

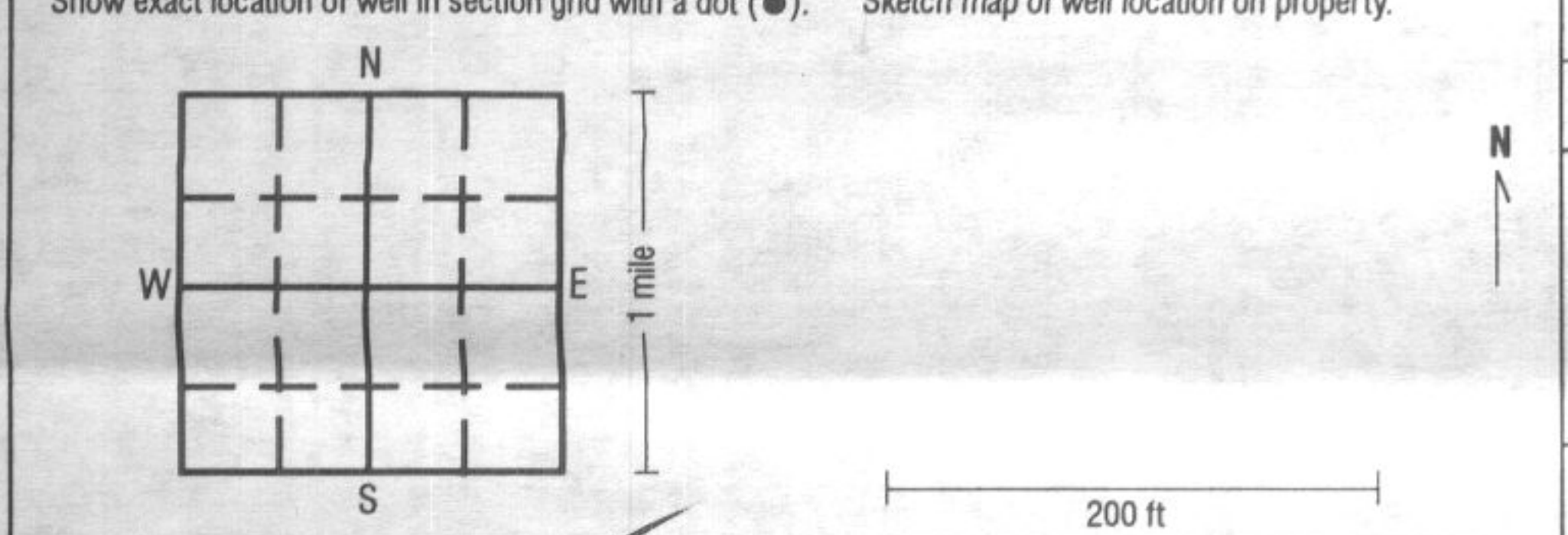
Site identification
 Property Owner Des Moines Water W. Well Number CW1
 Address 2201 Valley Drive, Des Moines, Ia. 50321-1198
 Tenant _____
 Well Depth 38.51 ft Date completed 10/13/99

Drill method rotary auger cable other Cassion
Hole size
16 inch from 0 ft to 38.51 ft
 _____ inch from _____ ft to _____ ft

Location County Polk
.2 mi. ^N and .75 mi. ^E of intersection of Army Rd. W and I35S
 _____ 1/4 of the _____ 1/4 of the _____ 1/4 of Sec 30 TWP 78N RNG 25 ^E

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)
<u>13'/16'</u>	<u>concrete</u>	<u>836.54</u>	<u>798.03</u>	<u>38.51</u>



Perforated or slotted casing? (yes / no)
 Perforated / slotted from _____ ft to _____ ft
 Perforated / slotted from _____ ft to _____ ft

upland hillside valley Elevation (if known) 836.54

Casing grouted? (yes / no) Placement method _____

Type	Depth Top	Depth bottom	Amount (vol/wt)

Formation log

From	To	Color	Hardness	Formation description
<u>0</u>	<u>3</u>	<u>Br.</u>	<u>Soft</u>	<u>Br. Clay / sand</u>
<u>3</u>	<u>10</u>	<u>Br</u>	<u>Soft</u>	<u>Lt Brown Sand Fine / Med</u>
<u>10</u>	<u>31</u>	<u>Br</u>	<u>Soft</u>	<u>Lt Brown Sand Fine / Coarse</u>
<u>31</u>		<u>Blue</u>	<u>Hard</u>	<u>Weathered Shale</u>

use additional sheets as needed

Well screen? (yes / no)

Diameter	Slot size	Depth Top	Depth Bottom	Length	Material
<u>9.625"</u>	<u>0.---</u>			<u>690'</u>	<u>SS.</u>

 Bottom capped (yes) / (no) with SS. Plate
 Seals / Packers (yes) / (no) kind K-Packer depth _____ ft
 Gravel packed (yes / no) from _____ ft to _____ ft
 type _____ amount _____

Well developed? (yes) / (no)
 Explain Surged by Pumping
 (pumped) airlifted, bailed) for _____ hrs at _____ GPM.

Pump installed? (yes) / (no) Date 12/1/99
 Installer's name Harry Burton
 Type of pump Johnson / Turbine Depth to intake 40' ft
 Pump diameter 20" Rated capacity 3400 GPM

Water information Aquifer: sand / gravel limestone sandstone
 Main water-supply zone from _____ ft to _____ ft seepage well
 Static water level 26.31 ft (below GL; tape airline E-line estimate
 Pumping water level 803.91 ft below GL; tape airline E-line estimate
 At yield of 1000 GPM; orifice volumetric estimate
 Measurements taken at _____ : _____ (AM / PM) Date _____ / _____ / _____

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

Water quality test? (yes / no) Date tested _____ / _____ / _____
 Tested by _____

Well use
 Domestic Municipal Commercial
 Livestock Public supply Monitoring
 Test well Irrigation Other _____ (explain)

Contractor Reynolds, Inc.
 Address P.O. Box 186 Orleans, Ia. 47452
 Driller Harry Burton Certification no. 40562