

OILFIELD RESEARCH LABORATORIES

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

May 28, 1981

James E. Russell Petroleum, Inc.
P. O. Box 2618
Abilene, Texas 79604

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Minckley "B" Section 10 Lease, Well No. 121, located in Anderson County, Kansas.

The core was sampled and sealed in plastic bags by a representative of Oilfield Research Laboratories and was received in our laboratory on May 21, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

3 c to Abilene, Texas
2 c to Chanute, Kansas

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company James E. Russell Petroleum, Inc. Minckley "B"
 Location 660' SNL & 5' EWL NW $\frac{1}{4}$ Lease Section 10 Well No. 121
 Section 10 Twp. 23S Rge. 19E County Anderson State Kansas

Elevation, Feet Datum: Mean Sea Level (Ground Level) 1025.6
 Name of Sand Squirrel
 Top of Core 694.0
 Bottom of Core 714.0
 Top of Sand 694.4
 Bottom of Sand 707.9
 Total Feet of Permeable Sand 4.9

Distribution of Permeable Sand: Permeability Range Millidarcys

	Feet	Cum. Ft.
0 - 0.60	2.0	2.0
0.60 & Above	2.9	4.9

Average Permeability Millidarcys 0.72
 Average Percent Porosity 11.2
 Average Percent Oil Saturation 10.4
 Average Percent Water Saturation 76.0
 Average Oil Content, Bbls./A. Ft. 87.
 Total Oil Content, Bbls./Acre 652.

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LOG

Name James E. Russell Petroleum, Inc.

Lease Minckley B Section 10 Well No. 121

<u>Depth Interval, Feet</u>	<u>Description</u>
694.0 - 694.4	Shale, gray, sandy.
694.4 - 700.3	Sandstone and shale, light brown and gray laminated.
700.3 - 705.1	Shale, gray, sandy.
705.1 - 705.7	Sandstone, light brown and gray shale laminated.
705.7 - 706.9	Shale, gray, sandy.
706.9 - 707.9	Sandstone, brown, shaly.
707.9 - 714.0	Shale, gray, sandy.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company James E. Russell Petroleum, Inc. Lease Minckley "B" Section 10 Well No. 121

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	694.6	9.3	5	90	95	36	Imp.	1.0	1.0	36	0.00
2	695.5	13.8	6	80	86	65	1.1	1.0	2.0	65	1.10
3	696.7	13.8	3	72	75	32	0.57	0.9	2.9	29	0.51
4	697.4	11.7	11	77	88	100	0.87	0.9	3.8	90	0.78
5	698.3	12.4	12	65	77	115	0.89	1.0	4.8	115	0.89
6	699.3	9.2	6	91	97	43	0.22	1.1	5.9	47	0.24
7	705.6	3.9	21	73	94	64	Imp.	0.6	6.5	38	0.00
8	707.7	13.0	23	57	80	232	Imp.	1.0	7.5	232	0.00

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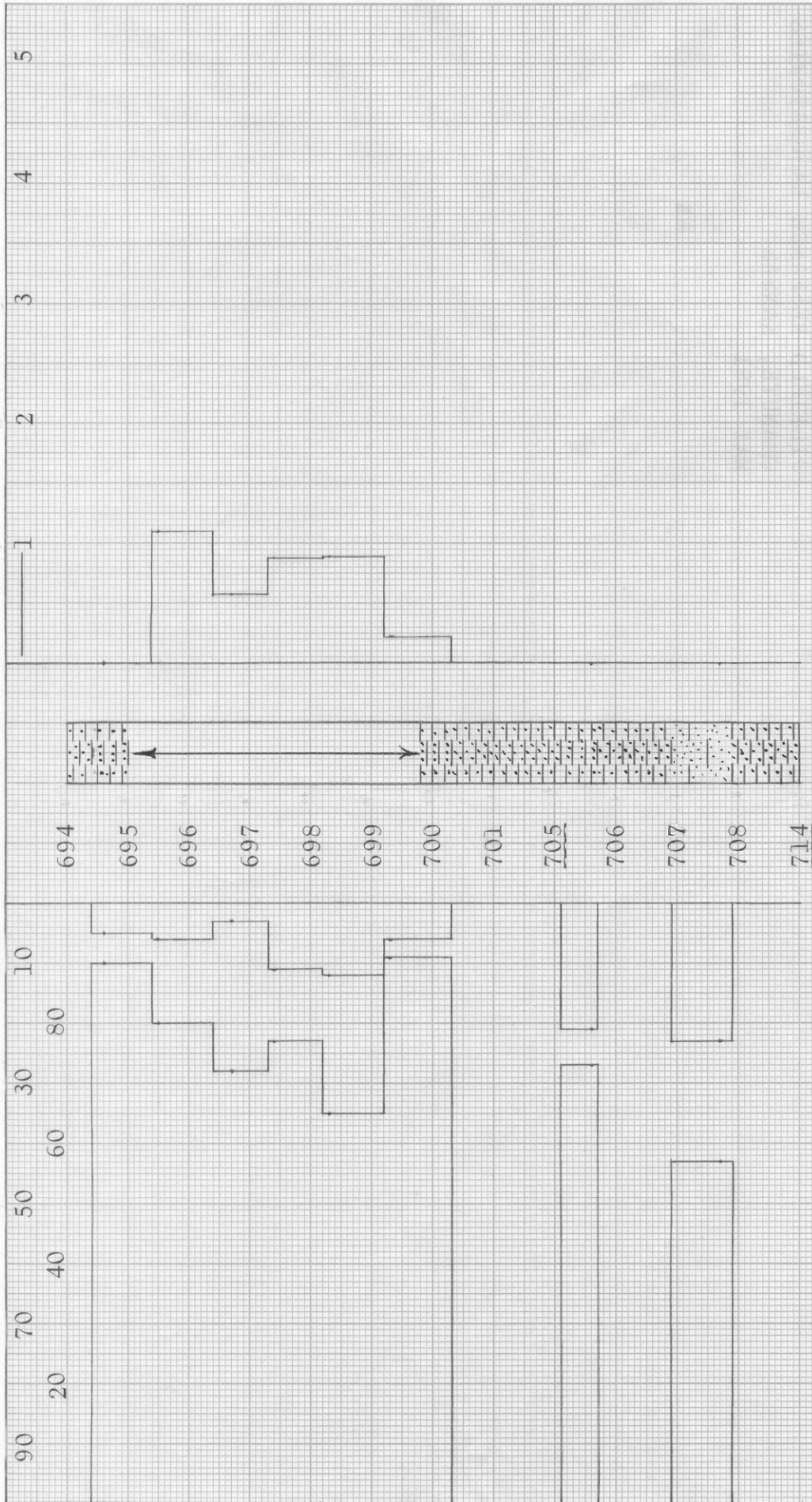
SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		James E. Russell Petroleum, Inc.		Lease Minckley "B" Section 10		Well No.		121
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.					
694.4 - 707.9	4.9	0.72	3.52					
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		
694.4 - 707.9	7.5	11.2	10.4	76.0	87	652		

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

PERMEABILITY, IN MILLIDARCYS



KEY:

SANDY SHALE

SHALY SANDSTONE

LAMINATED SANDSTONE AND SHALE

JAMES E. RUSSELL PETROLEUM, INC.

WELL NO. 121

MINCKLEY "B" SECTION 10 LEASE

ANDERSON COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE PERCENT POROSITY	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCS
694.4 - 707.9	7.5	11.2	10.4	76.0	0.72

NOTE: ELEVATION FEET - DATUM: MEAN SEA LEVEL ((GROUND LEVEL) 1025.6

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CHANUTE, KANSAS
MAY 1981

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