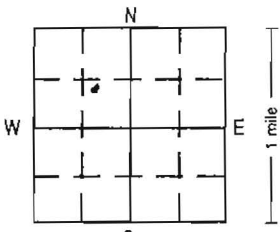
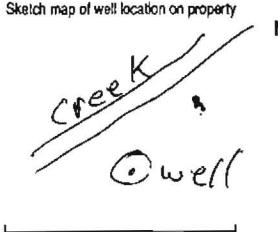


Site identification Property Owner <u>Town of Earling</u> Well Number _____ Address <u>106 Main Street</u> Tenant <u>Earling, Iowa 51530</u> Well Depth <u>42-3</u> ft Date Completed <u>10/19/04</u>		Drill method ☒ rotary ☐ auger ☐ cable other _____																																																													
Location County <u>Shelby</u> mi. N and <u>1/2</u> mi. S of intersection of <u>m16</u> and <u>191</u> <u>NW 1/4 of the SE 1/4 of the NW 1/4 of Sec 5 TWP 80 Rng 39 E W</u> <u>Westolia Twp</u> Show exact location of well in section grid with a dot (•).  Sketch map of well location on property 		Hole size <u>10.5</u> inch from <u>0</u> ft to <u> </u> ft hole size continued <u> </u> inch from <u> </u> ft to <u> </u> ft <u> </u> inch from <u> </u> ft to <u> </u> ft																																																													
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>5</td><td>Black med</td><td>clay</td><td></td></tr><tr><td>5</td><td>15-5</td><td>Brown med</td><td>clay</td><td></td></tr><tr><td>15-5</td><td>20-6</td><td>gray med</td><td>clay</td><td></td></tr><tr><td>20-6</td><td>24-8</td><td>Brown med</td><td>clay</td><td></td></tr><tr><td>24-8</td><td>32-6</td><td>Blue med</td><td>clay</td><td></td></tr><tr><td>32-6</td><td>34-6</td><td>Brown wh. to</td><td>Hard</td><td>Sand</td></tr><tr><td>34-6</td><td>38-6</td><td>Brown med</td><td></td><td>clay + Junky Sand</td></tr><tr><td>38-6</td><td>43-2</td><td>gray wh. to</td><td>Black</td><td>hard Sand + gravel</td></tr><tr><td>43-2</td><td>48-2</td><td>Tan med</td><td>clay</td><td></td></tr></tbody></table>		From	To	Color	Hardness	Formation description	0	5	Black med	clay		5	15-5	Brown med	clay		15-5	20-6	gray med	clay		20-6	24-8	Brown med	clay		24-8	32-6	Blue med	clay		32-6	34-6	Brown wh. to	Hard	Sand	34-6	38-6	Brown med		clay + Junky Sand	38-6	43-2	gray wh. to	Black	hard Sand + gravel	43-2	48-2	Tan med	clay		Casing <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>6</td><td>Sch 40</td><td>0</td><td>37-9</td><td>37-9</td></tr></tbody></table> Perforated or slotted casing? (yes/no) <u>no</u> Perforated / slotted from <u> </u> ft to <u> </u> ft Perforated / slotted from <u> </u> ft to <u> </u> ft Casing grouted? (yes/no) <u>yes</u> Type <u>neat cement</u> Depth Top <u>0</u> Depth Bottom <u>36-9</u> Amount <u> </u>		Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)	6	Sch 40	0	37-9	37-9
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Well screen? (yes/no) <u>yes</u> <table border="1"><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>6</td><td>100</td><td>38-4"</td><td>43-4</td><td>5-5</td><td>304 Stainless Steel</td></tr></tbody></table> Bottom capped (yes/no) <u>yes</u> with <u>Stainless steel plate</u> Seals / Packers (yes/no) <u>no</u> kind <u> </u> depth <u> </u> ft Gravel packed (yes/no) <u>yes</u> from <u> </u> ft to <u> </u> ft type <u>Platt River Road gravel</u> amount <u>run thru</u>		Diameter	Slot size	Depth Top	Depth Bottom	Length	Material	6	100	38-4"	43-4	5-5	304 Stainless Steel	Well developed? (yes/no) <u>yes</u> Explain <u>Bailer developed + test pumped</u> <u>HTH disinfected</u>																																																	
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Pump installed? (yes/no) <u>yes</u> Date <u> </u> / <u> </u> / <u> </u> Installer's name <u> </u> Type of pump <u> </u> Depth to intake <u> </u> ft Pump diameter <u> </u> Rated capacity <u> </u> GPM		Water information Aquifer: ☒ sand/gravel ☐ limestone ☐ sandstone Main water-supply zone from <u>32-6"</u> to <u>43-2"</u> Final water level (static water level) <u>9-6"</u> ft (below / above) GL. Pumping water level <u>37-4"</u> ft below GL; ☒ tape ☐ airline ☐ E-line At yield of <u>47</u> GPM; ☐ orifice ☒ volumetric ☐ estimate Date <u>10-25-04</u>																																																													
Remarks (including depth of lost drilling fluids, materials, or tools) <u>N 41° - 46.477' W 95° - 24.810'</u> <u>41.724617 Lat. -95.4135 Longitude</u>		Water quality test? (yes/no) <u>yes</u> Date tested <u> </u> / <u> </u> / <u> </u> Tested by <u> </u> Test results <u> </u>																																																													
Well use <table border="1"><tbody><tr><td>☐ Domestic</td><td>☒ Municipal</td><td>☐ Industrial</td></tr><tr><td>☐ Livestock</td><td>☐ Public Supply</td><td>☐ Monitoring</td></tr><tr><td>☐ Test Well</td><td>☐ Irrigation</td><td>☐ Other (explain) <u> </u></td></tr></tbody></table>		☐ Domestic	☒ Municipal	☐ Industrial	☐ Livestock	☐ Public Supply	☐ Monitoring	☐ Test Well	☐ Irrigation	☐ Other (explain) <u> </u>	Contractor <u>Jacobs well Drilling Inc.</u> Address <u>1905 Lincoln Ave. Harlan, Ia 51537</u> Driller <u>David Jacobs + Dave Holcombe</u> Certification no. <u>3204</u>																																																				
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TOWN OF EARLING

Test hole log

#2 replacement well

South side of creek

June 23, 2004

Contractor: JACOBS WELL DRILLING INC.

1905 Lincoln Avenue

Harlan, IA 51537

Driller: David Jacobs

Location: North 41 degrees, 46.477' West 95 degrees, 24.810'

Latitude is 41.774617

Longitude is -95.4135

Bore hole: Size is 5".

Well log:

Ground level is 0.

0'-5' Black, medium clay

5'-15' 5" Brown, medium clay

15' 5"-20' 6" Gray, medium clay

20' 6"-24' 8" Brown, medium clay

24' 8"-32' 6" Blue, gray, medium, sticky clay

32' 6"-34' 6" Brown and white sand

34' 6"-38' 6" Brown, medium clay, some junky sand

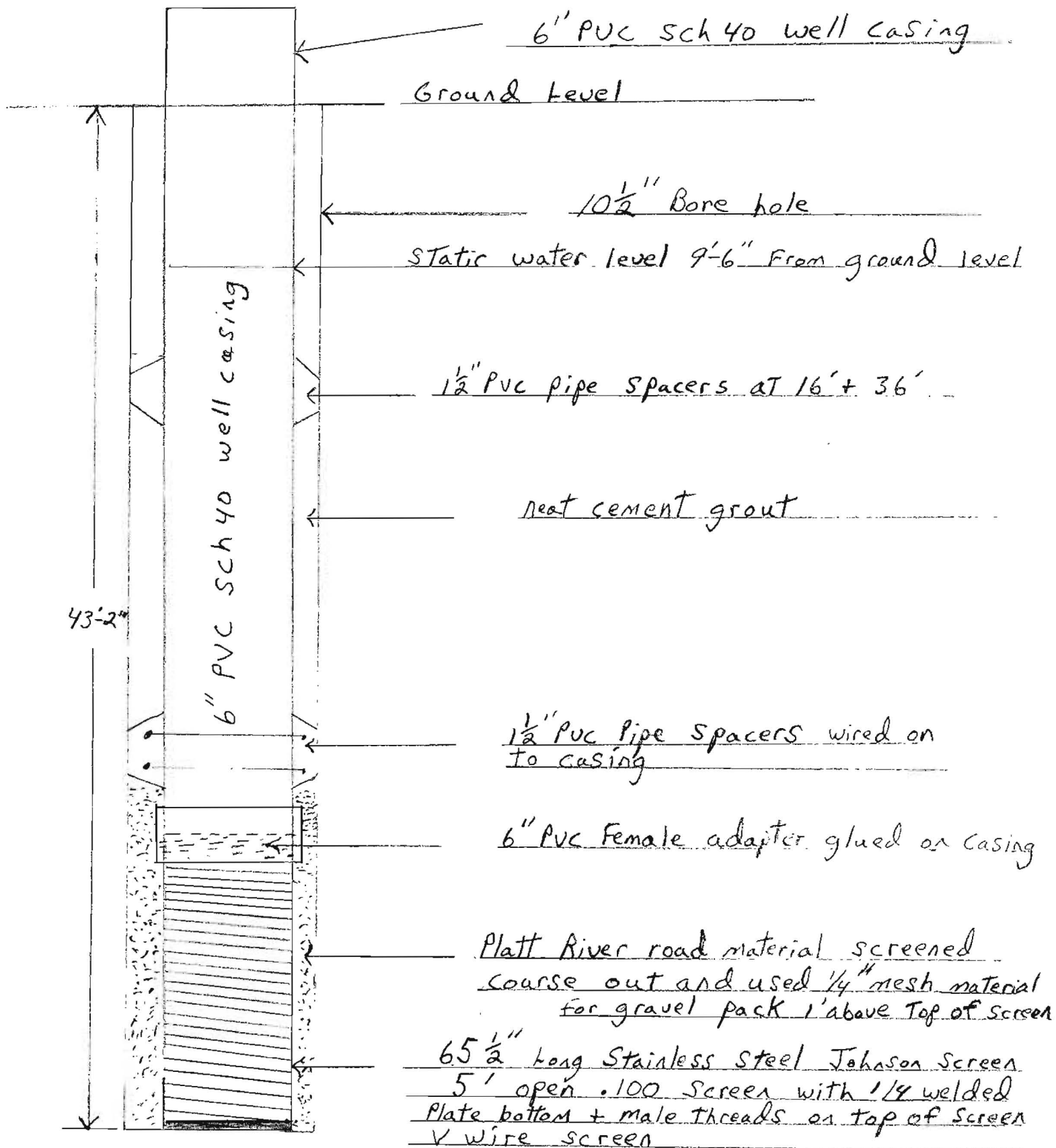
38' 6"-43' 2" Black, Brown, Gray, White sand and gravel

43' 2"-48' 2" Tan, medium clay

Well #2 Replacement 10-19-04

Town of Earling

Dave Jacobs Jacobs Well Drilling Inc. Driller



TOWN OF EARLING
#2 Replacement Well

Contractor: JACOBS WELL DRILLING INC.
1905 Lincoln Avenue
Harlan, IA 51537

Driller: David Jacobs

This well was dug on October 19, 2004, and test pumped on October 25, 2004 at 47 gallons per minute. The test pump intake was 40 feet from ground level.

Pumping test: Static water level was 9' 6" at 10:35 a.m., October 25, 2004 with all of the other wells pumping at the same time as this test was performed. The results are as follows:

10:36 a.m.	24' 6"
10:37 a.m.	27' 9"
10:38 a.m.	28'
10:50 a.m.	29' 10"
11:00 a.m.	31'
11:05 a.m.	31' 9"
11:20 a.m.	32'
11:35 a.m.	32' 7"
11:50 a.m.	33' 3"
12:05 p.m.	34' 4"
12:20 p.m.	34' 8"
12:35 p.m.	35'
2:00 p.m.	37' 4"

The pump was shut off at 2:00 p.m.

2:01 p.m. the static water level was at 22'

2:03 p.m. the static water level was at 16'

2:05 p.m. the static water level was at 15'

2:15 p.m. the static water level was 13' 4"

3:45 p.m. the static water level was 10' 4"