## BEFORE THE OIL CONSERVATION DIVISION EXAMINER HEARING AUGUST 9-10, 2023

#### APPLICATION OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

#### HEARING PACKET II

Case No. 23452:

Loosey Goosey 4-9 Fed Com 204H Well Loosey Goosey 4-9 Fed Com 304H Well

Case No. 23453:

Loosey Goosey 4-9 Fed Com 301H Well

Case No. 23454:

**Loosey Goosey 4-9 Fed Com 302H Well** 

Case No. 23455:

Loosey Goosey 4-9 Fed Com 303H Well

**CIMAREX ENERGY CO.** 

#### TAB 1 Reference for Case No. 23452-23455 Applications Case Nos. 23452-23455:

Loosey Goosey 4-9 Fed Com 204H Well Loosey Goosey 4-9 Fed Com 304H Well Loosey Goosey 4-9 Fed Com 301H Well Loosey Goosey 4-9 Fed Com 302H Well Loosey Goosey 4-9 Fed Com 303H Well

#### NMOCD Checklists Case Nos. 23452-23455 Prehearing Statements Case Nos. 23452-23455

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Wolfcamp Frac

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TAB 6 Exhibit E: Self-Affirmed Statement of Notice, Darin C. Savage

> Exhibit E-1: Notice Letters Exhibit E-2: Mailing List

Exhibit E-3: Affidavits of Publication

### **TAB 1**

Reference for Case Nos. 23452-23455 Applications Case Nos. 23452-23455:

> Loosey Goosey 4-9 Fed Com 204H Well Loosey Goosey 4-9 Fed Com 304H Well Loosey Goosey 4-9 Fed Com 301H Well Loosey Goosey 4-9 Fed Com 302H Well Loosey Goosey 4-9 Fed Com 303H Well

NMOCD Checklists Case Nos. 23452-23455 Prehearing Statement Case Nos. 23452-23455

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

APPLICATION OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

#### **APPLICATION**

Cimarex Energy Co. ("Cimarex"), OGRID No. 215099, through its undersigned attorneys, hereby files this Application with the Oil Conservation Division ("Division") pursuant to the provisions of NMSA 1978, Section 70-2-17, seeking an order (1) establishing a standard 320.89-acre, more or less, spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a stratigraphic equivalent of 9,373 feet (that being the top of 1st Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], a depth as defined on the log for the Hudson Federal #1 Well (API No. 30-025-32819), to a stratigraphic equivalent of 10,845 feet, as defined by same Well, that being the base of the Bone Spring formation, designated as an oil pool, underlying said unit. Section 4 is an irregular section with correction Lots.

In support of its Application, Cimarex states the following:

1. Cimarex is a working interest owner in the proposed horizontal spacing and proration unit ("HSU") and has a right to drill a well thereon.

- 2. Cimarex proposes and dedicates to the HSU the Loosey Goosey 4-9 Fed Com 204H Well and the Loosey Goosey 4-9 Fed Com 304H Well, as initial wells, to be drilled to a sufficient depth to test the Bone Spring formation.
- 3. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 204H Well,** an oil well, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 9, Township 20, Range 34 East, NMPM.
- 4. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 304H Well,** an oil well, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 9, Township 20, Range 34 East, NMPM.
- 5. The proposed wells are orthodox in their locations, and the take points and completed intervals comply with setback requirements under the statewide rules.
  - 6. Cimarex's review of the land records did not reveal any overlapping units.
- 7. Cimarex has sought in good faith but has been unable to obtain voluntary agreement from all interest owners to participate in the drilling of the wells or the commitment of their interests to the wells for their development within the proposed HSU.
- 8. The pooling of all interests in the Bone Spring formation within the proposed HSU will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.
- 9. In order to provide for its just and fair share of the oil and gas underlying the subject lands, Cimarex requests that all uncommitted interests in this HSU be pooled and that Cimarex be designated the operator of the proposed horizontal wells and HSU.

WHEREFORE, Cimarex requests that this Application be set for hearing on April 6, 2023, before an Examiner of the Oil Conservation Division, and after notice and hearing as required by

law, the Division enter an order:

A. Establishing of a standard 320.89-acre, more or less, spacing and proration unit

comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the

E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico;

B. Pooling all uncommitted mineral interests in the Bone Spring formation underlying

the proposed HSU;

C. Approving the Loosey Goosey 4-9 Fed Com 204H Well and the Loosey Goosey 4-

**9 Fed Com 304H Well** as the wells for the HSU.

D. Designating Cimarex as operator of this HSU and the horizontal wells to be drilled

thereon;

E. Authorizing Cimarex to recover its costs of drilling, equipping, and completing the

wells;

F. Approving actual operating charges and costs of supervision, to the maximum extent

allowable, while drilling and after completion, together with a provision adjusting the rates

pursuant to the COPAS accounting procedures; and

G. Setting a 200% charge for the risk assumed by Cimarex in drilling and completing

the wells in the event a working interest owner elects not to participate in the wells.

Respectfully submitted,

ABADIE & SCHILL, PC

/s/ Darin C. Savage

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**Attorneys for Cimarex Energy Co.** 

Application of Cimarex Energy Co. for a Horizontal Spacing and Proration Unit and Compulsory Pooling, Lea County, New Mexico. Applicant in the above-styled cause seeks an order from the Division: (1) establishing a standard 320.89-acre, more or less, horizontal spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. Section 4 is an irregular section containing correction lots. The proposed wells to be dedicated to the horizontal spacing unit are the Loosey Goosey 4-9 Fed Com 204H Well and the Loosey Goosey 4-9 Fed Com 304H Well, both oil wells, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 9, Township 20 South, Range 34 East, NMPM. The wells will be orthodox, and the take points and completed intervals will comply with the setback requirements under the statewide Rules; also to be considered will be the cost of drilling and completing the wells and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the wells and unit; and a 200% charge for the risk involved in drilling and completing the wells. The wells and lands are located approximately 40 miles northeast of Carlsbad, New Mexico.

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

APPLICATION OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case No. 23453

#### **APPLICATION**

Cimarex Energy Co. ("Cimarex"), OGRID No. 215099, through its undersigned attorneys, hereby files this Application with the Oil Conservation Division ("Division") pursuant to the provisions of NMSA 1978, Section 70-2-17, seeking an order (1) establishing a standard 320.21-acre, more or less, spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a stratigraphic equivalent of 9,373 feet (that being the top of 1st Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], a depth as defined on the log for the Hudson Federal #1 Well (API No. 30-025-32819), to a stratigraphic equivalent of 10,845 feet, as defined by same Well, that being the base of the Bone Spring formation, designated as an oil pool, underlying said unit. Section 4 is an irregular section with correction Lots.

In support of its Application, Cimarex states the following:

- 1. Cimarex is a working interest owner in the proposed horizontal spacing and proration unit ("HSU") and has a right to drill a well thereon.
- Cimarex proposes and dedicates to the HSU the Loosey Goosey 4-9 Fed Com
   301H Well, as the initial well, to be drilled to a sufficient depth to test the Bone Spring formation.

- 3. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 301H Well,** an oil well, to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SW/4 (Unit M) of Section 9, Township 20, Range 34 East, NMPM.
- 4. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under the statewide rules.
- 5. Cimarex has sought in good faith but has been unable to obtain voluntary agreement from all interest owners to participate in the drilling of the well or the commitment of their interests to the well for their development within the proposed HSU.
- 6. The pooling of all interests in the Bone Spring formation within the proposed HSU will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.
  - 7. Cimarex's review of the land records did not reveal any overlapping units.
- 8. In order to provide for its just and fair share of the oil and gas underlying the subject lands, Cimarex requests that all uncommitted interests in this HSU be pooled and that Cimarex be designated the operator of the proposed horizontal well and HSU.

WHEREFORE, Cimarex requests that this Application be set for hearing on April 6, 2023, before an Examiner of the Oil Conservation Division, and after notice and hearing as required by law, the Division enter an order:

A. Establishing of a standard 320.21-acre, more or less, spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico;

- B. Pooling all uncommitted mineral interests in the Bone Spring formation underlying the proposed HSU;
  - C. Approving the **Loosey Goosey 4-9 Fed Com 301H Well** as the well for the HSU.
- D. Designating Cimarex as operator of this HSU and the horizontal well to be drilled thereon;
- E. Authorizing Cimarex to recover its costs of drilling, equipping, and completing the well;
- F. Approving actual operating charges and costs of supervision, to the maximum extent allowable, while drilling and after completion, together with a provision adjusting the rates pursuant to the COPAS accounting procedures; and
- G. Setting a 200% charge for the risk assumed by Cimarex in drilling and completing the well in the event a working interest owner elects not to participate in the well.

Respectfully submitted,

ABADIE & SCHILL, PC

/s/ Darin C. Savage

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**Attorneys for Cimarex Energy Co.** 

Application of Cimarex Energy Co. for a Horizontal Spacing and Proration Unit and Compulsory Pooling, Lea County, New Mexico. Applicant in the above-styled cause seeks an order from the Division: (1) establishing a standard 320.21-acre, more or less, horizontal spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. Section 4 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the Loosey Goosey 4-9 Fed Com 301H Well, an oil well, to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SW/4 (Unit M) of Section 9, Township 20 South, Range 34 East, NMPM. The well will be orthodox, and the take points and completed interval will comply with the setback requirements under the statewide Rules; also to be considered will be the cost of drilling and completing the well and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the well and unit; and a 200% charge for the risk involved in drilling and completing the well. The well and lands are located approximately 40 miles northeast of Carlsbad, New Mexico.

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

APPLICATION OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case No.	23454
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#### **APPLICATION**

Cimarex Energy Co. ("Cimarex"), OGRID No. 215099, through its undersigned attorneys, hereby files this Application with the Oil Conservation Division ("Division") pursuant to the provisions of NMSA 1978, Section 70-2-17, seeking an order (1) establishing a standard 320.44-acre, more or less, spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a stratigraphic equivalent of 9,373 feet (that being the top of 1st Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], a depth as defined on the log for the Hudson Federal #1 Well (API No. 30-025-32819), to a stratigraphic equivalent of 10,845 feet, as defined by same Well, that being the base of the Bone Spring formation, designated as an oil pool, underlying said unit. Section 4 is an irregular section with correction Lots.

In support of its Application, Cimarex states the following:

- 1. Cimarex is a working interest owner in the proposed horizontal spacing and proration unit ("HSU") and has a right to drill a well thereon.
- 2. Cimarex proposes and dedicates to the HSU the **Loosey Goosey 4-9 Fed Com 302H Well,** as the initial well, to be drilled to a sufficient depth to test the Bone Spring formation.

- 3. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 302H Well,** an oil well, to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SW/4 (Unit N) of Section 9, Township 20, Range 34 East, NMPM.
- 4. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under the statewide rules.
  - 5. Cimarex's review of the land records did not reveal any overlapping units.
- 6. Cimarex has sought in good faith but has been unable to obtain voluntary agreement from all interest owners to participate in the drilling of the well or the commitment of their interests to the well for their development within the proposed HSU.
- 7. The pooling of all interests in the Bone Spring formation within the proposed HSU will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.
- 8. In order to provide for its just and fair share of the oil and gas underlying the subject lands, Cimarex requests that all uncommitted interests in this HSU be pooled and that Cimarex be designated the operator of the proposed horizontal well and HSU.

WHEREFORE, Cimarex requests that this Application be set for hearing on April 6, 2023, before an Examiner of the Oil Conservation Division, and after notice and hearing as required by law, the Division enter an order:

A. Establishing of a standard 320.44-acre, more or less, spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico;

- B. Pooling all uncommitted mineral interests in the Bone Spring formation underlying the proposed HSU;
  - C. Approving the Loosey Goosey 4-9 Fed Com 302H Well as the well for the HSU.
- D. Designating Cimarex as operator of this HSU and the horizontal well to be drilled thereon;
- E. Authorizing Cimarex to recover its costs of drilling, equipping, and completing the well;
- F. Approving actual operating charges and costs of supervision, to the maximum extent allowable, while drilling and after completion, together with a provision adjusting the rates pursuant to the COPAS accounting procedures; and
- G. Setting a 200% charge for the risk assumed by Cimarex in drilling and completing the well in the event a working interest owner elects not to participate in the well.

Respectfully submitted,

ABADIE & SCHILL, PC

/s/ Darin C. Savage

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Attorneys for Cimarex Energy Co.

Application of Cimarex Energy Co. for a Horizontal Spacing and Proration Unit and Compulsory Pooling, Lea County, New Mexico. Applicant in the above-styled cause seeks an order from the Division: (1) establishing a standard 320.44-acre, more or less, horizontal spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. Section 4 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the Loosey Goosey 4-9 Fed Com 302H Well, an oil well, to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SW/4 (Unit N) of Section 9, Township 20 South, Range 34 East, NMPM. The well will be orthodox, and the take points and completed interval will comply with the setback requirements under the statewide Rules; also to be considered will be the cost of drilling and completing the well and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the well and unit; and a 200% charge for the risk involved in drilling and completing the well. The well and lands are located approximately 40 miles northeast of Carlsbad, New Mexico.

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

APPLICATION OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case No. 23455

#### **APPLICATION**

Cimarex Energy Co. ("Cimarex"), OGRID No. 215099, through its undersigned attorneys, hereby files this Application with the Oil Conservation Division ("Division") pursuant to the provisions of NMSA 1978, Section 70-2-17, seeking an order (1) establishing a standard 320.66-acre, more or less, spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a stratigraphic equivalent of 9,373 feet (that being the top of 1st Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], a depth as defined on the log for the Hudson Federal #1 Well (API No. 30-025-32819), to a stratigraphic equivalent of 10,845 feet, as defined by same Well, that being the base of the Bone Spring formation, designated as an oil pool, underlying said unit. Section 4 is an irregular section with correction Lots.

In support of its Application, Cimarex states the following:

- 1. Cimarex is a working interest owner in the proposed horizontal spacing and proration unit ("HSU") and has a right to drill a well thereon.
- Cimarex proposes and dedicates to the HSU the Loosey Goosey 4-9 Fed Com
   303H Well, as the initial well, to be drilled to a sufficient depth to test the Bone Spring formation.

- 3. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 303H Well,** an oil well, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SE/4 (Unit O) of Section 9, Township 20, Range 34 East, NMPM.
- 4. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under the statewide rules.
  - 5. Cimarex's review of the land records did not reveal any overlapping units.
- 6. Cimarex has sought in good faith but has been unable to obtain voluntary agreement from all interest owners to participate in the drilling of the well or the commitment of their interests to the well for their development within the proposed HSU.
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- 8. In order to provide for its just and fair share of the oil and gas underlying the subject lands, Cimarex requests that all uncommitted interests in this HSU be pooled and that Cimarex be designated the operator of the proposed horizontal well and HSU.

WHEREFORE, Cimarex requests that this Application be set for hearing on April 6, 2023, before an Examiner of the Oil Conservation Division, and after notice and hearing as required by law, the Division enter an order:

A. Establishing of a standard 320.66-acre, more or less, spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico;

- B. Pooling all uncommitted mineral interests in the Bone Spring formation underlying the proposed HSU;
  - C. Approving the Loosey Goosey 4-9 Fed Com 303H Well as the well for the HSU.
- D. Designating Cimarex as operator of this HSU and the horizontal well to be drilled thereon;
- E. Authorizing Cimarex to recover its costs of drilling, equipping, and completing the well;
- F. Approving actual operating charges and costs of supervision, to the maximum extent allowable, while drilling and after completion, together with a provision adjusting the rates pursuant to the COPAS accounting procedures; and
- G. Setting a 200% charge for the risk assumed by Cimarex in drilling and completing the well in the event a working interest owner elects not to participate in the well.

Respectfully submitted,

ABADIE & SCHILL, PC

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Attorneys for Cimarex Energy Co.

Application of Cimarex Energy Co. for a Horizontal Spacing and Proration Unit and Compulsory Pooling, Lea County, New Mexico. Applicant in the above-styled cause seeks an order from the Division: (1) establishing a standard 320.66-acre, more or less, horizontal spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. Section 4 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the Loosey Goosey 4-9 Fed Com 303H Well, an oil well, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SE/4 (Unit O) of Section 9, Township 20 South, Range 34 East, NMPM. The well will be orthodox, and the take points and completed interval will comply with the setback requirements under the statewide Rules; also to be considered will be the cost of drilling and completing the well and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the well and unit; and a 200% charge for the risk involved in drilling and completing the well. The well and lands are located approximately 40 miles northeast of Carlsbad, New Mexico.

ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS	
Case: 23452	APPLICANT'S RESPONSE
Date: August 9, 2023 (Scheduled hearing)	
Applicant	Cimarex Energy Co.
Designated Operator & OGRID (affiliation if applicable)	215099
Applicant's Counsel:	Darin C. Savage, Abadie & Schill, P.C.
Case Title:	APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	Permian Resources Operating, LLC Read & Stevens, Inc. Northern Oil and Gas, Inc. Attorneys for Sandstone Properties, LLC
Well Family	Loosey Goosey
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Teas; Bone Spring, East (96637)
Well Location Setback Rules:	Statewide Rules
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320.89-acre, more or less
Building Blocks:	Quarter-Quarter Sections (40 Acre Blocks)
Orientation:	North to South
Description: TRS/County	Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested in this application?	Yes, Standard Spacing Unit
Other Situations	
Depth Severance: Y/N. If yes, description	No, N/A
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	No
Applicant's Ownership in Each Tract	See Exhibit A-2.1, breakdown of ownership
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard prings 8.30202) 7:31:50 AM	Add wells as needed

Exhibit A

Unlocatable Parties to be Pooled

Ownership Depth Severance (including percentage above &	Page 24
below)	N/A
Joinder	
Sample Copy of Proposal Letter	Exhibit A-3
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-2.1
Chronology of Contact with Non-Joined Working Interests	Exhibit A-4
Overhead Rates In Proposal Letter	Exhibit A-3
Cost Estimate to Drill and Complete	Exhibit A-3
Cost Estimate to Equip Well	Exhibit A-3
Cost Estimate for Production Facilities	Exhibit A-3
Geology	
Summary (including special considerations)	Exhibit B
Spacing Unit Schematic	Exhibit B-5, B-6, B-8, B-11, B-12
Gunbarrel/Lateral Trajectory Schematic	Exhibit B-3, B-4,
Well Orientation (with rationale)	Exhibit A-1, B-5, B-6, B-8, B-11, B-12
Target Formation	Exhibit B-3, B-4, B-6, B-7, B-13, B-14
HSU Cross Section	Exhibit B-3, B-4, B-6, B-7, B-13, B-14
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	Exhibit A-1
Tracts	Exhibit A-2.1
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-2.1
General Location Map (including basin)	Exhibit A-2.1
Well Bore Location Map	Exhibit A-1, B-2, B-3
Structure Contour Map - Subsea Depth	Exhibit B-5, B-6, B-11, B-16
Cross Section Location Map (including wells)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14
Cross Section (including Landing Zone)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14
Additional Information	
Special Provisions/Stipulations	
CERTIFICATION: I hereby certify that the information provi	ded in this checklist is complete and accurate.
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	/s/ Darin Savage
Date:	Date 8-2-2023

Case: 23455	APPLICANT'S RESPONSE
Date: August 9, 2023 (Scheduled hearing)	
Applicant	Cimarex Energy Co.
Designated Operator & OGRID (affiliation if applicable)	215099
Applicant's Counsel:	Darin C. Savage, Abadie & Schill, P.C.
Case Title:	APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	Permian Resources Operating, LLC Read & Stevens, Inc. Northern Oil and Gas, Inc. Attorneys for Sandstone Properties, LLC
Well Family	Loosey Goosey
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Teas; Bone Spring, East (96637)
Well Location Setback Rules:	Statewide Rules
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320.66-acre, more or less
Building Blocks:	Quarter-Quarter Sections (40 Acre Blocks)
Orientation:	North to South
Description: TRS/County	Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested this application?	Yes, Standard Spacing Unit
Other Situations	
Depth Severance: Y/N. If yes, description	No, N/A
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	No
Applicant's Ownership in Each Tract	See Exhibit A-2.4, breakdown of ownership

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Name & API (if assigned), surface and bottom hole	Add wells as needed
location, footages, completion target, orientation,	
well #1  Horizontal Well First and Last Take Points	Loosey Goosey 4-9 Fed Com 303H Well (API No. 30-015-Pending), SHL: Unit O, 194' FSL, 1448' FEL, Section 33, T19S-R34E; BHL: Unit O, 100' FSL, 1744' FEL, Section 9, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location  Loosey Goosey 4-9 Fed Com 303H Well: FTP: 100' FNL,
	1744' FEL, Section 4; LTP: 100' FSL, 1744' FEL, Section 9
Completion Target (Formation, TVD and MD)	Loosey Goosey 4-9 Fed Com 303H Well: TVD approx. 10,810', TMD 20,966'; Bone Spring formation, See Exhibit A, A-1
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	\$8000, Exhibit A
Production Supervision/Month \$	\$800, Exhibit A
Justification for Supervision Costs	Exhibit A
Requested Risk Charge	200%, Exhibit A
Notice of Hearing	
Proposed Notice of Hearing	Exhibit E, E-1
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit E-2
Proof of Published Notice of Hearing (10 days before heari	r Exhibit E-3
Ownership Determination	
Land Ownership Schematic of the Spacing Unit	Exhibit A-2.4
Tract List (including lease numbers and owners)	Exhibit A-2.4
If approval of Non-Standard Spacing Unit is requested, Tract List (including lease numbers and owners) of Tracts	
subject to notice requirements.	N/A
Pooled Parties (including ownership type)	All uncommitted WI owners; including as shown on Exhibit A-2
Unlocatable Parties to be Pooled	Exhibit A-2
Ownership Depth Severance (including percentage above	
& below)	N/A
Joinder	
Sample Copy of Proposal Letter	Exhibit A-3
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-2.4
Chronology of Contact with Non-Joined Working Interests	Exhibit A-4
Overhead Rates In Proposal Letter	Exhibit A-3
Cost Estimate to Drill and Complete	Exhibit A-3
Released to Imaging: 8/3/202317:31:50 AM	Exhibit A-3

Cost Estimate for Production Facilities	Exhibit A-3
Geology	
Summary (including special considerations)	Exhibit B
Spacing Unit Schematic	Exhibit B-5, B-6, B-8
Gunbarrel/Lateral Trajectory Schematic	Exhibit B-3, B-4,
Well Orientation (with rationale)	Exhibit A-1, B-5, B-6, B-8
Target Formation	Exhibit B-3, B-4, B-6, B-7
HSU Cross Section	Exhibit B-3, B-4, B-6, B-7
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	Exhibit A-1
Tracts	Exhibit A-2.4
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-2.4
General Location Map (including basin)	Exhibit A-2.4
Well Bore Location Map	Exhibit A-1, B-2, B-3
Structure Contour Map - Subsea Depth	Exhibit B-5, B-6
Cross Section Location Map (including wells)	Exhibit B-3, B-4, B-6, B-7
Cross Section (including Landing Zone)	Exhibit B-3, B-4, B-6, B-7
Additional Information	
Special Provisions/Stipulations	
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	/s/ Darin Savage
Date:	Date 8-2-2023

Case: 23454	APPLICANT'S RESPONSE
Date: July 20, 2023 (Scheduled hearing)	
Applicant	Cimarex Energy Co.
Designated Operator & OGRID (affiliation if applicable)	215099
Applicant's Counsel:	Darin C. Savage, Abadie & Schill, P.C.
Case Title:	APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	Permian Resources Operating, LLC Read & Stevens, Inc. Northern Oil and Gas, Inc. Attorneys for Sandstone Properties, LLC
Well Family	Loosey Goosey
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Teas; Bone Spring, East (96637)
Well Location Setback Rules:	Statewide Rules
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320.44-acre, more or less
Building Blocks:	Quarter-Quarter Sections (40 Acre Blocks)
Orientation:	North to South
Description: TRS/County	Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested in this application?	Yes, Standard Spacing Unit
Other Situations	
Depth Severance: Y/N. If yes, description	No, N/A
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	No
Applicant's Ownership in Each Tract	See Exhibit A-2.3, breakdown of ownership
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed

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Summary (including special considerations)	Exhibit B
Spacing Unit Schematic	Exhibit B-5, B-6, B-8
Gunbarrel/Lateral Trajectory Schematic	Exhibit B-3, B-4,
Well Orientation (with rationale)	Exhibit A-1, B-5, B-6, B-8
Target Formation	Exhibit B-3, B-4, B-6, B-7
HSU Cross Section	Exhibit B-3, B-4, B-6, B-7
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	Exhibit A-1
Tracts	Exhibit A-2.3
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-2.3
General Location Map (including basin)	Exhibit A-2.3
Well Bore Location Map	Exhibit A-1, B-2, B-3
Structure Contour Map - Subsea Depth	Exhibit B-5, B-6
Cross Section Location Map (including wells)	Exhibit B-3, B-4, B-6, B-7
Cross Section (including Landing Zone)	Exhibit B-3, B-4, B-6, B-7
Additional Information	
Special Provisions/Stipulations	
CERTIFICATION: I hereby certify that the information p	rovided in this checklist is complete and accurate.
<b>Printed Name</b> (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	/s/ Darin Savage
Date:	Date 8-2-2023

Case: 23455	APPLICANT'S RESPONSE
Date: August 9, 2023 (Scheduled hearing)	
Applicant	Cimarex Energy Co.
Designated Operator & OGRID (affiliation if applicable)	215099
Applicant's Counsel:	Darin C. Savage, Abadie & Schill, P.C.
Case Title:	APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	Permian Resources Operating, LLC Read & Stevens, Inc. Northern Oil and Gas, Inc. Attorneys for Sandstone Properties, LLC
Well Family	Loosey Goosey
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Teas; Bone Spring, East (96637)
Well Location Setback Rules:	Statewide Rules
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320.66-acre, more or less
Building Blocks:	Quarter-Quarter Sections (40 Acre Blocks)
Orientation:	North to South
Description: TRS/County	Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested this application?	Yes, Standard Spacing Unit
Other Situations	
Depth Severance: Y/N. If yes, description	No, N/A
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	No
Applicant's Ownership in Each Tract	See Exhibit A-2.4, breakdown of ownership

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Name & API (if assigned), surface and bottom hole	Add wells as needed
location, footages, completion target, orientation,	
completion status (standard or non-standard) Well #1	Loosey Goosey 4-9 Fed Com 303H Well (API No. 30-015-Pending), SHL: Unit O, 194' FSL, 1448' FEL, Section 33, T19S-R34E; BHL: Unit O, 100' FSL, 1744' FEL, Section 9, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location
Horizontal Well First and Last Take Points	Loosey Goosey 4-9 Fed Com 303H Well: FTP: 100' FNL, 1744' FEL, Section 4; LTP: 100' FSL, 1744' FEL, Section 9
Completion Target (Formation, TVD and MD)	Loosey Goosey 4-9 Fed Com 303H Well: TVD approx. 10,810', TMD 20,966'; Bone Spring formation, See Exhibit A, A-1
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	\$8000, Exhibit A
Production Supervision/Month \$	\$800, Exhibit A
Justification for Supervision Costs	Exhibit A
Requested Risk Charge	200%, Exhibit A
Notice of Hearing	
Proposed Notice of Hearing	Exhibit E, E-1
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit E-2
Proof of Published Notice of Hearing (10 days before heari	r Exhibit E-3
Ownership Determination	
Land Ownership Schematic of the Spacing Unit	Exhibit A-2.4
Tract List (including lease numbers and owners)	Exhibit A-2.4
If approval of Non-Standard Spacing Unit is requested, Tract List (including lease numbers and owners) of Tracts	N/A
subject to notice requirements.	N/A
Pooled Parties (including ownership type)	All uncommitted WI owners; including as shown on Exhibit A-2
Unlocatable Parties to be Pooled	Exhibit A-2
Ownership Depth Severance (including percentage above & below)	N/A
Joinder	
Sample Copy of Proposal Letter	Exhibit A-3
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-2.4
Chronology of Contact with Non-Joined Working Interests	Exhibit A-4
Overhead Rates In Proposal Letter	Exhibit A-3
Cost Estimate to Drill and Complete	Exhibit A-3
Released to Imaging: 8/3/2033/7:31:50 AM	Exhibit A-3

Cost Estimate for Production Facilities	Exhibit A-3
Geology	
Summary (including special considerations)	Exhibit B
Spacing Unit Schematic	Exhibit B-5, B-6, B-8
Gunbarrel/Lateral Trajectory Schematic	Exhibit B-3, B-4,
Well Orientation (with rationale)	Exhibit A-1, B-5, B-6, B-8
Target Formation	Exhibit B-3, B-4, B-6, B-7
HSU Cross Section	Exhibit B-3, B-4, B-6, B-7
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	Exhibit A-1
Tracts	Exhibit A-2.4
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-2.4
General Location Map (including basin)	Exhibit A-2.4
Well Bore Location Map	Exhibit A-1, B-2, B-3
Structure Contour Map - Subsea Depth	Exhibit B-5, B-6
Cross Section Location Map (including wells)	Exhibit B-3, B-4, B-6, B-7
Cross Section (including Landing Zone)	Exhibit B-3, B-4, B-6, B-7
Additional Information	
Special Provisions/Stipulations	
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	/s/ Darin Savage
Date:	Date 8-2-2023

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

APPLICATIONS OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case Nos. 23452, 23453, 23454 & 23455

AMENDED PREHEARING STATEMENT

Cimarex Energy Co., ("Cimarex"), OGRID No. 215099, through its undersigned attorneys, submits the following Amended Prehearing Statement pursuant to the rules of the Oil Conservation Division ("Division") for the above referenced Cases which are consolidated with the Case Nos. 23448-23451, 23594 – 23601 and 23508 – 23523 for a contested hearing pursuant to that certain "Further Amended Pre-Hearing Order" issued on June 8, 2023. This Prehearing Statement describes Cimarex's Case Nos. 23452-23455, which propose to pool the Bone Spring formation underlying Sections 4 and 9, in Township 20 South, Range 34 East, NMPM, Lea County ("Subject Lands") and which compete directly against Case Nos. 23508 – 23511 filed by Read & Stevens, Inc., in association with Permian Resources Operating, LLC (collectively referred to herein as "Permian Resources") which also propose to pool the Bone Spring formation underlying the Subject Lands.

**APPEARANCES** 

**APPLICANT** ATTORNEY

Cimarex Energy Co. Darin C. Savage

Andrew D. Schill William E. Zimsky Abadie & Schill, PC 214 McKenzie Street Santa Fe, New Mexico 87501

Telephone: 970.385.4401

Facsimile: 970.385.4901 darin@abadieschill.com andrew@abadieschill.com bill@abadieschill.com

#### **COMPETING PARTY**

Read & Stevens, Inc., in association with Permian Resources Operating, LLC

Michael H. Feldewert Adam G. Rankin Julia Broggi Paula M. Vance Holland & Hart LLP Post Office Box 2208 Santa Fe, NM 87504 505-988-4421

Facsimile: 505-983-6043 mfeldewert@hollandhart.com agrankin@hollandhart.com jbroggi@hollandhart.com pmvance@hollandhart.com

#### **ADDITIONAL PARTIES**

Sandstone Properties, LLC

Sealy Cavin, Jr.
Scott S. Morgan
Brandon D. Hajny
P.O. Box 1216
Albuquerque, NM 87103
505-243-5400
scavin@cilawnm.com
smorgan@cilawnm.com
bhajny@cilawnm.com

Northern Oil and Gas, Inc.

Blake C. Jones Steptoe & Johnson PLLC 1780 Hughes Landing Blvd., Ste 750 The Woodlands, TX 77380 281-203-5730 Facsimile: 281-203-5701

blake.jones@steptoe-johnson.com

#### **APPLICANT'S STATEMENT OF THE CASES**

Cimarex provides this Prehearing Statement to provide a summary of Case Nos. 23452, 23453, 23454 and 23455. These four cases seek to develop the Bone Spring formation in the Subject Lands (i.e., Sections 4 and 9), and these cases are grouped and organized in a logical manner to present to the Division an intelligible overview of the cases that can be readily followed.

In Case No. 23452, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, the Teas; Bone Spring, East [Pool Code 96637], designated as an oil pool, underlying a standard 320.89-acre, more or less, spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Loosey Goosey 4-9 Fed Com 204H Well** and the **Loosey Goosey 4-9 Fed Com 304H Well**, as initial wells, to be drilled to a sufficient depth to test the Bone Spring formation. The proposed wells are orthodox in their locations, and the take points and completed intervals comply with setback requirements under statewide rules.

In Case No. 23453, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, the Teas; Bone Spring, East [Pool Code 96637], designated as an oil pool, underlying a standard 320.21-acre, more or less, spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Loosey Goosey 4-9 Fed Com 301H Well,** as the initial well, to be drilled to a sufficient depth to test the Bone Spring formation. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under statewide rules.

In Case No. 23454, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, the Teas; Bone Spring, East [Pool Code 96637], designated as an oil pool, underlying a standard 320.44-acre, more or less, spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Loosey Goosey 4-9 Fed Com 302H Well,** as the initial well, to be drilled to a sufficient depth to test the Bone Spring formation. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under statewide rules.

In Case No. 23455, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, the Teas; Bone Spring, East [Pool Code 96637], designated as an oil pool, designated as an oil pool, underlying a standard 320.66-acre, more or less, spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Loosey Goosey 4-9 Fed Com 303H Well,** as the initial well, to be drilled to a sufficient depth to test the Bone Spring formation. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under statewide rules.

Cimarex's four cases described herein and its plans for development compete directly with Case Nos. 23508, 23509, 23510, and 23511 filed by Permian Resources for the Subject Lands. In Case No. 23508, Permian Resources seeks to pool all uncommitted interests in the Bone Spring formation underlying a standard 320-acre, more or less, spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2

of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Bane 4-9 Federal Com 111H, 121H, 122H, 171H, and 131H wells to said unit.

In Case No. 23509, Permian Resources seeks to pool all uncommitted interests in the Bone Spring formation underlying a standard 320-acre, more or less, spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Bane 4-9 Federal Com 112H, 123H, 124H, 172H, and 132H wells to said unit.

In Case No. 23510, Permian Resources seeks to pool all uncommitted interests in the Bone Spring formation underlying a standard 320-acre, more or less, spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Bane 4-9 Federal Com 113H, 125H, 126H, 173H, and 133H wells to said unit.

In Case No. 23511, Permian Resources seeks to pool all uncommitted interests in the Bone Spring formation underlying a standard 320-acre, more or less, spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Bane 4-9 Federal Com 114H, 127H, 128H, 174H, and 134H wells to said unit.

#### APPLICANT'S PROPOSED EVIDENCE AND WITNESS QUALIFICATIONS

WITNESS ESTIMATED TIME **EXHIBITS** 

Approx. 45 min Landman: John Coffman Approx. 11 Qualifications: I graduated in 2018 from Texas Tech University with a Bachelor's degree in Business Administration with an emphasis on Energy Commerce. I have worked at Cimarex and

Coterra Energy Inc. ("Coterra") for approximately 4 years, and I have been working in New Mexico for 4 years. (I was originally employed by Cimarex. Since October 1, 2021, when Cimarex merged with Cabot Oil & Gas Corporation to form Coterra, I have been an employee of Coterra.) My credentials as an expert witness in petroleum land matters have been accepted by the Division

and made a matter of record.

Geologist: Staci Meuller Approx. 45 min Approx. 21 Qualifications: I have a Bachelor of Science Degree in Geophysical Engineering from Colorado School of Mines, and a Master of Science Degree in Geophysics from Colorado School of Mines. I have worked on New Mexico Oil and Gas matters since July 2018. My credentials as an expert witness in geology have been accepted by the Division and made a matter of record.

Reservoir Engineer: Eddie Behm Approx. 45 minutes Approx. 23 Qualifications: I attended the University of Tulsa and graduated with a Bachelor of Science in Petroleum Engineering in 2011. I have worked for Occidental, California Resources prior to working for Cimarex and have been employed as a Production and Reservoir Engineer for Cimarex and Coterra (as of October 1, 2021) for the last 6 years, working in the Delaware Basin with a primary focus on Lea County, New Mexico. I have previously testified before the Division as an expert in Reservoir Engineering, and my credentials have been accepted of record.

Facilities Engineer: Calvin Boyle Approx. 15 min Approx. 2 Qualifications: I attended the University of Oklahoma and graduated with a Bachelor of Science in Petroleum Engineering in 2016 followed by Oklahoma State University where I graduated with a Master of Business Administration in 2018. I worked for Halliburton prior to working for Cimarex and have been employed as a Field, Production, and Facilities engineer for Cimarex and Coterra (as of October 1, 2021) for the last 4 years, working in the Delaware Basin with a primary focus on Lea County, New Mexico. I am familiar with the subject applications filed in the abovereferenced Cases and the facilities proposed by Cimarex involved. I have not testified previously before the Division and am providing a one-page resume.

#### LIST OF MATERIAL FACTS NOT IN DISPUTE

Parties are in general agreement that the Bone Spring formation underlying the Subject

Lands would be productive if developed and should be developed; however, there are factual

differences regarding the best way to achieve optimum development and productivity or the Bone Spring.

#### **LIST OF DISPUTED FACTS AND ISSUES**

The central issue in Cimarex's Case Nos. 23452 – 23455 and Permian Resources' competing Case Nos. 23508 – 23511 is which party should be the designated operator for the Bone Spring formation in the Subject Lands. In addition, there are specific disagreements between the parties regarding (1) the number of wells that should be used to develop the Bone Spring, (2) the depths and spacing of the wells, (3) the costs of developing the Bone Spring underlying the Subject Lands; and (4) a dispute about whether the Upper Wolfcamp should be drilled and to what extent it should be developed (Cimarex asserts that the drilling of the Upper Wolfcamp would result in waste and harm to correlative rights; while Permian Resources proposes to drill the Upper Wolfcamp).

#### PROCEDURAL MATTERS

This contested hearing includes Cimarex's Case Nos. 23452 – 23455 and Permian Resources' competing applications in Case Nos. 23508 – 23511, as described herein, but the hearing also includes numerous additional cases for the Bone Spring in Sections 5 and 8, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and consideration of whether to drill the Wolfcamp formation. In all, the Division will need to review and consider 32 cases addressing both the Bone Spring and Wolfcamp in Sections 5 and 8 and Sections 4 and 9, all in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. The Prehearing Statements submitted in these matters, three Prehearing Statements in all, are organized in an effort to provide a manageable approach to reviewing the cases by addressing (1) the 8 competing cases in the Bone

4 and 9 and Sections 5 and 8.

Spring for Sections 5 and 8; (2) the 8 competing cases in the Bone Spring for Sections 4 and 9; and finally (3) the status of the competing cases filed for the Wolfcamp formation in both Sections

Respectfully submitted,

ABADIE & SCHILL, PC

/s/ Darin C. Savage

Darin C. Savage

Andrew D. Schill William E. Zimsky 214 McKenzie Street Santa Fe, New Mexico 87501 Telephone: 970.385.4401 Facsimile: 970.385.4901 darin@abadieschill.com andrew@abadieschill.com bill@abadieschill.com

**Attorneys for Cimarex Energy Co.** 

#### **CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing was filed with the New Mexico Oil Conservation Division and was served on counsel of record via electronic mail on August 2, 2023.

Michael H. Feldewert – mfeldewert@hollandhart.com Adam G. Rankin – agrankin@hollandhart.com Julia Broggi – jbroggi@hollandhart.com Paula M. Vance – pmvance@hollandhart.com

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Attorneys for Sandstone Properties, LLC

/s/ Darin C. Savage

Darin C. Savage

# TAB 2

Case Nos. 23452-23455

Exhibit A: Self-Affirmed Statement of John Coffman Landman

Exhibit A-1: C-102 Forms

Exhibit A-2.1: Ownership and Sectional Map Exhibit A-2.2: Ownership and Sectional Map

Exhibit A-2.3: Ownership and Sectional Map Exhibit A-2.4: Ownership and Sectional Map

Exhibit A-3: Well Proposal Letters and AFEs

Exhibit A-4: Chronology of Contacts with Uncommitted Owners

Exhibit A-5: Support Letters from Interest Owners Exhibit A-6: Read and Stevens Original Well Proposal

Exhibit A-7: Ownership Supporting Cimarex Exhibit A-8: Cost Difference Between Plans

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

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

Case Nos. 23452, 23453, 23454 & 23455

### SELF-AFFIRMED STATEMENT OF JOHN COFFMAN

I, being duly sworn on oath, state the following:

- 1. I am over the age of eighteen years and have the capacity to execute this Self-Affirmed Statement, which is based on my personal knowledge.
- 2. I am employed as a Landman with Coterra Energy, Inc., and its subsidiary Cimarex Energy Co. ("Cimarex"), the applicant in this case, and I am familiar with the subject application and the lands involved.
- 3. I graduated in 2018 from Texas Tech University with a bachelor's degree in Business Administration with an emphasis on Energy Commerce. I have worked at Cimarex for approximately 4 years, and I have been working in New Mexico for 5 years. My credentials as an expert witness in petroleum land matters have been accepted by the New Mexico Oil Conservation Division ("Division") and made a matter of record.
- 4. This Statement is submitted in connection with the filing by Cimarex of the above-referenced compulsory pooling applications pursuant to 19.15.4.12.A(1).
- 5. The Land Statement is the second Statement placed in this Hearing Packet II to address the four cases (Case Nos. 23452-23455) that involve the Bone Spring formation, in which resides the primary reservoir and common source of supply, for Sections 4 and 9, Township 20



South, Range 34 East, NMPM, Lea County, New Mexico, as it applies to Cimarex's Loosey Goosey wells. This Land Statement will discuss the Loosey Goosey wells both within the four cases that specifically focus on the wells, but also within the broader context of Cimarex's development plan for all the Subject Lands.

- 6. This Hearing Packet II also contains the full set of geology and engineering testimony and exhibits, for all 16 cases, that provide a larger focus on the background, technical detail, and context that support and elucidate the Landman Statement.
- 7. Thus, as we begin with the Loosey Goosey wells, the above-referenced cases (Case Nos. 23452 23455) all seek to develop the Bone Spring formation underlying Sections 4 and 9, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico.
- 8. Under <u>Case No. 23452</u>, Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Spring formation, more specifically, the Teas; Bone Spring, East [Pool Code 96637], designated as an oil pool, underlying a standard 320.89-acre, more or less, spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit two initial wells: the **Loosey Goosey 4-9** Fed Com 204H Well, and the Loosey Goosey 4-9 Fed Com 304H Well.
- 9. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 204H Well** (API pending) to be horizontally drilled from a surface location 194' FSL and 1428' FEL of Section 33, Township 19 South, Range 34 East to a bottom hole location 100' FSL and 330' FEL of Section 9, Township 20 South, Range 34 East; approximate TVD of 10,300'; approximate TMD of 20,518'; FTP in Section 4: 100' FNL, 330' FEL; LTP in Section 9: 100' FSL, 330' FEL.

- 10. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 304H Well** (API pending) to be horizontally drilled from a surface location 194' FSL and 1408' FEL of Section 33 to a bottom hole location 100' FSL and 330' FEL of Section 9; approximate TVD of 10,800'; approximate TMD of 21,075'; FTP in Section 4: 100' FNL, 330' FEL; LTP in Section 9: 100' FSL, 330' FEL.
- 11. Under <u>Case No. 23453</u>, Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Spring formation, more specifically, the Teas; Bone Spring, East [Pool Code 96637], designated as an oil pool,, underlying a standard 320.21-acre, more or less, spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4 and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit the **Loosey Goosey 4-9 Fed Com 301H Well**.
- 12. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 301H Well** (API pending) to be horizontally drilled from a surface location 1189' FSL and 1464' FWL of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location 100' FSL and 706' FWL of Section 9 Township 20 South, Range 34 East, NMPM; approximate TVD of 10,830'; approximate TMD of 21,091'; FTP in Section 4: 100' FNL, 706' FWL; LTP in Section 9: 100' FSL, 706' FWL.
- 13. Under <u>Case No. 23454</u>, Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Spring formation, more specifically, the Teas; Bone Spring, East [Pool Code 96637], designated as an oil pool, underlying a standard 320.44-acre, more or less, spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4 and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit the **Loosey Goosey 4-9 Fed Com 302H Well**.

- 14. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 302H Well** (API pending) to be horizontally drilled from a surface location 1189' FSL and 1484' FWL of Section 33 Township 19 South, Range 34 East, NMPM, to a bottom hole location in the 100' FSL and 2120' FWL of Section 9, Township 20 South, Range 34 East; with an approximate TVD of 10,820'; approximate TMD of 21,100'; FTP in Section 4: 100' FNL, 2,120' FWL; LTP in Section 9: 100' FSL, 2,120' FWL.
- 15. Under <u>Case No. 23455</u>, Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Spring formation, more specifically, the Teas; Bone Spring, East [Pool Code 96637], designated as an oil pool, underlying a standard 320.66-acre, more or less, spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4 and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit the **Loosey Goosey 4-9 Fed Com 303H Well**.
- 16. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 303H Well** (API pending) to be horizontally drilled from a surface location 194' FSL and 1448' FEL of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location 100' FSL and 1,744' FEL of Section 9; approximate TVD of 10,810'; approximate TMD of 20,966'; FTP in Section 4: 100' FNL, 1,744' FEL; LTP in Section 9: 100' FSL, 1,744' FEL.
- 17. Cimarex has been informed that in a recent pleading filed by Permian Resources, Permian Resources accused Cimarex of sitting on its acreage and not moving forward with development. I read this in Permian Resources' Response to Cimarex's Motion to Continue, the exact language accused Cimarex of "sitting on this acreage for years," and only now moving forward. This is a complete mischaracterization of the efforts Cimarex and its parent company

Coterra Energy, Inc., ("Coterra" or collectively "Cimarex") have made toward developing the Subject Lands and the surrounding area ("Area of Interest"). I provide a full overview of Cimarex's history with Read & Stevens in my Landman Statement that I provided in Hearing Packet I for the Mighty Pheasant Well, at Paragraphs 24 through 32, for the Examiners' review.

- 18. Paragraphs 33 through 35 of my Landman Statement in Hearing Packet I for the Might Pheasant Wells provides a detailed overview of the extreme differences in costs between the development plans provided by Permian Resources and Cimarex, with Permian Resources' plan costing over 52% more and drilling 18 more wells that result in no additional production or EUR than the amount that Cimarex's plan produces. Exhibit A-8 provides a table that compares the costs of the two plans to each working interest ("WI") owner as well as a comparison of the total costs.
- 19. And this is why the majority of WI owners support Cimarex over Permian Resources. This Landman Statement, as part of Hearing Packet II, focuses on Cimarex's Loosey Goosey wells in the Bone Spring units underlying Section 4 and 9 of the Subject Lands. Exhibit A-7 provides a table showing which owners and their acreage support Cimarex, referred to in the chart as CTRA, and which support Permian Resources, referred to in table as PR. Going across the units listed in the table for the Loosey Goosey wells in the Bone Spring, you can see that the majority of owners in each unit clearly support Cimarex over Permian Resources (61.93% v. 26.98% in the W/2 W/2 unit; 61.94% v. 26.97% in the E/2 W/2 unit; 61.49% v. 28.92% in the W/2 E/2 unit; and 61.50% v. 28.92% in the E/2 E/2 unit).
- 20. Cimarex operates around 15,000 acres and operate ~50 wellbores in the immediate vicinity in Township 19 South, Ranges 33 and 34 East, in Lea County. I believe that Cimarex is a top-tier operator especially regarding the knowledge it takes to drill in this area. We have been

able to come to agreements with multiple owners in the area to effectively and efficiently develop a large portion of this area.

- 21. The proposed C-102 for each Loosey Goosey well is attached as **Exhibit A-1**.
- 22. A general location plat and a plat outlining the units being pooled is attached hereto as **Exhibit A-2.1** through **Exhibit A-2.4**, which show the location of the proposed Loosey Goosey wells within the units. The location of each well is orthodox, and it meets the Division's offset requirements.
- 23. The parties being pooled, the nature of their interests, and their last known addresses are listed in **Exhibit A-2.1** through **Exhibit A-2.4** attached hereto. These Exhibits include information regarding working interest owners.
- 24. In the Loosey Goosey Bone Spring units underlying Sections 4 and 9, there are no depth severances in the Bone Spring formation in this acreage. Cimarex's review of the lands shows no overlapping units.
- 25. I provided the law firm of Abadie & Schill P.C. a list of names and addresses for the uncommitted interest owners shown on **Exhibit A-2.1** through **Exhibit A-2.4**. In compiling these addresses, I conducted a diligent search of the public records in **Lea** County, New Mexico, where the wells are located, and of phone directories and did computer searches to locate the contact information for parties entitled to notification. All working interest owners were locatable and noticed. Cimarex published notice in the Hobbs News-Sun, a newspaper of general circulation in Lea County, New Mexico, to account for any unlocatable parties and cover any contingencies regarding notice.
- 26. Cimarex provided notice to all WI owners in the Bone Spring unit of Section 4 and 9, which it considers to be the necessary parties who have a right to notice. Cimarex considers the

Overriding Royalty Interest ("ORRI") owners no be non-participatory royalty owners subject to the pooling clauses present in the assignment instruments and the leases, and therefore it is the applicant's option to provide notice to them and pool them as part of the pooling proceeding, or to address the ORRI owners separately outside the pooling process.

- 27. Cimarex has made a good faith effort to negotiate with the interest owners, but has been unable to obtain, voluntary agreement from all interest owners to participate in the drilling of the well or in the commitment of their interests to the well for its development within the proposed horizontal spacing unit. **Exhibits A-4** provides a chronology and history of contacts with the owners. Prior to the acquisition by Permian Resources of Read & Stevens, Cimarex had made good faith efforts to communicate and get a plan of development in place for these Sections. No meetings with Read & Stevens had ever come to fruition. I have personally worked for over 2 years and Cimarex has worked for over 4 years to get to a resolution so that this acreage can be developed. The majority of the working interest owners in these Sections are excited for development and have been long awaiting a return on their investment. Cimarex has constantly been trying to obtain term assignments, vetting out trades with other working interest owners, and has made offers to purchase in this area. We believe in this area and have shown our earnestness in development for years. Cimarex was the first operator to do the groundwork and file applications for the Subject Lands, filing well before Read & Stevens.
- 28. The interest owners being pooled have been contacted regarding the proposed wells but have failed or refused to voluntarily commit their interest in the wells. However, Cimarex has been in ongoing discussions with some of the interest owners to voluntarily enter into a Joint Operating Agreement. If a mutually agreeable Joint Operating Agreement is reached between Cimarex and another interest owner or owners, Cimarex requests that the voluntary agreement

become operative and supersede the Division's order for said parties, except to the extent the Division deems it necessary to maintain spacing criteria for the purpose of conservation, the prevention of waste, and protection of correlative rights.

- 29. For any unleased open acreage being pooled, Cimarex requests that the acreage be pooled pursuant to statutory one-eighth (1/8) royalty.
- 30. **Exhibit A-3** is a sample proposal letter and the AFEs for each proposed well. The estimated cost of the wells set forth in the AFEs is fair, reasonable, and comparable to the costs of other wells of similar depths and lengths drilled in this area of New Mexico.
- 31. Without Wolfcamp wells as proposed by Permian Resources, Cimarex's full development of the acreage is far, far less expensive to develop the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Bone Spring formations. Permian not only proposes to over-drill the Subject Lands, but it will incur unnecessary costs that will substantially burden smaller working interest owners. Working interest owners should get the best wells at the most economic prices, and we feel that our development provides the most efficient and cost-saving plan. See **Exhibit A-5** which provides letters of support from working interest owners in the units who support Cimarex's development plan, based on excellent prior experiences working with Cimarex as an operator.
- 32. Cimarex requests overhead and administrative rates of \$8000/month for drilling each well and \$800/month for producing each well. These rates are fair and comparable to the rates charged by other operators for wells of this type in this area of southeastern New Mexico. Cimarex requests that these rates be adjusted periodically as provided in the COPAS Accounting Procedure.
- 33. Cimarex requests the maximum cost, plus 200% risk charge be assessed against non-consenting working interest owners.
  - 34. Cimarex requests that it be designated operator of the units and wells.

- 35. The Exhibits to this Self-Affirmed Statement were prepared by me or compiled from Cimarex's company business records under my direct supervision.
- 36. The granting of this Application is in the best interests of conservation, the prevention of waste, and the protection of correlative rights, and will avoid the drilling of unnecessary wells. Due to Cimarex's operational footprint and expertise in the area, we are able to utilize our drilling efficiencies, relationships with working interest owners, and third party takeaway to cost-effectively develop this acreage. We understand the geology of this area and do not need to over-drill the Subject Lands in order to fully develop the acreage.
  - 37. The foregoing is correct and complete to the best of my knowledge and belief.

[Signature page follows]

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Signature page of Self-Affirmed Statement of John Coffman:

I understand that this Self-Affirmed Statement will be used as written testimony before the Division in Case Nos. 23452, 23453, 23454 and 23455, and affirm that my testimony herein is true and correct, to the best of my knowledge and belief and made under penalty of perjury under the laws of the State of New Mexico.

John Coffman

01103

Date Signed

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

UL or lot no. Section Township Range

# 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

X AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025-	r	<sup>2</sup> Pool Code 9663 <b>7</b>	st				
<sup>4</sup> Property Code		<sup>5</sup> Property Name LOOSEY GOOSEY 4-9 FED COM					
<sup>7</sup> OGRID №. 215099			perator Name EX ENERGY CO.	<sup>9</sup> Elevation 3659.8'			

### <sup>10</sup> Surface Location

Lot Idn

О	33	19S	34E		194	SOUTH	1428	EAST	LEA
			11	Bottom H	ole Location I	f Different From	Surface		

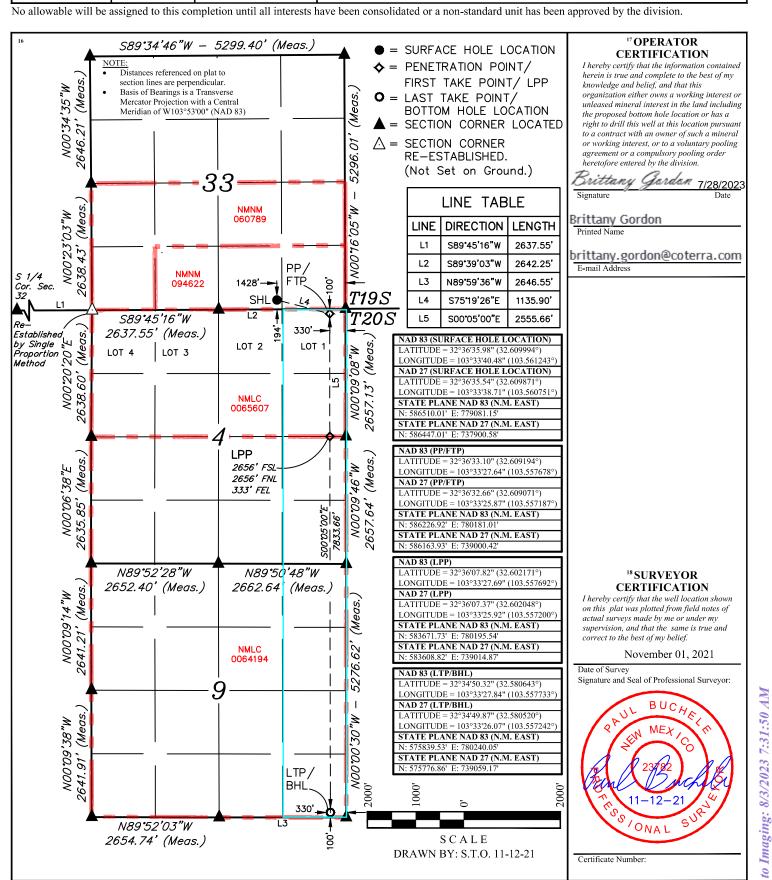
Feet from the North/South line

Т

Feet from the

East/West line

UL or lot no. P	Section 9		wnship 20S	Range 34E	Lot Idn	Fe	eet from the 100	North/South line SOUTH	Feet from the 330	East/West line EAST	County LEA
12 Dedicated Acro	es 1	<sup>3</sup> Joint or	r Infill	14 Conso	lidation Code		15 Order No.				





Released

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

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Section Township Range

Lot Idn

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County

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### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025 Number	•	<sup>2</sup> Pool Code 96637	Teas; Bone Špring, Eas	st
<sup>4</sup> Property Code			operty Name OOSEY 4-9 FED COM	<sup>6</sup> Well Number 304H
21 <sup>7</sup> 5099 No.			perator Name EX ENERGY CO.	<sup>9</sup> Elevation 3659.4'

#### <sup>10</sup> Surface Location

Feet from the

	O	33	19S Î	34Ĕ		194	SOUTH	1408	EAST	LEA
-				11	Bottom H	ole Location I	f Different From	Surface		•

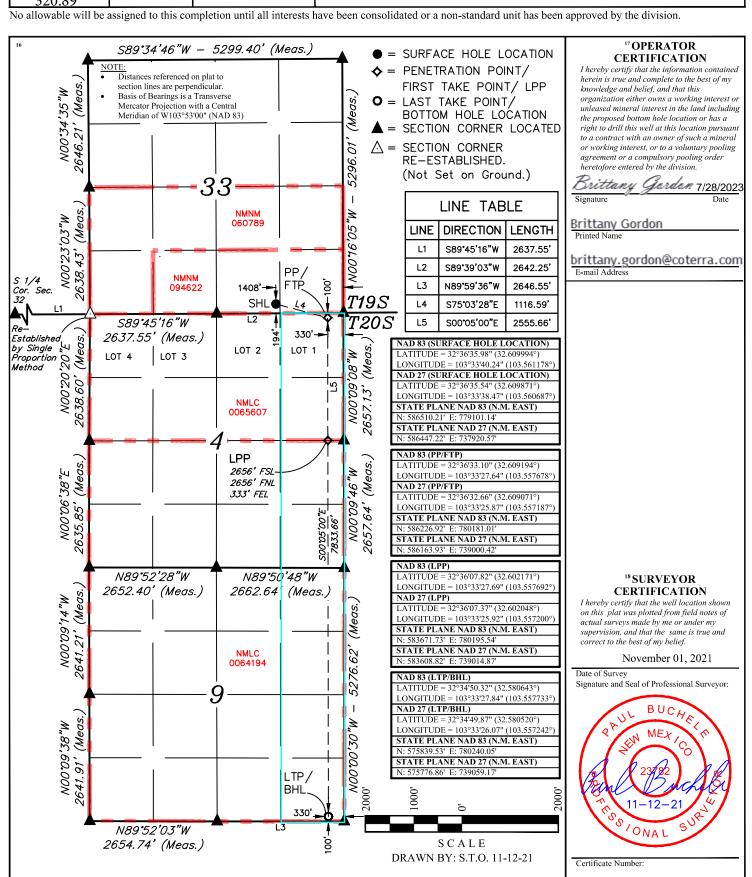
North/South line

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Feet from the

East/West line

UL or lot no. P	Section 9	n T	Township 20S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 330	East/West line EAST	County LEA
12 Dedicated Act 320.89	es	<sup>13</sup> Joint	t or Infill	14 Conso	olidation Code	15 Order No.				



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District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

UL or lot no. Section Township Range Lot Idn

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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East/West line

X AMENDED REPORT

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#### WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025	r	<sup>2</sup> Pool Code 9663 <b>7</b>				
<sup>4</sup> Property Code		<sup>5</sup> Property Name LOOSEY GOOSEY 4-9 FED COM				
<sup>7</sup> OGRID №. 215099		<sup>8</sup> O <sub>F</sub> CIMARE	<sup>9</sup> Elevation 3659.4'			

### <sup>10</sup> Surface Location

Feet from the

	N	33	19S	34E		1189	SOUTH	1464	WEST	LEA		
"Dettem Hele Leagtion If Different Errors Comfees												
"Bottom Hole Location If Different From Surface												

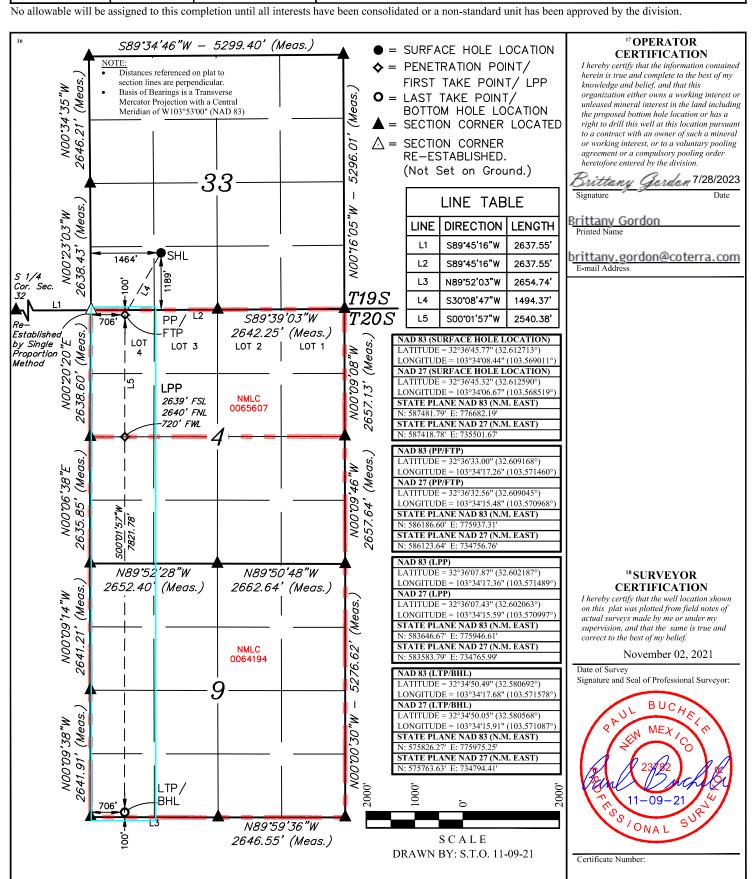
North/South line

Т

Feet from the

Т

UL or lot no. M	Section 9	Township 20S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 706	East/West line WEST	County LEA
12 Dedicated Acre 320.21	es 13 ,	Joint or Infill	14 Conse	olidation Code	15 Order No.				



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#### WELL LOCATION AND ACREAGE DEDICATION PLAT

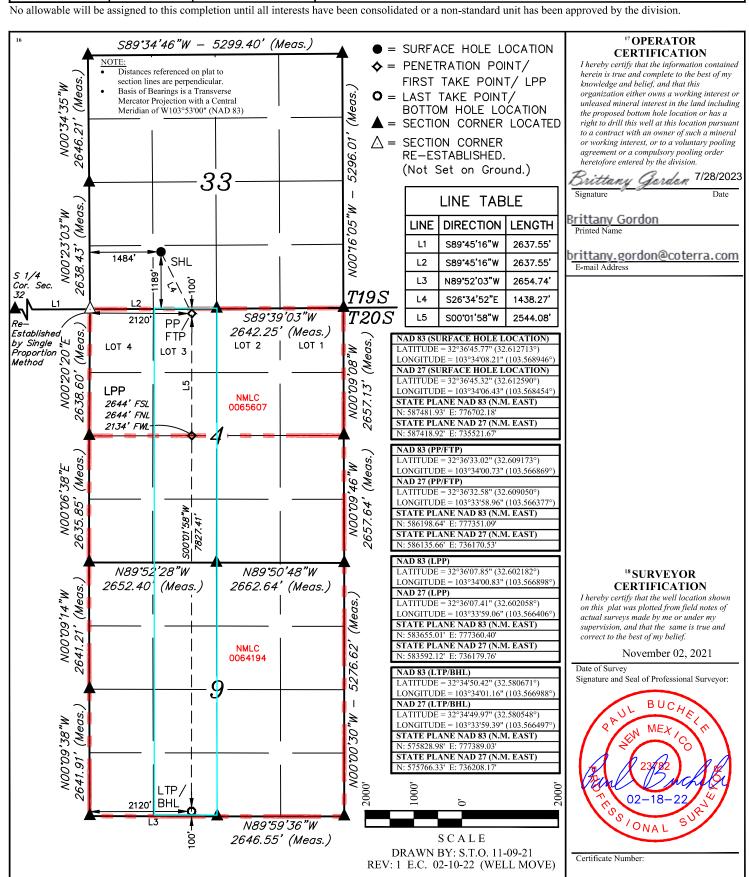
30-025 Number	•	<sup>2</sup> Pool C <u>od</u> e 9663 <b>7</b>	ast			
<sup>4</sup> Property Code			roperty Name OOSEY 4-9 FED COM 302H			
<sup>7</sup> OGRID №. 215099			perator Name EX ENERGY CO.	<sup>9</sup> Elevation 3659.8'		

#### <sup>10</sup> Surface Location

	N	33	19S	34E	Lot Iun	1189	SOUTH	1484	WEST	LEA		
•	"Bottom Hole Location If Different From Surface											

#### Bottom Hole Location If Different From Surface

UL or lot no. N	Sect 9	ion )	Township 20S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 2120	East/West line WEST	County LEA
12 Dedicated Acre 320.44	es	<sup>13</sup> Jo	oint or Infill	14 Conso	olidation Code	15 Order No.				



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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

Section Township Range

Lot Idn

# 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

East/West line

Feet from the

X AMENDED REPORT

County

Released to Imaging: 8/3/2023 7:31:50 AM

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025	<sup>2</sup> Pool C <u>od</u> e 9663 <b>7</b>	Teas; Bone Spring, Ea	ast
<sup>4</sup> Property Code		operty Name OOSEY 4-9 FED COM	<sup>6</sup> Well Number 303H
<sup>7</sup> OGRID №. 215099		perator Name EX ENERGY CO.	<sup>9</sup> Elevation 3659.9'

### <sup>10</sup> Surface Location

North/South line

Feet from the

О	33	19S	34Ē		194	SOUTH	1448	EAST	LEA
"Bottom Hole Location If Different From Surface									

#### Bottom Hole Location If Different From Surface

UL or lot no. O	Sect 9	ion )	Township 20S	Range 34E	Lot Idn	Fee	et from the 100	North/South line SOUTH	Feet from the 1744	East/West line EAST	County LEA
12 Dedicated Acre 320.66	es	<sup>13</sup> Jo	oint or Infill	14 Conso	olidation Code		15 Order No.				

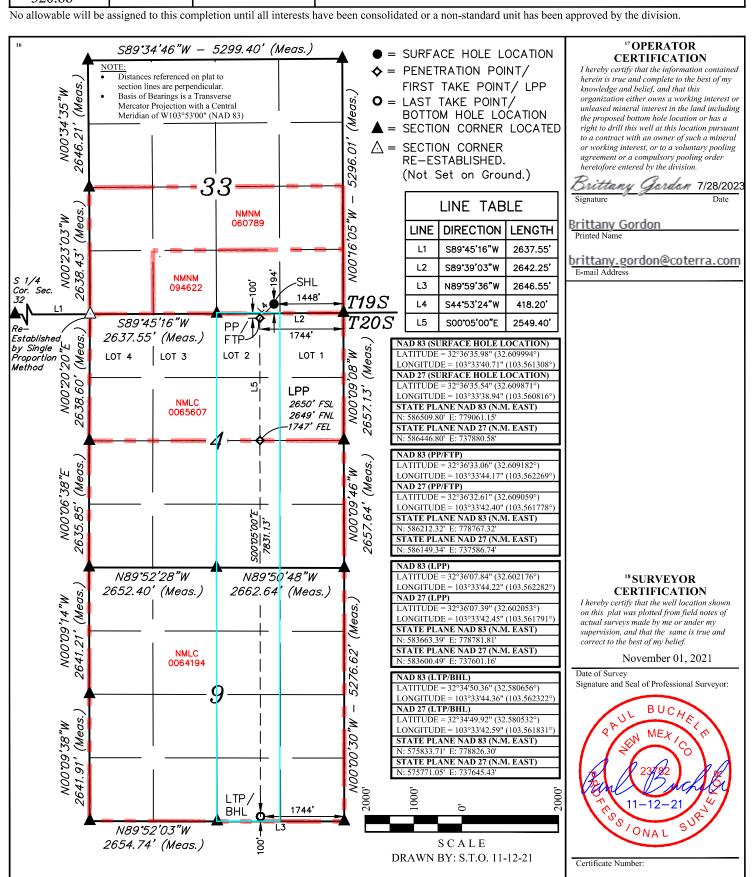
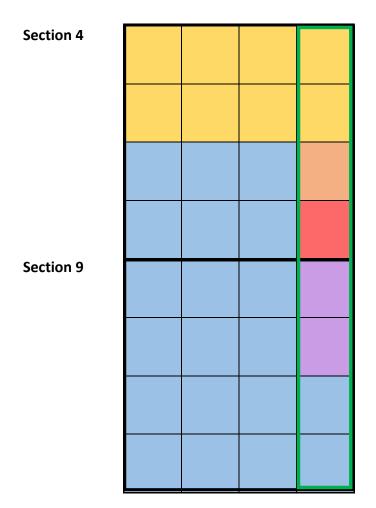


Exhibit "A-2"

E/2E/2 of Section 4 and the E/2E/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation



Tract 1: USA NMLC-0064194 (40.00 acres)



Tract 2: USA NMLC-0064194 (40.00 acres)



Tract 3:

USA NMLC-0064194 (80.00 acres)



Tract 4: USA NMLC-0064194 (80.00 acres)



Tract 5:

USA NMLC-0065607 (80.89 acres)





#### **Loosey Goosey 4-9 Fed Com 204H**

SHL: Sec. 33-19S-34E; 194' FSL and 1428' FEL BHL: Sec. 9-20S-34E; 100' FNL and 330' FEL

#### **Loosey Goosey 4-9 Fed Com 304H**

SHL: Sec. 33-19S-34E; 194' FSL and 1408' FEL BHL: Sec. 9-20S-34E; 100' FNL and 330' FEL

# Exhibit "A-2" OWNERSHIP BREAKDOWN – Bone Spring formation

# E/2E/2 of Section 4 and the E/2E/2 of Section 9 of Section 9, Township 20 South, Range 34 East of Lea County, NM

#### Loosey Goosey 4-9 Fed Com 204H and 304H

#### TRACT 1 OWNERSHIP (NE/4SE/4 of Section 4-T20S-R34E, being 40.00 acres)

Lease: USA NMLC-0064194

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	0.8308	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	1.3427	0.03356644	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Challenger Crude, Ltd.	1.1673	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	12.1016	0.30253929	Uncommitted
300 N. Marienfeld St., Ste. 1000			

	Midland,	TX	797	01
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Javelina Partners	2.3719	0.05929631	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	1.2904	0.03225960	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	11.2378	0.28094405	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.2346	0.00586541	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	0.7038	0.01759615	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	0.7203	0.01800821	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	4.2538	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			

Midland, TX 79706	Mid	land,	TX	797	706
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Avalon Energy Corporation	0.2273	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	1.9446	0.04861609	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.2377	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.1259	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	1.2096	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	40.00	.12465331	

# TRACT 2 OWNERSHIP (SE/4 SE/4 of Section 4-T20S-R34E, being 40.00 acres)

Lease: USA NMLC-0064194

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	0.8308	0.02076924	Committed

	$\sim$	D	1	$\sim$	^
Ρ.	( ).	Box	-3	U /	u

Galveston, TX 77552

HOG Partnership, LP	1.3427	0.03356644	Uncommitted
5950 Cedar Springs Rd., Ste. 242	1.5427	0.03330044	Oncommitted
Dallas, TX 75235			
Dallas, 1X 73233			
Challenger Crude, Ltd.	1.1673	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	12.1016	0.30253929	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	2.3719	0.05929631	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	1.2904	0.03225960	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	11.2378	0.28094405	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.2346	0.00586541	Committed
Hudson Trust f/b/o J. Terrell Ard			

P.O. Box	1	61	O	0
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San Antonio, TX 78296

Ard Oil, LTD 222 West Forth St., Ph5	0.7038	0.01759615	Uncommitted
Fort Worth, TX 76102			
Chase Oil Corporation	0.7203	0.01800821	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	4.2538	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.2273	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	1.9446	0.04861609	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220	1.5440	0.04001003	oncommitted
Denver, CO 80203			
5cc., 66 66265			
Marks Oil, Inc.	0.2377	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.1259	0.00314685	Committed
616 Texas St.			

Fort Worth, TX 76102

Union Hill Oil and Gas Co. Inc.	1.2096	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 2 TOTAL	40.00	.12465331	

# TRACT 3 OWNERSHIP (E/2NE/4 of Section 9-T20S-R34E, being 80.00 acres)

Lease: USA NMLC-0064194

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	1.6615	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	2.6853	0.03356644	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Challenger Crude, Ltd.	2.3346	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	24.2031	0.27617294	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	4.7437	0.05929631	Committed
616 Texas St.			

# Fort Worth, TX 76102

Zorro Partners, Ltd.	2.5808	0.03225960	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	22.4755	0.28094405	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759615	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	1.4407	0.01800821	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5076	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.4545	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			

# Midland, TX 79701

Wilbanks Reserve Corporation	3.8893	0.04861609	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.2517	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 3 TOTAL	80.00	.24930662	

# TRACT 4 OWNERSHIP (E/2 SE/4 of Section 9-T20S-R34E, being 80.00 acres)

Lease: USA NMLC-0064194

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	1.6615	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	3.6923	0.04615385	Uncommitted
5950 Cedar Springs Rd., Ste. 242			

# Dallas, TX 75235

Permian Resources LLC/Read and Stevens	30.9320	0.38665000	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	3.9885	0.04985576	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	2.5808	0.03225961	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	15.3846	0.19230768	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.4692	0.00586540	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759615	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Cimarex Energy Co.	17.8154	0.22269231	Committed
6001 Deauville Blvd., Ste. 300N			

Midland, TX 79706

Avalon Energy Corporation	0.4545	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Union Hill Oil and Gas Co. Inc.	2.0680	0.02585000	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 4 TOTAL	80.00	.24930662	

# TRACT 5 OWNERSHIP (Lot 1 and the SE/4SE/4 of Section 4-T20S-R34E, being 80.89 acres)

Lease: USA NMLC-0065607

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	4.5501	0.05625000	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	10.1113	0.12500000	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Javelina Partners	23.4560	0.28997392	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	15.1774	0.18763017	Committed
616 Texas St.			

Fort Worth, TX 76102

Frost Bank, Trustee of the Josephine T. 2.7595 0.03411465 Committed

Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD 8.2786 0.10234375 Uncommitted

222 West Forth St., Ph5

Fort Worth, TX 76102

Cimarex Energy Co. 16.5572 0.20468750 Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

TRACT 5 TOTAL 80.00 .25208015

# **Complete List of Parties/Persons to be Pooled:**

# **Working Interest Owners**

HOG Partnership, LP

Permian Resources LLC

Ard Oil, LTD

**Chase Oil Corporation** 

Avalon Energy Corporation

Wilbanks Reserve Corporation

Marks Oil, Inc.

Union Hill Oil & Gas Co. Inc.

#### **UNIT RECAPITULATION:**

### E/2E/2 of Section 4 and the E/2E/2 of Section 9; all in T20S-R34E; 320.89 acres

Moore and Shelton Co., LTD 2.97132% WI

HOG Partnership, LP 5.97532% WI

Challenger Crude, Ltd. 1.45508% WI

Permian Resources LLC 24.72445% WI

Javelina Partners 11.50920% WI

Zorro Partners, Ltd. 7.14254% WI

Magnum Hunter Production Inc. 18.80260% WI

Frost Bank, Trustee of the Josephine T. 1.29865% WI

Hudson Testamentary Trust FBO J. Terrell Ard

Ard Oil, LTD 3.89594% WI

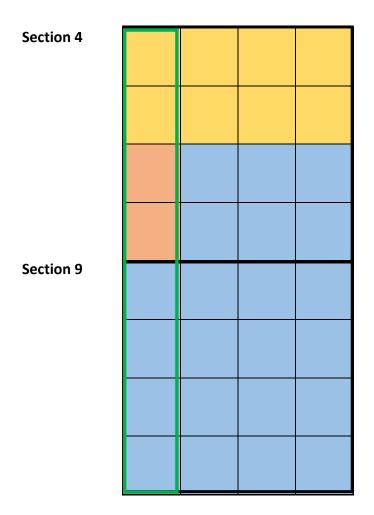
Chase Oil Corporation 0.89791% WI

Cimarex Energy Co. 16.01411% WI

Avalon Energy Corporation	0.28330% WI
Wilbanks Reserve Corporation	2.42406% WI
Marks Oil, Inc.	0.29631% WI
William A. Hudson, II	0.15691% WI
Union Hill Oil and Gas Co. Inc.	2.15231% WI

Exhibit "A-2"

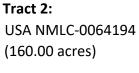
W/2W/2 of Section 4 and the W/2W/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation



Tract 1: USA NMLC-0064194 (80.00 acres)



Tract 3: USA NMLC-0065607 (80.21 acres)







### **Loosey Goosey 4-9 Fed Com 301H**

SHL: Sec. 33-19S-34E; 1189' FSL and 1464' FWL BHL: Sec. 9-20S-34E; 100' FNL and 706' FWL

# Exhibit "A-2" OWNERSHIP BREAKDOWN – Bone Spring formation

# W/2W/2 of Section 4 and the W/2W/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM

### Loosey Goosey 4-9 Fed Com 301H

### TRACT 1 OWNERSHIP (W/2SW/4 of Section 4-T20S-R34E, being 80.00 acres)

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	1.6615	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	2.6853	0.03356644	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Challenger Crude, Ltd.	2.3346	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	24.2031	0.30253929	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	4.7437	0.05929631	Committed
616 Texas St.			

# Fort Worth, TX 76102

Zorro Partners, Ltd.	2.5808	0.03222596	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	22.4755	0.28094405	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759615	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	1.4407	0.01800821	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5076	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.4545	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			

## Midland, TX 79701

Wilbanks Reserve Corporation	3.8893	0.04861609	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.2517	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	80.00	.24983605	

## TRACT 2 OWNERSHIP (W/2W/2 of Section 9-T20S-R34E, being 160.00 acres)

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	3.3231	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	5.3706	0.03356644	Uncommitted
5950 Cedar Springs Rd., Ste. 242			

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Challenger Crude, Ltd.	4.6692	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	48.4063	0.30253929	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	9.4874	0.05929631	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	5.1615	0.03225960	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	44.9510	0.28094405	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.9385	0.00586541	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	2.8154	0.01759615	Uncommitted
222 West Forth St., Ph5			

Fort Worth, TX 76102	Fort	Worth.	TX 7610
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Chase Oil Corporation 11344 Lovington Hwy. Artesia, NM 88210	2.8813	0.01800821	Uncommitted
Cimarex Energy Co. 6001 Deauville Blvd., Ste. 300N Midland, TX 79706	17.0151	0.10634446	Committed
Avalon Energy Corporation 310 W. Wall St., Ste. 305 Midland, TX 79701	0.9091	0.00568182	Uncommitted
Wilbanks Reserve Corporation 450 E. 17 <sup>th</sup> Ave., Ste. 220 Denver, CO 80203	7.7786	0.04861609	Uncommitted
Marks Oil, Inc. 1775 Sherman St., Ste. 2990 Denver, CO 80203	0.9508	0.00594271	Uncommitted
William A. Hudson, II 616 Texas St. Fort Worth, TX 76102	0.5035	0.00314685	Committed
Union Hill Oil and Gas Co. Inc. 7712 Glanshannon Cir. Dallas, TX 75225	4.8385	0.03024091	Uncommitted

TRACT 2 TOTAL

160.00

.49967209

## TRACT 3 OWNERSHIP (Lot 4 and the SW/4NW/4 of Section 4-T20S-R34E, being 80.21 acres)

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	4.5118	0.05625000	Committed
P.O. Box 3070			
Galveston, TX 77552			
Cimarex Energy Co.	16.4180	0.20468750	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Javelina Partners	23.2588	0.28997392	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	15.0498	0.18763017	Committed
616 Texas St.			
Fort Worth, TX 76102			
Frost Bank, Trustee of the Josephine T.	2.7363	0.03411465	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
HOG Partnership, LP	10.0263	0.12500000	Uncommitted
5950 Cedar Springs Rd., Ste. 242			

Dallas, TX 75235

Ard Oil, LTD 8.2090 0.10234375 Uncommitted

222 West Forth St., Ph5

Fort Worth, TX 76102

TRACT 3 TOTAL 80.21 .25049186

## **Complete List of Parties/Persons to be Pooled:**

### **Working Interest Owners**

HOG Partnership, LP

Permian Resources LLC

Ard Oil, LTD

**Chase Oil Corporation** 

Avalon Energy Corporation

Wilbanks Reserve Corporation

Marks Oil, Inc.

Union Hill Oil & Gas Co. Inc.

#### **UNIT RECAPITULATION:**

W/2W/2 of Section 4 and the W/2W/2 of Section 9; all in T20S-R34E; 320.21 acres

Moore and Shelton Co., LTD 2.96569 % WI

HOG Partnership, LP 5.64698% WI

Challenger Crude, Ltd. 2.18725% WI

Permian Resources LLC 22.67557% WI

Javelina Partners

Zorro Partners, Ltd.	7.11787% WI
Magnum Hunter Production Inc.	21.05699% WI
Frost Bank, Trustee of the Josephine T.	1.29416% WI

11.70792% WI

Ard Oil, LTD 3.88247% WI

Hudson Testamentary Trust FBO J. Terrell Ard

Chase Oil Corporation 1.34973% WI

Cimarex Energy Co. 13.09786% WI

Avalon Energy Corporation 0.42586% WI

Wilbanks Reserve Corporation 3.64382% WI

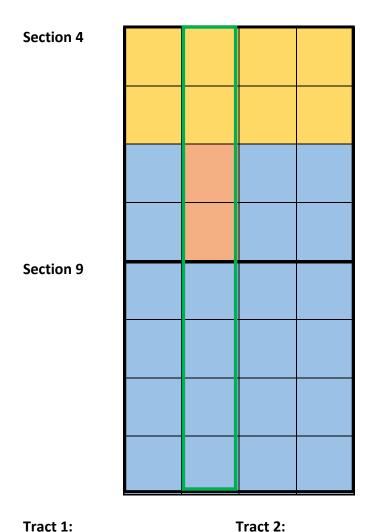
Marks Oil, Inc. 0.44541% WI

William A. Hudson, II 0.23586% WI

Union Hill Oil and Gas Co. Inc. 2.26658% WI

Exhibit "A-2"

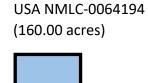
E/2W/2 of Section 4 and the E/2W/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation



Tract 1: USA NMLC-0064194 (80.00 acres)



Tract 3: USA NMLC-0065607 (80.44 acres)







### **Loosey Goosey 4-9 Fed Com 302H**

SHL: Sec. 33-19S-34E; 1189' FSL and 1484' FWL BHL: Sec. 9-20S-34E; 2120' FWL and 100' FSL

# Exhibit "A-2" OWNERSHIP BREAKDOWN – Bone Spring formation

# E/2W/2 of Section 4 and the E/2W/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM

### Loosey Goosey 4-9 Fed Com 302H

#### TRACT 1 OWNERSHIP (E/2SW/4 of Section 4-T20S-R34E, being 80.00 acres)

 Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	1.6615	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	2.6853	0.03356644	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Challenger Crude, Ltd.	2.3346	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	24.2031	0.30253929	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	4.7437	0.05929631	Committed
616 Texas St.			

# Fort Worth, TX 76102

Zorro Partners, Ltd.	2.5808	0.03222596	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	22.4755	0.28094405	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759615	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	1.4407	0.01800821	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5076	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.4545	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			

## Midland, TX 79701

Wilbanks Reserve Corporation	3.8893	0.04861609	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.2517	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	80.00	.24965672	

## TRACT 2 OWNERSHIP (E/2W/2 of Section 9-T20S-R34E, being 160.00 acres)

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	3.3231	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	5.3706	0.03356644	Uncommitted
5950 Cedar Springs Rd., Ste. 242			

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Challenger Crude, Ltd.	4.6692	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	48.4063	0.30253929	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	9.4874	0.05929631	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	5.1615	0.03225960	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	44.9510	0.28094405	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.9385	0.00586541	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	2.8154	0.01759615	Uncommitted
222 West Forth St., Ph5			

Fort Worth, TX 761	102
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Chase Oil Corporation	2.8813	0.01800821	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	17.0151	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.9091	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	7.7786	0.04861609	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.9508	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.5035	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	4.8385	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			

TRACT 2 TOTAL 160.00 .49931344

## TRACT 3 OWNERSHIP (Lot 3 and the SE/4NW/4 of Section 4-T20S-R34E, being 80.44 acres)

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	4.5248	0.05625000	Committed
P.O. Box 3070			
Galveston, TX 77552			
Cimarex Energy Co.	16.4651	0.20468750	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Javelina Partners	23.3255	0.28997392	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	15.0930	0.18763017	Committed
616 Texas St.			
Fort Worth, TX 76102			
Frost Bank, Trustee of the Josephine T.	2.7442	0.03411465	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
HOG Partnership, LP	10.0550	0.12500000	Uncommitted
5950 Cedar Springs Rd., Ste. 242			

Dallas, TX 75235

Ard Oil, LTD 8.2325 0.10234375 Uncommitted

222 West Forth St., Ph5

Fort Worth, TX 76102

TRACT 3 TOTAL 80.44 .25102983

## **Complete List of Parties/Persons to be Pooled:**

### **Working Interest Owners**

HOG Partnership, LP

Permian Resources LLC

Ard Oil, LTD

**Chase Oil Corporation** 

Avalon Energy Corporation

Wilbanks Reserve Corporation

Marks Oil, Inc.

Union Hill Oil & Gas Co. Inc.

#### **UNIT RECAPITULATION:**

E/2W/2 of Section 4 and the E/2W/2 of Section 9; all in T20S-R34E; 320.44 acres

Moore and Shelton Co., LTD 2.96760% WI

HOG Partnership, LP 5.65190% WI

Challenger Crude, Ltd. 2.18568% WI

Permian Resources LLC 22.65929% WI

Javelina Partners	11.72033% WI
Javenna i artifers	11.7 2000 VVI

Zorro Partners, Ltd. 7.12623% WI

Magnum Hunter Production Inc. 21.04187% WI

Frost Bank, Trustee of the Josephine T. 1.29568% WI

Hudson Testamentary Trust FBO J. Terrell Ard

Ard Oil, LTD 3.88703% WI

Chase Oil Corporation 1.34876% WI

Cimarex Energy Co. 13.103150% WI

Avalon Energy Corporation 0.42555% WI

Wilbanks Reserve Corporation 3.6412% WI

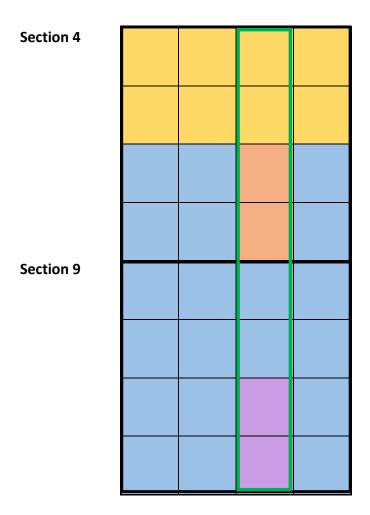
Marks Oil, Inc. 0.44509% WI

William A. Hudson, II 0.23569% WI

Union Hill Oil and Gas Co. Inc. 2.26495% WI

Exhibit "A-2"

# W/2E/2 of Section 4 and the W/2E/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation



Tract 1: USA NMLC-0064194 (80.00 acres)



Tract 3: USA NMLC-0064194 (80.00 acres)



Tract 2: USA NMLC-0064194 (80.00 acres)



**Tract 4:**USA NMLC-0065607
(80.66 acres)



#### **Loosey Goosey 4-9 Fed Com 303H**

SHL: Sec. 33-20S-34E; 194' FSL and 1488' FWL BHL: Sec. 9-20S-34E; 100' FSL and 1744' FEL

# Exhibit "A-2" OWNERSHIP BREAKDOWN – Bone Spring formation

# W/2E/2 of Section 4 and the W/2E/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM

### Loosey Goosey 4-9 Fed Com 303H

### TRACT 1 OWNERSHIP (W/2SE/4 of Section 4-T20S-R34E, being 80.00 acres)

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	1.6615	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	2.6853	0.03356644	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Challenger Crude, Ltd.	2.3346	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	24.2031	0.30253929	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
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Javalina Dartnara	4 7427	0.05020624	Committed
Javelina Partners	4.7437	0.05929631	Committed

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Fort Worth, TX 76102

Zorro Partners, Ltd.	2.5808	0.03222596	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	22.4755	0.28094405	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759615	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	1.4407	0.01800821	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5076	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.4545	0.00568182	Uncommitted

310 W. Wall St., Ste. 305

Midland, TX 79701

Wilbanks Reserve Corporation	3.8893	0.04861609	Committed
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.2517	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	80.00	.24948544	

## TRACT 2 OWNERSHIP (W/2NE/4 of Section 9-T20S-R34E, being 80.00 acres)

 Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	1.6615	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	2.6853	0.03356644	Uncommitted

5950 Cedar Spr	ings Rd.,	Ste.	242
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Dallas, TX 75235

Challenger Crude, Ltd.	2.3346	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	24.2031	0.30253929	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	4.7437	0.05929631	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	2.5808	0.03225960	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	22.4755	0.28094405	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759615	Uncommitted

222	West	Forth	St.,	Ph5
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Fort Worth, TX 76102

Fort Worth, 1X 76102			
Chase Oil Corporation	1.4407	0.01800821	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5076	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.4545	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	3.8893	0.04861609	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.2517	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Haira Hill Oil and Car Carles	2.4402	0.02024004	Haraman (1911)
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			

Dallas, TX 75225

TRACT 2 TOTAL 80.00 .24948544

## TRACT 3 OWNERSHIP (W/2SE/4 of Section 9-T20S-R34E, being 80.00 acres)

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	1.6615	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	3.6923	0.04615385	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Permian Resources LLC/Read and Stevens	30.9320	0.38665000	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	3.9885	0.04985576	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	2.5808	0.03225961	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	15.3846	0.19230768	Committed
6001 Deauville Blvd., Ste. 300N			

## Midland, TX 79706

Frost Bank, Trustee of the Josephine T.	0.4692	0.00586540	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759615	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Cimarex Energy Co.	17.8154	0.22269231	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Union Hill Oil and Gas Co. Inc.	2.0680	0.02585000	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 3 TOTAL	80.00	.24948544	

## TRACT 4 OWNERSHIP (Lot 2 and the SW/4NE/4 of Section 4-T20S-R34E, being 80.66 acres)

 Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	4.5371	0.05625000	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	10.0825	0.12500000	Uncommitted

5950 Cedar S	Springs	Rd.,	Ste.	242
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Dallas, TX 75235

Javelina Partners	23.3893	0.28997392	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	15.1342	0.18763017	Committed
616 Texas St.			
Fort Worth, TX 76102			
Frost Bank, Trustee of the Josephine T.	2.7517	0.03411465	Committed
Hudson Trust f/b/o J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	8.2550	0.10234375	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Cimarex Energy Co.	16.5101	0.20468750	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
TRACT 4 TOTAL	80.66	.25154369	

## **Complete List of Parties/Persons to be Pooled:**

### **Working Interest Owners**

HOG Partnership, LP

Permian Resources LLC

Ard Oil, LTD

**Chase Oil Corporation** 

Avalon Energy Corporation

Wilbanks Reserve Corporation

Marks Oil, Inc.

Union Hill Oil & Gas Co. Inc.

#### **UNIT RECAPITULATION:**

W/2E/2 of Section 4 and the W/2E/2 of Section 9; all in T20S-R34E; 320.66 acres

Moore and Shelton Co., LTD 2.96942% WI

HOG Partnership, LP 5.97064% WI

Challenger Crude, Ltd. 1.45612% WI

Permian Resources LLC 24.74219% WI

Javelina Partners 11.49665% WI

Zorro Partners, Ltd. 7.13421% WI

Magnum Hunter Production Inc. 18.81609% WI

Frost Bank	, Trustee o	f the Jose	phine T.	1	29713% WI

Hudson Testamentary Trust FBO J. Terrell Ard

Ard Oil, LTD 3.89139% WI

Chase Oil Corporation 0.89856% WI

Cimarex Energy Co. 16.01091% WI

Avalon Energy Corporation 0.28351% WI

Wilbanks Reserve Corporation 2.4258% WI

Marks Oil, Inc. 0.29652% WI

William A. Hudson, II 0.15702% WI

Union Hill Oil and Gas Co. Inc. 2.15385% WI

Cimarex Energy Co. Permian Business Unit 600 N. Marienfeld Street Suite 600 Midland, Texas 79701 MAIN 432.571.7800



August 25, 2022

Apache Corporation 200 Post Oak Blvd., Ste. 100 Houston, TX 77056

Re: Proposal to Drill

Loosey Goosey 4-9 Fed Com 101H-104H, 201H-204H & 301H-304H

Sections 4 & 9, Township 20 South, Range 34 East

Lea County, NM

Dear Working Interest Owner,

Cimarex Energy Co. hereby proposes to drill the Loosey Goosey 4-9 Fed Com 101H-104H, 201H-204H & 301H-304H Wells at a legal location in Section 4, Township 20 South, Range 34 East, NMPM, Lea Co., NM.

Loosey Goosey 4-9 Fed Com 101H - The intended surface hole location for the well is 1360' FSL and 1640' FWL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 706' FWL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 9,530' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Loosey Goosey 4-9 Fed Com 102H - The intended surface hole location for the well is 1360' FSL and 1600' FWL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 2120' FWL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 9,530' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Loosey Goosey 4-9 Fed Com 103H - The intended surface hole location for the well is 340' FSL and 1640' FEL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 1744' FEL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 9,530' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Loosey Goosey 4-9 Fed Com 104H - The intended surface hole location for the well is 340' FSL and 1600' FEL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 330' FEL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 9,530' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.



<u>Loosey Goosey 4-9 Fed Com 201H</u> - The intended surface hole location for the well is 1360' FSL and 1620' FWL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 706' FWL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,304' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

<u>Loosey Goosey 4-9 Fed Com 202H</u> - The intended surface hole location for the well is 1360' FSL and 1580' FWL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 2120' FWL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,304' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

<u>Loosey Goosey 4-9 Fed Com 203H</u> - The intended surface hole location for the well is 340' FSL and 1620' FEL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 1744' FEL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,300' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

<u>Loosey Goosey 4-9 Fed Com 204H</u> - The intended surface hole location for the well is 280' FSL and 1520' FEL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 330' FEL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,300' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

<u>Loosey Goosey 4-9 Fed Com 301H</u> - The intended surface hole location for the well is 1300' FSL and 1520' FWL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 706' FWL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,830' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

<u>Loosey Goosey 4-9 Fed Com 302H</u> - The intended surface hole location for the well is 1300' FSL and 1500' FWL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 2120' FWL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,820' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

<u>Loosey Goosey 4-9 Fed Com 303H</u> - The intended surface hole location for the well is 280' FSL and 1540' FEL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 1744' FEL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,810' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

<u>Loosey Goosey 4-9 Fed Com 304H</u> - The intended surface hole location for the well is 280' FSL and 1500' FEL of Section 33, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 330' FEL of Section 9, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,800' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

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 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 Loosey Goosey 4-9 Fed Com Wells. If you intend to participate, please approve and return one (1) original of the enclosed AFE, one (1) original of the signature page to the Operating Agreement, 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.

Cimarex will file for force pooling for the Loosey Goosey 4-9 Fed Com 101H-104H, 201H-204H & 301H-304H wells 30 days after the receipt of these proposals.

Please call the undersigned with any questions or comments.

Respectfully,

John Coffman 432.571.7883

John.Coffman@Coterra.com

Date

7/6/2022

Approved By (Signature)

AFE # XXXXXXX O COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 204H Date Prepared Company Entity 8/17/2022 AFE Property Number Exploration Region Well Name Prospect Loosey Goosey 4-9 Fed Com 204H New Mexico Bone Spring XXXXXX-XXX.01 XXXXXXXX Permian Basin Estimated Spud Estimated Completion County, State Location Section 4-9 T20S-R34E Lea, NM Lea, NM X New Well Type Iti Measured Depth Til Vetical Depth Formation DEV 19800 10300 Supplement 2nd Sand Revision Purpose Drill and complete well Description The intended surface hold location for the well is 280 FSL and 1520 FEL of Section 33, T19S-R34E, and the intended bottom hole location is Drilling 100 FSL and 330 FEL of Section 9, T20S-R34E. The well is proposed to be drilled vertically to the 2nd Sand formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 10300 feet. Dry Hole After Casing Point Completed Well Cost Intangible \$2,475,500 Drilling Costs \$2 475 500 Completion Costs \$4,314,672 \$4,314,672 \$6,790,172 Total Intangible Cost \$2,475,500 \$4,314,672 Completed Well Cost After Casing Point Tangible Dry Hole \$1,125,000 \$1,518,000 Well Equipment \$393,000 \$262,523 \$262 523 Lease Equipment \$1,387,523 \$1,780,523 Total Tangible Cost \$393,000 Total Well Cost \$8,570,695 \$2,868,500 \$5,702,195 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

Approved By (Print Name)

share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate

Company



OCOTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 204H

AFE # XXXXXXX

Description	BCP - D	June 1977		Drilling		np/Stim	_	ion Equip	Post Con	-	Total
	Codes	Amount	Codes	Amount		Amount		Amount	Codes	Amount	Cos
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	4,989	PCOM.100	3,000	30,989
Damages	DIDC.105	16,500					CON.105	0			16,500
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,000
Day Rate	DIDC.115	468,000	DICC 120	96,000							564,000
Misc Preparation	DIDC.120	30,000									30,000
Bits	DIDC.125	97,000	DICC 125	0	STIM.125	ò			PCOM.125	0	97,000
				0		9			PCOM.130	0	119,000
Fuel	DIDC.135	119,000	DICC.130		7.00						
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	25,000
Mud & Additives	DIDC.145	300,000									300,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	109,193	109,193
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	3,118	PCOM.140	60,000	297,118
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	166,000
Flowback Labor	Diocitos	151,000			STIM.141	0			PCOM.141	30,000	30,000
					311141	U		25.500	PCOM.150	5,000	31,689
Automation Labor		200					CON.150	26,689	PCOM.130	3,000	
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING							CON.165	15,340			15,340
Cementing & Float Equipment	DIDC,185	70,000	DICC 155	140,000							210,000
Tubular Inspections	DIDC.190	38,000	<b>DICC.160</b>	8,000	STIM.160	4,000			PCOM.160	0	50,000
Casing Crews	DIDC.195	15,000	DICC.165	13,000		0					28,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	Total Control of the Control	0		84,182	PCOM.170	5,000	112,182
									PCOM.175	0,000	51,354
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000		4,000		9,354			
Supervision	DIDC 210	81,000	DICC.180	13,000		47,000		13,469	PCOM.180	0	154,469
Trailer House/Camp/Catering	DIDC 280	36,000	DICC.255	5,000	STIM.280	31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC 190	0	STIM.190	85,000	CON.190	14,966	PCOM.190	0	104,966
Overhead	DIDC 225	5,000	DICC 195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Control of the Contro		100000000000000000000000000000000000000									
Solids Control	DIDC.260	46,000			**********				Suprificial.		46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260	0	0
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,000
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
					The state of the state of				PCOW.210		
Stimulation Water/Water Transfer/Water					STIM.395	191,000					191,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,000
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	15,465			15,465
FL/GL - ON PAD LABOR							CON.495	85,305			85,305
FL/GL - Supervision							CON.505	9,354			9,354
200000000000000000000000000000000000000											
Survey	3.23,22		5.50550				CON.515	748			748
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	42,153	PCOM.220	0	340,153
Contingency							CON.221	12,347			12,347
Total Intangible Cost		2,475,500		306,000		3,459,000		337,479		212,193	6,790,172
Conductor Pipe	DWEB.130	0									0
Water String	DWEB.135	104,000									104,000
Surface Casing	DWEB.140	251,000									251,000
Control of the contro	DWEB.145	251,000									251,000
Intermediate Casing 1	DWEB.145	0	200120012								
Production Casing or Liner			DWEA.100	792,000							792,000
Tubing					STIMT.105	139,000	1		PCOMT.105	0	139,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0	100						0
Packer, Nipples			01121121		STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS					3111011.400	20,000	CONTRO	0.770	PCOMI.400		
							CONT.380	8,730			8,730
WALKOVERS							CONT.390	2,494			2,494
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
Surface Equipment									PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	103,263			103,263
Battery Equipment							CONT.410				58,740
								58,740			
Secondary Containments							CONT.415	4,989			4,989
Meters and Metering Equipment							CONT.445	12,471			12,471
Facility Line Pipe							CONT.450	10,476			10,476
Lease Automation Materials							CONT.455	33,049			33,049
FL/GL - Materials							CONT.550	10,227			10,227
FL/GL - Line Pipe							CONT.555	18,084			18,084
Total Tangible Cost		393,000		810,000		205.000		262,523		30,000	1,780,523
	-					285,000					
Total Estimated Cost		2,868,500		1,116,000		3,744,000		600,002		242,193	8,570,695



COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 204H

AFE # XXXXXXX

Description		BCI	P - Drilling		ACP - Drilling			o/Stim	1 1000
	Codes		Amount			Amount		CON.100	Amour 3,00
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,00
Damages	DIDC.105		16,500			1			9
Mud/Fluids Disposal	DIDC 255		200,000				STIM.255		51,00
Day Rate	DIDC.115	DICC.120	468,000	DICC 120		96,000			
Misc Preparation	DIDC.120		30,000			1 400			
Bits	DIDC.125	DICC 125		DICC.125	STIM 125	0	STIM.125		1
			10.00		311W.123		311141,123		
Fuel	DIDC.135		119,000		NO. 277.02	0	93.77.522		
Water for Drilling Rig (Not Frac	DIDC.140	DICC.135	5,000	DICC.135	STIM.135	0	STIM.135		20,00
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD									
Surface Rentals	DIDC 150	DICC 140	97,000	DICC.140	STIM 140	0	STIM.140	CON.140	137,00
	2000	DICCIAO	131,000	DICC.140	211111-1-40		STIM.145	CONTRACTOR	35,00
Downhole Rentals	DIDC.155		131,000						
Flowback Labor							STIM.141		
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING			1						
Cementing & Float Equipment	DIDC.185	DICC 155	70,000	DICC 155		140,000			
					CTILLECO	A Common of the	CT11.1.CO		400
Tubular Inspections	DIDC.190			DICC.160		8,000	STIM.160		4,00
Casing Crews	DIDC.195		20.00	DICC.165	The state of the s	13,000	STIM.165	Her French	
Mechanical Labor	DIDC.200	DICC.170	20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	1
Trucking/Transportation	DIDC.205	DICC.175	30,000	DICC.175	STIM.175	8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210				STIM.180	13,000	STIM.180	CON.180	47,000
	DIDC280						STIM.280		31,000
Trailer House/Camp/Catering					STIM.280	5,000			50000
Other Misc Expenses	DIDC 220			DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Overhead	DIDC225	DICC.195	5,000	DICC.195		5,000			
MOB/DEMOB	DIDC 240		115,000						1
Directional Drilling Services	DIDC.245		307,000						
Color at All the second			100000						1
Solids Control	DIDC.260	STATE OF THE PARTY	46,000	har and					J-2000
Well Control Equip (Snubbing	DIDC.265	DICC.240	84,000	DICC.240	STIM.240	0	STIM.240		64,000
Completion Rig			1				STIM.115		21,000
Coil Tubing Services							STIM.260		(
Completion							STIM.200		257,000
							4		
Composite Plugs							STIM.390		39,000
Stimulation							STIM.210		2,245,000
Stimulation Water/Water						1 1	STIM.395		191,000
Cimarex Owned Frac/Rental							STIM.305		60,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		0.00000						
	DIDC.203		7,000						
Major Construction Overhead						1 1			
FL/GL - ON PAD LABOR									
FL/GL - Supervision						1			
Survey									
Contingency	DIDC.435	DICC 220	118 000	DICC.220	STIM 220	15,000	STIM.220	CON.220	165,000
C. Artista C.	DIDC.433	DICCEEU	110,000	DICC.220	311M.22U	15,000	311W.22U	CONZZU	165,000
Contingency			-						_
Total Intangible Cos			2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
			251,000						
Intermediate Casing 1	DWEB 145		0	willer 1 270		- Carite			
Production Casing or Liner				DWEA.100		792,000			
Tubing							STIMT, 105		139,000
Wellhead, Tree, Chokes	DWEB.115	DWEA.120	38,000	DWEA.120	STIMT.120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA 125	The state of the s	DWEA.125		0			
A CONTRACTOR OF THE PARTY OF TH		202000	1				STIME 400		20 000
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,000
Surface Equipment									
Well Automation Materials									
N/C Lease Equipment			1						
Battery Equipment									
Secondary Containments			1						
Meters and Metering Equipment			.11						
Meters and Metering Equipment Facility Line Pipe									
Meters and Metering Equipment Facility Line Pipe Lease Automation Materials									
Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials									
Meters and Metering Equipment Facility Line Pipe Lease Automation Materials									
Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials			393,000			810,000			285,000

OCOTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 204H

AFE # XXXXXXX

Description		Production Equip		Post Completion		Total
	Codes	Amount			Amount	Cos
Roads & Location	CON.100	4,989		Repair any roads post D&C	3,000	30,989
Damages	CON.105	0				16,500
Mud/Fluids Disposal			PCOM.255		0	251,000
Day Rate						564,000
Misc Preparation						30,000
Bits			PCOM.125		0	97,000
Fuel			PCOM,130		0	119,000
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	25,000
Mud & Additives						300,000
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257	Water for 60 days (270K barrels)	109,193	109,193
Surface Rentals	CON.140	3,118	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	297,118
Downhole Rentals			PCOM.145		0	166,000
Flowback Labor			PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,000
Automation Labor	CON.150	26,689	PCOM.150		5,000	31,689
Mud Logging						5,000
IPC & EXTERNAL PAINTING	CON.165	15,340				15,340
Cementing & Float Equipment						210,000
Tubular Inspections			PCOM.160		0	50,000
Casing Crews		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				28,000
Mechanical Labor	CON.170	84,182	PCOM, 170	RU Flowback Iron & Automation	5,000	112,182
Trucking/Transportation	CON.175	9,354	PCOM.175		0	51,354
Supervision	CON.180	13,469	PCOM.180		0	154,469
Trailer House/Camp/Catering						72,000
Other Misc Expenses	CON.190	14,966	PCOM.190		0	104,966
Overhead	7117					10,000
MOB/DEMOB						115,000
Directional Drilling Services						307,000
Solids Control						46,000
Well Control Equip (Snubbing Services)			PCOM.240		0	148,000
Completion Rig			PCOM.115		0	21,000
Coil Tubing Services			PCOM.260		0	0
Completion Logging/Perforating/Wireline			PCOM.200		0	257,000
Composite Plugs			PCOM.390		0	39,000
Stimulation			PCOM.210		0	2,245,000
Stimulation Water/Water Transfer/Water				1		191,000
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	60,000
Legal/Regulatory/Curative	CON.300	0				10,000
Well Control Insurance	7777					7,000
Major Construction Overhead	CON.305	15,465				15,465
FL/GL - ON PAD LABOR	CON.495	85.305				85,305
FL/GL - Supervision	CON.505	9,354				9,354
Survey	CON.515	748				748
Contingency	CON.220	42,153	PCOM.220	10% Contingency	0	340,153
Contingency	CON.221	12,347				12,347
Total Intangible Cost		337,479			212,193	6,790,172
Conductor Pipe					-	0
Water String						104,000
Surface Casing						251,000
Intermediate Casing 1						0
Production Casing or Liner						792,000
Tubing			PCOMT.105		0	139,000
Wellhead, Tree, Chokes			PCOMT.120	The State of the Control of the Cont	10,000	104,000
Liner Hanger, Isolation Packer				The second secon	1,515 2,9	0
Packer, Nipples			PCOMT.400		0	28,000
SHORT ORDERS	CONT.380	8,730				8,730
WALKOVERS	CONT.390	2,494				2,494
Downhole Lift Equipment	Description	2,434	PCOMT.410		0	80,000
Surface Equipment		- 1		Replacing Chokes, Stuffing Boxes, and all	15,000	15,000
Well Automation Materials			PCOMT.420		5,000	5,000
N/C Lease Equipment	CONT.400	103,263		and represent meters	5,000	103,263
Battery Equipment	CONT.410	58,740				58,740
Secondary Containments	CONT.415	4,989				4,989
Meters and Metering Equipment	CONT.445	12,471				12,471
Facility Line Pipe	CONT.450	10,476				10,476
Lease Automation Materials	CONT.455	33,049				33,049
FL/GL - Materials	CONT.550					10,227
FL/GL - Line Pipe	CONT.555	10,227				18,084
	20111.000	18,084				
Total Tangible Cost		262,523			30,000	1,780,523

7/6/2022

AFE # XXXXXXX COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 301H Date Prepared Company Entity 8/17/2022 Property Number AFF Exploration Region Well Name Prospect XXXXXXX XXXXXX-XXX.01 Permian Basin Loosey Goosey 4-9 Fed Com 301H New Mexico Bone Spring Estimated Spud Estimated Completion County, State Location Lea, NM Section 4-9 T20S-R34E Lea, NM Itl Vetical Deoth X New Well Type Ttl Measured Depth 10830 Supplement 3rd Sand DEV 20330 Revision Purnose Drill and complete well Description The intended surface hold location for the well is 1300 FSL and 1520 FWL of Section 33, T19S-R34E, and the intended bottom hole location Drilling is 100 FSL and 706 FWL of Section 9, T20S-R34E. The well is proposed to be drilled vertically to the 3rd Sand formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 10830 feet. Completed Well Cost After Casing Point Intangible Dry Hole \$2,475,500 Drilling Costs \$2,475,500 \$4.624.922 Completion Costs \$4.624.922 \$7,100,422 Total Intangible Cost \$2,475,500 \$4,624,922 Completed Well Cost Tangible Dry Hole After Casing Point \$1,518,000 Well Equipment \$393,000 \$1,125,000 \$790,428 Lease Equipment \$790,428 Total Tangible Cost \$393,000 \$1,915,428 \$2,308,428 Total Well Cost \$2,868,500 \$6,540,350 \$9,408,850 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. 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 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



COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 301H

Damages Mud/Fluids Disposal Day Rate Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	Codes DIDC.100 DIDC.105 DIDC.255 DIDC.115 DIDC.120 DIDC.125 DIDC.135 DIDC.140 DIDC.145 DIDC.150 DIDC.150 DIDC.155	Amount 20,000 16,500 200,000 468,000 97,000 119,000 5,000 300,000	DICC 120 DICC 125 DICC 130	Amount 96,000	STIM.100 STIM.255	Amount 3,000 51,000	CON.100 CON.105	Amount 48,637 15807	PCOM,100	3,000 0	74,63 32,30 251,00
Damages Mud/Fluids Disposal Day Rate Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.105 DIDC.255 DIDC.115 DIDC.120 DIDC.125 DIDC.135 DIDC.140 DIDC.145	16,500 200,000 468,000 30,000 97,000 119,000 5,000	DICC.125	96,000	STIM.255		CON.105				32,30
Mud/Fluids Disposal Day Rate Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.255 DIDC.115 DIDC.120 DIDC.125 DIDC.135 DIDC.140 DIDC.145	200,000 468,000 30,000 97,000 119,000 5,000	DICC.125	96,000		51,000		15807	PCOM 255	0	
Day Rate Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.115 DIDC.120 DIDC.125 DIDC.135 DIDC.140 DIDC.145 DIDC.150	468,000 30,000 97,000 119,000 5,000	DICC.125	96,000		51,000			PCOM 255	0	251.00
Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.120 DIDC.125 DIDC.135 DIDC.140 DIDC.145	30,000 97,000 119,000 5,000	DICC.125	96,000					1.0001111000		251,00
Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.125 DIDC.135 DIDC.140 DIDC.145 DIDC.150	97,000 119,000 5,000	TOTAL SECTION OF								564,00
Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.135 DIDC.140 DIDC.145	97,000 119,000 5,000	TOTAL SECTION OF								30,00
Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.135 DIDC.140 DIDC.145	119,000 5,000	TOTAL SECTION OF	0	STIM.125	0			PCOM.125	0	97,00
Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.140 DIDC.145	5,000		0					PCOM.130	0	119,00
Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.145		DICC.135	0		20,000			PCOM.135	0	25,00
SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Mud Logging	DIDC.150	300,000	DICC 155		211111.122	20,000			r COM. 133		300,00
Surface Rentals Downhole Rentals Flowback Läbor Automation Labor Mud Logging	300,000,000								05011357	87,354	87,35
Downhole Rentals Flowback Labor Automation Labor Mud Logging	300,000,000		0.000		الاستناسات		4000000		PCOM.257		
Flowback Labor Automation Labor Mud Logging		97,000	DICC 140	0	E330110 17	137,000	CON.140	1,378	PCOM.140	60,000	295,37
Automation Labor Mud Logging	DIDC.133	131,000			STIM.145	35,000			PCOM.145	0	166,00
Mud Logging					STIM.141	0			PCOM.141	30,000	30,00
							CON 150	36,558	PCOM.150	5,000	41,55
IDC O. FYTERNIAL DAINTING	DIDC.170	5,000									5,00
IPC & EXTERNAL PAINTING							CON.165	18,888			18,88
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000							210,000
	DIDC.190	38,000	DICC.160	8,000	STIM.160	4,000			PCOM.160	0	50,00
	DIDC.195	15,000	DICC.165	13,000	Note that the same of	0				1	28,00
	DIDC.200	20,000	DICC 170	3,000		0		139,588	PCOM.170	5,000	167,58
and the first of the first file and the same of the file and the file	All the Market and		DICC 175						PCOM.175	0	59,83
A STATE OF THE PARTY OF THE PAR	DIDC 205	30,000		8,000	San	4,000		17,833			
	DIDC 210	81,000	DICC.180	13,000	100000000000000000000000000000000000000	47,000		21,238	PCOM.180	0	162,23
	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000					72,00
	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	24,318	PCOM.190	0	114,31
	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Contract the second sec	DIDC.260	46,000									46,000
The state of the s	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig		2000	21000,00		STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260	0	.,,
					STIM.200	P designation of			PCOM.200	0	257,000
Completion Logging/Perforating/Wireline						257,000					
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
Stimulation Water/Water Transfer/Water					STIM.395	191,000					191,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,000
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	26,507			26,507
FL/GL - ON PAD LABOR							CON.495	37,613			37,613
FL/GL - Labor							CON.500	94,842			94,842
FL/GL - Supervision							CON.505	14,429			14,429
Survey			1				CON.515	2,351			2,351
SWD/Other - Labor							CON.600	0			2,22,
SWD/Other - Supervision							CON.605	0			0
							CON.701				
Aid In Construct/3rd Party Connect	0/05/125	*****	0100 220		CT11.220			40,531			40,531
Charles and a second	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	105,542	PCOM.220	0	403,542
Contingency							CON.221	23,508			23,508
Total Intangible Cost		2,475,500		306,000		3,459,000		669,568		190,354	7,100,422
Conductor Pipe	DWEB.130	0									
Water String	DWEB.135	104,000									104,000
Surface Casing	DWEB.140	251,000			10						251,000
	DWEB.145	0									0
Production Casing or Liner		-	DWEA.100	792,000							792,000
Tubing					STIMT.105	139,000			PCOMT.105	0	139,000
	DWEB.115	38,000	DWEA.120	10,000	STIMT.120				PCOMT.105 PCOMT.120		104,000
The Control of the Co	DWEB.115 DWEB.100	38,000	DWEA.125	18,000	211W1.120	38,000			PCOM1.120	10,000	
	-11ED.100	0	DWEN.123	0	CTIMET	20.00			DCOLUT ::		29.000
Packer, Nipples					STIMT.400	28,000		20000	PCOMT.400	0	28,000
SHORT ORDERS							CONT.380	10,538			10,538
PUMPS							CONT.385	30,804			30,804
WALKOVERS							CONT.390	4,053			4,053
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
Surface Equipment									PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	184,334		10.00	184,334
Tanks, Tanks Steps, Stairs							CONT.405	51,879			51,879
Battery Equipment							CONT.410	214,003			214,003
Secondary Containments											
Control of the Contro							CONT.415	19,292			19,292
Overhead Power Distribution			1				CONT.420	64,038			64,038
Facility Electrical							CONT.425	32,100			32,100
Telecommunication Equipment							CONT.426	486			486
Meters and Metering Equipment							CONT.445	45,232			45,232
Facility Line Pipe							CONT.450	31,208			31,208
Lease Automation Materials							CONT.455	32,424			32,424
FL/GL - Materials							CONT.550	21,400			21,400
FL/GL - Line Pipe							CONT.555	48,637			48,637
SWD/Other - Materials							CONT.650	0			40,03
SWD/Other - Line Pipe							CONT.655	0			
		202.000		010.000	-	205.00-	CO141.033			20.000	2 202 12
Total Tangible Cost Total Estimated Cost		393,000		810,000 1,116,000		285,000 3,744,000		790,428 1,459,996		30,000 220,354	2,308,428 9,408,850



OCOTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 301H

Description	Codes	BCP	- Drilling Amount	Codes	ACP - Drilling	Amount	-	/Stim	Amou
Roads & Location	DIDC.100		20,000			Amount	STIM.100	CON.100	3,0
Damages	DIDC.105		16,500				2	1.55	-
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		51,0
Day Rate		DICC.120		DICC.120		96,000			
Misc Preparation	DIDC.120		30,000	5.000.00		20000			
Bits	DIDC.125	DICC.125	97,000	DICC.125	STIM.125	0	STIM 125		
Fuel	DIDC.135		119,000			0			
Water for Drilling Rig (Not Frac	DIDC.140	The state of the s	5,000		STIM.135	0	STIM.135		20,00
Mud & Additives	DIDC.145	1	300,000						
SWD PIPED TO 3RD PARTY SWD									
Surface Rentals	DIDC.150	DICC140	97,000	DICC.140	STIM.140	0	STIM.140	CON.140	137,00
Downhole Rentals	DIDC.155	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	131,000				STIM.145	Carlotte .	35,00
Flowback Labor							STIM.141		
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING			3.011						
Cementing & Float Equipment	DIDC.185	DICC.155	70,000	DICC.155		140,000			
Tubular Inspections	DIDC.190	DICC 160	38,000	DICC.160	STIM.160	8,000	STIM.160		4,00
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	13,000	STIM.165		
Mechanical Labor	DIDC 200	DICC.170		DICC,170	The state of the s	3,000	STIM. 170	CON.170	
Trucking/Transportation	DIDC.205					8,000	STIM.175	CON.175	4,00
Supervision	DIDC.210			DICC.180	STIM.180	13,000	STIM.180	CON.180	47,00
Trailer House/Camp/Catering	DIDC.280			DICC.255		5,000	STIM.280		31,00
Other Misc Expenses	DIDC 220				9.00C 40.0CC	0	STIM.190	CON.190	85,00
Overhead	DIDC 225		5,000		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5,000			1
MOB/DEMOB	DIDC.240	Advantage.	115,000			3,000			
Directional Drilling Services	DIDC 245		307,000						
Solids Control	DIDC.260		46,000						
Well Control Equip (Snubbing	DIDC.265	DICC.240		DICC.240	STIM 240	0	STIM.240		64,00
Completion Rig			01,000				STIM.115		21,00
Coil Tubing Services							STIM.260		2.00
Completion							STIM.200		257,00
Composite Plugs							STIM.390		39,00
Stimulation							STIM.210		2,245,00
Stimulation Water/Water							STIM.395		191,00
Cimarex Owned Frac/Rental							STIM.305		60,00
Legal/Regulatory/Curative	DIDC 300		10,000				3111/1.303		60,00
Well Control Insurance	DIDC 285		7,000						
Major Construction Overhead	DIDC.203		7,000						
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey								1	
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect	DIDC 135	DICCARA	****	DICC 220	5741.000		CTU 1 220	0011330	400.00
Contingency	DIDC.435	DICC.220	118,000	DICC.220	STIM.220	15,000	STIM.220	CON.220	165,00
Contingency									
Total Intangible Cos			2,475,500			306,000			3,459,00
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner				DWEA.100		792,000	2200000		100
Tubing	B. 1	DUE 100	122327	BO 5.		3699	STIMT.105		139,00
Wellhead, Tree, Chokes		DWEA.120			STIMT.120	18,000	STIMT.120		38,00
Liner Hanger, Isolation Packer	DWEB.100	DWEA 125	0	DWEA.125		0	GEN WINE		17000
Packer, Nipples							STIMT.400		28,00
SHORT ORDERS									
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,00
Surface Equipment									
Well Automation Materials									
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 - Materials									
SWD/Other - Materials									
SWD/Other - Line Pipe									
Total Tangible Cost			393,000			810,000			285,00

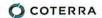


COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 301H

Description	- 100	Production Equip		0.1	Post Completion	A	Total
	Codes	Amou		Codes	Paralle and send part SAC	Amount	74.63
Roads & Location	CON.100 CON.105	48,6	201	PCOM.100	Repair any roads post D&C	3,000	32,30
Damages	CON.105	158	-	DCOMPE		0	251,00
Mud/Fluids Disposal			1	PCOM.255		U	564,00
Day Rate Misc Preparation							30,00
Misc Preparation Bits				PCOM 125		0	97,00
Fuel			- 1	PCOM. 123		0	119,00
Water for Drilling Rig (Not Frac Water)				PCOM.135		0	25,00
Mud & Additives				PCOW, 133		,	300,00
SWD PIPED TO 3RD PARTY SWD WELL				PCOM.257	Water for 60 days (270K barrels)	87,354	87,35
Surface Rentals	CON.140	13		PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	295,37
Downhole Rentals	2011.110	1,2	~~	PCOM.145	non-rac onn sie no rolle villes per asy	0	166,00
Flowback Labor				PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,00
Automation Labor	CON.150	36,5		PCOM.150	2 Floridati, Flanco (es days), Este	5,000	41,55
Mud Logging	20/1/104	30,3	30			-	5,00
IPC & EXTERNAL PAINTING	CON.165	18,8	88				18.88
Cementing & Float Equipment	Services.	10,0					210,000
Tubular Inspections				PCOM.160		0	50,000
Casing Crews							28,000
Mechanical Labor	CON.170	139,5	88	PCOM.170	RU Flowback Iron & Automation	5,000	167,58
Trucking/Transportation	CON.175	17,8		PCOM.175		0	59,83
Supervision	CON.180	21,2		PCOM.180		0	162,23
Trailer House/Camp/Catering		2.7/2	7				72,000
Other Misc Expenses	CON.190	24,3	18	PCOM.190		0	114,31
Overhead			1				10,000
MOB/DEMOB							115,000
Directional Drilling Services							307,000
Solids Control							46,000
Well Control Equip (Snubbing Services)			-10	PCOM.240		0	148,000
Completion Rig				PCOM.115		0	21,000
Coil Tubing Services			-16	PCOM.260		0	(
Completion Logging/Perforating/Wireline			Т	PCOM.200		0	257,000
Composite Plugs	MI.		Ш	PCOM.390		0	39,000
Stimulation			П	PCOM.210		0	2,245,000
Stimulation Water/Water Transfer/Water							191,000
Cimarex Owned Frac/Rental Equipment				PCOM.305		0	60,000
Legal/Regulatory/Curative	CON.300		0				10,000
Well Control Insurance							7,000
Major Construction Overhead	CON.305	26,5	07				26,507
FL/GL - ON PAD LABOR	CON.495	37,6	13				37,613
FL/GL - Labor	CON.500	94,8	42				94,842
FL/GL - Supervision	CON.505	14,4	29				14,429
Survey	CON.515	23	51				2,35
SWD/Other - Labor	CON.600		0				(
SWD/Other - Supervision	CON.605		0				(
Aid In Construct/3rd Party Connect	CON.701	40,5	31				40,53
Contingency	CON.220	105,5	42				403,542
Contingency	CON.221	23,5					23,508
Total Intangible Cost		669,5	68			190,354	7,100,422
Conductor Pipe							(
Water String							104,000
Surface Casing							251,000
Intermediate Casing 1							(
Production Casing or Liner							792,000
Tubing			11.5	PCOMT.105	and the second second second second	0	139,000
Wellhead, Tree, Chokes			F	PCOMT.120	Replace worn chokes and valves during FB	10,000	104,000
Liner Hanger, Isolation Packer							(
Packer, Nipples SHORT ORDERS	CONTRACT			PCOMT.400		0	28,000
SHORT ORDERS PUMPS	CONT.380	10,5					10,538
WALKOVERS	CONT.385	30,8					30,804
	CONT.390	4,0		2001			4,053
Downhole Lift Equipment Surface Equipment			- 1	PCOMT.410	Desiration Challes Co. 15	0	80,000
				PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,000
Well Automation Materials N/C Lease Equipment	CONT.400	1000		PCOMT.455	PTs, and replacing meters	5,000	5,000
	127.101.04.101	184,3					184,334
Tanks, Tanks Steps, Stairs Battery Equipment	CONT.410	51,8	254				51,879
Secondary Containments	CONT.415	214,0					214,003
Overhead Power Distribution	CONT.415	19,2 64,0	22.0			-	19,292 64,038
Facility Electrical	CONT.425	32,1					32,100
Telecommunication Equipment	CONT.425		36				486
Meters and Metering Equipment	CONT.426						45,232
Facility Line Pipe	CONT.445	45,2 31,2					31,208
Lease Automation Materials	CONT.455	31,2	-				32,424
FL/GL - Materials	CONT.550	21,4					21,400
FL/GL - Line Pipe	CONT.555						48,637
SWD/Other - Materials	CONT.650	48,6	0				48,637
SWD/Other - Line Pipe	CONT.655		0				0
Total Tangible Cost		790,4				30,000	2,308,428
		/90.4	C (2)				

7/6/2022

			d Com 302H	
Company Entity				Date Prepared 8/17/2022
Exploration Region	Well Name	Prospect	Property Nun	nber AFE
Permian Basin	Loosey Goosey 4-9 Fed Com 302H	New Mexico Bone Spring	XXXXXX-XXX.0	
County, State	Location		Estimated Spud	Estimated Completion
Lea, NM	Section 4-9 T20S-R34E Lea, NM			
X New Supplement Revision	Formation 3rd Sand	Well Type DEV	Ttl Measured Deoth 20320	Til Vetical Depth 10820
Purpose <b>Drill</b> Description	and complete well			
is so	ne intended surface hold location for the well 100 FSL and 2120 FWL of Section 9, T20S-R3- butherly direction within the formation to the opproximately 10820 feet.	IE. The well is proposed to be drilled	I vertically to the 3rd Sand form	nation and laterally in a
Drilling Cost	S	\$2,475,500	This cooling room	\$2,475,500
Completion		******	\$4,624,922	\$4,624,922
Total Intangible Cost		\$2,475,500	\$4,624,922	\$7,100,422
Tangible Well Equipm		Dry Hole \$393,000	After Casing Point \$1,125,000	Completed Well Cost \$1,518,000
Lease Equipi		\$393,000	\$790,428	\$790,428
		1,000,000		
Total Tangible Cost		\$393,000	\$1,915,428	\$2,308,428
Total Well Cost  Comments On Well (		\$2,868,500	\$6,540,350	
Total Well Cost  Comments On Well Co.  1. All tubulars, well  Well Control Insurance Unless otherwise inc Operator so long as well control insurance available, but in no	or lease equipment is priced by COPAS and C	\$2,868,500 EPS guidelines using the Historic Proof of the pay your prorated share of the prance acceptable to Operator, as to perations. You agree that failure to perations.	\$6,540,350 ice Multiplier. ed by Operator 's well control premiums therefore. If you ele form and limits, at the time thi	\$9,408,850 insurance procured by ect to purchase your own is AFE is returned, if
Total Well Cost  Comments On Well Co.  1. All tubulars, well  Well Control Insurance Unless otherwise inc Operator so long as well control insurance available, but in no will result in your be	or lease equipment is priced by COPAS and Core  dicated below, you, as a non-operating working to the core of the	\$2,868,500 EPS guidelines using the Historic Programmer of the cover of to pay your prorated share of the rance acceptable to Operator, as to perations. You agree that failure to proceed to the covered	\$6,540,350 ice Multiplier. ed by Operator 's well control premiums therefore. If you ele form and limits, at the time thi	ect to purchase your own is AFE is returned, if
Total Well Cost  Comments On Well Co.  1. All tubulars, well  Well Control Insurance Unless otherwise inc Operator so long as well control insurance available, but in no evill result in your be  I elect to p  Marketing Election Cimarex sells its gas insufficient volumes contracts. Upon write	or lease equipment is priced by COPAS and Cope dicated below, you, as a non-operating working Operator conducts operations hereunder and ce, you must provide a certificate of such insue event later than commencement of drilling operating covered by insurance procured by Operating	\$2,868,500  EPS guidelines using the Historic Property of the pay your prorated share of the rance acceptable to Operator, as to perations. You agree that failure to proceed to pay your prorated share of the rance acceptable to Operator, as to perations. You agree that failure to proceed the policy.  The policy of the proceedings of t	\$6,540,350  ice Multiplier.  ed by Operator 's well control premiums therefore. If you ele form and limits, at the time this provide the certificate of insurance of the certificate of the certi	\$9,408,850 insurance procured by ect to purchase your own is AFE is returned, if ence, as provided herein, es may be incurred for the terms of such hich gas will be sold.
Total Well Cost  Comments On Well Co.  1. All tubulars, well  Well Control Insurance Unless otherwise inc Operator so long as well control insurance available, but in no exit result in your be  I elect to public to the contracts of the control insurance I elect to public to the contracts. Upon write Failure to make an exit result in your beautiful to make an exit result in your beautiful to the contracts. Upon write the contracts of the contract of th	or lease equipment is priced by COPAS and Core  dicated below, you, as a non-operating working to the common operation of the core of the	\$2,868,500  EEPS guidelines using the Historic Property of the pay your prorated share of the prance acceptable to Operator, as to perations. You agree that failure to proceed to pay your prorated share of the prance acceptable to Operator, as to perations. You agree that failure to proceed the property of the proceed of the proceeding of the proceedin	\$6,540,350  fice Multiplier.  ed by Operator 's well control premiums therefore. If you ele form and limits, at the time this provide the certificate of insurance, you will be subject to all of and conditions pursuant to were the terms and conditions set	\$9,408,850 insurance procured by ect to purchase your own is AFE is returned, if ence, as provided herein, es may be incurred for the terms of such hich gas will be sold.
Total Well Cost  Comments On Well Co.  1. All tubulars, well  Well Control Insurance Unless otherwise inc Operator so long as well control insurance available, but in no a will result in your be  I elect to p  Marketing Election Cimarex sells its gas insufficient volumes contracts. Upon writ Failure to make an e  I elect to to I elect to to Comments on AFE The above costs are estimated costs with	or lease equipment is priced by COPAS and Coperator conducts operations hereunder and coperator conducts operations hereunder and coperator conducts operations hereunder and copy of the	\$2,868,500  EPS guidelines using the Historic Property of the pay your prorated share of the prance acceptable to Operator, as to perations. You agree that failure to provide the property of the policy.  Purchasers. Such contracts may invariently your share of gas with Cimare, we will share with you the terms market your gas with Cimarex under the property of the terms and conditions of the terms and conditions of the terms without any foreseeable charactering ranted. By approval of the terms granted. By approval of the terms granted.	\$6,540,350  ice Multiplier.  ed by Operator 's well control premiums therefore. If you ele form and limits, at the time this provide the certificate of insurance, and conditions pursuant to we the terms and conditions set its contract.	\$9,408,850 insurance procured by ect to purchase your own is AFE is returned, if ence, as provided herein, es may be incurred for the terms of such hich gas will be sold, forth above, es may exceed the where agrees to pay its
Total Well Cost  Comments On Well Co.  1. All tubulars, well  Well Control Insurance Unless otherwise inc Operator so long as well control insurance available, but in no a will result in your be  I elect to p  Marketing Election Cimarex sells its gas insufficient volumes contracts. Upon writ Failure to make an e  I elect to to lect to to Comments on AFE The above costs are estimated costs with proportionate share	or lease equipment is priced by COPAS and Coperator conducts operations hereunder and coperator conducts operations of drilling operators of the coperator of drilling operators of the coperator of the coperator of drilling operators of the coperator of th	\$2,868,500  EPS guidelines using the Historic Property of the pay your prorated share of the prance acceptable to Operator, as to perations. You agree that failure to provide the property of the terms and conditions of the terms and conditions of the terms and conditions of the terms without any foreseeable characteristics and the property of the p	\$6,540,350  ice Multiplier.  ed by Operator 's well control premiums therefore. If you ele form and limits, at the time this provide the certificate of insurance, and conditions pursuant to we the terms and conditions set its contract.	\$9,408,850 insurance procured by ect to purchase your own is AFE is returned, if ence, as provided herein, es may be incurred for the terms of such hich gas will be sold, forth above, es may exceed the where agrees to pay its



**COTERRA** Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 302H

Description	BCP - Dr	Illing	ACP -	Drilling		np/Stim	Product	ion Equip	Post Com		Total
Description	Codes	Amount	Codes	Amount		Amount		Amount	Codes	Amount	Cos
Roads & Location	DIDC.100	20,000			STIM.100	3,000		48,637	PCOM.100	3,000	74,63
Damages	DIDC.105	16,500					CON.105	15807			32,30
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,00
Day Rate	DIDC.115	468,000	DICC.120	96,000							564,00
Misc Preparation	DIDC.120	30,000									30,00
Bits	DIDC.125	97,000	DICC 125	0	STIM.125	0			PCOM.125	0	97.00
Fuel	DIDC.135	119,000	DICC.130	0				1	PCOM.130	0	119,00
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	25,00
Mud & Additives	DIDC.145	300,000									300,00
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	87,354	87,35
Surface Rentals	DIDC.150	97,000	DICC 140	0	STIM.140	137,000	CON.140	1,378	PCOM.140	60,000	295,37
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000		14675	PCOM.145	0	166,000
Flowback Labor	DIDC.155	131,000			STIM.141	0	1		PCOM.141	30,000	30,000
Automation Labor					Jillivi, 141	U	CON 150	36.558	PCOM.150	5,000	41,55
	DIDC.170	5,000					CONTIN	30,530	1 COM. 130	3,000	5,00
Mud Logging	DIDC.170	5,000					CON.165	18,888			18,88
IPC & EXTERNAL PAINTING	DIDC.185	70,000	DICC.155	140,000			CON.165	10,000			210,000
Cementing & Float Equipment			DICC.153		CTILLICO	4 000			PCOM.160	0	50,00
Tubular Inspections	DIDC.190	38,000		8,000		4,000			PCOM.160	0	
Casing Crews	DIDC.195	15,000	DICC 165	13,000		0		23.00	5000000	556	28,00
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0		139,588	PCOM,170	5,000	167,58
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000		17,833	PCOM.175	0	59,83
Supervision	DIDC.210	81,000	DICC.180	13,000	STIM.180	47,000		21,238	PCOM.180	0	162,23
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	24,318	PCOM.190	0	114,31
Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Solids Control	DIDC.260	46,000									46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260	0	(
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM 200	0	257,000
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
Stirnulation Water/Water Transfer/Water					STIM.395	191,000		1	7.400.0219		191,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,000
Legal/Regulatory/Curative	DIDC.300	10,000			511111303	00,000	CON.300	0			10,000
Well Control Insurance	DIDC.285	7,000					CO14.300				7,000
Major Construction Overhead	DIDC203	7,000					CON.305	26,507			26,507
FL/GL - ON PAD LABOR							CON.495	W1067 241			
FL/GL - Labor								37,613		1	37,613
							CON.500	94,842			94,842
FL/GL - Supervision							CON.505	14,429		1	14,429
Survey							CON.515	2,351			2,35
SWD/Other - Labor							CON.600	0			
SWD/Other - Supervision							CON.605	0			(
Aid In Construct/3rd Party Connect	Same of the						CON.701	40,531			40,531
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000		105,542	PCOM.220	0	403,542
Contingency				-			CON.221	23,508			23,508
Total Intangible Cost		2,475,500		306,000		3,459,000		669,568		190,354	7,100,422
Conductor Pipe	DWEB.130	0									(
Water String	DWEB.135	104,000									104,000
Surface Casing	DWEB.140	251,000									251,000
Intermediate Casing 1	DWEB.145	0									(
Production Casing or Liner			DWEA.100	792,000							792,000
Tubing					STIMT.105	139,000			PCOMT.105	0	139,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0		440.43			777		(
Packer, Nipples		-			STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS						-4/200	CONT.380	10,538			10,538
PUMPS							CONT.385	30,804			30,804
WALKOVERS							CONT.390	4,053			4,053
Downhole Lift Equipment					STIMT.410	80,000		4,033	PCOMT.410	0	80,000
Surface Equipment						00,000			PCOMT.410	15,000	15,000
Well Automation Materials									PCOMT.420 PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	184,334	. COMI.433	3,000	184,334
Tanks, Tanks Steps, Stairs							CONT.405	1000000		11-11-1	51,879
Battery Equipment								51,879			214,003
							CONT.410	214,003			
Secondary Containments Overhead Power Distribution							CONT.415	19,292			19,292
							CONT.420	64,038			64,038
Facility Electrical							CONT.425	32,100			32,100
Telecommunication Equipment					1		CONT.426	486			486
Meters and Metering Equipment							CONT.445	45,232			45,232
Facility Line Pipe							CONT.450	31,208			31,208
Lease Automation Materials							CONT.455	32,424			32,424
FL/GL - Materials					1		CONT.550	21,400			21,400
FL/GL - Line Pipe							CONT.555	48,637			48,637
SWD/Other - Materials							CONT.650	0			C
SWD/Other - Line Pipe							CONT.655	0			C
Total Tangible Cost		393,000		810,000		285,000		790,428		30,000	2,308,428



Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 302H

Description	-	BCF	- Drilling	-	ACP - Drilling	1		o/Stim	Aucr
	Codes		Amount			Amount		CON1100	Amour 3,00
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,00
Damages	DIDC.105		16,500				23,74553		
Mud/Fluids Disposal	DIDC.255	10.00	200,000			1000	STIM.255		51,00
Day Rate	DIDC.115	DICC.120		DICC.120		96,000			
Misc Preparation	DIDC.120		30,000		Lanca de la constante de la co			1	
Bits		DICC.125	97,000	DICC.125	STIM.125	.0	STIM.125		1 2
Fuel	DIDC.135	DICC.130	119,000	DICC.130		0			1
Water for Drilling Rig (Not Frac	DIDC.140	DICC.135	5,000	DICC.135	STIM.135	0	STIM.135		20,00
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD			100000					1	
Surface Rentals	DIDC 150	DICC.140	97,000	DICC.140	STIM 140	0	STIM.140	CON.140	137,00
Downhole Rentals	DIDC.155	Dicc.150	131,000		311M.14G		STIM.145	Collins	35,00
	DIDC.133		131,000						3000
Flowback Labor							STIM.141		
Automation Labor						1			
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	DICC.155	70,000	DICC.155		140,000			
Tubular Inspections	DIDC.190	DICC.160	38,000	DICC.160	STIM.160	8,000	STIM.160		4,000
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	13,000	STIM.165		1
Mechanical Labor		DICC.170		DICC.170	- Set Color Co.	3,000	STIM.170	CON.170	1 - 1
Trucking/Transportation		DICC.175		DICC.175	to an electronic section of	8,000	STIM.175	CON.175	4,000
Supervision		DICC.180		DICC.180	STIM.180	13,000	STIM.180	CON.180	47,000
		Indiacate Co.						2014.100	1 1000000000000000000000000000000000000
Trailer House/Camp/Catering		DICC.255			Mary 2004 3 3 44	5,000	STIM.280	CONTRO	31,000
Other Misc Expenses		DICC.190		DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Overhead		DICC.195		DICC.195		5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC 245		307,000					1	
Solids Control	DIDC.260		46,000						
Well Control Equip (Snubbing	DIDC.265	DICC.240	84,000	DICC.240	STIM 240	0	STIM.240		64,000
Completion Rig	ESS/JEAN)	74,37,343	27/224	3/55-5/3	- 11.11.2.12		STIM.115		21,000
Coil Tubing Services							STIM.260		21,000
							20010575		257,000
Completion							STIM.200		
Composite Plugs							STIM.390		39,000
Stimulation							STIM.210		2,245,000
Stimulation Water/Water							STIM.395		191,000
Cimarex Owned Frac/Rental							STIM.305		60,000
Legal/Regulatory/Curative	DIDC.300		10,000						1
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead			0,000						
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect			1		1.4				
Contingency	DIDC.435	DICC.220	118,000	DICC.220	STIM.220	15,000	STIM.220	CON.220	165,000
Contingency			6.96.00			1-500.0		- C. C. C.	-
Total Intangible Cos			2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		0			300,000	_	-	3,433,000
			10.70						
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner				DWEA.100		792,000			
Tubing							STIMT.105		139,000
Wellhead, Tree, Chokes	DWEB.115	DWEA.120	38,000	DWEA.120	STIMT.120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	Control of the	DWEA 125	1	DWEA.125		0	J. W. S.		200.000
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS							2111112900		20,000
PUMPS									
WALKOVERS									- I make
Downhole Lift Equipment							STIMT.410		80,000
Surface Equipment									
Well Automation Materials			0						
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs									
Battery Equipment									
Secondary Containments									
The second secon									
Overhead Power Distribution Facility Electrical									
Facility Electrical Telecommunication Equipment									
Facility Electrical Telecommunication Equipment Meters and Metering Equipment									
Facility Electrical Telecommunication Equipment Meters and Metering Equipment Facility Line Pipe									
Facility Electrical Telecommunication Equipment Meters and Metering Equipment Facility Line Pipe									
Facility Electrical Telecommunication Equipment Meters and Metering Equipment Facility Line Pipe Lease Automation Materials									
Facility Electrical Telecommunication Equipment Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials									
Facility Electrical Telecommunication Equipment Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials FL/GL - Materials									
Facility Electrical Telecommunication Equipment Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials FL/GL - Materials SWD/Other - Materials									
Facility Electrical Telecommunication Equipment Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials FL/GL - Materials			393,000			810,000			285,000



COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 302H

Description	east I	Production Equip	A	C+4	Post Completion	Amount	Total Co
	Codes		Amount	Codes	Repair any roads post D&C	3,000	74,63
Roads & Location	CON.100		48,637	PCOM.100	Repair any roads post Dac	5,000	32,30
Damages	CON.105		15807	PCOM.255		0	251,00
Mud/Fluids Disposal				PCOM.255		U	564,00
Day Rate						191	30,00
Misc Preparation				PCOM.125		0	97,00
Bits						0	119,00
Fuel				PCOM.130 PCOM.135		0	25,00
Water for Drilling Rig (Not Frac Water)				PCOM.135		Ü	300,000
Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL				00011357	Water for 60 days (270K barrels)	87,354	87,35
Surface Rentals	CON.140		1.770	PCOM.257 PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	295,37
Downhole Rentals	CON.140		1,378	PCOM.140 PCOM.145	Iron. XEC OWN SK. No Tox. \$1,100 per day	00,000	166,00
					2 Flankadi Handa (60 days) 25%	30,000	30,000
Flowback Labor	5011450		20000	PCOM.141	3 Flowback Hands (60 days), 25%	4000000	
Automation Labor	CON.150		36,558	PCOM.150		5,000	41,550 5,000
Mud Logging	CON.165						18,88
IPC & EXTERNAL PAINTING	CON.165		18,888				210,000
Cementing & Float Equipment				PCOM.160		0	50,000
Tubular Inspections				PCOM. 160		U	28,000
Casing Crews	CON 170		*20.500	05011170	BUT I I I I I I I I I I I I I I I I I I I	5 000	167,58
Mechanical Labor	CON.170		139,588	PCOM.170	RU Flowback Iron & Automation	5,000	59,83
Trucking/Transportation	CON.175		17,833	PCOM.175		0	
Supervision Trailer House / Camp / Catering	CON.180		21,238	PCOM.180		0	162,23
Trailer House/Camp/Catering	CONTRO		2122	0001110		0	72,000
Other Misc Expenses	CON.190		24,318	PCOM.190		0	114,318
Overhead MOB/DEMOB							10,000
		1					115,000
Directional Drilling Services							307,000
Solids Control				Arrest Law.		4	46,000
Well Control Equip (Snubbing Services)				PCOM.240		0	148,000
Completion Rig				PCOM.115		0	21,000
Coil Tubing Services				PCOM.260		0	(
Completion Logging/Perforating/Wireline				PCOM.200		0	257,000
Composite Plugs				PCOM.390		0	39,000
Stimulation				PCOM.210		0	2,245,000
Stimulation Water/Water Transfer/Water							191,000
Cimarex Owned Frac/Rental Equipment				PCOM.305		0	60,000
Legal/Regulatory/Curative	CON.300		0				10,000
Well Control Insurance	1000000						7,000
Major Construction Overhead	CON.305		26,507				26,507
FL/GL - ON PAD LABOR	CON.495		37,613				37,613
FL/GL - Labor	CON.500		94,842				94,842
FL/GL - Supervision	CON.505		14,429				14,429
Survey	CON.515		2351				2,35
SWD/Other - Labor	CON.600		0				(
SWD/Other - Supervision	CON.605		0				(
Aid In Construct/3rd Party Connect	CON.701		40,531				40,531
Contingency	CON.220		105,542				403,542
Contingency	CON 221		23,508				23,508
Total Intangible Cost			669,568			190,354	7,100,422
Conductor Pipe							(
Water String							104,000
Surface Casing							251,000
Intermediate Casing 1							(
Production Casing or Liner							792,000
Tubing				PCOMT.105	Company of the second	0	139,000
Wellhead, Tree, Chokes				PCOMT.120	Replace worn chokes and valves during FB	10,000	104,000
Liner Hanger, Isolation Packer							(
Packer, Nipples	277777			PCOMT.400		0	28,000
SHORT ORDERS	CONT.380		10,538				10,538
PUMPS	CONT.385		30,804				30,804
WALKOVERS	CONT.390		4,053				4,053
Downhole Lift Equipment				PCOMT.410	De la company de	0	80,000
Surface Equipment				PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,000
Well Automation Materials	10.000			PCOMT.455	PTs, and replacing meters	5,000	5,000
N/C Lease Equipment	CONT.400		184,334				184,334
Tanks, Tanks Steps, Stairs	CONT.405		51,879				51,879
Battery Equipment	CONT.410		214,003				214,003
Secondary Containments	CONT.415		19,292				19,292
Overhead Power Distribution	CONT.420		64,038				64,038
Facility Electrical	CONT.425		32,100				32,100
Telecommunication Equipment	CONT.426		486				486
Meters and Metering Equipment	CONT.445		45,232				45,232
Facility Line Pipe	CONT.450		31,208				31,208
Lease Automation Materials	CONT.455		32,424				32,424
FL/GL - Materials	CONT.550		21,400				21,400
FL/GL - Line Pipe	CONT.555		48,637				48,637
SWD/Other - Materials	CONT.650		0				(
SWD/Other - Line Pipe	CONT.655		0				
Total Tangible Cost			790,428			30,000	2,308,428

COTERRA AFE # XXXXXXX Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 303H Date Prepared Company Entity 8/17/2022 Prospect Property Number Well Name Exploration Region XXXXXXXX Permian Basin Loosey Goosey 4-9 Fed Com 303H New Mexico Bone Spring XXXXXX-XXX.01 Estimated Soud Estimated Completion County, State Location Lea, NM Section 4-9 T20S-R34E Lea, NM Well Type Ttl Vetical Deoth. Ttl Measured Depth Supplement 20310 10810 DEV Revision Drill and complete well Purpose Description Drilling The intended surface hold location for the well is 280 FSL and 1540 FEL of Section 33, T19S-R34E, and the intended bottom hole location is 100 FSL and 1744 FEL of Section 9, T20S-R34E. The well is proposed to be drilled vertically to the 3rd Sand formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 10810 feet. Intangible Dry Hole After Casing Point Completed Well Cost \$2,475,500 Drilling Costs \$2,475,500 Completion Casts \$4,595,289 \$4,595,289 \$4,595,289 \$7,070,789 Total Intangible Cost \$2,475,500 Completed Well Cost Tangible Dry Hole After Casing Point Well Equipment \$393,000 \$1,125,000 \$1,518,000 \$840.065 Lease Equipment \$840.065 Total Tangible Cost \$2,358,065 \$393,000 \$1,965,065 Total Well Cost \$6,560,354 \$9,428,854 \$2,868,500 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. 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. 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

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate

Approved By (Signature)

Date

7/6/2022

Approved By (Print Name)

share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

Company



**COTERRA** Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 303H

Description	BCP - Dr	1	ACP -			np/Stim	1	ion Equip	Post Com		Total
	Codes	Amount	Codes	Amount		Amount		Amount	Codes	Amount	Co
Roads & Location	DIDC.100	20,000			STIM.100	3,000		44,205	PCOM.100	3,000	70,20
Damages	DIDC.105	16,500					CON.105	3215			19,71
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,00
Day Rate	DIDC.115	468,000	DICC 120	96,000							564,00
Misc Preparation	DIDC.120	30,000									30,00
Bits	DIDC.125	97,000	DICC.125	0	STIM.125	0			PCOM.125	0	97,00
Fuel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,00
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	25,00
Mud & Additives	DIDC.145	300,000				20,000					300,000
SWD PIPED TO 3RD PARTY SWD WELL	Diocirio	300,000							PCOM.257	87,354	87,35
	DIDC 150	07.000	DICCAM	0	CTILLIAN	177.000	CONTIN	6012	PCOM.140	60,000	300,91
Surface Rentals	DIDC.150	97,000	DICC 140	Ü	STIM.140	137,000		6,912			
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	166,000
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Automation Labor							CON.150	45,010	PCOM.150	5,000	50,010
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING							CON.165	5,144			5,14
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000				-			210,000
Tubular Inspections	DIDC.190	38,000	DICC.160	8,000	STIM.160	4,000			PCOM.160	0	50,000
Casing Crews	DIDC.195	15,000	DICC.165	13,000		0					28,000
Mechanical Labor	DIDC.200	20,000	DICC 170	3,000		0		185,663	PCOM.170	5,000	213,663
					Territoria I						
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000		4,000	1	16,075	PCOM.175	0	58,075
Supervision	DIDC.210	81,000	DICC.180	13,000		47,000		11,574	PCOM.180	0	152,574
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000		31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	19,290	PCOM.190	0	109,290
Overhead	DIDC.225	5,000	DICC.195	5,000				1			10,000
MOB/DEMOB	DIDC 240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Solids Control	DIDC.260	46,000									46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig	5,56,203	0-4,000	5166640	U	STIM.115	21,000			PCOM.240 PCOM.115	0	21,000
									PCOM.260		21,000
Coil Tubing Services					STIM.260	0				0	
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,000
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
Stimulation Water/Water Transfer/Water					STIM.395	191,000					191,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000		1	PCOM.305	0	60,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	7,000						1			7,000
Major Construction Overhead	DIDCLOS	1,000					CON.305	0			.,
FL/GL - ON PAD LABOR								1			33,114
							CON.495	33,114			
FL/GL - Labor							CON.500	113,970			113,970
FL/GL - Supervision							CON.505	12,056			12,056
Survey							CON.515	6,590			6,590
SWD/Other - Labor							CON,600	0			(
SWD/Other - Supervision							CON.605	0			(
Aid In Construct/3rd Party Connect							CON.701	0			
Contingency	DIDC.435	118,000	DICC.220	15.000	STIM.220	165,000	CON.220	106,737	PCOM.220	0	404,737
Contingency						100,000	CON.221	30,381	0.0000000		30,381
Total Intangible Cost		2,475,500		306,000		3,459,000	CONTACT	639,935		190,354	7,070,789
Conductor Pipe	DWEB.130	0		200,000		3,439,000		035,533	-	150,534	7,070,703
The state of the s	The Assessment of the State of	1000									
Water String	DWEB.135	104,000									104,000
Surface Casing	DWEB.140	251,000									251,000
Intermediate Casing 1	DWEB.145	0									C
Production Casing or Liner			DWEA.100	792,000							792,000
Tubing					STIMT.105	139,000			PCOMT.105	0	139,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18.000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0		20,000			ALCOHOLD STATE	12,230	0
Packer, Nipples	21123/100	U	J. T. T. T.	U	STIME 400	20,000			PCOMT.400	0	28,000
SHORT ORDERS					STIMT.400	28,000		27.455	FCOM1.400	U	
							CONT.380	11,253			11,253
PUMPS							CONT.385	26,362			26,362
WALKOVERS							CONT.390	6,430	Donation of		6,430
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
Surface Equipment									PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	279,861			279,861
Tanks, Tanks Steps, Stairs				0.00			CONT.405	0			0
Battery Equipment							CONT.410	57.7.77			229,386
								229,386			
Secondary Containments							CONT.415	12,859			12,859
Overhead Power Distribution							CONT.420	10,288			10,288
Facility Electrical							CONT.425	48,224			48,224
Telecommunication Equipment							CONT.426	0			0
Meters and Metering Equipment							CONT.445	42,758			42,758
Facility Line Pipe							CONT.450	28,935			28,935
Lease Automation Materials							CONT.455	36,972			36,972
FL/GL - Materials							CONT.550	26,684			26,684
FL/GL - Line Pipe							CONT.555	80,052			80,052
SWD/Other - Materials							CONT.650	0			C
SWD/Other - Line Pipe							CONT.655	0			0
		202.000		810,000		285,000		840,065		30,000	2,358,065
Total Tangible Cost		393,000		010,000		203,000		0440,003		30,000	2,000,000



COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 303H

Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes DWEB.115 Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS	CC.125 CC.130 CC.135 CC.140 CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	30,000 97,000 119,000 300,000 97,000 131,000 5,000 15,000 20,000 36,000 5,000 5,000 5,000 115,000 36,000 46,000	DICC.120 DICC.125 DICC.130 DICC.135 DICC.140 DICC.155 DICC.160 DICC.165 DICC.175 DICC.175 DICC.175 DICC.180 DICC.255 DICC.250 DICC.255 DICC.190	STIM.140  STIM.160 STIM.165 STIM.175 STIM.175 STIM.180 STIM.280 STIM.190	96,000  0  0  140,000 8,000 13,000 8,000 13,000 5,000 5,000	Codes STIM.100 STIM.255 STIM.125 STIM.135 STIM.140 STIM.141 STIM.160 STIM.160 STIM.175 STIM.175 STIM.170 STIM.170 STIM.180 STIM.180 STIM.180 STIM.180	CON.140  CON.170 CON.175 CON.180	4,000
Damages         DIDC.105           Mud/Fluids Disposal         DIDC.255           Day Rate         DIDC.125           Miss Preparation         DIDC.125           Bits         DIDC.125           Fuel         DIDC.135           Mater for Drilling Rig (Not Frac         DIDC.140           Mud & Additives         DIDC.145           SWD PIPED TO 3RD PARTY SWD         DIDC.150           Surface Rentals         DIDC.150           Downhole Rentals         DIDC.155           Flowback Labor         Automation Labor           Mud Logging         DIDC.170           IPC & EXTERNAL PAINTING         DIDC.185           Cementing & Float Equipment         DIDC.185           Tubular Inspections         DIDC.200           Casing Crews         DIDC.200           Mechanical Labor         DIDC.200           Trucking/Transportation         DIDC.200           Supervision         DIDC.200           Olice         DIDC.200           Other Misc Expenses         DIDC.200           Olice Trucking/Transportation         DIDC.200           Other Misc Expenses         DIDC.200           Olice Trucking/Transportation         DIDC.200           Directional Drilling	CC.125 CC.130 CC.135 CC.140 CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	16,500 200,000 468,000 30,000 97,000 119,000 5,000 97,000 131,000 5,000 15,000 30,000 81,000 5,000 5,000 5,000 115,000 36,000 46,000 46,000	DICC.120 DICC.125 DICC.130 DICC.135 DICC.140 DICC.155 DICC.160 DICC.165 DICC.170 DICC.170 DICC.180 DICC.255 DICC.190 DICC.195	STIM.140  STIM.160 STIM.165 STIM.175 STIM.175 STIM.180 STIM.280 STIM.190	140,000 8,000 13,000 3,000 5,000	STIM.125 STIM.125 STIM.135 STIM.140 STIM.145 STIM.141 STIM.160 STIM.170 STIM.175 STIM.175 STIM.178	CON.140  CON.170 CON.175	51,000 20,000 137,000 35,000 4,000
DIDC.255   DIDC.255   DIDC.150   DIDC.155   DIDC.150   DIDC.155   DIDC.150   DIDC.155   DIDC.150	CC.125 CC.130 CC.135 CC.140 CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	200,000 468,000 30,000 97,000 119,000 5,000 300,000 70,000 38,000 30,000 81,000 5,000 5,000 5,000 115,000 36,000 36,000 46,000 46,000	DICC.120 DICC.125 DICC.130 DICC.135 DICC.140 DICC.155 DICC.160 DICC.165 DICC.170 DICC.170 DICC.180 DICC.255 DICC.190 DICC.195	STIM.140  STIM.160 STIM.165 STIM.175 STIM.175 STIM.180 STIM.280 STIM.190	140,000 8,000 13,000 3,000 5,000	STIM.125 STIM.135 STIM.140 STIM.141 STIM.141 STIM.160 STIM.175 STIM.175 STIM.175 STIM.178 STIM.178	CON 170 CON 175	20,000 137,000 35,000 4,000
Day Rate         DIDC.115         DICC.125           Misc Preparation         DIDC.125         DICC.125           Fuel         DIDC.125         DICC.125           Water for Drilling Rig (Not Frac         DIDC.135         DICC.145           SWD PIPED TO 3RD PARTY SWD         DIDC.145         DIDC.145           SWD PIPED TO 3RD PARTY SWD         DIDC.150         DICC.150           Surface Rentals         DIDC.155         DICC.150           Downhole Rentals         DIDC.150         DICC.150           Mud Logging         DIDC.150         DICC.150           IPC & EXTERNAL PAINTING         Cementing & Float Equipment         DIDC.180         DICC.180           Mud Logging         DIDC.190         DICC.260         DICC.260 <t< td=""><td>CC.125 CC.130 CC.135 CC.140 CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195</td><td>468.000 30.000 97,000 119,000 5,000 300,000 97,000 38,000 15,000 30,000 81,000 5,000 5,000 5,000 115,000 46,000</td><td>DICC.120 DICC.125 DICC.130 DICC.135 DICC.140 DICC.155 DICC.160 DICC.165 DICC.170 DICC.170 DICC.180 DICC.255 DICC.190 DICC.195</td><td>STIM.140  STIM.160 STIM.165 STIM.175 STIM.175 STIM.180 STIM.280 STIM.190</td><td>140,000 8,000 13,000 3,000 5,000</td><td>STIM.125 STIM.135 STIM.140 STIM.141 STIM.141 STIM.160 STIM.175 STIM.175 STIM.175 STIM.178 STIM.178</td><td>CON 170 CON 175</td><td>20,00 137,00 35,00 4,00</td></t<>	CC.125 CC.130 CC.135 CC.140 CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	468.000 30.000 97,000 119,000 5,000 300,000 97,000 38,000 15,000 30,000 81,000 5,000 5,000 5,000 115,000 46,000	DICC.120 DICC.125 DICC.130 DICC.135 DICC.140 DICC.155 DICC.160 DICC.165 DICC.170 DICC.170 DICC.180 DICC.255 DICC.190 DICC.195	STIM.140  STIM.160 STIM.165 STIM.175 STIM.175 STIM.180 STIM.280 STIM.190	140,000 8,000 13,000 3,000 5,000	STIM.125 STIM.135 STIM.140 STIM.141 STIM.141 STIM.160 STIM.175 STIM.175 STIM.175 STIM.178 STIM.178	CON 170 CON 175	20,00 137,00 35,00 4,00
Misc Preparation         DIDC.120           Bits         DIDC.125           Fuel         DIDC.125           Water for Drilling Rig (Not Frac         DIDC.135           Mud & Additives         DIDC.140           Downhole Rentals         DIDC.155           Flowback Labor         Automation Labor           Mud Logging         DIDC.155           Flowback Labor         DIDC.170           Automation Labor         DIDC.170           Mud Logging         DIDC.170           IPC & EXTERNAL PAINTING         DIDC.190           Cementing & Float Equipment         DIDC.190           Tubular Inspections         DIDC.190           Casing Crew         DIDC.190           Mechanical Labor         DIDC.200           Trucking/Transportation         DIDC.200           Supervision         DIDC.200           Other Misc Expenses         DIDC.200           Other Misc Expenses         DIDC.220           Outher Misc Expenses         DIDC.220           Outher Misc Expenses         DIDC.220           Outher Misc Expenses         DIDC.220           Outher Misc Expenses         DIDC.240           Directional Drilling Services         DIDC.245           Solids Con	CC.125 CC.130 CC.135 CC.140 CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	30,000 97,000 119,000 300,000 97,000 131,000 5,000 15,000 20,000 36,000 5,000 5,000 5,000 115,000 36,000 46,000	DICC.125 DICC.130 DICC.135 DICC.140 DICC.155 DICC.160 DICC.165 DICC.170 DICC.170 DICC.180 DICC.180 DICC.190	STIM.140  STIM.160 STIM.165 STIM.175 STIM.175 STIM.180 STIM.280 STIM.190	140,000 8,000 13,000 3,000 5,000	STIM.140 STIM.140 STIM.145 STIM.141 STIM.165 STIM.175 STIM.175 STIM.175 STIM.180 STIM.280	CON 170 CON 175	20,00 137,00 35,00 4,00
Bits	CC.130 CC.135 CC.140 CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	97,000 119,000 5,000 97,000 131,000 5,000 70,000 38,000 15,000 30,000 81,000 5,000 5,000 115,000 36,000 46,000	DICC.130 DICC.135 DICC.140 DICC.155 DICC.160 DICC.165 DICC.170 DICC.175 DICC.170 DICC.175 DICC.180 DICC.255 DICC.190	STIM.140  STIM.160 STIM.165 STIM.175 STIM.175 STIM.180 STIM.280 STIM.190	140,000 13,000 13,000 13,000 5,000	STIM.140 STIM.140 STIM.145 STIM.141 STIM.165 STIM.175 STIM.175 STIM.175 STIM.180 STIM.280	CON 170 CON 175	20,00 137,00 35,00 4,00
Fuel         DIDC.135         DIDC.135         DIDC.140           Water for Drilling Rig (Not Frac         DIDC.145         DIDC.145         DIDC.145           SWD PIPED TO 3RD PARTY SWD         DIDC.150         DIDC.150         DIDC.155           SWD PIPED TO 3RD PARTY SWD         DIDC.155         DIDC.155         DIDC.155           SWD PIPED TO 3RD PARTY SWD         DIDC.155         DIDC.155         DIDC.150           Downhole Rentals         DIDC.155         DIDC.150         DIDC.150         DIDC.150         DIDC.170         DIDC.170         DIDC.170         DIDC.170         DIDC.170         DIDC.170         DIDC.180         DIDC.170         DIDC.170         DIDC.170         DIDC.170         DIDC.170         DIDC.200         DIDC.170         DIDC.200         DIDC.220         DIDC.200         DIDC.220         DIDC.200         DIDC.220         DIDC.200         DIDC.220         DIDC.200	CC.130 CC.135 CC.140 CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	119,000 5,000 300,000 97,000 131,000 5,000 38,000 15,000 30,000 81,000 5,000 5,000 115,000 36,000 46,000	DICC.130 DICC.135 DICC.140 DICC.155 DICC.160 DICC.165 DICC.170 DICC.175 DICC.170 DICC.175 DICC.170 DICC.175 DICC.190	STIM.140  STIM.160 STIM.165 STIM.175 STIM.175 STIM.180 STIM.280 STIM.190	140,000 13,000 13,000 13,000 5,000	STIM.140 STIM.140 STIM.145 STIM.141 STIM.165 STIM.175 STIM.175 STIM.175 STIM.180 STIM.280	CON 170 CON 175	20,00 137,00 35,00 4,00
Water for Drilling Rig (Not Frac Mud & Additives SWD PIPED TO 3RD PARTY SWD Surface Rentals Downhole Rentals Downhole Rentals DiDC.155 Flowback Labor Automation Labor Mud Logging IPC & EXTERNAL PAINTING Cementing & Float Equipment DiDC.195 DiDC.195 Mechanical Labor DiDC.195 Mechanical Labor DiDC.205 DiDC.195 Mechanical Labor DiDC.205	CC.135  CC.140  CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	5,000 300,000 97,000 131,000 5,000 70,000 38,000 15,000 81,000 5,000 5,000 115,000 307,000 46,000	DICC.135  DICC.140  DICC.155  DICC.160  DICC.175  DICC.175  DICC.175  DICC.175  DICC.175  DICC.180  DICC.255  DICC.190  DICC.195	STIM.140 STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	140,000 8,000 13,000 8,000 13,000 5,000	STIM.140 STIM.145 STIM.161 STIM.165 STIM.170 STIM.175 STIM.175 STIM.178	CON 170 CON 175	137,00 35,00 4,00
Mud & Additives SWD PIPED TO 3RD PARTY SWD Surface Rentals DiDC.155 Downhole Rentals DiDC.155 Downhole Rentals DiDC.155 DiDC.150 DiDC.150 DiDC.170	CC.140  CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	300,000 97,000 131,000 5,000 70,000 38,000 15,000 81,000 81,000 5,000 5,000 115,000 46,000	DICC.140  DICC.155  DICC.160  DICC.165  DICC.170  DICC.170  DICC.180  DICC.255  DICC.190  DICC.195	STIM.140 STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	140,000 8,000 13,000 8,000 13,000 5,000	STIM.140 STIM.145 STIM.161 STIM.165 STIM.170 STIM.175 STIM.175 STIM.178	CON 170 CON 175	137,000 35,000 4,000
SWD PIPED TO 3RD PARTY SWD  Surface Rentals  Downhole Rentals  Flowback Labor  Automation Labor  Mud Logging  PIC & EXTERNAL PAINTING  Cementing & Float Equipment  Tubular Inspections  DIDC.155  DICC.185  DICC.200  D	CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190	97,000 131,000 5,000 70,000 38,000 15,000 30,000 81,000 5,000 5,000 115,000 46,000	DICC.140  DICC.155 DICC.165 DICC.165 DICC.170 DICC.170 DICC.180 DICC.255 DICC.190 DICC.195	STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	140,000 8,000 13,000 3,000 8,000 13,000 5,000	STIM.145 STIM.141 STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 170 CON 175	4,000 4,000 4,000
Surface Rentals	CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190	5,000 70,000 38,000 15,000 20,000 81,000 5,000 115,000 307,000 46,000	DICC.155 DICC.160 DICC.165 DICC.175 DICC.175 DICC.180 DICC.255 DICC.190	STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	140,000 8,000 13,000 3,000 8,000 13,000 5,000	STIM.145 STIM.141 STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 170 CON 175	4,000
Downhole Rentals Flowback Labor Automation Labor Mud Logging IPC & EXTERNAL PAINTING Cementing & Float Equipment Tubular Inspections Casing Crews IDDC.195 IDC.195 IDC.205 IDC.195 IDC.205 IDC.206 IDC.206 IDC.206 IDC.206 IDC.206 IDC.206 IDC.206 IDC.206 IDC.207 IDC	CC.155 CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190	5,000 70,000 38,000 15,000 20,000 81,000 5,000 115,000 307,000 46,000	DICC.155 DICC.160 DICC.165 DICC.175 DICC.175 DICC.180 DICC.255 DICC.190	STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	140,000 8,000 13,000 3,000 8,000 13,000 5,000	STIM.145 STIM.141 STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 170 CON 175	4,000 4,000 4,000
Flowback Labor	CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	5,000 70,000 38,000 15,000 20,000 30,000 81,000 5,000 5,000 115,000 46,000	DICC.155 DICC.160 DICC.165 DICC.170 DICC.175 DICC.180 DICC.255 DICC.190	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	8,000 13,000 3,000 8,000 13,000 5,000	STIM.141 STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 175	4,000
Automation Labor Mud Logging DIDC.170 PC & EXTERNAL PAINTING Cementing & Float Equipment DIDC.185 Tubular Inspections DIDC.190 Casing Crews DIDC.195 Casing Crews DIDC.205 Casing Crews DIDC.205 Mechanical Labor DIDC.200 Trucking/Transportation DIDC.205 Supervision DIDC.205 Supervision DIDC.205 Coverhead DIDC.225 Overhead DIDC.225 Overhead DIDC.225 DIDC.225 Overhead DIDC.225 DIDC.230 DIDC.230 DIDC.230 DIDC.230 DIDC.230 DIDC.235 DIDC.	CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	70,000 38,000 15,000 20,000 30,000 81,000 5,000 5,000 115,000 46,000	DICC.155 DICC,160 DICC,165 DICC.170 DICC.175 DICC.180 DICC.255 DICC.190	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	8,000 13,000 3,000 8,000 13,000 5,000	STIM.160 STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 175	4,000
Mud Logging IPC & EXTERNAL PAINTING Cementing & Float Equipment Tubular Inspections Casing Crews DIDC.195 DICC Casing Crews DIDC.200 DICC Casing Crews Mechanical Labor Trucking/Transportation DIDC.200 DICC Trucking/Transportation DIDC.200 DICC Trucking/Transportation DIDC.200 DICC DICC Trucking/Transportation DIDC.200 DICC DICC Trucking/Transportation DIDC.200 DICC DICC Trucking/Transportation DIDC.200 DICC DICC DICC Trucking/Transportation DIDC.200 DICC DICC DICC DICC DICC DICC DICC DI	CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	70,000 38,000 15,000 20,000 30,000 81,000 5,000 5,000 115,000 46,000	DICC.155 DICC,160 DICC,165 DICC.170 DICC.175 DICC.180 DICC.255 DICC.190	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	8,000 13,000 3,000 8,000 13,000 5,000	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 175	4,000
IPC & EXTERNAL PAINTING Cementing & Float Equipment Tubular Inspections DIDC.185 DIDC.190 DICC. Casing Crews DIDC.205 Mechanical Labor Trucking/Transportation DIDC.205 DICC. Mechanical Labor Trucking/Transportation DIDC.205 DICC. Supenvision DIDC.205 DICC. Supenvision DIDC.205 DICC. Supenvision DIDC.205 DICC. DIDC.225 DICC. DICC	CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	70,000 38,000 15,000 20,000 30,000 81,000 5,000 5,000 115,000 46,000	DICC.155 DICC,160 DICC,165 DICC.170 DICC.175 DICC.180 DICC.255 DICC.190	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	8,000 13,000 3,000 8,000 13,000 5,000	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 175	4,000
Cementing & Float Equipment         DIDC.185         DIC.195         DIC.195         DIC.195         DIC.195         DIC.195         DIC.205         DIC.206         DIC.206         DIC.206         DIC.207         DI	CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	38,000 15,000 20,000 30,000 81,000 5,000 5,000 115,000 307,000 46,000	DICC.160 DICC.165 DICC.170 DICC.175 DICC.180 DICC.255 DICC.190 DICC.195	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	8,000 13,000 3,000 8,000 13,000 5,000	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 175	4,000
Tubular Inspections         DIDC.190         DIDC.190         DIDC.190         DIDC.205         DIDC.206         DIDC.206 </td <td>CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195</td> <td>38,000 15,000 20,000 30,000 81,000 5,000 5,000 115,000 307,000 46,000</td> <td>DICC.160 DICC.165 DICC.170 DICC.175 DICC.180 DICC.255 DICC.190 DICC.195</td> <td>STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190</td> <td>8,000 13,000 3,000 8,000 13,000 5,000</td> <td>STIM.165 STIM.170 STIM.175 STIM.180 STIM.280</td> <td>CON 175</td> <td>4,000</td>	CC.160 CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	38,000 15,000 20,000 30,000 81,000 5,000 5,000 115,000 307,000 46,000	DICC.160 DICC.165 DICC.170 DICC.175 DICC.180 DICC.255 DICC.190 DICC.195	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	8,000 13,000 3,000 8,000 13,000 5,000	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 175	4,000
Casing Crews DIDC.195 DICC Mechanical Labor DIDC.200 DICC Trucking/Transportation DIDC.205 DICC Supervision DIDC.205 DICC Trailer House/Camp/Catering DIDC.280 DICC Trailer House/Camp/Catering DIDC.280 DICC Trailer House/Camp/Catering DIDC.280 DICC Overhead DIDC.225 DICC Overhead DIDC.230 DIDC.265 DICC Overhead DIDC.230 DIDC.235 DIDC.235 DICC Overhead DIDC.230 DIDC.235 DIDC.23	CC.165 CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	15,000 20,000 30,000 81,000 36,000 5,000 115,000 307,000 46,000	DICC.165 DICC.170 DICC.175 DICC.180 DICC.255 DICC.190 DICC.195	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	13,000 3,000 8,000 13,000 5,000	STIM.165 STIM.170 STIM.175 STIM.180 STIM.280	CON 175	4,000
Mechanical Labor DIDC 200 DICC	CC.170 CC.175 CC.180 CC.255 CC.190 CC.195	20,000 30,000 81,000 36,000 5,000 115,000 307,000 46,000	DICC.170 DICC.175 DICC.180 DICC.255 DICC.190 DICC.195	STIM.170 STIM.175 STIM.180 STIM.280 STIM.190	3,000 8,000 13,000 5,000	STIM.170 STIM.175 STIM.180 STIM.280	CON 175	4,000
Trucking/Transportation DIDC.205 DICC Supension DIDC.210 DICC Supension DIDC.210 DICC 210 DICC 217 DIC	CC.175 CC.180 CC.255 CC.190 CC.195	30,000 81,000 36,000 5,000 5,000 115,000 307,000 46,000	DICC.175 DICC.180 DICC.255 DICC.190 DICC.195	STIM.175 STIM.180 STIM.280 STIM.190	8,000 13,000 5,000 0	STIM.175 STIM.180 STIM.280	CON 175	4,000
Supervision DIDC 210 DICC 210 DICC 210 DICC 210 DICC 210 DICC 210 DICC 220	CC.180 CC.255 CC.190 CC.195	81,000 36,000 5,000 5,000 115,000 307,000 46,000	DICC.180 DICC.255 DICC.190 DICC.195	STIM.180 STIM.280 STIM.190	13,000 5,000 0	STIM.180 STIM.280		
Trailer House/Camp/Catering DIDC 280 DICC 280 Other Misc Expenses DIDC 220 DICC 280	CC.255 CC.190 CC.195	36,000 5,000 5,000 115,000 307,000 46,000	DICC.190 DICC.195	STIM.190	5,000 0	STIM.280	CON.180	47.00
Other Misc Expenses Other Misc Expenses Overhead Objectional Drilling Services Solids Control Overheit Equip (Snubbing Completion Rig Coil Tubing Services Completion Rig Coil Tubing Services Completion Rig Coil Tubing Services Completion Composite Plugs Stimulation Stimulation Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative DiDC.285 Major Construction Overhead Fl/GL - ON PAD LABOR Fl/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Water String Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS	CC.190 CC.195	5,000 5,000 115,000 307,000 46,000	DICC.190 DICC.195	STIM:190	0			47,000
Other Misc Expenses DIDC 220 DICC Overhead DIDC 225 DICC Overhead DIDC 225 DICC Overhead DIDC 225 DICC Overhead DIDC 225 DIDC 240 DIDC 245	CC.195	5,000 115,000 307,000 46,000	DICC.195		1	STIM.190	the same of the sa	31,000
MOB/DEMOB DIDC 240 Directional Drilling Services DIDC 245 Solids Control DIDC 265 Well Control Equip (Snubbing DIDC 265 Completion Rig Coil Tubing Services Completion Composite Plugs Stimulation Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative Well Control Insurance DIDC 285 Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Contingency Total Intangible Cos Conductor Pipe Well Surface Casing DWEB.130 Surface Casing DWEB.140 Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer PLORT DRDERS		115,000 307,000 46,000		STIM 240	5,000		CON 190	85,000
Directional Drilling Services  Solids Control  Well Control Equip (Snubbing  Completion Rig  Coil Tubing Services  Completion  Composite Plugs  Stimulation  Stimulation Water/Water  Cimarex Owned Frac/Rental  Legal/Regulatory/Curative  Well Control Insurance  Major Construction Overhead  FL/GL - ON PAD LABOR  FL/GL - Supervision  Survey  SWD/Other - Labor  SWD/Other - Supervision  Aid In Construct/3rd Party Connect  Contingency  Total Intangible Cos  Conductor Pipe  Water String  Water String  Water String  DWEB.135  Surface Casing  Intermediate Casing 1  Production Casing or Liner  Tubing  Wellhead, Tree, Chokes  Liner Hanger, Isolation Packer  Packer, Nipples  SHORT ORDERS	CC240	307,000 46,000		STIM 240	1			
Directional Drilling Services Solids Control Solids Control DIDC 260 Well Control Equip (Snubbing Completion Rig Coil Tubing Services Completion Composite Plugs Stimulation Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative DIDC 285 Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String DWEB.135 Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS	CC240	307,000 46,000		STIM 240				
Solids Control Well Control Equip (Snubbing Completion Rig Coll Tubing Services Completion Composite Plugs Stimulation Stimulation Stimulation Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Water String Water String DWEB.135 Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer PLOSI - DIDC.265 DIDC.265 DIDC.285 DICC.265 DIDC.285 DICC.265 DIDC.285 DICC.265 DIDC.285 DIDC	CC240	46,000		STIM 240				
Well Control Equip (Snubbing Completion Rig Coil Tubing Services Completion Composite Plugs Stimulation Stimulation Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative DIDC.300 Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Contingency Total Intangible Cos Conductor Pipe Water String Water String Water String DWEB.135 Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS	CC 240		DICC.240	STIM 240				
Completion Rig Coil Tubing Services Completion Composite Plugs Stimulation Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String DWEB.130 Water String DWEB.135 Surface Casing DWEB.140 Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS				J111V1.44U	0	STIM.240		64,000
Coil Tubing Services Completion Composite Plugs Stimulation Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String DWEB.135 Surface Casing Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS						STIM.115		21,000
Completion Composite Plugs Stimulation Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String DWEB.135 Surface Casing Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS						STIM.260		(
Composite Plugs Stimulation Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Water String DWEB.135 Surface Casing DWEB.140 Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS						STIM.200		257,000
Stimulation Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Aid in Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Water String Water String DWEB.135 Surface Casing DWEB.140 Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS						STIM.390		39,000
Stimulation Water/Water Cimarex Owned Frac/Rental Legal/Regulatory/Curative Well Control Insurance DIDC.285 Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Labor SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String DWEB.135 Surface Casing Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS						STIM.210		2,245,000
Cimarex Owned Frac/Rental Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Water String DwEB.135 Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS						STIM.395		191,000
Legal/Regulatory/Curative DIDC.300 Well Control Insurance DIDC 285  Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency DIDC.435 Conductor Pipe DWEB.130 Water String DWEB.135 Surface Casing DWEB.140 Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes DWEB.115 Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS								
Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Water String Water String DWEB.130 Surface Casing DWEB.140 Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS		10.000				STIM.305		60,000
Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String DWEB.130 Water String DWEB.130 UNEB.135 UNEB.135 UNEB.135 UNEB.136 UNEB.136 UNEB.136 UNEB.135 UNEB.140 UNEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS		10,000						
FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String DWEB.135 Surface Casing Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS		7,000						
FL/GL - Labor FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String DWEB.135 Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS								
FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Water String Water String DWEB.135 Surface Casing DWEB.140 Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS								
Survey SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS								
SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency  Total Intangible Cos Conductor Pipe Water String Water String Water String DWEB.130 UNEB.130 UNEB.130 UNEB.130 UNEB.130 UNEB.140 Intermediate Casing Intermediate Casing UNEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS								
SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Water String UWEB.135 Surface Casing Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS								
Aid In Construct/3rd Party Connect Contingency Total Intangible Cos Conductor Pipe Water String Water String DWEB.135 Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS								
Contingency Contingency Total Intangible Cos  Conductor Pipe Water String Water String DWEB.135 Surface Casing Owteb.140 Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS  DIDCA35 DWEB.130 DWEB.130 DWEB.135 DWEB.145 DWEB.100 DWEB.115 DWEB.100 DWEB.115 DWEB.100 DWEB								
Contingency Total Intangible Cos  Conductor Pipe Water String DWEB.135 Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS	ATMOS I						1,1,	
Total Intangible Cos  Conductor Pipe Water String DWEB.130 Water String DWEB.135 Surface Casing Intermediate Casing 1 DWEB.140 Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS	CC 220	118,000	DICC.220	STIM.220	15,000	STIM.220	CON.220	165,000
Conductor Pipe DWEB.130 Water String DWEB.135 Surface Casing DWEB.135 Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes DWEB.115 DWE Liner Hanger, Isolation Packer DWEB.100 DWEB.100 Packer, Nipples SHORT ORDERS								
Water String DWEB.135 Surface Casing DWEB.140 Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes DWEB.115 Liner Hanger, Isolation Packer DWEB.100 Packer, Nipples SHORT ORDERS		2,475,500			306,000			3,459,000
Surface Casing DWEB.140 Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes DWEB.115		0						
Intermediate Casing 1 DWEB.145 Production Casing or Liner Tubing Wellhead, Tree, Chokes DWEB.115 DWE Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS		104,000						
Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS		251,000						
Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS DWEB.105 DWEB.105 DWEB.106 DWEB.107		0						
Wellhead, Tree, Chokes DWEB.115 DWE Liner Hanger, Isolation Packer DWEB.100 DWE Packer, Nipples SHORT ORDERS			DWEA.100		792,000			
Liner Hanger, Isolation Packer DWEB.100 DWE Packer, Nipples SHORT ORDERS						STIMT.105		139,000
Packer, Nipples SHORT ORDERS	100000000000000000000000000000000000000	38,000	DWEA.120	STIMT.120	18,000	STIMT.120		38,000
SHORT ORDERS	WEA.125	0	DWEA.125		0			
Carrier Control of the Control of th						STIMT.400		28,000
PUMPS								1
DECEMBER OF STREET								
WALKOVERS								
Downhole Lift Equipment						STIMT.410		80,000
Surface Equipment								100000
Well Automation Materials								
N/C Lease Equipment								
Tanks, Tanks Steps, Stairs								
Battery Equipment								
Secondary Containments								
Overhead Power Distribution								
Facility Electrical								
Telecommunication Equipment								
Meters and Metering Equipment								
AND								
Facility Line Pipe								
Lease Automation Materials								
FL/GL - Materials								
FL/GL - Materials								1
SWD/Other - Materials								
SWD/Other - Line Pipe								
Total Tangible Cost  Total Estimated Cost		393,000			810,000			285,000



COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 303H

Description	L-10-10-10-10-10-10-10-10-10-10-10-10-10-	Production Equip			Post Completion		Total
Description	Codes		Amount	Codes		Amount	Co
Roads & Location	CON.100		44,205	PCOM.100	Repair any roads post D&C	3,000	70,20
Damages	CON.105		3215				19,71
Mud/Fluids Disposal				PCOM.255		0	251,00
Day Rate							564,00
Misc Preparation							30,00
Bits				PCOM.125		0	97,00
Fuel				PCOM.130	4	0	119,00
Water for Drilling Rig (Not Frac Water)			1	PCOM.135		0	25,00
Mud & Additives							300,00
SWD PIPED TO 3RD PARTY SWD WELL				PCOM.257	Water for 60 days (270K barrels)	87,354	87,35
Surface Rentals	CON.140		6,912		Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	300,91
Downhole Rentals	CON.140		0,912		Iron. AEC OWIT SK. NO TOK. \$1,100 per day	0,000	166,00
				PCOM.145	201 1 111 1 100 1 1 200	F 10 20 20 20 20 20 20 20 20 20 20 20 20 20	
Flowback Labor			10.47	PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,00
Automation Labor	CON.150		45,010	PCOM.150		5,000	50,01
Mud Logging	Control of		1 500				5,00
IPC & EXTERNAL PAINTING	CON.165		5,144				5,14
Cementing & Float Equipment							210,00
Tubular Inspections				PCOM.160		0	50,000
Casing Crews							28,000
Mechanical Labor	CON.170		185,663	PCOM.170	RU Flowback Iron & Automation	5,000	213,663
Trucking/Transportation	CON.175		16,075	PCOM.175		0	58,075
Supervision	CON.180		11,574	PCOM.180		0	152,574
Trailer House/Camp/Catering	7		1.097.4			7	72,000
Other Misc Expenses	CON.190		19,290	PCOM.190		0	109,290
Overhead	2012.150		19,290	r COIVI, 190		U	10,000
MOB/DEMOB							
							115,000
Directional Drilling Services							307,000
Solids Control							46,000
Well Control Equip (Snubbing Services)				PCOM.240		0	148,000
Completion Rig				PCOM.115		0	21,000
Coil Tubing Services				PCOM.260		0	(
Completion Logging/Perforating/Wireline				PCOM.200		0	257,000
Composite Plugs				PCOM.390		0	39,000
Stimulation				PCOM.210		0	2,245,000
Stimulation Water/Water Transfer/Water							191,000
Cimarex Owned Frac/Rental Equipment				PCOM.305		0	60,000
Legal/Regulatory/Curative	CON.300		0	FCON.303			10,000
	CO14.300		0				
Well Control Insurance							7,000
Major Construction Overhead	CON.305		0				
FL/GL - ON PAD LABOR	CON.495		33,114				33,114
FL/GL - Labor	CON.500		113,970				113,970
FL/GL - Supervision	CON.505		12,056				12,056
Survey	CON.515		6590				6,590
SWD/Other - Labor	CON.600		0				C
SWD/Other - Supervision	CON.605		0				0
Aid In Construct/3rd Party Connect	CON.701		0				0
Contingency	CON.220		106,737				404,737
Contingency	CON.221		30,381				30,381
Total Intangible Cost	44.144		639,935			190,354	7,070,789
Conductor Pipe			039,933			150,354	1,070,763
Water String							
Mark 1974 1974 1974 1974 1974 1974 1974 1974							104,000
Surface Casing							251,000
Intermediate Casing 1							0
Production Casing or Liner							792,000
Tubing				PCOMT.105		0	139,000
Wellhead, Tree, Chokes				PCOMT.120	Replace worn chokes and valves during FB	10,000	104,000
Liner Hanger, Isolation Packer							0
Packer, Nipples				PCOMT.400		0	28,000
SHORT ORDERS	CONT.380		11,253			-	11,253
PUMPS	CONT.385		26,362				26,362
WALKOVERS	CONT.390		6,430				6,430
Downhole Lift Equipment	20111.000		6,430	DCOLIT 110			
				PCOMT.410	Dealesing Chalus Co. H C	15,000	80,000
Surface Equipment			1	PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,000
Well Automation Materials	entir in		1 32.32	PCOMT.455	PTs, and replacing meters	5,000	5,000
N/C Lease Equipment	CONT.400		279,861				279,861
Tanks, Tanks Steps, Stairs	CONT.405		0				0
Battery Equipment	CONT.410		229,386				229,386
Secondary Containments	CONT.415		12,859				12,859
Overhead Power Distribution	CONT.420		10,288				10,288
Facility Electrical	CONT.425		48,224				48,224
Telecommunication Equipment	CONT.426		0				0
Meters and Metering Equipment	CONT.445		42,758				42,758
Facility Line Pipe	CONT.450		28,935				28,935
Lease Automation Materials	CONT.455						36,972
FL/GL - Materials	CONT.550		36,972				
			26,684				26,684
FL/GL - Line Pipe	CONT.555		80,052				80,052
SWD/Other - Materials	CONT.650		0				0
			2				0
SWD/Other - Line Pipe Total Tangible Cost	CONT.655		0			30,000	2,358,065

O COTERRA

Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 304H

AFE # XXXXXXX

Company Entity				Date Prepared 8/17/2022
Exploration Region Permian Basin	Well Name Loosey Goosey 4-9 Fed Com 304H	Prospect New Mexico Bone Spring	Property Nurr XXXXXX-XXX.01	
County, State Lea, NM	Location Section 4-9 T20S-R34E Lea, NM		Estimated Spud	Estimated Completion
X New Supplement Revision	Formation 3rd Sand	Well Type DEV	Ttl Measured Depth 20300	Ttl Vetical Depth 10800
Purpose Dri Description	il and complete well			
	The intended surface hold location for the well 100 FSL and 330 FEL of Section 9, T20S-R34E. T southerly direction within the formation to the approximately 10800 feet.	he well is proposed to be drilled vertic	cally to the 3rd Sand formation	on and laterally in a

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,475,500		\$2,475,500
Completion Costs		\$4,595,289	\$4,595,289
Total Intangible Cost	\$2,475,500	\$4,595,289	\$7,070,789
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	\$393,000	\$1,125,000	\$1,518,000
Lease Equipment		\$840,065	\$840,065
Total Tangible Cost	\$393,000	\$1,965,065	\$2,358,065
Total Well Cost	\$2,868,500	\$6,560,354	\$9,428,854

### Comments On Well Costs

### 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.

	Committee of the Commit	According to the River	and the second	ALL VIEW CONTRACTOR	
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.

l 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.

perator 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.

7/6/2022

<sup>1.</sup> All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 304H

Description	BCP - Dr	illing	ACP - D			np/Stim	Production		Post Com	-	Total
Description	Codes	Amount	Codes	Amount		Amount		Amount		Amount	Cos
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	44,205	PCOM.100	3,000	70,20
Damages	DIDC.105	16,500					CON.105	3215			19,71
Mud/Fluids Disposal	DIDC.255	200,000	190		STIM.255	51,000			PCOM.255	0	251,00
Day Rate	DIDC.115	468,000	DICC 120	96,000					1		564,000
Misc Preparation	DIDC.120	30,000	1000								30,000
Bits	DIDC.125	97,000	DICC 125	0	STIM.125	0			PCOM.125	0	97,000
Fuel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC 135	0	STIM.135	20,000			PCOM.135	0	25,000
Mud & Additives	DIDC.145	300,000	DICCISS		31IM.133	20,000			7.00.11.133		300,000
	DIDC.143	300,000							PCOM.257	87,354	87,354
SWD PIPED TO 3RD PARTY SWD WELL					CT 11 4 4 40				100000000000000000000000000000000000000		300,912
Surface Rentals	DIDC.150	97,000	DICC.140	0	3220000	137,000	CON.140	6,912		60,000	
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	166,000
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Automation Labor							CON.150	45,010	PCOM 150	5,000	50,010
Mud Logging	DIDC.170	5,000							1000		5,000
IPC & EXTERNAL PAINTING							CON.165	5,144			5,144
Cementing & Float Equipment	DIDC.185	70,000	DICC 155	140,000							210,000
Tubular Inspections	DIDC.190	38,000	DICC.160	8,000	STIM.160	4,000			PCOM,160	0	50,000
Casing Crews	DIDC.195	15,000	DICC.165	13,000		0			1.34110.141		28,000
Mechanical Labor	DIDC.200	20,000	DICC 170		STIM.170		CON.170	105.553	PCOM.170	5,000	213,663
						0		185,663	The second second	100000000000000000000000000000000000000	
Trucking/Transportation	DIDC.205	30,000	DICC 175	8,000		4,000		16,075	Belleville Control of	0	58,075
Supervision	DIDC.210	81,000	DICC.180	13,000		47,000	CON.180	11,574	PCOM.180	0	152,574
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000		31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC 190	0	STIM.190	85,000	CON.190	19,290	PCOM.190	0	109,290
Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Solids Control	DIDC.260	46,000									46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig	DIDCLEOS	5-4,000	DICCELIO	· ·	STIM.115				PCOM.115	0	21,000
						21,000					
Coil Tubing Services			1		STIM.260	0			PCOM.260	0	0
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,000
Composite Plugs			1.		STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000	- 1		PCOM.210	0	2,245,000
Stimulation Water/Water Transfer/Water					STIM.395	191,000					191,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0	100000000000000000000000000000000000000		10,000
Well Control Insurance	DIDC.285	7,000									7,000
Major Construction Overhead	Dibeleos	1,000					CON.305	0			0
FL/GL - ON PAD LABOR							CON.495				
The state of the s								33,114			33,114
FL/GL - Labor							CON.500	113,970			113,970
FL/GL - Supervision							CON.505	12,056			12,056
Survey							CON.515	6,590			6,590
SWD/Other - Labor			1				CON.600	0			.0
SWD/Other - Supervision			1				CON.605	0			0
Aid In Construct/3rd Party Connect							CON.701	0			0
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	106,737	PCOM.220	0	404,737
Contingency	0.00					334.22	CON.221	30,381	200000000000000000000000000000000000000		30,381
Total Intangible Cost		2,475.500		306,000		3,459,000	45,146	639,935		190,354	7,070,789
Conductor Pipe	DWEB.130	0		200,000		3,433,000		032,233		150,554	0
and the second s	DWEB.135		4								
Water String		104,000									104,000
Surface Casing	DWEB.140	251,000									251,000
Intermediate Casing 1	DWEB.145	0									0
Production Casing or Liner			DWEA.100	792,000							792,000
Tubing					STIMT.105	139,000			PCOMT.105	0	139,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples		-			STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS						20,000	CONT.380	11,253			11,253
PUMPS							CONT.385				
WALKOVERS							A 100 CO	26,362			26,362
					Carrie or	122.180	CONT.390	6,430			6,430
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
Surface Equipment									PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	279,861		-	279,861
Tanks, Tanks Steps, Stairs							CONT.405	0			0
Battery Equipment							CONT.410	229,386			229,386
Secondary Containments			1				CONT.415	12,859			12,859
Overhead Power Distribution							CONT.420	10,288			10,288
Facility Electrical							CONT.425	48,224			48,224
The state of the s											
Telecommunication Equipment							CONT.426	0			0
Meters and Metering Equipment							CONT.445	42,758			42,758
Facility Line Pipe							CONT.450	28,935			28,935
Lease Automation Materials			/				CONT.455	36,972			36,972
FL/GL - Materials							CONT.550	26,684			26,684
FL/GL - Line Pipe					1		CONT.555	80,052			80,052
SWD/Other - Materials			1				CONT.650	0,032			0,032
							CONT.655	0			0
SWD/Other - Line Pipe							CO141'033	U		- 1	0
SWD/Other - Line Pipe Total Tangible Cost		393,000		810,000		285,000		840,065		30,000	2,358,065



**COTERRA** Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 304H

Description		BCP	- Drilling	-	ACP - Drilling		Comp	/Stim	
	Codes		Amount			Amount			Amoun
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,00
Damages	DIDC.105		16,500				200.0420		****
Mud/Fluids Disposal	DIDC.255	Constitution of the consti	200,000			20000	STIM.255		51,00
Day Rate	DIDC.115	DICC.120		DICC,120		96,000			
Misc Preparation	DIDC.120		30,000	2000	Land of the land		12.75522		
Bits		DICC.125		DICC.125	STIM.125	0	STIM.125		
Fuel	Total Charles	DICC.130		DICC.130	Lava sarv	.0	42.151.44		1
Water for Drilling Rig (Not Frac	DIDC.140	DICC 135		DICC.135	STIM.135	- 0	STIM.135		20,00
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD		Lauren			Laurence Control			V-3-2-1-10	1
Surface Rentals	274,200,00	DICC.140		DICC.140	STIM.140	0	STIM.140	CON.140	137,00
Downhole Rentals	DIDC.155		131,000				STIM. 145		35,00
Flowback Labor							STIM.141		
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment		DICC.155	70,000	DICC.155		140,000			1
Tubular Inspections	DIDC.190	DICC.160	38,000	DICC.160	STIM.160	8,000	STIM.160		4,00
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	13,000	STIM.165	1	
Mechanical Labor	DIDC.200	DICC.170	20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	1
Trucking/Transportation	DIDC.205	DICC.175	30,000	DICC.175	STIM.175	8,000	STIM.175	CON.175	4,00
Supervision	DIDC.210	DICC.180				13,000	STIM.180	CON.180	47,00
Trailer House/Camp/Catering	DIDC.280	DICC.255		DICC.255	STIM.280	5,000	STIM.280		31,000
Other Misc Expenses	DIDC 220	DICC.190		DICC.190	STIM.190	0	STIM.190	CON.190	85,00
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000		2-7	
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC.245		307,000		10				
Solids Control	DIDC.260		46,000		7. 4				
Well Control Equip (Snubbing		DICC240		DICC.240	STIM.240	0	STIM.240		64,000
Completion Rig	1000		,,,,,,		WW.242		STIM.115		21,000
Coil Tubing Services							STIM.260		
Completion							STIM.200		257,000
Composite Plugs							STIM.390		39,000
Stimulation							STIM.210		2,245,000
Stimulation Water/Water							STIM.395		191,000
Cimarex Owned Frac/Rental							STIM.305		60,000
Legal/Regulatory/Curative	DIDC.300		10,000				311M.303		60,000
Well Control Insurance	DIDC.300		7,000						
Major Construction Overhead	DIDC 203		7,000						
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect	12 (0 S / 20 )	iviaii:		Sales Est		0.66		300 (100 Fig. 1)	
Contingency	DIDC.435	DICC220	118,000	DICC.220	STIM.220	15,000	STIM.220	CON 220	165,000
Contingency									
Total Intangible Cos			2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner				DWEA.100		792,000			
Tubing							STIMT.105		139,000
Wellhead, Tree, Chokes		DWEA.120	38,000	DWEA.120	STIMT.120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0			
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									1
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,000
Surface Equipment									
Well Automation Materials									
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 - Materials									
SWD/Other - Materials									
SWD/Other - Line Pipe									
Total Tangible Cost			393,000			810,000			285,000
Total Estimated Cost			,868,500			1,116,000			3,744,000



COTERRA Authorization For Expenditure - Loosey Goosey 4-9 Fed Com 304H

Description  Codes Roads & Location  Con-100  Damages  Mul/Fluids Disposal Day Rate Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mul & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Flowback Labor Automation Labor  Con-140 Downhole Rentals Flowback Labor Automation Labor  Gementing & Float Equipment Tubular Inspections Casing Crews Mechanical Labor  Con-170 Ceneriting & Float Equipment Tubular Inspections Casing Crews Mechanical Labor  Trucking/Transportation Supervision Con-180 Trailer House/Camp/Catering Other Misc Expenses  Con-190 Overhead MOB/DEMOB Directional Drilling Services Solidis Control Well Control Equip (Snubbing Services) Completion flig Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Composite Plugs Stimulation Water/Water Transfer/Water Composite Plugs Stimulation Overhead Legal/Regulatory/Curative Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead Con-190 Vell Control Insurance Major Construction Overhead Con-190 Vell Control Insurance Major Construction Overhead Con-190 Con-	ction Equip	- 22,00	Post Completion	1	Total
Damages Mud/Fluids Disposal Day Rate Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives WATER for Drilling Rig (Not Frac Water) Mud & Additives WATER for Drilling Rig (Not Frac Water) Mud & Additives WATER for Drilling Rig (Not Frac Water) Mud & Additives WATER for Drilling Rig (Not Frac Water) Mud & Additives WATER for Drilling Rig (Not Frac Water) Mud & Downhole Rentals Flowback Labor Automation Labor Mud Logging Flow & ExterNAL PAINTING Cementing & Float Equipment Tubular Inspections Casing Crews Mechanical Labor Trucking/Transportation Con.170 Trucking/Transportation Con.175 Supervision Con.180 Trailer House/Camp/Catering Other Misc Expenses Overhead MoB/DEMOB Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coli Tubing Services Well Control Equip (Snubbing Services) Completion Rig Coli Tubing Services Completion Rig Coli Tubing Services Completion Rig Coli Tubing Services Completion Rig Coll Tubing Services Conductor Right Ri	Amount	Codes		Amount	Co
Mud/Fluids Disposal Day Rate Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPEO TO 3RD PARTY SWD WELL Surface Rentals Flowback Labor Automation Labo Downhole Rentals Flowback Labor Automation Labo Mud Logging IPC & EXTERNAL PAINTING Cementing & Float Equipment Tubular Inspections Casing Crews Machanical Labor Trucking/Transportation Supervision Con.150 Own.190 Overhead MoB/DEMOB Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coll Tubing Services Completion Rig Coll Tubing Services Stimulation Stimulation Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead Con.305 EL/GL - ON PAD LABOR FL/GL - Labor Con.505 SUPCY FL/GL - Labor Con.505 SUPCY SUPCY/Other - Supervision Con.605 SWD/Other - Labor SWD/Other - Supervision Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Unitermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Unitermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Unitermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Unitermediate Casing 1 Production Casing or Con.1380 CON.1390 Downhole Lit Equipment Surface Equipment Con.1410 Con.1420 Con.1420 Con.1430 Con.1450 Celeses Automation Materials Northead Power Distribution CON.1420 Celeses Automation Materials CON.1450 Lease Automation Materials CON.1450 Celeses Automation Materials CON.1450 Celeses Automation Materials CON.1550	44,205	PCOM.100	Repair any roads post D&C	3,000	70,20
Day Rate Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mid & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Auto	3215				19,71
Misc Preparation Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Downhole Rentals Flowback Labor Automation Labor Automation Labor Mud Logging PEC & EXTERNAL PAINTING Con.165 Cementing & Float Equipment Tubular Inspections Casing Crews Mechanical Labor Con.176 Trucking/Transportation Supervision Con.180 Trailer House/Camp/Catering Other Misc Expenses Ooverhead MOB/DEMOB Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Stimulation Stimulation Water/Water Transfer/Water Climares Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead Con.305 EL/GL - ON PAD LABOR EL/GL - Supervision Con.505 Survey Con.515 Survey Con.515 SurVey Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SUALKOVERS Downhole Lift Equipment Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Well Loguiner Well Automation Materials NUC Lesse Equipment Surface Equipment Well Automation Materials NUC Lesse Equipment Surface Equipment Well Automation Materials NUC Lesse Equipment Con.1415 Con.1426 Chelect Survers Con.1426 Con.1436 Con.1436 Con.1436 Con.1436 Con.1450 Con.1456 Cedect Con.1456 Con.1450 Con.1456 Cedect Con.1456 Con.1450 Con.1456 Cedect Con.1456 Con.1450 Con.1450 Con.1456 Cedect Con.1456 Con.1450 C		PCOM.255		0	251,00
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Bits Fuel Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL Surface Rentals Flowback Labor Automation Labor Mud Logging IPC & EXTERNAL PAINTING Comenting & Float Equipment Tubular Inspections Casing Crews Mechanical Labor Con.170 Trucking/Transportation Supervision Trailer House/Camp/Catering Other Misc Expenses Overhead MOB/DEMOB Directional Drilling Services Solids Control Well Control Equip (Shubbing Services) Completion Rig Coil Tubing Services Construction Overhead Conyolo Control Insurance Major Construction Overhead Conyolo Control Insurance Conyolo Control Insurance Conyolo Con		1			30,00
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Water for Drilling Rig (Not Frac Water) Mud & Additives SWD PIPED TO SRD PARTY SWD WELL Surface Rentals CON.140 Downhole Rentals Flowback Labor Automation Labor Mud Logging PIPC & EXTERNAL PAINTING Cementing & Float Equipment Tubular Inspections Casing Crews Mechanical Labor CON.170 Trucking/Transportation Supervision Con.175 Supervision Con.180 Trailer House/Camp/Catering Other Misc Expenses Overhead MoB/DEMOB Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead CON.505 FL/GL - ON PAD LABOR CON.505 FL/GL - Labor FL/GL - Supervision Survey CON.515 SWD/Other - Labor SWW/Other - Labor SWW/Other - Labor SWW/Other - Supervision Aid in Construct/3rd Party Connect Contingency Contingency Contingency Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials NC Lease Equipment Cont.140 Cont.20 Cont.390 Downhole Lift Equipment Surface Equipment Cont.400 Cont.420 Cont.420 Cont.420 Cont.420 Cont.420 Cont.420 Cont.420 Cont.425 Cecendary Containments CONT.410 Cont.426 Cont.425 Cecendary Cont.435 Cont.435 Cont.435 Cont.435 Cont.435 Cont.435 Cont.435 Cont.435 Cont.435 Cont.436 Cont.435 Cont.436 Cont.435 Cont.436 Cont.435 Cont.436 Cont.435 Cont.436 Cont.435 Cont.436 Cont.435 Cont.435 Cont.435 Cont.436 Cont.435 Cont.436 Cont.435 Cont.436 Cont.435 Cont.435 Cont.435 Cont.436 Cont.435 Cont.435 Cont.435 Cont.435 Cont.435 Cont		PCOM.130		0	119,00
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Downhole Rentals Flowback Labor Automation Labor Mud Logging IPC & EXTERNAL PAINTING Cementing & Float Equipment Tubular Inspections Casing Crews Mechanical Labor Trucking/Transportation Supervision Con.170 Trucking/Transportation Con.170 Trucking/Transportation Con.180 Trailer House/Camp/Catering Other Misc Expenses Coverbead MOB/DEMOB Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead Con.495 FL/GL - On PAD LABOR Con.495 FL/GL - Supervision Con.505 Survey Con.515 SWD/Other - Labor SWD/Other - Supervision Con.600 SWD/Other - Supervision Con.605 Aid in Construct/3rd Party Connect Con.200 Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHOR ORDERS CONT.380 PUMPS CONT.380 Velle Automation Materials N/C Lease Equipment Surface Equipment Surface Equipment Surface Equipment Cont.405 Secondary Containments CONT.410 Secondary Containments CONT.415 Coverhead Power Distribution Facility Electrical CONT.425 Facility Liner Pipe CONT.435 Facility Lin		PCOM.257	Water for 60 days (270K barrels)	87,354	87,35
Flowback Labor Automation Labor Mud Logging IPC & EXTERNAL PAINTING Cementing & Float Equipment Tubular Inspections Casing Crews Mechanical Labor Trucking/Transportation Supervision Con.175 Supervision Con.175 Supervision Con.180 Trailer House/Camp/Catering Other Misc Expenses Overhead MoS/DEMOB Directional Drilling Services Solids Control Well Control Equip (Shubbing Services) Completion Rig Coil Tubing Services Construct/Subing Services Con.300 Well Control Insurance Major Construct/Subing Coil Rig Rigulatory/Curative Well Control Insurance Coil Tubing Coil Tubi	6,912		Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	300,91
Automation Labor Mud Logging PIC & EXTERNAL PAINTING Cementing & Float Equipment Tubular Inspections Casing Crews Mechanical Labor Trucking/Transportation Supervision Con.170 Trucking/Transportation Supervision Con.170 Truiler House/Camp/Catering Other Misc Expenses Con.190 Overhead Moß/DEMOB Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead Con.305 FL/GL - On PAD LABOR FL/GL - Supervision Con.505 Survey Con.515 SWD/Other - Labor SWD/Other - Supervision Aid in Construct/3rd Party Connect Con.701 Contingency Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Well Automation Materials N/C Lease Equipment Cont.405 Sattry Equipment Cont.405 Cont.405 Sattry Equipment Cont.415 Coverhead Power Distribution Secondary Containments Cont.425 Cont.425 Celler Cont.435 Cont.435 Cont.436 C		PCOM.145		0	166,00
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IPC & EXTERNAL PAINTING Cementing & Float Equipment Tubular Inspections Casing Crews Mechanical Labor Trucking/Transportation Supervision Con.170 Trucking/Transportation Supervision Con.180 Trailer House/Camp/Catering Other Misc Expenses CON.190 Overhead MOS/DEMOB Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead EL/GL - ON PAD LABOR EL/GL - ON PAD LABOR EL/GL - Supervision Survey SUMD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid in Construct/3rd Party Connect Contingency Contingency Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Well Automation Materials N/C Lease Equipment Cont.420 Cont.420 Cont.425 Celectory Total Intermediate Cont.430 Cont.440 Canks, Tanks Steps, Stairs Cont.430 Cont.440 Canks, Tanks Steps, Stairs Cont.440 Canks, Tanks Steps, Stairs Cont.440 Case Automation Materials CONT.440 Case Automation Materials CONT.440 Case Automation Materials CONT.445 Cacility Electrical CONT.445 Cacility Electrical CONT.455 CONT.550	45,010	PCOM.150	1	5,000	50,01
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Other Misc Expenses Overhead MOB/DEMOB Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead EL/GL - Labor EL/GL - Supervision Survey CON.505 Survey CON.505 Survey CON.505 Survey CON.505 Survey CON.505 Survey CON.506 Aid In Construct/3rd Party Connect Contingency Contingency Contingency Contingency Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials Nu/C Lease Equipment Well Automation Materials Well Latomation Materials Well Latomation Materials Nu/C Lease Equipment Cont.410 Secondary Containments Cont.420 Facility Liectrical Cont.425 Felcolity Line Pipe Cont.455 FL/GL - Materials CONT.550	11,574	PCOM.180	1	0	152,57
Overhead MOS/DEMOB Directional Drilling Services Solidis Control Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead El/GL - ON PAD LABOR CON.305 FL/GL - ON PAD LABOR CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Supervision CON.605 Aid In Construct/3rd Party Connect Contingency Contingency Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 VONT.385 VONT.495 Battery Equipment Well Automation Materials N/C Lease Equipment Well Automation Materials N/C Lease Equipment Well Automation Materials N/C Lease Equipment CONT.410 Secondary Containments CONT.425 Facility Life-trical CONT.425 Facility Line Pipe CONT.455 FL/GL - Materials CONT.550				1 2	72,000
MOB/DEMOB Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead CON.305 FL/GL - ON PAD LABOR CON.500 FL/GL - Supervision CON.505 Survey CON.515 SWD/Other - Labor CON.600 SWD/Other - Supervision CON.605 Aid in Construct/3rd Party Connect CON.701 Contingency CON.221  Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CON.410 Secondary Containments CON.420 Facility Lifectrical CONT.425 Facility Lifectrical CONT.455 FL/GL - Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	19,290	PCOM.190		0	109,29
Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead CON.300 Well Control Insurance Major Construction Overhead CON.500 FL/GL - ON PAD LABOR CON.500 FL/GL - Supervision CON.500 FL/GL - Supervision CON.501 Survey CON.505 Survey CON.505 Survey CON.505 Survey CON.505 Survey CON.505 Aid In Construct/3rd Party Connect CON.701 Contingency Contingency Con.220 Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials Nu/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.405 Battery Equipment CONT.410 Secondary Containments CONT.420 Facility Lifectrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Lease Automation Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550					10,000
Directional Drilling Services Solids Control Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead CON.305 FL/GL - ON PAD LABOR CON.495 FL/GL - Supervision CON.500 FL/GL - Labor CON.505 Survey Con.505					115,000
Solids Control Well Control Equip (Snubbing Services) Completion Rig Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead Eff. Supervision Major Construction Overhead FL/GL - Labor FL/GL - Supervision Survey CON.505 Survey CON.506 Survey CON.50					307,000
Well Control Equip (Snubbing Services) Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR CON.500 FL/GL - Supervision CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Contingency Contingency Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 PUMPS CONT.385 PUMPS CONT.385 Sattrace Equipment Surface Equipment Well Automation Materials NV/C Lease Equipment Well Automation Materials NV/C Lease Equipment Well Automation Materials NV/C Lease Equipment Cont.410 Secondary Containments Cont.420 Cont.425 Telecommunication Equipment Cont.426 Meters and Metering Equipment Cont.445 Lease Automation Materials Cont.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550					46,000
Completion Rig Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Wall Control Insurance Major Construction Overhead Con.305 FL/GL - ON PAD LABOR FL/GL - ON PAD LABOR FL/GL - Supervision Survey Con.515 SWD/Other - Labor SWD/Other - Supervision Con.605 Aid In Construct/3rd Party Connect Contingency Contingency Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wallhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.385 WALKOVERS Downhole Lift Equipment Surface Equipment Wall Automation Materials N/C Lease Equipment Wall Automation Materials N/C Lease Equipment Surface Equipment Cont.410 Secondary Containments Cont.425 Facility Electrical Con.425 Felecommunication Equipment Cont.445 Gease Automation Materials Con.455 FL/GL - Materials Con.455 FL/GL - Materials Con.455 FL/GL - Materials Con.455 FL/GL - Materials Con.550		PCOM.240		0	148,000
Coil Tubing Services Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead Con.305 FL/GL - ON PAD LABOR Con.495 FL/GL - Labor Con.500 FL/GL - Supervision Con.505 Survey Con.515 SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Con.200 Contingency Con.201 Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS WALKOVERS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials Nur Lease Equipment Cont.410 Secondary Containments Cont.420 Facility Electrical Cont.455 FL/GL - Materials Cont.450 Lease Automation Materials Cont.450 Lease Automation Equipment Cont.450 Lease Automation Materials Cont.455 FL/GL - Materials Cont.550		PCOM.115		0	21,000
Completion Logging/Perforating/Wireline Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - On PAD LABOR FL/GL - Supervision CON.500 FL/GL - Supervision CON.505 Survey CON.515 SWD/Other - Labor CON.600 SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency CON.201 Contingency CON.221 Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS PUMPS CONT.380 Downhole Lift Equipment Surface Equipment Surface Equipment Well Automation Materials NV/C Lease Equipment CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Cease Automation Materials CONT.455 FL/GL - Materials CONT.550		PCOM.113		0	21,000
Composite Plugs Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Wall Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - ON PAD LABOR FL/GL - Supervision CON.505 Survey CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Supervision CON.600 SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency CON.220 Contingency Contingency Con.220 Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS PUMPS CONT.385 SHORT ORDERS CONT.380 PUMPS CONT.385 CONT.380 PUMPS CONT.385 CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CONT.410 Secondary Containments CONT.425 Facility Electrical CONT.425 Facility Line Pipe CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550		W. W. C. C. C. C. C. C.			257000
Stimulation Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Supervision SWD/Other - Labor SWD/Other - Supervision Aid in Construct/3rd Party Connect Contingency Contingency Contingency Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.385 PUMPS CONT.385 PUMPS CONT.385 VONLAUGH Well Automation Materials N/C Lease Equipment Well Automation Materials N/C Lease Equipment Surface Equipment Cont.410 Secondary Containments Cont.420 Cont.425 Telecommunication Equipment Cont.426 Meters and Metering Equipment Cont.445 Cease Automation Materials Cont.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550		PCOM.200		0	257,000
Stimulation Water/Water Transfer/Water Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Supervision Survey CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Contingency Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 Dewnhole Lift Equipment Surface Equipment Well Automation Materials Nu/C Lease Equipment Cont.410 Secondary Containments Cont.420 Cont.420 Cont.420 Cont.420 Cont.420 Cont.420 Cont.420 Cont.420 Cont.420 Casing Cont.420 Cont.420 Cont.420 Cont.420 Cont.420 Facility Electrical Cont.425 Telecommunication Equipment Cont.450 Lease Automation Materials Cont.455 FL/GL - Materials Cont.550		PCOM.390		0	39,000
Cimarex Owned Frac/Rental Equipment Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - On PAD LABOR FL/GL - Supervision CON.505 FL/GL - Supervision CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect CON.600 SWD/Other - Supervision CON.605 Aid In Construct/3rd Party Connect CON.200 Contingency CON.220 Contingency CON.221 Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials NV/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Lease Automation Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550		PCOM.210		0	2,245,000
Legal/Regulatory/Curative Well Control Insurance Major Construction Overhead FL/GL - On PAD LABOR FL/GL - Supervision Survey CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Supervision CON.600 SWD/Other - Supervision Aid In Construct/3rd Party Connect Contingency Con.220 Contingency Con.221  Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.385 PUMPS CONT.385 CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Cont.400 Tanks, Tanks Steps, Stairs Cont.410 Secondary Containments Cont.420 Facility Lifectrical Cont.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550			Į.		191,000
Well Control Insurance Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Supervision Survey CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Supervision CON.605 Aid In Construct/3rd Party Connect CON.701 Contingency CON.220 Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 VMALKOVERS Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Vell Automation Materials N/C Lease Equipment CONT.410 Secondary Containments CONT.420 Facility, Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Lease Automation Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550		PCOM.305		0	60,000
Well Control Insurance Major Construction Overhead CON.305 FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Supervision CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Supervision CON.605 Aid In Construct/3rd Party Connect CON.701 Contingency CON.220 Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.385 PUMPS CONT.385 PUMPS CONT.385 CONT.380 PUMPS CONT.385 CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Well Automation Materials N/C Lease Equipment CONT.410 Secondary Containments CONT.425 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Facility Line Pipe CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550	0				10,000
Major Construction Overhead FL/GL - ON PAD LABOR FL/GL - Labor FL/GL - Supenvision Survey CON.505 Survey CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect CON.600 SWD/Other - Supervision CON.605 Aid In Construct/3rd Party Connect CON.701 Contingency CON.220 Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS WALKOVERS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials Nu/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs Battery Equipment CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Facility Line Pipe CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550			1		7,000
FL/GL - ON PAD LABOR FL/GL - Labor CON.500 FL/GL - Supervision CON.500 Survey CON.515 SWD/Other - Labor CON.600 SWD/Other - Supervision CON.605 Aid In Construct/3rd Party Connect CON.701 Contingency CON.200 Contingency CON.220 Contingency Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials NV/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs Downhole Lift Equipment Surface Equipment CONT.410 Secondary Containments CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Lease Automation Materials CONT.450 Lease Automation Materials CONT.450 Lease Automation Equipment CONT.450 Lease Automation Materials CONT.550	0				0
FL/GL - Labor FL/GL - Supervision CON.505 Survey CON.515 SWD/Other - Labor SWD/Other - Supervision Aid In Construct/3rd Party Connect CON.605 Aid In Construct/3rd Party Connect CON.220 Contingency CON.221  Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 CONT.385 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.405 Battery Equipment Secondary Containments CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Lease Automation Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550	33,114				33,114
FL/GL - Supervision  Survey  SUP/Other - Labor  SWD/Other - Supervision  Aid In Construct/3rd Party Connect  CON.605  Aid In Construct/3rd Party Connect  CON.200  Contingency  Contingency  Total Intangible Cost  Conductor Pipe  Water String  Surface Casing  Intermediate Casing 1  Production Casing or Liner  Tubing  Wellhead, Tree, Chokes  Liner Hanger, Isolation Packer  Packer, Nipples  SHORT ORDERS  CONT.380  PUMPS  CONT.385  VALKOVERS  Downhole Lift Equipment  Surface Equipment  Well Automation Materials  N/C Lease Equipment  Well Automation Materials  N/C Lease Equipment  CONT.400  Tanks, Tanks Steps, Stairs  CONT.405  Battery Equipment  CONT.410  Secondary Containments  Coverhead Power Distribution  Cont.420  Facility, Electrical  Cont.425  Telecommunication Equipment  Cont.445  Lease Automation Materials  CONT.450  Lease Automation Materials  CONT.455  FL/GL - Materials  CONT.550	113,970				113,970
Survey CON.515 SWD/Other - Labor CON.600 SWD/Other - Supervision CON.605 Aid In Construct/3rd Party Connect CON.701 Contingency CON.220 Contingency CON.221  Total Intangible Cost  Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs Battery Equipment Secondary Containments CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.426 Meters and Metering Equipment CONT.445 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550		1			12,056
SWD/Other - Labor CON.600 SWD/Other - Supervision CON.605 Aid In Construct/3rd Party Connect CON.701 Contingency CON.220 Contingency CON.221  Total Intangible Cost  Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 SHORT ORDERS CONT.380 Dewnhole Lift Equipment Surface Equipment Well Automation Materials NVC Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs Battery Equipment Secondary Containments CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.450 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550	12,056				
SWD/Other - Supervision CON.605 Aid In Construct/3rd Party Connect CON.701 Contingency CON.220 Contingency CON.221  Total Intangible Cost Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials NVC Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.405 Battery Equipment CONT.410 Secondary Containments CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.445 Meters and Metering Equipment CONT.450 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	6590				6,590
Aid In Construct/3rd Party Connect Contingency Contingency Contingency Contingency Total Intangible Cost  Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 PUMPS CONT.385 CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Well Automation Materials N/C Lease Equipment CONT.410 Secondary Containments CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550	0				C
Contingency Contingency Contingency Total Intangible Cost  Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.385 WALKOVERS CONT.385 WALKOVERS CONT.390 Downhole Lift Equipment Surface Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CONT.410 Secondary Containments CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.425 Facility Electrical CONT.426 Meters and Metering Equipment Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.455 FL/GL - Materials CONT.550	0				0
Contingency Total Intangible Cost  Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS CONT.385 WALKOVERS CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials NVC Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Lease Automation Materials CONT.450 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	0				0
Total Intangible Cost  Conductor Pipe Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS CONT.380 Downhole Lift Equipment Surface Equipment Well Automation Materials NVC Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.405 Battery Equipment Secondary Containments CONT.410 Secondary Containments CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.455 Facility Line Pipe CONT.455 FL/GL - Materials CONT.550	106,737			1	404,737
Conductor Pipe Water String Water String Intermediate Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 CONT.385 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Tanks, Tanks Steps, Stairs CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.415 Coverhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.450 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	30,381				30,381
Conductor Pipe Water String Water String Intermediate Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 CONT.385 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Tanks, Tanks Steps, Stairs CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.415 Coverhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.450 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	639,935			190,354	7,070,789
Water String Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.385 WALKOVERS CONT.385 WALKOVERS CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs Sattery Equipment CONT.410 Secondary Containments CONT.410 Secondary Containments Cont.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Lease Automation Materials CONT.455 Lease Automation Materials CONT.455 Lease Automation Materials CONT.455 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550					0
Surface Casing Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.445 Eacility Line Pipe CONT.450 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550					104,000
Intermediate Casing 1 Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials NVC Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.410 Secondary Containments CONT.410 Facility Electrical CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550					251,000
Production Casing or Liner Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Tanks, Tanks Steps, Stairs CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550					
Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Tanks, Tanks Steps, Stairs CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical Telecommunication Equipment CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.450 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550					707.000
Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs Sattery Equipment CONT.410 Secondary Containments CONT.410 Overhead Power Distribution CONT.420 Facility Electrical Telecommunication Equipment CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.455 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550					792,000
Liner Hanger, Isolation Packer Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKOVERS CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550		PCOMT.105		0	139,000
Packer, Nipples SHORT ORDERS CONT.380 PUMPS CONT.385 WALKGUERS CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Tanks, Tanks Steps, Stairs CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.450 Lease Automation Materials CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550		PCOMT.120	Replace worn chokes and valves during FB	10,000	104,000
SHORT ORDERS CONT.380 PUMPS CONT.385 CONT.385 CONT.385 CONT.390 Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.405 Battery Equipment CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.445 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550					0
PUMPS CONT.385  WALKOVERS CONT.390  Downhole Lift Equipment  Surface Equipment  Well Automation Materials  N/C Lease Equipment CONT.400  Tanks, Tanks Steps, Stairs CONT.405  Battery Equipment CONT.410  Secondary Containments CONT.415  Overhead Power Distribution CONT.420  Facility Electrical CONT.425  Telecommunication Equipment CONT.425  Meters and Metering Equipment CONT.445  Facility Line Pipe CONT.450  Lease Automation Materials CONT.455  FL/GL - Materials CONT.550		PCOMT.400		0	28,000
PUMPS CONT.385  WALKOVERS CONT.390  Downhole Lift Equipment  Surface Equipment  Well Automation Materials  N/C Lease Equipment CONT.400  Tanks, Tanks Steps, Stairs CONT.405  Battery Equipment CONT.410  Secondary Containments CONT.415  Overhead Power Distribution CONT.420  Facility Electrical CONT.425  Telecommunication Equipment CONT.425  Meters and Metering Equipment CONT.445  Facility Line Pipe CONT.450  Lease Automation Materials CONT.455  FL/GL - Materials CONT.550	11,253				11,253
WALKOVERS CONT.390  Downhole Lift Equipment  Surface Equipment  Well Automation Materials  N/C Lease Equipment  CONT.400  Tanks, Tanks Steps, Stairs  CONT.410  Secondary Containments  CONT.415  Overhead Power Distribution  CONT.420  Facility Electrical  CONT.425  Telecommunication Equipment  CONT.426  Meters and Metering Equipment  CONT.445  Facility Line Pipe  CONT.450  Lease Automation Materials  CONT.455  FL/GL - Materials  CONT.550	26,362				26,362
Downhole Lift Equipment Surface Equipment Well Automation Materials N/C Lease Equipment Tanks, Tanks Steps, Stairs CONT.400 Tanks, Tanks Steps, Stairs CONT.410 Secondary Containments CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	6,430				6,430
Surface Equipment Well Automation Materials N/C Lease Equipment Tanks, Tanks Steps, Stairs CONT.400 Tanks, Tanks Steps, Stairs CONT.405 Battery Equipment CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	0,430	PCOMT.410		0	80,000
Well Automation Materials  N/C Lease Equipment  CONT.400  Tanks, Tanks Steps, Stairs  CONT.405  Sattery Equipment  Secondary Containments  CONT.410  Secondary Containments  CONT.415  Overhead Power Distribution  CONT.420  Facility Electrical  Telecommunication Equipment  Meters and Metering Equipment  CONT.425  Facility Line Pipe  CONT.450  Lease Automation Materials  CONT.455  FL/GL - Materials  CONT.550		PCOMT.420		15,000	15,000
N/C Lease Equipment CONT.400 Tanks, Tanks Steps, Stairs CONT.405 Battery Equipment CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550				5,000	5,000
Tanks, Tanks Steps, Stairs Battery Equipment CONT.410 Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	44.00	PCOMT.455	PTs, and replacing meters	3,000	
Battery Equipment CONT.410  Secondary Containments CONT.415  Overhead Power Distribution CONT.420  Facility Electrical CONT.425  Telecommunication Equipment CONT.426  Meters and Metering Equipment CONT.445  Facility Line Pipe CONT.450  Lease Automation Materials CONT.455  FL/GL - Materials CONT.550	279,861				279,861
Secondary Containments CONT.415 Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.550 FL/GL - Materials CONT.550	0				0
Overhead Power Distribution CONT.420 Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	229,386				229,386
Facility Electrical CONT.425 Telecommunication Equipment CONT.426 Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	12,859				12,859
Telecommunication Equipment CONT.426  Meters and Metering Equipment CONT.445  Facility Line Pipe CONT.450  Lease Automation Materials CONT.455  FL/GL - Materials CONT.550	10,288				10,288
Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	48,224				48,224
Meters and Metering Equipment CONT.445 Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	0				(
Facility Line Pipe CONT.450 Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	42,758				42,758
Lease Automation Materials CONT.455 FL/GL - Materials CONT.550	28,935				28,935
FL/GL - Materials CONT.550					36,972
	36,972				
hi // - Lina Dina	26,684				26,684
The state of the s	80,052				80,052
SWD/Other - Materials CONT.650	0				C
SWD/Other - Line Pipe CONT.655	0				(
Total Tangible Cost	840,065			30,000	2,358,065

# A.A.P.L. FORM 610 - 1989

# MODEL FORM OPERATING AGREEMENT

		TED 5 , <u>2022</u> ,		
OPERATOR Cima	rex Energy Co.			
CONTRACT AREA	All Section 4 and Sect	ion 9, Township 20	South, Rang	ge 34 East
COUNTY OR PARISH	H OF <b>Lea</b>	,	STATE OF	New Mexico

OPERATING AGREEMENT

**LOOSEY GOOSEY 4-9 FED COM WELLS** 

COPYRIGHT 1989 - ALL RIGHTS RESERVED AMERICAN ASSOCIATION OF PETROLEUM LANDMEN, 4100 FOSSIL CREEK BLVD. FORT WORTH, TEXAS, 76137, APPROVED FORM.

A.A.P.L. NO. 610 – 1989

COPAS 2005 Accounting Procedure Recommended by COPAS, Inc.

- · human resources
- · management

A.

- 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 no	ot covered	by oth	ner p	provisions	of thi
Section III, the O	perator sha	ıll charge	on either	r:										

<b>V</b>	(Alternative 1) Fixed Rate Basis, Section III.1.B. (Alternative 2) Percentage Basis, Section III.1.C.
TEC	CHNICAL SERVICES
(i)	Except as otherwise provided in Section II.13 ( <i>Ecological Environmental, and Safety</i> ) and Section III.2 ( <i>Overhead – Major Construction and Catastrophe</i> ), or by approval of the Parties pursuant to Section I.6.A ( <i>General Matters</i> ), the salaries, wages, related payroll burdens and benefits, and Personal Expenses for <b>On-site</b> Technical Services, including third party Technical Services:
	☑ (Alternative 1 – Direct) shall be charged direct to the Joint Account.

(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

	vices:
	(Alternative 1 – All Overhead) shall be covered by the <u>overhead</u> rates.
<b>V</b>	(Alternative 2 – All Direct) shall be charged direct to the Joint Account.

☐ (Alternative 2 – Overhead) shall be covered by the <u>overhead</u> rates.

☐ (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 Jo	int Account at the fo	llowing rates per well per month:
	Drilling Well Rate per month \$_	8,000.00	_(prorated for less than a full month)

Producing Well Rate per month \$ 800.00

- (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.

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## **Chronology of Contacts with Non-Joined Working Interest Owners**

Sent all Working Interest Owners Well Proposals with a copy of the proposed Operating Agreement. Followed up with emails and phone calls.

### **Read and Stevens-**

10/2021 – Reached out to Harrison Read, Vice President of Land and Business Development for Read and Stevens to have an in-person meeting over the development of the area.

1/24/22 – Reached out to Harrison with no response.

2/18/22-3/31/22 – Received response from Harrison with a few dates, none of which were viable and attempted to reschedule. Meeting never took place.

8/25/22- Elections were sent to Read and Stevens for both developments.

<u>Permian Resources</u>- We were notified Permian Resources had acquired Read and Stevens Inc. and were open to talks.

March 1-7, 2023 – Met with Travis Macha and Skyler Fast from Permian Resources to exchange information on potential trade tracts.

March 15, 2023 – Sent email about separate contested hearing to "trade out of each others way". PR was still evaluating the trade.

April 27, 2023- Sent a follow up Email to Travis Macha, Skyler Fast, Mark Hajdik on trade tracts.

April 28, 2023- Emails exchanged to have a follow up in-person meeting of the minds.

May 18, 2023- Meeting with Bob Heller, Travis Macha and Patrick Godwin from Permian Resources and Dylan Park from Coterra to discuss other potential trade tracts.

May 25, 2023- Call with Travis Macha to discuss next steps on potential trade.

June 1 2023- Emails/discussions with Travis Macha on a potential 3 company trade.

June 6, 2023- Follow up to 3 company trade.

June 20, 2023- Followed up on 3 company trade, decision made to move forward with hearing

## **HOG Partnership**

9/7/22 – Email Discussion about proposals received

9/8/22 – Email discussion about proposals received

### **Challenger Crude (Henry Resources)**

9/27/22 – Discussed election timing and general development plan after receipt of proposals with Kymberly Holman



- 3/23/23 Discussed ownership figures for both developments
- 4/3/23 Confirmed that we received executed Operating Agreements from Challenger and elections back
- 6/16/23- Discussed supplemental Wolfcamp notice that was sent
- 7/10/23 Phone call with Kymberly to update her on hearing moving forward.

## Randall Hudson, Edward Hudson, Javelina Partners, Zorro Partners, William Hudson II (Hudson Group)

- 2/9/22 Email discussion to communicate plans to develop both developments in which the Hudson group owns
- 6/2/22 Updated the Hudson Group of our AFE's and full development of the leasehold
- 8/25/22 Let the groups know that proposals were heading their way
- 10/26/22 Confirmed each entities interest via email to confirm with what ownership they were showing
- 2/7/23 Discussed with Randall and Edward about potential trades that may come of the Permian Resources acquisition and next steps for pooling
- 3/7/23 Provided Randall and Edward with timing of development in order for them to secure a term assignment from Lindy's Living Trust
- 3/22/23 Sent OA's for their files and confirmed they were executed
- 6/26/23 Met with Randall and Edward with Lea Team to discuss fine details of plans and landing zones etc.

## Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard

- 2/10/23- Spoke to Brad Ince about a potential Term Assignment and terms for the trust
- 2/14/23- Sent an email to Brad Ince at Frost bank to confirm best time to negotiate and hash out terms of the contract
- 4/17/23 Sent an email with the Term assignment form for redline and review
- 5/18/23 Email exchange to discuss best time for a call
- 5/20/23 Call with Brad to confirm details of the Term assignment
- 6/9/23 Sent changes to form along with Net acre figures to calculate bonus payment
- 6/27/23 Forwarded Staci's information for geologic questions concerning the development

7/10-12/23- Provided Debbie Dorsett with AFE's and other information to get the Term assignment routed.

### Ard Oil LTD.

- 10/19/22-Received email from Reid Marley to discuss Loosey Goosey and Mighty Pheasant proposals and discussed with development plan and path Coterra would be making forward
- 2/27/23- Phone call with Reid to discuss term assignment offer and provided Operating agreements via email
- 7/10/23 Discussed development timing with Reid
- 7/11/23 Reid emailed that he would like to not be considered committed

## **Chase Oil Corporation**

- 9/12/22 Received email from Morgan Buckles confirming receipt of the proposals.
- 9/12/22 Phone call with Morgan Buckles to discuss proposals and plan of development
- 6/7/23 Received email from Morgan Buckles stating that they would like to sign AFE's and move forward with the operator the OCD decides post hearing.

## Wilbanks Reserve Corporation/Marks Oil

- 9/1/22 Phone call with Hannah Frederick confirming receipt of the proposals and request to confirm interest in the contract area
- 9/6/22- Received email from Hannah Frederick following up on working interest figures and sent ownership at the time
- 9/27/22 Email correspondence to set up a phone call to discuss moving forward with title run
- 11/3/22 Discussion of timing for force pooling filing and next steps
- 1/30/23 Discussed Permian Resources development and proposals in the area
- 2/22/23 Reached out to determine if Wilbanks Reserve had signed OA's. Hannah mentioned she would bring this up to upper management and get a decision since there was traction on development
- 7/10/23 Confirmed DOTO figures with Hannah
- 7/11/23 Wilbanks Reserve would like to wait until the Commission has made a decision on operator

### **Union Hill Oil and Gas**

- 3/1/23- Spoke with Robert Buchholz about proposals he received
- 3/1/23 Sent Robert the corresponding Operating agreements for both developments and provided ownership

### Highland Texas Energy Company and Richardson Oil Company

10/11/22- Received elections back from Gary Richardson for the development

3/9/23 – Followed up with Gary to confirm they would like to participate under the OA

3/21/23 – Discussed force pooling matters via email

Moore & Shelton Co. LLP P.O. Box 3070 Galveston, Texas 77552

July 10, 2023

New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

Re: Application of Cimarex Energy Co. for Horizontal Spacing Unit and Compulsory Pooling in Case Nos. 23448 23449 23450 23451 23452 23453 23454 23455 23594 23595 23596 23597 23598 23599 23600 23601

To Whom it May Concern:

Moore & Shelton Co. LLP of Galveston, Texas is a working interest owner in Eddy and Lea Counties and has interests in all of sections 4, 5, 8 & 9 of T20S-R34E, Lea County. Moore & Shelton owns interests in over 40 wells in Eddy and Lea Counties.

We have been extremely pleased with Cimarex representing our interests and believe Cimarex has the most and best experience to efficiently develop these properties.

Moore & Shelton Co. LLP therefore supports Cimarex' application and requests that the Division rule in their favor.

Sincerely,
Paul C. More

Paul Moore

Moore & Shelton Co. LLP

General Partner

## JAVELINA PARTNERS & ZORRO PARTNERS LTD

616 TEXAS STREET FORT WORTH, TX 76102 (817) 336-7109

July 7, 2023

New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, NM 87505

Re: Applications of Cimarex Energy Co. for Horizontal Spacing Unit and
Compulsory Pooling
Case Nos.
23448 23449 23450 23451 23452 23453 23454 23455 23594 23595 23596 23597
23598 23599 23600 23601

Ladies and Gentlemen,

Javelina Partners and Zorro Partners LTD are working interest owners in the referenced Applications and Case Nos, which collectively cover all of sections 4, 5, 8 & 9 of T20S – R34E, Lea County ('the Acreage').

There are competing Applications for the Bone Spring and Wolfcamp formations in the referenced Applications and Case Nos.

Javelina Partners and Zorro Partners LTD own interests in approximately 105,000 gross leasehold acres in Eddy & Lea Counties. Over the last 3.5 years, Javelina Partners and Zorro Partners LTD have participated in the drilling of over 130 horizontal Bone Spring and Wolfcamp wells, with seven different operators, in Eddy & Lea Counties.

Cimarex Energy Co. is the Operator of a JOA which covers 75% of the Acreage, and includes the Bone Spring and Wolfcamp formations.

## **JAVELINA PARTNERS & ZORRO PARTNERS LTD**

616 TEXAS STREET FORT WORTH, TX 76102 (817) 336-7109

It is our opinion that Cimarex Energy Co. has accurately analyzed the nature of the geology between the 3<sup>rd</sup> Bone Spring and Upper Wolfcamp and offers a superior plan that develops the total reservoir tank, which includes both the 3<sup>rd</sup> Bone Spring Sand and the Upper Wolfcamp Sands without having to drill additional costly and unnecessary wells, thus, representing the best use of both drilling capital and surface acres in comparison with competing applications.

Javelina Partners and Zorro Partners LTD therefore support Cimarex Energy Co.'s Applications covering the referenced Horizontal Spacing Units and Case Nos in both the Bone Spring and Wolfcamp formations, and respectfully request that the Division rule accordingly.

Sincerely,

Edward Randall Hudson IV

Javelina Partners

Land Manager

William A. Hudson II Zorro Partners LTD Managing Partner

Re: Applications of Cimarex Energy Co. for Horizontal Spacing Unit and Compulsory Pooling

Case Nos.

23448 23449 23450 23451 23452 23453 23454 23455 23594 23595 23596 23597 23598 23599 23600 23601

## ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE: 2	.17.2023			AFE NO.: _	1
WELL NAME: B	ane 4-9 Federal Com 11	11H		FIELD:	Teas; Bone Spring
_				_	19,915' / 9,630'
OCATION: <u>S</u>	ection 4, T20S-R34E			MD/TVD:_	
COUNTY/STATE: L	ea County, New Mexic	0		LATERAL LENGTH:	10,000'
Permian WI:	•			DRILLING DAYS:	19.6
_		<del></del>		_	
GEOLOGIC TARGET: F	BSG			COMPLETION DAYS:	18.6
<u> </u>	rill a horizontal FRSG	well and complete	with 44 stages. AFE includ	les drilling, completions, f	lowback and Initial AL
		and complete			
REMARKS: <u>i</u>	nstall cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE CO	сте	COSTS	COSTS	COSTS	COSTS
	313				
l Land/Legal/Regulatory	\$	52,768	<u>·</u>	37,500	\$ 90,268
2 Location, Surveys & Damages		257,363	16,141	2,500	276,003
4 Freight / Transportation		42,549	39,110	25,000	106,660
5 Rental - Surface Equipment		111,070	192,448	105,000	408,518
6 Rental - Downhole Equipmen	•	183,520	53,429	<del></del>	236,949
	•	42,956	48,671	<del></del>	91,627
7 Rental - Living Quarters					
10 Directional Drilling, Surveys		383,743		-	383,743
11 Drilling		673,443	<u> </u>		673,443
12 Drill Bits		89,495	-	•	89,495
13 Fuel & Power		168,789	647,751		816,540
14 Cementing & Float Equip		217,354			217,354
				15.000	15,000
15 Completion Unit, Swab, CTL				15,000	
16 Perforating, Wireline, Slickli	ne		351,218	<u> </u>	351,218
17 High Pressure Pump Truck			110,130	•	110,130
18 Completion Unit, Swab, CTL	J		130,865		130,865
20 Mud Circulation System		93,991	•		93,991
		15,660		<del></del>	15,660
21 Mud Logging	·		<del> </del>		
22 Logging/Formation Evaluati	on	6,495	7,450		13,944
23 Mud & Chemicals		323,254	391,463	10,000	724,717
24 Water		38,825	591,078	225,000	854,903
25 Stimulation			727,236	•	727,236
26 Stimulation Flowback & Dis	_		108,640	150,000	258,640
	r	- IHA P.1.			
28 Mud/Wastewater Disposal		172,514	54,630	•	227,144
30 Rig Supervision / Engineerin		108,273	119,194	21,667	249,134
32 Drlg & Completion Overhead	d	9,312	-		9,312
35 Labor		137,006	62,080	101,667	300,753
54 Proppant			1,121,387	•	1,121,387
		12.004	1,121,507		13,096
95 Insurance		13,096	*****		
97 Contingency		-	21,817	3,833	25,650
99 Plugging & Abandonment		•	<u> </u>	<u> </u>	
	TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379
	OTTE INTENDED	3,212,110	.,,,,,,,,		
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COS	TC	COSTS	COSTS	COSTS	COSTS
	,13				
60 Surface Casing	3	109,201		•	\$ 109,201
61 Intermediate Casing		307,574			307,574
62 Drilling Liner		•	•	•	-
63 Production Casing		613,783			613,783
64 Production Liner				-	
					140,000
65 Tubing			<u>-</u>	140,000	140,000
66 Wellhead		57,908		40,000	97,908
67 Packers, Liner Hangers		13,161	•	20,000	33,161
68 Tanks				45,833	45,833
69 Production Vessels			<del></del>	126,667	126,667
				66,667	66,667
70 Flow Lines					
71 Rod string					-
72 Artificial Lift Equipment		-	<u>-</u>	90,000	90,000
73 Compressor			•	5,833	5,833
74 Installation Costs			-		-
75 Surface Pumps				61,667	61,667
76 Downhole Pumps					
77 Measurement & Meter Instal				116,667	116,667
78 Gas Conditioning / Dehydra	tion	•			
79 Interconnecting Facility Pipi	ng	-	-	20,000	20,000
80 Gathering / Bulk Lines					-
81 Valves, Dumps, Controllers			<del></del>	108,333	108,333
82 Tank/Facility Containment				43,333	43,333
83 Flare Stack		<u>·</u> _		16,667	16,667
84 Electrical/Grounding				50,000	50,000
85 Communications / SCADA		•	<u> </u>	36,667	36,667
86 Instrumentation / Safety		-	-	853	853
•	TOTAL TANGIBLES >	1,101,627		989,187	2,090,814
	TOTAL COSTS :	· 4,243,103	4,794,736	1,686,354	10,724,193
-	,				
PARED BY Permian Resou	rces Operating, LLC:				
	·				
Drilling Engineer:	PS				
Completions Engineer:	ML				
Production Engineer:	DC				
nian Pasaumas Onaratina I	I C APPROVAL				
nian Resources Operating, l	LLC ALL NOTAL		<del></del>		
Co-CEO			Co-CEO	VP - Ope	rations
CO-CEO_	WH	`		11-Оре	
	WH		jw		CRM
VP - Land & Legal		VP - Geo	sciences		
	RC:	5.0			
	i-Ci		30		
N OPERATING PARTNER	APPROVAL:				
Company Name:			Working Interset (%)	1	Гах ID:
_			. Working interest (%)		
_			_		
Signed by:			_		
Signed by:			_		

# Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701 Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COS	STS AND AUTHO	DRIZATION FOR	EXPENDITURE

		0. 6001011110110	THORIZATION TOX EXTER	AFE NO.:	1
DATE:	2.17.2023	4017		-	Teas; Bone Spring
WELL NAME:	Bane 4-9 Federal Com 1	12H		FIELD:	
LOCATION:	Section 4, T20S-R34E			MD/TVD:_	19,895' / 9,610'
COUNTY/STATE:	Lea County, New Mexic	.0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG			COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal FBSG install cost	well and complete	with 44 stages. AFE includ	les drilling, completions, i	flowback and Initial AL
REMARKS.	III COST		GOLUBI ETTION	DE COLUMNIA I	TOTAL
		DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
INTANGIBLE		5 52,768		37,500	5 90,268
1 Land / Legal / Regulatory 2 Location, Surveys & Dama		257,363	16,141	2,500	276,003
4 Freight/Transportation	,	42,549	39,110	25,000	106,660
5 Rental - Surface Equipmen	t	111,070	192,448	105,000	408,518
6 Rental - Downhole Equipm	ient	183,520	53,429		236,949
7 Rental - Living Quarters		42,956	48,671		91,627 383,743
10 Directional Drilling, Surv 11 Drilling	eys	383,743 673,443	<del></del>	<del></del>	673,443
12 Drill Bits		89,495			89,495
13 Fuel & Power		168,789	647,751		816,540
14 Cementing & Float Equip		217,354	·	-	217,354
15 Completion Unit, Swab, C			•	15,000	15,000
16 Perforating, Wireline, Slic			351,218 110,130	<del></del>	351,218 110,130
17 High Pressure Pump Truc 18 Completion Unit, Swab, O		<del></del>	130,865	<del></del>	130,865
20 Mud Circulation System		93,991	- 100,000		93,991
21 Mud Logging		15,660	-	-	15,660
22 Logging / Formation Evaluation	uation	6,495	7,450	-	13,944
23 Mud & Chemicals		323,254	391,463	10,000	724,717
24 Water 25 Stimulation		38,825	591,078 727,236	225,000	854,903 727,236
26 Stimulation Flowback & I	Disp	<del></del>	108,640	150,000	258,640
28 Mud/Wastewater Dispos		172,514	54,630		227,144
30 Rig Supervision / Enginee		108,273	119,194	21,667	249,134
32 Drig & Completion Overl		9,312	•	-	9,312
35 Labor		137,006	62,080	101,667	300,753
54 Proppant		12 006	1,121,387		1,121,387
95 Insurance 97 Contingency		13,096	21,817	3,833	25,650
99 Plugging & Abandonmen	t			- 5,035	- 25,050
( <b>4</b> ,,-	TOTAL INTANGIBLES:	> 3,141,476	4,794,736	697,167	8,633,379
				PROPRIETION	TOTAL
T. N.C.D. T. C	ocero.	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE C	.0515	\$ 109,201			\$ 109,201
61 Intermediate Casing	,	307,574			307,574
62 Drilling Liner			•	•	
63 Production Casing		613,783	•	-	613,783
64 Production Liner				-	
65 Tubing				140,000	140,000
66 Wellhead 67 Packers, Liner Hangers		57,908 13,161		40,000 20,000	97,908 33,161
68 Tanks		13,101		45,833	45,833
69 Production Vessels				126,667	126,667
70 Flow Lines		•	•	66,667	66,667
71 Rod string			<del>-</del>		<u> </u>
72 Artificial Lift Equipment			<u> </u>	90,000	90,000
73 Compressor 74 Installation Costs				5,833	5,833
75 Surface Pumps			<del></del>	61,667	61,667
76 Downhole Pumps			-	-	•
77 Measurement & Meter In	stallation	-	-	116,667	116,667
78 Gas Conditioning/Dehy				-	-
79 Interconnecting Facility P	iping		•	20,000	20,000
80 Gathering / Bulk Lines 81 Valves, Dumps, Controlle	rs		<del></del>	108,333	108,333
82 Tank/Facility Containme		<del></del>	<del></del>	43,333	43,333
83 Flare Stack		-	•	16,667	16,667
84 Electrical/Grounding				50,000	50,000
85 Communications / SCAD	A	-		36,667	36,667
86 Instrumentation / Safety	TOTAL TANGIBLES	> 1,101,627		853 989,187	2,090,814
	TOTAL COSTS:		4,794,736	1,686,354	
	TOTAL COSTS	> 4,243,103	4,/94,/36	1,086,354	10,724,193
REPARED BY Permian Res	ources Operating LLC:				
DI I THUIAN NES	onice operating the:				
Drilling Engineer	r: PS				
Completions Engineer	r: ML				
Production Engineer	r: DC				
			· · · · · · · · · · · · · · · · · · ·		
ermian Resources Operatin	g, LLC APPROVAL:				
Co-CEC	D	C	Co-CEO	VP - Ope	
	WH .		JW		CRM
VP - Land & Lega	NG BG	VP - Geos			
	BG		SO		
ON OPERATING PARTNI	R APPROVAL.				
ON OFERALING PARINI	AFFROVAL!				
Company Name	:		Working Interest (%):		Гах ID:
_					
Signed by	":		Date: _		
Title				☐ Yes	☐ No (mark one)
				<del></del>	
costs on this AFE are estimates only and may not be co	matrued as collings on any specific item or the lots	it cost of the project. Tubing installation	in approved under the AFE may be delayed up to a innerating agreement, regulatory order or other age	s year after the well has been completed. In execut syment covering this well. Participants shall be co	ing this AFF, the Perticipant agrees to pay its

<b>ESTIMATE OF</b>	COSTS AND AU	THORIZATION FOR	R EXPENDITURE

		JI COSTS AND AUTHO	DRIZATION FOR EXPENI		
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 11	3H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	19,895' / 9,610'
COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG			COMPLETION DAYS:	18.6
GLOLOGIC IARGEI:		wall and complete with	1 44 stages AFF include	s drilling, completions, fl	
DEMAPLE.	install cost	wen and complete with	. 22 suges. Are include	o armag, complettors, Il	Orrough aim milidi AL
REMARKS:	instali cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COMPLETION	COSTS	COSTS
1 Land/Legal/Regulatory	COS15 \$			37,500	s 90,268
2 Location, Surveys & Dama		257,363	16,141	2,500	276,003
4 Freight / Transportation	n	42,549	39,110	25,000	106,660
5 Rental - Surface Equipmen	nt .	111,070	192,448	105,000	408,518
6 Rental - Downhole Equipo		183,520	53,429		236,949
7 Rental - Living Quarters		42,956	48,671	<u> </u>	91,627
10 Directional Drilling, Surv	reys	383,743	<u> </u>	•	383,743
11 Drilling		673,443	<u> </u>	-	673,443
12 Drill Bits		89,495	- <u> </u>	<u> </u>	89,495 816,540
13 Fuel & Power 14 Cementing & Float Equip		168,789 217,354	647,751		217,354
15 Completion Unit, Swab, (		217,554	<del></del>	15,000	15,000
16 Perforating, Wireline, Slice		<del></del>	351,218	- 15,600	351,218
17 High Pressure Pump True		<del></del>	110,130	<del></del>	110,130
18 Completion Unit, Swab, (		<del></del>	130,865	-	130,865
20 Mud Circulation System		93,991	-	-	93,991
21 Mud Logging		15,660	-	-	15,660
22 Logging / Formation Eval	uation	6,495	7,450		13,944
23 Mud & Chemicals		323,254	391,463	10,000	724,717
24 Water		38,825	591,078	225,000	854,903
25 Stimulation	<b>~</b> •	-	727,236		727,236
26 Stimulation Flowback & 1		120 514	108,640	150,000	258,640
28 Mud / Wastewater Dispos		172,514	54,630 119,194	91.44	227,144 249,134
30 Rig Supervision / Engine		108,273	119,194	21,667	
32 Drig & Completion Overl	irad	9,312	62,080	101,667	9,312 300,753
35 Labor 54 Proppant		137,000	1,121,387	101,00/	1,121,387
95 Insurance		13,096		<del></del>	13,096
97 Contingency		- 15,070	21,817	3,833	25,650
99 Plugging & Abandonmer	nt	<del></del>	-	-	•
	TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379
	TOTAL INTANGIBLES				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE (		COSTS	COSTS	COSTS	COSTS
60 Surface Casing	5		<u> </u>	<u> </u>	\$ 109,201
61 Intermediate Casing		307,574	•	<u> </u>	307,574
62 Drilling Liner		613,783	<del></del>	<del></del>	613,783
63 Production Casing		013,/83	<del></del>	<u>-</u>	013,/83
64 Production Liner 65 Tubing		<del></del>	<del></del>	140,000	140,000
66 Wellhead		57,908	<del> </del>	40,000	97,908
67 Packers, Liner Hangers		13,161	-	20,000	33,161
68 Tanks			-	45,833	45,833
69 Production Vessels				126,667	126,667
70 Flow Lines				66,667	66,667
71 Rod string					
72 Artificial Lift Equipment				90,000	90,000
73 Compressor			·	5,833	5,833
74 Installation Costs			<u> </u>	(1//2	61,667
75 Surface Pumps		<u>-</u> _	<del></del>	61,667	
76 Downhole Pumps 77 Measurement & Meter In	stallation	<del></del>	<del></del>	116,667	116,667
78 Gas Conditioning / Dehy		<del></del>	<del></del>	- 110,007	110,007
79 Interconnecting Facility F		<del></del>		20,000	20,000
80 Gathering / Bulk Lines	· ····	<del></del>		-	-
81 Valves, Dumps, Controlle	ers		-	108,333	108,333
82 Tank / Facility Containme		<del></del>	•	43,333	43,333
83 Flare Stack				16,667	16,667
84 Electrical/Grounding				50,000	50,000
85 Communications / SCAD	Α			36,667	36,667
86 Instrumentation/Safety		<del></del>		853	853
	TOTAL TANGIBLES >		0	989,187	2,090,814
	TOTAL COSTS >	4,243,103	4,794,736	1,686,354	10,724,193
					<del></del>
REPARED BY Permian Res	ourse Operation IIC				
TO CONTRACT OF 1 CIUIGH KES	orices Operating, LLC:				
Drilling Enginee	r: PS				
Completions Enginee					
Production Enginee					
rmian Resources Operatin	o IIC APPROVAI.				
- man resources Operatin	B DEC STINOTAL				
Co-CE	0	Co-C	CEO	VP - Opera	ations
	WH		- jw	•	CRM
VP - Land & Lega	****	VP - Geoscier	• • • • • • • • • • • • • • • • • • • •		
	BG	, . Seconici	SO SO		
	-				
	<del> </del>			<del></del>	
ON OPERATING PARTNI	ER APPROVAL:				
OI OI LIMINO FARINI	- ALLINOVALI				
Company Name	e:		Working Interest (%):	T	ax ID:
				-	
Signed by	y:		Date:		
			A	¬ v~	□ No (
Title			Approval: _[		No (mark one)
	restruct as colleges on any sourthy them on the boat	to fat and Table to tell living and	and a to the 435 and be talend a second		4. 455 4 5

ESTIMATE OF COST	C AND AITHO	RIZATION FO	OR EXPENDITURE

	ESTIMATE	OF COSTS AND AUTHO	RIZATION FOR EXPEND		
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 1	14H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	19,875' / 9,590'
COUNTY/STATE:	Lea County, New Mexic	20		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG			COMPLETION DAYS:	18.6
	Drill a horizontal FBSG	well and complete with	44 stages. AFE includes	s drilling, completions, fl	owback and Initial AL
REMARKS:	install cost		U		
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory		\$ 52,768		37,500	\$ 90,268
2 Location, Surveys & Dama	ges	257,363	16,141	2,500 25,000	276,003 106,660
4 Freight / Transportation 5 Rental - Surface Equipmer		42,549 111,070	39,110 192,448	105,000	408,518
6 Rental - Downhole Equipmen		183,520	53,429	-	236,949
7 Rental - Living Quarters		42,956	48,671	-	91,627
10 Directional Drilling, Surv	reys	383,743			383,743
11 Drilling		673,443	<u> </u>	<u> </u>	673,443 89,495
12 Drill Bits 13 Fuel & Power		89,495 168,789	647,751	<del></del>	816,540
14 Cementing & Float Equip	<b>)</b>	217,354		-	217,354
15 Completion Unit, Swab,		-	-	15,000	15,000
16 Perforating, Wireline, Sli			351,218	-	351,218
17 High Pressure Pump True			110,130	•	110,130
18 Completion Unit, Swab, 0	CTU	93,991	130,865	<del></del>	130,865
20 Mud Circulation System 21 Mud Logging		15,660	<del></del>	<del></del>	15,660
22 Logging / Formation Eval	uation	6,495	7,450	-	13,944
23 Mud & Chemicals		323,254	391,463	10,000	724,717
24 Water		38,825	591,078	225,000	854,903
25 Stimulation	Dian	<del></del>	727,236 108,640	150,000	727,236 258,640
26 Stimulation Flowback & 28 Mud / Wastewater Dispos		172,514	54,630	130,000	227,144
30 Rig Supervision / Engine		108,273	119,194	21,667	249,134
32 Drlg & Completion Over		9,312		-	9,312
35 Labor		137,006	62,080	101,667	300,753
54 Proppant		13,096	1,121,387	<del></del>	1,121,387
95 Insurance 97 Contingency		13,096	21,817	3,833	25,650
99 Plugging & Abandonme	nt			- 3,033	- 25,050
naa	TOTAL INTANGIBLES	> 3,141,476	4,794,736	697,167	8,633,379
TANCIDI F	- Corre	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE 0		\$ 109,201			S 109,20I
61 Intermediate Casing		307,574	<del></del>		307,574
62 Drilling Liner			-	-	<del></del>
63 Production Casing		613,783	•	-	613,783
64 Production Liner			•	-	
65 Tubing 66 Wellhead		57,908	-	140,000	140,000 97,908
67 Packers, Liner Hangers		13,161	<del></del>	20,000	33,161
68 Tanks		- 10/101	-	45,833	45,833
69 Production Vessels		-	•	126,667	126,667
70 Flow Lines		<u> </u>		66,667	66,667
71 Rod string		<del></del>	<del></del>	90,000	90,000
72 Artificial Lift Equipment 73 Compressor		<del></del>	<del></del>	5,833	5,833
74 Installation Costs		<del></del>			
75 Surface Pumps			-	61,667	61,667
76 Downhole Pumps			-		-
77 Measurement & Meter In 78 Gas Conditioning / Dehy		<u> </u>	<del></del>	116,667	116,667
79 Interconnecting Facility I		<del></del>	<del></del>	20,000	20,000
80 Gathering / Bulk Lines			•	•	<del></del>
81 Valves, Dumps, Controll	ers	·	•	108,333	108,333
82 Tank / Facility Containm	ent	-	-	43,333	43,333
83 Flare Stack 84 Electrical/Grounding		<del></del>	<del></del>	16,667	16,667 50,000
85 Communications / SCAD	)A	<del></del>	<del></del>	36,667	36,667
86 Instrumentation / Safety		-	-	853	853
	TOTAL TANGIBLES	> 1,101,627	0	989,187	2,090,814
	TOTAL COSTS	> 4,243,103	4,794,736	1,686,354	10,724,193
			·		<del></del>
REPARED BY Permian Res	ourse Operating IIC				
KLI AKED DI TEIBIIAII KE	outers Operating, EDC.				
Drilling Enginee	er: PS				
Completions Enginee	er: ML				
Production Enginee	er: DC				
ermian Resources Operatio	g, LLC APPROVAL:				
Co-CE		Co-C		VP - Oper	
110 7 147	WH	up Garagian	JW		CRM
VP - Land & Leg	al <u>PC</u>	VP - Geoscier	SO		
	ВС		30		
ON OPERATING PARTN	ER APPROVAL				
-					
Company Nam	e:		Working Interest (%):	Т	ax ID:
Signed b	v·		Date:		
Signed D	1.		Date.		<del></del>
Titl	e:		Approval: _	Yes	No (mark one)
costs on this AFE are estimates only and may not be o	wantened as codings on any specific item on the let	al and of the service of Tables in tallation service		or after the well has been completed. In executir	the ALE do Desirent and the State of the Sta

	ESTIMATE	OF COSTS AND AUT	HORIZATION FOR EXPEN	DITURE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 1	21 H		FIELD:	Teas; Bone Spring
	Section 4, T20S-R34E			MD/TVD:	20,605' / 10,320'
LOCATION:				· —	
COUNTY/STATE:	Lea County, New Mexic	:0		LATERAL LENGTH:	10,000'
Permian WI:		_		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG			COMPLETION DAYS:	18.6
		wall and complete w	ith 44 stages. AFE include	s drilling completions fl	owhack and Initial AL.
DEL A DEC		wen and complete w	idi 11 Suges. Ili 2 nemue	.s urming, completions, in	
REMARKS:	install cost				
					TOT. 1
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory		54,351	<u>-</u>	37,500	\$ 91,851
2 Location, Surveys & Dama	iges	265,083	16,625	2,500	284,208
4 Freight / Transportation		43,826	40,284	25,000	109,110
5 Rental - Surface Equipmen		114,402	198,221	105,000	417,624
6 Rental - Downhole Equips	ment	189,026	55,031		244,057
7 Rental - Living Quarters		44,244	50,131		94,375
10 Directional Drilling, Surv	veys	395,255	<u> </u>		395,255
11 Drilling		693,647			693,647
12 Drill Bits		92,179	-		92,179
13 Fuel & Power		173,853	667,183	<u>-</u>	841,036
14 Cementing & Float Equip		223,875		-	223,875
15 Completion Unit, Swab,			<u> </u>	15,000	15,000
16 Perforating, Wireline, Sli			361,754	<u> </u>	361,754
17 High Pressure Pump Tru			113,434		113,434
18 Completion Unit, Swab,	CTU		134,791	-	134,791
20 Mud Circulation System		96,811		<u> </u>	96,811
21 Mud Logging		16,130	-	<u>:</u>	16,130
22 Logging / Formation Eval	luation	6,690	7,673		14,363
23 Mud & Chemicals		332,951	403,207	10,000	746,158
24 Water		39,990	608,810	250,000	898,800
25 Stimulation			749,053		749,053
26 Stimulation Flowback &			111,899	150,000	261,899
28 Mud/Wastewater Dispo	sal	177,689	56,269		233,959
30 Rig Supervision / Engine	ering	111,522	122,769	21,667	255,958
32 Drlg & Completion Over	head	9,591		<u> </u>	9,591
35 Labor		141,116	63,942	101,667	306,725
54 Proppant		-	1,155,029	<u> </u>	1,155,029
95 Insurance		13,489	<u> </u>		13,489
97 Contingency			22,472	3,833	26,305
99 Plugging & Abandonmer	nt	-		-	<u> </u>
	TOTAL INTANGIBLES:	3,235,720	4,938,578	722,167	8,896,465
-					
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		\$ 112,477	<u> </u>		\$ 112,477
61 Intermediate Casing		316,801	<u> </u>		316,801
62 Drilling Liner					
63 Production Casing		632,196	-	-	632,196
64 Production Liner		-		-	-
65 Tubing		•	-	140,000	140,000
66 Wellhead		59,645		40,000	99,645
67 Packers, Liner Hangers		13,556	-	20,000	33,556
68 Tanks		•	-		<del></del>
69 Production Vessels		-	<del></del>	45,833	45,833
70 Flow Lines		-	-	126,667	126,667
71 Rod string			<del></del>	66,667	66,667
72 Artificial Lift Equipment	:		<del></del>	90,000	90,000
73 Compressor		-	-	5,833	5,833
74 Installation Costs				<del></del>	-
75 Surface Pumps		-		61,667	61,667
76 Downhole Pumps					-
77 Measurement & Meter In	stallation			116,667	116,667
78 Gas Conditioning / Dehy	dration		<del></del>		
79 Interconnecting Facility I	Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines				-	-
81 Valves, Dumps, Controll	ers	-	-	108,333	108,333
82 Tank / Facility Containm				43,333	43,333
83 Flare Stack				16,667	16,667
84 Electrical/Grounding			<del></del>	50,000	50,000
85 Communications / SCAD	)A	-	•	36,667	36,667
86 Instrumentation / Safety				833	833
-	TOTAL TANGIBLES:	1,134,676	0	989,167	2,123,843
	TOTAL COSTS:	> 4,370,396	4,938,578	1,711,334	11,020,308
		-,-, 0,0,0	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3, 2400	,,,,,,,,,,
REPARED BY Permian Res	sources Operating, LLC:				
<u>-</u>					
Drilling Enginee	er: PS				
Completions Enginee	er: ML				
Production Enginee	er: DC				
amalan Pasan	a LIC ADDROVAT				
ermian Resources Operatin	ig, LLC APPROVAL:				
C. 00	0	~	NCEO.	1m 0	ations
Co-CE	О	C	-CEOiw	VP - Oper	
			•		CRM
VP - Land & Leg	aı	VP - Geosc			
	BG		SO		
ON OPERATING PARTN	ER APPROVAL.				
ON OFENATING PARTN	EN ALL NOVAL:				
Company Nam	e:		Working Interest (%):	T	ax ID:
				·	·
Signed b	y:		Date:		
5. <u>6</u>	·				<del></del>
Titl	le:		Approval:	Yes	No (mark one)
		t and the second second second		out after the well has been consciented. In execution	ALL ALL ALL BURNESS

Permian Resources Operating, LLC
300 N. Marienfeld St., Ste. 1000 Midland, TX 79701
Phone (432) 695-4222 • Fax (432) 695-4063
ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

	estimate			A PER NIC.	1
DATE:	2.17.2023			AFE NO.: _	
WELL NAME:	Bane 4-9 Federal Com 1	22H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	20,290' / 10,005'
COUNTY/STATE:	Lea County, New Mexic	20		LATERAL LENGTH:	10,000'
•	Dea County, Tron ment	<del>-</del>		DRILLING DAYS:	19.6
Permian WI:				_	
GEOLOGIC TARGET:	SBSG			COMPLETION DAYS:	18.6
	Drill a horizontal SBSG	well and complete w	rith 44 stages. AFE include	s drilling, completions, f	lowback and Initial AL
REMARKS:	install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTEANCIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
INTANGIBLE				37,500	\$ 91,851
1 Land/Legal/Regulatory		54,351 265,083	16,625	2,500	284,208
2 Location, Surveys & Dama	ges		40,284	25,000	109,110
4 Freight/Transportation 5 Rental - Surface Equipmen		43,826 114,402	198,221	105,000	417,624
		189,026	55,031	103,000	244,057
6 Rental - Downhole Equipm	ient	44,244	50,131	<del></del>	94,375
7 Rental - Living Quarters		395,255		<del></del>	395,255
10 Directional Drilling, Surv	eys	693,647	<del></del>	<del></del>	693,647
11 Drilling		92,179	<del></del>	<del></del>	92,179
12 Drill Bits		173,853	667,183	<del></del>	841,036
13 Fuel & Power		223,875	- 007,183	<del></del>	223,875
14 Cementing & Float Equip			<u>-</u>	15,000	15,000
15 Completion Unit, Swab, C			361,754	15,000	361,754
16 Perforating, Wireline, Slice			113,434		113,434
17 High Pressure Pump True			134,791		134,791
18 Completion Unit, Swab, (	.10	0/ 011		<del></del>	96,811
20 Mud Circulation System		96,811	<del></del>		
21 Mud Logging		16,130	7,673		16,130 14,363
22 Logging / Formation Eval	Jauon	6,690	403,207	10,000	746,158
23 Mud & Chemicals		332,951			
24 Water		39,990	608,810	250,000	898,800
25 Stimulation	Na		749,053	150 000	749,053
26 Stimulation Flowback &		100 100	111,899	150,000	261,899
28 Mud/Wastewater Dispos		177,689	56,269		233,959
30 Rig Supervision / Engine		111,522	122,769	21,667	255,958
32 Drlg & Completion Overl	read	9,591	-		9,591
35 Labor		141,116	63,942	101,667	306,725
54 Proppant		<u> </u>	1,155,029		1,155,029
95 Insurance		13,489	<u> </u>	-	13,489
97 Contingency			22,472	3,833	26,305
99 Plugging & Abandonmer	t		-		•
	TOTAL INTANGIBLES:	3,235,720	4,938,578	722,167	8,896,465
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		5 112,477	<u> </u>		\$ 112,477
61 Intermediate Casing		316,801	-	-	316,801
62 Drilling Liner					
63 Production Casing		632,196		-	632,196
64 Production Liner				-	-
65 Tubing		-		140,000	140,000
66 Wellhead		59,645	<del>-</del>	40,000	99,645
67 Packers, Liner Hangers		13,556		20,000	33,556
68 Tanks					<del></del>
69 Production Vessels		<del></del>		45,833	45,833
70 Flow Lines				126,667	126,667
71 Rod string				66,667	66,667
72 Artificial Lift Equipment		<del></del>		90,000	90,000
73 Compressor		<del></del>		5,833	5,833
74 Installation Costs					<u> </u>
75 Surface Pumps			<del></del>	61,667	61,667
76 Downhole Pumps					
77 Measurement & Meter In	stallation			116,667	116,667
78 Gas Conditioning / Dehy		<del></del>			<del>.</del>
79 Interconnecting Facility F		<del></del>		20,000	20,000
80 Gathering/Bulk Lines			<del></del>		
81 Valves, Dumps, Controlle	rs	<del></del>		108,333	108,333
82 Tank / Facility Containme		<del></del>	<del></del>	43,333	43,333
83 Flare Stack		<del></del>	<del></del>	16,667	16,667
84 Electrical/Grounding				50,000	50,000
85 Communications / SCAD	A		<del></del>	36,667	36,667
86 Instrumentation / Safety		-	-	833	833
	TOTAL TANGIBLES:	1,134,676	0	989,167	2,123,843
•	TOTAL COSTS:		4,938,578		
	TOTAL COSTS:	> 4,370,390	4,738,378	1,711,334	11,020,308
REPARED BY Permian Res	ources Operating, LLC:				
Drilling Enginee					
Completions Enginee	r: ML				
Production Enginee	r: DC				
	. I.C. ADDD COLAT				
ermian Resources Operatin	g, LLC APPROVAL:				
		_	- CEO		
Co-CE		C	o-CEO	VP - Ope	
	WH		JW		CRM
VP - Land & Lega	ul	VP - Geosc	ciences		
-	BG		SO		
				<del></del>	
ON OPERATING PARTN	ER APPROVAL:				
Company Name	»:		Working Interest (%):		Tax ID:
Company Name	<u> </u>	<del></del>			
Signed by	<del>,.</del>		Date:		
Signed by	r:		Date		<del></del>
Title	2:		Approval:	□ Yes	☐ No (mark one)
	·				<del></del>
costs on this AFE are estimates only and may not be co	nstrued as critings on any specific item or the total	l cost of the project. Tubing installation	approved under the AFE may be delayed up to a y	var after the well has been completed. In execut	ing this AFE, the Participant agrees to pay its

	ESTIMATE	OF COSTS AND AUTHO	DRIZATION FOR EXPEN	DITURE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 1	23H		FIELD:	Teas; Bone Spring
		2011		_	
LOCATION:	Section 4, T20S-R34E			MD/TVD:	20,610' / 10,325'
COUNTY/STATE:	Lea County, New Mexic	20		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
	CDCC			COMPLETION DAYS:	18.6
GEOLOGIC TARGET:	SBSG			_	
	Drill a horizontal SBSG	well and complete with	44 stages. AFE include	s drilling, completions, fl	owback and Initial AL
REMARKS:	install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
IN THE ADDRESS OF	corre	COSTS	COSTS	COSTS	COSTS
INTANGIBLE					
1 Land/Legal/Regulatory		54,351	-	37,500	S 91,851
2 Location, Surveys & Dama	ges	265,083	16,625	2,500	284,208
4 Freight / Transportation		43,826	40,284	25,000	109,110
5 Rental - Surface Equipmen		114,402	198,221	105,000	417,624
6 Rental - Downhole Equipa	nent	189,026	55,031	-	244,057
7 Rental - Living Quarters		44,244	50,131		94,375
10 Directional Drilling, Surv	eys .	395,255	-	•	395,255
11 Drilling		693,647	<u>-</u>	-	693,647
12 Drill Bits		92,179	-	-	92,179
13 Fuel & Power		173,853	667,183	-	841,036
14 Cementing & Float Equip	)	223,875	-	•	223,875
15 Completion Unit, Swab,	CTU		<del>-</del>	15,000	15,000
16 Perforating, Wireline, Sli	ckline		361,754	-	361,754
17 High Pressure Pump True	ck	<del></del>	113,434		113,434
18 Completion Unit, Swab,	CTU		134,791	-	134,791
20 Mud Circulation System		96,811	<del></del>	-	96,811
21 Mud Logging		16,130			16,130
22 Logging / Formation Eval	uation	6,690	7,673	· — -	14,363
23 Mud & Chemicals		332,951	403,207	10,000	746,158
24 Water		39,990	608,810	250,000	898,800
25 Stimulation			749,053		749,053
26 Stimulation Flowback &	Disn		111,899	150,000	261,899
28 Mud/Wastewater Dispo		177,689	56,269		233,959
30 Rig Supervision / Engine		111,522	122,769	21,667	255,958
32 Drig & Completion Over		9,591	- 122,707	21,007	9,591
35 Labor	neau	141,116	63,942	101,667	306,725
		141,110	1,155,029	101,007	1,155,029
54 Proppant		12 400	1,155,029		13,489
95 Insurance		13,489		1022	
97 Contingency		<del></del>	22,472	3,833	26,305
99 Plugging & Abandonme	nt		•	•	
	TOTAL INTANGIBLES:	> 3,235,720	4,938,578	722,167	8,896,465
		DRUTING	COMPLETION	PRODUCTION	TOTAL
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		\$ 112,477	•		\$ 112,477
61 Intermediate Casing		316,801		-	316,801
62 Drilling Liner		<u> </u>	-	•	<u> </u>
63 Production Casing		632,196	•	-	632,196
64 Production Liner				-	<del></del>
65 Tubing		-	<del></del>	140,000	140,000
66 Wellhead		59,645		40,000	99,645
67 Packers, Liner Hangers		13,556	-	20,000	33,556
68 Tanks			<del></del>		
69 Production Vessels		<del></del>		45,833	45,833
70 Flow Lines			<del></del>	126,667	126,667
71 Rod string			<del></del>	66,667	66,667
••		<del></del>		90,000	90,000
72 Artificial Lift Equipment		<del></del>	<del>-</del>		
73 Compressor		<u>-</u>		5,833	5,833
74 Installation Costs			<u>-</u>		
75 Surface Pumps			-	61,667	61,667
76 Downhole Pumps					-
77 Measurement & Meter In				116,667	116,667
78 Gas Conditioning / Dehy		<u>-</u>	<u> </u>		
79 Interconnecting Facility I	Piping			20,000	20,000
80 Gathering/Bulk Lines			<u> </u>	<u> </u>	<u> </u>
81 Valves, Dumps, Controll	ers	<u> </u>		108,333	108,333
82 Tank / Facility Containm	ent	<u> </u>		43,333	43,333
83 Flare Stack				16,667	16,667
84 Electrical/Grounding		•	•	50,000	50,000
85 Communications / SCAD	)A			36,667	36,667
86 Instrumentation / Safety		-		833	833
	TOTAL TANGIBLES:	> 1,134,676	0	989,167	2,123,843
	TOTAL COSTS	> 4,370,396	4,938,578	1,711,334	11,020,308
	101112 00010	1,010,050	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		11,020,000
REPARED BY Permian Res	ources Operating, LLC:				
Drilling Enginee	er: PS				
Completions Enginee					
Production Enginee	er: DC				
	·				
ermian Resources Operatir	ig, LLC APPROVAL:				
Co-CF	0	Co-C	ŒO	VP - Opera	ations
C5 CL	~ <del></del>			. Open	CRM
VD 1461		UD Casasian	• • • • • • • • • • • • • • • • • • • •		CAM
vr - Land & Leg	BG BG	VP - Geoscier			
:	BG		SO		
ON OPERATING PARTN	ER APPROVAL:				
Company Nam	e:		Working Interest (%):	T	ax ID:
1 y			- ` '-		
Signed b	y:		Date:		
- 0			-		
Titl	e:		Approval: [	Yes	No (mark one)
	construed as critimes on any specific item or the total				<u>'</u> '

## ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

	0.17.0000			AFE NO.:	1
DATE:	2.17.2023			_	
WELL NAME:	Bane 4-9 Federal Com	124H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	20,290' / 10,005'
COUNTY/STATE:	Lea County, New Mexi	ico		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
	SBSG			COMPLETION DAYS:	18.6
GEOLOGIC TARGET:				_	
		well and complete wi	h 44 stages. AFE includes	s arilling, completions, r	lowback and Ininai AL
REMARKS:	install cost				
					<del></del>
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land / Legal / Regulatory		\$ 54,351	•	37,500	s 91,851
2 Location, Surveys & Dama	ges	265,083	16,625	2,500	284,208
4 Freight / Transportation		43,826	40,284	25,000	109,110
5 Rental - Surface Equipmer	it	114,402	198,221	105,000	417,624
6 Rental - Downhole Equips	nent	189,026	55,031		244,057
7 Rental - Living Quarters		44,244	50,131		94,375
10 Directional Drilling, Surv	eys	395,255	-		395,255
11 Drilling		693,647	<del>-</del>		693,647
12 Drill Bits		92,179	•		92,179
13 Fuel & Power		173,853	667,183		841,036
14 Cementing & Float Equip	1	223,875		-	223,875
15 Completion Unit, Swab,			-	15,000	15,000
16 Perforating, Wireline, Slice		<del></del>	361,754		361,754
17 High Pressure Pump True		<del></del>	113,434		113,434
18 Completion Unit, Swab, (		-	134,791	-	134,791
20 Mud Circulation System		96,811	<del></del>		96,811
21 Mud Logging		16,130			16,130
22 Logging / Formation Eval	uation	6,690	7,673	-	14,363
23 Mud & Chemicals		332,951	403,207	10,000	746,158
24 Water		39,990	608,810	250,000	898,800
25 Stimulation		-	749,053	-	749,053
26 Stimulation Flowback &	Disp	<del></del>	111,899	150,000	261,899
28 Mud/Wastewater Dispos		177,689	56,269	-	233,959
30 Rig Supervision/Engine		111,522	122,769	21,667	255,958
32 Drlg & Completion Over		9,591			9,591
35 Labor		141,116	63,942	101,667	306,725
54 Proppant			1,155,029	-	1,155,029
95 Insurance		13,489		<del></del>	13,489
97 Contingency		13,107	22,472	3,833	26,305
99 Plugging & Abandonmer	18	<del></del>			
Jo I rugging & Abandonnie			4 000 550		0.006.465
	TOTAL INTANGIBLES	> 3,235,720	4,938,578	722,167	8,896,465
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE (	COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	.0313	\$ 112,477	•		\$ 112,477
61 Intermediate Casing		316,801			316,801
62 Drilling Liner		310,001		<del></del>	310,001
63 Production Casing		632,196		<del></del>	632,196
		032,170		<del></del>	032,170
64 Production Liner			<del></del>	140,000	140,000
65 Tubing		59,645		40,000	99,645
66 Wellhead			<u> </u>	20,000	33,556
67 Packers, Liner Hangers		13,556		20,000	
68 Tanks			<u>-</u>	45,833	45,833
69 Production Vessels		<del></del>			126.667
70 Flow Lines		<u> </u>		126,667	
71 Rod string		<u>:</u> _		66,667	66,667
72 Artificial Lift Equipment			· · · · · · · · · · · · · · · · · · ·	90,000	90,000
73 Compressor				5,833	5,833
74 Installation Costs				42.77	
75 Surface Pumps		-		61,667	61,667
76 Downhole Pumps		<u> </u>		*****	
77 Measurement & Meter In			<del></del>	116,667	116,667
78 Gas Conditioning / Dehy		<u> </u>			20.000
79 Interconnecting Facility I	'iping	-	<u> </u>	20,000	20,000
80 Gathering / Bulk Lines			<u> </u>	100 222	100 222
81 Valves, Dumps, Controll			<u> </u>	108,333	108,333
82 Tank/ Facility Containm	ent		<u>·</u>	43,333	43,333
83 Flare Stack			<u> </u>	16,667	16,667
84 Electrical/Grounding		<u> </u>	<u> </u>	50,000	50,000
85 Communications / SCAD	'A	<del></del>	<del></del>	36,667	36,667
86 Instrumentation / Safety		. <del></del> -		833	833
	TOTAL TANGIBLES		0	989,167	2,123,843
	TOTAL COSTS	> 4,370,396	4,938,578	1,711,334	11,020,308
				<u> </u>	
REPARED BY Permian Res	ources Operating, LLC:				
Drilling Enginee	r: PS				
Completions Enginee					
Production Enginee					
ermian Resources Operatir	g, LLC APPROVAL:				
	_				
Co-CE		Со	CEO	VP - Ope	
	WH		JW		CRM
VP - Land & Leg	al	VP - Geosci	ences		
	BG		50		
			==		
ON OPERATING PARTN	ER APPROVAL:				
2 ::			Washing Forest (W)		Tau ID:
Company Nam	e:		Working Interest (%):		Tax ID:
			_	_	
Signed b	y:		Date:		
				¬ v	Ma /
Titi	e:		Approval: _[	Yes	No (mark one)
e costs on this AFE are estimates only and may not be o	onstrued as cellings on any specific item or the Is	otal cost of the project. Tabling installation a	proved under the AFE may be delayed up to a ye	ear after the well has been completed. In execut	ing this AFE, the Participant agrees to pay its
mortionate share of actual costs incurred including le	ral curative regulatory brokerage and well cont	a under the terms of the annitrable into tone	atine accrement, reculatory order or other accres	ment covering this well. Participants shall be co	wered by and billed remountimately for Overator's well

	ESTIMATE	OF COSTS AND AUTHO	RIZATION FOR EXITEN		
DATE:	2.17.2023			AFE NO.: _	1
WELL NAME:	Bane 4-9 Federal Com 12	25H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	20,615' / 10,330'
COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG			COMPLETION DAYS:	18.6
GLOLOGIC IAMOLI.		well and complete with	44 stages. AFE include	s drilling, completions, fl	owback and Initial AL
REMARKS:	install cost	neu and compress	о	<i>y</i> ,	
					======
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE (	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory	\$	54,351	•	37,500	\$ 91,851
2 Location, Surveys & Damag	zes	265,083	16,625	2,500	284,208
4 Freight / Transportation		43,826	40,284	25,000	109,110
5 Rental - Surface Equipment		114,402	198,221	105,000	417,624
6 Rental - Downhole Equipm	ient	189,026	55,031	<u> </u>	244,057 94,375
7 Rental - Living Quarters		44,244 395,255	50,131	<del></del>	395,255
10 Directional Drilling, Surve	eys	693,647	<del></del>	<del></del>	693,647
11 Drilling 12 Drill Bits		92,179	<del></del>	<del></del>	92,179
13 Fuel & Power		173,853	667,183		841,036
14 Cementing & Float Equip		223,875	-	<del></del>	223,875
15 Completion Unit, Swab, C	TU	-	-	15,000	15,000
16 Perforating, Wireline, Slick	kline	-	361,754		361,754
17 High Pressure Pump Truck	k		113,434		113,434
18 Completion Unit, Swab, C	.TU		134,791		134,791
20 Mud Circulation System		96,811	<del> </del>		96,811
21 Mud Logging	untion	16,130	7,673	<del></del>	16,130 14,363
22 Logging / Formation Evalu 23 Mud & Chemicals	IAUON	6,690 332,951	403,207	10,000	746,158
23 Mud & Chemicals 24 Water		39,990	608,810	250,000	898,800
24 syster 25 Stimulation		- 39,990	749,053		749,053
26 Stimulation Flowback & D	Disp		111,899	150,000	261,899
28 Mud/Wastewater Dispose		177,689	56,269		233,959
30 Rig Supervision / Enginee		111,522	122,769	21,667	255,958
32 Drig & Completion Overh		9,591			9,591
35 Labor		141,116	63,942	101,667	306,725
54 Proppant		-	1,155,029		1,155,029
95 Insurance		13,489			13,489
97 Contingency			22,472	3,833	26,305
99 Plugging & Abandonmen		<u>-</u>		<u> </u>	
	TOTAL INTANGIBLES >	3,235,720	4,938,578	722,167	8,896,465
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	.00.0	112,477	•	•	\$ 112,477
61 Intermediate Casing		316,801	-	•	316,801
62 Drilling Liner		-	-	-	
63 Production Casing		632,196	<u> </u>		632,196
64 Production Liner					
65 Tubing		-		140,000	140,000
66 Wellhead		59,645		40,000	99,645
67 Packers, Liner Hangers		13,556		20,000	33,556
68 Tanks 69 Production Vessels		<del></del>	· ·	45,833	45,833
70 Flow Lines		<del></del>	<del></del>	126,667	126,667
71 Rod string		<del></del>	<del></del>	66,667	66,667
72 Artificial Lift Equipment				90,000	90,000
73 Compressor		<del></del>	-	5,833	5,833
74 Installation Costs		-			-
75 Surface Pumps		•		61,667	61,667
76 Downhole Pumps			-		-
77 Measurement & Meter Ins				116,667	116,667
78 Gas Conditioning / Dehyd		<u> </u>	<u> </u>	20,000	-
79 Interconnecting Facility Pi	iping	<del></del>	<del></del>	20,000	20,000
80 Gathering / Bulk Lines				108,333	108,333
81 Valves, Dumps, Controlle 82 Tank / Facility Containme		<del></del>	<del></del>	43,333	43,333
83 Flare Stack		<del></del>	<del></del>	16,667	16,667
84 Electrical/Grounding			-	50,000	50,000
85 Communications / SCAD	A	•		36,667	36,667
86 Instrumentation / Safety				833	833
	TOTAL TANGIBLES >	1,134,676	0	989,167	2,123,843
	TOTAL COSTS >	> 4,370,396	4,938,578	1,711,334	11,020,308
EPARED BY Permian Reso	ources Operating, LLC:	-	7270		
		-			
Drilling Engineer	r: PS				
Completions Engineer	r: ML				
Production Engineer	r: DC				
rmian Resources Operating	g, LLC APPROVAL:				
Co-CEC	<b>1</b>	Co-C	'FO	VP - Oper	rations
55 521	WH				CRM
VP - Land & Lega	1	VP - Geoscien	ices .		
. 2 Limite of Dega	BG	3000.1611	50		
	20		•		
ON OPERATING PARTNE	ED APPROVALA				
Company Name	<u> </u>		Working Interest (%):	т	Tax ID:
٠, ١, ١, ١, ١, ١, ١, ١, ١, ١, ١, ١, ١, ١,	r•		Date:		
Signed by	<i>.</i> :		Date: —		
Title	ĸ		Approval: [	Yes	No (mark one)
outs on this AFE are est mates only and may not be co	•	Least of the marine Taking to tell other		<del></del>	<u>,                                    </u>

ESTIMATE OF COSTS AND A	UTHORIZATION FOR	<b>EXPENDITURI</b>
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	ESTIMATE	OF COSTS AND AUTHO	RIZATION FOR EXPEN	DITURE			
DATE:	2.17.2023	_		AFE NO.:	1		
WELL NAME:	Bane 4-9 Federal Com 1:	26H		FIELD:	Teas; Bone Spring		
LOCATION:	Section 4, T20S-R34E			MD/IVD:	20,290' / 10,005'		
COUNTY/STATE:	Lea County, New Mexic	70		LATERAL LENGTH:	10,000'		
Permian WI:	Dea County, Iven Mexic			DRILLING DAYS:	19.6		
-	SBSG			COMPLETION DAYS:	18.6		
GEOLOGIC TARGET:			AA ataaaa AFF (malada				
		well and complete with	44 stages. Are include	s drilling, completions, flo	owback and munar AL		
REMARKS: install cost							
<del></del>					TOTAL		
		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS		
INTANGIBLE		COSTS	COSTS	COSTS			
1 Land/Legal/Regulatory		54,351		37,500	\$ 91,851 284,208		
2 Location, Surveys & Dama	iges	265,083	16,625	2,500 25,000	109,110		
4 Freight / Transportation 5 Rental - Surface Equipmen	-4	43,826 114,402	198,221	105,000	417,624		
6 Rental - Downhole Equips		189,026	55,031	-	244,057		
7 Rental - Living Quarters	uent	44,244	50,131	•	94,375		
10 Directional Drilling, Surv	vevs	395,255			395,255		
11 Drilling	,	693,647	-	•	693,647		
12 Drill Bits		92,179	•	•	92,179		
13 Fuel & Power		173,853	667,183	<u> </u>	841,036		
14 Cementing & Float Equip		223,875	-	-	223,875		
15 Completion Unit, Swab,		<u> </u>	-	15,000	15,000		
16 Perforating, Wireline, Sli		<u> </u>	361,754	<u> </u>	361,754		
17 High Pressure Pump Tru		<u> </u>	113,434	<del>-</del> _	113,434		
18 Completion Unit, Swab,	CIU	04 811	134,791		96,811		
20 Mud Circulation System		96,811	<del></del>	<del></del>	16,130		
21 Mud Logging 22 Logging / Formation Eval	luation	6,690	7,673	<del></del>	14,363		
23 Mud & Chemicals		332,951	403,207	10,000	746,158		
24 Water		39,990	608,810	250,000	898,800		
25 Stimulation		-	749,053	•	749,053		
26 Stimulation Flowback &	Disp	-	111,899	150,000	261,899		
28 Mud/Wastewater Dispo		177,689	56,269		233,959		
30 Rig Supervision / Engine	ering	111,522	122,769	21,667	255,958		
32 Drlg & Completion Over	head	9,591		· ·	9,591		
35 Labor		141,116	63,942	101,667	306,725		
54 Proppant		•	1,155,029	<del></del>	1,155,029		
95 Insurance		13,489		2.022	13,489		
97 Contingency	_	<del></del>	22,472	3,833	26,305		
99 Plugging & Abandonme		<del></del>					
	TOTAL INTANGIBLES:	> 3,235,720	4,938,578	722,167	8,896,465		
		DRILLING	COMPLETION	PRODUCTION	TOTAL		
TANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS		
60 Surface Casing		S 112,477	-		\$ 112,477		
61 Intermediate Casing		316,801		-	316,801		
62 Drilling Liner			-	-	-		
63 Production Casing		632,196	-		632,196		
64 Production Liner		-		-	<del>-</del>		
65 Tubing				140,000	140,000		
66 Wellhead		59,645		40,000	99,645		
67 Packers, Liner Hangers		13,556		20,000	33,556		
68 Tanks 69 Production Vessels		<del></del>		45,833	45,833		
70 Flow Lines		<del></del>		126,667	126,667		
71 Rod string		<del></del>		66,667	66,667		
72 Artificial Lift Equipment	+	<del></del>		90,000	90,000		
73 Compressor		<del></del>	<del></del>	5,833	5,833		
74 Installation Costs		-	•		•		
75 Surface Pumps			-	61,667	61,667		
76 Downhole Pumps		-			•		
77 Measurement & Meter Ir	nstallation	-	-	116,667	116,667		
78 Gas Conditioning / Dehy				·	<u> </u>		
79 Interconnecting Facility I	Piping			20,000	20,000		
80 Gathering / Bulk Lines			<u>·</u>				
81 Valves, Dumps, Controll				108,333	108,333		
82 Tank / Facility Containm	ent		<del></del>	43,333	43,333		
83 Flare Stack 84 Electrical/Grounding			<del></del>	50,000	50,000		
85 Communications / SCAE	)A		<del></del>	36,667	36,667		
86 Instrumentation / Safety		<del></del>	<del></del>	833	833		
	TOTAL TANGIBLES:	> 1,134,676	0	989,167	2,123,843		
	TOTAL COSTS:		4,938,578	1,711,334	11,020,308		
	101112 C0010	12.02.50	1,750,010				
REPARED BY Permian Res	sources Operating, LLC:						
Drilling Enginee							
Completions Enginee	er: ML						
Production Enginee	er: DC						
ermian Resources Operatir	ng, LLC APPROVAL:						
	· · · · · · · · · · · · · · · · · · ·	-			•		
Co-CE		Co-C	EO	VP - Opera			
	WH		jw		CRM		
VP - Land & Leg	al	VP - Geoscien	ices				
·	BG		SO				
		-			·		
ON OPERATING PARTN	ER APPROVAL:						
a.unyo iANIN			_				
Company Nam	e:		Working Interest (%):	T	ax ID:		
			-		<del></del>		
Signed b	y:		Date:				
					<b>-</b> No (22.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		
Titl	ie:	<del></del>	Approval: _	Yes	No (mark one)		
	construed as collings on any specific item or the lote	I t of the content. To blood best elletten anno			white AEE the Death to an account to		

# ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023			AFE NO.:	1		
WELL NAME:	Bane 4-9 Federal Com 1	27H		FIELD:	Teas; Bone Spring		
LOCATION:	Section 4, T20S-R34E			MD/TVD:	20,615' / 10,330'		
COUNTY/STATE:	Lea County, New Mexi	со		LATERAL LENGTH:	10,000'		
Permian WI:				DRILLING DAYS:	19.6		
GEOLOGIC TARGET:	SBSG	<del></del>		COMPLETION DAYS:	18.6		
REMARKS:	Drill a horizontal SBSG install cost	well and complete wi	th 44 stages. AFE includes	drilling, completions, fl	owback and Initial AL		
	COOMS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS		
INTANGIBLE 1 Land/Legal/Regulatory		\$ 54,351		37,500	\$ 91,851		
2 Location, Surveys & Dama		265,083	16,625	2,500	284,208		
4 Freight/Transportation		43,826	40,284	25,000	109,110		
5 Rental - Surface Equipmer 6 Rental - Downhole Equipr		114,402 189,026	198,221 55,031	105,000	417,624 244,057		
7 Rental - Living Quarters	uent	44,244	50,131		94,375		
10 Directional Drilling, Surv	reys	395,255			395,255		
11 Drilling		693,647 92,179	<u> </u>	<del></del>	693,647 92,179		
12 Drill Bits 13 Fuel & Power		173,853	667,183	<del></del>	841,036		
14 Cementing & Float Equip	•	223,875			223,875		
15 Completion Unit, Swab, G		•	2/1754	15,000	15,000		
16 Perforating, Wireline, Slic 17 High Pressure Pump True		<del></del>	361,754 113,434	<del></del>	361,754 113,434		
18 Completion Unit, Swab, (		•	134,791	-	134,791		
20 Mud Circulation System		96,811	-		96,811		
21 Mud Logging 22 Logging/Formation Eval	nation	16,130 6,690	7,673	<del></del>	16,130		
22 Logging / Formation Eval 23 Mud & Chemicals	**************************************	332,951	403,207	10,000	746,158		
24 Water		39,990	608,810	250,000	898,800		
25 Stimulation	Dt	·	749,053	150,000	749,053		
26 Stimulation Flowback & 28 Mud/Wastewater Dispos	•	177,689	111,899 56,269	150,000	261,899 233,959		
30 Rig Supervision / Engine		111,522	122,769	21,667	255,958		
32 Drlg & Completion Over		9,591	·		9,591		
35 Labor		141,116	63,942 1,155,029	101,667	306,725 1,155,029		
54 Proppant 95 Insurance		13,489	1,155,029	<del></del>	13,489		
97 Contingency		-	22,472	3,833	26,305		
99 Plugging & Abandonmer	nt	<u> </u>					
	TOTAL INTANGIBLES	> 3,235,720	4,938,578	722,167	8,896,465		
		DRILLING	COMPLETION	PRODUCTION	TOTAL		
TANGIBLE C	COSTS	COSTS \$ 112.477	COSTS	COSTS	COSTS 112,477		
60 Surface Casing 61 Intermediate Casing		\$ 112,477 316,801	<del></del>	<del></del>	316,801		
62 Drilling Liner		<u> </u>			•		
63 Production Casing		632,196	-		632,196		
64 Production Liner 65 Tubing		<u>-</u> _		140,000	140,000		
66 Wellhead		59,645		40,000	99,645		
67 Packers, Liner Hangers		13,556		20,000	33,556		
68 Tanks		<u> </u>	<u> </u>	15 022	45.022		
69 Production Vessels 70 Flow Lines		<del></del>	<del></del>	45,833 126,667	45,833 126,667		
71 Rod string			-	66,667	66,667		
72 Artificial Lift Equipment				90,000	90,000		
73 Compressor 74 Installation Costs		<del></del>		5,833	5,833		
75 Surface Pumps				61,667	61,667		
76 Downhole Pumps							
77 Measurement & Meter In			-	116,667	116,667		
78 Gas Conditioning / Dehy 79 Interconnecting Facility I		<del></del>	<del></del>	20,000	20,000		
80 Gathering / Bulk Lines	· · · · · · · · ·	-	<del></del>	- 20,000	20,000		
81 Valves, Dumps, Controlle				108,333	108,333		
82 Tank / Facility Containme 83 Flare Stack	ent		<u> </u>	43,333 16,667	43,333		
83 Flare Stack 84 Electrical/Grounding		<del></del>	<del></del>	50,000	16,667 50,000		
85 Communications / SCAD	A	<u> </u>		36,667	36,667		
86 Instrumentation / Safety	TOWN			833	833		
	TOTAL COSTS		4 029 579	989,167	2,123,843		
	TOTAL COSTS	> 4,370,396	4,938,578	1,711,334	11,020,308		
REPARED BY Permian Res	ources Operating, LLC:						
			<del></del> ,				
Drilling Enginee Completions Enginee							
Production Enginee							
					<del> </del>		
ermian Resources Operatin	g, LLC APPROVAL:						
Co-CE	0	Со	CEO	VP - Oper	ations		
·	WH	=	jw		CRM		
VP - Land & Leg	al	VP - Geosci	ences SO				
	<b>5</b> U		3U				
ON OPERATING PARTNER APPROVAL:							
Company Nam			Working Interest (%):	т	ax ID:		
Company Main	··			<del></del> '			
Signed b	y:		Date:				
Titl	е:		Approval:	] Yes	☐ No (mark one)		
		tal cost of the project. Tubing installation a	proved under the AFE may be delayed up to a year	<del>-</del>	<del></del>		

	ESTIMATE (	OF COSTS AND AUTHO	RIZATION FOR EXPEN	DITUKE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 12	28H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	20,290' / 10,005'
				·	10,000'
COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG			COMPLETION DAYS:	18.6
	Drill a horizontal SBSG	well and complete with	44 stages. AFE include	s drilling, completions, fl	owback and Initial AL
REMARKS:	install cost		0		
KEWAKIO.	I Dian Cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
	COS15			37,500	\$ 91,851
1 Land/Legal/Regulatory 2 Location, Surveys & Dama		265,083	16,625	2,500	284,208
4 Freight / Transportation	iges	43,826	40,284	25,000	109,110
5 Rental - Surface Equipmen	nt.	114,402	198,221	105,000	417,624
6 Rental - Downhole Equips		189,026	55,031	-	244,057
7 Rental - Living Quarters		44,244	50,131		94,375
10 Directional Drilling, Surv	vevs	395,255	•		395,255
11 Drilling		693,647		-	693,647
12 Drill Bits		92,179	-	-	92,179
13 Fuel & Power		173,853	667,183		841,036
14 Cementing & Float Equip	,	223,875			223,875
15 Completion Unit, Swab,	CTU	•		15,000	15,000
16 Perforating, Wireline, Sli	ckline		361,754	<u> </u>	361,754
17 High Pressure Pump True	ck		113,434		113,434
18 Completion Unit, Swab,	CTU		134,791	-	134,791
20 Mud Circulation System		96,811	<u> </u>	-	96,811
21 Mud Logging		16,130	7.773	<u> </u>	16,130
22 Logging/Formation Eval	luation	6,690	7,673	10 000	14,363
23 Mud & Chemicals		332,951	403,207	10,000 250,000	746,158 898,800
24 Water		39,990	608,810 749,053	250,000	749,053
25 Stimulation	Dian	<u> </u>	749,053 111,899	150,000	261,899
26 Stimulation Flowback &	•	177,689	56,269	150,000	233,959
28 Mud/Wastewater Dispo			122,769	21,667	255,958
30 Rlg Supervision / Engine		111,522 9,591	122,769	21,06/	9,591
32 Drig & Completion Over	ııvaU	141,116	63,942	101,667	306,725
35 Labor 54 Proppant		191,110	1,155,029	101,007	1,155,029
95 Insurance		13,489	1,155,029	<del></del>	13,489
97 Contingency		13,467	22,472	3,833	26,305
99 Plugging & Abandonme	nt.				
>> 1.14,5.11, C. >1011111011111C		3,235,720	4,938,578	722,167	8,896,465
	TOTAL INTANGIBLES >	3,235,720	4,730,370	/22,10/	0,070,103
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	\$	112,477	•	-	\$ 112,477
61 Intermediate Casing		316,801		-	316,801
62 Drilling Liner		•	-	-	•
63 Production Casing		632,196	•	•	632,196
64 Production Liner		•		-	·
65 Tubing		-		140,000	140,000
66 Wellhead		59,645		40,000	99,645
67 Packers, Liner Hangers		13,556	-	20,000	33,556
68 Tanks		<u> </u>			
69 Production Vessels				45,833	45,833
70 Flow Lines		<del></del>		126,667	126,667
71 Rod string			<del></del>	66,667	66,667
72 Artificial Lift Equipment	1		<u> </u>	90,000	90,000
73 Compressor			-	5,833	5,833
74 Installation Costs			<u>-</u>	61,667	61,667
75 Surface Pumps			•	61,007	- 01,007
76 Downhole Pumps		<u> </u>		116.667	116.667
77 Measurement & Meter Ir		<del></del>		116,667	110,007
78 Gas Conditioning / Dehy 79 Interconnecting Facility I		<u> </u>	· ·	20,000	20,000
80 Gathering / Bulk Lines	'P"K	<del></del>	<del></del>	20,000	20,000
81 Valves, Dumps, Controll	ers	<del></del>	<del></del>	108,333	108,333
82 Tank / Facility Containm		<del></del>	<del></del>	43,333	43,333
83 Flare Stack	•	<del></del>	<del></del>	16,667	16,667
84 Electrical / Grounding		<del></del>		50,000	50,000
85 Communications / SCAE	)A	<del></del>	•	36,667	36,667
86 Instrumentation / Safety		-	-	833	833
,	TOTAL TANGIBLES >	1,134,676		989,167	2,123,843
	TOTAL COSTS >		4,938,578	1,711,334	11,020,308
-		-,,	-,,,,,,,,	37. 2-70-7	
REPARED BY Permian Res	sources Operating, LLC:				
Drilling Enginee					
Completions Enginee	er: ML				
Production Enginee	er; DC				
rmian Resources Operatir	o. LLC APPROVATA				
<del>-</del>	<del></del>				
Co-CF		Cn-C	ŒO	VP - Oper	ations
20.00	WH				CRM
		VP - Geoscier	• • • • • • • • • • • • • • • • • • • •		======
11 - rum or reg	BG BG	71 - Geosciei	<u> </u>		
	₩.		3.0		
ON OPERATING PARTN	ER APPROVAL:				
			Made - to	_	au ID:
Company Nam	ie:		working Interest (%):	T	ax ID:
Ciana de	· · ·		Date:		
oigned 0	y:		Date:		
Titl	le:		Approval-	□ Yes	☐ No (mark one)
	e:		· ipprovan_		<u> </u>

ESTIMATE OF	COSTS AND	<b>AUTHORIZATIO</b>	N FOR EXPENDITUE	RI
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2		ESTIMATE C	OF COSTS AND AUTHO	RIZATION FOR EXPEND	HIUKE	
MILLANS	DATE: 2.1	7.2023			AFE NO.:	1
COCATION    COCATY  A PRICE   CocaTy   A Price   CocaTy   A PRICE   LINSON   10.000     Permiss WE   FIRST   CocaTy   A Price   CocaTy   A Price   LINSON   10.000     Price   CocaTy   A Price   CocaTy   A Price   LINSON   10.000     Price   CocaTy   A Price   CocaTy   A Price   LINSON   10.000     Price   CocaTy   A Price   CocaTy   A Price   LINSON   CocaTy   LINSON			1H		FIELD:	Teas; Bone Spring
CONTYPY   TATE   CONTYPY   TATE   1,0000*					<del>-</del>	
DRILLING DAYS   19.6			<del></del>		· —	
READLESS	_	a County, New Mexico	<del>,</del>		_	
Description   Description   Triple   Description   Description   Triple   Description   Description   Triple   Description   Description   Triple   Description   Descript	<del></del>				_	
BEMARKS					_	
BRITANGBILE COSTS			vell and complete with	44 stages. AFE includes	s drilling, completions, fl	owback and Initial AL
NTANCIBLE COSTS	REMARKS: ins	stall cost				
NTANCIBLE COSTS						
Tanaff   Temperature   Tempe						
	INTANGIBLE COS	TS	COSTS	COSTS		
Second-December   Google   Company	1 Land/Legal/Regulatory	S				
Security	2 Location, Surveys & Damages					
Secretar   Downhole Equipment   198,377   57,783	4 Freight / Transportation					
Timestall Liching Quarters						
10   Dieteral Dilling, Surveys						
12 Drill Bilgs						
12 Del 19						
15 Ford & Prover   19,2545   705.52						
14 Cremeints & Flore Equily   328,600     135,000   125,000						
15 Completion Unit, Sweb, CTU						
15 Performing, Witchine, Silechline						
1918  Freezaw Pump Track				379.842		
18 Completion Units, Savab. CTU		e				
20 Mid Circulation System   101,651						
22 Mod Logging						
22   Logging   Formation Evaluation   7,023   8,057   7,050   72,250   7,050   72,250   7,050   72,250   7,050   72,250   7,050   72,250   7,050   72,250   7,050   72,250   7,050   72,250   7,050   72,250   7,050   72,250   7,050   72,250   7,050   7,050   72,250   7,050   7,						
23 Mark at Chemicals						
25 Water		,11				782,966
25 Stimulation						981,240
28 Stimulation Rowback & Disp 28 Jung Water Disposal 38 [85,574 59,883 2.245,87) 30 Rig Supervision   Engineering 117,988 128,986 21,667 2245,87) 30 Rig Supervision   Engineering 117,988 128,986 21,667 2245,87) 30 Rig Supervision   Engineering 117,988 128,986 21,667 2245,87) 31 Labor 186,177 50,118 10,667 21,878 31 Labor 197,988 128,988 21,667 245,879 31 Labor 197,989 128,989 21,679						786,506
28 Mad   Waterwater Disposal   186,574   59,683   - 245,555   - 225,675   -					150,000	267,494
20   15   15   20   20   20   20   20   20   20   2					•	245,657
12 Drig & Completion Overhead   10,071   10,07		1			21,667	267,673
151   150   151   172   173   174						10,071
Second Continue			148,172	67,140	101,667	316,978
11,164                   1,164				1,212,780	•	1,212,780
99 Plugging & Abandonment TOTAL INTANGIBLES > 3.975.06			14,164		-	14,164
TOTAL INTANGIBLES   3,997.506   5,185.907   772,167   9,355,18	97 Contingency		-	23,595	3,833	27,428
TANGIBLE COSTS	99 Plugging & Abandonment		-	-	-	·
TANGIBLE COSTS	T	OTAL INTANGIBLES >	3,397,506	5,185,507	772,167	9,355,180
TANGILLE COSTS   COSTS   COSTS   COSTS   COSTS   SUBJECT						TOTAL
Signate Caling   Signate						
State   Stat				COSTS	COSTS	
S. Drilling Liner		\$		-		
69 Production Casing   663,386			332,642	•		332,642
September   Sept				-		
140,000   140,						663,806
See Nethbard   Co.258						- 110 000
Section   Company Name	••					
SETAINS   SETA				<del></del>		
125,667   125,667   126,				<del></del>		
79 Flow Lines 71 Rod string 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Artificial Lift Equipment 75 Surface Pumps 75 Surface Pumps 75 Surface Pumps 75 Surface Pumps 76 Capter Installation 77 Measurement & Meter Installation 77 Measurement & Meter Installation 78 Lift Capter Installation 79 Interconnecting Facility Piping 79 Lift Capter Installation 79 Interconnecting Facility Piping 70 Lift Capter Installation 70 Lift Capter Installation 70 Lift Capter Installation 71 Lift Capter Installation 72 Lift Capter Installation 73 Lift Capter Installation 74 Lift Capter Installation 75 Lift Capter Installation 75 Lift Capter Installation 76 Lift Capter Installation 77 Lift Capter Installation 78 Lift Capter Installation 78 Lift Capter Installation 79 Lift Capter Installation 79 Lift Capter Installation 70 Lift Capter Installation 71 Lift Capter Installation 71 Lift Capter Installation 72 Lift Capter Installation 73 Lift Capter Installation 74 Lift Capter Installation 75 Lift Capter Inst			<u>·</u>	<del></del>		
71 Rod string			<del></del>	<del></del>		
72 Artificial Lift Equipment			<u>·</u> _			00,007
73 Compressor			<u>-</u>			90,000
74 Installation Costs						
15 Surface Pumps	•			<del></del>	3,633	3,833
76 Downhole Pumps				<del></del>	61.667	61 667
77 Measurement & Meter Installation	•				01,007	
78 Gas Conditioning / Dehydration	•				116 667	
19   Interconnecting Facility Piping				<del></del>	110,007	
80 Gathering/ Bulk Lines 81 Valves, Dumps, Controllers 81 Valves, Dumps, Controllers 81 Valves, Dumps, Controllers 81 Cambridge Controllers 81 Cambridge Controllers 81 Cambridge Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical/ Grounding 85 Communications / SCADA 96 Electrical/ Grounding 97 Controllers 98 Communications / SCADA 98 Electrical/ Grounding 98 Electrical/ Electrica				<del></del>	20,000	
18   Valves, Dumps, Controllers		К	<del></del>			
82 Tank / Facility Containment 83 Flare Stack 83 Flare Stack 84 Electrical/ Grounding 85 Communications / SCADA 86 Instrumentation / Safety TOTAL TANGIBLES > 1,191,410					108,333	108,333
83 Flare Stack						43,333
## Electrical/Grounding   -   -   50,000   50,00						16,667
Stommunications   SCADA						50,000
86 Instrumentation / Safety TOTAL TANGIBLES > 1,191,410			<del></del>	-		36,667
TOTAL TANGIBLES			<del></del>	-	833	833
TOTAL COSTS > 4,588,916		TOTAL TANGIBLES >	1,191,410		989,167	2,180,577
Drilling Engineer: PS Completions Engineer: ML Production Engineer: DC  Trainan Resources Operating, LLC APPROVAL:  Co-CEO Co-CEO VP - Operations WH VP - Land & Legal BG VP - Geosciences BG SO  ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID: Signed by: Date:				5 185 507	1.761.334	11,535,757
Completions Engineer: ML   Production Engineer: DC   Production Engineer: DC   Co-CEO   VP - Operations   VP - Operations   VP - Operations   VP - CRM   VP - Land & Legal   BG   VP - Geosciences   SO   OPERATING PARTNER APPROVAL:    Company Name:   Working Interest (%):   Tax ID:	REPARED BY Permian Resour					
Completions Engineer: ML   Production Engineer: DC   Production Engineer: DC   Co-CEO   VP - Operations   VP - Operations   VP - Operations   VP - CRM   VP - Land & Legal   BG   VP - Geosciences   SO   OPERATING PARTNER APPROVAL:    Company Name:   Working Interest (%):   Tax ID:	Delling Posters	nc				
Production Engineer: DC   DC     Production Engineer: DC     Production Engineer: DC     Production Engineer: DC     Production Engineer: DC   Pro						
Co-CEO		ML				
Co-CEO	Production Engineer:	DC				
Co-CEO	i Bassansa Onesetina I	I.C. A PPP OVAL.				
WH JW CRM  VP - Land & Legal BG VP - Geosciences  BG SO  DN OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID:  Signed by: Date:	innan Kesources Operating, L	LC AFFRUVAL!				
WH JW CRM  VP - Land & Legal BG VP - Geosciences  BG SO  DN OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID:  Signed by: Date:	Co CEO		CoC	TO.	VP - Once	ations
VP - Land & Legal         VP - Geosciences           BG         50              ON OPERATING PARTNER APPROVAL:         Working Interest (%):		1601	Co-C		VI - Opei	
ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%):	VD I and 6 I and		VP Cassier	· · ·		CKM
ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%):	VI' - Land & Legal		VP - Geoscier	ices		
Company Name: Working Interest (%): Tax ID:  Signed by: Date:		BG		50		
Company Name: Working Interest (%): Tax ID:  Signed by: Date:						
Company Name: Working Interest (%): Tax ID:  Signed by: Date:						
Company Name: Working Interest (%): Tax ID:  Signed by: Date:						
Company Name: Working Interest (%): Tax ID:  Signed by: Date:	ON OPERATING PARTNER A	APPROVAL:				
Signed by: Date:						
Signed by: Date:	Company Name:			Working Interest (%):	Т	ax ID:
	<u>.</u>					
Title: Approval: Yes No (mark one)	Signed by:		<u>-</u>	Date:		<del></del>
Approva: ies No (mark one)	Trus -			A	7 v~	□ No (mastrons)
	1 itie:			Approvai:	res	100 (mark one)

Permian Resources Operating, LLC
300 N. Marienfeld St., Ste. 1000 Midland, TX 79701
Phone (432) 695-4222 • Fax (432) 695-4063
IMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

		OF COSTS AND ACTIVE	ORIZATION FOR EXPEND		
DATE:	2.17.2023			AFE NO.: _	1
WELL NAME:	Bane 4-9 Federal Com 13	32H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	21,110' / 10,825'
COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	10,000′
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG			COMPLETION DAYS:	18.6
GEOLOGIC PARGET.	Drill a horizontal TBSG	wall and complete with	A4 stages AFF include	_	lowback and Initial AL
		wen and complete with	1 77 Stages. At L Include:	diming, completions, i	IOW DUCK WIGH IN THE INTE
REMARKS:	install cost				
	· ·	- DRILLING	COMPLETION	PRODUCTION	TOTAL
		DRILLING COSTS	COMPLETION COSTS	COSTS	COSTS
INTANGIBLE			C0313	37,500	\$ 94,569
1 Land/Legal/Regulatory		57,069 278,338	17,456	2,500	298,294
2 Location, Surveys & Damag 4 Freight / Transportation	ges	46,017	42,298	25,000	113,315
5 Rental - Surface Equipment	į	120,122	208,133	105,000	433,255
6 Rental - Downhole Equipm		198,477	57,783	<del></del>	256,260
7 Rental - Living Quarters		46,457	52,637	•	99,094
10 Directional Drilling, Surve	eys	415,018		-	415,018
11 Drilling		728,329		•	728,329
12 Drill Bits		96,788	-		96,788
13 Fuel & Power		182,546	700,542	<del></del>	883,088 235,069
14 Cementing & Float Equip	TT 1	235,069	<del></del>	15,000	15,000
15 Completion Unit, Swab, C		<del></del>	379,842	15,000	379,842
16 Perforating, Wireline, Slice 17 High Pressure Pump Truck		<del></del>	119,106	<del></del>	119,106
18 Completion Unit, Swab, C		<del></del>	141,530	<del></del>	141,530
20 Mud Circulation System		101,651			101,651
21 Mud Logging		16,936	-	-	16,936
22 Logging/Formation Evalt	ation	7,024	8,057	-	15,081
23 Mud & Chemicals		349,599	423,367	10,000	782,966
24 Water		41,989	639,251	300,000	981,240
25 Stimulation			786,506	•	786,506
26 Stimulation Flowback & I			117,494	150,000	267,494
28 Mud/Wastewater Dispos		186,574	59,083	•	245,657
30 Rig Supervision / Enginee		117,098	128,908	21,667	267,673
32 Drig & Completion Overh	ead	10,071		101 (/2	10,071
35 Labor		148,172	67,140 1,212,780	101,667	316,978 1,212,780
54 Proppant		14 174	1,212,780	<del></del>	
95 Insurance		14,164	23,595	3,833	14,164 27,428
97 Contingency 99 Plugging & Abandonmen	•	<del></del>	23,373		27,426
77 Frugging & Abandonmen			F 405 505	772,167	9,355,180
	TOTAL INTANGIBLES	3,397,506	5,185,507	//2,10/	7,335,180
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		118,101	•	•	\$ 118,101
61 Intermediate Casing		332,642	-	•	332,642
62 Drilling Liner				-	
63 Production Casing		663,806	-		663,806
64 Production Liner		<u> </u>	•		
65 Tubing			-	140,000	140,000
66 Wellhead		62,628	-	40,000	102,628
67 Packers, Liner Hangers		14,234		20,000	34,234
68 Tanks		<u> </u>		45,833	45,833
69 Production Vessels 70 Flow Lines		<del></del>	<del></del>	126,667	126,667
71 Rod string		<del></del>	<del></del>	- 00,007	- 00,007
72 Artificial Lift Equipment				90,000	90,000
73 Compressor			<del></del>	5,833	5,833
74 Installation Costs		<del></del>	<del></del>		
75 Surface Pumps		<del></del>	-	61,667	61,667
76 Downhole Pumps			-		<del></del>
77 Measurement & Meter Ins	stallation		-	116,667	116,667
78 Gas Conditioning / Dehyo	Iration	-	-	•	
79 Interconnecting Facility P	iping	•	-	20,000	20,000
80 Gathering / Bulk Lines			<u> </u>		
81 Valves, Dumps, Controlle				108,333	108,333
82 Tank / Facility Containme	nt			43,333	43,333
83 Flare Stack		<u> </u>		16,667	16,667
84 Electrical/Grounding	•			50,000	50,000
85 Communications / SCAD. 86 Instrumentation / Safety	*	<u>-</u>	<del></del>	36,667	36,667
oo mountentation/ Safety	TOTAL TANCING CO.	1,191,410	- 0	989,167	2,180,577
	TOTAL TANGIBLES:				
	TOTAL COSTS:	> 4,588,916	5,185,507	1,761,334	11,535,757
REPARED BY Permian Res	ources Operating LLC				
D. I CIBUAN NCS	operanny bbci				
Drilling Engineer	: PS				
Completions Engineer					
Production Engineer					
	. 50				
amalan Perre Const	- 11C ADDROVA				
ermian Resources Operating	g, LLC APPROVAL:				
0- 000	`	0-7	CEO	VP O	rations
Co-CEC	) <del></del>	رەر		VP - Ope	CRM
11m r 14 r		100 0 11	• • •		CKM
VP - Land & Lega		VP - Geoscier			
	BG		so		
				<del></del>	
ON OPERATING PARTNE	R APPROVAL:				
Company Name	<b>:</b>		Working Interest (%):	•	Гах ID:
			_		
Signed by	·		Date:		
		<del></del>			
Title			Approval:		No (mark one)
costs on this AFE are estimates only and may not be co	mitroed as cridings on any specific item or the total	l cost of the project. Tubing installation app	roved under the AFE may be delayed up to a ye	our after the well has been completed. In execut	ing this AFE, the Participant agrees to pay its
	I curative reculatory brokerace and applicants a	A st a data by Advision and a		nore recoring this well. Participates shall be on	

	ESTIMATE	OF COSTS AND AUTHO	ORIZATION FOR EXPENI	DITURE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 1	33H		FIELD:	Teas; Bone Spring
	Section 4, T20S-R34E			MD/TVD:	21,110' / 10,825'
LOCATION:				· —	
COUNTY/STATE:	Lea County, New Mexic	20		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG			COMPLETION DAYS:	18.6
		well and complete with	h 44 stages AFF include	s drilling, completions, fl	owback and Initial AL
P P		wen and complete wid	ii 11 Suges. The E menduc	s urmang, compicuous, ii	
REMARKS:	install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory		57,069	•	37,500	\$ 94,569
2 Location, Surveys & Dam.	ages	278,338	17,456	2,500	298,294
4 Freight/Transportation	•	46,017	42,298	25,000	113,315
5 Rental - Surface Equipme	nt	120,122	208,133	105,000	433,255
6 Rental - Downhole Equip	ment	198,477	57,783		256,260
7 Rental - Living Quarters		46,457	52,637	-	99,094
10 Directional Drilling, Sur	vevs	415,018		-	415,018
11 Drilling	,-	728,329			728,329
12 Drill Bits		96,788			96,788
13 Fuel & Power		182,546	700,542	<del></del>	883,088
14 Cementing & Float Equi	_	235,069		<del></del>	235,069
15 Completion Unit, Swab,				15,000	15,000
		<del></del>	379,842	15,000	379,842
16 Perforating, Wireline, SI					119,106
17 High Pressure Pump Tru			119,106		
18 Completion Unit, Swab,			141,530		141,530
20 Mud Circulation System		101,651		<del></del>	101,651
21 Mud Logging		16,936	0.000	•	16,936
22 Logging/Formation Eva	luation	7,024	8,057	•	15,081
23 Mud & Chemicals		349,599	423,367	10,000	782,966
24 Water		41,989	639,251	300,000	981,240
25 Stimulation		•	786,506		786,506
26 Stimulation Flowback &	Disp	-	117,494	150,000	267,494
28 Mud/Wastewater Dispo		186,574	59,083	•	245,657
30 Rig Supervision / Engine		117,098	128,908	21,667	267,673
32 Drlg & Completion Over		10,071	-	-	10,071
35 Labor		148,172	67,140	101,667	316,978
		140,172	1,212,780		1,212,780
54 Proppant		14 144	1,212,780		14,164
95 Insurance		14,164	22.505	2 022	
97 Contingency		<del>`</del> _	23,595	3,833	27,428
99 Plugging & Abandonme	nt	<u> </u>			
	TOTAL INTANGIBLES:	> 3,397,506	5,185,507	772,167	9,355,180
			001 (Pt F7101)	nn on Homes	TOW. 1
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		S 118,101	-		\$ 118,101
61 Intermediate Casing		332,642			332,642
62 Drilling Liner			-	-	
63 Production Casing		663,806	-	-	663,806
64 Production Liner		<del></del>	-		-
65 Tubing		<del></del>	<del></del>	140,000	140,000
66 Wellhead		62,628		40,000	102,628
		14,234		20,000	34,234
67 Packers, Liner Hangers		14,234			
68 Tanks		<del></del>		45,833	45,833
69 Production Vessels		<u>-</u>		126,667	126,667
70 Flow Lines				66,667	66,667
71 Rod string		-			
72 Artificial Lift Equipmen	l	<u>-</u>		90,000	90,000
73 Compressor		•	<u> </u>	5,833	5,833
74 Installation Costs		-	•		-
75 Surface Pumps		<del></del>	-	61,667	61,667
76 Downhole Pumps			-		
77 Measurement & Meter I	nstallation	<del></del>		116,667	116,667
78 Gas Conditioning / Deh		<del></del>			-
79 Interconnecting Facility		<del></del>		20,000	20,000
80 Gathering / Bulk Lines					
81 Valves, Dumps, Control	ers		<del></del>	108,333	108,333
82 Tank / Facility Contains			<del></del>	43,333	43,333
	n. art	<del></del>		16,667	
83 Flare Stack		<del>`</del> _	-		16,667
84 Electrical/Grounding				50,000	50,000
85 Communications / SCAI				36,667	36,667
86 Instrumentation / Safety				833	833
	TOTAL TANGIBLES			989,167	2,180,577
	TOTAL COSTS	> 4,588,916	5,185,507	1,761,334	11,535,757
REPARED BY Permian Re	sources Operating, LLC:				
	<del></del>				
Drilling Engine	er: PS				
Completions Engine					
Production Engine	. U.				
ermian Resources Operati	ng, LLC APPROVAL:				
Co-C1	··o	Cn-C	CEO	VP - Oper	ations
		3.		Pro-	CRM
			•		CKM
VP - Land & Leg	BG BG	VP - Geoscie	nces		
	BG		SO		
ON OPERATING PARTN	ER APPROVAL:				
					- ID
	IER APPROVAL:		Working Interest (%):	т	ax ID:
Company Nan	ne:				
Company Nan	ne:				
Signed t	ne: 		Date:		
Company Nan	ne: 		Date:		

Permian Resources Operating, LLC
300 N. Marienfeld St., Ste. 1000 Midland, TX 79701
Phone (432) 695-4222 • Fax (432) 695-4063
IMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE   1972		ESTIMATE	OF COSTS AND AUTHO	MIZATION FOR EXPEN		
DOCATION    COUNTY/STATE   As County, New Mexico   DRILLING DAYS   15.60     Formal will   Formal will   Property   Pr	DATE:	2.17.2023			AFE NO.:	11
CRIATIPA LENOTE   1,000   1	WELL NAME:	Bane 4-9 Federal Com 13	34H		FIELD:	Teas; Bone Spring
Pomein Ni	LOCATION:	Section 4, T20S-R34E			MD/TVD:	21,110' / 10,825'
Probability   Property   Prope	COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	10,000'
SECONDETION DAYS   18.6					DRILLING DAYS:	19.6
Detail horizontal TISG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL Install Costs		TRSG			_	18.6
REMANES   Poblit   Color	GLOLOGIC TANGETT		well and complete with	AA stages AFF include	_	
NYTANOBIAL COSTB	DEMARKS.		wen and complete with	1 TI Stages. AI L menude	s arming, completions, i	IOW DUCK AND TRADAL TO
NTANCIBLE COSTS	REMARKS:	IIstan Cost				
NTANCIBLE COSTS			DRILLING	COMPLETION	PRODUCTION	TOTAL
Tand/Legal/Regalibery	INTANCIBLE	ОСТС				
2						
Sepelly   Committee   Commit				17.456		
Sizeral Sardars Equipment		25				
Signature   Sig					105,000	
150 Discretated Delling, Serveys		ent	198,477	57,783	<del></del>	256,260
11 Delila   783.35			46,457	52,637		
12 Doll sile	10 Directional Drilling, Surve	ys		-		
15 Pari & Prover   1825/86   700.552	••					
15 Cennering & Float Equip						
15.Completion Unit, Swith, CTU						
18 Performing, Wheeline, Silechilars		rti				
19 High Pressure Pure Prack						,
18 Completion Unit, Sough, CTU						
20 Maid Colonalison Systems   10,155						
22 Logging/Fornation Evaluation			101,651	•	-	101,651
23 Maid & Chemicals	21 Mud Logging		16,936		-	16,936
24 Water		ation				
25 Stinulation						
28 Stimulation Revolvack & Disp			41,989		300,000	
28 Mady Mastewater Disposal   184,574   59,085		lam.			150,000	
30 Rig Supervision / Engineering			104 574		150,000	
13. Drig Completion Orerhead   10,071					21.667	
## 1848/72				120,700	21,007	
\$1 Propagat	.,			67.140	101.667	
95 Insurance						
99 Pluggling & Abandonment TOTAL INTANGIBLES> 3.387,506  \$ 1385,507  TANGIBLE COSTS  COSTS			14,164		<del></del>	
TOTAL INTANGIBLES   3.387.906	97 Contingency		<del></del>	23,595	3,833	27,428
TANGIBLE COSTS	99 Plugging & Abandonment			•	•	
TANGIBLE COSTS		TOTAL INTANGIBLES >	3,397,506	5,185,507	772,167	9,355,180
TANGIBLE COSTS			DRILLING	COMPLETION	PRODUCTION	TOTAL
18,10	TANGIBLE	OCTC				
Statementalise Casing   332,642		7515				
S. Drilling Liner		•				
60 Production Casing   60 Stable			- 552,012			
64 Production Liner			663,806			663,806
65 Wellhead   62,628			<del>.</del>		-	
March   Marc	65 Tubing		<del></del>	-	140,000	140,000
68 Tanks	66 Wellhead		62,628	-	40,000	102,628
99 Production Vessels	67 Packers, Liner Hangers		14,234	-		
70 Flow Lines				•		
17. Rod string				·		
72 Artificial Lift Equipment			<del></del>	<u> </u>		
73 Compressor	••			<del></del>		
74 Installation Costs			<u> </u>	<del></del>		
75 Surface Pumps			<del></del>		3,000	
To Downhole Pumps					61,667	
77 Measurement & Meter Installation			<del></del>	<del></del>		
Total Contention   Total Costs   Total Cos	-	allation		<del></del>	116,667	116,667
79 Interconnecting Facility Piping			-	-	-	
181 Valves, Damps, Controllers	79 Interconnecting Facility Pi	ping		•	20,000	20,000
Stank   Facility Containment	80 Gathering/Bulk Lines			·	-	-
183 Flare Stack				•		
## Electrical/Grounding ## 50,000		nt				
Stommunications/SCADA			<u> </u>			
833   833   833   833   833   833   833   833   833   833   835						
TOTAL TANGIBLES			<del></del>	<del></del>		
TOTAL COSTS > 4,588,916	amenimuon, outery	TOTAL TANCIRI FG	1.191.410	<u> </u>		
EPARED BY Permian Resources Operating, LLC:  Drilling Engineer: PS Completions Engineer: ML Production Engineer: DC  Trainan Resources Operating, LLC APPROVAL:  Co-CEO						
Drilling Engineer: PS Completions Engineer: ML Production Engineer: DC  Trainian Resources Operating, LLC APPROVAL:  Co-CEO	****	TOTAL COSTS	1,000,710	3,103,30/	1,/01,334	11,535,/5/
Drilling Engineer: PS Completions Engineer: ML Production Engineer: DC  Trainian Resources Operating, LLC APPROVAL:  Co-CEO						
Completions Engineer: ML Production Engineer: DC   Trainian Resources Operating, LLC APPROVAL:  Co-CEO VP - Operations WH VP - Land & Legal BG VP - Geosciences BG VP - Geosciences  ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approval: Yes No (mark one)	REPARED BY Permian Reso	urces Operating, LLC:				
Completions Engineer: ML Production Engineer: DC   Trainian Resources Operating, LLC APPROVAL:  Co-CEO VP - Operations WH VP - Land & Legal BG VP - Geosciences BG VP - Geosciences  ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID: Signed by: Date: Title: Approval: Yes No (mark one)						
Production Engineer: DC    Co-CEO						
Co-CEO CO-CEO VP - Operations  WH VP - Land & Legal BG VP - Geosciences  ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID:  Signed by: Date:  Title: Approval: Yes No (mark one)	Completions Engineer:	ML				
Co-CEO	Production Engineer:	DC				
Co-CEO			<del></del>			
Co-CEO	rmian Resources Operating	, LLC APPROVAL:				
VP - Land & Legal BG VP - Geosciences SO  ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID:  Signed by: Date:  Title: Approval: Yes No (mark one)						
VP - Land & Legal BG VP - Geosciences SO  ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID:  Signed by: Date:  Title: Approval: Yes No (mark one)	Co-CEO		Co-C		VP - Oper	
ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID:  Signed by: Date:  Title: Approval: Yes No (mark one)		WH		• • • • • • • • • • • • • • • • • • • •		CRM
ON OPERATING PARTNER APPROVAL:  Company Name: Working Interest (%): Tax ID:  Signed by: Date:  Title: Approval: Yes No (mark one)	VP - Land & Legal		VP - Geoscier			
Company Name:         Working Interest (%):         Tax ID:           Signed by:         Date:           Title:         Approval:         Yes         No (mark one)	· ·	BG		50		
Company Name:         Working Interest (%):         Tax ID:           Signed by:         Date:           Title:         Approval:         Yes         No (mark one)						
Company Name:         Working Interest (%):         Tax ID:           Signed by:         Date:           Title:         Approval:         Yes         No (mark one)						
Company Name:         Working Interest (%):         Tax ID:           Signed by:         Date:           Title:         Approval:         Yes         No (mark one)	<u> </u>	-			<del></del>	
Signed by:         Date:           Title:         Approval:         Yes         No (mark one)	ON OPERATING PARTNE	R APPROVAL:				
Signed by:         Date:           Title:         Approval:         Yes         No (mark one)	· · ·			Markin Value (CC)		ID:
Title: Approval: Yes No (mark one)	Company Name:			vvorking Interest (%):	1	Iax ID;
Title: Approval: Yes No (mark one)	Cianad b			Data		
	Jigneu by:	<del>.</del>		Date.		
	Title:			Approval: [	Yes	No (mark one)
						<del></del> ` ´ ´

	ESTIMATE	OF COSTS AND AUTHO	DRIZATION FOR EXPENI	HIUKE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 1	71H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	20,700' / 10,415'
COUNTY/STATE:	Lea County, New Mexic	20		LATERAL LENGTH:	10,000'
•	Dea County, New Mexic			DRILLING DAYS:	19.6
Permian WI:	TDCC.			_	18.6
GEOLOGIC TARGET:	TBSG			COMPLETION DAYS:	
		well and complete with	1 44 stages. AFE include	s drilling, completions, fl	owback and Initial AL
REMARKS:	install cost				
		DDII I DIC	COMPLETION	PRODUCTION	TOTAL
		DRILLING COSTS	COMPLETION	COSTS	COSTS
INTANGIBLE C			C0515		\$ 93,239
1 Land/Legal/Regulatory		55,739 271,852	17,050	37,500 2,500	291,402
2 Location, Surveys & Damag 4 Freight / Transportation	es	44,945	41,312	25,000	111,257
5 Rental - Surface Equipment		117,323	203,283	105,000	425,606
6 Rental - Downhole Equipm		193,853	56,437		250,289
7 Rental - Living Quarters	L	45,374	51,411		96,785
10 Directional Drilling, Surve	ys	405,348		-	405,348
11 Drilling	•	711,359	-		711,359
12 Drill Bits		94,533	<u> </u>	•	94,533
13 Fuel & Power		178,292	684,220	•	862,512
14 Cementing & Float Equip		229,592	-	-	229,592
15 Completion Unit, Swab, C			270.000	15,000	15,000
16 Perforating, Wireline, Slice			370,992		370,992
17 High Pressure Pump Truck		<del></del>	116,330 138,232	<del></del>	116,330 138,232
18 Completion Unit, Swab, C	10	99,283	136,232	<del></del>	99,283
20 Mud Circulation System		16,542	<del></del>	<del></del>	16,542
21 Mud Logging 22 Logging/Formation Evalu	ation	6,860	7,869		14,729
23 Mud & Chemicals		341,453	413,503	10,000	764,956
24 Water		41,011	624,356	300,000	965,367
25 Stimulation		•	768,180	-	768,180
26 Stimulation Flowback & D	disp	-	114,757	150,000	264,757
28 Mud/Wastewater Disposa	•	182,227	57,706	-	239,933
30 Rig Supervision / Engineer	ring	114,369	125,904	21,667	261,941
32 Drig & Completion Overh	ead	9,836	•	-	9,836
35 Labor		144,719	65,575	101,667	311,961
54 Proppant			1,184,522		1,184,522
95 Insurance		13,834	22.045	2 822	13,834
97 Contingency		<del></del>	23,045	3,833	20,8/8
99 Plugging & Abandonment					
	TOTAL INTANGIBLES:	> 3,318,344	5,064,685	772,167	9,155,196
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE CO	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		\$ 115,349		-	s 115,349
61 Intermediate Casing		324,891	•	•	324,891
62 Drilling Liner			·	•	•
63 Production Casing		648,340	•	-	648,340
64 Production Liner			•		
65 Tubing			•	140,000	140,000
66 Wellhead		61,169		40,000	101,169
67 Packers, Liner Hangers		13,902	<u>-</u>	20,000	33,902
68 Tanks 69 Production Vessels		·		45,833 126,667	45,833 126,667
70 Flow Lines		<del></del>	<del></del>	66,667	66,667
71 Rod string		<del></del>	<del></del>		- 00,007
72 Artificial Lift Equipment				90,000	90,000
73 Compressor			<del></del>	5,833	5,833
74 Installation Costs		•			
75 Surface Pumps		-	<del></del>	61,667	61,667
76 Downhole Pumps			-	<del></del>	<del></del>
77 Measurement & Meter Ins	tallation	•	·	116,667	116,667
78 Gas Conditioning / Dehyd					
79 Interconnecting Facility Pi	ping	-	-	20,000	20,000
80 Gathering / Bulk Lines			-	-	
81 Valves, Dumps, Controller			<u> </u>	108,333	108,333
82 Tank / Facility Containments 83 Flare Stack	ш			43,333	43,333
84 Electrical/Grounding		<del></del>	<del></del>	50,000	50,000
85 Communications / SCADA	•	<del></del>	<del></del>	36,667	36,667
86 Instrumentation / Safety	•		<del></del>	833	833
	TOTAL TANGIBLES	> 1,163,650		989,167	2,152,817
	TOTAL COSTS		5,064,685	1,761,334	11,308,013
	TOTAL COSTS	1,101,1791	3,00,1003	1,701,3371	11,000,013
REPARED BY Permian Reso	urces Operating, LLC:				
Drilling Engineer					
Completions Engineer					
Production Engineer	: DC				
rmian Resources Operating	, LLC APPROVAL:				
O. CTO		0.0	200	1/D 0	
Co-CEC		Co-C	EO	VP - Oper	CRM
			• • • • • • • • • • • • • • • • • • • •		Скм
VP - Land & Lega		VP - Geoscier			
	BG		50		
ON OPERATING PARTNE	R APPROVAL:				
Company Mana			Working Interest (%):	т	ax ID:
Company Name			TOTALIS INTEREST (70):	,	
Signed by			Date:		
Title	:		Approval: _	Yes	No (mark one)

ESTIMATE OF COSTS AN	D AUTHORIZATION FOR	R EXPENDITURI

		OF COSTS AND AUTHO			
DATE:	2.17.2023			AFE NO.:	1 T P C
WELL NAME:	Bane 4-9 Federal Com 1	72H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	20,700' / 10,415'
COUNTY/STATE:	Lea County, New Mexic	co		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG			COMPLETION DAYS:	18.6
	Drill a horizontal TBSG	well and complete with	n 44 stages. AFE includes	drilling, completions, fl	owback and Initial AL
REMARKS:	install cost	•	U		
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory	-	\$ 55,739		37,500	5 93,239
2 Location, Surveys & Damas	ges	271,852	17,050	2,500	291,402
4 Freight / Transportation		44,945	41,312 203,283	25,000 105,000	111,257 425,606
5 Rental - Surface Equipmen 6 Rental - Downhole Equipm		117,323	56,437	105,000	250,289
7 Rental - Living Quarters	CIII	45,374	51,411	<del></del>	96,785
10 Directional Drilling, Surv	eys	405,348	<del></del>	<del></del>	405,348
11 Drilling	•	711,359		-	711,359
12 Drill Bits		94,533			94,533
13 Fuel & Power		178,292	684,220		862,512
14 Cementing & Float Equip	TT. 1	229,592	<u> </u>	15,000	229,592 15,000
15 Completion Unit, Swab, C 16 Perforating, Wireline, Slice		<del></del>	370,992	15,000	370,992
17 High Pressure Pump Truc		<del></del>	116,330	<del></del>	116,330
18 Completion Unit, Swab, C		<del></del>	138,232		138,232
20 Mud Circulation System		99,283	•	-	99,283
21 Mud Logging		16,542	-		16,542
22 Logging / Formation Evalu	ation	6,860	7,869		14,729
23 Mud & Chemicals		341,453	413,503	10,000	764,956
24 Water 25 Stimulation		41,011	624,356 768,180	300,000	965,367 768,180
25 Stimulation 26 Stimulation Flowback & I	Disn	<del></del>	114,757	150,000	264,757
28 Mud/Wastewater Dispos	•	182,227	57,706	130,000	239,933
30 Rig Supervision/Enginee		114,369	125,904	21,667	261,941
32 Drlg & Completion Overl		9,836	-		9,836
35 Labor		144,719	65,575	101,667	311,961
54 Proppant			1,184,522		1,184,522
95 Insurance		13,834	-	-	13,834
97 Contingency	_		23,045	3,833	26,878
99 Plugging & Abandonmen		<del></del>		-	
	TOTAL INTANGIBLES	> 3,318,344	5,064,685	772,167	9,155,196
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		\$ 115,349			\$ 115,349
61 Intermediate Casing		324,891	·		324,891
62 Drilling Liner		*****	<u> </u>	-	
63 Production Casing		648,340	<del></del>		648,340
64 Production Liner 65 Tubing		<u> </u>	<del></del>	140,000	140,000
66 Wellhead		61,169	<del></del>	40,000	101,169
67 Packers, Liner Hangers		13,902	<del></del>	20,000	33,902
68 Tanks			-	45,833	45,833
69 Production Vessels			-	126,667	126,667
70 Flow Lines			-	66,667	66,667
71 Rod string		-		-	-
72 Artificial Lift Equipment			-	90,000	90,000
73 Compressor		-	<del></del>	5,833	5,833
74 Installation Costs 75 Surface Pumps		<del></del>	<del></del>	61,667	61,667
76 Downhole Pumps		<del></del>	<del></del>	01,007	01,007
77 Measurement & Meter Ins	tallation	<del></del>	<del></del>	116,667	116,667
78 Gas Conditioning / Dehyo		<del></del>	-	-	-
79 Interconnecting Facility P			•	20,000	20,000
80 Gathering/Bulk Lines			_	•	•
81 Valves, Dumps, Controlle				108,333	108,333
82 Tank / Facility Containme	Rt		<del></del>	43,333	43,333
83 Flare Stack 84 Electrical/Grounding			<del></del>	16,667 50,000	16,667 50,000
85 Communications / SCAD	4	<del></del>	<del></del>	36,667	36,667
86 Instrumentation / Safety		-	-	833	833
	TOTAL TANGIBLES	> 1,163,650	0	989,167	2,152,817
	TOTAL COSTS:		5,064,685	1,761,334	11,308,013
					-,,-
FRAREDOVO 4 =					
EPARED BY Permian Res	ources Operating, LLC:			_	
Drilling Engineer	: PS				
Completions Engineer					
Production Engineer					
- roudenon Engineer	. 50				
mian Resources O	TIC ADDDOMAL.				
mian Resources Operating	LLC APPKOVAL:				
Co-CEC	)	Co-C	ŒO	VP - Opera	ations
Co-CLC	,	COC	JW	Open	CRM
VP - Land & Lega		VP - Geoscier	•		<b></b> 1
VP - Land & Lega	BG	,. Scorie	50		
	· <del>-</del>		- <del>-</del>		
			-		
N OPERATING PARTNE	R APPROVAI.				
N OPERATING PARTNE	R APPROVAL:				•
N OPERATING PARTNE			Working Interest (%):	T	ax ID:
Company Name	:		Working Interest (%):	T	ax ID:
	:		Working Interest (%):	Ti	ax ID:
• •	:				ax ID: No (mark one)

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

			<u> </u>	AFE NO.:	1
DATE:	2.17.2023	7711		FIELD:	Teas; Bone Spring
WELL NAME:	Bane 4-9 Federal Com 1	/3F1		_	20,700' / 10,415'
LOCATION:	Section 4, T20S-R34E			MD/TVD:_	
COUNTY/STATE:	Lea County, New Mexic	:0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG			COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal TBSG install cost	well and complete v	vith 44 stages. AFE include	s drilling, completions, fl	owback and Initial AL
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory		55,739	<u> </u>	37,500	\$ 93,239
2 Location, Surveys & Dama	ges	271,852	17,050	2,500	291,402
4 Freight / Transportation		44,945	41,312 203,283	25,000 105,000	111,257 425,606
5 Rental - Surface Equipmen 6 Rental - Downhole Equipmen		117,323 193,853	56,437	105,000	250,289
7 Rental - Living Quarters	sen	45,374	51,411	<del></del>	96,785
10 Directional Drilling, Surv	eys	405,348	<del></del>	<del></del>	405,348
11 Drilling	•	711,359	-	-	711,359
12 Drill Bits		94,533			94,533
13 Fuel & Power		178,292	684,220	<del></del>	862,512 229,592
14 Cementing & Float Equip		229,592	-	15,000	15,000
15 Completion Unit, Swab, C 16 Perforating, Wireline, Slice		<del></del>	370,992	- 13,000	370,992
17 High Pressure Pump Truc		<del></del>	116,330		116,330
18 Completion Unit, Swab, (		<del></del>	138,232		138,232
20 Mud Circulation System		99,283	-		99,283
21 Mud Logging		16,542			16,542
22 Logging/Formation Eval	uation	6,860	7,869	10,000	14,729
23 Mud & Chemicals		341,453	413,503 624,356	10,000 300,000	764,956 965,367
24 Water 25 Stimulation		41,011	768.180	300,000	768,180
26 Stimulation Flowback &	Disp		114,757	150,000	264,757
28 Mud/Wastewater Dispos		182,227	57,706	-	239,933
30 Rig Supervision / Engine	ering	114,369	125,904	21,667	261,941
32 Drlg & Completion Over	head	9,836	-		9,836
35 Labor		144,719	65,575	101,667	311,961
54 Proppant		12 024	1,184,522	<del></del>	1,184,522
95 Insurance 97 Contingency		13,834	23,045	3,833	26,878
99 Plugging & Abandonmen	nf	<del></del>		- 3,000	- 20,070
John Maria	TOTAL INTANGIBLES:		5,064,685	772,167	9,155,196
	TOTAL INTANGIBLES				<del></del>
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE (	COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	;	\$ 115,349 324,891	<del></del>		\$ 115,349 324,891
61 Intermediate Casing 62 Drilling Liner		324,091	<del></del>	<del></del>	324,071
63 Production Casing		648,340	<del></del>		648,340
64 Production Liner		-	•	-	-
65 Tubing			•	140,000	140,000
66 Wellhead		61,169	•	40,000	101,169
67 Packers, Liner Hangers		13,902	·	20,000	33,902
68 Tanks		<u>-</u>		45,833 126,667	45,833 126,667
69 Production Vessels 70 Flow Lines		<u>-</u>	<del></del>	66,667	66,667
71 Rod string		<del></del>			
72 Artificial Lift Equipment			-	90,000	90,000
73 Compressor			•	5,833	5,833
74 Installation Costs					
75 Surface Pumps				61,667	61,667
76 Downhole Pumps			<u> </u>	11///3	11///
77 Measurement & Meter In		<del></del>	<del></del>	116,667	116,667
78 Gas Conditioning / Dehy 79 Interconnecting Facility F		<del></del>	<del></del>	20,000	20,000
80 Gathering / Bulk Lines				- 20,000	
81 Valves, Dumps, Controlle	ers		-	108,333	108,333
82 Tank / Facility Containme		<u>-</u>	-	43,333	43,333
83 Flare Stack			•	16,667	16,667
84 Electrical/Grounding				50,000	50,000
85 Communications / SCAD 86 Instrumentation / Safety	A	<del></del>	<del></del>	36,667 833	36,667 833
oo msuumentauon/ Sarety	TOTAL TANGIBLES	> 1,163,650	- 0	989,167	2,152,817
	TOTAL COSTS:		5,064,685	1,761,334	11,308,013
	TOTAL COSTS	4,401,551	3,002,003	1,01,034	11,500,015
REPARED BY Permian Res	ources Operating, LLC:				
Deilling Engine	r bc				
Drilling Enginee					
Completions Enginee					
Production Enginee	r: DC				
ermian Resources Operatin	G. LIC APPROVAL				
resources Operatin	G IN I NOTAL				
Co-CE		c	Co-CEO	VP - Oper	rations
	WH		JW	•	CRM
VP - Land & Lega	al	VP - Geos	ciences		
ŭ	BG		50		
ION OPER ATING TARE	ED A DDD CV 47		****		
ON OPERATING PARTN					
Company Name	e:		Working Interest (%):	т	ax ID:
Ø1 11			<b>~</b>	_	_
Signed by	y:		Date:		
Title	e:		Approval:	Yes	☐ No (mark one)
costs on this AFE are estimates only and may not be or					<u> </u>
r costs on this ATE are estimates only and may not be co	onstrord as cellings on any specific item or the total	s cost of the project. Tubing installation	n approved under the AFE may be delayed up to a y	ear after the well has been completed. In execution	ng this AFE, the Participant agrees to pay its

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 17	74H		FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E			MD/TVD:	20,700' / 10,415'
COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	10,000'
•	Dea county) I terr intende			DRILLING DAYS:	19.6
Permian WI:	TDCC			COMPLETION DAYS:	18.6
GEOLOGIC TARGET:	TBSG	<del></del>		_	
REMARKS:	Drill a horizontal TBSG vinstall cost	well and complete wi	ith 44 stages. AFE includes	drilling, completions, fi	owback and Initial AL
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE O	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory	s		•	37,500	\$ 93,239
2 Location, Surveys & Damag	es	271,852	17,050	2,500	291,402
4 Freight/Transportation		44,945	41,312	25,000	111,257
5 Rental - Surface Equipment		117,323	203,283 56,437	105,000	425,606 250,289
6 Rental - Downhole Equipm	ent	45,374	51,411	<del></del>	96,785
7 Rental - Living Quarters 10 Directional Drilling, Surve	nre	405,348	- 51,411		405,348
11 Drilling	.ys	711,359	<del></del>	<del></del>	711,359
12 Drill Bits		94,533	-		94,533
13 Fuel & Power		178,292	684,220	-	862,512
14 Cementing & Float Equip		229,592		-	229,592
15 Completion Unit, Swab, C				15,000	15,000
16 Perforating, Wireline, Slick			370,992	-	370,992
17 High Pressure Pump Truck		<u> </u>	116,330	•	116,330
18 Completion Unit, Swab, C 20 Mud Circulation System	10	99,283	130,232	<del></del>	99,283
21 Mud Logging		16,542	<del></del>	<del></del>	16,542
22 Logging / Formation Evalu	ation	6,860	7,869	<del></del>	14,729
23 Mud & Chemicals		341,453	413,503	10,000	764,956
24 Water		41,011	624,356	300,000	965,367
25 Stimulation			768,180	-	768,180
26 Stimulation Flowback & D	•		114,757	150,000	264,757
28 Mud/Wastewater Disposa		182,227	57,706		239,933
30 Rig Supervision / Engineer		114,369	125,904	21,667	261,941
32 Drlg & Completion Overh	ead	9,836	65,575	101//7	9,836
35 Labor		144,719	1,184,522	101,667	311,961 1,184,522
54 Proppant 95 Insurance		13,834	1,104,322	<del></del>	13,834
97 Contingency		15,054	23,045	3,833	26,878
99 Plugging & Abandonment			•		
	TOTAL INTANGIBLES >	3,318,344	5,064,685	772,167	9,155,196
	101112111111111111111111111111111111111				
		DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE CO					S 115,349
60 Surface Casing			<del></del>	<del></del>	324,891
61 Intermediate Casing 62 Drilling Liner		324,891	<del></del>	<del></del>	324,071
63 Production Casing		648,340	<del></del>	<del></del>	648,340
64 Production Liner			<del></del>		
65 Tubing		<del></del>		140,000	140,000
66 Wellhead		61,169	-	40,000	101,169
67 Packers, Liner Hangers		13,902	-	20,000	33,902
68 Tanks		-		45,833	45,833
69 Production Vessels			•	126,667	126,667
70 Flow Lines			•	66,667	66,667
71 Rod string			<del>-</del> _	-	- 00.000
72 Artificial Lift Equipment		<del></del>	<del></del>	90,000 5,833	90,000
73 Compressor 74 Installation Costs		<del></del>	<del></del>	3,033	•
75 Surface Pumps		<del></del>	<del></del>	61,667	61,667
76 Downhole Pumps			<del></del>		
77 Measurement & Meter Ins	tallation	<del></del>		116,667	116,667
78 Gas Conditioning / Dehyd	ration	-	<del></del>	-	<del></del>
79 Interconnecting Facility Pi				20,000	20,000
80 Gathering / Bulk Lines		-			-
81 Valves, Dumps, Controller		•		108,333	108,333
82 Tank/Facility Containme	nt		•	43,333	43,333
83 Flare Stack				16,667	16,667
84 Electrical/Grounding		<del>-</del> _	<del></del>	50,000	50,000 36,667
85 Communications / SCADA 86 Instrumentation / Safety	•	<del></del>	<del></del>	36,667	833
os monumentation/ sarety	TOTAL TANGIBLES >	1,163,650		989,167	2,152,817
-	TOTAL COSTS >		5,064,685	1,761,334	11,308,013
E	101,12 0010	.,,	Charles	-,,02,001	
REPARED BY Permian Reso	ources Operating, LLC:				
D1112					
Drilling Engineer					
Completions Engineer					
Production Engineer	: DC				
	LICAPPROVA				
ermian Resources Operating	LLC APPROVAL:				
Co-CEC	1	Ca	-CEO	VP - Oper	ations
CUCEC	<u></u>	Co		71 - Oper	CRM
VP - Land & Lega	****	VP - Geosci	• • •		
A 1 - Funn or redu	BG	V I - Geosti	SO		
			**		
ON OPER ATTAIC TARREST	D A DDD CV A V				
ON OPERATING PARTNE	k APPKOVAL:				
Company Name	:		Working Interest (%):	Т	ax ID:
• •					
Signed by	:		Date:		
Title			Approval:	Yes	☐ No (mark one)
11116					<u> </u>
		Local of the manual. Turbine installation of	controved analog the AFE may be delayed up to a ve-	or after the well has been completed. In execution	ng this AFE, the Participant agrees to pay its

	ESTIMATE C	OF COSTS AND AUTHO	RIZATION FOR EXPEND	TIUKE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 20	1H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 4, T20S-R34E			MD/TVD:	21,210' / 10,925'
COUNTY/STATE:	Lea County, New Mexico			LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	19
	Drill a horizontal WCXY	well and complete with	h 44 stages. AFE includ	es drilling, completions,	flowback and Initial
REMARKS:	AL install cost	-	-		
=					
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory	\$		•	37,500	\$ 96,566
2 Location, Surveys & Damage	es	288,079	18,067	2,500 25,000	308,647 116,406
4 Freight / Transportation 5 Rental - Surface Equipment		47,628 124,327	215,417	105,000	444,744
6 Rental - Downhole Equipme		205,424	59,805	- 100,000	265,229
7 Rental - Living Quarters		48,083	54,480	-	102,562
10 Directional Drilling, Surve	ys	429,543	•	-	429,543
11 Drilling		753,820		•	753,820
12 Drill Bits		100,176	725,061	<del></del>	913,996
13 Fuel & Power 14 Cementing & Float Equip		243,296	725,061	<del></del>	243,296
15 Completion Unit, Swab, CT	ru	243,270	<del></del>	15,000	15,000
16 Perforating, Wireline, Slick		<del></del>	393,136		393,136
17 High Pressure Pump Truck		-	123,274	-	123,274
18 Completion Unit, Swab, Cl	ru		146,484	<u> </u>	146,484
20 Mud Circulation System		105,209	•	•	105,209
21 Mud Logging	ation	17,529 7,270	8,339		17,529 15,609
22 Logging / Formation Evalua 23 Mud & Chemicals	auon	361,835	438.185	10,000	810.020
24 Water		43,459	661,625	300,000	1,005,083
25 Stimulation			814,033	-	814,033
26 Stimulation Flowback & D			121,606	150,000	271,606
28 Mud/Wastewater Disposa		193,104	61,151	-	254,254
30 Rig Supervision / Engineer		121,196	133,420	21,667	276,283
32 Drlg & Completion Overhe	ad	10,423	69,489	101,667	10,423 324,514
35 Labor 54 Proppant		153,358	1,255,227	101,007	1,255,227
95 Insurance		14,660	- 1,23,221		14,660
97 Contingency			24,421	3,833	28,254
99 Plugging & Abandonment				-	
	TOTAL INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585
-		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANCIBLE CO	Domo	COSTS	COSTS	COSTS	COSTS
TANGIBLE CO	J515 S				5 122,234
61 Intermediate Casing	•	344,284	<del></del>		344,284
62 Drilling Liner		-		<del></del>	-
63 Production Casing		687,039	•		687,039
64 Production Liner					<u>.</u>
65 Tubing			-	140,000	140,000
66 Wellhead		64,820		40,000	104,820
67 Packers, Liner Hangers 68 Tanks		14,732	<del></del>	20,000 45,833	34,732 45,833
69 Production Vessels		<del></del>	<del></del>	126,667	126,667
70 Flow Lines			<del></del>	66,667	66,667
71 Rod string			-		-
72 Artificial Lift Equipment		•	-	90,000	90,000
73 Compressor				5,833	5,833
74 Installation Costs			<u> </u>		•
75 Surface Pumps		<del></del>	<del></del>	61,667	61,667
76 Downhole Pumps 77 Measurement & Meter Inst	tallation	<del></del>	<del></del>	116.667	116,667
78 Gas Conditioning / Dehyda		<del></del>	<del></del>	- 110,007	- 110,007
79 Interconnecting Facility Pi		-	-	20,000	20,000
80 Gathering / Bulk Lines				-	<del></del>
81 Valves, Dumps, Controller				108,333	108,333
82 Tank / Facility Containmen	at			43,333	43,333
83 Flare Stack		<u> </u>		16,667	16,667 50,000
84 Electrical/Grounding 85 Communications/SCADA		<del></del>	<del></del>	36,667	36,667
86 Instrumentation / Safety		<del></del>	-	833	833
, ,	TOTAL TANGIBLES >	1,233,109	0	989,167	2,222,276
	TOTAL COSTS >		5,367,000	1,761,334	11,877,862
EPARED BY Permian Reso	urces Operating, LLC:				
Drilling Engineer:	: PS				
Completions Engineer:					
Production Engineer:					
Froduction Engineer:	υ. 				
mian Denames - October	. IIC ADDDOMA				
rmian Resources Operating	, LLC APPROVAL:		_		
Co-CEO	)	Co-C	EO	VP - Oper	ations
20 220	WH			· · · Ope.	CRM
VP - Land & Legal	1	VP - Geoscien	ces		
	BG	Geoscien			
ON OPERATING PARTNE	R APPROVAL:				
Company Name:			Working Interest (%):	T	ax ID:
Cianad b			Date:		
Signed by:			Date:		<del></del>
Title:	<b>:</b>		Approval: [	Yes	☐ No (mark one)
osts on this AFE are estimates only and may not be com		control the product. To him to a find the control	_		

### ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	<del></del>		AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 2	02H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 4, T20S-R34E			MD/TVD:	21,210' / 10,925'
COUNTY/STATE:	Lea County, New Mexic	:0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	19
REMARKS:	Drill a horizontal WCXY AL install cost	well and complete w	rith 44 stages. AFE include	es drilling, completions,	flowback and Initial
				<u> </u>	
		DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
INTANGIBLE 1 Land/Legal/Regulatory		59,066		37,500	\$ 96,566
2 Location, Surveys & Dama		288,079	18,067	2,500	308,647
4 Freight/Transportation	<b>D</b>	47,628	43,778	25,000	116,406
5 Rental - Surface Equipmen		124,327	215,417	105,000	444,744
6 Rental - Downhole Equipa 7 Rental - Living Quarters	nent	205,424 48,083	59,805 54,480	-	265,229 102,562
10 Directional Drilling, Surv	evs	429,543		<del></del>	429,543
11 Drilling	-,-	753,820	-		753,820
12 Drill Bits		100,176			100,176
13 Fuel & Power		188,935 243,296	725,061	<del></del>	913,996 243,296
14 Cementing & Float Equip 15 Completion Unit, Swab, (		-		15,000	15,000
16 Perforating, Wireline, Slice		<del></del>	393,136		393,136
17 High Pressure Pump Truc		•	123,274	-	123,274
18 Completion Unit, Swab, C 20 Mud Circulation System	CTU	105,209	146,484	<del></del>	146,484 105,209
21 Mud Logging		17,529	<del></del>	<del></del>	17,529
22 Logging/Formation Eval	uation	7,270	8,339		15,609
23 Mud & Chemicals		361,835	438,185	10,000	810,020
24 Water		43,459	661,625	300,000	1,005,083 814,033
25 Stimulation 26 Stimulation Flowback & 1	Disp		814,033 121,606	150,000	271,606
28 Mud/Wastewater Dispos		193,104	61,151	-	254,254
30 Rig Supervision / Engine		121,196	133,420	21,667	276,283
32 Drig & Completion Over	head	10,423	(0.400	101/47	10,423
35 Labor		153,358	69,489 1,255,227	101,667	324,514 1,255,227
54 Proppant 95 Insurance		14,660	- 1,23,221		14,660
97 Contingency			24,421	3,833	28,254
99 Plugging & Abandonmer	nt		•		•
	TOTAL INTANGIBLES:	> 3,516,419	5,367,000	772,167	9,655,585
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE (	COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		5 122,234	-		5 122,234
61 Intermediate Casing 62 Drilling Liner		344,284		<del></del>	344,284
63 Production Casing		687,039	<del></del>	<del></del>	687,039
64 Production Liner		<del></del>	-		
65 Tubing				140,000	140,000
66 Wellhead		64,820	<del></del>	40,000	104,820 34,732
67 Packers, Liner Hangers 68 Tanks		14,732	<del></del>	20,000 45,833	45,833
69 Production Vessels		<del></del>		126,667	126,667
70 Flow Lines		<del></del>	•	66,667	66,667
71 Rod string					
72 Artificial Lift Equipment 73 Compressor		<del>-</del>		90,000	90,000 5,833
74 Installation Costs		<del></del>	<del></del>	- 3,005	- 5,055
75 Surface Pumps			-	61,667	61,667
76 Downhole Pumps					
77 Measurement & Meter In		<u> </u>	<u> </u>	116,667	116,667
78 Gas Conditioning / Dehy 79 Interconnecting Facility F		<del></del>	<del></del>	20,000	20,000
80 Gathering / Bulk Lines	ipuig	<del></del>	-	-	
81 Valves, Dumps, Controlle	ers			108,333	108,333
82 Tank / Facility Containm	ent			43,333	43,333
83 Flare Stack		<u> </u>		16,667 50,000	16,667 50,000
84 Electrical/Grounding 85 Communications/SCAD	)A	<del></del>	-	36,667	36,667
86 Instrumentation / Safety		·	-	833	833
	TOTAL TANGIBLES	> 1,233,109	0	989,167	2,222,276
	TOTAL COSTS	> 4,749,528	5,367,000	1,761,334	11,877,862
REPARED BY Permian Res	sources Operating, LLC:			<u></u>	-
Drilling Enginee					
Completions Enginee					
Production Enginee	er: DC				
ermian Resources Operatin	ig, LLC APPROVAL:				
Co-CE	0	Co	-CEO	VP - Ope	rations
	WH		JW	•	CRM
VP - Land & Leg	al	VP - Geosci	ences		
	BG		so		
ON OPERATING PARTN	ER APPROVAL:				
Company Nam		· -	Working Internet (9 ).	1	Tax ID:
Company Nam	e:		rrorking interest (%):		
Signed b	y:		Date:		
Titl	•		Approval: _		No (mark one)
costs on this AFE are estimates only and may not be o	construed as codings on any specific item or the tot	al cost of the project. Tabing installation a	pproved under the AFE may be delayed up to a ye	ear after the well has been completed. In execut	ng this AFE, the Participant agrees to pay its

<b>ESTIMATE</b>	OF COSTS	AND	<b>AUTHORIZ</b>	ATION FOR	EXPENDIT	URE

	ESTIMATE	OF COSTS AND AUTHO	ORIZATION FOR EXPEN	DITORE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 20	03H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 4, T20S-R34E			MD/TVD:	21,210' / 10,925'
				LATERAL LENGTH:	10,000'
COUNTY/STATE:	Lea County, New Mexic	0			
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	19
	Drill a horizontal WCXY	well and complete wi	ith 44 stages. AFE includ	les drilling, completions, l	flowback and Initial
REMARKS:	AL install cost		<b>3</b>		
KEWAKIO.	TIE HOURI COST				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
ILITA LIGITA E	CORTA	COSTS	COSTS	COSTS	COSTS
INTANGIBLE					
1 Land/Legal/Regulatory	S	59,066 288,079	18,067	37,500 2,500	\$ 96,566 308,647
2 Location, Surveys & Dama	ges	47,628	43,778	25,000	116,406
4 Freight / Transportation		124,327	215,417	105,000	444,744
5 Rental - Surface Equipmen		205,424	59,805	103,000	265,229
6 Rental - Downhole Equipm	neut	48,083	54,480	<del></del>	102,562
7 Rental - Living Quarters		429,543	34,460		429,543
10 Directional Drilling, Surv	reys	753,820	<del></del>	<del></del>	753,820
11 Drilling		100,176		<del></del>	100,176
12 Drill Bits		188,935	725,061	<del></del>	913,996
13 Fuel & Power		243,296	723,001	<del></del>	243,296
14 Cementing & Float Equip				15,000	15,000
15 Completion Unit, Swab, C			202 124		393,136
16 Perforating, Wireline, Slice			393,136		
17 High Pressure Pump True			123,274	<u> </u>	123,274
18 Completion Unit, Swab, G	CTU	•	146,484		146,484
20 Mud Circulation System		105,209	-	<del></del>	105,209
21 Mud Logging		17,529	<del></del>	•	17,529
22 Logging/Formation Eval	uation	7,270	8,339		15,609
23 Mud & Chemicals		361,835	438,185	10,000	810,020
24 Water		43,459	661,625	300,000	1,005,083
25 Stimulation			814,033		814,033
26 Stimulation Flowback &			121,606	150,000	271,606
28 Mud/Wastewater Dispos		193,104	61,151		254,254
30 Rig Supervision / Engine		121,196	133,420	21,667	276,283
32 Drlg & Completion Over	head	10,423		•	10,423
35 Labor		153,358	69,489	101,667	324,514
54 Proppant			1,255,227	<u> </u>	1,255,227
95 Insurance		14,660			14,660
97 Contingency		-	24,421	3,833	28,254
99 Plugging & Abandonmer	nt	-			<u> </u>
	TOTAL INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585
•					
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE (	COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		122,234	-	•	5 122,234
61 Intermediate Casing		344,284	-	•	344,284
62 Drilling Liner		·	-	-	<u> </u>
63 Production Casing		687,039		-	687,039
64 Production Liner		-	-	-	-
65 Tubing		-	-	140,000	140,000
66 Wellhead		64,820		40,000	104,820
67 Packers, Liner Hangers		14,732	-	20,000	34,732
68 Tanks		<del></del>	-	45,833	45,833
69 Production Vessels				126,667	126,667
70 Flow Lines		<del></del>		66,667	66,667
71 Rod string		<del></del>	-		-
72 Artificial Lift Equipment		<del></del>	-	90,000	90,000
73 Compressor		-		5,833	5,833
74 Installation Costs			-	<del></del>	
75 Surface Pumps		•		61,667	61,667
76 Downhole Pumps		<del></del>	-	<del></del>	
77 Measurement & Meter In	stallation			116,667	116,667
78 Gas Conditioning/Dehy			-	-	<del></del>
79 Interconnecting Facility I			-	20,000	20,000
80 Gathering/Bulk Lines		-			-
81 Valves, Dumps, Controll	ers	<del></del>		108,333	108,333
82 Tank/Facility Containm		-	•	43,333	43,333
83 Flare Stack		<del></del>	-	16,667	16,667
84 Electrical/Grounding		-	•	50,000	50,000
85 Communications / SCAD	)A	<del></del>		36,667	36,667
86 Instrumentation / Safety			<del></del>	833	833
	TOTAL TANGIBLES >	1,233,109		989,167	2,222,276
	TOTAL COSTS >	4,749,528	5,367,000	1,761,334	11,877,862
	10141 (0313)	1,77,740	טטען זטכן כ		11,011,00%
REPARED BY Permian Res	sources Operating, LLC:				
Drilling Enginee	er: PS				
Completions Enginee					
Production Enginee					
- rotaction Enginee	V.				
ermian Resources Operatin	*				
	•		CEO		
Co-CE	О	Co-C	CEO	VP - Oper	
			JW		CRM
VP - Land & Leg	al	VP - Geoscie	nces		
_	BG		SO		
ON OPERATING PARTN	ER APPROVATO				
ON OLDRATING PARTN	EN ALL NOVAL				
Company Nam	e:		Working Interest (%):	T	ax ID:
Signed b	y:		Date:		
			_		
Titt	e:		Approval:	Yes	No (mark one)
					<del>-</del>

	ESTIMATE				
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 2	04H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 4, T20S-R34E			MD/TVD:	21,210' / 10,925'
COUNTY/STATE:	Lea County, New Mexic	20		LATERAL LENGTH:	10,000'
Permian WI:	·			DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	19
		Y well and complete wit	h 44 stages. AFE includ	es drilling, completions,	lowback and Initial
REMARKS:	AL install cost	. Well and complete will		or arming, compressor,	
TEMARKS.	715 Hount cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE C	тоете	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory		\$ 59,066		37,500	s 96,566
2 Location, Surveys & Damag		288,079	18,067	2,500	308,647
4 Freight/Transportation		47,628	43,778	25,000	116,406
5 Rental - Surface Equipment		124,327	215,417	105,000	444,744
6 Rental - Downhole Equipme	ent	205,424	59,805	-	265,229
7 Rental - Living Quarters		48,083	54,480	-	102,562
10 Directional Drilling, Surve	ys	429,543	-	•	429,543
11 Drilling	•	753,820	<del></del>		753,820
12 Drill Bits		100,176		•	100,176
13 Fuel & Power		188,935	725,061	·	913,996
14 Cementing & Float Equip		243,296			243,296
15 Completion Unit, Swab, C.	ΓU	-	•	15,000	15,000
16 Perforating, Wireline, Slick	line		393,136	-	393,136
17 High Pressure Pump Truck	1		123,274	•	123,274
18 Completion Unit, Swab, C	ΓU	-	146,484		146,484
20 Mud Circulation System		105,209	•		105,209
21 Mud Logging		17,529			17,529
22 Logging/Formation Evalu	ation	7,270	8,339		15,609
23 Mud & Chemicals		361,835	438,185	10,000	810,020
24 Water		43,459	661,625	300,000	1,005,083
25 Stimulation		-	814,033	-	814,033
26 Stimulation Flowback & D	•		121,606	150,000	271,606
28 Mud/Wastewater Disposa		193,104	61,151		254,254
30 Rig Supervision / Engineer		121,196	133,420	21,667	276,283
32 Drlg & Completion Overho	ead	10,423	- 48 498	********	10,423
35 Labor		153,358	69,489	101,667	324,514
54 Proppant		•	1,255,227		1,255,227
95 Insurance		14,660		- 2000	14,660
97 Contingency			24,421	3,833	28,254
99 Plugging & Abandonment		<u> </u>			
	TOTAL INTANGIBLES	> 3,516,419	5,367,000	772,167	9,655,585
		DRILLING	COMPLETION	PRODUCTION	TOTAL
T	DOTO	COSTS	COSTS	COSTS	COSTS
TANGIBLE CO		s 122,234			\$ 122,234
60 Surface Casing		344,284	<del></del>		344,284
61 Intermediate Casing		344,204	<del></del>	<del></del>	344,204
62 Drilling Liner		687,039	<del></del>	<del></del>	687,039
63 Production Casing			·		
64 Production Liner 65 Tubing		<del></del>	<del></del>	140,000	140,000
66 Wellhead		64,820	<del></del>	40,000	104,820
67 Packers, Liner Hangers		14,732	<del></del>	20,000	34,732
68 Tanks		- 14,732		45,833	45,833
69 Production Vessels		<del></del>	<u>-</u>	126,667	126,667
70 Flow Lines		<del></del>	<del></del>	66,667	66,667
71 Rod string					
72 Artificial Lift Equipment		<del></del>		90,000	90,000
73 Compressor		<del></del>		5,833	5,833
74 Installation Costs		<del></del>	<del></del>	- 5,055	
75 Surface Pumps		<del></del>		61,667	61,667
76 Downhole Pumps		<del></del>	<del></del>		
77 Measurement & Meter Ins	allation		<del></del>	116,667	116,667
78 Gas Conditioning / Dehyd			<del></del>	110,007	- 110,007
79 Interconnecting Facility Pi		<del></del>	<del></del>	20,000	20,000
80 Gathering/Bulk Lines	r6		<del></del>		
81 Valves, Dumps, Controller	8	<del></del>		108,333	108,333
82 Tank / Facility Containmen			<del></del>	43,333	43,333
83 Flare Stack	•	<del></del>	<del></del>	16,667	16,667
84 Electrical/Grounding		<del></del>		50,000	50,000
85 Communications / SCADA	<b>\</b>	<del></del>		36,667	36,667
86 Instrumentation / Safety		<del></del>		833	833
	TOTAL TANGIBLES	> 1,233,109	0	989,167	2,222,270
	TOTAL COSTS		5,367,000	1,761,334	11,877,86
EPARED BY Permian Reso					
Drilling Engineer:	PS				
Completions Engineer:					
Production Engineer:	DC				
nian Resources Operating	, LLC APPROVAL:				
Co-CEO	1	Co-Cl	EO	VP - Oper	ations
	WH		JW		CRM
		VP - Geoscien	•		
		V1 - GCOSCICIA	so		
VP - Land & Legal	BG				
VP - Land & Legal	BG				
VP - Land & Legal	BG R APPROVAL:		Working Interest (%):	т	ax ID:
VP - Land & Legal	BG R APPROVAL:		Working Interest (%):	т	ax ID:
VP - Land & Legal  N OPERATING PARTNE  Company Name:	BG R APPROVAL:		· ·		
VP - Land & Legal  N OPERATING PARTNE  Company Name:	R APPROVAL:		Date:	T	

		Using Coterr	a Ownership					
	In Favor of CTRA	In Favor of R&S						
Mighty Pheasant - Bone Spring Proration Unit								
Owner	W2W2 of Sections 5 and 8	E2W2 of Sections 5 and 8	W2E2 of Sections 5 and 8	E2E2 of Sections 5 and 8				
Moore & Shelton Co., Ltd	1.5576%	1.5575%	1.5574%	1.5573%	CTRA Support			
HOG Partnership, LP	2.5174%	5.6433%	5.6438%	5.6444%	Neutral			
Challenger Crude, Ltd.	2.1886%	2.1884%	2.1883%	2.1881%	CTRA Support			
Permian Resources LLC	44.1918%	25.7614%	24.0932%	24.0915%	PR Owned			
Delmar Hudson Lewis Living Trust	2.6393%	4.1226%	4.1227%	4.1229%	CTRA Owned			
Magnum Hunter Production	21.0701%	21.0682%	32.0105%	32.0116%	CTRA Owned			
Zorro Partners, Ltd.	2.4194%	5.6503%	5.6507%	5.6514%	CTRA Support			
Josephine T. Hudson Trust	0.4399%	0.8371%	0.8372%	0.8373%	CTRA Support			
Ard Oil, LTD	1.3197%	2.5114%	2.5115%	2.5118%	PR Support			
Chase Oil Corporation	1.3506%	1.3504%	1.3504%	1.3502%	Neutral			
Cimarex Energy Co.	5.3362%	5.3357%	5.3354%	5.3349%	CTRA Owned			
Avalon Energy Corporation	0.4261%	0.4261%	0.4261%	0.4260%	PR Owned			
Wilbanks Reserve Corporation	2.3677%	2.3675%	2.3674%	2.3671%	Neutral			
Prime Rock Resources	1.2784%	1.2782%	1.2782%	1.2781%	Neutral			
Marks Oil, Inc.	0.4457%	0.4456%	0.4456%	0.4456%	Neutral			
Javelina Partners	4.4471%	7.6778%	7.6781%	7.6786%	CTRA Support			
William A. Hudson, II	0.2360%	0.2360%	0.2360%	0.2359%	CTRA Support			
Union Hill Oil & Gas Co. Inc.	2.2680%	2.2678%	2.2676%	2.2674%	CTRA Support			
Highland (Texas) Energy Company	1.2049%	0.0000%	0.0000%	0.0000%	CTRA Support			
Richardson Oil Company, LLC	0.2953%	0.0000%	0.0000%	0.0000%	CTRA Support			
Carolyn R. Beall	0.5000%	0.0000%	0.0000%	0.0000%	PR Support			
Diamond Star Production Co., LLC	0.5000%	0.0000%	0.0000%	0.0000%	PR Support			
Tierra Encantada, LLC	0.5000%	0.0000%	0.0000%	0.0000%	Neutral			
David Luna	0.5000%	0.0000%	0.0000%	0.0000%	Neutral			
MRC Permian Company	0.0000%	4.5009%	0.0000%	0.0000%	Neutral			
CM Resources II, LLC	0.0000%	3.1066%	0.0000%	0.0000%	PR Owned			
CBR Oil Properties, LLC	0.0000%	1.3336%	0.0000%	0.0000%	PR Support			
General Partnership, 2023 Permian								
Basin JV	0.0000%	0.3334%	0.0000%	0.0000%	Neutral			
% for CTRA	44.10%	50.94%	61.88%	61.89%				
% for PR	46.94%	33.14%	27.03%					
70 TOT F IX	40.94%	35.14%	27.05%	27.05%				

	Loosey Goosey - Bone Spring Proration Unit					
Owner	W2W2 of Sections 4 and 9	E2W2 of Sections 4 and 9	W2E2 of Sections 4 and 9	E2E2 of Sections 4 and 9		
Moore & Shelton Co., Ltd	2.9657%	2.9676%	2.9694%	2.9713%	CTRA Support	
HOG Partnership, LP	5.6470%	5.6519%	5.9706%	5.9753%	Neutral	
Challenger Crude, Ltd.	2.1872%	2.1857%	1.4561%	1.4551%	CTRA Support	
Permian Resources LLC	22.6756%	22.6593%	24.7422%	24.7244%	PR Owned	
Delmar Hudson Lewis Living Trust	7.7649%	7.7741%	7.7828%	7.7919%	CTRA Owned	
Magnum Hunter Production	21.0570%	21.0419%	18.8161%	18.8026%	CTRA Owned	
Zorro Partners, Ltd.	7.1179%	7.1262%	7.1342%	7.1425%	CTRA Support	
Josephine T. Hudson Trust	1.2942%	1.2957%	1.2971%	1.2986%	CTRA Support	
Ard Oil, LTD	3.8825%	3.8870%	3.8914%	3.8959%	PR Support	
Chase Oil Corporation	1.3497%	1.3488%	0.8986%	0.8979%	Neutral	
Cimarex Energy Co.	5.3329%	5.3291%	8.2281%	8.2222%	CTRA Owned	
Avalon Energy Corporation	0.4259%	0.4256%	0.2835%	0.2833%	PR Owned	
Wilbanks Reserve Corporation	2.3662%	2.3645%	1.5753%	1.5742%	Neutral	
Prime Rock Resources	1.2776%	1.2767%	0.8505%	0.8499%	Neutral	
Marks Oil, Inc.	0.4454%	0.4451%	0.2965%	0.2963%	Neutral	
Javelina Partners	11.7079%	11.7203%	11.4967%	11.5092%	CTRA Support	
William A. Hudson, II	0.2359%	0.2357%	0.1570%	0.1569%	CTRA Support	
Union Hill Oil & Gas Co. Inc.	2.2666%	2.2650%	2.1539%	2.1523%	CTRA Support	
Highland (Texas) Energy Company	0.0000%	0.0000%	0.0000%	0.0000%	CTRA Support	
Richardson Oil Company, LLC	0.0000%	0.0000%	0.0000%	0.0000%	CTRA Support	
Carolyn R. Beall	0.0000%	0.0000%	0.0000%	0.0000%	PR Support	
Diamond Star Production Co., LLC	0.0000%	0.0000%	0.0000%	0.0000%	PR Support	
Tierra Encantada, LLC	0.0000%	0.0000%	0.0000%	0.0000%	Neutral	
David Luna	0.0000%	0.0000%	0.0000%	0.0000%	Neutral	
MRC Permian Company	0.0000%	0.0000%	0.0000%	0.0000%	Neutral	
CM Resources II, LLC	0.0000%	0.0000%	0.0000%	0.0000%	PR Owned	
CBR Oil Properties, LLC	0.0000%	0.0000%	0.0000%	0.0000%	PR Support	
General Partnership, 2023 Permian						
Basin JV	0.0000%	0.0000%	0.0000%	0.0000%	Neutral	
					<u> </u>	
% for CTRA	61.93%	61.94%	61.49%	61.50%	EXH	
I						

26.97%

28.92%

26.98%

A-7

28.90%

Total Permian Development Cost	Net Cost Per WIO	Total Coterra Development Cost	Net Cost Per WIO	Difference between Developments
Delmar Hudson Trust	\$ 18,089,832.78	Delmar Hudson Trust	\$ 9,876,838.20	\$ 8,212,994.57
Lindys Living Trust	\$ 29,308,032.49	Lindys Living Trust	\$ 15,737,845.12	\$ 13,570,187.37
Javelina Partners	\$ 41,670,448.93	Javelina Partners	\$ 22,324,341.03	\$ 19,346,107.90
Zorro Partners	\$ 28,105,608.88	Zorro Partners	\$ 14,763,299.18	\$ 13,342,309.71
Josephine Hudson Trust	\$ 5,421,906.00	Josephine Hudson Trust	\$ 2,890,835.22	\$ 2,531,070.78
Ard Oil	\$ 14,654,016.11	Ard Oil	\$ 7,868,922.49	\$ 6,785,093.62
Moore and Shelton	\$ 12,917,179.04	Moore and Shelton	\$ 6,876,219.27	\$ 6,040,959.77
HOG Partnership LP	\$ 30,874,175.16	HOG Partnership LP	\$ 15,655,402.13	\$ 15,218,773.03
Read and Stevens	\$ 130,419,826.77	Read and Stevens	\$ 67,260,556.01	\$ 63,159,270.76
First Century Oil	\$ 29,866,998.32	First Century Oil	\$ 15,056,029.91	\$ 14,810,968.42
Foran Oil Co.	\$ 10,316,095.71	Foran Oil Co.	\$ 5,681,103.05	\$ 4,634,992.65
Chase Oil Co.	\$ 7,038,561.43	Chase Oil Co.	\$ 3,876,155.67	\$ 3,162,405.76
Union Hill	\$ 3,374,058.47	Union Hill	\$ 1,682,281.67	\$ 1,691,776.80
Magnum Hunter	\$ 99,757,303.82	Magnum Hunter	\$ 55,226,946.45	\$ 44,530,357.37
Cimarex	\$ 32,268,923.15	Cimarex	\$ 16,714,493.11	\$ 15,554,430.04
William A Hudson II	\$ 1,040,859.62	William A Hudson II	\$ 695,639.44	\$ 345,220.19
Challenger Crude	\$ 10,822,899.53	Challenger Crude	\$ 5,621,612.32	\$ 5,201,287.21
MRC Permian	\$ 4,107,154.83	MRC Permian	\$ 1,514,460.94	\$ 2,592,693.89
Northern Oil and Gas	\$ 2,835,005.00	Northern Oil and Gas	\$ 1,045,418.83	\$ 1,789,586.17
CBR Oil Prop	\$ 1,521,121.47	CBR Oil Prop	\$ 560,899.00	\$ 960,222.47
CLM Production Co.	\$ 59,381.89	CLM Production Co.	\$ -	\$ 59,381.89
Highland (Texas) Energy	\$ 893,406.32	Highland (Texas) Energy	\$ 504,660.85	\$ 388,745.48
Diamond Star Prod.	\$ 337,390.03	Diamond Star Prod.	\$ 168,220.28	\$ 169,169.75
Carolyn Beall	\$ 337,390.03	Carolyn Beall	\$ 168,220.28	\$ 169,169.75
Tierra Encantada	\$ 337,390.03	Tierra Encantada	\$ 168,220.28	\$ 169,169.75
David Luna	\$ 337,390.03	David Luna	\$ 168,220.28	\$ 169,169.75
Warren Associates	\$ 59,381.89	Warren Associates	\$ -	\$ 59,381.89
Marks Oil	\$ 2,561,792.75	Marks Oil	\$ 1,099,625.19	\$ 1,462,167.56
Prime Rock	\$ 5,212,791.56	Prime Rock	\$ 3,154,214.30	\$ 2,058,577.27
Wilbanks Reserve	\$ 13,609,171.58	Wilbanks Reserve	\$ 5,841,723.33	\$ 7,767,448.26
Avalon Energy Corp.	\$ 1,737,833.25	Avalon Energy Corp.	\$ 1,051,547.61	\$ 686,285.64
	\$ 539,893,326.89		\$ 283,253,951.43	\$ 256,639,375.46
				Total Cost Delta Between Developments



# **TAB 3**

Case Nos. 23452-23455

Exhibit B:	Self-Affirmed Statement of Staci Mueller, Geologist
Exhibit B-1:	Locator Map & Stress Direction
Exhibit B-2:	Permit Status
Exhibit B-3:	Gun Barrel View
Exhibit B-4:	Development Plan Comparison
Exhibit B-5:	Subsea Structure Map
Exhibit B-6:	3 <sup>rd</sup> bone Spring Isopach Map
Exhibit B-7:	Structural Cross Section
Exhibit B-8:	3 <sup>rd</sup> Bone Spring Producers vs. all Wolfcamp Producers
Exhibit B-9:	All 3 <sup>rd</sup> Bone Spring and Wolfcamp Producers
	Comparing 3 <sup>rd</sup> Sand to Wolfcamp Reservoir (SoPhiH)
	2 <sup>nd</sup> Bone Spring Structure Map
	2 <sup>nd</sup> Bone Spring Sand Isopach
Exhibit B-13:	2 <sup>nd</sup> Bone Spring Sand Cross Section
	2 <sup>nd</sup> Bone Spring Sand vs. 3 <sup>rd</sup> Bone Spring Carbonate Producers
Exhibit B-15:	PhilH L 2 <sup>nd</sup> Sand vs. 3 <sup>rd</sup> Carbonate
	1 <sup>st</sup> Bone Spring Sand Structure
Exhibit B-17:	1 <sup>st</sup> Bone Spring Sand Isopach
Exhibit B-18:	1 <sup>st</sup> Bone Spring Structural Cross Section
Exhibit B-19:	Wolfcamp Structure Map (Subsea TVD)
	Wolfcamp XY Isopach
	Wolfcamp XY West to East Cross Section
	3D Seismic Outline
	Cross Section Across 3 <sup>rd</sup> Bone Spring Sand
Exhibit B-24:	Net-to-Gross Density Porosity (DPHI) <4% Within the 3rd Bone
	Spring Sand and Upper Wolfcamp Sands

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

APPLICATIONS OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case Nos. 23448 – 23451 (Mighty Pheasant; Bone Spring)

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

Case Nos. 23594 – 23597 (Mighty Pheasant; Wolfcamp)

APPLICATIONS OF CIMAREX ENERGY CO.
FOR A HORIZONTAL SPACING UNIT AND
COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case Nos. 23452 – 23455 (Loosey Goosey; Bone Spring)

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

Case Nos. 23598 – 23601 (Loosey Goosey; Wolfcamp)

# SELF-AFFIRMED STATEMENT OF STACI MUELLER

- I, being duly sworn on oath, state the following:
- 1. I am over the age of 18, and I have personal knowledge of the matters stated herein.
- 2. I am employed as a petroleum geologist for Coterra Energy, Inc. ("Coterra") The Applicant, Cimarex Energy Co. ("Cimarex"), is a subsidiary of Coterra. I am familiar with the subject application and the geology involved.



- 3. This testimony is submitted in connection with the filing by Cimarex in the above-referenced compulsory pooling application pursuant to 19.15.4.12.A(1) NMAC.
  - 4. I have testified previously by affidavit before the Oil Conservation Division ("Division") as an expert petroleum geologist; my credentials have been made a matter of record, and I have been qualified as an expert by the Division.
    - a. I have a Bachelor of Science Degree in Geophysical Engineering from Colorado School of Mines, and a Master of Science Degree in Geophysics from Colorado School of Mines.
    - b. I have worked on New Mexico Oil and Gas matters since July 2018.
- 5. Cimarex is an established operator in the Quail Ridge area, with 35 horizontal wells drilled within the basal 3<sup>rd</sup> Bone Spring Sand starting in 2010 through 2022. In most of the 3<sup>rd</sup> Sand developments, Triple Combo logs were taken to further the reservoir characterization of both the Bone Spring and Wolfcamp formations. From these extensive mapping efforts along with offset production analyses, Cimarex has verified that the 3<sup>rd</sup> Sand is the most economic target at the Mighty Pheasant and Loosey Goosey proposed development.
- 6. **Exhibit B-1** shows a map made by Jens-Erik Lund Snee and Mark D. Zoback from Stanford University, which depicts the maximum horizontal stress direction throughout the Delaware and Midland Basins. The map on the right is a zoomed in portion of the regional map (red outline), where the blue lines represent the digitized version of the same stress directions. Based on the regional trend observed by Lund Snee and Zoback, the estimated stress direction at Mighty Pheasant and Loosey Goosey is approximately N70E, which means the favorable well orientation is north-south instead of east-west. Both Cimarex and Permian Resources plan to drill in the north-south orientation.

- 7. **Exhibit B-2** is a table summarizing the permit status for the Mighty Pheasant and Loosey Goosey developments. Highlighted in yellow are the wells that Cimarex has submitted to the BLM, and each well has "AFMSS-Accepted" noted to show that these wells are high enough on Cimarex's priority list for the BLM to be currently working on them. Ten permits were submitted between February and March 2022 for a 3<sup>rd</sup> Bone Spring Sand development (tier 1 target in area) plus a 1<sup>st</sup> Sand or 2<sup>nd</sup> Sand well to de-risk the sections in more highly channelized reservoirs.
- 8. **Exhibit B-3** is a gun barrel view of Cimarex's development plan across both Mighty Pheasant (Sections 5 & 8) and Loosey Goosey (Sections 4 & 9). Cimarex plans to develop the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Bone Spring Sands at 4 wells per section spacing. The 1<sup>st</sup> Sand target is the high porosity, clean sand in the upper half of the interval. The 2<sup>nd</sup> Sand target is the basal siltstone/sandstone interval, and the 3<sup>rd</sup> Sand target is the basal clean sand lobe, which is also the established target across several townships.
- 9. **Exhibit B-4** is a gun barrel view of Cimarex's plan (left side) versus Permian Resources (right side). Permian Resources plans to include 3 additional landing zones in their full section development: the Upper 2<sup>nd</sup> Bone Spring Sand, the 3<sup>rd</sup> Carbonate, and the Wolfcamp XY Sands. This is a risky development scenario, because the 3<sup>rd</sup> Sand & Wolfcamop XY vertical spacing is about 95 ft, which is not considered a true stagger and subsequently treated as a flat development. Therefore, Permian Resource plans to develop the 3<sup>rd</sup> Sand & Wolfcamp XY combined reservoir tank at 8 wells per section, which is over-spaced for this area, where almost every operator has developed the 3<sup>rd</sup> Sand with 4 wells per section. Permian Resources' 3<sup>rd</sup> Carbonate target is approximately 135 ft vertical distance from their proposed Lower 2<sup>nd</sup> Sand target, which is also very tight vertical spacing when there is no frac baffle in between (no tight carbonates). The Lower 2<sup>nd</sup> Sand is the established target across several townships, while there has only been one well

landed in the 3<sup>rd</sup> Carbonate (with no 2<sup>nd</sup> Sand above). The Upper 2<sup>nd</sup> Sand is a target that Cimarex has investigated and determined to be too risky to drill before collecting data.

- 10. **Exhibit B-5** is a structure map (Subsea TVD) of the top of the Wolfcamp, which is about 50 ft below the 3<sup>rd</sup> Bone Spring Sand Target, as noted by the type log located at the blue star. The contour interval is 100 ft, well control points are displayed, and structure is dipping to the south. From the first take point to the last take point of the Mighty Pheasant and Loosey Goosey wells (located within black and red box), there is approximately 100 ft of relief.
- 11. **Exhibit B-6** is an isopach map of the 3<sup>rd</sup> Bone Spring Sand, as noted by the type log located at the blue star. The contour interval is 20 ft, well control points are displayed, and the 3<sup>rd</sup> Sand is consistently between 260-280 ft at the Mighty Pheasant and Loosey Goosey development (located within black and red box).
- 12. **Exhibit B-7** is a structural cross section from west to east on the northern end of the Mighty Pheasant and Loosey Goosey sections. Gamma Ray is displayed in the first log track, on a scale from 0 to 150 API, shaded to the right with blue representing low Gamma Ray, brown representing high Gamma Ray, and yellow in between. The second track is deep resistivity (RDEEP), on a scale from 2 to 2000 Ohms, with RDEEP less than 20 Ohms shaded solid red to represent the Bone Spring Sand reservoirs. The third track is the photoelectric log (PEF) which is shaded blue and purple for higher values and yellow for lower values. The fourth track is neutron and density porosity (NPHI and DPHI). NPHI is shown in red, while DPHI is blue, and when DPHI crosses to the left of NPHI, the space in between the two curves is shaded yellow. Otherwise, it is shaded grey. The basal 3<sup>rd</sup> Sand target is often characterized by the yellow crossover shading in the NPHI and DPHI track, Gamma Ray around 50-70 API, and RDEEP below 20 Ohms. Cimarex's target is the standard basal 3<sup>rd</sup> Bone Spring Sand target across the area (a few townships), which is shown

as a green stick in all three logs. Frac baffles are shown in red and white striped boxes within the depth track, and there are only a couple frac baffles present within the 3<sup>rd</sup> Bone Spring Carbonate. These baffles are characterized by low Gamma Ray <50 API, indicating carbonate, along with high resistivity, and low neutron and density porosities (0-4%). There are no indications of any major geomechanical changes/frac baffles in between Cimarex's 3<sup>rd</sup> Sand target and Permian Resources' Wolfcamp Sands target, indicating that these two intervals are most likely one shared reservoir tank.

- 13. **Exhibit B-8** is showing a map with all the producing 3<sup>rd</sup> Bone Spring Sand wells across almost three townships (left), versus all of the Wolfcamp producers across the area (right). This Exhibit highlights the fact that the 3<sup>rd</sup> Sand is the established target in the area surrounding the Mighty Pheasant and Loosey Goosey sections (black and red box), while there have only been two Wolfcamp developments plus some parent well tests. Cimarex is also an established operator in this area, with 36 wells drilled including a Wolfcamp test.
- 14. **Exhibit B-9** shows all of the 3<sup>rd</sup> Bone Spring Sand producing wells with blue diamonds, and all of the Wolfcamp Sands producing wells with orange diamonds. Mighty Pheasant and Loosey Goosey are located within the black and red box which lies among almost all 3<sup>rd</sup> Sand wells. There are a couple of Wolfcamp development tests two miles to the south, but the majority of Wolfcamp and 3<sup>rd</sup> Sand co-development occurs 3 townships to the south, where the total 3<sup>rd</sup> Sand and Wolfcamp Sands reservoir tank is much thicker and deeper into the basin.
- 15. **Exhibit B-10** shows the PhiH (porosity\*height) of the 3<sup>rd</sup> Bone Spring Sand (left) versus the Wolfcamp X and Y Sands (right) as shown by the type log located at the blue star. PhiH is one of the most common reservoir maps to identify ideal target areas within the Bone Spring Sands because it represents total pore space, and more pore space means more room for hydrocarbon

storage. Both maps have the same color scale, with a contour interval of 2 pore-ft. The Mighty Pheasant and Loosey Goosey sections are shown in the black and red box, and the well control points are displayed, along with the values of the closest control points to the subject development. Higher PhiH values are indicated in yellow and red, while lower values are shown in blue. The average PhiH within the 3<sup>rd</sup> Sand, based on the closest control points, is 26.75 pore-ft. While the average PhiH within the Wolfcamp X and Y Sands is 10 pore-ft, which means that the 3<sup>rd</sup> Sand is at least 72.8% of the total reservoir, while the Wolfcamp Sands are 27.2% of the total reservoir. However, because there are no frac baffles separating the 3<sup>rd</sup> Sand and Wolfcamp Sands, and because the two Permian Resource targets would have about 95 ft of vertical separation, their Wolfcamp wells would drain a significant portion of the 3<sup>rd</sup> Sand reservoir that the four 3<sup>rd</sup> Sand wells would already be targeting.

- 16. **Exhibit B-11** is a structure map (Subsea TVD) of the top of the 3<sup>rd</sup> Bone Spring Carbonate, which is about 40 ft below the 2<sup>nd</sup> Bone Spring Sand Target, as noted by the type log located at the blue star. The contour interval is 100 ft, well control points are displayed, and structure is dipping to the south. From the first take point to the last take point of the Mighty Pheasant and Loosey Goosey wells (located within black and red box), there is approximately 200 ft of relief on the eastern edge of the proposed development, and about 100 ft of relief on the western edge.
- 17. **Exhibit B-12** is an isopach map of the 2<sup>nd</sup> Bone Spring Sand, as noted by the type log located at the blue star. The contour interval is 20 ft, well control points are displayed, and the 2<sup>nd</sup> Sand is consistently between 420-440 ft at the Mighty Pheasant and Loosey Goosey development (located within black and red box).
- 18. **Exhibit B-13** is a structural cross section from west to east on the northern end of the Mighty Pheasant and Loosey Goosey sections. Gamma Ray is displayed in the first log track, on

a scale from 0 to 150 API, shaded to the right with blue representing low Gamma Ray, brown representing high Gamma Ray, and yellow in between. The second track is deep resistivity (RDEEP), on a scale from 2 to 2000 Ohms, with RDEEP less than 20 Ohms shaded solid red to represent the Bone Spring Sand reservoirs. The third track is the photoelectric log (PEF) which is shaded blue and purple for higher values and yellow for lower values. The fourth track is neutron and density porosity (NPHI and DPHI). NPHI is shown in red, while DPHI is blue, and when DPHI crosses to the left of NPHI, the space in between the two curves is shaded yellow. Otherwise, it is shaded grey. The Lower 2<sup>nd</sup> Sand target is often characterized by the yellow crossover shading in the NPHI and DPHI track, Gamma Ray around 50-70 API, and RDEEP below 200 Ohms (not as low as basal 3rd Sand target). Cimarex's target is the standard Lower 2nd Bone Spring Sand target across the area (a few townships), which is shown as a green stick in all three logs. Frac baffles are shown in red and white striped boxes within the depth track, and there are only a couple frac baffles present within the 2<sup>nd</sup> Bone Spring Carbonate and in the middle of the 2<sup>nd</sup> Sand. These baffles are characterized by low Gamma Ray <50 API, indicating carbonate, along with high resistivity, and low neutron and density porosities (0-4%). These frac baffles within the 2<sup>nd</sup> Sand, plus the vertical distance of approximately 400 ft, indicate that there may be another target within the Upper 2<sup>nd</sup> Sand (similar log characteristics as the Lower Sand target). However, this would be a several mile step-out test, so Cimarex is planning advanced logging/data collection through this interval to de-risk it while drilling the 3<sup>rd</sup> Sand wells.

19. **Exhibit B-14** is showing a map with all the producing Lower 2<sup>nd</sup> Bone Spring Sand wells across almost nine townships (left), versus all of the 3<sup>rd</sup> Bone Spring Carbonate producers across the area (right). This Exhibit highlights the fact that the Lower 2<sup>nd</sup> Sand is the established target in

the area surrounding the Mighty Pheasant and Loosey Goosey sections (black and red box), while there has only been one well landed in the 3<sup>rd</sup> Carbonate, with no 2<sup>nd</sup> Sand development above.

- 20. **Exhibit B-15** shows the PhiH (porosity\*height) of the 2<sup>nd</sup> Bone Spring Sand (left) versus the 3<sup>rd</sup> Bone Spring Carbonate (right) as shown by the type log located at the blue star. PhiH is one of the most common reservoir maps to identify ideal target areas within the Bone Spring Sands because it represents total pore space, and more pore space means more room for hydrocarbon storage. Both maps have the same color scale, with a contour interval of 2 pore-ft. The Mighty Pheasant and Loosey Goosey sections are shown in the black and red box, and the well control points are displayed. Higher PhiH values are indicated in yellow and red, while lower values are shown in blue. The average PhiH within the 2<sup>nd</sup> Sand, based on the closest control points, is 30 pore-ft. While the average PhiH within the 3<sup>rd</sup> Carbonate is 20 pore-ft, which means that the 2<sup>nd</sup> Sand is at least 60% of the total reservoir, while the 3<sup>rd</sup> Carbonate is 40% of the total reservoir. However, because there are no frac baffles separating the 2<sup>nd</sup> Sand and 3<sup>rd</sup> Carbonate, and because the two Permian Resource targets would have about 135 ft of vertical separation, their 3<sup>rd</sup> Carbonate wells would drain a significant portion of the 2<sup>nd</sup> Sand reservoir that the four 2<sup>nd</sup> Sand wells would already be targeting.
- 21. **Exhibit B-16** is a structure map (Subsea TVD) of the top of the 1<sup>st</sup> Bone Spring Sand, which is about 40 ft above the 1<sup>st</sup> Bone Spring Sand Target, as noted by the type log located at the blue star. The contour interval is 100 ft, well control points are displayed, and structure is dipping to the south. From the first take point to the last take point of the Mighty Pheasant and Loosey Goosey wells (located within black and red box), there is approximately 85 ft of relief.
- 22. **Exhibit B-17** is an isopach map of the 1<sup>st</sup> Bone Spring Sand, as noted by the type log located at the blue star. The contour interval is 20 ft, well control points are displayed, and the 1<sup>st</sup>

Sand is consistently between 280-300 ft at the Mighty Pheasant and Loosey Goosey development (located within black and red box).

23. Exhibit B-18 is a structural cross section from west to east on the northern end of the Mighty Pheasant and Loosey Goosey sections. Gamma Ray is displayed in the first log track, on a scale from 0 to 150 API, shaded to the right with blue representing low Gamma Ray, brown representing high Gamma Ray, and yellow in between. The second track is deep resistivity (RDEEP), on a scale from 2 to 2000 Ohms, with RDEEP less than 20 Ohms shaded solid red to represent the Bone Spring Sand reservoirs. The third track is the photoelectric log (PEF) which is shaded blue and purple for higher values and yellow for lower values. The fourth track is neutron and density porosity (NPHI and DPHI). NPHI is shown in red, while DPHI is blue, and when DPHI crosses to the left of NPHI, the space in between the two curves is shaded yellow. Otherwise, it is shaded grey. The 1st Sand target is often characterized by the yellow crossover shading in the NPHI and DPHI track, Gamma Ray around 50-70 API, and RDEEP below 20 Ohms. Cimarex's target is the standard 1st Bone Spring Sand target across the area (a few townships), which is shown as a green stick in all three logs.

### **WOLFCAMP STATEMENT**

- 24. **Exhibit B-19** is a structure map (Subsea TVD) of the top of the Wolfcamp, which is about 50 ft below the 3<sup>rd</sup> Bone Spring Sand Target, as noted by the type log located at the blue star. The contour interval is 100 ft, well control points are displayed, and structure is dipping to the south. From the first take point to the last take point of the Mighty Pheasant and Loosey Goosey wells (located within black and red box), there is approximately 100 ft of relief.
- 25. **Exhibit B-20** is an isopach map of the Wolfcamp X and Y Sands, as noted by the type log located at the blue star. The contour interval is 20 ft, well control points are displayed, and the

Wolfcamp X and Y Sands are consistently about 100 ft at the Mighty Pheasant and Loosey Goosey development (located within black and red box).

26. Exhibit B-21 is a structural cross section from west to east on the northern end of the Mighty Pheasant and Loosey Goosey sections. Gamma Ray is displayed in the first log track, on a scale from 0 to 150 API, shaded to the right with blue representing low Gamma Ray, brown representing high Gamma Ray, and yellow in between. The second track is deep resistivity (RDEEP), on a scale from 2 to 2000 Ohms, with RDEEP less than 20 Ohms shaded solid red to represent the Bone Spring Sand reservoirs. The third track is the photoelectric log (PEF) which is shaded blue and purple for higher values and yellow for lower values. The fourth track is neutron and density porosity (NPHI and DPHI). NPHI is shown in red, while DPHI is blue, and when DPHI crosses to the left of NPHI, the space in between the two curves is shaded yellow. Otherwise, it is shaded grey. The basal 3<sup>rd</sup> Sand target is often characterized by the yellow crossover shading in the NPHI and DPHI track, Gamma Ray around 50-70 API, and RDEEP below 20 Ohms. Cimarex's target is the standard basal 3<sup>rd</sup> Bone Spring Sand target across the area (a few townships), which is located above the Wolfcamp X & Y Sands (highlighted yellow on the left side). Frac baffles are shown in red and white striped boxes within the depth track, and there are only a couple frac baffles present within the 3<sup>rd</sup> Bone Spring Carbonate. These baffles are characterized by low Gamma Ray <50 API, indicating carbonate, along with high resistivity, and low neutron and density porosities (0-4%). There are no indications of any major geomechanical changes/frac baffles in between Cimarex's 3rd Sand target and Permian Resources' Wolfcamp Sands target, indicating that these two intervals are most likely one shared reservoir tank; therefore, Permian Resources' Wolfcamp XY Sands target will primarily produce from the 3<sup>rd</sup> Bone Spring Sand.

## NO FRAC BAFFLE BETWEEN WOLFCAMP AND 3<sup>RD</sup> SAND

27. **Exhibit B-22** shows the outlined area in red of Cimarex's 3D seismic coverage, which includes the Mighty Pheasant and Loosey Goosey sections as well as the adjacent Cimarex acreage. The Capitan Reef area is shaded blue, and the Potash outline is light blue. 3D seismic will

aid in geosteering the Bone Spring development.

28. **Exhibit B-23** is a cross section across 3<sup>rd</sup> Bone Spring Sand developments, as shown on the map, in two townships (approximate target shown along the green line). The highlighted portion of the logs, which represents the sands bordering the 3<sup>rd</sup> Bone Spring Sand and Upper Wolfcamp, shows that there are no frac baffles (carbonates) present that would separate the Bone

Spring and Wolfcamp across the whole area.

29. **Exhibit B-24** is a map showing net-to-gross density porosity (DPHI) <4% within the 3<sup>rd</sup> Bone Spring Sand and Upper Wolfcamp Sands, where 0% means there is no frac baffle separating the two formations. Almost all 3<sup>rd</sup> Sand developments on the map lie within an area that contains minimal-to-no carbonate/frac baffle between the Bone Spring and Wolfcamp.

30. The fact that there are minimal-to-no carbonate/frac baffles between the Bone Spring and Wolfcamp, as evidenced by Exhibits B-23 and B-24, further supports Cimarex's contention that these two intervals are most likely one shared reservoir tank. Thus, Cimarex's proposed 3rd Sand single landing is the optimal proposal based on the geology of the target area. These exhibits also provide further proof that Permian Resources' Wolfcamp XY Sands target will primarily produce from the 3rd Pone Spring Sand

from the 3rd Bone Spring Sand.

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

- 32. The granting of this Application is in the interests of conservation, the prevention of waste, and the protection of correlative rights.
  - 33. The foregoing is correct and complete to the best of my knowledge and belief.

[Signature page follows]

Signature page of Self-Affirmed Statement of Staci Mueller:

I understand that this Self-Affirmed Statement will be used as written testimony before the Division in Case Nos. 23448-23455 and 23594 – 23601 and affirm that my testimony herein is true and correct, to the best of my knowledge and belief and made under penalty of perjury under the laws of the State of New Mexico.

STACI MUELLER

8/2/2023

Date Signed

# Geology Exhibits



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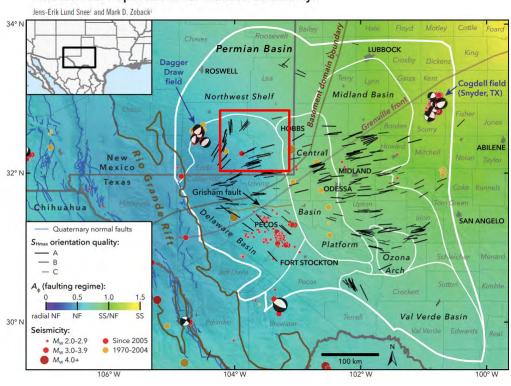
# Locator Map & Stress Direction

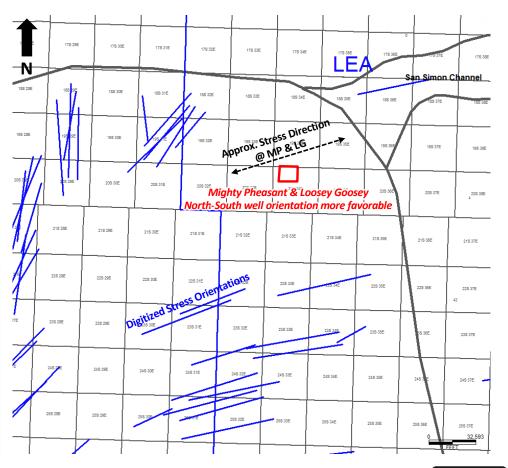
Coterra plans to develop Sections 4-9 and 5-8 with 2-mile laterals

- 8 Lower 3<sup>rd</sup> Bone Spring Sand
- 2. 8 2<sup>nd</sup> Bone Spring Sand
- 3. 8 1st Bone Spring Sand

The wells will be drilled north to south from 2 pads/ Section

## State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity





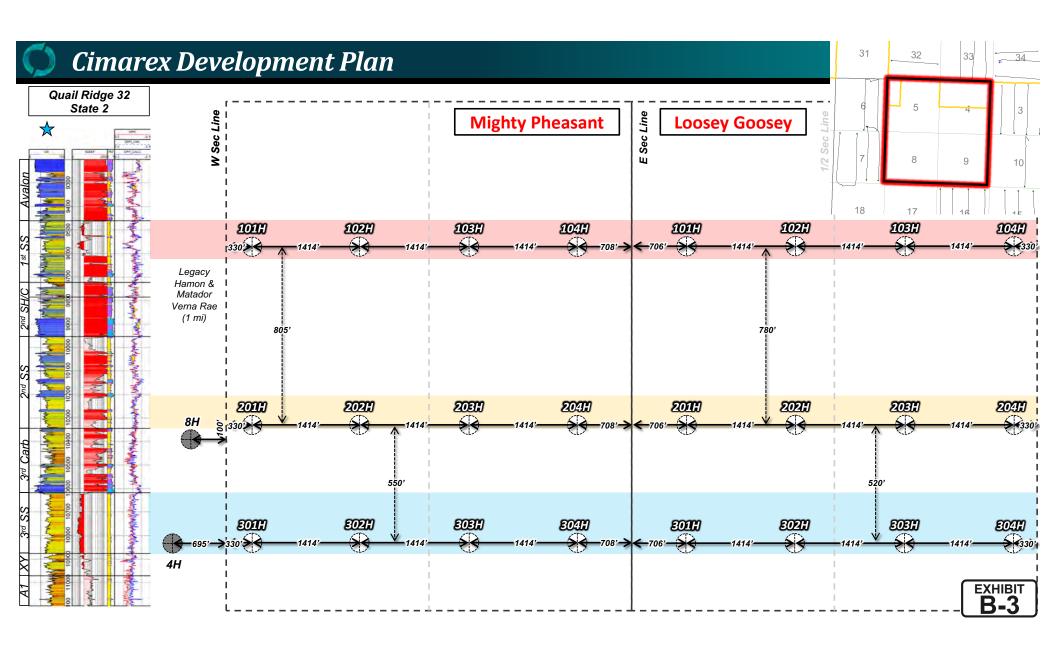


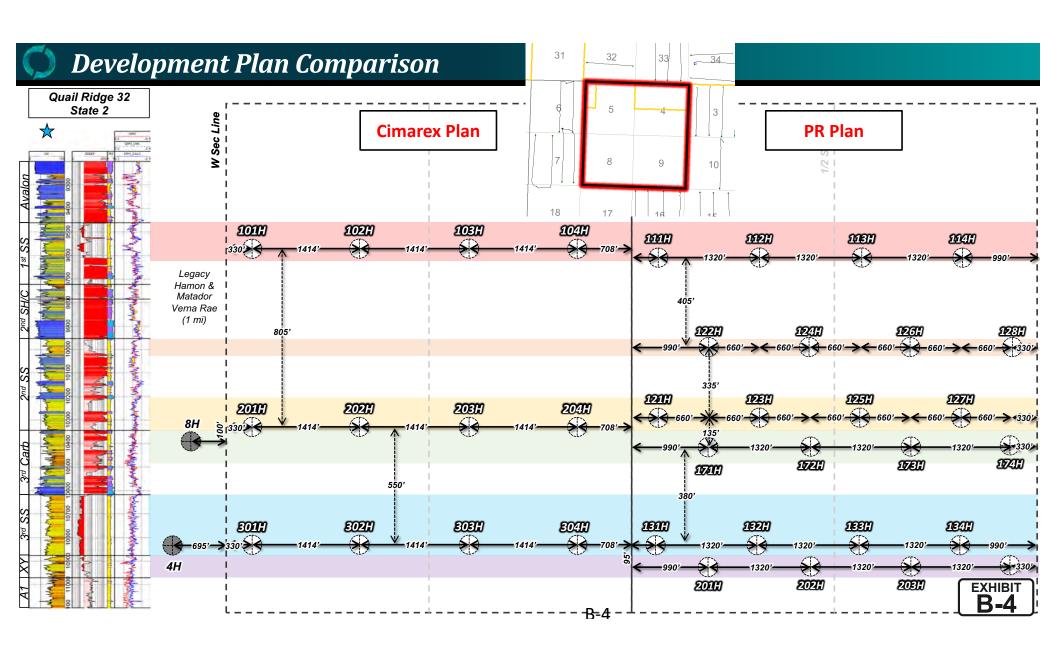


# Permit Status

	State	County	Well Name & Number	Permit Status	Permit Submission Due Date	Permit Submitted Date	10-Day Letter Date	10-Day Letter Due
	NM	Lea	Mighty Pheasant 5-8 Fed Com 101H	To be permitted				
	NM	Lea	Mighty Pheasant 5-8 Fed Com 102H	To be permitted				
	NM	Lea	Mighty Pheasant 5-8 Fed Com 103H	To be permitted				
	NM	Lea	Mighty Pheasant 5-8 Fed Com 104H	To be permitted				
	NM	Lea	Mighty Pheasant 5-8 Fed Com 201H	To be permitted				
	NM	Lea	Mighty Pheasant 5-8 Fed Com 202H	To be permitted				
	NM	Lea	Mighty Pheasant 5-8 Fed Com 203H	To be permitted				
	NM	Lea	Mighty Pheasant 5-8 Fed Com 204H	AFMSS-Accepted	2/14/2022	2/14/2022	6/2/2023	7/17/2023
	NM	Lea	Mighty Pheasant 5-8 Fed Com 301H	AFMSS-Accepted	3/1/2022	3/1/2022		
₹.	NM	Lea	Mighty Pheasant 5-8 Fed Com 302H	AFMSS-Accepted	3/2/2022	3/2/2022		
	NM	Lea	Mighty Pheasant 5-8 Fed Com 303H	AFMSS-Accepted	2/14/2022	2/14/2022	6/2/2023	7/17/2023
Ĺ	NM	Lea	Mighty Pheasant 5-8 Fed Com 304H	AFMSS-Accepted	3/1/2022	3/1/2022	6/2/2023	7/17/2023
	NM	Lea	Loosey Goosey 4-9 Fed Com 101H	To be permitted				
Submitted permits for 3 <sup>rd</sup> Sand	NM	Lea	Loosey Goosey 4-9 Fed Com 102H	To be permitted				
development & 1st Sand/2nd	NM	Lea	Loosey Goosey 4-9 Fed Com 103H	To be permitted				
Sand test	NM	Lea	Loosey Goosey 4-9 Fed Com 104H	To be permitted				
BLM is currently working on	NM	Lea	Loosey Goosey 4-9 Fed Com 201H	To be permitted				
these	NM	Lea	Loosey Goosey 4-9 Fed Com 202H	To be permitted				
_	NM	Lea	Loosey Goosey 4-9 Fed Com 203H	To be permitted				
	NM	Lea	Loosey Goosey 4-9 Fed Com 204H	AFMSS-Accepted	3/15/2022	3/15/2022		
	NM	Lea	Loosey Goosey 4-9 Fed Com 301H	AFMSS-Accepted	3/9/2022	3/9/2022		
<b>ન</b>	NM	Lea	Loosey Goosey 4-9 Fed Com 302H	AFMSS-Accepted	3/9/2022	3/9/2022		
	NM	Lea	Loosey Goosey 4-9 Fed Com 303H	AFMSS-Accepted	3/15/2022	3/15/2022		
L	NM	Lea	Loosey Goosey 4-9 Fed Com 304H	AFMSS-Accepted	3/15/2022	3/15/2022		

B-2

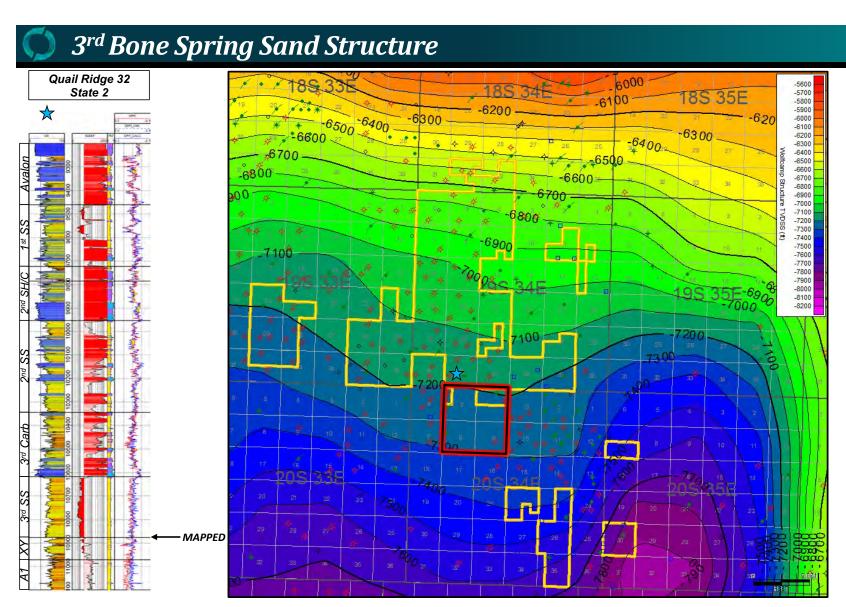




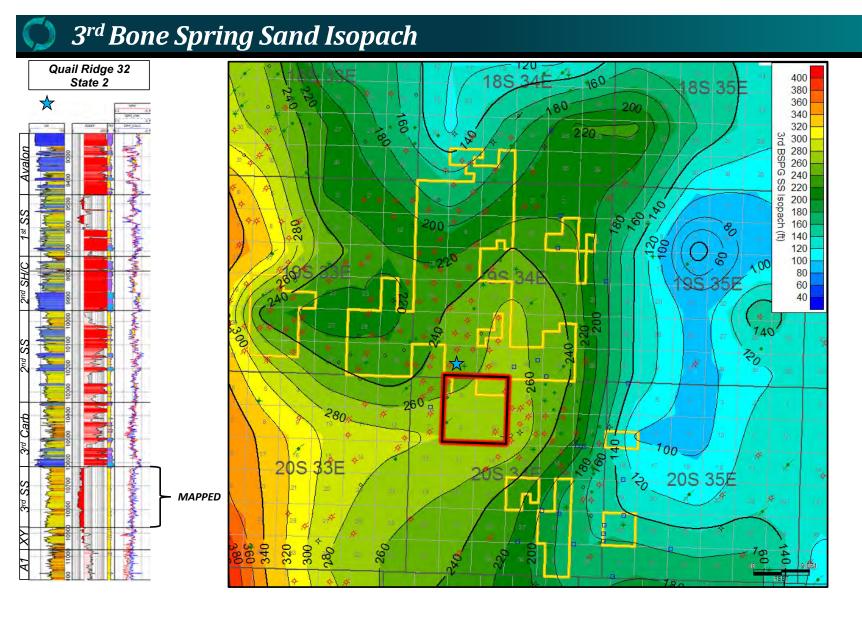
# 3<sup>rd</sup> Bone Spring Sand



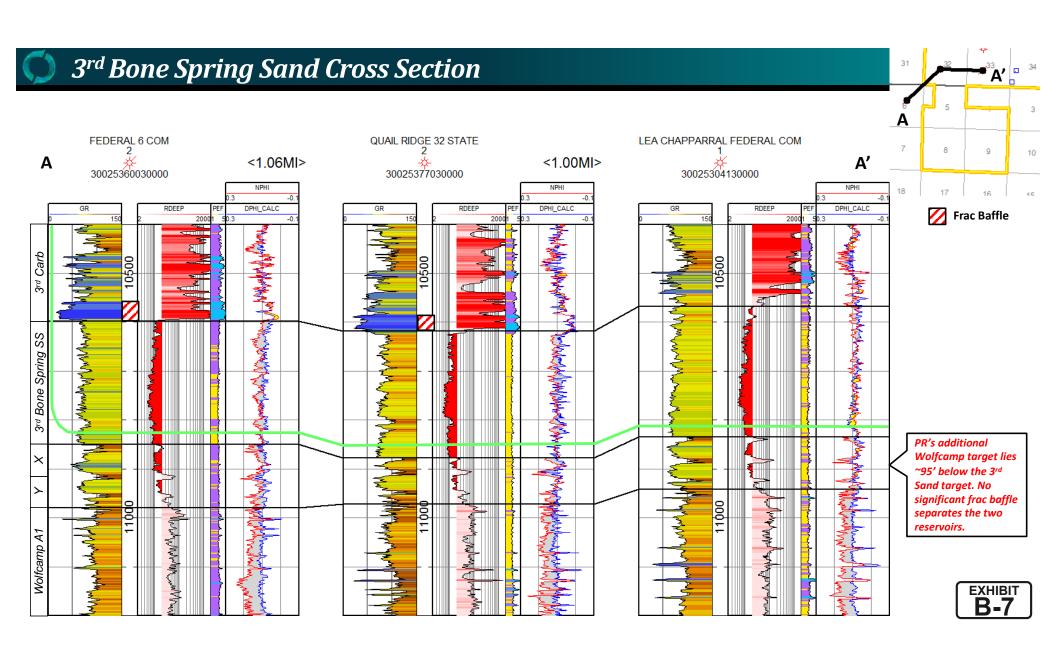
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B-5

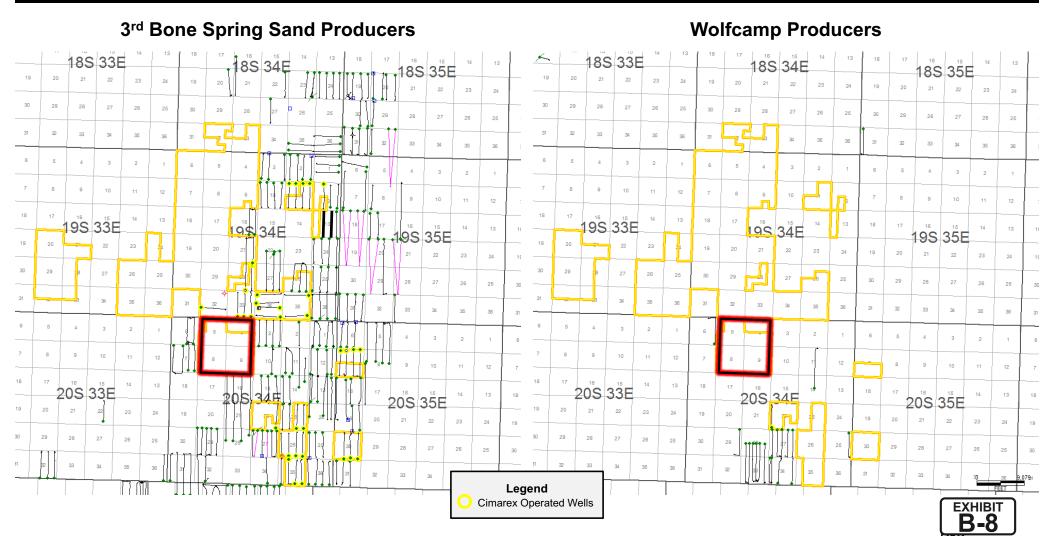


B-6



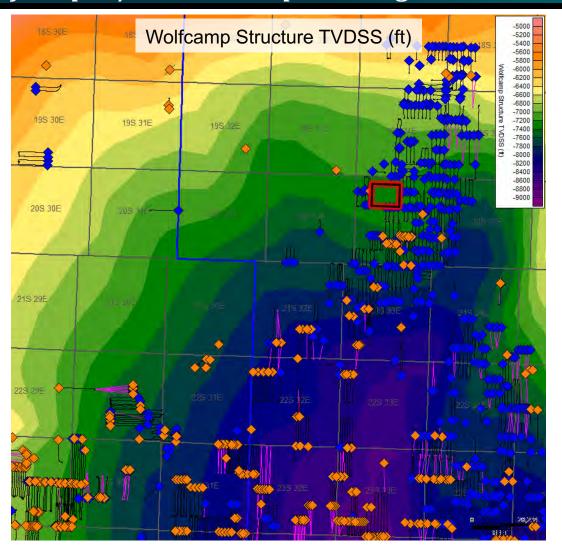


## 3<sup>rd</sup> Bone Spring Sand is Established Target



## O

## Co-Wolfcamp SS/3<sup>rd</sup> SS Development Begins Further South



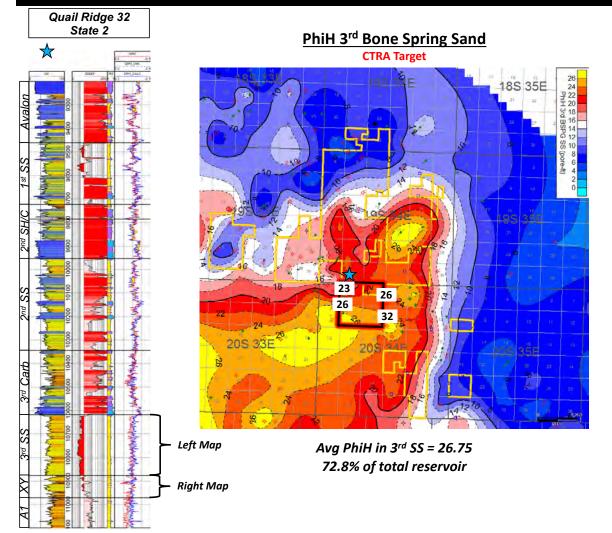
3<sup>rd</sup> Bone Spring Sand

Wolfcamp Sands

EXHIBIT **B-9** 

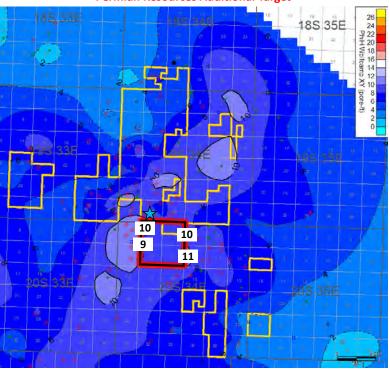
## O

## Comparing 3<sup>rd</sup> Sand to Wolfcamp Reservoir (SoPhiH)



#### **PhiH Wolfcamp X & Y Sands**

**Permian Resources Additional Target** 



Avg PhiH in WFMP XY = 10 27.2% of total reservoir

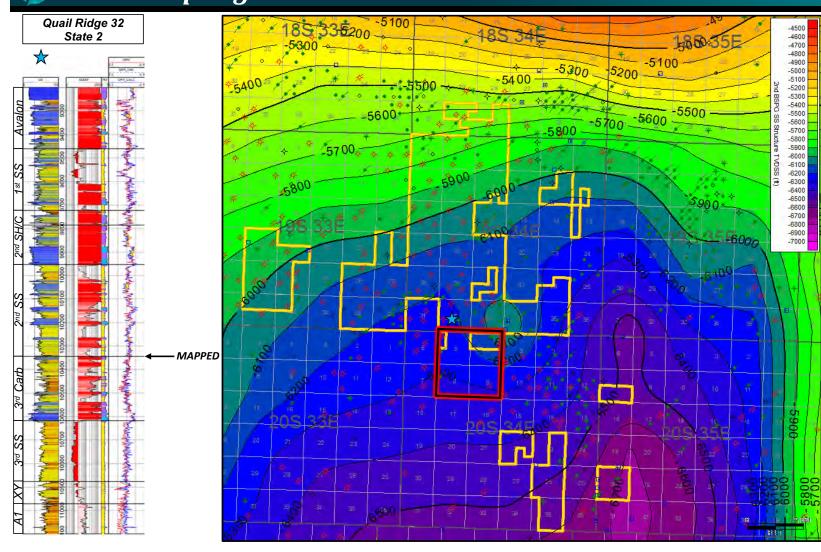
B-10

# 2<sup>nd</sup> Bone Spring Sand

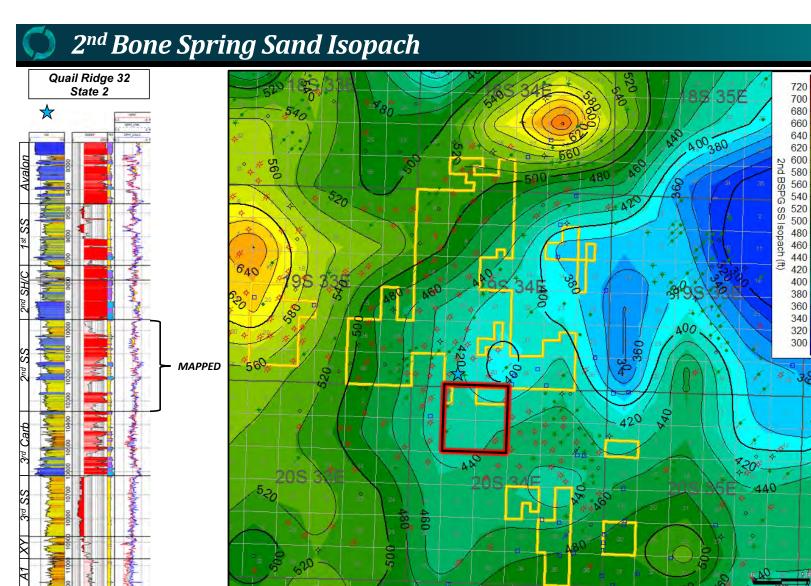




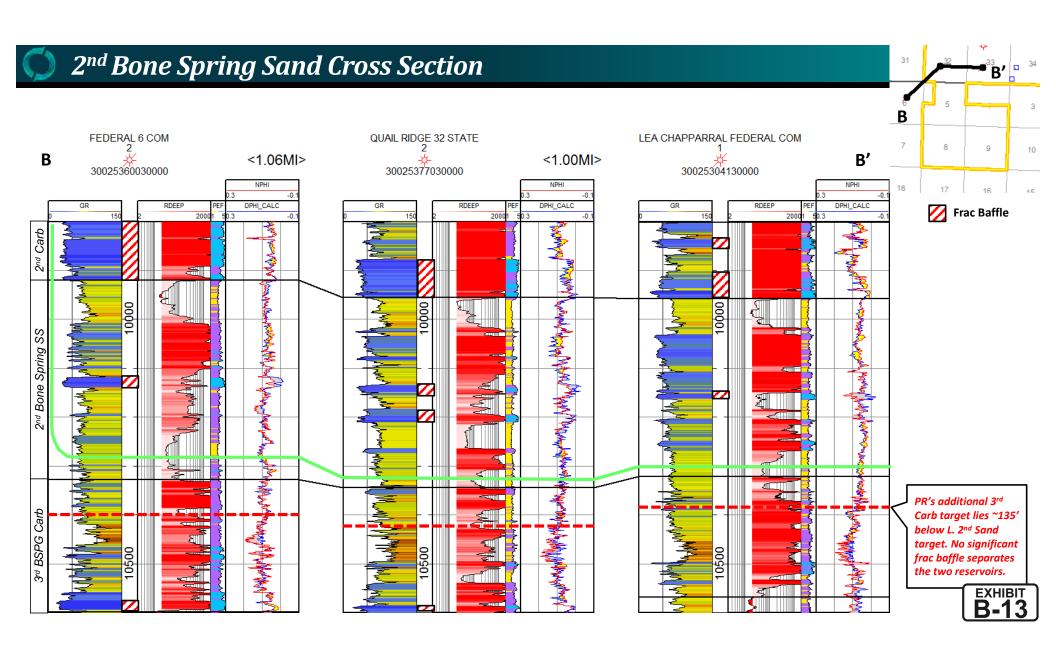
## 2<sup>nd</sup> Bone Spring Sand Structure







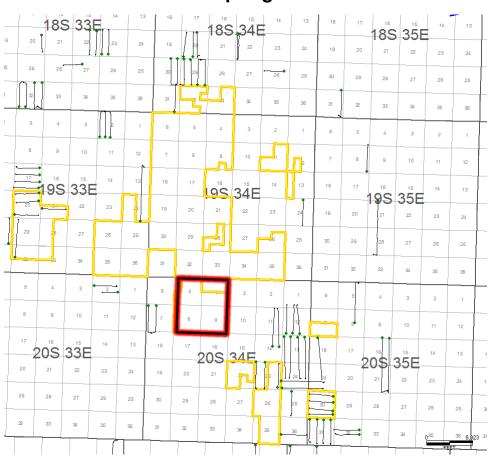




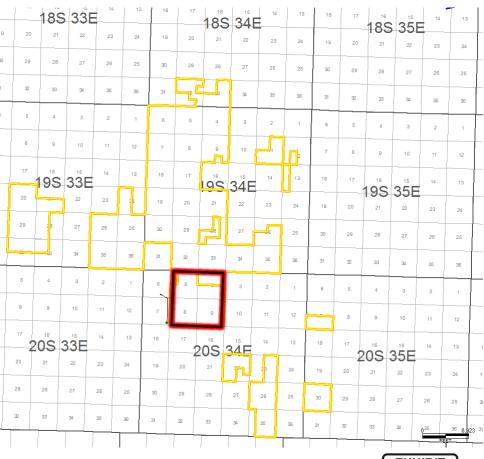


## 2<sup>nd</sup> Bone Spring Sand is Established Target

#### **Lower 2nd Bone Spring Sand Producers**



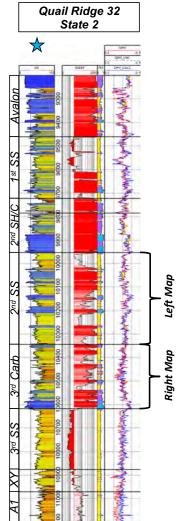
#### 3<sup>rd</sup> Bone Spring Carb Producers



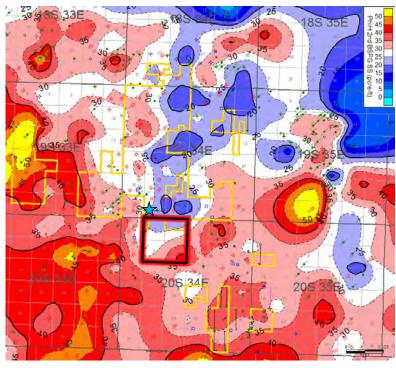
**B-14** 

## O

## PhiH L 2<sup>nd</sup> Sand vs. 3<sup>rd</sup> Carb



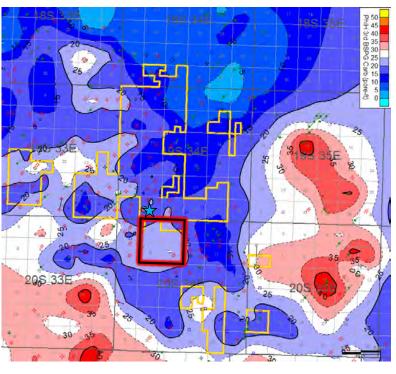
## PhiH 2<sup>nd</sup> Bone Spring Sand CTRA Target



Avg PhiH in 3<sup>rd</sup> SS = 30 60% of total reservoir

#### PhiH 3<sup>rd</sup> Bone Spring Carb

**Permian Resources Additional Target** 



Avg PhiH in WFMP XY = 20 40% of total reservoir

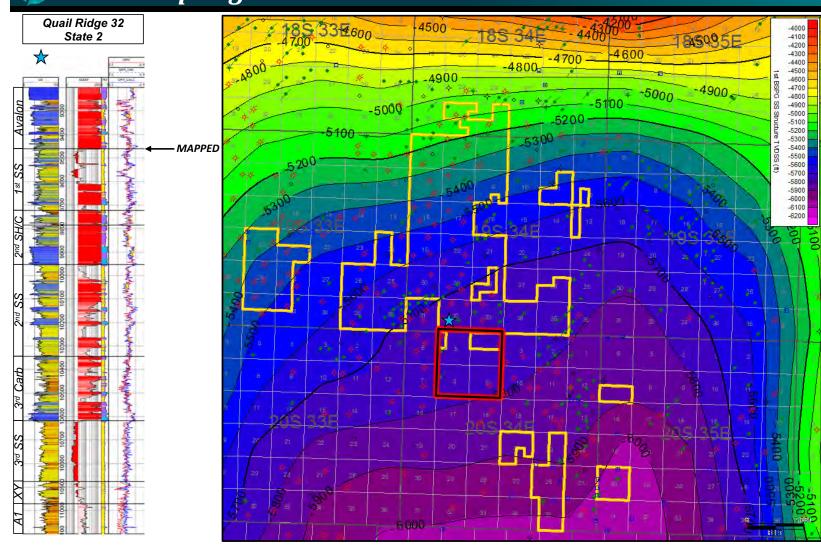


# 1st Bone Spring Sand

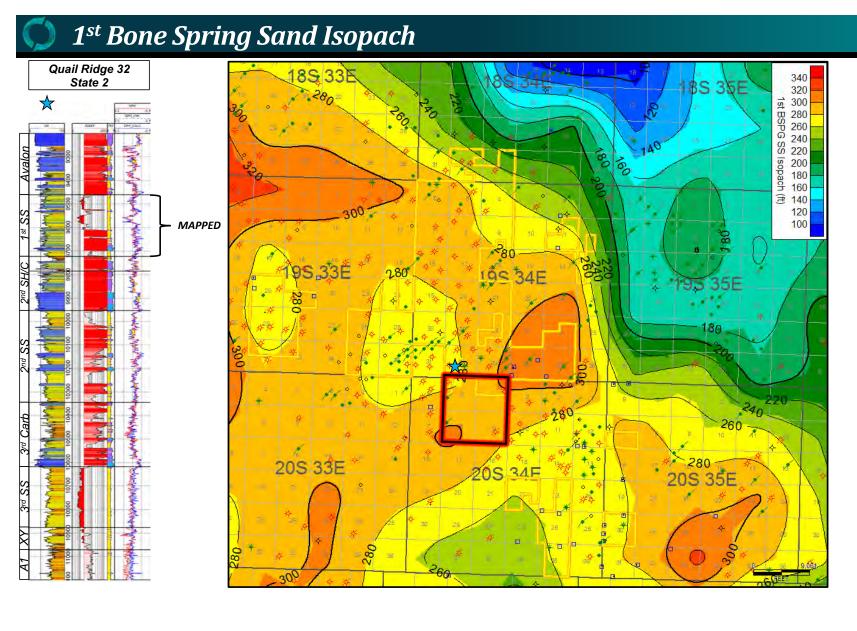




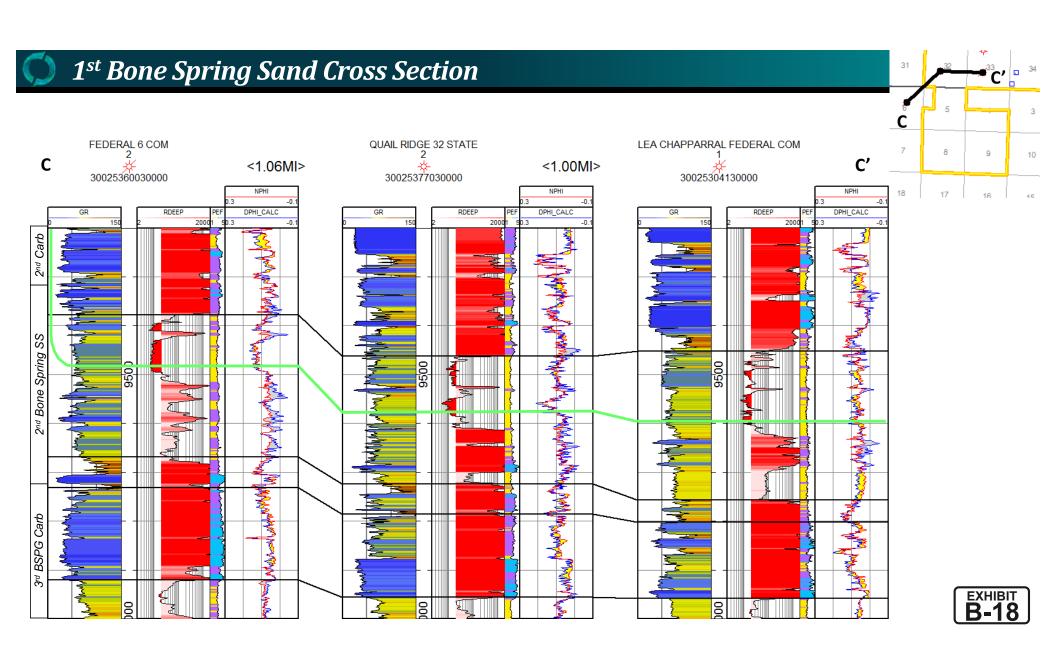
## 1<sup>st</sup> Bone Spring Sand Structure



**B-16** 

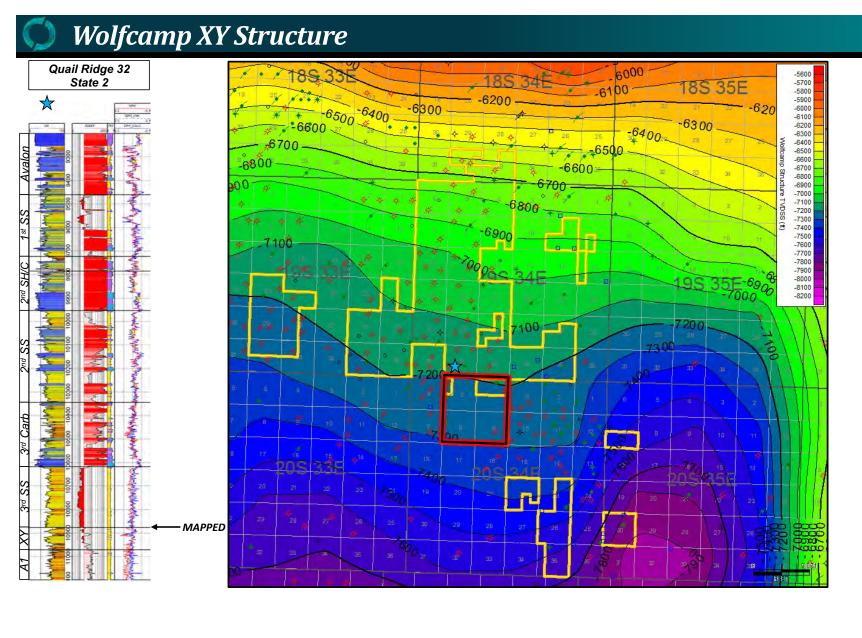


B-17

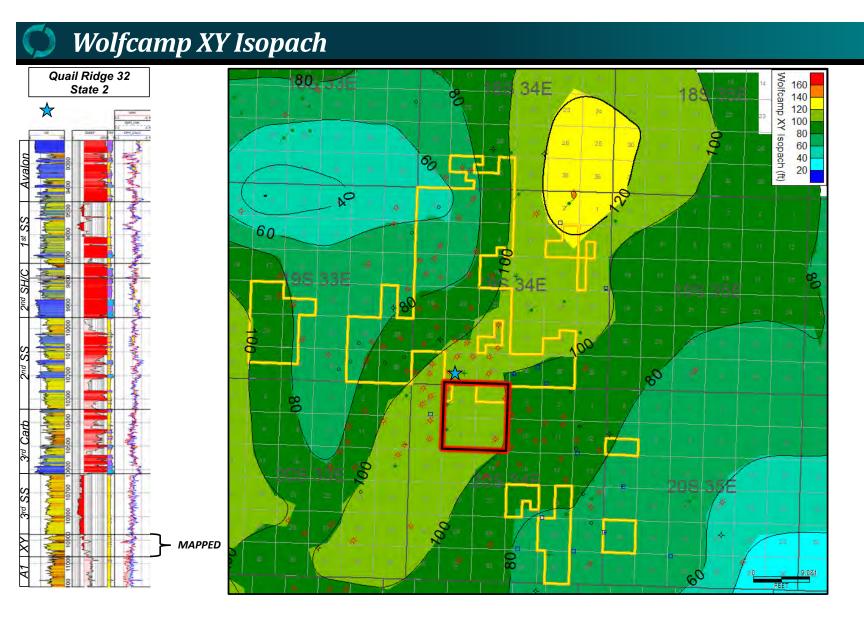


# Wolfcamp XY

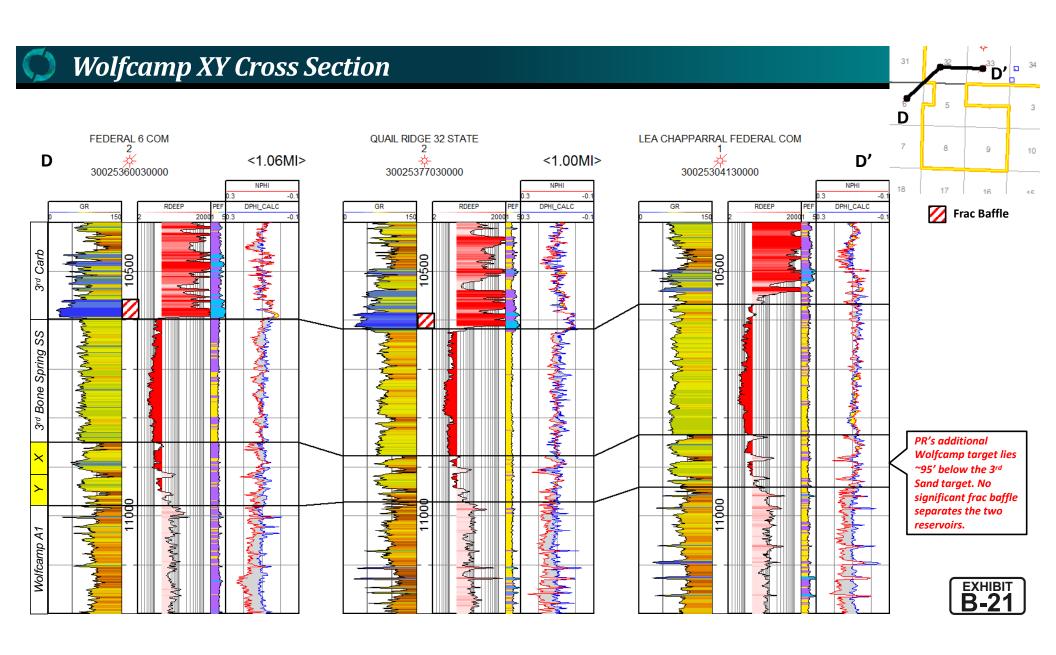




B-19

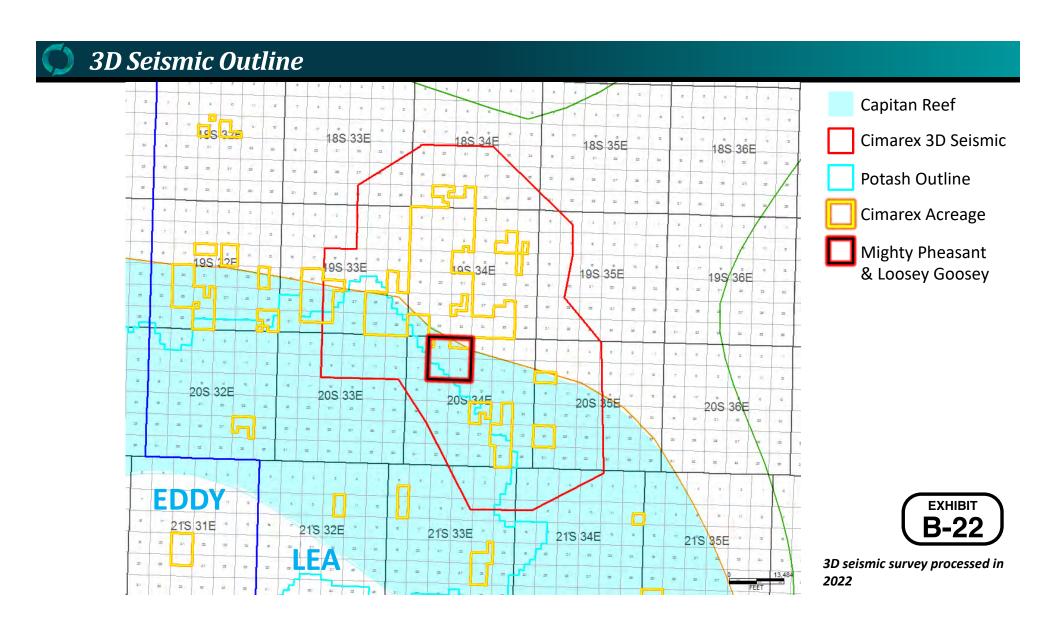






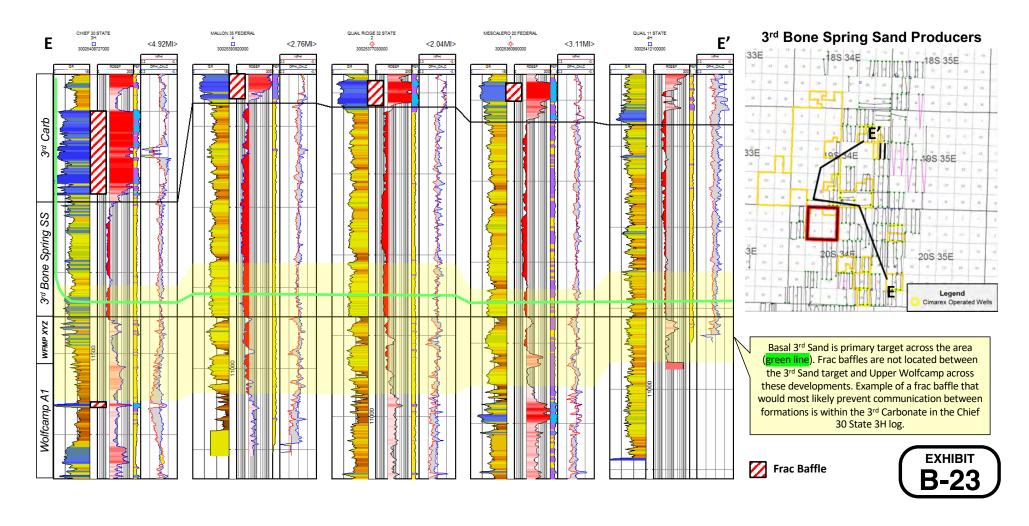
# No Frac Baffle Between Wolfcamp and 3<sup>rd</sup> Sand





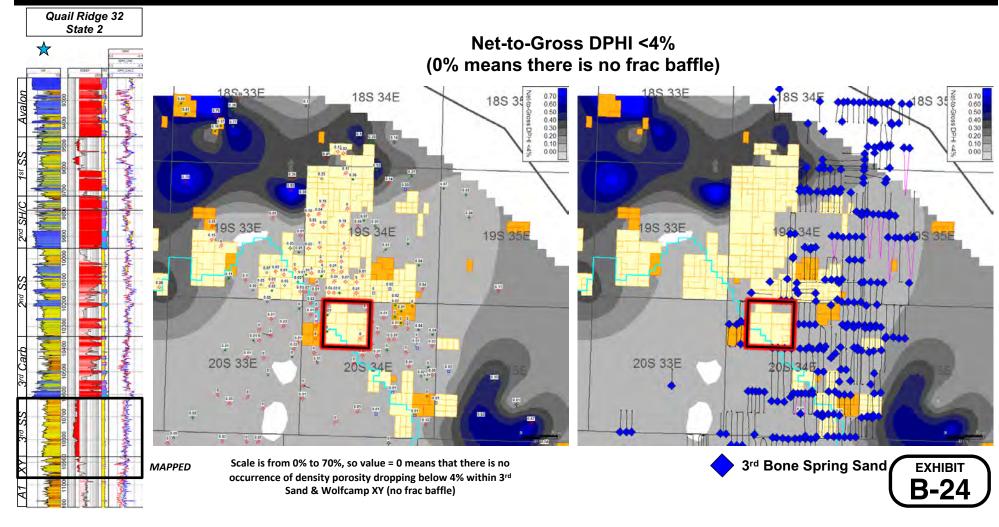
## C

## No Frac Baffle Present Between Wolfcamp & 3<sup>rd</sup> Sand at Offset 3<sup>rd</sup> Sand Developments





## No Frac Baffles Between BSPG & WFMP at Existing Production



#### **TAB 4**

Case Nos. 23452-23455

Exhibit C: Self-Affirmed Statement of Calvin Boyle, Facility Engineer Exhibit C-1: Mighty Pheasant - Loosey Goosey Development Plan

Exhibit C-2: Mighty Pheasant - Loosey Goosey Operations and Environmental

Overview

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

APPLICATIONS OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

> Case Nos. 23448 – 23451 (Mighty Pheasant; Bone Spring; Secs. 5 & 8)

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

> Case Nos. 23594 – 23597 (Mighty Pheasant; Wolfcamp; Secs. 5 & 8)

APPLICATIONS OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

> Case Nos. 23452 - 23455 (Loosey Goosey; Bone Spring; Secs. 4 & 9)

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

> Case Nos. 23598 – 23601 (Loosey Goosey; Wolfcamp; Secs. 4 & 9)

#### SELF-AFFIRMED STATEMENT OF CALVIN BOYLE

- 1. I am over the age of 18 and have the capacity to provide this Statement.
- 2. I graduated from the University of Oklahoma in 2016 with a Bachelor of Science degree in Petroleum Engineering. I received a Master of Business Administration from Oklahoma State University in 2018.



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- 3. I was employed by Haliburton Energy Services from June 2017 until March 2019, as a Technical Professional, responsible for designing and managing cementing programs for all of XTO Energy Inc.'s drilling rigs in the Mid-Continent.
- 4. I joined Cimarex Energy Co. ("Cimarex") in March 2019. Since October 1, 2021, when Cimarex merged with Cabot Oil & Gas Corporation to form Coterra Energy Inc. ("Coterra"), I have been an employee of Coterra.
- 5. I have been a Facility Engineer for Cimarex and then Cottera since April 2021. As the Facility Engineer, I am responsible for planning, designing, and managing production facilities operated by Cimarex. Coterra has charged me with ensuring that production facilities are designed and managed so as to minimize environmental impacts.
- 6. I manage construction budgets for production facilities and allocate capital to optimize production facilities. I have appended a copy of my resume as Attachment A to my Statement.
- 7. This Statement provides a description and overview of the facilities that Cimarex will implement in its development plan for the Mighty Pheasant Wells in Sections 5 and 8, Township 20 South, Range 34 East; and the Loosey Goosey Wells in Sections 4 and 9, Township 20 South, Range 34 East, covering 2,880 acres, more or less. (The 2,880 acres are referred to herein as the "Subject Lands" and the Development Plan for the Subject Lands is referred to herein as the "MP-LG Development Plan.").
- 8. I assisted in the formulation of Cimarex's plans to develop the hydrocarbons in the applications filed in the above-referenced Cases and am familiar with facilities that Cimarex is proposing in its applications as well as the AFEs associated with all of the wells that Cimarex is

proposing in these cases and the AFEs associated with the additional wells that Cimarex is planning to drill on the Subject Lands.

#### Exhibit C-1: Mighty Pheasant - Loosey Goosey Development Plan.

- 9. As shown on Exhibit C-1, Cimarex will develop the Subject Lands with only 33.9 acres of disturbance to the surface, consisting of 2.33 acres of roads, 25.25 acres for pads, and 6.31 acres for a single battery. Thus, the results in a minimal 1.17% disturbance of the Subject Lands that substantially minimizes the environmental impact of the plan of development.
- 10. After the four drill pads and bulk gathering lines are installed, Cimarex will rotate back to these existing drill pads for all activities and operations within the MP-LG Development Plan, thus requiring no further surface disturbance to the lands. By minimizing dirt work in this way, Cimarex will reduce potential air pollution and preserve both native vegetation and natural habitat.
- 11. Cimarex will use a single Battery for all of the 27 to 34 wells that Cimarex intends to drill as part of the MP-LG Development Plan. A single battery eliminates two additional batteries that would otherwise be required, thereby eliminating additional surface disturbances and high-risk emissions devices.
- 12. Cimarex will develop the Subject Lands utilizing best-in-class gas capture technology and operations. Cimarex has already initiated this approach by securing proposals for oil, water, and gas takeaway using such technology and by submitting load requests to power surface equipment to develop the acreage. Cimarex has implemented an operations policy that encompasses zero (0) routine flaring and the use of tankless facilities that offer superior capture rates of low-pressure gas (>90% low pressure capture) for new developments. Cimarex will utilize these policies in the development plan.

#### Exhibit C-2:

#### Mighty Pheasant - Loosey Goosey Operations and Environmental Overview

- Cimarex will construct a single tankless facility for the MP-LG Development Plan. Cimarex will spend an additional \$610,000 to lower the emission's risk of the facility. Cimarex's tankless facility utilizes surge vessels rather than tanks. In doing so, Cimarex removes all high-risk emissions devices from the facility. Cimarex will not utilize a high-pressure flare unless H<sub>2</sub>S is present which allows Cimarex to minimize flaring. Cimarex will also install redundant vapor recovery units to increase low pressure gas capture and minimize flaring.
- 14. Cimarex will spend an additional \$255,000 to lower the spill risk of the facility. Cimarex will install lined containment around all equipment and pumps. Berm switches will be installed inside the containment to minimize a spill if one should occur. Cimarex will install stainless steel piping in high spill risk areas which significantly reduces the likelihood of a spill occurring. Cimarex will install pump seal leak detection to minimize the likelihood of a spill off of the water transfer pumps.
- 15. The Exhibits to this Self-Affirmed Statement were prepared by me or compiled from Cimarex's company business records under my supervision and/or approval.
  - 16. The foregoing is correct and complete to the best of my knowledge and belief.

I understand that this Self-Affirmed Statement will be used as written testimony before the Division in Case Nos. 23448-23455 and 23594-23601 and affirm that my testimony herein is true and correct, to the best of my knowledge and belief and made under penalty of perjury under the laws of the State of New Mexico.

Calvin Thomas Boyle

8-2-23

**Date Signed** 

#### **Calvin Thomas Boyle**

6001 Deauville Blvd. Suite 300N Midland, TX 79706 | (918)-891-1095 | calvin.boyle@coterra.com

#### Education

**Master of Business Administration** 

Concentration: Energy Business
Oklahoma State University – Stillwater, OK

Graduated August 2018; GPA: 4.00

#### **Bachelor of Science in Petroleum Engineering**

*University of Oklahoma – Norman, OK* Graduated May 2016; GPA: 3.71

#### **Work Experience**

#### Coterra Energy (Formerly Cimarex Energy) – Facility Engineer

*Midland, TX (April 2021-present)* 

- Plan, supervise, and design capital projects to minimize environmental impact
- Efficiently allocate capital to optimize production facilities
- Manage \$74MM capital construction budget
- Implement Vapor Recovery Unit life plan to effectively decrease emissions
- Coordinate with field personnel and executive management for successful project execution
- Software proficiencies: Promax, ARIES, Carte, XSPOC, Spotfire, Google Earth, and various

#### Coterra Energy (Formerly Cimarex Energy) – Production Engineer

Midland, TX (March 2020-April 2021)

- Monitor production of more than 200 oil and gas wells in Lea and Eddy County New Mexico (Gas Lift, ESP, flowing, and pumping wells)
- Proposed, oversaw, and executed the divestiture of a 30 well asset
- Design and implement workovers (Rod Lift, ESP, Plunger, Acid Stimulation)
- Implemented the XSPOC system which decreased downtime by 12%

#### Coterra Energy (Formerly Cimarex Energy) – Field Engineer

Jal, NM (March 2019 to March 2020)

- Managed production of 31 oil wells (Gas lift, pumping, plunger, and flowing)
- Optimized the wells to increase production and decrease LOE
- Monitored flare pilot and VRUs to prevent methane emissions from flares and tanks
- Maintained production facilities

#### Halliburton Energy Services – Technical Professional, Cement

El Reno, OK (June 2017 to March 2019)

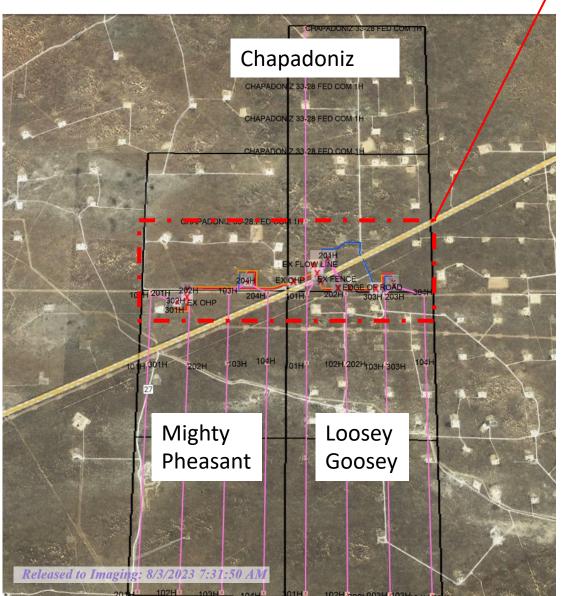
- Manage and design the cementing program for all of XTO's drilling rigs in the Mid-Continent; designing the cement programs in order to meet or exceed all of the XTO's specifications on each well drilled
- Design cement slurries for thickening time, compressive strength, rheological properties, and fluid loss; proactively tailoring cement slurries to achieve desired properties and alleviate risk for both my customers and Halliburton
- Run foam cement jobs on location; monitoring multiple variables and pumping nitrogen to ensure a successful job





## Mighty Pheasant Loosey Goosey Development Plan

1 mile





Single Battery develops – 27 to 34 planned wells

- Oil water gas power ROW connects 4 drilling pads with on pad separation to Battery
- Single battery eliminates 2 additional batteries worth of disturbance and high-risk emissions devices.
- Cimarex permits 0 routine flaring, and our design has >=90% low pressure vapor capture
- Roads (2.33) acres, pads (25.25 acres) and battery (6.31 acres) create ~33.9 acres of disturbance allowing for full development of ~2880 acres, 1.17% disturbance.
- Pipelines are onetime construction; follow-up wells will use existing gathering off pad which is installed the first time a well is drilled off a drill pad. All future wells create no new disturbance off drill pads minimizing environmental impact

## Operations and Environmental Overview



## Tankless Battery Design

- Central battery utilizing surge vessels
- Satellite separators utilized to eliminate future ground disturbance

### **Emissions Reduction**

- 0 high risk emissions devices
- Removal of high-pressure flare (Shut wells in during high line pressure events)
- Redundant vapor recovery units to increase low-pressure gas capture and reduce flaring

## **Spill Mitigation**

- Containment around all equipment and pumps
- Stainless steel piping in high-risk areas
- Transfer pump seal leak detection
- Berm switches in containments





## **TAB 5**

Case Nos. 23452-23455

Exhibit D:	Self-Affirmed Statement of Eddie Behm, Petroleum Engineer	
	Exhibit D-1:	
	Exhibit D-2:	Cimarex's Overall Production in Lea County
	Exhibit D-3:	Map of 3 <sup>rd</sup> Bone Spring Sand Producers
	Exhibit D-4:	3 <sup>rd</sup> Sand Well Count by Landing and Operators
	Exhibit D-5:	Black and Tan 3 <sup>rd</sup> Sand Composite Forecast 6 wells
		(Before WC completion)
	Exhibit D-6:	Black and Tan 3 <sup>rd</sup> Sand Composite Forecast 6 Wells Post
		Wolfcamp Frac
	Exhibit D-7:	Black and Tan Wolfcamp Composite Forecast 6 wells
	Exhibit D-8:	Black and Tan Wolfcamp Composite Forecast 5 wells
		Lessons learned from Black & Tan Development
	Exhibit D-10:	Diagram of Staggered Landing Wolfcamp 3rd SS Vs. 3rd SS Flat
		Black and Tan Analog comparison to MP/LG
	Exhibit D-12:	Landing Zone Matters; Five Years Ago, Cimarex's Perry Test
		Confirmed 3 <sup>rd</sup> SS Landing as Best Target
	Exhibit D-13:	Vrena Frac Test
	Exhibit D-13:	Dataset Identifying all Wells in Area of Interest
	Exhibit D-14:	Production Projections: 1280 Scale
	Exhibit D-15:	Average Cumulations of Oil
	Exhibit D-16:	Projected Oil Rate: 1280 Scale
	Exhibit D-17:	Batman WH vs. EH
	Exhibit D-18:	Capital Plan Comparison
	Exhibit D-19:	Cimarex Majority Working Interest
	Exhibit D-20:	Comparison of Development Plans
		PV10 Comparison: Mighty Pheasant vs. Joker
	Exhibit D-22:	PV10 Comparison: Loosey Goosey vs. Bane
		Ownership Rations and Depth Severances
	Exhibit D-24:	API List of Wells by Formation

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

APPLICATIONS OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case Nos. 23448 – 23451 (Mighty Pheasant; Bone Spring; Secs. 5 & 8)

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

Case Nos. 23594 – 23597 (Mighty Pheasant; Wolfcamp; Secs. 5 & 8)

APPLICATIONS OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

> Case Nos. 23452 – 23455 (Loosey Goosey; Bone Spring; Secs. 4 & 9)

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

Case Nos. 23598 – 23601 (Loosey Goosey; Wolfcamp; Secs. 4 & 9)

#### SELF-AFFIRMED STATEMENT OF EDDIE BEHM

- 1. I am over the age of 18 and have the capacity to provide this Statement.
- 2. For the past six years, I have been employed as a Production Engineer and Reservoir Engineer in the Delaware Basin for Cimarex Energy Co. ("Cimarex") and then Coterra Energy Inc ("Coterra") as of October 1, 2021, when Cimarex merged with Cabot Oil & Gas



Corporation to form Coterra. My primary focus has been the development of the Bone Spring and Wolfcamp formations in Lea County, New Mexico.

- 3. I graduated from the University of Tulsa in 2011 with a Bachelor of Science degree in Petroleum Engineering. I was employed by Occidental Petroleum Corporation and California Resources Corporation from 2011 to 2017, prior to working for Cimarex.
- 4. I have previously testified before the Oil Conservation Division ("Division") as an expert in Petroleum Engineering and my credentials have been accepted of record by the Division.
- 5. I provided petroleum engineering and petroleum reservoir expertise with respect to the formulation of Cimarex's plans to develop the Loosey Goosey Wells in Sections 4 and 9 and the Mighty Pheasant Wells in Sections 5 and 8, Township 20 South, Range 34 East, Township 20 South, Range 34 East, covering 2,880 acres, more or less. (The 2,880 acres are referred to herein as the "Subject Lands" and Cimarex's Development Plan for the Subject Lands is referred to herein as the "Goosey-Pheasant Plan.")
- 6. I am also thoroughly familiar with the competing applications filed by Read & Stevens, Inc. in Case Nos. 23508-23523 for its Bane Wells proposed for Sections 4 and 9 and its Joker Wells proposed for Section 5 and 8 (collectively referred to as the "Bane-Joker Plan"). Read & Stevens designated Permian Resources Operating, LLC as the Operator for its proposed development. (Read & Stevens, Inc. and Permian Resources Operating, LLC are collectively referred to herein as "Permian Resources.")
- 7. This Statement compares Cimarex's Goosey-Pheasant Plan to Permian Resources' Bane-Joker Plan to be used in the hearing before the Division on these completing applications.
- 8. Based on my educational background, my experience as a Petroleum Engineer in the area surrounding the competing plans that contain the same geological and reservoir

characteristics (referred to herein as the "Area of Interest" and as the "AOI"), production data from wells completed in the 3<sup>rd</sup> Bone Spring Sand and in the Upper Wolfcamp in the Area of Interest, Recovery factors within the subject lands, Stack Stagger results throughout Lea County in various geologic settings, data from the Hydraulic Fracturing Test Site 2 ("HFTS2"), and the costs of the competing plans, it is my opinion regarding the development to the Subject Lands as an expert in the field of Petroleum Engineering that:

- The 3<sup>rd</sup> Bone Spring Sand ("3<sup>rd</sup> Sand") is the established single bench target;
- The optimal spacing for the 3<sup>rd</sup> Sand is four (4) laterals per Section;
- The spacing proposed by Permian Resources of eight (8) laterals per Section in the 3<sup>rd</sup> Sand is overly dense and wasteful since it will not result in an increase production to offset the additional \$166 Million in capital expenditures incurred;
- Co-development of the Upper Wolfcamp in association with the development of the 3<sup>rd</sup> Sand will not result in any significant increase in the Estimated Ultimate Recovery ("EUR") of hydrocarbons and may negatively impact EUR;
- Due to the fact that the working interest owners under Permian Resources' plan will be burdened with an additional \$270 Million in costs that will result in little, if any, disparities in EUR, all working interest owners will enjoy a substantial benefit if Cimarex's Goosey-Pheasant Plan is implemented, even working interest owners who own a greater interest in the Wolfcamp Formation than the Bone Spring Formation; and
- Conversely, all working interest owners of the Subject Lands will suffer considerable reduction in their return on investment if Permian Resources' Joker-Bane Plan is implemented, even working interest owners who own a greater interest in the Wolfcamp Formation than the Bone Spring Formation
- 9. The information on which I am basing my opinions are the type of information that an expert in Petroleum Engineering normally relies upon in formulating opinions related to these subject matters.

#### Exhibits D-1 and D-2 Cimarex is a Play Leader in Lea County

- 10. **Exhibits D-1 and D-2** show the top fifteen (15) operators in Lea County from 2018-2022, based on the Average First 12 Month Cum BOE per 1000 feet of laterals (Ex. D-1) and based on Average First 12 Month Cum Oil BBL per 1000 feet of laterals (Ex. D-2), as compiled by Enverus, Inc.
- 11. **Exhibit D-1** shows that from 2018-2022 Coterra/Cimarex averaged 50,749 BOE for the first twelve months for each 1,000 feet of laterals over 81 wells, while Permian Resources averaged just 30,059 BOE for that same period for 94 wells. Coterra/Cimarex is one of the top two operators in Lea County under this metric.
- 12. **Exhibit D-2** shows that from 2018-2022, Coterra/Cimarex averaged 34,633 barrels of oil for the first twelve months per 1,000 feet of laterals over 81 wells, while Permian Resources averages just 23,625 BOE for that same period for 94 wells. Coterra/Cimerax is one of the top two operators in Lea County under this metric.
- 13. While these results are dependent upon the quality of the producing formations, Cimarex's superior results are also the result of applying a similar process using barrier and flow unit identification to inform landings, full section development recovery from densely drilled projects to inform well count, and understanding how oil is distributed within the flow units to most efficiently target all the economic barrels in each development. The most important driver of our success in Lea County over this time period has been driven not only by improved lateral spacing but by recognizing whether a flat single landing or stagger is most appropriate for the flow unit or units being targeted. We target the Leonard, Avalon, 2<sup>nd</sup> Shale, Upper 2<sup>nd</sup> Sand, lower 2<sup>nd</sup> Sand, Harkey, 3<sup>rd</sup> Sand, Wolfcamp sands, Wolfcamp A, and Wolfcamp Lower A/B and over spacing

laterally or vertically risks performance of wells landed in formations above and below as well as within the same bench.

- 14. Recognizing when a single landing is needed and a stagger is warranted is a fundamental difference in the plans proposed. Cimarex moved from 14 well per section testing staggers as vertically tight as 40 feet in 2017 at Hallertau (Section 5, Township 26 South, Range 32 East), which targeted the X and Y as if they were separate flow units with a third landing in the A 150 feet below despite a lack of barriers. Lack of vertical separation in addition to over spacing was a common mistake 6 years ago which results quickly made obvious to operators who reduced well count and increased vertical separation. Cimarex moved from a 40 foot stagger to a single clastic landing and now targets the A at 200 to 250' of vertical separation at places like the Red Hills 32-5 and Red Hills Unit 33-4 Wells (Section 32, Township 24 South, Range 32 East and Section 33, Township 25 South, Range 32 East) where both benches exist at 9 wells per section or as a single clastic landing at the Dos Equis 12-13 Wells (Sections 12 and 13, Township 24 South, Range 32 East), 6 wells per section where carbonate has made the Middle A non-prospective. The 3<sup>rd</sup> Bone Spring Sand and Wolfcamp stagger combined with 8 wells per 1280 acres, the well count proposed by Permian, looks more like a 2018 test in both well count and vertical drainage assumptions than a 2023 development plan informed by studies like HFTS2 and all the production results from significant development within Lea County.
- 15. South Lea county is complex across the entire area with flow units changing drastically over several miles. Cimarex's aggregate experience in Lea County is important because it is actually harder to optimally develop properties in the Southern part of Lea County, where most of Cimarex's Lea county activity has been the last 5 years. This is due to the fact that there are more landing zones with unclear boundaries due to multiple non laterally continuous thin carbonates and

much more variation in rock quality within individual landing zones due to increased distance from sediment source. The Subject Lands are the closest thing to conventional formations in Lea County and Cimarex's experience in the County and all the lessons learned in tighter rock on spacing and vertical separation will be even more important in a region of higher porosity, higher vertical continuity, higher permeability, and more defined frac baffles and barriers, especially when paired with the ability to complete wells with higher net fracture pressure (bigger frac height/half-length at same surface pressure).

# Exhibit D-3 3rd Bone Spring Sand is the Established Single Bench Target at 4 Wells Per Section Within the Area of Interest

- 16. **Exhibit D-3** consists of a map of approximately 42,650 acres in the AOI that includes the Subject Lands. This Exhibit compares the development of the 3<sup>rd</sup> Bone Spring Sand (left AOI map) and the Wolfcamp (right AOI map). The laterals of the Cimarex operated wells are highlighted in yellow. The lands controlled by Cimarex are marked by yellow boundary lines.
- 17. In the AOI, there are little or no indications of any major geomechanical changes/frac baffles in between the 3<sup>rd</sup> Sand target and Wolfcamp Sands that are the target of Permian Resources' proposed Wolfcamp wells, indicating that these two intervals are most likely one shared reservoir tank.
- 18. Cimarex has substantial experience in developing hydrocarbons in the AOI based on the fact that it has executed 36 wells within the AOI, 15% of all wells. Moreover, we were an early lateral play delineator within the AOI whose results helped drive significant lateral investment in the area.

- 19. This Exhibit, and the data upon which it is based, coupled with Cimarex's experience within the AOI, supports my opinion that the reservoir of hydrocarbons in the AOI is adequately captured with a single landing within the flow unit for the following reasons.
- 20. The map on the left of **Exhibit D-3**, "3<sup>rd</sup> Bone Spring Sand Producers" shows significant single bench development of the 3<sup>rd</sup> Sand at four (4) wells per section spacing (WPS).
- 21. The map on the right of **Exhibit D-3**, "Wolfcamp Producers," shows that the Wolfcamp Formation is not primarily targeted in conjunction with 3<sup>rd</sup> Bone Spring Sand development. Furthermore, as demonstrated by the map on the right, "Wolfcamp Producers," where the Wolfcamp Formation is developed, it is predominantly drilled and developed without the 3<sup>rd</sup> Sand also being developed.
- 22. Thus, the history of development in the AOI supports my opinion that the reservoir is adequately captured with a single landing in the 3<sup>rd</sup> Sand within the flow unit.

# Exhibit D-4 Well Count by Landing and Operators Proves that the 3<sup>rd</sup> Sand is the Consensus Landing

- 23. **Exhibit D-4** contains a table that shows the total number of 3<sup>rd</sup> Sand wells and Wolfcamp wells drilled in the AOI by year and by operator.
- 24. Ninety-seven percent (97%) of wells drilled in the AOI, that is 236 out of 244 wells, are executed as single bench, non-staggered developments. Of the 22 Wolfcamp Wells drilled in the AOI, 14 were drilled as stand along wells, *i.e.*, wells without a 3<sup>rd</sup> Sand Well, 5 were drilled as a separate bench, and only 3 were drilled in stacks with 3<sup>rd</sup> Sand Wells.

- 25. This well-established history of development, involving more than \$2 Billion of CapEx<sup>1</sup> by fifteen (15) different operators, proves that it is not just Cimarex's idiosyncratic opinion that the best development plan for the Subject Lands requires a single landing target but rather that this is the consensus shared by all 15 companies active within the AOI, a consensus directly supported by the production data.
- 26. Furthermore, the fact that 222 wells out of 244 total wells within the AOI land in the 3<sup>rd</sup> Sand supports Cimarex's assessment of the 3<sup>rd</sup> Sand as the optimum landing.

# Exhibits D-5 and D-6 Wine Rack of the Black and Tan Wells and Reference Map Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 wells (Before WC completion)

- 27. There is only one development plan within the entire AOI similar to the plan Permian Resources is proposing for its Joker and Bane Wells, the Black and Tan Wells drilled in Section 27, Township 20 South, Range 35 East, located just 2 miles south of the Subject Lands. *See* Exhibit D-3. The development of the Black and Tan Wells was based on similar well drainage assumptions that utilize outdated completion height assumptions that Permian Resources appears to be relying upon.
- 28. Those assumptions include that there are separate benches which a single landing does not access, that in bench spacing drives performance, and that the vertical separation of a 100-feet would not have much impact on production.
- 29. The development of the Black and Tan Wells in Section 27 is best analog to Permian Resources' Joker and Bane Development Plan and is predictive of the likely outcome of Permian Resources' proposal to develop the 3<sup>rd</sup> Sand and the Wolfcamp as if they are separate and

<sup>&</sup>lt;sup>1</sup> Assuming that the average cost of the 244 wells was \$8.2MM, the CapEx for all of these wells exceeds \$2 Billion.

equal targets. A summary of the production results is set forth in **Exhibit D-10** below. These results demonstrate substantial underproduction and waste that occurred as a result of the development of the Black and Tan Wells, results that would likely be replicated under Permian Resources' Joker and Bane Development Plan, which is based on the same erroneous underlying assumptions that doomed the Wolfcamp development of Section 27 with the Black and Tan Wells. Cimarex's MG-LG Development Plan would avoid such an outcome.

- 30. **Exhibit D-5** shows the winerack view of the Black and Tan Wells with a reference map. **Exhibit D-6** shows the actual aggregate production from the six 3<sup>rd</sup> Sand Wells, through May 1, 2019, before the five Wolfcamp Wells were fraced.
- 31. Exhibit D-6 also shows the Forecast as of May 1, 2019, for the future aggregate well performance of the six 3<sup>rd</sup> Sand Wells, <u>prior to</u> the underlying Wolfcamp development. Significant reserves (that of 2.5MM barrels of oil) and rates (that being 3356 BOPD IP30) were accessed by these 1-mile wells supporting 3<sup>rd</sup> Sand as a proven landing for optimal production.
- 32. We calculate Recovery Factor as within 1% of slickwater 4 well per section developments despite the drilling of 2 additional wells and would execute this section at 4 wells per section and expect similar results.

### Exhibit D-7 Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 Wells Post Wolfcamp Frac

33. This Slide shows the Forecast as of May 1, 2023, for the future aggregate well performance of 3<sup>rd</sup> Bone Spring Sand wells <u>after</u> underlying Wolfcamp development. Unfavorable results included elevated water cut, rapid Gas-to-Oil Ratio Incline, and steep oil decline, all of which are signatures of interference between the five Wolfcamp wells drilled below these six 3<sup>rd</sup> Sand wells. After the Wolfcamp wells were drilled and produced, overall reserves appear to have

fallen to 1.63 MM barrels of oil with a steep decline profile. These facts prove the degradation a 2<sup>nd</sup> landing causes within the AOI on the 3<sup>rd</sup> Bone Spring Sand.

### Exhibit D-8 Black and Tan Wolfcamp Composite Forecast 5 wells

34. This plot shows the aggregate performance and forecast for the five Wolfcamp wells completed below the six 3<sup>rd</sup> Sand wells shown on exhibits **D-5**, **D-6** and **D-7**. Data clearly shows that vertical interference occurs in staggered developments, causing these 5 wells to add only 885MBO oil reserves and 500 BOPD IP in the aggregate. Elevated water cut and rapid GOR incline are evidence of interference with 3<sup>rd</sup> sand wells above.

### Exhibit D-9 Lessons Learned from the Black and Tan Development

that only a negligible rate and a negligible amount of EUR were detectible from drilling the five extra, not to mention expensive, Wolfcamp wells. It is noteworthy and significant how little benefit the five wells added and how much they negatively impacted 3<sup>rd</sup> sand production. The aggregate rate change is so small it is essentially zero (0) which does not support or justify as effective capital stewardship the drilling of the 8 additional \$11MM dollar wells proposed by Permian Resources. Table 1.1 shows the pore space distribution, 3<sup>rd</sup> Sand has 268% more PHIH than the upper Wolfcamp and is clearly the predominant contributing reservoir. The hypothesis that landing in 3<sup>rd</sup> Sand with 268% more porosity and height combined with better flow properties is the best way to access all the bbls becomes unarguable with production data from Black And Tan where the addition of Wolfcamp landings added no reserves and only negatively impacted the 3<sup>rd</sup> Sand raising aggregate section OpEx. The lesson learned from this data is that drilling into the Upper Wolfcamp itself is financially wasteful and jeopardizes optimal 3<sup>rd</sup> Sand production. A setback

from  $3^{rd}$  sand is in the best interest of efficient low risk recovery of the area reserves in this single landing target.

### Exhibit D-10 Diagram of Staggered Landing Wolfcamp 3<sup>rd</sup> SS Vs. 3<sup>rd</sup> SS Flat

This exhibit shows what Cimarex believes happened in the Black and Tan analog 36. example which reflects the nature of Permian Resources' proposal and therefore Permian's likely outcome. The Majority of Stimulated Rock Volume accessed by 3<sup>rd</sup> Sand well's landed flat must be very similar to the Stimulated rock volume accessed by staggered Wolfcamp and 3<sup>rd</sup> landings. If this were not true, the sum of Wolfcamp and 3<sup>rd</sup> sand production out of the Black and Tan development would be significantly higher once the 2<sup>nd</sup> bench was added instead of about the same. Where appropriate geologically, Cimarex executes as many as 9 landings within the same section in Lea County. Due to the location of barriers and target reservoir height executing two landings within the contested acreage in the  $3^{rd}$  Sand Wolfcamp target or the lower  $2^{nd}$  Sand  $3^{rd}$ Shale target serves only to double development CapEx. Cimarex has proprietary data from South Lea County developments in thicker more heterogeneous pay that support the accuracy of how we have assessed the vertical interference and is confident additional landings serve only to dilute sweet spot landing production. Not everyone has access to the same data but there is a wealth of public data available from the Hydraulic Fracture Test Site 2 DOE and industry partnership that would lead to the same conclusion.

### Exhibit D-11 Black and Tan Analog comparison to MP/LG

37. Loosey Goosey and Mighty Pheasant have a similar pore space distribution as the Black and Tan Development with slightly higher porosity. The extra porosity is more likely to correlate to better permeability and allow a single landing to capture proven 3<sup>rd</sup> sand reserves even

more efficiently. Sensitivities run vs. reserves (Table 1.3) and Highside expectations (Table 1.4) show the PV 10 degradation and how much uplift would be needed to break even on the additional wells proposed by Permian. Given Black and Tan's added negligible bbls and rate, close to 0%, in similar rock two miles away, the public data simply does not support the 30% to 40% EUR and rate improvement needed to even break even on the extra incremental CapEx proposed by Permian resources well count. The recovery factor needed to payout the additional wells proposed is unrealistic in my opinion based on the Analog results. Furthermore, due to optimum well count Cimarex's plan is self-funding with payout in < 1 year. This is important for follow up benches that Cimarex will be able to rapidly develop out of lease cashflow, whereas Permian resources would require debt to fund an annual drilling program and would be significantly more exposed to commodity pricing jeopardizing timely development of subsequent benches if they go from 5 wells per section to 8 wells per section.

#### Exhibit D-12 Landing Zone Matters; Five Years Ago, Cimarex's Perry Test Confirmed 3<sup>rd</sup> SS Landing as Best Target

38. Cimarex confirmed 3<sup>rd</sup> Sand as best landing zone 5 years ago in 2018 with the Perry 4H 1 mile South of the contested acreage block. Over the life of the well, we see the old conventional 3<sup>rd</sup> Sand landing outperform other landings. Fracs evolved over time to modern slick water completions. Today most companies pump between 2000#/ft and 3000#/ft and 38 bbl/ft up to 60 bbl/ft with 6 to 14 clusters per stage depending on the target. It is highly unusual for a legacy frac, that is, one more conventional (i.e., <2016 with low cluster count, long stages, and unfocused frac energy), to better access reservoir than a modern frac (>2016 vintage with high cluster count, short stages, very focused frac energy). The best explanation for 478#/ft 3<sup>rd</sup> Sand frac outperforming 5 to 6 times the frac energy pumped in the Wolfcamp test well is that the vast

majority of oil reserves and best rock fabric flow properties are located within the 3<sup>rd</sup> Sand, and not in the Upper Wolfcamp. Thus, drilling into the Upper Wolfcamp is a waste of resources.

39. The dataset that identifies all the wells in the Area of Interest that I used in my analysis and that played a role in my conclusions is attached hereto as **Exhibit D-24**.

#### Exhibit D-13 Verna Rae Frac Test

40. The Verna Rae wells are a frac test and a poor analog for a full development. In my opinion, the 6827#/ft and 129 bbls/ft of frac energy is draining significantly more bbls than the 160-acre proration unit and appears to interfere with the 133H. Full developments are better to use for EUR and spacing because well half lengths are constrained which prevents both over estimating program development performance and section EUR's. I do not recommend offsetting the Verna Rae wells at double proven density as a good investment of CapEx because 3 times a modern slick waters frac energy was concentrated immediately adjacent to the subject lands.

#### Exhibits D-14 1280-Scale Project Cum. Oil/ft vs. Days

- 41. **Exhibit D-14** shows multiple developments executed at various Wells Per Section ("WPS"). The Y axis shows project cum/ft normalized to a full section development. For example, the ESTE WH Minis are 2 wells drilled at 4 WPS. Production from these wells is multiplied by 2 so production from these wells can be readily compared to full section projects. The Este EH Minis are 4 wells drilled at 8 WPS in the East Half and are multiplied by 8 to easily compare them to full section projects.
- 42. This simple plot provides a good check for Reserves vs. Acceleration. Acceleration occurs when a project is outperforming other projects during its early life, the first year for example, only to roll over with more production time to point towards the same ultimate

cumulative recovery. Understanding if production is additional reserves or merely acceleration of production is very important in places like New Mexico that offer decades of drilling opportunity with finite localized takeaway. Our Lea County team's definition of optimum development is a well count that accesses the economic bbls, rather than drill a 5<sup>th</sup> well to potentially accelerate bbls that appear to already be accessed by 4 wells we would deploy that capital in an additional landing within the project to add additional reserves with that capital or even de-risk a less tested landing for the area to replenish inventory. When Cimarex executes this approach across its Lea County acreage at portfolio level it allows Cimarex to drill additional projects with entire landing zones fully developed at an accelerated pace as opposed to executing less acres and benches at a denser well count that degrades stakeholders' returns and decreases aggregate royalty payments in the County.

- 43. The Reed and Stevens North Lea 3 (shown on Exhibit D-13) is an example where the long-term reserves captured by 4 WPS is very similar to denser projects. Cimarex is proposing this same spacing with all wells executed with a modern slickwater frac, produced on ESP with appropriate gas separation down hole, and then combined with adequate takeaway. It is my opinion that Cimarex's proposal will deliver a top performer as compared to all developments shown in Exhibit D-13, including the Batman E/2 and Batman W/2, with respect to the economics, *i.e.*, a greater return on investment and in terms of EUR.
  - 44. The key takeaways from **Exhibit D-14** are that:
    - Over time, 4 WPS developments catch up to denser spaced projects in production indicating that higher early-life production from denser developments is primarily attributable to acceleration;
    - COG's Little Bear project is a dense Wolfcamp only landing, full development that underperforms, similar to the Black and Tan Wolfcamp, supporting Cimarex's proposed 3<sup>rd</sup> Sand landing; and

- Drilling Wolfcamp wells appears damaging to 3rd SS project at Black and Tan. The Wolfcamp wells appear to have added at most 30 bbl/ft reserves after 1,000 days which is, more or less, equivalent to slope of 3rd Sand prior to completion.
- 45. The early results for the 5 WPS Batman project looks good and the spacing is within 1 well of Cimarex's proposed 4 WPS, as opposed to Permian Resources' proposed 8 WPS for the 3<sup>rd</sup> Sand and Wolfcamp. However, it is too early to assess success or failure of the 5 WPS Batman project. Each of the Batman projects need to Cum approximately 125 bbl/ft out of the DSU to be able to make firm EURs. I would be more confident assessing the success or failure of this project after the Batman wells have had ESP's installed and several months of decline are evident. My expectation is that the ESP install will peak the differences between the two half sections and that over time differences between the two half section developments will decrease similar to what has been seen on other developments as spacing impacts materialize in production. I am not sure the East half 3<sup>rd</sup> sand wells drilled at 4 wells per section have fully cleaned up yet and if they have not, it will adversely affect production from the Batman wells.

### Exhibit D-15 Average Per-Well Cum. Oil/ft vs Days, 2-Year Zoom

- 46. **Exhibit D-15** shows the average well performance in Bo/ft vs. Time zoomed into a 2-year period. This is a simple capital efficiency plot with the most capitally efficient early time wells plotting at the top and less capitally efficient wells plotting at the bottom. It is noteworthy that the best wells are either 4 WPS developments or flowed by EOG which, in my opinion, is one of the best operators in Lea County at aggressive drawdown / acceleration of their developments.
  - 47. The main take aways from **Exhibit D-15** are that:
    - Denser spaced developments underperform looser spaced developments to the point that drilling past 4 WPS appears to be a waste of capital;

- The Della project drilled by EOG takes longer to show degradation, most likely due to aggressive drawdown common on EOG's developments; and
- In aggregate 3rd Sand is the best way to develop from production results.

#### Exhibit D-16 1280-Scale Project Oil Rate/ft vs cum Oil/ft

- 48. **Exhibit D-16** shows Rate/ft vs. Cum/ft for multiple projects executed within the subject lands. This plot is useful for comparing developments that may be flowed differently. For example, if an operator is flowing a well constrained by takeaway they will plot low on the y axis but stay flat for a long time on the X axis. Alternatively, if a development is flowed without constraints it will peak very high on the y axis but quickly go on decline. On this Exhibit, the data past 125 cum oil/ft out of the development is most important with shallower declines equating to larger EURs and steeper declined equating to lower EURs. The 4 WPS Reed & Stevens project is an example where significant bbls were contacted and could have been produced more efficiently by some combination of frac, drawdown, and takeaway capacity.
  - 49. The main take aways from **Exhibit D-16** are that:
    - More time is needed on the Batman wells to gauge performance, post ESP install decline at 100 to 150 cum/ft will be a meaningful data point; and
    - In aggregate 3<sup>rd</sup> sand developments have a shallower slope than Wolfcamp developments and will enjoy ultimate higher EURs.

#### Exhibit D-17 Batman East Half vs. Batman West Half

50. **Exhibit D-17** illustrates that there is a significant shift in GOR and Watercut on day 8 in the Batman development. Based on the limited days of production, as a Reservoir Engineer I am unable to determine whether these results evidence a long-term trend or whether these results are being driven by (1) allocation with oil carryover on the East Half 4 WPS development; or (2) water carry over on the West Half 6 WPS development; or (3) if this is an

early time issue that will be resolved by ESP install in the coming weeks, or (4) some combination thereof. These unanswerable questions further undercut any reliance a Reservoir Engineer can place on production from the Batman wells at this early juncture.

#### Exhibit D-18 Capital Expenditure Comparison between Cimarex's Goosey-Pheasant Plan vs. Permian Resources Bane-Joker Plan

- 51. **Exhibit D-18** contains two tables comparing the capital expenditures for Cimarex's Loosey Goosey and Mighty Pheasant wells and the additional wells that it plans to develop in the future in Sections 4, 5, 8, and 9<sup>2</sup> versus the capital expenditures for Permian Resources' Bane and Joker Wells<sup>3</sup>. These tables establish that:
  - a) Permian Resources proposes to spend \$92.7 Million more in capital expenditures than Cimarex to develop each of its Plans by drilling an additional four (4) wells in the 3<sup>rd</sup> Bone Spring Sand and four (4) wells in the Upper Wolfcamp under each of its Plans;
  - b) In each of its Plans, Permian Resources proposes to spend \$11 Million on a fourth well in the Upper 2<sup>nd</sup> Sand well compared to Cimarex's plan for three Upper 2<sup>nd</sup> Sand wells; and
  - Due to Permian Resources' higher per well AFEs, Permian Resources will spend \$31.6 Million more than Cimarex (using Cimarex's updated August 2023 cost estimates) in each of it Plans to drill 4 wells in the 1<sup>st</sup> Sand, 2<sup>nd</sup> Sand, and 3<sup>rd</sup> Sand and three wells in the upper 2<sup>nd</sup> Sand (\$166,181,956 versus \$134,593,047).

<sup>&</sup>lt;sup>2</sup> There are two columns for AFE CapEx amounts for Mighty Pheasant Wells 204H, 301H, 302H, 303H, and 304H, and for the additional wells that Cimarex plans for Sections 5 and 8. The first column sets forth estimated costs as of August 25, 2022, when Cimarex sent out its election letters to working interest owners for the Mighty Pheasant Wells. The second column sets forth the estimated costs for these wells updated to reflect June 2023 costs, which were provided to me by John Coffman.

<sup>&</sup>lt;sup>3</sup> The AFE CapEx amounts for the Bane and Joker Wells are based on the AFEs that Permian Resources included in the package sent to working interest owners with the election letters dated March 17, 2023.

- 52. In sum, if the Division grants Permian Resources' development plan for its Bane and Joker Wells, Permian Resources will spend \$135,352,717 more than Cimarex to develop Sections 4 and 9 (Bane vs. Loosey Goosey) and will spend \$135,352,717 more than Cimarex to develop Sections 5 and 8 (Joker vs. Mighty Pheasant).
- 53. As set forth herein, the excessive capital expenditures will not result in increased production justifying the expense. Such a result constitutes financial waste that unnecessarily burdens, undermines, and harms the correlative rights of all working interest owners.

#### Exhibit D-19 NPV-10 Comparison Between Goosey-Pheasant and Bane-Joker

- 54. **Exhibit D-19** contains two tables that set forth the present value of the estimated future oil and gas revenues, reduced by direct expenses and discounted at an annual rate of 10% (PV-10), net of all burdens (NPV-10). The first table shows the NPV-10 for Permian Resources' Joker and Bane Wells and the second table shows the NPV-10 for Cimarex's Might Pheasant and Loosey Goosey Wells.
- 55. The NPV-10 calculations are based on the June 2023 Strip West Texas Intermediate prices and assume that the NRI is 80% and that the technical EUR accessed is 9,336MMbo across the DSU's similar to Black and Tan 3<sup>rd</sup> sand development with ~560Mbo of negative impact from offset depletion. The after-tax rate of return (ATax ROR%) assumes a 22.6543% tax on profits.
- 56. The NPV-10 comparison shows that the NPV-10 for Permian Resources' Joker-Bane Plan shows a \$32 Million return on CapEx and an after-tax Rate of Return of 21%, while Cimarex's Goosey-Pheasant Plan shows a \$115 Million on CapEx and an after-tax Rate of Return of 149%.

#### Exhibit D-20

#### Comparison of 3<sup>rd</sup> Sand Flat Cimarex Plan vs. Wolfcamp Stagger Permian Plan

- 57. **Exhibit D-20** contains a table that compares the PV-10 under Permian Resources' plan to drill eight 3<sup>rd</sup> Sand wells and four Wolfcamp wells in each of its two development proposals (Bane-Joker) versus the PV-10 under Cimarex's plan to drill four 3<sup>rd</sup> Sand Wells in each of its two development proposals (Goosey-Pheasant). The PV-10 calculations are based on the same assumptions used in Exhibit D-18. The Table is controlled to determine the change in PV-10 based on the ratio of ownership of Bone Spring net acres versus Wolfcamp net acres. The ratio in the first row is 1:1 and the last row is 1:8.
- 58. The purpose of this Exhibit is to demonstrate that working interest owners will enjoy a significant benefit under Cimarex's planned developments even if their interest in the Wolfcamp formation is five times greater than in the Bone Spring. At a 1:6 ratio, Bone Spring to Wolfcamp, the working interest owner would still enjoy a \$1,246 PV-10 per 1 net acre of Bone Spring working interest advantage under Cimarex's proposal.

#### Exhibit D-21 MRC Permian – PV-10 Comparison Mighty Pheasant versus Joker

- 59. **Exhibit D-21** focuses on MRC Permian, which has the highest ratio of Bone Spring to Wolfcamp ownership, 1:3.0088, in Sections 5 and 8, Cimarex's Mighty Pheasant Plan, versus Permian Resources' Joker Plan.
- 60. The Table on **Exhibit D-21** shows that under Permian Resources' Joker Plan, MRC Permian's PV-10 is \$25,193/acre versus \$45,237/acre under Cimarex's Might Pheasant Plan. In other words, despite the fact that MRC Permian's interest in the Wolfcamp is a little more than 3 times its interest in the Bone Spring, MRC Permian would enjoy a PV-10 of \$20,044/acre more

under the Mighty Pheasant per each net acre that it owns in the Bone Spring as compared to Permian Resources' Joker Plan.

#### Exhibit D-22 HOG Partners – PV-10 Comparison Loosey Goosey vs. Bane

- 61. **Exhibit D-22** focuses on HOG Partnership LP, which has the highest ratio of Bone Spring to Wolfcamp ownership, 1:1.37, in Sections 4 and 9, Cimarex's Loosey Goosey Plan, versus Permian Resources' Bane Plan.
- 62. The Table on **Exhibit D-22** shows that under Permian Resources' Bane Plan, HOG Partnership's PV-10 is \$14,894/acre versus \$45,237/acre under Cimarex's Loosey Goosey Plan. In other words, despite the fact HOG Partnership's interest in the Wolfcamp is 37% higher than its interest in the Bone Spring, HOG Partnership would enjoy a PV-10 of \$30,343/acre more under the Mighty Pheasant per each net acre that it owns in the Bone Spring as compared to Permian Resources' Bane Plan.

### Exhibit D-23 Ownership Ratios and Depth Severances

- 63. **Exhibit D-23** contains two tables. The table on the left, "Ownership Loosey Goosey/Bane," lists all of the working interest owners in Sections 4 and 9, showing their respective working interests in the Bone Spring and in the Wolfcamp, as well as their WC/BS ownership ratio.
- 64. The Loosey Goosey/Bane Table shows that the only working interest owner in Sections 4 and 9 that owns a greater interest in the Wolfcamp than it owns in the Bone Spring is HOG Partnership LP. As shown in **Exhibit D-23**, HOG Partnership LP would enjoy a much better outcome under the Loosey Goosey Plan despite the fact that it has a greater working interest in the Wolfcamp than it does in the Bone Spring.

- 65. The table on the right, "Ownership Mighty Pheasant/Joker," lists all of the working interest owners in Sections 5 and 8, showing their respective working interests in the Bone Spring and in the Wolfcamp, as well as their WC/BS ownership ratio.
- 66. The Mighty Pheasant/Joker Table shows that there are a number of working interest owners in Sections 5 and 8 that own a greater interest in the Wolfcamp than the Bone Spring, with MRC Permian having the largest ratio, 1:3009 (rounded up from 1:30088). As shown in Exhibit D-20, MRC Permian would enjoy a much better outcome under the Loosey Goosey Plan despite the fact that it owns more than 3 times an interest in the Wolfcamp than it does in the Bone Spring.
- 67. The purpose of **Exhibit D-23**, as well as **Exhibits D-18 through D-22**, is to demonstrate that Cimarex's Loosey Goosey and Mighty Pheasant Plans protect the correlative rights of all working interest owners since they will enjoy a much greater economic benefit under Cimarex's plans than under Permian Resources' plan and, conversely, Permian Resources' plans do not protect the correlative rights of the working interest owners in Sections 4, 5, 8, and 9 since their economic return on investment will be crushed under the weight of Permian Resources' excessive capital expenditures that do not increase the EURs.
- 68. The Exhibits to this Self-Affirmed Statement were prepared by me or compiled from Cimarex's company business records under my supervision and/or aproval.
- 69. As explained by the foregoing, the granting of Cimarex's Applications are in the best interests of conservation, the prevention of waste, and the protection of correlative rights.
  - 70. The foregoing is correct and complete to the best of my knowledge and belief.

Self-Affirmed Signature on following page.

#### **Self-Affirmed Statement of Eddie Behm:**

I understand that this Self-Affirmed Statement will be used as written testimony before the Division in Case Nos. 23448-23455 and 23594-23601 and affirm that my testimony herein is true and correct, to the best of my knowledge and belief and made under penalty of perjury under the laws of the State of New Mexico.

Eddie Behm		

From: Eddie Behm Eddie.Behm@coterra.com Subject: Signing my statement by Email 8/2/2023

Date: August 2, 2023 at 2:17 PM
To: Bill Zimsky bill@abadieschill.com



I understand that this Self-Affirmed Statement will be used as written testimony before the Division in Case Nos. 23448-23455 and 23594-23601 and affirm that my testimony herein is true and correct, to the best of my knowledge and belief and made under penalty of perjury under the laws of the State of New Mexico.

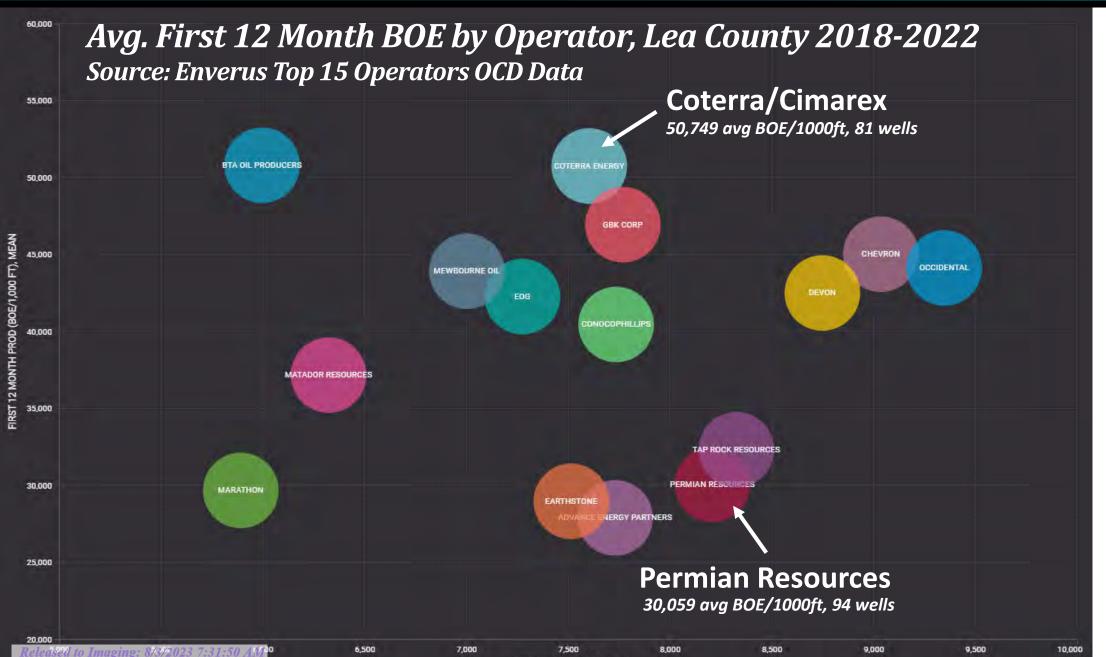
I am signing my self-affirmed statement by this email on August 2<sup>nd</sup> 2023

#### Eddie Behm

This message may contain confidential and/or privileged information. If you are not the addressee or authorized to receive this for the addressee, you must not use, copy, disclose or take any action based on this message or any information herein. If you have received this message in error, please advise the sender immediately by reply e-mail and delete this message.



### Cimarex is a Play Leader in Lea County ( Avg 12 Month Cum BOE / 1000ft)

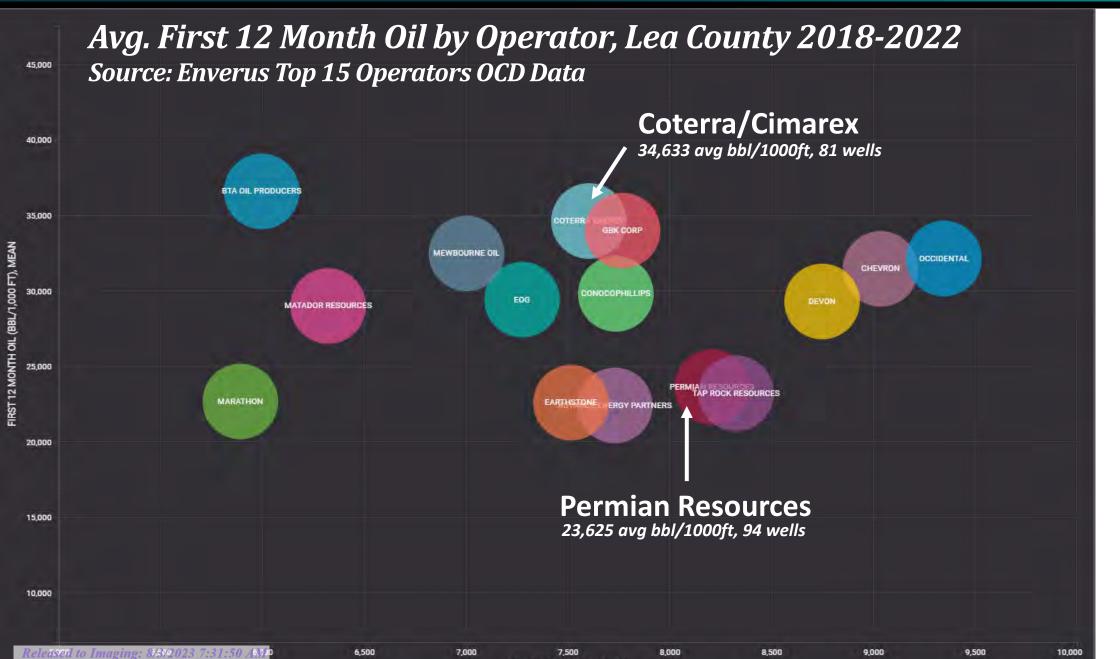


LATERAL LENGTH (FT). MEAN

Exhibit D-1



### Cimarex is a Play Leader in Lea County ( Avg 12 Month Cum Oil BBl/ 1000ft)



LATERAL LENGTH (FT), MEAN

Exhibit D-2

### \*\* 3rd Bone Spring Sand is the Established Single Bench Target at 4 WPS within AOP

42,650 acres developed with more than 1 well, all but one development, 98.5% of sections similar to Cimarex proposal

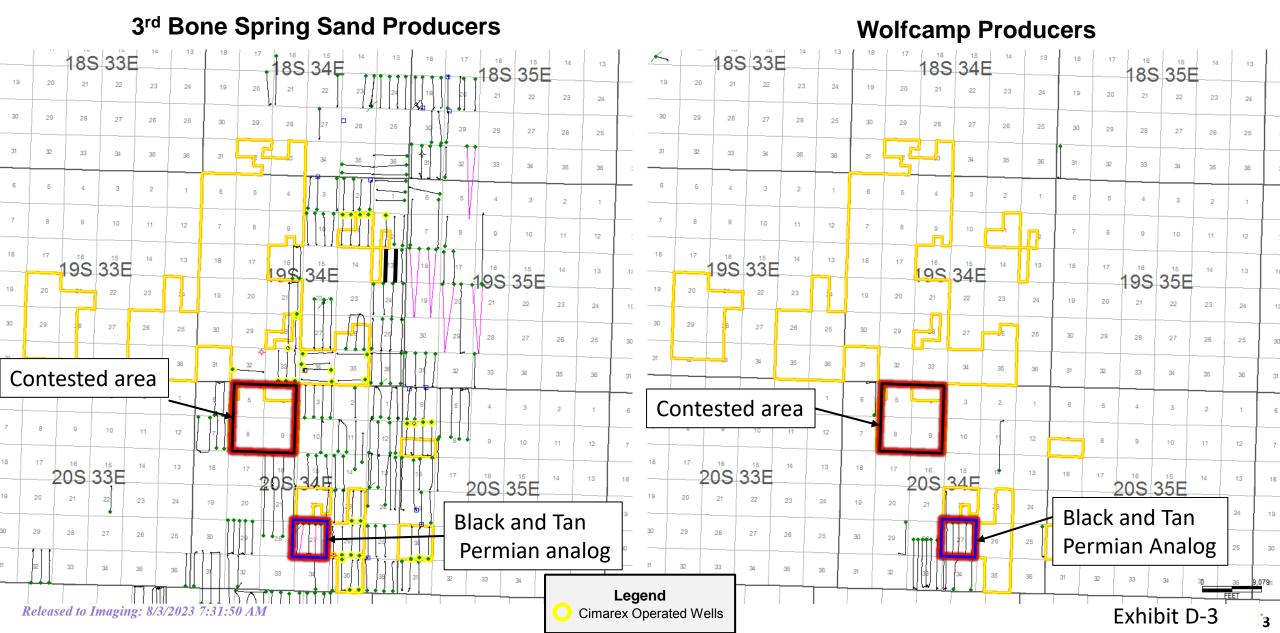
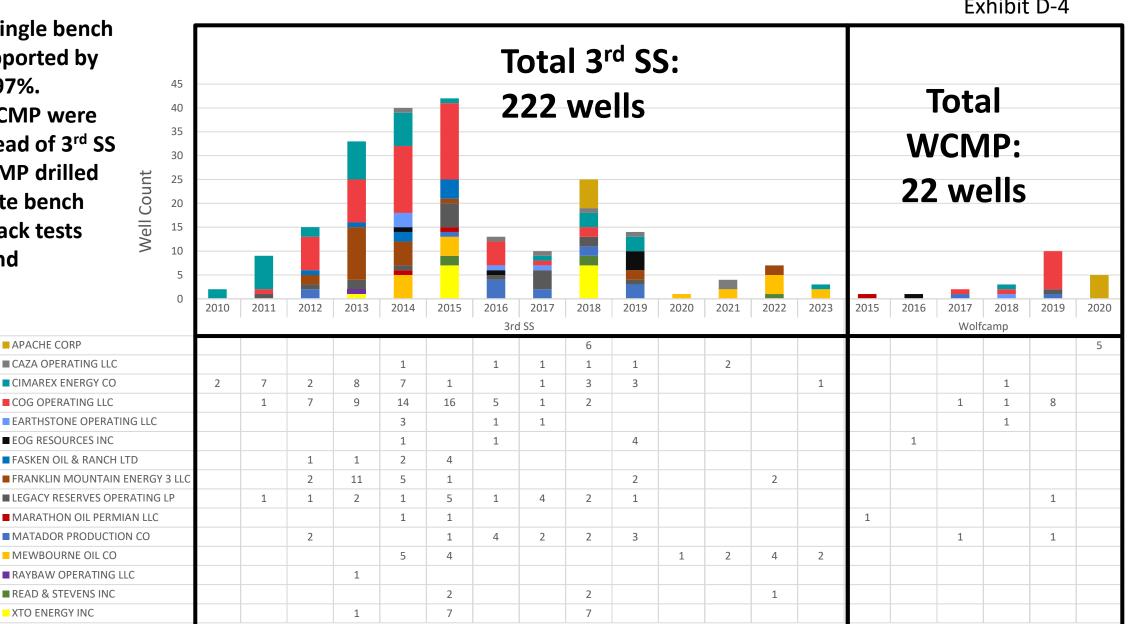


Exhibit D-4

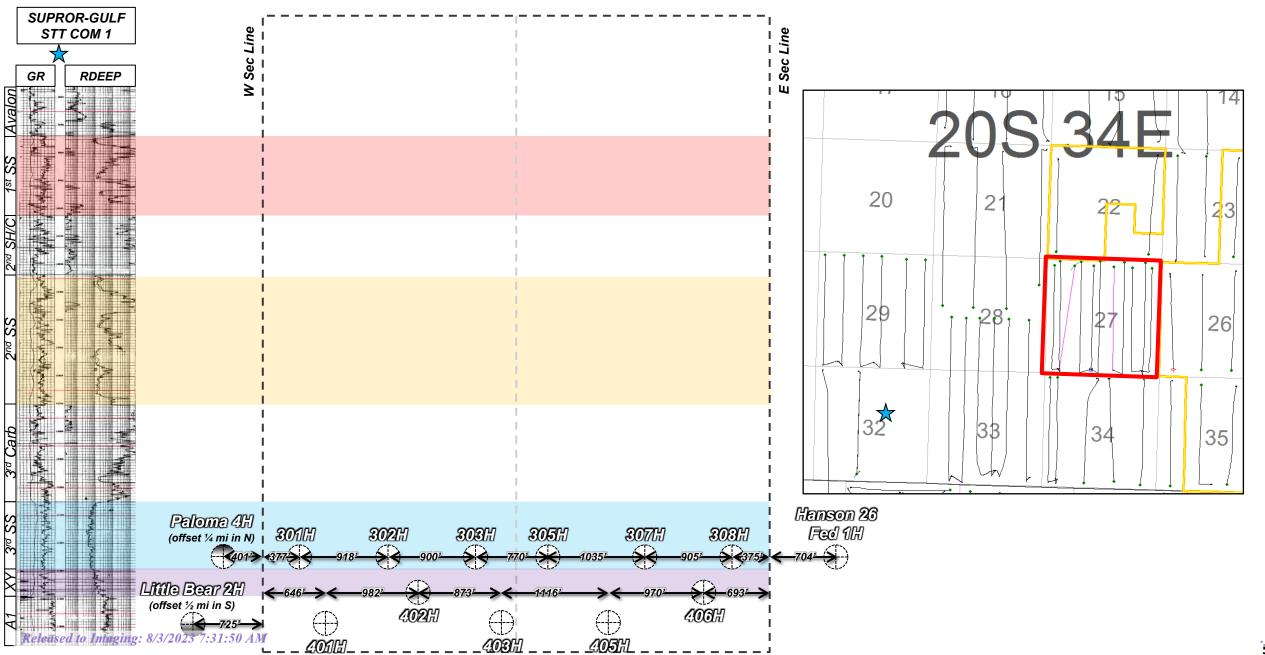
- 3<sup>rd</sup> Sand / single bench landing supported by 236 wells, 97%.
- 14 of 22 WCMP were drilled instead of 3<sup>rd</sup> SS
- 5 of 22 WCMP drilled as a separate bench
- 3 WCMP stack tests with 3rd Sand

APACHE CORP



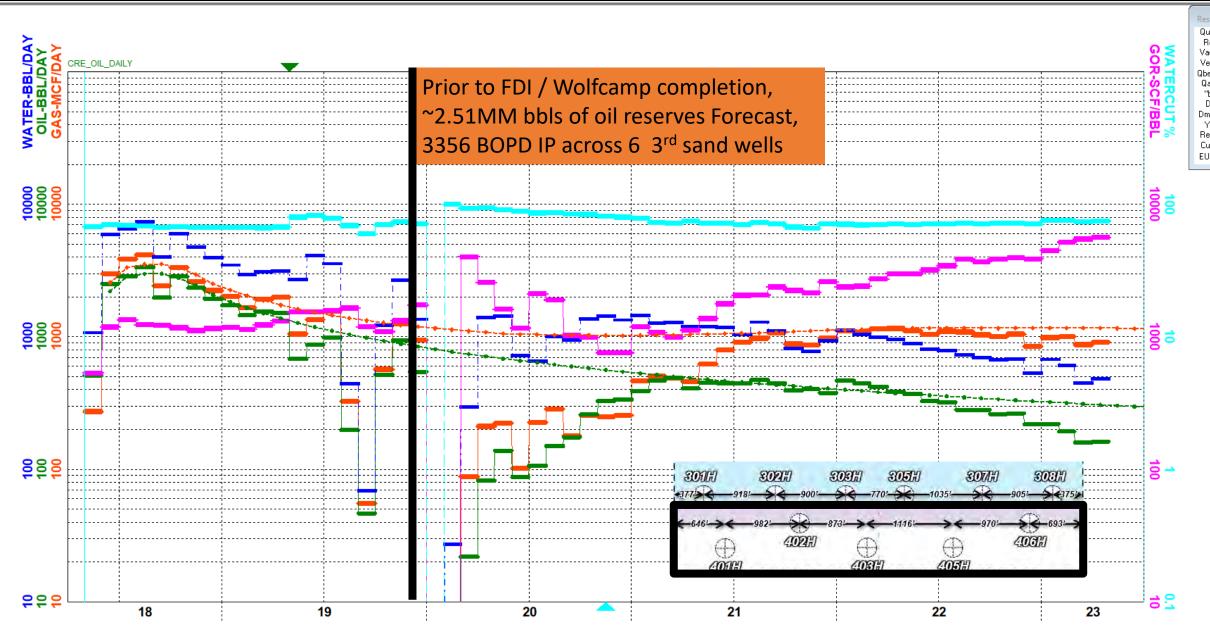
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XTO ENERGY INC





### Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 Wells ( Before WC completion)



5/1/2019

49.167 1756744

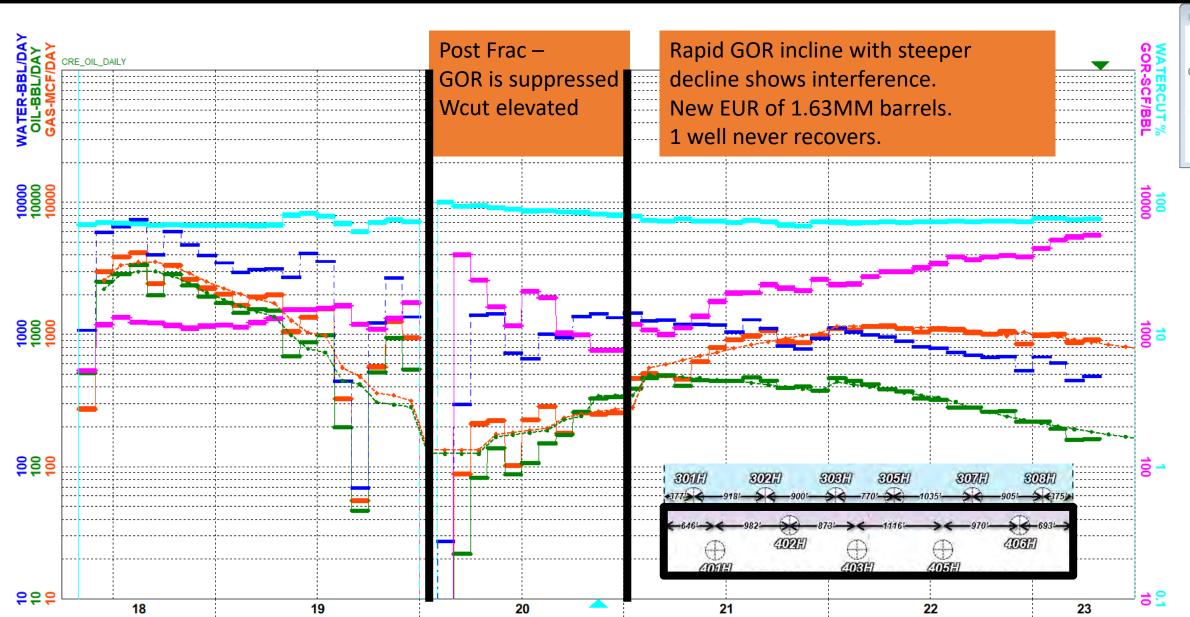


### Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 Wells Post Wolfcamp Frac

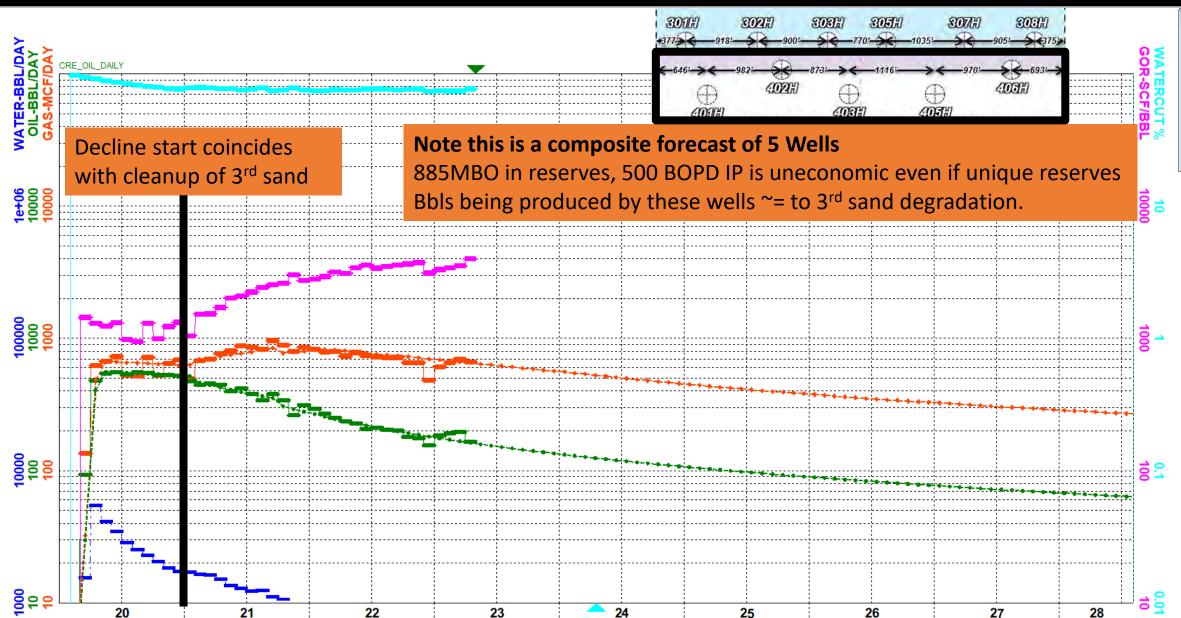


5/1/2023

0.000 175.490



5/1/2023 0.000 158.504



ÈΣ PROJECT = Black & Tan 27	
🔥 30025461240000   BLACK & TAN 27 FEDERAL COM #405H   BLACK & TAN 27 FEDERAL COM   WOLFCAMP A   APACHE CORP   LEA   4583   09/01/2019   02/26/2020   0EF33AE781	
- 🍐 30025460720000   BLACK & TAN 27 FEDERAL COM #401H   BLACK & TAN 27 FEDERAL COM   WOLFCAMP A   APACHE CORP   LEA   4666   10/19/2019   01/22/2020   AFD8F0925C	Completed 2nd
→ 🗴 30025460730000   BLACK & TAN 27 FEDERAL COM #402H   BLACK & TAN 27 FEDERAL COM   WOLFCAMP SANDS XY SAND   APACHE CORP   LEA   4561   08/17/2019   02/26/2020   B4C53386′	
→ 🗴 30025461230000   BLACK & TAN 27 FEDERAL COM #403H   BLACK & TAN 27 FEDERAL COM   WOLFCAMP SANDS XY SAND   APACHE CORP   LEA   4629   09/08/2019   02/26/2020   607292AC	
→ 🗴 30025460750000   BLACK & TAN 27 FEDERAL COM #406H   BLACK & TAN 27 FEDERAL COM   WOLFCAMP SANDS XY SAND   APACHE CORP   LEA   4694   09/29/2019   02/26/2020   F44F2545:	
→ 🗴 30025440180000   BLACK & TAN 27 FEDERAL COM #302H   BLACK & TAN 27 FEDERAL COM   3RD BONE SPRING SAND   APACHE CORP   LEA   4416   12/11/2017   06/01/2018   163AC020E2	
- 🌢 30025440170000   BLACK & TAN 27 FEDERAL COM #301H   BLACK & TAN 27 FEDERAL COM   3RD BONE SPRING SAND   APACHE CORP   LEA   4526   11/15/2017   06/01/2018   402B8A1B23	
- 🄞 30025439210100   BLACK & TAN 27 FEDERAL COM #303H   BLACK & TAN 27 FEDERAL COM   3RD BONE SPRING SAND   APACHE CORP   LEA   4360   10/24/2017   05/18/2018   748D250B4E	
- 🄞 30025439400000   BLACK & TAN 27 FEDERAL COM #305H   BLACK & TAN 27 FEDERAL COM   3RD BONE SPRING SAND   APACHE CORP   LEA   4524   03/17/2018   05/23/2018   A635466807	Completed 1st
- 🌢 30025440440000   BLACK & TAN 27 FEDERAL COM #307H   BLACK & TAN 27 FEDERAL COM   3RD BONE SPRING SAND   APACHE CORP   LEA   4303   01/07/2018   05/16/2018   CF72E02929	

#### WC vs. 3<sup>rd</sup> sand comparison shows stagger is capital waste

- 3<sup>rd</sup> sand IP is > 6 X Wolfcamp
- Wolfcamp oil rate ~= to 3<sup>rd</sup> sand rate decrease
- Wolfcamp reserves ~= to 3<sup>rd</sup> sand EUR decrease
- 5 Wolfcamp wells added ~ 0 additional bbls

Table 1.0 Comparison		3rd Sand		(Wolfcamp - 3rd Sand		
Table 1.0 Comparison	3rd Bone	3rd Bone Post	ne Post 3rd Sand Delta		Delta) = value added	
or ard sand to workamp	f 3rd sand to Wolfcamp Spring frac		3rd Sand Deita		from 5 wells	
IP30 BOPD	3,356	NA	NA	555	NA	
Pre vs. Post frac oil rate						
BOPD	950	500	-450	+555	105	
EUR MMBO	2.51	1.63	-0.88	+0.89	0.01	

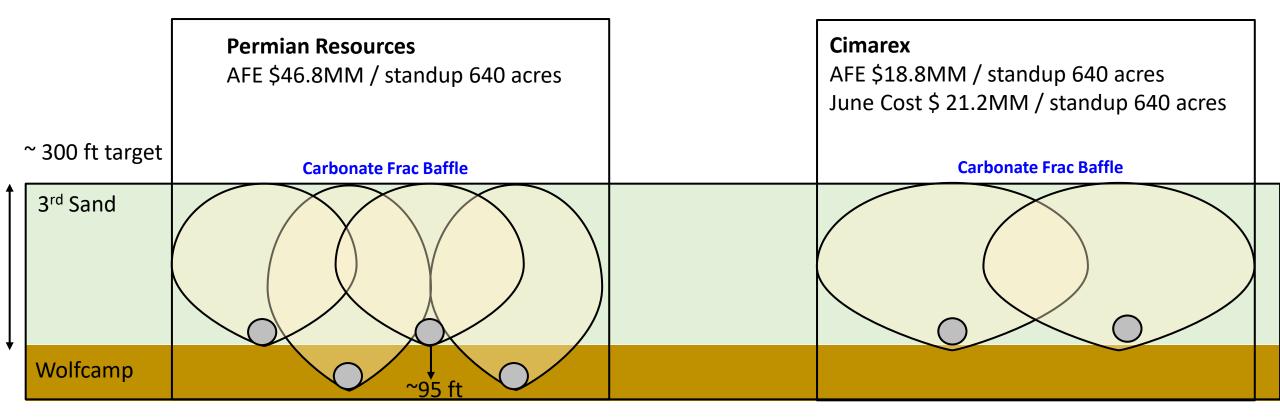
#### 3<sup>rd</sup> sand is the landing for this single bench target

- 268% Phi H vs. Wolfcamp
- 3<sup>rd</sup> sand delta compounded by being cleaner with better flow property's than the Wolfcamp

Table 1.1				3rd / Wolfcamp
Analog Comparison	3rd Sand	Wolfcamp	3rd SS % of total	Comparison %
PHIH	26.75	10	72.8	268

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- Cimarex has experience developing as many as 8 landings within a DSU successfully in Lea county with 9<sup>th</sup> drilling now, 35 to 38 wells / section. The difference is the combination of geology (barriers, reservoir height, and flow units) don't support the proposed staggers at Mighty Pheasant Loosey Goosey as demonstrated by area developments like Black and Tan.
- 3<sup>rd</sup> and Wolfcamp landed this close together are equivalent to 8 WPS flat in the 3<sup>rd</sup> Sand, double the AOI proven density.
- A wealth of data from the DOE and industry funded Hydraulic Fracture Test Site 2 supports an upper Wolfcamp buffer zone in this specific location to protect proven 3<sup>rd</sup> Sand correlative rights and prevent capital waste.

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Table 1.2	Black and Tan			Mighty Pheasant Loosey Goosey		
Analog Comparison	3rd Sand	Wolfcamp	3 <sup>rd</sup> SS % of total	3rd Sand	Wolfcamp	3 <sup>rd</sup> SS % of total
PHIH	22	7	76	27	10	73

- Contested acreage is expected to outperform Black and Tan 2.5MMbo / 640-acre Technical EUR by ~20%
- Over performance driven by improved PHIH of 3<sup>rd</sup> sand. 27/22 = 122%.
- Sensitivities highlight impact of capital waste given 0% uplift on Black and Tan Wolfcamp 3<sup>rd</sup> SS analog
  - Table 1.3 Wolfcamp must add ~40% reserves to break even vs Cimarex Development at P90 reserves case
  - Table 1.4 Wolfcamp must add ~31% reserves to break even vs. Cimarex Development at SM business case
  - Neither Table 1.3 or 1.4 increase in performance is reasonable to expect given public data

Table 1.3 Reserves Economic Comparison 10MM Technical EUR DSU								
\$65 flat analy	\$65 flat analysis at Cimarex WI & NRI			Permian		Cimarex		
Reserves	IP	Economic EUR MBO	PV10 \$MM	Payout months	PV10 \$MM	Payout months		
100%	14,738	8,860	14.7	43	41.8	12		
110% expected	16,212	9,820	21.4	33				
120% expected	17,685	10,780	28.2	26				
130% expected	19,159	11,740	34.9	23				
140% expected	20,633	12,700	41.5	21				

Table 1.4 Development Comparison 12MM Technical EUR DSU								
\$65 flat analysis at Cimarex WI & NRI			Permian		Cimarex			
12 MM EUR	IP	Economic EUR MBO	PV10 \$MM	Payout months	PV10	Payout months		
100%	18,897	11,026	34.8	23	61.9	10		
110% expected	20,787	12,987	43.6	20				
120% expected	22,676	14,233	52.3	18				
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140% expected	26,456	16,727	69.7	15				

- In order to create equivalent PV10, Wolfcamp landings must add ~40% more reserves vs reserves estimate (table 1.3) and 31% more reserves vs. P50 expectation (table 1.4). This outcome is unrealistic vs. observed results.
- Cimarex lower terminal fixed OpEx + less well degradation results in 9.1MM EUR vs. Permian 8.9MM EUR at 100% reserves expectation.
- The Cimarex plan self-funds annual drilling after first batch of wells supporting rapid development
- Permian plan supports slower development speed

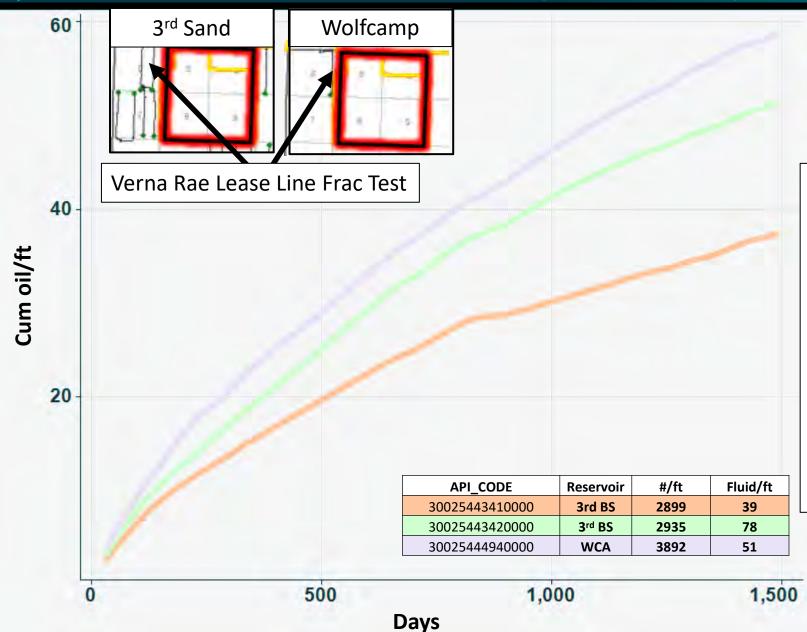




# Exhibit D-12 Note: 5 to 6 x the frac energy is not as important as the right landing zone.

- The Perry 1H 2014 vintage 3<sup>rd</sup> sand well outperforms modern 2018 Perry 4H Wolfcamp completion in the same section at better oil cut 1 mile south of contested development area.
- The best flow properties and majority of bbls are best accessed from the 3<sup>rd</sup> sand where they are located
- Updated Production to Monthly / Days in Month

### Verna Rae Frac Test Section 6 Adjacent to Subject Lands



#### Key points:

(None) +

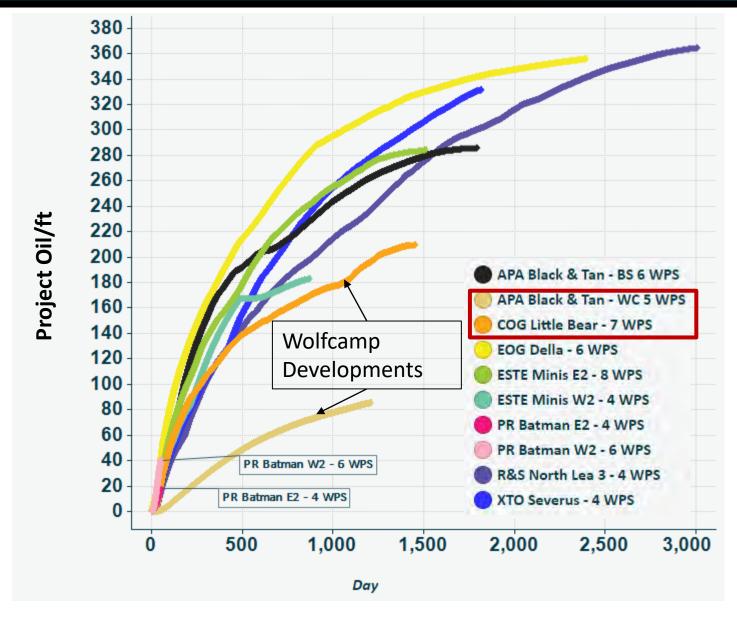
WELL\_NAME + ) (+)

VERNA RAE FED COM #133H

VERNA RAE FEDERAL COM #134H VERNA RAE FEDERAL COM #204H

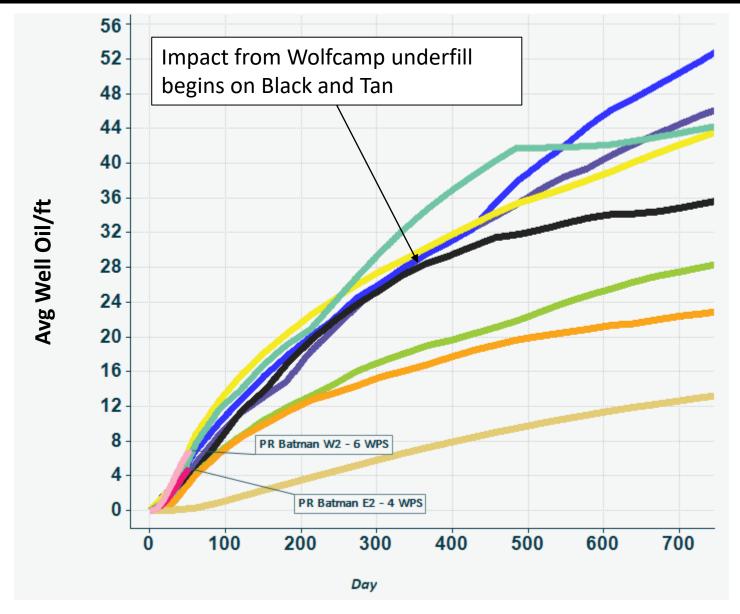
- The Verna Rae 204H is capturing significant 3<sup>rd</sup> sand bbls due to significantly more energy pumped on this frac test than what is prudent in a full development scenario. Frac Uplift on unbounded Edge wells does not equate to uplift when bounded
- Cimarex uses full developments when available to avoid unreasonable full section bounded development expectations.
- Offsetting these massive frac tests which Lease line Mighty Pheasant / Joker at double proven well density will not outperform Cimarex plan.

### 1280-Scale Project Cum. Oil/ft vs Days



- Key points
- Over time 4 WPS developments catchup to denser projects indicating denser developments are primarily acceleration
- COG little Bear is a dense Wolfcamp only landing full development that underperforms similar to Black and Tan Wolfcamp supporting our proposed 3<sup>rd</sup> Sand landing
- Batman needs to Cum ~125bbls /ft out of the DSU to get an idea of EURS
- SS project at Black and Tan. WFMP looks to have added at most 30 bbl/ft reserves after 1000 days which is ~equivalent to slope of 3rd sand prior to completion.

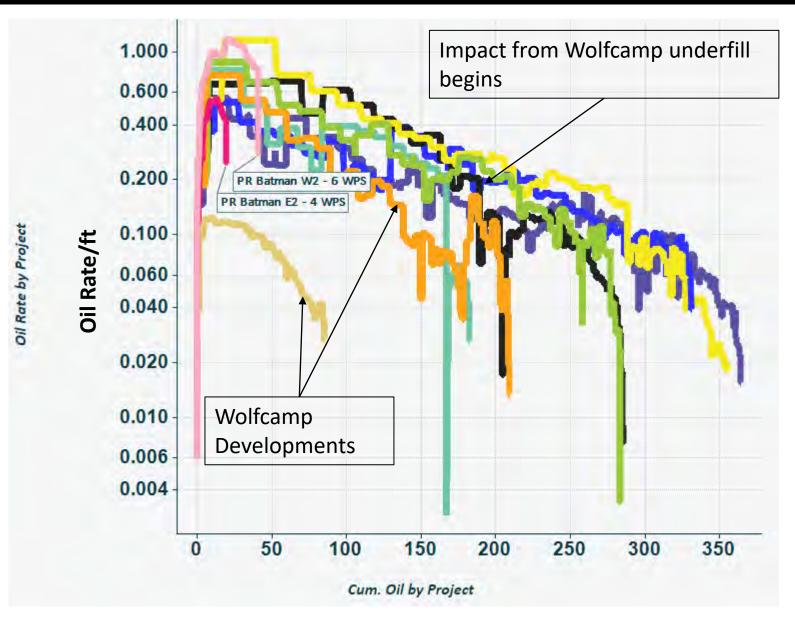






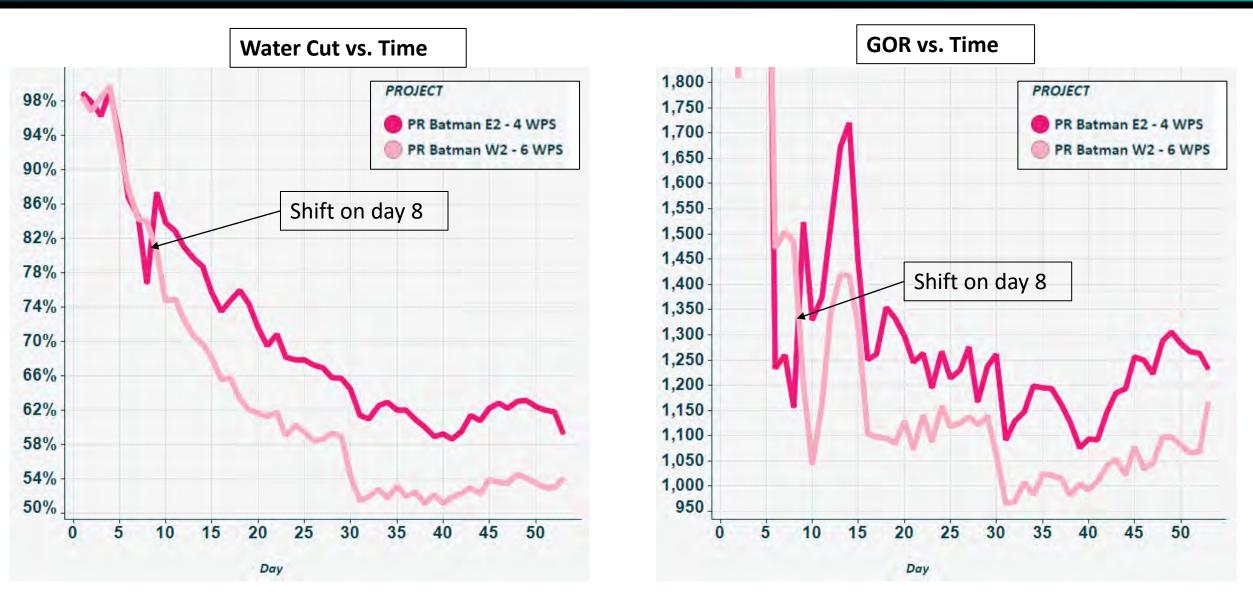
- Key points
- Denser spaced developments underperform looser spaced developments to the point that drilling past 4 WPS appears to be a waste of capital
- The Della project drilled by EOG takes longer to show degradation most likely due to aggressive drawdown common on their developments.
- In aggregate 3rd Sand is the best way to develop from production results







- Key Point
- More time is needed on the Batman wells to gauge performance, post ESP install decline at 100 to 150 cum/ft will be a meaningful data point
- In aggregate 3<sup>rd</sup> sand developments have a shallower slope than Wolfcamp developments and will enjoy ultimate higher EUR's



Shift in oil allocation on day 8, long-term trend or driven by a hung separator dump or carryover?

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## Capital Plan Comparison

		Cimarex - Loose	y Goosey/Mighty Pheasai	nt
Res	Well	AFE CapEx	June Current Cost	AFE Bench Total
1st	101H	\$8,570,695	\$9,651,993	
1st	102H	\$9,450,693	\$9,651,993	626 022 774
1st	103H	\$9,450,693	\$9,651,993	\$36,922,774
1st	104H	\$9,450,693	\$9,651,993	
upper 2 <sup>nd</sup> *	211H	\$8,570,695	\$9,651,993	
upper 2 <sup>nd*</sup>	212H	\$8,570,695	\$9,651,993	\$25,712,085
upper 2 <sup>nd*</sup>	213H	\$8,570,695	\$9,651,993	
2nd	201H	\$8,570,695	\$9,651,993	
2nd	202H	\$8,570,695	\$9,651,993	624 202 700
2nd	203H	\$8,570,695	\$9,651,993	\$34,282,780
2nd	204H	\$8,570,695	\$9,651,993	
3rd	301H	\$9,428,854	\$10,621,993	
3rd	302H	\$9,428,854	\$10,621,993	627 C7F 400
3rd	303H	\$9,408,850	\$10,621,993	\$37,675,408
3rd	304H	\$9,408,850	\$10,621,993	
Total Gro	ss CapEx	\$134,593,047	\$148,659,895	\$134,593,047

\*Note: we have planned for upper 2<sup>nd</sup>, acquiring data on 3<sup>rd</sup> sand wells to confirm adequate flow, saturation, and in place in this ~60-foot target and will execute if viable.

		Permian Re	esources – Bane/Joker		
Res	Well	AFE CapEx	June Current Cost	AFE Bench Total	
1st	111H	\$10,724,193			
1st	112H	\$10,724,193		\$42,896,772	
1st	113H	\$10,724,193		\$42,890,772	
1st	114H	\$10,724,193			
uppr 2nd	122H	\$11,020,308			
uppr 2nd	124H	\$11,020,308		\$44,081,232	
uppr 2nd	126H	\$11,020,308		344,001,232	
uppr 2nd	128H	\$11,020,308			
2nd	121H	\$11,020,308			
2nd	123H	\$11,020,308		644 001 222	
2nd	125H	\$11,020,308		\$44,081,232	
2nd	127H	\$11,020,308			
3rd bs	131H	\$11,535,757			
3rd bs	132H	\$11,535,757		\$46,143,028	
3rd bs	133H	\$11,535,757		340,143,026	
3rd bs	134H	\$11,535,757			
3rd bs	171H	\$11,308,013			
3rd bs	172H	\$11,308,013			
3rd bs	173H	\$11,308,013			
3rd bs	174H	\$11,308,013		\$92,743,500	
WC	201H	\$11,877,862		392,745,500	
WC	202H	\$11,877,862			
WC	203H	\$11,877,862			
WC	204H	\$11,877,862			
Total Gro	oss CapEx	\$269,945,764	?	\$269,945,764	

### For each Plan, Permian is spending \$135MM more / 1280 acres with proposal Capex, ~100% more CapEx, bad for WI owners:

- \$ 92.7 MM, shown in red, Cimarex models as uneconomic non additive wells with reserves best captured by single landing.
- \$ 31.6 MM, where well counts are ~= Permian costs are \$ 2.1 MM to \$2.4MM higher/well at time of proposal
- \$ 11 MM, one additional 2<sup>nd</sup> sand well vs. Cimarex Proven spacing.
- Repetition is >= \$121MM of waste driven by Frac cost and Well Count



We model Permian's plan as significantly over drilled. Extra wellbores raise OpEx, interventions, and spill risk while capturing negligible additional reserves.

		16 we	ell Permian Plan   Ju	ne Strip  80% 8/8	ths NRI	
Development	WI	NRI	Gross Capex	WI Capex	NPV10	ATax ROR%
Mighty Pheasant / Joker	0.477066	0.381653	\$93,654,476	\$44,574,978	\$7,746,535	21%
Loosey Goosey / Bane	0.518295	0.414636	\$93,654,476	\$48,527,881	\$8,347,243	21%
Total Cimarex	0.497681	0.398144	\$187,308,952	\$93,102,854	\$16,093,779	21%
Total Development	1	0.8	\$187,308,952	\$187,308,952	\$32,176,560	21%

Cimarex's plan benefits significantly from not over drilling the target. This materializes as fast payout, lower OpEx, and lower spill risk.

	8 well 3 <sup>rd</sup> Sand Cimarex Plan   June Strip  80% 8/8ths NRI					
Development	WI	NRI	Gross Capex	WI Capex	NPV10	ATax ROR%
Mighty Pheasant / Joker	0.553327	0.4426616	\$42,487,972	\$23,509,755	\$32,039,956	149%
Loosey Goosey / Bane	0.527654	0.4221232	\$42,487,972	\$22,418,953	\$30,552,828	149%
Total Cimarex	0.540491	0.432393	\$84,975,944	\$45,928,710	\$62,592,788	149%
Total Development	1	0.8	\$84,975,944	\$84,975,944	\$115,807,328	149%

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## Comparison of 3<sup>rd</sup> sand Flat Cimarex Plan vs. Wolfcamp Stagger Permian Plan (1997)

Exhibit D-20

Ownership mixes vs PV10 of Wolfcamp 3rd Development Plans						
BS acres	WC acres	WC/BS Ratio	PV10 Permian Plan	PV10 Cimarex Plan	Cimarex - Permian	
1	1	1	\$12,569	\$45,237	\$32,668	
1	1.37	1.37	\$14,894	\$45,237	\$30,343	
1	2	2	\$18,853	\$45,237	\$26,384	
1	3	3	\$25,138	\$45,237	\$20,099	
1	3.0088	3.0088	\$25,193	\$45,237	\$20,044	
1	4	4	\$31,422	\$45,237	\$13,815	
1	5	5	\$37,707	\$45,237	\$7,530	
1	6	6	\$43,991	\$45,237	\$1,246	
1	7	7	\$50,276	\$45,237	-\$5,039	

- Above Table sensitivity shows different ownership blends at June Strip pricing and 80% 8/8ths NRI.
- We model WI owners benefitting from our development as long as they do not have a Wolfcamp to 3<sup>rd</sup> Sand ownership imbalance of more than 6x.
- The biggest differential ownership in Loosey Goosey is held by HOG Partnership LP with a 1.37 ratio of Wolfcamp to Bone Spring. \$45,237/acre under Cimarex plan outperforms Permian Plan by ~\$30,000/acre.
- The biggest differential ownership in Mighty Pheasant is held by MRC Permian and is a 3.0088 ratio of Wolfcamp to Bone Spring. \$45,237/acre under Cimarex plan outperforms Permian Plan by ~\$20,000/acre.



BS a	cres	WC acres	WC/BS Ratio	PV10 Permian Plan	PV10 Cimarex Plan	Cimarex - Permian
1	L	3.0088	3.0088	\$25,193	\$45,237	\$20,044

- The biggest differential ownership in Mighty Pheasant / Joker is held by MRC Permian with a 3.0088 ratio of Wolfcamp to Bone Spring
- Under Cimarex's single landing development MRC Permian's PV10 is \$45,237/acre
- Under Permian Resources' co-development plan, MRC Permian 's PV10 is \$25,193/acre
- MRC Permian enjoys an additional \$20,044/acre PV10 under Cimarex's plan

BS acres	WC acres	WC/BS Ratio	PV10 Permian Plan	PV10 Cimarex Plan	Cimarex - Permian
1	1.37	1.37	\$14,894	\$45,237	\$30,343

- The only and by default biggest differential ownership in Loosey Goosey / Bane is held by HOG Partnership LP with a 1.37 ratio of Wolfcamp to Bone Spring
- Under Cimarex's single landing development HOG Partnership PV10 is \$45,237/acre
- Under Permian Resources' co-development plan HOG Partnership PV10 is \$14,894/acre
- HOG Partnership enjoys an additional \$30,343/acre PV10 under Cimarex's plan



## Ownership Ratios and Depth Severences

0	Ownership Loosey Goosey / Bane				
OWNER	BS WI	WC WI	WC / BS ownership Ratio		
Delmar Hudson Trust	0.060950089	0.060950089	1.0000		
Lindys Living Trust	0.079980077	0.079980077	1.0000		
Javelina Partners	0.086387997	0.07235004	0.8375		
Zorro Partners	0.053319802	0.053319802	1.0000		
Josephine Hudson Trust	0.013330013	0.013330013	1.0000		
Ard Oil	0.039990039	0.039990039	1.0000		
Moore and Shelton	0.030981016	0.030981016	1.0000		
HOG Partnership LP	0.050128926	0.068846535	1.3734		
Read and Stevens	0.244691793	0.244691793	1.0000		
First Century Oil	0.073245733	0.073245733	1.0000		
Foran Oil Co.	0.038215438	0.038215438	1.0000		
Chase Oil Co.	0.026073984	0.026073984	1.0000		
Union Hill	0	0			
Magnum Hunter	0.09280948	0.09280948	1.0000		
Cimarex	0.089193344	0.089193344	1.0000		
William A Hudson II	0.004679402	0	0.0000		
Challenger Crude	0.016022867	0.016022867	1.0000		

### **Loosey Goosey / Bane: Almost Uniform Interest.**

- The Majority backs lower well count when unclouded by ownership.
- HOG has a 1.8% delta in ownership which we model as benefiting \$30,000/acre from optimum well count vs. double CapEx plan.

	Ownership Migh	ty Pheasant / Joke	er
OWNER	BS WI	WC WI	WC / BS ownership Ratio
MRC Permian	0.011252148	0.033766407	3.0009
HOG Partnership LP	0.060948477	0.060948477	1.0000
Northern Oil and Gas	0.007767257	0.023305971	3.0005
Javelina Partners	0.07044874	0.07044874	1.0000
Zorro Partners	0.05079596	0.05079596	1.0000
Delmar Hudson Trust	0.006062753	0.006062753	1.0000
First Century Oil	0.030962423	0.067510413	2.1804
Read and Stevens	0.229467276	0.280456983	1.2222
CBR Oil Prop	0.00416737	0.012505521	3.0008
Ard Oil	0.014295	0.014295	1.0000
Josephine Hudson Trust	0.006755155	0.006755155	1.0000
Magnum Hunter	0.307816041	0.131229999	0.4263
CLM Production Co.	0	0.001249844	
Highland (Texas) Energy	0.003749531	0.001249844	0.3333
Diamond Star Prod.	0.001249844	0.001249844	1.0000
Carolyn Beall	0.001249844	0.001249844	1.0000
Tierra Encantada	0.001249844	0.001249844	1.0000
David Luna	0.001249844	0.001249844	1.0000
Warren Associates	0	0.001249844	
Cimarex Energy	0.025670122	0.0522325	2.0348
Moore and Shelton	0.01687	0.01687	1.0000
Lindys Living Trust	0.02859	0.02859	1.0000
Challenger Crude	2%	2%	1.0000
Avalon Energy Corp	0.007812793	0	0.0000
Marks Oil	0.00817	0.01567	1.9180
Prime Rock	0.023435195	0	0.0000
Wilbanks Reserve	0.043402861	0.083240693	1.9179
Union Hill	0.012499024	0.012499024	1.0000

### Mighty Pheasant / Joker : Complicated by Depth Severance

 MRC Permian has worst ratio with 2.25% delta in ownership which we model as benefiting \$20,000/acre more from optimum well count vs. double CapEx Plan.

## 3<sup>rd</sup> SS Wolfcamp API List

WI (APINum)	Well Label	Operator	Formation
3002502424010	LEA UNIT 4H	LEGACY RESERVES OPERATING LP	3rd SS
3002532818000	MALLON '34' FEDERAL 16	CIMAREX ENERGY CO	3rd SS
3002539382010	MALLON 35 FEDERAL 4H	CIMAREX ENERGY CO	3rd SS
3002539555000	TUSK FEDERAL 2H	COG OPERATING LLC	3rd SS
3002539763010	MALLON 34 FEDERAL 18H	CIMAREX ENERGY CO	3rd SS
3002539894010	MALLON 34 FEDERAL 19	CIMAREX ENERGY CO	3rd SS
3002540035000	AIRCOBRA 12 STATE 002H	COG OPERATING LLC	3rd SS
3002540040000	QUAIL RIDGE 32 STATE 3H	CIMAREX ENERGY CO	3rd SS
3002540086000	MALLON 35 FEDERAL 7H	CIMAREX ENERGY CO	3rd SS
3002540115000	LYNCH 23 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS
3002540123000	LYNCH 23 FEDERAL 2H	CIMAREX ENERGY CO	3rd SS
3002540135000	MALLON 34 FEDERAL 20	CIMAREX ENERGY CO	3rd SS
3002540253010	CHAPARRAL 33 FEDERAL 3H	CIMAREX ENERGY CO	3rd SS
3002540327000	HANSON 26 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS
3002540328000	CHAPARRAL 33 FEDERAL COM 4	CIMAREX ENERGY CO	3rd SS
3002540330000	EAGLE '2' STATE 006H	MATADOR PRODUCTION CO	3rd SS
3002540361000	QUAIL '16' STATE COM 003H	FASKEN OIL & RANCH LTD	3rd SS
3002540388010	KING COBRA 2 STATE 1H	COG OPERATING LLC	3rd SS
3002540397000	AIRSTRIP 6 STATE COM 2H	COG OPERATING LLC	3rd SS
3002540404000	WILD COBRA 1 STATE 2H	COG OPERATING LLC	3rd SS
	PLAYA 2 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
3002540425000	WEST PEARL 36 STATE 002H	COG OPERATING LLC	3rd SS
3002540430000	TIGER '11' FEDERAL 1H	COG OPERATING LLC	3rd SS
	QUAIL '16' STATE 004H	FASKEN OIL & RANCH LTD	3rd SS
3002540549000	PLAYA 2 STATE 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
3002540604010	IGLOO 19 STATE 2H	CAZA OPERATING LLC	3rd SS
	IRONHOUSE 20 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
3002540634000	BUTTER CUP 35 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	HANSON 26 FEDERAL 3H	CIMAREX ENERGY CO	3rd SS
3002540640000	BUTTER CUP 36 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
3002540641000	BUTTER CUP 36 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	BUTTER CUP 35 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
3002540676010	IRONHOUSE 19 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	LAGUNA 23 FEDERAL COM 002H	EARTHSTONE OPERATING LLC	3rd SS
3002540698010		LEGACY RESERVES OPERATING LP	3rd SS
3002540699010		LEGACY RESERVES OPERATING LP	3rd SS
	OUTLAW '22' FEDERAL COM 1H	COG OPERATING LLC	3rd SS
3002540727000	MONGOOSE FEE 001H	MATADOR PRODUCTION CO	3rd SS
3002540742000	LAGUNA 23 FEDERAL COM 1H	EARTHSTONE OPERATING LLC	3rd SS
3002540748000	IRONHOUSE 20 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
3002540750000		CIMAREX ENERGY CO	3rd SS
3002540778010	PRICKLY PEAR 6 FEDERAL 4H	COG OPERATING LLC	3rd SS
	HANSON 26 FEDERAL 4H	CIMAREX ENERGY CO	3rd SS
	CONDOR STATE 001H	COG OPERATING LLC	3rd SS
	HANSON 26 FEDERAL 2H	CIMAREX ENERGY CO	3rd SS
	LYNCH 35 FEE 1H	CIMAREX ENERGY CO	3rd SS
	MERIT 32 DM STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	QUAIL 11 STATE COM 1H	CIMAREX ENERGY CO	3rd SS
	307881:50AAMM2H	CIMAREX ENERGY CO	3rd SS
	AIRCOBRA 12 STATE 1H	COG OPERATING LLC	3rd SS

30025408840000	MERIT 6 EH STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025409420000	QUAIL '16' STATE 007H	FASKEN OIL & RANCH LTD	3rd SS
30025409700000	STRATOJET 31 STATE COM 2H	COG OPERATING LLC	3rd SS
30025409770100	TRES PRIMOS 3 STATE 1H	COG OPERATING LLC	3rd SS
30025409840000	MARATHON ROAD 14 NC FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025410250000	CONDOR STATE 2H	COG OPERATING LLC	3rd SS
30025410500000	IRONHOUSE 19 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025410600000	KING COBRA 2 STATE 2H	COG OPERATING LLC	3rd SS
30025410940000	IRONHOUSE 19 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025411060100	GOOSE STATE 001H	COG OPERATING LLC	3rd SS
30025411100000	WILD COBRA 1 STATE 1H	COG OPERATING LLC	3rd SS
30025411310000	PERLA NEGRA FEDERAL COM 1H	XTO ENERGY INC	3rd SS
30025411410000	QUAIL 11 STATE COM 3H	CIMAREX ENERGY CO	3rd SS
30025411480100	CAPROCK 27 STATE FEDERAL COM 1H	RAYBAW OPERATING LLC	3rd SS
30025411520000	AIRSTRIP FEE COM 1H	COG OPERATING LLC	3rd SS
30025411630000	IRONHOUSE 24 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025412010000	GOOSE STATE COM 2H	COG OPERATING LLC	3rd SS
	QUAIL 11 STATE COM 4H	CIMAREX ENERGY CO	3rd SS
30025412150000	MARATHON ROAD 14 MD FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025412450200	IRONHOUSE '19' STATE COM 004H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
The state of the s	HAMON A FEDERAL COM 3H	LEGACY RESERVES OPERATING LP	3rd SS
	TUSK FEDERAL 4H	COG OPERATING LLC	3rd SS
	QUAIL '16' STATE 8H	FASKEN OIL & RANCH LTD	3rd SS
	LEA SOUTH 25 FEDERAL COM 5H	EARTHSTONE OPERATING LLC	3rd SS
	NIGHTHAWK STATE COM 1H	MARATHON OIL PERMIAN LLC	3rd SS
	SCHARB 10 PA STATE 1H	MEWBOURNE OIL CO	3rd SS
	ALBATROSS STATE COM 2H	COG OPERATING LLC	3rd SS
The second secon	TANGO BTP STATE COM 004H	EOG RESOURCES INC	3rd SS
	PRICKLY PEAR 6 FEDERAL 2H	COG OPERATING LLC	3rd SS
	TUSK FEDERAL 3H	COG OPERATING LLC	3rd SS
	TUSK FEDERAL SH	COG OPERATING LLC	3rd SS
	MARATHON ROAD 15 PA FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
	IRONHOUSE 24 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	PERRY 22 FEDERAL COM 1H	CIMAREX ENERGY CO	3rd SS
	ORIOLE STATE 1H	COG OPERATING LLC	3rd SS
	HAMON A FEDERAL COM 4H	LEGACY RESERVES OPERATING LP	3rd SS
	PRICKLY PEAR 6 FEDERAL 3H	COG OPERATING LLC	3rd SS
	HAMON FEDERAL COM A 2H	LEGACY RESERVES OPERATING LP	3rd SS
	LYNCH 35 FED COM 3H	CIMAREX ENERGY CO	3rd SS
	IRONHOUSE 24 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
1 0 10 10 10 10 10 10 10 10 10 10 10 10	IRONHOUSE 24 STATE COM 004H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	TOMCAT FEE 1H	COG OPERATING LLC	3rd SS
	CUATRO HIJOS FEE 4H	COG OPERATING LLC	3rd SS
	212121222222222222222222222222222222222		
THE PROPERTY OF THE PARTY OF TH	SCHARB 10 B3OB STATE 1H	MEWBOURNE OIL CO	3rd SS
	MALLON 27 FEDERAL COM 003H	MATADOR PRODUCTION CO	3rd SS
	ALBATROSS STATE COM 1H	COG OPERATING LLC	3rd SS
	TIGER 11 FEDERAL 2H	COG OPERATING LLC	3rd SS
	CORDONIZ 28 FEDERAL COM 4H	CIMAREX ENERGY CO	3rd SS
	KINGFISHER STATE COM 1H	COG OPERATING LLC	3rd SS
	KINGFISHER STATE COM 2H	COG OPERATING LLC	3rd SS
	TEAL 12 STATE 2H	CIMAREX ENERGY CO	3rd SS
30025418610000	PERLA VERDE 31 STATE 2H	XTO ENERGY INC	3rd SS

## 3rd S3 Wolfcamp API List

30025418620000	PERLA VERDE 31 STATE 003H	XTO ENERGY INC	3rd SS
30025418630000	PERLA VERDE 31 STATE 4H	XTO ENERGY INC	3rd SS
30025418790000	CHAPARRAL 33 FEDERAL COM 5H	CIMAREX ENERGY CO	3rd SS
30025418980000	LEA SOUTH 25 FEDERAL COM 6H	EARTHSTONE OPERATING LLC	3rd SS
30025419450000	MARATHON ROAD 15 B30B FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025419470000	PALOMA 21 FEDERAL COM 4H	FASKEN OIL & RANCH LTD	3rd SS
30025419860000	SCHARB 10 B3NC STATE 1H	MEWBOURNE OIL CO	3rd SS
30025419870100	SUPER COBRA STATE COM 1H	COG OPERATING LLC	3rd SS
30025419930000	PALOMA 21 FEDERAL COM 1H	FASKEN OIL & RANCH LTD	3rd SS
30025419940000	PALOMA 21 FEDERAL COM 2H	FASKEN OIL & RANCH LTD	3rd SS
30025419950000	PALOMA 21 FEDERAL COM 3H	FASKEN OIL & RANCH LTD	3rd SS
30025420340000	STRATOSPHERE 36 STATE COM 3H	COG OPERATING LLC	3rd SS
30025420350000	STRATOSPHERE 36 STATE COM 4H	COG OPERATING LLC	3rd SS
	STRATOSPHERE 36 STATE COM 5H	COG OPERATING LLC	3rd SS
30025420370000	STRATOSPHERE 36 STATE COM 6H	COG OPERATING LLC	3rd SS
30025420630000	PERLA VERDE 31 STATE 001H	XTO ENERGY INC	3rd SS
	NORTH LEA '3' FEDERAL COM 001H	READ & STEVENS INC	3rd SS
	TRES PRIMOS 3 STATE 2H	COG OPERATING LLC	3rd SS
	PEARL WEST 36 STATE COM 6H	COG OPERATING LLC	3rd SS
	WEST PEARL 36 STATE COM 003H	COG OPERATING LLC	3rd SS
	PEARL WEST 36 STATE COM 4H	COG OPERATING LLC	3rd SS
	WEST PEARL 36 STATE COM 005H	COG OPERATING LLC	3rd SS
	RAPTOR WEST 3 STATE 004H	MARATHON OIL PERMIAN LLC	3rd SS
	MARATHON ROAD 15 NC FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
	MALLON 27 FEDERAL COM 001H	MATADOR PRODUCTION CO	3rd SS
	NORTH LEA 3 FEDERAL COM 002H	READ & STEVENS INC	3rd SS
	NORTH LEA '3' FEDERAL COM 003H	READ & STEVENS INC	3rd SS
	LEA 7 FEDERAL COM 1H	CIMAREX ENERGY CO	3rd SS
	CUATRO HIJOS FEE 3H	COG OPERATING LLC	3rd SS
	BLACK PEARL 1 FEDERAL COM 1H	COG OPERATING LLC	3rd SS
	BLACK PEARL 1 FEDERAL 002H	COG OPERATING LLC	3rd SS
	BLACK PEARL 1 FEDERAL 3H	COG OPERATING LLC	3rd SS
	BLACK PEARL 1 FEDERAL 4H	COG OPERATING LLC	3rd SS
	MALLON 27 FEDERAL COM 2H	MATADOR PRODUCTION CO	3rd SS
	BLUE JAY FEDERAL 001H	COG OPERATING LLC	3rd SS
30025423380100		LEGACY RESERVES OPERATING LP	3rd SS
30025423420000		LEGACY RESERVES OPERATING LP	3rd SS
30025423440000		LEGACY RESERVES OPERATING LP	3rd SS
	CIMARRON 16-19-34 RN STATE 134H	MATADOR PRODUCTION CO	3rd SS
	IGLOO '19' STATE 3H	CAZA OPERATING LLC	3rd SS
	BUTTER CUP 36 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	IGGLES STATE COM 001H	COG OPERATING LLC	3rd SS
Z-10-207-2-2-1-1-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-	STRATOJET 31 STATE COM 8H	COG OPERATING LLC	3rd SS
the second second second			
	KINGFISHER STATE COM 5H	COG OPERATING LLC	3rd SS
	PICKARD 20 18 34 RN STATE 124H	MATADOR PRODUCTION CO	3rd SS
	SCHARB 10 B3MD STATE 1H	MEWBOURNE OIL CO	3rd SS
	LEA 7 FEDERAL COM 2H (P&A 12/27/	CIMAREX ENERGY CO	3rd SS
	PERLA NEGRA FEDERAL COM 4H	XTO ENERGY INC	3rd SS
	NORTH LEA '3' FEDERAL COM 004H	READ & STEVENS INC	3rd SS
	PERLA NEGRA FEDERAL COM 2H	XTO ENERGY INC	3rd SS
8/3/2023090	FEBRUARY FEDERAL COM 3H	XTO ENERGY INC	3rd SS
30025428850000	LEA UNIT 44H	LEGACY RESERVES OPERATING LP	3rd SS

30025429490000		LEGACY RESERVES OPERATING LP	3rd SS
30025429500000	MAS FEDERAL 3H	COG OPERATING LLC	3rd SS
30025429580000	LEA UNIT 051H	LEGACY RESERVES OPERATING LP	3rd SS
30025429720000	DESERT ROSE 17-8 FEDERAL COM 001	CAZA OPERATING LLC	3rd SS
30025429790000	CIMARRON 16 19S 34E RN STATE COM	MATADOR PRODUCTION CO	3rd SS
30025429880100	EAGLECLAW FEDERAL 001H	CAZA OPERATING LLC	3rd SS
30025430290000	LEA SOUTH 25 FEDERAL COM 3BS 007	EARTHSTONE OPERATING LLC	3rd SS
30025430350000	LEA UNIT 059H	LEGACY RESERVES OPERATING LP	3rd SS
30025430540000 DELLA 29 FEDERAL COM 602H		EOG RESOURCES INC	3rd SS
30025430770000	LEA UNIT 038H	LEGACY RESERVES OPERATING LP	3rd SS
30025432470100	LEA UNIT 062H	LEGACY RESERVES OPERATING LP	3rd SS
30025432500000	HAMON A FED COM 009H	LEGACY RESERVES OPERATING LP	3rd SS
30025434150000	SEVERUS 31 FEDERAL COM 001H	XTO ENERGY INC	3rd SS
0025434160000	SEVERUS 31 FEDERAL COM 002H	XTO ENERGY INC	3rd SS
30025434170000 SEVERUS 31 FEDERAL COM 003H		XTO ENERGY INC	3rd SS
0025434180000	SEVERUS 31 FEDERAL COM 004H	XTO ENERGY INC	3rd SS
0025434680100	CHIEF 30 STATE 7H	CIMAREX ENERGY CO	3rd SS
0025435330000	BLUE JAY FEDERAL COM 002H	COG OPERATING LLC	3rd SS
0025436800000	NORTH LEA 10 FEDERAL 002H	READ & STEVENS INC	3rd SS
0025437410000	ESPEJO FEDERAL COM 001H	XTO ENERGY INC	3rd SS
30025437420000 ESPEJO FEDERAL COM 002H		XTO ENERGY INC	3rd SS
0025437770000	ESPEJO FEDERAL COM 003H	XTO ENERGY INC	3rd SS
0025437920000	STRATOJET 31 STATE COM 007H	COG OPERATING LLC	3rd SS
0025438160100	AIRSTRIP 31 18 35 RN STATE COM #132H	MATADOR PRODUCTION CO	3rd SS
0025439210100	BLACK & TAN 27 FEDERAL COM 303H	APACHE CORP	3rd SS
0025439400000	BLACK & TAN 27 FEDERAL COM 305H	APACHE CORP	3rd SS
30025440170000	BLACK & TAN 27 FEDERAL COM 301H	APACHE CORP	3rd SS
0025440180000	BLACK & TAN 27 FEDERAL COM 302H	APACHE CORP	3rd SS
0025440440000	BLACK & TAN 27 FEDERAL COM 307H	APACHE CORP	3rd SS
0025440450000	BLACK AND TAN 27 FEDERAL COM 308	APACHE CORP	3rd SS
0025440920000	MAS FEDERAL COM 001H	COG OPERATING LLC	3rd SS
0025442130000	CHIEF 30 STATE 8H	CIMAREX ENERGY CO	3rd SS
0025443230000	AIRSTRIP 31-18-35 RN STATE COM 1	MATADOR PRODUCTION CO	3rd SS
0025443410000	VERNA RAE FEDERAL COM 133H	MATADOR PRODUCTION CO	3rd SS
0025443420000	VERNA RAE FEDERAL COM 134H	MATADOR PRODUCTION CO	3rd SS
0025444740000	DELLA 29 FEDERAL COM 603H	EOG RESOURCES INC	3rd SS
0025444750000	DELLA 29 FEDERAL 604H	EOG RESOURCES INC	3rd SS
0025444760000	DELLA 29 FEDERAL 605H	EOG RESOURCES INC	3rd SS
0025444770000	DELLA 29 FEDERAL 606H	EOG RESOURCES INC	3rd SS
0025444950000	EAGLECLAW FEDERAL COM 002H	CAZA OPERATING LLC	3rd SS
0025445090000	AIRSTRIP 31-18-35 RN STATE COM 1	MATADOR PRODUCTION CO	3rd SS
0025449080000	CHIEF 30 STATE 9H	CIMAREX ENERGY CO	3rd SS
0025450540000	MESCALERO RIDGE 21 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS
80025451540000		LEGACY RESERVES OPERATING LP	3rd SS
0025451990000	LEA 7 FEDERAL COM 29H	CIMAREX ENERGY CO	3rd SS
30025452000000	LEA 7 FEDERAL COM 30H	CIMAREX ENERGY CO	3rd SS
0025452100000	LEA UNIT 065H	LEGACY RESERVES OPERATING LP	3rd SS
	AIRSTRIP 31-18S-35E RN STATE COM	MATADOR PRODUCTION CO	3rd SS
	ANCHOR 19 35 33 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	CABLE 19 35 9 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	HEREFORD 29-20 W10B FED COM 001H	MEWBOURNE OIL CO	3rd SS
The second second second	SANTA VACA 19-18 B3MD STATE COM	MEWBOURNE OIL CO	3rd SS

30025474570000	TALON 5-8 FEDERAL 001H	CAZA OPERATING LLC	3rd SS
30025474830000	HEREFORD 29-20 W1MD STATE COM 00	MEWBOURNE OIL CO	3rd SS
30025474840000	HEREFORD 29-20 W1NC STATE COM 00	MEWBOURNE OIL CO	3rd SS
30025474860000 TALON 5-8 FEDERAL 005H		CAZA OPERATING LLC	3rd SS
30025491550000	SANTA VACA 19 18 B3NC STATE COM	MEWBOURNE OIL CO	3rd SS
30025499040000	CHAROLAIS 28 21 W1MD STATE COM 0	MEWBOURNE OIL CO	3rd SS
30025499350000	HEREFORD 29 20 W1PA STATE COM 00	MEWBOURNE OIL CO	3rd SS
30025501680000	FOXTAIL E2 05 32 W1 STATE COM 00	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025501690000 FOXTAIL E2 05 32 W1 STATE COM 00		FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025502420000 SANTA VACA 19-18 B30B FEE 001H		MEWBOURNE OIL CO	3rd SS
30025503260000	SANTA VACA 19-18 B3PA FEE 001H	MEWBOURNE OIL CO	3rd SS
30025507240000	MESCALERO RIDGE 21-28 FED COM 2H	CIMAREX ENERGY CO	3rd SS
30025416080000	PERRY 22 FEDERAL COM 4H	CIMAREX ENERGY CO	Wolfcamp
30025419500000	NIGHTHAWK STATE COM 003H	MARATHON OIL PERMIAN LLC	Wolfcamp
30025430530000 DELLA 29 FEDERAL COM 701H		EOG RESOURCES INC	Wolfcamp
30025431100000	LEA SOUTH 25 FEDERAL COM WCA 012	EARTHSTONE OPERATING LLC	Wolfcamp
30025433950000	AIRSTRIP 31 18 35 RN STATE COM 2	MATADOR PRODUCTION CO	Wolfcamp
30025434820000	MAS FEDERAL 4H	COG OPERATING LLC	Wolfcamp
30025442140100	MAS FEDERAL COM 002H	COG OPERATING LLC	Wolfcamp
30025444940000	VERNA RAE FEDERAL COM 204H	MATADOR PRODUCTION CO	Wolfcamp
30025450980100	LITTLE BEAR FEDERAL COM 001H	COG OPERATING LLC	Wolfcamp
30025450990000	LITTLE BEAR FEDERAL COM 003H	COG OPERATING LLC	Wolfcamp
30025451000000	LITTLE BEAR FEDERAL COM 004H	COG OPERATING LLC	Wolfcamp
30025451020000	LITTLE BEAR FEDERAL COM 006H	COG OPERATING LLC	Wolfcamp
30025451030000 LITTLE BEAR FEDERAL COM 007H		COG OPERATING LLC	Wolfcamp
30025451040000	LITTLE BEAR FEDERAL COM 008H	COG OPERATING LLC	Wolfcamp
30025451050000	LITTLE BEAR FEDERAL COM 009H	COG OPERATING LLC	Wolfcamp
30025451490000	LITTLE BEAR FEDERAL COM 002H	COG OPERATING LLC	Wolfcamp
30025452110100	LEA UNIT 100H	LEGACY RESERVES OPERATING LP	Wolfcamp
30025460720000	BLACK & TAN 27 FEDERAL COM 401H	APACHE CORP	Wolfcamp
30025460730000	BLACK & TAN 27 FEDERAL COM 402H	APACHE CORP	Wolfcamp
30025460750000	BLACK & TAN 27 FEDERAL COM 406H	APACHE CORP	Wolfcamp
30025461230000	BLACK & TAN 27 FEDERAL COM 403H	APACHE CORP	Wolfcamp
30025461240000	BLACK & TAN 27 FEDERAL COM 405H	APACHE CORP	Wolfcamp

Released to Imaging: 8/3/2023 7:31:50 AM

## TAB 6

Case No. 23452-23455

Exhibit E: Self-Affirmed Statement of Notice, Darin C. Savage

Exhibit E-1: Notice Letter Exhibit E-2: Mailing List
Exhibit E-3: Affidavits of Publication

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

APPLICATION OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO

Case Nos. 23452-23455

#### **SELF-AFFIRMED STATEMENT OF NOTICE**

STATE OF NEW MEXICO	)	
	)	SS.
COUNTY OF SANTA FE	)	

- I, Darin C. Savage, attorney and authorized representative of Cimarex Energy Co. ("Cimarex"), the Applicant herein, being first duly sworn, upon oath, states the following:
- 1. Notice of the applications and hearing in the above-reference cases was timely sent by certified mail, return receipt requested, through the United States Postal Service on March 15, 2023, to all uncommitted interest owners sought to be pooled in this proceeding. *See* Exhibit D-2, attached hereto. Copies of notice letters and evidence of mailing to parties are attached hereto as Exhibits D-1 and D-2.
- 2. Notice was sent to the Hobbs News-Sun, a newspaper of general circulation in Lea County, New Mexico, and timely published in said newspaper on March 17, 2023. *See* Exhibit D-3.



Signature page of Self-Affirmed Statement of Darin C. Savage:

I understand that this Self-Affirmed Statement will be used as written testimony before the Division in Case Nos. 23452-23455 and affirm that my testimony herein is true and correct, to the best of my knowledge and belief and made under penalty of perjury under the laws of the State of New Mexico.

Darin Savage

7-13-2023

Date Signed



#### ABADIE I SCHILL PC

Colorado New Mexico
Louisiana Texas
Nebraska Kansas
Montana Wyoming
Oklahoma California
North Dakota

March 15, 2023

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

#### TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and

compulsory pooling, Lea County, New Mexico

<u>Loosey Goosey 4-9 Fed Com 204H Well</u> (Case No. 23452) <u>Loosey Goosey 4-9 Fed Com 304H Well</u> (Case No. 23452)

Case No. 23452:

#### **Dear Interest Owners:**

This letter is to advise you that Cimarex Energy Co. ("Cimarex") has filed the enclosed application, Case No. 23452, with the New Mexico Oil Conservation Division ("Division") for the compulsory pooling of units within the interval of the Bone Spring formation, as described in the application.

In Case No. 23452, Cimarex seeks to establish a standard 320.89-acre, more or less, horizontal spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. The unit will be dedicated to the above-referenced wells.

A hearing has been requested before a Division Examiner on April 6, 2023, and the status of the hearing can be monitored through the Division's website. Division hearings will commence at 8:15 a.m., traditionally in Porter Hall at the Oil Conservation Division's Santa Fe Offices located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505.

abadieschill.com

214 McKenzie Street, Santa Fe, New Mexico, 87501

O: 970.385.4401 • F: 970.385.4901

EXHIBIT E-1

However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and status of the case, you can visit the Division's website at: https://www.emnrd.nm.gov/ocd/hearing-info/ or call (505) 476-3441.

You are being notified as an interest owner (subject to title examination) and are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Parties appearing in cases are required by Division Rule 19.15.4.13.B NMAC to file a Prehearing Statement at least four business days in advance of a scheduled hearing, but in no event later than 5 p.m. mountain time on the Thursday preceding the scheduled hearing date. This statement must be filed at the Division's Santa Fe office at the above specified address and should include: The names of the parties and their attorneys; a concise statement of the case; the names of all witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and identification of any procedural matters that are to be resolved prior to the hearing.

If you have any questions about this matter, please contact John Coffman at (432) 571-7883 or at john.coffman@coterra.com.

Sincerely,

Darin C. Savage

Attorney for Cimarex Energy Co.



#### ABADIE I SCHILL PC

Colorado New Mexico
Louisiana Texas
Nebraska Kansas
Montana Wyoming
Oklahoma California
North Dakota

March 15, 2023

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and

compulsory pooling, Lea County, New Mexico

Loosey Goosey 4-9 Fed Com 301H Well (Case No. 23453)

Case No. 23453:

Dear Interest Owners:

This letter is to advise you that Cimarex Energy Co. ("Cimarex") has filed the enclosed application, Case No. 23453, with the New Mexico Oil Conservation Division ("Division") for the compulsory pooling of units within the interval of the Bone Spring formation, as described in the application.

In Case No. 23453, Cimarex seeks to establish a standard 320.21-acre, more or less, horizontal spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. The unit will be dedicated to the above-referenced well.

A hearing has been requested before a Division Examiner on April 6, 2023, and the status of the hearing can be monitored through the Division's website. Division hearings will commence at 8:15 a.m., traditionally in Porter Hall at the Oil Conservation Division's Santa Fe Offices located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505.

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However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and status of the case, you can visit the Division's website at: <a href="https://www.emnrd.nm.gov/ocd/hearing-info/">https://www.emnrd.nm.gov/ocd/hearing-info/</a> or call (505) 476-3441.

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If you have any questions about this matter, please contact John Coffman at (432) 571-7883 or at john.coffman@coterra.com.

Sincerely,

Darin C. Savage

Attorney for Cimarex Energy Co.



#### ABADIE I SCHILL PC

Colorado New Mexico
Louisiana Texas
Nebraska Kansas
Montana Wyoming
Oklahoma California
North Dakota

March 15, 2023

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and

compulsory pooling, Lea County, New Mexico

Loosey Goosey 4-9 Fed Com 302H Well (Case No. 23454)

Case No. 23454:

Dear Interest Owners:

This letter is to advise you that Cimarex Energy Co. ("Cimarex") has filed the enclosed application, Case No. 23454, with the New Mexico Oil Conservation Division ("Division") for the compulsory pooling of units within the interval of the Bone Spring formation, as described in the application.

In Case No. 23454, Cimarex seeks to establish a standard 320.44-acre, more or less, horizontal spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. The unit will be dedicated to the above-referenced well.

A hearing has been requested before a Division Examiner on April 6, 2023, and the status of the hearing can be monitored through the Division's website. Division hearings will commence at 8:15 a.m., traditionally in Porter Hall at the Oil Conservation Division's Santa Fe Offices located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505.

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However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and status of the case, you can visit the Division's website at: <a href="https://www.emnrd.nm.gov/ocd/hearing-info/">https://www.emnrd.nm.gov/ocd/hearing-info/</a> or call (505) 476-3441.

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If you have any questions about this matter, please contact John Coffman at (432) 571-7883 or at john.coffman@coterra.com.

Sincerely,

Darin C. Savage

Attorney for Cimarex Energy Co.



#### ABADIE I SCHILL PC

Colorado New Mexico
Louisiana Texas
Nebraska Kansas
Montana Wyoming
Oklahoma California
North Dakota

March 15, 2023

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and

compulsory pooling, Lea County, New Mexico

Loosey Goosey 4-9 Fed Com 303H Well (Case No. 23455)

Case No. 23455:

Dear Interest Owners:

This letter is to advise you that Cimarex Energy Co. ("Cimarex") has filed the enclosed application, Case No. 23455, with the New Mexico Oil Conservation Division ("Division") for the compulsory pooling of units within the interval of the Bone Spring formation, as described in the application.

In Case No. 23455, Cimarex seeks to establish a standard 320.66-acre, more or less, horizontal spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. The unit will be dedicated to the above-referenced well.

A hearing has been requested before a Division Examiner on April 6, 2023, and the status of the hearing can be monitored through the Division's website. Division hearings will commence at 8:15 a.m., traditionally in Porter Hall at the Oil Conservation Division's Santa Fe Offices located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505.

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However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and status of the case, you can visit the Division's website at: <a href="https://www.emnrd.nm.gov/ocd/hearing-info/">https://www.emnrd.nm.gov/ocd/hearing-info/</a> or call (505) 476-3441.

You are being notified as an interest owner (subject to title examination) and are not required to attend this hearing, but as an owner of an interest that may be affected by this application, you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Parties appearing in cases are required by Division Rule 19.15.4.13.B NMAC to file a Prehearing Statement at least four business days in advance of a scheduled hearing, but in no event later than 5 p.m. mountain time on the Thursday preceding the scheduled hearing date. This statement must be filed at the Division's Santa Fe office at the above specified address and should include: The names of the parties and their attorneys; a concise statement of the case; the names of all witnesses the party will call to testify at the hearing; the approximate time the party will need to present its case; and identification of any procedural matters that are to be resolved prior to the hearing.

If you have any questions about this matter, please contact John Coffman at (432) 571-7883 or at john.coffman@coterra.com.

Sincerely,

Darin C. Savage

Attorney for Cimarex Energy Co.

Mail Activity Report - CertifiedPro.net					
Mailed from 3/1/2023 to 3/31/2023					
User Name: abadieschill					
Generated: 7/12/2023 12:52:26 PM					

Generated: //12/2023 12:52:26 PW										
USPS Article Number	Date Mailed	Name 1	Name 2	Address 1	Address 2	City	State	Zip	Mailing Status	Service Options
9314869904300105482880	03/15/2023	Bureau of Land Management	Name 2	414 W Taylor St	Address 2	Hobbs	NM	88240	Mailed	Return Receipt - Electronic, Certified Mail
		9		•						
9314869904300105482897	03/15/2023	Moore & Shelton Co., Ltd		PO Box 3070		Galveston	TX	77552	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105482903	03/15/2023	HOG Partnership, LP		5950 Cedar Springs Rd.		Dallas	TX	75235	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105482910	03/15/2023	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210	Midland	TX	79701	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105482927	03/15/2023	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105482934	03/15/2023	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105482941	03/15/2023	Francis Hill Hudson,	Trustee of Lindy's Living Trust	4200 S. Hulen St.	Suite 302	Fort Worth	TX	76109	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105482958	03/15/2023	Bank of America, N.A., Successor Trustee of	the Delmar Hudson Lewis Living Trust	301 Commerce St.	Suite 2400	Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105482965	03/15/2023	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105482972	03/15/2023	Zorro Partners, Ltd.		616 Texas St.		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105482989	03/15/2023	Frost Bank, Trustee of the Josephine T. Hudson	Testamentary Trust FBO J. Terrell Ard	640 Taylor Street	17th floor	Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105482996	03/15/2023	Ard Oil, LTD		PO Box 101027		Fort Worth	TX	76185	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105483009	03/15/2023	Chase Oil Corporation		PO Box 1767		Artesia	NM	88211	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105483016	03/15/2023	Avalon Energy Corporation		310 West Wall St.	Suite 305	Midland	TX	79701	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105483023	03/15/2023	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220	Denver	CO	80203	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105483030	03/15/2023	Prime Rock Resources AgentCo, Inc., as nominee	for the benefit of Prime Rock Resources, LLC	203 W. Wall Street	Suite 1000	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105483047	03/15/2023	Marks Oil, Inc.		1775 Sherman St.	Suite 2990	Denver	CO	80203	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105483054	03/15/2023	Javelina Partners		616 Texas St.		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105483061	03/15/2023	William A. Hudson, II		616 Texas St.		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105483078	03/15/2023	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle		Dallas	TX	75225	Delivered	Return Receipt - Electronic, Certified Mail



March 20, 2023

Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0105 4830 78.

Item Details

Status: Delivered, Left with Individual Status Date / Time: March 18, 2023, 02:45 p.m.

Location:DALLAS, TX 75225Postal Product:First-Class Mail®Extra Services:Certified Mail™

Return Receipt Electronic

Recipient Name: Union Hill Oil Gas Co Inc

Shipment Details

Weight: 5.0oz

**Destination Delivery Address** 

**Street Address:** 7712 GLENSHANNON CIR **City, State ZIP Code:** DALLAS, TX 75225-2054

Recipient Signature

Signature of Recipient:

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: **9314 8699 0430 0105 4830 61**.

Item Details Status: Delivered, Left with Individual Status Date / Time: March 20, 2023, 03:22 p.m. Location: FORT WORTH, TX 76102 **Postal Product:** First-Class Mail® **Extra Services:** Certified Mail™ Return Receipt Electronic **Recipient Name:** William A Hudson II Shipment Details Weight: 5.0oz **Destination Delivery Address** City, State ZIP Code: FORT WORTH, TX 76102-4662 Recipient Signature Signature of Recipient: Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0105 4830 54.

Item Details Status: Delivered, Left with Individual Status Date / Time: March 20, 2023, 03:22 p.m. Location: FORT WORTH, TX 76102 **Postal Product:** First-Class Mail® **Extra Services:** Certified Mail™ Return Receipt Electronic **Recipient Name:** Javelina Partners Shipment Details Weight: 5.0oz **Destination Delivery Address** City, State ZIP Code: FORT WORTH, TX 76102-4662 Recipient Signature Signature of Recipient: Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



Item Details

Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0105 4830 47.

# Status: Delivered to Agent for Final Delivery Status Date / Time: March 20, 2023, 04:38 p.m. Location: DENVER CO 80203

Location:DENVER, CO 80203Postal Product:First-Class Mail®Extra Services:Certified Mail™

Return Receipt Electronic

Recipient Name: Marks Oil Inc

Shipment Details

Weight: 5.0oz

#### Recipient Signature

Signature of Recipient:
(Authorized Agent)

Address of Recipient: 1775 Sherran -

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: **9314 8699 0430 0105 4830 30**.

Item Details

**Status:** Delivered, Left with Individual

**Status Date / Time:** March 20, 2023, 04:37 p.m.

Location: MIDLAND, TX 79701

Postal Product: First-Class Mail®
Extra Services: Certified Mail™

Return Receipt Electronic

Recipient Name: Prime Rock Resources AgentCo Inc as nominee

Shipment Details

Weight: 5.0oz

**Destination Delivery Address** 

Street Address: 203 W WALL ST

City, State ZIP Code: MIDLAND, TX 79701-4530

Recipient Signature

Signature of Recipient:

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0105 4830 23.

Item Details

Status: Delivered, Front Desk/Reception/Mail Room

**Status Date / Time:** March 20, 2023, 03:39 p.m.

Location: DENVER, CO 80203

Postal Product: First-Class Mail®
Extra Services: Certified Mail™

Return Receipt Electronic

Recipient Name: Wilbanks Reserve Corporation

Shipment Details

Weight: 5.0oz

**Destination Delivery Address** 

Street Address: 450 E 17TH AVE UNIT 220 City, State ZIP Code: DENVER, CO 80203-1254

Recipient Signature

Signature of Recipient:

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: **9314 8699 0430 0105 4830 09**.

Item Details

Status: Delivered, Individual Picked Up at Post Office

**Status Date / Time:** March 20, 2023, 11:20 a.m.

Location: ARTESIA, NM 88210

Postal Product: First-Class Mail<sup>®</sup>
Extra Services: Certified Mail<sup>™</sup>

Return Receipt Electronic

Recipient Name: Chase Oil Corporation

Shipment Details

Weight: 5.0oz

Recipient Signature

Signature of Recipient:

Draws

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: **9314 8699 0430 0105 4829 89**.

Item Details

Status:Delivered, Left with IndividualStatus Date / Time:March 20, 2023, 01:04 p.m.Location:FORT WORTH, TX 76102

Postal Product: First-Class Mail<sup>®</sup>
Extra Services: Certified Mail<sup>™</sup>

Return Receipt Electronic

Recipient Name: Frost Bank Trustee of the Josephine T Hudson

Shipment Details

Weight: 5.0oz

**Destination Delivery Address** 

Street Address: 640 TAYLOR ST

City, State ZIP Code: FORT WORTH, TX 76102-4809

Recipient Signature

Signature of Recipient:

Address of Recipient:

H. BOYANT S

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0105 4829 72.

Item Details Status: Delivered, Left with Individual Status Date / Time: March 20, 2023, 03:22 p.m. Location: FORT WORTH, TX 76102 **Postal Product:** First-Class Mail® **Extra Services:** Certified Mail™ Return Receipt Electronic **Recipient Name:** Zorro Partners Ltd Shipment Details Weight: 5.0oz **Destination Delivery Address** City, State ZIP Code: FORT WORTH, TX 76102-4662 Recipient Signature Signature of Recipient: Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: **9314 8699 0430 0105 4829 65**.

Item Details

Status: Delivered, Individual Picked Up at Post Office

**Status Date / Time:** March 20, 2023, 01:10 p.m.

**Location:** MIDLAND, TX 79701 **Postal Product:** First-Class Mail®

Extra Services: Certified Mail™

Return Receipt Electronic

Recipient Name: Magnum Hunter Production

Shipment Details

Weight: 5.0oz

**Destination Delivery Address** 

Street Address: 600 N MARIENFELD ST STE 600

City, State ZIP Code: MIDLAND, TX 79701-4405

Recipient Signature

Signature of Recipient:

Address of Recipient:

Midle JA 79761

Pan Waldow

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



March 24, 2023

Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0105 4829 58.

Item Details

Status:Delivered, Left with IndividualStatus Date / Time:March 23, 2023, 11:16 a.m.Location:FORT WORTH, TX 76102

Postal Product: First-Class Mail<sup>®</sup>
Extra Services: Certified Mail<sup>™</sup>

Return Receipt Electronic

Recipient Name: Bank of America N A Successor Trustee of the

Shipment Details

Weight: 5.0oz

**Destination Delivery Address** 

Street Address: 301 COMMERCE ST STE 2400
City, State ZIP Code: FORT WORTH, TX 76102-4124

Recipient Signature

Signature of Recipient:

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



March 20, 2023

Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0105 4829 34.

Item Details

Status: Delivered, Left with Individual

**Status Date / Time:** March 18, 2023, 11:17 a.m.

**Location:** MIDLAND, TX 79701

Postal Product: First-Class Mail<sup>®</sup>
Extra Services: Certified Mail<sup>™</sup>

Return Receipt Electronic

Recipient Name: First Century Oil Inc

Shipment Details

Weight: 5.0oz

**Destination Delivery Address** 

Street Address: 300 N MARIENFELD ST STE 1000

City, State ZIP Code: MIDLAND, TX 79701-4688

Recipient Signature

Signature of Recipient:

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



March 20, 2023

Dear WALZ GROUP:

The following is in response to your request for proof of delivery on your item with the tracking number: 9314 8699 0430 0105 4829 27.

Item Details

**Status:** Delivered, Left with Individual

**Status Date / Time:** March 18, 2023, 11:17 a.m.

**Location:** MIDLAND, TX 79701

Postal Product: First-Class Mail<sup>®</sup>
Extra Services: Certified Mail<sup>™</sup>

Return Receipt Electronic

Recipient Name: Read Stevens Inc

Shipment Details

Weight: 5.0oz

**Destination Delivery Address** 

Street Address: 300 N MARIENFELD ST STE 1000

City, State ZIP Code: MIDLAND, TX 79701-4688

Recipient Signature

Signature of Recipient:

Address of Recipient:

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.



April 21, 2023

**Dear Covius Document Services:** 

The following is in response to your request for proof of delivery on your item with the tracking number: **9314 8699 0430 0105 4828 80**.

Item Details

**Status:** Delivered to Agent for Final Delivery

 Status Date / Time:
 April 20, 2023, 02:40 p.m.

 Location:
 DURANGO, CO 81301

Postal Product: First-Class Mail<sup>®</sup>
Extra Services: Certified Mail<sup>™</sup>

Return Receipt Electronic

Recipient Name: Bureau of Land Management

Shipment Details

Weight: 5.0oz

Recipient Signature

Signature of Recipient: (Authorized Agent)

Address of Recipient:

HIPKAM)

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

Information in this section provided by Covius Document Services, LLC.

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 March 17, 2023 and ending with the issue dated March 17, 2023.

Publisher

Sworn and subscribed to before me this 17th day of March 2023.

My commission expires

January 29, 2027 (Seal)

STATE OF NEW MEXICO **NOTARY PUBLIC** GUSSIE RUTH BLACK **COMMISSION # 1087526** COMMISSION EXPIRES 01/29/2027

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** March 17, 2023

LEGAL NOTICE March 17, 2023

CASE No. 23452: Notice to all parties and persons having any right, title, interest or claim to this case, including owners of working interest, overriding royalty interest, and record title, among others, as well as to the known and unknown heirs, devisees, assigns and successors of MOORE & SHELTON CO., LTD; HOG PARTNERSHIP, LP; CHALLENGER CRUDE, LTD; READ & STEVENS, INC.; FIRST CENTURY OIL, INC.; FRANCIS HILL HUDSON, TRUSTEE OF LINDY'S LIVING TRUST; BANK OF AMERICA, N.A., SUCCESSOR TRUSTEE OF THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD.; FROST BANK, TRUSTEE OF THE JOSEPHINE T. HUDSON TESTAMENTARY TRUST FROJ. TERRELL ARD; ARD OIL, LTD; CHASE OIL CORPORATION, VALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION, PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; JAVELINA PARTNERS; WILLIAM A. HUDSON, II and UNION HILL OIL & GAS CO. INC., of Cimarex Energy Co.'s application for approval of a spacing unit and compulsory pooling, Lea County, New Mexico, The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division Examiner will conduct a public hearing at 8:15 a.m. on April 6, 2023. traditionally held at 1220 S. St. Francis, Santa Fe, New Mexico, 87505. However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division's website at: https://www.emmrd.nm.gov/ocd/hearing-info/ or call (505) 476-3441. Cimarex Energy Co. (operational office at 600 N. Marienfeld St. Suite 600, 79701; HQ office at 1700 Lincoln Street, Suite 3700, Denver CO 80203) seeks an order from the Division; (1) establishing a standard 320.89-acre, more or less, horizontal spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 B/2 of Section 9, in Township 20 South, Range 34 East, NMPM. Lea County, Ne

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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 March 17, 2023 and ending with the issue dated March 17, 2023.

Publisher

Sworn and subscribed to before me this 17th day of March 2023.

Business Manager

My commission expires

January 29, 2027 ATE OF NEW MEXICO (Seal) **NOTARY PUBLIC** 

GUSSIE RUTH BLACK **COMMISSION # 1087526** COMMISSION EXPIRES 01/29/2027

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 March 17, 2023

CASE No. 23453: Notice to all parties and persons having any right, title, interest or claim to this case, including owners of working Interest, overriding royalty interest, and record title, among others, as well as to the known and unknown heirs, devisees, assigns and successors of MOORE & SHELTON CO., LTD: HOG PARTNERSHIP, LP; CHALLENGER CRUDE, LTD; READ & STEVENS, INC.; FIRST CENTURY OIL, INC.; FRANCIS HILL HUBSON, TRUSTEE OF LINDY'S LIVING TRUST; BANK OF AMERICA, N.A., SUCCESSOR TRUSTEE OF THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD.; FROST BANK, TRUSTEE OF THE JOSEPHINE T. HUDSON TESTAMENTARY TRUST FBO J. TERRELL ARD; ARD OIL, LTD; CHASE OIL CORPORATION; PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION; PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; AGAS CO. INC., of Cimarex Energy Co.'s application for approval of a spacing unit and compulsory pooling, Lea County, New Mexico, The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division Examiner will conduct a public hearing at 8:15 a.m., on April 6, 2023, traditionally held at 1220 S. St. Francis, Santa Fe, New Mexico, 87505. However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division's website at: https://www.emard.mm.gov/ocd/hearing-info/ or call (505) 476-3441, Cimarex Energy Co. (operational office at 600 N. Marlenfeld St. Suite 600, 79701; HQ office at 1700 Lincoln Street, Suite 3700, Denver CO 80203) seeks an order from the Division: (1) establishing a standard 320.21-acre, more or less, horizontal spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9 in Township 20 South, Range 34 East

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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 March 17, 2023 and ending with the issue dated March 17, 2023.

Publisher

Sworn and subscribed to before me this 17th day of March 2023.

**Business Manager** 

My commission expires

January 29, 2027

(Seal)

STATE OF NEW MEXICO NOTARY PUBLIC GUSSIE RUTH BLACK COMMISSION # 1087525 CIONNIMISSION EXPIRES 91/29/20

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 March 17, 2023

CASE No. 23454: Notice to all parties and persons having any right, title, interest or claim to this case, including owners of working interest, overriding royalty interest, and record title, among others, as well as to the known and unknown heirs, devisees, assigns and successors of MOORE & SHELTON CO., LTD; HOG PARTNERSHIP, LP; CHALLENGER CRUDE, LTD.; READ & STEVENS, INC.; FIRST CENTURY OIL, INC.; FRANCIS HILL HUDSON, TRUSTEE OF LINDY'S LIVING TRUST; BANK OF AMERICA, N.A., SUCCESSOR TRUSTEE OF THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD.; FROST BANK, TRUSTEE OF THE JOSEPHINE T. HUDSON TESTAMENTARY TRUST FBO J. TERRELL ARD; ARD OIL, LTD; CHASE OIL CORPORATION; AVALON ENERGY CORPORATION; WILBANK'S RESERVE CORPORATION; AVALON ENERGY CORPORATION; WILBANK'S RESERVE CORPORATION; PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; JAVELINA PARTNERS; WILLIAM A. HUDSON, II and UNION HILL OIL & GAS CO, INC., of Cimarex Energy Co, 's application for approval of a spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division Examiner will conduct a public hearing at 8:15 a.m., on April 6, 2023, traditionally held at 1220 S. St. Francis, Santa Fe, New Mexico, 87505. However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division's website at: https://www.emprd.nm.gov/ocd/hearing-info/ or call (505) 476-3441, Cimarex Energy Co, Operational office at 600 N. Marienfeld St. Suite 600, 79701; HO office at 1700 Lincoln Street, Suite 3700, Denver CO 80203) seeks an order from the Division: (1) establishing a standard 320.44-acre, more or less, horizontal spacing and proration unit comprised of Lot 3 (NEJ/A NW/4 equivalent), the SE/A NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the well and unit; and a 200% charge for the risk involved in drilling and completing the well. The well and lands are located approximately 40 miles northeast of Carlsbad, New Mexico. #00276788

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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 March 17, 2023 and ending with the issue dated March 17, 2023.

Publisher

Sworn and subscribed to before me this 17th day of March 2023.

**Business Manager** 

My commission expires

January 29, 2027 (Seal)

NOTARY PUBLIC

NOTARY PUBLIC

GUSSIE RUTH BLACK

COMMISSION # 1087526

COMMISSION EXPIRES 01/29/2027

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 March 17, 2023

CASE No. 23455: Notice to all parties and persons having any right, title, interest or claim to this case, including owners of working interest, overriding royalty interest, and record title, among others, as well as to the known and unknown heirs, devisees, assigns and successors of MOORE & SHELTON CO., LTD: HOG PARTNERSHIP, LP; CHALLENGER CRUDE, LTD.; READ & STEVENS, INC.; FIRST CENTURY OIL, INC.; FRANCIS HILL HUDSON, TRUSTEE OF LINDY'S LIVING TRUST; BANK OF AMERICA, N.A., SUCCESSOR TRUSTEE OF THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD.; FROST BANK, TRUSTEE OF THE JOSEPHINE T. HUDSON TESTAMENTARY TRUST FBO J. TERRELL ARD; ARD OIL, LTD; CHASE OIL CORPORATION, AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION, AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION, PRIME ROCK RESOURCES ALC; MARKS OIL, INC.; JAVELINA PARTNERS; WILLIAM A. HUDSON, II and UNION HILL OIL & GAS CO. INC., of Clmarex Energy Co. 's application for approval of a spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division Examiner will conduct a public hearing at 8:15 a.m. on April 6, 2023, traditionally held at 1220 S. St. Francis, Santa Fe, New Mexico, 87505. However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division's website at: https://www.emnrd.nm.gov/ocd/hearing-info/ or call (505) 476-3441. Cimarex Energy Co. (operational office at 600 N. Marienteld St. Suite 600, 79701; HQ office at 1700 Lincoin Street, Suite 3700, Denver CO 80203) seeks an order from the Division: (1) establishing a standard 320.66-acre, more or less, horizontal spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 is an irregular section or list. The part of the case pring, of the Case to the principal standard 320.66-acre, more or le

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