

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 |
| ⁴ Property Code | ⁵ Property Name DAVINCI 7-18 FEDERAL COM | ⁶ Well Number 29H |
| ⁷ OGRID No. | ⁸ Operator Name CIMAREX ENERGY CO. | ⁹ Elevation 3308.9' |

¹⁰ Surface Location

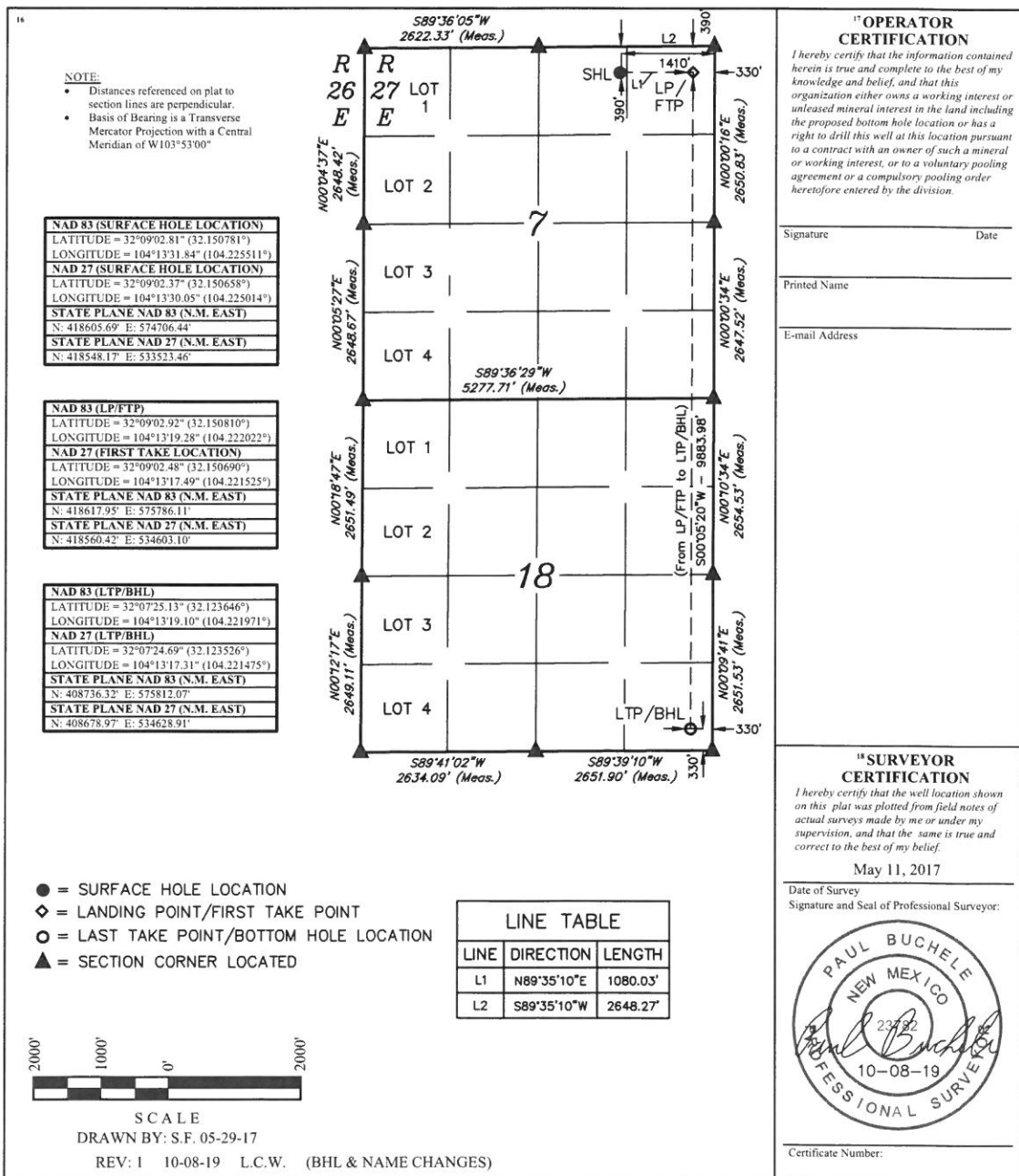
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| B | 7 | 25S | 27E | | 390 | NORTH | 1410 | 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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| P | 18 | 25S | 27E | | 330 | SOUTH | 330 | EAST | EDDY |

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

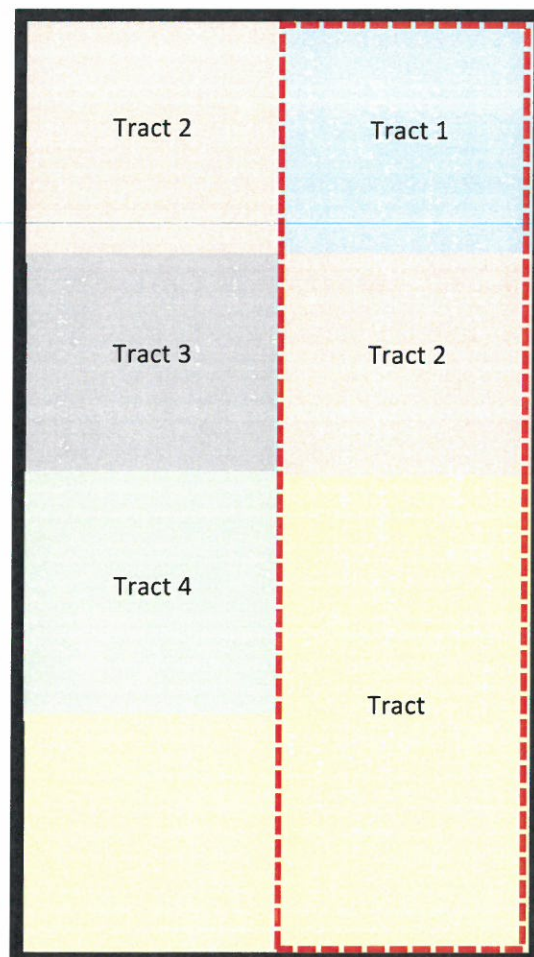
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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

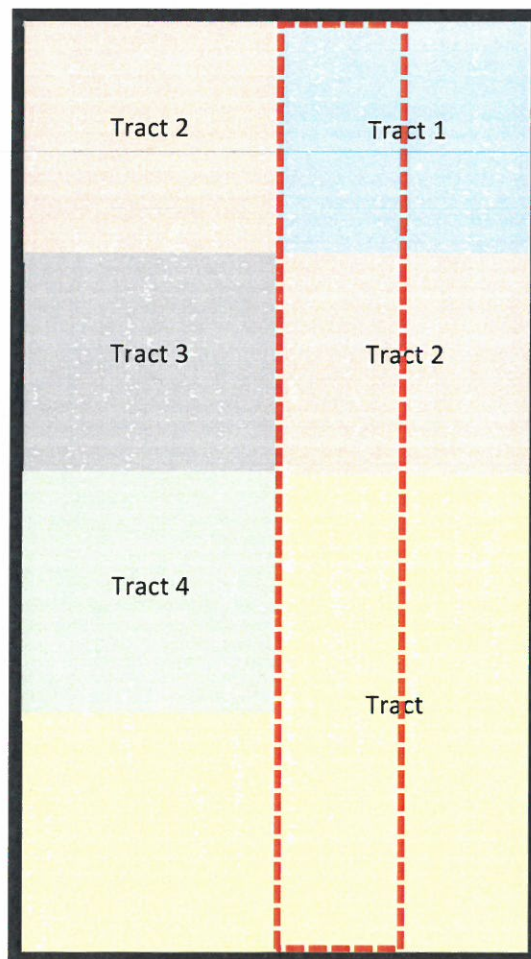
| Owner – Bone Spring | Tract | Net | Working Interest Percentage | Force Pool Interest |
|---------------------|-------|---------|-----------------------------|---------------------|
| Cimarex Energy Co. | 1, 2 | 319.285 | 49.944078% | No – Operator |
| Chevron USA Inc | 5 | 312 | 48.804524% | No |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



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

| 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 |
| | |



Cimarex Energy Co.
600 N. Marienfeld St.
Suite 600
Midland, TX 79701
MAIN 432.571.7800
October 9, 2019



TLW Investments
1001 Fannin Ste. 2020
Houston, Texas 77002
Attn: Thad Montgomery

Via-CMRRR

Re: New Well Proposal- DaVinci 7-18 Fed Com 29H
E/2: Section 7 & 18, Township 25 South, Range 27 East, N.M.P.M.
Eddy County, New Mexico

Dear Working Interest Owner:

Cimarex Energy Co. hereby proposes to drill the DaVinci 7-18 Fed Com 29H well at a legal location in the E/2 of Section 7, Township 25 South Range 27 East, Eddy County, New Mexico.

The intended surface hole location for the well is 390' FNL and 1410' FEL of Section 7, Township 25 South, Range 27 East, Eddy County, and the intended bottom hole location is 330' FSL and 2317' 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 9,555' to the Wolfcamp 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 20,534' 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 DaVinci 7-18 Fed Com 29H well. 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.

Please note that Cimarex is open to discuss an Assignment or Farmout of your working interest in the subject acreage. Should you be interested or have any questions, please feel to contact the undersigned.

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

A handwritten signature in cursive script, appearing to read "C. Pierce", written over the typed name "Caitlin Pierce, Landman".

**ELECTION TO PARTICIPATE
DaVinci 7-18 Fed Com 29H**

_____ TLW Investments elects **TO** participate in the proposed DaVinci 7-18 Fed Com 29H.

_____ TLW Investments elects **NOT** to participate in the proposed DaVinci 7-18 Fed Com 29H.

Dated this _____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is TO participate in the proposed DaVinci 7-18 Fed Com 29H, 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, re-drilling, 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.



Authorization For Expenditure Drilling

AFE # 26619078

Company Entity
Cimarex Energy Co (001)

Date Prepared
10/9/2019

| | | | | |
|---|--|-------------------------------|----------------------|--------------------|
| Exploration Region | Well Name | Prospect | Property Number | AFE |
| Permian Basin | DA VINCI 7-18 FEDERAL COM 29H | Carlsbad Bone Spring Prospect | 300001-056.01 | 26619078 |
| County, State | Location | Estimated Spud | Estimated Completion | |
| Eddy, NM | E/2 of Section 7 & 18-25S-27E, Eddy County, New Mexico | 10/10/2019 | 11/10/2019 | |
| <input checked="" type="checkbox"/> New | Formation | Well Type | Ttl Measured Depth | Ttl Vertical Depth |
| <input type="checkbox"/> Supplement | Wolfcamp | DEV | 20,534 | 9,555 |
| <input type="checkbox"/> Revision | | | | |

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 9045' (KOP). Drill curve at 12"/100' initial build rate to +/- 75 degrees and set casing at +/- 9670' MD. Finish curve at +/- 4"/100' to +/- 9560' TVD and drill a +/- 9900' long lateral in the Wolfcamp C 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 | \$2,702,000 | | \$2,702,000 |
| Completion Costs | | \$6,491,978 | \$6,491,978 |
| Total Intangible Cost | \$2,702,000 | \$6,491,978 | \$9,193,978 |
| Tangible | Dry Hole | After Casing Point | Completed Well Cost |
| Well Equipment | \$390,000 | \$505,000 | \$895,000 |
| Lease Equipment | | \$903,250 | \$903,250 |
| Total Tangible Cost | \$390,000 | \$1,408,250 | \$1,798,250 |
| Total Well Cost | \$3,092,000 | \$7,900,228 | \$10,992,228 |

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

| Description | BCP - Drilling | | ACP - Drilling | | Comp/Stim | | Production Equip | | Post Completion | | Total | |
|--|----------------|------------------|----------------|----------------|-----------|------------------|------------------|------------------|-----------------|----------------|-------------------|--|
| | 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 | 28,000 | 187,000 | |
| Damages | DIDC.105 | 6,000 | | | | | CON.105 | 9,500 | | | 15,500 | |
| Mud/Fluids Disposal | DIDC.255 | 145,000 | | | STIM.255 | 53,000 | | | PCOM.255 | 60,638 | 258,638 | |
| Day Rate | DIDC.115 | 525,000 | DICC.120 | 100,000 | | | | | | | 625,000 | |
| Misc Preparation | DIDC.120 | 35,000 | | | | | | | | | 35,000 | |
| Blis | DIDC.125 | 85,000 | DICC.125 | 0 | STIM.125 | 0 | | | PCOM.125 | 0 | 85,000 | |
| Fuel | DIDC.135 | 86,000 | DICC.130 | 0 | | | | | PCOM.130 | 0 | 86,000 | |
| 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 | 187,000 | | | | | | | | | 187,000 | |
| 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 | 120,000 | DICC.140 | 0 | STIM.140 | 237,000 | CON.140 | 6,000 | PCOM.140 | 30,900 | 393,900 | |
| Downhole Rentals | DIDC.155 | 145,000 | | | STIM.145 | 0 | | | PCOM.145 | 0 | 145,000 | |
| 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 | 24,000 | | | | | | | | | 24,000 | |
| Open Hole Logging | DIDC.180 | 0 | | | | | | | | | 0 | |
| Cementing & Float Equipment | DIDC.185 | 144,000 | DICC.155 | 67,000 | | | | | | | 211,000 | |
| Tubular Inspections | DIDC.190 | 20,000 | DICC.160 | 5,000 | STIM.160 | 2,000 | | | PCOM.160 | 0 | 27,000 | |
| Casing Crews | DIDC.195 | 30,000 | DICC.165 | 13,000 | STIM.165 | 0 | | | | | 43,000 | |
| 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 | 10,000 | DICC.175 | 8,000 | STIM.175 | 4,000 | CON.175 | 25,000 | PCOM.175 | 0 | 47,000 | |
| Supervision | DIDC.210 | 104,000 | DICC.180 | 16,000 | STIM.180 | 94,000 | CON.180 | 19,000 | PCOM.180 | 0 | 233,000 | |
| Trailer House/Camp/Catering | DIDC.280 | 45,000 | DICC.255 | 6,000 | STIM.280 | 67,000 | | | | | 118,000 | |
| Other Misc Expenses | DIDC.220 | 5,000 | DICC.190 | 0 | STIM.190 | 0 | CON.190 | 24,000 | PCOM.190 | 0 | 29,000 | |
| Overhead | DIDC.225 | 10,000 | DICC.195 | 5,000 | | | | | | | 15,000 | |
| Remedial Cementing | DIDC.231 | 0 | | | STIM.215 | 0 | | | PCOM.215 | 0 | 0 | |
| MOB/DEMOS | DIDC.240 | 150,000 | | | | | | | | | 150,000 | |
| Directional Drilling Services | DIDC.245 | 377,000 | | | | | | | | | 377,000 | |
| Solids Control | DIDC.260 | 66,000 | | | | | | | | | 66,000 | |
| Well Control Equip (Snubbing Services) | DIDC.265 | 77,000 | DICC.240 | 5,000 | STIM.240 | 109,000 | | | PCOM.240 | 0 | 191,000 | |
| 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 | 476,000 | | | PCOM.200 | 0 | 476,000 | |
| Composite Plugs | | | | | STIM.390 | 108,000 | | | PCOM.390 | 0 | 108,000 | |
| Stimulation Pumping/Chemicals/Additives/Sand | | | | | STIM.210 | 2,733,000 | | | PCOM.210 | 0 | 2,733,000 | |
| Stimulation Water/Water Transfer/Water Storage | | | | | STIM.395 | 486,000 | | | | | 486,000 | |
| 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 | 7,000 | | | | | | | | | 7,000 | |
| 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 | 129,000 | DICC.220 | 12,000 | STIM.220 | 246,000 | CON.220 | 106,000 | PCOM.220 | 8,690 | 501,690 | |
| Contingency | | | | | | | CON.221 | 61,500 | | | 61,500 | |
| P&A Costs | DIDC.295 | 0 | DICC.275 | 0 | | | | | | | 0 | |
| Total Intangible Cost | | 2,702,000 | | 247,000 | | 5,158,000 | | 930,750 | | 156,228 | 9,193,978 | |
| 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 | 307,000 | | | | | | | | | 307,000 | |
| Intermediate Casing 2 | DWEB.155 | 0 | | | | | | | | | 0 | |
| Drilling Liner | DWEB.160 | 0 | | | | | | | | | 0 | |
| Production Casing or Liner | | | DWEA.100 | 164,000 | STIM.101 | 0 | | | | | 164,000 | |
| Production Tie-Back | | | DWEA.165 | 0 | STIM.105 | 82,000 | | | PCOM.105 | 0 | 82,000 | |
| Tubing | | | | | STIM.120 | 25,000 | | | PCOM.120 | 0 | 65,000 | |
| Wellhead, Tree, Chokes | DWEB.115 | 20,000 | DWEA.120 | 20,000 | | | | | | | 67,000 | |
| Liner Hanger, Isolation Packer | DWEB.100 | 0 | DWEA.125 | 67,000 | | | | | | | 67,000 | |
| Packer, Nipples | | | | | STIM.400 | 28,000 | | | PCOM.400 | 0 | 28,000 | |
| Pumping Unit, Engine | | | | | STIM.405 | 0 | | | PCOM.405 | 0 | 0 | |
| Downhole Lift Equipment | | | | | STIM.410 | 60,000 | | | PCOM.410 | 0 | 60,000 | |
| Surface Equipment | | | | | | | | | PCOM.420 | 59,000 | 59,000 | |
| Well Automation Materials | | | | | | | | | PCOM.455 | 0 | 0 | |
| Total Tangible - Well Equipment Cost | | 390,000 | | 251,000 | | 195,000 | | | | 59,000 | 895,000 | |
| N/C Lease Equipment | | | | | | | CON.400 | 208,250 | | | 208,250 | |
| Tanks, Tanks Steps, Stairs | | | | | | | CON.405 | 0 | | | 0 | |
| Battery Equipment | | | | | | | CON.410 | 208,250 | | | 208,250 | |
| Secondary Containments | | | | | | | CON.415 | 25,750 | | | 25,750 | |
| Overhead Power Distribution | | | | | | | CON.420 | 93,500 | | | 93,500 | |
| Facility Electrical | | | | | | | CON.425 | 45,250 | | | 45,250 | |
| Telecommunication Equipment | | | | | | | CON.426 | 0 | | | 0 | |
| Meters and Metering Equipment | | | | | | | CON.445 | 46,500 | | | 46,500 | |
| Facility Line Pipe | | | | | | | CON.450 | 28,750 | | | 28,750 | |
| Lease Automation Materials | | | | | | | CON.455 | 43,750 | | | 43,750 | |
| FL/GL - Materials | | | | | | | CON.550 | 39,000 | | | 39,000 | |
| FL/GL - Line Pipe | | | | | | | CON.555 | 164,250 | | | 164,250 | |
| SWD/Other - Materials | | | | | | | CON.650 | 0 | | | 0 | |
| SWD/OTHER - LINE PIPE | | | | | | | CON.655 | 0 | | | 0 | |
| Total Tangible - Lease Equipment Cost | | | | | | | | 903,250 | | | 903,250 | |
| Total Estimated Cost | | 3,092,000 | | 498,000 | | 5,353,000 | | 1,834,000 | | 215,228 | 10,992,228 | |



| Description | BCP - Drilling | | ACP - Drilling | | Comp/Stim | |
|--|----------------|--------------------------------|----------------|---------------------------------|-----------|-----------|
| | Codes | Amount | Codes | Amount | Codes | Amount |
| Roads & Location | DIDC.100 | 140,000 | | | STBA.100 | 10,000 |
| Damages | DIDC.105 | 6,000 | | | | |
| Mud/Fluids Disposal | DIDC.255 | 145,000 | | | STBA.255 | 53,000 |
| Day Rate | DIDC.115 | 20 days at \$25,000/day | DICC.120 | 4 days at \$25,000/day | | |
| Misc Preparation | DIDC.120 | 35,000 | | | | |
| Bits | DIDC.125 | 85,000 | DICC.125 | 0 | STBA.125 | 0 |
| Fuel | DIDC.135 | 1,150 gal/day at \$3.00/gal | DICC.130 | 0 | | |
| Water for Drilling Rig (Not Frac Water) | DIDC.140 | 5,000 | DICC.135 | 0 | STBA.135 | 24,000 |
| Mud & Additives | DIDC.145 | 187,000 | | | | |
| 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 | DICC.140 | 0 | STBA.140 | 237,000 |
| Downhole Rentals | DIDC.155 | 145,000 | | | STBA.145 | 0 |
| Flowback Labor | | | | | STBA.141 | 0 |
| Automation Labor | | | | | | |
| Formation Evaluation (DST, Coring, etc.) | DIDC.160 | 0 | | | STBA.150 | 0 |
| Mud Logging | DIDC.170 | 16 days at \$1,200/day | | | | |
| Open Hole Logging | DIDC.180 | 0 | | | | |
| Cementing & Float Equipment | DIDC.185 | 144,000 | DICC.155 | 67,000 | | |
| Tubular Inspections | DIDC.190 | 20,000 | DICC.160 | 5,000 | STBA.160 | 2,000 |
| Casing Crews | DIDC.195 | 30,000 | DICC.165 | 13,000 | STBA.165 | 0 |
| Mechanical Labor | DIDC.200 | 15,000 | DICC.170 | 10,000 | STBA.170 | 0 |
| Trucking/Transportation | DIDC.205 | 10,000 | DICC.175 | 8,000 | STBA.175 | 4,000 |
| Supervision | DIDC.210 | 104,000 | DICC.180 | 16,000 | STBA.180 | 94,000 |
| Trailer House/Camp/Catering | DIDC.280 | 45,000 | DICC.255 | 6,000 | STIM.280 | 67,000 |
| Other Misc Expenses | DIDC.220 | 5,000 | DICC.190 | 0 | STBA.190 | 0 |
| Overhead | DIDC.225 | 10,000 | DICC.195 | 5,000 | | |
| Remedial Cementing | DIDC.231 | 0 | | | STBA.215 | 0 |
| MOB/DEMORB | DIDC.240 | 150,000 | | | | |
| Directional Drilling Services | DIDC.245 | 377,000 | | | | |
| SoBis Control | DIDC.260 | 66,000 | | | | |
| Well Control Equip (Snubbing Services) | DIDC.265 | 77,000 | DICC.240 | 5,000 | STIM.240 | 109,000 |
| Fishing & Sidetrack Services | DIDC.270 | 0 | DICC.245 | 0 | STIM.245 | 0 |
| Completion Rig | | | | | STBA.115 | 21,000 |
| Coil Tubing Services | | | | | STIM.260 | 448,000 |
| Completion Logging/Perforating/Airline | | | | | STIM.200 | 476,000 |
| Composite Plugs | | | | | STBA.390 | 108,000 |
| Stimulation | | | | | STIM.210 | 2,733,000 |
| Stimulation Water/Water Transfer/Water | | | | | STBA.395 | 486,000 |
| Cimarex Owned Frac/Rental Equipment | | | | | STBA.305 | 40,000 |
| Legal/Regulatory/Curative | DIDC.300 | 10,000 | | | | |
| Well Control Insurance | DIDC.285 | 7,000 | | | | |
| Major Construction Overhead | | | | | | |
| Real Time Operations Center | DIDC.560 | 0 | | | STIM.560 | 0 |
| FL/GIL - Labor | | | | | | |
| FL/GIL - Supervision | | | | | | |
| Survey | | | | | | |
| SWD/Other - Labor | | | | | | |
| SWD/OTHER - SUPERVISION | | | | | | |
| Contingency | DIDC.435 | 500 % of Drilling Intangibles | DICC.220 | 12,000 | STIM.220 | 246,000 |
| Contingency | | | | | | |
| P&A Costs | DIDC.295 | 0 | DICC.275 | 0 | | |
| Total Intangible Cost | | 2,702,000 | | 247,000 | | 5,158,000 |
| 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 | | | | |
| Intermediate Casing 1 | DWEB.145 | 7" - 9,770ft at \$29.00/ft | | | | |
| Intermediate Casing 2 | DWEB.155 | 0 | | | | |
| Drilling Liner | DWEB.160 | 0 | | | | |
| Production Casing or Liner | | | DWEA.100 | 4 1/2" - 12,590ft at \$13.00/ft | STBA.101 | 0 |
| Production Tie-Back | | | DWEA.165 | 0 | STIM.105 | 82,000 |
| Tubing | | | | | STIM.120 | 25,000 |
| Wellhead, Tree, Chokes | DWEB.115 | 20,000 | DWEA.120 | 20,000 | | |
| Liner Hanger, Isolation Packer | DWEB.100 | 0 | DWEA.125 | 67,000 | STBA.400 | 28,000 |
| Packer, Nipples | | | | | STIM.405 | 0 |
| Pumping Unit, Engine | | | | | STBA.410 | 60,000 |
| Downhole Lift Equipment | | | | | | |
| Surface Equipment | | | | | | |
| Well Automation Materials | | | | | | |
| Total Tangible - Well Equipment Cost | | 390,000 | | 251,000 | | 195,000 |
| 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/GIL - Materials | | | | | | |
| FL/GIL - Line Pipe | | | | | | |
| SWD/Other - Materials | | | | | | |
| SWD/OTHER - LINE PIPE | | | | | | |
| Total Tangible - Lease Equipment Cost | | | | | | |
| Total Estimated Cost | | 3,092,000 | | 498,000 | | 5,353,000 |



29H

| Description | Codes | Production Equip | | Post Completion | | Total | |
|--|----------|------------------|-----------|---|-----------|------------|--|
| | | Amount | Codes | Amount | Cost | | |
| Roads & Location | CON.100 | 9,000 | PCOM.100 | 28,000 | 187,000 | | |
| Damages | CON.105 | 9,500 | | | 15,500 | | |
| Mud/Fluids Disposal | | | PCOM.255 | \$0.25/bbl for 60 days using Da Vinci 7-18 9H | 60,638 | 258,638 | |
| Day Rate | | | | | 625,000 | | |
| Misc Preparation | | | | | 35,000 | | |
| Bits | | | PCOM.125 | 0 | 85,000 | | |
| Fuel | | | PCOM.130 | 0 | 86,000 | | |
| Water for Drilling Rig (Not Frac Water) | | | PCOM.135 | 0 | 29,000 | | |
| Mud & Additives | | | | | 187,000 | | |
| 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 iron, manifold, half-pit tank, pipe | 30,900 | 393,900 | |
| Downhole Rentals | | | PCOM.145 | 0 | 145,000 | | |
| Flowback Labor | | | PCOM.141 | \$2,000/day 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 | | | | | 24,000 | | |
| Open Hole Logging | | | | | 0 | | |
| Cementing & Float Equipment | | | | | 211,000 | | |
| Tubular Inspections | | | PCOM.160 | 0 | 27,000 | | |
| Casing Crews | | | | | 43,000 | | |
| Mechanical Labor | CON.170 | 187,000 | PCOM.170 | 0 | 212,000 | | |
| Trucking/Transportation | CON.175 | 25,000 | PCOM.175 | 0 | 47,000 | | |
| Supervision | CON.180 | 19,000 | PCOM.180 | 0 | 233,000 | | |
| Trailer House/Camp/Catering | | | | | 118,000 | | |
| Other Misc Expenses | CON.190 | 24,000 | PCOM.190 | 0 | 29,000 | | |
| Overhead | | | | | 15,000 | | |
| Remedial Cementing | | | PCOM.215 | 0 | 0 | | |
| MOB/DEMOS | | | | | 150,000 | | |
| Directional Drilling Services | | | | | 377,000 | | |
| Solids Control | | | | | 66,000 | | |
| Well Control Equip (Snubbing Services) | | | PCOM.240 | 0 | 191,000 | | |
| 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 | 476,000 | | |
| Composite Plugs | | | PCOM.390 | 0 | 108,000 | | |
| Stimulation Pumping/Chemicals/Additives/Sand | | | PCOM.210 | 0 | 2,733,000 | | |
| Stimulation Water/Water Transfer/Water | | | | | 486,000 | | |
| Cimarex Owned Frac/Rental Equipment | | | PCOM.305 | 0 | 40,000 | | |
| Legal/Regulatory/Curative | CON.300 | 0 | | | 10,000 | | |
| Well Control Insurance | | | | | 7,000 | | |
| Major Construction Overhead | CON.305 | 38,750 | | | 38,750 | | |
| Real Time Operations Center | | | | | 0 | | |
| FL/GI - Labor | CON.500 | 352,750 | | | 352,750 | | |
| FL/GI - 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% | 8,690 | 501,690 | |
| Contingency | CON.221 | 61,500 | | | 61,500 | | |
| P&A Costs | | | | | 0 | | |
| Total Intangible Cost | | 930,750 | | | 156,228 | 9,193,978 | |
| Drive Pipe | | | | | 0 | | |
| Conductor Pipe | | | | | 0 | | |
| Water String | | | | | 13,000 | | |
| Surface Casing | | | | | 50,000 | | |
| Intermediate Casing 1 | | | | | 307,000 | | |
| Intermediate Casing 2 | | | | | 0 | | |
| Drilling Liner | | | | | 0 | | |
| Production Casing or Liner | | | | | 164,000 | | |
| Production Tie-Back | | | | | 0 | | |
| Tubing | | | PCOMT.105 | 0 | 82,000 | | |
| Wellhead, Tree, Chokes | | | PCOMT.120 | 0 | 65,000 | | |
| 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 | 895,000 | |
| N/A 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/GI - Materials | CONT.550 | 39,000 | | | 39,000 | | |
| FL/GI - 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 | | | 215,228 | 10,992,228 | |

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. 20992

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 29H** well, the proposed well within the Wolfcamp horizontal spacing unit that is the subject of this case, and the **Da Vinci 7-18 Fed Com 30H** well.

- b. **Exhibit C.2** is a Locator Map identifying the DaVinci 7-18 E/2 project area, in proximity to the Capitan Reef, for the Wolfcamp horizontal spacing unit that is the subject of this application.
- c. **Exhibit C.3** is a Cross-Section Locator Map. This map identifies the cross-section running from A-A' with the cross-section well names and a blue dotted line in proximity to the proposed DaVinci 7-18 E/2 wells. It also identifies the sections in which the cross-section wells are located.
- d. **Exhibit C.4** is a Deep Structure Map on the top of the Wolfcamp formation. This map identifies the proposed **Da Vinci 7-18 Fed Com 29H** well with a red line. It also identifies the location of the cross-section running from A-A' with a blue dotted line. This map shows that the structure dips to the east.
- e. **Exhibit C.5** is a Lower Wolfcamp Isopach Map. It shows that the formation is relatively uniform across the proposed unit. It also shows the location of cross-section A-A' in proximity to the proposed well.
- f. **Exhibit C.6** is a Stratigraphic Cross Section hung on the top of the Wolfcamp formation. The well logs on the cross-section give a representative sample of the Wolfcamp formation in the area. The target zone for the well is the Wolfcamp C Shale, and that zone is consistent across the unit. The planned well-path for this well is indicated by a blue dashed line, and the letters 'LZ'.
- g. **Exhibit C.7** is a detailed view of the Target Zone within Stratigraphic Cross Section hung on the top of the Wolfcamp Fm. The target zone for the well is the Lower Wolfcamp C Shale and is identified in bright teal, and that zone is consistent across the unit.

- h. **Exhibit C.8** is a Well Bore Diagram for the proposed well in the above referenced case. It shows the well's TVD and setback from the proposed unit boundary.
4. Based upon my study as illustrated in these exhibits, knowledge of the geology in this area, and education and training, it is my expert opinion that:
- a. The horizontal spacing unit is justified from a geologic standpoint.
 - b. There are no structural impediments or faulting that will interfere with horizontal development.
 - c. Each quarter section in the unit will contribute more or less equally to production.
5. The preferred well orientation in this area is either N-S or E-W. This is due to the fact that regional max horizontal stress orientation in this area is approximately N45E.
-
6. The producing interval for each of these wells will be orthodox and will comply with the Division's set back requirements.
7. I attest that the information provided herein is true, correct and complete to the best of my knowledge and belief.