

2700 Stanley Avenue
Fredericksburg, IA 50630

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

**On Hwy 139 - Kendallville Park-
PWSID #9615901 Fac. #WL02
Cresco, IA 52136**

County **Winneshiek**
Township **Fremont**
Section **33**
Quarters **NWNE**

Dave Oestmann
Winneshiek County Conservation
2546 Lake Meyer
Fort Atkinson, IA 52144

Contact Date **1/19/2006**
Confirmation Date **5/8/2006**

Home Ph:
Work Ph: **563-534-7145**
Cell Ph:
Fax:

Best time to call:
Email: **d4os@acegroup.cc**
Customer since: **10/27/2005**
Referred By:

Area **WK**

Confirmation **5/8/2006**
Start Date **6/5/2006**
End Date **6/12/2006**

Latitude
Longitude

PWTS # **PWSID #9615901** Warranty Date
Permit Number Warranty

Actual Size **7"**
Depth **412'**
Elevation
SWL **34'**
RPS **190' @ 45 gpm**
Max GPM **412' @ 150 gpm**

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

Made Water @15'-160', 228'-295', 373'-412'

**Air Lift @ 190' @ 45
gpm, @ 412' @
150 gpm**

Exploratory -- To Ft
Mock Rock -- Acidize --
Well Use

Slot Size
Riser Pipe
Set From
Perforated From
Tail Pipe

Rig **99 30K**

Driller **Tom Mellick**; Cert #: **7058**

Driller 2 **Bill Franzen & Chad Kucera**

A 12¼" hole was drilled to 28' and 10" temporary casing was installed. A 10" hole was drilled to 320'. The well was then cased with 322' of 7" outside diameter X .272 wall steel casing. Then Neat cement grout was pumped into the annular space. The temporary casing was removed. A 6¼" hole was drilled to 412' and the well was airlifted.

Remarks:

From-To	Color	Formation
0 - 4	Brown	Clay
4 - 15	Black	Siltstone
15 - 28	Brown	Sand & Gravel
28 - 35	Brown	Limerock
35 - 40	Gray	Limerock
40 - 160	Tan - Gray	Limerock
160 - 200	Green	Shale
200 - 223	Gray	Limerock
223 - 228	Blue	Sandstone
223 - 228	Blue	Shale
228 - 295	White	Sandstone
295 - 296	Brown	Limerock & Shale
296 - 373	Brown	Limerock
373 - 380	Brown	Sandstone & Limerock
380 - 394	Brown	Limerock
394 - 398	Brown	Sandstone & Limerock
398 - 412	Brown	Limerock

From-To	Bit Size - Number	
0 - 28	12 1/4"	167140
28 - 320	9 7/8"	C48235
37 - 264	9 7/8"	2445
320 - 412	6 1/4"	310300

From-To	Casing
+ 2 - 0	7" x .272" Steel
0 - 320	7" x .272" Steel

Screen Size

Slot Size

Riser Pipe

Set From
Tail Pipe

Amount	Type
170 sacks	Neat Cement
6 sacks	Quick Jel
2 sacks	Casing Seal

Iowa Department of Natural Resources Geological Survey Bureau
109 Trowbridge Hall Iowa City, IA 52242-1319 PH (319) 335-1575

WELL RECORD

Permit No. _____

PWS ID # 9615901

Site identification Winn County Conservation Property Owner <u>Kendallville Park</u> Well Number <u>2</u> Address <u>On Hwy 139, Kendallville, Ia</u> Tenant _____ Well Depth <u>412</u> ft Date completed <u>06/12/06</u>				Drill method ☒ rotary ☐ auger ☐ cable ☐ other _____ Hole size 1 1/4 inch from 0 ft to 28 ft 9 7/8 inch from 37 ft to 41 ft 9 7/8 inch from 28 ft to 320 ft 6 1/4 inch from 320 ft to 412 ft Record all depth measurements from ground level (GL). Use (+) for above GL measurements.																																																																																								
Location County <u>Winn</u> State <u>Ia</u> mi. N and mi. E of intersection of _____ and _____ 1/4 of the _____ 1/4 of the _____ NE 1/4 of Sec. <u>33</u> TWP <u>100</u> RANG <u>10</u> E Show exact location of well in section grid with a dot (•). Sketch map of well location on property.				Casing Drive shoe (yes/no) ☒ Pileless adapter (yes/no) _____ Size (ID/OD) Type / WT Depth top Depth bottom Amount (length) 7" 272 Steel +2 320' 322'																																																																																								
Upland ☐ hillside ☐ valley ☐ Elevation (if known) _____ Formation log <table border="1"> <thead> <tr> <th>From</th> <th>To</th> <th>Color</th> <th>Hardness</th> <th>Formation description</th> </tr> </thead> <tbody> <tr><td>0</td><td>4</td><td>Brown</td><td>Clay</td><td></td></tr> <tr><td>4</td><td>15</td><td>Black</td><td>silt</td><td></td></tr> <tr><td>15</td><td>28</td><td>brown</td><td>Sand + gravel</td><td></td></tr> <tr><td>28</td><td>35</td><td>brown</td><td>Limestone</td><td></td></tr> <tr><td>35</td><td>40</td><td>gray</td><td>Limestone</td><td></td></tr> <tr><td>40</td><td>160</td><td>Tan gray</td><td>Limestone</td><td></td></tr> <tr><td>160</td><td>200</td><td>Green</td><td>shale</td><td></td></tr> <tr><td>200</td><td>223</td><td>gray</td><td>Limestone</td><td></td></tr> <tr><td>223</td><td>228</td><td>Blue</td><td>shale</td><td></td></tr> <tr><td>228</td><td>295</td><td>white</td><td>Sandstone</td><td></td></tr> <tr><td>295</td><td>296</td><td>brown</td><td>Limestone shale</td><td></td></tr> <tr><td>296</td><td>373</td><td>Brown</td><td>Limestone</td><td></td></tr> <tr><td>373</td><td>380</td><td>Brown</td><td>Sandstone Limestone</td><td></td></tr> <tr><td>380</td><td>394</td><td>Brown</td><td>Limestone</td><td></td></tr> <tr><td>394</td><td>398</td><td>Brown</td><td>Sandstone Limestone</td><td></td></tr> <tr><td>398</td><td>412</td><td>Brown</td><td>Limestone</td><td></td></tr> </tbody> </table>				From	To	Color	Hardness	Formation description	0	4	Brown	Clay		4	15	Black	silt		15	28	brown	Sand + gravel		28	35	brown	Limestone		35	40	gray	Limestone		40	160	Tan gray	Limestone		160	200	Green	shale		200	223	gray	Limestone		223	228	Blue	shale		228	295	white	Sandstone		295	296	brown	Limestone shale		296	373	Brown	Limestone		373	380	Brown	Sandstone Limestone		380	394	Brown	Limestone		394	398	Brown	Sandstone Limestone		398	412	Brown	Limestone		Perforated or slotted casing? (yes/no) ☒ Perforated / slotted from _____ ft to _____ ft Perforated / slotted from _____ ft to _____ ft			
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Casing grouted? (yes/no) ☒ Placement method <u>grout</u> Type Depth top Depth bottom Amount (vol/WT) Wet cement 0 320' 170 sacks				Well screen? (yes/no) ☒ Diameter Slot size Depth top Depth bottom Length Material 0" 0" 0" 0" 0' 0"																																																																																								
Bottom capped? (yes/no) _____ with _____ Seals / Packers (yes/no) _____ kind _____ depth _____ ft Gravel packed (yes/no) _____ from _____ ft to _____ ft type _____ amount _____				Well developed? (yes/no) ☒ Explain <u>2190 @ 45 gpm @ 412' @ 150 cpm</u> (pumped, drilled, bailed) for <u>1</u> hrs at <u>45</u> GPM																																																																																								
Pump installed? (yes/no) ☒ Date <u>1/1/06</u> Installer's name _____ Type of pump _____ Depth to intake _____ ft Pump diameter _____ Rated capacity _____ GPM				Water information Aquifer: ☐ sand / gravel ☒ limestone ☐ sandstone Main water supply zone from <u>373</u> ft to <u>412</u> ft ☐ seepage well Static water level <u>34</u> ft below / above GL ☐ tape ☐ airline ☒ E-line ☐ estimate Pumping water level <u>190</u> ft below GL ☐ tape ☐ airline ☒ E-line ☐ estimate At yield of <u>45</u> GPM ☐ orifice ☐ volumetric ☒ estimate Measurements taken at <u>5:00 AM</u> Date <u>06/12/06</u>																																																																																								
Remarks (including depth of lost drilling fluids, materials, or tools)				Water quality test? (yes/no) _____ Date tested <u>1/1/06</u> Tested by _____																																																																																								
Well use ☐ Domestic ☐ Municipal ☐ Commercial ☐ Livestock ☒ Public supply ☐ Monitoring ☐ Test well ☐ Irrigation ☐ Other _____ (explain)				Contractor <u>Shawver Well Co</u> Address <u>Fredericksburg</u> Driller <u>Tom Mellick</u> Certification no. <u>2058</u>																																																																																								