



Reporting Form for Tier 1 Aquifer Testing

P.O. Box 340595, Austin, Tx 78734 · Tel. 512-276-2875 · www.swtcgcd.org

Complete and submit this form as part of the reporting requirements for: 1) an Existing Well seeking an Operating Permit; 2) for a proposed New Well seeking a Non-exempt Domestic Use (NDU) General Permit; or 3) for a proposed New Well seeking to permit less than 1 million gallons per year under an Operating Permit. For Existing Wells seeking Operating Permits, you may use this form to report results from new or previously conducted aquifer tests. Additional information regarding aquifer-testing requirements is provided in SWTCGCD "Guidelines for Aquifer Testing and Hydrogeologic Reports," which is available at www.SWTCGCD.org. You may mail the completed form and other materials to the address above or email the completed form and supplemental materials to staff@swtcgcd.org.

Section I. Guidelines for Tier 1 Aquifer Testing

Before Beginning Aquifer Test

Measure and record the water level at 15-minute intervals for at least 1 hour to establish a baseline (static) water level prior to testing; report static water-level measurements in the "Test Data" section of this form. Aquifer tests should not be conducted if water levels are fluctuating rapidly (e.g., recovering from recent pumping).

Duration of Aquifer Test

Conduct a constant-rate pumping test long enough to pump at least the daily equivalent of the requested annual permitted volume (1-hour minimum), or as long as conditions (e.g., water levels, pump saver) allow. Continue collecting water-level data through the recovery phase (after pumping stops), which should be approximately as long as the pumping phase or until water levels have recovered at least 90% of the maximum drawdown observed. See Appendix A in the SWTCGCD "Guidelines for Aquifer Testing and Hydrogeologic Reports" for additional details.

Table 1. Example Calculation for Duration of Tier 1 Aquifer Testing

Annual Permit Request (gal)	Daily Equivalent (gal)	Target Pumping Volume (gal)	Pumping Duration at 15 GPM (hr)	Pumping Duration at 25 GPM (hr)
500,000	1,370	1,370	1.5	0.9 (1-hr minimum)
1,000,000	2,740	2,740	3.0	1.8
10,000,000	27,400	27,400	30	18

Frequency of Measurements

Obtain as much information as possible during the first ten minutes of the pumping and recovery phases; water levels should be measured at least every minute. Initiate recovery measurements immediately at the conclusion of the pumping phase and record them with the same frequency as those taken during the pumping phase. The frequency of water-level measurements throughout the aquifer test must provide an adequate basis to estimate required aquifer parameters. If a calibrated flow meter is not available, pumping rate may be measured or estimated at the beginning, middle, and end of the test using another approved method, such as a weir, or the time required to fill a storage vessel of known volume ("bucket test"); alternative measurement methods must be approved by SWTCGCD prior to testing.

Water-Quality Measurements

Monitor field parameters (temperature, conductivity, pH) throughout the test with tabular results reported in the "Test Data" section of this form. If laboratory analyses are available, please submit results with this form.

Section II. Administrative Information

Purpose of Reporting Form (please check one)

<input type="checkbox"/> Existing Well Seeking Operating Permit
<input type="checkbox"/> Proposed New Well Seeking Non-Exempt Domestic Use (NDU) General Permit
<input type="checkbox"/> Proposed New Well Seeking Operating Permit for less than 1,000,000 gallons per year

Owner Contact Information

Well Owner/Applicant Name(s):		
Email:		
Mailing Address:		
City:	State:	Zip:
Primary Phone:	Secondary Phone:	
<input type="checkbox"/> Check if Physical Well Address is same as Mailing Address.		

Well Information

Well Registration/Identification Number:		
Physical Well Address (if different from Owner Mailing Address):		
City:	State: TX	Zip:
Well Coordinates (https://www.maps.ie/coordinates.html)		
Latitude:	Longitude:	
Aquifer(s): <input type="checkbox"/> Upper Trinity <input type="checkbox"/> Middle Trinity <input type="checkbox"/> Lower Trinity <input type="checkbox"/> Other (please specify):		
Wellhead Elevation:	Total Well Depth:	
Pump Depth:	Pump Size (HP):	Well Capacity (GPM):
Casing Sizes and Depths:	Screened Interval(s):	

Technical Consultant Contact Information

Technical Consultant Name(s):		
Email:		
Mailing Address:		
City:	State:	Zip:
Primary Phone:	Secondary Phone:	

Testing Requirements

Requested Annual Permitted Volume (gallons):
Daily Equivalent Volume (gallons; divide Requested Annual Volume by 365):
Target Pumping Rate (gallons per minute):
Minimum Required Pumping Duration (minutes; divide Daily Equivalent Volume by Target Pumping Rate):

Section III. Aquifer Testing Information

General Information

Pumping Start Date/Time:	Pumping End Date/Time:
Water-Level Measurement Method (e.g., eline, transducer, etc.):	
Pumping-Rate Measurement Method (e.g., calibrated meter, bucket test, etc.):	
Water Quality Laboratory Analyses Available: <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, please submit results with this form)	
Digital Water-Level Data Available: <input type="checkbox"/> Yes <input type="checkbox"/> No (If yes, please submit data with this form)	

Static Water-Level Measurements

Time	Water Level (depth to water)	Measurement Method	Notes

Testing Data (continued on next page)

Utilize the “Notes” field below to record observations such as the time pumping starts and stops, changes in the appearance or smell of produced water, fluctuations in pumping rate, time pump saver is activated, or other observations related to data collection.

Time or Elapsed Time	Water Level (depth to water)	Total Drawdown (ft)	Pumping Rate (GPM)	Temp (°C)	pH	Cond (µs/cm)	Notes

Test Results and Estimated Aquifer Properties

Actual Pumping Duration (minutes):
Actual Volume Pumped During Test (gallons):
Average Pumping Rate (GPM; divide Actual Volume Pumped by Actual Pumping Duration):
Maximum Drawdown Observed (ft):
Specific Capacity (GPM/ft; divide Average Pumping Rate by Maximum Drawdown Observed):

Section IV. Observation Well (if any)

Observation Well Information

Well Registration/Identification Number:
Physical Well Address:
City: _____ State: TX _____ Zip: _____
Well Coordinates (https://www.maps.ie/coordinates.html)
Latitude: _____ Longitude: _____
Aquifer(s) (Note: Observation wells must be completed in the same aquifer as the pumping well): <input type="checkbox"/> Upper Trinity <input type="checkbox"/> Middle Trinity <input type="checkbox"/> Lower Trinity <input type="checkbox"/> Other (please specify): _____
Distance from Pumping Well (ft):
Wellhead Elevation: _____ Total Well Depth: _____
Casing Sizes and Depths: _____ Screened Interval(s): _____

Observation Well - Static Water-Level Measurements

Time	Water Level (depth to water)	Measurement Method	Notes

			N/A				
			N/A				
			N/A				
			N/A				
			N/A				
			N/A				
			N/A				
			N/A				
			N/A				
			N/A				
			N/A				

Additional Notes:

Section VIII. Applicant or Authorized Agent* Sworn Statement

I hereby submit this form to the Southwestern Travis County Groundwater Conservation District for the purpose indicated above for the water well described herein, and I certify that I am the property owner/grantor or lessee/grantee or its Authorized Agent, and that each and all the statements herein are true and correct, and that I will comply with District Rules, Well Construction Standards, and groundwater use permit and plan requirements. I hereby authorize the District access to this property following reasonable advance notice or, in an emergency, immediately, with such emergency access reported to the owner if advance notice was not possible. The District may access the well for the purposes of inspecting, collecting water quality samples, and investigating conditions relating to the withdrawal, waste, water quality, pollution, or contamination of groundwater.

Signature of Applicant or Authorized Agent* **Print Name** **Date**
*(*Notarized Agent Authorization Form Required if Signature Not the Well Owner)*

State of Texas, County of _____ . SWORN TO AND SUBSCRIBED before me by the said owner or agent on this the ____ day of _____ 20__.

Notary Public, State of Texas My commission expires _____