## New Mexico Energy, Minerals and Natural Resources Department

## Susana Martinez

Governor

Harrison H. Schmitt Cabinet Secretary-Designate J. Daniel Sanchez Acting Division Director Oil Conservation Division



January 12, 2011

Sam Brandon Yates Petroleum Corporation 105 South Fourth Street Artesia, NM 88210

RE: Lovelady SWD Well No. 1, 30-005-20474, SWD-294

Unit Letter J, Section 31, Township 8 South, Range 33 East, Chaves County, New Mexico

Dear Sir:

You have today requested on behalf of Yates Petroleum Corporation an exception to the packer setting depth requirement stated in permit SWD-294 for this disposal well. Your attached correspondence outlines reasons for the need for a higher allowed packer setting depth.

The proposed new packer seat is below the top of the San Andres formation and, we understand, that Yates owns the rights to all depths in this well. There does not seem to be the danger of waste caused by the proposed packer seat and correlative rights are protected.

Your new packer seat at any depth below 4100 feet is hereby approved.

Sincerely,

J. Daniel Sanchez Acting Director

cc:

Oil Conservation Division – Hobbs Files: API No. 30-005-20474, SWD-294

## Jones, William V., EMNRD

From:

Sam Brandon [sbrandon@yatespetroleum.com]

Sent:

Wednesday, January 12, 2011 3:41 PM

To:

Jones, William V., EMNRD

Subject:

Lovelady SWD #1

Will, we submit the following:

Yates Petroleum Corporation requests permission to continue injection into the subject well located in Sec. 31-8S-33E, Chaves County, NM with the packer set at 4127'. The well recently failed the MIT. We rigged up on it and found a hole in the first joint under the wellhead. The packer had been set at 4101' back in 2005 when we last worked on it.

Perforations are in the San Andres 4318-4366'. When we attempted to set the packer within 100' of the top perforation, we were unable to get the packer to set. We ran a bit and scraper down to the perfs and tried to set the packer again without success. A different type of packer was run, but again it would not set. A slightly larger packer was brought to location but would not go into the 5", 18# casing. Finally we ran the same type and size of packer that we had pulled from the well, set it at 4127' and tested the annulus successfully.

Yates Petroleum owns rights to the surface. We operate the Cola ADO State #2 in the NW/4 of the section. Two other wells are within a ½ mile radius of the subject well. Both wells are plugged and abandoned. The Tidewater State #1 was plugged in 1969. Production casing was cut at 4195' and a 25 sack cement plug was set across the stub. A 25 sack plug was set across the 8 5/8" shoe at 3657'. The other plugged well is YPC's Cola ADO State #1. It was plugged by setting a cement retainer at 3200' and pumping 50 sacks of Class C cement, squeezed to 1250 psi. 2500' of 4 ½" casing was pulled. A 60 sack cement plug was placed across the stub and 35 sack plug was set 440'-300'.

Formation tops reported by the original operator of the Lovelady well are:

T. Salt 1930'
B. Salt 2370'
T. Yates 2390'
T. San Andres 3584'
T. Glorieta 5020'
T. Abo 6495'
T. Cisco 9170'

There is cement to 3712'.

We are unsure of the reason for the packer not setting nearer to the top perfs. I suspect that the somewhat obsolete 5" 18# casing may be a factor. Packers are difficult to find for this well. There may be some casing roughness that prevents a good packer setting. The packer was set at 4230' in 1989 and apparently had not been moved until 2005. The packer was set at 4101' in 12/2005.

I believe that there is no danger to fresh water intervals due to the packer setting at 4127'. Cement behind the casing is to 3712' and the casing tests good above the packer.

Sam Brandon Area Engineer/Senior Production Engineer Yates Petroleum Corporation (575) 748-4281