

OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

September 24, 1981

Jackson Brothers
514 North Main
Eureka, Kansas 67045

Gentlemen:

Enclosed herewith is the report of the analysis of the rotary core taken from the Dusenberry Lease, Well No. 5, located in Greenwood County, Kansas and submitted to our laboratory on September 16, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

5 c to Eureka, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Jackson Brothers Lease Dusenberry Well No. 5
 Location NE NW NW
 Section 18 Twp. 24S Rgc. 10E County Greenwood State Kansas

Elevation, Feet

Name of Sand.....

Bartlesville

Top of Core

2156.0

Bottom of Core

2165.0

Top of Sand

2156.0

Bottom of Sand (Tested)

2163.2

Total Feet of Permeable Sand

5.2

Total Feet of Floodable Sand

0.0

Distribution of Permeable Sand; Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 2	5.2	5.2

Average Permeability Millidarcys

0.91

Average Percent Porosity

13.4

Average Percent Oil Saturation

21.1

Average Percent Water Saturation.....

55.4

Average Oil Content, Bbls./A. Ft.

229.

Total Oil Content, Bbls./Acre.....

1,647.

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

0.

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

0.

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

0.

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

0.

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The core was sampled by a representative of Oilfield Research Laboratories. Fresh water mud was used as a drilling fluid. The core was reported to be from a virgin area.

Since the core did not respond to flooding susceptibility tests, no calculated recovery is given.

FORMATION CORED

The detailed log of the formation cored is as follows:

<u>Depth Interval, Feet</u>	<u>Description</u>
2156.0 - 2161.2	Grayish light brown shaly sandstone.
2161.2 - 2164.4	Grayish light brown very shaly sandstone.
2164.4 - 2165.0	Black shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Jackson Brothers Lease Dusenberry Well No. 5

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	2156.8	12.6	25	40	65	244	1.1	1.0	1.0	244	1.10
2	2157.5	13.9	22	63	85	237	0.52	1.0	2.0	237	0.52
3	2158.5	13.9	19	57	76	205	0.18	1.0	3.0	205	0.18
4	2159.4	15.0	29	39	68	338	1.8	1.0	4.0	338	1.80
5	2160.4	16.6	24	45	69	309	0.96	1.2	5.2	371	1.15
6	2161.4	12.0	24	64	88	223	Imp.	1.0	6.2	223	0.00
7	2162.5	9.3	4	82	86	29	Imp.	1.0	7.2	29	0.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lease		Well No.	
Jackson Brothers		Dusenberry		5	
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
2156.0 - 2163.2	5.2	0.91	4.75		
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
2156.0 - 2163.2	7.2	13.4	21.1	55.4	1,647

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RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company			Jackson Brothers			Lease			Dusenberry			Well No.			5		
Sample No.	Depth, Feet	Effective Porosity Percent	Original Oil Saturation		Oil Recovery		Residual Saturation			Volume of Water Recovered cc*	Effective Permeability Millidarcys**	Initial Fluid Production Pressure Lbs./Sq./In.					
			%	Bbls./A. Ft.	%	Bbls./A. Ft.	% Oil	% Water	Bbls./A. Ft.								
1	2156.8	12.7	25	246	0	0	25	41	246	0	Imp.	-					
2	2157.5	13.8	22	236	0	0	22	64	236	0	Imp.	-					
3	2158.5	13.8	19	203	0	0	19	58	203	0	Imp.	-					
4	2159.4	15.5	28	337	0	0	28	48	337	132	1.15	15					
5	2160.4	16.7	24	311	0	0	24	48	311	14	0.17	30					
6	2161.4	12.1	24	225	0	0	24	65	225	0	Imp.	-					
7	2162.5	9.4	4	29	0	0	4	83	29	0	Imp.	-					

Notes: cc—cubic centimeter.

*—Volume of water recovered at the time of maximum oil recovery.

**—Determined by passing water through sample which still contains residual oil.

Company Jackson Brothers

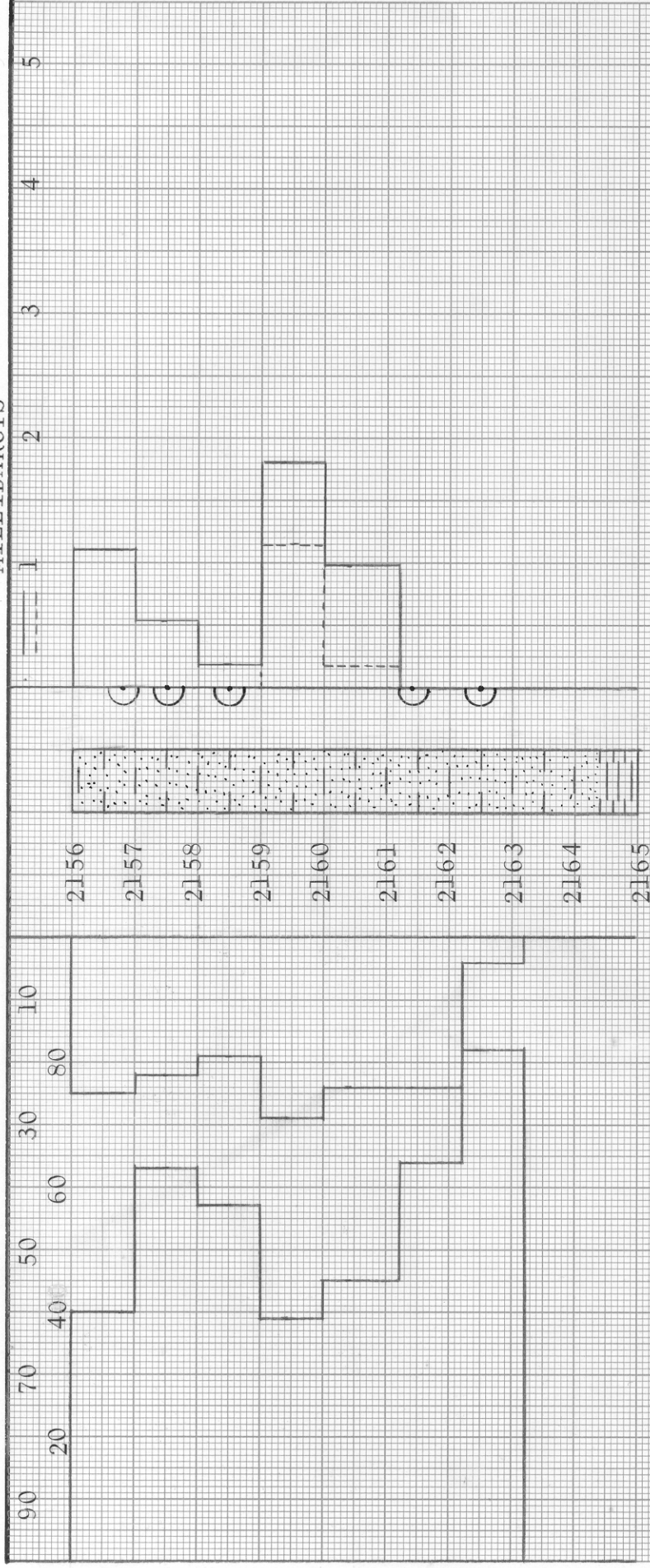
Lease Dusenberry

Well No.

5

WATER SAT., PERCENT →
OIL SAT., PERCENT

— PERMEABILITY, IN MILLIDARCS
--- EFFECTIVE PERMEABILITY TO WATER, IN MILLIDARCS



KEY:

○ IMPERMEABLE TO WATER

SHALY SANDSTONE

SHALE

JACKSON BROTHERS

WELL NO. 5

DUSENBERRY LEASE

GREENWOOD COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCS	CALCULATED OIL RECOVERY BBLs. / ACRE
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JACKSON BROTHERS

DUSENBERRY LEASE

WELL NO. 5

GREENWOOD COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYS	CALCULATED OIL RECOVERY BBLs. / ACRE
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2156.0 - 2163.2

7.2

13.4

21.1

55.4

0.91

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POILFIELD RESEARCH LABORATORIES
CHANUTE, KANSAS
SEPTEMBER, 1981

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