

OILFIELD RESEARCH LABORATORIES

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

March 5, 1980

F.C. Oil Company
P.O. Box 24
Ottawa, Kansas 66067

Gentlemen:

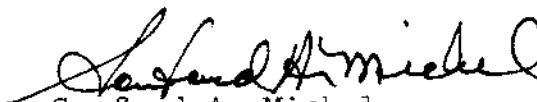
Enclosed herewith are the results of tests run on the rotary cores taken from the Alice Caylor Lease, Well No. 3, Miami County, Kansas, and submitted to our laboratory on February 21, 1980.

The cores were 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 Ottawa, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company F.C. Oil Company Lease Alice Caylor Well No. 3

Location -

Section 31 Twp. 17S Rge. 22E County Miami State Kansas

Elevation, Feet

Name of Sand	Peru	Squirrel
Top of Core	316.0	480.0
Bottom of Core	329.5	488.5
Top of Sand	316.0	481.3
Bottom of Sand	329.5	487.7
Total Feet of Permeable Sand	11.9	4.1

Distribution of Permeable Sand: Permeability Range Millidarcys

Feet

Cum. Ft.

PERU SAND

0 - 10	5.4	5.4
10 - 15	2.5	7.9
25 - 35	3.0	10.9
50 & Above	1.0	11.9

SQUIRREL SAND

0 - 3	2.4	2.4
6 & Above	1.7	4.1

Average Permeability Millidarcys	17.6	3.1
Average Percent Porosity	14.6	17.3
Average Percent Oil Saturation	29.7	37.9
Average Percent Water Saturation	57.5	41.7
Average Oil Content, Bbls./A. Ft.	353.	508.
Total Oil Content, Bbls./Acre	4,759.	2,593.

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LOGName F.C. Oil Company Lease Alice Caylor Well No. 3Depth Interval,
FeetDescriptionPERU SAND

316.0 - 317.4	Grayish, light brown, very shaly sandstone.
317.4 - 325.0	Light brown, broken shaly sandstone containing a vertical fracture.
325.0 - 328.0	Brown, shaly sandstone.
328.0 - 329.5	Grayish light brown, very shaly sandstone.

SQUIRREL SAND

480.0 - 481.3	Brownish gray, sandy shale.
481.3 - 482.7	Brown, shaly, sandstone.
482.7 - 484.0	Gray, sandy shale.
484.0 - 487.7	Brown and gray, broken shaly sandstone.
487.7 - 488.5	Gray, sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE I-B

Company F.C. Oil Company Lease Alice Caylor 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	316.5	8.3	20	70	90	PERU SAND	9.4	1.4	1.4	181	13.16
2	317.5	16.2	27	68	95	129	Imp.	0.6	2.0	203	0.00
3	318.5	16.0	19	70	89	339	33.	1.0	3.0	236	33.00
4	319.5	17.4	39	39	78	527	53.	1.0	4.0	527	53.00
5	320.5	15.6	43	44	87	520	14.	1.5	5.5	780	21.00
6	322.5	17.2	38	44	82	507	6.0	1.5	7.0	761	9.00
7	323.5	6.3	22	71	93	108	Imp.	1.0	8.0	108	0.00
8	324.5	13.6	6	92	98	63	13.	1.0	9.0	63	13.00
9	325.5	16.9	39	43	82	511	27.	1.0	10.0	511	27.00
10	326.5	18.6	33	50	83	476	8.7	1.0	11.0	476	8.70
11	327.5	15.5	43	40	83	517	30.	1.0	12.0	517	30.00
12	328.5	14.8	23	67	90	264	1.0	1.5	13.5	396	1.50
<u>SQUIRREL SAND</u>											
1	481.5	19.2	39	25	64	581	6.0	0.7	0.7	407	4.20
2	482.5	17.6	38	35	73	519	2.3	0.7	1.4	363	1.61
3	484.2	19.5	31	47	78	469	0.16	1.0	2.4	469	0.16
4	485.3	16.3	40	51	91	506	Imp.	1.0	3.4	506	0.00
5	486.5	17.4	42	33	75	567	6.7	1.0	4.4	567	6.70
6	487.5	13.6	38	57	95	401	0.26	0.7	5.1	281	0.18

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	F.C. Oil Company	Lease	Alice Caylor	Well No.	3
	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	

481.3 - 487.7 5.1 17.3 37.9 41.7 508 2,593

316.0 - 329.5 13.5 14.6 29.7 57.5 353 4,759

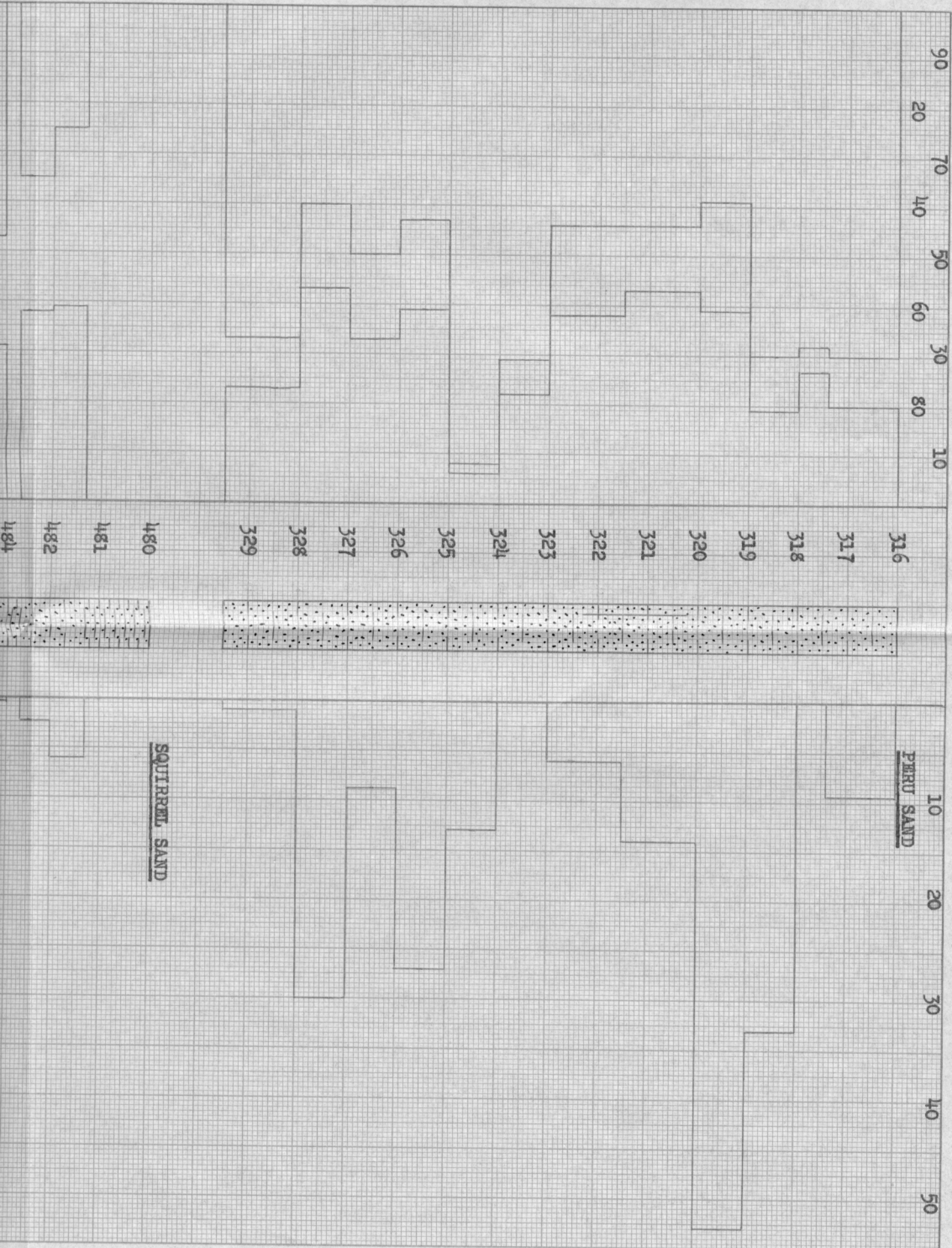
WATER SAT.,
PERCENT

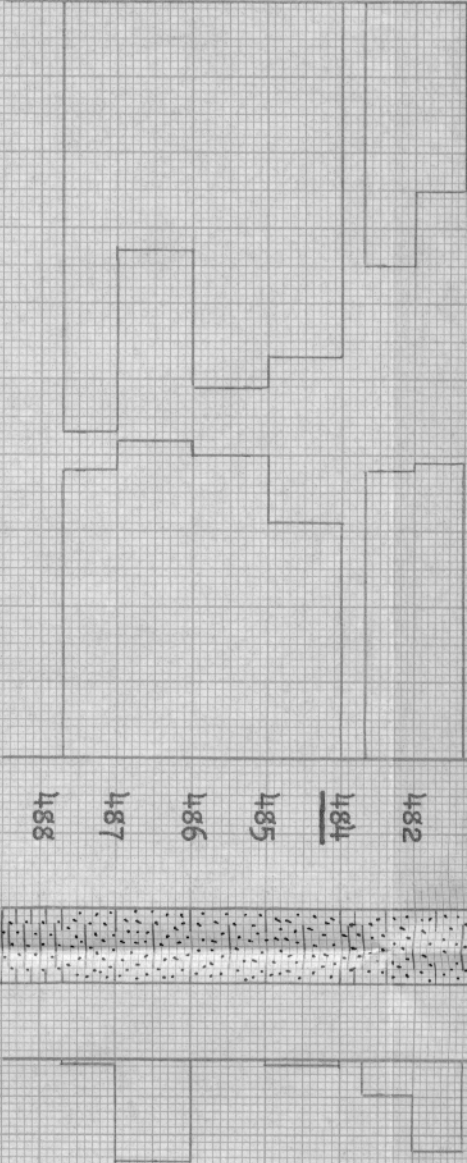
OIL SAT.,
PERCENT

K&E 10 X 10 TO THE CENTIMETER • 25 X 39 CM.
KODAK & ESSER CO. MADE IN U.S.A.

47 1512

PERMEABILITY, IN MILLIDARCS





KEY:

SHALY SANDSTONE

FORMATION CONTAINING A VERTICAL FRACTURE

SANDY SHALE

F. C. OIL COMPANY

ALICE CAYLOR LEASE

WELL NO. 3

MIAMI COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY MILLIDARCS
316.0 - 329.5	13.5	PERU SAND 14.6	29.7	57.5	17.6
481.3 - 487.7	5.1	SQUIRREL SAND 17.3	37.9	41.7	3.1