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Iowa Department of Natural Resources

WELL RECORD FORM

Geological and Water Survey

PWTS No. *or* PWS No. 1345043 | PWTS Permit No. _____ | GEOSAM Well No. *(DNR use only)* _____

Site Identification

Property owner Lake City Water Other ID _____

Address 105 N Center St City Lake City

Tenant _____

Well depth 306 ft Date completed 7 / 29 / 2013

Location

County Calhoun

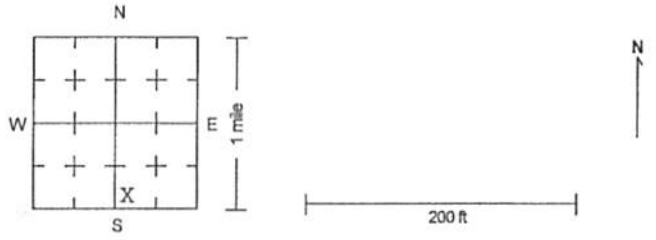
GPS coordinates (NAD83 datum)

42.2688330 Latitude 94.7345830 Longitude

☐ Decimal Degrees ☐ Degrees, Decimal Minutes ☐ Degrees, Minutes, Seconds

SE 1/4 of the SE 1/4 of the SE 1/4 of Sec 7 TWP 86 RNG 33 E W

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



Formation Log

From	To	Color	Hardness	Formation description
0	17	Brown	Loose	Clay with cobbles
17	18	brown	hard	
18	20	Blue	dense	clay with cobbles
57	58	tan	coarse	fine gravel
58	60	blue	dense	clay
60	90	blue	dense	sandy clay with cobbles
90	91	brown	hard	hard
91	95	tan	dense	sandy clay
95	100	tan	coarse	sandstone
100	115	tan	coarse	sandstone with shale streaks
115	120	yellow	hard	shale with sandstone streaks
120	134	tan	coarse	sandstone with shale layers
134	137	yellow	hard	shale
137	140	tan	coarse	sandstone
140	151	tan	coarse	sandstone with shale layers
151	169	tan	hard	shale with sandstone streaks
169	175	brown	hard	hard

(use additional sheets as needed)

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

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By

Well Use

☐ Domestic ☑ Public supply ☐ Livestock

☐ Heat pump ☐ Commercial ☐ Irrigation

# of borehole(s) ____ ☐ Monitoring ☐ Other _____

Drill Method

☑ Rotary ☐ Auger ☐ Cable ☐ Other _____

Hole size

36 inch from 0 ft to 80 ft

28 inch from 80 ft to 306 ft

hole size continued

____ inch from ____ ft to ____ ft

____ inch from ____ ft to ____ ft

Casing or Loop Pipe

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

Size (in)	Material	Depth Top	Depth Bottom	Perforated	Slotted	Screen
16	Steel	0	230	☐	☐	☐ slot size _____
16	Stainless Steel	250	301	☑	☐	☐ slot size .030
16	Steel	301	306	☐	☐	☐ slot size _____
				☐	☐	☐ slot size _____
				☐	☐	☐ slot size _____

Casing Grout

Placement method _____

Type	Depth top	Depth bottom
Concrete Grout	0	230
Bentonite Seal	230	240
☑ Gravel packed variety #30	240	306
☐ Seals/packers		

Pump Installation

Date 9 / 13 / 2013

Type of pump _____ Depth to intake _____ ft

Pump diameter _____ in Rated capacity _____ GPM

Water Information

Date 9 / 13 / 2013

Use + for above GL measurements.

Static Water Level	Pumping Water Level	Yield	Duration
130 ft	234 ft	480 GPM	15.00 hrs

Water level measurement: ☐ Sonic ☐ Tape ☐ Airline ☐ E-line ☐ Estimate

Water yield measurement: ☐ Orifice ☐ Volumetric ☐ Estimate

Main water-supply zone from _____ ft to _____ ft below GL

Well Development

☐ Physical explain: _____

☐ Chemical explain: _____

Contractor

Company Charles Sargent Irrigation Company, Inc.

Address 2016 Industrial Park Road, Carroll, IA 51401

Driller _____ Certification no. _____

Revision Date: 10/2011

Send form to **Iowa Department of Natural Resources – Geological and Water Survey**
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH 319-335-1575 FAX 319-335-2754

Make photocopies for:
well contractor, customer, and county health department

Iowa Department of Natural Resources

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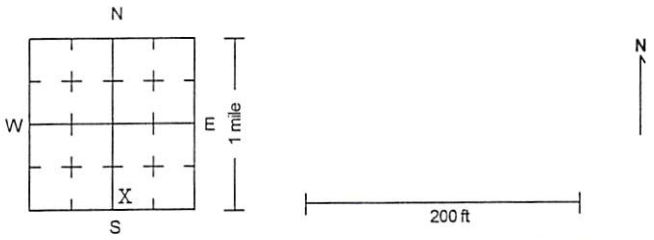
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Formation Log

From	To	Color	Hardness	Formation description
175	180	tan	coarse	sandstone
180	194	tan	coarse	sandstone with shale streaks
194	196	gray	hard	shale
196	200	tan	loose	gravel & sand
200	214	tan	loose	gravel & coarse sand
214	220	gray	hard	shale w/trace of sand
220	232	gray	dense	sandy shale
232	251	gray	hard	shale
251	260	white	dense	sandstone
260	274	tan	dense	sandstone
274	280	tan	dense	sandstone w/shale layers
280	286	gray	hard	shale
286	296	tan	dense	sandstone with fine gravel
296	298	gray	hard	shale
298	300	tan	coarse	sandstone and fine gravel
300	301	tan	coarse	sandstone
301	320	gray	hard	shale

(use additional sheets as needed)

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

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hole size continued

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Casing Grout

Placement method _____

Type	Depth top	Depth bottom
☐ Gravel packed variety _____		
☐ Seals/packers		

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Date ____/____/____

Type of pump _____ Depth to intake _____ ft

Pump diameter _____ in Rated capacity _____ GPM

Water Information

Date ____/____/____

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