

SOUTH WINN COUNTRY CLUB  
CALMAR, IA 52132

A  
WINNESHIEK, CALMAR, SEC. 28NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$   
JUNE 1987  
BILLED TO DR. R. ARLAN / PAULSON

#28089

| LOG OF WELL |    |      |                     |
|-------------|----|------|---------------------|
| 0'          | to | 390' | Existing well       |
| 390'        | to | 411' | Gray limerock       |
| 411'        | to | 440' | Blue gray limerock  |
| 440'        | to | 470' | Brown limerock      |
| 470'        | to | 490' | Shale streaks       |
| 490'        | to | 515' | Shale               |
| 515'        | to | 542' | Limerock and shale  |
| 542'        | to | 556' | Shale               |
| 556'        | to | 610' | St. Peter sandstone |

*Conover*

The existing well was an 8" ID well cased to an estimated depth of 190'. The well has a dog leg from 315' to approx. 390'. The 7" liner dragged in this area during installation. An attempt to install the 8" hammer with a 7" stabilizer above it would not go during initial stringing of tools. The subsequent 220' of drilling from 390'-610' was done with an 8" bit and a 5 $\frac{1}{2}$ " OD

OVER

*P.2 S. Winn Country Club*

stabilizer. The ledges of a crevice were knocked off with a 7 7/8" roller cone bit to allow the 7" liner to be installed. The liner was installed from 455'-560'.

The static water level upon completion was 315'.

The casing is doglegged in the upper part of the well as well as misaligned in the 315'-340' range. Upon completion of the drilling water was trickling into the lower water from an unknown source. Top of liner has a reverse 6" coupling.

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