

OILFIELD RESEARCH LABORATORIES

✓

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

May 30, 1980

Renflow Oil Company
Box 707
Chanute, Kansas 66720

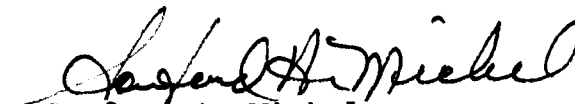
Gentlemen:

Enclosed herewith is the report of the analysis of the rotary core taken from the Campbell Lease, Well No. 13A, Allen County, Kansas, and submitted to our laboratory on April 25, 1980.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES



Sanford A. Michel

SAM/tem

5 c to Chanute, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Renflow Oil Company Lease Campbell Well No. 13A

Location -

Section 29 Twp 26S Rge 20E County Allen State Kansas

Elevation, Feet - - - - -

Name of Sand - - - - - Tucker

Top of Core - - - - - 805.0

Bottom of Core - - - - - 814.1

Top of Sand - - - - - 805.0

Bottom of Sand - - - - - 814.1

Total Feet of Permeable Sand - - - - - 8.9

Total Feet of Floodable Sand - - - - - 0.0

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 5

0.7

0.7

400 - 600

3.7

4.4

800 - 1200

4.5

8.9

Average Permeability Millidarcys - - - - - 721.6

Average Percent Porosity - - - - - 22.6

Average Percent Oil Saturation - - - - - 4.4

Average Percent Water Saturation - - - - - 90.6

Average Oil Content, Bbls./A. Ft. - - - - - 79.

Total Oil Content, Bbls./Acre - - - - - 704.

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

OILFIELD RESESEARCH LABORATORIES

-2-

The core was sampled by a representative of Oilfield Research Laboratories. Fresh water mud was used as a drilling fluid.

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

FORMATION CORED

<u>Depth Interval, Feet</u>	<u>Description</u>
805.0 - 811.1	Gray slightly calcareous sandstone.
811.1 - 811.8	Gray conglomeratic shaly sandstone.
811.8 - 813.2	Gray sandstone.
813.2 - 813.4	Gray shale.
813.4 - 814.1	Gray sandstone.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Renflow Oil Company Lease Campbell Well No. 13A

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	805.5	23.4	8	90	98	145	1153.	1.0	1.0	145	1153.00
2	806.6	22.2	2	95	97	34	460.	1.0	2.0	34	460.00
3	807.5	23.1	6	89	95	108	970.	1.0	3.0	108	970.00
4	808.5	21.9	2	95	97	34	599.	1.0	4.0	34	599.00
5	809.8	23.9	8	89	97	148	460.	1.0	5.0	148	460.00
6	810.6	25.3	5	91	96	98	861.	1.1	6.1	109	947.10
7	811.5	21.0	2	76	78	33	3.8	0.7	6.8	23	2.66
8	812.8	21.2	4	92	96	66	1019.	1.4	8.2	92	1426.60
9	813.6	21.0	1	94	95	16	577.	0.7	8.9	11	403.90

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lease		Well No.	
Renflow Oil Company		Campbell		13A	
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
805.0 - 814.1	8.9	721.6	6422.26		
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Total Oil Content Bbls./Acre
805.0 - 814.1	8.9	22.6	4.4	90.6	79
					704

Oilfield Research Laboratories
RESULTS OF LABORATORY FLOODING TESTS

TABLE IV

Company		Renflow Oil Company		Lease		Campbell		Well No.		13A	
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	805.5	23.7	7	129	0	0	7	91	180	134.46	5
2	806.6	22.2	2	34	0	0	2	95	134	100.10	5
3	807.5	23.2	6	108	0	0	6	89	197	146.41	5
4	808.5	22.2	2	34	0	0	2	95	201	149.94	5
5	809.5	23.4	9	163	0	0	9	88	206	154.50	5
6	810.6	25.0	5	97	0	0	5	92	281	210.00	5
7	811.5	21.1	2	33	0	0	2	93	312	10.68	10
8	812.8	21.4	4	66	0	0	4	93	241	179.93	5
9	813.6	21.3	1	17	0	0	1	96	124	93.00	5

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.