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

Well Name: Deines #4
API: 15-167-23993-00-00
Location: Russell County
License Number: 32826
Spud Date: 8/25/14
Surface Coordinates: 1518' FNL & 1271' FEL (NW NW SE NE)
Section 36-T15S-R14W
Bottom Hole Coordinates: Same as above, vertical well with minimal deviation
Region: Kansas
Drilling Completed: 8/30/14
Ground Elevation (ft): 1845' K.B. Elevation (ft): 1854'
Logged Interval (ft): 2700 To: TD Total Depth (ft): 3290'
Formation: Topeka through Arbuckle
Type of Drilling Fluid: Chemical (Mudco - Gary Schmidtberger)

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Michaelis, Roger dba ALEO Oil Co.
Address: 5907 W. Broadway
Great Bend, KS 67530

GEOLOGIST

Name: Steven P. Murphy, PG
Company: Consulting Petroleum Geologist
Address: 3365 CR 390
Otis, KS 67565

LogTops (Datum)

An open hole was not run. The following are sample tops based on ROP & sample examination:

Anhydrite Top - 818 (+1036)
Anhydrite Base - 853 (+1001)
Topeka - 2749 (-895)
Heebner - 3043 (-1189)
Lansing - 3050 (-1155)
Arbuckle - 3284 (-1430)

DSTs

Drillstem testing was performed by Trilobite Testing (Hays, KS shop):

DST #1 3214-3236 (LKC "J" Zone)

15:15:15:15
 IF: Wk surf blow died in 3 min, NR
 FF: NB, flushed tool, NB
 Recovery: 1' Mud
 IHP: 1572 FHP: 1547
 IFP: 21-26 ISIP: 120
 FFP: 25-26 FSIP: 56
 BHT - 102 F

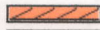


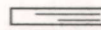
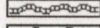
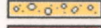

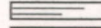
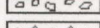
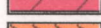
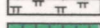
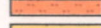
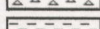

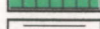
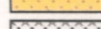
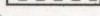

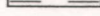

DST #2 3278-3294 (Arbuckle)

15:30:15:30
 IF: BOB 45 sec, surface blow return
 FF: BOB 1 min, 2" return
 Recovery: 10' Oil,
 620' OGW (15% O, 85% W),
 1049' SI OCW (3%), 97% W),
 186' W w/show of oil
 IHP: 1635 FHP: 1097
 IFP: 363-619 ISIP: 1094
 FFP: 682-865 FSIP: 1097
 BHT - 106 F
 Chlorides - 27,000 ppm

COMMENTS

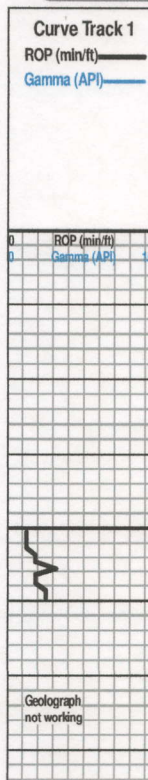
The operator elected to run 5 1/2" production casing to perform an open-hole completion in the Arbuckle.

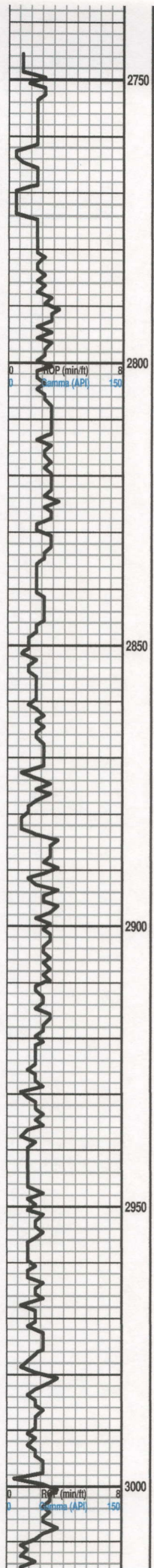
ROCK TYPES

 Anhy	 Coal	 Lmst	 Shcol
 Bent	 Congl	 Meta	 Shgy
 Brec	 Dol	 Mrlst	 Slstst
 Cht	 Gyp	 Salt	 Ss
 Clyst	 Igne	 Shale	 Till

OTHER SYMBOLS

 OIL SHOW Even	 Dead	 INTERVAL Core	 EVENT Conn
 Spotted	 Gas	 Dst	 Rft
 Ques			 Sidewall

Curve Track 1 ROP (min/ft) Gamma (API)	Depth	Lithology	Oil Shows	Geological Descriptions	REMARKS
	2700			*Displaced @ 2650'-2681' Begin 20' sample examination LS: cm-gry, vfxln, dense, sl foss, NS LS: as above w/abund gry-gm-brn shale, NS	Southwind Rig #8 MIRU 8/25/14 Toolpusher - Darrell Yott 8 5/8" set @ 853' w/325 sacks Deviation survey @ 853' - 1 1/2 degree NOTE: The following tops are based on ROP & sample examination. An open-hole log was not run. ANHYDRITE TOP - 818' (+1036) ANHYDRITE BASE - 853 (+1001)



LS: cm-tan-gry, vfxln, dense, w/abund gry shale/slst

TOPEKA 2749 (-895)

LS: cm-brn, vfxln, sl foss, dense, shaley in pt

LS: cm-tan-gry, vfxln, dense, sl chalky, NS

LS: as above

*Bit trip (hole in pipe) @ 2808'

LS: as above, sl foss, NS

LS: wht-tan, vfxln, dense, sl chalky, NS

LS: cm-gry, vfxln, dense, sl foss, sl chalky, NS

LS: as above w/abund blk-gry shale

LS: cm-tan-gry, vfxln, dense, NS

LS: as above

*Start 10' sample examination

LS: tan-gry, vfxl, foss, sl chalky, dense, NS

LS: as above

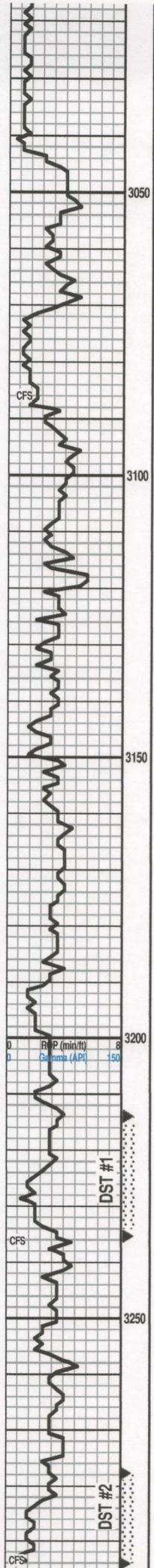
LS: cm-tan, vfxln, dense, NS

SH: blk, carb

HEEBNER 2975 (-1121)

LS: cm-gry, vfxln, dense, sl chalky, NS

LS: cm-tan, sl ool, mostly dense, rare fr vug por, nsfo, spotty live stn, sl odor



SH: gry

LS: wht-tan-gry, vfxln, foss, sl chalky, dense, NS

LANSING 3043 (-1189)

SH: gry-gm

LS: crm-tan, vfxln, dense, sl chalky, NS

LS: wht-tan-gry, f-vfxln, oolitic in pt, mostly dense, nsfo, rare spotty stn, no odor w/abund gry-gm-brn shale

LS: crm-tan, vfxln, dense, minor chert, NS

LS: wht-tan-gry, vfxln, dense, sl chalky, NS

LS: wht-tan-brn, vfxln, dense w/abund blk-gry-gm shale, NS

LS & SH: as above

LS: wht-crm-gry, vfxln, dense, sl chalky, NS

LS: as above

LS: wht-tan-gry, vfxln, dense, oolitic/oolic, nsfo, tr lite stn, sl odor

LS: wht-tan, vfxln, dense, sl chalky, NS

LS: as above w/blk chert

SH: blk-gry-rust

LS: crm-tan-gry, vfxln, dense, minor chert, NS

LS: crm-tan-gry, fxl, oolic, fr oomold por, NS

SH: gry-blk-gm

DST #1 3214-3236 (LKC "J" Zone)
 15:15:15
 IF: Wk surf blow died in 3 min, NR
 FF: NB, flushed tool, NB
 Recovery: 1' Mud
 IHP: 1572 FHP: 1547
 IFP: 21-26 ISIP: 120
 FFP: 25-26 FSIP: 56
 BHT - 102 F

LS: wht-tan, fxl, oolic, fr inter-ool & vug por, ssfo on brk, spotty live stn, fr odor

LS: crm-tan-gry, vfxln, dense, NS

SH: blk-gry-gm

LS: wht-tan, vfxln, dense, NS

SH: gry-blk-gm

LS: wht-tan-gry, vfxln, dense, NS

DOL: crm-tan, f-mxlm, rhombic in pt, gd vug & inxln por, fsfo, even sat stn, strong odor

ARBUCKLE 3284 (-1430)

DST #2 3278-3294 (Arbuckle)

