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

August 5, 1980

Rantoul Energy Corporation
P. O. Box 516
Hutchinson, Kansas 67501

Gentlemen:

Enclosed herewith is the report of the analysis of the rotary core taken from the Peckham Lease, Well No. 5, Franklin County, Kansas and submitted to our laboratory on June 3, 1980.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman

Benjamin R. Pearman

SAM/ks

5 c to Hutchinson, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Rantoul Energy Corporation Lease Peckham Well No. 5

Location

Section 21 Twp. 21S Rge. 17E County Franklin State Kansas

Elevation, Feet	
Name of Sand	Squirrel
Top of Core	484.0
Bottom of Core	497.4
Top of Sand	484.0
Bottom of Sand	496.2
Total Feet of Permeable Sand	3.3
Total Feet of Floodable Sand	0.0

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 5	1.2	1.2
40 -50	1.0	2.2
60 -70	1.1	3.3

Average Permeability Millidarcys	33.9
Average Percent Porosity	17.5
Average Percent Oil Saturation	17.6
Average Percent Water Saturation	58.4
Average Oil Content, Bbls./A. Ft.	244.
Total Oil Content, Bbls./Acre	1514.
Average Percent Oil Recovery by Laboratory Flooding Tests	0.0
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	0.0
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	0.0
Total Calculated Oil Recovery, Bbls./Acre	0.0

The core was sampled and the samples sealed in plastic bags by a representative of the client.

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

FORMATION CORED

The detailed log of the formation cored is as follows:

Depth Interval, Feet	Description
484.0 - 486.1	Light brown sandstone.
486.1 - 487.0	Grayish brown sandy shale.
487.0 - 487.9	Gray very shaly sandstone.
487.9 - 489.1	Gray sandy shale.
489.1 - 489.9	Gray very shaly sandstone.
489.9 - 491.4	Gray sandy shale.
491.4 - 491.8	Grayish light brown very shaly sandstone.
491.8 - 493.2	Gray laminated sandstone and shale.
493.2 - 494.0	Brown and gray laminated sandstone and shale.
494.0 - 495.0	Gray sandy shale.
495.0 - 496.2	Gray very shaly sandstone.
496.2 - 497.4	Gray sandy shale.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Rantoul Energy Corporation Lease Peckham 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	484.5	19.2	25	53	78	372	41.	1.0	1.0	372	41.00
2	485.5	22.3	15	48	63	260	62.	1.1	2.1	286	68.20
3	487.5	15.2	18	64	82	212	Imp.	0.9	3.0	191	0.00
4	489.5	19.3	19	44	63	285	Imp.	0.8	3.8	228	0.00
5	491.5	14.4	17	76	93	190	0.46	0.4	4.2	76	0.18
6	493.5	17.5	22	60	82	299	2.9	0.8	5.0	239	2.32
7	495.3	13.2	10	71	81	102	Imp.	1.2	6.2	122	0.00

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Rantoul Energy Corporation Lease Peckham Well No. 5

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
484.0 - 496.2	3.3	33.9	111.70

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
484.0 - 496.2	6.2	17.5	17.6	58.4	244.	1,514

Oilfield Research Laboratories

RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company Rantoul Energy Corporation Lease Peckham 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	484.5	19.3	25	374	0	0	25	71	374	350	7.95	15
2	485.5	22.0	15	256	0	0	15	83	256	321	9.75	25
3	487.5	15.7	17	207	0	0	17	66	207	0	Imp.	–
4	489.5	19.0	19	280	0	0	19	48	280	0	Imp.	–
5	491.5	14.8	16	184	0	0	16	77	184	0	Imp.	–
6	493.5	17.4	22	297	0	0	22	76	297	113	2.25	25
7	495.3	13.2	10	102	0	0	10	82	102	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.