

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Pecos District
Carlsbad Field Office
620 E. Greene

Carlsbad, New Mexico 88220-6292 www.blm.gov/nm/st/en.html



IN REPLY REFER TO: NM 88525X 3180-1 (P0220)

Your Reference:

Case No. 14558: Application of Marbob Energy Corporation to Expand the Vertical Limits of the Burch-Keely Unit, Eddy County, New Mexico.

OCT 0.5 2010

Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
Attention: Mark E. Fesmire, P.E., Director
1220 South Saint Francis Drive
Santa Fe, NM 87505

Dear Mr. Fesmire:

Pursuant to a meeting (August 26, 2010) in the Bureau of Land Management Carlsbad Field Office with Marbob Energy Corporation, the BLM concurs with Marbob Energy Corporation that the vertical depth for the Burch-Keely Unit should extend to a depth of 5000 feet. This will enable Marbob Energy Corporation to capture incremental Blinebry and Paddock reserves that are commonly owned and will be shared by the Working Interest Owners within the Unit.

Please contact Wesley Ingram, Supervisory Petroleum Engineer at 575-234-5982 if you have any questions.

Sincerely,

/s/ Don Peterson

Don Peterson Assistant Field Manager Lands and Minerals

cc: Marbob Energy Corporation

bcc: Concho Resources



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Pecos District Carlsbad Field Office 620 E. Greene Carlsbad, New Mexico 88220-6292



NMNM-88525X 3180 (P0220)

www.blm.gov/nm

MAK 1 / ZOTT

Your Reference: NMNM-88525X Burch Keely Unit Application for the vertical expansion of the Burch Keely Unit Eddy County, New Mexico

MAR 1 0 2011

CERTIFIED—RETURN RECEIPT REQUESTED 7008 3230 0002 0987 4991

COG Operating LLC 550 West Texas Ave, Suite 100 Midland, Texas 79701

Gentlemen:

Your application dated February 8, 2011, requesting approval to amend the Unitized Formation of the Burch Keely Unit to comprise that interval underlying the Unit Area from the top of the Seven Rivers formation to a true vertical depth of 5,000 feet below the surface is hereby approved and is effective January 31, 2011, pursuant to Section 4 of the Burch Keely Unit Agreement, Eddy County, New Mexico.

The Authorized Officer concurs with the approval of your application by NMOCD Order No. R-7900-C and approval to the expansion of the vertical limits of the Grayburg-Jackson-Seven Rivers-Queen-Grayburg-San Andres Pool (Pool Code 28509) within the horizontal boundaries of the Burch Keely Unit Order No. R-10067-B. The pool and unit area are comprised of the following lands:

Township 17 South, Range 29 East, NMPM

Section 12:

SE/4 SE/4

Section 13:

All

Section 23 through 26:

All

Township 23 South, Range 30 East, NMPM

Section 18 and 19:

All

Section 30:

All

Copies of this approval letter are being distributed to the appropriate Federal agencies and one copy is returned herewith. If necessary, provide an updated Exhibit B of Unit Agreement. Please advise all interested parties of the vertical expansion of the Unitized Formation of the Burch Keely Unit, NM-88525X and the effective date of January 31, 2011. Please provide

If you need assistance or clarification, please contact the Office of Natural Resource Revenue at 1-800-525-9167 or 303-231-3504.

Sincerely,

Don Peterson

Assistant Field Manager, Lands and Minerals

Enclosure

cc: Commissioner of Public Lands
ONRR, Denver (MS357B-1)
New Mexico Taxation & Revenue Dept.
Revenue Processing Division
NMOCD
NM9210
NMP0220,(CFO I&E)

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

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

CASE NO. 14577 ORDER NO. R-10067-B

APPLICATION OF COG OPERATING, LLC
FOR A VERTICAL EXTENSION OF THE
GRAYBURG-JACKSON (SEVEN RIVERSQUEEN-GRAYBURG-SAN ANDRES: POOL
TO CORRESPOND WITH THE UNITIZED
FORMATION OF THE BURCH KEELY UNIT.
EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8.15 a m. on January 6, 2011, or Santa Fe. New Mexico, before Examiner David K. Brooks.

NOW on this 1st day of February, 2011, the Division Director, having considered the restimony the record and the recommendations of the Examiner.

FINDS THAT:

- 1. Due notice has been given, and the Division has jurisdiction of the subject matter of this case.
- (2) COC Operating LLC C Applicant ") seeks expansion of the vertical of its of the Grayburg Jackson-Seven Rivers-Queet-Grayburg San Andres Pool Pool Code 28500] the "Con burg Lees in Pool" a refuse for use small be a forms of the Book Keely Unit.
- Burshing to Order No. RestOpe 7 the vertical limits of this poor within the street Keely Entrangence in the top of the Society Research and 500 performance for the top of the Padd of Parada and Approximating a social the formation of the notation concludes a sequence of the second of the second

(4) The Burch Keety Unit is a statutory unit that was established by Order No-R-7900-A, issued in Case No. 10810 on October 28, 1993. The horizontal boundaries of the Burch Keety Unit, which Applicant does not propose to change comprise the following federal lands in Eddy County, New Mexico:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM

Section 12:

SE/4 SE/4

Section 13.

 ΔH

Sections 23 through 26:

All

TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM

Sections 18 and 19:

 $-\Lambda H$

Section 30:

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- (5) This case is closely related to Case No. 14558, in which Marbob Energy Corporation, predecessor in title to Applicant, sought vertical expansion of the Burch Keely unit so as to establish the lower firmt of the "Unitized Formation" at 5,000 feet below the surface
- (6) In Order No. R 7900-C, issued on January 31, 2011, the Division granted the Application of Marbob in Case No. 14558. The Division's findings set forth in Order No. R-7900-C are incorporated herein by reference
- (7) At the hearing in this case, Applicant appeared through counsel and presented land and geologic testimory
- (8) Applicant's geologic witness testified *inter-alia* that the Blinebry formation which lies below the Paddock in the depth interval below the present base of the Grayburg-Jackson Pool and the proposed base is a portion of the Yeso Formation, and "is all the same statigraphic rock" as the ornations now included in the Grayburg-Jackson Pool. He further testified that other pools in the vicinity include the formations both above and below the present base of the Grayburg-Jackson Pool
- (9) ConocoPhiltips Company, the operator of the Grayburg Deep Pool which encorpasses this area below the 5,000-foot boundary, appeared at the nearing through counsel, but did not present any testimony nor articulate any objection to the granting of this Application.

The Dry ston concludes that

(10) Graming this Application will prevent waste and will not three correlative rights

IT IS THERLEORE ORDERED THAT:

- (1) The vertical boundaries of the Grayburg Jackson Serieu Revers- juger Grayburg San Andres Pool (Pool Code 2850), only within the horizontal limits of the Burch Keely Unit as specifically described in Finding Paragraph (4) or this Order, are hereby expanded to coincide with the lower vertical limits of the "Unitized Formation" of the Burch Keely Unit as amended by Order No. R 7000-C. Issued in Case No. (4558) in January 31, 2011.
- (2) Accordingly the base of the Grayburg-Jackson Poct within the horizontal limits of the Burch Keely Unit is hereby established as a lepth of 5,000 feet below the surface throughout the Burch Keely Unit
- (3) Jurisdiction of this case is retained for the entry of stell further orders as the Division may deem necessary

DONE of Santa Fe. New Mester: on the day and year heremahove designated.

STATE OF NEW MENICO OIL CONSERVATION DIVISION

DANIEL SANCHEZ Acting Director

SEAL

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

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

CASE NO. 14558 ORDER NO. R-7900-C

APPLICATION OF MARBOB ENERGY CORPORATION FOR A VERTICAL EXPANSION OF THE BURCH KEELY UNIT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on October 28, 2010, at Santa Fe, New Mexico, before Examiner David K. Brooks.

NOW, on this 31st day of January, 2011, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

- (1) Due notice has been given, and the Division has jurisdiction of the subject matter of this case.
- (2) Marbob Energy Corporation on behalf of its successor in title, COG Operating, LLC, ("Applicant" or "COG), seeks expansion of the vertical limits of the Burch Keely Unit, a statutory unit established by the Division in Order No. R-7900-A, issued in Case No. 10810 on October 28, 1993.
- (3) The horizontal boundaries of the Burch Keely Unit, which Applicant does not propose to change, comprise the following federal lands in Eddy County, New Mexico:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM

Section 12:

SE/4 SE/4

Section 13:

All

Sections 23 through 26:

All

TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM

Sections 18 and 19:

All

Section 30:

All

- (4) The vertical limits or "Unitized Formation" of the Burch Keely Unit is defined in Order No. R-7900-A as "that interval from the top of the Seven Rivers formation to the base of the San Andres formation (which corresponds with the vertical limits of the Grayburg-Jackson Pool) or to a vertical depth of 5,000 feet below the surface, whichever is <u>lesser</u>.
- (5) Operator, with the concurrence of the United States Bureau of Land Management (BLM), on March 11, 1994, expanded the vertical limits of the Burch Keely Unit "to include the top 500 feet of the Paddock formation." The Division apparently never expressly approved this expansion. However, in Order No. R-10067, issued in Case No. 10903 on February 22, 1994, the Division expanded the vertical boundaries of the Grayburg-Jackson Pool to include the top 500 feet of the Paddock formation "within the designated Burch Keely Unit Area."
- (6) Applicant now seeks to extend the vertical limits of the Burch Keely Unit to a depth of 5,000 feet below the surface throughout the Unit Area.
- (7) At the hearing, Applicant appeared through counsel and presented land, geologic and engineering testimony and exhibits, as follows:
 - (a) COG is now the sole working interest owner in the Burch Keely Unit, and in the depth interval proposed to be added in this application. The United States of America is the sole royalty interest owner. The BLM has approved the proposed expansion.
 - (b) There are numerous overriding royalty interests that apply to different tracts within the Unit Area. However, there are no differences in overriding royalty ownership between the Unit Area as presently defined and the proposed expansion.
 - (c) In this area, the Paddock formation immediately underlies the San Andres formation, the base of which was the original base of the Unitized Formation. The Paddock is mostly contained in the 500 feet immediately below the top of the Paddock.
 - (d) The depth interval between the base of the Paddock and 5,000 feet below surface is part of the Blinebry formation, and is prospective for oil development with the assistance of modern fracture stimulation technology.
 - (e) The 5,000-foot depth is an ownership boundary and not a geologic boundary, being the top of the unitized interval in the Grayburg Deep Unit.

- (f) The Blinebry section between the present depth boundary (500 feet below the top of the Paddock) and 5,000 feet below the surface varies in thickness from 260 feet on the west side of the Unit Area to 550 feet or more on the east side.
- (g) It would not be economic to develop this interval by drilling stand alone wells. Development by unit wells is expected to result in production of an additional 5,000 barrels of oil that would not otherwise be economic to produce.

- (h) All owners of interest in the Burch Keely Unit and the proposed expansion interval, and all offsetting operators, were duly notified of this application and of the hearing.
- 8. ConocoPhillips Company (ConocoPhillips), operator of the Grayburg Deep Unit, appeared through counsel in opposition to the application, arguing that expansion of the Burch Keely Unit to the 5,000 foot depth could adversely impact its correlative rights. However, CononcoPhillips presented no evidence.

The Division concludes that:

- 9. Expansion of the Unitized Formation of the Burch Keely Unit to include depths down to 5,000 feet below the surface throughout the Unit Area will facilitate the production of additional oil that might not otherwise be produced, thereby preventing waste.
- 10. It cannot be concluded that granting this application will adversely affect correlative rights because:
 - a. drainage across the 5,000-foot vertical boundary could occur in either direction, and nothing in this record demonstrates that net, uncompensated drainage would occur;
 - b. Denial of unit expansion would not necessarily prevent completion of wells in the depth interval immediately above the 5,000-foot boundary; and
 - c. Establishment of a buffer zone above the 5,000-foot boundary, even if denial of the unit expansion were to have that effect, would not protect correlative rights, since no buffer exists below the 5,000-foot boundary.
- 11. To the extent that COG, as sole working interest owner in the Burch Keely Unit, has the right, with BLM approval, to bind overriding royalty interests by its dedication of the leasehold interests in the proposed expansion interval to the Unit, no exercise of the Division's powers under the Statutory Unitization Act [NMSA 1978 Section 70-7-1 through 70-7-21] is required to approve this unit expansion. Accordingly, the Division need not make the findings nor apply the procedures, mandated by that Act.

IT IS THEREFORE ORDERED THAT:

- (1) The Application of Marbob Energy Corporation, on behalf of COG Operating, LLC, is granted, amending the Unitized Formation of the Burch Keely Unit to comprise that interval underlying the Unit Area from the top of the Seven Rivers formation to a true vertical depth of 5,000 feet below the surface.
- (2) In all other respects, except as amended hereby, Orders R-7900, R7900-A and R7900-B shall remain in full force and effect.
- (3) 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 hereinabove designated.

Dan

DANIEL SANCHEZ

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

Acting Director



Ocean Munds-Dry omundsdry@hollandhart.com

September 14, 2010

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

TO AFFECTED INTEREST OWNERS

Re: Application of Marbob Energy Corporation for vertical expansion of the Burch Keely Unit, Eddy Couty, New Mexico.

This letter is to advise you that Marbob Energy Corporation has filed the enclosed application with the New Mexico Oil Conservation Division seeking an order amending Division Order No. R-7900-A to vertically expand the Unitized Formation in the Burch Keely Unit Area, Eddy County, New Mexico.

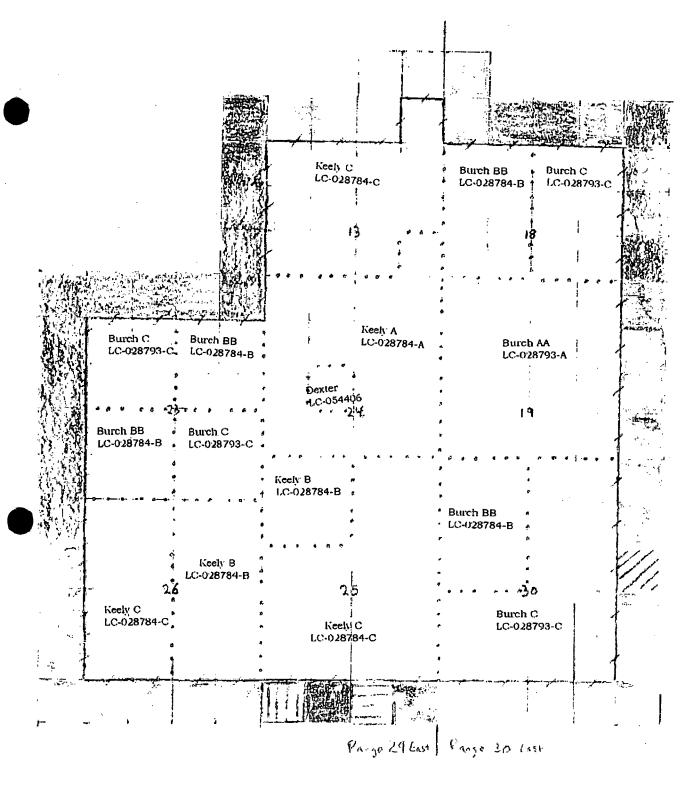
This application has been set for hearing before a Division Examiner at 8:15 a.m. on October 14, 2010. The hearing will be held in Porter Hall in the Oil Conservation Division's Santa Fe Offices located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Parties appearing in cases are required by Division Rule 1208.B to file a Pre-hearing Statement four days in advance of a scheduled hearing. This statement must be filed at the Division's Santa Fe office at the above specified address and should include: the names of the parties and their attorneys; a concise statement of the case; the names of all witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and identification of any procedural matters that are to be resolved prior to the hearing.

Sincerely,

Ocean Munds-Dry

ATTORNEY FOR MARBOB ENERGY CORP.



COG Operating

Marbob Energy Corp

Tandem Energy Corp

Pioneer Natrual Resources USA Inc.

CBS Operating Corporation

Burnett Oil Co. Inc

Southern Bay Energy LLC

Southwest Royalties Inc.

Lobos Energy Partners

ConocPhillips Company

Anadarko Prod Corp Case No. 14558 EOG Resources Inc Hunt Oil Co

Marbob/Concho Exh 7