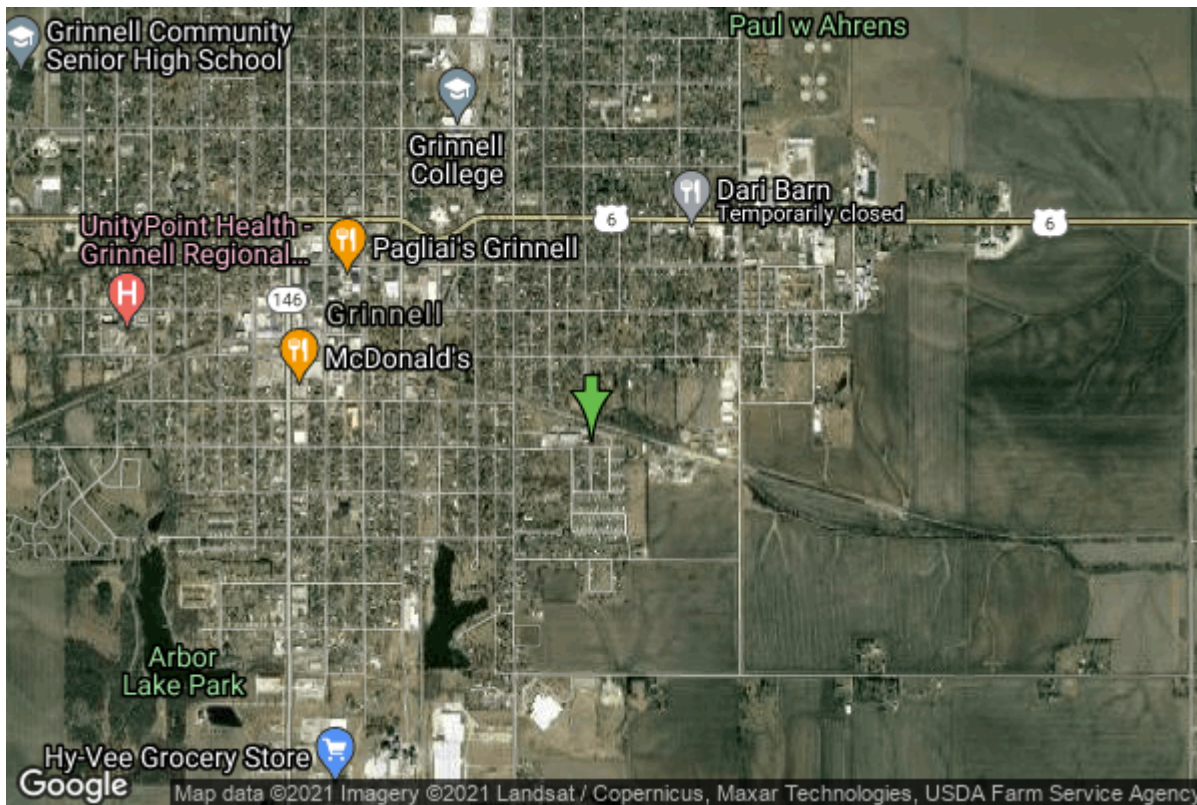


Well W#23328 Information



Date Received		State	Iowa
Owner Name	Grinnell, City Of	County	Poweshiek
Alt Name	#8	Quadrangle	Grinnell South, Iowa
WNumber	23328	Township	T80N
PWTS ID	0	Range	R16W
PWS ID	7930008	Section	16
Storet ID	0	Quarter	NE SW SE
SDWIS ID	2411846	Latitude	41.7390700000
USGS ID	0	Longitude	-92.7136700000
Project	Source Water Protection	Accuracy	
Operator	Unknown	UTM X	523810
		UTM Y	4620846

Site Type	Drilled hole	Drilling Company	Winslow Well Co.
Well Status	Active	Drilling Date	05/25/1974
Field Located	No	Drilling Method	Rotary
Elevation	1004 ft	Bedrock Depth	0 ft
Elevation Accuracy	Digital Elevation Model	Well Depth	2328 ft
	Accurate to 5 ft	Total Depth	2510 ft
Landscape Position	Unknown	Well Types	Municipal, Public Supply
		Aquifers	Cambrian-Ordovician

Casing Construction Information

Date	01/01/2014	Casing Type	
Start Depth	710.00 ft	End Depth	1993.00 ft

Diameter	8.00 in	Amount	1283.00 ft
Comments	Reported on DNR 2014 Jordan Questionnaire		

Date	01/01/2014	Casing Type	
Start Depth	0.00 ft	End Depth	710.00 ft
Diameter	16.00 in	Amount	0.00 ft
Comments	Reported on DNR 2014 Jordan Questionnaire		

Date	05/25/1974	Casing Type	Steel
Start Depth	0.00 ft	End Depth	0.00 ft
Diameter	26.00 in	Amount	235.00 ft
Comments			

Date	05/25/1974	Casing Type	Steel
Start Depth	0.00 ft	End Depth	0.00 ft
Diameter	20.00 in	Amount	715.00 ft
Comments			

Date	05/25/1974	Casing Type	Steel
Start Depth	-3.00 ft	End Depth	1287.00 ft
Diameter	12.00 in	Amount	1290.00 ft
Comments			

Grout Construction Information

Date	05/25/1974		
Grout Type	Cement	Grout Placement	Unknown
Start Depth	0.00 ft	End Depth	1287.00 ft
Comments			

Log Information

Date	09/01/1984		
Log Types	Strip log		
Prepared By	Bouk, Michael Joseph		
Comments			

Date			
Log Types	Drillers log		
Prepared By	Unknown		
Comments			

Date			
Log Types	Pump Test		
Prepared By			
Comments			

Stratigraphy Information

System	Unknown		
Series			
Group			
Formation			
Member			
Submember			
Start Depth	0.00 ft	End Depth	70.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Unknown	Percent	0
Secondary Lithology	Unknown	Percent	0
Tertiary Lithology	Unknown	Percent	0
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group	Pre-Illinoian		
Formation			
Member			
Submember			
Start Depth	70.00 ft	End Depth	75.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Till - Oxidized And Unleached	Percent	80
Secondary Lithology	Paleosol	Percent	20
Tertiary Lithology		Percent	
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group	Pre-Illinoian		
Formation			
Member			
Submember			
Start Depth	75.00 ft	End Depth	105.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Paleosol	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group	Pre-Illinoian		

Formation			
Member			
Submember			
Start Depth	105.00 ft	End Depth	195.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Till - Unoxidized And Unleached	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Unknown		
Series			
Group			
Formation			
Member			
Submember			
Start Depth	195.00 ft	End Depth	220.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group			
Formation			
Member			
Submember			
Start Depth	220.00 ft	End Depth	225.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Sand And Gravel	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Mississippian (Subsystem Of Carboniferous System)		
Series			
Group	Augusta		
Formation	Keokuk		
Member			
Submember			
Start Depth	225.00 ft	End Depth	275.00 ft
Contact Accuracy			
Penetration			

Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Mississippian (Subsystem Of Carboniferous System)		
Series			
Group	Augusta		
Formation	Burlington		
Member			
Submember			
Start Depth	275.00 ft	End Depth	345.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Mississippian (Subsystem Of Carboniferous System)		
Series			
Group	North Hill		
Formation			
Member			
Submember			
Start Depth	400.00 ft	End Depth	424.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Devonian		
Series			
Group	Yellow Spring (New Albany)		
Formation	Maple Mill		
Member			
Submember			
Start Depth	424.00 ft	End Depth	575.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Devonian		
Series			

Group	Yellow Spring (New Albany)		
Formation	Lime Creek		
Member			
Submember			
Start Depth	575.00 ft	End Depth	715.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			
<hr/>			
System	Devonian		
Series			
Group	Cedar Valley		
Formation	Coralville		
Member			
Submember			
Start Depth	715.00 ft	End Depth	820.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			
<hr/>			
System	Devonian		
Series			
Group	Cedar Valley		
Formation	Little Cedar		
Member	Rapid		
Submember			
Start Depth	820.00 ft	End Depth	1010.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			
<hr/>			
System	Devonian		
Series			
Group	Wapsipinicon		
Formation			
Member			
Submember			
Start Depth	1010.00 ft	End Depth	1044.00 ft
Contact Accuracy			
Penetration			

Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Silurian		
Series			
Group			
Formation			
Member			
Submember			
Start Depth	1044.00 ft	End Depth	1200.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group			
Formation	Maquoketa		
Member			
Submember			
Start Depth	1200.00 ft	End Depth	1408.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Unknown		
Series			
Group			
Formation			
Member			
Submember			
Start Depth	1408.00 ft	End Depth	1625.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			

Group	Galena		
Formation	Decorah		
Member	Guttenberg		
Submember			
Start Depth	1625.00 ft	End Depth	1635.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Galena		
Formation	Decorah		
Member	Spechts Ferry		
Submember			
Start Depth	1635.00 ft	End Depth	1637.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Galena		
Formation	Platteville		
Member	Mcgregor		
Submember			
Start Depth	1637.00 ft	End Depth	1692.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Ancell		
Formation	Glenwood		
Member			
Submember			
Start Depth	1692.00 ft	End Depth	1693.00 ft
Contact Accuracy			
Penetration			

Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Ancell		
Formation	St. Peter Sandstone		
Member			
Submember			
Start Depth	1693.00 ft	End Depth	1726.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Prairie Du Chien		
Formation	Shakopee		
Member	Willow River		
Submember			
Start Depth	1726.00 ft	End Depth	1905.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Prairie Du Chien		
Formation	Shakopee		
Member	New Richmond		
Submember			
Start Depth	1905.00 ft	End Depth	1980.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			

Group	Prairie Du Chien		
Formation	Oneota		
Member			
Submember			
Start Depth	1980.00 ft	End Depth	2195.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Cambrian		
Series			
Group			
Formation	Jordan		
Member	Coon Valley		
Submember			
Start Depth	2195.00 ft	End Depth	2225.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Cambrian		
Series			
Group			
Formation	Jordan		
Member			
Submember			
Start Depth	2225.00 ft	End Depth	2255.00 ft
Contact Accuracy			
Penetration			
Primary Lithology		Percent	
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Cambrian		
Series			
Group			
Formation	St. Lawrence		
Member			
Submember			
Start Depth	2255.00 ft	End Depth	2510.00 ft
Contact Accuracy			
Penetration			

Primary Lithology	Percent
Secondary Lithology	Percent
Tertiary Lithology	Percent
Comments	

Water Production Information

Date	01/01/2014	Start Time	
Aquifer		Yield	0 gallons per minute
Static Water Level	472.00 ft	Yield Method	
Pumping Water Level	591 ft	Pump Test	No
Measurement	Airline	Duration	0 mins
Pump Method			
Comments	Reported on DNR 2014 Jordan Questionnaire		

Date	10/21/1974	Start Time	09:22
Aquifer	Unknown	Yield	1403 gallons per minute
Static Water Level	373.00 ft	Yield Method	Unknown
Pumping Water Level	415 ft	Pump Test	Yes
Measurement	Electric Line	Duration	2400 mins
Pump Method	Pumped		
Comments	THESE DATA ARE AFTER ACIDIZING.		

Date	09/26/1974	Start Time	09:10
Aquifer	Unknown	Yield	1040 gallons per minute
Static Water Level	371.00 ft	Yield Method	Unknown
Pumping Water Level	548 ft	Pump Test	Yes
Measurement	Electric Line	Duration	2400 mins
Pump Method	Pumped		
Comments	DATA IS PRIOR TO ACIDIZING.		

Chip Storage Information

Date	03/21/1974	Bin	
Storage	PL8-884->889	Number of Samples	432
Number of Boxes	6	Sample Gaps	150-55 195-220 240-45 355-80 400-05 415-20,
Sample Intervals	5	Sample Bottom	2500 ft
Sample Top	70 ft	Washed Bottom	2500 ft
Washed Top	220 ft		
Duplicate Storage			
Comments			