



OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS - PHONE HE1-2650

February 15, 1968

Stubbs & Fleming
680 Fourth National Building
Wichita, Kansas 67202

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Kellar Lease, Well No. 1, Greenwood County, Kansas, and submitted to our laboratory on February 14, 1968.

This core is from a virgin territory and was sampled and the samples sealed in tin cans by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:bjo

5 c. - Wichita, Kansas

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GENERAL INFORMATION & SUMMARY

Company	<u>Stubbs & Fleming</u>		Lease	<u>Kellar</u>		Well No.	<u>1</u>
Location	<u>NW, NW, SE</u>						
Section	<u>28</u>	Twp.	<u>26S</u>	Rge.	<u>13E</u>	County	<u>Greenwood</u>
						State	<u>Kansas</u>
Name of Sand	-	-	-	-	-	-	Squirrel
Top of Core	-	-	-	-	-	-	1316.0
Bottom of Core	-	-	-	-	-	-	1341.0
Top of Sand	-	-	(Cored)	-	-	-	1316.0
Bottom of Sand	-	-	-	-	-	-	1339.8
Total Feet of Permeable Sand	-	-	-	-	-	-	16.9
Total Feet of Floodable Sand	-	-	-	-	-	-	
Distribution of Permeable Sand:							
Permeability Range			Feet			Cum. Ft.	
Millidarcys							
0 - 5			7.5			7.5	
5 - 20			4.4			11.9	
20 - 40			2.9			14.8	
40 & above			2.1			16.9	
Average Permeability Millidarcys	-	-	-	-	-	-	15.2
Average Percent Porosity	-	-	-	-	-	-	17.9
Average Percent Oil Saturation	-	-	-	-	-	-	33.8
Average Percent Water Saturation	-	-	-	-	-	-	50.6
Average Oil Content, Bbls./A. Ft.	-	-	-	-	-	-	472.
Total Oil Content, Bbls./Acre	-	-	-	-	-	-	8,353.
Average Percent Oil Recovery by Laboratory Flooding Tests	-	-	-	-	-	-	
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	-	-	-	-	-	-	
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	-	-	-	-	-	-	
Total Calculated Oil Recovery, Bbls./Acre	-	-	-	-	-	-	
Packer Setting, Feet	-	-	-	-	-	-	
Viscosity, Centipoises @	-	-	-	-	-	-	
A. P. I. Gravity, degrees @ 60 °F	-	-	-	-	-	-	
Elevation, Feet	-	-	-	-	-	-	

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- LOG -

Company Stubbs & Fleming Lease Kellar Well No. 1

Depth Interval, Feet	Description
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1316.0 - 1318.6	- Dark brown fine grained sandstone.
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1318.6 - 1319.5	- Dark micaceous sandstone.
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1319.5 - 1322.6	- Gray sandy shale.
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1322.6 - 1324.1	- Brown micaceous shaly sandstone.
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1324.1 - 1325.3	- Gray sandy shale.
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1325.3 - 1328.7	- Brown fine grained shaly sandstone.
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1328.7 - 1330.1	- Brown laminated micaceous shaly sandstone containing a shale streak.
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1330.1 - 1334.1	- Grayish brown fine grained sandstone.
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1334.1 - 1334.9	- Gray finely laminated sandy shale.
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1334.9 - 1335.5	- Dark gray fine grained sandstone.
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1335.5 - 1338.1	- Gray laminated micaceous carbonaceous sandstone.
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1338.1 - 1339.0	- Gray laminated sandstone and shale.
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1339.0 - 1339.8	- Gray micaceous shaly sandstone.
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1339.8 - 1341.0	- Gray laminated sandstone and shale.
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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Stubbs & Fleming Lease Kellar Well No. 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	1316.1	19.0	32	39	71	472	2.7	0.6	0.6	283	1.62
2	1317.1	15.8	46	39	85	564	31.	1.0	1.6	564	31.00
3	1318.1	20.1	52	32	84	811	3.3	1.0	2.6	811	3.30
4	1319.1	19.7	59	23	82	902	1.6	0.9	3.5	812	1.44
5	1322.9	15.8	39	52	91	478	18.	0.8	4.3	382	14.40
6	1323.9	15.9	49	41	90	605	5.3	0.7	5.0	423	3.71
7	1325.4	20.3	40	34	74	630	14.	0.8	5.8	504	11.20
8	1326.7	18.3	36	39	75	511	0.76	1.1	6.9	562	0.84
9	1327.7	17.2	38	39	77	507	23.	1.0	7.9	507	23.00
10	1328.5	16.5	32	57	89	410	16.	0.5	8.4	205	8.00
11	1329.4	18.0	35	60	95	489	1.6	1.3	9.7	636	2.08
12	1330.6	17.1	29	50	79	385	21.	0.9	10.6	347	18.90
13	1331.5	17.6	32	53	85	437	17.	1.0	11.6	437	17.00
14	1332.5	19.3	25	52	77	374	48.	1.0	12.6	374	48.00
15	1333.5	19.2	27	55	82	402	51.	1.1	13.7	442	56.10
16	1335.1	17.4	30	54	84	405	18.	0.6	14.3	243	10.80
17	1336.6	16.8	13	75	88	169	1.4	1.7	16.0	287	2.38
18	1337.8	17.5	21	76	97	285	3.5	0.9	16.9	257	3.15
19	1339.4	18.6	24	71	95	346	Imp.	0.8	17.7	277	0.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Stubbs & Fleming	Lease	Kellar	Well No.	1		
	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.			
	1316.0 - 1328.2	7.9	11.5	90.51			
	1328.2 - 1339.8	9.0	18.5	166.41			
	1316.0 - 1339.8	16.9	15.2	256.92			
	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
	1316.0 - 1328.2	7.9	18.0	43.7	37.3	614.	4,848.
	1328.2 - 1339.8	9.8	17.8	25.8	61.5	358.	3,505.
	1316.0 - 1339.8	17.7	17.9	33.8	50.6	472.	8,353.