94406

WELL RECORD FORM

PWTS No. or PWS No. IA9704060 | PWTS Permit No. 2020-0187W | GEOSAM Well No. (IGS use only)

Site Identification

Property owner CITY OF ANTHON Other ID

Address WATER TREATMENT PLANT City ANTHON

Tenant

Well depth 192 ft Date completed 6/30/20

Location

County WOODBURY

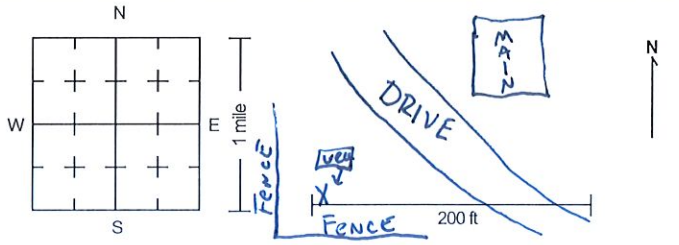
GPS coordinates (NAD83 datum)

42.23.272 N Latitude 95.52.392 W Longitude

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

NW 1/4 of the NE 1/4 of the SW 1/4 of Sec 4 TWP T88N RNG R44 (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'	5'			TILL
5'	27'			L + BROWN CLAY
27'	49'			MEDIUM TO COARSE SAND
49'	89.5'			GRAY CLAY
89.5'	90'			WOOD
90'	120'			FINE SAND W/SOME SHALE
120'	138'			FINE to MED. SAND W/ SOME SHALE
138'	147'			UNIFORM MEDIUM GRAY SAND
147'	190'			UNIFORM MED. GRAY SAND W/SHALE STREAK FROM 164'-168' to 168.5'
190'	192'			WHITE SUGAR
				(use additional sheets as needed)

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

Well Use

☐ Domestic ☒ Public supply ☐ Livestock

☐ Heat pump ☐ Commercial ☐ Irrigation

# of borehole(s) ____ ☐ Monitoring ☐ Other

Drill Method

☐ Rotary ☐ Auger ☐ Cable ☐ Other REVERSE CIRCULATION

Hole size

15 inch from 0 ft to 192 ft

____ inch from ____ ft to ____ 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
10.75"	STAINLESS STEEL	+2.5'	153.5'	☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____
10.75"	SS	153.5'	190'	☐	☐	☒ slot size .050
				☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____

Casing Grout

Placement method PRESSURE GROUTED

Type	Depth Top	Depth Bottom	Amount (vol/wt)
NEAT CEMENT TYPE I-II	0'	131'	116 SACKS
2% CALCIUM CHLORIDE			
☒ Gravel packed variety 1/8" x #16	138'	191'	48 k
☒ Seals/packers HOLE PLUG	131'	138'	7 SACKS

Pump Installation

Date 6/23/20

Type of pump GRUNDFOS Depth to intake 130'-2" ft

Pump diameter 6 in Rated capacity 400 GPM

Water Information

Date 6/30/20

Use + for above GL measurements.

Static Water Level	Pumping Water Level	Yield	Duration
50'-9" ft	77 ft	600 GPM	6 hrs

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

Water yield measurement: ☒ Orifice ☐ Volumetric ☐ Estimate

Main water-supply zone from 153.5' ft to 190' ft below GL

Well Development

☒ Physical explain: AIR SURGED THEN DBL. DISK SURGE BLOCK

☒ Chemical explain: 200 PPM SODIUM HYDROCHLORIDE

Contractor

Company CAHOY PUMP SERVICE

Address 24568 150th ST. - SUMNER, IA 50674

Driller TONY THEIN Certification no. 8294