

66424

WELL RECORD

PWTS Permit No. _____

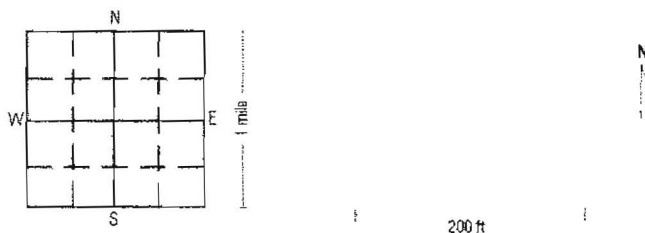
Iowa Department of Natural Resources - Geological Survey
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH (319) 335-1575

PWTS Well No. _____

County Permit No. _____

Site identification
 Property Owner Council Bluffs City Water Works Well # 08-1
 Address 2000 North 25th St, Council Bluffs, Iowa
 Tenant N/A
 Well Depth 109 ft Date completed 11/21/08

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:
41.192367 N. Latitude 95.875967 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	7			Fine silty sand
7	35			Fine sand
35	42			Fine to medium sand
42	55			Clay with sand
55	75			Clay with medium sand
75	101			Medium/coarse sand and gravel
101	110			Medium sand
110				Limestone

use additional sheets as needed

Remarks (including depth of lost drilling fluids, materials, or tools)

Well use

<input type="checkbox"/> Domestic	<input type="checkbox"/> Heat pump	<input type="checkbox"/> Commercial
<input type="checkbox"/> Livestock	<input type="checkbox"/> Municipal	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Test well	<input checked="" type="checkbox"/> Public supply	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Irrigation	

Drill method rotary auger cable other Reverse Rotary
Hole size
36 inch from 0 ft to 110 ft
 _____ 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)
<u>24" O.D.</u>	<u>A-53, 500-well</u>	<u>+3</u>	<u>81</u>	<u>84</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>50 bags</u>

Well screen? (yes /no)

Diameter	Slot size	Depth top	Depth bottom	Length	Material
<u>24"</u>	<u>0.100</u>	<u>81</u>	<u>109</u>	<u>28</u>	<u>Stainless Steel</u>
<u>0</u>	<u>0</u>				

Bottom capped (yes /no) with Stainless steel plate
 Seals / Packers (yes /no) kind _____ depth _____ ft
 Gravel packed (yes /no) from 30 ft to 109 ft
 type Red Flint #90 amount 3,000 lbs

Well developed? (yes /no)
 Explain Test pumped
 pumped, airlifted, bailed for 72 hrs at 1413 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 81 ft to 109 ft seepage well
 Static water level 14 ft (below/above) GL: tape airline E-line estimate
 Pumping water level 58 ft below GL: tape airline E-line estimate
 At yield of 1413 GPM: orifice volumetric estimate for 72 hours
 Measurements taken at 8:00 (AM/PM) Date 3/10/09

Water quality test? (yes /no) Date tested 3/10/09
 Tested by Council Bluffs Water Works

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