

Journeyman Well Driller Geotechnical

Licensure Study Topics

Terms-to-Know/Vocabulary

- Lost Circulation Problem
- Hydrogen Sulfide
- Artificial gravel-packing
- Groundwater quality
- Formation permeability
- Confined & unconfined aquifers
- Static water level/standing water elevation
- Water table
- Specific capacity
- Vacuum
- Cone of depression
- Potentiometric surface
- Drawdown
- Recovery
- Hydrologic cycle
- Water mining
- Groundwater recharge
- Annular velocity
- pH
- Monitoring well
- Fishing
- Plume
- Quicksand
- 3 principal earth augers
- Continuous flow return method
- Porosity
- Types of tests
- Air rotary drilling

Math/Conversions

- Pressure to lift a column of water (psi to ft of lift)
- Maximum yield
- Calculating a well's annular space

State Regulations

- Well Permits
- Well abandonment/reports
- Hydrogeologic Areas 1-5
- Casing
- Grout
- Screen
- Emergency well permits
- Nominal wall thickness of various-sized metal casings
- Materials used for casing and grout
- Design of a monitoring well
- Well completion report
- Seal of an abandoned well
- “Miss Utility”
- Well logs
- MOSHA

Safety

- Eye protection
- Entering a hazardous waste site
- Clothing
- Respirators
- Vapor exposure
- Electrocutation
- Acetylene torches
- Symptoms of exposure
- Cyanide compound odor

Troubleshooting

- Salt water intrusion
- Drilling Methods and equipment or term associated with method
- Removal of air-rotary hole drill cuttings
- Procedures of developing a water well