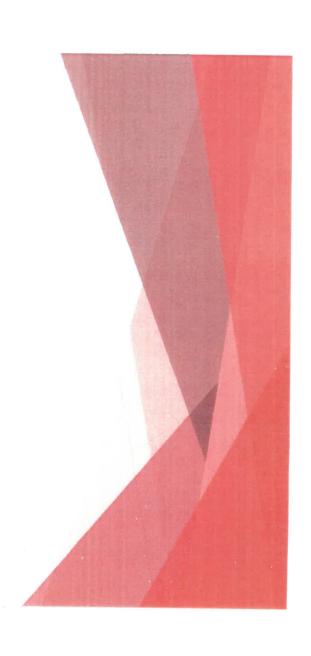
Before the Oil Conservation Division Examiner Hearing September 6, 2018

Case No. 16379

Lea 7 Federal Com 30H





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

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

**CASE NO. 16379** 

<b>AFFID</b>	AV	TI
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STATE OF TEXAS	)
	) ss
COUNTY OF MIDLAND	)

Cody Elliot, being duly sworn, deposes and states:

- 1. I am over the age of 18, I am a landman for Cimarex Energy Co. ("Cimarex"), and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert petroleum landman.
- 2. Pursuant to NMAC 19.15.4.12.A(1), the following information is submitted in support of the above referenced compulsory pooling application:
  - a. The purpose of this application is to force pool working interest owners into the horizontal spacing unit described below, and in the well to be drilled in the unit.
  - b. No opposition is expected because the interest owners being pooled have been contacted regarding the proposed well, but have failed or refused to voluntarily commit their interests in the well.
  - c. A plat outlining the unit being pooled is attached hereto as **Exhibit A**. This exhibit also includes the ownership of each separate tract in the proposed unit and the proposed well's location within the unit. Cimarex seeks an order pooling of all mineral interests in the Bone Spring formation underlying the E/2 E/2 of Section 7,



Township 20 South, Range 35 East, N.M.P.M., Lea County, New Mexico. The unit will be dedicated to the Lea 7 Federal Com 30H well, which is a horizontal well with a surface location in the SE/4 SE/4 of Section 7, Township 20 South, Range 35 East and a final take point in the NE/4 NE/4 of Section 7, Township 20 South, Range 35 East.

- d. There are no depth severances within the Bone Spring formation.
- e. Attached as **Exhibit B** is a proposed C-102 for the well. The well will develop the Wildcat Bone Spring pool, which is an oil pool.
- f. The producing interval for the well will be orthodox and will comply with the Division's set back requirements.
- g. The parties being pooled and the nature and percent of their interests are set forth in Exhibit A.
- h. The parties being pooled last known addresses are identified in Exhibit A to DeanaM. Bennett's affidavit which will be submitted as Exhibit 3 in this matter.
- i. There is one un-locatable interest owner.
- j. I have conducted a diligent search of the public records in the county where the well is located, and conducted computer searches to locate contact information for parties entitled to notification, and mailed all parties well proposals, including an Authorization for Expenditure and a form of Operating Agreement.
- k. Cimarex has made a good faith effort to obtain voluntary joinder of the work interest owners in the proposed well.
- 1. Exhibits C and D are a sample proposal letter and the Authorization for Expenditure for the proposed well. The estimated cost of the well set forth therein

- is fair and reasonable, and is comparable to the costs of other wells of similar depths and length drilled in this area of New Mexico.
- m. Cimarex requests overhead and administrative rates of \$7000.00/month for a drilling well and \$700.00/month for a producing 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.
- n. Cimarex requests the maximum cost plus 200% risk charge be assessed against non-consenting working interest owners.
- o. Cimarex requests that it be designated operator of the well.
- 3. The attachments to this affidavit were prepared by me, or compiled from company business records.
- 4. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.
- 5. The granting of this application is in the interests of conservation and the prevention of waste.

Cody Elliot

SUBSCRIBED AND SWORN to before me this 5 day of September, 2018 by Cody Elliot, on behalf of Cimarex Energy Co.

Notary Public

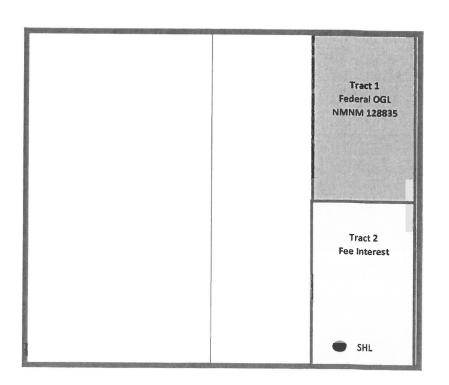
My commission expires: 3/24/301

KAIMI BROWNLEE
Nolary Public, State of Texas
Comm. Expires 03-26-2019
Notary ID 126052368

# Section 7, Range 20 South, Township 35 East, Lea Co., New Mexico Lea 7 Federal 30H Well (E/2E/2 – 160.00 acre unit)

#### Interests to Pool Covering Tract 2

OWNER	TYPE	NET ACRES
The Long Trusts, Larry P. Long, Managing Trustee	Unleased	.3595312
	Minerals	
Lowe Family, Ltd.	Unleased	.0288064
	Minerals	
Teddy L. Hartley & Roberta Thomas Hartley, as Trustees of the Vora Lowe	Unleased	.0188352
Hartley Mineral Trust	Minerals	
M. Dion Lowe	Unleased	.0632512
	Minerals	
Total		0.470424





District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District III
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. Frencis 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

			11 2020	2001111	013 111 122 110	TOP TOP DEPT	21110111 DEL			
	API Num )-025	ber		<sup>2</sup> Pool Code		Wildcat; Bone Spring				
Property Code SProperty Name LEA 7 FEDERAL COM						6 Well Number 30H				
10GRID1 215099	Ψo.	*Operator Name CIMAREX ENERGY CO.							9 Elevation 3676.6'	
					"Surface	Location				
UL or lot no.	Section 7	Township 20S	Range 35E	Lot Idn	Feet from the 191	North/South line SOUTH	Feet from the 1139	East/West line EAST	County LEA	
			11	Bottom Ho	le Location I	f Different From	Surface			
UL or lot no.	Section 7	Township 20S	Runge 35E	Lot Idn	Feet from the 330	North/South line NORTH	Feet from the 660	East/West line EAST	County LEA	
12 Dedleated Acr 160	es	<sup>3</sup> Johnt or Infill	14 Conso	lidation Code	15 Order No.	<del> </del>				

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.

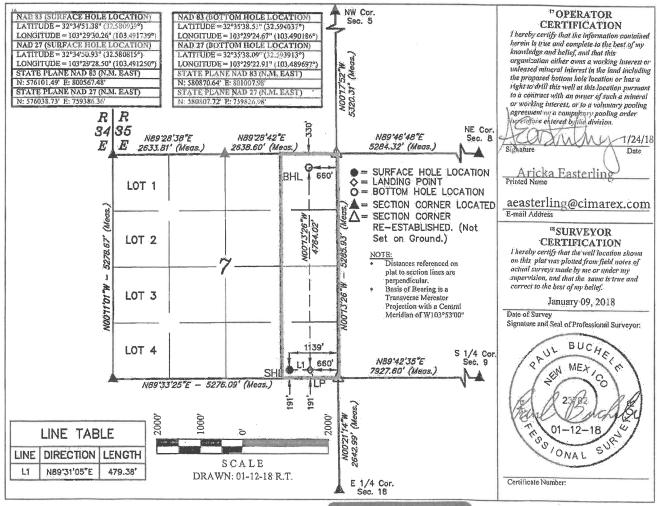


EXHIBIT 1-8



June 20, 2018

The Long Trusts 118 S. Kilgore St. Kilgore, Texas 75662

Re:

Proposal to Drill

Lea 7 Fed Com 30H

Section 7, Township 20 South, Range 35 East

Lea County, NM

Dear Working Interest Owner,

Cimarex Energy Co. hereby proposes to drill the Lea 7 Fed Com 30H well at a legal location in the E/2 of Section 7. Township 20 South, Range 35 East, Lea County, New Mexico.

The intended surface hole location for the well is 191' FSL and 1,139' FEL of Section 7, Township 20 South, Range 35 East, and the intended bottom hole location is 330' FNL and 660' FEL of Section 7, Township 20 South, Range 35 East. The well is proposed to be drilled vertically to a depth of approximately 11,180' to the Third Bone Spring formation and laterally in a northerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 15,949' feet from surface to terminus.

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

Enclosed, in duplicate, is (i) our detailed AFE reflecting estimated costs associated with this proposal, and; (ii) our proposed form of Operating Agreement to govern operations of the Lea 7 Fed Com 30H. If you intend to participate, please approve and return one (1) original of the enclosed AFE, and one (1) original of the signature page to the Operating Agreement, along with the contact information to receive your well data, 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 you elect not to participate, please so indicate on the attached election form and return it to the attention of the undersigned at the letterhead address. Failure to elect whether or not to participate within 30 days of your receipt of this proposal will, as provided in the Operating Agreement, will be considered an election not to participate.

Please call the undersigned with any questions or comments.

Respectfully,

Cody Elliott, Landman

EXHIBIT Language 1-C

#### ELECTION TO PARTICIPATE Lea 7 Fed Com 30H

The Lon	ig Trusts elects TO particip	pate in the proposed Lea 7 Fed	d Com 30H
The Lon	ng Trusts elects NOT to par	rticipate in the proposed Lea	7 Fed Com 30H.
Dated this day of _	, 2018.		
Title:			
70 . 1 . 1	<b>70.</b>		
If your election above is	10 participate in the propo	sed Lea 7 Fed Com 30H well	, then:
The Lon Energy C		ered by well control insurance	procured by Cimarex
Energy C to comm	Co. and agrees to provide C	covered by well control insurationarex Energy Co. with a certations or be deemed to have	tificate of insurance prior



#### Authorization For Expenditure Drilling

Company Entry Date Prepared 6/20/2018

Permian Basin Well Name Prospect Property Number AFE.

Permian Basin LEA 7 FEDERAL COM 3011 New Mexico Bone Spring Pros 301471-365.01 26718057 (Lea)

,...

 County, State
 Location
 Estimated Completion

 Lea, NM
 Sec 7-T20S-R35E
 12/30/2018
 2/28/2019

 
 X
 Naw
 Formation
 Well Lips
 In Measured Death
 Tit Verical Depth

 Supplement Revision
 Bone Spring 3 /Sd/
 DEV
 15,949
 11,180

Purpole: Drill and complete well

#### Description

Drill and complete a horizontal test. Drill to 1780 set surface casing. Drill to 5720' set intermediate casing. Drill to 10703' (KOP).

Drill curve at 127/100' initial build rate to +/- 90 degrees and 1180' TVD and drill a +/- 4280' long lateral in the bone spring formation. Run and cement production liner. Stage frac in stages. Drill out plugs. Run production packer, tubing and GLVs.

Intangible Drilling Costs	Đểy Hole \$2,188,000	After Casing Point	Completed Well Cost \$2,188,000
Completion Costs		\$3,561,900	\$3,561,900
Total Intangible Cost	\$2,188,000	\$3,561,900	\$5,749,900
Tangible	Dry Hote.	After Casing Point	Completed Well Cost
Well Equipment	\$279,000	\$482,000	\$761,000
Lease Equipment		\$485,000	\$485,000
Total Tangible Cost	\$279,000	\$967,000	\$1,246,000
Total Well Cost	\$2,467,000	\$4,528,900	\$6,995,900

#### Comments On Well Costs

1. All tubulars, yiell 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

Cimares sells its gas under arm's length contracts with third party purchasers. Such contracts may include fees. In addition, penaltics may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimares, you will be subject to all of the terms of such contracts. Upon written request to Cimares'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 Cimares 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.

#### Commients 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.

Formperator Approved
Company Approved By (Figure) Approved By (Signature) Date

NOTICE TO NONOPERATOR. Costs shown an this farm are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate that are circumstances of the constance of the co

6/20/2018





### CIMAREX Authorization For Expenditure - LEA 7 FEDERAL COM 30H

A11.1.	_	8CP - Drilling			ACP - Drilling			Comp/Stim	
Sub Ledger Description Roads & Location Preparation /	Codes DIDC.100		Amoun			Amount	Codes		Amount
Damages	DIDC.105		100,000				STIM.100		5,000
Mud/Fluids Disposel	DIDC.255		125,000				STIM.255		20,000
Day Rate		20 days at \$23,000/day	483,000		4 days at \$23,000/day	81,000			20,000
Misc Preparation Cost (mouse hole, rat	DIDC.120		35,000						
Bits Fuel	DIDC.125	i i : 1,300 gal/day at \$2,25/gal	60,000			0	STIM.125		0
Water for Orilling Rig / Completion Fluids			73,000			0	5TIM.13S		
Mud & Additives	DIDC.145		140,000			0	316M.133		14,000
Surface Rentals		Per Day (BCP)/day	74,000			0	STIM.140		98,000
Downhole Rentals	DIDC.155	<b>;</b>	162,000	)			STIM145		000,000
Automation Labor Formation Evaluation (DST, Caring									-
Mud Logging	DIDC.160	1 17 days at \$1,200/day	35 000				STIM.150		0
Open Hale Lagging	DIDC.180		25,000						
Cementing & Float Equipment	DIDC.185		160,000			106,000			
Tubular Inspections	DIDC.190		30,000			5,000	STIM.160		2,000
Cosing Crews Mechanical Labor	DIDC.195	!	10,000			18,000	STIM.16S		0
Trucking/Transportation	DIDC200		15,000			3,000	STIM.170		0
Supervision	DIDC.210		15,000			10,000 14,000	STUM.175 STUM.180		2,000
Trailer House / Camp / Catering	DIDC,280		13,000			2,000	STIM.280	1	29,000 12,500
Other Misc Expenses	DIDC.220	1	5,000	DICC.190		0	STIM.190	1	12,300
Overhead	DIDC.22S		10,000	DICC.195		5,000		:	
Remedial Cementing MOB/DEMOB	D(DC.231		0				STDA.215		0
Directional Drilling Services	DIDC.245		125,000 118,000						
Crane for Construction	DIDLLYS		110,000					l.	
Solids Control	D1DC.260		71,000	1.				t	
Well Control Equip (Snubbing services)	DIDC.265		82,000	DICC.240		0	STIM.240		40,000
Fishing & Sidetrack Services Completion Rig	DIDC.270		0	DICC245		0	STDAL245		0
Call Tubing Services							STIM.115	!	13,600
Completion Logging, Periorating, WL							STIM.260 STIM.200		168,000
Composite Plugs							STIM.390	:	176,000 41,000
Stimulation Pumping Charges, Chemicals,							STIM.210		1,552,000
Stimulation Water/Water Transfer/Water							ZEEMITZ		372,000
Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative	DIDC300		40000				STIM.305		42,000
Well Control Insurance	DIDC.285	\$0.35/1	10,000 6,000						
FL/GL - Labor			0,000						
FL/GL - Supervision									
FL/GL - NDE(X-Ray)								:	
FL/GL - Survey FL/GL - Hydro Test									
FL/GL - Hydro Var									
FL/GL - Trucking									
SWD Lines - Intangible									
Gas Sales Lines - Intangible									
Contingency Contingency	DIDCA35	500 % of Orilling Intangibles	104,000	DICC.220		12,000	STIM.220		129,060
Construction for Flow Lines									
Construction For Sales P/L		:							
PBA Costs	DIDC.295		0	DICC275		0			
Total intangible Cost			2,188,000	*		256,000			2,715,500
Orive Pipe	DWEB.150		0						27-13500
Conductor Pipe Water String	OWEB.130 DWEB.135	;	0						
Surface Casing		13 3/8" - 1,780ft at \$33.00/ft	0 59,000						
Intermediate Casing 1		9 S/8" - 5,720ft at \$35,00/ft	200,000						
Intermediate Casing 2	DWEB.155		0						
Drilling Liner	DWEB.160		0						
Production Casing or Liner Production Tie-Back				DWEA.165	5 1/2" - 15,949/t at \$18.00/ft	287,000		1	
Tubing				DMEN (D)		0	STRAT 101	2 7/8" - 10,800ft at \$6,00/ft	0
Wellhead, Tree, Chakes	DWEB.115		20.000	OWEA.120		20,000	STPMT.120	2 7/6 - 10,800m at \$6,00/m	65,000
Uner Hanger, Isolation Packer	DWEB.100			DWEA.125		0			25,000
Packer, Nipples						_	STIMTADO		15,000
Pumping Unit, Engine Downhole Lift Equipment (BHP, Rods,							STIMT.405		0
Downhole Un Equipment (BHP, Rocks Surface Equipment							STBAT.410		70,000
Total Tangibla - Well Equipment Cos			279,000			207.000			
N/C Lease Equipment			~			307,000			175,000
Tanks, Tanks Steps, Stairs									
Battery (Heater Treater, Separator, Gas Secondary Containments									
Overhead Power Distribution (electric line		,							
Facility Electrical		:							
SWD Connection									
Flow Lines (Line Pipe From Wellhead To									
Pipeline to Sales									
Meters and Metering Equipment Facility Line Pipe	:								
Automotion Materials									
FL/GL - Valves/Fittings									
FL/GL • Pipe									
SWD Lines - Tangible									
Gas Sales Lines - Tangible Total Tangible - Lease Equipment Cor									
Total Estimated Cost	*		2,467,000			563,000			2000 000
						2-01000			2,890,500



### CIMAREX Authorization For Expenditure - LEA 7 FEDERAL COM 30H

1-			400 6111	70111	3011		
Sub Ledger Description	Codes	Production Equip			Post Completion		Total
Roads & Location Preparation / Restoration	Codes CON100		Antour			Amount	Cost
Damages	CON.105		3,000		Road Repairs	8,000	116,000
Mud/Fluids Disposel	6016103		20,500				30,500
Doy Rate				PCOM.2SS	Water Disposal (\$0.75/bbl)	45,000	190,000
Misc Preparation Cost (mouse hole, ret hole,							564,000
Bits				PCOM,125			35,000
Fuel				PCOM.130		0	
Water for Drilling Rig / Completion Fluids (Not				PCOM.135	•	0	
Mud & Additives				F-COM, 133		0	17,000
Surface Rentals	CQN.140		9,750	PCOM.140	Sand Separator (\$450/day), fron (\$300/day),		140,000
Downhole Rentals			3,730	PCOM:145	sand separator (seso/day), tron (\$100/day),	32,700	214,450
Automation Labor	CON.150		33.260	PCOM.150		0	162,000
Formation Evaluation (DST, Coring including			23,230	FCGM,130		0	33,250
Mud Logging							0
Open Hale Logging							25,000
Cementing & Float Equipment							٥
Tubular Inspections				PCOM.160			286,000
Casing Crews				,		0	37,000
Mechanical Labor	CON.170		80.000	PCQML178	Flowback Hand		28,000
Trucking/Transportation	CON,175		9,500		Frack Tank and Sand Separator Delivery	5,700	103,700
Supervision	CON,180		18,750		And the same period preparates extends	2,000	38,500
Trailer House / Camp / Catering			14,130	1 1007111 100		0	165,750
Other Misc Expenses	CON.190		6,000	PCOM.190			27,500
Overhead			0,000			Q	11,000
Remedial Comenting				PCOM.215			15,000
MOB/DEMO8				7 11 11 11 11 11		0	0
Directional Drilling Services							125,000
Crane for Construction	CON.230						118,000
Solids Control							0
Well Control Equip (Snubbing services)				PCOM.240			71,000
Fishing & Sidetrack Services				PCOM.245		0	122,000
Completion Rig				PCOM.115		0	0
Coil Tubing Services				PCOM.260		0	13,000
Completion Lagging, Perforating, WL Units, WL				PCOM.200		0	168,000
Composite Plugs				PCQM:390		0	176,000
Stimulation Pumping Charges, Chemicals,				PCOM-210		0	41,000
Stimulation Water/Water Transfer/Water Storage						0	1,552,000
Cimarex Owned Frac/Rental Equipment				PCOM.305		0	372,000
Legal/Regulatory/Curative	CON.300		0			U	42,000
Well Control Insurance			_				10,000
FL/GL - Labor	CQN.500		91,250				6,000
FL/GL - Supervision	CON.505		38,750				91,250
FL/GL - NDE(X-Ray)	CON.510		1,750				38,750
FL/GL - Survey	CON.515		3,000				1,750
FL/GL - Hydro Test	CONLS20		3,750				3,000
FL/GL - Hydro Vac	CON.525		2,500				3,750
FL/GL - Trucking	CON.530		1,500				2,500
SWD Lines - Intangible	CON.600		0				1,500
Gas Sales Lines - Intangible	CON.700		0				0
Contingency	CON.220		60,250	PCOM.220	10%	93.000	398,250
Contingency	CON.221		20,500			22,000	20,500
Construction for Flow Unes	CON.310		,				20,300
Construction For Sales P/L	CON.265						0
PSIA Costs							0
Fotal Intengible Cost			404,000			186,400	5,749,900
Drive Pipe						10-4-00	0
Conductor Pipe							0
Water String							0
Surface Casing							59,000
Intermediate Cashig 1							200,000
Intermediate Casing 2							0
Orilling Liner Production Coulon on himse							0
Production Casing or Liner							287,000
Production Tie-Back Tubing							0
Wellhead, Tree, Chokes				PCOMT.105		0	65,000
				PCOMT.120		0	65,000
Liner Hanger, Isolation Packer							0
Packer, Nipples				PCONT.400		0	15,000
Pumping Unit, Engine				PCOMTA05		0	0
Downhole Lift Equipment (BHP, Rods, Anchors,				PCOMTA10		0	70,000
Surface Equipment				PCOMT/20		0	0
Total Tangible - Well Equipment Cos	######################################					0	761,000
N/C Lease Equipment	CONT.400		45,000			_	45,000
Tanks, Tanks Steps, Stairs	CONT.405		47,500				47,500
Battery (Heater Treater, Separator, Gas Treating	CONT.410		154,000				154,000
Secondary Containments	CONTAIS		13,750				13,750
Overhead Power Distribution (electric line to	CONTA20		104,250				104,250
Facility Electrical	CONT.425		13,000				13,000
SWO Connection	CONTA30						0
	CONTA35						0
Pipeline to Sales	CONTAGO						0
Meters and Metering Equipment	CONTAIS		14,500				14,500
Facility Line Pipe	CONT.450		11,000				11,000
Automation Materials	CONT.455			PCOMTASS		0	40,250
FL/GL - Valves/Fittings	CONT.SSO		11,250			-	11,250
FL/GL - Pipe	CONT.SSS		30,500				30,500
SWD Lines - Tangible	CONT.550		0				0
Gas Sales Lines - Tangible	CONT.750		0				0
Yotal Tangible - Lease Equipment Cor			485,000			0	485,000
Total Estimated Cost			889,000		2	186,400	6,995,900

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

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

**CASE NO. 16379** 

	<b>AFFIDAVIT</b>
STATE OF 10/10	)
S 11 0 1	) ss.
COUNTY OF redlaid	)

Staci Mueller, being duly sworn, deposes and states:

- 1. I am over the age of 18, and have person knowledge of the matters stated herein.
- I received a Bachelor of Science degree and a Master of Science degree in geophysics from the Colorado School of Mines, in Golden Colorado. I received my Masters in 2016.
- 3. I have worked for Cimarex Energy Co. ("Cimarex") as a petroleum geologist for over 1.5 years. Before that, I worked at Liberty Resources in Denver, Colorado for 6 months.
- 4. My work for Cimarex involves Lea County, and I am familiar with the geological matters involved in this case, including the Bone Spring formation.
  - 5. The following geological exhibits are attached hereto:
    - a. Exhibit A is a structure map on the base of the 3<sup>rd</sup> Bone Spring Sand. It shows that the structure dips down to the southeast. It also shows the 3<sup>rd</sup> Bone Spring Sand wells in the vicinity of the proposed Lea 7 Fed Com 30H well,



- which is identified by the purple line and call out box, and a line of crosssection, running from A to A'.
- b. Exhibit B is a Net Pay Map of the 3<sup>rd</sup> Bone Spring Sand. The 3<sup>rd</sup> Bone Spring Sand is uniform across the proposed well unit.
- c. Exhibit C is a 3<sup>rd</sup> Bone Spring Sand cross section. It is a stratigraphic cross-section hung on the base of the 3<sup>rd</sup> Bone Spring Sand. The well logs on the cross-section give a representative sample of the 3<sup>rd</sup> Bone Spring Sand formation in the area. The target zone for the well is the basal 3<sup>rd</sup> Bone Spring Sand, and that zone is continuous across the well unit.
- 6. I conclude from the maps 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. Each quarter quarter section in the unit will contribute more or less equally to production.
- 7. The preferred well orientation in this area is North-South. This is because of the maximum horizontal stress direction.

Staci Mueller

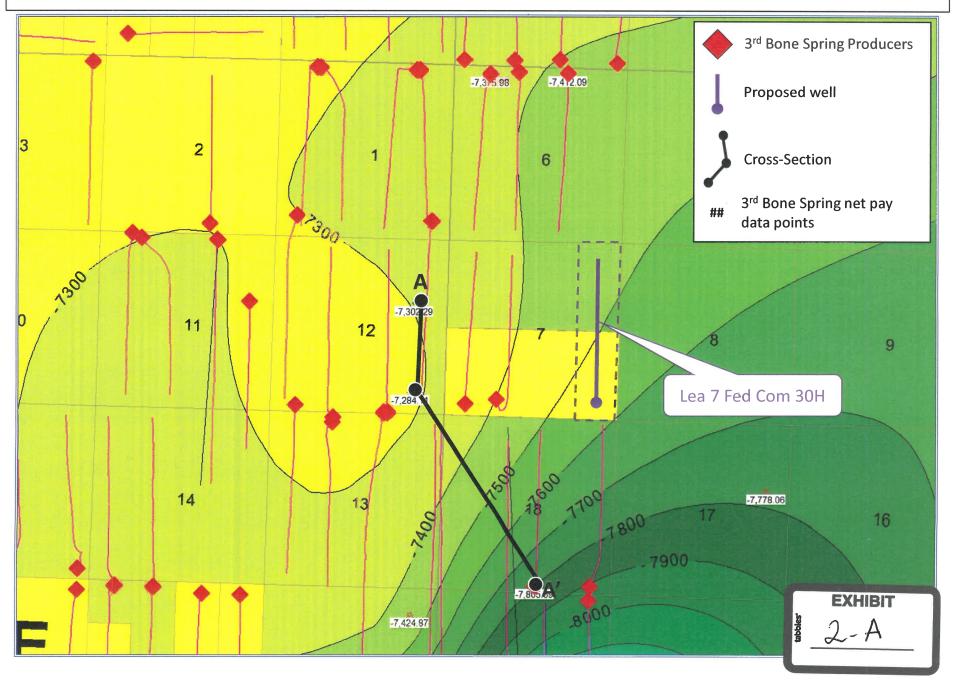
SUBSCRIBED AND SWORN to before me this 5th day of September, 2018 by Staci Mueller, on behalf of Cimarex Energy Co.

Notary Public

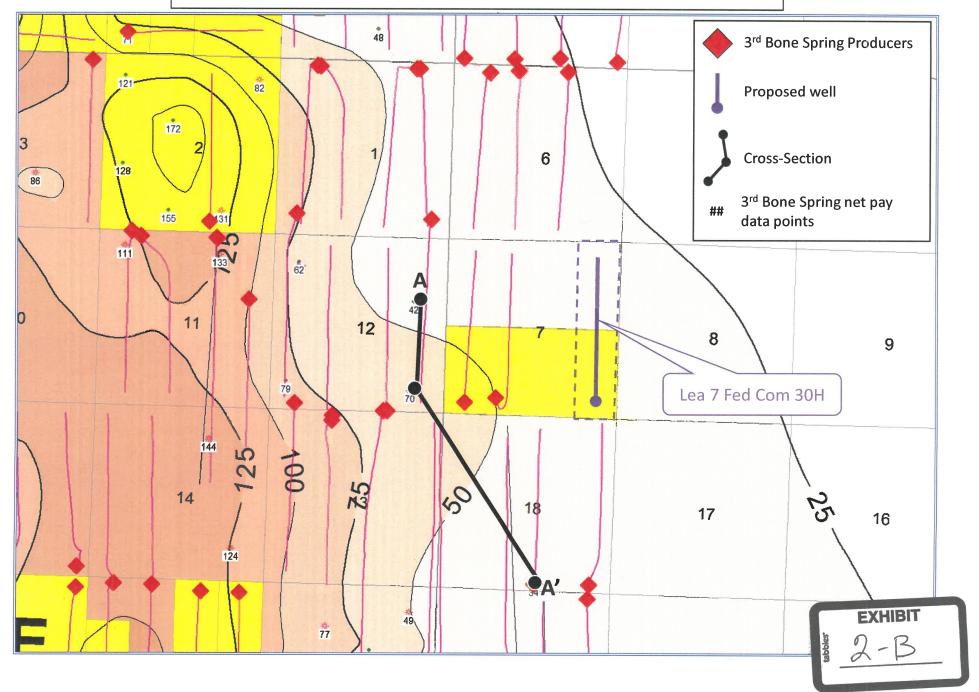
My commission expires: 07/34/2020

VIVIANA M. BELTRAN
My Notary ID # 126673991
Expires September 26, 2020

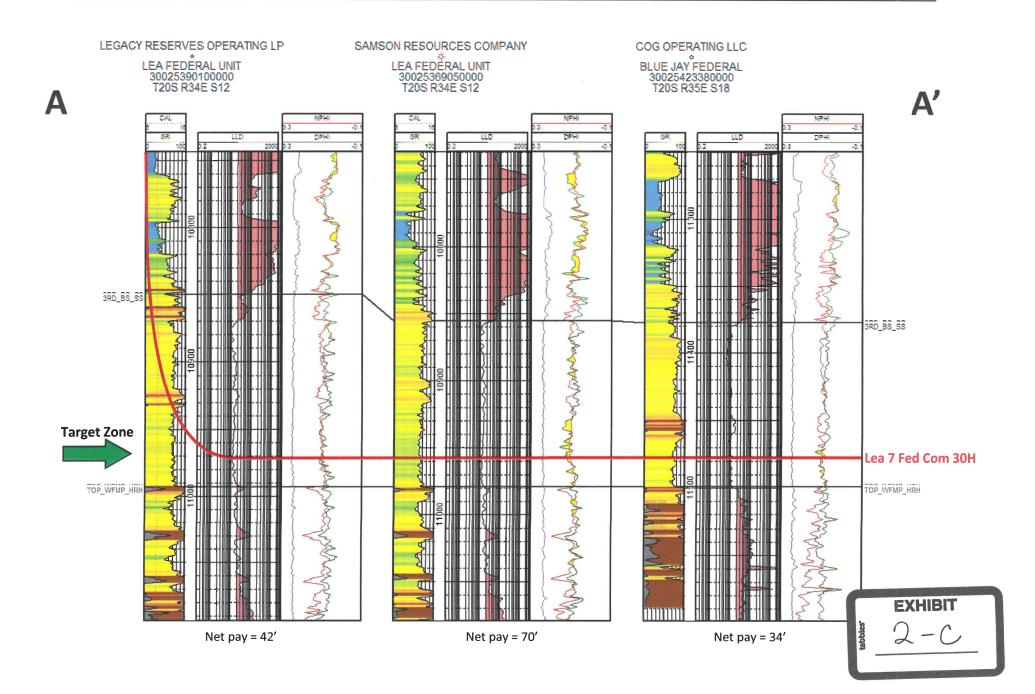
### Base of 3<sup>rd</sup> Bone Spring Sand Structure Map (SSTVD)



### 3<sup>rd</sup> Bone Spring Sand Net Pay Map



### 3<sup>rd</sup> Bone Spring Sand Stratigraphic Cross-Section



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

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

**CASE NO. 16379** 

AF	F	П	D	4	V	ľ	T

STATE OF NEW MEXICO	)
	) ss.
COUNTY OF BERNALILLO	)

Deana M. Bennett, attorney in fact and authorized representative of Cimarex Energy Co., the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application was provided under the notice letter and that proof of receipt is attached hereto.

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 5th day of September, 2018 by Deana

M. Bennett.

OFFICIAL SEAL Karlene Schuman

NOTARY PUBLIC STATE OF NEW MEXICO

My commission expires: Q

Notary Public



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



Type of Mailing: CERTIFIED 08/15/2018



Firm Mailing Book ID: 149028

Line	Article Number	Name, Street & P.O. Address		Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
T	9314 8699 0430 0049 5876 89	Lowe Family, Ltd P.O. Box 53775 Lubbock TX 79453		\$0.68	\$3.45	\$1.50	82762-0168	\$0.00 Notice
2	9314 8699 0430 0049 5876 96	Vora Lowe Hartley Mineral Trust P.O. Box 1024 Clovis NM 88102		\$0.68	\$3.45	\$1.50	82762-0168	\$0.00 Notice
3	9314 8699 0430 0049 5877 02	The Long Trusts 118 S. Kilgore St. Kilgore TX 75662		\$0.68	\$3.45	\$1.50	82762-0168	\$0.00 Notice
4	9314 8699 0430 0049 5877 19	M. Dion Lowe 7801 Espanola Trail Austin TX 78737		\$0.68	\$3.45	\$1.50	82762-0168	S0.00 Notice
		The same of the service of the servi	Totals:	\$2.72	\$13.80	\$6.00		\$0.00
							Grand Total:	\$22.52

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

Dated:

:4



1 Company (E) BIDE - 1 JUNIE

#### Transaction Report Details - CertifiedPro.net Firm Mail Book ID= 149028 Generated: 9/5/2018 9:56:23 AM

Certified Mail Article		A CONTRACTOR OF THE PROPERTY O						Certified		
Number	- Date Created Name 1	Address	City	State	Zip	Postage	Fees	Mailing Status	Service Options	Mail Delivery Date
									Return Receipt -	
9314869904300049587719	2018-08-15 1:06 PM M. Dion Lowe	7801 Espanola Trail	Austin	TX	78737	0.68	4.95	Delivered	Electronic	08-20-2018
									Return Receipt -	
9314869904300049587702	2018-08-15 1:06 PM The Long Trusts	118 S. Kilgore St.	Kilgore	TX	75662	0.68	4.95	Delivered	Electronic	08-20-2018
	Vora Lowe Hartley								Return Receipt -	
9314869904300049587696	2018-08-15 1:06 PM Mineral Trust	P.O. Box 1024	Clovis	NM	88102	0.68	4.95	Delivered	Electronic	08-21-2018
									Return Receipt -	
9314869904300049587689	2018-08-15 1:06 PM Lowe Family, Ltd	P.O. Box 53775	Lubbock	TX	79453	0.68	4.95	Mailed	Electronic	

#### Affidavit of Publication

STATE OF NEW MEXICO **COUNTY OF LEA** 

I. Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

> Beginning with the issue dated August 24, 2018 and ending with the issue dated August 24, 2018.

Publisher

Sworn and subscribed to before me this 24th day of August 2018.

**Business Manager** 

My commission expires January 29, 2019

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OFFICIAL SEAL **GUSSIE BLACK** Notary Public State of New Mexico My Commission Expires 1-29

This newspaper is duly qualified to bublish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE August 24, 2018

CASE NO. 16379: Notice to all affected parties, as well as the heirs and devisees of M. Dion Lowe, The Long Trusts; Lowe Family Ltd., Yora Lowe Hartley Mineral Trusts, Lowe Family Ltd.;

Trusts, Lowe Family Ltd.;

Vora Lowe Hartley Mineral

Trust of the application of

Cimarex Energy Co. for

compulsory pooling, Lea

County, New Mexico, the

State of New Mexico, the

State of New Mexico, the

State of New Mexico, through its Oil Conservation

Division, thereby gives notice
that the Division will conduct
a public hearing at 8:15 a.m.
on September 6: 2018, to

consider this application.

Applicant seeks an order

from the Division, pooling all

mineral interests in the Bone

Spring formation underlying
a horizontal spacing unit

within the E/Z E/Z of Section

7. Township 20 South,

Range 35 East, N.M.P.M.

Lea County, New Mexico,

This spacing unit will be the

unit of the Lea Federal Com

30H well, to be horizontally

drilled. The producing area

to this well will be orhodox.

Also to be considered will be

the cost of drilling and

completing said well, the

allocation of these costs as

well as the actual operating

costs, and charges for

supervision, designation of

Cimarex as operator of the

well, and a 200% charge for

risk involved sin drilling, said

vell, Said area is located

approximately, it 6 miles

southeast of the intersection

of Hobbs Highway 180 and

County Road 27-AMarathon

Road.

#33165 #33165

01104570

00216950

**DOLORES SERNA** MODRALL, SPERLING, ROEHL, HARRIS & P. O. BOX 2168 ALBUQUERQUE, NM 87103-2168

