

# Saman Sharifaie

## Petroleum Geologist

### GEOLOGIST'S REPORT

#### DRILLING TIME AND SAMPLE LOG

COMPANY: **Martin Drilling Co., Inc.**  
LEASE: **DKN #1-4**

FIELD: **Wicklat**  
LOCATION: **3307 ESL & 500 FEL**  
COUNTY: **Twisp IS RGE 38W**  
SECTION: **Cheyenne STATE Kansas**  
CONTRACTOR: **Martin Drilling #3**  
SPUD: **10/21/15 COMP 10/22/15**  
RTD: **4822' LTD 4821'**  
MUD UP: **3100' TYPE MUD Chemical**

SAMPLES SAVED FROM: **3360' TO RTD**  
DRILLING TIME KEPT FROM: **3360' TO RTD**  
SAMPLES EXAMINED FROM: **3360' TO RTD**  
GEOLOGICAL SUPERVISION FROM: **3060'**

REFERENCE WELL: **Christensen OW#0 #3-32**

FORMATION: **Flower Hill**

Formation	Sample Tops	E-log Tops	Feet
Amshadite	3020 (-18)	3017 (+21)	3
Russ Amshadite	3490 (-11)	3050 (-12)	4
Neva	3477 (-400)	3450 (-412)	27
TOUSA	3790 (-752)	3788 (-750)	2
Oreda	3026 (-888)	3026 (-888)	0
Starb	4000 (-962)	3997 (-959)	3
Starb	4224 (-1186)	4237 (-1185)	13
Phewee	4404 (-1366)	4403 (-1365)	1
Cherokee	4490 (-1452)	4488 (-1450)	2

DEVELOPMENTS: **KB 3038**

DEF: **3033'**  
MEASUREMENTS ARE ALL FROM KELLY BUSHING

CASING: **CONDUCTOR SURFACE 8-5/8" at 221'**

ELECTRICAL SURVEYS: **CND, DIL, MEL, SMI**

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

Respectfully Submitted,  
Saman Sharifaie  
Petroleum Geologist

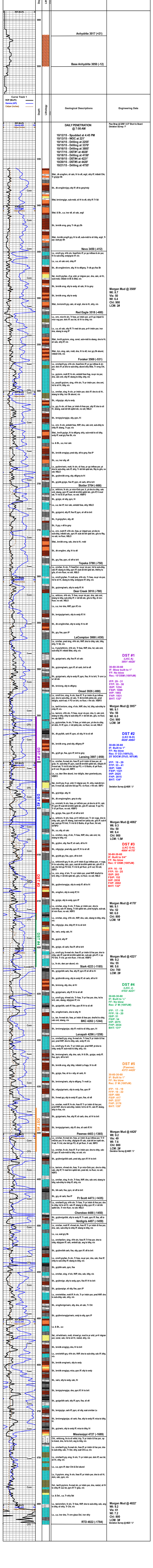
API #15-023-21426

\*Tops have been adjusted to electric logs

Flower Hill

Depth

Curve Track 1  
ROP (Min/Ft)  
Gamma (API)  
Caliper (Inches)



Engineering Data

Pipe Strap @ 3250': 0.37' Short to Board  
Deviation Survey: 1"

Morgan Mud @ 3509'  
WT: 8.7  
Vis: 50  
WI: 6.4  
Chl: 900  
LCM: 2#

Morgan Mud @ 3957'  
WT: 9.6  
Vis: 51  
WI: 6.0  
Chl: 900  
LCM: 3#

DST #1 (LKC A) 3951'-4028'  
30-60-30-60  
IF: Blow built to 1"  
FF: No blow  
Rec: 5' OSM (100%M)

IFP: 29 - 31  
FFP: 35 - 38  
ISIP: 1234  
FISP: 1099  
IHP: 1993  
FHP: 1931  
BHT: 132°

Morgan Mud @ 4082'  
WT: 9.1  
Vis: 50  
WI: 6.0  
Chl: 900  
LCM: 1.5#

DST #2 (LKC B-D) 4020'-4084'  
30-60-30-60  
IF: Built to 1"  
FF: No blow  
Rec: 5' OSM (100%), 25' SOCM (5%, 95%M)

IFP: 19 - 29  
FFP: 33 - 41  
ISIP: 1400  
FISP: 1321  
IHP: 2025  
FHP: 2015  
BHT: 134°

Deviation Survey @ 4028': 1/2"

Morgan Mud @ 4082'  
WT: 9.1  
Vis: 50  
WI: 6.0  
Chl: 900  
LCM: 1.5#

DST #3 (LKC G-H) 4084'-4170'  
30-60-30-60  
IF: Built to 3/4"  
FF: No blow  
Rec: 5' OSM (100%M)

IFP: 16 - 18  
FFP: 19 - 25  
ISIP: 283  
FISP: 153  
IHP: 2038  
FHP: 2002  
BHT: 132°

Morgan Mud @ 4170'  
WT: 9.2  
Vis: 52  
WI: 6.0  
Chl: 800  
LCM: 1#

Morgan Mud @ 4221'  
WT: 9.1  
Vis: 56  
WI: 5.6  
Chl: 700  
LCM: 2#

DST #4 (LKC J) 4163'-4221'  
30-60-30-60  
IF: Built to 1/2"  
FF: No blow  
Rec: 2' M (100%M)

IFP: 17 - 19  
FFP: 19 - 20  
ISIP: 51  
FISP: 417  
IHP: 2237  
FHP: 2034  
BHT: 131°

Morgan Mud @ 4420'  
WT: 9.2  
Vis: 49  
WI: 7.6  
Chl: 800  
LCM: 2#  
Deviation Survey @ 4420': 1/2"

Morgan Mud @ 4822'  
WT: 9.2  
Vis: 61  
WI: 7.0  
Chl: 800  
LCM: 3#  
Deviation Survey @ 4822': 1/2"