



Woolsey Operating Company, LLC

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

Measured Depth Log

Well Name: TUCKER GU A-4
Location: S2 NW SW
License Number: API: 15-007-23941-00-00
Spud Date: September 10, 2012
Surface Coordinates: Section 28-T33S-R10W, 1650'FSL, 660' FWL
Bottom Hole Coordinates: Vertical Hole
Ground Elevation (ft): 1434
Logged Interval (ft): 3900 To: 5052
Formation: McLish Shale
Type of Drilling Fluid: Chemical Mud, Displace at 3294'

Region: Barber County, Kansas

Drilling Completed: September 19, 2012

K.B. Elevation (ft): 1444

Total Depth (ft): 5052

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	4310(-2866)	4308(-2864)
B/KC	4364(-2920)	4365(-2921)
PAWNEE	4455(-3011)	4453(-3009)
CHEROKEE GROUP	4504(-3060)	4504(-3060)
MISSISSIPPIAN	4543(-3099)	4545(-3101)
KINDERHOOK SHALE	4772(-3328)	4759(-3325)
WOODFORD SHALE	4842(-3398)	4839(-3395)
VIOLA	4866(-3422)	4864(-3420)
SIMPSON GROUP	4972(-3528)	4970(-3526)
SIMPSON SAND	4990(-3546)	4987(-3543)
MCLISH SHALE	5047(-3603)	NDE
RTD	5052(-3608)	
LTD		5050(-3606)

COMMENTS

Surface Casing: Set 5 joints 10 3/4" at 215'(tallied 202') with 240 sxs Class A, 2% gel, 3% cc, plug down at 9:30 pm on September 10, 2012. Cement did Circulate.

Production Casing: 5 1/2" Ran

Deviation Surveys: 3/4 - 215', 3/4 - 570', 3/4-1000', 1 1/2 - 1497', 1 - 1897, 2 - 2425', 3 -2767', 1 - 3076', 1 - 3108', 1 1.4 - 3356', 2 1/2 - 3912, 3- 4284', 2 3/4 - 4347', 3/4 - 4752', 1 3/4 - 5052'.

Contractor Bit Record:

1- 14 3/4" out at 215'.

2- 7 7/8" (PDC) out at 4284'

3 - 7 7/8" out at 5052'.

Pipe Strap at 4284' 1.23 long to board.

Gas Detector: Woolsey Operating Company, Trailer #1

Mud System: Mud Co, Brad Bortz, Terry Ison, Engineers

DSTs: None

Logged by Superior Well Services.

LTD - 5050'

DSTs

None Taken

CREWS

Hardt Drilling, Inc Rig #1

Tool Pusher - Scott Adelhardt

Drillers - Days - Steve Myers

Evening - Jody Divine

Morning - Billy Maas

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
- Shysltst
- Sltsh

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

- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

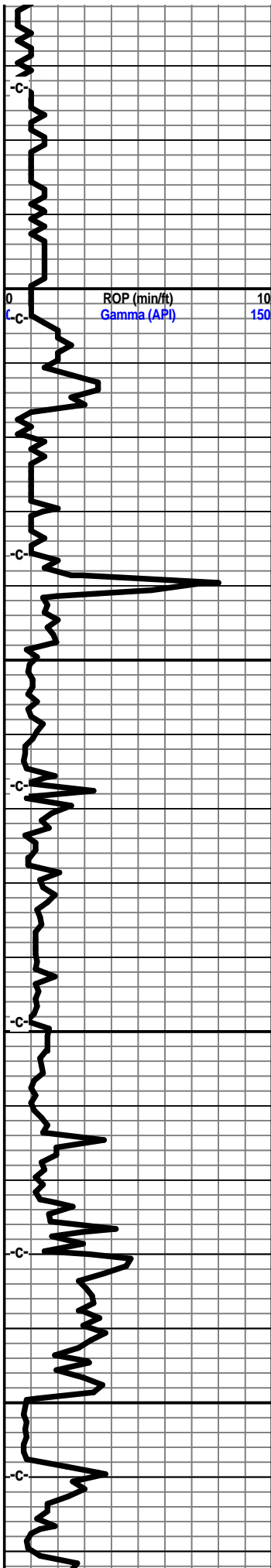
STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstng
- Ssstng
- Carbsh
- Clystng
- Dol

TEXTURE

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

Curve Track 1 ROP (min/ft) Gamma (API)		Depth	Lithology	Geological Descriptions	TG, C1-C5
0	10	39		Drilling Progress September 10, 2012 MIRT September 11, 2012 215' @ 7:00 am September 12, 2012 1342' @ 7:00 am September 13, 2012 2300' @ 7:00 am September 14, 2012 3014' @ 7:00 am September 15, 2012 3665' @ 7:00 am September 16, 2012 4284' @ 7:00 am September 17, 2012 4530' @ 7:00 am September 18, 2012 4850' @ 7:00 am September 19, 2012 5052' @ 7:00 am	TG (units) C1 (units) C2 (units) C3 (units) C4 (units) C5 (units)
0	150	3950			TG Vis 49 Wt 9.2 Survey @ 3912' 2 1/2 degrees KB 1444' Mud Co Mud Check September 15, 2012 3942' @ 2:00 pm Vis 61 Wt 9.4

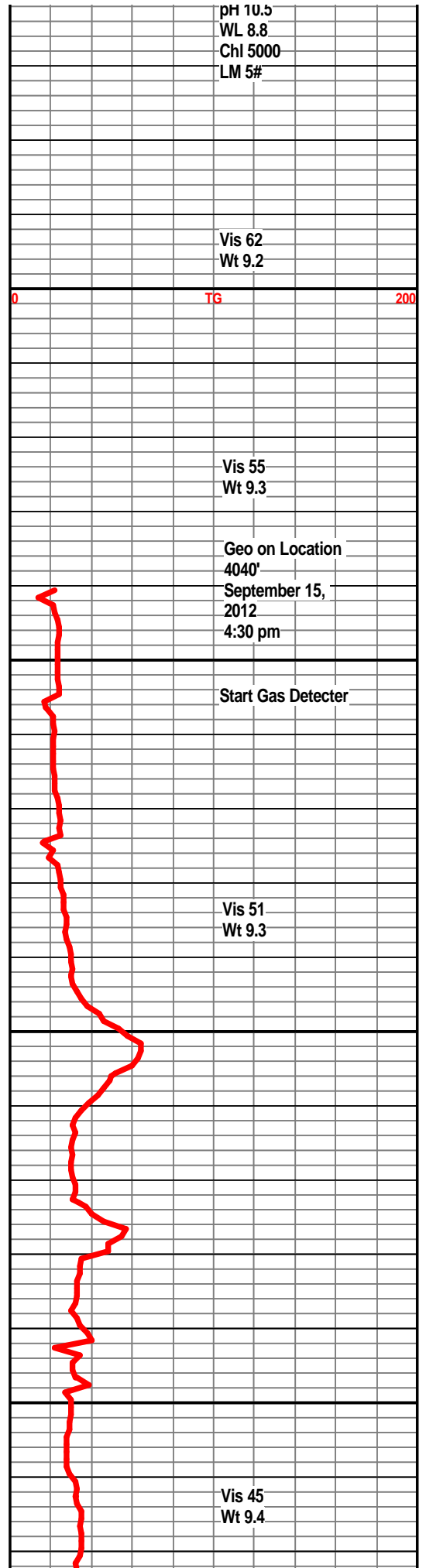


4000

4050

4100

4150



Vis 62
Wt 9.2

TG

200

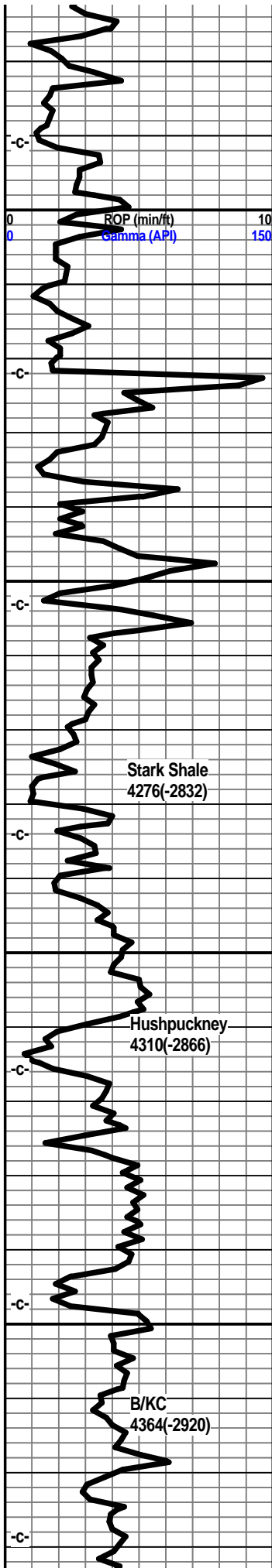
Vis 55
Wt 9.3

Geo on Location
4040'
September 15,
2012
4:30 pm

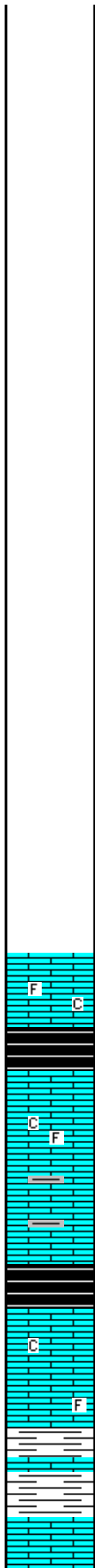
Start Gas Detector

Vis 51
Wt 9.3

Vis 45
Wt 9.4



4200
4250
4300
4350



Start Samples

Limestone, cream-white, offwhite, fxln, partly dense, slightly foss, chalky in part.

Shale, grey-black, fissile, slight show gas.

Limestone, tan, buff-white, xln, partly dense, trace fossils, trace subchalky.

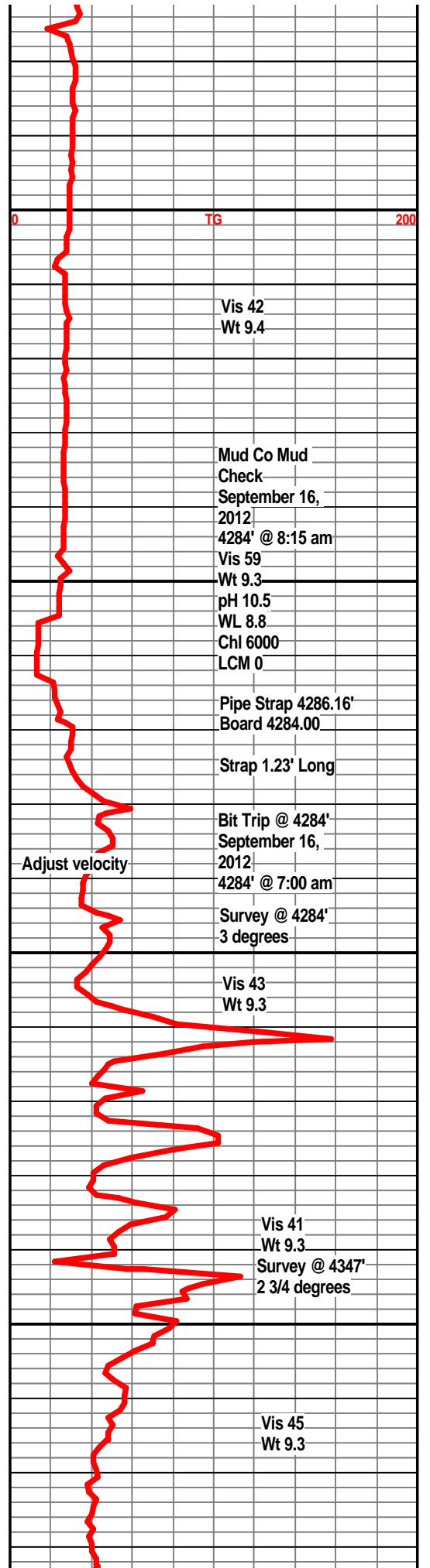
Limestone, ta, grey-white, xln, partly dense, slightly shaley in part.

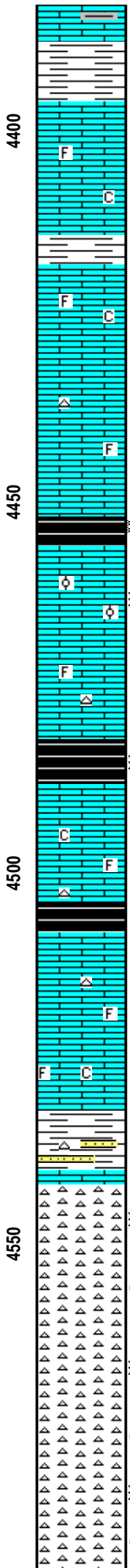
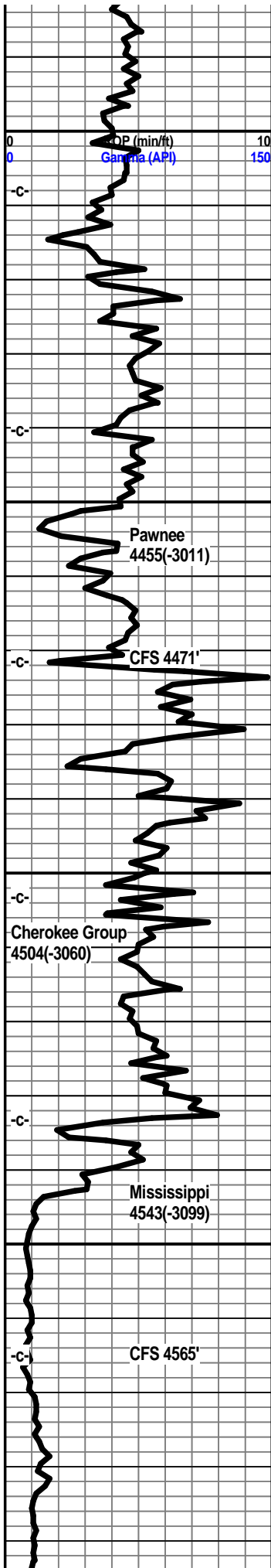
Shale, grey-black, fissile, trace gas.

Limestone, grey-white, tan, xln, partly dense, subchalky in part, trace fossils.

Shale, light grey-green, silty.

Limestone, grey-white, light pale green, xln,





shaley in part.

Shale, light green.

Limestone, buff, cream-white, xln, partly dense, trace fossils.

Shale, light green, light grey.

Limestone, buff, light tan, fxln, dense, trace fossils, slightly chalky in part.

Limestone, tan, buff-white, fxln, dense, trace fossils, trace tan chert.

Shale, grey-black, carb.

Limestone, tan, buff-white, fxln, oolitic, micro oolites, some inter oolitic porosity, traces of xln porosity, very slight show gas, faint gassy odor, dull spotty floor.

Limestone, tan, buff, xln, dense, fossils, slightly chalky.

Shale, grey-black, slightly carb.

Limestone, tan, light grey, xln, dense, trace fossils, subchalky in part, trace tan chert.

Shale, grey, dark grey.

Limestone, tan, tan-white, xln, dense, trace tan chert.

Limestone, tan-white, xln, chalky, trace foss.

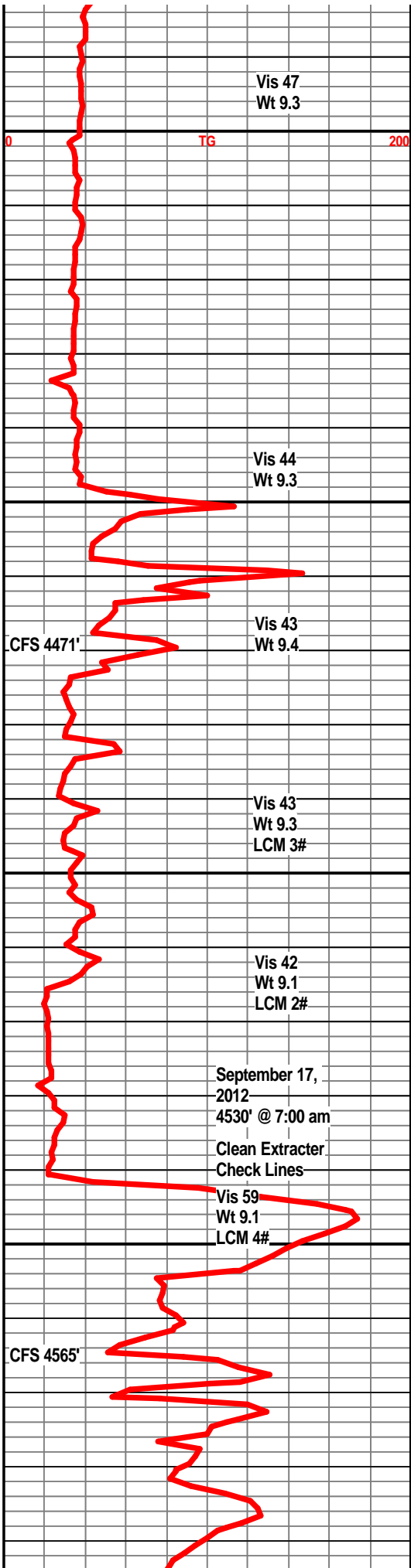
Shale, light grey-green, some imbedded sand clusters, lt grey-white, trace dark stain, no odor, no show free oil.

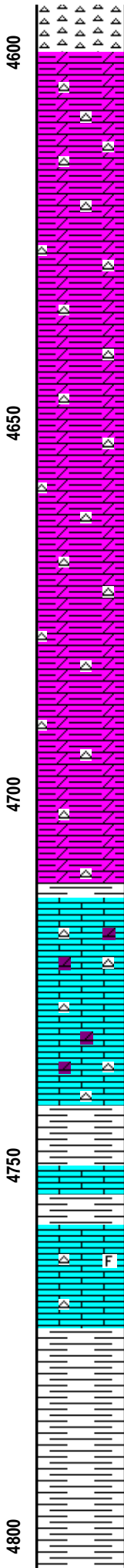
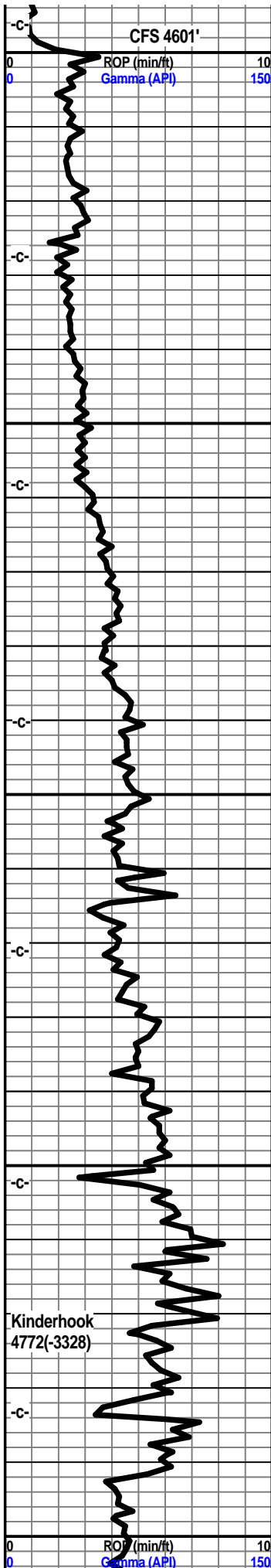
Chert, tan-white, buff-white, weathered, spongy texture, scattered ppt porosity, p-f odor, slight show light oil, trace free oil in tray, scattered light brown staining, dull spotty floor.

Chert, tan-white to off-white, weathered, spongy, increase in fresh sharp chert, scattered light brown staining, free oil in tray, spotty dull floor, fair gassy odor.

Chert, tan-white, off-white, weathered, some sharp, scattered ppt porosity, f gassy odor, spotty dull floor, scattered staining.

Chert, tan, off-white, sharp to weathered, ppt porosity, few scattered small vugs, fair show oil, f gassy odor, spotty floor.





Chert, off-white, mostly fresh, some weathered w/ ppt porosity, scattered light stain, trace light oil, poor odor, poor fluor.

Dolo, tan, buff-white, xln, dense, traces of weathered cherts, traces ppt porosity, light scattered staining, faint odor, some fresh cherts,

Dolo, light grey-white, tan, xln, dense, weathered cherts, fresh cherts, very slight shows, shows decreasing, spotty fluor.

Dolo, grey-white, xln, dense, some fresh cherts, green-grey splintery shales.

Dolo, grey-white, xln, dense, some fresh cherts, grey to light grey splintery shales.

Dolo, light grey to grey, xln, dense, tan to off-white cherts, some grey splintery shales.

Dolo, grey-white, xln, dense, tan, off-white sharp cherts.

Dolo, light grey to grey, xln, dense, tan-white cherts, some splintery shales.

Dolo, grey-white, xln, dense, tan cherts, some grey-green splintery shales.

Limestone, cream-white, tan, xln, partly dense, shaley in part, chalky, off-white cherts, slightly dolo in part.

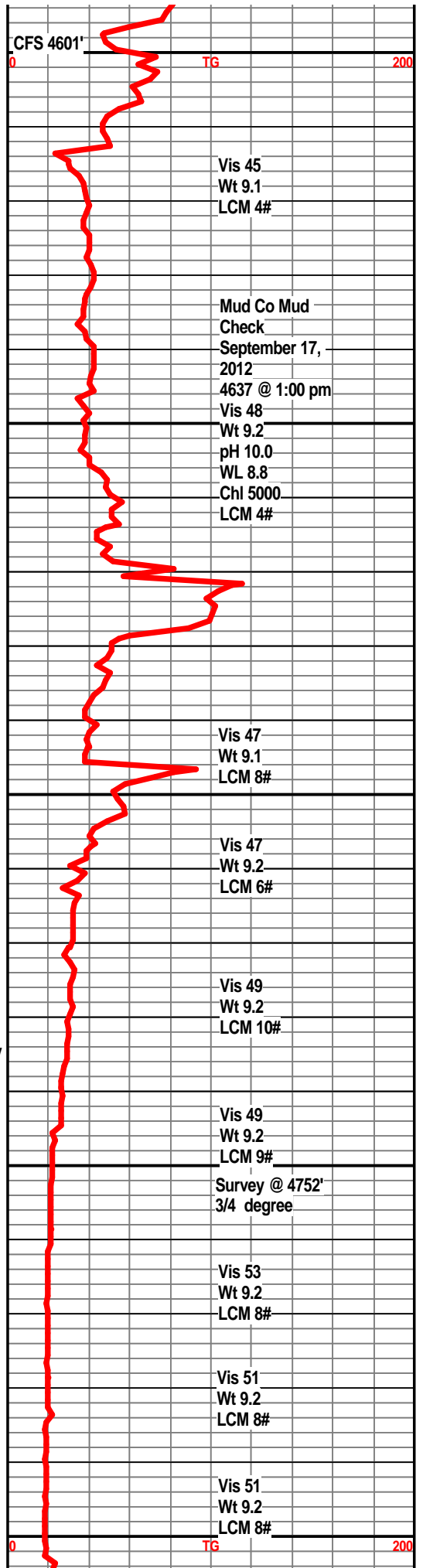
Limestone, cream, buff-white, xln, dense, dolo in part, white sharp cherts, grey-green splintery shales, slightly chalky in part.

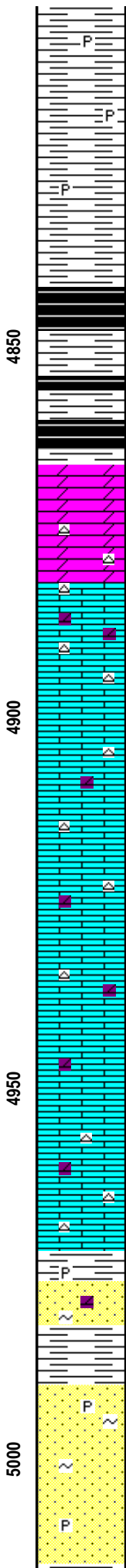
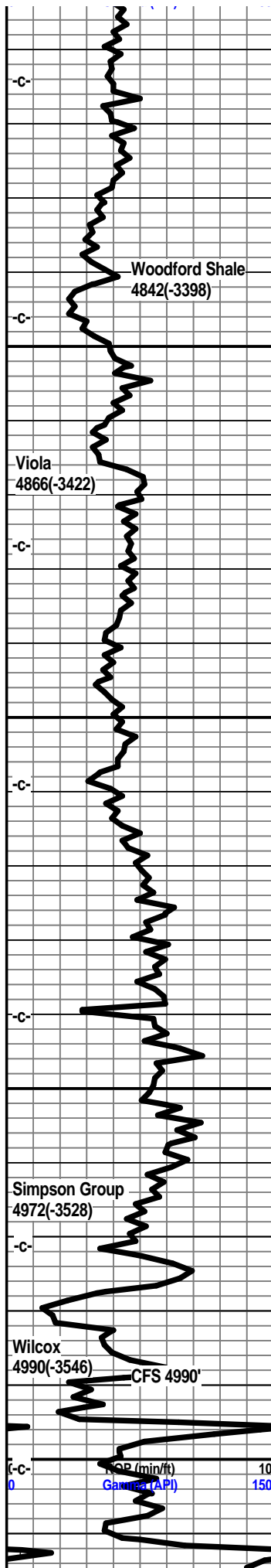
Shale, light green to light grey.

Limestone, buff-white, tan, xln, dense. fossil frags, white chert.

Shale, light grey to grey, some splintery, silty.

Shale, light grey to grey, silty.





Shale, light grey to grey, silty, traces of pyrite.

Shale, grey, silty, traces of pyrite.

Shale, grey, dark grey, traces of pyrite.

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

Shale, grey-black to coffe brown, slight show gas bubbles, spores.

Shale, grey, light grey, few clusters of pyritic sand at base, no visible shows.

Dolo, light grey, silty.

Dolo, buff-white, light grey, cream ls frags, traces of off-white cherts, no visible shows.

Limestone, cream, tan-white, xln, slightly dolo in part, tan-white cherts, one piece very slight fluor.

Limestone, tan-white, xln, dense, slightly dolo in appearance, tan sharp cherts.

Limestone, tan, buff-white, xln, dense, tan cherts, slightly dolo in part, traces of light green shales.

Limestone, tan, buff, xln, dense, sharp tan cherts, traces of shales.

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

Limestone, tan, xln, dense, grainy texture, sharp tan cherts.

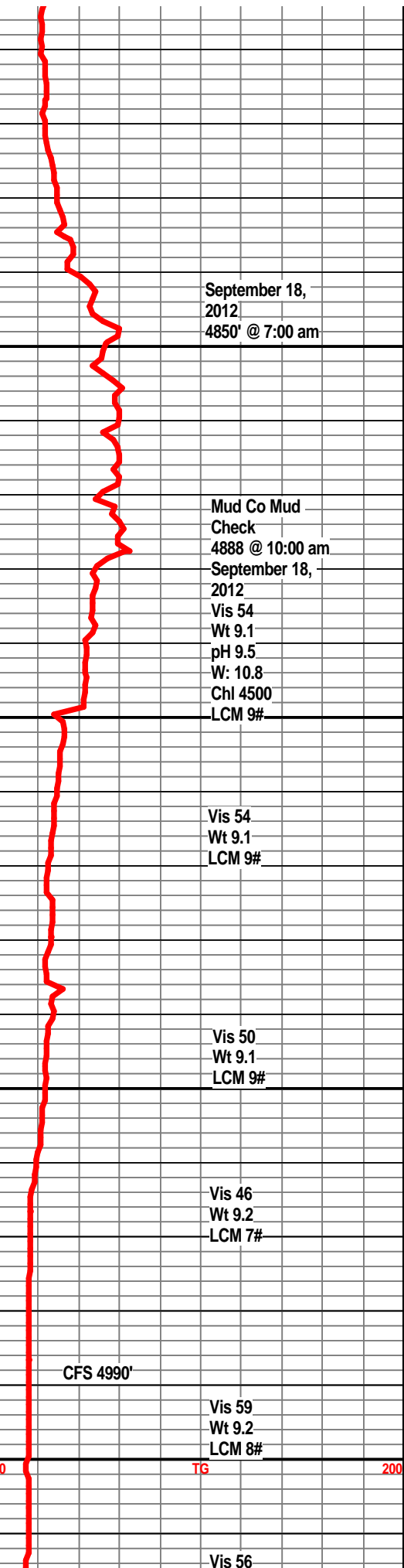
Shale, light green to pale green, trace pyrite.

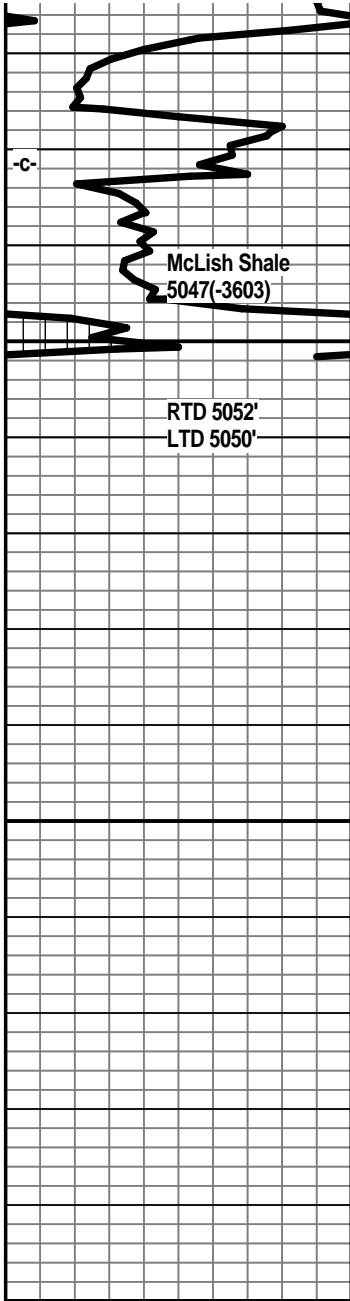
Sandstone, grey-white, SA, dolo in part, well cemented, some friable, no vis shows.

Shale, pale to teal green, few sand clusters.

Sandstone, clear to grey-white, some friable, some well cemented, sa to sr, glauc, trace pyrite, no visible shows, no odor, no fluor.

Sandstone, grey-white, white, well sorted, well cemented, sa to sr, dolo in part, shale stringers, glauc, gil, traces of pyrite, trace show oil, no odor, no kick, no fluor.

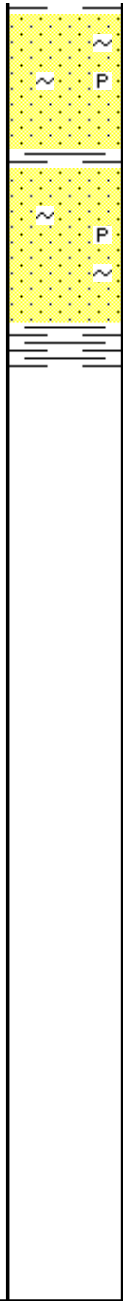




5050

5100

50



Sandstone, frosted white, fn grained, well sorted, well cemented, sa to sr, glauc, gil, pyritic, some shale stringers, no visible shows.

Sandstone, frosted white, fine grained, well sorted, pyritic, well cemented, glauc, shale stringers, no visible shows.

