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

1 API Number	2 Pool Code	3 Pool Name
30015-44790	97494	Cottonwood Draw; Bone Spring (O)

4 Property Code	5 Property Name	6 Well Number
317791	DAVINCI 7-18 FEDERAL COM	30H
7 OGRID No.	8 Operator Name	9 Elevation
215099	CIMAREX ENERGY CO.	3308.4'

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	7	25S	27E		390	NORTH	1430	EAST	EDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	18	25S	27E		330	SOUTH	1980	EAST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320			

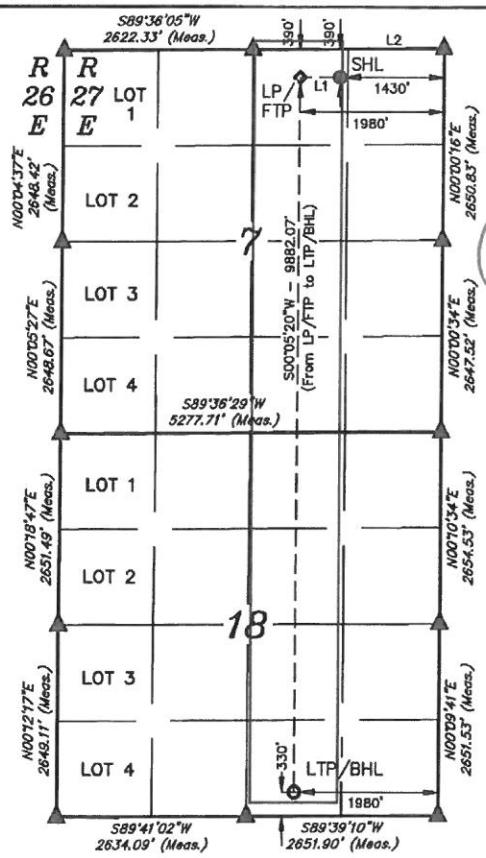
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

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

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'02.80" (32.150778°)
LONGITUDE = 104°13'32.07" (104.225575°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'02.37" (32.150658°)
LONGITUDE = 104°13'30.28" (104.225078°)
STATE PLANE NAD 83 (N.M. EAST)
N: 418605.38' E: 574686.47'
STATE PLANE NAD 27 (N.M. EAST)
N: 418547.86' E: 533503.49'

NAD 83 (LP/FTP)
LATITUDE = 32°09'02.75" (32.150763°)
LONGITUDE = 104°13'38.47" (104.227352°)
NAD 27 (FIRST TAKE LOCATION)
LATITUDE = 32°09'02.31" (32.150643°)
LONGITUDE = 104°13'36.68" (104.226855°)
STATE PLANE NAD 83 (N.M. EAST)
N: 418599.14' E: 574136.56'
STATE PLANE NAD 27 (N.M. EAST)
N: 418541.63' E: 532953.39'

NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = 32°07'24.98" (32.123604°)
LONGITUDE = 104°13'38.28" (104.227300°)
NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = 32°07'24.54" (32.123484°)
LONGITUDE = 104°13'36.49" (104.226804°)
STATE PLANE NAD 83 (N.M. EAST)
N: 408719.43' E: 574162.48'
STATE PLANE NAD 27 (N.M. EAST)
N: 408662.10' E: 532979.35'



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S89°35'10"W	550.01'
L2	S89°35'10"W	2648.27'

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

2000' 1000' 0' 2000'

SCALE
DRAWN BY: S.F. 05-29-17

REV: 1 10-08-19 L.C.W. (BHL & NAME CHANGES)

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.

10/22/19
Signature Date

Terri Stathem
Printed Name

tstathem@cimarex.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.

May 11, 2017
Date of Survey
Signature and Seal of Professional Surveyor:

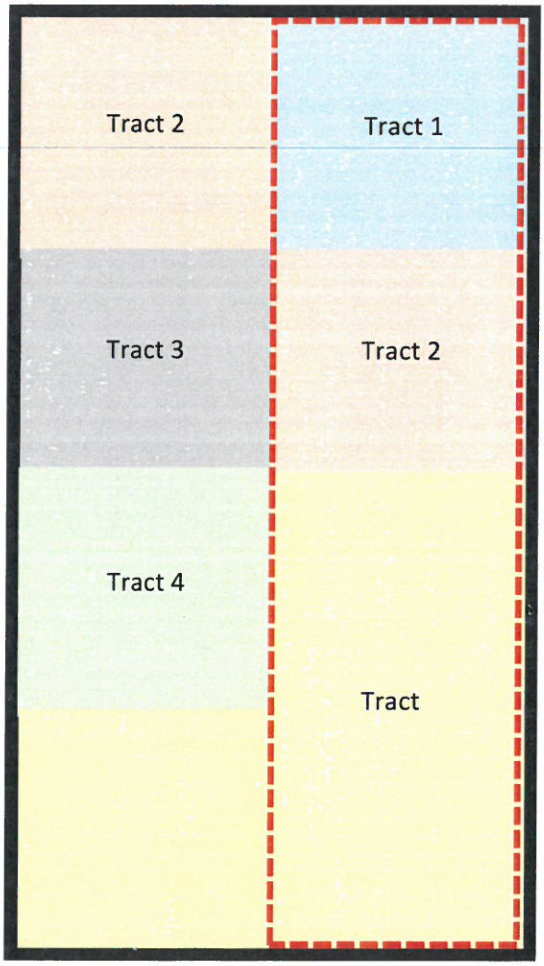
PAUL BUCHELE
NEW MEXICO
23782
10-08-19
PROFESSIONAL SURVEYOR

Certificate Number:

Da Vinci 7-18 Federal Com 29H - Wolfcamp

E/2 of Section 7, Township 25 South, Range 27 East, Eddy County, NM
E/2 of Section 18, Township 25 South, Range 27 East, Eddy County, NM

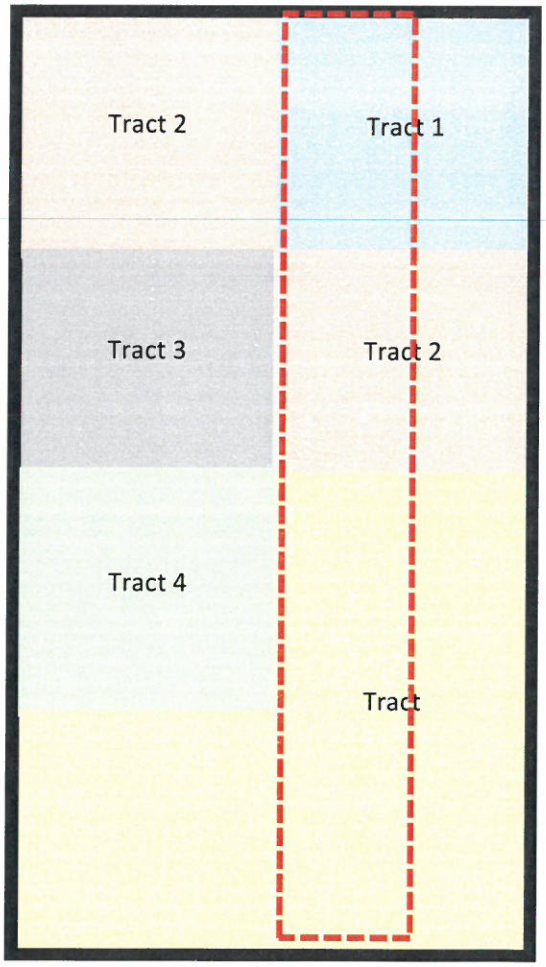
ORRI Owner – Wolfcamp	Tract
Chevron USA Inc	1,2,5
EOG A Resources, Inc	1,2,5
EOG M Resources Inc	1,2,5
EOG Y Resources, Inc	1,2,5
Oxy Y-1 Company	1,2,5



Da Vinci 7-18 Federal Com 30H – Bone Spring

E/2 of Section 7, Township 25 South, Range 27 East, Eddy County, NM
E/2 of Section 18, Township 25 South, Range 27 East, Eddy County, NM

Owner – Bone Spring	Tract	Net	Working Interest Percentage	Force Pool Interest
Cimarex Energy Co.	1, 2	319.285	49.944078%	No – Operator
Chevron USA Inc	5	312	48.804524%	No
TLW Investments	5	8	1.251398%	Yes
TOTAL			100%	



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

October 9, 2019

TLW Investment
1001 Fannin, Ste. 2020
Houston, TX 77002
Attn: Thad Montgomery

Via-CMRRR

Re: New Well Proposal - DaVinci 7-18 Fed Com 30H
W/2E/2: Section 7 & 18, Township 25 South, Range 27 East, N.M.P.M.
Eddy County, New Mexico

Dear Working Interest Owner:

Pursuant to that certain Operating Agreement dated February 1, 2019 (Initial well: DaVinci 7-18 Fed Com 29H), Cimarex Energy Co., hereby proposes to drill the DaVinci 7-18 Federal Com 30H Well at a legal location in W/2E/2 of Sections 7 & 18, Township 25 South, Range 27 East, Eddy County, New Mexico.

The intended surface hole location for the well is 390' FNL and 1430' FEL of Section 7, Township 25 South, Range 27 East, Eddy County, and the intended bottom hole location is 100' FSL and 1980' FEL of Section 18, Township 25 South, Range 27 East, Eddy County. The well is proposed to be drilled vertically to a depth of approximately 7,942' to the Harkey formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 18,262' 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 our detailed AFE reflecting estimated costs associated with this proposal. If you intend to participate, please approve and return one (1) original of the enclosed AFE, as well as the Election Form attached to this proposal, to the undersigned within 30 days of receipt of this proposal. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance to Cimarex prior to commencement of drilling operations; otherwise, you will be covered by insurance procured by Cimarex and will be responsible for your share of the cost.

If you 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.

If you should have any questions or comments, please do not hesitate to contact the undersigned at (432) 571-7862 if you should have any questions or comments.

Respectfully,

Cimarex Energy Co.
Caitlin Pierce, Landman

CP/ps
Enclosures as stated

ELECTION TO PARTICIPATE
DaVinci 7-18 Fed Com 30H

_____ TLW Investments elects **TO** participate in the proposed DaVinci 7-18 Fed Com 30H.

_____ TLW Investments elects **NOT** to participate in the proposed DaVinci 7-18 Fed Com 30H.

Dated this _____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is TO participate in the proposed DaVinci 7-18 Fed Com 30H, then:

_____ TLW Investments elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

_____ TLW Investments 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.

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

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

1. OVERHEAD—DRILLING AND PRODUCING OPERATIONS

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

☑ **(Alternative 1)** Fixed Rate Basis, Section III.1.B.
☐ **(Alternative 2)** Percentage Basis, Section III.1.C.

A. TECHNICAL SERVICES

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

☑ **(Alternative 1 – Direct)** shall be charged direct to the Joint Account.

☐ **(Alternative 2 – Overhead)** shall be covered by the overhead rates.

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

☑ **(Alternative 1 – All Overhead)** shall be covered by the overhead rates.

☐ **(Alternative 2 – All Direct)** shall be charged direct to the Joint Account.

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

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

B. OVERHEAD—FIXED RATE BASIS

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

Drilling Well Rate per month $ 6,500.00 (prorated for less than a full month)

Producing Well Rate per month $ 650.00

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

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

CIMAREX Authorization For Expenditure Drilling AFE # 26820001

Company Entity

Date Prepared
10/9/2019

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	DA VINCI 7-18 FEDERAL COM 30H	Carlsbad Bone Spring Prospect	300001-161.01	26820001

County, State	Location	Estimated Spud	Estimated Completion
Eddy, NM	W/2E/2 of Sections 7 & 18, Township 25 South, Range 27 East, Eddy County, New Mexico	12/1/2019	12/26/2019

	Formation	Well Type	Ttl Measured Depth	Ttl Vetical Depth
X New Supplement Revision	Bone Spring	DEV	18,262	7,942

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 450', set water string casing. Drill to 2070', set surface casing. Drill to 7465' (KOP). Drill curve at 12°/100' initial build rate to +/- 90 degrees and set casing at +/- 7940' TVD and drill a +/- 9590' long lateral in the Harkey formation. Run and cement production liner. Stage frac.Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	$2,554,000		$2,554,000
Completion Costs		$6,017,150	$6,017,150
Total Intangible Cost	**$2,554,000**	**$6,017,150**	**$8,571,150**

Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	$340,000	$478,000	$818,000
Lease Equipment		$903,250	$903,250
Total Tangible Cost	**$340,000**	**$1,381,250**	**$1,721,250**

Total Well Cost	**$2,894,000**	**$7,398,400**	**$10,292,400**

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. 10/9/2019

CIMAREX

Authorization For Expenditure - DA VINCI 7-18 FEDERAL COM 30H

AFE # 26820001

	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
Description	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	140,000			STIM.100	10,000	CON.100	9,000	PCOM.100	20,000	179,000
Damages	DIDC.105	6,000					CON.105	9,500			15,500
Mud/Fluids Disposal	DIDC.255	135,000			STIM.255	62,000			PCOM.255	60,000	257,000
Day Rate	DIDC.115	463,000	DICC.120	100,000							563,000
Misc Preparation	DIDC.120	35,000									35,000
Bits	DIDC.125	75,000	DICC.125	0	STIM.125	0			PCOM.125	0	75,000
Fuel	DIDC.135	88,000	DICC.130	0					PCOM.130	0	88,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	24,000			PCOM.135	0	29,000
Mud & Additives	DIDC.145	198,000									198,000
SWD PIPED TO XEC SWD WELL									PCOM.254	0	0
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	0	0
SWD HAULED TO XEC SWD WELL									PCOM.258	0	0
SWD HAULED TO 3RD PARTY SWD WELL									PCOM.259	0	0
Surface Rentals	DIDC.150	110,000	DICC.140	0	STIM.140	237,000	CON.140	6,000	PCOM.140	36,000	389,000
Downhole Rentals	DIDC.155	136,000			STIM.145	0			PCOM.145	0	136,000
Flowback Labor					STIM.141	0			PCOM.141	28,000	28,000
Automation Labor							CON.150	43,250	PCOM.150	0	43,250
Formation Evaluation (DST, Coring, etc.)	DIDC.160	0			STIM.150	0					0
Mud Logging	DIDC.170	21,000									21,000
Open Hole Logging	DIDC.180	0									0
Cementing & Float Equipment	DIDC.185	145,000	DICC.155	63,000							208,000
Tubular Inspections	DIDC.190	20,000	DICC.160	5,000	STIM.160	4,000			PCOM.160	0	29,000
Casing Crews	DIDC.195	20,000	DICC.165	13,000	STIM.165	0					33,000
Mechanical Labor	DIDC.200	15,000	DICC.170	10,000	STIM.170	0	CON.170	187,000	PCOM.170	0	212,000
Trucking/Transportation	DIDC.205	25,000	DICC.175	8,000	STIM.175	4,000	CON.175	25,000	PCOM.175	0	62,000
Supervision	DIDC.210	94,000	DICC.180	16,000	STIM.180	94,000	CON.180	19,000	PCOM.180	0	223,000
Trailer House/Camp/Catering	DIDC.280	41,000	DICC.255	6,000	STIM.280	34,000					81,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	15,000	CON.190	24,000	PCOM.190	0	44,000
Overhead	DIDC.225	10,000	DICC.195	5,000							15,000
Remedial Cementing	DIDC.231	0			STIM.215	0			PCOM.215	0	0
MOB/DEMOB	DIDC.240	150,000									150,000
Directional Drilling Services	DIDC.245	352,000									352,000
Solids Control	DIDC.260	59,000									59,000
Well Control Equip (Snubbing Services)	DIDC.265	68,000	DICC.240	5,000	STIM.240	109,000			PCOM.240	0	182,000
Fishing & Sidetrack Services	DIDC.270	0	DICC.245	0	STIM.245	0			PCOM.245	0	0
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	448,000			PCOM.260	0	448,000
Completion Logging/Perforating/Wireline					STIM.200	408,000			PCOM.200	0	408,000
Composite Plugs					STIM.390	108,000			PCOM.390	0	108,000
Stimulation Pumping/Chemicals/Additives/Sand					STIM.210	2,448,000			PCOM.210	0	2,448,000
Stimulation Water/Water Transfer/Water Storage					STIM.395	402,000					402,000
Cimarex Owned Frac/Rental Equipment					STIM.305	40,000			PCOM.305	0	40,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	6,000									6,000
Major Construction Overhead							CON.305	38,750			38,750
Real Time Operations Center	DIDC.560	0			STIM.560	0					0
FL/GL - Labor							CON.500	352,750			352,750
FL/GL - Supervision							CON.505	44,000			44,000
Survey							CON.515	5,000			5,000
SWD/Other - Labor							CON.600	0			0
SWD/OTHER - SUPERVISION							CON.605	0			0
Contingency	DIDC.435	122,000	DICC.220	12,000	STIM.220	223,000	CON.220	106,000	PCOM.220	8,400	471,400
Contingency							CON.221	61,500			61,500
P&A Costs	DIDC.295	0	DICC.275	0							0
Total Intangible Cost		2,554,000		243,000		4,691,000		930,750		152,400	8,571,150
Drive Pipe	DWEB.150	0									0
Conductor Pipe	DWEB.130	0									0
Water String	DWEB.135	13,000									13,000
Surface Casing	DWEB.140	50,000									50,000
Intermediate Casing 1	DWEB.145	257,000									257,000
Intermediate Casing 2	DWEB.155	0									0
Drilling Liner	DWEB.160	0									0
Production Casing or Liner			DWEA.100	155,000							155,000
Production Tie-Back			DWEA.165	0	STIMT.101	0					0
Tubing					STIMT.105	59,000			PCOMT.105	0	59,000
Wellhead, Tree, Chokes	DWEB.115	20,000	DWEA.120	25,000	STIMT.120	25,000			PCOMT.120	0	70,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	67,000							67,000
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
Pumping Unit, Engine					STIMT.405	0			PCOMT.405	0	0
Downhole Lift Equipment					STIMT.410	60,000			PCOMT.410	0	60,000
Surface Equipment									PCOMT.420	59,000	59,000
Well Automation Materials									PCOMT.455	0	0
Total Tangible - Well Equipment Cost		340,000		247,000		172,000				59,000	818,000
N/C Lease Equipment							CONT.400	208,250			208,250
Tanks, Tanks Steps, Stairs							CONT.405	0			0
Battery Equipment							CONT.410	208,250			208,250
Secondary Containments							CONT.415	25,750			25,750
Overhead Power Distribution							CONT.420	93,500			93,500
Facility Electrical							CONT.425	45,250			45,250
Telecommunication Equipment							CONT.426	0			0
Meters and Metering Equipment							CONT.445	46,500			46,500
Facility Line Pipe							CONT.450	28,750			28,750
Lease Automation Materials							CONT.455	43,750			43,750
FL/GL - Materials							CONT.550	39,000			39,000
FL/GL - Line Pipe							CONT.555	164,250			164,250
SWD/Other - Materials							CONT.650	0			0
SWD/OTHER - LINE PIPE							CONT.655	0			0
Total Tangible - Lease Equipment Cost								903,250			903,250
Total Estimated Cost		**2,894,000**		**490,000**		**4,863,000**		**1,834,000**		**211,400**	**10,292,400**

CIMAREX Authorization For Expenditure - DA VINCI 7-18 FEDERAL COM 30H

AFE # 26820001

Description	BCP - Drilling Codes		Amount	ACP - Drilling Codes		Amount	Comp/Stim Codes		Amount
Roads & Location	DIDC.100		140,000				STIM.100		10,000
Damages	DIDC.105		6,000						
Mud/Fluids Disposal	DIDC.255		135,000				STIM.255		62,000
Day Rate	DIDC.115	18 days at $25,000/day	463,000	DICC.120	4 days at $25,000/day	100,000			
Misc Preparation	DIDC.120		35,000						
Bits	DIDC.125		75,000	DICC.125		0	STIM.125		0
Fuel	DIDC.135	1,300 gal/day at $3.00/gal	88,000	DICC.130		0			
Water for Drilling Rig (Not Frac Water)	DIDC.140		5,000	DICC.135		0	STIM.135		24,000
Mud & Additives	DIDC.145		198,000						
SWD PIPED TO XEC SWD WELL									
SWD PIPED TO 3RD PARTY SWD WELL									
SWD HAULED TO XEC SWD WELL									
SWD HAULED TO 3RD PARTY SWD WELL									
Surface Rentals	DIDC.150	Per Day (BCP)/day	110,000	DICC.140		0	STIM.140		237,000
Downhole Rentals	DIDC.155		136,000				STIM.145		0
Flowback Labor							STIM.141		0
Automation Labor									
Formation Evaluation (DST, Coring, etc.)	DIDC.160		0				STIM.150		0
Mud Logging	DIDC.170	13 days at $1,200/day	21,000						
Open Hole Logging	DIDC.180		0						
Cementing & Float Equipment	DIDC.185		145,000	DICC.155		63,000			
Tubular Inspections	DIDC.190		20,000	DICC.160		5,000	STIM.160		4,000
Casing Crews	DIDC.195		20,000	DICC.165		13,000	STIM.165		0
Mechanical Labor	DIDC.200		15,000	DICC.170		10,000	STIM.170		0
Trucking/Transportation	DIDC.205		25,000	DICC.175		8,000	STIM.175		4,000
Supervision	DIDC.210		94,000	DICC.180		16,000	STIM.180		94,000
Trailer House/Camp/Catering	DIDC.280		41,000	DICC.255		6,000	STIM.280		34,000
Other Misc Expenses	DIDC.220		5,000	DICC.190		0	STIM.190		15,000
Overhead	DIDC.225		10,000	DICC.195		5,000			
Remedial Cementing	DIDC.231		0				STIM.215		0
MOB/DEMOB	DIDC.240		150,000						
Directional Drilling Services	DIDC.245		352,000						
Solids Control	DIDC.260		59,000						
Well Control Equip (Snubbing Services)	DIDC.265		68,000	DICC.240		5,000	STIM.240		109,000
Fishing & Sidetrack Services	DIDC.270		0	DICC.245		0	STIM.245		0
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		448,000
Completion Logging/Perforating/Wireline							STIM.200		408,000
Composite Plugs							STIM.390		108,000
Stimulation							STIM.210		2,448,000
Stimulation Water/Water Transfer/Water							STIM.395		402,000
Cimarex Owned Frac/Rental Equipment							STIM.305		40,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285	$0.35/ft	6,000						
Major Construction Overhead									
Real Time Operations Center	DIDC.360		0				STIM.360		0
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/OTHER - SUPERVISION									
Contingency	DIDC.435	500 % of Drilling Intangibles	122,000	DICC.220		12,000	STIM.220		223,000
Contingency									
P&A Costs	DIDC.295		0	DICC.275		0			
Total Intangible Cost			2,554,000			243,000			4,691,000
Drive Pipe	DWEB.150		0						
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		13,000						
Surface Casing	DWEB.140	9 5/8" - 2,070ft at $24.00/ft	50,000						
Intermediate Casing 1	DWEB.145	7" - 8,320ft at $28.00/ft	257,000						
Intermediate Casing 2	DWEB.155		0						
Drilling Liner	DWEB.160		0						
Production Casing or Liner				DWEA.100	4 1/2" - 11,900ft at $13.00/ft	155,000			
Production Tie-Back				DWEA.165		0	STIMT.101		0
Tubing							STIMT.105	3-1/2"" - 6,570ft at $9.00/ft	59,000
Wellhead, Tree, Chokes	DWEB.115		20,000	DWEA.120		25,000	STIMT.120		25,000
Liner Hanger, Isolation Packer	DWEB.100		0	DWEA.125		67,000			
Packer, Nipples							STIMT.400		28,000
Pumping Unit, Engine							STIMT.405		0
Downhole Lift Equipment							STIMT.410		60,000
Surface Equipment									
Well Automation Materials									
Total Tangible - Well Equipment Cost			340,000			247,000			172,000
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									
SWD/Other - Materials									
SWD/OTHER - LINE PIPE									
Total Tangible - Lease Equipment Cost									
Total Estimated Cost			**2,894,000**			**490,000**			**4,863,000**

CIMAREX Authorization For Expenditure - DA VINCI 7-18 FEDERAL COM 30H

AFE # 26820001

	Production Equip			Post Completion			Total
Description	Codes		Amount	Codes		Amount	Cost
Roads & Location	CON.100		9,000	PCOM.100	Road Repairs	20,000	179,000
Damages	CON.105		9,500				15,500
Mud/Fluids Disposal				PCOM.255	$0.25/bbl for 60 days , using Cottonberry	60,000	257,000
Day Rate							563,000
Misc Preparation							35,000
Bits				PCOM.125		0	75,000
Fuel				PCOM.130		0	88,000
Water for Drilling Rig (Not Frac Water)				PCOM.135		0	29,000
Mud & Additives							198,000
SWD PIPED TO XEC SWD WELL				PCOM.254		0	0
SWD PIPED TO 3RD PARTY SWD WELL				PCOM.257		0	0
SWD HAULED TO XEC SWD WELL				PCOM.258		0	0
SWD HAULED TO 3RD PARTY SWD WELL				PCOM.259		0	0
Surface Rentals	CON.140		6,000	PCOM.140	Flowback equipment ($1,200/d for 30 days)	36,000	389,000
Downhole Rentals				PCOM.145		0	136,000
Flowback Labor				PCOM.141	Flowback hands ($2,000/d for 14 days)	28,000	28,000
Automation Labor	CON.150		43,250	PCOM.150		0	43,250
Formation Evaluation (DST, Coring, etc.)							0
Mud Logging							21,000
Open Hole Logging							0
Cementing & Float Equipment							208,000
Tubular Inspections				PCOM.160		0	29,000
Casing Crews							33,000
Mechanical Labor	CON.170		187,000	PCOM.170		0	212,000
Trucking/Transportation	CON.175		25,000	PCOM.175		0	62,000
Supervision	CON.180		19,000	PCOM.180		0	223,000
Trailer House/Camp/Catering							81,000
Other Misc Expenses	CON.190		24,000	PCOM.190		0	44,000
Overhead							15,000
Remedial Cementing				PCOM.215		0	0
MOB/DEMOB							150,000
Directional Drilling Services							352,000
Solids Control							59,000
Well Control Equip (Snubbing Services)				PCOM.240		0	182,000
Fishing & Sidetrack Services				PCOM.245		0	0
Completion Rig				PCOM.115		0	21,000
Coil Tubing Services				PCOM.260		0	448,000
Completion Logging/Perforating/Wireline				PCOM.200		0	408,000
Composite Plugs				PCOM.390		0	108,000
Stimulation Pumping/Chemicals/Additives/Sand				PCOM.210		0	2,448,000
Stimulation Water/Water Transfer/Water							402,000
Cimarex Owned Frac/Rental Equipment				PCOM.305		0	40,000
Legal/Regulatory/Curative	CON.300		0				10,000
Well Control Insurance							6,000
Major Construction Overhead	CON.305		38,750				38,750
Real Time Operations Center							0
FL/GL - Labor	CON.500		352,750				352,750
FL/GL - Supervision	CON.505		44,000				44,000
Survey	CON.515		5,000				5,000
SWD/Other - Labor	CON.600		0				0
SWD/OTHER - SUPERVISION	CON.605		0				0
Contingency	CON.220		106,000	PCOM.220	10%	8,400	471,400
Contingency	CON.221		61,500				61,500
P&A Costs							0
Total Intangible Cost			930,750			152,400	8,571,150
Drive Pipe							0
Conductor Pipe							0
Water String							13,000
Surface Casing							50,000
Intermediate Casing 1							257,000
Intermediate Casing 2							0
Drilling Liner							0
Production Casing or Liner							155,000
Production Tie-Back							0
Tubing				PCOMT.105		0	59,000
Wellhead, Tree, Chokes				PCOMT.120		0	70,000
Liner Hanger, Isolation Packer							67,000
Packer, Nipples				PCOMT.400		0	28,000
Pumping Unit, Engine				PCOMT.405		0	0
Downhole Lift Equipment				PCOMT.410		0	60,000
Surface Equipment				PCOMT.420	XEC owned material transferred sand	59,000	59,000
Well Automation Materials				PCOMT.455		0	0
Total Tangible - Well Equipment Cost						59,000	818,000
N/C Lease Equipment	CONT.400		208,250				208,250
Tanks, Tanks Steps, Stairs	CONT.405		0				0
Battery Equipment	CONT.410		208,250				208,250
Secondary Containments	CONT.415		25,750				25,750
Overhead Power Distribution	CONT.420		93,500				93,500
Facility Electrical	CONT.425		45,250				45,250
Telecommunication Equipment	CONT.426		0				0
Meters and Metering Equipment	CONT.445		46,500				46,500
Facility Line Pipe	CONT.450		28,750				28,750
Lease Automation Materials	CONT.455		43,750				43,750
FL/GL - Materials	CONT.550		39,000				39,000
FL/GL - Line Pipe	CONT.555		164,250				164,250
SWD/Other - Materials	CONT.650		0				0
SWD/OTHER - LINE PIPE	CONT.655		0				0
Total Tangible - Lease Equipment Cost			903,250				903,250
Total Estimated Cost			**1,834,000**			**211,400**	**10,292,400**

Communication Timeline

10/9/2019 – Proposals for both the Da Vinci 7-18 Federal Com 29H & 30H sent

10/12/2019 – Proposals received by TLW Investments, LLC, Attn: Thad Montgomery

10/23/2019 – Received an email from Mr. Montgomery indicating that the acreage was sold to Brigham several years ago and that all well proposals should be sent to Brigham

11/14/2019 – XEC was informed by Brigham that they did not have record of acquiring TLW's interest in the E/2 of Section 18. Brigham's records reflected that they acquired only the SW/4 of Section 18. I then reached out to TLW. TLW confirmed that they do still own the interest in the E/2 of Section 18. I then sent the proposals to TLW again and informed them that we would be filing for force pooling. TLW indicated that they would go Non-Consent unless we were willing to purchase. I then requested the form they would require to use in order to sell to XEC.

11/26/2019 - – I followed up with Thad Montgomery at TLW to understand the need to use their specific "sublease" form

12/3/2019 – Landman from TLW indicated that they prefer to use the sublease form as previously provided. We could not agree to a form of assignment.

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

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

CASE NO. 20993

AFFIDAVIT OF HARRISON HASTINGS

STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

Harrison Hastings, being duly sworn, deposes and states:

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

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

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

   a. **Exhibit C.1** is a Gunbarrel/Lateral Trajectory Diagram. This diagram identifies the DaVinci 7-18 E/2 development plan, which includes the **Da Vinci 7-18 Fed Com 30H** well, the proposed well within the Bone Spring horizontal spacing unit that is the subject of this case, and the **Da Vinci 7-18 Fed Com 29H** well.