



# COLORADO

## Division of Water Resources

Department of Natural Resources

Board of Examiners of Water Well Construction  
and Pump Installation Contractors

February 7, 2022

### Bulletin 2022-B Construction of Wells in the Cheyenne Basin

#### Purpose

The purpose of this bulletin is to:

- highlight the presence of the Laramie-Fox Hills aquifer outside of the Denver Basin and display the extent of the Cheyenne Basin
- clarify that a well constructed into the Laramie-Fox Hills aquifer must comply with Rule 10.4.8
- advise licensed water well contractors of other bedrock aquifers within the Cheyenne Basin

#### Discussion

Permit staff have recently started adding permit notes identifying the aquifer depths and construction requirements for wells anticipated to produce from the Laramie-Fox Hills aquifer (LFH) within the Cheyenne Basin, **even though the permit does not restrict the aquifer into which the well can be completed.** We would like to bring this to the attention of the contractors to prevent any violations of the Construction Rules.

The Laramie-Fox Hills aquifer is present in locations outside of the Administrative Denver Basin, in particular to the north and east of Greeley in the Cheyenne Basin (see Colorado Groundwater Atlas [Figure 11b-02-02-01](#)). Wells constructed into the LFH aquifer must comply with Rule 10.4.8 requiring steel casing and grout from the top of the production zone to the top of the well. It is the responsibility of the licensed well contractor (Rule 10.1.2) to familiarize themselves with all conditions that may exist at the well location; including the geology of potential aquifers, confining layers, and anticipated water quality problems. Regardless of whether the permit has been conditioned for construction into the LFH aquifer, if you are contracted to construct a well in a location that falls within the aquifer boundary (see attached map) you are required to comply with the applicable Construction Rules. Obviously, not all wells in this area will be completed in a Type I or LFH aquifer, but if you complete the well in bedrock you must know which aquifer type it is and construct appropriately (see Colorado Groundwater Atlas [Table 11b-02-02-01](#)).

Specifically, wells may be completed in various aquifers within the Cheyenne Basin and Type I wells penetrating multiple confining layers must comply with Rule 10.4.5.2. Do your research before bidding any wells. The Construction Rules are in place to protect the consumer and contractors.

#### Bulletin

Any well constructed into the Laramie-Fox Hills aquifer, inside or outside the Administrative Denver Basin, must be constructed in accordance with Rule 10.4.8, with steel casing and grout from the top of the production zone to the top of the well. There are several bedrock aquifers in the Cheyenne Basin (i.e., High Plains, Upper Laramie, LFH, and Upper Pierre aquifers) and it is the responsibility of the licensed contractor to familiarize themselves with these aquifers and comply with all applicable Well Construction Rules.



Dated February 7, 2022



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Christopher J. Sanchez, PG, Chairperson  
Board of Examiners of Water Well Construction  
and Pump Installation Contractors