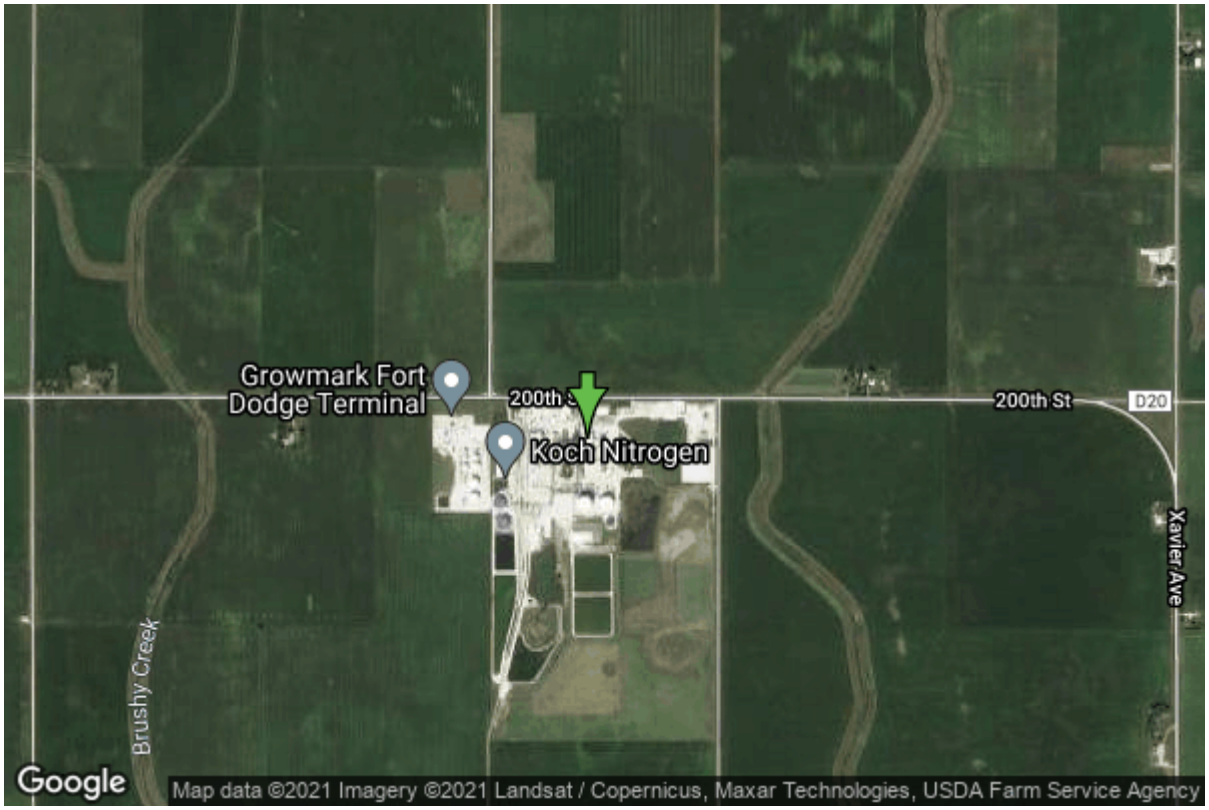
Well W#16634 Information



Date Received		**State**	Iowa
Owner Name	Farmland Industries Inc.	**County**	Webster
Alt Name		**Quadrangle**	Evanston, Iowa
WNumber	16634	**Township**	T89N
PWTS ID	0	**Range**	R27W
PWS ID	9433161	**Section**	27
Storet ID	0	**Quarter**	NE NE NW
SDWIS ID	2411327	**Latitude**	42.4997600000
USGS ID	0	**Longitude**	-94.0156900000
Project	Source Water Protection	**Accuracy**	
Operator	Unknown	**UTM X**	416544
		UTM Y	4705766

Site Type	Drilled hole	**Drilling Company**	Thorpe Well Co.
Well Status	Not Used	**Drilling Date**	10/08/1964
Field Located	No	**Drilling Method**	Cable
Elevation	1112 ft	**Bedrock Depth**	227 ft
Elevation Accuracy	Digital Elevation Model Accurate to 5 ft	**Well Depth**	2025 ft
		Total Depth	2025 ft
Landscape Position	Level Surface	**Well Types**	Commercial, Public Supply
		Aquifers	Cambrian-Ordovician

Casing Construction Information

Date	10/08/1964	**Casing Type**	Steel
Start Depth	-2.00 ft	**End Depth**	224.00 ft
Diameter	24.00 in	**Amount**	226.00 ft
Comments			

Date	10/08/1964	**Casing Type**	Steel
Start Depth	-2.60 ft	**End Depth**	624.30 ft
Diameter	18.00 in	**Amount**	626.90 ft
Comments			

Date	10/08/1964	**Casing Type**	Steel
Start Depth	936.00 ft	**End Depth**	1257.00 ft
Diameter	16.00 in	**Amount**	321.00 ft
Comments			

Date	10/08/1964	**Casing Type**	Steel
Start Depth	1399.30 ft	**End Depth**	1518.00 ft
Diameter	14.00 in	**Amount**	118.70 ft
Comments			

Date	10/08/1964	**Casing Type**	Steel
Start Depth	600.00 ft	**End Depth**	1586.00 ft
Diameter	10.00 in	**Amount**	986.00 ft
Comments			

Grout Construction Information

Date	10/08/1964		
Grout Type	Cement	**Grout Placement**	Unknown
Start Depth	0.00 ft	**End Depth**	624.00 ft
Comments			

Date	10/08/1964		
Grout Type	Cement	**Grout Placement**	Unknown
Start Depth	0.00 ft	**End Depth**	1586.00 ft
Comments			

Log Information

Date	01/01/1964
Log Types	Strip log
Prepared By	Northup, Richard Cox
Comments	

Date	
Log Types	Drillers log
Prepared By	Farmland Industries Inc.
Comments	

Stratigraphy Information

System	Quaternary		
Series	Pleistocene Series		
Group	Wisconsinan Episode		
Formation	Dows		
Member			
Submember			
Start Depth	0.00 ft	**End Depth**	10.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Till - Oxidized And Unleached	**Percent**	100
Secondary Lithology	Unknown	**Percent**	0
Tertiary Lithology	Unknown	**Percent**	0
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group	Wisconsinan Episode		
Formation	Dows		
Member			
Submember			
Start Depth	10.00 ft	**End Depth**	40.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Till - Unoxidized And Unleached	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group	Wisconsinan Episode		
Formation	Dows		
Member			
Submember			
Start Depth	40.00 ft	**End Depth**	45.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Sand And Gravel	**Percent**	100

Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group			
Formation			
Member			
Submember			
Start Depth	45.00 ft	**End Depth**	160.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Till - Unoxidized And Unleached	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group			
Formation			
Member			
Submember			
Start Depth	160.00 ft	**End Depth**	165.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Sand And Gravel	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group			
Formation			
Member			
Submember			
Start Depth	165.00 ft	**End Depth**	180.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Till - Unoxidized And Unleached	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Quaternary

Series	Pleistocene Series		
Group			
Formation			
Member			
Submember			
Start Depth	180.00 ft	**End Depth**	185.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Sand And Gravel	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group			
Formation			
Member			
Submember			
Start Depth	185.00 ft	**End Depth**	195.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Till - Unoxidized And Unleached	**Percent**	100
Secondary Lithology	Unknown	**Percent**	0
Tertiary Lithology	Unknown	**Percent**	0
Comments			

System	Quaternary		
Series	Pleistocene Series		
Group			
Formation			
Member			
Submember			
Start Depth	195.00 ft	**End Depth**	227.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Sand And Gravel	**Percent**	100
Secondary Lithology	Unknown	**Percent**	0
Tertiary Lithology	Unknown	**Percent**	0
Comments			

System	Mississippian (Subsystem Of Carboniferous System)		
Series			
Group	Augusta		
Formation			
Member			
Submember			
Start Depth	227.00 ft	**End Depth**	293.00 ft

Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	**Percent**	0
Secondary Lithology	Limestone	**Percent**	0
Tertiary Lithology		**Percent**	
Comments			

System	Mississippian (Subsystem Of Carboniferous System)		
Series			
Group	Sub-Augusta		
Formation	Gilmore City		
Member			
Submember			
Start Depth	293.00 ft	**End Depth**	402.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Limestone	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Mississippian (Subsystem Of Carboniferous System)		
Series			
Group	Sub-Augusta		
Formation	Maynes Creek		
Member			
Submember			
Start Depth	402.00 ft	**End Depth**	560.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Mississippian (Subsystem Of Carboniferous System)		
Series			
Group	North Hill		
Formation	Prospect Hill		
Member			
Submember			
Start Depth	560.00 ft	**End Depth**	568.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	**Percent**	0
Secondary Lithology	Siltstone	**Percent**	0
Tertiary Lithology		**Percent**	
Comments			

System	Devonian		
Series			
Group	Yellow Spring (New Albany)		
Formation	Maple Mill		
Member			
Submember			
Start Depth	568.00 ft	**End Depth**	578.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Shale	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Devonian		
Series			
Group	Yellow Spring (New Albany)		
Formation	Aplington		
Member			
Submember			
Start Depth	578.00 ft	**End Depth**	590.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Devonian		
Series			
Group	Yellow Spring (New Albany)		
Formation	Sheffield		
Member			
Submember			
Start Depth	590.00 ft	**End Depth**	597.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Shale	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Devonian
Series	
Group	
Formation	
Member	
Submember	

Start Depth	597.00 ft	**End Depth**	1120.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	**Percent**	0
Secondary Lithology	Limestone	**Percent**	0
Tertiary Lithology		**Percent**	
Comments			

System	Ordovician		
Series			
Group			
Formation	Maquoketa		
Member			
Submember			
Start Depth	1120.00 ft	**End Depth**	1230.00 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	1230.00 ft	**End Depth**	1400.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Ordovician		
Series			
Group	Galena		
Formation	Decorah/Platteville Undiff.		
Member			
Submember			
Start Depth	1400.00 ft	**End Depth**	1472.00 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	1472.00 ft	**End Depth**	1503.00 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	1503.00 ft	**End Depth**	1557.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Sandstone	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Ordovician		
Series			
Group	Prairie Du Chien		
Formation	Shakopee		
Member			
Submember			
Start Depth	1557.00 ft	**End Depth**	1740.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	**Percent**	0
Secondary Lithology	Sandstone	**Percent**	0
Tertiary Lithology		**Percent**	
Comments			

System	Ordovician
Series	
Group	Prairie Du Chien
Formation	Oneota
Member	
Submember	

Start Depth	1740.00 ft	**End Depth**	1905.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Cambrian		
Series			
Group			
Formation	Jordan		
Member			
Submember			
Start Depth	1905.00 ft	**End Depth**	1990.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Sandstone	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

System	Cambrian		
Series			
Group			
Formation	St. Lawrence		
Member			
Submember			
Start Depth	1990.00 ft	**End Depth**	2025.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	**Percent**	100
Secondary Lithology		**Percent**	
Tertiary Lithology		**Percent**	
Comments			

Water Production Information

Date	10/08/1964	**Start Time**	
Aquifer	Unknown		
Static Water Level	162.00 ft	**Yield**	1900 gallons per minute
Pumping Water Level	208 ft	**Yield Method**	Unknown
Measurement	Unknown	**Pump Test**	No
Pump Method	Unknown	**Duration**	0 mins
Comments			

Chip Storage Information

Date	10/12/1964		
Storage	PL5-887->891	**Bin**	
Number of Boxes	5	**Number of Samples**	402
Sample Intervals	5	**Sample Gaps**	370-375,1290-1295,1715-1725
Sample Top	0 ft	**Sample Bottom**	2025 ft
Washed Top	290 ft	**Washed Bottom**	2025 ft
Duplicate Storage			
Comments			

https://www.iihr.uiowa.edu/igs/geosam/well/16634/general-information