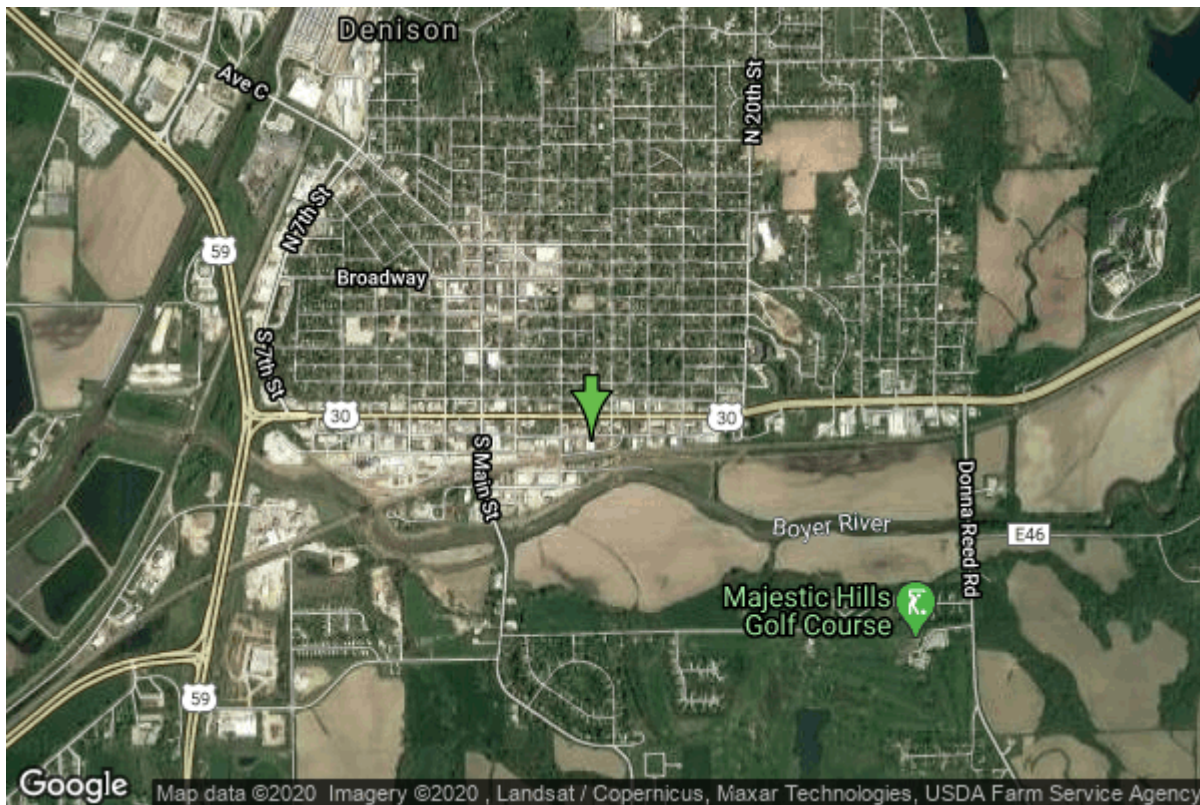


# Well W#34 Information



<b>Date Received</b>		<b>State</b>	Iowa
<b>Owner Name</b>	Denison, City Of	<b>County</b>	Crawford
<b>Alt Name</b>		<b>Quadrangle</b>	Denison, Iowa
<b>WNumber</b>	34	<b>Township</b>	T83N
<b>PWTS ID</b>	0	<b>Range</b>	R39W
<b>PWS ID</b>	2424027	<b>Section</b>	11
<b>Storet ID</b>	0	<b>Quarter</b>	SE SW NE
<b>SDWIS ID</b>	0	<b>Latitude</b>	42.0115530000
<b>USGS ID</b>	0	<b>Longitude</b>	-95.3498910000
<b>Project</b>	Source Water Protection	<b>Accuracy</b>	
<b>Operator</b>	Unknown	<b>UTM X</b>	305417
		<b>UTM Y</b>	4653730

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<b>Site Type</b>	Drilled hole	<b>Drilling Company</b>	Gray, Layne
<b>Well Status</b>	Not Used	<b>Drilling Date</b>	01/01/1916
<b>Field Located</b>	No	<b>Drilling Method</b>	Unknown
<b>Elevation</b>	1172 ft	<b>Bedrock Depth</b>	180 ft
<b>Elevation Accuracy</b>	Digital Elevation Model	<b>Well Depth</b>	1810 ft
	Accurate to 5 ft	<b>Total Depth</b>	1810 ft
<b>Landscape Position</b>	Valley	<b>Well Types</b>	Municipal
		<b>Aquifers</b>	Ordovician (abv St. Peter), Silurian/Devonian

# Casing Construction Information

<b>Date</b>	01/01/1916	<b>Casing Type</b>	Steel
<b>Start Depth</b>	0.00 ft	<b>End Depth</b>	0.00 ft
<b>Diameter</b>	14.00 in	<b>Amount</b>	262.00 ft
<b>Comments</b>			

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<b>Date</b>	01/01/1916	<b>Casing Type</b>	Steel
<b>Start Depth</b>	239.00 ft	<b>End Depth</b>	500.00 ft
<b>Diameter</b>	10.00 in	<b>Amount</b>	261.00 ft
<b>Comments</b>			

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<b>Date</b>	01/01/1916	<b>Casing Type</b>	Steel
<b>Start Depth</b>	1618.00 ft	<b>End Depth</b>	1665.00 ft
<b>Diameter</b>	8.00 in	<b>Amount</b>	47.00 ft
<b>Comments</b>			

# Log Information

<b>Date</b>	02/13/1951
<b>Log Types</b>	Strip log
<b>Prepared By</b>	Screven, Ruth E. Wehner
<b>Comments</b>	Restudy

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<b>Date</b>	01/27/1950
<b>Log Types</b>	Strip log
<b>Prepared By</b>	
<b>Comments</b>	

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<b>Date</b>	03/25/1941
<b>Log Types</b>	Strip log
<b>Prepared By</b>	Harris Jr., Stanley E.
<b>Comments</b>	

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<b>Date</b>	05/01/1939
<b>Log Types</b>	Strip log
<b>Prepared By</b>	Carmody, R.A.
<b>Comments</b>	

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<b>Date</b>	
<b>Log Types</b>	Drillers log
<b>Prepared By</b>	Denison, City Of
<b>Comments</b>	

# Stratigraphy Information

**System** Quaternary  
**Series** Pleistocene Series  
**Group**  
**Formation**  
**Member**  
**Submember**  
**Start Depth** 0.00 ft **End Depth** 180.00 ft  
**Contact Accuracy**  
**Penetration**  
**Primary Lithology** Till **Percent** 0  
**Secondary Lithology** Sand **Percent** 0  
**Tertiary Lithology** **Percent**  
**Comments**

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**System** Pennsylvanian (Subsystem Of Carboniferous System)  
**Series**  
**Group**  
**Formation**  
**Member**  
**Submember**  
**Start Depth** 180.00 ft **End Depth** 370.00 ft  
**Contact Accuracy**  
**Penetration**  
**Primary Lithology** Shale **Percent** 0  
**Secondary Lithology** Sand **Percent** 0  
**Tertiary Lithology** **Percent**  
**Comments**

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**System** Mississippian (Subsystem Of Carboniferous System)  
**Series**  
**Group**  
**Formation** St. Louis  
**Member**  
**Submember**  
**Start Depth** 370.00 ft **End Depth** 410.00 ft  
**Contact Accuracy**  
**Penetration**  
**Primary Lithology** Limestone **Percent** 0  
**Secondary Lithology** Chert/Chalcedony **Percent** 0  
**Tertiary Lithology** **Percent**  
**Comments**

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**System** Mississippian (Subsystem Of Carboniferous System)  
**Series**  
**Group** Augusta  
**Formation** Warsaw

<b>Member</b>			
<b>Submember</b>			
<b>Start Depth</b>	410.00 ft	<b>End Depth</b>	490.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Shale	<b>Percent</b>	0
<b>Secondary Lithology</b>	Limestone	<b>Percent</b>	0
<b>Tertiary Lithology</b>	Chert/Chalcedony	<b>Percent</b>	0
<b>Comments</b>			

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<b>System</b>	Mississippian (Subsystem Of Carboniferous System)		
<b>Series</b>			
<b>Group</b>			
<b>Formation</b>			
<b>Member</b>			
<b>Submember</b>			
<b>Start Depth</b>	490.00 ft	<b>End Depth</b>	780.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Limestone	<b>Percent</b>	100
<b>Secondary Lithology</b>	Unknown	<b>Percent</b>	0
<b>Tertiary Lithology</b>	Unknown	<b>Percent</b>	0
<b>Comments</b>			

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<b>System</b>	Devonian		
<b>Series</b>			
<b>Group</b>			
<b>Formation</b>			
<b>Member</b>			
<b>Submember</b>			
<b>Start Depth</b>	780.00 ft	<b>End Depth</b>	1220.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Dolomite	<b>Percent</b>	100
<b>Secondary Lithology</b>	Unknown	<b>Percent</b>	0
<b>Tertiary Lithology</b>	Unknown	<b>Percent</b>	0
<b>Comments</b>			

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<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>			
<b>Formation</b>			
<b>Member</b>			
<b>Submember</b>			
<b>Start Depth</b>	1220.00 ft	<b>End Depth</b>	1290.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Dolomite	<b>Percent</b>	0
<b>Secondary Lithology</b>	Chert/Chalcedony	<b>Percent</b>	0

<b>Tertiary Lithology</b>	Unknown	<b>Percent</b>	0
<b>Comments</b>			
<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>			
<b>Formation</b>	Maquoketa		
<b>Member</b>	Ft. Atkinson Limestone		
<b>Submember</b>			
<b>Start Depth</b>	1290.00 ft	<b>End Depth</b>	1350.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Dolomite	<b>Percent</b>	0
<b>Secondary Lithology</b>	Chert/Chalcedony	<b>Percent</b>	0
<b>Tertiary Lithology</b>		<b>Percent</b>	
<b>Comments</b>			
<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>			
<b>Formation</b>	Maquoketa		
<b>Member</b>	Elgin Limestone		
<b>Submember</b>			
<b>Start Depth</b>	1350.00 ft	<b>End Depth</b>	1420.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Dolomite	<b>Percent</b>	0
<b>Secondary Lithology</b>	Chert/Chalcedony	<b>Percent</b>	0
<b>Tertiary Lithology</b>		<b>Percent</b>	
<b>Comments</b>			
<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>	Galena		
<b>Formation</b>			
<b>Member</b>			
<b>Submember</b>			
<b>Start Depth</b>	1420.00 ft	<b>End Depth</b>	1570.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Dolomite	<b>Percent</b>	0
<b>Secondary Lithology</b>	Chert/Chalcedony	<b>Percent</b>	0
<b>Tertiary Lithology</b>	Unknown	<b>Percent</b>	0
<b>Comments</b>			
<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>	Galena		
<b>Formation</b>	Decorah		

<b>Member</b>	Ion		
<b>Submember</b>			
<b>Start Depth</b>	1570.00 ft	<b>End Depth</b>	1600.00 ft
<b>Contact Accuracy Penetration</b>			
<b>Primary Lithology</b>	Shale	<b>Percent</b>	0
<b>Secondary Lithology</b>	Limestone	<b>Percent</b>	0
<b>Tertiary Lithology</b>	Dolomite	<b>Percent</b>	0
<b>Comments</b>			

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<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>	Galena		
<b>Formation</b>	Decorah		
<b>Member</b>	Guttenberg		
<b>Submember</b>			
<b>Start Depth</b>	1600.00 ft	<b>End Depth</b>	1615.00 ft
<b>Contact Accuracy Penetration</b>			
<b>Primary Lithology</b>	Limestone	<b>Percent</b>	0
<b>Secondary Lithology</b>	Shale	<b>Percent</b>	0
<b>Tertiary Lithology</b>		<b>Percent</b>	
<b>Comments</b>			

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<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>	Galena		
<b>Formation</b>	Decorah		
<b>Member</b>	Spechts Ferry		
<b>Submember</b>			
<b>Start Depth</b>	1615.00 ft	<b>End Depth</b>	1630.00 ft
<b>Contact Accuracy Penetration</b>			
<b>Primary Lithology</b>	Shale	<b>Percent</b>	0
<b>Secondary Lithology</b>	Limestone	<b>Percent</b>	0
<b>Tertiary Lithology</b>		<b>Percent</b>	
<b>Comments</b>			

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<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>	Galena		
<b>Formation</b>	Platteville		
<b>Member</b>	Mcgregor		
<b>Submember</b>			
<b>Start Depth</b>	1630.00 ft	<b>End Depth</b>	1640.00 ft
<b>Contact Accuracy Penetration</b>			
<b>Primary Lithology</b>	Limestone	<b>Percent</b>	0
<b>Secondary Lithology</b>	Shale	<b>Percent</b>	0

Tertiary Lithology		Percent	
Comments			
<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>	Ancell		
<b>Formation</b>	Glenwood		
<b>Member</b>	Harmony Hill		
<b>Submember</b>			
<b>Start Depth</b>	1640.00 ft	<b>End Depth</b>	1660.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Shale	<b>Percent</b>	100
<b>Secondary Lithology</b>		<b>Percent</b>	
<b>Tertiary Lithology</b>		<b>Percent</b>	
<b>Comments</b>			
<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>	Ancell		
<b>Formation</b>	St. Peter Sandstone		
<b>Member</b>			
<b>Submember</b>			
<b>Start Depth</b>	1670.00 ft	<b>End Depth</b>	1725.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Sandstone	<b>Percent</b>	0
<b>Secondary Lithology</b>	Shale	<b>Percent</b>	0
<b>Tertiary Lithology</b>	Chert/Chalcedony	<b>Percent</b>	0
<b>Comments</b>			
<b>System</b>	Ordovician		
<b>Series</b>			
<b>Group</b>	Prairie Du Chien		
<b>Formation</b>			
<b>Member</b>			
<b>Submember</b>			
<b>Start Depth</b>	1725.00 ft	<b>End Depth</b>	1810.00 ft
<b>Contact Accuracy</b>			
<b>Penetration</b>			
<b>Primary Lithology</b>	Limestone	<b>Percent</b>	0
<b>Secondary Lithology</b>	Dolomite	<b>Percent</b>	0
<b>Tertiary Lithology</b>	Chert/Chalcedony	<b>Percent</b>	0
<b>Comments</b>			

# Water Production Information

<b>Date</b>	01/01/1916	<b>Start Time</b>	
<b>Aquifer</b>	Unknown		
<b>Static Water Level</b>	88.00 ft	<b>Yield</b>	200 gallons per minute
<b>Pumping Water Level</b>	170 ft	<b>Yield Method</b>	Unknown
<b>Measurement</b>	Unknown	<b>Pump Test</b>	No
<b>Pump Method</b>	Unknown	<b>Duration</b>	0 mins
<b>Comments</b>			

# Chip Storage Information

<b>Date</b>		<b>Bin</b>	
<b>Storage</b>	WA5-8,9	<b>Number of Samples</b>	177
<b>Number of Boxes</b>	2	<b>Sample Gaps</b>	0-20,250-70,310-20,1740 -70 ??
<b>Sample Intervals</b>	0	<b>Sample Bottom</b>	1810 ft
<b>Sample Top</b>	20 ft	<b>Washed Bottom</b>	0 ft
<b>Washed Top</b>	0 ft		
<b>Duplicate Storage</b>	WS: CF14-4		
<b>Comments</b>			

<https://www.iihr.uiowa.edu/igs/geosam/well/34/general-information>