

66427

WELL RECORD

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

Property Owner Council Bluffs City Water Works Other ID Well # 08-4

Address 2000 North 25th St, Council Bluffs, Iowa

Tenant N/A

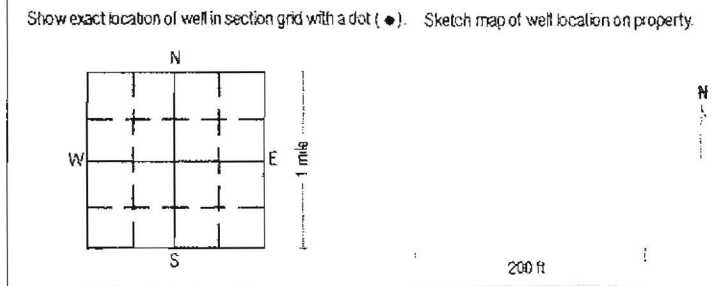
Well Depth 97 ft Date completed 12/17/08

Location County Pottawattamie

_____ mi. N and _____ mi. E of intersection of _____ and _____

_____ 1/4 of the _____ 1/4 of the _____ 1/4 of Sec _____ TWP _____ RANG _____ E _____ W _____

GPS Coordinates (NAD83 datum only) decimal degrees:
41.191783 N. Latitude 95.883517 W. Longitude



upland hillside valley level surface Elevation (if known) _____

Formation log

From	To	Color	Hardness	Formation description
0	30			Fine silty sand
30	40			Fine to medium sand
40	50			Fine to medium sand with some gray clay
50	68			Fine to medium sand with gray clay; gravel
68	69			Gray clay, medium sand
69	85			Fine to medium sand
85	89			Medium sand + gravel with cobbles
89	98			Fine to medium sand
98				Limestone

use additional sheets as needed

Remarks (including depth of lost drilling fluids, materials, or tools)
2 segments of screen installed stainless steel blank from 64' to 72'

Well use

Domestic Heat pump Commercial Monitoring Other _____

Livestock Municipal Public supply Irrigation

Test well

Drill method rotary auger cable other Reverse Rotary

Hole size 36 inch from 0 ft to 98 ft hole size continued _____ 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 / Wall	Depth top	Depth bottom	Amount (length)
<u>24" 0.0</u>	<u>A-53 0.500 wall</u>	<u>+4</u>	<u>54</u>	<u>58</u>

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

Type	Depth top	Depth bottom	Amount (vol/wt)
<u>Neat cement</u>	<u>0</u>	<u>20</u>	<u>82 bags</u>
<u> Bentonite seal</u>	<u>20</u>	<u>30</u>	<u>36 bags</u>

Well screen? (yes/no)

Diameter	Slot size	Depth top	Depth bottom	Length	Material
<u>24"</u>	<u>0.070</u>	<u>54</u>	<u>64</u>	<u>10'</u>	<u>Stainless steel</u>
<u>24"</u>	<u>0.070</u>	<u>72</u>	<u>97</u>	<u>25'</u>	<u>Stainless steel</u>

Bottom capped (yes/no) with Stainless steel plate

Seals / Packers (yes/no) kind _____ depth _____ ft

Gravel packed* (yes/no) from 30 ft to 97 ft type Red Flint #60 amount 36,000 lbs.

Well developed? (yes/no)

Explain Test pumped

(pumped, airlifted, bailed) for 72 hrs at 1261 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 54 ft to 97 ft seepage well

Static water level 13 ft (below/above) GL: tape airline line estimate

Pumping water level 32 ft below GL: tape airline line estimate

At yield of 1261 GPM: orifice volumetric estimate for 72 hours

Measurements taken at 10:00 (AM/PM) Date 2/24/09

Water quality test? (yes/no) Date tested 2/24/09

Tested by Council Bluffs Water Works

Contractor Cahoy Pump Service, Inc.

Address 411 E. Main St, Frederickburg, Iowa 50630

Driller Tony Thein Certification no. 8294