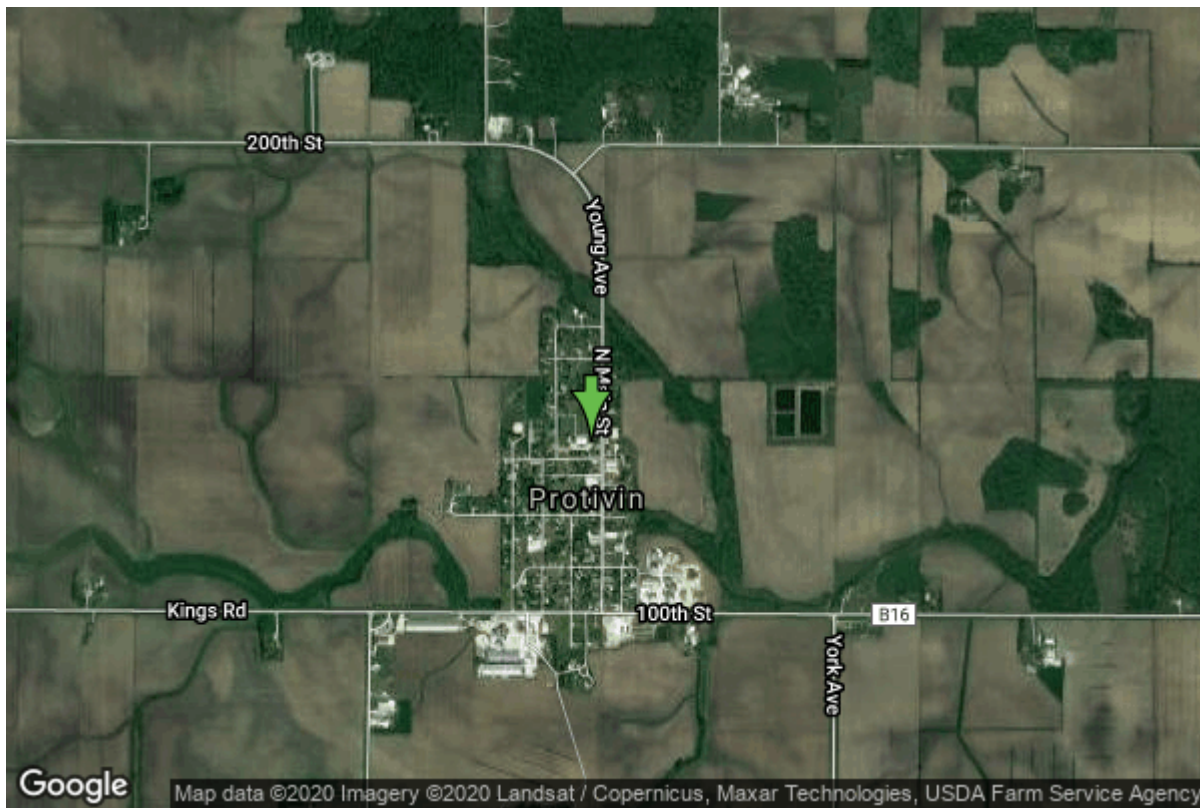


Well W#4001 Information



Date Received		State	Iowa
Owner Name	Protivin, City Of	County	Howard
Alt Name	#2	Quadrangle	Protivin, Iowa
WNumber	4001	Township	T97N
PWTS ID	0	Range	R11W
PWS ID	4552063	Section	13
Storet ID	0	Quarter	SE NW SW
SDWIS ID	2409030	Latitude	43.2183420000
USGS ID	0	Longitude	-92.0907460000
Project	Source Water Protection	Accuracy	
Operator	Unknown	UTM X	573849
		UTM Y	4785463

Site Type	Drilled hole	Drilling Company	Hoeg & Ames (H.M. White)
Well Status	Active	Drilling Date	03/04/1950
Field Located	No	Drilling Method	Cable
Elevation	1183 ft	Bedrock Depth	41 ft
Elevation Accuracy	Digital Elevation Model Accurate to 5 ft	Well Depth	699 ft
Landscape Position	Unknown	Total Depth	699 ft
		Well Types	Municipal, Public Supply
		Aquifers	Cambrian-Ordovician, Ordovician

Casing Construction Information

Date	03/04/1950	Casing Type	Steel
Start Depth	-1.40 ft	End Depth	41.00 ft
Diameter	16.00 in	Amount	42.40 ft
Comments			

Date	03/04/1950	Casing Type	Steel
Start Depth	-1.60 ft	End Depth	294.00 ft
Diameter	10.00 in	Amount	295.60 ft
Comments			

Date	03/04/1950	Casing Type	Steel
Start Depth	491.50 ft	End Depth	622.00 ft
Diameter	8.00 in	Amount	130.50 ft
Comments			

Date	03/04/1950	Casing Type	Steel
Start Depth	615.00 ft	End Depth	655.00 ft
Diameter	6.00 in	Amount	40.00 ft
Comments			

Date	03/04/1950	Casing Type	Perforated Steel
Start Depth	659.00 ft	End Depth	699.00 ft
Diameter	6.00 in	Amount	40.00 ft
Comments			

Date	03/04/1950	Casing Type	Perforated Steel
Start Depth	0.00 ft	End Depth	0.00 ft
Diameter	0.00 in	Amount	0.00 ft
Comments			

Log Information

Date	03/23/1950
Log Types	Strip log
Prepared By	Unknown
Comments	

Date	03/03/1950
Log Types	Pump Test
Prepared By	
Comments	

Date	
Log Types	Drillers log

Prepared By
Comments

Stratigraphy Information

System	Quaternary		
Series	Pleistocene Series		
Group	Pre-Illinoian		
Formation			
Member			
Submember			
Start Depth	0.00 ft	End Depth	40.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Till	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Devonian		
Series			
Group	Wapsipinicon		
Formation			
Member			
Submember			
Start Depth	40.00 ft	End Depth	100.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Limestone	Percent	0
Tertiary Lithology	Sandstone	Percent	0
Comments			

System	Devonian		
Series			
Group	Wapsipinicon		
Formation	Spillville		
Member			
Submember			
Start Depth	100.00 ft	End Depth	165.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Devonian		
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Series
Group Wapsipinicon
Formation Spillville
Member Lake Meyer
Submember
Start Depth 165.00 ft **End Depth** 175.00 ft
Contact Accuracy
Penetration
Primary Lithology Shale **Percent** 0
Secondary Lithology Sandstone **Percent** 0
Tertiary Lithology
Comments

System Ordovician
Series
Group
Formation Maquoketa
Member Brainard Shale
Submember
Start Depth 175.00 ft **End Depth** 212.00 ft
Contact Accuracy
Penetration
Primary Lithology Shale **Percent** 100
Secondary Lithology
Tertiary Lithology
Comments

System Ordovician
Series
Group
Formation Maquoketa
Member Ft. Atkinson Limestone
Submember
Start Depth 212.00 ft **End Depth** 259.00 ft
Contact Accuracy
Penetration
Primary Lithology Dolomite **Percent** 0
Secondary Lithology Limestone **Percent** 0
Tertiary Lithology
Comments

System Ordovician
Series
Group
Formation Maquoketa
Member Clermont Shale
Submember
Start Depth 259.00 ft **End Depth** 270.00 ft
Contact Accuracy

Penetration			
Primary Lithology	Shale	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group			
Formation	Maquoketa		
Member	Elgin Limestone		
Submember			
Start Depth	270.00 ft	End Depth	315.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Chert/Chalcedony	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Galena		
Formation			
Member			
Submember			
Start Depth	315.00 ft	End Depth	400.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Limestone	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Galena		
Formation	Dunleith		
Member			
Submember			
Start Depth	400.00 ft	End Depth	515.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Limestone	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
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Series			
Group	Galena		
Formation	Decorah		
Member			
Submember			
Start Depth	515.00 ft	End Depth	585.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Shale	Percent	0
Secondary Lithology	Limestone	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Galena		
Formation	Platteville		
Member			
Submember			
Start Depth	585.00 ft	End Depth	610.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Limestone	Percent	0
Secondary Lithology	Shale	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Ancell		
Formation	Glenwood		
Member			
Submember			
Start Depth	610.00 ft	End Depth	620.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Shale	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Ancell		
Formation	St. Peter Sandstone		
Member			
Submember			
Start Depth	620.00 ft	End Depth	680.00 ft
Contact Accuracy			

Penetration			
Primary Lithology	Sandstone	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Prairie Du Chien		
Formation			
Member			
Submember			
Start Depth	680.00 ft	End Depth	699.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Chert/Chalcedony	Percent	0
Tertiary Lithology		Percent	
Comments			

Water Production Information

Date	01/01/2014	Start Time	
Aquifer			
Static Water Level	272.00 ft	Yield	0 gallons per minute
Pumping Water Level	298 ft	Yield Method	
Measurement		Pump Test	No
Pump Method		Duration	0 mins
Comments	Reported on DNR 2014 Jordan Questionnaire		

Date	03/04/1950	Start Time	
Aquifer	Unknown		
Static Water Level	79.00 ft	Yield	200 gallons per minute
Pumping Water Level	151 ft	Yield Method	Unknown
Measurement	Unknown	Pump Test	Yes
Pump Method	Unknown	Duration	0 mins
Comments			

Chip Storage Information

Date		Bin	
Storage	CG6-3,4	Number of Samples	145
Number of Boxes	2	Sample Gaps	
Sample Intervals	5	Sample Bottom	700 ft
Sample Top	0 ft	Washed Bottom	700 ft
Washed Top	40 ft		
Duplicate Storage			

Comments

<https://www.ihr.uiowa.edu/igs/geosam/well/4001/general-information>