

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

**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
De Novo**

**APPLICATION OF MARBOB ENERGY CORPORATION
(NOW COG OPERATING LLC) FOR VERTICAL
EXPANSION OF THE BURCH-KEELY UNIT,
EDDY COUNTY, NEW MEXICO**

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

**Case No. 14577
Order No. R-10,067-B
DeNovo**

**APPLICATION OF COG OPERATING, LLC FOR
VERTICAL EXPANSION OF THE GRAYBURG-
JACKSON (SEVEN RIVERS-QUEEN-GRAYBURG-
SAN ANDRES) POOL TO CORRESPOND WITH
THE UNITIZED FORMATION OF THE BURCH
KEELY UNIT, EDDY COUNTY, NEW MEXICO**

COG EXHIBIT NOTEBOOK

Exhibits

For OCC Hearing for Expansion of Burch Keely (BK)Unit and Grayburg Jackson (GJ)Pool

Number

- | | |
|------------|---|
| Exhibit 1 | Applications for Expansion |
| Exhibit 2 | OCD Orders for Expansion |
| Exhibit 3 | Surface map of BK Unit |
| Exhibit 4 | Acquisition of Marbob assets |
| Exhibit 5 | Marbob purchase from Phillips |
| Exhibit 6 | BK Unit Orders |
| Exhibit 7 | BK Unit Agreement |
| Exhibit 8 | BLM approval in 1994 to expand the BK Unit 500 feet into the Paddock |
| Exhibit 9 | BLM approvals of current expansion of the BK Unit |
| Exhibit 10 | OCD Nomenclature Orders extending the Grayburg Jackson pool 500 feet into the Paddock within the BK Unit area |
| Exhibit 11 | OCC Pool Orders |
| Exhibit 12 | Marbob/Concho notice package |
| Exhibit 13 | Attorney Affidavit regarding notice in BK Unit case |
| Exhibit 14 | Attorney Affidavits in GJ Pool case only |
| Exhibit 15 | Type Log Yeso Shelf Area |
| Exhibit 16 | Heterogeneous Reservoir |
| Exhibit 17 | Structure Map with wells |
| Exhibit 18 | Cross-section from west to east |
| Exhibit 19 | Cross-section with proposed buffer |
| Exhibit 20 | BK Unit Expansion Development Plans |
| Exhibit 21 | BK Unit Expansion Economics |

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

**IN THE MATTER OF THE APPLICATION
OF MARBOB ENERGY CORPORATION TO VERTICALLY
EXPAND THE BURCH KEELY UNIT,
EDDY COUNTY, NEW MEXICO.**

CASE NO. 14558

APPLICATION

MARBOB ENERGY CORPORATION, ("Marbob") as successor to be of COG Operating, LLC through its undersigned attorneys, hereby makes application to the Oil Conservation Division for an order amending Order No. R-7900-A to vertically expand the the unitized formation in the Burch Keely Unit. In support of its application, Marbob states:

1. Marbob is the operator of the Burch-Keely Unit, Eddy County, New Mexico which is comprised of 5149.44 acres, more or less, of federal lands which was statutorily unitized pursuant to Oil Conservation Division Order No. R-7900-A dated October 28, 1993. The Unit boundaries include the following acreage:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM

Section 12: SE/4 SE/4
Section 13: All
Section 23 through 26: All

TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM

Sections 18 and 19: All
Section 30: All

2. The "Unitized Formation" in the Burch Keely Unit comprises the interval from the top of the Seven Rivers formation to the base of the San Andres formation or to a true vertical depth of 5000 feet, whichever is lesser.

3. In Order No. R-10067 dated February 22, 1994, the Division granted Marbob's application to abolish the Grayburg-Paddock Pool and to extend the vertical limits of the Grayburg-Jackson Pool to include the Glorieta Yeso (Paddock) formation under the Unit Area. The vertical limits of the Grayburg-Jackson-Paddock Pool was amended to include that interval from the top of the Seven Rivers formation to 500 feet below the top of the Paddock formation.

4. Marbob seeks to extend the vertical limits of the Unitized Formation to 5000 feet.

5. A vertical expansion to the proposed depth of 5000 feet will allow the efficient recovery of all movable hydrocarbons within the full oil column present in the Paddock and the upper Blinbry formations.

6. Exhibit A is a list of parties that were notified of this hearing in accordance with Division rules.

7. Approval of this application will afford Marbob the opportunity to produce its just and equitable share of the remaining reserves in the Burch Keely Unit Area and will otherwise be in the best interest of conservation, the protection of correlative rights and the prevention of waste.

WHEREFORE, Marbob Energy Corporation, as successor to be of COG Operating LLC requests that this application be set for hearing before an Examiner of

the Oil Conservation Division on October 14, 2010 and, after notice and hearing as required by law, the Division enter its order granting this application.

Respectfully submitted,
HOLLAND & HART LLP

By: Ocean Munds-Dry
William F. Carr
Ocean Munds-Dry
Post Office Box 2208
Santa Fe, New Mexico 87504
(505)988-4421

ATTORNEYS FOR MARBOB ENERGY
CORPORATION

EXHIBIT A

**APPLICATION OF
MARBOB RESOURCES, INC.
TO EXPAND THE VERTICAL LIMITS OF THE BURCH KEELY UNIT
EDDY COUNTY, NEW MEXICO.**

Unit Interest Owners:

Pansam Trust Raymon Newton
Childress
PO Box 66
Joplin, MO 64802

Robert F. Dexter Trust UDT Date
8/27/92, Louise H. Dexter
20940 Pacific Coast Hwy
Malibu, CA 90265

William D. Inglehart
701 E. Pennsylvania
Escondido, CA 92025-3004

Sharon A. Hansen
5822 Jones Ave
Westminster, CA 92683

Donna K. Walls
616 El Cajon Blvd Ste B
PMB 253
San Diego, CA 92115

Beth J. Inglehart
5385 Hubbell Ct
Ventura, CA 93003

Hugh Ross Burch Trustee
Hugh R. Burch Rev Living Trust
4601 Memory Lane
Oklahoma City, OK 73112

Russell Resources Ltd.
Michael Russell Lilly VP
PO Box 373
Longview, TX 75606

Barbara Kruse Frankenfield
73333 Wooded Acres Trail
Mansfield, TX 76063

Marbob Energy Corp
PO Box 227
Artesia, NM 88211-0227

Jack W. McCaw
PO Box 127
Artesia, NM 88211-0127

Leo Vernon Mock Family Trust
Debbie Bowers &
286 StageCoach Rd.
Arroyo Grande, CA 94320

Chester J. Acree and Jean C.
Acree – Trustees of the Acree Family
Trust Dated 9-30-88
2604 Via Segunda
Palos Verdes Estates, CA 90274

Higgins Trust Inc.
PO Box 6905
Thomasville, GA 31758-6905

Carol Jean Dexter Purcell
5535 Ravia St.
Lakewood, CA 90713

Maryanne Kanani Lynn Blakely
1025 Bordner St.
Montpelier, OH 43543

Sandra Leigh Terry
PO Box 12617
El Paso, TX 79912

Susan Lynn Terry
7200 Montgomery NE #367
Albuquerque, NM 87109

Dolores J. Thomas
1045 La Reina
Lake San Marcos, CA 92078

Margaret Louise Treat
PO Box 20031
Billings, MT 59104

Kurt A. Weber
7631 Willis Ave
Van Nuys, CA 91405

Virginia Weber
7631 Willis Ave
Van Nuys, CA 91405

William C. White
15 Desert Flower Rd.
Artesia, NM 88210

EHW LLC
101 South Fourth St.
Artesia, NM 88210

Mary Kenney Gore
1729 Sabatini Drive
Henderson, NV 89052-4102

Willa Kathryn Kennedy Estate
Tanya Marie Mangum – Pers Rep
PO Box 1121
Edgewood, NM 87015

Jimmy R. McCutcheon
1503 Parker Drive
Odessa, TX 79761-1550

Lynn Barker
10915 Huston St #112

North Hollywood, CA 91601

Ocotillo Production LLC
1705 W Washington Ave
Artesia, NM 88210

Marshall & Winston Inc
PO Box 50880
Midland, TX 79710-0880

Pitch Energy Corporation
P.O. Box 304
Artesia, NM 88210

Costaplenty Energy Corp.
PO Box 1182
Artesia, NM 88211-1182

Sabine Royalty Trust Bank of
America NA
Escrow Agent-Sabine Royalty Tr.
Dallas, TX 75284-0887

Hugh Burch
3315 NW 63rd
Oklahoma City, OK 73116

Trust UW Francisca S Winston
c/o Meristem
Attn: L. Karls
601 Carlson PKWY Ste 800
Minnetonka, NM 55305

CQWE LLC Bob Acree Manager
PO Box 241826
Anchorage, AK 99524

Downer Family Trust 1991
Selma Downer-TTEE
21948 Marjoram Ct
Santa Clarita, CA 91350

Long Minerals Trust U/T/A 6/4/08
4189 Bellaire Blvd Ste 202
Houston, TX 77025-1045

Donna Finch Adams
PO Box 1025
Dennison, TX 75021

Gary Laird Finch Jr.
PO Box 12
Stowell, TX 77661

Juliette Rathbone Finch Family
Trust Johnny Walker Finch Trustee
PO Box 2395
Kerrville, TX 78029-2395

Dexter Family Trust DTD
3/31/2009 Robert & Hadiya
Dexter Trustees
9262 Irongate Lane
San Diego, CA 92126

Minerals Management Service
PO Box 5810 TA
Denver, CO 80217-5810

Selma E Andrews Trust F/B/O
Peggy Barrett
Bank of America NA TTEE
PO Box 840738
Dallas, TX 75284-0738

Selma E Andrews Perpetual
Charitable Trust
Bank of America NA TTEE
PO Box 840738
Dallas, TX 75284-0738

D V LoFlin Jr.
PO Box 4987
Monroe, LA 71211

John Neal Lofline
162 Cottonwood
Uvalde, TX 78801

James Rankin
230 Taglewood LN
Levelland, TX 79336-6612

Mary K Rankin Elliott
104 Wood circle
Levelland, TX 79336

Robert R Purcell Family Trust
Darby C Ritter Trustee
2012 East 26th Street
Lawrence, KS 66046

Rosemary Leforce
715 Spring Lane
Bristow, OK 74010

Frank W Addis
97304 E Alhambra Rd
Kennewick, WA 99337-8800

Connie Alexander
8716 Warner Rd
Kernersville, NC 27284

Roy C Andrews
C/O J P Andrews
3113 79th St.
Lubbock, TX 79423-1823

Peggy Fallon Ashenbrenner
401 E 8th St Ste 214-348
Souix Falls, SD 57103

Betty Jean Banks
8688 East Easter Place
Centennial, CO 80112-1856

Braille Institute of America,
Agency Bank of America N A
Agent and AIF
PO Box 840738
Dallas, TX 75284-0738

Maxine Cole
1202 N Washington
Wellington, KS 67152

Robin W Crouse Jr.
11619 NE 146th ST
Liberty, MO 64068

Marion Wier Deford
6509 Mesa Drive
Austin, TX 78731-2703

Virginia J Delhagen
PO Box 21356
Mesa, AZ 85277-1356

Mr. Edward Dreesen Jr.
PO Box 830
Palo Cedro, CA 96073

Ingrid Dreesen Powell, TTEE
for the Betty Kyte Dreesen
Irrevocable Trust of 12-23-58
PO Box 1665
Los Altos, CA 94022

William Eaton, 87457-132
20450 N. E. 150th
Luther, OK 73054

Doris M. Griffin
1343 W. Hedding St.
San Jose, CA 95126-1615

James R. Griffin
2713 Larkspur
Antioch, CA 509

Sara S. Jones
1042 Carlisle Drive
Allen, TX 75002

Mrs. Walter Leforce
116 Main
Udall, KS 97146

James R. Leforce
225 Southeast 28th
Oklahoma City, OK 73129

Judith J Mack
32522 Crete Road
Monarch Beach, CA 92629-3619

Richard Lee Mourning
2504 Sennett
Wichita, KS 67212

Robert Alan Mourning
1508 N Stoney Point St
Wichita, KS 67212

Roger William Mourning
9429 Hardtner
Wichita, KS 67212

Ronald Eugene Mourning
711 Crestline
Wichita, KS 67212

Christopher Leslie Mourning
1621 W Shady Grove Rd
Irving, TX 75060-3771

Sidney Francis Mourning
PO Box 300882
Austin, TX 78703

Timothy Mourning
PO Box 300071
Austin, TX 78703-0002

Virginia Mourning
UnKnown

Betty Jane Pettigrew
501 Morningside Dr
Wellington, KS 67152

Cecil Bond Kyte
PO Box 30864
Santa Barbara, CA 93105

Ms Ingrid Powell
PO Box 416
Los Altos, CA 94022

Mack Purcell
UNKNOWN

Gary R. Purcell
5213 Jonathan Way -SW
Knoxville, TN 37920

Thomas G. Purcell
5516 New Hampshire Blvd
Louisville, KY 40219

Frank H Purcell Trust
PO Box 27286
Tempe, AZ 85285-7286

Helen Reed
16762 Gazeley, Apt 5127
Saugus, CA 91350

Alva P. Sanders
20450 NE 150 St
Luther, OK 73054

Dee Schooling
1417 E. Sims
Edmond, OK 73103

Ann H. Stromberg
274 San Luis Place
Claremont, CA 91711

Hazel Turner
521 S. Washington
Wichita, KS 67214

Mary C. Underwood
7006 Camino Blanco
Las Cruces, NM 88007

Donald R. Wilson
4955 County Rd 429
Van Alstyne, TX 75495

Sarah Woolum
13242 Montano Rd
Gravois Mills, MO 65037

Betty Lou Mitchell
6740 Mayview Ct
Oklahoma City, OK 73159-6527

Trust UW Francisca S
Winston C/O Meristem
Attn: L. Karls
601 Carlson PKWY Ste 800
Minnetonka, MN 55305

Welter 1981 Trust Wells Fargo
Ban NA Succ-TTEE
PO Box 5383
Denver, CO 80217

Norma C Rose
50 Royal Place Circle
Odessa, TX 79762

Gary Laird Finch Jr.
PO Box 12
Stowell, TX 77661

Eileen Heard Trustee Robert J
Heard & Eileen Heard TR
10317 Del Rey Drive
Yuma, AZ 85367

Vallory Sue Freeman
1634 Steeple Chase Place
Vista, CA 92083

Dorothy Rountree Smith
PO Box 6697
Pine Bluff, AR 71611

Connor Family LLC
PO Box 1080
Artesia, NM 88211-1080

Offsets:

COG Operating LLC
550 W. Texas
Midland, Texas 79701

Tandem Energy Corp
PO Box 1559
Midland, Texas 79702

Pioneer Natural Resources USA Inc.
PO Box 3178
Midland, Texas 79702

CBS Operating Corporation
PO Box 2236
Midland, Texas 79702

Burnett Oil Co. Inc.
801 Cherry St. Unit 9
Fort Worth, Texas 76102

Southern Bay Energy LLC
110 Cypress Station Dr. #220
Houston, Texas 77090

Southwest Royalties, Inc.
PO Box 11390
Midland, Texas 79702

Lobos Energy Partners
3817 NW Expressway Suite 950
Oklahoma City, OK 73112

ConocoPhillips Co.
PO Box 50688
Midland, Texas 79710

Anadarko Production Corp.
PO Box 2497
Midland, Texas 79702

EOG Resources, Inc.
PO Box 2267
Midland, Texas 79702

Hunt Oil Co.
PO Box 1317
Denver, CO 80201

Surface Owners:

Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220

John. R. Gray, LLC
PO Box 1182
Artesia, NM 88211-1182

CASE 14558:

Application of Marbob Energy Corporation for vertical expansion of the Burch Keely Unit, Eddy County, New Mexico. Applicant in the above-styled cause seeks an order amending Order No. R-7900-A to extend the vertical limits in the Burch Keely Unit to expand the Unitized Formation to 5000 feet. The Unit Area consists of lands in Sections 12, 13, 23 through 26 in Township 17 South, Range 29 East and Sections 18, 19 and 30 in Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico. Said area is located approximately 2 miles west of Loco Hills, New Mexico.

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

**IN THE MATTER OF THE APPLICATION OF COG
OPERATING LLC FOR VERTICAL EXTENSION OF
THE GRAYBURG-JACKSON (SEVEN RIVERS-
QUEEN-GRAYBURG-SAN ANDRES) POOL TO
CORRESPOND WITH THE UNITIZED FORMATION
OF THE BURCH-KEELY UNIT, EDDY COUNTY,
NEW MEXICO**

CASE NO. 1457

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APPLICATION

Applicant, COG Operating LLC ("COG") through its undersigned attorneys, Montgomery & Andrews, P.A., (J. Scott Hall), requests the New Mexico Oil Conservation Division ("Division") enter an order amending Division Order No. R-10067 to extend the vertical limits of the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool (28509) to a depth of 5,000 feet to correspond with the Unitized Formation of the Burch-Keely Unit. In support of its Application, COG states:

1. COG is the operator of the Burch-Keely Unit in Eddy County, New Mexico comprised of 5,149.44 acres, more or less, of federal lands which were statutorily unitized pursuant to Oil Conservation Division Order No. R-7900-A dated October 28, 1993. The Unit boundaries include the following acreage:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM

Section 12:	SE/4 SE/4
Section 13:	All
Section 23 through 26:	All

TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM

Sections 18 and 19:	All
Section 30:	All

2. The Unit Agreement for the Burch-Keely Unit defines the "Unitized Formation" as the interval from the top of the Seven Rivers formation to the base of the San Andres formation or to a true vertical depth of 5,000 feet, whichever is lesser.

3. On February 22, 1994, the Division entered Order No. R-10067 which abolished the Grayburg-Paddock Pool and extended the vertical limits of the Grayburg-Jackson Pool under the Unit Area to include the Glorieta Yeso (Paddock) formation. The vertical limits of the pool were amended to include that interval from the top of the Seven Rivers formation to 500 feet below the top of the Paddock formation. Pursuant to this order, the pool name was changed to the Grayburg-Jackson Paddock Pool, but the pool continues to be described in other records of the Division as the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool (28509). The horizontal limits of the pool correspond with the unit area of the Burch-Keely Unit.

4. In a related matter pending before the Division in Case No. 14558, Marbob Energy Corporation applied to extend the vertical limits of the Unitized Formation to 5,000 feet. A hearing on the Application in Case No. 14558 was held on November 28, 2010. Marbob established at the hearing that ownership of the interval within the proposed extension also corresponds with ownership of the Unitized Formation. All of the working interests in the Unit and in the proposed extension are owned by Marbob. COG recently acquired Marbob Energy Corporation's interests in the Unit, as well as in the extended interval, and COG is succeeding Marbob as Unit Operator. COG supported Marbob's Application at the hearing and provided evidence of plans to develop oil reserves within the Blinbry formation down to 5,000 feet.

5. The extended vertical limits of the Unitized Formation proposed in Case No. 14558 do not correspond with the vertical limits of the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool as currently defined in Order No. R-10067. As a consequence,

development of Blinebry formation reserves within the proposed vertical extension of the Unitized Formation would potentially result in the inclusion of production from two intervals, one of which is a defined common source of supply, and the other which is presently undesignated.

6. Making the vertical limits of the expanded Unitized Formation and the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool uniform will accommodate future unit operations and facilitate administration of the single pool by both the Unit Operator and the Division. The need for the filing and processing of numerous down-hole commingling approvals would be eliminated and the potential for confusion in the reporting of production will be avoided.

7. Working interest and mineral interest ownership in the Unit Area and the proposed extension of the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool are identical.

8. Extension of the vertical limits of the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool will be in the interests of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, COG Operating LLC requests that this Application be set for hearing before one of the Division's examiners on December 16, 2010 and that after notice and hearing, the Division enters its order granting the relief requested above.

Respectfully submitted,

MONTGOMERY & ANDREWS, P. A.

By: *J. Scott Hall*

J. Scott Hall

P.O. Box 2307

Santa Fe, NM 87504-2307

(505) 982-3873 - Telephone

(505) 982-4289 - Fax

Attorneys for COG Operating LLC

00234062

Case 14577 : *Application of COG Operating LLC for vertical extension of the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool to correspond with the Unitized Formation of the Burch-Keely Unit, Eddy County, New Mexico.* Applicant seeks an order amending Division Order No. R-10067 to extend the vertical limits of the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool to a depth of 5,000 feet to correspond with the proposed extension of the Unitized Formation of the Burch-Keely Unit. 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 17 SOUTH, RANGE 30 EAST, NMPM

Sections 18 and 19:	All
Section 30:	All

The pool and unit are located approximately 2 miles west of Loco Hills, New Mexico.

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