



Woolsey Operating Company, LLC

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

Measured Depth Log

Well Name: Spicer A #4
Location: E2 NW NE
License Number: API: 15-007-23771-00-00
Spud Date: October 6, 2011
Surface Coordinates: 660' FNL, 1650' FEL Section 2-Twp 34 South - Rge 11 West
Roundup South Pool
Bottom Hole Vertical Hole
Coordinates:
Ground Elevation (ft): 1428 K.B. Elevation (ft): 1437
Logged Interval (ft): 4000 To: 5110 Total Depth (ft): 5110
Formation: McLish Shale
Type of Drilling Fluid: Chemical Mud, Displace at 3421'

Region: Barber County, Kansas

Drilling Completed: October 14, 2011

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
STARK SHALE	4332(-2895)	4332(-2895)
HUSHPUCKNEY SHALE	4364(-2927)	4364(-2927)
B/KC	4409(-2972)	4411(-2974)
PAWNEE	4510(-3073)	4507(-3070)
MISSISSIPPIAN	4579(-3142)	4576(-3139)
KINDERHOOK SHALE	4778(-3341)	4779(-3342)
WOODFORD SHALE	4861(-3424)	4860(-3423)
VIOLA	4899(-3462)	4897(-3460)
SIMPSON GROUP	5005(-3568)	5001(-3564)
SIMPSON WILCOX	5034(-3597)	5932(-3595)
MCLISH SHALE	5060(-3623)	5058(-3621)
RTD	5110(-3673)	
LTD		5108(-3671)

COMMENTS

Surface Casing: Set 5 joints 10 3/4" at 215' with 240 sxs Class A, 2% gel, 3% cc, plug down at 11:15 pm on October 6, 2011. Cement did Circulate.

Production Casing:.

Deviation Surveys: 220' 1 1/2, 911' 1/2, 1414' 1/2, 1947' 3/4, 2449' 1, 2951' 1 1/2, 3341' 3/4, 3828' 1, 3921' 1/2, 4014' 1/4, 4107' 1/4, 4616' 1, 5110' 1.

Contractor Bit Record: 1- 14 3/4" out at 220'.
2- 7 7/8" out at 4616'.
3 -7 7/8" out at 5110'.

Gas Detector: Woolsey Operating Company, Trailer #1

Mud System: Mud Co, Brad Bortz, Engineer

DSTs: One DST by Superior Testers Enterprises, LLC

Logged by Superior Well Services

LTD 5108'.

DSTs

DST #1 4524 to 4616' Times 30-60-60-120

1st Opening - weak blow, built to 3"

2nd Opening - weak blow, built to 1"

Recovery: 2' Mud

IFP 93-88# FFP 91-92#


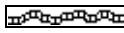
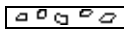
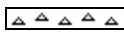
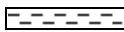








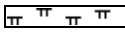

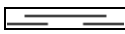







ISIP 152# FSIP 157#

IHP 2252# FHP 2154#















































































CREWS









H2 Drilling Rig #3
 Tool Pusher - Randy Smith
 Drillers - Gary Axtell
 Luis Marquez
 Cornelio Avalos

ROCK TYPES

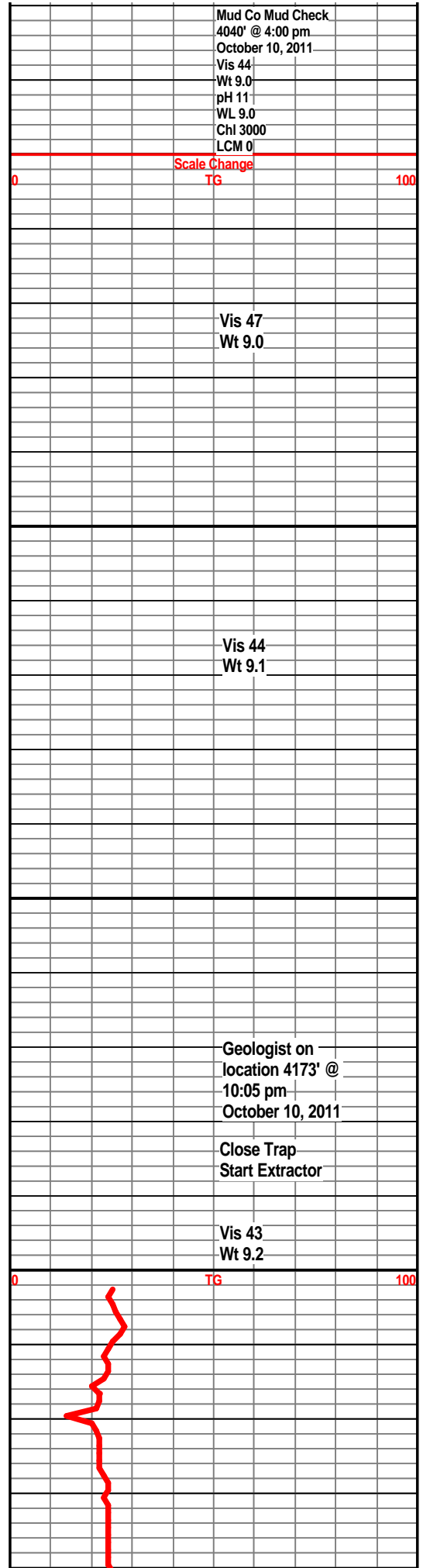
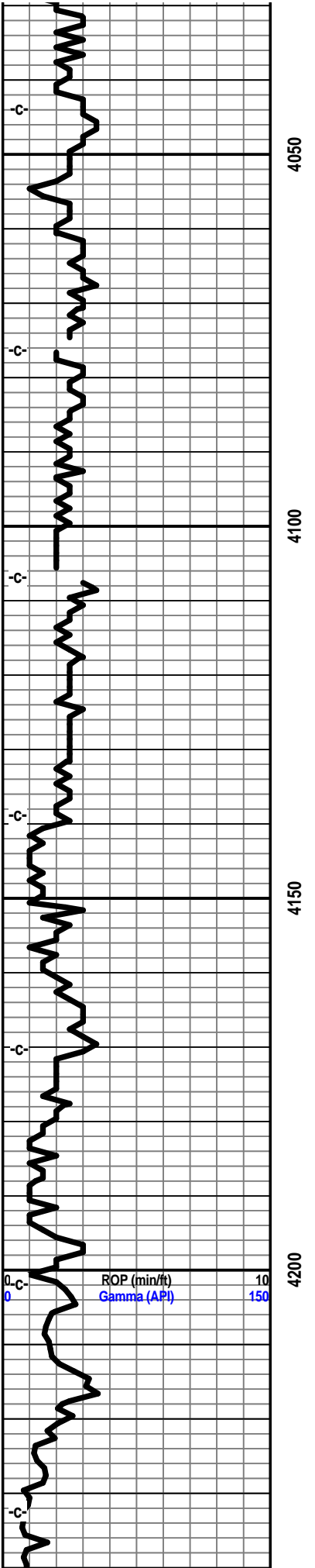
 Anhy  Bent  Brec  Cht  Clyst  Coal	 Congl  Sdy dolo  Shy dolo  Dol  Gyp  Sdy lmst	 Lmst  Mrlst  Salt  Shale  Sltst  Ss	 Black sh  Gry sh  Shale  Shyslstst  Sltysh
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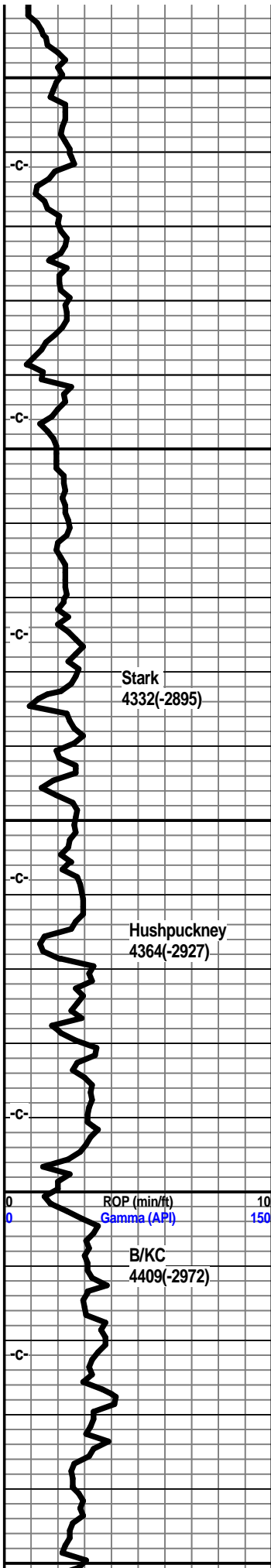
ACCESSORIES

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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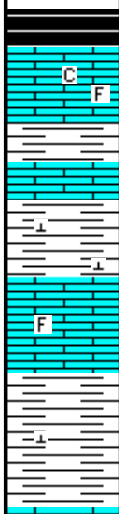
Curve Track 1 ROP (min/ft)  Gamma (API) 	Depth	Lithology	Geological Descriptions	TG, C1-C5
0 ROP (min/ft) 10 0 Gamma (API) 150	40	Oil Shows	Drilling Progress October 6, 2011, MIRT, Spud October 7, 2011, 220' @ 7:00 am WOC October 8, 2011, 1916' @ 7:00 am October 9, 2011, 2929' @ 7:00 am October 10, 2011, 3733' @ 7:00 am October 11, 2011, 4400' @ 7:00 am	TG (units)  C1 (units)  C2 (units)  C3 (units)  C4 (units)  C5 (units) 
0 ROP (min/ft) 10 0 Gamma (API) 150				0 TG 200

October 12, 2011 4616' @ 7:00 am
 October 13, 2011 4850' @ 7:00 am
 October 14, 2011 5110' @ 7:00 am





4250
4300
4350
4400
450



Shale, grey, black, carb.

Limestone, tan-white, buff, xln, dense, chalky in part, some trace fossil frags.

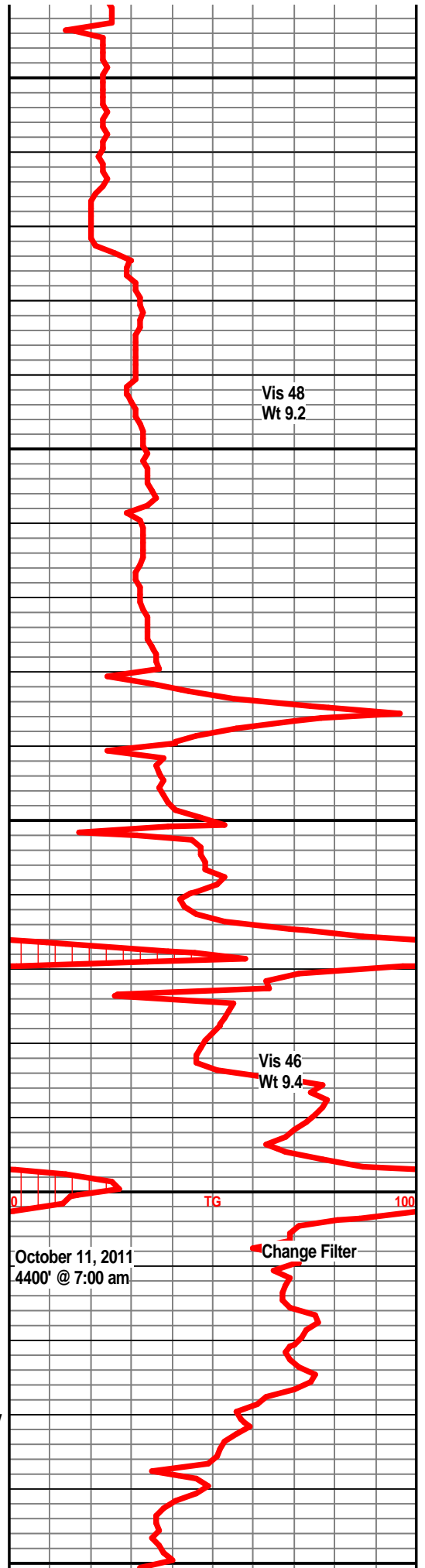
Shale, lt grey, silty.

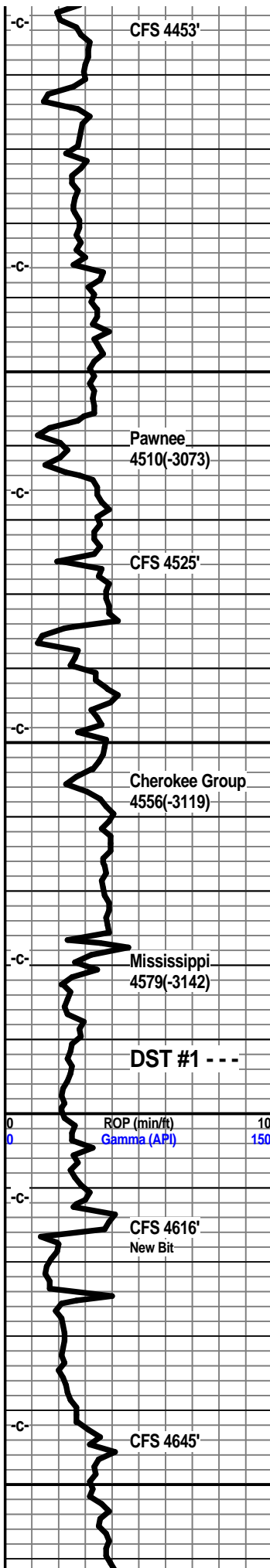
Limestone, grey-white, light green, xln, dense.

Shale, grey, green, soft to calcitic in part.

Limestone, grey, buff white, xln, dense, slightly foss, trace chalky in part.

Shale, light grey, light grey-green, calcitic.





Limestone, green, pale green, buff, xln, dense.

Limestone, grey-white, xln, dense, trace foss.

Shale, light grey.

Limestone, grey-white, buff, xln, slightly chalky, trace foss.

Shale, light grey.

Limestone, cream, buff-white, xln, partly dense, sub chalky in part, trace fossil frags.

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

Shale, grey-black, carb.

Limestone, cream, buff, fxln, foss., oolites, trace oolitic porosity, trace xln, ppt porosity, very slight show gas bubbles, dull mineral fluor, no odor, no visible show of oil.

Shale, grey-black, carb.

Limestone, cream, tan-white, xln, dense.

Shale, grey-black

Limestone, grey-white, fxln, soft in part, sub chalky, trace foss.

Shale, light grey, grey.

Chert, white, grey-white, opaque, sharp to weathered, scattered ppt porosity, scattered light brown staining, fair odor, trace show of oil, scattered light fluor., very limy at top.

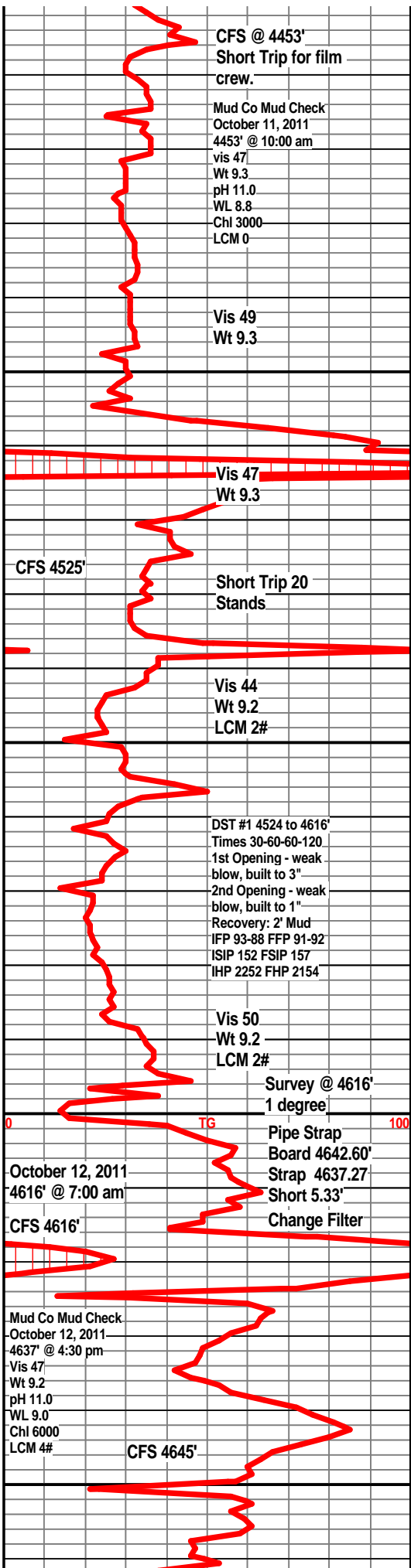
Chert, off-white, tan, sharp to weathered, ppt porosity, fair light brown staining, fair odor, very slight show oil, dull scattered fluor.

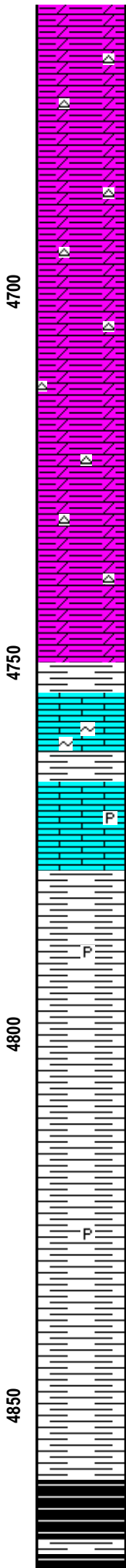
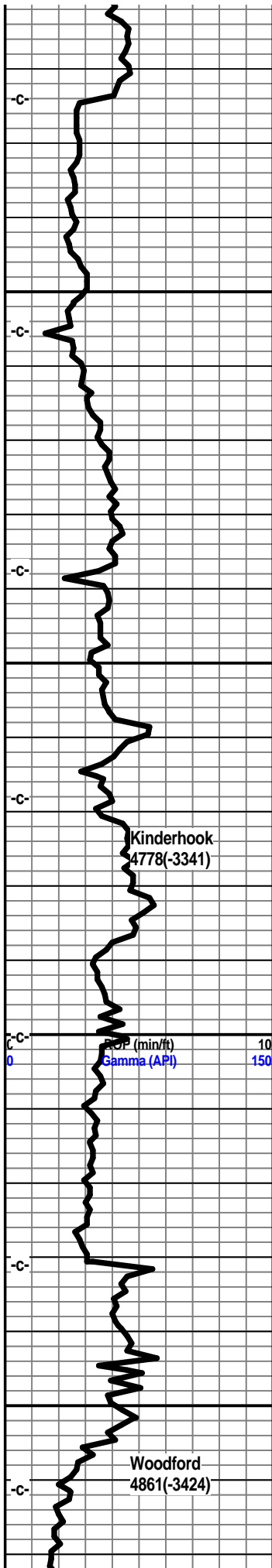
Chert a/a, increasing show of grey-green splintery shales.

Chert, off-white, tan, sharp to weathered, scattered ppt porosity, scattered light brown staining, fair odor, no visible shows of free oil or gas bubbles, scattered dull fluor., some grey-green splintery shales, slight traces of dolomite.

Dolomite, grey-white, fine grained, xln, scattered weathered cherts with light brown staining, grey-green splintery shales.

Dolomite, grey-white, xln, dense, cherty in part, sharp to weathered, some ith light scattered staining, grey-green splintery shales.





Dolomite, grey-white, tan-white, xln, dense, sharp translucent cherts, some grey green splintery shales, decreasing staining on cherts.

Dolomite, grey to tan-white, xln dense, sharp fresh cherts, traces of grey-green shales.

Dolomite, tan-white, grey, fxln, dense, fresh off-white cherts.

Dolomite, grey, fxln, dense, trace sharp chert, grey-green splintery shales.

Limestone, cream, buff-white, xln, trace glauc, sub chalky.

Shale, green, light grey.

Limestone, cream, buff-white, tan, xln, dense, trace pyrite.

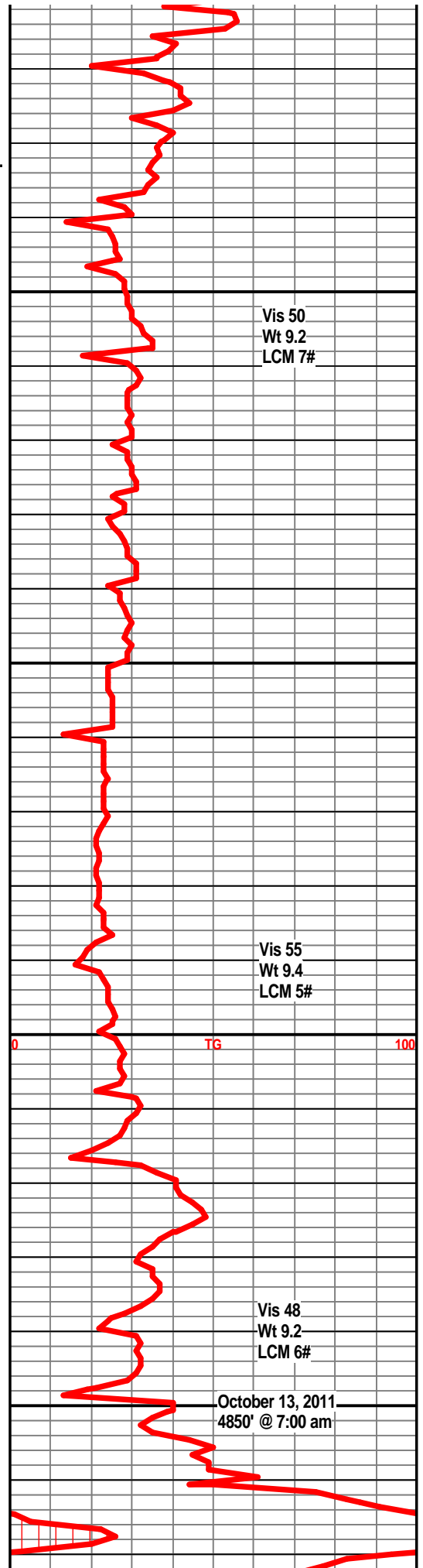
Shale, grey to dark grey, trace pyrite.

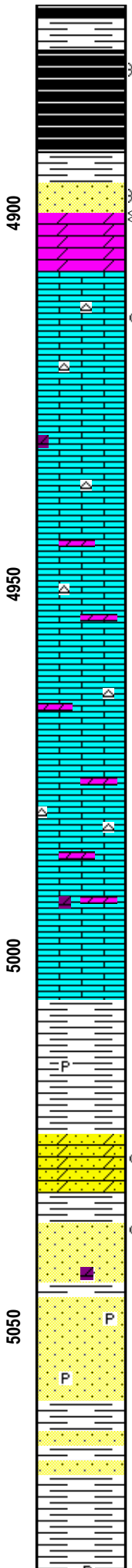
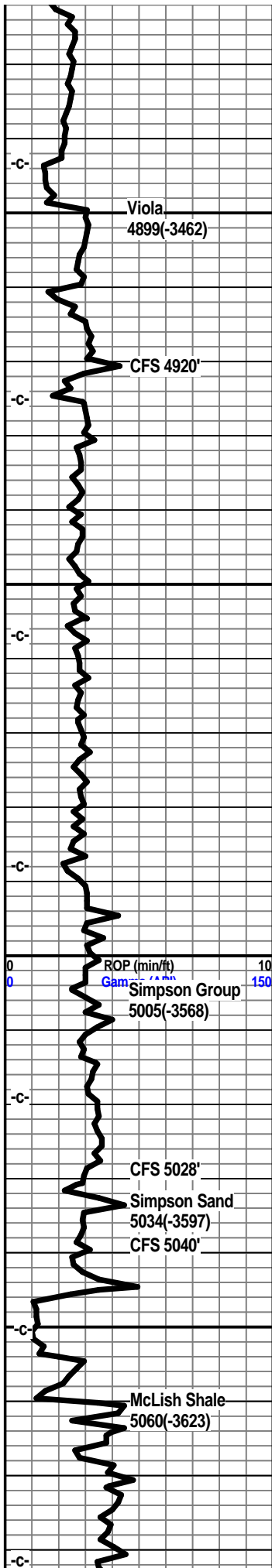
Shale, grey, dark grey, silty

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

Shale, grey, silty.

Shale, grey, grey-black, carb.





Shale, grey-black, carb, show gas bubbles.

Shale, gre, grey-black, carb, show gas bubbles.

Sandstone, grey, tan-white, sa to sr, poor sorting, shale inclusions, slightly friable, mostly well cemented, dirty, show of light oil, fair odor, slight show oil, spotty fluor.

Dolomite, grey, xln, soft, slightly limesy in part.

Limestone, off-white, grey, xln, trace ppt porosity, dark scattered staining, faint odor, slight show dark oil, dull scattered fluor., slight show light oil under UV

Limestone, cream-white, tan, fxln, traces of ppt porosity, sub chalky, slight trace white chert.

Limestone, tan, buff-white, fxln, dense, traces of tan sharp chert, slightly dolo in part.

Limestone, tan-white, buff, fxln, dense, sharp tan cherts, slightly dolomitic in part.

Limestone, tan, tan-white, buff, xln, dense, speckled, tan sharp cherts, slightly dolo in part.

Limestone, tan, fxln, grainular, tan sharp cherts.

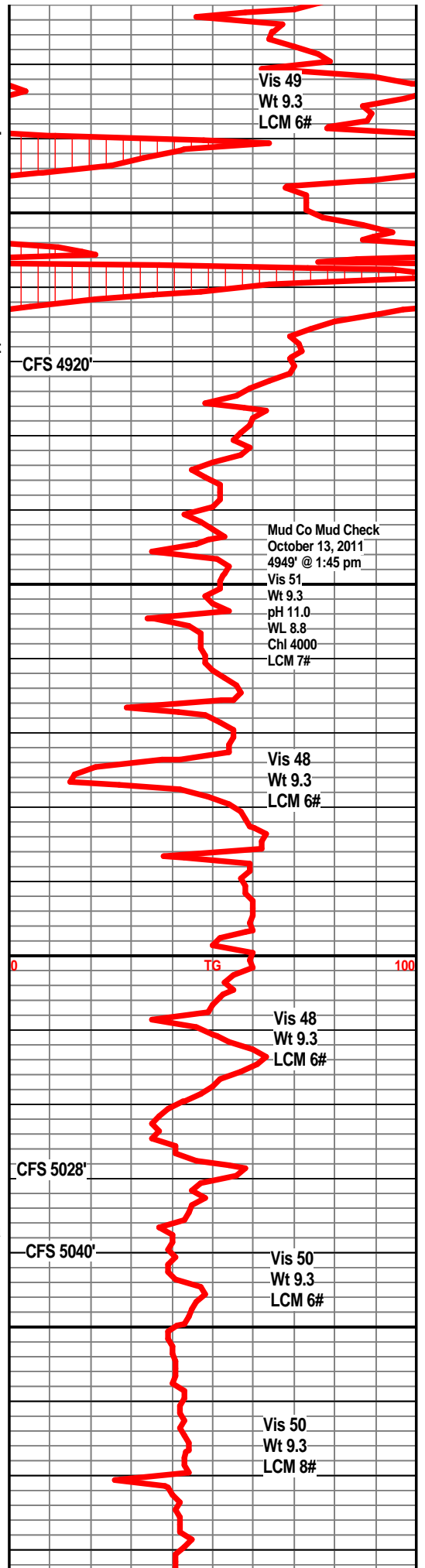
Shale, grey-green, firm, waxey, trace of pyrite, some embedded sand grains.

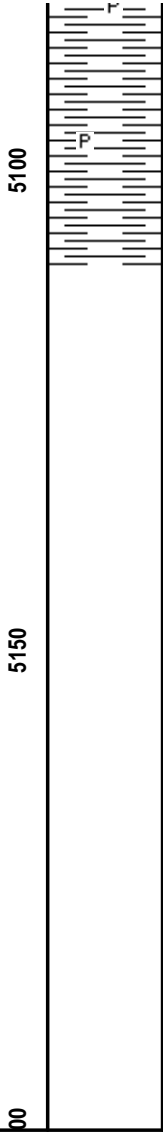
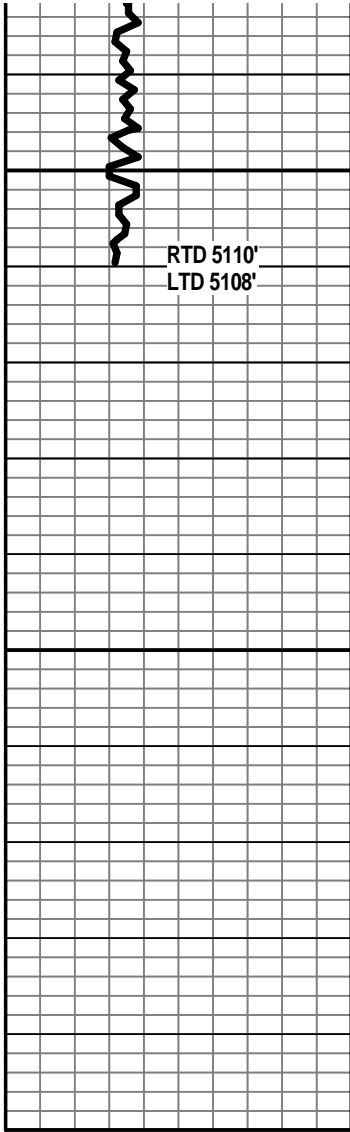
Sandstone, grey-white, dolomitic, some friable mostly well cemented, very faint show light oil, dull spotted fluor.

Sandstone, clear to white frosted qtz grains, sa to sr, fair sorting, friable in part, some well cemented, light show of oil when cluster broken, spotty fluor., very faint odor.

Sandstone, clear to white, sr to sa good sorting, friable, fine grained, clean, no visible shows, no odor, no fluor, slightly dolo in part, trace of pyrite, trace of gilsonite.

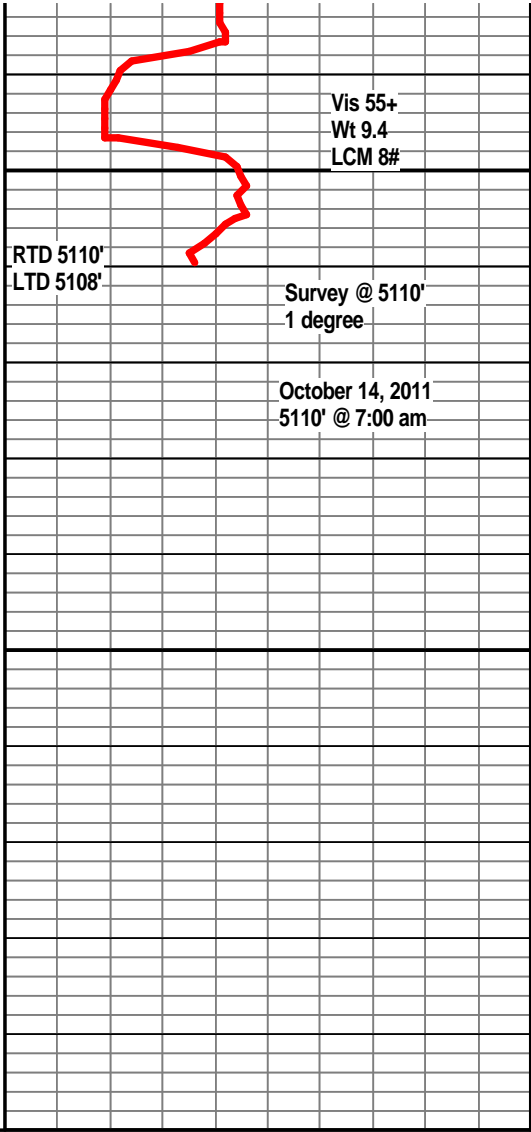
Shale, dark green, firm, waxey, traces of pyrite.





Shale, dark green, firm.

Shale, dark green, firm.



Vis 55+
Wt 9.4
LCM 8#

RTD 5110'
LTD 5108'

Survey @ 5110'
1 degree

October 14, 2011
5110' @ 7:00 am