

CASE NO. 22333

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. 22333

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 (Carlsbad; Bone Spring, South; Pool Code: 9670) underlying a standard 320-acre,

EXHIBIT **A**

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

6. Under Case No. 22333, Cimarex seeks to dedicate the **Southern Hills 32-29 State Fed Com 2H 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 7,900'; approximate TMD of 17,900'; FTP in Section 32: 813' FSL, 2,112' FWL; LTP in Section 29: 100' FNL, 2,112' FWL.

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

8. 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.

9. 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.

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

11. 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.

12. 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.

13. 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.

14. 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.

15. **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.

16. 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.

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

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

19. The Exhibits to this Affidavit were prepared by me or compiled from Cimarex's company business records under my direct supervision.

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

21. 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 21 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: 2/10/22

Riley Morris

Riley Morris

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

30-015- ¹ API Number	9670 ² Pool Code	Carlsbad; Bone Spring, South ³ Pool Name
⁴ Property Code	⁵ Property Name SO. HILLS 32-29 STATE FED COM	
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁶ Well Number 2H ⁹ Elevation 3244.2'

¹⁰ Surface Location									
UL or lot no. N	Section 32	Township 25S	Range 27E	Lot Idn	Feet from the 820	North/South line SOUTH	Feet from the 1558	East/West line WEST	County EDDY

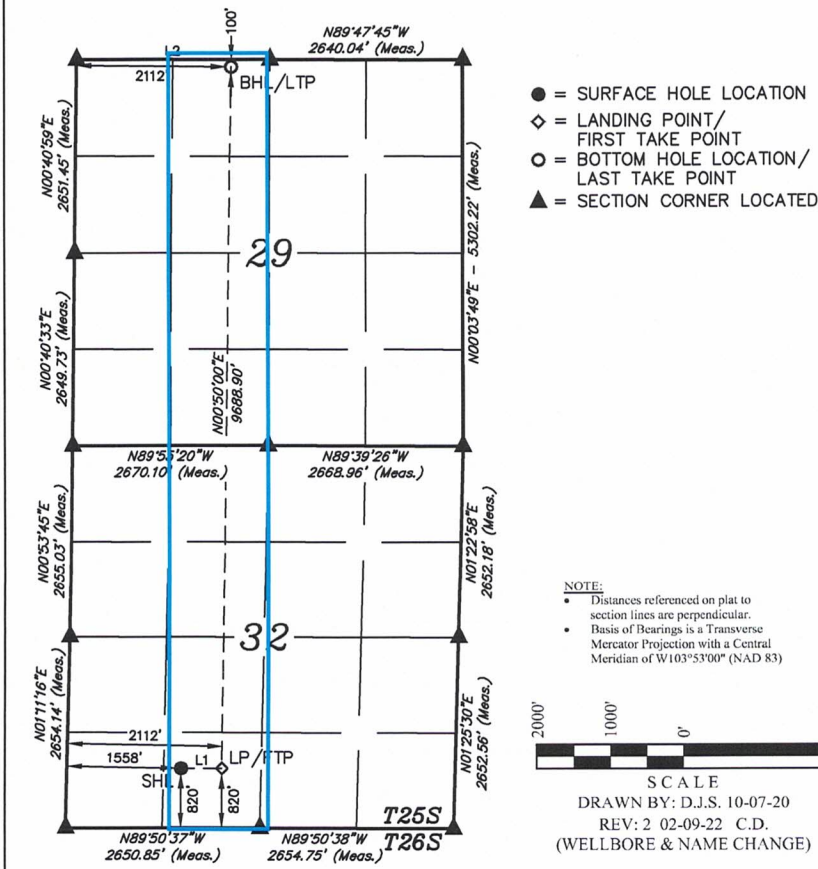
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. C	Section 29	Township 25S	Range 27E	Lot Idn	Feet from the 100	North/South line NORTH	Feet from the 2112	East/West line WEST	County EDDY
¹² Dedicated Acres 320		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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.

NAD 83 (SURFACE HOLE LOCATION) LATITUDE = 32°04'52.56" (32.081267°) LONGITUDE = 104°12'57.23" (104.215896°)	NAD 83 (LP/FTP) LATITUDE = 32°04'52.56" (32.081267°) LONGITUDE = 104°12'50.79" (104.214108°)	NAD 83 (BHL/LTP) LATITUDE = 32°06'28.41" (32.107893°) LONGITUDE = 104°12'49.50" (104.213749°)
NAD 27 (SURFACE HOLE LOCATION) LATITUDE = 32°04'52.12" (32.081145°) LONGITUDE = 104°12'55.44" (104.215401°)	NAD 27 (LP/FTP) LATITUDE = 32°04'52.12" (32.081145°) LONGITUDE = 104°12'49.01" (104.213613°)	NAD 27 (BHL/LTP) LATITUDE = 32°06'27.98" (32.107772°) LONGITUDE = 104°12'47.71" (104.213253°)
STATE PLANE NAD 83 (N.M. EAST) N: 393321.73' E: 577709.56'	STATE PLANE NAD 83 (N.M. EAST) N: 393322.32' E: 578263.36'	STATE PLANE NAD 83 (N.M. EAST) N: 403008.43' E: 578363.84'
STATE PLANE NAD 27 (N.M. EAST) N: 393264.65' E: 536526.10'	STATE PLANE NAD 27 (N.M. EAST) N: 393265.23' E: 537079.89'	STATE PLANE NAD 27 (N.M. EAST) N: 402951.16' E: 537180.52'

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S89°49'18"E	553.93'
L2	N89°48'34"W	2642.05'

¹⁷ 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 02/10/2022
Signature Date
Fatima Vasquez
Printed Name
fatima.vasquez@coterra.com
E-mail Address



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.
August 31, 2020
Date of Survey
Signature and Seal of Professional Surveyor:

Certificate Number:

ATTACHMENT 1





ATTACHMENT 2



SOUTHERN HILLS OWNERSHIP Eddy County, NM

DATE: 1/18/2022	DATE: 01/18/2022 08:58:07 AM New Mexico State
USER: LRS/STW	NUMPAGE: 8

 Southern Hills - 2 Mile BSPG
 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. Maricfeld St.
Suite 600
Midland, TX 79701
Main: 432.571.7800



November 1, 2021

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

**Re: UPDATE LETTER
Proposal to Drill
Southern Hills 32-29 State Fed Com 1H
Southern Hills 32-29 State Fed Com 2H
W2 Section 32 and 29, Township 25 South, Range 27 East
Eddy County, NM**

Dear Working Interest Owner,

By letter dated September 3, 2021 Cimarex Energy Co. proposed to drill the Southern Hills 32-29 State Fed Com 1H and Southern Hills 32-29-20 State Fed Com 2H (the "Proposal to Drill"). Please let this Update Letter serve as an update of the well name of the Southern Hills 32-29-20 State Fed Com 2H to the Southern Hills 32-29 State Fed Com 2H along with the bottom hole location and AFE total for the subject well. Please note that this update is for advisory purposes only and all other information contained herein is identical to the original Proposal to Drill.

Cimarex Energy Co. hereby proposes to drill the Southern Hills 32-29 State Fed Com 1H & Southern Hills 32-29 State Fed Com 2H 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 1H - The intended surface hole location for the well is 813'FSL & 1,540'FWL of Section 32, Township 25 South, Range 27 East, and the intended bottom hole location 100'FNL & 330'FWL of Section 29, Township 25 South, Range 27 East. The well is proposed to be drilled vertically to the Harkey 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 7,900'.

Southern Hills 32-29 State Fed Com 2H - The intended surface hole location for the well is 820'FSL & 1,558'FWL of Section 32, Township 25 South, Range 27 East, and the intended bottom hole location 100'FNL & 2,112'FWL of Section 29, Township 25 South, Range 27 East. The well is proposed to be drilled vertically to the Harkey 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 7,900'.

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:

ATTACHMENT 3

- 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.

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 Southern Hills 32-29 State 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,



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

**ELECTION TO PARTICIPATE
Southern Hills 32-29 State Fed Com 1H**

_____ Chevron U.S.A. Inc. elects **TO** participate in the proposed Southern Hills 32-29 State Fed Com 1H well.

_____ Chevron U.S.A. Inc. elects **NOT** to participate in the proposed Southern Hills 32-29 State Fed Com 1H 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 1H 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 # 26822009

Company Entity

Date Prepared
11/1/2021

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	SO HILLS 32-29 STATE FED COM 2H	Carlsbad Bone Spring Prospect	300001-189.01	26822009
County, State	Location	Estimated Spud	Estimated Completion	
Eddy, NM	E2W2 SECTIONS 32, 29 AND 20, TOWNSHIP 25 SOUTH, RANGE 27 EAST, EDDY COUNTY, NM	4/27/2022		
<input checked="" type="checkbox"/> New <input type="checkbox"/> Supplement <input type="checkbox"/> Revision	Formation	Well Type	Ttl Measured Depth	Ttl Vertical Depth
	Harkey	DEV	19,960	7,900

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 440 Set Surface casing. Drill to Drill to 2635', set surface casing. Drill to 9490' (KOP). Drill curve at 12*/100' initial build rate to +/- 75 degrees and set casing at +/- 10115' MD. Finish curve at +/- 4*/100' to +/- 10000' TVD and drill a +/- 9470' long lateral in the Wolfcamp A formation. Run and cement production liner. Stage frac. Drill out plugs. Run production packer, tubing and GLVs.

	Dry Hole	After Casing Point	Completed Well Cost
Intangible			
Drilling Costs	\$2,024,000		\$2,024,000
Completion Costs		\$4,571,800	\$4,571,800
Total Intangible Cost	\$2,024,000	\$4,571,800	\$6,595,800
Tangible			
Well Equipment	\$476,000	\$457,000	\$933,000
Lease Equipment		\$1,138,125	\$1,138,125
Total Tangible Cost	\$476,000	\$1,595,125	\$2,071,125
Total Well Cost	\$2,500,000	\$6,166,925	\$8,666,925

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.

11/1/2021



Authorization For Expenditure - SO HILLS 32-29 STATE FED
COM 2H

AFE # 26822009

Description	BCP - Drilling		ACP - Drilling		Comp/Stm		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.130	0	62,000
Fuel	DIDC.135	42,000	DICC.130	0					PCOM.135	0	42,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	25,000	DICC.135	0	STIM.135	20,000					45,000
Mud & Additives	DIDC.145	150,000									150,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	88,800	88,800
Surface Rentals	DIDC.150	92,000	DICC.140	0	STIM.140	132,000	CON.140	2,875	PCOM.140	60,000	286,875
Downhole Rentals	DIDC.155	81,000			STIM.145	35,000			PCOM.145	0	116,000
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Automation Labor							CON.150	59,375	PCOM.150	9,500	68,875
Mud Logging	DIDC.170	21,000					CON.165	21,375			21,375
IPC & EXTERNAL PAINTING											175,000
Cementing & Float Equipment	DIDC.185	120,000	DICC.155	55,000					PCOM.160	0	175,000
Tubular Inspections	DIDC.190	50,000	DICC.160	10,000	STIM.160	4,000					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	62,000	CON.190	37,750	PCOM.190	0	104,750
Overhead	DIDC.225	10,000	DICC.195	5,000							15,000
MOB/DEMORB	DIDC.240	110,000									110,000
Directional Drilling Services	DIDC.245	218,000									218,000
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	2,002,000			PCOM.210	10,000	2,012,000
Stimulation Water/Water Transfer/Water Storage					STIM.395	212,000					212,000
Cinmarex 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	84,000	DICC.220	9,000	STIM.220	159,000	CON.220	159,750	PCOM.220	0	411,750
Contingency							CON.221	12,500			12,500
Total Intangible Cos		2,024,000		191,000		3,341,000		762,000		277,800	6,595,800
Conductor Pipe	DWEB.130	8,000									8,000
Water String	DWEB.135	18,000									18,000
Surface Casing	DWEB.140	73,000									73,000
Intermediate Casing 1	DWEB.145	339,000									339,000
Production Casing or Liner			DWEA.100	145,000							145,000
Tubing					STIMT.105	83,000			PCOMT.105	0	83,000
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
Total Tangible Cos		476,000		218,000		229,000		1,138,125		10,000	2,071,125
Total Estimated Cost		2,500,000		409,000		3,570,000		1,900,125		287,800	8,666,925



Authorization For Expenditure - SO HILLS 32-29 STATE FED
COM 2H

AFE # 26822009

Description	BCP - Drilling			ACP - Drilling			Comp/Stim		Amount
	Codes		Amount	Codes		Amount	Codes		
Roads & Location	DIDC.100		125,000				STIM.100	CON.100	10,000
Damages	DIDC.105		30,000						53,000
Mud/Fluids Disposal	DIDC.255		125,000				STIM.255		
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
Downhole Rentals	DIDC.155		81,000				STIM.145		35,000
Flowback Labor							STIM.141		0
Automation Labor									
Mud Logging	DIDC.170		21,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	DICC.155	120,000	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	62,000
Overhead	DIDC.225	DICC.195	10,000	DICC.195		5,000			
MOB/DEMOB	DIDC.240		110,000						
Directional Drilling Services	DIDC.245		218,000						
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		2,002,000
Stimulation Water/Water Transfer/Water							STIM.395		212,000
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	84,000	DICC.220	STIM.220	9,000	STIM.220	CON.220	159,000
Contingency									
Total Intangible Cost			2,024,000			191,000			3,341,000
Conductor Pipe	DWEB.130		8,000						
Water String	DWEB.135		18,000						
Surface Casing	DWEB.140		73,000						
Intermediate Casing 1	DWEB.145		339,000						
Production Casing or Liner				DWEA.100		145,000			
Tubing							STIMT.105		83,000
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									
Total Tangible Cos			476,000			218,000			229,000
Total Estimated Cost			2,500,000			409,000			3,570,000



Authorization For Expenditure - SO HILLS 32-29 STATE FED
COM 2H

AFE # 26822009

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	2000 BWPD for 2 months to BBR @ \$0.74/ubl	88,800	88,800	
Surface Rentals	CON.140	2,875	PCOM.140	\$1,500/d for 40 days	60,000	286,875	
Downhole Rentals			PCOM.145			0	116,000
Flowback Labor			PCOM.141	\$2,000/d for 15 days	30,000	30,000	
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						175,000	
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	104,750
Overhead							15,000
MOB/DEMOB							110,000
Directional Drilling Services							218,000
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	2,012,000	
Stimulation Water/Water Transfer/Water Storage							212,000
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	411,750
Contingency	CON.221	12,500					12,500
Total Intangible Cost		762,000			277,800	5,595,800	
Conductor Pipe							8,000
Water String							18,000
Surface Casing							73,000
Intermediate Casing 1							339,000
Production Casing or Liner							145,000
Tubing			PCOMT.105			0	83,000
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
Total Tangible Cos		1,138,125			10,000	2,071,125	
Total Estimated Cost		1,900,125			287,800	8,666,925	

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. 22295 and 22333

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 Bone Spring Carbonate Formation with contour interval of 20 feet. The unit being pooled is outlined by a green rectangle. The

EXHIBIT

B

structure map shows 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 base of the Bone Spring Sand. 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 Bone Spring 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 overall Bone Spring Carbonate 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. Exhibits B-1 through B-5 are the same for the Bone Spring Sandstone application in both Case Nos. 22295 and 22333.

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 Bone Spring

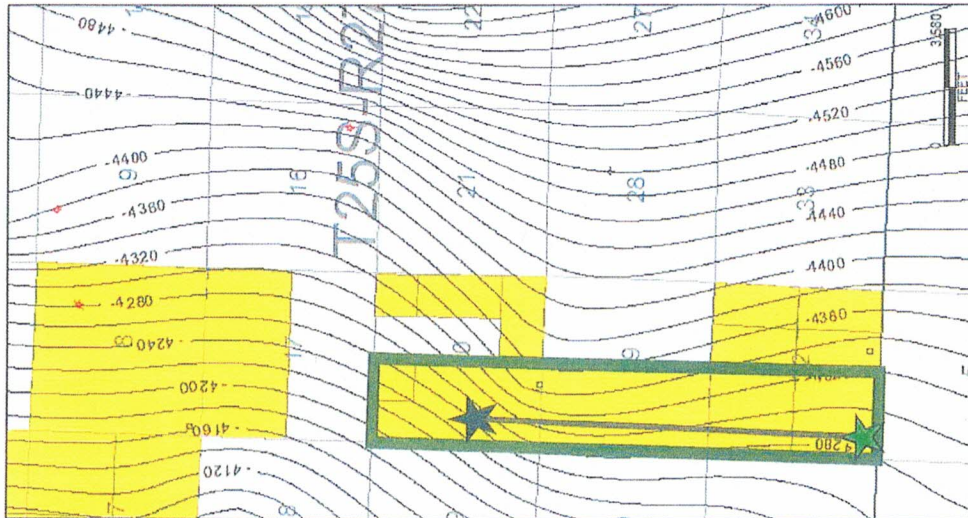
COTERRA

Bone Spring Interval Top Structure Map

C.I. = 20'

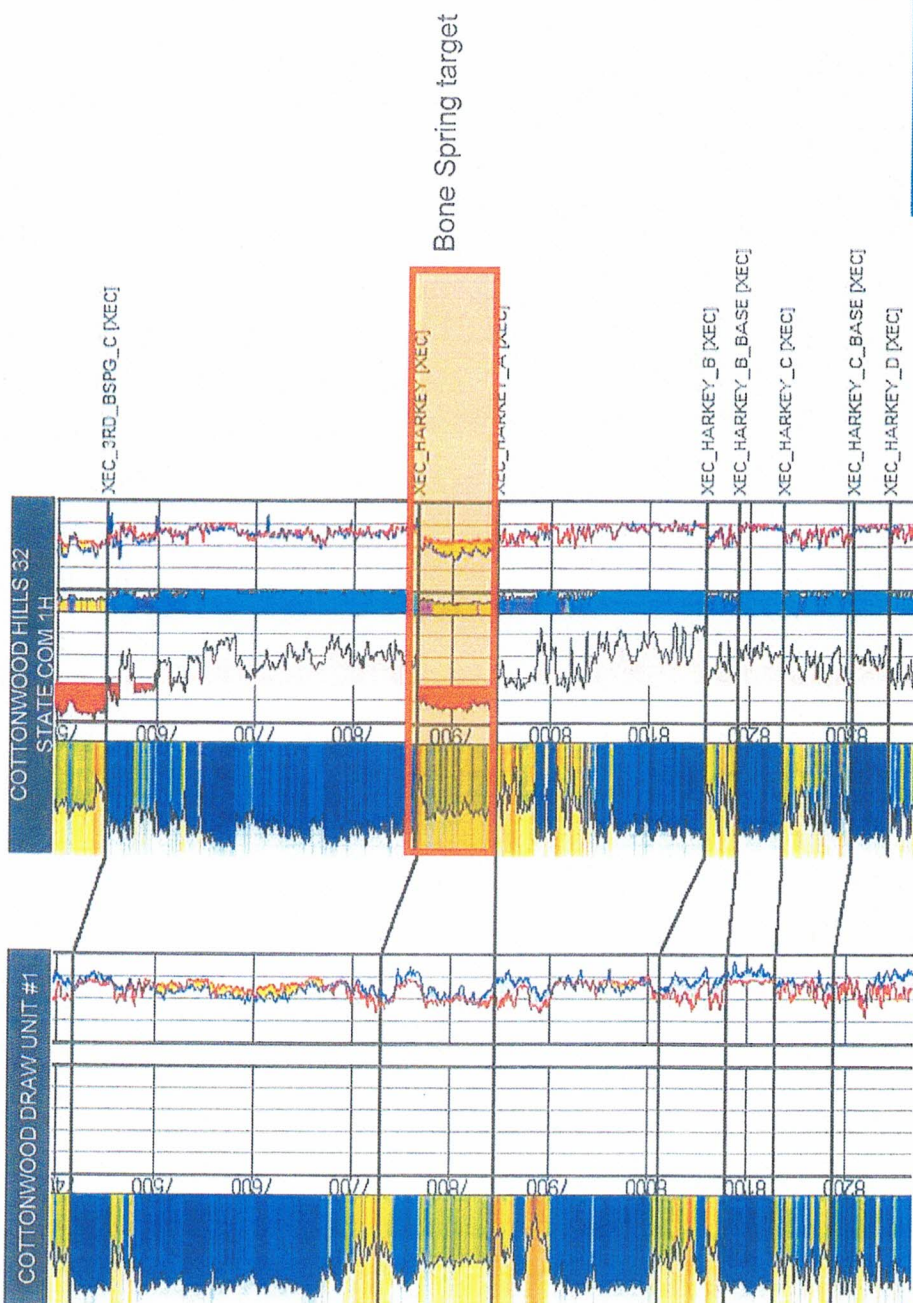
SSTVD

B-1



SOUTHERN HILLS CROSS SECTION

COTERRA

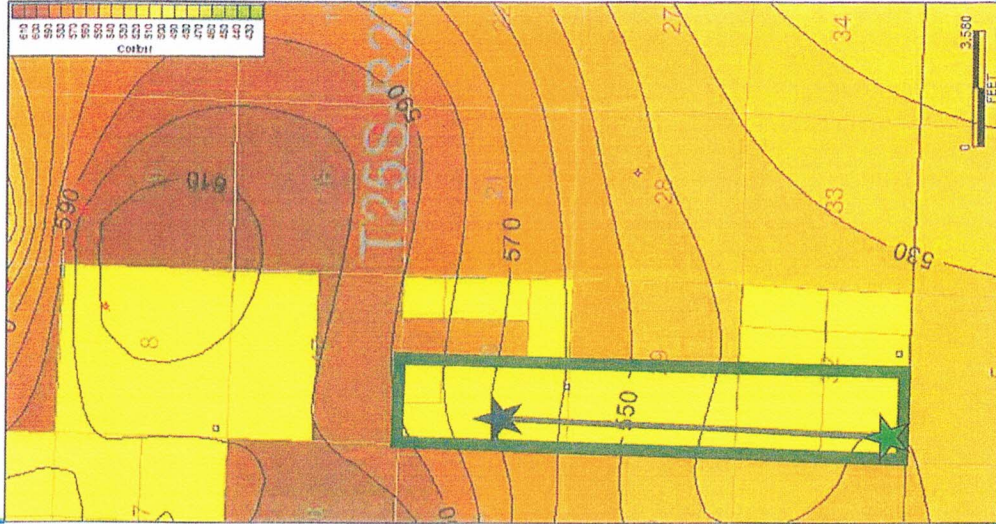


B-2

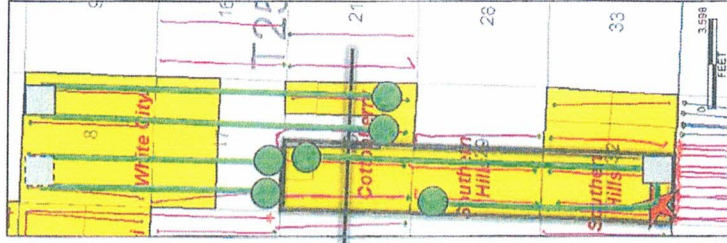
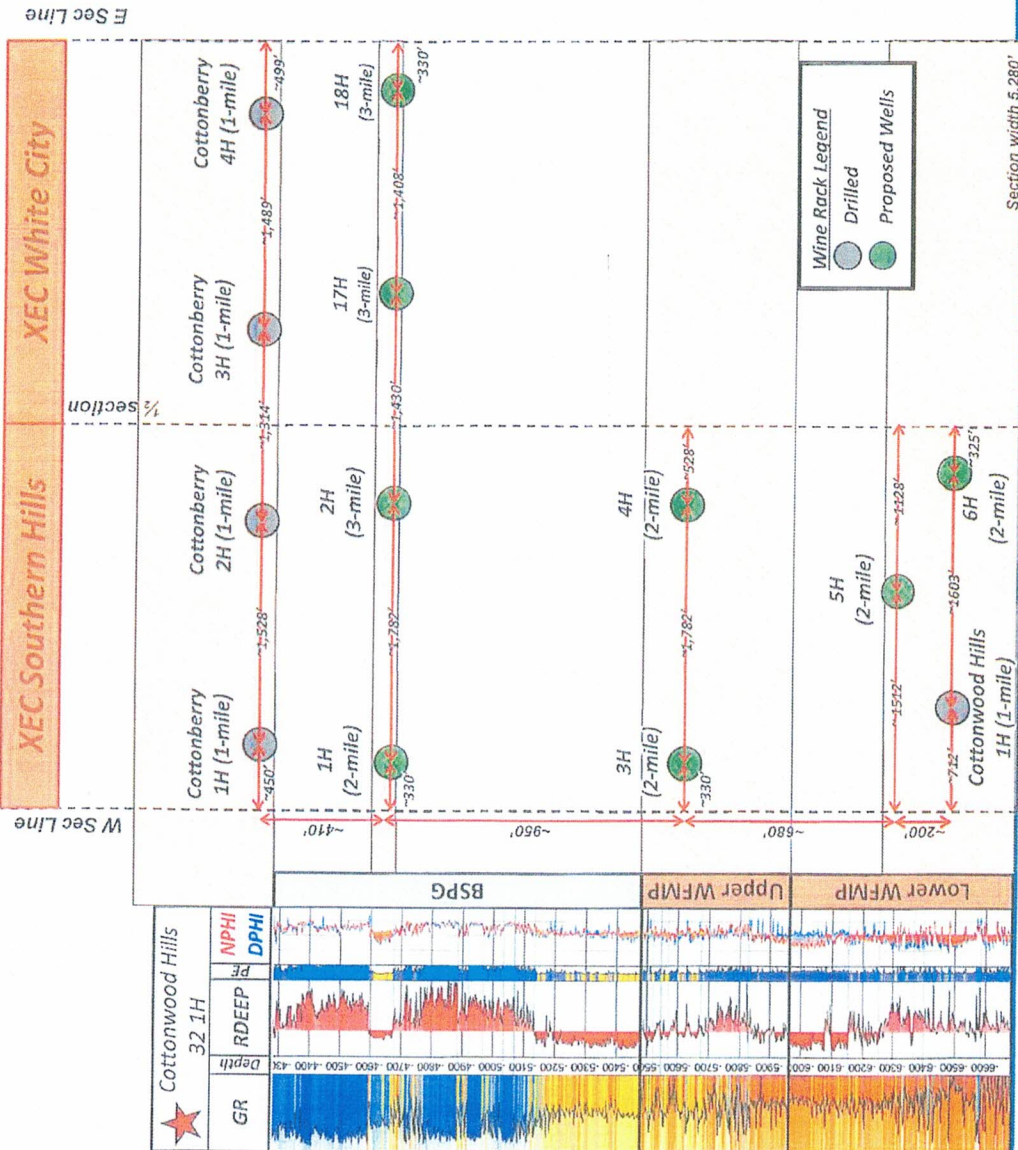
Bone Spring Interval Gross Isopach Map

C.I. = 10'

B-3



Southern Hills Wine Rack

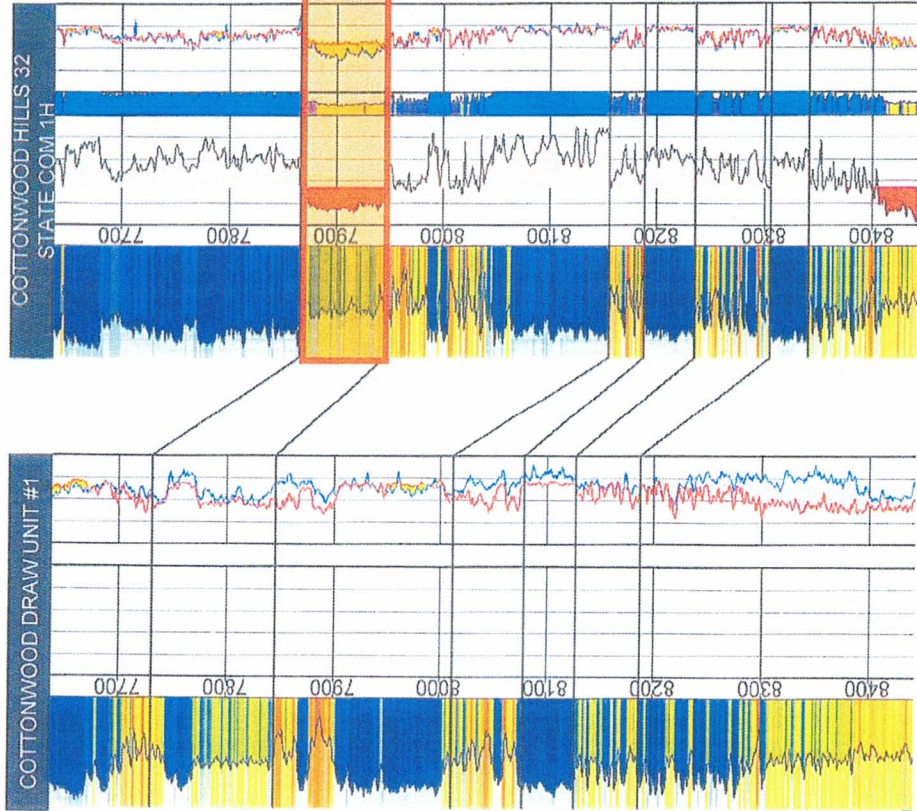


B-4

COTERRA

SOUTHERN HILLS CROSS SECTION

COTERRA



B-5

Bone Spring target