

Site identification

Property Owner Rural Water Sstem #1 - PL1-9 Other ID _____

Address 4438 380th St., Hospers, IA 51238

Tenant _____

Well Depth 26 ft Date completed 05 / 13 / 15
37' after berm

Location County Sioux

_____ mi. ^N and _____ mi. ^E of intersection of _____ and _____
_S _W

NE 1/4 of the NE 1/4 of the _____ 1/4 of Sec 14 TWP 96 RNG 43 ^X_W

GPS Coordinates (NAD83 datum only) decimal degrees:
43 . 140528 N. Latitude 95 . 883333 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 | brown | dense | Top soil |
| 7 | 20 | brown | dense | Fine, medium, coarse gravel medium and coarse sand |
| 20 | 26 | brown | dense | Fine, medium and coarse sand and gravel |
| 26 | 30 | tan | dense | Clay |
| use additional sheets as needed | | | | |

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

Well use

Domestic Heat pump Commercial
 Livestock Municipal Monitoring
 Test well Irrigation Other _____

Drill method rotary auger cable other Caisson

Hole size

| | |
|---|--------------------------------------|
| <u>54</u> inch from <u>0</u> ft to <u>26</u> ft | hole size continued |
| _____ inch from _____ ft to _____ ft | _____ inch from _____ ft to _____ 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) |
|--------------|------------------|-----------|--------------|-----------------|
| 16" | .375" wall steel | 0 | 18 | |
| 16" | .375" wall steel | 22 | 26 | |

Perforated or slotted casing? (yes/~~no~~)

~~XXXXXX~~ Perforated / slotted from 18 ft to 22 ft

Perforated / slotted from _____ ft to _____ ft

Casing grouted? (yes/~~no~~) Placement method _____

| Type | Depth top | Depth bottom | Amount (vol/wt) |
|-------------|-----------|--------------|-----------------|
| Neat Cement | 0 | 12 | 5.5 yards |
| Bentonite | 12 | 14 | |

Well screen? (yes / no)

| Diameter | Slot size | Depth top | Depth bottom | Length | Material |
|----------|----------------|-----------|--------------|--------|----------|
| 16" | <u>0.1 0 0</u> | 18 | 22 | 4' | V-wire |
| | 0. _____ | | | | |

Bottom capped (yes/~~no~~) with steel

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

Gravel packed (yes/~~no~~) from 14 ft to 26 ft
type .100 amount 5 super sacks

Well developed? (yes / ~~no~~)

Explain Double Disc Surge Block

(pumped, airlifted, bailed) for 10 hrs at 80 GPM

Pump installed? (yes / no) Date 09 / 21 / 15

Installer's name Charles Sargent Irrigation, Inc.

Type of pump Grundfos Depth to intake 34.6 ft

Pump diameter 6 Rated capacity 230 GPM

Water information Aquifer: sand / gravel limestone sandstone

Main water-supply zone from 18 ft to 22 ft seepage well

Static water level 18 ft (below / above) GL; tape airline E-line estimate

Pumping water level 26.8 ft below GL; tape airline E-line estimate

At yield of 114.5 GPM; orifice volumetric estimate for 2 hours

Measurements taken at _____: _____ (AM / PM) Date 09 / 21 / 15

Water quality test? (yes / ~~no~~) Date tested _____ / _____ / _____

Tested by Rural Water System #1

Contractor Sargent Drilling

Address 2016 Industrial Park Road

Driller Derek Schweitzer Certification no. 8338