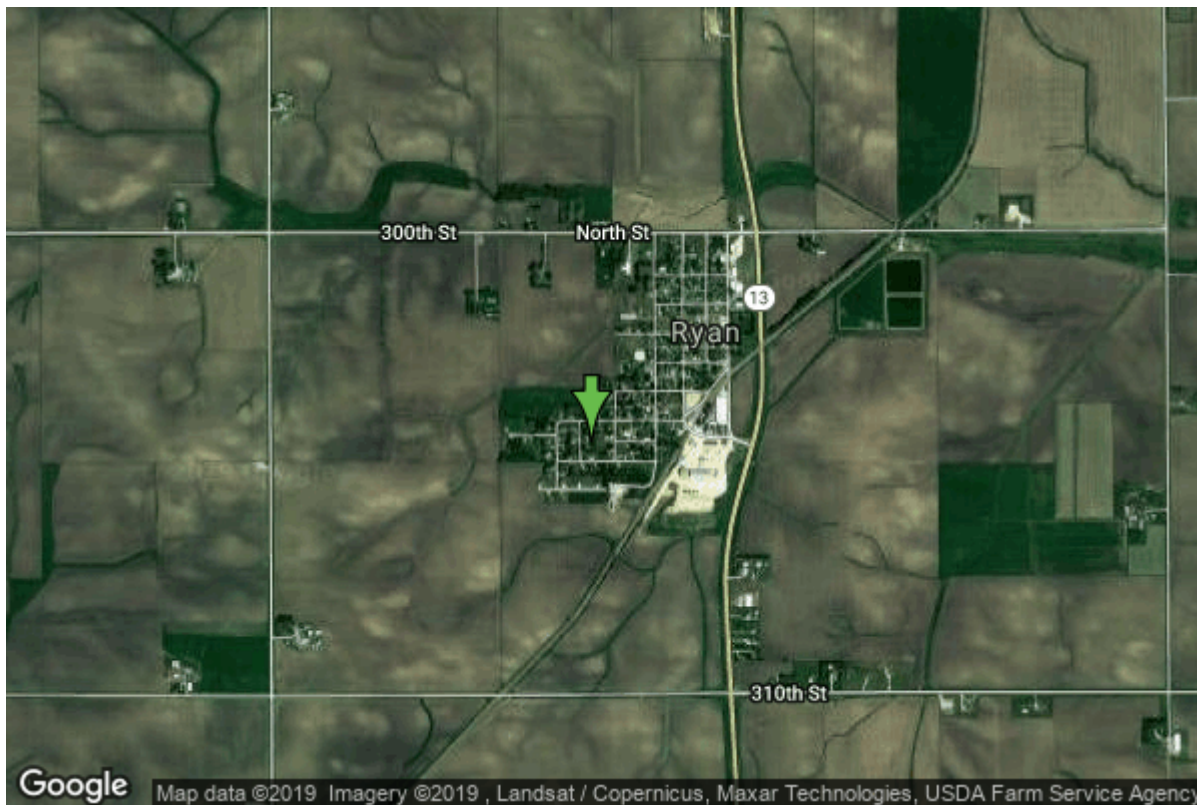


Well W#83045 Information



Date Received	09/13/2016	State	Iowa
Owner Name	Ryan, City of	County	Delaware
Alt Name	3	Quadrangle	Ryan, Iowa
WNumber	83045	Township	T87N
PWTS ID	0	Range	R6W
PWS ID	2864013	Section	13
Storet ID	0	Quarter	NE SW SE
SDWIS ID	0	Latitude	42.3479000000
USGS ID	0	Longitude	-91.4858000000
Project		Accuracy	
Operator		UTM X	624718
		UTM Y	4689515

Site Type	Drilled hole	Drilling Company	Northway Well & Pump Company
Well Status	Active	Drilling Date	11/03/2015
Field Located	No	Drilling Method	Rotary
Elevation	1031 ft	Bedrock Depth	134 ft
Elevation Accuracy	Topo Map Accurate to 2 ft	Well Depth	402 ft
Landscape Position	Upland	Total Depth	402 ft
		Well Types	Municipal
		Aquifers	

Hole Construction Information

Date	11/03/2015		
Diameter	17.50 in	Depth	114.00 ft
Comments			

Date	11/03/2015		
Diameter	13.00 in	Depth	201.00 ft
Comments			

Date	11/03/2015		
Diameter	7.75 in	Depth	402.00 ft
Comments			

Casing Construction Information

Date	11/03/2015	Casing Type	Unknown
Start Depth	-2.00 ft	End Depth	114.00 ft
Diameter	14.00 in	Amount	116.00 ft
Comments			

Date	11/03/2015	Casing Type	Unknown
Start Depth	-2.00 ft	End Depth	201.00 ft
Diameter	8.63 in	Amount	203.00 ft
Comments			

Grout Construction Information

Date	11/03/2015		
Grout Type	Cement	Grout Placement	Unknown
Start Depth	0.00 ft	End Depth	201.00 ft
Comments			

Pump Construction Information

Date	12/30/2015	Pump Type	Submersible
Diameter	6.00 in	Rating	150
Depth Intake	220.00 ft		
Comments			

Log Information

Date	11/03/2015		
Log Types	Drillers log		

Formation Information

Formation Color	Brown	Formation Lithology	clay
Start Depth	0.00 ft	End Depth	5.00 ft
Comments			
Formation Color	Gray	Formation Lithology	sand and gravel
Start Depth	5.00 ft	End Depth	48.00 ft
Comments	w/ clay		
Formation Color	Gray	Formation Lithology	sand and gravel
Start Depth	48.00 ft	End Depth	108.00 ft
Comments	w/ clay		
Formation Color	Brown	Formation Lithology	dolomite
Start Depth	108.00 ft	End Depth	134.00 ft
Comments	w/ white & gray chips		
Formation Color	Gray	Formation Lithology	dolomite
Start Depth	134.00 ft	End Depth	147.00 ft
Comments			
Formation Color	Gray	Formation Lithology	dolomite
Start Depth	147.00 ft	End Depth	178.00 ft
Comments	w/ shale		
Formation Color	Gray	Formation Lithology	dolomite
Start Depth	178.00 ft	End Depth	277.00 ft
Comments			
Formation Color	Gray	Formation Lithology	dolomite
Start Depth	277.00 ft	End Depth	285.00 ft
Comments			
Formation Color	Tan	Formation Lithology	dolomite
Start Depth	285.00 ft	End Depth	297.00 ft
Comments			
Formation Color	Gray	Formation Lithology	dolomite
Start Depth	297.00 ft	End Depth	312.00 ft
Comments			
Formation Color	Tan	Formation Lithology	dolomite

Start Depth	312.00 ft	End Depth	325.00 ft
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Formation Color	Gray	Formation Lithology	dolomite
Start Depth	325.00 ft	End Depth	393.00 ft

Formation Color	Blue	Formation Lithology	shale
Start Depth	393.00 ft	End Depth	402.00 ft

Water Production Information

Date	12/29/2015	Start Time	
Aquifer	Unknown	Yield	175 gallons per minute
Static Water Level	93.00 ft	Yield Method	Estimate
Pumping Water Level	180 ft	Pump Test	No
Measurement	Airline	Duration	360 mins
Pump Method	Airlifted		
Comments			

<https://www.iuhr.uiowa.edu/igs/geosam/well/83045/general-information>