

OILFIELD RESEARCH LABORATORIES

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

August 15, 1980

KLI Petroleum Corporation
808 Southeast Sixth Street
Evansville, Indiana 47708

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Nelson Lease, Well No. K-47, Allen County, Kansas and submitted to our laboratory on July 13, 1980.

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

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Sanford A. Michel

SAM/ks

3 c to Evansville, Indiana

Oilfield Research Laboratories
GENERAL INFORMATION & SUMMARY

Company KLI Petroleum Corporation Lease Nelson Well No. K-47
 Location 1350^o SNL & 1200^o EWL SW $\frac{1}{4}$
 Section 21 Twp. 26S Rge. 21E County Allen State Kansas

Elevation, Feet	-
Name of Sand	Bartlesville
Top of Core	639.0
Bottom of Core	658.2
Top of Sand	639.0
Bottom of Sand	658.2
Total Feet of Permeable Sand	11.4

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 5	6.9	6.9
5 & above	4.5	11.4

Average Permeability Millidarcys	3.6
Average Percent Porosity	13.0
Average Percent Oil Saturation	29.5
Average Percent Water Saturation	49.8
Average Oil Content, Bbls./A. Ft.	308.
Total Oil Content, Bbls./Acre	5,417.

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LOG

Name KLI Petroleum Corporation Lease Nelson Well No. K-47

<u>Depth Interval, Feet</u>	<u>Description</u>
639.0 - 639.9	Brown shaly sandstone.
639.9 - 645.1	Light brown very shaly sandstone.
645.1 - 645.6	Brown shaly sandstone.
645.6 - 647.9	Brown very shaly sandstone.
647.9 - 648.6	Brown shaly sandstone.
648.6 - 650.1	Grayish brown very shaly sandstone.
650.1 - 651.0	Grayish light brown shaly sandstone.
652.6 - 656.7	Grayish brown very shaly sandstone.
656.7 - 658.2	Brown shaly sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company KLI Petroleum Corporation Lease Nelson Well No. K-47

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	639.3	10.4	34	63	97	274	5.4	0.9	0.9	247	4.86
2	640.5	13.7	31	50	81	330	Imp.	1.2	2.1	396	0.00
3	541.4	15.0	26	43	69	303	0.40	1.0	3.1	303	0.40
4	642.5	14.9	35	33	68	405	Imp.	1.0	4.1	405	0.00
5	643.5	16.8	30	30	60	391	3.6	1.0	5.1	391	3.60
6	644.5	11.1	28	70	98	241	0.26	1.0	6.1	241	0.26
7	645.4	16.3	34	25	59	430	7.1	0.5	6.6	215	3.55
8	646.3	12.0	38	54	92	354	Imp.	1.3	7.9	460	0.00
9	647.4	11.3	52	33	85	456	Imp.	1.0	8.9	456	0.00
10	648.5	15.3	36	14	50	427	5.6	0.7	9.6	299	3.92
11	649.3	7.3	12	80	92	68	1.4	0.8	10.4	54	1.12
12	649.6	9.4	14	51	65	102	Imp.	0.7	11.1	71	0.00
13	650.5	9.1	18	76	94	127	8.7	0.9	12.0	114	7.83
14	653.5	15.6	32	46	78	387	1.8	1.0	13.0	387	1.80
15	654.5	10.9	16	77	93	135	Imp.	1.0	14.0	135	0.00
16	655.3	16.2	20	51	71	251	0.30	1.0	15.0	251	0.30
17	656.5	11.9	18	59	77	166	1.2	1.1	16.1	183	1.32
18	657.2	15.8	44	34	78	539	8.3	1.5	17.6	809	12.45

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company KLI Petroleum Corporation Lease Nelson Well No. K-47

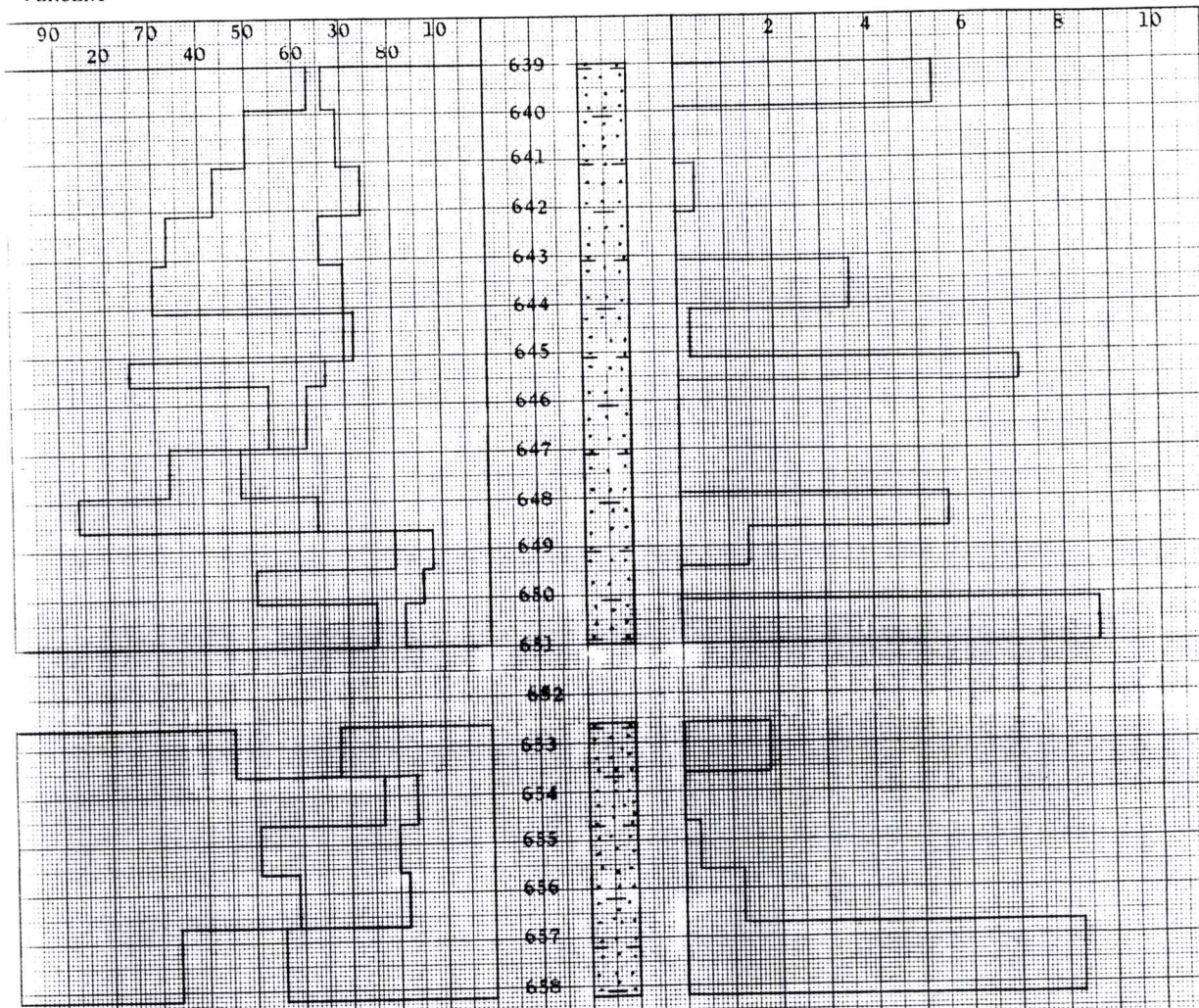
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
639.0 - 648.6	5.1	3.3	16.59
648.6 - 658.2	6.3	3.9	24.82
639.0 - 658.2	11.4	3.6	41.41

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
639.0 - 648.6	9.6	13.5	34.4	43.6	356	3,413
648.6 - 658.2	8.0	12.5	23.7	57.3	251	2,004
639.0 - 658.2	17.6	13.0	29.5	49.8	308	5,417

WATER SAT., PERCENT →

← OIL SAT., PERCENT

— PERMEABILITY, IN MILLIDARCYS



SHALY SANDSTONE

KLI PETROLEUM CORPORATION

NELSON LEASE

WELL NO. K-47

ALLEN COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY MILLIDARCYS
639.0 - 648.6	9.6	13.5	34.4	43.6	3.3
648.6 - 658.2	8.0	12.5	23.7	57.3	3.9
639.0 - 658.2	17.6	13.0	29.5	49.8	3.6

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 CHANUTE, KANSAS
 AUGUST, 1980