73560

WELL RECORD

PWTS Permit No. 2009-0388W

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

PWTS Well No. PWSID #9778024

County Permit No. _____

Site identification

Property Owner City of Salix Other ID Well #4

Address 317 Tipton, Salix, IA 51052

Tenant City of Salix

Well Depth 140 ft Date completed 05 / 22 / 10

Location

County Woodbury

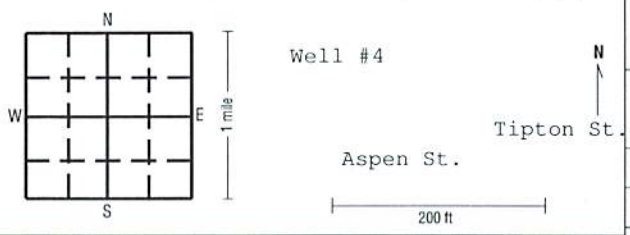
1/8 mi. N/S and 1/8 mi. E/W of intersection of Aspen St. and Tipton St.

NW 1/4 of the SW 1/4 of the NW 1/4 of Sec 35 TWP 87N RNG 47 E/W

GPS Coordinates (NAD83 datum only) decimal degrees:

42.310941 N. Latitude 96.288834 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	2.5	Black		Topsoil
2.5	4.5	Dk. Gray		Silty Clay
4.5	11	Yellow/brown		Clay
11	41	Gray/brown		Clay
41	56	Gray		Clay
56	67	Gray		Fine-med sand w/gravel
67	120	Gray		Med-coarse sand w/gravel
120	131	Gray		Coarse-med sand & gravel
131	140	Gray		Coarse sand & gravel

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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

20 inch from 0 ft to 140 ft

____ inch from ____ ft to ____ 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)
8" SST	0.322"	116'	126'	10'
8" PVC	0.508"	8'	116'	108'
8" Steel	0.322"	+3'	8'	11'

Perforated or slotted casing? (yes / no)

Perforated / slotted from _____ ft to _____ ft

Perforated / slotted from _____ ft to _____ ft

Casing grouted? (yes / no)

Placement method Tremie

Type	Depth top	Depth bottom	Amount (vol/wt)
Neat Cement	0'	50'	3 cyd

Well screen? (yes / no)

Diameter	Slot size	Depth top	Depth bottom	Length	Material
8"	0.070	126'	140'	14'	SST
	0.___				

Bottom capped (yes / no) with SST Plate Attached

Seals / Packers (yes / no) kind Bentonite depth 50-52 ft

Gravel packed (yes / no) from 52 ft to 140 ft

type Northern #2 amount 4 Tons

Well developed? (yes / no)

Explain Surge block, bailer, rawhiding

(pumped, airlifted, bailed) for 8 hrs at 200-400 GPM

Pump installed? (yes / no)

Date 08 / 30 / 10

Installer's name Carlisle/Dooling

Type of pump Submersible Depth to intake 82 ft

Pump diameter 6" Rated capacity 85 GPM

Water information

Aquifer: ☒ sand / gravel ☐ limestone ☐ sandstone

Main water-supply zone from 126 ft to 140 ft ☐ seepage well

Static water level 11.8 ft (below / above) GL; ☐ tape ☐ airline ☒ E-line ☐ estimate

Pumping water level 13.8 ft below GL; ☐ tape ☐ airline ☒ E-line ☐ estimate

At yield of 306 GPM; ☒ orifice ☐ volumetric ☐ estimate for 15 hours

Measurements taken at 9 : 15 (AM / PM) Date 05 / 22 / 10

Water quality test? (yes / no)

Date tested ____ / ____ / ____

Tested by _____

Contractor Layne Christensen Company

Address 3150 SE Gateway Drive, Suite B, Grimes, IA

Driller Mark Leslie Certification no. 3684

Send original form to: **Iowa Department of Natural Resources – Geological Survey**

Make photocopies for: **Well Contractor, Customer, and County Health Department**

73560

Layne Christensen Company
5600 Gateway Drive, Suite B
Grimes, IA 50111
(515) 986-3462 / 3474 Fax

WELL #4 TEST DATA REPORT

PROJECT:	City of Salix		**DATE TESTED:**	5/21/10 - 5/22/10
LOCATION:	Salix, Iowa		**TESTED BY:**	D. Carlisle
WELL NO:	4		**DRIVER:**	30-HP Sub. Motor
WELL DIAMETER:	8.00	inches I.D.	**COLUMN AND SHAFT:**	4" Drop Pipe
WELL DEPTH:	140.0	feet - from grade	**BOWL SIZE & MAKE:**	475S
TOP OF SCREEN:	126.0	feet - from grade	**MANUFACTURER:**	Grundfos
STATIC LEVEL:	11.8	feet - from top of casing	**SERIAL NUMBER:**	
ORIFICE SIZE:	6" x 4"			

TIME	PIEZ. READ. (IN)	FLOW RATE (GPM)	AIRLINE READING (FEET)	WELL 3 PWL (FEET)	DRAW DOWN (FEET)	SPEC. CAPACITY (GPM/FT)		WELL 4 WATER LEVEL (FEET)	REMARKS
0				11.8				11.8	Started at 8:15 p.m.
5 min.		306		12.5	0.7	437.1		12.0	
10		306		13.5	1.7	180.0		12.1	
15		306		13.5	1.7	180.0		12.1	
30		306		13.5	1.7	180.0		12.1	
45		306		13.8	2.0	153.0		12.1	
60		306		13.8	2.0	153.0		12.1	
75		306		13.8	2.0	153.0		12.1	
90		306		13.8	2.0	153.0		12.1	
105		306		13.8	2.0	153.0		12.1	
120		306		13.8	2.0	153.0		12.1	
180		306		13.8	2.0	153.0		12.1	
240		306		13.8	2.0	153.0		12.1	
300		306		13.8	2.0	153.0		12.2	
360		306		13.8	2.0	153.0		12.2	
420		306		13.8	2.0	153.0		12.2	
480		306		13.8	2.0	153.0		12.2	
540		306		13.8	2.0	153.0		12.2	
600		306		13.8	2.0	153.0		12.2	
660		306		13.8	2.0	153.0		12.2	
720		306		13.8	2.0	153.0		12.2	
780		306		13.8	2.0	153.0		12.2	
840		306		13.8	2.0	153.0		12.2	
900		306		13.8	2.0	153.0		12.2	Sand Non-Detectable
RECOVERY READINGS:									
5 min.		0		12.0				12.0	
10		0		11.9				11.9	
15		0		11.9				11.8	

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WELL DIAMETER:	8.00	inches I.D.	**COLUMN AND SHAFT:**	4" Drop Pipe
WELL DEPTH:	140.0	feet - from grade	**BOWL SIZE & MAKE:**	475S
TOP OF SCREEN:	126.0	feet - from grade	**MANUFACTURER:**	Grundfos
STATIC LEVEL:	11.8	feet - from top of casing	**SERIAL NUMBER:**	
ORIFICE SIZE:	6" x 4"			

TIME	PIEZ. READ. (IN)	FLOW RATE (GPM)	AIRLINE READING (FEET)	WELL 3 PWL (FEET)	DRAW DOWN (FEET)	SPEC. CAPACITY (GPM/FT)		WELL 4 WATER LEVEL (FEET)	REMARKS
RECOVERY READINGS CONTINUED:									
20		0		11.8				11.8	Full Recovery
25		0		11.8				11.8	
30		0		11.8				11.8	
35		0		11.8				11.8	
40		0		11.8				11.8	
45		0		11.8				11.8	
60		0		11.8				11.8	

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