

Before the Oil Conservation Division  
Examiner Hearing September 6, 2018

*Case No. 16379*

Lea 7 Federal Com 30H

**CIMAREX**

**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**

**AFFIDAVIT**

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 Deana M. 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.
- l. **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.

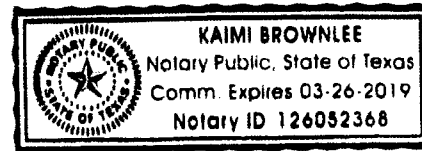
5. The granting of this application is in the interests of conservation and the prevention of waste.

CJ  
Cody Elliot

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

Kaimi Brownlee  
Notary Public

My commission expires: 3/24/2019

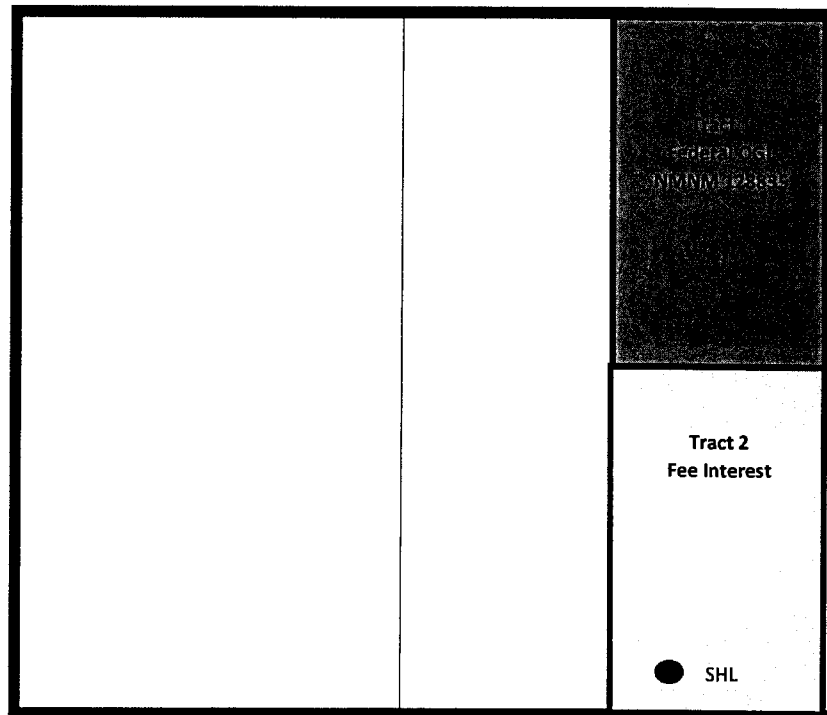


Section 7, Range 20 South, Township 35 East, Lea Co., New Mexico

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 Minerals	.3595312
Lowe Family, Ltd.	Unleased Minerals	.0288064
Teddy L. Hartley & Roberta Thomas Hartley, as Trustees of the Vora Lowe Hartley Mineral Trust	Unleased Minerals	.0188352
M. Dion Lowe	Unleased Minerals	.0632512
<b>Total</b>		<b>0.470424</b>



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 <b>30-025</b>	<sup>2</sup> Pool Code <b>Wildcat; Bone Spring</b>	<sup>3</sup> Pool Name <b>Wildcat; Bone Spring</b>
<sup>4</sup> Property Code	<sup>5</sup> Property Name <b>LEA 7 FEDERAL COM</b>	<sup>6</sup> Well Number <b>30H</b>
<sup>7</sup> OGRID No. <b>215099</b>	<sup>8</sup> Operator Name <b>CIMAREX ENERGY CO.</b>	<sup>9</sup> Elevation <b>3676.6'</b>

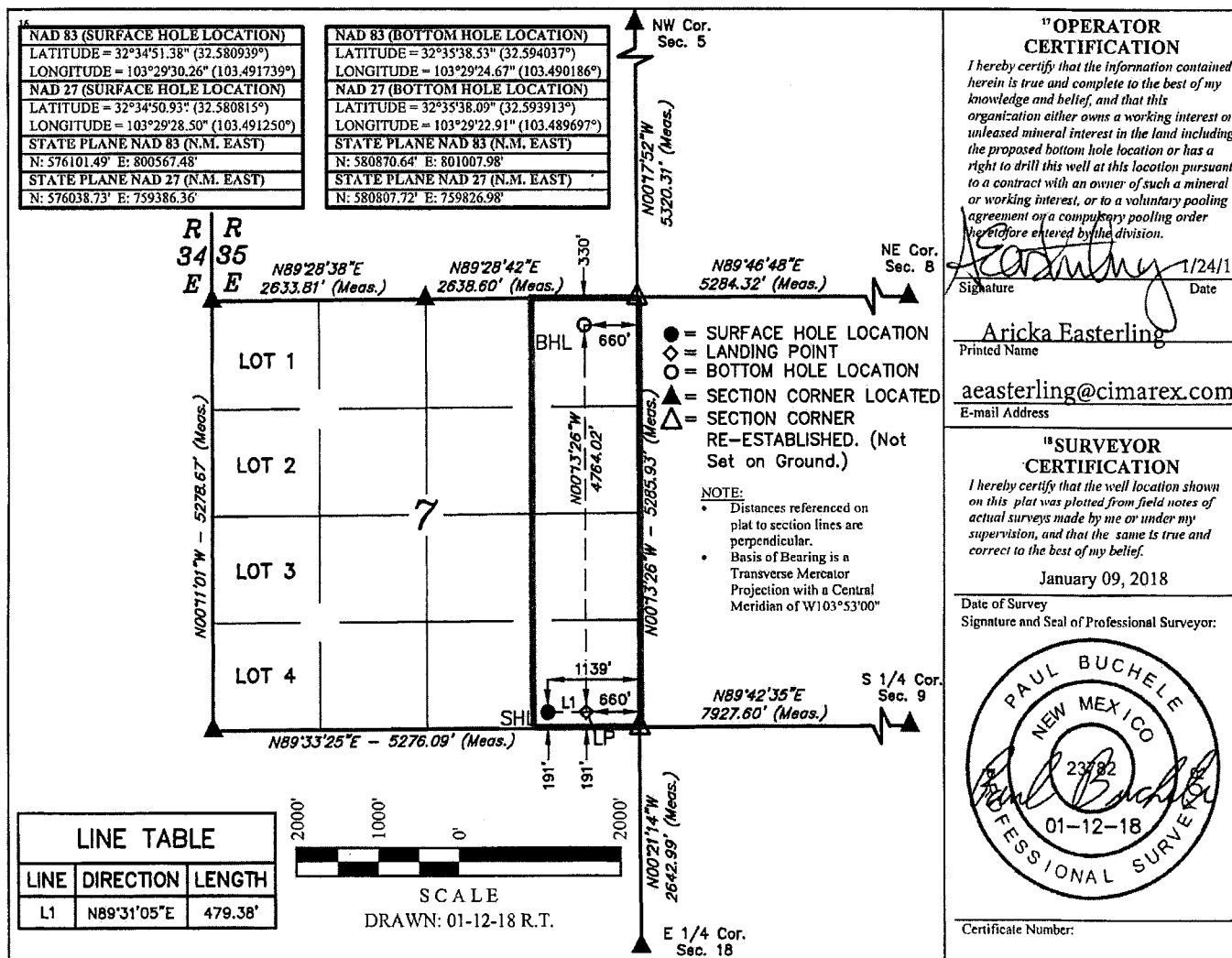
<sup>10</sup> Surface Location

UL or lot no. <b>P</b>	Section <b>7</b>	Township <b>20S</b>	Range <b>35E</b>	Lot Idn	Feet from the <b>191</b>	North/South line <b>SOUTH</b>	Feet from the <b>1139</b>	East/West line <b>EAST</b>	County <b>LEA</b>
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no. <b>A</b>	Section <b>7</b>	Township <b>20S</b>	Range <b>35E</b>	Lot Idn	Feet from the <b>330</b>	North/South line <b>NORTH</b>	Feet from the <b>660</b>	East/West line <b>EAST</b>	County <b>LEA</b>
<sup>12</sup> Dedicated Acres <b>160</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.



**EXHIBIT**

**1-B**



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,

A handwritten signature in black ink, appearing to be "Cody Elliott", written over a horizontal line.

Cody Elliott, Landman





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

\_\_\_\_\_ The Long Trusts elects **TO** participate in the proposed Lea 7 Fed Com 30H

\_\_\_\_\_ The Long Trusts elects **NOT** to participate in the proposed Lea 7 Fed Com 30H.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

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

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

If your election above is TO participate in the proposed Lea 7 Fed Com 30H well, then:

\_\_\_\_\_ The Long Trusts elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

\_\_\_\_\_ The Long Trusts 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

Company/Entity

Date Prepared  
6/20/2018

Exploration Region <b>Permian Basin</b>	Well Name <b>LEA 7 FEDERAL COM 30H</b>	Prospect <b>New Mexico Bone Spring Pros (Lea)</b>	Property Number <b>301471-365.01</b>	AFE <b>26718057</b>
County, State <b>Lea, NM</b>	Location <b>Sec 7-T20S-R35E</b>		Estimated Start <b>12/30/2018</b>	Estimated Completion <b>2/28/2019</b>
<b>X New Supplement Revision</b>	Formation <b>Bone Spring 3 /Sd/</b>	Well Type <b>DEV</b>	Est Measured Depth <b>15,949</b>	Est Vertical Depth <b>11,180</b>

Purpose **Drill and complete well**

## Description

Drilling: 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 12"/100' initial build rate to +/- 90 degrees and 11180' 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.

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

6/20/2018





# Authorization For Expenditure - LEA 7 FEDERAL COM 30H

BCP - Drilling			ACP - Drilling			Comp/Stim	
Sub Ledger Description	Codes	Amount	Codes	Amount	Codes	Amount	Amount
Roads & Location Preparation /	DIDC.100	100,000			STIM.100		5,000
Damages	DIDC.105	10,000					
Mud/Fluids Disposal	DIDC.255	125,000			STIM.255		20,000
Day Rate	DIDC.115 20 days at \$23,000/day	460,000	DICC.120 4 days at \$23,000/day	81,000			
Misc Preparation Cost (mouse hole, rat	DIDC.120	35,000					
Bits	DIDC.125	60,000	DICC.125	0	STIM.125		0
Fuel	DIDC.135 1,300 gal/day at \$2.25/gal	73,000	DICC.130	0			
Water for Drilling Rig / Completion Fluids	DIDC.140	3,000	DICC.135	0	STIM.135		14,000
Mud & Additives	DIDC.145	140,000					
Surface Rentals	DIDC.150 Per Day (BCP)/day	74,000	DICC.140	0	STIM.140		98,000
Downhole Rentals	DIDC.155	162,000			STIM.145		0
Automation Labor							
Formation Evaluation (DST, Coring	DIDC.160	0			STIM.150		0
Mud Logging	DIDC.170 17 days at \$1,200/day	25,000					
Open Hole Logging	DIDC.180	0					
Cementing & Float Equipment	DIDC.185	180,000	DICC.155	106,000			
Tubular Inspections	DIDC.190	30,000	DICC.160	5,000	STIM.160		2,000
Casing Crews	DIDC.195	10,000	DICC.165	18,000	STIM.165		0
Mechanical Labor	DIDC.200	15,000	DICC.170	3,000	STIM.170		0
Trucking/Transportation	DIDC.205	15,000	DICC.175	10,000	STIM.175		2,000
Supervision	DIDC.210	104,000	DICC.180	14,000	STIM.180		29,000
Trailer House / Camp / Catering	DIDC.280	13,000	DICC.255	2,000	STIM.280		12,500
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190		0
Overhead	DIDC.225	10,000	DICC.195	5,000			
Remedial Cementing	DIDC.231	0			STIM.215		0
MOB/DEMOCB	DIDC.240	125,000					
Directional Drilling Services	DIDC.245	118,000					
Crane for Construction							
Solids Control	DIDC.260	71,000					
Well Control Equip (Snubbing services)	DIDC.265	82,000	DICC.240	0	STIM.240		40,000
Fishing & Sidetrack Services	DIDC.270	0	DICC.245	0	STIM.245		0
Completion Rig					STIM.115		13,000
Coil Tubing Services					STIM.260		168,000
Completion Logging, Perforating, WL					STIM.200		176,000
Composite Plugs					STIM.390		41,000
Stimulation Pumping Charges, Chemicals,					STIM.210		1,552,000
Stimulation Water/Water Transfer/Water					STIM.395		372,000
Cimarex Owned Frac/Rental Equipment					STIM.305		42,000
Legal/Regulatory/Curative	DIDC.300	10,000					
Well Control Insurance	DIDC.285 \$0.35/ft	6,000					
FL/GL - Labor							
FL/GL - Supervision							
FL/GL - NDE(X-Ray)							
FL/GL - Survey							
FL/GL - Hydro Test							
FL/GL - Hydro Vac							
FL/GL - Trucking							
SWD Lines - Intangible							
Gas Sales Lines - Intangible							
Contingency	DIDC.435 500 % of Drilling Intangibles	104,000	DICC.220	12,000	STIM.220		129,000
Contingency							
Construction for Flow Lines							
Construction For Sales P/L							
P&A Costs	DIDC.295	0	DICC.275	0			
Total Intangible Cost		2,188,000		256,000			2,715,500
Drive Pipe	DWEB.150	0					
Conductor Pipe	DWEB.130	0					
Water String	DWEB.135	0					
Surface Casing	DWEB.140 13 3/8" - 1,780ft at \$33.00/ft	59,000					
Intermediate Casing 1	DWEB.145 9 5/8" - 5,720ft at \$35.00/ft	200,000					
Intermediate Casing 2	DWEB.155	0					
Drilling Liner	DWEB.160	0					
Production Casing or Liner			DWEA.100 5 1/2" - 15,949ft at \$18.00/ft	287,000			
Production Tie-Back			DWEA.165	0	STIMT.101		0
Tubing					STIMT.105 2 7/8" - 10,800ft at \$6.00/ft		65,000
Wellhead, Tree, Chokes	DWEB.115	20,000	DWEA.120	20,000	STIMT.120		25,000
Uner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0			
Packer, Nipples					STIMT.400		15,000
Pumping Unit, Engine					STIMT.405		0
Downhole Lift Equipment (BHP, Rods,					STIMT.410		70,000
Surface Equipment							
Total Tangible - Well Equipment Cos		279,000		307,000			175,000
N/C Lease Equipment							
Tanks, Tanks Steps, Stairs							
Battery (Meter, 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							
Automation Materials							
FL/GL - Valves/Fittings							
FL/GL - Pipe							
SWD Lines - Tangible							
Gas Sales Lines - Tangible							
Total Tangible - Lease Equipment Cos							
Total Estimated Cost		2,467,000		563,000			2,890,500



# Authorization For Expenditure - LEA 7 FEDERAL COM 30H

Sub Ledger Description	Codes	Production Equip		Post Completion		Total	
		Amount	Codes	Amount	Cost		
Roads & Location Preparation / Restoration	CON.100	3,000	PCOM.100	8,000	116,000		
Damages	CON.105	20,500			30,500		
Mud/Fluids Disposal			PCOM.255	45,000	190,000		
Day Rate					564,000		
Misc Preparation Cost (mouse hole, rat hole, Bits)			PCOM.125	0	35,000		
Fuel			PCOM.130	0	60,000		
Water for Drilling Rig / Completion Fluids (Not Mud & Additives)			PCOM.135	0	73,000		
Surface Rentals	CON.140	9,750	PCOM.140	32,700	140,000		
Downhole Rentals			PCOM.145	0	214,450		
Automation Labor	CON.150	33,250	PCOM.150	0	162,000		
Formation Evaluation (DST, Coring including Mud Logging)				0	33,250		
Open Hole Logging					0		
Cementing & Float Equipment					25,000		
Tubular Inspections			PCOM.160	0	0		
Casing Crews					286,000		
Mechanical Labor	CON.170	80,000	PCOM.170	5,700	37,000		
Trucking/Transportation	CON.175	9,500	PCOM.175	2,000	28,000		
Supervision	CON.180	18,750	PCOM.180	0	103,700		
Trailer House / Camp / Catering					38,500		
Other Misc Expenses	CON.190	6,000	PCOM.190	0	165,750		
Overhead					27,500		
Remedial Cementing			PCOM.215	0	11,000		
MOB/DEMOS					15,000		
Directional Drilling Services					0		
Crane for Construction	CON.230				125,000		
Solids Control					118,000		
Well Control Equip (Snubbing services)			PCOM.240	0	0		
Fishing & Sidetrack Services			PCOM.245	0	71,000		
Completion Rig			PCOM.115	0	122,000		
Coil Tubing Services			PCOM.260	0	0		
Completion Logging, Perforating, WL Units, WL Composite Plugs			PCOM.200	0	13,000		
Stimulation Pumping Charges, Chemicals			PCOM.390	0	168,000		
Stimulation Water/Water Transfer/Water Storage			PCOM.210	0	176,000		
Cimarex Owned Frac/Rental Equipment			PCOM.305	0	41,000		
Legal/Regulatory/Curative	CON.300	0			1,552,000		
Well Control Insurance					372,000		
FL/GL - Labor	CON.500	91,250			42,000		
FL/GL - Supervision	CON.505	38,750			10,000		
FL/GL - NDE(X-Ray)	CON.510	1,750			6,000		
FL/GL - Survey	CON.515	3,000			91,250		
FL/GL - Hydro Test	CON.520	3,750			91,250		
FL/GL - Hydro Vac	CON.525	2,500			38,750		
FL/GL - Trucking	CON.530	1,500			1,750		
SWD Lines - Intangible	CON.600	0			3,000		
Gas Sales Lines - Intangible	CON.700	0			3,750		
Contingency	CON.220	60,250	PCOM.220	10%	2,500		
Contingency	CON.221	20,500			93,000		
Construction for Flow Lines	CON.310				398,250		
Construction For Sales P/L	CON.265				20,500		
P&A Costs					0		
Total Intangible Cost		404,000			186,400		
Drive Pipe					5,749,900		
Conductor Pipe					0		
Water String					0		
Surface Casing					59,000		
Intermediate Casing 1					200,000		
Intermediate Casing 2					0		
Drilling Liner					0		
Production Casing or Liner					287,000		
Production Tie-Back					0		
Tubing			PCOMT.105	0	65,000		
Wellhead, Tree, Chokes			PCOMT.120	0	65,000		
Liner Hanger, Isolation Packer					0		
Packer, Nipples			PCOMT.400	0	15,000		
Pumping Unit, Engine			PCOMT.405	0	0		
Downhole Lift Equipment (BHP, Rods, Anchors, Surface Equipment)			PCOMT.410	0	70,000		
Total Tangible - Well Equipment Cost			PCOMT.420	0	0		
N/C Lease Equipment	CONT.400	45,000			761,000		
Tanks, Tanks Steps, Stairs	CONT.405	47,500			45,000		
Battery (Heater Treater, Separator, Gas Treating)	CONT.410	154,000			47,500		
Secondary Containments	CONT.415	13,750			154,000		
Overhead Power Distribution (electric line to Facility Electrical)	CONT.420	104,250			13,750		
SWD Connection	CONT.425	13,000			104,250		
Flow Lines (Line Pipe From Wellhead To Central Pipeline to Sales)	CONT.435				13,000		
Meters and Metering Equipment	CONT.445	14,500			0		
Facility Line Pipe	CONT.450	11,000			0		
Automation Materials	CONT.455	40,250	PCOMT.455	0	14,500		
FL/GL - Valves/Fittings	CONT.550	11,250			11,000		
FL/GL - Pipe	CONT.555	30,500			40,250		
SWD Lines - Tangible	CONT.650	0			11,250		
Gas Sales Lines - Tangible	CONT.750	0			30,500		
Total Tangible - Lease Equipment Cost		485,000			0		
Total Estimated Cost		889,000			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**

**AFFIDAVIT**

STATE OF TEXAS )  
COUNTY OF Smyland ) ss.

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.
2. 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,



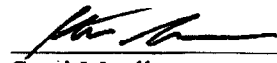
which is identified by the purple line and call out box, and a line of cross-section, running from A to A'.

- 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.

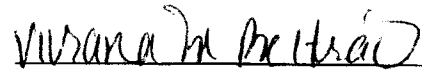
6. I conclude from the maps that:

- 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.

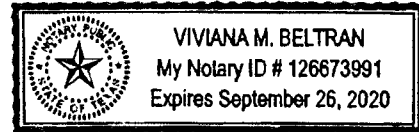
7. The preferred well orientation in this area is North-South. This is because of the maximum horizontal stress direction.

  
Staci Mueller

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

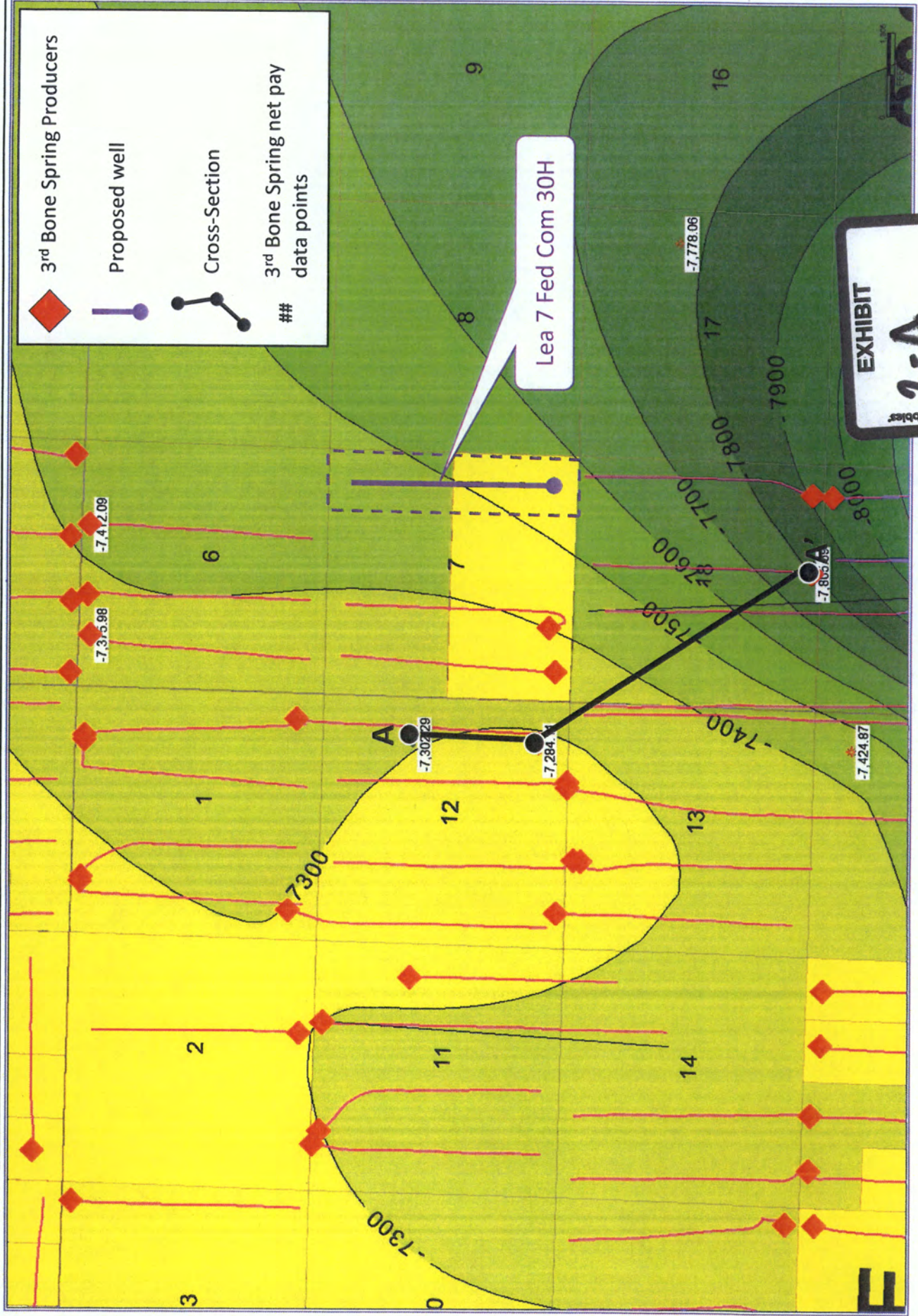
  
Notary Public

My commission expires: 09/26/2020





# Base of 3rd Bone Spring Sand Structure Map (SSTVD)





# 3rd Bone Spring Sand Stratigraphic Cross-Section

A

A'

LEGACY RESERVES OPERATING LP

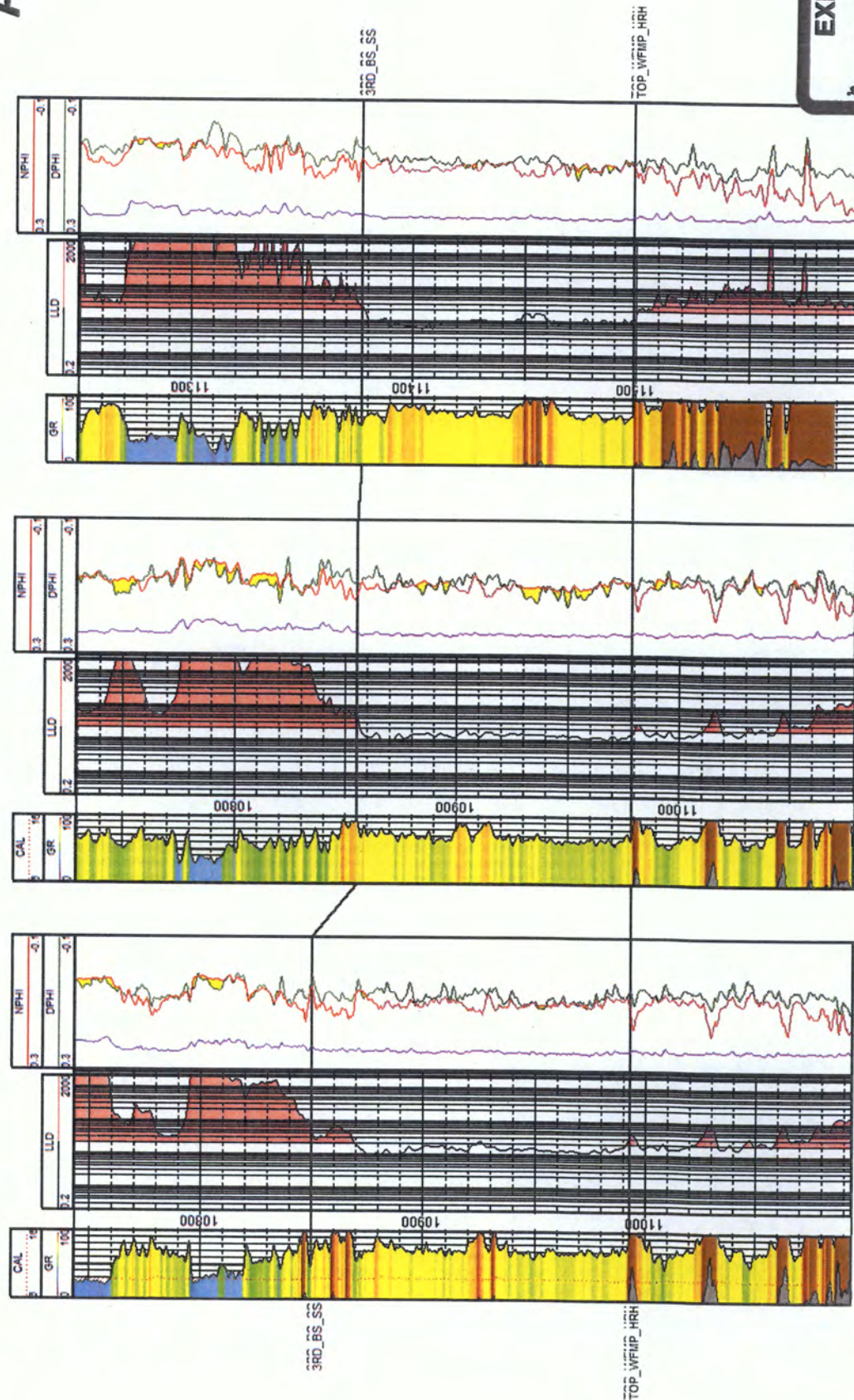
LEA FEDERAL UNIT  
30025390100000  
T20S R34E S12

SAMSON RESOURCES COMPANY

LEA FEDERAL UNIT  
30025369050000  
T20S R34E S12

COG OPERATING LLC

BLUE JAY FEDERAL  
30025423380000  
T20S R35E S18



EXHIBIT

2-B

Tables

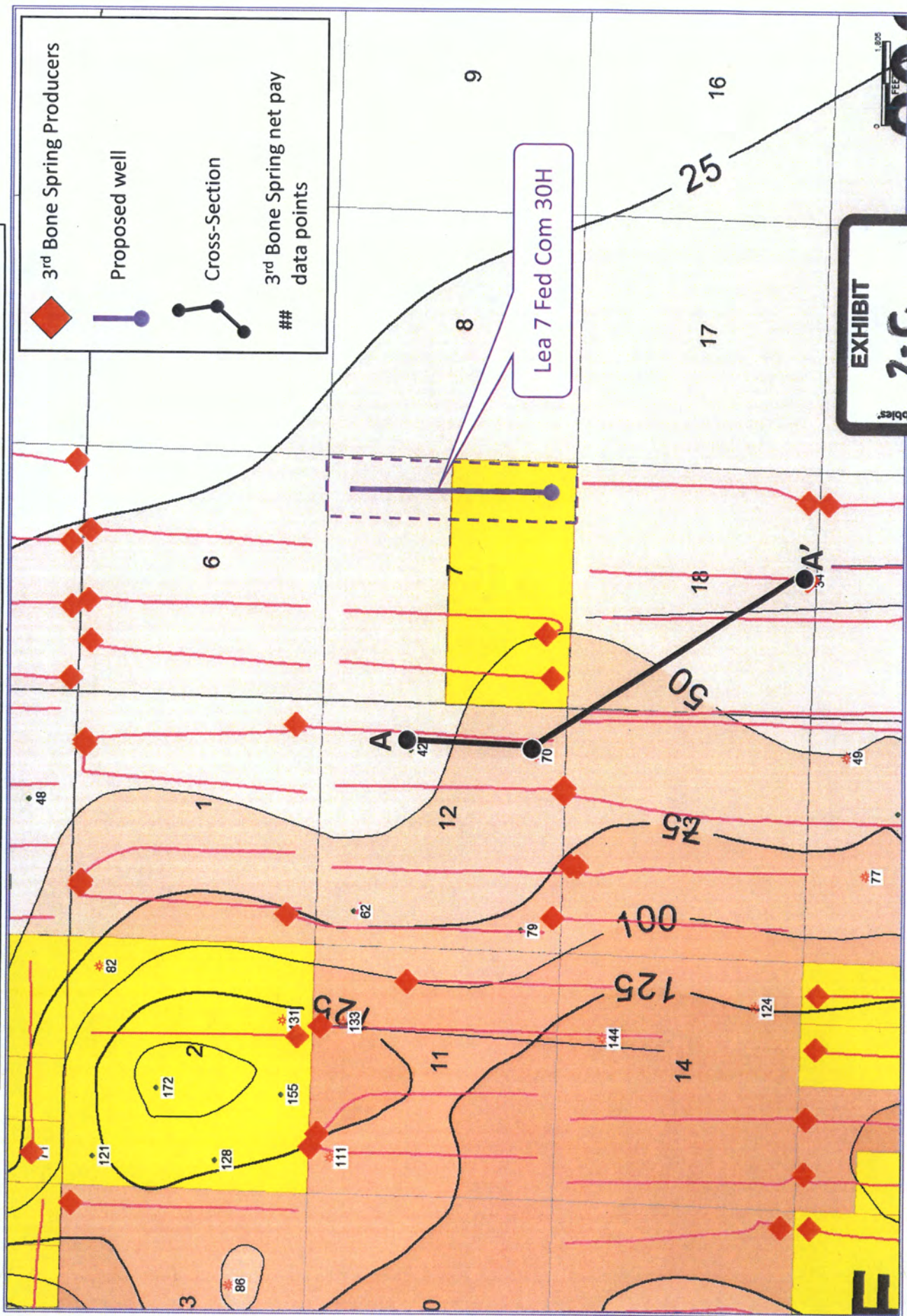
Net pay = 42'

Net pay = 70'

Net pay = 34'



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





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

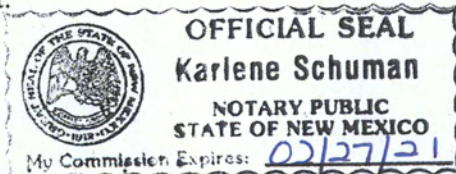
AFFIDAVIT

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.



My commission expires: \_\_\_\_\_

  
Notary Public



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

PS Form 3877

Type of Mailing: CERTIFIED  
08/15/2018

Firm Mailing Book ID: 149028

*Cummary - Lea Fed*



Line	Article Number	Name, Street & P.O. Address	Postage	Fee	R.R.Fee	Reference	Rest.Del.Fee Contents
1	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	\$0.00 Notice
Totals:			\$2.72	\$13.80	\$6.00		\$0.00
						Grand Total:	\$22.52

Dated:

List Number of Pieces  
Listed by Sender

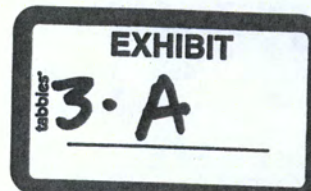
Postmaster:

Total Number of Pieces  
Received at Post Office

Name of receiving employee



*N. B. Crum*



## Transaction Report Details - CertifiedPro.net

Firm Mail Book ID= 149028

Generated: 9/5/2018 9:56:23 AM

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



# Affidavit of Publication

STATE OF NEW MEXICO  
COUNTY OF LEA

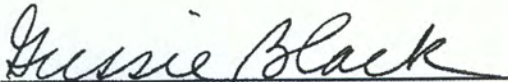
I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

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



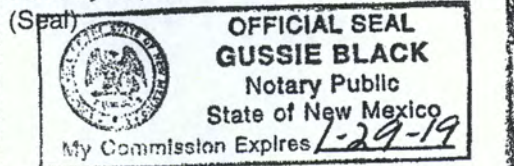
Publisher

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



Business Manager

My commission expires  
January 29, 2019



This newspaper is duly qualified to publish 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., Vora Lowe Hartley Mineral Trust of the application of Cimarex Energy Co. for compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on 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/2 E/2 of Section 7, Township 20 South, Range 35 East, N.M.P.M., Lea County, New Mexico. This spacing unit will be the unit for the Lea Federal Com 30H well, to be horizontally drilled. The producing area for this well will be orthodox. 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 in drilling said well. Said area is located approximately 11.6 miles southeast of the intersection of Hobbs Highway 180 and County Road 27-A/Marathon Road.  
#33165

01104570

00216950

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

