

15-001-26706
JAMES E. RUSSELL PETROLEUM, INC.

CORE ANALYSIS REPORT

SHIRLEY LEASE

WELL NO. R-1

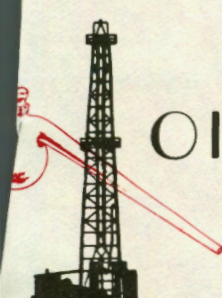
ALLEN COUNTY, KANSAS

29-26-24E

OILFIELD RESEARCH LABORATORIES

536 N. HIGHLAND

CHANUTE, KANSAS



OILFIELD RESEARCH LABORATORIES

P. O. BOX 647 - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

May 31, 1985

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

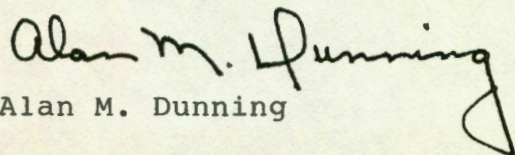
Gentlemen:

Enclosed herewith is the report of the analysis of the rotary core taken from the Shirley Lease, Well No. R-1, located in Allen County, Kansas and submitted to our laboratory on May 2, 1985.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Alan M. Dunning

AMD/ral

8 copies

- REGISTERED ENGINEERS -

CORE ANALYSIS - WATER ANALYSIS - REPRESSURING ENGINEERING - SURVEYING & MAPPING - PROPERTY EVALUATION & OPERATION

Oilfield Research Laboratories
GENERAL INFORMATION & SUMMARY

Company James E. Russell Petroleum, Inc. Lease Shirley Well No. R-1
Location 1280' WEL & 1185' NSL
Section 29 Twp. 26S Rge. 21E County Allen State Kansas

Elevation, Feet Datum: Mean Sea Level (Ground Level) 1065.5
Name of Sand..... Bartlesville
Top of Core 680.0
Bottom of Core 720.0
Top of Pay Sand 689.0
Bottom of Pay Sand..... 695.5
Total Feet of Permeable Sand 12.3
Total Feet of Productive Oil Sand -

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 1.0	9.8	9.8
1.0 - 2.0	0.8	10.6
3.0 - 4.0	1.2	11.8
4.0 - 5.0	0.5	12.3

The core was sampled and the samples sealed in plastic bags by a representative of the client. Salt water base mud with 2% KCl was the drilling fluid used during the coring operation. The core was reported to be from a non-virgin area.

FORMATION CORED

The detailed log of the formation cored is as follows:

<u>Depth Interval, Feet</u>	<u>Description</u>
680.0 - 681.5	Sandstone, gray, very shaly.
681.5 - 689.0	Sandstone, grayish brown, very shaly.
689.0 - 691.0	Sandstone, brown, shaly, with scattered gray shale and mica partings.
691.0 - 693.5	Sandstone, gray and brown, alternate layers, very shaly.
693.5 - 694.0	Sandstone, brown, shaly.
694.0 - 694.5	Shale, gray, with scattered brown sandstone stringers.
694.5 - 696.3	Sandstone, brown, very shaly, calcareous.
696.3 - 706.0	Shale, gray.
706.0 - 708.0	Limestone, gray.
708.0 - 708.6	Sandstone, gray, calcareous.
708.6 - 720.0	Shale, gray.

DISCUSSION

Coring was commenced at 680.0 feet in very shaly sand. Analysis indicates that 16.3 feet of core between 680.0 and 696.3 feet is predominantly very shaly sandstone. The lower 23.7 feet of section

is mostly gray shale.

Based on a study of the core data, and history of the area as provided by the client, it appears that completion of this well would not be an economic success. Therefore, no recovery estimates are given.

The results expressed herein are the best professional opinion of the personnel of Oilfield Research Laboratories based on the rock properties determined from this core by generally accepted laboratory practices. We assume no responsibility or liability for the use of these data for purposes other than intended by the analysis of this core or circumstances over which we have no control. This report has been prepared for the exclusive use of our client.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

Company James E. Russell Petroleum, Inc. Lease Shirley Well No. R-1

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	680.3	4.5	2	95	97	7	Imp.	0.8	0.8	6	0.00
2	681.2	9.0	7	89	96	49	Imp.	0.7	1.5	34	0.00
3	682.0	12.8	16	81	97	159	0.21	1.0	2.5	159	0.21
4	683.1	11.4	4	91	95	35	Imp.	1.0	3.5	35	0.00
5	684.0	11.9	22	70	92	203	0.22	1.0	4.5	203	0.22
6	685.1	12.8	11	84	95	109	0.22	1.0	5.5	109	0.22
7	686.0	11.0	5	92	97	43	0.31	1.4	6.9	60	0.43
8	687.0	13.0	24	73	97	242	0.53	1.1	8.0	266	0.58
9	688.3	12.1	14	82	96	131	Imp.	1.0	9.0	131	0.00
10	689.3	13.4	23	73	96	239	1.1	0.8	9.8	191	0.88
11	689.9	14.8	26	61	87	299	3.0	1.2	11.0	359	3.60
12	691.1	12.8	33	64	97	328	0.17	0.7	11.7	230	0.12
13	692.0	13.5	23	74	97	241	0.28	1.0	12.7	241	0.28
14	692.9	13.5	31	65	96	325	0.26	0.8	13.5	260	0.21
15	693.9	13.8	27	61	88	289	4.7	0.5	14.0	145	2.35
16	695.0	15.7	24	73	97	292	0.56	1.0	15.0	292	0.56
17	696.0	8.9	36	57	93	249	0.18	0.8	15.8	199	0.14
			AVERAGES						TOTALS		
	680.0-689.0	11.2	11.9	83.9			0.18		9.0	1003	1.66
	689.0-695.5	14.1	26.3	67.7			1.3		6.0	1718	8.00
	695.5-696.3	8.9	36.0	57.0			0.18		0.8	199	0.14

Oilfield Research Laboratories

RESULTS OF LABORATORY FLOODING TESTS

Company James E. Russell Petroleum, Inc. Lease Shirley Well No. R-1

Sample No.	Depth, Feet	Effective Porosity Percent	Original Oil Saturation		Oil Recovery		Residual Saturation			Volume of Water Recovered cc*	Effective Permeability Millidarcys**	Initial Fluid Production Pressure Lbs./Sq./In.
			%	Bbls./A. Ft.	%	Bbls./A. Ft.	% Oil	% Water	Bbls./A. Ft.			
5	684.0	12.3	22	210	0	0	22	70	210	0	Imp.	-
6	685.1	12.9	11	110	0	0	11	84	110	0	Imp.	-
7	686.0	11.4	5	44	0	0	5	92	44	0	Imp.	-
8	687.0	13.0	24	242	0	0	24	73	242	0	Imp.	-
9	688.3	12.4	14	135	0	0	14	82	135	0	Imp.	-
10	689.3	13.4	23	239	0	0	23	73	239	0	Imp.	-
11	689.9	14.7	26	297	0	0	26	61	297	0	Imp.	-
12	691.1	12.9	33	330	0	0	33	64	330	0	Imp.	-
13	692.0	13.5	23	241	0	0	23	74	241	0	Imp.	-
14	692.9	13.6	31	327	0	0	31	65	327	0	Imp.	-
15	693.9	13.8	27	289	0	0	27	61	289	0	Imp.	-
16	695.0	15.7	24	292	0	0	24	73	292	0	Imp.	-
17	696.0	9.1	36	254	0	0	36	57	254	0	Imp.	-

Notes: cc—cubic centimeter.

*—Volume of water recovered at the time of maximum oil recovery.

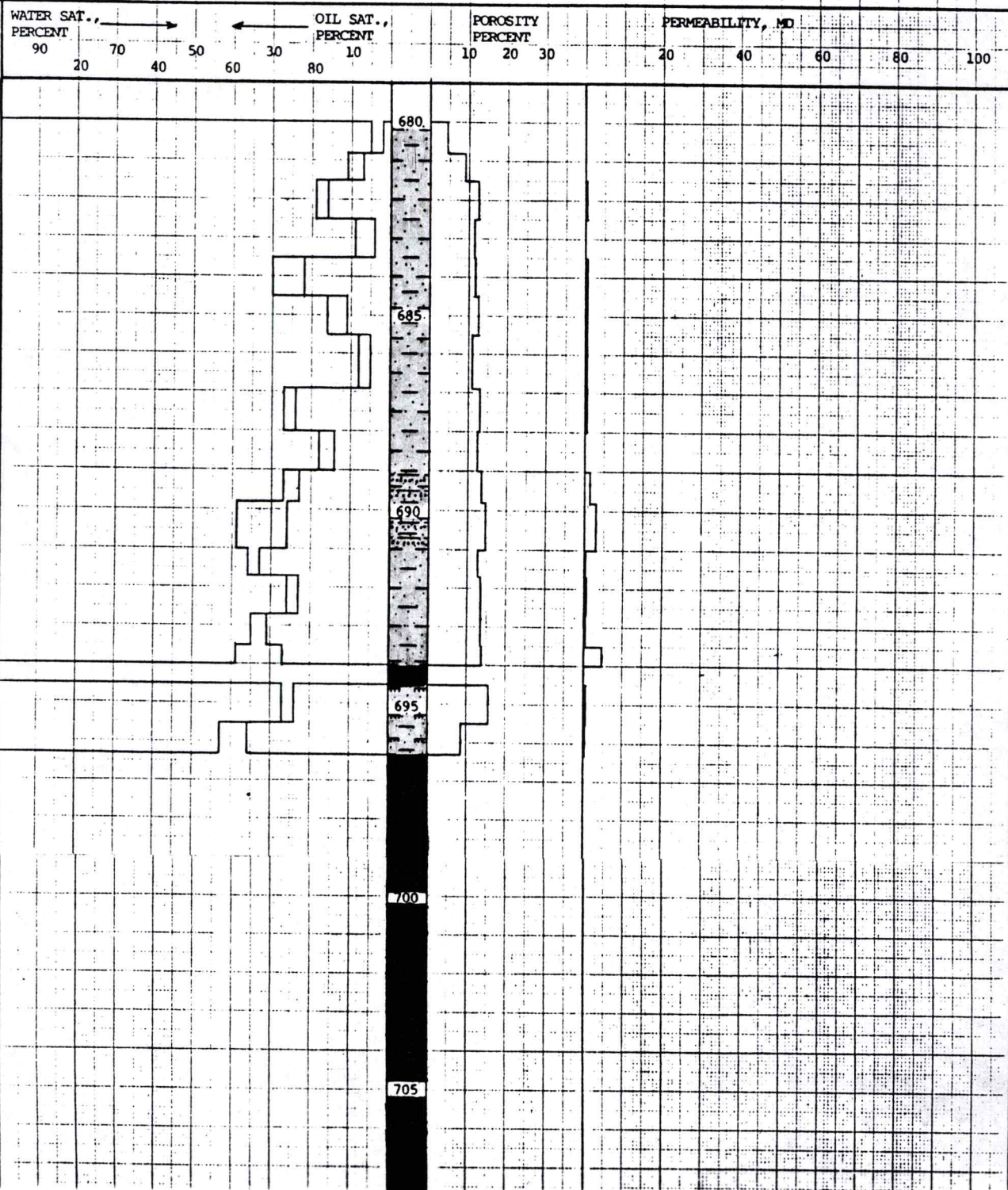
**—Determined by passing water through sample which still contains residual oil.

—COREGRAPH—

OILFIELD RESEARCH LABORATORIES

JAMES E. RUSSELL PETROLEUM, INC.

LEASE Shirley WELL NO. R-1 DATE RECEIVED May 2, 1985
FIELD Savonburg Northeast ELEVATION 1065.5 MSL - GL
COUNTY Allen STATE Kansas FORMATION Bartlesville Sandstone
LOCATION 1280' WEL & 1185' NSL DRILLING FLUID Salt Water Mud & 2% KCl
Sec. 29, T-26S, R-21E TYPE OF CORE Rotary
INTERVAL CORED 680.0' - 720.0'



700

705

710

715

720

KEY:



SANDSTONE, SHALY



SHALE



LIMESTONE



SANDSTONE, SHALY, CALCAREOUS



SANDSTONE, SHALY, WITH SHALE AND MICA PARTINGS



SHALE, WITH SANDSTONE STRINGERS



SANDSTONE, CALCAREOUS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVERAGE PERMEABILITY, MILLIDARCYs
680.0 - 689.0	9.0	11.2	11.9	83.9	0.18
689.0 - 695.5	6.0	14.1	26.3	67.7	1.3
695.5 - 696.3	0.8	8.9	36.0	57.0	0.18

CHANUTE, KANSAS
MAY, 1985 RAL