



Woolsey Operating Company, LLC

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

Measured Depth Log

Well Name: CIRCLE B-1
Location: Approx S2 NW NE SW
License Number: API: 15-007-23776-00-00
Spud Date: October 19, 2011
Surface Coordinates: 2040' FSL & 1650 FWL Section 33-Twp 33 South - Rge 10 West
Bottom Hole Coordinates: Vertical Hole
Kochi Field
Region: Barber County, Kansas
Drilling Completed: , 2011

Ground Elevation (ft): 1421
Logged Interval (ft): 3800 To: RTD
Formation: McLish Shale
Type of Drilling Fluid: Chemical Mud, Displace at 3365'

K.B. Elevation (ft): 1430
Total Depth (ft):

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: W. Scott Alberg
Company: Alberg Petroleum, LLC
Address: 609 Meadowlark Lane
Pratt, Kansas 67124

FORMATION TOPS

	SAMPLE TOPS	LOG TOPS
STARK SHALE	4297(-2867)	
HUSHPUCKNEY SHALE	4332(-2902)	
B/KC	4378(-2948)	
PAWNEE	4476(-3046)	
CHEROKEE GROUP	4527(-3097)	
MISSISSIPPIAN	4578(-3148)	
KINDERHOOK SHALE	4798(-3368)	
WOODFORD SHALE	4874(-3444)	
VIOLA	4897(-3467)	
SIMPSON GROUP	5017(-3587)	
SIMPSON SAND	5021(-3591)	
MCLISH SHALE	5075(-3645)	
RTD	5116(-3686)	
LTD		

COMMENTS

Surface Casing: Set 5 joints 10 3/4" at 215' with 240 sxs Class A, 2% gel, 3% cc, plug down at 2:00 pm on October 19, 2011. Cement did Circulate.

Production Casing:

Deviation Surveys: 3/4- 220', 3/4-726', 1/4-1224', 3/4-1695', 3/4-2228', 1/2-2732', 1/4-3232', 3/4-3794', 1/4-3920'.
2-4014', 1 1/4-4109', 3/4 - 4203', 2 1/4 - 4453', 1 3/4 - 4518', 1 1/4 - 4636',

Contractor Bit Record:

- 1- 14 3/4" out at 220'.
- 2- 7 7/8" out at 4453'
- 3- 7 7/8" out at 4934'.
- 4- 7 7/8" out at

Gas Detector: Woolsey Operating Company, Trailer #1

Mud System: Mud Co, Brad Bortz, Engineer

DSTs: Trilobite Testing

Logged by Superior Well Services

LTD -

DSTs

DST #1 4582 to 4636' Times 30-60-60-120
 1st Opening, Strong Blow, BOB in 3 1/2 minutes.
 2nd Opening, Strong Blow, BOB 3 minutes.

Recovery:

3050' GIP

155' OCWM(3% Oil, 27% W, 70% M)

125' OCWM(3% Oil, 45% W, 52% M)

370' MW w/ Oil Specks(92% W 8%M)

IFP 128-182# FFP 202-315#

ISIP 1509# FSIP 1507#

IHP 2250# FHP 2166#

DST #2 4916 to 4934 Times 30-60-30-120

1st Opening - Weak blow building to 5 1/2 inches

2nd Opening - Fair to Strong blow, BOB in 5 seconds.

Recovery: 1015' GIP, 35' GOCM (10% G, 10% O, 80% Mud)

IFP 23-24# FFP 21-28#

ISIP 1437# FSIP 1740#

IHP 2440# FHP 2366#

CREWS

H2 Drilling Rig #3


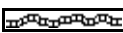
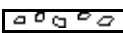

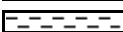

Tool Pusher - Randy Smith







Drillers - Gary Axtell


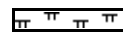
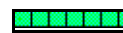



Luis Marquez






Cornelio Avalos

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
	Shyslts
	Slysh

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
- Slty

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra

- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomoldic

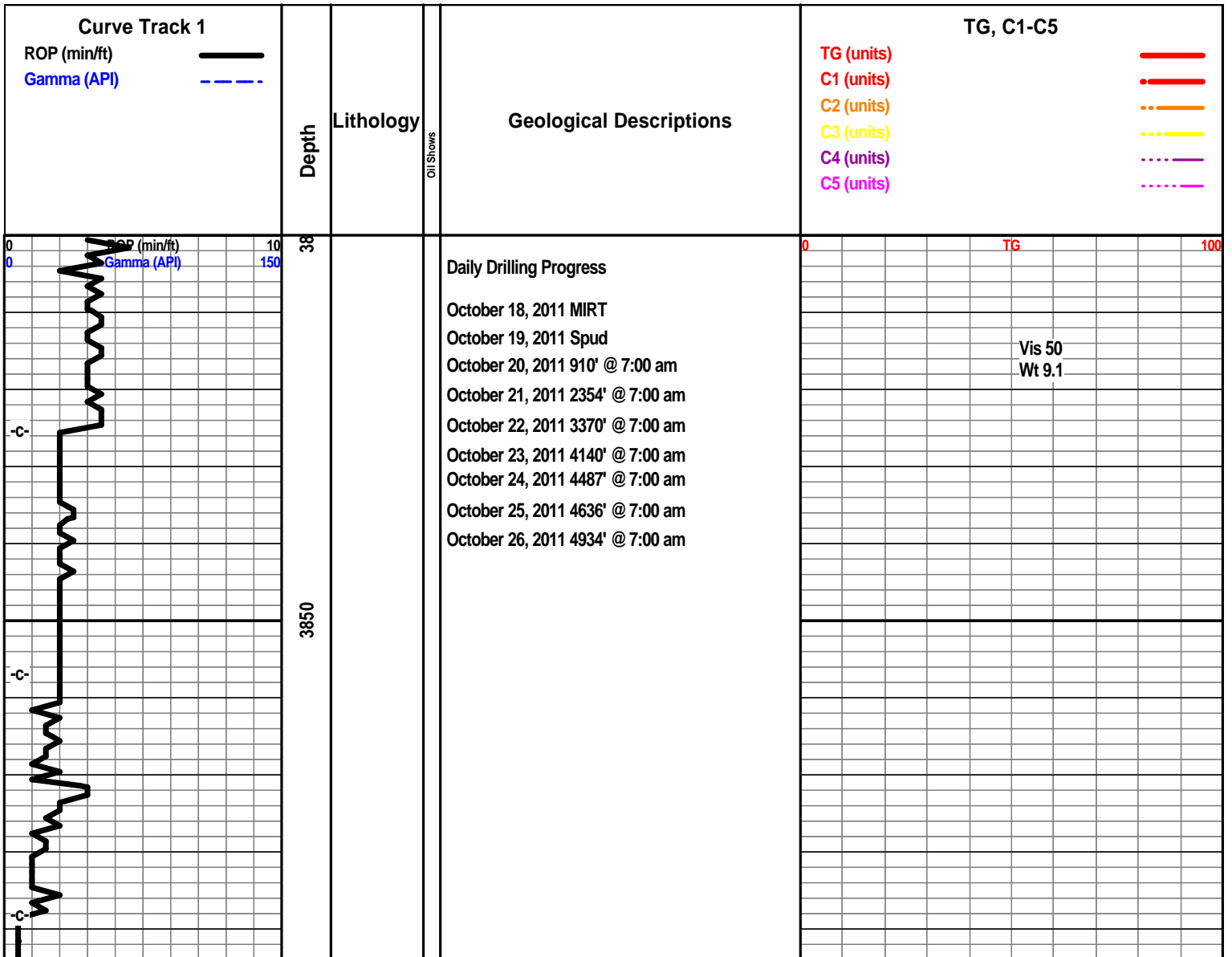
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Slstn

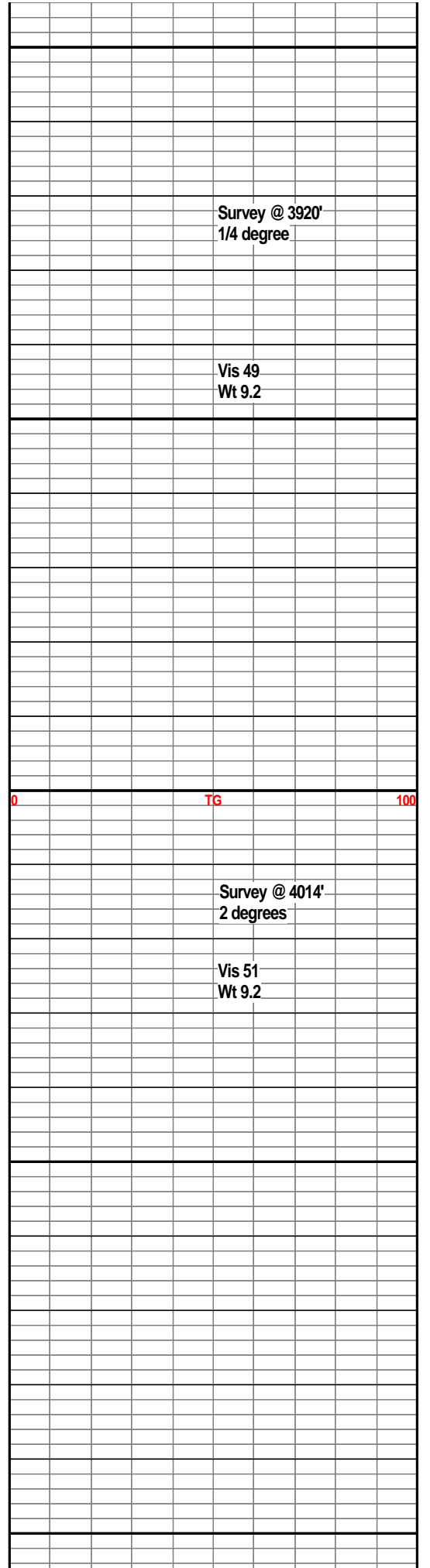
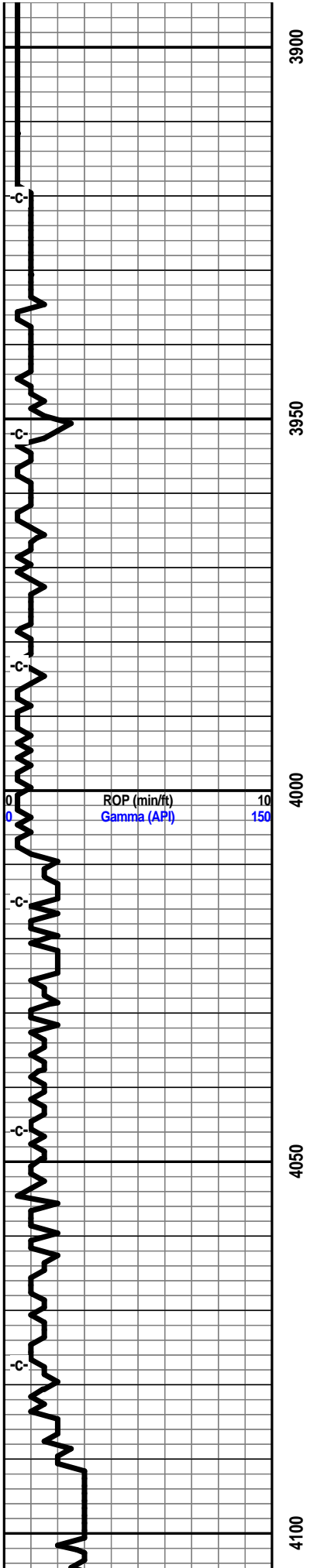
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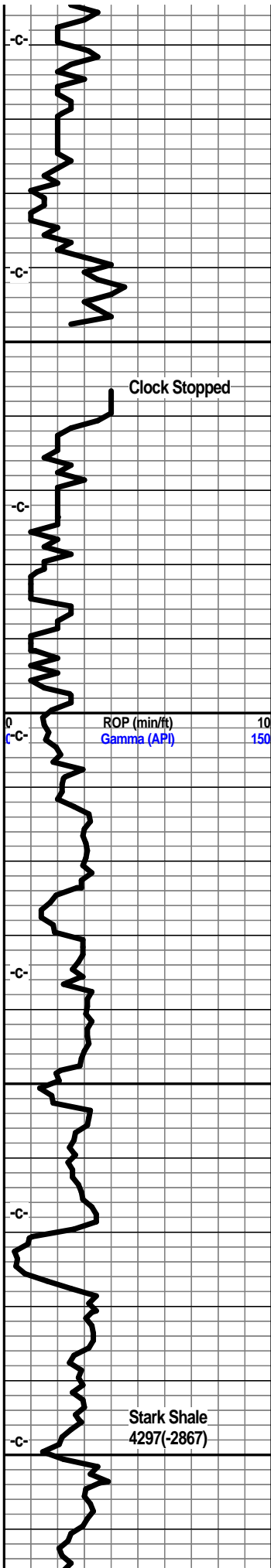
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Slststrg
- Ssststrg
- Carbsh
- Clystn
- Dol

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest







4150

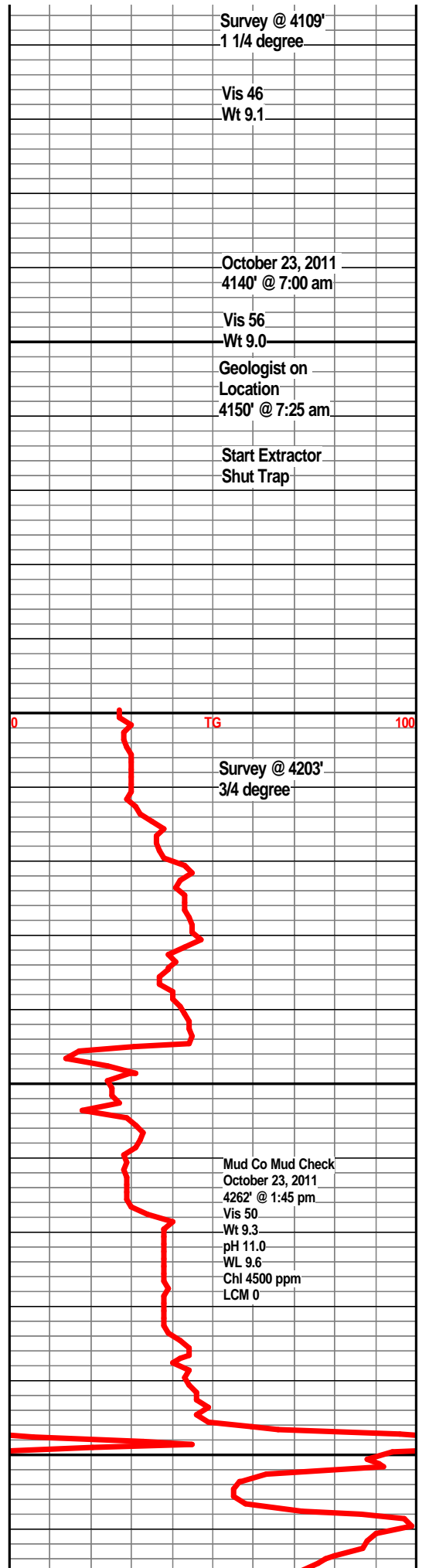
4200

4250

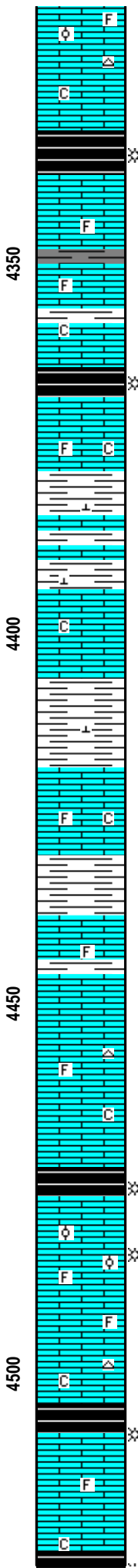
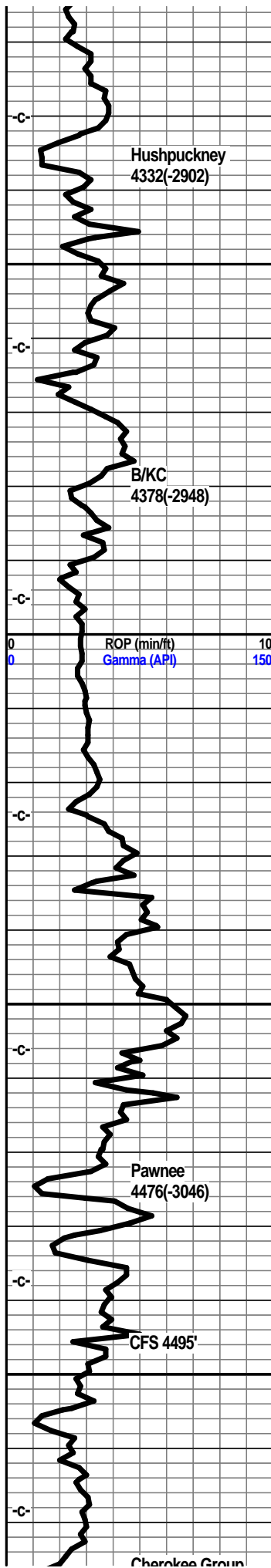
4300



Shale, grey-black, carb.
Limestone, cream, grey-white, xln, dense.
Shale, light grey.



0 TG 100



Limestone, cream, tan, xln, partly dense, slightly foss, trace oolites, foss, frags, trace grey chert.

Limestone, buff-white, xln, subchalky, slight foss.

Shale, grey-black, carb.

Limestone, buff, tan, xln, dense, subchalky, fossil frags.

Shale, grey.

Limestone, tan, buff, xln, dense, foss frags, subchalky, some grey shale.

Shale, grey-black, carb.

Limestone, tan, buff, xln, dense, trace foss, subchalky in part, some tan-bwn frags.

Shale, grey-green, ls frags., calcitic.

Limestone, buff, pale green, xln, dense.

Shale, grey-green, calcitic, ls frags.

Limestone, buff, tan-white, xln, dense, slightly chalky, trace foss.

Shale, grey-green, grey.

Limestone, cream, tan, xln, dense, slightly foss., subchalky in part, traces of grey shale.

Limestone, cream, buff-white, xln, dense, trace grey chert, subchalky in part, trace foss frags.

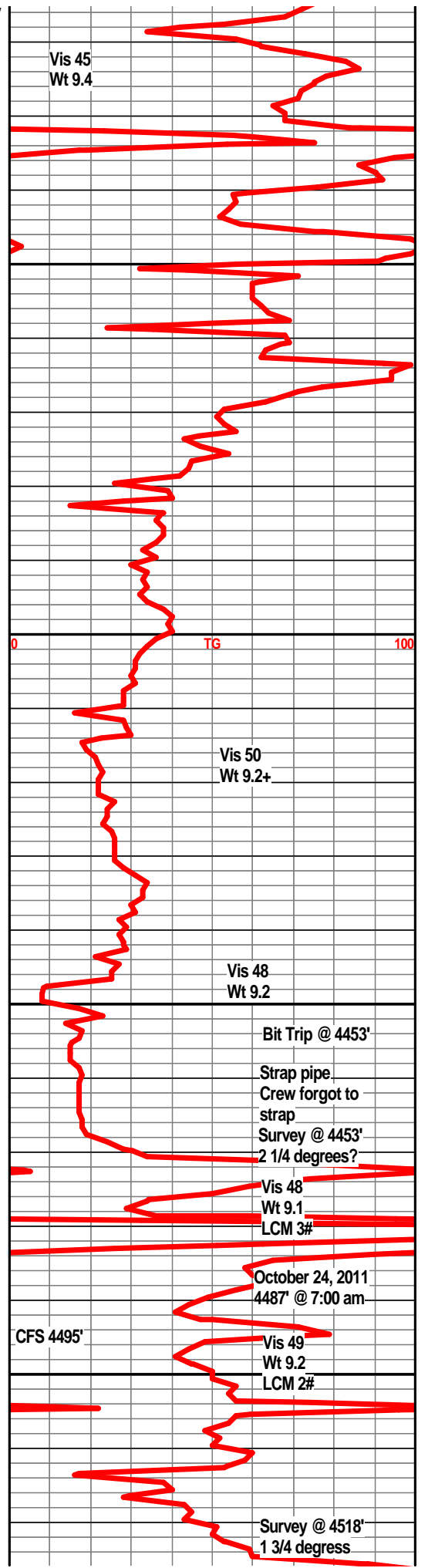
Shale, grey-black, carb.

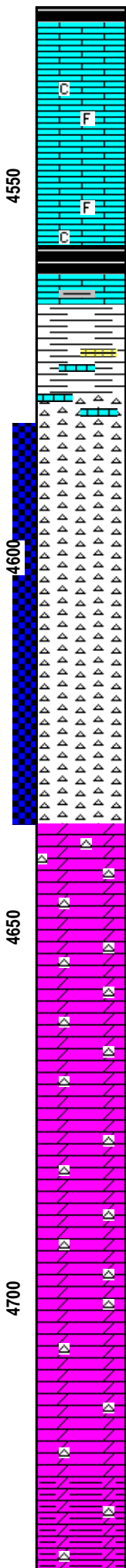
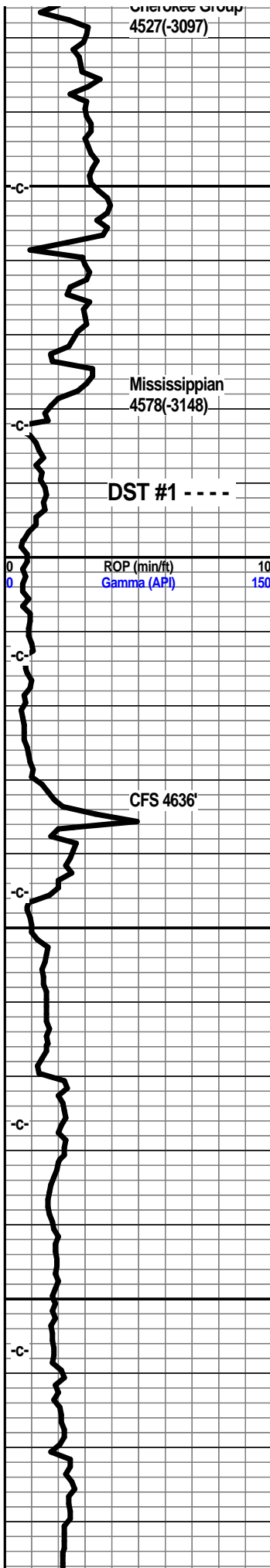
Limestone, cream, tan, fxln, micro ool., trace xln porosity, trace of gas bubbles, questionable odor, dull mineral fluor.

Limestone, tan, buff-white, fxln, dense, foss, subchalky traces of chert.

Shale, grey-black, carb.

Limestone, tan, cream, buff-white, xln, dense, subchalky, foss in part.





Shale, grey-black, carb.

Limestone, grey-white, tan, xln, dense, subchalky, slightly foss., some grey shales.

Limestone, tan, buff, xln, dense, subchalky, trace foss frags.

Shale, dark grey, grey, slightly carb.

Limestone, cream, tan, xln, dense, shaley in part.

Shale, grey-green, maroon, light green cherts, some loose sand grains embedded, scattered limestone fragments.

Chert, off-white, tan, sharp, slightly weathered, few pieces with ppt porosity, slight scattered staining, faint odor.

Chert, white, off-white, tan, scattered weathering, sharp, traces of scattered staining, fair odor, slight show oil, trace gas bubbles, ppt porosity.

Chert, off-white, tan, good even weathering, ppt to small scattered vugular porosity, even light brown staining, increase in show of oil, fair show, fair odorm dull min fluor.

Chert, off-white, tan-white, weathered, ppt porosity, scattered show free oil, trace show of gas bubbles, fair odor, dull fluor, mostly ppt porosity, scattered dull fluor.

Chert, off-white, weathered, sharp, ppt porosity, fair light brown staining, fair odor, scattered light shows of oil, dull fluor.

Dolo, off-white to grey-white, xln, fine grained, sharp off-white to grey-white cherts, traces of grey-green shale.

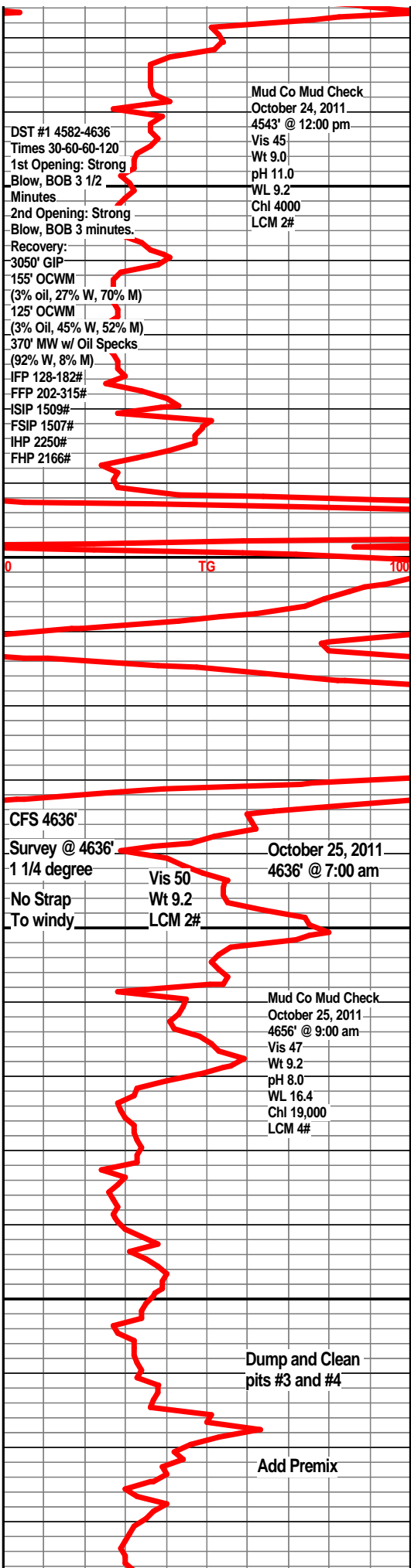
Dolo, cream-white, tan, grey, abundant off-white sharp chert, some grey-green shales, glauc.

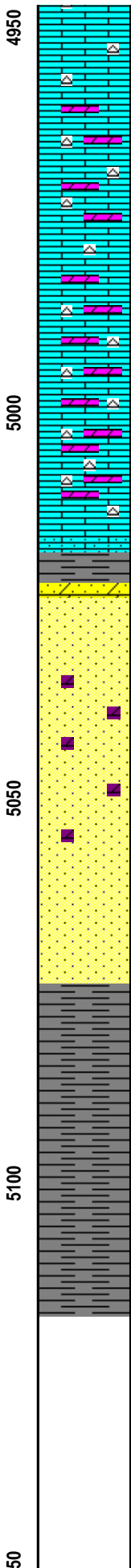
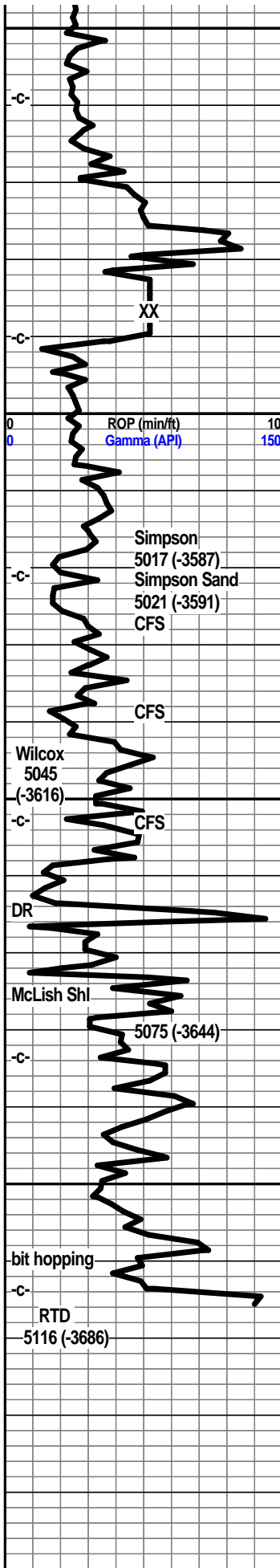
Dolo, off-white, tan, grey, fxln, fine grained, sharp off-white to grey-white cherts, grey-green shales.

Dolo, off-white, tan, grey, fxln, dense in part, abundant sharp off-white, grey, cherts.

Dolo, grey-white, tan, fxln, dense, abundant off-white to grey sharp chert, traces of grey-green shales.

Dolo., grey-white, tan, xln, fine grained, sharp off-white to grey chert, increase in grey-green shales.





Limestone, tan-white, thin, thin porosity, tan to off-white sharp chert, no visible shows.

lst wht off wht, f vf xln gran blkly ang sub chlkly, dolo tan lt brnf vf xln gran dns hrd sndy sli sucr in prt, chrt dull tan shrp frsh foss

lst/dolo in prt, tan lt tan lt brn f vf xln blkly ang dns hrd, gran gritty, sndy in prt, sucr in prt, chrt dull tan shrp frsh

lst, mstly dolo, crm tan lt brn f vf xln dns hrd blkly sli sucr, tr sndy, chrt, chrt tan dull tan lt gry, shrp foss frsh

lst/dolo in prt tan lt brn brn f vf xln dns hrd blkly ang fnly sucr in prt mstly hrd dns, chrt, chrt dull tan/gry shrp frsh

lst mstly dolo tan lt brn f vf xln dns hrd, blkly ang chrt, sli sucr in prt, chrt dull tan brn shrp frsh opa, pyritic

lst mstly dolo, tan brn f vf xln dns hrd blkly ang, chrt, much chrt tan dull tan gry shrp frsh opa

shl gry green, teal green, sst off wht gry/green clstrs, f grnd, sub ang, sub rded grns, w/srtd, w/cem, semi sub fria, silic cem, pyritic, min fill, tr clay fill, tr calc fill, tr gas bub, filmy SFO, nodor

sst clr/wht tan clstrs f grnd, sub ang/sub rded grns, w/srtd, semi w/cem, silic cem, vry dolo in prt, sub fria, dead flky gilsonitic stain, tr gas bubs, hvy grsy SFO, nodor

sst wht f vf grnd, sub ang, tr sub rded, w/srtd, dns, hrd blkly clstrs, v/well cem, silic cem, qrtzitic text, min fill, tr gas bub, tr grsy dead oil smears, nodor

sst wht f vf grnd, sub rded grns, w/srtd, w/cem, packed tite, silic cem. semi-fria, mstly dns hrd ang clstrs, min fill, dead gilsonitic flakes, nodor

shl drk gry, gry green, silty sndy, gritty, min fill, pyritic, snd grn inclu

shl gry drk gry, silty griitty, snd grn inclu, pyritic

shl gry drk gry, gry green, teal green, silty, wxy grsy, snd grn inclu

shl gry drk gry, drk gry green, teal green, silty, gritty snd grn inclu, pyritic bands

