



OILFIELD RESEARCH LABORATORIES

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

August 17, 1979

Burns Oil Company
9650 Chadwick
Overland Park, Kansas 66206

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Silsby Lease, Well No. 5, Franklin County, Kansas, and submitted to our laboratory on August 15, 1979.

The core was sampled by a representative of the client.

Based on the results of the laboratory tests, the estimated primary oil reserves for the squirrel sand in the vicinity of this well are 420 stock tank barrels per acre.

No estimate of initial production has been attempted.

The initial production of a well depends on many factors, such as; well spacing, production history of the lease, completion methods, etc. This data is not available to the writer.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman
Benjamin R. Pearman

BRP:dlb

5 c to Overland Park, Kansas

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GENERAL INFORMATION & SUMMARY

Company Burns Oil Company Lease Silsby Well No. 5

Location SW

Section 32 Twp. 17S Rge. 21E County Franklin State Kansas

Name of Sand	-	Squirrel
Top of Core	-	622.0
Bottom of Core	-	631.0
Top of Sand	-	622.8
Bottom of Sand	-	631.0
Total Feet of Permeable Sand	-	6.8
Total Feet of Floodable Sand	-	

Distribution of Permeable Sand:
Permeability Range
Millidarcys

	Feet	Cum. Ft.	
0 - 1.2	1.4	1.4	
1.2 - 10	1.0	2.4	
10 - 20	1.4	3.8	
20 - 50	2.0	5.8	
50 & Above	1.0	6.8	
Average Permeability Millidarcys	-		21.8
Average Percent Porosity	-		18.1
Average Percent Oil Saturation	-		38.0
Average Percent Water Saturation	-		50.9
Average Oil Content, Bbls./A. Ft.	-		527.
Total Oil Content, Bbls./Acre	-		4,058.
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	-	(Primary)	420.
Packer Setting, Feet	-		
Viscosity, Centipoises @	-		
A. P. I. Gravity, degrees @ 60 °F	-		
Elevation, Feet	-		

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LOG

Company Burns Oil Company Lease Silsby Well No. 5

<u>Depth Interval, Feet</u>	<u>Description</u>
622.0 - 622.8	Gray sandy shale.
622.8 - 623.2	Dark brown shaly sandstone.
623.2 - 623.7	Brown and gray laminated sandstone and shale.
623.7 - 624.3	Dark brown sandstone.
624.3 - 626.2	Dark brown slightly laminated shaly sandstone.
626.2 - 629.3	Dark brown sandstone.
629.3 - 630.3	Dark brown slightly shaly sandstone.
630.3 - 631.0	Dark brown sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Burns Oil Company Lease Silsby Well No. 5

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	622.9	17.1	38	49	87	504	0.89	0.4	0.4	202	0.36
2	623.9	19.3	29	58	87	434	15.	0.6	1.0	260	9.00
3	624.8	15.0	27	68	95	314	Imp.	0.9	1.9	282	0.00
4	625.6	15.6	41	56	97	496	1.2	1.0	2.9	496	1.20
5	626.5	20.2	28	53	81	439	18.	0.8	3.7	352	14.40
6	627.5	21.2	26	55	81	428	56.	1.0	4.7	428	56.00
7	628.5	17.3	58	37	95	778	24.	1.3	6.0	1,012	31.20
8	629.5	17.4	47	44	91	634	8.9	1.0	7.0	634	8.90
9	630.5	21.2	34	44	78	559	39.	0.7	7.7	392	27.30

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease	Well No.			
Burns Oil Company	Silsby	5			
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
622.8 - 631.0	6.8	21.8	148.36		
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
622.8 - 631.0	7.7	38.0	50.9	527	4,058