

# OILFIELD RESEARCH LABORATORIES

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

February 12, 1980

KLI Petroleum Corporation  
808 Southeast Sixth  
Evansville, Indiana 74048

Gentlemen:

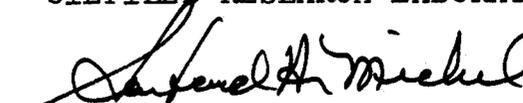
Enclosed herewith are the results of tests run on the rotary core taken from the Nelson Lease, Well No. K-39, Allen County, Kansas, and submitted to our laboratory on January 26, 1980.

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

  
Sanford A. Michel

SAM/tem

5 c to Evansville, Indiana

**Oilfield Research Laboratories**  
**GENERAL INFORMATION & SUMMARY**

Company           KLI Petroleum Corporation           Lease           Nelson           Well No.           K-39          

Location           165' SNL & 570' WEL          

Section           21           Twp.           26S           Rge.           21E           County           Allen           State           Kansas          

Elevation, Feet . . . . .	
Name of Sand . . . . .	Bartlesville
Top of Core . . . . .	655.0
Bottom of Core . . . . .	677.0
Top of Sand . . . . .	655.0
Bottom of Sand . . . . .	669.7
Total Feet of Permeable Sand . . . . .	13.1

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	5.8	5.8
10 - 20	3.4	9.2
20 - 40	3.0	12.2
55 & Above	0.9	13.1

Average Permeability Millidarcys . . . . .	16.8
Average Percent Porosity . . . . .	17.2
Average Percent Oil Saturation . . . . .	40.1
Average Percent Water Saturation . . . . .	39.0
Average Oil Content, Bbls./A. Ft. . . . .	534.
Total Oil Content, Bbls./Acre . . . . .	6,998.

LOGName  KLI Petroleum Corporation  Lease  Nelson  Well No.  K-39 

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
655.0 - 660.3	Light brown shaly sandstone.
660.3 - 660.5	Gray sandy shale.
660.5 - 661.0	Brown shaly sandstone.
661.0 - 661.9	Brown sandstone.
661.9 - 662.0	Gray sandy shale.
662.0 - 662.4	Brown slightly shaly sandstone.
662.4 - 662.9	Gray sandy shale.
662.9 - 663.2	Brown slightly shaly sandstone.
663.2 - 664.3	Gray sandy shale.
664.3 - 669.7	Brown slightly shaly sandstone.
669.7 - 669.8	Coal.
669.8 - 670.4	Shaly sandy conglomerate.
670.4 - 677.0	Gray sandy shale.

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**RESULTS OF SATURATION & PERMEABILITY TESTS**

**TABLE 1-B**

Company KLI Petroleum Corporation Lease Nelson Well No. K-39

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	655.2	14.2	32	55	87	353	4.5	1.0	1.0	353	4.50
2	656.3	15.0	40	44	84	466	2.3	1.0	2.0	466	2.30
3	657.7	15.7	44	37	81	536	6.3	1.0	3.0	536	6.30
4	658.5	16.6	34	42	76	438	4.7	1.0	4.0	438	4.70
5	659.6	15.6	44	42	86	533	17.	1.3	5.3	693	22.10
6	660.6	16.8	39	38	77	508	7.1	0.5	5.8	254	3.55
7	661.2	21.2	45	29	74	740	56.	0.9	6.7	666	50.40
8	662.3	19.4	41	29	70	617	19.	0.4	7.1	247	7.60
9	664.5	17.5	37	39	76	502	12.	0.7	7.8	351	8.40
10	665.5	19.0	37	35	72	545	38.	1.0	8.8	545	38.00
11	666.6	15.9	56	37	93	691	13.	1.0	9.8	691	13.00
12	667.2	19.6	40	33	73	608	26.	1.0	10.8	608	26.00
13	668.6	19.4	40	33	73	602	31.	1.0	11.8	602	31.00
14	669.6	17.9	35	39	74	486	1.8	0.7	12.5	340	1.26
15	670.2	14.9	30	48	78	347	0.68	0.6	13.1	208	0.41

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## SUMMARY OF PERMEABILITY & SATURATION TESTS

**TABLE III**

Company KLI Petroleum Corporation Lease Nelson Well No. K-39

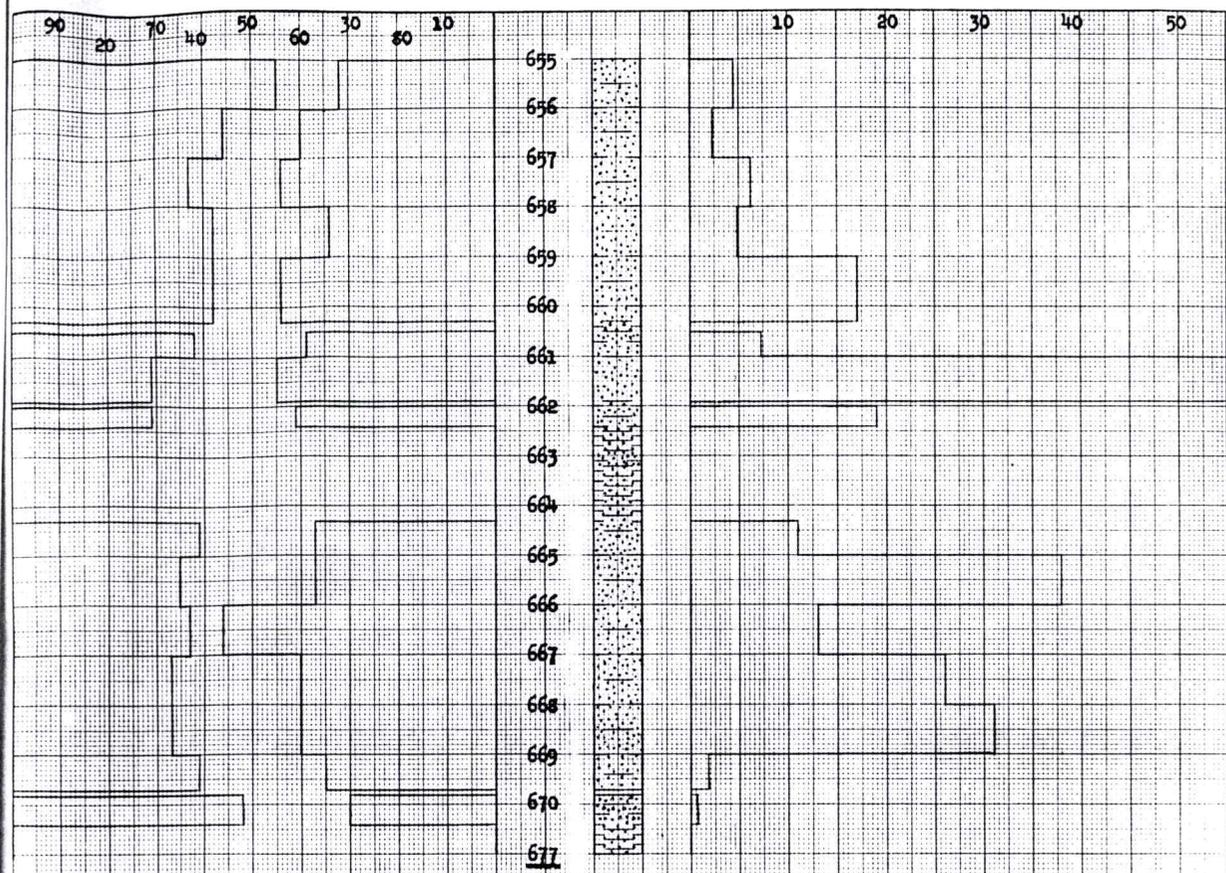
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
655.0 - 670.4	13.1	16.8	219.52

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
655.0 - 670.4	13.1	17.2	40.1	39.0	534	6,998

WATER SAT., PERCENT

OIL SAT., PERCENT

PERMEABILITY, IN MILLIDARCTS



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KEY:

- SANDSTONE
- SANDY SHALE
- COAL
- SHALY SANDSTONE
- SHALY SANDY CONGLOMERATE

# KLI PETROLEUM CORPORATION

NELSON LEASE

ALLEN COUNTY, KANSAS

WELL NO. K - 39

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCTS
655.0 - 670.4	13.1	17.2	40.1	39.0	16.8

OILFIELD RESEARCH LABORATORIES  
 CHANUTE, KANSAS  
 FEBRUARY, 1960 HR