

# Saman Sharifaie

## Petroleum Geologist

### GEOLOGIST'S REPORT

#### DRILLING TIME AND SAMPLE LOG

COMPANY: **Martin Drilling Co., Inc.**  
LEASE: **Gambhir #3-22**

FIELD: **Wildcat**

LOCATION: **1500' F.N.I. & 1050' F.W.L.**  
SEC: **22** TWP: **2S** RGE: **37W**  
COUNTY: **Cheyenne** STATE: **Kansas**

CONTRACTOR: **Martin Drilling #3**  
RUD: **10/1/19** COMP: **10/2/19**

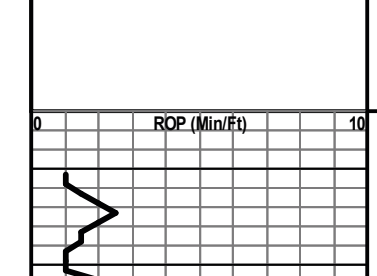
SPUD: **49:50'** TYPE MUD: **4951'**  
MUD UP: **3:00'** TYPE MUD: **Chemical**

SAMPLES SAVED FROM: **4010'** TO RTD  
DRILLING TIME KEPT FROM: **4000'** TO RTD  
SAMPLES EXAMINED FROM: **4010'** TO RTD

GEOLOGICAL SUPERVISION FROM: **3710'**  
REFERENCE WELL: **MDCI - Gambhir #1-22**

FORMATION: **Flower Hill**

Formation	Sample Tops	E-log Tops	Strat Pos.
Anhydrite	3297 (+109)	3297 (+107)	-13
Base Anhydrite	3326 (+78)	3326 (+78)	-11
Topeka	4109 (-705)	4111 (-707)	-4
Overbed	4256 (-852)	4253 (-849)	-6
Saltine	4350 (-926)	4330 (-925)	-6
Stark	4353 (-1151)	4328 (-1154)	-8
Mount City	4605 (-1201)	4608 (-1204)	-8
FT Scott	4736 (-1332)	4738 (-1334)	-9
ORKEY	4810 (-1406)	4811 (-1407)	-6



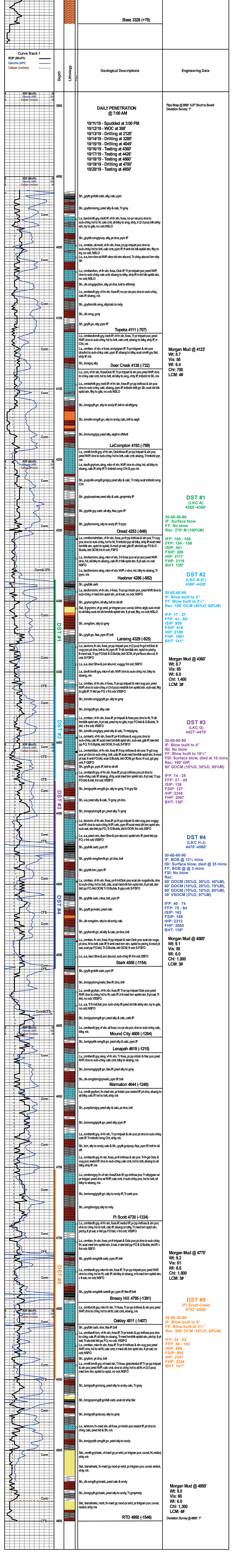
REMARKS: Due to fair to good shows of oil in multiple potential pay zones and positive DST results, it is recommended and agreed upon by all parties that production casing be set to further evaluate this well.

Respectfully Submitted,

API #15-023-21524

Saman Sharifaie  
Petroleum Geologist

\*Tops have been adjusted to electric logs



Depth (ft)	Geological Descriptions	Engineering Data
3297-3326	<b>Anhydrite 3297 (+107)</b> <b>Base 3326 (+78)</b>	
3950-4000	<b>DAILY PENETRATION @ 7:00 AM</b> 10/11/19 - Spudded at 3:00 PM 10/12/19 - WOC at 388' 10/13/19 - Drilling at 2120' 10/14/19 - Drilling at 3280' 10/15/19 - Drilling at 4045' 10/16/19 - Testing at 4360' 10/17/19 - Testing at 4426' 10/18/19 - Testing at 4560' 10/19/19 - Drilling at 4700' 10/20/19 - Testing at 4850'	Pipe Strap @ 3950': 0.57' Short to Board Deviation Survey: 1"
4111-4136	<b>Topeka 4111 (-707)</b>	<b>Morgan Mud @ 4123'</b> Wt: 8.7 Vis: 58 Chl: 7.00 LCM: 4#
4136-4150	<b>Deer Creek 4136 (-732)</b>	<b>DST #1</b> (LKC A-B) 4285'-4360'
4150-4200	<b>LeCompton 4193 (-789)</b>	<b>DST #2</b> (LKC B-D) 4360'-4426'
4200-4250	<b>Oread 4253 (-849)</b>	<b>DST #3</b> (LKC G) 4427'-4470'
4250-4300	<b>Heebner 4286 (-882)</b>	<b>DST #4</b> (LKC H-J) 4470'-4560'
4300-4350	<b>Lansing 4329 (-825)</b>	<b>DST #5</b> (FT Scott-Cella) 4702'-4850'
4350-4400	<b>Stark 4558 (-1154)</b>	<b>DST #6</b> (FT Scott-Cella) 4702'-4850'
4400-4450	<b>Mound City 4608 (-1204)</b>	<b>DST #7</b> (FT Scott-Cella) 4702'-4850'
4450-4500	<b>Lenapah 4619 (-1215)</b>	<b>DST #8</b> (FT Scott-Cella) 4702'-4850'
4500-4550	<b>Marmaton 4644 (-1240)</b>	<b>DST #9</b> (FT Scott-Cella) 4702'-4850'
4550-4600	<b>Broozy Hill 4795 (-1391)</b>	<b>DST #10</b> (FT Scott-Cella) 4702'-4850'
4600-4650	<b>Oakley 4811 (-1407)</b>	<b>DST #11</b> (FT Scott-Cella) 4702'-4850'
4650-4700	<b>RTD 4950 (-1546)</b>	<b>DST #12</b> (FT Scott-Cella) 4702'-4850'