



OILFIELD RESEARCH LABORATORIES

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

November 11, 1966

Jackson Brothers
514 North Main
Eureka, Kansas

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Covert Lease, Well No. 1, Greenwood County, Kansas, and submitted to our laboratory on November 8, 1966.

This core was out approximately 24 hours prior to sampling. 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

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GENERAL INFORMATION & SUMMARY

Company Jackson Bros. Lease Covert Well No. 1

Location NW NE NE

Section 4 Twp. 23S Rge. 10E County Greenwood State Kansas

Name of Sand - - - - - Cattleman

Top of Core - - - - - 2103.0

Bottom of Core - - - - - 2111.5

Top of Sand - - - (Analyzed) - - - 2103.0

Bottom of Sand - - - (Analyzed) - - - 2111.5

Total Feet of Permeable Sand - - - - - 3.5

Total Feet of Floodable Sand - - - - - 0.0

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

1 - 30

1.6

1.6

42 - 53

1.9

3.5

Average Permeability Millidarcys - - - - - 30.9

Average Percent Porosity - - - - - 15.6

Average Percent Oil Saturation - - - - - 21.1

Average Percent Water Saturation - - - - - 21.8

Average Oil Content, Bbls./A. Ft. - - - - - 208.

Total Oil Content, Bbls./Acre - - - - - 728.

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 - - - - -

Packer Setting, Feet - - - - -

Viscosity, Centipoises @ - - - - -

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

Elevation, Feet - - - - -

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Jackson Bros. Lease Covert 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	Total			Ft.	Cum. Ft.		
1	2103.1	15.4	11	16	27	131	28.	0.6	0.6	79	16.80
2	2104.1	16.8	13	17	30	169	42.	1.0	1.6	169	42.00
3	2105.1	20.7	9	16	25	144	53.	0.9	2.5	130	47.70
4	2110.6	9.8	46	35	81	350	1.5	1.0	3.5	350	1.50
								Total	-----	728	

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RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Sample No.	Depth, Feet	Effective Porosity Percent	Original Oil Saturation		Oil Recovery		Residual Saturation			Volume of Water Recovered cc ^o	Effective Permeability MILIDARCY ^o	Initial Fluid Production Pressure Lbs./Sq./In.
			%	Bbls./A. Ft.	%	Bbls./A. Ft.	% Oil	% Water	Bbls./A. Ft.			
1	2103.1	15.7	10	122	0	0	10	88	122	244	7.00	10
2	2104.1	17.3	14	188	0	0	14	85	188	254	7.30	20
3	2105.1	20.6	11	176	0	0	11	88	176	434	27.00	10
4	2110.6	9.7	45	338	0	0	45	37	338	0	Imp.	-

Company Jackson Bros. Lease Covert Well No. 1

Notes: cc—cubic centimeter.

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

^{oo}—Determined by passing water through sample which still contains residual oil.

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RESULTS OF WATER DIFFERENTIATION TESTS
TABLE VI

Company Jackson Bros. Lease Covert Well No. 1

Sample No.	Depth, Feet	Chloride Content of Brine in Sand ppm	Percent Water Saturation	
			Connate	Drilling & Foreign Total
1	2103.1	50,900		
2	2104.1	70,900		
3	2105.1	57,900		
4	2110.6	128,900		

Note: ppm — parts per million