Residential Well Flow and Production Testing Frequently Asked Questions

Thank you for choosing GeoWater Services to perform the well flow or production test for your home or property transaction. Accurate information, knowledge of the process and recognition of individual responsibilities for coordination and testing are necessary to ensure complete, accurate and timely results for your individual well test. Below are some frequently asked questions (FAQs) regarding the well testing process and what to expect before, during, and after the test. Please take the time to review these FAQs prior to the date of the test. If the well test will be for a real estate transaction, please forward this FAQ sheet to all parties to the transaction (buyers, sellers, realtors, etc.).

Why a "well test"?

A well flow or well production test is typically done as part of the due diligence / inspection process when purchasing a new home, with the goal of determining if the well will produce enough water to support the water demands of a typical family, taking into consideration the size of the home. The well test, when combined with proper seller disclosures and representations, is intended to provide the prospective buyer with a measure of comfort that the existing well water production will meet the individual's family needs.

What types of well tests are available?

- Well Flow Test (2-hour): This type of well test is a simple, cost effective test designed to
 report the pumping rate (flow) of a well for a two hour time period only. While common in
 real estate transactions, it is important to note that this test is designed to measure the
 pumping rate of the well pump (and possibly well storage), but in many cases may not be
 long enough to determine the actual stabilized production of the well, especially in
 situations where the property may have been vacant for a period of time.
- <u>Stabilized Well Yield Estimate (Production Only No Static Water Level) (BOE Rule 12.2):</u>
 This is the most common residential well test used for real estate transactions. The production of a well shall be determined as a stabilized production rate where the withdrawal rate does not change by more than 10% during the last hour of the test. Please note that for real estate transactions, the well head will not be opened and therefore no current static water level or pump depth data will be available.
- <u>Stabilized Well Yield Test (Non-real estate transactions) (BOE Rule 12.6):</u> The production of a well shall be determined as a stabilized production rate where the withdrawal rate and the static water level drawdown do not change by more than 10% during the last hour of the test. GeoWater will attempt to obtain static water level on a best efforts basis, however in

some cases well construction (wire blockage, well seal, etc.) may prevent insertion of equipment necessary to obtain static levels. Please note that the well will be chlorinated at the conclusion of the test.

Jefferson County Zoning Well Test (Resolution Section 54): This test is required prior to
obtaining a building permit for new construction (including expansion of footprint) in
Jefferson County. This test requires pumping for a minimum of 4 hours (may be longer); and
the yield of a well shall be determined as a stabilized production rate where the withdrawal
rate and the static water level drawdown do not change by more than 10% during the last
hour of the test. Please note that the well will be chlorinated at the conclusion of the test.

What do I (or the real estate professionals) need to do to ensure that the process goes smoothly?

Coordination and communication between all parties are the keys to success! Access to the property and a clear understanding by all parties of expectations and potential impacts of the well test are important. Access includes entry to the house, mechanical equipment room, pump houses, well head, etc. Animals and pets should be controlled to ensure safe access for the technician performing the test. In real estate transactions, the buyer's and seller's agents should work together to ensure that the homeowner understands that water cannot be used during the test and potential impacts to water quality and/or well equipment after the test (see below). Additionally, a basic understanding of the system on the front end (especially the existence of above ground storage tanks or buried cisterns), will allow the test to be staffed and equipped properly to avoid unexpected additional costs and / or rescheduling of the test.

Can water be used during the well test?

No. The water will be shut off for the duration of the test to ensure accuracy in measurement of water flows. This is important to know so that the homeowner can be notified and that home inspectors or other due diligence contractors are not scheduled at a time where access to water is required.

When can the water be used after the well test?

In most cases, right away, subject to certain limitations. In lower producing wells, the well may be pumped completely dry during the test. In this event, it may take a number of hours for the well to recover enough for household usage. In other cases, the well water may be "dirty" due to the turbulence created by extended pumping. Each well is different so it is impossible to know in advance which wells may be problematic and which will not. In rare cases, well equipment problems may also make water unavailable after the test (see below). In the case of real estate transactions, it is important that the real estate professionals communicate these potential limitations to the homeowner.

What does it cost?

The cost of well testing is dependent upon a number of factors, including the type of test performed, the location of the property, the specifics of the well system design (storage systems, etc.), etc. Your GeoWater Project Manager will be happy to review your specific needs and determine the cost of testing.

Will there be any additional costs for the test?

Generally no, however certain unidentified site conditions may require additional work to be performed in order to conduct the test. The most common are unidentified water storage tanks or cisterns that require temporary plumbing modifications or lifting the pump at the well head to complete the test. These additional costs will be included in your initial quote (if known up front) or be billed on a labor & materials basis as incurred on-site.

In certain instances, the well test may not be started or completed due to circumstances not within GeoWater's control. These may include no access to property (gates codes, doors locked, aggressive pets, etc.), well pump equipment malfunction (either at the beginning or during the test), unusual site conditions, etc. GeoWater will make a good faith effort to complete the test if at all possible. In the event that we are unable to start or complete the test, the adjusted cost of the well test will be based upon standard service call and labor rates, not to exceed the original contracted cost of the test.

While it is not necessary that you be on-site during the test, it is important that you and the real estate representatives involved (buyer and seller) be available by phone to make decisions in the event unanticipated site conditions are encountered so that the test can be completed in a timely fashion.

When will I know the results of the test?

Generally within two (2) business days of the completion of the test. This may be slightly longer if work is completed late in the day of the test. Please factor this into your scheduling of the test if you have real estate objection or response deadlines.

Are there any special concerns for real estate transactions?

In real estate transactions it is important that the realtors be involved to assist in coordination of access to the property, gathering basic information about the system, and other communication with all parties to the transaction. It is especially important that the homeowner be made clearly aware of the procedures to be performed, the lack of available water for household use during the process, the possible impacts to water quality and quantity available immediately after the test, and potential adverse impacts to the pump and / or pump related equipment.

An item of particular importance is the understanding that in order to perform the well test, GeoWater may be required to access the well head, the mechanical room, turn well related equipment on and off, turn house shut-off valves on and off, run the pump for extended

periods of time, etc. On rare occasions, equipment that appeared to be in workable condition at the start of the test, may not work properly during the well test or at the conclusion of the test. Whether this is the result of the required testing procedures, or due to pre-existing problems with the equipment not known of or not disclosed by the homeowner, is in most cases impossible to determine. In this event, a homeowner's statement that "it was fine until you touched it" can be difficult to prove or resolve. Your real estate purchase contract may or may not address who is responsible for any repairs. While GeoWater will use all reasonable care in performing the test, we are required to use the well equipment to perform the test. As such, GeoWater will not be responsible for any alleged "damage" that results either from an unidentified or undisclosed pre-existing condition, or that resulting from the required use of, or access to, any well related equipment necessary to perform the contracted well test.

These are general FAQs common to most private well flow / production testing. Conditions may vary significantly from project to project. Please feel free give us a call at 303-670-3348 if you have any additional questions and thank you for your business!