

OILFIELD RESEARCH LABORATORIES

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

June 12, 1980

JRK Oil Company
202 South State Street
Iola, Kansas 66749

Gentlemen:

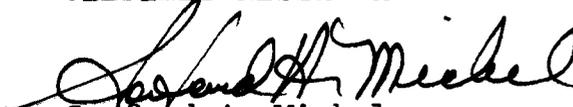
Enclosed herewith are the results of tests run on the rotary core taken from the Herder Lease, Well No. 6, Allen County, Kansas, and submitted to our laboratory on June 2, 1980.

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 Iola, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company JRK Oil Company Lease Herder Well No. 6
 Location 1585' WEL & 1150' SNL SE $\frac{1}{4}$
 Section 28 Twp. 25S Rge. 18E County Allen State Kansas

Elevation, Feet	
Name of Sand	Bartlesville
Top of Core	827.0
Bottom of Core	841.8
Top of Sand	827.0
Bottom of Sand	841.8
Total Feet of Permeable Sand	14.5

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	10.3	10.3
20 - 50	1.6	11.9
90 - 100	0.8	12.7
300 & Above	1.8	14.5

Average Permeability Millidarcys	52.1
Average Percent Porosity	17.1
Average Percent Oil Saturation	31.6
Average Percent Water Saturation	39.3
Average Oil Content, Bbls./A. Ft.	446.
Total Oil Content, Bbls./Acre	6,472.

OILFIELD RESEARCH LABORATORIES

LOGName JRK Oil Company Lease Herder Well No. 6Depth Interval,
FeetDescription

827.0 - 827.8

Brown slightly laminated sandstone and shale.

827.8 - 831.1

Brown and gray laminated sandstone and shale.

831.1 - 831.4

Gray sandy shale.

831.4 - 836.2

Brown and gray laminated sandstone and shale.

836.2 - 836.6

Brown sandstone.

836.6 - 838.8

Brown and gray laminated sandstone and shale.

838.8 - 840.6

Dark brown sandstone.

840.6 - 841.8

Black carbonaceous sandstone.

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE I-B

Company JRK Oil CompanyLease HerderWell No. 6

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	827.5	14.5	26	50	76	293	90.	0.8	0.8	234	72.00
2	828.5	14.2	26	55	81	286	4.9	1.3	2.1	372	6.37
3	829.5	12.5	23	65	88	223	4.6	1.0	3.1	223	4.60
4	830.5	18.5	30	33	63	431	0.78	1.0	4.1	431	0.78
5	831.5	16.9	35	33	68	459	0.90	1.0	5.1	459	0.90
6	832.5	16.4	20	51	71	255	4.3	1.0	6.1	255	4.30
7	833.5	15.4	24	46	70	287	6.1	1.0	7.1	287	6.10
8	834.5	16.6	20	50	70	258	3.5	0.9	8.0	232	3.15
9	835.4	13.4	17	59	76	177	1.5	0.9	8.9	159	1.35
10	836.5	17.5	33	35	68	448	46.	0.4	9.3	179	18.40
11	837.5	15.8	17	50	67	208	4.8	1.0	10.3	208	4.80
12	838.4	18.5	35	27	62	502	9.1	1.2	11.5	602	10.92
13	839.5	23.6	53	14	67	970	364.	0.8	12.3	776	291.20
14	840.4	22.6	55	10	65	962	305.	1.0	13.3	962	305.00
15	841.5	20.6	57	12	69	911	21.	1.2	14.5	1093	25.20

Oilfield Research Laboratories

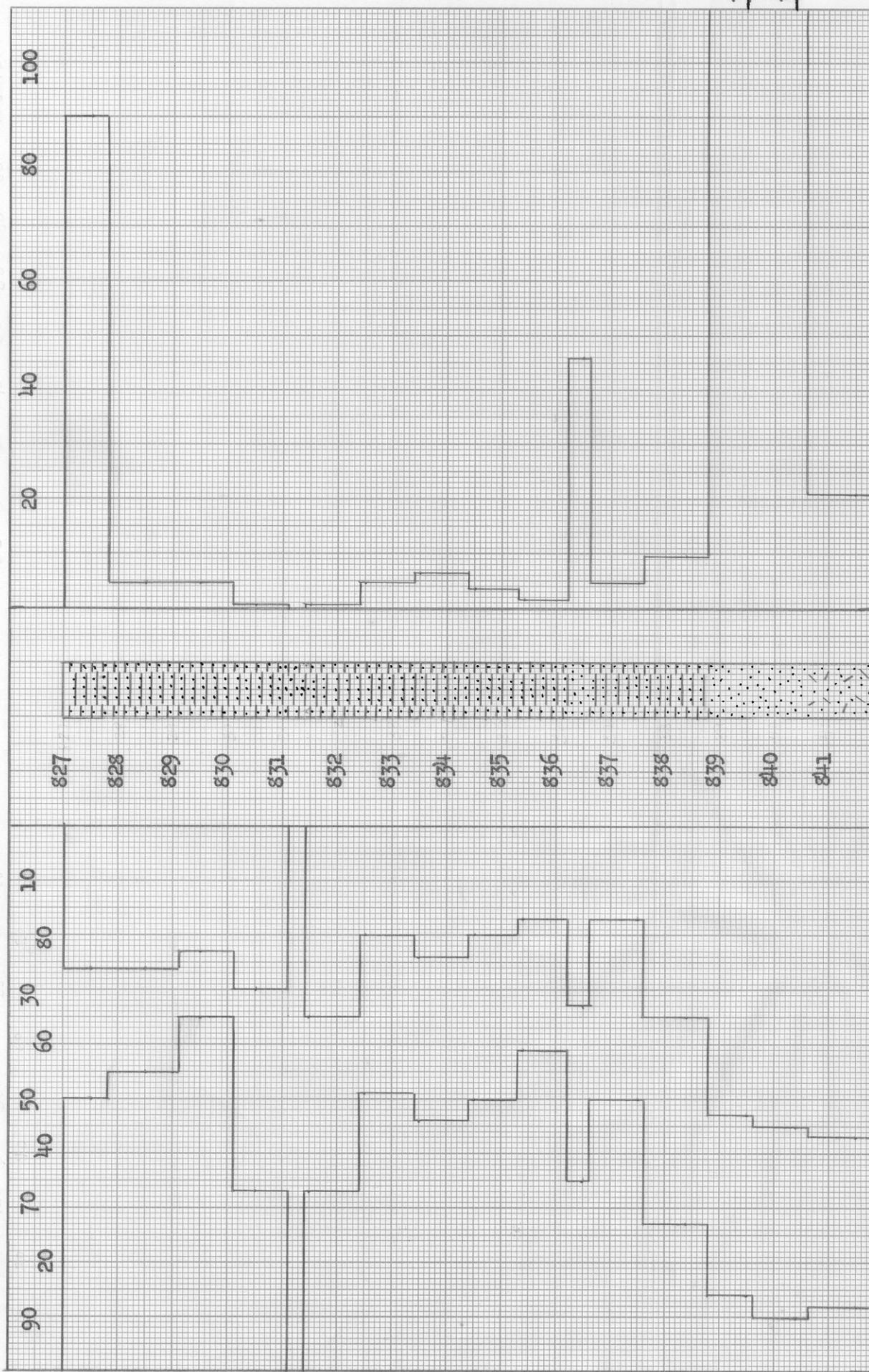
SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lease		Herder		Well No.		
JRK Oil Company						6		
Depth Interval, Feet	Feet of Core Analyzed	Average Porosity Percent	Average Percent Oil Saturation	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Average Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbl./Acre
827.0 - 838.8	11.5	15.8	25.4	11.6	133.67	46.4	317	3,641
838.8 - 841.8	3.0	22.1	55.3	207.1	621.40	11.9	944	2,831
827.0 - 841.8	14.5	17.1	31.6	52.1	755.07	39.3	446	6,472

WATER SAT., PERCENT → OIL SAT., PERCENT ←

PERMEABILITY, IN MILLIDARCYS



KEY:

- Laminated Sandstone & Shale
- Sandstone

- Sandy Shale
- Carbonaceous Sandstone

KEY:

 LAMINATED SANDSTONE & SHALE

 SANDY SHALE

 SANDSTONE

 CARBONACEOUS SANDSTONE

JRK OIL COMPANY

HERDER LEASE

ALLEN COUNTY, KANSAS

WELL NO. 6

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE		AVG. OIL		AVG. WATER		AVERAGE	
		PERCENT POROSITY	SATURATION PERCENT	SATURATION PERCENT	SATURATION PERCENT	PERMEABILITY MILLIDARCS			
827.0 - 838.8	11.5	15.8	25.4	46.4	11.6				
838.8 - 841.8	3.0	22.1	55.3	11.9	207.1				
827.0 - 841.8	14.5	17.1	31.6	39.3	52.1				

OILFIELD RESEARCH LABORATORIES
 CHANUTE, KANSAS
 JUNE, 1980
 VM