

799940

County Mower
Quad Austin East
Quad ID 8B

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING REPORT
Minnesota Statutes Chapter 1031

Entry Date07/24/2015
Update Date12/29/2016
Received Date06/25/2015

Well Name RETTERATH,					Township 103	Range 18	Dir W	Section 14	Subsection BDBAAA	Well Depth 244 ft.				Depth Completed 244 ft.				Date Well Completed 06/04/2015							
Elevation 1220					Elev. Method LiDAR 1m DEM (MNDNR)					Drill Method Dual Rotary				Drill Fluid											
Address										Use irrigation				Status Active											
Well 260TH ST LANSING MN 55950										Well Hydrofractured? Yes ☐ No ☐				From To											
Contact 120 5TH AV SE BOCA RATON FL 33432										Casing Type Single casing				Joint Welded											
Stratigraphy Information										Drive Shoe? Yes ☒ No ☐				Above/Below											
Geological Material		From	To (ft.)	Color	Hardness	Casing Diameter				Weight				Hole Diameter											
TOPSOIL		0	2			16 in. To				96 ft. 62.64 lbs./ft.				16 in. To 96 ft.											
SAND W/ GRAVEL		2	37											16 in. To 244 ft.											
CLAY STICKY		37	78	GRAY																					
GRAVEL & SAND		78	94																						
LIMEROCK FIRM		94	244	LT. TAN																					
Open Hole										From	96	ft.	To	244	ft.										
Screen? ☐										Type				Make											
Static Water Level										9	ft.	land surface				Measure	06/04/2015								
Pumping Level (below land surface)										15	ft.	2	hrs.	Pumping at				431	g.p.m.						
Wellhead Completion										Pitless adapter manufacturer				Model											
☒ Casing Protection										☐ 12 in. above grade															
☐ At-grade (Environmental Wells and Borings ONLY)																									
Grouting Information										Well Grouted? ☒ Yes ☐ No ☐ Not Specified															
Material				Amount				From				To													
driven casing seal				4 Sacks				ft. 96				ft.													
Nearest Known Source of Contamination										feet				Direction				Type							
Well disinfected upon completion?										☐ Yes ☐ No															
Pump ☐ Not Installed										Date Installed				06/16/2015											
Manufacturer's name										BERKELEY															
Model Number		8T30650		HP		30		Volt		460															
Length of drop pipe		60		ft		Capacity		700		g.p.		Typ		Submersible											
Abandoned										Does property have any not in use and not sealed well(s)?				☐ Yes ☐ No											
Variance										Was a variance granted from the MDH for this well?				☐ Yes ☐ No											
Miscellaneous										First Bedrock				Spillville-Galena				Aquifer				Spillville-Galena			
Last Strat										Spillville-Galena				Depth to Bedrock				94				ft			
Located by										Minnesota Department of Health															
Locate Method										GPS SA Off (averaged) (15 meters)															
System										UTM - NAD83, Zone 15, Meters				X 503008				Y 4841714							
Unique Number Verification										Info/GPS from data				Input Date				07/24/2015							
Angled Drill Hole																									
Well Contractor										DMB Drilling Co., Inc.				1647				HOFMAN, R.							
Licensee Business										Lic. or Reg. No.				Name of Driller											
Minnesota Well Index Report					799940					Printed on 09/01/2026 HE-01205-15															

Minnesota Unique Well No.

799940

County Mower
Quad Austin East
Quad ID 8B

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD
Minnesota Statutes Chapter 1031

Entry Date 07/24/2015
Update 06/25/2015
Received Date 12/29/2016

Well Name		Township	Range	Dir	Section	Subsection	Use	Status	Well Depth	Depth Completed		Date Well Completed		Lic/Reg. No.							
RETTERATH,		103	18	W	14	BDBAAA	irrigation	A	244 ft.	244 ft.		06/04/2015		1647							
Elevation	1220 ft.	Elev. Method		LiDAR 1m DEM (MNDNR)			Aquifer	Spillville-Galena		Depth to Bedrock		94	ft	Open Hole	96	-	244	ft	Static Water Level	9	ft
Field Located By		Minnesota Department of				Locate Method		GPS SA Off (averaged) (15 meters)				Universal Transverse Mercator (UTM) - NAD83 - Zone 15 -									
Unique No. Verified		Info/GPS from data source				Input Source		Minnesota Department of Health				UTM Easting (X)		503008							
Geological Interpretation		Julia Steenberg				Input Date		07/24/2015				UTM Northing (Y)		484171							
Agency (Interpretation)												Interpretaion Method		Geologic study 1:24k to 1:100k							
						Depth (ft.)				Elevation (ft.)											
Geological Material		Color	Hardness			From	To	Thickness	From	To	Stratigraphy	Primary Lithology		Secondary				Minor Lithology			
TOPSOIL						0	2	2	1220	1218	Recent undiff.	soil		organic deposits							
SAND W/ GRAVEL						2	37	35	1218	1183	sand +larger	sand		gravel							
CLAY STICKY		GRAY				37	78	41	1183	1142	clay-gray	clay									
GRAVEL & SAND						78	94	16	1142	1126	sand +larger	gravel		sand							
LIMEROCK FIRM		LT. TAN				94	244	150	1126	976	Spillville-Galena	dolomite		limestone				shale			
Minnesota Well Index - Stratigraphy Report									799940			Printed on 09/01/2026									



Minnesota Well Index

General Information

Unique Well ID:	799940	Well Name:	RETTERATH, STEVE	County:	Mower	Aquifer:	Spillville-Galena
Well Elevation (msl in feet):	1220	Drilled Depth (ft):	244	Well Completed (ft):	244	Date Drilled:	06/04/2015
Township:	103	Range:	18	Dir:	W	Section:	14
Subsection:	BDBAAA	Use:	irrigation	Well Status:	Active	Depth To Bedrock:	94
Driller:	DMB Drilling Co., Inc.	Entry Date:	07/24/2015	Update Date:	12/29/2016		

Related Resources:

Go to MN Well Index Map	Well Log Report	Scanned Record(s)	Stratigraphy Report
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- More Details
- Stratigraphy
- Address
- Chemical Data
- Construction
- Pump Test
- Static Water
- Comments
- Location Changes
- Overview Map

First Bedrock:	DSOG	Last Strat:	DSOG	Open hole top (ft):	96
Strat Source:	MGS	Strat Method:	Q	Open hole bottom (ft):	244
Strat Date:	I I	Strat Update Date:	12/29/2016	MGS Quadrangle:	8B

WELL OR BORING LOCATION

County Name

Mower

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD

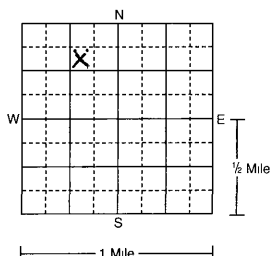
Minnesota Statutes, Chapter 103I

MINNESOTA UNIQUE WELL
AND BORING NO.

799940

Township Name Lansing Township No 103 Range No 18 Section No 14 Fraction SW 1/4 NE 1/4 NW 1/4GPS LOCATION Latitude 43 degrees 43 minutes 12 seconds 4 Longitude 12 degrees 57 minutes 45 seconds 54House Number, Street Name, City, and ZIP Code of Well Location
260th St, Lansing MN 55950

Show exact location of well/boring in section grid with "X" Sketch map of well/boring location Showing property lines, roads, buildings, and direction



260th St
Corn Field
Well #

PROPERTY OWNER'S NAME/COMPANY NAME

Steve Ratterath

Property owner's mailing address if different than well location address indicated above

120 SE 5th Ave
Suite 223
Boca Raton, FL 33432

WELL OWNER'S NAME/COMPANY NAME

Well/boring owner's mailing address if different than property owner's address indicated above

WELL/BORING DEPTH (completed)

DATE WORK COMPLETED

June 4, 2015

DRILLING METHOD

☐ Cable Tool ☐ Driven
☐ Auger ☐ Rotary
☒ Other Dual Rotary

DRILLING FLUID

WELL HYDROFRACTURED? ☐ Yes ☐ No

From _____ ft To _____ ft

USE

☐ Domestic ☐ Monitoring ☐ Heating/Cooling
☐ Noncommunity PWS ☐ Environ Bore Hole ☐ Industry/Commercial
☐ Community PWS ☒ Irrigation ☐ Remedial
☐ Elevator ☐ Dewatering ☐

CASING MATERIAL

Drive Shoe? ☒ Yes ☐ No

HOLE DIAM

☒ Steel ☐ Threaded ☒ Welded
☐ Plastic ☐

CASING Diameter

Weight

Specifications

16 in To 96 ft 62.64 lbs/ft Dongbu 16 in To 96 ft
____ in To _____ ft _____ lbs/ft _____
____ in To _____ ft _____ lbs/ft _____

SCREEN

OPEN HOLE

Make

From 96 ft To 244 ft

Type

Diam

Slot/Gauze

Length

Set between _____ ft and _____ ft

FITTINGS

STATIC WATER LEVEL

Measured from Top of casing9 ft ☒ Below ☐ Above land surfaceDate measured June 4, 2015

PUMPING LEVEL (below land surface)

15 ft after 2 hrs. pumping 431 gpm

WELLHEAD COMPLETION

☐ Pitless/adaptor manufacturer _____ Model _____
☒ Casing protection well seal ☐ 12 in above grade
☐ At-grade ☐ Well House ☐ Hand Pump

GROUTING INFORMATION (specify bentonite, cement-sand, neat-cement, concrete, cuttings, or other)

Material _____ From _____ To _____ ft _____ Yds ☐ BagsMaterial _____ From _____ To _____ ft _____ Yds ☐ BagsMaterial _____ From _____ To _____ ft _____ Yds ☐ Bags

Driven casing seal From 0 To 96 4 Bags

NEAREST KNOWN SOURCE OF CONTAMINATION

_____ feet _____ direction _____ type

Well disinfected upon completion? ☐ Yes ☐ No

PUMP

☐ Not installed Date installed June 16, 2015Manufacturer's name BerkeleyModel Number ET 30450 HP 30 Volts 460Length of drop pipe 60 ft Capacity 700 gpmType ☒ Submersible ☐ LS Turbine ☐ Reciprocating ☐ Jet ☐

ABANDONED WELLS

Does property have any not in use and not sealed well(s)? ☐ Yes ☐ No

VARIANCE

Was a variance granted from the MDH for this well? ☐ Yes ☐ No TN#

WELL CONTRACTOR CERTIFICATION

This well was drilled under my supervision and in accordance with Minnesota Rules, Chapter 4725. The information contained in this report is true to the best of my knowledge.

Sams Well Drilling Inc 1647

Licensee Business Name

Lic or Reg No

Certified Representative Signature

Certified Rep No

Date

Name of Driller

Ray Hoffman

MINN. DEPT. OF HEALTH COPY

799940

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Well Owner: Steve Retterrath	Date: June 10, 2015	Unique Well # 799940 Job 37199
Casing Diameter (inches): 16	Measuring point Description (ex. Top of Casing):	Well Depth (ft):
Driller/Crew:	Test Pump Setting (ft): 84	Static Water Level Measurement and Time: 5.46

Time test pumping started: June 10, 2015

[illegible]