

HICKORY CREEK OIL COMPANY

CORE ANALYSIS REPORT

WELL NO. HCO-61

P. Flaherty

OILFIELD RESEARCH LABORATORIES
536 N. HIGHLAND
CHANUTE, KANSAS



OILFIELD RESEARCH LABORATORIES

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

November 14, 1979

Hickory Creek Oil Company
1128 Main Street
Parsons, Kansas 67357

Gentlemen:

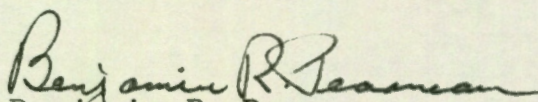
Enclosed herewith are the results of tests run on the rotary core taken from Well No. HCO-61, and submitted to our laboratory on November 2, 1979.

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

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Benjamin R. Pearman

BRP/tem

4 c to Parsons, Kansas
1 c to Chanute, Kansas



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GENERAL INFORMATION & SUMMARY

Company Hickory Creek Oil Company Lease - Well No. HCO-61

Location ----

Section - Twp - Rge. - County - State -

Name of Sand - - - - -

Top of Core - - - - - 174.0

Bottom of Core - - - - - ~~200.0~~

Top of Sand - - - - - 174.1

Bottom of Sand - - - - - ~~200.0~~

Total Feet of Permeable Sand - - - - - 24.9

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 12	4.9	4.9
25 - 35	6.0	10.9
35 - 50	12.0	22.9
145 & Above	2.0	24.9

Average Permeability Millidarcys - - - - - 42.0

Average Percent Porosity - - - - - 18.4

Average Percent Oil Saturation - - - - - 48.8

Average Percent Water Saturation - - - - - 32.2

Average Oil Content, Bbls./A. Ft. - - - - - 714.

Total Oil Content, Bbls./Acre - - - - - 18,497.

Average Percent Oil Recovery by Laboratory Flooding Tests - - - - -

Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft. - - - - -

Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre - - - - -

Total Calculated Oil Recovery, Bbls./Acre - - - - -

Packer Setting, Feet - - - - -

Viscosity, Centipoises @ - - - - -

A. P. I. Gravity, degrees @ 60 °F - - - - -

Elevation, Feet - - - - -

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LOG

Name Hickory Creek Oil Company Well No. HCO-61Depth Interval,
FeetDescription

174.0 - 174.1 Light micaceous siltstone.

174.1 - ~~199.0~~ Brown sandstone.~~199.0~~ - ~~220.0~~ Dark brown carbonaceous sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Hickory Creek Oil Company Lease - F-4 Well No. HCO-61

26' cored
9, 8, 1, 5

2283.5 *228.4* *361* *610.49*

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	~~174 - 178~~	13.7	40	39	79	510	10.	3.9	3.9	1,989	39.00
2	~~178 - 182~~	17.3	48	36	84	644	42.	4.0	7.9	2,576	168.00
3	~~182 - 186~~	18.9	46	30	76	675	26.	4.0	11.9	2,700	104.00
4	~~186 - 190~~	20.3	45	34	79	709	35.	4.0	15.9	2,836	140.00
5	~~190 - 193~~	18.9	54	30	84	792	49.	3.0	18.9	2,376	147.00
6	~~193.5~~	18.1	62	30	92	871	26.	1.0	19.9	871	26.00
7	~~194.5~~	17.8	60	35	95	828	39.	1.0	20.9	828	39.00
8	~~195.5~~	20.9	51	25	76	827	31.	1.0	21.9	827	31.00
9	~~196 - 197~~	25.5	57	15	72	1,128	203.	1.0	22.9	1,128	203.00
10	~~197 - 198~~	21.6	53	29	82	888	149.	1.0	23.9	888	149.00
11	~~198 - 199~~	21.2	53	19	72	872	*	1.0	24.9	872	-
12	~~199 - 200~~	14.2	55	39	94	606	0.49	1.0	25.9	606	0.49

* A Perm. sample was unobtainable.

÷ 12 = 30.1
1 - .302 = 69.9

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Hickory Creek Oil Company Lease - Well No. HCO-61

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
174.1 - ~~200.0~~	24.9	42.0	1,046.49

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
174.1 - ~~200.0~~	25.9	18.4	48.8	32.2	714	18,497