



OILFIELD RESEARCH LABORATORIES

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

August 30, 1979

Lincoln 77
8485 Kathy Lane
Lincoln, Nebraska 68526


Gentlemen:

Enclosed herewith is the report of the analysis of the rotary core taken from the Edwards Lease, Well No. 5, Coffey County, Kansas and submitted to our laboratory on August 20, 1979.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Benjamin R. Pearman

BRP:km
4 c to Lincoln, Nebraska
1 c to Topeka, Kansas

Fresh water mud was used as the circulating fluid while taking this core. The core was sampled and the samples sealed in plastic bags by a representative of the client. Inasmuch as the core samples did not respond to laboratory flooding tests, see Table IV, no calculated oil recovery is presented.

FORMATION CORED

The detailed log of the formation cored is as follows:

<u>Depth Interval, Feet</u>	<u>Description</u>
1004.0 - 1004.8	Gray and brown laminated sandstone and shale.
1004.8 - 1005.2	Gray and brown laminated sandstone and limestone.
1005.2 - 1007.2	Gray and brown laminated sandstone and shale.
1007.2 - 1007.5	Gray shale.
1007.5 - 1008.0	Brown and gray laminated sandstone and shale.
1008.0 - 1010.2	Gray shale.

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Lincoln 77 Lease Edwards Well No. 5

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbbls. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water	Total			Ft.	Cum. Ft.		
1	1004.7	13.4	4.8	24	72	499	1.7	0.8	0.8	399	1.36
2	1005.5	13.6	5.4	20	74	570	5.7	1.0	1.8	570	5.70
3	1006.3	13.3	5.6	24	80	578	7.4	1.0	2.8	578	7.40
4	1007.6	15.3	4.2	40	82	499	0.61	0.5	3.3	250	0.31

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease	Edwards	Well No.	
Lincoln 77		Edwards		5
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Total Oil Content Bbls./Acre
1004.0 - 1008.0	3.3	4.5	14.77	
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.
1004.0 - 1008.0	3.3	51.4	25.2	545
		13.7		1,797

RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company Lincoln 77 Lease Edwards 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			
1	1004.7	13.6	4.8	506	0	0	4.8	26	0	Imp.	-
2	1005.5	13.6	5.4	570	0	0	5.4	23	0	Imp.	-
3	1006.3	13.4	5.4	561	0	0	5.4	29	0	Imp.	-
4	1007.6	15.2	4.3	507	0	0	4.3	4.2	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.