

JOHN T. DAVIS

CORE ANALYSIS REPORT

UMBARGER LEASE

WELL NO. ~~15~~

C-12
0-9

WILSON COUNTY, KANSAS



OILFIELD RESEARCH LABORATORIES

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

April 9, 1974

John T. Davis
212 East Locust
Independence, Kansas 67301

Dear Sir:

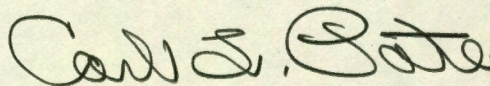
Enclosed herewith are the results of tests run on the Rotary core taken from the Umbarger Lease, Well No. I-5, Wilson County, Kansas, and submitted to our laboratory on April 6, 1974.

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

Your business is greatly appreciated.

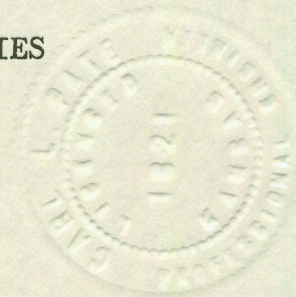
Very truly yours,

OILFIELD RESEARCH LABORATORIES



Carl L. Pate

CLP:bl
5 c to Independence, Kansas



Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company John T. Davis Lease Umbarger Well No. I-5

Location 250' FNL & 1320' FWL, SW $\frac{1}{4}$

Section 36 Twp. 28S Rge. 16E County Wilson State Kansas

Name of Sand - - - - -	Squirrel
Top of Core - - - - -	660.0
Bottom of Core - - - - -	684.0
Top of ^{Oil} Sand (Analyzed) - - - - -	664.0
Permeable	
Bottom of Sand - - - - -	677.8
Total Feet of Permeable Sand (Analyzed) - - - - -	16.8
Total Feet of Floodable Sand - - - - -	

Distribution of Permeable Sand:
Permeability Range
Millidarcys

	Feet	Cum. Ft.
0 - 10	6.8	6.8
10 - 20	2.6	9.4
20 - 40	4.6	14.0
40 & above	2.8	16.8

Average Permeability Millidarcys - - - - -	23.2
Average Percent Porosity - - - - -	16.8
Average Percent Oil Saturation - - - - -	43.9
Average Percent Water Saturation - - - - -	33.3
Average Oil Content, Bbls./A. Ft. - - - - -	611.
Total Oil Content, Bbls./Acre - - - - -	11,308.
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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Company John T. Davis Lease Umbarger Well No. I-5

Depth Interval, Feet	Description
660.0 - 663.0	Grayish light brown shaly sandstone.
663.0 - 664.0	Brown slightly calcareous sandstone.
664.0 - 665.0	Brown slightly shaly sandstone.
665.0 - 667.9	Dark brown sandstone.
667.9 - 675.0	Brown laminated shaly sandstone.
675.0 - 678.6	Grayish brown laminated shaly sandstone.
678.6 - 680.0	Grayish light brown very shaly sandstone.
680.0 - 684.0	Gray sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company John T. Davis Lease Umbarger Well No. I-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	660.2	16.8	25	46	71	326	1.2	1.2	1.2	391	1.44
2	662.1	12.7	15	77	92	146	0.95	1.8	3.0	243	1.71
3	664.2	22.8	49	25	74	869	5.7	1.0	4.0	869	5.70
4	665.8	20.6	54	22	76	865	46.	1.3	5.3	1,123	59.80
5	666.8	22.2	54	21	75	930	38.	1.6	6.9	1,488	60.80
6	668.4	17.3	53	27	80	714	60.	1.5	8.4	1,071	90.00
7	670.3	17.3	51	22	73	686	28.	1.5	9.9	1,029	42.00
8	671.5	14.0	54	35	89	587	13.	1.3	11.2	764	16.90
9	673.0	15.6	49	27	76	594	52.	1.5	12.7	890	78.00
10	674.4	17.5	48	23	71	840	16.	1.3	14.0	1,092	20.80
11	676.1	15.3	45	27	72	534	6.9	1.6	15.6	854	11.04
12	677.2	15.2	33	39	72	532	2.0	1.2	16.8	638	2.40
13	678.5	15.3	45	27	72	535	-	0.8	17.6	428	-
P-13	678.7	-	-	-	-	-	Imp.	0.5	18.1	-	0.00
14	679.5	13.6	45	38	83	476	Imp.	0.9	19.0	428	0.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company John T. Davis Lease Umbarger Well No. I-5

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
660.0 - 663.0	3.0	1.0	3.15
664.0 - 680.0	13.8	28.1	387.44
660.0 - 680.0	16.8	23.2	390.59

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
660.0 - 663.0	3.0	14.1	19.0	64.6	211	634
664.0 - 680.0	15.5	17.3	48.8	27.3	689	10,674
660.0 - 680.0	18.5	16.8	43.9	33.3	611	11,308