

Site Identification Property Owner <u>City of Onslow</u> Well Number _____ Address <u>Onslow, Iowa</u> Tenant _____ Well Depth <u>320</u> ft Date completed <u>5/20/99</u>				Drill method <input checked="" type="checkbox"/> rotary <input type="checkbox"/> auger <input type="checkbox"/> cable <input type="checkbox"/> other _____ Hole size <div style="display: flex; justify-content: space-between;"> <div> <u>4 3/4</u> inch from <u>0</u> ft to <u>127</u> ft <u>8</u> inch from <u>127</u> ft to <u>320</u> ft </div> <div> hole size continued <u>13</u> inch from <u>127</u> ft to <u>145</u> ft _____ inch from _____ ft to _____ ft </div> </div>																																																															
Location County <u>Jones</u> _____ mi. N and _____ mi. E of intersection of _____ and _____ _____ 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 (•). Sketch map of well location on property. <div style="text-align: center;"> </div>				Record all depth measurements from ground level (GL). Use (+) for above GL measurements. Casing <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>14"</td> <td>Steel</td> <td>+2'</td> <td>127'</td> <td>129'</td> </tr> <tr> <td>8 3/8"</td> <td>Steel</td> <td>+2'</td> <td>145'</td> <td>147'</td> </tr> <tr> <td>6.9"</td> <td>PVC</td> <td>190'</td> <td>320'</td> <td>180'</td> </tr> </tbody> </table>				Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)	14"	Steel	+2'	127'	129'	8 3/8"	Steel	+2'	145'	147'	6.9"	PVC	190'	320'	180'																																								
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<input type="checkbox"/> upland <input type="checkbox"/> hillside <input type="checkbox"/> valley Elevation (if known) _____ Well screen? <input checked="" type="checkbox"/> (yes) <input type="checkbox"/> (no) Diameter _____ Slot size _____ Depth Top _____ Depth Bottom _____ Length _____ Material _____ Bottom capped (yes/no) _____ with _____ Seals / Packers (yes/no) _____ kind _____ depth _____ ft Gravel packed (yes/no) _____ from _____ ft to _____ ft type _____ amount _____				Casing grouted? <input checked="" type="checkbox"/> (yes) <input type="checkbox"/> (no) Placement method _____ <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>127'</td> <td>80 sacks</td> </tr> <tr> <td>Grout</td> <td></td> <td></td> <td>6 sacks</td> </tr> <tr> <td></td> <td></td> <td></td> <td>4 sacks</td> </tr> </tbody> </table>				Type	Depth Top	Depth bottom	Amount (vol/wt)	Neat Cement	0'	127'	80 sacks	Grout			6 sacks				4 sacks																																												
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Well developed? <input checked="" type="checkbox"/> (yes) <input type="checkbox"/> (no) Explain <u>Air Lift: 90 GPM at 140', 50 GPM at 160'</u> (pumped, airlifted, bailed) for _____ hrs at _____ GPM.				Pump installed? <input type="checkbox"/> (yes) <input type="checkbox"/> (no) Date ____/____/____ Installer's name _____ Type of pump _____ Depth to intake _____ ft Pump diameter _____ Rated capacity _____ GPM																																																															
Water information Aquifer: <input type="checkbox"/> sand / gravel <input checked="" type="checkbox"/> limestone <input type="checkbox"/> sandstone Main water-supply zone from _____ ft to _____ ft <input type="checkbox"/> seepage well Static water level <u>51</u> ft (below / above) GL; <input type="checkbox"/> tape <input type="checkbox"/> airline <input type="checkbox"/> E-line <input type="checkbox"/> estimate Pumping water level <u>150</u> ft below GL; <input type="checkbox"/> tape <input type="checkbox"/> airline <input type="checkbox"/> E-line <input type="checkbox"/> estimate At yield of _____ GPM; <input type="checkbox"/> orifice <input type="checkbox"/> volumetric <input type="checkbox"/> estimate Measurements taken at _____ (AM / PM) Date ____/____/____				Water quality test? <input checked="" type="checkbox"/> (yes) <input type="checkbox"/> (no) Date tested <u>5/27/99</u> Tested by <u>KeyStone Labs</u>																																																															
Remarks (including depth of lost drilling fluids, materials, or tools) <u>test pumped for 24 hrs.</u>				Contractor <u>Shawver Well Company</u> Address <u>Fredericksburg, IA 50630</u> Driller <u>Jim Bunting</u> Certification no. <u>40121</u>																																																															
Well use <input type="checkbox"/> Domestic <input checked="" type="checkbox"/> Municipal <input type="checkbox"/> Commercial <input type="checkbox"/> Livestock <input type="checkbox"/> Public supply <input type="checkbox"/> Monitoring <input type="checkbox"/> Test well <input type="checkbox"/> Irrigation <input type="checkbox"/> Other _____ (explain) _____																																																																			

- 50376

W-50376

id well number
 9905130
 owner name CITY OF ONSLOW
 second name JIM BOUSLEY
 address 1 4155 PENNSYLVANIA AVENUE
 address 2 IIW ENGINEERS & SURVEYORS
 city/state ONSLOW, IA
 zip 52321
 county JONES
 township WYOMING
 section 07
 quarters NW
 startdate 05/10/99
 enddate 05/20/99

LOG OF WELL

0'	TO	21'	BROWN CLAY
21'	TO	42'	BLUE CLAY
42'	TO	55'	GRAVEL
55'	TO	123'	BLUE CLAY
123'	TO	158'	LIMEROCK
158'			MADE 20 GPM
158'	TO	180'	LIMEROCK
180'	TO	188'	LIMEROCK
188'	TO	193'	OPEN, WATER
193'	TO	285'	LIMEROCK
285'			WATER
285'	TO	318'	GRAY ROCK
318'	TO	320'	SHALE

DESCRIPTION OF WELL

ELEVATION: 919'
 A 14 3/4" HOLE WAS DRILLED TO 127' AND 129' OF 14" OD STEEL CASING WAS INSTALLED. AN ENVELOPE OF BENSEAL GROUT WAS PUMPED BETWEEN THE 14" OD CASING & THE 14.75" BOREHOLE. AN 8" HOLE WAS THEN DRILLED TO 320'. THE HOLE WAS THEN REAMED TO 13" FROM 127' TO 145'. 147' OF 8 5/8" X .322 WALL STEEL CASING WAS INSTALLED FROM 2' ABOVE GROUND LEVEL TO 145'. THE 8" CASING WAS PRESURE GROUTED IN PLACE WITH 80 SACKS OF NEAT CEMENT GROUT.
 6/9/99 - The well is then cased from 140' to 320' with 6.9" SDR 21 casing. The 6.9" casing is perforated at 158', 180'-198', 285' and from 240'-270' to admit water.

s w l 51
 r p s 150'
 water test info FIELD TEST:NITRATE <1, IRON 1
 BOREHOLE DATA

50376

0'	TO	127'	14 3/4" DIAMETER
127'	TO	320'	8" DIAMETER
127'	TO	145'	13" DIAMETER

driller

JIM BUNTING
