



Pump Tests

Overview

A pump test, also known as an aquifer test, is not really a test of the pump, but rather a test of the well and aquifer. It should not be confused with other testing types, such as well flow or step-drawdown tests. Permitted wells must be tested as a condition of certification.

Pump test information must be submitted on these forms, which can be obtained on the Department's website.

Pump Test Specifications

A Pump Test consists of three phases:

- The **pre-pumping** phase includes several depth-to-water measurements made prior to pumping the well to determine any natural fluctuations in water level.
- The **pumping** phase of the test is a minimum of four hours. The actual pumping phase of the test consists of pumping the well at a constant rate for period of four hours. As the well is pumped, the water level will drop. During pumping, the depth to water is measured and recorded at minimum specified intervals.
- The **post-pumping or recovery phase** of the test occurs after the pump is turned off. After pumping stops, depth-to-water measurements continue at minimum specified intervals as the water rises, or recovers, in the well.

For more detailed test specifications, see OAR 690-217.

Forms and a detailed pump test program guide can be found on the Department's website at

<https://www.oregon.gov/OWRD/programs/GWWL/GW/Pages/PumpTestProgram.aspx>.

Exemptions

In some cases there are exemptions to the pump test requirements.

See reverse side for details.

Qualifications to Conduct Pump Tests

Pump tests must be conducted by qualified individuals. The well owner may conduct the test, or may designate another person to do the test as long as that person meets certain qualifications.

The following persons are eligible to conduct these pump tests:

1. The owner of the well to be tested.
2. A full-time employee of the well owner who routinely works with and is familiar with wells and pumps.
3. Individuals whose primary occupation involves well pump installation, service or testing.
4. Individuals within the following professional groups, provided they have significant experience conducting pump or aquifer tests:
 - Registered Geologists or Engineering Geologists
 - Licensed Well Drillers
 - Certified Water Right Examiners
 - Registered Professional Engineers

Well owners who decide to conduct the pump test themselves should become thoroughly familiar with all the test requirements. These requirements are described in the Water Resources Department's administrative rules OAR 690-217. Some specialized equipment is needed to conduct pump tests.

Pump Test Exemptions

Multiple Well Exemptions:

You may qualify for an exemption from testing your well if you meet the following three criteria:

1. You own multiple wells producing water from the same aquifer;
2. One of the wells has been previously tested and the test approved; and
3. The wells are within 5 miles of the previously tested well.

Multiple well exemption requests must be submitted using the department's form which can be obtained on the Department's website.

Unreasonable Burden Exemptions:

In some cases, it may be extremely difficult or inconvenient to conduct a pump test that meets the Water Resources Department's requirements. In such cases, well owners may request an exemption.

Exemptions shall be granted for public water supply wells if pump testing will cause interruption of service to customers.

Unreasonable burden exemption requests must be submitted using the department's form which can be obtained on the Department's website.

Wells Not Requiring a Pump Test:

- A well with a diameter greater than 36 inches and a depth less than 30 feet.
- Excavations that produce water from horizontal screens embedded in a gravel pack (infiltration galleries) or vertical caissons that produce water from a radiating system of horizontal casings or screens (collection wells).
- Contact the Department, if any of these apply to your situation.

Additional Information

If you would like additional information about pump test requirements, contact our office to speak with a customer service representative.

Mail pump tests or requests for exemptions to the attention of the Certificate Support.

Submittals and inquiries can be sent to WRD_DL_pumptestsupport@oregon.gov