



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
**Betty Rivera**  
Cabinet Secretary

**Lori Wrotenbery**  
Director  
Oil Conservation Division

December 20, 2002

Mr. Saeed Afghahi  
Avra Oil Company  
PO Box 3193  
Midland, Texas 79702

Re: Division Administrative Permit SWD-819  
Charlcia A. Taylor No. 1 API 30-025-07329  
Section 11, T18S, R38E, NMPM, Lea County, New Mexico

Dear Mr. Afghahi:

Please refer to your letter to the New Mexico Oil Conservation Division (Division) dated December 4, 2002, concerning this Salt Water Disposal well and the permit for this well.

We received your return receipt from Mr. Tom L. Jones, Hobbs, New Mexico, and will incorporate this into the Division's permit file.

It is unfortunate the Queen formation has naturally low permeability to water. Plugging of perforations with precipitated iron and scale caused by mixing of injection fluids is also common in Queen reservoirs as is some reduction of permeability due to migrating clays. It is possible that these Queen wells are poor candidates for water disposal and deeper, more permeable formations should instead be used. Please consult with Mr. Paul Kautz 505-393-6161 geologist in the Hobbs District Office when searching for alternative saltwater disposal formations in this area.

Please log on to the Division's web site at [www.emnrd.state.nm.us/ocd/](http://www.emnrd.state.nm.us/ocd/), click on "rulebook" and read sections 703.A, 704, and 705. Salt Water Disposal wells shall not be inactive for over one (1) year without isolating the injection formation with cement or a bridge plug. Moreover, the Division may require more comprehensive testing of the injection wells when deemed advisable.

Please replace the damaged joints of tubing as needed to remove any internal profile restrictions and restore the well to optimum injection status and maintain mechanical integrity.

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It is not required to run bottom hole pressure gauges during a step rate test UNLESS such gauges are necessary to interpret the test results. Normally injection wells in low permeable reservoirs and/or wells with narrow injection intervals do not require bottom hole gauges to aid in test interpretation.

The step rate test run on September 4, 2001, on the offsetting Queen saltwater disposal well - C.A. Taylor Well No. 1 API: 30-025-21276 – was easy to interpret from surface pressures alone. As a result of this test, the Division on October 9, 2002, raised the surface injection pressure allowable to 1,585psi.

As concerning the subject well, the currently permitted maximum surface injection pressure is 821psi. If additional pressure is needed, conduct a valid Step Rate Test on this well and submit it to this Division's Santa Fe office with a letter requesting increased injection pressure.

Sincerely,



William V Jones Jr. PE

cc: Oil Conservation Division-Hobbs  
Files: SWD-819, IPI 2002 #341