Woolsey Operating Company, LLC

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

Well Name:	TUCKER GU A-5
Location:	APPROX NE SW SE NW
License Number:	API: 15-007-24038-00-00
Region:	Barber County, Kansas
Spud Date:	June 18, 2013
Drilling Completed:	June 25, 2013
Surface Coordinates:	Section 28-T33S-R10W, 2259' FNL, 1830' FWL Traffas
Bottom Hole Coordinates:	Vertical Hole
Ground Elevation (ft):	1433
K.B. Elevation (ft):	1445
Logged Interval (ft):	4000 To: RTD
Total Depth (ft):	5080
Formation:	McLish Shale
Type of Drilling Fluid:	Chemical Mud, Displace at 3381'.

Printed by MUD.LOG 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	4277(-2832)	4271(-2826)
HUSHPUCKNEY SHALE	4310(-2865)	4303(-2858)
B/KC	4365(-2920)	4360(-2915)
PAWNEE	4454(-3009)	4450(-3005)
MISSISSIPPIAN	4532(-3087)	4526(-3081)
KINDERHOOK SHALE	4770(-3325)	4764(-3319)
WOODFORD SHALE	4841(-3396)	4834(-3389)
VIOLA	4880(-3435)	4876(-3431)
SIMPSON SHALE	4970(-3525)	4964(-3519)
SIMPSON SAND	4980(-3535)	4980(-3535)
MCLISH SHALE	5045(-3600)	5036(-3591)
RTD	5080(-3635)	
LTD		5075(-3630)

NOTE: Log tops are approximately 4-7' higher than all sample tops. Log TD was 5' Shallow to RTD.

COMMENTS

Surface Casing: Set 6 joints 10 3/4" at 219' with 200 sxs Class A, 2% gel, 3% cc, 1/4# Celoflake, plug down at 10:30 pm on June 18, 2013. Cement did Circulate.
Production Casing: Ran 5 1/2" Casing.
Deviation Survey's: 221', 1/2 - 845', 1/2 - 1350', 1/4 - 1850', 3/4 - 2398', 1 1/4 - 2905', 1/4 - 3095', 1/2 - 3570', 3/4 - 4046', 3/4 - 4648', 2 1/4 - 5080'.
Contractor Bit Record:
1- 14 3/4" out at 221'.
2- 7 7/8" out at 4668'.
3- 7 7/8" out at 5080'.

Gas Detector: Woolsey Operating Company, Trailer #1
Mud System: Mud Co, Brad Bortz, Engineer
DSTs: None Taken
Logged by Nabors Completion and Production Services
LTD - 5075'

DSTs

None Taken

CREWS

Fossil Drilling, Inc Rig #3
Tool Pusher - Jim Wenrich
Drillers - Days - Daniel Orranta
Evening - Ed Raney
Morning - Andres Maestas
Relief - Allen Collins

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, Sltysh

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, Slty

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