

OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

700 NORTH MISSION
OKMULGEE, OKLAHOMA
PHONE: 4444

Chanute, Kansas

536 N. HIGHLAND
CHANUTE, KANSAS
PHONE: HE 1-2650

September 25, 1961

Lance C. Hill, et al
P.O. Box 506
Emporia, Kansas

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Miller "C" Lease, Well No. 3, Greenwood County, Kansas, and submitted to our laboratory on September 22, 1961

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


Fred O. Stenger

FOS:rf

12 c.

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Lance C. Hill Lease Miller "C" Well No. 3

Location NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$

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

Name of Sand - - - - - Bartlesville

Top of Core - - - - - 2340.0

Bottom of Core - - - - - 2361.0

Top of Sand - - - (Received) - - - 2340.0

Bottom of Sand - - - - - ?

Total Feet of Permeable Sand - - - (Analyzed) - - - 18.

Total Feet of Floodable Sand - - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 5	3.9	3.9
5 - 20	8.6	12.5
20 - 100	4.6	17.1
100 & above	0.9	18.0

Average Permeability Millidarcys - - - - - 22.

Average Percent Porosity - - - - - 19.3

Average Percent Oil Saturation - - - - - 22.3

Average Percent Water Saturation - - - - - 37.8

Average Oil Content, Bbls./A. Ft. - - - - - 337.

Total Oil Content, Bbls./Acre - - - - - 6,072.

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 - - - - -

LOGCompany Lance C. Hill Lease Miller "C" Well No. 3

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
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2340.0 - 2340.9	Light brown sandstone.
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2340.9 - 2341.5	Light brown conglomeratic sandstone.
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2341.5 - 2345.4	Light brown sandstone.
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2345.4 - 2346.1	Light brown conglomeratic sandstone.
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2346.1 - 2349.1	Light brown sandstone.
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2349.1 - 2350.4	Light brown conglomeratic sandstone.
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2350.4 - 2354.5	Light brown sandstone.
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2354.5 - 2355.0	Shale.
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2355.0 - 2358.0	Light brown slightly calcareous sandstone.
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2358.0 - 2358.3	Light brown conglomeratic sandstone.
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2358.3 - 2359.6	Sandy conglomerate.
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2359.6 - 2360.5	Light brown calcareous sandstone.
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2360.5 - 2361.0	Sandy conglomerate.
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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Lance C. Hill Lease Miller "C" 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	Total			Ft.	Cum. Ft.		
1	2340.1	22.7	25	28	53	441	189.	0.9	0.9	396	170.00
2	2341.1	14.1	22	44	66	241	0.77	0.6	1.5	145	0.46
3	2342.1	19.7	28	33	61	429	2.6	1.0	2.5	429	2.60
4	2343.1	19.3	21	32	53	315	4.1	1.0	3.5	315	4.10
5	2344.1	19.9	25	33	58	386	6.0	1.0	4.5	386	6.00
6	2345.1	20.7	29	34	63	466	8.0	0.9	5.4	420	7.20
7	2346.2	20.3	22	38	60	347	21.	0.5	5.9	173	10.50
8	2347.1	21.5	20	36	56	334	16.	1.0	6.9	334	16.00
9	2348.1	21.3	20	36	56	331	14.	1.5	8.4	496	21.00
10	2349.2	13.4	16	44	60	167	0.63	0.5	8.9	84	0.31
11	2350.1	14.6	20	43	63	226	0.53	0.8	9.7	181	0.42
12	2351.1	21.9	23	32	55	391	25.	1.2	10.9	469	30.00
13	2352.1	20.7	24	38	62	386	28.	1.0	11.9	386	28.00
14	2353.1	20.3	23	40	63	362	34.	1.0	12.9	362	34.00
15	2354.1	19.1	19	36	55	282	20.	0.9	13.8	254	18.00
16	2355.1	19.1	19	41	60	282	15.	0.6	14.4	169	9.00
17	2356.1	16.7	23	43	66	298	13.	1.0	15.4	298	13.00
18	2357.1	18.2	19	42	61	268	17.	1.0	16.4	268	17.00
19	2358.1	21.2	28	36	64	461	13.	0.7	17.1	322	9.10
20	2360.1	14.7	18	57	75	206	6.0	0.9	18.0	185	5.40
Total									-----	6,072	

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lance C. Hill		Lease		Miller "C"		Well No.		3	
Depth Interval, Feet		Feet of Core Analyzed		Average Permeability, Millidarcy's		Permeability Capacity Ft. x Md.					
2340.0 - 2350.4		9.7		25.		238.59					
2350.4 - 2360.5		8.3		20.		163.50					
2340.0 - 2360.5		18.0		22.		402.09					

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 Bbls./Acre	
2340.0 - 2350.4		9.7		19.4		22.7		35.6		346		3,359	
2350.4 - 2360.5		8.3		19.2		21.8		40.4		327		2,713	
2340.0 - 2360.5		18.0		19.3		22.3		37.8		337		6,072	