



OILFIELD RESEARCH LABORATORIES

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

September 25, 1967

Sanders-Thoureen, Inc.
P. O. Box 260
Lake Worth, Florida

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Inge Lease, Well No. W-105, Elk County, Kansas, and submitted to our laboratory on September 19, 1967.

This core was sampled and the samples sealed in plastic bags by a representative of Oilfield Research Laboratories.

It is recommended that the casing be set at 698.0 and the hole plugged back to 706.0 feet.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

CLF:bjc

4 c. - Lake Worth, Florida
2 c. - Bartlesville, Oklahoma

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Sanders-Thoureen, Inc. Lease Inge Well No. W-105

Location 660' SNL & 1320' WEL, SE/4

Section 34 Twp. 31S Rge. 12E County Elk State Kansas

Name of Sand - - - - - Stray (Lower)

Top of Core - - - - - 680.0

Bottom of Core - - - - - 718.0

Pay
Top of Sand - - - - - 697.0

Bottom of Sand - (Core) - - - - - 718.0

Total Feet of Permeable Sand - - - - - 14.3

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

	Feet	Cum. Ft.	
0 - 10	2.0	2.0	
10 - 50	3.0	5.0	
50 - 100	2.8	7.8	
100 - 200	4.0	11.8	
200 & above	2.5	14.3	
Average Permeability Millidarcys - - - - -			104.3
Average Percent Porosity - - - - -			23.1
Average Percent Oil Saturation - - - - -			30.2
Average Percent Water Saturation - - - - -			49.5
Average Oil Content, Bbls./A. Ft. - - - - -			555.
Total Oil Content, Bbls./Acre - - - - -			8,495
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 - (Ground) - - - - -			966.0

- LOG -

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
680.0 - 680.4	- Brown fine grained sandstone.
680.4 - 681.3	- Gray calcareous carbonaceous sandstone.
681.3 - 682.4	- Dark slightly calcareous sandstone.
682.4 - 682.8	- Gray calcareous carbonaceous sandstone.
682.8 - 683.8	- Dark slightly calcareous sandstone.
683.8 - 685.5	- Gray laminated sandy shale containing a coal seam.
685.5 - 691.0	- Discarded at well.
691.0 - 693.2	- Gray to brown slightly calcareous sandstone.
693.2 - 696.0	- Gray shaly sandstone.
696.0 - 697.0	- Hard gray dolomite.
697.0 - 707.3	- Brown slightly calcareous sandstone, containing a shale streak.
707.3 - 708.0	- Drilled
708.0 - 711.0	- Sandy shale
711.0 - 711.2	- Coal.
711.2 - 718.0	- Gray laminated shaly sandstone.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Sanders-Thoureen, Inc. Lease Inge Well No. W-105

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			Ft.	Cum. Ft.		
1	680.5	9.6	27	66	201	Imp.	0.9	0.9	181	0.00
2	681.5	11.9	45	48	416	9.3	1.1	2.0	458	10.23
3	682.5	14.2	22	73	242	Imp.	0.4	2.4	97	0.00
4	683.5	17.4	43	46	580	50.6	1.0	3.4	580	50.00
5	691.5	21.5	22	71	367	7.6	1.0	4.4	367	7.60
6	692.5	23.0	24	44	428	19.	1.2	5.6	514	22.80
7	693.5	23.3	30	47	542	10.	0.8	6.4	434	8.00
8	694.5	20.4	12	83	190	Imp.	1.0	7.4	190	0.00
9	695.5	18.4	8	88	114	5.1	1.0	8.4	114	5.10
10	697.5	24.2	43	36	807	51.	1.0	9.4	807	51.00
11	698.5	19.4	26	44	392	45.	1.0	10.4	392	45.00
12	699.5	25.7	36	36	718	61.	1.0	11.4	718	61.00
13	700.5	24.1	42	31	785	156.	1.0	12.4	785	156.00
14	701.5	25.1	41	41	798	253.	1.0	13.4	798	253.00
15	702.5	25.5	38	37	752	108.	1.0	14.4	752	108.00
16	703.5	23.6	42	36	769	183.	1.0	15.4	769	183.00
17	704.5	24.9	39	41	753	141.	1.0	16.4	753	141.00
18	705.5	24.9	14	65	270	257.	1.0	17.4	270	257.00
19	706.5	21.5	40	42	667	85.	0.8	18.2	534	68.00
20	707.2	25.6	30	47	596	249.	0.5	18.7	298	124.50

Oilfield Research Laboratories

SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Sanders-Thoureen, Inc. Lease Inge Well No. W-105

Depth Interval, Feet	Feet of Core Analyzed	Average Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Total Oil Content Bbls./Acre
680.4 - 683.8	2.1	13.2	37.0	55.1	28.7	60.23	1,316
691.0 - 696.0	4.0	21.3	19.0	66.5	10.9	43.50	1,619
697.0 - 707.3	10.3	24.0	35.7	41.1	140.5	1,447.50	6,876
691.0 - 707.3	14.3	22.1	30.2	49.5	104.3	1,491.00	8,495