



OILFIELD RESEARCH LABORATORIES

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

November 16, 1966

Homa Oil Company
3568 Mimosa Avenue
Memphis, Tennessee

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Nighswonger Lease, Well No. 1, Bourbon County, Kansas, and submitted to our laboratory on November 15, 1966.

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

Benjamin R. Pearman
Benjamin R. Pearman

BRP:rf

4 c. - Memphis, Tennessee
1 c. - Gilbert Fouts

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Homa Oil Company Lease Nighswonger Well No. 1

Location SE NW

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

Name of Sand	Stray
Top of Core	225.3
Bottom of Core	247.0
Top of Sand	225.3
Bottom of Sand	238.5
Total Feet of Permeable Sand	3.5
Total Feet of Floodable Sand	

Distribution of Permeable Sand:
Permeability Range
Millidarcys

	Feet	Cum. Ft.
1 - 10	1.7	1.7
12 - 24	1.8	3.5

Average Permeability Millidarcys	12.3
Average Percent Porosity	14.1
Average Percent Oil Saturation	25.3
Average Percent Water Saturation	55.9
Average Oil Content, Bbls./A. Ft.	284.
Total Oil Content, Bbls./Acre	2,635.
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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Company Homa Oil Company Lease Nighswonger Well No. 1

Depth Interval, Description
Feet

- 225.3 - 227.4 - Grayish light brown, shaly sandstone.
- 227.4 - 230.4 - Brown, slightly shaly sandstone.
- 230.4 - 231.2 - Dark brown, shaly sandstone.
- 231.2 - 236.5 - Gray, laminated, sandy shale.
- 236.5 - 238.5 - Brown, laminated, shaly sandstone.
- 238.5 - 247.0 - Gray, laminated, sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Homa Oil Company Lease Nighswonger Well No. 1

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	225.4	14.0	16	70	174	1.3	0.5	0.5	87	0.65
2	226.1	14.6	14	76	159	Imp.	0.8	1.3	127	0.00
3	227.1	11.1	14	83	120	Imp.	0.8	2.1	96	0.00
4	228.1	13.8	37	57	396	9.4	1.2	3.3	475	11.28
5	229.1	14.4	44	53	491	12.	1.0	4.3	491	12.00
6	230.1	17.9	49	38	679	24.	0.8	5.1	543	19.20
7	231.1	15.0	30	67	348	Imp.	0.8	5.9	278	0.00
8	232.1	14.5	9	82	101	Imp.	1.4	7.3	141	0.00
9	237.1	12.8	21	63	208	Imp.	1.0	8.3	208	0.00
10	238.1	12.8	19	77	189	Imp.	1.0	9.3	189	0.00
							Total	-----	2,635	