

# STATE OF COLORADO

OFFICE OF THE STATE ENGINEER  
Division of Water Resources  
Department of Natural Resources

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COLORADO OIL & GAS CONSERVATION COMMISSION



Roy Romer  
Governor  
Ken Salazar  
Executive Director  
Hal D. Simpson  
State Engineer

## MEMORANDUM

TO: Ed DiMatteo, Colorado Oil and Gas Conservation Commission ✓

FROM: John Romero, Colorado Division of Water Resources JR

SUBJECT: Injection Well, UPRR 43 Pan Am B-1  
NE1/4 SW1/4 Section 3, T1N, R68W, Weld County

Known and suspected aquifers in the area are all surficial deposits, the Laramie-Fox Hills aquifer, and, possibly, two Pierre sandstones/siltstones in the 800 to 900-foot interval of the UPRR 43 log.

Note that in this area, the Laramie-Fox Hills aquifer includes two sandstone/siltstone layers of the upper Pierre Shale. These layers, Pierre A and Pierre B (this letter) are included with the Laramie-Fox Hills aquifer because of their proximity to the Fox-Hills sandstone. Farther east, the two Pierre layers and the Fox Hills sandstones become distinctly separated with the two Pierre layers then being classed as sandstone/siltstone layers within the Fox Hills-Pierre transition zone (refer to our SB-5 cross-sections).

The Pierre sandstone/siltstone layers in the 800 to 900-foot interval appear to be the same hydrogeologic interval discussed earlier, re: the area southeast of Loveland. At the UPRR-43 site, however, it is possible that the layer will not be utilized, as a full thickness of Laramie-Fox Hills aquifer lies above it.

The 830-foot of cemented casing (227 feet of surface casing and 830 feet of longstring casing) isolates the entire Laramie-Fox Hills aquifer. An additional 70 feet would also isolate the 800 to 900-foot Pierre aquifer we have discussed many times in the past two or three months. This would be wise since the layer is less than 1000 feet below land surface.

Our records reveal the presence of a large number of both surficial and Laramie-Fox Hills wells in the area.

If you have any questions, give me a call.

JCR/clf:uprr43  
cc: Alan Berryman, Division Engineer  
Enclosure



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