

# OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS - PHONE HE1-2650

March 27, 1967

Homa Oil Company  
351 Saturn Drive  
P.O. Box 9435  
Memphis, Tennessee

Gentlemen:

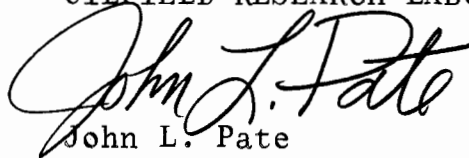
Enclosed herewith are the results of tests run on the Rotary core taken from the Nighswonger Lease, Well No. 3, Bourbon County, Kansas, and submitted to our laboratory on March 25, 1967.

This core was sampled and the samples sealed in cans by a representative of Oilfield Research Laboratories. The well was drilled in virgin territory.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

  
John L. Pate

JLP:rf

4 c. - Memphis, Tennessee  
1 c. - Milton Bishop  
1 c. - Joe Rolls

# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

Company Homa Oil Company Lease Nighswonger Well No. 3

Location SE NW

Section 2 Twp. 24S Rge. 25E County Bourbon State Kansas

Name of Sand - - - - - Bartlesville

Top of Core - - - - - 222.8

Bottom of Core - - - - - 241.5

Top of Sand - - - - - 222.8

Bottom of Sand - - - - - 235.3

Total Feet of Permeable Sand - - - - - 4.6

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:  
Permeability Range  
Millidarcys

Feet

Cum. Ft.

0 - 10	0.9	0.9
10 - 100	1.7	2.6
100 & above	2.0	4.6

Average Permeability Millidarcys - - - - - 87.5

Average Percent Porosity - - - - - 16.1

Average Percent Oil Saturation - - - - - 24.8

Average Percent Water Saturation - - - - - 53.0

Average Oil Content, Bbls./A. Ft. - - - - - 386.

Total Oil Content, Bbls./Acre - - - - - 3,399.

Average Percent Oil Recovery by Laboratory Flooding Tests - - - - -

Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft. - - - - -

Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre - - - - -

Total Calculated Oil Recovery, Bbls./Acre - - - - -

Packer Setting, Feet - - - - -

Viscosity, Centipoises @ - - - - -

A. P. I. Gravity, degrees @ 60 °F - - - - -

Elevation, Feet - - - - -

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-LOG-

Company Homa Oil Company Lease Nighswonger Well No. 3Depth Interval, Description  
Feet

222.8 - 230.0 - Grayish light brown, laminated, sandy shale.

230.0 - 233.7 - Brown sandstone.

233.7 - 235.3 - Dark, slightly carbonaceous sandstone.

235.3 - 237.1 - Gray, finely laminated, sandy shale.

237.1 - 238.5 - Dark shale.

238.5 - 239.0 - Coal.

239.0 - 241.5 - Shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Homa Oil Company Lease Nighswonger Well No. 3

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation		Oil Content Bbls. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water			Ft.	Cum. Ft.		
1	222.9	15.2	21	78	248	Imp.	0.5	0.5	124	0.00
2	224.1	15.3	9	80	107	Imp.	1.0	1.5	107	0.00
3	227.3	10.1	15	65	118	Imp.	1.0	2.5	118	0.00
4	228.1	8.9	11	74	76	Imp.	1.0	3.5	76	0.00
5	230.1	20.4	29	41	459	50.	0.6	4.1	275	30.00
6	231.1	17.5	29	43	394	174.	1.0	5.1	394	174.00
7	232.1	19.4	46	40	692	139.	1.0	6.1	692	139.00
8	233.1	21.7	43	36	723	47.	1.1	7.2	795	51.60
9	234.1	16.5	47	38	602	9.4	0.9	8.1	542	8.45
10	235.1	17.0	30	40	395	Imp.	0.7	8.8	276	0.00
							Total		3,399	