

# OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

813 EAST SIXTH  
OKMULGEE, OKLAHOMA  
PHONE: 4444

Chanute, Kansas

536 N. HIGHLAND  
CHANUTE, KANSAS  
PHONE: 728

June 7, 1961

D. W. Polkinghorn  
5842 Mission Road  
Mission, Kansas

Dear Sir:

Enclosed herewith are the results of tests run on the Cable Tool core taken from the Coats-Sigler Lease, Well No. P-1, Franklin County, Kansas, and submitted to our laboratory on June 1, 1961.

This core was sampled and a portion sealed in jars by a representative of the client, and the remainder sealed in cans by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

  
Benjamin R. Pearman

BRP:rf

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# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

Company Polkinghorn Lease Coats-Sigler Well No. P-1

Location 80 feet S. of N. line & 160' E. of W. line (SE $\frac{1}{4}$  SE $\frac{1}{4}$ )

Section 13 Twp. 18S Rge. 19E County Franklin State Kansas

Name of Sand	-		Squirrel
Top of Core	-		717.0
Bottom of Core	-		735.5
Top of Sand	-	(Tested)	717.0
Bottom of Sand	-	Good	727.0
Total Feet of Permeable Sand	-		13.6
Total Feet of Floodable Sand	-		-

**Distribution of Permeable Sand:**  
Permeability Range  
Millidarcys

	Feet	Cum. Ft.
0 - 10	11.0	11.0
10 - 20	1.6	12.6
20 - 40	1.0	13.6

Average Permeability Millidarcys	-	(Pay Sand)	10.5
Average Percent Porosity	-	(Pay Sand)	20.8
Average Percent Oil Saturation	-	(Pay Sand)	33.2
Average Percent Water Saturation	-	(Pay Sand)	56.0
Average Oil Content, Bbls./A. Ft.	-	(Pay Sand)	534.
Total Oil Content, Bbls./Acre	-	(Pay Sand)	4,589.
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 Polkinghorn Lease Coats-Sigler Well No. P-1

Depth Interval, Description  
Feet

717.0 - 727.0 - Dark brown and gray slightly shaley sandstone.

727.0 - 729.5 - Brownish gray shaley sandstone.

729.5 - 733.5 - Gray shaley sandstone.

733.5 - 735.5 - Gray sandy shale.

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE I-B

Company Polkinghorn Lease Coats-Sigler Well No. P-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	717.1	19.8	39	48	87	599	13.0	0.6	359	7.80	
2	718.1	20.8	33	53	86	532	4.0	1.0	532	4.00	
3	419.1	18.7	21	71	92	304	2.8	1.0	304	2.80	
4	720.1	23.2	40	53	93	720	3.9	1.0	720	3.90	
5	721.1	19.2	31	60	91	461	9.4	1.0	461	9.40	
6	722.1	19.7	32	55	87	489	17.0	1.0	489	17.00	
7	723.1	21.2	40	43	83	626	38.0	1.0	626	38.00	
8	724.1	22.2	31	61	92	534	6.4	1.0	534	6.40	
9	725.1	21.4	34	57	91	564	0.95	1.0	564	0.95	
10	726.1	20.4	26	66	92	411	0.85	1.4	576	1.19	
11	727.1	15.5	14	79	93	168	1.1	0.6	101	0.66	
12	728.1	19.6	22	69	91	335	0.03	1.0	335	0.03	
13	729.1	18.0	24	70	94	335	0.75	0.9	301	0.67	
14	730.1	18.0	19	75	94	266	0.92	1.1	293	1.01	
15	731.1	17.5	23	68	91	312	Imp.	1.4	437	0.00	

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## SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease	Coats-Sigler	Well No.		
Polkinghorn			P-1		
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
717.0 - 725.6	8.6	10.5	90.25		
725.6 - 730.6	5.0	0.7	3.56		
717.0 - 730.6	13.6	6.9	93.81		
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
717.0 - 725.6	8.6	33.2	56.0	534	4,589
725.6 - 732.0	6.4	23.7	70.1	320	2,043
717.0 - 732.0	15.0	29.2	62.1	441	6,632

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## SHOT RECOMMENDATION

Company Polkinghorn Lease Coats-Sigler Well No. P-1

<u>Depth Interval, Feet</u>	<u>Feet of Sand</u>	<u>Size of Shell Inches</u>	<u>Qts./Ft.</u>	<u>Total Quarts</u>
717.0 - 725.6	8.6	5.0	4.0	34.4
Top of Core	<u>717.0</u>			
Top of Sand	<u>717.0</u>			
Bottom of Core	<u>735.5</u>			
Bottom of Pay Sand	<u>725.6</u>			