

OILFIELD RESEARCH LABORATORIES

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January 31, 1962

Lance C. Hill, et al
P.O. Box 442
Emporia, Kansas

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Miller Lease, Well No. 5-C, Greenwood County, Kansas, and submitted to our laboratory on January 25, 1962.

This core was sampled and the samples sealed in cans by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman
Benjamin R. Pearman

BRP:rf

12 c.

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Lance C. Hill, et al Lease Miller Well No. 5-C

Location NW SE SE

Section 27 Twp. 23S Rge. 10E County Greenwood State Kansas

Name of Sand - - - - - Bartlesville

Top of Core - - - - - 2289.0

Bottom of Core - - - - - 2335.0

Top of Sand - - - - - (Tested) 2297.0

Bottom of Sand - - - - - (Tested) 2320.0

Total Feet of Permeable Sand - - - - - 17.3

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 5	4.6	4.6
5 - 10	9.7	14.3
10 - 13	3.0	17.3

Average Permeability Millidarcys - - - - - 6.9

Average Percent Porosity - - - - - 15.7

Average Percent Oil Saturation - - - - - 29.0

Average Percent Water Saturation - - - - - 47.3

Average Oil Content, Bbls./A. Ft. - - - - - 354.

Total Oil Content, Bbls./Acre - - - - - 6,123.

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 - - - - -

LOG

Company Lance C. Hill, et al Lease Miller Well No. 5-C

<u>Depth Interval, Feet</u>	<u>Description</u>
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2289.0 - 2292.7 - Sandy shale.

2292.7 - 2297.0 - Laminated shaley sandstone.

2297.0 - 2299.0 - Light brown slightly shaley sandstone.

2299.0 - 2300.0 - Conglomeratic sandy shale.

2300.0 - 2301.0 - Laminated shaley sandstone.

2301.0 - 2302.7 - Sandy shale.

2302.7 - 2311.0 - Light brown laminated slightly shaley sandstone.

2311.0 - 2312.5 - Sandy shale.

2312.5 - 2312.8 - Light brown shaley sandstone.

2312.8 - 2313.0 - Sandy shale.

2313.0 - 2320.0 - Light brown slightly calcareous slightly shaley sandstone.

2320.0 - 2335.0 - Black shale.

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company		Lance C. Hill, et al		Lease		Miller		Well No.		5-C	
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	Total			Ft.	Cum. Ft.		
1	2297.3	14.8	36	50	86	413	0.66	0.8	0.8	330	0.53
2	2298.2	15.4	34	40	74	406	1.2	1.2	2.0	488	1.44
3	2303.1	14.9	33	45	78	381	5.3	0.9	2.9	342	4.77
4	2304.1	16.4	20	58	78	254	0.85	1.0	3.9	254	0.85
5	2305.1	16.3	31	44	75	392	2.8	1.0	4.9	392	2.80
6	2306.1	18.3	34	43	77	482	8.5	1.0	5.9	482	8.50
7	2307.1	19.0	34	43	77	500	6.0	1.0	6.9	500	6.00
8	2308.1	17.3	24	49	73	322	9.9	1.0	7.9	322	9.90
9	2309.1	17.9	28	45	73	389	12.	1.0	8.9	389	12.00
10	2310.1	17.3	31	45	76	416	8.5	1.4	10.3	583	11.90
11	2313.1	15.7	29	47	76	353	2.1	0.6	10.9	212	1.26
12	2314.1	15.9	28	44	72	345	7.6	1.0	11.9	345	7.60
13	2315.2	15.1	23	55	78	269	9.5	1.0	12.9	269	9.50
14	2316.1	14.6	30	46	76	339	13.	1.0	13.9	339	13.00
15	2317.1	13.5	29	52	81	303	11.	1.0	14.9	303	11.00
16	2318.1	12.4	29	47	76	279	7.1	1.0	15.9	279	7.10
17	2319.1	12.3	22	52	74	210	7.4	1.4	17.3	294	10.36
Total									-----	6,123	

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lance C. Hill, et al		Lease		Miller		Well No.		5-C	
Depth Interval, Feet	Depth Interval, Feet	Feet of Core Analyzed		Average Permeability, Millidarcys		Permeability Capacity Ft. x Md.					
2297.0 - 2311.0	2297.0 - 2311.0	10.3		5.7		58.69					
2313.0 - 2320.0	2313.0 - 2320.0	7.0		8.5		59.82					
2297.0 - 2320.0	2297.0 - 2320.0	17.3		6.9		118.51					

Depth Interval, Feet	Depth Interval, Feet	Feet of Core Analyzed		Average Percent Porosity		Average Percent Oil Saturation		Average Percent Water Saturation		Average Oil Content Bbl./A. Ft.		Total Oil Content Bbbl./Acre	
2297.0 - 2311.0	2297.0 - 2311.0	10.3		16.8		30.4		46.0		396		4,082	
2313.0 - 2320.0	2313.0 - 2320.0	7.0		14.0		26.8		49.3		292		2,041	
2297.0 - 2320.0	2297.0 - 2320.0	17.3		15.7		29.0		47.3		354		6,123	