Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Phillips Petroleum Co. Lease N.B.U. Well No. 30-W23

Location SE¼

Section 15 Twp. 27N Rge. 5E County Osage State Oklahoma

Name of Sand	Burbank
Top of Core	3130.0
Bottom of Core	3187.0
Top of Pay Sand	3138.0
Bottom of Pay Sand	3173.0
Total Feet of Permeable Sand	47.0
Total Feet of Floodable Sand	-

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 10	13.0	13.0
10 - 20	4.0	17.0
20 - 100	9.2	26.2
100 - 300	7.8	34.0
300 & above	13.0	47.0

Average Permeability Millidarcys	345.
Average Percent Porosity	20.8
Average Percent Oil Saturation	
Average Percent Water Saturation	
Average Oil Content, Bbls./A. Ft.	
Total Oil Content, Bbls./Acre	
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 Phillips Petroleum Co. Lease N.B.U. Well No. 30-W23

Depth Interval, Feet	Description
3130.0 - 3138.0	Brown slightly shaley sandstone.
3138.0 - 3152.0	Soft light brown sandstone.
3152.0 - 3162.8	Soft brown sandstone.
3162.8 - 3172.0	Brown sandstone.
3172.0 - 3187.0	Dark carbonaceous shaley sandstone.

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RESULTS OF PERMEABILITY AND POROSITY TESTS

TABLE I A

Company Phillips Petroleum Co. Lease N.B.U. Well No. 30-W23

Sample No.	Depth, Feet	Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.	Percent Porosity
			Ft.	Cum. Ft.		
1	3130.5	6.2	1.0	1.0	6.20	17.0
2	3131.5	11.	1.0	2.0	11.00	16.8
3	3132.5	9.0	1.0	3.0	9.00	17.1
4	3133.5	5.1	1.0	4.0	5.10	15.3
5	3134.5	1.8	1.0	5.0	1.80	14.0
6	3135.5	5.9	1.0	6.0	5.90	16.8
7	3136.5	20.	1.0	7.0	20.00	18.8
8	3137.5	6.3	1.0	8.0	6.30	10.9
9	3138.5	66.	1.0	9.0	66.00	22.4
10	3139.5	109.	1.0	10.0	109.00	26.4
11	3140.5	265.	1.0	11.0	265.00	27.4
12	3141.5	358.	1.0	12.0	358.00	27.8
13	3142.5	1080.	1.0	13.0	1080.00	28.9
14	3143.5	1180.	1.0	14.0	1180.00	28.5
15	3144.5	2150.	1.0	15.0	2150.00	29.5
16	3145.5	450.	1.0	16.0	450.00	26.0
17	3146.5	298.	1.0	17.0	298.00	25.4
18	3147.5	1160.	1.0	18.0	1160.00	29.5
19	3148.5	740.	1.0	19.0	740.00	27.9
20	3149.5	900.	1.0	20.0	900.00	30.0
21	3150.5	1270.	1.0	21.0	1270.00	29.6
22	3151.5	1110.	1.0	22.0	1110.00	29.3
23	3152.5	730.	1.0	23.0	730.00	27.2
24	3153.5	90.	1.0	24.0	90.00	24.8
25	3154.5	298.	1.0	25.0	298.00	27.0
26	3155.5	392.	1.0	26.0	392.00	25.9
27	3156.5	244.	1.0	27.0	244.00	24.6
28	3157.5	263.	1.0	28.0	263.00	24.7
29	3158.5	360.	1.0	29.0	360.00	25.0
30	3159.5	204.	1.0	30.0	204.00	24.2
31	3160.5	87.	1.0	31.0	87.00	22.0
32	3161.5	6.4	1.0	32.0	6.40	14.3
33	3162.5	131.	0.8	32.8	104.80	20.1
34	3163.5	35.	1.2	34.0	42.00	16.9
35	3164.5	13.	1.0	35.0	13.00	15.0
36	3165.5	24.	1.0	36.0	24.00	14.8
37	3166.5	20.	1.0	37.0	20.00	15.0
38	3167.5	31.	1.0	38.0	31.00	15.2
39	3168.5	11.	1.0	39.0	11.00	14.7
40	3169.5	8.4	1.0	40.0	8.40	15.1

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RESULTS OF PERMEABILITY AND POROSITY TESTS

TABLE I A

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Sample No.	Depth, Feet	Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.	Percent Porosity
			Ft.	Cum. Ft.		
41	3170.5	52.	1.0	41.0	52.00	16.7
42	3171.5	13.	1.0	42.0	13.00	14.9
43	3172.5	5.3	1.0	43.0	5.30	13.4
44	3173.5	Imp.	1.0	44.0	0.00	-
45	3174.5	Imp.	1.0	45.0	0.00	-
46	3175.5	0.25	1.0	46.0	0.25	11.9
47	3176.5	Imp.	1.0	47.0	0.00	-
48	3177.5	Imp.	1.0	48.0	0.00	-
49	3178.5	Imp.	1.0	49.0	0.00	-
50	3179.5	Imp.	1.0	50.0	0.00	-
51	3180.5	Imp.	1.0	51.0	0.00	-
52	3181.5	Imp.	1.0	52.0	0.00	-
53	3182.5	Imp.	1.0	53.0	0.00	-
54	3183.5	Imp.	1.0	54.0	0.00	-
55	3184.5	0.45	1.0	55.0	0.45	13.2
56	3185.5	0.41	1.0	56.0	0.41	14.2
57	3186.5	0.28	1.0	57.0	0.28	10.9

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SUMMARY OF PERMEABILITY & POROSITY TESTS

TABLE II A

Company Phillips Petroleum Co. Lease N.B.U. Well No. 30-W23

Depth Interval, Feet	Feet of Core Analyzed	Average Air Permeability, Millidarcys	Average Effective Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Average Percent Porosity
3130.0 - 3138.0	8.0	8.2	-	65.30	15.8
3138.0 - 3173.0	35.0	461.	-	16134.91	22.8
3175.0 - 3187.0	4.0	0.35	-	1.39	12.6
3130.0 - 3187.0	47.0	345.	-	16201.60	20.8