



GEOHERMAL Pump & Reinjection

High Capacity Wells

What You Need to Know...

Iowa DNR Water Use and Allocation
Water Supply Engineering
Wallace State Office Building
502 E 9th St
Des Moines, Iowa 50319

Are you considering Pump & Reinjection?

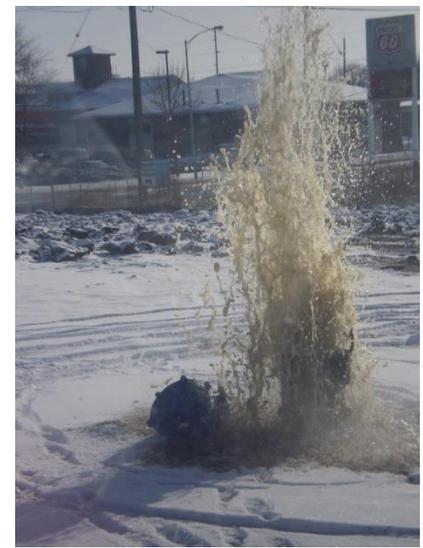
- ? WILL you be pumping at or above 500 Gallons per Minute (gpm)?
- ? ARE there nearby Private Wells, Other High Capacity Wells or Industrial Wells?

Know your well's geology, aquifers & water-bearing formations:

- + Bedrock - dolomite, limestone, sandstone
- + Alluvial or Buried sands and gravel
- + Protected aquifers such as:
 - Jordan Sandstone (Ordovician)*
 - Devonian Limestone*
 - Silurian Dolomite*
 - Dakota Sandstone (Cretaceous)*

WHY is this IMPORTANT?

- ... Protect your well
- ... Protect your neighbor's well
- ... Protect Iowa's Ground Water



To Obtain a Water Use Permit for a High Capacity Well

- ✓ Provide map of proposed irrigation well site
- ✓ Provide map inventory of wells and well construction details within a 1 mile radius
- ✓ Contact us prior or during construction for pump testing guidance based upon your geological setting
- ✓ Submit results of any required pump testing – including production well and observation well(s)



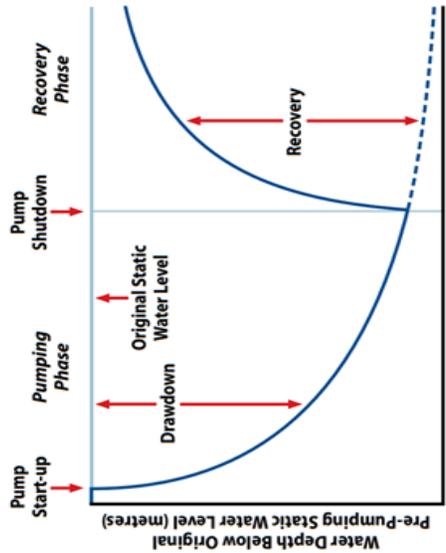
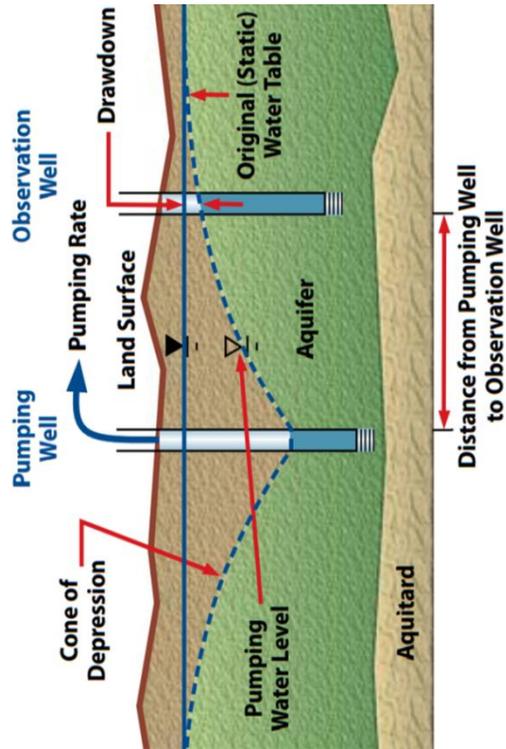


Figure 2. Graph showing the different phases of a constant rate pumping test – the pumping phase and the recovery phase.



What Permits do you need?

County Private Well Construction Permit

☎ Your local Iowa Certified Well Driller

DNR Water Use & Allocation Permit

☎ DNR – Water Supply Engineering –
Water Use & Allocation Team

Contact:

DNR Water Supply Engineering

Water Allocation & Use (WSE- WAT)

<http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Water-Supply-Engineering/Water-Allocation-Use>

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☎ (515) 725-0336

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DNR – Private Well Program

<http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Private-Well-Program>

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Additional Resources for

Well Mapping Resources

Iowa Geological Survey - GEOSAM

<https://geosam.ihr.uiowa.edu/home>

Iowa DNR - Technical Bulletin 23.1 – SD 0014



IMPORTANT INFORMATION ON IRRIGATION