



Woolsey Operating Company, LLC

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

Well Name: Landis #2
Location: S/2 N/2 NE NW
License Number: API: 15-007-23626-00-00
Spud Date: December 3, 2010
Surface Coordinates: 495' FNL, 1920' FWL Section 16-Twp 34 South - Rge 11 West
Schuplach Southwest Pool
Bottom Hole Coordinates: Vertical Hole
Region: Barber County, Kansas
Drilling Completed: December 12, 2010
Ground Elevation (ft): 1350
K.B. Elevation (ft): 1359
Logged Interval (ft): 3600 To: 5180
Total Depth (ft): 5180
Formation: McLish Shale
Type of Drilling Fluid: Chemical Mud, Displace at 3445'
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	4340(-2981)	4343(-2984)
B/KC	4389(-3030)	4392(-3033)
PAWNEE	4481(-3122)	4485(-3126)
CHEROKEE GROUP	4528(-3169)	4534(-3175)
CHEROKEE SAND	4551(-3192)	4557(-3198)
MISSISSIPPIAN	4567(-3208)	4568(-3209)
COMPTON LIMESTONE	4764(-3405)	4769(-3410)
KINDERHOOK SHALE	4772(-3413)	4778(-3419)
WOODFORD SHALE	4850(-3491)	4858(-3499)
VIOLA	4882(-3523)	4889(-3530)
SIMPSON GROUP	5001(-3642)	5007(-3648)
SIMPSON WILCOX	5030(-3671)	5034(-3675)
MCLISH SHALE	5068(-3709)	5070(-3711)
MCLISH SAND	5144(-3785)	5149(-3780)
RTD	5180(-3821)	
LTD		5188(-3829)

COMMENTS

Surface Casing: Set 6 joints 10 3/4" at 219.96' with 220 sxs Class A, 2% gel, 3% cc, plug down at 1:45 am on December 3, 2010. Cement did Circulate.

Production Casing: 5 1/2" Casing Ran.

Deviation Surveys: 222' 1, 1252' 3/4, 1787' 1, 2299' 1/2, 2808' 1, 3317' 1, 3826' 1 1/4, 3922' 2 3/4 (missrun), 3922' 3/4, 4017' 1 3/4, 4112' 1/2, 4336' 1/4, 4716' 3/4, 5180' 2 1/2.

Contractor Bit Record: 1- 14 3/4" out at 222'.

2- 7 7/8" out at 5180'

Gas Detector: Woolsey Operating Company, Trailer #2

Mud System: Mud Co, Brad Bortz, Aaron Rush, Engineers

Logged By Superior Well Services

LTD 5188'


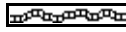
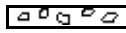










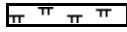
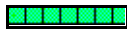
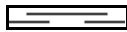




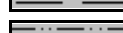


DSTs

No DST's Ran on this well.















































































CREWS

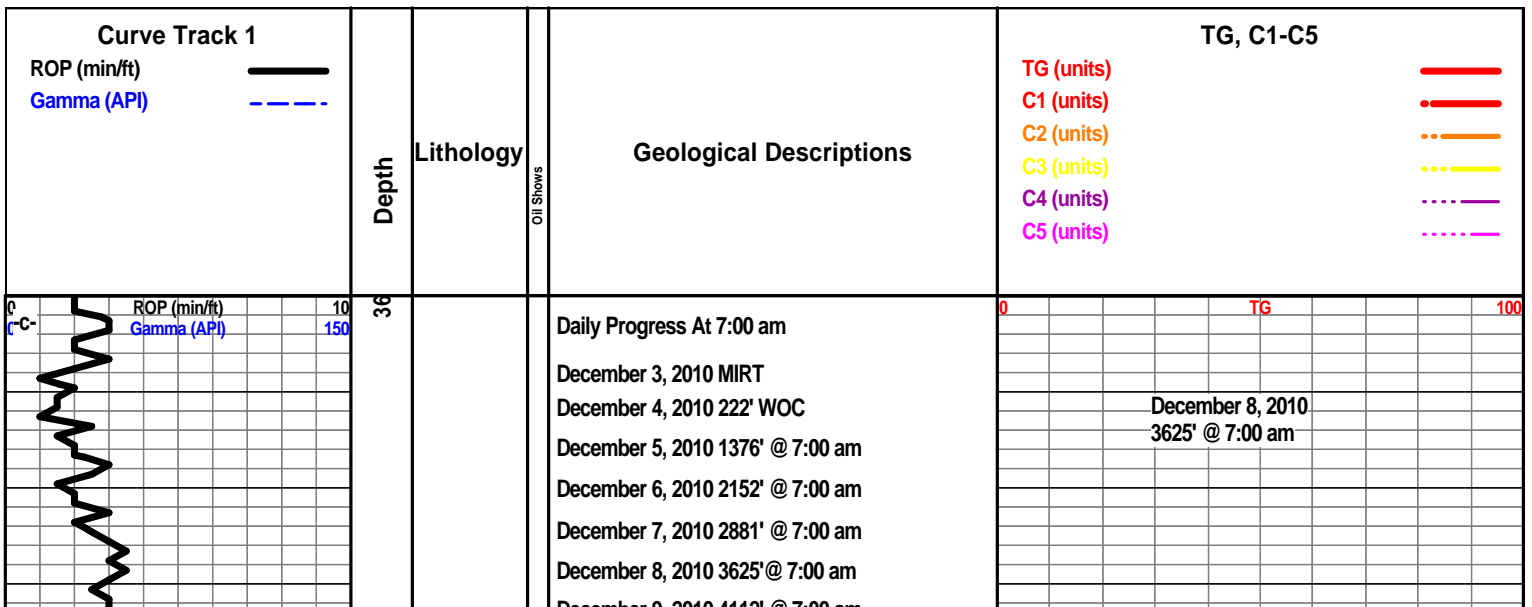
H2 Drilling Rig #3
 Tool Pusher - Randy Smith
 Drillers - Mark Staats
 Gary Axtell
 Cesar Regalado

ROCK TYPES

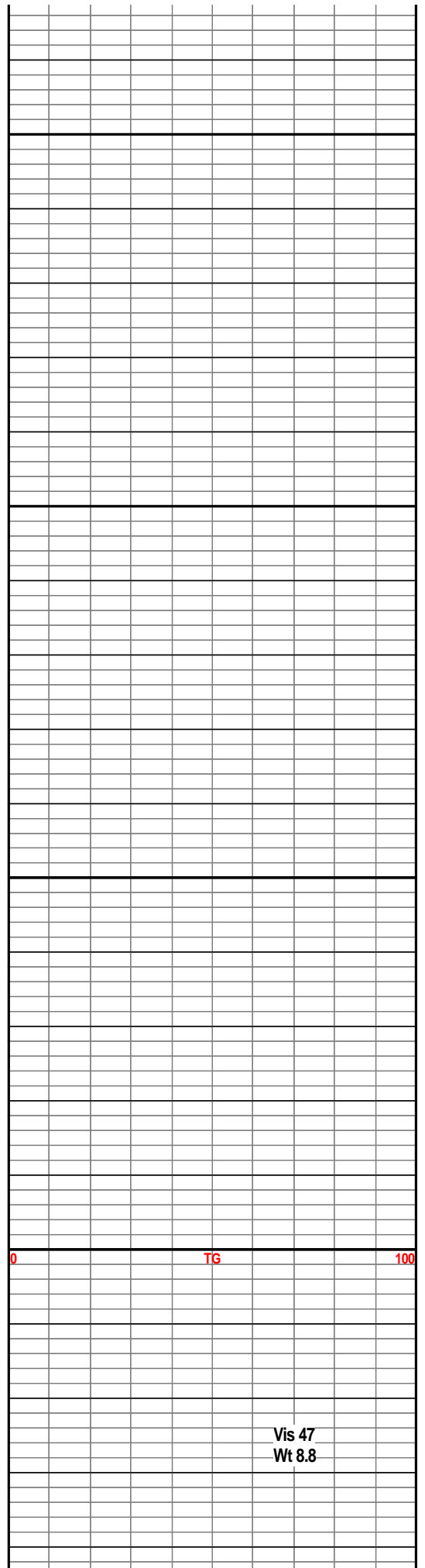
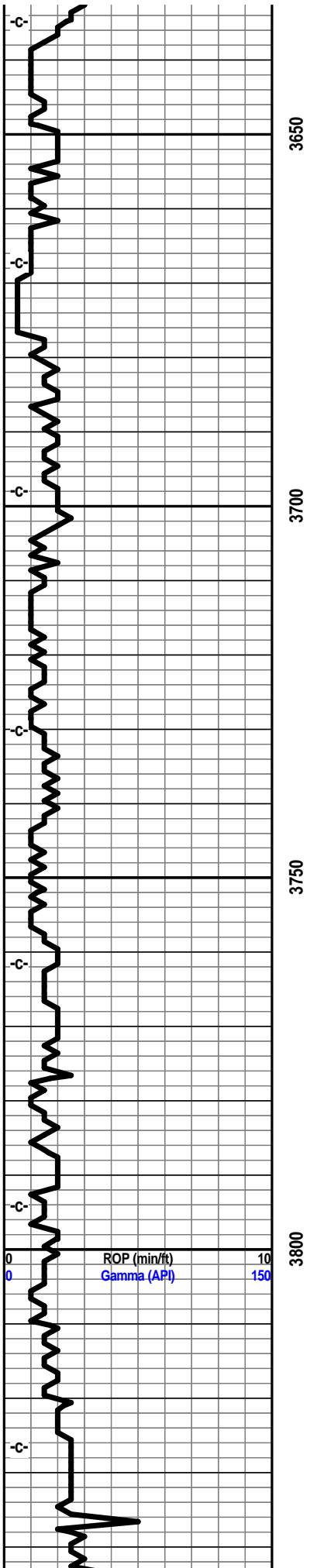
 Anhy  Bent  Brec  Cht  Clyst  Coal	 Congl  Sdy dolo  Shy dolo  Dol  Gyp  Sdy lmst	 Lmst  Mrlst  Salt  Shale  Sltst  Ss	 Black sh  Gry sh  Shale  Shyslts  Sltsh
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ACCESSORIES

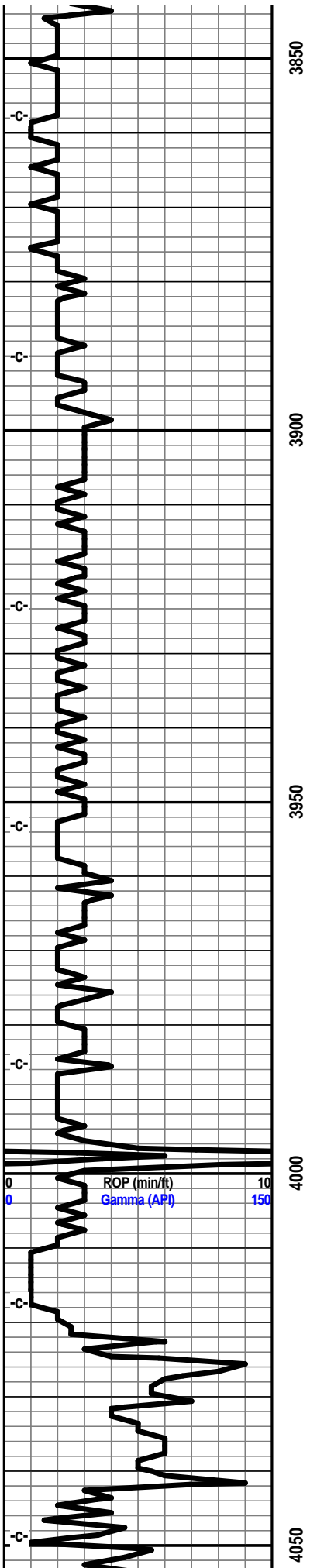
MINERAL  Anhy  Arg  Bent  Bit  Brecfrag  Calc  Carb  Chtdk  Chtlt  Dol  Ferrpel  Ferr  Glau  Gyp  Marl  Nodule  Phos  Pyr  Salt  Sandy  Silt	 Chlorite  Dol  Sand  Silty FOSSIL  Algae  Amph  Belm  Bioclst  Brach  Bryozoa  Cephal  Coral  Crin  Echin  Fish  Foram  Fossil  Gastro  Oolite  Ostra	 Pelec  Pellet  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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December 9, 2010 4112 @ 7:00 am
December 10, 2010 4510' @ 7:00 am
December 11, 2010 4915' @ 7:00 am
December 12, 2010 5180' @ 7:00 am



Vis 47
Wt 8.8

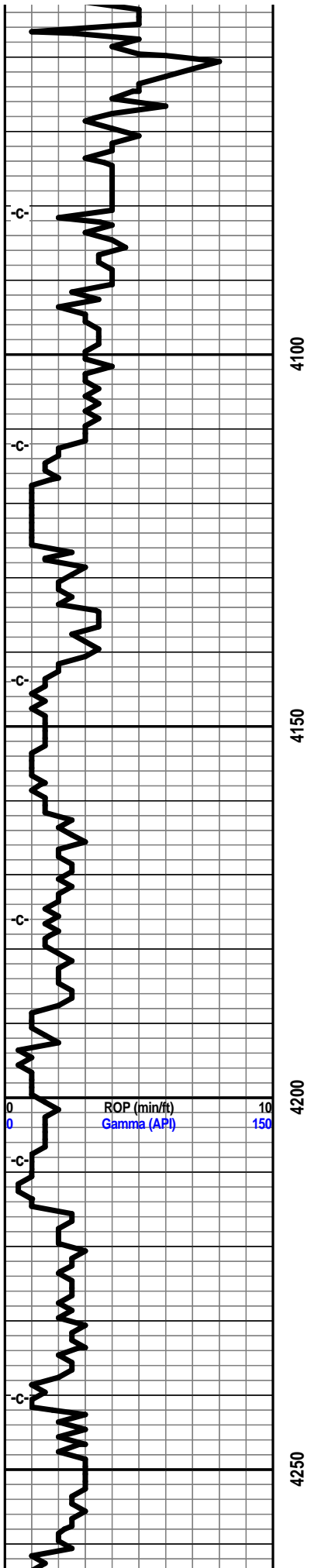


Survey 3922'
2 3/4, run again - 3/4

Vis 46
Wt 9.1

0 TG 100

Survey 4017'
1 3/4 degrees



Vis 51
Wt 9.2

December 9, 2010
4112' @ 7:00 am

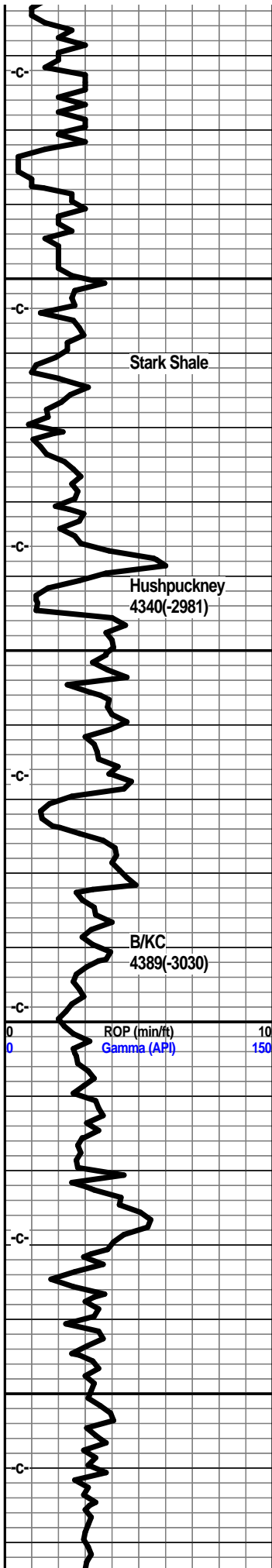
Survey @ 4112' 1/2
degree

0 TG 100

Mud Co Mud Check
December 9, 2010
4208 @ 10:30 am
Vis 45
Wt 9.3
pH 10.0
WL 10.4
Chl 5,500 ppm
LCM 0

Geologist on
Location @ 4240
December 9, 2010
11:12 am

Start Tooke Dat at
4245'



4300

4350

4400

4450



Shale, Grey-black, carb.

Limestone, cream, tan, fxln, foss frags, traces of tan chert.

Shale, grey-green, some green ls streaks.

Limestone, cream, tan, bwn, xln, trace foss, trace tan cherts, sub chalky in part.

Shale, grey-green, calc. in part.

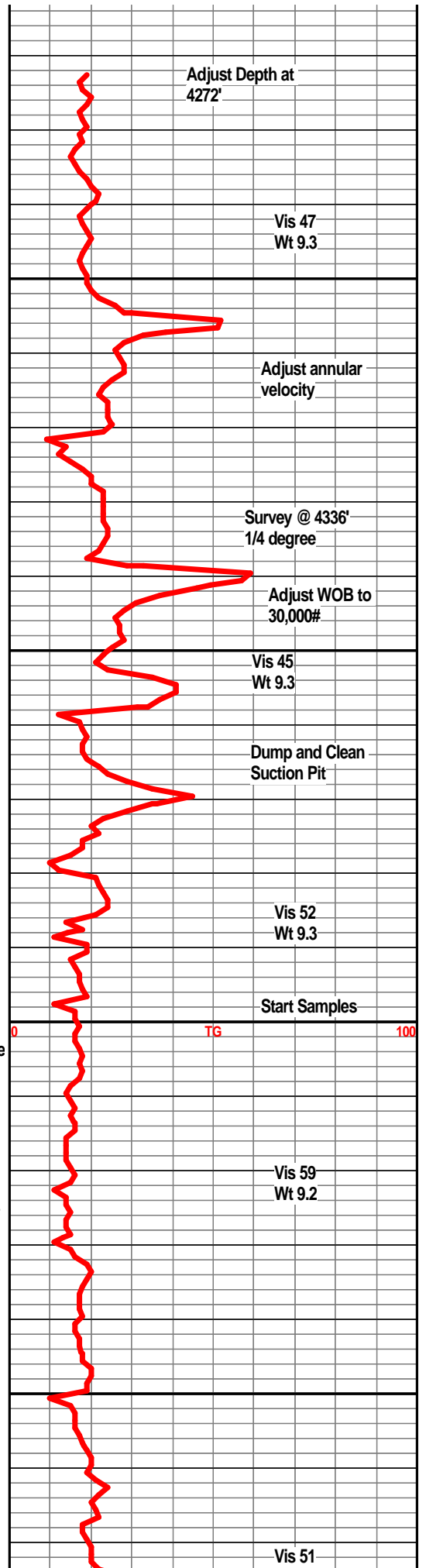
Limestone, cream, tan, xln, sub chalky, traces of chert, some foss.

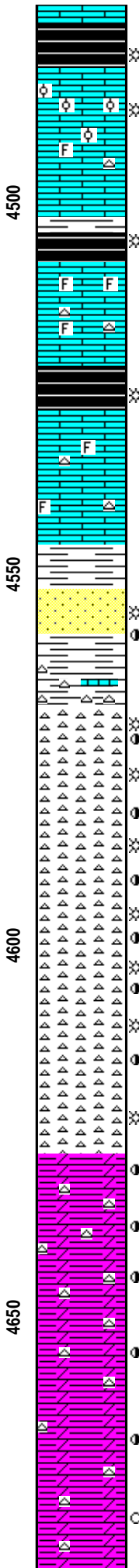
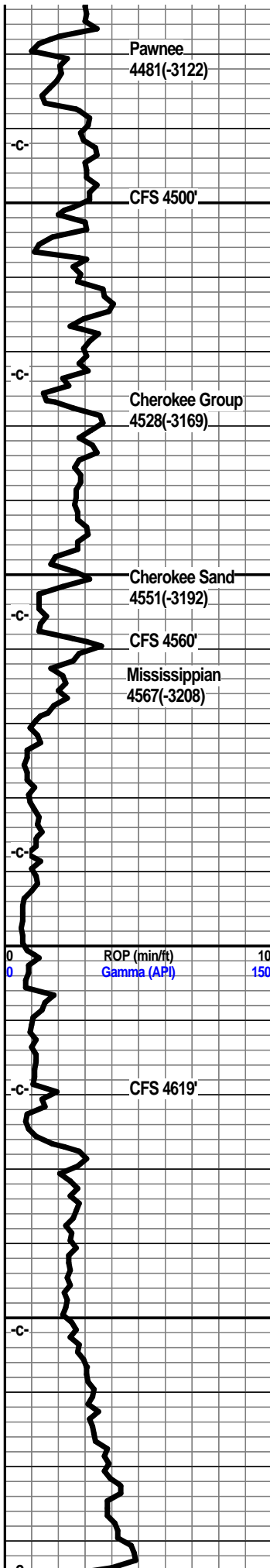
Shale, grey

Limestone, crm, tan-white, xln, sub chalky, foss in part, traces of tan to trans chert.

Limestone, crm-tan, xln, chalky in part, traces of foss frags, cherty in part.

Limestone, crm, off-white, tan, xln, chalky, foss, cherts.





Shale, grey-black, carb in part.

Limestone, crm, tan-white, xln, trace xln porosity, oolitic in part, some cal filled xln por., show of gas bubbles, trace of lt bwn staining, no odor, NSFO, good gas indication.

Shale, grey-black, sl carb.

Limestone, crm, off-white, xln, chalky, foss in part, fragments, traces of tan chert.

Shale, grey-black, carb.

Limestone, crm, tan, tan-bwn, xln, dense, traces of foss frags, sub chalky in part.

Limestone, crm, some grey blkly, chalky, foss.

Shale, grey, dk grey, some green.

Sst, tan, fine grained, sa to sr, well cemented in part, some clusters friable, good odor SFO, show of gas bubbles, good gas indication, good light bwn staining.

Shale, pale green, some pale grn ls, some chert.

Chert, white, off-white, clear to trans, sharp, weathered, some scattered small vugs, pin point porosity, fair lt brown staining, some black asphaltic staining, good odor, fair show of free oil, fair odor, show of bleeding gas, dull fluor, good gas indication.

Chert, off-white, bone-white, more translucent, sharp, weathered on edges, some with pin point porosity, lt bwn scattered staining, some asphaltic staining, good odor, SFO, show of bleeding gas, dull fluor, good gas indication.

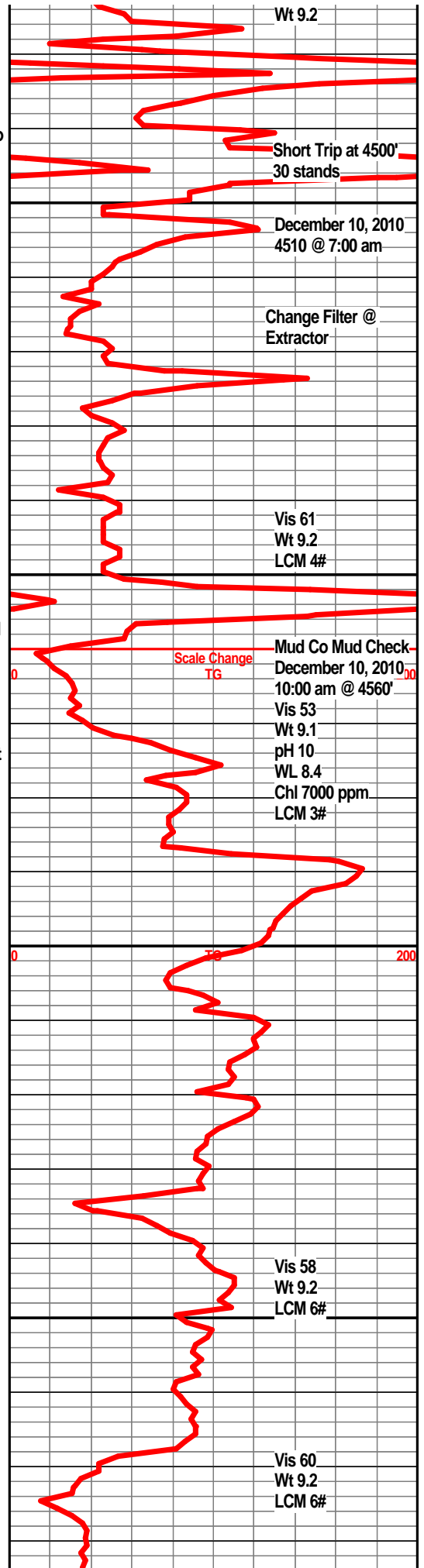
Chert, off-white to bone white, trans, sharp, pp porosity, fair staining along edges, fair odor, show of free oil, bleeding gas, dull fluor, good gas indication.

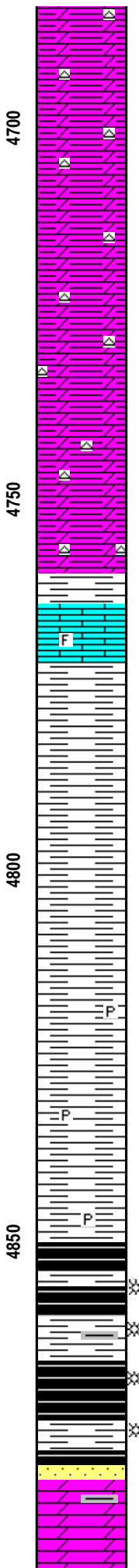
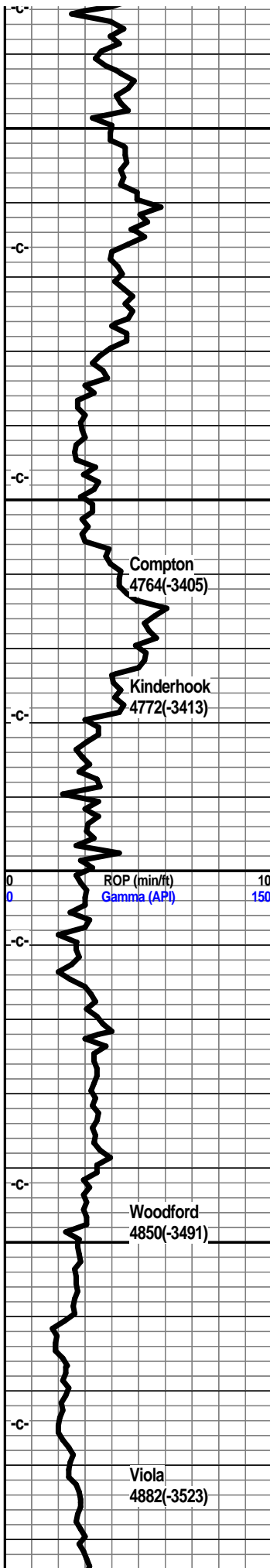
Dolo, dk grey, shaley, abundant white to bone white chert with edge staining, slight show of oil, faint odor.

Dolo., grey, shaley, very cherty, sharp to weathered, lt bwn staining, slight show oil, faint odor, slight show gas.

Dolo, grey to dk grey, dk grey shales, off-white cherts, sharp, weathered edges with lt bwn staining, slight show oil & gas, v faint odor.

Dolo, grey, cherty, decreasing show of staining, very faint odor and show of oil & gas.





Dolo., lt grey, fine grained, xln, shaley in part, traces of trans chert, no visible shows.

Dolo., lt grey, fine grained, xln, grey shales, slightly cherty, no visible shows.

Dolo., lt grey, fine grained, xln, cherty in part, some grey shales, no visible shows.

Dolo, Lt grey, fine grained, xln, traces of chert, grey shales, no visible shows.

Dolo., Lt grey, fine grained, xln, some grey shales, trans. chert.

Dolo, lt grey fine grained, grey to green shales, trans chert.

Limestone, crm-white, tan, xln, foss. sub chalky.

Shale, grey, silty, some ls fragments.

Shale, grey, dk grey, silty, blk

Shale, grey, silty, blk, firm in part.

Shale, grey, lt grey, silty, traces of pyrite, blk.

Shale, grey, lt grey, silty.

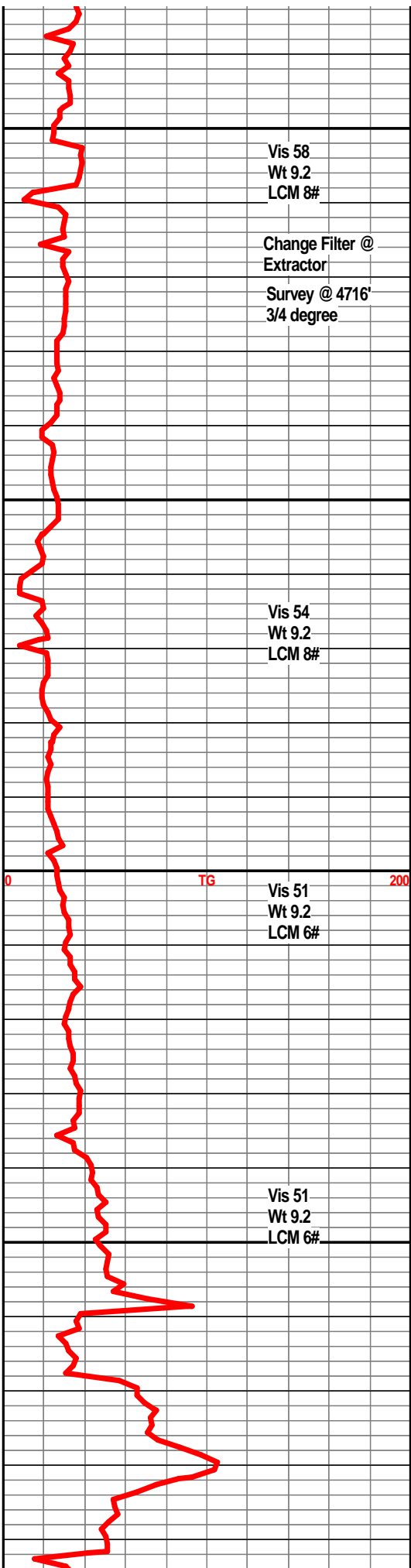
Shale, lt grey, grey, silty.

Shale, grey, dk grey, silty, carb., sl show gas bubbles.

Shale, dk grey, carb, somw coffee brown, silty.

Sst, tan, sa, fn grained, friable, sl. odor, trace of oil, sl bwn staining, very small amout of sand present, dull fluor.

Dolo., grey, white, fn grained, xln.



Vis 58
Wt 9.2
LCM 8#

Change Filter @
Extractor

Survey @ 4716'
3/4 degree

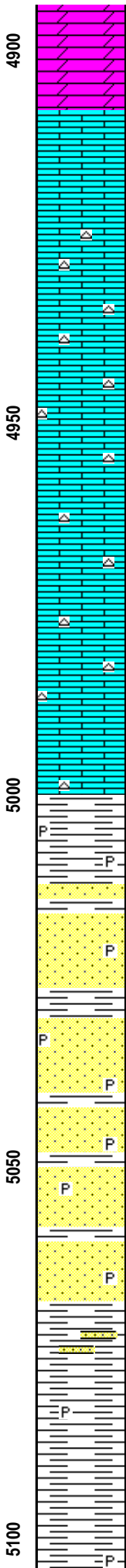
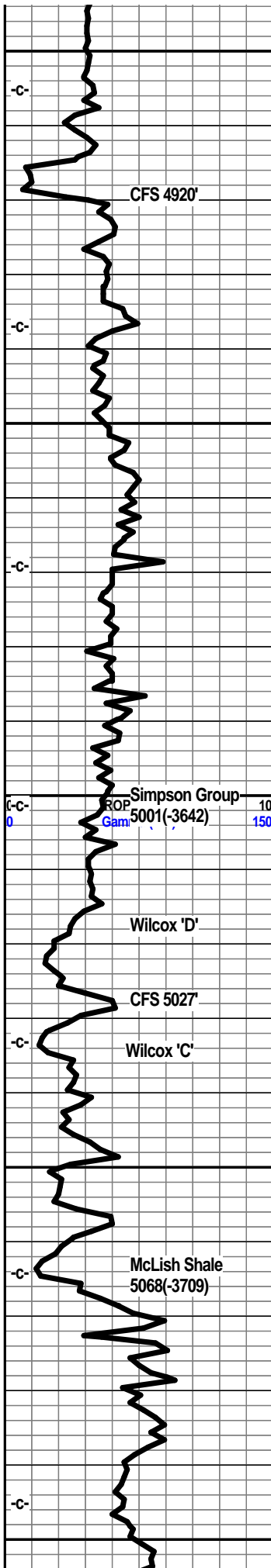
Vis 54
Wt 9.2
LCM 8#

Vis 51
Wt 9.2
LCM 6#

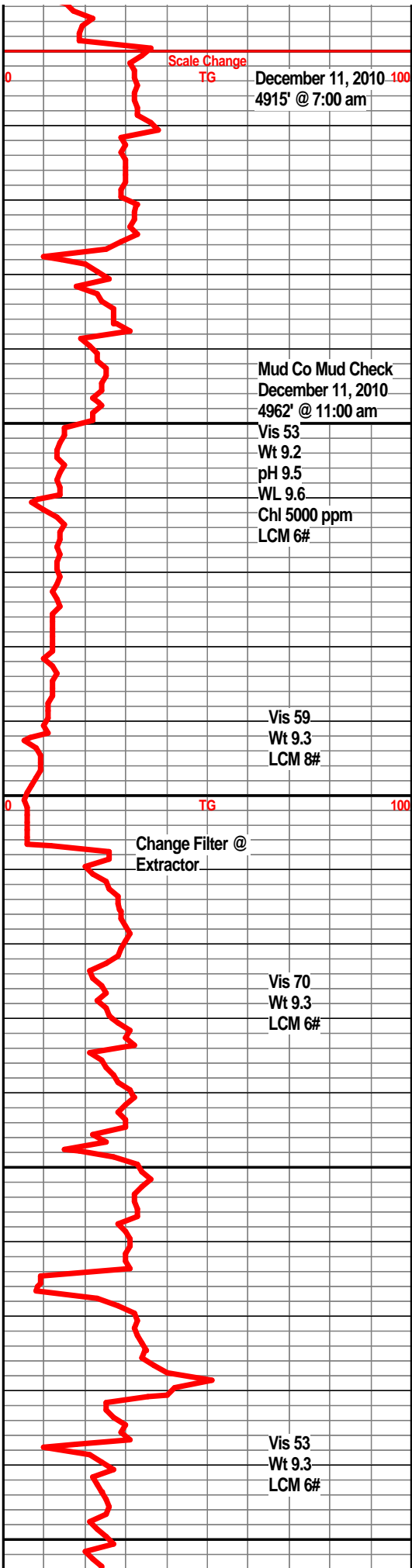
Vis 51
Wt 9.2
LCM 6#

TG

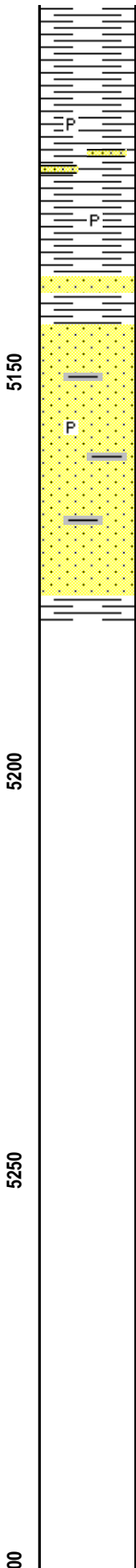
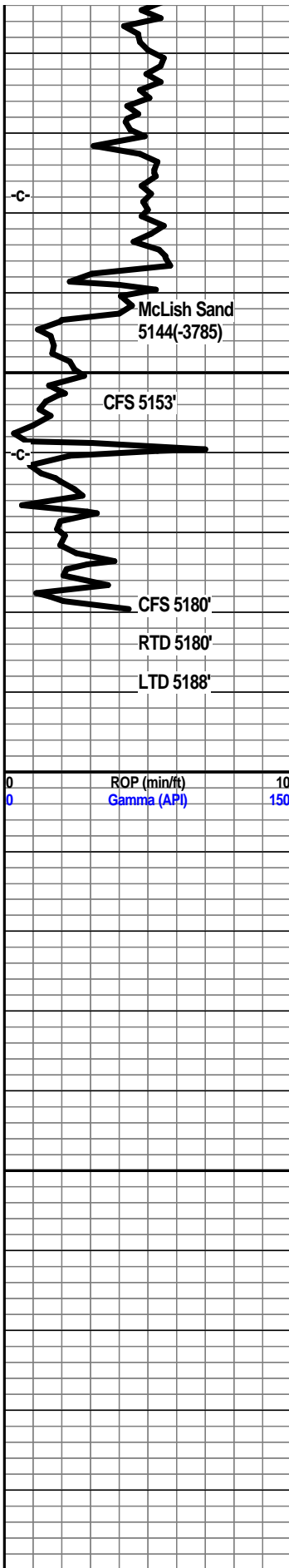
200



Dolo, grey-white, xln, fn grained, soft.
 Dolo., grey, lt grey, fn grained, soft.
 Limestone, white to off-white, xln, xln porosity, granular texture, good porosity, no visible shows, no odor, no gas indication.
 Limestone, crm-white, fxln, xln porosity, chalky in part, traces of chert.
 Limestone, off-white, tan-white, xln, chalky, traces of chert.
 Limestone, tan-white, xln, chalky, tan cherts, sharp.
 Limestone, tan-white, xln, chalky, tan cherts, sharp.
 Limestone, tan, tan-white, xln, dolo in part, tan cherts.
 Limestone, tan, tan-white, xln, dolo in part, tan chert, sharp.
 Shale, green, firm, trace of pyrite.
 Sst, clear to grey, well sorted, friable in part, sa to sr, no visible shows, no odor.
 Sst., clear to dirty grey, well cemented, friable in part, glauc, some pryite, sa to sr, fair sorting, no visible shows, no odor, no fluor.
 Shale, dk apple green, firm, pyritic.
 Sst., clear to grey-white, sa to sr, friable in part, mostly well cemented, glauc, some pyrite inclusions, fair sorting, no visible shows, no odor, no fluor., some shale stringers.
 Sst., clear, grey-white, sr to sa, fair sorting, pyrite inclusions, few pieces partly friable, very slight show of bwn oil near the pyritic inclusions, no odor, no fluor.
 Sst, clear to grey, sa to sr, well cemented for the most part, some friable, glauc., pyritic in part, some shale stringers, very faint bwn scattered stain, no odor, no visible shows, no fluor.
 Shale, dk green, grey, firm, pyritic inclusions.
 Shale, dk green, firm.



December 11, 2010 100
 4915' @ 7:00 am
 Mud Co Mud Check
 December 11, 2010
 4962' @ 11:00 am
 Vis 53
 Wt 9.2
 pH 9.5
 WL 9.6
 Chl 5000 ppm
 LCM 6#
 Vis 59
 Wt 9.3
 LCM 8#
 Vis 70
 Wt 9.3
 LCM 6#
 Vis 53
 Wt 9.3
 LCM 6#



Shale, dk green, grey-green, firm, pyrite.

Shale, dk grey-green, firm

Shale, green, dk green, traces of pyrite, firm, some sand stringers.

Sst., clear to grey, sa, poor sorting, well cemented. glauc., no visible shows. Shale, dk green, firm.

Sst, clear to grey, sa, poorly sorted, friable in part, glauc., no visible shows, no odor, no gas indication.

Sst, clear to grey-white, sa, poorly sorted, well cemented in part, some friable, trace of pyrite, no visible shows, some shale stringers.

Sst, clear to grey white, sa, poorly sorted, well cemented for the most part, few pieces friable, no visible shows, no odor.

Shale, grey-green.

