

Geological Report

Palmer Oil, Inc.

Brookover #8-5

925' FNL & 2045' FWL

Sec. 8, T25s, R32w

Finney County, Kansas



Palmer Oil, Inc.

General Data

Well Data: Palmer Oil, Inc.
Brookover #8-5
925' FNL & 2045' FWL
Sec. 8, T25s, R32w
Finney County, Kansas
API # 15-055-22269-00-00

Drilling Contractor: Duke Drilling Co. Rig #5

Geologist: Kevin Timson

Spud Date: February 7, 2014

Completion Date: February 18, 2014

Elevation 2888' G.L.
2899' K.B.

Directions: From Garden City, KS. Go South on Hwy 83 1 mile South of Southwind. Turn East on lease road and South-East into location.

Casing: 1742' 8 5/8" #24 Surface Casing
5050' 5 1/2" #15.5 Production Casing

Samples: 4500' to RTD 10' Wet & Dry

Drilling Time: 3800' to RTD

Electric Logs: Pioneer Energy Services "J. Henrickson"
Full Sweep

Drillstem Tests: Two-Trilobite Testing "Mike Roberts"

Problems: Drilled additional 55' after log to improve low pressure reservoir production.

Formation Tops

Brookover #8-5

Sec. 8, T25s, R32w

925' FNL & 2045' FWL

Anhydrite	1881' +1018
Base	1945' +954
Heebner	3914' -1015
Lansing	3959' -1060
Stark	4342' -1443
Bkc	4461' -1562
Marmaton	4486' -1587
Pawnee	4561' -1662
Fort Scott	4596' -1697
Cherokee	4614' -1715
Morrow	4809' -1910
Miss	4895' -1996
RTD	5055' -2156

Sample Zone Descriptions

Morrow (4809', -1910): Covered in DST #1 & #2

Ss. Grey glauconitic. Very coarse grain. Well rounded. Fair stain. Fair saturation. Show of free oil when broken. Fair odor. 20 Unit gas kick.

Drill Stem Tests
Trilobite Testing
“Bradley Walter”

DST #1

Morrow

Interval (4804’ - 4874’) Anchor Length 70’

IHP - 2392 #

IFP - 30” – 1/8” blow died in 20 min 19-22 #

ISI - 30” – No return 38 #

FFP - 10” – No blow 22-NA #

FSIP - Pull Tool NA

FHP - 2354 #

BHT - 120° F

Recovery: 5’ Mud

DST #2

Morrow

Interval (4803’ – 4905’) Anchor Length 102’

IHP - 2372 #

IFP - 30” – BOB in 1 min 240-343 #

ISI - 45” – 1/2” return 430 #

FFP - 45” – 6” blow 348-352 #

FSIP - 60” – 1” return 354 #

FHP - 2296 #

BHT - 117° F

Recovery: 61’ OCGM (10% Oil)

180’ OCGM (10% Oil)

186’ OCGM (10% Oil)

124’ OCM (2% Oil)

62’ Mud

Structural Comparison

	Palmer Oil, Inc. Brookover #8-5 Sec. 8, T25s, R32w 925' FNL & 2045' FWL		Palmer Oil, Inc. Brookover #8-1 Sec. 8, T25s, R32w 990' FNL & 1255' FWL		Palmer Oil, Inc. Brookover #8-3 Sec 8, T25s, R32w 737' FNL & 2204' FEL
Formation					
Heebner	3914' -1015	-27	3897' -988	-19	3912' -996
Lansing	3959' -1060	-27	3942' -1033	-16	3960' -1044
Stark	4342' -1443	-31	4321' -1412	-13	4346' -1430
BKC	4461' -1562	NA	NA	NA	NA
Marmaton	4486' -1587	NA	NA	NA	NA
Pawnee	4561' -1662	-28	4543' -1634	-20	4558' -1642
Fort Scott	4596' -1697	-27	4579' -1670	-18	4595' -1679
Cherokee	4614' -1715	-30	4594' -1685	-15	4616' -1700
Morrow	4809' -1910	-29	4790' -1881	-12	4814' -1898
Miss	4895' -1996	-30	4875' -1966	-22	4890' -1974

Summary

The location for the Brookover #8-5 well was found via 3-D seismic survey. The new well ran structurally lower than expected at the Morrow Sandstone formation. Two drill stem tests were conducted, one of which recovered commercial quantities of oil. After all the gathered data had been examined, the decision was made to run 5 ½" production casing to produce and then inject the Morrow Sandstone formation.

Perforations

Primary:

Morrow (4883' – 4893')

Before Abandonment:

St. Louis (4911' – 4914')

Respectfully Submitted,

Kevin Timson
Palmer Oil, Inc.

