

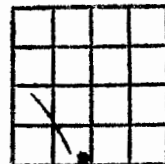
**WELL LOG BUREAU--KANSAS GEOLOGICAL SOCIETY**  
**505 East Murdock, Wichita, Kansas**

Company- WILLIAM I. GRUENERWALD  
 Farm- Mahoney No. 1

SEC. 13 T. 15 R. 9E  
 SE SE SW

Total Depth. 3150'  
 Comm. 4-6-58 Comp. 4-16-58  
 Shot or Treated.  
 Contractor. White & Ellis Drlg, Inc.  
 Issued. 7-4-59

County Wabaunsee  
 KANSAS



CASING:  
 8 5/8" 203' w/125 sx cem.

Elevation. 1381' KRM

Production. DRY

Figures Indicate Bottom of Formations.

|                         |      |            |      |
|-------------------------|------|------------|------|
| K.B.Meas 5' above G.L.  |      |            |      |
| gravel                  | 5    | Kinderhook | 2745 |
| lime                    | 20   | Hunton     | 2892 |
| shale                   | 25   | Viola      | 3082 |
| red rock                | 35   |            |      |
| shale, shell            | 110  |            |      |
| lime                    | 135  |            |      |
| shale                   | 160  |            |      |
| lime                    | 206  |            |      |
| shale, lime stks        | 215  |            |      |
| shale, shell            | 463  |            |      |
| lime                    | 467  |            |      |
| shale, shell            | 525  |            |      |
| lime                    | 530  |            |      |
| shale rgh lime stks     | 730  |            |      |
| shale                   | 1000 |            |      |
| lime, shale             | 1260 |            |      |
| shale w/lime stks       | 1365 |            |      |
| shale, shell            | 1425 |            |      |
| shale, lime             | 1430 |            |      |
| lime, shale             | 1500 |            |      |
| lime, shale, shell      | 1539 |            |      |
| shale, shell            | 1546 |            |      |
| lime                    | 1686 |            |      |
| lime                    | 1805 |            |      |
| lime hd                 | 1815 |            |      |
| lime wh                 | 1840 |            |      |
| lime w/shale            | 1855 |            |      |
| lime                    | 1901 |            |      |
| shale, shell            | 1981 |            |      |
| drk shale, lime stks    | 2059 |            |      |
| lime                    | 2070 |            |      |
| shale, lime stks        | 2145 |            |      |
| shale w/lime, shells    | 2345 |            |      |
| chat                    | 2474 |            |      |
| lime                    | 2560 |            |      |
| lime w/chert stks       | 2598 |            |      |
| chert rgh stks          | 2610 |            |      |
| lime                    | 2621 |            |      |
| lime w/thin chatty stks | 2633 |            |      |
| lime hd                 | 2638 |            |      |
| lime                    | 2685 |            |      |
| lime w/shale stks       | 2715 |            |      |
| lime                    | 2745 |            |      |
| lime, shale             | 2770 |            |      |
| shale                   | 2892 |            |      |
| lime                    | 2989 |            |      |
| lime, shale stks        | 3047 |            |      |
| shale                   | 3082 |            |      |
| lime                    | 3150 |            |      |
| Total Depth             |      |            |      |

TOPS:  
 Lansing 1546  
 Kansas City 1606  
 Mississippi chat 2345  
 Mississippi lime 2474