

# **Geological Report**

Palmer Oil, Inc.

## **Brookover #4-5**

335' FSL & 1042' FWL

Sec. 4, T25s, R32w

Finney County, Kansas



**Palmer Oil, Inc.**

## General Data

Well Data: Palmer Oil, Inc.  
Brookover #4-5  
335' FSL & 1042' FWL  
Sec. 4, T25s, R32w  
Finney County, Kansas  
API # 15-055-22297-00-00

Drilling Contractor: Duke Drilling Co. Rig #9

Geologist: Kevin Timson

Spud Date: May 3, 2014

Completion Date: May 12, 2014

Elevation 2854' G.L.  
2867' K.B.

Directions: From Garden City, KS. Go South on Hwy 83 1 mile South of Southwind. Turn East on lease road and continue East 2 miles, North into.

Casing: 1726' 8 5/8" #24 Surface Casing

Samples: 3800' to RTD 10' Wet & Dry

Drilling Time: 3800' to RTD

Electric Logs: Pioneer Energy Services "J. Henrickson"  
Stacked-Micro

Drillstem Tests: One-Trilobite Testing "Will MacLean"

Problems: None

## Formation Tops

Brookover #4-5

Sec. 4, T25s, R32w

335' FSL & 1042' FWL

Anhydrite	1865' +1002
Base	1930' +937
Heebner	3906' -1039
Lansing	3969' -1102
Stark	4321' -1454
Bkc	4443' -1576
Marmaton	4466' -1599
Pawnee	4552' -1685
Fort Scott	4578' -1711
Cherokee	4594' -1727
Morrow	4779' -1912
Miss	4797' -1930
RTD	5000' -2133
LTD	5000' -2133

### Sample Zone Descriptions

**Morrow** (4779', -1912): Covered in DST #1  
No sand!

**St. Louis** (4797', -1930): Covered in DST #1  
Ls. Tan. Medium to sub crystalline. Fair oomoldic and poor oolycastic porosity. Fair stain in porosity. Poor saturation. No show of free oil. Slight odor. 25 Unit hotwire.

**Drill Stem Tests**  
 Trilobite Testing  
 “Will MacLean”

**DST #1**

**Morrow/St. Louis**

Interval (4774’ - 4874’) Anchor Length 100’

IHP	-2367 #	
IFP	- 30” – WSB built to ¾”	21-28 #
ISI	- 30” – No return	58 #
FFP	- 30” – No blow	29-32 #
FSIP	- 30” – No return	45 #
FHP	- 2210 #	
BHT	- 119° F	
Recovery:	10’ OCM (2% Oil)	

**Structural Comparison**

<b>Formation</b>	<b>Palmer Oil, Inc.</b> <b>Brookover #4-5</b> Sec. 4, T25s, R32w 335’ FSL & 1042’ FWL	Palmer Oil, Inc. Brookover #4-6 Sec. 4, T25s, R32w 780’ FSL & 1070’ FEL	EOG Resources Brookover #4-1 Sec 4, T25s, R32w 330’ FSL & 1709’ FWL
Heebner	3906’ -1039	+1	3898’ -1040
Lansing	3969’ -1102	+2	3962’ -1104
Stark	4321’ -1454	-2	4310’ -1452
BKC	4443’ -1576	+13	4447’ -1589
Marmaton	4466’ -1599	+16	4473’ -1615
Pawnee	4552’ -1685	+10	4553’ -1695
Fort Scott	4578’ -1711	+17	4586’ -1728
Cherokee	4594’ -1727	+15	4600’ -1742
Morrow	4779’ -1912	+13	4783’ -1925
Miss	4797’ -1930	+73	4861’ -2003
			-2 <b>FL</b> +7 +6 +4 +2 +3 <b>FL</b> +9 +87
			3905’ -1037 3970’ -1102 4329’ -1461 4450’ -1582 4471’ -1603 4555’ -1687 4582’ -1714 4595’ -1727 4789’ -1921 4885’ -2017

## Summary

The location for the Brookover #4-5 well was found via 3-D seismic survey. The new well ran structurally as expected. One drill stem test was conducted, which was negative. After all the gathered data had been examined, the decision was made to plug and abandon the Brookover #4-5 well.

Respectfully Submitted,

Kevin Timson  
Palmer Oil, Inc.