

Catanach, David, EMNRD

From: Tom Kellahin [tkellahin@comcast.net]
Sent: Wednesday, January 10, 2007 2:42 PM
To: Catanach, David, EMNRD
Subject: OCD Case 13848 (Concho)
Attachments: Concho-Draft Order CL 4 (3)1.10.07.doc; COG_BLINEBRY_SHUTIN_WELLS_1-8-07.xls

David:

Attached are (1) a proposed draft order and (2) a list of the shut-in Blinebry wells that you requested at the conclusion of the hearing on January 4, 2007. Please call me if I can be of assistance or if you need anything further.

Regards, Tom

1/29/2007

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

**CASE NO. 13848
ORDER NO R-3127-C**

**IN THE MATTER OF THE APPLICATION OF COG OPERATING LLC
FOR THE APPROVAL OF THE THIRD AMENDMENT OF THE
GRAYBURG-JACKSON WEST COOPERATIVE UNIT AGREEMENT
EXTENDING THE VERTICAL LIMITS OF THE UNITIZED FORMATION
TO INCLUDE THE BLINEBRY, TUBB AND DRINKARD INTERVALS
OF THE YESO FORMATION, TO AMEND ORDER NO. R-3127-B TO
CORRECT CERTAIN FINDINGS AND TO INCLUDE COMMINGLED
PRODUCTION AND FOR EXTENSION OF THE GRAYBURG JACKSON
SEVEN RIVERS-QUEEN-GRAYBURG-SAN ANDRES-GLORIETA-YESO
(Paddock) POOL TO INCLUDE THE BLINEBRY, TUBB AND DRINKARD
INTERVALS OF THE YESO FORMATION,
EDDY COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on January 4, 2007, at Santa Fe, New Mexico, before Examiner, David R Catanach.

NOW, on this __th day of January 2007, the Division Director, having considered the testimony, the record and the recommendations of the Examiner:

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

Parties:

(2) The following parties entered their appearances at the hearing: (a) COG Oil & Gas LP and its sole General Partner, COG Operating LLC, as wholly owned subsidiaries of Concho Resources Inc., collectively referred to herein as "Concho," with COG Operating LLC being the applicant, and (b) Devon Energy Production Company, L.P., by counsel, an operator within ½ mile of the Unit's outer boundary.

Unit Area:

(3) Applicant, COG Operating LLC ("COG") is the Operator of the Grayburg-Jackson West Cooperative Unit (the "Unit"), that 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 (the "Unit Area"):

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

(4) 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 unitized formation under the Unit Agreement as originally described was that portion of the Grayburg San-Andres formation encountered between the depths of 2,200' and 3,600' underlying the Unit Area ("Initial Unitized Formation").

(5) The Unit was acquired along with other properties from Chase Oil Corporation and its affiliates ("Chase") on February 27, 2006 by COG Oil & Gas LP, a Texas limited partnership ("COG LP"), of which COG is the sole General Partner. COG became the record Operator of the Unit effective March 1, 2006, as successor to Mack Energy Corporation ("Mack Energy").

Background:

(6) On November 15, 2005, application was made by Mack Energy on behalf of Chase to the Division for approval to, *inter alia*, expand the vertical limits of the Initial Unitized Formation. Under the application, Mack Energy proposed that the expanded vertical limits of the Initial Unitized Formation would extend from the top of the Seven Rivers formation to the

base of the Glorieta-Yeso (Paddock) formation, being those depths from 1,116' to 4,636' below the Kelly Bushing, as shown on the Schlumberger log of the Diamondbacks State No. 1 Well located 2,040' FNL and 2,140' FEL of Section 28, T17S, R29E, Eddy County, New Mexico. Under the expansion then proposed, the horizontal boundaries of the Unit would remain unchanged. To accomplish the vertical expansion of the Unitized Formation, a companion application was filed with the NMOCD as Case 13608 to eliminate the East Empire Yeso Pool from three sections within the Unit Area and to simultaneously extend the vertical limits of the Grayburg Jackson (Seven Rivers-Queen-Grayburg-San Andres) pool to include the Glorieta-Yeso (Paddock) formation in those three sections and throughout the remainder of the Unit Area. To support the relief requested in both applications, Mack Energy, as the Unit Operator at the time, proposed to operate the expanded vertical extent of the Unitized Formation and the extended Grayburg Jackson Pool as a single common source of supply throughout the area.

(7) Hearings on the two applications filed with the Division were originally scheduled for December 15, 2005, but were continued at Mack Energy's request.

(8) On February 27, 2006, COG LP acquired the Unit from Chase. Operations of the Unit were assumed by COG, the General Partner of COG LP; however, Mack Energy was designated under a contract operating agreement with COG and COG LP to operate the Unit for COG and COG LP. Mack Energy is not an affiliate of Concho.

Prior Order:

(9) Order R-3127-B was issued as a result of the Division's Examiner hearing held on April 13, 2006 in Case No. 13608, which was consolidated with Case 13609. Based on witness testimony at the April 13, 2006 hearing, the Division entered *inter alia* Finding 10(b) of order R-3127-B which stated "The Yeso/Paddock interval has not been tested or developed within the Unit Area. However, Mack expects that interval will be productive." The Division also entered Finding (12) of such order, stating in part that "There has been no development of that interval in the Unit Area...." referring to the Yeso (Paddock) interval.

(10) The witness testimony and the Findings quoted above are inaccurate, as the Division now finds that from 1984 through 1997, prior operators had drilled, tested, developed and produced the Yeso/Paddock and Yeso/Blinbry intervals within the Unit Area, and that production therefrom continues today. Further, production history and reserve potential of wells that were the subject of testimony during the April 13, 2006 hearing appear to have been inaccurate, inasmuch as Unit production was reported as Grayburg-Jackson San Andres production only, when in fact it was Yeso (Paddock) production or commingled Grayburg-Jackson San Andres, Yeso (Paddock) and/or Yeso (Blinbry) production.

(11) On June 13, 2006, the Division entered Order No. R-3127-B in Case No. 13609 which approved, *inter alia*, the extension of 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 1,116' to 4,636' below the Kelly Bushing as shown on the Schlumberger log of the Diamondbacks State

No. 1 Well located 2,040' FNL and 2,140' FEL of Section 28, T17S, R29E, Eddy County, New Mexico (the "Expanded Unitized Interval"). The horizontal boundaries of the Unit remained unchanged.

(12) On September 27, 2006, the Commissioner of Public Lands issued final approval of the Second Amendment of the Unit Agreement expanding the Initial Unitized Formation within the Unit Area to be and include the Expanded Unitized Interval.

Unit's Problems:

(13) Concho discovered and voluntarily disclosed to the Division and the SLO that, prior to the entry of Division Order R-3127-B, the following activities were done in apparent violation of Division's rules and regulations:

- (a) forty-seven wells were perforated and completed in the Paddock interval of the Yeso formation as well as the Grayburg-San Andres formation;
- (b) twelve wells were perforated and completed solely in the Paddock interval of the Yeso formation;
- (c) five wells were perforated and completed in the Paddock and Blinebry intervals of the Yeso formation as well as the Grayburg-San Andres formation;
- (d) four wells were perforated and completed solely in the Blinebry and Paddock intervals of the Yeso formation;
- (e) production was commingled from these formations downhole and at the surface;
- (f) production from these wellbores was incorrectly reported solely as Unit production, when production actually came from the Initial Unitized Formation and lower formations, including the Expanded Unitized Interval;
- (g) various reports indicating that the completion, perforated and producing intervals as being solely within the Initial Unitized Formation were filed with the Division, were incorrect; and
- (h) the deepening of certain wells was done without Division approval.

In addition, Concho discovered and voluntarily disclosed to the Division and the SLO that the reporting and payment of royalty attributable to the Unit and due to the State of New Mexico was incorrect as a result of the above circumstances.

Commingling:

(14) Concho's petroleum engineer demonstrated that it is impractical to correct the commingled production reporting because the production was not independently measured from each formation or interval before it was commingled. Concho does not have sufficient data to provide an accurate estimate of past production by separate formation or interval.

(15) Concho's petroleum engineer submitted evidence that demonstrated that:

- (a) there has been no reservoir damage, no crossflow, no increased or abnormal scaling, nor any decrease in value or recovery of hydrocarbons by the prior commingling of fluids among the Grayburg-Jackson Pool and the Glorieta-Yeso Pool, and no such circumstances were reasonably expected to arise from the commingling of such fluids in the future; and
- (b) there will be no waste of hydrocarbons if future production attributable to the Expanded Unitized Interval and formations down to the top of the Abo formation is or continues to be commingled.

State Land Office:

(16) In order to cure any violation of correlative rights, Mack Energy, the previous operator of the Unit, Concho and the New Mexico State Land Office ("SLO") agreed upon a methodology to establish the value of the royalty underpayment due the State of New Mexico resulting from prior misreporting and commingling of Unit and non-Unit production. The sum of \$615,444.30, including interest, has been paid to the SLO by Mack Energy, and the parties have entered into a Settlement Agreement to confirm the satisfaction of such underpayment.

Preliminary Approval:

(17) By letter dated December 22, 2006, Concho applied to the SLO for preliminary approval to extend the vertical limits of the Unit to include the Blinebry, Tubb and Drinkard intervals of the Yeso Formation. By letter dated January 4, 2007, the SLO granted such preliminary approval.

(18) Concho has already taken action to correct the past reporting inaccuracies by filing on September 14, 2006, amended forms C-103, C-104 and C-105 for the wells concerned. In addition, nine wells within the Unit Area producing from the Yeso (Blinebry) formation were shut-in on September 6, 2006, voluntarily by Concho, and forms C-103 for those wells were among the records delivered to the Division on September 14, 2006.

Requested Relief:

(19) By its Application, Concho seeks to:

- (a) obtain (1) the correction of Findings (10)(b) and (12) of Order R-3127-B to reflect that Unit wellbores had been drilled into and produced from both the Paddock and the Blinebry intervals of the Yeso formation, and that such intervals had been developed and produced, prior to the entry of Order R-3127-B; and (2) the Division's affirmation of the effectiveness of Order R-3127-B on the basis of such correction, its Application and related hearing evidence;

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- (b) expand the vertical limits of the confirmed Expanded Unitized Interval to the top of the Abo formation, thereby including the Blinebry, Tubb and Drinkard intervals of the Yeso formation within the unitized formation;
 - (c) obtain approval for past production attributable to the subject wells and the various pools within and below the Expanded Unitized Interval that, instead of being allocated and reported for each pool, was commingled and reported solely as Unit production; and
 - (d) obtain the expansion of the vertical limits of the Grayburg-Jackson San Andres Pool (28509) to include the Blinebry, Tubb and Drinkard intervals of the Yeso formation to the Unit Area, so that all intervals may be administered and operated as a single common source of supply.

Prevention of Waste and Protection of Correlative Rights:

- (20) Concho presented geologic and engineering evidence demonstrating that:
 - (a) the Grayburg Jackson Pool is productive throughout the Unit Area;
 - (b) the Yeso/Paddock interval and the Yeso/Blinebry interval have been tested and found to be productive within the Unit Area;
 - (c) the Yeso/Drinkard interval is possibly productive within the Unit Area;
 - (d) the Grayburg-Jackson Pool and the Glorieta Yeso Pool within the Unit Area would be most efficiently managed as a single common source of supply;
 - (e) the requested extension will result, with reasonable probability, in the increased recovery of substantially more oil and/or gas from the Unit Area than would otherwise be recovered;
 - (f) there is no need to require that commingling of production from the Expanded Unitized Interval be approved by the Division pursuant to Rule 303 (Form C-107-A); and
 - (g) approval of the Third Amendment will allow economic recovery of oil and gas reserves attributable to the Yeso formation that may otherwise not be recovered, thereby preventing waste, and will not impair correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of COG for approval of the Third Amendment to the Unit Agreement for the Grayburg-Jackson West Cooperative Unit (the "Third Amendment"), 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 is granted.

(2) All provisions of Order No. R-3127-B and any other hearing or administrative orders of the Division authorizing operations within the Grayburg-Jackson West Cooperative

Unit, Eddy County, New Mexico, are hereby amended to conform to the findings, conclusions and declaratory provisions of this order (Order R-3127-C); and the effectiveness of Order No. R-3127-B, as so conformed and amended, is hereby affirmed.

(3) The unitized interval of the Grayburg-Jackson West Cooperative Unit is hereby extended to include all formations from the top of the Seven Rivers to the top of the Abo formation, being the geological equivalent of those depths from 1,121 feet to 6,037 feet below the Kelly Bushing as shown on the Halliburton Dual Spaced Neutron Spectral Density Spectral Gamma Log of the G-J West Coop Unit No. 140 Well, located 1,700 feet from the South line and 1,980 feet from the West line of Section 21, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico.

(4) Past production attributable to the subject wells and the various pools within and below the Expanded Unitized Interval which, instead of being allocated and reported for each pool, was commingled and reported solely as Unit production is hereby approved.

(5) The expansion of the vertical limits of the Grayburg-Jackson San Andres Pool (28509) to include the Blinebry, Tubb and Drinkard intervals of the Yeso formation to the Unit Area, so that all intervals may be administered and operated as a single common source of supply, is hereby approved.

(6) The Applicant is authorized to immediately commence producing any well producing from the Yeso/Blinebry interval and that was shut-in pending the entry of an order in this matter.

(7) Jurisdiction of this case is retained for the entry of such further orders, as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.
Director

SEAL

COG OPERATING LLC
GJ WEST COOP UNIT
EDDY COUNTY, NM

LIST OF UNIT WELLS THAT CONTAIN PERFORATIONS DEEPER THAN CURRENT APPROVED UNITIZED INTERVAL
(i.e. Blinbry producers)

API NUMBER	UNIT WELL NAME	NM_TWNSHIP	NM_RNG	NM_SEC	NM FOOTAGE	CURRENT STATUS
30015030360000	GJ West Coop #26	17S	29E	22	330 FSL 990 FWL	SHUT-IN
30015031690000	GJ West Coop #16	17S	29E	28	1650 FNL 330 FEL	SHUT-IN
30015031700000	GJ West Coop #7	17S	29E	28	2310 FSL 330 FEL	SHUT-IN
30015201920001	GJ West Coop #108	17S	29E	28	1980 FNL 660 FWL	SHUT-IN
30015203510001	GJ West Coop #123	17S	29E	21	660 FSL 660 FEL	SHUT-IN
30015208440000	GJ West Coop #124	17S	29E	28	1980 FSL 1980 FWL	SHUT-IN
30015273600000	GJ West Coop #115	17S	29E	21	990 FNL 990 FWL	SHUT-IN
30015273620000	GJ West Coop #117	17S	29E	21	380 FNL 1650 FWL	SHUT-IN
30015273770000	GJ West Coop #107	17S	29E	21	1650 FSL 330 FWL	SHUT-IN