

# OILFIELD RESEARCH LABORATORIES

813 EAST SIXTH  
OKMULGEE, OKLAHOMA  
PHONE 1488

- REGISTERED ENGINEERS -

Chanute, Kansas

536 N. HIGHLAND  
CHANUTE, KANSAS  
PHONE 728

November 5, 1959

Mr. F. Merton Jeanes  
108 South Rutter  
Chanute, Kansas

Dear Sir:

Enclosed herewith are the results of tests run on the 3" Rotary core taken from the Arthur Hull Lease, Well No. 1, Wilson County, Kansas, and submitted to our laboratory on October 30, 1959.

It was recommended that the pipe be perforated from a depth of 1088.0 to 1104.0 feet.

This core was sampled and the samples were sealed in cans by a representative of Oilfield Research Laboratories.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

*Carl L. McElrea*  
Carl L. McElrea

CLM:cs

5 c.

# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

Company F. Merton Jeanes Lease Arthur Hull Well No. 1

Location 800' S. of N. Line & 870' E. of W. Line, SW $\frac{1}{4}$

Section 11 Twp. 28S Rge. 15E County Wilson State Kansas

Name of Sand	-	Bartlesville
Top of Core	-	1081.0
Bottom of Core	-	1130.0
Good		
Top of/Sand	-	1087.0
Good		
Bottom of/Sand	-	1105.6
Total Feet of Permeable Sand	-	-
Total Feet of Floodable Sand	-	-

<b>Distribution of Permeable Sand:</b>		
Permeability Range	Feet	Cum. Ft.
Millidarcys		

Average Permeability Millidarcys	-	-
Average Percent Porosity	-	15.8
Average Percent Oil Saturation	-	30.8
Average Percent Water Saturation	-	46.8
Average Oil Content, Bbls./A. Ft.	-	385.
Total Oil Content, Bbls./Acre	-	10,988.
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	-	

## OILFIELD RESEARCH LABORATORIES

LOGCompany F. Merton Jeanes Lease Arthur Hull Well No. 1  
~~6~~

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
1081.0 - 1082.0	- Dark brown shaley sandstone.
1082.0 - 1085.0	- Laminated sandstone and shale.
1085.0 - 1085.4	- Sandy shale.
1085.4 - 1087.0	- Laminated sandstone and shale.
1087.0 - 1089.2	- Brown sandstone.
1089.2 - 1089.4	- Sandy shale.
1089.4 - 1089.6	- Brown laminated shaley sandstone.
1089.6 - 1089.8	- Sandy shale.
1089.8 - 1098.2	- Brown laminated shaley micaceous sandstone.
1098.2 - 1098.9	- Sandy shale.
1098.9 - 1108.0	- Brown laminated shaley sandstone.
1108.0 - 1116.0	- Grayish brown shaley sandstone.
1116.0 - 1117.5	- Dark carbonaceous shaley sandstone.
1117.5 - 1118.5	- Laminated sandstone and shale.
1118.5 - 1119.0	- Grayish brown shaley sandstone.
1119.0 - 1130.0	- Loss.

Oilfield Research Laboratories

RESULTS OF SATURATION TESTS

TABLE II

Company F. Merton Jeanes Lease Arthur Hull Well No. 1

Sat. No.	Depth, Feet	Effective Porosity Percent	Percent Saturation		Total	Oil Content Bbls./A. Ft.	Feet of Core		Total Oil Content Bbls./Acre
			Oil	Water			Ft.	Cum. Ft.	
1	1081.1	16.9	27	36	63	354	1.0	1.0	354
2	1082.1	14.3	30	49	79	333	0.6	1.6	200
3	1083.1	11.8	16	77	93	146	1.0	2.6	146
4	1084.1	11.1	15	83	98	129	1.4	4.0	181
5	1085.5	12.2	28	66	94	265	0.4	4.4	106
6	1086.1	14.4	37	58	95	414	1.2	5.6	497
7	1087.1	19.5	30	31	61	454	0.6	6.2	272
8	1088.1	19.6	45	25	70	685	1.6	7.8	1,096
9	1089.5	15.0	32	50	82	372	0.2	8.0	74
10	1090.3	17.2	33	35	68	440	0.8	8.8	352
11	1091.1	18.5	36	32	68	516	1.1	9.9	567
12	1092.5	17.6	34	33	67	464	1.3	11.2	604
13	1093.5	15.5	30	44	74	361	1.0	12.2	361
14	1094.5	15.4	37	41	78	442	1.0	13.2	442
15	1095.5	17.5	41	38	79	556	0.9	14.1	501
16	1096.2	19.6	26	37	63	396	0.9	15.0	356
17	1097.3	18.2	31	36	67	438	0.9	15.9	394
18	1098.1	18.3	28	38	66	398	0.5	16.4	199
19	1099.1	13.0	28	66	94	282	0.7	17.1	197
20	1100.1	12.1	31	62	93	291	1.0	18.1	291
21	1101.1	13.1	37	52	89	376	1.0	19.1	376
22	1102.1	17.2	28	41	69	373	1.0	20.1	373
23	1103.1	18.6	30	40	70	433	1.0	21.1	433
24	1104.1	16.5	41	40	81	525	1.0	22.1	525
25	1105.1	17.6	42	34	76	574	1.0	23.1	574

Oilfield Research Laboratories

RESULTS OF SATURATION TESTS

TABLE II

Company F. Merton Jeanes Lease Arthur Hull Well No. 1

Sat. No.	Depth, Feet	Effective Porosity Percent	Percent Saturation		Total	Oil Content Bbls./A. Ft.	Feet of Core		Total Oil Content Bbls./Acre
			Oil	Water			Ft.	Cum. Ft.	
26	1106.1	15.0	26	47	73	302	1.0	24.1	302
27	1107.1	15.4	30	45	75	358	1.4	25.5	501
28	1108.1	12.0	23	67	90	214	0.6	26.1	128
29	1109.1	11.6	15	73	88	135	1.0	27.1	135
30	1110.1	16.0	26	47	73	322	1.4	28.5	451
					Total-		Total-	- - - -	-10,988

# Oilfield Research Laboratories

## SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Lease		Well No.			
F. Merton Jeanes	Arthur Hull		1			
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.			
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Oil Saturation	Average Oil Content Bbl./A. Ft.			
Depth Interval, Feet	Average Percent Porosity	Average Percent Water Saturation	Total Oil Content Bbls./Acre			
1081.0 - 1087.0	5.6	13.4	24.6	63.4	265	1,484
1087.0 - 1098.2	10.8	17.9	34.8	35.1	483	5,218
1098.9 - 1111.0	12.1	15.1	29.9	49.9	354	4,286
1081.0 - 1111.0	28.5	15.8	30.8	46.8	385	10,988