

Thomas J. Funk
Petroleum Geologist

**Geologists Report
Drilling Time and Sample Log**

OPERATOR **Murfin Drilling Co., Inc**

LEASE **Racette** WELL NO **#3-12**
FIELD **Tom Tom** API **15-109-21597**
LOCATION **1100' FNL & 2100' FEL**
SEC. **12** TWP. **13S** RGE. **33W**
COUNTY **Logan** STATE **Kansas**

ELEVATION
KB 3045'
DF
GL 3034'
Measurements Are All From **KB**

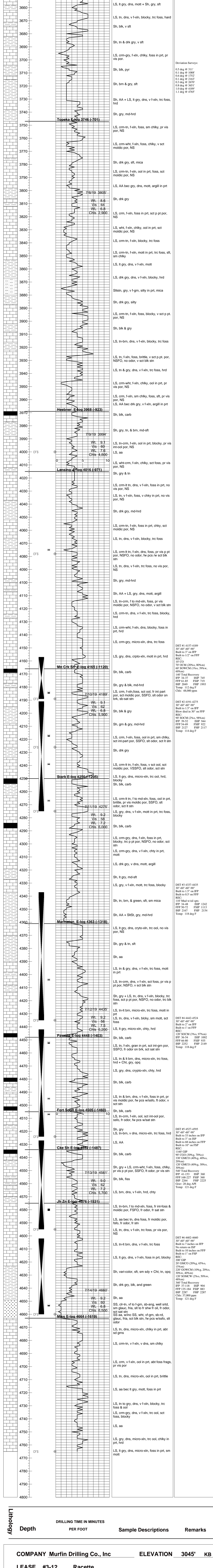
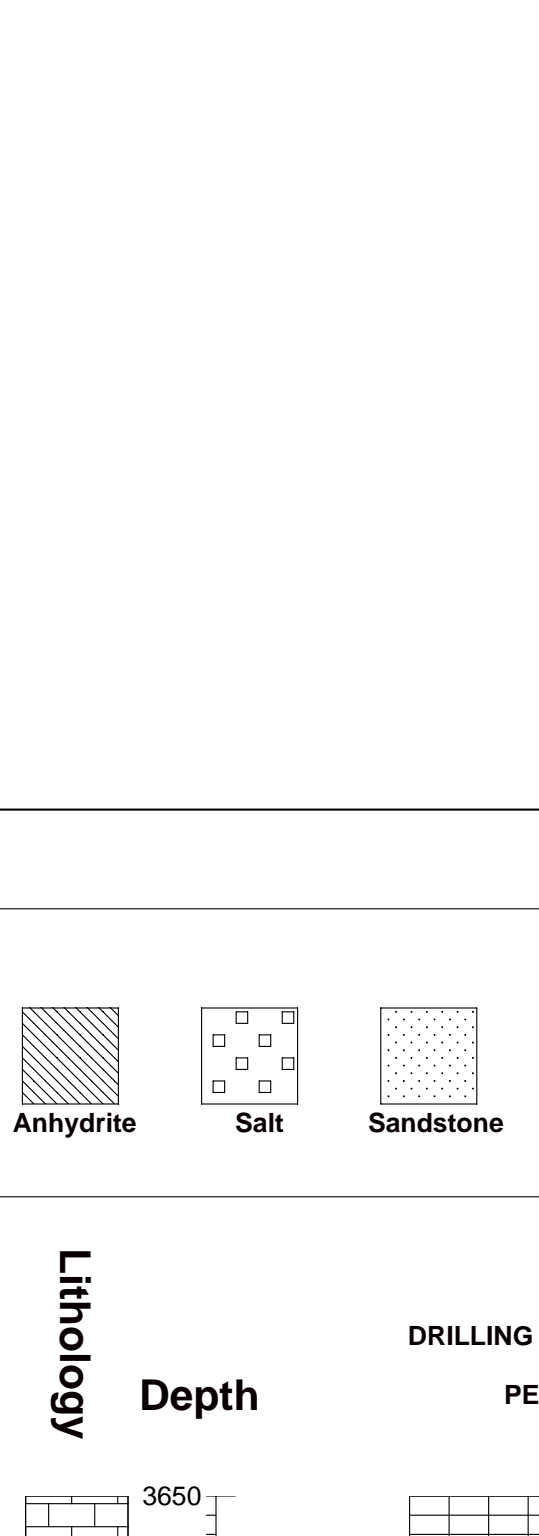
CASING RECORD
SURFACE
8 5/8" at 310'KB w/2005x

DRILLING TIME KEPT FROM **3650** TO **4765'**
SAMPLES EXAMINED FROM **3650** TO **4765'**
GEOLOGICAL SUPERVISION FROM **3680** TO **4765'**
MUD UP **3250** TYPE MUD **Chemical**

FORMATION	LOG	SAMPLE	ELECTRICAL SURVEYS
	TOP DATUM	TOP DATUM	Log-Tech
Anhydrite	2502 (+516)	2519 (+526)	DIL
Baryanhydrite	2525 (+493)	2541 (+504)	MEL
Toppekaka	3746 (-701)	3747 (-702)	DUCP
Heebner Sh	3968 (-923)	3969 (-924)	BHCS
Lansing	4016 (-971)	4015 (-970)	
Muncie Creek	4166 (-1120)	4166 (-1121)	
Start Sh	4250 (-1205)	4250 (-1205)	
Marmaton	4363 (-1318)	4361 (-1316)	
Pawnee	4448 (-1403)	4448 (-1403)	
Cherokee Sh	4532 (-1487)	4534 (-1489)	
Johnson Zone	4576 (-1531)	4575 (-1530)	
Mississippian	4664 (-1619)	4663 (-1618)	

Date	Drilling Progress	NO	Size	Make	Type	Depth	Out	Feet	Hours
	Spud	1	1/2	1/4	RR			311	3
7/5/19									
7/6/19									
7/7/19		2	7/8"	HTC	DF506F	3651		3340	50.25
7/8/19		3	7/8"	HTC	GX22s	4765		1114	73.75
7/9/19									
7/11/19									
7/12/19									
7/13/19									
7/14/19									
7/15/19									

REMARKS AND RECOMMENDATIONS:
Based on sample examination, DST results, and log analysis it was recommended to run casing to further test the #3-12 Racette.
Thomas Funk
Petroleum Geologist



COMPANY **Murfin Drilling Co., Inc** **ELEVATION** **3045'** **KB**
LEASE **#3-12** **Racette**
LOCATION **1100' FNL & 2100' FEL** **Sec 12** **TWP 13S** **RGE 33W**
COUNTY **Logan** **STATE** **Kansas**

