

ERICKSON WELLSITE GEOLOGY



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

Well Name: Pancirni #3-7  
 Location: SW NW SW Sec 7 T2S R36W  
 License Number: 15-153-21196  
 Spud Date: 8/2/2017  
 Surface Coordinates: 1650' FSL & 330' FWL  
 Region: Rawlins County, KS  
 Drilling Completed: 8/10/2017  
 Bottom Hole Coordinates: Surface Casing: 8 5/8" @345'  
 Production Casing: 5 1/2" @4894'  
 Ground Elevation (ft): 3373  
 K.B. Elevation (ft): 3378  
 Logged Interval (ft): 3980  
 To: TD  
 Total Depth (ft): 4900  
 Formation:  
 Type of Drilling Fluid: Chemical Mud  
 Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Murfin Drilling Co., Inc.  
 Address: 250 N Water, Suite 300  
 Wichita, KS 67202

GEOLOGIST

Name: Clayton Erickson  
 Company: Erickson Wellsite Geology  
 Address: 402 Palmer Street  
 P.O. Box 294  
 Loomis, NE 68958

DSTs

DST #1 4176-4245 30-60-60-90; Hydro: 2072-2063 IFF: 17-43 ISIP: 474 FFP: 48-78 FSIP: 473; Rec: 15' 1%g 50%o 49% m 60' 5%g 34%o 61% m 60' 10%g 5%o 85% m; BHT: 138F; IF: 3 1/4" ISI: dead FF: 3" FSI: dead  
 DST #2 4248-4330 30-60-60-90; Hydro: 2130-2121 IFF: 18-97 ISIP: 1281 FFP: 101-142 FSIP: 1212; Rec: 390' GIP 30' 2%o 20%w 75% m 370' 8%g 1%o 30%w 61% m 1490' trace oil 97%w 3% m; BHT: 151 F; RW: .511 @ 79.1 F Chl: 11,000ppm; IF: BOB 18 1/2min ISI: 2 3/4"  
 DST #3 4326-4385 30-60-30-60; Hydro: 2138-2107 IFF: 198-729 ISIP: 920 FFP: 742-892 FSIP: 923; Rec: 120' 3%g 2%o 20%w 75% m 370' 8%g 1%o 30%w 61% m 1490' trace oil 97%w 3% m; BHT: 151 F; RW: .511 @ 79.1 F Chl: 11,000ppm; IF: BOB 18 1/2min ISI: 2 3/4"  
 DST #4 4435-4530 30-60-30-60; Hydro: 2243-2243 IFF: 18-27 ISIP: 1043 FFP: 28-43 FSIP: 1062; Rec: 115' GIP 10' 94%o 6% m 53' 10%g 35%o 55% m; BHT: 141F Grav: 31.2; IF: 2 1/2" ISI: dead FF: 4" FSI: dead  
 DST #5 4624-4760 30-60-30-60; Hydro: 2339-2302 IFF: 20-28 ISIP: 854 FFP: 30-37 FSIP: 759; Rec: 45' 1%o 99% m; BHT: 142 F; IF: 1 3/4" ISI: dead FF: dead FSI: dead

COMMENTS

Based upon good shows of oil and positive DST results from DST #1 and DST #2 it was decided to run production casing to further evaluate the economic potential of this well.

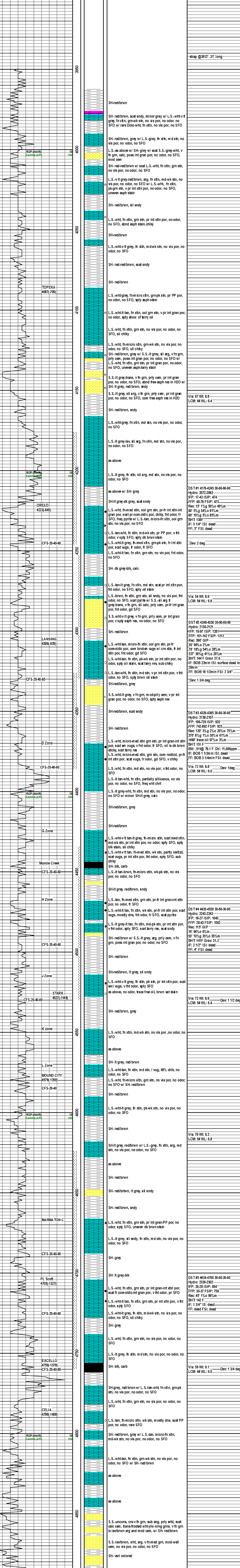
FORMATION TOPS

Anhydrite	Log Tops	Sample tops
Base Anhy	3278(+100)	3278(+100)
TOPEKA	3310(+68)	3311(+67)
OREAD	4086(-708)	4087(-709)
LANSING	4220(-842)	4223(-845)
STARK	4304(-926)	4306(-928)
MOUND CITY	4522(-1144)	4527(-1149)
FT SCOTT	4577(-1199)	4578(-1200)
EXCELLO	4706(-1328)	4705(-1327)
CELIA	4786(-1408)	4786(-1408)
TD	4896(-1518)	4900(-1522)

	Anhy		Clyst		Gyp		Mrlst		Shgy
	Bent		Carb. shale		Igne		Salt		Sltst
	Brec		Arkose		Lmst		Shale		Ss
	Cht		Dol		Meta		Shcol		Till

OTHER SYMBOLS

	Oil Show Even		Spotted Ques		Dead		Interval Dst
--	---------------	--	--------------	--	------	--	--------------



Remarks section containing DST data and well logs:

DST #1 4176-4245 30-60-60-90  
 Hydro: 2072-2063  
 IFF: 17-43 ISIP: 474  
 FFP: 48-78 FSIP: 473  
 Rec: 15' 1%g 50%o 49% m 60' 5%g 34%o 61% m 60' 10%g 5%o 85% m  
 BHT: 138F  
 IF: 3 1/4" ISI: dead  
 FF: 3" FSI: dead

DST #2 4248-4330 30-60-60-90  
 Hydro: 2130-2121  
 IFF: 18-97 ISIP: 1281  
 FFP: 101-142 FSIP: 1212  
 Rec: 390' GIP  
 2%o 20%w 75% m 370' 8%g 1%o 30%w 61% m 1490' trace oil 97%w 3% m  
 BHT: 151 F  
 RW: .511 @ 79.1 F Chl: 11,000ppm  
 IF: BOB 18 1/2min ISI: 2 3/4"  
 FF: BOB 18 1/2min ISI: 2 3/4"

DST #3 4326-4385 30-60-30-60  
 Hydro: 2138-2107  
 IFF: 198-729 ISIP: 920  
 FFP: 742-892 FSIP: 923  
 Rec: 120' 3%g 2%o 20%w 75% m 370' 8%g 1%o 30%w 61% m 1490' trace oil 97%w 3% m  
 BHT: 151 F  
 RW: .511 @ 79.1 F Chl: 11,000ppm  
 IF: BOB 18 1/2min ISI: 2 3/4"  
 FF: BOB 18 1/2min ISI: 2 3/4"

DST #4 4435-4530 30-60-30-60  
 Hydro: 2243-2243  
 IFF: 18-27 ISIP: 1043  
 FFP: 28-43 FSIP: 1062  
 Rec: 115' GIP  
 10' 94%o 6% m 53' 10%g 35%o 55% m  
 BHT: 141F Grav: 31.2  
 IF: 2 1/2" ISI: dead  
 FF: 4" FSI: dead

DST #5 4624-4760 30-60-30-60  
 Hydro: 2339-2302  
 IFF: 20-28 ISIP: 854  
 FFP: 30-37 FSIP: 759  
 Rec: 45' 1%o 99% m  
 BHT: 142 F  
 IF: 1 3/4" ISI: dead  
 FF: dead FSI: dead