

OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

813 EAST SIXTH
OKMULGEE, OKLAHOMA
PHONE: 4444

Chanute, Kansas

536 N. HIGHLAND
CHANUTE, KANSAS
PHONE: 728

May 23, 1961

Gordon Willis
319 West 7th
Chanute, Kansas

Dear Sir:

Attached hereto are the results of tests run on Cable Tool core taken from the Orth Lease, Well No. 5, Woodson County, Kansas, and submitted to our laboratory on May 20, 1961.

This core was sampled and the samples were 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

5 c.

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GENERAL INFORMATION & SUMMARY

Company Gordon Willis Lease Orth Well No. 5

Location NW

Section 28 Twp. 25S Rge. 17E County Woodson State Kansas

Name of Sand - - - - - Squirrel

Top of Core - - - - - 743.5

Bottom of Core - - - - - 756.0

Top of ^{Pay}Sand - - - - - 746.5

Bottom of ^{Pay}Sand - - - - - 754.5

Total Feet of Permeable Sand - - - - - 8.0

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 20	2.0	2.0
20 - 50	5.0	7.0
50 & above	1.0	8.0

Average Permeability Millidarcys - - - - - 31.6

Average Percent Porosity - - - - - 17.9

Average Percent Oil Saturation - - - - - 53.5

Average Percent Water Saturation - - - - - 26.0

Average Oil Content, Bbls./A. Ft. - - - - - 747.

Total Oil Content, Bbls./Acre - - - - - 6,870.

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 Gordon Willis Lease Orth Well No. 5Depth Interval, Description
Feet

743.5 - 745.3 - Shale.

745.3 - 746.5 - Dark brown calcareous sandstone.

746.5 - 754.5 - Dark brown sandstone.

754.5 - 756.0 - Soft shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Gordon Willis Lease Orth Well No. 5

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	Total			Ft.	Cum. Ft.		
1	746.0	9.2	45	19	64	321	Imp.	1.2	1.2	385	0.00
2	747.0	19.3	64	27	91	958	23.	1.0	2.2	958	23.00
3	748.0	19.3	56	23	79	839	31.	1.0	3.2	839	31.00
4	749.0	19.1	52	30	82	770	30.	1.0	4.2	770	30.00
5	750.0	19.1	61	29	90	904	37.	1.0	5.2	904	37.00
6	751.0	20.2	48	29	77	752	37.	1.0	6.2	752	37.00
7	752.0	18.2	59	24	83	833	19.	1.0	7.2	833	19.00
8	753.0	19.2	55	24	79	820	20.	1.0	8.2	820	20.00
9	754.0	18.7	42	30	72	609	56.	1.0	9.2	609	56.00

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III - B

Company		Gordon Willis		Lease		Orth		Well No.		5
Depth Interval, Feet	Feet of Core Analyzed	Average Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Permeability Capacity Ft. x Md.	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
745.3 - 754.5	9.2	17.9	53.5	26.0	747	253.00	745.3 - 754.5	8.0	31.6	253.00
745.3 - 754.5	9.2	17.9	53.5	26.0	747	253.00	745.3 - 754.5	8.0	31.6	253.00