

WELL RECORD

74911 PWTS Permit No. 36417

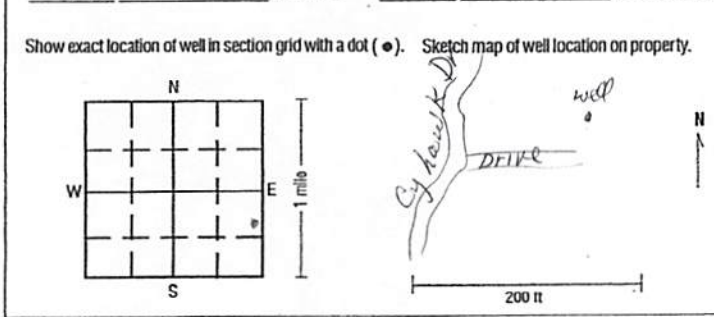
Iowa Department of Natural Resources - Geological Survey
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH (319) 335-1575

PWTS Well No. 2160556

County Permit No. _____

Site identification
 Property Owner Nick Steinkamp Other ID _____
 Address _____
 Tenant 34816 Cyhawk Drive Emmetsburg
 Well Depth 81 ft Date completed 4/27/12

Location County Palo Alto
1/4 mi. ^N and 1 mi. ^E of intersection of N40 and 350th St
SE 1/4 of the N2 1/4 of the SE 1/4 of Sec. 7 TWP 96 RNG 32 ^E ^W
 GPS Coordinates (NAD83 datum only) decimal degrees:
43.14509 N. Latitude -94.66020 W. Longitude.



upland hillside valley level surface Elevation (if known) _____

Formation log

From	To	Color	Hardness	Formation description
0	3	blk	S	Top So. 1
3	8	yel	M	clay
8	36	gray	M	clay
36	75	yel	S	fine Sand/Clay
75	90	yel	S	Sand

use additional sheets as needed

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

Well use

<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Heat pump	<input type="checkbox"/> Commercial
<input type="checkbox"/> Livestock	<input type="checkbox"/> Municipal	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Test well	<input type="checkbox"/> Public supply	<input type="checkbox"/> Other
	<input type="checkbox"/> Irrigation	

Drill method rotary auger cable other _____
Hole size
9 inch from 0 ft to 90 ft
 _____ 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) _____ Pileless adapter (yes/no) _____

Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)
5	PVC 200	+1	76	77

Perforated or slotted casing? (yes/no) _____
 Perforated / slotted from _____ ft to _____ ft
 Perforated / slotted from _____ ft to _____ ft

Casing grouted? (yes/no) _____ Placement method poured in

Type	Depth top	Depth bottom	Amount (vol/wt)
Bentonite	0	50	21 bags

Well screen? (yes/no) _____

Diameter	Slot size	Depth top	Depth bottom	Length	Material
5 ID	0.018	76	81	5	SS
	0.---				

Bottom capped (yes/no) _____ with SS Plate
 Seals / Packers (yes/no) _____ kind _____ depth _____ ft
 Gravel packed (yes/no) _____ from 50 ft to 81 ft
 type Plack Muehling amount 500

Well developed? (yes/no) _____
 Explain airlift - Surge - Jet w/ water
 (pumped, aerated, bailed) for _____ hrs at _____ GPM

Pump installed? (yes/no) _____ Date 4/30/12
 Installer's name Bill Elbert
 Type of pump Subm Depth to intake 40 ft
 Pump diameter 3 Rated capacity 15 GPM

Water information Aquifer: sand / gravel limestone sandstone
 Main water-supply zone from 76 ft to 81 ft seepage well
 Static water level 23 ft (below / above) GL; tape airline E-line estimate
 Pumping water level 24 ft below GL; tape airline E-line estimate
 At yield of 20 GPM; orifice volumetric estimate for 2 hours
 Measurements taken at 3:00 (AM/PM) Date 4/27/12

Water quality test? (yes/no) _____ Date tested 1/1
 Tested by Sanitarian

Contractor Elbert Bros Well Drilling Inc
 Address Whittemore
 Driller Rick Elbert Certification no. 2335