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

PWTS Well No. 2125425 County Permit No. 25040

Site identification

Property Owner VeraSun Hartley, LLC Other ID Well #1

Address 3260 Van Buren Avenue

Tenant VeraSun Hartley, LLC

Well Depth 574 ft Date completed 05 / 21 / 07

Location

County O'Brien

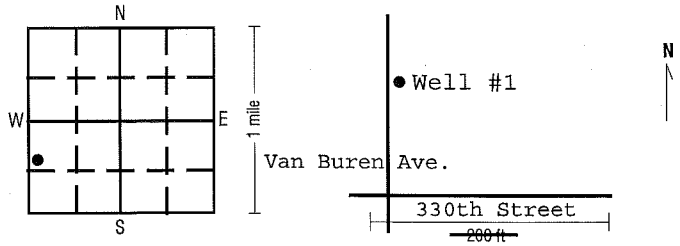
1/4 mi. (N) S and 1/32 mi (E) W of intersection of Van Buren Ave. and 330th St.

SW 1/4 of the NW 1/4 of the SW 1/4 of Sec 31 TWP 97 RNG 39 (E) W

GPS Coordinates (NAD83 datum only) decimal degrees:

_____ N. Latitude _____ 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	3	Black		Topsoil
3	21	Yellow		Sandy clay
21	119	Gray		Till
119	130	Brown		Sand
130	218	Gray		Till
218	285	Gray		Shale
285	330	Tan		Sandstone
330	405	Gray		Shale w/sandstone seams
405	578	Gray		Sandstone w/shale seams
				use additional sheets as needed

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

Well use

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

Drill method

☐ rotary ☐ auger ☐ cable other Reverse Rotary

Hole size

36 inch from 0 ft to 414 ft
23 inch from 414 ft to 578 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)
24"	0.375"	0'	414'	414'
14"	0.375"	+2'	474'	476'

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'	414'	50 cyd (24")
Neat Cement	0'	389'	24 cyd (14")

Well screen? (yes) no

Diameter	Slot size	Depth top	Depth bottom	Length	Material
14"	0.025"	474'	574'	100'	SST
	0.___				

Bottom capped (yes) no with SST Plate Attached
Seals / Packers (yes) no kind Bentonite depth 389-394 ft
Gravel packed (yes) no from 394 ft to 574 ft
type Northern #0 amount 20 Tons

Well developed? (yes) no

Explain Surge block, bailer, airlifting
(pumped) (airlifted) (bailed) for 10 hrs at 500+ GPM

Pump installed? (yes) no Date 11 / 16 / 07

Installer's name Mark Leslie
Type of pump Submersible Depth to intake 368 ft
Pump diameter 10" Rated capacity 550 GPM

Water information

Aquifer: ☐ sand / gravel ☐ limestone ☒ sandstone
Main water-supply zone from 474 ft to 574 ft ☐ seepage well
Static water level 250 ft (below) above) GL; ☐ tape ☐ airline ☒ E-line ☐ estimate
Pumping water level 292 ft below GL; ☐ tape ☐ airline ☒ E-line ☐ estimate
At yield of 641 GPM; ☒ orifice ☐ volumetric ☐ estimate for 72 hours
Measurements taken at 8 : 00 (AM) PM) Date 09 / 22 / 07

Water quality test? (yes) no Date tested 10 / 03 / 07

Tested by Layne-Western - Sent to Midwest Labs.

Contractor Layne-Western
Address 5600 Gateway Drive, Suite B, Grimes, IA
Driller Duane Trask Certification no. 5509