

CASE NO. 22297

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

CIMAREX ENERGY CO.'S EXHIBIT LIST (PART I)

- A. Landman's Affidavit
- B. Geologist's Affidavit
- C. Application and Proposed Notice
- D. Affidavit of Mailing
- E. Affidavit of Publication
- F. Pooling Checklist

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

APPLICATIONS OF CIMAREX ENERGY CO. OF  
COLORADO FOR A HORIZONTAL SPACING UNIT  
AND COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO

Case No. 22297

SELF-AFFIRMED STATEMENT OF RILEY MORRIS

STATE OF TEXAS            )  
                                  ) ss.  
COUNTY OF MIDLAND    )

I, being duly sworn on oath, state the following:

1. I am over the age of eighteen years and have the capacity to execute this Affidavit, which is based on my personal knowledge.

2. I am employed as a Landman with Cimarex Energy Co. ("Cimarex"), and I am familiar with the subject application and the lands involved.

3. I graduated in 2010 from Texas Tech University with a bachelor's degree in Business Administration with an emphasis on Energy Commerce. I have worked at Cimarex for approximately 3 years, and I have been working in New Mexico for 3 years. My credentials as a petroleum landman have been accepted by the New Mexico Oil Conservation Division ("Division") and made a matter of record.

4. This affidavit is submitted in connection with the filing by Cimarex of the above-referenced spacing and compulsory pooling applications pursuant to 19.15.4.12.A(1).

5. Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Spring formation (Purpose Sage; Wolfcamp, Gas; Pool Code: 98220) underlying a standard 640-acre,

EXHIBIT **A**

more or less, horizontal spacing and proration unit comprised of the W/2 of Sections 29 and 32, Township 25 South, Range 27 East, NMPM, Eddy County, New Mexico.

6. Under Case No. 22297:

a. Cimarex seeks to dedicate the **Southern Hills 32-29 State Fed Com 3H Well** (API 30-015-pending/#####) as an initial well, horizontally drilled from a surface location in SE/4 SW/4 (Unit N) of Section 32 to a bottom hole location in the NW/4 NW/4 (Unit D) of Section 29; approximate TVD of 8,830'; approximate TMD of 18,830'; FTP in Section 32: 827' FSL, 330' FWL; LTP in Section 29: 100' FNL, 330' FWL.

b. Cimarex seeks to dedicate the **Southern Hills 32-29 State Fed Com 4H Well** (API 30-015-pending/#####) as an initial well, horizontally drilled from a surface location in SE/4 SW/4 (Unit N) of Section 32 to a bottom hole location in the NE/4 NW/4 (Unit C) of Section 29; approximate TVD of 8,830'; approximate TMD of 18,830'; FTP in Section 32: 834' FSL, 2,112' FWL; LTP in Section 29: 100' FNL, 2,2112' FWL.

7. The wells will be unorthodox in location, and the 100' setback of the take points do not comply with the special field rules for the Purple Sage, Wolfcamp, pursuant to Order No. R-14262; Cimarex will be applying administratively to the NMOCD for approval of the non-standard locations.

8. Cimarex has a horizontal well, the Cottonwood Hills 32 State Com (API No. 30-015-39967), in the W/2 of Section 32, in the Wolfcamp formation. The proposed HSU will overlap this 320-acre unit in the W/2, and Cimarex respectfully requests approval, to the

extent necessary, for the overlapping units.

9. The proposed C-102 for each well is attached as **Exhibit A-1**.

10. A general location plat and a plat outlining the units being pooled is attached hereto as **Exhibit A-2**, which show the location of the proposed well within the unit. The location of each well is orthodox, and it meets the Division's offset requirements.

11. The parties being pooled, the nature of their interests, and their last known addresses are listed on **Exhibit A-2** attached hereto. **Exhibit A-2** includes information regarding working interest owners and overriding royalty interest owner.

12. There are no depth severances in the Bone Spring formation in this acreage.

13. I provided the law firm of James Bruce a list of names and addresses for the uncommitted ORRI owners shown on **Exhibit A-2**. In compiling these addresses, I conducted a diligent search of the public records in Eddy County, New Mexico, where the wells are located, and of phone directories and did computer searches to locate the contact information for parties entitled to notification. All working interest owners were locatable and noticed; there were zero unlocatable parties who were overriding interest owners. Cimarex published notice in the Carlsbad Current Argus, a newspaper of general circulation in Eddy County, New Mexico, to account for any unlocatable parties and cover any contingencies regarding notice.

14. Cimarex has made a good faith effort to negotiate with the interest owners, but has been unable to obtain, voluntary agreement from all interest owners to participate in the drilling of the well or in the commitment of their interests to the well for its development within the proposed horizontal spacing unit. **Exhibit A-4** provides a chronology and history of contacts with the owners.

15. The interest owners being pooled have been contacted regarding the proposed wells but have failed or refused to voluntarily commit their interest in the wells. However, Cimarex has been in ongoing discussions with some of the interest owners to voluntarily enter into a Joint Operating Agreement. If a mutually agreeable Joint Operating Agreement is reached between Cimarex and another interest owner or owners, Cimarex requests that the voluntary agreement become operative and supersede the Division's order for said parties, except to the extent the Division deems it necessary to maintain spacing criteria for the purpose of conservation, the prevention of waste, and protection of correlative rights.

16. The interest owners being pooled have been contacted regarding the proposed wells, and the working interest owners have voluntarily committed their interests in the wells. This pooling application has been submitted for approval in order to account for the overriding royalty interest owners.

17. **Exhibit A-3** is a sample proposal letter and the AFEs for each proposed well. The estimated cost of the wells set forth in the AFEs is fair, reasonable, and comparable to the costs of other wells of similar depths and lengths drilled in this area of New Mexico.

18. Cimarex requests overhead and administrative rates of \$8,000/month for drilling each well and \$800/month for producing each well. 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. Cimarex requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.

19. Cimarex requests the maximum cost, plus 200% risk charge be assessed against non-consenting working interest owners to the extent needed.

20. Cimarex requests that it be designated operator of the units and wells.

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 Brazos 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

ATTACHMENT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name
	98220	Purple Sage; Wolfcamp, Gas
<sup>4</sup> Property Code	<sup>5</sup> Property Name	
	So. Hills 32-29 State Fed Com	
<sup>7</sup> OGRID No.	<sup>8</sup> Operator Name	<sup>9</sup> Elevation
215099	CIMAREX ENERGY CO.	3244.5'

<sup>10</sup> Surface Location

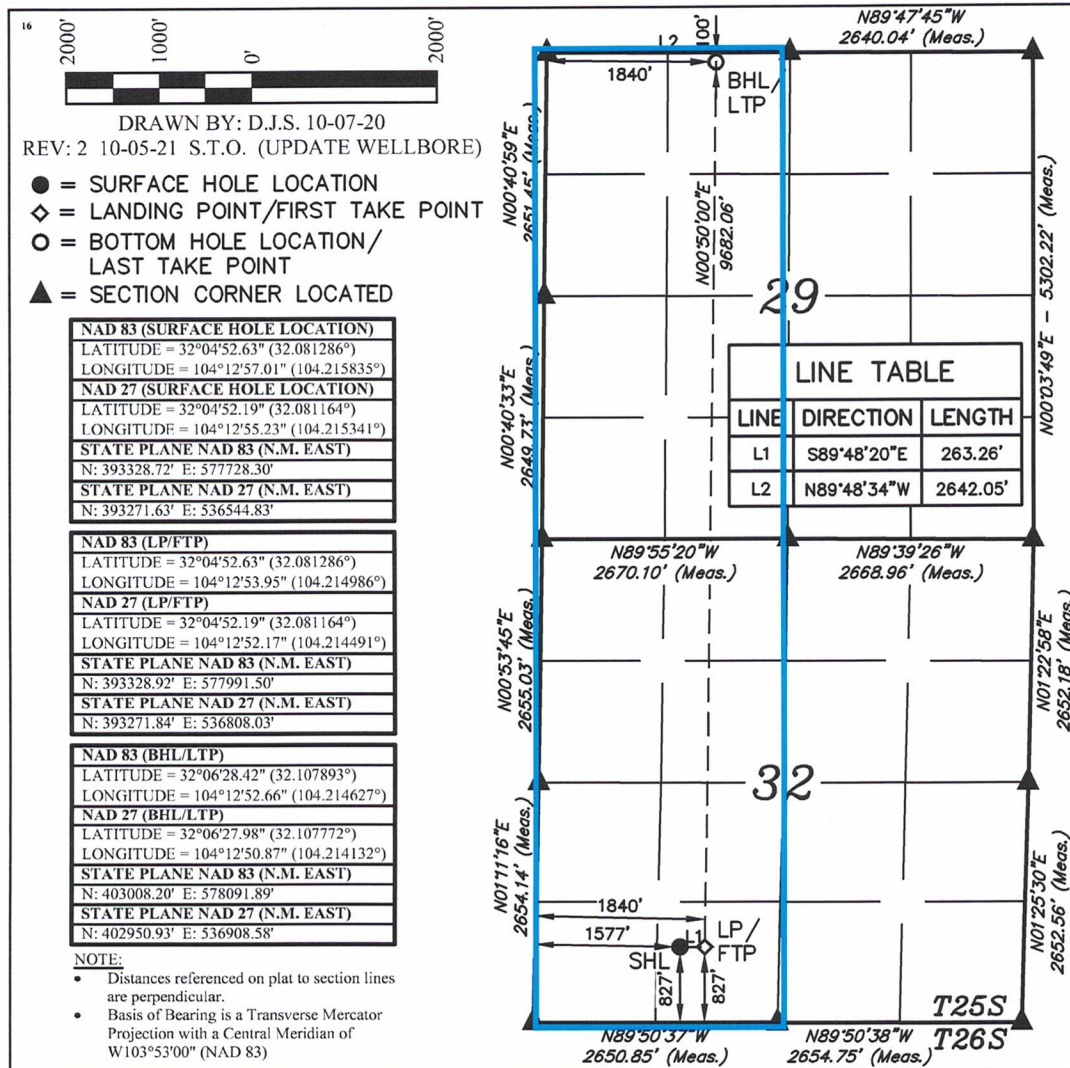
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	32	25S	27E		827	SOUTH	1577	WEST	EDDY

<sup>11</sup> 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
C	29	25S	27E		100	NORTH	1840	WEST	EDDY

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
640			

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.



<sup>17</sup> 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.

Fatima Vasquez 10/05/2021  
Signature Date

Fatima Vasquez  
Printed Name

fvasquez@cimarex.com  
E-mail Address

<sup>18</sup> 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.

August 31, 2020  
Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number:

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 Brazos 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

AMENDED REPORT

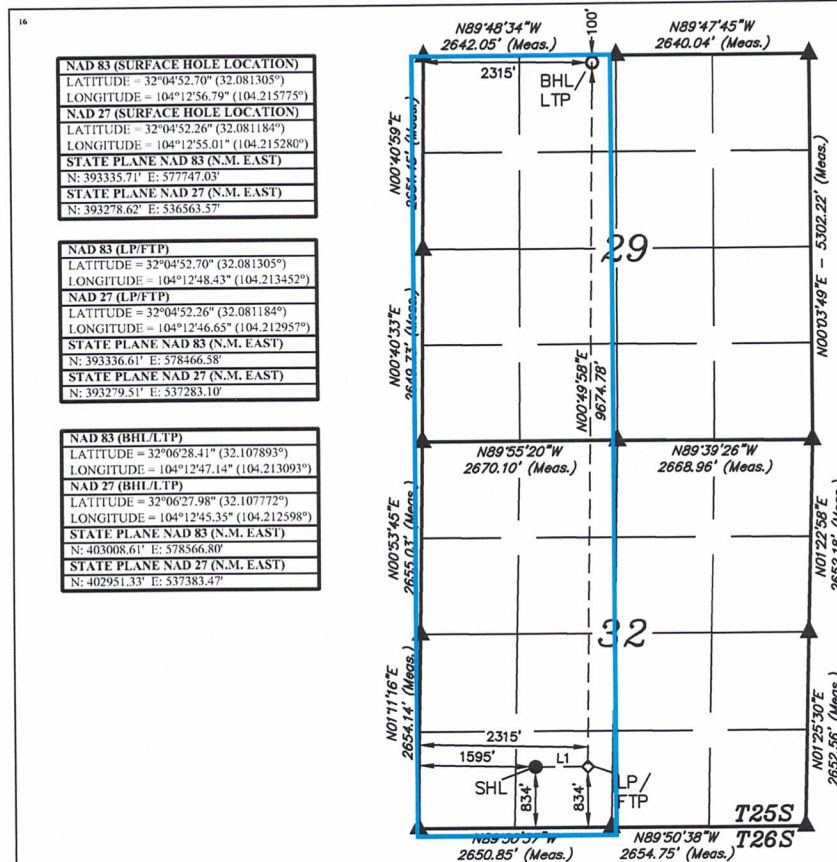
WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name
	98220	Purple Sage; Wolfcamp, Gas
<sup>4</sup> Property Code	<sup>5</sup> Property Name	
	So. Hills 32-29 State Fed Com	
<sup>7</sup> OGRID No.	<sup>8</sup> Operator Name	<sup>9</sup> Elevation
215099	CIMAREX ENERGY CO.	3244.7'

<sup>10</sup> Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	32	25S	27E		834	SOUTH	1595	WEST	EDDY

<sup>11</sup> 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
C	29	25S	27E		100	NORTH	2315	WEST	EDDY
<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						
640									

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

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" (NAD 83)



DRAWN BY: D.J.S. 10-07-20  
REV: 2 10-05-21 S.T.O. (UPDATE WELLBORE)

<sup>17</sup> 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.

Fatima Vasquez 10/05/2021  
Signature Date

Fatima Vasquez  
Printed Name

fvasquez@cimarex.com  
E-mail Address

<sup>18</sup> 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.

August 31, 2020

Date of Survey  
Signature and Seal of Professional Surveyor:



Certificate Number:

18

17

16

19

20

21

**SOUTHERN HILLS 32-29**

30

29

28

25S 27E

67.775% WI  
55.553333% NRI

31

32

33

ATTACHMENT 2

6

5

4

26S 27E



**SOUTHERN HILLS OWNERSHIP**  
Eddy County, NM



Scale: 1:10,000 Date: 6/25/2021  
CRS: NAD 1983 StatePlane New Mexico East  
Author: jlew

-  Southern Hills - 2 Mile WFMP
-  XEC Leasehold



Owner	Address	Total Unit WI	Total Unit NRI	Total Unit ORRI/RI
Cimarex Energy Co.	600 N. Marienfeld St., Ste. 600 Midland, TX 79701	0.67775000	0.55553333	0.00000000
ABO Petroleum, Inc.	P.O. Box 900 Artesia, NM 88211	0.11110000	0.09721250	0.00000000
Chevron USA Inc.	1400 Smith Street Houston, TX 77002	0.10000000	0.08333333	0.00000000
Oxy Y-1 Company	5 Greenway Plaza, Ste. 110 Houston, TX 77046	0.11115000	0.09725625	0.00000000
COG Operating, LLC	600 W. Illinois Ave. Midland, TX 79701	0.00000000	0.00000000	0.02083125
United States of America	c/o Bureau of Land Management 301 Dinosaur Trail Santa Fe, NM 87508	0.00000000	0.00000000	0.06250000
State of New Mexico	c/o Commissioner of Public Lands 310 Old Santa Fe Trail Santa Fe, NM 87501	0.00000000	0.00000000	0.08333334

Chevron USA Inc.  
6301 Deauville Blvd.  
Midland, TX 79706

MRC Permian Company  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240

MRC Permian LKE Co. LLC  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240

Premier Oil & Gas Inc.  
1096 Mechem Drive, Suite G-16  
Ruidoso, NM 88345

COG Operating LLC  
600 W. Illinois  
Midland, TX 79701

Family Tree Corporation  
915 S. Pearl Street  
Denver, CO 80209

Christi Lea Rucker  
243 S. Buena Vista St., Apt. B  
Redlands, CA 92373

EnCore Permian Holdings LP  
P. O. Box 1113  
Midland, TX 79702

PetroLima, LLC  
P. O. Box 1113  
Midland, TX 79702

Francine Marilyn Hepler  
59500 Ramsey Rd., Apt. 568  
Anza, CA 92539

Robert Hepler  
41175 Mount Rd.  
Anza, CA 92539

Belinda Lee Hepler  
59500 Ramsey Rd.  
Anza, CA 92539

Zella Marie Hepler  
1303 East Orchid Lane #15  
Carlsbad, NM 88220

Marla Risher  
2007 W. Pepper Tree Cir.  
Carlsbad, NM 88220

Camarie Oil & Gas, LLC  
2502 Camarie  
Midland, TX 79705

United States of America  
c/o Bureau of Land Management  
620 E. Greene St.  
Carlsbad, NM 88220

State of New Mexico  
Commissioner of Public Lands  
310 Old Santa Fe Trail  
Santa Fe, NM 87501

ABO Petroleum LLC  
PO Box 900  
Artesia, NM 88211

OXY Y-1 Company  
5 Greenway Plaza Suite 110  
Houston, TX 77046

Ross Duncan Properties LLC  
P.O. Box 647  
Artesia, NM 88211

Nora Wright  
1303 E. Orchard Ln., TRLR 15  
Carlsbad, NM 88220

Betty Jonas  
607 E. Hill Ave.  
Gallup, NM 87301

Weslyn Hepler  
1303 E. Orchard Ln., TRLR 18  
Carlsbad, NM 88220

Eryn Hepler  
603 N. 9th St.  
Carlsbad, NM 88220

Charlene Hepler  
4309 Sycamore St.  
Carlsbad, NM 88220

Sam L. Shackelford  
1096 Mechem Drive  
Ruidoso, NM 88345

Doug J. Schutz  
P.O. Box 973  
Santa Fe, NM 87504

Big Three Energy Group, LLC  
P.O. Box 429  
Roswell, NM 88202

Featherstone Development Corp.  
P.O. Box 429  
Roswell, NM 88202

Prospector, LLC  
P.O. Box 429  
Roswell, NM 88202

Xplor Resources, LLC  
1104 N. Shore Drive  
Carlsbad, NM 88220

Xplor Resources, LLC  
1104 N. Shore Drive  
Carlsbad, NM 88220

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



September 3, 2021

Chevron U.S.A. Inc.  
1400 Smith Street  
Houston, TX 77002

**Re: Proposal to Drill  
Southern Hills 32-29 State Fed Com 3H & 4H  
W2 Section 32 and 29, Township 25 South, Range 27 East  
Eddy County, NM**

Dear Working Interest Owner,

Cimarex Energy Co. hereby proposes to drill the Southern Hills 32-29 State Fed Com 3H & 4H wells at a legal location in Section 32, Township 25 South, Range 27 East, NMPM, Eddy County, New Mexico.

**Southern Hills 32-29 State Fed Com 3H** - The intended surface hole location for the well is 827'FSL & 1,577'FWL of Section 32, Township 25 South, Range 27 East, and the intended bottom hole location 100'FNL & 1,840'FWL of Section 29, Township 25 South, Range 27 East. The well is proposed to be drilled vertically to the Wolfcamp formation and laterally in a northerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 8,830'.

**Southern Hills 32-29 State Fed Com 4H** - The intended surface hole location for the well is 834'FSL & 1,595'FWL of Section 32, Township 25 South, Range 27 East, and the intended bottom hole location 100'FNL & 2,315'FWL of Section 29, Township 25 South, Range 27 East. The well is proposed to be drilled vertically to the Wolfcamp formation and laterally in a northerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 8,830'.

Cimarex Energy Co. is proposing these wells under the terms of a new Operating Agreement, which is included for your review and approval. It has the following general provisions:

- 100%/300% Non-Consenting Penalty;
- \$8000 Drilling and \$800 Producing Rate; and
- Cimarex Energy Co. named as Operator.

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.

ATTACHMENT

3

Enclosed, in duplicate, is (i) our detailed AFE reflecting estimated costs associated with this proposal, and; (ii) our proposed form of Operating Agreement to govern operations of the White City 32-29 Fed Com wells. If you intend to participate, please approve and return one (1) original of the enclosed AFE, one (1) original of the signature page to the Operating Agreement, to the undersigned within thirty (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 we do not reach an agreement within 30 days of the date of this letter, Cimarex may apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest in to a horizontal spacing unit for the proposed well.

Please call the undersigned with any questions or comments.

Respectfully,

A handwritten signature in blue ink that reads "Riley C. Morris". The signature is written in a cursive, flowing style.

Riley C. Morris  
Sr. Landman  
432.620.1966  
rmorris@cimarex.com

**ELECTION TO PARTICIPATE  
Southern Hills 32-29 State Fed Com 3H**

\_\_\_\_\_ Chevron U.S.A. Inc. elects **TO** participate in the proposed Southern Hills 32-29 State Fed Com 3H well.

\_\_\_\_\_ Chevron U.S.A. Inc. elects **NOT** to participate in the proposed Southern Hills 32-29 State Fed Com 3H well.

Dated this \_\_\_\_ day of \_\_\_\_\_, 2021.

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

If your election above is **TO** participate in the proposed Southern Hills 32-29 State Fed Com 3H well, then:

\_\_\_\_\_ Chevron U.S.A. Inc. elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

\_\_\_\_\_ Chevron U.S.A. Inc. 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.



Authorization For Expenditure Drilling

AFE # 26821008

Company Entity

Date Prepared  
9/3/2021

Exploration Region Permian Basin	Well Name SO HILLS 32-29 STATE FED COM 3H	Prospect Carlsbad Bone Spring Prospect	Property Number 300001-183.01	AFE 26821008
County, State Eddy, NM	Location W/2 OF SECTIONS 29 & 32, TOWNSHIP 25 SOUTH, RANGE 27 EAST, EDDY COUNTY, NEW MEXICO		Estimated Spud 5/17/2021	Estimated Completion 6/17/2021
<input checked="" type="checkbox"/> New Supplement Revision	Formation Wolfcamp	Well Type DEV	Ttl Measured Depth 18,830	Ttl Vertical Depth 8,830

Purpose Drill and complete well

Description

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,096,000		\$2,096,000
Completion Costs		\$4,805,200	\$4,805,200
<b>Total Intangible Cost</b>	<b>\$2,096,000</b>	<b>\$4,805,200</b>	<b>\$6,901,200</b>
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	\$402,000	\$408,000	\$810,000
Lease Equipment		\$1,138,125	\$1,138,125
<b>Total Tangible Cost</b>	<b>\$402,000</b>	<b>\$1,546,125</b>	<b>\$1,948,125</b>
<b>Total Well Cost</b>	<b>\$2,498,000</b>	<b>\$6,351,325</b>	<b>\$8,849,325</b>

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.

9/3/2021



Authorization For Expenditure - SO HILLS 32-29 STATE FED  
COM 3H

AFE # 26821008

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	DIDC.100	125,000			STIM.100	10,000	CON.100	50,500	PCOM.100	7,000	192,500
Damages	DIDC.105	30,000					CON.105	3,000			33,000
Mud/Fluids Disposal	DIDC.255	125,000			STIM.255	53,000			PCOM.255	0	178,000
Day Rate	DIDC.115	350,000	DICC.120	60,000							410,000
Misc Preparation	DIDC.120	20,000									20,000
Bits	DIDC.125	62,000	DICC.125	0	STIM.125	0			PCOM.125	0	62,000
Fuel	DIDC.135	42,000	DICC.130	0					PCOM.130	0	42,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	25,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	45,000
Mud & Additives	DIDC.145	150,000									150,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	244,200	244,200
Surface Rentals	DIDC.150	92,000	DICC.140	0	STIM.140	132,000	CON.140	2,875	PCOM.140	60,000	286,875
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Downhole Rentals	DIDC.155	81,000			STIM.145	35,000			PCOM.145	0	116,000
Automation Labor							CON.150	59,375	PCOM.150	9,500	68,875
Mud Logging	DIDC.170	21,000									21,000
IPC & EXTERNAL PAINTING							CON.165	21,375			21,375
Cementing & Float Equipment	DIDC.185	110,000	DICC.155	55,000							165,000
Tubular Inspections	DIDC.190	50,000	DICC.160	10,000	STIM.160	4,000			PCOM.160	0	64,000
Casing Crews	DIDC.195	15,000	DICC.165	15,000	STIM.165	0					30,000
Mechanical Labor	DIDC.200	28,000	DICC.170	10,000	STIM.170	0	CON.170	270,375	PCOM.170	0	308,375
Trucking/Transportation	DIDC.205	18,000	DICC.175	8,000	STIM.175	4,000	CON.175	29,875	PCOM.175	0	59,875
Supervision	DIDC.210	70,000	DICC.180	9,000	STIM.180	45,000	CON.180	29,625	PCOM.180	0	153,625
Trailer House/Camp/Catering	DIDC.280	38,000	DICC.255	5,000	STIM.280	23,000					66,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	58,000	CON.190	37,750	PCOM.190	0	100,750
Overhead	DIDC.225	10,000	DICC.195	5,000							15,000
MOB/DEMOB	DIDC.240	110,000									110,000
Directional Drilling Services	DIDC.245	297,000									297,000
Solids Control	DIDC.260	44,000									44,000
Well Control Equip (Snubbing Services)	DIDC.265	74,000	DICC.240	5,000	STIM.240	59,000			PCOM.240	0	138,000
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	164,000			PCOM.260	0	164,000
Completion Logging/Perforating/Wireline					STIM.200	235,000			PCOM.200	0	235,000
Composite Plugs					STIM.390	41,000			PCOM.390	0	41,000
Stimulation Pumping/Chemicals/Additives/Sand					STIM.210	2,014,000			PCOM.210	10,000	2,024,000
Stimulation Water/Water Transfer/Water Storage					STIM.395	278,000					278,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	72,500	132,500
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	7,000					CON.495	19,500			26,500
FL/GL - ON PAD LABOR							CON.500	39,125			39,125
FL/GL - Labor							CON.505	23,625			23,625
FL/GL - Supervision							CON.515	2,750			2,750
Survey							CON.220	159,750	PCOM.220	0	159,750
Contingency	DIDC.435	87,000	DICC.220	9,000	STIM.220	163,000	CON.221	12,500			271,500
Contingency											12,500
<b>Total Intangible Cost</b>		<b>2,096,000</b>		<b>191,000</b>		<b>3,419,000</b>		<b>762,000</b>		<b>433,200</b>	<b>6,901,200</b>
Conductor Pipe	DWEB.130	8,000									8,000
Water String	DWEB.135	15,000									15,000
Surface Casing	DWEB.140	71,000									71,000
Intermediate Casing 1	DWEB.145	270,000									270,000
Production Casing or Liner			DWEA.100	127,000							127,000
Tubing					STIMT.105	52,000			PCOMT.105	0	52,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	55,000							55,000
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
PUMPS							CONT.385	27,625			27,625
WALKOVERS							CONT.390	15,000			15,000
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
N/C Lease Equipment							CONT.400	217,750			217,750
Tanks, Tanks Steps, Stairs							CONT.405	103,000			103,000
Battery Equipment							CONT.410	355,375			355,375
Secondary Containments							CONT.415	51,875			51,875
Overhead Power Distribution							CONT.420	85,625			85,625
Facility Electrical							CONT.425	78,125			78,125
Telecommunication Equipment							CONT.426	1,250			1,250
Meters and Metering Equipment							CONT.445	37,125			37,125
Facility Line Pipe							CONT.450	45,500			45,500
Lease Automation Materials							CONT.455	78,125			78,125
FL/GL - Materials							CONT.550	8,625			8,625
FL/GL - Line Pipe							CONT.555	33,125			33,125
<b>Total Tangible Cost</b>		<b>402,000</b>		<b>200,000</b>		<b>198,000</b>		<b>1,138,125</b>		<b>10,000</b>	<b>1,948,125</b>
<b>Total Estimated Cost</b>		<b>2,498,000</b>		<b>391,000</b>		<b>3,617,000</b>		<b>1,900,125</b>		<b>443,200</b>	<b>8,849,325</b>



Authorization For Expenditure - SO HILLS 32-29 STATE FED  
COM 3H

AFE # 26821008

Description	BCP - Drilling		Amount	ACP - Drilling		Amount	Comp/Stim		Amount
	Codes			Codes			Codes		
Roads & Location	DIDC.100		125,000				STIM.100 CON.100	10,000	
Damages	DIDC.105		30,000						
Mud/Fluids Disposal	DIDC.255		125,000				STIM.255	53,000	
Day Rate	DIDC.115	DICC.120	350,000	DICC.120		60,000			
Misc Preparation	DIDC.120		20,000						
Bits	DIDC.125	DICC.125	62,000	DICC.125	STIM.125	0	STIM.125	0	
Fuel	DIDC.135	DICC.130	42,000	DICC.130		0			
Water for Drilling Rig (Not Frac Water)	DIDC.140	DICC.135	25,000	DICC.135	STIM.135	0	STIM.135	20,000	
Mud & Additives	DIDC.145		150,000						
SWD PIPED TO 3RD PARTY SWD WELL									
Surface Rentals	DIDC.150	DICC.140	92,000	DICC.140	STIM.140	0	STIM.140 CON.140	132,000	
Flowback Labor							STIM.141	0	
Downhole Rentals	DIDC.155		81,000				STIM.145	35,000	
Automation Labor									
Mud Logging	DIDC.170		21,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	DICC.155	110,000	DICC.155		55,000			
Tubular Inspections	DIDC.190	DICC.160	50,000	DICC.160	STIM.160	10,000	STIM.160	4,000	
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	15,000	STIM.165	0	
Mechanical Labor	DIDC.200	DICC.170	28,000	DICC.170	STIM.170	10,000	STIM.170 CON.170	0	
Trucking/Transportation	DIDC.205	DICC.175	18,000	DICC.175	STIM.175	8,000	STIM.175 CON.175	4,000	
Supervision	DIDC.210	DICC.180	70,000	DICC.180	STIM.180	9,000	STIM.180 CON.180	45,000	
Trailer House/Camp/Catering	DIDC.280	DICC.255	38,000	DICC.255	STIM.280	5,000	STIM.280	23,000	
Other Misc Expenses	DIDC.220	DICC.190	5,000	DICC.190	STIM.190	0	STIM.190 CON.190	58,000	
Overhead	DIDC.225	DICC.195	10,000	DICC.195		5,000			
MOS/DEMJOB	DIDC.240		110,000						
Directional Drilling Services	DIDC.245		297,000						
Solids Control	DIDC.260		44,000						
Well Control Equip (Snubbing Services)	DIDC.265	DICC.240	74,000	DICC.240	STIM.240	5,000	STIM.240	59,000	
Completion Rig							STIM.115	21,000	
Coil Tubing Services							STIM.260	164,000	
Completion Logging/Perforating/Wireline							STIM.200	235,000	
Composite Plugs							STIM.390	41,000	
Stimulation							STIM.210	2,014,000	
Stimulation Water/Water Transfer/Water							STIM.395	278,000	
Cinarex Owned Frac/Rental Equipment							STIM.305	60,000	
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		7,000						
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
Contingency	DIDC.435	DICC.220	87,000	DICC.220	STIM.220	9,000	STIM.220 CON.220	163,000	
Contingency									
<b>Total Intangible Cost</b>			<b>2,096,000</b>			<b>191,000</b>		<b>3,419,000</b>	
Conductor Pipe	DWEB.130		8,000						
Water String	DWEB.135		15,000						
Surface Casing	DWEB.140		71,000						
Intermediate Casing 1	DWEB.145		270,000						
Production Casing or Liner				DWEA.100		127,000			
Tubing							STIMT.105	52,000	
Wellhead, Tree, Chokes	DWEB.115	DWEA.120	38,000	DWEA.120	STIMT.120	18,000	STIMT.120	38,000	
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		55,000			
Packer, Nipples							STIMT.400	28,000	
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410	80,000	
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 - Line Pipe									
<b>Total Tangible Cost</b>			<b>402,000</b>			<b>200,000</b>		<b>198,000</b>	
<b>Total Estimated Cost</b>			<b>2,498,000</b>			<b>391,000</b>		<b>3,617,000</b>	





Authorization For Expenditure - SO HILLS 32-29 STATE FED  
COM 3H

AFE # 26821008

Description	Codes	Production Equip		Post Completion		Total	
		Amount	Codes	Amount	Cost	Amount	Cost
Roads & Location	CON.100	50,500	PCOM.100 Road Repair	7,000		192,500	
Damages	CON.105	3,000				33,000	
Mud/Fluids Disposal			PCOM.255		0	178,000	
Day Rate						410,000	
Misc Preparation						20,000	
Bits			PCOM.125		0	62,000	
Fuel			PCOM.130		0	42,000	
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	45,000	
Mud & Additives						150,000	
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257 \$500 BWPD for 2 months to BBR @ \$0.74/bbl	244,200		244,200	
Surface Rentals	CON.140	2,875	PCOM.140 \$1,500/d for 40 days		60,000	286,875	
Flowback Labor			PCOM.141 \$2,000/d for 15 days		30,000	30,000	
Downhole Rentals			PCOM.145		0	116,000	
Automation Labor	CON.150	59,375	PCOM.150 Sand Separator Hookup		9,500	68,875	
Mud Logging						21,000	
IPC & EXTERNAL PAINTING	CON.165	21,375				21,375	
Cementing & Float Equipment						165,000	
Tubular Inspections			PCOM.160		0	64,000	
Casing Crews						30,000	
Mechanical Labor	CON.170	270,375	PCOM.170		0	308,375	
Trucking/Transportation	CON.175	29,875	PCOM.175		0	59,875	
Supervision	CON.180	29,625	PCOM.180		0	153,625	
Trailer House/Camp/Catering						66,000	
Other Misc Expenses	CON.190	37,750	PCOM.190		0	100,750	
Overhead						15,000	
MOB/DEMOB						110,000	
Directional Drilling Services						297,000	
Solids Control						44,000	
Well Control Equip (Snubbing Services)			PCOM.240		0	138,000	
Completion Rig			PCOM.115		0	21,000	
Coil Tubing Services			PCOM.260		0	164,000	
Completion Logging/Perforating/Wireline			PCOM.200		0	235,000	
Composite Plugs			PCOM.390		0	41,000	
Stimulation Pumping/Chemicals/Additives/Sand			PCOM.210 Initial Chem Install	10,000		2,024,000	
Stimulation Water/Water Transfer/Water Storage						278,000	
Cimarex Owned Frac/Rental Equipment			PCOM.305 XEC Owned Spherical Plus Iron	72,500		132,500	
Legal/Regulatory/Curative	CON.300	0				10,000	
Well Control Insurance						7,000	
FL/GL - ON PAD LABOR	CON.495	19,500				19,500	
FL/GL - Labor	CON.500	39,125				39,125	
FL/GL - Supervision	CON.505	23,625				23,625	
Survey	CON.515	2,750				2,750	
Contingency	CON.220	159,750	PCOM.220		0	418,750	
Contingency	CON.221	12,500				12,500	
<b>Total Intangible Cost</b>		<b>762,000</b>			<b>433,200</b>	<b>6,901,200</b>	
Conductor Pipe						8,000	
Water String						15,000	
Surface Casing						71,000	
Intermediate Casing 1						270,000	
Production Casing or Liner						127,000	
Tubing			PCOMT.105		0	52,000	
Wellhead, Tree, Chokes			PCOMT.120 Welded Hairpin	10,000		104,000	
Liner Hanger, Isolation Packer						55,000	
Packer, Nipples			PCOMT.400		0	28,000	
PUMPS	CONT.385	27,625				27,625	
WALKOVERS	CONT.390	15,000				15,000	
Downhole Lift Equipment			PCOMT.410		0	80,000	
N/C Lease Equipment	CONT.400	217,750				217,750	
Tanks, Tanks Steps, Stairs	CONT.405	103,000				103,000	
Battery Equipment	CONT.410	355,375				355,375	
Secondary Containments	CONT.415	51,875				51,875	
Overhead Power Distribution	CONT.420	85,625				85,625	
Facility Electrical	CONT.425	78,125				78,125	
Telecommunication Equipment	CONT.426	1,250				1,250	
Meters and Metering Equipment	CONT.445	37,125				37,125	
Facility Line Pipe	CONT.450	45,500				45,500	
Lease Automation Materials	CONT.455	78,125				78,125	
FL/GL - Materials	CONT.550	8,625				8,625	
FL/GL - Line Pipe	CONT.555	33,125				33,125	
<b>Total Tangible Cost</b>		<b>1,138,125</b>			<b>10,000</b>	<b>1,948,125</b>	
<b>Total Estimated Cost</b>		<b>1,900,125</b>			<b>443,200</b>	<b>8,849,325</b>	

**ELECTION TO PARTICIPATE  
Southern Hills 32-29 State Fed Com 4H**

\_\_\_\_\_ Chevron U.S.A. Inc. elects **TO** participate in the proposed Southern Hills 32-29 State Fed Com 4H well.

\_\_\_\_\_ Chevron U.S.A. Inc. elects **NOT** to participate in the proposed Southern Hills 32-29 State Fed Com 4H well.

Dated this \_\_\_\_ day of \_\_\_\_\_, 2021.

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

If your election above is TO participate in the proposed Southern Hills 32-29 State Fed Com 4H well, then:

\_\_\_\_\_ Chevron U.S.A. Inc. elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

\_\_\_\_\_ Chevron U.S.A. Inc. 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.



Authorization For Expenditure Drilling

AFE # 26822010

Company Entity

Date Prepared  
9/3/2021

Exploration Region Permian Basin	Well Name SO HILLS 32-29 STATE FED COM 4H	Prospect Carlsbad Bone Spring Prospect	Property Number 300001-190.01	AFE 26822010
County, State Eddy, NM	Location Section 32, Township 25 South, Range 27 East		Estimated Spud 5/11/2022	Estimated Completion
X New Supplement Revision	Formation Wolfcamp	Well Type DEV	Ttl Measured Depth 19,083	Ttl Vertical Depth 9,083

Purpose Drill and complete well

Description

	Dry Hole	After Casing Point	Completed Well Cost
<b>Intangible</b>			
Drilling Costs	\$2,096,000		\$2,096,000
Completion Costs		\$4,805,200	\$4,805,200
<b>Total Intangible Cost</b>	<b>\$2,096,000</b>	<b>\$4,805,200</b>	<b>\$6,901,200</b>
<b>Tangible</b>			
Well Equipment	\$402,000	\$408,000	\$810,000
Lease Equipment		\$1,138,125	\$1,138,125
<b>Total Tangible Cost</b>	<b>\$402,000</b>	<b>\$1,546,125</b>	<b>\$1,948,125</b>
<b>Total Well Cost</b>	<b>\$2,498,000</b>	<b>\$6,351,325</b>	<b>\$8,849,325</b>

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.

9/3/2021



Authorization For Expenditure - SO HILLS 32-29 STATE FED  
COM 4H

AFE # 26822010

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	DIDC.100	125,000			STIM.100	10,000	CON.100	50,500	PCOM.100	7,000	192,500
Damages	DIDC.105	30,000					CON.105	3,000			33,000
Mud/Fluids Disposal	DIDC.255	125,000			STIM.255	53,000			PCOM.255	0	178,000
Day Rate	DIDC.115	350,000	DICC.120	60,000							410,000
Misc Preparation	DIDC.120	20,000							PCOM.125	0	20,000
Bits	DIDC.125	62,000	DICC.125	0	STIM.125	0			PCOM.125	0	62,000
Fuel	DIDC.135	42,000	DICC.130	0					PCOM.130	0	42,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	25,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	45,000
Mud & Additives	DIDC.145	150,000									150,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	244,200	244,200
Surface Rentals	DIDC.150	92,000	DICC.140	0	STIM.140	132,000	CON.140	2,875	PCOM.140	60,000	286,875
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Downhole Rentals	DIDC.155	81,000			STIM.145	35,000			PCOM.145	0	116,000
Automation Labor							CON.150	59,375	PCOM.150	9,500	68,875
Mud Logging	DIDC.170	21,000									21,000
IPC & EXTERNAL PAINTING							CON.165	21,375			21,375
Cementing & Float Equipment	DIDC.185	110,000	DICC.155	55,000							165,000
Tubular Inspections	DIDC.190	50,000	DICC.160	10,000	STIM.160	4,000			PCOM.160	0	64,000
Casing Crews	DIDC.195	15,000	DICC.165	15,000	STIM.165	0					30,000
Mechanical Labor	DIDC.200	28,000	DICC.170	10,000	STIM.170	0	CON.170	270,375	PCOM.170	0	308,375
Trucking/Transportation	DIDC.205	18,000	DICC.175	8,000	STIM.175	4,000	CON.175	29,875	PCOM.175	0	59,875
Supervision	DIDC.210	70,000	DICC.180	9,000	STIM.180	45,000	CON.180	29,625	PCOM.180	0	153,625
Trailer House/Camp/Catering	DIDC.280	38,000	DICC.255	5,000	STIM.280	23,000					66,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	58,000	CON.190	37,750	PCOM.190	0	100,750
Overhead	DIDC.225	10,000	DICC.195	5,000							15,000
MOB/DEMOB	DIDC.240	110,000									110,000
Directional Drilling Services	DIDC.245	297,000									297,000
Solids Control	DIDC.260	44,000									44,000
Well Control Equip (Snubbing Services)	DIDC.265	74,000	DICC.240	5,000	STIM.240	59,000			PCOM.240	0	138,000
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	164,000			PCOM.260	0	164,000
Completion Logging/Perforating/Wireline					STIM.200	235,000			PCOM.200	0	235,000
Composite Plugs					STIM.390	41,000			PCOM.390	0	41,000
Stimulation Pumping/Chemicals/Additives/Sand					STIM.210	2,014,000			PCOM.210	10,000	2,024,000
Stimulation Water/Water Transfer/Water Storage					STIM.395	278,000					278,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	72,500	132,500
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	7,000									7,000
FL/GL - ON PAD LABOR							CON.495	19,500			19,500
FL/GL - Labor							CON.500	39,125			39,125
FL/GL - Supervision							CON.505	23,625			23,625
Survey							CON.515	2,750			2,750
Contingency	DIDC.435	87,000	DICC.220	9,000	STIM.220	163,000	CON.220	159,750	PCOM.220	0	418,750
Contingency							CON.221	12,500			12,500
<b>Total Intangible Cost</b>		<b>2,096,000</b>		<b>191,000</b>		<b>3,419,000</b>		<b>762,000</b>		<b>433,200</b>	<b>6,901,200</b>
Conductor Pipe	DWEB.130	8,000									8,000
Water String	DWEB.135	15,000									15,000
Surface Casing	DWEB.140	71,000									71,000
Intermediate Casing 1	DWEB.145	270,000									270,000
Production Casing or Liner			DWEA.100	127,000							127,000
Tubing					STIMT.105	52,000			PCOMT.105	0	52,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	55,000							55,000
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
PUMPS							CONT.385	27,625			27,625
WALKOVERS							CONT.390	15,000			15,000
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
N/C Lease Equipment							CONT.400	217,750			217,750
Tanks, Tanks Steps, Stairs							CONT.405	103,000			103,000
Battery Equipment							CONT.410	355,375			355,375
Secondary Containments							CONT.415	51,875			51,875
Overhead Power Distribution							CONT.420	85,625			85,625
Facility Electrical							CONT.425	78,125			78,125
Telecommunication Equipment							CONT.426	1,250			1,250
Meters and Metering Equipment							CONT.445	37,125			37,125
Facility Line Pipe							CONT.450	45,500			45,500
Lease Automation Materials							CONT.455	78,125			78,125
FL/GL - Materials							CONT.350	8,625			8,625
FL/GL - Line Pipe							CONT.355	33,125			33,125
<b>Total Tangible Cost</b>		<b>402,000</b>		<b>200,000</b>		<b>198,000</b>		<b>1,138,125</b>		<b>10,000</b>	<b>1,948,125</b>
<b>Total Estimated Cost</b>		<b>2,498,000</b>		<b>391,000</b>		<b>3,617,000</b>		<b>1,900,125</b>		<b>443,200</b>	<b>8,949,325</b>



Authorization For Expenditure - SO HILLS 32-29 STATE FED  
COM 4H

AFE # 26822010

Description	BCP - Drilling			ACP - Drilling			Comp/Stim		Amount
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	
Roads & Location	DIDC.100	125,000					STIM.100 CON.100	10,000	
Damages	DIDC.105	30,000							
Mud/Fluids Disposal	DIDC.255	125,000					STIM.255	53,000	
Day Rate	DIDC.115 DICC.120	350,000	DICC.120	60,000					
Misc Preparation	DIDC.120	20,000							
Bits	DIDC.125 DICC.125	62,000	DICC.125 STIM.125	0			STIM.125	0	
Fuel	DIDC.135 DICC.130	42,000	DICC.130	0					
Water for Drilling Rig (Not Frac Water)	DIDC.140 DICC.135	25,000	DICC.135 STIM.135	0			STIM.135	20,000	
Mud & Additives	DIDC.145	150,000							
SWD PIPED TO 3RD PARTY SWD WELL									
Surface Rentals	DIDC.150 DICC.140	92,000	DICC.140 STIM.140	0			STIM.140 CON.140	132,000	
Flowback Labor							STIM.141	0	
Downhole Rentals	DIDC.155	81,000					STIM.145	35,000	
Automation Labor									
Mud Logging	DIDC.170	21,000							
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185 DICC.155	110,000	DICC.155	55,000					
Tubular Inspections	DIDC.190 DICC.160	50,000	DICC.160 STIM.160	10,000			STIM.160	4,000	
Casing Crews	DIDC.195 DICC.165	15,000	DICC.165 STIM.165	15,000			STIM.165	0	
Mechanical Labor	DIDC.200 DICC.170	28,000	DICC.170 STIM.170	10,000			STIM.170 CON.170	0	
Trucking/Transportation	DIDC.205 DICC.175	18,000	DICC.175 STIM.175	8,000			STIM.175 CON.175	4,000	
Supervision	DIDC.210 DICC.180	70,000	DICC.180 STIM.180	9,000			STIM.180 CON.180	45,000	
Trailer House/Camp/Catering	DIDC.280 DICC.255	38,000	DICC.255 STIM.280	5,000			STIM.280	23,000	
Other Misc Expenses	DIDC.220 DICC.190	5,000	DICC.190 STIM.190	0			STIM.190 CON.190	58,000	
Overhead	DIDC.225 DICC.195	10,000	DICC.195	5,000					
MOB/DEMOB	DIDC.240	110,000							
Directional Drilling Services	DIDC.245	297,000							
Solids Control	DIDC.260	44,000							
Well Control Equip (Snubbing Services)	DIDC.265 DICC.240	74,000	DICC.240 STIM.240	5,000			STIM.240	59,000	
Completion Rig							STIM.115	21,000	
Coil Tubing Services							STIM.260	164,000	
Completion Logging/Perforating/Wireline							STIM.200	235,000	
Composite Plugs							STIM.390	41,000	
Stimulation							STIM.210	2,014,000	
Stimulation Water/Water Transfer/Water							STIM.395	278,000	
Cimarex Owned Frac/Rental Equipment							STIM.305	60,000	
Legal/Regulatory/Curative	DIDC.300	10,000							
Well Control Insurance	DIDC.285	7,000							
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
Contingency	DIDC.435 DICC.220	87,000	DICC.220 STIM.220	9,000			STIM.220 CON.220	163,000	
Contingency									
<b>Total Intangible Cost</b>		<b>2,096,000</b>		<b>191,000</b>				<b>3,419,000</b>	
Conductor Pipe	DWEB.130	8,000							
Water String	DWEB.135	15,000							
Surface Casing	DWEB.140	71,000							
Intermediate Casing 1	DWEB.145	270,000							
Production Casing or Liner			DWEA.100	127,000					
Tubing							STMT.105	52,000	
Wellhead, Tree, Chokes	DWEB.115 DWEA.120	38,000	DWEA.120 STIMT.120	18,000			STMT.120	38,000	
Liner Hanger, Isolation Packer	DWEB.100 DWEA.125	0	DWEA.125	55,000					
Packer, Nipples							STMT.400	28,000	
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STMT.410	80,000	
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 - Line Pipe									
<b>Total Tangible Cost</b>		<b>402,000</b>		<b>200,000</b>				<b>198,000</b>	
<b>Total Estimated Cost</b>		<b>2,498,000</b>		<b>391,000</b>				<b>3,617,000</b>	



Authorization For Expenditure - SO HILLS 32-29 STATE FED  
COM 4H

AFE # 26822010

Description	Codes	Production Equip		Post Completion		Total	
		Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	CON.100	50,500	PCOM.100 Road Repair	7,000		192,500	
Damages	CON.105	3,000				33,000	
Mud/Fluids Disposal			PCOM.255	0		178,000	
Day Rate						410,000	
Misc Preparation						20,000	
Bits			PCOM.125	0		62,000	
Fuel			PCOM.130	0		42,000	
Water for Drilling Rig (Not Frac Water)			PCOM.135	0		45,000	
Mud & Additives						150,000	
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257 \$500 BWPD for 2 months to BBR @ \$0.74/bbl	244,200		244,200	
Surface Rentals	CON.140	2,875	PCOM.140 \$1,500/d for 40 days	60,000		286,875	
Flowback Labor			PCOM.141 \$2,000/d for 15 days	30,000		30,000	
Downhole Rentals			PCOM.145	0		116,000	
Automation Labor	CON.150	59,375	PCOM.150 Sand Separator Hookup	9,500		68,875	
Mud Logging						21,000	
IPC & EXTERNAL PAINTING	CON.165	21,375				21,375	
Cementing & Float Equipment						165,000	
Tubular Inspections			PCOM.160	0		64,000	
Casing Crews						30,000	
Mechanical Labor	CON.170	270,375	PCOM.170	0		308,375	
Trucking/Transportation	CON.175	29,875	PCOM.175	0		59,875	
Supervision	CON.180	29,625	PCOM.180	0		153,625	
Trailer House/Camp/Catering						66,000	
Other Misc Expenses	CON.190	37,750	PCOM.190	0		100,750	
Overhead						15,000	
MOB/DEMOB						110,000	
Directional Drilling Services						297,000	
Solids Control						44,000	
Well Control Equip (Snubbing Services)			PCOM.240	0		138,000	
Completion Rig			PCOM.115	0		21,000	
Coil Tubing Services			PCOM.260	0		164,000	
Completion Logging/Perforating/Wireline			PCOM.200	0		235,000	
Composite Plugs			PCOM.390	0		41,000	
Stimulation Pumping/Chemicals/Additives/Sand			PCOM.210 Initial Chem Install	10,000		2,024,000	
Stimulation Water/Water Transfer/Water Storage						278,000	
Cimarex Owned Frac/Rental Equipment			PCOM.305 XEC Owned Spherical Plus Iron	72,500		132,500	
Legal/Regulatory/Curative	CON.300	0				10,000	
Well Control Insurance						7,000	
FL/GL - ON PAD LABOR	CON.495	19,500				19,500	
FL/GL - Labor	CON.500	39,125				39,125	
FL/GL - Supervision	CON.505	23,625				23,625	
Survey	CON.515	2,750				2,750	
Contingency	CON.220	159,750	PCOM.220	0		418,750	
Contingency	CON.221	12,500				12,500	
<b>Total Intangible Cost</b>		<b>762,000</b>			<b>433,200</b>	<b>6,901,200</b>	
Conductor Pipe						8,000	
Water String						15,000	
Surface Casing						71,000	
Intermediate Casing 1						270,000	
Production Casing or Liner						127,000	
Tubing			PCOMT.105	0		52,000	
Wellhead, Tree, Chokes			PCOMT.120 Welded Hairpin	10,000		104,000	
Liner Hanger, Isolation Packer						55,000	
Packer, Nipples			PCOMT.400	0		28,000	
PUMPS	CONT.385	27,625				27,625	
WALKOVERS	CONT.390	15,000				15,000	
Downhole Lift Equipment			PCOMT.410	0		80,000	
N/C Lease Equipment	CONT.400	217,750				217,750	
Tanks, Tanks Steps, Stairs	CONT.405	103,000				103,000	
Battery Equipment	CONT.410	355,375				355,375	
Secondary Containments	CONT.415	51,875				51,875	
Overhead Power Distribution	CONT.420	85,625				85,625	
Facility Electrical	CONT.425	78,125				78,125	
Telecommunication Equipment	CONT.426	1,250				1,250	
Meters and Metering Equipment	CONT.445	37,125				37,125	
Facility Line Pipe	CONT.450	45,500				45,500	
Lease Automation Materials	CONT.455	78,125				78,125	
FL/GL - Materials	CONT.550	8,625				8,625	
FL/GL - Line Pipe	CONT.555	33,125				33,125	
<b>Total Tangible Cost</b>		<b>1,138,125</b>			<b>10,000</b>	<b>1,948,125</b>	
<b>Total Estimated Cost</b>		<b>1,900,125</b>			<b>443,200</b>	<b>8,849,325</b>	

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

APPLICATIONS OF CIMAREX ENERGY CO. OF  
COLORADO FOR A HORIZONTAL SPACING UNIT  
AND COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO

Case No. 22297

SELF-AFFIRMED STATEMENT OF LUCAS HAAS

I, LUCAS HAAS, being duly sworn, states the following:

1. I am over the age of 18, and I have personal knowledge of the matters stated herein.
2. I am employed as a petroleum geologist for Cimarex Energy Co. ("Cimarex"), and I am familiar with the subject applications and the geology involved.
3. This affidavit is submitted in connection with the filing by Cimarex of the above-referenced compulsory pooling applications pursuant to 19.15.4.12.A(1) NMAC.
4. I have testified previously by affidavit before the Oil Conservation Division ("Division") as an expert petroleum geologist; my credentials have been made a matter of record, and I have been qualified as an expert by the Division.
  - a. I have a Bachelor of Science Degree in Geology from Binghamton University, and a Master of Science Degree in Geology from the University of Colorado.
  - b. I have worked on New Mexico Oil and Gas matters since January 2019.
5. **Exhibit B-1** is a structure map of top Wolfcamp Formation with contour interval of 20 feet. The unit being pooled is outlined by a green rectangle. The structure map shows

EXHIBIT

B

that there is a regional down-dip to the east. I do not observe any faulting, pinchouts, or other geologic impediments to developing this targeted interval

6. **Exhibit B-2** is a stratigraphic cross-section flattened on the top Wolfcamp. Each well in the cross-section contains a gamma ray, resistivity, and porosity log. The cross-section demonstrates continuity of the target zone. The well logs on the cross-section give a representative sample of the Upper Wolfcamp Z Sandstone target. The landing zone is highlighted by light, brown shading.

7. Additional exhibits for the benefit of the Division's review include **Exhibit B-3**, a gross isopach of the Upper Wolfcamp interval, as well as **Exhibits B-4 and B-5**. **Exhibit B-4** is a gun barrel representation of the unit, and **Exhibit B-5** is a structural cross section built along the wellbore trajectories.

8. I conclude from the attached exhibits that:

- a. The horizontal spacing and proration unit is justified from a geologic standpoint.
- b. There are no structural impediments or faulting that will interfere with horizontal development.
- c. The target zone is continuous and of relatively uniform thickness across the well unit.
- d. Each quarter-quarter section in the unit will contribute more or less equally to production.

9. The preferred well orientation in this area is North-South so that the wells run sub-perpendicular to the inferred orientation of the maximum horizontal stress.



10. The Exhibits to this Affidavit were prepared by me or compiled from Cimarex Energy Co. business records under my direct supervision.


11. The granting of this Application is in the interests of conservation, the prevention of waste and the drilling of unnecessary wells, and the protection of correlative rights.

12. The foregoing is correct and complete to the best of my knowledge and belief.

*[Signature page follows]*

I understand that this Self-Affirmed Statement will be used as written testimony in these cases. I affirm that my testimony in paragraphs 1 through 12 above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

Date: 2/10/2022

  
\_\_\_\_\_  
Lucas Haas



# Southern Hills Wolfcamp

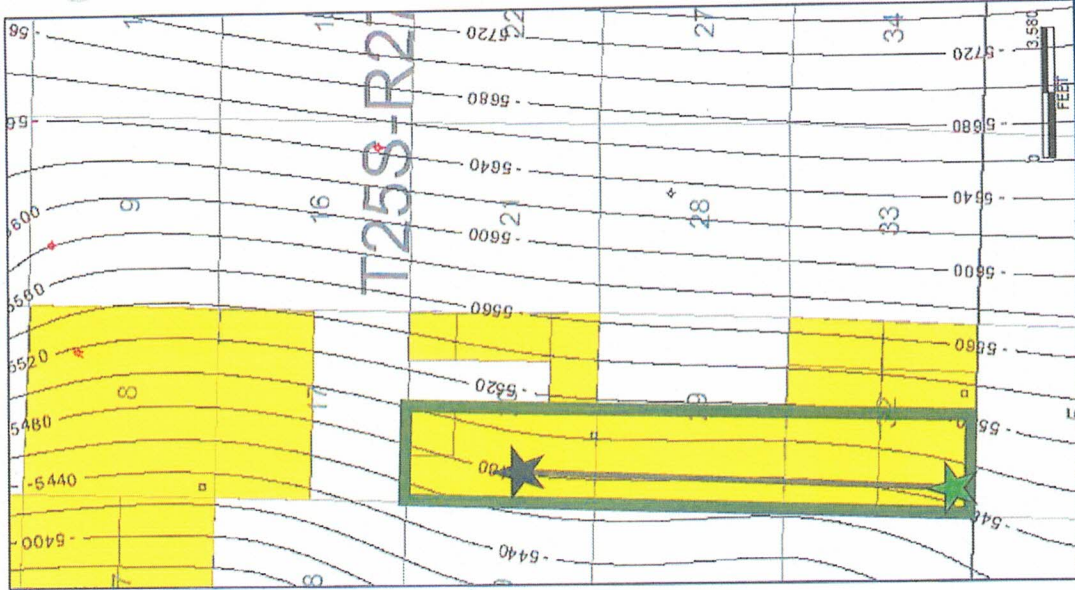
# Wolfcamp Interval Top Structure Map

COTERRA

C.I. = 20'

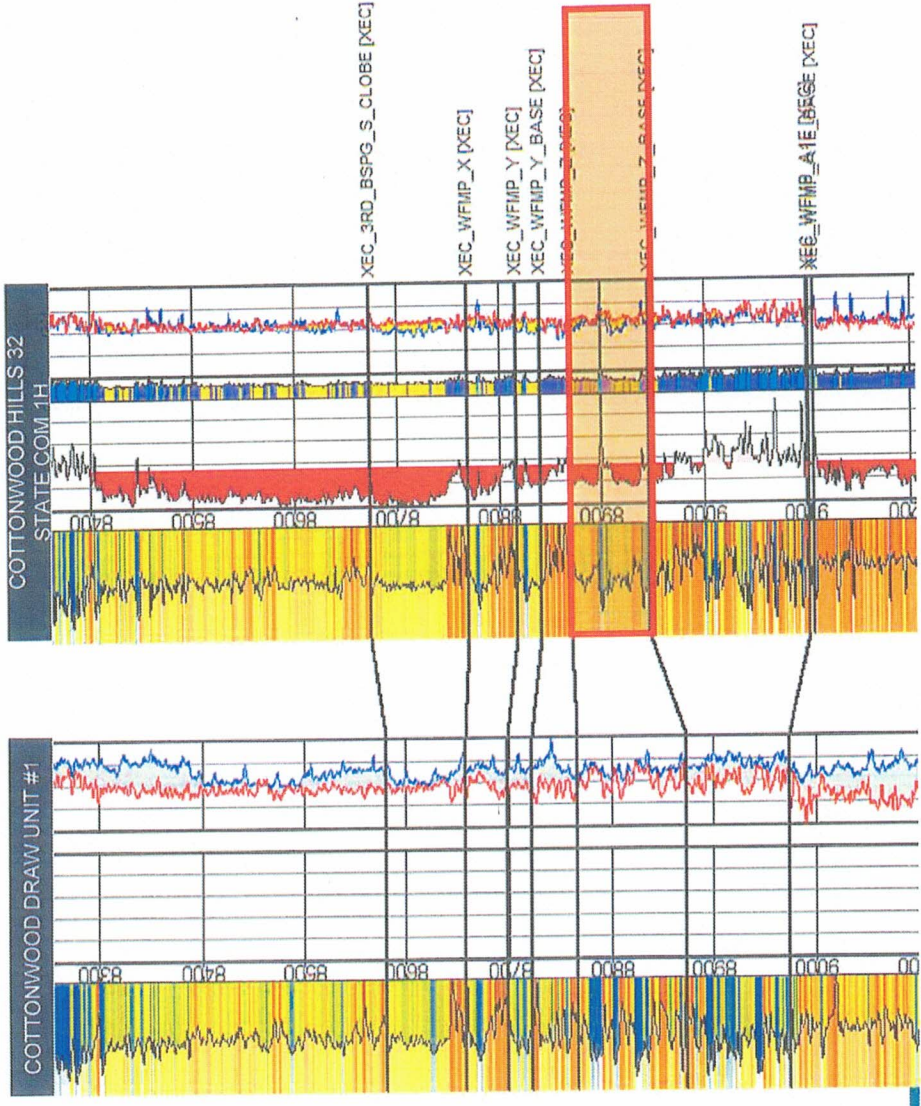
SSTVD

B-1



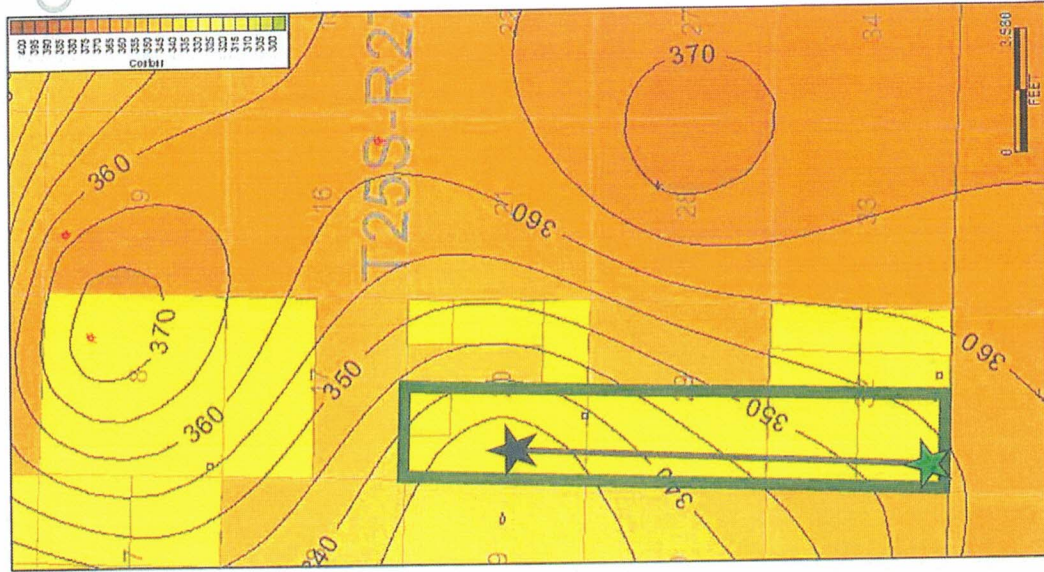
# SOUTHERN HILLS CROSS SECTION

COTERRA



B-2

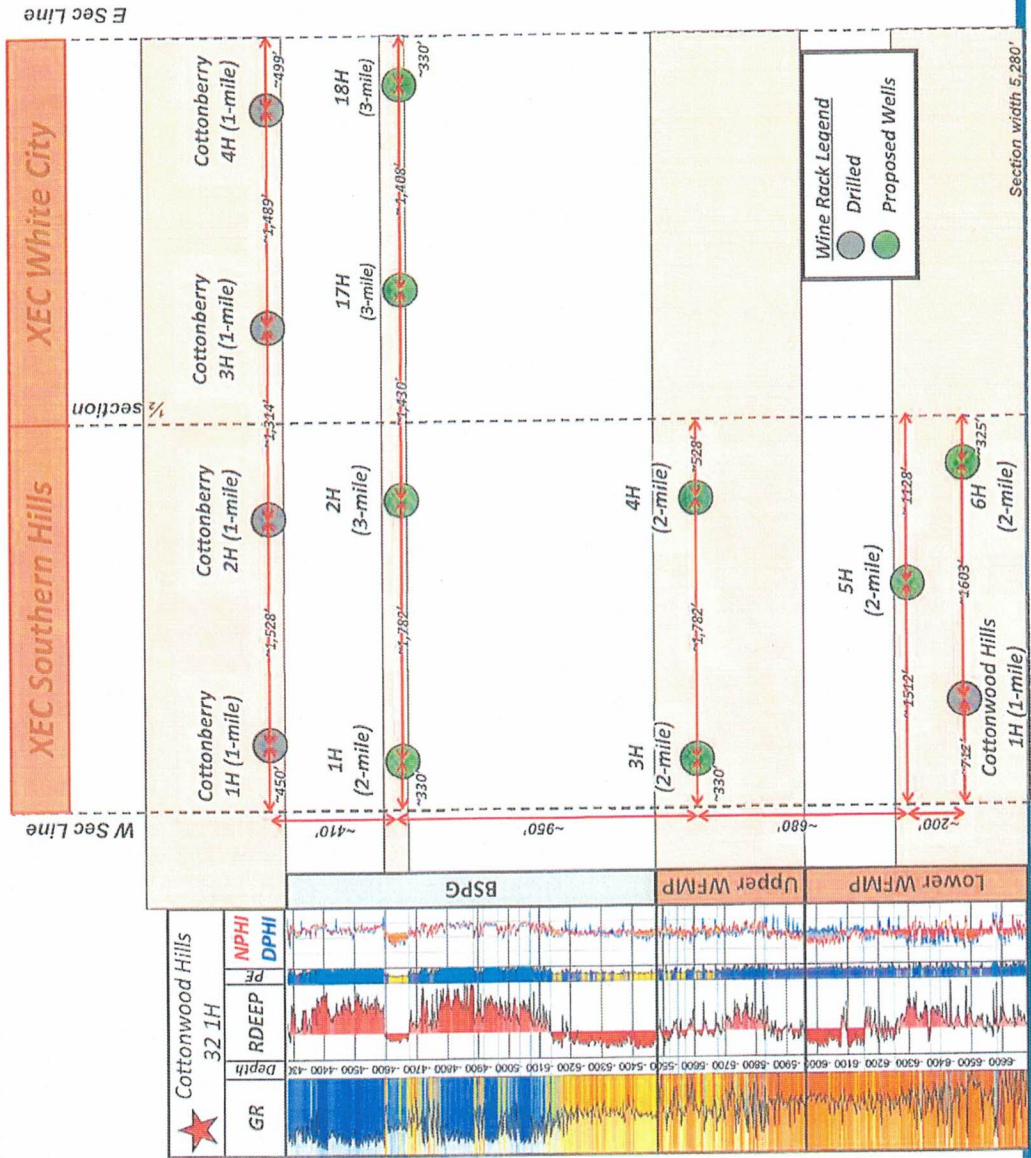
# Wolfcamp Interval Gross Isopach Map



C.I. = 5'

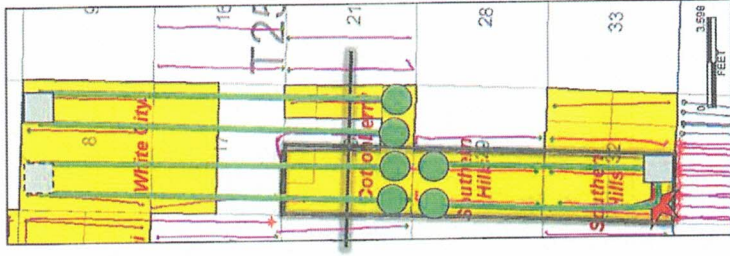
B-3

# Southern Hills Wine Rack



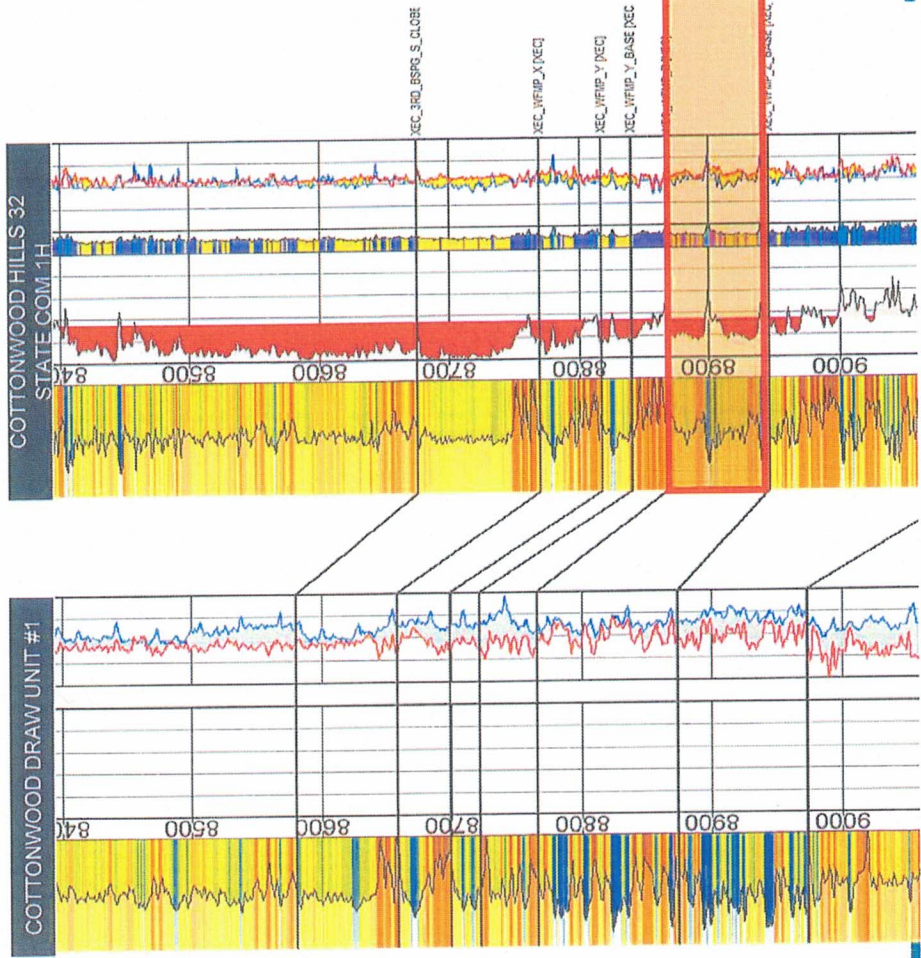
B-4

COTERRA



# SOUTHERN HILLS CROSS SECTION

COTERRA



33

B-5



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

**APPLICATION OF CIMAREX ENERGY CO.  
FOR A HORIZONTAL SPACING UNIT AND  
COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO**

Case No. 22297

**APPLICATION**

Cimarex Energy Co. ("Cimarex"), OGRID No. 215099, through its undersigned attorneys, hereby files this Application with the Oil Conservation Division ("Division") pursuant to the provisions of NMSA 1978, Section 70-2-17, for an order (1) creating a standard 640-acre, more or less, spacing and proration unit comprised of the W/2 of Sections 29 and 32, Township 25 South, Range 27 East, NMPM, Eddy County, New Mexico, and (2) pooling all uncommitted mineral interests in the Wolfcamp formation, designated as a gas pool, underlying said unit.

In support of its Application, Cimarex states the following:

1. Cimarex is a working interest owner in the proposed horizontal spacing and proration unit ("HSU") and has a right to drill a well thereon.
2. Cimarex proposes and dedicates to the HSU the **Southern Hills 32-29 State Fed Com 3H Well** and **Southern Hills 32-29 State Fed Com 4H Well** as initial wells, to be drilled to a sufficient depth to test the Wolfcamp formation.
3. Cimarex proposes the **Southern Hills 32-29 State Fed Com 3H Well** to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 32 to a bottom hole location in the NE/4 NW/4 (Unit C) of Section 29.

EXHIBIT

C

4. Cimarex proposes the **Southern Hills 32-29 State Fed Com 4H Well** to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 32 to a bottom hole location in the NE/4 NW/4 (Unit C) of Section 29.

5. The wells will be unorthodox in location, and the 100' setback of the take points do not comply with the special field rules for the Purple Sage, Wolfcamp, pursuant to Order No. R-14262; Cimarex will be applying administratively to the NMOCD for approval of the non-standard locations

6. Cimarex has a horizontal well, the Cottonwood Hills 32 State Com (API No. 30-015-39967), in the W/2 of Section 32, in the Wolfcamp formation. The proposed HSU will overlap this 320-acre unit in the W/2, and Cimarex respectfully requests approval, to the extent necessary, for the overlapping units.

7. Cimarex has sought in good faith, but has been unable to obtain, voluntary agreement from all interest owners to participate in the drilling of the wells or in the commitment of their interests to the wells for their development within the proposed HSU.

8. The pooling of all interests in the Wolfcamp formation within the proposed HSU, and creation of the spacing unit, will avoid the drilling of unnecessary wells, prevent waste and protect correlative rights.

9. In order to provide for its just and fair share of the oil and gas underlying the subject lands, Cimarex requests that all uncommitted interests in this HSU be pooled and that Cimarex be designated the operator of the proposed horizontal wells and HSU.

WHEREFORE, Cimarex requests that this Application be set for hearing on November 4, 2021, before an Examiner of the Oil Conservation Division, and after notice and hearing as required by law, the Division enter an order:

- A. Approving the creation of a standard 640-acre, more or less, spacing and proration unit comprised of the W/2 of Sections 29 and 32, Township 25 South, Range 27 East, NMPM, Eddy County, New Mexico;
- B. Pooling all uncommitted mineral interests in the Wolfcamp formation underlying the proposed HSU.
- C. Approving the **Southern Hills 32-29 State Fed Com 3H Well** and **Southern Hills 32-29 State Fed Com 4H Well** as the wells for the HSU.
- D. Designating Cimarex as operator of this HSU and the horizontal wells to be drilled thereon;
- E. Authorizing Cimarex to recover its costs of drilling, equipping, and completing the wells;
- F. Approving actual operating charges and costs of supervision, to the maximum extent allowable, while drilling and after completion, together with a provision adjusting the rates pursuant to the COPAS accounting procedures; and
- G. Setting a 200% charge for the risk assumed by Cimarex in drilling and completing the wells in the event a working interest owner elects not to participate in the wells.

Respectfully submitted,

ABADIE & SCHILL, PC

/s/ Darin C. Savage

---

Darin C. Savage

William E. Zimsky  
Andrew D. Schill  
214 McKenzie Street  
Santa Fe, New Mexico 87501  
Telephone: 970.385.4401

Facsimile: 970.385.4901  
darin@abadieschill.com  
bill@abadieschill.com  
andrew@abadieschill.com

**Attorneys for Cimarex Energy Co.**

***Application of Cimarex Energy Co. for a Horizontal Spacing and Proration Unit and Compulsory Pooling, Eddy County, New Mexico.*** Applicant in the above-styled cause seeks an order from the Division: (1) creating a standard 640-acre, more or less, horizontal spacing and proration unit comprised of the W/2 of Sections 29 and 32, Township 25 South, Range 27 East, NMPM, Eddy County, New Mexico, and (2) pooling all mineral interests in the Wolfcamp formation, designated as a gas pool, underlying the unit. The proposed wells to be dedicated to the horizontal spacing unit are the **Southern Hills 32-29 State Fed Com 3H Well** to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 32 to a bottom hole location in the NE/4 NW/4 (Unit C) of Section 29; and the **Southern Hills 32-29 State Fed Com 4H Well** to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 32 to a bottom hole location in the NE/4 NW/4 (Unit C) of Section 29. The wells will be unorthodox in location, and the 100' setback of the take points do not comply with the special field rules for the Purple Sage, Wolfcamp, pursuant to Order No. R-14262; Cimarex will be applying administratively to the NMOCD for approval of the non-standard locations; also to be considered is the approval, to the extent necessary, of an overlapping spacing unit involving the Cottonwood Hills 32 State Com (API No. 30-015-39967) in the W/2 of Section 32; the cost of drilling and completing the wells and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the wells and unit; and a 200% charge for the risk involved in drilling and completing the wells. The wells and lands are located approximately 3 miles south of Carlsbad, New Mexico, and 1 mile north of the state line.