

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

RECEIVED OGD  
2014 JUL 31 P 3:50

IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION DIVISION FOR  
THE PURPOSE OF CONSIDERING:

APPLICATION OF PARKER ENERGY SUPPORT  
SERVICES, INC. FOR AUTHORIZATION TO INJECT,  
LEA COUNTY, NEW MEXICO.

Case No. 15,180

PRE-HEARING STATEMENT

This pre-hearing statement is submitted by Cameron Oil and Gas, Inc. and Nordstrand Engineering, Inc. as required by the Oil Conservation Division.

**APPEARANCES**

APPLICANT

Parker Energy Support Services, Inc.

APPLICANT'S ATTORNEY

J. Scott Hall

OPPONENTS

Cameron Oil and Gas, Inc.  
P.O. Box 1456  
Roswell, New Mexico 88202

OPPONENTS' ATTORNEY -

James Bruce  
Post Office Box 1056  
Santa Fe, New Mexico 87504  
(505) 982-2043

Nordstrand Engineering, Inc.  
Suite 200  
3229 D'Amico Street  
Houston, Texas 77019

**STATEMENT OF THE CASE**

APPLICANT

Applicant seeks an order approving water disposal into the San Andres formation at depths of 4100-4320 and 4329-4675 feet subsurface in the Harry Leonard NCT Well No. 5, located 1200 feet from the north line and 990 feet from the east line of Section 24, Township 21 South, Range 36 East, NMPM.

## OPPONENTS

Cameron Oil and Gas, Inc. ("Cameron") and Nordstrand Engineering, Inc. ("Nordstrand") object to the application due to the potential adverse effect on the following wells:

1. Cameron's well:

Sunshine State Well No.2  
API No.30-25-21035  
Producing interval: 3734-3882 feet subsurface  
(Approximately 2234 feet from proposed SWD)  
990 feet FNL & 884 feet FEL  
Section 19, Township 21 South, Range 37 East, N.M.P.M.

2. Nordstrand's well:

Gulf Mattern A Well No. 1  
API No. 30-25-20271  
Producing interval: 3790-3798 feet subsurface  
(Approximately 2990 feet from proposed SWD)  
1650 feet FSL & 330 feet FEL  
Section 24, Township 21 South, Range 36 East, N.M.P.M.

Cameron and Nordstrand believe that the vertical separation (between top of the proposed disposal interval and the bottom of their producing intervals) of 218 (+) feet is minimal and could potentially allow for future horizontal migration and vertical communication, and have a detrimental impact on the producing horizon of its well.

Based on experience with OCD policy, wells within an Area of Review ("AOR") of a proposed injection well were considered to be 'safe' if the cement sheath on a long string (or whichever string is exposed to the approximate interval) was established to be at a height about 500 feet above the proposed injection zone. This rule-of-thumb was used as far back as 1982, the year that OCD received primacy for the Underground Injection Control program, granted by the EPA. It is not clear whether this policy is still being applied to current applications for injection in the state of New Mexico.

Cameron and Nordstrand's understanding for the reason this was considered a rule-of-thumb is simply due to the obvious fact that there are other parameters applied to individual wells within an AOR -- the simplest of being distance between the subject wells. For example, since New Mexico's AOR is based on a one-half mile radius, if an AOR well fell nearly on the one-half mile line (or 2640 feet) away from the subject well, a vertical difference of 350 feet *might* be considered adequate. Specifically, if the top proposed injection interval was 4500 feet, a reviewer would look to be near or above 4000 feet and in the example, or 4150 feet due to the distance. Again, this is a simplistic example. However, it illustrates that 500 feet is not a hard stipulation but may be adjusted for any number of reasons. Similarly, if an offset AOR well was only a few hundred feet from the proposed injector, the 500 foot (+) would probably be more

strongly considered or even increased, depending on other technical parameters and considerations.

Being fundamental to the industry, Cameron and Nordstrand understand that there are any number of technical aspects of formation characteristics and complexity that may be considered for more scientific discrimination between zones and the isolation of zones. However, Cameron and Nordstrand believe the 500 foot rule-of-thumb was utilized for good reason and with good results in protecting offset producing wells and the operators of those wells. This is exactly part of OCD's job -- to prevent waste and protect correlative rights. There are no qualifying factors of how much a well may or may not be producing to protect the production of hydrocarbons from that well.

The fact that Cameron and Nordstrand's wells are fairly low producers does not mitigate the fact that the Cameron just spent a significant sum (approximately \$57,000) to successfully repair the well in May of this year, and is only now beginning to see the well's production start to recover, and, while improving, it is not yet back to normal production rates.

Cameron and Nordstrand believe the burden should be on Parker to provide engineering, geological, and/or reservoir studies to confidently demonstrate that there will be a very low risk of any adverse effect on their wells or other AOR wells with the proposed disposal rates and increasing injection pressures which will eventually be realized.

Additionally, Cameron and Nordstrand believes that with the distance between the wellbores, even an additional 100 feet of depth added to the proposed SWD top of interval (to approximately 4200 feet) would greatly enhance the comfort level that the potential effect would be minimized to an acceptable level. Again, barring this compromise, Cameron and Nordstrand request that Parker be required to provide more substantial technical data which demonstrate that its current proposal adequately protects offsetting production. Cameron and Nordstrand believe that it is the responsibility of the OCD to insist that this be demonstrated to provide for the protection of correlative rights and operations of the offset effected parties.

## **PROPOSED EVIDENCE**

### APPLICANT

#### WITNESSES

#### EST. TIME

#### EXHIBITS

### OPPONENT

#### WITNESSES

#### EST. TIME

#### EXHIBITS

David Sweeney

20 min.

Approx. 5

**PROCEDURAL MATTERS**

Cameron and Nordstrand may request a continuance to provide them with extra time to prepare for hearing.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "James Bruce", is written over a horizontal line.

James Bruce

Post Office Box 1056

Santa Fe, New Mexico 87504

(505) 982-2043

Attorney for Cameron Oil and Gas, Inc. and  
Nordstrand Engineering, Inc.