

WELL RECORD

Permit No.

Iowa Department of Natural Resources - Geological Survey Bureau
199 Trowbridge Hall, Iowa City, IA 52242-1919 PH (319) 335-1578

PWS# 2108459

PWSID# 4515902

Site identification <u>Howard Co. Vernon Spring</u> Property Owner <u>Prairie & Edge Nature Center</u> Address <u>11563 Valley Ave, Cresco Ia</u> Tenant Well Depth <u>356</u> ft Date completed <u>04/28/05</u>				Drill method ☒ Rotary ☐ Auger ☐ Cable ☐ Other Hole size <u>12 1/4</u> inch from 0 ft to <u>20</u> ft <u>6 1/4</u> inch from <u>308</u> ft to <u>356</u> ft <u>9 7/8</u> inch from <u>20</u> ft to <u>308</u> ft																																								
Location County <u>Howard</u> mi. N and mi. E of intersection of _____ and _____ <u>SW 1/4 of the NE 1/4 of the NW 1/4 of Sec 34 TWP 99 RANG 11 E</u> Show exact location of well in section grid with a dot (•). Sketch map of well location on property.				Record all depth measurements from ground level (GL). Use (+) for above GL measurements. Casing Drive shoe (yes/no) ☒ Pitless adapter (yes/no) ☐ <table border="1"> <thead> <tr> <th>Size (ID/OD)</th> <th>Type / WT</th> <th>Depth top</th> <th>Depth bottom</th> <th>Amount (length)</th> </tr> </thead> <tbody> <tr> <td>7" 00</td> <td>317 5/8 + 1</td> <td></td> <td>293'</td> <td>294'</td> </tr> </tbody> </table>				Size (ID/OD)	Type / WT	Depth top	Depth bottom	Amount (length)	7" 00	317 5/8 + 1		293'	294'																											
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				Perforated or slotted casing? (yes/no) ☒ Perforated / slotted from _____ ft to _____ ft Perforated / slotted from _____ ft to _____ ft																																								
☐ 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>6</td> <td>Fill</td> <td></td> <td>Dirt</td> </tr> <tr> <td>6</td> <td>187</td> <td>Brown / Gray</td> <td></td> <td>Limestone</td> </tr> <tr> <td>187</td> <td>200</td> <td>Brown</td> <td></td> <td>Limestone</td> </tr> <tr> <td>200</td> <td>356</td> <td>Brown</td> <td></td> <td>Limestone</td> </tr> </tbody> </table>				From	To	Color	Hardness	Formation description	0	6	Fill		Dirt	6	187	Brown / Gray		Limestone	187	200	Brown		Limestone	200	356	Brown		Limestone	Casing grouted? (yes/no) ☒ Placement method <u>premix</u> <table border="1"> <thead> <tr> <th>Type</th> <th>Depth Top</th> <th>Depth bottom</th> <th>Amount (vol/wt)</th> </tr> </thead> <tbody> <tr> <td>Neat cement</td> <td>0</td> <td>308'</td> <td>80-Sacks</td> </tr> <tr> <td>High Early</td> <td>0</td> <td>308'</td> <td>12 Sacks</td> </tr> </tbody> </table>				Type	Depth Top	Depth bottom	Amount (vol/wt)	Neat cement	0	308'	80-Sacks	High Early	0	308'	12 Sacks
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Well developed? (yes/no) ☒ Explain <u>@ 238' @ 50 gpm, @ 356' @ 100+ gpm</u> (pumped, lifted, bailed) for <u>1</u> hrs at <u>50</u> GPM.				Pump installed? (yes/no) ☒ Date <u>4/28/05</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>308</u> ft to <u>356</u> ft ☐ seepage well Static water level <u>110</u> ft (below/above) GL: ☐ tape ☐ airline ☒ E-line ☐ estimate Pumping water level <u>230</u> ft below GL: ☐ tape ☒ airline ☐ E-line ☐ estimate At yield of <u>50</u> GPM: ☐ orifice ☐ volumetric ☒ estimate Measurements taken at <u>5:00 (AM/PM)</u> Date <u>04/28/05</u>				Water quality test? (yes/no) ☐ Date tested _____ Tested by _____																																								
Remarks (including depth of lost drilling fluids, materials, or tools)				Well use ☐ Domestic ☐ Municipal ☐ Commercial ☐ Monitoring ☐ Other (explain) ☐ Livestock ☒ Public supply ☐ Irrigation																																								
Contractor <u>Shawver Well Co</u> Address <u>Friedrichsburg IA</u> Driller <u>Gary Martin</u> Certification no. <u>3895</u>																																												