

Saman Sharifaie
Petroleum Geologist

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY: **Martin Drilling Co., Inc.**
FIELD: **Wickliff**
LOCATION: **2310 FNL & 1650' FEL**
SEC: **29** TWP: **2S** RGE: **35W**
COUNTY: **Randolph** STATE: **Kansas**
CONTRACTOR: **Martin Drilling #24**
RPTD: **08/21/17** COMP: **08/30/17**
WUD UP: **4890'** TYPE MUD: **Chemical**

ELEVATIONS
KB: **3226'**
DF: _____
GL: **3221'**
Measurments Are All From Kelly Bushing

CASING
CONDUCTOR _____
SURFACE: **8-5/8" at 347'**
PRODUCTION: **N/A**

SAMPLES SAVED FROM: **3330'** TO: **RTD**
DRILLING TIME KEPT FROM: **3330'** TO: **RTD**
SAMPLES EXAMINED FROM: **3330'** TO: **RTD**

GEOLOGICAL SUPERVISION FROM: **3330'**
CND: **DILL, MEEL, Smitc**
REFERENCE WELL: **Northern Lights - Sabeyger #1**
Fluorinel Threeline

Formation

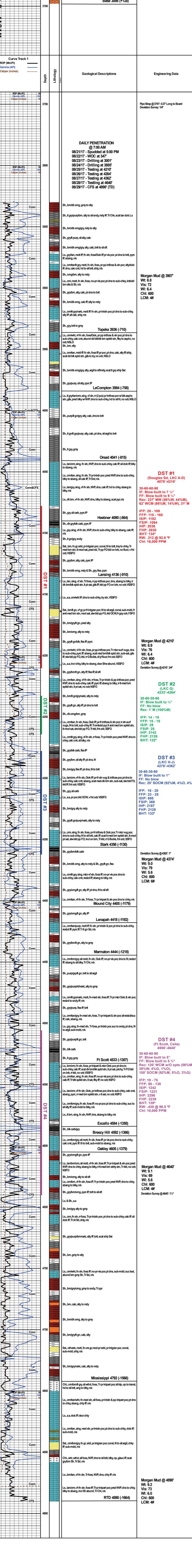
Sample Tops	E-log Tops	Strat Pos.	
Amshydric	3055 (+171)	3052 (+128)	+1-4
Base Amshydric	3055 (+171)	3088 (+128)	+1
Trigbed	3936 (+210)	3936 (+10)	+3
Ordal	4046 (+320)	4041 (+815)	+4
Ordal	4142 (+316)	4136 (+910)	+4
Stark	4360 (+134)	4356 (+130)	+3
Mount City	4410 (+184)	4405 (+179)	+6
FT Scott	4536 (+310)	4533 (+307)	+2
Mississippi	4792 (+1566)	4792 (+1566)	DNR



REMARKS Due to poor shows of oil in multiple potential pay zones and negative DST results, it is recommended and agreed upon by all parties that this well be plugged and abandoned.

Respectfully Submitted,
API #15-153-21197
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*Tops have been adjusted to electric logs



DST #1 (Douglas Sd, LKC A-D) 4078'-4261'
30-60-60-90
IF: Blow built to 7 1/2"
FF: Blow built to 9 1/2"
Rec: 237' MW (56%W, 44%M), 62' WCM (86%M, 14%W), 31' M
IFP: 20 - 109
FFP: 115 - 168
Vis: 72
WT: 6.4
Chl: 1094
FSP: 1094
IHP: 2036
FHP: 2030
BHT: 134°
RWT: 312 @ 92.6 °F
Chl: 16,000 PPM

Morgan Mud @ 3907'
WT: 8.8
Vis: 72
WT: 6.4
Chl: 600
LCM: 4#

Morgan Mud @ 4210'
WT: 8.9
Vis: 76
WT: 6.4
Chl: 600
LCM: 4#
Deviation Survey @ 4210': 34°

DST #2 (LKC G) 4233'-4264'
30-60-30-60
IF: Blow built to 1/4"
FF: No blow
Rec: 1' M (100%M)

Morgan Mud @ 4374'
WT: 9.0
Vis: 79
WT: 5.6
Chl: 600
LCM: 6#

DST #3 (LKC H-J) 4278'-4362'
30-60-30-60
IF: Blow built to 1"
FF: No blow
Rec: 20' SOCM (92%M, 4%O, 4%G)

IFP: 16 - 20
FFP: 23 - 25
ISIP: 695
FSP: 269
IHP: 2187
FHP: 2128
BHT: 133°

Deviation Survey @ 4362: 1°

Morgan Mud @ 4640'
WT: 9.1
Vis: 69
WT: 5.6
Chl: 600
LCM: 4#
Deviation Survey @ 4640': 11°

DST #4 (Ft Scott, Cella) 4506'-4640'
30-60-60-90
IF: Blow built to 5"
FF: Blow built to 5 1/2"
Rec: 120' WCM w/O spms (56%W, 39%W, 4%G, 1%O), 150' SOCM (92%M, 5%O, 3%G)

IFP: 19 - 75
FFP: 80 - 138
ISIP: 1242
FSP: 1221
IHP: 2296
FHP: 2239
BHT: 139°
RWT: 430 @ 96.5 °F
Chl: 10,000 PPM

Morgan Mud @ 4640'
WT: 9.1
Vis: 69
WT: 5.6
Chl: 600
LCM: 4#

Morgan Mud @ 4890'
WT: 9.2
Vis: 73
WT: 6.0
Chl: 600
LCM: 4#