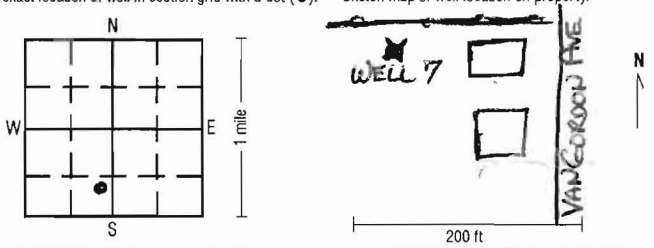
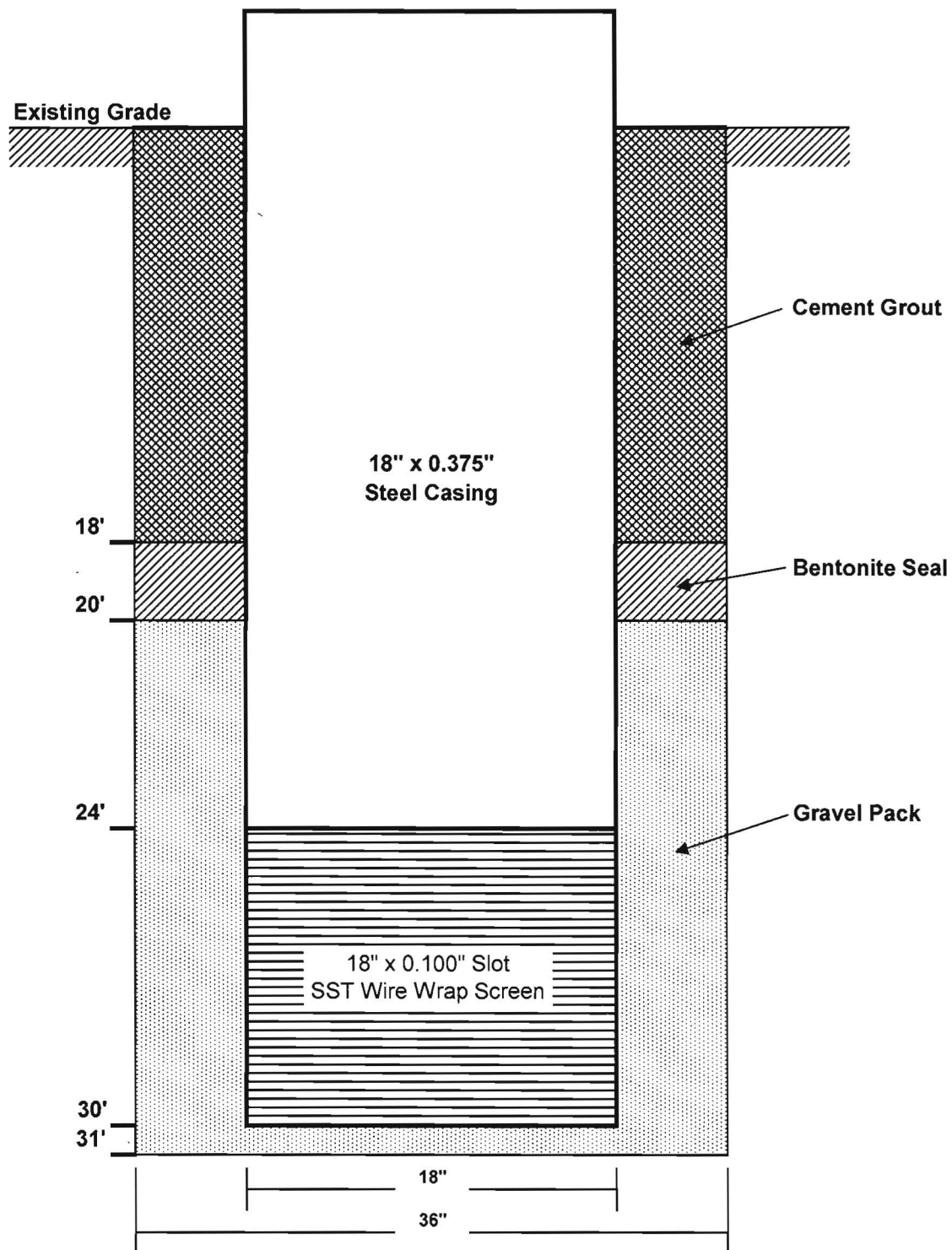


Site identification Property Owner <u>CITY OF GRAETTINGER</u> Well Number <u>7</u> Address <u>104 S. CEDAR ST., PO BOX 418</u> Tenant <u>SAME</u> Well Depth <u>30</u> ft Date completed <u>12 / 21 / 04</u>				Drill method ☒ REVERSE rotary ☐ auger ☐ cable ☐ other _____ Hole size <u>36</u> inch from <u>0</u> ft to <u>31</u> ft hole size continued _____ inch from _____ ft to _____ ft _____ inch from _____ ft to _____ ft																												
Location County <u>PALO ALTO</u> <u>1/8</u> mi. N and <u>1/6</u> mi. E of intersection of <u>CO. RD. B-H</u> and <u>VAN GORDON AVE.</u> <u>NE</u> 1/4 of the <u>SE</u> 1/4 of the <u>SW</u> 1/4 of Sec <u>4</u> TWP <u>97N</u> RANG <u>33</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) _____ Pitless adapter (yes / no) _____ Size (ID/OD) Type / Wt Depth top Depth bottom Amount (length) <u>18"</u> <u>STD. STEEL</u> <u>+2'</u> <u>24'</u> <u>26'</u>																												
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><u>0</u></td><td><u>6"</u></td><td><u>BROWN</u></td><td></td><td><u>CLAY</u></td></tr><tr><td><u>6"</u></td><td><u>24'</u></td><td><u>BROWN</u></td><td><u>HARD</u></td><td><u>COBBLES/ROCKS/GRAVEL</u></td></tr><tr><td><u>24'</u></td><td><u>30'</u></td><td><u>GRAY</u></td><td><u>HARD</u></td><td><u>SAND + GRAVEL</u></td></tr><tr><td><u>30'</u></td><td><u>31'</u></td><td><u>GRAY</u></td><td></td><td><u>TILL</u></td></tr></tbody></table>				From	To	Color	Hardness	Formation description	<u>0</u>	<u>6"</u>	<u>BROWN</u>		<u>CLAY</u>	<u>6"</u>	<u>24'</u>	<u>BROWN</u>	<u>HARD</u>	<u>COBBLES/ROCKS/GRAVEL</u>	<u>24'</u>	<u>30'</u>	<u>GRAY</u>	<u>HARD</u>	<u>SAND + GRAVEL</u>	<u>30'</u>	<u>31'</u>	<u>GRAY</u>		<u>TILL</u>	Perforated or slotted casing? (yes / <u>no</u>) Perforated / slotted from _____ ft to _____ ft Perforated / slotted from _____ ft to _____ ft			
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☒ upland ☐ hillside ☐ valley Elevation (if known) <u>1250</u>				Casing grouted? (yes / <u>no</u>) Placement method <u>TREMIE</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 (vol/wt)</th></tr></thead><tbody><tr><td><u>NEAT CEMENT</u></td><td><u>0</u></td><td><u>18'</u></td><td><u>4 CYD.</u></td></tr></tbody></table>				Type	Depth Top	Depth bottom	Amount (vol/wt)	<u>NEAT CEMENT</u>	<u>0</u>	<u>18'</u>	<u>4 CYD.</u>																	
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Well developed? (yes / <u>no</u>) Explain <u>SURGE BLOCK + TEST PUMP</u> (pumped, airlifted, bailed) for <u>4</u> hrs at <u>VARIOUS</u> GPM.				Pump installed? (yes / <u>no</u>) Date <u>6 / 30 / 05</u> Installer's name <u>JOE DOOLING / RODNEY RAY</u> Type of pump <u>VERTICAL TURBINE</u> Depth to intake <u>30</u> ft Pump diameter <u>10"</u> Rated capacity <u>250</u> GPM																												
Water information Aquifer: ☒ sand / gravel ☐ limestone ☐ sandstone Main water-supply zone from <u>16</u> ft to <u>30</u> ft ☐ seepage well Static water level <u>16</u> ft (below / above) GL; ☐ tape ☐ airline ☒ E-line ☐ estimate Pumping water level <u>20</u> ft below GL; ☐ tape ☐ airline ☒ E-line ☐ estimate At yield of <u>250</u> GPM; ☒ orifice ☐ volumetric ☐ estimate Measurements taken at _____ (AM / PM) Date <u>1 / 13 / 05</u>				Water quality test? (yes / <u>no</u>) Date tested <u>1 / 18 / 05</u> Tested by <u>IOWA HYGIENIC LAB.</u>																												
Remarks (including depth of lost drilling fluids, materials, or tools)				Well use ☐ Domestic ☒ Municipal ☐ Commercial ☐ Livestock ☐ Public supply ☐ Monitoring ☐ Test well ☐ Irrigation ☐ Other _____ (explain)																												

WELL CONSTRUCTION DETAIL
CITY OF GRAETTINGER, IOWA
WELL #7



NOT TO SCALE

