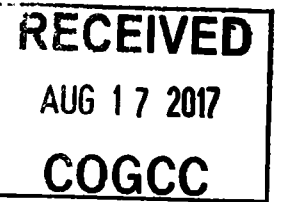




02188032

8-17-17

511 Documents



Fifth Creek Energy Operating Company, LLC

Cause No. 421

Docket No. 170900555

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

IN THE MATTER OF THE APPLICATION OF)	CAUSE NO. 421
FIFTH CREEK ENERGY OPERATING)	
COMPANY, LLC FOR AN ORDER)	DOCKET NO. 170900555
AUTHORIZING ADDITIONAL WELLS IN SIX (6))	
APPROXIMATE 1,280-ACRE DRILLING AND)	TYPE: ADDITIONAL
SPACING UNITS ESTABLISHED FOR)	WELLS
SECTIONS 19, 20, 21, 22, 27, 27, 29 AND 30,)	
TOWNSHIP 12 NORTH, RANGE 62 WEST,)	
6TH P.M., AND SECTIONS 23, 24, 25 AND 26,)	
TOWNSHIP 12 NORTH, RANGE 63 WEST,)	
6TH P.M., FOR PRODUCTION FROM THE)	
NIOBRARA FORMATION, HEREFORD FIELD,)	
WELD COUNTY, COLORADO.)	

REQUEST FOR RECOMMENDATION OF
APPROVAL OF APPLICATION WITHOUT A HEARING

Fifth Creek Energy Operating Company, LLC ("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 13, 2017, 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 17th day of August 2017.

Respectfully submitted,

FIFTH CREEK ENERGY OPERATING COMPANY, LLC

By: 

Jamie L. Jost
Kelsey Wasylenky
Jost Energy Law, P.C.
Attorney for Applicant
1401 17th St., Suite 370
Denver, Colorado 80202
(720) 446-5620

Fifth Creek Energy Operating Company, LLC

Teale Stone - Land Testimony

Cause No. 421; Docket No. 170900555

Increased Density – Niobrara Formation

Wattenberg Field, Weld County, Colorado

September 2017 Colorado Oil and Gas Conservation Commission Hearing

My name is Teale Stone, and I am currently employed as a Senior Landman at Fifth Creek Energy Operating Company, LLC ("Applicant"). I have over five years of professional 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 and my sworn testimony herein, I am submitting six (6) exhibits. This testimony and exhibits provide the supporting basis for approval of the Applicant's request for an order to authorize an additional seven (7) horizontal wells, for a total of fifteen (15) horizontal wells, in each of six (6) approximate 1,280-acre drilling and spacing units established by Order No. 421-84 for Sections 19, 20, 21, 22, 27, 27, 29 and 30, Township 12 North, Range 62 West, 6th P.M., and Sections 23, 24, 25 and 26, Township 12 North, Range 63 West, 6th P.M., for the efficient and economic development of oil, gas and associated hydrocarbons from the Niobrara Formation underlying the below-described lands.

Township 12 North, Range 62 West, 6th P.M.

Section 19: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 30: All

1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 62 West, 6th P.M.

Section 20: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 29: All

1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 62 West, 6th P.M.

Section 21: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 28: All

1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 62 West, 6th P.M.

Section 22: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 27: All

1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 63 West, 6th P.M.

Section 23: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 26: All
1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 63 West, 6th P.M.

Section 24: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 25: All
1,280 acres, more or less, Weld County, Colorado

Exhibit 1: Leasehold Ownership Map:

Exhibit 1 is a map showing the location of the Application Lands and the leasehold ownership. Upon information and belief, the following parties own leasehold or unleased mineral interests in the Application Lands:

Retamco Operating, Inc.
8 North, LLC
Arapahoe Resources, LLC
RK Pinson & Associates
Anadarko E&P Company
Glen Hodgell
Jesse Ernest Loyd
Incline Niobrara Partners
William and Thomas Breeden
Richard Leigh Faris
Sherryl E. Faris

Exhibit 2: Mineral Ownership Map:

Exhibit 2 is a map showing the mineral ownership of the Application Lands, which is owned in fee.

Exhibit 3: Property Location Plat:

Attached as Exhibit 3 is a Property Location Plat. The Applicant will conform to its statement that the treated perforation of the Wells within the Niobrara Formation will not be closer than 300 feet from the unit boundaries of the 1,280.00-acre drilling and spacing unit and not less than 150 feet from the treated interval of another well within the unit.

Exhibit 4: Surface Ownership Map:

Exhibit 4 is a map showing the surface ownership of the Application Lands, which is owned in fee.

Exhibit 5: Topographic Map:

Exhibit 5 is a map showing the topography of the Application Lands. Approval of the Application for a drilling and spacing unit would allow for a less impactful surface development plan.

Exhibit 6: Interested Parties:

Attached as Exhibit 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.

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.

Teale Stone

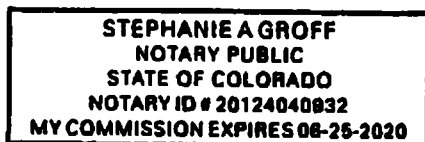
Teale Stone
Senior Landman
Fifth Creek Energy Operating Company, LLC

STATE OF COLORADO)
) ss.
COUNTY OF ARAPAHOE)

The foregoing instrument was subscribed and sworn to before me this 1st day of August 2017, by Teale Stone, Senior Landman for Fifth Creek Energy Operating Company, LLC.

Witness my hand and official seal.

[SEAL]



My commission expires: June 22, 2020

Stephanie A Groff

Notary Public

Teale Philip Stone

1850 Bassett Street #401
Denver, CO 80202
(918) 694-3231 teale.stone@gmail.com

EDUCATION

B.S. in Business Administration – 2011

UNIVERSITY OF DENVER

Major: Management through the Daniels College of Business

- Dean's List
- Academic All Conference (Soccer)

Petroleum Land Management Certificate – Expected 2017

UNIVERSITY OF DENVER

CASCIA HALL PREPARATORY SCHOOL - 2007

Tulsa, Oklahoma

EXPERIENCE

Fifth Creek Energy Operating Company, LLC

Denver, Colorado

Senior Landman

March 2017 – Present

- Oversee all Land Operation tasks, including but not limited to managing brokers, ordering and curing title, clearing surface locations for drill sites, assisting in acquisitions, and planning for all future development.

BILL BARRETT CORPORATION

Denver, Colorado

Landman I – Uinta Basin and DJ Basin

August 2014 to March 2017

- Nearly 5 years of professional in house land experience with a primary focus in the Rocky Mountain Region (Utah, Colorado, Wyoming and New Mexico).
- Prepare and present Uinta Basin and DJ Basin Asset Status Reports directly to Senior Management on a weekly basis.
- Perform aspects of title research, fee and federal leasing, purchasing fee working interests and aid in the maintenance of multiple drilling prospects throughout the Uinta and DJ Basin.
- Operations Land Lead on BBC's recent divestiture of over 120,000 net acres in the Uinta Basin which closed in July of 2016.
- Source and evaluate potential acquisitions and acreage swaps of all sizes within the DJ Basin.
- Negotiate and draft JOAs, acquire various surface and subsurface contracts from fee mineral owners, Bureau of Land Management, and Bureau of Indian Affairs.
- Extensive work dealing with Exploration Development Agreements, Joint Development Agreements and Farmout Agreements throughout BBC's assets in the Uinta and DJ Basin
- Calculate Net Revenue Interests, Gross Working Interests, and Acreage Totals for multiple drilling prospects throughout the Uinta and DJ Basin.
- Manage all Operated and Non-Operated Wells still owned by BBC within the Uinta Basin.
- Point of contact for multiple attorneys and coordinating the ordering of Drilling and Division Order Title Opinions.
- Manage two field brokerage firms to direct leasing efforts, help with Surface Use Agreements and Right of Ways across Public, Private, BIA, and Division of Wildlife lands.
- Testified before the Utah Division of Oil, Gas and Mining several times regarding Compulsory Force Pooling and various Spacing Orders.
- Maintain and manage company owned surface property throughout the Uinta Basin. Recently started assisting on the DJ Basin Surface Team.
- Certified Registered Landman with the AAPL. Seeking RPL Certificate in 2017.

BILL BARRETT CORPORATION

Denver, Colorado

Land Technician I & II – Uinta Basin

March 2012 to August 2014

- Help manage various assets within the Uinta Basin

Teale Philip Stone

1850 Bassett Street #401

Denver, CO 80202

(918) 694-3231 teale.stone@gmail.com

- Help draft Operating Agreements, AFE's, Fee Assignments, and Leases & Assignments for the Bureau of Indian Affairs
- Performance of regular data entry tasks (Oildex, Wellview, and Excalibur)
- Proficient in Microsoft Excel

KROENKE SPORTS & ENTERTAINMEN

October 2011 – March 2012

Denver, Colorado

Marketing Team

- In game marketing before, during and after all sporting events located at the Pepsi Center
- Promoted Altitude Sports Network

COMMUNITY SERVICE/LEADERSHIP

2014 ENGEN CLASS GRADUATE

- Colorado Oil and Gas Association sponsored group for Young Professionals in Energy
- Currently serving as board member for the program.

AAPL

- Registered Landman

UNIVERSITY OF DENVER SOCCER

- Team Captain
- NCAA Tournament Appearances 2008 and 2010

CAMBUUR SOCCER CLUB

- Played for Professional Soccer Team located in Leeuwarden, Netherlands in 2008

YOU CAN PLAY PROJECT

- Manager of College Operations. Served as the liaison between the organization, various College and Universities, and the NCAA. "You Can Play" is a Community Service/Non-Profit Organization visit youcanplayproject.org for more information.

Exhibit 1

Leasehold Ownership

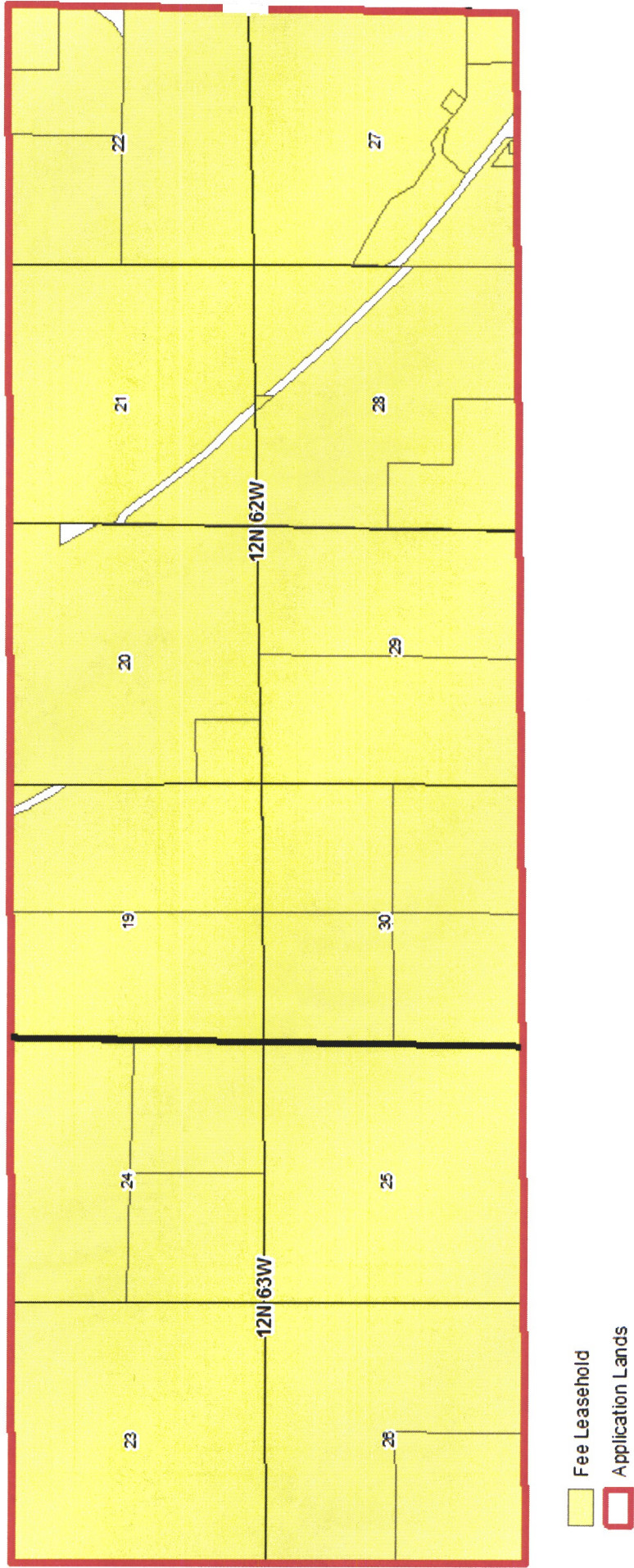


Exhibit 2

Mineral Ownership

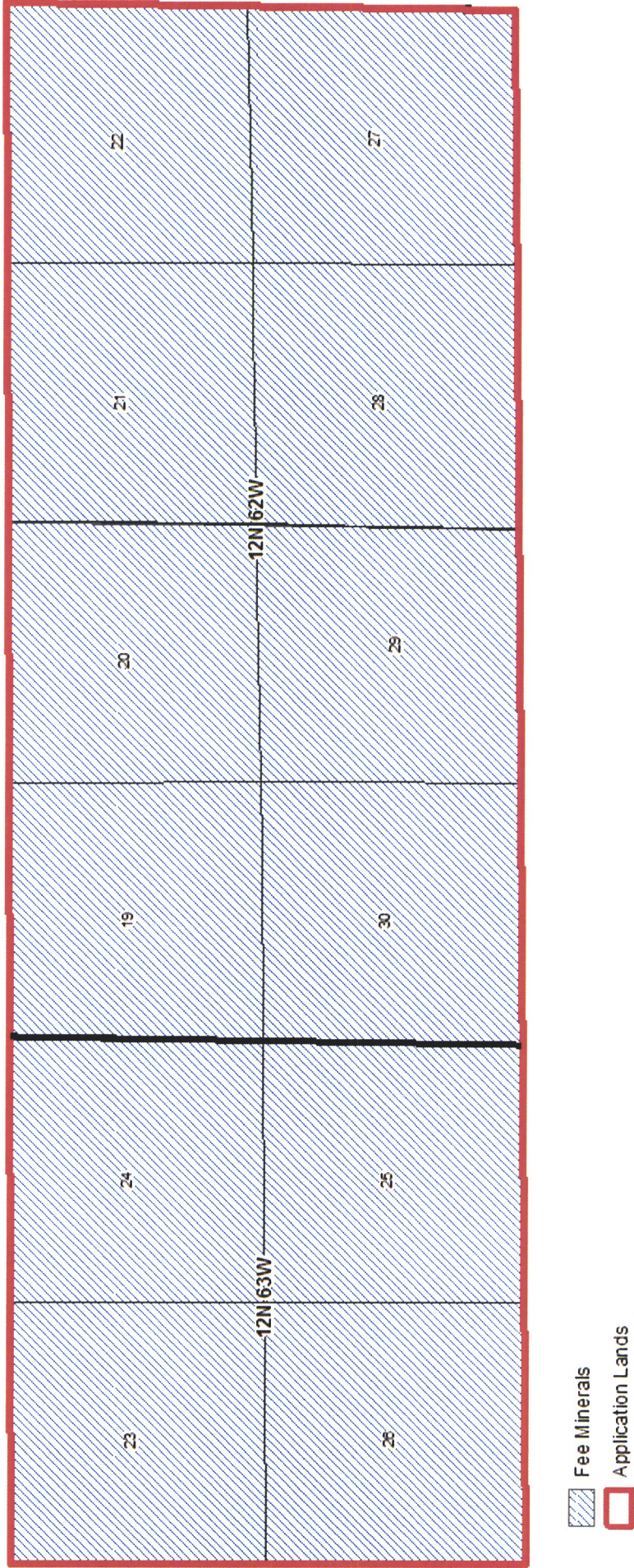
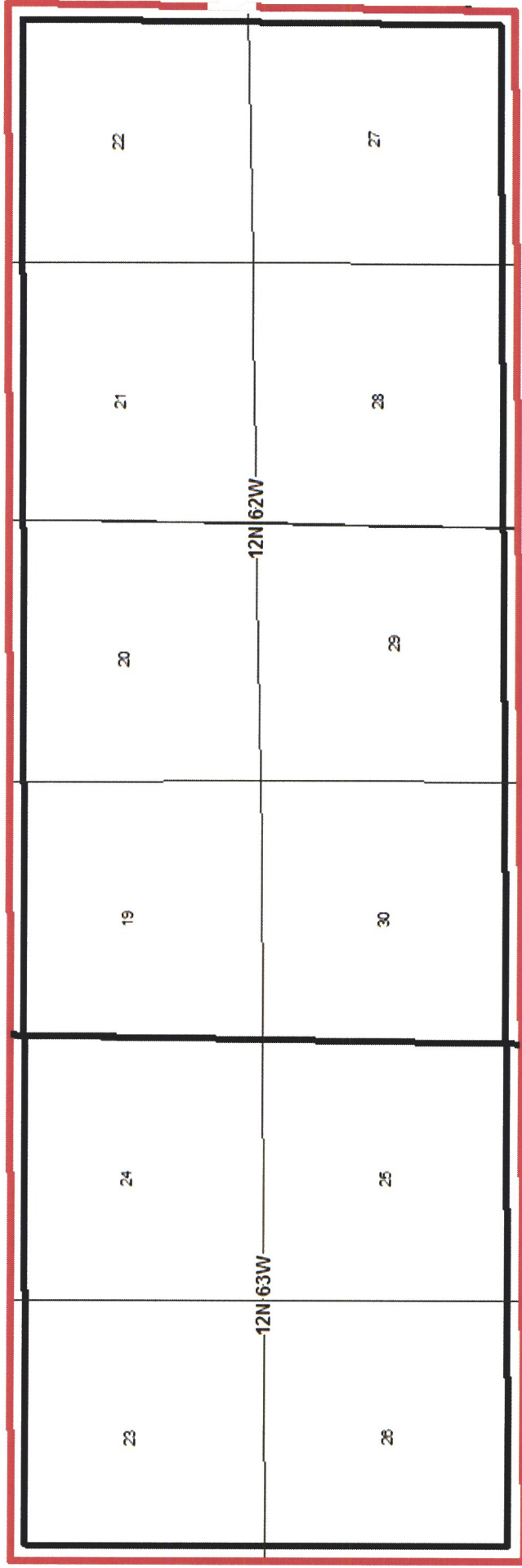


Exhibit 3

Property Location Plat





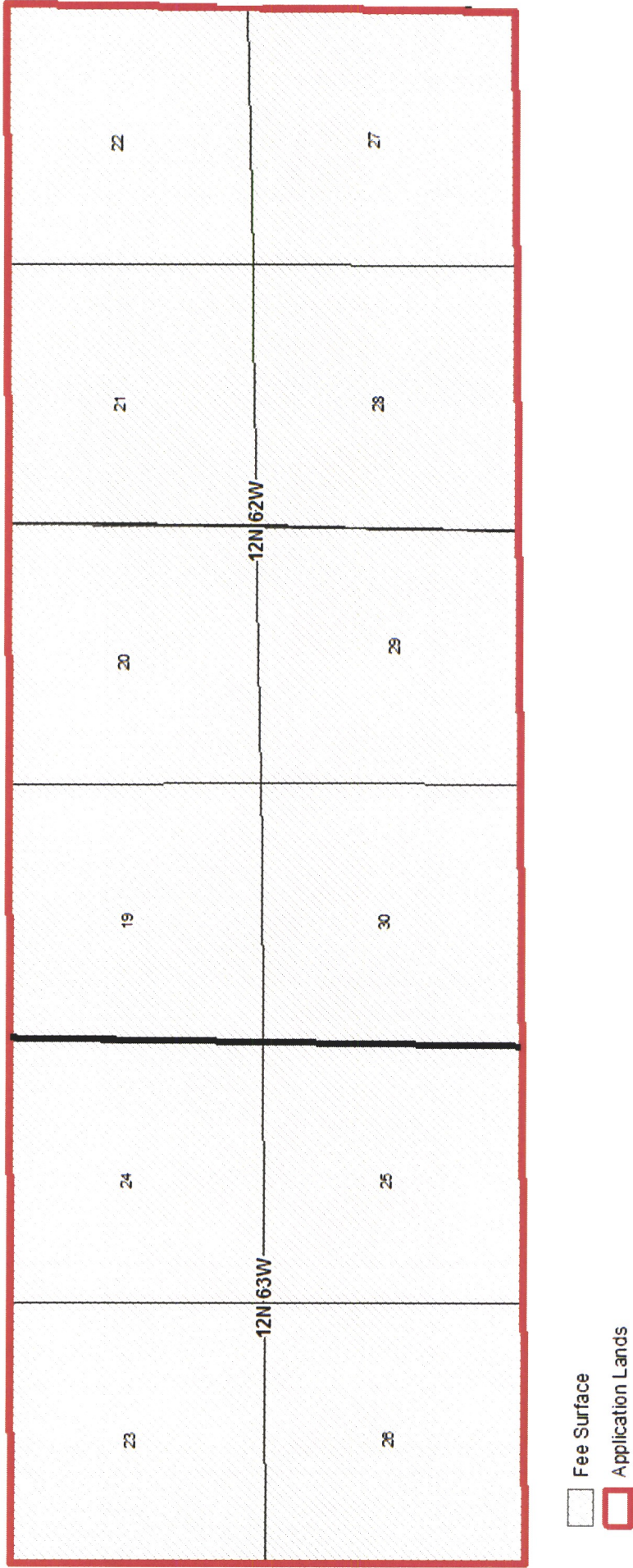
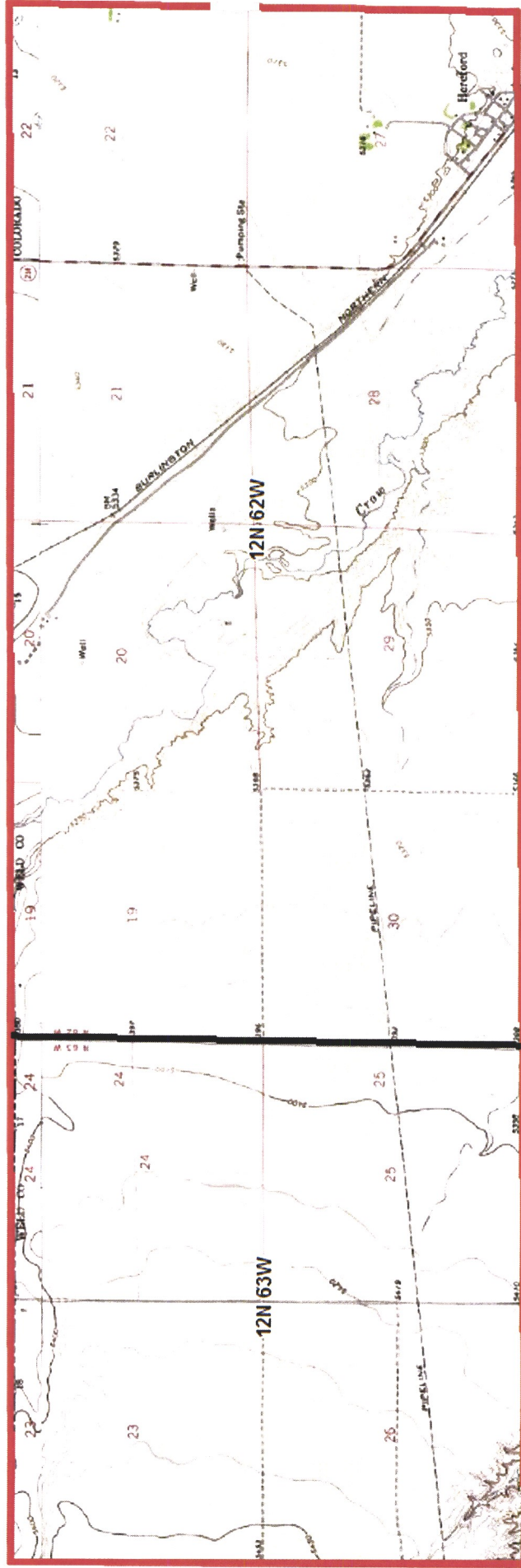
-  300' Setback
-  Application Lands

Exhibit 4

Surface Ownership



Topography



Application Lands

Exhibit 6
ID - T12N-R62/63W - 6 Units

FIFTH CREEK ENERGY OPERATING
COMPANY 5251 DTC PKWY
GREENWOOD, VILLAGE, CO 80111

GAIL J BOWMAN TRUSTEE GAIL J BOWMAN
REVOCABLE TRUST
29330 CR 358A
BUENA VISTA, CO 81211-3477

RONALD R BOWMAN TRUSTEE
RONALD R BOWMAN REVOCABLE TRUST
29330 CR 358A
BUENA VISTA, CO 81211-3477

TIETMEYER MINERAL CO LLC
67125 WELD COUNTY 83
GROVER, CO 80729-0000

8 NORTH LLC
1888 SHERMAN STREET, SUITE 200
DENVER, CO 80203

FIFTH CREEK ENERGY OPERATING
COMPANY
5251 DTC PARKWAY, SUITE 420
ATTN: TRICIA DIGRAPPA
GREENWOOD VILLAGE, CO 80111

GLEN HODGELL
3405 16TH STREET, NO. 16
GREELEY, CO 80631

JESSE ERNEST LOYD
66732 WCR 136 & 87
HEREFORD, CO 80732

ANADARKO E&P ONSHORE LLC
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DALLAS, TX 75373-0875

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5700 EAST COUNTRY RD 48
FORT COLLINS, CO 80524-0000

LOYD FARMS
66732 WCR 87
GROVER, CO 80729-0000

RETAMCO OPERATING INC
P O BOX 790
RED LODGE, MT 59068-0790

SWSMK ENERGY LLC
1842 EMERALD WAY
LYNDEN, WA 98264-0000

TERRY W STELLING ROBIN Z STELLING
5 MT RAINIER DRIVE
SAN RAFAEL, CA 94903-0000

THE REGENTS OF THE UNIVERSITY OF
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SEDONA, AZ 86351-0000

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CONGRESS, AZ 85332-0000

EMMANUEL FARM LLP
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CARPENTER, WY 82054-0000

GARY W SMITH AND NORMA J SMITH
BOX 365
CARPENTER, WY 82054-0000

IVY ENERGY INC
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TULSA, OK 74152-0000

JEREMY R HARDCASTLE
6875 LILLIAN DR
SHINGLETON, CA 96088-0000

LEWIS CHURCH OF CHRIST C/O JAMES R
CONN
200 WASHINGTON ST
LEWIS, IA 51544-0000

TARA L TURNER
405 ALAMINE DR
REDDING, CA 96003-0000

TRICIA HOPPER
2146 WASHINGTON AVENUE
REDDING, CA 96001-0000

WILLA CHARLENE DEWITT CONKLIN
TRUSTEE FOR THE DEWITT-CONKLIN
TRUST
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ROCK ISLAND, IL 61201-4748

DOUBLE EAGLE ENERGY ROCKIES, LLC
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FORT WORTH, TX 76102

"R.K. PINSON & ASSOCIATES, LLC "
621 17TH ST. SUITE 5300
DENVER, CO 80293

THE PROSPECT COMPANY
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EDMOND, OK 73083

"WILLIAM J. BREEDEN AND THOMAS V.
BREEDEN"
3630 FOXCROFT ROAD
CHEYENNE, WY 82001

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314 N. MISSOURI STREET
ATWOOD, IL 61913

LANCE LACY
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SURPRISE, AZ 85379

MERRITT LACY
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EL MIRAGE, AZ 85335

RICHARD LEIGH FARIS
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SPARKS, NV 89441

SHERRYL E. FARIS
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PERU, IA 50222

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ARNOLD GLEIT
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BOCA RATON, FL 33431-0000

ARTHUR G RICE
328 OLDE POINT LOOP
HAMPSTEAD, NC 28443-0000

BAMBI FERNANDEZ 2004 TRUST
1637 EDMONTON AVE
SUNNYVALE, CA 94087-5202

BANKIM PATEL AND HEMMA PATEL
9162 CEDAR RIDGE DR
GRANITE BAY, CA 95746-0000

BELD OIL & MINERALS COMPANY
1738 S POPLAR ST
CASPER, WY 82601-0000

BERNARD CAPUTO
34 WOODCREST RD
BOXFORD, MA 19210000

BLACK BEAR OIL & GAS LLC
P O BOX 621226
LITTLETON, CO 80162-0000

BRIAN H DAVIS
628 AQUA CIRCLE
LINO LAKES, MN 55014-0000

BRUCE FULLER
3049 CLARION DR
SPRINGFIELD, OH 45503-0000

BUTKIN INVESTMENT COMPANY, LLC
P O BOX 2090
DUNCAN, OK 73534-0000

C THREE J LLC
13705 HWY 11
ALLENDALE, IL 62410-0000

CHARLES FULLER CHARLES FULLER 2006
TRUST MORGAN STANLEY 101-088923-066
101 CALIFORNIA ST 3RD FLOOR
SAN FRANCISCO, CA 94111-0000

DALE HARLAN
7005 WAGON TRAIN RD
P O BOX 348
HICKMAN, NE 68372-0348

DANIEL STUBBLEFIELD
600 E MAIN
ODESSA, MO 64076-0000

DANNY POSS
48981 801ST ROAD
SCOTIA, NE 68875-0000

DAVID A DENT
6712 ARROWHEAD PASS
EDINA, MN 55439-1003

DAVID A POOL
HC 65 BOX 3 128 E HICKEY RD
PIE TOWN, NM 87827-0000

DENIS M DESMOND TRUSTEE
THE DESMOND FAMILY LIVING TR
111 HIDDEN VALLEY DRIVE
JOPLIN, MO 64804-5061

DERK SMITH
3321 HERITAGE LAKE DR
LOCKPORT, IL 60441-0000

DOMESTIC INVESTMENT SURVEYS LLC
14901 QUORUM DR #800
DALLAS, TX 75254-0000

DOMESTIC ROYALTY PROPERTIES LLC
13601 PRESTON RD SUITE E112
DALLAS, TX 75240-0000

DRJ VENTURES LLC C/O JOHNNY BOGGS
P O BOX 2097
SUGAR LAND, TX 77487-0000

EDWARD NALL STRADER
3718 DOVER ROAD
CHEYENNE, WY 82001-0000

ELSR LP BENGAL JONES GROUP LLC
GENERAL PARTNERS
STE 1420 LB12 8080 N CENTRAL EXPWY
DALLAS, TX 75206-0000

EQUITY TRUST COMPANY CUSTODIAN
FBO MICHAEL E MANOLOFF IRA
P O BOX 451159
WESTLAKE, OH 44145-0629

FREDERICK H J & RITA ANN WYEN LIVING
TRUST AGREEMENT
2564 MIDDLE URBANA RD
SPRINGFIELD, OH 45502-8215

FUTURA LLC
9302 S 83RD COURT
HICKORY HILLS, IL 60457-1932

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GERALD W SIMONSON
5813 JEFF PLACE
EDINA, MN 55436-0000

GERALD WERNER
10254 SOUTH 700 WEST
UNION MILLS, IN 46382-0000

GRANT AVERY
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GUY M ANTHONY
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HARRIE M CURTIS
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ALBANY, NY 12203-0000

IRA RESOURCES INC FBO HARRY W
BUEHRLE II IRA #32486 IRA RESOURCES
INC
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BLVD
LA JOLLA, CA 92037-0000

JACK E EARNEST
C/O JACK EARNEST ENERGY LP
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ASPEN, CO 81612-0000

JAMES A HANNON & REGINA A HANNON
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JAMES S WITHERELL TRUST DATED
06/17/1997 JAMES S WITHERELL TRUSTEE
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WOODSTOCK, IL 60098-9743

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MARANA, AZ 85658-0000

JERRY S STRATTON
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PLANO , TX 75023-0000

JIM CLAYTON
1258 WHISPERING OAKS
DESOTO, TX 75115-0000

JOHN C PETERSON
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MAPLE GROVE, MN 55369-6500

JOHN D CONROY
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KATHRYN J RIGEL
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SPRINGFIELD, OH 45503-0000

KEN WARD
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CEDAR HILL, TX 75104-0000

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S CHARLESTON, OH 45368-0000

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7444 MEINERS RD
LEDBETTER, TX 78946-0000

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6369 WHITETAIL RIDGE CT
YORKVILLE, IL 60560-0000

MATT WITHERELL AND KIRSTEN
WITHERELL
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ROGERS, AR 72758-0000

MILDRED HOLEMAN
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HOUSTON,TX 77206-0008

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TYLER, TX 75703-1132

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JACKSONVILLE, FL 32216-0000

NOBLE ENERGY INC
P O BOX 910083
DALLAS, TX 75391-0083

OVERLAND MINERALS AND ROYALTIES LLC
518 17TH STREET STE 1005
DENVER, CO 80202-0000

PETRO-SENTINEL LLC
P O BOX 477
WILLISTON, ND 58802-0477

R D HOLDER OIL COMPANY INC
P O BOX 40
NEW CARLISLE, OH 45344-0000

RANDY JAMES PETERS
27819 ARIKAREE ROAD
LOVELAND, CO 80534-0000

RDMB HOLDINGS INC
3106 DRUID HILL DR
DES MOINES, IA 50315-0000

REBECCA S BISHOP ROTH IRA
HUNTINGTON NATIONAL BANK
2835 OXFORD DR
SPRINGFIELD, OH 45506-0000

REGIONAL MARKETING GROUP LLC
13601 PRESTON RD SUITE E112
DALLAS, TX 75240-0000

ROBERT E AND ROSALIE T DETTLE LIVING
TRUST DATED 02/29/1980 ROBERT E
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SANTA CRUZ, CA 95062-1514

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2912 BURRWOOD
SPRINGFIELD, OH 45503-0000

ROBIN OIL & GAS CORP
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OKLAHOMA CITY, OK 73172-0000

RODELLA A VERGAMINI AND JOHN L
VERGAMINI
113 BONHAM CIR
COUNCIL BLUFFS, IA 51503-0000

TED N STEFFEN LVG TR UTA DATED 02-03-
2003
ATTN ELIZABETH STEFFEN TTEE
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THOMAS E SHOWS & EDNA M SHOWS
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MANSFIELD, TX 76063-5314

TITUS A MORTON
259 LENOX AVENUE APT #1
NEW YORK, NY 10027-0000

TODD M KRINGEN AND KARLA R KRINGEN
8540 EAST DOWELL ROAD #59
MESA, AZ 85207-0000

WILLIAM GARY ALBERG
21 ROBLEN DR APT 2
PAWTUCKET, RI 02860-1016

JOHN L PETERS AND SHARON A PETER
P O BOX M
CARPENTER, WY 82054-0000

LUANN ANDERSON AND
WILLIAM C ANDERSON
15313 HERITAGE CIRCLE
THORNTON, CO 806020000

MARY ANN KIRCHGESSNER
12229 YELLOWSTONE RD NE
ALBUQUERQUE, NM 871110000

PETERS 313 RANCH INC
P O BOX M
CARPENTER, WY 820540000

KENT KUSTER
COLORADO DEPARTMENT OF
PUBLIC HEALTH & ENVIRONMENT
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530

BRANDON MARETTE
ENERGY LIAISON
COLORADO PARKS AND WILDLIFE
NORTHEAST REGIONAL OFFICE
6060 BROADWAY
DENVER, CO 80216

TROY SWAIN
WELD COUNTY
DEPARTMENT OF PLANNING SERVICES
1555 NORTH 17TH AVENUE
GREELEY, CO 80631

ANITA RUTH JOHNSON
67464 WELD COUNTY RD 390
HEREFORD, CO 80732-0000

CHRISTINA KAFKA
4690 W 102ND PL
WESTMINSTER, CO 80031-2319

ETTIE P BLAKE LIVING TRUST DTD 8-15-88
C/O FRANCIS W BLAKE
5700 E COUNTY ROAD 48
FORT COLLINS, CO 80524-0000

MARK JENKINS AND KAREN R JENKINS
11776 COUNTY ROAD 42
PLATTEVILLE, CO 80651-8918

T E MCCLINTOCK TRUST BANK OF
OKLAHOMA NA FBO MARY M SWIFT
PO BOX1588
TULSA, OK 74101-1588

ARAPAHOE RESOURCES LLC
P O BOX 57107
OKLAHOMA CITY, OK 73157-0000

CATHERYN L GEISSLER
7300 W 107TH APT 229
OVERLAND PARK, KS 6621-20000

DIANA R RICKARD LIVING TRUST DTD 10-13-
04 DIANA R RICKARD & DWIGHT F RICKARD
CO-TRUSTEES1
604 S 189TH CT
OMAHA, NE 68130-0000

DIANA RICKARD
1604 S 189TH CT
OMAHA, NE 68130-0000

EOG RESOURCES INC DOMINION PLAZA
600 17TH ST #1000N
DENVER, CO 80202

KONIG LAND & CATTLE LLC JAMES M KONIG
MANAGING MEMBER
57851 CR 81
GROVER, CO 80729-0000

COBANK FCB SUCCESSOR TO US AGBANK
FCB
245 N WACO ST
WICHITA, KS 67202-0000

CURTIS C ANDERSON AND CATHLEEN L
ANDERSON TTEES OF ANDERSON FAMILY
TR DTD 1-17-14
208 REDBUD DR
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Fifth Creek Energy Operating Company, LLC
Benjamin C. Burke - Geology Testimony
Cause No. 421; Docket No. 170900555
Increased Density – Niobrara Formation
Wattenberg Field, Weld County, Colorado

September 2017 Colorado Oil and Gas Conservation Commission Hearing

My name is Benjamin C. Burke, and I am currently employed as the Geoscience Manager for Fifth Creek Energy Operating Company, LLC ("Applicant"). I earned a Bachelors of Arts in Geology from Bowdoin College, a Masters of Business Administration from Texas A&M University, and a PhD in Earth Sciences from Dartmouth College. I have 14 years of private sector geology experience, 12 of which is in the oil and gas industry. I am familiar with the lands described, and the matters set forth in, the verified application ("Application") subject to the above-referenced docket.

In support of Applicant's Application and my sworn testimony herein, I am submitting five (5) exhibits. This testimony and exhibits provide the supporting basis for approval of the Applicant's request for an order to authorize an additional seven (7) horizontal wells, for a total of fifteen (15) horizontal wells, in each of six (6) approximate 1,280-acre drilling and spacing units established by Order No. 421-84 for Sections 19, 20, 21, 22, 27, 27, 29 and 30, Township 12 North, Range 62 West, 6th P.M., and Sections 23, 24, 25 and 26, Township 12 North, Range 63 West, 6th P.M., for the efficient and economic development of oil, gas and associated hydrocarbons from the Niobrara Formation underlying the below-described lands.

Township 12 North, Range 62 West, 6th P.M.

Section 19: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 30: All

1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 62 West, 6th P.M.

Section 20: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 29: All

1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 62 West, 6th P.M.

Section 21: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 28: All

1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 62 West, 6th P.M.

Section 22: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 27: All

1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 63 West, 6th P.M.

Section 23: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 26: All

1,280 acres, more or less, Weld County, Colorado

Township 12 North, Range 63 West, 6th P.M.

Section 24: All portions of this section within the State of Colorado and excluding any portion within the State of Wyoming

Section 25: All

1,280 acres, more or less, Weld County, Colorado

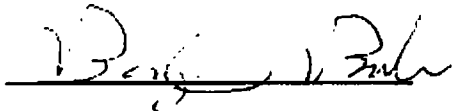
1. Exhibit G-1 – Structure Contour Map – Top Niobrara with offset well locations
Exhibit G-1 is a structure map constructed on the top of the Niobrara Formation. The contour interval of the map is 25 feet. The Niobrara is gently dipping to the west in the mapped area.
2. Exhibit G-2 – Isopach Map – Niobrara with offset well locations
Exhibit G-2 is an isopach map of the Niobrara Formation measured in feet. The contour interval of Niobrara thickness is 10 feet. Total thickness across the Application Lands ranges from approximately 230-260 feet.
3. Exhibit G-3 – Cross Section showing Niobrara section.
Exhibit G-3 is a cross section that includes the entire Niobrara Formation. This cross section and the isopach maps show the Niobrara intervals to be present and continuous throughout the Application Lands.
4. Exhibit G-4 – Hereford Field Type Log.
Exhibit G-4 is a type log showing the Formations and Members of the Cretaceous-aged lithology present in the Lamotta 5-01M (05-123-30556). The Lamotta well is located in Section 1, 11N 63W and has wireline logs that are typical of the geology of the Hereford Field. The wireline logs shown in the type section are the gamma ray, deep resistivity, and density porosity.
5. Exhibit G-5 – Offset Well Locations
Exhibit G-5 shows well locations on and in the vicinity of the Application Lands, according to the COGCC reference base map as of August 4, 2017.

The stratigraphy, geochemistry, and pressure data reviewed show that the additional wells in the Niobrara are necessary to adequately and economically recover the oil, gas and associated hydrocarbons from the Niobrara Formation.

Dated this 14th day of August 2017

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.



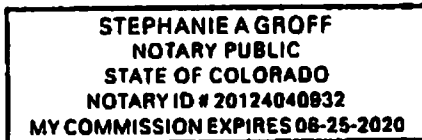
Benjamin C. Burke
Geoscience Manager
Fifth Creek Energy Operating Company, LLC

STATE OF COLORADO)
) ss.
COUNTY OF Arapahoe)

The foregoing instrument was subscribed and sworn to before me this 14th day of August, 2017, by Benjamin C. Burke, Geoscience Manager for Fifth Creek Energy Operating Company, LLC.

Witness my hand and official seal.

[SEAL]



My commission expires: June 25, 2020


Notary Public

Exhibit G-1

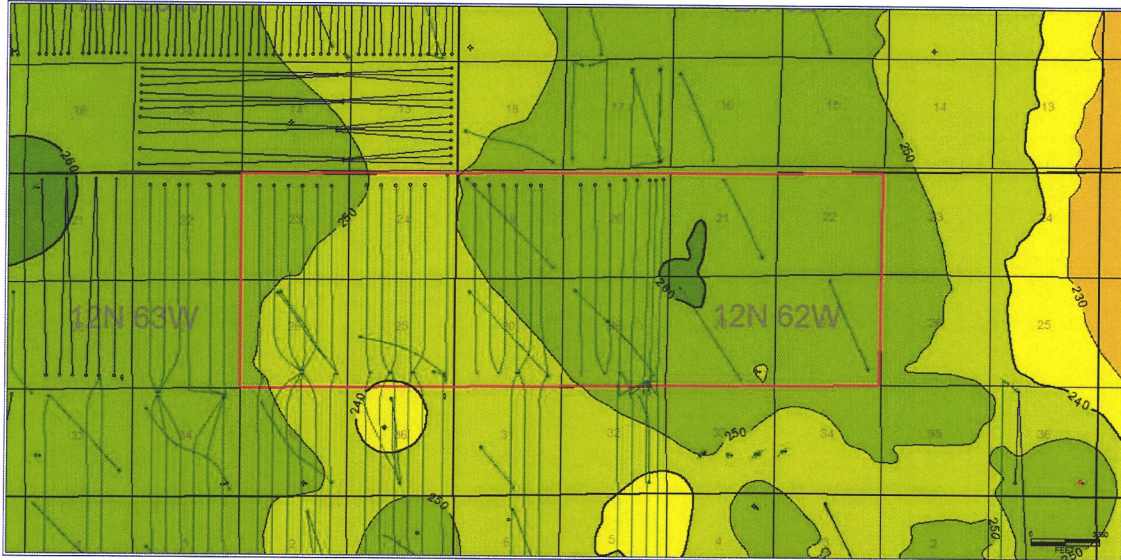
Structure Contour Map on the top of the Niobrara Formation



25 ft contour intervals

Exhibit G-2

Isopach Map on the top of the Niobrara Formation



10 ft isopach intervals

Exhibit G-3

Cross section showing Niobrara section

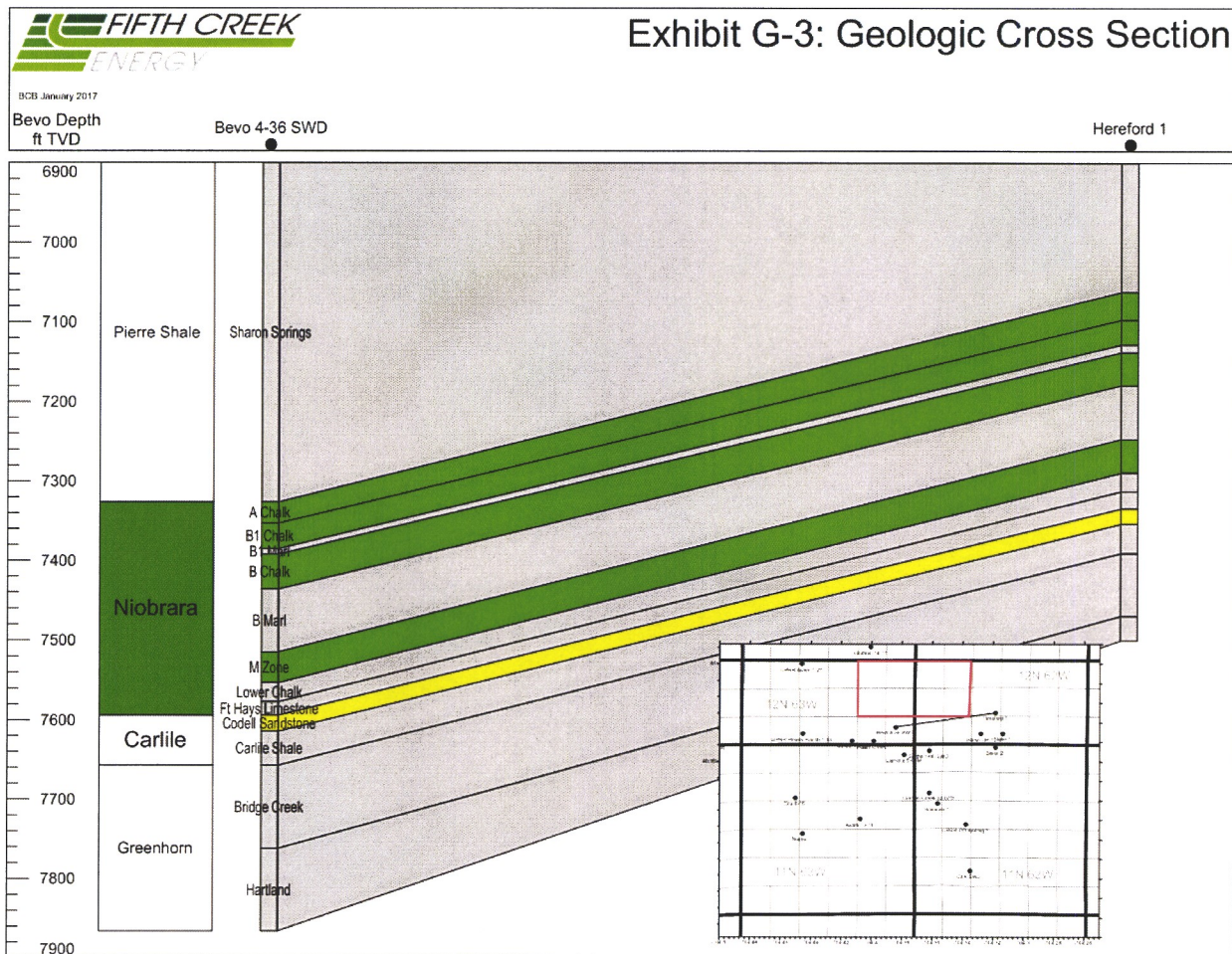


Exhibit G-4

Type log showing formations and lithology present

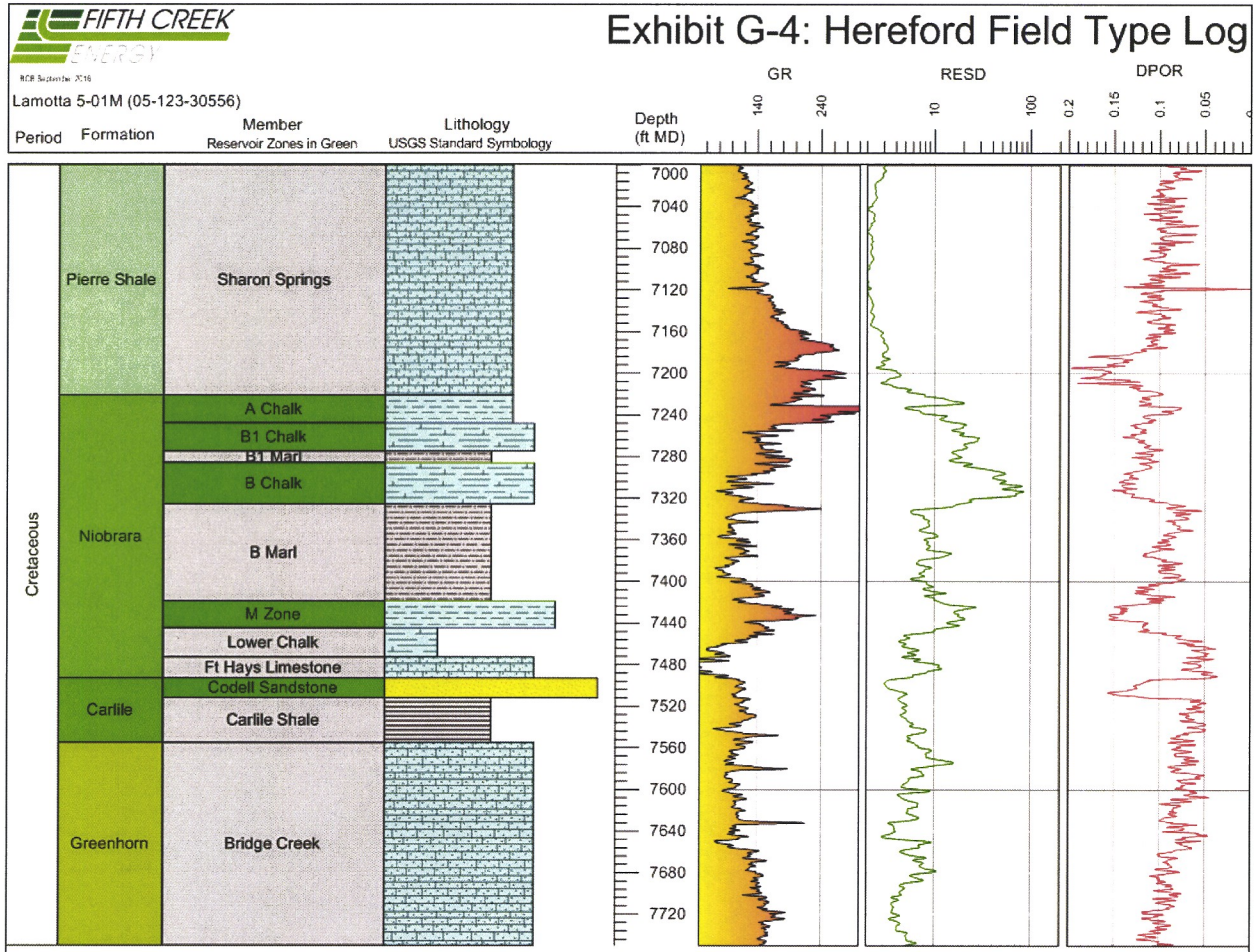
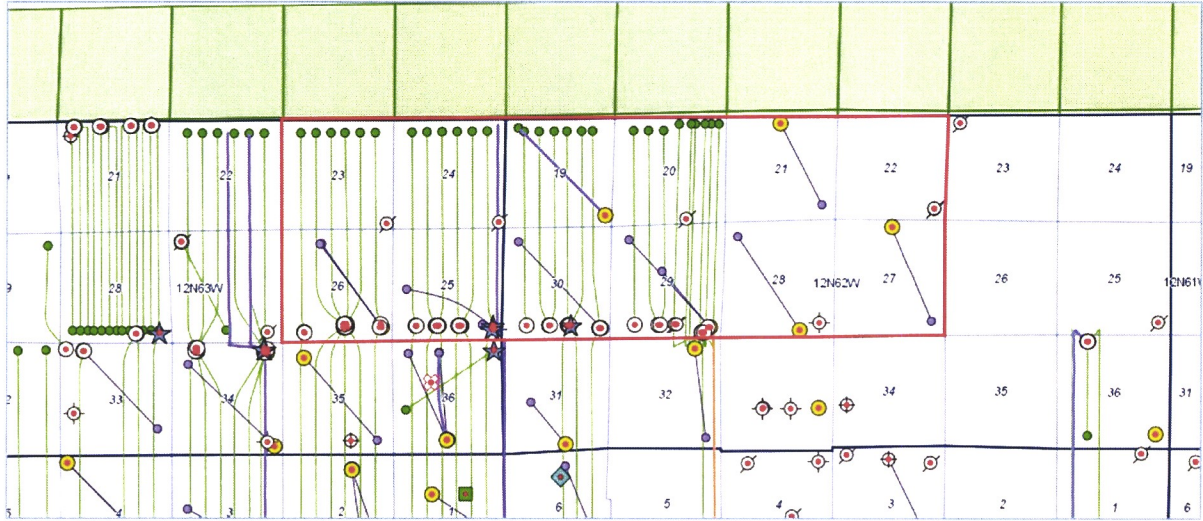


Exhibit G-5

Offset Well Locations



COGCC GIS Well Database, retrieved August 3, 2017

Fifth Creek Energy Operating Company, LLC
Engineering Testimony – William Irwin
Cause No. 421
Docket No. 170900555

September 2017 Colorado Oil and Gas Conservation Commission Hearing

My name is William Irwin and I am currently employed as the Engineering Advisor for Fifth Creek Energy Operating Company, LLC (“Fifth Creek”). I hold a Bachelor’s of Science in Petroleum Engineering from Montana Tech. I have 32 years of experience in oil and gas engineering. I am familiar with the lands subject to, and matters set forth in, the verified application (“Application”) subject to the above-referenced docket.

In support of Fifth Creek’s Application in the above referenced docket, I am submitting three (3) exhibits along with this sworn testimony. This Application requests an order to approve an additional seven (7) horizontal wells, for a total of fifteen (15) horizontal wells, in DSU #1, DSU #2, DSU #3, DSU #4, DSU #5 and DSU #6, to require that the productive interval of each additional proposed horizontal well in each approximate 1,280-acre drilling and spacing unit shall be no closer than 300 feet from the boundaries of the unit (regardless of the lease lines within the unit) and all horizontal wells shall be no closer than 150 feet from the productive interval of another well producing from the same source of supply within the unit, unless an exception is granted by the Director, and providing that the wells will be drilled from no more than five well pads, including the existing wellpads, in each of the six drilling and spacing units to be located within such unit or adjacent thereto, unless an exception is granted by the Director, consistent with Order No. 421-84 underlying the following lands (“Application Lands”):

Township 12 North, Range 62 West, 6th P.M.

Section 19: All (All portions of this section within the State of Colorado)

Section 30: All

(“DSU #1”)

Township 12 North, Range 62 West, 6th P.M.

Section 20: All (All portions of this section within the State of Colorado)

Section 29: All

(“DSU #2”)

Township 12 North, Range 62 West, 6th P.M.

Section 21: All (All portions of this section within the State of Colorado)

Section 28: All

(“DSU #3”)

Township 12 North, Range 62 West, 6th P.M.

Section 22: All (All portions of this section within the State of Colorado)

Section 27: All

(“DSU #4”)

Township 12 North, Range 63 West, 6th P.M.

Section 23: All (All portions of this section within the State of Colorado)

Section 26: All

("DSU #5")

Township 12 North, Range 63 West, 6th P.M.

Section 24: All (All portions of this section within the State of Colorado)

Section 25: All

("DSU #6")

1. Exhibit E-1 – OOIP and EUR Calculations

Exhibit E-1 shows OOIP calculations, estimated ultimate recovery, and drainage area for fifteen Niobrara Formation wells drilled in a 1280-acre drilling and spacing unit within the underlying the Application Lands as compared to eight wells drilled in the same drilling and spacing unit. The improved recovery factor by 47% shows the drilling of up to fifteen wells will promote efficient drainage, protect correlative rights and prevent waste in a 1280-acre unit versus only drilling eight wells. These reserves would not be fully recovered without the application of horizontal well technology in a 1280-acre drilling and spacing unit.

2. Exhibit E-2 – Analog Well Evaluation

Exhibit E-2 reflects an evaluation of analog 2-section lateral well results in Table A and 1-section lateral well results in Table B. Estimated ultimate recovery and associated drainage area are calculated through decline curve analysis utilizing available public data and the inclusion of one new well drill by the Fifth Creek underlying the Application Lands. The 2-section lateral analog wells have an average lateral length of 9,261' and average estimated ultimate recovery of 431,333 bbl for the Niobrara Formation, for a drainage per well of 85 acres. The 1-section lateral analog wells have an average lateral length of 4,143' and average estimated ultimate recovery of 191,000 bbl for the Niobrara Formation, for a drainage area per well of 38 acres. These estimates are within a reasonable expected range and support the Application.

3. Exhibit E-3 – Economic Analysis


Economic calculations show in improved value of 50% by drilling on 1280-acre units with total of 15 wells versus not developing the resource in an efficient, scientific manner. This result leads to the conclusion that reserves will not be appropriately accessed or drained in a tight unconventional resource with only eight wells per 1280 acre spacing unit, therefore leaving reserves under-developed and creating waste.

Conclusions

Based on each drilling and spacing unit area of 1,280 acres, the drainage calculations are consistent with the development of up to fifteen Niobrara horizontal wells. This testimony and attached exhibits support my conclusion that the drilling, completion, and production of up to fifteen horizontal wells within each proposed drilling and spacing unit will increase total recovery and reduce resource waste relative to an eight-well 1280-acre drilling and spacing unit. In addition, the proposed development plan can be accomplished in an economic and efficient manner while protecting correlative rights.

Affirmation

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 and in the exhibits are true, correct, and accurate.



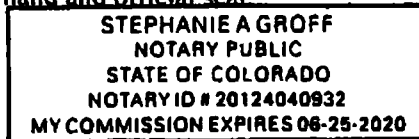
William Irwin
Engineering Advisor
Fifth Creek Energy Operating Company, LLC

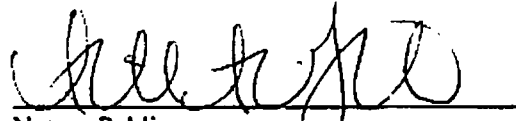
State of Colorado)
) ss.
County of)

The foregoing instrument was subscribed and sworn to before me this 16th day of August, 2017, by William Irwin as Engineering Advisor for Fifth Creek Energy Operating Company, LLC.

Witness my hand and official seal

[SEAL]





Notary Public

My commission expires: June 25 2020

William (Bill) L. Irwin, P.E., Senior Engineering Advisor

Mr. Irwin has a Bachelor of Science Degree in Petroleum Engineering from Montana Tech, and over 30 years of oil industry experience. In his most recent role as Vice President of Operations with Bakken Hunter, LLC, a division of Magnum Hunter Resources Corporation (MHR), he was instrumental in developing significant Bakken and Three Forks shale oil assets; using modern unconventional resource drilling and completion techniques. These techniques include horizontal drilling and multistage hydraulic fracturing. In addition, his facilities team planned, permitted, constructed and commissioned numerous field gathering and processing facilities. These cutting edge facilities produced, in record time, a cross-border, FERC regulated gas pipeline.

Prior to joining the MHR, Mr. Irwin was the Founder, President, and CEO of Pinon Oil & Gas Ltd. (1997) and Red Mike Energy Inc. (2000). Both private exploration and production companies primarily operated in southern Alberta. From 2007 to 2010, he was the Vice President, Business Development and Board Advisor for Fractal Systems Inc.; an oil services company with proprietary heavy oil viscosity reduction, and partial upgrading technology.

From 1994 through 1997 he was the Operations Manager for Tidal Resources Inc. (Tidal) in Canada and North Dakota. Tidal was a leader in the implementation of horizontal drilling technology to legacy assets in North Dakota. Prior to 1994, Mr. Irwin held varying technical and management roles with Unocal Corp and Quintana Petroleum Corporation in Canada, Colorado, New Mexico, Texas, and Utah. Mr. Irwin is a registered Professional Engineer in Alberta and is an accepted professional engineering witness in North Dakota and New Mexico.

Exhibit E-1 OOIP
OOIP and EUR Calculations

Date: 8/1/17

Reference Sections:

Engineer: William L. Irwin

Key Variables & Assumptions		8 Niobrara wells		15 Niobrara wells	
Water Saturation (S_w)	Porosity (ϕ)	10%	10%	10%	Median porosity for Niobrara
		75%	75%	75%	Core-based corrected saturation
	Area (A)	1280	1280	1280	Drilling and Spacing Unit acreage
Oil Formation Volume Factor (B_o)	Height (h)	272	272	272	Niobrara Total Thickness (chalks & marls)
		1.5	1.5	1.5	bbl/STB

Calculation Original Oil in Place

Estimated Oil Equivalent in Place:	45,017,088	45,017,088	Bbl oil
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Niobrara Well Performance

Horizontal Well Count	8	15	Density of wells
Drainage area for 1 well	85	85	acres
Average EUR per well	431,333	431,333	Bbl oil
Estimated Total Oil	3,450,667	6,470,000	Bbl of oil (total 8 wells, total 15 wells)
Estimated Rf of OOIP	7.7%	14.4%	

Comparison of Recovery Factors

Total increased Rf		47%	Increase in Recovery factor due to increase in well density
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Symbols, Terminology, and Equations			
ϕ	Porosity as %	Rf	Recovery Factor, %
h	height, feet	bbl	barrel of oil, 42 gallons
A	Area, acres (1 acre is 42,560 ft ²)	STB	Stock Tank Barrel
B_o	Oil Formation Volume Factor, bbl/STB		
S_w	Water Saturation as %		
OOIP	Original Oil in Place, bbls	EUR	Estimated Ultimate Recovery, BBL of oil
	OOIP = 7758 A h ϕ (1- S_w) / B_o		EUR = 7758 (A) (Rf) (h) (ϕ) (1- S_w) / (B_o)

Exhibit E-2
Analog Well Evaluation

Date: 8/1/17
Reference Sections:
Engineer: William L. Irwin

Table A: 2-Section Laterals

Type	Zone	API	Township	Range	Section	Lateral Length (ft)	EUR (MBO)	Net Thickness (h, ft)	Average Porosity (φ, %)	Average Water Saturation (Sw, %)	Recovery Factor (Rf, %)	Bo (Rb/STB)	Drainage Area (A, acres)
JUBILEE 113-1609H	Niobrara	49-021-21078	13N	65W	16, 9	8,875	237,000	272	10%	75%	14.5%	1.50	46
JUBILEE 151-1034H	Niobrara	49-021-21087	13N	65W	10, 34	9,484	557,000	272	10%	75%	14.5%	1.50	109
JUBILEE 153-1034H	Niobrara	49-021-21082	13N	65W	10, 34	9,371	353,000	272	10%	75%	14.5%	1.50	69
JUBILEE 154-1034H	Niobrara	49-021-21086	13N	65W	10, 34	9,365	685,000	272	10%	75%	14.5%	1.50	134
JUBILEE 194-2311H	Niobrara	49-021-21094	13N	65W	23, 11	9,515	338,000	272	10%	75%	14.5%	1.50	66
Fox Creek 222-3422H	Niobrara	05-123-42582	12N	63W	34, 22	8,955	418,000	272	10%	75%	14.5%	1.50	82
Averages						9,261	431,333	272	10%	75%	14.5%	1.50	85

Table B: 1-Section Laterals

Type	Zone	API	Township	Range	Section	Lateral Length (ft)	EUR (MBO)	Net Thickness (h, ft)	Average Porosity (φ, %)	Average Water Saturation (Sw, %)	Recovery Factor (Rf, %)	Bo (Rb/STB)	Drainage Area (A, acres)
CASPER 1-26H	Niobrara	49-021-21111	16N	65W	25	4,468	241	272	10%	75%	14.5%	1.50	47
CRITTER CREEK 21-26H	Niobrara	05-123-31796	11N	63W	26	4,655	148	272	10%	75%	14.5%	1.50	29
CRITTER CREEK 22-27H	Niobrara	05-123-31507	11N	63W	27	4,955	52	272	10%	75%	14.5%	1.50	10
CRITTER CREEK 29-02H	Niobrara	05-123-33687	11N	63W	2	3,117	60	272	10%	75%	14.5%	1.50	12
CRITTER CREEK 30-26H	Niobrara	05-123-32328	11N	63W	26	4,266	94	272	10%	75%	14.5%	1.50	18
CRITTER CREEK 34-16H	Niobrara	05-123-33103	11N	63W	16	4,736	169	272	10%	75%	14.5%	1.50	33
ELMER 8-31H	Niobrara	05-123-30584	12N	62W	31	1,827	318	272	10%	75%	14.5%	1.50	62
ELSIE 7-34H	Niobrara	05-123-30631	12N	63W	34	4,930	473	272	10%	75%	14.5%	1.50	93
FOX CREEK 1-35H	Niobrara	05-123-31385	12N	63W	35	4,669	256	272	10%	75%	14.5%	1.50	50
FOX CREEK 2-25H	Niobrara	05-123-31400	12N	63W	25	3,776	168	272	10%	75%	14.5%	1.50	33
FOX CREEK 3-26H	Niobrara	05-123-31417	12N	63W	26	3,987	247	272	10%	75%	14.5%	1.50	48
FOX CREEK 6-33H	Niobrara	05-123-31558	12N	63W	33	4,140	37	272	10%	75%	14.5%	1.50	7
ROSIE 1-35H	Niobrara	49-021-21009	16N	65W	35	4,327	225	272	10%	75%	14.5%	1.50	44
Averages						4,143	191	272	10%	75%	14.5%	1.50	38
$\text{Drainage Area (acres)} = \frac{(EUR_{ult} \cdot B_o)(5.615 \frac{ft^3}{bbl})}{(RF)(\phi)(1 - S_w)(h)(43,560 \frac{ft^2}{acre})}$													

Where:
RF = Recovery Factor, %
φ = Porosity, %
Sw = Water Saturation, %
h = Net Thickness, ft
Bo = Oil Formation Volume Factor, RB/STB
EUR_{ult} = Estimated Ultimate Oil Recovery, bbls

Note: 1-section lateral average drainage area calculates to roughly half of 2-section lateral - check

Exhibit E-3

Economic Analysis

Date: 8/1/17
Reference Sections:
Engineer: William L. Irwin

Key Variables & Assumptions									
		Type Well 8		Type Well 15	8 wells		15 wells		
Total Equivalent EUR	Capex	\$	5,800	\$	5,600	\$	46,400	\$	84,000
	LOE	\$	13,000	\$	13,000	\$	13,000	\$	13,000
			503		503		4,026		7,548
	EUR, Oil		431		431		3,451		6,470
	EUR, Gas		431		431		3,451		6,470
	WI		100		100		100		100
	NRI		86		86		86		86
	Oil Price	\$	50.00	\$	50.00	\$	50.00	\$	50.00
	Gas Price	\$	3.00	\$	3.00	\$	3.00	\$	3.00
Economic Outputs									
BT NPV10		\$	2,987	\$	3,187	\$	23,896	\$	47,805
BT ROR			41%		57%		41%		57%
Rate of Return as %									
M\$, Net present value discounted at 10%									
Due to improved Recovery Factor from increase in well density and pad development lowering per well cost.									

M\$ Pad development and shared facilities lowers cost by \$200 M\$
Monthly operating expenses per well, \$
Estimated ultimate recovery, MBOE
Estimated oil recovery, Mbbls
Estimated gas recovery, Mscf (assuming 1,000 scf/bbl)
Estimated Working Interest
Estimated Net Revenue Interest
\$/bbl, Estimated realized price, includes differential from Nymex
\$/Mcf, Estimated realized price, includes differential from Henry Hub

M\$, Net present value discounted at 10%
Rate of Return as %