

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

APPLICATION OF CIMAREX
ENERGY CO. FOR COMPULSORY
POOLING, EDDY COUNTY,
NEW MEXICO

CASE NO. 21021

Examiner Docket: February 6, 2020

CIMAREX'S EXHIBITS

Riverbend 12-13 Fed Com 29H, Riverbend 12-13 Fed Com 30H,
Riverbend 12-13 Fed Com 31H, Riverbend 12-13 Fed Com 32H,
Riverbend 12-13 Fed Com 33H, Riverbend 12-13 Fed Com 34H, and
Riverbend 12-13 Fed Com 35H



Earl E. DeBrine, Jr.
Lance D. Hough

 MODRALL SPERLING

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

**APPLICATION OF CIMAREX
ENERGY CO. FOR COMPULSORY
POOLING, EDDY COUNTY,
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Exhibit A Compulsory Pooling Application Checklist

Exhibit B Affidavit of Caitlin Pierce
 B-1 Application
 B-2 C102s
 B-3 Tract Map with WIs and ORRIs
 B-4 Well Proposal Letter
 B-5 Excerpt from Proposed JOA
 B-6 Authorization for Expenditure
 B-7 Communication Timeline

Exhibit C Affidavit of Harrison Hastings
 C-1 Gun Barrel Diagram
 C-2 Regional Locator Map
 C-3 Cross-Section Locator Map
 C-4 Deep Structure Map
 C-5 Lower Wolfcamp Isopach Map
 C-6 Stratigraphic Cross Section
 C-7 Target Zone within Stratigraphic Cross Section

Exhibit D Affidavit of Lance D. Hough
 D-1 Hearing Notice
 D-2 Certified Mail Log / Notice January 16, 2020
 D-3 Certified Mail Log / Report February 4, 2020
 D-4 Affidavit of Publication

Earl E. DeBrine, Jr.
Lance D. Hough

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COMPULSORY POOLING APPLICATION CHECKLIST (pdf)

ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

Case: 21021	APPLICANT'S RESPONSE
Date 2/6/20	
Applicant	Cimarex Energy Co.
Designated Operator & OGRID (affiliation if applicable)	Cimarex Energy Co. (OGRID 215099)
Applicant's Counsel:	Modrall Sperling
Case Title:	APPLICATION OF CIMAREX ENERGY CO. FOR COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO, CASE NO. 21021
Entries of Appearance/Intervenors:	None
Well Family	Riverbend
Formation/Pool	
Formation Name(s) or Vertical Extent:	Wolfcamp Formation
Primary Product (Oil or Gas):	Gas
Pooling this vertical extent:	Wolfcamp Formation
Pool Name and Pool Code:	Purple Sage; Wolfcamp Pool (Pool Code 98220)
Well Location Setback Rules:	Division's special set back requirements in Order No. R-14262
Spacing Unit Size:	640 Acres
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	640 Acres
Building Blocks:	Half Section Equivalents
Orientation:	North to South
Description: TRS/County	W/2 of Sections 12 and 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe	Yes
Other Situations	
Depth Severance: Y/N. If yes, description	No
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	N/A
Applicant's Ownership in Each Tract	Exhibit B.3
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	See Exhibit B.1 and Exhibit B.2
Well #1	Riverbend 12-13 Fed Com 29H, API No. 30-015-Pending SHL: SE/4 SE/4 (Unit P) of Section 3, Township 25 South, Range 26 East, NMPM, Eddy County. BHL: SW/4 SW/4 (Unit M) of Section 4, Township 25 South, Range 26 East, NMPM, Eddy County Completion Target: Wolfcamp at approx 10,760 feet TVD. Well Orientation: North to South Completion Location expected to be: Standard
Well #2	Riverbend 12-13 Fed Com 30H, API No. 30-015-Pending SHL: 1,379' FSL and 1,376' FWL of Section 1, Township 25 South, Range 28 East, Eddy County. BHL: 330' FSL and 2310' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County. Completion Target: Wolfcamp at approx 9,714 feet TVD. Well Orientation: North to South Completion Location expected to be: Standard



Well #3	<p>Riverbend 12-13 Fed Com 31H, API No. 30-015-Pending SHL: 1,439' FSL and 1,376' FWL of Section 1, Township 25 South, Range 28 East, Eddy County. BHL: 330' FSL and 1,874' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County</p> <p>Completion Target: Wolfcamp at approx 9,918 feet TVD. Well Orientation: North to South Completion Location expected to be: Standard</p>
Well #4	<p>Riverbend 12-13 Fed Com 32H, API No. 30-015-Pending SHL: 1,439' FSL and 1,257' FWL of Section 1, Township 25 South, Range 28 East, Eddy County. BHL: 330' FSL and 330' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County</p> <p>Completion Target: Wolfcamp at approx 9,918 feet TVD. Well Orientation: North to South Completion Location expected to be: Standard</p>
Well #5	<p>Riverbend 12-13 Fed Com 33H, API No. 30-015-Pending SHL: 1,439' FSL and 1,277' FWL of Section 1, Township 25 South, Range 28 East, Eddy County. BHL: 330' FSL and 716' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County</p> <p>Completion Target: Wolfcamp at approx 9,714 feet TVD. Well Orientation: North to South Completion Location expected to be: Standard</p>
Well #6	<p>Riverbend 12-13 Fed Com 34H, API No. 30-015-Pending SHL: 1,439' FSL and 1,297' FWL of Section 1, Township 25 South, Range 28 East, Eddy County. BHL: 330' FSL and 1,102' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County</p> <p>Completion Target: Wolfcamp at approx 9,918 feet TVD. Well Orientation: North to South Completion Location expected to be: Standard</p>
Well #7	<p>Riverbend 12-13 Fed Com 35H, API No. 30-015-Pending SHL: 1,439' FSL and 1,317' FWL of Section 1, Township 25 South, Range 28 East, Eddy County. BHL: 330' FSL and 1,488' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County</p> <p>Completion Target: Wolfcamp at approx 9,714 feet TVD. Well Orientation: North to South Completion Location expected to be: Standard</p>
Horizontal Well First and Last Take Points	Exhibit B.2
Completion Target (Formation, TVD and MD)	Exhibit B.1; Exhibit B.2; Exhibit B.4; Exhibit C.6, Exhibit C.1; Exhibit C.7
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	6,500
Production Supervision/Month \$	650
Justification for Supervision Costs	Exhibit B.6 for AFEs
Requested Risk Charge	200%; see Exhibit B
Notice of Hearing	
Proposed Notice of Hearing	Exhibit D.1
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit D.2 and D.3
Proof of Published Notice of Hearing (10 days before hearing)	Exhibit D.4
Ownership Determination	
Land Ownership Schematic of the Spacing Unit	Exhibit B; Exhibit B.3
Tract List (including lease numbers and owners)	Exhibit B.3

Pooled Parties (including ownership type)	Exhibit B.3
Unlocatable Parties to be Pooled	Exhibit B.3; Exhibit D.2
Ownership Depth Severance (including percentage above & below)	None
Joinder	
Sample Copy of Proposal Letter	Exhibit B.4
List of Interest Owners (ie Exhibit A of JOA)	Exhibit B.3
Chronology of Contact with Non-Joined Working Interests	Exhibit B.7
Overhead Rates In Proposal Letter	Exhibit B.5
Cost Estimate to Drill and Complete	Exhibit B.6 for AFEs
Cost Estimate to Equip Well	Exhibit B.6 for AFEs
Cost Estimate for Production Facilities	Exhibit B.6 for AFEs
Geology	
Summary (including special considerations)	Exhibit C
Spacing Unit Schematic	Exhibits C.1, C.2, and C.3
Gunbarrel/Lateral Trajectory Schematic	Exhibit C.1
Well Orientation (with rationale)	Exhibit C
Target Formation	Exhibits C.6 and C.7
HSU Cross Section	Exhibits C.6 and C.7
Depth Severance Discussion	Exhibit B
Forms, Figures and Tables	
C-102	Exhibit B.2
Tracts	Exhibit B.3
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit B.3
General Location Map (including basin)	Exhibit C.2
Well Bore Location Map	Exhibits C.1
Structure Contour Map - Subsea Depth	Exhibit C.4
Cross Section Location Map (including wells)	Exhibits C.3
Cross Section (including Landing Zone)	Exhibits C.6 and C.7
Additional Information	
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Lance Hough
Signed Name (Attorney or Party Representative):	
Date:	2/5/20

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

APPLICATION OF CIMAREX
ENERGY CO. FOR COMPULSORY
POOLING, EDDY COUNTY,
NEW MEXICO

CASE NO. 21021

AFFIDAVIT OF CAITLIN PIERCE

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

Caitlin Pierce, being duly sworn, deposes and states:

1. I am a landman for Cimarex Energy Co. ("Cimarex"), over the age of 18 and have personal knowledge of the matters stated herein. I have previously been qualified to testify by the New Mexico Oil Conservation Division as an expert in petroleum land matters.

2. Pursuant to NMAC 19.15.4.12.A(1), the following information is submitted in support of the above referenced compulsory pooling applications filed by Cimarex.

3. This case involves a request for an order from the Division for compulsory pooling of interest owners who have refused to voluntarily pool their interests for the proposed Wolfcamp horizontal spacing unit described below, and in the well to be drilled in the horizontal spacing unit.

4. Prior to filing it application, Cimarex made a good faith effort to obtain voluntary joinder of the working interest owners in the proposed well. Cimarex identified all of the working interest, unleased mineral interests, and overriding royalty interest owners from a title opinion. To locate interest owners, Cimarex conducted a diligent search of the public records in the county where the well will be located, and conducted phone directory and computer searches to locate



contact information for parties entitled to notification. I mailed all working interest owners well proposals and an Authorization for Expenditure, and a form of Operating Agreement upon request.

5. No opposition is expected. Prior to filing its applications Cimarex contacted the interest owners being pooled regarding the proposed well; the pooled working interest owners have failed or refused to voluntarily commit their interests in the well. Cimarex provided all of the working interest owners, any unleased mineral owners, and overriding royalty owners with notice of this application, and none have entered an appearance in opposition to Cimarex's application.

6. In its Application, Cimarex seeks an order from the Division: (1) to the extent necessary, approving the creation of a 640-acre, more or less, Wolfcamp horizontal spacing unit; and, (2) pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the W/2 of Sections 12 and 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Riverbend 12-13 Fed Com 29H, Riverbend 12-13 Fed Com 30H, Riverbend 12-13 Fed Com 31H, Riverbend 12-13 Fed Com 32H, Riverbend 12-13 Fed Com 33H, Riverbend 12-13 Fed Com 34H, and Riverbend 12-13 Fed Com 35H** wells, to be horizontally drilled. The Application is attached hereto as **Exhibit B.1**.

7. Attached as **Exhibit B.2** are the C-102s for the proposed wells. The wells will develop the Purple Sage; Wolfcamp Pool (Pool Code 98220), which is a gas pool. The producing interval for the wells will be orthodox and will comply with the Division's special set back requirements in Order No. R-14262, as the first and last take points will be no closer than 330' from the proposed unit boundary and the completed lateral will be no closer than 330' from the proposed unit boundary.

8. A lease tract map outlining the unit to be pooled is attached hereto as **Exhibit B.3**. The working interest owners being pooled and the percent of their interest, as well as a list of

overriding royal interest owners being pooled, are also included as part of **Exhibit B.3**. Cimarex owns an interest in the proposed unit and has a right to drill a well thereon.

9. There are no depth severances within the proposed spacing unit.

10. **Exhibit B.4** is a sample well proposal letter sent to each of the working interest owners seeking their voluntary participation in the wells.

11. **Exhibit B.5** is an excerpt of the proposed joint operating agreement, included with the well proposal letter sent to each of the working interest owners, that provides overhead and administrative rates of \$6,500/month during drilling and \$650/month while producing.

12. **Exhibit B.6** are the Authorizations for Expenditure for the proposed wells. The estimated cost of each well, set forth therein and listed below, is fair and reasonable, and is comparable to the costs of other wells of similar depth, length and completion method being drilled in this area of New Mexico.

a. **Riverbend 12-13 Fed Com 29H:** \$13,028,000.

b. **Riverbend 12-13 Fed Com 30H:** \$12,353,000.

c. **Riverbend 12-13 Fed Com 31H:** \$11,249,000.

d. **Riverbend 12-13 Fed Com 32H:** \$11,256,000.

e. **Riverbend 12-13 Fed Com 33H:** \$11,230,000.

f. **Riverbend 12-13 Fed Com 34H:** \$11,238,000.

g. **Riverbend 12-13 Fed Com 35H:** \$11,230,000.

13. **Exhibit B.7** is a summary of communications with the non-joined working interest.

14. Cimarex requests overhead and administrative rates of \$6,500/month during drilling and \$650/month while producing. These rates are fair and comparable to the rates charged by other operators for wells of this type in this area of Southeastern, New Mexico and consistent

with the rates awarded by the Division in recent compulsory pooling orders. Cimarex requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.

15. Cimarex requests the maximum cost plus 200% risk charge be assessed against non-consenting pooled working interest owners.

16. Cimarex requests that it be designated operator of the well.

17. Cimarex requests that it be allowed a period of one (1) year between when the wells are drilled and when the first well is completed under the order.

18. The parties Cimarex is seeking to pool were notified of this hearing.

19. Cimarex requests that overriding royalty interest owners be pooled.

20. Based upon my knowledge of the land matters involved in this case, education and training, it is my expert opinion that the granting of Cimarex's applications in this case is in the interests of conservation and the prevention of waste.

21. The attachments to my Affidavit were prepared by me or compiled from company business records.

22. I attest that the information provided herein is true, correct and complete to the best of my knowledge and belief.

Caitlin Pierce
Caitlin Pierce

SUBSCRIBED AND SWORN to before me this 5th day of February 2020 by Caitlin Pierce.

Amanda Bustamante
Notary Public
My commission expires: 4-29-2023



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

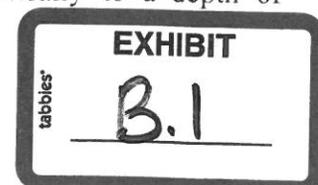
APPLICATION OF CIMAREX
ENERGY CO. FOR COMPULSORY
POOLING, EDDY COUNTY,
NEW MEXICO

CASE NO. _____

APPLICATION

Cimarex Energy Co. ("Cimarex"), OGRID Number 215099, through its undersigned attorneys, hereby makes an application to the Oil Conservation Division pursuant to the provisions of NMSA (1978), Section 70-2-17, for an order pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the W/2 of Sections 12 and 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. In support of this application, Cimarex states as follows:

1. Cimarex is an interest owner in the subject lands and has a right to drill a well thereon.
2. Cimarex seeks to dedicate the W/2 of Sections 12 and 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico to form a 640-acre, more or less, Wolfcamp horizontal spacing unit.
3. Cimarex plans to drill the **Riverbend 12-13 Fed Com 29H to 35H** wells to a depth sufficient to test the Wolfcamp formation, and laterally in a southerly direction within the formation to the referenced bottom hole location:
 - a. The **Riverbend 12-13 Fed Com 29H** well is a horizontal well with a surface hole location at 1,379' FSL and 1396' FWL of Section 1, Township 25 South, Range 28 East, Eddy County, and an intended bottom hole location at 330' FSL and 2200' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This well is proposed to be drilled vertically to a depth of approximately 10,760' to the Wolfcamp formation.



- b. The **Riverbend 12-13 Fed Com 30H** well is a horizontal well with a surface hole location at 1,379' FSL and 1,376' FWL of Section 1, Township 25 South, Range 28 East, Eddy County, and an intended bottom hole location at 330' FSL and 2310' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This well is proposed to be drilled vertically to a depth of approximately 9,714' to the Wolfcamp formation.
- c. The **Riverbend 12-13 Fed Com 31H** well is a horizontal well with a surface hole location at 1,439' FSL and 1,376' FWL of Section 1, Township 25 South, Range 28 East, Eddy County, and an intended bottom hole location at 330' FSL and 1,874' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This well is proposed to be drilled vertically to a depth of approximately 9,918' to the Wolfcamp formation.
- d. The **Riverbend 12-13 Fed Com 32H** well is a horizontal well with a surface hole location at 1,439' FSL and 1,257' FWL of Section 1, Township 25 South, Range 28 East, Eddy County, and an intended bottom hole location at 330' FSL and 330' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This well is proposed to be drilled vertically to a depth of approximately 9,918' to the Wolfcamp formation.
- e. The **Riverbend 12-13 Fed Com 33H** well is a horizontal well with a surface hole location at 1,439' FSL and 1,277' FWL of Section 1, Township 25 South, Range 28 East, Eddy County, and an intended bottom hole location at 330' FSL and 716' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This well is proposed to be drilled vertically to a depth of approximately 9,714' to the Wolfcamp formation.
- f. The **Riverbend 12-13 Fed Com 34H** well is a horizontal well with a surface hole location at 1,439' FSL and 1,297' FWL of Section 1, Township 25 South, Range 28 East, Eddy County, and an intended bottom hole location at 330' FSL and 1,102' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This well is proposed to be drilled vertically to a depth of approximately 9,918' to the Wolfcamp formation.
- g. The **Riverbend 12-13 Fed Com 35H** well is a horizontal well with a surface hole location at 1,439' FSL and 1,317' FWL of Section 1, Township 25 South, Range 28 East, Eddy County, and an intended bottom hole location at 330' FSL and 1,488' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This well is proposed to be drilled vertically to a depth of approximately 9,714' to the Wolfcamp formation.

4. These wells will be located within the Purple Sage; Wolfcamp (Gas) Pool (Pool Code: 98220) and will comply with the Division's special setback requirements set forth in R-14262.

5. Cimarex sought, but has been unable to obtain, a voluntary agreement from all interest owners in the Wolfcamp formation underlying the proposed spacing unit to participate in the drilling of the wells or to otherwise commit their interests to the wells.

6. The creation of a horizontal spacing unit and the pooling of all interests in the Wolfcamp formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

7. A proposed Exhibit A for the Division's compulsory pooling order describing the horizontal spacing unit is attached hereto as "Exhibit A".

WHEREFORE, Cimarex requests that this case is set for hearing before an Examiner of the Oil Conservation Division on February 6, 2020, and after notice and hearing as required by law, the Division enter its order:

A. Creating an approximately 640-acre horizontal spacing unit in the Wolfcamp formation comprised of W/2 of Sections 12 and 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico;

B. Pooling all mineral interests in the Wolfcamp formation underlying a horizontal spacing unit within the W/2 of Sections 12 and 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico;

C. Designating Cimarex as operator of this unit and the wells to be drilled thereon;

D. Authorizing Cimarex to recover its costs of drilling, equipping and completing the wells;

E. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;

F. Setting a 200% charge for the risk involved in drilling and completing the wells in the event a working interest owner elects not to participate in the wells.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: 

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Attorneys for Applicant

W3590721.DOCX

CASE NO. _____: Application of Cimarex Energy Co. for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a 640-acre, more or less, Wolfcamp horizontal spacing unit; and, (2) pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the W/2 of Sections 12 and 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Riverbend 12-13 Fed Com 29H, Riverbend 12-13 Fed Com 30H, Riverbend 12-13 Fed Com 31H, Riverbend 12-13 Fed Com 32H, Riverbend 12-13 Fed Com 33H, Riverbend 12-13 Fed Com 34H, and Riverbend 12-13 Fed Com 35H** wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Cimarex as operator of the wells, and a 200% charge for risk involved in drilling said wells. Said area is located approximately 9.5 miles south of Loving, New Mexico.

Exhibit "A"

Applicant: Cimarex Energy Co.
Operator: Cimarex Energy Co. (OGRID 215099)

Spacing Unit: Horizontal Gas
Building Blocks: Half Section Equivalent
Spacing Unit Size: 640 acres (more or less)
Orientation of Unit: North/South

Spacing Unit Description:
W/2 of Sections 12 and 13, Township 25 South, Range 28 East,
NMPM, Eddy County, New Mexico

Pooling this Vertical Extent: Wolfcamp Formation
Depth Severance? (Yes/No): No

Pool: Purple Sage; Wolfcamp Gas (Pool code 98220)
Pool Spacing Unit Size: Half Sections
Governing Well Setbacks: Special Rules for the Purple Sage Gas Pool Apply
Pool Rules: Purple Sage and Horizontal Well Rules

Proximity Tracts: No

Monthly charge for supervision: While drilling: \$6,500; while producing: \$650
As the charge for risk, 200 percent of reasonable well costs.

Proposed Wells:

Riverbend 12-13 Fed Com 29H, API No. 30-015-Pending

SHL: 1,379' FSL and 1396' FWL of Section 1, Township 25 South, Range 28 East, Eddy County.

BHL: 330' FSL and 2200' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County.

Completion Target: Wolfcamp at approx 10,760 feet TVD.

Well Orientation: North to South

Completion Location expected to be: Standard

Riverbend 12-13 Fed Com 30H, API No. 30-015-Pending

SHL: 1,379' FSL and 1,376' FWL of Section 1, Township 25 South, Range 28 East, Eddy County.

BHL: 330' FSL and 2310' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County.

Completion Target: Wolfcamp at approx 9,714 feet TVD.
Well Orientation: North to South
Completion Location expected to be: Standard

Riverbend 12-13 Fed Com 31H, API No. 30-015-Pending

SHL: 1,439' FSL and 1,376' FWL of Section 1, Township 25 South, Range 28 East, Eddy County.

BHL: 330' FSL and 1,874' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County.

Completion Target: Wolfcamp at approx 9,918 feet TVD.
Well Orientation: North to South
Completion Location expected to be: Standard

Riverbend 12-13 Fed Com 32H, API No. 30-015-Pending

SHL: 1,439' FSL and 1,257' FWL of Section 1, Township 25 South, Range 28 East, Eddy County.

BHL: 330' FSL and 330' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County.

Completion Target: Wolfcamp at approx 9,918 feet TVD.
Well Orientation: North to South
Completion Location expected to be: Standard

Riverbend 12-13 Fed Com 33H, API No. 30-015-Pending

SHL: 1,439' FSL and 1,277' FWL of Section 1, Township 25 South, Range 28 East, Eddy County.

BHL: 330' FSL and 716' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County.

Completion Target: Wolfcamp at approx 9,714 feet TVD.
Well Orientation: North to South
Completion Location expected to be: Standard

Riverbend 12-13 Fed Com 34H, API No. 30-015-Pending

SHL: 1,439' FSL and 1,297' FWL of Section 1, Township 25 South, Range 28 East, Eddy County.

BHL: 330' FSL and 1,102' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County.

Completion Target: Wolfcamp at approx 9,918 feet TVD.
Well Orientation: North to South
Completion Location expected to be: Standard

Riverbend 12-13 Fed Com 35H, API No. 30-015-Pending

Case No. _____
Order No. R- _____
Page 3 of 3

SHL: 1,439' FSL and 1,317' FWL of Section 1, Township 25 South, Range 28 East, Eddy County.

BHL: 330' FSL and 1,488' FWL of Section 13, Township 25 South, Range 28 East, NMPM, Eddy County.

Completion Target: Wolfcamp at approx 9,714 feet TVD.

Well Orientation: North to South

Completion Location expected to be: Standard

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Arroyos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

NM OIL CONSERVATION
ARTESIA DISTRICT

AMENDED REPORT

JUN 06 2018

WELL LOCATION AND ACREAGE DEDICATION **RECEIVED**

¹ API Number 30-015 45021	² Pool Code 98220	³ Pool Name Purple Sage Wolfcamp gas
⁴ Property Code 321482	⁵ Property Name RIVERBEND 12-13 FEDERAL COM	
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁶ Well Number 29H ⁹ Elevation 2937.2

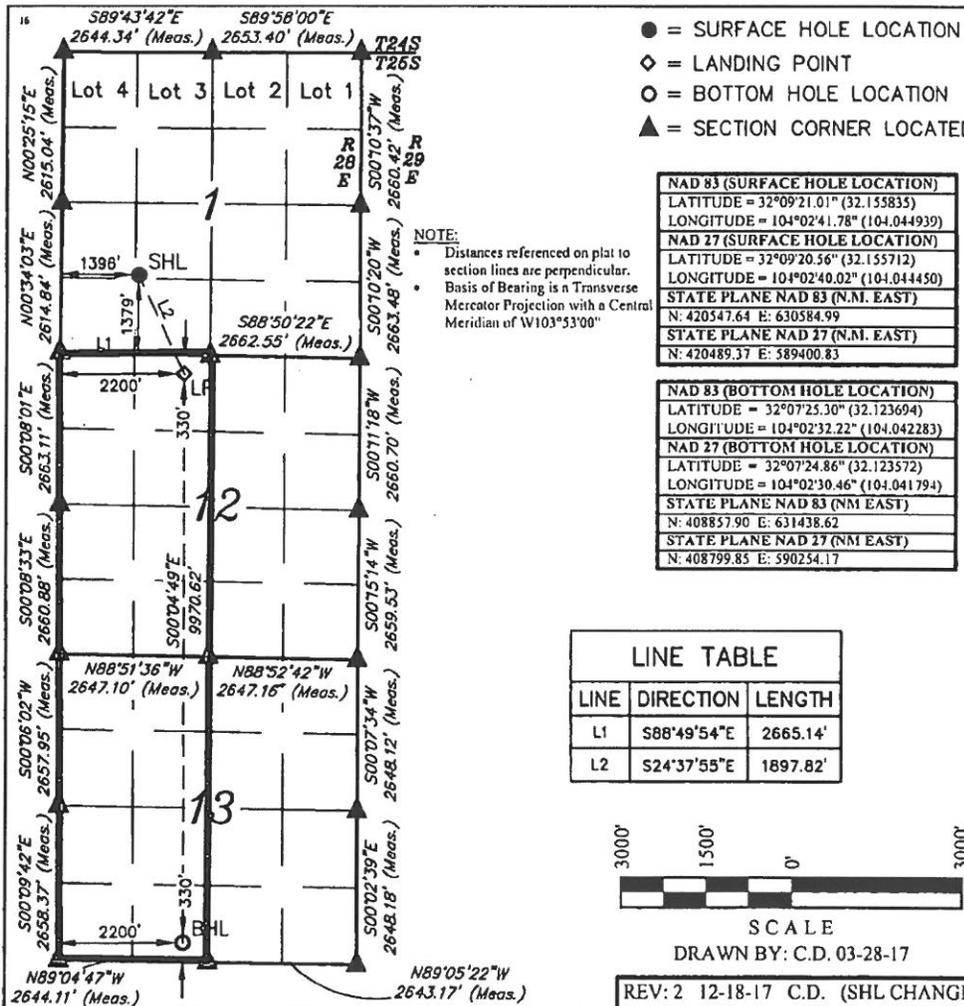
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	I	25S	28E		1379	SOUTH	1396	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	25S	28E		330	SOUTH	2200	WEST	EDDY
¹² Dedicated Acres 640		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



"OPERATOR CERTIFICATION"
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Aricka Easterling* Date: 2/1/18

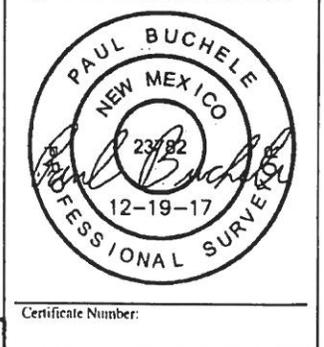
Aricka Easterling
Printed Name

aeasterling@cimarex.com
E-mail Address

"SURVEYOR CERTIFICATION"
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

December 12, 2017
Date of Survey

Signature and Seal of Professional Surveyor:



Rev 6-6-18



District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Pinos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
NEW OIL CONSERVATION
OIL CONSERVATION DIVISION
ARTESIA DISTRICT
1220 South St. Francis Dr.
Santa Fe, NM 87505
JUN 06 2018

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015 45022	² Pool Code 98220	³ Pool Name Purple Sage Wolfcamp
⁴ Code 321482	⁵ Property Name RIVERBEND 12-13 FEDERAL COM	
⁶ Well Number 30H	⁷ Operator Name CIMAREX ENERGY CO.	
⁸ Elevation 2937.6	⁹ Well ID No. 215099	

"Surface Location

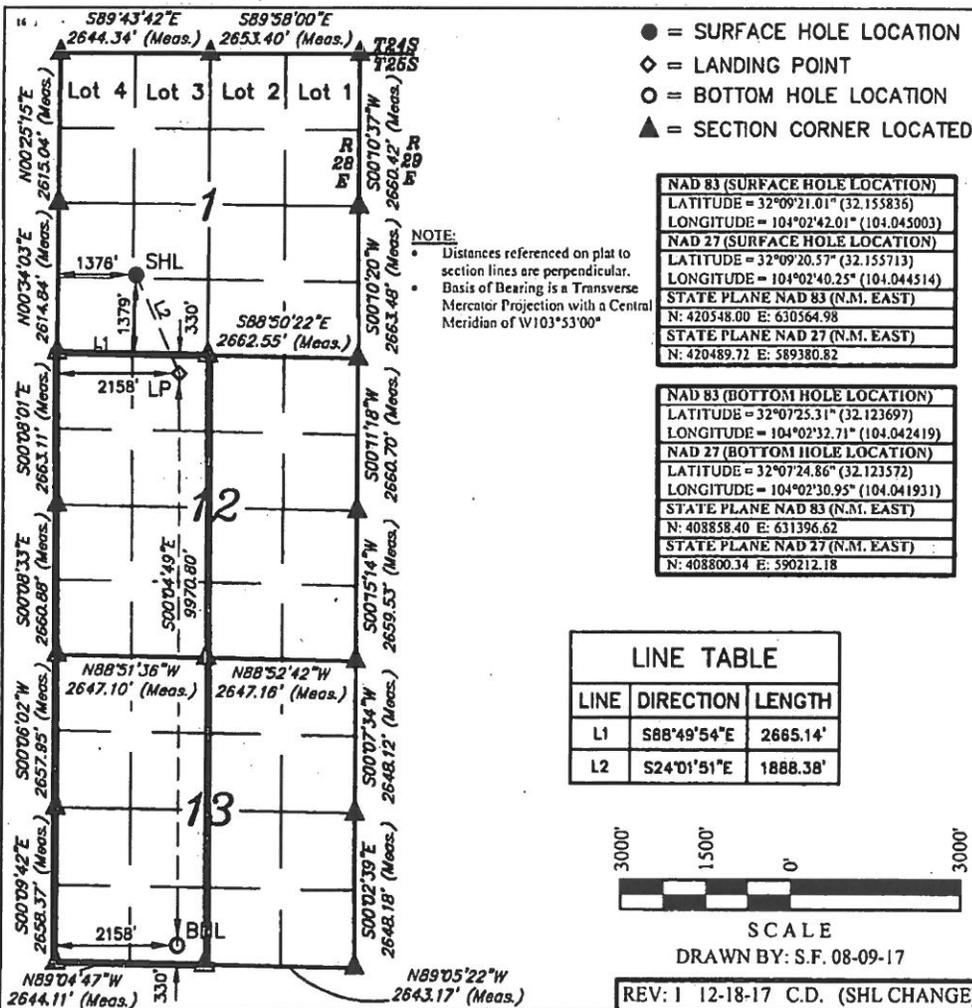
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	1	25S	28E		1379	SOUTH	1376	WEST	EDDY

"Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	25S	28E		330	SOUTH	2158	WEST	EDDY

¹¹ Dedicated Acres 640	¹² Joint or Infill	¹⁴ Consolidation Code	¹³ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

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"OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order hereinafter entered by the division.

Signature: *Aricka Easterling* Date: 2/1/18

Printed Name: Aricka Easterling
E-mail Address: aeasterling@cimarex.com

"SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

December 12, 2017
Date of Survey
Signature and Seal of Professional Surveyor:

Certificate Number:

PAUL BUCHELE
NEW MEXICO
12-19-17
PROFESSIONAL SURVEYOR

RWP 6-6-18

RECEIVED

MAY 07 2019

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1263 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
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District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015 45972	² Pool Code 98220	³ Pool Name Purple Sage Wolfcamp (Gas)
⁴ Property Code 321482	⁵ Property Name RIVERBEND 12-13 FEDERAL COM	⁶ Well Number 31H
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁹ Elevation 2937.5

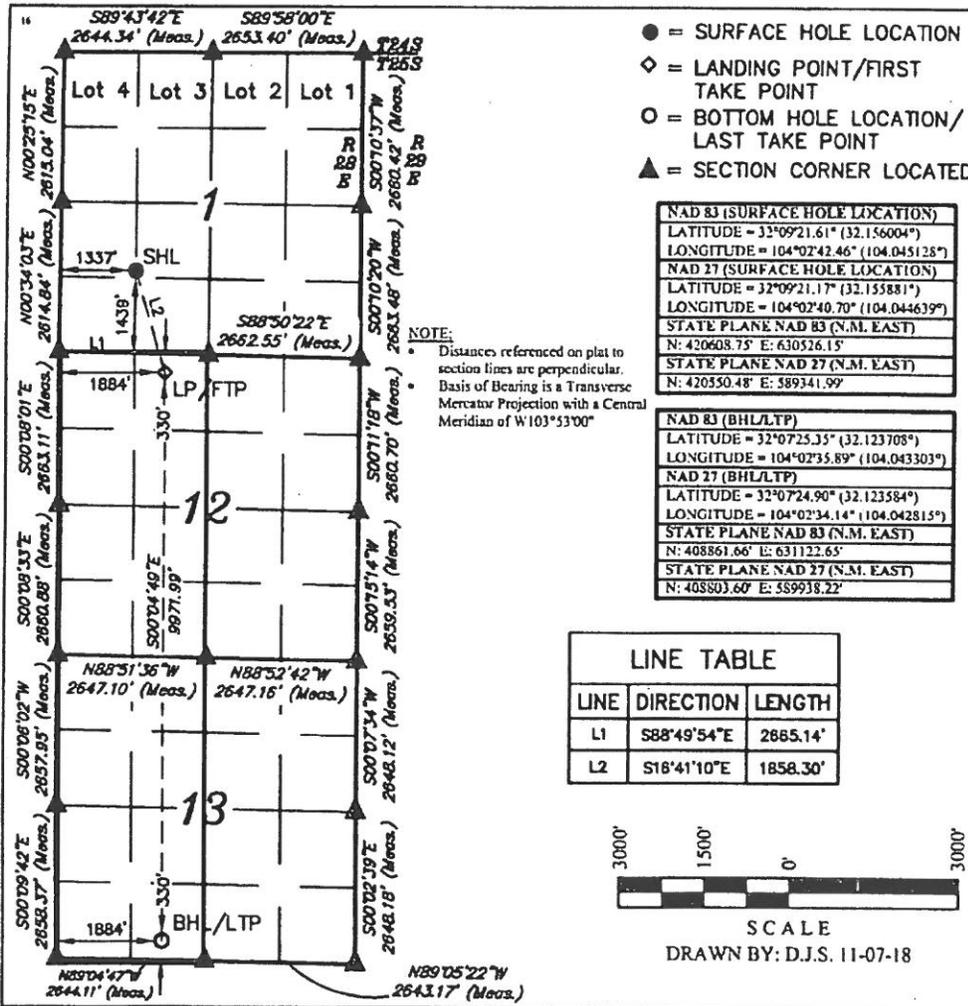
Surface Location

UL or lot no. K	Section 1	Township 25S	Range 28E	Lot Idn	Feet from the 1439	North/South line SOUTH	Feet from the 1337	East/West line WEST	County EDDY
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Bottom Hole Location If Different From Surface

UL or lot no. N	Section 13	Township 25S	Range 28E	Lot Idn	Feet from the 330	North/South line SOUTH	Feet from the 1884	East/West line WEST	County EDDY
¹¹ Dedicated Acres 640	¹² Joint or Infill	¹³ Consolidation Code	¹⁴ Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



- = SURFACE HOLE LOCATION
- ◇ = LANDING POINT/FIRST TAKE POINT
- = BOTTOM HOLE LOCATION/LAST TAKE POINT
- ▲ = SECTION CORNER LOCATED

NAD 83 (SURFACE HOLE LOCATION)	
LATITUDE = 32°09'21.61" (32.156004°)	
LONGITUDE = 104°02'42.46" (104.045128°)	
NAD 27 (SURFACE HOLE LOCATION)	
LATITUDE = 32°09'21.17" (32.155881°)	
LONGITUDE = 104°02'40.70" (104.044639°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 420608.75' E: 630526.15'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 420350.48' E: 589341.99'	

NAD 83 (BHL/LTP)	
LATITUDE = 32°07'25.35" (32.123708°)	
LONGITUDE = 104°02'35.89" (104.043303°)	
NAD 27 (BHL/LTP)	
LATITUDE = 32°07'24.90" (32.123584°)	
LONGITUDE = 104°02'34.14" (104.042815°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 408861.66' E: 631122.63'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 408803.60' E: 589938.22'	

NOTE:
Distances referenced on plat to section lines are perpendicular.
Basis of Bearing is a Transverse Mercator Projection with a Central Meridian of W103°53'00"

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: Hope Knauls
Date: 11-13-18

Printed Name: Hope Knauls

E-mail Address: hknauls@cimarex.com

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date: December 12, 2017

Signature and Seal of Professional Surveyor:



Certificate Number:

RWP 5-9-19

RECEIVED

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District II
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District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr. DISTRICT II-ARTESIA O.C.D.
Santa Fe, NM 87505

MAY 07 2019

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015 45973	² Pool Code 98220	³ Pool Name Purple Sage Wolfcamp (Gas)
⁴ Property Code 321482	⁵ Property Name RIVERBEND 12-13 FEDERAL COM	
⁷ OGRID No. 215099	⁶ Operator Name CIMAREX ENERGY CO.	⁸ Well Number 32H ⁹ Elevation 2938.4

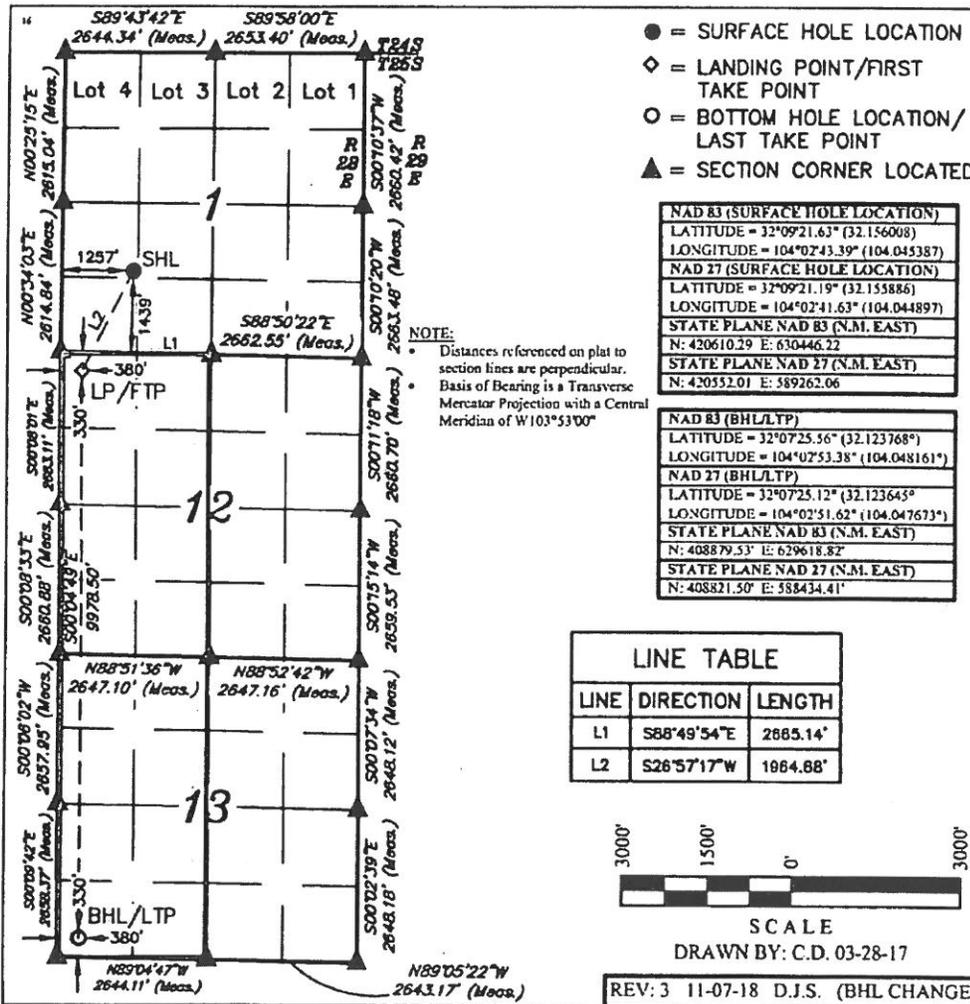
" Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	1	25S	28E		1439	SOUTH	1257	WEST	EDDY

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	13	25S	28E		330	SOUTH	380	WEST	EDDY
¹² Dedicated Acres 640		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



- = SURFACE HOLE LOCATION
- ◇ = LANDING POINT/FIRST TAKE POINT
- = BOTTOM HOLE LOCATION/LAST TAKE POINT
- ▲ = SECTION CORNER LOCATED

NAD 83 (SURFACE HOLE LOCATION)	
LATITUDE = 32°09'21.63" (32.156008)	LONGITUDE = 104°02'43.39" (104.045387)
NAD 27 (SURFACE HOLE LOCATION)	
LATITUDE = 32°09'21.19" (32.155886)	LONGITUDE = 104°02'41.63" (104.044897)
STATE PLANE NAD 83 (N.M. EAST)	
N: 420610.29 E: 630446.22	
STATE PLANE NAD 27 (N.M. EAST)	
N: 420552.01 E: 589262.06	

NAD 83 (BHL/LTP)	
LATITUDE = 32°07'25.56" (32.123768°)	LONGITUDE = 104°07'53.38" (104.048161°)
NAD 27 (BHL/LTP)	
LATITUDE = 32°07'25.12" (32.123645°)	LONGITUDE = 104°07'51.62" (104.047673°)
STATE PLANE NAD 83 (N.M. EAST)	
N: 408879.53 E: 629618.82	
STATE PLANE NAD 27 (N.M. EAST)	
N: 408821.50 E: 588434.41	

" OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Aricka Easterling* Date: 11/14/18

Printed Name: Aricka Easterling
E-mail Address: aeasterling@cimarex.com
E-mail Address

" SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

December 12, 2017

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number:

RW 5-9-19

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OIL CONSERVATION DIVISION
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Santa Fe, NM 87505

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MAY 07 2019
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015 45974	² Pool Code 98220	³ Pool Name Purple Sage Wolfcamp (Gas)
⁴ Property Code 321482	⁵ Property Name RIVERBEND 12-13 FEDERAL COM	
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁶ Well Number 33H ⁹ Elevation 2938.2

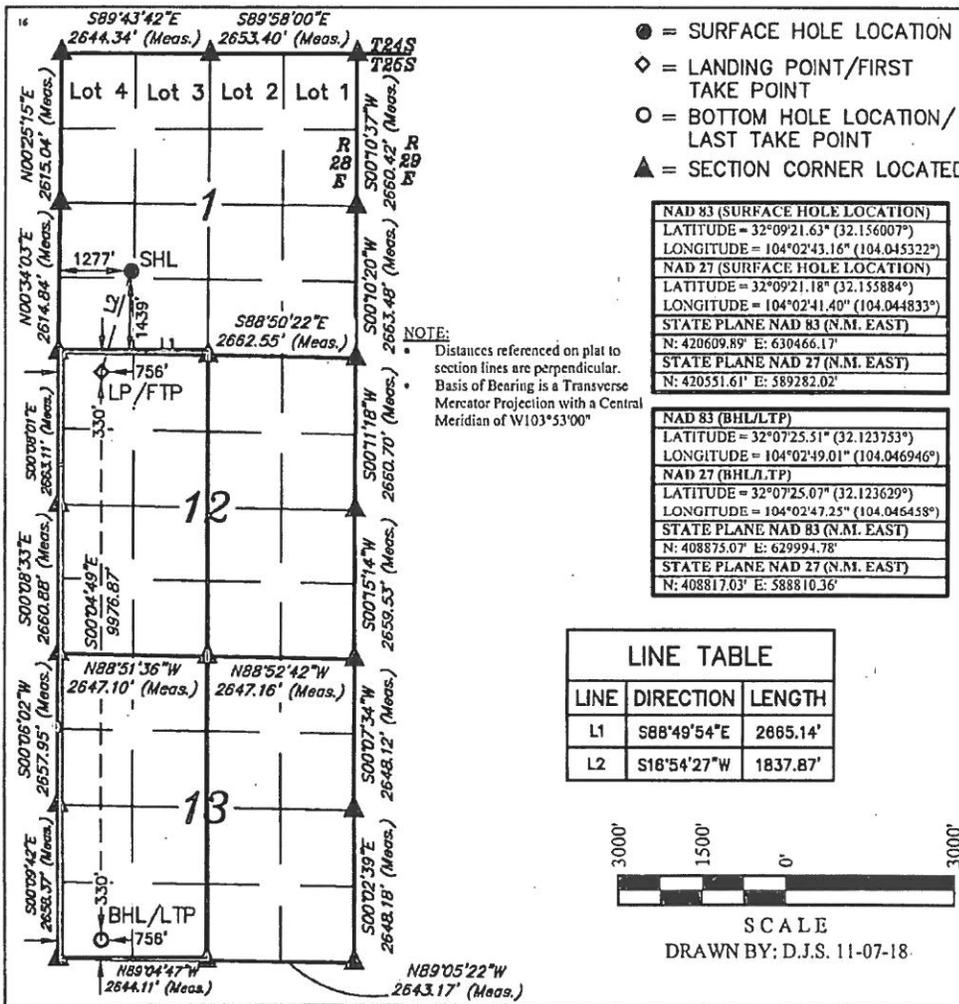
¹⁰ Surface Location

UL or lot no. L	Section 1	Township 25S	Range 28E	Lot Idn	Feet from the 1439	North/South line SOUTH	Feet from the 1277	East/West line WEST	County EDDY
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. M	Section 13	Township 25S	Range 28E	Lot Idn	Feet from the 330	North/South line SOUTH	Feet from the 756	East/West line WEST	County EDDY
¹² Dedicated Acres 640		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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- ◇ = LANDING POINT/FIRST TAKE POINT
- = BOTTOM HOLE LOCATION/LAST TAKE POINT
- ▲ = SECTION CORNER LOCATED

NAD 83 (SURFACE HOLE LOCATION)	
LATITUDE = 32°09'21.63" (32.156007°)	LONGITUDE = 104°02'43.16" (104.045322°)
NAD 27 (SURFACE HOLE LOCATION)	
LATITUDE = 32°09'21.18" (32.155884°)	LONGITUDE = 104°02'41.40" (104.044833°)
STATE PLANE NAD 83 (N.M. EAST)	
N: 420609.89° E: 630466.17°	STATE PLANE NAD 27 (N.M. EAST)
N: 420551.61° E: 589282.02°	

NAD 83 (BHL/LTP)	
LATITUDE = 32°07'25.51" (32.123753°)	LONGITUDE = 104°02'49.01" (104.046946°)
NAD 27 (BHL/LTP)	
LATITUDE = 32°07'25.07" (32.123629°)	LONGITUDE = 104°02'47.25" (104.046458°)
STATE PLANE NAD 83 (N.M. EAST)	
N: 408875.07° E: 629994.78°	STATE PLANE NAD 27 (N.M. EAST)
N: 408817.03° E: 588810.36°	

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S88°49'54"E	2865.14'
L2	S18°54'27"W	1837.87'



SCALE
DRAWN BY: D.J.S. 11-07-18.

¹⁷ OPERATOR CERTIFICATION

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Signature: *Aricka Easterling* Date: 11/14/18

Printed Name: Aricka Easterling
E-mail Address: aeasterling@cimarex.com

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

December 12, 2017

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number:

Riv 5-9-19

RECEIVED

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OIL CONSERVATION DIVISION
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Santa Fe, NM 87505

MAY 07 2019

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District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015 45975	² Pool Code 98220	³ Pool Name Purple Sage Wolfcamp (Gas)
⁴ Property Code 321482	⁵ Property Name RIVERBEND 12-13 FEDERAL COM	
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁶ Well Number 34H ⁹ Elevation 2937.9

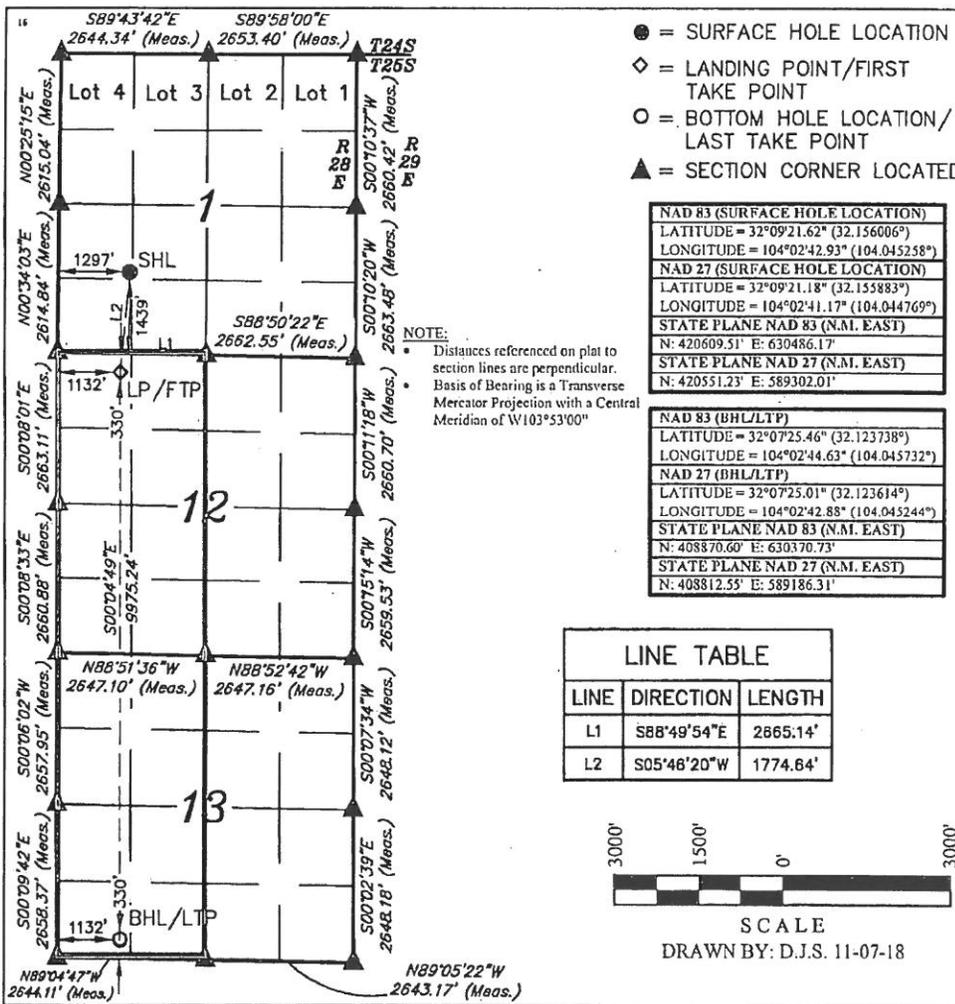
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	1	25S	28E		1439	SOUTH	1297	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	13	25S	28E		330	SOUTH	1132	WEST	EDDY
¹² Dedicated Acres 640		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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¹⁷ OPERATOR CERTIFICATION

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Signature: *Aricka Easterling* Date: 11/13/18

Printed Name: Aricka Easterling
E-mail Address: aeasterling@cimarex.com

¹⁸ SURVEYOR CERTIFICATION

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December 12, 2017

Date of Survey
Signature and Seal of Professional Surveyor:

PAUL BUCHELE
NEW MEXICO
23782
11-07-18
PROFESSIONAL SURVEYOR

Certificate Number:

RWP 5-9-19

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MAY 07 2019

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AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015 45976	² Pool Code 98220	³ Pool Name Purple Sage Wolfcamp (Gas)
⁴ Property Code 321482	⁵ Property Name RIVERBEND 12-13 FEDERAL COM	
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁶ Well Number 35H ⁹ Elevation 2937.7

¹⁰ Surface Location

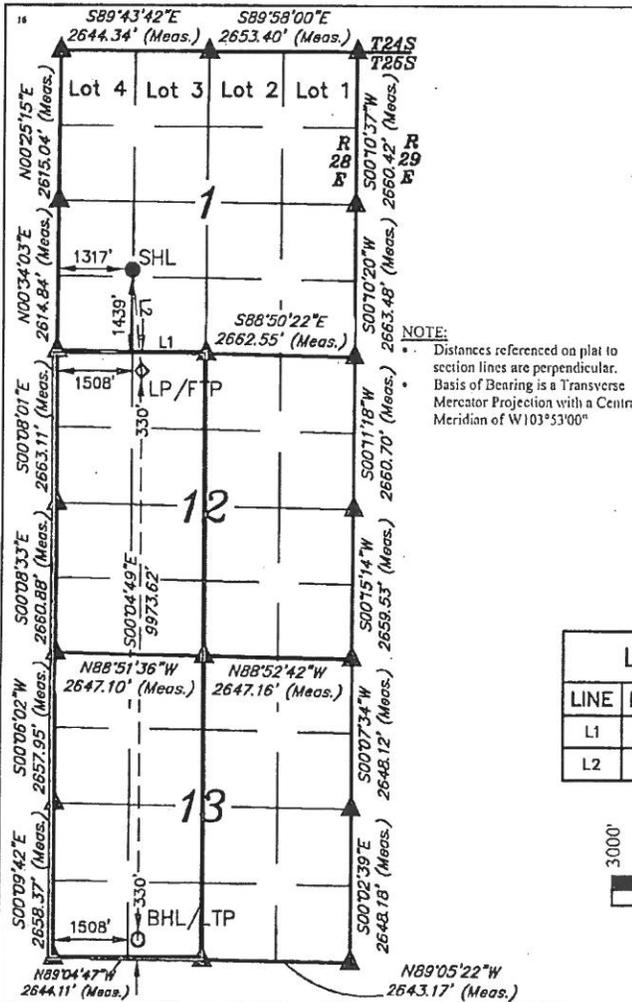
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	1	25S	28E		1439	SOUTH	1317	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	25S	28E		330	SOUTH	1508	WEST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

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- = SURFACE HOLE LOCATION
- ◇ = LANDING POINT/FIRST TAKE POINT
- = BOTTOM HOLE LOCATION/LAST TAKE POINT
- ▲ = SECTION CORNER LOCATED

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'21.62" (32.156005°)
LONGITUDE = 104°02'42.69" (104.045193°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'21.18" (32.155882°)
LONGITUDE = 104°02'40.93" (104.044704°)
STATE PLANE NAD 83 (N.M. EAST)
N: 420609.13' E: 630506.16'
STATE PLANE NAD 27 (N.M. EAST)
N: 420350.86' E: 589322.00'

NAD 83 (BHL/LTP)
LATITUDE = 32°07'25.40" (32.123723°)
LONGITUDE = 104°02'40.26" (104.044518°)
NAD 27 (BHL/LTP)
LATITUDE = 32°07'24.96" (32.123599°)
LONGITUDE = 104°02'38.51" (104.044030°)
STATE PLANE NAD 83 (N.M. EAST)
N: 408866.13' E: 630746.69'
STATE PLANE NAD 27 (N.M. EAST)
N: 408808.08' E: 589562.26'

NOTE: Distances referenced on plat to section lines are perpendicular. Basis of Bearing is a Transverse Mercator Projection with a Central Meridian of W103°53'00"

LINE	DIRECTION	LENGTH
L1	S88°49'54"E	2665.14'
L2	S05°43'08"E	1781.72'



SCALE
DRAWN BY: D.J.S. 11-07-18

¹⁶ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order hereinafter created by the division.

Signature: Aricka Easterling Date: 11/13/18

Aricka Easterling
Printed Name

aeasterling@cimarex.com
E-mail Address

¹⁷ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

December 12, 2017

Date of Survey
Signature and Seal of Professional Surveyor:



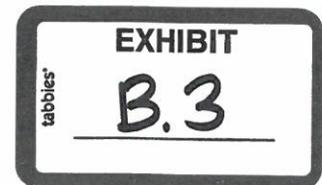
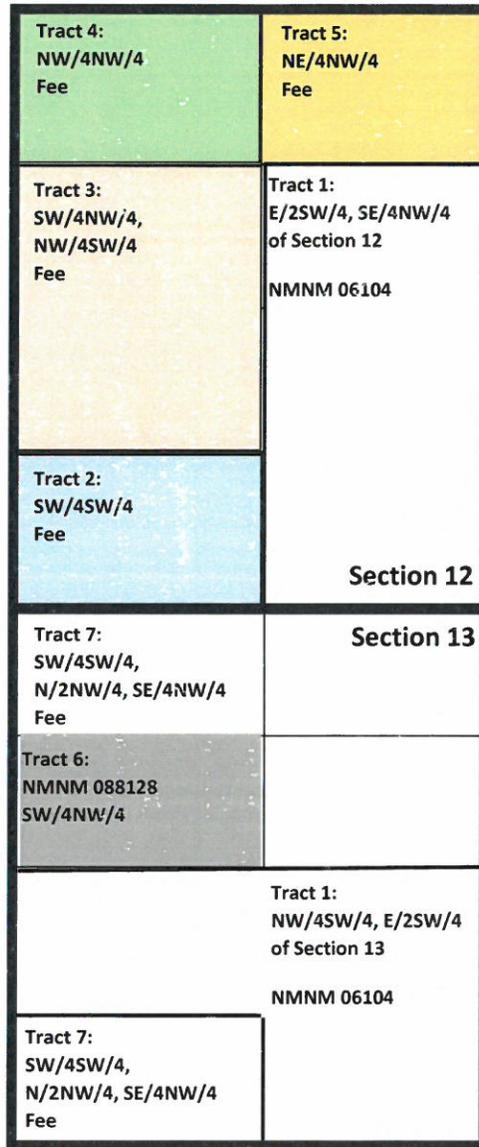
Certificate Number:

RUP 5-9-19

Riverbend 12 – 13 Federal Com 29H, 30H, 31H, 32H, 33H, 34H & 35H – Pooled Interests

W/2 of Section 12 & W/2 of Section 13, Township 25 South, Range 28 East, Eddy County, New Mexico

OWNER	Tract	TYPE	Net Acres	Working Interest Percentage
Tap Rock Resources	3 & 4	Leasehold	36.5634375	5.713037%
Total			36.5634375	5.713037%



ORRI Owners		Tract	Section
United States of America			
Department of the Interior, Bureau of Land Management	RI	1,2,3,4 & 5	13
Monty D McClane	ORRI	1, 3, 5	13
Alan Jochimsen	ORRI	1, 6, 7	13
States Royalty, LP	ORRI	1, 6, 7	13
Morris E Schertz	ORRI	1, 6, 7	13
Orion Oil & Gas Properties	ORRI	1, 6, 7	13
Premier Oil & Gas Inc	ORRI	1, 6, 7	13
GHHunker, LLC	ORRI	1, 6, 7	13
Chisos Minerals, LLC	ORRI	1, 6, 7	13
Norton LLC	ORRI	1, 6, 7	13
MKHM Oil, LLC	ORRI	1, 6, 7	13
OGI, Inc	ORRI	1, 6, 7	13
Energy Properties, LP	ORRI	1, 6, 7	13
ROEC Inc	ORRI	1, 6, 7	13
Sam L. Shackelford	ORRI	1, 6, 7	13
Robin K. Shackelford	ORRI	1, 6, 7	13
The Willian N. Heiss Profit Sharing Plan, Willian N. Heiss and Susan E.			
Heiss, Co-Trustees	ORRI	1, 6, 7	13
Dutch-Irish Oil Company	ORRI	1, 6, 7	13
Matt Hinkle	ORRI	1, 6, 7	13
Rolla Hinkle, III	ORRI	1, 6, 7	13
Magnum Hunter Production Inc	ORRI	1, 6, 7	13
Curtis W Mewbourne, Trustee	ORRI	1, 6, 7	13
Conoco Phillips Company	ORRI	3	13
Centennial, a New Mexico Partnership	ORRI	3	13
Hutchings Oil Company	ORRI	3	13
Peter T. Balog, Trustee of the Balog Family Trust	ORRI	3	13
Vermego Property Investment Company	ORRI	3	13
Dan M. Leonard	LOR	3	13
Dan M. Leonard, Trustee of the DML Revocable Trust	LOR	3	13
LML Properties, LLC	LOR	3	13
Jack's Peak, LLC	LOR	3	13
Kevin K. Leonard, Trustee of the Kevin K. Leonard Child's Trust	LOR	3	13
Mark B. Murphy	LOR	3	13
Strata Production Company	LOR	3	13
Valorie F. Walker, Trustee of the Jack V. Walker Revocable Trust	LOR	3	13
Sharon Winn Scott	LOR	3	13
Worrall Investment Corporation	LOR	3	13
Mitchell Exploration Inc	LOR	3	13
Permian Basin Investment Corporation	LOR	3	13
Southwest Petroleum Land Services, LLC	LOR	3	13
Realtimezone, Inc.	LOR	3	13

Oak Valley Mineral & Land, LP	LOR	1,2,4	13
Stanley W. Light	LOR	1,2,4	13
Carlsbad National Bank Trust Department, Testamentary Trustee under the Last Will and Testament of Bradley T. Light	LOR	1,2,4	13
Curtis W. Mewbourne	LOR	1,2,4	13
OGX Royalty Fund, LP	ORI	1,2,4	13
Benny May Jenkins	LOR	1,2,4	12
James Matthew Jenkins	LOR	1,2,4	12
Leanne Jenkins Hacker	LOR	1,2,4	12
Joy Elizabeth Cooksey	LOR	1,2,4	12
James Monroe Cooksey, III	LOR	1,2,4	12
Douglas C Koch	LOR	1,2,4	12
Wayne Bissett	LOR	1,2,4	12
Andrew A Latham	LOR	1,2,4	12
Morris E. Schertz, et ux, Holly K Schertz	LOR	1,2,4	12
Larry G. Phillips et ux, Anne C. Phillips	LOR	1,2,4	12
Empire Energy LLC	LOR	1,2,4	12
New State Gas LLC	LOR	1,2,4	12
Charles Getchel Wiley, Trustee of the Charles Getchel Wiley Trust	LOR	1,2,4	12
Pegasus Resources, LLC	LOR	1,2,4	12
McMullun Minerals LLC	LOR	1,2,4	12
Ronadero Company Inc	LOR	1,2,4	12
Seaboard Oil Company	LOR	1,2,4	12
Rowan Family Minerals LLC	LOR	1,2,4	12
Cirrus Minerals, LLC	LOR	1,2,4	12
PEP II Management, LLC	LOR	1,2,4	12
BNSF Railway Company		1,2,4	12

<p>Tract 4: NW/4NW/4 Fee</p>	<p>Tract 5: NE/4NW/4 Fee</p>
<p>Tract 3: SW/4NW/4, NW/4SW/4 Fee</p>	<p>Tract 1: E/2SW/4, SE/4NW/4 of Section 12 NMNM 06104</p>
<p>Tract 2: SW/4SW/4 Fee</p>	<p>Section 12</p>
<p>Tract 7: SW/4SW/4, N/2NW/4, SE/4NW/4 Fee</p>	<p>Section 13</p>
<p>Tract 6: NMNM 088128 SW/4NW/4</p>	
	<p>Tract 1: NW/4SW/4, E/2SW/4 of Section 13 NMNM 06104</p>
<p>Tract 7: SW/4SW/4, N/2NW/4, SE/4NW/4 Fee</p>	

Cimarex Energy Co.
600 N. Marienfeld St.
Suite 600
Midland, TX 79701
Main: 432.571.7800



September 5, 2019

Tap Rock Resources
802 Park Point Drive, Suite 200
Golden, Colorado 80401

**Re: Proposal to Drill
Riverbend 12-13 Federal Com 29H-35H
W/2 of Section 12 & 13, Township 25 South, Range 28 East, Eddy County, NM**

Dear Working Interest Owner,

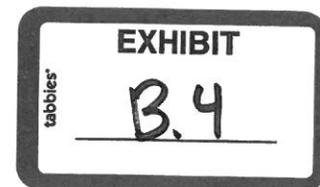
Cimarex Energy Co. previously proposed to drill the following wells in the West-half of Sections 12 & 13, Township 25 South, Range 28 East, Eddy County, NM under that certain Operating Agreement dated February 7, 2017. After review of pugh clauses in the leases contributed by one of our working interest owners, it became apparent that Tap Rock Resources owns Wolfcamp rights within this spacing unit. Details of each well now being proposed to Tap Rock are as follows:

Riverbend 12-13 Fed Com 29H - The intended surface hole location for the well is 1,379 FSL and 1,396' FWL of Section 1, Township 25 South, Range 28 East, and the intended bottom hole location is 330' FSL and 2,200' FWL of Section 13, Township 25 South, Range 28 East. The well is proposed to be drilled vertically to a depth of approximately 10,760' to the Wolfcamp formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 23,173' feet from surface to terminus.

Riverbend 12-13 Fed Com 30H - The intended surface hole location for the well is 1,379' FSL and 1,396' FWL of Section 1, Township 25 South, Range 28 East, and the intended bottom hole location is 100' FSL and 2,310' FWL of Section 13, Township 25 South, Range 28 East. The well is proposed to be drilled vertically to a depth of approximately 9,714' to the Wolfcamp formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 22,437' feet from surface to terminus.

Riverbend 12-13 Fed Com 31H - The intended surface hole location for the well is 1,439' FSL and 1,337' FWL of Section 1, Township 25 South, Range 28 East, and the intended bottom hole location is 330' FSL and 1,874' FWL of Section 13, Township 25 South, Range 28 East. The well is proposed to be drilled vertically to a depth of approximately 9,918' to the Wolfcamp formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 21,085' feet from surface to terminus.

Riverbend 12-13 Federal Com 32H - The intended surface hole location for the well is 1,439' FSL and 1,257' FWL of Section 1, Township 25 South, Range 28 East, and the intended bottom hole location is 330' FSL and 330' FWL of Section 13, Township 25 South, Range 28 East. The well is proposed to be drilled vertically to a depth of approximately 9,918' to the Wolfcamp formation and laterally in a



southerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 21,254' feet from surface to terminus.

Riverbend 12-13 Federal Com 33H - The intended surface hole location for the well is 1,439' FSL and 1,277' FWL of Section 1, Township 25 South, Range 28 East, and the intended bottom hole location is 330' FSL and 716' FWL of Section 13, Township 25 South, Range 28 East. The well is proposed to be drilled vertically to a depth of approximately 9,714' to the Wolfcamp formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 20,651' feet from surface to terminus.

Riverbend 12-13 Federal Com 34H - The intended surface hole location for the well is 1,439' FSL and 1,297' FWL of Section 1, Township 25 South, Range 28 East, and the intended bottom hole location is 330' FSL and 1,102' FWL of Section 13, Township 25 South, Range 28 East. The well is proposed to be drilled vertically to a depth of approximately 9,918' to the Wolfcamp formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 20,855' feet from surface to terminus.

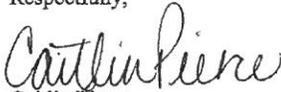
Riverbend 12-13 Federal Com 35H - The intended surface hole location for the well is 1,439' FSL and 1,317' FWL of Section 1, Township 25 South, Range 28 East, and the intended bottom hole location is 330' FSL and 1,488' FWL of Section 13, Township 25 South, Range 28 East. The well is proposed to be drilled vertically to a depth of approximately 9,714' to the Wolfcamp formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 20,651' feet from surface to terminus.

It should be understood that compliance with topography or cultural or environmental concerns, among others, might require modification of Cimarex's intended procedure. Cimarex will advise you of any such modifications.

Enclosed, in duplicate, is (i) our detailed AFEs reflecting estimated costs associated with each proposal, and; (ii) our proposed form of Operating Agreement governing operations of wells drilled in the W/2 of Sections 12 & 13, Township 25 South, Range 28 East, NMPM, Eddy County, NM. If you intend to participate, please approve and return one (1) original of the enclosed AFE, as well as the Election Form attached to this proposal, to the undersigned within 30 days of receipt of this proposal. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance to Cimarex prior to commencement of drilling operations; otherwise, you will be covered by insurance procured by Cimarex and will be responsible for your share of the cost.

If you should have any questions concerning the above, please call the undersigned at (432) 571-7862.

Respectfully,



Caitlin Pierce

Exploration Landman

**ELECTION TO PARTICIPATE
Riverbend 12-13 Federal Com 29H**

_____ Tap Rock Resources elects **TO** participate in the proposed Riverbend 12-13 Federal Com 29H well.

_____ Tap Rock Resources elects **NOT** to participate in the proposed Riverbend 12-13 Federal Com 29H well.

Dated this ____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is TO participate in the proposed Riverbend 12-13 Federal Com 29H well, then:

_____ Tap Rock Resources elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

_____ Tap Rock Resources elects **NOT** to be covered by well control insurance procured by Cimarex Energy Co. and agrees to provide Cimarex Energy Co. with a certificate of insurance prior to commencement of drilling operations or be deemed to have elected to be covered by well control insurance procured by Cimarex Energy Co.

**ELECTION TO PARTICIPATE
Riverbend 12-13 Federal Com 30H**

_____ Tap Rock Resources elects **TO** participate in the proposed Riverbend 12-13 Federal Com 30H well.

_____ Tap Rock Resources elects **NOT** to participate in the proposed Riverbend 12-13 Federal Com 30H well.

Dated this ____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is **TO** participate in the proposed Riverbend 12-13 Federal Com 30H well, then:

_____ Tap Rock Resources elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

_____ Tap Rock Resources elects **NOT** to be covered by well control insurance procured by Cimarex Energy Co. and agrees to provide Cimarex Energy Co. with a certificate of insurance prior to commencement of drilling operations **or** be deemed to have elected to be covered by well control insurance procured by Cimarex Energy Co.

**ELECTION TO PARTICIPATE
Riverbend 12-13 Federal Com 31H**

_____ Tap Rock Resources elects **TO** participate in the proposed Riverbend 12-13 Federal Com 31H well.

_____ Tap Rock Resources elects **NOT** to participate in the proposed Riverbend 12-13 Federal Com 31H well.

Dated this ____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is TO participate in the proposed Riverbend 12-13 Federal Com 31H well, then:

_____ Tap Rock Resources elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

_____ Tap Rock Resources elects **NOT** to be covered by well control insurance procured by Cimarex Energy Co. and agrees to provide Cimarex Energy Co. with a certificate of insurance prior to commencement of drilling operations or be deemed to have elected to be covered by well control insurance procured by Cimarex Energy Co.

**ELECTION TO PARTICIPATE
Riverbend 12-13 Federal Com 32H**

_____ Tap Rock Resources elects **TO** participate in the proposed Riverbend 12-13 Federal Com 32H well.

_____ Tap Rock Resources elects **NOT** to participate in the proposed Riverbend 12-13 Federal Com 32H well.

Dated this ____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is TO participate in the proposed Riverbend 12-13 Federal Com 32H well, then:

_____ Tap Rock Resources elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

_____ Tap Rock Resources elects **NOT** to be covered by well control insurance procured by Cimarex Energy Co. and agrees to provide Cimarex Energy Co. with a certificate of insurance prior to commencement of drilling operations or be deemed to have elected to be covered by well control insurance procured by Cimarex Energy Co.



**ELECTION TO PARTICIPATE
Riverbend 12-13 Federal Com 33H**

_____ Tap Rock Resources elects **TO** participate in the proposed Riverbend 12-13 Federal Com 33H well.

_____ Tap Rock Resources elects **NOT** to participate in the proposed Riverbend 12-13 Federal Com 33H well.

Dated this ____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is TO participate in the proposed Riverbend 12-13 Federal Com 33H well, then:

_____ Tap Rock Resources elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

_____ Tap Rock Resources elects **NOT** to be covered by well control insurance procured by Cimarex Energy Co. and agrees to provide Cimarex Energy Co. with a certificate of insurance prior to commencement of drilling operations or be deemed to have elected to be covered by well control insurance procured by Cimarex Energy Co.

**ELECTION TO PARTICIPATE
Riverbend 12-13 Federal Com 34H**

_____ Tap Rock Resources elects **TO** participate in the proposed Riverbend 12-13 Federal Com 34H well.

_____ Tap Rock Resources elects **NOT** to participate in the proposed Riverbend 12-13 Federal Com 34H well.

Dated this ____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is TO participate in the proposed Riverbend 12-13 Federal Com 34H well, then:

_____ Tap Rock Resources elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

_____ Tap Rock Resources elects **NOT** to be covered by well control insurance procured by Cimarex Energy Co. and agrees to provide Cimarex Energy Co. with a certificate of insurance prior to commencement of drilling operations or be deemed to have elected to be covered by well control insurance procured by Cimarex Energy Co.

**ELECTION TO PARTICIPATE
Riverbend 12-13 Federal Com 35H**

_____ Tap Rock Resources elects **TO** participate in the proposed Riverbend 12-13 Federal Com 35H well.

_____ Tap Rock Resources elects **NOT** to participate in the proposed Riverbend 12-13 Federal Com 35H well.

Dated this ____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is **TO** participate in the proposed Riverbend 12-13 Federal Com 35H well, then:

_____ Tap Rock Resources elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

_____ Tap Rock Resources elects **NOT** to be covered by well control insurance procured by Cimarex Energy Co. and agrees to provide Cimarex Energy Co. with a certificate of insurance prior to commencement of drilling operations or be deemed to have elected to be covered by well control insurance procured by Cimarex Energy Co.

- 1 • human resources
- 2 • management
- 3 • supervision not directly charged under Section II.2 (*Labor*)
- 4 • legal services not directly chargeable under Section II.9 (*Legal Expense*)
- 5 • taxation, other than those costs identified as directly chargeable under Section II.10 (*Taxes and Permits*)
- 6 • preparation and monitoring of permits and certifications; preparing regulatory reports; appearances before or meetings with
- 7 governmental agencies or other authorities having jurisdiction over the Joint Property, other than On-site inspections; reviewing,
- 8 interpreting, or submitting comments on or lobbying with respect to Laws or proposed Laws.
- 9

10 Overhead charges shall include the salaries or wages plus applicable payroll burdens, benefits, and Personal Expenses of personnel performing
11 overhead functions, as well as office and other related expenses of overhead functions.

12
13 **1. OVERHEAD—DRILLING AND PRODUCING OPERATIONS**

14
15 As compensation for costs incurred but not chargeable under Section II (*Direct Charges*) and not covered by other provisions of this
16 Section III, the Operator shall charge on either:

- 17
- 18 (Alternative 1) Fixed Rate Basis, Section III.1.B.
- 19 (Alternative 2) Percentage Basis, Section III.1.C.
- 20

21 **A. TECHNICAL SERVICES**

22
23 (i) Except as otherwise provided in Section II.13 (*Ecological, Environmental, and Safety*) and Section III.2 (*Overhead – Major*
24 *Construction and Catastrophe*), or by approval of the Parties pursuant to Section I.6.A (*General Matters*), the salaries, wages,
25 related payroll burdens and benefits, and Personal Expenses for **On-site** Technical Services, including third party Technical
26 Services:

- 27
- 28 (Alternative 1 – Direct) shall be charged direct to the Joint Account.
- 29
- 30 (Alternative 2 – Overhead) shall be covered by the overhead rates.
- 31

32 (ii) Except as otherwise provided in Section II.13 (*Ecological, Environmental, and Safety*) and Section III.2 (*Overhead – Major*
33 *Construction and Catastrophe*), or by approval of the Parties pursuant to Section I.6.A (*General Matters*), the salaries, wages,
34 related payroll burdens and benefits, and Personal Expenses for **Off-site** Technical Services, including third party Technical
35 Services:

- 36
- 37 (Alternative 1 – All Overhead) shall be covered by the overhead rates.
- 38
- 39 (Alternative 2 – All Direct) shall be charged direct to the Joint Account.
- 40
- 41 (Alternative 3 – Drilling Direct) shall be charged direct to the Joint Account, only to the extent such Technical Services
42 are directly attributable to drilling, re-drilling, deepening, or sidetracking operations, through completion, temporary
43 abandonment, or abandonment if a dry hole. Off-site Technical Services for all other operations, including workover,
44 recompletion, abandonment of producing wells, and the construction or expansion of fixed assets not covered by Section
45 III.2 (*Overhead - Major Construction and Catastrophe*) shall be covered by the overhead rates.
- 46

47 Notwithstanding anything to the contrary in this Section III, Technical Services provided by Operator's Affiliates are subject to limitations
48 set forth in Section II.7 (*Affiliates*). Charges for Technical personnel performing non-technical work shall not be governed by this Section
49 III.1.A, but instead governed by other provisions of this Accounting Procedure relating to the type of work being performed.

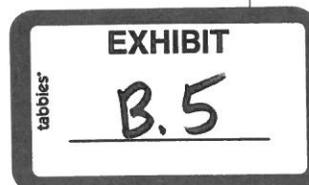
50
51 **B. OVERHEAD—FIXED RATE BASIS**

52
53 (1) The Operator shall charge the Joint Account at the following rates per well per month:

- 54
- 55 Drilling Well Rate per month \$ 6,500.00 (prorated for less than a full month)
- 56
- 57 Producing Well Rate per month \$ 650.00
- 58

59 (2) Application of Overhead—Drilling Well Rate shall be as follows:

- 60
- 61 (a) Charges for onshore drilling wells shall begin on the spud date and terminate on the date the drilling and/or completion
62 equipment used on the well is released, whichever occurs later. Charges for offshore and inland waters drilling wells shall
63 begin on the date the drilling or completion equipment arrives on location and terminate on the date the drilling or completion
64 equipment moves off location, or is released, whichever occurs first. No charge shall be made during suspension of drilling
65 and/or completion operations for fifteen (15) or more consecutive calendar days.
- 66





Authorization For Expenditure Drilling

AFE # 2617071

Company Entity
Magnum Hunter Production Inc (430)

Date Prepared
9/5/2019

Exploration Region Permian Basin	Well Name RIVERBEND 12-13 FEDERAL COM 29H	Prospect Carlsbad Bone Spring Prospect	Property Number 300001-049.01	AFE 2617071
County, State Eddy, NM	Location E/2 of Sections 12 & 13, Township 25 South, Range 28 East, Eddy County, New Mexico	Estimated Spud 7/15/2017	Estimated Completion 11/17/2018	
<input type="checkbox"/> New <input type="checkbox"/> Supplement <input checked="" type="checkbox"/> Revision	Formation Wolfcamp	Well Type DEV	Ttl Measured Depth 21,061	Ttl Vertical Depth 10,750

Purpose Devon into Canaan, CWPLCO into Clayton Williams, Jr

Description

Drilling Drill and complete a horizontal test. Drill to 450', set water string casing. Drill to 2665', set surface casing. Drill to 10200' (KOP). Drill curve at 12°/100' initial build rate to +/- 75 degrees and set casing at +/- 10825' MD. Finish curve at +/- 4°/100' to +/- 10710' TVD and drill a +/- 9510' long lateral in the Wolfcamp formation. Run and cement production liner. Stage frac in stages. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$3,003,000		\$3,003,000
Completion Costs		\$7,878,750	\$7,878,750
Total Intangible Cost	\$3,003,000	\$7,878,750	\$10,881,750
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Tangible - Well Equipment	\$479,000	\$525,000	\$1,004,000
Tangible - Lease Equipment		\$1,142,250	\$1,142,250
Total Tangible Cost	\$479,000	\$1,667,250	\$2,146,250
Total Well Cost	\$3,482,000	\$9,546,000	\$13,028,000

Comments On Well Costs

- All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

9/5/2019





Description	BCP - Drilling		ACF - Drilling		Comp/ Stim		Production Equip		Post Completion		Total	Cost
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount		
Damages	DIDC.105				STIM.100				PCOM.100		0	0
Mud/Fluids Disposal	DIDC.255				STIM.255				PCOM.255		0	0
Day Rate	DIDC.115		DICC.120								0	0
Misc Preparation	DIDC.120										0	0
Bits	DIDC.125		DICC.125		STIM.125				PCOM.125		0	0
Fuel	DIDC.135		DICC.130						PCOM.130		0	0
Water for Drilling Rig (Hot Frac Water)	DIDC.140		DICC.135		STIM.135				PCOM.135		0	0
Mud & Additives	DIDC.145										0	0
SWD PIPED TO XEC SWD WELL									PCOM.254		0	0
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257		0	0
SWD HAULED TO XEC SWD WELL									PCOM.258		0	0
SWD HAULED TO 3RD PARTY SWD WELL									PCOM.259		0	0
Surface Rentals	DIDC.150		DICC.140		STIM.140		CON.140		PCOM.140		0	0
Flowback Labor					STIM.141				PCOM.141		0	0
Downhole Rentals	DIDC.155				STIM.145				PCOM.145		0	0
Automation Labor							CON.150		PCOM.150		0	0
Formation Evaluation (DST, Coring, etc.)	DIDC.160				STIM.150						0	0
Mud Logging	DIDC.170										0	0
Open Hole Logging	DIDC.180										0	0
Cementing & Fixat Equipment	DIDC.185		DICC.155								0	0
Tubular Inspections	DIDC.190		DICC.160		STIM.160				PCOM.160		0	0
Casing Crews	DIDC.185		DICC.165		STIM.165						0	0
Mechanical Labor	DIDC.200		DICC.170		STIM.170		CON.170		PCOM.170		0	0
Trucking/Transportation	DIDC.205		DICC.175		STIM.175		CON.175		PCOM.175		0	0
Supervision	DIDC.210		DICC.180		STIM.180		CON.180		PCOM.180		0	0
Trailer House/Camp/Catering	DIDC.280		DICC.255		STIM.280						0	0
Other Misc Expenses	DIDC.230		DICC.190		STIM.190		CON.190		PCOM.190		0	0
Overhead	DIDC.235		DICC.195								0	0
Remedial Cementing	DIDC.231				STIM.215				PCOM.215		0	0
MOB/DEMOB	DIDC.240										0	0
Directional Drilling Services	DIDC.245										0	0
Solids Control	DIDC.260										0	0
Well Control Equip (Snubbing Services)	DIDC.265		DICC.240		STIM.240				PCOM.240		0	0
Piping & Siderack Services	DIDC.270		DICC.245		STIM.245				PCOM.245		0	0
Completion Rig					STIM.115				PCOM.115		0	0
Casb Tubing Services					STIM.260				PCOM.260		0	0
Completion Logging/Perforating/Wireline					STIM.200				PCOM.200		0	0
Composital Pumps					STIM.390				PCOM.390		0	0
Stimulation Pumping/Chemicals/Additives/Sand					STIM.210				PCOM.210		0	0
Stimulation Water/Water Transfer/Water Storage					STIM.395						0	0
Cinatrex Owned Frac/Rental Equipment					STIM.305				PCOM.305		0	0
Legal/Regulatory/Curative	DIDC.300						CON.300				0	0
Well Control Insurance	DIDC.285										0	0
Major Construction Overhead							CON.305	0			0	0
Real Time Operations Center	DIDC.560				STIM.560						0	0
FLUGL - Labor							CON.500				0	0
FLUGL - Supervision							CON.505				0	0
Survey							CON.515				0	0
SWD/Other - Labor							CON.600				0	0
SWD/OTHER - SUPERVISION							CON.605				0	0
Contingency	DIDC.435		DICC.220		STIM.220		CON.220		PCOM.220		0	0
Contingency							CON.221				0	0
P&A Costs	DIDC.295		DICC.275								0	0
Total Intangible Cost												0
Drive Pipe	DWEA.130										0	0
Conductor Pipe	DWEA.130										0	0
Water String	DWEA.135										0	0
Surface Casing	DWEA.140										0	0
Intermediate Casing 1	DWEA.145										0	0
Intermediate Casing 2	DWEA.155										0	0
Drilling Liner	DWEA.160										0	0
Production Casing or Liner			DWEA.100								0	0
Production Tie-Back			DWEA.165		STIMT.101						0	0
Tubing					STIMT.105				PCOMT.105		0	0
Wellhead, Tree, Chokes	DWEA.115		DWEA.120		STIMT.120				PCOMT.120		0	0
Liner Hanger, Isolation Packer	DWEA.100		DWEA.125								0	0
Packer, Nipples					STIMT.400				PCOMT.400		0	0
Pumping Unit, Engine					STIMT.405				PCOMT.405		0	0
Downhole Lift Equipment					STIMT.410				PCOMT.410		0	0
Surface Equipment									PCOMT.420		0	0
Well Automation Materials									PCOMT.455		0	0
Total Tangible - Well Equipment Cost												0
N/C Lease Equipment							CONT.400				0	0
Tanks, Tanks Steps Stairs							CONT.405				0	0
Battery Equipment							CONT.410				0	0
Secondary Containment							CONT.415				0	0
Facility Electrical							CONT.420				0	0
Facility Electrical							CONT.425				0	0
Telecommunication Equipment							CONT.430				0	0
Meters and Metering Equipment							CONT.445				0	0
Facility Line Pipe							CONT.450				0	0
Lease Automation Materials							CONT.455				0	0
FLUGL - Materials							CONT.550				0	0
FLUGL - Line Pipe							CONT.555				0	0
SWD/Other - Materials							CONT.650				0	0
SWD/OTHER - LINE PIPE							CONT.655				0	0
Total Tangible - Lease Equipment Cost												0
Total Estimated Cost												0



Description	Codes	BCP - Drilling		ACP - Drilling		Codes	Comp/Stim	Amount
		Amount	Codes	Amount	Codes			
Roads & Location	DICC.100					STIM.100		
Damages	DICC.105							
Mud/Fluids Disposal	DICC.255					STIM.255		
Day Rate	DICC.115		DICC.120					
Misc Preparation	DICC.130							
Bits	DICC.125		DICC.125			STIM.125		
Fuel	DICC.135		DICC.130					
Water for Drilling Rig (Not Frac Water)	DICC.140		DICC.135			STIM.135		
Mud & Additives	DICC.145							
SWD PIPED TO XEC SWD WELL								
SWD PIPED TO 3RD PARTY SWD WELL								
SWD HAULED TO XEC SWD WELL								
SWD HAULED TO 3RD PARTY SWD WELL								
Surface Rentals	DICC.150		DICC.140			STIM.140		
Flowback Labor						STIM.141		
Downhole Rentals	DICC.155					STIM.145		
Automation Labor								
Formation Evaluation (DST, Coring, etc.)	DICC.160					STIM.150		
Mud Logging	DICC.170							
Open Hole Logging	DICC.180							
Cementing & Float Equipment	DICC.185		DICC.155			STIM.150		
Tubular Inspections	DICC.190		DICC.160			STIM.155		
Casing Crews	DICC.195		DICC.165			STIM.170		
Mechanical Labor	DICC.200		DICC.170			STIM.175		
Trucking/Transportation	DICC.205		DICC.175			STIM.180		
Supervision	DICC.210		DICC.180			STIM.280		
Trailer House/Camp/Catering	DICC.280		DICC.255			STIM.190		
Other Misc Expenses	DICC.220		DICC.190					
Overhead	DICC.225		DICC.195					
Remedial Cementing	DICC.231					STIM.215		
MOB/DBAOB	DICC.240							
Directional Drilling Services	DICC.245							
Solids Control	DICC.260		DICC.240			STIM.240		
Well Control Equip (Shrubbing Services)	DICC.265		DICC.245			STIM.245		
Fishing & Sidetrack Services	DICC.270					STIM.115		
Completion Rig						STIM.260		
Coil Tubing Services						STIM.200		
Completion Logging/Perforating/Wireline						STIM.390		
Composite Plugs						STIM.270		
Stimulation						STIM.395		
Stimulation Water/Water Transfer/Water						STIM.305		
Cimarex Owned Frac/Rental Equipment								
Legal/Regulatory/Consulting	DICC.300							
Well Control Insurance	DICC.295							
Major Construction Overhead								
Real Time Operations Center	DICC.560					STIM.560		
FL/GI - Labor								
FL/GI - Supervision								
Survey								
SWD/Other - Labor								
SWD/OTHER - SUPERVISION								
Contingency	DICC.435		DICC.220			STIM.220		
Contingency								
P&A Costs	DICC.295		DICC.275					
Total Intangible Cost								
Dive Pipe	DWEB.150							
Conductor Pipe	DWEB.130							
Water String	DWEB.135							
Surface Casing	DWEB.140							
Intermediate Casing 1	DWEB.145							
Intermediate Casing 2	DWEB.155							
Drilling Liner	DWEB.160							
Production Casing or Liner			DWEA.100					
Production Tie-back			DWEA.105			STIMT.101		
Tubing						STIMT.105		
Wellhead, Tree, Chokes	DWEB.115		DWEA.120			STIMT.120		
Liner Hanger, Isolation Packer	DWEB.100		DWEA.125			STIMT.400		
Packer, Nipples						STIMT.405		
Pumping Unit, Engine						STIMT.410		
Downhole Lift Equipment								
Surface Equipment								
Well Automation Materials								
Total Tangible - Well Equipment Cost								
N/C Lease Equipment								
Tanks, Tanks Steps, Stairs								
Battery Equipment								
Secondary Containment								
Overhead Power Distribution								
Facility Electrical								
Telecommunication Equipment								
Meters and Metering Equipment								
Facility Line Pipe								
Lease Automation Materials								
FL/GL - Materials								
FL/GL - Line Pipe								
SWD/Other - Materials								
SWD/OTHER - LINE PIPE								
Total Tangible - Lease Equipment Cost								
Total Estimated Cost								



Description	Production Equip		Post Completion		Total
	Code	Amount	Code	Amount	
Roads & Location	CON.100		PCOM.100		0
Damages	CON.105				0
Mud/Fluids Disposal			PCOM.235		0
Day Rate					0
Misc Preparation					0
Bits			PCOM.123		0
Fuel			PCOM.130		0
Water for Drilling Rig (Not Frac Water)			PCOM.133		0
Mod & Additives					0
SWD RPIED TO XEC SWD WELL			PCOM.254		0
SWD RPIED TO 3RD PARTY SWD WELL			PCOM.237		0
SWD HAULED TO XEC SWD WELL			PCOM.258		0
SWD HAULED TO 3RD PARTY SWD WELL			PCOM.259		0
Surface Rentals	CON.140		PCOM.140		0
Flowback Labor			PCOM.141		0
Downhole Rentals			PCOM.145		0
Automation Labor	CON.150		PCOM.150		0
Formation Evaluation (DST, Coring, etc.)					0
Mud Logging					0
Open Hole Logging					0
Cementing & Flow Equipment					0
Tubular Inspections			PCOM.160		0
Casing Crews					0
Mechanical Labor	CON.170		PCOM.170		0
Trucking/Transportation	CON.175		PCOM.175		0
Supervision	CON.180		PCOM.180		0
Trailer House/Camp/Catering					0
Other Misc Expenses	CON.190		PCOM.190		0
Overhead					0
Remedial Cementing			PCOM.215		0
MOB/DBMOB					0
Directional Drilling Services					0
Salts Control					0
Well Control Equip (Brushing Services)			PCOM.240		0
Fishing & Sidetrack Services			PCOM.245		0
Completion Rig			PCOM.115		0
Coil Tubing Services			PCOM.260		0
Completion Logging/Perforating/Wireline			PCOM.200		0
Composite Plugs			PCOM.390		0
Stimulation Pumping/Chemicals/Additives/Sand			PCOM.210		0
Stimulation Water/Water Transfer/Water Storage					0
Cimarex Owned Frac/Rental Equipment			PCOM.305		0
Legal/Regulatory/Curtive	CON.300				0
Well Control Insurance					0
Major Construction Overhead	CON.305	0			0
Real Time Operations Center					0
FL/GI - Labor	CON.500				0
FL/GI - Supervision	CON.505				0
Survey	CON.515				0
SWD/Other - Labor	CON.600				0
SWD/OTHER - SUPERVISION	CON.605				0
Contingency	CON.220		PCOM.220		0
Contingency	CON.221				0
ABA Costs					0
Total Intangible Cost		0			0
Drill Pipe					0
Conductor Pipe					0
Water Sizing					0
Surface Casing					0
Intermediate Casing 1					0
Intermediate Casing 2					0
Drilling Liner					0
Production Casing or Liner					0
Production Tie-Back			PCOMT.105		0
Tubing			PCOMT.120		0
Wellhead, Tree, Chokes					0
Liner Hanger, Isolation Packer			PCOMT.400		0
Packer, Nipples			PCOMT.405		0
Pumping Unit, Engine			PCOMT.410		0
Downhole Lift Equipment			PCOMT.420		0
Surface Equipment			PCOMT.455		0
Well Automation Materials					0
Total Tangible - Well Equipment Cost					0
N/C Lease Equipment	CONT.400				0
Tanks, Tanks Steps, Stairs	CONT.405				0
Battery Equipment	CONT.410				0
Secondary Containment	CONT.415				0
Overhead Power Distribution	CONT.420				0
Facility Electrical	CONT.425				0
Telecommunication Equipment	CONT.430				0
Meters and Metering Equipment	CONT.435				0
Facility Line Pipe	CONT.450				0
Lease Automation Materials	CONT.455				0
FL/GI - Materials	CONT.550				0
FL/GI - Line Pipe	CONT.555				0
SWD/Other - Materials	CONT.650				0
SWD/OTHER - LINE PIPE	CONT.655				0
Total Tangible - Lease Equipment Cost					0
Total Estimated Cost		0			0



Company Entity

Magnum Hunter Production Inc (430)

Date Prepared

9/5/2019

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	RIVERBEND 12-13 FEDERAL COM 30H	Carlsbad Bone Spring Prospect	300001-067.01	26618050
County, State	Location	Estimated Spud	Estimated Completion	
Eddy, NM	W/2 of Sections 12 & 13, Township 25 South, Range 28 East, Eddy County, New Mexico	7/2/2018	11/15/2018	
<input type="checkbox"/> New Supplement	Formation	Well Type	Ttl Measured Depth	Ttl Vertical Depth
<input checked="" type="checkbox"/> Revision	Wolfcamp	DEV	20,177	9,750

Purpose Canaan into Devon, CWPLCO into Clayton Williams, Jr

Description

Drilling Drill and complete a horizontal test. Drill to 450', set water string casing. Drill to 2665', set surface casing. Drill to 9240' (KOP). Drill curve at 12°/100' initial build rate to +/- 75 degrees and set casing at +/- 9865' MD. Finish curve at +/- 4°/100' to +/- 9750' TVD and drill a +/- 9180' long lateral in the Wolfcamp formation. Run and cement production liner. Stage frac in stages. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,539,000		\$2,539,000
Completion Costs		\$7,699,750	\$7,699,750
Total Intangible Cost	\$2,539,000	\$7,699,750	\$10,238,750
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Tangible - Well Equipment	\$449,000	\$523,000	\$972,000
Tangible - Lease Equipment		\$1,142,250	\$1,142,250
Total Tangible Cost	\$449,000	\$1,665,250	\$2,114,250
Total Well Cost	\$2,988,000	\$9,365,000	\$12,353,000

Comments On Well Costs

- All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefor. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

Comments on AFE

The above costs are estimates only and anticipate trouble-free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

9/5/2019



Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	
Roads & Location	DIDC.100				STIM.100		CON.100		PCOM.100		0
Damages	DIDC.105						CON.105				0
Mud/Fluids Disposal	DIDC.255				STIM.255				PCOM.255		0
Day Rate	DIDC.115		DICC.120								0
Misc Preparation	DIDC.120										0
Bits	DIDC.125		DICC.125		STIM.125				PCOM.125		0
Fuel	DIDC.135		DICC.130						PCOM.130		0
Water for Drilling Rig (Not Frac Water)	DIDC.140		DICC.135		STIM.135				PCOM.135		0
Mud & Additives	DIDC.145										0
SWD PIPED TO XEC SWD WELL									PCOM.254		0
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257		0
SWD HAULED TO XEC SWD WELL									PCOM.258		0
SWD HAULED TO 3RD PARTY SWD WELL									PCOM.259		0
Surface Rentals	DIDC.150		DICC.140		STIM.140		CON.140		PCOM.140		0
Flowback Labor					STIM.141				PCOM.141		0
Downhole Rentals	DIDC.155				STIM.145				PCOM.145		0
Automation Labor							CON.150		PCOM.150		0
Formation Evaluation (DST, Coring, etc.)	DIDC.160				STIM.150						0
Mud Logging	DIDC.170										0
Open Hole Logging	DIDC.180										0
Cementing & Float Equipment	DIDC.185		DICC.155								0
Tubular Inspections	DIDC.190		DICC.160		STIM.160				PCOM.160		0
Casing Crews	DIDC.195		DICC.165		STIM.165						0
Mechanical Labor	DIDC.200		DICC.170		STIM.170		CON.170		PCOM.170		0
Trucking/Transportation	DIDC.205		DICC.175		STIM.175		CON.175		PCOM.175		0
Supervision	DIDC.210		DICC.180		STIM.180		CON.180		PCOM.180		0
Trailer House/Camp/Catering	DIDC.280		DICC.255		STIM.280						0
Other Misc Expenses	DIDC.220		DICC.190		STIM.190		CON.190		PCOM.190		0
Overhead	DIDC.225		DICC.195								0
Remedial Cementing	DIDC.231				STIM.215				PCOM.215		0
MOB/DENOB	DIDC.240										0
Directional Drilling Services	DIDC.245										0
Solids Control	DIDC.260										0
Well Control Equip (Snubbing Services)	DIDC.265		DICC.240		STIM.240				PCOM.240		0
Fishing & Siderack Services	DIDC.270		DICC.245		STIM.245				PCOM.245		0
Completion Rig					STIM.115				PCOM.115		0
Coil Tubing Services					STIM.260				PCOM.260		0
Completion Logging/Perforating/Wireline					STIM.200				PCOM.200		0
Composite Plugs					STIM.390				PCOM.390		0
Stimulation Pumping/Chemicals/Additives/Sand					STIM.210				PCOM.210		0
Stimulation Water/Water Transfer/Water Storage					STIM.385						0
Gimrex Owned Frac/Rental Equipment					STIM.305				PCOM.305		0
Legal/Regulatory/Curative	DIDC.200						CON.300				0
Well Control Insurance	DIDC.285										0
Major Construction Overhead							CON.305	0			0
Real Time Operations Center	DIDC.560				STIM.560						0
FLUGL - Labor							CON.500				0
FLUGL - Supervision							CON.505				0
Survey							CON.515				0
SWD/Other - Labor							CON.600				0
SWD/OTHER - SUPERVISION							CON.605				0
Contingency	DIDC.435		DICC.220		STIM.220		CON.220		PCOM.220		0
Contingency							CON.221				0
P&A Costs	DIDC.255		DICC.275								0
Total Intangible Cost								0			0
Dive Pipe	DWEI.150										0
Conductor Pipe	DWEI.130										0
Water String	DWEI.135										0
Surface Casing	DWEI.140										0
Intermediate Casing 1	DWEI.145										0
Intermediate Casing 2	DWEI.155										0
Drilling Liner	DWEI.160										0
Production Casing or Liner			DWEA.100								0
Production Tie-Backs			DWEA.165		STIMT.101						0
Tubing					STIMT.105				PCOMT.105		0
Wellhead, Tree, Chokes	DWEI.115		DWEA.120		STIMT.120				PCOMT.120		0
Liner Hanger, Isolation Packer	DWEI.100		DWEA.125								0
Packer, Nipples					STIMT.400				PCOMT.400		0
Pumping Unit, Engine					STIMT.405				PCOMT.405		0
Downhole Lift Equipment					STIMT.410				PCOMT.410		0
Surface Equipment									PCOMT.420		0
Well Automation Materials									PCOMT.455		0
Total Tangible - Well Equipment Cost											0
N/C Lease Equipment							CONT.400				0
Tanks, Tanks Steps, Stairs							CONT.405				0
Battery Equipment							CONT.410				0
Secondary Containments							CONT.415				0
Overhead Power Distribution							CONT.420				0
Facility Electrical							CONT.425				0
Telecommunication Equipment							CONT.430				0
Meters and Metering Equipment							CONT.435				0
Facility Line Pipe							CONT.440				0
Lease Automation Materials							CONT.445				0
FLUGL - Materials							CONT.450				0
FLUGL - Line Pipe							CONT.455				0
SWD/Other - Materials							CONT.550				0
SWD/OTHER - LINE PIPE							CONT.555				0
SWD/OTHER - LINE PIPE							CONT.650				0
SWD/OTHER - LINE PIPE							CONT.655				0
Total Tangible - Lease Equipment Cost											0
Total Estimated Cost								0			0



Description	BCP - Drilling		ACP - Drilling		Comp/Stim	
	Codes	Amount	Codes	Amount	Codes	Amount
Roads & Location	DIDC.100				STIM.190	
Damages	DIDC.105					
Mud/Fluids Disposal	DIDC.255				STIM.255	
Day Rate	DIDC.115		DICC.120			
Misc Preparation	DIDC.120					
Bits	DIDC.125		DICC.125		STIM.125	
Fuel	DIDC.135		DICC.130			
Water for Drilling Rig (Not Frac Water)	DIDC.140		DICC.135		STIM.135	
Mud & Additives	DIDC.145					
SWD PIPED TO XSC SWD WELL						
SWD PIPED TO 3RD PARTY SWD WELL						
SWD HAULED TO XSC SWD WELL						
SWD HAULED TO 3RD PARTY SWD WELL						
Surface Rentals	DIDC.130		DICC.140		STIM.140	
Flowback Labor					STIM.141	
Downhole Rentals	DIDC.155				STIM.145	
Automation Labor						
Formation Evaluation (DST, Coring, etc.)	DIDC.160				STIM.150	
Mud Logging	DIDC.170					
Open Hole Logging	DIDC.180					
Cementing & Float Equipment	DIDC.185		DICC.155			
Tubular Inspections	DIDC.190		DICC.160		STIM.160	
Casing Crews	DIDC.195		DICC.165		STIM.165	
Mechanical Labor	DIDC.200		DICC.170		STIM.170	
Trucking/Transportation	DIDC.205		DICC.175		STIM.175	
Supervision	DIDC.210		DICC.180		STIM.180	
Trailer House/Camps/Casings	DIDC.280		DICC.255		STIM.280	
Other Misc Expenses	DIDC.220		DICC.190		STIM.190	
Overhead	DIDC.225		DICC.195			
Remedial Cementing	DIDC.231				STIM.215	
MGB/DEMOS	DIDC.240					
Directional Drilling Services	DIDC.245					
Solids Control	DIDC.280					
Well Control Equip (Shubbing Services)	DIDC.265		DICC.240		STIM.240	
Fishing & Sidetrack Services	DIDC.270		DICC.245		STIM.245	
Completion Rig					STIM.115	
Oil Tubing Services					STIM.260	
Completion Logging/Perforating/Wireline					STIM.200	
Composite Plugs					STIM.390	
Stimulation					STIM.210	
Stimulation Water/Water Transfer/Water					STIM.855	
Owner Owned Frac/Rental Equipment					STIM.305	
Legal/Regulatory/Curtive	DIDC.300					
Well Control Insurance	DIDC.285					
Major Construction Overhead						
Real Time Operations Center	DIDC.560				STIM.560	
FL/GI - Labor						
FL/GI - Supervision						
Survey						
SWD/Other - Labor						
SWD/OTHER - SUPERVISION						
Contingency	DIDC.435		DICC.220		STIM.220	
Contingency						
P&A Costs	DIDC.285		DICC.275			
Total Intangible Cost						
Drive Pipe	DWEB.150					
Conductor Pipe	DWEB.130					
Water String	DWEB.135					
Surface Casing	DWEB.140					
Intermediate Casing 1	DWEB.145					
Intermediate Casing 2	DWEB.155					
Drilling Liner	DWEB.160					
Production Casing or Liner			DWEA.100			
Production Tie-back			DWEA.165		STIMT.101	
Tubing					STIMT.105	
Wellhead, Tree, Chokes	DWEB.115		DWEA.120		STIMT.120	
Liner Hanger, Isolation Packer	DWEB.100		DWEA.125			
Packer, Nipples					STIMT.400	
Pumping Unit, Engine					STIMT.405	
Downhole Lift Equipment					STIMT.410	
Surface Equipment						
Well Automation Materials						
Total Tangible - Well Equipment Cost						
N/C Lease Equipment						
Tents, Tanks, Steps, Stairs						
Battery Equipment						
Secondary Commitments						
Overhead Power Distribution						
Facility Electrical						
Telecommunication Equipment						
Meters and Metering Equipment						
Facility Line Pipe						
Lease Automation Materials						
FL/GI - Materials						
FL/GI - Line Pipe						
SWD/Other - Materials						
SWD/OTHER - LINE PIPE						
Total Tangible - Lease Equipment Cost						
Total Estimated Cost						



Description	Production Equip		Post Completion		Total
	Codes	Amount	Codes	Amount	
Roads & Location	CON100		PCOM100		0
Damages	CON105				0
Mud/Fluids Disposal			PCOM255		0
Day Rate					0
Misc Preparation					0
Bits			PCOM125		0
Fuel			PCOM130		0
Water for Drilling Rig (Net Frac Water)			PCOM135		0
Mud & Additives					0
SWD PIPED TO XEC SWD WELL			PCOM254		0
SWD PIPED TO 3RD PARTY SWD WELL			PCOM257		0
SWD HAULED TO XEC SWD WELL			PCOM258		0
SWD HAULED TO 3RD PARTY SWD WELL			PCOM259		0
Surface Rentals	CON140		PCOM140		0
Flowback Labor			PCOM141		0
Downhole Rentals			PCOM145		0
Automation Labor	CON150		PCOM150		0
Formation Evaluation (DST, Coring, etc)					0
Mud Logging					0
Open Hole Logging					0
Cementing & Float Equipment					0
Tubular Inspections			PCOM160		0
Casing Crews					0
Mechanical Labor	CON170		PCOM170		0
Trucking/Transportation	CON175		PCOM175		0
Supervision	CON180		PCOM180		0
Trailer House/Camp/Catering					0
Other Misc Expenses	CON190		PCOM190		0
Overhead					0
Remedial Cementing			PCOM215		0
MCS/DIMCS					0
Directional Drilling Services					0
Solids Control					0
Well Control Equip (Shubbing Services)			PCOM240		0
Fishing & Sidetrack Services			PCOM245		0
Completion Rig			PCOM115		0
Coil Tubing Services			PCOM260		0
Completion Logging/Perforating/Wireline			PCOM200		0
Composite Plugs			PCOM390		0
Simulation Pumping/Chemicals/Additives/Sand			PCOM210		0
Simulation Water/Water Transfer/Water Storage					0
Cimarex Owned Frac/Rental Equipment			PCOM305		0
Legal/Regulatory/Curtive	CON300				0
Well Control Insurance					0
Major Construction Overhead	CON305	0			0
Real Time Operations Center					0
FL/GI - Labor	CON500				0
FL/GI - Supervision	CON505				0
Survey	CON515				0
SWD/Other - Labor	CON600				0
SWD/OTHER - SUPERVISION	CON605				0
Contingency	CON220		PCOM220		0
Contingency	CON221				0
PSIA Costs					0
Total Intangible Cost		0			0
Drive Pipe					0
Conductor Pipe					0
Water String					0
Surface Casing					0
Intermediate Casing 1					0
Intermediate Casing 2					0
Drilling Liner					0
Production Casing or Liner					0
Production Tie-Back					0
Tubing			PCOMT105		0
Wellhead, Tree, Chokes			PCOMT120		0
Liner Hanger, Isolation Packer					0
Packer, Nipples			PCOMT400		0
Pumping Unit, Engine			PCOMT405		0
Downhole Lift Equipment			PCOMT410		0
Surface Equipment			PCOMT420		0
Well Automation Materials			PCOMT455		0
Total Tangible - Well Equipment Cost					0
NAC Lease Equipment	CONT400				0
Tanks, Tanks Steps, Scales	CONT405				0
Battery Equipment	CONT410				0
Secondary Containments	CONT415				0
Overhead Power Distribution	CONT420				0
Facility Electrical	CONT425				0
Telecommunication Equipment	CONT426				0
Meters and Metering Equipment	CONT445				0
Facility Line Pipe	CONT450				0
Lease Automation Materials	CONT455				0
FL/GI - Materials	CONT550				0
FL/GI - Line Pipe	CONT555				0
SWD/Other - Materials	CONT650				0
SWD/OTHER - LINE PIPE	CONT655				0
Total Tangible - Lease Equipment Cost					0
Total Estimated Cost		0			0



Company Entity

Date Prepared
9/5/2019

Exploration Region Permian Basin	Well Name RVERBEND 12-13 FEDERAL COM 31H Carlsbad Bone Spring Prospect	Prospect	Property Number 300001-140.01	AFE 26620017
County, State Eddy, NM	Location W/2 of Sections 12 & 13, Township 25 South, Range 28 East, Eddy County, NM		Estimated Spud 7/15/2019	Estimated Completion 8/15/2019
<input checked="" type="checkbox"/> New <input type="checkbox"/> Supplement <input type="checkbox"/> Revision	Formation Wolfcamp	Well Type DEV	Ttl Measured Depth 21,085	Ttl Vertical Depth 9,918

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 400', set water string casing. Drill to 2566', set surface casing. Drill to 9408' (KOP). Drill curve at 12°/100' initial build rate to +/- 75 degrees and set casing at +/- 10033' MD. Finish curve at +/- 4°/100' to +/- 9920' TVD and drill a +/- 9740' long lateral in the Wolfcamp formation. Run and cement production liner. Stage frac. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,785,000		\$2,785,000
Completion Costs		\$6,825,500	\$6,825,500
Total Intangible Cost	\$2,785,000	\$6,825,500	\$9,610,500
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	\$409,000	\$544,000	\$953,000
Lease Equipment		\$685,500	\$685,500
Total Tangible Cost	\$409,000	\$1,229,500	\$1,638,500
Total Well Cost	\$3,194,000	\$8,055,000	\$11,249,000

Comments On Well Costs

1. All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

Well Control Insurance

Unless otherwise Indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

9/5/2019



Description	ACP - Drilling		ACP - Drilling		Comp/Slam		Production Equip		Post Completion		Total	
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost	
Roads & Location	DIC100	25,000			STIM100	10,000	CON100	3,000	PCOM100	10,000		48,000
Damages	DIC105	6,000					CON105	4,000				10,000
Mud/Fluids Disposal	DIC255	160,000			STIM255	62,000			PCOM255	252,000		474,000
Day Rate	DIC115	618,000	DICC120	104,000								722,000
Misc Preparation	DIC120	35,000										35,000
Bits	DIC125	75,000	DICC125	0	STIM125	0			PCOM125	0		75,000
Fuel	DIC135	108,000	DICC130	0					PCOM130	0		108,000
Water for Drilling Rig (Not Frac Water)	DIC140	5,000	DICC135	0	STIM135	24,000			PCOM135	0		29,000
Mud & Additives	DIC145	198,000							PCOM254	0		198,000
SWD PIPED TO XEC SWD WELL									PCOM257	0		0
SWD PIPED TO 3RD PARTY SWD WELL									PCOM258	0		0
SWD HAULED TO XEC SWD WELL									PCOM259	0		0
SWD HAULED TO 3RD PARTY SWD WELL												0
Surface Rentals	DIC150	131,000	DICC140	0	STIM140	237,000	CON140	1,500	PCOM140	45,000		414,500
Downhole Rentals	DIC155	177,000			STIM145	0			PCOM145	0		177,000
Flowback Labor					STIM141	0			PCOM141	33,000		33,000
Automation Labor							CON150	45,000	PCOM150	0		45,000
Formation Evaluation (DST, Coring, etc.)	DIC160	0			STIM150	0						0
Mud Logging	DIC170	27,000										27,000
Open Hole Logging	DIC180	0										0
Cementing & Plumb Equipment	DIC185	145,000	DICC155	63,000								208,000
Tubular Inspections	DIC180	50,000	DICC160	5,000	STIM160	4,000			PCOM160	0		59,000
Casing Crews	DIC195	20,000	DICC165	13,000	STIM165	0						33,000
Mechanical Labor	DIC200	20,000	DICC170	10,000	STIM170	0	CON170	181,000	PCOM170	0		211,000
Trucking/Transportation	DIC205	25,000	DICC175	8,000	STIM175	4,000	CON175	18,000	PCOM175	0		55,000
Supervision	DIC210	115,000	DICC180	16,000	STIM180	94,000	CON180	10,000	PCOM180	0		235,000
Trailer House/Camp/Catering	DIC220	49,000	DICC235	6,000	STIM220	34,000						89,000
Other Misc Expenses	DIC220	5,000	DICC190	0	STIM190	155,000	CON190	12,000	PCOM190	0		172,000
Overhead	DIC223	10,000	DICC185	5,000								15,000
Remedial Cementing	DIC231	0			STIM215	0			PCOM215	0		0
MOB/DEMOS	DIC240	50,000										50,000
Directional Drilling Services	DIC245	383,000										383,000
Solids Control	DIC260	99,000										99,000
Well Control Equip (Snubbing Services)	DIC265	99,000	DICC240	5,000	STIM240	109,000			PCOM240	0		213,000
Fishing & Sidetrack Services	DIC270	0	DICC245	0	STIM245	0			PCOM245	0		0
Completion Rig					STIM115	21,000			PCOM115	0		21,000
Coil Tubing Services					STIM260	368,000			PCOM260	0		368,000
Completion Logging/Perforating/Wireline					STIM200	432,000			PCOM200	0		432,000
Composite Plugs					STIM390	96,000			PCOM390	0		96,000
Stimulation Pumping/Chemicals/Additives/Sand					STIM210	2,926,000			PCOM210	0		2,926,000
Stimulation Water/Water Transfer/Water Storage					STIM395	702,000						702,000
Cinemas Owned Frac/Rental Equipment					STIM305	40,000			PCOM305	59,000		99,000
Legal/Regulatory/Curative	DIC300	10,000					CON300	0				10,000
Well Control Insurance	DIC285	7,000										7,000
Major Construction Overhead							CON305	25,000				25,000
Real Time Operations Center	DIC360	0			STIM360	0						0
FL/G - Labor							CON500	153,500				153,500
FL/G - Supervision							CON505	22,000				22,000
Survey							CON515	4,000				4,000
SWD/Other - Labor							CON600	0				0
SWD/OTHER - SUPERVISION							CON605	0				0
Contingency	DIC435	133,000	DICC220	12,000	STIM220	266,000	CON220	85,500	PCOM220	0		497,500
Contingency							CON221	30,000				30,000
P&A Costs	DIC295	0	DICC275	0								0
Total Intangible Cost		2,785,000		2,47,000		5,584,000		595,500		999,000		9,610,500
Drive Pipe	DWEA130	0										0
Conductor Pipe	DWEA130	0										0
Water String	DWEA135	14,000										14,000
Surface Casing	DWEA140	67,000										67,000
Intermediate Casing 1	DWEA145	308,000										308,000
Intermediate Casing 2	DWEA155	0										0
Drilling Liner	DWEA160	0										0
Production Casing or Liner			DWEA100	166,000								166,000
Production Tie-Back			DWEA165	0	STIM101	0						0
Tubing					STIM105	77,000			PCOM105	0		77,000
Wellhead, Tree, Chokes	DWEA115	20,000	DWEA120	25,000	STIM120	60,000			PCOM120	10,000		115,000
Liner Hanger, Isolation Packer	DWEA100	0	DWEA135	98,000								98,000
Packer, Nipples					STIM400	28,000			PCOM400	0		28,000
Pumping Unit, Engine					STIM405	0			PCOM405	0		0
Downhole Lift Equipment					STIM410	80,000			PCOM410	0		80,000
Surface Equipment									PCOM420	0		0
Well Automation Materials									PCOM435	0		0
Total Tangible - Well Equipment Cost		409,000		289,000		245,000				10,000		953,000
N/C Lease Equipment							CON400	176,500				176,500
Tank, Tanks Steps, Stairs							CON405	51,500				51,500
Battery Equipment							CON410	191,500				191,500
Secondary Containments							CON415	12,000				12,000
Overhead Power Distribution							CON420	25,000				25,000
Facility Electrical							CON425	30,000				30,000
Telecommunication Equipment							CON426	0				0
Meters and Metering Equipment							CON445	22,500				22,500
Facility Line Pipe							CON450	23,000				23,000
Lease Automation Materials							CON455	37,500				37,500
FL/G - Materials							CON550	68,500				68,500
FL/G - Line Pipe							CON555	52,500				52,500
SWD/Other - Materials							CON650	0				0
SWD/OTHER - LINE PIPE							CON655	0				0
Total Tangible - Lease Equipment Cost								685,500				685,500
Total Estimated Cost		3,194,000		536,000		5,829,000		1,281,000		409,000		11,249,000



Description	BCP - Drilling		ACP - Drilling		Comp/Stim	
	Codes	Amount	Codes	Amount	Codes	Amount
Roads & Location	DIDC.100	25,000			STIM.100	10,000
Damages	DIDC.105	8,000				
Mud/Pulvis Disposal	DIDC.255	160,000			STIM.255	62,000
Day Rate	DIDC.115 23 days at \$28,000/day	618,000	DICC.120 4 days at \$28,000/day	104,000		
Misc Preparation	DIDC.120	35,000				
Bits	DIDC.125	75,000	DICC.125	0	STIM.125	0
Fuel	DIDC.135 1,300 gal/day at \$3.00/gal	108,000	DICC.130	0		
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	24,000
Mud & Additives	DIDC.145	198,000				
SWD PIPED TO XEC SWD WELL						
SWD PIPED TO 3RD PARTY SWD WELL						
SWD HAULED TO XEC SWD WELL						
SWD HAULED TO 3RD PARTY SWD WELL						
Surface Rentals	DIDC.150 Per Day (BCP)/day	131,000	DICC.140	0	STIM.140	237,000
Downhole Rentals	DIDC.155	177,000			STIM.145	0
Flowback Labor					STIM.141	0
Automation Labor					STIM.150	0
Formation Evaluation (DST, Coring, etc.)	DIDC.160	0				
Mud Logging	DIDC.170 18 days at \$1,200/day	27,000				
Open Hole Logging	DIDC.180	0				
Cementing & Float Equipment	DIDC.185	145,000	DICC.155	63,000		
Tubular Inspections	DIDC.190	50,000	DICC.160	5,000	STIM.160	4,000
Casing Crews	DIDC.195	20,000	DICC.165	13,000	STIM.165	0
Mechanical Labor	DIDC.200	20,000	DICC.170	10,000	STIM.170	0
Trucking/Transportation	DIDC.205	25,000	DICC.175	8,000	STIM.175	4,000
Supervision	DIDC.210	115,000	DICC.180	16,000	STIM.180	94,000
Trailer House/Camp/Catering	DIDC.280	49,000	DICC.255	6,000	STIM.280	34,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	155,000
Overhead	DIDC.225	10,000	DICC.195	5,000		
Remedial Cementing	DIDC.231	0			STIM.215	0
MOB/D&A08	DIDC.240	50,000				
Directional Drilling Services	DIDC.245	383,000				
Solids Control	DIDC.260	99,000				
Well Control Equip (Snubbing Services)	DIDC.265	99,000	DICC.240	5,000	STIM.240	109,000
Fishing & Sidetrack Services	DIDC.270	0	DICC.245	0	STIM.245	0
Completion Rig					STIM.115	21,000
Coil Tubing Services					STIM.280	368,000
Completion Logging/Perforating/Wireline					STIM.200	432,000
Composite Plugs					STIM.390	96,000
Simulation					STIM.210	2,926,000
Simulation Water/Water Transfer/Water					STIM.395	702,000
Owner Owned Frac/Remed Equipment					STIM.305	40,000
Legal/Regulatory/Curtive	DIDC.300	10,000				
Well Control Insurance	DIDC.285 \$0.35/ft	7,000				
Major Commission Overhead						
Real Time Operations Center	DIDC.560	0			STIM.560	0
FL&L - Labor						
FL&L - Supervision						
Survey						
SWD/Other - Labor						
SWD/OTHER - SUPERVISION						
Contingency	DIDC.435 500 % of Drilling Intangibles	133,000	DICC.220	12,000	STIM.220	266,000
Contingency						
P&A Costs	DIDC.295	0	DICC.275	0		
Total Intangible Cost		2,785,000		247,000		5,584,000
Drive Pipe	DWEB.150	0				
Conductor Pipe	DWEB.130	0				
Water String	DWEB.135	14,000				
Surface Casing	DWEB.140 9 5/8" - 2,666ft at \$25.00/ft	67,000				
Intermediate Casing 1	DWEB.145 7" - 10,130ft at \$28.00/ft	308,000				
Intermediate Casing 2	DWEB.155	0				
Drilling Liner	DWEB.160	0				
Production Casing or Liner			DWEA.100 4 1/2" - 12,780ft at \$18.00/ft	166,000		
Production Tie-back			DWEA.165	0	STMT.101	0
Tubing					STMT.105 3-1/2" - 6,510ft at \$9.00/ft	77,000
Wellhead, Tree, Chokes	DWEB.115	20,000	DWEA.120	25,000	STMT.120	60,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	98,000		
Packer, Nipples					STMT.400	28,000
Pumping Unit, Engine					STMT.405	0
Downhole Lift Equipment					STMT.410	80,000
Surface Equipment						
Well Automation Materials						
Total Tangible - Well Equipment Cost		409,000		289,000		245,000
N/C Lease Equipment						
Tanks, Tanker Steps, Stairs						
Battery Equipment						
Secondary Containment						
Overhead Power Distribution						
Facility Electrical						
Telecommunication Equipment						
Meters and Metering Equipment						
Facility Line Pipe						
Lease Automation Materials						
FL&L - Materials						
FL&L - Line Pipe						
SWD/Other - Materials						
SWD/OTHER - LINE PIPE						
Total Tangible - Lease Equipment Cost		0		0		0
Total Estimated Cost		3,194,000		536,000		5,829,000



Description	Production Equip		Post Completion		Total	
	Codes	Amount	Codes	Amount	Cost	
Roads & Location	CON.103	5,000	PCOM.100	Road Repair	10,000	48,000
Damages	CON.105	4,000				10,000
Mud/FLUIDS Disposal			PCOM.235	6,000 BWPD for 50 Days @ \$0.70/bbl	252,000	474,000
Day Rate						722,000
Misc Preparation						35,000
Bits			PCOM.125		0	75,000
Fuel			PCOM.130		0	108,000
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	29,000
Mud & Additives						198,000
SWD PIPED TO XEC SWD WELL			PCOM.254		0	0
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257		0	0
SWD HAULED TO XEC SWD WELL			PCOM.258		0	0
SWD HAULED TO 3RD PARTY SWD WELL			PCOM.259		0	0
Surface Rentals	CON.140	1,500	PCOM.140	\$1500/day for anticipated 30 days	45,000	414,500
Downhole Rentals			PCOM.145		0	177,000
Flowback Labor			PCOM.141	\$2200/day for anticipated 15 days	33,000	33,000
Automation Labor	CON.150	45,000	PCOM.150		0	45,000
Formation Evaluation (DST, Coring, etc.)						0
Mud Logging						27,000
Open Hole Logging						0
Cementing & Float Equipment						208,000
Tubular Inspections			PCOM.160		0	59,000
Casing Crews						33,000
Mechanical Labor	CON.170	181,000	PCOM.170		0	211,000
Trucking/Transportation	CON.175	18,000	PCOM.175		0	55,000
Supervision	CON.180	10,000	PCOM.180		0	235,000
Trailer House/Camp/Catering						89,000
Other Misc Expenses	CON.190	12,000	PCOM.190		0	172,000
Overhead						15,000
Remedial Cementing			PCOM.215		0	0
MOB/DEMOS						50,000
Directional Drilling Services						383,000
Solids Control						99,000
Well Control Equip (Grubbing Services)			PCOM.240		0	213,000
Fishing & Sidetrack Services			PCOM.245		0	0
Completion Rig			PCOM.115		0	21,000
Coil Tubing Services			PCOM.200		0	368,000
Completion Logging/Perforating/Wireline			PCOM.200		0	432,000
Completion Progs			PCOM.390		0	96,000
Stimulation Pumping/Chemicals/Additives/Sand			PCOM.210		0	2,928,000
Stimulation Water/Water Transfer/Water Storage						702,000
Company Owned Frac/Rental Equipment			PCOM.305	XEC Owned Sand Separator	59,000	99,000
Legal/Regulatory/Compliance	CON.300	0				10,000
Well Control Insurance						7,000
Major Construction Overhead	CON.305	25,000				25,000
Real Time Operations Center						0
FLUCL - Labor	CON.500	153,500				153,500
FLUCL - Supervision	CON.505	22,000				22,000
Survey	CON.515	4,000				4,000
SWD/OTHER - Labor	CON.600	0				0
SWD/OTHER - SUPERVISION	CON.605	0				0
Contingency	CON.220	86,500	PCOM.220		0	497,500
Contingency	CON.221	30,000				30,000
P&A Costs						0
Total Intangible Cost		595,500			399,000	9,670,500
Drive Pipe						0
Conductor Pipe						0
Water String						14,000
Surface Casing						67,000
Intermediate Casing 1						308,000
Intermediate Casing 2						0
Drilling Liner						0
Production Casing or Liner						166,000
Production Tie-Back						0
Tubing			PCOMT.105		0	77,000
Wellhead, Tree, Chokes			PCOMT.120	Makeup from choke to flowline	10,000	115,000
Liner Hanger, Isolation Packer						98,000
Packer, Nipples			PCOMT.400		0	28,000
Pumping Unit, Engine			PCOMT.405		0	0
Downhole Lift Equipment			PCOMT.410		0	80,000
Surface Equipment			PCOMT.420		0	0
Well Automation Materials			PCOMT.455		0	0
Total Tangible - Well Equipment Cost					10,000	953,000
N/C Lease Equipment	CONT.400	176,500				176,500
Tanks, Tanks Steps, Stairs	CONT.405	51,500				51,500
Battery Equipment	CONT.410	191,500				191,500
Secondary Containments	CONT.415	12,000				12,000
Overhead Power Distribution	CONT.420	25,000				25,000
Facility Electrical	CONT.425	30,000				30,000
Telecommunication Equipment	CONT.426	0				0
Meters and Metering Equipment	CONT.445	22,500				22,500
Facility Line Pipe	CONT.450	23,000				23,000
Lease Automation Materials	CONT.455	37,500				37,500
FLUCL - Materials	CONT.550	63,500				63,500
FLUCL - Line Pipe	CONT.555	52,500				52,500
SWD/OTHER - Materials	CONT.650	0				0
SWD/OTHER - LINE PIPE	CONT.655	0				0
Total Tangible - Lease Equipment Cost		685,500				685,500
Total Estimated Cost		1,281,000			409,000	11,249,000



Company Entity

Date Prepared
9/5/2019

Exploration Region Permian Basin	Well Name RIVERBEND 12-13 FEDERAL COM 32H	Prospect Carlsbad Bone Spring Prospect	Property Number 300001-141.01	AFE 26620018
County, State Eddy, NM	Location W/2 of Sections 12 & 13, Township 25 South, Range 28 East, Eddy County, NM		Estimated Spud 7/15/2019	Estimated Completion 8/15/2019
<input checked="" type="checkbox"/> New <input type="checkbox"/> Supplement <input type="checkbox"/> Revision	Formation Wolfcamp	Well Type DEV	Ttl Measured Depth 21,254	Ttl Vertical Depth 9,918

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 400', set water string casing. Drill to 2666', set surface casing. Drill to 9408' (KOP). Drill curve at 12°/100' initial build rate to +/- 75 degrees and set casing at +/- 10033' MD. Finish curve at +/- 4°/100' to +/- 9920' TVD and drill a +/- 9740' long lateral in the Wolfcamp formation. Run and cement production liner. Stage frac. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,790,000		\$2,790,000
Completion Costs		\$6,825,500	\$6,825,500
Total Intangible Cost	\$2,790,000	\$6,825,500	\$9,615,500
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	\$409,000	\$546,000	\$955,000
Lease Equipment		\$685,500	\$685,500
Total Tangible Cost	\$409,000	\$1,231,500	\$1,640,500
Total Well Cost	\$3,199,000	\$8,057,000	\$11,256,000

Comments On Well Costs

- All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefor. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

Comments on AFE

The above costs are estimates only and anticipate trouble-free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the joint Operating Agreement.

9/5/2019



Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total	Cost
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount		
Roads & Location	DIC100	25,000			STIM100	10,000	CON100	3,000	PCOM100	10,000		48,000
Damages	DIC105	6,000					CON105	4,000				10,000
Mud/Fluids Disposal	DIC255	160,000			STIM255	62,000			PCOM255	252,000		474,000
Day Rate	DIC115	618,000	DICC120	104,000								722,000
Misc Preparation	DIC120	35,000										35,000
Bits	DIC125	75,000	DICC135	0	STIM125	0			PCOM125	0		75,000
Fuel	DIC135	108,000	DICC130	0					PCOM130	0		108,000
Water for Drilling Rig (Not Frac Water)	DIC140	5,000	DICC135	0	STIM135	24,000			PCOM135	0		29,000
Mud & Additives	DIC145	198,000										198,000
SWD PIPED TO XEC SWD WELL									PCOM254	0		0
SWD PIPED TO 3RD PARTY SWD WELL									PCOM257	0		0
SWD HAULED TO XEC SWD WELL									PCOM258	0		0
SWD HAULED TO 3RD PARTY SWD WELL									PCOM259	0		0
Surface Rentals	DIC150	131,000	DICC140	0	STIM140	237,000	CON140	1,500	PCOM140	45,000		414,500
Downhole Rentals	DIC155	177,000			STIM145	0			PCOM145	0		177,000
Flowback Labor					STIM141	0			PCOM141	33,000		33,000
Automation Labor							CON130	45,000	PCOM150	0		45,000
Formation Evaluation (DST, Coring, etc.)	DIC160	0			STIM150	0						0
Mud Logging	DIC170	27,000										27,000
Open Hole Logging	DIC180	0										0
Cementing & Float Equipment	DIC185	145,000	DICC155	63,000								208,000
Tubular Inspections	DIC190	50,000	DICC160	5,000	STIM160	4,000			PCOM160	0		59,000
Casing Crews	DIC195	20,000	DICC165	13,000	STIM165	0						33,000
Mechanical Labor	DIC200	20,000	DICC170	10,000	STIM170	0	CON170	181,000	PCOM170	0		211,000
Trucking/Transportation	DIC205	25,000	DICC175	8,000	STIM175	4,000	CON175	18,000	PCOM175	0		55,000
Supervision	DIC210	115,000	DICC180	16,000	STIM180	94,000	CON180	10,000	PCOM180	0		235,000
Trailer House/Camp/Catering	DIC230	49,000	DICC255	6,000	STIM230	34,000						89,000
Other Misc Expenses	DIC230	5,000	DICC190	0	STIM190	155,000	CON190	12,000	PCOM190	0		172,000
Overhead	DIC225	10,000	DICC195	5,000								15,000
Remedial Cementing	DIC231	0			STIM215	0			PCOM215	0		0
MOB/DEM/DB	DIC240	30,000										30,000
Directional Drilling Services	DIC245	388,000										388,000
Solids Control	DIC260	99,000										99,000
Well Control Equip (Snubbing Services)	DIC265	99,000	DICC240	5,000	STIM240	109,000			PCOM240	0		213,000
Fishing & Sidetrack Services	DIC270	0	DICC245	0	STIM245	0			PCOM245	0		0
Completion Rig					STIM115	21,000			PCOM115	0		21,000
Coil Tubing Services					STIM260	368,000			PCOM260	0		368,000
Completion Logging/Perforating/Wireline					STIM200	432,000			PCOM200	0		432,000
Composite Pumps					STIM390	96,000			PCOM390	0		96,000
Simulation Pumping/Chemicals/Additives/Sand					STIM210	2,926,000			PCOM210	0		2,926,000
Simulation Water/Water Transfer/Water Storage					STIM395	702,000						702,000
Cimarex Owned Frac/Rental Equipment					STIM305	40,000			PCOM305	59,000		99,000
Legal/Regulatory/Curtive	DIC200	10,000					CON300	0				10,000
Well Control Insurance	DIC285	7,000										7,000
Major Construction Overhead							CON305	25,000				25,000
Real Time Operations Center	DIC260	0			STIM560	0						0
FLUGL - Labor							CON500	153,500				153,500
FLUGL - Supervision							CON505	22,000				22,000
Survey							CON515	4,000				4,000
SWD/Other - Labor							CON400	0				0
SWD/OTHER - SUPERVISION							CON405	0				0
Contingency	DIC435	133,000	DICC220	12,000	STIM220	266,000	CON220	86,500	PCOM220	0		497,500
Contingency							CON221	30,000				30,000
P&A Costs	DIC285	0	DICC275	0								0
Total Intangible Cost		2,790,000		247,000		5,584,000		595,500		999,000		9,615,500
Drive Pipe	DWEA150	0										0
Conductor Pipe	DWEA130	0										0
Water String	DWEA135	14,000										14,000
Surface Casing	DWEA140	67,000										67,000
Intermediate Casing 1	DWEA145	308,000										308,000
Intermediate Casing 2	DWEA155	0										0
Drilling Liner	DWEA160	0										0
Production Casing or Liner			DWEA100	168,000								168,000
Production Tie-Back			DWEA165	0	STIM101	0						0
Tubing					STIM105	77,000			PCOM105	0		77,000
Wellhead, Tree, Chokes	DWEA115	20,000	DWEA120	25,000	STIM120	60,000			PCOM120	10,000		115,000
Liner Hanger, Isolation Packer	DWEA100	0	DWEA125	98,000								98,000
Packer, Nipples					STIM400	28,000			PCOM400	0		28,000
Pumping Unit, Engine					STIM405	0			PCOM405	0		0
Downhole Lift Equipment					STIM410	80,000			PCOM410	0		80,000
Surface Equipment									PCOM420	0		0
Well Automation Materials									PCOM455	0		0
Total Tangible - Well Equipment Cost		409,000		291,000		245,000				10,000		955,000
N/C Lease Equipment							CON400	176,500				176,500
Tanks, Tanks Steps, Scales							CON405	51,500				51,500
Battery Equipment							CON410	191,500				191,500
Secondary Containments							CON415	12,000				12,000
Overhead Power Distribution							CON420	25,000				25,000
Facility Electrical							CON425	30,000				30,000
Telecommunication Equipment							CON426	0				0
Meters and Metering Equipment							CON445	22,500				22,500
Facility Line Pipe							CON450	23,000				23,000
Lease Automation Materials							CON455	37,500				37,500
FLUGL - Materials							CON455	63,500				63,500
FLUGL - Line Pipe							CON455	52,500				52,500
SWD/Other - Materials							CON450	0				0
SWD/OTHER - LINE PIPE							CON455	0				0
Total Tangible - Lease Equipment Cost								685,500				685,500
Total Estimated Cost		3,199,000		538,000		5,829,000		1,281,000		409,000		11,236,000



Description	BCP - Drilling		ACP - Drilling		Comp/Stim	
	Codes	Amount	Codes	Amount	Codes	Amount
Roads & Location	DIDC.100	25,000			STIM.130	10,000
Damages	DIDC.105	6,000				
Mud/Fluids Disposal	DIDC.255	160,000				
Day Rate	DIDC.115 123 days at \$26,000/day	618,000	DICC.120 4 days at \$26,000/day	104,000	STIM.255	62,000
Misc Preparation	DIDC.120	35,000				
Bits	DIDC.125	75,000	DICC.125	0	STIM.125	0
Fuel	DIDC.135 1,300 gal/day at \$3.00/gal	108,000	DICC.130	0		
Water for Drilling Rig (Hot Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	24,000
Mud & Additives	DIDC.145	188,000				
SWD PIPED TO XSC SWD WELL						
SWD PIPED TO 3RD PARTY SWD WELL						
SWD HAULED TO XSC SWD WELL						
SWD HAULED TO 3RD PARTY SWD WELL						
Surface Rentals	DIDC.150 Per Day (BCP)/day	131,000	DICC.140	0	STIM.140	237,000
Downhole Rentals	DIDC.155	177,000			STIM.145	0
Flowback Labor					STIM.141	0
Automation Labor						
Formation Evaluation (DST, Coring, etc.)	DIDC.160	0			STIM.150	0
Mud Logging	DIDC.170 18 days at \$1,200/day	27,000				
Open Hole Logging	DIDC.180	0				
Cementing & Float Equipment	DIDC.185	145,000	DICC.155	63,000		
Tubular Inspections	DIDC.190	50,000	DICC.160	5,000	STIM.160	4,000
Casing Crews	DIDC.195	20,000	DICC.165	13,000	STIM.165	0
Mechanical Labor	DIDC.200	20,000	DICC.170	10,000	STIM.170	0
Trucking/Transportation	DIDC.205	25,000	DICC.175	8,000	STIM.175	4,000
Supervision	DIDC.210	115,000	DICC.180	16,000	STIM.180	94,000
Trailer House/Camp/Catering	DIDC.220	49,000	DICC.235	6,000	STIM.230	34,000
Other Misc Expenses	DIDC.230	5,000	DICC.190	0	STIM.190	155,000
Overhead	DIDC.235	10,000	DICC.195	5,000		
Remedial Cementing	DIDC.231	0			STIM.215	0
MUD/OH/CH	DIDC.240	50,000				
Directional Drilling Services	DIDC.245	388,000				
Safety Control	DIDC.250	99,000				
Well Control Equip (Snubbing Services)	DIDC.265	99,000	DICC.240	5,000	STIM.240	109,000
Fishing & Sidetrack Services	DIDC.270	0	DICC.245	0	STIM.245	0
Completion Rig					STIM.115	21,000
Coil Tubing Services					STIM.250	368,000
Completion Logging/Perforating/Wireline					STIM.255	432,000
Composite Plugs					STIM.330	96,000
Stimulation					STIM.210	2,926,000
Stimulation Water/Water Transfer/Water					STIM.335	702,000
Cimarex Owned Frac/Remed Equipment					STIM.335	40,000
Legal/Regulatory/Consultive	DIDC.300	10,000				
Well Control Insurance	DIDC.285 50.35/ft	7,000				
Major Construction Overhead						
Real Time Operations Center	DIDC.560	0			STIM.560	0
FL/GL - Labor						
FL/GL - Supervision						
Survey						
SWD/Other - Labor						
SWD/OTHER - SUPERVISION						
Contingency	DIDC.435 500 % of Drilling Intangibles	133,000	DICC.220	12,000	STIM.220	266,000
Contingency						
P&A Costs	DIDC.295	0	DICC.275	0		
Total Intangible Cost		2,790,000		247,000		5,584,000
Drive Pipe	DWEB.130	0				
Conductor Pipe	DWEB.130	0				
Water String	DWEB.135	14,000				
Surface Casing	DWEB.140 9 5/8" - 2,660ft at \$25.00/ft	67,000				
Intermediate Casing 1	DWEB.145 7" - 10,130ft at \$28.00/ft	308,000				
Intermediate Casing 2	DWEB.155	0				
Drilling Liner	DWEB.160	0				
Production Casing or Liner			DWEA.100 4 1/2" - 12,950ft at \$13.00/ft	168,000		
Production Tie-Back			DWEA.165	0	STIMT.101	0
Tubing					STIMT.105 3-1/2" - 6,510ft at \$9.00/ft	77,000
Wellhead, Tree, Chokes	DWEB.115	20,000	DWEA.120	25,000	STIMT.120	60,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	98,000		
Packer, Nipples					STIMT.400	28,000
Pumping Unit, Engine					STIMT.405	0
Downhole Lift Equipment					STIMT.410	80,000
Surface Equipment						
Well Automation Materials						
Total Tangible - Well Equipment Cost		409,000		291,000		245,000
N/C Lease Equipment						
Tanks, Tanks Steps, Stairs						
Battery Equipment						
Secondary Complements						
Overhead Power Distribution						
Facility Electrical						
Telecommunication Equipment						
Meters and Metering Equipment						
Facility Line Pipe						
Lease Automation Materials						
FL/GL - Materials						
FL/GL - Line Pipe						
SWD/Other - Materials						
SWD/OTHER - LINE PIPE						
Total Tangible - Lease Equipment Cost						
Total Estimated Cost		3,199,000		538,000		5,829,000



Description	Production Equip			Post Completion			Total
	Codes	Amount	Codes	Amount	Cost		
Roads & Location	CON.100	3,000	PCDM.100	Road Repair	10,000	48,000	
Damages	CON.105	4,000				10,000	
Mud/Fluids Disposal			PCDM.255	6,000 @WPD for 60 Days @ 50.70/bbl	252,000	474,000	
Day Rate						722,000	
Misc Preparation						35,000	
Blis			PCDM.125		0	75,000	
Fuel			PCDM.130		0	108,000	
Water for Drilling Rig (Not Frac Water)			PCDM.135		0	29,000	
Mud & Additives						198,000	
SWD PIPED TO XEC SWD WELL			PCDM.254		0	0	
SWD PIPED TO 3RD PARTY SWD WELL			PCDM.257		0	0	
SWD HAULED TO XEC SWD WELL			PCDM.258		0	0	
SWD HAULED TO 3RD PARTY SWD WELL			PCDM.259		0	0	
Surface Rentals	CON.140	1,500	PCDM.140	\$1500/day for anticipated 30 days	45,000	414,500	
Downhole Rentals			PCDM.145		0	177,000	
Flowback Labor			PCDM.141	\$2200/day for anticipated 15 days	33,000	33,000	
Automation Labor	CON.150	45,000	PCDM.150		0	45,000	
Formation Evaluation (DST, Coring, etc.)						0	
Mud Logging						27,000	
Open Hole Logging						0	
Cementing & Float Equipment						208,000	
Tubular Inspections			PCDM.160		0	59,000	
Casing Crews						33,000	
Mechanical Labor	CON.170	181,000	PCDM.170		0	211,000	
Trucking/Transportation	CON.175	18,000	PCDM.175		0	55,000	
Supervision	CON.180	10,000	PCDM.180		0	235,000	
Trailer House/Camp/Catering						89,000	
Other Misc Expenses	CON.190	12,000	PCDM.190		0	172,000	
Overhead						15,000	
Remedial Cementing			PCDM.215		0	0	
MOB/DEMOB						50,000	
Directional Drilling Services						388,000	
Solids Control						99,000	
Well Control Equip (Grubbing Services)			PCDM.240		0	213,000	
Fishing & Siderack Services			PCDM.245		0	0	
Completion Rig			PCDM.115		0	21,000	
Coil Tubing Services			PCDM.260		0	368,000	
Completion Logging/Perforating/Wireline			PCDM.200		0	432,000	
Composite Plugs			PCDM.290		0	96,000	
Stimulation Pumping/Chemicals/Additives/Sand			PCDM.210		0	2,926,000	
Stimulation Water/Water Transfer/Water Storage						702,000	
Cimarex Owned Frac/Rental Equipment			PCDM.305	XEC Owned Sand Separator	59,000	99,000	
Legal/Regulatory/Compliance	CON.300	0				10,000	
Well Control Insurance						7,000	
Major Construction Overhead	CON.305	25,000				25,000	
Real Time Operations Center						0	
FLUGL - Labor	CON.500	153,500				153,500	
FLUGL - Supervision	CON.505	22,000				22,000	
Survey	CON.515	4,000				4,000	
SWD/Other - Labor	CON.600	0				0	
SWD/OTHER - SUPERVISION	CON.605	0				0	
Contingency	CON.220	86,500	PCDM.220		0	497,500	
Contingency	CON.221	30,000				30,000	
P&A Costs						0	
Total Intangible Cost		595,500			399,000	9,615,500	
Drive Pipe						0	
Conductor Pipe						0	
Water String						14,000	
Surface Casing						67,000	
Intermediate Casing 1						308,000	
Intermediate Casing 2						0	
Drilling Liner						0	
Production Casing or Liner						168,000	
Production Tie-Back						0	
Tubing			PCOMT.105		0	77,000	
Wellhead, Tree, Chokes			PCOMT.120	Halfpin from choke to flowline	10,000	115,000	
Liner Hanger, Isolation Packer						98,000	
Packer, Nipples			PCOMT.400		0	28,000	
Pumping Unit, Engine			PCOMT.405		0	0	
Downhole Lift Equipment			PCOMT.410		0	80,000	
Surface Equipment			PCOMT.430		0	0	
Well Automation Materials			PCOMT.455		0	0	
Total Tangible - Well Equipment Cost					10,000	955,000	
N/C Lease Equipment	CONT.100	176,500				176,500	
Tanks, Tanks Steps, Stairs	CONT.405	51,500				51,500	
Battery Equipment	CONT.410	191,500				191,500	
Secondary Containments	CONT.415	12,000				12,000	
Overhead Power Distribution	CONT.420	25,000				25,000	
Facility Electrical	CONT.425	30,000				30,000	
Telecommunication Equipment	CONT.428	0				0	
Meters and Metering Equipment	CONT.445	22,500				22,500	
Facility Line Pipe	CONT.450	23,000				23,000	
Lease Automation Materials	CONT.455	37,500				37,500	
FLUGL - Materials	CONT.550	63,500				63,500	
FLUGL - Line Pipe	CONT.555	52,500				52,500	
SWD/Other - Materials	CONT.650	0				0	
SWD/OTHER - LINE PIPE	CONT.655	0				0	
Total Tangible - Lease Equipment Cost		685,500				685,500	
Total Estimated Cost		1,281,000			409,000	11,256,000	



Company Entity

Date Prepared
9/5/2019

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	RIVERBEND 12-13 FEDERAL COM 33H Carlsbad	Bone Spring Prospect	300001-142.01	26620019
County, State	Location		Estimated Spud	Estimated Completion
Eddy, NM	W/2 of Sections 12 & 13, Township 25 South, Range 28 East, Eddy County, NM		7/15/2019	8/15/2019
<input checked="" type="checkbox"/> New	Formation	Well Type	Ttl Measured Depth	Ttl Vertical Depth
<input type="checkbox"/> Supplement	Wolfcamp	DEV	20,651	9,714
<input type="checkbox"/> Revision				

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 400', set water string casing. Drill to 2666', set surface casing. Drill to 9204' (KOP). Drill curve at 12°/100' initial build rate to +/- 75 degrees and set casing at +/- 9829' MD. Finish curve at +/- 4°/100' to +/- 9710' TVD and drill a +/- 9510' long lateral in the Wolfcamp formation. Run and cement production liner. Stage frac. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,777,000		\$2,777,000
Completion Costs		\$6,825,500	\$6,825,500
Total Intangible Cost	\$2,777,000	\$6,825,500	\$9,602,500
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	\$403,000	\$539,000	\$942,000
Lease Equipment		\$685,500	\$685,500
Total Tangible Cost	\$403,000	\$1,224,500	\$1,627,500
Total Well Cost	\$3,180,000	\$8,050,000	\$11,230,000

Comments On Well Costs

- All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval			
Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

9/5/2019



Description	BCP - Drilling		ACP - Drilling		Comp/Strm		Production Equip		Post Completion		Total Cost
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	
Roads & Location	DIDC100	25,000			STIM100	10,000			PCOM100	10,000	48,000
Damages	DIDC105	6,000					CON105	4,000			10,000
Mud/Fluids Disposal	DIDC235	160,000			STIM235	62,000			PCOM235	252,000	474,000
Day Rate	DIDC115	618,000	DICC120	104,000							722,000
Misc Preparation	DIDC120	35,000									35,000
Bit	DIDC125	75,000	DICC125	0	STIM125	0			PCOM125	0	75,000
Fuel	DIDC135	108,000	DICC130	0					PCOM130	0	108,000
Water for Drilling Rig (Net Frac Water)	DIDC140	5,000	DICC135	0	STIM135	24,000			PCOM135	0	29,000
Mud & Additives	DIDC145	198,000							PCOM254	0	198,000
SWD PIPED TO XEC SWD WELL									PCOM257	0	0
SWD PIPED TO 3RD PARTY SWD WELL									PCOM258	0	0
SWD HAULED TO XEC SWD WELL									PCOM259	0	0
SWD HAULED TO 3RD PARTY SWD WELL											0
Surface Rentals	DIDC150	131,000	DICC140	0	STIM140	237,000	CON140	1,500	PCOM140	45,000	414,500
Downhole Rentals	DIDC155	177,000			STIM145	0			PCOM145	0	177,000
Flowback Labor					STIM141	0			PCOM141	33,000	33,000
Automation Labor							CON150	45,000	PCOM150	0	45,000
Formation Evaluation (DST, Coring, etc.)	DIDC160	0			STIM150	0					0
Mud Logging	DIDC170	27,000									27,000
Open Hole Logging	DIDC180	0									0
Cementing & Float Equipment	DIDC185	145,000	DICC155	63,000							208,000
Tubular Inspections	DIDC190	50,000	DICC160	5,000	STIM160	4,000			PCOM160	0	59,000
Casing Crews	DIDC195	20,000	DICC165	13,000	STIM165	0					33,000
Mechanical Labor	DIDC200	20,000	DICC170	10,000	STIM170	0	CON170	181,000	PCOM170	0	211,000
Trucking/Transportation	DIDC205	25,000	DICC175	8,000	STIM175	4,000	CON175	18,000	PCOM175	0	55,000
Supervision	DIDC210	115,000	DICC180	16,000	STIM180	94,000	CON180	10,000	PCOM180	0	235,000
Trailer House/Camp/Catering	DIDC280	49,000	DICC255	6,000	STIM280	34,000					89,000
Other Misc Expenses	DIDC230	5,000	DICC190	0	STIM190	155,000	CON190	12,000	PCOM190	0	172,000
Overhead	DIDC235	10,000	DICC195	5,000							15,000
Remedial Cementing	DIDC231	0			STIM215	0			PCOM215	0	0
MDC/EDM/CB	DIDC240	50,000									50,000
Directional Drilling Services	DIDC245	376,000									376,000
Solids Control	DIDC260	99,000									99,000
Well Control Equip (Snubbing Services)	DIDC265	99,000	DICC240	5,000	STIM240	109,000			PCOM240	0	213,000
Flaring & Sidetrack Services	DIDC270	0	DICC245	0	STIM245	0			PCOM245	0	0
Completion Rig					STIM115	21,000			PCOM115	0	21,000
Coil Tubing Services					STIM260	368,000			PCOM260	0	368,000
Completion Logging/Perforating/Wireline					STIM200	432,000			PCOM200	0	432,000
Composite Plugs					STIM390	96,000			PCOM390	0	96,000
Stimulation Pumping/Chemicals/Additives/Sand					STIM210	2,925,000			PCOM210	0	2,925,000
Stimulation Water/Water Transfer/Water Storage					STIM395	702,000					702,000
Cimarex Owned Frac/Rental Equipment					STIM305	40,000			PCOM305	59,000	99,000
Legal/Regulatory/Corrosive	DIDC200	10,000					CON200	0			10,000
Well Control Insurance	DIDC285	7,000									7,000
Major Construction Overhead							CON205	25,000			25,000
Real Time Operations Center	DIDC580	0			STIM560	0					0
FL/GL - Labor							CON500	153,500			153,500
FL/GL - Supervision							CON505	22,000			22,000
Survey							CON515	4,000			4,000
SWD/Other - Labor							CON600	0			0
SWD/OTHER - SUPERVISION							CON605	0			0
Contingency	DIDC435	132,000	DICC220	12,000	STIM220	266,000	CON220	86,500	PCOM220	0	496,500
Contingency							CON221	30,000			30,000
P&A Costs	DIDC285	0	DICC275	0							0
Total Intangible Cost		2,777,000		247,000		5,584,000		595,500		399,000	9,602,500
Drive Pipe	DWEB150	0									0
Conductor Pipe	DWEB130	0									0
Water String	DWEB135	14,000									14,000
Surface Casing	DWEB140	67,000									67,000
Intermediate Casing 1	DWEB145	302,000									302,000
Intermediate Casing 2	DWEB155	0									0
Drilling Liner	DWEB160	0									0
Production Casing or Liner			DWEB100	163,000							163,000
Production Tie-Back			DWEB165	0	STIM101	0					0
Tubing					STIM105	75,000			PCOM105	0	75,000
Wellhead, Tree, Chokes	DWEB115	20,000	DWEB120	25,000	STIM120	60,000			PCOM120	10,000	115,000
Liner Hanger, Isolation Packer	DWEB100	0	DWEB125	98,000							98,000
Packer, nipples					STIM400	28,000			PCOM400	0	28,000
Pumping Unit, Engine					STIM405	0			PCOM405	0	0
Downhole Lift Equipment					STIM410	80,000			PCOM410	0	80,000
Surface Equipment									PCOM420	0	0
Well Automation Materials									PCOM435	0	0
Total Tangible - Well Equipment Cost		403,000		286,000		243,000		176,500		10,000	942,000
N/C Lease Equipment							CON400	176,500			176,500
Tanks, Tanks Steps, Stairs							CON405	51,500			51,500
Baritary Equipment							CON410	191,500			191,500
Secondary Containment							CON415	12,000			12,000
Overhead Power Distribution							CON420	25,000			25,000
Facility Electrical							CON425	30,000			30,000
Telecommunication Equipment							CON430	0			0
Meters and Metering Equipment							CON435	22,500			22,500
Facility Line Pipe							CON440	23,000			23,000
Lease Automation Materials							CON445	37,500			37,500
FL/GL - Materials							CON550	63,500			63,500
FL/GL - Line Pipe							CON555	52,500			52,500
SWD/Other - Materials							CON650	0			0
SWD/OTHER - LINE PIPE							CON655	0			0
Total Tangible - Lease Equipment Cost							685,500				685,500
Total Estimated Cost		3,180,000		533,000		5,827,000		1,281,000		499,000	11,230,000



Description	BCP - Drilling		ACP - Drilling		Completion	
	Codes	Amount	Codes	Amount	Codes	Amount
Roads & Location	DIDC.100	25,000			STB4.100	10,000
Damages	DIDC.105	6,000				
Mud/Fluids Disposal	DIDC.235	160,000			STB4.235	62,000
Day Rate	DIDC.115 23 days at \$25,000/day	618,000	DICC.120 4 days at \$26,000/day	104,000		
Misc Preparation	DIDC.120	35,000				
Bits	DIDC.125	75,000	DICC.125	0	STB4.125	0
Fuel	DIDC.135 1,300 gal/day at \$3.00/gal	108,000	DICC.130	0		
Water for Drilling Rig (Hot Frac Water)	DIDC.140	5,000	DICC.135	0	STB4.135	24,000
Mud & Additives	DIDC.145	198,000				
SWD PIPED TO XEC SWD WELL						
SWD PIPED TO 3RD PARTY SWD WELL						
SWD HAULED TO XEC SWD WELL						
SWD HAULED TO 3RD PARTY SWD WELL						
Surface Rentals	DIDC.150 Per Day (BCP)/day	131,000	DICC.140	0	STB4.140	237,000
Downhole Rentals	DIDC.155	177,000			STB4.145	0
Flowback Labor					STB4.141	0
Automation Labor						
Formation Evaluation (DST, Coring, etc.)	DIDC.160	0			STB4.150	0
Mud Logging	DIDC.170 18 days at \$1,200/day	27,000				
Open Hole Logging	DIDC.180	0				
Cementing & Float Equipment	DIDC.185	145,000	DICC.155	63,000		
Tubular Inspections	DIDC.190	50,000	DICC.160	5,000	STB4.160	4,000
Casing Crews	DIDC.195	20,000	DICC.165	13,000	STB4.165	0
Mechanical Labor	DIDC.200	20,000	DICC.170	10,000	STB4.170	0
Tracking/Transportation	DIDC.205	25,000	DICC.175	8,000	STB4.175	4,000
Supervision	DIDC.210	115,000	DICC.180	16,000	STB4.180	94,000
Trailer House/Camp/Catering	DIDC.215	49,000	DICC.235	6,000	STB4.230	34,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STB4.190	155,000
Overhead	DIDC.225	10,000	DICC.195	5,000		
Remedial Cementing	DIDC.231	0			STB4.215	0
MOB/DEMOS	DIDC.240	50,000				
Directional Drilling Services	DIDC.245	376,000				
Solids Control	DIDC.250	99,000				
Well Control Equip (Snubbing Services)	DIDC.265	99,000	DICC.240	5,000	STB4.240	109,000
Fishing & Sidetrack Services	DIDC.270	0	DICC.245	0	STB4.245	0
Completion Rig					STB4.115	21,000
Coil Tubing Services					STB4.260	368,000
Completion Logging/Perforating/Wireline					STB4.200	482,000
Composite Plugs					STB4.390	96,000
Stimulation					STB4.210	2,926,000
Stimulation Water/Water Transfer/Water					STB4.385	702,000
Cimarex Owned Frac/Rental Equipment					STB4.305	40,000
Legal/Regulatory/Curtative	DIDC.300	10,000				
Well Control Insurance	DIDC.285 \$0.35/ft	7,000				
Major Construction Overhead						
Real Time Operations Center	DIDC.560	0			STB4.560	0
FL/GI - Labor						
FL/GI - Supervision						
Survey						
SWD/Other - Labor						
SWD/OTHER - SUPERVISION						
Contingency	DIDC.435 500 % of Drilling Intangibles	132,000	DICC.220	12,000	STB4.230	266,000
Contingency						
P&A Costs	DIDC.295	0	DICC.275	0		
Total Intangible Cost		2,777,000		247,000		5,584,000
Drive Pipe	DWEB.150	0				
Conductor Pipe	DWEB.130	0				
Water String	DWEB.135	14,000				
Surface Casing	DWEB.140 9 5/8" - 2,668ft at \$25.00/ft	67,000				
Intermediate Casing 1	DWEB.145 7" - 5,930ft at \$28.00/ft	302,000				
Intermediate Casing 2	DWEB.155	0				
Drilling Liner	DWEB.160	0				
Production Casing or Liner			DWEA.100 4 1/2" - 12,550ft at \$19.00/ft	163,000		
Production Tie-Back			DWEA.165	0	STB4.191	0
Tubing					STB4.195 3-1/2" - 6,300ft at \$9.00/ft	75,000
Wellhead, Tree, Chokes	DWEB.115	20,000	DWEA.120	25,000	STB4.120	60,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	98,000		
Packer, Nipples					STB4.460	28,000
Pumping Unit, Engine					STB4.465	0
Downhole Lift Equipment					STB4.410	80,000
Surface Equipment						
Well Automation Materials						
Total Tangible - Well Equipment Cost		403,000		286,000		243,000
N/C Lease Equipment						
Tanks, Tanks Steps, Stairs						
Battery Equipment						
Secondary Commitments						
Overhead Power Distribution						
Facility Electrical						
Telecommunication Equipment						
Meters and Metering Equipment						
Facility Line Pipe						
Lease Automation Materials						
FL/GI - Materials						
FL/GI - Line Pipe						
SWD/Other - Materials						
SWD/OTHER - LINE PIPE						
Total Tangible - Lease Equipment Cost						
Total Estimated Cost		3,180,000		533,000		5,827,000



Description	Codes	Production Equip		Post Completion		Total	
		Amount	Codes	Amount	Cost	Amount	Cost
Roads & Location	CON.100	3,000	PCOM.100	Road Repair	10,000	48,000	10,000
Damages	CON.105	4,000				10,000	10,000
Mud/Pkts Disposal			PCOM.235	6,000 BHPD for 60 Days @ \$0.70/bbl	252,000	474,000	722,000
Day Rate						35,000	35,000
Misc Preparation			PCOM.125		0	75,000	75,000
Bits			PCOM.130		0	108,000	108,000
Fuel			PCOM.135		0	23,000	23,000
Water for Drilling Rig (Not Frac Water)						198,000	198,000
Mud & Additives			PCOM.254		0	0	0
SWD PIPED TO XEC SWD WELL			PCOM.257		0	0	0
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.258		0	0	0
SWD HAULED TO XEC SWD WELL			PCOM.259		0	0	0
SWD HAULED TO 3RD PARTY SWD WELL						0	0
Surface Rentals	CON.140	1,500	PCOM.140	\$1500/day for anticipated 30 days	45,000	414,500	414,500
Dowshoi Rentals			PCOM.145		0	177,000	177,000
Flowback Labor			PCOM.141	\$2300/day for anticipated 15 days	33,000	33,000	33,000
Automation Labor	CON.150	45,000	PCOM.150		0	45,000	45,000
Formation Evaluation (DST, Coring, etc.)						0	0
Mud Logging						27,000	27,000
Open Hole Logging						0	0
Cementing & Float Equipment			PCOM.160		0	59,000	59,000
Tubular Inspections						33,000	33,000
Casing Crews						211,000	211,000
Mechanical Labor	CON.170	181,000	PCOM.170		0	55,000	55,000
Trucking/Transportation	CON.175	18,000	PCOM.175		0	235,000	235,000
Supervision	CON.180	10,000	PCOM.180		0	89,000	89,000
Trailer House/Camp/Catering						172,000	172,000
Other Misc Expenses	CON.190	12,000	PCOM.190		0	15,000	15,000
Overhead						0	0
Remedial Cementing			PCOM.215		0	50,000	50,000
MOB/DEMCOB						376,000	376,000
Directional Drilling Services						99,000	99,000
Soils Control			PCOM.240		0	213,000	213,000
Well Control Equip (Snubbing Services)			PCOM.245		0	0	0
Wellbore & Siderack Services			PCOM.113		0	21,000	21,000
Completion Rig			PCOM.250		0	358,000	358,000
Coil Tubing Services			PCOM.200		0	432,000	432,000
Completion Logging/Perforating/Wireline			PCOM.330		0	96,000	96,000
Composite Plug			PCOM.210		0	2,926,000	2,926,000
Stimulation Pumping/Chemicals/Additives/Sand						702,000	702,000
Stimulation Water/Water Transfer/Water Storage			PCOM.305	XEC Owned Sand Separator	59,000	99,000	99,000
Cinmarex Owned Frac/Rental Equipment						10,000	10,000
Legal/Regulatory/Curtive	CON.300	0				7,000	7,000
Well Control Insurance						25,000	25,000
Major Construction Overhead	CON.305	25,000				0	0
Real Time Operations Center						153,500	153,500
FL/GI - Labor	CON.500	153,500				22,000	22,000
FL/GI - Supervision	CON.505	22,000				4,000	4,000
Survey	CON.515	4,000				0	0
SWD/Other - Labor	CON.600	0				0	0
SWD/OTHER - SUPERVISION	CON.605	0				0	0
Contingency	CON.220	86,500	PCOM.220		0	496,500	496,500
Contingency	CON.221	30,000				30,000	30,000
P&A Costs						0	0
Total Intangible Cost		595,500			399,000	9,602,500	9,602,500
Drive Pipe						0	0
Conductor Pipe						0	0
Water String						14,000	14,000
Surface Casing						67,000	67,000
Intermediate Casing 1						302,000	302,000
Intermediate Casing 2						0	0
Drilling Liner						0	0
Production Casing or Liner						163,000	163,000
Production Tie-Back						0	0
Tubing			PCOMT.105		0	75,000	75,000
Wellhead, Tree, Chokes			PCOMT.120	Hairpin from choke to flowline	10,000	115,000	115,000
Liner Hanger, Isolation Packer						98,000	98,000
Packer, Nipples			PCOMT.400		0	28,000	28,000
Pumping Unit, Engine			PCOMT.405		0	0	0
Downhole Lift Equipment			PCOMT.410		0	80,000	80,000
Surface Equipment			PCOMT.420		0	0	0
Well Automation Materials			PCOMT.455		0	0	0
Total Tangible - Well Equipment Cost					10,000	942,000	942,000
M/C Lease Equipment	CON.T.400	176,500				176,500	176,500
Tanks, Tanks Steps, Stairs	CON.T.405	51,500				51,500	51,500
Battery Equipment	CON.T.410	191,500				191,500	191,500
Secondary Containment	CON.T.415	12,000				12,000	12,000
Overhead Power Distribution	CON.T.420	25,000				25,000	25,000
Facility Electrical	CON.T.425	30,000				30,000	30,000
Telecommunication Equipment	CON.T.430	0				0	0
Meters and Metering Equipment	CON.T.435	22,500				22,500	22,500
Facility Line Pipe	CON.T.440	23,000				23,000	23,000
Lease Automation Materials	CON.T.445	37,500				63,500	63,500
FL/GI - Materials	CON.T.550	63,500				52,500	52,500
FL/GI - Line Pipe	CON.T.555	52,500				0	0
SWD/Other - Materials	CON.T.560	0				0	0
SWD/OTHER - LINE PIPE	CON.T.555	0				0	0
Total Tangible - Lease Equipment Cost		685,500				685,500	685,500
Total Estimated Cost		1,261,000			409,000	11,230,000	11,230,000



Company Entity

Date Prepared
9/5/2019

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	RIVERBEND 12-13 FEDERAL COM 34H	Carlsbad Bone Spring Prospect	300001-143.01	26620020
County, State	Location	Estimated Spud	Estimated Completion	
Eddy, NM	W/2 of Sections 12 & 13, Township 25 South, Range 28 East, Eddy County, NM	7/15/2019	8/15/2019	
<input checked="" type="checkbox"/> New Supplement Revision	Formation	Well Type	Td Measured Depth	Td Vertical Depth
	Wolfcamp	DEV	20,855	9,918

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 400', set water string casing. Drill to 2666', set surface casing. Drill to 9408' (KOP). Drill curve at 12°/100' initial build rate to +/- 75 degrees and set casing at +/- 10033' MD. Finish curve at +/- 4°/100' to +/- 9920' TVD and drill a +/- 9510' long lateral in the Wolfcamp formation. Run and cement production liner. Stage frac. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,777,000		\$2,777,000
Completion Costs		\$6,825,500	\$6,825,500
Total Intangible Cost	\$2,777,000	\$6,825,500	\$9,602,500
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	\$409,000	\$541,000	\$950,000
Lease Equipment		\$685,500	\$685,500
Total Tangible Cost	\$409,000	\$1,226,500	\$1,635,500
Total Well Cost	\$3,186,000	\$8,052,000	\$11,238,000

Comments On Well Costs

- All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefor. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

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Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

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I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

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The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

9/5/2019



Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total	Cost
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount		
Roots & Location	D1DC100	25,000			STIM100	10,000	CON100	3,000	PCOM100	10,000		48,000
Damages	D1DC105	6,000					CON105	4,000				10,000
Mud/Fluids Disposal	D1DC255	160,000			STIM255	62,000			PCOM255	252,000		474,000
Day Rate	D1DC115	618,000	D1CC120	104,000								722,000
Misc Preparation	D1DC120	35,000										35,000
Bits	D1DC125	75,000	D1CC125	0	STIM125	0			PCOM125	0		75,000
Fuel	D1DC135	108,000	D1CC130	0					PCOM130	0		108,000
Water for Drilling Rig (Not Frac Water)	D1DC140	5,000	D1CC135	0	STIM135	24,000			PCOM135	0		29,000
Mud & Additives	D1DC145	198,000										198,000
SWD PIPED TO XEC SWD WELL									PCOM254	0		0
SWD PIPED TO 3RD PARTY SWD WELL									PCOM257	0		0
SWD HAULED TO XEC SWD WELL									PCOM258	0		0
SWD HAULED TO 3RD PARTY SWD WELL									PCOM259	0		0
Surface Rentals	D1DC150	131,000	D1CC140	0	STIM140	237,000	CON140	1,500	PCOM140	45,000		414,500
Downhole Rentals	D1DC155	177,000			STIM145	0			PCOM145	0		177,000
Flowback Labor					STIM141	0			PCOM141	33,000		33,000
Automation Labor							CON150	45,000	PCOM150	0		45,000
Formation Evaluation (DST, Coring, etc.)	D1DC160	0			STIM150	0						0
Mud Logging	D1DC170	27,000										27,000
Open Hole Logging	D1DC180	0										0
Cementing & Float Equipment	D1DC185	145,000	D1CC155	63,000								208,000
Tubular Inspections	D1DC190	50,000	D1CC160	5,000	STIM160	4,000			PCOM160	0		59,000
Casing Crews	D1DC195	20,000	D1CC165	13,000	STIM165	0						33,000
Mechanical Labor	D1DC200	20,000	D1CC170	10,000	STIM170	0	CON170	181,000	PCOM170	0		211,000
Trucking/Transportation	D1DC205	25,000	D1CC175	8,000	STIM175	4,000	CON175	18,000	PCOM175	0		55,000
Supervision	D1DC210	115,000	D1CC180	16,000	STIM180	94,000	CON180	10,000	PCOM180	0		235,000
Trailer House/Camp/Catering	D1DC280	49,000	D1CC255	6,000	STIM280	34,000						89,000
Other Misc Expenses	D1DC220	5,000	D1CC190	0	STIM190	155,000	CON190	12,000	PCOM190	0		172,000
Overhead	D1DC225	10,000	D1CC195	5,000								15,000
Remedial Cementing	D1DC231	0			STIM215	0			PCOM215	0		0
MOB/DEMOS	D1DC240	50,000										50,000
Directional Drilling Services	D1DC245	376,000										376,000
Solids Control	D1DC260	99,000										99,000
Well Control Equip (Swabbing Services)	D1DC265	99,000	D1CC240	5,000	STIM240	109,000			PCOM240	0		213,000
Fishing & Sidetrack Services	D1DC270	0	D1CC245	0	STIM245	0			PCOM245	0		0
Completion Rig					STIM115	21,000			PCOM115	0		21,000
Coil Tubing Services					STIM260	368,000			PCOM260	0		368,000
Completion Logging/Perforating/Wireline					STIM200	432,000			PCOM200	0		432,000
Completion Plugs					STIM390	96,000			PCOM390	0		96,000
Stimulation Pumping/Chemicals/Aud/Drives/Sand					STIM270	2,926,000			PCOM270	0		2,926,000
Stimulation Water/Water Transfer/Water Storage					STIM385	702,000						702,000
Cimarex Owned Frac/Rental Equipment					STIM305	40,000			PCOM305	59,000		99,000
Legal/Regulatory/Cursive	D1DC300	10,000					CON300	0				10,000
Well Control Insurance	D1DC285	7,000										7,000
Major Construction Overhead							CON305	25,000				25,000
Real Time Operations Center	D1DC500	0			STIM560	0						0
FL/GI - Labor							CON300	153,500				153,500
FL/GI - Supervision							CON505	22,000				22,000
Survey							CON515	4,000				4,000
SWD/Other - Labor							CON600	0				0
SWD/OTHER - SUPERVISION							CON605	0				0
Contingency	D1DC435	132,000	D1CC220	12,000	STIM220	266,000	CON220	86,500	PCOM220	0		496,500
Contingency							CON221	30,000				30,000
P&A Costs	D1DC285	0	D1CC275	0								0
Total Tangible Cost		2,777,000		247,000		5,584,000		595,500		399,000		9,602,500
Drive Pipe	D1WE150	0										0
Conductor Pipe	D1WE130	0										0
Water String	D1WE135	14,000										14,000
Surface Casing	D1WE140	67,000										67,000
Intermediate Casing 1	D1WE145	308,000										308,000
Intermediate Casing 2	D1WE155	0										0
Drilling Liner	D1WE160	0										0
Production Casing or Liner			D1WE100	163,000								163,000
Production Tie-Back			D1WE165	0	STIM101	0						0
Tubing					STIM105	77,000			PCOM105	0		77,000
Wellhead, Tree, Chokes	D1WE115	20,000	D1WE120	25,000	STIM120	60,000			PCOM120	10,000		115,000
Liner Hanger, Isolation Packer	D1WE100	0	D1WE125	98,000								98,000
Packer, Nipples					STIM400	28,000			PCOM400	0		28,000
Pumping Unit, Engine					STIM405	0			PCOM405	0		0
Downhole Lift Equipment					STIM410	80,000			PCOM410	0		80,000
Surface Equipment									PCOM420	0		0
Well Automation Materials									PCOM455	0		0
Total Tangible - Well Equipment Cost		409,000		286,000		245,000				10,000		950,000
N/C Lease Equipment							CON400	176,500				176,500
Tanks, Tank Steps, Stairs							CON405	51,500				51,500
Battery Equipment							CON410	191,500				191,500
Secondary Containments							CON415	12,000				12,000
Overhead Power Distribution							CON420	25,000				25,000
Facility Electrical							CON425	30,000				30,000
Telecommunication Equipment							CON426	0				0
Meters and Metering Equipment							CON445	22,500				22,500
Facility Line Pipe							CON450	23,000				23,000
Lease Automation Materials							CON455	37,500				37,500
FL/GI - Materials							CON390	63,500				63,500
FL/GI - Line Pipe							CON355	52,500				52,500
SWD/Other - Materials							CON450	0				0
SWD/OTHER - LINE PIPE							CON455	0				0
Total Tangible - Lease Equipment Cost								685,500				685,500
Total Estimated Cost		3,186,000		533,000		5,829,000		1,281,000		409,000		11,238,000



Description	BCP - Drilling			ACP - Drilling			Comp/Stim	
	Codes	Amount	Codes	Amount	Codes	Amount		
Roads & Location	DIOC.100	25,000			STIM.100			10,000
Damages	DIOC.105	6,000						
Mud/Pulvis Disposal	DIOC.255	160,000			STIM.255			62,000
Mud Rate	DIOC.115	23 days at \$26,000/day	DICC.120	4 days at \$26,000/day				
Misc Preparation	DIOC.120	35,000						
Sits	DIOC.125	75,000	DICC.125	0	STIM.125			0
Fuel	DIOC.135	1,300 gal/day at \$3.00/gal	DICC.130	0				
Water for Drilling Rig (Not Frac Water)	DIOC.140	5,000	DICC.135	0	STIM.135			24,000
Mud & Additives	DIOC.145	198,000						
SMD PIPED TO XEC SMD WELL								
SMD PIPED TO 3RD PARTY SMD WELL								
SMD HAULED TO XEC SMD WELL								
SMD HAULED TO 3RD PARTY SMD WELL								
Surface Rentals	DIOC.150	Per Day (BCP)/day	DICC.140	0	STIM.140			237,000
Downhole Rentals	DIOC.155				STIM.145			0
Flowback Labor		177,000			STIM.141			0
Automation Labor								0
Formation Evaluation (DST, Coring, etc.)	DIOC.160	0			STIM.150			0
Mud Logging	DIOC.170	16 days at \$1,200/day						
Open Hole Logging	DIOC.180	0						
Cementing & Float Equipment	DIOC.185	145,000	DICC.155	63,000				
Tubular Inspections	DIOC.190	50,000	DICC.160	5,000	STIM.160			4,000
Casing Crews	DIOC.195	20,000	DICC.165	13,000	STIM.165			0
Mechanical Labor	DIOC.200	20,000	DICC.170	10,000	STIM.170			0
Trucking/Transportation	DIOC.205	25,000	DICC.175	8,000	STIM.175			4,000
Supervision	DIOC.210	115,000	DICC.180	16,000	STIM.180			94,000
Trailer House/Camp/Catering	DIOC.280	49,000	DICC.255	6,000	STIM.280			34,000
Other Misc Expenses	DIOC.220	5,000	DICC.190	0	STIM.190			155,000
Overhead	DIOC.225	10,000	DICC.195	5,000				
Remedial Cementing	DIOC.231	0			STIM.215			0
MOB/DEMOS	DIOC.240	50,000						
Directional Drilling Services	DIOC.245	376,000						
Solids Control	DIOC.260	99,000						
Well Control Equip (Snubbing Services)	DIOC.265	99,000	DICC.240	5,000	STIM.240			109,000
Fishing & Sidetrack Services	DIOC.270	0	DICC.245	0	STIM.245			0
Completion Rig					STIM.115			21,000
Coil Tubing Services					STIM.280			368,000
Completion Logging/Perforating/Wireline					STIM.200			432,000
Composite Plugs					STIM.380			96,000
Stimulation					STIM.210			2,926,000
Stimulation Water/Water Transfer/Water					STIM.395			702,000
Concrete Owned Frac/Rental Equipment					STIM.305			40,000
Legal/Regulatory/Curtail	DIOC.500	10,000						
Well Control Insurance	DIOC.285	\$0.25/ft						
Major Construction Overhead								
Real Time Operations Center	DIOC.580	0			STIM.560			0
FL/GI - Labor								
FL/GI - Supervision								
Survey								
SMD/Other - Labor								
SMD/OTHER - SUPERVISION								
Contingency	DIOC.485	500 % of Drilling Intangibles	DICC.220	12,000	STIM.220			266,000
Contingency								
RSA Costs	DIOC.295	0	DICC.275	0				
Total Intangible Cost		2,777,000		247,000				5,584,000
Drive Pipe	DWEB.150	0						
Conductor Pipe	DWEB.130	0						
Water Sling	DWEB.135	14,000						
Surface Casing	DWEB.140	9 5/8" - 2,660ft at \$25.00/ft						
Intermediate Casing 1	DWEB.145	7" - 10,130ft at \$28.00/ft						
Intermediate Casing 2	DWEB.155	0						
Drilling Liner	DWEB.160	0						
Production Casing or Liner			DWEA.100	4 1/2" - 12,550ft at \$19.00/ft	163,000			
Production Tie-Back			DWEA.165	0	STIMT.101			0
Tubing					STIMT.105	3-1/2" - 8,510ft at \$9.00/ft		77,000
Wellhead, Trees, Chokes	DWEB.115	20,000	DWEA.120	25,000	STIMT.120			60,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	98,000				
Packer, Nipples					STIMT.400			28,000
Pumping Unit, Engine					STIMT.405			0
Downhole Lift Equipment					STIMT.410			80,000
Surface Equipment								
Well Automation Materials								
Total Tangible - Well Equipment Cost		409,000		286,000				245,000
N/C Lease Equipment								
Tanks, Tanks Steps, Stairs								
Battery Equipment								
Secondary Containment								
Overhead Power Distribution								
Facility Electrical								
Telecommunication Equipment								
Meters and Metering Equipment								
Facility Line Pipe								
Lease Automation Materials								
FL/GI - Materials								
FL/GI - Line Pipe								
SMD/Other - Materials								
SMD/OTHER - LINE PIPE								
Total Tangible - Lease Equipment Cost								
Total Estimated Cost		3,186,000		533,000				5,829,000



Description	Production Equip		Post Completion		Total	
	Codes	Amount	Codes	Amount	Cost	
Roads & Location	CON.100	3,000	PCOM.100	Road Repair	10,000	48,000
Damages	CON.105	4,000				10,000
Mud/Fluids Disposal			PCOM.255	6,000 BWPD for 60 Days @ \$0.70/bbl	252,000	474,000
Day Rate						722,000
Misc Preparation						35,000
Bits			PCOM.125		0	75,000
Fuel			PCOM.130		0	108,000
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	29,000
Mud & Additives						198,000
SWD PIPED TO XEC SWD WELL			PCOM.254		0	0
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257		0	0
SWD HAULED TO XEC SWD WELL			PCOM.258		0	0
SWD HAULED TO 3RD PARTY SWD WELL			PCOM.259		0	0
Surface Rentals	CON.140	1,500	PCOM.140	\$1500/day for anticipated 30 days	45,000	414,500
Downhole Rentals			PCOM.145		0	177,000
Flowback Labor			PCOM.141	\$2200/day for anticipated 15 days	33,000	33,000
Automation Labor	CON.150	45,000	PCOM.150		0	45,000
Formation Evaluation (DST, Coring, etc.)						0
Mud Logging						27,000
Open Hole Logging						0
Cementing & Float Equipment						208,000
Tubular Inspections			PCOM.160		0	59,000
Casing Crews						33,000
Mechanical Labor	CON.170	181,000	PCOM.170		0	211,000
Trucking/Transportation	CON.175	18,000	PCOM.175		0	55,000
Supervision	CON.180	10,000	PCOM.180		0	235,000
Trailer House/Camp/Catering						89,000
Other Misc Expenses	CON.190	12,000	PCOM.190		0	172,000
Overhead						15,000
Remedial Cementing			PCOM.215		0	0
MOB/DEMOB						50,000
Directional Drilling Services						376,000
Solids Control						99,000
Well Control Equip (Snubbing Services)			PCOM.240		0	213,000
Fishing & Sidetrack Services			PCOM.245		0	0
Completion Rig			PCOM.115		0	21,000
Coil Tubing Services			PCOM.260		0	368,000
Completion Logging/Perforating/Wireline			PCOM.200		0	432,000
Composite Progs			PCOM.390		0	96,000
Stimulation Pumping/Chemicals/Additives/Sand			PCOM.210		0	2,926,000
Stimulation Water/Water Transfer/Water Storage						702,000
Cimarex Owned Frac/Rental Equipment						99,000
Legal/Regulatory/Compliance	CON.300	0	PCOM.305	XEC Owned Sand Separator	59,000	10,000
Well Control Insurance						7,000
Major Construction Overhead	CON.305	25,000				25,000
Real Time Operations Center						0
FLUGL - Labor	CON.500	153,500				153,500
FLUGL - Supervision	CON.505	22,000				22,000
Survey	CON.515	4,000				4,000
SWD/Other - Labor	CON.600	0				0
SWD/OTHER - SUPERVISION	CON.605	0				0
Contingency	CON.220	86,500	PCOM.220		0	496,500
Contingency	CON.221	30,000				30,000
PBA Costs						0
Total Intangible Cost		595,500			399,000	9,602,500
Drive Pipe						0
Conductor Pipe						0
Water String						14,000
Surface Casing						67,000
Intermediate Casing 1						308,000
Intermediate Casing 2						0
Drilling Liner						0
Production Casing or Liner						163,000
Production Tie-Back						0
Tubing			PCOMT.108		0	77,000
Wellhead, Trees, Chokes			PCOMT.120	Halfinch from choke to flowline	10,000	115,000
Liner Hanger, Isolation Packer						98,000
Packer, Nipples			PCOMT.400		0	28,000
Pumping Unit, Engine			PCOMT.405		0	0
Downhole Lift Equipment			PCOMT.410		0	80,000
Surface Equipment			PCOMT.420		0	0
Well Automation Materials			PCOMT.455		0	0
Total Tangible - Well Equipment Cost					10,000	950,000
N/C Lesse Equipment	CONT.400	176,500				176,500
Tanks, Tanks Steps, Stairs	CONT.405	51,500				51,500
Battery Equipment	CONT.410	191,500				191,500
Secondary Containments	CONT.415	12,000				12,000
Overhead Power Distribution	CONT.420	25,000				25,000
Facility Electrical	CONT.425	30,000				30,000
Telecommunication Equipment	CONT.426	0				0
Meters and Metering Equipment	CONT.445	22,500				22,500
Facility Line Pipe	CONT.450	23,000				23,000
Lesse Automation Materials	CONT.455	37,500				37,500
FLUGL - Materials	CONT.550	63,500				63,500
FLUGL - Line Pipe	CONT.555	52,500				52,500
SWD/Other - Materials	CONT.650	0				0
SWD/OTHER - LINE PIPE	CONT.655	0				0
Total Tangible - Lease Equipment Cost		685,500				685,500
Total Estimated Cost		1,281,000			409,000	11,238,000



Company Entity

Date Prepared
9/5/2019

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	RIVERBEND 12-13 FEDERAL COM 35H Carlsbad	Bone Spring Prospect	300001-144.01	26620021
County, State	Location	Estimated Spud	Estimated Completion	
Eddy, NM	W/2 of Sections 12 & 13, Township 25 South, Range 28 East, Eddy County, NM	7/15/2019	8/15/2019	
<input checked="" type="checkbox"/> New <input type="checkbox"/> Supplement <input type="checkbox"/> Revision	Formation	Well Type	Ttl Measured Depth	Ttl Vertical Depth
	Wolfcamp	DEV	20,651	9,714

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 400', set water string casing. Drill to 2666', set surface casing. Drill to 9204' (KOP). Drill curve at 12"/100' initial build rate to +/- 75 degrees and set casing at +/- 9829' MD. Finish curve at +/- 4"/100' to +/- 9710' TVD and drill a +/- 9510' long lateral in the Wolfcamp formation. Run and cement production liner. Stage frac. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,777,000		\$2,777,000
Completion Costs		\$6,825,500	\$6,825,500
Total Intangible Cost	\$2,777,000	\$6,825,500	\$9,602,500
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	\$403,000	\$539,000	\$942,000
Lease Equipment		\$685,500	\$685,500
Total Tangible Cost	\$403,000	\$1,224,500	\$1,627,500
Total Well Cost	\$3,180,000	\$8,050,000	\$11,230,000

Comments On Well Costs

- All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

I elect to purchase my own well control insurance policy.

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

9/5/2019



Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total	Cost
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount		
Roads & Location	DIDC100	25,000			STIM100	10,000	CON100	3,000	PCOM100	10,000	48,000	
Damages	DIDC105	6,000					CON105	4,000			10,000	
Mud/Fluids Disposal	DIDC255	160,000			STIM255	62,000			PCOM255	252,000	474,000	
Day Rate	DIDC115	618,000	DICC120	104,000							722,000	
Misc Preparation	DIDC120	35,000									35,000	
Mts	DIDC125	75,000	DICC125	0	STIM125	0			PCOM125	0	75,000	
Fuel	DIDC135	108,000	DICC130	0					PCOM130	0	108,000	
Water for Drilling Rig (Not Frac Water)	DIDC140	5,000	DICC135	0	STIM135	24,000			PCOM135	0	29,000	
Inhib & Additives	DIDC145	198,000									198,000	
SWD PIPED TO XEC SWD WELL									PCOM254	0	0	
SWD PIPED TO 3RD PARTY SWD WELL									PCOM257	0	0	
SWD HAULED TO XEC SWD WELL									PCOM258	0	0	
SWD HAULED TO 3RD PARTY SWD WELL									PCOM259	0	0	
Surface Rentals	DIDC150	131,000	DICC140	0	STIM140	237,000	CON140	1,500	PCOM140	45,000	414,500	
Downhole Rentals	DIDC155	177,000			STIM143	0			PCOM143	0	177,000	
Flowback Labor					STIM141	0			PCOM141	33,000	33,000	
Automation Labor							CON150	45,000	PCOM150	0	45,000	
Formation Evaluation (DST, Coring, etc)	DIDC160	0			STIM150	0					0	
Mud Logging	DIDC170	27,000									27,000	
Open Hole Logging	DIDC180	0									0	
Cementing & Flow Equipment	DIDC185	145,000	DICC155	63,000	STIM160	4,000			PCOM160	0	208,000	
Tubular Inspections	DIDC190	50,000	DICC160	5,000	STIM165	0					55,000	
Casing Crews	DIDC195	20,000	DICC165	13,000	STIM170	0					33,000	
Mechanical Labor	DIDC200	20,000	DICC170	10,000	STIM175	8,000	CON170	181,000	PCOM170	0	211,000	
Trucking/Transportation	DIDC205	25,000	DICC175	8,000	STIM180	34,000	CON175	18,000	PCOM175	0	55,000	
Supervision	DIDC210	115,000	DICC180	16,000	STIM180	94,000	CON180	10,000	PCOM180	0	235,000	
Trailer House/Camp/Catering	DIDC280	49,000	DICC255	6,000	STIM280	34,000					89,000	
Other Misc Expenses	DIDC220	5,000	DICC190	0	STIM190	155,000	CON190	12,000	PCOM190	0	172,000	
Overhead	DIDC235	10,000	DICC195	5,000							15,000	
Remedial Cementing	DIDC231	0			STIM215	0			PCOM215	0	0	
MOB/DEMOB	DIDC240	50,000									50,000	
Directional Drilling Services	DIDC245	376,000									376,000	
Solids Control	DIDC280	59,000									59,000	
Well Control Equip (Snubbing Services)	DIDC285	59,000	DICC240	5,000	STIM240	109,000			PCOM240	0	213,000	
Fishing & Sidetrack Services	DIDC270	0	DICC245	0	STIM245	0			PCOM245	0	0	
Completion Rig					STIM115	21,000			PCOM115	0	21,000	
Coil Tubing Services					STIM260	368,000			PCOM260	0	368,000	
Completion Logging/Perforating/Wireline					STIM200	432,000			PCOM200	0	432,000	
Composite Plugs					STIM390	96,000			PCOM390	0	96,000	
Stimulation Pumping/Chemicals/Additives/Sand					STIM210	2,926,000			PCOM210	0	2,926,000	
Stimulation Water/Water Transfer/Water Storage					STIM395	702,000					702,000	
Cimarex Owned Frac/Rental Equipment					STIM305	40,000			PCOM305	59,000	99,000	
Legal/Regulatory/Creative	DIDC300	10,000					CON300	0			10,000	
Well Control Insurance	DIDC285	7,000					CON305	25,000			32,000	
Major Construction Overhead											25,000	
Real Time Operations Center	DIDC560	0			STIM560	0					0	
FL/GL - Labor							CON500	153,500			153,500	
FL/GL - Supervision							CON505	22,000			22,000	
Survey							CON515	4,000			4,000	
SWD/Other - Labor							CON600	0			0	
SWD/OTHER - SUPERVISION							CON605	0			0	
Contingency	DIDC435	132,000	DICC220	12,000	STIM220	266,000	CON220	86,500	PCOM220	0	496,500	
Contingency							CON221	30,000			30,000	
F&B Costs	DIDC295	0	DICC275	0							0	
Total Intangible Cost		2,777,000		247,000		5,584,000		595,500		399,000	9,602,500	
Drive Pipe	DWEB130	0									0	
Conductor Pipe	DWEB130	0									0	
Water String	DWEB135	14,000									14,000	
Surface Casing	DWEB140	67,000									67,000	
Intermediate Casing 1	DWEB145	302,000									302,000	
Intermediate Casing 2	DWEB155	0									0	
Drilling Liner	DWEB160	0									0	
Production Casing or Liner			DWEA100	163,000							163,000	
Production Tie-Back			DWEA165	0	STIM101	0					0	
Tubing					STIM105	75,000			PCOM105	0	75,000	
Wellhead, Trees, Chokes	DWEB115	20,000	DWEA120	25,000	STIM120	60,000			PCOM120	10,000	115,000	
Liner Hanger, Isolation Packer	DWEB100	0	DWEA125	98,000							98,000	
Packer, Nipples					STIM400	28,000			PCOM400	0	28,000	
Pumping Unit, Engine					STIM405	0			PCOM405	0	0	
Downhole Lift Equipment					STIM410	80,000			PCOM410	0	80,000	
Surface Equipment									PCOM420	0	0	
Well Automation Materials									PCOM455	0	0	
Total Tangible - Well Equipment Cost		403,000		286,000		243,000				10,000	942,000	
N/C Lease Equipment							CONT400	176,500			176,500	
Tanks, Tanks Steps, Stairs							CONT405	51,500			51,500	
Battery Equipment							CONT410	191,500			191,500	
Secondary Containments							CONT415	12,000			12,000	
Overhead Power Distribution							CONT420	25,000			25,000	
Facility Electrical							CONT425	30,000			30,000	
Telecommunication Equipment							CONT426	0			0	
Meters and Metering Equipment							CONT445	22,500			22,500	
Facility Line Pipe							CONT450	23,000			23,000	
Lease Automation Materials							CONT455	37,500			37,500	
FL/GL - Materials							CONT550	63,500			63,500	
FL/GL - Line Pipe							CONT555	52,500			52,500	
SWD/Other - Materials							CONT650	0			0	
SWD/OTHER - LINE PIPE							CONT655	0			0	
Total Tangible - Lease Equipment Cost								685,500			685,500	
Total Estimated Cost		3,180,000		533,000		5,827,000		1,281,000		409,000	11,230,000	



Description	BCP - Drilling		ACP - Drilling		Codes	Amount
	Codes	Amount	Codes	Amount		
Roads & Location	DIDC100	25,000			STIM100	10,000
Damages	DIDC105	6,000				
Mud/Fluids Disposal	DIDC255	160,000			STIM255	62,000
Day Rate	DIDC115 23 days at \$26,000/day	618,000	DICC120 4 days at \$26,000/day	104,000		
Misc Preparation	DIDC120	35,000				
Bits	DIDC125	75,000	DICC125	0	STIM125	0
Fuel	DIDC135 1,300 gal/day at \$9.00/gal	108,000	DICC130	0		
Water for Drilling Rig (Not Frac Water)	DIDC140	5,000	DICC135	0	STIM135	24,000
Mud & Additives	DIDC145	198,000				
SWD PIPED TO XBC SWD WELL						
SWD PIPED TO 3RD PARTY SWD WELL						
SWD HAULED TO XBC SWD WELL						
SWD HAULED TO 3RD PARTY SWD WELL						
Surface Rentals	DIDC150 Per Day (BCP)/day	131,000	DICC140	0	STIM140	237,000
Downhole Rentals	DIDC155	177,000			STIM145	0
Flowback Labor					STIM141	0
Automation Labor						0
Formation Evaluation (DST, Coring, etc.)	DIDC160	0			STIM150	0
Mud Logging	DIDC170 18 days at \$1,200/day	27,000				
Open Hole Logging	DIDC180	0				
Cementing & Float Equipment	DIDC185	145,000	DICC155	63,000		
Tubular Inspections	DIDC190	50,000	DICC160	5,000	STIM180	4,000
Casing Crews	DIDC195	20,000	DICC165	13,000	STIM165	0
Mechanical Labor	DIDC200	20,000	DICC170	10,000	STIM170	0
Trucking/Transportation	DIDC205	25,000	DICC175	8,000	STIM175	4,000
Supervision	DIDC210	115,000	DICC180	16,000	STIM180	94,000
Trailer House/Camp/Catering	DIDC280	49,000	DICC255	6,000	STIM280	34,000
Other Misc Expenses	DIDC220	5,000	DICC190	0	STIM190	153,000
Overhead	DIDC225	10,000	DICC195	5,000		
Remedial Cementing	DIDC281	0			STIM215	0
MAOR/DENIOS	DIDC240	50,000				
Directional Drilling Services	DIDC245	376,000				
Slide Control	DIDC260	99,000				
Well Control Equip (Snubbing Services)	DIDC265	99,000	DICC240	5,000	STIM240	109,000
Fishing & Sidetrack Services	DIDC270	0	DICC245	0	STIM245	0
Completion Rig					STIM115	21,000
Coil Tubing Services					STIM280	368,000
Completion Logging/Perforating/Wireline					STIM200	432,000
Composite Plugs					STIM390	96,000
Stimulation					STIM210	2,926,000
Stimulation Water/Water Transfer/Water					STIM395	702,000
Cimarex Owned Frac/Rental Equipment					STIM305	40,000
Legal/Regulatory/Curtative	DIDC300	10,000				
Well Control Insurance	DIDC285 \$0.35/ft	7,000				
Major Construction Overhead						
Real Time Operations Center	DIDC560	0			STIM560	0
FL/GL - Labor						
FL/GL - Supervision						
Survey						
SWD/Other - Labor						
SWD/OTHER - SUPERVISION						
Contingency	DIDC435 500 % of Drilling Intangible	132,000	DICC220	12,000	STIM220	266,000
Contingency						
P&A Costs	DIDC285	0	DICC275	0		
Total Intangible Cost		2,777,000		247,000		5,584,000
Drive Pipe	DWEB150	0				
Conductor Pipe	DWEB130	0				
Water String	DWEB135	14,000				
Surface Casing	DWEB140 9 5/8" - 2,660ft at \$25.00/ft	67,000				
Intermediate Casing 1	DWEB145 7" - 9,930ft at \$28.00/ft	302,000				
Intermediate Casing 2	DWEB155	0				
Drilling Liner	DWEB160	0				
Production Casing or Liner			DWEA100 4 1/2" - 12,550ft at \$19.00/ft	163,000		
Production Tie-Back			DWEA165	0	STIMT101	0
Tubing					STIMT105	75,000
Wellhead, Trees, Chokes	DWEB115	20,000	DWEA120	25,000	STIMT120	60,000
Liner Hanger, Isolation Packer	DWEB100	0	DWEA125	98,000		
Packers, Nipples					STIMT400	28,000
Pumping Unit, Engine					STIMT405	0
Downhole Lift Equipment					STIMT410	80,000
Surface Equipment						
Well Automation Materials						
Total Tangible - Well Equipment Cost		408,000		286,000		243,000
N/C Lease Equipment						
Tanks, Tanks Steps, Stairs						
Battery Equipment						
Secondary Containments						
Overhead Power Distribution						
Facility Electrical						
Telecommunication Equipment						
Meters and Metering Equipment						
Facility Line Pipe						
Lease Automation Materials						
FL/GL - Materials						
FL/GL - Live Pipe						
SWD/Other - Materials						
SWD/OTHER - LINE PIPE						
Total Tangible - Lease Equipment Cost						
Total Estimated Cost:		3,180,000		533,000		5,827,000



Description	Codes	Production Equip		Post Completion		Total	
		Amount	Codes	Amount	Cost	Amount	Cost
Roads & Location	CON1100	3,000	PCOM100	10,000	48,000		
Damages	CON1105	4,000			10,000		
Mud/Fluids Disposal			PCOM255	6,000 BHPD for 60 Days @ \$0.70/bbl	252,000	474,000	
Day Rate						722,000	
Misc Preparation						35,000	
Bits			PCOM125		0	75,000	
Fuel			PCOM130		0	108,000	
Water for Drilling Rig (Not Frac Water)			PCOM135		0	29,000	
Mud & Additives						198,000	
SWD PIPED TO XEC SWD WELL			PCOM254		0	0	
SWD PIPED TO 3RD PARTY SWD WELL			PCOM257		0	0	
SWD HAULED TO XEC SWD WELL			PCOM258		0	0	
SWD HAULED TO 3RD PARTY SWD WELL			PCOM258		0	0	
Surface Rentals	CON140	1,500	PCOM140	\$1500/day for anticipated 30 days	45,000	414,500	
Downhole Rentals			PCOM145		0	177,000	
Flowback Labor			PCOM141	\$2200/day for anticipated 15 days	33,000	33,000	
Automation Labor	CON150	45,000	PCOM150		0	45,000	
Formation Evaluation (DST, Coring, etc)						0	
Mud Logging						27,000	
Open Hole Logging						0	
Cementing & Float Equipment						208,000	
Tubular Inspections			PCOM160		0	59,000	
Casing Crews						33,000	
Mechanical Labor	CON170	181,000	PCOM170		0	211,000	
Trucking/Transportation	CON175	18,000	PCOM175		0	55,000	
Supervision	CON180	10,000	PCOM180		0	235,000	
Trailer House/Camp/Catering						89,000	
Other Misc Expenses	CON190	12,000	PCOM190		0	172,000	
Overhead						15,000	
Remedial Cementing			PCOM215		0	0	
MOB/DMAOB						50,000	
Directional Drilling Services						376,000	
Solids Control						99,000	
Well Control Equip (Snubbing Services)			PCOM240		0	213,000	
Fishing & Sidetrack Services			PCOM245		0	0	
Completion Rig			PCOM115		0	21,000	
Coil Tubing Services			PCOM260		0	368,000	
Completion Logging/Perforating/Wireline			PCOM200		0	432,000	
Composate Plugs			PCOM390		0	96,000	
Stimulation Pumping/Chemicals/Additives/Sand			PCOM210		0	2,926,000	
Stimulation Water/Water Transfer/Water Storage						702,000	
Cinemas Owned Frac/Rentals Equipment			PCOM305	XEC Owned Sand Separator	59,000	99,000	
Legal/Regulatory/Carative	CON300	0				10,000	
Well Control Insurance						7,000	
Major Construction Overhead	CON305	25,000				25,000	
Real Time Operations Center						0	
FLUGL - Labor	CON500	153,500				153,500	
FLUGL - Supervision	CON505	22,000				22,000	
Survey	CON515	4,000				4,000	
SWD/Other - Labor	CON600	0				0	
SWD/OTHER - SUPERVISION	CON605	0				0	
Contingency	CON220	86,500	PCOM220		0	496,500	
Contingency	CON221	30,000				30,000	
P&A Costs						0	
Total Intangible Cost		595,500			399,000	9,602,500	
Drive Pipe						0	
Conductor Pipe						0	
Water String						14,000	
Surface Casing						67,000	
Intermediate Casing 1						302,000	
Intermediate Casing 2						0	
Drilling Liner						0	
Production Casing or Liner						163,000	
Production Tie-Back						0	
Tubing			PCOMT105		0	75,000	
Wellhead, Tree, Chokes			PCOMT120	Halfpin from choke to flowline	10,000	115,000	
Liner Hanger, Isolation Packer						98,000	
Packer, Nipples			PCOMT400		0	28,000	
Pumping Unit, Engine			PCOMT405		0	0	
Downhole Lift Equipment			PCOMT410		0	80,000	
Surface Equipment			PCOMT420		0	0	
Well Automation Materials			PCOMT455		0	0	
Total Tangible - Well Equipment Cost					10,000	942,000	
N/C Lease Equipment	CONT400	176,500				176,500	
Tanks, Tanks Steps, Stairs	CONT405	51,500				51,500	
Battery Equipment	CONT410	191,500				191,500	
Secondary Containments	CONT415	12,000				12,000	
Overhead Power Distribution	CONT420	25,000				25,000	
Facility Electrical	CONT425	30,000				30,000	
Telecommunication Equipment	CONT430	0				0	
Meters and Metering Equipment	CONT445	22,500				22,500	
Facility Line Pipe	CONT450	23,000				23,000	
Lease Automation Materials	CONT455	37,500				37,500	
FLUGL - Materials	CONT550	69,500				69,500	
FLUGL - Line Pipe	CONT555	52,500				52,500	
SWD/Other - Materials	CONT650	0				0	
SWD/OTHER - LINE PIPE	CONT655	0				0	
Total Tangible - Lease Equipment Cost		685,500				685,500	
Total Estimated Cost		1,281,000			409,000	11,230,000	

**Timeline of Communications with Tap Rock in regards to W/2 Riverbend Wells –
Sections 12 & 13-25S-28E, Eddy County, NM**

Post Receipt of Well Proposals:

12/20/2019 – Dana Arnold at Tap Rock reached out with the idea of a possible trade in lieu of Tap Rock participating in the proposed wells

1/7/2019 – Caitlin Pierce from Cimarex called and left a voicemail for Dana Arnold regarding the proposed trade of which XEC could not accept

1/23/2019 – Tap Rock reached out again, this time regarding their interest in the wells. Caitlin Pierce from Cimarex provided a working interest breakdown and snippets of the title opinion that pertained to Tap Rock's interest that same day. This information was provided to Taylor Hindes at Tap Rock who indicated that she would pass on to the landman over the specific area.



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

APPLICATION OF CIMAREX
ENERGY CO. FOR COMPULSORY
POOLING, EDDY COUNTY,
NEW MEXICO

CASE NO. 21021

AFFIDAVIT OF HARRISON HASTINGS

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

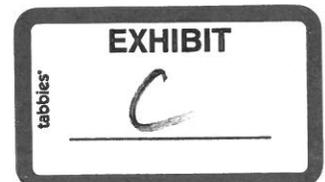
Harrison Hastings, being duly sworn, deposes and states:

1. I am over the age of 18, I am a geologist for Cimarex Energy Co. (“Cimarex”), and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division (“Division”) as an expert in petroleum geology matters.

2. I conducted a geological study of the area that encompasses the horizontal spacing unit that is the subject of Cimarex’s application in this case and am familiar with the geological matters involved in this case.

3. As part of my study, I have prepared the following geological exhibits with respect to the horizontal spacing unit that are attached hereto:

- a. **Exhibit C.1** is a Gunbarrel/Lateral Trajectory Diagram. This diagram identifies the Riverbend 12-13 development plan, which includes the **Riverbend 12-13 Fed Com 29H, Riverbend 12-13 Fed Com 30H, Riverbend 12-13 Fed Com 31H, Riverbend 12-13 Fed Com 32H, Riverbend 12-13 Fed Com 33H, Riverbend 12-13 Fed Com 34H, and Riverbend 12-13 Fed Com 35H** wells (*hereinafter*



“Proposed Wells”) that are located within the Wolfcamp horizontal spacing unit that is the subject of this application.

- b. **Exhibit C.2** is a Locator Map identifying the Riverbend 12-13 project area, in proximity to the Capitan Reef, for the Wolfcamp horizontal spacing unit that is the subject of this application.
- c. **Exhibit C.3** is a Cross-Section Locator Map. This map identifies the cross-section running from A-A' with the cross-section well names and a blue dotted line in proximity to the Proposed Wells. It also identifies the sections in which the cross-section wells are located.
- d. **Exhibit C.4** is a Deep Structure Map on the top of the Wolfcamp formation. This map identifies each of the Proposed Wells with a red line. It also identifies the location of the cross-section running from A-A' with a blue dotted line. This map shows that the structure dips to the east.
- e. **Exhibit C.5** is an Upper Wolfcamp Isopach Map. It shows that the formation is relatively uniform across the proposed unit. It also shows the location of cross-section A-A' in proximity to the Proposed Spacing Unit.
- f. **Exhibit C.6** is a Stratigraphic Cross Section hung on the top of the Wolfcamp formation. The well logs on the cross-section give a representative sample of the Wolfcamp formation in the area. The target zones for the wells in this development are the Wolfcamp 'X' Sand, the Wolfcamp 'Y' Sand, and the Wolfcamp 'A' Shale, and those zones are consistent across the unit. The planned well-paths for the proposed wells are indicated by three blue dashed lines, and the letters 'LZ'.

g. **Exhibit C.7** contains detailed views of the three Target Zones identified within the Stratigraphic Cross Section hung on the top of the Wolfcamp Formation. The target zones for the wells in this development are the Wolfcamp 'X' Sand, the Wolfcamp 'Y' Sand, and the Wolfcamp 'A' Shale; each are identified in bright red, and show that all three zones are consistent across the unit.

4. Based upon my study as illustrated in these exhibits, knowledge of the geology in this area, and education and training, it is my expert opinion that:

- a. The horizontal spacing unit is justified from a geologic standpoint.
- b. There are no structural impediments or faulting that will interfere with horizontal development.
- c. Each quarter section in the unit will contribute more or less equally to production.

5. The preferred well orientation in this area is either N-S. This is due to the fact that regional max horizontal stress orientation in this area is approximately N35E.

6. The producing interval for each of these wells will be orthodox and will comply with the Division's set back requirements.

7. I attest that the information provided herein is true, correct and complete to the best of my knowledge and belief.



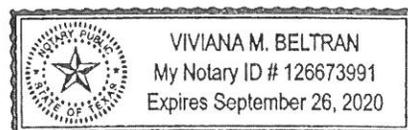
Harrison Hastings

SUBSCRIBED AND SWORN to before me this 4th day of February 2020 by Harrison Hastings, on behalf of Cimarex Energy Co.



Notary Public

My commission expires: 09/26/2020



XEC Riverbend 12-13 Gun Barrel Diagram

Sections 12 & 13 – T25S R28E
Eddy Co., NM

Cross-Sectional View Location

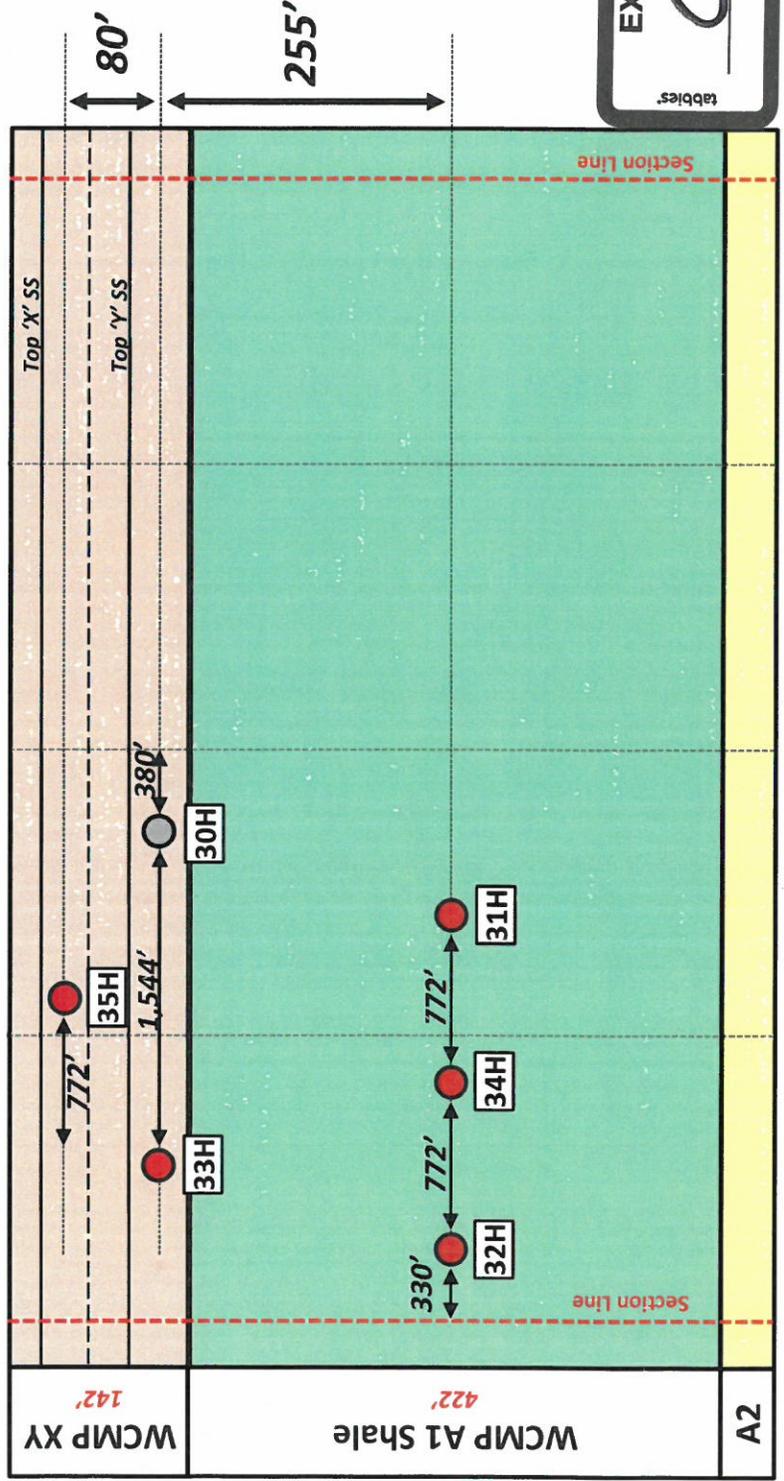
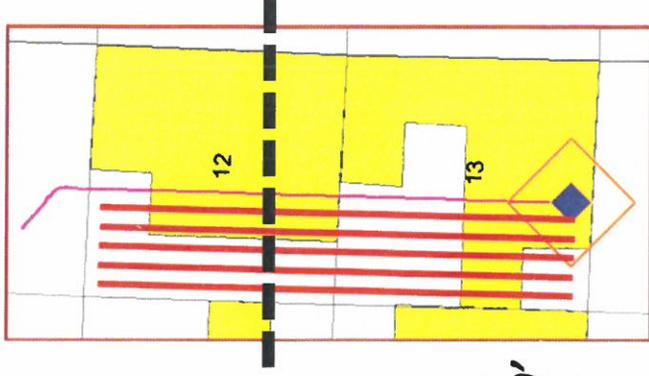
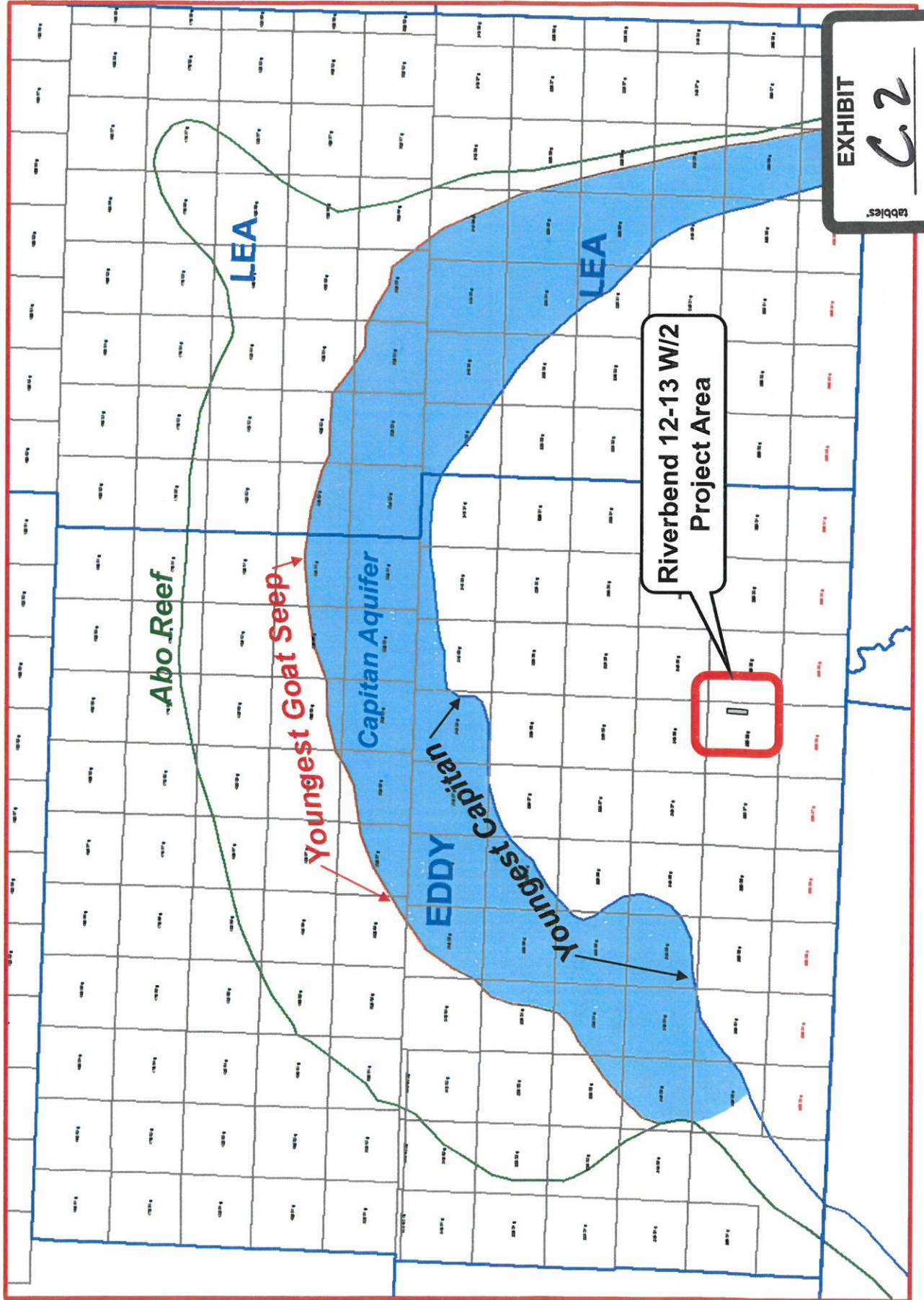


EXHIBIT
C.1
rabblies

Riverbend 12-13 Fed W/2 (31H -35H) Locator Map



Cross-Section Locator Map

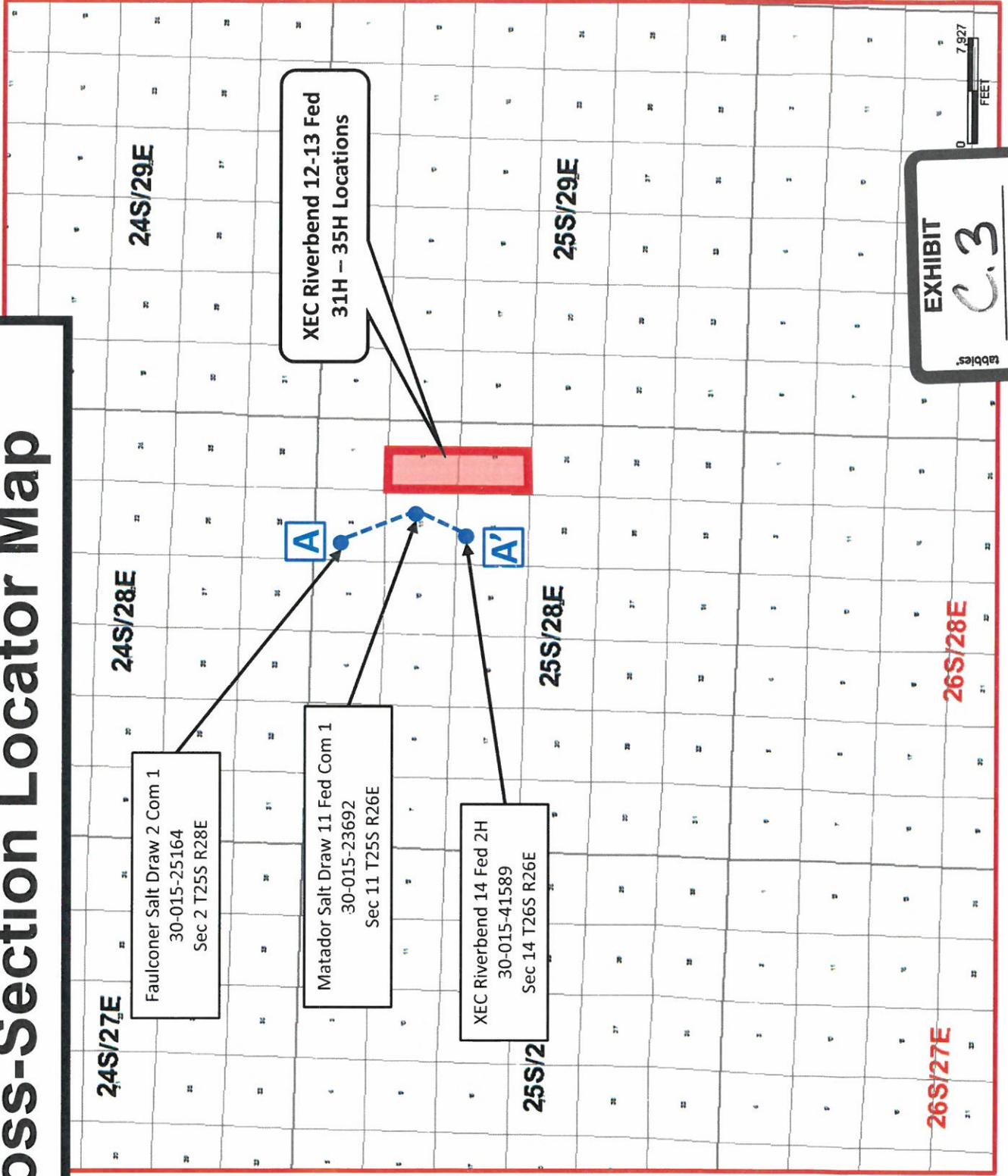


EXHIBIT
C.3
Tables

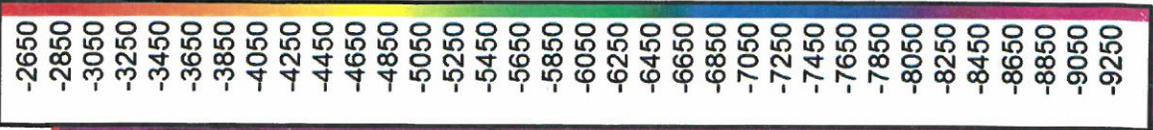
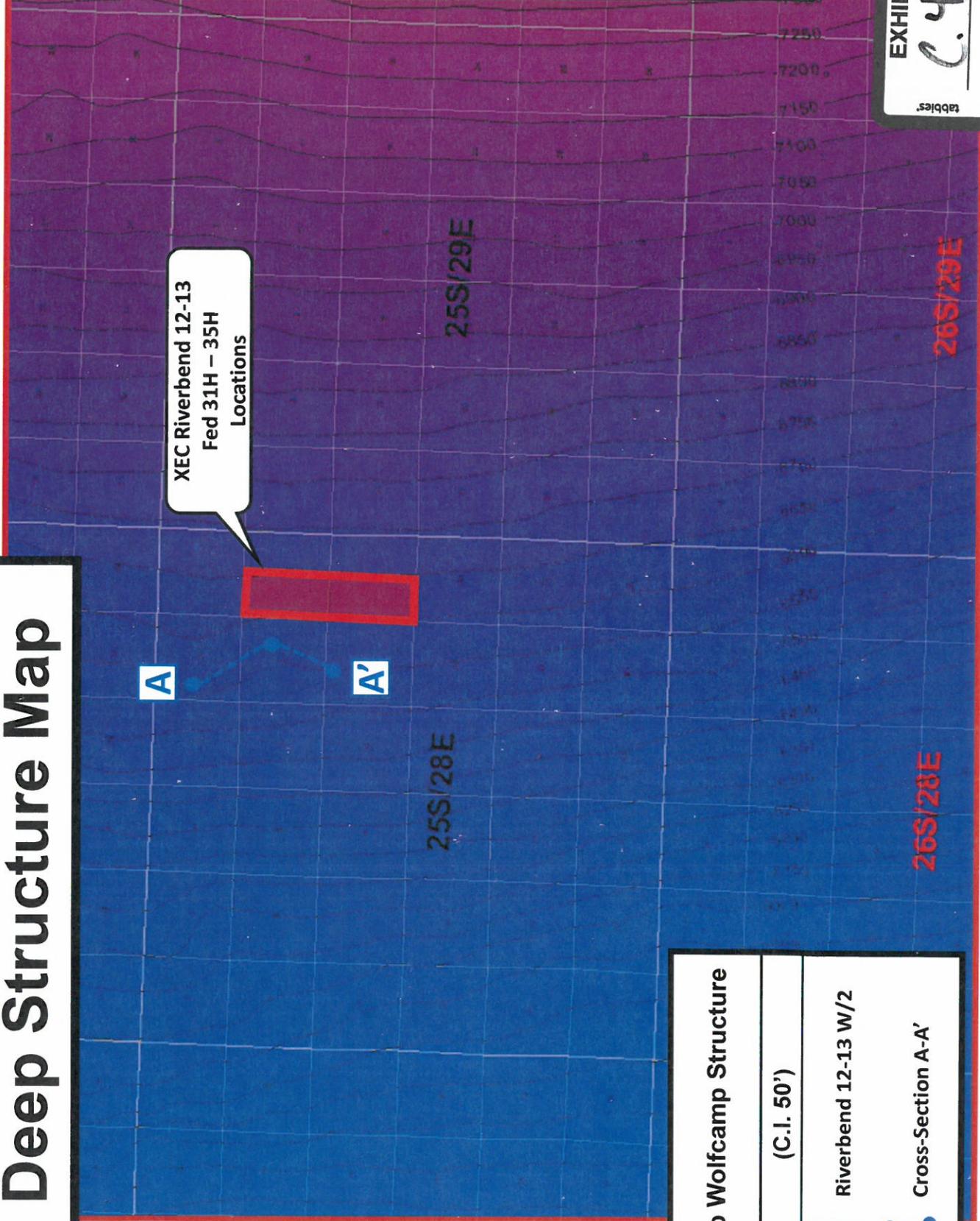


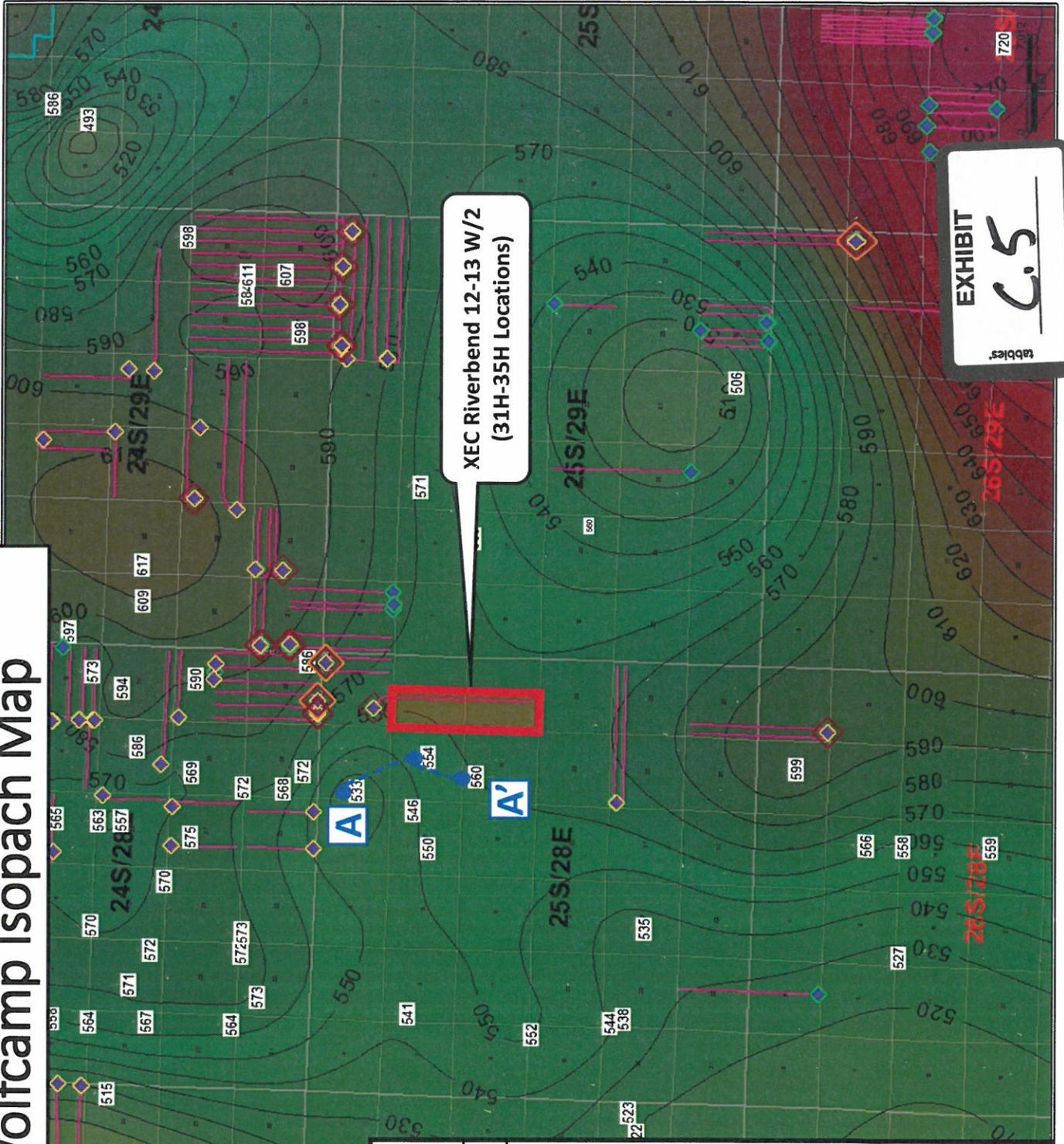
EXHIBIT
 C.4
 Tables

Deep Structure Map



Top Wolfcamp Structure
(C.I. 50')
 Riverbend 12-13 W/2  Cross-Section A-A'

Upper Wolfcamp Isopach Map



XEC Riverbend 12-13 W/2
(31H-35H Locations)

U. Wolfcamp Gross Isopach (Top WCMP to 'A2')	WCMP XYZ Producers
S. Eddy County	WCMP A Producers
	Spud Last 12 Mo.
	Comp. Last 12 Mo.
	Riverbend 12-13 W/2
	Cross-Section A-A'
##	U. WCMP Isopach Datapoints
Upper WCMP Gross Isopach (Top WCMP to 'A2')	

EXHIBIT
C.5
tabbles

Upper WCMP N-S Cross-Section A-A'

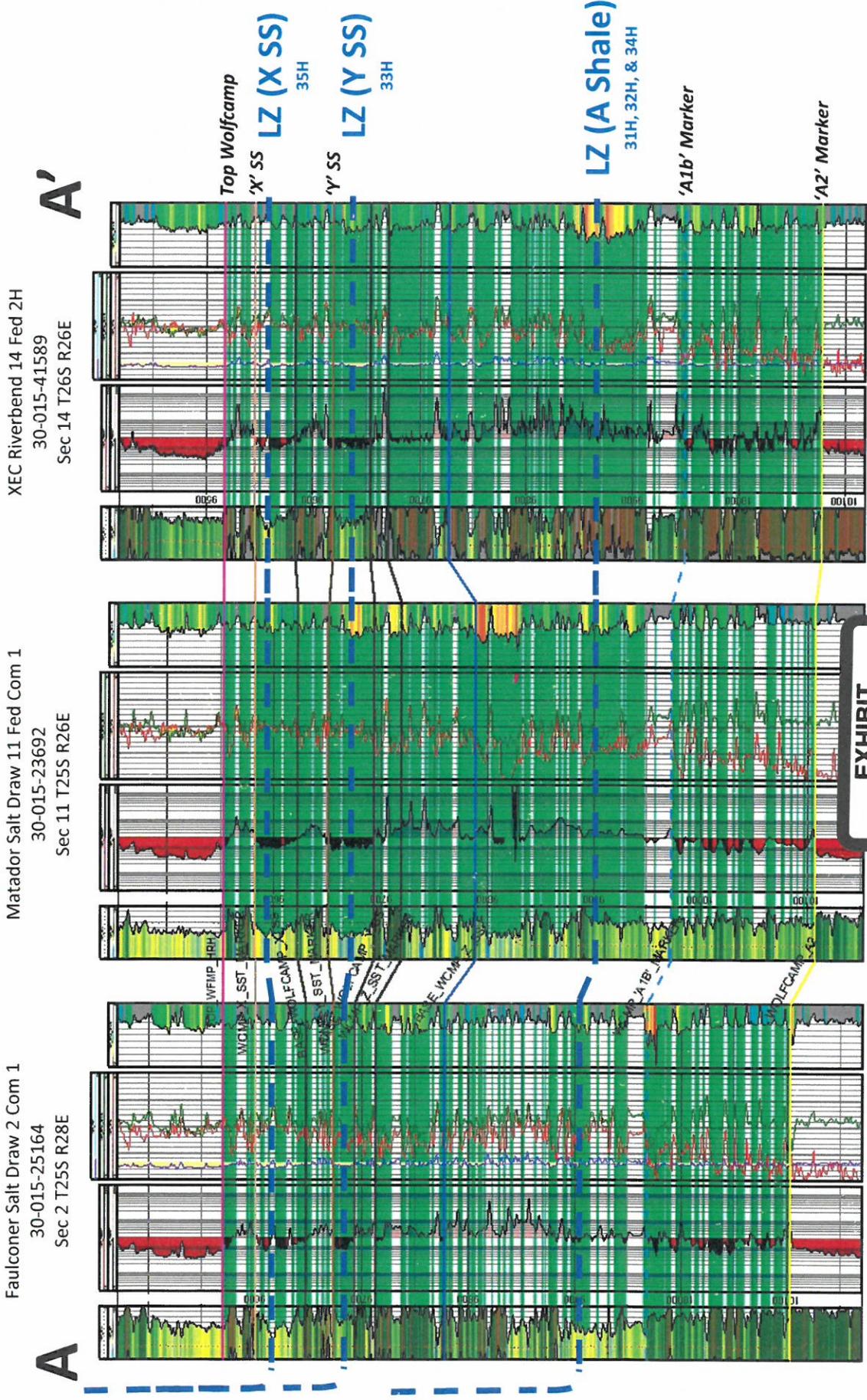
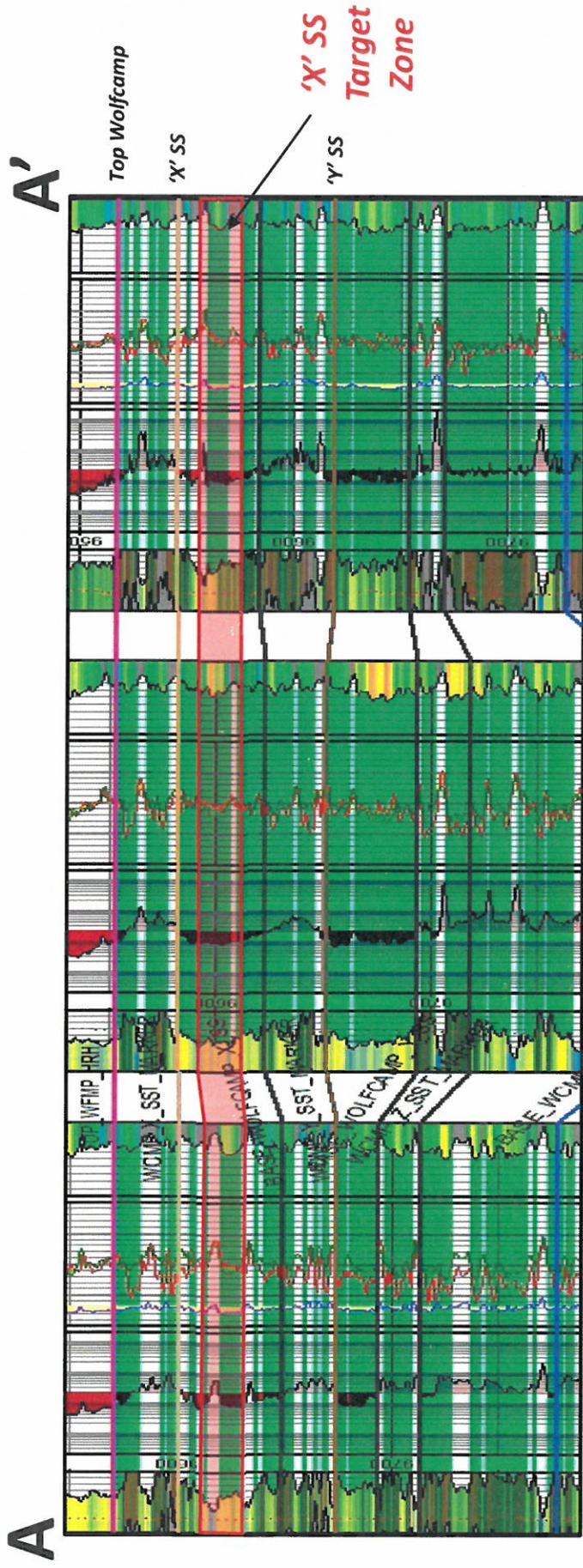


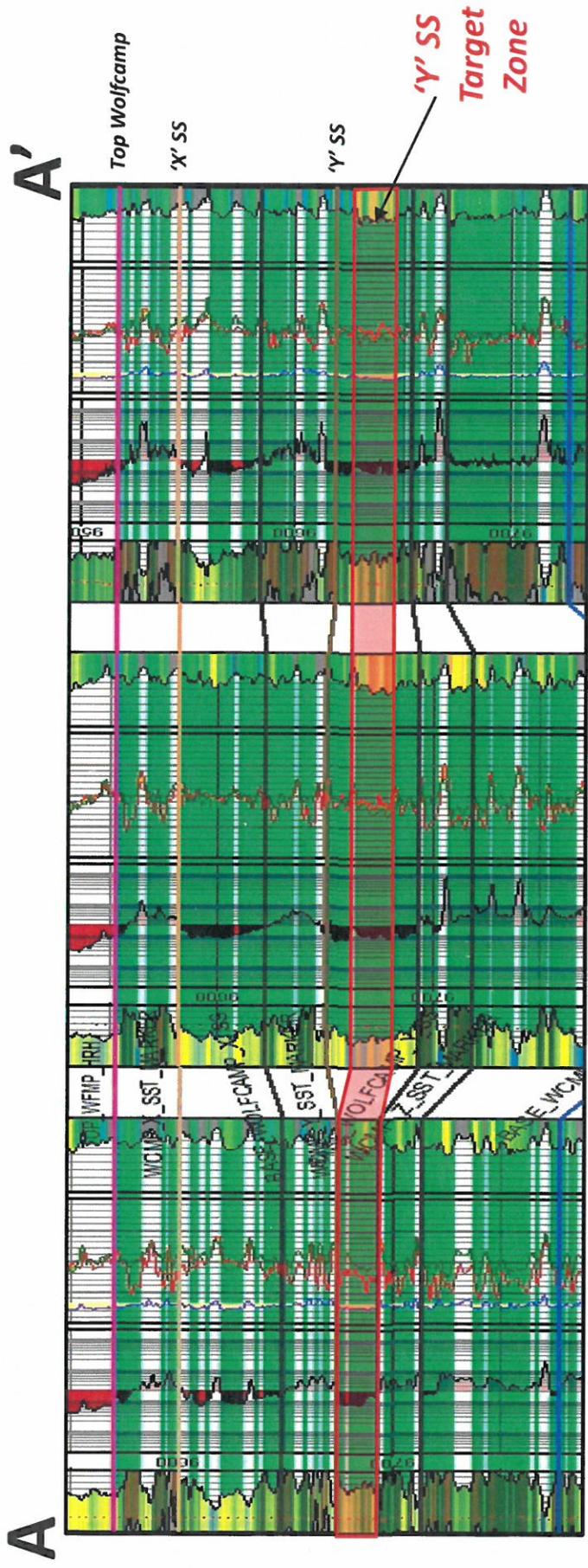
EXHIBIT
C6

Upper WCMP N-S Cross-Section (A-A') – 'X' SS LZ



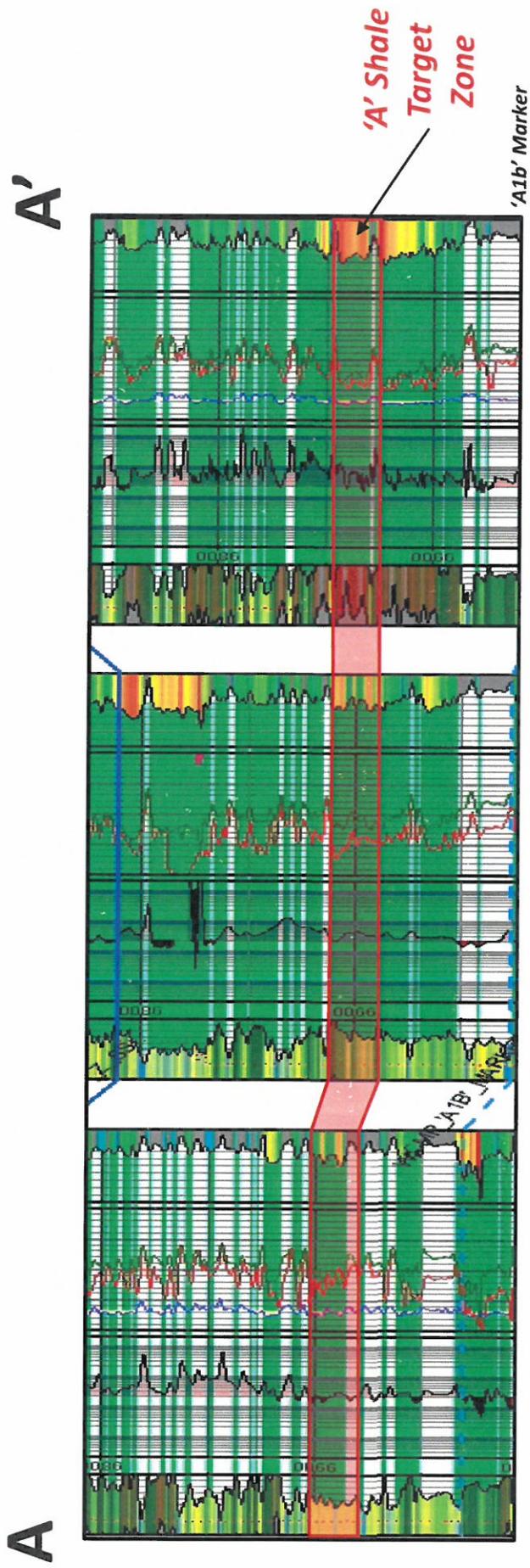
- Upper Wolfcamp Net Pay (DPHI > 9% DPHI)

Upper WCMP N-S Cross-Section (A-A') – 'Y' SS LZ



- Upper Wolfcamp Net Pay (DPHI > 9% DPHI)

Upper WCMP N-S Cross-Section (A-A') – 'A' Shale LZ



- Upper Wolfcamp Net Pay (DPHI >9% DPHI)



MODRALL SPERLING
LAWYERS

January 16, 2020

Lance D. Hough
Tel: 505.848.1826
Fax: 505.848.9710
Lance.Hough@modrall.com

VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED

TO: AFFECTED PARTIES

This letter is to advise you that Cimarex Energy Co. has filed the enclosed applications with the New Mexico Oil Conservation Division:

Case No. 21021: Application of Cimarex Energy Co. for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a 640-acre, more or less, Wolfcamp horizontal spacing unit; and, (2) pooling all uncommitted mineral interests within a Wolfcamp horizontal spacing unit underlying the W/2 of Sections 12 and 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Riverbend 12-13 Fed Com 29H, Riverbend 12-13 Fed Com 30H, Riverbend 12-13 Fed Com 31H, Riverbend 12-13 Fed Com 32H, Riverbend 12-13 Fed Com 33H, Riverbend 12-13 Fed Com 34H, and Riverbend 12-13 Fed Com 35H** wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Cimarex as operator of the wells, and a 200% charge for risk involved in drilling said wells. Said area is located approximately 9.5 miles south of Loving, New Mexico.

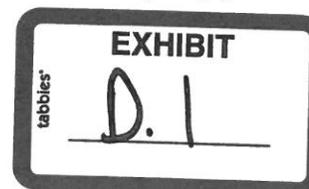
These applications have been set for hearing before a Division Examiner at **8:15 a.m. on February 6, 2020**. The hearing will be held in Porter Hall in the Oil Conservation Division's Santa Fe Office located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. As a party who may be affected by these applications, we are notifying you of your right to appear at the hearing and participate in this case, including the right to present evidence either in support of or in opposition to the applications. Failure to appear at the hearing may preclude you from any involvement in this case at a later date.

Modrall Sperring
Roehl Harris & Sisk P.A.

500 Fourth Street NW
Suite 1000
Albuquerque,
New Mexico 87102

PO Box 2168
Albuquerque,
New Mexico 87103-2168

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AFFECTED PARTIES

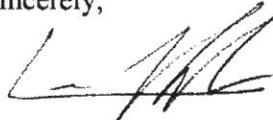
Cimarex / Riverbend 12-13 Fed Com 29H to 35H

January 16, 2020

Page 2

You are further notified that if you desire to appear in these cases, then you are requested to file a Pre-Hearing Statement with the Division at least four business days in advance of a scheduled hearing before the Division or the Commission, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date, with a copy delivered to the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to read "Lance D. Hough". The signature is stylized and written over a horizontal line.

Lance D. Hough
Attorney for Applicant

EED/ldh/w3634823.DOCX

Enclosures: as stated

Zina Crum
 Modrall Spering
 500 4th Street NW
 Suite 1000
 Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
 01/16/2020



Firm Mailing Book ID: 182807

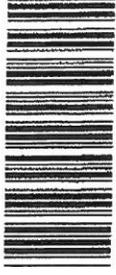
Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest. Del. Fee	Reference Contents
1	9314 8699 0430 0067 7526 94	Bureau of Land Management General Land Office 301 Dinosaur Trail Santa Fe NM 87508	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
2	9314 8699 0430 0067 7527 00	Monty D McClane P.O. Box 9451 Midland TX 79708	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
3	9314 8699 0430 0067 7527 17	Alan Jochimsen 4209 Cardinal Lane Midland TX 79707	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
4	9314 8699 0430 0067 7527 24	States Royalty, LP P.O. Box 911 Breckenridge TX 76424	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
5	9314 8699 0430 0067 7527 31	Morris E Schertz P.O. Box 2588 Roswell TX 88201	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
6	9314 8699 0430 0067 7527 48	Orion Oil & Gas Properties 2505 Lakeview, Ste. 210 Amarillo TX 79109	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
7	9314 8699 0430 0067 7527 55	Premier Oil & Gas Inc P.O. Box 1246 Artesia NM 88211	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
8	9314 8699 0430 0067 7527 62	GHHunter, LLC P.O. Box 524 Lander WY 82520	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
9	9314 8699 0430 0067 7527 79	Chisos Minerals, LLC 1111 Bagby St, Ste. 2150 Houston TX 77002	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
10	9314 8699 0430 0067 7527 86	Norton LLC 60 Beach Ave. - Bay View S. Dartmouth MA 02748	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
11	9314 8699 0430 0067 7527 93	MKHM Oil, LLC 3200 N. Tacoma St. Arlington VA 22213	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
12	9314 8699 0430 0067 7528 09	OGI, Inc 841 Hersch Ave. Pagosa Springs CO 81147	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
13	9314 8699 0430 0067 7528 16	Energy Properties, LP P.O. Box 51408 Casper WY 82605	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
14	9314 8699 0430 0067 7528 23	ROEC Inc P.O. Box 490 Grand Junction CO 81502	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice
15	9314 8699 0430 0067 7528 30	Sam L. Shackelford 1096 Mechem Dr., Ste. G-16 Ruidoso NM 88345	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbond Notice



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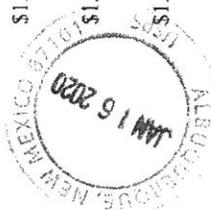
PS Form 3877

Type of Mailing: CERTIFIED MAIL,
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Firm Mailing Book ID: 182807

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest. Del. Fee	Reference Contents
16	9314 8699 0430 0067 7528 47	Robin K. Shackelford 108 Paradise Canyon Dr. Ruidoso NM 88345	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
17	9314 8699 0430 0067 7528 54	The William N. Heiss Profit Sharing Plan William N. Heiss and Susan E. Heiss, Co-Trustees c/o Midhill P.O. Box 2680 Dutch-Irish Oil Company 223 W. Wall, Ste. 407 Midland TX 79701	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
18	9314 8699 0430 0067 7528 61	Matt Hinkle P.O. Box 2292 Roswell NM 88202	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
19	9314 8699 0430 0067 7528 78	Rolla Hinkle, III P.O. Box 2292 Roswell NM 88202	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
20	9314 8699 0430 0067 7528 85	Magnum Hunter Production Inc 1700 Lincoln Street, Suite 3700 Denver CO 80203	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
21	9314 8699 0430 0067 7528 92	Conoco Phillips Company 600 N. Dairy Ashford Rd. Houston TX 77079	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
22	9314 8699 0430 0067 7529 08	Centennial, a New Mexico Partnership P.O. Box 1837 Roswell NM 88202	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
23	9314 8699 0430 0067 7529 15	Hutchings Oil Company 3235 Calle De Deborah NW Albuquerque NM 87104	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
24	9314 8699 0430 0067 7529 22	Peter T. Balog, Trustee of the Balog Family Trust Karen J. Krohn, POA P.O. Box 111890 Anchorage AK 99511	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
25	9314 8699 0430 0067 7529 39	Dan M. Leonard P.O. Box 3422 Midland TX 79702	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
26	9314 8699 0430 0067 7529 46	Dan M. Leonard, Trustee of 1 the DML Revocable Trus P.O. Box 3422 Midland TX 79702	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
27	9314 8699 0430 0067 7529 53	LML Properties, LLC P.O. Box 3194 Boulder CO 80307	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
28	9314 8699 0430 0067 7529 60	Jack's Peak, LLC P.O. Box 294928 Kerrville TX 78029	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
29	9314 8699 0430 0067 7529 77		\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice



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Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest. Del. Fee	Reference Contents
30	9314 8699 0430 0067 7529 84	Kevin K. Leonard, Trustee of the Kevin K. Leonard Child's Trust P.O. Box 50688 Midland TX 79710	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
31	9314 8699 0430 0067 7529 91	Mark B. Murphy c/o Murphy Petroleum Corp P.O. Box 2545 Roswell NM 88202	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
32	9314 8699 0430 0067 7530 04	Strata Production Company P.O. Box 1030 Roswell NM 88202	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
33	9314 8699 0430 0067 7530 11	Valorie F. Walker, Trustee of the Jack V. Walker Revocable Trust 2341 Scarborough DR. Anchorage AK 99504	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
34	9314 8699 0430 0067 7530 28	Sharon Winn Scott 9626 Meadowland Dr. Houston TX 77063	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
35	9314 8699 0430 0067 7530 35	Worrall Investment Corporation P.O. Box 1834 Roswell NM 88202	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
36	9314 8699 0430 0067 7530 42	Mitchell Exploration Inc 6212 Homestead Blvd. P.O. Box 2415 Midland TX 79702	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
37	9314 8699 0430 0067 7530 59	Permian Basin Investment Corporation c/o Bank of the Southwest P.O. Box 1638 Roswell NM 88202	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
38	9314 8699 0430 0067 7530 66	Southwest Petroleum Land Services, LLC P.O. Box 702377 Dallas TX 75370	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
39	9314 8699 0430 0067 7530 73	Realtimzone, Inc. 100 N. Pennsylvania Ave. Roswell NM 88203	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
40	9314 8699 0430 0067 7530 80	Oak Valley Mineral & Land, LP P.O. Box 50820 Midland TX 79710	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
41	9314 8699 0430 0067 7530 97	Stanley W. Light 3818 Turtle Creek Dr. Dallas TX 75219	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
42	9314 8699 0430 0067 7531 03	Carlsbad National Bank Trust Department, Trustee Last Will and Testament of Bradley T. Light 2401 S. Canal Street Carlsbad NM 88270	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice



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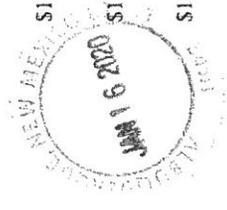
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43	9314 8699 0430 0067 7531 10	OGX Royalty Fund, LP P.O. Box 2064 Midland TX 79702	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
44	9314 8699 0430 0067 7531 27	Benny May Jenkins 4023 West Lea Street Carlsbad NM 88220	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
45	9314 8699 0430 0067 7531 34	James Matthew Jenkins 112 SW Avc. C Seminole TX 79360	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
46	9314 8699 0430 0067 7531 41	Leanne Jenkins Hacker P.O. Box 2754 Roswell NM 88202	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
47	9314 8699 0430 0067 7531 58	Joy Elizabeth Cooksey P.O. Box 45 Carlsbad NM 88221	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
48	9314 8699 0430 0067 7531 65	James Monroe Cooksey, III P.O. Box 103 Malaga NM 88263	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
49	9314 8699 0430 0067 7531 72	Douglas C Koch P.O. Box 540244 Houston TX 77254	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
50	9314 8699 0430 0067 7531 89	Wayne Bissett P.O. Box 2101 Midland TX 79702	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
51	9314 8699 0430 0067 7531 96	Morris E. Schertz, et ux, Holly K Schertz P.O. Box 2588 Roswell NM 88202	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
52	9314 8699 0430 0067 7532 02	Larry G. Phillips et ux, Anne C. Phillips P.O. Box 2197 Midland TX 79702	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
53	9314 8699 0430 0067 7532 19	Empire Energy LLC 70 Riverside Dr. Roswell NM 88201	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
54	9314 8699 0430 0067 7532 26	New State Gas LLC 33530 Tiderunner Ave. Millshoro DE 19966	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
55	9314 8699 0430 0067 7532 33	Charles Getchel Wiley, Trustee of the Charles Getchel Wiley Trust 6965 Independence Street Arvada CO 80004	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
56	9314 8699 0430 0067 7532 40	Pegasus Resources, LLC P.O. Box 733980 Dallas TX 75373	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
57	9314 8699 0430 0067 7532 57	McMullum Minerals LLC P.O. Box 470857 Fl. Worth TX 76147	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice



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58	9314 8699 0430 0067 7532 64	Ronadero Company Inc P.O. Box 746 Big Horn NY 82833	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
59	9314 8699 0430 0067 7532 71	Seaboard Oil Company P.O. Box 50180 Midland TX 79710	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
60	9314 8699 0430 0067 7532 88	Rowan Family Minerals LLC P.O. Box 107 Andrews TX 79714	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
61	9314 8699 0430 0067 7532 95	Cirrus Minerals, LLC P.O. Box 51746 LaFayette LA 70505	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
62	9314 8699 0430 0067 7533 01	PEP II Management, LLC 330 Marshall St., Ste. 300 Shreveport LA 71101	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
63	9314 8699 0430 0067 7533 18	BNSF Railway Company P.O. Box 676167 Dallas TX 75267	\$1.15	\$3.55	\$1.60	\$0.00	82762.0192 Riverbend Notice
			Totals:	\$77.45	\$100.80	\$0.00	
				Grand Total:	\$396.90		



List Number of Pieces Listed by Sender: _____ Total Number of Pieces Received at Post Office: _____ Postmaster: _____ Name of receiving employee: _____ Dated: _____

USPS Article Number	Date Created	Name 1	Name 2	Address 1	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
931486990430006753318	2020-01-16 1:50 PM	BNSF Railway Company		P.O. Box 671617	Dallas	TX	75267	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753301	2020-01-16 1:50 PM	PEP II Management, LLC		330 Marshall St., Ste. 300	Shreveport	LA	71101	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753295	2020-01-16 1:50 PM	Cirus Minerals, LLC		P.O. Box 51746	LaFayette	LA	70505	Delivered	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006753288	2020-01-16 1:50 PM	Rowan Family Minerals LLC		P.O. Box 107	Andrews	TX	79714	Mailed	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006753271	2020-01-16 1:50 PM	Seaboard Oil Company		P.O. Box 50180	Midland	TX	79710	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753264	2020-01-16 1:50 PM	Ronadero Company Inc		P.O. Box 746	Big Horn	WY	82833	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753257	2020-01-16 1:50 PM	McMullin Minerals LLC		P.O. Box 470857	Fl. Worth	TX	76147	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006753240	2020-01-16 1:50 PM	Pegasus Resources, LLC		P.O. Box 733980	Dallas	TX	75373	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753233	2020-01-16 1:50 PM	Charles Getchel Wiley, Trustee of	the Charles Getchel Wiley Trust	6965 Independence Street	Arvada	CO	80004	Undelivered	Return Receipt - Electronic, Certified Mail	01-24-2020
931486990430006753219	2020-01-16 1:50 PM	New State Gas LLC		33530 Tiderunner Ave.	Millisboro	DE	19966	Undelivered	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006753216	2020-01-16 1:50 PM	Empire Energy LLC		70 Riverside Dr.	Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006753202	2020-01-16 1:50 PM	Larry G. Phillips et ux, Anne C. Phillips		P.O. Box 2197	Midland	TX	79702	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006753196	2020-01-16 1:50 PM	Morris E. Schertz, et ux, Holly K Schertz		P.O. Box 2588	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006753189	2020-01-16 1:50 PM	Wayne Bissett		P.O. Box 2101	Midland	TX	79702	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006753172	2020-01-16 1:50 PM	Douglas C Koch		P.O. Box 540244	Houston	TX	77254	Delivered	Return Receipt - Electronic, Certified Mail	01-27-2020
931486990430006753165	2020-01-16 1:50 PM	James Monroe Cooksey, III		P.O. Box 103	Malaga	NM	88263	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006753158	2020-01-16 1:50 PM	Joy Elizabeth Cooksey		P.O. Box 45	Carlsbad	NM	88221	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006753141	2020-01-16 1:50 PM	Leanne Jenkins Hacker		P.O. Box 2754	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006753134	2020-01-16 1:50 PM	James Matthew Jenkins		112 SW Ave. C	Seminole	TX	79360	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006753127	2020-01-16 1:50 PM	Benny May Jenkins		4023 West Lea Street	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753110	2020-01-16 1:50 PM	OGX Royalty Fund, LP		P.O. Box 2064	Midland	TX	79702	Mailed	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753103	2020-01-16 1:50 PM	Carlsbad National Bank Trust Department, Trustee	Last Will and Testament of Bradley T. Light	2403 S. Canal Street	Carlsbad	NM	88270	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753097	2020-01-16 1:50 PM	Stenley W. Light		3818 Turtle Creek Dr.	Carlsbad	NM	88270	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753080	2020-01-16 1:50 PM	Oak Valley Mineral & Land, LP		P.O. Box 50820	Midland	TX	79710	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753073	2020-01-16 1:50 PM	Realtimzone, Inc.		100 N. Pennsylvania Ave.	Roswell	NM	88203	Mailed	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006753066	2020-01-16 1:50 PM	Southwest Petroleum Land Services, LLC		P.O. Box 702377	Dallas	TX	75370	Mailed	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006753059	2020-01-16 1:50 PM	Permian Basin Investment Corporation		P.O. Box 1638	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006753042	2020-01-16 1:50 PM	Mitchell Exploration Inc	c/o Bank of the Southwest	P.O. Box 2435	Midland	TX	79702	Mailed	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006753035	2020-01-16 1:50 PM	Worral Investment Corporation	6212 Homestead Blvd.	P.O. Box 1834	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753028	2020-01-16 1:50 PM	Sharon Winn Scott		9626 Meadowland Dr.	Houston	TX	77065	Mailed	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753011	2020-01-16 1:50 PM	Valorie F. Walker, Trustee of	the Jack V. Walker Revocable Trust	2341 Scarborough DR.	Anchorage	AK	99504	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006753004	2020-01-16 1:50 PM	Strata Production Company		P.O. Box 1030	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006752991	2020-01-16 1:50 PM	Mark B. Murphy		P.O. Box 2545	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752984	2020-01-16 1:50 PM	Kevin K. Leonard, Trustee of	c/o Murphy Petroleum Corp	P.O. Box 50688	Midland	TX	79710	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752977	2020-01-16 1:50 PM	Jack's Peak, LLC	the Kevin K. Leonard Child's Trust	P.O. Box 3194	Boulder	CO	80307	Delivered	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006752960	2020-01-16 1:50 PM	LML Properties, LLC		P.O. Box 3422	Midland	TX	79702	Delivered	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006752953	2020-01-16 1:50 PM	Dan M. Leonard, Trustee of f		P.O. Box 3422	Midland	TX	79702	Delivered	Return Receipt - Electronic, Certified Mail	01-23-2020
931486990430006752946	2020-01-16 1:50 PM	Dan M. Leonard		P.O. Box 111890	Anchorage	AK	99511	Mailed	Return Receipt - Electronic, Certified Mail	01-18-2020
931486990430006752939	2020-01-16 1:50 PM	Peter T. Balog, Trustee of the Balog Family Trust		3235 Calle De Deborah NW	Albuquerque	NM	87104	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752932	2020-01-16 1:50 PM	Hutchings Oil Company		P.O. Box 4837	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752915	2020-01-16 1:50 PM	Centennial, a New Mexico Partnership		500 N. Dairy Ashford Rd.	Houston	TX	77079	Mailed	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006752908	2020-01-16 1:50 PM	Conoco Phillips Company		1700 Lincoln Street, Suite 3700	Denver	CO	80203	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752892	2020-01-16 1:50 PM	Magnum Hunter Production Inc		P.O. Box 2292	Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752885	2020-01-16 1:50 PM	Rolla Hinkle, III		223 W. Wall, Ste. 407	Midland	TX	79701	Returned to Se	Return Receipt - Electronic, Certified Mail	02-04-2020
931486990430006752878	2020-01-16 1:50 PM	Matt Hinkle		108 Midhill P.O. Box 2680	Casper	WY	82502	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006752861	2020-01-16 1:50 PM	Dutch-Irish Oil Company	William N. Heiss and Susan E. Heiss, Co-Trustees	c/o Midhill P.O. Box 2680	Casper	WY	82502	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752854	2020-01-16 1:50 PM	The William N. Heiss Profit Sharing Plan		108 Paradise Canyon Dr.	Ruidoso	NM	88345	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752847	2020-01-16 1:50 PM	Robin K. Shackelford		1096 Mechem Dr., Ste. G-16	Ruidoso	NM	88345	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752830	2020-01-16 1:50 PM	Sam L. Shackelford		P.O. Box 490	Grand Junction	CO	81502	Delivered	Return Receipt - Electronic, Certified Mail	01-28-2020
931486990430006752823	2020-01-16 1:50 PM	ROEC Inc		P.O. Box 51408	Casper	WY	82605	Delivered	Return Receipt - Electronic, Certified Mail	01-24-2020
931486990430006752816	2020-01-16 1:50 PM	Energy Properties, LP		841 Hersch Ave.	Casper	WY	82605	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
931486990430006752809	2020-01-16 1:50 PM	OGI, Inc		3200 N. Tacoma St.	Pagosa Spring, CO	81147	Mailed	Return Receipt - Electronic, Certified Mail	01-21-2020	
931486990430006752793	2020-01-16 1:50 PM	MKHM Oil, LLC		60 Beach Ave. - Bay View	Arlington	VA	22213	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
931486990430006752786	2020-01-16 1:50 PM	Norton, LLC		S. Dartmouth	MA	02748	Delivered	Return Receipt - Electronic, Certified Mail	01-23-2020	
931486990430006752779	2020-01-16 1:50 PM	Chisos Minerals, LLC		:111 Bagby St., Ste. 2150	Houston	TX	77002	Delivered	Return Receipt - Electronic, Certified Mail	01-23-2020



9314869904300067752762	2020-01-16 1:50 PM	GHunker, LLC	P.O. Box 524	Lander	WY	82520	Delivered	Return Receipt - Electronic, Certified Mail	01-25-2020
9314869904300067752755	2020-01-16 1:50 PM	Premier Oil & Gas Inc	P.O. Box 1246	Artesia	NM	88211	Delivered	Return Receipt - Electronic, Certified Mail	01-29-2020
9314869904300067752748	2020-01-16 1:50 PM	Orion Oil & Gas Properties	2505 Lakeview, Ste. 210	Amarillo	TX	79109	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
9314869904300067752731	2020-01-16 1:50 PM	Morris E Schertz	P.O. Box 2588	Roswell	TX	88201	Delivered	Return Receipt - Electronic, Certified Mail	01-22-2020
9314869904300067752724	2020-01-16 1:50 PM	States Royalty, LP	P.O. Box 911	Breckenridge	TX	76424	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020
9314869904300067752717	2020-01-16 1:50 PM	Alan Jochimsen	4209 Cardinal Lane	Midland	TX	79707	Delivered	Return Receipt - Electronic, Certified Mail	01-24-2020
9314869904300067752700	2020-01-16 1:50 PM	Monty D McClane	P.O. Box 9451	Midland	TX	79708	Delivered	Return Receipt - Electronic, Certified Mail	01-24-2020
9314869904300067752694	2020-01-16 1:50 PM	Bureau of Land Management	301 Dinosaur Trail	Santa Fe	NM	87508	Delivered	Return Receipt - Electronic, Certified Mail	01-21-2020

General Land Office

Carlsbad Current Argus.

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Affidavit of Publication

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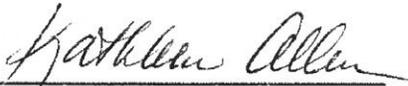
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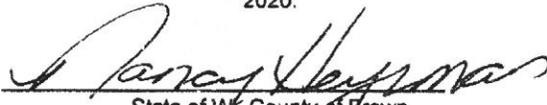
I, a legal clerk of the **Carlsbad Current Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

January 22, 2020



Legal Clerk

Subscribed and sworn before me this January 22, 2020:



State of WI, County of Brown
NOTARY PUBLIC
5.15.23

My commission expires

CASE NO. 21021: Notice to all affected parties, as well as their heirs and devisees, of Veritas Permian Resources, LLC EOG Resources, LLC; Mewbourne Oil Company; Clayton Williams, Jr.; CWM 2000-B Ltd; CWM 2000-BII, LTD; 3MG Corporation; Mewbourne Development Corporation; COG Acreage Fund LP; COG Operating LLC; Chevron USA Inc; CWPLCO, Inc; Empire Energy LLC; New State Gas LLC; WPX Energy Permian, LLC; Tap Rock Resources, LLC; Ronadero Company, Inc; Devon Energy Production Company, LP; BNSF Railway Company United States of America; Department of the Interior, Bureau of Land Management; Monty D McClane; Alan Jochimsen; States Royalty, LP; Morris E Schertz; Orion Oil & Gas Properties; Premier Oil & Gas Inc; GHHunker, LLC; Chisos Minerals, LLC; Norton LLC; MKHM Oil, LLC; OGI, Inc; Energy Properties, LP; ROEC Inc; Sam L. Shackelford; Robin K. Shackelford; The William N. Heiss Profit Sharing Plan, William N. Heiss and Susan E. Heiss, Co-Trustees; Dutch-Irish Oil Company; Matt Hinkle; Rolla Hinkle, III; Curtis W Mewbourne, Trustee; Conoco Phillips Company; Centennial, a New Mexico Partnership; Hutchings Oil Company; Peter T. Balog, Trustee of the Balog Family Trust; Vermego Property Investment Company; Dan M. Leonard; Dan M. Leonard, Trustee of the DML Revocable Trust; LML Properties, LLC; Jack's Peak, LLC; Kevin K. Leonard, Trustee of the Kevin K. Leonard Child's Trust; Mark B. Murphy; Strata Production Company; Valorie F. Walker, Trustee of the Jack V. Walker Revocable Trust; Sharon Winn Scott; Worrall Investment Corporation; Mitchell Exploration Inc; Permian; Basin Investment Corporation; Southwest Petroleum Land Services, LLC; Realltimezone, Inc.; Oak Valley Mineral & Land, LP; Stanley W. Light; Carlsbad National Bank Trust Department, Testamentary Trustee under the Last Will and Testament of Bradley T. Light; Curtis W. Mewbourne; OGX Royalty Fund, LP; Benny May Jenkins; James Matthew Jenkins; Leanne Jenkins Hacker; Joy Elizabeth Cooksey; James Monroe Cooksey, III; Douglas C Koch; Wayne Bissett; Andrew A Latham; Morris E. Schertz, et ux, Holly K Schertz; Larry G. Phillips et ux, Anne C. Phillips; Empire Energy LLC New State Gas LLC; Charles Getchel Wiley, Trustee of the Charles Getchel Wiley Trust; Pegasus Resources, LLC McMullin Minerals LLC; Ronadero Company Inc; Seaboard Oil Company; Rowan; Family Minerals LLC; Cirrus Minerals, LLC; PEP II Management, LLC; BNSF Railway Company of Cimarex Energy Co.'s Application for compulsory pooling, Eddy County, New Mexico. The State of New Mexico through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on **February 6, 2020** to consider this application. Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a 640-acre, more or less, Wolfcamp horizontal spacing unit; and, (2) pooling all un-committed mineral interests within a Wolfcamp horizontal spacing unit underlying the W/2 of Sections 12 and 13, Township 25 South, Range 28 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Riverbend 12-13 Fed Com 29H, Riverbend 12-13 Fed Com 30H, Riverbend 12-13 Fed Com 31H, Riverbend 12-13 Fed Com 32H, Riverbend 12-13 Fed Com 33H, Riverbend 12-13 Fed Com 34H, and Riverbend 12-13 Fed Com 35H** wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Cimarex as operator of the wells, and a 200% charge for risk involved in drilling said wells. Said area is located approximately 9.5 miles south of Loving, New Mexico.

January 22, 2020

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NANCY HEYRMAN
Notary Public
State of Wisconsin

EXHIBIT
D.4