

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION AND  
ESTABLISHMENT OF FIELD RULES TO GOVERN  
OPERATIONS IN THE HEREFORD FIELD, WELD  
COUNTY, COLORADO

) CAUSE NO. 421  
)  
) DOCKET NO. 1106-SP-77  
)

**APPLICATION TO AMEND ORDER NO. 421-4**

COMES NOW EOG Resources, Inc. ("Applicant"), by its undersigned attorneys, and makes application ("Application") to the Oil and Gas Conservation Commission of the State of Colorado ("Commission") for an order amending Commission Order No. 421-4 based on the reasons set forth below. The original October 8, 2010 Verified Application is attached as Exhibit A.

In support of its Application, Applicant avers and states as follows:

1. That Applicant is a corporation duly authorized to conduct business in the State of Colorado and is a registered operator in good standing with the Commission.

2. That Applicant owns a substantial leasehold interest in the Niobrara Formation underlying the following 1,280 acre drilling and spacing units in Weld County, Colorado as established in Order No. 421-4:

Township 11 North, Range 63 West, 6th P.M.  
1,280-acre DSU #1: Sections 9 and 10  
1,280-acre DSU #2: Sections 14 and 15  
1,280-acre DSU #3: Sections 15 and 16

(hereinafter "Application Lands")

3. On February 22, 2010, the Commission issued Order No. 421-1, which among other things, established approximate 640-acre drilling and spacing units for certain lands including Sections 9, 10, 14, 15, and 16, Township 11 North, Range 63 West, 6<sup>th</sup> P.M., for the production of oil, gas and associated hydrocarbons from the Niobrara Formation with no more than one (1) horizontal well to be drilled in each drilling and spacing unit.

4. On October 8, 2010, Applicant filed a verified application requesting that the Commission: (i) establish three exploratory drilling and spacing units, each such unit consisting of approximately one thousand, two hundred eighty (1,280) acres in a "laydown" configuration and allowing the drilling of up to two (2) horizontal wells in each such unit in the underlying Niobrara Formation, and (ii) modify Order No. 421-1 to vacate the established 640-acre drilling and spacing units on the Application Lands (with the intent to vacate only as to the additional horizontal wells to be drilled in the laydown 1280-acre drilling and spacing units.

5. On or about January 3, 2011, Applicant submitted exhibits and testimony in support of the uncontested October 8, 2010 Application as part of its Rule 511 filing. Specifically, Applicant submitted land testimony re-stating and clarifying Applicant's requests in the October 8, 2010 Application. With respect to the request to vacate the established 640-acre drilling and spacing units, the land testimony provided as follows:

For purposes of clarification, EOG requested “up to two (2) additional horizontal wells” in each proposed 1,280-acre drilling and spacing unit only because there are overlapping 1,280-acre drilling and spacing units in Section 15, Township 11 North, Range 63 West. There will be portions of up to three (3) wellbores that will underlie Section 15, Township 11 North, Range 63 West, but EOG will allocate the production for the individual additional horizontal wells according to their respective “rolling” laydown 1,280-acre drilling and spacing unit. A complete discussion on the allocation of production from the horizontal wells located in the 1,280-acre drilling and spacing units is set forth in Osman Apaydin’s testimony submitted in support of the Application.

For further purposes of clarification, it is also EOG’s intent to vacate the existing 640-acre drilling and spacing unit only as it relates to the additional horizontal well located in each “rolling” laydown 1,280-acre drilling and spacing unit. The existing horizontal wells and the established 640-acre drilling and spacing units, as it relates to the existing horizontal wells, shall remain unchanged.”

See Exhibit B, page 2, attached hereto.

6. Applicant also submitted a proposed order to the Commission with its 511 filings on or about January 3, 2011. The proposed order included, among other things, findings related to the land testimony set forth in Paragraph 5 above that outlined EOG’s intent to vacate the existing 640-acre drilling and spacing units only as they relate to the additional horizontal well located in each “rolling” laydown 1,280-acre drilling and spacing unit. Many of the provisions set forth in the proposed order were not included in the final Order No. 421-4. See Exhibit C attached hereto.

7. On January 13, 2011, the Commission issued Order No. 421-4, which, in error, vacated five approximate 640-acre drilling and spacing units established for Sections 9, 10, 14, 15, and 16, Township 11 North, Range 63 West, 6<sup>th</sup> P.M. under Order No. 421-1, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation. Order No. 421-4 correctly established three approximate 1,280-acre laydown drilling and spacing units for certain lands located in said Sections 9, 10, 14, 15, and 16 (with overlapping drilling and spacing units for said Section 15) and approved of up to two horizontal wells within each 1,280-acre drilling and spacing unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation. See Exhibit D attached hereto.

8. On or about May 25, 2011, the Commission permitting staff pulled three of Applicant’s Application for Permits to Drill (“APD’s”) for the additional horizontal wells approved by Order No. 421-4 for the Application Lands. Specifically, the Commission staff pulled the APD’s for the Critter Creek #32-10H Well (API #05-123-33354), which is the horizontal well planned for 1,280-acre DSU #1, the Critter Creek #33-15H Well (API #05-123-33355), which is the horizontal well planned for the 1,280-acre DSU #2, and the Critter Creek #34-16H Well (API #05-123-33103), which is the horizontal well planned for the 1, 280-acre DSU #3. The Commission permitting staff’s reason for pulling the three APD’s was because, in their view, there was “improper spacing” on the Applications Lands by virtue of the inaccuracies set forth in Order No. 421-4.

9. In order to clarify the approved 1,280-acre drilling and spacing units for the Application Lands, and the effect the 1,280-acre drilling and spacing units have on the established

640-acre drilling and spacing units (pursuant to Order No. 421-1), Applicant hereby requests that the Commission amend Order No. 421-4 to correctly address the intent and requests included in Applicant's October 8, 2010 Application as follows:

i. To determine that the purported vacation of the existing 640-acre drilling and spacing units in Order No. 421-4 is null and void and that Order No. 421-1 continues to apply to the 640-acre drilling and spacing units on the Application Lands and to the existing wells therein;

ii. To confirm that the existing 640-acre drilling and spacing units inapplicable only as the additional horizontal well located in each of the approved "rolling" laydown 1,280-acre drilling and spacing units.

iii. To confirm that (a) the "rolling" laydown 1,280-acre drilling and spacing units are governed by Order No. 421-4, (b) the Applicant is allowed up to two (2) additional horizontal wells (which do not include any existing horizontal wellbore in an existing 640-acre drilling and spacing unit) in each of the approved 1,280-acre drilling and spacing unit because there are overlapping 1,280-acre drilling and spacing units, and (c) there will be portions of up to three (3) wellbores that will underlie Section 15, Township 11 North, Range 63 West of the Application Lands.

10. That the authorized drilling and spacing units will allow more efficient development of the oil and gas resources within the Niobrara Formation, will prevent waste and will not violate correlative rights.

11. That the names and addresses of the interested parties according to the information and belief of the Applicant are set forth in Exhibit A attached hereto.

WHEREFORE, Applicant respectfully requests that this matter be set for hearing in June 2011; that notice be given as required by law and that upon such hearing this Commission enter its order consistent with Applicant's proposals as set forth above.

Dated this 26<sup>th</sup> day of May, 2011.

**BEATTY & WOZNIAK, P.C.**

By: 

Jamie L. Jost  
Michael J. Wozniak  
216 Sixteenth Street, Suite 1100  
Denver, Colorado 80202-5155  
303-407-4499

Applicant's Address:  
600 17th St, Suite 1000N  
Denver, CO 80202

**VERIFICATION**

STATE OF COLORADO                     )  
  )     ss.  
CITY AND COUNTY OF DENVER        )

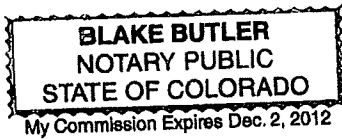
Jason McLaren of lawful age, being first duly sworn upon oath, deposes and says that he a Landman for EOG Resources, Inc. and that he has read the foregoing Application and that the matters therein contained are true to the best of his knowledge, information and belief.


  
\_\_\_\_\_  
Jason McLaren

Subscribed and sworn to before me this 26 day of May, 2010.

Witness my hand and official seal.

My commission expires: 12/02/12



  
\_\_\_\_\_  
Notary Public

**EXHIBIT A**  
**INTERESTED PARTIES**

David M. and Nancy Lewis P.O. Box 608 Sandpoint, ID 83864
Denkai Animal Sanctuary and E. Ray Reichley 1311 41st Ave. Greeley, CO 80634
Kristina R. and Roger Sparks 2003 Pine Cliff Dr. Valdosta, GA 31602
Raymond W. Thomas 3771 County Road P Wiggins, CO 80654
Ronald W. Thomas 11923 Granite Woods Loop Venice, FL 34292
Todd A. and Angela K. Ayars 565 Winter Bluff Dr. Fenton, MO 63026
Kenyon K. and Norma J. Ayars 63546 WCR 67 Grover, CO 80729
Karen R. Haley, as Trustee of the Karen R. Haley Rev. Tr. Agrmt dated 2-8-2002 9550 E. Orchard Dr. Greenwood Village, CO 80111
Susan Genevieve Mitchell Luecht 1944 29th Ave. Greeley, CO 80634
Colorado State Land Board 1127 Sherman St., #300 Denver, CO 80203

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION AND  
ESTABLISHMENT OF FIELD RULES TO GOVERN  
OPERATIONS IN THE HEREFORD FIELD, WELD  
COUNTY, COLORADO

)  
)  
)  
)

CAUSE NO. 421

DOCKET NO. 1106-SP-77

**AFFIDAVIT OF MAILING**

STATE OF COLORADO )

)

ss.

CITY AND COUNTY OF DENVER )

Jamie L. Jost, of lawful age, and being first duly sworn upon his oath, states and declares:

That she is the attorney for EOG Resources, Inc., that on or before June 2<sup>nd</sup>, 2011, She caused a copy of the attached Application to be deposited in the United States Mail, postage prepaid, addressed to the parties listed on Exhibit A to the Application.

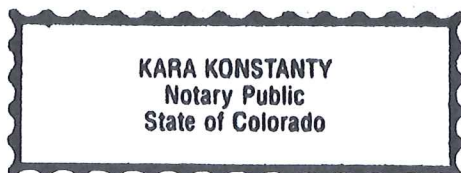
*Jamie L. Jost*

Jamie L. Jost

Subscribed and sworn to before me May 26, 2011.

Witness my hand and official seal.

My commission expires: 3/3/2015

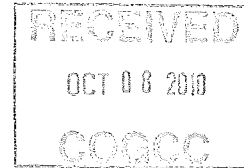


*Kara Konstanty*

Notary Public

## EXHIBIT A

### BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO



IN THE MATTER OF THE APPLICATION OF  
EOG RESOURCES, INC. FOR AN ORDER  
ESTABLISHING THREE EXPLORATORY LAY-  
DOWN APPROXIMATE 1,280 ACRE DRILLING  
AND SPACING UNITS FOR HORIZONTAL  
WELLS IN THE NIOBRARA FORMATION  
UNDERLYING SECTIONS 9, 10, 14-16,  
TOWNSHIP 11 NORTH, RANGE 63 WEST, 6<sup>TH</sup>  
P.M., WELD COUNTY, COLORADO

CAUSE NO. \_\_\_\_\_

DOCKET NO. \_\_\_\_\_

#### APPLICATION

COMES NOW EOG Resources, Inc. ("Applicant"), by its undersigned attorneys, and makes application ("Application") to the Oil and Gas Conservation Commission of the State of Colorado ("Commission") for an order establishing three exploratory drilling and spacing units, each such unit consisting of approximately one thousand, two hundred eighty (1,280) acres in a "laydown" configuration and allowing the drilling of up to two (2) horizontal wells in each such unit in the underlying Niobrara Formation. The proposed units are comprised of the following described lands in Weld County, Colorado:

Township 11 North, Range 63 West, 6th P.M.  
1,280-acre DSU #1: Sections 9 and 10  
1,280-acre DSU #2: Sections 14 and 15  
1,280-acre DSU #3: Sections 15 and 16

(hereinafter "Application Lands")

A preliminary well plat for the Application Lands is attached hereto. Such plat remains subject to modification.

In support of its Application, Applicant avers and states as follows:

1. That Applicant is a corporation duly authorized to conduct business in the State of Colorado and is a registered operator in good standing with the Commission.
2. That Applicant owns a substantial leasehold interest in the Niobrara Formation underlying the Application Lands.
3. On February 22, 2010 the Commission entered Order No. 421-1 which established fifty-eight (58) approximate 640-acre drilling and spacing units in Townships 11 and 12 North, Ranges 62 and 62 West for the production of oil, gas and associated hydrocarbons from the Niobrara Formation with no more than one (1) horizontal well to be drilled in each unit. Order No. 421-1 further ordered that the surface location for each horizontal well shall be located anywhere within the unit, provided that the horizontal leg into the Niobrara Formation shall not be closer than 600 feet to the outside boundary of the drilling unit and the terminus of the horizontal leg shall not be any closer than 600 feet to the outside boundary of the drilling and spacing unit without exception being granted by the Director of the Oil and Gas Conservation Commission. The Applications Lands are subject to Order No. 421-1.
4. That Applicant is experienced in drilling horizontal wells with laterals in excess of 4,000 feet, and has successfully drilled many such wells in the Bakken Formation in North Dakota.
5. Based on its early experience in drilling horizontal wells in the Niobrara Formation in Colorado, Applicant believes that the Niobrara Formation underlying the Application Lands is an ideal candidate for the drilling and testing of up to two (2) horizontal wells with lengthy laterals. Due to a overlapping 1,280-acre drilling and spacing units in Section 15, Township 11 North, Range 63 West, portions of up to three (3) wellbores shall underlie Section 15, Township 11 North, Range 63 West.
6. That based upon geological studies and horizontal drilling of the Niobrara Formation in the same general area of the Application Lands, Applicant asserts that the Niobrara

Formation may produce economic volumes of oil when drilled and completed within horizontal wells having longer laterals than are currently authorized by Order No. 421-1.

7. That appropriate setbacks for the drilling of the two (2) exploratory horizontal wells within each drilling and spacing unit for the Niobrara Formation of the Application Lands should be as follows:

(a) That the surface location may be located anywhere on the Application Lands.

(b) That the initial perforation, lateral and terminus of the horizontal wells within the Niobrara Formation shall be located no closer than 600 feet from the boundary of the established drilling and spacing unit and the interior section line shall be extinguished.

(c). That the lateral within the Niobrara Formation shall be located no closer than 600 feet from any other wellbore on the Application Lands which has perforated the Niobrara Formation.

8. That the proposed drilling and spacing units will allow more efficient development of the oil and gas resources within the Niobrara Formation, will prevent waste and will not violate correlative rights.

9. That the Commission modify Order No. 421-1 to vacate the established 640-acre drilling and spacing units on the Application Lands and establish the three (3) requested exploratory laydown 1280-acre drilling and spacing units requested in this Application.

10. That the names and addresses of the interested parties according to the information and belief of the Applicant are set forth in Exhibit A attached hereto.

WHEREFORE, Applicant respectfully requests that this matter be set for hearing in November 2010; that notice be given as required by law and that upon such hearing this Commission enter its order consistent with Applicant's proposals as set forth above.

Dated this 8th day of October, 2010.

**BEATTY & WOZNIAK, P.C.**

By: 

Jamie L. Jost  
Michael J. Wozniak  
216 Sixteenth Street, Suite 1100  
Denver, Colorado 80202-5155  
303-407-4499


Applicant's Address:  
600 17th St, Suite 1000N  
Denver, CO 80202



VERIFICATION

STATE OF COLORADO                     )  
  ) ss.  
CITY AND COUNTY OF DENVER        )

Steve Smith, of lawful age, being first duly sworn upon oath, deposes and says that he a Landman for EOG Resources, Inc. and that he has read the foregoing Application and that the matters therein contained are true to the best of his knowledge, information and belief.

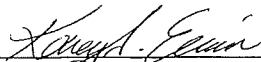
  
\_\_\_\_\_  
Steve Smith

Subscribed and sworn to before me this 8<sup>th</sup> day of October, 2010.

Witness my hand and official seal.

My commission expires: June 25, 2011



  
\_\_\_\_\_  
Notary Public  
Karen S. Erwin

**EXHIBIT A**  
**INTERESTED PARTIES**

David M. and Nancy Lewis P.O. Box 608 Sandpoint, ID 83864
Denkai Animal Sanctuary and E. Ray Reichley 1311 41st Ave. Greeley, CO 80634
Kristina R. and Roger Sparks 2003 Pine Cliff Dr. Valdosta, GA 31602
Raymond W. Thomas 3771 County Road P Wiggins, CO 80654
Ronald W. Thomas 11923 Granite Woods Loop Venice, FL 34292
Todd A. and Angela K. Ayars 565 Winter Bluff Dr. Fenton, MO 63026
Kenyon K. and Norma J. Ayars 63546 WCR 67 Grover, CO 80729
Karen R. Haley, as Trustee of the Karen R. Haley Rev. Tr. Agrmt dated 2-8-2002 9550 E. Orchard Dr. Greenwood Village, CO 80111
Susan Genevieve Mitchell Luecht 1944 29th Ave. Greeley, CO 80634
Colorado State Land Board 1127 Sherman St., #300 Denver, CO 80203

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF THE APPLICATION OF  
EOG RESOURCES, INC. FOR AN ORDER  
ESTABLISHING THREE EXPLORATORY LAY-  
DOWN APPROXIMATE 1,280 ACRE DRILLING  
AND SPACING UNITS FOR HORIZONTAL  
WELLS IN THE NIOBRARA FORMATION  
UNDERLYING SECTIONS 9, 10, 14-16,  
TOWNSHIP 11 NORTH, RANGE 63 WEST, 6<sup>TH</sup>  
P.M., WELD COUNTY, COLORADO

CAUSE NO. \_\_\_\_\_

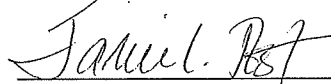
DOCKET NO. \_\_\_\_\_

**AFFIDAVIT OF MAILING**

STATE OF COLORADO                    )  
  )       ss.  
CITY AND COUNTY OF DENVER        )

Jamie L. Jost, of lawful age, and being first duly sworn upon his oath, states and declares:

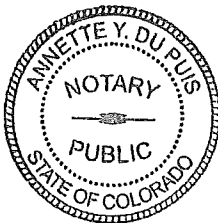
That she is the attorney for EOG Resources, Inc., that on or before October 8, 2010, She caused a copy of the attached Application to be deposited in the United States Mail, postage prepaid, addressed to the parties listed on Exhibit A to the Application.

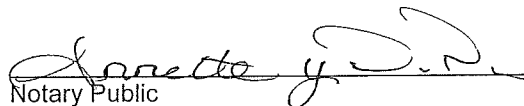
  
\_\_\_\_\_  
Jamie L. Jost

Subscribed and sworn to before me October 8, 2010.

Witness my hand and official seal.

My commission expires: Sept 26, 2014



  
\_\_\_\_\_  
Notary Public

## EXISTING WELLS DRILLED

## PROPOSED WELLS & 1280 ACRE UNITS

## SECTIONS 9 & 10

## SECTIONS 15 & 16

## SECTIONS 14 & 15



**EXHIBIT B**

# EOG RESOURCES, INC.

Cause No. 421, Docket No. 1101-SP-03

# EOG RESOURCES, INC.

## Jason McLaren – Land Testimony

Docket No 1101-SP-03; Cause 421

Sections 9, 10, 14, 15 & 16 of Township 11 North, Range 63 West, 6<sup>th</sup> P.M.,  
Weld County, Colorado

January 13, 2011 Colorado Oil and Gas Conservation Commission Hearing

My name is Jason McLaren, and I am currently employed as a Landman for EOG Resources, Inc. ("EOG"). I graduated from Emory University in 1995 and received by law degree from the University of Wyoming School of Law in 2000. I have over 8 years experience in oil and gas land and contract work. I am familiar with the lands subject to, and the matters set forth in, the October 8, 2010 verified application ("Application").

In support of EOG's Application in the above-referenced docket, I am submitting four (4) exhibits. The exhibits are attached to my sworn testimony and form the basis for EOG's Application to gain approval to (i) establish three (3) laydown "rolling" 1,280-acre drilling and spacing units, (ii) drill and complete up to two (2) additional horizontal wells in the proposed 1,280-acre drilling and spacing units for the Niobrara Formation as illustrated on Exhibit L-5, and (iii) vacate the existing 640-acre drilling and spacing units on the Application Lands (defined below), but only as the existing 640-acre spacing relates to the additional horizontal well in the proposed "rolling" laydown 1,280-acre drilling and spacing units. The Application covers the following lands (the "Application Lands"):

Township 11 North, Range 63 West, 6<sup>th</sup> P.M.  
Sections 9, 10, 14, 15 & 16

### Exhibit L-1: EOG Leasehold Interests.

Exhibit L-1 shows the leasehold interests held by EOG on the Application Lands. EOG holds 100% leasehold ownership interest in the areas shaded in yellow and holds a partial leasehold ownership interest in the yellow-hatched areas. EOG holds 100% leasehold ownership interest in the Application Lands.

### Exhibit L-2: Mineral Ownership.

Exhibit L-2 shows the mineral ownership of the Application Lands. A majority of the mineral ownership in the Application Lands is held in fee. Section 16, Township 11 North, Range 63 West is State of Colorado Minerals. There are no Federal minerals on the Application Lands.

### Exhibit No. L-3: Surface Ownership.

Exhibit L-3 shows the surface ownership of the Application Lands. A majority of the surface ownership of the Application Lands is owned in fee. Section 16, Township 11 North, Range 63 West is owned by the State of Colorado. EOG shall conform to the request in the Application that the surface location for any horizontal well may be located anywhere within the established 1,280-acre drilling and spacing unit, provided that the initial perforation, lateral, and



terminus of the horizontal wells within the Niobrara Formation shall be located no closer than 600 feet from the boundary of the established drilling and spacing unit (with the interior section line extinguished) and that the lateral within the Niobrara Formation be located no closer than 600 feet from any other wellbore on the Application Lands which has perforated the Niobrara Formation.

Exhibit No. L-4: Topography.

Exhibit L-4 shows the topography of the Application Lands.

Exhibit No. L-5: Map of Application Lands and Well Orientation

Exhibit L-5 shows the existing 640-acre drilling and spacing units as well as the three (3) proposed "rolling" laydown 1,280-acre drilling and spacing units.

The black lines show the existing wells that are referenced in Osman Apaydin's engineering testimony submitted in support of the Application. The red, green, and blue lines illustrate the proposed additional horizontal wells in the three (3) proposed "rolling" laydown 1,280-acre drilling and spacing units.

For purposes of clarification, EOG requested "up to two (2) additional horizontal wells" in each proposed 1,280-acre drilling and spacing unit only because there are overlapping 1,280-acre drilling and spacing units in Section 15, Township 11 North, Range 63 West. There will be portions of up to three (3) wellbores that will underlie Section 15, Township 11 North, Range 63 West, but EOG will allocate the production for the individual additional horizontal wells according to their respective "rolling" laydown 1,280-acre drilling and spacing unit. A complete discussion on the allocation of production from the horizontal wells located in the 1,280-acre drilling and spacing units is set forth in Osman Apaydin's testimony submitted in support of the Application.

For further purposes of clarification, it is also EOG's intent to vacate the existing 640-acre drilling and spacing unit only as it relates to the additional horizontal well located in each "rolling" laydown 1,280-acre drilling and spacing unit. The existing horizontal wells and the established 640-acre drilling and spacing units, as it relates to the existing horizontal wells, shall remain unchanged.

Based upon our examination of relevant documents, and under my direction and control, all of the interested parties included in Exhibit A attached to the Application received proper notice. As of the date of this testimony, EOG has not received any protests or objections to the Application.

The matters described herein were all conducted under my direction and control. To the best of my knowledge and belief, all of the matters set forth herein, my testimony and in the exhibits are true, correct and accurate.

Dated this 30th day of December, 2010.

  
\_\_\_\_\_  
Jason McLaren, Landman

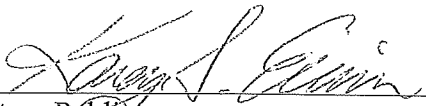
EOG Resources, Inc.

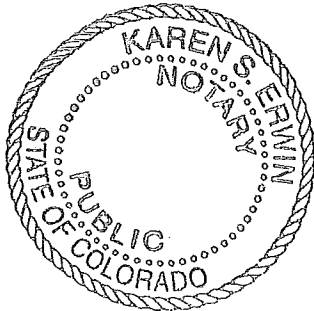
STATE OF COLORADO                    )  
  ) ss.  
CITY AND COUNTY OF DENVER )

The foregoing instrument was subscribed and sworn to before me this 30th day of December, 2010, by Jason McLaren, Landman, for EOG Resources, Inc.

Witness my hand and official seal.

My commission expires: June 25, 2011

  
\_\_\_\_\_  
Notary Public

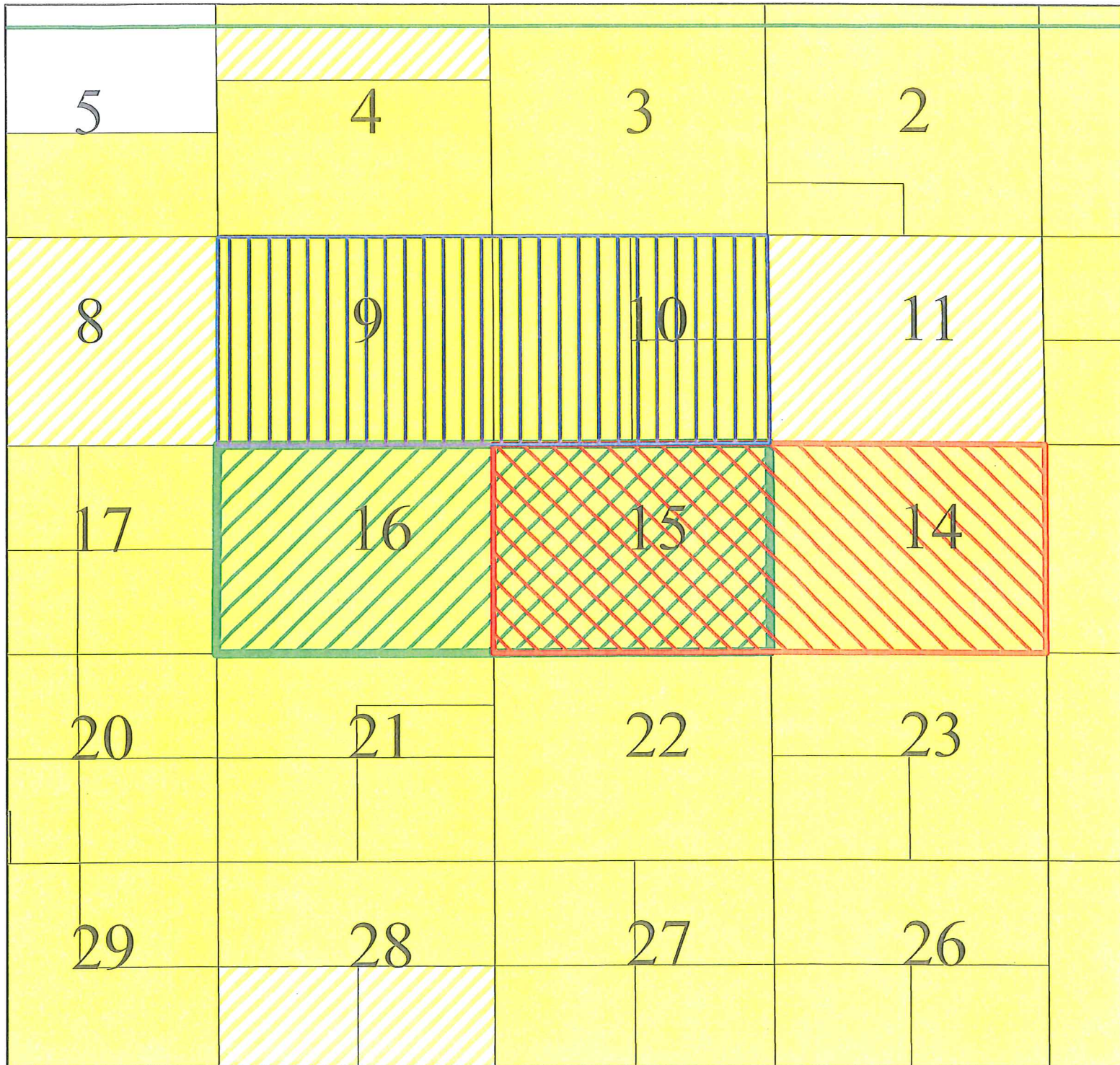




# Lease Ownership Map

## Proposed 1280 acre Spacing Unit

Township 11North,  
Range 63 West,  
6th PM



Docket No. 1101-SP-03, Cause 421

Exhibit L1

December 17, 2010

### Legend

Spacing Units	EOG Full Interest
Sections 15&14	EOG Partial Interest
Sections 16 & 15	
Sections 9 & 10	



# Mineral Ownership Map



## Proposed 1280 acre Spacing Unit

Township 11 North,  
Range 63 West,  
6th PM



### Legend

#### Spacing Units

-  Sections 15&14
-  Sections 16 & 15
-  Sections 9 & 10

#### Mineral Ownership

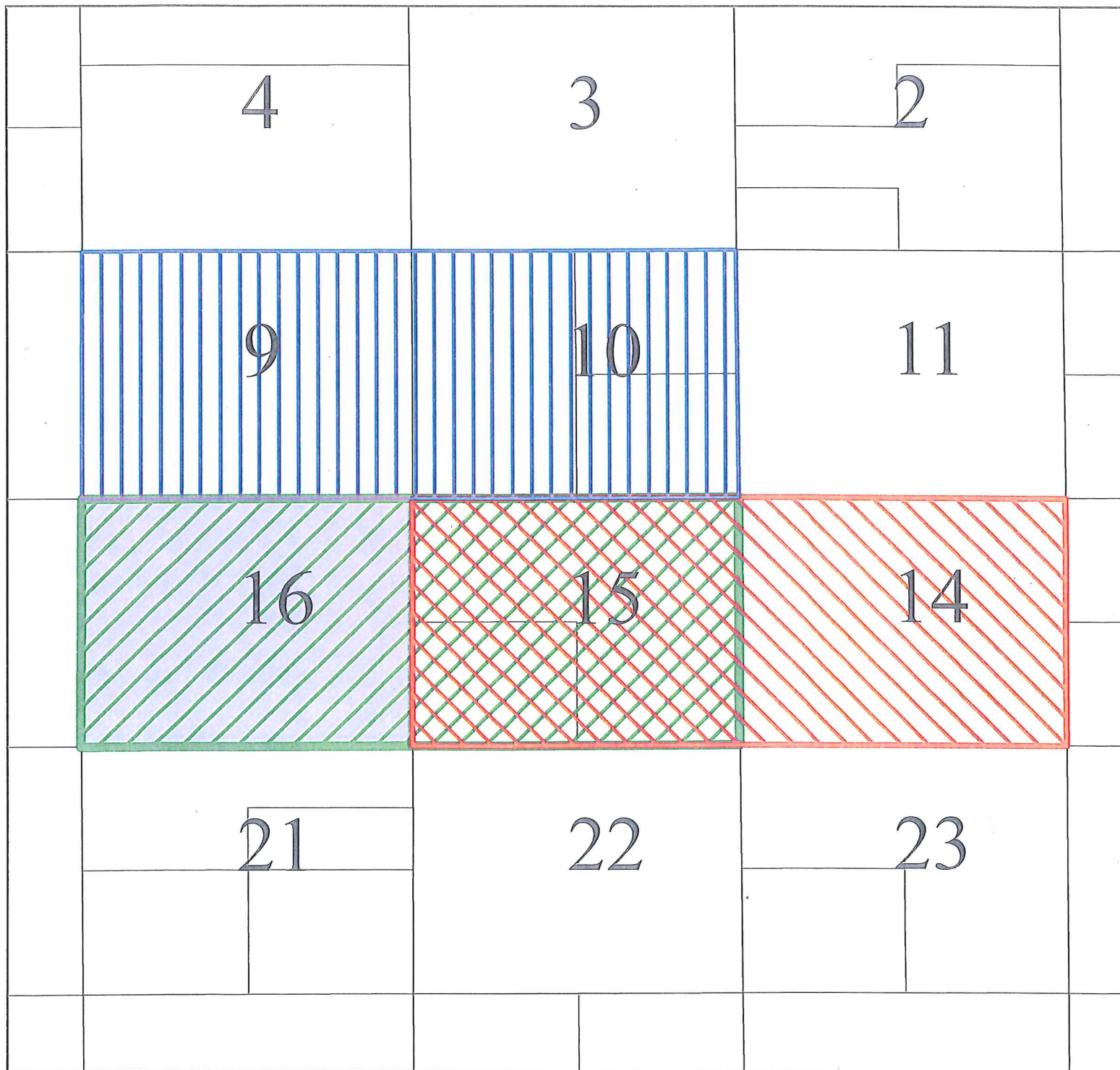
-  State Minerals
-  Fee Minerals

Docket No. 1101-SP-03, Cause 421  
Exhibit L2  
December 17, 2010

# Surface Ownership Map




## Proposed 1280 acre Spacing Unit

Township 11 North,  
Range 63 West,  
6th PM





### Legend

#### Spacing Unit

-  Sections 15&14
-  Sections 16 & 15
-  Sections 9 & 10

#### Surface Ownership

-  State
-  Fee

Docket No. 1101-SP-03, Cause 421

Exhibit L3

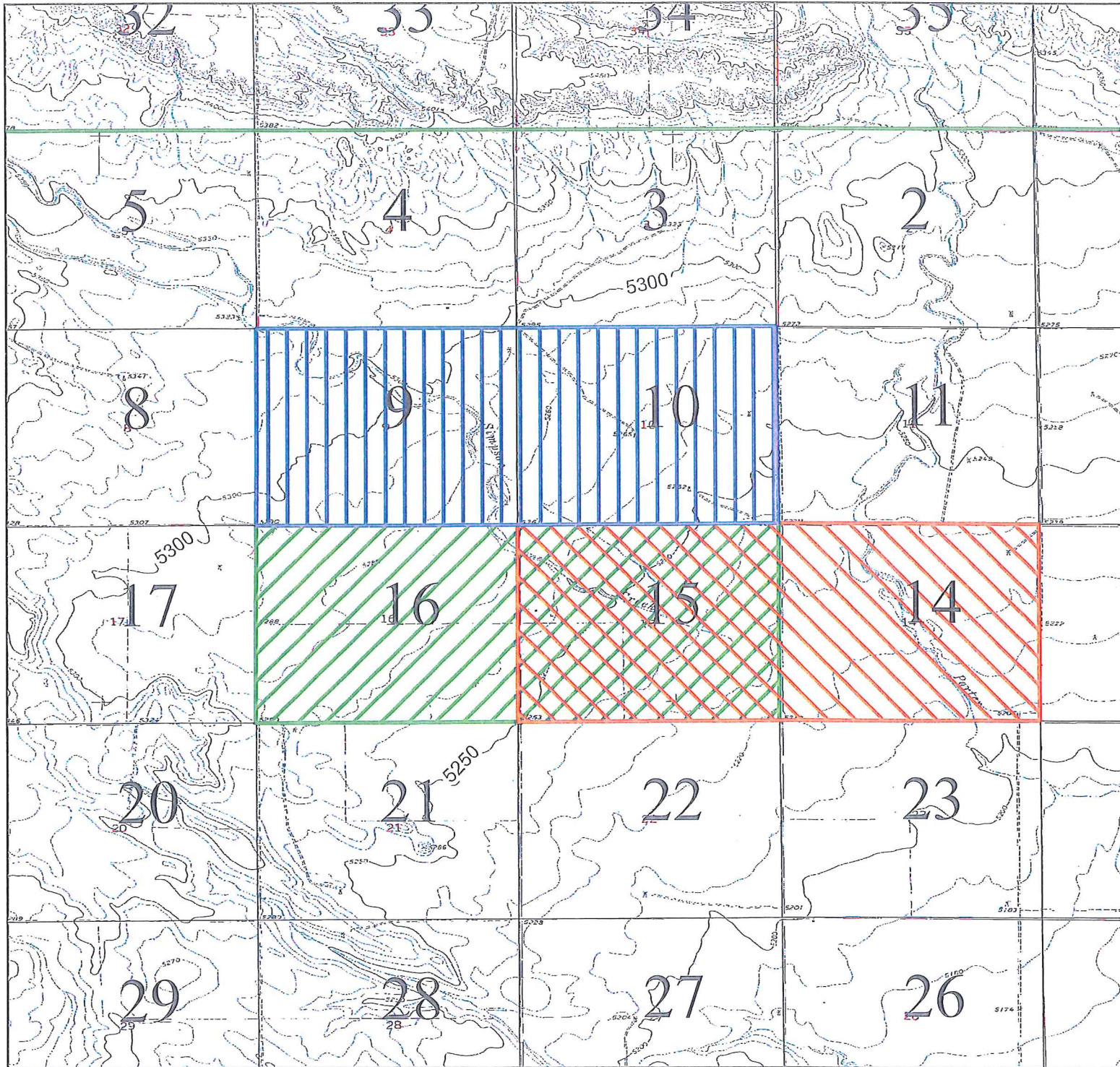
December 17, 2010



# Topographical Map




## Proposed 1280 acre Spacing Unit

Township 11 North,  
Range 63 West,  
6th PM



### Legend

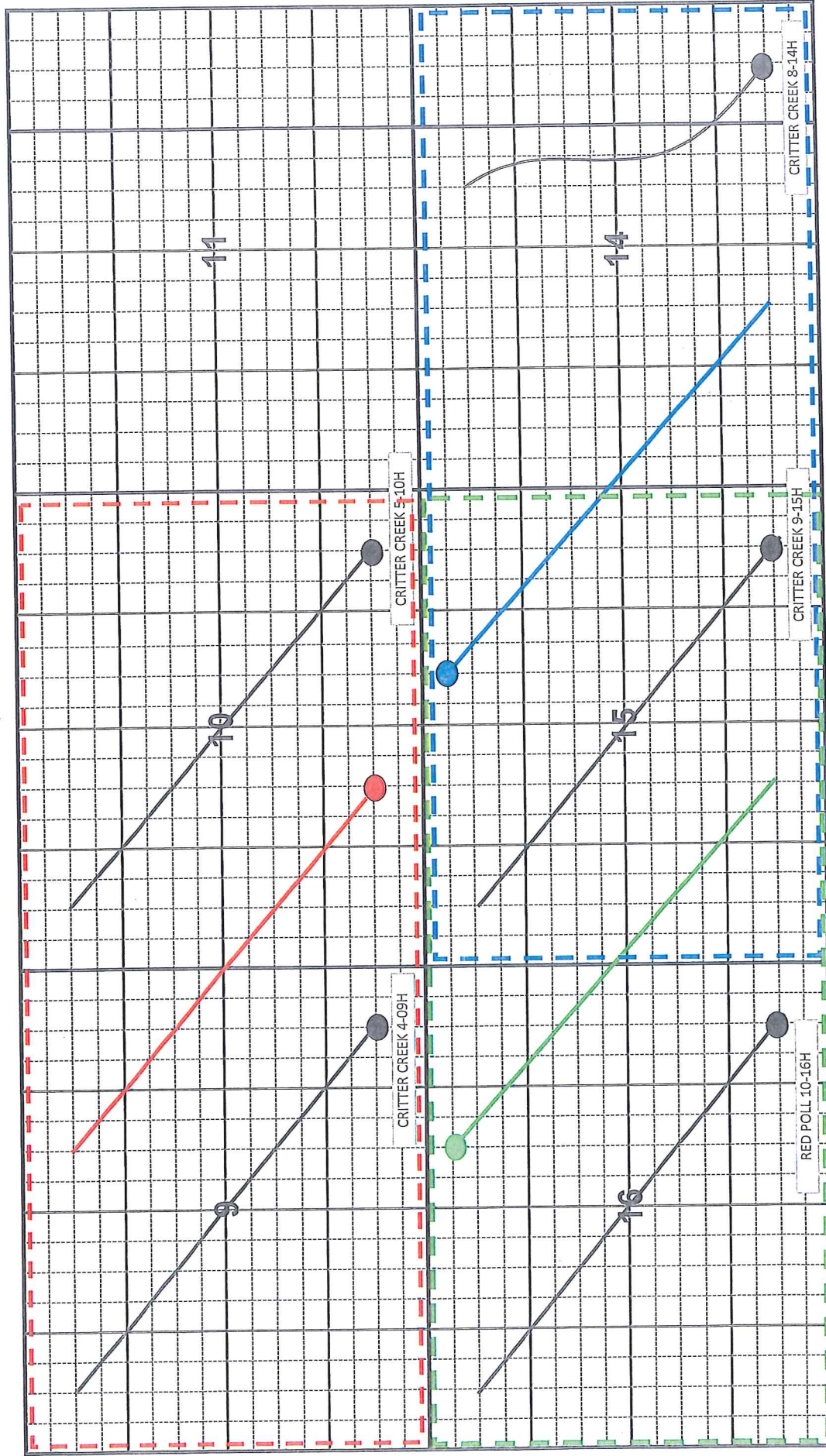
#### Spacing Units

-  Sections 15&14
-  Sections 16 & 15
-  Sections 9 & 10

Docket No. 1101-SP-03, Cause 421  
Exhibit L4, 2010  
December 17, 2010



TOWNSHIP 11 NORTH, RANGE 63 WEST, 6TH P.M.  
WELD COUNTY, COLORADO



APPLICATION AREA

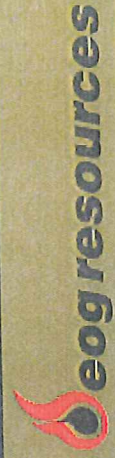
EXISTING WELLS DRILLED

PROPOSED WELLS & 1280 ACRE UNITS

SECTIONS 9 & 10

SECTIONS 15 & 16

SECTIONS 14 & 15



Docket No. 1101-SP-03, Cause 421  
Exhibit L5

## EXHIBIT C

### BEFORE THE OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION )  
AND ESTABLISHMENT OF FIELD RULES ) Cause No. 421  
TO GOVERN OPERATIONS IN THE )  
HEREFORD FILED, WELD COUNTY, ) Docket No. 1101-SP-03  
COLORADO )

#### REPORT OF THE COMMISSION

This cause came on for hearing before the Commission at 9:00 a.m. on January 13, 2011, in Suite 801, The Chancery Building, 1120 Lincoln Street, Denver, Colorado 80203, for an order establishing three exploratory drilling and spacing units, each such unit consisting of approximately one thousand, two hundred eighty (1,280) acres in a "laydown" configuration and allowing the drilling of up to two (2) exploratory horizontal wells in each such unit in the underlying Niobrara Formation. The proposed units are comprised of the following described lands in Weld County, Colorado:

Township 11 North, Range 63 West, 6th P.M.  
1,280-acre DSU #1: Sections 9 and 10  
1,280-acre DSU #2: Sections 14 and 15  
1,280-acre DSU #3: Sections 15 and 16

(hereinafter "Application Lands")

#### FINDINGS

The Commission finds as follows:

1. EOG Resources, Inc. ("Applicant") owns a substantial leasehold interest in the Niobrara Formation underlying the Application Lands.
2. Due notice of the time, place and purpose of the hearing has been given in all respects as required by law.
3. The Commission has jurisdiction over the subject matter embraced in said Notice, and of the parties interested therein, and jurisdiction to promulgate the hereinafter prescribed order pursuant to the Oil and Gas Conservation Act.
4. On February 22, 2010 the Commission entered Order No. 421-1 which established fifty-eight (58) approximate 640-acre drilling and spacing units in Townships 11 and 12 North, Ranges 62 and 62 West for the production of oil, gas and associated hydrocarbons from the Niobrara Formation with no more than one (1) horizontal well to be drilled in each unit. Order No. 421-1 further ordered that the surface location for each horizontal well shall be located anywhere within the unit, provided that the horizontal leg into the Niobrara Formation shall not be closer than 600 feet to the outside boundary of the drilling unit and the terminus of the horizontal leg shall not be any closer than 600 feet to the outside boundary of the drilling and spacing unit without exception being granted by the Director of the Oil and Gas Conservation Commission. The Applications Lands are subject to Order No. 421-1.
5. Applicant is experienced in drilling horizontal wells with laterals in excess of 4,000 feet, and has successfully drilled many such wells in the Bakken Formation in North Dakota. Based on its early experience in drilling horizontal wells in the Niobrara Formation in Colorado, Applicant asserted that the Niobrara Formation underlying the Application Lands is an ideal candidate for the drilling and testing of up to two (2) exploratory horizontal wells with lengthy laterals in 1,280 acre drilling and spacing units. Due to overlapping of the proposed 1,280-acre drilling and spacing units in Section 15, Township 11 North, Range 63 West, portions of up to three (3) wellbores shall underlie Section 15, Township 11 North, Range 63 West.
6. Based upon geological studies and horizontal drilling of the Niobrara Formation in the same general area of the Application Lands, Applicant asserted that the Niobrara Formation may produce economic volumes of oil when drilled and completed within horizontal wells having longer laterals than are currently authorized by Order No. 421-1.

7. The appropriate setbacks for the drilling of up to two (2) exploratory horizontal wells within each 1,280-acre unit for the Niobrara Formation of the Application Lands should be as follows: (a) that the surface location may be located anywhere on the Application Lands; (b) that the initial perforation, lateral and terminus of the horizontal wells within the Niobrara Formation shall be located no closer than 600 feet from the boundary of the established drilling and spacing unit and the interior section line shall be extinguished; and (c) that the lateral within the Niobrara Formation shall be located no closer than 600 feet from any other wellbore on the Application Lands which has perforated the Niobrara Formation.

8. The land testimony and exhibits in support of the Application showed that EOG holds 100% leasehold ownership interest in the Application Lands and that a majority of the surface and mineral ownership of the Application Lands is held in fee. The land testimony also confirmed the following: (a) EOG requested "up to two (2) additional horizontal wells" in each proposed 1,280-acre drilling and spacing unit only because there are overlapping 1,280-acre drilling and spacing units in Section 15, Township 11 North, Range 63 West, and there will be portions of up to three (3) wellbores that will underlie Section 15, Township 11 North, Range 63 West, but EOG will allocate the production for the individual additional horizontal wells according to their respective "rolling" laydown 1,280-acre drilling and spacing unit; and (b) it is EOG's intent to vacate the existing 640-acre drilling and spacing units only as they relate to the additional horizontal wells located in each "rolling" laydown 1,280-acre drilling and spacing unit as the existing horizontal wells and the established 640-acre drilling and spacing units, as they relate to the existing horizontal wells, shall remain unchanged.

9. The geology testimony and exhibits in support of the Application showed that the Niobrara Formation exists under all of the Application Lands.

10. Testimony and exhibits in support of the Application showed that production for the existing wellbores on the previously established 640-acre drilling and spacing units shall remain in place, while production for horizontal wells drilled within the proposed "rolling" laydown 1,280-acre drilling and spacing units shall be allocated on a 1280-acre basis. The testimony and exhibit further provides that EUR estimates for the EOG Resources drilled horizontal wells, with limited production history, vary between 130,000 to 285,000 barrels. The estimated original oil in place is between 2,600,000 and 5,700,000 BBL, and this range yields estimated drainage areas between 92 acres to 202 acres. The drainage area ranges presented in the testimony support the additional horizontal infill wells.

11. The testimony and exhibits showed that granting the Application will promote efficient reservoir drainage, will prevent waste, will allow greater ultimate recovery of oil and gas, and will protect correlative rights.

12. Order No. 421-1 shall be modified to vacate the existing 640-acre drilling and spacing units on the Application Lands, but only as the existing 640-acre spacing relates to the exploratory horizontal well(s) in the "rolling" laydown 1,280-acre drilling and spacing units. The existing horizontal wells drilled within the established 640-acre drilling and spacing units shall remain unchanged.

13. Applicant agreed to be bound by oral order of the Commission.

14. Based on the facts stated in the verified application, having received no protests and based on the Hearing Officer review of the application under Rule 511.a., the Commission should enter an order establishing three exploratory 1,280-acre drilling and spacing units, each in a "laydown" configuration, allow the drilling of up to two (2) exploratory horizontal wells in each unit for the underlying Niobrara Formation, and establish the setbacks for such horizontal wells to conform to those set forth in Paragraph 7 of these Findings.

#### ORDER

NOW, THEREFORE IT IS ORDERED that three (3) exploratory 1,280-acre drilling and spacing units are established for the following lands in Weld County, Colorado and that such units are established in a "laydown" configuration:

Township 11 North, Range 63 West, 6th P.M.  
1,280-acre DSU #1: Sections 9 and 10  
1,280-acre DSU #2: Sections 14 and 15  
1,280-acre DSU #3: Sections 15 and 16

IT IS FURTHER ORDERED that the drilling of up to two (2) exploratory horizontal wells shall be allowed in each of the above-described 1,280-acre drilling and spacing units for the Application Lands.

IT IS FURTHER ORDERED that the appropriate setbacks for the drilling of up to two (2) exploratory horizontal wells within each 1,280-acre unit for the Niobrara Formation of the Application Lands shall be as follows: (a) that the surface location may be located anywhere on the Application Lands; (b) that the initial perforation, lateral and terminus of the horizontal wells within the Niobrara Formation shall be located no closer than 600 feet from the boundary of the established drilling and spacing unit and the interior section line shall be extinguished; and (c) that the lateral within the Niobrara Formation shall be located no closer than 600 feet from any other wellbore on the Application Lands which has perforated the Niobrara Formation.

IT IS FURTHER ORDERED that Order No. 421-1 is modified to vacate the existing 640-acre drilling and spacing units on the Application Lands, but only as the existing 640-acre drilling and spacing units relate to the exploratory horizontal well(s) in the "rolling" laydown 1,280-acre drilling and spacing units. The existing horizontal wells drilled within the established 640-acre drilling and spacing units shall remain unchanged.

IT IS FURTHER ORDERED, that the provisions contained in the above order shall become effective forthwith.

IT IS FURTHER ORDERED, that the Commission expressly reserves its right, after notice and hearing, to alter, amend or repeal any and/or all of the above orders.

IT IS FURTHER ORDERED, that under the State Administrative Procedure Act the Commission considers this order to be final agency action for purposes of judicial review within thirty (30) days after the date this order is mailed by the Commission.

IT IS FURTHER ORDERED, that an application for reconsideration by the Commission of this order is not required prior to the filing for judicial review.

ENTERED this \_\_\_\_\_ day of \_\_\_\_\_, as of \_\_\_\_\_.

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

By: \_\_\_\_\_  
\_\_\_\_\_

Dated at Suite 801  
1120 Lincoln Street  
Denver, Colorado 80203  
\_\_\_\_\_, 2011



**EXHIBIT D**BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADOIN THE MATTER OF THE PROMULGATION AND  
ESTABLISHMENT OF FIELD RULES TO GOVERN  
OPERATIONS IN THE HEREFORD FIELD, WELD  
COUNTY, COLORADO) CAUSE NO. 421  
)  
) ORDER NO. 421-4  
)REPORT OF THE COMMISSION

This cause was heard by the Commission on January 13, 2011, in Suite 801, The Chancery Building, 1120 Lincoln Street, Denver, Colorado, for an order to: 1) vacate the approximate 640-acre drilling and spacing units established under Order No. 421-1 for Sections 9, 10, 14, 15, and 16, Township 11 North, Range 63 West, 6th P.M.; 2) establish three exploratory approximate 1,280-acre laydown drilling and spacing units; and 3) approve of up to two horizontal wells within each unit, for those same lands with overlapping units in Section 15.

FINDINGS

The Commission finds as follows:

1. EOG Resources, Inc. ("EOG" or "Applicant"), as applicant herein, is an interested party in the subject matter of the above-referenced hearing.
2. Due notice of the time, place and purpose of the hearing has been given in all respects as required by law.
3. The Commission has jurisdiction over the subject matter embraced in said Notice, and of the parties interested therein, and jurisdiction to promulgate the hereinafter prescribed order pursuant to the Oil and Gas Conservation Act.
4. On February 22, 2010, the Commission issued Order No. 421-1, which among other things, established approximate 640-acre drilling and spacing units for certain lands including Sections 9, 10, 14, 15, and 16, Township 11 North, Range 63 West, 6th P.M., for the production of oil, gas and associated hydrocarbons from the Niobrara Formation, with no more than one horizontal well to be drilled in each unit.
5. On October 8, 2010, EOG, by its attorneys, filed with the Commission a verified application ("Application") for an order to: 1) vacate the approximate 640-acre drilling and spacing units established under Order No. 421-1 for Sections 9, 10, 14, 15, and 16, Township 11 North, Range 63 West, 6th P.M., ("Application Lands") for the production of oil, gas and associated hydrocarbons from the Niobrara Formation; 2) establish three exploratory approximate 1,280-acre laydown drilling and spacing units for the Application Lands as described below; and 3) approve of up to two horizontal wells within each drilling and spacing unit, for the production of oil, gas and associated hydrocarbons from the Niobrara Formation:

*Drilling and Spacing Unit #1*

Township 11 North, Range 63 West, 6th P.M.  
Sections 9 and 10: All

*Drilling and Spacing Unit #2*

Township 11 North, Range 63 West, 6th P.M.  
Sections 14 and 15: All

*Drilling and Spacing Unit #3*

Township 11 North, Range 63 West, 6th P.M.  
Sections 15 and 16: All

The surface location for any horizontal well permitted under this Application should be located anywhere upon the drilling and spacing unit, provided that the initial perforation, lateral and terminus of the horizontal leg into the Niobrara Formation should not be closer than 600 feet to the outside boundary of the drilling and spacing unit, and the interior section line shall be ignored, unless an exception is granted by the Director of the Commission. Further, the lateral of the horizontal leg into the Niobrara Formation should be located no closer than 600 feet from any other wellbore on the Application Lands which has been perforated the Niobrara Formation. Due to the overlapping of Drilling and Spacing Units #2 and #3 in Section 15, portions of up to three horizontal legs drilled into the Niobrara Formation may underlie Section 15.

6. On January 3, 2011, EOG, by its attorney, filed with the Commission a written request to approve the Application based on the merits of the verified Application and the supporting exhibits. Sworn written testimony and exhibits were submitted in support of the Application.

7. Land testimony and exhibits submitted in support of the Application showed that EOG holds 100% leasehold ownership interest in the Application Lands. The land testimony also confirmed that EOG requested "up to two additional horizontal wells" in each proposed 1,280-acre drilling and spacing unit only because there are overlapping 1,280-acre drilling and spacing units in Section 15, and there will be portions of up to three wellbores that will underlie Section 15. EOG will allocate the production for the individual additional horizontal wells according to their respective "rolling" laydown 1,280-acre drilling and spacing unit.

8. Geological testimony submitted in support of the Application showed that: 1) the Niobrara Formation underlying the Application Lands has a total thickness ranging from 265 feet to 283 feet; 2) the Niobrara Formation within the Application Lands consists of two members, the Smoky Hill Chalk and the Ft. Hayes Limestone; and 3) the Niobrara Formation underlies all of the Application Lands.

9. Engineering testimony and exhibits submitted in support of the Application showed that: 1) EOG has drilled approximately 28 wells in the Hereford Field, which includes the Application Lands, with reported production in horizontal wells reported between 348 BOPD and 1,100 BOPD; 2) production from vertical wells in the area is highly variable, and significantly less than that achieved through horizontal wells; 3) Estimated Ultimate Recovery (EUR) in EOG wells in the Hereford Field vary between 130,000 to 285,000; 4) Estimated original oil in place is between 2,600,000 and 5,700,000 BBL; 5) estimated drainage from EOG wells in the area ranges between 92 acres and 202 acres; and 6) the drainage area ranges presented in the testimony support the additional horizontal infill wells.

10. The verified Application states that: 1) based on its early experience in drilling horizontal wells in the Niobrara Formation in Colorado, EOG believes that the Niobrara Formation underlying the Application Lands is an ideal candidate for the drilling and testing of up to two exploratory horizontal wells with lengthy laterals in 1,280 acre drilling and spacing units; 2) the Niobrara Formation may produce economic volumes of oil when drilled and completed within horizontal wells having longer laterals than are currently authorized by Order No. 421-1; 3) the appropriate setbacks for the drilling of up to two exploratory horizontal wells within each 1,280-acre unit for the Niobrara Formation of the Application Lands should be as follows: (a) the initial perforation, lateral and terminus of the horizontal wells within the Niobrara Formation should be located no closer than 600 feet from the boundary of the established drilling and spacing unit and the interior section line shall be extinguished; and (b) the lateral within the Niobrara Formation should be located no closer than 600 feet from any other wellbore on the Application Lands which has perforated the Niobrara Formation.

11. Testimony and exhibits submitted in support of the Application showed that production for the existing wellbores on the previously established 640-acre drilling and spacing units should remain in place, while production for horizontal wells drilled within the proposed "rolling" laydown 1,280-acre drilling and spacing units shall be allocated on a 1280-acre basis.

12. The above-referenced testimony and exhibits show that the granting of the Application will allow more efficient reservoir drainage, will prevent waste, will assure a greater ultimate recovery of oil/gas, and will not violate correlative rights.

13. EOG agreed to be bound by oral order of the Commission.

14. Based on the facts stated in the verified Application, having received no protests, and based on the Hearing Officer review of the Application under Rule 511., the Commission should enter an order to: 1) vacate the approximate 640-acre drilling and spacing units established under Order No. 421-1 for Sections 9, 10, 14, 15, and 16, Township 11 North, Range 63 West, 6th P.M.; 2) establish three exploratory approximate 1,280-acre laydown drilling and spacing units; and 3) approve of up to two horizontal wells within each unit within the Application Lands, with three horizontal well bores permitted in Section 15, due to units 2 and 3 overlapping in Section 15.

#### ORDER

NOW, THEREFORE IT IS ORDERED, that the below-listed approximate 640-acre drilling and spacing units established in Order No. 421-1, are hereby vacated.

Township 11 North, Range 63 West, 6<sup>th</sup> P.M.  
Sections 9, 10, 14 through 16: All

IT IS FURTHER ORDERED, that three approximate exploratory 1,280-acre laydown drilling and spacing units, are hereby established, consisting of the below-listed lands:

*Drilling and Spacing Unit #1*

Township 11 North, Range 63 West, 6<sup>th</sup> P.M.  
Sections 9 and 10: All

*Drilling and Spacing Unit #2*

Township 11 North, Range 63 West, 6<sup>th</sup> P.M.  
Sections 14 and 15: All

*Drilling and Spacing Unit #3*

Township 11 North, Range 63 West, 6<sup>th</sup> P.M.  
Sections 15 and 16: All

IT IS FURTHER ORDERED, that setbacks for the drilling of up to two exploratory horizontal wells within each 1,280-acre unit for the Niobrara Formation of the Application Lands shall be as follows: (a) the initial perforation, lateral and terminus of the horizontal wells within the Niobrara Formation shall be located no closer than 600 feet from the boundary of the established drilling and spacing unit and the interior section line shall be extinguished; and (b) that the lateral within the Niobrara Formation shall be located no closer than 600 feet from any other wellbore on the Application Lands which has perforated the Niobrara Formation.

IT IS FURTHER ORDERED that each Drilling and Spacing Unit defined above shall be permitted to have one additional exploratory horizontal well, for a total of two exploratory horizontal wellbores per unit. Since *Drilling and Spacing Unit #2* and *Drilling and Spacing Unit #3* overlap in Section 15, Township 11 North, Range 63 West, 6<sup>th</sup> P.M., Section 15 may have a total of three exploratory horizontal wellbores.

IT IS FURTHER ORDERED, that while Order No. 421-1 is modified to vacate the existing 640-acre drilling and spacing units on the Application Lands, production allocation for the existing horizontal wells drilled within the pre-existing, five 640-acre drilling and spacing units, shall remain unaffected by this Order.

IT IS FURTHER ORDERED, that the provisions contained in the above order shall become effective immediately.

IT IS FURTHER ORDERED, that the Commission expressly reserves its right, after notice and hearing, to alter, amend or repeal any and/or all of the above orders.

IT IS FURTHER ORDERED, that under the State Administrative Procedure Act the Commission considers this Order to be final agency action for purposes of judicial review within thirty (30) days after the date this order is mailed by the Commission.

IT IS FURTHER ORDERED, that an application for reconsideration by the Commission of this order is not required prior to the filing for judicial review.

ENTERED this 2<sup>nd</sup> day of February 2011, as of January 13, 2011.

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

By \_\_\_\_\_  
Robert A. Willis, Acting Secretary

Dated at Suite 801  
1120 Lincoln Street  
Denver, Colorado 80203  
February 2, 2011