



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2466

00260191

NOV 21 1994

Ref: 8WM-DW

Mr. Richard Griebeling, Director  
Colorado Oil and Gas Conservation  
Commission  
1580 Logan Street, Suite 380  
Denver, Colorado 80203

RE: Request for an Aquifer Exemption for the  
Dakota Formation in the Vicinity of the  
Blevins A-2, Canadian River Field

Dear Mr. Griebeling:

My staff has reviewed the application by Gasco, Inc., for an aquifer exemption of the Dakota Formation within 1/4 mile of Blevins A-2 in the Canadian River Field. A November 10, 1994 letter from the Colorado Department of Public Health and Environment, regarding the results of their review of the application, was also reviewed. The well is located in Section 3 of T9N, R78W, 6th P.M. The Blevins A-2 will be used to inject produced water from the gas production from the Dakota Sand Formation into the overlying Dakota Formation at a depth of 1704 to 1724 feet.

Our review indicates that the Dakota Formation in the vicinity of the well contains fluids with a total dissolved solids (TDS) content of about 4300 mg/liter. Additionally, the Dakota Formation also contains significant amounts of residual oil within the boundaries of the field. The Dakota was a significant oil production zone in the past, but is no longer economically producible. The applicant has supplied information indicating it would cost about \$37,000 to drill and complete a well to the Dakota and about \$160,000 to build a pipeline from the field to the nearest community (Walden). Utilization of the Dakota as a source of drinking water would also require significant treatment to reduce the TDS and remove the hydrocarbons to drinkable limits. Based on available information, the initial cost of a treatment plant would exceed \$600,000. The initial capital costs and the long-term O&M costs far exceed the cost of developing a water supply from the shallower formations which contain water of better quality.

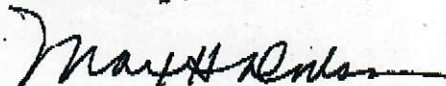


The area where the well is located is sparsely populated with occasional ranches. The closest community is Walden which is located about five miles away. Drinking water is either supplied by shallow wells ranging in depth from 50 to 500 feet deep or from local streams.

Based on our review, the Environmental Protection Agency (EPA) has determined that the Dakota Formation in the vicinity of the Blevins A-2 is not reasonably expected to supply water to a public water system. Thus, EPA does not object to the granting of an exception for the Dakota within 1/4 mile of the well. The exemption is considered to be a minor modification of the COGCC's program for the regulation of Class II injection wells under Section 1425 of the Safe Drinking Water Act.

If there are any questions, please contact Paul S. Osborne, of my staff, at (303) 293-1418.

Sincerely,



Max H. Dodson  
Director  
Water Management Division

cc: George Moravec, CDPH&E  
J. David Holm, "

## STATE OF COLORADO

Roy Romer, Governor  
Patricia A. Nolan, MD, MPH, Executive Director

*Dedicated to protecting and improving the health and environment of the people of Colorado*

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Colorado Department  
of Public Health  
and Environment

October 28, 1994

Mr. Rich Griebeling  
Director  
Colorado Oil and Gas Conservation Commission  
1580 Logan Street, Suite 380  
Denver, Colorado, 80203

RE: Request for Aquifer Exemption, Dakota Formation  
in the Canadian River Field

Dear Rich,

We have reviewed the application for aquifer exemption submitted by Gasco for the Blevins A-2 well in the Canadian River field in Jackson County. We are recommending approval of the aquifer exemption with one minor stipulation, namely that the map showing the exemption area be redrawn to show a 1/4 mile radius around the well as described in the exemption request. The map currently depicts a somewhat larger area. We agree with the exemption according to Rule 322B(a)(1) and 322(a)(2)(B), on the basis of 1) the lack of previous use of the Dakota Formation as a drinking water source in the area, and 2) the location and depth of the proposed injection zone, which render it unlikely to serve as a source of drinking water in the future.

We do have some concerns with the completeness of the information submitted by Gasco, however, and would prefer to see the following additional information presented in future exemption applications:

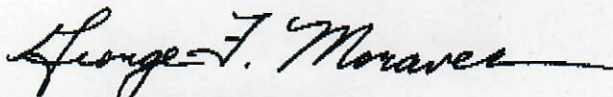
- Full documentation of all water quality analyses (lab reports for the quoted Dakota Fm. TDS concentrations were not included). The only submitted laboratory report for a Dakota Fm. sample indicates 474 mg/l TDS in the State #1.
- A better description of sampling methods, such as volume and method of well purging, sample preservation, chain-of-custody procedures etc. Gasco said in their response letter that standard sampling procedures were used, but this can mean many different things.

Mr. Rich Griebeling  
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- A list of all domestic and irrigation wells is required by Rule 323(a)(2). Owner, township-range location, depth, aquifer, and available well construction information would help us evaluate ground water use in the area of the exemption.
- Resistivity logs, as required by Rule 323(a)(3), would facilitate assessment of impacts on other water- or hydrocarbon-producing stratigraphic units.

Inclusion of the above information in addition to that provided by Gasco would greatly facilitate our review and permit us to make a more timely and informed recommendation.

Sincerely,



George F. Moravec  
Ground Water Unit Leader