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December 22, 2006

HAND-DELIVERED

Mr. Pete Martinez
New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Re: Application of COG Operating LLC for Preliminary Approval of an Amendment to the Grayburg-Jackson West Cooperative Unit Agreement, Eddy County, New Mexico

Dear Mr. Martinez:

On behalf of COG Operating LLC ("COG"), we request the preliminary approval of an amendment to the terms of the Grayburg-Jackson West Cooperative Unit Agreement to extend the vertical limits of the unitized formation to include all formations from the top of the Seven Rivers formation to the top of the Abo formation

The Unit Area for the Grayburg-Jackson West Cooperative Unit is comprised of approximately 2,400 acres of State of New Mexico and fee lands located in Eddy County, New Mexico, more particularly described as follows:

Township 17 South, Range 29 East, NMPM

Section 15: W1/2SW1/4

Section 16: All

Section 21: All

Section 22: W1/2W1/2, E1/2NW1/4,
NE1/4SW1/4, NW1/4NE1/4

Section 27: W1/2SW1/4

Section 28: All

NMOCD CASE NO. 13848
JANUARY 4, 2007
COG OPERATING LLC
EXHIBIT NO. 5

ALBUQUERQUE
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The Grayburg-Jackson West Cooperative Unit Agreement was originally approved by the Oil Conservation Commission on October 4, 1966 by Order No. R-3127 which was subsequently amended on March 4, 1968 by Order No. R-3127-A to include an additional 300 acres. The Unit, as approved, was formed for the purposes of conducting primary and secondary recovery operations in the Unit Area. The original Unit Agreement was approved by the Commissioner of Public Lands on September 28, 1966 and the Amended Unit Agreement which expanded the Unit to include additional lands was subsequently approved by the Commissioner on March 8, 1968.

On June 13, 2006, the Oil Conservation Division entered Order No. R-3127-B in Case No. 13609 which approved, *inter alia*, the Second Amendment to the Unit Agreement extending the vertical limits of the Initial Unitized Formation and the Grayburg-Jackson Pool to include all formations from the top of the Seven Rivers formation to the base of the Glorieta-Yeso (Paddock) formation, being those depths from 1116' to 4636' below the Kelly Bushing as shown on the Schlumberger log of the Diamondbacks State No. 1 Well located 2040' FNL and 2140' FEL of Section 28, T17S, R29E, Eddy County, New Mexico (the "Unitized Formation, Second Amendment"). The horizontal boundaries of the Unit remained unchanged. On September 27, 2006, the Commissioner of Public Lands issued final approval of the Second Amendment of the Unit Agreement.

By the Third Amendment, COG proposes to extend the vertical limits of the Unitized formation to the top of the Abo formation to include the Blinebry formation. A copy of the proposed Third Amendment To Grayburg-Jackson West Cooperative Unit Agreement is enclosed. (Ex. 1)

Both primary and secondary recovery operations by means of a waterflood are being conducted in certain intervals of the Unitized Formation as currently defined. COG proposes initially to conduct primary operations in the expanded intervals of the Unitized Formation and anticipates that secondary recovery operations may be implemented at a subsequent date as circumstances may warrant. As Unit Operator, COG currently has the authority to implement primary and secondary recovery operations in this manner pursuant to Article III B of the Unit Agreement. A Geological and Engineering Report describing the proposed operations is enclosed as Exhibit 2.

Unit operations are currently being conducted through 110 wells, 10 of which are injectors. A list of Unit Wells currently being utilized for production and injection operations is enclosed as Exhibit 3. As was previously reported to the State Land Office, it was recently determined that five unit wells were completed in the Paddock and Blinebry intervals of the Yeso formation as well as the Grayburg-San Andres formation and that four wells were completed solely in the Blinebry and Paddock intervals of the Yeso formation. These nine wells that were producing from the Blinebry formation were shut-in on September 6, 2006. Expansion of the Unitized Formation to include the

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Blinbery formation will allow these nine shut-in wells to resume production. Further, there will be no need to redesignate well names for these shut-in wells or to terminate any communitization agreements.

The majority of the Unit Area and the proposed expansion of the Unitized Formation is currently within the vertical limits and portions of the horizontal boundaries of the Grayburg Jackson San Andres Pool and the East Empire Yeso-Pool. By way of separate application to the New Mexico Oil Conservation Division, COG is seeking the expansion of the horizontal boundaries and vertical limits of the Grayburg-Jackson San Andres Pool and the contraction of the East Empire-Yeso Pool so that the pool boundaries and Unitized Formation will encompass a single common source of supply, thus obviating any problems associated with commingling.

As under the current Unit Agreement, Unitized Substances will be allocated on a surface acreage basis. Working interest and mineral interest ownership in the currently defined Unitized Formation and the proposed expanded intervals is identical. Identification of the current owners and lessees of record is reflected in the attached Exhibit 4.

The Application of unit operations to the expanded Unitized Formation will result with reasonable probability in the increased recovery of substantially more oil and/or gas from the unitized area than would otherwise be recovered. As is explained in further detail in the enclosed Geological and Engineering Report (Exhibit 3), it is estimated that the application of unit operations to the expanded unitized intervals will result in the ultimate recovery of additional incremental reserves of 1.7 to 2.4 MMBO and 7,800 to 10,700 MMCFG.

Expansion of the Unitized Formation to include the additional depths will also benefit the working interest owners and the royalty owners in the Unit Area.

Approval of the proposed Third Amendment to the Grayburg-Jackson West Cooperative Unit Agreement is in the best interests of unit working interest owners and the State lands trust beneficiaries.

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Enclosed is our check for \$180.00 for the filing fee for this application. Should you require additional information or materials, please do not hesitate to contact me.

Respectfully submitted,



J. Scott Hall

MILLER STRATVERT P.A.
Attorneys for COG Operating, LLC

cc: Brent Robertson, COG LLC w/o Encl.

JSH/glb

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