

OILFIELD RESEARCH LABORATORIES

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

December 5, 1980

Blackhawk Oil Company
15 North Highland
Chanute, Kansas 66720

Gentlemen:

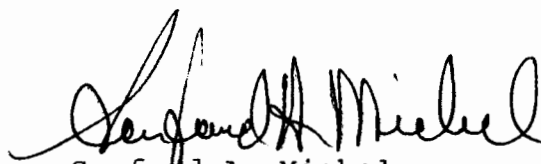
Enclosed herewith are the results of tests run on the rotary core taken from the Kuhn Lease, Well No. 1, located in Wilson County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and submitted to our laboratory on November 22, 1980.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES



Sanford A. Michel

SAM/kas

5 c to Chanute, Kansas

Oilfield Research Laboratories
GENERAL INFORMATION & SUMMARY

Company Blackhawk Oil Co. Lease Kuhn Well No. 1
 Location -
 Section 36 Twp. 27S Rge. 16E County Wilson State Kansas

Sec. 1?

Elevation, Feet	-
Name of Sand	Squirrel
Top of Core	851.0
Bottom of Core	859.2
Top of Sand	851.6
Bottom of Sand	858.5
Total Feet of Permeable Sand	6.9

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 5	2.4	2.4
5 - 10	0.5	2.9
10 - 15	1.7	4.6
50 & Above	2.3	6.9

Average Permeability Millidarcys	21.7
Average Percent Porosity	14.5
Average Percent Oil Saturation	58.5
Average Percent Water Saturation	26.5
Average Oil Content, Bbls./A. Ft.	673.
Total Oil Content, Bbls./Acre	4,641.

OILFIELD RESEARCH LABORATORIES

LOGName Blackhawk Oil Company Lease Kuhn Well No. 1

<u>Depth Interval, Feet</u>	<u>Description</u>
851.0 - 851.6	Hard gray fossiliferous limestone.
851.6 - 852.1	Brown and gray laminated calcareous sandstone and shale.
852.1 - 853.0	Brown calcareous sandstone.
853.0 - 855.4	Brown and gray laminated calcareous sandstone and shale.
855.4 - 856.2	Black carbonaceous slightly calcareous sandstone.
856.2 - 857.2	Black carbonaceous slightly calcareous shaly sandstone.
857.2 - 858.1	Brown and gray laminated slightly carbonaceous slightly calcareous sandstone and shale.
858.1 - 858.5	Black carbonaceous slightly calcareous shaly sandstone.
858.5 - 859.2	Gray sandy shale.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Blackhawk Oil Co. Lease Kuhn 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	851.7	7.3	26	70	96	147	5.0	0.5	0.5	74	2.50
2	852.5	14.5	39	38	77	439	56.	0.9	1.4	395	50.40
3	853.5	10.7	62	35	97	515	0.17	1.0	2.4	515	0.17
4	854.5	17.1	61	18	79	809	54.	1.4	3.8	1133	75.60
5	855.6	15.5	73	12	85	878	14.	0.8	4.6	702	11.20
6	856.5	15.9	67	9	76	827	0.34	1.0	5.6	827	0.34
7	857.5	15.5	57	30	87	685	10.	0.9	6.5	617	9.00
8	858.4	15.6	78	20	98	944	0.45	0.4	6.9	378	0.18

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lease		Well No.		1	
Blackhawk Oil Co.		Kuhn					
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.				
851.6 - 858.5	6.9	21.7	149.39				
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		
851.6 - 858.5	6.9	14.5	58.5	26.5	4,641		