

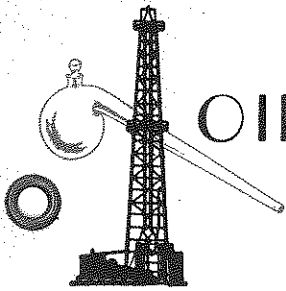
K-K DRILLING COMPANY

CORE ANALYSIS REPORT

ROBERTS LEASE

WELL NO. CT-2

WOODSON COUNTY, KANSAS



OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS - PHONE HE1-2650

June 23, 1966

K-K Drilling Company
P.O. Box 556
Chanute, Kansas

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Roberts Lease, Well No. CT-2, Woodson County, Kansas, and submitted to our laboratory on June 17, 1966.

This core was sampled and the samples sealed in cans by a representative of Oilfield Research Laboratories. The well was drilled in virgin territory.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:rf

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OILFIELD RESEARCH LABORATORIES

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Company K-K Drilling Company Lease Roberts Well No. CT-2

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

842.0 - 854.5 - Shale.

854.5 - 857.7 - Brown laminated shaly sandstone.

857.7 - 859.8 - Shale.

859.8 - 861.0 - Alternate layers sandstone and shale.

861.0 - 870.0 - Dark brown slightly shaly sandstone.

870.0 - 874.9 - Brown to dark slightly carbonaceous laminated shaly sandstone.

874.9 - 875.4 - Shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company K-K Drilling Company Lease Roberts Well No. CT-2

| 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 | 855.1 | 17.3 | 47 | 27 | 74 | 632 | 5.9 | 1.1 | 1.1 | 696 | 6.49 |
| 2 | 856.1 | 17.2 | 48 | 25 | 73 | 643 | 11. | 1.0 | 2.1 | 643 | 11.00 |
| 3 | 857.6 | 18.3 | 38 | 28 | 66 | 540 | 4.2 | 1.1 | 3.2 | 594 | 4.62 |
| 4 | 859.9 | 18.5 | 21 | 52 | 73 | 302 | 15. | 1.2 | 4.4 | 362 | 18.00 |
| 5 | 861.1 | 21.0 | 52 | 28 | 80 | 848 | 86. | 0.6 | 5.0 | 509 | 51.60 |
| 6 | 862.1 | 19.9 | 49 | 24 | 73 | 758 | 101. | 1.0 | 6.0 | 758 | 101.00 |
| 7 | 863.1 | 18.5 | 49 | 30 | 79 | 705 | 37. | 1.0 | 7.0 | 705 | 37.00 |
| 8 | 864.1 | 21.0 | 36 | 28 | 64 | 587 | 39. | 1.2 | 8.2 | 704 | 46.80 |
| 9 | 865.6 | 21.0 | 44 | 28 | 72 | 718 | 25. | 1.0 | 9.2 | 718 | 25.00 |
| 10 | 866.1 | 23.5 | 46 | 27 | 73 | 840 | 37. | 0.8 | 10.0 | 672 | 29.60 |
| 11 | 867.0 | 23.7 | 56 | 25 | 81 | 1030 | 50. | 0.5 | 10.5 | 515 | 25.00 |
| F-11 | 867.2 | 17.3 | 50 | - | - | 672 | - | 0.5 | 11.0 | 336 | - |
| 12 | 868.1 | 22.4 | 42 | 29 | 71 | 730 | 30. | 1.0 | 12.0 | 730 | 30.00 |
| 13 | 869.1 | 19.2 | 41 | 34 | 75 | 613 | 34. | 1.4 | 13.4 | 858 | 47.60 |
| 14 | 870.1 | 14.7 | 29 | 69 | 98 | 332 | 5.8 | 1.0 | 14.4 | 332 | 5.80 |
| 15 | 871.5 | 12.7 | 17 | 68 | 85 | 168 | 18. | 1.0 | 15.4 | 168 | 18.00 |
| 16 | 872.5 | 19.7 | 50 | 27 | 77 | 765 | 30. | 1.2 | 16.6 | 918 | 36.00 |
| 17 | 874.0 | 18.2 | 51 | 37 | 88 | 722 | 12. | 1.3 | 17.9 | 938 | 15.60 |

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company K-K Drilling Company Lease Roberts Well No. CT-2

| Depth Interval, Feet | Feet of Core Analyzed | Average Permeability, Millidarcys | Permeability Capacity Ft. x Md. |
|-------------------------|--------------------------|---|---------------------------------------|
| 854.5 - 870.0 | 12.9 | 33.9 | 433.71 |
| 870.0 - 874.5 | 4.5 | 18.8 | 75.40 |
| 854.5 - 874.5 | 17.4 | 29.3 | 509.11 |

| 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 |
|-------------------------|--------------------------|--------------------------------|--------------------------------------|--|---------------------------------------|------------------------------------|
| 854.5 - 870.0 | 13.4 | 19.7 | 42.7 | 30.3 | 657 | 8,800 |
| 870.0 - 874.5 | 4.5 | 16.6 | 38.3 | 48.3 | 523 | 2,356 |
| 854.5 - 874.5 | 17.9 | 18.9 | 41.6 | 35.0 | 623 | 11,156 |