



Woolsey Operating Company, LLC

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

Well Name: Luthi GU #3
Location: SE SE SW
License Number: API: 15-007-23677-00-00
Spud Date: March 31, 2011
Surface Coordinates: 330' FSL, 2310' FWL Section 36-Twp 33 South - Rge 11 West
Kochia Pool
Bottom Hole Vertical Hole
Coordinates:
Ground Elevation (ft): 1447 K.B. Elevation (ft): 1456
Logged Interval (ft): 4000 To: 5150 Total Depth (ft): 5150
Formation: McLish Shale
Type of Drilling Fluid: Chemical Mud, Displace at 3441'

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	4382(-2926)	4374(-2918)
B/KC	4436(-2980)	4430(-2974)
PAWNEE	4523(-3067)	4518(-3062)
CHEROKEE GROUP	4570(-3114)	4566(-3110)
CHEROKEE SAND	4594(-3138)	4590(-3134)
MISSISSIPPIAN	4610(-3154)	4600(-3144)
KINDERHOOK SHALE	4828(-3372)	4823(-3367)
WOODFORD SHALE	4908(-3452)	4904(-3448)
VIOLA	4940(-3484)	4938(-3482)
SIMPSON GROUP	5038(-3582)	5034(-3578)
SIMPSON WILCOX	5058(-3602)	5053(-3597)
MCLISH SHALE	5104(-3648)	5098(-3642)
MCLISH SAND	NDE	NDE
RTD	5150(-3694)	
LTD		5148(-3692)

Note: Log Tops are 4 to 6' higher than all sample tops.

COMMENTS

Surface Casing: Set 6 joints 10 3/4" at 231' with 240 sxs Class A, 2% gel, 3% cc, plug down at 12:45 a.m. on April 1, 2011. Cement did Circulate.

Production Casing: Ran 5 1/2" Casing

Deviation Surveys: 0- 235', 1/4-1214', 1-1722', 1/2-2199', 1/2-2739', 3/4-3249', 1-3757', 1-3915', 1 1/4-4011', 1/4-4170', 1 - 4665', 1/2-5150'.

Contractor Bit Record:

1- 14 3/4" out at 235'.

2- 7 7/8" out at 4665'

3- 7 7/8" out at 5150'.

Gas Detector: Woolsey Operating Company, Trailer #2

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

DSTs: Superior Testing Company

Logged by Superior Well Services

LTD - 5148'

DSTs

DST #1 Mississippian 4538' to 4665'

Times 30-60-60-120

Initial Opening: Strong Blow, BOB 1 minute, weak surface blow back

Second Opening: Strong Blow, BOB 1 minute, no blow back.

IHP 2282# FHP 2269#

IF 111#-131# FF 125#-165#

ISIP 784# FSIP 1545#

Recovery: 180' MW, 30% M, 70% W, Chlorides 20,000 ppm

CREWS

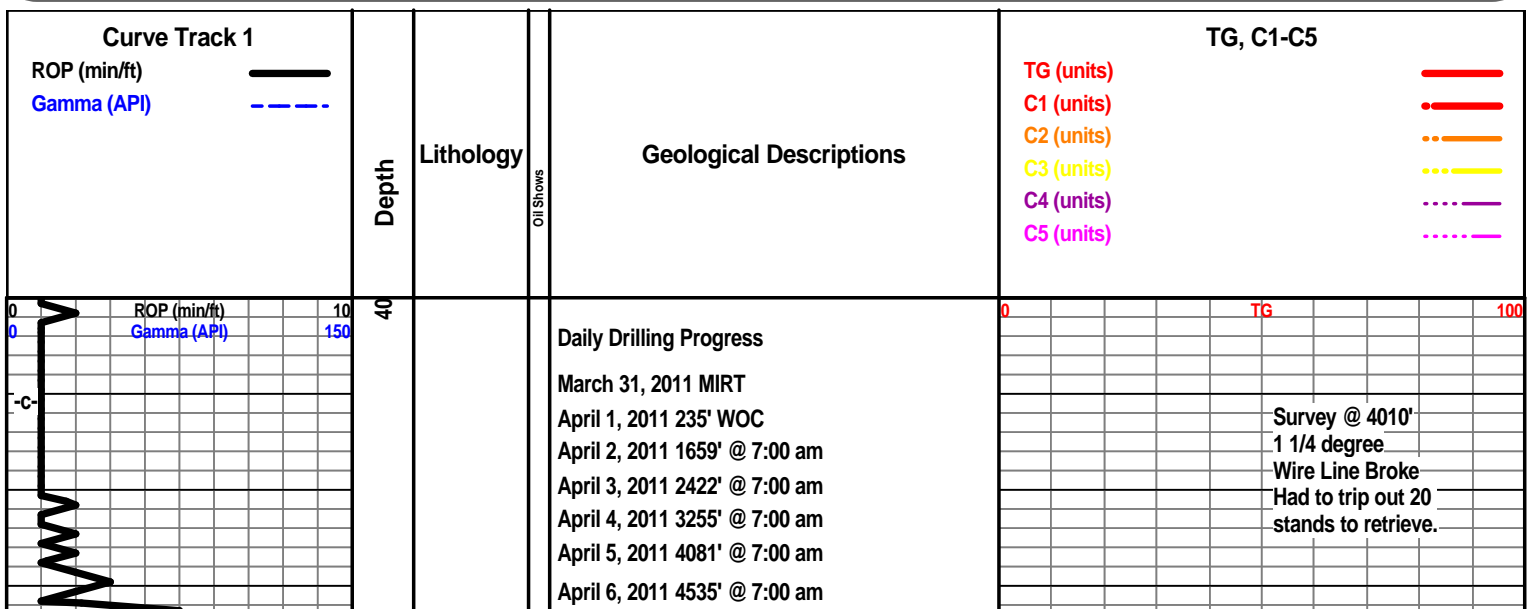
H2 Drilling Rig #3
 Tool Pusher - Randy Smith
 Drillers - Gary Axtell
 Luis Marquez
 Cain Charles

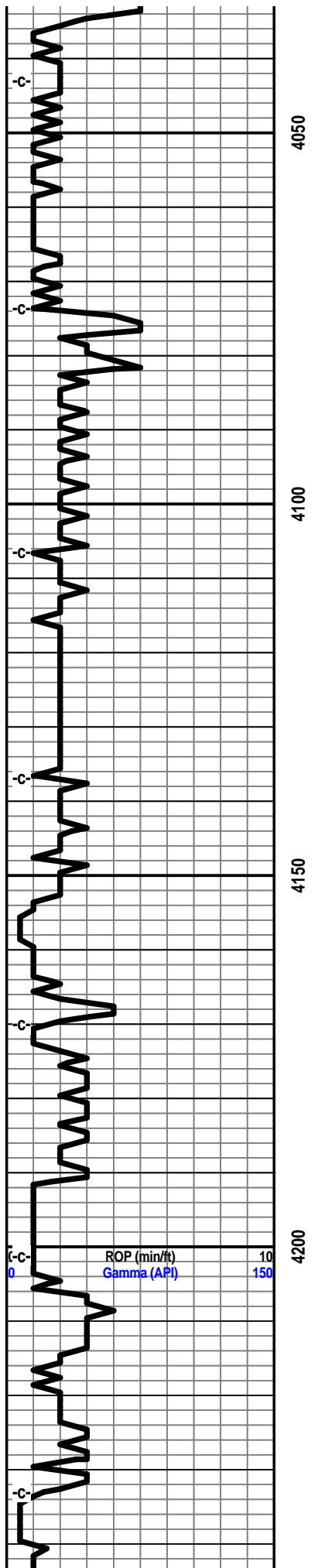
ROCK TYPES

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

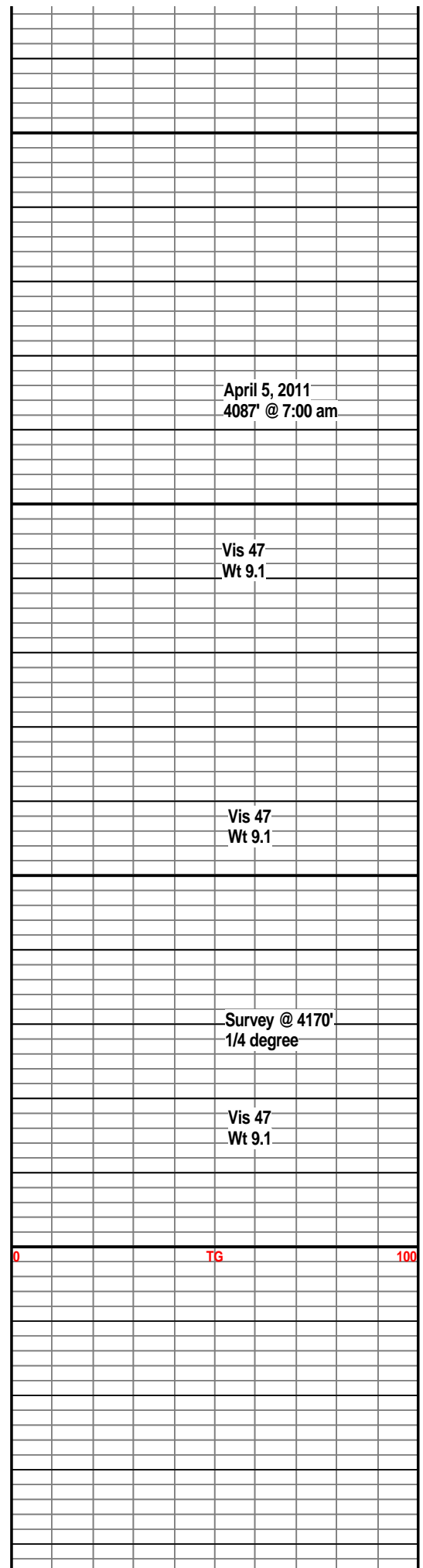
ACCESSORIES

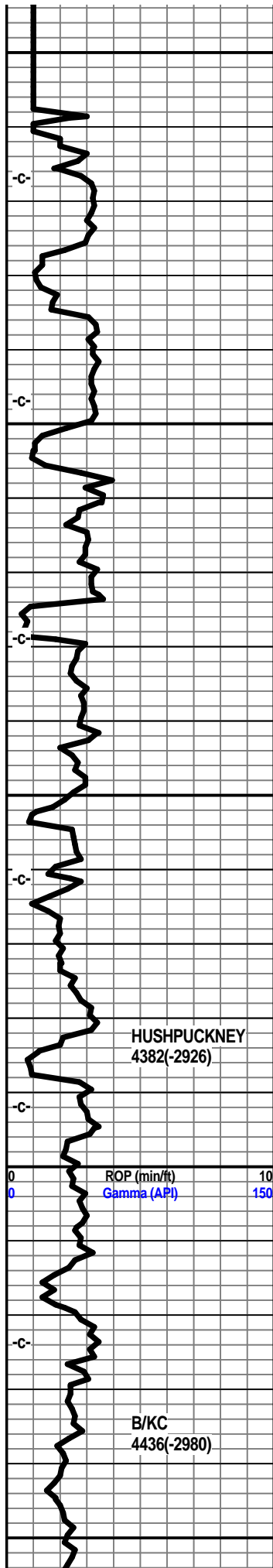
MINERAL							
	Anhy		Chlorite		Pelec		Grysh
	Arg		Dol		Pellet		Gryslt
	Bent		Sand		Pisolite		Lms
	Bit		Silty		Plant		Sandylms
	Brecfrag	FOSSIL			Strom		Sh
	Calc		Algae		Fuss		Sltstn
	Carb		Amph		Oomoldic		
	Chtdk		Belm	STRINGER			
	Chtlt		Bioclst		Anhy		Boundst
	Dol		Brach		Arg		Chalky
	Ferrpel		Bryozoa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





April 7, 2011 4665' @ 7:00 am
April 8, 2011 5008' @ 7:00 am
April 9, 2011 5150' @ 7:00 am
Preparing to run surface casing.





Shale, Grey-black, carb.

Limestone, tan-white, fxln, slightly foss., subchalky in part, trace of crystalline porosity, no visible shows, no odor.

Shale, grey, dark grey.

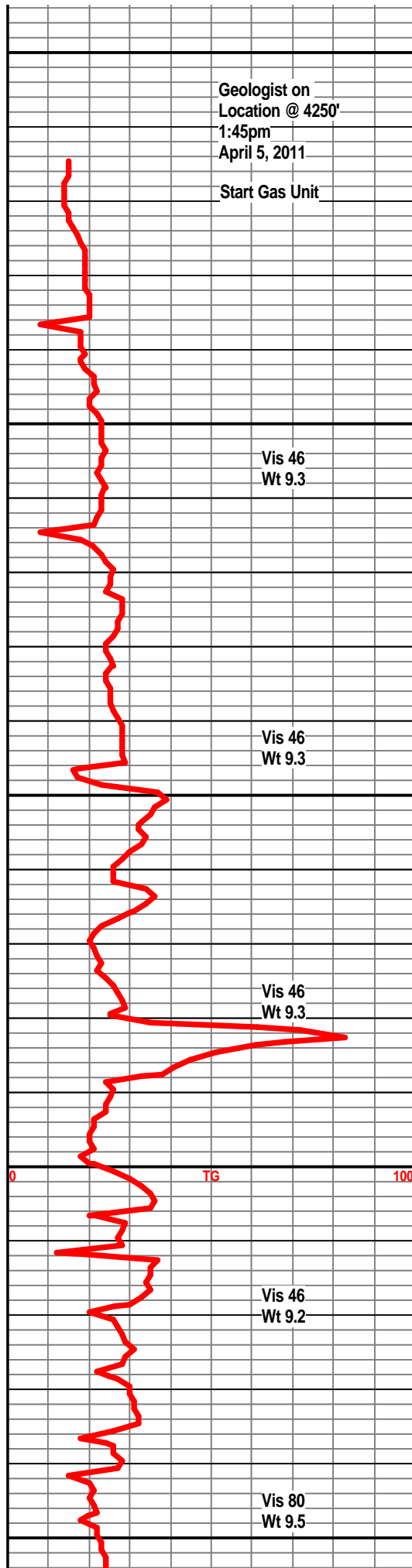
Limestone, tan, fxln, mostly dense, foss. in part.

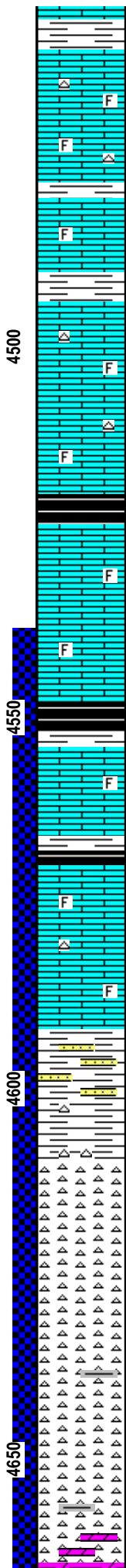
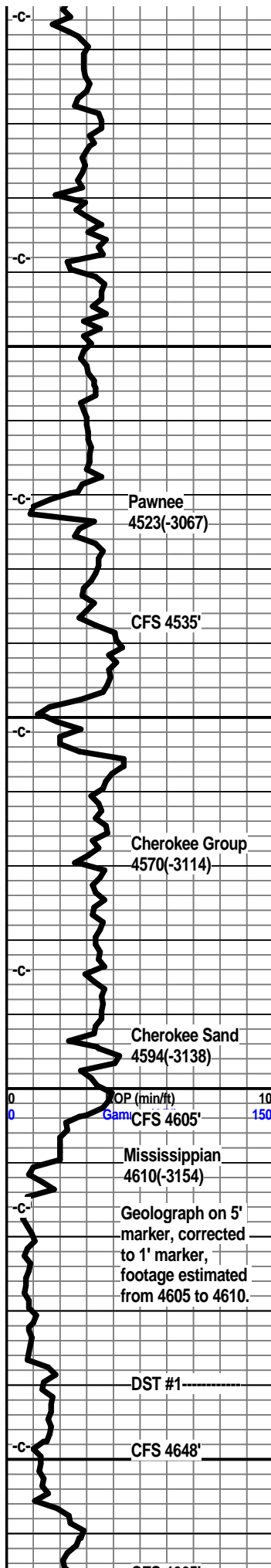
Shale, grey, dark grey.

Limestone, tan, buff-white, fxln, dense, foss, subchalky.

Shale, grey, dark grey, some green.

Limestone, tan, tan-brown, fxln, dense, slightly foss, trace of tan chert.





Shale, lt grey, green.

Limestone, tan, fxln, dense, trace of foss, some tan chert.

Shale, grey-green, some dark grey.

Limestone, tan, tan-white, fxln, slightly foss.

Shale, grey

Limestone, tan-white, fxln, dense, slightly foss, trace of tan chert.

Limestone, tan-white, fxln, slightly foss, tan cherts, some slightly chalky, trace asphaltic stain.

Shale, grey-black, slightly carb.

Limestone, tan, xln, foss. in prt, trace of xln porosity, some light brown staining, dull fluor, no odor, no visible shows of oil or gas.

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

Shale, grey-black, carb.

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

Shale, dark grey, grey-black.

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

Limestone, a/a, with some trans chert.

Shale, grey, dark grey.

Shale, green, varicolored, some interbedded sand stringers, clear to a grey-white, some tan, some w/ questionable asphaltic stain, well cemented, fair sorting, trace of chert.

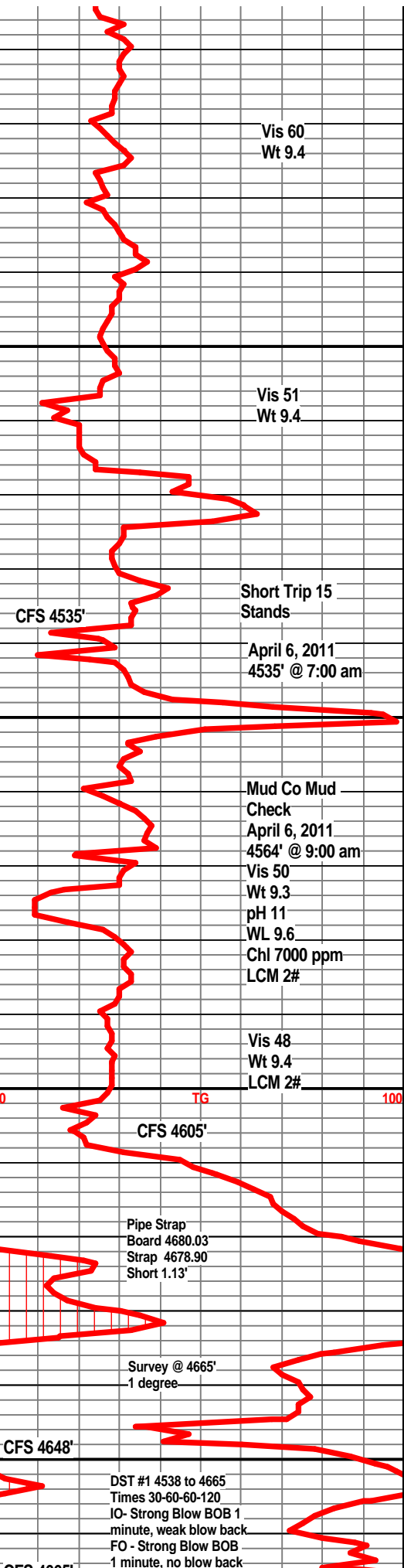
Chert, white to off-white, trip in part, some fresh, lt brown staining, few scattered small vugs, some light staining along edges, slight show of light oil, poor fluor, very faint odor.

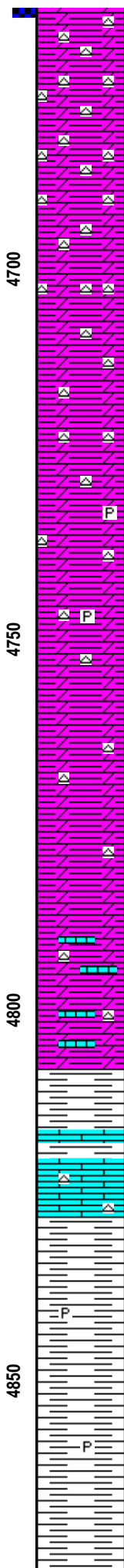
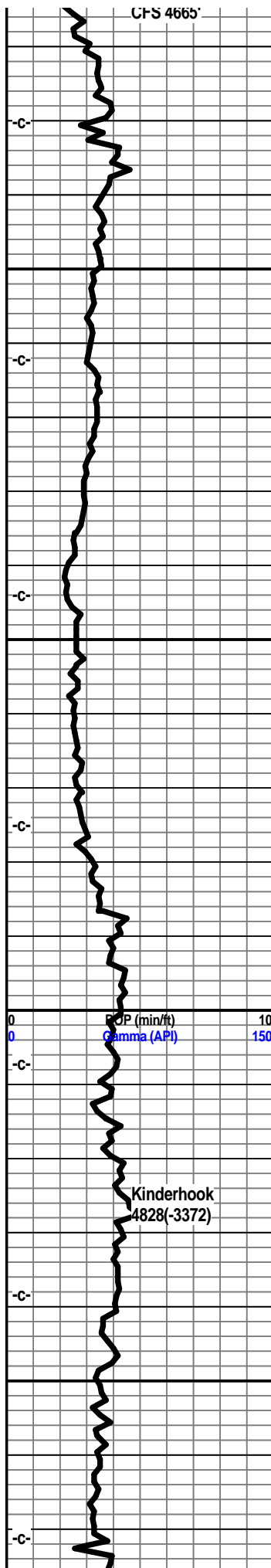
Chert, off-white to tan, weathered, traces of pin point porosity, good light brown staining, faint odor, slight show of free oil in tray, v dull fluor.

Chert a/a with more fresh, sharp with some lt brown edge staining, faint odor, slight show oil.

Chert, off-white to tan, weathered, sharp, fresh, trace pin point porosity, slight show light oil, faint odor, traces of grey-green shale.

Chert, grey-white, weathered, more grey, dark





grey shales, still slight staining on cherts with faint odor.

Dolo, grey-white, pale green-grey, very cherty, some weathered cherts with light brown staining, fresh chert with scattered edge staining, v. ft odor, grey to drk grey splintery shales.

Dolo, tan-grey, grey-white, cherty a/ increasing amounts of splintery shales.

Dolo, tan, grey-white, xln, weathered cherts with light brown staining, fresh cherts with edge staining, grey-green splintery shales, traces of pyrite.

Dolo, tan, grey, dark grey green shales, weathered light stained cherts.

Dolo, tan-grey, xln in part, trace amounts of weathered cherts, light brown scattered staining, grey dark grey shales, some pyrite inclusions.

Dolo, tan, tan-grey, very small amount of chert, dark grey-green splintery shales, pyrite, trace of foss.

Dolo, grey-white, tan, xln, grey-green shales, calcitic in part.

Dolo, tan, grey-white, xln, traces of chert, calcitic green shales.

Dolo, tan-white, xln, dark grey splintery shales.

a/a, with tan-buff limestone stringers, slightly foss.

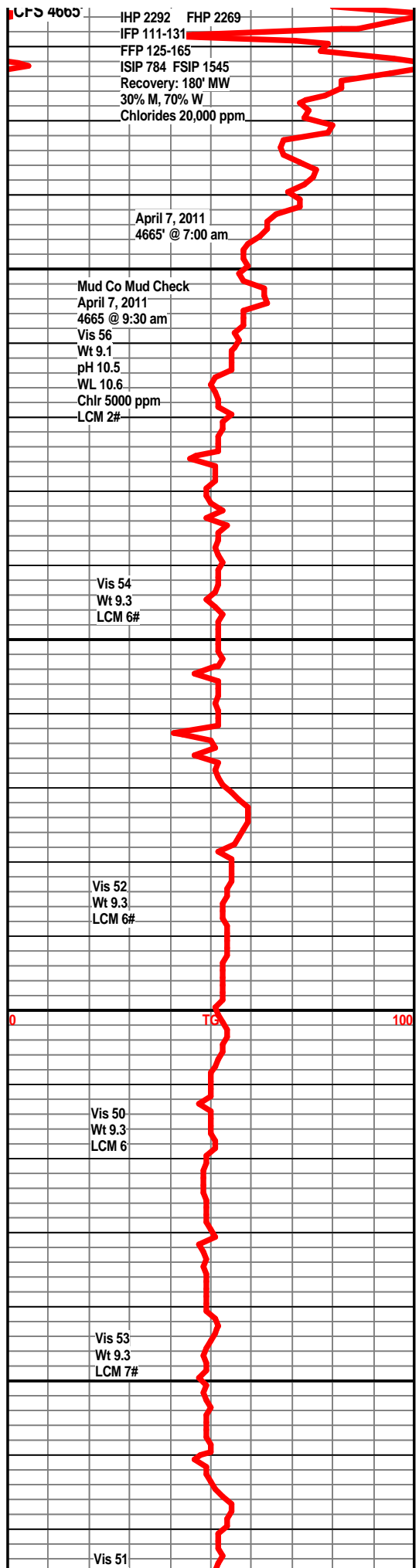
Shale, green to dark green, slightly calcitic.

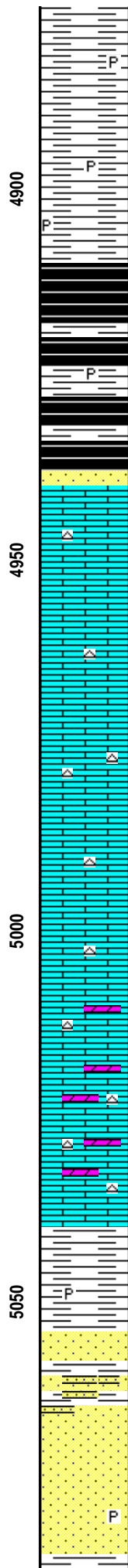
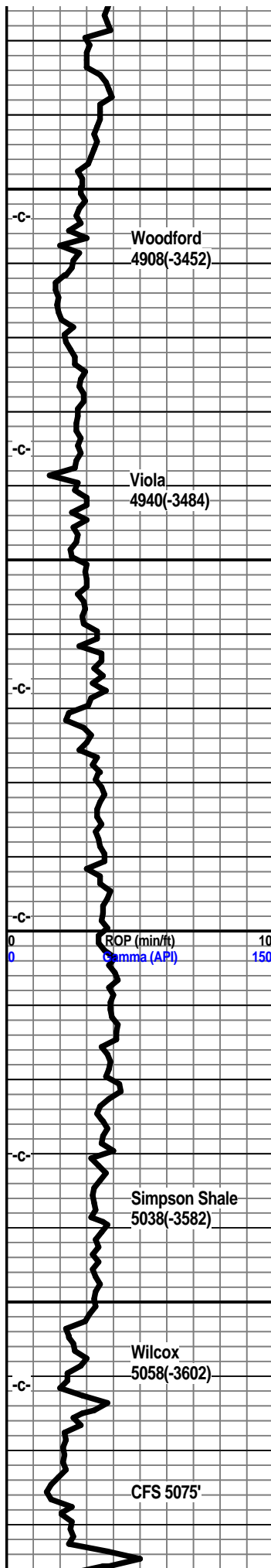
Limestone, buff-white, fxln, dense, slightly foss, sub chalky in part, trace of white cherts.

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

Shale, dark grey, massive.

Shale, dark grey-green.





Shale, dark grey-green, trace of pyrite.

Shale, dark grey, silty.

Shale, dark grey-black, coffee brown, carb, show of gas, trace of pyrite.

Shale, coffee brown, grey-black.

Shale, grey-black.

Sandstone, grey, SA to SR, few friable, slight odor, slight show scummy oil, some with good yellow fluor., glauc.

Limestone, cream, buff-white, xln, mostly dense, traces of xln porosity, very slight staining, subchalky in part, traces of white chert.

Limestone, cream-white to tan-white, xln, trace xln porosity, tan-white cherts, subchalky.

Limestone, tan, tan-white, fxln, granular, subchalky in part, traces of tan cherts.

Limestone, tan-white, fxln, granular texture, tan-brown cherts, sharp, slightly dolo in part.

Limestone, tan, tan-white, fxln, dense, subchalky in part, traces of tan-brown sharp cherts, slightly dolo in part.

Shale, green, pale green, firm, waxey, traces of inbedded pyrite, traces of sand grains in bedded.

Sandstone, clear to grey, dolomitic, firm, well cemented, traces of shale, glauc.

Sandstone, clear to white frosted qtz grains SA to SR, friable, glauc, trace of pyrite, no vis. shows, no odor.

Sandstone, clear to white SA to SR, fair sorting, friable, glauc, trace of pyrite, no vis shows, no odor.

Sandstone, clear to grey-white, SA to SR, fair

