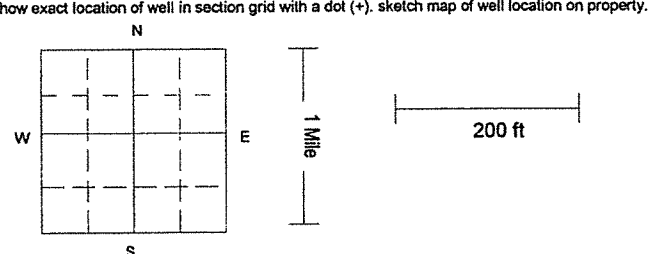


WELL RECORD

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

PWTS Well No.: _____

PWTS Permit No. _____
County Permit No. _____

| Site Identification Property Owner <u>FONTANELLE, CITY OF</u> ID: _____ WELL #7 Address <u>2482 DOVER AVE, FONTANELLE, IA 50846</u> Tenant _____ Well Depth: <u>205</u> ft Date Completed: <u>5/21/2021</u> | | | | | Drill Method <input checked="" type="checkbox"/> rotary <input type="checkbox"/> auger <input type="checkbox"/> cable other _____ Hole Size 21 inch from 0 ft to 173 ft inch from ft to ft 14.75 inch from 173 ft to 205 ft inch from ft to ft | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------|--------------|-----------------|-----------------------|--|----|-------|----------|-----------------------|-----------------------------|-----------|--------------|-----------------|-----------------|--|------------|-----------|-----------|-----|----------|-----------------|-------------------------|-----|-----|-----------|----------|-----------|-----------|--------------|--------|----------|-------|------|-----|-----|----|-------------|
| Location County <u>ADAIR COUNTY IOWA</u> _____ mi ^N and _____ mi ^E of intersection of _____ and _____ NE 1/4 of the SE 1/4 of the SE 1/4 of Sec 15 TW 75N RN 33W E W GPS Coordinates (NAD83 datum only) decimal degrees: _____ N. Latitude _____ W. Longitude Show exact location of well in section grid with a dot (+). sketch map of well location on property. | | | | | Casing Placement Method: <u>TRIMIE</u> <input type="checkbox"/> Drive shoe <input type="checkbox"/> Plu <table border="1" style="width:100%; border-collapse: collapse;"> <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>16 OD</td> <td>STEEL .375</td> <td>0</td> <td>173</td> <td>173</td> </tr> <tr> <td>10.75 OD</td> <td>STEEL SCH40/365</td> <td>0</td> <td>180</td> <td>180</td> </tr> </tbody> </table> | | | | | Size (ID/OD) | Type/ Wt | Depth top | Depth bottom | Amount (length) | 16 OD | STEEL .375 | 0 | 173 | 173 | 10.75 OD | STEEL SCH40/365 | 0 | 180 | 180 | | | | | | | | | | | | | |
| Size (ID/OD) | Type/ Wt | Depth top | Depth bottom | Amount (length) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 OD | STEEL .375 | 0 | 173 | 173 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10.75 OD | STEEL SCH40/365 | 0 | 180 | 180 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | Perforated or Slotted Casing <input type="checkbox"/> Perforated <input type="checkbox"/> Slotted from ft to ft <input type="checkbox"/> Perforated <input type="checkbox"/> Slotted from ft to ft | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Upland <input type="checkbox"/> Hillside <input checked="" type="checkbox"/> Valley <input type="checkbox"/> Level Surface Elevation (if known) _____ | | | | | Casing Grouted <input checked="" type="checkbox"/> Grouted <table border="1" style="width:100%; border-collapse: collapse;"> <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>173</td> <td>200 CU/FT</td> </tr> <tr> <td>HOLE PLUG</td> <td>165</td> <td>170</td> <td>3 CU/FT</td> </tr> <tr> <td>NEAT CEMENT Well Screen</td> <td>0</td> <td>185</td> <td>100 CU/FT</td> </tr> </tbody> </table> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Diameter</th> <th>Slot size</th> <th>Depth top</th> <th>Depth bottom</th> <th>Length</th> <th>Material</th> </tr> </thead> <tbody> <tr> <td>10.75</td> <td>0.03</td> <td>180</td> <td>205</td> <td>25</td> <td>AINLESS STE</td> </tr> </tbody> </table> | | | | | Type | Depth top | Depth bottom | Amount (vol/wt) | NEAT CEMENT | 0 | 173 | 200 CU/FT | HOLE PLUG | 165 | 170 | 3 CU/FT | NEAT CEMENT Well Screen | 0 | 185 | 100 CU/FT | Diameter | Slot size | Depth top | Depth bottom | Length | Material | 10.75 | 0.03 | 180 | 205 | 25 | AINLESS STE |
| Type | Depth top | Depth bottom | Amount (vol/wt) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NEAT CEMENT | 0 | 173 | 200 CU/FT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HOLE PLUG | 165 | 170 | 3 CU/FT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NEAT CEMENT Well Screen | 0 | 185 | 100 CU/FT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diameter | Slot size | Depth top | Depth bottom | Length | Material | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10.75 | 0.03 | 180 | 205 | 25 | AINLESS STE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Formation Log <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>From</th> <th>To</th> <th>Color</th> <th>Hardness</th> <th>Formation Description</th> </tr> </thead> <tbody> <tr> <td colspan="5" style="text-align: center;">**SEE ATTACHED FORMATIONS**</td> </tr> </tbody> </table> | | | | | From | To | Color | Hardness | Formation Description | **SEE ATTACHED FORMATIONS** | | | | | Bottom Capped <input checked="" type="checkbox"/> with <u>STAINLESS STEEL</u> Packers <input type="checkbox"/> kind depth ft Seals <input type="checkbox"/> kind depth ft Gravel packed <input checked="" type="checkbox"/> from <u>170</u> to <u>205</u> ft type <u>#30 RED FLINT</u> amount <u>4300</u> | | | | | | | | | | | | | | | | | | | | | | |
| From | To | Color | Hardness | Formation Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **SEE ATTACHED FORMATIONS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remarks (including depth of lost drilling fluids, materials, or tools) ADDITIONAL DRILLER: DILLON GINGERICH 10177 | | | | | Well Developed <input checked="" type="checkbox"/> Well Developed Explain <u>SURGE BLOCK</u> <input type="checkbox"/> pumped <input checked="" type="checkbox"/> airlifted <input type="checkbox"/> bailed for <u>6</u> hrs at <u>100</u> GPM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Well Use <input type="checkbox"/> Domestic <input type="checkbox"/> Municipal <input type="checkbox"/> Monitoring <input type="checkbox"/> Livestock <input checked="" type="checkbox"/> Public Supply <input type="checkbox"/> Other _____ <input type="checkbox"/> Test Well <input type="checkbox"/> Irrigation _____ | | | | | Pump Installed <input type="checkbox"/> Pump Installed Date _____ Type of Pump <u>Sub</u> Depth to Intake <u>150</u> ft Pump diameter <u>4</u> Rated Capacity <u>100</u> GPM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water information <input checked="" type="checkbox"/> Sand/gravel <input type="checkbox"/> Limestone <input type="checkbox"/> Sandstone Main Water-Supply Zone 1 from <u>190</u> ft to <u>199</u> ft <input type="checkbox"/> Seepage Well Main Water-Supply Zone 2 from _____ ft to _____ ft Static water level <u>12</u> ft (below/above) GL <input type="checkbox"/> tape <input type="checkbox"/> airline <input checked="" type="checkbox"/> E-line <input type="checkbox"/> estimate Pump water level <u>128</u> ft (below) GL; <input type="checkbox"/> tape <input type="checkbox"/> airline <input checked="" type="checkbox"/> E-line <input type="checkbox"/> estimate At yield of <u>100</u> GPM <input type="checkbox"/> Orifice <input checked="" type="checkbox"/> Volumetric <input type="checkbox"/> Estimate for <u>24</u> hours Measurement taken at <u>6:00:00 PM</u> Date <u>5/24/2021</u> | | | | | Water quality test? <input checked="" type="checkbox"/> Date <u>5/24</u> Tested by <u>Hygienic Lab</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Contractor Name <u>GINGERICH WELL PUMP SERVICE, LLC</u> Address <u>1331 HWY 1, KALONA, IA 52247</u> Driller <u>KLINT GINGERICH</u> Certification No. <u>2639</u> | | | | | Contractor Name <u>GINGERICH WELL PUMP SERVICE, LLC</u> Address <u>1331 HWY 1, KALONA, IA 52247</u> Driller <u>KLINT GINGERICH</u> Certification No. <u>2639</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

City of Fontanelle - Well #7

| From | To | Color | Hardness | Description |
|-------------|-----------|--------------|-----------------|--------------------|
| 0 | 17 | Yellow | Soft | Clay |
| 17 | 35 | Yellow | Soft | Course Sand |
| 35 | 140 | Gray | Soft | Clay |
| 140 | 143 | Gray | Soft | Fine Blow Sand |
| 143 | 165 | Gray | Soft | Clay |
| 165 | 171 | Gray | Soft | Sand |
| 171 | 173 | Gray | Soft | Clay |
| 173 | 174 | Gray | Soft | Gravel |
| 174 | 175 | Gray | Soft | Clay |
| 175 | 176 | Gray | Soft | Gravel |
| 176 | 180 | Gray | Soft | Clay |
| 180 | 183 | Gray | Soft | Course Sand |
| 183 | 187 | Gray | Soft | Clay |
| 187 | 190 | Gray | Soft | Sandy Clay |
| 190 | 199 | Gray | Soft | Fine Sand |
| 199 | 202 | Gray | Soft | Shaley Sandstone |
| 202 | 205 | White | Firm | Limestone |