

February 8, 2024



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Joseph Padilla
Tualatin Estate Vineyards
Via email: joseph.padilla@wvv.com

**Re:** Well #2 (PR#174-2022)

**Tualatin Estate Vineyard (PWS ID#95692)** 

**Conditional Approval** 

## Dear Joseph:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of the well log for the completed well. The well (well log WASH 80972) was completed on December 30, 2022.

A geologist with DWS reviewed the well log construction details and noted the following:

- The well meets current below-ground construction standards.
- The well was constructed to a depth of 540 feet. The casing and casing seal extend to a depth of 200 feet. The seal is completed 12 feet into competent basalt of low permeability. A narrow diameter screened liner, placed in the well between 120 and 540 feet below ground and helps keep the borehole open below the casing.
- The well draws water from a deep confined layered basalt aquifer. The first water-bearing zone below the casing seal occurs at 220 feet and is overlain by 32 feet of low permeability basalt that acts as a confining layer. Water within the aquifer is under pressure, rising 73 feet above the first water-bearing zone below the casing seal to a final static water level of 147 feet below ground.
- Results from a sensitivity analysis suggest that the well construction does not contribute to the overall sensitivity of this water source to local land use practices and the aquifer is not highly sensitive to nearby land use practices.

## The plans are approved with the following conditions:

- Above ground well head details must be provided (pictures may be the best way of showing these items), specifically:
  - Unless a pitless adapter was installed, a concrete slab must be provided around the well.
  - The casing height must be 12" above the slab (or 12" above grade, if a pitless adapter was installed.)
  - o A watertight sanitary seal must be provided.
  - o A sample tap at the well head must be provided.
  - O Piping arrangements must include provisions for pumping the total flow of the well to waste. Pump-to-waste piping is typically installed for this, however, some systems plan to pump the flow to waste through the sample tap.
  - A method of determining the total output of the well must be provided (typically a flowmeter is installed for this purpose).
  - o Unless a pitless adapter is installed, a well house must be provided. If the well house is not a small dog-house style, then it must be provided with light and heat. In all cases it must be lockable.
  - A casing vent with a screened return bend must be provided. If a pitless adapter was installed, the caps must be vented.

Until we receive verification that the conditions have been met and final approval has been issued, the facility is not approved for use. Documentation demonstrating how the above conditions were met should reference Plan Review #174-2022 and can be emailed to me at Carrie.L.Gentry@oha.oregon.gov.

If you have any questions, please feel free to call me at (971) 201-9794. Sincerely,

Carrie Gentry, PE Regional Engineer Drinking Water Services

CAS

cc: Nicole Alfafara, REHS, OHA/DWS
Steve Wong, REHS, Oregon Department of Agriculture
Sarah Schwab, REHS, Oregon Department of Agriculture