

OILFIELD RESEARCH LABORATORIES

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- REGISTERED ENGINEERS -

Chanute, Kansas

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January 6, 1961

Thomas Oil Company
1329 North Ninth
Independence, Kansas

Gentlemen:

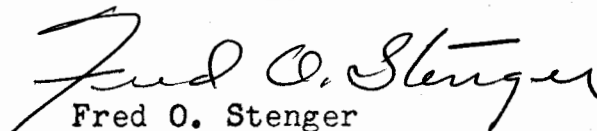
Enclosed herewith are the results of tests run on the Cable Tool core taken from the Terwilliger "A" Lease, Well No. 1, Labette County, Kansas, and submitted to our laboratory by Mr. Jack Thomas on January 3, 1961.

This core was sampled and the samples were sealed in jars by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Fred O. Stenger

FOS:db

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GENERAL INFORMATION & SUMMARY

Company Thomas Oil Company Lease Terwilliger "A" Well No. 1

Location NW 1/4 NE 1/4

Section 36 Twp. 32S Rge. 17E County Labette State Kansas

Name of Sand - - - - - Bartlesville

Top of Core - - - - - 710.0

Bottom of Core - - - - - 729.0

Top of Sand - - - - - ?

Bottom of Sand - - - - - 728.8

Total Feet of Permeable Sand - - - - - 17.6

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 10	9.0	9.0
10 - 40	4.8	13.8
40 & above	3.8	17.6

Average Permeability Millidarcys - - - - - 93.9

Average Percent Porosity - - - - - 18.6

Average Percent Oil Saturation - - - - - 38.4

Average Percent Water Saturation - - - - - 37.1

Average Oil Content, Bbls./A. Ft. - - - - - 568.

Total Oil Content, Bbls./Acre - - - - - 10,442.

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 - - - - -

830.5

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LOGCompany Thomas Oil Company Lease Terwilliger "A" Well No. 1

Depth Interval, Feet	Description
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710.0 - 710.8	- Dark brown sandstone.
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710.8 - 711.0	- Gray shaley sandstone.
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711.0 - 716.0	- Dark brown laminated shaley sandstone.
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716.0 - 716.2	- Gray laminated shaley sandstone.
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716.2 - 727.0	- Brown to dark carbonaceous laminated shaley sandstone.
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727.0 - 728.8	- Brownish gray calcareous sandstone.
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728.8 - 729.0	- Black shale.
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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Thomas Oil Company Lease Terwilliger "A" Well No. 1

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	710.5	24.9	54	31	1043	410.	0.8	0.8	834	328.00
2	711.5	20.7	30	49	482	470.	1.0	1.8	482	470.00
3	712.5	21.9	38	40	646	542.	1.0	2.8	646	542.00
4	713.5	19.8	30	48	461	258.	1.0	3.8	461	258.00
5	714.5	18.2	22	51	311	14.	1.0	4.8	311	14.00
6	715.5	18.0	26	46	363	10.	1.0	5.8	363	10.00
7	716.5	21.2	32	43	526	24.	0.8	6.6	421	19.20
8	717.5	16.4	47	33	598	22.	1.0	7.6	598	22.00
9	718.5	20.9	67	15	1087	37.	1.0	8.6	1087	37.00
10	719.5	22.3	47	23	813	9.6	1.0	9.6	813	9.60
11	720.5	21.9	47	20	799	2.2	1.0	10.6	799	2.20
12	721.5	19.2	45	30	670	1.9	1.0	11.6	670	1.90
13	722.5	15.7	18	69	220	2.9	1.0	12.6	220	2.90
14	723.5	18.9	41	31	601	2.1	1.0	13.6	601	2.10
15	724.5	17.7	41	29	564	2.9	1.0	14.6	564	2.90
16	725.5	19.8	37	29	569	3.7	1.0	15.6	569	3.70
17	726.5	13.2	28	41	286	0.78	1.0	16.6	286	0.78
18	727.5	14.6	50	28	567	1.4	1.0	17.6	567	1.40
19	728.5	9.3	28	53	202	Imp.	0.8	18.4	162	0.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III - B

Company		Thomas Oil Company		Lease	Terwilliger "A"		Well No.	1
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.					
710.0 - 714.0	3.8	421.	1598.00					
714.0 - 728.8	14.6	8.9	129.68					
710.0 - 728.8	18.4	93.9	1727.68					

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
710.0 - 714.0	3.8	21.6	37.2	42.7	635	2,411
714.0 - 728.8	14.6	17.9	38.7	35.7	550	8,031
710.0 - 728.8	18.4	18.6	38.4	37.1	568	10,442