WELL RECORD 68021

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 Well
Property Owner Fort Madison Other ID #7
Address 2489 280th St., Fort Madison, IA
Tenant N/A
Well Depth 179 ft Date completed 6/19/09

Drill method ☒ rotary ☐ auger ☐ cable other Reverse Circulation Rotary

Hole size
36 inch from 0 ft to 179 ft
____ inch from ____ ft to ____ ft

hole size continued
____ inch from ____ ft to ____ ft
____ inch from ____ ft to ____ ft

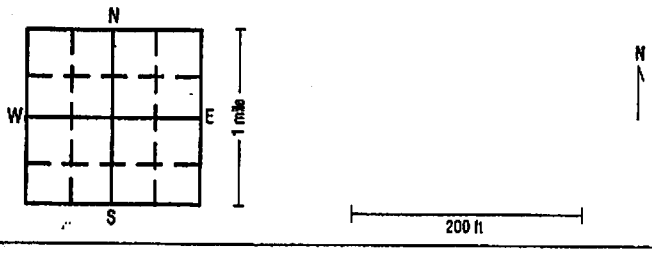
Record all depth measurements from ground level (GL). Use (+) for above GL measurements.

Location County Lee

____ mi. N/S and ____ mi. E/W 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:
40.5625 N. Latitude 91.4375 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) _____

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	+3	123	126

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	3	115	820 bags
Bentonite Seal	115	118	22 bags

Well screen? (yes / no)

Diameter	Slot size	Depth top	Depth bottom	Length	Material
16"	0.040	123	179	56	Stainless Steel
	0.___				

Bottom capped (yes / no) with Stainless Steel Plate
Seals / Packers (yes / no) kind _____ depth _____ ft
Gravel packed (yes / no) from 118 ft to 179 ft
type Red Flint #40 amount 59,000 lbs.

Well developed? (yes / no)
Explain Airlifted, then test-pumped
(pumped, airlifted, bailed) for 6 hrs at 500 GPM

Pump 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 ☐ sandstone
Main water-supply zone from 123 ft to 179 ft ☐ seepage well
Static water level 33 ft (below / above) GL; ☐ tape ☐ airline ☒ E-line ☐ estimate
Pumping water level 57 ft below GL; ☐ tape ☐ airline ☒ E-line ☐ estimate
At yield of 1056 GPM; ☒ orifice ☐ volumetric ☐ estimate for 24 hours
Measurements taken at 8:00 (AM / PM) Date 7/15/09

Water quality test? (yes / no) Date tested 7/14/09
Tested by Cahoy Pump Service, Inc.

Formation log

From	To	Color	Hardness	Formation description
0	13	Brown		Sandy silt
13	90	Brown		Fine to medium sand, silty
90	94			Cobbles & boulders
94	106	Blue/Gray		Clay with cobbles
106	115			Sand, gravel, boulders
115	155	Gray		Fine to medium sand
155	170			Medium to coarse sand, gravel
170	179			Sand, gravel, cobbles
179				Limestone

use additional sheets as needed

Remarks (including depth of lost drilling fluids, materials, or tools)
All measurements from original ground level. Add 15' for berm and pitless adapter.

Well use
☐ Domestic ☐ Livestock ☐ Test well
☐ Heat pump ☒ Municipal ☐ Public supply ☐ Irrigation
☐ Commercial ☐ Monitoring ☐ Other _____

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

Send original form to: Iowa Department of Natural Resources – Geological Survey