

# Saman Sharifaie

## Petroleum Geologist

### GEOLOGIST'S REPORT

#### DRILLING TIME AND SAMPLE LOG

COMPANY: **Martin Drilling Co., Inc.**  
 LEASE: **Virginia-C-#1-14**  
 FIELD: **Midcat**  
 LOCATION: **1800 FSL & 660 FWL**  
 SEC: **14** TWP: **1S** RGE: **36W**  
 COUNTY: **Randolph** STATE: **Kansas**  
 CONTRACTOR: **Martin Drilling #2**  
 RPTD: **07/19/14** COMP: **07/26/14**  
 RTD: **4574'** LTD: **4575'**  
 MUD UP: **3.13'** TYPE MUD: **Chemical**

SAMPLES SAVED FROM: **3600'** TO RTD  
 DRILLING TIME KEPT FROM: **3600'** TO RTD  
 SAMPLES EXAMINED FROM: **3600'** TO RTD  
 GEOLOGICAL SUPERVISION FROM: **3300'**  
 REFERENCE WELL: **MDCI - Burk "E" #1-14**

ELEVATIONS  
 KB: **3299'**  
 DE: \_\_\_\_\_  
 GL: **3288'**  
 Measurements Are All From Kelly Bushing

CASING  
 CONDUCTOR: \_\_\_\_\_  
 SURFACE: **8-5/8" at 265'**  
 PRODUCTION: **5-1/2" at 4569'**

ELECTRICAL SURVEYS  
 CND: **D.L. MEL, SANC**  
 REFERENCE: **Powder Hrefline**

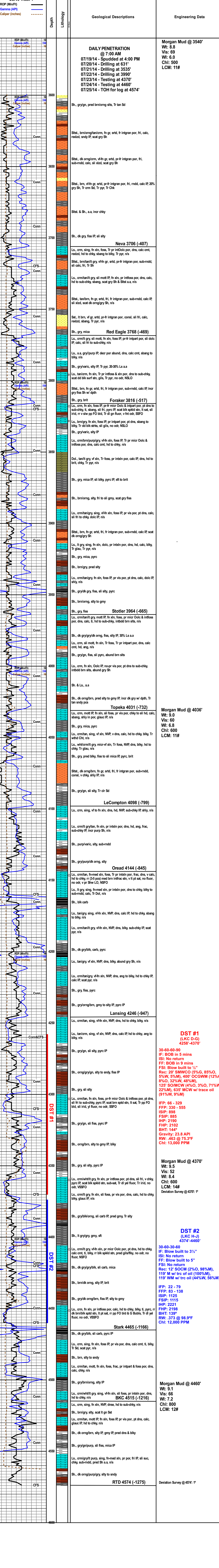
Formation	Sample Tops	E-log Tops	Strat. Pos.
Anhydrite	3216 (+83)	3218 (+81)	-11
Base Anhydrite	3255 (+44)	3255 (+44)	-14
Neva	3703 (-404)	3706 (-407)	8
Foraker	3816 (-517)	3816 (-517)	-10
Topoka	4031 (-732)	4031 (-732)	-10
Ordov	4144 (-845)	4144 (-845)	-11
Lansing	4246 (-947)	4246 (-947)	-12
Stark	4465 (-1166)	4465 (-1166)	-10
BKC	4514 (-1215)	4515 (-1216)	-11



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,  
 API #15-153-21036  
 Saman Sharifaie  
 Petroleum Geologist

\*Tops have been adjusted to electric logs



**DST #1**  
 (LKC D-G)  
 4258'-4370'  
 30-60-30-60  
 IF: BOB in 5 mins  
 ISI: No return  
 FF: BOB in 9 mins  
 FSI: Blow built to 1/2"  
 Rec: 2' S/MWCO (5%G, 85%O, 5%W, 5%M), 400' OCGWM (12%G, 8%O, 32%W, 48%M), 125' SO/MCW (4%O, 3%O, 71%W, 22%M), 635' MCW w/ trace oil (91%W, 9%M)

**DST #1**  
 (LKC D-G)  
 4258'-4370'  
 30-60-30-60  
 IF: BOB in 5 mins  
 ISI: No return  
 FF: Blow built to 5"  
 FSI: No return  
 Rec: 12' SOCM (2%O, 98%M), 119' M w/ trc oil (44%W, 56%M)

**DST #2**  
 (LKC H-J)  
 4374'-4460'  
 30-60-30-60  
 IF: Blow built to 3 1/2"  
 ISI: No return  
 FF: Blow built to 5"  
 FSI: No return  
 Rec: 12' SOCM (2%O, 98%M), 119' M w/ trc oil (44%W, 56%M)

**DST #2**  
 (LKC H-J)  
 4374'-4460'  
 30-60-30-60  
 IF: Blow built to 3 1/2"  
 ISI: No return  
 FF: Blow built to 5"  
 FSI: No return  
 Rec: 12' SOCM (2%O, 98%M), 119' M w/ trc oil (44%W, 56%M)

**Morgan Mud @ 3540'**  
 Wt: 8.8  
 Vis: 69  
 WI: 6.0  
 Chl: 500  
 LCM: 11#

**Morgan Mud @ 4036'**  
 Wt: 9.0  
 Vis: 60  
 WI: 6.8  
 Chl: 600  
 LCM: 11#

**Morgan Mud @ 4370'**  
 Wt: 8.5  
 Vis: 52  
 WI: 8.4  
 Chl: 800  
 LCM: 14#  
 Deviation Survey @ 4370': 1°

**Morgan Mud @ 4460'**  
 Wt: 9.1  
 Vis: 66  
 WI: 7.2  
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 LCM: 12#

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