

WELL RECORD 85880 - PWTS Permit No. _____

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

PWTS Well No.: _____ County Permit No. _____

Site identification

Property Owner: CITY OF NORTH LIBERTY WELL #9 Other ID: WELL 9

Address 920 WEST ZELLER, NORTH LIBERTY, IA 52317

Tenant _____

Well Depth: 485 ft Date Completed: 12/22/2016

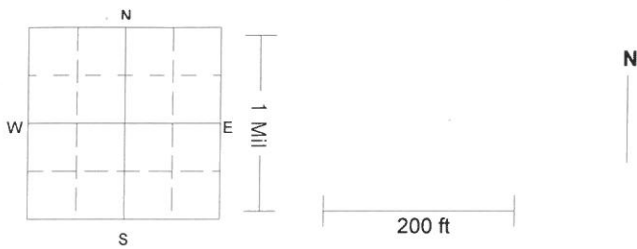
Location County JOHNSON COUNTY IOWA

____ mi. ^N/_S and ____ mi. ^E/_W of intersection of _____ and _____
1/4 of the 1/4 of the 1/4 of Sec TW RN ^E/_W

GPS Coordinates (NAD83 datum only) decimal degrees:

41.745019 N. Latitude -91.612608 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	31	BROWN		CLAY
40	70	BLUE		CLAY
70	105	GRAY		SHALE
105	270	GR/TN		LIMESTONE
270	273	GRAY		SHALE
273	283	LT GR		LIMESTONE
283	285	GRAY		SHALE
285	345	LT GR		LIMESTONE
345	475	WHT/GRY		LIMESTONE
475	485	GREEN		SHALE

Drill method rotary auger cable other _____

Hole size	
<u>24</u> inch from <u>0</u> ft t <u>115</u> ft	<u>11.25</u> inch from <u>310</u> ft t <u>485</u> ft
<u>17</u> inch from <u>115</u> ft t <u>310</u> ft	inch from ft t ft

Casing Drive shoe Pitless adaptor

Size (ID/OD)	Type/ Wt	Depth top	Depth bottom	Amount (length)
12	STEEL .500	+2	310	312
18	STEEL .500	2	115	117

Perforated or slotted casing?
 Perforated Slotted from ft t ft
 Perforated Slotted from ft t ft

Casing grouted? Grouted Placement method: _____

Type	Depth top	Depth bottom	Amount (vol/wt)
CEMENT	0	115	160 CU FT
CEMENT	0	310	250 CU FT

Well Screen? Screen

Diameter	Slot size	Depth top	Depth bottom	Lenght	Material

Bottom Capped with _____
 Packers kind _____ depth ft
 Seals kind _____ depth
 Gravel packed from _____ to _____ ft
 type amount

Well developed? Well Developed

Explain
 pumped airlifted bailed for _____ hrs at _____ GPM

Pump installed? Pump Installed Date _____

Type of Pump _____ Depth to Intake _____ ft
 Pump diameter _____ Rated Capacity GPM _____ GPM

Water information Sand/gravel Limestone Sandstone
 Main water-supply zone 1 from 310 ft to 475 ft seepage well
 Main water-supply zone 2 from _____ ft to _____ ft

Static water level 135 ft (below/above) GL tape airline E-line estimate
 Pump water level _____ ft below GL tape airline E-line estimate

At yield of _____ GPM; Orifice Volumetric Estimate for _____ hours
 Measurement taken at _____ Date _____

Water quality test? Date _____

Tested by _____

Contractor name GINGERICH WELL PUMP SERVICE, LLC
 Address 1331 HWY 1, KALONA, IA 52246

Driller DILLON GINGERICH Certification no. 1017

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

ACIDIZED WITH 1,300 GALLONS HCL

Well use Domestic Heat Pump Commercial Livestock Municipal Monitoring Test Well Public Supply Irrigation Other _____

04-27-2017