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 I

Case No. 23448:

Mighty Pheasant 5-8 Fed Com 204H Well Mighty Pheasant 5-8 Fed Com 304H Well

Case No. 23449:

Mighty Pheasant 5-8 Fed Com 301H Well

Case No. 23450:

Mighty Pheasant 5-8 Fed Com 302H Well

Case No. 23451:

Mighty Pheasant 5-8 Fed Com 303H Well

CIMAREX ENERGY CO.

TAB 1 Reference for Case No2. 23448-23451 Applications Case Nos. 23448-23451

Mighty Pheasant 5-8 Fed Com 204H Well Mighty Pheasant 5-8 Fed Com 304H Well Mighty Pheasant 5-8 Fed Com 301H Well Mighty Pheasant 5-8 Fed Com 302H Well Mighty Pheasant 5-8 Fed Com 303H Well

NMOCD Checklists Case Nos. 23448-23451 Prehearing Statement Case Nos. 23448-23451

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Exhibit B-9: All 3rd Bone Spring and Wolfcamp Producers

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TAB 1

Reference for Case Nos. 23448-23451 Applications Case Nos. 23448-23451:

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NMOCD Checklists Case Nos. 23448-23451 Prehearing Statement Case Nos. 23448-23451

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. 23448

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 320.09-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 5 and the E/2 E/2 of Section 8, 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 5 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 **Mighty Pheasant 5-8 Fed Com 204H Well** and the **Mighty Pheasant 5-8 Fed Com 304H Well**, as the initial wells, to be drilled to a sufficient depth to test the Bone Spring formation.

- 3. Cimarex proposes the **Mighty Pheasant 5-8 Fed Com 204H Well,** an oil well, to be horizontally drilled from a surface location in SW/4 SE/4 (Unit O) of Section 32, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 8, Township 20 South, Range 34 East, NMPM.
- 4. Cimarex proposes the **Mighty Pheasant 5-8 Fed Com 304H Well,** an oil well, to be horizontally drilled from a surface location in SW/4 SE/4 (Unit O) of Section 32, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 8, Township 20 South, 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 a standard 320.09-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 5 and

the E/2 E/2 of Section 8, 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 Mighty Pheasant 5-8 Fed Com 204H Well and the Mighty

Pheasant 5-8 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 320.09-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 5 and the E/2 E/2 of Section 8, 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 5 is an irregular section containing correction lots. The proposed wells to be dedicated to the horizontal spacing unit are the Mighty Pheasant 5-8 Fed Com 204H Well and the Mighty Pheasant 5-8 Fed Com 304H Well, both oil wells, to be horizontally drilled from surface locations in the SW/4 SE/4 (Unit O) of Section 32, Township 19 South, Range 34 East, NMPM, to bottom hole locations in the SE/4 SE/4 (Unit P) of Section 8, Township 20 South, Range 34 East, NMPM. The wells 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 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.	23449

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 320.01-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 5 and the W/2 W/2 of Section 8, 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 5 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 Mighty Pheasant 5-8 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 **Mighty Pheasant 5-8 Fed Com 301H Well,** an oil well, to be horizontally drilled from a surface location in Lot 4 (NW/4 NW/4 equivalent) of Section 5 to a bottom hole location in the SW/4 SW/4 (Unit M) of Section 8.
- 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 320.01-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 5 and the W/2 W/2 of Section 8, 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 **Mighty Pheasant 5-8 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 320.01-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 5 and the W/2 W/2 of Section 8, 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 5 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the Mighty Pheasant 5-8 Fed Com 301H Well, an oil well, to be horizontally drilled from a surface location in Lot 4 (NW/4 NW/4 equivalent) of Section 5 to a bottom hole location in the SW/4 SW/4 (Unit M) of Section 8. 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. 23450

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 320.04-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 5 and the E/2 W/2 of Section 8, 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 5 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 Mighty Pheasant 5-8 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 **Mighty Pheasant 5-8 Fed Com 302H Well,** an oil well, to be horizontally drilled from a surface location in Lot 4 (NW/4 NW/4 equivalent) of Section 5 to a bottom hole location in the SE/4 SW/4 (Unit N) of Section 8.
- 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 a standard 320.04-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 5 and the E/2 W/2 of Section 8, 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 **Mighty Pheasant 5-8 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

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) creating a standard 320.04-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 5 and the E/2 W/2 of Section 8, 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 5 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the Mighty Pheasant 5-8 Fed Com 302H Well, an oil well, to be horizontally drilled from a surface location in Lot 4 (NW/4 NW/4 equivalent) of Section 5 to a bottom hole location in the SE/4 SW/4 (Unit N) of Section 8. 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. 23451

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 320.06-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 5 and the W/2 E/2 of Section 8, 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 5 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 Mighty Pheasant 5-8 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 **Mighty Pheasant 5-8 Fed Com 303H Well,** an oil well, to be horizontally drilled from a surface location in SW/4 SE/4 (Unit O) of Section 32, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SE/4 (Unit O) of Section 8, Township 20 South, 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 a standard 320.06-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 5 and the W/2 E/2 of Section 8, 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 **Mighty Pheasant 5-8 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

/s/ Darin C. Savage

Darin C. Savage

William E. Zimsky Andrew D. Schill 214 McKenzie Street Santa Fe, New Mexico 87501 Telephone: 970.385.4401

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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 320.06-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 5 and the W/2 E/2 of Section 8, 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 5 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the Mighty Pheasant 5-8 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 32, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SE/4 (Unit O) of Section 8, 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.

COMPULSORY POOLIN	G APPLICATION CHECKLIST
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Case: 23448	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 HORIZONTA SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	Read & Stevens, Inc., / Permian Resources Operating, LLC Sandstone Properties, LLC Northern Oil and Gas, Inc.
Well Family	Mighty Pheasant
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)	320.09-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 5 and the E/2 E/2 of Section 8, 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	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 or non-standard)	Add wells as needed
Well #1	Mighty Pheasant 5-8 Fed Com 204H Well (API No. 30-015-Pending), SHL: Unit O, 281' FSL, 1443' FEL, Section 32, T19S-R34E; BHL: Unit P, 100' FSL, 708' FEL, Section 8, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location

Received by OCD. 8/2/2023 8.28.00 FM	118123	
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	
HSU Cross Section	Exhibit B-3, B-4, B-6, B-7, B-13	
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	
Cross Section (including Landing Zone)	Exhibit B-3, B-4, B-6, B-7, B-13	
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/ Darín Savage	
Date:	Date 8-2-2023	

COMPULSORY POOLING APPLICATION CHECKLIST

Case: 23449	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:	Read & Stevens, Inc., / Permian Resources Operating, LLC Sandstone Properties, LLC Northern Oil and Gas, Inc.
Well Family	Mighty Pheasant
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)	320.01-acre, more or less
Building Blocks:	Quarter-Quarter Sections (40 Acre Blocks)
Orientation:	North to South
Description: TRS/County	Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 5 and the W/2 W/2 of Section 8, 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-2.2, 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

Exhibit B

Summary (including special considerations)

Received by OCD: 8/2/2023 8:28:00 PM	Page 28
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-2.2
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-2.2
General Location Map (including basin)	Exhibit A-2.2
Well Bore Location Map	Exhibit A-1, B-2, B-3
Structure Contour Map - Subsea Depth	Exhibit B-5, B-6, B-11
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.
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	/s/ Darín Savage
Date:	Date 8-2-2023

COMPULSORY POOLING APPLICATION CHECKLIST

Case: 23450	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:	Read & Stevens, Inc., / Permian Resources Operating, LLC Sandstone Properties, LLC Northern Oil and Gas, Inc.
Well Family	Mighty Pheasant
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)	320.04-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 5 and the E/2 W/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County,
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
Well #1	Mighty Pheasant 5-8 Fed Com 302H Well (API No. 30-015-Pending), SHL: Lot 4, 484' FNL, 1312' FWL, Section 5, T20S-R34E; BHL: Unit N, 100' FSL, 1744' FWL, Section 8, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location

Exhibit B-3, B-4, B-6, B-7

Exhibit B-3, B-4, B-6, B-7

N/A

Target Formation

HSU Cross Section

Depth Severance Discussion

Forms, Figures and Tables	ruge 31 tj	
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 provided in this checklist is complete and accurate.		
Printed Name (Attorney or Party Representative):	Darin C. Savage	
Signed Name (Attorney or Party Representative):	/s/ Darín Savage	
Date:	Date 8-2-2023	

COMPULSORY POOLING APPLICATION CHECKLIST

ALL INFORMATION IN THE APPLICATION MUST BE SUPP	ORTED BY SIGNED AFFIDAVITS
Case: 23451	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:	Read & Stevens, Inc., / Permian Resources Operating, LLC Sandstone Properties, LLC Northern Oil and Gas, Inc.
Well Family	Mighty Pheasant
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)	320.06-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 5 and the W/2 E/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County,
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-2.4, ownership breakdown
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
Well #1 Released to Imaging: 8/3/2023 10:11:33 AM	Mighty Pheasant 5-8 Fed Com 303H Well (API No. 30-015-Pending), SHL: Unit O, 281' FSL, 1463' FEL, Section 32, T19S-R34E; BHL: Unit O, 100' FSL, 2122' FEL, Section 8, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard

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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/ Darín 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. 23448, 23449, 23450 & 23451

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. 23452-23455, 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. 23448 - 23451, which proposes Cimarex's Mighty Pheasant wells and to pool the Bone Spring formation underlying Sections 5 and 8, in Township 20 South, Range 34 East, NMPM, Lea County ("Subject Lands"), and which compete directly with Case Nos. 23516 – 23519 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

Cimarex Energy Co.

APPLICANT ATTORNEY

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Santa Fe, New Mexico 87501

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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

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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. 23448, 23449, 23450 and 23451. These four cases seek to develop the Bone Spring formation in the Subject Lands (i.e., Sections 5 and 8), 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. 23448, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, 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 a standard 320.09-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 5 and the E/2 E/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the Mighty Pheasant 5-8 Fed Com 204H Well and the Mighty Pheasant 5-8 Fed Com 304H Well, as the 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. 23449, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, 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 a standard 320.01-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 5 and the W/2 W/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Mighty Pheasant 5-8 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. 23450, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, 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 a standard 320.04-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 5 and the E/2 W/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Mighty Pheasant 5-8 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. 23451, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, 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 a standard 320.06-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 5 and the W/2 E/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Mighty Pheasant 5-8 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. 23516, 23517, 23518, and 23519 filed by Permian Resources for the Subject Lands. In Case No. 23516, 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 5 and the W/2 W/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Joker 5-8 Federal Com 111H, 121H, 122H, 171H, and 131H wells to said unit.

In Case No. 23517, 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 5 and the E/2 W/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Joker 5-8 Federal Com 112H, 123H, 124H, 172H, and 132H wells to said unit.

In Case No. 23518, 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 5 and the W/2 E/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Joker 5-8 Federal Com 113H, 125H, 126H, 173H, and 133H wells to said unit.

In Case No. 23519, 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 5 and the E/2 E/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Joker 5-8 Federal Com 114H, 127H, 128H, 174H, and 134H wells to said unit.

APPLICANT'S PROPOSED EVIDENCE AND WITNESS QUALIFICATIONS

WITNESS ESTIMATED TIME EXHIBITS

Landman: John Coffman Approx. 45 min 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 above-referenced 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 of the Bone Spring.

LIST OF DISPUTED FACTS AND ISSUES

The central issue in Cimarex's Case Nos. 23448-23451 and Permian Resources' competing Case Nos. 23516 – 23519 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 and should not be done; while Permian Resources proposes to drill the Upper Wolfcamp).

PROCEDURAL MATTERS

This contested hearing includes Cimarex's Case Nos. 23448-23451 and Permian Resources' competing applications in Case Nos. 23516 – 23519, as described herein, but the hearing also includes numerous additional cases for the Bone Spring in Sections 4 and 9, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and consideration of whether to drill the Wolfcamp formation in Case Nos. 23594 - 23. 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 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 4 and 9 and Sections 5 and 8.

Respectfully submitted,

ABADIE & SCHILL, PC

/s/ Darin C. Savage

Darin C. Savage

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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

Attorneys for Read & Stevens, Inc.; and Permian Resources Operating, LLC

Blake C. Jones – blake.jones@steptoe-johnson.com

Attorney for Northern Oil and Gas, Inc.

Sealy Cavin, Jr. – scavin@cilawnm.com Scott S. Morgan – smorgan@cilawnm.com Brandon D. Hajny – bhajny@cilawnm.com

Attorneys for Sandstone Properties, LLC

/s/ Darin C. Savage

Darin C. Savage

TAB 2

Case Nos. 23448-23451

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: Cimarex Development Layout

Exhibit A-8: Summary Judgement

Exhibit A-9: Ownership Support for Cimarex

Exhibit A-10: Cost Differences 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. 23448, 23449, 23450 & 23451

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. This Statement is the first of four Landman Statements in four hearing packets (Hearing Packets I through IV) that cover Cimarex's 16 cases among the 32 cases heard in this contested hearing. Cimarex has presented the cases to the best of its ability in digestible parts so



the Division can review each hearing packet and comprehend how it fits into the larger context. Cimarex has created this larger context by providing in each hearing packet the geology testimony and exhibits and the engineering testimony and exhibits that provide review and reference for all the cases so that as the examiners work through each Hearing Packet, they see how the more focused set of cases fits into larger and more technical descriptions of Cimarex's overall development plan.

- 6. For example, this Landman Statement provides the introduction to Hearing Packet I, and its exhibits herein address the above-referenced 4 cases that involve the Bone Spring formation, in which resides the primary reservoir and common source of supply, for Sections 5 and 8, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, as it applies Cimarex's Mighty Pheasant wells. But, it will also discuss the Mighty Pheasant wells in the broader context of Cimarex's development plan as a whole.
- 7. The Landman Statement in Hearing Packet II addresses 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.
- 8. The Landman Statement in Hearing Packet III addresses and explains Cimarex's Option 1, which proposes an alternative to Option 2, offering an approach that would pool and drill only the Bone Spring formation, with focus on the Third Bone Spring, in order to optimally produce the reservoir and common source of supply.
- 9. The Landman Statement in Hearing Packet IV addresses and explains Cimarex's Option 2, which proposes an alternative to Option 1, and offers an approach by which Cimarex would pool the Wolfcamp formation as a means to protect the reservoir and common source of

supply from unnecessary drilling and capture as production within the pooled unit any oil and gas that would come from the Wolfcamp formation.

- 10. Each Hearing Packet, I through IV, 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 each Landman Statement.
- 11. Thus, as we begin with the Mighty Pheasant wells, the above-referenced cases (Case Nos. 23448 23451) all seek to develop the Bone Spring formation underlying Sections 5 and 8, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico ("Subject Lands").
- 12. Under <u>Case No. 23448</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 320.09-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 5 and the E/2 E/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit two initial wells: the **Mighty Pheasant 5-8 Fed Com 204H Well,** and the **Mighty Pheasant 5-8 Fed Com 304H Well**.
- 13. Cimarex proposes the **Mighty Pheasant 5-8 Fed Com 204H Well** (API pending) to be horizontally drilled from a surface location 281' FSL and 1443' FEL of Section 32, Township 19 South, Range 34 East to a bottom hole location 100' FSL and 708' FEL of Section 8, Township 20 South, Range 34 East; approximate TVD of 10,308'; approximate TMD of 20,465'; FTP in Section 5: 100' FNL, 708' FEL; LTP in Section 8: 100' FSL, 708' FEL.
- 14. Cimarex proposes the **Mighty Pheasant 5-8 Fed Com 304H Well** (API pending) to be horizontally drilled from a surface location 281' FSL and 1423' FEL of Section 32 to a bottom hole location 100' FSL and 708' FEL of Section 8; approximate TVD of 10,840';

approximate TMD of 21,040'; FTP in Section 5: 100' FNL, 708' FEL; LTP in Section 8: 100' FSL, 708' FWL.

- 15. Under <u>Case No. 23449</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 320.01-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 5 and the W/2 W/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit the **Mighty Pheasant 5-8 Fed Com 301H Well**.
- 16. Cimarex proposes the **Mighty Pheasant 5-8 Fed Com 301H Well** (API pending) to be horizontally drilled from a surface location 483' FNL and 1272' FWL of Section 5, Township 20 South, Range 34 East, to a bottom hole location 100' FSL and 330' FWL of Section 8 Township 20 South, Range 34 East; approximate TVD of 10,870'; approximate TMD of 21,057'; FTP in Section 5: 100' FNL, 330' FWL; LTP in Section 8: 100' FSL, 330' FWL.
- 17. Under <u>Case No. 23450</u>, Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Bone Spring formation, more specifically, the Teas; Bone Spring, East [Pool Code 96637], designated as an oil pool, underlying a standard 320.04-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 5 and the E/2 W/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit the **Mighty Pheasant 5-8 Fed Com 302H Well**.
- 18. Cimarex proposes the **Mighty Pheasant 5-8 Fed Com 302H Well** (API pending) to be horizontally drilled from a surface location 484' FNL and 1312' FWL of Section 5 Township

- 20 South, Range 34 East, to a bottom hole location in the 100' FSL and 1744' FWL of Section 8, Township 20 South, Range 34 East; with an approximate TVD of 10,860'; approximate TMD of 20,992'; FTP in Section 5: 100' FNL, 1,744' FWL; LTP in Section 8: 100' FSL, 1,744' FWL.
- 19. Under <u>Case No. 23451</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 320.06-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 5 and the W/2 E/2 of Section 8, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit the **Mighty Pheasant 5-8 Fed Com 303H Well**.
- 20. Cimarex proposes the **Mighty Pheasant 5-8 Fed Com 303H Well** (API pending) to be horizontally drilled from a surface location 281' FSL and 1463' FEL of Section 5, to a bottom hole location 100' FSL and 2122' FEL of Section 8; approximate TVD of 10,860'; approximate TMD of 21,019'; FTP in Section 5: 100' FNL, 2,122' FEL; LTP in Section 8: 100' FSL, 2,122' FEL.
 - 21. The proposed C-102 for each Mighty Pheasant 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 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. 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").
- 25. Cimarex has had a difficult history with Read & Stevens, Inc. ("Read & Stevens") and during this history, it is Read & Stevens who has taken actions to impede and obstruct the development of the Subject Lands and Area of Interest over the years.
- **Exhibit A-7** shows the extent of land and acreage that Cimarex has been actively developing and expanding. Coterra has acquired approximately 60 percent working interest ("WI") in Sections 4, 5, 6, 7, 8, 9, 17, 18, 19, 20, 29, 30, 31, 32 and 33, in the Subject Lands and Area of Interest as shown in Slides 1 and 2. It is the intent of Coterra to develop and transform the majority of this acreage into a federal unit, and that is what we have been working toward over the years, to develop these lands into a federal unit that will complement our two other federal units that we operate in the nearby area; those are Laguna Deep and Pipeline Deep.
- 27. Cimarex has been coordinating its efforts, and directly communicating with, the operator of the Mescalero Ridge Unit which covers all depths. As such, we are working toward dissolving and consolidating certain federal units no longer in use and have been working closely with the BLM to revitalize production in the consolidated interests. This will position the majority of our North Lea Acreage for full development and production in the First, Second, and Third

Bone Spring (it is the Bone Spring that contains the common sources of the supply in the Area of Interest) with very little surface impact and the ability to commingle on a larger scale than we would normally be able to do without the wider effort. See, for example, Slide 4, **Exhibit A-7**. This is what Cimarex has been working toward over the past decade, developing, and expanding its acreage and plans, positioning itself well within the acreage, not sitting on them. Furthermore, the Division should appreciate that this kind of work – working with the BLM and the other major owners involved – takes time.

- 28. Cimarex has been able to work quite well and cooperatively with most of the major WI owners, successfully reaching out to larger companies such as Matador, XTO, and Chevron; however, Read & Stevens has proven to be a most uncooperative party in the Area of Interest, and it is not even a party involved in the larger effort of creating and consolidating the federal units. Read & Stevens has presence only in certain contract areas in which most operators are able resolve their difference and reach an agreement. After much negotiating and even offering to travel across Texas and New Mexico to meet, Cimarex could never obtain a successful meeting or reach an agreement with Read & Stevens.
- 29. In fact, Read & Stevens made every effort to frustrate and undermine the coordinated efforts of the WI owners in the Subject Lands. A large part of the Subject Lands (S/2 of Sections 4 and 5 and all of Sections 8 and 9, Township 20 South, Range 34 East) is governed by an existing Operating Agreement dated August 1, 1979, in which Estoril Producing Corporation was the original operator ("1979 OA"). During negotiations over the Subject Lands, Read & Stevens challenged Cimarex's right to seek operatorship under the 1979 OA (Magnum Hunter Hunter Production, Inc. ("Magnum Hunter"), a subsidiary of Cimarex and successor member to the 1979 OA, was the actual party seeking operatorship). Read & Stevens sued Magnum Hunter

in the Fifth Judicial District of New Mexico, in Case No. D-504-CV-2014-00358, claiming that Magnum Hunter had no right to consider being an operator of the 1979 OA. The Judge ruled in favor of Magnum Hunter and Cimarex, stating that Magnum Hunter does have a right to seek operatorship under the 1979 OA. *See* Order on Motion for Partial Summary Judgment in Case No. D-504-CV-2014-00358, Fifth Judicial District, attached hereto as **Exhibit A-8**.

- 30. Based on the court's ruling, Magnum Hunter sent out operatorship ballots to WI owners, in accordance with the terms of the 1979 OA and received a majority of votes in its favor, which secured Magnum Hunter's position as operator under the 1979 OA. However, Read & Steven appeared to reject the opinion of the court and refused to acknowledge Hunger Magnum's balloting of the WI owners under the 1979 OA as legitimate, and instead of respecting the votes of the WI owners, Read & Stevens continued spudding, without well proposals under the 1979 OA, and setting casing for each of their wells in parts of the Subject Lands directly subject to the 1970 OA, specifically in Section 9, Read & Stevens wells being the North Lea 9 Federal 2H (API No. 30-025-4375) (a Third Bone Spring well), and the North Lea 4 Fed Com 2H (API No. 30-025-43504). Cimarex's position is that Read & Stevens spud these wells in trespass under the 1979 OA, and these are the kinds of bad faith antics that Cimarex had to deal with over the years that has consumed an inordinate amount of time and resources, which does not constitute just sitting on the acreage, as erroneously claimed by Permian Resources. Cimarex attempted to reach out to Read & Stevens to find a resolution in the dispute over the 1979 OA, but no resolution or agreement ever materialized.
- 31. When Cimarex heard news that Permian Resources became associated with Read & Stevens, Cimarex was encouraged that a resolution could be reached based on interactions with

Permian Resources, but after talks involving numerous proposed trades and deals, no resolution or agreement could be reached.

- 32. Cimarex operates around 15,000 acres and operates ~50 wellbores in the immediate vicinity of 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. See, for example, Slide 3, **Exhibit A-7**. We have been able to come to agreements with multiple owners in the area to effectively and efficiently develop a large portion of the Area of Interest, except for the four Sections in the Subject Lands, where Read & Stevens has blocked and stalled our efforts. Cimarex wants to see the Subject Lands developed in the most prudent way possible, which is what our development plan herein represents, and we want to develop this acreage for the number of WI owners who have been waiting far longer than Cimarex to see the minerals, many of which are family minerals, finally developed, providing the owners with their just and equitable share, unburdened by the massive costs imposed on the interest by Permian Resources.
- 33. **Exhibit A-10** shows just how much Permian Resources' development plan burdens the owners with additional costs compared to Cimarex's development plan. As depicted in **Exhibit A-10**, overall Permian Resources' plan costs \$539, 893, 326.89 compared to Cimarex's costs of \$283,253,951.43. This reflects a 52% difference in costs where Permian Resource's plan costs the owners as a group a full \$256,639,375.46 more, or about a quarter billion dollars more. Yet, Permian Resources continues to claim that Cimarex's plan violates the correlative rights of the individual owners. One of the owners whose correlative rights Permian Resources' claims will be undermined is HOG Partnership LP ("HOG"), but a close examination of **Exhibit A-10** shows that HOG individually will have to pay \$30,874,175.16 under Permian Resources' plan but only half that, \$15,655,402.13, under Cimarex's plan. Another example: MRC Permian would have to pay

\$4,107,154.83 under Permian Resources' plan but pay only \$1,514,460.94 under Cimarex's plan. In fact, every WI owners listed in the table in **Exhibit A-10** has to pay substantially more under Permian Resources' plan compared to Cimarex's plan. Cimarex's engineering exhibits addressing production show in more detail these costs and revenue differences between Cimarex's plan and Permian Resources' plan.

- 34. Given the magnitude of the massive costs imposed by Permian Resources' plan, it is inherently impossible for Permian Resources to protect the owners' correlative rights or provide their "just and equitable" share of production. This is because, as our geology and engineering exhibits show, although overall Permian Resources proposes 18 more wells than what Cimarex proposes, their additional wells do not add anything to overall production or EUR, and therefore Permian Resources' massive costs resulting from a total of 48 wells across Sections 4 and 9, and 5 and 8, are imposed on the same amount of production that Cimarex achieves with its 30 wells in the same Sections.
- 35. That is why Permian Resources cannot begin to protect the owners' correlative rights, because the massive additional costs do not result in more revenue from more production, they only result in the drilling of 18 unnecessary wells, which the Division is charged with avoiding.
- 36. Copies of Permian Resources' well proposals with AFEs have been attached as **Exhibit A-6**.
- 37. And this is why the majority of WI owners support Cimarex over Permian Resources. This Landman Statement, as part of Hearing Packet I, focuses on Cimarex's Mighty Pheasant wells in the Bone Spring units underlying Section 5 and 8 of the Subject Lands. **Exhibit A-9** 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 Mighty Pheasant wells, you can see that the majority of owners in each unit clearly support Cimarex (50.94% v. 33.14% in the E/2 W/2 unit; 61.88% v. 27.03% in the W/2 E/2 unit; and 61.89% v. 27.03% in the E/2 E/2 unit). The only unit in which Permian Resources' percentage of support edges out Cimarex's support is in the W/2 W/2, where Cimarex has 44.10% and Permian Resources has 46.94%, a small difference of 2.84%.

- 38. In the Mighty Pheasant Bone Spring units underlying Sections 5 and 8, there are no depth severances in the Bone Spring formation in this acreage. Cimarex's review of the lands shows no overlapping units.
- 39. I provided the law firm of Abadie & Schill P.C. a list of names and addresses for the uncommitted working interest owners shown on **Exhibits A-2.1 through 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.
- 40. Cimarex provided notice to all WI owners in the Bone Spring unit of Section 5 and 8, 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.

- 41. 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.
- 42. 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.

- 43. For any unleased open acreage being pooled, Cimarex requests that the acreage be pooled pursuant to statutory one-eighth (1/8) royalty.
- 44. **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.
- 45. Without Wolfcamp wells as proposed by Permian Resources, Cimarex's full development of the acreage is far, far less expensive to develop the 1st, 2nd and 3rd 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.
- 46. 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.
- 47. Cimarex requests the maximum cost, plus 200% risk charge be assessed against non-consenting working interest owners.
 - 48. Cimarex requests that it be designated operator of the units and wells.
- 49. The Exhibits to this Self-Affirmed Statement were prepared by me or compiled from Cimarex's company business records under my direct supervision.

- 50. The granting of this Application is in the best interests of conservation, the prevention of waste, and the protection of correlative rights, and will especially 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.
 - 51. 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. 23448, 23449, 23450 and 23451, 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

8/1/23

Date Signed

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

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

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

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

X AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	•	² Pool Code	³ Pool Name Teas: Bone Spring, East			
30-025		96637				
4 Property Code		5 Pr	roperty Name 6 Well Number			
		MIGHTY PHE	ASANT 5-8 FED COM	204Н		
⁷ OGRID No.			perator Name	⁹ Elevation		
215099		CIMARI	EX ENERGY CO.	3645.3'		

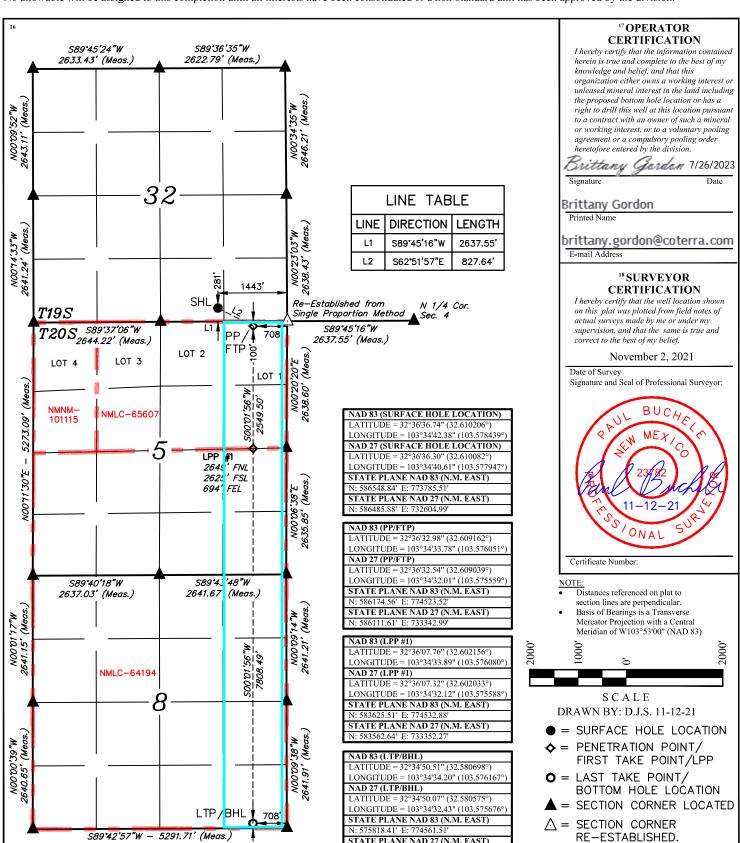
¹⁰ Surface Location

l	OL 07 101 110.	32	19S	34E	Lot lan	281	SOUTH	1443	EAST EAST	LEA
-					D II	1 7 7	CD:00 + E	G C		

"Bottom Hole Location If Different From Surface

UL or lot no P	Se	ction 8	Township 20S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 708	East/West line EAST	County LEA
12 Dedicated 320.09	Acres	13 J	oint or Infill	14 Conso	olidation Code	15 Order No.				

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



N: 575818.41 E. 7/4301.31 STATE PLANE NAD 27 (N.M. EAST) N: 575755.78' E: 733380.69'

9

EXHIBIT

(Not Set on Ground.)

to Imaging: 8/3/2023 10:11:33 AM

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WELL LOCATION AND ACREAGE DEDICATION PLAT

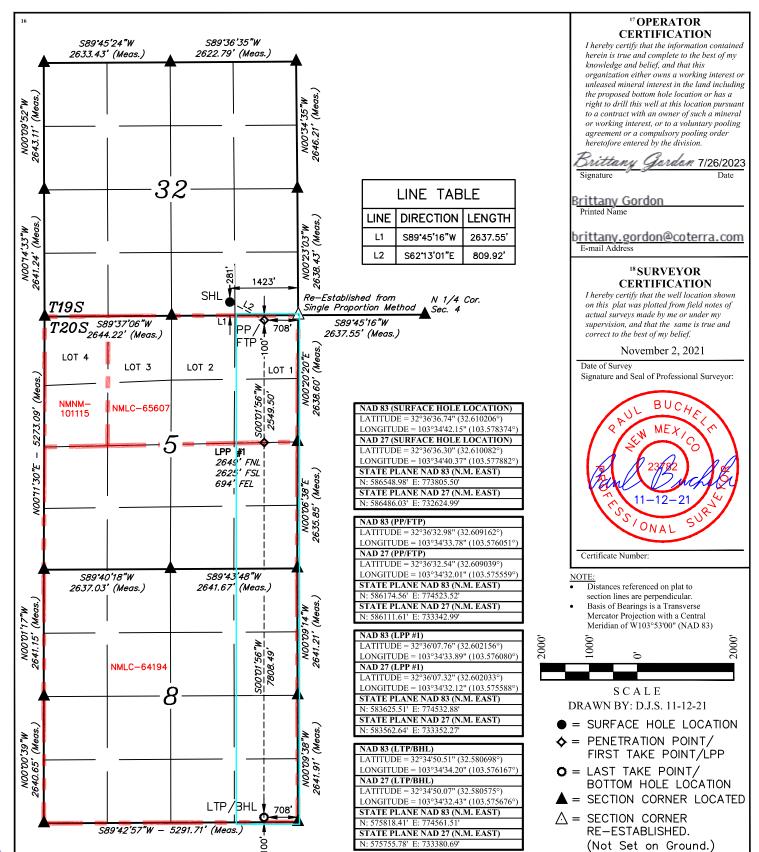
30-025 API Number	² Pool Code 96637	t		
⁴ Property Code		perty Name ASANT 5-8 FED COM 304H		
⁷ OGRID №. 215099		perator Name EX ENERGY CO.	⁹ Elevation 3645.7'	

¹⁰ Surface Location

UL or lot no. O	Section 32	Township 19S	Range 34E	Lot Idn	Feet from the 281	North/South line SOUTH	Feet from the 1423	East/West line EAST	County LEA
Rottom Hole Location If Different From Surface									

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	8	20S	34E		100	SOUTH	708	EAST	LEA
12 Dedicated Acr 320.09	es 13	Joint or Infill	¹⁴ Conse	olidation Code	¹⁵ Order No.				

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



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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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X AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

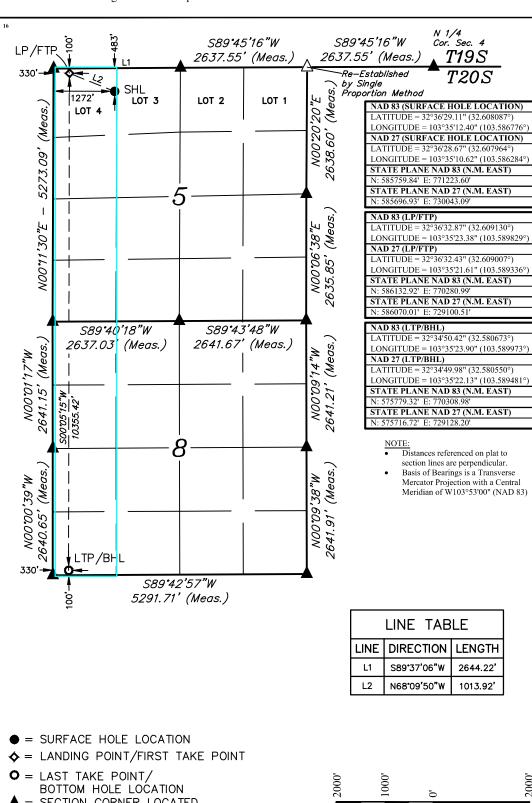
30-025	•	² Pool Code 96637	³ Pool Name Teas: Bone Spring, Ea	 ast	
⁴ Property Code			Property Name 6 Well Number EASANT 5-8 FED COM 301H		
⁷ OGRID No. 215099			perator Name EX ENERGY CO.	⁹ Elevation 3629.8'	

¹⁰ Surface Location

4	5	20S	34E		483	NORTH	1272	WEST	LEA	
			11	Bottom H	ole Location I	f Different From	Surface			
Bottom Hole Bottlion in Billetent From Startage										

	UL or lot no. M	Section 8	on	Township 20S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 330	East/West line WEST	County LEA
ſ	12 Dedicated Acre	es	13 Jo	int or Infill	14 Conso	lidation Code	15 Order No.				
ı	320.01										

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



¹⁷OPERATOR

CERTIFICATION

I hereby certify that the information containent herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Brittany Gardan 7/28/2023

<u>Brittany Gordon</u>

brittany.gordon@coterra.com

18 SURVEYOR

CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

November 01, 2021



Released to Imaging: 8/3/2023 10:11:33 AM

Certificate Number:

SECTION CORNER LOCATED

SECTION CORNER RE-ESTABLISHED. (Not Set on Ground.)



SECTION CORNER

RE-ESTABLISHED.

(Not Set on Ground.)

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

X AMENDED REPORT

County

WELL LOCATION AND ACREAGE DEDICATION PLAT

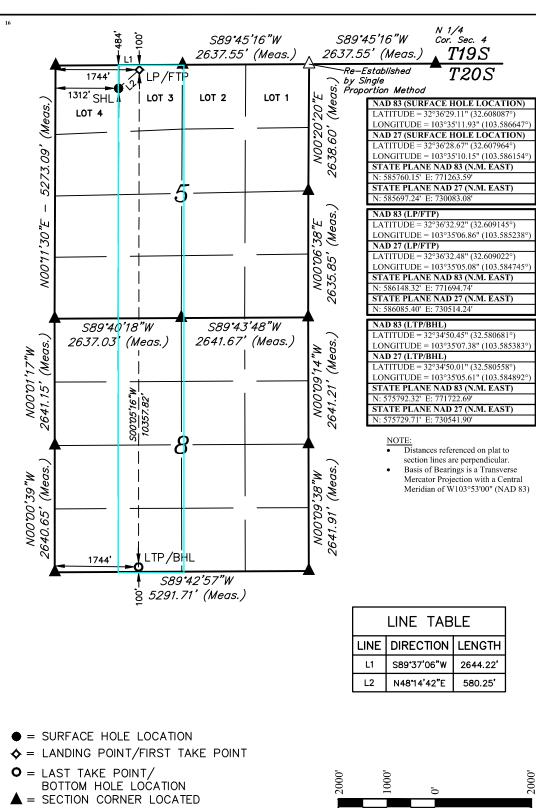
30-025 Number	•	² Pool Code 9663 7	Teas; Bone Spring, East	
⁴ Property Code			operty Name ASANT 5-8 FED COM	⁶ Well Number 302H
⁷ OGRID No. 215099			perator Name EX ENERGY CO.	⁹ Elevation 3629.9'

¹⁰ Surface Location

4	3	208	34E		484	NORTH	1312	WEST	LEA
D to HILL to ICD:CC AF C C									
"Bottom Hole Location If Different From Surface									
III or lot no	Section	Township	Dongo	Lot Idn	Foot from the	North/South line	Foot from the	Fost/Wost line	County

20S 34Ē 100 SOUTH 1744 WEST LEA 320.04

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



¹⁷OPERATOR

CERTIFICATION

I hereby certify that the information containent herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Brittany Gerden 7/28/2023

<u>Brittany Gordon</u>

brittany.gordon@coterra.com E-mail Address

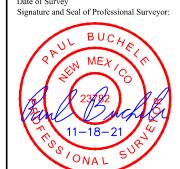
18 SURVEYOR

CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

November 01, 2021

Released to Imaging: 8/3/2023 10:11:33 AM



Certificate Number:

SCALEDRAWN BY: Z.L. 11-10-21

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

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

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

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

X AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025	r	² Pool Code 96637	ast	
⁴ Property Code			operty Name ASANT 5-8 FED COM	⁶ Well Number 303H
⁷ OGRID №. 215099			perator Name EX ENERGY CO.	⁹ Elevation 3644.9'

¹⁰ Surface Location

OL 07 101 110.	32	19S	34E	Lot lan	281	SOUTH	1463	EAST EAST	LEA
D. H. J. J. J. J. D. C. C.									

"Bottom Hole Location If Different From Surface

UL or lot no. O	Secti 8	ion	Township 20S	Range 34E	Lot Idn		rom the 00	North/South line SOUTH	Feet from the 2122	East/West line EAST	County LEA
12 Dedicated Acres 320.06		13 Jo	oint or Infill	14 Conso	olidation Code	15 (Order No.				

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

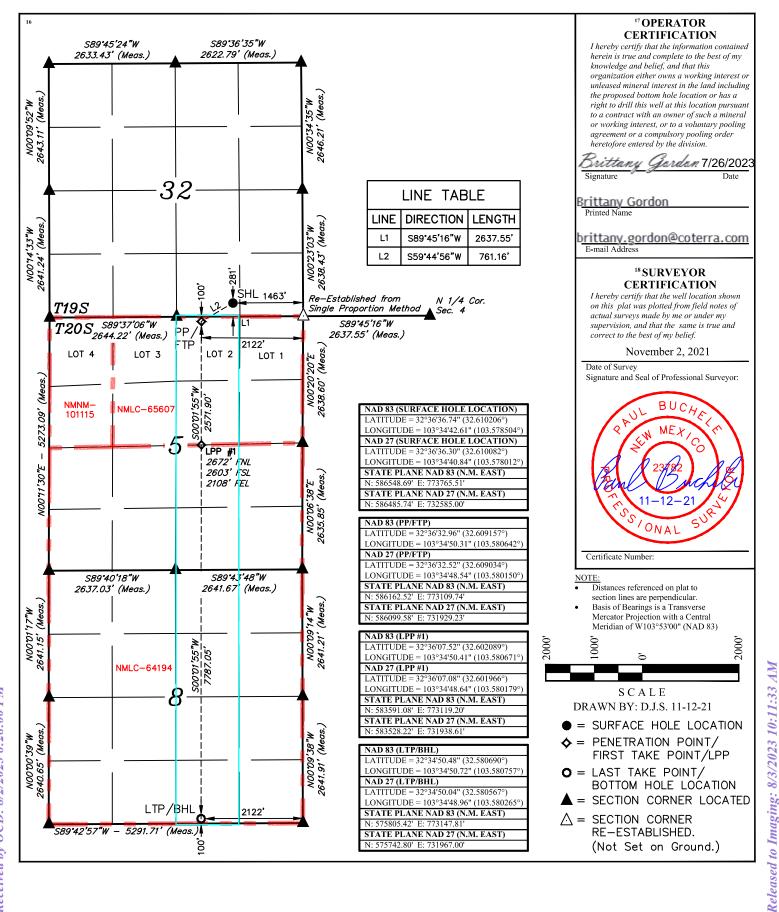
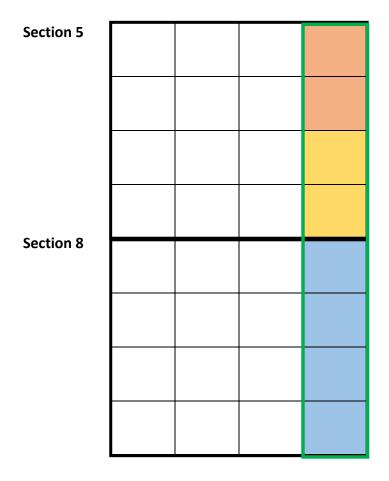


Exhibit "A-2"

E/2E/2 of Section 5 and the E/2E/2 of Section 8, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation



Tract 1: USA NMLC-0064194 (80 acres)



Tract 2: USA NMLC-0064194 (160 acres)



Tract 3:USA NMLC-0065607
(80.09 acres)



Mighty Pheasant 5-8 Fed Com 204H

SHL: Sec. 32-19S-34E; 281' FSL and 1443' FEL BHL: Sec. 8-20S-34E; 100' FSL and 708' FEL

Mighty Pheasant 5-8 Fed Com 304H

SHL: Sec. 32-19S-34E; 281' FSL and 1423' FEL BHL: Sec. 8-20S-34E; 100' FSL and 708' FEL

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

E/2E/2 of Section 5 and the E/2E/2 of Section 8, Township 20 South, Range 34 East of Lea County, NM

Mighty Pheasant 5-8 Fed Com 204H and 304H

TRACT 1 OWNERSHIP (E/2SE/4 of Section 5-T20S-R34E, being 80 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	0.02918245	Committed
3525 Andrews Highway			
Midland, TX 79703			

Permian Resources LLC/Read and Stevens	24.2031	0.30253931	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	0.03225959	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	22.4755	0.28094403	Committed
6001 Deauville Blvd., Ste 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
Hudson Testamentary Trust FBO J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759615	Uncommitted
222 West Fort Worth St. Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	1.4407	0.01800822	Committed
11344 Lovington Hwy.	1.770/	0.01000022	Committed
Artesia, NM 88210			
ALCOID, INIVI OUZIU			

Cimarex Energy Co.	8.5075	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.4545	0.00568184	Committed
310 W. Wall Street, Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	3.8893	0.04861611	Uncommitted
450 E. 17 th 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	0.00314684	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024090	Committed
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	80	0.249929707	

TRACT 2 OWNERSHIP (E/2E/2 of Section 8-T20S-R34E, being 160 acres)

Lease: USA NMLC-0064194

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			
Dallas, TX 75235			
Challenger Crude, Ltd.	4.6692	0.02918247	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	48.4063	0.30253931	Uncommitted
5400 LBJ Freeway, Suite 1500			
Dallas, TX 75240			
Javelina Partners	9.4874	0.05929631	Committed
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Zorro Partners, Ltd.	5.1615	0.03225959	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	44.9510	0.28094406	Committed
6001 Deauville Blvd., Ste. 300N			

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.	0.9385	0.00586541	Committed
Hudson Testamentary Trust FBO 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			
Chase Oil Corporation	2.8813	0.01800820	Committed
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	Committed
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	7.7786	0.04861609	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.9508	0.00594271	Committed
1775 Sherman St., Ste. 2990			

Denver, CO 80203

William A. Hudson, II	0.5035	0.00314684	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	4.8385	0.03024090	Committed
7712 Glanshannon Cir.			
Dallas, TX 75225			

TRACT 3 OWNERSHIP (Lot 1 and SE/4NE/4 of Section 5-T20S-R34E, being 80.09 acres)

Lease: USA NMLC-0065607

TRACT 2 TOTAL

Owner	Net Acres	Unit WI	Status
Cimarex Energy Co.	4.7508	0.05931848	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Permian Resources LLC/Read and Stevens	4.5050	0.05625003	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	10.3472	0.12919490	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	10.3472	0.12919490	Committed
616 Texas St.			

160.00

0.49985941

Fort Worth, TX 76102

Frost Bank, Trustee of the Josephine T. 1.2723 0.01588544 Committed

Hudson Testamentary Trust FBO J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Magnum Hunter Production Inc. 35.0394 0.43750000 Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Ard Oil, LTD 3.8168 0.04765624 Uncommitted

222 West Forth St., Ph5

Fort Worth, TX 76102

HOG Partnership LP 10.0113 0.12500000 Uncommitted

5950 Cedar Springs Rd., Ste. 242

Dallas, TX 75235

TRACT 3 TOTAL 80.09 0.25021088

Complete List of Parties/Persons to be Pooled:

Working Interest Owners

HOG Partnership, LP

Permian Resources LLC Ard Oil, LTD Wilbanks Reserve Corporation Marks Oil, Inc.

Record Title Owners

Read and Stevens Inc.

Delmar Hudson Lewis Living Trust

Lindy's Living Trust

Javelina Partners

Zorro Partners Ltd

UNIT RECAPITULATION:

E/2E/2 of Section 5 and E/2E/2 of Section 8; all in T20S-R34E; 320.06 acres

Moore & Shelton Co., Ltd - 1.557255%

HOG Partnership, LP - 5.644411%

Challenger Crude, Ltd. – 2.188069%

Permian Resources LLC / Read and Stevens – 24.091505%

Magnum Hunter Production - 32.011605%

Zorro Partners, Ltd. – 5.651386%

Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard – 0.837253%

Ard Oil, LTD – 2.511751%

Chase Oil Corporation – 1.350236%

Cimarex Energy Co. - 9.457805%

Avalon Energy Corporation – 0.426017%

Wilbanks Reserve Corporation – 3.645182%

Marks Oil, Inc. - 0.445578%

Javelina Partners - 7.678570%

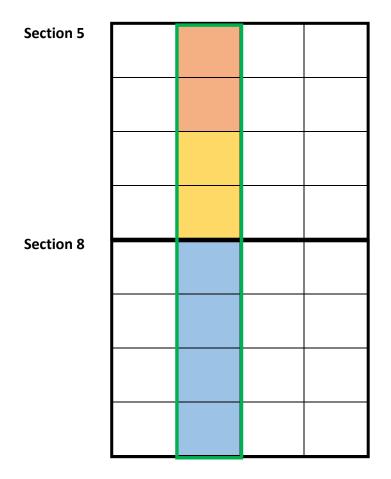
William A. Hudson, II - 0.235947%

Union Hill Oil & Gas Co. Inc. – 2.267430%

UNIT TOTAL: 100% WI

Exhibit "A-2"

E/2W/2 of Section 5 and the E/2W/2 of Section 8, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation



Tract 1: USA NMLC-0064194 (80 acres)



Tract 2: USA NMLC-0064194 (160 acres)



Tract 3:USA NMLC-0065607
(80.04 acres)



Mighty Pheasant 5-8 Fed Com 302H

SHL: Sec. 5-20S-34E; 484' FNL and 1312' FWL BHL: Sec. 8-20S-34E; 100' FSL and 1744' FWL Exhibit "A-2"

OWNERSHIP BREAKDOWN – Bone Spring formation

E/2W/2 of Section 5 and the E/2W/2 of Section 8, Township 20 South, Range 34 East of Lea County, NM

Mighty Pheasant 5-8 Fed Com 302H

TRACT 1 OWNERSHIP (E/2SW/4 of Section 5-T20S-R34E, being 80 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	0.02918245	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	24.2031	0.30253930	Uncommitted
300 N. Marienfeld St., Ste. 1000			

Midland, TX 79701

Javelina Partners	4.7437	0.05929629	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	2.5808	0.03225963	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	22.4755	0.28094408	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
Hudson Testamentary Trust FBO J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759616	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	1.4407	0.01800821	Committed
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5075	0.10634445	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			

Avalon Energy Corporation	0.4545	0.00568183	Committed
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	3.8893	0.04861608	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.4754	0.00594270	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.2517	0.00314683	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024090	Committed
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	80	0.24996875	

TRACT 2 OWNERSHIP (E/2W/2 of Section 8-T20S-R34E, being 160 acres)

Lease: USA NMLC-0064194

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			
Dallas, TX 75235			
Challenger Crude, Ltd.	4.6692	0.02918247	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	0.03225959	Committed
616 Texas St.			
Fort Worth, TX 76102			
FOIL WOILII, IX 70102			
Fort Worth, 1A 70102			
Magnum Hunter Production Inc.	44.9510	0.28094405	Committed
	44.9510	0.28094405	Committed
Magnum Hunter Production Inc.	44.9510	0.28094405	Committed
Magnum Hunter Production Inc. 6001 Deauville Blvd., Ste. 300N	44.9510	0.28094405	Committed

Hudson Testamentary Trust FBO J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	2.8154	0.01759614	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	2.8813	0.01800821	Committed
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	17.0151	0.10634447	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.9091	0.00568181	Committed
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	7.7786	0.0486161	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.9508	0.00594270	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 0.03024092 Committed 7712 Glanshannon Cir.

Dallas, TX 75225

TRACT 2 TOTAL 160.00 0.49993751

TRACT 3 OWNERSHIP (Lot 3 and SE/4NW/4 of Section 5-T20S-R34E, being 80.04 acres)

Owner	Net Acres	Unit WI	Status
Cimarex Energy Co.	4.7479	0.05931848	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Permian Resources LLC/Read and Stevens	9.8374	0.12290556	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	10.3408	0.12919492	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	10.3408	0.12919492	Committed
616 Texas St.			
Fort Worth, TX 76102			
Frost Bank, Trustee of the Josephine T.	1.2715	0.01588544	Committed

Hudson Testamentary Trust FBO J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	3.8144	0.04765625	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
MRC Permian Company	14.4048	0.17997000	Committed
5400 LBJ Freeway, Suite 1500			
Dallas, TX 75240			
Northern Oil and Gas, Inc. (CM Resources)	9.9425	0.12421882	Uncommitted
4350 Baker Road, Suite 400			
Minnetonka, MN 55343			
CBR Oil Properties, LLC	1.2628	0.03157067	Uncommitted
400 N. Pennsylvania, Suite 1080			
Roswell, NM 88201			
General Partnership, 2023 Permian Basin JV	1.0670	0.01333116	Uncommitted
P.O. Box 10			
Folsom, LA 70437			
HOG Partnership LP	10.0050	0.12500001	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
TRACT 3 TOTAL	80.04	0.25009374	

Complete List of Parties/Persons to be Pooled:

Working Interest Owners

HOG Partnership, LP

Permian Resources LLC
Ard Oil, LTD
Wilbanks Reserve Corporation
Marks Oil, Inc.
Northern Oil and Gas, Inc.
CBR Oil Properties, LLC
General Partnership, 2023 Permian

Record Title Owners

Read and Stevens Inc.

Delmar Hudson Lewis Living Trust

Lindy's Living Trust

Javelina Partners

Zorro Partners Ltd

UNIT RECAPITULATION:

E/2W/2 of Section 5 and E/2W/2 of Section 8; all in T20S-R34E; 320.04 acres

Moore & Shelton Co., Ltd – 1.557644%

HOG Partnership, LP - 5.643340%

Challenger Crude, Ltd. – 2.188411%

Permian Resources LLC / Read and Stevens - 25.761402%

Magnum Hunter Production – 21.068171%

Zorro Partners, Ltd. – 5.650252%

Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard – 0.837136%

Ard Oil, LTD – 2.511399%

Chase Oil Corporation – 1.350447%

Cimarex Energy Co. - 9.458356%

Avalon Energy Corporation – 0.426083%

Wilbanks Reserve Corporation - 3.645751%

Marks Oil, Inc. - 0.445647%

Javelina Partners – 7.677751%

William A. Hudson, II – 0.235984%

Union Hill Oil & Gas Co. Inc. – 2.267785%

MRC Permian Company – 4.500937%

Northern Oil and Gas Inc. – 3.106635%

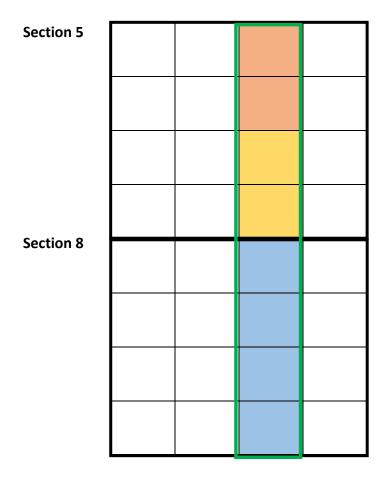
CBR Oil Properties, LLC – 1.333611%

General Partnership, 2023 Permian Basin JV – 0.333404%

UNIT TOTAL: 100% WI

Exhibit "A-2"

W/2E/2 of Section 5 and the W/2E/2 of Section 8, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation



Tract 1:USA NMLC-0064194
(80 acres)



Tract 2: USA NMLC-0064194



(160 acres)

Tract 3:USA NMLC-0065607
(80.06 acres)





Mighty Pheasant 5-8 Fed Com 303H

SHL: Sec. 32-19S-34E; 281' FSL and 1463' FEL BHL: Sec. 8-20S-34E; 100' FSL and 2122' FWL Exhibit "A-2"

OWNERSHIP BREAKDOWN – Bone Spring formation

W/2E/2 of Section 5 and the W/2E/2 of Section 8, Township 20 South, Range 34 East of Lea County, NM

Mighty Pheasant 5-8 Fed Com 303H

TRACT 1 OWNERSHIP (W/2SE/4 of Section 5-T20S-R34E, being 80 acres)

Lease: USA NMLC-0064194

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	1.6615	0.02076925	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	2.6853	0.03356645	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Challenger Crude, Ltd.	2.3346	0.02918247	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	24.2031	0.30253928	Uncommitted
300 N. Marienfeld St., Ste. 1000			

Midland, TX 79701

Javelina Partners	4.7437	0.05929632	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.	22.4755	0.28094403	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.4692	0.00586542	Committed
Hudson Testamentary Trust FBO J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	1.4077	0.01759614	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	1.4407	0.01800822	Committed
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5075	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			

Avalon Energy Corporation	0.4545	0.00568183	Committed
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	3.8893	0.04861608	Uncommitted
450 E. 17 th 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	0.00314683	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Committed
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	80	0.24995313	

TRACT 2 OWNERSHIP (W/2E/2 of Section 8-T20S-R34E, being 160 acres)

Lease: USA NMLC-0064194

Owner Net Acres Unit WI Status

Moore and Shelton Co., LTD	3.3231	0.02076923	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	5.3706	0.03356643	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Challenger Crude, Ltd.	4.6692	0.02918245	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	48.4063	0.30253930	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	9.4874	0.05929632	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	5.1615	0.03225959	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 Testamentary	Trust FBO J.	Terrell Ard
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P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	2.8154	0.01759616	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	2.8813	0.01800822	Committed
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	17.0151	0.10634448	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.9091	0.00568183	Committed
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	7.7786	0.0486161	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.9508	0.00594271	Committed
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.5035	0.00314685	Committed

Committed

616 Texas St.

TRACT 2 TOTAL

Fort Worth, TX 76102

Union Hill Oil and Gas Co. Inc. 4.8385 0.03024091
7712 Glanshannon Cir.
Dallas, TX 75225

TRACT 3 OWNERSHIP (Lot 2 and SW/4NE/4 of Section 5-T20S-R34E, being 80.06 acres)

160.00

0.49990627

Owner	Net Acres	Unit WI	Status
Cimarex Energy Co.	4.7479	0.05931848	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Permian Resources LLC/Read and Stevens	4.5034	0.05625001	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	10.3433	0.12919490	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zawa Dartu ara Ital	10.2422	0.12040400	Committed
Zorro Partners, Ltd.	10.3433	0.12919490	Committed
616 Texas St.			
Fort Worth, TX 76102			
Frost Bank, Trustee of the Josephine T.	1.2718	0.01588547	Committed
Trost bank, Trustee of the Josephille 1.	1.2/10	0.01366347	Committed

Hudson Testamentary Trust FBO J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Magnum Hunter Production Inc. 35.0262 0.43749999 Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Ard Oil, LTD 3.8154 0.04765624 Uncommitted

222 West Forth St., Ph5

Fort Worth, TX 76102

HOG Partnership LP 10.0075 0.12500002 Uncommitted

5950 Cedar Springs Rd., Ste. 242

Dallas, TX 75235

TRACT 3 TOTAL 80.06 0.25014060

Complete List of Parties/Persons to be Pooled:

Working Interest Owners

HOG Partnership, LP

Permian Resources LLC Ard Oil, LTD Wilbanks Reserve Corporation Marks Oil, Inc.

Record Title Owners

Read and Stevens Inc.

Delmar Hudson Lewis Living Trust

Lindy's Living Trust

Javelina Partners

Zorro Partners Ltd

UNIT RECAPITULATION:

W/2E/2 of Section 5 and W/2E/2 of Section 8; all in T20S-R34E; 320.06 acres

Moore & Shelton Co., Ltd – 1.557401%

HOG Partnership, LP – 5.643769%

Challenger Crude, Ltd. – 2.188274%

Permian Resources LLC / Read and Stevens – 24.093234%

Magnum Hunter Production – 32.010504%

Zorro Partners, Ltd. – 5.650705%

Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard – 0.837183%

Ard Oil, LTD – 2.511540%

Chase Oil Corporation – 1.350363%

Cimarex Energy Co. – 9.458136%

Avalon Energy Corporation – 0.426057%

Wilbanks Reserve Corporation – 3.645523%

Marks Oil, Inc. - 0.445620%

Javelina Partners – 7.678079%

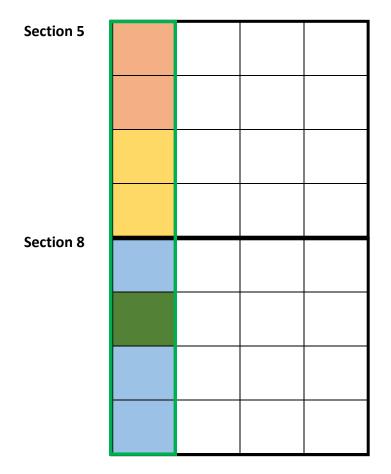
William A. Hudson, II – 0.235969%

Union Hill Oil & Gas Co. Inc. – 2.267643%

UNIT TOTAL: 100% WI

Exhibit "A-2"

W/2W/2 of Section 5 and the W/2W/2 of Section 8, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation



Tract 1: USA NMLC-0064194 (80 acres)



Tract 2: USA NMLC-0064194 (120 acres)



Tract 3: USA NMLC-0064194 (40 acres)



Tract 4: USA NMLC-101115 (80.01 acres)



Mighty Pheasant 5-8 Fed Com 301H

SHL: Sec. 5-20S-34E; 483' FNL and 1272' FWL BHL: Sec. 8-20S-34E; 100' FSL and 330' FWL

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

W/2W/2 of Section 5 and the W/2W/2 of Section 8, Township 20 South, Range 34 East of Lea County, NM

Mighty Pheasant 5-8 Fed Com 301H

TRACT 1 OWNERSHIP (W/2SW/4 of Section 5-T20S-R34E, being 80 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.	7.0038	0.02188616	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	22.0938	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 Testamentary Trust FBO 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	Committed
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5075	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			

Avalon Energy Corporation	0.4545	0.00568182	Committed
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	3.8892	0.04861609	Uncommitted
450 E. 17 th 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	Committed
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	80	0.24999219	

TRACT 2 OWNERSHIP (NW/4NW/4 and W/2SW/4 of Section 8-T20S-R34E, being 120 acres)

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	2.4923	0.02076924	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	4.0279	0.03356644	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Challenger Crude, Ltd.	3.5018	0.02918246	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	36.3047	0.30253927	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Javelina Partners	7.1156	0.05929631	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	3.8712	0.03225962	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	33.7133	0.28094406	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			

Frost Bank, Trustee of the Josephine T.	0.7039	0.00586541	Committed
Hudson Testamentary Trust FBO J. Terrell Ard			
P.O. Box 1600			
San Antonio, TX 78296			
Ard Oil, LTD	2.1115	0.01759615	Uncommitted
222 West Forth St., Ph5			
Fort Worth, TX 76102			
Chase Oil Corporation	2.1609	0.01800822	Committed
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	12.7613	0.10634444	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.6818	0.00568183	Committed
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	5.8339	0.04861608	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.7131	0.00594272	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			

William A. Hudson, II	.3776	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	3.6289	0.03024092	Committed
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 2 TOTAL	120.00	0.37498828	

TRACT 3 OWNERSHIP (SW/4NW/4 of Section 8-T20S-R34E, being 40 acres)

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	0.8308	0.02076921	Committed
P.O. Box 3070			
Galveston, TX 77552			
HOG Partnership, LP	1.3427	0.03356641	Uncommitted
5950 Cedar Springs Rd., Ste. 242			
Dallas, TX 75235			
Challenger Crude, Ltd.	1.1673	0.02918243	Committed
3525 Andrews Hwy.			
Midland, TX 79703			
Permian Resources LLC/Read and Stevens	12.1016	0.30253921	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			

Javelina Partners	2.3719	0.05929633	Committed
616 Texas St.			
Fort Worth, TX 76102			
Zorro Partners, Ltd.	1.2904	0.03225957	Committed
616 Texas St.			
Fort Worth, TX 76102			
Magnum Hunter Production Inc.	11.2378	0.28094406	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Frost Bank, Trustee of the Josephine T.	0.2346	0.00586538	Committed
Hudson Testamentary Trust FBO 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	0.01800824	Committed
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	2.8461	0.10634444	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			

Avalon Energy Corporation	0.2273	0.00568186	Committed
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	1.9446	0.04861616	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.2377	0.00594275	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	.1259	0.00314682	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	1.2096	0.03024095	Committed
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 3 TOTAL	40.00	0.12499609	

TRACT 4 OWNERSHIP (Lot 4 and SW/4NW/4 of Section 5-T20S-R34E, being 80.01 acres)

 Owner	Net Acres	Unit WI	Status
Permian Resources LLC/Read and Stevens	68.8086	0.8599999	Uncommitted
300 N. Marienfeld St., Ste. 1000			
Midland, TX 79701			
Highland (Texas) Energy Company	3.8557	0.04819048	Committed

1	1886	Greenvi	lle	Ave.,	Ste.	106
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Dallas, TX 75243

Richardson Oil Company, LLC	0.9449	0.01180953	Committed
11886 Greenville Ave., Ste. 106			
Dallas, TX 75243			
Carolyn R. Beall	1.6002	0.02000001	Uncommitted
P.O. Box 3098			
Midland, TX 79702			
Diamond Star Production Co., LLC	1.6002	0.02000001	Uncommitted
P.O. Box 638			
Ardmore, OK 73402			
Tierra Encantada, LLC	1.6002	0.02000001	Uncommitted
P.O. Box 3098			
Midland, TX 79702			
David Luna	1.6002	0.02000001	Uncommitted
P.O. Box 1518			
Roswell, NM 88202			
TRACT 4 TOTAL	80.01	0.25002344	

Complete List of Parties/Persons to be Pooled:

Working Interest Owners

HOG Partnership, LP

Permian Resources, LLC

Ard Oil, LTD

Wilbanks Reserve Corporation

Marks Oil, Inc.

Carolyn R. Beall

Diamond Star Production Co., LLC

Tierra Encantada, LLC

David Luna

Record Title Owners

Read and Stevens Inc.

Delmar Hudson Lewis Living Trust

Lindy's Living Trust

Javelina Partners

Zorro Partners Ltd

UNIT RECAPITULATION:

W/2W/2 of Section 5 and W/2W/2 of Section 8; all in T20S-R34E; 320.01 acres

Moore & Shelton Co., Ltd – 1.557644%

HOG Partnership, LP - 2.517404%

Challenger Crude, Ltd. - 2.188616%

Permian Resources LLC / Read and Stevens – 44.191751%

Magnum Hunter Production – 21.070146%

Zorro Partners, Ltd. – 2.419395%

Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard – 0.439892%

Ard Oil, LTD – 1.319670%

Chase Oil Corporation – 1.350574%

Cimarex Energy Co. – 7.975584%

Avalon Energy Corporation – 0.426124%

Wilbanks Reserve Corporation – 3.646093%

Marks Oil, Inc. – 0.445690%

Javelina Partners – 4.447084%

William A. Hudson, II – 0.236006%

Union Hill Oil & Gas Co. Inc. – 2.267998%

Highland (Texas) Energy Company – 1.204875%

Richardson Oil Company, LLC – 0.295266%

Carolyn R. Beall – 0.500047%

Diamond Star Production Co., LLC – 0.500047%

Tierra Encantada, LLC – 0.500047%

David Luna – 0.500047%

UNIT TOTAL: 100% WI

Cimarex Energy Co. Permian Business Unit 600 N. Marienfeld Street Suite 600 Midland, Texas 79701 MAIN 432.571,7800



August 25, 2022

Ard Oil, Ltd. 222 West Forth St., Ph5 Fort Worth, TX 76102

Re:

Proposal to Drill

Mighty Pheasant 5-8 Fed Com 101H-104H, 201H-204H & 301H-304H

Sections 5 & 8, Township 20 South, Range 34 East

Lea County, NM

Dear Working Interest Owner,

Cimarex Energy Co. hereby proposes to drill the Mighty Pheasant 5-8 Fed Com 101H-104H, 201H-204H & 301H-304H Wells at a legal location in Section 5, Township 20 South, Range 34 East, NMPM, Lea Co., NM.

Mighty Pheasant 5-8 Fed Com 101H - The intended surface hole location for the well is 330' FNL and 1090' FWL of Section 5, Township 20 South, Range 34 East, and the intended bottom hole location is 100' FSL and 330' FWL of Section 8, 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.

Mighty Pheasant 5-8 Fed Com 102H - The intended surface hole location for the well is 330' FNL and 1130' FWL of Section 5, Township 20 South, Range 34 East, and the intended bottom hole location is 100' FSL and 1744' FWL of Section 8, 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.

Mighty Pheasant 5-8 Fed Com 103H - The intended surface hole location for the well is 340' FSL and 1640' FEL of Section 32, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 2122' FEL of Section 8, 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.

Mighty Pheasant 5-8 Fed Com 104H - The intended surface hole location for the well is 340' FSL and 1600' FEL of Section 32, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 708' FEL of Section 8, 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.



Mighty Pheasant 5-8 Fed Com 201H - The intended surface hole location for the well is 330' FNL and 1110' FWL of Section 5, Township 20 South, Range 34 East, and the intended bottom hole location is 100' FSL and 330' FWL of Section 8, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,310' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Mighty Pheasant 5-8 Fed Com 202H - The intended surface hole location for the well is 330' FNL and 1150' FWL of Section 5, Township 20 South, Range 34 East, and the intended bottom hole location is 100' FSL and 1744' FWL of Section 8, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,310' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Mighty Pheasant 5-8 Fed Com 203H - The intended surface hole location for the well is 340' FSL and 1620' FEL of Section 32, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 2122' FEL of Section 8, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,308' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Mighty Pheasant 5-8 Fed Com 204H - The intended surface hole location for the well is 280' FSL and 1520' FEL of Section 32, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 708' FEL of Section 8, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,308' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Mighty Pheasant 5-8 Fed Com 301H - The intended surface hole location for the well is 390' FNL and 1190' FWL of Section 5, Township 20 South, Range 34 East, and the intended bottom hole location is 100' FSL and 330' FWL of Section 8, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,870' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Mighty Pheasant 5-8 Fed Com 302H - The intended surface hole location for the well is 390' FNL and 1230' FWL of Section 5, Township 20 South, Range 34 East, and the intended bottom hole location is 100' FSL and 1744' FWL of Section 8, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,860' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Mighty Pheasant 5-8 Fed Com 303H - The intended surface hole location for the well is 280' FSL and 1540' FEL of Section 32, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 2122' FEL of Section 8, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,850' to the Bone Spring formation and laterally within the formation to the referenced bottom hole location.

Mighty Pheasant 5-8 Fed Com 304H - The intended surface hole location for the well is 280' FSL and 1500' FEL of Section 32, Township 19 South, Range 34 East, and the intended bottom hole location is 100' FSL and 708' FEL of Section 8, Township 20 South, Range 34 East. The well is proposed to be drilled vertically to a depth of approximately 10,840' 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 Mighty Pheasant 5-8 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 Mighty Pheasant 5-8 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

O COTERRA

Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 204H

AFE # XXXXXXX

Company Entity				Date Prepared 8/17/2022
Exploration Region Permian Basin	Well Name Mighty Pheasant 5-8 Fed Com 204H	Prospect New Mexico Bone Spring	Property Nu XXXXXX-XXX.0	
County, State Lea, NM	Location Section 5-8 T20S-R34E Lea, NM		Estimated Spud	Estimated Completion
X New Supplement Revision	Formation 2nd Sand	Well Type DEV	Til Measured Depth 19808	Ttl Vetical Depth 10308
Purpose Drill Description	and complete well			
1	he intended surface hold location for the well i 00 FSL and 708 FEL of Section 8, T20S-R34E. Th outherly direction within the formation to the n	ne well is proposed to be drilled vertic	cally to the 2nd Sand format	ion and laterally in a

Completed Well Cost Intangible Dry Hole After Casing Point Drilling Costs \$2,475,500 \$2,475,500 \$4,646,761 \$4,646,761 Completion Casts Total Intangible Cost \$2,475,500 \$4,646,761 \$7,122,261 Completed Well Cost Dry Hole After Casing Point Tangible \$1,125,000 \$1,518,000 Well Equipment \$393,000 \$790,428 \$790,428 Lease Equipment Total Tangible Cost \$393,000 \$1,915,428 \$2,308,428

\$2,868,500

Comments On Well Costs

Total Well Cost

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.

approximately 10308 feet.

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 cont	ract

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.

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

\$9,430,689

\$6,562,189

^{1.} All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 204H

Rece M. Lordonie ODC-LTD SUB-ON-STORY ODC-	Description	BCP - Dr	illing	ACP - I	Drilling	Con	p/Stim	Producti	on Equip	Post Com	ALEX-CONT.	Total
Commany Comm	Description		Amount	Codes	Amount		Amount			Codes	Amount	Cos
ModPlace Micropart ModPlace	Roads & Location	DIDC,100	20,000			5TIM.100	3,000			PCOM.100	3,000	
Day later Day	Damages	DIDC.105	16,500					CON.105	15807	100000		32,30
Machine Mach	Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,00
inseried of the control of the contr	Day Rate	DIDC.115	468,000	DICC.120	96,000							564,00
Fig. Col.	Misc Preparation	DIDC.120	30,000									30,00
No. P. P. P. P. P. P. P.	Bits	DIDC.125	97,000	DICC.125	0	STIM.125	0			PCOM.125		97,00
Mod. 9 Application DOC 145 300,000	Fuel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,00
NO. Prof. 1 1 1 1 1 1 1 1 1	Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC 135	0	STIM.135	20,000			PCOM.135	0	25,00
Submers kernich ODC-150 17200 DC-140 STMA 140 STMA 15000 CON-140 FOOM-140 Month of Resident Labor Flow-list Labor And Logging ODC-177 S. 0,000 DC-175 STMA 141 CON-140 B.85.55 CON-150 B.80.55 C		DIDC.145	300,000									300,000
Suthers Amenia DOC-150 97000 DOC-150 13000	SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	109,193	109,19
Double D	Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	1,378	PCOM.140	60,000	295,378
Richards Liber Authorisation Liber Lib						STIM.145	35.000			PCOM.145	0	166,000
Automation Laber Mail Logging MC & DETRINAL PANTING MC Represented Floating Experiment DDC.195 7,000 DDC.195 7,000 DDC.195 1,000	A. A. 11 (1) (A. 11) (A. 11)	piedoss	18.13.00							and the state of t	30,000	30,000
Mail Logging DIDC.179 5,000 1,						21111111111		CON 150	36.558	PCOM 150	100000000000000000000000000000000000000	41,558
Inc. bottlessee 100		DIDC 170	5,000					20111130	30,550			5,000
Communing A hast Foughterent UDIC_105 9 3000 DCC-150 3 0000 DCC-150 0 0000 DCC-160 0 0000 DCC-16		DIDC.170	3,000					CON 165	18 888			18,88
Tabular Impedentions DICLINO \$ 3,000 DCC150 8,000 STRA 160 8,000 STRA 160 9,000 DCC165 13,000 STRA 160 9,000 DCC175 1,000 STRA 170 1,000 DCC175 1,000 DCC175 1,000 STRA 170 1,000 DCC175 1,000		D)DC 105	70,000	DICC 155	140,000			CO14.103	10,000			
Caleng Crewn DIDC-209 13,000 DCC-179	and the second section of the second section of the second section of the second section secti					CTIMATO	4.000			DCOM 160	0	
Mechanical labor						and the second of the second				PCOM. 160	U	
Tacking Transportation												
Supervision									The second second			
Total = Total Camp Camp Catering	Control of the Contro		100000000000000000000000000000000000000						100000000000000000000000000000000000000	Annual Control of the		59,833
Clark Mic Sperines	Supervision							CON.180	21,238	PCOM.180	0	162,238
Discription Drilling Services Discription Drilling Service	Trailer House/Camp/Catering				5,000							72,000
MBN/DBNOB		DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	24,318	PCOM.190	0	114,318
Discription Dalling Services DIDC-254 \$0,000 \$0 \$0.000	Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
Salas Control ODC_260 46,000 ODC_265 84,000 DDC_265 STIM_260 0 STIM_260	MOB/DEMOB	DIDC.240	115,000									115,000
Solds Control MCC Control (group Smulbing Services) DIOC 265 84,000 DIOC 265 STIM 115 21,000 PCOM 130 DIOC 265 DIOC 265 DIM 115 DIOC 265 DIOC 2	Directional Drilling Services	DIDC.245	307,000									307,000
Well Control Equip Services Competion Right Services Competion Right Services Competion Right Services Competion Right Services STM 30	A CONTRACTOR OF THE PROPERTY O	DIDC.260	46,000							771		46,000
Complete Plays	Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion toggging/perforating/Wieline Composite Plays Stimulation Water/Water Transfer/Water Composite Plays Register Plays Stimulation Water/Water Transfer/Water Composite Plays Register Plays	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					STIM.115	21,000			PCOM.115	0	21,000
Compelior Logging/Perforating/Weeline Compension Logging/Perforating/Weeline Compension Logging-Inflamental Equipment Loggin										PCOM.260	0	C
Composite Plays Stimulation Stimulatio										PCOM.200		257,000
Semulation Sem										to the second according to		39,000
Stimulation Water Mater Transfort/Water Climares Conned Frace/Retail Equipment (pulse) Connect Con	THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRE									- 40C/266118003011		
Communication Communicatio										r COMMETO		
Legal/Regidatory/Curatelve OIDC.285 7,000 Vell Control Insurance OIDC.285 7,000 Vell Control PAD LaSOR FL/GL - Labor FL/GL - Labor FL/GL - Supervision Survey SWD/Other - Labor SWD/Other - Supervision Ald in Construct/3rd Party Connect Contingency OIDC.285 118,000 OIDC.285 118,00										DCOM 205	0	
Well Control Insurance CIDIC 285 7,000 White Control C		0,000,000	10.000			311M.305	60,000	CON 200		PCOIVI.303	.0	
Mgir Construction Overhead RLGG - Oxportation RLGG - Supervision RLGG - Supervision Survey SWD/Other - Supervision Ald in Construct/3d Party Connect Contingency Total Intangible Cost Oxportation Total Intangible Cost Oxportation Oxp	The second secon							CON.300	0			
FL/GL - Labor Labo		DIDC.285	7,000					districtive and the second	06.6339			
FL/GL - Supervision FL/GL	Marie Contract to the Contract											
FL/GL - Supervision												37,613
Survey, Other - Labor SWD/Other - Labor SWD/Other - Supervision Ald In Construct/3rd Party Connect Contingency DIDC.435 DIDC.435 DIDC.435 DIDC.435 DIBC.435												94,842
SMD/Other - Labor SMD/Other - Supervision SMD/Other - Materials SMD/Other - Supervision SMD/Other - SMD/Other - Supervision SMD/Other - SMD/Othe	FL/GL - Supervision							CON.505				14,429
SMD/Other - Supervision Aid in Construct/3rd Party Connect Contingency DIDC A33 118,000 DICC 220 15,000 STIM 20 165,000 CON 270 40,531 CON 40,55 CONTINGENCY DIDC A33 118,000 DICC 220 15,000 STIM 20 165,000 CON 270 105,542 PCOM 220 0 403.5 CON 271 23,508 CON 271	Survey							CON.515	2,351			2,351
Add in Construct/3rd Party Connect Contingency DIDC.435	SWD/Other - Labor							CON.600	0			0
Contingency	SWD/Other - Supervision							CON.605	0		- 1	0
Contingency Contingency Contingency Conductor Pipe DWEB.130 Conductor Pipe DWEB.135 DA,000 DA,00	Aid In Construct/3rd Party Connect							CON.701	40,531			40,531
Total Intangible Cost	Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	105,542	PCOM.220	0	403,542
Total Intangible Cost	Contingency							CON.221	23,508			23,508
Conductor Pipe			2,475,500		306.000		3.459.000				212,193	7,122,26
Mater String		DWFB.130					37.374.77					0
Surface Casing DWE8.140 DWE8.145 O D												104,000
Intermediate Casing 1	Control of the Contro											251,000
Production Casing or Liner DWEA.100 792,000 STIMT.105 139,000 PCOMT.105 0 139,000 PCOMT.105 0 139,000 PCOMT.105 0 139,000 PCOMT.105 0 139,000 PCOMT.105 10,000 104,000 PCOMT.105 10,000 PCOMT.105 10,000 PCOMT.105 10,000 PCOMT.105												251,000
Tubing Wellhead, Tree, Chokes DWEB.115 38,000 DWEA.120 18,000 STIMT.105 38,000 PCOMT.105 10,000 104,00 Liner Hanger, Isolation Packer DWEB.100 0 DWEA.125 0 DWEB.105 0 DWEA.125 0 DWEB.106 DWEB.105 0 DWEA.125 0 DWEB.106 DWEA.125 0 DWEA.125 0 DWEB.106 DWEA.125 0 DWEA.125 D	A CONTRACTOR OF THE PARTY OF TH	D111.0.143	U	DWEA 100	702.000							
Wellhead, Tree, Chokes DWEB.115 38,000 DWEB.120 18,000 STIMT.120 38,000 PCOMT.120 10,000 104,00 Liner Hanger, Isolation Packer DWEB.100 0 DWEB.125 0 STIMT.400 28,000 PCOMT.400 0 28,00 SHORT ORDERS CONT.380 10,538 10,538 10,538 10,538 10,538 10,538 30,804 4,0 40,0 20,000 PCOMT.410 0 80,00 4,0 20,000 PCOMT.410 0 80,00 30,8 4,0 20,000 PCOMT.410 0 80,00 9,00 4,0 9,00 9,00 15,00 15,00 15,00 15,00 9,00 15,00 15,00 15,00 9,00 15,00 9,00 15,00 15,00 9,00 16,433 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 18,43 <td></td> <td></td> <td></td> <td>DVV2A.100</td> <td>132,000</td> <td>STIME 105</td> <td>120,000</td> <td></td> <td></td> <td>DCOMT 10F</td> <td>0</td> <td></td>				DVV2A.100	132,000	STIME 105	120,000			DCOMT 10F	0	
Liner Hanger, Isolation Packer DWEB.100 DWEB.105 O DWEB.	A CONTRACTOR OF THE PROPERTY O	DIMERTIA	20.000	DWE 4 100	10.000	Carrier others in other				Same distinguishing the first		
Packer, Nipples STIMT.400 28,000 CONT.380 10,538 10,53					18,000	31IM1.120	38,000			FCOM1.120	10,000	104,000
SHORT ORDERS		DWEB.100	0	DWEA.125	0	CTIA CT	-4			DCOLET 100		
PUMPS	A AMORE SERVICES					511MT.400	28,000		20'00"	PCOM1.400	0	28,000
WALKOVERS												10,538
Downhole Lift Equipment STIMT.410 80,000 PCOMT.420 15,00												30,804
Surface Equipment PCOMT.420 15,000 150 Well Automation Materials CONT.400 184,334 5,000 5,0 N/C Lease Equipment CONT.405 184,334 184,334 184,334 184,334 214,003 214,004 214,004 21									4,053	and the same		4,053
Well Automation Materials PCOMT.455 5,000 5,0 N/C Lease Equipment CONT.400 184,334 184,034 184,034 184,034 184,034 184,034 184,034 184,034 184,04 184,04 184,04 184,04 184,04 184,04 184,04 184,04 184,04 184,04 184,04 184,04 184,04						STIMT.410	80,000			Contracting address of all	0	80,000
N/C Lease Equipment Tanks, Tanks Steps, Stairs CONT.400 184.334 184.33 184.34 184.33 1	Surface Equipment										Landage Co.	15,000
Tanks, Tanks Steps, Stairs CONT.405 51,879 51,8 Battery Equipment CONT.410 214,003 214,0 Secondary Containments CONT.415 124,202 19.2 Overhead Power Distribution CONT.420 64,038 64,0 Facility Electrical CONT.425 32,100 32,1 Telecommunication Equipment CONT.426 486 4 Meters and Metering Equipment CONT.450 31,208 31,2 Lease Automation Materials CONT.450 31,208 31,2 FL/GL - Materials CONT.550 21,400 21,4 FL/GL - Line Pipe CONT.555 48,637 48,6 SWD/Other - Materials CONT.655 0 0 SWD/Other - Line Pipe CONT.655 0 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4	Well Automation Materials									PCOMT.455	5,000	5,000
Tanks, Tanks Steps, Stairs CONT.405 51,879 51,8 Battery Equipment CONT.410 214,003 214,00 Secondary Containments CONT.425 19,22 19,2 Overhead Power Distribution CONT.420 64,038 66,0 Facility Electrical CONT.425 32,100 32,1 Telecommunication Equipment CONT.426 486 4 Meters and Metering Equipment CONT.450 31,208 31,2 Lease Automation Materials CONT.450 31,208 31,2 Lease Automation Materials CONT.455 32,424 32,4 FL/GL - Materials CONT.550 21,400 21,4 FL/GL - Line Pipe CONT.555 48,637 48,6 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4	N/C Lease Equipment							CONT.400	184,334	45.		184,334
Battery Equipment CONT.410 214,003 214,003 Secondary Containments CONT.415 19,292 19,2 Overhead Power Distribution CONT.420 64,038 64,0 Facility Electrical CONT.425 486 4 Meters and Metering Equipment CONT.426 486 4 Meters and Metering Equipment CONT.450 31,208 31,2 Lease Automation Materials CONT.450 31,208 31,2 FL/GL - Materials CONT.550 21,400 21,4 FL/GL - Line Pipe CONT.550 21,400 21,4 SWD/Other - Materials CONT.550 0 0 SWD/Other - Line Pipe CONT.650 0 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4	Tanks, Tanks Steps, Stairs							CONT.405	51,879			51,879
Secondary Containments CONT.415 19,292 19,292 Overhead Power Distribution CONT.420 64,038 64,038 Facility Electrical CONT.425 32,100 32,1 Telecommunication Equipment CONT.426 486 4 Meters and Metering Equipment CONT.454 45,232 45,2 Facility Line Pipe CONT.450 31,208 31,2 Lease Automation Materials CONT.455 32,424 32,4 FL/GL - Materials CONT.550 21,400 21,4 SWD/Other - Materials CONT.555 48,637 48,6 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4	Battery Equipment							CONT.410				214,003
Overhead Power Distribution CONT.420 64.038 64.00 Facility Electrical CONT.425 32,100 32,1 Telecommunication Equipment CONT.426 486 4 Meters and Metering Equipment CONT.450 45,232 45,232 Facility Line Pipe CONT.450 31,208 31,208 Lease Automation Materials CONT.455 32,424 32,4 FL/GL - Materials CONT.550 21,400 21,4 FL/GL - Line Pipe CONT.555 48,637 48,6 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4								CONT.415				19,292
Facility Electrical CONT.425 32,100 32,11 Telecommunication Equipment CONT.426 486 44 Meters and Metering Equipment CONT.435 45,232 45,23 Facility Line Pipe CONT.435 31,208 31,208 Lease Automation Materials CONT.455 32,424 32,4 FL/GL - Materials CONT.550 21,400 21,40 FL/GL - Line Pipe CONT.555 48,637 48,637 SWD/Other - Materials CONT.655 0 SWD/Other - Line Pipe CONT.655 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,40 CONT.655 CONT.655 30,000 32,308,40 CONT.655 CONT.655 CONT.655 30,000 32,308,40 CONT.655 CONT.655 CONT.655 CONT.655 CONT.655 CONT.655 CO	to a second and a second a second and a second a second and a second a											64,038
Telecommunication Equipment CONT.426 486 4 Meters and Metering Equipment CONT.445 45,232 45,245,245,245,245,245,245,245,245,245,2												32,100
Meters and Metering Equipment CONT.445 45,232 45,2 Facility Line Pipe CONT.450 31,208 31,2 Lease Automation Materials CONT.455 32,424 32,4 FL/GL - Materials CONT.550 21,400 21,4 SWD/Other - Materials CONT.555 48,637 48,6 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4												486
Facility Line Pipe CONT.450 31,208 31,2 Lease Automation Materials CONT.455 32,424 32,4 FL/GL - Materials CONT.550 21,400 21,4 FL/GL - Line Pipe CONT.555 48,637 48,6 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4									1 1 1 1 1 1 1 1			45,232
Lease Automation Materials CONT.455 32,424 32,4 FL/GL - Materials CONT.550 21,400 21,4 FL/GL - Line Pipe CONT.555 48,637 48,63 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4												
FL/GL - Materials CONT.550 21,400 21,4 FL/GL - Line Pipe CONT.555 48,637 48,6 SWD/Other - Materials CONT.650 0 SWD/Other - Line Pipe CONT.655 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4	Andrew State of the State of th								all discounts			
FL/GL - Line Pipe												
SWD/Other - Materials CONT.650 0 SWD/Other - Line Pipe CONT.655 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4												
SWD/Other - Line Pipe CONT.655 0 Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2,308,4									100000000000000000000000000000000000000			48,637
Total Tangible Cost 393,000 810,000 285,000 790,428 30,000 2.308,4									1			(
	Total Tangible Cost		393,000		810,000		285,000		790,428		the same of the sa	2,308,428



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 204H

Description		ВСР	- Drilling		ACP - Drilling	1	Comp	/Stim	America
	Codes		Amount			Amount	Codes	CON.100	Amour 3,00
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,00
Damages	DIDC.105		16,500						4 100
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						
Bits	DIDC.125	DICC.125	97,000	DICC.125	STIM.125	0	STIM.125		
Fuel	DIDC.135	DICC.130	119,000	DICC.130		0			
Water for Drilling Rig (Not Frac	DIDC.140	DICC 135	5.000		STIM.135	0	STIM.135		20,00
Mud & Additives	DIDC.145	5,44,155	300,000			diam'r			
SWD PIPED TO 3RD PARTY SWD	DIDC.143		300,000						
	DIDC 150	DICC.140	97,000	DICC.140	STIMA 1 40	0	STIM.140	CON.140	137,000
Surface Rentals Downhole Rentals		DICC.140	70000000	DICC. 140	311141.140	, u	STIM.145	CONTINU	35,000
	DIDC.155		131,000						33,00
Flowback Labor							STIM.141		
Automation Labor			Sec. 13						
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185		70,000			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		(
Mechanical Labor	DIDC.200	DICC.170	20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	(
Trucking/Transportation	DIDC.205		30,000			8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210		81,000		STIM 180	13,000	STIM.180	CON.180	47,000
Trailer House/Camp/Catering	DIDC.280		36,000		STIM.280	5,000	STIM.280		31,000
Control of the Contro			5,000		STIM 190	0,000	STIM.190	CON.190	85,000
Other Misc Expenses					31IW 130		211IVI. 13U	2011.130	03,000
Overhead		DICC.195	5,000			5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC.245		307,000						
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							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
							STIM.305		60,000
Cimarex Owned Frac/Rental			70 202				511M.303		60,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		7,000						
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		nudana.		DICC 220		40.000	CT11 1 220	CON 220	10000
Contingency	DIDC.435	DICC.220	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			11 30			
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000			1			
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner	5.1.20.1.43			DWEA.100		792,000			
				DVVEA.100		792,000	STIMT.105		139,000
Tubing	DUED	DIMEA 120	30.55	DIAMA	CTILIT 120	40.00-			
Wellhead, Tree, Chokes		DWEA.120		DWEA.120		18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0	Sec. 10. 12.		120/01
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									
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									
and the second second									
SWD/Other - Materials									
SWD/Other - Materials SWD/Other - Line Pine									
SWD/Other - Materials SWD/Other - Line Pipe Total Tangible Cost			393,000			810,000			285,000



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 204H

Total Tangible Cost		790,428			30,000	
SWD/Other - Line Pipe	CONT.655	0				2,308,42
SWD/Other - Materials	CONT.650	0				
FL/GL - Line Pipe	CONT.555	48,637				48,637
FL/GL - Materials	CONT.550	21,400				21,400
Lease Automation Materials	CONT.455	32,424				32,424
Facility Line Pipe	CONT.450	31,208				31,208
Meters and Metering Equipment	CONT.445	45,232				45,232
Telecommunication Equipment	CONT.426	486				486
Facility Electrical	CONT.425	32,100				32,100
Overhead Power Distribution	CONT.420	64,038				64,038
Secondary Containments	CONT.415	19,292		N A		19,292
Battery Equipment	CONT.410	51,879 214,003				214,003
N/C Lease Equipment Tanks, Tanks Steps, Stairs	CONT.400 CONT.405	184,334				184,334 51,879
Well Automation Materials	CONT 400	10.00	PCOMT.455	PTs, and replacing meters	5,000	5,000
Surface Equipment			PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,000
Downhole Lift Equipment			PCOMT.410	Louis and the Samuel	0	80,000
WALKOVERS	CONT.390	4,053				4,053
PUMPS	CONT.385	30,804				30,804
SHORT ORDERS	CONT.380	10,538				10,538
Packer, Nipples		1	PCOMT.400		0	28,000
Liner Hanger, Isolation Packer				PALE CANCELLOS CONTROL ENCL. LEURE CALLAND 12	0.073	(
Wellhead, Tree, Chokes				Replace worn chokes and valves during FB	10,000	104,000
Tubing			PCOMT.105		0	139,000
Production Casing or Liner						792,000
Intermediate Casing 1						(
Surface Casing						251,000
Water String						104,000
Total Intangible Cost Conductor Pipe		995,568			216,133	1,122,20
Contingency Total Intangible Cost	CON.221	23,508 669,568			212,193	7,122,26
Contingency	CON 220	105,542				23,508
Aid In Construct/3rd Party Connect	CON.701	40,531				40,531
SWD/Other - Supervision	CON.605	0				(0.536
SWD/Other - Labor	CON.600	0				(
Survey	CON.515	2351				2,351
FL/GL - Supervision	CON.505	14,429				14,429
FL/GL - Labor	CON.500	94,842				94,842
FL/GL - ON PAD LABOR	CON.495	37,613				37,613
Major Construction Overhead	CON.305	26,507				26,507
Well Control Insurance	27,024-00					7,000
Legal/Regulatory/Curative	CON.300	0				10,000
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	60,000
Stimulation Water/Water Transfer/Water						191,000
Stimulation			PCOM.210		0	2,245,000
Composite Plugs			PCOM.390		0	39,000
Completion Logging/Perforating/Wireline			PCOM.200		0	257,000
Coil Tubing Services			PCOM.260		0	(
Completion Rig			PCOM.115		0	21,000
Well Control Equip (Snubbing Services)			PCOM.240		0	148,000
Solids Control						46,000
Directional Drilling Services				1		307,000
MOB/DEMOB						115,000
Overhead	177					10,000
Other Misc Expenses	CON.190	24,318	PCOM.190		0	114,318
Trailer House/Camp/Catering		1.,000	SAN ONITE			72,000
Supervision	CON.180	21,238	PCOM.180		0	162,238
Trucking/Transportation	CON.175	17,833	PCOM.175		0	59,833
Mechanical Labor	CON.170	139,588	PCOM.170	RU Flowback Iron & Automation	5,000	167,588
Tubular Inspections Casing Crews			FCOIVI. 160		V	28,000
Cementing & Float Equipment			PCOM.160		0	210,000
IPC & EXTERNAL PAINTING	CON.165	18,888				18,888
Mud Logging						5,000
Automation Labor	CON.150	36,558	PCOM.150		5,000	41,558
Flowback Labor			PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,000
Downhole Rentals		7,50	PCOM,145		0	166,000
Surface Rentals	CON.140	1,378	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	295,378
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257	Water for 60 days (270K barrels)	109,193	109,193
Mud & Additives				A CONTRACTOR OF THE PARTY OF TH		300,000
Fuel Water for Drilling Rig (Not Frac Water)			PCOM.135		0	25,000
Bits			PCOM.123		0	119,000
Misc Preparation			PCOM.125		0	97,000
Day Rate						564,000 30,000
Mud/Fluids Disposal			PCOM.255		0	251,000
Damages	CON.105	15807			124	32,307
House or Ferminal	CON.100	48,637	PCOM.100	Repair any roads post D&C	3,000	74,637
Roads & Location	Annual State of State					
Description Roads & Location	Codes	Amount	Codes		Amount	Cost

7/6/2022

AFE # XXXXXXX O COTERRA Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 301H Date Prepared Company Entity 8/17/2022 Property Number AFF Prospect Explaration Region Well Name XXXXXX-XXX.01 XXXXXXX Mighty Pheasant 5-8 Fed Com 301H New Mexico Bone Spring Permian Basin Estimated Soud Estimated Completion County, State Location Section 5-8 T20S-R34E Lea, NM Lea, NM Ttl Measured Depth Ttl Vetical Depth Well Type X New 10870 DEV Supplement 3rd Sand Revision Drill and complete well Purpose Description The intended surface hold location for the well is 390 FNL and 1190 FWL of Section 5, T20S-R34E, and the intended bottom hole location is Drilling 100 FSL and 330 FWL of Section 8, 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 10870 feet. After Casing Point Completed Well Cost Dry Hole Intangible \$2,475,500 Drilling Costs \$2,475,500 \$4,595,289 \$4,595,289 Completion Costs \$7,070,789 Total Intangible Cost \$2,475,500 \$4,595,289 Completed Well Cost Dry Hole After Casing Point Tangible \$1,518,000 Well Equipment \$1,125,000 \$393,000 \$840.065 Lease Equipment \$840.065 \$2,358,065 \$1,965,065 Total Tangible Cost \$393,000 \$6,560,354 Total Well Cost \$2,868,500 \$9,428,854 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 Date Approved By (Print Name) Approved By (Signature) Company

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



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 301H

Description	BCP - Dr	lling	ACP -	Drilling	-	np/Stim	To Calaboration	on Equip	Post Com	A CONTRACTOR OF THE PARTY OF TH	Total
Description	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Co
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	44,205	PCOM.100	3,000	70,2
Damages	DIDC.105	16,500					CON.105	3215			19,7
Mud/Fluids Disposal	DIDC.255	200,000		10000	STIM.255	51,000		1	PCOM.255	0	251,0
Control of the Contro	DIDC.115	468,000	DICC 120	96,000	51,111.6.55	51,000					564,00
Day Rate			DICC. 120	96,000							30,00
Misc Preparation	DIDC.120	30,000	0.010.0						00011175		
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									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	6,912	PCOM.140	60,000	300,91
			DICC. 140				CO14.140	0,512	PCOM.145	0	166,00
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000					
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,00
Automation Labor							CON.150	45,010	PCOM.150	5,000	50,01
Mud Logging	DIDC.170	5,000									5,00
IPC & EXTERNAL PAINTING							CON.165	5,144			5,14
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000							210,00
Tubular Inspections	DIDC.190	38,000	DICC.160	8,000	STIM.160	4,000			PCOM.160	0	50,00
				The second second					1 00111.100		28,00
Casing Crews	DIDC.195	15,000	DICC.165	13,000	STIM.165	0	A section	1000000			
Mechanical Labor	DIDC.200	20,000	DICC 170	3,000	STIM.170	0	CON.170	185,663	PCOM.170	5,000	213,66
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000	CON.175	16,075	PCOM.175	0	58.07
Supervision	DIDC.210	81,000	DICC 180	13,000	STIM.180	47,000	CON.180	11,574	PCOM.180	0	152,57
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000					72,00
Other Misc Expenses	DIDC.220	5,000	DICC 190	0	STIM.190	85,000	CON.190	19,290	PCOM.190	0	109,29
Overhead	DIDC.225	5,000	DICC 195	5,000		35,000				1	10,00
			DICC 193	3,000							115,00
MOB/DEMOB	DIDC.240	115,000									
Directional Drilling Services	DIDC.245	307,000									307,00
Solids Control	DIDC.260	46,000									46,00
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,00
Completion Rig	1000				STIM.115	21,000			PCOM.115	0	21,00
Coil Tubing Services					STIM.260	0			PCOM.260	0	
ACTION OF THE PROPERTY OF THE									PCOM.200	0	257,00
Completion Logging/Perforating/Wireline					STIM.200	257,000					
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,00
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,00
Stimulation Water/Water Transfer/Water					STIM.395	191,000					191,00
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,00
Legal/Regulatory/Curative	DIDC.300	10,000				(21150)	CON.300	0			10,00
The state of the s	DIDC.285	7,000					CO14.500				7,00
Well Control Insurance	DIDC.203	7,000					-221122				7,00
Major Construction Overhead							CON.305	0			
FL/GL - ON PAD LABOR							CON.495	33,114			33,11
FL/GL - Labor							CON.500	113,970			113,97
FL/GL - Supervision							CON.505	12,056			12,05
Survey							CON.515	6,590			6,59
SWD/Other - Labor							CON.600	0			
							CON.605	0			
SWD/Other - Supervision											
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	404,73
Contingency							CON.221	30,381			30,38
Total Intangible Cost		2,475,500		306,000		3,459,000		639,935		190,354	7,070,78
Conductor Pipe	DWEB.130	0				11.000,000					
Water String	DWEB.135	104,000									104,00
Surface Casing	DWEB.140	251,000									251,00
Intermediate Casing 1	DWEB.145	0									
Production Casing or Liner			DWEA.100	792,000							792,00
Tubing					STIMT.105	139,000			PCOMT.105	0	139,00
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,00
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125						a wally care	17.00	
Packer, Nipples	2.720.100				STIMT.400	28,000			PCOMT.400	0	28,00
and the state of t					511W1.400	20,000	CONTRACT	1140	, COMT.400	Ü	
SHORT ORDERS							CONT.380	11,253			11,25
PUMPS							CONT.385	26,362			26,36
WALKOVERS							CONT.390	6,430			6,43
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,00
Surface Equipment						100000			PCOMT.420	15,000	15,00
Well Automation Materials									PCOMT.455	5,000	5,00
							CONT 100	270.00		5,000	279,86
N/C Lease Equipment							CONT.400	279,861			2/9,86
Tanks, Tanks Steps, Stairs							CONT.405	0			
Battery Equipment							CONT.410	229,386			229,38
Secondary Containments							CONT.415	12,859			12,85
Overhead Power Distribution							CONT.420	10,288			10,28
Facility Electrical							CONT.425	48,224			48,22
Telecommunication Equipment							CONT.426	0			
											10.70
Meters and Metering Equipment							CONT.445	42,758			42,75
Facility Line Pipe							CONT.450	28,935			28,93
							CONT.455	36,972			36,97
Lease Automation Materials							CONT.550	26,684			26,68
Lease Automation Materials FL/GL - Materials											
FL/GL - Materials							CONT.555	80.052			80.09
FL/GL - Materials FL/GL - Line Pipe							CONT.555	80,052			
FL/GL - Materials FL/GL - Line Pipe SWD/Other - Materials							CONT.650	0			
FL/GL - Materials FL/GL - Line Pipe		393,000		810,000		285,000	CONT.650 CONT.655			30,000	80,05 2,358,06



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 301H

Description		BCP	- Drilling		ACP - Drilling		Comp	/Stim	Ameni
	Codes		Amount	Codes		Amount	Codes STIM.100	CONTRO	Amour 3,00
Roads & Location	DIDC.100		20,000				S11M.100	CON.100	3,00
Damages	DIDC.105		16,500						2002
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		51,000
Day Rate	DIDC.115	DICC.120	468,000	DICC.120		96,000			
Misc Preparation	DIDC.120		30,000						
Bits	DIDC.125	DICC.125	97,000	DICC.125	STIM.125	0	STIM.125		
Fuel		DICC130	119,000	DICC.130		0			
Water for Drilling Rig (Not Frac	DIDC.140	DICC.135	5,000		STIM.135	0	STIM.135		20,000
Mud & Additives	DIDC.145	Dicc. 133	300,000		3.1111,123				
SWD PIPED TO 3RD PARTY SWD	DIDC.143		300,000						
	DIDCATO	DICCIII	07.000	DICC 140	CTIMATAO	- 0	STIM.140	CON.140	137,000
Surface Rentals		DICC.140	97,000	DICC.140	STIM.140	- 0		CON.140	35,000
Downhole Rentals	DIDC.155		131,000				STIM.145		14
Flowback Labor							STIM.141		(
Automation Labor									
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		38,000		STIM.160	8,000	STIM.160		4,000
The state of the s	DIDC.195		15,000		STIM.165	13,000	STIM.165		(
Casing Crews						1	STIM.170	CON.170	
Mechanical Labor	DIDC.200		20,000		STIM.170	3,000			
Trucking/Transportation	DIDC.205		30,000		STIM.175	8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210		81,000		STIM.180	13,000	STIM.180	CON.180	47,000
Trailer House/Camp/Catering	DIDC.280		36,000		STIM.280	5,000	STIM.280		31,000
Other Misc Expenses	DIDC.220		5,000	DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC 245		307,000						
Solids Control	DIDC260		46,000						
		DICC 240	84,000	DICC 340	STIM.240	0	STIM.240		64,000
Well Control Equip (Snubbing	DIDC 265	DICC240	64,000	DICC.240	311W.24U	Ü	STIM.115		21,000
Completion Rig									
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						
A CONTRACTOR OF STREET	DIDC.285		7,000						
Well Control Insurance	DIDC.203		7,000						
Major Construction Overhead									
FL/GL - ON PAD LABOR									
FL/GL - Labor						1			
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect									
the artists are assets to the color of the c	DIDC.435	DICC 220	118,000	DICC 330	STIM.220	15,000	STIM.220	CON 220	165,000
Contingency	DIDC.433	DICCEZO	110,000	DICCLEZO	311W.22U	13,000	JIIIVIZZO	CO14220	105,000
Contingency									2 450 000
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	DWFR 115	DWEA.120	38 000	DWFA 120	STIMT.120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer		DWEA.125		DWEA.125		10,000	2		50,500
	DIVED. 100	Differ 123	0	DIVER.125		0	STILLT 400		28,000
Packer, Nipples							STIMT,400		20,000
SHORT ORDERS									
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,000
Surface Equipment									
Well Automation Materials									
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs								1	
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical						1			
Telecommunication Equipment									
Meters and Metering Equipment									100
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Materials									
SWD/Other - Materials									
SWD/Other - Line Pipe									
T			393,000			810,000			285,00
Total Tangible Cost			333,000			010,000			200,00



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 301H

Mode Standards	Description		Production Equip			Post Completion		Total
Damage	Description					5	100000000000000000000000000000000000000	Co
ModPublic Ripowal Way Rete Med. Programmin No. Processing No. Proc	Roads & Location	CON.100			PCOM.100	Repair any roads post D&C	3,000	
Due Faller Machine M	Damages	CON.105		3215				
March Preparation Find F	Mud/Fluids Disposal				PCOM.255		0	
Bink Red	Day Rate							
March Conting Sig Next Frace Water) March Stack	Misc Preparation							30,00
Waster for Drilling ing (filter frace Water)	Bits				PCOM.125			97,00
Mar & Andrews Workers 1972	Fuel				PCOM.130			119,00
SMO PRED TO 3839 PARTY SUD WELL SLinke Retails SLin	Water for Drilling Rig (Not Frac Water)				PCOM.135		0	25,00
Suitable Renaits County Co								300,00
Suitace Renaits Count-total Count-total	SWD PIPED TO 3RD PARTY SWD WELL				PCOM.257	Water for 60 days (270K barrels)	87,354	87,35
Doumble Actacles		CON.140	6	.912	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	300,91
Floatibles (abor Allorest Col 150 45,015 Flootible Flo		1000				A TOTAL CONTRACTOR OF THE PARTY	0	166,00
Automation Labor Mac Cogning (PC & LETERAL PAINTING CON 165 5.144 Congregation (Congregation Control of Co						3 Flowback Hands (60 days), 25%	30,000	30,00
Med Logging		CON 150	45	010		S Tronback Thinds (es dejs).	100000	50,01
PCC ASTERNAL PAINTNING CON-1905 S.144 PCCM-160 PCCM-170		CONTINU	***	,010	1 COM. 150		5,000	5,00
Commonts Final Enginement Comparison		CONTES		144				5,14
Tabubar Inspection Caming Creams Caming		CO14,103		, 1-4-4				210,00
Caring Crims CON 170 18,563 PCOM 170 10,000 PCOM 170 10,000 PCOM 170 P					00011100		0	
Medical Labor 100,015 185,63 100,000					PCOM. 160		U	
Trucking firms approaches								
Supervision		the state of the s				KU Howback Iron & Automation		213,66
Table Floored Campicatering Owthead MAGURMON Owthead MAGURMON MAGURMON Detectional Drilling Services Solids Control Well Centrol Equip Simbleing Services) Completion (Equip Simbleing Services) Completion (Equip Simbleing Services) Completion (Equip Servi	The same of the sa	The state of the s						58,07
Cher Mice Express		CON.180	11	,574	PCOM.180		0	152,57
Decision Dilling Services	The state of the s	100000						72,00
MONIPORNO Processor Drilling Services Control		CON.190	19	,290	PCOM.190		0	109,29
Directional Dalling Services	Overhead							10,00
Solids Control Will Control Equip Embibling Services)	MOB/DEMOB							115,00
PCOM.200	Directional Drilling Services							307,00
PCOM.400	Solids Control							46,00
Completion Rig	Well Control Equip (Snubbing Services)				PCOM.240		0	148,00
Con Tubing Services Completion togging/Perforating/Wieline Composite Plugs Simulation Vater/Mater Transfer/Mater Composite Plugs Simulation Vater/Mater Composite Plugs Simulation Vater/Mater Composite Plugs Simulation Vater/Mater Composite Plugs Simulation Vater V	A CONTRACTOR OF THE PROPERTY O						0	21,00
Complein Loging/Perforating/Wireline Composite Place PCOM.309 PCOM.209 PCOM.309 PCOM.209	and the first of t				PCOM 260		0	
Composite Plugs					1000			257,00
Simulation Sim								39,00
Simulation Water/Water Tamsfer/Water Commence Owner Face-Price all Equipment Legal/Regulatory/Curative							1	
Command Fac/Rental Equipment Cosy 300					PCOM.210			
Legal/Regulatory/Curative Well Control Insurance Major Construction Ownhead CoN 305					05011305		ò	
Well Control Insurance Mily Construction Owerhead CON 305 FL/GL - ON PAD LABOR CON 495 FL/GL - Labor CON 505 FL/GL - Labor CON 505 FL/GL - Supervision CON 505 Survey CON 515 Survey Con 5		5011300			PCOM.305		Ü	
Major Construction Overhead CON 305 CON	LA PUNCHE THE CONTRACTOR	CON.300		0				
FL/GL - Labor		and the second second						7,00
FL/GL - Labor	A Committee of the Comm							
FL/GL - Supervision		community statement						33,11
Survey	FL/GL - Labor	CON.500	113	,970				113,97
SWD/Other - Labor	FL/GL - Supervision	CON.505	12	,056				12,05
SMD/Other - Supervision CON-205 Aid In Construct/3rd Party Connect CON-201 Contingency CON-220 Conductor Pipe Water String Water S	Survey	CON.515		5590				6,59
Aid in Construct/3rd Party Connect CON 220 Contingency CON 221 30.381 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 CONT.380 CONT.380 CONT.385 CONT.385 CONT.385 CONT.385 CONT.385 CONT.385 CONT.385 CONT.385 CONT.385 CONT.386 CONT.386 CONT.387 CONT.387 CONT.388 PLUMPS CONT.388	SWD/Other - Labor	CON.600		0				
Contingency	SWD/Other - Supervision	CON.605		0				
Contingency	Aid In Construct/3rd Party Connect	CON.701		0				
Contingency CON.221 30.381 639.935 190.334 7070		CON.220	106	.737				404,73
Total Intangible Cost 639,935 190,354 7,070		CON.221						30,38
Conductor Pipe Water String Surface Casing 104 251 104 251 104							190.354	7,070,78
Water String Surface Casing Surface Casing Production Casing or Liner Production Packer Pro				1202				
Surface Casing 1 Production Casing or Liner Production Casing Cas	Control of the Contro							104,00
Intermediate Casing 1 Production Casing or Liner Trubing Production Casing or Liner Production Casing or Liner Trubing Production Casing or Liner Production Casing or Line	Contractor to the contract of							251,00
Production Casing or Liner Tubing	The second secon							251,00
Tubing Wellhard, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples PCOMT.105 PCOMT.105 Replace worn chokes and valves during FB 10,000 104,106 PCOMT.107 PCO	Control of the Contro							
Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples PCOMT.420 PCOMT.420 PCOMT.400 0 28/15/26, PCOMT.400 PCOMT.400 PCOMT.400 PCOMT.400 PCOMT.400 PCOMT.455 PTs, and replacing meters PTs, and replacing met								792,00
Liner Hanger, Isolation Packer Packer, Nipples Packer, Nippl	And the state of t					Last a consistence of the constraint of the cons	10° Province Co.	139,00
Packer, Nipples					PCOMT.120	Replace worn chokes and valves during FB	10,000	104,00
SHORT ORDERS					and the second			
PUMPS		1000000			PCOMT.400		0	28,00
WALKOVERS CONT.390 6,430 PCOMT.410 O 80,0		constitution of the same						11,25
Downhole Lift Equipment Surface Equipment PCOMT.410 PCOMT.420 Replacing Chokes, Stuffing Boxes, and all 15.000 15.0			100					26,36
Surface Equipment PCOMT.420 Replacing Chokes, Stuffing Boxes, and all 15.000		CONT.390	6	,430				6,43
Well Automation Materials PCOMT.455 PTs, and replacing meters 5,000 5,100 5	Downhole Lift Equipment				PCOMT.410		0	80,00
N/C Lease Equipment CONT.400 279,861 279,861 Tanks, Tanks Steps, Stairs CONT.405 0 229,386 Battery Equipment CONT.410 229,386 229,386 Secondary Containments CONT.415 12,859 12,1 Overhead Power Distribution CONT.420 10,288 10,0 Facility Electrical CONT.425 48,224 48,224 Telecommunication Equipment CONT.426 0 42,758 Meters and Metering Equipment CONT.455 42,758 42,758 Facility Line Pipe CONT.450 28,935 28,835 Lease Automation Materials CONT.455 36,972 36,77 FL/GL - Materials CONT.550 26,684 26,75 FL/GL - Line Pipe CONT.555 80,052 80,05 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 30,000 2,358,000					PCOMT.420	Replacing Chokes, Stuffing Boxes, and all		15,00
N/C Lease Equipment CONT.400 279,861 279,861 Tanks, Tanks Steps, Stairs CONT.405 0 3 Battery Equipment CONT.410 229,386 229,386 Secondary Containments CONT.415 12,859 12,1 Overhead Power Distribution CONT.420 10,288 10, Facility Electrical CONT.425 48,224 48,224 Telecommunication Equipment CONT.426 0 42,758 Meters and Metering Equipment CONT.450 28,935 28,35 Lease Automation Materials CONT.450 28,935 28,36 Lease Automation Materials CONT.550 26,684 26,75 FL/GL - Line Pipe CONT.550 26,684 26,75 SWD/Other - Materials CONT.650 0 80,052 SWD/Other - Line Pipe CONT.655 0 30,000 2,358,000 Total Tangible Cost 840,065 30,000 2,358,000	Well Automation Materials	2000			PCOMT.455	PTs, and replacing meters	5,000	5,00
Battery Equipment CONT.410 229,386 229, Secondary Containments CONT.415 12,859 12,00 Overhead Power Distribution CONT.420 10,288 10, 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 36,77 FL/GL - Materials CONT.550 26,684 26,76 FL/GL - Line Pipe CONT.555 80,05 80,05 SWD/Other - Materials CONT.650 0 50,00 SWD/Other - Line Pipe CONT.655 80,00 30,000 2,358,00	N/C Lease Equipment	CONT.400	279	,861				279,86
Battery Equipment CONT.410 229,386 229, Secondary Containments CONT.415 12,859 12,1 Overhead Power Distribution CONT.420 10,288 10, Facility Electrical CONT.425 48,224 48,224 Telecommunication Equipment CONT.426 0 0 Meters and Metering Equipment CONT.455 42,758 42,758 Facility Line Pipe CONT.450 28,935 28,935 Lease Automation Materials CONT.455 36,972 36,672 FL/GL - Materials CONT.550 26,684 26,174 SWD/Other - Materials CONT.550 80,052 80,05 SWD/Other - Materials CONT.650 0 80,05 SWD/Other - Line Pipe CONT.655 80,05 30,000 2,358,00	Tanks, Tanks Steps, Stairs	CONT.405		0		,		
Secondary Containments CONT.415 12,859 12,0 Overhead Power Distribution CONT.420 10,288 10,0 Facility Electrical CONT.425 48,224 48,24 Telecommunication Equipment CONT.426 0 6 Meters and Metering Equipment CONT.445 42,758 <td></td> <td>CONT.410</td> <td>229</td> <td>,386</td> <td></td> <td></td> <td></td> <td>229,38</td>		CONT.410	229	,386				229,38
Overhead Power Distribution CONT.420 10,288 10,0 Facility Electrical CONT.425 48,224 64,824 Telecommunication Equipment CONT.426 0 64,824 Meters and Metering Equipment CONT.455 42,758 42,758 Facility Line Pipe CONT.450 28,935 28,935 Lease Automation Materials CONT.550 36,972 36,762 FL/GL - Materials CONT.550 26,684 26,764 SWD/Other - Materials CONT.650 0 80,052 80,052 SWD/Other - Materials CONT.650 0 0 80,052 80,052 SWD/Other - Materials CONT.650 0 0 80,052								12,85
Facility Electrical CONT.425 48.224 48.224 Telecommunication Equipment CONT.426 0 42.758 Meters and Metering Equipment CONT.455 42.758 42.758 Facility Line Pipe CONT.450 28.935 28.935 Lease Automation Materials CONT.455 36.972 36.7 FL/GL - Materials CONT.550 26.684 26,7 FL/GL - Line Pipe CONT.555 80.052 80.052 SWD/Other - Materials CONT.650 0 0 SWD/Other - Usine Pipe CONT.655 0 0 Total Tangible Cost 840.065 30.000 2.358,								10,28
Telecommunication Equipment CONT.426 0		Transference to be fall to the		10000				48,22
Meters and Metering Equipment CONT.445 42,758 42,758 Facility Line Pipe CONT.450 28,935 28, Lease Automation Materials CONT.455 36,972 36, FL/GL - Materials CONT.550 26,684 26, El/GL - Line Pipe CONT.555 80,052 80,052 SWD/Other - Materials CONT.650 0 60,000 SWD/Other - Line Pipe CONT.655 0 0 SWD/Other - Line Pipe CONT.655 80,052 30,000 2,358,000	Company of the compan			1				70,55
Facility Line Pipe CONT.450 28,935 28,1 Lease Automation Materials CONT.455 36,972 36,7 FL/GL - Materials CONT.550 26,684 26,7 FL/GL - Line Pipe CONT.655 80,052 80,052 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 30,000 2,358,000 Total Tangible Cost 840,065 30,000 2,358,000		the state of the s	39					42,75
Lease Automation Materials CONT.455 36,972 36,772 FL/GL - Materials CONT.550 26,684 26,000 FL/GL - Line Pipe CONT.650 80,052 80,052 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 30,000 2,358,000 Total Tangible Cost 840,065 30,000 2,358,000								28,93
FL/GL - Materials CONT.550 26,684 26,7 FL/GL - Line Pipe CONT.555 80,052 80,052 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 30,000 2,358,000 Total Tangible Cost 840,065 30,000 2,358,000		and the state of t	4 22					
FL/GL - Line Pipe CONT.555 80,052 80,052 SWD/Other - Materials CONT.650 0 0 SWD/Other - Line Pipe CONT.655 0 0 Total Tangible Cost 840,065 30,000 2,358,		and the state of t						
SWD/Other - Materials CONT.650 0 SWD/Other - Line Pipe CONT.655 0 Total Tangible Cost 840,065 30,000 2,358,		and the first or and						26,68
SWD/Other - Line Pipe CONT.655 0 Total Tangible Cost 840,065 30,000 2,358,		Control of the Contro	80					80,05
Total Tangible Cost 840,065 30,000 2.358,								
		CONT.655						
	Total Tangible Cost		840	0,065			30,000	2,358,06

7/6/2022

O COTERRA Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 302H AFE # XXXXXXX Date Prepared Company Entity 8/17/2022 Property Number AFF Exploration Region Well Name Prospect XXXXXX-XXX.01 XXXXXXX Permian Basin Mighty Pheasant 5-8 Fed Com 302H New Mexico Bone Spring Estimated Completion Estimated Soud County, State Location Lea, NM Section 5-8 T20S-R34E Lea, NM Itl Vetical Deoth X New Well Type Ttl Measured Depth 10860 Supplement 3rd Sand DEV 20360 Revision Purpose Drill and complete well Description The intended surface hold location for the well is 390 FNL and 1230 FWL of Section 5, T205-R34E, and the intended bottom hole location is Drilling 100 FSL and 1744 FWL of Section 8, 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 10860 feet. Completed Well Cost After Casing Point Dry Hole Intangible Drilling Costs \$2,475,500 \$2,475,500 \$4,595,289 \$4,595,289 Completion Costs Total Intangible Cost \$2,475,500 \$4,595,289 \$7,070,789 After Casing Point Completed Well Cost Tangible Dry Hole \$1,518,000 \$1,125,000 Well Equipment \$393,000 \$840,065 \$840,065 Lease Equipment \$1,965,065 \$2,358,065 Total Tangible Cost \$393,000 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. 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 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.



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 302H

Description	BCP - Dr	illing	ACP - I	Drilling	Con	np/Stim	Producti	on Equip	Post Com		Total
Description	Codes	Amount	Codes	Amount	Codes	Amount		Amount	Codes	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			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									30,000
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	119,00
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	87,354	87,35
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	6,912	PCOM.140	60,000	300,91
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	8.541.7.3	345.57					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	STIM.165	0					28,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0		185,663	PCOM.170	5,000	213,66
			DICC.175		STIM.175			16,075	PCOM.175	0	58,075
Trucking/Transportation	DIDC.205	30,000		8,000		4,000			Independent begins	0	152,574
Supervision	DIDC.210	81,000	DICC 180	13,000	STIM.180	47,000		11,574	PCOM.180	U	72,000
Trailer House/Camp/Catering	DIDC.280	36,000	DICC 255	5,000	STIM.280	31,000			DCCHARGO		
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							Mark Plants		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
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				13000	CON.300	0	30110000		10,000
Well Control Insurance	DIDC 285	7,000									7,000
Major Construction Overhead	0.0000	1,000					CON.305	ō			(
FL/GL - ON PAD LABOR							CON.495	33,114			33,114
FL/GL - Labor							CON.500	113,970			113,970
							CON.505	12,056			12,056
FL/GL - Supervision							CON.515	6,590			6,590
Survey)
SWD/Other - Labor							CON.600	0			
SWD/Other - Supervision							CON.605	0			
Aid In Construct/3rd Party Connect	January	2.780.000	Harrie da l	10,222	440000000	ATTACKS.	CON,701	0	Wayniage!		101 000
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000		106,737	PCOM.220	0	404,737
Contingency							CON.221	30,381		-	30,381
Total Intangible Cost		2,475,500		306,000		3,459,000		639,935		190,354	7,070,789
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					- 1		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					27.74		(
Packer, Nipples	-2.2000				STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS						34,030	CONT.380	11,253	D SCHOOL DESIGNATION		11,253
PUMPS							CONT.385	26,362			26,362
WALKOVERS							CONT.390	6,430			6,430
Downhole Lift Equipment					STIMT.410	80,000		0,450	PCOMT.410	0	80,000
The state of the s					211W11.410	80,000			PCOMT.410	15,000	15,000
Surface Equipment Well Automation Materials									PCOMT.420 PCOMT.455	5,000	5,000
Well Automation Materials							CONT 100	270.05	FCUWII.455	3,000	
N/C Lease Equipment							CONT.400	279,861			279,861
Tanks, Tanks Steps, Stairs							CONT.405	0			220.20
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			(
Meters and Metering Equipment							CONT.445	42,758			42,758
Facility Line Pipe							CONT.450	28,935			28,93
Lease Automation Materials							CONT.455	36,972			36,97
FL/GL - Materials							CONT.550	26,684			26,68
FL/GL - Line Pipe							CONT.555	80,052			80,05
							CONT.650	00,032			1
SWD/Other - Materials								0			
SWD/Other - Materials SWD/Other - Line Pipe											
SWD/Other - Materials SWD/Other - Line Pipe Total Tangible Cost		393,000	-	810,000		285,000	CONT.655	840,065		30,000	2,358,065



COTERRA Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 302H AFE # XXXXXXXX

Description			BCP - Drilling		ACP - Drilling		Comp	/Stim	
Description	Codes		Amount	Codes		Amount	Codes	Section 1	Amoun
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,00
Damages	DIDC.105		16,500						
Mud/Fluids Disposal	DIDC.255		200,000			1	STIM.255		51,000
Day Rate	DIDC.115	DICC.120	468,000	DICC,120		96,000			
Misc Preparation	DIDC.120		30,000					1	
Bits	DIDC.125	DICC.125	97,000		STIM,125	0	STIM.125		(
Fuel	DIDC.135	DICC130	119,000			0			
Water for Drilling Rig (Not Frac	DIDC.140	DICC.135	5,000		STIM.135	0	STIM.135		20,000
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	137,000
Downhole Rentals	DIDC.155		131,000				STIM.145		35,000
Flowback Labor							STIM.141		
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	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		4,000
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	13,000	STIM.165		(
Mechanical Labor	DIDC.200	DICC.170	20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	(
Trucking/Transportation	DIDC 205	A Author Street Street	30,000		STIM.175	8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210	DICC.180	81,000			13,000	STIM.180	CON.180	47,000
Trailer House/Camp/Catering	DIDC.280	DICC.255	36,000	DICC.255	STIM.280	5,000	STIM.280		31,000
Other Misc Expenses	DIDC.220	DICC.190	5,000	DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC.245		307,000						
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							STIM.115		21,000
Coil Tubing Services							STIM.260		0
Completion							STIM.200		257,000
Composite Plugs							STIM.390		39,000
Stimulation							STIM.210		2,245,000
Stimulation Water/Water						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		7,000						
Major Construction Overhead	DIDELEGS		7,000						
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey						1			
SWD/Other - Labor									
SWD/Other - Supervision						1			
Aid In Construct/3rd Party Connect			-						
Contingency	DIDC.435	DICC 220	118 000	DICC.220	STIM 220	15,000	STIM.220	CON.220	165,000
	DIDCASS	DICC.220	110,000	DICC.220	311W.220	13,000	311141.220	CO14.220	105,000
Contingency Total Intangible Cos	-		2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		2,473,500			300,000			3,433,000
	DWEB.135		104,000						
Water String			0.000						
Surface Casing Intermediate Casing 1	DWEB.140 DWEB.145		251,000						
	DWEB.145		0			707.000			
Production Casing or Liner				DWEA.100		792,000			430.000
Tubing	DWED 11-	DWEA 120	30.000	DIATA	CTILIT 120	40.000	STIMT.105		139,000
Wellhead, Tree, Chokes		DWEA.120			STIMT,120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA 125	0	DWEA.125		0	CTIL (** ***		20.444
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									
PUMPS									
WALKOVERS							100		9,394
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						1			11
Telecommunication Equipment									
Meters and Metering Equipment			1						
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			2,868,500			1,116,000			3,744,000



COTERRA Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 302H

Description		Production Equip			Post Completion		Total
Description	Codes	Amo		Codes		Amount	Co
Roads & Location	CON.100	44,		PCOM.100	Repair any roads post D&C	3,000	70,20
Damages	CON.105	3.	115				19,71
Mud/Fluids Disposal			4	PCOM.255		0	251,00
Day Rate							564,00
Misc Preparation			-1				30,00
Bits				PCOM.125		0	97,00
Fuel			-1	PCOM.130		0	119,00
Water for Drilling Rig (Not Frac Water)			-1	PCOM.135		0	25,00
Mud & Additives						100	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	12		Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	300,91
	CO14,140		12	PCOM.145	non necomberno	0	166,00
Downhole Rentals			-		2 Floriback Handa (60 days) 25%	30,000	30,00
Flowback Labor	Annual Control			PCOM.141	3 Flowback Hands (60 days). 25%		50,01
Automation Labor	CON.150	45,	10	PCOM.150		5,000	
Mud Logging							5,00
IPC & EXTERNAL PAINTING	CON.165	5,	44				5,14
Cementing & Float Equipment			-1				210,00
Tubular Inspections				PCOM.160		0	50,00
Casing Crews							28,00
Mechanical Labor	CON.170	185,	663	PCOM.170	RU Flowback Iron & Automation	5,000	213,66
Trucking/Transportation	CON.175	16,	David L	PCOM.175		0	58,07
ACT TO THE ADMINISTRATION OF THE PERSON.	CON.180	11,	80.53	PCOM.180		0	152,57
Supervision	CON.100	(1)	1.55	, COIVI. 100		, i	72,00
Trailer House/Camp/Catering		100		DC01: 10-			
Other Misc Expenses	CON.190	19,	90	PCOM.190		0	109,29
Overhead							10,00
MOB/DEMOB							115,00
Directional Drilling Services							307,00
Solids Control			1				46,00
Well Control Equip (Snubbing Services)				PCOM.240		0	148,00
Completion Rig				PCOM.115		0	21,00
Coil Tubing Services				PCOM.260		0	
Completion Logging/Perforating/Wireline			- 1	PCOM.200		0	257,00
				PCOM.390		0	39,00
Composite Plugs							2,245,00
Stimulation				PCOM.210		0	
Stimulation Water/Water Transfer/Water							191,00
Cimarex Owned Frac/Rental Equipment				PCOM.305		0	60,00
Legal/Regulatory/Curative	CON.300		0				10,00
Well Control Insurance							7,00
Major Construction Overhead	CON.305		0				
FL/GL - ON PAD LABOR	CON.495	33,	->1				33,11
FL/GL - Labor	CON.500	113,					113,97
Control of	CON.505	1 020	A-1				12,05
FL/GL - Supervision		12,	200				6,59
Survey	CON.515	6	590				
SWD/Other - Labor	CON.600		0				
SWD/Other - Supervision	CON.605		0				
Aid In Construct/3rd Party Connect	CON.701		0				
Contingency	CON.220	106,	137				404,73
Contingency	CON.221	30,	181				30,38
Total Intangible Cost		639,				190,354	7,070,78
Conductor Pipe							1
Water String			- 1				104,00
							251.00
Surface Casing							251,00
Intermediate Casing 1							
Production Casing or Liner							792,00
Tubing				PCOMT.105		0	139,00
Wellhead, Tree, Chokes				PCOMT.120	Replace worn chokes and valves during FB	10,000	104,00
Liner Hanger, Isolation Packer							
Packer, Nipples				PCOMT.400		0	28,00
SHORT ORDERS	CONT.380	11,	253				11,25
PUMPS	CONT.385	26,	- 1				26,36
WALKOVERS	CONT.390		130				6,43
Downhole Lift Equipment	30.11.330	0,	.50	PCOMT.410		0	80,00
Surface Equipment				PCOMT.410	Replacing Chokes, Stuffing Boxes, and all	15,000	15,00
						1.00	5,00
Well Automation Materials	COLUT 100	Tana		PCOMT.455	PTs, and replacing meters	5,000	
N/C Lease Equipment	CONT.400	279.	100				279,86
Tanks, Tanks Steps, Stairs	CONT.405		0				
Battery Equipment	CONT.410	229,	886				229,38
Secondary Containments	CONT.415	12,	359				12,85
Overhead Power Distribution	CONT.420	10,	288				10,28
Facility Electrical	CONT.425		224				48,22
Telecommunication Equipment	CONT.426		0				
Meters and Metering Equipment	CONT.445	42,	-004				42,75
	CONT.450	1 -7					28,93
Facility Line Pipe	and the second s		935				
Lease Automation Materials	CONT.455	1000	972				36,97
FL/GL - Materials	CONT.550	26,					26,68
FL/GL - Line Pipe	CONT.555	80,	052				80,05
SWD/Other - Materials	CONT.650		0				
SWD/Other - Line Pipe	CONT.655		0				
Total Tangible Cost		840.				30,000	2,358,06

O COTERRA

Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 303H

AFE # XXXXXXX

Company Entity				Date Prepared 8/17/2022
Exploration Region Permian Basin	Well Name Mighty Pheasant 5-8 Fed Com 303H	Prospect New Mexico Bone Spring	Property Num XXXXXX-XXX.01	
County, State Lea, NM	Location Section 5-8 T20S-R34E Lea, NM		Estimated Spud	Estimated Completion
X New Supplement Revision	Formation 3rd Sand	Well Type DEV	Ttl Measured Deoth 20350	Ttl Vetical Deoth 10850
Purpose Drill Description	and complete well			
	ne intended surface hold location for the well i			

After Casing Point Completed Well Cost Dry Hole Intangible \$2,475,500 Drilling Costs \$2,475,500 \$4,624,922 \$4,624,922 Completion Costs \$7,100,422 Total Intangible Cost \$2,475,500 \$4,624,922 Completed Well Cost Dry Hole After Casing Point Tangible \$1,518,000 \$1,125,000 Well Equipment \$393,000 \$790,428 Lease Equipment \$790,428 \$2,308,428 \$1,915,428 Total Tangible Cost \$393,000 Total Well Cost \$2,868,500 \$6,540,350 \$9,408,850

southerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be

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.

I elect to purchase my own well control insurance policy.

approximately 10850 feet.

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 co	onditions 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.

Company	Approved By (Print Name)	Approved By (Signature)	Date
Company	ripproved by (i intervaline)	Approved by (signature)	0.010

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

^{1.} All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.



COTERRA Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 303H

C-registion	BCP - Dr	rilling	ACP -	Drilling	Cor	np/Stim	Producti	on Equip	Post Com		Total
Description	Codes	Amount	Codes	Amount		Amount		Amount	Codes	Amount	Cos
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	48,637	PCOM.100	3,000	74,63
Damages	DIDC.105	16,500					CON.105	15807	Section 1		32,30
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	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									300,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	87,354	87,354
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	1,378	PCOM.140	60,000	295,378
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	36,558	PCOM.150	5,000	41,558
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING							CON.165	18,888			18,888
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	STIM.165	0					28,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0	CON.170	139,588	PCOM.170	5,000	167,588
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000	CON.175	17,833	PCOM.175	0	59,833
Supervision	DIDC.210	81,000	DICC.180	13,000	STIM.180	47,000	CON.180	21,238	PCOM.180	Ω	162,238
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		85,000	CON.190	24,318	PCOM.190	0	114,318
Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000		3,37							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	2,4,5,5,5	2.444	200		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
					STIM.390	39,000			PCOM.390	0	39,000
Composite Plugs					STIM.210	2,245,000			PCOM.210	0	2,245,000
Stimulation					STIM.395				PCOIVI.210		191,000
Stimulation Water/Water Transfer/Water						191,000			PCOM.305	0	60,000
Cimarex Owned Frac/Rental Equipment	DIDC 200	40,000			STIM.305	60,000	CON 300	0	PCOIVI.303	0	10,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	U			7,000
Well Control Insurance	DIDC.285	7,000						22.04			
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	2,351			2,351
SWD/Other - Labor							CON.600	0			C
SWD/Other - Supervision							CON.605	0			C
Aid In Construct/3rd Party Connect	In tools						CON.701	40,531	Description of the last		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									0
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							0
Packer, Nipples					STIMT.400	28,000			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		7,13	PCOMT.410	0	80,000
Surface Equipment					7 636.				PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	184,334	an Application (Co. A)		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.413	64,038			64,038
Facility Electrical							CONT.425	32,100			32,100
							CONT.425	486			486
Telecommunication Equipment											45,232
Meters and Metering Equipment							CONT.445	45,232			31,208
Facility Line Pipe							CONT.450	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			C
SWD/Other - Line Pipe							CONT.655	0			
Total Tangible Cost		393,000		810,000		285,000		790,428		30,000	2,308,428
Total Estimated Cost		2,868,500		1,116,000		3,744,000		1,459,996		220,354	9,408,850



COTERRA Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 303H AFE # XXXXXXXX

Description		BCP	- Drilling		ACP - Drilling	y	Comp	/Stim	1
	Codes		Amount	Codes		Amount	Codes	CON.100	Amou 3,00
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,0
Damages	DIDC.105		16,500						510
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						
Bits	DIDC.125	DICC.125	97,000		STIM.125	0	STIM.125		
Fuel	DIDC.135	DICC130	119,000			0			
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
Downhole Rentals	DIDC.155		131,000				STIM.145		35,00
Flowback Labor						1	STIM.141		
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING	Dibeino		3,000						
Cementing & Float Equipment	DIDC.185	DICC 155	70,000	DICC.155		140,000			
		100000000000000000000000000000000000000	38,000		STIM.160	8,000	STIM.160		4,00
Tubular Inspections						1,725,000	STIM.165		-1,00
Casing Crews	DIDC.195	1000 Sec. 1000	15,000		STIM.165	13,000		CON.170	
Mechanical Labor	DIDC.200		20,000		STIM.170	3,000	STIM.170	and the same of th	The second secon
Trucking/Transportation	DIDC.205	The state of the s	30,000		STIM.175	8,000	STIM.175	CON.175	4,00
Supervision	DIDC.210		81,000		STIM.180	13,000	STIM.180	CON.180	47,00
Trailer House/Camp/Catering	DIDC 280		36,000			5,000	STIM.280	Santa Santa	31,00
Other Misc Expenses	DIDC.220	Parks, security of the control of th	5,000		STIM.190	0	STIM.190	CON.190	85,00
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC.245		307,000						
Solids Control	DIDC.260		46,000						
Well Control Equip (Snubbing	DIDC.265	DICC 240	84,000	DICC.240	STIM.240	0	STIM.240		64,00
Completion Rig	30.75.277				and the same of th		STIM.115		21,00
Coil Tubing Services							STIM.260		
Completion							STIM.200		257,00
						1	STIM.390		39,00
Composite Plugs							STIM.210		2,245,00
Stimulation									
Stimulation Water/Water							STIM.395		191,00
Cimarex Owned Frac/Rental							STIM.305		60,00
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead									
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									4
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect									
Contingency	DIDC.435	DICC 220	118,000	DICC.220	STIM 220	15,000	STIM.220	CON 220	165,00
Contingency	DIDCASS	Dicello	110,000	DICCILLO	511141.220	15,000	Similar	CONTER	100,00
Total Intangible Cos			2,475,500			306,000		-	3,459,00
TO CONTRACT AND ADMINISTRATION OF THE PARTY	DWEB.130		2,4/3,300			300,000	_	-	3,435,00
Conductor Pipe									
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		Land Allertan					STIMT.105		139,00
Wellhead, Tree, Chokes	DWEB.115	DWEA.120			STIMT.120	18,000	STIMT,120		38,00
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0			
Packer, Nipples							STIMT.400		28,00
SHORT ORDERS									
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,00
Surface Equipment							31		25,00
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									No.
FL/GL - Materials									
FL/GL - Materials									
SWD/Other - Materials									
			393,000			810,000			285,00



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 303H

Description		Production Equip		Post Completion	Aminust	Total
	Codes	Amount		2	Amount 3,000	74,63
Roads & Location	CON.100	48,637	PCOM.100	Repair any roads post D&C	5,000	32,30
Damages	CON 105	15807	20011255		0	251,00
Mud/Fluids Disposal			PCOM.255		· ·	564,00
Day Rate						30,00
Misc Preparation			PCOM.125		0	97,00
Bits			PCOM.123		0	119,000
Fuel			PCOM.135		0	25,000
Water for Drilling Rig (Not Frac Water)			PCOW, 133			300,000
Mud & Additives SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257	Water for 60 days (270K barrels)	87,354	87,35
Surface Rentals	CON.140	1,378		Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	295,378
Downhole Rentals	CON.140	1,370	PCOM.145	non-rac onn on the ton three per any	0	166,000
Flowback Labor			PCOM.141	3 Flowback Hands (60 days), 25%	30,000	30,000
Automation Labor	CON.150	36,558		S (1011back (1a11ba (es au)s), as is	5,000	41,558
Mud Logging	CO14.130	30,330	, commo		-	5,000
IPC & EXTERNAL PAINTING	CON.165	18,888				18,888
Cementing & Float Equipment	CONTROL	10,000				210,000
Tubular Inspections			PCOM.160		0	50,000
Casing Crews						28,000
Mechanical Labor	CON.170	139,588	PCOM.170	RU Flowback Iron & Automation	5,000	167,588
Trucking/Transportation	CON.175	17,833			0	59,833
Supervision	CON.180	21,238			0	162,238
Trailer House/Camp/Catering		21,230				72,000
Other Misc Expenses	CON.190	24,318	PCOM.190		0	114,318
Overhead		24,310			7	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				10,000
Well Control Insurance	- Grandy					7,000
Major Construction Overhead	CON.305	26,507				26,50
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					
Aid In Construct/3rd Party Connect	CON.701	40,531				40,53
Contingency	CON.220	105,542				403,542
Contingency	CON.221	23,508				23,50
Total Intangible Cost		669,568			190,354	7,100,42
Conductor Pipe						(
Water String						104,000
Surface Casing						251,000
Intermediate Casing 1						
Production Casing or Liner						792,00
Tubing			PCOMT.105	A Company of the Comp	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			PCOMT,400	-	0	28,000
SHORT ORDERS	CONT.380	10,538	1			10,53
PUMPS	CONT.385	30,804				30,80
WALKOVERS	CONT.390	4,053				4,05
Downhole Lift Equipment			PCOMT.410		0	80,00
Surface Equipment			PCOMT.420		15,000	15,000
Well Automation Materials	Section 1		PCOMT.455	PTs, and replacing meters	5,000	5,000
N/C Lease Equipment	CONT.400	184,334	1			184,33
Tanks, Tanks Steps, Stairs	CONT.405	51,879				51,87
Battery Equipment	CONT.410	214,003				214,00
Secondary Containments	CONT.415	19,292				19,29
Overhead Power Distribution	CONT.420	64,038	1			64,03 32,10
Facility Electrical	CONT.425	32,100	1			
Telecommunication Equipment	CONT.426	486	1			48
Meters and Metering Equipment	CONT.445	45,232				45,23
Facility Line Pipe	CONT.450	31,208				31,20
Lease Automation Materials	CONT.455	32,424				32,42
FL/GL - Materials	CONT.550	21,400				21,40 48,63
FL/GL - Line Pipe	CONT.555	48,637				48,63
SWD/Other - Materials	CONT.650					
SWD/Other - Line Pipe	CONT.655	790,428			30,000	2,308,42
Total Tangible Cost						

7/6/2022

O COTERRA Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 304H AFE # XXXXXXX Date Prepared Company Entity 8/17/2022 AFE Property Number Exploration Region Well Name Prospect XXXXXX-XXX.01 XXXXXXX Permian Basin Mighty Pheasant 5-8 Fed Com 304H New Mexico Bone Spring Estimated Completion Estimated Spud Location County, State Lea, NM Section 5-8 T20S-R34E Lea, NM Tti Vetical Depth Itl Measured Depth X New Well Type Supplement 3rd Sand DEV 20340 Revision Purpose Drill and complete well Description The intended surface hold location for the well is 280 FSL and 1500 FEL of Section 32, T19S-R34E, and the intended bottom hole location is Drilling 100 FSL and 708 FEL of Section 8, 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 10840 feet. Completed Well Cost Dry Hole After Casing Point Intangible Drilling Costs \$2,475,500 \$2,475,500 \$4,624,922 \$4,624,922 Completion Costs \$7,100,422 Total Intangible Cost \$2,475,500 \$4,624,922 Completed Well Cost Dry Hole After Casing Point Tangible \$1,125,000 \$1,518,000 Well Equipment \$393,000 \$790,428 Lease Equipment \$790,428 \$2,308,428 Total Tangible Cost \$393,000 \$1,915,428 Total Well Cost \$2,868,500 \$6,540,350 \$9,408,850 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) Date Company Approved By (Signature)

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 - Mighty Pheasant 5-8 Fed Com 304H

Description	BCP - D		ACP -			np/Stim		on Equip	Post Com		Total
	Codes	Amount	Codes	Amount		Amount	Codes	Amount	Codes	Amount	Cos
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	48,637	PCOM.100	3,000	74,63 32,30
Damages	DIDC.105	16,500			*****		CON.105	15807	PCOM.255	0	251,000
Mud/Fluids Disposal	DIDC.255	200,000	DICC 120	96,000	STIM.255	51,000			PCOM.255	0	564,000
Day Rate	DIDC.115	468,000	DICC.120	96,000							30,000
Misc Preparation	DIDC.120 DIDC.125	30,000 97,000	DICC 125	0	STIM.125	0			PCOM.125	0	97,000
Bits Fuel	DIDC.125	119,000	DICC 130	0	311W.123	U			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	DICC133		311111.123	20,000			T GO THE CO		300,000
SWD PIPED TO 3RD PARTY SWD WELL	DIDC.143	300,000							PCOM.257	87,354	87,354
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	1,378	PCOM.140	60,000	295,378
Downhole Rentals	DIDC.155	131,000	DICC. 140		STIM.145	35,000	COMMITTE		PCOM.145	0	166,000
Flowback Labor		14/4975			STIM.141	0			PCOM.141	30,000	30,000
Automation Labor					200000		CON.150	36,558	PCOM.150	5,000	41,558
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING							CON.165	18,888			18,888
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	STIM.165	0					28,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0	CON.170	139,588	PCOM.170	5,000	167,588
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000	CON.175	17,833	PCOM.175	0	59,833
Supervision	DIDC.210	81,000	DICC.180	13,000	STIM.180	47,000	CON.180	21,238	PCOM.180	0	162,238
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	114,318
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							C 7.0		46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	5TIM.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
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					Michigan I	172160			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	2,351			2,351
SWD/Other - Labor							CON.600 CON.605	0			0
SWD/Other - Supervision Aid In Construct/3rd Party Connect							CON.701	40,531			40,531
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	105,542	PCOM.220	0	403,542
Contingency	DIDC.433	110,000	DICC.220	13,000	311W.22U	165,000	CON.221	23,508	rcom.zzo		23,508
Total Intangible Cost		2,475,500		306,000		3,459,000	CONTECT	669,568		190,354	7,100,422
Conductor Pipe	DWEB.130	0		300,000		3,433,000		000,000		130,531	(
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	-						(
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS						,,,,,,	CONT.380	10,538	A CONTRACTOR OF THE PARTY OF TH		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			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						1	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		10.00	2 200 470
Total Tangible Cost		393,000		810,000		285,000	1	790,428		30,000	2,308,428
Total Estimated Cost		2,868,500		1,116,000		3,744,000		1,459,996		220,354	9,408,850



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 304H

Description		BCP	- Drilling		ACP - Drilling	7-5	Comp	o/Stim	1 2000
	Codes		Amount	Codes		Amount		CONTRO	Amou 3,0
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,0
Damages	DIDC.105		16,500				CT11 4 DET		51,0
Mud/Fluids Disposal	DIDC.255		200,000			05.000	STIM.255		51,0
Day Rate	DIDC.115	DICC 120		DICC.120		96,000			
Misc Preparation	DIDC.120		30,000		Same and the same				
Bits		And an abuse of the	1 2 2 2 2 2 2 2	DICC.125	STIM.125	0	STIM.125		
Fuel	DIDC.135		119,000			0			20.0
Water for Drilling Rig (Not Frac	DIDC.140	DICC.135	5,000	DICC.135	STIM.135	0	STIM.135	1.	20,00
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD								COLUMN	1270
Surface Rentals	DIDC.150	DICC.140	97,000	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			Park 20						
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING	and the same	2.32.		0.92723					
Cementing & Float Equipment	DIDC.185	THE PROPERTY OF THE PARTY OF TH		DICC.155		140,000			
Tubular Inspections		And the second second		DICC.160		8,000	STIM.160		4.00
Casing Crews	DIDC.195			DICC.165		13,000	STIM.165		
Mechanical Labor	DIDC.200	DICC.170		DICC.170		3,000	STIM.170	CON.170	-
Trucking/Transportation	DIDC.205			DICC.175		8,000	STIM.175	CON.175	4,00
Supervision	DIDC.210	100 March 200 Ma	81,000		And the second second	13,000	STIM.180	CON.180	47,00
Trailer House/Camp/Catering		DICC.255	36,000		STIM.280	5,000	STIM.280	Later and	31,00
Other Misc Expenses	DIDC.220		5,000		STIM.190	0	STIM.190	CON.190	85,00
Overhead		DICC.195	5,000	DICC.195		5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC 245		307,000						
Solids Control	DIDC.260	A STATE OF THE STA	46,000						
Well Control Equip (Snubbing	DIDC.265	DICC.240	84,000	DICC.240	STIM.240	0	STIM.240		64,00
Completion Rig							STIM.115		21,00
Coil Tubing Services							STIM.260		
Completion							STIM.200		257,00
Composite Plugs						1	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			1			
Well Control Insurance	DIDC 285		7,000						
Major Construction Overhead									
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/Other - Supervision						1			
Aid In Construct/3rd Party Connect									
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	100	1/		DWEA.100		792,000			
Tubing						1	STIMT.105		139,00
Wellhead, Tree, Chokes	DWEB.115	DWEA.120	38.000	DWEA.120	STIMT.120	18,000			38,00
Liner Hanger, Isolation Packer		DWEA.125		DWEA.125		0			
Packer, Nipples		1					STIMT.400		28,00
SHORT ORDERS									23,00
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,00
Surface Equipment							21111111111		55,00
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									T.
SWD/Other - Line Pipe Total Tangible Cost			393,000			810,000			285.00



Authorization For Expenditure - Mighty Pheasant 5-8 Fed Com 304H

Description		Production Equip		Post Completion	Assassas	Total
	Codes	Amoun		2001	Amount	74,63
Roads & Location	CON.100	48,637	PCOM.100	Repair any roads post D&C	3,000	32,30
Damages	CON,105	15807	DCOMPE		0	251,00
Mud/Fluids Disposal			PCOM.255			564,00
Day Rate						30,00
Misc Preparation Bits			PCOM.125		0	97,00
Fuel			PCOM.120		0	119,00
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	25,00
Mud & Additives			1 COM. 155			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	1,378		Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	295,37
Downhole Rentals	CONTRACT	1,275	PCOM.145	months of the second second second	0	166,00
Flowback Labor			PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,00
Automation Labor	CON.150	36,558	11 July 19 19 19 19 19 19 19 19 19 19 19 19 19		5,000	41,55
Mud Logging	45000				-	5,00
IPC & EXTERNAL PAINTING	CON.165	18,888				18,88
Cementing & Float Equipment						210,00
Tubular Inspections			PCOM.160		0	50,00
Casing Crews						28,00
Mechanical Labor	CON.170	139,588	PCOM.170	RU Flowback Iron & Automation	5,000	167,58
Trucking/Transportation	CON.175	17,833	PCOM.175		0	59,83
Supervision	CON.180	21,238			0	162,23
Trailer House/Camp/Catering						72,00
Other Misc Expenses	CON.190	24,318	PCOM.190		0	114,31
Overhead	2.00					10,00
MOB/DEMOB						115,00
Directional Drilling Services						307,00
Solids Control					1	46,00
Well Control Equip (Snubbing Services)			PCOM.240		0	148,00
Completion Rig			PCOM.115		0	21,00
Coil Tubing Services			PCOM.260		0	
Completion Logging/Perforating/Wireline			PCOM.200		0	257,00
Composite Plugs			PCOM.390		0	39,00
Stimulation			PCOM.210		0	2,245,00
Stimulation Water/Water Transfer/Water						191,00
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	60,00
Legal/Regulatory/Curative	CON.300					10,00
Well Control Insurance						7,00
Major Construction Overhead	CON.305	26,507				26,50
FL/GL - ON PAD LABOR	CON.495	37,613				37,61
FL/GL - Labor	CON.500	94,842	1			94,84
FL/GL - Supervision	CON.505	14,429				14,42
Survey	CON.515	2351				2,35
SWD/Other - Labor	CON.600					
SWD/Other - Supervision	CON.605					10.53
Aid In Construct/3rd Party Connect	CON.701	40,531				40,53
Contingency	CON.220	105,542				403,54
Contingency	CON.221	23,508			400.754	23,50
Total Intangible Cost		669,560			190,354	7,100,42
Conductor Pipe						104,00
Water String						251,00
Surface Casing						231,00
Intermediate Casing 1						792,00
Production Casing or Liner			DCOME 105		0	139,00
Tubing Wellhead, Tree, Chokes			PCOMT.105 PCOMT.120	Replace worn chokes and valves during FB	10,000	104,00
Liner Hanger, Isolation Packer			PCOM1.120	replace worll clickes and valves during FB	10,000	104,00
Packer, Nipples			PCOMT.400		0	28,00
SHORT ORDERS	CONT.380	10,538	And any or other states			10,53
PUMPS	CONT.385	30,804				30,80
WALKOVERS	CONT.390	4,053				4,05
Downhole Lift Equipment		4,05	PCOMT.410		0	80,00
Surface Equipment			PCOMT.420		15,000	15,00
Well Automation Materials			PCOMT.455		5,000	5,00
N/C Lease Equipment	CONT.400	184,334			-	184,33
Tanks, Tanks Steps, Stairs	CONT.405	51,879				51,87
Battery Equipment	CONT.410	214,003				214,00
Secondary Containments	CONT.415	19,292				19,29
Overhead Power Distribution	CONT.420	64,038				64,03
Facility Electrical	CONT.425	32,100				32,10
Telecommunication Equipment	CONT.426	486	1			48
Meters and Metering Equipment	CONT.445	45,233				45,23
Facility Line Pipe	CONT.450	31,208				31,20
Lease Automation Materials	CONT.455	32,424				32,42
FL/GL - Materials	CONT.550	21,400	1			21,40
FL/GL - Line Pipe	CONT.555	48,633	1			48,63
SWD/Other - Materials	CONT.650		1			
SWD/Other - Line Pipe	CONT.655				1000	
SWD/Other - Line Pipe						

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

MODEL FORM OPERATING AGREEMENT

	DATED		
		,	
OPERATOR Cimarex Ene	ergy Co.		
CONTRACT AREA All Sec	ction 5 and Section 8, Township	20 South, Ran	ge 34 East
COUNTY OR PARISH OF	Lea	, STATE OF	New Mexico
MIGHT	TY PHEASANT 5-8 FED COM	WELLS	

OPERATING AGREEMENT

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.

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:										

ion II	II, the Operator shall charge on either:
	(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 On-site Technical Services, including third party Technical Services:
	☑ (Alternative 1 – Direct) shall be charged <u>direct</u> to the Joint Account.
	☐ (Alternative 2 – Overhead) shall be covered by the <u>overhead</u> rates.

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

☐ (Alternative 1 – All Overhead) shall be covered by the <u>overhead</u>	l rates
--	---------

☑ (Alternative 2 – All Direct) shall be charged <u>direct</u> to the Joint Account.

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

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

OVERHEAD—FIXED RATE BASIS

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

Drilling Well Rate per month \$ 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

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 3rd Bone Spring and Upper Wolfcamp and offers a superior plan that develops the total reservoir tank, which includes both the 3rd 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



300 N. MARIENFELD STREET, SUITE 1000 MIDLAND, TX 79701 OFFICE 432.695.4222 FAX 432.695.4063

RECEIVED

March 17, 2023

Via Certified Mail

MAR 20 2023

92148902956265901602225706

Magnum Hunter Production, Inc. 600 N. Marienfeld St, Suite 600 Midland, TX 79701

COTERRA ENERGY

RE:

Joker 5-8 Federal Com - Well Proposals

Sections 5 & 8, T20S-R34E Lea County, New Mexico

To Whom It May Concern:

Permian Resources Operating, LLC, as operator for Read & Stevens, Inc. ("Permian"), hereby proposes the drilling and completion of the following twenty-four (24) wells, the Joker 5-8 Federal Com wells at approximate locations within Township 20 South, Range 34 East:

FIRST BONE SPRING FORMATION:

1. Joker 5-8 Federal Com 111H - (West Pad)

SHL: 380' FNL & 2,179' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 330' FWL of Section 5 LTP: 100' FSL & 330' FWL of Section 8 BHL: 10' FSL & 330' FWL of Section 8

Standard Spacing Unit: Lot 4, SWNW, W2SW of Section 5, W2W2 of Section 8, T20S-R34E

TVD: 9,576' TMD: 19,861'

2. Joker 5-8 Federal Com 112H - (West Pad)

SHL: 380' FNL & 2,212' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 1,650' FWL of Section 5 LTP: 100' FSL & 1,650' FWL of Section 8 BHL: 10' FSL & 1,650' FWL of Section 8

Standard Spacing Unit: Lot 3, SENW, E2SW of Section 5, E2W2 of Section 8, T20S-R34E

TVD: 9,596' TMD: 19,881'

3. Joker 5-8 Federal Com 113H - (East Pad)

SHL: 380' FNL & 2,005' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 2,310' FEL of Section 5 LTP: 100' FSL & 2,310' FEL of Section 8 BHL: 10' FSL & 2,310' FEL of Section 8

Standard Spacing Unit: Lot 2, SWNE, W2SE of Section 5, W2E2 of Section 8, T20S-R34E

TVD: 9,616' TMD: 19,901'



4. Joker 5-8 Federal Com 114H - (East Pad)

SHL: 380' FNL & 1,840' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 990' FEL of Section 5 LTP: 100' FSL & 990' FEL of Section 8 BHL: 10' FSL & 990' FEL of Section 8

Standard Spacing Unit: Lot 1, SENE, E2SE of Section 5, E2E2 of Section 8, T20S-R34E

TVD: 9,616' TMD: 19,901'

SECOND BONE SPRING FORMATION:

5. Joker 5-8 Federal Com 121H - (West Pad)

SHL: 380' FNL & 2,245' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 330' FWL of Section 5 LTP: 100' FSL & 330' FWL of Section 8 BHL: 10' FSL & 330' FWL of Section 8

Standard Spacing Unit: Lot 4, SWNW, W2SW of Section 5, W2W2 of Section 8, T20S-R34E

TVD: 10,316' TMD: 20,601'

6. Joker 5-8 Federal Com 122H - (West Pad)

SHL: 380' FNL & 2,278' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 990' FWL of Section 5 LTP: 100' FSL & 990' FWL of Section 8 BHL: 10' FSL & 990' FWL of Section 8

Standard Spacing Unit: Lot 4, SWNW, W2SW of Section 5, W2W2 of Section 8, T20S-R34E

TVD: 9,981' TMD: 20,266'

7. Joker 5-8 Federal Com 123H - (West Pad)

SHL: 380' FNL & 2,311' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 1,650' FWL of Section 5 LTP: 100' FSL & 1,650' FWL of Section 8 BHL: 10' FSL & 1,650' FWL of Section 8

Standard Spacing Unit: Lot 3, SENW, E2SW of Section 5, E2W2 of Section 8, T20S-R34E

TVD: 10,296' TMD: 20,581'

8. Joker 5-8 Federal Com 124H - (West Pad)

SHL: 380' FNL & 2,344' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 2,310' FWL of Section 5 LTP: 100' FSL & 2,310' FWL of Section 8 BHL: 10' FSL & 2,310' FWL of Section 8

Standard Spacing Unit: Lot 3, SENW, E2SW of Section 5, E2W2 of Section 8, T20S-R34E

TVD: 9,971' TMD: 20,256'

9. Joker 5-8 Federal Com 125H - (East Pad)

SHL: 380' FNL & 1,972' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 2,310' FEL of Section 5 LTP: 100' FSL & 2,310' FEL of Section 8 BHL: 10' FSL & 2,310' FEL of Section 8

Standard Spacing Unit: Lot 2, SWNE, W2SE of Section 5, W2E2 of Section 8, T20S-R34E

TVD: 10,286' TMD: 20,571'

10. Joker 5-8 Federal Com 126H - (East Pad)

SHL: 380' FNL & 1,939' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 1,650' FEL of Section 5 LTP: 100' FSL & 1,650' FEL of Section 8 BHL: 10' FSL & 1,650' FEL of Section 8

Standard Spacing Unit: Lot 2, SWNE, W2SE of Section 5, W2E2 of Section 8, T20S-R34E

TVD: 9,961' TMD: 20,256'

11. Joker 5-8 Federal Com 127H - (East Pad)

SHL: 380' FNL & 1,906' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 990' FEL of Section 5 LTP: 100' FSL & 990' FEL of Section 8 BHL: 10' FSL & 990' FEL of Section 8

Standard Spacing Unit: Lot 1, SENE, E2SE of Section 5, E2E2 of Section 8, T20S-R34E

TVD: 10,286' TMD: 20,571'

12. Joker 5-8 Federal Com 128H - (East Pad)

SHL: 380' FNL & 1,873' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 330' FEL of Section 5 LTP: 100' FSL & 330' FEL of Section 8 BHL: 10' FSL & 330' FEL of Section 8

Standard Spacing Unit: Lot 1, SENE, E2SE of Section 5, E2E2 of Section 8, T20S-R34E

TVD: 9,961' TMD: 20,256'

THIRD BONE SPRING CARB (HARKEY) FORMATION:

13. Joker 5-8 Federal Com 171H - (West Pad)

SHL: 250' FNL & 2,179' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 990' FWL of Section 5 LTP: 100' FSL & 990' FWL of Section 8 BHL: 10' FSL & 990' FWL of Section 8

Standard Spacing Unit: Lot 4, SWNW, W2SW of Section 5, W2W2 of Section 8, T20S-R34E

TVD: 10,451' TMD: 20,736'

14. Joker 5-8 Federal Com 172H - (West Pad)

SHL: 250' FNL & 2,344' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 2,310' FWL of Section 5 LTP: 100' FSL & 2,310' FWL of Section 8 BHL: 10' FSL & 2,310' FWL of Section 8

Standard Spacing Unit: Lot 3, SENW, E2SW of Section 5, E2W2 of Section 8, T20S-R34E

TVD: 10,446' TMD: 20,731'

15. Joker 5-8 Federal Com 173H - (East Pad)

SHL: 250' FNL & 2,005' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 1,650' FEL of Section 5 LTP: 100' FSL & 1,650' FEL of Section 8 BHL: 10' FSL & 1.650' FEL of Section 8

Standard Spacing Unit: Lot 2, SWNE, W2SE of Section 5, W2E2 of Section 8, T20S-R34E

TVD: 10,436' TMD: 20,721'

16. Joker 5-8 Federal Com 174H - (East Pad)

SHL: 250' FNL & 1,840' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 330' FEL of Section 5 LTP: 100' FSL & 330' FEL of Section 8 BHL: 10' FSL & 330' FEL of Section 8

Standard Spacing Unit: Lot 1, SENE, E2SE of Section 5, E2E2 of Section 8, T20S-R34E

TVD: 10,416' TMD: 20,701'

THIRD BONE SPRING FORMATION:

17. Joker 5-8 Federal Com 131H - (West Pad)

SHL: 250' FNL & 2,212' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 330' FWL of Section 5 LTP: 100' FSL & 330' FWL of Section 8 BHL: 10' FSL & 330' FWL of Section 8

Standard Spacing Unit: Lot 4, SWNW, W2SW of Section 5, W2W2 of Section 8, T20S-R34E

TVD: 10,831' TMD: 21,116'

18. Joker 5-8 Federal Com 132H - (West Pad)

SHL: 250' FNL & 2,278' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 1,650' FWL of Section 5 LTP: 100' FSL & 1,650' FWL of Section 8 BHL: 10' FSL & 1.650' FWL of Section 8

Standard Spacing Unit: Lot 3, SENW, E2SW of Section 5, E2W2 of Section 8, T20S-R34E

TVD: 10,831' TMD: 21,116'

19. Joker 5-8 Federal Com 133H - (East Pad)

SHL: 250' FNL & 1,972' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 2,310' FEL of Section 5 LTP: 100' FSL & 2,310' FEL of Section 8 BHL: 10' FSL & 2,310' FEL of Section 8

Standard Spacing Unit: Lot 2, SWNE, W2SE of Section 5, W2E2 of Section 8, T20S-R34E

TVD: 10,821' TMD: 21,106'

20. Joker 5-8 Federal Com 134H - (East Pad)

SHL: 250' FNL & 1,906' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 990' FEL of Section 5 LTP: 100' FSL & 990' FEL of Section 8 BHL: 10' FSL & 990' FEL of Section 8

Standard Spacing Unit: Lot 1, SENE, E2SE of Section 5, E2E2 of Section 8, T20S-R34E

TVD: 10,821' TMD: 21,106'

WOLFCAMP XY FORMATION:

21. Joker 5-8 Federal Com 201H - (West Pad)

SHL: 250' FNL & 2,245' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 990' FWL of Section 5 LTP: 100' FSL & 990' FWL of Section 8 BHL: 10' FSL & 990' FWL of Section 8

Standard Spacing Unit: Lot 4, SWNW, W2SW of Section 5, W2W2 of Section 8, T20S-R34E

TVD: 10,926' TMD: 21,211'

22. Joker 5-8 Federal Com 202H - (West Pad)

SHL: 250' FNL & 2,311' FWL (or at a legal location in Lot 3) of Section 5

FTP: 100' FNL & 2,310' FWL of Section 5 LTP: 100' FSL & 2,310' FWL of Section 8 BHL: 10' FSL & 2,310' FWL of Section 8

Standard Spacing Unit: Lot 3, SENW, E2SW of Section 5, E2W2 of Section 8, T20S-R34E

TVD: 10,926' TMD: 21,211'

23. Joker 5-8 Federal Com 203H - (East Pad)

SHL: 250' FNL & 1,939' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 1,650' FEL of Section 5 LTP: 100' FSL & 1,650' FEL of Section 8 BHL: 10' FSL & 1,650' FEL of Section 8

Standard Spacing Unit: Lot 2, SWNE, W2SE of Section 5, W2E2 of Section 8, T20S-R34E

TVD: 10,906' TMD: 21,191'

24. Joker 5-8 Federal Com 204H - (East Pad)

SHL: 250' FNL & 1,873' FEL (or at a legal location in Lot 2) of Section 5

FTP: 100' FNL & 330' FEL of Section 5 LTP: 100' FSL & 330' FEL of Section 8 BHL: 10' FSL & 330' FEL of Section 8

Standard Spacing Unit: Lot 1, SENE, E2SE of Section 5, E2E2 of Section 8, T20S-R34E

TVD: 10,896' TMD: 21,181' The locations, TVDs, and targets are approximate and subject to change dependent on surface or subsurface issues encountered. These locations do fall within an approved potash drill island, so any surface changes remain subject to BLM approval. Permian is proposing to drill these wells under the modified terms of the 1989 AAPL Operating Agreement and a form of said Operating Agreement is enclosed. The Operating Agreement has the following general provisions:

- -100%/300%/300% non-consent provisions
- \$8,000/\$800 drilling and producing rates
- Permian Resources Operating, LLC named as Operator

Note that communitization agreements for each spacing unit shall be sent in a separate mailing.

Please indicate your election to participate in the drilling and completion of the proposed wells in the space provided below. Please sign and return one copy of this letter, a signed copy of the proposed AFE, and your geologic well requirements.

Please further note that the Sections 5 & 8 require a Potash Development Area to be approved by the Bureau of Land Management prior to any permits to be submitted. Permian has submitted for this development area and conducted federal onsites. This development area has been protested by Cimarex. Any development of these two sections will be subject to that protest being dismissed.

In the interest of time, should we not reach an agreement within thirty (30) days of the date of your receipt of this letter, Permian will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well. If you do not wish to participate, Permian would be interested in acquiring your interest in the subject lands which is subject to further mutually agreeable negotiation.

Thank you for your time and consideration, if you have any questions at all, please don't hesitate to contact me at 432.400.1037 or by email at travis.macha@permianres.com. Due to the number of inquiries received, email may be the quickest way to receive a response.

<u>Operator Note:</u> Permian has recently drilled a pilot hole in the N/2 of Section 18 of T20S-R34E to the southwest of the Joker unit and is presently drilling a 3rd Bone Spring/Wolfcamp XY spacing test in Sections 18 & 19 (Batman Unit). Permian further plans a second 1st Bone Spring/2nd Bone Spring spacing test in Sections 17 & 20 of T20S-R34E directly south of the Joker unit later this year (Robin Unit). The learnings from the pilot hole and both spacing tests will be implemented by Permian in all zones here in order to ensure thoughtful and efficient development.

Respectfully,

Travis Macha
Senior Landman

Enclosures

Joker 5-8 Federal Com Elections:

	Well Elections	
(Please indicate yo	ur responses in the s	paces below)
Well(s)	Elect to Participate	Elect to NOT Participate
Joker 5-8 Federal Com 111H		
Joker 5-8 Federal Com 112H		
Joker 5-8 Federal Com 113H		
Joker 5-8 Federal Com 114H		
Joker 5-8 Federal Com 121H		
Joker 5-8 Federal Com 122H		
Joker 5-8 Federal Com 123H		
Joker 5-8 Federal Com 124H		
Joker 5-8 Federal Com 125H		
Joker 5-8 Federal Com 126H		
Joker 5-8 Federal Com 127H		
Joker 5-8 Federal Com 128H		
Joker 5-8 Federal Com 171H		
Joker 5-8 Federal Com 172H		
Joker 5-8 Federal Com 173H		
Joker 5-8 Federal Com 174H		
Joker 5-8 Federal Com 131H		
Joker 5-8 Federal Com 132H		
Joker 5-8 Federal Com 133H		
Joker 5-8 Federal Com 134H		
Joker 5-8 Federal Com 201H		
Joker 5-8 Federal Com 202H		
Joker 5-8 Federal Com 203H		
Joker 5-8 Federal Com 204H		

Company Name	e (If Applicable):	
D		
By:		
Printed Name: _		
Date:		

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

DATE: WELL NAME:	2.17.2023			AFE NO.:	1
				ALLINO	<u>.</u>
	Joker 5-8 Federal Com	111H		FIELD:	Teas; Bone Spring
I OCATIONI	<u> </u>			_	
LOCATION:	Section 5, T20S-R34E			MD/TVD:_	19,861' / 9,576'
COUNTY/STATE:	Lea County, New Mexi	ico		LATERAL LENGTH:	10,000'
Permian WI:		-		DRILLING DAYS:	19.6
	FDCC			-	
GEOLOGIC TARGET:	FBSG			COMPLETION DAYS:	18.6
	Drill a horizontal FBSC	well and complete with	n 44 stages. AFE include	es drilling, completions, fl	owback and Initial AL
REMARKS:	install cost	•	0	3 1 ,	
NEWBIIGO.	HBILLII COST				
	-	DDD I DIC	COMPLETION	PRODUCTION	TOTAL
		DRILLING	COMPLETION		
INTANGIBLI	COSTS	COSTS	COSTS	COSTS	COSTS
I Land/Legal/Regulatory		\$ 52,768	-	37,500	5 90,268
2 Location, Surveys & Dam		257,363	16,141	2,500	276,003
	nges		39,110		106,660
4 Freight/Transportation	_	42,549		25,000	
5 Kental - Surtace Equipme		111,070	192,448	105,000	408,518
6 Kental - Downhole Equip	ment	183,520	53,429	•	236,949
7 Kental - Living Quarters		42,956	48,671		91,627
10 Directional Drilling, Sur	veys	383,743			383,743
11 Drilling	•	673,443			673,443
12 Drill Bits		89,495			89,495
13 Fuel & Power		168,789	647,751	-	816,540
14 Cementing & Float Equi	P	217,354			217,354
15 Completion Unit, Swab,	Cru			15,000	15,000
16 Pertorating, Wireline, Si			351,218		351,218
					110,130
17 High Pressure Pump Tru		•	110,130	-	
18 Completion Unit, Swab,	Cru	-	130,865	-	130,865
20 Mud Circulation System		93,991	•		93,991
21 Mud Logging		15,660			15,660
22 Logging/Formation Eva	luation	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 &	Disp		108,640	150,000	258,640
		177 514		.50,000	227,144
28 Mud/Wastewater Dispo		1/2,514	54,630		
30 Kig Supervision/Engine		108,273	119,194	21,667	249,134
32 Drlg & Completion Over	head	9,312		•	9,312
35 Labor		137,006	62,080	101,667	300,753
54 Proppant			7,121,387		1,121,387
• •			1,121,367		
95 Insurance		13,096	-	-	13,096
97 Contingency			21,817	3,833	25,650
99 Plugging & Abandonme	nt		•	-	
-	TOTAL INTANGIBLES	> 3,141,476	4,794,736	697,167	8,633,37
	TOTAL INTANGIBLES	5,111,170			
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
	20313				\$ 109,201
50 Surface Casing		\$ 109,201			
61 Intermediate Casing		307,574		<u> </u>	307,574
62 Drilling Liner				•	•
63 Production Casing		613,783		-	613,783
64 Production Liner					
65 Tubing				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				126,667	126,667
70 Flow Lines				66,667	66,667
				00,007	
71 Rod string					
72 Artificial Lift Equipmen	i		-	90,000	90,000
73 Compressor			-	5,833	5,833
74 Installation Costs					-
75 Surtace Pumps				61,667	61,667
•				01,001	
76 Downhole Pumps					
77 Measurement & Meter L		•	-	116,667	116,667
78 Gas Conditioning / Dehy	dration		-		
79 interconnecting Facility	Piping			20,000	20,000
KD Cathering / Rulk Lines					
•			<u> </u>		109 222
80 Gathering / Bulk Lines 81 Valves, Dumps, Control			<u>-</u> _	108,333	108,333
81 Valves, Dumps, Control 82 Tank / Facility Containm		<u> </u>		108,333 43,333	43,333
81 Valves, Dumps, Control		<u>:</u>		108,333	43,333 16,667
81 Valves, Dumps, Control 82 Tank / Facility Containm		:		108,333 43,333	43,333 16,667
81 Valves, Dumps, Controll 82 Tank / Facility Containm 83 Flare Stack 84 Electrical / Grounding	ent			108,333 43,333 16,667 50,000	43,333 16,667 50,000
31 Vaives, Dumps, Controli 32 Tank / Facility Contains 33 Flare Stack 34 Electrical / Grounding 35 Communications / SCAL	ent DA			108,333 43,333 16,667 50,000 36,667	43,333 16,667 50,000 36,667
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL	oent DA	· · · · · · · · · · · · · · · · · · ·		108,333 43,333 16,667 50,000 36,667 853	43,333 16,667 50,000 36,667 853
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL	ent DA	> 1,101,627	0	108,333 43,333 16,667 50,000 36,667	43,333 16,667 50,000 36,667 853
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL	oent DA		0	108,333 43,333 16,667 50,000 36,667 853	43,33 16,66 50,00 36,66 85. 2,090,81
81 Valves, Dumps, Controll 82 Tank / Facility Containm 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety	TOTAL TANGIBLES TOTAL COSTS Sources Operating, LLC:			108,333 43,333 16,667 50,000 36,667 853 989,187	·
81 Valves, Dumps, Controll 82 Tank / Facility Containm 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety	TOTAL TANGIBLES TOTAL COSTS Sources Operating, LLC:			108,333 43,333 16,667 50,000 36,667 853 989,187	43,33: 16,66/ 50,000 36,66/ 85: 2,090,6 1
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res	TOTAL TANGIBLES TOTAL COSTS Sources Operating, LLC:			108,333 43,333 16,667 50,000 36,667 853 989,187	43,33: 16,66/ 50,000 36,66/ 85: 2,090,6 1
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Drilling Enginee Completions Enginee	TOTAL TANGIBLES TOTAL COSTS SOurces Operating, LLC: PS			108,333 43,333 16,667 50,000 36,667 853 989,187	43,33: 16,66/ 50,000 36,66/ 85: 2,090,6 1
11 Valves, Dumps, Controll 12 Tank / Facility Contains 13 Flare Stack 14 Electrical / Grounding 15 Communications / SCAL 16 Instrumentation / Safety PARED BY Permian Res	TOTAL TANGIBLES TOTAL COSTS SOurces Operating, LLC: PS			108,333 43,333 16,667 50,000 36,667 853 989,187	43,33 16,66 50,00 36,66 85. 2,090,81
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Drilling Engines Completions Engines	TOTAL TANGIBLES TOTAL COSTS SOurces Operating, LLC: PS			108,333 43,333 16,667 50,000 36,667 853 989,187	43,333 16,667 50,000 36,667 852 2,090,61
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Drilling Engines Completions Engines Production Engines	TOTAL TANGIBLES TOTAL COSTS Sources Operating, LLC: PS	> 4,243,103		108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,33: 16,66: 50,000 36,66: 85: 2,090,81 10,724,19
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Drilling Engines Completions Engines Production Engines	TOTAL TANGIBLES TOTAL COSTS SOURCES Operating, LLC: PS PS PT: ML PC: DC Og, LLC APPROVAL:	> 4,243,103	4,794,736	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,333 16,667 50,000 36,667 853 2,090,81 10,724,19
81 Vaives, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Drilling Enginee Completions Enginee Production Engineenian Resources Operation	TOTAL TANGIBLES TOTAL COSTS Sources Operating, LLC: PS. PS. PS. ML PT. DC Og. LLC APPROVAL:	> 4,243,103	4,794,736 EEO	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,33: 16,66: 50,000 36,66: 85: 2,090,81 10,724,19
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Drilling Engines Completions Engines Production Engines	TOTAL TANGIBLES TOTAL COSTS Sources Operating, LLC: PS PR: ML PR: DC OG LLC APPROVAL: OG WH	> 4,243,103	4,794,736 EO JIV	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,33: 16,66; 50,000 36,66; 85: 2,090,81 10,724,19
81 Vaives, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Drilling Enginee Completions Enginee Production Engineenian Resources Operation	TOTAL TANGIBLES TOTAL COSTS Sources Operating, LLC: PS. PS. PS. ML PT. DC Og. LLC APPROVAL:	> 4,243,103	4,794,736 EEO	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,33. 16,66. 50,000 36,66. 85. 2,090,81 10,724,19
11 Valves, Dumps, Controll 12 Tank / Facility Containm 13 Flare Stack 14 Electrical / Grounding 15 Communications / SCAL 16 Instrumentation / Safety PARED BY Permian Res Drilling Enginee Completions Enginee Production Enginee tian Resources Operatin	TOTAL TANGIBLES TOTAL COSTS Sources Operating, LLC: PS PR: ML PR: DC OG LLC APPROVAL: OG WH	> 4,243,103	4,794,736 EO JIV	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,33 16,66 50,00 36,66 85 2,090,81 10,724,19
st Valves, Dumps, Controll 22 Tank / Facility Containm 33 Flare Stack 44 Electrical / Grounding 55 Communications / SCAL 56 Instrumentation / Safety PARED BY Permian Res Drilling Enginee Completions Enginee Production Enginee nian Resources Operatin	TOTAL TANGIBLES TOTAL COSTS Sources Operating, LLC: PS PR: ML PR: DC OG LLC APPROVAL: OG WH	> 4,243,103	4,794,736 EO JIV	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,33: 16,66; 50,000 36,66; 85: 2,090,81 10,724,19
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Completions Enginee Completion Enginee Production Enginee nian Resources Operation Co-CE	TOTAL TANGIBLES TOTAL COSTS SOURCES Operating, LLC: PS	> 4,243,103	4,794,736 EEO	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,33: 16,66; 50,000 36,66; 85: 2,090,81 10,724,19
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Drilling Engines Completions Engines Production Engines Production Engines Name of Control VP - Land & Leg	TOTAL TANGIBLES TOTAL COSTS SOURCES OPERATING, LLC: PS PS PT: ML PT: DC OG. LLC APPROVAL: OO WH PART BG BG ER APPROVAL:	> 4,243,103 Co-C VP - Geoscier	4,794,736 EO JIV	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,333 16,667 50,000 36,667 853 2,090,81 10,724,19
81 Valves, Dumps, Controll 82 Tank / Facility Contains 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCAL 86 Instrumentation / Safety PARED BY Permian Res Drilling Engines Completions Engines Production Engines Production Engines VP - Land & Leg N OPERATING PARTN Company Name	TOTAL TANGIBLES TOTAL COSTS SOURCES OPERATING, LLC: PS. PS. PS. ML PT. DC OR, LLC APPROVAL: BG ER APPROVAL:	> 4,243,103 Co-C VP - Geoscier	4,794,736 EEO JW nces SO Working Interest (%):	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,33: 16,66: 50,000 36,66: 85: 2,090,81 10,724,19 ations CRM
St Valves, Dumps, Controll 22 Tank / Facility Contains 33 Flare Stack 44 Electrical / Grounding 55 Communications / SCAL 56 Instrumentation / Safety PARED BY Permian Res Drilling Engines Completions Engines Production Engines Too-CE VP - Land & Leg N OPERATING PARTN Company Name	TOTAL TANGIBLES TOTAL COSTS SOURCES OPERATING, LLC: PS	> 4,243,103 Co-C VP - Geoscien	4,794,736 EEO	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,33: 16,66: 50,000 36,66: 85: 2,090,81 10,724,19 ations CRM
St Valves, Dumps, Controll 22 Tank / Facility Contains 33 Flare Stack 44 Electrical / Grounding 55 Communications / SCAL 56 Instrumentation / Safety PARED BY Permian Res Drilling Engines Completions Engines Production Engines Too-CE VP - Land & Leg N OPERATING PARTN Company Name	TOTAL TANGIBLES TOTAL COSTS SOURCES OPERATING, LLC: PS	> 4,243,103 Co-C VP - Geoscier	4,794,736 EEO JW nces SO Working Interest (%):	108,333 43,333 16,667 50,000 36,667 853 989,187 1,686,354	43,333 16,667 50,000 36,667 853 2,090,81 10,724,19 ations CRM

The costs on this AFE are estimates only and may not be construed as critings on any specific item or the total cost of the project. Tubing installation approved under the AFE may be delayed up to a year after the we'll have been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred, including, legal, country, regulatory, brokenses and will be convered by and billed proportionately for Operator's actually likely to proportionately included to the project of the projec

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

	ESTIMATE	OF COSTS AND AUTH	ORIZATION FOR EXPEN	DITURE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	12H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	19,881' / 9,596'
COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG			COMPLETION DAYS:	18.6
		well and complete with	n 44 stages. AFE include	es drilling, completions, fl	owback and Initial AL
REMARKS:	install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
T Land/ Legal/ Regulatory	<u> </u>	52,768	-	37,500	\$ 90,268
2 Location, Surveys & Damage	es	257,363	16,141	2,500	2/6,003
4 Freight / Transportation		42,549	39,110	25,000	106,660
5 Rental - Suriace Equipment 6 Rental - Downhole Equipme		111,070	192,448 53,429	105,000	408,518 236,949
7 Kental - Living Quarters		42,956	48,671		91,627
10 Directional Drilling, Surve	ys	383,743	•	•	383,743
11 Drilling 12 Drill Bits		673,443 89,495		-	673,443 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 Periorating, Wireline, Slick 17 High Pressure Pump Truck		-	351,218 110,130	•	351,218 110,130
18 Completion Unit, Swab, C		-	130,865	•	130,865
20 Mud Circulation System		93,991	•	•	93,991
21 Mud Logging 22 Logging / Formation Evalua	ation	15,660	7.450		15,660
22 Logging / Formation Evalua 23 Mud & Chemicals	mudii	323,254	7,450 391,463	10,000	13,944 724,717
24 Water		38,825	591,078	225,000	854,903
25 Stimulation	·	•	727,236		727,236
26 Stimulation Flowback & D: 28 Mud / Wastewater Disposa	•	172,514	108,640 54,630	150,000	258,640
30 Rig Supervision / Engineer		108,273	119,194	21,667	249,134
32 Drig & Completion Overhe		9,312	-	•	9,312
35 Labor		137,006	62,080	101,667	300,753
54 Proppant 95 Insurance		13,096	1,121,387	•	1,121,387
97 Contingency		- 15,676	21,817	3,833	25,650
99 Plugging & Abandonment		•	-	•	•
	TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE CO	osts	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	5	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		<u> </u>		140,000	140,000
66 Wellhead 67 Packers, Liner Hangers		57,908		40,000 20,000	97,908 33,161
68 Tanks		15,101		45,833	45,833
69 Production Vessels		-		126,667	126,667
70 Flow Lines			-	66,667	66,667
71 Rod string 72 Artilicial 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 77 Measurement & Meter Inst	allation			116,667	116,667
78 Gas Conditioning / Dehydr			•		- 110,007
79 Interconnecting Facility Pip	ping	<u> </u>	•	20,000	20,000
80 Gathering / Bulk Lines		•		- 1/0-1/17	108,333
81 Valves, Dumps, Controllers 82 Tank / Facility Containmen				108,333	43,333
83 Flare Stack	•			16,667	16,667
84 Electrical / Grounding				50,000	50,000
85 Communications / SCADA 86 Instrumentation / Safety		<u>.</u>		36,667 853	36,667
or more ameniation / Salety	TOTAL TANGIBLES >	1,101,627		989,187	2,090,814
	TOTAL COSTS >	4,243,103	4,794,736	1,686,354	10,724,193
EPARED BY Permian Resou	/	apa aujawo	4,72,700	2,000,000	
Drilling Engineer:	P5				
Completions Engineer:	ML				
Production Engineer:	DC				
mian Resources Operating,					
Co-CEO		Co-C		VP - Opera	
VP - Land & Legal		VD . Constant	JW		CRM
vr - Land & Legal	RC .	VP - Geoscien	ces		
	B ∪		S O		
N OPERATING PARTNER	R APPROVAL:				
Company Name:			Working Interest (%):	T	ax ID:
Ct A t					
Signed by:			Date:		
Title:			Approval:	Yes	No (mark one)
on this AFF era milimates only and may be control.					

The costs on this AFE are retinates only and not you not be construed on enthings on any sprentic term or the state cost of the project. The proportionate share of actual costs incurred, including, legal, curative, regulatory, brokers go and will cost under the lerms of the explicable joint opportuning approximate share of actual costs incurred, including, legal, curative, regulatory, brokers go and will cost under the lerms of the explicable joint opportuning approximate properties of a state costs incurred, including, legal, curative, regulatory, brokers go and will cost under the lerms of the explicable joint opportuning approximate properties of a state of actual costs of the properties of the propert

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	13H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	19,901' / 9,616'
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 wit	h 44 stages. AFE includes	drilling, completions, flo	wback and Initial AL
DITANGEN S	20070	DRILLING COSTS	COMPLETION	PRODUCTION COSTS	TOTAL COSTS
INTANGIBLE (T Land / Legal / Regulatory	0515	52,768		37,500	\$ 90,268
2 Location, Surveys & Damag	ges	257,363	16,141	2,500	2/6,003
4 Freight / Transportation		42,549	39,110	25,000	106,660
5 Rental - Surface Equipment 6 Rental - Downhole Equipm		111,070	192,448 53,429	105,000	408,518
7 Rental - Living Quarters		42,956	48,671	•	91,627
10 Directional Drilling, Surve	eys .	383,743		-	383,743
11 Drilling 12 Drill Bits		673,443 89,495			89,495
13 Fuel & Power		168,789	647,751	•	816,540
14 Cementing & Float Equip	****	217,354	-	15,000	217,354 15,000
15 Completion Unit, Swab, C 16 Perforating, Wireline, Slick		-	351,218	15,000	351,218
17 High Pressure Pump Truck		•	110,130	•	110,130
18 Completion Unit, Swab, C	าเก	-	130,865	•	130,865
20 Mud Circulation System 21 Mud Logging		93,991	-	•	93,991 15,660
22 Logging / Formation Evalu	ation	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
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30 Kig Supervision / Engineer		108,273 9,312	119,194	21,667	249,134 9,312
32 Drig & Completion Overh 35 Labor	eau	137,006	62,080	101,667	300,753
54 Proppant		-	1,121,387		1,121,387
95 Insurance		13,096			13,096
97 Contingency 99 Plugging & Abandonment		<u>.</u>	21,817	3,833	25,650
	TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379
•		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE CO	OSTS	COSTS	COSTS	COSTS	COSTS
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61 Intermediate Casing 62 Drilling Liner		307,574		-	307,574
63 Production Casing		613,783	•	-	613,783
64 Production Liner		•	•		-
65 Tubing				140,000	140,000
66 Wellhead 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 71 Rod string				66,667	66,667
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			-		
77 Measurement & Meter Ins		-	•	116,667	116,667
78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi				20,000	20,000
80 Gathering / Bulk Lines	brug			20,000	20,000
81 Valves, Dumps, Controller	rs	-		108,333	108,333
82 Tank / Facility Containmen	nt			43,333	43,333
83 Flare Stack 84 Electrical / Grounding				16,667	50,000
85 Communications / SCADA				36,667	36,667
86 Instrumentation / Safety		<u> </u>	-	853	853
-	TOTAL TANGIBLES >		0	989,187	2,090,814
	TOTAL COSTS >	· 4,243,103	4,794,736	1,686,354	10,724,193
EPARED BY Permian Reso	ources Operating, LLC:				
Drilling Engineer:	: PS				
Completions Engineer:					
Production Engineer:					
mian Resources Operating	, LLC APPROVAL:				
C- CEO		Cont	CEO	VP. O	·
Co-CEO	wн	C0-4	CEO	VP - Opera	CRM
VP - Land & Legal	 I	VP - Geoscie	nces		
•	BG		so		
N OPERATING PARTNE	R APPROVAL:				
Company Name:			Working Interest (%):	Ta	x ID:
					-
Signed by:			Date:		
Title:			Approval:	Yes	No (mark one)
ets on this AFE are retimates only and may not be con-	strued as ceilings on any specific item or the total	cost of the project. Tubing installation app	roved under the AFE may be delayed up to a year	r after the well has been completed. In executing t	his AFE, the Participant agrees to pay its

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ESTIMATE OF COSTS AN	DAUTHORIZATION FO	OR EXPENDITURE

DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	14H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/IVD:	19,901' / 9,616'
COUNTY/STATE:	Lea County, New Mexic	20		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG			COMPLETION DAYS:	18.6
GEOLOGIC IARGE I.		well and complete wit	h 44 stages. AFE includes o	_	
REMARKS:	install cost	wen and complete wit	ii 71 stages. At E includes i	irining, completions, no	Woock and Indui 115
REMARKS.	Instan Cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory		52,768		37,500	\$ 90,268
2 Location, Surveys & Dama	zes	257,363	16,141	2,500	276,003
4 Freight/Transportation		42,549	39,110	25,000	106,660
5 Rental - Suriace Equipmen		111,070	192,448	105,000	408,518
6 Rental - Downhole Equipm	ent	183,520	53,429	-	236,949
7 Rental - Living Quarters		42,956	48,671	•	91,627
10 Directional Drilling, Surv	eys	383,743	<u> </u>	-	383,743 673,443
11 Drilling 12 Drill Bits		673,443 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	วาบ	·	•	15,000	15,000
16 Pertorating, Wireline, Slice		-	351,218	-	351,218
17 High Pressure Pump Truc	k	-	110,130	-	110,130
18 Completion Unit, Swab, C	TU	-	130,865	•	130,865
20 Mud Circulation System		93,991		-	93,991
21 Mud Logging		15,660	-	-	15,660
22 Logging/Formation Evalu	ation	6,495	7,450	111.000	13,944
23 Mud & Chemicals		323,254	391,463	10,000	724,717 854,903
24 Water 25 Stimulation		38,825	727,236	225,000	727,236
26 Stimulation Flowback & 1	Disp		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 Over		9,312			9,312
35 Labor		137,006	62,080	101,667	300,753
54 Proppant			1,121,387		1,121,387
95 Insurance		13,096		•	13,096
97 Contingency		-	21,817	3,833	25,650
99 Plugging & Abandonmen	t			•	•
	TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		109,201			\$ 109,201
61 Intermediate Casing		307,574	-		307,574
62 Drilling Liner		-	-	•	•
63 Production Casing		613,783		•	613,783
64 Production Liner			-	-	<u> </u>
65 Tubing		<u> </u>	<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		<u> </u>	<u> </u>	126,667	126,667
70 Flow Lines				66,667	
71 Kod string 72 Artificial Lift Equipment				90,000	90,000
73 Compressor				5,833	5,833
74 Installation Costs					-
75 Surtace Pumps				61,667	61,667
76 Downhole Pumps			-	-	•
77 Measurement & Meter Ins	stallation	•		116,667	116,667
78 Gas Conditioning / Dehye	Iration	•	•	•	
79 Interconnecting Facility P	iping		<u> </u>	20,000	20,000
80 Gathering / Bulk Lines					100 777
81 Valves, Dumps, Controlle				108,333	108,333
82 Tank / Facility Containme 83 Flare Stack	nt	-		43,333	16,667
03 Flate Stack					50,000
84 Electrical / Grounding		-	•	JU.UAN	
84 Electrical / Grounding 85 Communications / SCAD		-		36,667	36,667
84 Electrical / Grounding 85 Communications / SCAD 86 Instrumentation / Safety	4	<u> </u>		36,667 853	
85 Communications / SCAD		1,101,627		36,667	36,667
85 Communications / SCAD	TOTAL TANGIBLES			36,667 853 989,187	36,667 853 2,090,814
85 Communications / SCAD			0 4,794,736	36,667 853	36,667 853
85 Communications / SCAD. 86 Instrumentation / Salety	TOTAL TANGIBLES			36,667 853 989,187	36,667 853 2,090,814
85 Communications / SCAD	TOTAL TANGIBLES			36,667 853 989,187	36,667 853 2,090,814
85 Communications / SCAD, 86 Instrumentation / Safety EPARED BY Permian Rese	TOTAL TANGIBLES : TOTAL COSTS : Durces Operating, LLC:			36,667 853 989,187	36,667 853 2,090,814
85 Communications / SCAD, 86 Instrumentation / Safety EPARED BY Permian Reso	TOTAL TANGIBLES : TOTAL COSTS : Durces Operating, LLC: : PS			36,667 853 989,187	36,667 853 2,090,814
85 Communications / SCAD, 86 Instrumentation / Salety EPARED BY Permian Reso Drilling Engineer Completions Engineer	TOTAL TANGIBLES S TOTAL COSTS S Durces Operating, LLC: PS HL			36,667 853 989,187	36,667 853 2,090,814
85 Communications / SCAD, 86 Instrumentation / Safety EPARED BY Permian Reso	TOTAL TANGIBLES S TOTAL COSTS S Durces Operating, LLC: PS HL			36,667 853 989,187	36,667 853 2,090,814
85 Communications / SCAD. 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer	TOTAL TANGIBLES S TOTAL COSTS S Durces Operating, LLC: PS ML DC			36,667 853 989,187	36,667 853 2,090,814
85 Communications / SCAD, 86 Instrumentation / Salety EPARED BY Permian Reso Drilling Engineer Completions Engineer	TOTAL TANGIBLES S TOTAL COSTS S Durces Operating, LLC: PS ML DC			36,667 853 989,187	36,667 853 2,090,814
85 Communications / SCAD. 86 Instrumentation / Safety EPARED BY Permian Rese Drilling Engineer Completions Engineer Production Engineer	TOTAL TANGIBLES 3 TOTAL COSTS 3 Durces Operating, LLC: PS ML DC DC LLC APPROVAL:	4,243,103	4,794,736	36,667 853 989,187 1,686,354	36,667 853 2,090,814 10,724,193
85 Communications / SCAD. 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer	TOTAL TANGIBLES : TOTAL COSTS : Durces Operating, LLC: S PS ML DC LLC APPROVAL:	4,243,103	4,794,736	36,667 853 989,187	36,667 853 2,090,814 10,724,193
85 Communications / SCAD. 86 Instrumentation / Salety EPARED BY Permian Rese Drilling Engineer Completions Engineer Production Engineer rmian Resources Operating	TOTAL TANGIBLES : TOTAL COSTS : Durces Operating, LLC: : PS : ML : DC : DC : LLC APPROVAL:	• 4,243,103	4,794,736 CEO	36,667 853 989,187 1,686,354	36,667 853 2,090,814 10,724,193
85 Communications / SCAD. 86 Instrumentation / Safety EPARED BY Permian Rese Drilling Engineer Completions Engineer Production Engineer	TOTAL TANGIBLES: TOTAL COSTS: Durces Operating, LLC: PS: ML DC: LLC APPROVAL: WH	4,243,103	4,794,736 CEO JW nces	36,667 853 989,187 1,686,354	36,667 853 2,090,814 10,724,193
85 Communications / SCAD. 86 Instrumentation / Salety EPARED BY Permian Rese Drilling Engineer Completions Engineer Production Engineer rmian Resources Operating	TOTAL TANGIBLES : TOTAL COSTS : Durces Operating, LLC: : PS : ML : DC : DC : LLC APPROVAL:	• 4,243,103	4,794,736 CEO	36,667 853 989,187 1,686,354	36,667 853 2,090,814 10,724,193
85 Communications / SCAD. 86 Instrumentation / Salety EPARED BY Permian Rese Drilling Engineer Completions Engineer Production Engineer rmian Resources Operating	TOTAL TANGIBLES: TOTAL COSTS: Durces Operating, LLC: PS: ML DC: LLC APPROVAL: WH	• 4,243,103	4,794,736 CEO JW nces	36,667 853 989,187 1,686,354	36,667 853 2,090,814 10,724,193
85 Communications / SCAD. 86 Instrumentation / Salety EPARED BY Permian Rese Drilling Engineer Completions Engineer Production Engineer rmian Resources Operating	TOTAL TANGIBLES: TOTAL COSTS: Durces Operating, LLC: PS: ML DC: LLC APPROVAL: WH	• 4,243,103	4,794,736 CEO JW nces	36,667 853 989,187 1,686,354	36,667 853 2,090,814 10,724,193
85 Communications / SCAD, 86 Instrumentation / Salety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer rmian Resources Operating Co-CEC	TOTAL TANGIBLES S TOTAL COSTS S Durces Operating, LLC: PS ML DC LLC APPROVAL: WH BG	• 4,243,103	4,794,736 CEO JW nces	36,667 853 989,187 1,686,354	36,667 853 2,090,814 10,724,193
85 Communications / SCAD, 86 Instrumentation / Salety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer rmian Resources Operating Co-CEC	TOTAL TANGIBLES S TOTAL COSTS S Durces Operating, LLC: PS ML DC LLC APPROVAL: WH BG	• 4,243,103	4,794,736 CEO	36,667 853 989,187 1,686,354 VP - Opera	36,667 853 2,090,814 10,724,193
85 Communications / SCAD, 86 Instrumentation / Salety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer rmian Resources Operating Co-CEC	TOTAL TANGIBLES 3 TOTAL COSTS 3 Durces Operating, LLC: PS ML DC LLC APPROVAL: WH BG R APPROVAL:	• 4,243,103 Co-4 VP - Geoscie	4,794,736 CEO JW nces	36,667 853 989,187 1,686,354 VP - Opera	36,667 853 2,090,814 10,724,193
B5 Communications / SCAD, B6 Instrumentation / Salety B6 Instrumentation / Salety EPARED BY Permian Resolution Engineer Completions Engineer Production Engineer Production Engineer Co-CEC VP - Land & Lega DN OPERATING PARTNE	TOTAL TANGIBLES : TOTAL COSTS : Durces Operating, LLC: PS : ML DC : DC J. LLC APPROVAL: WH : BG	VP - Geoscie	4,794,736 CEO JW nces SO Working Interest (%):	36,667 853 989,187 1,686,354 VP - Opera	36,667 853 2,090,814 10,724,193
85 Communications / SCAD, 86 Instrumentation / Salety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer rmian Resources Operating Co-CEC VP - Land & Lega	TOTAL TANGIBLES : TOTAL COSTS : Durces Operating, LLC: PS : ML DC : DC J. LLC APPROVAL: WH : BG	• 4,243,103 Co-4 VP - Geoscie	4,794,736 CEO	36,667 853 989,187 1,686,354 VP - Opera	36,667 853 2,090,814 10,724,193
B5 Communications / SCAD, B6 Instrumentation / Salety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer Production Engineer Co-CEC VP - Land & Lega ON OPERATING PARTNE Company Name Signed by	TOTAL TANGIBLES S TOTAL COSTS S Durces Operating, LLC: PS ML DC LLC APPROVAL: WH BG R APPROVAL:	VP - Geoscie	4,794,736 TEO JW nces SO Working Interest (%): Date:	36,667 853 989,187 1,686,354 VP - Opera	36,667 853 2,090,814 10,724,193 Rions
B5 Communications / SCAD, B6 Instrumentation / Salety B6 Instrumentation / Salety EPARED BY Permian Resolution Engineer Completions Engineer Production Engineer Production Engineer Co-CEC VP - Land & Lega DN OPERATING PARTNE	TOTAL TANGIBLES S TOTAL COSTS S Durces Operating, LLC: PS ML DC LLC APPROVAL: WH BG R APPROVAL:	VP - Geoscie	4,794,736 CEO JW nces SO Working Interest (%): Date: Approval:	36,667 853 989,187 1,686,354 VP - Opera	36,667 853 2,090,814 10,724,193 tions CRM

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ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

	ESTIMATE	OF COSTS AND AUTHO	ORIZATION FOR EXPENI	DITORE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	121H		FIELD:	Teas; Bone Spring
	<u> </u>				
LOCATION:	Section 5, T20S-R34E			MD/TVD:	20,601' / 10,316'
COUNTY/STATE:	Lea County, New Mexic	co		LATERAL LENGTH:	10,000'
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, flo	owback and Initial AL
REMARKS:	install cost	•	0		
KEWAKKS.	nistan cost				
					TOTAL
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/ Legal/ Regulatory		\$ 54,351		37,500	\$ 91,851
2 Location, Surveys & Damas	700	265,083	16,625	2,500	284,208
4 Freight/Transportation	565	43,826	40,284	25,000	109,110
5 Kental - Surface Equipmen		114,402	198,221	105,000	417,624
6 Kental - Downhole Equipm	ient	189,026	55,031	-	244,057
7 Kental - Living Quarters		44,244	50,131		94,375
10 Directional Drilling, Surve	eys	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, C	****			15,000	15,000
		•			
16 Periorating, Wireline, Slic			361,754	-	361,754
17 High Pressure Pump Truc		•	113,434	•	113,434
18 Completion Unit, Swab, C	TU	-	134,791		134,791
20 Mud Circulation System		96,811		•	96,811
21 Mud Logging		16,130			16,130
22 Logging / Formation Evalu	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
				250,000	
25 Stimulation		-	749,053		749,053
26 Stimulation Flowback & L	Disp	•	111,899	150,000	261,899
28 Mud/Wastewater Dispos	ai	177,689	56,269		233,959
30 Kig Supervision / Enginee	ring	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		141,110	1,155,029	101,007	1,155,029
• • •			1,135,029		
95 Insurance		13,489	-	•	13,489
97 Contingency		-	22,472	3,833	26,305
99 Plugging & Abandonment	t	•		-	
	TOTAL INTANGIBLES	> 3,235,720	4,938,578	722,167	8,896,465
	TOTAL INTANGIBLES	3,233,720	4,536,576	722,107	0,070,403
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OCTC	COSTS	COSTS	COSTS	COSTS
	0515			COD 15	
60 Surface Casing		112,477	-		5 112,477
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				-	•
69 Production Vessels		•	-	45,833	45,833
70 Flow Lines				126,667	126,667
71 Kod string				66,667	66,667
72 Artificial Lift Equipment				90,000	90,000
73 Compressor				5,833	5,833
74 Installation Costs			<u>-</u>	3,833	
75 Surface Pumps				61,667	61,667
76 Downhole Pumps					-
77 Measurement & Meter Ins	tallation	-		116,667	116,667
78 Gas Conditioning / Dehyd	Iration				
79 Interconnecting Facility Pi				20,000	20,000
80 Gathering / Bulk Lines					
	re				_
81 Vaives, Dumps, Controller				108,333	108,333
82 Tank / Facility Containmen	ш			43,333	43,333
83 Flare Stack		•		16,667	16,667
84 Electrical / Grounding		-		50,000	50,000
85 Communications / SCADA	\	•	•	36,667	36,667
86 Instrumentation / Safety				833	833
•	TOTAL TANGIBLES	1,134,676		989,167	2,123,843
			<u></u> _		
	TOTAL COSTS :	4,370,396	4,938,578	1,711,334	11,020,308
EPARED BY Permian Reso	ources Operating, LLC:				
Drilling Engineer	: PS				
Completions Engineer:	: ML				
Production Engineer:	: DC				
mian Persuasa O	. I I C A DDD CT - T				
mian Resources Operating	, LLC AFPKUVAL:				
Co-CEO		Co-C		VP - Opera	tions
	WH		JW		CRM
VP - Land & Legal	•	VP - Geoscien	res		
** - Land & Legal	BG	vr - ⊖eoscien			
	вG		SO		
			<u></u>		
N OPERATING PARTNE	R APPROVAL:				
Company Name:			Working Interest (%):	Ta	x ID:
Signed by:			Date:		
				_	
Title:			Approval:	Yes	No (mark one)
to on this AFE are estimates only and may not be com	stread as criffeen on any	cost of the parties. Tulture to a "	·· —		
		was on the property author tostallation arresty	THE SHOUT WAS ALL DRAY DO GOLLYCO UP to a year	a mar use went has been completed. In execution t	or to the restrictment acress to pey the

The costs of this ATE are estimates only and may not be construed an entitings on any specific time or the total cost of the project. Tubing installation approved under the ATE may be delayed up to a year after the well has been completed. In executing this ATE, the Participant agrees to pay its proportionable where of actual costs incurred, including, legal, curstive, regulatory, bederange and well costs under the irran of the applicable joint operating agreement, regulatory outcome or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's control and general liability insurance unless participant provider Operator are certificate evidencing to swall coverage to a support accorded and general liability insurance unless participant provider Operator are certificate evidencing to swall coverage to the operation.

DATE: WELL NAME:	2.17.2023 Joker 5-8 Federal Com	122H		AFE NO.: FIELD:	1 Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	20,266' / 9,981'
COUNTY/STATE:	Lea County, New Mex	ico		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	•		COMPLETION DAYS:	18.6
n=141 n/c		well and complete with	n 44 stages. AFE includes	drilling, completions, flo	wback and Initial AL
REMARKS:	install cost	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
Land/Legal/Regulatory		\$ 54,351		37,500	\$ 91,851
Location, Surveys & Dama	ges	265,083	16,625	2,500	284,208
4 Freight/Transportation		43,826	40,284	25,000	109,110
5 Kental - Surface Equipmen		114,402	198,221	105,000	417,624
6 Kental - Downhole Equips	nent	189,026	55,031	•	244,057 94,375
7 Kental - Living Quarters 10 Directional Drilling, Surv	rave	395,255	50,151	-	395,255
11 Drilling	-,,,	693,647			693,647
12 Drill Bits		92,179	•	-	92,179
3 Fuel & Power		173,853	667,183	•	841,036
14 Cementing & Float Equip		223,875	-		223,875
l5 Compietion Unit, Swab, (l6 Pertorating, Wireline, Sli			361,754	15,000	15,000 361,754
17 High Pressure Pump True			113,434		113,434
8 Completion Unit, Swab,		-	134,791		134,791
Mud Circulation System		96,811	•	•	96,811
11 Mud Logging		16,130			16,130
2 Logging/Formation Eval	uation	6,690	7,673		14,363
3 Mud & Chemicals		332,951	403,207	10,000	746,158
4 Water		39,990	608,810	250,000	898,800
5 Stimulation	Nen		749,053	TENTON-	749,053
26 Stimulation Flowback & 28 Mud/Wastewater Dispo:		177,689	111,899 56,269	150,000	261,899
20 Midd/ wastewater Dispo: 30 Kig Supervision/Engine		111,522	122,769	21,667	255,958
32 Drig & Completion Over		9,591		- 21,007	9,591
S Labor		141,116	63,942	101,66/	306,72
54 Proppant			1,155,029	·	1,155,029
55 Insurance		13,489	-	-	13,489
7 Contingency			22,472	3,833	26,305
9 Piugging & Abandonmer				•	-
	TOTAL INTANGIBLES	> 3,235,720	4,938,578	722,167	8,896,46
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE (COSTS	COSTS	COSTS	COSTS	COSTS
0 Surface Casing		\$ 112,477			\$ 112,477
1 Intermediate Casing		316,801		•	316,801
52 Drilling Liner		677 106	-	•	2.17.102
3 Production Casing 4 Production Liner		632,196			632,196
5 Tubing				140,000	140,000
66 Wellhead		59,645		40,000	99,645
7 Packers, Liner Hangers		13,556		20,000	33,556
8 Tanks		-		-	•
9 Production Vessels		-		45,833	45,833
70 Flow Lines				126,667	126,667
71 Kod string 72 Artificial Lift Equipment				90,000	90,000
3 Compressor				5,833	5,833
4 Installation Costs				5,005	
5 Surtace Pumps				61,667	61,667
6 Downhole Pumps					
7 Measurement & Meter In	stallation		-	116,667	116,667
'8 Gas Conditioning/Dehy		-	-	•	-
9 Interconnecting Facility P	iping		-	20,000	20,000
U Gathering / Bulk Lines		•		100 777	
11 Valves, Dumps, Controlle 12 Tank / Facility Containme		•		108,333	108,333
i3 Flare Stack	••••			16,66/	16,667
4 Electrical / Grounding				50,000	50,000
5 Communications / SCAD	A			36,667	36,667
6 Instrumentation / Safety			-	833	833
	TOTAL TANGIBLES	> 1,134,676	0	989,167	2,123,84
		> 4,370,396	4,938,578	1,711,334	11,020,30
	TOTAL COSTS	2010000			
PARED BY Permian Res	ources Operating, LLC:	7,0,0,0			
Drilling Enginee	ources Operating, LLC:	421020			
Drilling Enginee Completions Enginee	ources Operating, LLC: r: PS r: ML	421020			
Drilling Enginee	ources Operating, LLC: r: PS r: ML	421020			
Drilling Enginee Completions Enginee Production Enginee	ources Operating, LLC: PS ML DC	4210200			
Drilling Enginee Completions Enginee	ources Operating, LLC: PS ML CDC LLC APPROVAL:		EO	VP - Oners	tions
Drilling Enginee Completions Enginee Production Enginee uian Resources Operatin	ources Operating, LLC: PS ML CDC LLC APPROVAL:	Co-C	EO JW	VP - Opera	tionsCRM
Drilling Enginee Completions Enginee Production Enginee tian Resources Operatin	pources Operating, LLC: PS ML DC LLC APPROVAL: WH	Co-C	JW	VP - Opera	
Drilling Enginee Completions Enginee Production Enginee uian Resources Operatin	pources Operating, LLC: PS ML DC LLC APPROVAL: WH		JW	VP - Opera	
Drilling Enginee Completions Enginee Production Enginee ian Resources Operatin	pources Operating, LLC: PS ML DC LLC APPROVAL: WH	Co-C	JW aces	VP - Opera	
Drilling Enginee Completions Enginee Production Enginee itan Resources Operating Co-CEC	pources Operating, LLC: PS ML C DC G, LLC APPROVAL: O WH BG	Co-C	JW aces	VP - Opera	
Drilling Enginee Completions Enginee Production Enginee Production Enginee Lian Resources Operating Co-CEC VP - Land & Lega OPERATING PARTNI	DUTCES OPERATING, LLC: PS HL DC DC G, LLC APPROVAL: O WH BG ER APPROVAL:	Co-C VP - Geoscien	JW SO		CRM
Drilling Enginee Completions Enginee Production Enginee atian Resources Operatin	DUTCES OPERATING, LLC: PS	Co-C VP - Geoscien	JW aces		
Drilling Enginee Completions Enginee Production Enginee Production Enginee Lian Resources Operating Co-CEC VP - Land & Lega VP - Land & Lega VOPERATING PARTNI	DUTCES OPERATING, LLC: PS HL DC DC G, LLC APPROVAL: O WH BG ER APPROVAL:	Co-C VP - Geoscien	JW SO		CRM

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	23H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	20,581' / 10,296'
COUNTY/STATE:	Lea County, New Mexic	20		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG		Market Are Are Are 1	COMPLETION DAYS:	18.6
REMARKS:	install cost	well and complete t	with 44 stages. AFE include	es drilling, completions, fi	OWDACK AND INIDAL AL
INTANGIBLE C	YOUTE .	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
T Land/ Legal/ Regulatory	.0515	54,351		37,500	\$ 91,851
2 Location, Surveys & Damag	es	265,083	16,625	2,500	284,208
4 Freight / Transportation 5 Rental - Surface Equipment		43,826	40,284 198,221	25,000 105,000	109,110
6 Kental - Downhole Equipme		189,026	55,031	105,000	244,057
7 Kental - Living Quarters		44,244	50,131		94,375
10 Directional Drilling, Surve	ys	395,255	-	•	395,255
11 Drilling 12 Drill Bits		693,647			92,179
13 Fuel & Power		173,853	667,183		841,036
14 Cementing & Float Equip 15 Completion Unit, Swab, C	111	223,875		15,000	223,875 15,000
16 Perforating, Wireline, Slick			361,754	-	361,754
17 High Pressure Pump Truck			113,434		113,434
18 Completion Unit, Swab, C 20 Mud Circulation System	ľU	96,811	134,791		134,791 96,811
21 Mud Logging		16,130			16,130
22 Logging / Formation Evalu	ation	6,690	7,673	-	14,363
23 Mud & Chemicals 24 Water		332,951 39,990	403,207 608,810	250 000	746,158 898,800
24 water 25 Stimulation		- 046,66	749,053	250,000	749,053
26 Stimulation Flowback & D	-		111,899	150,000	261,899
28 Mud / Wastewater Disposa		177,689	56,269	•	233,959
30 Rig Supervision / Engineer 32 Drig & Completion Overho		9,591	122,769	21,667	255,958 9,591
35 Labor		141,116	63,942	101,667	306,725
54 Proppant		11.490	1,155,029		1,155,029
95 Insurance 97 Contingency		13,489	22,472	3,833	13,489 26,305
99 Plugging & Abandonment					
	TOTAL INTANGIBLES	3,235,720	4,938,578	722,167	8,896,465
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE CO	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing 61 Intermediate Casing	•	316,801			\$ 112,477 316,801
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 69 Production Vessels			-	45,833	45,833
70 Flow Lines			-	126,667	126,667
71 Rod string		-	•	66,667	66,667
72 Artificial Lift Equipment 73 Compressor				5,833	90,000
74 Installation Costs				3,033	
75 Surface Pumps				61,667	61,667
76 Downhole Pumps 77 Measurement & Meter Inst	- Uetle-			11////	116.667
78 Gas Conditioning / Dehyd			 -	116,667	116,667
79 Interconnecting Facility Pi				20,000	20,000
80 Gathering / Bulk Lines	e			100 222	1/10 222
81 Valves, Dumps, Controller 82 Tank / Facility Containmer				108,333	108,333
83 Flare Stack	-			16,667	16,667
84 Electrical / Grounding				50,000	50,000
85 Communications / SCADA 86 Instrumentation / Safety			-	36,667	36,667
million Dately	TOTAL TANGIBLES >	1,134,676		989,167	2,123,843
	TOTAL COSTS >		4,938,578	1,711,334	11,020,308
EDADED BY Downton D	ureae Oneretine II C				
EPARED BY Permian Reso	<u></u>				
Drilling Engineer:					
Completions Engineer:					
Production Engineer:	DC				
rmian Resources Operating	LLC APPROVAL:				
Co-CEO			Co-CEO	VP . O	ations
Co-CEO	WH		JW	VP - Oper	CRM
VP - Land & Legal		VP - Geos	•		
•	BG		50		
ON OPERATING PARTNE	R APPROVAL:				
ON OPERATING PARTNEI Company Name:			Working Interest (%):	Т	ax ID:
Company Name:			- · · · -	тт	ax ID:
			Working Interest (%):	т	
Company Name:			- · · · -	TT	ax ID:No (mark one)

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

DATE:	2.17.2023		ORIZATION FOR EXPENI	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	2411		FIELD:	Teas; Bone Spring
		2411			
LOCATION:	Section 5, T20S-R34E			MD/TVD:	20,256' / 9,971'
COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG			COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG install cost	well and complete with	n 44 stages. AFE includes	s drilling, completions, fl	owback and Initial AI
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBL	E COSTS	COSTS	COSTS	COSTS	COSTS
Land/Legal/Regulatory		54,351	-	37,500	\$ 91,85
2 Location, Surveys & Dan		265,083	16,625	2,500	284,20
4 Freight / Transportation		43,826	40,284	25,000	109,11
5 Rental - Surtace Equipm	ent	114,402	198,221	105,000	417,62
6 Kental - Downhole Equi	pment	189,026	55,031	•	244,05
7 Kental - Living Quarters		44,244	50,131	•	94,37
10 Directional Drilling, Su	irveys	395,255	-		395,25
11 Drilling		693,647	-	•	693,64
12 Driit Bits 13 Fuel & l'ower		92,179	667,183	•	92,17
13 Fuel & Fower 14 Cementing & Float Equ	in	223,875	007,103		223,87
15 Completion Unit, Swab				15,000	15,00
6 Periorating, Wireline, S			361,754	15,000	361,75
7 High Pressure Pump Tr		-	113,434		113,43
8 Completion Unit, Swab			134,791		134,79
0 Mud Circulation System		96,811	-	-	96,81
1 Mud Logging		16,130			16,13
2 Logging / Formation Ev	aluation	6,690	7,673	-	14,36
3 Mud & Chemicals		332,951	403,207	10,000	746,15
4 Water		39,990	608,810	250,000	898,80
5 Stimulation			749,053		749,05
6 Stimulation Flowback &		-	111,899	150,000	261,89
8 Mud/Wastewater Disp		177,689	56,269		233,95
U Rig Supervision / Engin		111,522	122,769	21,667	255,95
2 Drig & Completion Ove 5 Labor	erneau	9,591	63,942	103 777	9,59
is Labor i4 Proppant		141,116	1,155,029	101,667	306,72 1,155,02
5 Insurance		13,489	1,133,029		13,48
7 Contingency			22,472	3,833	26,30
9 Plugging & Abandonm	ent			•	
	TOTAL INTANGIBLES >	3,235,720	4,938,578	722,167	8,896,4
		DRILLING COSTS	COMPLETION COSTS	PRODUCTION	TOTAL COSTS
TANGIBLE	COSTS		C0313	COSTS	
0 Surface Casing	5	112,477	•	•	\$ 112,47
ol Intermediate Casing old Drilling Liner		316,801	·	-	316,80
3 Production Casing		632,196			632,19
4 Production Liner					
5 Tubing				140,000	140,00
6 Wellhead		59,645		40,000	99,64
7 Packers, Liner Hangers		13,556		20,000	33,55
8 Tanks		-			-
9 Production Vessels				45,833	45,83
'O Flow Lines			-	126,667	126,66
1 Rod string			•	66,667	66,66
2 Artificial Lift Equipmen	16		•	90,000	90,00
3 Compressor		-	-	5,833	5,83
4 Installation Costs		-			
'5 Surface Pumps		<u>·</u>		61,667	61,66
'6 Downhole l'umps 7 Measurement & Meter I	lectalistics			116.669	116,66
8 Gas Conditioning / Deh				116,667	110,00
9 Interconnecting Facility				20,000	20,00
0 Gathering / Bulk Lines					20,00
1 Valves, Dumps, Control	llers		-	108,333	108,33
2 Tank / Facility Contains				43,333	43,33
3 Flare Stack			-	16,667	16,66
4 Electrical / Grounding		•	-	50,000	50,00
5 Communications / SCA		-		36,667	36,66
6 Instrumentation / Safety			•	833	83
	TOTAL TANGIBLES >	1,134,676	0	989,167	2,123,84
	TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,30
PARED BY Permian Re	sources Operating, LLC:				
Drilling Engine	eer: PS				
Completions Engine	er: ML				
Production Engine	er: DC				
in Paramete Orașeli	II C A PROCESA I		·		
ian Resources Operati					
Co-Cl	EO	Co-C	EO	VP - Opera	CRM CRM
VP - Land & Le	gal	VP - Geoscien	ices		Ciuri
	BG		SO		
OPERATING PARTN	JER APPROVAT.				
			Madda - too - too		
Company Nan	ne:		Working Interest (%):	Ta	ix ID:
Signed I	by:		Date:		
ŭ	· ——				
Tit	tle:		Approval:	Yes	No (mark one)

The costs on this ATE are reliables only and may not be construed an entities on any specific term or the total cost of the project, the proportionates share of actual costs incurred, including, legal, creative, regulatory, beducage and well only under the ATE are the order to the regulatory order or other agreement covering this well. Participants shall be covered by and the project order to the complete and the project of the project order or other agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's control and covered by the project order or other agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's control and the project or other agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's control and the project or other agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's control agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's control agreement, regulatory order or other agreement covering this well. Participants also be covered by and billed proportionately for Operator's control agreement, regulatory order or other agreement covering this well. Participants also be controlled by the participant of the proportionately for Operator's controlled by the participants and the participants are controlled by the participants and the participants are controlled by the

		E OF COSTS AND AUTHO			1
DATE:	2.17.2023	1254		AFE NO.: FIELD:	Teas; Bone Spring
WELL NAME:	Joker 5-8 Federal Com	125FI		_	20,571' / 10,286'
LOCATION:	Section 5, T20S-R34E			MD/TVD:_	
COUNTY/STATE:	Lea County, New Mex	ico		LATERAL LENGTH:	10,000'
Permian WI;				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG			COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSC install cost	G well and complete with	144 stages. AFE includes	s drilling, completions, fl	owback and Initial AL
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/ Legal/ Regulatory		\$ 54,351		37,500	\$ 91,851
2 Location, Surveys & Dam	iges	265,083	16,625	2,500	284,208
4 Freight / Transportation	-	43,826	40,284	25,000	109,110
5 Rental - Surface Equipme		114,402	198,221	105,000	417,624
6 Kental - Downhole Equips	ment	189,026 44,244	55,031 50,131		244,057 94,375
7 Kental - Living Quarters 10 Directional Drilling, Sur	vevs	395,255	30,131		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 15 Completion Unit, Swab,		223,875		15,000	223,875
16 Pertorating, Wireline, Si			361,754		361,754
17 High Pressure Pump Tru			113,434		113,434
18 Completion Unit, Swab,	CIU	•	134,791	•	134,791
20 Mud Circulation System		96,811	-	•	96,811
21 Mud Logging		16,130		-	16,130
22 Logging/Formation Eva 23 Mud & Chemicals	uanon	6,690 332,951	7,673 403,207	10,000	14,363 746,158
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		177,689	56,269	•	233,959
30 Kig Supervision / Engine		111,522	122,769	21,667	255,958
32 Drig & Completion Over 35 Labor	nead	9,591 141,116	63,942	101,667	9,591 306,725
54 Proppant		•	1,155,029	101,007	1,155,029
95 Insurance		13,489	•	-	13,489
97 Contingency		•	22,472	3,833	26,305
99 Plugging & Abandonme	nt				
	TOTAL INTANGIBLES	S > 3,235,720	4,938,578	722,167	8,896,46
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE (COSTS	COSTS	COSTS	COSTS	COSTS
0 Surtace Casing		\$ 112,477	•	•	\$ 112,477
61 Intermediate Casing		316,801		•	316,801
62 Drilling Liner		-	-		
63 Production Casing 64 Production Liner		632,196			632,196
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 70 Flow Lines				45,833	45,833
70 Flow Lines 71 Rod string				126,667	126,667
72 Artificial Lift Equipment				90,000	90,000
73 Compressor		.		5,833	5,833
74 Installation Costs		-			•
75 Surtace Pumps			•	61,667	61,667
76 Downhole Pumps	-1-11-41				
77 Measurement & Meter In 78 Gas Conditioning / Dehy				116,667	116,667
79 Interconnecting Facility I				20,000	20,000
50 Gathering / Bulk Lines	-ro	-			
31 Valves, Dumps, Controll	ers	-		108,333	108,333
82 Tank/ Facility Containm	ent		•	43,333	43,333
83 Flare Stack		-		16,66/	16,667
84 Electrical / Grounding	•	•	•	50,000	50,000
85 Communications / SCAD 86 Instrumentation / Satety	A			36,667	36,667
o monumentation, ourery	TOTAL TANGIBLES	5 > 1,134,676		989,167	2,123,84
	TOTAL COSTS		4,938,578	1,711,334	11,020,30
		20.000	1,000,010	2,7.12,003	
PARED BY Permian Res	ources Operating, LLC:				
Drilling Enginee	r: PS				
Completions Enginee	r: ML				
Production Enginee	r. DC				
	g. LLC APPROVAL:				
iian Resources Operatin	O · · · · · · · · · · · ·		TEO	VP. Oner	ations
	n		.EO	VP - Opera	CRM
nian Resources Operatin		C0-C	IW		ÇKN1
Co-CE	WH		•		
	WH	VP - Geoscien	•		
Co-CE	WH		nces		
Co-CE VP - Land & Leg	WH BG		nces		
Co-CE VP - Land & Leg	BG ER APPROVAL:	VP - Geoscien	50 SO		
VP-Land & Leg	WH BG	VP - Geoscien	nces		ax ID:
Co-CE VP - Land & Leg V - Land & Leg V - Coperating Partn Company Nam	BG ER APPROVAL:	VP - Geoscien	SO Working Interest (%):	Ti	ax ID:
Co-CE VP - Land & Leg	BG ER APPROVAL:	VP - Geoscien	50 SO	Т.	ax ID:

	ESTIMATE	OF COSTS AND AUTH	ORIZATION FOR EXPEN	DITURE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	26H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	20,256' / 9,961'
COUNTY/STATE:	Lea County, New Mexic			LATERAL LENGTH:	10,000'
· •	Lea County, New Mexic			_	19.6
Permian WI:	cncc			DRILLING DAYS:	
GEOLOGIC TARGET:	SBSG			COMPLETION DAYS:	18.6
		well and complete with	h 44 stages. AFE include	s drilling, completions, flo	wback and Initial AL
REMARKS:	install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
NITANGEN E	COSTS	COSTS	COSTS	COSTS	COSTS
INTANGIBLE T Land / Legal / Regulatory	CO313	54,351		37,500	\$ 91,851
2 Location, Surveys & Damas	zes	265,083	16,625	2,500	284,208
4 Freight/Transportation	•	43,826	40,284	25,000	109,110
5 Rental - Surtace Equipmen		114,402	198,221	105,000	417,624
6 Rental - Downhole Equipm	nent	189,026	55,031	•	244,057
7 Kental - Living Quarters		44,244 395,255	50,131	•	94,375 395,255
10 Directional Drilling, Surv 11 Drilling	cys	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, C			361,754	15,000	15,000
16 Periorating, Wireline, Slic 17 High Pressure Pump Truc			113,434	 -	361,754 113,434
18 Completion Unit, Swab, C			134,791		134,791
20 Mud Circulation System		96,811	•		96,811
21 Mud Logging		16,130			16,130
22 Logging/Formation Evalu	uation	6,690	7,673	•	14,363
23 Mud & Chemicals 24 Water		332,951	403,207	10,000	746,158
25 Stimulation		39,990	608,810 749,053	250,000	898,800 749,053
26 Stimulation Flowback & L	Disp		111,899	150,000	261,899
28 Mud / Wastewater Dispos		177,689	56,269	•	233,959
30 Rig Supervision / Enginee		111,522	122,769	21,667	255,958
32 Drig & Completion Overh	lead	9,591	-		9,591
35 Labor 54 Proppant		141,116	63,942 1,155,029	101,667	306,725 1,155,029
95 Insurance		13,489	1,133,029		13,489
97 Contingency			22,472	3,833	26,305
99 Plugging & Abandonmen	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			\$ 112,477
61 Intermediate Casing		316,801			316,801
62 Drilling Liner		-	-	•	
63 Production Casing		632,196	•		632,196
64 Production Liner 65 Tubing				- CONTROLL	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		-		45,833	45,833
70 Flow Lines		-		126,667	126,667
71 Rod string 72 Artificial Lift Equipment				90,000	90,000
73 Compressor				5,833	5,833
74 Installation Costs		-			
75 Surtace Pumps		.		61,667	61,667
76 Downhole Pumps			-		
77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd		•	-	116,667	116,667
79 Interconnecting Facility Pi				20,000	20,000
80 Gathering / Bulk Lines					
81 Valves, Dumps, Controller	rs	-	-	108,333	108,333
82 Tank / Facility Containmen	nt	-		43,333	43,333
83 Flare Stack		•		16,667	16,667
84 Electrical / Grounding 85 Communications / SCADA	١			50,000 36,667	36,667
86 Instrumentation / Safety			-	833	833
<u></u>	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					
Drilling Engineer:					
Completions Engineer:					
Production Engineer:	: DC				
mian Resources Operating	, LLC APPROVAL:				
Co-CEO		Co-C		VP - Opera	tions
	WH		JW		CRM
VP - Land & Legal		VP - Geoscien			
	BG		50		
N OPERATING PARTNE	R APPROVAL:				
Company Name:			Working Interest (%):	Ta	c ID:
- ·			_		
Signed by:			Date:		
Title:	•		Approval:	☐ Yes ſ	No (mark one)
	street as critican on our practite them or the letal of			_ _	(mark one)

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	127H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	20,286' / 10,571'
COUNTY/STATE:	Lea County, New Mexic	co		LATERAL LENGTH:	10,000'
Permian WI:	•			DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG			COMPLETION DAYS:	18.6
	Drill a horizontal SBSG	well and complete wi	th 44 stages. AFE includes	drilling, completions, flo	wback and Initial AL
REMARKS:	install cost				
	. —	DRILLING	COMPLETION:	PRODUCTION	TOTAL
INTANCIDI F	COCTC	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS
INTANGIBLE (T Land / Legal / Regulatory	LUSIS	\$ 54,351		37,500	\$ 91,851
2 Location, Surveys & Damas	zes	265,083	16,625	2,500	284,208
4 Freight / Transportation	,	43,826	40,284	25,000	109,110
5 Kental - Surface Equipmen	t	114,402	198,221	105,000	417,624
6 Kental - Downhole Equipm	ient	189,026	55,031		244,057
7 Kental - Living Quarters		44,244	50,131	•	94,375 395,255
10 Directional Drilling, Surve 11 Drilling	eys	395,255 693,647			693,647
12 Drill Bits		92,179		-	92,179
13 Fuel & Power		173,853	667,183	•	841,036
14 Cementing & Fioat Equip		223,875	-	-	223,875
15 Completion Unit, Swab, C		-	7/17/2	15,000	15,000
16 Periorating, Wireline, Slic 17 High Pressure Pump Truc			361,754 113,434		361,754 113,434
18 Completion Unit, Swab, C			134,791		134,791
20 Mud Circulation System		96,811		•	96,811
21 Mud Logging		16,130		•	16,130
22 Logging / Formation Evalu	iation	6,690	7,673		14,363
23 Mud & Chemicals 24 Water		332,951	403,207 608,810	10,000 250,000	746,158 898,800
25 Stimulation		37,770	749,053	230,000	749,053
26 Stimulation Flowback & L	Disp		111,899	150,000	261,899
28 Mud / Wastewater Dispose	al	177,689	56,269	-	233,959
30 Kig Supervision / Enginee		111,522	122,769	21,667	255,958
32 Drig & Completion Overh	ead	9,591	7710	-	9,591
35 Labor 54 Proppant		141,116	63,942 1,155,029	101,66/	1,155,029
95 Insurance		13,489	1,155,027		13,489
97 Contingency			22,A72	3,833	26,305
99 Plugging & Abandonment	t	•		-	-
	TOTAL INTANGIBLES	> 3,235,720	4,938,578	722,167	8,896,465
<u> </u>		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		112,477		•	\$ 112,477
61 Intermediate Casing		316,801			316,801
62 Drilling Liner					
63 Production Casing 64 Production Liner		632,196	•	-	632,196
				140.000	140,000
65 Tubing 66 Wellhead		50.535		140,000	140,000 99,645
65 Tubing		59,645	-	140,000 40,000 20,000	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks		59,645		40,000	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels		59,645 13,536		40,000 20,000 - 45,833	99,645 33,556 45,833
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines		59,645		40,000 20,000 	99,645 33,556 45,833 126,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string		59,645 13,536		40,000 20,000 	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines		59,645 13,536		40,000 20,000 	99,645 33,556 45,833 126,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs		59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000	99,645 33,556 45,833 126,667 66,667 90,000
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps		59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000	99,645 33,556 45,833 126,667 66,667 90,000 5,833
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps	lallakkon	59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins		59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833	99,645 33,556 45,833 126,667 66,667 90,000 5,833
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps	Iration	59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd	Iration	59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667	99,645 33,556 45,833 126,667 66,667 90,000 5,833 - 61,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller	tration ping rs	59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 - 116,667 - 20,000	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containment	tration ping rs	59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 - 20,000 - 108,333 43,333	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containment 83 Flare Stack	tration ping rs	59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 - 20,000 - 108,333 43,333 16,667	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containment	iration ping rs nt	59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 - 20,000 - 108,333 43,333 16,667 50,000	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding	iration ping rs nt	59,645 13,536		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 - 20,000 - 108,333 43,333 16,667	99,645 33,556
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artilicial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA	iration ping rs nt	59,645		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artilicial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA	tration ping rs nt	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833	99,645 33,556 - 45,833 126,667 66,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artilicial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA	tration ping rs nt TOTAL TANGIBLES	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety	ration ping rs nt TOTAL TANGIBLES >	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety	ration ping rs nt TOTAL TANGIBLES >	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	99,645 33,556
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artilicial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA	tration pling rs nt TOTAL TANGIBLES > TOTAL COSTS > cources Operating, LLC:	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank/ Facility Containmen 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety	tration pling rs int TOTAL TANGIBLES > TOTAL COSTS > curces Operating, LLC:	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank/ Facility Containmen 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety EPARED BY Permian Reso	TOTAL TANGIBLES > TOTAL COSTS >	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer	TOTAL TANGIBLES > TOTAL COSTS	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank/ Facility Containmen 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer	TOTAL TANGIBLES > TOTAL COSTS	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmer 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer:	TOTAL TANGIBLES > TOTAL COSTS > DURCES OPERATING, LLC: PS ML DC LLC APPROVAL:	59,645 13,556		40,000 20,000	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer	TOTAL TANGIBLES > TOTAL COSTS > Purces Operating, LLC: PS ML DC LLC APPROVAL:	59,645 13,556		40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer:	TOTAL TANGIBLES > TOTAL COSTS > Ources Operating, LLC: PS ML DC LLC APPROVAL:	59,645 13,556		40,000 20,000	99,645 33,556
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmer 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer:	TOTAL TANGIBLES > TOTAL COSTS > OURCES Operating, LLC: PS ML DC LLC APPROVAL:	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: mian Resources Operating	TOTAL TANGIBLES > TOTAL COSTS > Ources Operating, LLC: PS ML DC LLC APPROVAL:	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: mian Resources Operating	TOTAL TANGIBLES > TOTAL COSTS > OURCES Operating, LLC: PS ML DC LLC APPROVAL:	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: mian Resources Operating	TOTAL TANGIBLES > TOTAL COSTS > OURCES Operating, LLC: PS ML DC LLC APPROVAL:	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank/ Facility Containmen 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer Production Engineer Mian Resources Operating Co-CEO VP - Land & Legal	TOTAL TANGIBLES > TOTAL COSTS > DURCES Operating, LLC: PS ML DC LLC APPROVAL: WH BG	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank/ Facility Containmen 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: Production Engineer: Production Engineer:	TOTAL TANGIBLES > TOTAL COSTS > TOTAL COSTS > PS ML DC LLC APPROVAL: WH BG	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank/ Facility Containmen 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer Production Engineer Mian Resources Operating Co-CEO VP - Land & Legal	TOTAL TANGIBLES > TOTAL COSTS > Durces Operating, LLC: PS ML DC LLC APPROVAL: WH BG	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank/ Facility Containmen 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: Production Engineer: Trainian Resources Operating Co-CEO VP - Land & Legal	TOTAL TANGIBLES > TOTAL COSTS > DURCES Operating, LLC: PS ML DC LLC APPROVAL: WH BG R APPROVAL:	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank/ Facility Containmen 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: Production Engineer: Production Engineer:	TOTAL TANGIBLES > TOTAL COSTS > DURCES Operating, LLC: PS ML DC LLC APPROVAL: WH BG R APPROVAL:	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning/ Dehyd 79 Interconnecting Facility Pi 80 Gathering/ Bulk Lines 81 Valves, Dumps, Controller 82 Tank/ Facility Containmen 83 Flare Stack 84 Electrical/ Grounding 85 Communications/ SCADA 86 Instrumentation/ Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: Production Engineer: Trainian Resources Operating Co-CEO VP - Land & Legal	TOTAL TANGIBLES: TOTAL COSTS: TOTAL COSTS: DURCES Operating, LLC: PS ML DC LLC APPROVAL: WH BG R APPROVAL:	59,645 13,556		40,000 20,000	99,645 33,556 - 45,833 126,667 90,000 5,833 - 61,667 - 20,000 - 108,333 43,333 16,667 50,000 36,667 833 2,123,843 11,020,308

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 (OF COSTS AND AUTHO	DRIZATION FOR EXPENI	JIIUKE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1:	28H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	20,256' / 9,961'
•	Lea County, New Mexic	0		LATERAL LENGTH:	10,000'
Permian WI:	Da county, Iven mone			DRILLING DAYS:	19.6
	SBSG			COMPLETION DAYS:	18.6
		usall and complete with	. 44 stages AEE includes	drilling, completions, flo	
		weii and complete with	1 44 Stages. ArE includes	s arming, completions, no	Woack and miliai AL
REMARKS:	install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTERNICIPI E C	OCTC	COSTS	COSTS	COSTS	COSTS
INTANGIBLE C	0313	54,351		37,500	\$ 91,851
Location, Surveys & Damage	.s	265,083	16,625	2,500	284,208
Freight/Transportation		43,826	40,284	25,000	109,110
Rental - Surface Equipment		114,402	198,221	105,000	417,624
Rental - Downhole Equipme	nt	189,026	55,031		244,057
' Kental - Living Quarters		44,244	50,131	•	94,375
0 Directional Drilling, Survey	7S	395,255	-	•	395,255
1 Drilling		693,647			693,647
2 Drill Bits		92,179	667,183		92,179 841,036
3 Fuel & Power 4 Cementing & Float Equip		173,853 223,875	007,103		223,875
15 Completion Unit, Swab, CI	11	- 223,673	`	15,000	15,000
6 Pertorating, Wireline, Slick			361,754	15,000	361,754
7 High Pressure Pump Truck			113,434		113,434
8 Completion Unit, Swab, CI			134,791		134,791
W Mud Circulation System		96,811			96,811
11 Mud Logging		16,130			16,130
2 Logging / Formation Evalua	tion	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 & Di			111,899	150,000	261,899
28 Mud/Wastewater Disposal		177,689	56,269	-	233,959
80 Rig Supervision/Engineeri		111,522	122,769	21,667	255,958
32 Drig & Completion Overhe	ad	9,591	-	*	9,591
IS Labor		141,116	63,942	101,667	306,725 1,155,029
34 Proppant 95 Insurance		13,489	1,155,029		13,489
37 Contingency		13,407	22,472	3,833	26,305
9 Plugging & Abandonment					-
> 1 1m00-m9 ca 1 10-m1-m0-m1-e-m	TOTAL INTANGIBLES >	3,235,720	4,938,578	722,167	8,896,465
	TOTAL INTANGIBLES				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE CO	STS	COSTS	COSTS	COSTS	COSTS
0 Surface Casing		112,477	•	•	\$ 112,477
il Intermediate Casing		316,801	•	•	316,801
52 Drilling Liner			•	•	•
53 Production Casing		632,196			632,196
4 Production Liner			•	•	•
55 Tubing				140,000	140,000
6 Wellhead		59,645	•	40,000	99,645
57 Packers, Liner Hangers		13,556	•	20,000	33,556
58 Tanks 59 Production Vessels				45,833	45,833
70 Flow Lines				126,667	126,667
71 Kod string				66,667	66,667
2 Artificial Lift Equipment				90,000	90,000
3 Compressor				5,833	5,833
4 Installation Costs					
5 Surface Pumps				61,667	61,667
6 Downhole Pumps			•		•
77 Measurement & Meter Inst	allation	•	•	116,667	116,667
'8 Gas Conditioning/Dehydr	ation		•	•	•
'9 Interconnecting Facility Pip	ing		•	20,000	20,000
O Gathering / Bulk Lines		-	•		•
31 Valves, Dumps, Controllers				108,333	108,333
32 Tank / Facility Containmen	t			43,333	43,333
33 Flare Stack		-	<u> </u>	16,667	16,667
84 Electrical / Grounding				50,000	50,000
35 Communications / SCADA				36,667	36,667
66 Instrumentation / Safety	TOTAL TANCON	9.004/22		833	
	TOTAL TANGIBLES >		0	989,167	2,123,843
	TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,308
PARED BY Permian Resou	rces Operating, LLC:				
Drilling Engineer:	PS				
Completions Engineer:	ML				
Production Engineer:	DC				
	-				
ian Resources Operating,	LLC APPROVAL:				
Co-CEO		Co-C		VP - Opera	
•	WH		JW		CRM
VP - Land & Legal		VP - Geoscier	nces		
٠.	BG		SO		
			·		
OPERATING PARTNER	APPROVAL:				
			141_1-		
Company Name:			Working Interest (%):	Ta	ix ID:
Classed b			Data		
Signed by:			Date:		
Title:			Approval:	Yes	No (mark one)
-					<u></u>
on this AFE are estimates only and may not be country	rurd as ceilings on any specific item or the lotal	cost of the project. Tubing installation appro	oved under the AFE may be delayed up to a ye	or after the well has been completed. In executing	this AFE, the Participant agrees to pay its

The costs on this ATE are retinates only and may not be construed on entitings on any specific tiem or the local cost of the project. Tuking installation approved under the ATE may be drilayed up to a year after the well has been completed. In executing this ATE, the Participant agrees to pay its preportionate share of actual costs incurred, including, legal, curstly, regulatory, problems are under the applicable point or pay alter an extra content of the applicable point or pay and the applicable point or other agreement, ceptableon of the applicable point of the applicable point or other agreement, covering this well. Participants shall be covered by and billed proportionately for Operator's content of the applicable point or other agreement, ceptableon or other agreement, ceptable point or other agreement, ceptableon or other agreement, ceptable point or other agreement, ceptableon or other agreement, ceptable point or other agreement, ceptableon or other agreement

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ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE: WELL NAME: LOCATION:					
	2.17.2023			AFE NO.:	1
I OCATION:	Joker 5-8 Federal Com	131H		FIELD:	Teas; Bone Spring
	Section 5, T20S-R34E			MD/TVD:	21,116' / 10,831'
COUNTY/STATE:	Lea County, New Mex	ico		LATERAL LENGTH:	10,000'
•	bed county, I tell likes			DRILLING DAYS:	19.6
Permian WI:				_	
GEOLOGIC TARGET:	TBSG			COMPLETION DAYS:	18.6
DENA DEC.		Gwell and complete with	h 44 stages. AFE include	s drilling, completions, fl	owback and Initial AL
REMARKS:	install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
T Land/ Legal / Regulatory		\$ 57,069	-	37,500	\$ 94,569
2 Location, Surveys & Damas	ges .	2/8,338	17,456	2,500	298,294
4 Freight/Transportation		46,017	42,298	25,000	113,315
5 Kental - Surface Equipmen	t	120,122	208,133	105,000	433,255
6 Kenial - Downhole Equipm	ent	198,477	57,783	<u> </u>	256,260
7 Kental - Living Quarters		46,457	52,637	-	99,094
10 Directional Drilling, Surv	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	•	883,088
14 Cementing & Float Equip		235,069		-	235,069
15 Completion Unit, Swab, C		-		15,000	15,000
16 Pertorating, Wireline, Slic			379,842	-	379,842
17 High Pressure Pump Truc	k	-	119,106	-	119,106
18 Completion Unit, Swab, C	TU		141,530		141,530
20 Mud Circulation System		101,651		•	101,651
21 Mud Logging		16,936		•	16,936
22 Logging / Formation Evalu	ation	7,024	8,057	<u> </u>	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 & L	Disp	 	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 Over		10,071		-	10,071
35 Labor		148,172	67,140	101,667	316,978
54 Proppant			1,212,780	•	1,212,780
95 Insurance		14,164		•	14,164
97 Contingency		- "	23,595	3,833	27,428
99 Plugging & Abandonmen	ł				-
	TOTAL INTANGIBLES	> 3,397,506	5,185,507	772,167	9,355,180
	TOTAL INTAINGIBLE				
		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		-			-
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				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					
75 Surface Pumps				61,667	61,667
76 Downhole Pumps				01,007	
•	station			11777	116,667
77 Measurement & Meter Ins				116,667	110,007
78 Gas Conditioning / Dehyo					20,000
79 Interconnecting Facility P	hruR		•	20,000	20,000
80 Gathering / Bulk Lines			•	*	
81 Valves, Dumps, Controlle		-	•	108,333	108,333
82 Tank / Facility Containme	nı	•		43,333	43,333
83 Flare Stack		•	•	16,667	16,667
84 Electrical / Grounding				50,000	50,000
	r	.		36,667	36,667
85 Communications / SCADA				833	833
85 Communications / SCADA 86 Instrumentation / Safety		> 1,191,410	· ··		2,180,577
•	TOTAL TANGIBLES	-,-,-,		989,167	
•	TOTAL TANGIBLES TOTAL COSTS		5,185,507	989,167 1,761,334	11,535,757
•					
86 Instrumentation / Safety	TOTAL COSTS				
86 Instrumentation / Safety EPARED BY Permian Rese	TOTAL COSTS				
86 Instrumentation / Safety EPARED BY Permian Rese	TOTAL COSTS purces Operating, LLC: PS				
86 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer	Durces Operating, LLC: PS ML				
86 Instrumentation / Safety EPARED BY Permian Rese	Durces Operating, LLC: PS ML				
B6 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer	Durces Operating, LLC: PS ML DC				
86 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer	TOTAL COSTS purces Operating, LLC: PS ML DC LLC APPROVAL:				
Bé Instrumentation / Safety EPARED BY Permian Rese Drilling Engineer Completions Engineer Production Engineer	TOTAL COSTS purces Operating, LLC: PS ML DC LLC APPROVAL:		5,185,507		11,535,75:
86 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer	TOTAL COSTS purces Operating, LLC: PS ML DC LLC APPROVAL:	> 4,588,916	5,185,507	1,761,334	11,535,75
86 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer	TOTAL COSTS purces Operating, LLC: PS ML DC LLC APPROVAL:	> 4,588,916	5,185,507	1,761,334	11,535,75:
B6 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer mian Resources Operating	TOTAL COSTS purces Operating, LLC: PS ML DC LLC APPROVAL:	> 4,588,916	5,185,507	1,761,334	11,535,75
B6 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer mian Resources Operating	TOTAL COSTS Durces Operating, LLC: PS ML DC LLC APPROVAL: WH	> 4,588,916	5,185,507 CEO	1,761,334	11,535,75
B6 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer mian Resources Operating	TOTAL COSTS Durces Operating, LLC: PS ML DC LLC APPROVAL: WH	> 4,588,916	5,185,507 CEO	1,761,334	11,535,75:
B6 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer mian Resources Operating Co-CEC VP-Land & Lega	TOTAL COSTS Durces Operating, LLC: PS ML DC LLC APPROVAL: WH BG	> 4,588,916	5,185,507 CEO	1,761,334	11,535,75:
B6 Instrumentation / Safety EPARED BY Permian Reserved Drilling Engineer Completions Engineer Production Engineer Production Engineer Production Engineer Co-CEC VP - Land & Legal NO PERATING PARTNE	TOTAL COSTS DURCES Operating, LLC: PS: ML: DC: LC APPROVAL: WH BG R APPROVAL:	> 4,588,916 Co-C VP - Geosciet	5,185,507 CEO	1,761,334 VP - Oper	11,535,75:
B6 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer mian Resources Operating Co-CEC VP-Land & Lega	TOTAL COSTS DURCES Operating, LLC: PS: ML: DC: LC APPROVAL: WH BG R APPROVAL:	> 4,588,916	5,185,507 CEO	1,761,334 VP - Oper	11,535,75:
86 Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer mian Resources Operating Co-CEC VP - Land & Lega	TOTAL COSTS DURCES Operating, LLC: PS ML DC LLC APPROVAL: WH BG R APPROVAL:	> 4,588,916 Co-C VP - Geosciet	5,185,507 CEO	1,761,334 VP - Oper	11,535,75:
Bé Instrumentation / Safety EPARED BY Permian Resc Drilling Engineer Completions Engineer Production Engineer Train Resources Operating Co-CEC VP - Land & Lega ON OPERATING PARTNE	TOTAL COSTS DURCES Operating, LLC: PS ML DC LLC APPROVAL: WH BG R APPROVAL:	> 4,588,916 Co-C VP - Geosciet	5,185,507 CEO	1,761,334 VP - Oper	11,535,75:

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	ESTIMATE	OF COSTS AND AUTHO	DRIZATION FOR EXPEND	DITORE	
DATE:	2.17.2023			AFE NO.:	1
	Joker 5-8 Federal Com 1	221		FIELD:	Teas; Bone Spring
WELL NAME:	<u>·</u>	3211		_	
LOCATION:	Section 5, T20S-R34E			MD/TVD:	21,116' / 10,831'
COUNTY/STATE:	Lea County, New Mexic	20		LATERAL LENGTH:	10,000'
<u>.</u>				DRILLING DAYS:	19.6
Permian WI:					
GEOLOGIC TARGET:	TBSG			COMPLETION DAYS:	18.6
	Drill a horizontal TBSG	well and complete with	h 44 stages. AFE include	s drilling, completions, fl	owback and Initial AL
REMARKS:	install cost			.	
REMARKS:	Itistali Cost				
					
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
I Land/Legal/Regulatory		\$ 57,069	-	37,500	\$ 94,569
2 Location, Surveys & Damas	res.	278,338	17,456	2,500	298,294
4 Freight / Transportation	Bes	46,017	42,298	25,000	113,315
• -				105,000	433,255
5 Rental - Surface Equipmen		120,122	208,133	105,000	
6 Rental - Downhole Equipm	nent	198,477	57,783	<u> </u>	256,260
7 Rental - Living Quarters		46,457	52,637	•	99,094
10 Directional Drilling, Surv	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		883,088
14 Cementing & Float Equip		235,069			235,069
15 Completion Unit, Swab, C				15,000	15,000
			3/9,842		379,842
16 Pertorating, Wireline, Slic				-	
17 High Pressure Pump Truc			119,106		119,106
18 Completion Unit, Swab, C	TU	•	141,530	<u> </u>	141,530
20 Mud Circulation System		101,651	-		101,651
21 Mud Logging		16,936		•	16,936
22 Logging / Formation Evalu	uation	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		41,707	786,506		786,506
	Nen				
26 Stimulation Flowback & L		•	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	read	10,071		-	10,071
35 Labor		148,172	67,140	101,667	316,978
54 Proppant			1,212,780		1,212,780
95 Insurance		14,164	1,212,700		
		14,104	•	•	14,164
97 Contingency		<u> </u>	23,595	3,833	27,428
99 Plugging & Abandonmen	t	-	- -		•
	TOTAL INTANGIBLES:	3,397,506	5,185,507	772,167	9,355,180
					
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE O	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		¥ 118,101			110101
	•			•	\$ 118,101
61 Intermediate Casing		332,642		<u> </u>	332,642
62 Drilling Liner		• "	-	•	•
63 Production Casing		663,806		-	663,806
64 Production Liner		•			
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				126,667	126,667
70 Flow Lines		•	•	66,667	66,667
71 Rod string					
72 Artiticial Litt Equipment				90,000	90,000
73 Compressor					
74 Installation Costs				5,833	5,833
					•
75 Surface Pumps				61,667	61,667
76 Downhole Pumps		-		-	-
77 Measurement & Meter Ins	tallation	•		116,667	116,667
78 Gas Conditioning / Dehyd	Iration	-			
79 Interconnecting Facility Pi		•		20,000	20,000
80 Gathering / Bulk Lines	. •			=3,000	20,000
<u>-</u> -	PG .			100-212	
81 Valves, Dumps, Controller		<u> </u>		108,333	108,333
82 Tank / Facility Containmen				43,333	43,333
83 Flare Stack		-		16,667	16,667
84 Electrical / Grounding			-	50,000	50,000
85 Communications / SCADA	1			36,667	36,667
86 instrumentation / Safety		•		833	833
•	TOTAL TANGIBLES >	1,191,410		989,167	2,180,577
	TOTAL COSTS >	4,588,916	5,185,507	1,761,334	11,535,757
EPARED BY Permian Reso	ources Operating, LLC:				
Drilling Engineer:	: PS				
Completions Engineer.					
Production Engineer:	: DC				
mian Resources Operating	, LLC APPROVAL:				
Co-CEO)	Co-C	FO	VP - Opera	tions
CJ-CEO	WH	20-2		vr - Opera	
			• • • • • • • • • • • • • • • • • • • •		CRM
VP - Land & Legal		VP - Geoscien	ces		
•	BG BG		SO		
· · · · · · · · · · · · · · · · · · ·					
N OPERATING PARTNE	R APPROVAL:				
					
Company Name:			Working Interest (%):	Ta	x ID:
_					
Signed by:			Date:		
			_		
Title:			Approval:	Yes	No (mark one)
to on this AFE are estimates and and more and be seen	strord as ceilings on any specific item or the total	cost of the project. Tables tratelletten as	red under the ATT may be also relocated to	after the self less	the AFF the Bushingers and the State of the

		OF COSTS AND AUT	HORIZATION FOR EXPE		
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	33H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	21,106' / 10,821'
COUNTY/STATE:	Lea County, New Mexic	0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG			COMPLETION DAYS:	18.6
		well and complete w	ith 44 stages. AFE inclu	des drilling, completions, l	flowback and Initial AL
REMARKS:	install cost				
		DRILLING	COMPLETION	PRODUCTION COSTS	TOTAL COSTS
INTANGIBL		COSTS	COSTS		94,569
T Land/ Legal/ Regulatory 2 Location, Surveys & Dan		2/8,338	17,456	37,500 2,500	298,294
4 Freight / Transportation	inges	46,017	42,298	25,000	113,315
5 Kental - Surface Equipm	ent	120,122	208,133	105,000	433,255
6 Rental - Downhole Equi	pment	198,477	57,783		256,260
7 Rental - Living Quarters		46,457	52,637	•	99,094
10 Directional Drilling, Su	rveys	415,018	•	-	415,018
11 Drilling 12 Drill Bits		728,329 96,788			728,329
13 Fuel & Power		182,546	700,542		883,088
14 Cementing & Float Equ	ip	235,069	-		235,069
15 Completion Unit, Swab				15,000	15,000
16 Pertorating, Wireline, S			379,842	-	379,842
17 High Pressure Pump Tr			119,106		119,100
18 Completion Unit, Swab 20 Mud Circulation System		101,651	141,530	•	101,65
21 Mud Logging	•	16,936			16,936
22 Logging / Formation Ev	aluation	7,024	8,057	-	15,081
23 Mud & Chemicals		349,599	423,36/	10,000	782,96
24 Water		41,989	639,251	300,000	981,240
25 Stimulation 26 Stimulation Flowback &	& Dien		786,506 117,494	150,000	786,500 267,494
28 Mud/Wastewater Disp	-	186,574	59,083	- 100,000	245,657
30 Kig Supervision / Engir		117,098	128,908	21,667	267,673
32 Drig & Completion Ove	erhead	10,071	•		10,07
35 Labor		148,172	67,140	101,667	316,970
54 Proppant		- 14161	1,212,780		1,212,780
95 Insurance 97 Contingency		14,164	23,595	3,833	27,420
99 Plugging & Abandonm	ent				
00 0	TOTAL INTANGIBLES >	3,397,506	5,185,507	772,167	9,355,18
-		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	. CO313	118,101			\$ 118,10
61 Intermediate Casing		332,642	-	-	332,642
62 Drilling Liner		-	•		•
63 Production Casing		663,806	•	•	663,806
64 Production Liner			<u> </u>		
65 Tubing 66 Wellhead		62,628	-	40,000	140,000
67 l'ackers, Liner Hangers		14,234		20,000	34,234
68 Tanks			•	45,833	45,833
69 Production Vessels			-	126,667	126,667
70 Flow Lines				66,667	66,667
71 Kod string			•	•	101100
72 Artificial Lift Equipmer 73 Compressor	at		· .	5,833	90,000
74 Installation Costs				3,633	
75 Surface Pumps			•	61,667	61,667
76 Downhole Pumps			•		•
77 Measurement & Meter		-	•	116,66/	116,667
78 Gas Conditioning / Deh	•		•	•	- 201700
79 Interconnecting Facility 80 Gathering / Bulk Lines	riping			20,000	20,000
81 Valves, Dumps, Contro.	llers		 -	108,333	108,333
82 Tank / Facility Contains			-	43,333	43,333
83 Flare Stack				16,667	16,667
84 Electrical / Grounding			-	50,000	50,000
85 Communications / SCA				36,667	36,667
86 Instrumentation / Safety		4 404 440		833	2 190 57
	TOTAL TANGIBLES >		5,185,507	989,167 1,761,334	2,180,57 11,535,75
PARED BY Permian Re	esources Operating, LLC:	***************************************	3,103,307	1,/01,53%	11,555,75
Drilling Engine					
Completions Engine					
Production Engine	eer: DC				
mian Resources Operati	ng. LLC APPROVAL:				
•					
Co-C		Co	-CEO	VP - Ope	
VP - Land & Le	WH	um a	• • •		CRM
VP - Land & Le	BG BG	VP - Geosc	SO		
N OPERATING PART	VER APPROVAL:				
			141	-	Fau ID:
Company Nai	me:		working Interest (%):		Tax ID:
Signed	by:		Date:		
Ti	tle:	<u>_</u>	Approval:	Yes	No (mark one)

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ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE		
2.17.2023	AFE NO.:	1
71 FOR 1 1C 10411	EIEI D.	Tage: Bone

Spring WELL NAME: Joker 5-8 Federal Com 134H Section 5, T20S-R34E 21,106' / 10,821' MD/TVD: LOCATION: Lea County, New Mexico LATERAL LENGTH: 10,000 COUNTY/STATE: DRILLING DAYS: 19.6 Permian WI: COMPLETION DAYS: 18.6 GEOLOGIC TARGET: TBSG

Drill a horizontal TBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL DEMARKS.

DATE:

REMARKS: install cost				
	DRILLING	COMPLETION	PRODUCTION	TOTAL
	COSTS	COSTS	COSTS	COSTS
INTANGIBLE COSTS			37,500	
1 Land / Legal / Regulatory 5	57,069 278,338	17,456	2,500	298,294
2 Location, Surveys & Damages	46,017	42,298	25,000	113,315
4 Freight / Transportation	120,122	208,133	105,000	433,255
5 Rental - Surface Equipment	198,477	57,783		256,260
6 Rental - Downhole Equipment	46,457	52,637		99,094
7 Rental - Living Quarters	415,018	32,037		415,018
10 Directional Drilling, Surveys	728,329			728,329
11 Drilling 12 Drill Bits	96,788			96,788
-	182,546	700,542		883,088
13 Fuel & Power	235,069	700,542		235,069
14 Cementing & Float Equip	200,007		15,000	15,000
15 Completion Unit, Swab, CTU 16 Perforating, Wireline, Slickline		3/9,842	13,500	379,842
•		119,106		119,100
17 High Pressure Pump Truck		141,530		141,530
18 Completion Unit, Swab, CTU 20 Mud Circulation System	101,651	141,050		101,65
· · · · · · · · · · · · · · · · · · ·	16,936			16,936
21 Mud Logging	7,024	8,057		15,08
22 Logging / Formation Evaluation 23 Mud & Chemicals	349,599	423,367	10,000	782,966
24 Water	41,989	639,251	300,000	981,240
25 Stimulation	41,707	786,506	300,000	786,506
26 Stimulation Flowback & Disp		117,494	150,000	267,494
• • • • • • • • • • • • • • • • • • •	186,574	59,083	150,000	245,657
28 Mud/Wastewater Disposal 30 Rig Supervision/Engineering	117,098	128,908	21,667	267,673
32 Drig & Completion Overhead		120,708	21,007	10,07
35 Labor	10,071	67,140	101,667	316,978
	140,172		101,007	1,212,780
54 Proppant 95 Insurance	14,164	1,212,780		14,164
97 Contingency	14,104	23,595	3,833	27,428
99 Plugging & Abandonment		23,393		27,7120
TOTAL INTANGIBLES >	3,397,506	5,185,507	772,167	9,355,18
TOTAL INTANGIBLES				
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing 5	118,101	•	<u> </u>	118,101
61 Intermediate Casing	332,642			
62 Drilling Liner			•	332,642
63 Production Casing	<u>.</u>	-		332,642
	663,806	-		-
64 Production Liner	663,806	-	•	663,806
64 Production Liner 65 Tubing	•	-		663,800
	62,628		•	663,806 140,000 102,628
65 Tubing	•	-	140,000	140,000 102,628 34,234
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks	62,628	-	140,000	140,000 102,628 34,234 45,833
65 Tubing 66 Wellhead 67 Packers, Liner Hangers	62,628 14,234	-	140,000 40,000 20,000	140,000 102,628 34,234 45,833
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks	62,628 14,234	-	- 140,000 40,000 20,000 45,833	663,808 140,000 102,628 34,234 45,833 126,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels	62,628	-	- 140,000 40,000 20,000 45,833 126,667	663,806 140,002 102,628 34,233 45,833 126,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines	62,628 14,234 -		- 140,000 40,000 20,000 45,833 126,667	663,806 140,002 102,628 34,233 45,833 126,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string	62,628 14,234 -		140,000 40,000 20,000 45,833 126,667 66,667	140,000 102,625 34,234 45,833 126,667 66,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment	62,628 14,234 -		140,000 40,000 20,000 45,833 126,667 66,667	140,000 102,625 34,234 45,833 126,667 66,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surtace Pumps	62,628 14,234 -		140,000 40,000 20,000 45,833 126,667 66,667	140,000 102,622 34,234 45,833 126,667 90,000 5,833
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs	62,628 14,234 -		140,000 40,000 20,000 45,833 126,667 66,667	140,000 102,622 34,234 45,833 126,667 90,000 5,833
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surtace Pumps	62,628 14,234 - - - - - - - -		140,000 40,000 20,000 45,833 126,667 66,667	663,808 140,000 102,628 34,234 45,833 126,667 66,667 90,000 5,833
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surtace Pumps 76 Downhole Pumps 77 Measurement & Meter Installation	62,628 14,234 - - - - - - - -		140,000 40,000 20,000 45,833 126,667 66,667 - 90,000 5,833	663,808 140,000 102,628 34,234 45,833 126,667 66,667 90,000 5,833
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artiticial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps	62,628 14,234 - - - - - - - -		140,000 40,000 20,000 45,833 126,667 66,667 - 90,000 5,833	663,800 140,000 102,622 34,234 45,833 126,662 66,665 90,000 5,833
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration	62,628 14,234 - - - - - - - -		140,000 40,000 20,000 45,833 126,667 66,667 90,000 5,833	663,800 140,000 102,622 34,234 45,833 126,662 66,665 90,000 5,833
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines	62,628 14,234 - - - - - - - -		140,000 40,000 20,000 45,833 126,667 66,667 90,000 5,833	663,800 140,000 102,622 34,23 45,83 126,66 66,66 90,000 5,83 - 116,66 - 20,000
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers	- 62,628 14,234 		90,000 116,667 116,667 20,000	663,808
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surtace Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping	- 62,628 14,234 		140,000 40,000 20,000 45,833 126,667 66,667 	663,806 140,000 102,625 34,234 45,833 126,667 66,667 90,000 5,833 - 61,667 116,667
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment	- 62,628 14,234 		140,000 40,000 20,000 45,833 126,667 66,667 - 90,000 5,833 61,667 116,667 - 20,000 - 108,333 43,333	663,806 140,000 102,628 34,234 45,833 126,667 66,667 90,000 5,833 116,667 20,0000 108,333 43,333
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surtace Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack	- 62,628 14,234 		140,000 40,000 20,000 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000	663,806 140,000 102,625 34,234 45,833 126,667 67,667 90,000 5,833 - 61,667 20,000 - 108,333 43,333 16,667
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding	- 62,628 14,234 		140,000 40,000 20,000 45,833 126,667 66,667 90,000 5,833 61,667 20,000 	663,806 140,000 102,628 34,234 45,833 126,667 66,667 90,000 5,833 61,667 116,667 108,333 43,333 16,667 50,000

PREPARED BY Permian Resources Operating, LLC:						
Drilling Engineer:	PS					
Completions Engineer:	ML					
Production Engineer:	DC					

5,185,507

1,761,334

11,535,757

4,588,916

Permian Resources Operating, LLC APPROVAL:							
Co-CEO	Co-CEO	VP - Operations					
WH	JW	CRM					
VP - Land & Legal	VP - Geosciences						
BG	50						

NON OPERATING PARTNER APPROVAL:					
Company Name:	Working Interest (%):	Tax ID:			
Signed by:	Date:				
Title:	Approval:	res No (mark one)			

TOTAL COSTS >

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

ESTIMATE OF	COSTS AND	AUTHORIZ	ATION FOR	R EXPENDITURE
minimize Of	COSISMI			· mar manta dave

DATE:	0.45.0000				
	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	71H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	20,736' / 10,451'
				· ·	
COUNTY/STATE:	Lea County, New Mexic	co		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG			COMPLETION DAYS:	18.6
			h 44 stages AFE include	s drilling, completions, fl	owbook and Initial AI
		wen and complete wit	it 44 Stages. Are include	s arming, completions, m	OWDACK AND HUDAI AL
REMARKS:	install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory	,	\$ 55,739		37,500	\$ 93,239
2 Location, Surveys & Damag	<u>tes</u>	2/1,852	17,050	2,500	291,402
4 Freight/Transportation	•	44,945	41,312	25,000	111,257
5 Kental - Surface Equipment	ł	117,323	203,283	105,000	425,606
6 Kental - Downhole Equipm		193,853	56,437		250,289
7 Kental - Living Quarters		45,374	51,411		96,785
10 Directional Drilling, Surve	evs	405,348			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		229,592			229,592
15 Completion Unit, Swab, C	TU			15,000	15,000
16 Periorating, Wireline, Slic			370,992		370,992
17 High Pressure Pump Truc		-	116,330		116,330
18 Completion Unit, Swab, C			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		41,011	624,356	300,000	965,367
25 Stimulation			768,180		768,180
26 Stimulation Flowback & L	dep		114,757	150,000	264,757
28 Mud / Wastewater Dispos	•	182,227	57,706	130,000	239,933
30 Kig Supervision / Enginee		114,369	125,904	21,667	261,941
32 Drig & Completion Overh		9,836	123,704	21,007	9,836
35 Labor		144,719	65,575	101,667	311,961
			1,184,522	101,007	1,184,522
54 Proppant		12 924	1,104,322		13,834
95 Insurance		13,834	- 17.04		
97 Contingency		-	23,045	3,833	26,878
99 Plugging & Abandonmen			<u>-</u> _		
	TOTAL INTANGIBLES:	> 3,318,344	5,064,685	772,167	9,155,196
		DRILLING	COMPLETION	PRODUCTION	TOTAL
		COSTS	COSTS		COSTS
TANGIBLE C	OSTS		COSIS	COSTS	
60 Surface Casing	•	115,349	-		\$ 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 Weilhead		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 Kod string					
72 Artificial Lilt Equipment				90,000	90,000
73 Compressor				5,833	5,833
74 Installation Costs					
75 Surtace Pumps				61,667	61,667
				01,007	
76 Downhole Pumps	allation			116.667	116.667
76 Downhole Pumps 77 Measurement & Meter Ins				116,667	116,667
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd	ration			-	•
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi	ration			20,000	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines	ration ping			20,000	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller	ration ping S	-		20,000	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen	ration ping S			20,000 - 108,333 43,333	20,000 108,333 43,333
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack	ration ping S			20,000 108,333 43,333 16,667	20,000 108,333 43,333 16,667
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding	ration ping 'S			20,000 - 108,333 43,333 16,667 50,000	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA	ration ping 'S			20,000 	20,000 108,333 43,333 16,667 50,000 36,667
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding	ration ping rs nt			20,000 - 108,333 43,333 16,667 50,000 36,667 833	20,000 108,333 43,333 16,667 50,000 36,667 833
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA	ration ping 'S	1,163,650		20,000 	20,000 108,333 43,333 16,667 50,000 36,667
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA	ration ping rs nt		- - - - - - - - - 0 5,064,685	20,000 - 108,333 43,333 16,667 50,000 36,667 833	20,000 108,333 43,333 16,667 50,000 36,667 833
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA	ration ping s nt TOTAL TANGIBLES > TOTAL COSTS >			20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso	ration ping s nt TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC:			20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer	ration ping TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC:			20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso	ration ping TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC:			20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer	ration ping TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML			20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer	ration ping TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML			20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer	ration ping TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC			20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer	ration ping TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC			20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer:	TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC , LLC APPROVAL:	• 4,481,994	5,064,685	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817 11,308,013
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer	TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC , LLC APPROVAL:		5,064,685	20,000 - 108,333 43,333 16,667 50,000 36,667 833 989,167	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: maian Resources Operating	TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC , LLC APPROVAL:	• 4,481,994 Co-C	5,064,685	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000 108,333 43,333 16,667 50,000 36,667 833 2,152,817 11,308,013
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer:	TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC , LLC APPROVAL:	• 4,481,994	5,064,685 CEO	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: maian Resources Operating	TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC , LLC APPROVAL:	• 4,481,994 Co-C	5,064,685	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: maian Resources Operating	TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC , LLC APPROVAL:	• 4,481,994 Co-C	5,064,685 CEO	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: maian Resources Operating	TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC , LLC APPROVAL:	• 4,481,994 Co-C	5,064,685 CEO	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: maian Resources Operating	TOTAL TANGIBLES > TOTAL COSTS > urces Operating, LLC: PS ML DC , LLC APPROVAL:	• 4,481,994 Co-C	5,064,685 CEO	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer Production Engineer To Completions Co-CEO VP - Land & Legal	ration ping S nt TOTAL TANGIBLES > TOTAL COSTS > Urces Operating, LLC: PS ML DC , LLC APPROVAL: WH BG	• 4,481,994 Co-C	5,064,685 CEO	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer Production Engineer To Completions Co-CEO VP - Land & Legal	ration ping S nt TOTAL TANGIBLES > TOTAL COSTS > Urces Operating, LLC: PS ML DC , LLC APPROVAL: WH BG	• 4,481,994 Co-C	5,064,685 CEO	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer Completions Engineer Production Engineer Production Engineer To Completions Co-CEO VP - Land & Legal	TOTAL TANGIBLES > TOTAL COSTS > TOTAL COSTS > Urces Operating, LLC: PS ML DC , LLC APPROVAL: WH BG	• 4,481,994 Co-C VP - Geoscier	5,064,685 EEO	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: Production Engineer: O-CEO VP - Land & Legal	TOTAL TANGIBLES > TOTAL COSTS > TOTAL COSTS > Urces Operating, LLC: PS ML DC , LLC APPROVAL: WH BG	• 4,481,994 Co-C VP - Geoscier	5,064,685 CEO	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: Production Engineer: O-CEO VP - Land & Legal	TOTAL TANGIBLES > TOTAL COSTS > UITCES Operating, LLC: PS ML DC , LLC APPROVAL: WH BG R APPROVAL:	• 4,481,994 Co-C VP - Geoscier	5,064,685 EEO	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: Production Engineer: Truian Resources Operating Co-CEO VP - Land & Legal ON OPERATING PARTNE	TOTAL TANGIBLES > TOTAL COSTS > UITCES Operating, LLC: PS ML DC , LLC APPROVAL: WH BG R APPROVAL:	• 4,481,994 Co-C VP - Geoscier	5,064,685 TW nces SO Working Interest (%):	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000
76 Downhole Pumps 77 Measurement & Meter Ins 78 Gas Conditioning / Dehyd 79 Interconnecting Facility Pi 80 Gathering / Bulk Lines 81 Valves, Dumps, Controller 82 Tank / Facility Containmen 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety EPARED BY Permian Reso Drilling Engineer: Completions Engineer: Production Engineer: Production Engineer: Truian Resources Operating Co-CEO VP - Land & Legal ON OPERATING PARTNE	TOTAL TANGIBLES > TOTAL COSTS > TOTAL COSTS > Urces Operating, LLC: PS ML DC , LLC APPROVAL: WH BG R APPROVAL:	• 4,481,994 Co-C VP - Geoscier	5,064,685 TW nces SO Working Interest (%):	20,000 108,333 43,333 16,667 50,000 36,667 833 989,167 1,761,334	20,000

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ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023			AFE NO.:	1
	Joker 5-8 Federal Com 1	771		FIELD:	Teas; Bone Spring
WELL NAME:				_	20,731' / 10,446'
LOCATION:	Section 5, T20S-R34E			MD/TVD:	
COUNTY/STATE:	Lea County, New Mexic	<u></u>		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 wit	h 44 stages. AFE includes	drilling, completions, fl	owback and Initial AL
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
T Land / Legal / Regulatory	•	\$ 55,739	•	37,500	\$ 93,239
2 Location, Surveys & Dama	ges	271,852	17,050	2,500	291,402
4 Freight / Transportation		44,945	41,312	25,000	111,257
5 Rental - Surface Equipmen		117,323	203,283	105,000	425,606
6 Rental - Downhole Equipm	nent	193,853	56,437	•	250,289
7 Rental - Living Quarters		45,374	51,411	-	96,785 405,348
10 Directional Drilling, Surv	eys	405,348 711,359		-	711,359
11 Orilling 12 Orill 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 Pertorating, Wireline, Slice	kline:	-	370,992	•	370,992
17 High Pressure Pump Truc	k		116,330	•	116,330
18 Completion Unit, Swab, C	.TU	-	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	1111000	14,729
23 Mud & Chemicals 24 Water		341,453	413,503 624,356	300,000	764,956 965,367
24 Water 25 Stimulation		41,011	768,180	300,000	768,180
26 Stimulation Flowback & I	Disp		114,757	150,000	264,757
28 Mud/Wastewater Dispos	•	182,227	57,706	150,000	239,933
30 Rig Supervision / Engine		114,369	125,904	21,667	261,941
32 Drig & Completion Over		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	t		•		-
	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	.0313	5 115,349			\$ 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		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 Kod string 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		-			
77 Measurement & Meter Ins	stallation	-	-	116,667	116,667
78 Gas Conditioning / Dehye	tration			•	-
79 Interconnecting Facility P	iping	-		20,000	20,000
80 Gathering / Bulk Lines				•	
81 Valves, Dumps, Controlle			-	108,333	108,333
82 Tank / Facility Containme 83 Fiare Stack	m		-	43,333	43,333
84 Electrical/Grounding		<u>-</u>		16,667	16,667
85 Communications / SCAD	Λ.			36,667	36,667
86 Instrumentation / Safety	-			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///	3,004,003	1,701,554	11,300,013
EPARED BY Permian Res	ources Operating, LLC:				
D					
Drilling Engineer					
Completions Engineer					
Production Engineer	: DC				
rmian Resources Operating	z, LLC APPROVAL:				
					
Co-CEC		Co-C	CEO	VP - Opera	tions
	WH		JW	-	CRM
VP - Land & Lega		VP - Geoscies	nces		
	BG		50		
ON OPERATING PARTNE	R APPROVAL:				
ON OPERATING PARTNE			Working Interest (%)	т-	ıv ID:
ON OPERATING PARTNE			Working Interest (%):	Ta	x ID:
_	:		Working Interest (%):	Ta	ix ID:
Company Name Signed by	:		Date:		
Company Name	:			Ta	No (mark one)

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	ESTIMATE OF	COSTS AND AUTHO	DRIZATION FOR EXPENI		
DATE: 2.17.2023	3			AFE NO.:	1
WELL NAME: Joker 5-8	Federal Com 1731	1		FIELD:	Teas; Bone Spring
LOCATION: Section 5	, T20S-R34E			MD/TVD:	20,721' / 10,436'
COUNTY/STATE: Lea Cour	nty, New Mexico			LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET: TBSG				COMPLETION DAYS:	18.6
Drill a ho	orizontal TBSG we	ll and complete with	44 stages. AFE include	s drilling, completions, flo	owback and Initial AL
REMARKS: install co		•	•	•	
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS		COSTS	COSTS	COSTS	COSTS
T Land / Legal / Regulatory	\$_	55,739		37,500	\$ 93,239
2 Location, Surveys & Damages	_	2/1,852 44,945	17,050 41,312	2,500 25,000	291,402
4 Freight/Transportation 5 Kental - Surface Equipment	_	117,323	203,283	105,000	425,606
6 Kental - Downhole Equipment		193,853	56,437		250,289
7 Kental - Living Quarters	_	45,374	51,411		96,785
10 Directional Drilling, Surveys	_	405,348			405,348
11 Drilling 12 Drill Bits	_	711,359 94,533	•		711,359 94,533
13 Fuel & Power	_	178,292	684,220		862,512
14 Cementing & Float Equip		229,592		-	229,592
15 Completion Unit, Swab, CTU	_	-	•	15,000	15,000
16 Periorating, Wireline, Slickline	_	-	370,992	•	370,992
17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU	_		116,330 138,232	<u> </u>	138,232
20 Mud Circulation System	-	99,283	- 130,232		99,283
21 Mud Logging	_	16,542			16,542
22 Logging / Formation Evaluation		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
26 Stimulation Flowback & Disp	-		114,757	150,000	264,757
28 Mud/Wastewater Disposal	-	182,227	57,706	•	239,933
30 Rig Supervision / Engineering	_	114,369	125,904	21,667	261,941
32 Drig & Completion Overhead 35 Labor	_	9,836	65 575	100 467	9,836 311,961
54 Proppant	_	144,719	65,575 1,184,522	101,667	1,184,522
95 Insurance	_	13,834			13,834
97 Contingency	_	•	23,045	3,833	26,878
99 Plugging & Abandonment		-		-	•
TOTAL	INTANGIBLES >	3,318,344	5,064,685	772,167	9,155,196
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS		COSTS	COSTS	COSTS	COSTS
60 Surface Casing	5_	115,349			\$ 115,349
61 Intermediate Casing 62 Drilling Liner	_	324,891			324,891
63 Production Casing	_	648,340			648,340
64 Production Liner	_	-		-	
65 Tubing	<u></u>	•		140,000	140,000
66 Wellhead	_	61,169		40,000	101,169
67 Packers, Liner Hangers 68 Tanks		13,902		20,000 45,833	33,902 45,833
69 Production Vessels	_			126,667	126,667
70 Flow Lines	_	-		66,667	66,667
71 Kod string		•			-
72 Artificial Lift Equipment	_	•		90,000	90,000
73 Compressor 74 Installation Costs	_			5,833	5,833
75 Surface Pumps	_			61,66/	61,667
76 Downhole Pumps	_	•	-		
77 Measurement & Meter Installation	_	•	•	116,667	116,667
78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping	_		•	20,000	20,000
80 Gathering / Bulk Lines	_	-		20,000	20,000
81 Valves, Dumps, Controllers	_			108,333	108,333
82 Tank / Facility Containment	_		-	43,333	43,333
83 Flare Stack	_		-	16,667	16,667
84 Electrical / Grounding 85 Communications / SCADA	_			36,667	36,667
86 Instrumentation / Safety	_	-		833	833
ТОТА	L TANGIBLES >	1,163,650	0	989,167	2,152,817
7	TOTAL COSTS >	4,481,994	5,064,685	1,761,334	11,308,013
EPARED BY Permian Resources Ope	erating, LLC:				
Drilling Engineer: P					
Completions Engineer: M					
Production Engineer: De	C				
mian Resources Operating, LLC API	PROVAL:				
Co-CEO	н	Co-C	EO	VP - Opera	CRM
VP - Land & Legal	••	VP - Geoscien	•		CRM
BC	3	vi - Geoscien	50		
N OPERATING PARTNER APPRO	VAL:				
Company Name:			Working Interest (%):	Ta	x ID:
Signed by:			Date:		
Title:			Approval:	Yes	No (mark one)

The costs on this AFE are estimates only and may not be construed an exiliage on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participants agrees to pay to proportionate above of actual costs incurred, including, legal, curality, regulatory, beckenage and well costs under the terms of the applicable joint operating agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's we construed and participants underso under participant provides Operator a certificate evidencing in sown immurance in an amount acceptable to the Operator by the data of spool.

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ESTIMATE OF COSTS AND	AUTHORIZATION FOR	EXPENDITURE
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DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 1	74H		FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E			MD/TVD:	20,701' / 10,416'
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 IIIIGEII		well and complete wit	h 44 stages. AFE include	es drilling, completions, f	lowback and Initial AL
REMARKS:	install cost	wen and complete with			
<u> </u>		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/ Legal/ Regulatory		55,739		37,500	\$ 93,239
2 Location, Surveys & Dama	ges	2/1,852	17,050	2,500	291,402
4 Freight / Transportation		44,945	41,312 203,283	25,000 105,000	111,25/ 425,606
5 Kental - Suriace Equipmen 6 Kental - Downhole Equipn		117,323	56,437	105,000	250,289
7 Kental - Living Quarters	icat	45,374	51,411		96,785
10 Directional Drilling, Surv	eys	405,348	-	-	405,348
11 Drilling		711,359	-		711,359
12 Drill Bits		94,533	•	•	94,533 862,512
13 Fuel & Power 14 Cementing & Float Equip		178,292	684,220		229,592
15 Completion Unit, Swab, C	าาบ	-		15,000	15,000
16 Perforating, Wireline, Slice			370,992		370,992
17 High Pressure Pump Truc		•	116,330	•	116,330
18 Completion Unit, Swab, C		-	138,232	•	138,232
20 Mud Circulation System		99,283	•		99,283
21 Mud Logging		16,542			16,542
22 Logging / Formation Evaluation	ation	6,860	7,869	- 10,000	764,956
23 Mud & Chemicals 24 Water		341,453	413,503 624,356	10,000	965,367
25 Stimulation		41,011	768,180		768,180
26 Stimulation Flowback & I	Disp	-	114,757	150,000	264,/5/
28 Mud/Wastewater Dispos		182,227	57,706	•	239,933
30 Rig Supervision / Enginee	ring	114,369	125,904	21,667	261,941
32 Drig & Completion Over	lead	9,836	-	•	9,836
35 Labor		144,719	65,5/5	101,667	311,961
54 Proppant 95 Insurance		13,834	1,184,522		1,184,522
97 Contingency		13,004	23,045	3,833	26,878
99 Plugging & Abandonmen	t		-		
50 5	TOTAL INTANGIBLES	> 3,318,344	5,064,685	772,167	9,155,19
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OCTC	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	0313	\$ 115,349			\$ 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 68 Tanks		13,902		20,000 45,833	33,902 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 75 Surface Pumps				61,667	61,667
76 Downhole Pumps				01,007	01,007
77 Measurement & Meter In	tallation			116,667	116.667
78 Gas Conditioning / Dehy	Iration		-	•	•
79 Interconnecting Facility P	iping	-	•	20,000	20,000
80 Gathering / Bulk Lines					
81 Valves, Dumps, Controlle		•	•	108,333	108,333
82 Tank / Facility Containme	πι	•		43,333	43,333
83 Flare Stack 84 Electrical / Grounding				16,667	16,667
85 Communications / SCAD	\	•		36,667	50,000 36,667
86 Instrumentation / Satety				833	833
, ,	TOTAL TANGIBLES	> 1,163,650		989,167	2,152,81
	TOTAL COSTS >		5,064,685	1,761,334	11,308,01
				2,702,001	
PARED BY Permian Reso	ources Operating, LLC:				
Drilling Engineer	: PS				
Completions Engineer					
Production Engineer					
<u>-</u>					
nian Resources Operating	, LLC APPROVAL:		···		
Co-CEC		Co-l	CEO	VP - Oper	ations
	WH		JW		CRM
VP - Land & Lega	BG	VP - Geoscie	nces		
LODED ATING DARWIN	R APPROVAL:				
OPERATING PARTNE					ax ID:
Company Name	·		Working Interest (%):	1	ax 10.
		···	Working Interest (%): Date:	1	ax ID.
Company Name					

ESTIMATE OF COSTS AND	ATTUODIZATION FOR	EXPENDITIBE
ESTIMATE OF COSTS AND	MOTHORIZATIONTON	MI DIADII OND

DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 2	01H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 5, T20S-R34E			MD/TVD:	21,211' / 10,926'
COUNTY/STATE:	Lea County, New Mexic	:0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	19
	Drill a horizontal WCXY	well and complete w	ith 44 stages. AFE include:	s drilling, completions, i	lowback and Initial
REMARKS:	AL install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
		DRILLING COSTS	CONFLETION	COSTS	COSTS
INTANGIBLE	COSTS	5 59,066		37,500	\$ 96,566
T Land / Legal / Regulatory 2 Location, Surveys & Dama	ges	288,079	18,067	2,500	308,647
4 Freight/Transportation	6-5	47,628	43,778	25,000	116,406
5 Kental - Surtace Equipmer	nt	124,327	215,417	105,000	444,744
6 Kental - Downhole Equipr	nent	205,424	59,805		265,229
7 Kental - Living Quarters		48,083	54,480		429,543
10 Directional Drilling, Surv 11 Drilling	reys	753,820			753,820
12 Drill Bits		100,176		•	100,176
13 Fuel & Power		188,935	725,061		913,996
14 Cementing & Float Equip		243,296	<u> </u>	-	243,296
15 Completion Unit, Swab, (16 Pertorating, Wireline, Sile			393,136	15,000	393,136
17 High Pressure Pump True			123,274		123,274
18 Completion Unit, Swab,			146,484	-	146,484
20 Mud Circulation System		105,209		-	105,209
21 Mud Logging		17,529			17,529
22 Logging/Formation Eval	uation	361,835	8,339 438,185	10,000	15,609 810,020
23 Mud & Chemicals 24 Water		43,459	661,625	300,000	1,005,083
25 Stimulation		10/10/	814,033		814,033
26 Stimulation Flowback &	Disp		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	2/6,283
32 Drig & Completion Over: 35 Labor	neau	153,358	69,489	101,667	324,514
54 Proppant			1,255,227	•	1,255,227
95 Insurance		14,660	· ·	•	14,660
97 Contingency			24,421	3,833	28,254
99 Plugging & Abandonmer					
	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			\$ 122,234
61 Intermediate Casing 62 Drilling Liner		344,284		-	344,284
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 l'ackers, Liner Hangers 68 Tanks		14,732	·	20,000	45,833
69 Production Vessels			 -	45,833 126,667	126,667
70 Flow Lines			-	66,667	66,667
71 Kod string		-	•		
72 Artificial Lift Equipment			<u> </u>	90,000	90,000
73 Compressor 74 Installation Costs			<u> </u>	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		•	<u> </u>		
79 Interconnecting Facility F 80 Gathering / Bulk Lines	iping			20,000	20,000
81 Valves, Dumps, Controlle	ers			108,333	108,333
82 Tank / Facility Containme				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			36,667 833	36,667
or more ameniation / outely	TOTAL TANGIBLES	1,233,109		989,167	2,222,276
	TOTAL COSTS >		5,367,000	1,761,334	11,877,862
	TOTAL COSTS	- 4,140,020	3,707,000	1,701,034	11,077,002
REPARED BY Permian Res	ources Operating, LLC:				
Drilling Enginee	r: PS				
Completions Enginee					
Production Enginee					
Trouvellon Englice					
rmian Resources Operatin	g. I.I.C APPROVAL:				
- Operating	b) EBC ATT NOTAE.				
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	WH		JW	•	CRM
VP - Land & Lega	d	VP - Geoscie	nces		
	BG		50		
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ON OPERATING PARTNI	K APPKOVAL:				
Company Name	2:		Working Interest (%):	Ta	ax ID:
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Signed by	r:		Date:		
Title	·		Approval:] Yes	No (mark one)
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roots on this AFE are estimates only and may not be co	owerens as critings on any specific strue or the total al, curstive, regulatory, brokerage and well costs us	cost of the project. Tubing installation app raise the terms of the applicable joint operal	woved under the AFE may be delayed up to a year o ting agreement, regulatory order or other agreement	iter the well has been completed. In executing I covering this well. Participants shall be cover	this AFE, the Participant agrees to pay its ed by and billed proportionalely for Operator's well

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

		0. 600.0.0.0.0.0.0	TORIZATION TORIZATEN		
DATE:	2.17.2023			AFE NO.: _	1
WELL NAME:	Joker 5-8 Federal Com 2	:02H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 5, T20S-R34E			MD/TVD:	21,211' / 10,926'
COUNTY/STATE:	Lea County, New Mexic	:0		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
	THEORY			-	19
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	
	Drill a horizontal WCX	Y well and complete v	vith 44 stages. AFE includ	des drilling, completions,	flowback and Initial
REMARKS:	AL install cost				
	<u> </u>				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
TLand/Legal/Regulatory		59,066		37,500	\$ 96,566
2 Location, Surveys & Dama	zes	288,079	18,067	2,500	308,647
4 Freight/Transportation		47,628	43,778	25,000	116,406
5 Rental - Surface Equipmen	t	124,327	215,417	105,000	444,744
6 Kental - Downhole Equipm	ent	205,424	59,805	-	265,229
7 Rental - Living Quarters		48,083	54,480	-	102,562
10 Directional Drilling, Surv	eys	429,543		-	429,543
11 Drilling		753,820	-	-	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	วาบ	-		15,000	15,000
16 Pertorating, Wireline, Slice	kline		393,136	•	393,136
17 High Pressure Pump Truc	k		123,274	-	123,274
18 Completion Unit, Swab, C	วาบ		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 & I	Disp		121,606	150,000	2/1,606
28 Mud/Wastewater Dispos	-	193,104	61,151		254,254
30 Kig Supervision / Enginee		121,196	133,420	21,667	2/6,283
32 Drig & Completion Overh	•	10,423	•	-	10,423
35 Labor		153,358	69,489	101,667	324,514
54 Proppant		-	1,255,227		1,255,227
95 Insurance		14,660		-	14,660
97 Contingency			24,421	3,833	28,254
99 Plugging & Abandonmen	t	-			
30 0	TOTAL INTANGIBLES:	> 3,516,419	5,367,000	772,167	9,655,585
	101111111111111111111111111111111111111				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing		5 122,234	-	•	\$ 122,234
61 Intermediate Casing		344,284			344,284
62 Drilling Liner		-		•	
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				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				•	-
75 Surtace Pumps				61,667	61,667
76 Downhole Pumps					
77 Measurement & Meter Ins	italiation		-	116,667	116,667
78 Gas Conditioning / Dehyo					-
79 Interconnecting Facility P.			-	20,000	20,000
80 Gathering / Bulk Lines					-
81 Valves, Dumps, Controlle	rs			108,333	108,333
82 Tank / Facility Containme			-	43,333	43,333
83 Flare Stack				16,667	16,667
84 Electrical / Grounding				50,000	50,000
85 Communications / SCAD	١.			36,667	36,667
86 Instrumentation / Safety				833	833
,,	TOTAL TANGIBLES:	> 1,233,109		989,167	2,222,276
	TOTAL COSTS :		5,367,000	1,761,334	11,877,862
C	TOTAL COSTS	4,743,326	5,307,000	1,/01,334	11,077,002
EPARED BY Permian Reso	ources Operating, LLC:				
Drilling Engineer	: PS				
Completions Engineer					
Production Engineer					
-roducion Engineer					
	. II C APPROVI				
rmian Resources Operating	z, LLC APPKOVAL:				
Co-CEC		Co	-CEO	VP - Oper	
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OF OFERALING PAKINE	AFFRUVAL:				
Company Name	:		Working Interest (%):	Т	ax ID:
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Signed by	:		Date:		
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		I and of the number of Technical Institution on		ner after the well has been completed. In execution	or this AEE the Restrictional services to many the

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

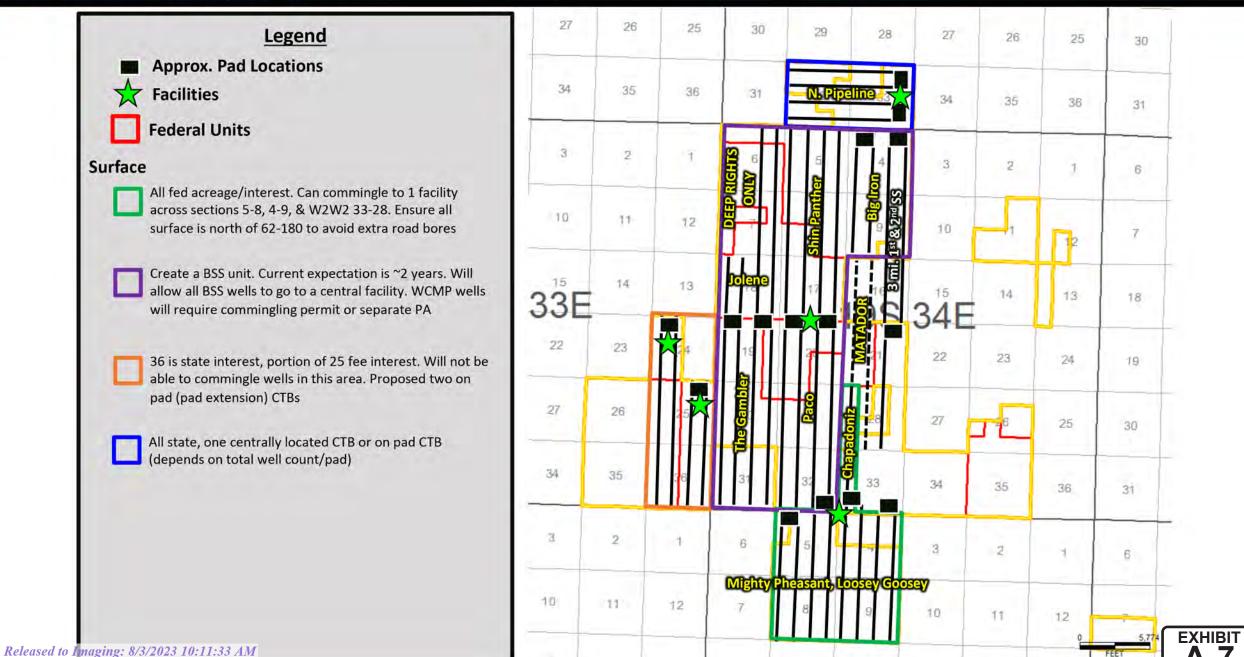
ESTIMATE OF COSTS A	ND AUTHORIZAT	ION FOR EXPENDITU	JRE
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	ESTIMATE	OF COSTS AND AUTH	IORIZATION FOR EXPEND	DITURE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 2	203H		FIELD:	Tonto; Wolfcamp
		-			21,191' / 10,906'
LOCATION:	Section 5, T20S-R34E			MD/TVD:	
COUNTY/STATE:	Lea County, New Mexic	co		LATERAL LENGTH:	10,000'
Permian WI:				DRILLING DAYS:	19.6
				_	19
GEOLOGIC TARGET:	WCXY			COMPLETION DAYS:	
	Drill a horizontal WCX	Y well and complete w	rith 44 stages. AFE include	es drilling, completions, f	lowback and Initial
REMARKS:	AL install cost	-	_		
		DRILLING	COMPLETION	PRODUCTION	TOTAL
		COSTS	COSTS	COSTS	COSTS
INTANGIBLE	COSTS				
T Land/ Legal/ Regulatory		59,066		37,500	\$ 96,566
2 Location, Surveys & Damag	jes	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 Kental - Downhole Equipm	ent	205,424	59,805	•	265,229
7 Kental - Living Quarters		48,083	54,480		102,562
10 Directional Drilling, Surve	eys .	429,543			429,543
11 Drilling		753,820			753,820
12 Drill Bits		100,176	-	-	100,176
13 Fuet & Power		188,935	725,061	•	913,996
14 Cementing & Float Equip		243,296		-	243,296
15 Completion Unit, Swab, C	าบ	-	-	15,000	15,000
16 Pertorating, Wireline, Slic			393,136		393,136
17 High Pressure Pump Truc			123,274		123,274
18 Completion Unit, Swab, C			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
23 Mud & Chemicals 24 Water		43,459	661,625	300,000	1,005,083
		43,439	814,033	300,000	814,033
25 Stimulation	Nen			1677 1071	
26 Stimulation Flowback & L	-	-	121,606	150,000	271,606
28 Mud/Wastewater Dispose		193,104	61,151	•	254,254
30 Rig Supervision / Enginee		121,196	133,420	21,667	276,283
32 Drlg & Completion Overh	ead	10,423	-		10,423
35 Labor		153,358	69,489	101,667	324,514
54 Proppant		•	1,255,227		1,255,227
95 Insurance		14,660		•	14,660
97 Contingency			24,421	3,833	28,254
99 Plugging & Abandonment	1	•			
00 0	TOTAL INTANGIBLES	> 3,516,419	5,367,000	772,167	9,655,585
	TOTAL BATANGIBLES	- 3,310,413	3,367,000	772,107	9,033,383
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	3313	5 122,234			\$ 122,234
61 Intermediate Casing				-	
9		344,284			344,284
62 Drilling Liner			-	<u> </u>	<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				45,833	45,833
69 Production Vessels				126,667	126,667
70 Flow Lines				66,667	66,667
71 Rod string					
72 Artiticial Litt Equipment				90,000	90,000
73 Compressor					5,833
74 Installation Costs				5,833	
		•	<u>-</u> _	<u> </u>	<u> </u>
75 Surface Pumps				61,667	61,667
76 Downhole Pumps					-
77 Measurement & Meter Ins		-	•	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		-	-	108,333	108,333
82 Tank / Facility Containment	nt	-		43,333	43,333
83 Flare Stack				16,667	16,667
84 Electrical / Grounding		•	•	50,000	50,000
85 Communications / SCADA		-		36,667	36,667
86 Instrumentation / Safety		-		833	833
•	TOTAL TANGIBLES	1,233,109		989,167	2,222,276
	TOTAL COSTS :				
	101AL COSIS	4,749,528	5,367,000	1,761,334	11,877,862
EPARED BY Permian Reso	urces Operating, LLC:				
Drilling Engineer:	PS				
Completions Engineer:					
Production Engineer:	DC				
rmian Resources Operating	, LLC APPROVAL:				
Co-CEO		Carl	CEO	VP O	tions
CU-CEO	WH	C0-4	- IW	VP - Opera	
1m 114.			***		CRM
VP • Land & Legal		VP - Geoscie			
	BG		SO		
N OPERATING PARTNE	ADDDOUAL.				
IN OPERATING PARTNE	APPKUVAL:				
C			141-4.1 1		
Company Name:			Working Interest (%):	Ta	x ID:
anta a ·			<u>-</u>		
Signed by:			Date:		
·					_
Title:			Approval:	Yes	No (mark one)
ots on this AFE are estimates only and may not be com-	trued so crilings on any specific item or the total	cost of the project. Tubing installation are	coved under the AFE may be delayed up to a veer	after the well has been consoleted. In execution t	his AFE, the Participant agrees to pay its
			· · · · · · · · · · · · · · · · · · ·		,

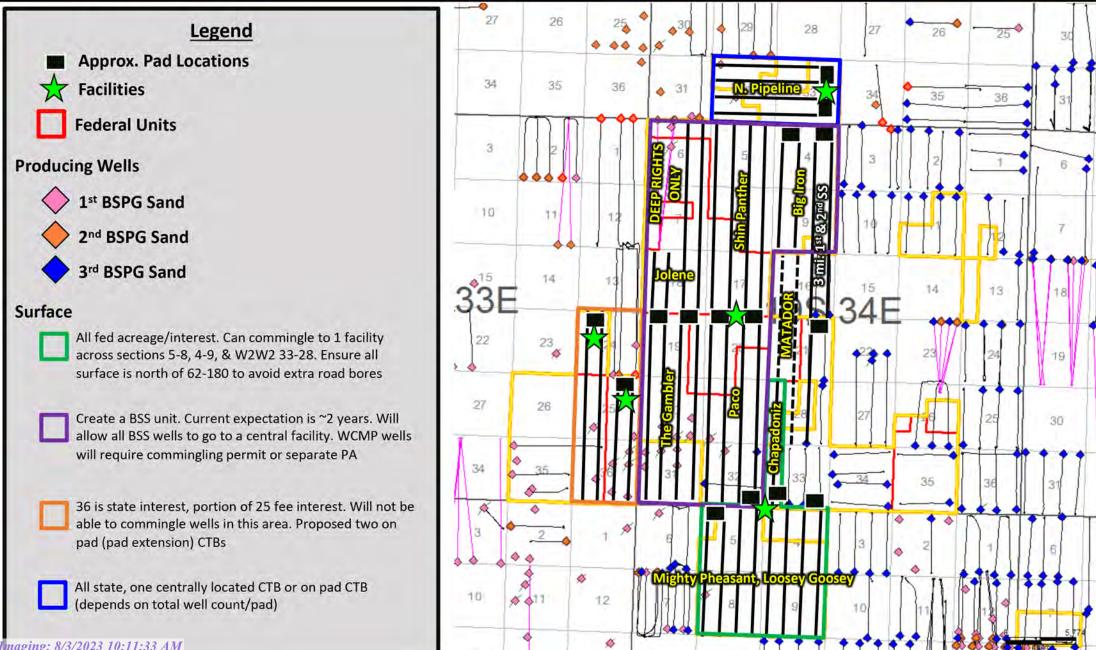
	ESTIMATE	OF COSTS AND AUT	HORIZATION FOR EXPEN	DITURE	
DATE:	2.17.2023			AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 2	04H		FIELD:	Tonto; Wolfcamp
LOCATION:	Section 5, T20S-R34E			MD/TVD:	21,181' / 10,896'
	Lea County, New Mexic			LATERAL LENGTH:	10,000'
COUNTY/STATE:	Lea County, New Mexic			DRILLING DAYS:	19.6
Permian WI:	WCXY			_	19
GEOLOGIC TARGET:		<u> </u>		COMPLETION DAYS:	
mm 4 + 94/0		well and complete v	vith 44 stages. ArE includ	les drilling, completions, i	nowback and initial
REMARKS:	AL install cost				
		DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE	COSTS	COSTS	COSTS	COSTS	COSTS
T Land / Legal / Regulatory	- 3	59,066		37,500	\$ 96,566
2 Location, Surveys & Dama	ges	288,079	18,067	2,500	308,647
4 Freight / Transportation		47,628	43,778	25,000	116,406
5 Kental - Surface Equipmen 6 Kental - Downhole Equipn		124,327 205,424	215,417 59,805	105,000	444,744 265,229
7 Kental - Living Quarters	nent	48,083	54,480		102,562
10 Directional Drilling, Surv	eys	429,543		•	429,543
11 Drilling		753,820		-	753,820
12 Drill Bits		100,176	725,061		913,996
13 Fuel & Power 14 Cementing & Float Equip		188,935	723,001		243,296
15 Completion Unit, Swab, C				15,000	15,000
16 Pertorating, Wireline, Slice	:kline		393,136		393,136
17 High Pressure Pump Truc			123,274		123,274
18 Completion Unit, Swab, C 20 Mud Circulation System	210	105,209	146,484	<u> </u>	146,484
21 Mud Logging		17,529	·····		17,529
22 Logging / Formation Eval	uation	7,2/0	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 26 Stimulation Flowback & I)isp		814,033	150,000	814,033 2/1,606
28 Mud/Wastewater Dispos	-	193,104	61,151	130,000	254,254
30 Rig Supervision / Enginee	ering	121,196	133,420	21,667	276,283
32 Drig & Completion Over	nead	10,423		-	10,423
35 Labor 54 Proppant		153,358	1,255,227	101,667	324,514 1,255,227
95 Insurance		14,660			14,660
97 Contingency			24,421	3,833	28,254
99 Plugging & Abandonmen			•		
	TOTAL INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585
		DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE C	OSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	5	122,234	<u> </u>	<u> </u>	\$ 122,234
61 Intermediate Casing		344,284		•	344,284
62 Drilling Liner 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 68 Tanks		14,732	<u> </u>	20,000 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 74 Installation Costs			.	5,833	5,833
75 Surface Pumps				61,667	61,667
76 Downhole Pumps		-	-	-	-
77 Measurement & Meter Ins				116,667	116,667
78 Gas Conditioning / Dehyo 79 Interconnecting Facility P			<u> </u>	20,000	20,000
80 Gathering / Bulk Lines	rhm.R			20,000	20,000
81 Valves, Dumps, Controlle	rs			108,333	108,333
82 Tank / Facility Containme	ent		•	43,333	43,333
83 Flare Stack			•	16,667	50,000
84 Electrical / Grounding 85 Communications / SCAD	A			50,000 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
					·
EPARED BY Permian Rese	ources Operating, LLC:				
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Drilling Engineer	r: PS				
Completions Engineer	:: ML				
Production Engineer	r. DC				
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mian Resources Operating	g, LLC APPROVAL:	- <u></u> -			
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VP - Land & Lega	****	VP - Geosci	•••		
samu a sego	BG	00050	SO		
N OPERATING PARTNE	R APPROVAL:				
Company Name	·		Working Interest (%):	T.	ax ID:
Company realite	··-		orning interest (10);		
Signed by	:		Date:		
Title			Approval:	Yes	No (mark one)
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Development Layout



Development Layout



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Lea County Well Count by Company, Formation, and Spud

Operator	BONE SPRING	WOLFCAMP	Grand Total
Cimarex Total	57	47	104
2018	19	7	26
2019	9	6	15
2020	2	7	9
2021	10	17	27
2022	12		12
2023	5	10	15

Cimarex has Spud 104 wells since 2018

- We are an established operator in Lea county.
 - 79 x 2 miles
 - 25 x 1 miles due to available length
- The Cimarex well blend is evenly distributed between Wolfcamp and Bone Spring and we have devoted considerable time and effort the study of appropriate Wolfcamp development.
- Our staggers over the last 4 years range from ~200 ft to ~500ft dependent on geology as we have worked to minimize vertical interference in our developments within the county and maximize capital efficiency.
- We have provided performance metrics for Lea County for the top 15 operators to allay any concerns over Cimarex's ability do deliver great wells on slides 8 and 9 comparing everyone's average 1st 12 months for BOE and Oil / 1000 ft.

Summary:

Single battery where possible

- Limits emissions and disturbance
- Lowest Infrastructure cost
- Improved marketing deals oil, water ,gas

Timing:

- Contested operatorship and dissolving federal unit have slowed development of this large position
- Mighty Pheasant and Loosey Goosey complexity increased by Reed and Stevens spudding 1-mile wells in 2020
- Rig schedule is 6 to 11 wells per year dependent on pricing with activity pausing during LPC season.
- We have bid out the aggregate development for Oil, Water, and Gas takeaway to 12 companies and benefit from economies of scale with limited connection points and substantial inventory.

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Received by OCD: 8/2/2023 8:28:00 PM

FILED IN MY OFFICE DISTRICT COURT OF THE 2/22/2017 9:55:24 AM KATIE ESPINOZA Janet Bloomer

STATE OF NEW MEXICO COUNTY OF CHAVES FIFTH JUDICIAL DISTRICT

READ & STEVENS, INC.,

Plaintiff,

٧.

Case No. D-504-CV-2014-00358

CIMAREX ENERGY CO., and MAGNUM HUNTER PRODUCTION INC.,

Defendants.

ORDER ON MOTION FOR PARTIAL SUMMARY JUDGMENT

THIS MATTER came before the Court on the Motion for Partial Summary Judgment filed on September 22, 2015 by Plaintiff Read & Stevens, Inc. The Court has reviewed the pleadings and exhibits thereto filed by the parties and heard argument of counsel for the parties at hearing on November 19, 2015.

Plaintiff's Motion sought two rulings. First, plaintiff requested a ruling that Defendants are not the operator of the Contract Area under the applicable Operating Agreement of August 1, 1979. The Court FINDS that there are no genuine issues of material fact regarding this issue. Plaintiff is entitled to judgment as a matter of law that Cimarex and Magnum Hunter are not currently and have not in the past been operators of the contract area as defined by the 1979 Operating Agreement.

Plaintiff also sought a ruling that Magnum Hunter has no viable right to serve as an operator under the 1979 Operating Agreement. The Court FINDS that Magnum Hunter may have a theoretical right in the future to become an operator pursuant to the

EXHIBIT A-8

provisions of paragraph V.B of the 1979 Operating Agreement. Consequently, Plaintiff is not entitled to judgment as a matter of law on this issue.

IT IS THEREFORE ORDERED that Plaintiff's Motion for Partial Summary judgment holding that Magnum Hunter and Cimarex are not currently and have not in the past been operators as defined by the 1979 Operating Agreement is GRANTED. Plaintiff's Motion for Partial Summary Judgment holding that Magnum Hunter has no viable right to serve as operator under the 1979 Operating Agreement is DENIED.

The Honorable Freddie J. Romero District Court Judge

Submitted by:

GALLEGOS LAW FIRM, P.C.

/s/ J.E. Gallegos

J.E. GALLEGOS MICHAEL J. CONDON 460 St. Michael's Drive, Bldg. 300 Santa Fe, New Mexico 87505 (505) 983-6686

CARSON RYAN, LLC Joel M. Carson III Elizabeth A. Ryan P.O. Box 1612 Roswell, New Mexico 88201 (575) 291-7606

Attorneys for Read & Stevens, Inc.

Approved as to form by:

MONTGOMERY & ANDREWS, P.A.

Email Approval 12/14/15
SCOTT HALL
SHARON SHAHEEN
Post Office Box 2307
Santa Fe, New Mexico 87504

Attorneys for Defendants

Using Coterra 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%	27.03%	

	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
% for CTRA	61.93%	61.94%	61.49%	61.50%	

26.97%

28.92%

26.98%

A-9

28.90%

Rel				Rec
Release				?eivec
otal Permian Development Cost	Net Cost Per WIO	Total Coterra Development Cost	Net Cost Per WIO	Difference between Developments
elmar Hudson Trust		Delmar Hudson Trust	\$ 9,876,838.20	\$ 8,212,994.57
indys Living Trust			\$ 15,737,845.12	
avelina Partners		Control Contro	\$ 22,324,341.03	90
orro Partners	\$ 28,105,608.88	Zorro Partners	\$ 14,763,299.18	No.
sephine Hudson Trust	\$ 5,421,906.00	Josephine Hudson Trust	\$ 2,890,835.22	
Ard Oil	\$ 14,654,016.11	The second secon	\$ 7,868,922.49	
Noore and Shelton	\$ 12,917,179.04	Moore and Shelton	\$ 6,876,219.27	\$ 6,040,959.77
OG Partnership LP		HOG Partnership LP	\$ 15,655,402.13	
ead and Stevens	\$ 130,419,826.77	Read and Stevens	\$ 67,260,556.01	
First Century Oil	\$ 29,866,998.32	First Century Oil	\$ 15,056,029.91	
Foran Oil Co.	\$ 10,316,095.71	Foran Oil Co.	\$ 5,681,103.05	
Chase Oil Co.	\$ 7,038,561.43	Chase Oil Co.	\$ 3,876,155.67	
Union Hill	\$ 3,374,058.47	Union Hill	\$ 1,682,281.67	
Magnum Hunter	\$ 99,757,303.82	Magnum Hunter	\$ 55,226,946.45	
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		Challenger Crude	\$ 5,621,612.32	\$ 5,201,287.21
MRC Permian		MRC Permian	\$ 1,514,460.94	\$ 2,592,693.89
Northern Oil and Gas		Mar and Albania and Albania and Albania	\$ 1,045,418.83	
CBR Oil Prop	\$ 1,521,121.47	CBR Oil Prop	\$ 560,899.00	
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.			\$ 168,220.28	
Carolyn Beall	\$ 337,390.03	Carolyn Beall	\$ 168,220.28	
Tierra Encantada	\$ 337,390.03	Tierra Encantada	\$ 168,220.28	
David Luna	\$ 337,390.03	David Luna	\$ 168,220.28	
Warren Associates	\$ 59,381.89	Warren Associates	\$ -	\$ 59,381.89
Marks Oil	\$ 2,561,792.75	Marks Oil	\$ 1,099,625.19	
Prime Rock	\$ 5,212,791.56		\$ 3,154,214.30	
Wilbanks Reserve		Wilbanks Reserve	\$ 5,841,723.33	
Avalon Energy Corp.			\$ 1,051,547.61	
<u>- : </u>	\$ 539,893,326.89		\$ 283,253,951.43	
				Total Cost Delta Between Developments

EXHIBIT A-10

TAB 3

Case Nos. 23448-23451

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 rd bone Spring Isopach Map
Exhibit B-7:	Structural Cross Section
Exhibit B-8:	3 rd Bone Spring Producers vs. all Wolfcamp Producers
Exhibit B-9:	All 3 rd Bone Spring and Wolfcamp Producers
Exhibit B-10:	Comparing 3 rd Sand to Wolfcamp Reservoir (SoPhiH)
Exhibit B-11:	2 nd Bone Spring Structure Map
	2 nd Bone Spring Sand Isopach
Exhibit B-13:	2 nd Bone Spring Sand Cross Section
	2 nd Bone Spring Sand vs. 3 rd Bone Spring Carbonate Producers
Exhibit B-15:	PhilH L 2 nd Sand vs. 3 rd Carbonate
Exhibit B-16:	1 st Bone Spring Sand Structure
Exhibit B-17:	1 st Bone Spring Sand Isopach
Exhibit B-18:	1 st Bone Spring Structural Cross Section
Exhibit B-19:	Wolfcamp Structure Map (Subsea TVD)
Exhibit B-20:	Wolfcamp XY Isopach
Exhibit B-21:	Wolfcamp XY West to East Cross Section
Exhibit B-22:	3D Seismic Outline
Exhibit B-23:	Cross Section Across 3 rd 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 3rd Bone Spring Sand starting in 2010 through 2022. In most of the 3rd 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 3rd 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 3rd Bone Spring Sand development (tier 1 target in area) plus a 1st Sand or 2nd 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 1st, 2nd, and 3rd Bone Spring Sands at 4 wells per section spacing. The 1st Sand target is the high porosity, clean sand in the upper half of the interval. The 2nd Sand target is the basal siltstone/sandstone interval, and the 3rd 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 2nd Bone Spring Sand, the 3rd Carbonate, and the Wolfcamp XY Sands. This is a risky development scenario, because the 3rd 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 3rd 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 3rd Sand with 4 wells per section. Permian Resources' 3rd Carbonate target is approximately 135 ft vertical distance from their proposed Lower 2nd Sand target, which is also very tight vertical spacing when there is no frac baffle in between (no tight carbonates). The Lower 2nd Sand is the established target across several townships, while there has only been one well

landed in the 3rd Carbonate (with no 2nd Sand above). The Upper 2nd 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 3rd 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 3rd 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 3rd 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 3rd 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 3rd 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 3rd 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.

- 13. **Exhibit B-8** is showing a map with all the producing 3rd 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 3rd 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 3rd 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 3rd Sand wells. There are a couple of Wolfcamp development tests two miles to the south, but the majority of Wolfcamp and 3rd Sand co-development occurs 3 townships to the south, where the total 3rd 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 3rd 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 3rd 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 3rd 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 3rd 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 3rd Sand reservoir that the four 3rd Sand wells would already be targeting.

- 16. **Exhibit B-11** is a structure map (Subsea TVD) of the top of the 3rd Bone Spring Carbonate, which is about 40 ft below the 2nd 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 2nd 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 2nd 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 2nd 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 2nd Bone Spring Carbonate and in the middle of the 2nd 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 2nd Sand, plus the vertical distance of approximately 400 ft, indicate that there may be another target within the Upper 2nd 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 3rd Sand wells.

19. **Exhibit B-14** is showing a map with all the producing Lower 2nd Bone Spring Sand wells across almost nine townships (left), versus all of the 3rd Bone Spring Carbonate producers across the area (right). This Exhibit highlights the fact that the Lower 2nd 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 3rd Carbonate, with no 2nd Sand development above.

- 20. **Exhibit B-15** shows the PhiH (porosity*height) of the 2nd Bone Spring Sand (left) versus the 3rd 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 2nd Sand, based on the closest control points, is 30 pore-ft. While the average PhiH within the 3rd Carbonate is 20 pore-ft, which means that the 2nd Sand is at least 60% of the total reservoir, while the 3rd Carbonate is 40% of the total reservoir. However, because there are no frac baffles separating the 2nd Sand and 3rd Carbonate, and because the two Permian Resource targets would have about 135 ft of vertical separation, their 3rd Carbonate wells would drain a significant portion of the 2nd Sand reservoir that the four 2nd Sand wells would already be targeting.
- 21. **Exhibit B-16** is a structure map (Subsea TVD) of the top of the 1st Bone Spring Sand, which is about 40 ft above the 1st 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 1st 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 1st

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 3rd 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 3rd 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 3rd 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 3rd 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 3rd Bone Spring Sand.

NO FRAC BAFFLE BETWEEN WOLFCAMP AND 3RD 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 3rd 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 3rd 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 3rd Bone Spring Sand and Upper Wolfcamp Sands, where 0% means there is no frac baffle separating the two formations. Almost all 3rd 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 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





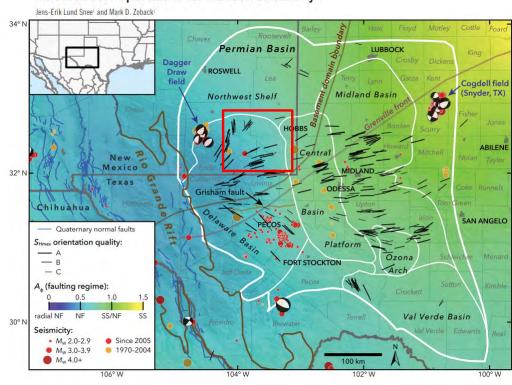
Locator Map & Stress Direction

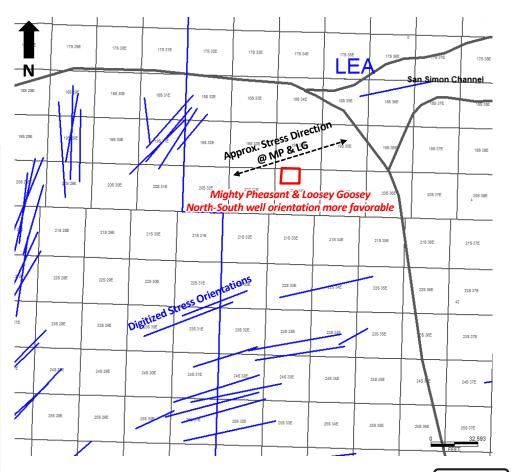
Coterra plans to develop Sections 4-9 and 5-8 with 2-mile laterals

- 1. 8 Lower 3rd Bone Spring Sand
- 2. 8 2nd 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





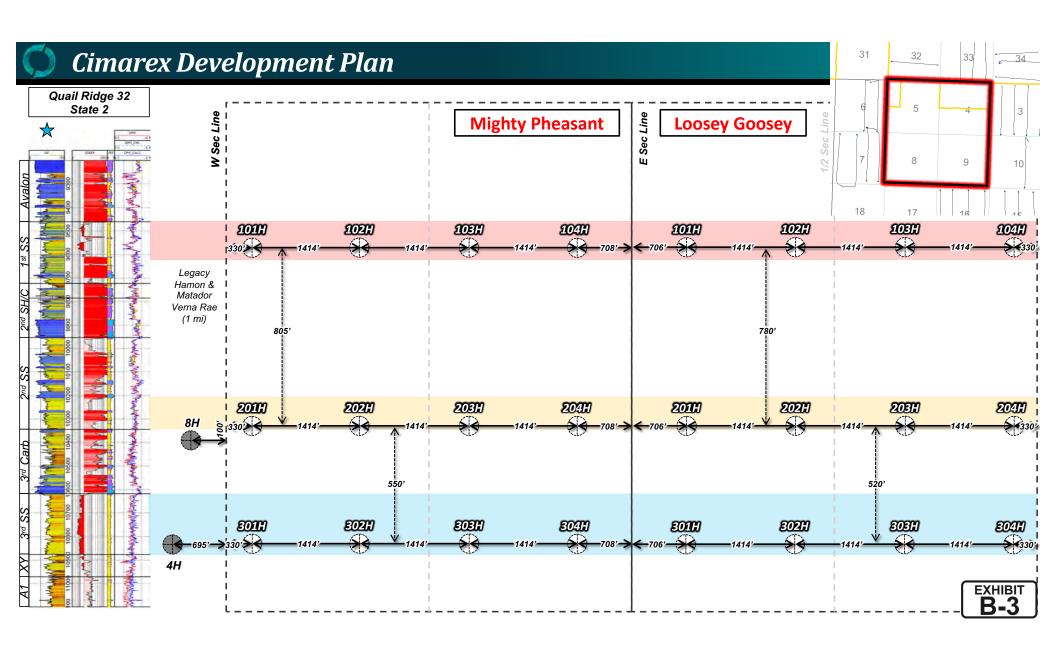


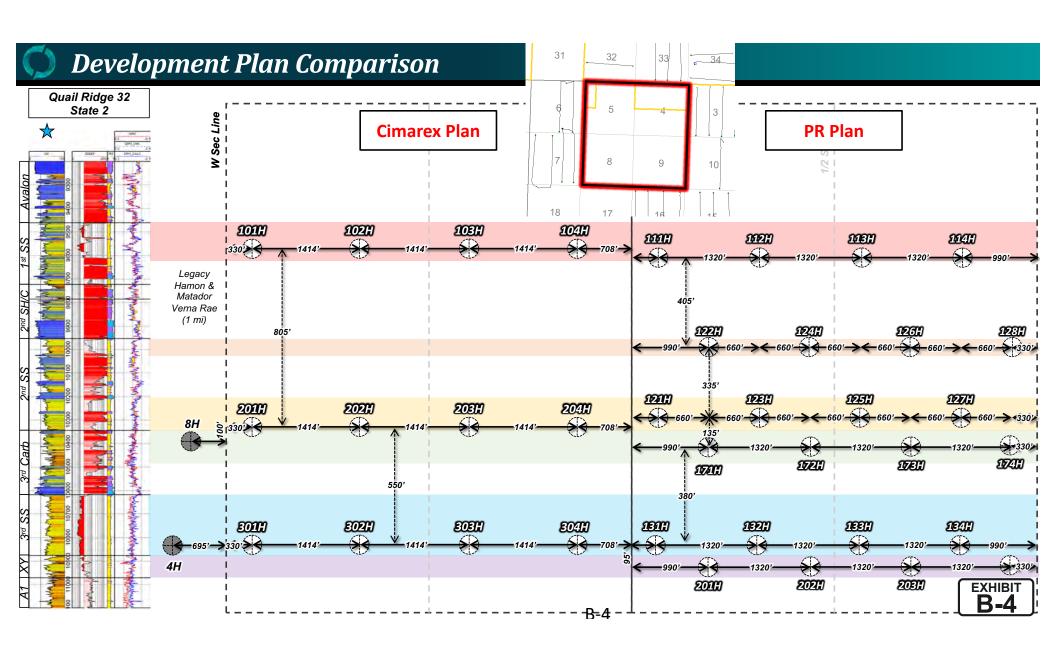


Permit Status

	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
	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				
	NM	Lea	Loosey Goosey 4-9 Fed Com 102H	To be permitted				
	NM	Lea	Loosey Goosey 4-9 Fed Com 103H	To be permitted				
	NM	Lea	Loosey Goosey 4-9 Fed Com 104H	To be permitted				
	NM	Lea	Loosey Goosey 4-9 Fed Com 201H	To be permitted				
	NM	Lea	Loosey Goosey 4-9 Fed Com 202H	To be permitted				
	NM	Lea	Loosey Goosey 4-9 Fed Com 203H	To be permitted				
$\left\{ \right.$	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		
	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		

Submitted permits for 3rd Sand development & 1st Sand/2nd Sand test BLM is currently working on these





3rd Bone Spring Sand



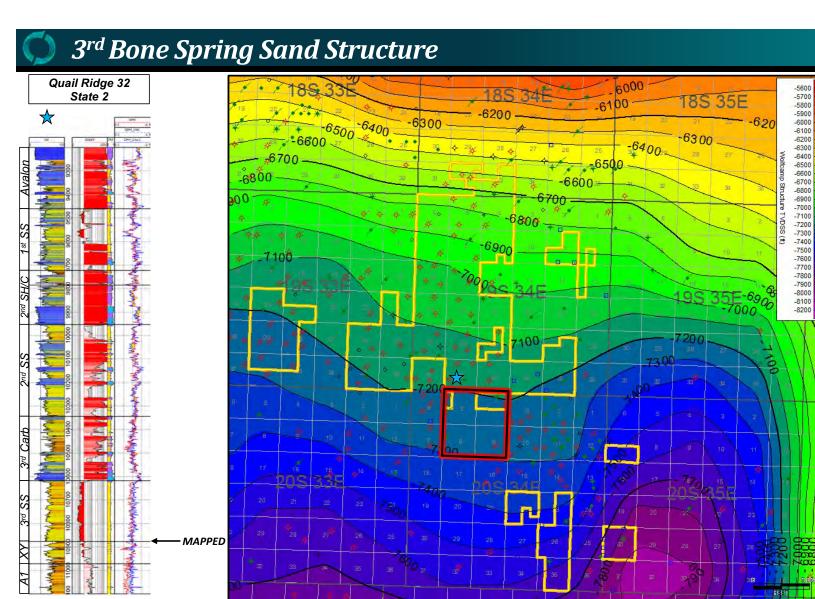
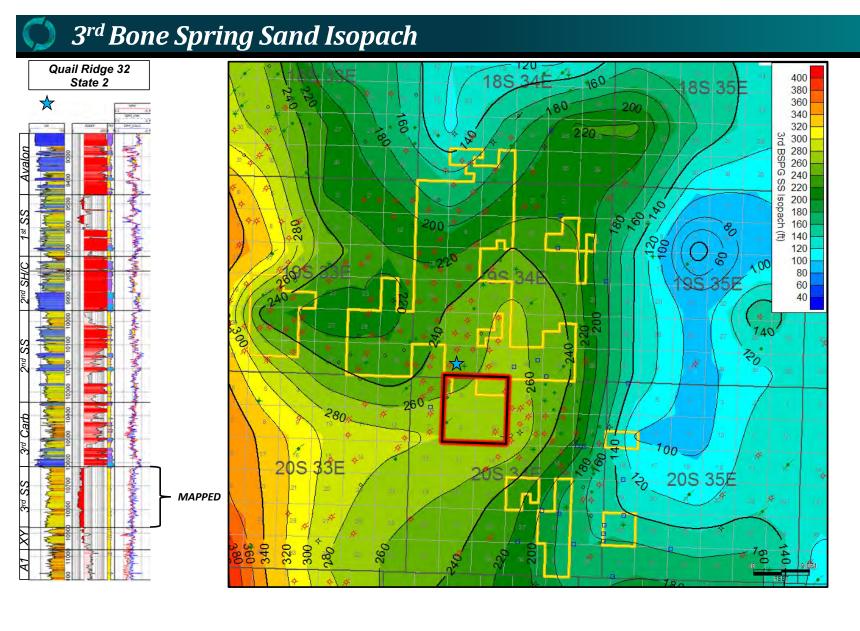
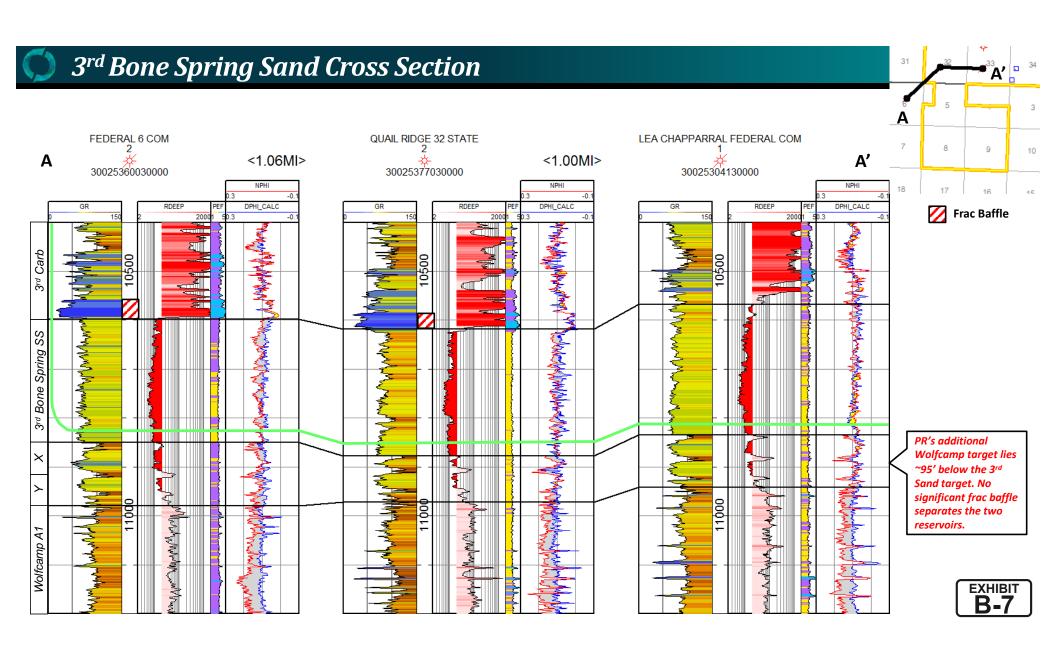


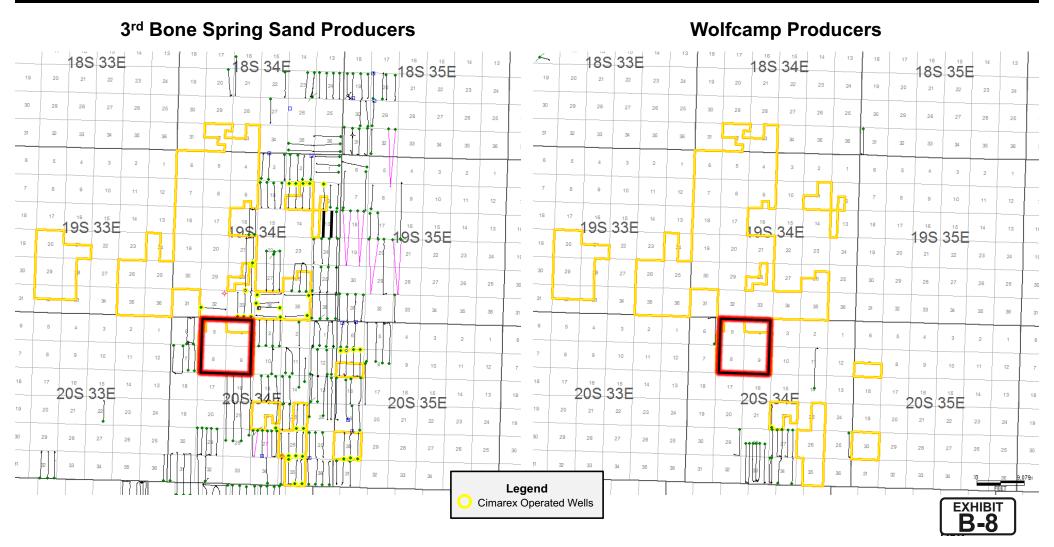
EXHIBIT **B-5**





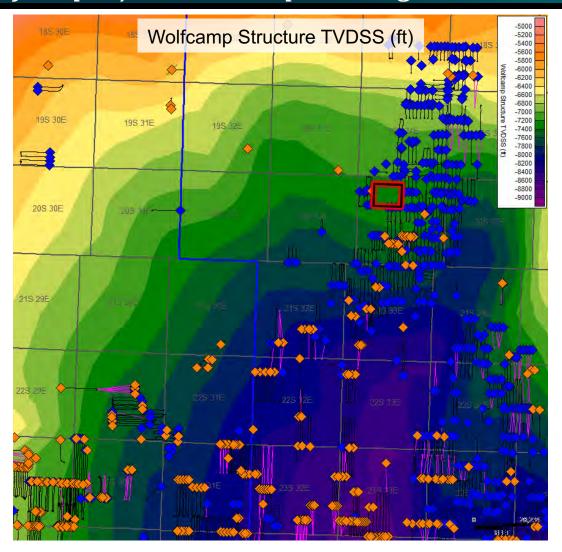


3rd Bone Spring Sand is Established Target



O

Co-Wolfcamp SS/3rd SS Development Begins Further South

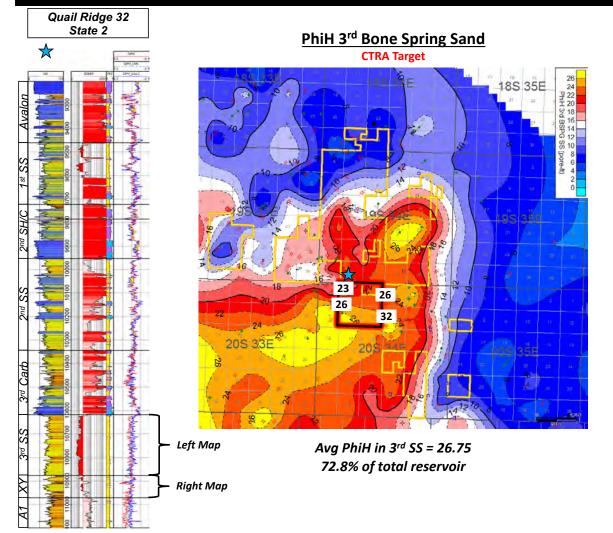




Wolfcamp Sands

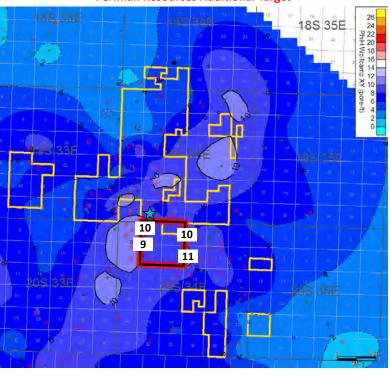
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Comparing 3rd Sand to Wolfcamp Reservoir (SoPhiH)



PhiH Wolfcamp X & Y Sands

Permian Resources Additional Target



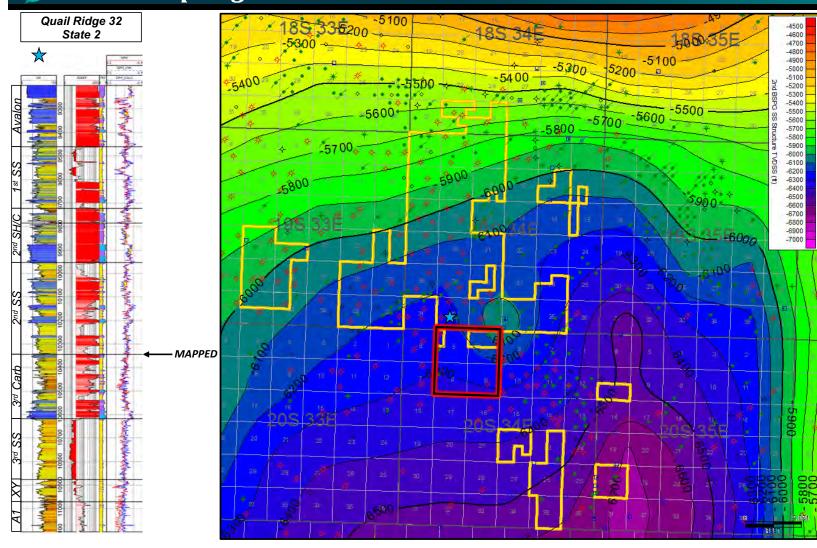
Avg PhiH in WFMP XY = 10 27.2% of total reservoir

2nd Bone Spring Sand

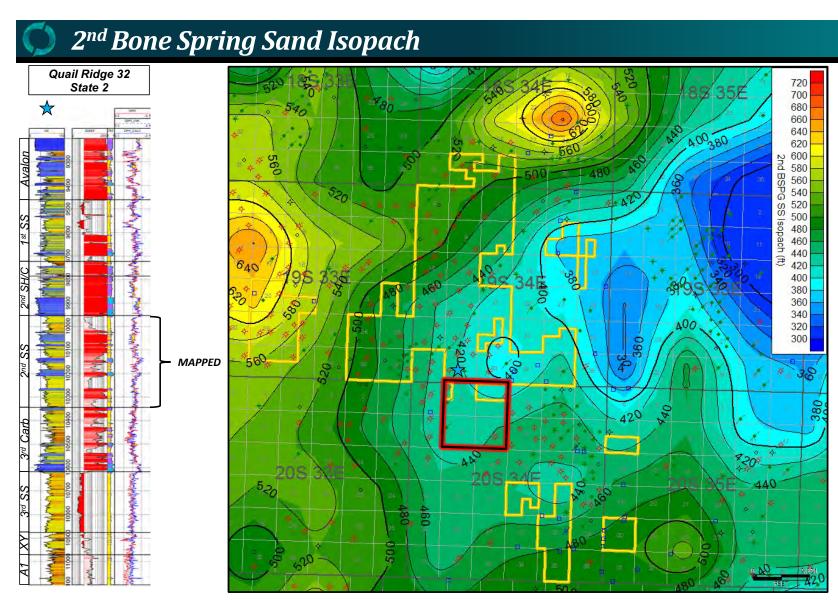




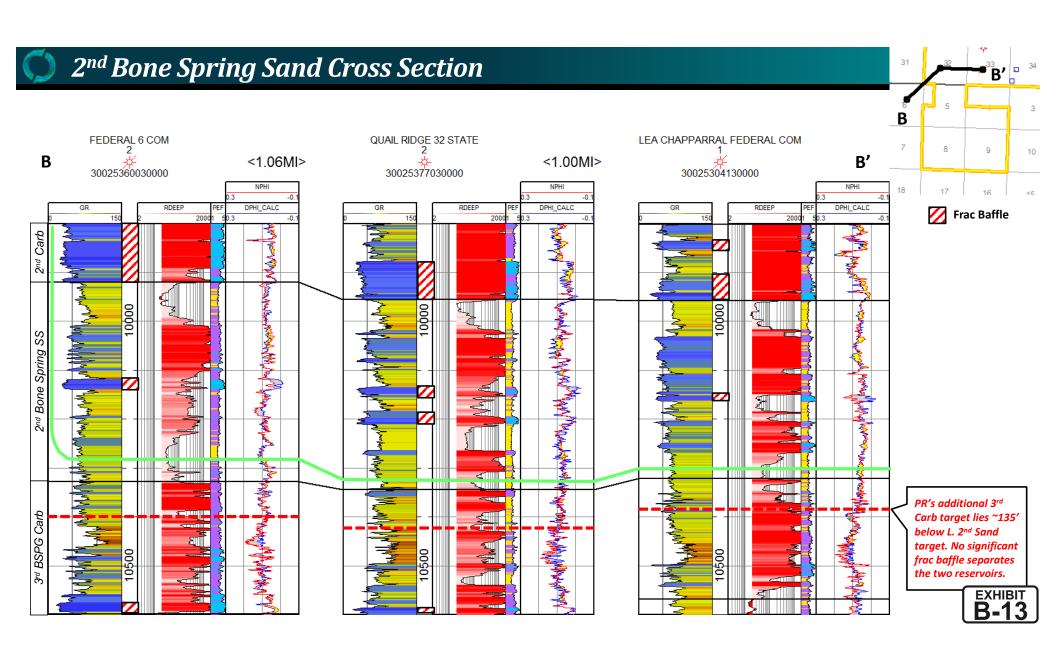
2nd Bone Spring Sand Structure











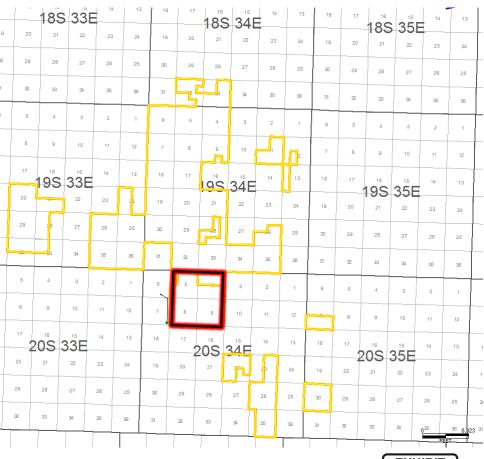


2nd Bone Spring Sand is Established Target

Lower 2nd Bone Spring Sand Producers

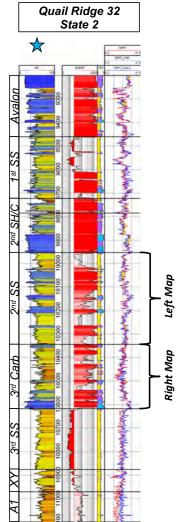


3rd Bone Spring Carb Producers

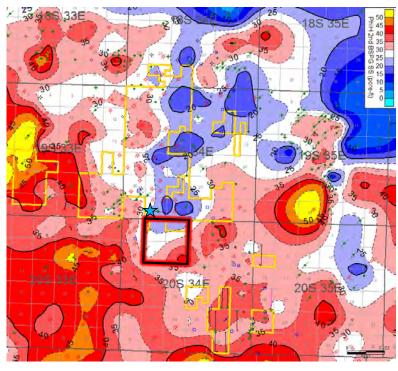


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PhiH L 2nd Sand vs. 3rd Carb



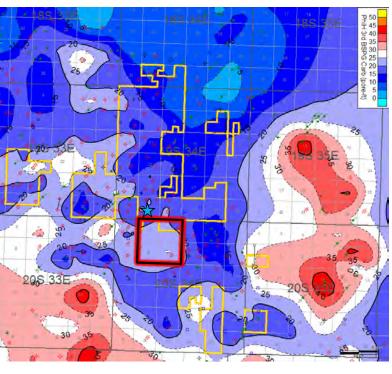
PhiH 2nd Bone Spring Sand CTRA Target



Avg PhiH in 3rd SS = 30 60% of total reservoir

PhiH 3rd Bone Spring Carb

Permian Resources Additional Target

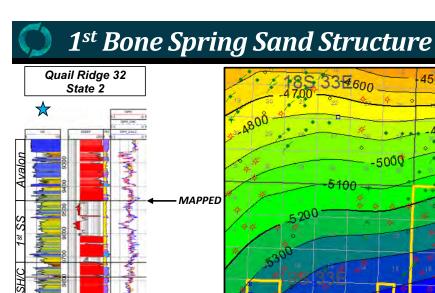


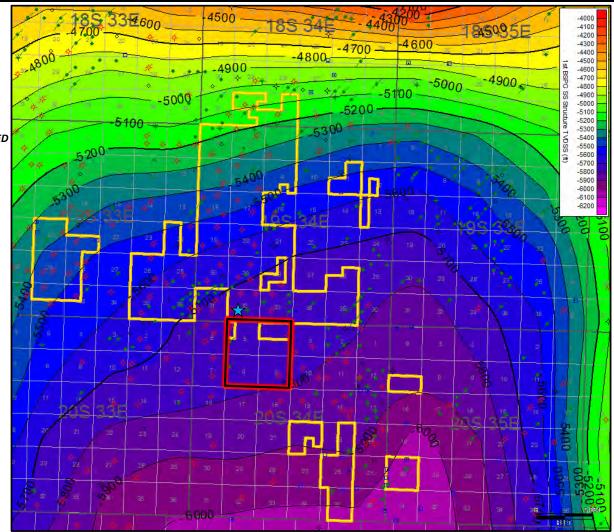
Avg PhiH in WFMP XY = 20 40% of total reservoir



1st Bone Spring Sand



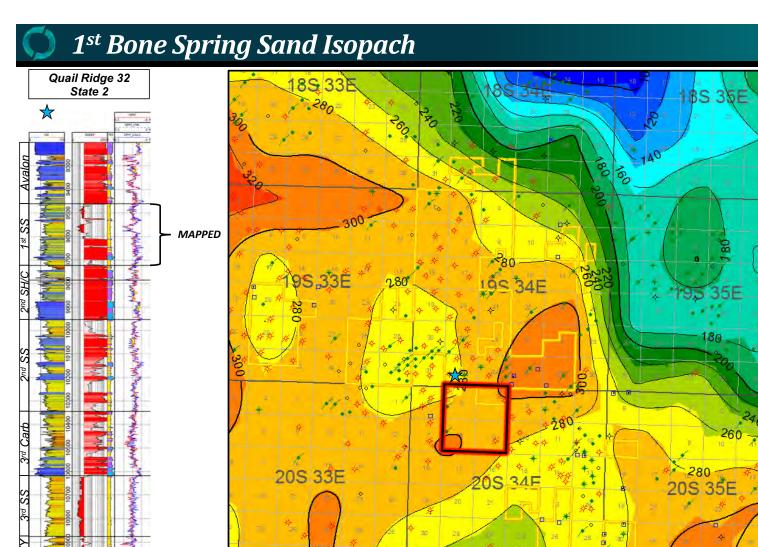


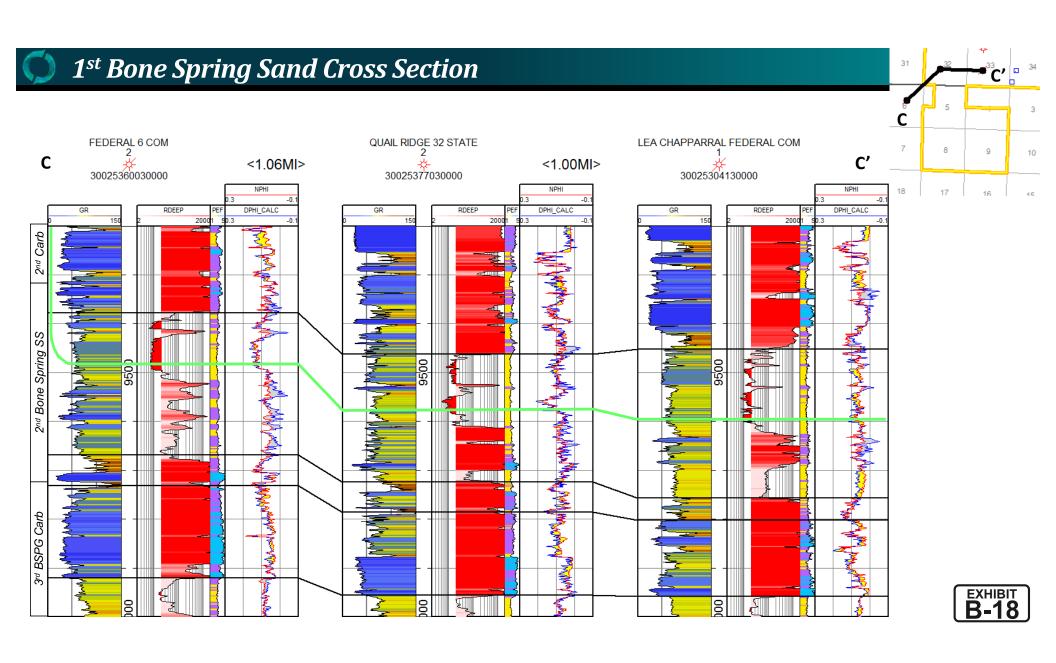


340

320 300 1st BSPG SS Isopach (ft)

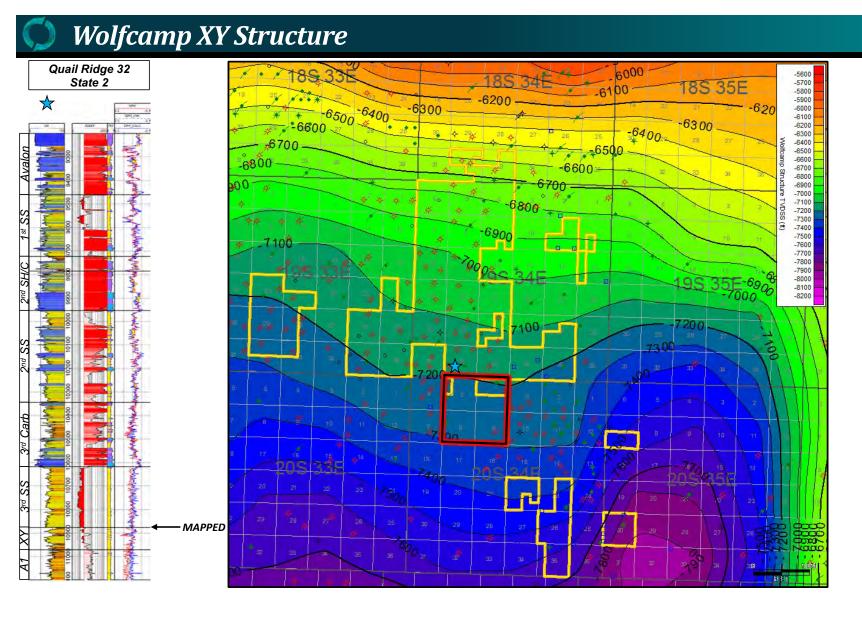
120 100

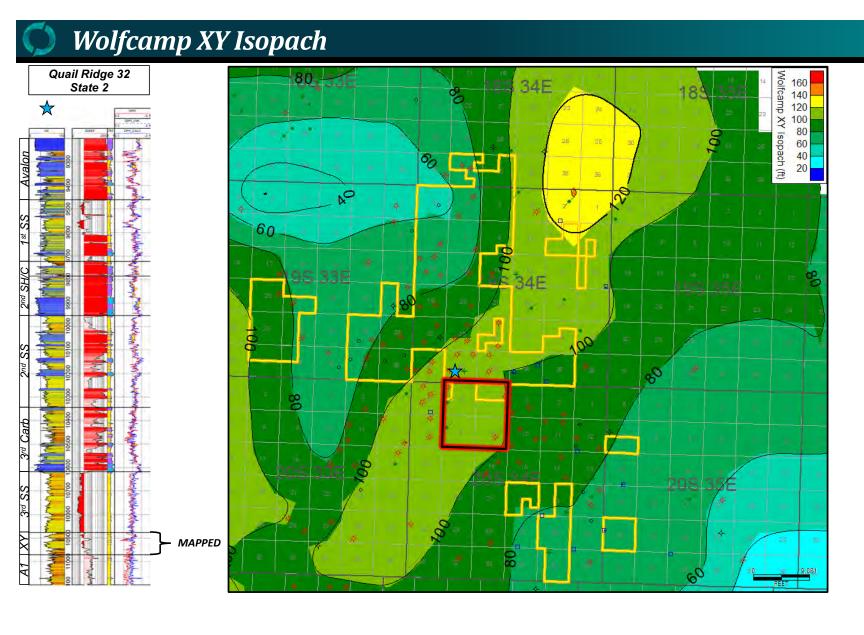




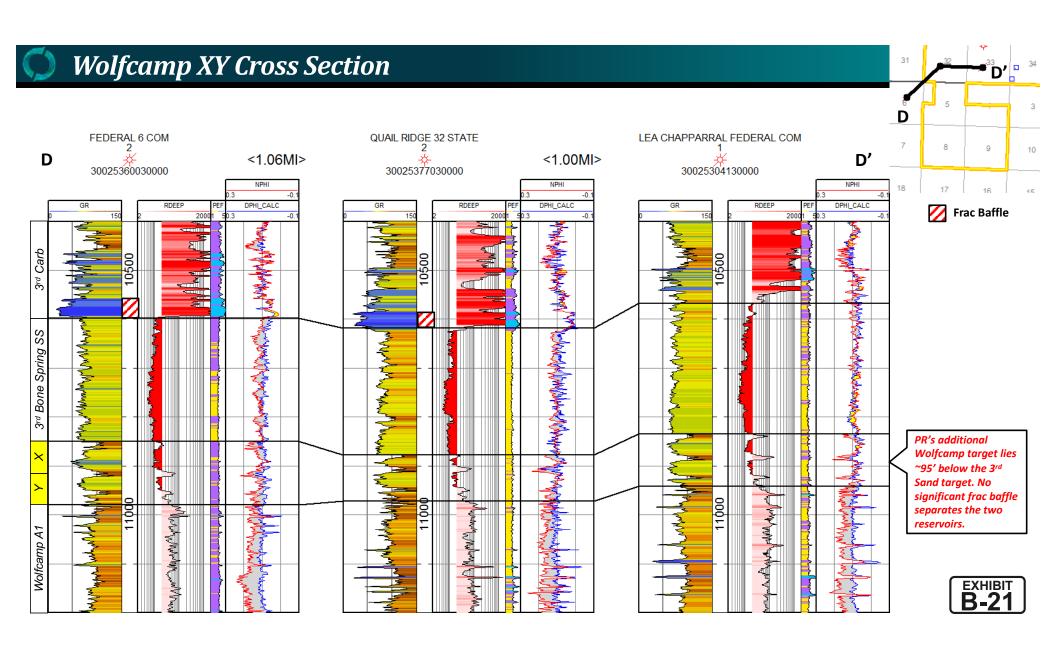
Wolfcamp XY





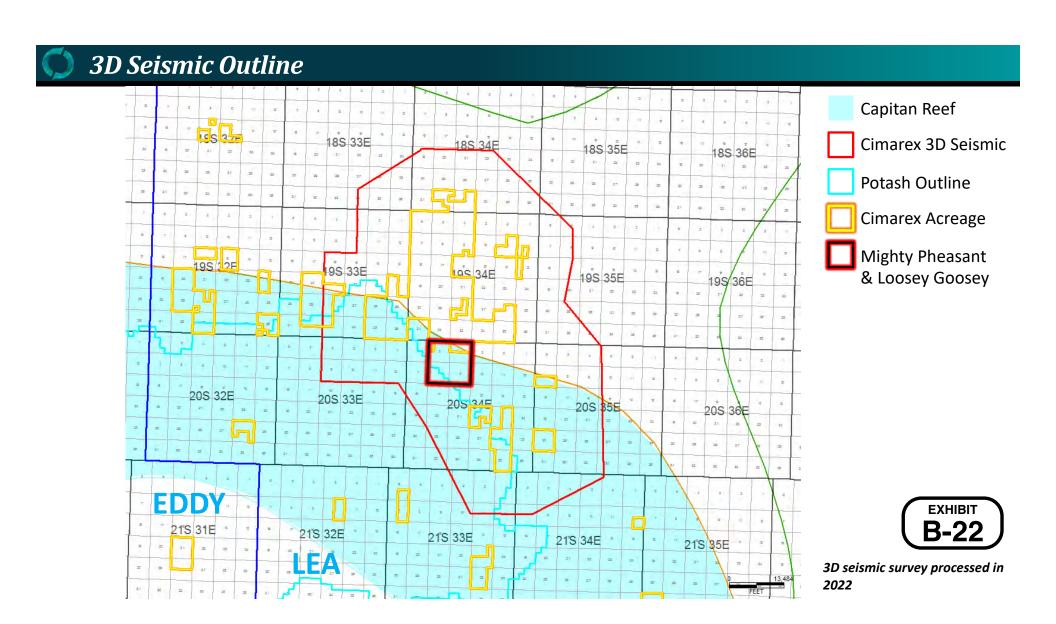






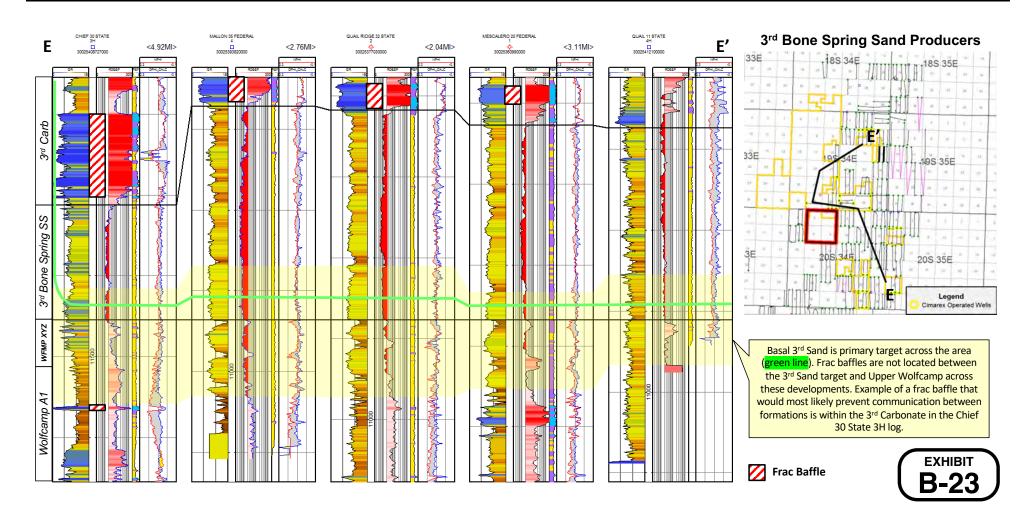
No Frac Baffle Between Wolfcamp and 3rd Sand





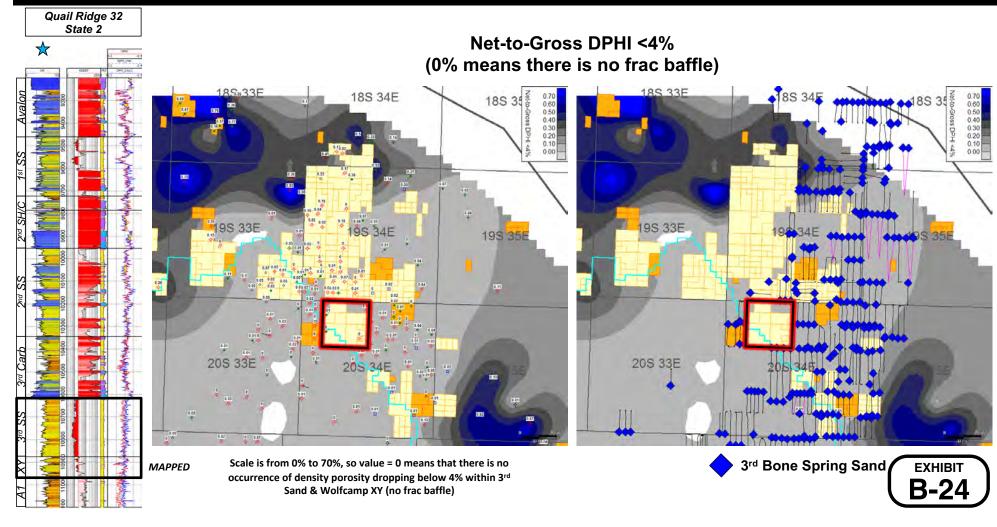
Ø

No Frac Baffle Present Between Wolfcamp & 3rd Sand at Offset 3rd Sand Developments



Ø

No Frac Baffles Between BSPG & WFMP at Existing Production



TAB 4

Case Nos. 23448-23451

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)

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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.

3.

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,

I was employed by Haliburton Energy Services from June 2017 until March 2019,

- 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

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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 (\$\sim 90\%\circ\$ 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 H₂S 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

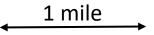
Halliburton Energy Services – Technical Professional, Cement

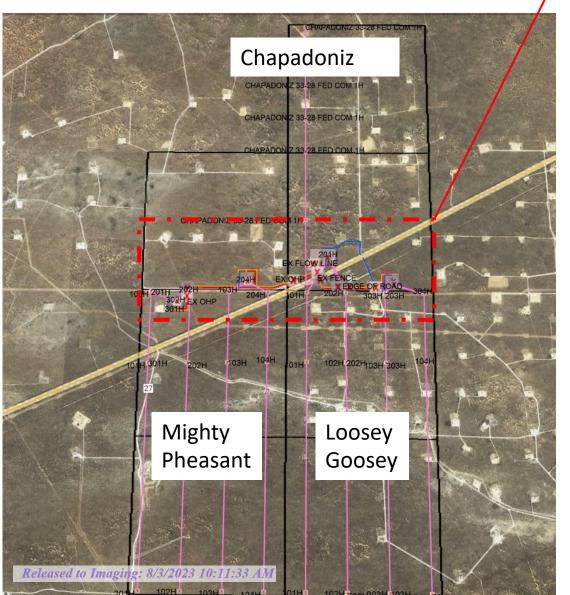
El Reno, OK (June 2017 to March 2019)

- 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











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. 23448-23451

Exhibit D:	Self-Affirmed Statement of Eddie Behm, Petroleum Engineer
Exhibit D-1:	Cimarex's High Profile Role in Lea County
Exhibit D-2:	Cimarex's Overall Production in Lea County
Exhibit D-3:	Map of 3 rd Bone Spring Sand Producers
Exhibit D-4:	3 rd Sand Well Count by Landing and Operators
Exhibit D-5:	Black and Tan 3 rd Sand Composite Forecast 6 wells
	(Before WC completion)
Exhibit D-6:	Black and Tan 3 rd 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
Exhibit D-9:	Lessons learned from Black & Tan Development
Exhibit D-10:	Diagram of Staggered Landing Wolfcamp 3 rd SS Vs. 3 rd SS Flat
Exhibit D-11:	Black and Tan Analog comparison to MP/LG
Exhibit D-12:	Landing Zone Matters; Five Years Ago, Cimarex's Perry Test
	Confirmed 3 rd 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
	Cimarex Majority Working Interest
	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

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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 3rd 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 3rd Bone Spring Sand ("3rd Sand") is the established single bench target;
- The optimal spacing for the 3rd Sand is four (4) laterals per Section;
- The spacing proposed by Permian Resources of eight (8) laterals per Section in the 3rd 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 3rd 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, 2nd Shale, Upper 2nd Sand, lower 2nd Sand, Harkey, 3rd 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 3rd 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 3rd 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 3rd 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**, "3rd Bone Spring Sand Producers" shows significant single bench development of the 3rd 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 3rd 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 3rd 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 3rd Sand within the flow unit.

Exhibit D-4 Well Count by Landing and Operators Proves that the 3rd Sand is the Consensus Landing

- 23. **Exhibit D-4** contains a table that shows the total number of 3rd 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 3rd Sand Well, 5 were drilled as a separate bench, and only 3 were drilled in stacks with 3rd Sand Wells.

- 25. This well-established history of development, involving more than \$2 Billion of CapEx¹ 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 3rd Sand supports Cimarex's assessment of the 3rd 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 3rd 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 3rd Sand and the Wolfcamp as if they are separate and

¹ 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 3rd 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 3rd 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 3rd 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 3rd 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 3rd 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 3rd 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 2nd landing causes within the AOI on the 3rd 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 3rd 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 3rd 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 3rd 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, 3rd Sand has 268% more PHIH than the upper Wolfcamp and is clearly the predominant contributing reservoir. The hypothesis that landing in 3rd 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 3rd 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 3rd Sand production. A setback

from 3rd 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 3rd SS Vs. 3rd 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 3rd Sand well's landed flat must be very similar to the Stimulated rock volume accessed by staggered Wolfcamp and 3rd landings. If this were not true, the sum of Wolfcamp and 3rd sand production out of the Black and Tan development would be significantly higher once the 2nd 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 3rd 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 3rd SS Landing as Best Target

38. Cimarex confirmed 3rd 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 3rd 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 3rd 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 3rd 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 5th 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 3rd 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 3rd 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 3rd 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 3rd 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 9² versus the capital expenditures for Permian Resources' Bane and Joker Wells³. 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 3rd 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 2nd Sand well compared to Cimarex's plan for three Upper 2nd Sand wells; and
 - c) 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 1st Sand, 2nd Sand, and 3rd Sand and three wells in the upper 2nd Sand (\$166,181,956 versus \$134,593,047).

² 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.

³ 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 3rd 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 3rd 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 3rd 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 3rd 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.

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.

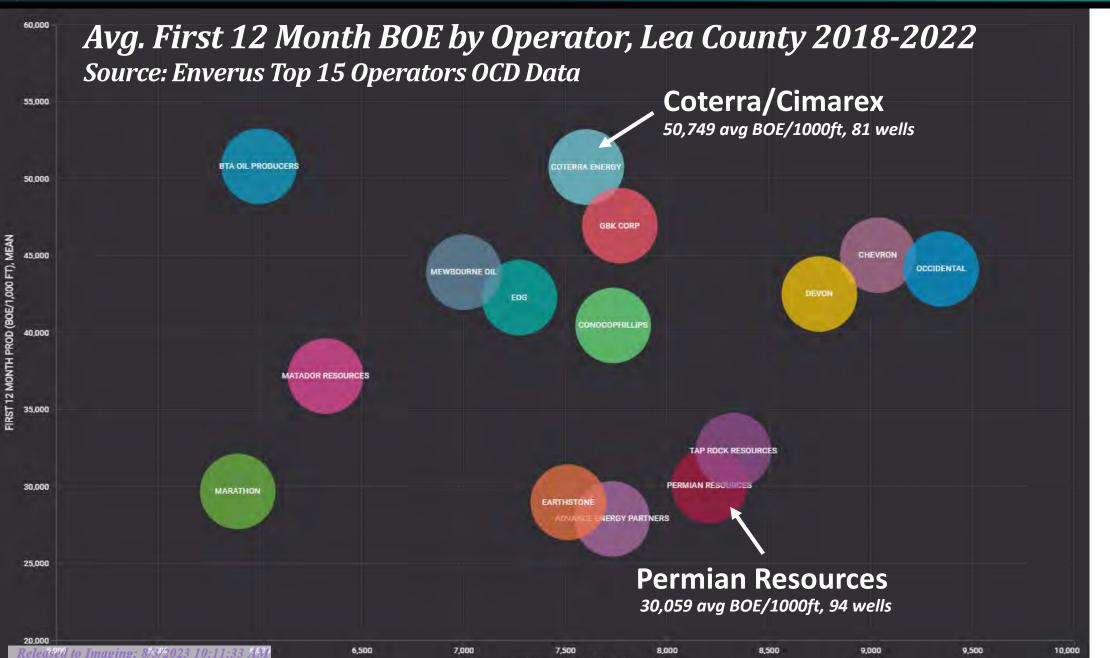
I am signing my self-affirmed statement by this email on August 2nd 2023

Eddie Behm

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

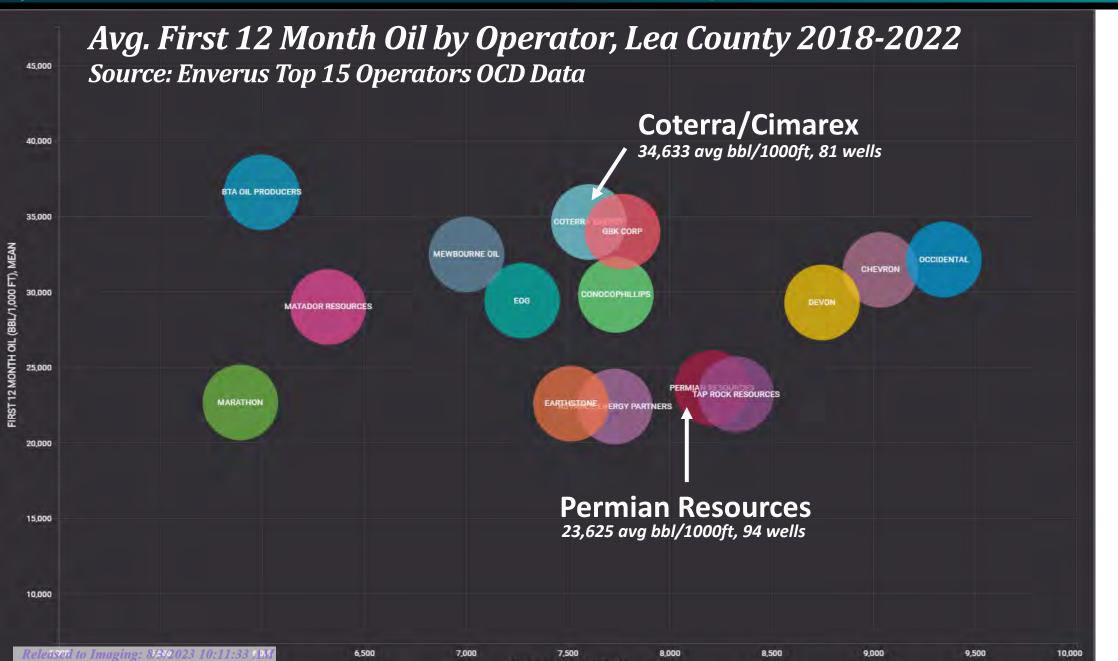


LATERAL LENGTH (FT). MEAN

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

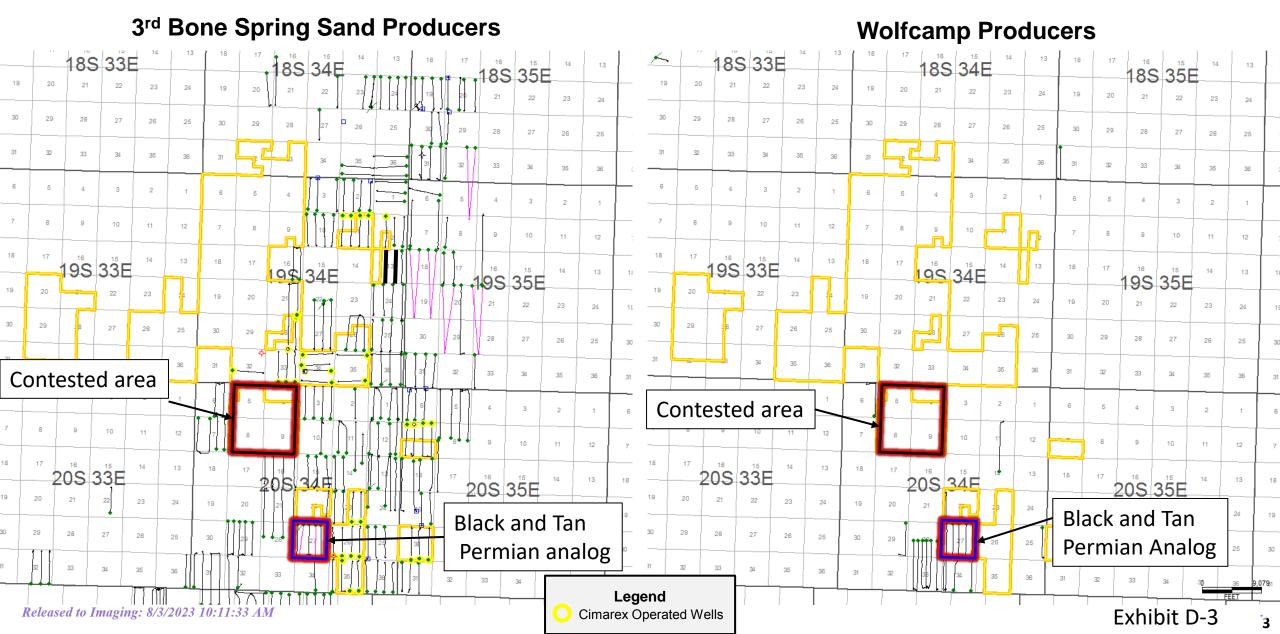


Exhibit D-4

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

APACHE CORP

■ CAZA OPERATING LLC

■ CIMAREX ENERGY CO

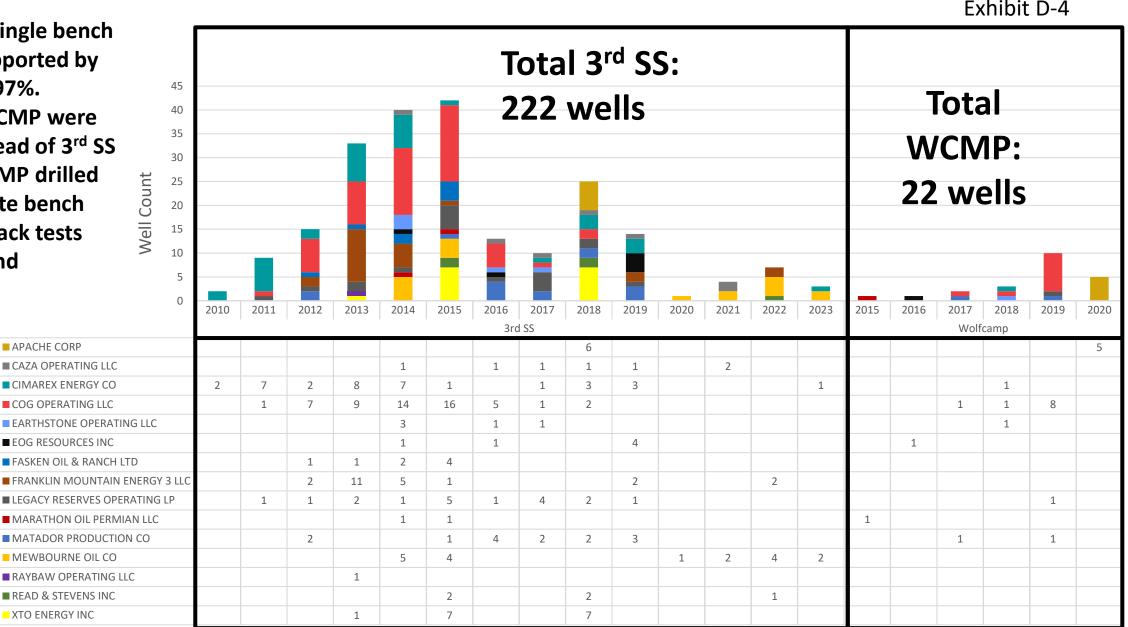
■ COG OPERATING LLC

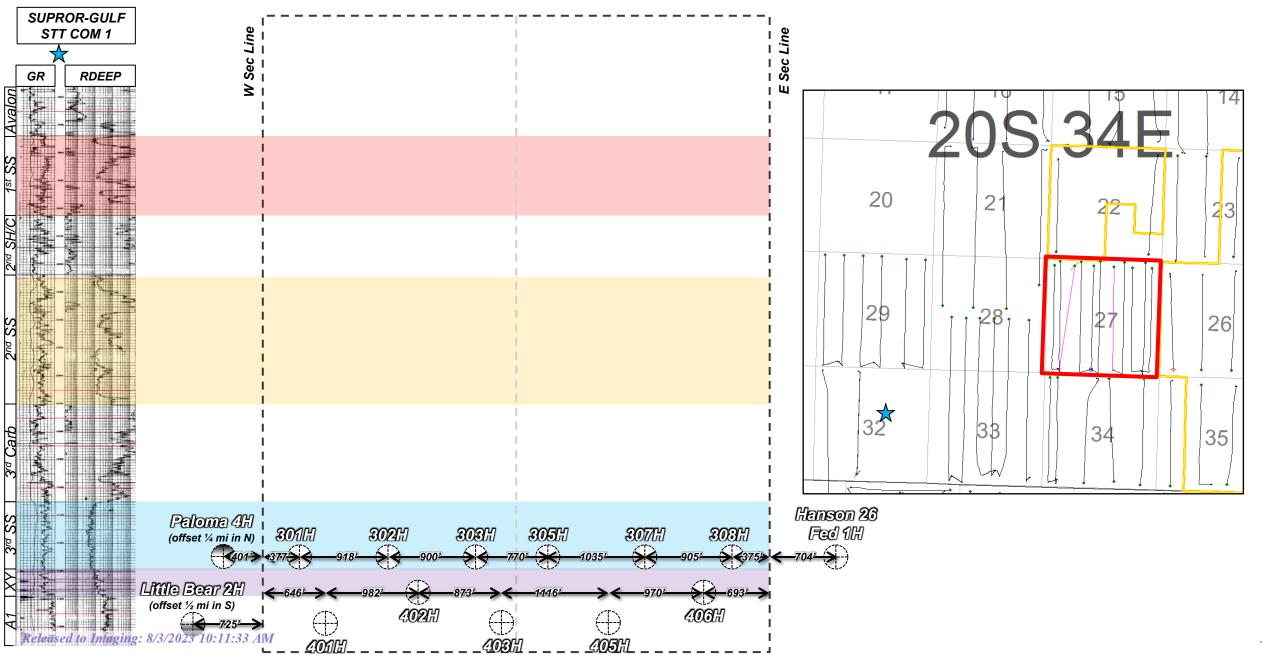
■ EOG RESOURCES INC

MEWBOURNE OIL CO

■ READ & STEVENS INC

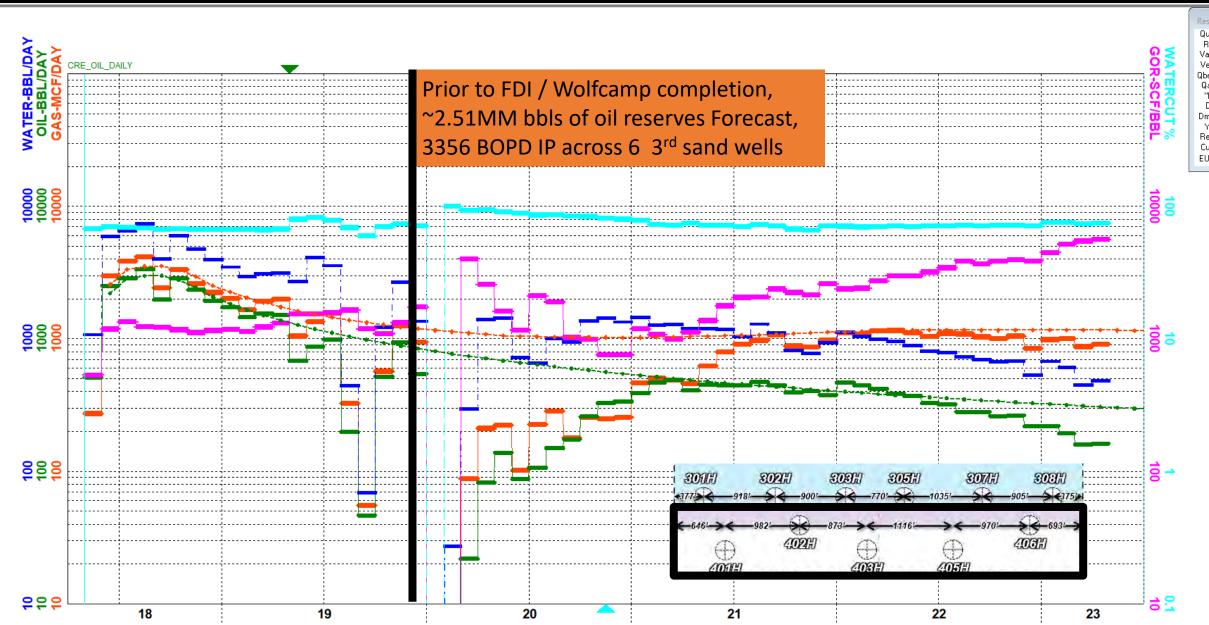
XTO ENERGY INC







Black and Tan 3rd Sand Composite Forecast 6 Wells (Before WC completion)



5/1/2019

49.167 1756744

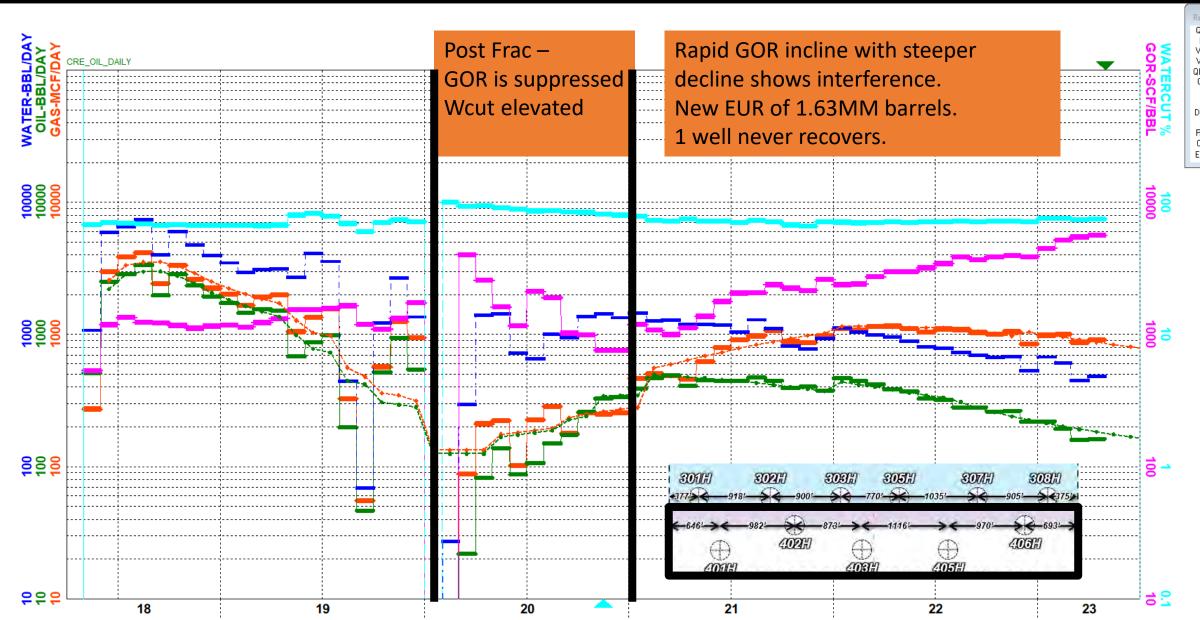


Black and Tan 3rd Sand Composite Forecast 6 Wells Post Wolfcamp Frac

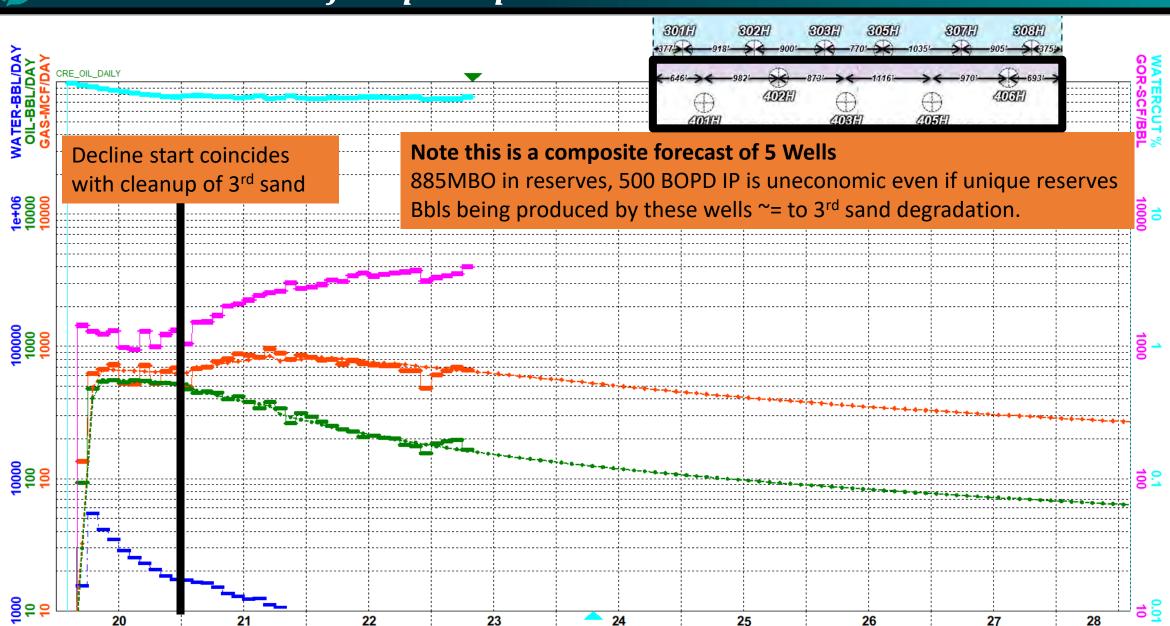


5/1/2023

0.000 175.490



5/1/2023 0.000 158.504



⊢∑ PROJECT = Black & Tan 27	
→ 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 4028841B23	
→ ♦ 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 A635466B07	Completed 1st
30025433400000 BLACK & TAN 27 FEDERAL COM #305H BLACK & TAN 27 FEDERAL COM 3RD BONE SPRING SAND APACHE CORP LEA 4303 01/07/2018 05/16/2018 CF72E02929	33p.32234 230
30023770770000 BLACK & MAR 21 EDELINE COM #3011 BLACK & MAR 21 EDELINE COM 3110 BONE 31 MING SAND AL ACITE COM ELA 4503 01707/2010 03/10/20	

WC vs. 3rd sand comparison shows stagger is capital waste

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

Table 1.0 Comparison		3rd Sand		(Wolfcamp - 3rd Sand	
Table 1.0 Comparison of 3rd sand to Wolfcamp	3rd Bone	3rd Bone Post	3rd Sand Delta	Wolfcamp	Delta) = value added
or ard sand to workamp	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

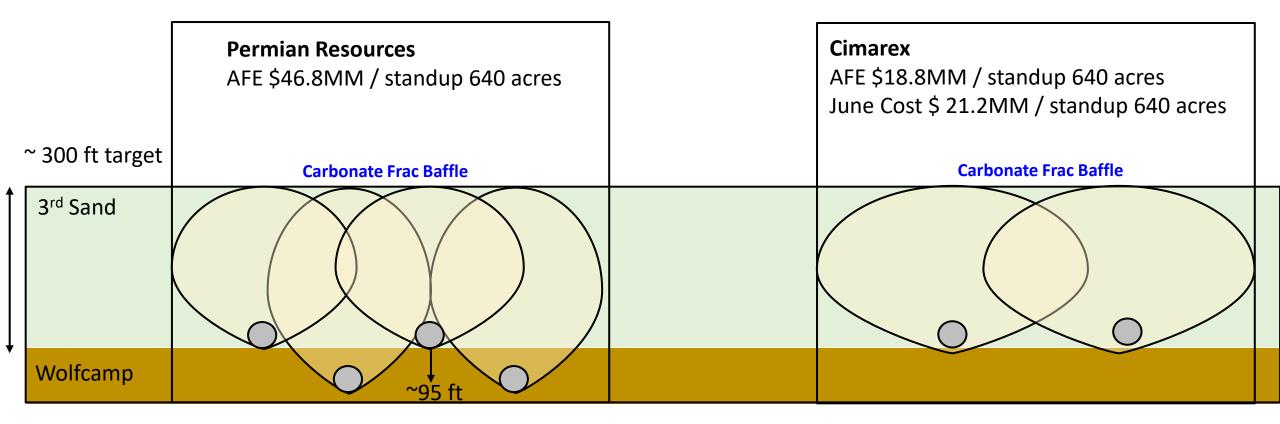
3rd sand is the landing for this single bench target

- 268% Phi H vs. Wolfcamp
- 3rd 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 9th 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.
- 3rd and Wolfcamp landed this close together are equivalent to 8 WPS flat in the 3rd 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 3rd Sand correlative rights and prevent capital waste.

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Black and Tan Analog Comparison To MP/LG

Table 1.2	Black and Tan			Mighty	Pheasant Loosey Goo	osey
Analog Comparison	3rd Sand Wolfcamp 3rd SS % of total		3rd Sand	Wolfcamp	3 rd 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 3rd sand. 27/22 = 122%.
- Sensitivities highlight impact of capital waste given 0% uplift on Black and Tan Wolfcamp 3rd 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

Т	Table 1.3 Reserves Economic Comparison 10MM Technical EUR DSU								
\$65 flat analy	ysis at Cim	arex WI & NRI	F	Permian		Cimarex			
Reserves	Reserves IP Economic		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	cted 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 analy	sis at Cim	arex WI & NRI	F	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

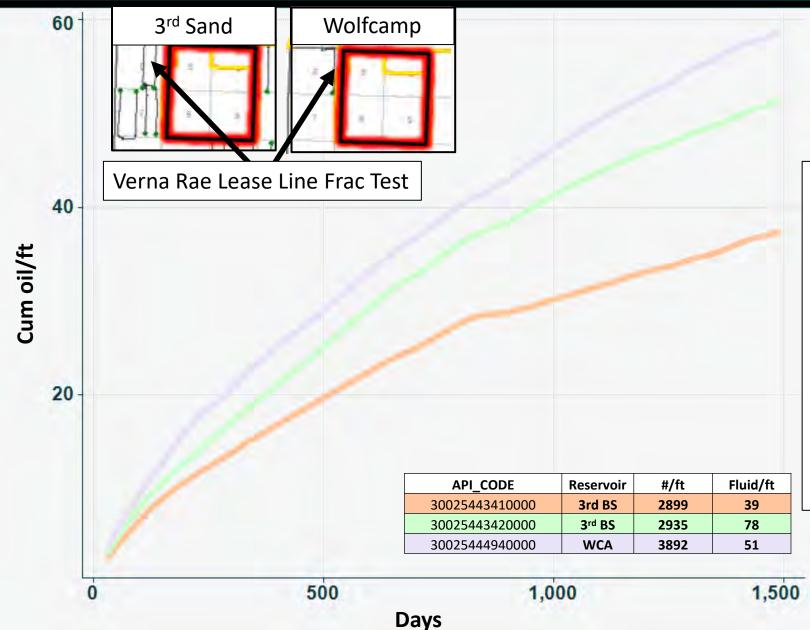




Exhibit D-12 Note: 5 to 6 x the frac energy is not as important as the right landing zone.

- The Perry 1H 2014 vintage 3rd 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 3rd 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) +

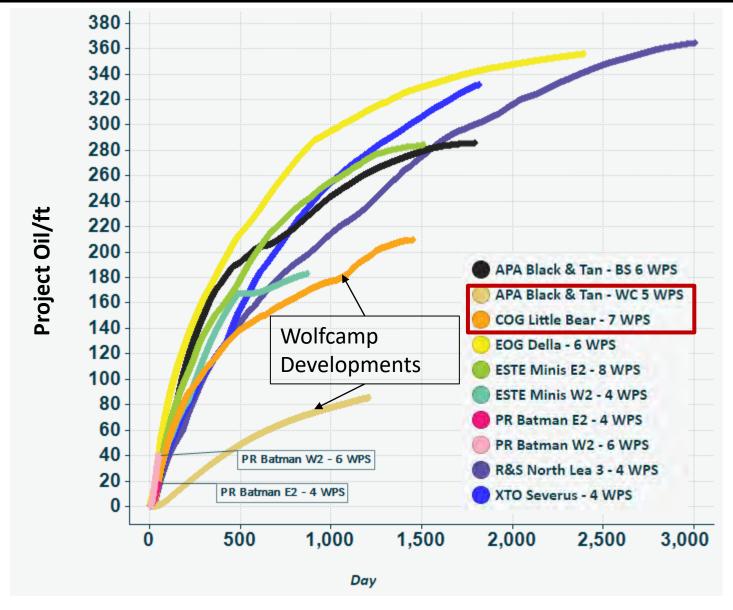
WELL_NAME +) (+)

VERNA RAE FED COM #133H

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

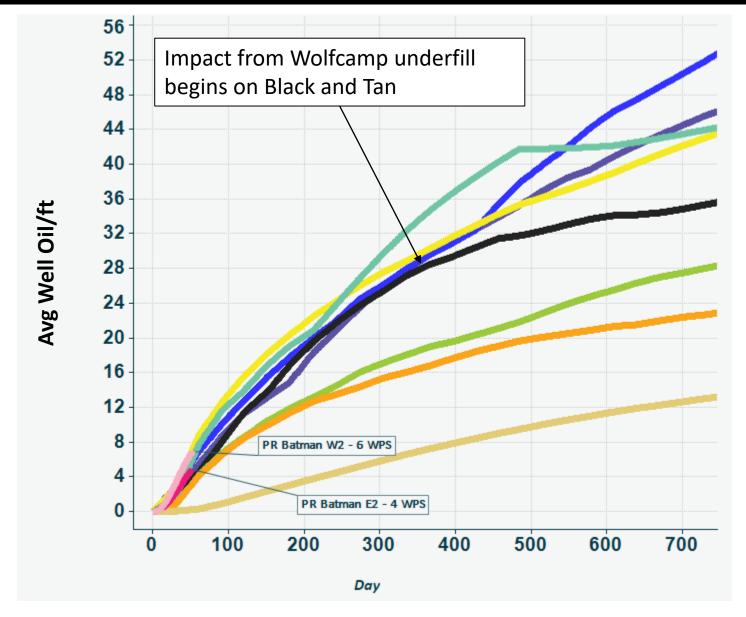
- The Verna Rae 204H is capturing significant 3rd sand bbls due to significantly more energy pumped on this frac test than what is prudent in a full development scenario. Frac Uplift on unbounded Edge wells does not equate to uplift when bounded
- Cimarex uses full developments when available to avoid 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.

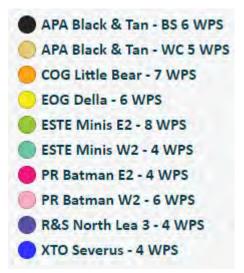




- Key points
- Over time 4 WPS developments catchup to denser projects indicating denser developments are primarily acceleration
- COG little Bear is a dense Wolfcamp only landing full development that underperforms similar to Black and Tan Wolfcamp supporting our proposed 3rd Sand landing
- Batman needs to Cum ~125bbls /ft out of the DSU to get an idea of EURS
- Drilling Wolfcamp looks damaging to 3rd 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.

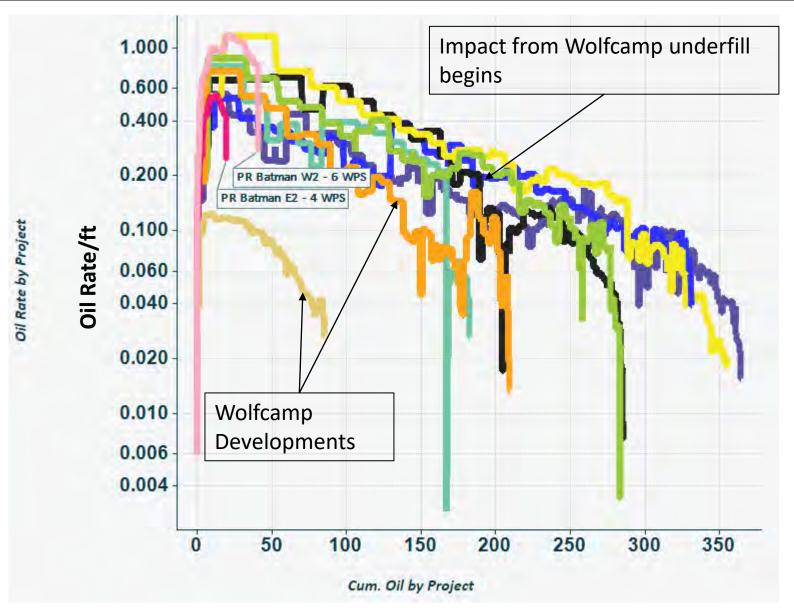






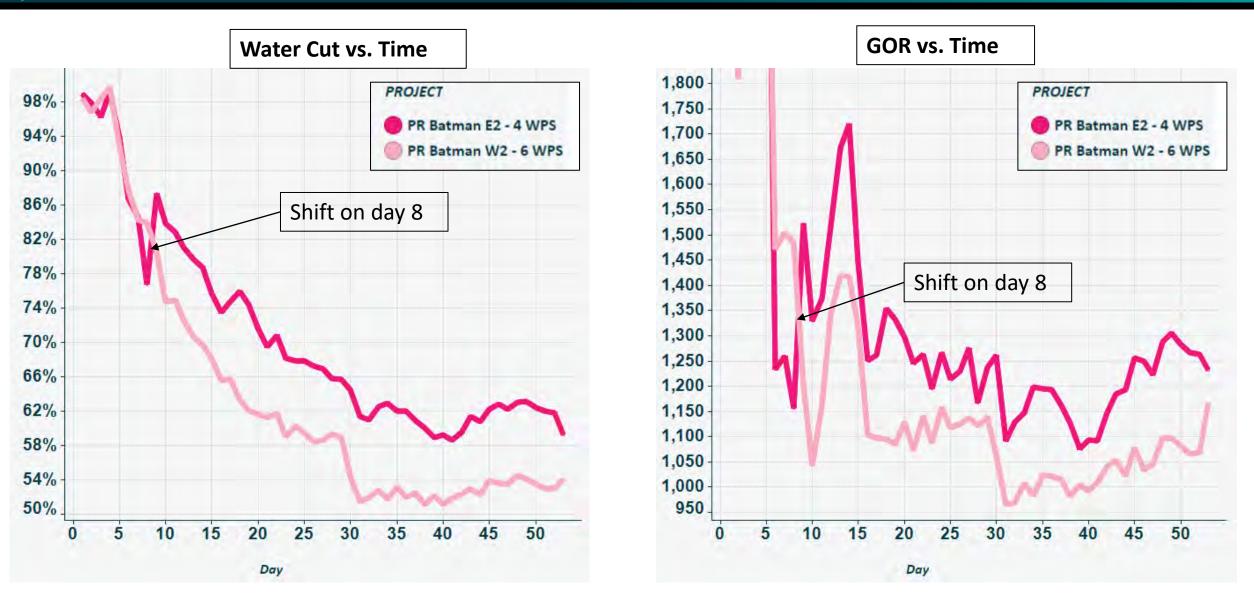
- Key points
- Denser spaced developments underperform looser spaced developments to the point that drilling past 4 WPS appears to be a waste of capital
- The Della project drilled by EOG takes longer to show degradation most likely due to aggressive drawdown common on their developments.
- In aggregate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

	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	¢26 022 774
1st	103H	\$9,450,693	\$9,651,993	\$36,922,774
1st	104H	\$9,450,693	\$9,651,993	
upper 2 nd *	211H	\$8,570,695	\$9,651,993	
upper 2 nd *	212H	\$8,570,695	\$9,651,993	\$25,712,085
upper 2 nd *	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	427.675.400
3rd	303H	\$9,408,850	\$10,621,993	\$37,675,408
3rd	304H	\$9,408,850	\$10,621,993	
Total Gross CanEx		\$134 593 047	\$148 659 895	\$134 593 047

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

Permian Resources – Bane/Joker								
Res	Well	AFE CapEx	June Current Cost	AFE Bench Total				
1st	111H	\$10,724,193						
1st	112H	\$10,724,193		¢42 006 772				
1st	113H	\$10,724,193		\$42,896,772				
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		\$44,081,232				
2nd	125H	\$11,020,308		\$44,061,252				
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		\$40,145,026				
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		\$32,745,300				
WC	202H	\$11,877,862						
WC	203H	\$11,877,862						
WC	204H	\$11,877,862						
Total Gro	ss 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 2nd 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 well Permian Plan June Strip 80% 8/8ths 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 rd 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 3rd sand Flat Cimarex Plan vs. Wolfcamp Stagger Permian Plan

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 3rd 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 acres	WC acres	WC/BS Ratio	PV10 Permian Plan	PV10 Cimarex Plan	Cimarex - Permian
1	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

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 Mighty Pheasant / Joker					
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.

3rd SS Wolfcamp API List

I (APINum)	Well Label	Operator	Formation
30025024240100		LEGACY RESERVES OPERATING LP	3rd SS
	MALLON '34' FEDERAL 16	CIMAREX ENERGY CO	3rd SS
	MALLON 35 FEDERAL 4H	CIMAREX ENERGY CO	3rd SS
	TUSK FEDERAL 2H	COG OPERATING LLC	3rd SS
30025397630100	MALLON 34 FEDERAL 18H	CIMAREX ENERGY CO	3rd SS
30025398940100	MALLON 34 FEDERAL 19	CIMAREX ENERGY CO	3rd SS
30025400350000	AIRCOBRA 12 STATE 002H	COG OPERATING LLC	3rd SS
30025400400000	QUAIL RIDGE 32 STATE 3H	CIMAREX ENERGY CO	3rd SS
30025400860000	MALLON 35 FEDERAL 7H	CIMAREX ENERGY CO	3rd SS
30025401150000	LYNCH 23 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS
30025401230000	LYNCH 23 FEDERAL 2H	CIMAREX ENERGY CO	3rd SS
30025401350000	MALLON 34 FEDERAL 20	CIMAREX ENERGY CO	3rd SS
30025402530100	CHAPARRAL 33 FEDERAL 3H	CIMAREX ENERGY CO	3rd SS
30025403270000	HANSON 26 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS
30025403280000	CHAPARRAL 33 FEDERAL COM 4	CIMAREX ENERGY CO	3rd SS
30025403300000	EAGLE '2' STATE 006H	MATADOR PRODUCTION CO	3rd SS
30025403610000	QUAIL '16' STATE COM 003H	FASKEN OIL & RANCH LTD	3rd SS
	KING COBRA 2 STATE 1H	COG OPERATING LLC	3rd SS
30025403970000	AIRSTRIP 6 STATE COM 2H	COG OPERATING LLC	3rd SS
	WILD COBRA 1 STATE 2H	COG OPERATING LLC	3rd SS
	PLAYA 2 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025404250000	WEST PEARL 36 STATE 002H	COG OPERATING LLC	3rd SS
And the second second	TIGER '11' FEDERAL 1H	COG OPERATING LLC	3rd SS
	QUAIL '16' STATE 004H	FASKEN OIL & RANCH LTD	3rd SS
	PLAYA 2 STATE 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	IGLOO 19 STATE 2H	CAZA OPERATING LLC	3rd SS
	IRONHOUSE 20 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	BUTTER CUP 35 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	HANSON 26 FEDERAL 3H	CIMAREX ENERGY CO	3rd SS
	BUTTER CUP 36 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	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
	IRONHOUSE 19 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	LAGUNA 23 FEDERAL COM 002H	EARTHSTONE OPERATING LLC	3rd SS
30025406980100		LEGACY RESERVES OPERATING LP	3rd SS
30025406990100		LEGACY RESERVES OPERATING LP	3rd SS
All the second s	OUTLAW '22' FEDERAL COM 1H	COG OPERATING LLC	3rd SS
	MONGOOSE FEE 001H	MATADOR PRODUCTION CO	3rd SS
	LAGUNA 23 FEDERAL COM 1H	EARTHSTONE OPERATING LLC	3rd SS
	IRONHOUSE 20 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025407500000		CIMAREX ENERGY CO	3rd SS
	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
The second secon	3010:11:383 FAM 2H	CIMAREX ENERGY CO	3rd SS
	AIRCOBRA 12 STATE 1H	COG OPERATING LLC	3rd SS

	MERIT 6 EH STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	QUAIL '16' STATE 007H	FASKEN OIL & RANCH LTD	3rd SS
30025409700000	STRATOJET 31 STATE COM 2H	COG OPERATING LLC	3rd SS
	TRES PRIMOS 3 STATE 1H	COG OPERATING LLC	3rd SS
	MARATHON ROAD 14 NC FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
	CONDOR STATE 2H	COG OPERATING LLC	3rd SS
30025410500000	RONHOUSE 19 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025410600000	KING COBRA 2 STATE 2H	COG OPERATING LLC	3rd SS
30025410940000	RONHOUSE 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	RONHOUSE 24 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025412010000	GOOSE STATE COM 2H	COG OPERATING LLC	3rd SS
30025412100100	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
30025413050100	HAMON A FEDERAL COM 3H	LEGACY RESERVES OPERATING LP	3rd SS
30025413580100	TUSK FEDERAL 4H	COG OPERATING LLC	3rd SS
30025413660000	QUAIL '16' STATE 8H	FASKEN OIL & RANCH LTD	3rd SS
30025413670100	LEA SOUTH 25 FEDERAL COM 5H	EARTHSTONE OPERATING LLC	3rd SS
30025415190100	NIGHTHAWK STATE COM 1H	MARATHON OIL PERMIAN LLC	3rd SS
30025415320000	SCHARB 10 PA STATE 1H	MEWBOURNE OIL CO	3rd SS
30025415440000	ALBATROSS STATE COM 2H	COG OPERATING LLC	3rd SS
30025415620000	TANGO BTP STATE COM 004H	EOG RESOURCES INC	3rd SS
30025415720100	PRICKLY PEAR 6 FEDERAL 2H	COG OPERATING LLC	3rd SS
30025415730000	TUSK FEDERAL 3H	COG OPERATING LLC	3rd SS
30025415740000	TUSK FEDERAL SH	COG OPERATING LLC	3rd SS
30025415750000	MARATHON ROAD 15 PA FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025415950000	RONHOUSE 24 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025416050000	PERRY 22 FEDERAL COM 1H	CIMAREX ENERGY CO	3rd SS
30025416120100	ORIOLE STATE 1H	COG OPERATING LLC	3rd SS
30025416170000	HAMON A FEDERAL COM 4H	LEGACY RESERVES OPERATING LP	3rd SS
80025416290000	PRICKLY PEAR 6 FEDERAL 3H	COG OPERATING LLC	3rd SS
30025416300100	HAMON FEDERAL COM A 2H	LEGACY RESERVES OPERATING LP	3rd SS
	LYNCH 35 FED COM 3H	CIMAREX ENERGY CO	3rd SS
30025416950000	RONHOUSE 24 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	IRONHOUSE 24 STATE COM 004H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025417140000		COG OPERATING LLC	3rd SS
	CUATRO HIJOS FEE 4H	COG OPERATING LLC	3rd SS
	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 1H	COG OPERATING LLC	3rd SS
30025418580000		CIMAREX ENERGY CO	3rd SS
	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
30025420360000 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
30025420800000 NORTH LEA '3' FEDERAL COM 001H	READ & STEVENS INC	3rd SS
30025421290000 TRES PRIMOS 3 STATE 2H	COG OPERATING LLC	3rd SS
30025421410000 PEARL WEST 36 STATE COM 6H	COG OPERATING LLC	3rd SS
30025421450000 WEST PEARL 36 STATE COM 003H	COG OPERATING LLC	3rd SS
30025421460000 PEARL WEST 36 STATE COM 4H	COG OPERATING LLC	3rd SS
30025421470000 WEST PEARL 36 STATE COM 005H	COG OPERATING LLC	3rd SS
30025421730000 RAPTOR WEST 3 STATE 004H	MARATHON OIL PERMIAN LLC	3rd SS
30025422010000 MARATHON ROAD 15 NC FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025422120000 MALLON 27 FEDERAL COM 001H	MATADOR PRODUCTION CO	3rd SS
30025422270000 NORTH LEA 3 FEDERAL COM 002H	READ & STEVENS INC	3rd SS
30025422280000 NORTH LEA '3' FEDERAL COM 003H	READ & STEVENS INC	3rd SS
30025422680000 LEA 7 FEDERAL COM 1H	CIMAREX ENERGY CO	3rd SS
30025422760000 CUATRO HIJOS FEE 3H	COG OPERATING LLC	3rd SS
30025422920000 BLACK PEARL 1 FEDERAL COM 1H	COG OPERATING LLC	3rd SS
30025422930000 BLACK PEARL 1 FEDERAL 002H	COG OPERATING LLC	3rd SS
30025422940000 BLACK PEARL 1 FEDERAL 3H	COG OPERATING LLC	3rd SS
30025422950000 BLACK PEARL 1 FEDERAL 4H	COG OPERATING LLC	3rd SS
30025423150000 MALLON 27 FEDERAL COM 2H	MATADOR PRODUCTION CO	3rd SS
30025423380100 BLUE JAY FEDERAL 001H	COG OPERATING LLC	3rd SS
30025423420000 LEA UNIT 32H	LEGACY RESERVES OPERATING LP	3rd SS
30025423430000 LEA UNIT 33H	LEGACY RESERVES OPERATING LP	3rd SS
30025423440000 LEA UNIT 34H	LEGACY RESERVES OPERATING LP	3rd SS
30025423520000 CIMARRON 16-19-34 RN STATE 134H	MATADOR PRODUCTION CO	3rd SS
30025423570100 IGLOO `19` STATE 3H	CAZA OPERATING LLC	3rd SS
30025423670000 BUTTER CUP 36 STATE COM 003H 30025423770000 IGGLES STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	COG OPERATING LLC	3rd SS
30025424300000 STRATOJET 31 STATE COM 8H	COG OPERATING LLC	3rd SS
30025424720000 KINGFISHER STATE COM 5H	COG OPERATING LLC	3rd SS
30025424990000 PICKARD 20 18 34 RN STATE 124H	MATADOR PRODUCTION CO	3rd SS
30025425210000 SCHARB 10 B3MD STATE 1H	MEWBOURNE OIL CO	3rd SS
30025425460000 LEA 7 FEDERAL COM 2H (P&A 12/27/	CIMAREX ENERGY CO	3rd SS
30025425770000 PERLA NEGRA FEDERAL COM 4H	XTO ENERGY INC	3rd SS
30025426840000 NORTH LEA '3' FEDERAL COM 004H	READ & STEVENS INC	3rd SS
30025427090000 PERLA NEGRA FEDERAL COM 2H	XTO ENERGY INC	3rd SS
393720230000 PF11-313 GFM EDERAL 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
0025434170000	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
0025440170000	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
0025451540000	LEA UNIT 066H	LEGACY RESERVES OPERATING LP	3rd SS
0025451990000	LEA 7 FEDERAL COM 29H	CIMAREX ENERGY CO	3rd SS
0025452000000	LEA 7 FEDERAL COM 30H	CIMAREX ENERGY CO	3rd SS
0025452100000	LEA UNIT 065H	LEGACY RESERVES OPERATING LP	3rd SS
80025454380000	AIRSTRIP 31-18S-35E RN STATE COM	MATADOR PRODUCTION CO	3rd SS
0025458960000	ANCHOR 19 35 33 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
0025461400000	CABLE 19 35 9 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025467680000	HEREFORD 29-20 W10B FED COM 001H	MEWBOURNE OIL CO	3rd SS
	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 B3OB 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
SOUZS TO IZ SOUDO DE ACIO OS TAIN ZO TEDENAL COM TOSTI		

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TAB 6

Case Nos. 23448-23451

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. 23448-23451

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.
- 3. It is my understanding that Cimarex has made a reasonably diligent effort to find the names and addresses for the interest owners entitled to receive notice of the application and case herein.



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. 23448-23451 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

Mighty Pheasant 5-8 Fed Com 204H Well (Case No. 23448) Mighty Pheasant 5-8 Fed Com 304H Well (Case No. 23448)

Case No. 23448:

Dear Interest Owners:

This letter is to advise you that Cimarex Energy Co. ("Cimarex") has filed the enclosed application, Case No. 23448, 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. 23448, Cimarex seeks to establish a standard 320.09-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 5 and the E/2 E/2 of Section 8, in Township 20 South, Range 34 East, Lea County, NMPM, 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



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 Production Company, L.P.



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

Mighty Pheasant 5-8 Fed Com 301H Well (Case No. 23449)

Case No. 23449:

Dear Interest Owners:

This letter is to advise you that Cimarex Energy Co. ("Cimarex") has filed the enclosed application, Case No. 23449, 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. 23449, Cimarex seeks to establish a standard 320.01-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 5 and the W/2 W/2 of Section 8, 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: 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.

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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

Mighty Pheasant 5-8 Fed Com 302H Well (Case No. 23450)

Case No. 23450:

Dear Interest Owners:

This letter is to advise you that Cimarex Energy Co. ("Cimarex") has filed the enclosed application, Case No. 23450, 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. 23450, Cimarex seeks to create a standard 320.04-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 5 and the E/2 W/2 of Section 8, 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: 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

Mighty Pheasant 5-8 Fed Com 303H Well (Case No. 23451)

Case No. 23451:

Dear Interest Owners:

This letter is to advise you that Cimarex Energy Co. ("Cimarex") has filed the enclosed application, Case No. 23451, 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. 23451, Cimarex seeks to establish a standard 320.06-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 5 and the W/2 E/2 of Section 8, 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: 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.

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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.

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

USPS Article Number	Date Mailed	Name 1	Name 2	Address 1	Address 2	City	State	Zip	Mailing Status	•
9314869904300105478180		Bureau of Land Management		414 W Taylor St		Hobbs	NM	88240	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478197		Moore & Shelton Co., Ltd		PO Box 3070		Galveston	TX	77552	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105478203	03/15/2023	HOG Partnership, LP		5950 Cedar Springs Rd.		Dallas	TX	75235	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105478210		Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210	Midland	TX	79701	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105478227	03/15/2023	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478234	· · , · · ,	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478241	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
9314869904300105478258	03/15/2023	Bank of America, N.A., Successor Trustee	of Delmar Hudson Lewis Living Trust	301 Commerce St.	Suite 2400	Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478265		Magnum Hunter Production		600 N. Marienfeld St.	Suite 600	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478272	03/15/2023	Zorro Partners, Ltd.		616 Texas St.		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478289	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
9314869904300105478296	03/15/2023	Ard Oil, LTD		PO Box 101027		Fort Worth	TX	76185	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478302	03/15/2023	Chase Oil Corporation		PO Box 1767		Artesia	NM	88211	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478319		Avalon Energy Corporation		310 West Wall St.	Suite 305	Midland	TX	79701	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105478326	03/15/2023	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220	Denver	CO	80203	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478333		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
9314869904300105478340	03/15/2023	Marks Oil, Inc.		1775 Sherman St.	Suite 2990	Denver	CO	80203	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478357	03/15/2023	Javelina Partners		616 Texas St.		Fort Worth		76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478364	03/15/2023	William A. Hudson, II		616 Texas St.		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478371	03/15/2023	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle		Dallas	TX	75225	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478388	03/15/2023	MRC Permian Company		5400 LBJ Freeway	Suite 1500	Dallas	TX	75240	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105478395	03/15/2023	CM Resources II, LLC		300 N. Marienfeld St.	Suite 1000	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478401	03/15/2023	CBR Oil Properties, LLC		400 N. Pennsylvania	Suite 1080	Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478418	03/15/2023	Laura K. Read, LLC		P.O. Box 1090		Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478425	03/15/2023	Highland (Texas) Energy Company		11886 Greenville Ave	Suite 106	Dallas	TX	75243	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478432	03/15/2023	Richardson Oil Company, LLC		11886 Greenville Ave	Suite 106	Dallas	TX	75243	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478449	03/15/2023	Carolyn R. Beall		PO Box 3098		Midland	TX	79702	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478456	03/15/2023	Diamond Star Production Co., LLC		331 G St, SW		Ardmore	OK	73401	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478463	03/15/2023	Tierra Encantada, LLC		P.O. Box 811		Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478470	03/15/2023	David Luna		P.O. Box 1518		Roswell	NM	88202	Delivered	Return Receipt - Electronic, Certified Mail





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 4784 70**.

Item Details

Status: Delivered, Individual Picked Up at Post Office

Status Date / Time:March 20, 2023, 09:18 a.m.Location:ROSWELL, NM 88201

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

Return Receipt Electronic

Recipient Name: David Luna

Shipment Details

Weight: 2.0oz

Recipient Signature

Signature of Recipient:

m Navah

M. Novak

Address of Recipient:

1518

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Dear WALZ GROUP:

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Item Details

Status: Delivered, Individual Picked Up at Post Office

Status Date / Time: March 20, 2023, 02:15 p.m.
Location: ROSWELL, NM 88201

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

Return Receipt Electronic

Recipient Name: Tierra Encantada LLC

Shipment Details

Weight: 2.0oz

Recipient Signature

Signature of Recipient:

Address of Recipient:

A Komed mu

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The following is in response to your request for proof of delivery on your item with the tracking number: **9314 8699 0430 0105 4784 56**.

Item Details

Status: Delivered, Individual Picked Up at Post Office

Status Date / Time: March 20, 2023, 09:58 a.m. Location: ARDMORE, OK 73401

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

Return Receipt Electronic

Recipient Name: Diamond Star Production Co LLC

Shipment Details

Weight: 2.0oz

Destination Delivery Address

Street Address: 331 G ST SW

City, State ZIP Code: ARDMORE, OK 73401-4956

Recipient Signature

Signature of Recipient:

Inms B Rean

Q-

331 G ST SW

Address of Recipient:

RDMORE, OK 73401-4956

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

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March 22, 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 4784 49**.

Item Details

Status: Delivered, Individual Picked Up at Post Office

Status Date / Time: March 21, 2023, 03:19 p.m.

Location:MIDLAND, TX 79701Postal Product:First-Class Mail®Extra Services:Certified Mail™

Return Receipt Electronic

Recipient Name: Carolyn R Beall

Shipment Details

Weight: 2.0oz

Recipient Signature

Signature of Recipient:

Address of Recipient:

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Dear WALZ GROUP:

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Item Details

Status: Delivered to Agent for Final Delivery

Status Date / Time: March 20, 2023, 02:00 p.m.

Location:DALLAS, TX 75243Postal Product:First-Class Mail®Extra Services:Certified Mail™

Return Receipt Electronic

Recipient Name: Richardson Oil Company LLC

Shipment Details

Weight: 2.0oz

Recipient Signature

Signature of Recipient: (Authorized Agent)

Address of Recipient:

11886 Greenville Al

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

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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 4784 25.

Item Details

Status: Delivered to Agent for Final Delivery

Status Date / Time: March 20, 2023, 02:00 p.m.

Location:DALLAS, TX 75243Postal Product:First-Class Mail®Extra Services:Certified Mail™

Return Receipt Electronic

Recipient Name: Highland Texas Energy Company

Shipment Details

Weight: 2.0oz

Recipient Signature

Signature of Recipient: (Authorized Agent)

Address of Recipient:

11886 Greenille 11

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

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March 23, 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 4784 18.

Item Details

Status: Delivered, Individual Picked Up at Post Office

Status Date / Time:March 22, 2023, 01:22 p.m.Location:ROSWELL, NM 88201

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

Return Receipt Electronic

Recipient Name: Laura K Read LLC

Shipment Details

Weight: 2.0oz

Recipient Signature

Signature of Recipient:

Delaska

PO BOX 1090

Address of Recipient:

ROSWELL, NM 88202-1090

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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 4784 01**.

Item Details

Status: Delivered, Front Desk/Reception/Mail Room

Status Date / Time:March 20, 2023, 11:16 a.m.Location:ROSWELL, NM 88201

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

Return Receipt Electronic

Recipient Name: CBR Oil Properties LLC

Shipment Details

Weight: 2.0oz

Destination Delivery Address

Street Address: 400 N PENNSYLVANIA AVE STE 1080

City, State ZIP Code: ROSWELL, NM 88201-4715

Recipient Signature

Signature of Recipient:

Reliebstering

400 N PENNSYLVANIA AVE STE 1000, ROSWELL, NM

Address of Recipient: 88201

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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 4783 95**.

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®

Extra Services: Certified Mail™

Return Receipt Electronic

Recipient Name: CM Resources II LLC

Shipment Details

Weight: 2.0oz

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:

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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 4783 71.

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: 8.0oz

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 4783 64.

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:	8.0oz							
Destination Delivery Address								
City, State ZIP Code:	FORT WORTH, TX 76102-4662							
Recipient Signature								
Signature of Recipient:	Corey Corexias							
Address of Recipient:	616 Texias							

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 4783 57.

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: 8.0oz **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 4783 40**.

Item Details Status: Delivered to Agent for Final Delivery Status Date / Time: March 20, 2023, 04:38 p.m. Location: DENVER, CO 80203 **Postal Product:** First-Class Mail® **Extra Services:** Certified Mail™ Return Receipt Electronic **Recipient Name:** Marks Oil Inc Shipment Details Weight: 8.0oz Recipient Signature Signature of Recipient: (Authorized Agent)

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

Address of Recipient:

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 4783 33.

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 f

Shipment Details

Weight: 8.0oz

Destination Delivery Address

Street Address: 203 W WALL ST STE 1000 City, State ZIP Code: MIDLAND, TX 79701-4525

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 4783 26**.

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: 8.0oz

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 4783 02**.

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[®]
Extra Services: Certified Mail[™]

Return Receipt Electronic

Recipient Name: Chase Oil Corporation

Shipment Details

Weight: 8.0oz

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 4782 96.

Item Details

Status: Delivered

Status Date / Time: March 20, 2023, 06:53 a.m. **Location:** FORT WORTH, TX 76185

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

Return Receipt Electronic

Recipient Name: Ard Oil LTD

Shipment Details

Weight: 8.0oz

Destination Delivery Address

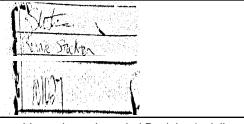
Street Address: PO BOX 101027

City, State ZIP Code: FORT WORTH, TX 76185-1027

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 4782 89.

Item Details

Status:Delivered, Left with IndividualStatus Date / Time:March 20, 2023, 01:05 p.m.Location:FORT WORTH, TX 76102

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

Return Receipt Electronic

Recipient Name: Frost Bank Trustee of the Josephine T Hudson T

Shipment Details

Weight: 8.0oz

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:

all lay for trost

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 4782 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: 8.0oz **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 4782 65.

Item Details

Status: Delivered, Individual Picked Up at Post Office

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

Location:MIDLAND, TX 79701Postal Product:First-Class Mail®Extra Services:Certified Mail™

Return Receipt Electronic

Recipient Name: Magnum Hunter Production

Shipment Details

Weight: 8.0oz

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:

Midled TX 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 4782 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[®]
Extra Services: Certified Mail[™]

Return Receipt Electronic

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

Shipment Details

Weight: 8.0oz

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 4782 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®

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

Return Receipt Electronic

Recipient Name: First Century Oil Inc

Shipment Details

Weight: 8.0oz

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 4782 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®
Extra Services: Certified Mail™

Return Receipt Electronic

Recipient Name: Read Stevens Inc

Shipment Details

Weight: 8.0oz

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.



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 4781 80**.

Item Details

Status: Delivered, Left with Individual Status Date / Time: March 20, 2023, 11:33 a.m.

Location:HOBBS, NM 88240Postal Product:First-Class Mail®Extra Services:Certified Mail™

Return Receipt Electronic

Recipient Name: Bureau of Land Management

Shipment Details

Weight: 8.0oz

Destination Delivery Address

Street Address: 414 W TAYLOR ST

City, State ZIP Code: HOBBS, NM 88240-6054

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.

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 # 1087528** 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. 23448: Notice — to all parties and persons having any right, title, interest or claim in this case, including owners of working interest, overriding royalty interest, and record title, among others, whether such parties or persons are listed herein or not, as well as notice to all known and unknown heirs, devisees, assigns and successors of such affected parties and persons, which based on reasonable diligence include 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; 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.emrd.nm.gov/ocd/hearing-info/ or call (505) 476-3441. Cimarex Energy Co. (operational office at 600 N. Marienfeld St. Sulte 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. Marienfeld 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 320.09-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 5 and the E/2 E/2 of Section 8, 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 leet (top of first Bone Spring) in the Ouail 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 5 is an irregular section containing correction lots. The proposed wells to be dedicated to the horizontal spacing unit are the Mighty Pheasant 5-8 Fed Com 204H Well and the Mighty Pheasant 5-8 Fed Com 204H Well and the Mighty Pheasant 5-8 Fed Com 304H Well, both oil wells, to be horizontally drilled from surface locations in the SW/4 SE/4 (Unit 0) of Section 32, Township 19 South, Range 34 East, NMPM, to bottom hole locations in the SE/4 SE/4 (Unit P) of Section 8, Township 20 South, Range 34 East, NMPM. The wells 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 wells and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Onerator of the wells and unit and a 2004 charges for the Applicant as Onerator of the wells and the allocation for the Applicant as Onerator of the wells and the allocation of the designation of the Applicant as Onerator of the Applicant as 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 Carisbad, New Mexico.

67115820

00276727

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 # 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. 23449: Notice — to all parties and persons having any right, title, interest or claim in this case, including owners of working interest, overriding royalty interest, and record title, among others, whether such parties or persons are listed herein or not, as well as notice to all known and unknown heirs, devisees, assigns and successors of such affected parties and persons, which based on reasonable diligence include 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; PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; JAVELINA PARTNERS; WILLIAM A. HUDSON, II; UNION HILL OIL & GAS CO, INC.; HIGHLAND (TEXAS) ENERGY COMPANY; RICHARDSON OIL COMPANY, LLC; CAROLYN R. BEALL; DIAMOND STAR PRODUCTION CO., LLC; TIERRA ENCANTADA, LLC AND DAVID LUNA, 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 policies the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division policies. 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. Marienteld 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 320.01-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 5 and the W/2 W/2 of Section 8, 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 oll pool, underlying the unit. Section 5 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the Mighty Pheasant 5-8 Fed Com 301H Well, an oil well, to be horizontally drilled from a surface location in Lot 4 (NW/4 NW/4 equivalent) of Section 5 to a bottom hole location in the SW/4 SW/4 (Unit M) of Section 8. 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.

67115820

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STATE OF NEW MEXICO COUNTY OF LEA

1, 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

STATE 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. 23450: Notice -- to all parties and persons having any right, title, interest or claim in this case, including owners of working interest, overriding royally interest, and record title, among others, whether such parties or persons are listed herein or not, as well as notice to all known and unknown heirs, devisees, assigns and successors of such affected parties and persons, which based on reasonable dilligence include 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; NEW Mexico, Though 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 orline. For information about remote access and the status of the case, you can visit the Division's website at https://www.emnrd.mm.gov/ocd/hearing-info/ or call (505) 476-3441. Climarex Energy Co. (operational office at 600 N. Marienfeld St. Suite 600, 79701; HQ office at 1700 Lincoin Street, Suite 3700, Denver CO 80203) seeks an order from the Division: (1) creating a standard 320.04-acre, more or less, horizontal spacing and 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 not be a considered to the costs of Carlsbad, New Mexico. #00276730

67115820

00276730

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

STATE 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. 23451: Notice -- to all parties and persons having any right, title, interest or claim in this case, including owners of working interest, overriding royalty interest, and record title, among others, whether such CASE No. 23451. Notice — to all parties and persons having any right, title, interest or claim in this case, including owners of working interest, overriding royalty interest, and record title, among others, whether such parties or persons are listed herein or not, as well as notice to all known and unknown heirs, devisees, assigns and successors of such affected parties and persons, which based on reasonable diligence include MOOHE & 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 DEL MAR 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; PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; AVELINA 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 Intomation about remote access and the status of the case, you can visit the Division's website at: https://www.emmfd.nm.gov/cod/hearing-info/ or call (505) 476-3441. Cimarex Energy Co. (operational office at 800 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 320.06-acre, more or less, horizontal spacing and prorotation unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE

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