

WELL RECORD FORM

90801

PWSID# or PWTS No. <u>1471069</u>		PWTS Permit No. _____		GeoSam WNumber (IGS use only) _____																																																																																													
Site Identification Property owner <u>City of Quimby</u> Other ID _____ Address <u>PO Box 187</u> City <u>Quimby</u> Tenant _____ Well depth <u>264</u> ft Date completed <u>10 / 2 / 2018</u>			Drill Method <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Auger <input type="checkbox"/> Cable <input type="checkbox"/> Other _____																																																																																														
			Hole size <u>22</u> inch from <u>0</u> ft to <u>264</u> ft _____ inch from _____ ft to _____ ft																																																																																														
			hole size continued _____ inch from _____ ft to _____ ft _____ inch from _____ ft to _____ ft																																																																																														
			Location County <u>Cherokee</u> GPS coordinates (NAD83 datum) <u>42.6291940</u> Latitude <u>95.6411940</u> Longitude <input checked="" type="checkbox"/> Decimal Degrees <input type="checkbox"/> Degrees, Decimal Minutes <input type="checkbox"/> Degrees, Minutes, Seconds <u>1/4</u> of the <u>NW</u> <u>1/4</u> of the <u>NW</u> <u>1/4</u> of Sec <u>12</u> TWP <u>90</u> RNG <u>41</u> E W Show exact location of well in section grid with a dot (•). Sketch map of well location on property. <div style="text-align: center;"> </div>																																																																																														
Formation Log <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>From</th> <th>To</th> <th>Color</th> <th>Hardness</th> <th>Formation description</th> </tr> </thead> <tbody> <tr><td>0</td><td>3</td><td>Tan</td><td>Loose</td><td>Top soil with rocks</td></tr> <tr><td>3</td><td>20</td><td>Tan</td><td>Dense</td><td>Fine, medium, coarse sand and fine, medium, coarse gravel and rocks with clay layer</td></tr> <tr><td>20</td><td>40</td><td>Tan</td><td>Dense</td><td>Fine, medium, coarse sand and fine, medium, coarse gravel and rocks with brown clay strips</td></tr> <tr><td>40</td><td>53</td><td>Tan</td><td>Dense</td><td>Fine, medium, coarse sand and fine, medium, coarse gravel</td></tr> <tr><td>53</td><td>90</td><td>Gray</td><td>Dense</td><td>Clay</td></tr> <tr><td>90</td><td>100</td><td>Black</td><td>Loose</td><td>Black and white sand</td></tr> <tr><td>100</td><td>120</td><td>Tan</td><td>Dense</td><td>Fine, medium, coarse sand and fine gravel with gray clay strip</td></tr> <tr><td>120</td><td>140</td><td>Tan</td><td>Dense</td><td>Fine, medium sand with some coarse sand and fine gravel and blue and gray clay strips</td></tr> <tr><td colspan="5">(use additional sheets as needed) with brown clay strip</td></tr> </tbody> </table>			From	To	Color	Hardness	Formation description	0	3	Tan	Loose	Top soil with rocks	3	20	Tan	Dense	Fine, medium, coarse sand and fine, medium, coarse gravel and rocks with clay layer	20	40	Tan	Dense	Fine, medium, coarse sand and fine, medium, coarse gravel and rocks with brown clay strips	40	53	Tan	Dense	Fine, medium, coarse sand and fine, medium, coarse gravel	53	90	Gray	Dense	Clay	90	100	Black	Loose	Black and white sand	100	120	Tan	Dense	Fine, medium, coarse sand and fine gravel with gray clay strip	120	140	Tan	Dense	Fine, medium sand with some coarse sand and fine gravel and blue and gray clay strips	(use additional sheets as needed) with brown clay strip					Casing or Loop Pipe Record all depth measurements from ground level (GL). Use + for above GL measurements. <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Size (in)</th> <th>Material</th> <th>Depth Top</th> <th>Depth Bottom</th> <th>Perforated</th> <th>Slotted</th> <th>Screen</th> </tr> </thead> <tbody> <tr> <td>10"</td> <td>SDR17 ShurGrip</td> <td>0</td> <td>214</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/> slot size _____</td> </tr> <tr> <td>10"</td> <td>Stainless Steel</td> <td>214</td> <td>264</td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/> slot size <u>.020</u></td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/> slot size _____</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/> slot size _____</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/> slot size _____</td></tr> </tbody> </table> <input checked="" type="checkbox"/> Gravel packed 205 264 amount <u>14.75</u> variety <u>Northern</u> <input type="checkbox"/> Seals/packers _____ type _____ <input type="checkbox"/> Bottom capped with _____			Size (in)	Material	Depth Top	Depth Bottom	Perforated	Slotted	Screen	10"	SDR17 ShurGrip	0	214	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____	10"	Stainless Steel	214	264	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size <u>.020</u>					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____
From	To	Color	Hardness	Formation description																																																																																													
0	3	Tan	Loose	Top soil with rocks																																																																																													
3	20	Tan	Dense	Fine, medium, coarse sand and fine, medium, coarse gravel and rocks with clay layer																																																																																													
20	40	Tan	Dense	Fine, medium, coarse sand and fine, medium, coarse gravel and rocks with brown clay strips																																																																																													
40	53	Tan	Dense	Fine, medium, coarse sand and fine, medium, coarse gravel																																																																																													
53	90	Gray	Dense	Clay																																																																																													
90	100	Black	Loose	Black and white sand																																																																																													
100	120	Tan	Dense	Fine, medium, coarse sand and fine gravel with gray clay strip																																																																																													
120	140	Tan	Dense	Fine, medium sand with some coarse sand and fine gravel and blue and gray clay strips																																																																																													
(use additional sheets as needed) with brown clay strip																																																																																																	
Size (in)	Material	Depth Top	Depth Bottom	Perforated	Slotted	Screen																																																																																											
10"	SDR17 ShurGrip	0	214	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____																																																																																											
10"	Stainless Steel	214	264	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size <u>.020</u>																																																																																											
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____																																																																																											
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____																																																																																											
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> slot size _____																																																																																											
Remarks (including depth of lost drilling fluids, materials, or tools) 			Casing Grout Placement method _____ <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Type</th> <th>Depth Top</th> <th>Depth Bottom</th> <th>Amount (vol/wt)</th> </tr> </thead> <tbody> <tr> <td>Neat Cement Grout</td> <td>0</td> <td>35</td> <td>8.75 yds</td> </tr> <tr> <td>Bentonite Seal</td> <td>35</td> <td>205</td> <td>12 super sacks</td> </tr> </tbody> </table>			Type	Depth Top	Depth Bottom	Amount (vol/wt)	Neat Cement Grout	0	35	8.75 yds	Bentonite Seal	35	205	12 super sacks																																																																																
Type	Depth Top	Depth Bottom	Amount (vol/wt)																																																																																														
Neat Cement Grout	0	35	8.75 yds																																																																																														
Bentonite Seal	35	205	12 super sacks																																																																																														
Well Use <input type="checkbox"/> Domestic <input checked="" type="checkbox"/> Public supply <input type="checkbox"/> Livestock <input type="checkbox"/> Heat pump <input type="checkbox"/> Commercial <input type="checkbox"/> Irrigation # of borehole(s) _____ <input type="checkbox"/> Monitoring <input type="checkbox"/> Other _____			Pump Installation Date <u>12 / 12 / 2018</u> Type of pump <u>Grundfos</u> Depth to intake <u>1</u> ft Pump diameter <u>6</u> in Rated capacity <u>150</u> GPM Water Information Date <u>10 / 16 / 2018</u> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Static Water Level</th> <th>Pumping Water Level</th> <th>Yield</th> <th>Duration</th> </tr> </thead> <tbody> <tr> <td><u>43</u> ft</td> <td><u>55</u> ft</td> <td><u>200</u> GPM</td> <td><u>24.00</u> hrs</td> </tr> </tbody> </table> Water level measurement: <input type="checkbox"/> Sonic <input checked="" type="checkbox"/> Tape <input type="checkbox"/> Airline <input type="checkbox"/> E-line <input type="checkbox"/> Estimate Water yield measurement: <input checked="" type="checkbox"/> Orifice <input type="checkbox"/> Volumetric <input type="checkbox"/> Estimate Main water-supply zone from <u>148</u> ft to <u>264</u> ft below GL Well Development <input checked="" type="checkbox"/> Physical explain: <u>Surge blocked and pumped for 6 hours</u> <input type="checkbox"/> Chemical explain: _____ Contractor Company <u>Sargent Drilling</u> Address <u>2016 Industrial Park Road, Carroll, IA 51401</u> Driller <u>Derek Schweitzer</u> Certification no. <u>8338</u>			Static Water Level	Pumping Water Level	Yield	Duration	<u>43</u> ft	<u>55</u> ft	<u>200</u> GPM	<u>24.00</u> hrs																																																																																				
Static Water Level	Pumping Water Level	Yield	Duration																																																																																														
<u>43</u> ft	<u>55</u> ft	<u>200</u> GPM	<u>24.00</u> hrs																																																																																														



Mail form to Iowa Department of Natural Resources: 502 E. 9th St., Des Moines, IA 50319-0034

 Or click here to e-mail form to: well.records@dnr.iowa.gov

Make copies for: well contractor, customer, and county health department


 DNR Form
542-8170

WELL RECORD FORM

90801

PWSID# or PWTS No. _____		PWTS Permit No. _____		GeoSam WNumber (IGS use only) _____	
Site Identification			Drill Method <input type="checkbox"/> Rotary <input type="checkbox"/> Auger <input type="checkbox"/> Cable <input type="checkbox"/> Other _____		
Property owner _____ Other ID _____			Hole size		
Address _____ City _____			hole size continued		
Tenant _____			_____ inch from _____ ft to _____ ft		
Well depth _____ ft Date completed ____/____/____			_____ inch from _____ ft to _____ ft		
Location			Casing or Loop Pipe		
County _____			Record all depth measurements from ground level (GL). Use + for above GL measurements.		
GPS coordinates (NAD83 datum)			Size (in) Material Depth Top Depth Bottom Perforated Slotted Screen		
_____ Latitude _____ Longitude _____			<input type="checkbox"/> slot size _____		
<input type="checkbox"/> Decimal Degrees <input type="checkbox"/> Degrees, Decimal Minutes <input type="checkbox"/> Degrees, Minutes, Seconds			<input type="checkbox"/> slot size _____		
_____ 1/4 of the _____ 1/4 of the _____ 1/4 of Sec _____ TWP _____ RNG _____ W			<input type="checkbox"/> slot size _____		
Show exact location of well in section grid with a dot (+). Sketch map of well location on property.			<input type="checkbox"/> slot size _____		
<div style="text-align: center;"> </div>			<input type="checkbox"/> slot size _____		
			<input type="checkbox"/> Gravel packed amount _____ variety _____		
			<input type="checkbox"/> Seals/packers type _____		
			<input type="checkbox"/> Bottom capped with _____		
Formation Log			Casing Grout		
From	To	Color	Hardness	Formation description	
140	143	Tan	Dense	Fine, medium sand with some	
				coarse sand and fine gravel	
143	148	Tan	Hard	Shale and pyrite	
148	160	White	Hard	White sandstone w/shale streaks	
160	168	White	Hard	Sandstone	
168	180	Gray	Dense	Gray shale with hard spots	
180	200	Gray	Hard	Gray shale with white sandstone	
				strips and hard strips	
200	214	White	Hard	White sandstone with gray shale	
				strip	
214	220	White	Hard	Sandstone	
220	226	White	Hard	White sandstone with cemented	
				sandstone strips	
226	240	White	Hard	Sandstone	
240	260	White	Dense	Fine, medium white sandstone	
				with some fine gravel	
(use additional sheets as needed)					
Remarks (including depth of lost drilling fluids, materials, or tools)					
Well Use					
<input type="checkbox"/> Domestic <input type="checkbox"/> Public supply <input type="checkbox"/> Livestock <input type="checkbox"/> Heat pump <input type="checkbox"/> Commercial <input type="checkbox"/> Irrigation # of borehole(s) _____ <input type="checkbox"/> Monitoring <input type="checkbox"/> Other _____					
Contractor					
Company <u>Sargent Drilling</u>					
Address <u>2016 Industrial Park Road, Carroll, IA 51401</u>					
Driller <u>Derek Schweitzer</u> Certification no. <u>8338</u>					
Pump Installation					
Date ____/____/____					
Type of pump _____ Depth to intake _____ ft					
Pump diameter _____ in Rated capacity _____ GPM					
Water Information					
Date ____/____/____					
Static Water Level		Pumping Water Level		Yield	
_____ ft		_____ ft		_____ GPM	
				_____ hrs	
Water level measurement: <input type="checkbox"/> Sonic <input type="checkbox"/> Tape <input type="checkbox"/> Airline <input type="checkbox"/> E-line <input type="checkbox"/> Estimate					
Water yield measurement: <input type="checkbox"/> Orifice <input type="checkbox"/> Volumetric <input type="checkbox"/> Estimate					
Main water-supply zone from _____ ft to _____ ft below GL					
Well Development					
<input checked="" type="checkbox"/> Physical explain: _____					
<input type="checkbox"/> Chemical explain: _____					

Mail form to **Iowa Department of Natural Resources**: 502 E. 9th St., Des Moines, IA 50319-0034Or click here to e-mail form to: well.records@dnr.iowa.gov

Make copies for: well contractor, customer, and county health department

DNR Form
542-8170

90801

