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09-02-14

511 DOCUMENTS

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

IN THE MATTER OF THE APPLICATION OF) CAUSE NO. 535
CONOCOPHILLIPS COMPANY FOR AN)
ORDER TO MODIFY ORDER NO. 535-97 FOR) DOCKET NO. 1409-SP-2118
SECTION 4, TOWNSHIP 4 SOUTH, RANGE 64)
WEST, 6TH P.M., AN UNNAMED FIELD,)
ARAPAHOE COUNTY, COLORADO)

**REQUEST FOR RECOMMENDATION OF
APPROVAL OF APPLICATION WITHOUT A HEARING**

ConocoPhillips Company ("Applicant"), by and through its undersigned attorneys, hereby requests pursuant to Rule 511.a. of the Rules of Regulations of the Colorado Oil and Gas Conservation Commission for the Director to recommend approval of its July 17, 2014, verified application ("Application") and the supporting exhibits without a hearing.

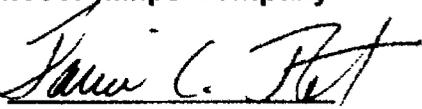
Applicant requests that the above-captioned matter be approved based upon: (i) the merits of the Application, and (ii) Applicant's sworn written testimony verifying sufficient facts along with exhibits that adequately support the relief requested in the Application. To Applicant's information and belief, no protests were timely filed in this matter.

WHEREFORE, Applicant requests that its request for a recommendation for approval of its Application without a hearing be granted.

DATED this 2nd day of September, 2014.

Respectfully submitted,

ConocoPhillips Company

By: 
Jamie L. Jost
James P. Parrot
Jost & Shelton Energy Group, P.C.
Attorneys for Applicant
1675 Larimer Street, Suite 420
Denver, CO 80202
(720) 379-1812

ConocoPhillips Company

**Cause No. 535
Docket No. 1409-SP-2118**

ConocoPhillips Company
Samual A. Hamidi - Land Testimony
Cause No. 535; Docket No. 1409-SP-2118
Reduced Setbacks Application – Niobrara Formation
Arapahoe County, Colorado

September 2014 Colorado Oil and Gas Conservation Commission Hearing

My name is Samual A. Hamidi, and I am currently employed as a Landman – Rockies Business Unit, Niobrara Land, for ConocoPhillips Company (“Applicant” of “ConocoPhillips”). I graduated from the University of Oklahoma in 2010 with a degree in Business Administration. I have over 3 years of experience in oil and gas land work and I am familiar with the lands subject to, and matters set forth in, the verified application (“Application”).

In support of Applicant’s Application in the above referenced docket, I am submitting six (6) exhibits. The exhibits are attached to my sworn testimony and form the basis of ConocoPhillips’ Application in the above-referenced docket requesting that this Commission enter an order to modify Order No. 535-97 only as to the Application Lands, to allow for the lateral of a given horizontal well to enter the Niobrara Formation anywhere within the unit, for the production of oil, gas, and associated hydrocarbons from the Niobrara Formation underlying the following described lands (“Application Lands”):

Township 4 South, Range 64 West, 6th P.M.
Section 4: ALL

Exhibit A-1: Leasehold Ownership Map:

Exhibit A-1 is a map showing the location of the Application Lands and the leasehold ownership. The Application Lands consist of 100% FEE mineral interest. The following parties own leasehold or unleased mineral interests in the Application Lands:

<u>INTEREST OWNER(S)</u>	<u>UNIT WI</u>
Burlington Resources Oil & Gas Company LP	63.133496%
ConocoPhillips Company	17.918004%
Other Working Interest Owners	18.948500%

ConocoPhillips and Burlington Resources Oil & Gas Company are operating in partnership with regard to the Application Lands, and for purposes of the Application are considered a single entity.

Exhibit A-2: Mineral Ownership Map:

Exhibit A-2 is a map showing the mineral ownership within the Application Lands, which is owned in fee and shaded in yellow.

Exhibit A-3: Property Location Plat:

Exhibit A-3 is a map showing the location of the Application Lands. The Application Lands consist of 640 acres more or less covering one section in Arapahoe County, Colorado. The Application Lands compose an approximate 640-acre drilling and spacing unit established by Commission Order 535-97.

Exhibit A-4: Surface Ownership Map:

Exhibit A-4 is a map showing the surface ownership within the Application Lands, which is owned in fee and shaded in yellow.

Exhibit A-5: Topographic Map:

Attached as Exhibit A-5 is a topographic map for the Application Lands.

Exhibit A-6: Interested Parties:

Attached as Exhibit A-6 are interested parties within the Application Lands. Based upon our examination of relevant documents all of the interested parties received proper notice. As of the date of this testimony, the Applicant is not aware of any unresolved protests or objections to the Application.

The records of the Colorado Oil and Gas Conservation Commission indicate that there have never been any wells drilled in the Niobrara in the Application Lands.

To promote efficient drainage within the Niobrara Formation of the Application Lands, to protect correlative rights and to avoid waste, the Commission should modify Order No. 535-97 only as to the Application Lands, to allow for the lateral of a given horizontal well to enter the Niobrara Formation anywhere within the unit. Applicant is not requesting modification of the 460-foot setbacks for the treated intervals of wells producing from the Niobrara Formation.

Applicant also reserves the right to submit additional documentation to respond to requests by the Commission or Commission Staff.

Based upon examination of relevant documents, all of the interested parties included in Exhibit A attached to the Application received proper notice. As of the date of this testimony, Applicant 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.

Affirmation

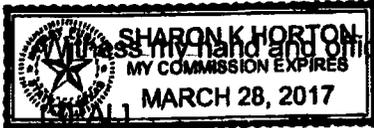
The matters described herein were all conducted under my direction and control. I hereby swear that to the best of my knowledge and belief, all of the matters set forth herein and in the exhibits are true, correct, and accurate.



Samual A. Hamidi
Landman – Rockies Business Unit, Niobrara Land
ConocoPhillips Company

STATE OF TEXAS)
) ss.
COUNTY OF HARRIS)

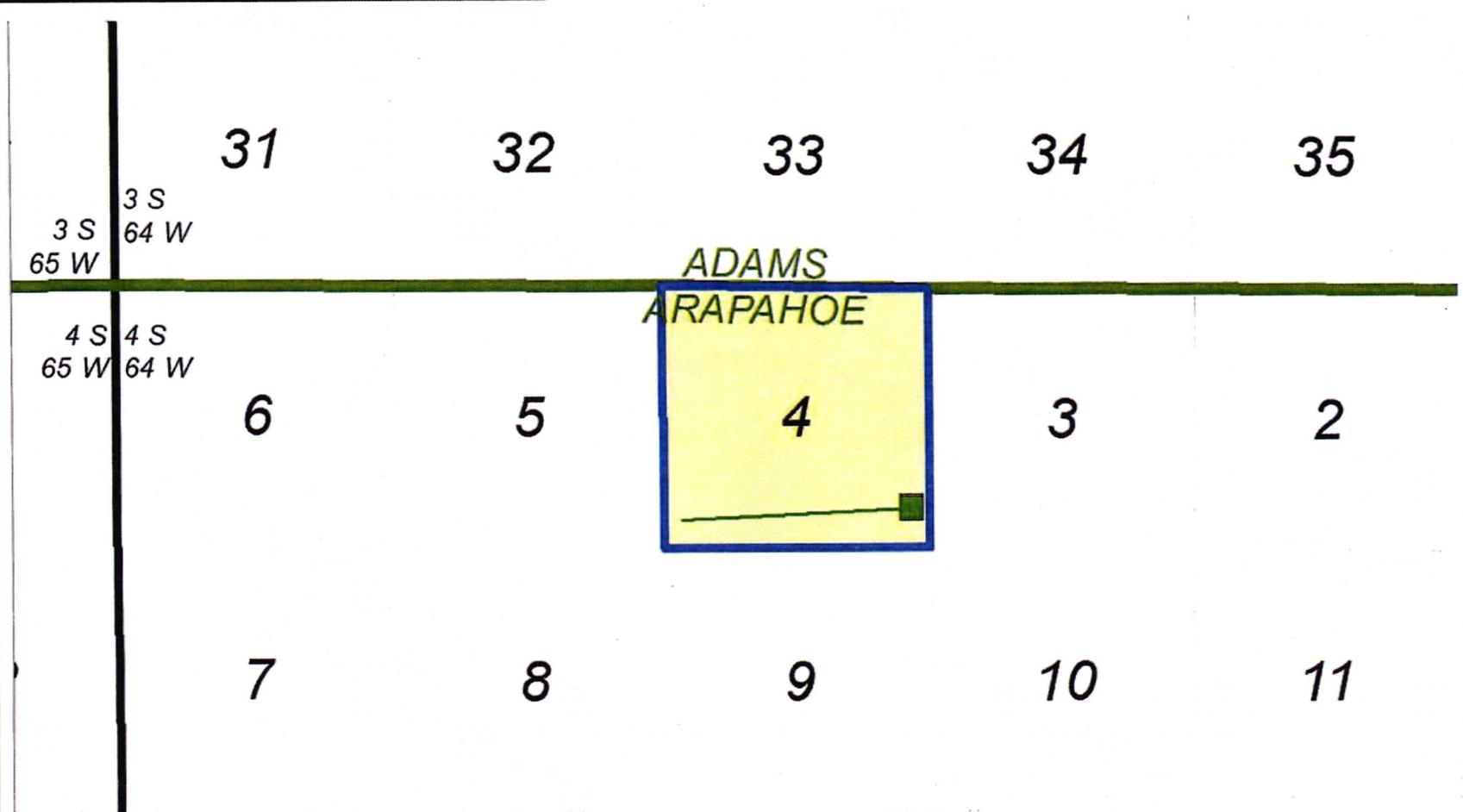
The foregoing instrument was subscribed and sworn to before me this 27th day of August, 2014, by Samual A. Hamidi, Landman – Rockies Business Unit, Niobrara Land, for ConocoPhillips Company.



Witness my hand and official seal.
My commission expires: March 28, 2017

Sharon K Horton
Notary Public

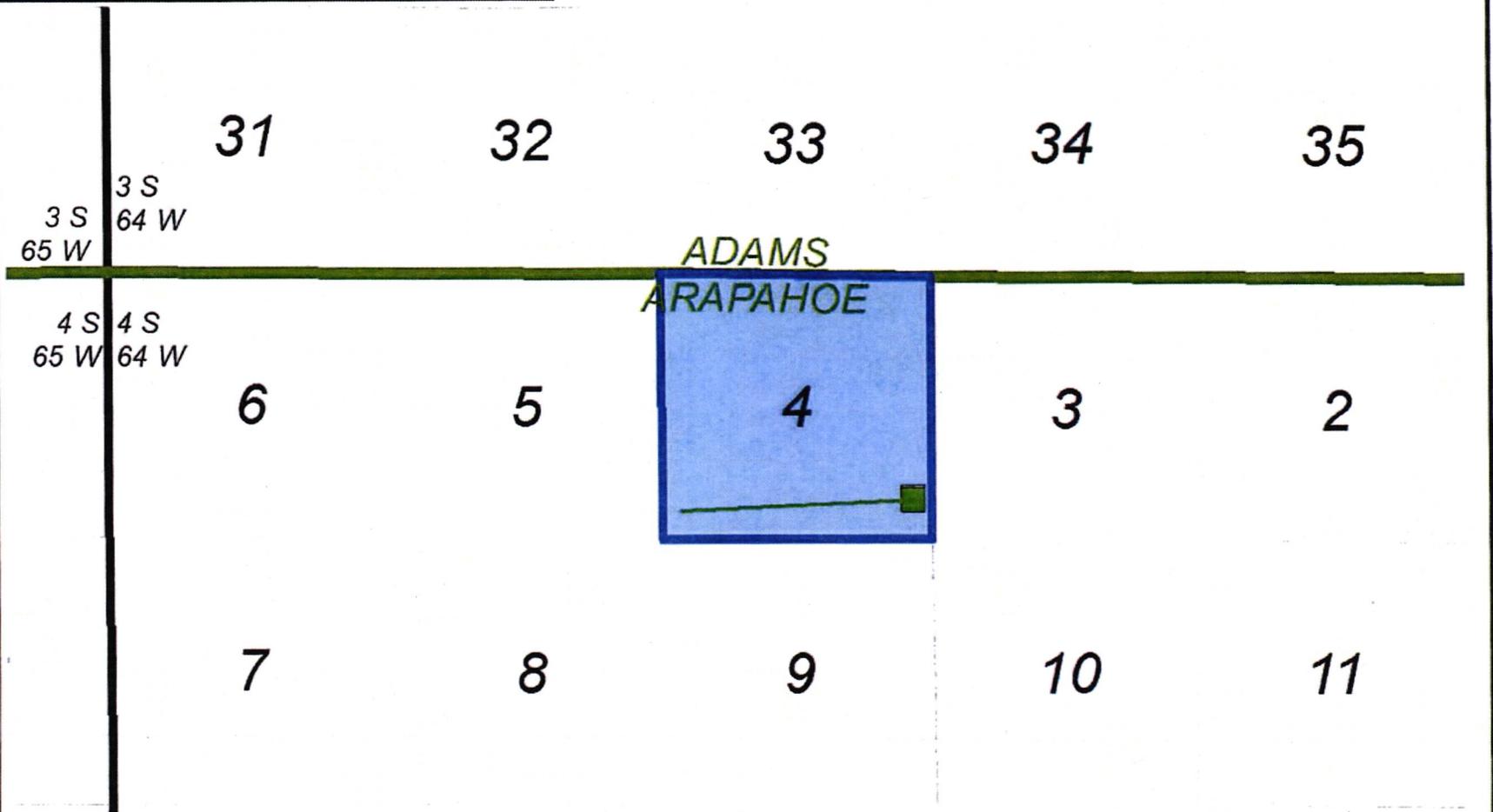
B & D Land 4-64 4 1H
Exhibit : A-1
Docket : 1409-SP-2118 Cause: 535
Leasehold Ownership Map
B & D Land 4-64 4 1H
Location: Section: 4 Township: 4S Range: 64W



Leasehold Ownership
 Majority Ownership

Prepared by Jace McKenzie

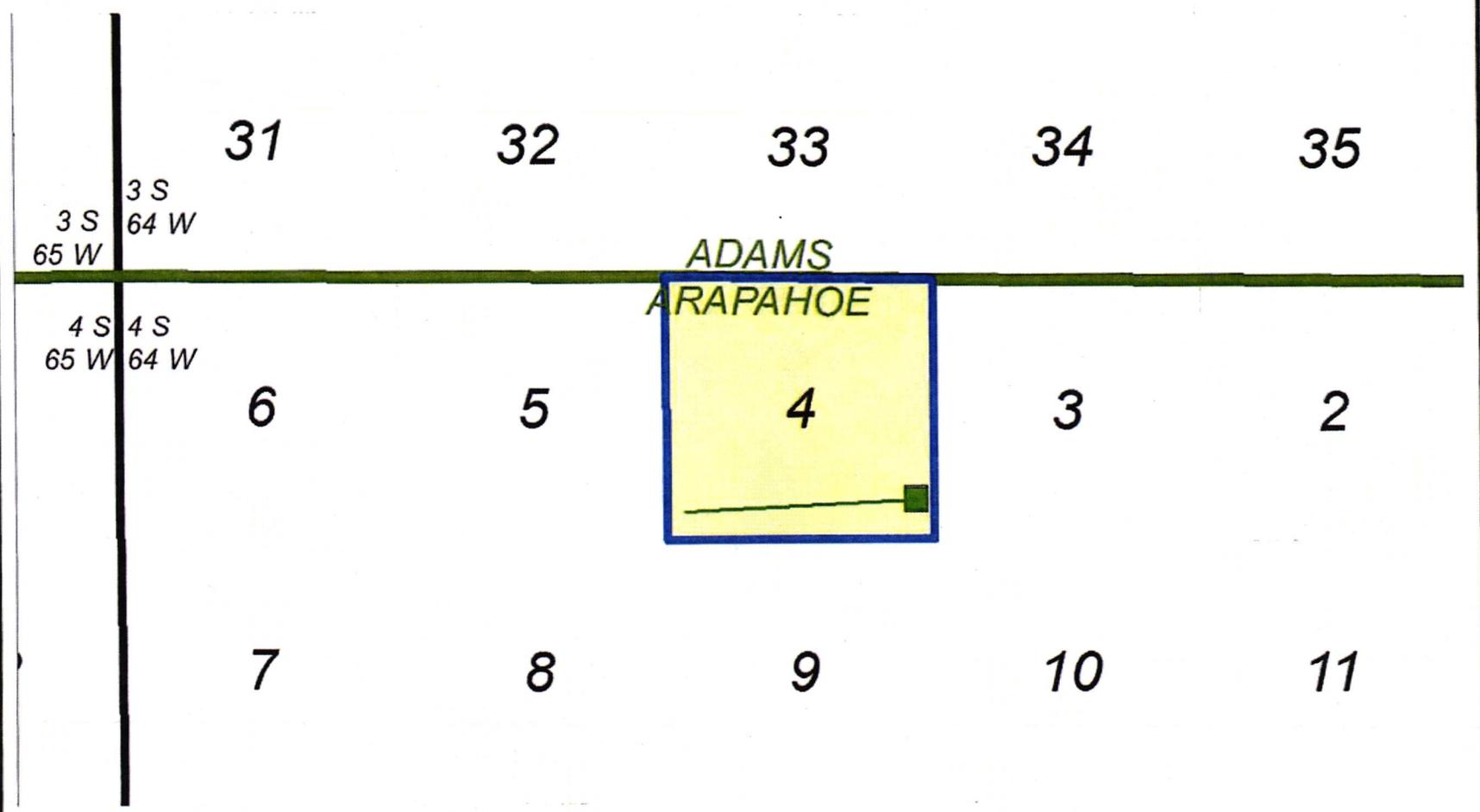
B & D Land 4-64 4 1H
Exhibit : A-2
Docket : 1409-SP-2118 Cause: 535
Mineral Ownership Map
B & D Land 4-64 4 1H
Location: Section: 4 Township: 4S Range: 64W



Mineral Ownership
Fee Mineral Ownership

Prepared by Jace McKenzie

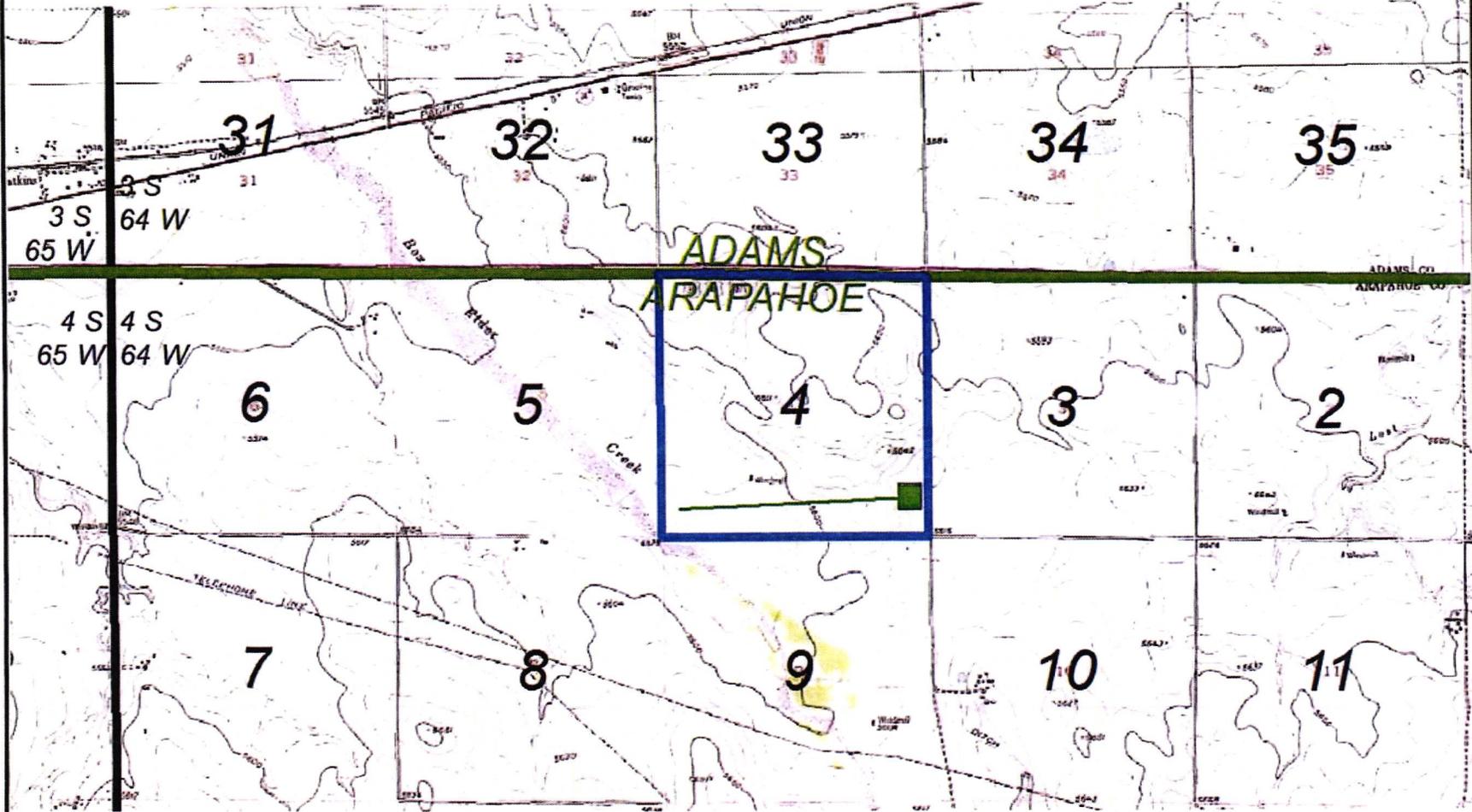
B & D Land 4-64 4 1H
Exhibit : A-4
Docket : 1409-SP-2118 Cause: 535
Surface Ownership Map
B & D Land 4-64 4 1H
Location: Section: 4 Township: 4S Range: 64W



Surface Ownership
 Fee Surface Ownership

Prepared by Jace McKenzie

B & D Land 4-64 4 1H
Exhibit : A-5
Docket : 1409-SP-2118 Cause: 535
Topographic Map
B & D Land 4-64 4 1H
Location: Section: 4 Township: 4S Range: 64W



Prepared by Jace
McKenzie

EXHIBIT A-6

Interested Party List

Burlington Resources Oil & Gas
Company LP
ATTN: Julia Browning
600 N. Dairy Ashford
Houston, TX 77079

ConocoPhillips Company
ATTN: Julia Browning
600 N. Dairy Ashford
Houston, TX 77079

Contex Energy Company
621 17th Street, Suite 1020
Denver, CO 80293

Herman A. Flader T/U/W
F/B/O Laura Britt, US Bank, N.A.,
Trustee
P.O. Box 3499
Tulsa, OK 74101

Herman A. Flader T/U/W
F/B/O Casey Reed, US Bank, N.A.,
Trustee
P.O. Box 3499
Tulsa, OK 74101

Radu Marcu and Floare Marcu, joint
tenants
3050 Oak
Lakewood, CO 80215

Christopher Alan Weller and
Laura L. Weller, joint tenants
920 South Kenton Street
Aurora, CO 80012

Brandon M. Barnes
1154 West Fork Way
Watkins, CO 80137

Jack D. Bell and
Melva R. Bell, joint tenants
1012 West Fork Way
Watkins, CO 80137

Ricky A. Schworm and
Denise L. Schworm, joint tenants
707 West Fork Way
Watkins, CO 80137

Jeff L. Becker and
Peg L. Becker, joint tenants
1206 West Fork Way
Watkins, CO 80137

Colorado Department of
Transportation
15285 S. Golden Rd., Bldg. 47
Golden, CO 80401

Merideth Wortz
P.O. Box 488
Riverside, CA 92502

Merideth Wortz and James M. Wortz
P.O. Box 488
Riverside, CA 92502

Merideth Wortz
Unknown
Crosby, ND 58730

Heirs and Devisees of James
Howard Wortz
Unknown
University Place, WA 98467

Thelma Eugenia Thompson
1506 Newport
San Luis Obispo, CA 93405

Kent Kuster
Colorado Department of
Public Health & Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Tom Schreiner
Energy Liaison
Colorado Parks and Wildlife
Northeast Regional Office
6060 Broadway
Denver, CO 80216

Diane Kocis
Arapahoe County Public
Works and Development
6924 South Lima Street
Centennial, CO 80112

ConocoPhillips Company

Geoscience Testimony

Spacing Application

Niobrara Formation

Colorado Oil and Gas Conservation Commission Hearing

Cause No. 535

Docket No. 1409-SP-2118

Township 4 South, Range 64 West, Sections 4

Arapahoe County

My name is Abby Tomkiewicz, and I am currently employed as a Senior Geologist for ConocoPhillips Company. I received a Bachelor's degree in Geology from Binghamton University (SUNY) (2005) and I have 6 years of experience in the oil and gas industry.

I have worked directly with the properties and lands that are subject of this matter.

In support of Applicant's application and my sworn testimony herein, I am submitting six (6) exhibits. The exhibits are attached to my sworn testimony and form the basis for the Applicant's request to gain approval for establishing an approximate 640 acre drilling and spacing unit for the production of oil, gas and associated hydrocarbons from the Niobrara formation underlying the following lands ("Application Lands")

Township 4 South, Range 64 West

Section 4: All

Arapahoe County, Colorado

The Niobrara Formation is a Cretaceous sequence of chinks, marls, limestones, and shales that were deposited in the Western Interior Seaway. This formation is regionally extensive and found throughout most of the Rocky Mountain Region and is in the subsurface throughout the Denver-Julesburg Basin. It is my conclusion that the Niobrara Formation underlies the Application Lands to be spaced.

The six geologic exhibits herein were prepared and presented as follows:

Exhibit No. G-1

Niobrara Type Log

Exhibit No. G-1 is the Type Log used for this area. The log is from Andrau Enterprises' #13 Owl Creek, located in Section 29, Township 29 North, Range 64 West. This log was originally published by Longman et al. (1998) and is widely used throughout literature and industry as an established type log for this part of the Denver-Julesburg Basin. Displayed on this log are typical Gamma Ray and Resistivity curves associated with modern open-hole logging of the Niobrara in this area. Scales of each are posted at the

bottom of the log. The targeted interval is the Smoky Hill Shale Member of the Niobrara formation, which is regionally defined as the upper member of the Niobrara formation, above the Ft Hays Limestone. The Niobrara top is identified as the upper red line on the log. The base of the Niobrara is defined as the top of the Ft Hays Limestone Sandstone (green line). The log exhibits a gamma ray and resistivity signature similar to logs derived from the Niobrara producers in nearby Arapahoe County. An increased resistivity measurement is commonly used as a proxy for hydrocarbon presence in the reservoir.

Exhibit No. G-2 Spacing Locator and Cross Section Line Indicator Map

Exhibit No. G-2 displays the drilling and spacing units ConocoPhillips is requesting consideration for approval from the Oil and Gas Conservation Commission to establish a 640 acre drilling and spacing unit for the Niobrara formation in order to drill horizontal wells in this section. The area is section 4, township 4 south, range 64 west, in Arapahoe County, Colorado. This area is represented on the map as a red filled rectangle. The location of the cross sections displayed in Exhibits G-3 and G-4 are identified as blue and green lines, respectively, on the map.

Exhibit No. G-3 Cross Section A-A'

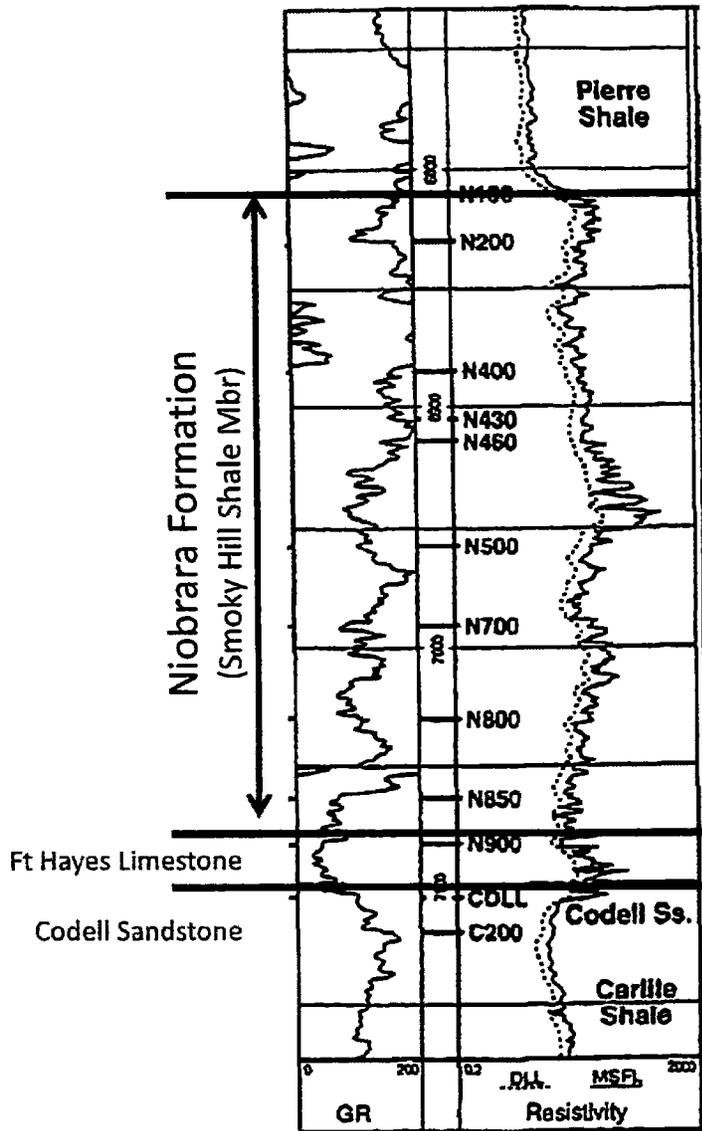
Exhibit No. G-3 is a cross section of wells in the area which comprises the drilling and spacing unit, showing the Niobrara section. The cross section extends generally from west (A) to east (A') and is hung on the top of the Niobrara. The formation annotation on this cross section is consistent with that of the type log shown in Exhibit No. G-1. All the logs display gamma ray and resistivity curves. Resistivity measurements above 25 ohms are shaded red and are shown as an indication for the likely presence of hydrocarbons in the reservoir. Logs on the cross section exhibit resistivity measurements comparable to productive Niobrara wells located in Arapahoe County.

Exhibit No. G-4 Cross Section B-B'

Exhibit No. G-4 is a cross section of wells in the area which comprises the drilling and spacing unit, showing the Niobrara section. The cross section extends generally from north (B) to south (B') and is hung on the top of the Niobrara. The formation annotation on this cross section is consistent with that of the type log shown in Exhibit No. G-1. All the logs display gamma ray and resistivity curves. Resistivity measurements above 25 ohms are shaded red and are shown as an indication for the likely presence of hydrocarbons in the reservoir. Logs on the cross section exhibit resistivity measurements comparable to productive Niobrara wells located in Arapahoe County.

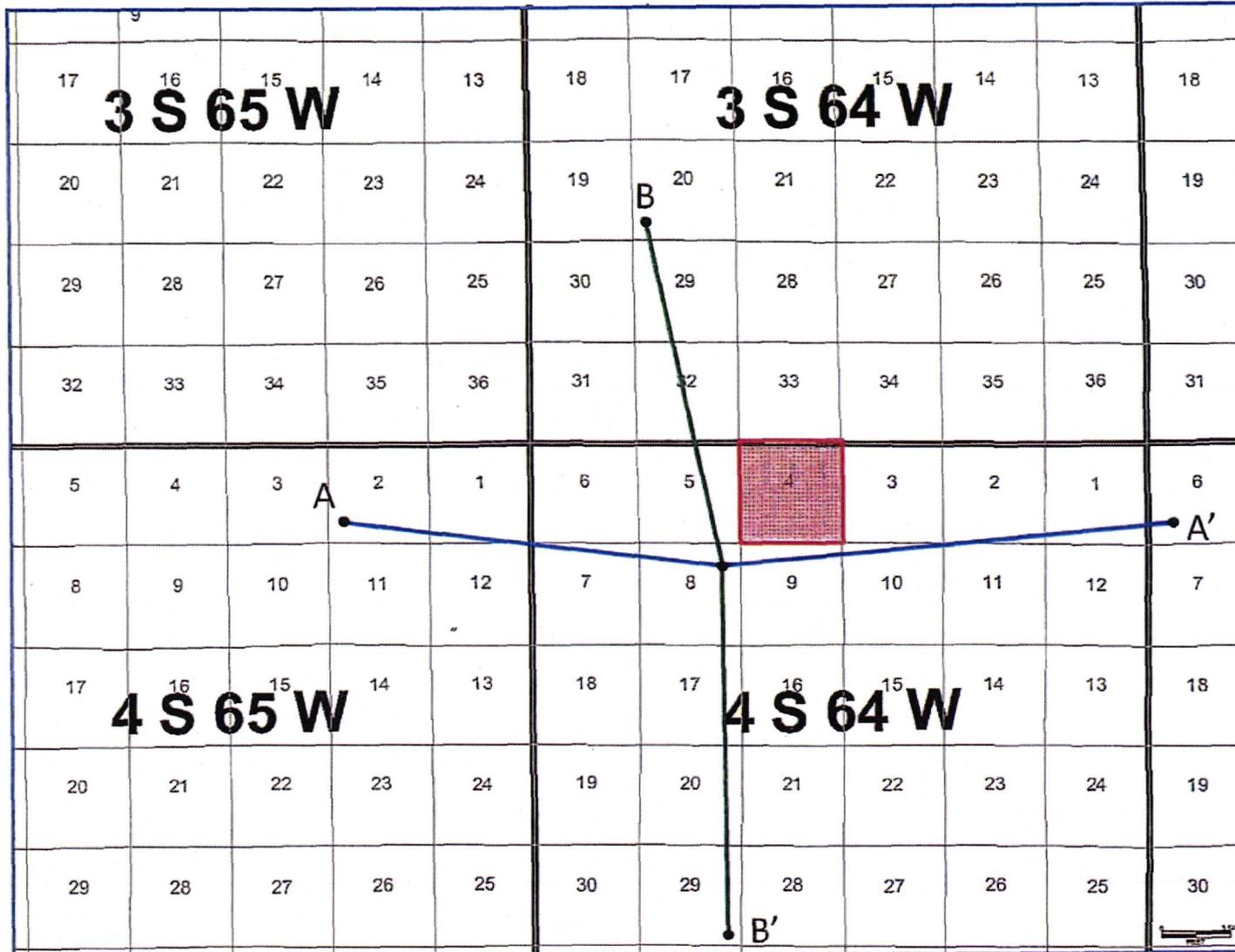
Exhibit No. G-5 Niobrara Top SubSea Structure

Exhibit No. G-5 shows the top subsea structure of the top Niobrara contoured in 50' intervals. Niobrara subsea values are posted on the bold contour lines at 100' intervals. This map reflects the regional monoclonal dip to the west existing in this area.



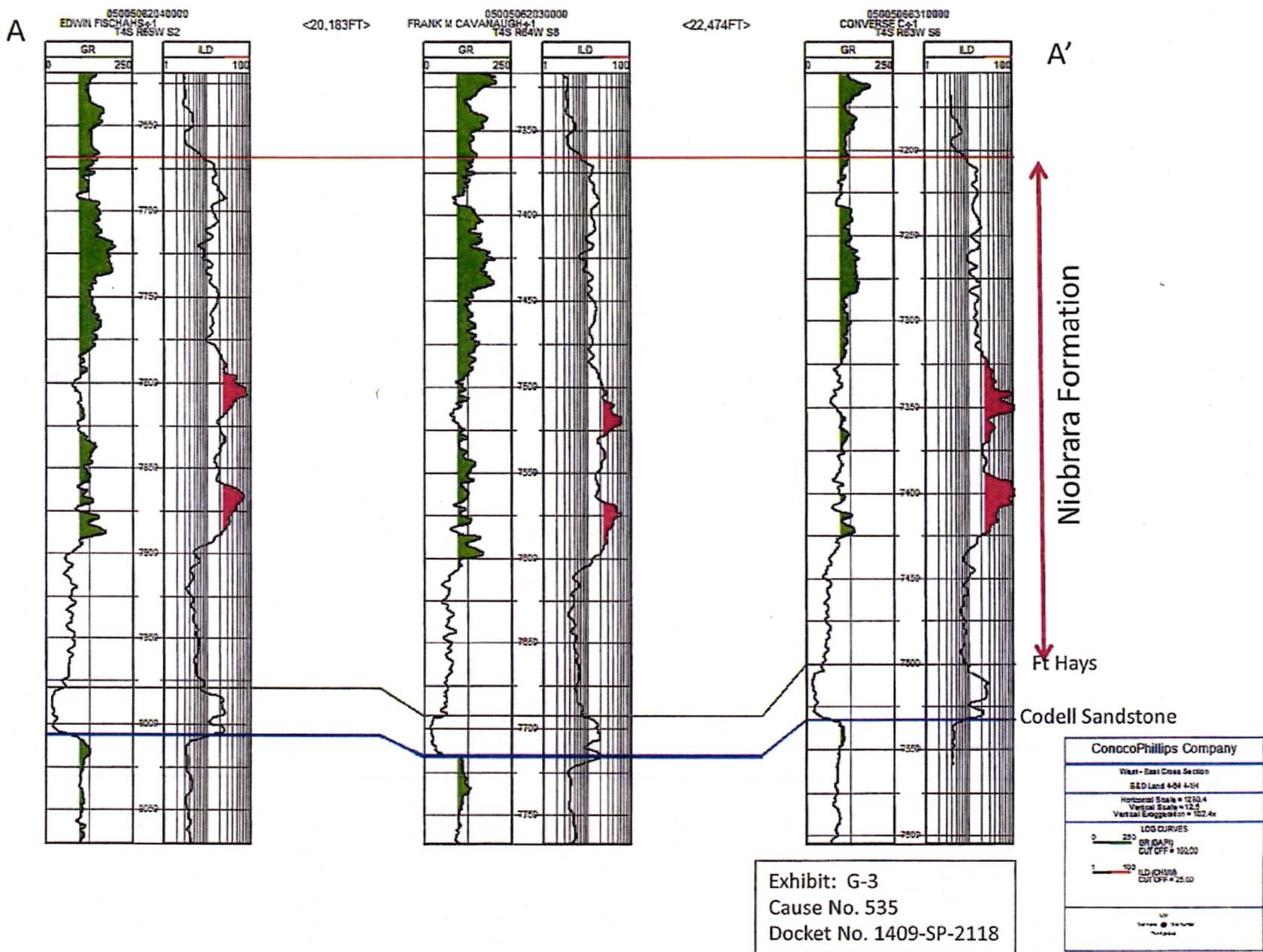
Type Log
Andrau Enterprises
#13 Owl Creek
NW NW Sec. 29 T7N R64W
Weld County, CO
 (Modified from Longman et al., 1998)

Exhibit: G-1
 Cause No. 535
 Docket No. 1409-SP-2118



 1280 Application Lands

Exhibit: G-2
Cause No. 535
Docket No. 1409-SP-2118



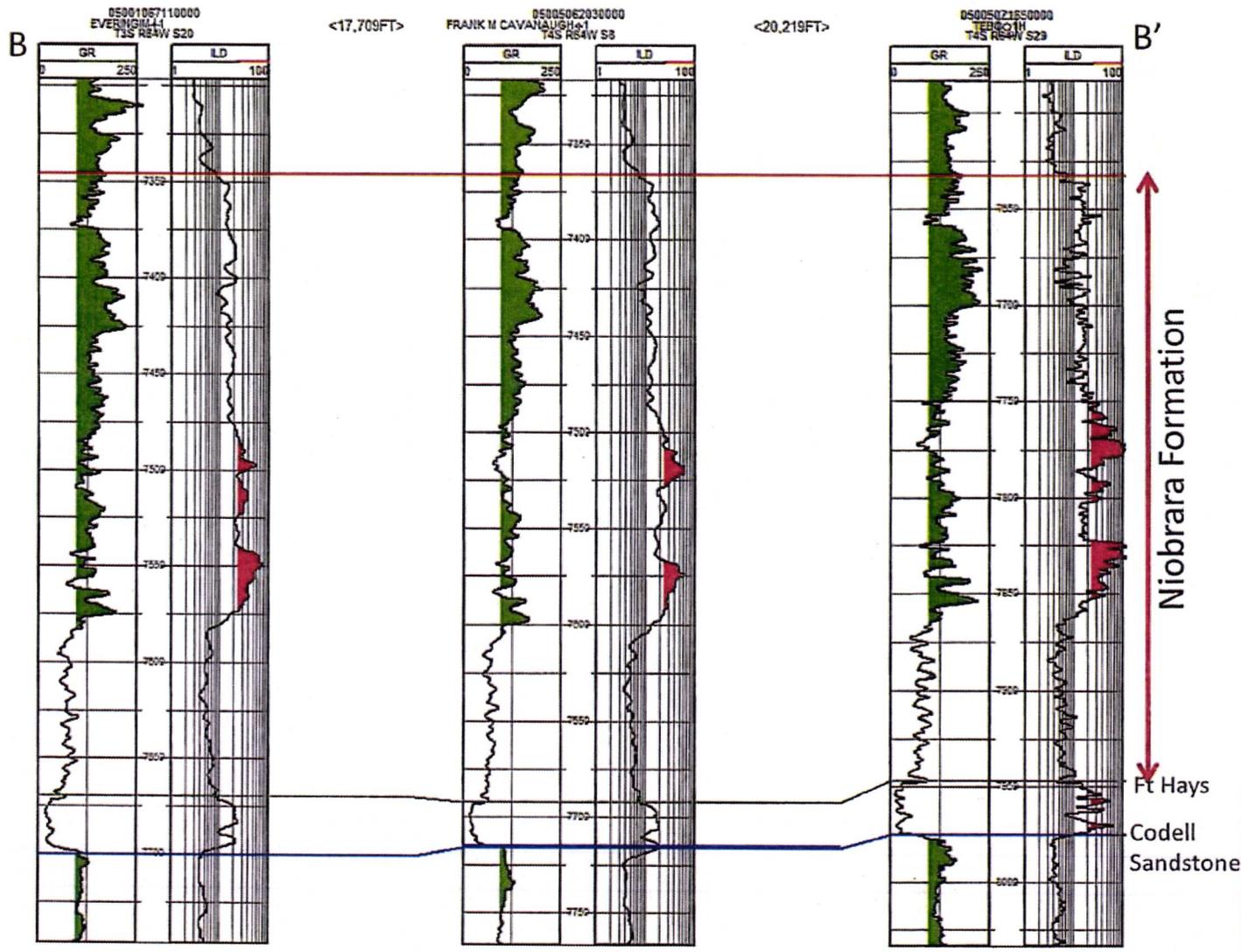
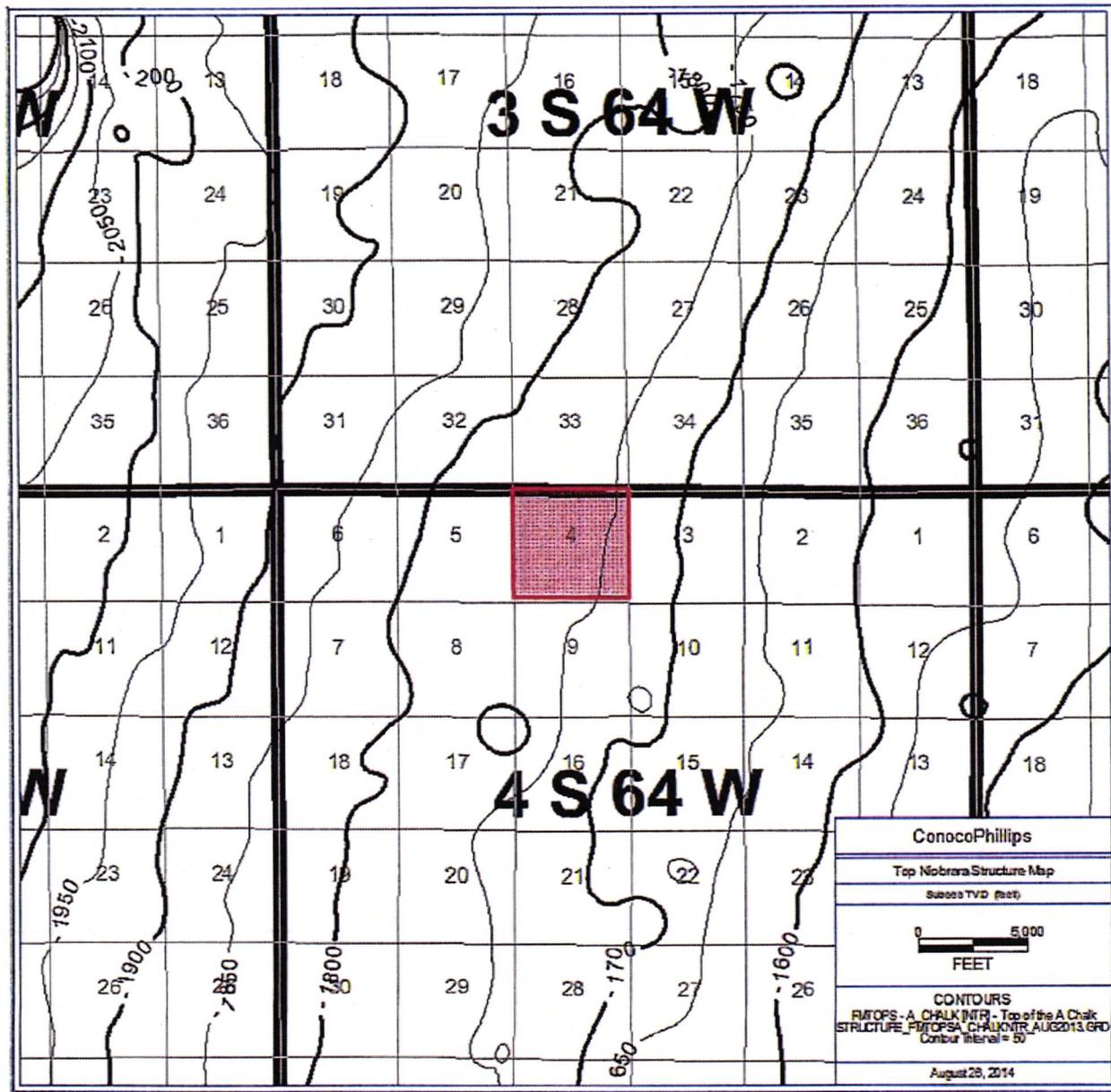


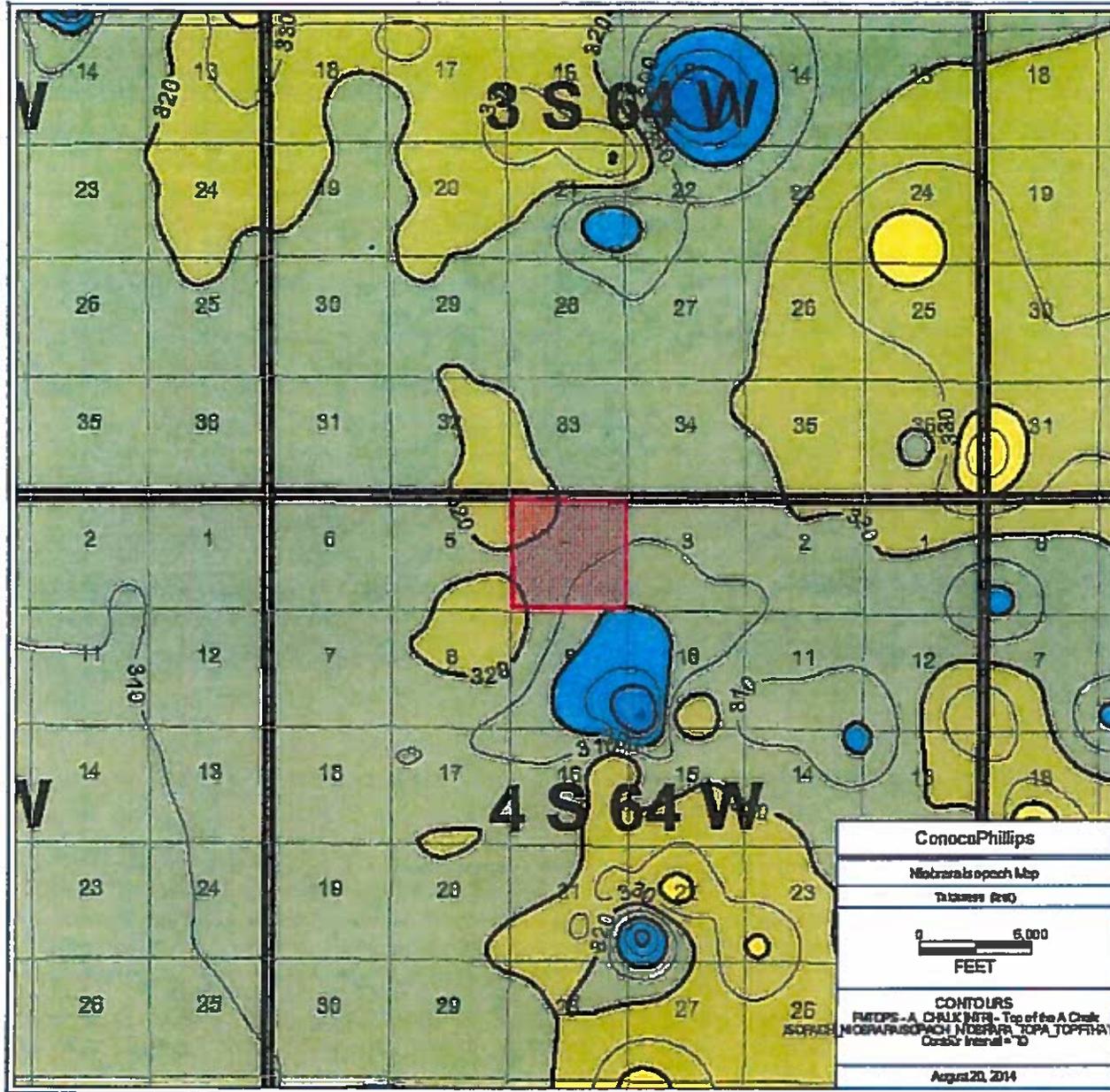
Exhibit: G-4
Cause No. 535
Docket No. 1409-SP-2118

ConocoPhillips Company	
North-South Cross Section B&D Land 4-04 4-1H	
Horizontal Scale = 1200.4 Vertical Scale = 12.5 Vertical Exaggeration = 102.4x	
LOG CURVES	
0 — 250	GR (GAPI) CUT OFF = 100.00
1 — 100	ILD (CHINA) CUT OFF = 25.00



 640 Application Lands

Exhibit: G-5
Cause No. 535
Docket No. 1409-SP-2118



1280 Application Lands

Exhibit: G-6
Cause No. 535
Docket No. 1409-SP-2118

Supplemental Engineering Testimony – Clint Hutchinson

Cause No. 535; Docket No. 1409-SP-2118

640 Acres Spacing Application – Niobrara Formation

Arapahoe County

September 2014 Colorado Oil and Gas Conservation Commission Hearing

In support of the Verified Application of ConocoPhillips in Cause No. 535, Docket 1409-SP-2118 (the Application), Clint Hutchinson, Lead Reservoir Engineer, upon oath, disposes and states as follows:

- a. I am currently employed as a Reservoir Engineer at ConocoPhillips. I have knowledge of the Reservoir Engineering characteristics of the Niobrara formation underlying the Application Lands. I have over 15 years of experience in the oil and gas industry. A true and correct copy of my resume is included as Exhibit E-1. To the best of my knowledge and belief, each of these Exhibits is correct and accurate as of the date of this Verified Statement.
- b. Exhibit E-2 is a base map of the application lands.
- c. Exhibit E-3 is the type curve developed from my study of offset wells in the Wattenberg Field. This type curve represents the oil profile developed from 600 horizontal wells completed in the Niobrara formation with laterals less than 5,000 feet in length. Estimated Ultimate Recovery (EUR) for the oil type curve is 153,934 barrels of oil.
- d. Exhibit E-4 shows the estimated drainage area for a horizontal Niobrara well on the Application Lands assuming my estimated Wattenberg oil type curve EUR of 153,934 barrels. ConocoPhillips rock and fluid parameters used in this estimate include a net pay of 40 feet, a porosity of 7.0%, a water saturation of 20%, a formation volume factor of 1.7 reservoir barrels per stock tank barrel, and a recovery factor of 5%. The effective porosity was derived from a combination of conventional core analysis and interpretation of the bulk density from wireline logging. Bulk density was utilized as an input to a regression tied to the conventional core porosity analysis. The statistical average porosity across our targeted zone in the Niobrara is approximately 7%. The net thickness was derived by utilizing porosity and water saturation cut-offs. The porosity was derived as stated above and the water saturation was an interpretation of our target formation in the Niobrara based on Archie's equation. The statistical average water saturation and net thickness across our targeted zone is approximately 20% and 40 feet, respectively. The petrophysical parameters were statistical

averages derived from our type log, the Tebo 29 1H. However, these values are somewhat consistent across acreage we have assessed. The formation volume factor was calculated from company PVT analysis.

The estimated drainage area is not greater than 301.2 acres per individual well. If a second optional well is drilled, total drainage area from both wells is estimated to be not greater than 602.3 acres. Thus, the proposed 640 acre drilling and spacing units are not smaller than the maximum area that can be economically and efficiently drained by a horizontal well in the Niobrara formation within each such unit, and a second optional horizontal well in each such unit would promote efficient drainage and not result in waste.

- e. Economics were run using completed well costs of \$9,474,799 for the B&D Land 4-64 4-1H, the type curve presented in this exhibit, and ConocoPhillips operating cost assumptions. The single well economics meet the Company's requirements for exploration wells.
- f. Exhibit E-5 is a summary of my conclusions relevant to this Application.
 - 1. The drainage area of a horizontal well in the Niobrara formation of the Application Lands having a wellbore lateral less than 5,000 feet in length is estimated to be no greater than 301.2 acres.
 - 2. A horizontal well with a less than 5,000 foot lateral producing from the Niobrara formation meets ConocoPhillips' economic requirements for exploration wells.
 - 3. The proposed 640 acre drilling and spacing unit, with the requested setbacks, for a horizontal well in the Niobrara formation in the Application Lands, and authorization for an optional second such well in each unit, will promote efficient drainage, protect correlative rights, and prevent waste.

I reserve the right to modify or supplement this testimony and the attached exhibits prior to the September 15, 2014 COGCC hearing.

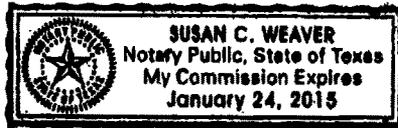
Clint Hutchinson
Clint Hutchinson

Subscribed to and sworn to before me this 28 day of August, 2014, by Clint Hutchinson, Lead Reservoir Engineer.

Notary Public Susan C. Weaver

My Commission Expires: 1-24-15

Address: 887 Glenchester, Houston, TX 77079



*****Exhibits E-1 through E-5 Follow on the Next Pages*****

Resume

CLINT HUTCHINSON
ConocoPhillips Company
P.O. Box 2197 Houston, TX 77252
Clint.L.Hutchinson@ConocoPhillips.com
281-647-1813

- 2013: Lead Reservoir Engineer – Niobrara Implementation - ConocoPhillips Houston, TX
Responsible for providing guidance and mentorship to reservoir engineering staff. Coordinate production performance analysis and reservoir studies.
- 2009-2013: Staff Reservoir Engineer – Eagle Ford Development - ConocoPhillips Houston, TX
Responsible for ensuring the implementation of a multi-rig drilling program. Identified and prepared prospects for drilling. Prepared field development plans. Developed type curves. Performed production performance analysis. Coordinated completion studies. Performed reservoir studies. Evaluated acreage for acquisition.
- 2003-2009: Staff Reservoir Engineer – South Texas Development- ConocoPhillips Houston, TX
Responsible for ensuring the implementation of a multi-rig drilling program. Identified and prepared prospects for drilling. Performed production performance analysis. Evaluated acreage for acquisition.
- 2001-2003: Reservoir Engineer – Gulf Coast Development - ConocoPhillips Houston, TX
Evaluated drilling prospects. Prepared acreage for disposition.
- 1999-1997: Reservoir Engineer – San Juan Development – Phillips Petroleum Farmington, NM
Identified and prepared prospects for drilling. Performed performance analysis. Maintained reserve forecasts.
- 1996-1999: Reservoir Engineer – Gulf Coast Development – Phillips Petroleum Houston, TX
Evaluated drilling and recompletion prospects. Maintained reserve forecasts. Prepared acreage for disposition.

Education
1992-1996: Colorado School of Mines Golden, CO
B.S. Petroleum Engineering

Exhibit E – 1
Cause # 535
Docket # 1409-SP-2118

Application Lands – Base Map

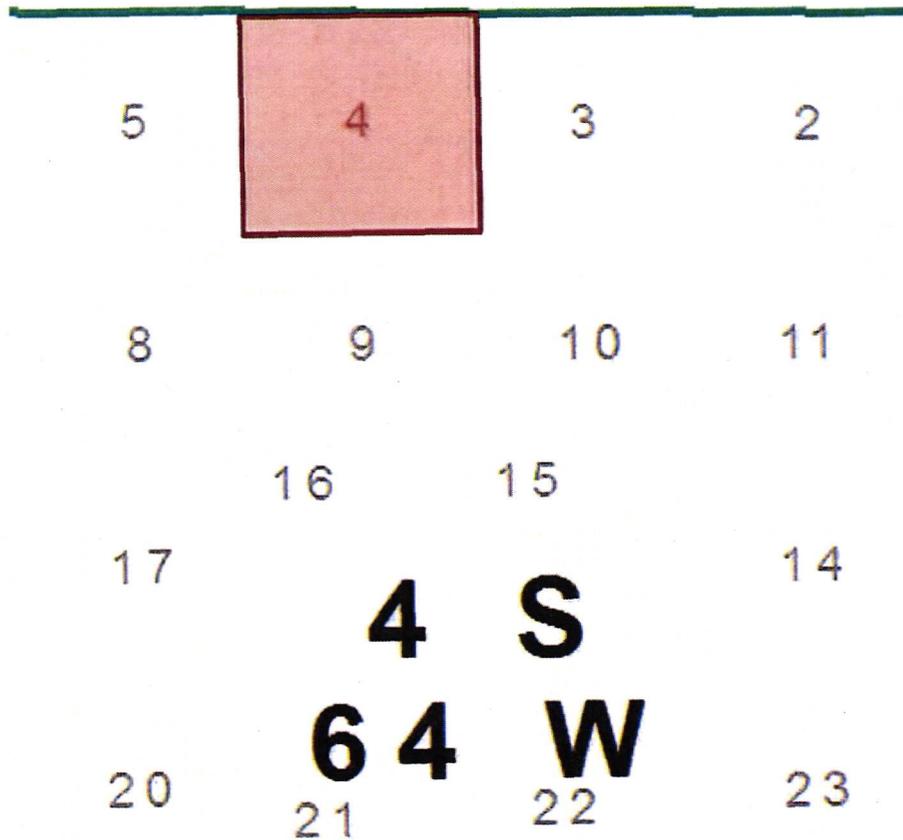


Exhibit E – 2
Cause # 535
Docket # 1409-SP-2118

Niobrara Short Lateral Type Curve

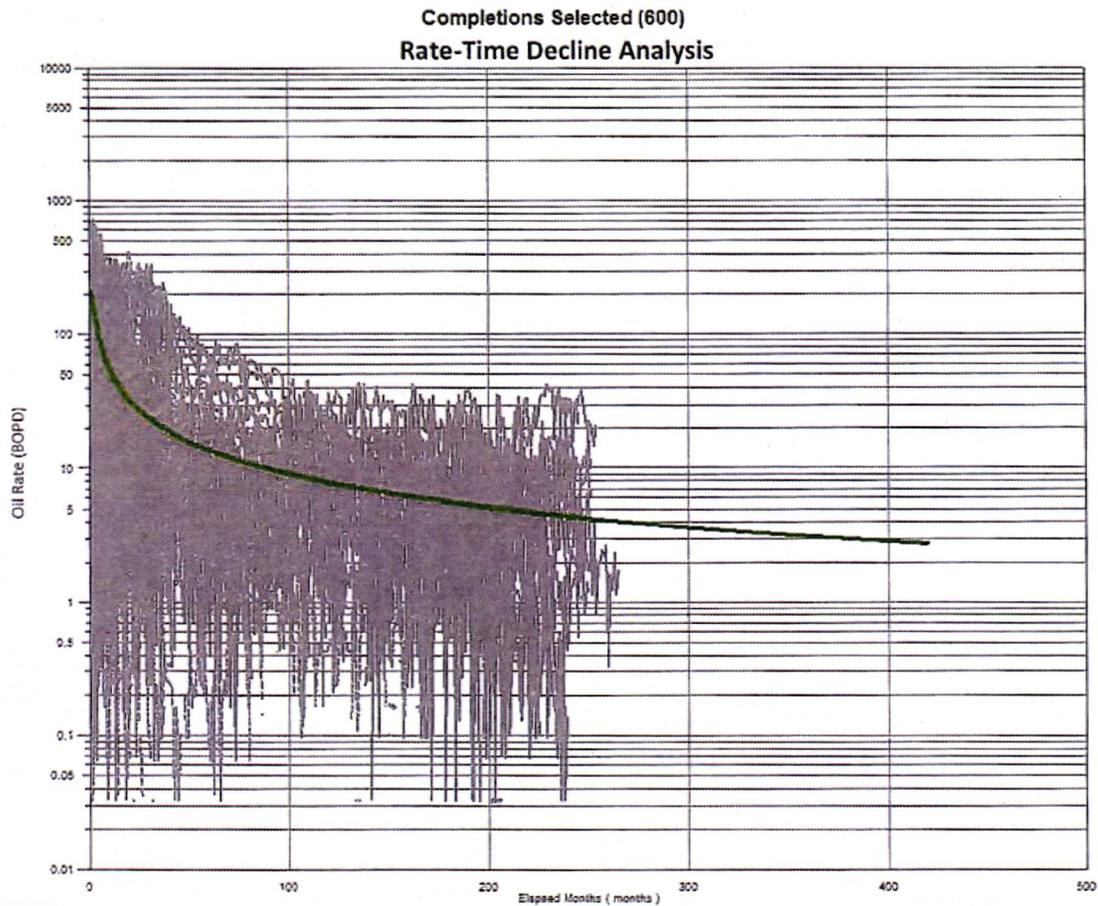


Exhibit E – 3
Cause # 535
Docket # 1409-SP-2118

Niobrara Short Lateral Drainage Area Calculation

COP PARAMETERS - SHORT LATERAL

EUR Oil, bbls	153,934.00	estimated ultimate oil recovery
h, ft	40	net thickness
Por, fraction	0.07	porosity
Sw, fraction	0.2	water saturation
Boi, rb/stb	1.7	formation volume factor
RF, fraction	0.05	recovery factor
OOIP, stb	3,078,680	EUR/RF

$$\text{Drainage area, acres} = \text{OOIP} * \text{Boi} / [7758 * \text{h} * \text{Por} * (1 - \text{Sw})]$$

Drainage area	301.2	acres per well
	602.3	acres per two wells

Exhibit E - 4
Cause # 535
Docket # 1409-SP-2118

Engineering Summary

- ▶ The drainage area of a horizontal well in the Niobrara formation of the Application Lands having a wellbore lateral of less than 5,000 feet in length is estimated to be no greater than 301.2 acres.
- ▶ A horizontal well with a less than 5,000 foot lateral producing from the Niobrara formation meets ConocoPhillips' economic requirements for exploration wells.
- ▶ The proposed 640 acre drilling and spacing unit, with the requested setbacks, for a horizontal well in the Niobrara formation in the Application Lands, and authorization for an optional second such well in each unit, will promote efficient drainage, protect correlative rights, and prevent waste.

Exhibit E – 5
Cause # 535
Docket # 1409-SP-2118