



BEFORE EXAMINER STOGNER

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

OCD/SEO EXHIBIT NO. B

CASE NO. 10693  
ELUID L. MARTINEZ  
State Engineer

BATAAN MEMORIAL BUILDING, ROOM  
POST OFFICE BOX 25102  
SANTA FE, NEW MEXICO 87504-510

April 7, 1993

Mr. Lawrence O. Van Ryan  
Chief Engineer, Oil Conservation Division  
Energy, Minerals, and Natural Resources Department  
P.O. Box 2088  
Santa Fe, New Mexico 87504

RE: Pronghorn SWD System  
Brooks Federal '7' Well No. 6  
Section 07-T20S-R33E, 660' FSL & 1926' FWL  
Lea County, New Mexico

Dear Mr. Van Ryan:

Your March 25, 1993, letter states that Pronghorn SWD System of Hobbs, New Mexico has proposed the use of an existing oil and gas test well, referred to as the Brooks Federal '7' Well No. 6, within Section 7, Township 20 South, Range 33 East, in Lea County, New Mexico as a salt water disposal well. The well would be used to inject water, taken from nearby oil producing wells, into the Capitan aquifer and dispose of that water at depths from 3220 to 5050 feet. You advise that the OCD will hold a hearing on April 8, 1993, to receive evidence upon which to base a recommendation as to the approval of the proposed injection into the Capitan aquifer.

I have noted your office's request for input from the experts in the State Engineer Office (SEO) on questions within their expertise as related to this matter. Attached is the April 7, 1993, memorandum from our Hydrology Section staff, which reviews a model of the Capitan aquifer prepared by RE/SPEC Inc., consultant for the applicant. The model developed provides an estimate of the impacts on the Capitan aquifer due to the proposed injection activities. A draft report prepared for the applicant indicates that the impacts from the proposed injection well on the Capitan aquifer will be "practically undetectable". However, the model results can not be verified by our staff and

do not change the fact that any degradation of any portion of the aquifer could, eventually, degrade the entire aquifer.

The applicants' report finds that the aquifer contains total dissolved solids concentrations greater than 10,000 parts-per-million (ppm) in the area of the proposed injection well. This information does not negate the fact that within the Capitan aquifer, zones of saline water are directly connected to major zones of fresh ground water and to the Pecos River. Due to the geologic complexity of the area and the fact that the Capitan is a major source of fresh water in the area, I share your concern about permitting brine injection into the Capitan.

I am of the opinion that in recognition of the fact that the saline zones in the Capitan are connected to fresh water sources, and with the knowledge that fresh water in that part of the state is limited, that our agencies agreed that no injection into the Capitan aquifer should be allowed. This is the same policy which underlies both the Federal Underground Injection Control Program's mandate that a determination be made that such injection not pose a danger of contaminating underground sources of drinking water and our legislature's grant of authority to the OCD to regulate produced water in a manner that affords reasonable protection against contamination of fresh water supplies designated by the state engineer [N.M. Stat. Ann §70-2-12(B)(15) (1987 Repl. Pamp.)]. The Capitan aquifer contains designated fresh water supplies and should be protected from contamination.

I hope that this letter will provide the evidence required for the April 8, 1993, hearing; however, if requested, this office will provide an expert in groundwater hydrology for your hearing officer on this matter. If a witness from this office is requested, please advise me of the date and time they will be needed.

Sincerely,



Eluid L. Martinez  
State Engineer

Attachment