

# OILFIELD RESEARCH LABORATORIES

- REGISTERED ENGINEERS -

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OKMULGEE, OKLAHOMA  
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Chanute, Kansas

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CHANUTE, KANSAS  
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July 19, 1962

Ross Schoonover  
1000 West 6th  
Topeka, Kansas

Dear Sir:

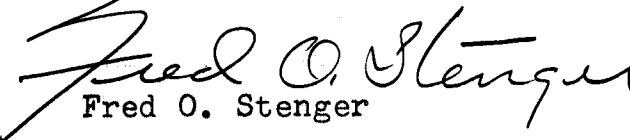
Enclosed herewith are the results of tests run on the Rotary core taken from the Broers Lease, Disposal Well, Franklin County, Kansas, and submitted to our laboratory on July 14, 1962.

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

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

  
Fred O. Stenger

FOS:rf

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# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

|                                                                           |                     |                      |                                            |
|---------------------------------------------------------------------------|---------------------|----------------------|--------------------------------------------|
| Company <u>Ross Schoonover</u>                                            | Lease <u>Broers</u> | Well No. <u>Well</u> | Disposal                                   |
| Location <u>NE <math>\frac{1}{4}</math></u>                               |                     |                      |                                            |
| Section <u>25</u>                                                         | Twp. <u>15S</u>     | Rge. <u>20E</u>      | County <u>Franklin</u> State <u>Kansas</u> |
| Name of Sand - - - - -                                                    |                     |                      | Squirrel                                   |
| Top of Core - - - - -                                                     |                     |                      | 747.0                                      |
| Bottom of Core - - - - -                                                  |                     |                      | 764.0                                      |
| Top of Sand - - - - - (Received)                                          |                     |                      | 747.0                                      |
| Bottom of Sand - - - - -                                                  |                     |                      | 762.0                                      |
| Total Feet of Permeable Sand - - - - -                                    |                     |                      | 15.0                                       |
| Total Feet of Floodable Sand - - - - -                                    |                     |                      | -                                          |
| Distribution of Permeable Sand:                                           |                     |                      |                                            |
| Permeability Range<br>Millidarcys                                         | Feet                | Cum. Ft.             |                                            |
| 0 - 10                                                                    | 7.0                 | 7.0                  |                                            |
| 10 - 20                                                                   | 7.0                 | 14.0                 |                                            |
| 20 & above                                                                | 1.0                 | 15.0                 |                                            |
| Average Permeability Millidarcys - - - - -                                |                     |                      | 10.4                                       |
| Average Percent Porosity - - - - -                                        |                     |                      | 17.4                                       |
| Average Percent Oil Saturation - - - - -                                  |                     |                      | 32.1                                       |
| Average Percent Water Saturation - - - - -                                |                     |                      | 49.3                                       |
| Average Oil Content, Bbls./A. Ft. - - - - -                               |                     |                      | 430.                                       |
| Total Oil Content, Bbls./Acre - - - - -                                   |                     |                      | 6,456.                                     |
| 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 - - - - -                                                 |                     |                      |                                            |

## OILFIELD RESEARCH LABORATORIES

-LOG-

Company Ross Schoonover Lease Broers Disposal Well

Depth Interval, Description  
Feet

747.0 - 756.0 - Brown, laminated, shaly sandstone.

756.0 - 757.0 - Brown, slightly shaly sandstone.

757.0 - 759.0 - Brown and gray, laminated shaly sandstone.

759.0 - 762.0 - Brown sandstone.

762.0 - 764.0 - Sandy shale.

## RESULTS OF SATURATION & PERMEABILITY TESTS

| Disposal        | Well No. | Lease | Broers |
|-----------------|----------|-------|--------|
| Ross Schoonover |          |       |        |

| 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          | 747.5            | 20.8                       | 28                 | 39    | 67    | 474                       | 11.          | 1.0          | 1.0      | 474               | 11.00                    |
| 2          | 748.5            | 21.6                       | 26                 | 40    | 66    | 435                       | 7.9          | 1.0          | 2.0      | 435               | 7.90                     |
| 3          | 749.5            | 20.8                       | 27                 | 41    | 68    | 457                       | 14.          | 1.0          | 3.0      | 457               | 14.00                    |
| 4          | 750.5            | 16.9                       | 27                 | 55    | 82    | 354                       | 2.6          | 1.0          | 4.0      | 354               | 2.60                     |
| 5          | 751.5            | 18.6                       | 31                 | 45    | 76    | 448                       | 7.7          | 1.0          | 5.0      | 448               | 7.70                     |
| 6          | 752.5            | 20.0                       | 33                 | 38    | 71    | 512                       | 9.6          | 1.0          | 6.0      | 512               | 9.60                     |
| 7          | 753.5            | 17.5                       | 15                 | 56    | 71    | 204                       | 1.7          | 1.0          | 7.0      | 204               | 1.70                     |
| 8          | 754.5            | 15.0                       | 35                 | 52    | 87    | 407                       | 12.          | 1.0          | 8.0      | 407               | 12.00                    |
| 9          | 755.5            | 14.5                       | 13                 | 73    | 86    | 146                       | 14.          | 1.0          | 9.0      | 146               | 14.00                    |
| 10         | 756.5            | 14.2                       | 47                 | 50    | 97    | 518                       | 14.          | 1.0          | 10.0     | 518               | 14.00                    |
| 11         | 757.5            | 17.9                       | 33                 | 45    | 78    | 458                       | 1.2          | 1.0          | 11.0     | 458               | 1.20                     |
| 12         | 758.5            | 16.4                       | 29                 | 57    | 86    | 369                       | 3.6          | 1.0          | 12.0     | 369               | 3.60                     |
| 13         | 759.5            | 15.7                       | 51                 | 46    | 97    | 622                       | 18.          | 1.0          | 13.0     | 622               | 18.00                    |
| 14         | 760.5            | 14.9                       | 42                 | 54    | 96    | 486                       | 22.          | 1.0          | 14.0     | 486               | 22.00                    |
| 15         | 761.5            | 16.2                       | 45                 | 49    | 94    | 566                       | 17.          | 1.0          | 15.0     | 566               | 17.00                    |
|            | <u>747</u><br>86 |                            |                    |       |       |                           |              | Total        | -----    | 6,456             |                          |

**Offield Research Laboratories**  
**SUMMARY OF PERMEABILITY & SATURATION TESTS**  
**TABLE III**

| Company              |      | Lease                 |      | Broers                          |  | Well No.                        |  | Disposal Well |  |
|----------------------|------|-----------------------|------|---------------------------------|--|---------------------------------|--|---------------|--|
| Depth Interval, Feet |      | Feet of Core Analyzed |      | Average Permeability, mD-inches |  | Permeability Capacity Ft. x Md. |  |               |  |
| 747.0 - 754.0        | 7.0  | 7.0                   | 7.8  | 54.50                           |  |                                 |  |               |  |
| 754.0 - 762.0        | 8.0  | 8.0                   | 12.7 | 101.80                          |  |                                 |  |               |  |
| 747.0 - 762.0        | 15.0 | 15.0                  | 10.4 | 156.30                          |  |                                 |  |               |  |

| Depth Interval, Feet |      | Feet of Core Analyzed |      | Average Porosity |     | Average Percent Oil Saturation |  | Average Percent Water Saturation |  | Average Oil Content Bbl./A. Ft. |  | Total Oil Content Bbl./Acre |  |
|----------------------|------|-----------------------|------|------------------|-----|--------------------------------|--|----------------------------------|--|---------------------------------|--|-----------------------------|--|
| 747.0 - 754.0        | 7.0  | 19.5                  | 26.7 | 44.9             | 412 | 2,884                          |  |                                  |  |                                 |  |                             |  |
| 754.0 - 762.0        | 8.0  | 15.6                  | 36.9 | 53.3             | 447 | 3,572                          |  |                                  |  |                                 |  |                             |  |
| 747.0 - 762.0        | 15.0 | 17.4                  | 32.1 | 49.3             | 430 | 6,456                          |  |                                  |  |                                 |  |                             |  |