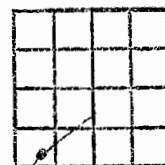


**WELL LOG BUREAU--KANSAS GEOLOGICAL SOCIETY**  
**508 East Murdock,                      Wichita, Kansas**

Company- NATURAL GAS & OIL CORP. & REPUBLIC NAT. SEC. 27 T. 24 R. 14W  
 Farm- Keolsch-Oswald No. 1 GAS CO. SE SW SW

Total Depth. 4308  
 Comm. 1-31-54 Comp. 2-15-54  
 Shot or Treated.  
 Contractor. : Natural Gas & Oil Corp.  
 Issued. 3-6-54

County Stafford  
 KANSAS



Elevation. 1977 RB

Production. Dry

Figures indicate Bottom of Formations.

|                 |      |
|-----------------|------|
| clay            | 40   |
| sand & clay     | 180  |
| shale & shells  | 310  |
| shale & sand    | 430  |
| red bed & shale | 640  |
| shale & shells  | 885  |
| anhydrite       | 923  |
| shale & shells  | 1300 |
| shale & salt    | 1550 |
| shale & shells  | 1765 |
| lime & shale    | 1845 |
| lime            | 2525 |
| lime & shale    | 3085 |
| lime            | 3550 |
| lime & shale    | 3660 |
| lime brown      | 3663 |
| lime & shale    | 3690 |
| lime            | 4083 |
| cherty lime     | 4114 |
| shale & lime    | 4180 |
| chert & shale   | 4220 |
| lime            | 4247 |
| shale & lime    | 4272 |
| sand & shale    | 4292 |
| lime            | 4308 |
| Total Depth     |      |

Tops:

|            |      |
|------------|------|
| Anhydrite  | 885  |
| Heebner    | 3526 |
| Brown Lime | 3660 |
| Lansing    | 3690 |
| Miss.      | 4072 |
| Viola      | 4163 |
| Simpson    | 4247 |
| Arbuckle   | 4296 |

DST: #1 3810-45' open 1 hr.  
 shut in 15 min. rec. 330'  
 gas 90' slightly oil & gas  
 cut mud, BHP 525#.

DST: #2 4075-14' open 1 hr.  
 shut in 15 min. good to strong  
 blow, rec. 320' slightly gas  
 cut watery mud, no gas in pipe.  
 520# BHP.

DST: #3 4298-4308' open 1 hr.  
 shut in 1/2 hrs. rec. 1165'  
 sulphur water 1430# BHP.

Run Schlumberger