Shawver Well Company, Inc.
2700 Stanley Avenue
Fredericksburg, IA 50630

(563) 237-5341
(800) 568-4449

Location of Well

south end of 6th Street
Elma, IA 50628

County **Howard**
Township **Afton**
Section **12**
Quarters **NE**

Customer Information

City of Elma
City of Elma

Elma, IA 50628

Contact Date **1/9/2006**
Confirmation Date

Contact Information

Home Ph:
Work Ph:
Cell Ph:
Fax:

Best time to call:
Email:
Customer since: **1/9/2006**
Referred By:

Job Information

Area **CM**
Latitude
Longitude
PWTS #
Permit Number

Confirmation
Start Date **5/3/2006**
End Date **5/19/2006**
Warranty Date
Warranty

Well Site Information

Actual Size **10"**
Depth **190'**
Elevation
SWL **26'**
RPS **120' @ 150+ GPM**
Max GPM **200 GPM**

Air Lift **190' @ 300+ GPM, 100' @ 150 GPM**
Exploratory -- To Ft --
Mock Rock Acidize --
Well Use
Rig **30K - 2002**
Driller **Matt Mineart**; Cert #: **7920**
Driller 2 **D. Halweg, D. Schumacher, M. Hageman**

Pump Inst -- Liner--ft
Sulfide --Screen--

Made Water **132'-133', 136', 147', 152', 170', 174', 176', 180'**
Screen Size
Slot Size
Riser Pipe
Set From
Perforated From
Tail Pipe

Description:
The well is cased to 64' with 16"X.375" wall structural grade casing. A 19" hole was drilled to 64' and 65' of 16"X.375" wall casing was installed and the annular space was grouted with neat cement grout. A 15" hole was then drilled to 129' and 130.8' of 10"X.322 wall A53-B casing was installed. The annular space was grouted with 100 sacks of neat cement grout. A 9.875" hole was then drilled to a total well depth of 190' and air lifted for a period of 1 hour for development. The estimated flow during airlifting was 400 GPM+. The static water level was observed at 27.2' after the well recovered from development. The well was test pumped at 160 GPM for a period of 24 hours with a pumping level of 37'.
Remarks:
Drilled a Pilot Hole... 28' to 67' - 6 1/4" RC 28' to 68' - 7 7/8" RC 68' to 73' - 6 1/4" RC 73' to 177' - 6 1/4" Hammer

Well Formation Log

From-To	Color	Formation
0 - 1	Black - Brown	Topsoil
1 - 4	Brown	Clay, Sandy
4 - 10	Brown	Sand
10 - 54	Multicolored	Sand & Pea Rock
54 - 60	Brown - Black	Boulders
60 - 65	Lt. Brown	Limerock
65 - 73	Gray	Limerock
73 - 77	Tan - Orange	Limerock
77 - 107	Lt. Brown - Gray	Limerock
107 - 113	Lt. Brown - Tan	Limerock
113 - 123	Gray	Shale
123 - 130	Gray	Shale Rock, Hard
130 - 164	Brown	Limerock
164 - 181	Gray	Limerock
181 - 189	Lt. Brown	Limerock
189 - 190	Gray	Shale, Hard

Bore Log

From-To	Bit Size - Number	
0 - 28	14 3/4"	M4633
0 - 19	21"	Hole Opener
19 - 64	12 1/4"	61986
19 - 64	19"	H11 Hole Opener
28 - 67	12 5/8	LG8417
64 - 129	15"	Hammer - 506208
129 - 190	9 7/8"	410836

Well Casing Log

	From-To	Casing
+	1.8 - 0	10" x Steel
	0 - 65	16" x Steel
	0 - 129	10" x Steel

Screen Size
Slot Size
Riser Pipe
Set From
Tail Pipe

Well Grout Used

Amount	Type
155 sacks	Neat Cement
14 sacks	Holeplug
16 sacks	EZ Seal
8 sacks	Casing Seal
50 sacks	Quick Jel
3 sacks	High Early
3 sacks	N-Seal
45 sacks	Polarset