SHAWVER WELL CO.

WATER WELL DRILLING
P. O. BOX ~~XXX~~ 266
FREDERICKSBURG, IOWA
Phone ~~515~~ 319 - 237-5341



City of Denver, Iowa
Log of Well
Location: Bremer, Jefferson
Drilled: June, 1973

0'	to	2'	Topsoil
2'	to	18'	Yellow clay
18'	to	24'	Blue clay
24'	to	32'	Sand
32'	to	55'	Brown clay
55'	to	118'	Blue clay
118'	to	130'	Limerock
130'	to	134'	Creviced limerock with water
134'	to	168'	Soft broken limerock with shale streaks
168'	to	177'	Limerock, produced water
177'	to	183'	Limerock
183'	to	185'	Shale

A 16" hole was drilled from ground level to 21' and 21' of 15½" x 16" O.D. temporary casing was installed. A 14" hole was then drilled from 21' to 127' and a 14" temporary casing was installed. Then 129' of 10" I.D. x 10 3/4" O.D. x .365 wall thickness P.E. casing equipped with a Butler Larkin combination pressure-grout shoe welded to the end of the casing was centered inside the 14" (temporary casing) hole from 2' above the ground level to 127' below ground level. 270 cubic feet of cement grout was placed in the annular space surrounding the 10 3/4" casing and the 14" temporary casing. The 14" temporary casing was removed as the grout was placed. After the cement grout had set up for 96 hours, the drilling of a 10" hole was continued from 127' through the underlying limerock formations to 185'. Because the limerock formation from 130' to 168' was unusually soft, large chunks of limerock would cave into the hole during the drilling operations. After consulting with engineer, Mr. L. W. Kehe, it was decided to install 8" I.D. perforated casing from 114' to 185' to prevent caving that would obstruct the flow of water.
The static water level is 117'.
Pumped 250 gallons per minute.

DRILLED DEEPER June, 1978.

0'	to	200'	Existing 10" well
200'	to	370'	Maquoketa shale
370'	to	478'	Shale and limerock
478'	to	510'	Soft Galena limerock
510'	to	705'	Galena limerock
705'	to	780'	Decorah Platteville shale
780'	to	790'	Glenwood shale
790'	to	820'	St. Peter sandstone Produced approximately 160 gpm
820'	to	980'	Dolomite (Prairie Du Chein)
980'	to	1040'	New Richmond Sandstone
1040'	to	1060'	Dolomite (Oneata)

Cased from 2' above ground level to 520' with 8" I.D. x .304 wall thickness