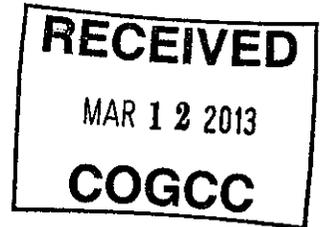




BEFORE THE OIL & GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO



IN THE MATTER OF THE APPLICATION OF AXIA)
ENERGY, LLC FOR AN ORDER TO POOL ALL)
INTERESTS IN AN APPROXIMATE 2613.44-ACRE)
UNIT LOCATED IN SECTIONS 3, 4, 9, AND 10,)
TOWNSHIP 8 NORTH, RANGE 90 WEST, 6TH)
P.M., UNNAMED FIELD, MANCOS AND)
NIOBRARA FORMATIONS, MOFFAT COUNTY,)
COLORADO

CAUSE NO. 540

DOCKET NO. 1303-UP-53

ORIGINAL

REQUEST FOR RECOMMENDATION OF
APPROVAL OF APPLICATION WITHOUT A HEARING

Axia Energy, LLC ("Applicant"), by and through its undersigned attorneys, hereby requests pursuant to Rule 511.a. of the Rules and Regulations of the Colorado Oil and Gas Conservation Commission for the Director to recommend approval of its January 24, 2013 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 12th day of March, 2013.

Respectfully submitted,

AXIA ENERGY, LLC

By: 

Jamie L. Jost
Gregory J. Nibert Jr.
Beatty & Wozniak, P.C.
Attorneys for Applicant
216 16th Street, Suite 1100
Denver, Colorado 80202
(303) 407-4499

Axia Energy, LLC

Cause No. 540
Docket No. 1303-UP-53

AXIA ENERGY, LLC
Tab McGinley – Land Testimony

Cause 540; Docket No. 1303-UP-53
Pooling Application – Mancos-Niobrara Formations
Unnamed Field, Moffat County, Colorado

March 2013 Colorado Oil and Gas Conservation Commission Hearing

My name is Tab McGinley, and I am currently employed as Vice President of Land for Axia Energy, LLC (“Applicant”). I graduated from Rice University in Houston, Texas in 1983 with a degree in Energy Land Management. I have over 29 years of experience in oil and gas land work. I have worked directly or in a supervisory role with the properties that are subject of this matter.

In support of Applicant’s application (“the Application”) and my sworn testimony herein, I have prepared six (6) exhibits. This testimony and exhibits provide the supporting basis for approval of the Applicant’s request for an order pooling all interests in the wellbore spacing unit comprised of the following lands:

Township 8 North, Range 90 West, 6th P.M.,
Section 3: Lots 2, 5-18; a/d/a SW¼NE¼; a/d/a ALL
Section 4: Lots 5-20; a/d/a ALL
Section 9: Lots 1-16; a/d/a ALL
Section 10: Lots 1-15; a/d/a SE¼SE¼; a/d/a ALL

Containing 2,613.44 acres, more or less
Moffat County, Colorado.

1. Exhibit No. 1

Exhibit No. 1 is the Well Location Certificate that shows the location of the Bulldog 10-24H-890 Well (“Well”) to be drilled on the subject lands.

2. Exhibit No. 2

Exhibit No. 2 is a list of all owners of an oil and gas interests in the tracts to be pooled. In addition to the working interest owners and unleased mineral owners, the notice was provided to leased mineral (royalty) owners who do not receive offers to lease or participate under Rule 530.

3. Exhibit No. 3

Exhibit No. 3 is an example of the offer letter sent to working interest owners pursuant to Rule 530. The letters were sent to the last known address (where available) of these parties. The letter offered the parties the opportunity to participate in the drilling and completion operations of the Well by paying a proportionate share of such costs.

4. Exhibit No. 4

Exhibit No. 4 is a copy of an Authority for Expenditure (“AFE”) which was sent by Applicant to the working interest owners and/or unleased mineral interest owners. This AFE is a fair and reasonable estimate of the costs of the drilling and completion operations of the Well.

5. Exhibit No. 5

Exhibit No. 5 is a copy of the form of lease which was sent by Applicant to the unleased mineral interest owners. The form of lease is reasonable and is customary for this area of Colorado.

6. Exhibit No. 6

Exhibit No. 6 is an example of the offer letter sent to unleased mineral interest owners pursuant to Rule 530. The letters were sent to the last known address (where available) of these parties. The letter offered the parties the opportunity to lease their mineral interests to Applicant and such offer is fair and reasonable for the Application Lands.

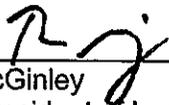
Applicant confirms that the approved pooling order in the above-referenced docket will pool all interests in the unit, pursuant to C.R.S.34-60-116(6) and acknowledges that the nonconsenting parties' interests in the first eight (8) wells drilled and completed in the unit will be subject to the non-consent penalties set forth in C.R.S. 34-60-116(7). Applicant further acknowledges that, for any well drilled in the unit after the eighth (8th) well, Applicant will send the appropriate correspondence to the nonconsenting parties regarding their election in such subsequent wells.

Based upon examination of relevant contracts and records, all owners of an oil and gas interest in the tracts to be pooled (who could be located by Applicant) received timely notice of the Application. In addition, at least thirty (30) days will have elapsed prior to the hearing on this matter since the information required by Rule 530 was provided to those interested parties entitled to such offers to lease or to participate in the Well. To date, Applicant has been unable to obtain a lease or other agreement to participate in the Well from one or more parties listed on Exhibit No. 2 (hereafter "nonconsenting parties").

Accordingly, Applicant requests that its Application be approved without the necessity of a hearing, that all interests in the drilling and spacing unit be pooled, including any subsequent operations to develop the Mancos and Niobrara Formations, and that any non-consenting parties be made subject to the cost recovery provisions of the applicable statute.

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.



Tab McGinley
Vice President of Land
Axia Energy, LLC

STATE OF COLORADO

CITY AND COUNTY OF DENVER

)
) ss.
)

The foregoing instrument was subscribed and sworn to before me this 11th day of March, 2013, by Tab McGinley, as Vice President of Land for Axia Energy, LLC.

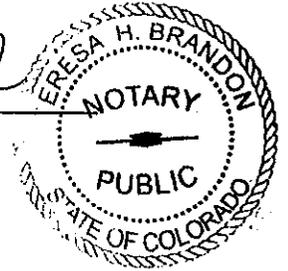
Witness my hand and official seal.

[SEAL]

My commission expires: 8/7/16

Erefsa H. Brandon

Notary Public



Tab McGinley

2993 South Milwaukee Circle, Denver CO 80210

Email: tmcginley@axiaenergy.com

Phone (720) 371-6473

Professional Experience

Axia Energy, LLC

Vice President of Land

October 2010 to Present, Denver, CO

- Currently working projects in Piceance and Sand Wash Basins of Colorado and Uinta Basin of Utah

Ultra Resources, Inc.

Land Manager

May 2005 to April 2010, Englewood, CO

- Managed assets in Pinedale & Jonah Fields of Wyoming and Marcellus Shale play in Pennsylvania

Bill Barrett Corporation

Senior Landman

July 2002 to May 2005, Denver, CO

- Assembled projects and initiated drilling programs in Colorado, Montana, North Dakota, Utah, and Wyoming

The St. Croix Group

Land Manager and Working Interest Partner,

Manager of Operations/Corporate Secretary for St. Croix Operating Inc.

1989 to 2002, Denver, CO

- Assembled, marketed, negotiated, and conducted closings on over 50 drilling, exploratory, seismic, and producing projects and properties located in Louisiana, Utah, Wyoming, North and South Dakota, Montana, and Colorado
- Acted as Corporate Secretary and Manager of Operations for St. Croix Operating Inc.

Stephen Smith, Inc.

Staff Landman

1986 to 1989, Denver, CO

- Staff Landman for Independent Oil Producer working in California, Louisiana, North Dakota, Wyoming, Utah, and Oklahoma Panhandle.

Professional Experience (Continued)

Murff F. Bledsoe, III

Independent Lease Broker

1984 to 1986, Houston, TX and Denver, CO

- Ran title and bought leases in South Texas, East Texas, Western Louisiana, North Dakota, Nebraska, and Western Wyoming

Professional Affiliations

- **2008 to 2010** Former Board Member of *Petroleum Association of Wyoming (PAW)*
- **2009 to 2010** Former Board Member of *Marcellus Shale Coalition*
- **2002 to 2005** Member of Uintah Basin Advisory Committee (UBAC) for IPAMS; former chairman of Energy Days, an annual IPAMs event held in Vernal Utah.
- **2000 to 2004** Former Board Member and Sponsorship Chairman, *Denver Prospect Fair & Technofest*, an annual event held at the Colorado Convention Center in Denver, CO
- **1986 to present** Member of *American Association of Professional Landmen*
- **1986 to present** Member, former Vice President & Treasurer, *Denver Association of Petroleum Landmen*

Education

- **1983 B.A** *Energy Land Management*, Rice University, Houston, Texas

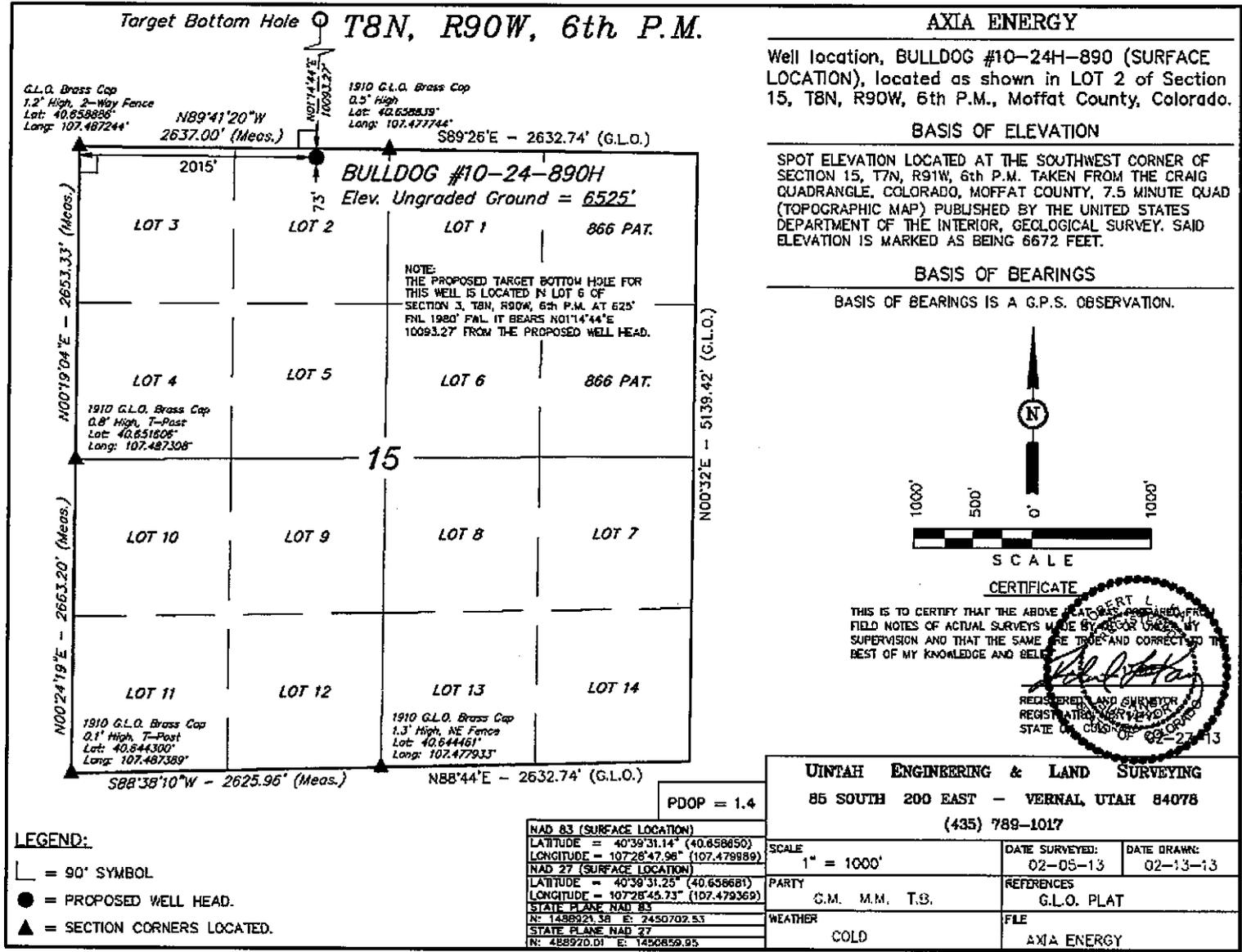
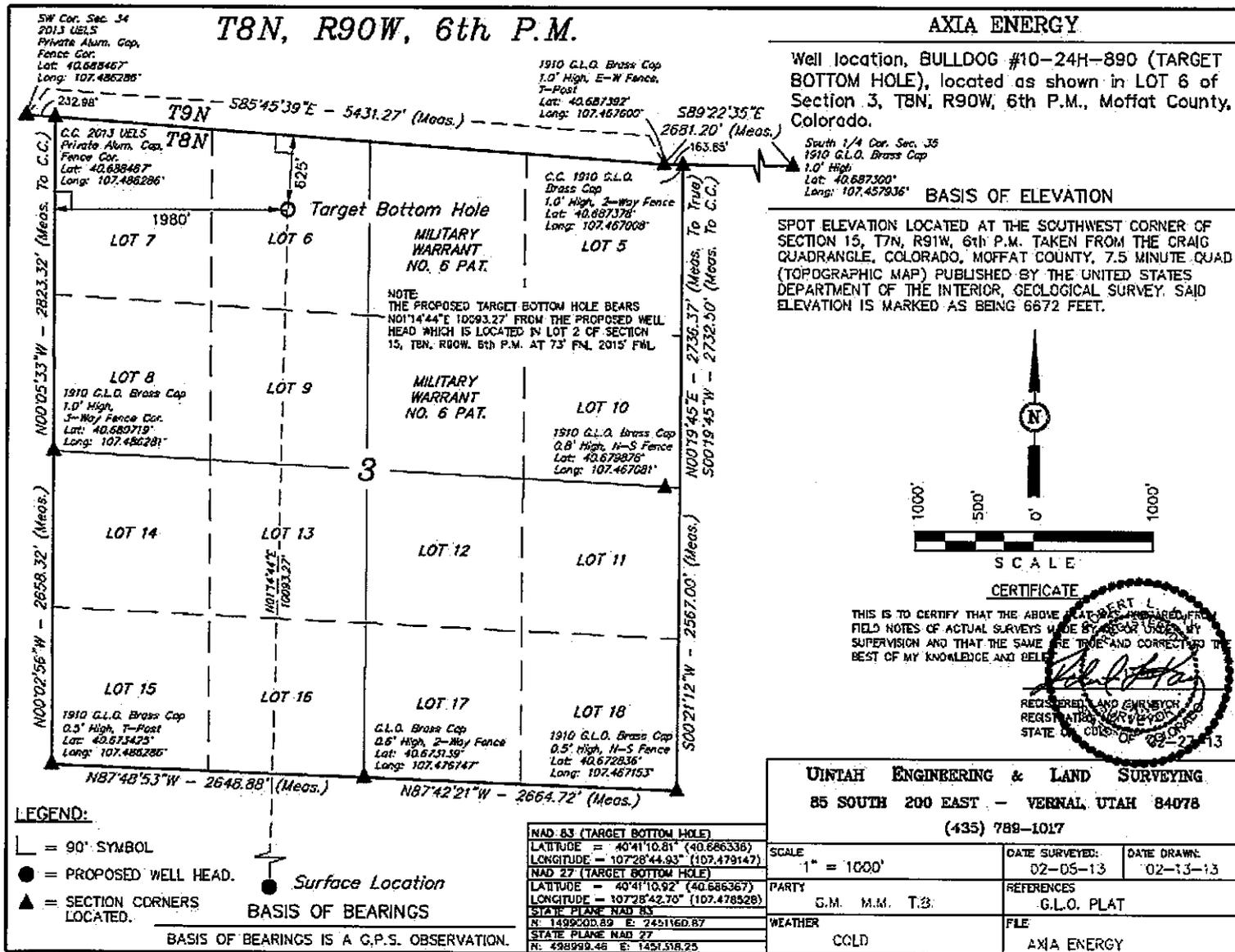


EXHIBIT NO. 1- WELL LOCATION CERTIFICATE: SURFACE LOCATION
Property Location Plat: Surface Location
Bulldog #10-24H-890
Sections 3, 4, 9 and 10, Township 8 North, Range 90 West
Moffat County, Colorado



WELL LOCATION CERTIFICATE: BOTTOM HOLE LOCATION

Property Location Plat: Bottom Hole Location

Bulldog #10-24H-890

Sections 3, 4, 9 and 10, Township 8 North, Range 90 West

Moffat County, Colorado

EXHIBIT NO. 2 - INTERESTED PARTIES

AXIA ENERGY, LLC
1430 LARIMER STREET, SUITE 400
DENVER, CO 80202

THE BOARD OF COUNTY COMMISSIONERS
OF MOFFAT COUNTY, STATE OF COLORADO
221 W. VICTORY WAY
CRAIG, CO 81625

OXY USA INC.
5 GREENWAY PLAZA, SUITE 110
HOUSTON, TEXAS 77046

20 MILE SHEEP COMPANY, LLC
35513 N. HWY 13
CRAIG, CO 81625

QUICKSILVER RESOURCES, INC.
801 CHERRY STREET, STE. 3700
FORT WORTH, TEXAS 76102

BILL M. & MARYLOU WISDOM
43637 N HWY 13
CRAIG, CO, 81625

YATES DRILLING COMPANY
105 S. 4TH STREET
ARTESIA, NM 88210

JIM F KOWACH
747 ROSE ST.
CRAIG, CO 81625

YATES PETROLEUM CORPORATION
105 S. 4TH STREET
ARTESIA, NM 88210

MCCOY FAMILY TRUST
600 APPALOOSA CIRCLE
RENO, NV, 89508

MYCO INDUSTRIES, INC.
423 WEST MAIN STREET
ARTESIA, NM 88210

LEONA DANNER (DEC) C/O THOMAS
DANNER
8 RODMAN LANE
PLYMOUTH, MA 02360

ABO PETROLEUM CORPORATION
105 S. 4TH STREET
ARTESIA, NM 88210

ISABELLE FEATHERS C/O DIANA HUNT
300 TUDOR CT.
SANTA ROSA, CA 95401

U.S.A. C/O BUREAU OF LAND MANAGEMENT
2850 YOUNGFIELD STREET, LAKEWOOD, CO
80215

BARBARA J. GORAL & DONNA R. MAHONEY
P.O. BOX 30
VICTOR, MT 59875-0030

STATE OF COLORADO, STATE BOARD OF
LAND COMMISSIONERS
1127 SHERMAN STREET, SUITE 300,
DENVER, CO 80202

ROBIN HERRING
848 E. 11TH
CRAIG, CO 81625

KRISTIN L. PRESCOTT
17512 83RD PLACE NE, APT. C204
KENMORE, WA 98028-1891

GEORGE G. MERCHANT
PO BOX 2613
EVERGREEN CO 80437

GAIL LYNN REUST & DIANE SUE BUTLER
1701 NEW HAVEN DR.
GLEN ALLEN, VA 23059

CAROLYN L. OWER
26223 COUNTY ROAD M
CORTEZ, CO 81321

EVELYN RICE C/O SALLEY A. GRIFFIN PR
830 FRANK ROAD
BELGRADE, MT 59714

BRYCE MILLER
2629 MCGREGOR BLVD
FERNANDINA BEACH, FL 32034

FROSTY ACRES RANCH PARTNERSHIP, LTD.
41380 NORTH HIGHWAY 13
CRAIG, CO 81625

CYNTHIA L. GASKILL
PO BOX 13726
LEXINGTON, KY 40583

KIM W. MILLER, TRUSTEE OF THE KIM
WESLEY MILLER REVOCABLE LIVING TRUST
DATED JANUARY 27, 1999
C/O SALLY MILLER SAKALA,
7533 W CO RD 20, LOVELAND, CO 80537

SALLY MILLER SAKALA
6723 E. HEATHER DRIVE
MESA, AZ 85215

SALLY MILLER SAKALA
7533 W CO RD 20
LOVELAND, CO 80537

FRANK MILLER JR.
3935 DOUGLAS MOUNTAIN DRIVE
GOLDEN, CO 80403

LINDA MILLER C/O SALLY MILLER SAKALA,
7533 W CO RD 20
LOVELAND, CO 80537

LINDA M. MILLER
6723 E. HEATHER DRIVE
MESA, AZ 85215

PIERRE & KAYE JOHNSON, CO-TRUSTEES
OF THE PIERRE AND KAYE JOHNSON
FAMILY TRUST
160 COUNTY ROAD 78
CRAIG, CO 81625

TRENT A. MILLER
3935 DOUGLAS MOUNTAIN DRIVE
GOLDEN, CO 80403

C. WILLIAM HOORNBECK
PO BOX 4
GRANBY, CO 80446

ROSALYN CULVER TRUST DATED 9/10/2009
PO BOX 81045
SAN DIEGO, CA 92138

OIL AND GAS TRUST UNDER A.M. CULVER
TRUST DATED 11/18/1970
PO BOX 81045
SAN DIEGO, CA 92138

RONALD LAWTON & SHIRLEY L. LAWTON
PO BOX 421
CRAIG, CO 81626

POMONA COLLEGE
550 NORTH COLLEGE AVENUE,
CLAREMONT, CA 91711

THE TRUST AGREEMENT OF GORDON
DELOSS BOOCO
PO BOX 970
HAYDEN, CO 81639

EXCO, INC.
PO BOX 6046
DENVER, CO 80206

THE TRUST AGREEMENT OF ILDA RUTH
BOOCA
PO BOX 970
HAYDEN, CO 81639

GEORGE HARPER
PO BOX 1738
CARBONDALE, CO 81623

LITTLE SNAKE FIELD OFFICE
BUREAU OF LAND MANAGEMENT
ATTENTION: MARTY O'MARA
455 EMERSON STREET
CRAIG, COLORADO 81625

JUDITH C. AMBER, AS TRUSTEE OF THE
JUDITH C. AMBER REVOCABLE LIVING
TRUST DATED JULY 1, 1992
3634 S. 40TH ST.
LINCOLN, NE 68506

JEFF COMSTOCK
MOFFAT COUNTY
221 W VICTOR WAY, SUITE 130
CRAIG, CO 81625

CAROL DEAN MURPHY
PO BOX 97
FRASER, CO 80442

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

JARRETT F. COOK, AS TRUSTEE OF THE
JARRETT F. COOK LIVING TRUST, DATED
4/7/2005
4055 COUNTY ROAD 501
BAYFIELD, CO 81122

MICHAEL WARREN
ENERGY LIAISON
COLORADO PARKS AND WILDLIFE
NORTHWEST REGIONAL OFFICE
711 INDEPENDENT AVE.
GRAND JUNCTION, CO 81505

TONIA L. REARDON FKA TONIA L. WENDT
166 GREENLINKS AVENUE
MIDDLETON, ID 83664

CHARLES W. JORDAN (DEC.) C/O CAROLYN
JORDAN
718 SOUTH 10TH STREET, UNIT B
CANON CITY, CO 81212

EXHIBIT NO. 3 - OFFER LETTER TO WORKING INTEREST OWNERS



VIA CERTIFIED RECEIPT MAIL

[DATE]

[WORKING INTEREST OWNER]

Re: Bulldog _____ Well – Mancos and Niobrara Formations

Township North, Range West, 6 P.M.

Section _____

Section _____

Moffat County, CO

Ladies and Gentlemen:

Further to correspondence you have received, Axia Energy, LLC ("Axia") is in the process of forming the Bulldog _____ exploratory drilling and spacing unit ("Unit") on the above described lands for the drilling of the Bulldog _____ horizontal well ("Well") in order to test the Mancos and Niobrara formations. As depicted on the enclosed plat, our proposed Units vary in size based upon the planned length of the lateral portion of our wellbore. In general, our total vertical depths are in the 10,000' to 11,000' foot range plus up to a 9,000' lateral. Axia has filed an application with the Colorado Oil and Gas Conservation Commission ("COGCC") to form this Unit. If approved by the COGCC, the Unit will comprise approximately _____ acres, inclusive of the lands in which you own a working interest. We are soliciting your participation in the Well or Wells to be drilled in the Unit.

The surface location for the Well will be in the _____, with a projected bottomhole location being in the _____.

Accordingly, enclosed for your consideration is Axia's AFE for the drilling and completing the Well which will be drilled to a total depth to sufficiently test the Mancos and Niobrara formations. Listed below is a summary of working interest and estimated expenditures.

Your working interest in the Well and all Wells:

_____ % (_____ net acres / _____ acres in the unit)

Your share to drill and complete this Well is:

\$ _____ (\$ _____ * _____ %)

Should you elect to participate, we will provide you with our proposed Joint Operating Agreement ("JOA") for your review covering the captioned lands. In addition, Axia requests that you provide a copy of all title and contracts applicable to your leasehold within the drilling unit so that our attorney may further review title for the benefit of all participating working interest owners.

Please notify Axia of your election to participate in the drilling of the proposed Well by checking the appropriate spaces below and signing and returning a copy of this letter, along with an executed copy of the AFE. Failure to respond within thirty (30) days from your receipt of this notice shall be deemed as an election to NOT participate under Option number 2 below.



Thank you in advance for your time and attention to this matter. Please feel free to call if you have any questions or require additional information.

Very truly yours,

Tab McGinley
Vice President of Land
720-746-5210

Enclosures



THE UNDERSIGNED ELECTS TO:

OPTION 1:

____ Participate in the drilling and completion for its _____ % working interest in Axia's Bulldog
_____ well.

OPTION 2:

____ Not Participate in the drilling and completion for its _____ % working interest in Axia's
Bulldog _____ well and elect to have its working interest be subject to C.R.S. 34-60-116.

Signature (1): _____

Date: _____

Name: _____

Signature (2): _____

Date: _____

Name: _____

EXHIBIT NO. 4 - AFE

AUTHORIZATION FOR EXPENDITURE



WELL NAME: **BULLDOG # WELLS** PROSPECT: **SAND WASH - MOBARRA**
 LOCATION: **TBD** DEPTH: **21,000** Date: **2/1/2013**
 MWD#/source: **11,500** MTD: **21,000**
 COUNTY: **MOEFAT** STATE: **COLORADO**
 TYPE OF OPERATION: **HORIZONTAL EXPLORATORY WELLS**
 TYPE OF WELL: _____ AFE# _____

ITEM #	DESCRIPTION	AFEA		
		TBD	UNIQUE #	TBD
		DRY HOLE	COMPLETION	TOTAL
DRILLING INTANGIBLES				
830-04	Regulatory, Surveys, and Permitting	\$32,000		\$32,000
830-10	Road, Location and Damages	\$315,000		\$315,000
830-20	Drilling Rig Turnkey			
830-21	Drilling Rig	\$700,000		\$700,000
830-22	Fuels and Lubricants	\$207,600		\$207,600
830-23	Mobilization, Demobilization and Trucking	\$450,000		\$450,000
830-24	Rental Equipment - Drilling Phase	\$417,950		\$417,950
830-25	Reamers and Drilling Motor	\$50,000		\$50,000
830-26	Bits	\$75,000		\$75,000
830-27	Fishing Tools and Service			
830-28	Pipe Inspection and Coating	\$50,000		\$50,000
830-30	Drilling Mud and Completion Fluids	\$550,000		\$550,000
830-35	Air Compressor Package / Underbalanced Services			
830-37	Directional Drilling Services	\$294,000		\$294,000
830-40	Logging Open Hole / Wireline	\$25,000		\$25,000
830-42	Formation Evaluation			
830-46	Mud Logging	\$70,000		\$70,000
830-50	Cement and Service	\$130,000		\$130,000
830-55	Plugging			
830-60	Transportation	\$75,000		\$75,000
830-70	Supervision	\$84,000		\$84,000
830-72	Overhead	\$13,000		\$13,000
830-75	Contract Labor	\$50,000		\$50,000
830-76	Casing Crews	\$27,500		\$27,500
830-77	Communication - Rig Phone/Svc	\$27,000		\$27,000
830-80	Other Intangibles	\$238,400		\$238,400
830-84	Well Insurance	\$15,000		\$15,000
830-88	Company Labor/Vehicles	\$8,500		\$8,500
COMPLETION INTANGIBLES				
850-06	Road, Location and Damages		\$7161,500	\$7,161,500
850-20	Completion Rig		\$150,000	\$150,000
850-22	Fuels & Lubricants			
850-23	Rig Move, Rig Up, Rig Down			
850-24	Rental Equipment - Completion Phase		\$137,500	\$137,500
850-27	Fishing Tools and Service			
850-30	Drilling Mud and Completion Fluids		\$157,100	\$157,100
850-35	Acidizing and Fracturing		\$2,315,000	\$2,315,000
850-40	Perforation and Wireline		\$242,600	\$242,600
850-50	Cement and Service		\$95,000	\$95,000
850-60	Transportation		\$35,000	\$35,000
850-70	Supervision		\$90,000	\$90,000
850-72	Overhead		\$5,000	\$5,000
850-76	Casing Crews		\$95,000	\$95,000
850-77	Communication - Rig Phone/Svc			
850-78	Contract Labor		\$231,500	\$231,500
850-84	Well Insurance			
850-80	Other Intangibles		\$253,000	\$253,000
850-88	Company Labor/Vehicles			
		\$3,692,550	\$5,68,200	\$9,361,150
TANGIBLE WELL EQUIPMENT				
840-05	Conductor Pipe	\$6,300		\$6,300
840-10	Casing	\$352,800		\$352,800
840-15	Tubing			
840-80	Other Tangible Drilling Cost	\$25,000		\$25,000
860-10	Casing		\$411,250	\$411,250
860-11	Other Surface Equipment		\$20,000	\$20,000
860-15	Tubing		\$70,330	\$70,330
860-16	Wellhead	\$29,600	\$90,000	\$119,600
870-03	Artificial Lift Equipment		\$5,000	\$5,000
870-17	Equipment/Construction		\$75,000	\$75,000
870-20	Tanks		\$65,000	\$65,000
870-22	Separator/Production Unit		\$60,000	\$60,000
870-53	Flow Lines		\$10,000	\$10,000
		\$419,900	\$776,280	\$1,196,180
ESTIMATED TOTAL WELL COST		\$4,112,450	\$6,464,480	\$10,576,930

NOTE: This AFE cost is intended to be an accurate estimate rather than a precise price

Approved by: _____
 Title: _____
 Company: _____

Approved by: _____
 Date: _____

EXHIBIT NO. 5 - FORM OF LEASE

PRODUCERS SS-PAID UP

OIL AND GAS LEASE

This Oil and Gas Lease ("Lease") is made this ____ day of _____, 2013, by and between, _____ ("Lessor" whether one or more) whose address is _____ and Axia Energy, LLC ("Lessee"), whose address is 1430 Larimer Street, Suite 400, Denver, Colorado 80202.

WITNESSETH, For and in consideration of TEN DOLLARS, the covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Lessor does hereby grant, demise, lease and let exclusively unto said Lessee, with the exclusive rights for the purposes of exploring by geophysical and other methods, drilling and operating for and producing therefrom oil and all gas of whatsoever nature or kind (including coalbed gas), and laying pipelines, telephone lines, building tanks, compressor units, roadways and structures thereon to produce, save and take care of said products, and the exclusive surface or subsurface rights and privileges related in any manner to any and all such operations, and any and all other rights and privileges necessary, incident to, or convenient for the operation alone or conjointly with neighboring land for such purposes, all that certain tract or tracts of land situated in Moffat County, State of Colorado described as follows, to wit:

[LEGAL DESCRIPTION]

and containing _____ acres, more or less, and also, in addition to the above described land, any and all strips or parcels of land, other than those constituting regular governmental subdivisions adjoining or contiguous to the above described land and owned or claimed by lessor, all of the foregoing land being hereinafter referred to as the "Premises."

1. It is agreed that this Lease shall remain in full force for a term of five (5) years from this date ("Primary Term") and as long thereafter as oil or gas of whatsoever nature or kind is produced from the Premises or on acreage pooled or unitized therewith, or operations are continued as hereinafter provided. If, at the expiration of the Primary Term, oil or gas is not being produced from the Premises or on acreage pooled or unitized therewith but Lessee is then engaged in drilling, reworking or dewatering operations thereon, then this Lease shall continue in force so long as such operations are being continuously prosecuted. Operations shall be considered to be continuously prosecuted if not more than one hundred eighty (180) days shall elapse between the completion or abandonment of one well and the beginning of operations for the drilling of a subsequent well. If after discovery of oil or gas on the Premises or on acreage pooled or unitized therewith, the production thereof should cease from any cause after the primary term, this Lease shall not terminate if Lessee commences additional drilling, reworking or dewatering operations within one hundred eighty (180) days from date of cessation of production or from date of completion of a dry hole. If oil or gas shall be discovered and produced as a result of such operations at or after the expiration of the Primary Term, this Lease shall continue in force so long as oil or gas is produced from the Premises or on acreage pooled or unitized therewith.
2. This is a PAID-UP LEASE. In consideration of the payment made herewith, Lessor agrees that Lessee shall not be obligated, except as otherwise provided herein, to commence or continue any operations during the primary term. Lessee may at any time or times during or after the Primary Term surrender this Lease as to all or any portion of the Premises and as to any strata or stratum, by delivering to Lessor or by filing for record a release or releases, and be relieved of all obligations thereafter accruing as to the acreage surrendered.
3. Lessee covenants and agrees to pay royalty to Lessor as follows:
 - a) On oil, to deliver to the credit of Lessor, free of cost on the lease if sold on the Premises or free of cost into the pipeline to which Lessee may connect wells at first point of sale, the equal seventeen percent (17.00%) part of all oil produced and saved from the Premises.
 - b) On gas of whatsoever nature or kind, liquid hydrocarbons and their respective constituent elements, casinghead gas or other gaseous substances, produced from the Premises ("Gas") Lessee shall pay, as royalty, seventeen percent (17.00%) of the net proceeds realized by Lessee from first point of sale.
 - c) On products produced from the Premises Lessee shall pay, as royalty, seventeen percent (17.00%) of the net proceeds realized by Lessee from first point of sale.
 - d) Lessee shall have the right to pay Lessor's proportionate share of any required severance, excise or gross production taxes.
4. Where gas from a well capable of producing gas is not sold or used after the expiration of the Primary Term, Lessee shall pay or tender as royalty to Lessor at the address set forth above One Dollar (\$1.00) per year per net mineral acre that is attributable to Lessors ownership, such payment or tender to be made on or before the anniversary date of this Lease next ensuing after the expiration of ninety (90) days from the date such well is shut in or dewatering operations are commenced and thereafter on or before the anniversary date of this Lease during the period such well is shut in or dewatering operations are being conducted.
5. If Lessor owns a lesser interest in the Premises than the entire and undivided fee simple estate therein, then the royalties, including any shut-in Gas royalty, herein provided for shall be paid Lessor only in the proportion which Lessor's interest bears to the whole and undivided fee.
6. Lessee shall have the right to use, free of cost, gas, oil and water produced on the Premises for Lessee's operations thereon, except water from the wells, streams, lakes and ponds of Lessor.
7. When requested by Lessor, in the event Lessor is also the surface owner, Lessee shall bury Lessee's pipeline below plow depth and no well shall be drilled nearer than 500 feet to the house or barn now on the Premises without written consent of Lessor. Lessee shall pay for damages caused by Lessee's operations on the Premises. Lessee shall have the right at any time to remove all machinery and fixtures (including casing) Lessee has placed on the Premises.

8. The rights of the Lessor and Lessee hereunder may be assigned in whole or part. No change in ownership of Lessor's interest (by assignment or otherwise) shall be binding on Lessee until Lessee has been furnished with notice, consisting of certified copies of all recorded instruments or documents and other information necessary to establish a complete chain of record title from Lessor, and then only with respect to payments thereafter made. No other kind of notice, whether actual or constructive, shall be binding on Lessee. No present or future division of Lessor's ownership as to different portions or parcels of the Premises shall operate to enlarge the obligations or diminish the rights of Lessee, and all of Lessee's operations may be conducted without regard to any such division. If all or any part of this Lease is assigned, no leasehold owner shall be liable for any act or omission of any other leasehold owner.
9. Lessee, at its option, is hereby given the right and power at any time and from time to time as a recurring right, either before or after production, as to all or any part of the land described herein and as to any one or more of the formations hereunder, to pool or unitize the leasehold estate and the mineral estate covered by this lease with other land, lease or leases in the immediate vicinity for the production of oil and gas, or separately for the production of either, when in Lessee's judgment it is necessary or advisable to do so, and irrespective of whether authority similar to this exists with respect to such other land, lease or leases. Likewise, units previously formed to include formations not producing oil or gas, may be reformed to exclude such non-producing formations. The forming or reforming of any unit shall be accomplished by Lessee executing and filing of record a declaration of such unitization or reformation, which declaration shall describe the unit. Any unit may include land upon which a well has theretofore been completed or upon which operations for drilling have theretofore been commenced. Production, drilling or reworking operations or a well shut in for want of a market anywhere on a unit which includes all or a part of this lease shall be treated as if it were production, drilling or reworking operations or a well shut in for want of a market under this lease. In lieu of the royalties elsewhere herein specified, including shut-in gas royalties, Lessor shall receive on production from the unit so pooled royalties only on the portion of such production allocated to this lease; such allocation shall be that proportion of the unit production that the total number of surface acres covered by this lease and included in the unit bears to the total number of surface acres in such unit. In addition to the foregoing, Lessee shall have the right to unitize, pool, or combine all or any part of the above described lands as to one or more of the formations thereunder with other lands in the same general area by entering into a cooperative or unit plan of development or operation approved by any governmental authority and, from time to time, with like approval, to modify, change or terminate any such plan or agreement and, in such event, the terms, conditions and provisions of this lease shall be deemed modified to conform to the terms, conditions, and provisions of such approved cooperative or unit plan of development or operation and, particularly, all drilling and development requirements of this lease, express or implied, shall be satisfied by compliance with the drilling and development requirements of such plan or agreement, and this lease shall not terminate or expire during the life of such plan or agreement. In the event that said above described lands or any part thereof, shall hereafter be operated under any such cooperative or unit plan of development or operation whereby the production therefrom is allocated to different portions of the land covered by said plan, then the production allocated to any particular tract of land shall, for the purpose of computing the royalties to be paid hereunder to Lessor, be regarded as having been produced from the particular tract of land to which it is allocated and not to any other tract of land; and the royalty payments to be made hereunder to Lessor shall be based upon production only as so allocated. Lessor shall formally express Lessor's consent to any cooperative or unit plan of development or operation adopted by Lessee and approved by any governmental agency by executing the same upon request of Lessee.
10. All express or implied covenants of this Lease shall be subject to all Federal and State Laws, Executive Orders, Rules or Regulations, and this Lease shall not be terminated, in whole or in part, nor Lessee held liable in damages, for failure to comply therewith if compliance is prevented by, or if such failure is the result of, any such Law, Order, Rule or Regulation. Any delay or interruption caused by storm, flood, act of God or other event of force majeure shall not be counted against Lessee. If, due to the above causes or any cause whatsoever beyond the control of Lessee, Lessee is prevented from conducting operations hereunder, such time shall not be counted against Lessee, and this Lease shall be extended for a period of time equal to the time Lessee was so prevented, anything in this Lease to the contrary notwithstanding.
11. Lessor hereby warrants and agrees to defend the title to the lands herein described, and agrees that the Lessee shall have the right at any time to redeem for Lessor, by payment, any mortgages, taxes or other liens on the above described lands, in the event of default of payment by Lessor and be subrogated to the rights of the holder thereof, and the undersigned Lessors, for themselves and their heirs, successors and assigns, hereby surrender and release all right of dower and homestead in the premises described herein, insofar as said right of dower and homestead may in any way affect the purposes for which this lease is made, as recited herein.
12. Should any one or more the parties named as Lessor herein fail to execute this Lease, it shall nevertheless be binding upon all such parties who do execute it as Lessor. The word "Lessor", as used in this Lease, shall mean any one or more or all of the parties who execute this Lease as Lessor. All the provisions of this lease shall be binding on the heirs, successors and assigns of Lessor and Lessee.
13. This Lease shall never be terminated, forfeited, or canceled for Lessee's failure to perform, in whole or in part, any of the covenants, conditions, obligations and requirements set forth in this Lease, until Lessee, after written notice by Lessor, has been given a reasonable period of time within which to comply with the covenant, condition, obligation, or requirement.
14. Lessee is expressly granted the exclusive right to conduct geophysical exploration by means of seismograph, vibroseis or similar techniques. However, if Lessee conducts such geophysical exploration or operations on the lands covered by this Lease, all shot holes shall be kept a sufficient distance away from Lessor's water wells so as not to cause any damage to the water wells. Lessee shall promptly plug all shot holes with concrete plugs or other approved methods set below plow depth, fill the holes with dirt on top of the plugs, and restore the surface of the lease premises to substantially the same condition it was in prior to the commencement of the geophysical operations.
15. Lessor recognizes that Lessee has the right to use as much of the surface of the lease premises as a reasonably prudent operator would use to accomplish the purposes of this Lease.

16. No litigation shall be initiated by Lessor with respect to any breach or default by Lessee hereunder, for a period of at least 90 days after Lessor has given Lessee written notice fully describing the breach or default, and then only if Lessee fails to remedy the breach or default, within such period. In the event the matter is litigated and there is a final judicial determination that a breach or default has occurred, this lease shall not be forfeited or cancelled in whole or in part unless Lessee is given a reasonable time after said judicial determination to remedy the breach or default and Lessee fails to do so.

17. In the event that Lessor, during the primary term of this lease, receives a bona fide offer which Lessor is willing to accept from any party offering to purchase from Lessor a lease covering any or all of the substances covered by this lease and covering all or a portion of the land described herein, with the lease becoming effective upon expiration of this lease, Lessor hereby agrees to notify Lessee in writing of said offer immediately, including in the notice the name and address of the offeror, the price offered and all other pertinent terms and conditions of the offer. Lessee, for a period of fifteen days after receipt of the notice, shall have the prior and preferred right and option to purchase the lease or part thereof or interest therein, covered by the offer at the price and according to the terms and conditions specified in the offer.

18. This instrument may be executed in any number of counterparts, each of which shall be deemed an original and shall be binding upon the party or parties so executing, their heirs, successors and assigns, and all of which when taken together constitute but one and the same instrument.

IN WITNESS WHEREOF, this instrument is executed as of the date first above written.

By: _____

Acknowledgement

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 2013 by _____.

My Commission Expires: _____

Notary Public

EXHIBIT NO. 6 – EXAMPLE OF OFFER LETTER



VIA CERTIFIED RECEIPT MAIL

[DATE]

[UNLEASED MINERAL OWNER]

Re: **Bulldog _____ Well – Mancos and Niobrara Formations**

Township North, Range West, 6 P.M.

Section ____: _____

Section ____: _____

Moffat County, CO

Dear Interest Owner:

Axia Energy, LLC ("Axia") is in the process of forming the Bulldog _____ exploratory drilling and spacing unit ("Unit") on the above described lands for the drilling of the Bulldog _____ horizontal well ("Well") in the Mancos and Niobrara formations. These are very deep and expensive wells. The size of the unit we are proposing is based upon the planned length of the lateral portion of our wellbore, which can be almost a mile (after we have drilled almost 2 miles vertically). If we are successful, you will share in any production associated with the Well for that portion of your minerals that are situated inside the Unit. Axia has filed an application with the Colorado Oil and Gas Conservation Commission ("COGCC") to form this Unit. If approved by the COGCC, the Unit will comprise approximately _____ acres, inclusive of the lands in which you own the minerals. We are soliciting your cooperation by electing to grant us an oil and gas lease or to participate as a working interest owner in the Well or Wells to be drilled inside the Unit.

If you execute an oil and gas lease in our favor, you will be entitled to a proportionately reduced royalty, free of the costs to drill and complete the Well. We are willing to lease your mineral interest for a bonus consideration of \$300 per net acre with a 17.00% royalty rate, for a term of 5 years, under the provisions described in the enclosed lease form. This offer is consistent with other leases we have acquired in this area. Please mark the appropriate line below and return this letter in the self-addressed envelope. Upon receipt, we will provide you with an executable lease to be signed, notarized and returned for a bonus consideration of \$_____ (_____ net acres x \$300) due within 30 business days from our receipt of a properly executed lease.

As an alternative, you have the option to participate in unit operations as an unleased working interest owner by paying for your proportionate share of the cost of drilling, completing and operating the Well. In return, you will be entitled to your share of the production revenues. As a working interest owner, you will be required to enter into a mutually acceptable joint operating agreement, a copy for which will be provided should you elect to participate.

Finally, if you decline to lease, participate or fail to respond to this letter, your mineral interest will be subject to a non-consent penalty as provided under the COGCC's Involuntary Pooling Proceedings (C.R.S. 34-60-116), until a share of all costs plus penalties have been recovered in accordance with the State Statute, should our Unit be approved by the COGCC.

Accordingly, enclosed for your consideration is Axia's Authority for Expenditure ("AFE") for the estimated drilling and completing costs for this Well. Listed below is a summary of your working interest



and estimated expenditures.

Your ~~unleased~~ working interest in the first Well in the Unit:

_____ % (_____ net acres / _____ acres in the unit)

Your share to drill and complete this Well is:

\$ _____ (\$ _____ * _____ %)

Within thirty (30) days from your receipt of this letter, please notify Axia of your election to 1) lease your mineral interest; 2) participate in drilling of the proposed Well with your mineral interest; or 3) not participate in the drilling of the proposed Well by checking the appropriate spaces below, signing and returning a copy of this letter, and if appropriate return an executed copy of the oil and gas lease or an executed copy of the AFE.

As the Well we are proposing to drill is extremely risky and expensive, we urge you to execute an oil and gas lease to us but would welcome your participation in the other alternatives we have set forth in this letter.

Thank you in advance for your time and attention to this matter. If you have any questions or comments, please don't hesitate to contact me using the number below.

Very truly yours,

Tab McGinley
Vice President of Land
720-746-5210

Enclosures



THE UNDERSIGNED ELECTS TO:

OPTION 1:

_____ Grant a Lease of the ~~unleased~~ minerals with the terms outlined therein.

OPTION 2:

_____ Participate in the drilling and completion for its _____% ~~unleased~~ working interest in Axia's Bulldog _____ well.

OPTION 3:

_____ ~~Neither Participate nor Lease~~ for its _____% ~~unleased~~ working interest in Axia's Bulldog _____ well plus any subsequent wells that may be drilled in the Unit, and elect to have its mineral interest be subject to C.R.S. 34-60-116.

Signature (1): _____

Date: _____

Name: _____

Signature (2): _____

Date: _____

Name: _____

AXIA ENERGY, LLC

Brian Berwick – Geology Testimony

Cause 540; Docket No. 1303-UP-53

Mancos-Niobrara Formations

Unnamed Field, Moffat County, Colorado

March 2013 Colorado Oil and Gas Conservation Commission Hearing

My Name is Brian Berwick and I am currently employed as Senior Geologist by Axia Energy ("Axia"). I received a Bachelors of Science in Geology degree from the University of Colorado, Denver in 2003 and a Master's of Science degree in Petroleum Geology from the Colorado School of Mines in 2008. I have 10 years of experience in oil and gas geology. I am familiar with the lands described, and the matters set forth in the March 25th and 26th verified application ("Application").

In support of Axia's application in the above referenced docket, I am submitting the following nine exhibits. These exhibits are attached to my sworn testimony and form the bases of Axia's application for an order establishing one 2613.44 acre spacing unit for the drilling of one or more horizontal or vertical wells for production of oil, gas and associated hydrocarbons from the Mancos and Niobrara formations underlying sections 3, 4, 9 and 10 of Township 8 North, Range 90 West, Moffat County, Colorado.

Exhibit #G1 – Type Log

Exhibit #G1 is a type log that shows the Mancos and Niobrara formations. The inset map shows the location of the type log relative to the Application Land. The log has two tracks: gamma ray and resistivity. The top of the Niobrara is marked by a sharp increase in gamma ray intensity as well as a general increase in resistivity. In the Mancos several relatively sandy intervals are indicated by a decrease in gamma ray intensity. In the Sand Wash Basin production has been established from both the Niobrara and Mancos, predominantly from vertical well bores. On the south and east flank of the basin historic Niobrara producers average more than 150,000 barrels of oil per well.

Exhibit #G2 – Correlation Cross-Section and Mancos and Niobrara logs

Exhibit #G2 shows a two well cross-section in the general area of the Application Lands. The logs have up to three tracks: gamma ray, resistivity and density porosity. The cross section shows the regional relationships of the Mancos and Niobrara and the isopach

interval that is included in exhibit #4. This cross section demonstrates that the Mancos and Niobrara formations are present throughout the Application Lands to be spaced.

Exhibit #G3 – Structure Contour Map

Exhibit #G3 is a subsea structure map constructed on the top of the Niobrara formation. The contour interval of the map is 200 feet. Structural dip in the Application lands is approximately 2.5 degrees to the north – northeast. Production from the Niobrara formation has been established in all three Bulldog wells independent of structural closure. Production of this nature demonstrates the characteristic of a shale resource play throughout the Application Lands to be spaced.

Exhibit #G4 – Isopach Map: Top Mancos to Base Niobrara

Exhibit #G4 is an isopach map of the interval from the top of the Mancos to the base of the Niobrara. Total thickness of this interval on the Application lands averages 3700'. This isopach map demonstrates that the Mancos and Niobrara formations are present throughout the Application Lands to be spaced.

Exhibit #G5

Exhibit #G5 is a Horizontal Wellbore Overview of the Bulldog 26-34H through the Niobrara formation. The log has three tracks: gamma ray, total gas and mud weight. The total gas curve in track #2 of the wellbore overview exhibits elevated levels of formation gas throughout the curve and lateral sections of the well. This demonstrates continuous hydrocarbon saturation characteristic of a shale resource play. Additionally, the elevated mud weight necessary to control formation gas– shown on track #3– demonstrates the Niobrara formation hydrocarbon reservoir is over-pressured. This over-pressured condition is a characteristic of shale resource plays. All three Bulldog wells encountered similar over-pressured conditions demonstrating that over-pressured Niobrara formation hydrocarbon reservoirs are present throughout the Application Lands to be spaced.

Exhibit #G6

Exhibit #G6 is a Horizontal Wellbore Overview accompanied by the Pilot-Hole Log of the Bulldog 20-12H through the Niobrara formation. The horizontal log has three tracks: gamma ray, total gas and mud weight. The pilot-hole log has three tracks: gamma ray, resistivity and total gas. The total gas curve in track #2 of the wellbore overview exhibits elevated levels of formation gas throughout the curve and lateral sections of the well. This demonstrates continuous hydrocarbon saturation characteristic of a shale resource play. Additionally, the elevated mud weight necessary to control formation gas– shown on track #3– demonstrates the Niobrara formation hydrocarbon reservoir is over-pressured. This over-pressured condition is a characteristic of shale resource plays. All three Bulldog wells encountered similar over-pressured conditions demonstrating that over-pressured Niobrara formation hydrocarbon reservoirs are present throughout the Application Lands to be spaced.

Exhibit #G7

Exhibit #G7 is a Horizontal Wellbore Overview of the Bulldog 5-31H through the Niobrara formation. The log has three tracks: gamma ray, total gas and mud weight. The total gas curve in track #2 of the wellbore overview exhibits elevated levels of formation gas throughout the curve and lateral sections of the well. This demonstrates continuous hydrocarbon saturation characteristic of a shale resource play. Additionally, the elevated mud weight necessary to control formation gas— shown on track #3— demonstrates the Niobrara formation hydrocarbon reservoir is over-pressured. This over-pressured condition is a characteristic of shale resource plays. All three Bulldog wells encountered similar over-pressured conditions demonstrating that over-pressured Niobrara formation hydrocarbon reservoirs are present throughout the Application Lands to be spaced.

Exhibit #G8

Exhibit #G8 is a well log that shows typical mud gas characteristics of the Mancos and Niobrara formations throughout the area of the Application Lands. Track one contains a gamma ray curve while track two contains a total gas curve. The total gas curve exhibits elevated levels of formation gas throughout the Mancos and Niobrara formations. This suggests the presence of hydrocarbons throughout both formations and presents the potential to exploit the resource with multiple, stacked lateral wellbores.

Exhibit #G9— Offset Well Locations

Exhibit #G9 shows all existing well locations on and in the vicinity of the Application lands. The surface and bottom-hole locations of the Bulldog 10-24H 890 and Bulldog 10-34H-890 are also shown. Note that very few wells currently exist within the Application lands. Those that are present are either dry holes, or produce from formations above the Mancos and Niobrara formations.

The Niobrara formation is a calcareous shale deposited throughout a broad area in the Cretaceous Western Interior Seaway. In addition to clay and carbonate, silt and clay sized quartz grains are common constituents of the Niobrara formation. Due to its fine grained nature, the reservoir permeability of Niobrara formation is very low - typically in the microdarcy range.

The Mancos formation is composed of predominantly of clay rich shale, and like the Niobrara formation, it was deposited throughout a broad area in the Cretaceous Western Interior Seaway. In addition to clay, siltstone and fine grained sandstone are common constituents of

the Mancos formation. Due to its fine grained nature, the reservoir permeability of Niobrara formation is very low - typically in the microdarcy range.

Due to the widespread nature of deposition of the Mancos and Niobrara within the Cretaceous Seaway, it is my conclusion that both formations underlie the Application Lands to be spaced.

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.

Brian R. Berwick

7634 Bison Court
Littleton, Colorado 80125
303.204.2356
bercycle@gmail.com

Petroleum Exploration Geologist

PROFESSIONAL WORK HISTORY

Axia Energy

February 2012 - Current

Senior Geologist - Denver, CO

Exploration Geologist with primary responsibility for prospect generation in several Rocky Mountain Basins to include the Sand Wash Basin, Powder River Basin Uintah Basin, Greater Green River Basin, Wind River Basin, Rock Springs Uplift as well as the Illinois and Michigan Basins.

Samson Resources Company

June 2004-February 2012

*District Geologist - Denver, CO
Williston Basin, ND & MT*

Developed and marketed normally pressured and over-pressured Bakken/Three Forks prospects. Defined the petroleum systems, stratigraphy, depositional environment, petrophysics, rock mechanics and geochemistry for both the Three Forks and Bakken Formations throughout the Williston Basin.

Generated multiple non-Bakken oil prospects in carbonate rocks within the Williston basin to include:

- Fractured resource play within the Lodgepole Formation encompassing 250,000 acres and recoverable reserves of 80 - 100 MBO
- Two prospects and 6 leads within the Dawson Bay Formation. Potential recovery of 20 MBO within the prospects and lead areas
- Generated multiple Red River prospects throughout the Williston Basin utilizing DST interpretation, log analysis and 2-D mapping
- Generated multiple prospects in the Mission Canyon and Ratcliffe Formations in both Montana and North Dakota

Successfully drilled and steered 37 horizontal wells (640 & 1280s) within the Sanish member of the Three Forks Formation, 8 horizontal wells with the Middle Bakken member of the Bakken Formation and 1 horizontal well in the Lodgepole Formation.

- Integrate all subsurface data in mapping including formation tops, fault cuts, sequence stratigraphic framework and reservoir rock properties

- Used industry standard software (Powerlog) to identify and map by-passed pay within the Williston Basin. Currently using my petrophysical and rock mechanics/physics models to identify areas of new potential for ductile vs. brittle zones.

Green River Basin, WY

- Re-defined the Lower Almond member of the Almond Formation within the Greater Wamsutter area. Added nearly 200 additional drilling locations within the acreage position. Drilled and completed 9 successful wells within the Lower Almond returning a average Proved Value Index of 1.28
- Provided operational support including overseeing well-site work, mud logging, open-hole logging and open-hole testing (cores, perms and DST's) on many vertical, directional and horizontal wells in several basins
- Successfully drilled 20 vertical wells within the Greater Wamsutter area

Savant Resources LLC

June 2002-May 2004

Geological Technician - Denver, CO

EDUCATION and PROFESSIONAL AFFILIATIONS

Colorado School of Mines, Golden, Colorado (2008)

Masters of Science: **Petroleum Geology**

*DEPOSITIONAL ENVIRONMENT, MINERALOGY, AND SEQUENCE
STRATIGRAPHY OF THE LATE DEVONIAN SANISH MEMBER (UPPER
THREE FORKS FORMATION), WILLISTON BASIN, NORTH DAKOTA*

University of Colorado, Denver, Colorado (2003)

Bachelor of Liberal Arts and Sciences

Major: **Geology**

American Association of Petroleum Geologists (AAPG) / Rocky Mountain Association of Geologists (RMAG)/ Society of Sedimentary Geology - Rocky Mountain Section (RMS - SEPM) / Society of Petrophysicists and Well Log Analysts (SPWLA) / Denver Well Logging Society (DWLS) / American Rock Mechanics Association (ARMA) / Society of Petroleum Engineers (SPE)

Expert witness with the State of North Dakota

PUBLICATIONS AND PRESENTATIONS

Berwick, B.R. and M. L. Hendricks, 2011, Depositional lithofacies of the Upper Devonian Three Forks Formation and the Grassy Butte member of the Lower Bakken Shale, Chapter 7, Rocky Mountain Association of Geologist, Bakken - Three Forks Petroleum Systems in the Williston Basin. (*Released Sept. 2011*)

Berwick, B.R., March 2009, RMS - SEPM Luncheon Speaker. Depositional environment, mineralogy, and sequence stratigraphy of the Late Devonian Sanish member (Upper Three Forks), Williston Basin, North Dakota.

Berwick, B.R., 2008, Depositional environment, mineralogy, and sequence stratigraphy of the Late Devonian Sanish member (Upper Three Forks), Williston Basin, North Dakota: Master's Thesis, Colorado School of Mines, 263 p.

Type Log Mancos and Niobrara

TEXAS PACIFIC OIL CO
BEAR 1
T7N R89W S26
9/7/1978
05107060540000

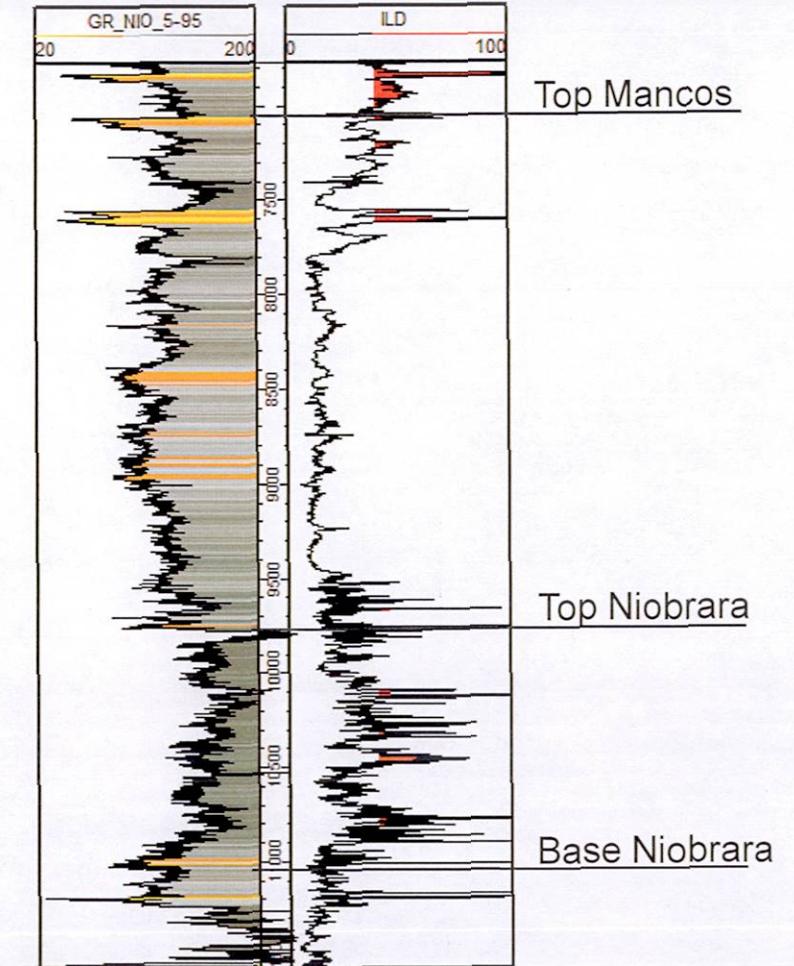
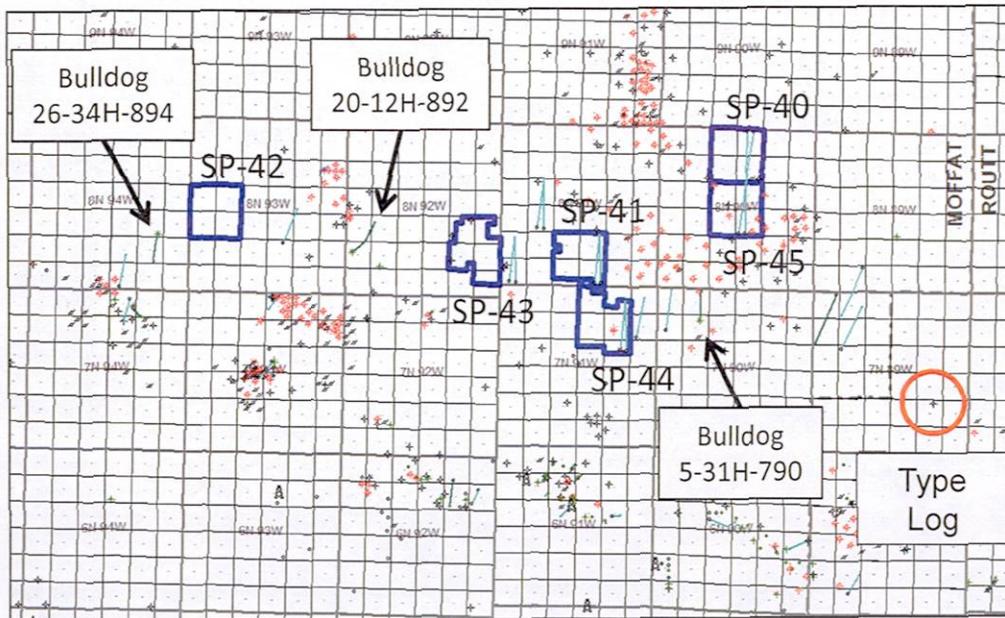
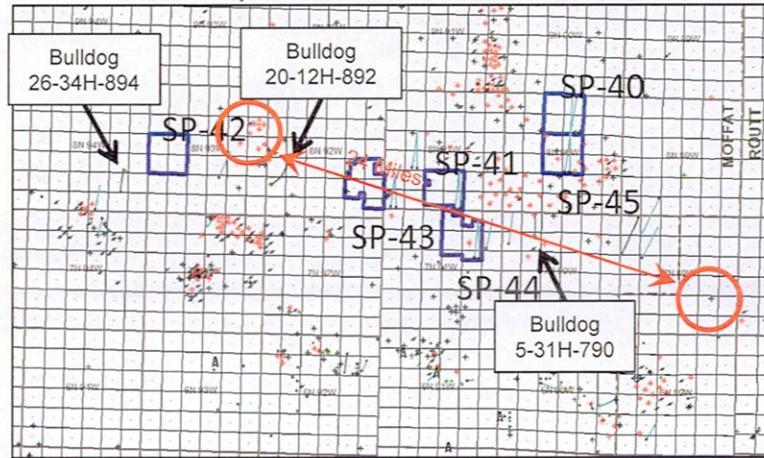


Exhibit G-2
Cause 540
Docket No. 1303 UP-53

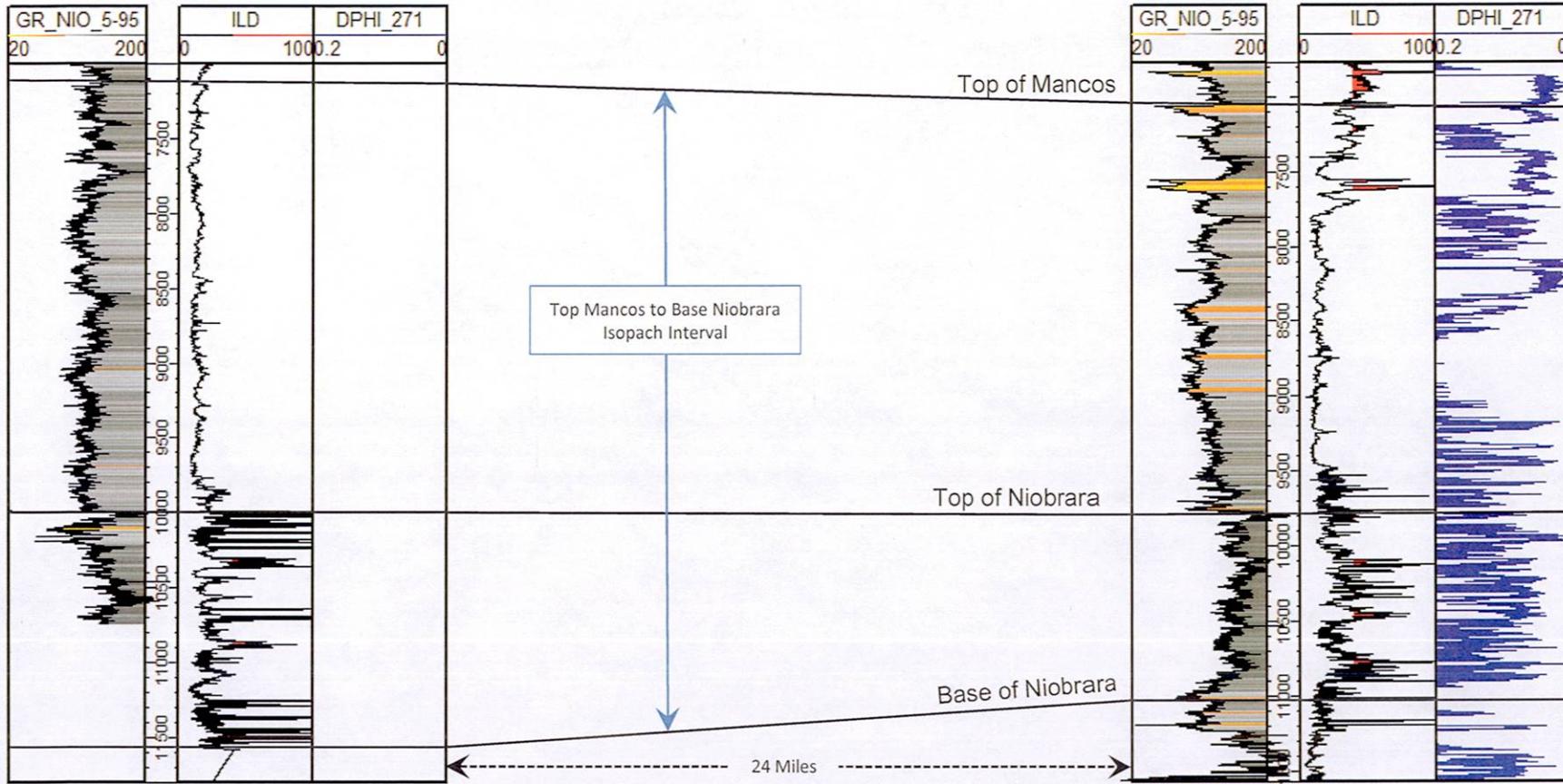
Index Map for Two Well Cross Section



Northwest – Southeast
Correlation Cross-Section
Showing
Mancos and Niobrara Thickness
and Porosity

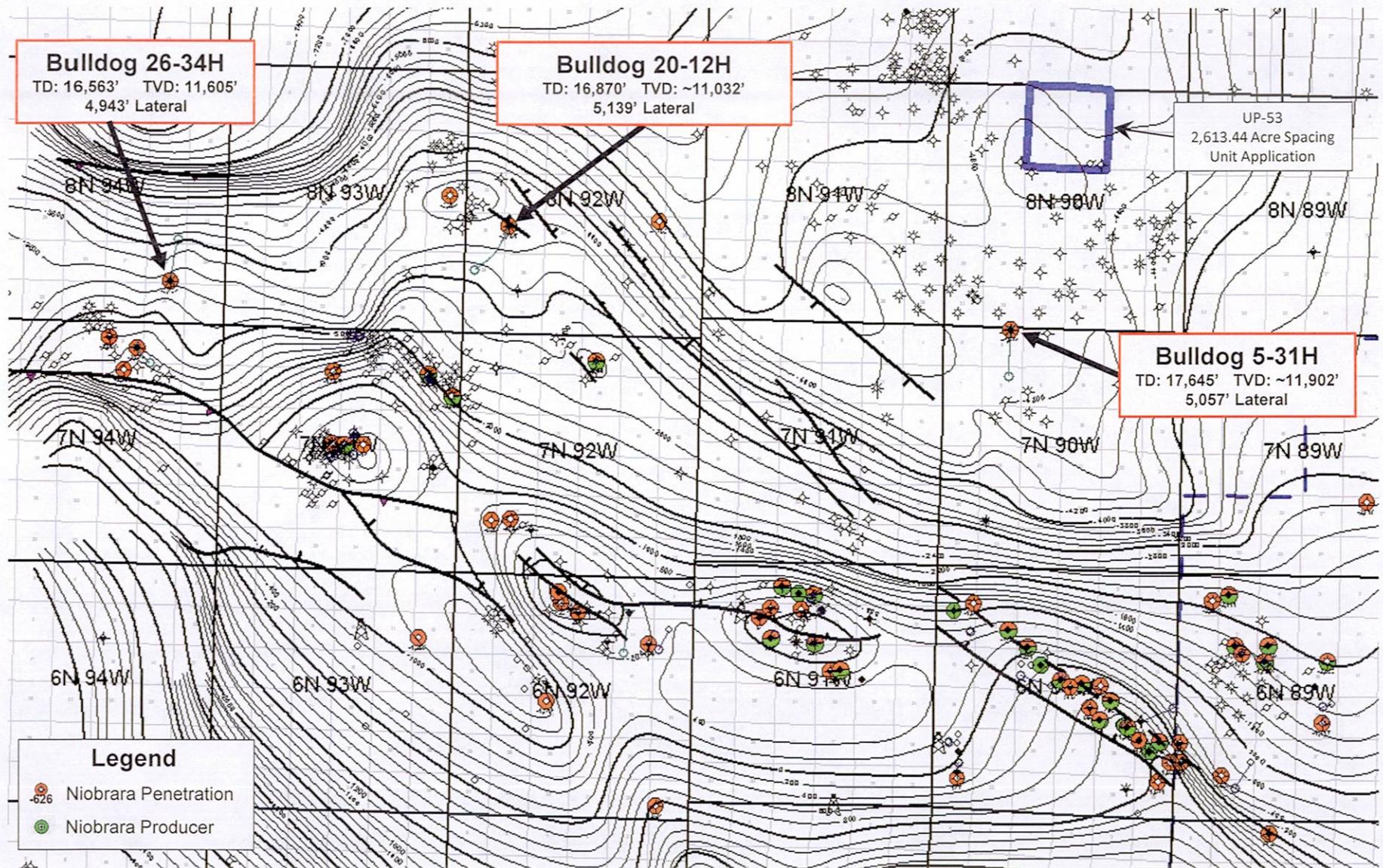

HUMBLE OIL & REFG CO
LAY CREEK 1
T8N R93W S13
3/22/1969
05081060510000


TEXAS PACIFIC OIL CO
BEAR 1
T7N R89W S26
9/7/1978
05107060540000

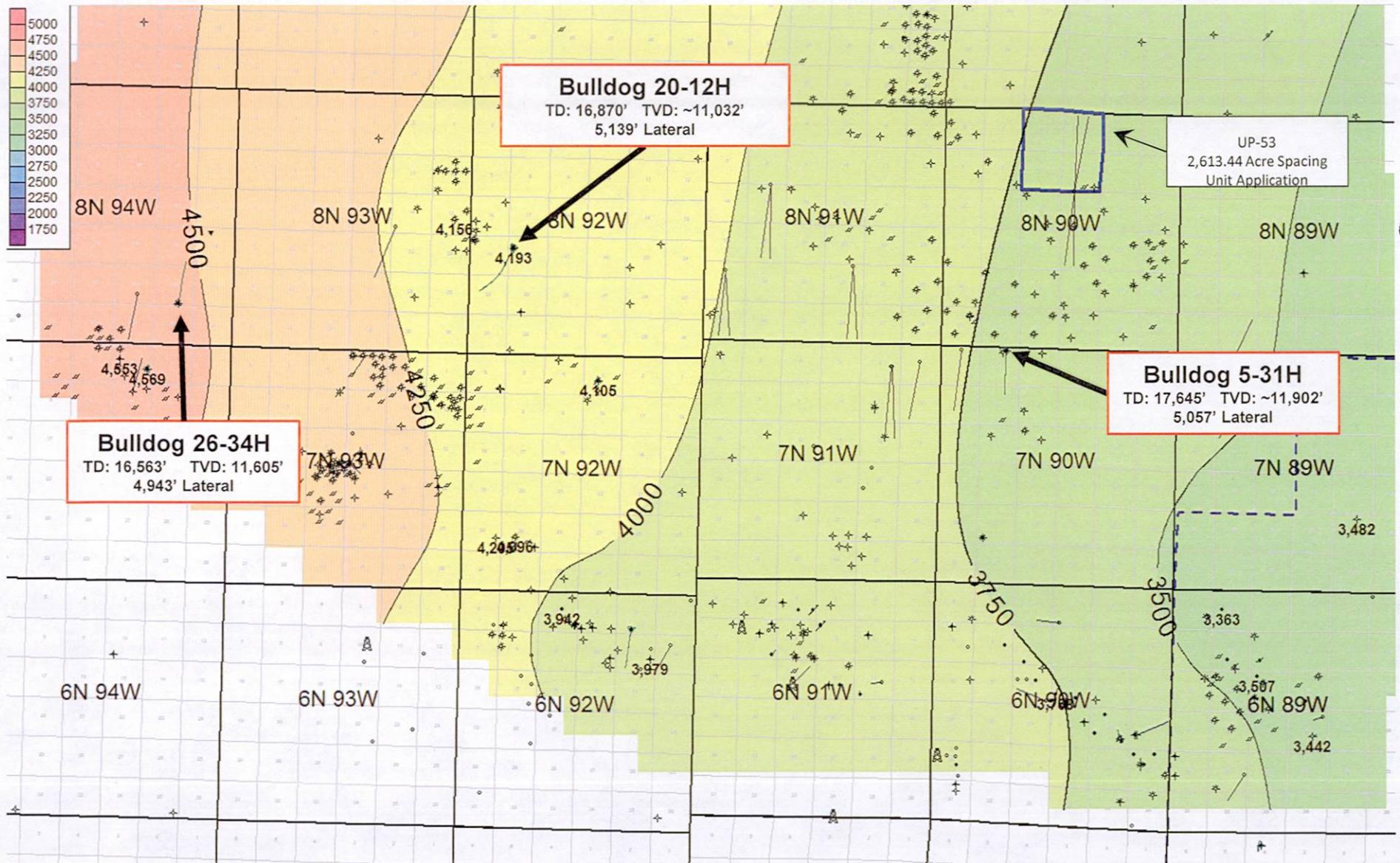


Structure Top Niobrara

CI = 200'



Top Mancos to Base Niobrara Isopach Map CI = 250'

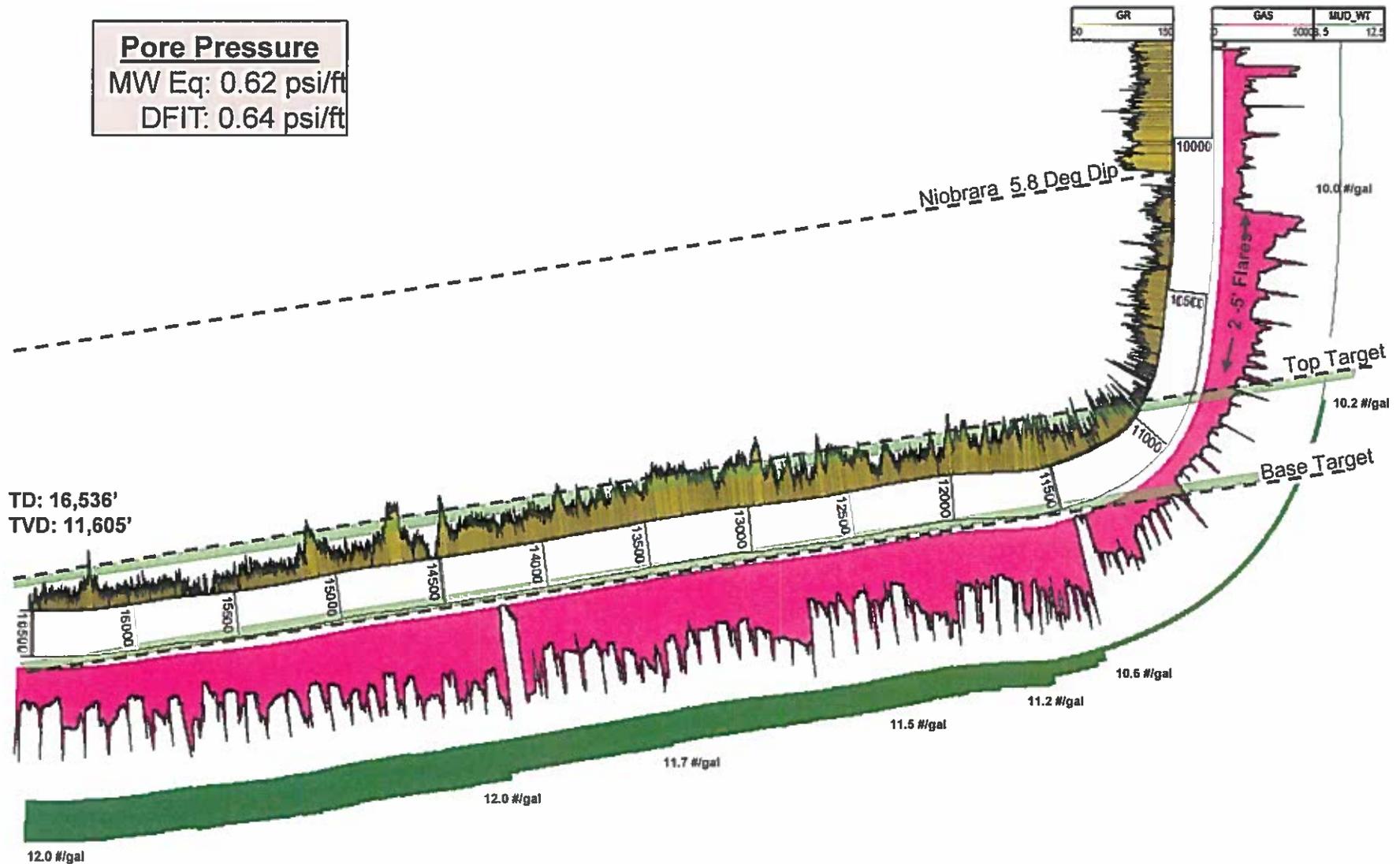


Cause 540, Docket 1303-UP-53: Exhibit G-4

Bulldog 26-34H – HZ Wellbore Overview

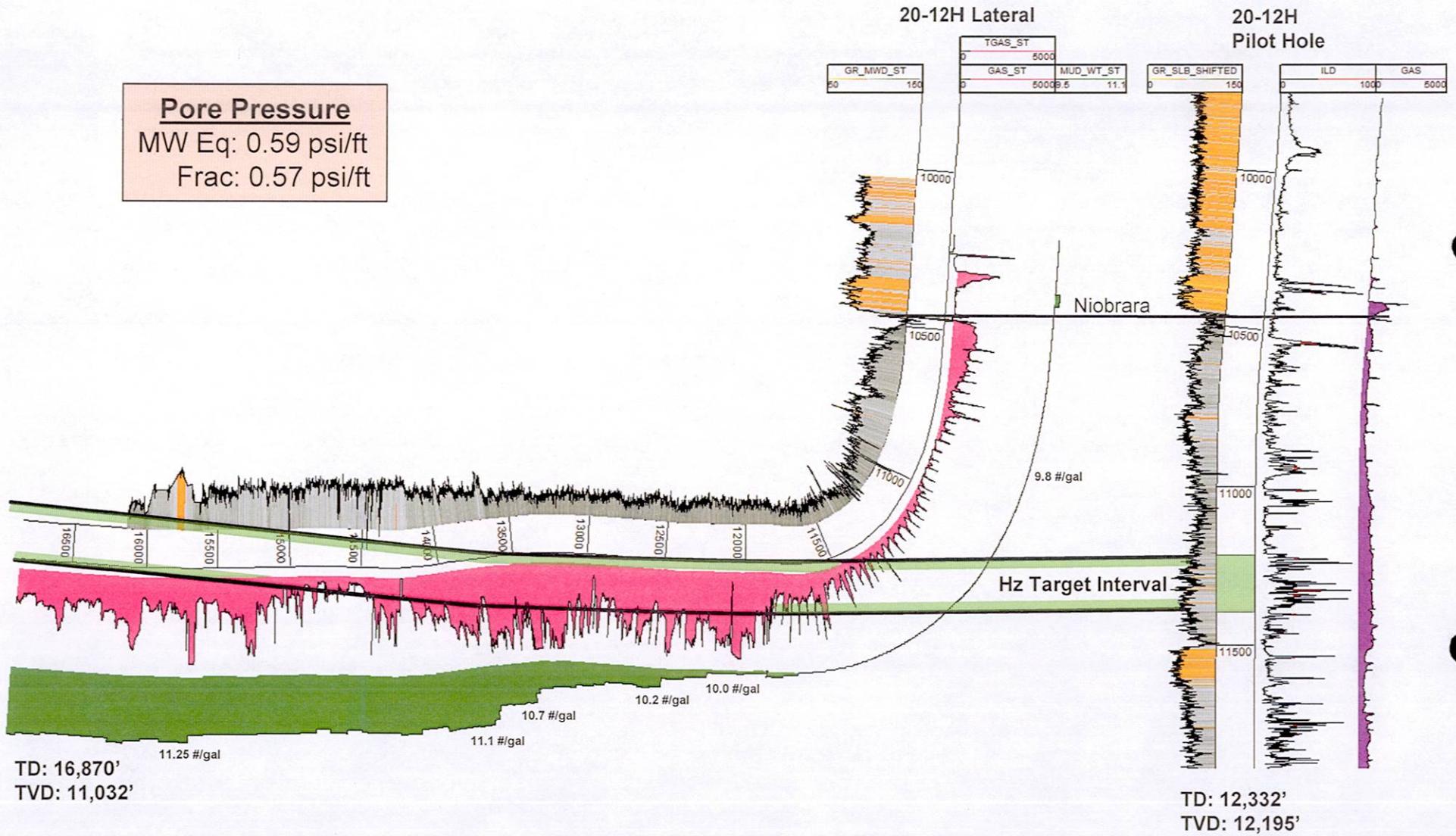
AXIA ENERGY
 BULLDOG 26-34H-894
 T8N R94W S26

Pore Pressure
 MW Eq: 0.62 psi/ft
 DFIT: 0.64 psi/ft



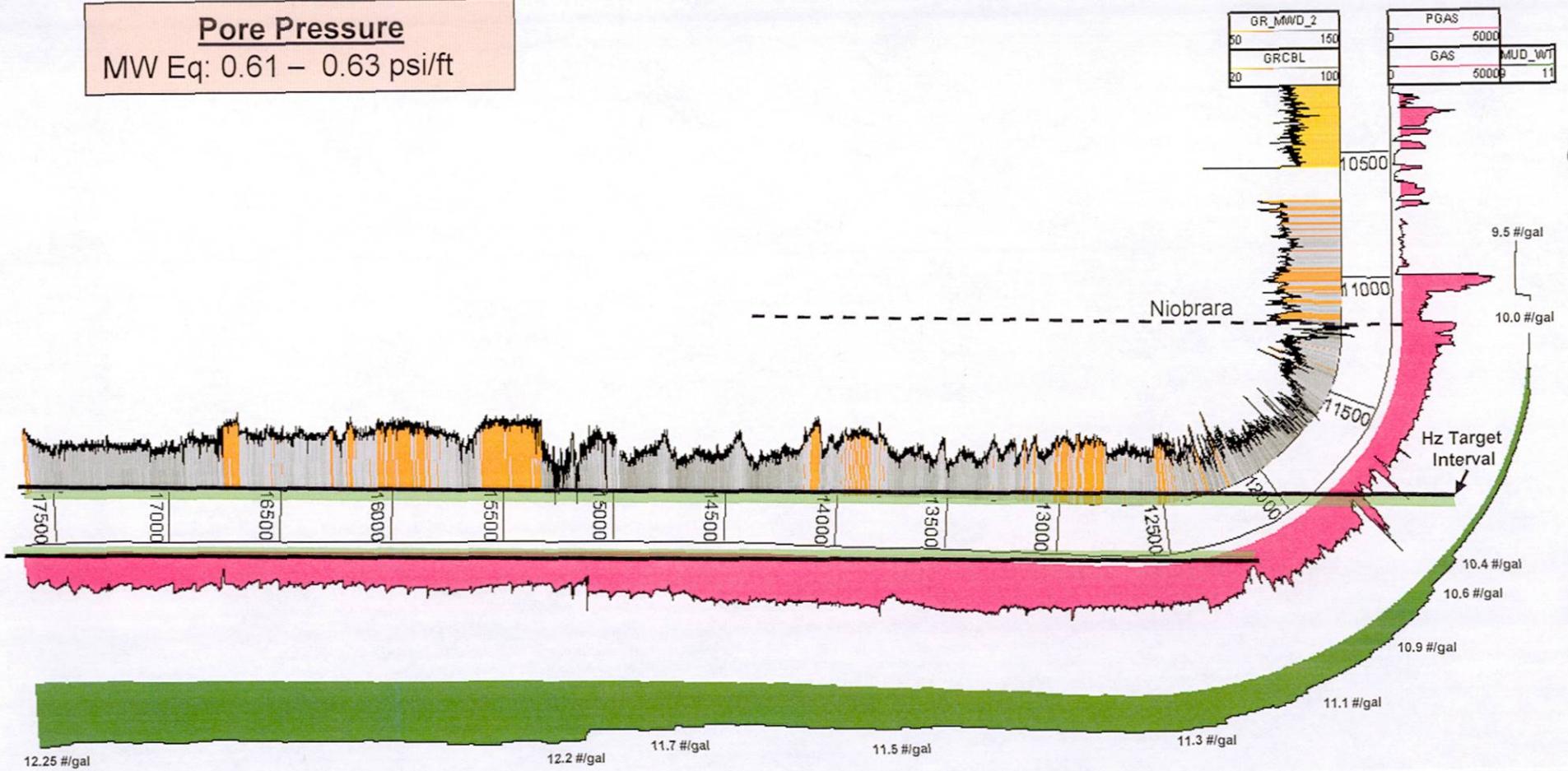
Bulldog 20-12H – HZ Wellbore Overview

Pore Pressure
 MW Eq: 0.59 psi/ft
 Frac: 0.57 psi/ft



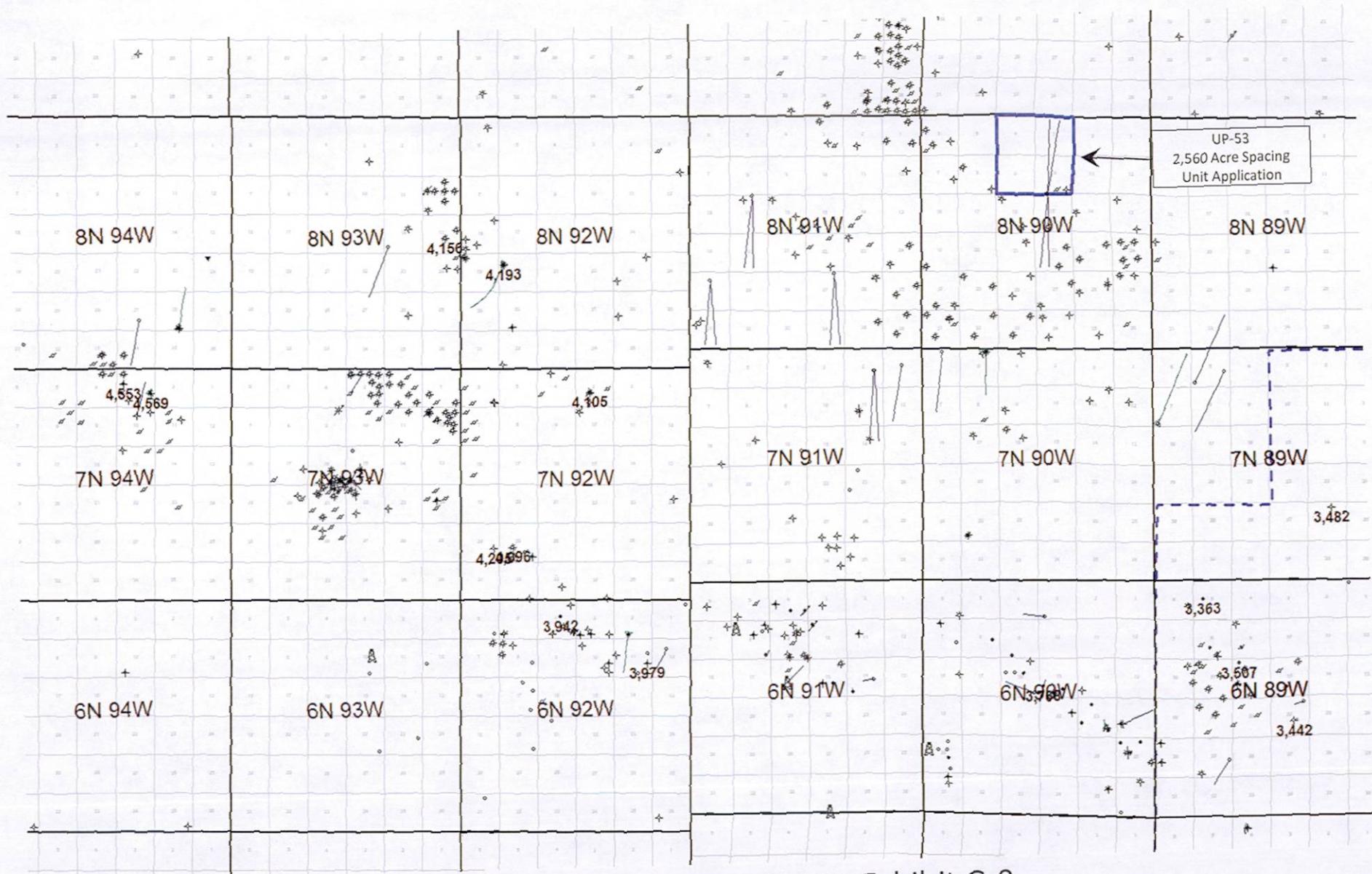
Bulldog 5-31H – HZ Wellbore Overview

Pore Pressure
 MW Eq: 0.61 – 0.63 psi/ft



TD: 17,645'
 TVD: 11,902'

Offset Well Locations



AXIA ENERGY, LLC

Taryn Frenzel - Engineering Testimony

Moffat County, Colorado Cause No. 540, Docket No. 1303-UP-53 Mancos/Niobrara Formation

My name is Taryn Frenzel. I am currently employed as a Senior Completions Engineer for the Sand Wash Team of Axia Energy, LLC ("Axia"). I have over 12 years of experience as a Completions Engineer. I have been and am presently responsible for and have knowledge of the reservoir characteristics of the Mancos and Niobrara formations underlying the Application Lands, as defined in Tab McGinley's Land Testimony submitted herewith. A copy of my curriculum vitae is attached hereto.

In support of Axia'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 Axia's application to gain approval to establish the unit set forth in the aforementioned Docket No. and well location rules for the drilling and producing of wells from the Mancos and Niobrara Formations covering the Application Lands.

Exhibits E-1 through E-4

Exhibit E-1 shows the average gross thickness of the Mancos and Niobrara formation across Axia Energy's acreage position. The average net pay was calculated from open hole logs from wells that were drilled prior to Axia Energy as well as using 3 wells that were drilled and completed by Axia Energy during 2012. The location of the three (3) wells that were drilled by Axia Energy can be seen on Exhibit E-2. Exhibit E-2 also illustrates the resource play aspect of the Niobrara and Mancos. Axia Energy's wells were placed across the acreage position and were not drilled on structure thereby proving the resource play potential across the entire acreage position.

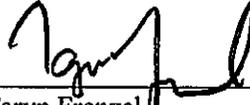
Due to the fact that the Niobrara and Mancos covers a large gross interval as shown in Exhibit E-1, stacked laterals will become a necessity to develop the resource. Exhibit E-3 shows a stacked lateral development. Multiple stacked lateral wells need to be drilled and stimulated in order to effectively drain the Mancos and Niobrara. Based upon frac simulator work conducted by Axia on the three (3) wells drilled in 2012, our estimated effective frac height is estimated to be 300'. The average reservoir pressure is .62 psi/ft based upon drilling and completion results and the total system porosity is 6.5% as shown in Exhibit E-4. The ability to drill 9,000' laterals allow for the more efficient development of the Mancos and Niobrara by eliminating unnecessary surface locations. By approving these spacing and pooling units, Axia Energy will be able to save over 40 acres of surface development per unit. By utilizing reservoir pressure, porosity, 9,000' laterals, Axia's estimated frac geometry and a recovery factor of 20%, Axia may realize 10 Bcfe of potential. Axia Energy's current well results support this type of potential for a 9,000' lateral when based on the current 5,000' configuration. These results more than exceed Axia Energy's economic hurdles.

Summary and Benefits

Approval of Axia's application for pooling and spacing will allow for the ability to optimally configure well locations and in turn maximize ultimate recovery of gas-in-place. Allowing for 9,000 foot laterals will greatly reduce surface pads needed to develop the spacing unit. In addition, pooling the interests in this resource play will allow for combined surface facilities thereby reducing the size and visual impacts of the locations required. Reducing the number of surface locations also results in having less completion pits, truck traffic and drilling rig moves. Self-skidding rigs would be able to develop spacing units much more efficiently by having less impactful rig mobilizations. It is my opinion that to maximize the ultimate recovery of gas in place in the Mancos and Niobrara Formation underlying the Application Lands, this spacing unit should be permitted and that by granting the Application in the above-referenced docket the waste of leaving recoverable Mancos and Niobrara gas in place will be

avoided and that correlative rights will be protected and the gas will be recovered more economically, efficiently and allow for as few of pads as possible.

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.



Taryn Frenzel
Senior Completions Engineer, Axia Energy LLC.

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.



Taryn Frenzel, Senior Completions Engineer
Axia Energy, LLC

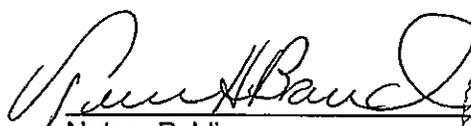
STATE OF COLORADO)
) ss.
CITY AND COUNTY OF DENVER)

The foregoing instrument was subscribed and sworn to before me this 11th day of March, 2013, by Taryn Frenzel, as Senior Completions Engineer, for Axia Energy, LLC.

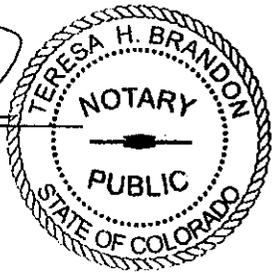
Witness my hand and official seal.

[SEAL]

My commission expires: 8/7/16



Notary Public



Taryn Frenzel

Experience

Axia Energy

December 2009 – Present

Sr. Completions Engineer

- Project evaluation including economic analysis, reserves, completions and production specializing in the Piceance Basin

Orion Energy Partners

March 2008 – October 2009

Sr. Completions Engineer

- Completions and production engineering. Provided Engineering support on reserves, and project evaluation.

Bill Barrett Corp.

July 2005 – March 2008

Sr. Completions Engineer

- Implemented new completion technique that improved production by over 4x taking the project from uneconomic levels to highly economic providing a 10 year project.
- Coordinated all operations for completions with over 100 wells per year
- Took production from 12 MMscf/day to over 100 MMscf/day
- Implemented and ran water pipeline infrastructure to compliment the new completion style which considerably reduced truck traffic, and saved over \$10,000,000 per year.
- Provided Engineering support to all completion engineers and responsible for all Exploratory completion projects

Schlumberger

June 1997-July 2005

- Ran Field Operations in cementing and stimulation services
- Supervisor for field operations, provided technical support to field ops teams
- Wrote software to assist in accurately calculating cementing volumes to ultimately improve QC
- Ran the Lab for All services
- In House Engineer for Tom Brown Inc. responsible for all aspects of the account. Improved market share from 50% to almost 90% in 3 years time.

Education

Montana Tech of the University of Montana *Butte, MT*

1994 – 1997

- B.S., Engineering Science
- GPA: 3.79

Dawson County College *Glendive, MT*

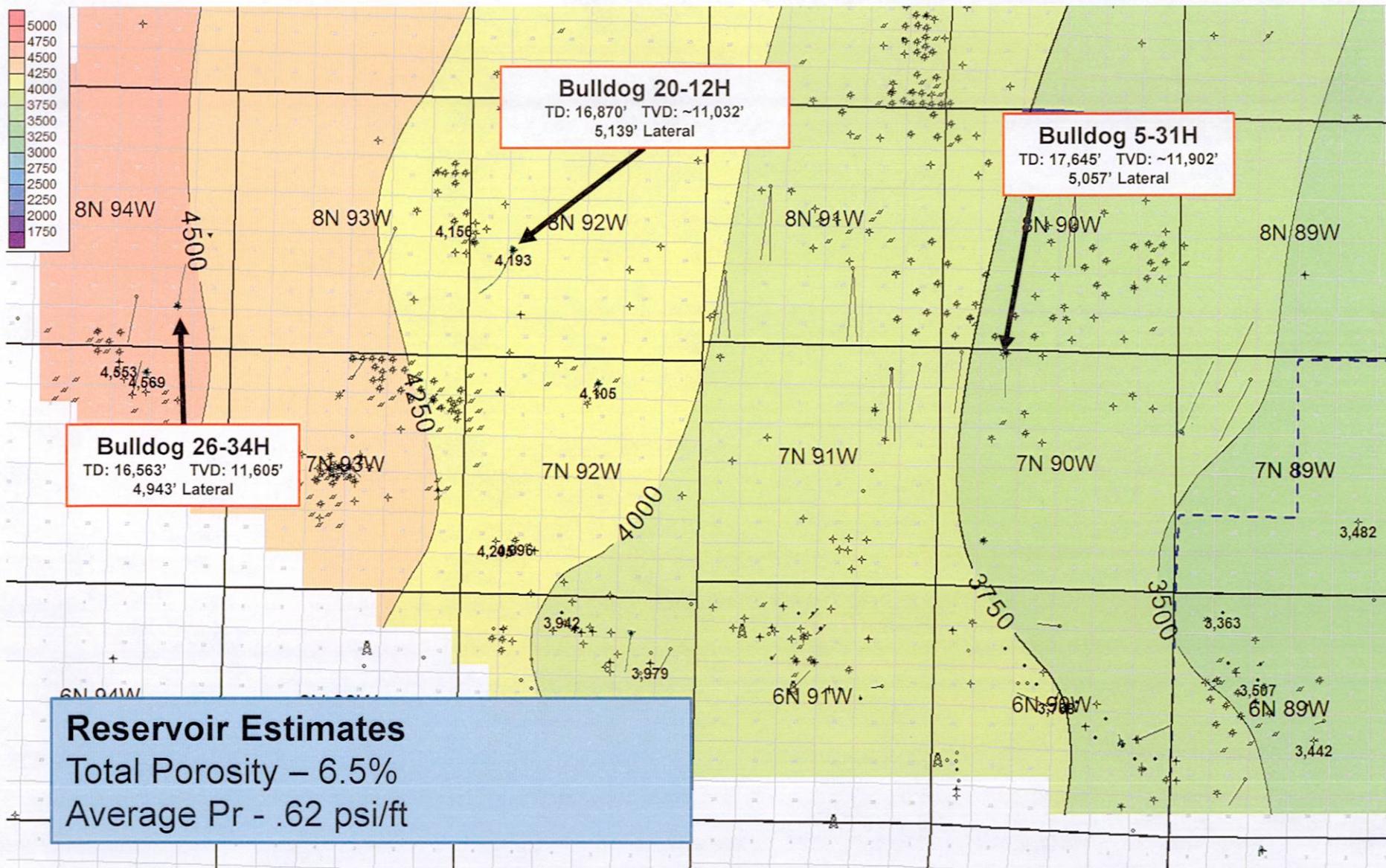
Fall 1992 – 1994

- Associates of Applied Science



Exhibits E-1 Gross Niobrara/Mancos Thickness

Cause No. 540
Docket No. 1303-UP-53





Exhibits E-2 Structure Top Niobrara (CI = 200')

Cause No. 540
Docket No. 1303-UP-53

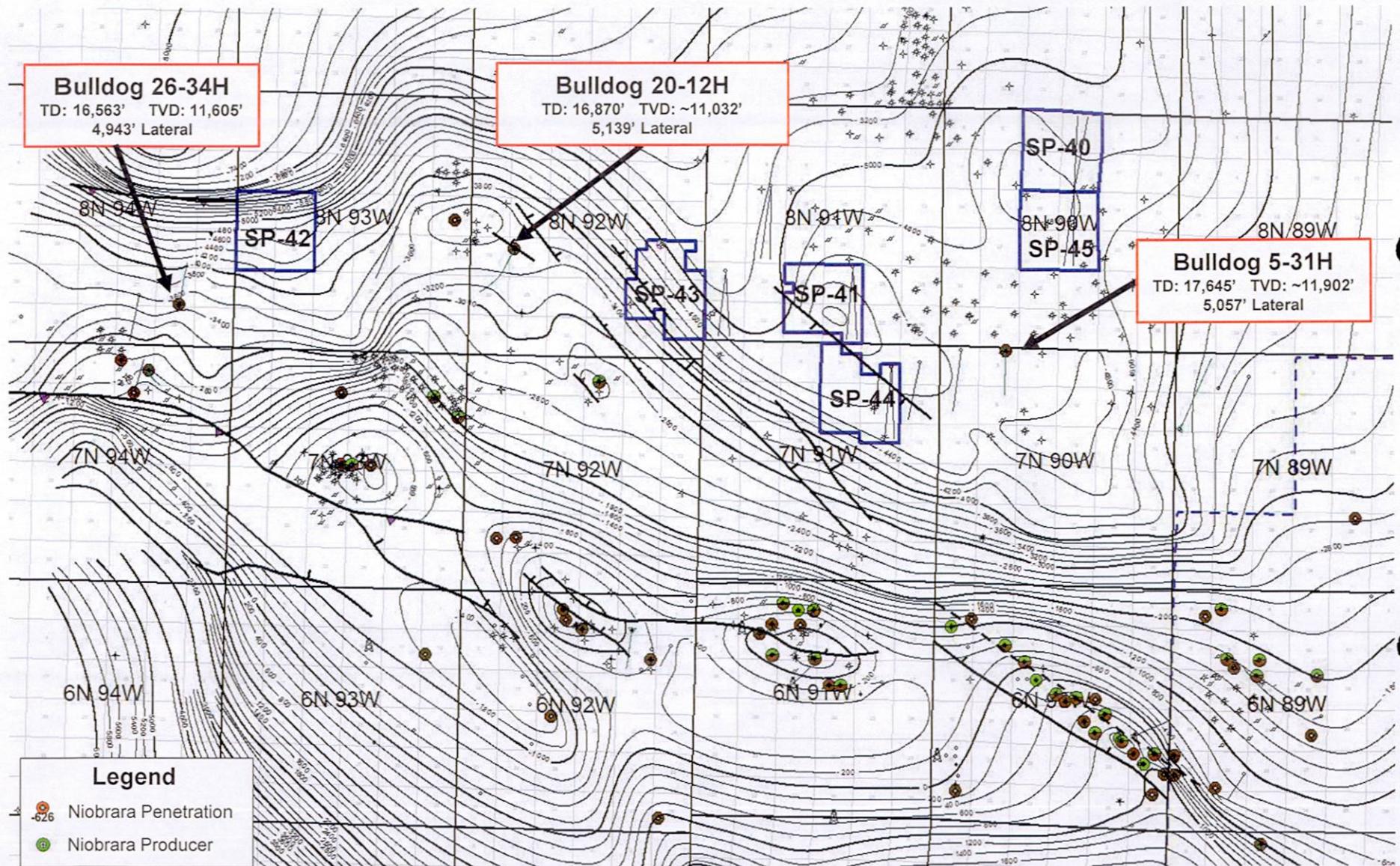




Exhibit E-3 Stacked Lateral Potential

Vertical Section

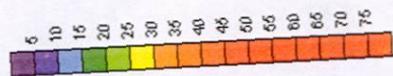
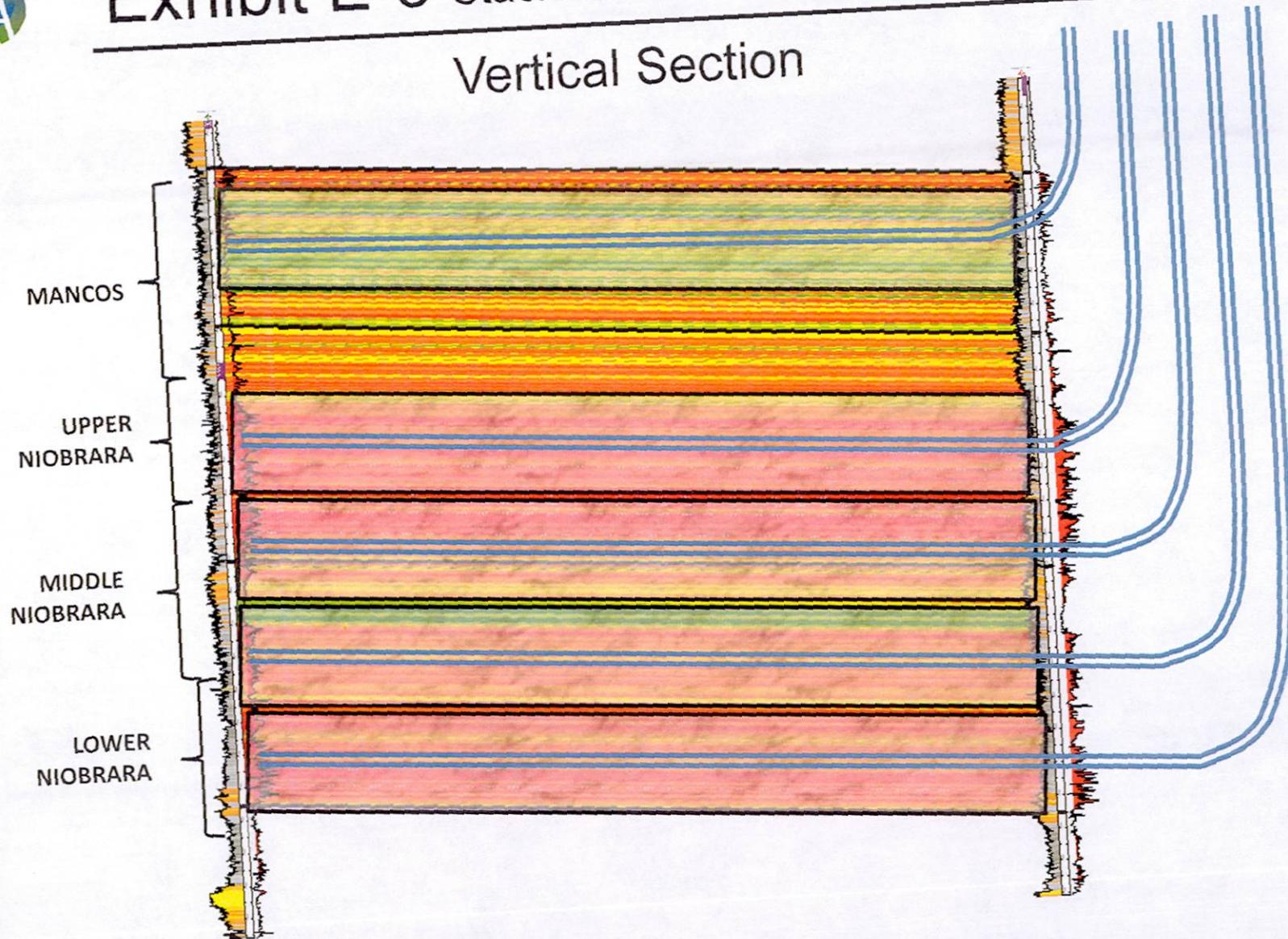




Exhibit E-4 OGIP

Cause No. 540
Docket No. 1303-UP-53

Reserve Inputs

Average Total Porosity – 6.5%

Average Pr - .62

Lateral length – 9,000 foot

OGIP and Recovery for a Horizontal Well Analysis 9,000 foot lateral

Niobrara Horizontal					
	Gross	Net	Net to Gross %	Avg Por	PhiH
Middle Niobrara	300	300	100.0%	6.5%	19.5

20% Recover per 9,000 foot lateral		
Gas (Bcf)	Oil (MMBO)	BCFE
8.4	0.420	10.9