

# OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

700 NORTH MISSION  
OKMULGEE, OKLAHOMA  
PHONE: 4444

Chanute, Kansas

536 N. HIGHLAND  
CHANUTE, KANSAS  
PHONE: HE 1-2650

September 24, 1962

Mid-Continent Drilling & Producing Company  
P.O. Box 1002  
Colorado Springs, Colorado

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Edd Greer Lease, Well No. 1, Wilson County, Kansas, and submitted to our laboratory on September 17, 1962.

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

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

*Benjamin R. Pearman*  
Benjamin R. Pearman

BRP:rf

5 c.



## OILFIELD RESEARCH LABORATORIES

-LOG-

Company Mid Continent Drilling & Producing Company Lease Edd Greer Well No. 1

Depth Interval, Description  
Feet

657.0 - 659.3 - Gray sandy shale.

659.3 - 664.8 - Brown, slightly shaly sandstone.

664.8 - 665.8 - Light brown, slightly shaly sandstone.

665.8 - 667.2 - Brown sandstone.

667.2 - 672.7 - Grayish light brown, shaly sandstone.

672.7 - 673.4 - Brown, slightly shaly sandstone.

673.4 - 677.2 - Light brown to dark, shaly sandstone.

677.2 - 679.4 - Dark carbonaceous sandstone.

679.4 - 685.0 - Gray sandy shale.

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Mid Continent Drilling & Prod. Co. Lease Edd Greer 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 |                           |              | T Total      | Ft.   |                   |                          |
| 1          | 660.0       | 8.9                        | 29                 | 17    | 200                       | 28.          | 1.2          | 1.2   | 240               | 33.60                    |
| 2          | 661.0       | 16.2                       | 40                 | 35    | 502                       | 188.         | 1.0          | 2.2   | 502               | 188.00                   |
| 3          | 662.0       | 14.9                       | 31                 | 40    | 358                       | 188.         | 1.0          | 3.2   | 358               | 188.00                   |
| 4          | 663.0       | 14.3                       | 43                 | 53    | 476                       | 7.7          | 1.0          | 4.2   | 476               | 7.70                     |
| 5          | 664.0       | 18.8                       | 51                 | 32    | 744                       | 68.          | 1.3          | 5.5   | 967               | 88.40                    |
| 6          | 665.0       | 11.0                       | 28                 | 58    | 239                       | Imp.         | 1.0          | 6.5   | 239               | 0.00                     |
| 7          | 666.0       | 18.1                       | 44                 | 33    | 617                       | 74.          | 0.7          | 7.2   | 432               | 51.80                    |
| 8          | 667.0       | 20.6                       | 47                 | 38    | 751                       | 93.          | 0.7          | 7.9   | 526               | 65.10                    |
| 9          | 668.0       | 12.6                       | 25                 | 68    | 244                       | 0.28         | 1.3          | 9.2   | 317               | 0.36                     |
| 10         | 669.0       | 16.0                       | 38                 | 28    | 471                       | 0.23         | 1.0          | 10.2  | 471               | 0.23                     |
| 11         | 670.0       | 16.0                       | 36                 | 40    | 446                       | 26.          | 1.0          | 11.2  | 446               | 26.00                    |
| 12         | 671.0       | 17.4                       | 40                 | 35    | 540                       | 2.5          | 1.0          | 12.2  | 540               | 2.50                     |
| 13         | 672.0       | 11.4                       | 17                 | 68    | 150                       | Imp.         | 1.2          | 13.4  | 180               | 0.00                     |
| 14         | 673.0       | 16.4                       | 34                 | 38    | 432                       | 37.          | 0.7          | 14.1  | 302               | 25.90                    |
| 15         | 674.0       | 10.1                       | 17                 | 77    | 133                       | Imp.         | 1.1          | 15.2  | 146               | 0.00                     |
| 16         | 675.0       | 16.1                       | 41                 | 33    | 511                       | 5.8          | 1.0          | 16.2  | 511               | 5.80                     |
| 17         | 676.0       | 15.2                       | 40                 | 33    | 471                       | 0.55         | 1.0          | 17.2  | 471               | 0.55                     |
| 18         | 677.0       | 11.7                       | 19                 | 75    | 173                       | 3.5          | 0.7          | 17.9  | 121               | 2.45                     |
| 19         | 678.0       | 14.1                       | 54                 | 33    | 590                       | 2.6          | 1.3          | 19.2  | 766               | 3.38                     |
| 20         | 679.0       | 18.3                       | 55                 | 11    | 780                       | 1.1          | 0.9          | 20.1  | 702               | 0.99                     |
|            |             |                            |                    |       |                           |              | Total        | ----- | 8,713             |                          |

# Oilfield Research Laboratories

## SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Mid Continent Drilling & Prod. Co. Lease Edd Greer Well No. 1

| Depth Interval, Feet | Feet of Core Analyzed | Average Permeability, Millidarcys | Permeability Capacity Ft. x Md. |
|----------------------|-----------------------|-----------------------------------|---------------------------------|
| 659.3 - 667.2        | 6.9                   | 90.2                              | 622.60                          |
| 667.2 - 679.4        | 9.9                   | 6.9                               | 68.16                           |
| 659.3 - 679.4        | 16.8                  | 41.1                              | 690.76                          |

| Depth Interval, Feet | Feet of Core Analyzed | Average Percent Porosity | Average Percent Oil Saturation | Average Percent Water Saturation | Average Oil Content Ebl./A. Ft. | Total Oil Content Ebls./Acre |
|----------------------|-----------------------|--------------------------|--------------------------------|----------------------------------|---------------------------------|------------------------------|
| 659.3 - 667.2        | 7.9                   | 15.0                     | 38.8                           | 37.6                             | 474                             | 3,740                        |
| 667.2 - 679.4        | 12.2                  | 14.5                     | 34.6                           | 45.5                             | 407                             | 4,973                        |
| 659.3 - 679.4        | 20.1                  | 14.7                     | 36.4                           | 42.4                             | 434                             | 8,713                        |