

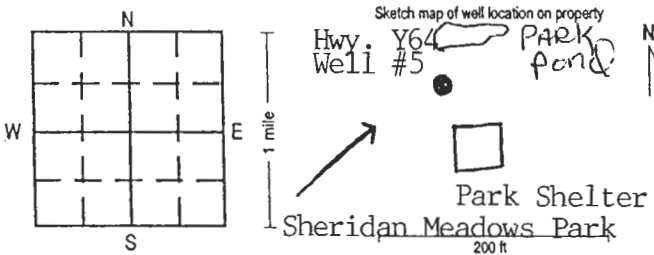
63128

PWSID 8230008

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

WELL RECORD

Permit No. 2006-472W

Site identification Property Owner <u>Eldridge, Iowa</u> Well Number <u>5</u> Address <u>851 N First Street</u> Tenant <u>Sheridan Meadows Park</u> Well Depth <u>482</u> ft Date Completed <u>11 / 19 / 06</u>					Drill method ☒ Rotary ☐ auger ☒ cable other _____ Hole size <u>22</u> inch from <u>0</u> ft to <u>201</u> ft hole size continued _____ inch from _____ ft to _____ ft <u>15</u> inch from <u>201</u> ft to <u>482</u> ft _____ inch from _____ ft to _____ ft Record all depth measurements from ground level (GL). Use (+) for above GL measurements.																																																																																																	
Location County <u>Scott</u> _____ mi. N and _____ mi. E of intersection of _____ and _____ _____ mi. S and _____ mi. W _____ 1/4 of the _____ 1/4 of the _____ 1/4 of Sec _____ TWP _____ RNG _____ E W Show exact location of well in section grid with a dot (•). 					Casing Drive shoe (yes / no) _____ Pitless adaptor (yes / no) _____ <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>22"</td> <td>.500</td> <td>+2</td> <td>63</td> <td>65'</td> </tr> <tr> <td>16"</td> <td></td> <td>+2</td> <td>200</td> <td>202'</td> </tr> </tbody> </table>					Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)	22"	.500	+2	63	65'	16"		+2	200	202'																																																																														
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☐ upland ☐ hillside ☒ valley Elevation (if known) _____ 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>0</td><td>5</td><td></td><td></td><td>Top Soil</td></tr> <tr><td>5</td><td>16</td><td>Br.</td><td>Hard</td><td>Clay</td></tr> <tr><td>16</td><td>29</td><td>Br.</td><td></td><td>Sandy Clay</td></tr> <tr><td>29</td><td>37</td><td>Gr.</td><td>Hard</td><td>Clay</td></tr> <tr><td>37</td><td>60</td><td>Br.</td><td></td><td>Sandy Clay</td></tr> <tr><td>60</td><td>81</td><td>Br.</td><td>Soft</td><td>Rock</td></tr> <tr><td>81</td><td>84</td><td></td><td></td><td>Large Crevice</td></tr> <tr><td>81</td><td>119</td><td>Br.</td><td>Hard</td><td>Limestone</td></tr> <tr><td>119</td><td>122</td><td>Br.</td><td></td><td>Broken Limestone</td></tr> <tr><td>122</td><td>138</td><td>Br.</td><td>Hard</td><td>Limestone</td></tr> <tr><td>138</td><td>144</td><td>Br.</td><td></td><td>Broken Limestone/Crevice</td></tr> <tr><td>144</td><td>149</td><td>Tan</td><td>Hard</td><td>Broken Limestone</td></tr> <tr><td>149</td><td>184</td><td>Br.</td><td>Hard</td><td>Limestone w/ shale Streaks loose stone</td></tr> <tr><td>184</td><td>190</td><td>Lt Tan</td><td></td><td>Sandy Clay w/ Gray Shale Streaks</td></tr> <tr><td>190</td><td>194</td><td>Br.</td><td></td><td>Limestone Green Shale</td></tr> <tr><td>194</td><td>200</td><td>Br.</td><td>Hard</td><td>Limestone</td></tr> </tbody> </table>					From	To	Color	Hardness	Formation description	0	5			Top Soil	5	16	Br.	Hard	Clay	16	29	Br.		Sandy Clay	29	37	Gr.	Hard	Clay	37	60	Br.		Sandy Clay	60	81	Br.	Soft	Rock	81	84			Large Crevice	81	119	Br.	Hard	Limestone	119	122	Br.		Broken Limestone	122	138	Br.	Hard	Limestone	138	144	Br.		Broken Limestone/Crevice	144	149	Tan	Hard	Broken Limestone	149	184	Br.	Hard	Limestone w/ shale Streaks loose stone	184	190	Lt Tan		Sandy Clay w/ Gray Shale Streaks	190	194	Br.		Limestone Green Shale	194	200	Br.	Hard	Limestone	Perforated or slotted casing? (yes / no) Perforated / slotted from _____ ft to _____ ft Perforated / slotted from _____ ft to _____ ft Casing grouted? (yes / no) <u>no</u> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Type</th> <th>Depth Top</th> <th>Depth Bottom</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>Cement</td> <td>GL</td> <td>200</td> <td>372 Sacks</td> </tr> </tbody> </table>					Type	Depth Top	Depth Bottom	Amount	Cement	GL	200	372 Sacks
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use additional sheets as needed Remarks (including depth of lost drilling fluids, materials, or tools)					Well screen? (yes / no) <u>no</u> <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> </tbody> </table> Bottom capped (yes / no) <u>no</u> with _____ Seals / Packers (yes / no) <u>no</u> kind _____ depth _____ ft Gravel packed (yes / no) <u>no</u> from _____ ft to _____ ft type _____ amount _____ Well developed? (yes / no) <u>no</u> Explain <u>Air lifted</u>					Diameter	Slot size	Depth Top	Depth Bottom	Length	Material																																																																																							
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Well use ☐ Domestic ☒ Municipal ☐ Industrial ☐ Livestock ☐ Public Supply ☐ Monitoring ☐ Test Well ☐ Irrigation ☐ Other _____ (explain) _____					Pump installed? (yes / no) <u>yes</u> Date <u>2 / 1 / 07</u> Installer's name <u>Northway Well & Pump Co</u> Type of pump <u>Turbine</u> Depth to intake <u>205</u> ft Pump diameter <u>10"</u> Rated capacity <u>675</u> GPM Water information Aquifer: ☐ sand/gravel ☒ limestone ☐ sandstone Main water-supply zone from <u>200</u> ft to <u>480</u> ft Final water level (static water level) <u>75.3</u> ft (below / above) GL. Pumping water level <u>94.6</u> ft below GL; ☐ tape ☐ airline ☒ E-line Flow Meter At yield of <u>600</u> GPM; ☐ orifice ☐ volumetric ☐ estimate Date <u>11-18-06</u> Water quality test? (yes / no) <u>yes</u> Date tested <u>11 / 19 / 06</u> Tested by <u>Hygenic Laboratory</u> Test results <u>On File</u> Contractor <u>Northway Well & Pump Company</u> Address <u>4895 8th Avenue - Marion, Iowa</u> Driller <u>Leon Carpenter</u> Certification no. <u>1822</u>																																																																																																	

yellow copy - County Health Officer

63128

Northway Well and Pump Co.

4895 8th Avenue
Marion, Iowa 52302
319-377-6339
1-800-747-6339

100 North 6th Street
Waukee, Iowa 50263
515-987-4575
1-800-747-4575

WELL TEST DATA REPORT

Customer City Water Works City Eldridge, Iowa
Location Park Well Well No. 5
Size Casing 16" Total Depth 483' Construction Drilled
Make Pump Sumo Model No. 9L1200 No. of Stages 3
Diameter 8" Total Setting 252 Air Line Length 252'
Meter Used Prop. 6" Static Level 75.3

DATE	TIME	GPM	P.L.	D.D.	S.C.	P.S.I.	TEMP DISCHARGE DESCRIPTION
11-17-06	4:10	910	75.3			107	Clear PH 8.40 Temp 53
PM	4:11	910	92.4	17.1	53.2	107	Clear
	4:12	910	93.5	17.2	52.9	107	Clear
	4:13	910	95	19.7	46.1	110	Clear
	4:14	910	95.6	20.3	44.8	110	Clear
	4:15	910	96	20.7	43.9	110	Clear
	4:16	910	97.1	21.8	41.7	110	Clear
	4:17	910	97.8	22.5	40.4	110	Clear
	4:18	910	98.4	23.1	39.3	110	Clear
	4:19	910	98.8	23.5	38.7	110	Clear
	4:20	910	99.1	23.8	38.2	110	Clear
	4:21	910	99.6	24.3	37.4	110	Clear
	4:25	910	99.8	24.5	37.1	110	Clear
	4:30	910	100.5	25.2	36.1	110	Clear
	4:35	910	100.6	25.3	35.9	110	Clear
	4:40	910	100.9	25.6	35.5	110	Clear
	4:45	910	101.1	25.8	35.2	110	Clear
	4:50	910	101.2	25.9	35.1	110	Clear
	4:55	910	101.3	26.0	35	110	Clear
	5:00	910	101.4	26.1	34.8	110	Clear
	5:05	910	101.5	26.2	34.7	110	Clean PH 8.40 Temp 52.9
	5:15	910	101.7	26.4	34.4	110	Clear
	5:30	920	102.6	27.3	33.6	110	Clear
	5:45	920	103.1	27.8	22	110	Clear
	6:00	920	103.4	28.1	32.7	110	Clear
	6:30	920	103.8	28.5	32.2	110	Clear
	7:00	920	104.2	28.9	31.8	110	Clear PH 8.40 Temp 53.8

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WELL TEST DATA REPORT

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Customer City Water Works City Eldridge, Iowa
Location Park Well Well No. 5

DATE	TIME	GPM	P.L.	D.D.	S.C.	P.S.I.	TEMP DISCHARGE DESCRIPTION
11-17-06PM	7:30	920	104.1	28.8	31.9	110	Clear
	8:00	920	104.2	28.9	31.8	110	Clear
	8:30	920	104.2	28.9	31.8	110	Clear
	9:00	920	104.3	29.0	31.7	110	Clear
	10:00	920	104.5	29.2	31.5	110	Clear
	11:00	920	104.7	29.4	31.2	110	Clear
11-18-06AM	12:00	920	104.8	29.5	31.3	110	Clear
	1:00	920	104.8	29.5	31.3	110	Clear
	2:00	920	105.1	29.8	30.8	110	Clear
	3:00	920	105.3	30.0	30.6	110	Clear
	4:00	920	105.6	30.3	30.3	110	Clear PH 8.40 Temp 54.8
	5:00	920	105.7	30.4	30.2	110	Clear
	6:00	920	105.8	30.5	30.1	110	Clear
	7:00	920	105.9	30.6	30	110	Clear
	8:00	920	106.0	30.7	29.9	110	Clear
	9:00	920	106.0	30.7	29.9	110	Clear
	10:00	920	106.0	30.7	29.9	110	Clear PH 8.40 Temp 54.8
	10:02	600	98.1	22.8	26.3	150	Flow Rate Change
	10:05	600	95.8	20.5	29.2	150	Clear
	10:10	600	95.0	19.7	30.4	150	Clear
	10:15	600	94.8	19.5	30.7	150	Clear
	10:20	600	94.6	19.3	31.0	150	Clear
	10:25	600	94.6	19.3	31.0	150	Clear
	10:30	600	94.6	19.3	31.0	150	Clear
	10:35	600	94.6	19.3	31.0	150	Clear
	10:40	600	94.6	19.3	31.0	150	Clear
	10:45	600	94.6	19.3	31.0	150	Clear

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WELL TEST DATA REPORT

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Customer City Water Works City Eldridge, Iowa
Location Park Well Well No. 5

DATE	TIME	GPM	P.L.	D.D.	S.C.	P.S.I.	TEMP DISCHARGE DESCRIPTION
11-18-06	11:00	600	94.6	19.3	31	150	Clear
	11:15	600	94.6	19.3	31	150	
	11:30	600	94.6	19.3	31	150	
	11:45	600	94.6	19.3	31	150	
	12:00pm	600	94.6	19.3	31	150	
	1:00	600	94.6	19.3	31	150	PH 8.40 Temp 54.8
	2:00	600	94.6	19.3	31	150	
11-18-06							
11-18-06pm			SWL				
Recovery	2:01	OFF	84.2				
	2:02		82.9				
	2:03		81.9				
	2:04		81.4				
	2:05		81.1				
	2:06		80.8				
	2:07		80.5				
	2:08		80.4				
	2:09		80.2				
	2:10		80.0				
	2:15		79.6				
	2:20		79.3				
	2:25		79.0				
	2:30		78.9				
	2:35		78.8				
	2:40		78.7				
	2:45		78.6				
	2:50		78.5				

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