

PWSID# or PWTS No. IA7820080 PWTS Permit No. 2020-0137W GeoSam WNumber (IGS use only) WL-09

**Site Identification**  
 Property owner COUNCIL BLUFFS WATER WORKS Other ID \_\_\_\_\_  
 Address 6601 GIFFORD RD. City COUNCIL BLUFFS  
 Tenant WATER OPERATOR  
 Well depth 101'-6" ft Date completed 5 / 13 / 20

**Drill Method**  Rotary  Auger  Cable  Other REVERSE CIRCULATION  
**Hole size**  
36 inch from 0 ft to 101'-6" ft  
 \_\_\_\_\_ inch from \_\_\_\_\_ ft to \_\_\_\_\_ ft

**Location** County POTTAWATTAMIE  
 GPS coordinates (NAD83 datum)  
41.11.21 N Latitude 95.53.8 W Longitude  
 Decimal Degrees  Degrees, Decimal Minutes  Degrees, Minutes, Seconds  
NW 1/4 of the NE 1/4 of the SE 1/4 of Sec S22 TWP174N RNG R22 (W)  
 Show exact location of well in section grid with a dot (.). Sketch map of well location on property.

**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
24"	STEEL	+2'	72'-3"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____
24"	STAINLESS STEEL	72'-3"	100'-11"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____

Gravel packed 35' 101'-6" amount 48k variety 1/8" x 1/16 NG  
 Seals/packers 20' 35' type HOLE PLUG / SLURRY  
 Bottom capped with 1/2" SS PLATE ON SCREEN

**Formation Log**

From	To	Color	Hardness	Formation description
0'	18'			FINE BROWN SAND
18'	30'			SMALL - MED. SAND
30'	48'			MED.-LARGE GRAVEL
48'	54'			MED.-LRG. GRAVEL / 1/2" PEBBLES
54'	56'			CLAY/MED. SAND/PETRIFIED WOOD
56'	69'			MED. SAND PETRIFIED WOOD/SHALE
69'	71'			CLAY/MED. SAND
71'	72'			PETRIFIED WOOD/MED. SAND
72'	82'			MED. SAND W/PETRIFIED WOOD STREAKS
82'	85'			PETRIFIED WOOD/MED. SAND
85'	86'			MED. SAND/1/2"-3/4" PEBBLES
86'	90'			COBBLES/BOULDERS/MED. SAND
90'	93'			COBBLES/PET. WOOD/MED. SAND
93'	98'			COBBLES
98'	101'-6"			COBBLES/MED. SAND
101'-6"	FINISHED			LIMESTONE (use additional sheets as needed)

**Casing Grout** Placement method PRESSURE GROUTED

Type	Depth Top	Depth Bottom	Amount (vol/wt)
NEAT CEMENT TYPE I-II	6.4'	20'	46 SACKS

**Pump Installation - TEST** Date 5 / 8 / 20  
 Type of pump AM. MARSH 10YC Depth to intake 72 ft  
 Pump diameter 10 in Rated capacity 2400 GPM

**Water Information** Date 5 / 13 / 20

Static Water Level	Pumping Water Level	Yield	Duration
<u>11.5</u> ft	<u>38</u> ft	<u>1500</u> GPM	<u>24</u> hrs

Water level measurement:  Sonic  Tape  Airline  E-line  Estimate  
 Water yield measurement:  Orifice  Volumetric  Estimate  
 Main water-supply zone from 72'-3" ft to 100'-11" ft below GL

**Well Development**  
 Physical explain: AIR SURGED THRU DOUBLE DISK SURGE BLOCK  
 Chemical explain: 1500 PPM SODIUM HYPOCHLORIDE

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

**Contractor**  
 Company CAHOY PUMP SERVICE  
 Address 24568 150<sup>th</sup> ST. SUMNER, IA. 50674  
 Driller TONY THEIN Certification no. 8294

**Well Use**  
 Domestic  Public supply  Livestock  
 Heat pump  Commercial  Irrigation  
 # of borehole(s) \_\_\_\_\_  Monitoring  Other \_\_\_\_\_