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91677

WELL RECORD

PWTS Permit No. 2019-0057W

PWTS Well No. 9433050

County Permit No. _____

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

Site identification

Property Owner City of Ft. Dodge Other ID _____

Address 819 1st Ave South

Tenant _____

Well Depth 517 ft Date completed 5 / 27 / 19

Location

County Webster

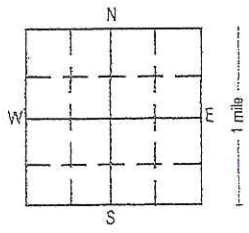
_____ mi. N/S and _____ mi. E/W of intersection of _____ and _____

_____ 1/4 of the _____ 1/4 of the _____ 1/4 of Sec 19 TWP 89N RNG 28 E/W

GPS Coordinates (NAD83 datum only) decimal degrees:

42.5036 N. Latitude -94.1989 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
				See attached

use additional sheets as needed

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

Well use

☐ Domestic ☐ Livestock ☐ Test well
☐ Heat pump ☒ Municipal ☐ Public supply ☐ Irrigation
☐ Commercial ☐ Monitoring ☐ Other _____

Drill method

☒ rotary ☐ auger ☐ cable other _____

Hole size

36	inch	from 0 ft	to 30 ft		
23½	inch	from 30 ft	to 487 ft		

hole size continued

____	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)
30" OD	Steel	0	30	30'
24" OD	Steel	30	278'	2

Perforated or slotted casing? (yes / no)

Perforated / slotted from _____ ft to _____ ft

Perforated / slotted from _____ ft to _____ ft

Casing grouted? (yes / no) Placement method _____

Type	Depth top	Depth bottom	Amount (vol/wt)
Neat Cement	0	30'5"	90 sacks

Well screen? (yes / no)

Diameter	Slot size	Depth top	Depth bottom	Length	Material
	0.___				
	0.___				

Bottom capped (yes / no) with _____

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

Gravel packed (yes / no) from _____ ft to _____ ft

type _____ amount _____

Well developed? (yes / no)

Explain acidizing

(pumped, airlifted, bailed) for 10 hrs at 2542 GPM

Pump installed? (yes / no)

Date ____ / ____ / ____

Installer's name _____ 64 others

Type of pump _____ Depth to intake _____ ft

Pump diameter _____ Rated capacity _____ GPM

Water information

Aquifer: ☐ sand / gravel ☒ limestone ☐ sandstone

Main water-supply zone Test Pumping from _____ ft to _____ ft ☐ seepage well

Static water level 103.7 ft (below / above) GL: ☐ tape ☒ airline ☐ E-line ☐ estimate

Pumping water level 115 ft below GL: ☐ tape ☒ airline ☐ E-line ☐ estimate

At yield of 2542 GPM: ☐ orifice ☐ volumetric ☐ estimate for _____ hours

Measurements taken at _____ : _____ (AM / PM) Date ____ / ____ / ____

See attached

Water quality test? (yes / no)

Date tested 5 / 15 / 19

Tested by Kenny Mohr

Contractor Cahoy Pump

Address 24568 150th St Sumner IA 50674

Driller Kaes DeGroot Certification no. 11135

The Cahoy Group

CAHOY PUMP SERVICE

SUMNER, IA
Corporate Office
563-578-1130

MARNE, IA
712-781-2030

Durand, Ill
815-218-6876

Lincoln, Ill
217-732-9997

DRILLER'S LOG

CLIENT: Fort Dodge

WELL: 22

DATE STARTED: 12/17/2018

DATE COMPLETED: 03/27/2019

DRILLER/LIC.#: 8194/11135

GPS: Lat: 42.5063 Long: -94.1989

County: Webster

¼ of SW Sec 19 TWP 89W RNG 28W

ROD#	LENGTH	DEPTH	FORMATION DESCRIPTION	DEPTH STARTED	DEPTH ENDED
			Top soil	0	1
Bit	7'	7'	Black /tan clay	1	5
Kelly	21.5'	28.5'	Tan/red clay	5	9
			Gray fine to medium sand	9	12
			Fine tan sand 2/medium to coarse gravel w/cobbles	12	22
			Gray/black clay "hard"	22	31
1 collar	21'	44.5'	Gray clay	31	38
			Gray clay w/some stone	38	40
			Hard gray clay	40	53
Rod 1	20'	69.5'	Gray clay w/coal streaks	53	80
Rod 2	21'	90.5'	Gray/black shale	80	83
			Shale w/limestone streaks	83	87
			Gray/black shale	87	117
Rod 3	20'	110.5'	Dark shale w/limestone streaks	117	133
Rod 4	21'	131.5'	Gray shale w/limestone streaks	133	161
Rod 5	21'	152.5'	Green/gray shale	161	165
Rod 6	21'	173.5'	Limestone streak	165	168
Rod7	21'	173.5'			

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ROD#	LENGTH	DEPTH	FORMATION DESCRIPTION	DEPTH STARTED	DEPTH ENDED
Rod 8	21'	194.5'	Gray shale	168	191
Rod 9	21'	215.5	Gray shale w/limestone streaks	191	222
Rod 10	21'	236.5'	Red shale	222	228
			Red shale w/limestone streaks	228	230
Rod 11	20'	258.5'	Hard dark shale	230	241
Rod 12	21'	279.5'	Very stiff gray shale	241	266
Rod 13	21'		Gray shale w/limestone streaks	266	269
			Limestone	269	291
	20'	302'	Sandstone	291	299
14	20'		Tan limestone	299	368
15	20'	382'	Gray limestone	368	381
16-19	20'	482'	Hard limestone with shale streaks	381	452
20-21	20'	502'	Limestone w/shale streaks	452	484
22	20'	522'	Limestone w/dolomite streaks	484	511
			Limestone w/shale streaks	511	515
			Shale	515	517.5

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Cahoy
Well And Pump Service
Municipal, Industrial, Environmental
24568 150th St. Sumner, IA 50674
Tel: 563-578-1130 Fax: 563-578-1135

OWNER: Fort Dodge Date: 12/17/2018
WELL #: 22
County: Webster

