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

APPLICATION OF NADEL AND GUSSMAN PERMIAN, L.L.C. FOR APPROVAL OF A UNIT AGREEMENT, CHAVES COUNTY, NEW MEXICO. **Case No. 14622**

AFFIDAVIT OF DAVID J. ANDREWS

STATE OF TEXAS)
) ss.
COUNTY OF Travis)

David J. Andrews, being first duly sworn on his oath, deposes and states:

1. I reside in Austin, Texas. I am an independent petroleum geologist employed by Nadel and Gussman Permian, L.L.C. ("NGP"), who is responsible for the formation of the proposed South Tobac Unit Area (the "Unit Area"), comprised of 1280.00 acres of State lands situated in Chaves County, New Mexico. The horizontal limits of the Unit Area are as follows:

Township 8 South, Range 33 East, N.M.P.M.
Section 28: W½
Section 29: All
Section 30: E½

2. Nadel and Gussman Permian, L.L.C., the designated Unit Operator in the Unit Agreement for the Development and Operation of the South Tobac Unit Area (the "Unit Agreement"), proposes the formation of the Unit Area to test all formations.

3. **Attachment 1** to this affidavit is a geologic justification for the Unit, with appropriate San Andres structure map included. The primary objective is the San Andres formation, with oil production possible.

4. The Unit Area covers an area that can be reasonably developed under a unit plan of development.

5. If the initial Unit well is successful, additional wells will be drilled in the Unit Area. Accordingly, approval of the Unit Agreement will result in the efficient recovery of hydrocarbons.

6. Approval of the Unit Agreement and the development of the Unit Area

Oil Conservation Division
Case No. 3
Exhibit No. 3

pursuant to a unit plan of development are in the best interests of conservation, the prevention of waste, and the protection of correlative rights.

David J. Andrews

STATE OF TEXAS)
) ss.
COUNTY OF Travis)

SUBSCRIBED AND SWORN TO before me on this 8th day of April, 2011 by David J. Andrews.

My Commission Expires: 2-3-15

Karissa Clontz
Notary Public

KARISSA CLONTZ NOTARY PUBLIC STATE OF TEXAS EXPIRES 02-03-15

South Tobac Unit Area Geological Summary:

The primary objective of the South Tobac Unit is the San Andres formation. In the South Tobac area, the San Andres is a relatively low permeability, vuggy, and sometimes fractured dolomitic reservoir. Producing fields in the area characteristically have higher than normal permeabilities, with the initial producing rates averaging approximately 20-40 barrels of oil per day, and the field margins are delineated by permeability pinchouts. The South Tobac Unit area has one producing San Andres well-the Nadel and Gussman Mohawk State #1, completed in August 2010-which has been averaging approximately 30-35 barrels of oil per day since completion. The lack of production decline due to pressure support that the well is exhibiting seems to indicate that there are additional locations within the field that can be economically drilled. Analysis of existing electrical logs in the field indicates a porosity/permeability pinchout to the west, north, and east of the Mohawk #1 as indicated on the structure map. The southern boundary of the field is unknown, but the downdip direction in the field is to the south, so it is probable that an additional permeability pinchout or an oil-water contact exists in this direction. Currently, the area within the proposed South Tobac Unit is thought to be within the producing permeable limits of the field and updip from the southern limit of the field.

Attachment 1