

GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY		Marlin Drilling Co., Inc.	
LEASE		Theron #2-10	
FIELD		Jones Canyon Southeast	
LOCATION		660' E.L. & 2310' E.L.	
SEC		10 T2SW 1S R3E 37W	
COUNTY		Cheyenne STATE Kansas	
CONTRACTOR		Marlin Drilling #14	
RTD		07/28/14 CONP 06/06/14	
MUD UP		4620' LTD 4620'	
		3297' TYPE MUD Chemical	
SAMPLES SAVED FROM		3400' TO RTD	
DRILLING TIME KEPT FROM		3400' TO RTD	
SAMPLES EXAMINED FROM		3400' TO RTD	
GEOLOGICAL SUPERVISION FROM		3100'	
REFERENCE WELL		MDCL - Theron #1-10	
FORMATION		Sample Tops	
Elog Tops		Stand Pos.	
Amphibole	3049 (+54)	3048 (+55)	4
Basal Amphibole	3081 (+22)	3079 (+24)	2
Neva	3501 (-308)	3500 (-397)	3
Toukai	3526 (-232)	3521 (-728)	-5
Oreda	3060 (-863)	3065 (-862)	-5
Starke	4066 (-243)	4067 (-344)	-5
Starke	4266 (-1165)	4263 (-1160)	-5
Pawnee	4440 (-1357)	4436 (-1353)	-2
Cherokee	4526 (-1423)	4522 (-1419)	-1

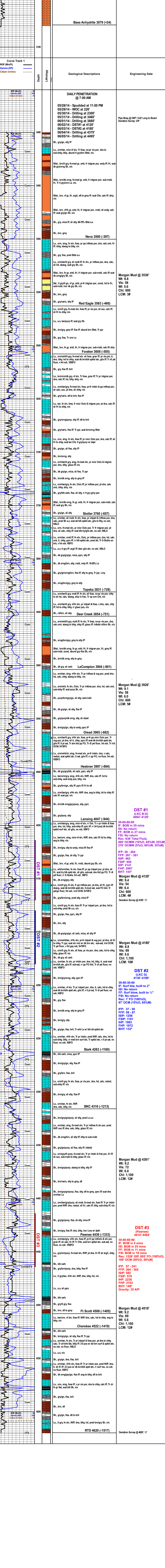
ELEVATIONS		KB 3103'
DEF		3,093'
Measurements Are All From Kelly Bushing		
CASING		CONDUCTOR
		surface 8-5/8" at 223'
		production 5-1/2" at 461'
ELECTRICAL SURVEYS		CND, DIL, MEL, SMC
		Powder Hydrilite

REMARKS Due to fair shows of oil in multiple 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,

API #15-023-21393 Saman Sharifaie
Petroleum Geologist

*Tops have been adjusted to electric logs



Engineering Data

Pipe Strap @ 3387': 0.42' Long to Board
Deviation Survey: 3/4"

Morgan Mud @ 3536'
Wt: 8.8
Vis: 5.8
Chl: 600
LCM: 3#

Red Eagle 3563 (-460)

Foraker 3608 (-505)

Stotka 3831 (-728)

Deer Creek 3854 (-751)

LeCompton 3904 (-801)

Heebner 3997 (-894)

Lansing 3965 (-862)

Starka 4263 (-1160)

BKC 4316 (-1213)

Pawnee 4436 (-1333)

Cherokee 4522 (-1419)

RTD 4620 (-1517)

DST #1
(LKC B-D)
4064'-4120'

30-60-60-90
IF: BOB in 25 mins
ISI: No return
FF: BOB in 27 mins
FSI: No return
Rec: 836' GIP, 805' FO (100%O), 460' OCMW (10%O, 65%W, 25%M), 376' OCMW (5%O, 60%W, 35%M)

IFP: 20 - 264
FFP: 267 - 391
ISIP: 963
FSP: 950
IHP: 2141
FHP: 2067
BHT: 143°

Morgan Mud @ 4120'
Wt: 9.4
Vis: 5.4
Chl: 6.4
LCM: 4#
Deviation Survey @ 4120': 1/2"

DST #2
(LKC G)
4130'-4180'

30-60-30-60
IF: Surf blow, built to 2"
ISI: No return
FF: Surf blow, built to 1/4"
FSI: No return
Rec: 1' FO (100%O), 97' OCM (15%O, 85%M)

IFP: 37 - 50
FFP: 59 - 67
ISIP: 1259
FSP: 1191
IHP: 1993
FHP: 1972
BHT: 133°

Morgan Mud @ 4381'
Wt: 9.2
Vis: 7.2
Chl: 1,100
LCM: 12#

DST #3
(Pawnee)
4414'-4464'

30-60-60-90
IF: BOB in 4 mins
ISI: BOB in 25 mins
FF: BOB in 11 mins
FSI: BOB in 19 mins
Rec: 1326' GIP, 805' FO (100%O), 188' OCM (50%O, 50%M)

IFP: 57 - 241
FFP: 264 - 365
ISIP: 582
FSP: 579
IHP: 2236
FHP: 2153
BHT: 149°
Gravity: 35 API

Morgan Mud @ 4518'
Wt: 9.2
Vis: 6.9
Chl: 5.6
LCM: 12#

Deviation Survey @ 4620': 1/2"