

OILFIELD RESEARCH LABORATORIES

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

August 13, 1979

Arnieville Oil Company
c/o Paul Porter
Rt. 2 North Cottonwood
Iola, Kansas 66749

Gentlemen:

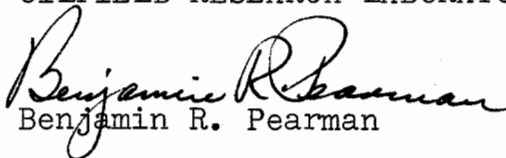
Enclosed herewith are the results of tests run on the rotary core taken from the Lair Lease, Well No. 3, Woodson County, Kansas, and submitted to our laboratory on August 9, 1979.

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

Your business is greatly appreciated.

Very truly yours,

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Benjamin R. Pearman

BRP:km
5 c to Iola, Kansas
1 c to Perry Brigham

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GENERAL INFORMATION & SUMMARY

Company Arnieville Oil Company Lease Lair Well No. 3

Location SE

Section 9 Twp. 24S Rge. 17E County Woodson State Kansas

Name of Sand	- - - - -	Squirrel
Top of Core	- - - - -	866.0
Bottom of Core	- - - - -	872.0
Top of Sand	- - - - -	866.0
Bottom of Sand	- - - - -	871.8
Total Feet of Permeable Sand	- - - - -	3.2
Total Feet of Floodable Sand	- - - - -	

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

1 - 2
11 - 20

0.5
2.7

0.5
3.2

Average Permeability Millidarcys	- - - - -	13.4
Average Percent Porosity	- - - - -	17.4
Average Percent Oil Saturation	- - - - -	51.3
Average Percent Water Saturation	- - - - -	18.7
Average Oil Content, Bbls./A. Ft.	- - - - -	678.
Total Oil Content, Bbls./Acre	- - - - -	2,577.
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

Company Arnieville Oil Company Lease Lair Well No. 3

<u>Depth Interval, Feet</u>	<u>Description</u>
866.0 - 866.6	Hard brown very calcareous fossiliferous sandstone.
866.6 - 867.4	Brown shaly sandstone.
867.4 - 868.1	Gray sandy shale.
868.1 - 868.6	Dark brown slightly shaly sandstone.
868.6 - 869.2	Dark brown sandstone.
869.2 - 869.7	Gray sandy shale.
869.7 - 871.8	Dark brown sandstone.
871.8 - 872.0	Gray sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Arncliffe Oil Company Lease Lair Well No. 3

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	866.5	9.7	61	14	75	459	Imp.	0.6	0.6	276	0.00
2	868.3	17.4	50	26	76	675	1.5	0.5	1.1	338	0.75
3	869.0	21.4	38	27	65	631	11.	0.6	1.7	379	6.60
4	870.2	17.4	52	18	70	702	19.	1.0	2.7	702	19.00
5	871.4	19.5	53	14	67	802	15.	1.1	3.8	882	16.50

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Arnieville Oil Company	Lease	Lair	Well No.	3