

OILFIELD RESEARCH LABORATORIES

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

July 30, 1980

L & L Oil Company
P. O. Box 13
Benedict, Kansas 66714

Gentleman:

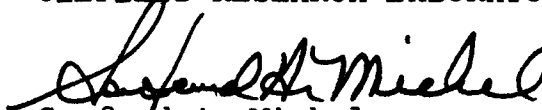
Enclosed herewith are the results of tests run on the rotary core taken from the Little Lease, Well No. 1-A, Crawford County, Kansas, and submitted to our laboratory on July 3, 1980.

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/kas
5 c to Benedict, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company L & L Oil Company Lease Little Well No. 1-A
 Location 990' FWL & 450' FSL
 Section 26 Twp. 28S Rgs. 21E County Crawford State Kansas

Elevation, Feet	
Name of Sand	Bartlesville
Top of Core	385.0
Bottom of Core	406.7
Top of Sand	385.5
Bottom of Sand	406.7
Total Feet of Permeable Sand	17.6

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	9.2	9.2
10 - 20	2.8	12.0
20 - 40	2.9	14.9
60 & above	2.7	17.6

Average Permeability Millidarcys	24.4
Average Percent Porosity	15.2
Average Percent Oil Saturation	39.3
Average Percent Water Saturation	49.0
Average Oil Content, Bbls./A. Ft.	497.
Total Oil Content, Bbls./Acre	9,980.

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LOGName L & L Oil Company Lease Little Well No. 1-A

<u>Depth Interval, Feet</u>	<u>Description</u>
385.0 - 385.5	Gray sandy shale.
385.5 - 388.6	Grayish brown very shaly sandstone.
388.6 - 389.3	Gray sandy shale.
389.3 - 389.7	Brown very shaly sandstone.
389.7 - 390.1	Gray sandy shale.
390.1 - 392.7	Brown slightly shaly sandstone.
392.7 - 394.9	Brown sandstone.
394.9 - 396.1	Brown shaly sandstone.
396.1 - 398.0	Brown sandstone.
398.0 - 399.3	Brown slightly shaly sandstone.
399.3 - 400.9	Brown very shaly sandstone.
400.9 - 402.6	Brown sandstone.
402.6 - 404.1	Dark brown slightly carbonaceous shaly sandstone.
404.1 - 406.7	Brown sandstone.

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company L & L Oil Company

Lease Little

Well No. 1-A

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	385.8	7.9	6	89	95	37	Imp.	0.5	0.5	18	0.00
2	386.6	6.5	10	80	90	50	Imp.	1.0	1.5	50	0.00
3	387.7	4.7	3	92	95	11	Imp.	1.0	2.5	11	0.00
4	388.5	12.6	5	79	84	49	5.4	0.6	3.1	29	3.24
5	389.5	14.8	50	40	90	574	0.76	0.4	3.5	230	0.30
6	390.5	14.7	38	51	89	433	8.7	0.9	4.4	390	7.83
7	391.5	15.2	40	56	96	472	7.1	1.0	5.4	472	7.10
8	392.5	15.8	27	64	91	331	8.3	0.7	6.1	232	5.81
9	393.5	14.0	42	45	87	456	15.	1.2	7.3	547	18.00
10	394.5	18.3	35	45	80	497	84.	1.0	8.3	497	84.00
11	395.5	15.7	44	43	87	536	5.5	1.2	9.5	643	6.60
12	396.3	16.6	46	41	87	592	20.	0.9	10.4	533	18.00
13	397.5	15.7	46	45	91	560	10.	1.0	11.4	560	10.00
14	398.5	21.4	34	36	70	565	9.1	1.3	12.7	734	11.83
15	399.5	14.5	50	48	98	563	0.47	1.0	13.7	563	0.47
16	400.5	19.8	44	25	69	676	1.0	0.6	14.3	406	0.60
17	401.5	13.5	61	37	98	639	32.	1.0	15.3	639	32.00
18	402.5	16.8	52	45	97	678	61.	0.7	16.0	475	42.70
19	403.5	16.9	56	35	91	734	0.25	1.5	17.5	1101	0.38
20	404.5	20.2	45	28	73	705	149.	1.0	18.5	705	149.00
21	405.5	16.1	57	40	97	712	18.	0.6	19.1	427	10.80
22	406.5	17.8	52	42	94	718	21.	1.0	20.1	718	21.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease	Well No.				
L. & L. Oil Company	Little	1-A				
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.			
385.5 - 388.6	0.6	5.4	3.24			
389.3 - 406.7	17.0	25.1	426.42			
385.5 - 406.7	17.6	24.4	429.66			
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
385.5 - 388.6	3.1	7.4	6.1	85.1	35	108
389.3 - 406.7	17.0	16.6	45.4	42.4	581	9,872
385.5 - 406.7	20.1	15.2	39.3	49.0	497	9,980