

OILFIELD RESEARCH LABORATORIES

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January 25, 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 Spencer "A" Lease, Well No. 1, Labette County, Kansas, and submitted to our laboratory on January 20, 1961, by Mr. Jack Thomas.

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

5 c.

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GENERAL INFORMATION & SUMMARY

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

Location SW $\frac{1}{4}$ NE $\frac{1}{4}$

Section 35 Twp. 32S Rge. 17E County Labette State Kansas

Name of Sand - - - - - Bartlesville

Top of Core - - - - - 698.0

Bottom of Core - - - - - 717.0

Top of Sand - - - - - ?

Pay
Bottom of Sand - - - - - 708.5

Total Feet of Permeable Sand - - - - - 16.9

Total Feet of Floodable Sand - - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 10	8.8	8.8
10 - 200	3.7	12.5
200 & above	4.4	16.9

Average Permeability Millidarcys - - - - - 139.41

Average Percent Porosity - - - - - 18.6

Average Percent Oil Saturation - - - - - 35.9

Average Percent Water Saturation - - - - - 39.2

Average Oil Content, Bbls./A. Ft. - - - - - 524.

Total Oil Content, Bbls./Acre - - - - - 9,644.

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 - - - - -

821.5

LOGCompany Thomas Oil Company Lease Spencer "A" Well No. 1Depth Interval, Description
Feet

698.0 - 698.3 - Brownish gray slightly calcareous sandstone.
698.3 - 698.9 - Gray laminated sandy shale.
698.9 - 699.1 - Light brown laminated shaley sandstone.
699.1 - 705.8 - Dark brown slightly laminated slightly shaley sandstone.
705.8 - 706.3 - Laminated sandstone and shale.
706.3 - 708.5 - Dark brown laminated shaley sandstone.
708.5 - 716.1 - Dark carbonaceous laminated shaley sandstone.
716.1 - 717.0 - Laminated sandstone and shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Thomas Oil Company Lease Spencer "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	698.1	13.7	29	34	308	1.0	0.3	0.3	92	0.30
2	699.0	13.8	32	30	343	197.	0.2	0.5	69	39.40
3	700.0	21.3	37	42	612	343.	1.4	1.9	857	480.20
4	701.0	19.6	36	44	548	77.	1.0	2.9	548	77.00
5	702.0	22.7	35	33	616	866.	1.0	3.9	616	866.00
6	703.0	22.2	31	35	603	460.	1.0	4.9	603	460.00
7	704.0	19.7	32	44	489	463.	1.0	5.9	489	463.00
8	705.0	23.2	29	38	522	124.	1.3	7.2	679	161.20
9	706.0	11.8	14	80	128	Imp.	0.5	7.7	64	0.00
10	707.0	20.2	31	39	486	178.	1.2	8.9	583	213.60
11	708.0	19.4	29	46	436	2.5	1.0	9.9	436	2.50
12	709.0	16.9	47	30	616	Imp.	1.0	10.9	616	0.00
13	710.0	13.7	22	60	234	1.7	1.0	11.9	234	1.70
14	711.0	17.5	35	46	476	4.8	1.0	12.9	476	4.80
15	712.0	18.8	44	27	642	6.9	1.0	13.9	642	6.90
16	713.0	18.1	59	17	829	4.3	1.0	14.9	829	4.30
17	714.0	18.8	50	28	730	3.1	1.0	15.9	730	3.10
18	715.0	15.6	53	27	642	0.84	1.0	16.9	642	0.84
19	716.0	14.0	23	48	250	1.2	0.6	17.5	150	0.72
20	717.0	14.8	28	49	321	1.7	0.9	18.4	289	1.53

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III - B

Company	Thomas Oil Company	Lease	Spencer "A"	Well No.	1
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
698.0 - 708.5	9.4	248.00	2,331.20		
709.5 - 717.0	7.5	3.19	23.89		
698.0 - 717.0	16.9	139.41	2,355.09		
Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Total Oil Content Bbls./Acre
698.0 - 708.5	9.9	20.3	31.5	41.7	5,036
708.5 - 717.0	8.5	16.6	41.0	36.2	4,608
698.0 - 717.0	18.4	18.6	35.9	39.2	9,644