



Woolsey Operating Company, LLC

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

Measured Depth Log

Well Name: Diel #D 4
Location: S2 NE NE NE
License Number: API: 15-007-23593-00-00
Spud Date: September 14, 2010
Surface Coordinates: 500' FNL, 330' FEL Section 16-Twp 34 South - Rge 11 West
Field Schupach
Bottom Hole Vertical Hole
Coordinates:
Ground Elevation (ft): 1331' K.B. Elevation (ft): 1340'
Logged Interval (ft): 2600 To: 5175 Total Depth (ft): 5175
Formation: McLish Sand
Type of Drilling Fluid: Chemical Mud, Displace at 3400'

Printed by WellSight Log Viewer 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
HUSHPUCKNEY SHALE	4313(-2973)	4320(-2980)
B/KC	4365(-3025)	4370(-3030)
PAWNEE	4457(-3117)	4462(-3122)
CHEROKEE GROUP	4506(-3166)	4514(-3174)
CHEROKEE SAND	4533(-3193)	4539(-3199)
MISSISSIPPIAN	4542(-3202)	4550(-3210)
COWLEY C2	4582(-3242)	4589(-3249)
COMPTON LIMESTONE	4743(-3403)	4744(-3404)
KINDERHOOK SHALE	4753(-3413)	4756(-3416)
WOODFORD SHALE	4835(-3495)	4840(-3500)
MAQUOKETA	4863(-3523)	4870(-3530)
VIOLA	4886(-3546)	4892(-3552)
SIMPSON GROUP	4981(-3641)	4983(-3643)
SIMPSON WILCOX	5006(-3666)	5006(-3666)
MCLISH SHALE	5049(-3709)	5053(-3713)
MCLISH SAND	5128(-3788)	5133(-3793)
RTD	5175(-3835)	
LTD		5182(-3842)

COMMENTS

Surface Casing: Set 6 joints 10 3/4" at 243' (tally 231') with 230 sxs Class A, 2% gel, 3% cc, plug down at 4:45 am on September 15, 2010. Cement did Circulate.
Production Casing: 5 1/2" Casing Ran, set at 4962' w/ 50 sks 60/40 poz, 130 sks Class H. 25 sks 60/40 poz in Rathole.

Deviation Surveys: 245-3/4, 742 1/2, 1253 1/4, 1759 1/4, 2268 1, 2588 3/4, 30923/4, 3600 1, 4045 3/4, 4600 3/4, 5175 1.

Pipe Strap @ 4045', Strap 4034.98 - 4033.46 (Board) = Strap long 1.52', no correction.

Contractor Bit Record: 1- 14 3/4" out at 245'

2- 7 7/8" PDC Smith out at 4045'

3 - 7 7/8" Smith F 27 out at 5175'

Gas Detector: GeoDynamics Well Logging, Unit 16

Mud System: Mud Co, Brad Bortz, Jason Witting, Engineers

DSTs: One DST, See DST Remarks

DSTs

DST #1 4475 to 4600' Mississippian

Times 30-60-60-120

SB both openings, No GTS

IHP 2347 FHP 2262

IFP 46-88 FFP 66-132

ISIP 1302 FSIP 1400

Recovery: 77' DM, 63' DM w/ few oil specks.

CREWS

H2 Drilling Rig #3

Tool Pusher - James Schultz

Drillers - Jose Ortiz

Guillermo Alarcon

Randon Smith

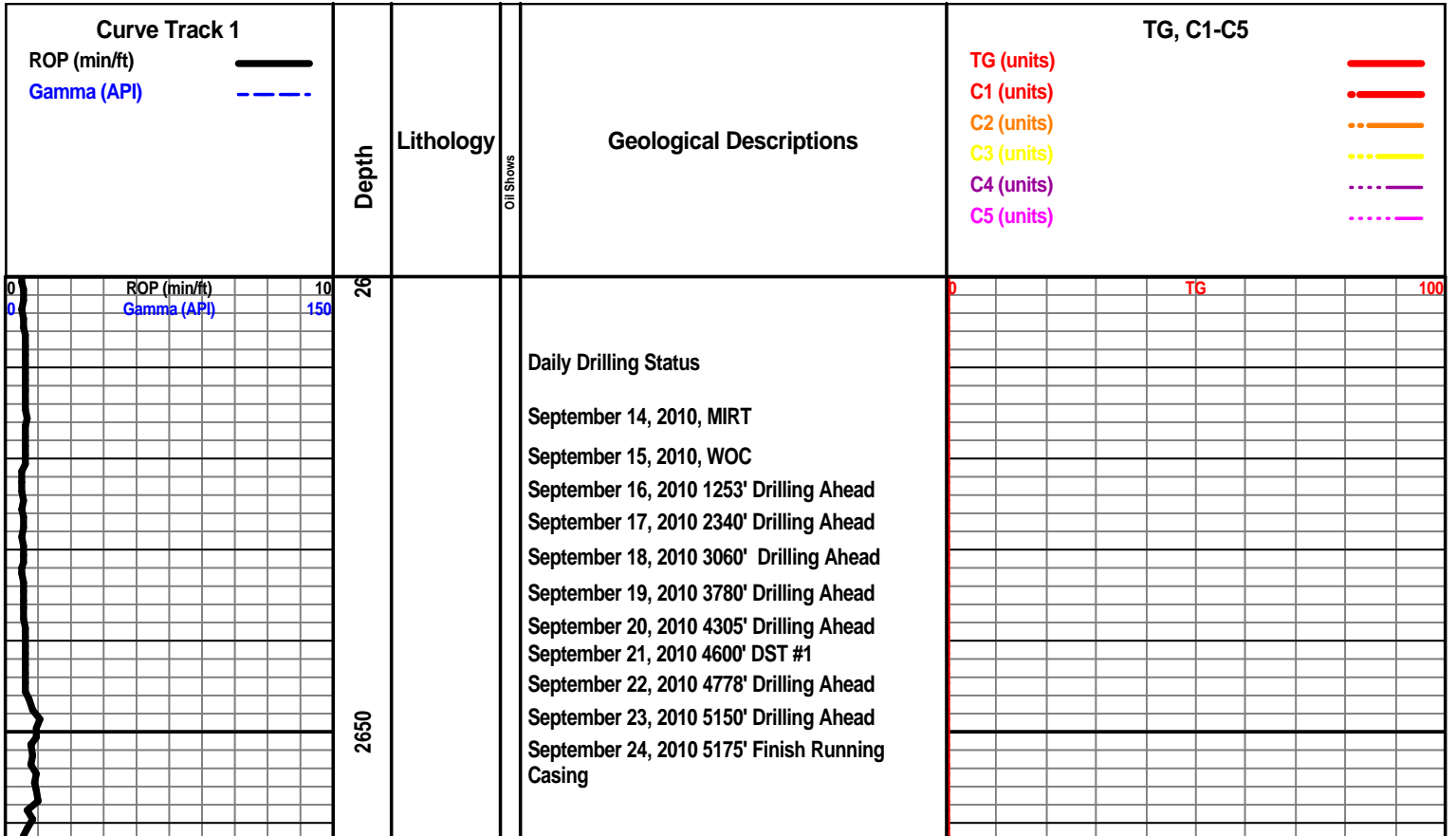
Jose Fabla

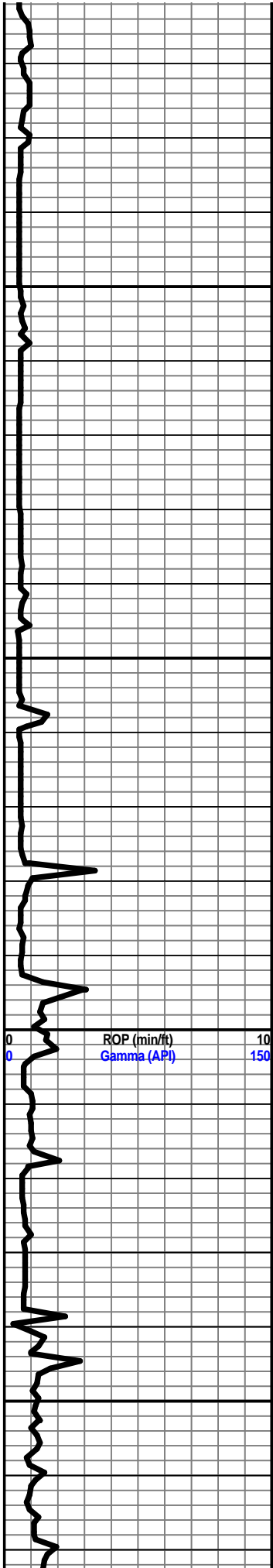
ROCK TYPES

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

ACCESSORIES

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





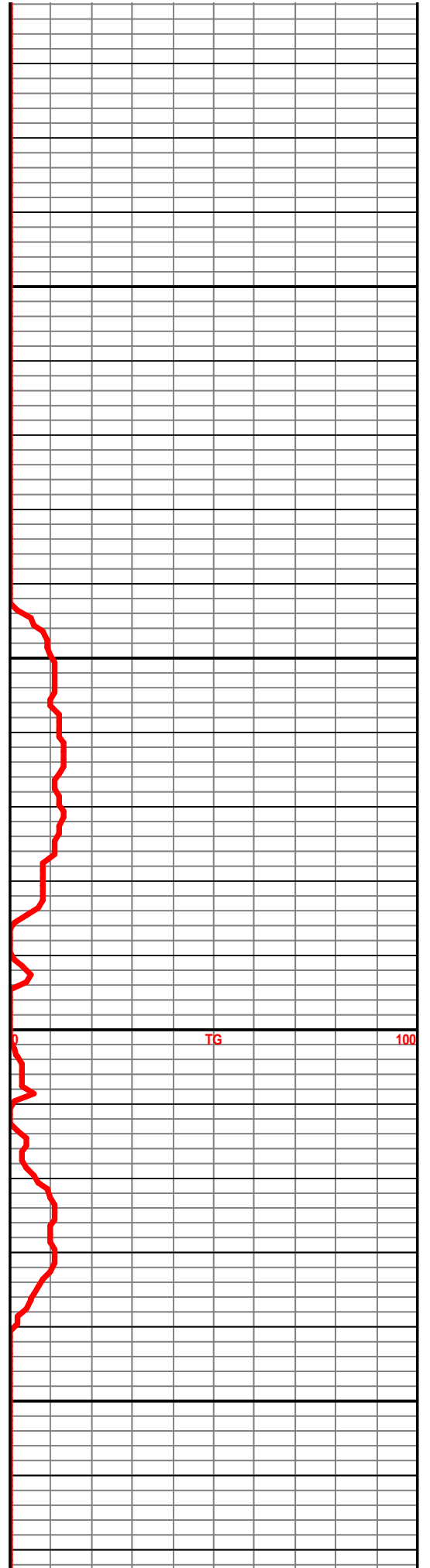
2700

2750

2800

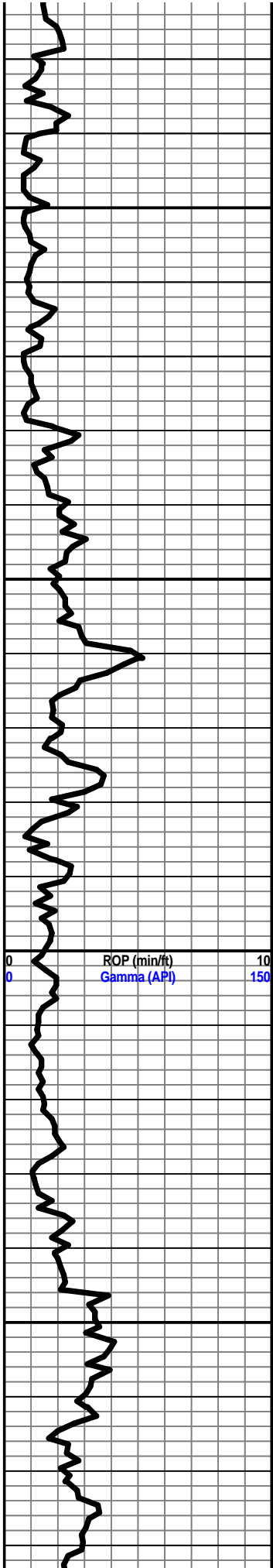
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ROP (min/ft) 10
Gamma (API) 150



TG

100

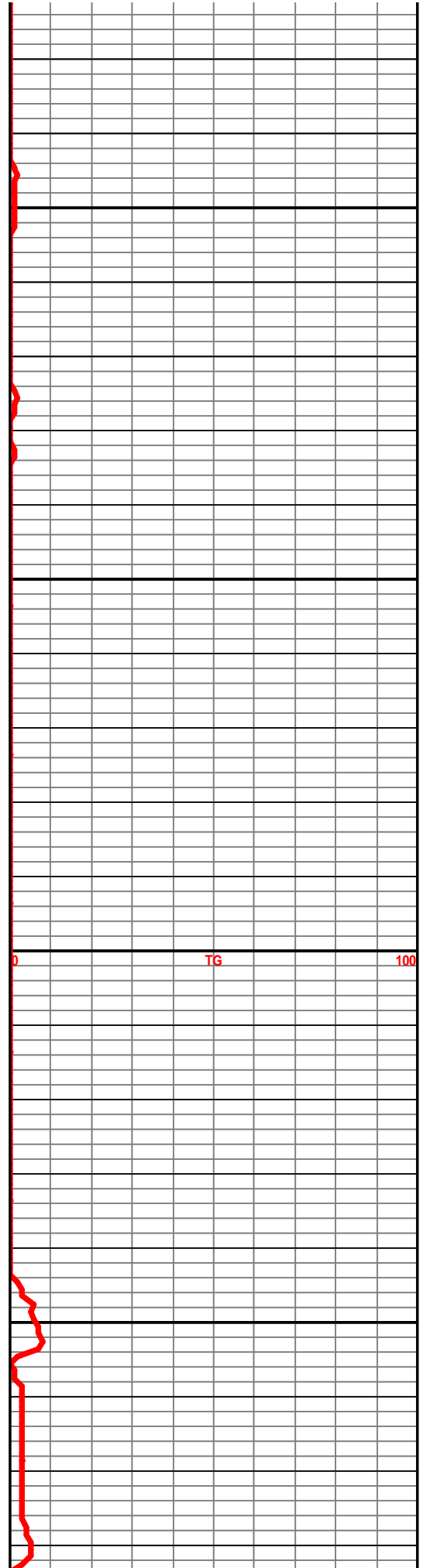


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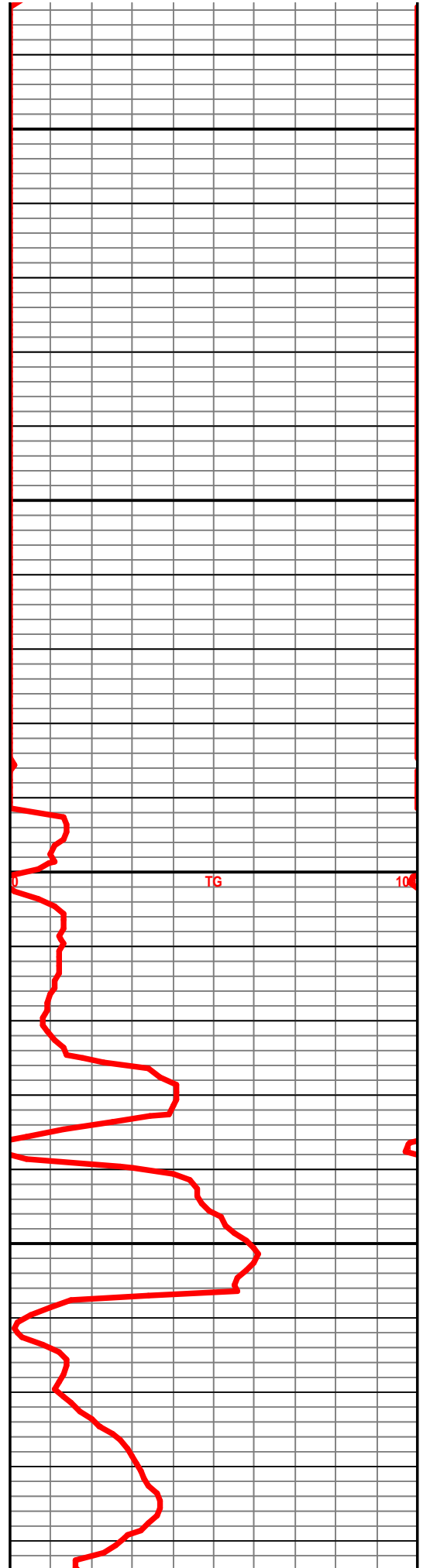
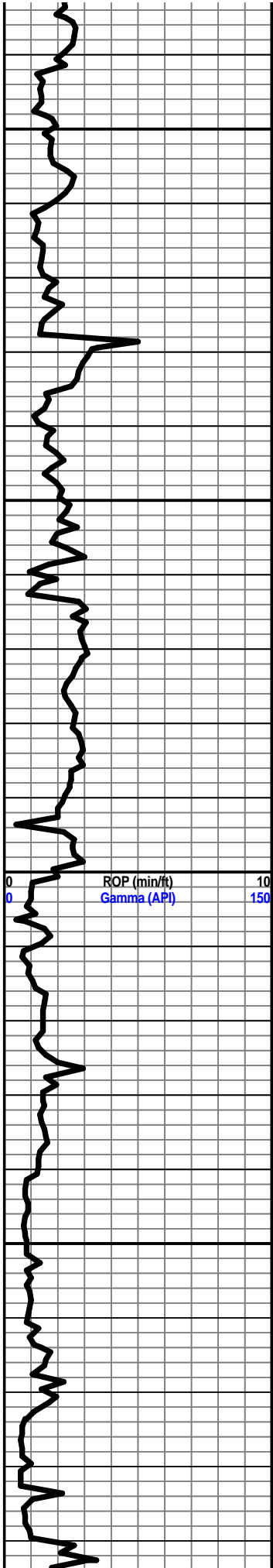
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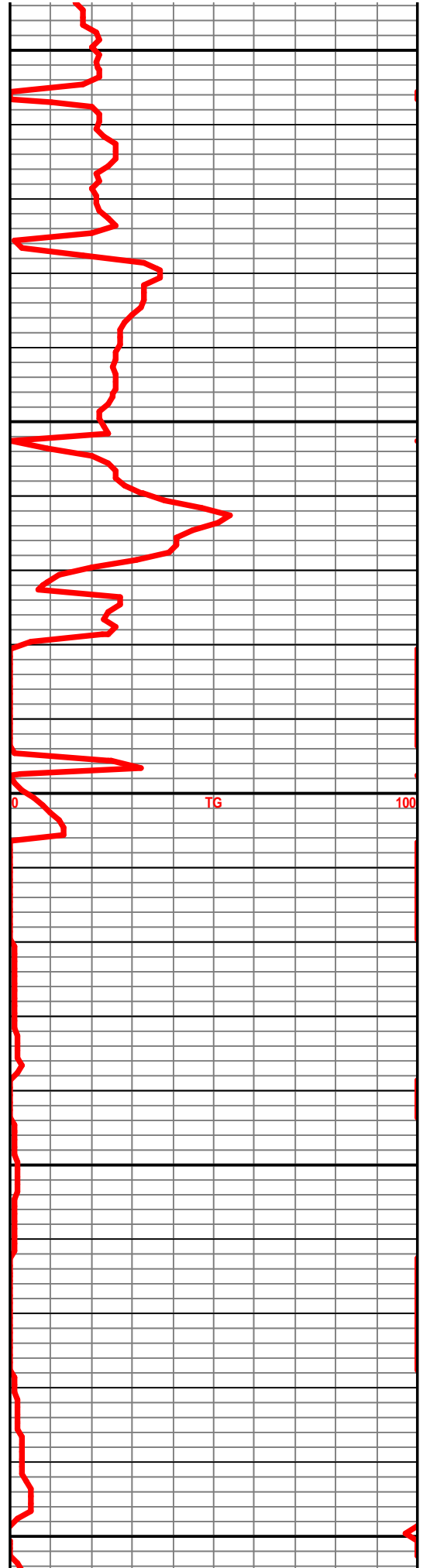
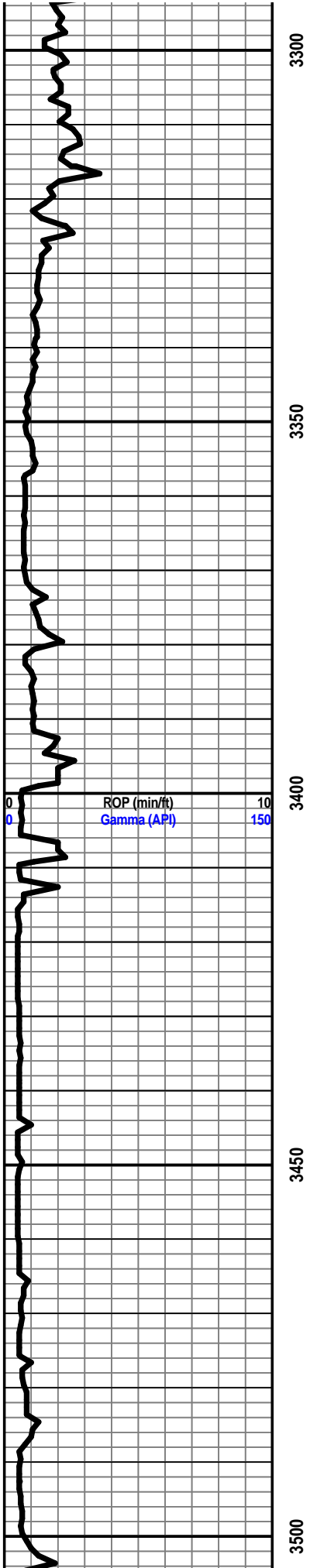
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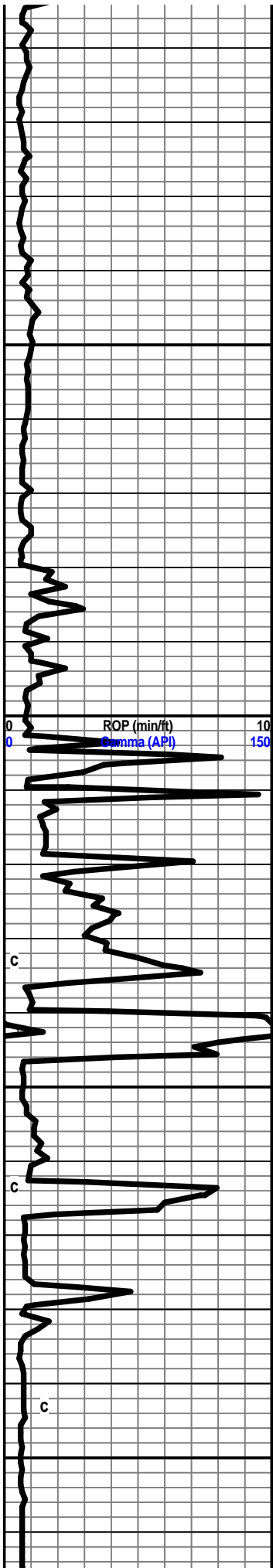
3050



100







3550

3600

3650

3700

ROP (min/ft)

Gamma (API)

0

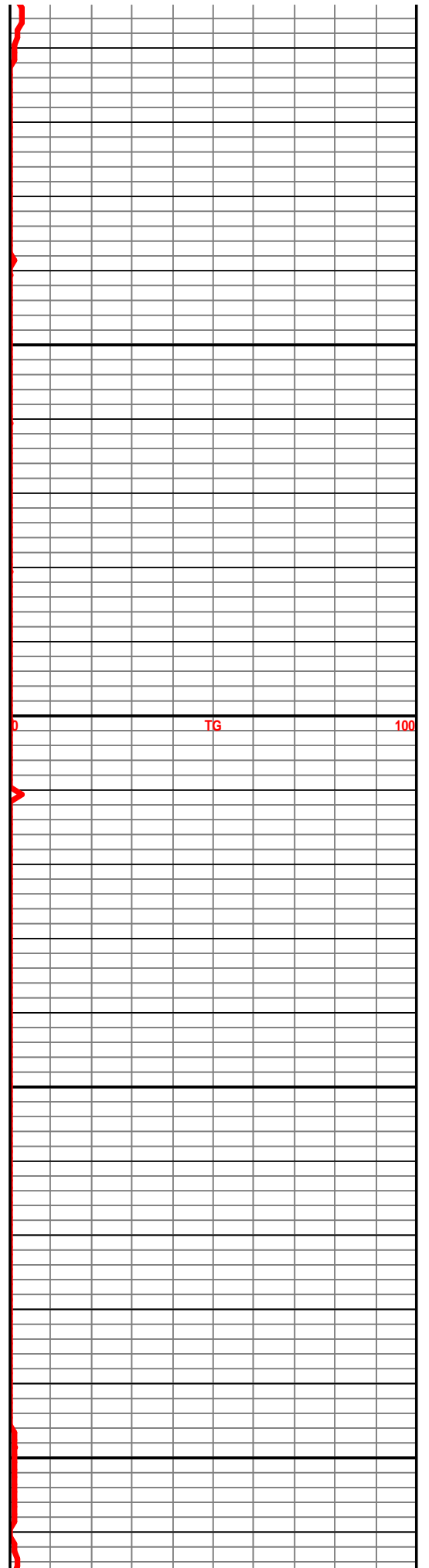
10

150

c

c

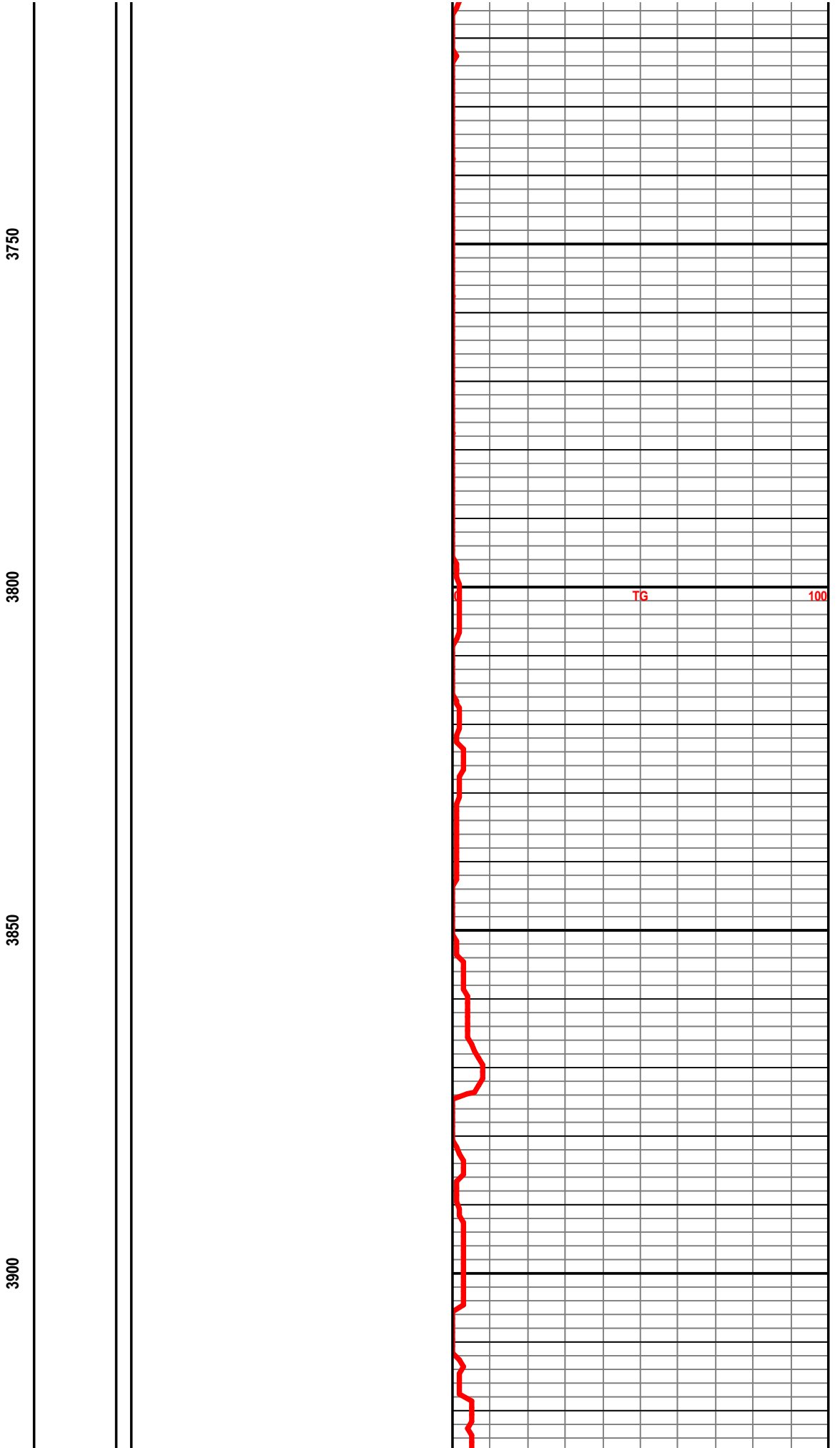
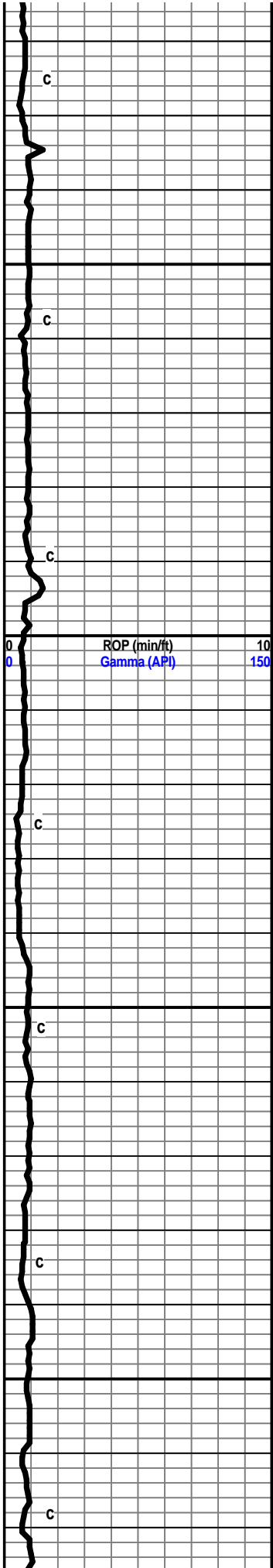
c

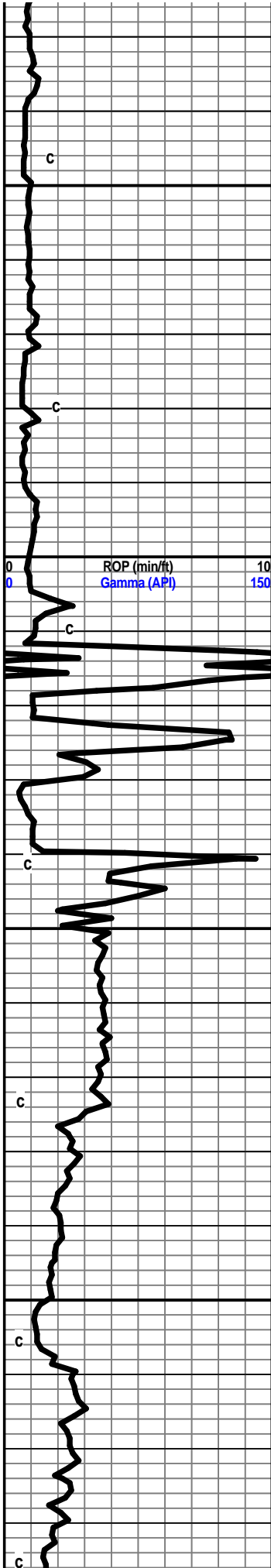


TG

100

0



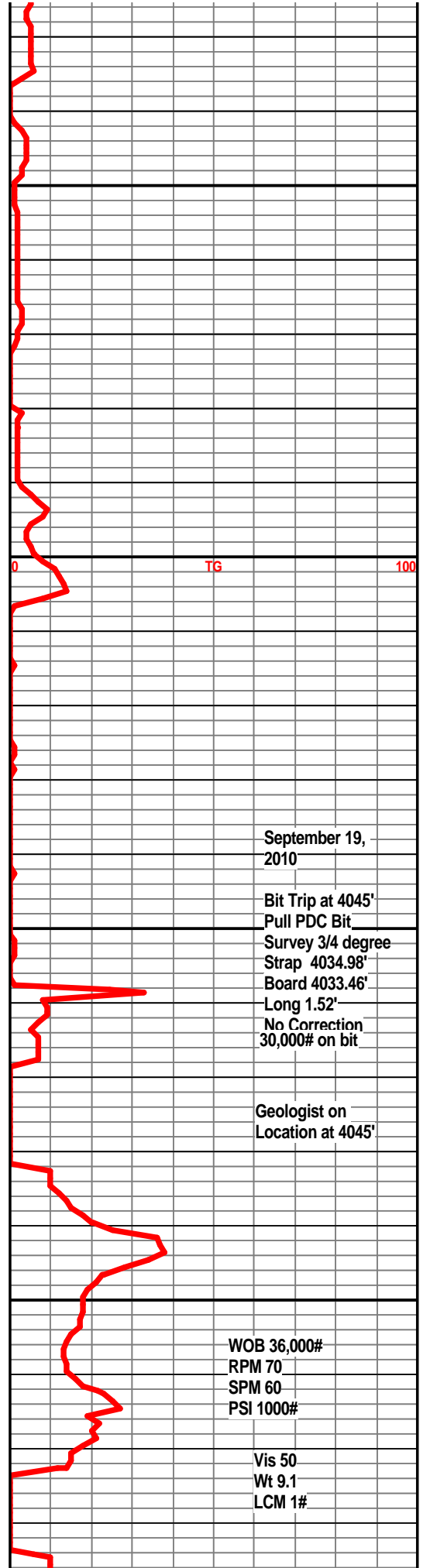


3950

4000

4050

4100



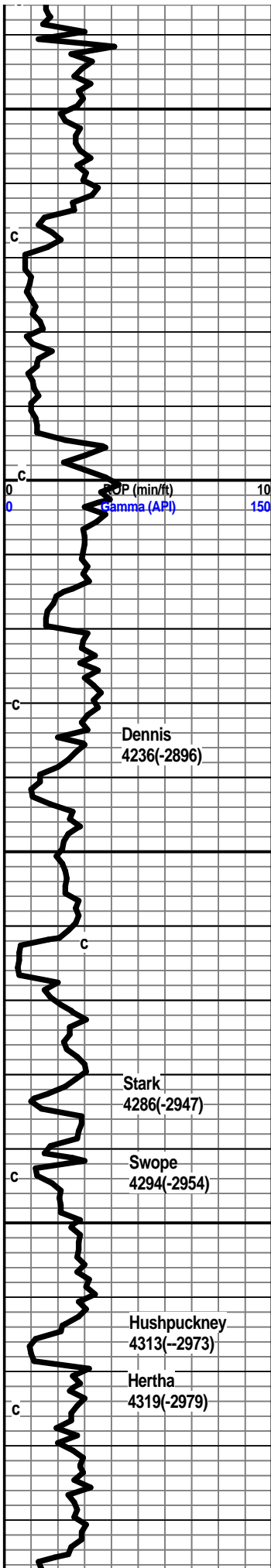
September 19,
2010

Bit Trip at 4045'
Pull PDC Bit
Survey 3/4 degree
Strap 4034.98'
Board 4033.46'
Long 1.52'
No Correction
30,000# on bit

Geologist on
Location at 4045'

WOB 36,000#
RPM 70
SPM 60
PSI 1000#

Vis 50
Wt 9.1
LCM 1#



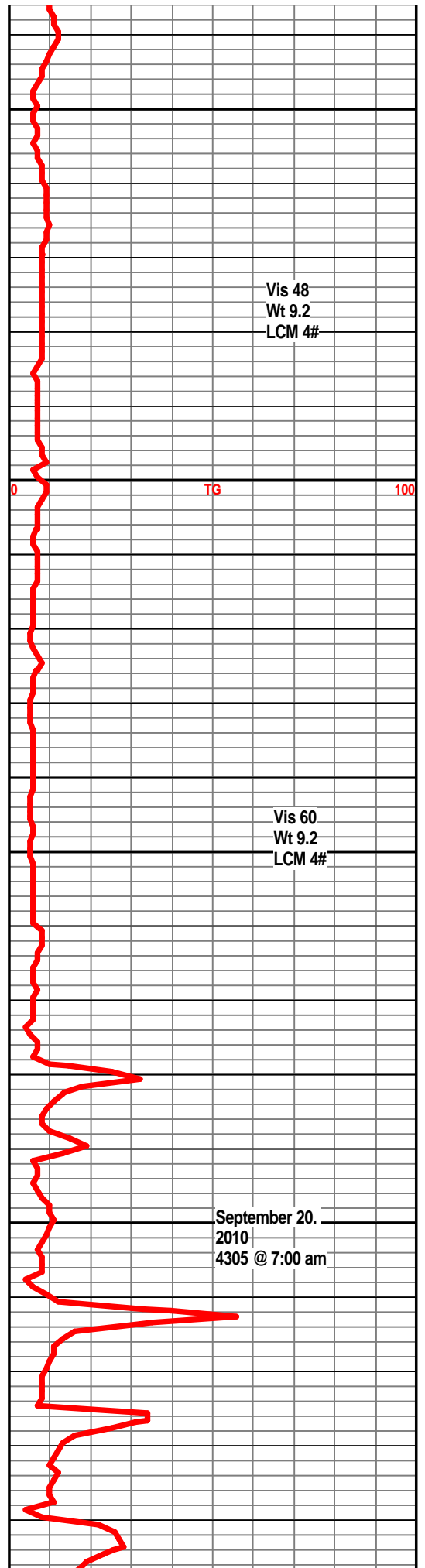
4150

4200

4250

4300

Shale gray-black carb in part slight show gas

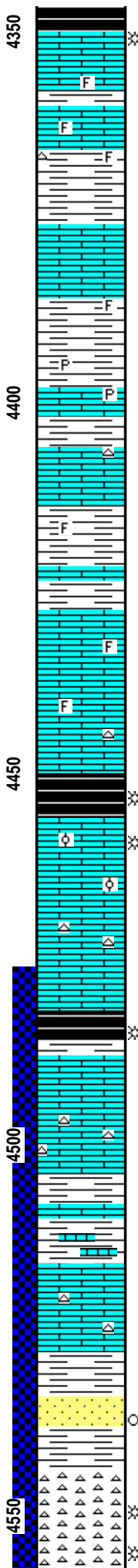
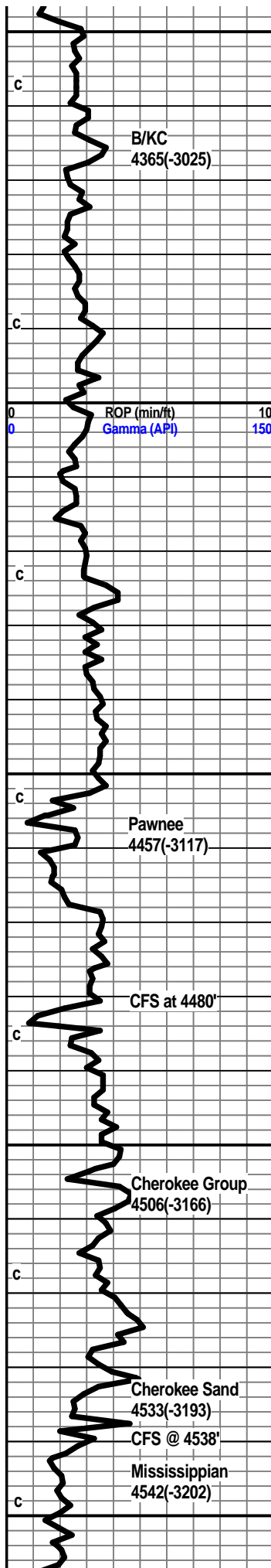


Vis 48
Wt 9.2
LCM 4#

TG

Vis 60
Wt 9.2
LCM 4#

September 20,
2010
4305 @ 7:00 am



Shale, grey black, carb in part, slight show gas bubbles.

Limestone, cream-tan, some lt brown, finely crystalline, trace foss frags, slightly sub chalky, some tan chert.

Shale, grey-black, some green-brown.

Limestone, cream-white, some tan, fxln, trace foss frags, slight chalky, shaley in part.

Shale, green-grey, silty to sandy in part, slightly limey, traces of pyrite.

Limestone, creamy-tan, fmxln, traces of tan chert.

Shale, grey-green, firm, waxy.

Limestone, tan-white, fxln, traces of foss. frags.

Shale, dk grey.

Limestone, cream-white, fmxln, shaley.

Shale, grey, green-brown.

Limestone, cream to tan-white, fxln, slightly foss., sub chalky.

a/a

Shale, Grey-black, carb.

Limestone, cream-white to off-white, tan, fmxln, slightly chalky, foss frags, slightly oolitic, tr. inter ool porosity, slight show of gas bubbles, no odor, no visible staining, poor fluor., trace of oolimoldic porosity.

Limestone, cream-tan, fxln, dense, trace tan chert, slightly foss.

Shale, grey-black, carb
 Shale, grey-green, firm.

Limestone, cream, tan-white, fmxln, sub chalky, trace of foss., cherty in part.

Shale, grey, green, firm, trace pyrite.

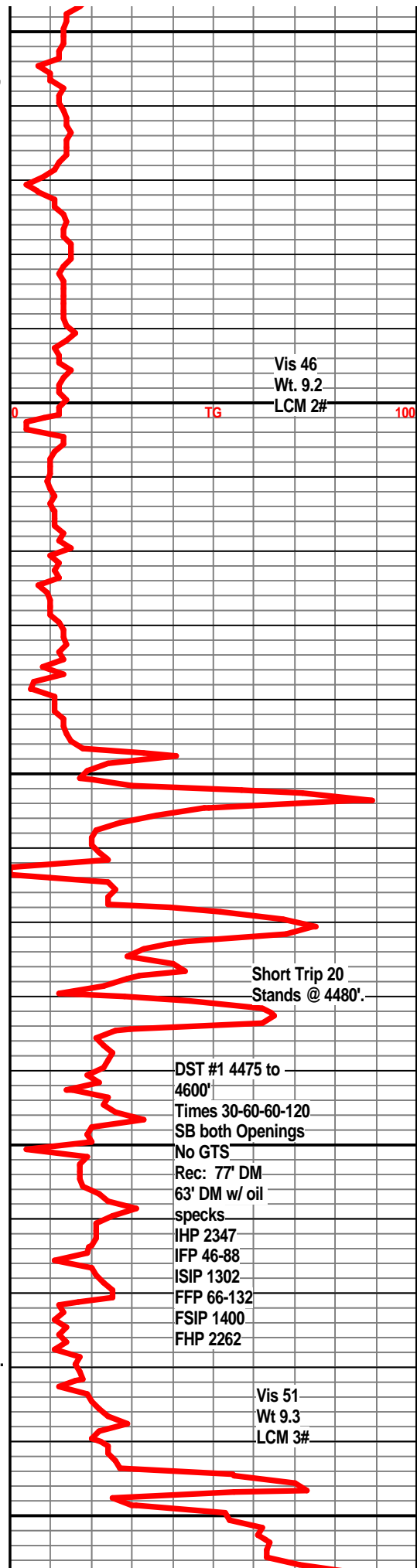
Shale, as above, some interbedded limestone stringers.

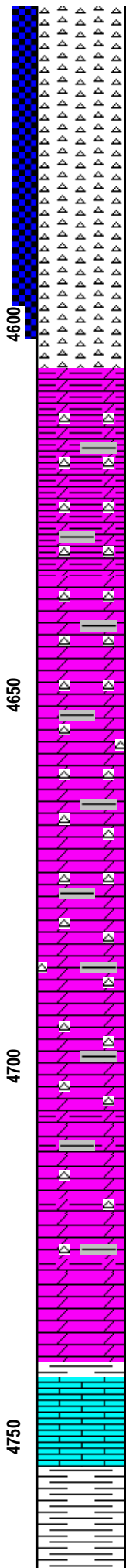
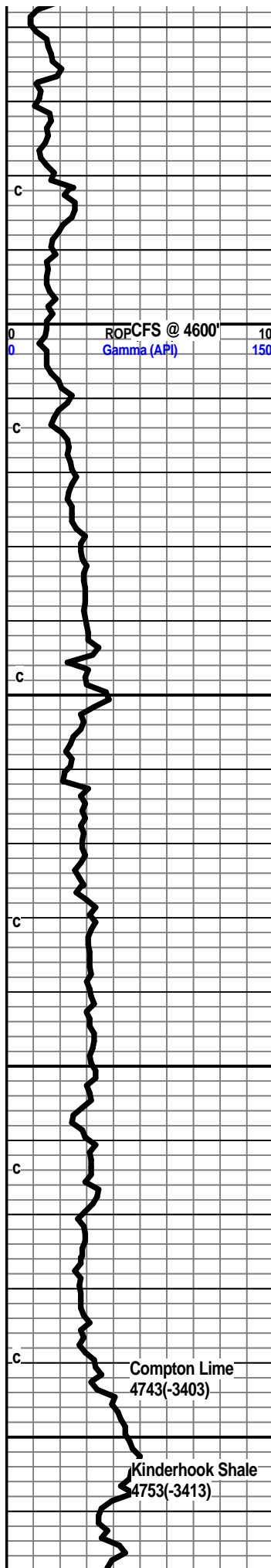
Limestone, cream-white, fxln, sub-chalky, traces of scattered chert.

Shale, grey, dark grey, some green-brown, firm.

SST, grey, dirty, some light brown clusters, well cemented, fine grained, SA, silty in part, traces of dark asphaltic staining, glau, few pieces friable, no odor, no fluor, no shows of free oil.

Chert, white, off white, sharp, fresh, slightly weathered, trace of edge staining, some dark asphaltic staining, slight show of oil and gas, faint odor, very dull fluor along edges





Chert, white, off-white, weathered, scattered vugs, fair light brown staining, p-f odor, slight show oil, few gas bubbles, edge staining, sharp.

Chert, white, smokey grey, sharp, weathered, fair odor, fair show oil, trace of fossils, few scattered vugs with bleeding oil and gas, fair odor. Some free oil in tray.

Chert, white, off-white, sharp, slightly weathered, few scattered small vugs, fair light brown staining, edge staining, dull fluor, p-f odor, slight show of oil, trace free oil in tray.

LS, dolo, tan-white, light brown, cherty, fresh, sharp, some weathered with fair light staining, trace show of oil, no odor, v. dull fluor., abundant grey, dk grey shales, firm, blk, splintery.

Dolo, lt, grey, dirty white, traces of pp porosity, cherty, fresh, sharp, trace weathered, very slight show lt. staining, no show free oil, no odor,

Dolo, grey, lt grey, cream, cherty, traces of pp porosity, no odor, no vis shows.

Dolo, grey, lt grey, some cream-white to tan, xln, pp porosity, cherty in part, no odor, no vis shows.

Dolo, lt grey, cream to off-white, cherty, traces of shale.

Dolo, grey to lt grey, cherty, sharp, fresh.

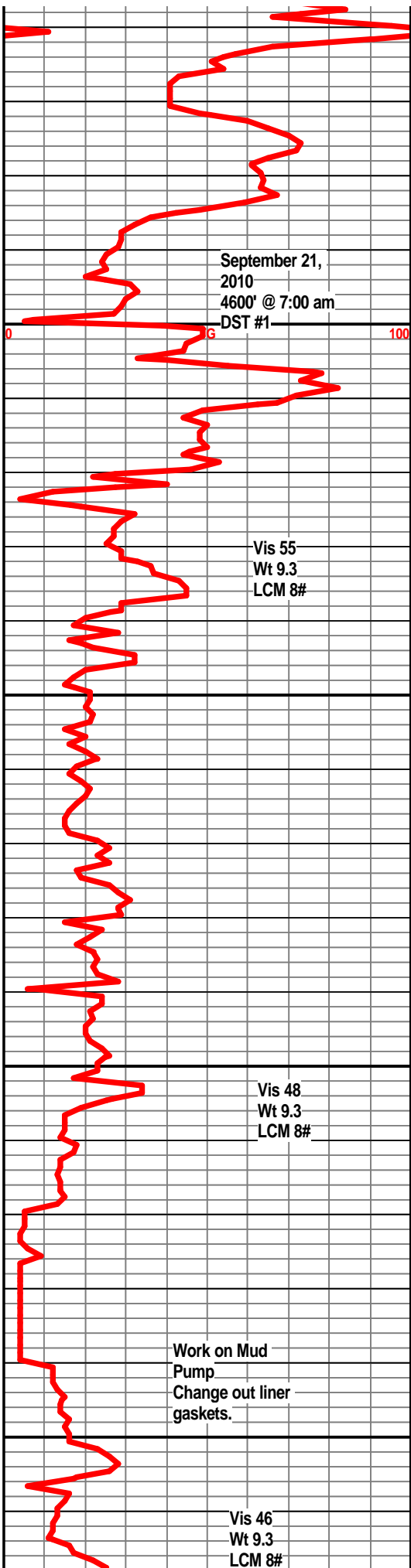
Dolo, grey-white, cream-white, xln, cherty.

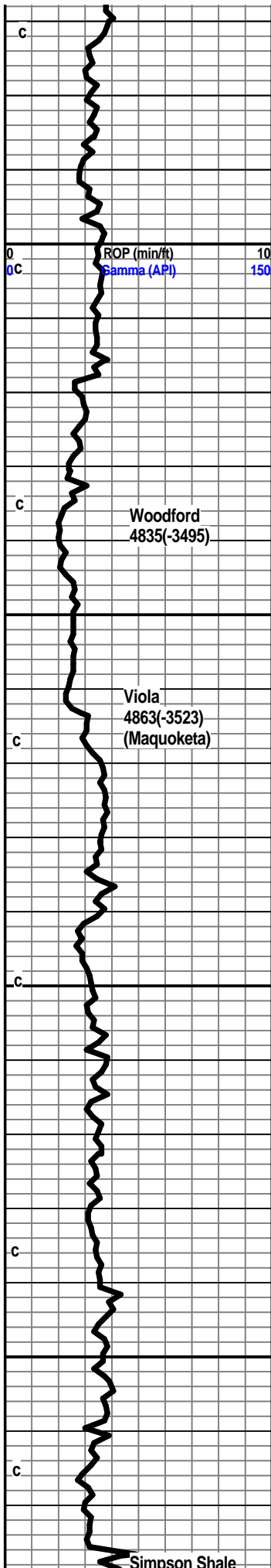
Dolo, grey, lt grey, cherty, traces of grey shale.

Shale, lt green.

LS, cream-white, fxln, trace of foss frags, slightly cherty.

Shale, grey, dk grey, blk, silty





Shale, grey, dk grey, blk, silty.

Shale, dk grey, grey, silty.

Shale, dk grey, grey silty, traces of pyrite.

Shale, grey, coffee brown, silty, traces of pyrite.

Shale, grey, lt grey, brown, silty, pyritic. trace gas bubbles.

Shale, Grey-black, brown, carb in part.

a/a

Shale, grey-black, brown, carb.

SST, dolomitic, sa, well cemented, very few clusters, no vis shows, no odor.

Dolo, lt brown, grey-white, xln, argil, silty, trace of chert, no vis shows.

Dolo as above, increasing ls amounts, xln.

Limestone, cream-white, off-white, xln, sl. dolo in part, soft, sl. foss. trace chert.

Limestone, cream-white, fxln, trace of xln porosity, sl. cherty, subchalky in part.

Limestone, off-white, tan, fxln, subchalky, trace tan chert, trace pyrite inclusions.

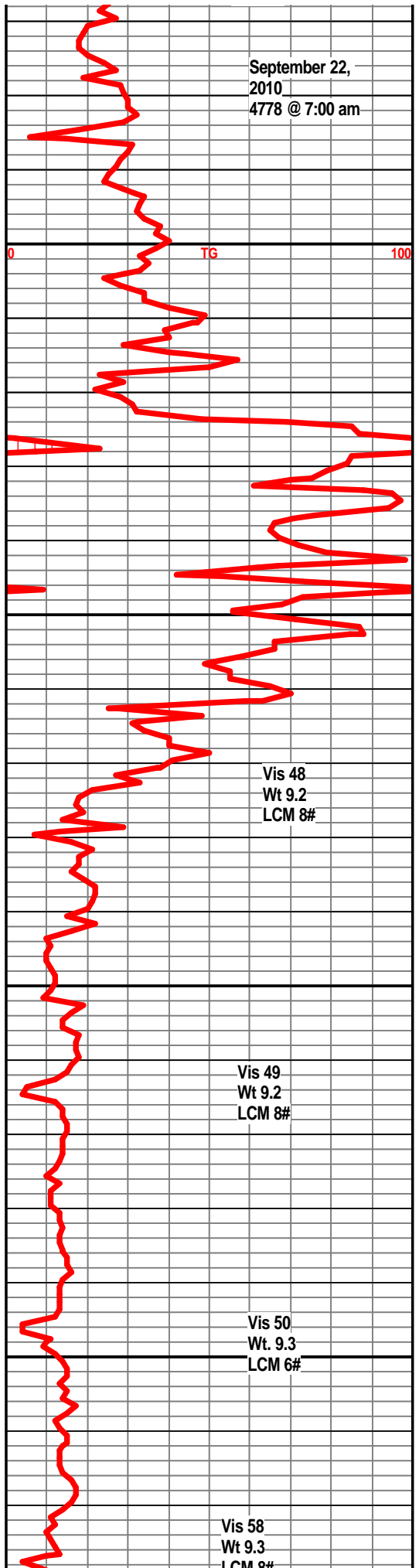
Limestone, tan-white, off-white, slightly dolo, tan cherts, chalky, xln.

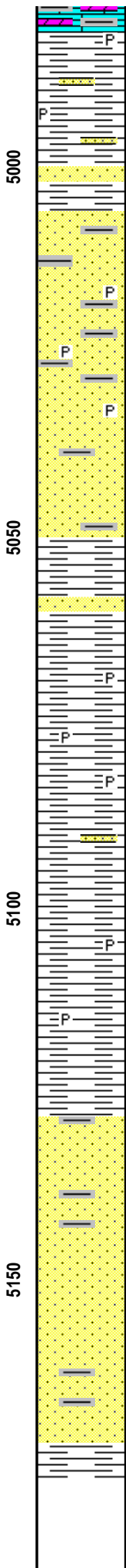
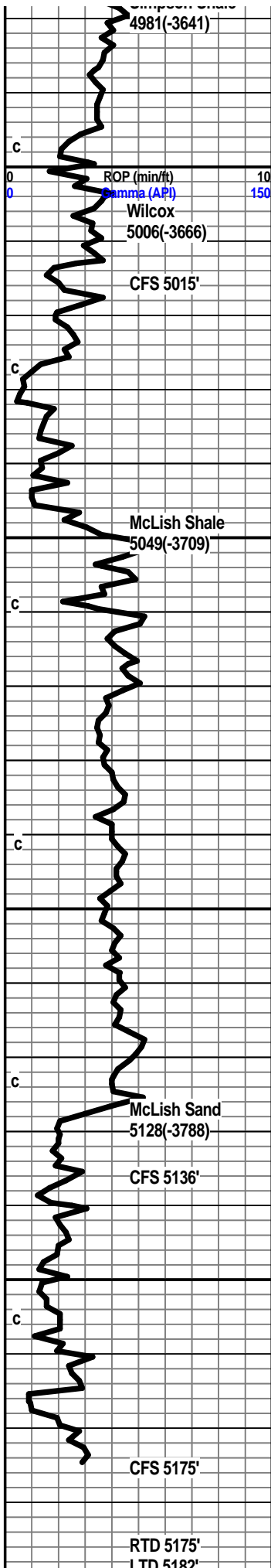
Limestone, dolo, tan, tan-white, xln, traces of tan cherts, trace foss.

Limestone, dolo, tan, off-white, xln, cherty, trace of pale green shales.

Dolo/ls, tan, tan-white, xln, grainy text, tan cherts, pale green shales.

Dolo, tan to tan-white, xln, sandy in part, some





green shales.

Shale, green to dk grey, pyritic, few imbedded sand grains.

Sst, clear to frosted quartz grains, SA to SR, friable, abundant lose grains, gluac, no vis shows. no odor.
Shale, green to dk grey-green.

Sst, clear to grey frosted grains, SA to SR, friable in part, mostly tite, spotted show of oil in tite sd, traces of pyrite inclusions, no odor no fluor, no kick

Sst. clear to white frosted qtz grains, SA to SR, friable in part, fair sorting, some shale inclusions w pyrite, gluac, some tite well cemented clusters, possible v. light stain in rare cluster, no odor, no visible fluor, no visible shows.

Sst, a/a

Shale, green, firm, banded, few embedded sand grains.

Sst, clear to grey, well cemented, shaley in part.

Shale, grey-green, apple green, traces of pyrite, waxey, firm, blk.

Shale, grey-green, firm, traces of pyrite, same sand inclusions.

a/a, sst stringer.

Shale, grey-green, firm, pyritic inclusions.

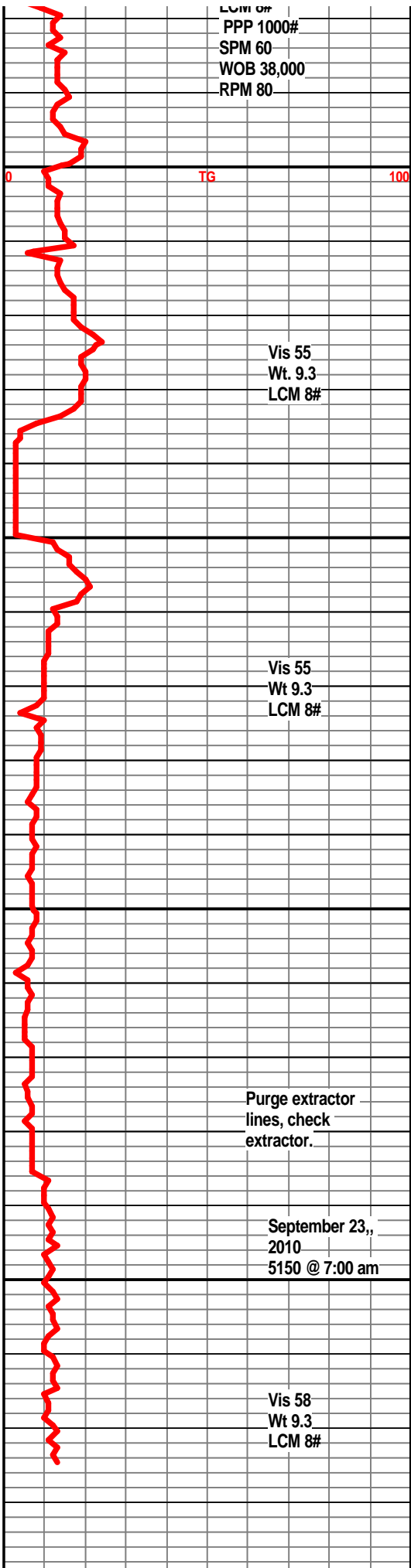
Shale, grey, pale green, firm, blk.

Sst, clear to grey angular grains, well cemented, traces of pyrite, gluac, some shale inclusions, no visible shows, no detectable odor.

Sst., clear to white, some grey frosted angular grains, well cemented, gluac., traces of interbedded shales, pyrite, no visible shows.

Sst., clear to grey, angular to sub rounded, well cemented, few pieces friable in part, gluac, pyritic in part, gray-green shales, no visible shows.

Shale, grey-green, firm, sand inclusions.



LCM of
PPP 1000#
SPM 60
WOB 38,000
RPM 80

TG 0 100

Vis 55
Wt. 9.3
LCM 8#

Vis 55
Wt 9.3
LCM 8#

Purge extractor
lines, check
extractor.

September 23,,
2010
5150 @ 7:00 am

Vis 58
Wt 9.3
LCM 8#

