



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**

Governor

**Betty Rivera**

Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil Conservation Division**

Date: June 25, 2002

Mr. David Richardson  
Richardson Operating Company  
3100 La Plata Highway  
Farmington, NM 87401



**Ref: Administrative Application for Injection Pressure Increase**

This letter acknowledges the receipt of your administrative application dated June 6, 2002, for Injection Pressure Increase in the Navajo Tribal No. H-13 well located in Section 13, Township 29 North, Range 14 West, NMPM, San Juan County, New Mexico.

The application has been approved for an increase in pressure, but you have asked for an additional pressure allowable. In order to gain an additional increase in pressure based on this test, the Division will require the following certified calculations from an engineer and/or hydrologist:

- 1) Engineering calculations showing the effects of any desired pressure increase vertically in the well bore and horizontally away from the well bore.
  - a) Vertical effect calculations should include assumed or measured stresses and pore pressures in the injection formation and in surrounding rocks and the pressure necessary to fracture these surrounding rocks.
  - b) Horizontal effect calculations should include expected area of invasion of the injected water and expected shape of this area both now and for the expected life of the well. This should include a drawn plat showing the invasion area and all well bores which penetrate the depth of the injection zone.
- 2) A Hall plot from the life of this injection well and the electronic data used to generate this plot.
- 3) A list of ISIP's for acid and/or fracture treatments in this particular formation in this well and in other wells in the area.
- 4) A history of activity on this well including all workovers, treatments, and changes in tubing sizes.

Richardson Operating Company  
Navajo Tribal No. H-13  
June 25, 2002

The Division will re-consider your request for increased injection pressure allowable after receipt of this data. If you have any questions, please contact me in Santa Fe, at 505-476-3448.

Sincerely,

A handwritten signature in black ink, appearing to read "W. V. Jones Jr.", with a long horizontal flourish extending to the right.

William V Jones Jr. PE  
Oil Conservation Division – Santa Fe

Cc: Oil Conservation Division – Aztec /  
Bureau of Land Management -- Farmington