

WELL RECORD

68023 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. _____

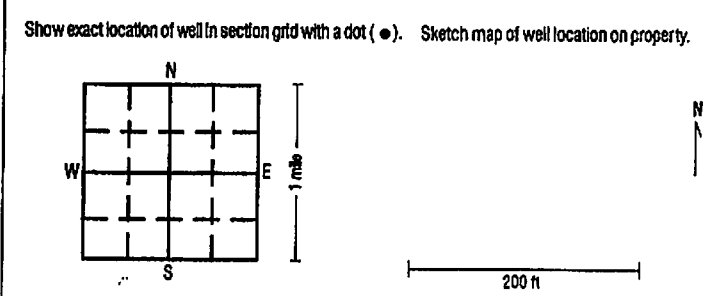
County Permit No. _____

Site Identification City of Fort Madison Well #9
Property Owner Fort Madison Other ID #9
Address 2489 280th St., Fort Madison, IA
Tenant N/A
Well Depth 177 ft Date completed 7/23/09

Drill method rotary auger cable other _____
Reverse Circulation Rotary
Hole size
36 inch from 0 ft to 177 ft
hole size continued _____ inch from _____ ft to _____ ft

Location County Lee
_____ ml. ^N and _____ ml. ^E of intersection of _____ and _____
_____ 1/4 of the _____ 1/4 of the _____ 1/4 of Sec _____ TWP _____ RNG _____ E
GPS Coordinates (NAD83 datum only) decimal degrees:
40.5564 N. Latitude 91.4328 W. Longitude.

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 +2 106 108



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 99 610 bags
Bentonite Seal 99 101 17 bags

upland hillside valley level surface Elevation (if known) _____

Well screen? (yes no)
Diameter Slot size Depth top Depth bottom Length Material
16" 0.030 106 177 71 Stainless Steel

Formation log

From	To	Color	Hardness	Formation description
0	5	Brown		Silt
5	46	Brown		Fine to coarse sand, gravel
46	78			Fine sand
78	91			Fine to coarse sand, gravel
91	99	Gray		Clay
99	140	Gray		Fine sand, gravel, cobbles
140	174	Brown		Fine, medium, + coarse sand, gravel
174	177	Gray		Coarse sand, gravel, + cobbles
177				Limestone

use additional sheets as needed

Bottom capped (yes no) with Stainless Steel Plate
Seals / Packers (yes no) kind _____ depth _____ ft
Gravel packed (yes no) from 101 ft to 177 ft
type Red Flint #30 amount 52,00 lbs

Well developed? (yes no)
Explain Air lifted, then test-pumped
(pumped, air lifted, bailed) for 7 hrs at 500 GPM

Pump installed? (yes no) Date 7/23/09
Installer's name _____
Type of pump _____ Depth to intake _____ ft
Pump diameter _____ Rated capacity _____ GPM

Water Information Aquifer: sand / gravel limestone sandstone
Main water-supply zone from 106 ft to 177 ft seepage well
Static water level 30 ft (below) above GL; tape airline DE-line estimate
Pumping water level 45 ft below GL; tape airline DE-line estimate
At yield of 1056 GPM; orifice volumetric estimate for 24 hours
Measurements taken at 5:00 (AM PM Date 8/11/09

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

Water quality test? (yes no) Date tested 8/11/09
Tested by Cahoy Pump Service, Inc.

Well use
 Domestic Heat pump Commercial
 Livestock Municipal Monitoring
 Test well Irrigation Other _____

Contractor Cahoy Pump Service, Inc.
Address 411 E. Main St., Fredericksburg, IA 50630
Driller Tony Thern Certification no. 8294