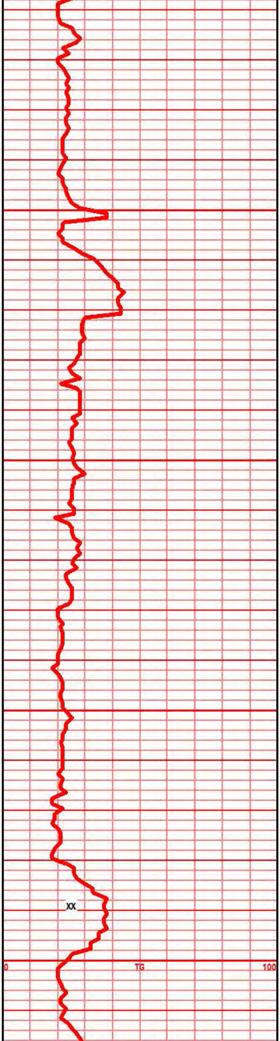
lst off wht lt gry mott f xln bkn blky ang arg vry chlky soft gran

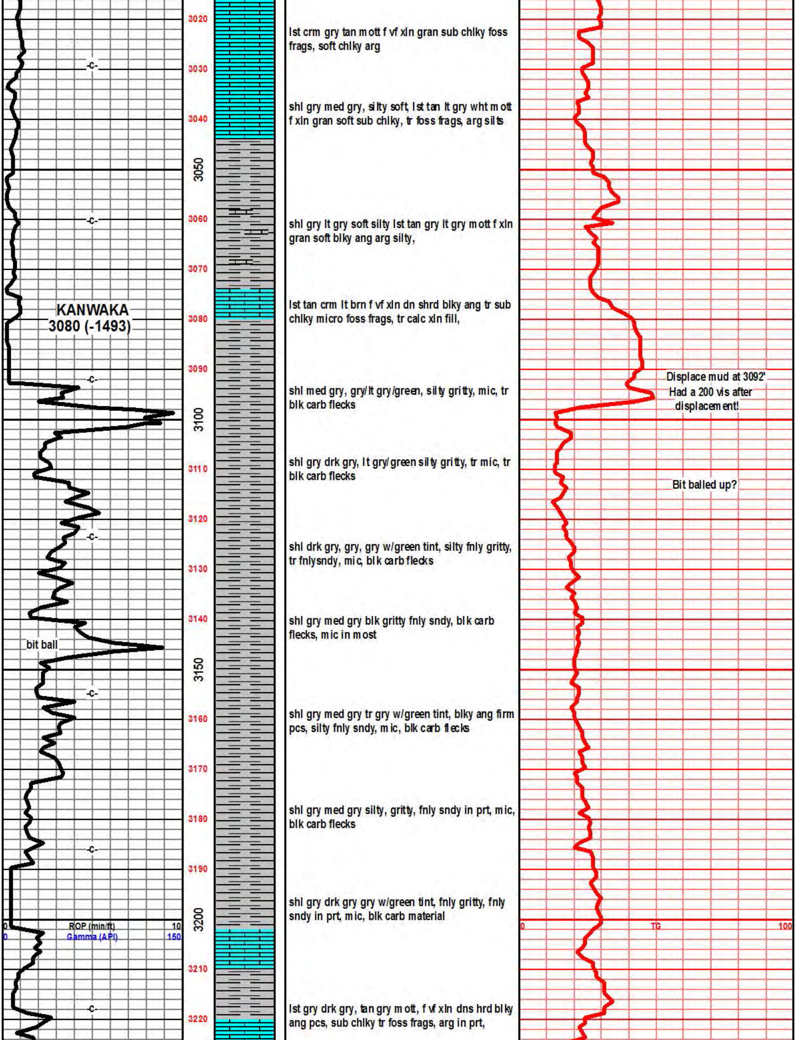
lst off wht lt gry f xln soft chlky gran tr foss frags, tr calc xln fill, mslty soft chlky mushy

lst crm/gry mott f vf lxn gran sub chlky soft gran arg, tr foss frags, gry arg silty

lst gry tan, crm/gry mott f xln blky ang gran sub chlky pcs, foss frags, mstly soft dns tr arg

shl gry, drk gry blk, blky ang firm pcs, sndy, clr f grnd, w/srted hvy clay fill much blk carb flecks, lst crm tan, crm gry mott f xln blky ang gran sub chlky soft , foss frags





lst crm gry tan mott f vf xln gran sub chlky foss frags, soft chlky arg

shl gry med gry, silty soft, lst tan lt gry wht mott f xln gran soft sub chlky, tr foss frags, arg silts

shl gry lt gry soft silty lst tan gry lt gry mott f xln gran soft blky ang arg silty,

lst tan crm lt brn f vf xln dn shrd blky ang tr sub chlky micro foss frags, tr calc xln fill,

shl med gry, gry/lt gry/green, silty gritty, mic, tr blk carb flecks

Displace mud at 3092'
Had a 200 vis after
displacement!

shl gry drk gry, lt gry/green silty gritty, tr mic, tr blk carb flecks

Bit balled up?

shl drk gry, gry, gry w/green tint, silty fnly gritty, tr fnlysndy, mic, blk carb flecks

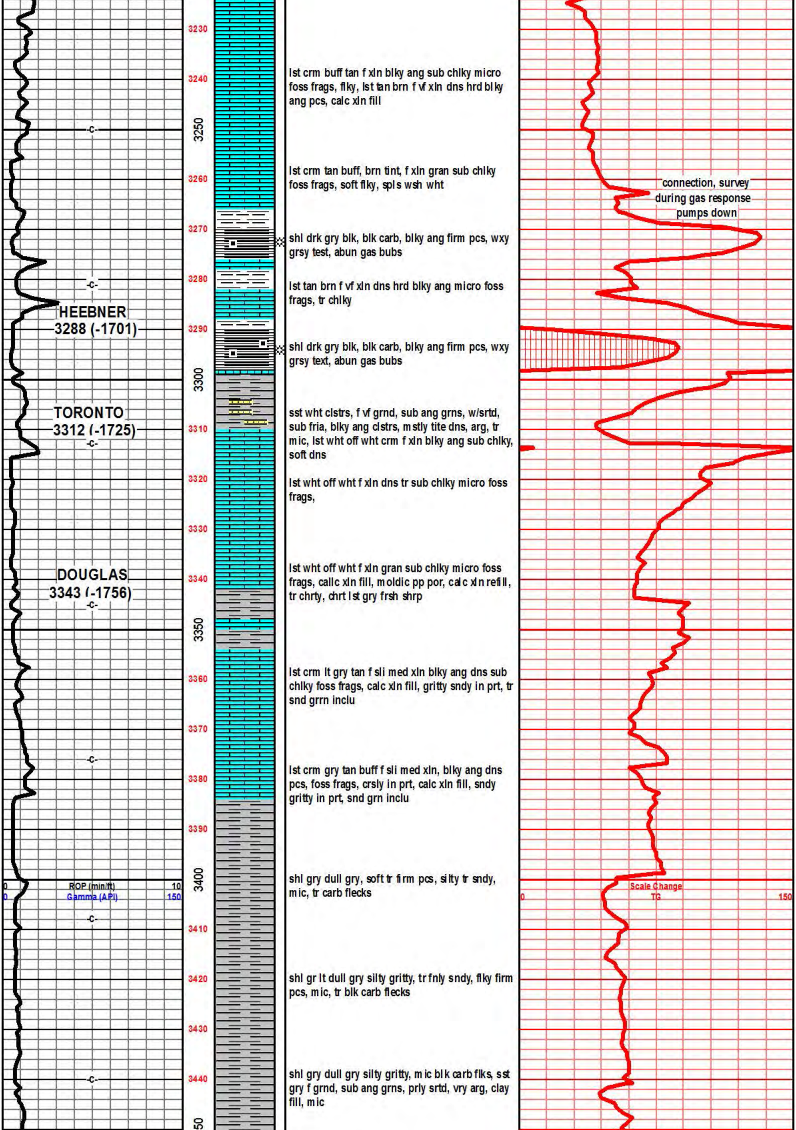
shl gry med gry blk gritty fnly sndy, blk carb flecks, mic in most

shl gry med gry tr gry w/green tint, blky ang firm pcs, silty fnly sndy, mic, blk carb flecks

shl gry med gry silty, gritty, fnly sndy in prt, mic, blk carb flecks

shl gry drk gry gry w/green tint, fnly gritty, fnly sndy in prt, mic, blk carb material

lst gry drk gry, tan gry mott, f vf xln dns hrd blky ang pcs, sub chlky tr foss frags, arg in prt,



lst crm buff tan f xln blky ang sub chlky micro foss frags, flky, lst tan brn f vf xln dns hrd blky ang pcs, calc xln fill

lst crm tan buff, brn tint, f xln gran sub chlky foss frags, soft flky, spls wsh wht

shl drk gry blk, blk carb, blky ang firm pcs, wxy grsy test, abun gas bubs

lst tan brn f vf xln dns hrd blky ang micro foss frags, tr chlky

shl drk gry blk, blk carb, blky ang firm pcs, wxy grsy text, abun gas bubs

sst wht clstrs, f vf grnd, sub ang grns, w/srtd, sub fria, blky ang clstrs, mstly tite dns, arg, tr mic, lst wht off wht crm f xln blky ang sub chlky, soft dns

lst wht off wht f xln dns tr sub chlky micro foss frags,

lst wht off wht f xln gran sub chlky micro foss frags, callc xln fill, moldic pp por, calc xln refill, tr chrty, chrt lst gry frsh shrp

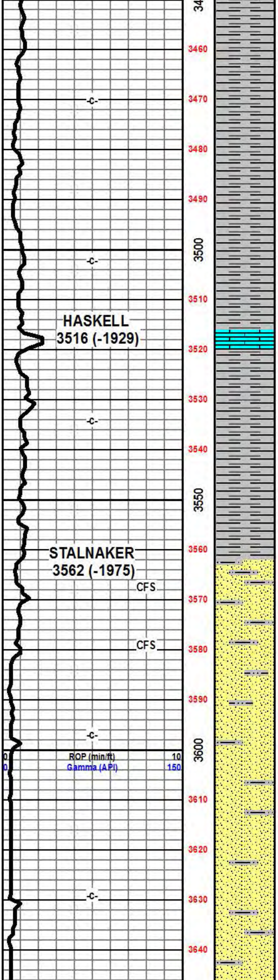
lst crm lt gry tan f sli med xln blky ang dns sub chlky foss frags, calc xln fill, gritty sndy in prt, tr snd grrn inclu

lst crm gry tan buff f sli med xln, blky ang dns pcs, foss frags, crsly in prt, calc xln fill, sndy gritty in prt, snd grn inclu

shl gry dull gry, soft tr firm pcs, silty tr sndy, mic, tr carb flecks

shl gr lt dull gry silty gritty, tr fnly sndy, flky firm pcs, mic, tr blk carb flecks

shl gry dull gry silty gritty, mic blk carb flks, sst gry f grnd, sub ang grns, prly srtd, vry arg, clay fill, mic



shl gry drk gry silty gritty, sndy in prt, mic, blk carb flecks, sst gry clstrs, vf grnd sub ang grns, prly srted, packed tite, tr sub fria, mic arg, silty/clay fill

shl gry drk gry silty gritty, mic, sndy, aa

shl gry med gry, silty gritty, mic, blk carb flecks

lst drk tan brn f vf xln dns hrd blky ang, micro foss, crs cal xln fill, shls aa, bec blky ang firm pcs

shl gry drk gry blky ang firm pcs, tr blk carb mat,

shl gry med gry silty sndy, sst/slstn gry vf grnd w/srted, ang grns, prly srted, sub fria, very arg hvy clay fill, mic, blk carb flecks

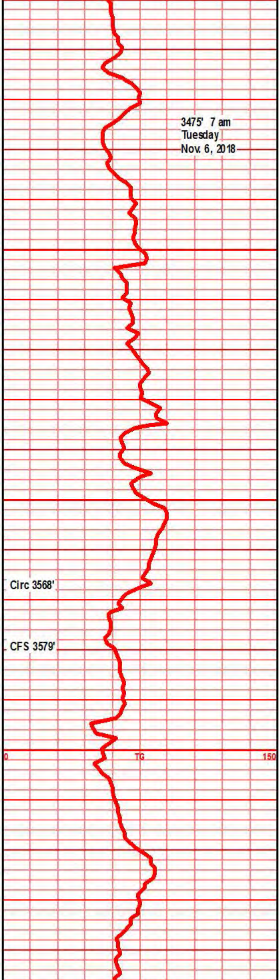
sst wht off wht clssstrs, vf grnd, sub ang grns w/srrted w/cem blky ang dns clstrs, sub fria to hrd, tr mic blk carb flecks, clay fill NS

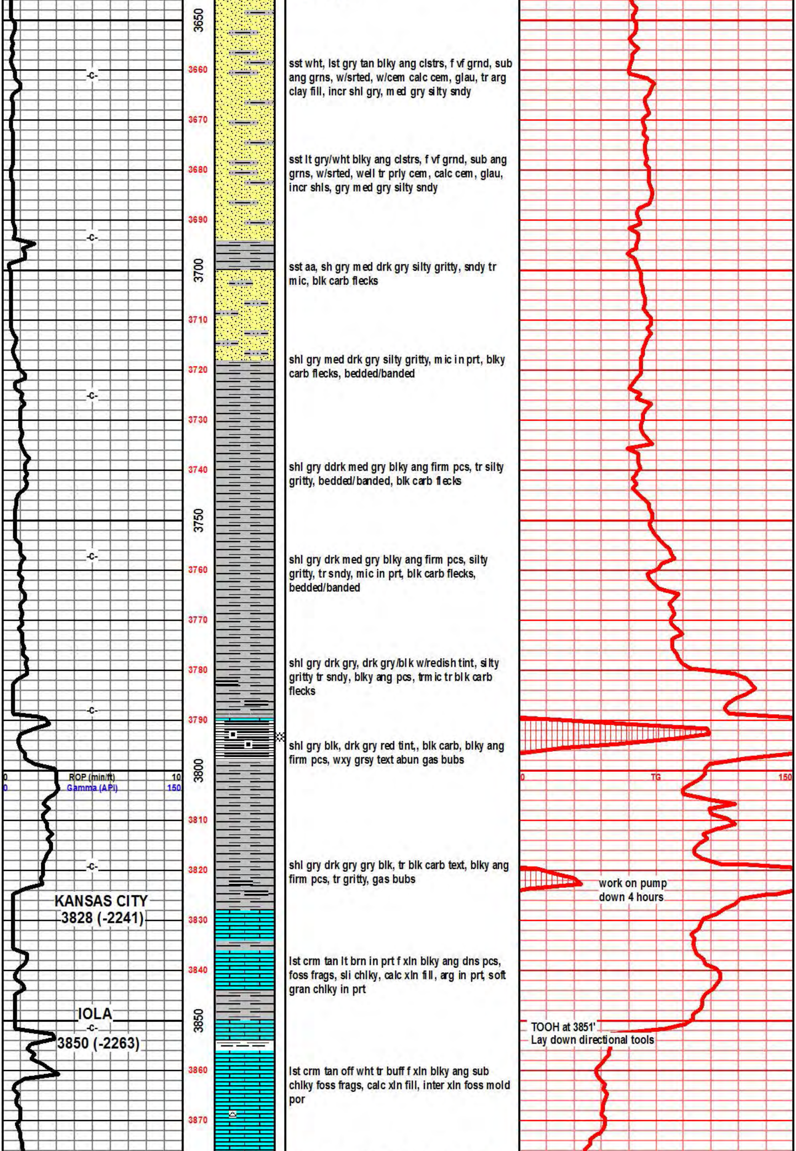
sst clstrs, wht lt gry tint, f grnd, sub ang grns, w/srted, w/cem, sub fria, inter grain por, clay fill, mic, tr blk carb flecks

sst wht lt gry clstrs, f vf grnd, sub ang grns, w/srted w/cem calc cem, sub fria to tite dns, glau, tr blk carb flecks

sst wht lt gry clstrs, f vf grnd, sub ang grns, w/srted, w/cem sub fria calc cem, tr dns tite blky clstrs, glau

sst wht tr lt tan, lt gry clstrs, f vf grnd sub ang grns, w/srted, w/cem, calc cem, tr tite dns, blky ang clstrs, glau





sst wht, lst gry tan blky ang clstrs, f vf grnd, sub ang grns, w/srted, w/cem calc cem, glau, tr arg clay fill, incr shl gry, med gry silty sndy

sst lt gry/wht blky ang clstrs, f vf grnd, sub ang grns, w/srted, well tr prly cem, calc cem, glau, incr shls, gry med gry silty sndy

sst aa, sh gry med drk gry silty gritty, sndy tr mic, blk carb flecks

shl gry med drk gry silty gritty, mic in prt, blky carb flecks, bedded/banded

shl gry ddrk med gry blky ang firm pcs, tr silty gritty, bedded/banded, blk carb flecks

shl gry drk med gry blky ang firm pcs, silty gritty, tr sndy, mic in prt, blk carb flecks, bedded/banded

shl gry drk gry, drk gry/blk w/redish tint, silty gritty tr sndy, blky ang pcs, trmic tr blk carb flecks

shl gry blk, drk gry red tint,, blk carb, blky ang firm pcs, wxy grsy text abun gas bubs

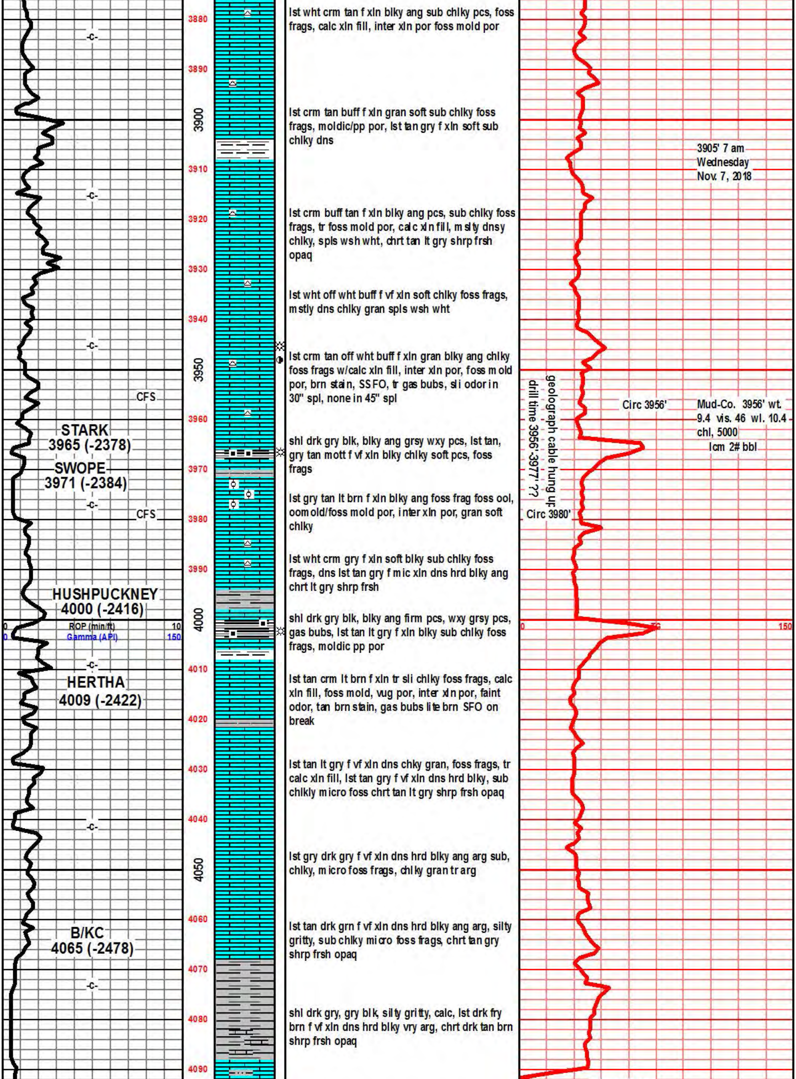
shl gry drk gry gry blk, tr blk carb text, blky ang firm pcs, tr gritty, gas bubs

work on pump
down 4 hours

lst crm tan lt brn in prt f xln blky ang dns pcs, foss frags, sli chlky, calc xln fill, arg in prt, soft gran chlky in prt

TOOH at 3851'
Lay down directional tools

lst crm tan off wht tr buff f xln blky ang sub chlky foss frags, calc xln fill, inter xln foss mold por



STARK 3965 (-2378)

SWOPE 3971 (-2384)

HUSHPUCKNEY 4000 (-2416)

HERTHA 4009 (-2422)

B/KC 4065 (-2478)

lst wht crm tan f xln blky ang sub chlky pcs, foss frags, calc xln fill, inter xln por foss mold por

lst crm tan buff f xln gran soft sub chlky foss frags, moldic/pp por, lst tan gry f xln soft sub chlky dns

lst crm buff tan f xln blky ang pcs, sub chlky foss frags, tr foss mold por, calc xln fill, m stly dnsy chlky, spls wsh wht, chrt tan lt gry shrp frsh opaq

lst wht off wht buff f vf xln soft chlky foss frags, m stly dns chlky gran spls wsh wht

lst crm tan off wht buff f xln gran blky ang chlky foss frags w/calc xln fill, inter xln por, foss m old por, brn stain, SSFO, tr gas bubs, sli odor in 30" spl, none in 45" spl

shl drk gry blk, blky ang grsy wxy pcs, lst tan, gry tan mott f vf xln blky chlky soft pcs, foss frags

lst gry tan lt brn f xln blky ang foss frag foss ool, oom old/foss mold por, inter xln por, gran soft chlky

lst wht crm gry f xln soft blky sub chlky foss frags, dns lst tan gry f mic xln dns hrd blky ang chrt lt gry shrp frsh

shl drk gry blk, blky ang firm pcs, wxy grsy pcs, gas bubs, lst tan lt gry f xln blky sub chlky foss frags, moldic pp por

lst tan crm lt brn f xln tr sli chlky foss frags, calc xln fill, foss mold, vug por, inter xln por, faint odor, tan brn stain, gas bubs lite brn SFO on break

lst tan lt gry f vf xln dns chky gran, foss frags, tr calc xln fill, lst tan gry f vf xln dns hrd blky, sub chlkly micro foss chrt tan lt gry shrp frsh opaq

lst gry drk gry f vf xln dns hrd blky ang arg sub, chlky, m icro foss frags, chlky gran tr arg

lst tan drk grn f vf xln dns hrd blky ang arg, silty gritty, sub chlky micro foss frags, chrt tan gry shrp frsh opaq

shl drk gry, gry blk, silty gritty, calc, lst drk fry brn f vf xln dns hrd blky vry arg, chrt drk tan brn shrp frsh opaq

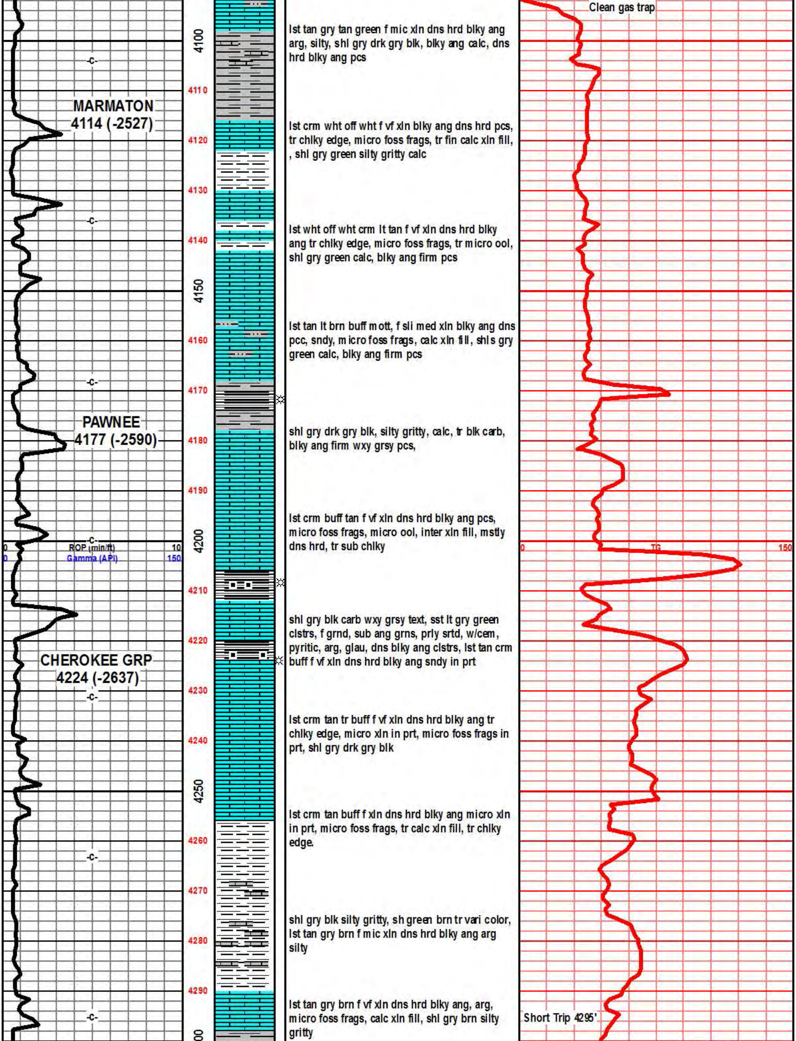
3905' 7 am
Wednesday
Nov. 7, 2018

geolograph cable hung up
drill time 3956'-3977' ??

Circ 3956'

Circ 3980'

Mud-Co. 3956' wt. 9.4 vis. 46 wl. 10.4 chl, 5000
lcm 2# bbl



lst tan gry tan green f mic xln dns hrd blky ang arg, silty, shl gry drk gry blk, blky ang calc, dns hrd blky ang pcs

lst crm wht off wht f vf xln blky ang dns hrd pcs, tr chlky edge, micro foss frags, tr fin calc xln fill, , shl gry green silty gritty calc

lst wht off wht crm lt tan f vf xln dns hrd blky ang tr chlky edge, micro foss frags, tr micro ool, shl gry green calc, blky ang firm pcs

lst tan lt brn buff mott, f sli med xln blky ang dns pcc, sndy, micro foss frags, calc xln fill, shls gry green calc, blky ang firm pcs

shl gry drk gry blk, silty gritty, calc, tr blk carb, blky ang firm wxy grsy pcs,

lst crm buff tan f vf xln dns hrd blky ang pcs, micro foss frags, micro ool, inter xln fill, mstly dns hrd, tr sub chlky

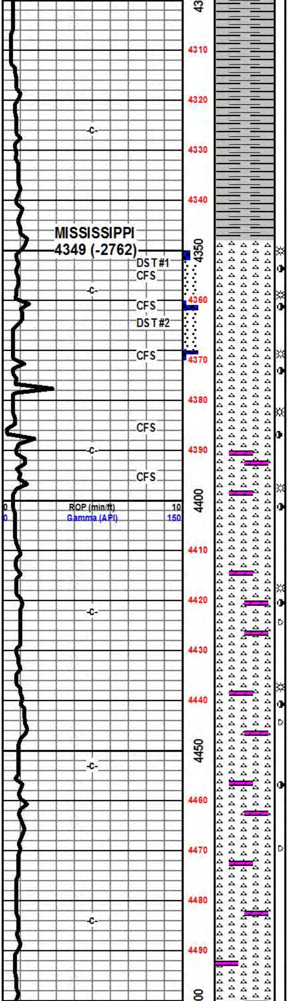
shl gry blk carb wxy grsy text, sst lt gry green clstrs, f grnd, sub ang grns, prly srtd, w/cem, pyritic, arg, glau, dns blky ang clstrs, lst tan crm buff f vf xln dns hrd blky ang sndy in prt

lst crm tan tr buff f vf xln dns hrd blky ang tr chlky edge, micro xln in prt, micro foss frags in prt, shl gry drk gry blk

lst crm tan buff f xln dns hrd blky ang micro xln in prt, micro foss frags, tr calc xln fill, tr chlky edge.

shl gry blk silty gritty, sh green brn tr vari color, lst tan gry brn f mic xln dns hrd blky ang arg silty

lst tan gry brn f vf xln dns hrd blky ang, arg, micro foss frags, calc xln fill, shl gry brn silty gritty


MISSISSIPPI
4349 (-2762)

shl gry green blk, tr maroon ratty silty bedded bandd

lst tan brn gry brn f vf xln dns hrd blky ang arg, silty, shl gry blk, maroon tr vari color, silty ratty

shl gry green, vari color, red, yellow, maroo, blk drk green/blue, ratty banded bedded

chrt wht tan brn mott, weath trip text, pp moldic por, gd odor, stain, abun gas bubs, tan brn filmy SFO, chrt frsh shrp w/gran weath trip text edge pp moldic por, blk stain, gas bubs, tan brn stain, filmy SFO

chrt wht shrp frsh w/weath trip text edge, wht soft gran edges, pp moldic por, vug por, fair odor, tan brn stain, SSFO, filmy SFO abun gas bubs

chrt wht tan brn mott frsh w/weath gran trip text edge, vug moldic por, fair odor, brn/blk stain, filmy SFO, abun gas bubs

chrt wth tr wht tan mott, frsh opaq w/weath gran trip text edge, soft crumbly edge, pp vug moldic por, tan stain, filmy SFO, blk gilson stain, fair gas bubs, sli odor

chrt wht off wht shrp frsh opaq w/weath gran trip text edges, dolo text in prt, pp moldic vug por, incr blk gilsonitic stain, gas bubs, tan brn stain VSSFO, faint odor

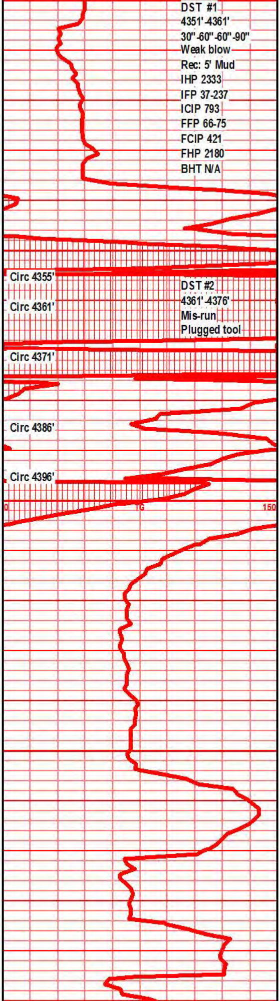
chrt wht shrp frsh opaq w/weath gran trip text edges, pp moldic por, dolo text, chrt wht off wht gran weasth text, pp moldic por, odor, blk gilson stain, tan brn stain, gas bubbles, RBSFO, filmy SFO

chr twht off wht shrp frsh opaq w/weath gran trip text edges, tr dolo text, chrt wht weath gran text, pp moldic por, odor, gilsonitic stain, tr brn blk stain tr gas bubs odor

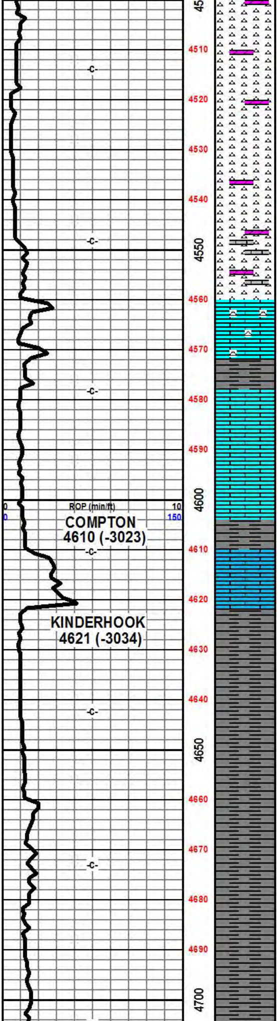
chrt wht , wht tan mott, dolo in prt, weath gran edges, soft gran, pp moldic por, lt tan stain, RBSFO, odor?, tr gas bubs, filmy stain

chrt wht shrp frsh opaq, blky ang tr gran weath edge, tr dolo text, nodor, tr rare gilsonitic stain,

chrt wht off wht, tr lt tan shrp frsh opaq, blky ang pcs, tr gran weath soft text, tr dolo text, pp moldic por, nodor, tr lt stain, NSFO


DST #1
4351'-4361'
30"-60"-60"-90"
Weak blow
Rec: 5' Mud
IHP 2333
IFP 37-237
ICIP 793
FFP 66-75
FCIP 421
FHP 2180
BHT N/A

DST #2
4361'-4376'
Mis-run
Plugged tool



chrt wht off wht shrp frsh blky ang opaq, dolo text, frsh wht chrt w/weath gran crumbly edge, tr foss, gran pp moldic por

chrt wht off wht shrp frsh opaq, blky ang pcs, dolo crm tan f xln gran ang blky chrty, frsh chrt inclu

chrt off wht tan shrp frsh opaq, blky ang shrp pcs, dolo tan off wht f vf xln gritty sndy, chrty, chrt inclu

lst crm tan off wth f mic xln dns hrd blky ang pcs, micro foss frags, chrty, chrt wht shrp frsh opaq, blky ang pcs

lst wht off wht tan f vf xln dns hrd blky ang pcs, chrt dull wht shrp frsh opaq, foss frag inclu, shl drk gry, gry green blky ang firm pcs, dolo lt blue green, f xln soft sndy gran

lst wht off wht dull tan f micro xln dns hrd blky ang, tr crs foss frags inclu,

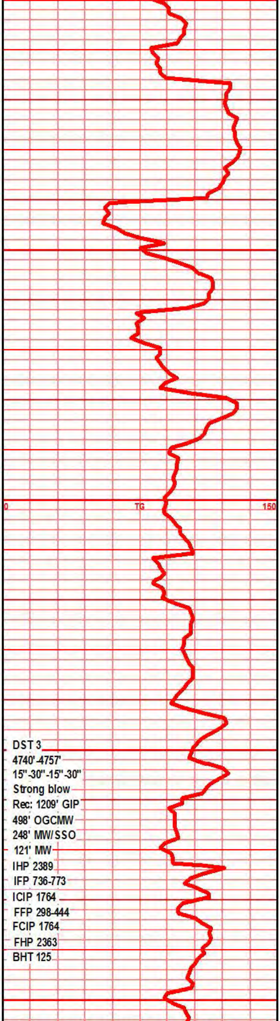
shl dull gry, brn/gry silty gritty platey, flky blky firm pcs, tr gas bubs

sh gry drk gry blk, gry/brn silty gritty, gas bubs

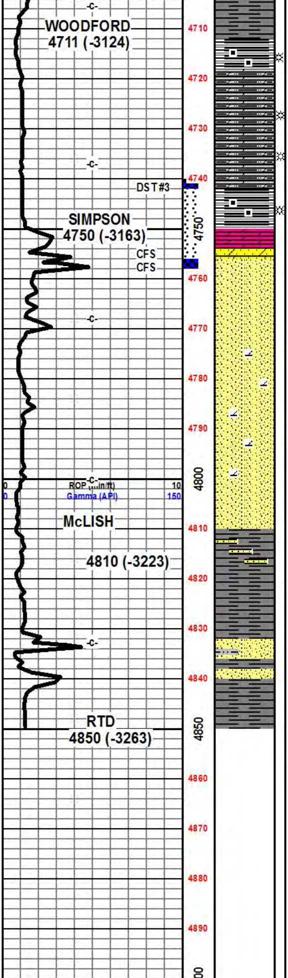
shl gry dull gry, dull gry brn silty gritty, platey, blky ang firm pcs, gas bubs

shl gry dull gry blk, silty gritty blky platey firm pcs, micro sndy in prt, gas bubs

shl gry dull gry silty gritty, blky ang firm pcs,



DST 3
4740'-4757'
15"-30"-15"-30"
Strong blow
Rec: 1209' GIP
498' OGCMW
248' MW/SSO
121' MW
IHP 2389
IFP 736-773
ICIP 1764
FFP 298-444
FCIP 1764
FHP 2363
BHT 125



shl gry blk, reddish brn/blk, blk carb, blky ang firm pcs, pyritic, cupric in prt, abun gas bubs

shl drk gry , gry blk, silty gritty, dolo in prt,

shl gry gry blk silty gritty dolo text, shl drk gry blk, reddish brn blk blky ang firm pcs, abun gas bubs

dolo drk brn f xln blky dns, sucr, interxln, pp por, brn stain, even stain, SFO, gas bubs, faint odor, dolo aa, v ry sucr/sndy, snd grn inclu

dolo aa, sst wht semi clear clstr, f grnd sub rded grns, w/srted, prly cem, sub fria, blk gilson stain, gas bubs, lt transl SFO, filmy RBSFO on break, faint odor in all

sst wht clr clstrs, f grnd, sub rded, w/srtd, sub fria, fair to prly srtd, fair to poorly cem, silic cem tr gilson stain, sst clstrs tan lt brn, f grnd sub ang, w/srtd sub fria, tr dolo/silic fill, tr tite.

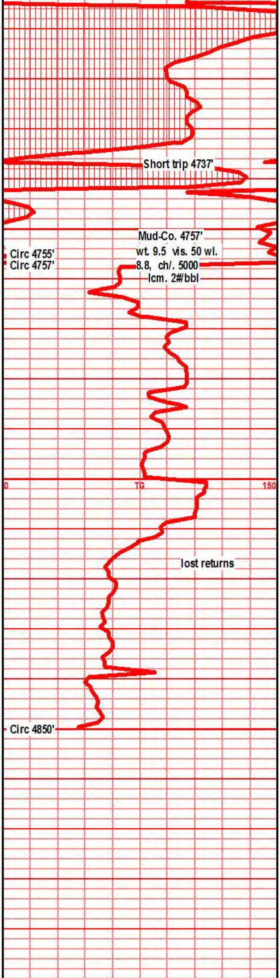
sst wht sli clr clstrs, f grnd, sub ang/sub rded grns, w/srtd, sub fria to tite, blky ang clstrs, tr silic dolo fill, blk min flecks

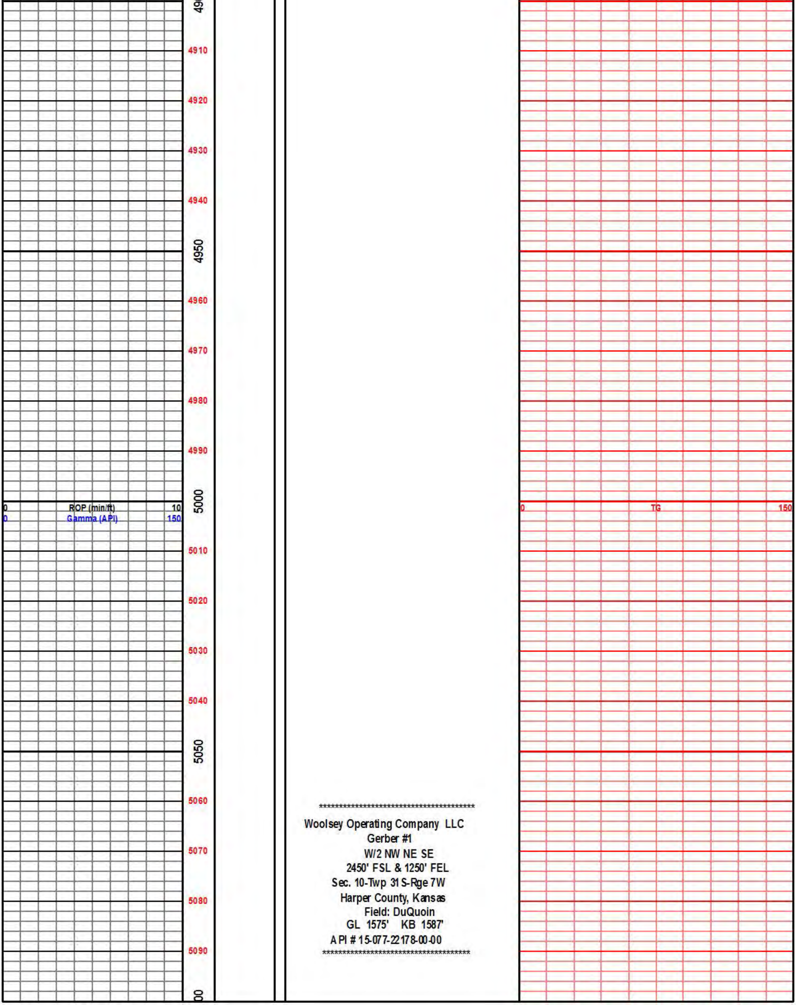
sst wht/clr clstrs f grnd, sub ang, sub rded/tr sub ang grns, w/srtd, sub fria to tite, tr blky ang hrd clstrs, silic cem and siilc/dolomitc fill, blk minc flecks

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

shl gry green teal green sitly gritty, snd grn inclu, sst gry green f vf grnd sub rded grns prly srtd, arg, gry green clay silt fill

shl gry drk gry green, teal green, silty gritty sndy in prt, rded clear fn grnd snd grain inclu.





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Woolsey Operating Company LLC
Gerber #1
W/2 NW NE SE
2450' FSL & 1250' FEL
Sec. 10-Twp 31S-Rge 7W
Harper County, Kansas
Field: DuQuoin
GL 1575' KB 1587'
API # 15-077-22178-00-00

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