



OILFIELD RESEARCH LABORATORIES

P. O. BOX 647 - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

December 16, 1986

Kansas Oil Properties, Inc.
R. 3, Box 189A
Baldwin City, KS 66006

Gentlemen:

Attached hereto are the results of tests run on the rotary core taken from the Shephard II Lease, Well No. 8, located in Section 13, T14S, R20E, Douglas County, Kansas.

The core was sampled and sealed in plastic bags by a representative of the client, and submitted to our laboratory on December 8, 1986.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Alan M. Dunning

Alan M. Dunning

AMD:bl

5 c to Baldwin City, KS

LOG

Company Kansas Oil Properties, Inc. Lease Shephard II Well No. 8

SECOND SQUIRREL SANDSTONE

| <u>Depth Interval, Feet</u> | <u>Description</u> |
|---------------------------------|---|
| 698.0 - 699.0 | Sandstone, light brown with scattered shale and mica partings. |
| 699.0 - 701.0 | Sandstone, brown. |
| 701.0 - 702.0 | Sandstone, brown with scattered shale and mica partings. |
| 702.0 - 703.8 | Sandstone, brown. |
| 703.8 - 709.3 | Sandstone, brown with scattered shale and mica partings. |
| 709.3 - 716.6 | Sandstone, brown. |
| 716.6 - 716.9 | Sandstone, light brown with scattered shale and carbonaceous inclusions. |
| 716.9 - 719.7 | Sandstone, brown. |
| 719.7 - 725.0 | Sandstone, light brown with scattered shale and mica partings, and coal inclusions. |
| 725.0 - 728.7 | Sandstone, brown with widely scattered coal inclusions. |
| 728.7 - 730.8 | Sandstone, brown with scattered shale and mica partings, and scattered shale and coal inclusions. |
| 730.8 - 733.0 | Sandstone, brown with widely scattered coal inclusions. |
| 733.0 - 735.7 | Sandstone, brown with scattered shale nodules and carbonaceous inclusions. |

LOG

Company Kansas Oil Properties, Inc. Lease Shephard II Well No. 8

SECOND SQUIRREL SANDSTONE (Continued)

| <u>Depth Interval, Feet</u> | <u>Description</u> |
|---------------------------------|--|
| 735.7 - 736.9 | Sandstone, light brown, slightly shaly with scattered carbonaceous inclusions. |
| 736.9 - 737.8 | Sandstone, brown with scattered carbonaceous inclusions. |

Oilfield Research Laboratories

RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1

Company Kansas Oil Properties, Inc. Lease Shepard II Well No. 8

| Sample No. | Depth, Feet | Porosity Percent | Percent Saturation | | | Stock Tank Barrels per Acre Foot | Permeability, Millidarcys |
|------------|-------------|------------------|--------------------|-------|-------|----------------------------------|---------------------------|
| | | | Oil | Water | Total | | |
| 1 | 698.5 | 23.3 | 19 | 63 | 82 | 637 | 102. |
| 2 | 699.5 | 24.7 | 34 | 32 | 66 | 1,241 | 57. |
| 3 | 700.5 | 26.8 | 50 | 25 | 75 | 1,485 | 237. |
| 4 | 701.5 | 24.7 | 44 | 27 | 71 | 1,332 | 44. |
| 5 | 702.5 | 24.7 | 41 | 27 | 68 | 1,332 | 50. |
| 6 | 703.5 | 25.4 | 39 | 28 | 67 | 1,351 | 82. |
| 7 | 704.5 | 25.2 | 46 | 21 | 67 | 1,471 | 87. |
| 8 | 705.6 | 23.1 | 22 | 43 | 65 | 973 | 36. |
| 9 | 706.5 | 25.7 | 45 | 24 | 69 | 1,443 | 121. |
| 10 | 707.5 | 24.6 | 24 | 48 | 72 | 945 | 28. |
| 11 | 708.4 | 26.1 | 40 | 29 | 69 | 1,369 | 58. |
| 12 | 709.5 | 26.7 | 50 | 23 | 73 | 1,519 | 104. |
| 13 | 710.5 | 25.5 | 50 | 22 | 72 | 1,470 | 51. |
| 14 | 711.5 | 24.7 | 43 | 28 | 71 | 1,314 | 64. |
| 15 | 712.5 | 24.5 | 58 | 16 | 74 | 1,521 | 52. |
| 16 | 713.5 | 24.2 | 60 | 13 | 73 | 1,556 | 36. |
| 17 | 714.5 | 25.9 | 47 | 27 | 74 | 1,397 | 78. |
| 18 | 715.5 | 26.4 | 43 | 29 | 72 | 1,385 | 68. |
| 19 | 716.5 | 25.9 | 42 | 28 | 70 | 1,378 | 56. |
| 20 | 717.5 | 28.8 | 34 | 26 | 60 | 1,574 | 46. |
| 21 | 718.5 | 28.4 | 42 | 27 | 69 | 1,532 | 38. |
| 22 | 719.5 | 27.7 | 38 | 30 | 68 | 1,433 | 92. |
| 23 | 720.5 | 24.0 | 29 | 41 | 70 | 1,046 | 39. |
| 24 | 721.5 | 25.4 | 15 | 40 | 55 | 1,126 | 32. |
| 25 | 722.5 | 25.5 | 25 | 38 | 63 | 1,168 | 30. |
| 26 | 723.5 | 25.9 | 38 | 19 | 57 | 1,550 | 72. |
| 27 | 724.5 | 25.4 | 33 | 31 | 64 | 1,295 | 28. |
| 28 | 725.5 | 23.9 | 45 | 33 | 78 | 1,183 | 32. |
| 29 | 726.5 | 26.8 | 44 | 25 | 69 | 1,485 | 68. |
| 30 | 727.5 | 28.1 | 43 | 26 | 69 | 1,536 | 84. |
| 31 | 728.5 | 25.9 | 35 | 28 | 63 | 1,378 | 74. |
| 32 | 729.5 | 25.1 | 39 | 24 | 63 | 1,409 | 13. |
| 33 | 730.5 | 26.1 | 45 | 18 | 63 | 1,581 | 90. |
| 34 | 731.4 | 27.1 | 50 | 19 | 69 | 1,622 | 53. |
| 35 | 732.5 | 26.8 | 48 | 16 | 64 | 1,663 | 59. |
| 36 | 733.5 | 26.0 | 40 | 26 | 66 | 1,422 | 101. |
| 37 | 734.5 | 27.2 | 39 | 27 | 66 | 1,540 | 92. |
| 38 | 735.5 | 24.9 | 35 | 34 | 69 | 1,214 | 32. |
| 39 | 736.5 | 15.9 | 49 | 27 | 76 | 858 | 7.4 |
| 40 | 737.5 | 27.5 | 43 | 22 | 65 | 1,585 | 42. |