

**Site identification**  
 Property Owner City of Rathvun Well Number #3  
 Address Rathvun, IA  
 Tenant None  
 Well Depth 481' ft Date completed 12/1/99

**Location** County Palo Alto  
1/8 mi. <sup>N</sup> and 3/4 mi. <sup>E</sup> of intersection of 18 and N18  
NE 1/4 of the SW 1/4 of the SE 1/4 of Sec 18 TWP 96 RNG 34 <sup>E</sup> <sub>W</sub>  
 Show exact location of well in section grid with a dot (•). Sketch map of well location on property.

upland  hillside  valley Elevation (if known) \_\_\_\_\_

**Formation log**

From	To	Color	Hardness	Formation description
0	2			Topsoil
2	13			Yellow Clay
13	20			Sandy Clay - Rocky
20	56			Blue Clay - Sandy
56	178			Gray Clay - Sandy
178	184			Gravel
184	202			Blue Clay
202	205			Gravel
205	212			Blue Clay
212	215			Gravel
215	255			Blue Clay
255	257			Gravel
257	261			Blue Clay
261	265			Gravel
265	366			Blue Shale
366	381			White Shale
381	421			Sandy - Green Shale

use additional sheets as needed

**Remarks** (including depth of lost drilling fluids, materials, or tools)

**Well use**

Domestic  Municipal  Commercial  
 Livestock  Public supply  Monitoring  
 Test well  Irrigation  Other \_\_\_\_\_ (explain)

**Drill method**  rotary  auger  cable other \_\_\_\_\_  
**Hole size**  
12 1/2 inch from 0 ft to 450 ft  
8 inch from 450 ft to 481 ft

Record all depth measurements from ground level (GL). Use (+) for above GL measurements.

**Casing** Drive shoe  (yes/no) Pitless adapter  (yes/no)

Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)
8" ID	Steel/30#	2' +	450	452'
5" ID	PVC/200#	430	450	20'

**Perforated or slotted casing?** (yes/no) no  
 Perforated / slotted from \_\_\_\_\_ ft to \_\_\_\_\_ ft  
 Perforated / slotted from \_\_\_\_\_ ft to \_\_\_\_\_ ft

**Casing grouted?**  (yes/no) Placement method Trime

Type	Depth Top	Depth bottom	Amount (vol/wt)
Bentonite	6"-	300'	1150 gallons
Sturry-Bentonite	300'	450'	450 gallons

**Well screen?**  (yes/no)  
 Diameter 5" Pipe size Slot size 0.020 Depth Top 450 Depth Bottom 481 Length 31' Material S.Steel  
 Bottom capped  (yes/no) with Plate-Bail Bottom  
 Seals / Packers  (yes/no) kind \_\_\_\_\_ depth \_\_\_\_\_ ft  
 Gravel packed  (yes/no) from 430 ft to 481 ft  
 type 16/30 silica amount 900#

**Well developed?**  (yes/no)  
 Explain Bailed - Pumped  
 (pumped, airlifted, bailed) for 6 hrs at 220 GPM.

**Pump installed?**  (yes/no) Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 Installer's name Truesdell Pump Service  
 Type of pump Goulds Sub. Depth to intake 280' ft  
 Pump diameter 6" Rated capacity 200 GPM

**Water information** Aquifer:  sand / gravel  limestone  sandstone  
 Main water-supply zone from 450 ft to 481 ft  seepage well  
 Static water level 216 ft (below / above) GL;  tape  airline  E-line  estimate  
 Pumping water level 249 ft below GL;  tape  airline  E-line  estimate  
 At yield of 220 GPM;  orifice  volumetric  estimate  
 Measurements taken at 11:00 (AM/PM) Date 11/25/99

**Water quality test?**  (yes/no) Date tested \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 Tested by Kuehl & Payer

Contractor Middendorff Well Co  
 Address Stary Rapids, IA  
 Driller Larry Steece Certification no. 40492