

## WELL RECORD

68022

PWTS Permit No. \_\_\_\_\_

Iowa Department of Natural Resources - Geological Survey  
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH (319) 335-1575

PWTS Well No. \_\_\_\_\_

County Permit No. \_\_\_\_\_

Reverse Circulation Rotary

## Site identification

City of Fort Madison Well #8  
 Property Owner Fort Madison Other ID #8  
 Address 2489 280th St., Fort Madison, IA  
 Tenant N/A  
 Well Depth 174 ft Date completed 7/7/09

## Location

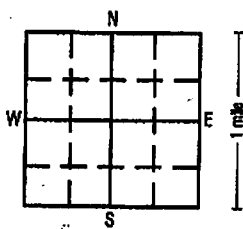
County Lee

\_\_\_\_\_ mi. <sup>N</sup> and \_\_\_\_\_ mi. <sup>E</sup> of intersection of \_\_\_\_\_ and \_\_\_\_\_  
 \_\_\_\_\_ 1/4 of the \_\_\_\_\_ 1/4 of the \_\_\_\_\_ 1/4 of Sec \_\_\_\_\_ TWP \_\_\_\_\_ RNG \_\_\_\_\_ E \_\_\_\_\_ W

GPS Coordinates (NAD83 datum only) decimal degrees:

40.5589 N. Latitude 91.4403 W. Longitude.

Show exact location of well in section grid with a dot (•). Sketch map of well location on property.



☐ upland ☐ hillside ☐ valley ☒ level surface Elevation (if known) \_\_\_\_\_

## Formation log

From	To	Color	Hardness	Formation description
0	19	Brown		Fine silty sand
19	76	Brown		Fine to medium to coarse sand
76	89	Brown		Sand, gravel, cobbles
89	104	Gray		Clay
104	111	Gray		Clay with sand, gravel
111	120			Fine silty sand
120	128	Brown		Fine sand, gravel
128	132	Black		Coarse sand
132	159	Gray/Brown		Fine sand
159	174	Gray		Fine to medium sand
174				Limestone

use additional sheets as needed

## Remarks

(including depth of lost drilling fluids, materials, or tools)  
 All measurements from original ground level.  
 Add 12' for berm and pitless adapter.

## Well use

- ☐ Domestic ☒ Heat pump ☐ Commercial  
☐ Livestock ☐ Municipal ☐ Monitoring  
☐ Test well ☐ Public supply ☐ Other \_\_\_\_\_  
☐ Irrigation

## Drill method

☒ rotary ☐ auger ☐ cable ☐ other \_\_\_\_\_

## Hole size

36 inch from 0 ft to 174 ft  
 \_\_\_\_\_ inch from \_\_\_\_\_ ft to \_\_\_\_\_ ft  
 \_\_\_\_\_ inch from \_\_\_\_\_ ft to \_\_\_\_\_ ft

hole size continued

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)
16" O.D.	Steel .375	+2	129	131

Perforated or slotted casing? (yes ☒ no 

Perforated / slotted from \_\_\_\_\_ ft to \_\_\_\_\_ ft  
 Perforated / slotted from \_\_\_\_\_ ft to \_\_\_\_\_ ft

Casing grouted? (yes ☒ no Placement method Tremie-pumped

Type	Depth top	Depth bottom	Amount (vol/wt)
Neat Cement	8'	120	820 bags
Bentonite Seal	120	123	18 bags

Well screen? (yes ☒ no 

Diameter	Slot size	Depth top	Depth bottom	Length	Material
16"	0.050	129	174	45	Stainless Steel
0.---					

Bottom capped (yes ☒ no Seals / Packers (yes ☒ no Gravel packed (yes ☒ no type Red Flint #50 amount 45,000 lbs.Well developed? (yes ☒ no Explain Air-lifted, then test-pumped(pumped, ☒ air-lifted, bailed) for 5 hrs at 500 GPMPump installed? (yes ☒ no Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Installer's name \_\_\_\_\_

Type of pump \_\_\_\_\_ Depth to intake \_\_\_\_\_ ft

Pump diameter \_\_\_\_\_ Rated capacity \_\_\_\_\_ GPM

## Water information

Aquifer: ☒ sand / gravel ☐ limestone ☐ sandstoneMain water-supply zone from 129 ft to 174 ft ☐ seepage wellStatic water level 29 ft (below/above) GL; ☐ tape ☐ airline ☒ PE-line ☐ estimatePumping water level 46 ft below GL; ☐ tape ☐ airline ☒ PE-line ☐ estimateAt yield of 1056 GPM; ☒ orifice ☐ volumetric ☐ estimate for 24 hoursMeasurements taken at 4:00 (AM/PM) Date 7/21/09Water quality test? (yes ☒ no Date tested 7/21/09Tested by Cahoy Pump Service, Inc.Contractor Cahoy Pump Service, Inc.Address 411 E. Main St., Fredericksburg, IA 50630Driller Tony Thern Certification no. 8294