

Saman Sharifaie

Petroleum Geologist

GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY: **Marlin Drilling Co., Inc.**
LEASE: **Wilkinson Trust 'K' #1-2**

FIELD: **Widewater**
LOCATION: **2310 FNL & 660 FWL**
SEC: **2** TWP: **2S** RGE: **36W**
COUNTY: **Rushville** STATE: **Kansas**
CONTRACTOR: **Martin Drilling #2**
SPUD: **11/01/14** COMP: **11/18/14**
RTD: **5000'** LIT: **5003'**
MUD UP: **3370'** TYPE MUD: **Chemical**

SAMPLES SAVED FROM: **3350'** TO RTD
DRILLING TIME KEPT FROM: **3550'** TO RTD
SAMPLES EXAMINED FROM: **3550'** TO RTD

GEOLOGICAL SUPERVISION FROM: **3050'**
REFERENCE WELL: **Berexco-Kenneth #1-35**

FORMATION: **Flower Hill**

ELEVATIONS
KB: **3328'**
DF: _____
GL: **3317'**
M: **Measurements Are All From Kelly Bushing**

CASING
CONDUCTOR: _____
SURFACE: **8-5/8" at 305'**
PRODUCTION: **5-1/2" at 4995'**

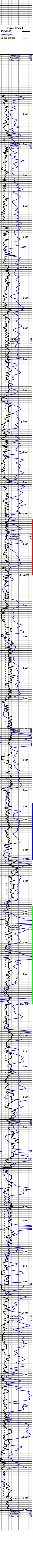
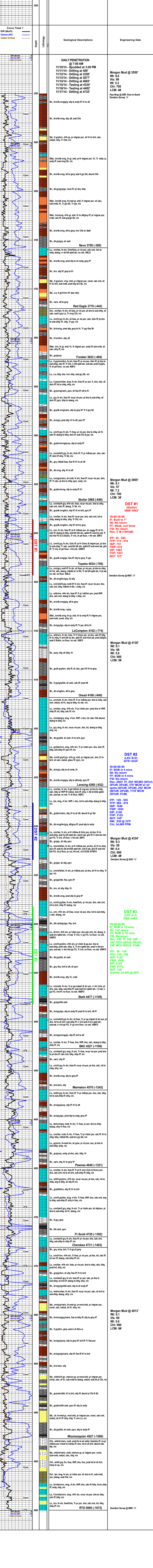
ELECTRICAL SURVEYS
CND: **D.L. MEL, SAUC**
P: **Flower Hill**

Formation	Sample Tops	E-log Tops	Strat Pos.
Anhydrite	3305 (+123)	3306 (+122)	+10
Base Anhydrite	3240 (+89)	3242 (+88)	+8
NLSO	3707 (-79)	3708 (-80)	+8
Tungate	4056 (-708)	4054 (-706)	+8
Leaning	4260 (-923)	4261 (-922)	+8
BKC	4326 (-1188)	4327 (-1199)	+8
Pawnee	4650 (-1522)	4649 (-1521)	+7
Cherokee	4733 (-1407)	4731 (-1403)	DNR
Mississippian	4934 (-1606)	4937 (-1509)	DNR

REMARKS: Due to fair shows of oil in multiple potential pay zones and positive DST results, it is recommended and agreed upon by all parties that production casing be set to further evaluate this well.

Respectfully Submitted,
Saman Sharifaie
Petroleum Geologist

API #15-153-20989
*Tops have been adjusted to electric logs



Depth	Lithology	Geological Descriptions	Engineering Data
3206 (+122)	Anhydrite	Anhydrite 3206 (+122)	
3242 (+86)		Base 3242 (+86)	
3350		DAILY PENETRATION @ 7:00 AM 11/10/14 - Spudded at 3:00 PM 11/11/14 - Drilling at 400' 11/12/14 - Drilling at 3256' 11/13/14 - Drilling at 3877' 11/14/14 - Drilling at 4065' 11/15/14 - Testing at 4334' 11/16/14 - Testing at 4482' 11/17/14 - Drilling at 4735'	Morgan Mud @ 3550' Wt: 8.6 Vis: 99 Wl: 5.2 Chl: 700 LCM: #4 Pipe Strap @ 3550': Even to Board Deviation Survey: 1/2"
3708 (-380)		Neva 3708 (-380)	
3822 (-494)		Foraker 3822 (-494)	
3968 (-640)		Stotler 3968 (-640)	Morgan Mud @ 3965' Wt: 9.1 Vis: 67 Wl: 7.2 Chl: 700 LCM: #3 DST #1 (Stotler) 3986'-4043' 30-60-30-60 IF: Built to 1" ISI: No return FF: Weak, surf blow FSI: No return Rec: 5' M (100% M) IFF: 54 - 282 FFF: 174 - 219 ISIP: 751 FSP: 615 IHP: 1983 FHP: 1931 BHT: 121°
4034 (-706)		Topeka 4034 (-706)	Deviation Survey @ 4043: 1/2"
4102 (-774)		LeCompton 4102 (-774)	Morgan Mud @ 4130' Wt: 9.1 Vis: 68 Wl: 5.6 Chl: 600 LCM: #8
4168 (-840)		Oread 4168 (-840)	
4260 (-932)		Lansing 4260 (-932)	DST #2 (LKC-B-D) 4276-4334' 30-60-60-90 IF: BOB in 4 mins ISI: No return FF: BOB in 4 mins FSI: No return Rec: 2003' TF, 255' WCMD (50% O, 20% W, 30% M), 378' MCW w/ oil spots (65% W, 35% M), 252' MCW (80% W, 20% M), 1118' MCW (95% W, 5% M) IFF: 128 - 120 FFF: 569 - 919 ISIP: 1048 FSP: 1052 IHP: 2148 FHP: 2122 BHT: 145° RW: .530 @ 33°F Chl: 34,000 PPM
4527 (-1199)		BKC 4527 (-1199)	Morgan Mud @ 4334' Wt: 9.3 Vis: 58 Wl: 6.4 Chl: 600 LCM: #8 Deviation Survey @ 4334: 1/2"
4570 (-1242)		Mammaton 4570 (-1242)	
4649 (-1321)		Pawnee 4649 (-1321)	
4731 (-1403)		Cherokee 4731 (-1403)	
4720 (-1392)		Ft Scott 4720 (-1392)	
4813		Morgan Mud @ 4813' Wt: 9.1 Vis: 69 Wl: 5.6 Chl: 800 LCM: #8	
4934 (-1606)		Mississippian 4927 (-1599)	Deviation Survey @ 5000: 1/2"