

Shellsburg, City of Shellsburg, Iowa Started 7/24/06 -- Completed 8/11/06

Log of Well

0,	То	1'	Topsoil
1'	То	6'	Brown Clay
6'	То	8'	Light Green Clay
8'	То	11'	Brown Clay w/ Red Streaks
11'	То	15'	Blue Clay
15'	То	19'	Dark Brown Black Clay
19'	To	27'	Blue Clay
27'	То	35'	Sand & Gravel
35'	То	46'	Gray Limestone
46'	То	47'	Gray Shale
47'	To	49'	Gray Limestone
49'	То	54'	Light Brown Limestone
54'	То	98'	Cream, Brown & Gray Limerock
98'	To	108'	Gray Shale
108'	То	127'	Cream & Gray Limerock
127'	То	170'	Brown, Gray & Cream Soft & Broken
			Limerock
170'	То	179'	Gray Limerock with Shale Streaks
179'	То	182'	Blue & Green Shale
182'	To	188'	Gray & Brown Limerock
188'	То	194'	Gray Shale
194'	То	207'	Cream Limerock with Shale Streaks
207'	То	248'	Cream & Yellow Limerock
248'	То	362'	Cream, Gray & Brown Limerock
362'	То	376'	Blue Shale
376'	То	428'	Cream & Gray Limerock
428'	To	452'	Blue & Green Limerock
452'	То	588'	Blue & Gray Soft Shale
588'	То	624'	Brown & Gray Shale Rock
624'	То	695'	Brown Dark Shale
695'	То	912'	Light Brown Limerock
912'	То	928'	Blue & Green Shale Rock
928'	То	958'	Light Brown Limerock
958'	То	971'	Gray Shale Rock
971'	To	998'	Brown & Gray Limerock
998'	To	1002'	Blue Soft Shale - Iron Pirite

Well Log Cont'd

1002'	То	1043'	Gray & White Sandstone
1043'	То	1045'	Shale & Limerock Crumbles
1045'	То	1085'	Brown & Gray Limerock
1085'	То	1100'	Cream Limerock
1100'	To	1108'	Brown Limerock
1108'	То	1109'	White Sandstone
1109'	То	1170'	Cream Limerock
1170'	To	1178'	White Sandstone
1178'	То	1190'	Gray & Cream Limerock
1190'	То	1196'	White Sandstone
1196'	То	1210'	Cream Limerock
1210'	То	1218'	White Sandstone
1218'	То	1300'	Cream Limerock with Sand Streaks
1300'	To	1345'	Cream & Brown Limerock
1345'	To	1389'	Gray & Light Brown Limerock
		•	With Streaks of Sandstone
1389'	То	1430'	Gray Limerock with Green Streaks
1430'	То	1436'	Light Brown Limerock
1436'	То	1440'	White Sandstone
1440'	То	1452'	Brown & Gray Limerock
1452'	То	1485'	Hard Limerock & Sandstone
1485'	То	1496'	Gray & Brown Sandstone with
			Limestone with Shale Streaks
1496'	To	1500'	Light Brown Sandstone & Limerock
1500'	То	1515'	Light Brown Sandstone
1515'	То	1523'	Light Gray Limerock & Sandstone
1523'	То	1526'	Light Gray Limerock
1526'	То	1539'	Light Brown with Sandstone Streaks
1539'	To	1546'	Light Tan Limerock
1546'	То	1567'	Light Brown & Gray Limerock
			With Some Sandstone Streaks

Construction Record

The well is cased to 1,083' with 13.625 x .430 wall – API Grade J-55 casing. A 23" hole was drilled to a depth of 52' and 54.1' of structural grade 18.625" x .435 wall casing was installed and grouted in with neat cement grout. A 17.5" hole was then drilled to a depth of 1,083' and 1,084' of 13.375" x .430 wall, API Grade J-55 casing was installed and grouted in with neat cement grout. A 12.375" open hole was then drilled to a depth of 1,567' and the well was air lifted for 2 hours for development. The estimated flow during development was in excess of 2,000 GPM. When the well recovered from development the static water level was observed at 210'. The well was then test pumped for a period of hours. After 20 hours of pumping the well stabilized at 378' pumping at a rate of 614 gallons per minute.

City of Shellsburg, IA New Well, Drilled July/August, 2006 13.375" Diameter, Jordan well, 1,567' Total Depth

