



# OILFIELD RESEARCH LABORATORIES

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

August 6, 1981

DFW Petroleum, Inc.  
1506 Park  
Harvey Center  
Oklahoma City, Oklahoma 73102

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Stewart Lease, Well No. B-22, located in Allen County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client and was submitted to our laboratory on August 4, 1981.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Sanford A. Michel

SAM/kas

5 c to Oklahoma City, Oklahoma

- REGISTERED ENGINEERS -

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

**Oilfield Research Laboratories**  
**GENERAL INFORMATION & SUMMARY**

Company DFW Petroleum, Inc. Lease Stewart Well No. B-22  
 Location 220' FWL & 660' FSL - SW $\frac{1}{4}$   
 Section 29 Twp. 23S Rge. 21E County Allen State Kansas

Elevation, Feet .....

Name of Formation ..... Mississippi

Top of Core ..... 916.0

Bottom of Core ..... 922.0

Top of Formation ..... 916.0

Bottom of Formation ..... 922.0

Total Feet of Permeable Formation ..... 6.0

Distribution of Permeable Permeability Range Millidarcys	Feet	Cum. Ft.
1 - 15	2.8	2.8
55 - 75	3.2	6.0

Average Permeability Millidarcys ..... 32.1

Average Percent Porosity ..... 13.7

Average Percent Oil Saturation ..... 41.9

Average Percent Water Saturation ..... 42.8

Average Oil Content, Bbls./A. Ft. .... 1,608.

Total Oil Content, Bbls./Acre ..... 9,645.

OILFIELD RESEARCH LABORATORIES

LOG

Name DFW Petroleum, Inc. Lease Stewart Well No. B-22

<u>Depth Interval, Feet</u>	<u>Description</u>
916.0 - 917.7	Brown calcareous sandstone.
917.7 - 918.9	Light brown calcareous sandstone.
918.9 - 920.2	Grayish brown calcareous slightly shaly sandstone.
920.2 - 922.0	Grayish brown calcareous shaly sandstone.

# Oilfield Research Laboratories

## RESULTS OF PERMEABILITY AND POROSITY TESTS

### TABLE I A

Company DFW Petroleum, Inc. Lease Stewart Well No. B-22  
1506 Park, Harvey Center  
Oklahoma City, Oklahoma 73102

Sample No.	Depth Feet	Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.	Percent Porosity
			Ft.	Cum. Ft.		
C-1 SB-21(2)1		19.				
C-2 SB-21(2)2		0.31				
C-3 SB-21(2)3		2.1				
C-4 SB-21(2)4		17.				
C-5 SB-21(2)5		14.				
C-6 SB-21(2)6		Imp.				
D-1 SB (22)11A		87.				
D-2 SB (22)12A		33.				
D-3 SB (22)1-3A		2.5				
D-4 SB (22)1-6A		Imp.				

# Oilfield Research Laboratories

## RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company DFW Petroleum, Inc. Lease Stewart Well No. B-22

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	916.5	19.8	37	45	568	73.	1.0	1.0	568	73.00
2	917.5	14.6	54	30	612	13.	0.7	1.7	428	9.10
3	918.5	16.8	33	29	430	56.	1.2	2.9	516	67.20
4	919.5	14.4	55	40	614	6.6	1.3	4.2	798	8.58
5	920.5	10.1	22	75	172	3.3	0.8	5.0	138	2.64
6	921.5	5.3	48	44	197	Imp.	1.0	6.0	197	0.00

# Oilfield Research Laboratories

## SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company		Lease		Stewart		Well No.	
DFW Petroleum, Inc.						B-22	
Depth Interval, Feet	Feet of Core Analyzed	Average Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Permeability Capacity Ft. x Md.	Total Oil Content Bbls./Acre
916.0 - 922.0	5.0	13.7	41.9	42.8	1,608	160.52	9,645

