



# OILFIELD RESEARCH LABORATORIES

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

March 20, 1980

Rumic Oil Company  
R.R. #2  
Neodesha, Kansas 66757

Gentlemen:

Enclosed herewith is the report of the analysis of the rotary core taken from the J. T. Burkey Lease, Well No. 9, Wilson County, Kansas and submitted to our laboratory on February 28, 1980.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

*Benjamin R. Pearman*  
Benjamin R. Pearman

BRP/kas  
5 c to Neodesha, Kansas



This core was sampled and the samples sealed in plastic bags by a representative of the client. The well was reportedly drilled in virgin territory using fresh water mud as the circulating fluid.

#### FORMATION CORED

The detailed log of the formation cored is as follows:

<u>Depth Interval, Feet</u>	<u>Description</u>
814.0 - 817.2	Light brown shaly sandstone.
817.2 - 819.2	Brown sandstone.
819.2 - 819.5	Gray sandy shale.
819.5 - 822.6	Brown shaly sandstone.
822.6 - 824.5	Gray sandy shale.

#### LABORATORY FLOODING SUSCEPTIBILITY TESTS

Since the sand in this core did not respond to laboratory flooding susceptibility tests, no oil reserve calculations have been made.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Rumic Oil Company Lease J. T. Burkey Well No. 9

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	814.5	15.7	24	41	65	292	2.4	1.0	1.0	292	2.40
2	815.5	15.2	26	43	69	307	2.2	1.0	2.0	307	2.20
3	816.5	16.2	28	38	66	352	2.8	1.2	3.2	422	3.36
4	817.5	17.2	31	33	64	414	13.	1.0	4.2	414	13.00
5	818.5	16.7	34	33	67	441	13.	1.0	5.2	441	13.00
6	819.6	15.6	40	36	76	490	5.8	0.5	5.7	245	2.90
7	820.5	14.8	31	46	77	356	4.5	1.0	6.7	356	4.50
8	821.5	15.8	42	34	76	515	2.6	1.0	7.7	515	2.60
9	822.5	15.0	29	44	73	338	0.76	0.6	8.3	202	0.46

# Oilfield Research Laboratories

## SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease	J. T. Burkey	Well No.		
Rumic Oil Company			9		
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
814.0 - 817.2	3.2	2.5	7.96		
817.2 - 822.6	5.1	7.2	36.46		
814.0 - 822.6	8.3	5.4	44.42		
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
814.0 - 817.2	3.2	26.2	40.5	320	1,021
817.2 - 822.6	5.1	34.4	37.4	426	2,173
814.0 - 822.6	8.3	30.0	38.6	385	3,194

# Oilfield Research Laboratories

## RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company Runic Oil Company Lease J. T. Burkey Well No. 9

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	814.5	15.9	26	321	0	0	26	42	321	0	Imp.	-
2	815.5	15.2	25	295	0	0	25	45	295	0	Imp.	-
3	816.5	16.3	28	354	0	0	28	40	354	0	Imp.	-
4	817.5	16.8	32	417	0	0	32	68	417	22	0.45	40
5	818.5	16.9	34	446	0	0	34	56	446	10	0.15	50
6	819.6	15.6	42	508	0	0	42	37	508	0	Imp.	-
7	820.5	14.8	31	356	0	0	31	48	356	0	Imp.	-
8	821.5	15.6	40	484	0	0	40	38	484	0	Imp.	-
9	822.5	15.1	30	351	0	0	30	46	351	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.