

WELL RECORD

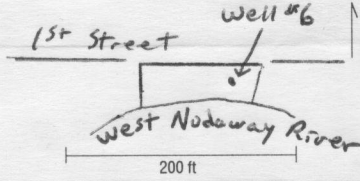
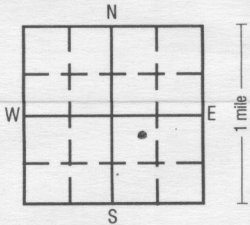
62594

Permit No. _____

Site identification
 Property Owner City of Massena, Iowa Well Number 6
 Address Southwest Well Field
 Tenant N/A
 Well Depth 32 ft Date completed 6/13/06

Location County Cass
 _____ mi. ^N and _____ mi. ^E of intersection of _____ and _____
NE 1/4 of the NW 1/4 of the SE 1/4 of Sec 32 TWP 75N RNG 34 ^E _W

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



upland hillside valley Elevation (if known) 1198

Formation log

From	To	Color	Hardness	Formation description
0	5			Oxidized till w/organics
5	10	Gray		Till
10	15	Gray-Brown		Till w/medium gravel
15	17	Brown		Till w/medium gravel
17	22	Blue-Gray		Till w/sand
20	25			Fine sand
25	30			Medium sand and coarse gravel w/cobbles
30	33			Coarse sand, small gravel, cobbles w/blue clay
33		Blue		Clay

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 Reverse Rotary

Hole size
30 inch from 0 ft to 33 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.

Casing Drive shoe (yes no Pitless adapter (yes no

Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)
12" I.D.	A-53 Steel	2	22	

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

Casing grouted? (yes no Placement method _____

Type	Depth Top	Depth bottom	Amount (vol/wt)
Bentonite Chips	5'	10'	1,300 lbs.

Well screen? (yes no
 Diameter Slot size Depth Top Depth Bottom Length Material
 12" I.D. 0.060 22 32 10' 3" Stainless Steel
 0. _____

Bottom capped (yes no with Stainless Steel Plate
 Seals / Packers (yes no kind _____ depth _____ ft
 Gravel packed (yes no from 10 ft to 33 ft
 type Red Flint .060 amount 12,000 lb.

Well developed? (yes no
 Explain _____
 (pumped, airlifted, bailed) for 24 hrs at 20 GPM.

Pump installed? (yes no Date 8/29/06
 Installer's name Cahoy Pump Service
 Type of pump Gould Depth to intake 45 ft
 Pump diameter 4" Rated capacity 18 GPM

Water information Aquifer: sand / gravel limestone sandstone
 Main water-supply zone from 22 ft to 32 ft seepage well
 Static water level 15.5 ft (below / above) GL; tape airline E-line estimate
 Pumping water level 26 ft below GL; tape airline E-line estimate
 At yield of 20 GPM; orifice volumetric estimate
 Measurements taken at 6:00 (AM / PM) Date 6/27/06

Water quality test? (yes no Date tested 9/27/06
 Tested by Cahoy Pump Service; Keystone Labs, Inc.

Contractor Cahoy Pump Service
 Address 411 E. Main St., Frederickburg, Iowa, 50630
 Driller Darin Cahoy Certification no. 1786