

OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

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August 8, 1961

Mr. D.M. Madrano and
Mr. J.A. Gregory
Taisha Oil Company
1611 N. Boston Avenue
Tulsa, Oklahoma

Gentlemen:

Enclosed herewith are the results of tests run on the Cable tool core taken from the Cyrus Hughes Lease, Well No. 1, Franklin County, Kansas, and submitted to our laboratory on August 4, 1961.

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

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman
Benjamin R. Pearman

BRP:rf

6 c. - J.A. Gregory
2 c. - D.M. Madrano

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GENERAL INFORMATION & SUMMARY

Company Taisha Oil Co. Lease Cyrus Hughes Well No. 1

Location NW¹/₄ SE¹/₄

Section 2 Twp. 19S Rge. 17E County Franklin State Kansas

Name of Sand 17S 19E Squirrel

Top of Core - - - - - 678.6

Bottom of Core - - - - - 695.4

Top of Sand - - - - - ?

Bottom of Sand - - - - - 691.1

Total Feet of Permeable Sand - - - (Analyzed) - - - 5.0

Total Feet of Floodable Sand - - - - - -

Distribution of Permeable Sand: Permeability Range Millidarcys	Feet	Cum. Ft.
0 - 30	2.0	2.0
30 - 60	2.0	4.0
60 & above	1.0	5.0

Average Permeability Millidarcys - - - - - 36.2

Average Percent Porosity - - - - - 22.8

Average Percent Oil Saturation - - - - - 32.7

Average Percent Water Saturation - - - - - 45.5

Average Oil Content, Bbls./A. Ft. - - - - - 579.

Total Oil Content, Bbls./Acre - - - - - 6,953.

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 - - - - -

LOGCompany Taisha Oil Co. Lease Cyrus Hughes Well No. 1

<u>Depth Interval,</u>	<u>Description</u>
<u>Feet</u>	

678.6 - 691.1	- Soft grayish brown laminated micaceous sandstone.
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691.1 - 691.6	- Sandy shale.
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691.6 - 693.8	- Loss.
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693.8 - 695.4	- Sandy shale.
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RESULTS OF PERMEABILITY TESTS
TABLE I

Company Taisha Oil Co. Lease Cyrus Hughes Well No. 1

Sample No.	Depth Feet	Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.
			Ft.	Cum. Ft.	
1	680.4	40.	1.0	1.0	40.00
2	681.5	61.	1.0	2.0	61.00
3	682.5	23.	1.0	3.0	23.00
4	686.9	30.	1.0	4.0	30.00
5	687.9	27.	1.0	5.0	27.00

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RESULTS OF SATURATION TESTS

TABLE II

Company Taisha Oil Co. Lease Cyrus Hughes Well No. 1

Sst. No.	Depth, Feet	Effective Porosity Percent	Percent Saturation		Oil Content Bbbs./A. Ft.	Feet of Core		Total Oil Content Bbbs./Acre
			Oil	Water		Total	Ft.	
1	679.1	25.5	30	44	74	1.0	1.0	594
2	680.1	22.0	37	41	78	1.0	2.0	632
3	681.1	21.0	23	54	77	1.0	3.0	375
4	682.1	24.1	33	43	76	1.4	4.4	864
5	684.1	23.1	45	44	89	1.3	5.7	1048
6	685.5	22.0	33	50	83	1.2	6.9	676
7	686.5	24.1	27	45	72	1.0	7.9	505
8	687.5	23.3	40	40	80	1.0	8.9	723
9	688.4	20.6	39	45	84	1.2	10.1	748
10	690.1	22.9	22	47	69	1.3	11.4	508
11	691.0	22.3	27	50	77	0.6	12.0	280

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Taisha Oil Co. Lease Cyrus Hughes Well No. 1

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
680.0 - 683.0	3.0	41.3	124.00
686.4 - 688.4	2.0	28.5	57.00
680.0 - 688.4	5.0	36.2	181.00

Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
678.6 - 683.0	4.4	23.3	31.0	45.4	561	2,465
683.5 - 691.1	7.6	22.5	33.8	45.7	591	4,488
678.6 - 691.1	12.0	22.8	32.7	45.5	579	6,953