



OILFIELD RESEARCH LABORATORIES

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December 3, 1979

Diamond B Industries
Rural Route 1
Paola, Kansas 66071

Gentlemen:

Enclosed herewith are the results of tests run on the rotary cores taken from the Finley Lease, Well No. 2, Woodson County, Kansas, and submitted to our laboratory on November 17, 1979.

These cores were sampled by a representative of Oilfield Research Laboratories.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Benjamin R. Pearman

BRP/tem
4 c to Paola, Kansas
1 c to Chanute, Kansas

- REGISTERED ENGINEERS -

CORE ANALYSIS - WATER ANALYSIS - REPRESSURING ENGINEERING - SURVEYING & MAPPING - PROPERTY EVALUATION & OPERATION

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company	<u>Diamond B Industries</u>	Lease	<u>Finley</u>	Well No.	<u>2</u>
Location	<u>S$\frac{1}{2}$ SE</u>				
Section	<u>31</u>	Twp.	<u>26S</u>	Rge.	<u>17E</u>
				County	<u>Woodson</u>
				State	<u>Kansas</u>
Name of Sand	Upper Bartlesville				
Top of Core					915.0
Bottom of Core					929.0
Top of Sand					915.0
Bottom of Sand					927.9
Total Feet of Permeable Sand					11.5
Total Feet of Floodable Sand					
Distribution of Permeable Sand:					
Permeability Range Millidarcys	Feet	Cum. Ft.			
5 - 10	2.7	2.7			
10 - 50	7.7	10.4			
50 & Above	1.1	11.5			
Average Permeability Millidarcys					26.0
Average Percent Porosity					20.0
Average Percent Oil Saturation					21.8
Average Percent Water Saturation					57.5
Average Oil Content, Bbls./A. Ft.					298.
Total Oil Content, Bbls./Acre					3,431.
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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GENERAL INFORMATION & SUMMARY

Company	Diamond B Industries	Lease	Finley	Well No.	2
Location	S $\frac{1}{2}$ SE				
Section	31	Twp.	26S	Rge.	17E
		County	Woodson		State Kansas
Name of Sand					Lower Bartlesville
Top of Core					948.0
Bottom of Core					960.0
Top of Sand					948.2
Bottom of Sand					960.0
Total Feet of Permeable Sand					10.3
Total Feet of Floodable Sand					
Distribution of Permeable Sand:					
Permeability Range Millidarcys	Feet	Cum. Ft.			
5 - 10	3.1	3.1			
10 - 50	6.2	9.3			
50 & Above	1.0	10.3			
Average Permeability Millidarcys		30.1			
Average Percent Porosity		17.6			
Average Percent Oil Saturation		35.3			
Average Percent Water Saturation		44.5			
Average Oil Content, Bbls./A. Ft.		505.			
Total Oil Content, Bbls./Acre		5,302.			
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					

LOGName Diamond B Industries Lease Finley Well No. 2Depth Interval,
FeetDescriptionUPPER BARTLESVILLE SAND

915.0 - 916.1	Brown slightly shaly sandstone.
916.1 - 918.0	Light brown laminated shaly sandstone.
918.0 - 918.9	Gray and light brown shaly sandstone.
918.9 - 920.6	Brown slightly shaly sandstone.
920.6 - 922.7	Gray finely laminated shaly sandstone.
922.7 - 923.6	Light brown laminated shaly sandstone.
923.6 - 924.0	Sandy shale.
924.0 - 925.4	Brown fine grained sandstone.
925.4 - 925.9	Laminated sandy shale.
925.9 - 927.2	Dark brown sandstone.
927.2 - 927.7	Finely laminated sandstone and shale.
927.7 - 927.9	Brown sandstone.
927.9 - 929.0	Gray shale.

LOWER BARTLESVILLE SAND

948.0 - 948.2	Sandy shale.
948.2 - 949.0	Dark brown sandstone.
949.0 - 952.3	Brown laminated shaly sandstone.
952.3 - 953.8	Gray sandy shale.
953.8 - 954.6	Brown shaly sandstone.
954.6 - 955.7	Gray shaly sandstone.
955.7 - 960.0	Dark brown fine grained sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Diamond B Industries Lease Finley Well No. 2

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.		
UPPER BARTLESVILLE SAND											
1	915.5	19.9	18	57	75	278	69.	1.1	1.1	306	75.90
2	916.5	12.2	18	73	91	170	5.4	0.9	2.0	153	4.86
3	917.7	19.3	18	55	73	270	35.	1.0	3.0	270	35.00
4	918.5	18.5	17	62	79	244	7.4	0.9	3.9	220	6.66
5	919.5	18.5	22	53	75	316	39.	1.0	4.9	316	39.00
6	920.5	19.6	25	50	75	380	35.	0.7	5.6	266	24.50
7	921.6	13.2	17	74	91	174	12.	2.1	7.7	366	25.20
8	922.8	16.5	40	34	74	512	6.6	0.9	8.6	461	5.94
9	924.8	18.5	22	50	72	316	35.	1.4	10.0	443	49.00
10	926.8	21.9	25	53	78	425	24.	1.3	11.3	552	31.20
11	927.8	16.2	31	49	80	390	11.	0.2	11.5	78	2.20
LOWER BARTLESVILLE SAND											
1	948.5	16.3	42	53	95	531	42.	0.8	0.8	425	33.60
2	949.5	14.6	32	59	91	363	16.	1.0	1.8	363	16.00
3	950.5	15.1	25	57	82	293	8.4	1.0	2.8	293	8.40
4	951.5	15.5	28	53	81	337	5.6	1.3	4.1	438	7.28
5	954.5	15.4	29	59	88	347	6.5	0.8	4.9	278	5.20
6	955.9	17.8	29	45	74	401	44.	1.1	6.0	441	48.40
7	957.5	21.6	45	32	77	754	44.	2.3	8.3	1734	101.20
8	958.5	19.2	42	38	80	626	44.	1.0	9.3	626	44.00
9	959.5	21.1	43	31	74	704	52.	1.0	10.3	704	52.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Diamond B Industries		Lease	Finley	Well No.	2
	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
			<u>UPPER BARTLESVILLE SAND</u>			
	915.0 - 927.9	11.5	26.0	299.46		
			<u>LOWER BARTLESVILLE SAND</u>			
	948.2 - 960.0	10.3	30.1	316.08		
	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
			<u>UPPER BARTLESVILLE SAND</u>			
	915.0 - 927.9	11.5	20.0	21.8	57.5	298
						3,431
			<u>LOWER BARTLESVILLE SAND</u>			
	948.2 - 960.0	10.3	17.6	35.3	44.5	505
						5,302