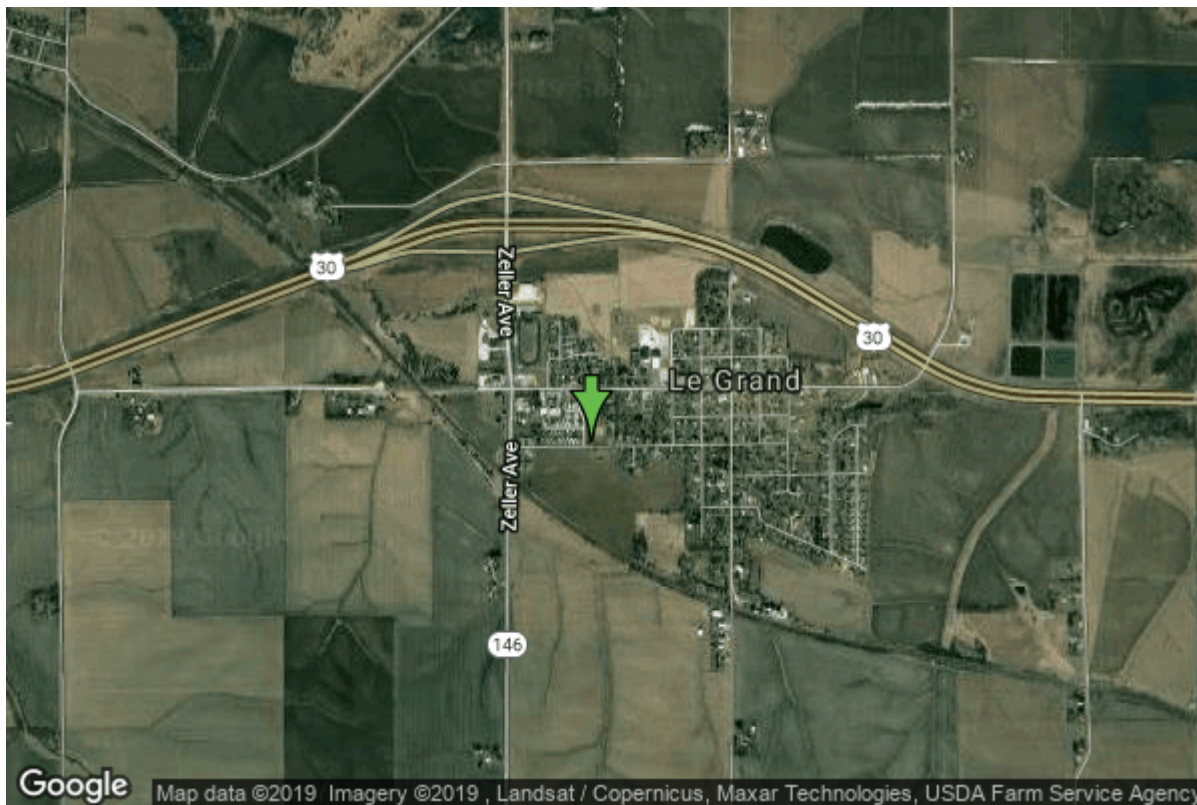


Well W#24635 Information



Date Received		State	Iowa
Owner Name	Le Grand, City Of	County	Marshall
Alt Name	#4	Quadrangle	Le Grand, Iowa
WNumber	24635	Township	T83N
PWTS ID	0	Range	R17W
PWS ID	6457070	Section	13
Storet ID	0	Quarter	NW NW NE
SDWIS ID	2413042	Latitude	42.0049900000
USGS ID	0	Longitude	-92.7810000000
Project	Source Water Protection	Accuracy	
Operator	Unknown	UTM X	518136
		UTM Y	4650353

Site Type	Drilled hole	Drilling Company	Layne Western - Ia.
Well Status	Standby	Drilling Date	01/01/1977
Field Located	No	Drilling Method	Unknown
Elevation	943 ft	Bedrock Depth	0 ft
Elevation Accuracy	Digital Elevation Model Accurate to 5 ft	Well Depth	2200 ft
Landscape Position	Unknown	Total Depth	2200 ft
		Well Types	Municipal, Public Supply
		Aquifers	Cambrian-Ordovician

Casing Construction Information

Date	12/01/1977	Casing Type	Steel
Start Depth	0.00 ft	End Depth	77.00 ft

Diameter	16.00 in	Amount	77.00 ft
Comments			

Date	12/01/1977	Casing Type	Steel
Start Depth	0.00 ft	End Depth	1632.00 ft
Diameter	10.75 in	Amount	1632.00 ft
Comments			

Log Information

Date	11/01/1978
Log Types	Strip log
Prepared By	Witzke, Brian Jon
Comments	

Date	
Log Types	Drillers log
Prepared By	Le Grand, City Of
Comments	

Stratigraphy Information

System	Quaternary		
Series	Pleistocene Series		
Group			
Formation			
Member			
Submember			
Start Depth	0.00 ft	End Depth	75.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Till	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			

System	Mississippian (Subsystem Of Carboniferous System)		
Series			
Group	North Hill		
Formation			
Member			
Submember			
Start Depth	75.00 ft	End Depth	85.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Limestone	Percent	100
Secondary Lithology		Percent	

Tertiary Lithology	Percent		
Comments			
System	Devonian		
Series			
Group	Yellow Spring (New Albany)		
Formation	Maple Mill		
Member	English River		
Submember			
Start Depth	85.00 ft	End Depth	105.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Sandstone	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	105.00 ft	End Depth	175.00 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	Sheffield		
Member			
Submember			
Start Depth	175.00 ft	End Depth	245.00 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	Lime Creek		

Member	Juniper Hill		
Submember			
Start Depth	245.00 ft	End Depth	410.00 ft
Contact Accuracy Penetration			
Primary Lithology	Shale	Percent	0
Secondary Lithology	Siltstone	Percent	0
Tertiary Lithology	Limestone	Percent	0
Comments			

System	Devonian		
Series			
Group	Cedar Valley		
Formation	Coralville		
Member			
Submember			
Start Depth	410.00 ft	End Depth	480.00 ft
Contact Accuracy Penetration			
Primary Lithology	Limestone	Percent	0
Secondary Lithology	Dolomite	Percent	0
Tertiary Lithology	Shale	Percent	0
Comments			

System	Devonian		
Series			
Group	Cedar Valley		
Formation	Little Cedar		
Member	Rapid		
Submember			
Start Depth	480.00 ft	End Depth	640.00 ft
Contact Accuracy Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Gypsum/Anhydrite	Percent	0
Tertiary Lithology	Chert/Chalcedony	Percent	0
Comments			

System	Devonian		
Series			
Group	Cedar Valley		
Formation	Little Cedar		
Member	Solon		
Submember			
Start Depth	640.00 ft	End Depth	705.00 ft
Contact Accuracy Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Gypsum/Anhydrite	Percent	0

Tertiary Lithology		Percent	
Comments			
System	Devonian		
Series			
Group	Wapsipinicon		
Formation			
Member			
Submember			
Start Depth	705.00 ft	End Depth	755.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Gypsum/Anhydrite	Percent	0
Secondary Lithology	Dolomite	Percent	0
Tertiary Lithology	Chert/Chalcedony	Percent	0
Comments			
System	Silurian		
Series			
Group			
Formation			
Member			
Submember			
Start Depth	755.00 ft	End Depth	935.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Chert/Chalcedony	Percent	0
Secondary Lithology	Dolomite	Percent	0
Tertiary Lithology	Limestone	Percent	0
Comments			
System	Ordovician		
Series			
Group			
Formation	Maquoketa		
Member	Brainard Shale		
Submember			
Start Depth	935.00 ft	End Depth	1040.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Shale	Percent	0
Secondary Lithology	Dolomite	Percent	0
Tertiary Lithology		Percent	
Comments			
System	Ordovician		
Series			
Group			
Formation	Maquoketa		

Member	Ft. Atkinson Limestone		
Submember			
Start Depth	1040.00 ft	End Depth	1070.00 ft
Contact Accuracy Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Shale	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group			
Formation	Maquoketa		
Member	Clermont Shale		
Submember			
Start Depth	1070.00 ft	End Depth	1100.00 ft
Contact Accuracy Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Shale	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group			
Formation	Maquoketa		
Member	Elgin Limestone		
Submember			
Start Depth	1100.00 ft	End Depth	1185.00 ft
Contact Accuracy Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Chert/Chalcedony	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Unknown		
Series			
Group			
Formation			
Member			
Submember			
Start Depth	1185.00 ft	End Depth	1262.00 ft
Contact Accuracy Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Limestone	Percent	0

Tertiary Lithology	Chert/Chalcedony	Percent	0
Comments			
System	Ordovician		
Series			
Group	Galena		
Formation	Dunleith		
Member			
Submember			
Start Depth	1262.00 ft	End Depth	1398.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Limestone	Percent	0
Tertiary Lithology	Chert/Chalcedony	Percent	0
Comments			
System	Ordovician		
Series			
Group	Galena		
Formation	Decorah		
Member	Ion		
Submember			
Start Depth	1398.00 ft	End Depth	1414.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Limestone	Percent	0
Secondary Lithology	Dolomite	Percent	0
Tertiary Lithology		Percent	
Comments			
System	Ordovician		
Series			
Group	Galena		
Formation	Decorah		
Member	Guttenberg		
Submember			
Start Depth	1414.00 ft	End Depth	1430.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Limestone	Percent	100
Secondary Lithology		Percent	
Tertiary Lithology		Percent	
Comments			
System	Ordovician		
Series			
Group	Galena		
Formation	Decorah		

Member	Spechts Ferry		
Submember			
Start Depth	1430.00 ft	End Depth	1440.00 ft
Contact Accuracy Penetration			
Primary Lithology	Limestone	Percent	0
Secondary Lithology	Shale	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Galena		
Formation	Platteville		
Member			
Submember			
Start Depth	1440.00 ft	End Depth	1498.00 ft
Contact Accuracy Penetration			
Primary Lithology	Limestone	Percent	0
Secondary Lithology	Dolomite	Percent	0
Tertiary Lithology	Shale	Percent	0
Comments			

System	Ordovician		
Series			
Group	Ansell		
Formation	Glenwood		
Member	Harmony Hill		
Submember			
Start Depth	1498.00 ft	End Depth	1504.00 ft
Contact Accuracy Penetration			
Primary Lithology	Limestone	Percent	0
Secondary Lithology	Shale	Percent	0
Tertiary Lithology		Percent	
Comments			

System	Ordovician		
Series			
Group	Ansell		
Formation	St. Peter Sandstone		
Member			
Submember			
Start Depth	1504.00 ft	End Depth	1546.00 ft
Contact Accuracy Penetration			
Primary Lithology	Sandstone	Percent	0
Secondary Lithology	Limestone	Percent	0

Tertiary Lithology		Percent	
Comments			
System	Ordovician		
Series			
Group	Prairie Du Chien		
Formation	Shakopee		
Member	Willow River		
Submember			
Start Depth	1546.00 ft	End Depth	1727.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Sandstone	Percent	0
Tertiary Lithology	Shale	Percent	0
Comments			
System	Ordovician		
Series			
Group	Prairie Du Chien		
Formation	Shakopee		
Member	New Richmond		
Submember			
Start Depth	1727.00 ft	End Depth	1823.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Sandstone	Percent	0
Tertiary Lithology	Chert/Chalcedony	Percent	0
Comments			
System	Ordovician		
Series			
Group	Prairie Du Chien		
Formation	Oneota		
Member			
Submember			
Start Depth	1823.00 ft	End Depth	2065.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Sandstone	Percent	0
Tertiary Lithology	Chert/Chalcedony	Percent	0
Comments			
System	Cambrian		
Series			
Group			
Formation	Jordan		

Member			
Submember			
Start Depth	2065.00 ft	End Depth	2109.00 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	2109.00 ft	End Depth	2200.00 ft
Contact Accuracy			
Penetration			
Primary Lithology	Dolomite	Percent	0
Secondary Lithology	Sandstone	Percent	0
Tertiary Lithology		Percent	
Comments			

Water Production Information

Date	12/01/1977	Start Time	
Aquifer	Unknown		
Static Water Level	281.00 ft	Yield	335 gallons per minute
Pumping Water Level	328 ft	Yield Method	Unknown
Measurement	Unknown	Pump Test	No
Pump Method	Unknown	Duration	0 mins
Comments			

Chip Storage Information

Date	12/14/1977		
Storage	PL9-436->441	Bin	
Number of Boxes	6	Number of Samples	435
Sample Intervals	5	Sample Gaps	425-50,470-75,500-510,1 165-70,1550-55
Sample Top	0 ft	Sample Bottom	2200 ft
Washed Top	75 ft	Washed Bottom	2200 ft
Duplicate Storage			
Comments			