

OILFIELD RESEARCH LABORATORIES

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June 9, 1961

A. W. Pugh Oil Company
Columbus, Kansas

Gentlemen:

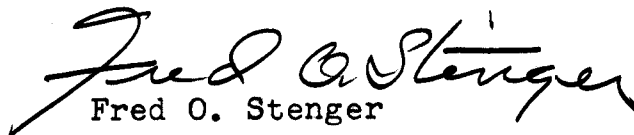
Enclosed herewith are the results of tests run on the Rotary core taken from the Joe Blaes Lease, Well No. 3, Montgomery County, Kansas, and submitted to our laboratory on June 5, 1961.

This core was sampled and the samples were sealed in cans by Mr. Pugh.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Fred O. Stenger

FOS:rf

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GENERAL INFORMATION & SUMMARY

Company	<u>A. W. Pugh Oil Co.</u>		Lease	<u>Joe Blaes</u>		Well No.	<u>3</u>
Location	<u>N$\frac{1}{2}$ NE$\frac{1}{4}$</u>						
Section	<u>30</u>	Twp.	<u>31S</u>	Rge.	<u>17E</u>	County	<u>Montgomery</u>
						State	<u>Kansas</u>
Name of Sand							Bartlesville
Top of Core							736.0
Bottom of Core							790.0
Top of Sand							?
Bottom of ^{Upper} Sand	(Received)						750.0
Total Feet of Permeable Sand							10.0
Total Feet of Floodable Sand							-
Distribution of Permeable Sand:			Feet			Cum. Ft.	
Permeability Range							
Millidarcys							
0 - 5			6.0			6.0	
5 - 10			3.0			9.0	
10 & above			1.0			10.0	
Average Permeability Millidarcys	(Upper Sand)						4.1
Average Percent Porosity	(Upper Sand)						16.2
Average Percent Oil Saturation	(Upper Sand)						30.2
Average Percent Water Saturation	(Upper Sand)						46.8
Average Oil Content, Bbls./A. Ft.	(Upper Sand)						392.
Total Oil Content, Bbls./Acre	(Upper Sand)						5,486.
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							

LOG

Company A. W. Pugh Oil Co. Lease Joe Blaes Well No. 3

Depth Interval, Description
Feet

736.0 - 745.0 - Grayish brown slightly shaley sandstone.

745.0 - 749.0 - Brownish gray slightly shaley sandstone.

749.0 - 750.0 - Gray shaley sandstone.

750.0 - 789.0 - Core not received.

789.0 - 790.0 - Hard dark slightly calcareous carbonaceous sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company A. W. Pugh Oil Co. Lease Joe Blaes Well No. 3

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	736.5	16.9	28	33	61	367	9.2	1.0	1.0	367	9.20
2	737.5	16.2	32	36	68	402	2.7	1.0	2.0	402	2.70
3	738.5	14.9	43	46	89	497	1.4	1.0	3.0	497	1.40
4	739.5	15.3	29	49	78	344	5.6	1.0	4.0	344	5.60
5	740.5	18.8	40	36	76	584	5.9	1.0	5.0	584	5.90
6	741.5	16.9	29	35	64	380	2.2	1.0	6.0	380	2.20
7	742.5	17.1	40	45	85	530	0.32	1.0	7.0	530	0.32
8	743.5	19.0	31	39	70	456	11.6	1.0	8.0	456	11.00
9	744.5	18.0	26	42	68	363	2.6	1.0	9.0	363	2.60
10	745.5	18.4	36	37	73	514	0.34	1.0	10.0	514	0.34
11	746.5	14.7	34	58	92	388	Imp.	1.0	11.0	388	0.00
12	747.5	13.3	21	70	91	217	Imp.	1.0	12.0	217	0.00
13	748.5	14.3	18	64	82	200	Imp.	1.0	13.0	200	0.00
14	749.5	12.4	15	65	80	144	Imp.	1.0	14.0	144	0.00
15	789.5	8.3	27	20	47	173	Imp.	1.0	15.0	173	0.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		A. W. Pugh Oil Co.		Lease		Joe Blaes		Well No.		3	
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 Bbl./Acres					
736.0 - 746.0	10.0	17.2	33.4	39.8	444	4,437					
746.0 - 750.0	4.0	13.7	22.0	64.2	262	1,049					
736.0 - 750.0	14.0	16.2	30.2	46.8	392	5,486					