## **BEFORE THE OIL CONSERVATION DIVISION EXAMINER HEARING JULY 20, 2023**

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

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.** 

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Reference for Case Nos. 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

#### 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 1<sup>st</sup> 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
 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:

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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 1<sup>st</sup> 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.

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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 1<sup>st</sup> 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;

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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 1<sup>st</sup> 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;

2

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

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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 POOLING APPLICATION CHECKLIST**

ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

#### Case: 23448 **APPLICANT'S RESPONSE** Date: July 20, 2023 (Scheduled hearing) Applicant Cimarex Energy Co. Designated Operator & OGRID (affiliation if applicable) 215099 Applicant's Counsel: Darin C. Savage, Abadie & Schill, P.C. Case Title: APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO Read & Stevens, Inc., / Permian Resources Operating, LLC Entries of Appearance/Intervenors: 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: Quail Ridge, Bone Spring Pool [Code: 50460] 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 Yes, Standard Spacing Unit and is approval of non-standard unit requested in this **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, Add wells as needed footages, completion target, orientation, completion status (standard or non-standard) 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: 7/13/2023 6:11:56 PM Horizontal Well First and Last Take Points	Mighty Pheasant 5-8 Fed Com 204H Well: FTP: 100' FNL,
	708' FEL, Section 5; LTP 100' FSL, 708' FEL, Section 8
Completion Target (Formation, TVD and MD)	Mighty Pheasant 5-8 Fed Com 204H Well: TVD approx.
	10,308', TMD 20,465'; Bone Spring formation, See Exhibit A, A-1,B-5
Well #2	Mighty Pheasant 5-8 Fed Com 304H Well <u>(API No. 30-015-</u> Pending), SHL: Unit O, 281' FSL, 1423' FEL, Section 32, T19S- R34E; BHL: Unit P, 100' FSL, 708' FEL, Section 8, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location
Horizontal Well First and Last Take Points	Mighty Pheasant 5-8 Fed Com 304H Well: FTP 100' FNL, 708' FEL, Section 5; LTP 100' FSL, 708' FWL, Section 8
Completion Target (Formation, TVD and MD)	Mighty Pheasant 5-8 Fed Com 304H Well: TVD approx. 10,840', TMD 21,040'; Bone Spring formation, See Exhibit A, A-1 & B-2
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	\$8000, Exhibit A
Production Supervision/Month \$	\$800, Exhibit A
Justification for Supervision Costs	Exhibit A
Requested Risk Charge	200%, Exhibit A
Notice of Hearing	
Proposed Notice of Hearing	Exhibit D, D-1
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit D-2
	Exhibit D-3
Ownership Determination	Exhibit A-2.1
Land Ownership Schematic of the Spacing Unit	
Tract List (including lease numbers and owners) If approval of Non-Standard Spacing Unit is requested, Tract	Exhibit A-2.1
List (including lease numbers and owners) of Tracts subject to notice requirements.	N/A
Pooled Parties (including ownership type)	All uncommitted WI owners; including as shown on Exhibit A-2.1
Unlocatable Parties to be Pooled	Exhibit A
Ownership Depth Severance (including percentage above & below)	N/A
Joinder	
Sample Copy of Proposal Letter	Exhibit A-3
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-2.1
Chronology of Contact with Non-Joined Working Interests	Exhibit A-4
Overhead Rates In Proposal Letter	Exhibit A-3
Cost Estimate to Drill and Complete	Exhibit A-3
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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,B-16, B-17		
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,B-16, B-17		
Target Formation	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18		
HSU Cross Section	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18		
Depth Severance Discussion	N/A		
Forms, Figures and Tables			
C-102	Exhibit A-1		
Tracts	Exhibit A-2.1		
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-2.1		
General Location Map (including basin)	Exhibit A-2.1		
Well Bore Location Map	Exhibit A-1, B-2, B-3		
Structure Contour Map - Subsea Depth	Exhibit B-5, B-6, B-11, B-16		
Cross Section Location Map (including wells)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18		
Cross Section (including Landing Zone)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18		
Additional Information			
Special Provisions/Stipulations			
CERTIFICATION: I hereby certify that the information pr	ovided 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 7-13-2023		

# **COMPULSORY POOLING APPLICATION CHECKLIST**

# ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

Case: 23449	APPLICANT'S RESPONSE		
Date: July 20, 2023 (Scheduled hearing)			
Applicant	Cimarex Energy Co.		
Designated Operator & OGRID (affiliation if applicable)	215099		
Applicant's Counsel: Case Title:	Darin C. Savage, Abadie & Schill, P.C. APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY		
Entries of Appearance/Intervenors:	POOLING, LEA COUNTY, NEW MEXICO 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:	Quail Ridge, Bone Spring Pool [Code: 50460]		
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		

Received by OCD: 7/13/2023 6:11:56 PM	Page 26 o	f 275
Well #1	Mighty Pheasant 5-8 Fed Com 301H Well (API No. 30-015- Pending), SHL: Lot 4, 483' FNL, 1272' FWL, Section 5, T20S- R34E; BHL: Unit M, 100' FSL, 330' FWL, Section 8, T20S- R34E, NMPM; Lea County, New Mexico, standup, standard location	y / U
Horizontal Well First and Last Take Points	Mighty Pheasant 5-8 Fed Com 301H Well: FTP: 100' FNL, 330' FWL, Section 5; LTP: 100' FSL, 330' FWL, Section 8	
Completion Target (Formation, TVD and MD)	Mighty Pheasant 5-8 Fed Com 301H Well: TVD approx. 10,870', TMD 21,057'; Bone Spring formation, See Exhibit A, A-1 & B-2	
AFE Capex and Operating Costs		
Drilling Supervision/Month \$	\$8000, Exhibit A	
Production Supervision/Month \$	\$800, Exhibit A	
Justification for Supervision Costs	Exhibit A	
Requested Risk Charge	200%, Exhibit A	
Notice of Hearing		
Proposed Notice of Hearing	Exhibit D, D-1	
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit D-2	
Proof of Published Notice of Hearing (10 days before hearing	Exhibit D-3	
Ownership Determination		
Land Ownership Schematic of the Spacing Unit	Exhibit A-2.2	
Tract List (including lease numbers and owners)	Exhibit A-2.2	
If approval of Non-Standard Spacing Unit is requested, Tract List (including lease numbers and owners) of Tracts subject to notice requirements.	N/A	
Pooled Parties (including ownership type)	All uncommitted WI owners; including as shown on Exhibit A-2.2	
Unlocatable Parties to be Pooled	Exhibit A	
Ownership Depth Severance (including percentage above & below)	N/A	
Joinder		
Sample Copy of Proposal Letter	Exhibit A-3	
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-2.2	
· · · ·		
Chronology of Contact with Non-Joined Working Interests	Exhibit A-4	
Overhead Rates In Proposal Letter	Exhibit A-3	
Cost Estimate to Drill and Complete	Exhibit A-3	
Cost Estimate to Equip Well	Exhibit A-3	
Cost Estimate for Production Facilities	Exhibit A-3	
Geology		
Summary (including special considerations)	Exhibit B	

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Spacing Unit Schematic	Exhibit B-5, B-6, B-8, B-11, B-12,B-16, B-17
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,B-16, B-17
Target Formation	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18
HSU Cross Section	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18
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, B-16
Cross Section Location Map (including wells)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18
Cross Section (including Landing Zone)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18
Additional Information	
Special Provisions/Stipulations	
CERTIFICATION: I hereby certify that the information pro	ovided 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 7-13-2023

# **COMPULSORY POOLING APPLICATION CHECKLIST**

Case: 23450	APPLICANT'S RESPONSE		
Date: July 20, 2023 (Scheduled hearing)			
Applicant	Cimarex Energy Co.		
Designated Operator & OGRID (affiliation if applicable)	215099		
Applicant's Counsel: Case Title:	Darin C. Savage, Abadie & Schill, P.C. 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:	Quail Ridge, Bone Spring Pool [Code: 50460]		
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, New Mexico		
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is	Yes, Standard Spacing Unit		
approval of non-standard unit requested in this application?			
Other Situations	No. N/A		
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		

Received by OCD: 7/13/2023 6:11:56 PM Horizontal Well First and Last Take Points	Mighty Pheasant 5-8 Fed Com 302H Well: FTP: 100' FNL, 1744' FWL, Section 5; LTP: Unit N, 100' FSL, 1744' FWL,		
	Section 8		
Completion Target (Formation, TVD and MD)	Mighty Pheasant 5-8 Fed Com 302H Well: TVD approx. 10,860', TMD 20,992'; Bone Spring formation, See Exhibit A, A-1		
AFE Capex and Operating Costs			
Drilling Supervision/Month \$	\$8000, Exhibit A		
Production Supervision/Month \$	\$800, Exhibit A		
Justification for Supervision Costs	Exhibit A		
Requested Risk Charge	200%, Exhibit A		
Notice of Hearing			
Proposed Notice of Hearing	Exhibit D, D-1		
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit D-2		
Proof of Published Notice of Hearing (10 days before hearing)	Exhibit D-3		
Ownership Determination			
Land Ownership Schematic of the Spacing Unit	Exhibit A-2.3		
Tract List (including lease numbers and owners)	Exhibit A-2.3		
If approval of Non-Standard Spacing Unit is requested, Tract List			
(including lease numbers and owners) of Tracts subject to notice requirements.	N/A		
Pooled Parties (including ownership type)	All uncommitted WI owners; including as shown on Exhibit A-2		
Unlocatable Parties to be Pooled	Exhibit A		
Ownership Depth Severance (including percentage above & below)			
	N/A		
Joinder			
Sample Copy of Proposal Letter	Exhibit A-3		
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-2.3		
Chronology of Contact with Non-Joined Working Interests	Exhibit A-4		
Overhead Rates In Proposal Letter	Exhibit A-3		
Cost Estimate to Drill and Complete	Exhibit A-3		
Cost Estimate to Equip Well	Exhibit A-3		
Cost Estimate for Production Facilities	Exhibit A-3		
Geology			
Summary (including special considerations)	Exhibit B		
Spacing Unit Schematic	Exhibit B-5, B-6, B-8, B-11, B-12,B-16, B-17		
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,B-16, B-17		
Target Formation	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18		
Target Formation HSU Cross Section	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18 Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18		

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Forms, Figures and Tables	
C-102	Exhibit A-1
Tracts	Exhibit A-2.3
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-2.3
General Location Map (including basin)	Exhibit A-2.3
Well Bore Location Map	Exhibit A-1, B-2, B-3
Structure Contour Map - Subsea Depth	Exhibit B-5, B-6, B-11, B-16
Cross Section Location Map (including wells)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18
Cross Section (including Landing Zone)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18
Additional Information	
Special Provisions/Stipulations	
CERTIFICATION: I hereby certify that the information provi	ded in this checklist is complete and accurate.
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	/s/ Darín Savage
Date:	Date 7-13-2012

# **COMPULSORY POOLING APPLICATION CHECKLIST**

Case: 23451	APPLICANT'S RESPONSE	
Date: July 20, 2023 (Scheduled hearing)		
Applicant	Cimarex Energy Co.	
Designated Operator & OGRID (affiliation if applicable)	215099	
Applicant's Counsel: Case Title:	Darin C. Savage, Abadie & Schill, P.C. 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:	Quail Ridge, Bone Spring Pool [Code: 50460]	
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, New Mexico	
Standard Horizontal Well Spacing Unit (Y/N), If No, describe <u>and is</u> 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	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 location	

Received by OCD: 7/13/2023 6:11:56 PM Horizontal Well First and Last Take Points	Page 32 of Mighty Pheasant 5-8 Fed Com 303H Well: FTP: 100' FNL,	
Completion Target (Formation, TVD and MD)	2122' FEL, Section 5; LTP: 100' FSL, 2122' FEL, Section 8 Mighty Pheasant 5-8 Fed Com 303H Well: TVD approx. 10,860', TMD 21,019'; Bone Spring formation, See Exhibit	
	A, A-1	
AFE Capex and Operating Costs		
Drilling Supervision/Month \$	\$8000, Exhibit A	
Production Supervision/Month \$	\$800, Exhibit A	
Justification for Supervision Costs	Exhibit A	
Requested Risk Charge	200%, Exhibit A	
Notice of Hearing		
Proposed Notice of Hearing	Exhibit D, D-1	
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit D-2	
Proof of Published Notice of Hearing (10 days before hearing)	Exhibit D-3	
Ownership Determination		
Land Ownership Schematic of the Spacing Unit	Exhibit A-2.4	
Tract List (including lease numbers and owners)	Exhibit A-2.4	
If approval of Non-Standard Spacing Unit is requested, Tract List		
(including lease numbers and owners) of Tracts subject to notice requirements.	N/A	
	All uncommitted WI owners; including as shown on	
Pooled Parties (including ownership type)	Exhibit A-2	
Unlocatable Parties to be Pooled Ownership Depth Severance (including percentage above & below)	Exhibit A	
	N/A	
Joinder		
Sample Copy of Proposal Letter	Exhibit A-3	
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-2.4	
Chronology of Contact with Non-Joined Working Interests	Exhibit A-4	
Overhead Rates In Proposal Letter	Exhibit A-3	
Cost Estimate to Drill and Complete	Exhibit A-3	
Cost Estimate to Equip Well	Exhibit A-3	
Cost Estimate for Production Facilities	Exhibit A-3	
Geology		
Summary (including special considerations)	Exhibit B	
Spacing Unit Schematic	Exhibit B-5, B-6, B-8, B-11, B-12,B-16, B-17	
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,B-16, B-17	
Target Formation	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18	
HSU Cross Section	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18	
Depth Severance Discussion	N/A	
Forms, Figures and Tables		
C-102 Ceteased to Imaging: 7/14/2023 8:08:00 AM	Exhibit A-1	

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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, B-11, B-16
Cross Section Location Map (including wells)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18
Cross Section (including Landing Zone)	Exhibit B-3, B-4, B-6, B-7, B-13, B-14, B-18
Additional Information	
Special Provisions/Stipulations	
CERTIFICATION: I hereby certify that the information provi	ded in this checklist is complete and accurate.
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	/s/ Darín Savage
Date:	Date 7-13-2023

## 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

#### **PREHEARING STATEMENT**

Cimarex Energy Co., ("Cimarex"), OGRID No. 215099, through its undersigned attorneys, submits the following 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 propose 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 against 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

APPLICANT

Cimarex Energy Co.

#### ATTORNEY

Darin C. Savage Andrew D. Schill William E. Zimsky Abadie & Schill, PC 214 McKenzie Street Santa Fe, New Mexico 87501 Telephone: 970.385.4401 Facsimile: 970.385.4901

darin@abadieschill.com andrew@abadieschill.com bill@abadieschill.com

# COMPETING PARTY

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

Michael H. Feldewert Adam G. Rankin Julia Broggi Paula M. Vance Holland & Hart LLP Post Office Box 2208 Santa Fe, NM 87504 505-988-4421 Facsimile: 505-983-6043 mfeldewert@hollandhart.com agrankin@hollandhart.com jbroggi@hollandhart.com

#### ADDITIONAL PARTIES

Sandstone Properties, LLC

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

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

Northern Oil and Gas, Inc.

#### 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 1<sup>st</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> 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. 9 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 for approximately 4 years, and I have been working in New Mexico for 4 years. My credentials as an expert witness in petroleum land matters have been accepted by the Division and made a matter of record.

Geologist: Staci MeullerApprox. 45 minApprox. 21Qualifications: I have a Bachelor of Science Degree in Geophysical Engineering from ColoradoSchool 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 expertwitness in geology have been accepted by the Division and made a matter of record.

Reservoir Engineer: Eddie Behm Approx. 45 minutes Approx. 17 Qualifications: I attended the University of Tulsa and graduated with a bachelor's 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 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 reservoir engineer, and my credentials have been accepted of record. Facilities Engineer: Calvin Boyle Available for questions (15 min) Approx. 1 Qualifications: I attended the University of Oklahoma and graduated with a bachelor's 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 Energy Co. ("Cimarex") and have been employed as a Field, Production, and Facilities engineer for Cimarex 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 engineering 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 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 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

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

Attorneys for Cimarex Energy Co.

## **CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing was filed with the New Mexico

Oil Conservation Division and was served on counsel of record via electronic mail on July 13,

2023:

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

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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

### 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 abovereferenced compulsory pooling applications pursuant to 19.15.4.12.A(1).

5. 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"); and therefore, we have grouped them together for



this presentation to the Division as a logical way to organize and present the cases being reviewed in this contested hearing.

6. Under <u>Case No. 23448</u>, Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Spring formation, more specifically, the Quail Ridge; Bone Spring formation [Pool Code 50460], designated as an oil pool, from a stratigraphic equivalent of 9,373 feet (that being the top of the 1<sup>st</sup> Bone Spring), 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 the same Well, that being the base of the Bone Spring formation, 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**.

7. 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.

8. 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.

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9. Under <u>Case No. 23449</u>, Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Spring formation, more specifically, the Quail Ridge; Bone Spring formation [Pool Code 50460], designated as an oil pool, from a stratigraphic equivalent of 9,373 feet (that being the top of the 1<sup>st</sup> Bone Spring), 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 the same Well, that being the base of the Bone Spring formation, 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**.

10. 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.

11. Under <u>Case No. 23450</u>, Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Spring formation, more specifically, the Quail Ridge; Bone Spring formation [Pool Code 50460], designated as an oil pool, from a stratigraphic equivalent of 9,373 feet (that being the top of the 1<sup>st</sup> Bone Spring), 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 the same Well, that being the base of the Bone Spring formation, 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**.

12. 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.

13. Under <u>Case No. 23451</u>, Cimarex seeks an order pooling all uncommitted mineral interest in the Bone Spring formation, more specifically, the Quail Ridge; Bone Spring formation [Pool Code 50460], designated as an oil pool, from a stratigraphic equivalent of 9,373 feet (that being the top of the 1<sup>st</sup> Bone Spring), 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 the same Well, that being the base of the Bone Spring formation, 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**.

14. 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.

15. The proposed C-102 for each well is attached as **Exhibit A-1**.

16. 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.

17. 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. In a Successor Operator Ballot sent to working interest owners in February of 2020 and subsequent letter dated August 31, 2020, Magnum Hunter Production Inc., a subsidiary of Cimarex, received the affirmative vote under the 1979 Estoril Operating Agreement that covers the S/2 of Sections 4 and 5 and all of Sections 8 and 9, Township 20 South, Range 34 East. At the time, a total of 14 working interest owners collectively owning 59.405672% of the interest in the contract area from the Top of the Bone Spring formation to the Base of the Bone Spring formation, and 54.758783% of the interest covering from the Base of the Bone Spring formation to the Base of the Bone Spring formation. Under the terms of said Operating Agreement, because two or more of the parties owning a majority interest have voted to elect Magnum Hunter Production Inc. as Operator, Magnum Hunter Production Inc. is the operator of said lands described above covered by the Operating Agreement.

There are no depth severances in the Bone Spring formation in this acreage.
 Cimarex's review of the lands shows no overlapping units.

19. Cimarex operates around 15,000 acres and operate ~50 wellbores in the immediate vicinity in Township 19 South, Ranges 33 and 34 East, in Lea County. I believe that Cimarex is a top-tier operator especially regarding the knowledge it takes to drill in this area. We have been able to come to agreements with multiple owners in the area to effectively and efficiently develop a large portion of this area.

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20. 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.

21. 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 and Stevens, Cimarex had made good faith efforts to communicate and get a plan of development in place for these four sections. No meetings with Read and Stevens had ever come to fruition, instead, we found out that they had spud wells in the middle of a 2-mile development in order to save their expiring permits. We were never notified or proposed by Read and Steven's in this action although we do own in the lands that were involved. 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.

22. 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.

23. For any unleased open acreage being pooled, Cimarex requests that the acreage be pooled pursuant to statutory one-eighth (1/8) royalty.

24. **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.

25. Not including the Wolfcamp development proposed by Permian Resources, Cimarex's full development of the acreage is far, far less expensive, by more than \$130MM, for 2 mile wellbores to develop the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Bone Spring formations (~Permian's cost of \$400MM vs. Cimarex's lower cost of \$266MM). 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.

26. 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.

27. Cimarex requests the maximum cost, plus 200% risk charge be assessed against non-consenting working interest owners.

28. Cimarex requests that it be designated operator of the units and wells.

29. The Exhibits to this Self-Affirmed Statement were prepared by me or compiled from Cimarex's company business records under my direct supervision.

30. The granting of this Application is in the best interests of conservation, the prevention of waste, and the protection of correlative rights, and will avoid the drilling of unnecessary wells. Due to Cimarex's operational footprint and expertise in the area, we are able to utilize our drilling efficiencies, relationships with working interest owners, and third party takeaway to cost-effectively develop this acreage. We understand the geology of this area and do not need to over-drill the Subject Lands in order to fully develop the acreage.

31. The foregoing is correct and complete to the best of my knowledge and belief.

#### [Signature page follows]

## 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

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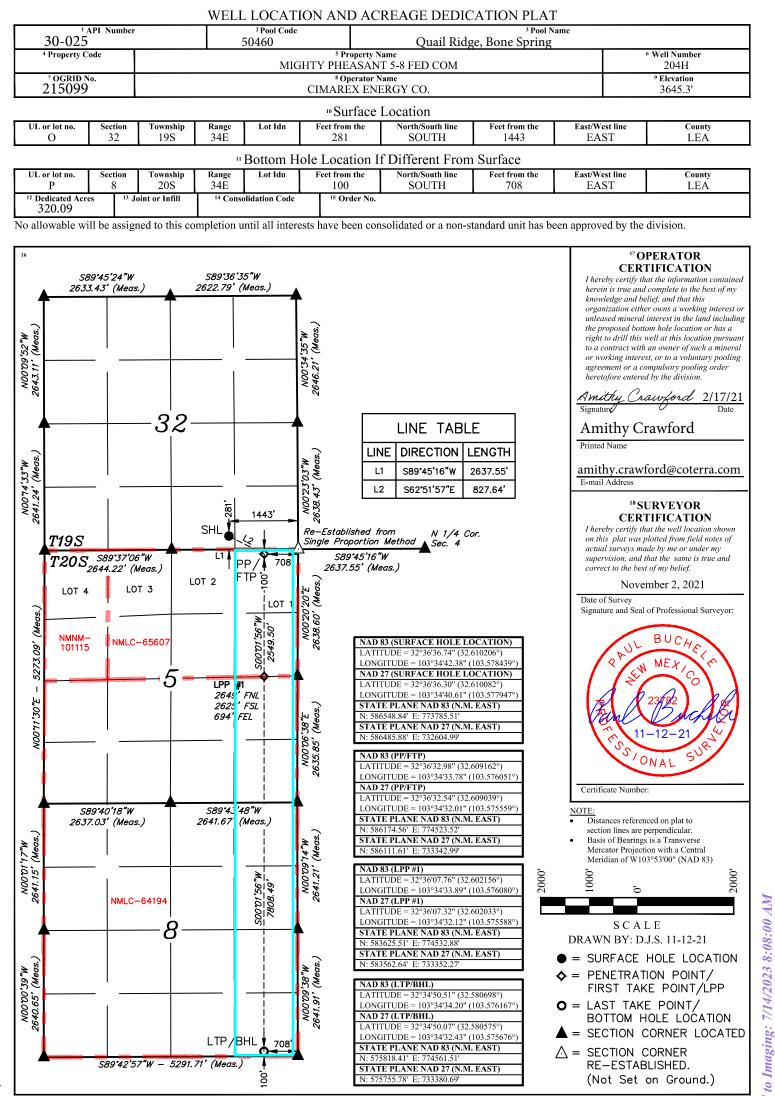
Date Signed

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Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u> 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

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EXHIBIT

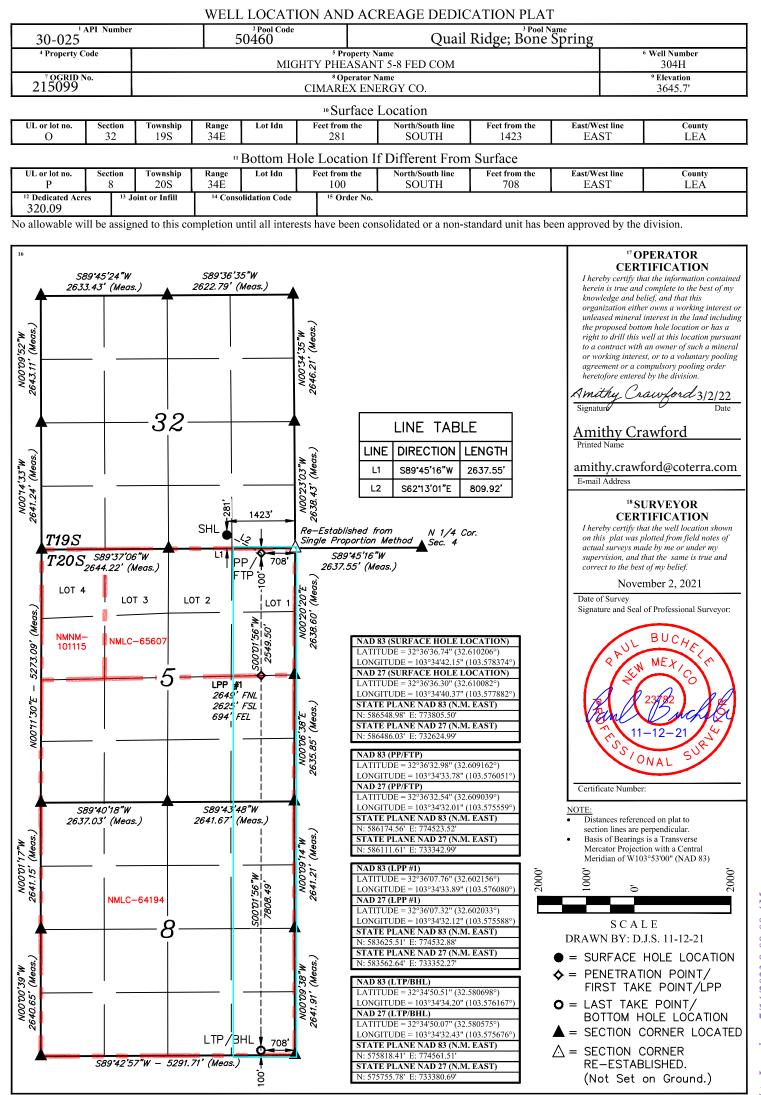
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

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

State of New Mexico

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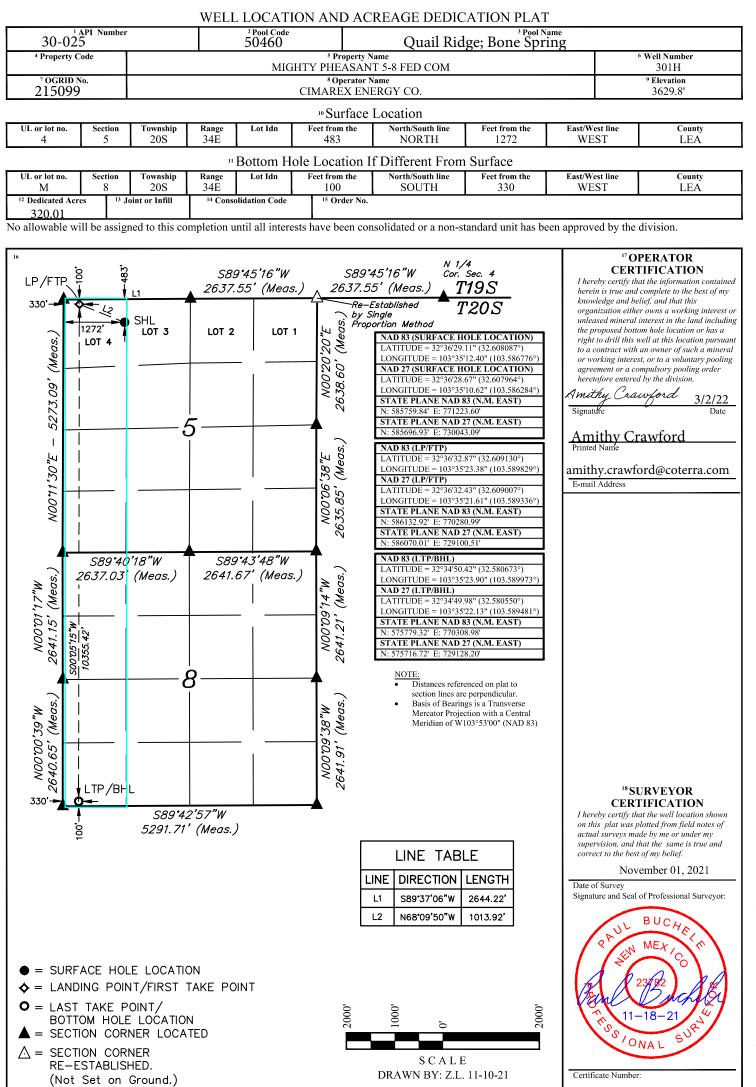


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District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

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

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 District I

 1625 N. French Dr., Hobbs, NM 88240

 Phone: (575) 393-6161 Fax: (575) 393-0720

 District II

 811 S. First St., Artesia, NM 88210

 Phone: (575) 748-1283 Fax: (575) 748-9720

 District III

 1000 Rio Brazos Road, Aztec, NM 87410

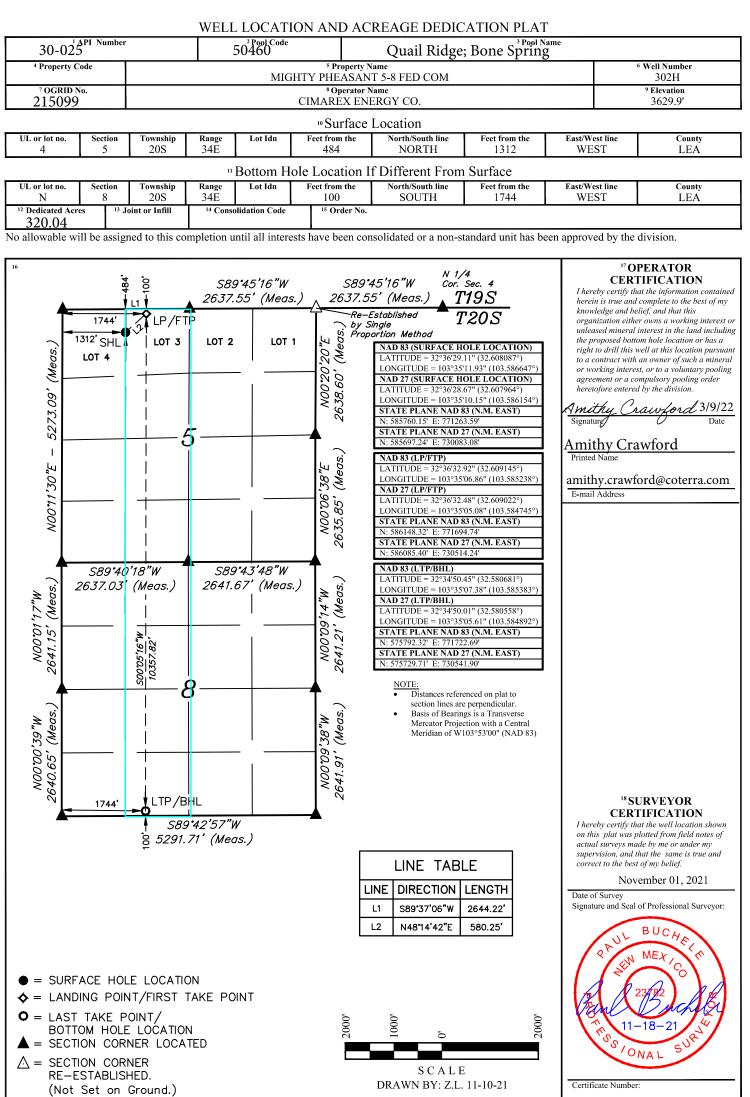
 Phone: (505) 334-6178 Fax: (505) 334-6170

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

AMENDED REPORT



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#### Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u> 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

AMENDED REPORT

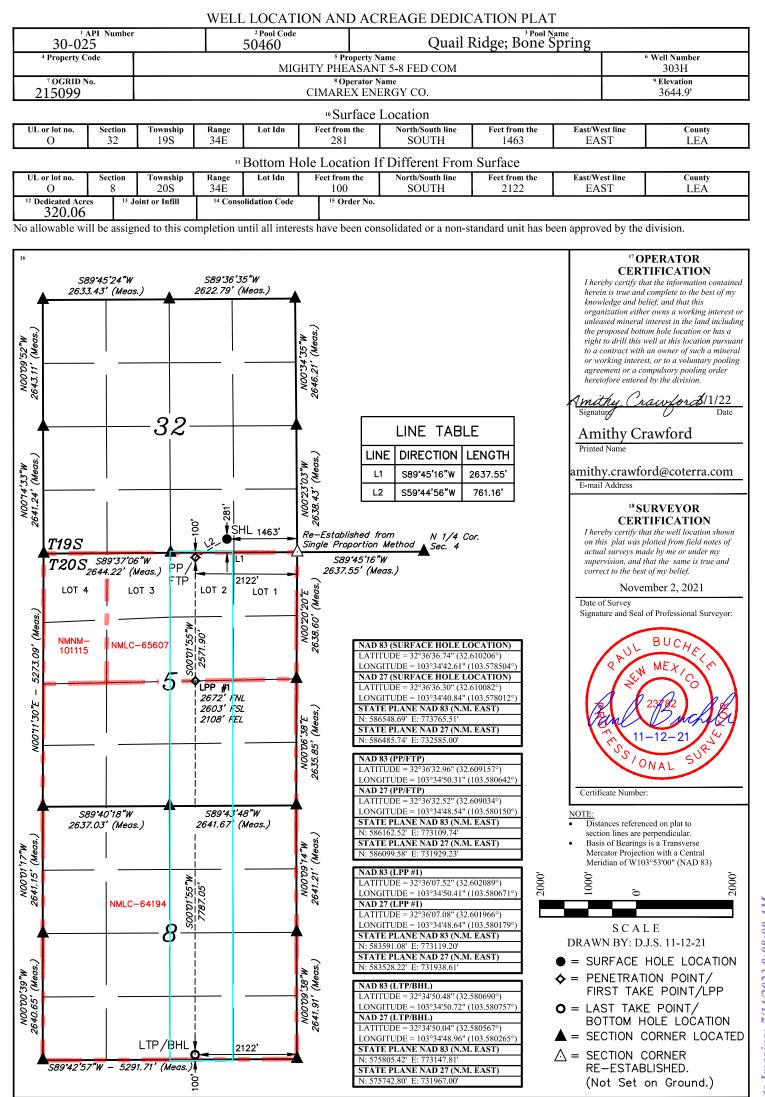
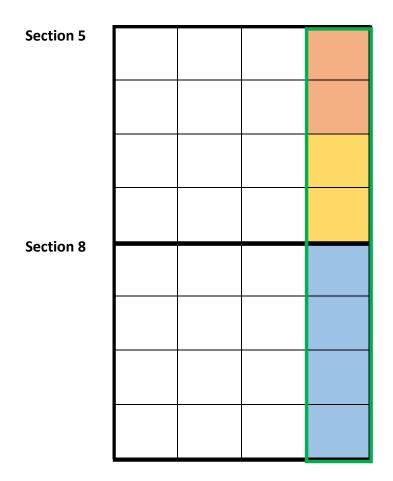


Exhibit "A-2"

## 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			

Cimarex Energy Co.	8.5075	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.4545	0.00568184	Uncommitted
310 W. Wall Street, Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	3.8893	0.04861611	Uncommitted
450 E. 17 <sup>th</sup> Ave. Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.2517	0.00314684	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024090	Uncommitted
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	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	17.0151	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			
Avalon Energy Corporation	0.9091	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	7.7786	0.04861609	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.9508	0.00594271	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	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 2 TOTAL	160.00	0.49985941	

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

Lease: USA NMLC-0065607			
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.			

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Fort Worth, T	X 76102
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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**

Moore & Shelton Co., Ltd HOG Partnership, LP Challenger Crude, Ltd. Permian Resources LLC 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 Cimarex Energy Co. Avalon Energy Corporation Wilbanks Reserve Corporation Marks Oil, Inc. Javelina Partners William A. Hudson, II Union Hill Oil & Gas Co. Inc.

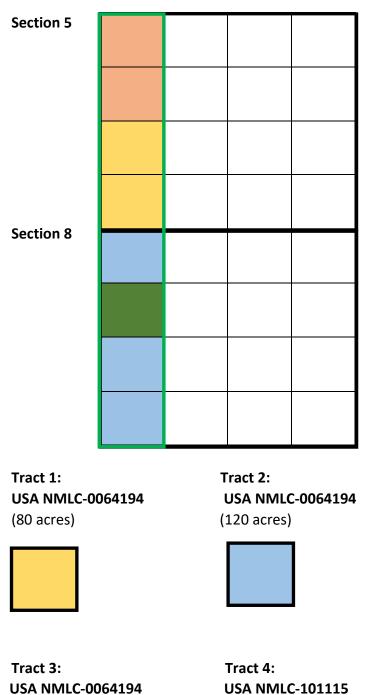
#### **UNIT RECAPITULATION:**

#### 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"

## 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



(80.01 acres)





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(40 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)

#### 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.	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	Uncommitted
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	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	3.8892	0.04861609	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.2517	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	80	0.24999219	

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

#### Lease: USA NMLC-0064194

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	Uncommitted
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	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	5.8339	0.04861608	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.7131	0.00594272	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			

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William A. Hudson, Il	.3776	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	3.6289	0.03024092	Uncommitted
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)

### Lease: USA NMLC-0064194

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	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
	2 9464	0 1000 4 4 4 4	Committed
Cimarex Energy Co.	2.8461	0.10634444	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			

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Avalon Energy Corporation	0.2273	0.00568186	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	1.9446	0.04861616	Uncommitted
450 E. 17 <sup>th</sup> 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	Uncommitted
Union Hill Oil and Gas Co. Inc. 7712 Glanshannon Cir.	1.2096	0.03024095	Uncommitted
	1.2096	0.03024095	Uncommitted
7712 Glanshannon Cir.	1.2096	0.03024095	Uncommitted
7712 Glanshannon Cir.	1.2096 40.00	0.03024095 0.12499609	Uncommitted
7712 Glanshannon Cir. Dallas, TX 75225	40.00	0.12499609	
7712 Glanshannon Cir. Dallas, TX 75225 TRACT 3 TOTAL	40.00	0.12499609	
7712 Glanshannon Cir. Dallas, TX 75225 TRACT 3 TOTAL <b>TRACT 4 OWNERSHIP (Lot 4 and SW/4NW/4</b>	40.00	0.12499609	
7712 Glanshannon Cir. Dallas, TX 75225 TRACT 3 TOTAL <b>TRACT 4 OWNERSHIP (Lot 4 and SW/4NW/4</b> Lease: USA NMLC-101115	40.00 of Section 5-T20	0.12499609 <b>0S-R34E, being 80</b>	).01 acres)
7712 Glanshannon Cir. Dallas, TX 75225 TRACT 3 TOTAL <b>TRACT 4 OWNERSHIP (Lot 4 and SW/4NW/4</b> Lease: USA NMLC-101115 Owner	40.00 of Section 5-T20 Net Acres	0.12499609 <b>)S-R34E, being 80</b> Unit WI	).01 acres) Status
7712 Glanshannon Cir. Dallas, TX 75225 TRACT 3 TOTAL <b>TRACT 4 OWNERSHIP (Lot 4 and SW/4NW/4</b> Lease: USA NMLC-101115 Owner Permian Resources LLC/Read and Stevens	40.00 of Section 5-T20 Net Acres	0.12499609 <b>)S-R34E, being 80</b> Unit WI	).01 acres) Status
7712 Glanshannon Cir. Dallas, TX 75225 TRACT 3 TOTAL <b>TRACT 4 OWNERSHIP (Lot 4 and SW/4NW/4</b> Lease: USA NMLC-101115 Owner Permian Resources LLC/Read and Stevens 300 N. Marienfeld St., Ste. 1000	40.00 of Section 5-T20 Net Acres	0.12499609 <b>)S-R34E, being 80</b> Unit WI	).01 acres) Status

11886 Greenville Ave., Ste. 106			
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

Moore & Shelton Co., LTD HOG Partnership, LP Challenger Crude, Ltd. Permian Resources, LLC 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 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 David Luna

### **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%

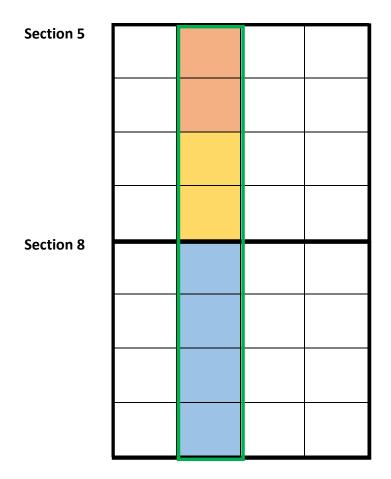
Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard -0.439892% Ard Oil, LTD – 1.319670% Chase Oil Corporation – 1.350574% Cimarex Energy Co. – 7.975584% Avalon Energy Corporation – 0.426124% Wilbanks Reserve Corporation – 3.646093% Marks Oil, Inc. - 0.445690% Javelina 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

## 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 Steven	ns 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	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5075	0.10634445	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			

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Avalon Energy Corporation	0.4545	0.00568183	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	3.8893	0.04861608	Uncommitted
450 E. 17 <sup>th</sup> 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	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
	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			
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			
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	Uncommitted
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	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	7.7786	0.0486161	Uncommitted
450 E. 17 <sup>th</sup> 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	Uncommitted
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-T20	S-R34E, being 80.	04 acres)
Lease: USA NMLC-0065607			
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**

Moore & Shelton Co., Ltd
HOG Partnership, LP
Challenger Crude, Ltd.
Permian Resources LLC
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
Cimarex Energy Co.
Avalon Energy Corporation
Wilbanks Reserve Corporation
Marks Oil, Inc.
Javelina Partners
William A. Hudson, II
Union Hill Oil & Gas Co. Inc.
MRC Permian Company
Northern Oil and Gas, Inc.
CBR Oil Properties, LLC
General Partnership, 2023 Permian
Basin JV

### **UNIT RECAPITULATION:**

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

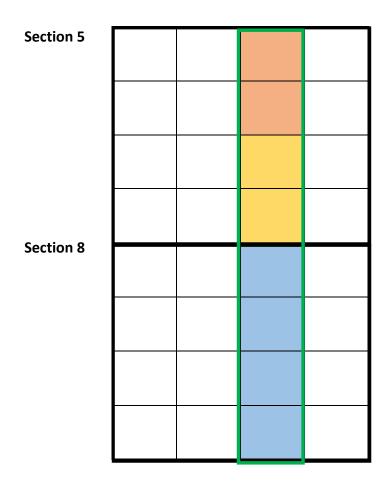
Moore & Shelton Co., Ltd – 1.557644% HOG Partnership, LP – 5.643340% Challenger Crude, Ltd. – 2.188411% Permian Resources LLC / Read and Stevens – 25.761402% Magnum Hunter Production – 21.068171% Zorro Partners, Ltd. – 5.650252% Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. 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 30	70			
Galveston,	TX 77552			
HOG Partne	ership, LP	2.6853	0.03356645	Uncommitted
5950 Cedar	Springs Rd., Ste. 242			
Dallas, TX 7	5235			
Challenger	Crude, Ltd.	2.3346	0.02918247	Committed
3525 Andre	ws Hwy.			
Midland, TX	( 79703			
Permian Re	sources LLC/Read and Stevens	24.2031	0.30253928	Uncommitted
300 N. Mari	ienfeld 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	Uncommitted
11344 Lovington Hwy.			
Artesia, NM 88210			
Cimarex Energy Co.	8.5075	0.10634446	Committed
6001 Deauville Blvd., Ste. 300N			
Midland, TX 79706			

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Avalon Energy Corporation	0.4545	0.00568183	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	3.8893	0.04861608	Uncommitted
450 E. 17 <sup>th</sup> Ave., Ste. 220			
Denver, CO 80203			
Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			
William A. Hudson, II	0.2517	0.00314683	Committed
616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 1 TOTAL	80	0.24995313	
	80	0.24555515	

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			
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	Uncommitted
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	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			
Wilbanks Reserve Corporation	7.7786	0.0486161	Uncommitted
450 E. 17 <sup>th</sup> 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

616 Texas St.			
Fort Worth, TX 76102			
Union Hill Oil and Gas Co. Inc.	4.8385	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			
TRACT 2 TOTAL	160.00	0.49990627	
TRACT 3 OWNERSHIP (Lot 2 and SW/4NE/4 of	Section 5-T20S-I	R34E, being 80.0	)6 acres)
Lease: USA NMLC-0065607			
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			
Zorro Partners, Ltd.	10.3433	0.12919490	Committed
616 Texas St.			
Fort Worth, TX 76102			

Frost Bank, Trustee of the Josephine T.1.27180.01588547Committed

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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**

Moore & Shelton Co., Ltd HOG Partnership, LP Challenger Crude, Ltd. Permian Resources LLC 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 Cimarex Energy Co. Avalon Energy Corporation Wilbanks Reserve Corporation Marks Oil, Inc. Javelina Partners William A. Hudson, II Union Hill Oil & Gas Co. Inc.

### **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

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.

<u>Mighty Pheasant 5-8 Fed Com 101H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 102H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 103H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 104H</u> - 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.



<u>Mighty Pheasant 5-8 Fed Com 201H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 202H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 203H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 204H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 301H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 302H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 303H</u> - 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.

<u>Mighty Pheasant 5-8 Fed Com 304H</u> - 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

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 Révision	Formation 2nd Sand	Well Type DEV	Ttl Measured Depth 19808	Ttl Vetical Deoth 10308
Purpose Drill Description	and complete well			
10	ne intended surface hold location for the well i 30 FSL and 708 FEL of Section 8, T20S-R34E. Th 30 Wherly direction within the formation to the r	ne well is proposed to be drilled vertic	cally to the 2nd Sand format	tion and laterally in a

approximately 10308 feet.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,475,500		\$2,475,500
Completion Casts		\$4,646,761	\$4,646,761
Total Intangible Cost	\$2,475,500	\$4,646,761	\$7,122,261
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	\$393,000	\$1,125,000	\$1,518,000
Lease Equipment		\$790,428	\$790,428
Total Tangible Cost	\$393,000	\$1,915,428	\$2,308,428
Total Well Cost	\$2,868,500	\$6,562,189	\$9,430,689

Comments On Well Costs

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

#### Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator 's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

#### I elect to purchase my own well control insurance policy.

#### Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

#### I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

#### Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval			
Company	Approved By (Print Name)	Approved By (Signature)	Date
NOTICE TO NONOPERATOR:	Costs shown on this form are estimates only.	By executing this AFE, the consenting party agrees to pay its proportionate	
share of actual costs incurred.	Overhead will be charged in accordance with	the Joint Operating Agreement.	9160

7/6/2022

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

Description	BCP - Dri	illing	ACP - D	Irilling	Com	p/Stim	Productio	on Equip	Post Com		Total
Description	Codes	Amount	Codes	Amount	1	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
Damages	DIDC.105	16,500			1000		CON.105	15807	Vanner		32,30
Mud/Fluids Disposal	DIDC.255	200,000	10.00		STIM.255	51,000			PCOM.255	0	251,00
Day Rate	DIDC.115	468,000	DICC.120	96,000							564,00
Misc Preparation	DIDC.120	30,000									30.00
Bits	DIDC.125	97,000	DICC.125	0	STIM.125	0			PCOM.125	0	97,00
Fuel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,00
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	25,00
Mud & Additives	DIDC.145	300,000	a second second								300,000
SWD PIPED TO 3RD PARTY SWD WELL	0100.145	500,000							PCOM.257	109,193	109,19
	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	1,378	PCOM.140	60,000	295,37
Surface Rentals			DICC.140	U	STIM.140		CON.140	1,570	PCOM.145	00,000	166,000
Downhole Rentals	DIDC.155	131,000				35,000			and the state of the second seco		30,000
Flowback Labor					STIM.141	0			PCOM.141	30,000	
Automation Labor							CON.150	36,558	PCOM.150	5,000	41,55
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING			5.0.0				CON.165	18,888			18,88
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	167,58
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	and the second second	4,000	CON.175	17,833	PCOM.175	0	59,833
			DICC.180	13,000	And and a second second	47,000	CON.180	21,238	PCOM.180	0	162,23
Supervision	DIDC.210 DIDC.280	81,000 36,000	DICC.255	5,000	and the second sec	31,000	0011100	61,630			72,000
Trailer House/Camp/Catering			Contraction of the second		Conversion 2		CONTRO	24.240	PCON 100	0	114,31
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	24,318	PCOM.190	U	
Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000									115,00
Directional Drilling Services	DIDC.245	307,000									307,00
Solids Control	DIDC.260	46,000	1						Sec. 2		46,00
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	257,00
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
									1 CONLETO		191,000
Stimulation Water/Water Transfer/Water					STIM.395	191,000			00011305	0	60,00
Cimarex Owned Frac/Rental Equipment	atore and	Sector			STIM.305	60,000	and the second		PCOM.305	0	
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	7,000									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			94,84
FL/GL - Supervision							CON.505	14,429			14,42
Survey							CON.515	2,351			2,35
SWD/Other - Labor							CON.600	0			
SWD/Other - Supervision							CON.605	0			
Aid In Construct/3rd Party Connect							CON.701	40,531	-	_	40,53
Contingency	DIDC.435	118,000	DICC.220	15 000	STIM.220	165,000		105,542	PCOM.220	0	403,54
	0100.435	110,000	DICC.220	13,000	31111.220	163,000			reomeeo	0	23,50
Contingency							CON.221	23,508	-	212.122	
Total Intangible Cost		2,475,500		306,000		3,459,000		669,568		212,193	7,122,26
Conductor Pipe	DWEB.130	0									
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					1.000		792,00
Tubing			and a state		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	0		201000			and a state of the		1.000
Packer, Nipples	21120.100	U	arrive real	U	STIMT.400	28,000			PCOMT.400	0	28,00
					51101.400	20,000	CONT.380	10,538	. commod	U	10,53
SHORT ORDERS											
PUMPS							CONT.385	30,804			30,80
WALKOVERS					in the second		CONT.390	4,053	and the second		4,05
Downhole Lift Equipment					STIMT.410	80,000			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
							CONT.425	486			48
Telecommunication Equipment											
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
FL/GL - Line Pipe							CONT.555	48,637			48,63
SWD/Other - Materials							CONT.650	0			
SWD/Other - Line Pipe							CONT.655	0			
		202.020		No.	-					20.000	2,308,42
Total Tangible Cost		393,000		810,000		285,000		790,428		30,000	2.308.42

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

Description		BCP	- Drilling		ACP - Drilling		Comp	/Stim	1
Description	Codes		Amount	Codes		Amount	Codes	in the second	Amoun
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,00
Damages	DIDC.105		16,500						and the second
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		DICC.125	STIM 125	0	STIM.125		
Fuel	DIDC.135		119,000		o think the	0			
			and the second sec	DICC.135	CTINATOR	0	STIM.135		20,000
Water for Drilling Rig (Not Frac	DIDC.140	DICC 135	and the second sec	DICC, 135	STIM.135	0	311111.133		20,000
Mud & Additives	DIDC.145		300,000			1			
SWD PIPED TO 3RD PARTY SWD								Sec. Sec.	
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	1 m m	35,00
Flowback Labor			1000			1	STIM.141		
Automation Labor									
Mud Logging	DIDC.170		5,000						
PC & EXTERNAL PAINTING	Dibeling		5,000						
	DIDC.185	DICCASE	70.000	DICC.155		140,000			
Cementing & Float Equipment						1.			4,00
Fubular Inspections		DICC.160		DICC.160	STIM.160	8,000	STIM.160		
Casing Crews	DIDC.195		10,000,000	DICC.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	DICC.175	30,000	DICC.175	STIM.175	8,000	STIM.175	CON.175	4,00
Supervision	DIDC.210	DICC.180	81,000	DICC.180	STIM 180	13,000	STIM.180	CON.180	47,00
frailer House/Camp/Catering	DIDC.280	DICC.255	36,000	DICC.255	STIM 280	5,000	STIM.280		31,00
Other Misc Expenses	DIDC.220	DICC.190		DICC.190	STIM 190	0	STIM.190	CON.190	85,00
Overhead	DIDC 225	Alternative states		DICC.195		5,000		11111	
MOB/DEMOB	DIDC.223 DIDC.240		115,000			5,000			
Directional Drilling Services	DIDC.245		307,000						
Solids Control	DIDC.260		46,000		Long to h		Sec. and		-
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						1	STIM.200		257,00
Composite Plugs						1	STIM.390		39,00
Stimulation							STIM.210		2,245,00
Stimulation Water/Water						1	STIM.395		191,00
Cimarex Owned Frac/Rental			251295				STIM.305		60,00
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead	E.M.								
FL/GL - ON PAD LABOR									
FL/GL - Labor						-			
FL/GL - Supervision									
Survey						1			
SWD/Other - Labor			1						
			1						-
SWD/Other - Supervision			1						
Aid In Construct/3rd Party Connect		Constant of the second s	Land		stokasz	Jane		12230 2220	
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			10.00			
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000			1			
Intermediate Casing 1	DWEB.145		0			1			
and the second se	DIVED.145	-	0			703 000			
Production Casing or Liner				DWEA.100		792,000			130.00
Tubing	-			-			STIMT.105		139,00
Wellhead, Tree, Chokes		DWEA.120		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							1999 A 1996		
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		-							
Ease Automation Materials FL/GL - Materials						1			
L/GL - Materials									
SWD/Other - Materials									
SWD/Other - Line Pipe									
			393,000			810,000			285,00
Total Tangible Cost			333,000			010,000			205,00

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

Description Roads & Location Jamages Mud/Fluids Disposal Jay Rate Misc Preparation Bits	Codes CON.100 CON.105	Amount 48,637	Codes PCOM.100	Repair any roads post D&C	Amount 3,000	Co 74,63
Damages Mud/Fluids Disposal Day Rate Misc Preparation Bits			PCOM.100	Repair any roads post D&C	3,000	14.6
Mud/Fluids Disposal Day Rate Misc Preparation Sits	CON.105	10007		the second se		
Day Rate Misc Preparation Bits		15807				32,3
Misc Preparation Bits			PCOM.255		0	251,0
Bits						564,0
						30,0
		1 1	PCOM.125		0	97,0
Fuel		1	PCOM.130		0	119,0
Water for Drilling Rig (Not Frac Water)		1	PCOM.135		0	25,0
Mud & Additives			i comitos	the second se		300,0
			PCOM.257	Water for 60 days (270K barrels)	109,193	109,1
SWD PIPED TO 3RD PARTY SWD WELL	001110	1.270		the second se	60,000	295,3
Surface Rentals	CON.140	1,378	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	and a second sec	
Downhole Rentals		1	PCOM.145	the state of a course state	0	166,0
Flowback Labor		1	PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,0
Automation Labor	CON.150	36,558	PCOM.150		5,000	41,5
Mud Logging		1.000				5,0
PC & EXTERNAL PAINTING	CON.165	18,888				18,8
Cementing & Float Equipment		1				210,0
Tubular Inspections			PCOM.160		0	50,0
		a summer of	r com roo			28,0
Casing Crews	0011470	120 500	00011170	RU Flowback Iron & Automation	5,000	167,5
Mechanical Labor	CON.170	139,588	PCOM.170	RU HOWDACK Iron & Automation		
Trucking/Transportation	CON.175	17,833	PCOM.175		0	59,8
Supervision	CON.180	21,238	PCOM.180		0	162,2
Frailer House/Camp/Catering		1				72.0
Other Misc Expenses	CON.190	24,318	PCOM.190		0	114,3
Dverhead	1000					10,0
MOB/DEMOB						115,0
Directional Drilling Services						307,0
and the second						46,0
Solids Control			DCOLLOUS		0	148,0
Well Control Equip (Snubbing Services)			PCOM.240			
Completion Rig			PCOM.115		0	21,0
Coil Tubing Services			PCOM.260		0	
Completion Logging/Perforating/Wireline			PCOM.200		0	257,0
Composite Plugs			PCOM.390		0	39,0
Stimulation			PCOM.210		0	2,245,0
Stimulation Water/Water Transfer/Water						191,0
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	60.0
Legal/Regulatory/Curative	CON.300	0			1	10,0
Well Control Insurance	CONTROL	0				7,0
And a second	CON 1905					26,5
Major Construction Overhead	CON.305	26,507				
FL/GL - ON PAD LABOR	CON.495	37,613			1.000	37,6
FL/GL - Labor	CON.500	94,842				94,8
FL/GL - Supervision	CON.505	14,429				14,4
Survey	CON.515	2351				2,3
SWD/Other - Labor	CON.600	0				
SWD/Other - Supervision	CON.605	0				
Aid In Construct/3rd Party Connect	CON.701	40,531				40,5
Contingency	CON.220	105,542			( n	403,5
Contingency	CON.221	23,508				23.5
	CONSET				212,193	7,122,
Total Intangible Cost		669,568			5151132	1,122,
Conductor Pipe						
Water String						104,0
Surface Casing						251,0
Intermediate Casing 1						
Production Casing or Liner						792,0
Tubing			PCOMT.105		0	139,0
Wellhead, Tree, Chokes		1.0		Replace worn chokes and valves during FB	10,000	104,0
Liner Hanger, Isolation Packer				the second se		
and the second se			DCOLIT 100		0	28,0
Packer, Nipples	CONTRAC		PCOMT.400		U	
SHORT ORDERS	CONT.380	10,538				10,5
PUMPS	CONT.385	30,804				30,8
WALKOVERS	CONT.390	4.053				4,0
Downhole Lift Equipment			PCOMT.410		0	80,0
Surface Equipment			PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,0
Well Automation Materials				PTs, and replacing meters	5,000	5,0
N/C Lease Equipment	CONT.400	184,334	and a second	and the second se	and the second	184,
Tanks, Tanks Steps, Stairs	CONT.405	51,879				51,8
Battery Equipment						214,0
	CONT.410	214,003				
Secondary Containments	CONT.415	19,292				19,2
Overhead Power Distribution	CONT.420	64,038				64,0
Facility Electrical	CONT.425	32,100				32,
Telecommunication Equipment	CONT.426	486				
Meters and Metering Equipment	CONT.445	45,232				45,
Facility Line Pipe	CONT.450	31,208				31,
	and the second sec	10000				32,
Lease Automation Materials	CONT.455	32,424				
FL/GL - Materials	CONT.550	21,400				21,
FL/GL - Line Pipe	CONT.555	48,637			1	48,
SWD/Other - Materials	CONT.650	0				
SWD/Other - Line Pipe	CONT.655	0				
Total Tangible Cost		790,428		-	30,000	2,308,

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

AFE # XXXXXXX

Company-Entity				Date Prepared 8/17/2022
Exploration Region Permian Basin	Well Name Mighty Pheasant 5-8 Fed Com 301H	Prospect New Mexico Bone Spring	Property Num XXXXXX-XXX.01	der AFE XXXXXXXX
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	Tt  Measured Depth 20370	Ttl Vetical Depth 10870
Purpose Drill Description	and complete well			
1	he intended surface hold location for the well i 00 FSL and 330 FWL of Section 8, T20S-R34E. T outherly direction within the formation to the r	The well is proposed to be drilled vert	ically to the 3rd Sand formation	on and laterally in a

approximately 10870 feet.

\$4,595,289 <b>\$4,595,289</b>	
	\$4,595,289 <b>\$7,070,789</b>
\$4,595,289	\$7,070,789
After Casing Point	Completed Well Cost
\$1,125,000	\$1,518,000
\$840,065	\$840,065
\$1,965,065	\$2,358,065
\$6,560,354	\$9,428,854
	\$1,125,000 \$840,065 <b>\$1,965,065</b>

Comments On Well Costs

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

#### Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator 's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

#### I elect to purchase my own well control insurance policy.

#### Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

#### I elect to take my gas in kind.

#### I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval Company	Approved By (Print Name)	Approved By (Signature)	Date
	Costs shown on this form are estimates only. By exec Overhead will be charged in accordance with the Join	uting this AFE, the consenting party agrees to pay its proj	portionate

7/6/2022

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

Description	BCP - Dri			Drilling		np/Stim		on Equip	Post Com Codes	Amount	Total
Roads & Location	Codes DIDC.100	Amount 20,000	Codes	Amount	Codes STIM.100	Amount 3,000	Codes CON.100	Amount 44,205		3,000	70,20
and the second	DIDC.100	16,500			311M.100	5,000	CON.105	3215	1 Com. Too	2,000	19,71
Damages	DIDC.255	200,000			STIM.255	51,000	CONTROS	52.15	PCOM.255	0	251.00
Mud/Fluids Disposal	DIDC.233 DIDC.115	468,000	DICC 120	96,000	311111.2.33	51,000			1 comess		564,00
Day Rate	DIDC.113	30,000	DICC.120	30,000							30,00
Misc Preparation	DIDC.120 DIDC.125	97,000	DICC 125	0	STIM.125	0			PCOM.125	0	97.00
Bits	and an an an an and a start of the	119,000	DICC 125	0	511WL125	U			PCOM.120	0	119,00
Fuel	DIDC.135		DICC 135	0	STIM.135	20,000			PCOM.135	0	25,00
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC 155	0	511M, 135	20,000			PCOM 155	0	300,000
Mud & Additives	DIDC.145	300,000							PCOM.257	87,354	87,35
SWD PIPED TO 3RD PARTY SWD WELL	-	07.000	DICC 110		CTULLO	127.000	CON.140	6.012		60,000	300,91
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	6,912			166,000
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Automation Labor	in a second						CON.150	45,010	PCOM.150	5,000	50,010
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING	And the second second						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	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		47,000	CON.180	11,574		0	152,57
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000		31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC 190	0	STIM.190	85,000	CON.190	19,290	PCOM.190	0	109,29
Overhead	DIDC.225	5,000	DICC 195	5,000		50,000					10,000
MOB/DEMOB	DIDC.240	115,000		5,000							115,00
Directional Drilling Services	DIDC.245	307,000									307,00
Solids Control	DIDC.243	46,000									46,000
Well Control Equip (Snubbing Services)	DIDC.265	46,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
and the part of the second s	DIDC.203	04,000	DICC.240	0					PCOM.115	0	21,000
Completion Rig	_				STIM.115	21,000			Defension and Street	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260		
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	2,245,00
Stimulation Water/Water Transfer/Water					STIM.395	191,000					191,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	7,000									7,000
Major Construction Overhead							CON.305	0			(
FL/GL - ON PAD LABOR							CON.495	33,114			33,114
FL/GL - Labor							CON.500	113,970			113,970
FL/GL - Supervision							CON.505	12,056			12,056
Survey							CON.515	6,590			6,590
SWD/Other - Labor							CON.600	0,550			(
							CON.605	0	-	1 million (1997)	
SWD/Other - Supervision								0			
Aid In Construct/3rd Party Connect					-		CON.701	and the second second second			
Contingency	DIDC.435	118,000	DICC 220	15,000	STIM.220	165,000	CON.220	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							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			1.1.1.1.1.1					(
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS						20,000	CONT.380	11,253	Constraint States		11,253
PUMPS							CONT.385	26,362			26,362
WALKOVERS							CONT.390	6,430			6,430
Downhole Lift Equipment					STIMT.410	80,000		0,430	PCOMT.410	0	80,000
Concernance and the second second					51101.410	60,000			PCOMT.410 PCOMT.420	15,000	15,000
Surface Equipment									and the second sec	and the second se	
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	279,861			279,861
Tanks, Tanks Steps, Stairs							CONT.405	0			(
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			42,75
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
SWD/Other - Materials							CONT.555 CONT.650	80,052			80,03
								0			
SWD/Other - Line Pipe							CONT.655	0			
Total Tangible Cost	1	393,000		810,000		285,000		840,065		30,000	2,358,06

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

			393,000	-		810,000			285,000
SWD/Other - Materials SWD/Other - Line Pipe									
SWD/Other - Materials									
FL/GL - Materials			1000						
FL/GL - Materials									
Lease Automation Materials									
Meters and Metering Equipment Facility Line Pipe									
Telecommunication Equipment									
Facility Electrical									
Overhead Power Distribution									
Secondary Containments					1			1	
Battery Equipment									
Tanks, Tanks Steps, Stairs						1			
N/C Lease Equipment									
Well Automation Materials			1		100				
Downhole Lift Equipment Surface Equipment							a11W1.410		60,000
WALKOVERS							STIMT.410		80,000
PUMPS									
SHORT ORDERS									
Packer, Nipples			1				STIMT.400		28,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0			20.005
Wellhead, Tree, Chokes		DWEA.120			STIMT.120	18,000	STIMT.120		38,000
Tubing	bran and		1. Participa		1		STIMT.105		139,000
Production Casing or Liner				DWEA.100		792,000			
Intermediate Casing 1	DWEB.145		0			di lan			
Surface Casing	DWEB.140		251,000		In the second second				
Water String	DWEB.135		104,000						
Conductor Pipe	DWEB.130		0		-				
Total Intangible Cos	1		2,475,500			306,000			3,459,000
Contingency		1000000							10000
Contingency	DIDC.435	DICC220	118.000	DICC.220	STIM.220	15,000	STIM.220	CON.220	165,000
SWD/Other - Supervision Aid In Construct/3rd Party Connect									
SWD/Other - Labor									
Survey SWD/Other - Labor									
FL/GL - Supervision									
FL/GL - Labor									
FL/GL - ON PAD LABOR									
Major Construction Overhead									
Well Control Insurance	DIDC.285		7,000						
Legal/Regulatory/Curative	DIDC.300		10,000						
Cimarex Owned Frac/Rental	-						STIM.305		60,000
Stimulation Water/Water							STIM.395		191,000
Stimulation							STIM.210		2,245,000
Composite Plugs							STIM.390		39,000
Completion							STIM.200		257,000
Coil Tubing Services							STIM.260		0
Completion Rig							STIM.115		21,000
Well Control Equip (Snubbing	DIDC 265	DICC240	84,000	DICC.240	STIM 240	0	STIM.240		64,000
Solids Control	DIDC 260		46,000						1. State 1.
Directional Drilling Services	DIDC 245		307,000						-
MOB/DEMOB	DIDC.240		115,000						
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000			-
Other Misc Expenses		DICC.190	5,000	DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Trailer House/Camp/Catering	DIDC.280		36,000	DICC.255	STIM.280	5,000	STIM.280		31,000
Supervision	DIDC.210		81,000		STIM.180	13,000	STIM.180	CON.180	47,000
Trucking/Transportation	DIDC.205	DICC.175	30,000		STIM.175	8,000	STIM.175	CON.175	4,000
Mechanical Labor	DIDC.200		20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	0
Casing Crews	DIDC.195		15,000	DICC.165	STIM.165	13,000	STIM.165		0
Tubular Inspections		DICC.160	38,000	DICC.160	STIM.160	8,000	STIM.160		4,000
Cementing & Float Equipment	DIDC.185	DICC 155	70,000	DICC.155		140,000			
Mud Logging IPC & EXTERNAL PAINTING	DIDC.170		5,000						
Automation Labor	DIDC 170		5 000						
Flowback Labor							STIM.141		0
Downhole Rentals	DIDC.155		131,000				STIM.145		35,000
Surface Rentals	DIDC.150	DICC.140	97,000	DICC.140	STIM.140	- 0	STIM.140	CON.140	137,000
SWD PIPED TO 3RD PARTY SWD									1 minuted
Mud & Additives	DIDC.145		300,000						
Water for Drilling Rig (Not Frac		DICC.135	5,000		STIM.135	0	STIM.135		20.000
Fuel	DIDC.125		119,000	DICC.130		0			
Misc Preparation Bits		DICC.125		DICC.125	STIM.125	0	STIM.125		0
Day Rate Misc Preparation	DIDC.115 DIDC.120	DICC. 120	30,000	0100.120		50,000			
Mud/Fluids Disposal	DIDC.255 DIDC.115	DICC 120		DICC.120		96,000	3101.233		51,000
Damages	DIDC.105		16,500 200,000				STIM.255		51,000
Roads & Location	DIDC.100		20,000			1.000	STIM.100	CON.100	3,000
	Codes		Amount	Codes		Amount	Codes	0011100	Amount
Description		В	CP - Drilling		ACP - Drilling		Comp	/Stim	1

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

Description	Production Equip			Post Completion		Total
Description	Codes	Amount	Codes	1	Amount	Co
Roads & Location	CON.100	44,205	PCOM.100	Repair any roads post D&C	3,000	70,20
Damages	CON.105	3215				19,7
Mud/Fluids Disposal			PCOM.255		0	251,0
Day Rate						564,0
Misc Preparation						30,0
Bits			PCOM.125		0	97,0
fuel			PCOM.130		0	119,0
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	25.0
Mud & Additives			1 6011.155	the second se		300,0
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257	Water for 60 days (270K barrels)	87,354	87,3
	and the second se			Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	300,9
Surface Rentals	CON.140	6,912		Iron. XEC Own SK. No Tok. \$1,100 per day	and the second sec	166,0
Downhole Rentals		C	PCOM.145	and the second second second	0	
Flowback Labor	Contract (	1.0	PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,0
Automation Labor	CON.150	45,010	PCOM.150		5,000	50,0
Mud Logging						5,0
PC & EXTERNAL PAINTING	CON 165	5,144				5,1
Cementing & Float Equipment						210,0
Tubular Inspections			PCOM. 160		0	50,0
Casing Crews			, comitor			28,0
	CON 170	105.000	00011170	PH Flowbook loss & Automation	E 000	213,6
Mechanical Labor	CON.170	185,663	PCOM.170	RU Flowback Iron & Automation	5,000	58.0
Trucking/Transportation	CON.175	16,075	PCOM.175		0	
Supervision	CON.180	11,574	PCOM.180		0	152,5
Trailer House/Camp/Catering	1. Aug 200					72,0
Other Misc Expenses	CON.190	19,290	PCOM.190		0	109,2
Overhead						10,0
MOB/DEMOB					1	115,0
Directional Drilling Services						307,0
Solids Control						46,0
Well Control Equip (Snubbing Services)			PCOM.240		0	148.0
Construction and the second					0	21,0
Completion Rig			PCOM.115			21,0
Coil Tubing Services			PCOM.260		0	
Completion Logging/Perforating/Wireline			PCOM.200		0	257,0
Composite Plugs			PCOM.390		0	39,0
Stimulation			PCOM.210		0	2,245,0
Stimulation Water/Water Transfer/Water	and the second sec					191,0
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	60,0
Legal/Regulatory/Curative	CON.300	0				10,0
Well Control Insurance	2011300	0				7,0
	CON 205					7,0
Major Construction Overhead	CON.305	0				
FL/GL - ON PAD LABOR	CON.495	33,114				33,1
FL/GL - Labor	CON.500	113,970				113,9
FL/GL - Supervision	CON.505	12,056				12,0
Survey	CON.515	6590				6,5
SWD/Other - Labor	CON.600	0				
SWD/Other - Supervision	CON.605	0			1.000	
	CON.701	0				
Aid In Construct/3rd Party Connect		0				1017
Contingency	CON.220	106,737				404,7
Contingency	CON.221	30,381				30,3
Total Intangible Cost		639,935			190,354	7,070,7
Conductor Pipe						
Water String						104,0
Surface Casing						251,0
ntermediate Casing 1						
Production Casing or Liner						792,0
			DCOLIT		0	
Tubing			PCOMT.105		and the second s	139,0
Wellhead, Tree, Chokes			PCOMT.120	Replace worn chokes and valves during FB	10,000	104,0
Liner Hanger, Isolation Packer						
Packer, Nipples	the second secon		PCOMT.400		0	28,0
SHORT ORDERS	CONT.380	11,253				11,2
PUMPS	CONT.385	26,362				26,3
WALKOVERS	CONT.390	6,430				6,4
Downhole Lift Equipment	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0,100	PCOMT.410	the second se	0	80,0
Surface Equipment			PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,0
Well Automation Materials				and the second	5,000	5,0
	CONT 100		PCOMT.455	r is, and replacing meters	5,000	
V/C Lease Equipment	CONT.400	279,861				279,8
Tanks, Tanks Steps, Stairs	CONT.405	0				
Battery Equipment	CONT.410	229,386				229,3
econdary Containments	CONT.415	12,859				12,8
Overhead Power Distribution	CONT.420	10,288				10,2
acility Electrical	CONT.425	48,224				48,2
felecommunication Equipment	CONT.426	0				
	and the appropriate the second s					42,7
Meters and Metering Equipment	CONT.445	42,758				
acility Line Pipe	CONT.450	28,935				28,9
ease Automation Materials	CONT.455	36,972				36,9
L/GL - Materials	CONT.550	26,684				26,6
L/GL - Line Pipe	CONT.555	80,052				80,0
WD/Other - Materials	CONT.650	0				
SWD/Other - Line Pipe	CONT.655	0				
and the second sec						
Total Tangible Cost		840,065			30,000	2,358,0

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

AFE # XXXXXXX

Company Entity.				Date Prepared 8/17/2022
Exploration Region Permian Basin	Well Name Mighty Pheasant 5-8 Fed Com 302H	Prospect New Mexico Bone Spring	Property Nur XXXXXX-XXX.0	
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 Depth 20360	Ttl Vetical Deoth 10860
Purpose Drill Description	and complete well			
10 so	e intended surface hold location for the well i 00 FSL and 1744 FWL of Section 8, T20S-R34E. utherly direction within the formation to the r pproximately 10860 feet.	The well is proposed to be drilled ver	tically to the 3rd Sand forma	ation and laterally in a

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

Comments On Well Costs

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

### Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator 's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

### I elect to purchase my own well control insurance policy.

### Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

### I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

#### Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Company	Approved By (Print Name)	Approved By (Signature)	Date
	Costs shown on this form are estimates only. By exect Overhead will be charged in accordance with the Joint	iting this AFE, the consenting party agrees to pay its prop	portionate

7/6/2022

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

Description	BCP - Di			Drilling		np/Stim		on Equip	Post Com		Total
	Codes	Amount	Codes	Amount		Amount		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
Aud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,0
Day Rate	DIDC.115	468,000	DICC.120	96,000					1.2.2.2.2		564.0
Aisc Preparation	DIDC.120	30,000									30,0
lits	DIDC.125	97,000	DICC.125	0	STIM 125	0			PCOM 125	0	97.0
uel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,0
Nater for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC 135	0	STIM.135	20,000			PCOM.135	o	25.0
		300,000	DICC 135		511141.155	20,000			Contras		300,0
Mud & Additives	DIDC.145	300,000							PCOM.257	87,354	87,3
SWD PIPED TO 3RD PARTY SWD WELL									and the second sec	and the second second	
Surface Rentals	DIDC.150	97,000	DICC.140	0		137,000	CON.140	6,912	PCOM 140	60,000	300,9
Downhole Rentals	DIDC 155	131,000			STIM.145	35,000			PCOM.145	0	166.0
lowback Labor					STIM.141	0			PCOM.141	30,000	30,0
Automation Labor							CON.150	45,010	PCOM.150	5,000	50,0
Mud Logging	DIDC.170	5,000									5,0
PC & EXTERNAL PAINTING							CON.165	5,144			5,
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000	1.000						210,0
Fubular Inspections	DIDC.190	38,000	DICC.160	8,000		4,000			PCOM.160	0	50,0
									r.com.roo	0	28,0
Casing Crews	DIDC.195	15,000	DICC.165	13,000		0	-			5 000	
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000		0	CON.170	185,663	PCOM.170	5,000	213,
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000		4,000	CON.175	16,075	PCOM.175	0	58,0
Supervision	DIDC.210	81,000	DICC 180	13,000	STIM.180	47,000	CON.180	11,574	PCOM.180	0	152,5
Frailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000			Acres 199		72,0
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	19,290	PCOM.190	0	109,3
Overhead	DIDC 225	5,000	DICC.195	5,000					and the second second	18	10,0
MOB/DEMOB	DIDC 240	115,000	COTT								115,
Directional Drilling Services	DIDC.245	307,000									307,0
and a second second a second second											46,0
Solids Control	DIDC.260	46,000	DICCON		minur				00011010		
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC240	0	1.	64,000			PCOM.240	0	148,0
Completion Rig					STIM.115	21,000			PCOM.115	0	21,0
Coil Tubing Services					STIM.260	0			PCOM.260	0	
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,0
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,0
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,0
Stimulation Water/Water Transfer/Water					STIM.395	191,000				1	191,0
					STIM.305	60,000			PCOM,305	0	60,0
Cimarex Owned Frac/Rental Equipment	DIDC 200	10.000			31110.303	60,000	CON 200	0	r compos	v	10,0
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			
Well Control Insurance	DIDC 285	7,000									7,
Major Construction Overhead							CON.305	0			
FL/GL - ON PAD LABOR							CON.495	33,114			33,1
FL/GL - Labor							CON.500	113,970			113,9
FL/GL - Supervision							CON.505	12,056			12,0
Survey							CON.515	6,590			6,5
SWD/Other - Labor							CON.600	0			
SWD/Other - Supervision							CON.605	0	-		
							CON.701	0			
Aid In Construct/3rd Party Connect			DICC 222	15 000					00011000	0	101
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000		106,737	PCOM.220	0	404,7
Contingency							CON.221	30,381	-		30,3
Total Intangible Cost		2,475,500		306,000		3,459,000		639,935	s	190,354	7,070,
Conductor Pipe	DWEB.130	0									
Water String	DWEB.135	104,000									104.0
Surface Casing	DWEB.140	251,000									251.0
ntermediate Casing 1	DWEB.145	0									
Contraction of the second s	01120.145	0	DIALEA 100	702.000							707
Production Casing or Liner			DWEA.100	792,000					000117-000		792,0
Tubing	and the	a dana	- maker	- Same	STIMT.105	139,000			PCOMT.105	0	139,0
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120		STIMT.120	38,000			PCOMT.120	10,000	104,0
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,
SHORT ORDERS							CONT.380	11,253			11,
PUMPS							CONT.385	26,362		S.C.	26,
WALKOVERS							CONT.390	6,430	· · · · · · · · · · · · · · · · · · ·		6,-
Downhole Lift Equipment					STIMT.410	80,000		0,450	PCOMT.410	0	80,
and the second					STIML 410	50,000			PCOMT.410	15,000	15,
Surface Equipment										and the second se	
Well Automation Materials									PCOMT.455	5,000	5,
V/C Lease Equipment							CONT.400	279,861			279,
Fanks, Tanks Steps, Stairs							CONT.405	0			
Battery Equipment							CONT.410	229,386			229,
Secondary Containments							CONT.415	12,859			12,
Overhead Power Distribution							CONT.420	10,288			10,
acility Electrical							CONT.425	48,224			48,
Felecommunication Equipment							CONT.426	40,224			
							CONT.426	and the second second			42,
Meters and Metering Equipment								42,758			
Facility Line Pipe							CONT.450	28,935			28,
ease Automation Materials							CONT.455	36,972			36,
L/GL - Materials							CONT.550	26,684			26,
L/GL - Line Pipe							CONT.555	80,052	1		80,
SWD/Other - Materials							CONT.650	0			
SWD/Other - Line Pipe							CONT.655	0		-	
and a second sec				and the second second							10 A.L.A.
Total Tangible Cost		393,000		810,000		285,000		840,065		30,000	2,358,

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

Description			BCP - Drilling		ACP - Drilling		Comp	/sum	
Description	Codes		Amount	Codes		Amount	Codes	actives .	Amount
Roads & Location	DIDC.100		20,000			1.0	STIM.100	CON.100	3,000
Damages	DIDC.105		16,500						
Mud/Fluids Disposal	DIDC.255	and the second second	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		C
Fuel	DIDC.135		119,000	DICC.130		0			
Water for Drilling Rig (Not Frac	DIDC.140	DICC.135	5,000	DICC.135	STIM 135	0	STIM.135		20,000
	DIDC.145	Dicc.155	300,000	Dicarios	51111122	-			
Mud & Additives	DIDC.143		300,000						
SWD PIPED TO 3RD PARTY SWD					-		STIM.140	001110	137,000
Surface Rentals	DIDC.150	DICC.140	1 2 2 2 3 3 3	DICC.140	STIM.140	0		CON.140	and the second se
Downhole Rentals	DIDC.155		131,000				STIM.145	-	35,000
Flowback Labor							STIM.141		(
Automation Labor									
Mud Logging	DIDC.170		5,000			10000			
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	DICC.155	70.000	DICC.155		140,000			
Tubular Inspections	DIDC.190	Change Contract	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DICC.160	STIM.160	8,000	STIM.160		4,000
and the second	DIDC.195			DICC.165	1200 Colorest 250	13,000	STIM.165	1000	C
Casing Crews		All Derror Angel A			************************************	3,000	STIM.170	CON.170	0
Mechanical Labor	DIDC.200	and a second sec	and the second sec	DICC.170	and the second se	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			and the second se
Trucking/Transportation	DIDC 205	A Destruction of the second		DICC.175		8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210	and the second se		DICC.180	and the second sec	13,000	STIM.180	CON.180	47,000
Trailer House/Camp/Catering	DIDC.280	DICC.255		DICC.255	STIM.280	5,000	STIM.280		31,000
Other Misc Expenses	DIDC.220	DICC.190	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		45,000						
		DICC 240	and the second se	DICCOM	STIM 240	0	STIM.240		64,000
Well Control Equip (Snubbing	DIDC.265	DICC.240	84,000	DICC.240	311M.240	0			21,000
Completion Rig							STIM.115		
Coil Tubing Services							STIM.260		C
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			1000			
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead									
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey						1.000			
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect									
and the second	0000 435	0100 220	110.000	DICC 220	STIL 4 220	15.000	STIM.220	CON.220	165,000
Contingency	DIDC.435	DICC.220	118,000	DICC.220	STIM.220	15,000	511M.220	CUN-220	165,000
Contingency									
Total Intangible Cos			2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		0			-			
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
Intermediate Casing 1	DWEB.145		0						
				DWEA.100		792,000			
Production Casing or Liner Tubing						1 32,000	STIMT.105		139,000
and the second	DW/ED 115	DWEA.120	30,000	DWEA 100	STILLT 120	10.000			38,000
Wellhead, Tree, Chokes		A Charles To supercraft and a constraint			STIMT.120		STIMT.120		56,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0	-		
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410	100	80,000
Surface Equipment									
Well Automation Materials									
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs						1.0			
A MARK AND AND A MARK A MARK AND A MARK									
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical						1			
Telecommunication Equipment									
Meters and Metering Equipment		1.0							
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Materials									
SWD/Other - Materials									
SWD/Other - Line Pipe						1 and the second			
Total Tangible Cost			393,000			810,000			285,000
Total Estimated Cost									3,744,000

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

Description	colum 1	Production Equip	1 12000	Cader	Post Completion	Amount	Total
	Codes CON.100		Amount 44,205	Codes PCOM.100	Repair any roads post D&C	3,000	70,2
Roads & Location	CON.100		3215	PCOM. TOU	Repair any roads post oute	5,000	19,1
Damages	CON.TOS		5215	PCOM.255		0	251,
Mud/Fluids Disposal				rcont.233			564,
Day Rate Misc Preparation							30,0
Bits				PCOM.125		0	97,0
			1	PCOM.130		0	119,0
Fuel Water for Drilling Rig (Not Frac Water)				PCOM.135		0	25.0
Mud & Additives				FCOM. 155	and the second se		300.0
SWD PIPED TO 3RD PARTY SWD WELL				PCOM.257	Water for 60 days (270K barrels)	87,354	87.3
Surface Rentals	CON.140		6,912		Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	300,9
Downhole Rentals	CON.140		0,912	PCOM.145	non see our se no role si roo per osy	0	166.0
				PCOM.143	3 Flowback Hands (60 days). 25%	30,000	30,0
Flowback Labor	011150		45.010	PCOM. 141	5 Flowback Hallds (00 days). 2576	5,000	50,0
Automation Labor	CON.150		45,010	PCOM. 130		5,000	5,0
Mud Logging	CONTRE						5,1
IPC & EXTERNAL PAINTING	CON.165		5,144				210,0
Cementing & Float Equipment						0	50,0
Tubular Inspections				PCOM.160		U	28,0
Casing Crews	10000					F 000	
Mechanical Labor	CON.170		185,663	PCOM.170	RU Flowback Iron & Automation	5,000	213,6
Trucking/Transportation	CON.175		16,075	PCOM.175			58,0
Supervision	CON.180		11,574	PCOM.180		0	152,5
Trailer House/Camp/Catering							72,0
Other Misc Expenses	CON.190		19,290	PCOM.190		0	109,
Overhead							10,
MOB/DEMOB							115,0
Directional Drilling Services							307,0
Solids Control							46,0
Well Control Equip (Snubbing Services)				PCOM.240		0	148,0
Completion Rig				PCOM.115		0	21,0
Coil Tubing Services				PCOM.260		0	
Completion Logging/Perforating/Wireline				PCOM.200		0	257,0
Composite Plugs	_			PCOM.390		0	39,0
Stimulation				PCOM.210		0	2.245,
Stimulation Water/Water Transfer/Water							191,0
Cimarex Owned Frac/Rental Equipment				PCOM.305		0	60,0
Legal/Regulatory/Curative	CON.300		0				10,0
Well Control Insurance							7,0
Major Construction Overhead	CON.305		0				
FL/GL - ON PAD LABOR	CON.495		33,114				33,1
FL/GL - Labor	CON.500		113,970				113,9
FL/GL - Supervision	CON.505		12,056				12,0
Survey	CON.515		6590				6,5
SWD/Other - Labor	CON.600		0				
SWD/Other - Supervision	CON.605		0				
Aid In Construct/3rd Party Connect	CON.701		0				
Contingency	CON.220		106,737			1	404,7
Contingency	CON.221		30,381				30,3
Total Intangible Cost			639.935			190,354	7,070,
Conductor Pipe						1	
Water String							104,0
Surface Casing	_						251,0
Intermediate Casing 1							
Production Casing or Liner						1	792,0
Tubing				PCOMT.105		0	139.0
Wellhead, Tree, Chokes				PCOMT.120	Replace worn chokes and valves during FB	10,000	104,0
Liner Hanger, Isolation Packer					1 and a state of the state of t		
Packer, Nipples				PCOMT.400		0	28,0
SHORT ORDERS	CONT.380		11,253			5	11,2
PUMPS	CONT.385		26,362				26.
WALKOVERS	CONT.390		6,430				6,-
Downhole Lift Equipment			0,430	PCOMT.410	and the second se	0	80,0
Surface Equipment				PCOMT.410 PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,0
Well Automation Materials				PCOMT.420 PCOMT.455	a second s	5,000	5,0
N/C Lease Equipment	CONT.400		279.861	/ CONT.435	rist one represend meters	5,000	279,1
Tanks, Tanks Steps, Stairs	CONT.400		279,861				213,0
Battery Equipment	CONT.405 CONT.410		229,386				229,
Secondary Containments	CONT.410		10 10 10 10 10 10 10 10 10 10 10 10 10 1				12,
Statute and a second statute statute statute	and the second se		12,859				10,
Overhead Power Distribution	CONT.420		10,288				
Facility Electrical	CONT.425		48,224				48,
Telecommunication Equipment	CONT.426		0				
Meters and Metering Equipment	CONT.445		42,758				42,
Facility Line Pipe	CONT.450		28,935				28,
Lease Automation Materials	CONT.455		36,972				36,
FL/GL - Materials	CONT.550		26,684				26,
FLIGH IT IN	CONT.555		80,052				80.
	Construction of the second		1000				
FL/GL - Line Pipe SWD/Other - Materials	CONT.650		0		1		
	CONT.650 CONT.655		0			30,000	2,358,

### 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 Nur XXXXXX-XXX.0	
County, State Lea, NM	Location Section 5-8 T20S-R34E Lea, NM		Estimated Spud	Estimated Completion
X New Supplement Revision	Formator 3rd Sand	Well Type DEV	Ttl Measured Deoth 20350	Ttl Vetical Deoth 10850
Purpose Drill Description	and complete well			
10	ne intended surface hold location for the well i 20 FSL and 2122 FEL of Section 8, T20S-R34E. T putherly direction within the formation to the r	The well is proposed to be drilled vert	ically to the 3rd Sand forma	tion and laterally in a

approximately 10850 feet.

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

Comments On Well Costs

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

### Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

### I elect to purchase my own well control insurance policy.

### Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

### I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

#### Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well

Nonoperator Approval			
Company	Approved By (Print Name)	Approved By (Signature)	Date
NOTICE TO NONOPERATOR:	Costs shown on this form are estimates only. By exec	uting this AFE, the consenting party agrees to pay its prop	ortionate
share of actual costs incurred.	Overhead will be charged in accordance with the Join	Operating Agreement.	7.02.02

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

Description	BCP - Dr	illing	ACP - D	Drilling		np/Stim	Productio		Post Com	pletion	Total
Description	Codes	Amount	Codes	Amount		Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	20,000			STIM.100	3,000		48,637	PCOM.100	3,000	74,637
Damages	DIDC.105	16,500			1000		CON.105	15807	Section and		32,307
Mud/Fluids Disposal	DIDC.255	200,000	1.000		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
	DIDC.145	300,000	Dige 155	0	51110.125	20,000					300.000
Mud & Additives	DIDC.145	300,000							PCOM.257	87,354	87,354
SWD PIPED TO 3RD PARTY SWD WELL					-			1.770	and the second se	60,000	295,378
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	1,378	PCOM.140	19.9 - 9	100000
Downhole Rentals	DIDC.155	131,000	A Could		STIM.145	35,000			PCOM.145	0	166,000
Flowback Labor			2		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	Contract (								5,000
IPC & EXTERNAL PAINTING							CON.165	18,888			18,888
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000					and the second second	1	210,000
Tubular Inspections	DIDC.190	38,000	DICC.160	8,000	STIM.160	4,000			PCOM.160	0	50,000
	DIDC.195	15,000	DICC.165	13,000		0					28,000
Casing Crews			DICC.170	3,000		0		139,588	PCOM.170	5,000	167,588
Mechanical Labor	DIDC.200	20,000	and the second se		Part Cold		and the second state of the		and the second se		
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000		4,000		17,833	PCOM.175	0	59,833
Supervision	DIDC.210	81,000	DICC.180	13,000		47,000		21,238	PCOM.180	0	162,238
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000			1.000		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									46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
	0100.200	04,000	UICC.240	0	a second second second				PCOM.240	0	21,000
Completion Rig					STIM.115	21,000			Contraction of the	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260		
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					conso				7,000
	DIDC.203	7,000					CON 205	76 607		_	26,507
Major Construction Overhead							CON.305	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			0
SWD/Other - Supervision							CON.605	0			0
Aid In Construct/3rd Party Connect							CON.701	40,531			40,531
	DIDC.435	118,000	DICC 220	15 000	STIM.220	165,000		105,542	PCOM.220	0	403,542
Contingency	DIDC.433	118,000	DICC.220	13,000	511WI.220	165,000			FCOM.220	0	
Contingency							CON.221	23,508			23,508
Total Intangible Cost		2,475,500		305,000		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									0
Production Casing or Liner			DWEA.100	792.000					-		792.000
Tubing			Constantes.		STIMT.105	139,000			PCOMT.105	0	139,000
and the second se	DWEB.115	38,000	DWEA 120	10 000	a second s				and the second states of	10,000	104,000
Wellhead, Tree, Chokes			DWEA.120	10,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0	-	1100			00011001100		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			PCOMT.410	0	80,000
Surface Equipment						0.000			PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
							CONT.400	184,334		5,030	184,334
N/C Lease Equipment											
Tanks, Tanks Steps, Stairs	1						CONT.405	51,879			51,879
Battery Equipment							CONT.410	214,003			214,003
Secondary Containments	-						CONT.415	19,292			19,292
Overhead Power Distribution							CONT.420	64,038			64,038
Facility Electrical							CONT.425	32,100			32,100
Telecommunication Equipment							CONT.426	486			486
Meters and Metering Equipment							CONT.445	45,232			45,232
Facility Line Pipe							CONT.450	31,208			31,208
											32,424
Lease Automation Materials							CONT.455	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			0
SWD/Other - Line Pipe		-					CONT.655	0			0
Total Tangibia Cast		393,000		810,000		305 000	1	790,428		30,000	2,308,428
Total Tangible Cost		333,000		810,000		285,000		190,420		50,000	

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

Description		BCF	- Drilling	1	ACP - Drilling	1	Comp	/sum	
Description	Codes		Amount			Amount			Amour
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,00
Damages	DIDC.105		16,500					(******	
Mud/Fluids Disposal	DIDC.255		200,000			1.00	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		DICC 130	119,000		51111.125	0			1.0
					CT134 135	0	STIM.135		20,00
Water for Drilling Rig (Not Frac	DIDC.140	DICC.135	5,000	DICC.155	511W.135	U	31111.133		20,00
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD		and the second sec						and the second se	
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	1	35,00
Flowback Labor		And the second second	1			1	STIM.141		
Automation Labor									
Mud Logging	DIDC.170		5,000			-			
IPC & EXTERNAL PAINTING	Diberno		5,000						
	0000100	DICCASE	70,000	DICC.155		140,000			
Cementing & Float Equipment	DIDC.185		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			and the second sec			100
Fubular Inspections	DIDC.190	DICC.160	38,000		STIM 160	8,000	STIM.160		4,00
Casing Crews	DIDC.195	and the second se		DICC.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	DICC.175	30,000	DICC.175	STIM.175	8,000	STIM.175	CON.175	4,00
Supervision	DIDC.210	DICC.180	81,000	DICC.180	STIM.180	13,000	STIM.180	CON.180	47,00
Trailer House/Camp/Catering	DIDC.280			DICC.255		5,000			31,00
Other Misc Expenses	DIDC.220	DICC.190	5,000			0	STIM.190	CON.190	85,00
Overhead	DIDC.225	DICC.195	5,000			5,000		C. ALT ALL A	
		0.00.100	1.			3,000			
MOB/DEMOB	DIDC.240		115,000			-			1
Directional Drilling Services	DIDC.245		307,000						
Solids Control	DIDC.260	in the second se	46,000						-
Well Control Equip (Snubbing	DIDC.265	DICC240	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							STIM.390		39,00
Stimulation							STIM.210		2,245,00
			1				STIM.210		191,00
Stimulation Water/Water			1						
Cimarex Owned Frac/Rental	human		NOTION.				STIM.305		60,00
Legal/Regulatory/Curative	DIDC.300		10,000			1		A Description of the second	
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead			1000						
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
						-			
SWD/Other - Labor						-			
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect						- Long			Contraction of the
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						-
and the second se	DWEB.140 DWEB.145							1	
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner			1	DWEA.100		792,000			
Tubing		in the second					STIMT.105		139,00
Wellhead, Tree, Chokes		DWEA.120		DWEA.120		18,000	STIMT.120		38,00
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0			
Packer, Nipples						1	STIMT.400		28,00
SHORT ORDERS									
PUMPS									
WALKOVERS									
							STIMT.410		80,00
Downhole Lift Equipment							31111.410		60,00
Surface Equipment									
Well Automation Materials									
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs			1					1.00	
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical			-						
A second back and recently									
Telecommunication Equipment									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									14
FL/GL - Materials									
FL/GL - Materials									
SWD/Other - Materials									
SWD/Other - Materials									
SWD/Other - Materials SWD/Other - Line Pipe Total Tangible Cost			393,000	-		810,000	-		285,00

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

Description		Production Equip		Post Completion	Francisco de la	Total
vescription	Codes	Amount		Salar and Salar	Amount	Co
Roads & Location	CON.100	48,637	PCOM.100	Repair any roads post D&C	3,000	74,6
Damages	CON.105	15807				32,3
Mud/Fluids Disposal	a second and		PCOM.255		0	251,0
Day Rate						564,0
Misc Preparation						30,0
Bits			PCOM.125	-	0	97,0
fuel			PCOM.130	-	0	119,0
			PCOM.135		0	25,0
Water for Drilling Rig (Not Frac Water)			PCOM, 155	And the second sec		300,0
Mud & Additives				Water for 60 days (270K barrels)	87,354	87.
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257		60,000	295,
Surface Rentals	CON.140	1,378		Iron. XEC Own 5K. No 10K. \$1,100 per day		
Downhole Rentals			PCOM.145	a survey and the survey lost and	0	166,0
lowback Labor			PCOM.141	3 Flowback Hands (60 days) 25%	30,000	30,0
Automation Labor	CON.150	36,558	PCOM.150		5,000	41,
Mud Logging				2		5,
PC & EXTERNAL PAINTING	CON.165	18,888				18,
Cementing & Float Equipment					1000	210,0
			PCOM.160		0	50,0
Tubular Inspections	and the second second second	and the second se	r com.ros			28,
Casing Crews					5,000	167,5
Mechanical Labor	CON.170	139,588	PCOM.170	RU Flowback Iron & Automation		
Trucking/Transportation	CON.175	17,833	PCOM.175		0	59,8
Supervision	CON.180	21,238	PCOM.180		0	162,3
Frailer House/Camp/Catering	And the second second					72,0
Other Misc Expenses	CON.190	24,318	PCOM.190		0	114,
Overhead						10,
MOB/DEMOB						115,
Directional Drilling Services						307,
and the second sec						46,
Solids Control			DCOMPAG		0	148,
Well Control Equip (Snubbing Services)	1		PCOM.240		0	
Completion Rig			PCOM.115		0	21,
Coil Tubing Services			PCOM.260		0	
Completion Logging/Perforating/Wireline			PCOM.200		0	257,
Composite Plugs		and the second se	PCOM.390		0	39,
Stimulation			PCOM.210		0	2,245,0
Stimulation Water/Water Transfer/Water	and the second s					191,0
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	60,
a server of the se	CON1200		FCONLOOD			10,
egal/Regulatory/Curative	CON.300	0				
Well Control Insurance	in the second	the second s				7,
Major Construction Overhead	CON.305	26,507				26,
L/GL - ON PAD LABOR	CON.495	37,613				37,
L/GL - Labor	CON.500	94,842				94,1
L/GL - Supervision	CON.505	14,429				14,4
Survey	CON.515	2351				2,
SWD/Other - Labor	CON.600	0				
SWD/Other - Supervision	CON.605	0				
and the second se	CON.701					40,
Aid In Construct/3rd Party Connect	and the second states of the s	40,531				
Contingency	CON.220	105,542				403,
Contingency	CON.221	23.508				23,
Total Intangible Cost		669.568			190,354	7,100,
Conductor Pipe						
Water String						104,0
Surface Casing						251,
ntermediate Casing 1						
and the second						792,
Production Casing or Liner			PCOLIT INT		0	139,
Tubing			PCOMT.105	Deplace were chalter and a first data to	and the second s	
Wellhead, Tree, Chokes			PCOMT.120	Replace worn chokes and valves during FB	10,000	104,
iner Hanger, Isolation Packer						
Packer, Nipples			PCOMT,400	-	0	28,
SHORT ORDERS	CONT.380	10,538				10,
PUMPS	CONT.385	30,804				30,
WALKOVERS	CONT.390	4,053				4.
Downhole Lift Equipment			PCOMT.410		0	80,
Surface Equipment			PCOMT.420		15,000	15
Well Automation Materials			PCOMT.420		5,000	5,
A second second second second second second second	CONT 400	101101	FCOM1.455	r is and replacing meters	5,000	184,
N/C Lease Equipment	CONT.400	184,334				
Tanks, Tanks Steps, Stairs	CONT.405	51,879				51,
Battery Equipment	CONT.410	214,003				214,
Secondary Containments	CONT.415	19,292				19,
Overhead Power Distribution	CONT.420	64,038				64,
Facility Electrical	CONT.425	32,100				32.
Telecommunication Equipment	CONT.426	486				
	CONT.445	45,232				45
the second se	CON1.445					31.
Meters and Metering Equipment	CONITATO	31,208				
Meters and Metering Equipment Facility Line Pipe	CONT.450					32,
Meters and Metering Equipment Facility Line Pipe Lease Automation Materials	CONT.455	32,424			1	
Meters and Metering Equipment Facility Line Pipe	the property of the second sec	32,424 21,400				
Meters and Metering Equipment Facility Line Pipe Lease Automation Materials	CONT.455					
Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials	CONT.455 CONT.550	21,400				21, 48,
Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials FL/GL - Line Pipe	CONT.455 CONT.550 CONT.555	21,400 48,637				

AFE # XXXXXXX

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

Company Entity				Date Prepared 8/17/2022
Exploration Region Permian Basin	Well Name Mighty Pheasant 5-8 Fed Com 304H	Prospect New Mexico Bone Spring	Property Numb XXXXXX-XXX.01	er AFE XXXXXXXX
County, State Lea, NM	Location Section 5-8 T20S-R34E Lea, NM		Estimated Spud	Estimated Completion
X New Supplement Revision	Formation 3rd Sand	Wel Type DEV	It! Measured Depth 20340	Ttl Vetical Depth 10840
Purpose Dri Description	ll and complete well			
	The intended surface hold location for the well in 100 FSL and 708 FEL of Section 8, T20S-R34E. Th southerly direction within the formation to the r approximately 10840 feet.	he well is proposed to be drilled vertic	cally to the 3rd Sand formation	and laterally in a

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

Comments On Well Costs

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

### Well Control Insurance

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator 's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

### I elect to purchase my own well control insurance policy.

### Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

### I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

#### Comments on AFE

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

Nonoperator Approval			
Company	Approved By (Print Name)	Approved By (Signature)	Date
	Costs shown on this form are estimates only. By exec Overhead will be charged in accordance with the Join	uting this AFE, the consenting party agrees to pay its prop	oortionate

7/6/2022

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

Description	BCP - Dr		ACP - D			p/Stim	Productio		Post Comp	and the second sec	Total
Description	Codes	Amount	Codes	Amount	in the second	Amount	Codes	Amount	Codes	Amount	Co
Roads & Location	DIDC.100	20,000	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )		STIM.100	3,000	CON.100	48,637	PCOM.100	3,000	74,6
Damages	DIDC.105	16,500					CON.105	15807	1		32,3
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,0
Day Rate	DIDC.115	468,000	DICC.120	96,000							564,0
Misc Preparation	DIDC.120	30,000	1000		-						30,0
Bits	DIDC.125	97,000	DICC 125	0	STIM.125	o			PCOM.125	0	97.0
	DIDC.125	119,000	DICC 130	0	Sinneres				PCOM.130	0	119.0
uel			100000000000000000000000000000000000000	0	CTRA AND	20.000			PCOM.135	0	25,0
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM. 135	U	300.0
Mud & Additives	DIDC.145	300,000									
SWD PIPED TO 3RD PARTY SWD WELL			and the second se				10000		PCOM.257	87,354	87,3
Surface Rentals	DIDC,150	97,000	DICC.140	0	STIM.140	137,000	CON.140	1,378	PCOM.140	60,000	295,3
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	166,0
lowback Labor			1000		STIM.141	0			PCOM.141	30,000	30,0
Automation Labor							CON.150	36,558	PCOM.150	5,000	41,
Mud Logging	DIDC.170	5,000									5,0
PC & EXTERNAL PAINTING	DIDC.ITO	3,000					CON.165	18,888			18,8
	DIDC 105	70.000	DICCARE	140.000			CON.105	10,000			210,0
Cementing & Float Equipment	DIDC.185	70,000	DICC 155	140,000							
Fubular Inspections	DIDC.190	38,000	DICC.160		STIM 160	4,000			PCOM.160	0	50,0
Casing Crews	DIDC.195	15,000	DICC.165	13,000	STIM.165	0					28,0
Mechanical Labor	DIDC 200	20,000	DICC.170	3,000	STIM.170	0	CON.170	139,588	PCOM.170	5,000	167,5
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000	CON.175	17,833	PCOM.175	0	59,8
Supervision	DIDC.210	81,000	DICC.180	13,000		47,000	CON.180	21,238	PCOM.180	0	162,3
			and the second sec				00141100	21,230			72.0
railer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000	-				
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	24,318	PCOM 190	0	114,
Overhead	DIDC.225	5,000	DICC.195	5,000							10,
MOB/DEMOB	DIDC.240	115,000	1.000								115,0
Directional Drilling Services	DIDC.245	307,000	1000 B								307,0
Solids Control	DIDC.260	46,000									46,0
			DICC 240	0	STIM 240	64.000			PCOM 240	0	148,0
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000				0	
Completion Rig					STIM.115	21,000			PCOM.115		21.0
Coil Tubing Services					STIM.260	0			PCOM.260	0	
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,0
Composite Plugs			1		STIM.390	39,000			PCOM.390	0	39.0
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,0
					STIM.395	191,000			I COMLETO		191.0
Stimulation Water/Water Transfer/Water											
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,0
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,0
Well Control Insurance	DIDC.285	7,000									7,0
Major Construction Overhead							CON.305	26,507	-	_	26,
FL/GL - ON PAD LABOR							CON.495	37,613			37.6
FL/GL - Labor							CON.500	94,842			94,8
FL/GL - Supervision							CON.505	14,429			14,4
Survey							CON.515	2,351			2,3
SWD/Other - Labor							CON.600	0			
SWD/Other - Supervision							CON.605	0			
Aid In Construct/3rd Party Connect							CON.701	40,531			40,5
	DIDC.435	118,000	DICC.220	15 000	STIM.220	165,000	CON.220	105,542	PCOM.220	0	403,5
Contingency	DIDC.435	110,000	DICC.220	15,000	511M.220	165,000			PCOM.220	U	
Contingency							CON.221	23,508			23,5
Total Intangible Cost		2,475,500		306,000		3,459,000		669,568		190,354	7,100,-
Conductor Pipe	DWEB.130	0									
Water String	DWEB.135	104,000									104,0
Surface Casing	DWEB.140	251,000			1						251.0
	DWEB.145	231,000									
Intermediate Casing 1	DWED.145	0	-	700.000							202
Production Casing or Liner			DWEA.100	792,000	Courses !!				2020030		792.0
Tubing			1.000		STIMT.105	139,000			PCOMT.105	0	139,0
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT,120	10,000	104,0
Liner Hanger, Isolation Packer	DWE8.100	0	DWEA.125	0					1000		
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,0
SHORT ORDERS						10,000	CONT.380	10,538			10,5
PUMPS							CONT.385	30,804			30,8
WALKOVERS							CONT.390	4,053	and the second		4,0
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,0
Surface Equipment									PCOMT.420	15,000	15,
Well Automation Materials									PCOMT.455	5,000	5,
							CONT.400	184,334			184,
N/C Lease Equipment											
Tanks, Tanks Steps, Stairs							CONT.405	51,879			51,
Battery Equipment							CONT.410	214,003			214,
Secondary Containments							CONT.415	19,292		-	19,
Overhead Power Distribution							CONT.420	64,038			64,
Facility Electrical							CONT.425	32,100			32,
the second se											
Telecommunication Equipment							CONT.426	486			
Meters and Metering Equipment							CONT.445	45,232			45,
Facility Line Pipe							CONT.450	31,208			31,
Lease Automation Materials							CONT.455	32,424			32,
L/GL - Materials							CONT.550	21,400			21,
											48.
FL/GL - Line Pipe							CONT.555	48,637			48.
SWD/Other - Materials					1		CONT.650	0			
SWD/Other - Line Pipe							CONT.655	0			
		393,000		B10,000		285,000		790,428		30,000	2,308,
Total Tangible Cost		525,000		010,000		205,000		1. ar sey "The ball		30,000	84, 01 0 0 J

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

Banch Stockhor         DDC100         CM3000         DMA00144         DMA00144         DMA00144         DMA00144         DMA00144         DMA00144         DMA00144         DMA00144         DMA00144         DMMA0144         DMMA01444         DMMA01444 <thdmma01444< th="">         DMMA01444         DM</thdmma01444<>	Description		B	CP - Drilling		ACP - Drilling	7-6	Comp	y sum	1
Dampe Dampe Morphale by And Activation by And Activation by And Activation by And Activation by And Activation by And Activation by And Activation by And by And 	Jeschphon				Codes		Amount		an in the	Amour
Jungfield         DOC:15         DOC:16         DOC:17         SIM:35         SIM:	Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,00
Day Data         DOC 110         DCC 120         <	Damages	DIDC.105		16,500						
Barton         DDC 120 bit         DDC 120 DC 130 DC	Aud/Fluids Disposal	DIDC 255		200,000				STIM.255	and the second s	51,00
in or constrained and constrai	Day Rate	DIDC.115	DICC 120	468,000	DICC.120		96,000			
mart         DOULTS         DCC130         DCC130 <thdcc130< th=""> <thdcc130< th=""></thdcc130<></thdcc130<>	Misc Preparation	DIDC.120		30,000						
Number Sep Net Pare Add Addiew         DOC.140         DEC.150         DEC.160         DEC.160 <thdec.160< th="">         DEC.160         <thde< td=""><td>and a state of the state of the</td><td>DIDC.125</td><td>DICC.125</td><td>97,000</td><td>DICC.125</td><td>STIM.125</td><td>0</td><td>STIM.125</td><td></td><td></td></thde<></thdec.160<>	and a state of the	DIDC.125	DICC.125	97,000	DICC.125	STIM.125	0	STIM.125		
Duck Lie         Duck Lie         Stop         Duck Lie         Stop         Duck Lie         Stop         Stop<		DIDC.135	DICC.130	119,000	DICC.130		0			-
Add A AddiesDOC 149DOC 149PROP 10 BUR MAY 200STM 140COM 440TIUnder RendaDOC 157DOC 158STM 140STM 140STM 140COM 440TIStandard LaborDOC 157STM 150DOC 157STM 150STM 140STM 140STM 140Standard LaborDOC 158DOC 158STM 160STM 160STM 160STM 160STM 160Standard LaborDOC 158DOC 158DOC 158STM 160STM 160STM 160STM 160Standard LaborDOC 150DOC 158DOC 158DOC 158STM 160STM 160STM 160STM 160Standard LaborDOC 150DOC 158DOC 158DOC 158STM 160STM 160STM 160STM 160STM 160Standard LaborDOC 250DOC 158STM 100DOC 110DOC 150DOC 150STM 150STM 150STM 150STM 150Standard LaborDOC 250DOC 150DOC 150DOC 150DOC 150DOC 150STM 150STM 150STM 150STM 150STM 150STM 150STM 150STM 260DOC 150STM 260STM 260 <td></td> <td></td> <td></td> <td></td> <td></td> <td>STIM 135</td> <td>0</td> <td>STIM.135</td> <td></td> <td>20.00</td>						STIM 135	0	STIM.135		20.00
NON PRED DIADO ANDY YOU using Remain Double for the property bookd taker to bookd taker to			Diceitas		Dictarios	51111.155				
unice sensity boundes isouth 5DDC135DDC145STAL 49STAL 49STAL 40STAL		DIDC. 143		500,000			1			
Damba Bundas         DOC.133         Partial Line         STM A45         STM A46			DISCUL	07000	-	CT111110	0	CT114.140	CONTRO	137,00
Ibaska Laker         Laker         Laker         Sinuka Laker         <			DICC.140		DICC.140	STIM.140	0		CON.140	1001010
Namenalia labor Ac Autogeng CC 4 Marting CC 4 Marting DC 19 DC	Downhole Rentals	DIDC.155		131,000		10 A				35,00
Add Logging         DDC.170         DDC.170         DDC.175         TADE         Part Add Logging	lowback Labor			1.000			1	STIM.141		
Cc 2000         DCC195         PACC195         PACC195 <td< td=""><td>Automation Labor</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Automation Labor									
Cc. AVEX.MAX PANTING         DOL:19         DOL:19         DOL:19         DOL:19         DOL:19         DOL:19         STM.160         BLOOD         STM.160         BLOOD         STM.160         CDU         STM.160         CDU         STM.160         CDU         STM.160         CDU         STM.160         CDU         STM.160         CDU         CDU <td< td=""><td>Aud Logging</td><td>DIDC.170</td><td></td><td>5,000</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Aud Logging	DIDC.170		5,000						
inenting APbat Equipment build meterios         DDC180         DDC180         DCC163         TM100         Response BML100         SML100	PC & EXTERNAL PAINTING									
black regentions         DDC 190         DDC 190         DDC 190         DDC 190         DDC 100         STM. 160         STM. 170         STM. 160         STM. 160         STM. 160         STM. 170         STM. 160		DIDC.185	DICC155	70.000	DICC.155		140,000			
aing Greed         DDC.195         DDC.165         DDC.165         DDC.205         DDC.206         DDC.205         DDC.206         DDC.207						STIM 160	and the second sec	STIM 160		4,00
International back-ranker back-							and the second se			
ndang/Tangonatalian papersion particle frage/Camp/Catering mile Hous/Camp/Catering mile Hous/Camp/Catering DIC-230 DICC-130 DICC-255 BM.200 DICC-250 DICC-250 DICC-250 DICC-250 DI	Carlos C. C. M. Della C.								CON1170	
spension         DDC-210         DCC-100         #1000         DCC100         STM1100         STM120         CON 180         1           Stmler Hous/Carg/Carg/Carg/Carg/Carg/Sinter Soud         DCC220         DCC109         Soud         STM1100         S							and the second second			
number body         DDC230         DDC225         S100.200							a strategy and			4,00
bite Max Sportes         DDC.200         DCC 190         SA00         DCC 190         STM 190         O         STM 190         COI 190         SA00           GOUGMONDS         DDC.200         DDC 200         115.00         DDC 200         5.000         5.000         DDC 200         GOUGMONDS         DDC 200         46.000         5.000         DDC 200         46.000         CC 190         STM 200	the statement will be an even being the second se					and the second	0.0000		CON.180	47,00
benhead         DDC.223         DCC.195         5.000         PCC.195         5.000         PCC.195         5.000         PCC.195         F.000         F.000         F.000         PCC.195         F.000         F.0000         F.0000         F.0000         F.0000	railer House/Camp/Catering	DIDC.280	DICC.255	36,000		Control of the second	5,000			31,00
DOUGNOM         DOC-200         Image: Source and Display in the source and decomposition in pine difference and Display in the source and decomposition in pine difference and decomposition decomposition in pine difference and decomposition in pine difference and decomposition decomposite decomposition decomposite dec	Other Misc Expenses	DIDC.220	DICC.190	5,000		STIM.190	0	STIM.190	CON.190	85,00
ODOUGNOB         DDC.240         I1500         I500         Information         Information </td <td>Overhead</td> <td>DIDC.225</td> <td>DICC.195</td> <td>5,000</td> <td>DICC.195</td> <td>1.00</td> <td>5,000</td> <td></td> <td></td> <td></td>	Overhead	DIDC.225	DICC.195	5,000	DICC.195	1.00	5,000			
inclusion         DDC.245         970.00         460.00         510.260         460.00         510.260         6         510.260         6         510.260         6         510.260         6         510.260         6         510.260         6         510.260         6         510.260         6         510.260         22           anopote Physics         510.260         510.260         510.260         510.260         22         510.260         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24         24		DIDC.240								
aliak Garnal Garnal Markalisha Ma							Contract of			
Val Control Equip Sinubing Completion Big Sinubics         DDC 245         DCC 240         B4.000         DCC 240         STM 240         0         STM 240         2           Completion Big Sinubics         STM 240         STM 240         STM 240         2           Completion Big Sinubics         STM 240         STM 240         2           VG Control Insurance         DDC 245         C/C 20         T1800         DCC 240         T10000         STM 220         CN200         1           VG - Labor         VG - Labor         STM 240         STM 240         STM 240         3         3           VG - StM 2408         DVE 8135         C/L 245<	A REAL PROPERTY OF A REAL PROPERTY OF A REAL									
completion Fig         Completion         Completion         STM 115         Completion           completion         STM 200         STM 200         22           completion         STM 200         STM 200         22           simulation         STM 200         STM 200         22           simulation         DDC 300         STM 200         22           simulation         DDC 200         STM 200         STM 200         22           simulation         DDC 200         STM 200         STM 200         22           simulation Control (Refrequence)         DDC 200         Total Name 200         STM 200         24           Viol - NAPPA Lobre         Viol - Supervision         Viol			DICC 340	Charles and Charles and	DICCOM	STINADAD		CTILLOUG		64,00
iai Tuking Simices Gampabia Phys tamubian t	and the second	DIDC.265	DICC.240	84,000	DICC.240	511M.240	0			100 C 100
iompine Page Intrustion Marce Mater Intrustion Materials Intrustion Materials Internet Page Intrustion Materials Internet Page Intrustion Materials Internet Page Internet Page Intrustion Materials Internet Page Internet Page Intern										21,00
composite Pugs timulation         STM.300         23           imulation         STM.300         22.0           imulation         STM.305         STM.305         22.0           imulation         DIDC.300         10000         STM.305         STM.305         10           Viel Control Insurance         DIDC.300         10000         STM.305         STM.305         10           Viel Control Insurance         DIDC.300         7,000         STM.200         STM.305         10           Viel Control Insurance         DIDC.305         PCC220         118.000         DICC220         STM.220         DIS.000         STM.220         002.00         11           Viel Control Viel Pary Connect         Control Insurance         2475.00         2475.00         360.00         0         34           Graduard Pary Connect         Control Insurance         DVER 130         0         2475.00         360.00         0         34           Graduard Pary Connect         DVER 135         104.000         2475.00         360.00         0         34           Graduard Pary Connect         DVER 130         DVER 130         0         2475.00         360.00         0         34           Graduard Pary Connect         DVER 130 <td>Coil Tubing Services</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td>	Coil Tubing Services						1			
binulation         STM2.20         STM2.20         2.2           timulation Water Water         DDC.280         10.000         STM3.35         10           egal/Regulatory/Curatice         DDC.285         7.000         STM3.35         10           high Control Insurance         DDC.285         7.000         STM3.35         10           VIG NPAD.LAGR         NUCL-Supervision         STM2.20         STM3.20         STM3.20         10           VIG NPAD.LAGR         NUCL-Supervision         STM2.20         STM3.20         CON220         11           W07/Dhter - Supervision         DDC.435         DCC220         T18.000         DCC220         STM4.20         STM2.20         CON220         11           W07/Dhter - Supervision         DDC.435         DCC220         T18.000         DCC220         STM4.20         CON220         11           W07/Dhter - Supervision         DDC.435         DCC220         T18.000         DCC220         STM4.101         STM3.201         CON220         11           W100 Cher - Supervision         DVEE.135         DVEE.135         DVEE.130         DVEE.130         DVEE.130         STM1.101         STM1.102         STM1.102         STM1.102         STM1.101         STM1.102         STM1.102         <	Completion							STIM.200		257,00
timulation Vater/Water interes Conder GraneRental ega/Negulatory/Curative bill Control Innurance pdp/Carbity/Curative bill Control Innurance pdp/Carbity/Curative DIDC.285 VIG - Labor W0/Other - M1/Other - Labor W0/Other - M1/Other -	Composite Plugs						1	STIM.390		39,00
inarez Osned Faz-Rental provide DDC.285 hajor Contruction Covenad hajor Cov	timulation							STIM.210		2,245,00
imare Convert FaceRenal or operation of the strand of t	timulation Water/Water						1	STIM.395		191,00
PayNage Manage Construction Overhaad         DDC 285         Pay Mage Construction Overhaad         Pay Mage Construction Ov							1			60,00
Weil Control Insurance         DDC 285         Part of Mathematical Supervision         Part of		DIDC 300		10,000						
Age Construction Overhead (JG ON PAD LABOR (JG Supervision uirry)         Simple Si				and the second sec						
Lind - UAGOR       Linds		DIDC.285		7,000						
L/G Labor         L/G Supervision         L/G Superv										
Light - Supervision wavey W0/Chter - Labor W0/Chter - Supervision W0/Chter - Materials W0/Chter - Materials W0/Chter - Materials       DUC.230       II.8000       DUC.230       STIM220       STIM220       STIM220       36.000       34.4         Conductor Pipe W18135       DUE8.135       O       O       STIM220       36.000       VER.100       34.4         Conductor Pipe W18143       DWE8.145       DWEA.120       38.000       DWEA.120       STIM7.100							1			
unreg       WD/Other - Labor       WD/Other - Labor       WD/Other - Supervision       Image: Supervision <td>L/GL - Labor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td>	L/GL - Labor						1			
W0/Other-sboer W0/Other-Sopervision W0/Other-Sopervision W0/Other-Sopervision W0/Other-Sopervision Ubl CA35CC220Isoo PCC220STM210STM200STM220STM210STM200STM210STM200	L/GL - Supervision									
WD//Other - Supervision did in Construct/3rd Party Connect Iontingency.DICA35DICC220118.00DICC220STIM 220STIM 220STIM 220CON22011Total Intangible Cor.2.475500COO3.403.4Conductor PipeDWEB 130C2.475500COO3.4Conductor PipeDWEB 130C2.475500COO3.4Conductor PipeDWEB 135ODUC2.475500COO3.4Conductor PipeDWEB 135DWEB 140DDWEB 140DWEA 120DWEA 120TIMOTIMOTIMODVariance Casing of LinerUPDWEA 12038.000DWEA 120TIMDUCSTIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.20 <t< td=""><td>urvey</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td></t<>	urvey						1			
WD//Other - Supervision did in Construct/3rd Party Connect Iontingency.DICA35DICC220118.00DICC220STIM 220STIM 220STIM 220CON22011Total Intangible Cor.2.475500COO3.403.4Conductor PipeDWEB 130C2.475500COO3.4Conductor PipeDWEB 130C2.475500COO3.4Conductor PipeDWEB 135ODUC2.475500COO3.4Conductor PipeDWEB 135DWEB 140DDWEB 140DWEA 120DWEA 120TIMOTIMOTIMODVariance Casing of LinerUPDWEA 12038.000DWEA 120TIMDUCSTIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.100STIMT.20 <t< td=""><td>WD/Other - Labor</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td></t<>	WD/Other - Labor						1			
Naid no Construct/3rd Party Connect     DDCA39     DCC220     118.000     DCC220     STIM220     STIM220 </td <td></td>										
Dott 35         DICC 220         118.000         DICC 220         STIM 220         STIM 220         CN220         114           Contingency         Total Intangble Cos         2.475.50         0         306.000         34           Conductor Pipe         DWEB.130         0         0         306.000         346         306.000         346           Variance Casing         DWEB.135         104.00         2250.00         792.000         5111.105         5111.105         111           Variance Casing or Liner         DWEB.145         DWEA.120         380.00         DWEA.120         SIMT.100         180.000         STIMT.105         111           Vellhead.Tree. Chokes         DWEB.115         DWEA.120         380.00         DWEA.120         SIMT.120         180.00         STIMT.105         111           Variance Equipment         DWEB.100         DWEA.125         DWEA.120         SIMT.120         180.00         STIMT.400         200.00 </td <td></td> <td></td> <td></td> <td>1/2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				1/2						
Contingency         Contingency <thcontingency< th=""> <thcontingency< th=""></thcontingency<></thcontingency<>	the second		0100 000	110.000	DICC 222	CT-11 1 2 2 2	15.000	CTU 1 220	CO11222	100.00
Total Intangble Cos         Q2475.50         306,000         306,000         34,           Conductor Pipe         WEB.130         0		DIDC.435	DICC220	118,000	DICC.220	STIM.220	15,000	S11M.220	CON.220	165,00
Donductor Pipe         DWEB.130         0           Vater String         DWEB.135         104,000				_						
Nater String       DWEB.135       104,000         urface Casing       DWEB.140       251,000         roduction Casing or Liner       DWEB.145       0         ubing       DWEB.145       DWEA.120         reduction Casing or Liner       DWEB.145       DWEA.120         ubing       STIMT.105       STIMT.105         iner Hanger, Isolation Packer       DWEA.120       38,000       DWEA.125       STIMT.120       18,000       STIMT.400       38,000         acker, Nipples       DWEA.125       DWEA.125       DWEA.125       STIMT.400       38,000       STIMT.400       STIMT.400       STIMT.400       38,000       STIMT.400       STIMT.400       STIMT.400       STIMT.400       STIMT.400       STIMT.400       STIMT.400							306,000			3,459,00
unface Casing       DWEB.140       251,000       Totution Casing or Liner       DWEB.145       DWEA.100       TOUD       TOUD       STIMT.105       TOUD         roduction Casing or Liner       Ubing       STIMT.105       STIMT.105       TOUD	Conductor Pipe	DWEB.130		0						
ntermediate Casing 1 DWEB.145 0 0 0 792,000 1 10 10 11 10 10 10 10 11 10 10 10 1	Vater String	DWEB.135		104,000						
hroduction Casing or Liner ubing Wellhead, Tree, Chokes Iner Hanger, Isolation Packer DWEB.115 DWEA.120 JWEB.100 DWEA.125 DWEB.100 DWEA.125 0 D	urface Casing	DWEB.140		251,000						
hroduction Casing or Liner ubing Wellhead, Tree, Chokes Iner Hanger, Isolation Packer DWEB.115 DWEA.120 JWEB.100 DWEA.125 DWEB.100 DWEA.125 0 D	ntermediate Casing 1	DWEB.145		0						
ubing       STIMT.105	A STATE OF A				DWEA.100		792.000			
Wellhead, Tree, Chokes       DWEB.115       DWEB.120       38.000       DWEA.120       STIMT.120       18.000       STIMT.120       38.000       DWEA.125       0         lacker, Nipples       DWEB.100       DWEA.125       D       DWEA.125       0       STIMT.400       2         HORT ORDERS       UMPS       STIMT.400       STIMT.400       STIMT.400       2         VALKOVERS       VALKOVERS       STIMT.410       STIMT.410       STIMT.410       STIMT.410         Valkace Equipment       STIMT.410       STIMT.410       STIMT.410       STIMT.410       STIMT.410         vell Automatinals       V/C Lease Equipment       STIMT.410								STIMT 105		139,00
iner Hanger, Isolation Packer DWEB.100 DWEA.125	and the second se	DWER 115	DWFA 120	38.000	DWFA 120	STIMT 120	18 000			38,00
lacker, Nipples STIMT.400 2 HORT ORDERS UMPS VALKOVERS Jownhole Lift guipment warkee Equipment Vell Automation Materials V/C Less Equipment Vell Automation Materials V/C Less Equipment aks, Tanks Steps, Stairs attery Equipment iecondary Containments Verhead Power Distribution acility Electrical iecondary Containments Verhead Power Distribution acility Electrical iecondary Containments Verhead Power Distribution acility Electrical iecondary Containments Verhead Power Distribution acility Electrical iecondary Containments Verhead Power Distribution acility Line Pipe ease Automation Materials L/GL - Materials U/GL - Materials WD/Other - Materials WD/Other - Materials							100 1.14	511911120		50,00
HORT ORDERS UMPS VALKOVERS Now hole Lift Equipment Valk Quers and Materials V/C Lease Equipment Vell Automation Materials V/C Lease Equipment Vell Automation Materials V/C Lease Equipment leacondary Containments Nerehead Power Distribution acality Electrical leacondary Containments Nerehead Power Distribution acality Electrical leacondary Containments Nerehead Power Distribution acality Electrical leacondary Containments Nerehead Power Distribution acality Electrical leacondary Containments Nerehead Power Distribution acality Line Pipe ease Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Materials WD/Other - Materials	the second se	DAVED. 100	DATER 123	0	UWEA 125		0	CTIL 17 100		20.00
PUMPS   WALKOVERS   Downhole Lift Equipment   Walk Automation Materials   V/C Lease Equipment   V/C Lease								511M1.400		28,00
VALKOVERS Jownhole Lift Equipment Jownhole Lift Equipment Urface Equipment Urface Equipment Urface Equipment STIMT.410 STIMT.4										
bownhole Lift Equipment urface Equipment Vell Automation Materials V/C Lease Equipment anks, Tanks Steps, Stairs attery Equipment active Status tatery Equipment active Status Status Sterhaad Power Distribution active Status Sterhaad Power Distribution active Sterhaad Power Distribution active St										
urface Equipment   Vell Automation Materials   V/C Less Equipment   anks, Tanks Steps, Stairs   attery Equipment   iecondary Containments   Sverhead Power Distribution   acility Electrical   iecondary Containments   Verhead Power Distribution   acility Electrical   iecondary Containments   Verhead Power Distribution   acility Electrical   iecondary Containments   Verhead Power Distribution   acility Electrical   iecondary Contain Equipment   Aeters and Metering Equipment   actions Equipment   V/C - Materials   U/G - Materials   WD/Other - Materials   WD/Other - Line Pipe										
Vell Automation Materials V/C Lease Equipment anks, Staps, Stairs lattery Equipment econdary Containments Verhead Power Distribution acility Electrical elecommunication Equipment deters and Metering Equipment acility Line Pipe ease Automation Materials L/GL - Materials WD/Other - Materials WD/Other - Materials WD/Other - Iune Pipe	Downhole Lift Equipment							STIMT.410		80,00
Vell Automation Materials V/C Lease Equipment anks, Tanks Steps, Stairs attery Equipment econdary Containments Verhead Power Distribution acility Electrical elecommunication Equipment deters and Metering Equipment acility Line Pipe ease Automation Materials V/G - Materials V/G - Materials WD/Other - Materials WD/Other - Materials WD/Other - Ine Pipe	urface Equipment									
V/C Lease Equipment     anks Steps, Stairs       anks Tanks Steps, Stairs     attery Equipment       econdary Containments     attery Equipment       ocondary Containments     attery Equipment       acility Electrical     attery Equipment       elecommunication Equipment     attery Equipment       acility Electrical     attery Equipment       elecommunication Equipment     attery Equipment       acility Electrical     attery Equipment       acility Line Pipe     attery Equipment       ease Automation Materials     attery Equipment       L/GL - Materials     attery Equipment       WD/Other - Materials     attery Equipment       WD/Other - Ine Pipe     attery Equipment										
anks, Tanks Steps, Stairs attery Equipment econdary Containments verhead Power Distribution acility Electrical elecommunication Equipment Aters and Metering Equipment acility Line Pipe ease Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Line Pipe						and the second se				
attery Equipment econdary Containments verhead Power Distribution aclity Electrical elecommunication Equipment teters and Metering Equipment aclity Line Pipe ease Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Materials	the broad of an intervent of the subset for solid									
econdary Containments Veerhead Power Distribution acliity Electrical elecommunication Equipment deters and Metering Equipment acliity Line Pipe acase Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Materials										
Averhead Power Distribution     aclify Electrical       aclify Electrical     aclify Electrical       elecommunication Equipment     aclify Electrical       deters and Metering Equipment     aclify Line Pipe       ease Automation Materials     aclify Line Pipe       case Automation Materials     aclify Line Pipe       U/GL - Materials     aclify Line Pipe       WD/Other - Materials     aclify Line Pipe										
aclity Electrical elecommunication Equipment teters and Metering Equipment aclity Line Pipe ease Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Line Pipe	Charles (end) that a short strength and									
elecommunication Equipment Aters and Metering Equipment acility Line Pipe ease Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Line Pipe										
teters and Metering Equipment acility Line Pipe ease Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Line Pipe										
acility Line Pipe ease Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Line Pipe	elecommunication Equipment									
acility Line Pipe ease Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Line Pipe										
ease Automation Materials L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Line Pipe	and the second									
L/GL - Materials L/GL - Materials WD/Other - Materials WD/Other - Line Pipe				-						
L/GL - Materials WD/Other - Materials WD/Other - Line Pipe									1	1
WD/Other - Materials WD/Other - Line Pipe										
WD/Other - Line Pipe										
Total Tangible Cost 393,000 810.000 22										
	Total Tangible Cost			393,000			810,000			285,00

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

Description	Production Equip			Post Completion		Total
Description	Codes	Amount	Codes		Amount	Co
Roads & Location	CON.100	48,637	PCOM.100	Repair any roads post D&C	3,000	74,6
Damages	CON.105	15807				32,3
Mud/Fluids Disposal			PCOM.255		0	251,0
Day Rate						564,0
Misc Preparation						30,0
Bits			PCOM 125		0	97,0
Fuel			PCOM.130		0	119,0
					0	25,0
Water for Drilling Rig (Not Frac Water)		and the second s	PCOM.135	in the second seco	U	
Mud & Additives				and the second se		300,0
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257	Water for 60 days (270K barrels)	87,354	87,3
Surface Rentals	CON.140	1,378	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	295,3
Downhole Rentals			PCOM.145		0	166,0
Flowback Labor		and the second	PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,0
Automation Labor	CON.150	36,558	PCOM.150		5,000	41,5
Mud Logging	A DOM OF A					5,0
IPC & EXTERNAL PAINTING	CON.165	18,888				18,8
Cementing & Float Equipment				1 contract of the second se		210,0
and the second se			PCOM.160		0	50,0
Tubular Inspections			PLOM. TOU		0	
Casing Crews	Concert Sectors in the sector of the sector			which we want the fact of the state of the s		28,0
Mechanical Labor	CON.170	139,588	PCOM.170	RU Flowback Iron & Automation	5,000	167,5
Trucking/Transportation	CON.175	17,833	PCOM.175		0	59,8
Supervision	CON.180	21,238	PCOM.180		0	162,2
Trailer House/Camp/Catering						72,0
Other Misc Expenses	CON.190	24,318	PCOM.190		0	114,3
Overhead	and the second s			1		10,0
MOB/DEMOB						115,0
Directional Drilling Services						307,0
a da su de la su de l					1	46,0
Solids Control			DECHINA		0	148,0
Well Control Equip (Snubbing Services)			PCOM.240		0	
Completion Rig			PCOM.115		0	21,0
Coil Tubing Services			PCOM.260		0	
Completion Logging/Perforating/Wireline			PCOM.200		0	257,0
Composite Plugs	and the second se		PCOM.390		0	39,0
Stimulation			PCOM.210		0	2,245,0
Stimulation Water/Water Transfer/Water	in the second					191,0
			PCOM.305		0	60,0
Cimarex Owned Frac/Rental Equipment	CON 200		PCOM.303		U	10,0
Legal/Regulatory/Curative	CON.300	0				
Well Control Insurance	and the second se					7,0
Major Construction Overhead	CON.305	26,507				26,50
FL/GL - ON PAD LABOR	CON.495	37,613				37,6
FL/GL - Labor	CON.500	94,842				94,8
FL/GL - Supervision	CON.505	14,429			1	14,43
Survey	CON.515	2351				2,3
SWD/Other - Labor	CON.600	0				
	CON.605	0				
SWD/Other - Supervision	CPACE CONST.					40,5
Aid In Construct/3rd Party Connect	CON.701	40,531				
Contingency	CON.220	105,542			1	403,5
Contingency	CON.221	23,508				23,50
Total Intangible Cost		669,568			190,354	7,100,4
Conductor Pipe						
Water String						104,00
Surface Casing						251,0
Intermediate Casing 1						22.10
						7020
Production Casing or Liner						792,0
Tubing			PCOMT.105	and the second se	0	139,0
Wellhead, Tree, Chokes			PCOMT.120	Replace worn chokes and valves during FB	10,000	104,0
Liner Hanger, Isolation Packer						
Packer, Nipples	No. of Concession, Name	30.2	PCOMT.400		0	28,0
SHORT ORDERS	CONT.380	10,538				10,5
PUMPS	CONT.385	30,804				30,8
WALKOVERS	CONT.390	4,053				4,0
Downhole Lift Equipment			PCOMT.410	the second se	0	80,0
Surface Equipment			PCOMT.410	Replacing Chokes, Stuffing Boxes, and all	15,000	15,0
				and the second se	5,000	5,0
Well Automation Materials	CONT 100		PCOMT.455	PTs, and replacing meters	5,000	
N/C Lease Equipment	CONT.400	184,334				184,3
Tanks, Tanks Steps, Stairs	CONT.405	51,879				51,8
Battery Equipment	CONT.410	214,003				214,0
Secondary Containments	CONT.415	19,292				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.445	45,232				45,2
		100 Constant		-		31,2
Facility Line Pipe	CONT.450	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				
SWD/Other - Line Pipe	CONT.655	0			1.2.2.1	
					30,000	2,308,4
Total Tangible Cost		790,428			30.000	

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

# **MODEL FORM OPERATING AGREEMENT**

OPERATING AGREEMENT

DATED

August 15 , 2022 ,

OPERATOR **Cimarex Energy Co.** 

CONTRACT AREA All Section 5 and Section 8, Township 20 South, Range 34 East

COUNTY OR PARISH OF Lea , STATE OF New Mexico

# **MIGHTY PHEASANT 5-8 FED COM WELLS**

COPYRIGHT1989ALLRIGHTSRESERVEDAMERICANASSOCIATIONOFPETROLEUMLANDMEN,4100FOSSILCREEKBLVD.FORT WORTH,TEXAS,76137,APPROVED FORM.

A.A.P.L. NO. 610 – 1989

COPAS 2005 Accounting Procedure Recommended by COPAS, Inc.

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

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

### 1. OVERHEAD—DRILLING AND PRODUCING OPERATIONS

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

- (Alternative 1) Fixed Rate Basis, Section III.1.B.
- (Alternative 2) Percentage Basis, Section III.1.C.
- A. TECHNICAL SERVICES
  - (i) Except as otherwise provided in Section II.13 (Ecological Environmental, and Safety) and Section III.2 (Overhead Major Construction and Catastrophe), or by approval of the Parties pursuant to Section I.6.A (General Matters), the salaries, wages, related payroll burdens and benefits, and Personal Expenses for On-site Technical Services, including third party Technical Services:
    - ☑ (Alternative 1 Direct) shall be charged <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> rates.
    - (Alternative 2 All Direct) shall be charged <u>direct</u> to the Joint Account.
    - (Alternative 3 Drilling Direct) shall be charged <u>direct</u> to the Joint Account, <u>only</u> to the extent such Technical Services are directly attributable to drilling, redrilling, deepening, or sidetracking operations, through completion, temporary abandonment, or abandonment if a dry hole. Off-site Technical Services for all other operations, including workover, recompletion, abandonment of producing wells, and the construction or expansion of fixed assets not covered by Section III.2 (*Overhead Major Construction and Catastrophe*) shall be covered by the overhead rates.

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

## B. OVERHEAD—FIXED RATE BASIS

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

Drilling Well Rate per month \$\_\_\_\_\_\_(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.

**Permian Resources-** 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-<u>Received email from Reid Marley to discuss Loosey Goosey and Mighty Pheasant proposals</u> and discussed with development plan and path Coterra would be making forward

2/27/23- Phone call with Reid to discuss term assignment offer and provided Operating agreements via email

7/10/23 – Discussed development timing with Reid

7/11/23 - Reid emailed that he would like to not be considered committed

## **Chase Oil Corporation**

9/12/22 – Received email from Morgan Buckles confirming receipt of the proposals.

9/12/22 – Phone call with Morgan Buckles to discuss proposals and plan of development

6/7/23 – Received email from Morgan Buckles stating that they would like to sign AFE's and move forward with the operator the OCD decides post hearing.

## Wilbanks Reserve Corporation/Marks Oil

9/1/22 – Phone call with Hannah Frederick confirming receipt of the proposals and request to confirm interest in the contract area

9/6/22- Received email from Hannah Frederick following up on working interest figures and sent ownership at the time

9/27/22 - Email correspondence to set up a phone call to discuss moving forward with title run

11/3/22 – Discussion of timing for force pooling filing and next steps

1/30/23 – Discussed Permian Resources development and proposals in the area

2/22/23 – Reached out to determine if Wilbanks Reserve had signed OA's. Hannah mentioned she would bring this up to upper management and get a decision since there was traction on development

7/10/23 – Confirmed DOTO figures with Hannah

7/11/23 – Wilbanks Reserve would like to wait until the Commission has made a decision on operator

## **Union Hill Oil and Gas**

3/1/23- Spoke with Robert Buchholz about proposals he received

3/1/23 – Sent Robert the corresponding Operating agreements for both developments and provided ownership

## Highland Texas Energy Company and Richardson Oil Company

- 10/11/22- Received elections back from Gary Richardson for the development
- 3/9/23 Followed up with Gary to confirm they would like to participate under the OA
- 3/21/23 Discussed force pooling matters via email

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

July 10, 2023

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

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

To Whom it May Concern:

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

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

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

Sincerely,

Paul C. More

Paul Moore Moore & Shelton Co. LLP General Partner



# **JAVELINA PARTNERS & ZORRO PARTNERS LTD**

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

July 7, 2023

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

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

Ladies and Gentlemen,

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

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

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

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

# **JAVELINA PARTNERS & ZORRO PARTNERS LTD**

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

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

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

Sincerely,

A Hedron IV

Edward Randall Hudson IV Javelina Partners Land Manager

the lan

William A. Hudson If 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 Received by OCD: 7/13/2023 6:11:56 PM



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

## RECEIVED

March 17, 2023

# MAR 20 2023

Via Certified Mail

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:

 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'



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:

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 3<sup>rd</sup> Bone Spring/Wolfcamp XY spacing test in Sections 18 & 19 (Batman Unit). Permian further plans a second 1<sup>st</sup> Bone Spring/2<sup>nd</sup> 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

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# Joker 5-8 Federal Com Elections:

	Well Elections	
(Please indicate yo	u <mark>r respon</mark> ses 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 (If Applicable):

By: \_\_\_\_\_ Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Permian Resources Operating, LLC 300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

N. Marienfeld St., Ste. 1000 Midland, 1X 7 Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 111H	FIELD	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E	MD/TVD:	19,861' / 9,576'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG	COMPLETION DAYS:	18.6
	Drill a horizontal FBSG well and comple	te with 44 stages. AFE includes drilling, completions,	flowback and Initial AL
REMARKS:	install cost		

• · · · · · · · · · · · · · · · · · · ·	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
T Land/ Legal/ Regulatory	\$ 52,768	-	37,500	\$ 90,268
2 Location, Surveys & Damages	257,363	16,141	2,500	276,003
4 Freight/Transportation	42,549	39,110	25,000	106,660
5 Kental - Surface Equipment	111,070	192,448	105,000	408,518
6 Kental - Downhole Equipment	183,520	53,429	•	236,949
7 Kental - Living Quarters 10 Directional Drilling, Surveys	42,956	40,0/1		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 Equip	217,354		· · ·	217,354
15 Completion Unit, Swab, CTU		· · ·	15,000	15,000
16 Pertorating, Wireline, Slickline	-	351,218	·	351,218
17 High Pressure Pump Truck	-	110,130	-	110,130
18 Completion Unit, Swab, CTU 20 Mud Circulation System	93,991	130,865	-	93,991
21 Mud Logging	15,660		·	15,660
22 Logging/Formation Evaluation	6,495	7,450	<u> </u>	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
28 Mud / Wastewater Disposal	172,514	54,630	-	227,144
30 Rig Supervision / Engineering	108,273	119,194	21,667	9,312
32 Drig & Completion Overhead 35 Labor	137,005	62,080	101,667	
54 Proppant		1,121,387		1,121,387
95 Insurance	13,096		· · · ·	13,096
97 Contingency		21,817	3,833	25,650
99 Plugging & Abandonment	<u> </u>	· ·	•	-
TOTAL INTANGIBL	ES > 3,141,476	4,794,736	697,167	8,633,379
	5,141,470	4,7 54,7 50	077,207	
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS				TOTAL COSTS
TANGIBLE COSTS	DRILLING COSTS \$ 109,201	COMPLETION	PRODUCTION	COSTS \$ 109,201
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS \$ 109,201 307,574	COMPLETION	PRODUCTION COSTS	COSTS \$ 109,201 307,574
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS \$ 109,201	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner	DRILLING COSTS \$ 109,201 307,574	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 613,783 -
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	DRILLING COSTS \$ 109,201 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead	DRILLING COSTS \$ 109,201 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 613,783 -
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	DRILLING COSTS \$ 109,201 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers	DRILLING COSTS \$ 109,201 307,574 	COMPLETION COSTS	PRODUCTION COSTS 	COSTS \$ 109,201 307,574 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines	DRILLING COSTS \$ 109,201 307,574 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string	DRILLING COSTS \$ 109,201 307,574 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Litt Equipment	DRILLING COSTS \$ 109,201 307,574 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Litt Equipment 73 Compressor	DRILLING COSTS \$ 109,201 307,574 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs	DRILLING COSTS \$ 109,201 307,574 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Fumps	DRILLING COSTS \$ 109,201 307,574 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Installation	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Installation         78 Gas Conditioning / Dehydration         79 interconnecting Facility Piping         80 Gathering / Bulk Lines	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod 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 Cathering / Bulk Lines         81 Valves, Dumps, Controllers	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Installation         78 Gas Conditioning / Dehydration         79 interconnecting Facility Priping         80 Gathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Cathering / Buk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod 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 Cathering / Bulk Lines         81 Yalves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod 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         85 Communications / SCADA	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS 	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod 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         85 Communications / SCADA         86 Instrumentation / Satety	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS 	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod 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         85 Communications / SCADA	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS 	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -

## **PREPARED BY Permian Resources Operating, LLC:**

	<u> </u>		
Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer.	DC		
ian Resources Operating, LL	CAPPROVAL:		
Co-CEO		Co-CEO	VP - Operations
	WH	JW	CRM
VP - Land & Legal	BG	VP - Geosciences SO	
OPERATING PARTNER A	PPROVAL:		
Company Name:	·	Working Interest (%):	Tax ID:
Signed by:		Date:	

proportionale share of actual costs incurred, including, legal, curstive, regulatory, brokenage and well costs under the torus of the applicable joint operating agreement, regulatory outer or other agreement covering this well. Participants shall be covered by and billed proportionate control and general lisbility insurance unless participant provides Operator a certificate existence in an azowat acceptable to the Operator by the date of spud.

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

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 112H	FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E	MD/TVD:	19,881' / 9,596'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG	COMPLETION DAYS:	18.6
	Drill a horizontal FBSG well and com	plete with 44 stages. AFE includes drilling, completions, f	lowback and Initial AL
REMARKS:	install cost		

NTANCIBLE COSTS         COSTS <thcosts< th="">         COSTS</thcosts<>	•	DRILLING	COMPLETION	PRODUCTION	TOTAL
Land Legal / Regulatory         S         2/68         -         3/500         % 000           2 Location, Survey & Damages         27/353         16/11         2500         26/6           4 Reght / Transportation         42/517         97/10         25/000         10/6           5 Kental - Journa Equipment         110,007         10/24/45         100,007         10/24/45           6 Kental - Journa Equipment         18/2527         33,427         -         20/0           10 Kental - Lownhole Equipment         14/2537         -         10/7         10/24/45           11 Detti Hilo         80/75         -         10/7         10/24/45         10/7         10/7           11 Detti Hilo         80/75         -         10/7         <	INTANGIBLE COSTS				
2 Location, Surveys & Lanages         25/383         16,311         2.307         2/6.1           4 reight / Inseptration         42,547         33,427         2.80           8 Rental - Surveys & Lanages         42,557         35,427         2.80           9 Rental - Lowing Quarters         42,557         48,77		52.768	_	37,500	5 90,268
4 reight/Transportation         42.547         97,107         25.007         106.5           5 Rental - Surve Equipment         110.070         192,485         105.300         405.5           6 Rental - Lownbole Equipment         105.520         53.487         -         25.5           7 Rental - Living Quarters         42.575         53.487         -         35.7           10 Directional Unilling, Surveys         385,743         -         -         65.7           11 Drilling         67.5447         -         -         65.7           12 Drill Ints         100,707         -         15.000         70.5           13 Drilling Surveys         100,707         -         15.000         70.5           14 Drilling Surveys         100,707         -         15.000         70.5           15 Completion Unit, Swab, (1'U         -         152,000         70.3         20.0         20.000         72.5         70.3         70.0         100.0         20.0         20.000         72.5         70.000         72.6         70.000         72.6         70.000         72.6         70.000         72.6         70.000         72.6         70.000         72.6         70.000         72.6         70.7         70.7         <			16,141		276,003
6 Kental - Downkole Equipment         185.5207         33.4297         -         255.           7 Kental - Living Quarters         42.555         45.77         -         935.73           10 Urectional Drilling, Surveys         355.743         -         -         935.73           12 Drilling         67.543         -         -         935.73           13 Drill bits         87.445         -         -         687.33           13 Drill bits         87.445         -         -         887.43           14 Ceneting & Hoat Equip         186.747         -         155.007         -         217.21           14 Strending & Hoat Equip         186.747         -         155.007         -         100.07         -         100.07         217.21         155.007         -         103.23         100.07         217.21         100.07         217.21         100.07         -         105.22         100.007         235.22         100.007         235.22         100.007         235.22         100.007         235.23         100.007         236.23         100.000         236.23         100.007         236.24         240.44         100.000         236.25         100.26         20.007         236.25         100.26         100.26			-	-	106,660
6 Kental - Downkole Equipment         185.5207         33.4297         -         255.           7 Kental - Living Quarters         42.555         45.77         -         935.73           10 Urectional Drilling, Surveys         355.743         -         -         935.73           12 Drilling         67.543         -         -         935.73           13 Drill bits         87.445         -         -         687.33           13 Drill bits         87.445         -         -         887.43           14 Ceneting & Hoat Equip         186.747         -         155.007         -         217.21           14 Strending & Hoat Equip         186.747         -         155.007         -         100.07         -         100.07         217.21         155.007         -         103.23         100.07         217.21         100.07         217.21         100.07         -         105.22         100.007         235.22         100.007         235.22         100.007         235.22         100.007         235.23         100.007         236.23         100.000         236.23         100.007         236.24         240.44         100.000         236.25         100.26         20.007         236.25         100.26         100.26		111,070	192,448		408,518
10 Ubretional Uniting, Surveys         385,743         -         -         385,743           11 Ubrilling         65,7445         -         -         673,3           12 Ubrilling         673,743         -         -         673,3           13 Ubrilling         687,845         -         -         673,3           13 Ubrilling         687,845         -         -         247,5           14 Cementing & Float Squip         217,557         -         -         247,5           15 Vertel strap Wreitins, Stickline         -         -         100,00         155,00           15 Vertel strap Truck         -         100,00         -         100,00         100,00           14 Ubrilling Formation braitabilion         6,495         -         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00         100,00         743,00	6 Rental - Downhole Equipment		53,429		236,949
11 Ditling       5/3,443	7 Kental - Living Quarters	42,956	48,671		91,627
12 Unit Bis 59/452	10 Directional Drilling, Surveys	383,743	-	<u> </u>	383,743
15 Fed & Yover         168/787         647/751          880           15 Completion Unit, Swab, CTU           15/000         15/7           15 Completion Unit, Swab, CTU           10/001         15/7           15 Completion Unit, Swab, CTU           10/002         10/002           21 Mud Logging           10/002         10/002         10/002           21 Mud Chrashearter Usposal           10/002         20/002         <	11 Drilling	673,443	<u> </u>	<u> </u>	673,443
14 Cenerating & Heat Equip       277,354       -       127,254         15 Completion Unit, Swab, CIU       -       -       150,000         16 Verioxting, Witeline, Sitkkline       -       351,218       -       351,218         17 High Pressure Pump Track       -       1100,137       -       150,000         18 Completion Unit, Swab, CIU       -       130,855       -       150,000         21 Mud Logging       15,660       -       -       153,253         21 Mud Logging       15,660       -       -       153,253         21 Mud & Chemiston Evaluation       6,495       7,453       100,000       748,75         22 Mud & Chemiston Evaluation       6,495       7,453       100,000       748,75         23 Mud & Chemiston Evaluation       6,495       747,756       70,77,756       70,77,757         23 Mud & Chemiston / Evaluation       108,727       119,194       721,667       249,91         23 Mud & Chemiston / Evaluation       108,272       119,194       71,667       249,91         23 Libbo       101,62,73       119,194       721,667       249,91         24 Completion Overhead       9,312       -       153,006       62,0880       101,667       30,00	12 Drill Bits	89,495			89,495
15 Completion Unit, Swish, 'LTU	13 Fuel & Power	168,789	647,751	<u> </u>	816,540
bit Printing, Witeline, Silckline	14 Cementing & Float Equip	217,354			217,354
11 High Pressure Pump Franck       -       110,130       -       110,130         20 Multa Carculation System       30,597       -       933         20 Multa Carculation System       30,597       -       933         21 Multa Logging       115,660       -       -       153         22 Logging / Formation Evaluation       6,495       7,430       -       153         22 Logging / Formation Evaluation       6,495       7,430       -       153         23 Multa Character Lisposa       30,825       991,076       225,000       7437         24 Water       30,825       991,076       225,000       254,77         25 Multa / Mustanter Lisposa       172,726       -       777,72         25 Multa / Mustanter Lisposa       172,726       -       777,72         25 Multa / Mustanter Lisposa       172,737       173,794       225,007       235,73         28 Multa / Mustanter Lisposa       172,736       62,7887       -       172,73         28 Multa / Mustanter Lisposa       172,736       62,7887       -       172,73         29 Ling & Lober       157,006       62,7987       30,777       35,353       255         99 Ling Lines       121,1387       -       1	15 Completion Unit, Swab, CTU	-		15,000	15,000
18 Completion Unit, Swab, CTU       -       130285       -       1302         21 Mud Logging       15607       -       953         21 Mud Logging       15607       -       155         21 Mud Logging       352,527       391,7457       100007       724,737         23 Mud A Chandison System       322,5287       391,7457       100007       724,737         24 Mud Chandison System       323,527       391,7487       100007       724,737         25 Munualion Howback & Uisp       -       108,747       255,0007       255,0007         28 Mud Jone Statistion / Langineering       108,727       1191,194       21,667       249,727         28 Mud Jone Statistion / Langineering       108,727       1191,194       21,667       249,735         29 Hing Jone And Markan Andreament       -       -       302,72       302,73         29 Labor       137,006       157,007       111,12,07       -       112,120       111,120       -       112,120       -       112,120       -       112,120       -       112,120       -       112,120       -       112,120       -       112,120       -       112,120       -       112,120       -       112,120       -       112,120	16 Perlorating, Wireline, Slickline	-	351,218	•	351,218
20 Mai (Licrulation System 935 21 Logging 935 21 Logging / Formation Evaluation 6495 7.4597	17 High Pressure Pump Truck	•	110,130	-	110,130
21 Mut Logging         15,607         -         -         15,57           22 Logging / Normation braining         6,495         7,437         -         15,35           24 Mute 4 Chemicals         322,521         391,465         100,000         7,47,35           24 Mute         38,825         591,1078         222,0007         784,35           25 Mitmulation         6,895         -         727,236         -         727,236           25 Mitmulation Howback & Uisp         -         100,86407         150,0007         2583,35           26 Mith (Wastewater Diaposal         172,514         54,65307         100,667         240,37           32 Labor         1137,006         -         101,667         300,73         30,35         135,35         35,35		-	130,865	•	130,865
21 Logging / Formation         6.495         7.490         133           22 Logging / Formation         322,257         391,1463         100,000         7247           24 Water         38,825         591,1178         225,000         593,257           25 Stimulation         -         727,256         -         727,257           26 Stimulation         -         108,640         -         727,257           26 Mind (Westwater Usposal         172,514         516,000         -         227,73           28 Mind (Westwater Usposal         172,514         516,000         -         227,73           28 Lobor         138,720         -         -         72,73           28 Lobor         137,720         -         -         73,007           28 Lobor         137,720         -         -         13,007           29 Flugging & Abandonment         -         -         -         -           7 Contingency         -         21,817         38,835         26,64           9 Flugging & Abandonment         -         -         -         -           16 Litermediate Casing         307,747         -         -         -           16 Litermediate Casing         507,927				-	93,991
23 Mute & Chemicals         322,251         39/143         10007         24/2           24 Water         38,825         59/1078         225,000         583,535           25 Situnulation         38,825         59/1078         225,000         727,235           25 Situnulation         108,640         190,000         228,82           26 Mud / Wastewater Disposal         172,514         54,537         227,1           30 Hig Supervision / Engineering         108,275         119,144         24,567         247,1           31 Labor         54 froppant         -         -         32,33         24 froppant         -         32,33         25,57         30,12,867         -         112,12,87         -         112,12,87         -         112,12,87         -         112,12,87         -         112,12,87         -         112,12,87         -         112,12,12,12,12,12,12,12,12,12,12,12,12,				<u> </u>	15,660
24 Water         38/25         99/10/8         225/00/         99/20/8           25 Sitmulation         -         72/25         -         72/2           26 Sitmulation         -         72/25         -         72/2           26 Sitmulation         Figure 1         36,800         -         72/2           26 Minu/ Wastewater Disposal         172,511         36,800         -         72/2           20 Minu/ Wastewater Disposal         172,517         171,714         72,72         72/7           20 Minu/ Wastewater Disposal         172,517         36,800         -         72/7           32 Ubig & Competion Overhead         9,312         -         -         72/7           35 Labor         172,137         -         -         72/7           35 Insurance         13,000         6,000         101,567         0300           97 Contingency         -					13,944
25 Stimulation         72/256         72/26           26 Simulation Rowback & Disp         -         108,407         159,000         256,000           25 Mud / Wastewater Disposal         172,514         36,630         -         227,1           30 Kig Supervision / Engineering         108,275         119,114         21,667         248,000           31 Lidg & Completion Overhead         9,312         -         -         9,3           34 troppant         -         1,72,1387         -         -         1,72,1387         -         -         1,72,1387         -         -         1,72,1387         -         -         0,76,05         1,72,1387         -				10,000	724,717
26 Stimulation Flowback & Ukp		38,825	591,078	225,000	854,903
28 Mud / Wastewater Usposal         172,514         51,530         227,7           29 Mud / Wastewater Usposal         108,275         119,194         21,667         249,1           32 Urig & Completion Overhead         9,312         -         -         93,2           34 Lobor         54,7000         62,080         101,667         300,0           35 Labor         51,3076         -         1,121,387         -         1,121,387           95 Insurance         15,0976         -         21,817         3,833         25,5           97 Contingency         -         21,817         3,833         25,5         3,161,476         697,167         8,633,           70 Contingency         -         21,817         3,833         25,5         7,94,736         697,167         8,633,           71 Lintrancibles         3,161,476         4,794,736         697,167         8,633,           71 Lintrancible CoSTS         COSTS         COSTS         COSTS         COSTS         COSTS         70,007           80 Surface Casing         5         109,201         -         -         103,73         -         101,567           61 Intermediate Casing         50,17,035         -         -         103,74		•		-	727,236
30 Hig Supervision / Englineering         108,273         119,194         21,667         249,7           32 Long & Completion Overhead         9,312         -         -         9,3           32 Long & Completion Overhead         9,312         -         -         9,3           54 Iroppant         -         113/306         62,080         101,667         300,7           54 Iroppant         -         -         133         133,006         -         133,006           55 Insurance         13,096         -         -         133,006         -         133,006           97 Contingency         -         -         -         -         -         -         -           50 Surface Casing         019,201         -         -         5         109,201         -         -         5         103,754           61 Intermediate Casing         307,574         -         -         -         -         -         -         -         613,763         -         -         613,773         -         -         613,773         -         -         613,753         437,53         4353         4353         4453         -         -         -         -         -         -         <				150,000	258,640
32 Drig & Completion Overhead         9,312         -         -         92           36 Labor         137,006         62,080         101,667         3007           36 I hoprant         -         1,121,387         -         1,121,397           95 Insurance         13,096         -         -         13,097           97 Contingency         -         21,317         3,333         25,6           97 Plugging & Abandonment         -         -         -         -           TOTAL INTANGIBLES >         3,314,076         4,794,736         697,167         8,633,           TANGIBLE COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         0,537,           61 Intermediate Casing         307,574         -	· ·			<u> </u>	227,144
35 Labor         137,006         62,080         101,667         300,7           34 Proppant         -         1,121,387         -         1,121,387         -         1,121,387         -         1,121,387         -         1,121,387         -         1,121,387         -         1,121,387         -         1,121,387         -         1,121,387         -         1,121,387         -         1,121,387         -         -         1,121,387         -         -         1,121,387         -         -         1,121,387         -         -         1,121,387         - </td <td></td> <td></td> <td>119,194</td> <td>21,667</td> <td>249,134</td>			119,194	21,667	249,134
54 Proppant         1,121,387         1,121,387           95 Insurance         13,096         -         13,09           97 Contingency         -         71,011         3,833         25,6           99 Plugging & Abandonment         -         -         -         -         13,09           TOTAL INTANGIBLES >         3,414,76         4,794,736         697,167         8,633           TOTAL INTANGIBLES >         3,414,76         4,794,736         697,167         8,633           TOTAL INTANGIBLES >         3,414,76         4,794,736         697,167         8,633           OPTILLING COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         613,7           61 Intermediate Casing         307,574         -         -         613,7           61 Production Liner         -         -         -         613,73           64 Production Liner         -         -         140,000         90,000         97,74           6 013,733         -         -         140,000         90,000         97,79           6 013,753         -         - <td< td=""><td></td><td></td><td></td><td>-</td><td>9,312</td></td<>				-	9,312
95 Insurance       13,096       13,0         97 Contingency       -       21,817       3,833       22,5         99 Plugging & Abandonment       - <td></td> <td>137,006</td> <td></td> <td>101,667</td> <td>300,753</td>		137,006		101,667	300,753
97 Contingency	••	•	1,121,387		1,121,387
99 Plugging & Abandonment         -          -         - <td></td> <td>13,096</td> <td>-</td> <td></td> <td>13,096</td>		13,096	-		13,096
TOTAL INTANGIBLES>         3,141,476         4,794,736         697,167         8,633,           TANGIBLE COSTS         COSTS         COMPLETION COSTS         PRODUCTION COSTS         TOTAL           601 Surface Casing         5         109,201         -         -         5         109,22           61 Intermediate Casing         307,574         -         -         307,574         -         -         307,574           62 Drilling Liner         -<		-	21,817	3,833	25,650
TANGIBLE COSTS         DRILLING COSTS         COMPLETION COSTS         PRODUCTION COSTS         TOTAL COSTS           60 Surface Casing         5         109,201         -         -         5         109,20           62 Drilling Liner         -         -         -         307,574         -         -         307,574           62 Drilling Liner         - <td></td> <td></td> <td>-</td> <td>·</td> <td>-</td>			-	·	-
TANGIBLE COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         COSTS           60 Surface Casing         \$ 109,201         -         -         5 109,2           61 Intermediate Casing         307,57         -         -         307,57           62 Drilling Liner         -         -         -         -         -           63 Production Casing         613,783         - </td <td>TOTAL INTANGIBLES &gt;</td> <td>3,141,476</td> <td>4,794,736</td> <td>697,167</td> <td>8,633,379</td>	TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379
bit Status         109,201         -         -         5         109,2           61 Intermediate Casing         307,574         -					
61 Intermediate Casing       307,574       -       -       307,574         62 Drilling Liner       -			COMPLETION		
62 Drilling Liner       -       -       -       -       613/763       -       613/763       -       613/763       -       613/763       -       613/763       -       613/763       -       613/763       -       613/763       -       613/763       -       613/763       -       613/763       -       -       613/763       -       613/763       -       613/763       613/763       -       -       613/763       613/763       -       613/763       -       -       -       -       -       -       -       -       613/763       613/763       -			COMPLETION		
63 Production Casing       613//83       -       -       613//         64 Production Liner       -       -       -       -         65 Tubing       -	TANGIBLE COSTS 60 Surface Casing 5	COSTS 109,201	COMPLETION		COSTS \$ 109,201
64 Production Liner       -	TANGIBLE COSTS 60 Surface Casing 5 61 Intermediate Casing 5	COSTS 109,201	COMPLETION COSTS	COSTS	COSTS
65 Tubing       -       -       140,000       140,4         66 Weilhead       57,908       -       40,000       97,5         67 Packers, Liner Hangers       13,161       -       20,000       33,1         68 Tanks       -       -       45,833       49,833         69 Production Vessels       -       -       45,833       49,833         69 Production Vessels       -       -       126,667       126,667         70 Flow Lines       -       -       66,667       66,667         71 Kod string       -       -       -       -       -         72 Artilkia Litt Equipment       -       -       90,000       90,000       90,000         73 Compressor       -       -       -       90,000 </td <td>TANGIBLE COSTS 60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner</td> <td>COSTS 109,201 307,574</td> <td>COMPLETION COSTS</td> <td><u></u></td> <td>COSTS 5 109,201 307,574</td>	TANGIBLE COSTS 60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner	COSTS 109,201 307,574	COMPLETION COSTS	<u></u>	COSTS 5 109,201 307,574
66 Weilhead       57/908       -       40,000       97/3         67 Packers, Liner Hangers       13,161       -       20,000       33,1         68 Tanks       -       -       45,833       45,8         69 Production Vessels       -       -       125,667       126,67         70 Flow Lines       -       -       66,667       66,67         71 Rod string       -       -       -       -         72 Artilikial Lift Equipment       -       -       -       -         73 Compressor       -       -       -       -       -         75 Surface Pumps       -       -       -       -       -       -         76 Downhole Pumps       - </td <td>TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing</td> <td>COSTS 109,201 307,574</td> <td>COMPLETION COSTS</td> <td><u></u></td> <td>COSTS \$ 109,201</td>	TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	COSTS 109,201 307,574	COMPLETION COSTS	<u></u>	COSTS \$ 109,201
67 Packers, Liner Hangers       13,161       -       20,000       33,1         68 Tanks       -       -       45,833       45,8         69 Production Vessels       -       -       126,667       126,6         71 Rod string       -       -       66,667       66,6         72 Artilikial Lift Equipment       -       -       -       -         72 Artilikial Lift Equipment       -       -       90,000       90,000         73 Compressor       -       -       -       -       -         74 Installation Costs       -       -       -       -       -       -         75 Surface Pumps       -	TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner	COSTS 109,201 307,574	COMPLETION COSTS	COSTS	COSTS 5 109,201 307,574 
68 Tanks       -       -       45,833       45,8         69 Production Vessels       -       -       126,667       126,6         70 Flow Lines       -       -       66,667       66,6         71 Kod string       -       -       66,667       66,6         71 Kod string       -       -       -       66,667       66,6         72 Artill kial Lift Equipment       -       -       90,000       90,00       90,000       90,00       90,000 <t< td=""><td>TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing</td><td>COSTS 109,201 307,574 613,783</td><td>COMPLETION COSTS</td><td>COSTS</td><td>COSTS 109,201 307,574 </td></t<>	TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	COSTS 109,201 307,574 613,783	COMPLETION COSTS	COSTS	COSTS 109,201 307,574 
69 Production Vessels       -       -       125,667       126,67         70 Flow Lines       -       -       66,667       66,667         71 Kod string       -       -       -       66,667       66,667         72 Artilicial Lift Equipment       -       -       -       90,000       90,000         73 Compressor       -       -       -       -       -       -         73 Compressor       - <td< td=""><td>TANGIBLE COSTS 60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead</td><td>COSTS 109,201 307,574 </td><td>COMPLETION COSTS</td><td>COSTS</td><td>COSTS \$ 109,201 307,574 </td></td<>	TANGIBLE COSTS 60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
70 Flow Lines       -       -       66,667       66,67         71 Rod string       -       -       90,000       90,0         73 Compressor       -       -       90,000       90,0         74 Installation Costs       -       -       5,833       5,83         74 Installation Costs       -       -       -       -       -         75 Surface Pumps       -	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       5         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       67	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
71 Rod string       -       <	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       60	COSTS 109,201 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
72 Artilicial Lift Equipment       -       -       90,000       90,0         73 Compressor       -       -       5,833       5,833         74 Installation Costs       -       -       -       -         75 Surface Pumps       -       -       -       -       -         76 Downhole Pumps       -       <	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       64	COSTS 109,201 307,574 - - - - - - - - - - - - -	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 613,783 
73 Compressor       -       -       5,833       5,8         74 Installation Costs       - </td <td>TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       65         65 Tubbing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       60</td> <td>COSTS 109,201 307,574 </td> <td>COMPLETION COSTS</td> <td>COSTS</td> <td>COSTS \$ 109,201 307,574 </td>	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       65         65 Tubbing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       60	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
74 Installation Costs       -       -       -       -         75 Surface Pumps       -       -       61,667       61,67         76 Uownhole Pumps       -       -       -       -       -         77 Measurement & Meter Installation       -	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
75 Surface Pumps       -       -       61,667       61,667         76 Downhole Pumps       -       -       -       -       -         77 Measurement & Meter Installation       - <t< td=""><td>TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       5         62 Drilling Liner       63         63 Production Casing       64         64 Production Casing       64         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artilicial Lift Equipment       72</td><td>COSTS 109,201 307,574 </td><td>COMPLETION COSTS</td><td>COSTS</td><td>COSTS \$ 109,201 307,574 - - - - - - - - - - - - -</td></t<>	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       5         62 Drilling Liner       63         63 Production Casing       64         64 Production Casing       64         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artilicial Lift Equipment       72	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
76 Downhole Pumps       -	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       5         62 Drilling Liner       6         63 Production Casing       6         64 Production Casing       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       7         70 How Lines       7         71 Rod string       7         72 Artilikial Lift Equipment       73 Compressor	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
77 Measurement & Meter Installation       -       -       116,667       116,667         78 Gas Conditioning / Dehydration       -       -       -       -         79 Interconnecting Facility Piping       -       -       20,000       20,000         80 Gathering / Bulk Lines       -       -       -       -       -         81 Valves, Dumps, Controllers       -       -       -       -       -         82 Tank / Facility Containment       -	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       68         68 Tanks       6         99 Production Vessels       7         71 Kod string       7         72 Artilicial Litt Equipment       73 Compressor         74 Installation Costs       6	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 
78 Gas Conditioning / Dehydration       -       -       -       -         79 Interconnecting Facility Piping       -       -       20,000       20,0         80 Gathering / Bulk Lines       -	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Kod string       72         72 Artilicial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       74	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
79 Interconnecting Facility Piping       -       -       20,000       20,0         80 Gathering / Bulk Lines       -	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artilicial Litt Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 
S0 Gathering / Bulk Lines         -          -         - <td>TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       63         63 Production Casing       64         64 Production Casing       64         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artilicial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement &amp; Meter Installation</td> <td>COSTS 109,201 307,574 </td> <td>COMPLETION COSTS</td> <td>COSTS </td> <td>COSTS \$ 109,201 307,574 </td>	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       63         63 Production Casing       64         64 Production Casing       64         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artilicial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 
81 Valves, Dumps, Controllers       -       -       108,333       108,3         82 Tank / Facility Containment       -       -       43,333       43,3         83 Flare Stack       -       -       16,667       16,6         84 Electrical / Grounding       -       -       50,000       50,000         85 Communications / SCADA       -       -       36,667       36,66         86 Instrumentation / Safety       -       -       853       8         TOTAL TANGIBLES > 1,101,627       0       989,187       2,090,000	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Casing       \$         65 Tubing       \$         66 Weilhead       \$         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 Installation       \$         78 Gas Conditioning / Dehydration       \$	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 
82 Tank / Facility Containment         -         -         43,333         43,3           83 Flare Stack         -         -         16,667         16,6           84 Electrical / Grounding         -         -         50,000         50,000           85 Communications / SCADA         -         -         36,667         36,6           86 Instrumentation / Safety         -         -         853         8           TOTAL TANGIBLES >         1,101,627         0         989,187         2,090,000	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Casing       \$         65 Tubing       \$         66 Wellhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Rod string       \$         72 Artilicial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         77 Measurement & Meter Installation       \$         78 Gas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 
83 Flare Stack       -       -       16,667       16,67         84 Electrical / Grounding       -       -       50,000       50,000         85 Communications / SCADA       -       -       36,667       36,667         86 Instrumentation / Safety       -       -       85.3       88         TOTAL TANGIBLES >       1,101,627       0       989,187       2,090,000	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       6         69 Production Vessels       7         71 Kod string       7         72 Artilicial Litt Equipment       73 Compressor         74 Installation Costs       75 Surface Pumps         76 Downhole Pumps       7         77 Measurement & Meter Installation       78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping       80 Gathering / Bulk Lines	COSTS 109,201 307,574 - - - - - - - - - - - - -	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 
84 Electrical / Grounding         -         -         50,000         50,0           85 Communications / SCADA         -         -         36,667         36,6           86 Instrumentation / Satety         -         -         853         8           TOTAL TANGIBLES >         1,101,627         0         989,187         2,090,000	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       63 Production Casing         64 Production Liner       65 Tubing         65 Tubing       66 Weilhead         67 Packers, Liner Hangers       68 Tanks         69 Production Vessels       70 Viow Lines         71 Kod string       72 Artilicial 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 / Buik Lines         81 Valves, Dumps, Controllers       81	COSTS 109,201 307,574 - - - - - - - - - - - - -	COMPLETION COSTS	COSTS 	COSTS 109,201 307,574 
85 Communications / SCADA         -         -         36,66/ <t< td=""><td>TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubling       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artilicial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement &amp; Meter Installation       78         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81         81 Valves, Jumps, Controllers       82         82 Tank / Facility Containment       10</td><td>COSTS 109,201 307,574 - - - - - - - - - - - - -</td><td>COMPLETION COSTS</td><td>COSTS </td><td>COSTS 109,201 307,574 </td></t<>	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubling       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artilicial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81         81 Valves, Jumps, Controllers       82         82 Tank / Facility Containment       10	COSTS 109,201 307,574 - - - - - - - - - - - - -	COMPLETION COSTS	COSTS 	COSTS 109,201 307,574 
86 Instrumentation / Safety         -         853         8           TOTAL TANGIBLES >         1,101,627         0         989,187         2,090,4	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       63         63 Production Casing       64         64 Production Casing       64         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Rod string       72         72 Artilicial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81         81 Valves, Dumps, Controllers       82         82 Tank / Facility Containment       83         83 Flare Stack       84	COSTS 109,201 307,574 - - - - - - - - - - - - -	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 
TOTAL TANGIBLES > 1,101,627 0 989,187 2,090,	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Casing       \$         65 Tubing       \$         66 Wellhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Rod string       \$         72 Artilikial 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 Yaives, Dumps, Controllers       \$         82 Tank / Facility Containment       \$         83 Flare Stack       \$	COSTS 109,201 307,574 - - - - - - - - - - - - -	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 
	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Casing       \$         65 Tubing       \$         66 Wellhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Rod string       \$         72 Artilikial 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       \$         44 Electrical / Grounding       \$         85 Communications / SCADA       \$	COSTS 109,201 307,574 - - - - - - - - - - - - -	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
TOTAL COSTS > 4,243,103 4,794,736 1,686,354 10,724;	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Casing       6         65 Tubing       6         66 Wellhead       6         67 Packers, Liner Hangers       6         68 Tanks       6         69 Production Vessels       7         70 How Lines       7         71 Rod string       7         72 Artilicial Lift Equipment       7         73 Compressor       74 Installation Costs         75 Surface Pumps       7         76 Downhole Pumps       7         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81 Valves, Dumps, Controllers         82 Tank / Facility Containment       83 Flare Stack         84 Electrical / Grounding       85 Communications / SCADA         86 Instrumentation / Satety       86	COSTS 109,201 307,574 	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Casing       \$         65 Tubing       \$         66 Wellhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Rod string       \$         72 Artilicial 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       \$         44 Electrical / Grounding       \$         85 Communications / SCADA       \$         86 Instrumentation / Satety       \$	COSTS 109,201 307,574 - 613,783 - - - - - - - - - - - - -	COMPLETION COSTS	COSTS 	COSTS \$ 109,201 307,574 

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	P5		
Completions Engineer:	ML		
Production Engineer:	DC		
mian Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
VP - Land & Legal	WH	JW VP - Geosciences	CRM
VI - Land & Legar	BG	SO SO	
N OPERATING PARTNER A	PPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	
		Approval: Yes	No (mark one)

onto on the ATE are restantee only and any not be construed as estangs on any specific from or the total cost of the project. Tobaling installation approved cacher the ATE area how to delayed up to a pres after the well has been completed. In executing this ATE, the Participant agrees to pey that retractes these of a state close hourses, including a state of the regulation of the applicable biology of a state of a well. In a state of a well, Participant agrees to pey that retractes these of a state close hourses, including a state of the regulation of the applicable biolity for Operator is well at and general labGPU fearance using participant provides Operator as constant exceptible to the Operator by the date of speci.

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:	2.17.2023	AFE NO.:	1
VELL NAME:	Joker 5-8 Federal Com 113H	FIELD:	Teas; Bone Spring
OCATION:	Section 5, T20S-R34E	MD/TVD:	19,901' / 9,616'
OUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian WI:		DRILLING DAYS:	19.6
EOLOGIC TARGET:	FBSG	COMPLETION DAYS:	18.6
	Drill a horizontal FBSG well and complete with 4	4 stages. AFE includes drilling, completions, f	lowback and Initial
EMARKS:	install cost		

	DRILLING	COMPLETION	PRODUCTION	TOTAL
<b>INTANGIBLE COSTS</b>	COSTS	COSTS	COSTS	COSTS
1 Land/ Legal/ Regulatory	52,768	•	37,500	\$ 90,268
2 Location, Surveys & Damages	257,363	16,141	2,500	2/6,003
4 Freight / Transportation	42,549	39,110	25,000	106,660
5 Kental - Surface Equipment	111,070	192,448	105,000	408,518
6 Kental - Downhole Equipment	183,520	53,429	•	236,949
7 Kental - Living Quarters	42,956	48,671	•	91,627
10 Directional Drilling, Surveys	383,743	-	-	383,743
11 Drilling	673,443		-	673,443
12 Drill Bits	89,495	-	· · · · · · · · · · · · · · · · · · ·	89,495
13 Fuel & Power 14 Cementing & Float Equip	217,354	647,751	<u> </u>	217,354
15 Completion Unit, Swab, CTU			15,000	15,000
16 Periorating, Wireline, Slickline	·	351,218		351,218
17 High Pressure Pump Truck	<u> </u>	110,130	· · ·	110,130
18 Completion Unit, Swab, CTU	<u> </u>	130,865		130,865
20 Mud Circulation System	93,991	<u> </u>	· · ·	93,991
21 Mud Logging	15,660		······	15,660
22 Logging / Formation Evaluation	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		727,235
26 Stimulation Flowback & Disp	· ·	108,640	150,000	258,640
28 Mud / Wastewater Disposal	172,514	54,630		227,144
30 Kig Supervision / Engineering	108,273	119,194	21,667	249,134
32 Drig & Completion Overhead	9,312	-	•	9,312
35 Labor 54 Perspect	137,006	62,080	101,667	300,753
54 Proppant 95 Insurance	13,096	1,121,38/		1,121,587
97 Contingency		21,817	3,833	25,650
99 Plugging & Abandonment				
			100 110	9 633 370
TOTAL INTANCIBLES 5	3 141 476	4 794 736	697 167	
TOTAL INTANGIBLES >		4,794,736	697,167	8,633,379
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing	DRILLING COSTS 109,201	COMPLETION COSTS	PRODUCTION	TOTAL COSTS 5 109,201
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 109,201 307,574	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS 109,201	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner	DRILLING COSTS 307,574 613,783	COMPLETION COSTS 	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS 307,574 613,783	COMPLETION COSTS 	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing	DRILLING COSTS 307,574 613,783 -	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 109,201 307,574 613,783 140,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead	DRILLING COSTS 5 109,201 307,574 613,783 613,783 57,908	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 
TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       5         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       64	DRILLING COSTS 5 109,201 307,574 613,783 613,783 57,908	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines	DRILLING COSTS 5 109,201 307,574 613,783 613,783 57,908 13,161	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod string	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 90,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 900,000 5,833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 90,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 90,000 5,833 61,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 900,000 5,833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation         78 Gas Conditioning / Dehydration	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 90,000 5,833 61,667 116,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Measurement & Meter Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 90,000 5,833 61,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation         78 Gas Conditioning / Dehydration	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 90,000 5,833 61,667 116,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod 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	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod 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	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod 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	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Gas Conditioning / Dehydration         77 Interconnecting Facility Piping         80 Gathering / Bulk Lines         81 Yalves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding         85 Communications / SCADA	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 - - - - - - - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod 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         85 Communications / SCADA         86 Instrumentation / Satety	DRILLING COSTS 5 109,201 307,574 613,783 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 140,000 97,908 33,161 45,833 126,667 66,667 90,000 5,833 61,667 116,667 116,667 20,000 5,833 43,333 43,333 16,667 50,000 36,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Gas Conditioning / Dehydration         77 Interconnecting Facility Piping         80 Gathering / Bulk Lines         81 Yalves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding         85 Communications / SCADA	DRILLING COSTS 5 109,201 307,574 613,783 57,908 13,161 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 109,201 307,574 613,783 - - - - - - - - - - - - - - - - - - -

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS			
Completions Engineer:	ML			
Production Engineer:	DC			
ian Resources Operating, LL	C APPROVAL:	· · · · · · · · · · · · · · · · · · ·		
Co-CEO		Co-CEO	VP - Operations	
VP - Land & Legal	WH	JW VP - Geosciences		CRM
vi - Land & Legal	BG	SO SO		
OPERATING PARTNER A	PPROVAL:		 	
OPERATING PARTNER A	PPROVAL:	Working Interest (%):	 Tax ID:	
·····	PPROVAL:	Working Interest (%): Date:	 Tax ID:	

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

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 114H		Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E		19,901' / 9,616'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG	COMPLETION DAYS:	18.6
	Drill a horizontal FBSG well and complet	e with 44 stages. AFE includes drilling, completions, f	lowback and Initial AL
REMARKS:	install cost		

	DRILLING	COMPLETION	PRODUCTION	TOTAL
	COSTS	COSTS	COSTS	COSTS
INTANGIBLE COSTS	C0313	C0313		
1 Land/Legal/Regulatory 5	52,768	-	37,500	\$ 90,268
2 Location, Surveys & Damages	257,363	16,141	2,500	276,003
4 Freight / Transportation	42,549	39,110	25,000	106,660
5 Kental - Surface Equipment	111,070	192,448	105,000	408,518
	183,520	53,429		236,949
6 Kental - Downhote Equipment				91,627
7 Kental - Living Quarters	42,956	48,671	<u> </u>	
10 Directional Drilling, Surveys	383,743	•	•	383,743
11 Drilling	673,443			673,443
12 Drill Bits	89,495	•	······································	89,495
13 Fuel & Power	168,789	647,751	<u> </u>	816,540
14 Cementing & Float Equip	217,354		· · · · · ·	217,354
15 Completion Unit, Swab, CTU			15,000	15,000
		351,218	10,000	351,218
16 Pertorating, Wireline, Slickline		-		110,130
17 High Pressure Pump Truck	-	110,130		· · · ·
18 Completion Unit, Swab, CTU		130,865	-	130,865
20 Mud Circulation System	93,991			93,991
21 Mud Logging	15,660			15,660
22 Logging / Formation Evaluation	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
24 water 25 Stimulation		727,236		727,236
	-		-	
26 Stimulation Flowback & Disp	-	108,640	150,000	258,640
28 Mud / Wastewater Disposal	172,514	54,630	-	227,144
30 Rig Supervision / Engineering	108,273	119,194	21,667	249,134
32 Drig & Completion Overhead	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
			3,833	25,650
97 Contingency		21,817	3,833	23,030
99 Plugging & Abandonment	-	-	·	•
TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379
			PROBLICTION	TOTAL
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS			PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS	DRILLING	COMPLETION		
TANGIBLE COSTS 60 Surface Casing \$	DRILLING COSTS 109,201	COMPLETION COSTS	COSTS	COSTS \$ 109,201
TANGIBLE COSTS 60 Surface Casing \$ 61 Intermediate Casing	DRILLING COSTS	COMPLETION COSTS	COSTS	COSTS
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 109,201 307,574	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 -
TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       5         62 Drilling Liner       63 Production Casing	DRILLING COSTS 109,201 307,574 613,783	COMPLETION COSTS 	COSTS	COSTS \$ 109,201
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner	DRILLING COSTS 109,201 307,574	COMPLETION COSTS	COSTS	COSTS 5 109,201 307,574 613,783
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing	DRILLING COSTS 307,574 	COMPLETION COSTS 	COSTS	COSTS 5 109,201 307,574 613,783 140,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner	DRILLING COSTS 109,201 307,574 613,783	COMPLETION COSTS 	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing	DRILLING COSTS 307,574 	COMPLETION COSTS 	COSTS	COSTS 5 109,201 307,574 613,783 140,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead	DRILLING COSTS 307,574 613,783 613,783 57,908	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilkead       \$         67 Packers, Liner Hangers       \$	DRILLING COSTS 307,574 613,783 613,783 57,908	COMPLETION COSTS	COSTS	COSTS 5 109,201 307,574 613,783 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 I tanks         69 Production Vessels         70 Flow Lines         71 Kod string	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artifikiai Litt Equipment       \$         73 Compressor       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artilicial Litt Equipment       \$         73 Compressor       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         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       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Litt Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         76 Lownhole Pumps       \$         76 Gas Conditioning / Dehydration       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement & Meter Installation       \$         78 Cas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS 	COSTS 5 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         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       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS 	COSTS 5 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS 	COSTS 5 109,201 307,574 - 613,783 - 140,000 97,908 33,161 45,833 126,667 - 90,000 5,833 - 61,667 - 116,667 - 116,667 - 116,667 - 108,333 43,333 - -
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         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       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS 	COSTS 5 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       7         70 Flow Lines       7         71 Rod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         76 Lownhole Pumps       \$         76 Los Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$         80 Gathering / Buik Lines       \$         81 Valves, Dumps, Controllers       \$         82 Tank / Facility Containment       \$	DRILLING COSTS 307,574 613,783 	COMPLETION COSTS	COSTS	COSTS 5 109,201 307,574 - 613,783 - 140,000 97,908 33,161 45,833 126,667 - 90,000 5,833 - 61,667 - 116,667 - 116,667 - 116,667 - 108,333 43,333 - -
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artifikiai 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 Cathering / Bulk Lines       \$         81 Valves, Dumps, Controllers       \$         82 Tank / Facility Containment       \$         85 Flare Stack       \$         84 Electrical / Grounding       \$	DRILLING COSTS 307,574 	COMPLETION COSTS	COSTS	COSTS \$ 109,201 307,574 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement & Meter Installation       \$         78 Cas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$         80 Gathering / Bulk Lines       \$         81 Valves, Dumps, Controllers       \$         82 Tank / Facility Containment       \$         83 Fiare Stack       \$         84 Electrical / Grounding       \$         85 Communications / SCADA       \$	DRILLING COSTS 307,574 	COMPLETION COSTS	COSTS 	COSTS 5 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement & Meter Installation       \$         78 Cas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$         80 Gathering / Bulk Lines       \$         81 Valves, Dumps, Controllers       \$         82 Flare Stack       \$         84 Electrical / Grounding       \$         85 Communications / SCADA       \$         86 Instrumentation / Satety       \$	DRILLING COSTS 307,574 613,783 57,908 13,161 	COMPLETION COSTS	COSTS 	COSTS 5 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement & Meter Installation       \$         78 Cas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$         80 Gathering / Bulk Lines       \$         81 Valves, Dumps, Controllers       \$         82 Tank / Facility Containment       \$         83 Fiare Stack       \$         84 Electrical / Grounding       \$         85 Communications / SCADA       \$	DRILLING COSTS 307,574 613,783 57,908 13,161 	COMPLETION COSTS	COSTS 	COSTS 5 109,201 307,574 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       7         70 How Lines       7         71 Kod string       7         72 Artificial Lift Equipment       73 Compressor         74 Installation Costs       75         75 Surface Pumps       7         76 Downhole Pumps       7         77 Measurement & Meter Installation       78         78 Cas Conditioning / Dehydration       7         79 Interconnecting Facility Piping       80 Gathering / Bulk Lines         81 Valves, Dumps, Controllers       82 Tank / Facility Containment         83 Flare Stack       84 Electrical / Grounding         85 Communications / SCADA       86 Instrumentation / Satety	DRILLING COSTS 307,574 	COMPLETION COSTS	COSTS 	COSTS 5 109,201 307,574 - - - - - - - - - - - - -

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC		
rmian Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
VP - Land & Legal	WH	JW VP - Geosciences	СКМ
	BG	50	
ON OPERATING PARTNER A	PPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	
		Approval: Yes	No (mark one)

The costs on the AFE are reliances only and any not be constructed an exclusion and specific items or the total cost of the project. Tables idealized on approved under the AFE cary be delayed up to a prese after the well has been completed. In necessing this well, projections that have a default on the internet. Forsitative end approved on the original approaches that have a second second second approaches that have a second second

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:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 121H	FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E	MD/IVD:	20,601' / 10,316'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
	Drill a horizontal SBSG well and complete w	ith 44 stages. AFE includes drilling, completions, fl	owback and Initial A
REMARKS:	install cost	· · · ·	

DRILLING         DUMULE INN         PRODUCTION         101.4L           Lind LEGUT AGUILTON         COSTS         COSTS <t< th=""><th></th><th>DBUIDIC</th><th>COMPLETION</th><th>PRODUCTION</th><th>TOTAL</th></t<>		DBUIDIC	COMPLETION	PRODUCTION	TOTAL
Lang / Regulatory         Substr         -		DRILLING	COMPLETION	PRODUCTION	
2 Location, Surveys & Lamages 28,7057 18,757 2,3007 28,7007 10,717 5 Keala I - Surtaxe Equipment 114,7027 198,221 105,0007 47,7587 5 Keala I - Surtaxe Equipment 21,7587 47,224 105,7000 47,7587 5 Keala I - Living Quarters 44,2247 50,137 - 9,72,257 1 Dilling Surveys 375,255					
4 redga/j transportation         32525         402241         25000         100/10'           5 Renal - Surves Equipment         114/442         198/257         105/00'         41/457           5 Renal - Journes Equipment         189/255         53/351         -         44/4357           7 Renal - Living Usartes         44/44         53/351         -         49/357           10 Directional Uniting & 80/255         -         -         99/35/35         10         79/35/35           10 Directional Uniting & Robert All App         17/35/35         -         -         99/35/37         11/35/37         11/35/37           13 Incid R Foor         17/35/35         -         15/007         22/370         11/35/37					
5 Kenia i-Suntac Equipment         113,402         198,221         105,000         47,437           6 Kenia i-Suntac Equipment         189,025         53,331         -         44,437           7 Kenia i-Living Quartes         44,244         50,131         -         94,375           10 Ditterictional Diversional Diversi Diversi Diversional Diversional Diversional Diversi Diversional					
6 Kental - Uswnkoré Equipment         197/26         55/31         -         44/457           7 Kental - Léving Quarters         44/447         50/31         -         395/255           10 Directional Defiling, Surveys         395/255         -         -         395/257           11 Drilling         60/3547         -         -         69/3547           12 Drill Bills         82/179         -         -         72/175           13 Drill Killing         60/3547         -         -         72/175           13 Drill Killing         60/3547         -         -         72/175           13 Completion Unit, Svah, CTU         -         10/3797         -         10/3797           13 Mud Cheniting, Wheeling, Statchine         -         97/377         -         10/3797           21 Mud Logging         16/379         -         -         10/3797           21 Mud Logging         16/379         -         11/3797         -         10/3797           21 Mud Logging         -         11/3797         -         10/377         10/3677           21 Mud Logging         -         11/3797         -         10/377         10/3672           22 Mud Lorenation System         30/3797	• •				
7 Hental - Luing Quarters         74,241         30,131         -         94,357           11 Dittiling         643,547         -         -         653,557           11 Dittiling         647,547         -         -         74,137           13 Head & Forser         173,553         667,187         -         25,367           13 Completion Unit, Sweb, CTU         -         -         113,479         -         113,479           13 Head Exclusion         -         113,479         -         113,479         -         113,479           21 Maid & Chemistion Evaluation         -         -         74,773         -         113,479           22 Maid & Chemistion Evaluation         -         74,773         -         113,479         113,479         113,479         113,479         113,479         113,479         113,479         113,479         113,479         113,479         113,479         113,479         124,575         113,5107         141,157         124,575		-			
10 Utertional Unitating, Surveys         395,255         -         -         395,255           12 Uterting         693,547         -         -         693,547           12 Uterting         693,547         -         -         792,257           13 Uterting & Float Equip         223,875         -         -         223,875           14 Cementing & Float Equip         223,875         -         -         223,875           15 Completion Unit, Swab, CTU         -         -         153,007         153,007           15 Prediction Unit, Swab, CTU         -         -         153,007         153,007           15 Midd Creating Witerlans, Stickline         -         135,234         -         135,347           13 Completion Unit, Swab, CTU         -         -         135,047         -         16,137           12 Midd Creating Witerlans, Statistion         6,697         -//275         -         16,130           12 Midd A Creating Statistion         -         -         16,307         -         16,307           12 Midd A Creatistic Statistion         -         -         7,403,207         10,0007         746,308           12 Midd Creatistic Statistion         -         -         7,403,207         10,0007					
11 Utiling					
12 Unit Wis         72,179         -         -         92,179           13 Leit & Yoart         173,833         647,183         -         182,1383           14 Cenenting & Float Equip         223,875         -         122,833           15 Completion Unit, Swab, CTU         -         -         183,007           15 Pict Fororating, Whetline, Sitckline         -         133,434         -         113,434           15 Unit Swab, CTU         -         133,434         -         113,434           16 Constantion System         36,751         -         193,747         -         193,747           12 Maid Constantion System         36,8511         -         -         193,747         153,857           12 Maid Longsing         16,139         -         183,837         -         183,837           12 Maid Longsing         16,139         -         183,837         -         174,838           12 Maid Longsing / Formation Evaluation         56,979         7,973         -         174,838           12 Maid Longsing / Formation Evaluation         -         7,974         7,953,977         7,253,977           2 Minastion Evaluation         -         -         -         7,253,987         -         11,3897				<u> </u>	
13 heid & Fower         17.3853         66/.185         -         141.085           14 Cementing & Folst Equip         22.3875         -         -         22.3875           15 Completion Unit, Swab, C1U         -         -         15.000         15.000           15 Michige Sile.Killine         -         -         15.000         15.000           15 Completion Unit, Swab, C1U         -         15.137         -         15.137           21 Muid Logging         16.130         -         -         15.130           21 Muid Circulation System         98,811         -         -         15.130           21 Muid Circulation System         98,811         -         -         15.130           21 Muid Circulation System         98,8217         10000         746.183           22 Muid Alexateriation         6,890         7,777         -         14,825           23 Muid Supervision / Engineering         117.227         10000         26.1837           23 Muid Supervision / Engineering         117.227         12.24767         11.8322         -         1.8337           24 Muid Supervision / Engineering         11.522         -         1.153.027         -         1.53.027           24 Muid Supervision / Engineering			<u> </u>	· · · · · ·	
15 Completion Unit, Swab, C1U			667,183		·
16 Ferioriting, Wireline, Silektline       -       361/24       -       361/24         17 High Fresure Promp Track       -       113,343       -       113,343         18 Completion Unit, Swap, CTU       -       -       194,371       -       194,791       -       194,791         21 Mud Clexulation System       96,811       -       -       -       196,811         22 Muda Clexulation System       16,130       -       -       161,307         22 Muda Clexulation System       332,951       403,5207       10,3007       746,153         23 Muda Chemistion Fundation       -       747,053       -       14,365         24 Water       339,9907       608,8107       250,0007       745,153         25 Minulation Longineering       111,722       111,697       150,0007       723,167       253,987         23 Link & Completion Uverhead       79,997       - <td>14 Cementing &amp; Float Equip</td> <td>223,875</td> <td>· · ·</td> <td></td> <td>223,875</td>	14 Cementing & Float Equip	223,875	· · ·		223,875
17 High Presure Fung Franck         — 113,381         — 113,381         — 113,381           18 Completion Unit, Swab, CUU         — 134,791         — 134,791         — 134,791           20 Mud Carculation System         96,811         — 96,811         — 96,811           21 Mud Logging         16,130         — 10,132         — 10,132           21 Mud Logging         16,130         — 76,73         — 11,3434           22 Logging / Formation Evaluation         56,897         — 76,73         — 14,363           23 Mud & Metericals         332,9517         400,207         10,0007         740,1033           24 Mater         39,990         668,8107         220,897         740,1033           25 Minulation         107,7489         55,2697         — 22,55,987         730,000         263,1897           25 Minulation         10,971         10,0007         740,1033         14,974         - 95,977           25 Minulation         10,150,2077         10,50,297         - 10,50,297         - 10,50,297           25 Minulation         11,152         112,277         35,887         - 22,157         8,896,485           79 Vontingency         — 7         35,335         26,3057         - 10,50,027         - 11,50,027           99 Plugging &	15 Completion Unit, Swab, CTU			15,000	15,000
B Completion Unit, Swap, CTU         154,79T         154,79T           21 Mud Cugging         16,130         -         16,137           22 Agging / Normation Evaluation         6,590         7,673         -         16,137           22 Agging / Normation Evaluation         6,590         7,673         -         16,137           22 Agging / Normation Evaluation         5,590         7,673         -         16,537           23 Mud & Chemicals         32(291)         400,200         748,138         749,1053         -         749,1053           24 Mude / Matewater Ukposat         17,789         752,000         749,1057         -         25,5359           28 Mudualion / Explored         111,252         122,797         21,867         25,5359           29 Ling & Completion Overhead         19,557         112,897         -         38,497           38 Labor         14,116         15,50,027         -         1,550,027           39 Ling ging & Abandonment         -         -         -         -           71 Conlingery         316,801         -         -         -         -         -           72 Cort INTANGIBLES >         32,85,720         722,167         88,96,464         -         -         -	16 Pertorating, Wireline, Slickline		361,754		361,754
20 Mud Leculation System         96,811	17 High Pressure Pump Truck	• •	113,434		113,434
21 Mat Logging         16.137         -         16.137           22 Logging / formation tradition         66.690         7/675         14.365           23 Mata & Chemicals         3520,511         440,207         100,007         745,185           24 Mater         397,990         668,810         250,000         789,820           25 Miturulation Howback & Uisp         -         749,1035         -         749,005           25 Miturulation Howback & Uisp osal         117,522         122,2797         21,867         255,398           20 Mit & Completion Overhead         115,227         122,2797         21,867         358,725           21 Mate & Completion Overhead         115,207         -         95,997         -         95,997           21 Mate & Completion Overhead         115,207         -         95,997         -         73,897           21 Contingency         114,897         -         -         -         95,997         -         13,897           21 Contingency         -         11,4897         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - <t< td=""><td>18 Completion Unit, Swab, CTU</td><td>-</td><td>134,791</td><td></td><td>134,791</td></t<>	18 Completion Unit, Swab, CTU	-	134,791		134,791
22 Logging / Formation bealuation         6590         7673         -         14,853           23 Must & Chemicals         352791         400,8070         7693         -         744,185           24 Water         39,990         608,810         250,000         898,800         250,000         898,800         749,055           25 Stimulation         -         749,055         -         749,055         -         749,055           25 Minu & Howske & Disp         -         749,057         250,5297         -         253,957           26 Minu / Wastewiston / Logineering         111,522         122,697         -         753,977           26 Long / Loging & Abandonment         -         -         79,971         -         -         79,971           27 Contingency         -         1,159,027         -         1,158,027         -         1,158,027         -<	20 Mud Circulation System	96,811	-		
23 Muta & Chemicals         352:51         402;207         10:000         745:183           24 Water         39:990         668:800         25:0000         98:800         25:0000         98:800         25:0000         98:800         25:0000         98:800         25:0000         98:800         25:0000         26:80:90         26:80:90         26:80:90         26:80:90         26:80:90         26:80:90         26:80:90         26:80:90         26:80:90         25:30:90         26:80:90			-		
24 Water         39,990         608,810         220,000         898,800           25 Situnulation Howback & Disp         -         -         749,053         -         26,353,997           26 Situnulation Howback & Disp         -         -         749,053         -         26,3597         -         26,3597           28 Mud / Wastwatter Disposal         117,592         -         25,3597         -         25,3597           30 Mig Supervision / Engineering         111,522         122,7697         21,667         255,958           31 Abor         -         -         7,591         35,877         -         7,5307           30 Intig & Completion Overhead         9,591         -         -         7,537         7,5337         7,5337         7,5337         7,5337         7,53497         -					· .
25 Stimulation       -					
25         Simulation Howback & Disp         -         111,299         150,0007         26,1897           28         Mud / Wasewater Disposal         177,887         56,289         -         223,597           30         Mitg Supervision / Engineering         111,522         122,7697         21,667         225,598           32         Drig & Completion Overhead         9,391         -         -         9,393           54         Torpant         -         11,1167         65,3942         110,667         306,725           54         Torpant         -				250,000	
28 Mud / Wastewater Uksposal         177,689         56,269         233 (39)           20 Mig Supresition / Engineering         111,322         122,769         21,667         255,938           20 Mig & Comptetion Overhead         9,591         -         9,591         -         9,591           36 Labor         141,116         63,3742         101,667         306,725           36 Labor         1,115,027         -         1,155,027         -         1,155,027           97 Contingency         22,477         3,8353         263,035         722,167         8,896,465           97 Plugging & Abandonment         -         -         -         -         -           TANCIBLE COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         0012,477           61 Intermediate Casing         316,801         - <t< td=""><td></td><td></td><td></td><td>•</td><td></td></t<>				•	
39 Hig Supervision / Engineering         111.522         122.707         21.567         255.938           32 Lrig & Completion Overhead         9391         -         -         95.937           35 Labor         141,116         65.942         101,667         306,725           54 Iroppant         -         -         1,155,027         -         1,155,027           54 Iroppant         -         -         1,155,027         -         1,155,027           54 Iroppant         -         -         -         1,155,027         -         1,155,027           54 Iroppant         -         -         -         -         -         -         -         1,155,027         9,938,578         722,167         8,4896,485         - <t< td=""><td>-</td><td>-</td><td></td><td>150,000</td><td></td></t<>	-	-		150,000	
32         Dig & Completion Overhead         9,591         -         -         9,591           36 Labor         141,116         63,942         101,667         306,752           36 Irbopant         -         1,155,029         -         1,155,029           95 Insurance         13,489         -         -         1,353,029           97 Contingency         -         2,247,7         3,835         2,835,578         722,167         8,896,6465           TANGIBLE Costs         DBRLLING         COMPLETION         PRODUCTION         TOTAL         TOTAL           TANGIBLE Costs         COSTS         COSTS         COSTS         5         112,477           61 Intermediate Casing         5         112,477         -         5         112,477           62 Drilling Liner         -					
Si Labor         141,116         63,942         101,667         346,725           54 Proppant         1,155,029         1,155,029         1,155,029         1,155,029           57 Contingency         13,489         1,155,029         1,155,029         1,155,029           97 Plugging & Abandonment         22,472         3,835         26,335         26,335           TOTAL INTANGIBLES >         3,235,720         4,938,578         722,167         8,896,465           TANGIBLE COSTS         COSTS         COSTS         COSTS         COSTS         COSTS           60 Surface Casing         5         112,477         -         5         112,477           61 Intermediate Casing         5         316,801         -         -         -         -           62 Drolling Liner         - <td></td> <td></td> <td></td> <td></td> <td></td>					
54         FORD         1,155,029         -         1,155,029           95         Insurance         13,489         -         13,489         -         13,489           97         Contingency         3,235,720         3,835,73         722,167         8,895,645           99         Plugging & Abandonment         -         -         -         -           TOTAL INTANGIBLES > 3,235,720         COMPLETION         PRODUCTION         TOTAL           TANGIBLE COSTS         COSTA         COSTA         COSTA         COSTA					
95 Insurance         13,887         -         13,887           97 Contingency         -         22,472         3,833         26,305           97 Pringging & Abandomment         -					
97 Contingency         22477         3,833         26,305           Y9 Plugging & Abandonment         -         <		13.489			
99 Plugging & Abandonment         . <td></td> <td></td> <td>22.4/2</td> <td>3.833</td> <td></td>			22.4/2	3.833	
TOTAL INTANGIBLES >         3,235,720         4,938,578         722,167         8,896,465           TANGIBLE COSTS					
TANGIBLE COSTS         DRILLING COSTS         COMPLETION COSTS         PRODUCTION COSTS         TOTAL COSTS           60 Surface Casing         5         112,477         -         -         5         112,477           61 Intermediate Casing         316,801         -         -         -         316,807           62 Drilling Liner         - <td< td=""><td></td><td>GIBLES &gt; 3.235.720</td><td>4 938 578</td><td>722.167</td><td>8 896 465</td></td<>		GIBLES > 3.235.720	4 938 578	722.167	8 896 465
TANGIBLE COSTS         COSTS <thcosts< th="">         COSTS</thcosts<>			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		6,625 0, 100
b0 Surface Casing         \$         112,477         -         -         5         112,477           61 Intermediate Casing         316,801         -		DBRIDK	COMPLETION	PRODUCTION	TOTAL
61 Intermediate Casing       316,801       -       -       316,801         62 Drilling Liner       -       -       -       -       -         63 Production Casing       632,196       -       -       632,196         64 Production Casing       632,196       -       -       632,196         65 Tubing       -       -       -       -       632,196         66 Weilhead       59/645       -       40,000       940,000       94,045         67 Packers, Liner Hangers       13,556       -       20,000       33,556         68 Tanks       -       -       -       -       -         69 Production Vessels       -					
62 Drilling Liner       -       -       -       63 Production Liner         63 Production Liner       -       -       -       -       -         65 Tubing       -		COSTS	COSTS		COSTS
63 Production Casing       632,196       -       632,196         64 Production Liner       -       -       -         65 Tubing       -       -       140,000       140,000         66 Weilhead       59,645       -       140,000       33,555         68 Tanks       -       -       -       40,000       33,555         68 Tanks       - <td< td=""><td>60 Surface Casing</td><td>COSTS \$ 112,477</td><td>COSTS</td><td></td><td>COSTS 5 112,477</td></td<>	60 Surface Casing	COSTS \$ 112,477	COSTS		COSTS 5 112,477
64 Production Liner       -	60 Surface Casing 61 Intermediate Casing	COSTS \$ 112,477	COSTS		COSTS 5 112,477
65 Tubing       -       -       140,000       140,000         66 Weilhead       55/645       -       40,000       95/645         67 Packers, Liner Hangers       13,556       -       20,000       33,556         68 Tanks       -       -       -       -         69 Production Vessels       -       -       -       -         69 Production Vessels       -       -       45,833       43,833         70 How Lines       -       -       126,667       126,667         71 Rod string       -       -       66,667       66,667         72 Artilicial Lift Equipment       -       -       90,000       90,000         73 Compressor       -       -       -       90,000       90,000         74 Installation Costs       -       -       -       -       -         75 Surface Pumps       -       -       -       -       -       -         76 Gas Conditioning / Dehydration       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	COSTS 5 112,477 316,801	COSTS	COSTS	COSTS \$ 112,477 316,801 -
66 Weilhead       59/645       40,000       99/645         67 Packers, Liner Hangers       13,556       20,000       33,556         68 Tanks       -       -       -         69 Production Vessels       -       -       -         70 How Lines       -       -       -       -         71 Kod string       -       -       126,667       126,667       126,667         72 Artilicial Litt Equipment       -       -       90,000       90,000       90,000       90,000         73 Compressor       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	COSTS 5 112,477 316,801	COSTS	COSTS	COSTS \$ 112,477 316,801 -
67 Packers, Liner Hangers       13,556       20,000       33,556         68 Tanks       -       -       -         69 Production Vessels       -       -       -         70 How Lines       -       126,667       126,667         71 Rod string       -       -       126,667       66,667         72 Artiticial Lift Equipment       -       -       90,000       90,000         73 Compressor       -       -       -       -       -         74 Installation Costs       -       -       -       -       -         75 Surface Pumps       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner	COSTS 5 112,477 316,801	COSTS	COSTS	COSTS 5 112,477 316,801 
68 Tanks       -<	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	COSTS \$ 112,477 316,801 632,196 	COSTS	COSTS	COSTS 5 112,477 316,801 632,196 140,000
70 Flow Lines       -       -       125,667       125,667         71 Kod string       -       -       66,667       66,667         72 Artiticial Litt Equipment       -       -       90,000       90,000         73 Compressor       -       -       -       90,000       90,000         74 Installation Costs       -       -       -       -       -         75 Surface Pumps       -       -       -       -       -       -         76 Lossin       -<	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead	COSTS \$ 112,477 316,801 	COSTS	COSTS	COSTS 5 112,477 316,801 
70 Flow Lines       -       -       126,667       126,667         71 Kod string       -       -       66,667       66,667         72 Artilicial Litt Equipment       -       -       90,000       90,000         73 Compressor       -       -       5,833       5,833         74 Installation Costs       -       -       5,833       5,833         75 Surface Pumps       -       -       -       -         76 Losonhole Pumps       -       -       -       -         77 Measurement & Meter Installation       -       -       -       -         78 Gas Conditioning / Dehydration       -       -       -       -       -         79 Interconnecting Facility Piping       -       -       -       -       -       -         80 Gathering / Bulk Lines       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers	COSTS \$ 112,477 316,801 	COSTS	COSTS	COSTS 5 112,477 316,801 
72 Artilicial Litt Equipment       -       -       90,000       90,000         73 Compressor       -       -       5,833       5,833       -         74 Installation Costs       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks	COSTS \$ 112,477 316,801 	COSTS	COSTS	COSTS 5 112,477 316,801 
73 Compressor       -       -       5,833       5,833         74 Installation Costs       -       -       -       -       -         75 Surface Pumps       -       -       61,667       61,667       61,667         76 Downhole Pumps       -<	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels	COSTS \$ 112,477 316,801 	COSTS	COSTS	COSTS 5 112,477 316,801 632,196 
74 Installation Costs       -       -       -       -         75 Surface Pumps       -       -       61,667       61,667         76 Downhole Pumps       -       -       -       -       -         77 Measurement & Meter Installation       -       -       -       -       -       -         78 Gas Conditioning / Dehydration       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines	COSTS \$ 112,477 316,801 		COSTS	COSTS 5 112,477 316,801 
75 Surface Pumps       -       -       61,667       61,667         76 Downhole Pumps       -       -       -       -       -         77 Measurement & Meter Installation       - <t< td=""><td>60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Traduction Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment</td><td>COSTS \$ 112,477 316,801 </td><td></td><td>COSTS</td><td>COSTS 5 112,477 316,801 - - - - - - - - - - - - -</td></t<>	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Traduction Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment	COSTS \$ 112,477 316,801 		COSTS	COSTS 5 112,477 316,801 - - - - - - - - - - - - -
76 Downhole Pumps       -       -       -       -         77 Measurement & Meter Installation       -       -       116,667       116,667         78 Gas Conditioning / Dehydration       -       -       -       -       -         79 Interconnecting Facility Piping       -       -       -       -       -       -         79 Interconnecting Facility Piping       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment 73 Compressor	COSTS \$ 112,477 316,801 		COSTS	COSTS 5 112,477 
77 Measurement & Meter Installation       -       -       116,667       116,667         78 Gas Conditioning / Dehydration       -       -       -       -       -       -         79 Interconnecting Facility Piping       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs	COSTS \$ 112,477 316,801 		COSTS	COSTS 5 112,477 
78 Gas Conditioning / Dehydration       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps	COSTS \$ 112,477 316,801 		COSTS	COSTS 5 112,477 
79 Interconnecting Facility Piping       -       -       20,000       20,000         80 Gathering / Bulk Lines       -	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps	COSTS \$ 112,477 316,801 		COSTS 	COSTS 5 112,477 316,801 - - - - - - - - - - - - -
80 Gathering / Bulk Lines         - <td>60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement &amp; Meter Installation</td> <td>COSTS \$ 112,477 316,801 </td> <td></td> <td>COSTS </td> <td>COSTS 5 112,477 316,801 - - - - - - - - - - - - -</td>	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation	COSTS \$ 112,477 316,801 		COSTS 	COSTS 5 112,477 316,801 - - - - - - - - - - - - -
81 Vaives, Dumps, Controllers       -       -       108,333       108,333         82 Tank / Facility Containment       -       -       43,333       43,333         83 Flare Stack       -       -       16,667       16,667         84 Electrical / Grounding       -       -       36,667       36,667         85 Communications / SCADA       -       -       36,667       36,667         86 Instrumentation / Salety       -       -       833       833         TOTAL TANGIBLES > 1,134,676       0       989,167       2,123,843	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration	COSTS \$ 112,477 316,801 		COSTS	COSTS 5 112,477 
82 Tank / Facility Containment         -         -         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 / Satety         -         -         833         833           TOTAL TANGIBLES >         1,134,676         0         989,167         2,123,843	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping	COSTS \$ 112,477 316,801 		COSTS	COSTS 5 112,477 
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         0         989,167         2,123,843	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artitical Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines	COSTS \$ 112,477 316,801 		COSTS 	COSTS 5 112,477 316,801 - - - - - - - - - - - - -
84 Electrical / Grounding         -         -         50,000         50,000           85 Communications / SCADA         -         -         36,667         36,667           86 Instrumentation / Salety         -         -         833         833           TOTAL TANGIBLES >         1,134,676         0         989,167         2,123,843	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod 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 Vaives, Dumps, Controllers	COSTS \$ 112,477 316,801 		COSTS 	COSTS 5 112,477 316,801 - - - - - - - - - - - - -
85 Communications / SCADA 86 Instrumentation / Salety TOTAL TANGIBLES > 1,134,676 0 989,167 2,123,843	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Vaives, Dumps, Controliers 82 Tank / Facility Containment	COSTS \$ 112,477 316,801 		COSTS 	COSTS 5 112,477 316,801 - - - - - - - - - - - - -
86 Instrumentation / Salety         -         833         833           TOTAL TANGIBLES >         1,134,676         0         989,167         2,123,843	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Troduction Vessels 70 Flow Lines 71 Kod 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 Vaives, Dumps, Controliers 82 Tank / Facility Containment 83 Flare Stack	COSTS \$ 112,477 316,801 		COSTS 	COSTS 5 112,477 
TOTAL TANGIBLES > 1,134,676 0 989,167 2,123,843	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 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	COSTS		COSTS 	COSTS 5 112,477 
	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Vaives, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Elicetrical / Grounding 85 Communications / SCADA	COSTS		COSTS	COSTS 5 112,477 316,801 - - - - - - - - - - - - -
TOTAL COSTS > 4,370,396 4,938,578 1,711,334 11,020,308	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 Vaives, Dumps, Controliers 82 Tank, Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Salety	COSTS		COSTS	COSTS 5 112,477 316,801 - - - - - - - - - - - - -
	60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artitical 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 Vaives, Dumps, Controliers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Salety	COSTS \$ 112,477 316,801 	COSTS	COSTS	COSTS 5 112,477 316,801 - - - - - - - - - - - - -

# PREPARED BY Permian Resources Operating, LLC:

Co-CEO	VP - Operations CRM
JW	
JW	
JW	
JW	-
	CRM
SO	
Working Interest (%):	Tax ID:
Date:	
	Yes No (mark one)

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

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

FIELD: MD/TVD: LATERAL LENGTH:	Teas; Bone Spring 20,266' / 9,981' 10,000'
I ATERAL LENGTH	10 000
	10,000
DRILLING DAYS:	19.6
COMPLETION DAYS:	18.6
1	

	DBUIDE	COMPLETION	monucrioti	TOTAL
	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
INTANGIBLE COSTS				
	54,351		37,500	\$ 91,85T
2 Location, Surveys & Damages	265,083	16,625	2,500	284,208
4 Freight / Transportation 5 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Kental - Downhole Equipment	189,026	55,031	105,000	244,057
7 Kental - Living Quarters	44,244	50,131		94,375
10 Directional Drilling, Surveys	395,255		<u> </u>	395,255
11 Drilling	693,647			693,647
12 Drill Bits	92,179	•		92,179
13 Fuel & Power	173,853	667,183	<u> </u>	841,036
14 Cementing & Float Equip	223,875		·	223,875
15 Completion Unit, Swab, CTU	•	· · ·	15,000	15,000
16 Pertorating, Wireline, Slickline	-	361,754	· · ·	361,754
17 High Pressure Pump Truck		113,434	•	113,434
18 Completion Unit, Swab, CTU	-	134,791	<u> </u>	134,791
20 Mud Circulation System	96,811	•	•	96,811
21 Mud Logging	16,130	•	-	16,130
22 Logging / Formation Evaluation	6,690	7,673	•	14,363
23 Mud & Chemicais	332,951	403,207	10,000	746,158
24 Water	39,990	608,810	250,000	898,800
25 Stimulation		749,053		749,053
26 Stimulation Flowback & Disp		111,899	150,000	261,899
28 Mud/Wastewater Disposal 30 Kig Supervision/Engineering	177,689	56,269	21,667	233,959
32 Drig & Completion Overhead		122,769	21,007	9,591
35 Labor	141,116	63,942	101,667	306,725
54 Proppant		1,155,029		1,155,029
95 Insurance	13,489			13,489
97 Contingency		22,472	3,833	26,305
99 Plugging & Abandonment			•	
				8 906 465
IDIAL INTANCIBLES	> 3.235.720	4.938.578	722,167	
TOTAL INTANGIBLES		4,938,578	722,167	8,896,465
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS			TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing	DRILLING COSTS \$ 112,477	COMPLETION	PRODUCTION	TOTAL COSTS \$ 112,477
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing	DRILLING COSTS	COMPLETION COSTS	PRODUCTION	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 5 112,477 316,801	COMPLETION COSTS	PRODUCTION	TOTAL COSTS 5 112,477 316,801
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS 5 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 632,196
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner	DRILLING COSTS 5 112,477 316,801	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	DRILLING COSTS 5 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead	DRILLING COSTS 5 112,477 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS \$ 112,477 316,801 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers	DRILLING COSTS 5 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 - - - - - - - - - - - - - - - - - - -
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead	DRILLING COSTS 5 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 632,196 140,000 99,645 33,555
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks	DRILLING COSTS 5 112,477 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 632,196 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 632,196 140,000 99,645 33,555
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS \$ 112,477 316,801 - - - - - - - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Rod string         72 Artificial Lift Equipment	DRILLING COSTS 5 112,477 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 5 112,477 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 5 112,477 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubling         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 Lownhole Pumps         77 Measurement & Meter Installation	DRILLING COSTS 5 112,477 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Lownhole Pumps         77 Measurement & Meter Installation         78 Gas Conditioning / Dehydration	DRILLING COSTS 5 112,477 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping	DRILLING COSTS 5 112,477 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Lownhole Pumps         77 Measurement & Meter Installation         78 Cas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Gathering / Bulk Lines	DRILLING COSTS 5 112,477 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod 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	DRILLING COSTS 5 112,477 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubling         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 Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Gathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Froduction Casing         64 Production Liner         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 Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Cathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Cathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 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         85 Communications / SCADA	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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         85 Communications / SCADA         86 Instrumentation / Satety	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 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         85 Communications / SCADA	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC		
Permian Resources Operating, LL	.C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
VP - Land & Legai	WH	JW VP - Geosciences	CRM
	BG	50	
NON OPERATING PARTNER A	PPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:	<u> </u>	Date:	
Title:		Approval: Yes	No (mark one)
The costs on this AFE are estimates only and may not be construed a	in criticara can any more the total cont	t of the project. Tubing installation approved under the AFE may be delayed up to a year after the well has	here completed. In manyting this AFF, the Perticipant errors to pay the

The cost on the Arts are remained only and any not be constructed as excluding on any specific times on its ball cost of the project. These instances of the project of the

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:	2.17.2023	AFE NO.:	1
VELL NAME:	Joker 5-8 Federal Com 123H	FIELD	Teas; Bone Spring
OCATION:	Section 5, T20S-R34E	MD/TVD:	20,581' / 10,296'
OUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG well and complete with 44 install cost	-	

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
T Land/ Legal/ Kegulatory	54,351	•	37,500	\$ 91,851
2 Location, Surveys & Damages	265,083	16,625	2,500	284,208
4 Freight / Transportation	43,826	40,284	25,000	109,110
5 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Rental - Downhole Equipment 7 Rental - Living Quarters	189,026	55,031		94,375
10 Directional Drilling, Surveys	395,255			395,255
11 Drilling	693,647			693,647
12 Drill Bits	92,179		<u> </u>	92,179
13 Fuel & Power	173,853	667,183	· · ·	841,036
14 Cementing & Float Equip	223,875	-	•	223,875
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, Slickline		361,754	-	361,754
17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU	·	113,434	<u> </u>	113,434
20 Mud Circulation System	96,811	1.54,/ 71	<u> </u>	96,811
21 Mud Logging	16,130		<del></del> .	16,130
22 Logging / Formation Evaluation	6,690	7,673	·	14,363
23 Mud & Chemicals	332,951	403,207	10,000	746,158
24 Water	39,990	608,810	250,000	898,800
25 Stimulation	•	749,053	•	749,053
26 Stimulation Flowback & Disp	-	111,899	150,000	261,899
28 Mud / Wastewater Disposal	177,689	56,269	•	233,959
30 Rig Supervision / Engineering 32 Drig & Completion Overhead	<u> </u>	122,769	21,667	255,958
35 Labor	141,116	63,942	101,667	306,725
54 Proppant		1,155,029		1,155,029
95 Insurance	13,489			13,489
97 Contingency	·	22,472	3,833	26,305
99 Plugging & Abandonment	·			
TOTAL INTANGIBLES >	3,235,720	4,938,578	722,167	8,896,465
	0,200,.20	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS				TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing	DRILLING COSTS 112,477	COMPLETION	PRODUCTION	COSTS 5 112,477
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing	DRILLING COSTS	COMPLETION	PRODUCTION	COSTS
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 112,477 316,801	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS 112,477	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 112,477
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner	DRILLING COSTS 112,477 316,801	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Froduction Casing 64 Production Liner 65 Tubing	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Froduction Casing 64 Production Liner 65 Tubing 66 Wellhead	DRILLING COSTS 3 112,477 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Froduction Casing 64 Production Liner 65 Tubing	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers	DRILLING COSTS 3112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines	DRILLING COSTS 3112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Rod string	DRILLING COSTS 3112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod string         72 Artificial Lift Equipment	DRILLING COSTS 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Litt Equipment         73 Compressor	DRILLING COSTS 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Litt Equipment         73 Compressor         74 Installation Costs	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         70 Downhole Pumps         77 Measurement & Meter Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Gathering / Bulk Lines	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 / Buik Lines         81 Valves, Dumps, Controllers	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 / Buik Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Cathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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 Cathering / Bulk Lines         81 Yalves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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 / Buik Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding         85 Communications / SCADA	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation         78 Cas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Gathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Fiare Stack         84 Electrical / Grounding         85 Communications / SCADA         86 Instrumentation / Satety	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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 / Buik Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding         85 Communications / SCADA	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 - - - - - - - - - - - - -

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC		
n Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
	WH	jw	CRM
VP - Land & Legal	BG	VP - Geosciences 50	
PERATING PARTNER A			
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	

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

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

2.17.2023	AFE NO.:	1
Joker 5-8 Federal Com 124H	FIELD:	Teas; Bone Spring
Section 5, T20S-R34E	MD/TVD:	20,256' / 9,971'
Lea County, New Mexico	LATERAL LENGTH:	10,000'
·	DRILLING DAYS:	19.6
SBSG	COMPLETION DAYS:	18.6
	Joker 5-8 Federal Com 124H Section 5, T20S-R34E Lea County, New Mexico	Joker 5-8 Federal Com 124H     FIELD:       Section 5, T20S-R34E     MD/TVD:       Lea County, New Mexico     LATERAL LENGTH:       DRILLING DAYS:     DRILLING DAYS:

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory	54,351	-	37,500	91,851
2 Location, Surveys & Damages	265,083	16,625	2,500	284,208
4 Freight / Transportation	43,826	40,284	25,000	109,110
5 Kental - Surface Equipment	114,402	198,221	105,000	417,624
6 Rental - Downhole Equipment	189,026	55,031		244,057
7 Kental - Living Quarters	44,244	50,131	-	94,375
10 Directional Drilling, Surveys	395,255	-	-	395,255
11 Drilling	693,647	-	-	693,647
12 Drill Bits 13 Fuel & Power	92,179	667,183		92,179 841,036
14 Cementing & Float Equip	223,875	607,183		223,8/5
15 Completion Unit, Swab, CTU			15,000	15,000
16 Perforating, Wireline, Slickline	······································	361,754		361,754
17 High Pressure Pump Truck		113,434		113,434
18 Completion Unit, Swab, CTU		134,791	<b>_</b>	134,791
20 Mud Circulation System	96,811	<u> </u>	·	96,811
21 Mud Logging	16,130			16,130
22 Logging / Formation Evaluation	6,690	7,673		14,363
23 Mud & Chemicals	332,951	403,207	10,000	746,158
24 Water	39,990	608,810	250,000	898,800
25 Stimulation	•	749,053		749,053
26 Stimulation Flowback & Disp	•	111,899	150,000	261,899
28 Mud / Wastewater Disposal	177,689	56,269	•	233,959
30 Rig Supervision / Engineering 32 Drig & Completion Overhead	111,522	122,769	21,667	255,958
32 Drig & Completion Overnead	9,591	63,942	-	9,591 306,725
55 Labor 54 Proppant	141,110	1,155,029	101,667	1,155,029
95 Insurance	13,489	1,135,025		13,489
97 Contingency		22,472	3,833	26,305
99 Plugging & Abandonment	· · ·		-	
TOTAL INTANGIBLES	3,235,720	4,938,578	722,167	8,896,465
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	5 112,477	•	- 3	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
65 Tubing 66 Wellhead	59,645		40,000	99,645
65 Tubing 66 Wellhead 67 Packers, Liner Hangers	59,645 13,556			
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks	13,556		40,000	99,645
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels			40,000	99,645 33,556 45,833
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines	13,556		40,000 20,000 45,833 126,667	99,645 33,556 45,833 126,667
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string			40,000 20,000 - 45,833 126,667 66,667	99,645 33,556 45,833 126,667 66,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines			40,000 20,000 45,833 126,667	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			40,000 20,000 - 45,833 126,667 66,667 90,000	99,645 33,556 45,833 126,667 66,667
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Froduction Vessels 70 Flow Lines 71 Rod string 72 Artificial Litt Equipment 73 Compressor			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 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Froduction Vessels 70 Flow Lines 71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs			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 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation			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 Cosis 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration			40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 116,667	99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667 116,667
65 Tubing 66 Wellhead 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			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 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines			40,000 20,000 - 45,833 126,667 66,667 90,000 3,833 61,667 - 116,667 - - 20,000	99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod 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			40,000 20,000 45,833 126,667 66,667 90,000 5,833 61,667 116,667 	99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000 
65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Buik Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment			40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 - 116,667 - - 20,000 - - - 108,333 43,333	99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667 116,667 116,667 20,000 - 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 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Fiping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack			40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 - - - 20,000 - - - - - - - - - - - - - - - - -	99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000 
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 Cosis 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			40,000 20,000 - 45,833 126,667 66,667 90,000 5,833 61,667 - 116,667 - - - - - - - - - - - - - - - - - -	99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000 - - - - - - - - - - - - - - - - -
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 Cosis 75 Surface Pumps 76 Downhole 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 85 Communications / SCADA			40,000 20,000 - 45,833 126,667 66,667 66,667 90,000 5,833 61,667 - 20,000 - 108,333 43,333 16,667 50,000	99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667 116,667 200,000 - - - - - - - - - - - - - - - - -
65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod 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 85 Communications / SCADA 86 Instrumentation / Satety			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 36,667 833	99,645 33,556 45,833 126,667 90,000 5,833 61,667 116,667 200,000 - - - - - - - - - - - - - - - - -
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 Cosis 75 Surface Pumps 76 Downhole 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 85 Communications / SCADA	13,556 		40,000 20,000 - 45,833 126,667 66,667 66,667 90,000 5,833 61,667 - 20,000 - 108,333 43,333 16,667 50,000	99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667 116,667 200,000 - - - - - - - - - - - - - - - - -

# PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC		
ian Resources Operating, LL	.C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
	WH	Jw	CRM
VP - Land & Legal	BG	VP - Geosciences	
OPERATING PARTNER A	PPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	

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ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
VELL NAME:	Joker 5-8 Federal Com 125H	FIELD:	Teas; Bone Spring
OCATION:	Section 5, T20S-R34E	MD/TVD:	20,571' / 10,286'
OUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian Wl:		DRILLING DAYS:	19.6
EOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
	Drill a horizontal SBSG well and complete with 44	4 stages. AFE includes drilling, completions, f	lowback and Initial A
REMARKS:	install cost	- • •	

	DBHIDD	COMPLETION	BRODUCTION !	TOTAL
	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
INTANGIBLE COSTS		0313		
1 Land / Legal / Regulatory 5	54,351			<b>5</b> 91,851
2 Location, Surveys & Damages	265,083	16,625	2,500	284,208
4 Freight / Transportation	43,826	40,284	25,000	109,110
5 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Kental - Downhole Equipment	189,026			244,057
7 Rental - Living Quarters	44,244	50,131		94,375
10 Directional Drilling, Surveys	395,255	•	·	693,647
11 Drilling	693,647	<u> </u>		92,179
12 Drill Bits 13 Fuel & Power	92,179	667,183	·	841,036
14 Cementing & Float Equip	223,875			223,875
15 Completion Unit, Swab, CIU				15,000
16 Perforating, Wireline, Slickline	· ·	361,754	10,000	361,754
17 High Pressure Pump Truck		113,434		113,434
18 Completion Unit, Swab, CTU		113,4,791	·	134,791
20 Mud Circulation System	96,811			96,811
21 Mud Logging	16,130		<u> </u>	16,130
22 Logging / Formation Evaluation	6,690	7,673		14,363
23 Mud & Chemicals	332,951	403,207	10,000	746,158
24 Water	39,990	608,810	250,000	898,800
25 Stimulation		749,053		749,053
26 Stimulation Flowback & Disp		111,899	150,000	261,899
28 Mud/Wastewater Disposal	177,689	56,269		233,959
30 Rig Supervision / Engineering	111,522	122,769	21,667	255,958
32 Drig & Completion Overhead	9,591			9,591
35 Labor	141,116	63,942	101,667	306,725
54 Proppant	•	1,155,029	<b>.</b>	1,155,029
95 Insurance	13,489	•	•	13,489
97 Contingency		22,472	3,833	26,305
99 Plugging & Abandonment		<u> </u>	<u>_</u>	-
TOTAL INTANGIBLES >	3,235,720	4,938,578	722,167	8,896,465
<u></u>				TOTAL
<b>A</b>	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS
TANGIBLE COSTS 60 Surface Casing \$	DRILLING COSTS 112,477	COMPLETION	PRODUCTION COSTS	COSTS \$ 112,477
TANGIBLE COSTS 60 Surface Casing \$ 61 Intermediate Casing	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477
TANGIBLE COSTS 60 Surface Casing \$ 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 112,477 316,801	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 -
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS 112,477	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surtace Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$	DRILLING COSTS 112,477 316,801	COMPLETION COSTS	PRODUCTION COSTS	COSTS 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing	DRILLING COSTS 112,477 316,801 - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS 112,477 316,801 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 632,196 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Casing         65 Tubing         66 Weilhead         67 Packers, Liner Hangers	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 632,196 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilthead         67 Packers, Liner Hangers         68 Tanks	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         9 Production Vessels       \$	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surtace Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         99 Production Vessels       \$         70 Flow Lines       \$         71 Rod string       \$	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS 	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         9 Production Vessels       \$         70 How Lines       \$         71 Rod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS 	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Casing         64 Production Casing         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation         79 Interconnecting Facility Piping         80 Gathering/ Buik Lines         81 Valves, Dumps, Controllers	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Rod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         79 Interconnecting Facility Piping       \$         80 Gathering / Bulk Lines       \$         81 Valves, Dumps, Controllers       \$         82 Tank / Facility Containment       \$	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Casing         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Casing       \$         65 Tubing       \$         66 Wellhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How 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       \$	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Casing         64 Production Liner         65 Tubing         66 Weilthead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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         85 Communications / SCADA         86 Instrumentation / Satety	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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         85 Communications / SCADA	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 112,477 316,801 

#### PREPARED BY Permian Resources Operating, LLC:

	<u> </u>		
Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer.	DC		
Permian Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
VP - Land & Legal	WH	JW VP - Geosciences	CRM
T - Easte de Eegan	BG	50 SO	
NON OPERATING PARTNER A	PPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	
Title:		Approval: Yes	No (mark one)
the costs on this AFE are estimated only and may not be construed a	a collinear on one of the first on the total cost	of the regist. Tabine installation environal under the AFF may be delayed on to a user after the well have	have an address of the state of the SET the Destining of some to may its

The costs on the AFE are estimate only and new productions of a costspace on any specific item or the total cost of the project. This possibilition approved under the AFE are the delayed up to a year after the well has been completed. In exercising this well, Postported under the trans of the approximate share of actual costs incurrent, including, legal, curstiny, including and the covered by and billed proportionality for Operator's avell costs and gravital labelity because usine participant provide Operator a certificate relativity and actuation of the applicable joint of the Operator by the date of apal.

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 126H	FIELD:	Teas; Bone Spring
OCATION:	Section 5, T20S-R34E	MD/TVD:	20,256' / 9,961'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian WI:		DRILLING DAYS:	19.6
EOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
	Drill a horizontal SBSG well and complete wit	h 44 stages. AFE includes drilling, completions, fl	owback and Initial A
REMARKS:	install cost		

DATA OF THE COMPANY         DATA OF THE COMPANY <thdata company<="" of="" th="" the="">         DATA OF THE COMPANY</thdata>		DRILLING	COMPLETION	PRODUCTION	TOTAL
Land / Legal / Regulatory         SLAS1         -         -         -         -         -         -         9         91/81           2 Location. Survey & Lanages         23,525         40.251         25,000         100,107         98,326           4 Reight / Lanagestation         13,422         25,000         100,107         44,443           5 Rental - Survey & 23,525         -         -         39,225         -         -         70,255           10 Directional Utiling Surveys         35,255         -         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         70,255         -         -         72,235         -         70,255         -         -         72,235         -         72,235         -         70,255         -         -         72,235         -         72,235	INTANCIDI E COSTE				
2 Location, Survey & Lamages         225,087         155,55         2.307         284,207           4 Neight / Tansportaion         435,55         40,224         25,007         107,100           5 Kenial - Survice Equipment         114,402         119,520         35,031         -         44,867           7 Kenial - Living Quarters         43,244         50,137         -         44,867           1 Durition Unit Resolution Equipment         165,557         -         -         73,225           1 Durition Unit Sevals, CTU         -         -         73,225         -         -         73,225           1 Durition Unit Sevals, CTU         -         -         15,000         74,001         -         15,000         16,000					
4 Predgaty / transportation         32,825         402,847         25,007         100,110           5 Retail - Surves Rayloneat         18,70,25         55,057         -         44,40,57           6 Retail - Downhole Equipment         18,70,25         55,057         -         78,70,57           10 Directional Uniting, Surveys         38,72,55         -         -         78,75,75           11 Diriting         02,777         -         -         78,75,75           12 Diriting (Diriting, Surveys         38,72,57         -         -         78,75,75           13 Directional Uniting, Surveys         38,72,77         -         -         78,75,77           13 Directional Unit, Sweb, CUU         -         115,35,87         -         15,70,07         -         98,77,77           14 Mich Direction, Structure         -         -         115,35,87         -         15,35,77         -         15,35,77           15 Mich Direction, Structure         -         -         115,35,77         -         15,35,77           12 Mick Direction, Structure         -         -         115,357         -         15,357           12 Mick Direction, Structure, Structure         -         -         15,357         -         15,357					
3 Renial - Survixe Equipment         114.002         198.221         105.0007         47.4647           5 Renial - Lowing Quarters         189.025         55.1617         -         48.057           1 Deticitional Linking Surveys         385.255         -         -         585.657           1 Detiling Surveys         387.255         -         -         585.657           1 Detiling Surveys         387.257         -         -         587.647           1 Detiling Surveys         387.777         -         -         78.717           1 Standing A float Equip         120.267.7         -         -         78.717           1 Scompletion Unit, Swah, C1U         -         158.747         -         158.774           1 High Presser Yung Track         -         113.471         -         158.775           2 Made Cheation System         66.697         7.673         -         16.5137           2 Logging (Fromation Exclusion         6.697         7.673         -         16.5137           2 Logging (Fromation Exclusion         6.697         7.673         -         16.5137           2 Logging (Fromation Exclusion         6.697         7.673         -         16.5137           2 Logging (Fromation Exclusion					
6 Kental - Downhole Equipment         197025         55031         -         44437           7 Kental - Like (Quarkes         44447         50131         -         94,375           10 Directional Dollling, Surveys         355,255         -         -         595,257           11 Diriting         664,647         -         -         975,257           12 Diriting Konstanton         70,757         -         -         71,137           13 Istal & Frower         13,347         -         -         73,127           14 Community & Konstanto, CUU         -         133,797         -         113,547           17 High Pressure Pump Incok         -         113,547         -         113,547           21 Mud Logging         16,130         -         -         113,547           21 Mud Logging         16,130         -         -         113,547           21 Mud Logging         16,130         -         -         143,557           22 Mud Chechnelab         32,557         -         143,557         -         143,557           23 Mud Viasweits Daposat         177,487         36,267         -         25,557           24 Mud Yiasweits Daposat         177,487         36,267         -					
19 Directional Libriting.         395,257					244,057
11 Detilling         6935.647         -         6935.647           12 Detilling         6925.647         -         921.07           13 Feat & Fower         1735.835         667.183         -         281.08           13 Completion Unit, Sweb, CTU         -         -         282.875         -         282.875           15 Completion Unit, Sweb, CTU         -         -         113.4791         -         113.4791           13 Hot Indigon to twalkeline         -         -         113.4791         -         113.4791           21 Mud Logging to twalkeline         -         -         113.4791         -         113.4791           21 Mud Logging to twalkeline         -         -         -         113.4791         -         113.4791           22 Mud Logging to twalkeline         -         -         113.4791         -         113.4791           23 Mud Logging to twalkeline         -         -         113.4791         -         113.4791           23 Mud Logging to twalkeline         -         -         749.0537         -         749.0537           24 Water         -         -         -         -         24.0597         -         24.0597           23 Mud Logginon thankeline	7 Kental - Living Quarters	44,244	50,131	•	94,375
12 Drill Bis     92,179     -     92,179       13 Drill & Ford     173835     -     92,179       14 Canceling & Float Kquip     223875     -     223875       15 Completion Unit, Swab, CTU     -     -     35,074       15 Mich Ford     -     361,754     -       15 Mich Ford     -     361,754     -       15 Mich Ford     -     133,071     -       15 Mich Ford     -     -     135,007       12 Drill Mich Ford     -     -     -       12 Mich Ford     -     -     -       12 Mich Crack Landon     -     -     -       12 Mich Ford     -     -     -       12 Mich Ford     -     -     -       12 Mich Ford     -     -     -       13 Mich Ford     -     -     -       14 Mich Ford     -     -     -       15 Mich Ford     -     -     -       12 Mich Ford     - <td>10 Directional Drilling, Surveys</td> <td>395,255</td> <td>•</td> <td>· ·</td> <td></td>	10 Directional Drilling, Surveys	395,255	•	· ·	
13 Fuel & Forer         17.3833         66/.185         -         941.085           13 Completion Unit, Swap, CTU         -         -         15.0007         15.0007           15 Completion Unit, Swap, CTU         -         -         15.0007         15.0007           17 High Pressure Fung Truck         -         113.437         -         113.437           17 High Pressure Fung Truck         -         113.437         -         113.437           21 Mad Logging         16.5137         -         -         16.137           21 Mad Logging         16.5137         -         -         14.0007           21 Mad & Chronatola Southalton         5.6907         7.675         -         14.3537           23 Mad & Chronatola Southalton         5.6907         7.6757         -         14.0007           23 Mad & Chronatola Southalton         10.0007         7.40133         25.0007         26.0007           24 Made C         11.0597         150.0007         26.0007         26.0007         26.0007           24 Mad Vasteret Disposal         17.7697         50.2007         26.0007         26.0007         25.0007         26.0007           25 Unit Southalton Forback & Disp         11.0172         12.2767         21.667			-	•	
14 Cenenting & Host Equip         ZZ3875         -         -         ZZ3875           15 Completion Unit, Swab, CTU         -         -         15300         15300           15 Protocharding, Writeline, Sitckline         -         -         361,751         -         361,751         -         361,751           15 Vergene Pump Truck         -         113,347         -         113,547         -         113,547           18 Completion Unit, Swab, CTU         -         -         96,817         -         -         150,007         763,757         -         14,357           21 Mud Logging         161,307         -         161,307         -         164,352         -         161,307         -         164,352           22 Midd Karolaton Evaluation         5.6497         7,473         -         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,353         -         740,357         -         153,86			•	•	
15 Completion Unit, Swab, CTU				•	
19 Performating, Writeline, Sitckline       -	• • • •			-	•
17 Hdg Pressure Pump Track       I13/381       I13/381       I13/381         19 Hdg Pressure Pump Track       I3/791       I3/791       I3/791         20 Mud Caculation System       96,811       I       96,811         21 Mud Logging       I6,1307       I6,1307       I6,1307         22 Logging / Formation Evaluation       6,5690       7,67,37       I7,6357         23 Mud & Chenicals       332,9511       400,2007       10,0007       746,1537         24 Water       39,990       608,8107       230,007       968,807         25 Stimulation				15,000	
IB Completion Unit, Swab, CITU         ISL/PI         ISL/PI           21 Mud Circulation System         95,811         -         154,791           22 Mud Circulation System         95,811         -         161,307           22 Mud Circulation System         352,951         405,207         10,807         748,138           23 Mud & Lhemiation         352,951         405,207         10,807         748,138           23 Mud K Lhemiation         352,951         405,207         10,807         749,105           24 Muder         397,960         98,88,807         728,907         725,958           25 Minutation Howback & Dap         -         111,297         725,958         725,958           26 Mud (Waterwater Diagonal         177,887         35,2297         72,967         25,958           28 Mud (Supervision Venhead         19,591         -         73,971         30,867         39,97           28 Lind (Jonn Ovenhead         19,591         -         -         -         73,971           29 Ling & Completion Ovenhead         19,591         -         -         1,153,007         1,153,007         1,153,007         1,153,007         1,153,007         1,153,007         -         1,153,007         1,153,007         -         1,15					
20 Mad Creculation System         96,811         -         -         96,811           22 Logging         Instantion         Instantion <td< td=""><td>· ·</td><td></td><td></td><td></td><td></td></td<>	· ·				
Zi Mud Logging         16,137         -         16,137           Zi Logging Komation Kalustion         65690         7/6/37         114,587           20 Mud & Chenicals         552,951         400,207         100,007         746,183           23 Mutualition         552,951         400,207         100,007         749,083           23 Mutualition         97,990         668,8810         250,007         749,083           23 Mutualition Investment & Usigo ast         177,4897         56,2897         121,897         255,588           20 Mig & Completion Uverhead         79,991         -         21,897         255,598           32 Labor         111,522         122,4797         21,867         308,725           34 Kapppent         -         -         93,991         -         13,897           97 Contingency         13,4897         -         -         -         -           97 Contingency         32,25,720         4,938,578         722,167         8,996,465         -         -         -           97 Haggling & Abandonment         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - <td></td> <td>96,811</td> <td></td> <td></td> <td></td>		96,811			
21 Mark & Chemicals         352/511         402/207         100007         745/183           28 Mater         393907         608/8010         250/007         749/053         749/053           28 Situnulation Howback & Uisp         -         749/053         749/053         749/053           29 Mad / Waterwater Disposal         117/2697         752/267         -         253/3797           28 Mad / Waterwater Disposal         117/2697         752/267         -         253/3797           28 Mad / Waterwater Disposal         117/2697         72/2677         -         253/3797           28 Horopstal         117/2697         72/277         71/550/07         -         7,53/17           38 Labor         141.116         65,992         -         -         7,53/17           39 Plagging & Abandonment         -         -         -         -         -           TANCIBLE COSTS         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -	•	16,130	<u> </u>		16,130
24 Vater         99,907         608,810         230,0007         998,8007           25 Stimulation Howback & Disp         -         -         749,055         -         26,387         -         26,387         -         26,387         -         26,387         -         25,387         -         25,3897         -         25,3897         -         25,3897         -         25,3897         -         25,3897         -         25,3897         -         25,3897         -         25,3897         -         25,3897         -         25,3897         -         25,3897         30,872         30,872         39,872         -         -         -         -         -         -         39,872         39,872         -         -         1,3897         -		6,690	7,673		14,363
25 Stimulation   - 470(03) - 470(03) - 470(03) - 470(03) - 470(03) - 470(03) - 261,897   - 261,897   - 261,897   - 253,987   - 253,978   -				10,000	
2b         1112897         150,0007         26,1587           2b         Midd / Washwatter Uispoal         177,6897         36,2697         23,55736           2b         Midd / Washwatter Uispoal         111,2227         112,27697         21,5677         225,5736           3b         Midd / Washwatter Uispoal         111,2527         122,7697         21,5677         225,5736           3b         Midd / Washwatter Uispoal         111,1517         65,3942         101,067         306,725           3b         Labor         1,155,029         -         -         1,155,029         -         1,153,0897           3c         Midd / Mashwatter Uispoal         -		39,990		250,000	
23 Mid (Wastewater Usposal         177,697         56,267         233 (39)           30 Mig Supervision / Engineering         111,322         122,769         21,667         253 (39)           33 Labor         111,322         122,769         21,667         253 (39)           34 Hoppenin         -         -         9,591         -         9,591           34 Hoppenin         -         1,155,029         -         1,155,029         -         1,155,029           97 Contingency         -         22,4747         3,8353         263,355         263,355         263,357         22,167         8,896,465           97 Plugging & Abandonment         -		•			
39 Kig Supervision / Engineering         111.522         122.767         21,567         235 Sy 987           30 Kig Supervision / Lengineering         9,597         -         9,597         -         9,597           35 Labor         141,116         63,542         101,667         306,725           54 Hoppant         -         1,153,027         -         1,153,027           55 Insurance         13,489         -         -         13,489           97 Contingency         -         2,477         3,835         26,305           97 Longing & Abandonment         -         -         -         -           TANCIBLE COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         COSTS         -         612,219           61 Intermediate Casing         5         112,477         -		· .		150,000	
32 Drig & Completion Overhead 9,591 · · · · 9,997 · · · · 9,997 · · · · 9,997 · · · · · 9,997 · · · · · · · 9,997 · · · · · · · · · · · · · · · · · ·	• •			•	
35 Labor         141,116         63,942         101,667         306,252           54 Proppant         -         1,155,029         -         1,155,029         -         1,155,029         -         1,155,029         -         1,155,029         -         1,155,029         -         1,155,029         -         1,158,029         -         1,158,029         -         1,158,029         -         1,158,029         -         1,158,029         -         1,158,029         -         1,158,029         -         1,138,89         -<				21,667	
54 Propant         .         1,155,029         .         1,155,029           95 Insurance         13,489         .         13,489         .         13,489           97 Contingency         .         22,472         3,8353         26,3857           99 Plugging & Abandonment         .         .         .         .           TOTAL INTANGIBLES >         3,235,720         4,938,778         722,167         8,896,465           TOTAL INTANGIBLES >         3,235,720         COSTS         COSTA         COSTA         COSTA <t< td=""><td></td><td></td><td></td><td>-</td><td></td></t<>				-	
95 Insurance         13,489         -         -         13,489           97 Contingency         -         22,472         3,833         26,305           97 Hugging & Abandonment         -         -         -         -           TOTAL INTANCIBLES >         3,235,720         4,938,578         722,167         8,896,465           TANCIBLE COSTS         COSTS         COSTS         COSTS         COSTS         COSTS           60 Surface Casing         5         112,477         -         -         5         112,477           61 Intermediate Casing         5         112,477         -         -         5         112,477           61 Intermediate Casing         5         112,477         -         <					
97 Contingency         -          -         -		13.489			
99 Plugging & Abandonment         . <td></td> <td></td> <td>22.472</td> <td>3,833</td> <td></td>			22.472	3,833	
DRILLING COSTS         COMPLETION COSTS         PRODUCTION COSTS         TOTAL COSTS           60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 62 Drilling Liner 64 Production Casing 64 Production Liner 65 Tubbing 66 Production Liner 65 Tubbing 66 Veilhead 65 Tabbing 66 Veilhead 76 Packers, Liner Hangers 67 Tackers, Liner Hangers 67 Tackers, Liner Hangers 70 Flow Lines 70 How Lines 71 How Lines 71 How Lines 71 How Lines 72 Artifickal Lit Equipment 73 Compressor 73 Compressor 74 Caster Pumps 75 Surface Pumps 75 Surface Pumps 76 Cast Conditioning / Dehydration 77 Measurement & Meter Installation 77 Measurement & Meter Installation 77 Measurement & Meter Installation 78 Liner Conditioning / Dehydration 78 Liner Conditioning / Dehydration 78 Liner Conditioning / Dehydration 78 Liner Conditioning / Dehydration 71 Measurement & Meter Installation 77 Measurement & Meter Installation 78 Liner Conditioning / Dehydration 71 Measurement & Meter Installation 73 Liner Conditioning / Dehydration 73 Liner Conditioning / Dehydration 74 Liner Conditioning / Dehydration 75 Liner Conditioning / Dehydration 76 Liner Conditioning / Deh		<u> </u>		•	
TANGIBLE COSTS         COSTS         COSTS         COSTS         COSTS         COSTS           60 Surface Casing         \$ 112,477         -         \$ 112,477         -         \$ 112,477           61 Intermediate Casing         316,801         -         -         -         316,801           63 Production Casing         632,196         -	TOTAL INTANGIBLES >	3,235,720	4 938 578	722,167	8,896,465
TANGIBLE COSTS         COSTS         COSTS         COSTS         COSTS         COSTS           60 Surface Casing         \$ 112,477         -         \$ 112,477         -         \$ 112,477           61 Intermediate Casing         316,801         -         -         -         316,801           63 Production Casing         632,196         -					
60 Surface Casing       5       112,4/7       -       -       5       112,4/7         61 Intermediate Casing       316,801       - </td <td></td> <td></td> <td></td> <td></td> <td></td>					
62 Drilling Liner       .		DRILLING	COMPLETION	PRODUCTION	TOTAL
63 Production Casing       632,196       -       -       632,196         64 Production Liner       -       -       -       -       -         65 Tubing       - <td< td=""><td>TANGIBLE COSTS</td><td>DRILLING COSTS</td><td>COMPLETION</td><td>PRODUCTION COSTS</td><td>TOTAL COSTS</td></td<>	TANGIBLE COSTS	DRILLING COSTS	COMPLETION	PRODUCTION COSTS	TOTAL COSTS
64 Production Liner       -	TANGIBLE COSTS 60 Surface Casing	DRILLING COSTS 112,477	COMPLETION	PRODUCTION COSTS	TOTAL COSTS \$ 112,477
65 Tubing       -       -       140,000"       140,000"         66 Weilhead       595,645       -       40,000"       995,645         67 Packers, Liner Hangers       13,556       -       20,000"       33,556         68 Tanks       -       -       -       -         69 Production Vessels       -       -       -       -         70 Flow Lines       -       -       45,833       45,833         71 Rod string       -       -       126,667       126,667         72 Artificial Lift Equipment       -       -       90,000"       90,000"         73 Compressor       -       -       -       90,000"       90,000"         73 Compressor       -       -       -       -       -       -         74 Installation Costs       -       -       -       -       -       -         75 Surface Pumps       - </td <td>TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing</td> <td>DRILLING COSTS 112,477</td> <td>COMPLETION</td> <td>PRODUCTION COSTS</td> <td>TOTAL COSTS \$ 112,477</td>	TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing	DRILLING COSTS 112,477	COMPLETION	PRODUCTION COSTS	TOTAL COSTS \$ 112,477
66 Weilhead       59,645       -       40,000       99,645         67 Packers, Liner Hangers       13,556       -       20,000       33,556         68 Tanks       -<	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing	DRILLING COSTS 112,477 316,801	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801
67 Packers, Liner Hangers       13,556       -       20,000       33,556         68 Tanks       -	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner	DRILLING COSTS 112,477 316,801	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196
68 Tanks       -<	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
69 Production Vessels       -       -       45,833       45,833         70 Flow Lines       -       -       126,667       126,667         71 Rod string       -       -       66,667       66,667         72 Artilicial Lilt 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 Installation       -       -       -       -         78 Gas Conditioning / Dehydration       -       -       -       -         79 Interconnecting Facility Piping       -       -       -       -       -         80 Gathering / Bulk Lines       -       -       -       -       -       -       -         81 Valves, Dumps, Controllers       -       <	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       62         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       64	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
70 Flow Lines       -       -       125,667       126,667         71 Rod string       -       -       66,667       66,667         72 Artitictal Litt Equipment       -       -       90,000       90,000         73 Compressor       -       -       90,000       90,000       90,000         73 Compressor       -       -       90,000       90,000       90,000         74 Installation Costs       -       -       5,833       5,833       5,833         74 Installation Costs       -	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
71 Rod string       -        <	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks	DRILLING COSTS 112,477 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 140,000 99,645 33,556
72 Artiticial Lift Equipment       -       -       90,000       90,000         73 Compressor       -       -       5,833       5,833         74 Installation Costs       -       -       -       -         75 Surface Pumps       -       -       -       -       -         76 Downhole Pumps       -	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$	DRILLING COSTS 112,477 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 140,000 99,645 333,55 45,833
73 Compressor       -       -       5,833       5,833         74 Installation Costs       -	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines	DRILLING COSTS 112,477 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 632,196 140,000 99,645 33,556 45,833 126,667
74 installation Costs       -	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
76 Downhole Pumps       -	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Rod string       \$         72 Artificial Lift Equipment       \$	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
77 Measurement & Meter Installation       -       -       116,667       116,667         78 Gas Conditioning / Dehydration       -       -       -       -       -         79 Interconnecting Facility Piping       -	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
78 Gas Conditioning / Dehydration       -       -       -       -       -       -       -       20,000 <td< td=""><td>TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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</td><td>DRILLING COSTS 3 112,477 316,801 </td><td>COMPLETION COSTS</td><td>PRODUCTION COSTS</td><td>TOTAL COSTS \$ 112,477 316,801 632,196 140,000 99,645 33,556 45,833 126,667 90,000 5,833</td></td<>	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 140,000 99,645 33,556 45,833 126,667 90,000 5,833
79 Interconnecting Facility Piping       -       -       20,000       20,000         80 Gathering / Bulk Lines       -       -       -       -       -         81 Valves, Dumps, Controllers       -       -       -       -       -       -         82 Tank / Facility Containment       - <t< td=""><td>TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       S         64 Production Liner       S         65 Tubing       S         66 Weilhead       S         67 Packers, Liner Hangers       S         68 Tanks       S         69 Production Vessels       7         70 Flow Lines       7         71 Kod string       7         72 Artificial Lift Equipment       73 Compressor         74 Installation Costs       75 Surface Pumps         76 Downhole Pumps       76 Downhole Pumps</td><td>DRILLING COSTS 3 112,477 316,801 </td><td>COMPLETION COSTS</td><td>PRODUCTION COSTS</td><td>TOTAL COSTS \$ 112,477 316,801 632,196 140,000 99,645 33,556 45,833 126,667 90,000 5,833</td></t<>	TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       S         64 Production Liner       S         65 Tubing       S         66 Weilhead       S         67 Packers, Liner Hangers       S         68 Tanks       S         69 Production Vessels       7         70 Flow Lines       7         71 Kod string       7         72 Artificial Lift Equipment       73 Compressor         74 Installation Costs       75 Surface Pumps         76 Downhole Pumps       76 Downhole Pumps	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 140,000 99,645 33,556 45,833 126,667 90,000 5,833
80 Gathering / Bulk Lines         -          -         - <td>TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Rod string       \$         72 Artiticial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement &amp; Meter Installation       \$</td> <td>DRILLING COSTS 3 112,477 316,801 </td> <td>COMPLETION COSTS</td> <td>PRODUCTION COSTS</td> <td>TOTAL COSTS \$ 112,477 316,801 </td>	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Rod string       \$         72 Artiticial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement & Meter Installation       \$	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
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       -       -       50,000       50,000         85 Communications / SCADA       -       -       36,667       36,667         86 Instrumentation / Safety       -       -       833       833         TOTAL TANGIBLES >       1,134,676       0       989,167       2,123,843	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         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       \$	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
82 Tank / Facility Containment         -         -         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         0         989,167         2,123,843	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Measurement & Meter Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
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     0     989,167     2,123,843	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
84 Electrical / Grounding         -         -         50,000         50,000           85 Communications / SCADA         -         -         36,667         36,667           86 Instrumentation / Satety         -         -         833         833           TOTAL TANGIBLES > 1,134,676         0         989,167         2,123,843	TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       S         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gastering / Buik Lines       80         80 Gathering / Buik Lines       81         81 Vaives, Dumps, Controllers       81	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
85 Communications / SCADA 86 Instrumentation / Satety TOTAL TANGIBLES > 1,134,676 0 989,167 2,123,843	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       7         70 How Lines       \$         71 Rod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         76 Cas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$         80 Gathering / Builk Lines       \$         81 Valves, Dumps, Controllers       \$         82 Tank / Facility Containment       \$	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
86 Instrumentation / Safety         -         833         833           TOTAL TANGIBLES >         1,134,676         0         989,167         2,123,643	TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       6         69 Production Vessels       70         70 Flow Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Vaives, Dumps, Controllers       81         81 Vaives, Dumps, Controllers       82         82 Tank / Facility Containment       83         83 Flare Stack       8	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
TOTAL TANGIBLES > 1,134,676 0 989,167 2,123,843	TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod 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 Valves, Dumps, Controllers       \$         81 Tank / Facility Containment       \$         85 Tank / Facility Containment       \$         84 Electrical / Grounding       \$	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 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         85 Communications / SCADA	DRILLING COSTS 3 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 
	TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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         85 Communications / SCADA         86 Instrumentation / Satety	DRILLING COSTS 112,477 316,801 - - - - - - - - - - - - - - - - - - -	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 

#### PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS				
Completions Engineer:	ML				
Production Engineer:	DC				
ian Resources Operating, LL	C APPROVAL:				
Co-CEO		Co-CEO		VP - Operations	
VD Land & Land	WH	JW JW			CRM
VP - Land & Legal		VP - Geosciences			
· _	BG	50	•		
OPERATING PARTNER A		50			
OPERATING PARTNER A		SO Working Interest (%):		Tax ID:	
				Tax ID:	

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:	2.17.2023	AFE NO.:	1
VELL NAME:	Joker 5-8 Federal Com 127H	- FIELD:	Teas; Bone Spring
OCATION:	Section 5, T20S-R34E		20,286' / 10,571'
OUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian WI:	· · · · · · · · · · · · · · · · · · ·	DRILLING DAYS:	19.6
EOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
	Drill a horizontal SBSG well and complete	with 44 stages. AFE includes drilling, completions, fl	lowback and Initial A
EMARKS:	install cost		

• • • • • • • • • • • • • • • • • • • •	DRILLING	COMPLETION	PRODUCTION	TOTAL
	DRILLING COSTS	COMPLETION	PRODUCTION COSTS	COSTS
INTANGIBLE COSTS				\$ 91,851
T Land/Legal/Regulatory \$ 2 Location, Surveys & Damages	265,083	16,625	37,500	284,208
4 Freight / Transportation	43,826	40,284	25,000	109,110
5 Kental - Surface Equipment	114,402	198,221	105,000	417,624
6 Kental - Downhole Equipment	189,026	55,031		244,057
7 Kental - Living Quarters	44,244	50,131		94,375
10 Directional Drilling, Surveys	395,255		<u> </u>	395,255
11 Drilling	693,647	— <u> </u>		693,647
12 Drill Bits	92,179		•	92,179
13 Fuel & Power	173,853	667,183	•	841,036
14 Cementing & Fioat Equip	223,875		-	223,875
15 Completion Unit, Swab, CIU	•		15,000	15,000
16 Perforaling, Wireline, Slickline		361,754	-	361,754
17 High Pressure Pump Truck		113,434	•	113,434
18 Completion Unit, Swab, CTU	-	134,791	•	134,791
20 Mud Circulation System	96,811			96,811
21 Mud Logging 22 Logging / Formation Evaluation	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	
25 Slimulation		749,053		749,053
26 Stimulation Flowback & Disp		111,899	150,000	261,899
28 Mud / Wastewater Disposal	177,689	56,269	<u> </u>	233,959
30 Kig Supervision / Engineering	111,522	122,769	21,667	255,958
32 Drig & Completion Overhead	9,591	······	<u> </u>	9,591
35 Labor	141,116	63,942	101,667	306,725
54 Proppant		1,155,029	<u> </u>	1,155,029
95 Insurance	13,489	•		13,489
97 Contingency		22,472	3,833	26,305
99 Plugging & Abandonment	· .	-		•
TOTAL INTANCED FC.	3 A32 BAA	4 000 000	<b>BAA 4 / 7</b>	8,896,465
TOTAL INTANGIBLES >	3,235,720	4,938,578	722,167	8,070,403
IOTAL INTANGIBLES >	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS				
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS	COMPLETION	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing \$	DRILLING COSTS 112,477	COMPLETION	PRODUCTION COSTS	TOTAL COSTS \$ 112,477
TANGIBLE COSTS 60 Surface Casing \$ 61 Intermediate Casing	DRILLING COSTS 112,477	COMPLETION	PRODUCTION COSTS	TOTAL COSTS \$ 112,477
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 112,477 316,801	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing	DRILLING COSTS 112,477 316,801 632,196	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead	DRILLING COSTS 316,801 632,1% 632,1% 59,645	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 632,196 632,196 140,000 99,645
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Wellhead       \$         67 Packers, Liner Hangers       \$	DRILLING COSTS 316,801 632,196 59,645 13,556	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Wellhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$	DRILLING COSTS 316,801 632,1% 632,1% 59,645	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 632,196 140,000 99,645 33,556
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$	DRILLING COSTS 316,801 632,196 59,645 13,556	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 140,000 99,645 33,556 45,833 126,667
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 632,196 632,196 140,000 99,645 33,556 45,833 126,667 66,667
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         70 Flow Lines       7         71 Kod string       \$         72 Artificial Lift Equipment       \$	DRILLING COSTS 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Kod string         72 Artificial Lift Equipment         73 Compressor	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 632,196 632,196 140,000 99,645 33,556 45,833 126,667 66,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs	DRILLING COSTS 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 632,196 140,000 99,645 33,556 45,833 126,667 66,667 90,000 5,833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Kod string         72 Artificial Lift Equipment         73 Compressor	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 632,196 632,196 140,000 99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         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 Cosits       \$         75 Surface Pumps       \$	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS \$ 112,477 316,801 632,196 632,196 140,000 99,645 33,556 45,833 126,667 66,667 90,000 5,833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation (Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS 5 112,477 316,801 632,196 632,196 140,000 99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation         78 Gas Conditioning / Dehydration	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Kod 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	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Froduction Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Wellhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       7         70 Flow Lines       7         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         76 Lownhole Pumps       \$         70 Lownhole Pumps	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 632,196 140,000 99,645 33,556 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Casing       \$         65 Tubing       \$         66 Wellhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artilicial Lift Equipment       \$         73 Compressor       \$         74 Installation Cosits       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement & Meter Installation       \$         78 Gas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$         80 Cathering / Bulk Lines       \$         81 Valves, Dumps, Controllers       \$         82 Tank / Facility Containment       \$         83 Flare Stack       \$	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Wellhead       \$         67 Prackers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod 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 Tank / Facility Containment       \$         82 Tank / Facility Containment       \$         84 Electrical / Grounding       \$	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 632,196 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artilikiai 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 Tank / Facility Containment       \$         82 Tank / Facility Containment       \$         83 Flare Stack       \$         84 Electrical / Grounding       \$         85 Communications / SCADA       \$	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artilicial 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         85 Communications / SCADA         86 Instrumentation / Satety	DRILLING COSTS 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artilicial Litt Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement & Meter Installation       \$         78 Cas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$         80 Gathering / Bulk Lines       \$         81 Tank / Facility Containment       \$         82 Tank / Facility Containment       \$         84 Electrical / Grounding       \$         85 Communications / SCADA       \$	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477 316,801 

#### PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer.	PS	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Completions Engineer.	P3 ML		
Production Engineer.	DC		
mian Resources Operating, LL			
Co-CEO		Co-CEO	VP - Operations
	WH	jw	CRM
VP - Land & Legal		VP - Geosciences	
	BG	so	
N OPERATING PARTNER AI	PPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	

He code on this AFE are estimates only and any conduct on any specific lines or the ball could the project. Table pixelistics approved under the AFE are be delayed up to a year after the well has been completed in executing this AFE, the Participant agrees to pay its propriodicular dama of a statul cost increased. Including, light, carsive, regulatory, holestages and affer the tests of the applicable by complete systems regulatory codes or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's well constraint and proved list for the applicable provides or estimates or can annound acceptable to the Operator by the date of speci.

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

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 128H	FIELD:	Teas; Bone Spring
OCATION:	Section 5, T20S-R34E	MD/TVD:	20,256' / 9,961'
OUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian WI:		DRILLING DAYS:	19.6
SEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
	Drill a horizontal SBSG well and complete with 4	4 stages. AFE includes drilling, completions, fl	owback and Initial A
REMARKS:	install cost	- • •	

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
1 Land/Legal/Regulatory \$	54,351		37,500	5 91,851
2 Location, Surveys & Damages	265,083	16,625	2,500	284,208
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5 Kental – Suriace Equipment	114,402	198,221	105,000	417,624
6 Kental - Downhole Equipment	189,026	55,031	-	244,057
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11 Drilling	693,647	-		693,647
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14 Cementing & Float Equip	223,875			
15 Completion Unit, Swab, CTU			15,000	15,000
16 Pertorating, Wireline, Slickline	······	361,754		361,754
17 High Pressure Pump Truck	•	113,434		113,434
18 Completion Unit, Swab, CTU	· · ·	134,791		134,791
20 Mud Circulation System	96,811			96,811
21 Mud Logging	16,130			16,130
22 Logging / Formation Evaluation	6,690	7,673	•	14,363
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24 Water	39,990	608,810	250,000	898,800
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95 Insurance	13,489	1,100,029		13,489
97 Contingency		22,472	3,833	26,305
99 Plugging & Abandonment	·			
TOTAL INTANGIBLES >	2 035 730	1000 000	722,167	8,896,465
		4.938.578		
		4,938,578		
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS			TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing S	DRILLING COSTS 112,477	COMPLETION COSTS	PRODUCTION	TOTAL COSTS \$ 112,477
TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing \$ 61 Intermediate Casing	DRILLING COSTS 112,477	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 112,477
TANGIBLE COSTS 60 Surface Casing S 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 112,477 316,801	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 632,196
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead	DRILLING COSTS 112,477 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       S         64 Production Liner       S         65 Tubing       S         66 Weilhead       S         67 Packers, Liner Hangers       S	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$	DRILLING COSTS 112,477 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 632,196 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels	DRILLING COSTS 112,477 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 l'roduction Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 l'roduction Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines         71 Kod string	DRILLING COSTS 112,477 316,801 632,196 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       S         64 Production Liner       S         65 Tubing       S         66 Weilhead       S         67 Packers, Liner Hangers       S         68 Tanks       S         70 How Lines       71 Kod string         72 Artificial Lift Equipment       S	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Turbing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Turbing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Cosits         75 Surface Pumps	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       62         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilthead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       76	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Gathering / Buik Lines	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Cosits         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	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       S         64 Production Liner       S         65 Tubing       S         66 Weilhead       S         67 Packers, Liner Hangers       S         68 Tanks       S         69 Production Vessels       70 How Lines         71 Kod string       Takes         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 / Buik Lines       81 Valves, Dumps, Controllers         81 Valves, Dumps, Controllers       82 Tank / Facility Containment	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       S         64 Production Liner       S         65 Turbing       S         66 Weilhead       S         67 Packers, Liner Hangers       S         68 Tanks       S         69 Production Vessels       S         70 Flow Lines       T         71 Kod string       T         72 Artificial Lift Equipment       T         73 Compressor       T         74 Installation Costs       T         75 Surface Pumps       T         76 Downhole Pumps       T         77 Measurement & Meter Installation       T         78 Gas Conditioning / Dehydration       T         79 Interconnecting Facility Piping       SO Cathering / Bulk Lines         81 Valves, Dumps, Controllers       S2 T ank / Facility Containment         83 Flare Stack       St lare Stack	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64 Production Liner         65 Tubing       66 Weilhead         67 Packers, Liner Hangers       68 Tanks         69 Production Vessels       70 How Lines         71 Kod string       72 Artificial Lift Equipment         73 Compressor       74 Installation Costs         75 Surface Pumps       76 Downhole 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       1000000000000000000000000000000000000	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 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         85 Communications / SCADA	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod 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 / Buik Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding         85 Communications / SCADA         86 Instrumentalion / Safety	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 - - - - - - - - - - - - -
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 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         85 Communications / SCADA	DRILLING COSTS 112,477 316,801 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 112,477 316,801 

#### PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS					
Completions Engineer:	ML					
Production Engineer:	DC					
ian Resources Operating, LL	C APPROVAL:					
Co-CEO		Co-CEO		VP - C	Operations	
	₩Н		jw			CRM
VP - Land & Legal		VP - Geosciences				
	BG		50			
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OPERATING PARTNER A			50 1g Interest (%):		Tax ID:	
		Workir			Tax ID:	

**Released to Imaging:** 7/14/2023 8:08:00 AM

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

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 131H		Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E	MD/TVD:	21,116' / 10,831'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
	Drill a horizontal TBSG well and con	nplete with 44 stages. AFE includes drilling, completions, fi	lowback and Initial A
REMARKS:	install cost		

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
				\$ 94,569
T Land/ Legal/ Regulatory	\$ 57,069		37,500	298,294
2 Location, Surveys & Damages	2/8,338	17,456	2,500	
4 Freight / Transportation	46,017	42,298	25,000	113,315
5 Kental - Surface Equipment	120,122	208,133	105,000	433,255
6 Kental - Downhole Equipment	198,477	57,783	•	256,260
7 Kenial - Living Quarters	46,457	52,637		99,094
10 Directional Drilling, Surveys	415,018			415,018
11 Drilling	728,329			728,329
12 Drill Bits	96,788		<u> </u>	96,788
		700,542	·	883,088
13 Fuel & Power	182,546			235,069
14 Cementing & Float Equip	235,069	•		
15 Completion Unit, Swab, CTU	•	-	15,000	15,000
16 Periorating, Wireline, Slickline	-	379,842	-	379,842
17 High Pressure Pump Truck		119,106	<u>-</u>	119,106
18 Completion Unit, Swab, CTU		141,530		141,530
20 Mud Circulation System	101,651		<u> </u>	101,651
21 Mud Logging	16,936	· · · · · · · · · · · · · · · · · · ·	<u> </u>	16,936
22 Logging / Formation Evaluation	7,024	8,057	<u> </u>	15,081
	349,599	423,367		782,966
23 Mud & Chemicals				981,240
24 Water	41,989	639,251	300,000	
25 Stimulation	•	786,506	-	786,506
26 Stimulation Flowback & Disp	•	117,494	150,000	267,494
28 Mud / Wastewater Disposal	186,574	59,083	-	245,657
30 Rig Supervision / Engineering	117,098	128,908	21,667	267,673
32 Drig & Completion Overhead	10,071			10,0/1
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	<u> </u>	14,164
		23,595	3,833	27,428
97 Contingency		23,393	5,855	
99 Plugging & Abandonment	·•	·		
TOTAL INTANGIBLES	> 3,397,506	5,185,507	772,167	9,355,180
	+	-,,		
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing	DRILLING COSTS \$ 118,101	COMPLETION	PRODUCTION	TOTAL COSTS \$ 118,101
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing	DRILLING COSTS 5 118,101 332,642	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 118,101 332,642
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing	DRILLING COSTS \$ 118,101	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 118,101
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 5 118,101 332,642	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 118,101 332,642
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner	DRILLING COSTS 5 118,101 332,642 663,806	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 118,101 332,642 663,806
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Froduction Casing 64 Production Liner 65 Tubing	DRILLING COSTS 332,642 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 118,101 332,642 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead	DRILLING COSTS \$ 118,101 332,642 	COMPLETION COSTS	PRODUCTION COSTS 	TOTAL COSTS \$ 118,101 332,642 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers	DRILLING COSTS 5 118,101 332,642 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 118,101 332,642 663,806 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks	DRILLING COSTS \$ 118,101 332,642 	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS 5 118,101 332,642 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS \$ 118,101 332,642 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines	DRILLING COSTS \$ 118,101 332,642 	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS 5 118,101 332,642 663,806 140,000 102,628 34,254 45,833
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Froduction Casing 64 Froduction Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Froduction Vessels 70 Flow Lines 71 Rod string	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 118,101 332,642 663,806 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Froduction Casing 64 Froduction Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Froduction Vessels 70 Flow Lines 71 Kod string 72 Artiticial Litt Equipment	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Froduction Casing 64 Froduction Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Froduction Vessels 70 Flow Lines 71 Rod string	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 118,101 332,642 663,806 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Froduction Casing 64 Froduction Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Froduction Vessels 70 Flow Lines 71 Kod string 72 Artiticial Litt Equipment	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Production Vessels         68 Tanks         69 Production Vessels         70 Flow Lines         71 Hod string         72 Artiticial Litt Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS 5 118,101 332,642 663,806 140,000 102,628 34,234 45,833 126,667 66,667 90,000 5,833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 I lubing         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	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS 118,101 332,642 663,806 140,000 102,628 34,234 45,833 126,667 66,667 90,000 5,833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         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 Installation         78 Gas Conditioning / Dehydration	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 663,806 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Toubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         70 Downhole Pumps         77 Measurement & Meter Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Gathering / Bulk Lines	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS 118,101 332,642 663,806 140,000 102,628 34,234 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Gathering / Bulk Lines         81 Valves, Dumps, Controllers	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS - - - - - - - - - - - - - - - - - -	TOTAL COSTS 118,101 332,642 663,806 140,000 102,628 34,234 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Froduction Casing         64 Froduction Liner         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 Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Cathering / Bulk Lines         81 Valves, Dumps, Controllers	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Gathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Cathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Toubing         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         85 Communications / SCADA	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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         85 Communications / SCADA         86 Instrumentation / Satety	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 85 Communications / SCADA 86 Instrumentation / Satety	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 85 Communications / SCADA 86 Instrumentation / Satety	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 118,101 332,642 

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS				
Completions Engineer:	ML				
Production Engineer:	DC				
nian Resources Operating, LL	.C APPROVAL:				
Co-CEO		Co-CEO	-	VP - Operations	
VP - Land & Legal	WH	JW VP - Geosciences			CRM
vr - Lanu & Legal		vr - Geosciences			
	BC	so	•		
OPERATING PARTNER A		50	- 		
OPERATING PARTNER A		SO Working Interest (%):		Tax ID:	
				Tax ID:	

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 132H	FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E		21,116' / 10,831'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
	Drill a horizontal TBSG well and comple	te with 44 stages. AFE includes drilling, completions, f	lowback and Initial A
REMARKS:	install cost		

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
T Land/ Legal/ Regulatory	\$ 57,069	<u> </u>	37,500	\$ 94,569
2 Location, Surveys & Damages	278,338	17,456	2,500	298,294
4 Freight / Transportation	46,017	42,298	25,000	113,315
5 Kental - Surface Equipment	120,122	208,133	105,000	433,255
6 Kental - Downhole Equipment	198,477	57,783		256,260
7 Kental - Living Quarters	46,457	52,637	· · · ·	99,094
10 Directional Drilling, Surveys	415,018		<u> </u>	415,018
11 Drilling	728,329	<u> </u>		728,329
12 Drill Bits	96,788		<u> </u>	96,788
13 Fuel & Power	182,546	700,542		883,088
14 Cementing & Float Equip	235,069			235,069
15 Completion Unit, Swab, CTU			15,000	15,000
16 Pertorating, Wireline, Slickline		379,842		379,842
17 High Pressure Pump Truck	·	119,106		119,106
18 Completion Unit, Swab, CTU	<u>.</u>	141,530		141,530
20 Mud Circulation System	101,651			101,651
21 Mud Logging	16,936	<u> </u>	<u> </u>	16,936
22 Logging / Formation Evaluation	7,024	8,057		15,081
23 Mud & Chemicals	349,599	423,367	10,000	782,966
24 Water	41,989	639,251		981,240
25 Stimulation		786,506		786,506
25 Stimulation 26 Stimulation Flowback & Disp		117,494	150,000	267,494
28 Mud / Wastewater Disposai	186,574	59,083		245,657
30 Rig Supervision / Engineering	117,098	128,908	21,667	267,673
32 Drig & Completion Overhead	10,071-	120,700	21,007	10,071
35 Labor	148,172			316,9/8
	140,172	67,140	101,667	1,212,780
54 Proppant 95 Insurance		1,212,780	-	
	14,164	• •		14,164
97 Contingency		23,595	3,833	27,428
99 Plugging & Abandonment	•	<u>-</u>		<u> </u>
TOTAL INTANGIBLES	> 3,397,506	5,185,507	772,167	9,355,180
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS	COSTS		COSTS	COSTS
60 Surface Casing	COSTS \$ 118,101		COSTS	COSTS
60 Surface Casing 61 Intermediate Casing	COSTS	<u></u>	COSTS	COSTS
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	COSTS <u>118,101</u> <u>332,642</u>		COSTS	COSTS \$ 118,101 332,642
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	COSTS \$ 118,101	<u></u>	COSTS	COSTS
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner	COSTS <u>118,101</u> <u>332,642</u>		COSTS	COSTS \$ 118,101 332,642
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	COSTS \$ 118,101 332,642 		COSTS	COSTS \$ 118,101 332,642 663,806 140,000
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 65 Wellhead 67 Packers, Liner Hangers	COSTS \$ 118,101 332,642 		COSTS	COSTS \$ 118,101 332,642 663,806 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels	COSTS \$ 118,101 332,642 		COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Litt Equipment	COSTS \$ 118,101 332,642 		COSTS	COSTS \$ 118,101 332,642
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Litt Equipment 73 Compressor	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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	COSTS \$ 118,101 332,642 	COSTS	COSTS 	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 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	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 Installation 78 Gas Conditioning / Dehydration	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping	COSTS \$ 118,101 332,642 	COSTS	COSTS 	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Prackers, 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	COSTS	COSTS	COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Liner 64 Production Liner 65 Tubing 66 Wellhead 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	COSTS \$ 118,101 332,642 	COSTS	COSTS	COSTS \$ 118,101 332,642 663,806
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment	COSTS	COSTS	COSTS	COSTS \$ 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 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 82 Tank / Facility Containment 83 Flare Stack	COSTS	COSTS	COSTS	COSTS \$ 118,101 332,642
60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Cathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding	COSTS	COSTS	COSTS	COSTS 118,101 332,642 
60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Wellhead         67 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         82 Flare Stack         84 Electrical / Grounding         85 Communications / SCADA	COSTS	COSTS	COSTS 	COSTS 118,101 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 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 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety	COSTS	COSTS	COSTS 	COSTS 332,642 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Prackers, 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 85 Communications / SCADA	COSTS	COSTS	COSTS 	COSTS 118,101 332,642 
60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Lainer         65 Tubing         66 Weilhead         67 Production Liner         65 Tubing         66 Weilhead         67 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 Tark / Facility Containment         83 Flare Stack         84 Electrical / Grounding         85 Communications / SCADA         86 Instrumentation / Satety	COSTS \$ 118,101 332,642 	COSTS	COSTS 	COSTS 332,642 

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer.	ML		
Production Engineer:	DC		
rmian Resources Operating, LL	.C APPROVAL:		
Co-CEO	WH	Co-CEO	VP - Operations
VP - Land & Legal	WH	JW JW - Geosciences	CRM
	BG	SO	
N OPERATING PARTNER A	PPROVAL:		
ON OPERATING PARTNER A	PPROVAL:	Working Interest (%):	Tax ID:
	PPROVAL:	Working Interest (%): Date:	Tax ID:

here of actual costs insured, including, legal, country, regulatory, bokenessy and well costs under the terms of the special be joint over single government. Treplakary erail lability insurance unless participant provides Operator a certificate evidencing its own insurance in an amount acceptable to the Operator by the date of sped. well has been completed. In executing this AFE, the Participant agrees to pay its ng this well. Participants shall be covered by and billed proportionately for Operator's well. control and get

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

2.17.2023	AFE NO.:	1
Joker 5-8 Federal Com 133H	FIELD:	Teas; Bone Spring
Section 5, T20S-R34E	MD/TVD:	21,106' / 10,821'
Lea County, New Mexico	LATERAL LENGTH:	10,000'
	DRILLING DAYS:	19.6
TBSG	COMPLETION DAYS:	18.6
	Joker 5-8 Federal Com 133H Section 5, T20S-R34E Lea County, New Mexico	Joker 5-8 Federal Com 133HFIELD:Section 5, T20S-R34EMD/TVD:Lea County, New MexicoLATERAL LENGTH:DRILLING DAYS:DRILLING DAYS:

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
T Land / Legal / Regulatory	57,069	•	37,500	\$ 94,569
2 Location, Surveys & Damages	278,338	17,456	2,500	298,294
4 Freight / Transportation	46,017	42,298	25,000	113,315
5 Kental - Surface Equipment	120,122	208,133	105,000	433,255
6 Rental - Downhole Equipment	198,477	57,783	• • •	256,260
7 Kental - Living Quarters	46,457	52,637		99,094
10 Directional Drilling, Surveys	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, CTU			15,000	<u> </u>
16 Pertorating, Wireline, Slickline	-	379,842	-	119,106
17 High Pressure Pump Truck 18 Completion Unit, Swab, CTU	<u> </u>	141,530		141,530
20 Mud Circulation System	101,651	141,550		101,651
21 Mud Logging	16,936		<u> </u>	16,936
22 Logging / Formation Evaluation	7,024	8,057	······	10,750
23 Mud & Chemicals	349,599	423,367	10,000	782,966
24 Water	41,989	639,251	300,000	981,240
25 Stimulation		786,506		786,506
26 Stimulation Flowback & Disp		117,494	150,000	267,494
28 Mud/Wastewater Disposal	186,574	59,083		245,657
30 Kig Supervision / Engineering	117,098	128,908	21,667	267,673
32 Drig & Completion Overhead	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 & Abandonment	-	-		-
TOTAL INTANGIBLES :	3,397,506	5,185,507	772,167	9,355,180
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	5 118,101	-	-	\$ 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				
40 Production Vessels		•	45,833	45,833
69 Production Vessels			126,667	126,667
70 Flow Lines				
70 Flow Lines 71 Rod string			126,667	126,667
70 Flow Lines 71 Kod string 72 Artificial Litt Equipment			126,667 66,667 90,000	126,667 66,667 
70 Flow Lines 71 Rod string 72 Artificial Litt Equipment 73 Compressor			126,667	126,667
70 Flow Lines 71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs			126,667 66,667 90,000 5,833	126,667 66,667 90,000 5,833
70 Flow Lines 71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps			126,667 66,667 90,000	126,667 66,667 
70 Flow Lines 71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs			126,667 66,667 90,000 5,833 61,667	126,667 66,667 90,000 5,833
70 Flow Lines 71 Kod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps			126,667 66,667 90,000 5,833	126,667 66,667 90,000 5,833 61,667
70 Flow Lines 71 Kod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation			126,667 66,667 90,000 5,833 61,667	126,667 66,667 90,000 5,833 61,667
70 Flow Lines 71 Kod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 76 Measurement & Meter Installation 78 Gas Conditioning / Dehydration			126,667 66,667 90,000 5,833 61,667 116,667	126,667 66,667 90,000 5,833 61,667 116,667
70 Flow Lines 71 Kod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surlace Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping			126,667 66,667 90,000 5,833 61,667 116,667	126,667 66,667 90,000 5,833 61,667 116,667
70 Flow Lines 71 Kod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surlace Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines			126,667 66,667 90,000 5,833 61,667 116,667 20,000	126,667 66,667 90,000 5,833 61,667 116,667 20,000
70 Flow Lines 71 Kod 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 82 Tank / Facility Containment 83 Flare Stack			126,667 66,667 90,000 5,833 61,667 116,667 20,000 108,333	126,667 66,667 90,000 5,833 61,667 116,667 20,000 108,333 43,333 16,667
70 Flow Lines 71 Kod 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			126,667 66,667 90,000 5,833 61,667 116,667 20,000 108,333 43,333 16,667 50,000	126,667 66,667 90,000 5,833 - 61,667 - 116,667 - - 20,000 - - 108,333 43,333 16,667 50,000
70 Flow Lines 71 Kod 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 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA			126,667 66,667 90,000 5,833 61,667 116,667 20,000 	126,667 66,667 90,000 5,833 - 61,667 - 116,667 - 20,000 - 108,333 43,333 16,667 50,000
70 Flow Lines 71 Kod 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 85 Communications / SCADA 86 Instrumentation / Satety			126,667 66,667 90,000 5,833 61,667 116,667 20,000 108,333 43,333 16,667 50,000	126,667 
70 Flow Lines 71 Kod 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 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA			126,667 66,667 90,000 5,833 61,667 116,667 20,000 	126,667 66,667 90,000 5,833 - 61,667 - 116,667 - 20,000 - 108,333 43,333 16,667 50,000

#### PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC		
ian Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
	WH	w	CRM
VP - Land & Legal		VP - Geosciences	
	BG	SO	
N OPERATING PARTNER A	PPROVAL:	Working Interest (%):	Tax ID:
Signed by:		Date:	
		Approval: 🗍 Yes	No (mark one)

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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:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 134H		Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E		21,106' / 10,821'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
	Drill a horizontal TBSG well and com	plete with 44 stages. AFE includes drilling, completions, f	lowback and Initial A
REMARKS:	install cost		

	DBULING	COMPLETION	PRODUCTION	TOTAL
	DRILLING	COMPLETION	PRODUCTION COSTS	COSTS
INTANGIBLE COSTS	COSTS	COSTS		
T Land / Legal / Regulatory \$	57,069			\$ 94,569
2 Location, Surveys & Damages	278,338	17,456	2,500	298,294
4 Freight/Transportation	46,017	42,298	25,000	113,315
5 Kental - Surface Equipment	120,122	208,133	105,000	433,255
6 Kental - Downhole Equipment	198,477	57,783	-	256,260
7 Kental - Living Quarters	46,457	52,637	-	99,094
10 Directional Drilling, Surveys	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, CTU		-	15,000	15,000
16 Pertorating, Wireline, Slickline		379,842	-	379,842
17 High Pressure Pump Truck		119,106	-	119,106
18 Completion Unit, Swab, CTU	•	141,530		141,530
20 Mud Circulation System	101,651	······	<u> </u>	101,651
21 Mud Logging	16,936	•	<u> </u>	16,936
22 Logging/Formation Evaluation	7,024	8,057		15,081
23 Mud & Chemicals	349,599	423,367	10,000	782,966
24 Water	41,989	639,251	300,000	981,240
25 Stimulation	•	786,506		786,506
26 Stimulation Flowback & Disp	· · · ·	117,494	150,000	267,494
28 Mud / Wastewater Disposal	186,574	59,083		245,657
30 Rig Supervision / Engineering	117,098	128,908	21,667	267,673
32 Drig & Completion Overhead	10,071	<u> </u>	·	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 & Abandonment		·		-
TOTAL INTANGIBLES >	3,397,506	5,185,507	772,167	9,355,180
101110100000				
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing \$	118,101		<b>_</b>	\$ 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 Nod states				
/1 Koa su'ing	-		•	-
				90,000
72 Artificial Lift Equipment		· · · · · · · · · · · · · · · · · · ·	90,000	
72 Artificial Litt Equipment 73 Compressor				
72 Artificial Lift Equipment 73 Compressor 74 Installation Costs				5,833
72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps			5,833	5,833
72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surtace Pumps 76 Downhole Pumps			5,833	5,833 - - 61,667 -
72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation			5,833	5,833 - - 61,667 -
72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration			5,833	5,833 61,667 116,667
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			5,833 61,667 116,667	5,833 61,667 116,667
72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 76 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 50 Gathering / Bulk Lines			5,833 61,667 116,667 20,000	5,833 61,667 116,667 20,000
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			5,833 61,667 116,667 20,000 108,333	5,833 61,667 116,667 20,000
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			5,833 61,667 116,667 20,000 108,333 43,333	5,833 61,667 116,667 20,000 108,333 43,333
72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Fumps 76 Downhole Fumps 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			5,833 61,667 116,667 20,000 108,333 43,333 16,667	5,833 61,667 116,667 20,000 
72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole 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			5,833 61,667 116,667 20,000 108,333 43,333 16,667 50,000	5,833 61,667 1116,667 20,000 108,333 43,333 43,333 15,667 50,000
72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole 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 85 Communications / SCADA			5,833 61,667 116,667 20,000 - - - 108,333 43,333 16,667 50,000 36,667	5,833 61,667 116,667 20,000 
71 Kod string 72 Artik Lai 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 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Salety			5,833 61,667 116,667 20,000 	108,333 43,333 16,667 50,000 36,667 833
72 Artilical Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole 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 85 Communications / SCADA			5,833 61,667 116,667 20,000 - - - 108,333 43,333 16,667 50,000 36,667	5,833 

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC		
an Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
VP - Land & Legal	WH	JW VP - Geosciences	CRM
vi - Land & Legal	BG	SO SO	
OPERATING PARTNER A	PPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	
· · · · · · · · · · · · · · · · · · ·			

The concern and the summary was any not recommendent was concerned and the provide stands and approved table table to be despended by and being to a practice table and the provide stands and approved table table to be a provide table table to be a provide table table to be a provide table table operation of the provide table table operation of table table table tables and table tables and table tables and tables an

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
VELL NAME:	Joker 5-8 Federal Com 171H	FIELD:	Teas; Bone Spring
OCATION:	Section 5, T20S-R34E	MD/TVD:	20,736' / 10,451'
OUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian WI:	· · · · · · · · · · · · · · · · · · ·	DRILLING DAYS:	19.6
EOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
	Drill a horizontal TBSG well and complete with	44 stages. AFE includes drilling, completions, f	lowback and Initial A
REMARKS:	install cost		

• • • • • • • • • • • • • • • • • • • •	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
T Land/Legal/Regulatory 5	55,739		37,500	\$ 93,239
2 Location, Surveys & Damages	271,852	17,050	2,500	291,402
4 Freight / Transportation	44,945	41,312	25,000	111,257
5 Kental - Surface Equipment	117,323	203,283	105,000	425,606
6 Rental – 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	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, CTU	· · ·	370,992	15,000	15,000 370,992
16 Periorating, Wireline, Slickline 17 High Pressure Pump Truck	<u> </u>	116,330	<u> </u>	116,330
18 Completion Unit, Swab, CTU		138,232		138,232
20 Mud Circulation System	99,283	100,252		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	41,011	624,356	300,000	965,367
25 Stimulation		768,180		768,180
26 Stimulation Flowback & Disp		114,757	150,000	264,757
28 Mud / Wastewater Disposal	182,227	57,706	<u> </u>	239,933
30 Kig Supervision / Engineering	114,369	125,904	21,667	261,941
32 Drig & Completion Overhead	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 & Abandonment				-
TOTAL INTANGIBLES >	3,318,344	5,064,685	772,167	9,155,196
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS			COSTS
TANGIBLE COSTS 60 Surface Casing S	DRILLING COSTS 115,349	COMPLETION	PRODUCTION	COSTS \$ 115,349
TANGIBLE COSTS 60 Surface Casing 5 61 Intermediate Casing 5	DRILLING COSTS	COMPLETION	PRODUCTION COSTS	COSTS \$ 115,349 324,891
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 115,349 324,891	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 115,349 324,891
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS 115,349	COMPLETION	PRODUCTION COSTS	COSTS \$ 115,349 324,891
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner	DRILLING COSTS 115,349 324,891	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing	DRILLING COSTS 3115,349 324,891 648,340	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 648,340 140,000
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       65 Tubing         65 Weilhead       6	DRILLING COSTS 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 648,340 140,000 101,169
TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       6	DRILLING COSTS 3115,349 324,891 648,340	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       65 Tubing         65 Weilhead       6	DRILLING COSTS 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 648,340 140,000 101,169
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$	DRILLING COSTS 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       66         68 Tanks       69         69 Production Vessels       64	DRILLING COSTS 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines	DRILLING COSTS 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       8         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       9         99 Production Vessels       7         70 Kod string       7         72 Artificial Lilt Equipment       73 Compressor	DRILLING COSTS 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       6         69 Production Vessels       7         70 Kod string       7         72 Artificial Lift Equipment       73 Compressor         74 Installation Costs       6	DRILLING COSTS 3115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Lilt Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$	DRILLING COSTS 3115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         69 Production Vessels       70         70 Flow Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Longressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       76	DRILLING COSTS 3115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Lownhole Pumps       77         76 Measurement & Meter Installation       10	DRILLING COSTS 3115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       8         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       9         99 Production Vessels       7         70 Flow Lines       7         71 Rod string       7         72 Artificial Lilt Equipment       73 Compressor         74 Installation Costs       75 Surface Pumps         76 Downhole Pumps       7         77 Measurement & Meter Installation       78 Gas Conditioning / Dehydration	DRILLING COSTS 3115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Loss Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$	DRILLING COSTS 3115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Lownhole Pumps       \$         77 Measurement & Meter Installation       \$         78 Gas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$         80 Gathering / Bulk Lines       \$	DRILLING COSTS 3115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81         81 Valves, Dumps, Controllers       81	DRILLING COSTS 3115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81         81 Valves, Dumps, Controllers       82         82 Tank / Facility Containment       10	DRILLING COSTS 3 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       8         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       9         69 Production Vessels       70         70 Flow Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Valves, Dumps, Controllers       81         81 Valves, Dumps, Controllers       82         82 Tank / Facility Containment       83         83 Flare Stack       8	DRILLING COSTS 3115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       8         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       9         99 Production Vessels       70         70 Flow Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74 Installation Costs         75 Surface Pumps       76         76 Downhole Pumps       77         76 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Valves, Dumps, Controllers       82         81 Valves, Dumps, Containment       83         83 Flare Stack       84	DRILLING COSTS 3 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       8         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       9         69 Production Vessels       70         70 Flow Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Valves, Dumps, Controllers       81         81 Valves, Dumps, Controllers       82         82 Tank / Facility Containment       83         83 Flare Stack       8	DRILLING COSTS 3 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       9         69 Production Vessels       70         70 Kod string       7         72 Artificial Lift Equipment       7         73 Compressor       74 Installation Costs         75 Surface Pumps       7         76 Downhole Pumps       7         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81 Valves, Dumps, Controllers         81 Tank / Facility Containment       83 Flare Stack         84 Electrical / Grounding       85 Communications / SCADA         86 Instrumentation / Satety       1	DRILLING COSTS 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing       8         61 Intermediate Casing       8         62 Drilling Liner       8         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       9         69 Production Vessels       70         70 Kod string       7         72 Artificial Lift Equipment       73 Compressor         74 Installation Costs       75         75 Surface Pumps       7         76 Downhole Pumps       7         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81 Valves, Dumps, Controllers         82 Tank / Facility Containment       83 Flare Stack         84 Electrical / Grounding       85 Communications / SCADA	DRILLING COSTS 324,891 	COMPLETION COSTS	PRODUCTION COSTS	COSTS 5 115,349 324,891 

## PREPARED BY Permian Resources Operating, LLC:

PC		
DC		
C APPROVAL:		
	Co-CEO	VP - Operations
WH	JW	CRM
	VP - Geosciences	
BG	SO	
PPROVAL:		
	Working Interest (%):	Tax ID:
	Date:	
	WH BG	ML DC C APPROVAL: WH Co-CEO WH VP - Geosciences BG SO PPROVAL: PPROVAL:

The costs on this ATE are reliances only and new not be construct as collings on any specific iron or the isola cost of the project. Utang isolations approved under the ATE are bid-approved up to a year after to be well have been completed. In executing this ATE use bid-approved under the ATE are bid-approved up to a year after to be well have been completed. In executing this ATE, the Farticipant agrees to pay its propertionate back or databat and bearment, fundating, payline, consister, equations, howice and well constant of the apple to a provide back of the opposition of the attribution of

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 172H		Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E	 мd/гvd:	20,731' / 10,446'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:	······	DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
	Drill a horizontal TBSG well and com	plete with 44 stages. AFE includes drilling, completions, f	lowback and Initial A
REMARKS:	install cost		

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
T Land/ Legal/ Regulatory	55,739	•	01,000	\$ 93,239
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5 Kental - Surtace Equipment	117,323	203,283	105,000	425,606
6 Rental - 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	711,359			<u> </u>
12 Drill Bits	94,533		-	862,512
13 Fuel & Power 14 Compating & Floot Figure	178,292			229,592
14 Cementing & Float Equip 15 Completion Unit, Swab, CTU			15,000	15,000
16 Perforating, Wireline, Slickline		370,992	13,000	370,992
17 High Pressure Pump Truck		116,330		116,330
18 Completion Unit, Swab, CI'U	·	138,232		138,232
20 Mud Circulation System	99,283		<u> </u>	99,283
21 Mud Logging	16,542	<u>.</u>		16,542
22 Logging / Formation Evaluation	6,860	7,869		14,729
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32 Drig & Completion Overhead	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 & Abandonment				
TOTAL INTANGIBLES :	3,318,344	5,064,685	772,167	9,155,196
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing				
	COSTS	COSTS	COSTS	COSTS
60 Surface Casing	COSTS 115,349	COSTS	COSTS	COSTS \$ 115,349
60 Surface Casing 61 Intermediate Casing	COSTS 115,349	COSTS	COSTS	COSTS \$ 115,349
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	COSTS 	COSTS	COSTS	COSTS \$ 115,349 324,891 -
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	COSTS	COSTS	COSTS	COSTS 5 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner	COSTS 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 324,891 - - - - - - - - - - - - -
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers	COSTS	COSTS	COSTS	COSTS \$ 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 65 Yubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks	COSTS 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels	COSTS 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines	COSTS 5 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string	COSTS 5 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Froduction Vessels 70 Flow Lines 71 Kod string 72 Artificiat Litt Equipment	COSTS 5 115,349 324,891 	COSTS	COSTS 	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Troduction Vessels 70 Flow Lines 71 Kod string 72 Artificial Lili Equipment 73 Compressor	COSTS 5 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 How Lines 71 Kod string 72 Artificiat Lift Equipment 73 Compressor 74 Installation Costs	COSTS 5 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lili Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps	COSTS 5 115,349 324,891 	COSTS	COSTS 	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificiat Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps	COSTS 5 115,349 324,891 	COSTS	COSTS 	COSTS \$ 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificiat Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation	COSTS 5 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificiat Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration	COSTS 115,349 324,891 	COSTS	COSTS 	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping	COSTS 5 115,349 324,891 	COSTS	COSTS 	COSTS \$ 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Production Vessels 70 Flow Lines 71 Rod string 72 Artificial Lili 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	COSTS 115,349 324,891 	COSTS	COSTS 	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Kod string 72 Artificiat Lift Equipment 73 Compressor 74 Installation Cosis 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	COSTS 115,349 324,891 	COSTS	COSTS 	COSTS \$ 115,349 324,891 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificiat 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 / Buik Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment	COSTS 5 115,349 648,340 648,34	COSTS	COSTS 	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificiat Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 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	COSTS 5 115,349 324,891 	COSTS	COSTS 	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Flow Lines 71 Rod string 72 Artificiat Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 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 Fiare Stack 84 Electrical / Grounding	COSTS 5 115,349 324,891 648,340 648,340 648,340 61,169 13,902 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6	COSTS	COSTS 	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 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 85 Communications / SCADA	COSTS 5 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 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 76 Downhole Pumps 77 Measurement & Meter Installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Vaives, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety	COSTS 5 115,349 648,340 648,340 648,340 61,169 61,169 7 13,902 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	COSTS	COSTS 	COSTS \$ 115,349 324,891 - - - - - - - - - - - - -
60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Wellhead 67 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 85 Communications / SCADA	COSTS 5 115,349 324,891 	COSTS	COSTS	COSTS \$ 115,349 

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC		
rmian Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
VP - Land & Legal	WH	JW JW	CRM
<b>.</b>	BG	50	
NOPERATING PARTNER A	PPROVAL:		
ON OPERATING PARTNER A	PPROVAL:	Working Interest (%):	Tax ID:
	PPROVAL:	Working Interest (%): Date:	Tax ID:

en a service service and a service requirement of the service service and the service of the project carding measure approach to a for the service and the service serv ees to pay 100 tely for Operator's well

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:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 173H	FIELD:	Teas; Bone Spring
OCATION:	Section 5, T20S-R34E	MD/TVD:	20,721' / 10,436'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
	Drill a horizontal TBSG well and complete with 4	4 stages. AFE includes drilling, completions, f	lowback and Initial
REMARKS:	install cost		

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
T Land / Legal / Regulatory \$	55,739		37,500	\$ 93,239
2 Location, Surveys & Damages	271,852	17,050	2,500	291,402
4 Freight / Transportation	44,945	41,312	25,000	111,257
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	<u> </u>	96,785
10 Directional Drilling, Surveys	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		<u> </u>	229,592
15 Completion Unit, Swab, CTU			15,000	15,000
16 Perforating, Wireline, Slickline	-	370,992		370,992
17 High Pressure Pump Truck	•	116,330	-	116,330
18 Completion Unit, Swab, CTU		138,232	-	138,232
20 Mud Circulation System	99,283		<u> </u>	99,283
21 Mud Logging	16,542		-	16,542
22 Logging / Formation Evaluation	6,860	7,869	-	14,729
23 Mud & Chemicais	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 & Disp	-	114,757	150,000	264,757
28 Mud / Wastewater Disposal	182,227	57,706		239,933
30 Kig Supervision / Engineering	114,369	125,904	21,667	261,941
32 Drig & Completion Overhead	9,836		-	9,836
35 Labor	144,719	65,575	101,667	311,961
54 Proppant 95 Insurance	13,834	1,184,522		1,184,522
97 Contingency		23,045	3,833	13,834
99 Plugging & Abandonment				20,878
	<u> </u>			
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 \$	115,349	-	•	5 115,349
61 Intermediate Casing	324,891		<u> </u>	324,891
62 Drilling Liner	-		<u> </u>	
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 l'ackers, 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	•			•
	•	•	116,667	116,667
				•
78 Gas Conditioning / Dehydration	·	•		
78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping		·	20,000	20,000
78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines		· · · · · · · · · · · · · · · · · · ·	· ·	
78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers	<u> </u>		108,333	108,333
78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment		· · · · · · · · · · · · · · · · · · ·	108,333 43,333	108,333
78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Flare Stack			108,333 43,333 16,667	108,333 43,333 16,667
78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Fiare Siack 84 Electrical / Grounding			108,333 43,333 16,667 50,000	108,333 43,333 16,667 50,000
78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Fiare Stack 84 Electrical / Grounding 85 Communications / SCADA			108,333 43,333 16,667 50,000 36,667	108,333 43,333 16,667 50,000 36,667
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 Fiare Stack 84 Electrical / Grounding 85 Communications / SCADA 86 Instrumentation / Safety			108,333 43,333 16,667 50,000	
78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers 82 Tank / Facility Containment 83 Fiare Stack 84 Electrical / Grounding 85 Communications / SCADA			108,333 43,333 16,667 50,000 36,667	108,333 43,333 16,667 50,000 36,667

#### PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC		
rmian Resources Operating, LL	.C APPROVAL:		
Co-CEO	wh	Co-CEO	VP - Operations
VP - Land & Legal	₩Н	JW VP - Geosciences	CRM
•	BG	50	
N OPERATING PARTNER A	PPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	
Signed by.			

e vouw on use are consumerance una any one or consume as engaged in the set accord of the project. These or the set is an approxed under the AFE any by delayed up to a yrea after the well has been completed. In executing that AFE the Participant agrees to pay its performance have a constant constant any approxed, however, and well of constant the terms of the applicable black on providing systematic, regulatory order or other agreement covering this well. Faritcipants abuil be corrend by and billed proportionately for Operator's well and general lability insurance unless participant provides operations a certificate evidencing in own insurance to an associat acceptable to the Operator by the date of spead.

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## 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:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 174H	FIELD:	Teas; Bone Spring
LOCATION:	Section 5, T20S-R34E		20,701' / 10,416'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
	Drill a horizontal TBSG well and com	plete with 44 stages. AFE includes drilling, completions, f	lowback and Initial Al
REMARKS:	install cost		

		COMPLETION	PRODUCTION	TOTAL
	DRILLING COSTS	COSTS	COSTS	COSTS
INTANGIBLE COSTS			37,500	5 93,239
T Land/ Legal/ Regulatory	271,852		2,500	291,402
2 Location, Surveys & Damages	44,945	41,312	25,000	111,257
4 Freight/Transportation 5 Rental - Surtace 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	<u> </u>	96,785
10 Directional Drilling, Surveys	405,348		<u> </u>	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		<u> </u>	229,592
15 Completion Unit, Swab, CTU	-		15,000	15,000
16 Perforating, Wireline, Slickline	<u> </u>	370,992	-	370,992
17 High Pressure Pump Truck	•	116,330	•	116,330
18 Completion Unit, Swab, CTU		138,232	•	99,283
20 Mud Circulation System	16,542	<u> </u>		16,542
21 Mud Logging 22 Logging / Formation Evaluation	6,860	7,869		14,729
23 Mud & Chemicals	341,453	413,503		764,956
24 Water	41,011	624,356		965,367
25 Stimulation		768,180	·	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	9,836		<u> </u>	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 & Abandonment	<u> </u>	•	<u> </u>	· · · ·
				0 122 104
TOTAL INTANGIBLES :	3,318,344	5,064,685	772,167	9,155,196
TOTAL INTANGIBLES :	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	DRILLING COSTS			TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing	DRILLING COSTS 115,349	COMPLETION	PRODUCTION	TOTAL COSTS \$ 115,349
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 115,349 324,891	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS 115,349 324,891 648,340	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 648,340
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner	DRILLING COSTS 115,349 324,891	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	DRILLING COSTS 3115,349 324,891 648,340	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         65 Weilhead	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	DRILLING COSTS 3115,349 324,891 648,340	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 648,340 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 65 Weilkead 67 Packers, Liner Hangers	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 115,349 324,891 648,340 140,000 107,169 33,902 45,833 126,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 Flow Lines	DRILLING COSTS 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 115,349 324,891 648,340 140,000 107,169 33,902 45,833 126,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor	DRILLING COSTS 3115,349 324,891 648,340 648,340 61,169 13,902 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 648,340 101,169 33,902 45,833 126,667 66,667
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 115,349 324,891 648,340 140,000 101,169 33,902 45,833 126,667 66,667 90,000 5,833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Downhole Pumps         77 Measurement & Meter Installation	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 115,349 324,891 648,340 140,000 101,169 33,902 45,833 126,667 66,667 90,000 5,833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Lasing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 Jownhole Pumps         77 Measurement & Meter Installation         78 Gas Conditioning / Dehydration         79 Interconnecting Facility Piping         80 Gathering / Bulk Lines	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS 5 115,349 324,891 648,340 140,000 101,169 33,902 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Kod 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 Vaives, Dumps, Controllers	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 648,340 140,000 101,169 33,902 45,833 126,667 66,667 90,000 5,833 - 61,667 - 116,667 - 20,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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 Qathering / Bulk Lines         81 Valves, Dumps, Controllers         82 Tank / Facility Containment         83 Flare Stack	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         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 Tank / Facility Containment         82 Tank / Facility Containment         83 Flare Stack         84 Electrical / Grounding	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 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         85 Communications / SCADA	DRILLING COSTS 5 115,349 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How Lines         71 Rod string         72 Artificial Lift Equipment         73 Compressor         74 Installation Costs         75 Surface Pumps         76 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         85 Communications / SCADA         86 Instrumentation / Satety	DRILLING COSTS 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 648,340 140,000 101,169 33,902 45,833 126,667 66,667 90,000 5,833 61,667 116,667 116,667 116,667 116,667 108,333 43,333 16,667 50,000 36,667 833
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing         66 Weilhead         67 Packers, Liner Hangers         68 Tanks         69 Production Vessels         70 How 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         85 Communications / SCADA	DRILLING COSTS 324,891 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 115,349 324,891 648,340 140,000 101,169 33,902 45,833 126,667 66,667 90,000 5,833 61,667 - - - - - - - - - - - - - - - - - -

#### PREPARED BY Permian Resources Operating, LLC:

	-		
Drilling Engineer:	PS	·····	
Completions Engineer:	ML		
Production Engineer.	DC		
ermian Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
VP - Land & Legal	WH	JW VP - Geosciences	CRM
	BG	<u></u>	
ON OPERATING PARTNER A	PPROVAL:		
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	

A reason manufactory and may not recommend as change on any spectre prime on head root on the project. Learning theorem approved and the Art Root of the project learning theorem approved and the Art Root of the project of the project of prime approximation of Art Root of the project of the project of prime approximate regulatory. The prime and well const under the terms of the applicable plant operation agreement, regulatory to the date of prime approximation of the project of a project of the prime approximation approximation of the prime approximation approximation of the prime a red by and billed prope int agrees to pay its atlonately for Operator's well control and gr

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 201H	FIELD:	Tonto; Wolfcamp
LOCATION:	Section 5, T20S-R34E	MD/TVD:	21,211' / 10,926'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY	COMPLETION DAYS:	19
REMARKS:	Drill a horizontal WCXY well and complete with AL install cost	44 stages. AFE includes drilling, completions,	flowback and Initial

	DRILLING	COMPLETION	PRODUCTION	TOTAL
	COSTS	COSTS	COSTS	COSTS
INTANGIBLE COSTS	59,066			\$ 96,566
TLand/Legal/Regulatory \$ 2 Location, Surveys & Damages		18,067	2,500	308,647
4 Freight / Transportation	47,628	43,778	25,000	116,406
5 Kental - Surface Equipment	124,327	215,417	105,000	444,744
6 Kental - Downhole Equipment	205,424	59,805		265,229
7 Kental - Living Quarters	48,083	54,480		102,562
10 Directional Drilling, Surveys	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 15 Completion Unit, Swab, CTU	243,296	· · · ·	15,000	15,000
16 Pertorating, Wireline, Slickline	<u> </u>	393,136		393,136
17 High Pressure Pump Truck		123,274	<u> </u>	123,274
18 Completion Unit, Swab, CI'U		146,484	<b>_</b>	146,484
20 Mud Circulation System	105,209		<u> </u>	105,209
21 Mud Logging	17,529	<u> </u>		17,529
22 Logging / Formation Evaluation	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 & Disp		121,606	150,000	271,606
28 Mud / Wastewater Disposal	193,104	61,151	21,667	2/6,283
30 Kig Supervision / Engineering 32 Drig & Completion Overhead	121,196	155,420		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	<u> </u>	24,421	3,833	28,254
99 Plugging & Abandonment	<u> </u>	· · · · ·		-
TOTAL INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585
	DRILLING	COMPLETION	PRODUCTION	TOTAL
TANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
60 Surface Casing \$	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	<u> </u>	·		
66 Wellhead	64,820	·	40,000	140,000
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	<u>-</u>			
71 Kod string			126,667	66,667
71 Kod string 72 Artificial Litt Equipment			126,667 66,667 90,000	90,000
71 Kod string 72 Artificial Litt Equipment 73 Compressor			126,667	90,000
71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs			126,667 66,667 90,000 5,833	66,66/ 90,000 5,833
71 Kod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps			126,667 66,667 90,000	90,000
71 Kod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps			126,667 66,667 90,000 5,833 61,667	66,66/ 90,000 5,833 61,667
71 Rod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps 77 Measurement & Meter Installation			126,667 66,667 90,000 5,833	66,66/ 90,000 5,833 - 61,66/
71 Kod string 72 Artificial Litt Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 76 Downhole Pumps			126,667 66,667 90,000 5,833 61,667	66,66/ 90,000 5,833 
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			126,667 66,667 90,000 5,833 61,667	66,66/ 90,000 5,833 
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			126,667 66,667 90,000 5,833 61,667	66,66/ 90,000 5,833 
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			126,667 66,667 90,000 5,833 61,667 116,667 20,000	66,66/ 90,000 5,833 61,667 116,667 20,000
71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 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			126,667 66,667 90,000 5,833 61,667 116,667 20,000	66,66/ 90,000 5,833 61,667 116,667 20,000 
71 Rod string 72 Artificial Lift Equipment 73 Compressor 74 Installation Costs 75 Surface Pumps 75 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			126,667 66,667 90,000 5,833 61,667 116,667 20,000 - - 20,000 - - - - - - - - - - - - - - - - -	66,66/ 90,000 5,833 61,667 116,667 20,000 - 108,333 43,333 16,667 50,000
71 Kod 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 85 Communications / SCADA			126,667 66,667 90,000 5,833 	66,66/ - 90,000 - - 61,66/ - - 116,66/ - - 20,000 - - - - - - - - - - - - - - - - -
71 Kod 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 85 Communications / SCADA 86 Instrumentation / Salety			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	66,66/ 90,000 5,833 - 61,667 - 20,000 - - - - - - - - - - - - - - - - -
71 Kod 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 85 Communications / SCADA			126,667 66,667 90,000 5,833 	90,000

#### PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC		
rmian Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
VP - Land & Legal	WH	JW VP - Geosciences	CRM
vi · Lanu di Legar	BG	so so	
ON OPERATING PARTNER A			
Company Name:		Working Interest (%):	Tax ID:
Signed by:		Date:	
Title:		Approval:	Yes No (mark one)

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ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

oker 5-8 Federal Com 202H	FIELD:	Tonto; Wolfcamp
ection 5, T20S-R34E	MD/TVD:	21,211' / 10,926'
ea County, New Mexico	LATERAL LENGTH:	10,000'
	DRILLING DAYS:	19.6
WCXY	COMPLETION DAYS:	19
	ection 5, T20S-R34E ea County, New Mexico VCXY	ection 5, T20S-R34E MD/TVD: ea County, New Mexico LATERAL LENGTH: DRILLING DAYS:

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTA NOUR E COSTS	COSTS	COSTS	COSTS	COSTS
INTANGIBLE COSTS				
T Land / Legal / Regulatory 5	59,066		37,500	\$ 96,566
2 Location, Surveys & Damages	288,079	18,067	2,500	308,647
4 Freight / Transportation	47,628	43,778	25,000	116,406
5 Kental - Surface Equipment	124,327	215,417	105,000	444,744
6 Kental - Downhole Equipment	205,424	59,805		265,229
7 Kental - Living Quarters	48,083	54,480		102,562
10 Directional Drilling, Surveys	429,543		<u> </u>	429,543
11 Drilling	753,820	<u> </u>		753,820
12 Drill Bits	100,176		<u> </u>	100,176
13 Fuel & Power	188,935	725,061		913,996
	243,296	725,001		243,296
14 Cementing & Float Equip	243,290	<u> </u>		
15 Completion Unit, Swab, CI'U		-	15,000	15,000
16 Periorating, Wireline, Slickline	•	393,136	-	393,136
17 High Pressure Pump Truck		123,274		123,274
18 Completion Unit, Swab, CTU		146,484		146,484
20 Mud Circulation System	105,209		-	105,209
21 Mud Logging	17,529			17,529
22 Logging / Formation Evaluation	7,270	8,339	·	15,609
23 Mud & Chemicais	361,835	438,185	10,000	810,020
24 Water	43,459	661,625	300,000	1,005,083
				814,033
25 Stimulation		814,033	-	
26 Stimulation Flowback & Disp	•	121,606	150,000	2/1,606
28 Mud / Wastewater Disposal	193,104	61,151	-	254,254
30 Kig Supervision / Engineering	121,196	133,420	21,667	276,283
32 Drig & Compleiion Overhead	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		<u> </u>	14,660
97 Contingency		24,421	3,833	28,254
99 Plugging & Abandonment	<u> </u>			
	3.516.419	5,367,000	772,167	9,655,585
TOTAL INTANGIBLES >	3,510,415	5,367,000	//2,10/	
	DRILLING	COMPLETION	PRODUCTION	TOTAL
	DRILLING	COMPLETION	PRODUCTION	
TANGIBLE COSTS	DRILLING COSTS		PRODUCTION COSTS	TOTAL COSTS
TANGIBLE COSTS 60 Surface Casing S	DRILLING COSTS 122,234	COMPLETION	PRODUCTION	TOTAL COSTS \$ 122,234
TANGIBLE COSTS 60 Surface Casing 5 61 Intermediate Casing	DRILLING COSTS	COMPLETION	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 122,234 344,284	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS 122,234	COMPLETION	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner	DRILLING COSTS 122,234 344,284	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039
TANGIBLE COSTS 60 Surface Casing 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	DRILLING COSTS 122,234 344,284 687,039	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner	DRILLING COSTS 122,234 344,284 687,039	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Froduction Casing         64 Production Liner         65 Tubing         66 Wellhead	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000
TANGIBLE COSTS         60 Surface Casing         61 Intermediate Casing         62 Drilling Liner         63 Production Casing         64 Production Liner         65 Tubing	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       S         64 Production Liner       S         65 Tubing       S         66 Weilhead       S         67 Packers, Liner Hangers       S         68 Tanks       S	DRILLING COSTS 344,284 687,039 687,039 64,820 14,732	COMPLETION COSTS 	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$	DRILLING COSTS 5 122,234 344,284 687,039 687,039 687,039 687,039 687,039 14,732	COMPLETION COSTS 	PRODUCTION COSTS 	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS 	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833
TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       7         70 Flow Lines       7         71 Kod string       1	DRILLING COSTS 344,284 687,039 687,039 64,820 14,732	COMPLETION COSTS 	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       S         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         69 Froduction Vessels       70         70 How Lines       71         71 Kod string       72         72 Artificial Litt Equipment       S	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Kod string       72         72 Artificial Litt Equipment       73         73 Compressor       70	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS 	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Kod string       72         72 Artificial Litt Equipment       73         73 Compressor       70	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 How Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833
TANGIBLE COSTS         60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Hod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833
TANGIBLE COSTS         60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       6         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       68         68 Tanks       6         69 Production Vessels       7         70 Flow Lines       7         71 Kod string       7         72 Artificial Lift Equipment       73         73 Compressor       7         74 Installation Costs       75         75 Surface Pumps       7         76 Downhole Pumps       77         77 Measurement & Meter Installation       1	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74 Installation Costs         75 Surface Pumps       76 Downhole Pumps         76 Downhole Pumps       77         75 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       74	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       6         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Las Conditioning / Dehydration       79         79 Interconnecting Facility Piping       74	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       S         64 Production Liner       S         65 Tubing       S         66 Weilhead       S         67 Packers, Liner Hangers       S         68 Tanks       S         69 Production Vessels       70 How Lines         71 Kod string       72 Artificial Lift Equipment         73 Compressor       74 Installation Costs         75 Surface Pumps       75 Downhole Pumps         76 Jownhole Pumps       77 Measurement & Meter Installation         78 Gas Conditioning / Dehydration       79 Interconnecting Facility Piping         80 Gathering / Bulk Lines       Surface Pumps	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       S         65 Tubing       66         66 Weilhead       S         67 Packers, Liner Hangers       S         68 Tanks       S         69 Production Vessels       70         70 Flow Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80 Gathering / Bulk Lines         81 Valves, Dumps, Controllers       81	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000 108,333
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       S         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         76 Los Conditioning / Dehydration       79         79 Litters       Kallers         80 Gathering / Bulk Lines       81         81 Valves, Dumps, Controllers       82         82 Tank / Facility Containment       10	DRILLING COSTS 7 122,234 344,284 687,039 687,039 687,039 64,820 14,732 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       6         64 Production Liner       S         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       S         69 Production Vessels       70         70 Flow Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       7         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Vaives, Dumps, Controllers       81         81 Vaives, Dumps, Controllers       82         82 Tank / Facility Containment       83         83 Flare Stack       8	DRILLING COSTS 122,234 344,284 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74 Installation Costs         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Valves, Dumps, Controllers       82         81 Tank / Facility Containment       83         82 Tank / Facility Containment       84         84 Electrical / Grounding       94	DRILLING COSTS 7 122,234 344,284 687,039 687,039 687,039 64,820 14,732 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667 116,667 20,000 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       6         64 Production Liner       S         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       S         69 Production Vessels       70         70 Flow Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       7         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Vaives, Dumps, Controllers       81         81 Vaives, Dumps, Controllers       82         82 Tank / Facility Containment       83         83 Flare Stack       8	DRILLING COSTS 7 122,234 344,284 687,039 687,039 687,039 64,820 14,732 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000 108,333 43,333 43,333 16,667
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74 Installation Costs         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Valves, Dumps, Controllers       82         81 Tank / Facility Containment       83         82 Tank / Facility Containment       84         84 Electrical / Grounding       94	DRILLING COSTS 7 122,234 344,284 687,039 687,039 687,039 64,820 14,732 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667 116,667 20,000 
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       6         64 Production Liner       6         65 Tubing       6         66 Weilhead       6         67 Packers, Liner Hangers       6         68 Tanks       6         69 Production Vessels       70         70 How Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       77         78 Cas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81 Valves, Dumps, Controllers         82 Tank / Facility Containment       83 Flare Stack         84 Electrical / Grounding       85 Communications / SCADA         86 Instrumentation / Satety       84	DRILLING COSTS 344,234 687,039 687,039 687,039 64,820 14,732 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667 116,667 20,000 - - 20,000 - - 108,333 43,333 15,667 50,000 36,667 833
TANGIBLE COSTS         60 Surface Casing       S         61 Intermediate Casing       S         62 Drilling Liner       S         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 How Lines       71         71 Rod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Case Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Gathering / Bulk Lines       81         81 Valves, Dumps, Controllers       82         82 Tank / Facility Containment       83         84 Electrical / Grounding       85         85 Communications / SCADA       82	DRILLING COSTS 344,234 687,039 687,039 64,820 14,732 	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS \$ 122,234 344,284 687,039 140,000 104,820 34,732 45,833 126,667 66,667 90,000 5,833 61,667 116,667 20,000 108,333 43,333 43,333 16,667

#### **PREPARED BY Permian Resources Operating, LLC:**

Drilling Engineer:	PS		
Completions Engineer:	ML		
Production Engineer:	DC .		
rmian Resources Operating, LL	C APPROVAL:		
Co-CEO		Co-CEO	VP - Operations
	WH	Jw	CRM
VP - Land & Legal		VP - Geosciences	
	BG	so	
ON OPERATING PARTNER A	PPROVAL:		
Company Name:	· ·	Working Interest (%):	Tax 1D:
Signed by:		Date:	

year after the well has been completed. In executing this AFE, the Participant agrees to pay its rement covering this well. Participants shall be covered by and billed proportionately for Operator's well Are are examine only and any not secondaries or change on any operate may or not note that cover our project i access and are of actual cools incurred, including, legal, curative, regulatory, brokerage and well cools under the terms of the applicable joint a libility insurance unless participant provides Operators a certificate evidencing its own insurance in an amount acceptable to be wider of other act

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

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Joker 5-8 Federal Com 203H	FIELD:	Tonto; Wolfcamp
OCATION:	Section 5, T20S-R34E	MD/TVD:	21,191' / 10,906'
OUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
ermian WI:		DRILLING DAYS:	19.6
EOLOGIC TARGET:	WCXY	COMPLETION DAYS:	19
	Drill a horizontal WCXY well and con	nplete with 44 stages. AFE includes drilling, completions,	flowback and Initia
EMARKS:	AL install cost		

NYANGER COSTS         COSTS <thcosts< th="">         COSTS</thcosts<>					
Disk         Disk <thdisk< th="">         Disk         Disk         <thd< td=""><td></td><td></td><td></td><td></td><td>TOTAL</td></thd<></thdisk<>					TOTAL
2 Lociton, Surveys & Linnages         288/07         18.067         2.500         2           4 kright / Tangportation         47.52         45.778         25.000         2           5 Rental - Survace Equipment         124.527         21.5417         10.5000         3           6 Rental - Lowing Quarters         46.000         34.000         3         3         3           1 Ditting         7         7.552.07         -	INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
Program         47.628         43.778         23.007           9 Kenda - Surace Equipment         123.227         115.417         105.0007         4           9 Kenda - Surace Equipment         205.427         99.805         - </td <td>T Land/ Legal/ Regulatory 5</td> <td>59,066</td> <td>-</td> <td>37,500</td> <td>5 96,566</td>	T Land/ Legal/ Regulatory 5	59,066	-	37,500	5 96,566
S Rental - Suntace Equipment         124,327         215,417         105,0007         4           Rental - Leving Quarters         44,005         57,800         -	2 Location, Surveys & Damages	288,079	18,067	2,500	308,647
is Normale Exploratin         205424         99805         - <td< td=""><td>4 Freight / Transportation</td><td>47,628</td><td>43,778</td><td>25,000</td><td>116,406</td></td<>	4 Freight / Transportation	47,628	43,778	25,000	116,406
Rental-Leing Quartes         40.05         51.00           10 Ubrectional Ubling, Surveys         422515         - <td>5 Rental - Surface Equipment</td> <td>124,327</td> <td>215,417</td> <td>105,000</td> <td>444,744</td>	5 Rental - Surface Equipment	124,327	215,417	105,000	444,744
10         Uterting         735287         -	6 Rental - Downhole Equipment	205,424	59,805	• •	265,229
11 Druiting         7538.00         -	7 Rental - Living Quarters	48,083	54,480		102,562
12 Drill Bis         100,7/6         -	10 Directional Drilling, Surveys	429,543			429,543
15 Hot & Prover         188,955         72,500	11 Drilling	753,820			753,820
14 Comenting & Float lequip         2422%         - <t< td=""><td>12 Urill Bits</td><td>100,176</td><td>*</td><td></td><td>100,176</td></t<>	12 Urill Bits	100,176	*		100,176
IS Completion Unit, Swab, CTU	13 Fuet & Power	188,935	725,061	-	913,996
is Performing, Wretine, Stakitine	14 Cementing & Float Equip	243,296			243,296
17 High Pressure Fung Funck         125.274         125.274           18 (Completion Unit, Swate, CTU         146.4847         1           21 Mud Lingging         177.207         8,3397         -           21 Mud Lingging (Formation Evaluation         77.207         8,3397         -           23 Mud & Chemicals         301.235         448(165         100007         10           24 Mud & Chemicals         301.235         448(165         100007         10           24 Mud A Wastewater Usposal         100.227         -         10         21.667         2           24 Mud Wastewater Usposal         100.427         -         -         -         -         -           25 Insurance         10.4260         -         -         -         -         -         -         -         -         -         -         -         -         - <td>15 Completion Unit, Swab, CTU</td> <td></td> <td></td> <td>15,000</td> <td>15,000</td>	15 Completion Unit, Swab, CTU			15,000	15,000
18 Completion Unit, Seat, CTU         -         146,281         -           21 Med Chordson System         105,209         -         -           22 Med Chordson System         105,209         -         -           23 Med Chordson System         72,207         8,339         -           23 Med Chordson System         301,835         438,185         100,000         12           23 Med Chordson System         301,835         438,185         100,000         12           24 Meter         43,4397         601,625         300,000         12           25 Minutation Flowback & Disp         121,095         150,000         12           26 Minutation Flowback & Disp ost         133,323         604,827         -           26 Minutation Flowback & Disp ost         133,323         604,827         -           27 Mitg Supervision Ventexed         10,425         604,827         -           28 Mitg Completion Overhead         10,425         604,827         -         1,425           29 Hoppant         -         1,253,700         772,167         9,           20 Contingency         -         2,421         3,835         -           29 Hoppant         -         2,424         -         -	16 Periorating, Wireline, Slickline	· ·	393,136		393,136
DMd Ctruitation System         105,209         -         -           21 Mod Logging         7,229         -         -           22 Logging / Formation Evaluation         7,229         -         -           24 Mod Lennicals         361355         48381185         100,000         P           24 Mode Chemicals         361,355         483,1185         100,000         P           25 Minutation Howback & Disp ost         -         117,190         113,242         -         -           28 Minutation Howback & Disp ost         113,119         11,3140         11,500         120,000         -           28 Minutation Howback & Disp ost         113,119         11,3140         12,020         -         -           29 Mitg Supervision / longineering         12,119         13,3242         21,667         -         -           21 Mode Applied Companit         -         1,255,227         -         1,2         -	17 High Pressure Pump Truck	· · ·	123,274	-	123,2/4
I Mud Logging         17,207         -           21 Logging / Formation Evaluation         7,270         8,3397         -           23 Mud & Chemicals         30,1835         438,185         10,0007         E           24 Water         43,8175         100,0007         E         E           24 Water         43,8175         100,0007         E           25 Situnation Flowback & Disp .         -         11,100         10,2007         E           26 Mind / Water Water Disposit         112,100         130,000         12         2           26 Mind / Water Water Disposit         112,110         13,2427         -         -           27 Urg & Completion Overhead         10,422         - <td>18 Completion Unit, Swab, CTU</td> <td>-</td> <td>146,484</td> <td><u> </u></td> <td>146,484</td>	18 Completion Unit, Swab, CTU	-	146,484	<u> </u>	146,484
22 Logging/ Formation by alcation         7.200         8.339	20 Mud Circulation System	105,209	·		105,209
22 Logging/ Formation by alcation         7.200         8.339	21 Mud Logging	17,529	· · · ·		17,529
23 Mode & Chemicals         391,235         432,185         10,000         R           24 Water         43,357         651,825         300,000         11,           25 Stimulation         -         121,895         190,000         12,           25 Stimulation         -         121,895         190,000         12,           26 Mind (Wastewater Ubiposal         195,100         -         12,         -           28 Mind (Wastewater Ubiposal         193,100         -         12,         -         -           28 Mind (Soperation Overhead         10,425         -		7,270	8,339		15,609
25       Stimulation       -       810003       -       -       121,605       190,000       -         26       Stimulation Flowback & Disp       -       121,605       190,000       -		361,835	438,185	10,000	810,020
25 Stimulation       -       81(10)3       -       12(16)6       190(00)         28 Mud / Wastewater Uisposal       195,104       61,151       -					1,005,083
B         Mud / Wastewater Ulsposal         193,108         61,151	25 Stimulation		814,033		814,033
28         Mail of Wastewater Disposal         193,108         61,151            20 kig Supervision / Engineering         121,196         133,420         21,667         23           30 kig Supervision / Engineering         10,425               31 Labor         13,338         69,489         101,667	26 Stimulation Flowback & Disp		121,606	150,000	271,606
30 Ng Supervision / Engineering         121,196         135,420         21,667           32 Drig & Completion Overhead         10,425         -         -           34 Labor         133,333         697,489         101,667         -           34 Proppant         -         1255,227         -         1,2           97 Contingency         -         -         -         -           99 Plugging & Abandonment         -         -         -         -           TOTAL INTANGIBLES >         3,516,419         5,367,000         772,167         9,           00 Surface Casing         S         122,24         -         -         -           01 Intermediate Casing         344,284         -         -         -         -           61 Intermediate Casing         687,039         -         -         -         -         -           63 Irodiction Casing         687,039         -		193,104	61,151		254,254
35 Labor       153,338       69,4897       101,667       23         36 Proppant       1,255,227       1,25       1,25         97 Contingercy       24,421       3,835       -         99 Plugging & Abandonment       -       -       -         TOTAL INTANGIBLES >       3,516,419       5,367,000       772,167       9,         TANGIBLE COSTS	30 Kig Supervision / Engineering	121,196	133,420	21,667	276,283
35 Labor       153,338       69,4897       101,667       23         36 Proppant       1,255,227       1,25       1,25         97 Contingercy       24,421       3,835       -         99 Plugging & Abandonment       -       -       -         TOTAL INTANGIBLES >       3,516,419       5,367,000       772,167       9,         TANGIBLE COSTS	32 Drlg & Completion Overhead	10,423	-		10,423
94 Proppant         1,255,227         1,255,227           95 Insurance         14,660         - <td>• •</td> <td>153,358</td> <td>69,489</td> <td>101,667</td> <td>324,514</td>	• •	153,358	69,489	101,667	324,514
95       Insurance       14,660       -	54 Proppant		1,255,227	<b>_</b>	1,255,227
99 Plugging & Abandonment         . <td>95 Insurance</td> <td>14,660</td> <td></td> <td></td> <td>14,660</td>	95 Insurance	14,660			14,660
99 Plugging & Abandonment         . <td>97 Contingency</td> <td></td> <td>24,421</td> <td>3,833</td> <td>28,254</td>	97 Contingency		24,421	3,833	28,254
TOTAL INTANGIBLES>         3,516,419         5,367,000         772,167         9,           TANGIBLE COSTS         COSTS         COMPLETION COSTS         PRODUCTION COSTS         TOTAL           60 Surface Casing         5         122,224         -         -         5         1           61 Intermediate Casing         34,284         - </td <td></td> <td>· · ·</td> <td>-</td> <td></td> <td></td>		· · ·	-		
DRILLING COSTS         COMPLETION COSTS         PRODUCTION COSTS         TOTA COSTS           60 Surface Casing         5         12,234         -         -         5         1           61 Internediate Casing         344,284         - <td></td> <td>3 516 419</td> <td>5 367 000</td> <td>772 167</td> <td>9,655,585</td>		3 516 419	5 367 000	772 167	9,655,585
TANGIBLE COSTS         COSTS <thcosts< th="">         COSTS</thcosts<>		5,510,117		//2,10/	
60       Stirface Casing       \$ 122,234       -       -       3         61       Intermediate Casing       - <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
61 Intermediate Casing       344,284       - <td< td=""><td></td><td></td><td></td><td></td><td>TOTAL</td></td<>					TOTAL
62 Drilling Liner	TANGIBLE COSTS				TOTAL COSTS
63 Production Casing       687,039       -		COSTS			
64 Production Liner       -	60 Surface Casing 5	COSTS 122,234	COSTS	COSTS	COSTS
65 Tubing       -       -       140,000       1         66 Weilhead       64,820       -       40,000       1         67 Packers, Liner Hangers       14/732       -       20,000       1         68 Tanks       -       -       45,833       -       -       20,000       1         68 Tanks       -       -       -       45,833       -       -       -       20,000       -       1       -	60 Surface Casing 5 61 Intermediate Casing	COSTS 122,234 344,284	COSTS	COSTS	COSTS
66 Weilhead       64,820       -       40,000       1         67 Packers, Liner Hangers       14,732       -       20,000       -         68 Tanks       -       -       45,833       -       -       -       125,667       1         69 Production Vessels       -       -       -       125,667       1       -       -       125,667       1         70 Flow Lines       - <td>60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner</td> <td>COSTS 122,234 344,284</td> <td>COSTS</td> <td>COSTS</td> <td>COSTS</td>	60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner	COSTS 122,234 344,284	COSTS	COSTS	COSTS
67 Packers, Liner Hangers       14/732       -       20,000         68 Tanks       -       -       45,833         69 Production Vessels       -       -       126,667       1         70 How Lines       -       -       66,667       -       -         71 Rod string       -       -       66,667       - <t< td=""><td>60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing</td><td>COSTS 122,234 344,284 687,039</td><td>COSTS</td><td>COSTS</td><td>COSTS \$ 122,234 344,284 -</td></t<>	60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing	COSTS 122,234 344,284 687,039	COSTS	COSTS	COSTS \$ 122,234 344,284 -
68 Tanks       -       -       45,833         69 Production Vessels       -       -       126,667       1         70 How Lines       -       -       66,667       -         71 Kod string       -       -       66,667       -         72 Artificial Lift Equipment       -       -       -       -         73 Compressor       -       -       90,000       -         74 Installation Costs       -       -       -       -         75 Surface Pumps       -       -       -       -         76 Gas Conditioning / Dehydration       -       -       -       -         79 Interconnecting Facility Piping       -       -       -       -       -         79 Interconnecting Facility Piping       -       -       -       -       -       -         80 Gathering / Bulk Lines       - <td>60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner</td> <td>COSTS 122,234 344,284 687,039</td> <td>COSTS</td> <td>COSTS</td> <td>COSTS \$ 122,234 344,284 -</td>	60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner	COSTS 122,234 344,284 687,039	COSTS	COSTS	COSTS \$ 122,234 344,284 -
69 Production Vessels       -       -       125,657       1         70 Flow Lines       -       -       66,667       -         71 Kod string       -       -       66,667       -         72 Artificial Lift Equipment       -       -       90,000       -         73 Compressor       -       -       90,000       -       -         74 Installation Costs       -       -       -       -       -         75 Surface Pumps       -       -       -       -       -       -         76 Loss Conditioning / Dehydration       - <td>60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing</td> <td>COSTS 122,234 344,284 687,039</td> <td>COSTS</td> <td>COSTS</td> <td>COSTS 122,234 344,284 </td>	60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing	COSTS 122,234 344,284 687,039	COSTS	COSTS	COSTS 122,234 344,284 
70 Flow Lines       -       -       -       66,667         71 Kod string       -       -       -       -       -         72 Artificial Lift Equipment       -       -       -       -       -       -         73 Compressor       - </td <td>60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 64 Production Liner 65 Tubing 66 Wellhead</td> <td>COSTS 122,234 344,284 687,039 687,039 64,820</td> <td>COSTS</td> <td>COSTS</td> <td>COSTS 122,234 344,284 </td>	60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 64 Production Liner 65 Tubing 66 Wellhead	COSTS 122,234 344,284 687,039 687,039 64,820	COSTS	COSTS	COSTS 122,234 344,284 
70 Flow Lines       -       -       66,667         71 Kod string       -       -       -         72 Artilicial Lift Equipment       -       -       90,000         73 Compressor       -       -       5,833         74 Installation Costs       -       -       -         75 Surface Pumps       -       -       -         76 Use Conditioning / Dehydration       -       -       -         77 Measurement & Meter Installation       -       -       -         77 Measurement & Meter Installation       -       -       -         77 Measurement & Meter Installation       -       -       -         78 Gas Conditioning / Dehydration       -       -       -         79 Interconnecting Facility Plping       -       -       -         80 Gathering / Bulk Lines       -       -       -       -         81 Valves, Dumps, Controllers       -       -       -       -       -         82 Flare Stack       -       -       -       -       -       -       -         83 Flare Stack       -       -       -       -       -       -       -       -       -       -       - <t< td=""><td>60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Trubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks</td><td>COSTS 122,234 344,284 687,039 687,039 64,820</td><td>COSTS</td><td>COSTS</td><td>COSTS \$ 122,234 344,284 - - - - - - - - - - - - -</td></t<>	60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Trubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks	COSTS 122,234 344,284 687,039 687,039 64,820	COSTS	COSTS	COSTS \$ 122,234 344,284 - - - - - - - - - - - - -
72 Artilicial Lift Equipment       -       -       90,000         73 Compressor       -       -       5,833         74 Installation Costs       -       -       -         75 Surface Pumps       -       -       -         76 Downhole Pumps       -       -       -         76 Downhole 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       -       -       -       -         85 Communications / SCADA       -       -       -       -         833       -       -       -       -       833         70 TAL TANGIBLES >       1,233,109       0 <td< td=""><td>60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Trubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks</td><td>COSTS 122,234 344,284 687,039 687,039 64,820</td><td>COSTS</td><td>COSTS</td><td>COSTS \$ 122,234 344,284 </td></td<>	60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Trubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks	COSTS 122,234 344,284 687,039 687,039 64,820	COSTS	COSTS	COSTS \$ 122,234 344,284 
73 Compressor       -       -       5,833         74 Installation Costs       -       -       -         75 Surface Pumps       -       -       -         76 Downhole Pumps       -       -       -         76 Downhole Pumps       -       -       -         76 Downhole Pumps       -       -       -         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       -       -       -       -       -         85 Communications / SCADA       -	60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels	COSTS 122,234 344,284 	COSTS	COSTS	COSTS \$ 122,234 344,284 
74 Installation Costs       -	60 Surface Casing       5         61 Intermediate Casing       62         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubling       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       64	COSTS 122,234 344,284 	COSTS	COSTS	COSTS \$ 122,234 344,284 
74 Installation Costs       -       -       -       -         75 Surface Pumps       -       -       61,667       -         76 Downhole Pumps       -       -       -       -       -         77 Measurement & Meter Installation       -       -       -       -       -         78 Gas Conditioning / Dehydration       -       -       -       -       -       -         79 Interconnecting Facility Piping       -       <	60 Surface Casing 5 61 Intermediate Casing 62 Drilling Liner 63 Production Casing 64 Production Liner 65 Tubing 66 Weilhead 67 Packers, Liner Hangers 68 Tanks 69 Production Vessels 70 Fiow Lines 71 Kod string 57 Kod string	COSTS 122,234 344,284 	COSTS	COSTS	COSTS \$ 122,234 344,284 
76 Downhole Pumps       -       -       -       -         77 Measurement & Meter Installation       -       -       116,667       1         78 Gas Conditioning / Dehydration       -       -       -       -       -         79 Interconnecting Facility Piping       -       -       -       -       -       -         80 Gathering / Bulk Lines       -	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tranks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Rod string       \$         72 Artificial Lift Equipment       \$	COSTS 122,234 344,284 	COSTS	COSTS	COSTS \$ 122,234 344,284 
76 Downhole Pumps       -       -       -       -         77 Measurement & Meter Installation       -       -       116,667       1         78 Gas Conditioning / Dehydration       -       -       -       -       -         79 Interconnecting Facility Piping       -       -       -       -       -       -         80 Gathering / Bulk Lines       -	60 Surface Casing       5         61 Intermediate Casing       62         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       71         71 Kod string       72         72 Artificial Litt Equipment       73         73 Compressor       71	COSTS 122,234 344,284 	COSTS	COSTS	COSTS \$ 122,234 344,284 
78 Gas Conditioning / Dehydration       -	60 Surface Casing       5         61 Intermediate Casing       62         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Kod string       72         72 Artificial Lift Equipment       73 Compressor         74 Installation Costs       74	COSTS 122,234 687,039 687,039 64,820 64,820 14,732	COSTS	COSTS	COSTS \$ 122,234 344,284 
78 Gas Conditioning / Dehydration       -	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Lasing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Litt Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$	COSTS 122,234 687,039 687,039 64,820 64,820 14,732	COSTS	COSTS	COSTS \$ 122,234 344,284 
79 Interconnecting Facility Piping       -       -       20,000         80 Gathering / Bulk Lines       -       -       -       -         81 Valves, Dumps, Controllers       -       -       -       -       -         82 Tank / Facility Containment       - </td <td>60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Lasing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$</td> <td>COSTS 122,234 687,039 687,039 64,820 64,820 14,732</td> <td>COSTS</td> <td>COSTS</td> <td>COSTS \$ 122,234 344,284 </td>	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Lasing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$	COSTS 122,234 687,039 687,039 64,820 64,820 14,732	COSTS	COSTS	COSTS \$ 122,234 344,284 
80 Gathering / Bulk Lines       -<	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement & Meter Installation       \$	COSTS 122,234 687,039 687,039 64,820 64,820 14,732	COSTS	COSTS	COSTS \$ 122,234 344,284 
82 Tank / Facility Containment     -     -     43,333       83 Flare Stack     -     -     16,667       84 Electrical / Grounding     -     -     50,000       85 Communications / SCADA     -     -     36,667       86 Instrumentation / Satety     -     -     833       TOTAL TANGIBLES > 1,233,109     0     989,167     2,25	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         77 Measurement & Meter Installation       \$         78 Gas Conditioning / Dehydration       \$	COSTS 122,234 687,039 687,039 64,820 64,820 14,732	COSTS	COSTS	COSTS \$ 122,234 344,284 
82 Tank / Facility Containment       -       -       43,333         83 Flare Stack       -       -       16,667         84 Electrical / Grounding       -       -       50,000         85 Communications / SCADA       -       -       36,667         86 Instrumentation / Satety       -       -       833         TOTAL TANGIBLES >       1,233,109       0       989,167       2,2	60 Surface Casing       5         61 Intermediate Casing       62         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubling       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         79 Interconnecting Facility Piping       79	COSTS 122,234 687,039 687,039 64,820 64,820 14,732	COSTS	COSTS	COSTS \$ 122,234 
83 Flare Slack     -     -     16,667       84 Electrical / Grounding     -     -     50,000       85 Communications / SCADA     -     -     36,667       86 Instrumentation / Satety     -     -     38,33       TOTAL TANGIBLES >     1,233,109     0     989,167     2,33	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Laing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Production Vessels       \$         70 Flow Lines       \$         71 Kod 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       \$	COSTS 122,234 687,039 687,039 64,820 64,820 14,732	COSTS	COSTS	COSTS \$ 122,234 344,284 
84 Electrical / Grounding         -         -         50,000           85 Communications / SCADA         -         -         36,667           86 Instrumentation / Satety         -         -         833           TOTAL TANGIBLES >         1,233,109         0         989,167         2,	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Laing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Costs       \$         75 Surface Pumps       \$         76 Downhole Pumps       \$         78 Gas Conditioning / Dehydration       \$         79 Interconnecting Facility Piping       \$         80 Gathering / Bulk Lines       \$         81 Valves, Dumps, Controllers       \$	COSTS 122,234 687,039 687,039 64,820 64,820 14,732	COSTS	COSTS 	COSTS \$ 122,234 344,284 
85 Communications / SCADA 86 Instrumentation / Satety TOTAL TANGIBLES > 1,233,109 0 989,167 2,	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Production Vessels       \$         70 Flow Lines       \$         71 Kod 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       \$	COSTS 122,234 687,039 687,039 64,820 64,820 14,732	COSTS	COSTS	COSTS \$ 122,234 344,284 
86 Instrumentation / Satety         833           TOTAL TANGIBLES >         1,233,109         0         989,167         2,2	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       7         70 How 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 Valves, Dumps, Controllers       \$         81 Valves, Dumps, Controllers       \$         82 Tank / Facility Containment       \$         83 Flare Stack       \$	COSTS	COSTS	COSTS 	COSTS \$ 122,234 
TOTAL TANGIBLES > 1,233,109 0 989,167 2,	60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       63         63 Production Casing       64         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Packers, Liner Hangers       68         68 Tanks       69         69 Production Vessels       70         70 Flow Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73         73 Compressor       74         74 Installation Costs       75         75 Surface Pumps       76         76 Downhole Pumps       77         77 Measurement & Meter Installation       78         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80         80 Valves, Dumps, Controllers       82         81 Valves, Dumps, Contorlers       82         82 Tank / Facility Containment       83         84 Electrical / Grounding       10	COSTS	COSTS	COSTS	COSTS \$ 122,234 
	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Laing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artiticial 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       \$         82 Tank / Facility Containment       \$         83 Flare Stack       \$         84 Electrical / Grounding       \$         85 Communications / SCADA       \$	COSTS	COSTS	COSTS 	COSTS \$ 122,234 344,284 
101AL C0515 / 4,/47,525 5,567,000 1,761,334 11,	60 Surface Casing       5         61 Intermediate Casing       6         62 Drilling Liner       63 Production Lasing         64 Production Liner       65         65 Tubing       66         66 Weilhead       67         67 Production Vessels       70         70 Flow Lines       71         71 Kod string       72         72 Artificial Lift Equipment       73 Compressor         74 Installation Costs       75         75 Surface Pumps       76 Downhole Pumps         76 Jownhole Pumps       77 Measurement & Meter Installation         78 Gas Conditioning / Dehydration       79         79 Interconnecting Facility Piping       80 Gathering / Bulk Lines         81 Valves, Dumps, Controllers       82 Tank / Facility Containment         83 Flare Stack       84 Electrical / Grounding         85 Communications / SCADA       86 Instrumentation / Satety	COSTS	COSTS	COSTS 	COSTS \$ 122,234 344,284 
	60 Surface Casing       \$         61 Intermediate Casing       \$         62 Drilling Liner       \$         63 Production Casing       \$         64 Production Liner       \$         65 Tubing       \$         66 Weilhead       \$         67 Packers, Liner Hangers       \$         68 Tanks       \$         69 Production Vessels       \$         70 Flow Lines       \$         71 Kod string       \$         72 Artificial Lift Equipment       \$         73 Compressor       \$         74 Installation Cosits       \$         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       \$         85 Communications / SCADA       \$         86 Instrumentation / Satety       \$	COSTS 122,234 344,284 - - - - - - - - - - - - -	COSTS	COSTS 	COSTS \$ 122,234 344,284 

## PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS			
Completions Engineer. Production Engineer.	ML DC			
ermian Resources Operating, LL	C APPROVAL:		···· ·······	
Co-CEO	· · · · · ·	Co-CEO	VP - Operations	
VP - Land & Legal	WH BC	JW VP - Geosciences 50		CRM
ON OPERATING PARTNER A	PPROVAL:			
Company Name:		Working Interest (%):	Tax ID:	
Signed by:		Date:		
Title:		Approval:	Yes 🗖 N	o (mark one)

proportionals share of actual costs incurred, including, logid, curstive, regulatory, invitance 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 an costs of and graved labbility towarance axists participant provides Operator a certificate evidencing in own insurance in an amount acceptable to the Operator by the date of speci.

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

2.17.2023	AFE NO.:	1
Joker 5-8 Federal Com 204H	FIELD:	Tonto; Wolfcamp
Section 5, T20S-R34E	MD/TVD:	21,181' / 10,896'
Lea County, New Mexico	LATERAL LENGTH:	10,000'
	DRILLING DAYS:	19.6
WCXY	COMPLETION DAYS:	19
	Joker 5-8 Federal Com 204H Section 5, T20S-R34E Lea County, New Mexico	Joker 5-8 Federal Com 204H     FIELD:       Section 5, T20S-R34E     MD/TVD:       Lea County, New Mexico     LATERAL LENGTH:       DRILLING DAYS:     DRILLING DAYS:

	DRILLING	COMPLETION	PRODUCTION	TOTAL
INTANGIBLE COSTS	COSTS	COSTS	COSTS	COSTS
T Land/ Legal/ Kegulatory	\$ 59,066		37,500	5 96,566
2 Location, Surveys & Damages	288,079	18,067	2,500	308,647
4 Freight / Transportation	47,628	43,778	25,000	116,406
5 Kental - Surface Equipment	124,327	215,417	105,000	444,744
6 Kental - Downhole Equipment	205,424	59,805		265,229
7 Kental - Living Quarters	48,083	54,480	· · · ·	102,562
10 Directional Drilling, Surveys	429,543			429,543
11 Drilling	753,820		<u>_</u> _	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, CIU			15,000	15,000
16 Pertorating, Wireline, Slickline	<u> </u>	393,136		393,136
17 High Pressure Pump Truck		123,274	<u> </u>	123,274
18 Completion Unit, Swab, CI'U		146,484		146,484
20 Mud Circulation System	105,209			105,209
21 Mud Logging	17,529	·····		17,529
22 Logging / Formation Evaluation	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	500,000	814.033
26 Stimulation Flowback & Disp	-	121,606	150,000	2/1,606
28 Mud / Wastewater Disposal		61,151	150,000	254,254
30 Rig Supervision / Engineering	193,104	133,420	21,667	276,283
32 Drig & Completion Overhead	10,423		21,007	10,423
35 Labor	153,358	69,489	101.667	324,514
	133,338		101,007	1,255,227
54 Proppant		1,255,227		1,230,227
95 Insurance 97 Contingency	14,000			
		24,421	3,833	
99 Plugging & Abandonment			<b>_</b>	
TOTAL INTANGIBLES	i > 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	<u>.</u>	······	5 122,234
61 Intermediate Casing	344,284	<u>-</u>		344,284
62 Drilling Liner				
63 Production Casing	687,039			687,039
64 Production Liner				
65 Tubing			140,000	140,000
65 Wellhead	64,820		40,000	104,820
67 Fackers, Liner Hangers	14,732		20,000	34,732
68 Tanks	14,752		45,833	45,833
69 Production Vessels	·	·	126,667	126,667
70 Flow Lines		<u> </u>	66,667	66,667
71 Kod string			00,007	
72 Artificial Litt Equipment			90,000	90,000
72 Anticial Eat Equipment 73 Compressor			5,833	5,833
73 Compressor 74 Installation Costs	·	<u> </u>	3,033	5,035
			61,667	61,667
	•		61,007	01,00/
-				
76 Downhole Pumps			-	
76 Downhole Pumps 77 Measurement & Meter installation			116,667	116,667
76 Downhole Pumps 77 Measurement & Meter installation 78 Gas Conditioning / Dehydration			•	·····
76 Downhole Pumps 77 Measurement & Meter installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping			116,667	20,000
76 Downhole Pumps 77 Measurement & Meter installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines			20,000	20,000
76 Downhole Pumps 77 Measurement & Meter installation 78 Gas Conditioning / Dehydration 79 Interconnecting Facility Piping 80 Gathering / Bulk Lines 81 Valves, Dumps, Controllers	· · · · · · · · · · · · · · · · · · ·		20,000	20,000
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			20,000	20,000
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			20,000 108,333 43,333 16,667	20,000 108,333 43,333 16,667
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 Slack 84 Electrical / Grounding			20,000 108,333 43,333 16,667 50,000	20,000 108,333 43,333 16,667 50,000
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 85 Communications / SCADA			20,000 108,333 43,333 16,667 50,000 36,667	20,000 108,333 43,333 16,667 50,000 36,667
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 85 Communications / SCADA			20,000 108,333 43,333 16,667 50,000	20,000 108,333 43,333 16,667 50,000
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			20,000 108,333 43,333 16,667 50,000 36,667	20,000 108,333 43,333 16,667 50,000 36,667

## PREPARED BY Permian Resources Operating, LLC:

	and the second se			
Drilling Engineer:	PS			
Completions Engineer:	ML			
Production Engineer:	DC			
1 Resources Operating, LL	C APPROVAL:			
Co-CEO		Co-CEO	VP - Operations	
	WH	jw		CRM
VP - Land & Legal	BG	VP - Geosciences		
PERATING PARTNER A	PPROVAL		ar	
Company Name:		Working Interest (%):	Tax ID:	
Signed by:		Date:		
· · · _				

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## **TAB 3**

### Case No. 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<sup>rd</sup> bone Spring Isopach Map
- Exhibit B-7: Structural Cross Section
- Exhibit B-8: 3rd Bone Spring Producers vs. all Wolfcamp Producers
- Exhibit B-9: All 3<sup>rd</sup> Bone Spring and Wolfcamp Producers
- Exhibit B-10: Comparing 3<sup>rd</sup> Sand to Wolfcamp Reservoir (SoPhiH)
- Exhibit B-11: 2<sup>nd</sup> Bone Spring Structure Map
- Exhibit B-12: 2<sup>nd</sup> Bone Spring Sand Isopach
- Exhibit B-13: 2<sup>nd</sup> Bone Spring Sand Cross Section
- Exhibit B-14: 2<sup>nd</sup> Bone Spring Sand vs. 3<sup>rd</sup> Bone Spring Carbonate Producers
- Exhibit B-15: PhilH L 2<sup>nd</sup> Sand vs. 3<sup>rd</sup> Carbonate
- Exhibit B-16: 1st Bone Spring Sand Structure
- Exhibit B-17: 1<sup>st</sup> Bone Spring Sand Isopach
- Exhibit B-18: 1st 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

## 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 Cimarex Energy Co. ("Cimarex"), and 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 abovereferenced compulsory pooling application pursuant to 19.15.4.12.A(1) NMAC.



- 4. I have testified previously by affidavit before the Oil Conservation Division ("Division") as an expert petroleum geologist; my credentials have been made a matter of record, and I have been qualified as an expert by the Division.
  - a. I have a Bachelor of Science Degree in Geophysical Engineering from Colorado School of Mines, and a Master of Science Degree in Geophysics from Colorado School of Mines.
  - b. I have worked on New Mexico Oil and Gas matters since July 2018.

5. Cimarex is an established operator in the Quail Ridge area, with 35 horizontal wells drilled within the basal 3<sup>rd</sup> Bone Spring Sand starting in 2010 through 2022. In most of the 3<sup>rd</sup> Sand developments, Triple Combo logs were taken to further the reservoir characterization of both the Bone Spring and Wolfcamp formations. From these extensive mapping efforts along with offset production analyses, Cimarex has verified that the 3<sup>rd</sup> Sand is the most economic target at the Mighty Pheasant and Loosey Goosey proposed development.

6. **Exhibit B-1** shows a map made by Jens-Erik Lund Snee and Mark D. Zoback from Stanford University, which depicts the maximum horizontal stress direction throughout the Delaware and Midland Basins. The map on the right is a zoomed in portion of the regional map (red outline), where the blue lines represent the digitized version of the same stress directions. Based on the regional trend observed by Lund Snee and Zoback, the estimated stress direction at Mighty Pheasant and Loosey Goosey is approximately N70E, which means the favorable well orientation is north-south instead of east-west. Both Cimarex and Permian Resources plan to drill in the north-south orientation.

7. **Exhibit B-2** is a table summarizing the permit status for the Mighty Pheasant and Loosey Goosey developments. Highlighted in yellow are the wells that Cimarex has submitted to the BLM,

and each well has "AFMSS-Accepted" noted to show that these wells are high enough on Cimarex's priority list for the BLM to be currently working on them. Ten permits were submitted between February and March 2022 for a 3<sup>rd</sup> Bone Spring Sand development (tier 1 target in area) plus a 1<sup>st</sup> Sand or 2<sup>nd</sup> Sand well to de-risk the sections in more highly channelized reservoirs.

8. **Exhibit B-3** is a gun barrel view of Cimarex's development plan across both Mighty Pheasant (Sections 5 & 8) and Loosey Goosey (Sections 4 & 9). Cimarex plans to develop the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Bone Spring Sands at 4 wells per section spacing. The 1<sup>st</sup> Sand target is the high porosity, clean sand in the upper half of the interval. The 2<sup>nd</sup> Sand target is the basal siltstone/sandstone interval, and the 3<sup>rd</sup> Sand target is the basal clean sand lobe, which is also the established target across several townships.

9. Exhibit B-4 is a gun barrel view of Cimarex's plan (left side) versus Permian Resources (right side). Permian Resources plans to include 3 additional landing zones in their full section development: the Upper 2<sup>nd</sup> Bone Spring Sand, the 3<sup>rd</sup> Carbonate, and the Wolfcamp XY Sands. This is a risky development scenario, because the 3<sup>rd</sup> Sand & Wolfcamop XY vertical spacing is about 95 ft, which is not considered a true stagger and subsequently treated as a flat development. Therefore, Permian Resource plans to develop the 3<sup>rd</sup> Sand & Wolfcamp XY combined reservoir tank at 8 wells per section, which is over-spaced for this area, where almost every operator has developed the 3<sup>rd</sup> Sand with 4 wells per section. Permian Resources' 3<sup>rd</sup> Carbonate target is approximately 135 ft vertical distance from their proposed Lower 2<sup>nd</sup> Sand target, which is also very tight vertical spacing when there is no frac baffle in between (no tight carbonates). The Lower 2<sup>nd</sup> Sand is the established target across several townships, while there has only been one well landed in the 3<sup>rd</sup> Carbonate (with no 2<sup>nd</sup> Sand above). The Upper 2<sup>nd</sup> Sand is a target that Cimarex has investigated and determined to be too risky to drill before collecting data.

10. **Exhibit B-5** is a structure map (Subsea TVD) of the top of the Wolfcamp, which is about 50 ft below the 3<sup>rd</sup> Bone Spring Sand Target, as noted by the type log located at the blue star. The contour interval is 100 ft, well control points are displayed, and structure is dipping to the south. From the first take point to the last take point of the Mighty Pheasant and Loosey Goosey wells (located within black and red box), there is approximately 100 ft of relief.

11. **Exhibit B-6** is an isopach map of the 3<sup>rd</sup> Bone Spring Sand, as noted by the type log located at the blue star. The contour interval is 20 ft, well control points are displayed, and the 3<sup>rd</sup> Sand is consistently between 260-280 ft at the Mighty Pheasant and Loosey Goosey development (located within black and red box).

12. Exhibit B-7 is a structural cross section from west to east on the northern end of the Mighty Pheasant and Loosey Goosey sections. Gamma Ray is displayed in the first log track, on a scale from 0 to 150 API, shaded to the right with blue representing low Gamma Ray, brown representing high Gamma Ray, and yellow in between. The second track is deep resistivity (RDEEP), on a scale from 2 to 2000 Ohms, with RDEEP less than 20 Ohms shaded solid red to represent the Bone Spring Sand reservoirs. The third track is the photoelectric log (PEF) which is shaded blue and purple for higher values and yellow for lower values. The fourth track is neutron and density porosity (NPHI and DPHI). NPHI is shown in red, while DPHI is blue, and when DPHI crosses to the left of NPHI, the space in between the two curves is shaded yellow. Otherwise, it is shaded grey. The basal 3<sup>rd</sup> Sand target is often characterized by the yellow crossover shading in the NPHI and DPHI track, Gamma Ray around 50-70 API, and RDEEP below 20 Ohms. Cimarex's target is the standard basal 3<sup>rd</sup> Bone Spring Sand target across the area (a few townships), which is shown as a green stick in all three logs. Frac baffles are shown in red and white striped boxes within the depth track, and there are only a couple frac baffles present within the 3<sup>rd</sup> Bone Spring Carbonate.

These baffles are characterized by low Gamma Ray <50 API, indicating carbonate, along with high resistivity, and low neutron and density porosities (0-4%). There are no indications of any major geomechanical changes/frac baffles in between Cimarex's 3<sup>rd</sup> Sand target and Permian Resources' Wolfcamp Sands target, indicating that these two intervals are most likely one shared reservoir tank.

13. **Exhibit B-8** is showing a map with all the producing 3<sup>rd</sup> Bone Spring Sand wells across almost three townships (left), versus all of the Wolfcamp producers across the area (right). This Exhibit highlights the fact that the 3<sup>rd</sup> Sand is the established target in the area surrounding the Mighty Pheasant and Loosey Goosey sections (black and red box), while there have only been two Wolfcamp developments plus some parent well tests. Cimarex is also an established operator in this area, with 36 wells drilled including a Wolfcamp test.

14. **Exhibit B-9** shows all of the 3<sup>rd</sup> Bone Spring Sand producing wells with blue diamonds, and all of the Wolfcamp Sands producing wells with orange diamonds. Mighty Pheasant and Loosey Goosey are located within the black and red box which lies among almost all 3<sup>rd</sup> Sand wells. There are a couple of Wolfcamp development tests two miles to the south, but the majority of Wolfcamp and 3<sup>rd</sup> Sand co-development occurs 3 townships to the south, where the total 3<sup>rd</sup> Sand and Wolfcamp Sands reservoir tank is much thicker and deeper into the basin.

15. **Exhibit B-10** shows the PhiH (porosity\*height) of the 3<sup>rd</sup> Bone Spring Sand (left) versus the Wolfcamp X and Y Sands (right) as shown by the type log located at the blue star. PhiH is one of the most common reservoir maps to identify ideal target areas within the Bone Spring Sands because it represents total pore space, and more pore space means more room for hydrocarbon storage. Both maps have the same color scale, with a contour interval of 2 pore-ft. The Mighty Pheasant and Loosey Goosey sections are shown in the black and red box, and the well control

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

16. **Exhibit B-11** is a structure map (Subsea TVD) of the top of the 3<sup>rd</sup> Bone Spring Carbonate, which is about 40 ft below the 2<sup>nd</sup> Bone Spring Sand Target, as noted by the type log located at the blue star. The contour interval is 100 ft, well control points are displayed, and structure is dipping to the south. From the first take point to the last take point of the Mighty Pheasant and Loosey Goosey wells (located within black and red box), there is approximately 200 ft of relief on the eastern edge of the proposed development, and about 100 ft of relief on the western edge.

17. **Exhibit B-12** is an isopach map of the  $2^{nd}$  Bone Spring Sand, as noted by the type log located at the blue star. The contour interval is 20 ft, well control points are displayed, and the  $2^{nd}$  Sand is consistently between 420-440 ft at the Mighty Pheasant and Loosey Goosey development (located within black and red box).

18. Exhibit B-13 is a structural cross section from west to east on the northern end of the Mighty Pheasant and Loosey Goosey sections. Gamma Ray is displayed in the first log track, on a scale from 0 to 150 API, shaded to the right with blue representing low Gamma Ray, brown representing high Gamma Ray, and yellow in between. The second track is deep resistivity

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

19. Exhibit B-14 is showing a map with all the producing Lower  $2^{nd}$  Bone Spring Sand wells across almost nine townships (left), versus all of the  $3^{rd}$  Bone Spring Carbonate producers across the area (right). This Exhibit highlights the fact that the Lower  $2^{nd}$  Sand is the established target in the area surrounding the Mighty Pheasant and Loosey Goosey sections (black and red box), while there has only been one well landed in the  $3^{rd}$  Carbonate, with no  $2^{nd}$  Sand development above.

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

21. **Exhibit B-16** is a structure map (Subsea TVD) of the top of the 1<sup>st</sup> Bone Spring Sand, which is about 40 ft above the 1<sup>st</sup> Bone Spring Sand Target, as noted by the type log located at the blue star. The contour interval is 100 ft, well control points are displayed, and structure is dipping to the south. From the first take point to the last take point of the Mighty Pheasant and Loosey Goosey wells (located within black and red box), there is approximately 85 ft of relief.

22. Exhibit B-17 is an isopach map of the 1<sup>st</sup> Bone Spring Sand, as noted by the type log located at the blue star. The contour interval is 20 ft, well control points are displayed, and the 1<sup>st</sup> Sand is consistently between 280-300 ft at the Mighty Pheasant and Loosey Goosey development (located within black and red box).

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

#### WOLFCAMP STATEMENT

## <u>(See Cimarex's Motion for an Order to Prohibit the Drilling of Wells in the Upper</u> <u>Wolfcamp in Order to Protect Correlative Rights and Optimize Production of the Subject</u> <u>Lands</u>, filed as an Exhibit in Cases 23594 – 23597 and Cases 23598 - 23601)

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

25. **Exhibit B-20** is an isopach map of the Wolfcamp X and Y Sands, as noted by the type log located at the blue star. The contour interval is 20 ft, well control points are displayed, and the

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

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

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

28. The granting of this Application is in the interests of conservation, the prevention of waste, and the protection of correlative rights.

29. 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

7/11/2023

Date Signed

# Geology Exhibits



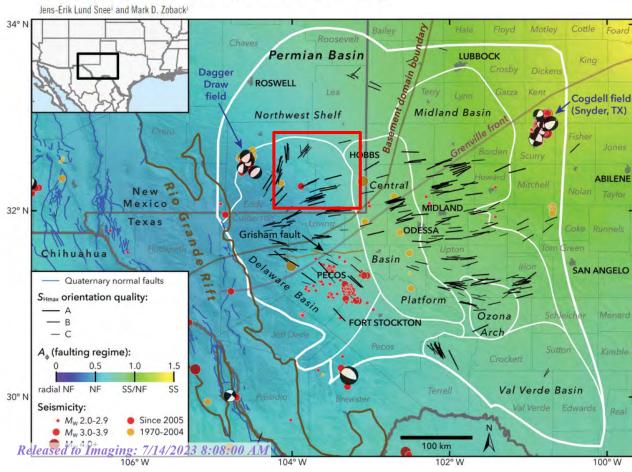
## **Locator Map & Stress Direction**

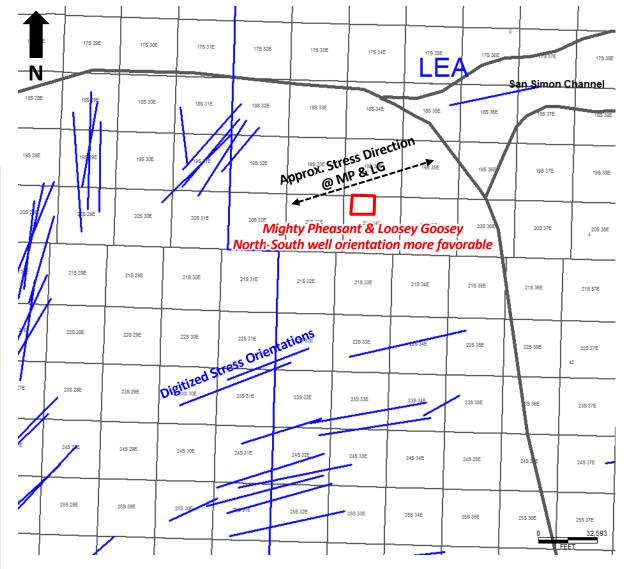
Coterra plans to develop Sections 4-9 and 5-8 with 2-mile laterals

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

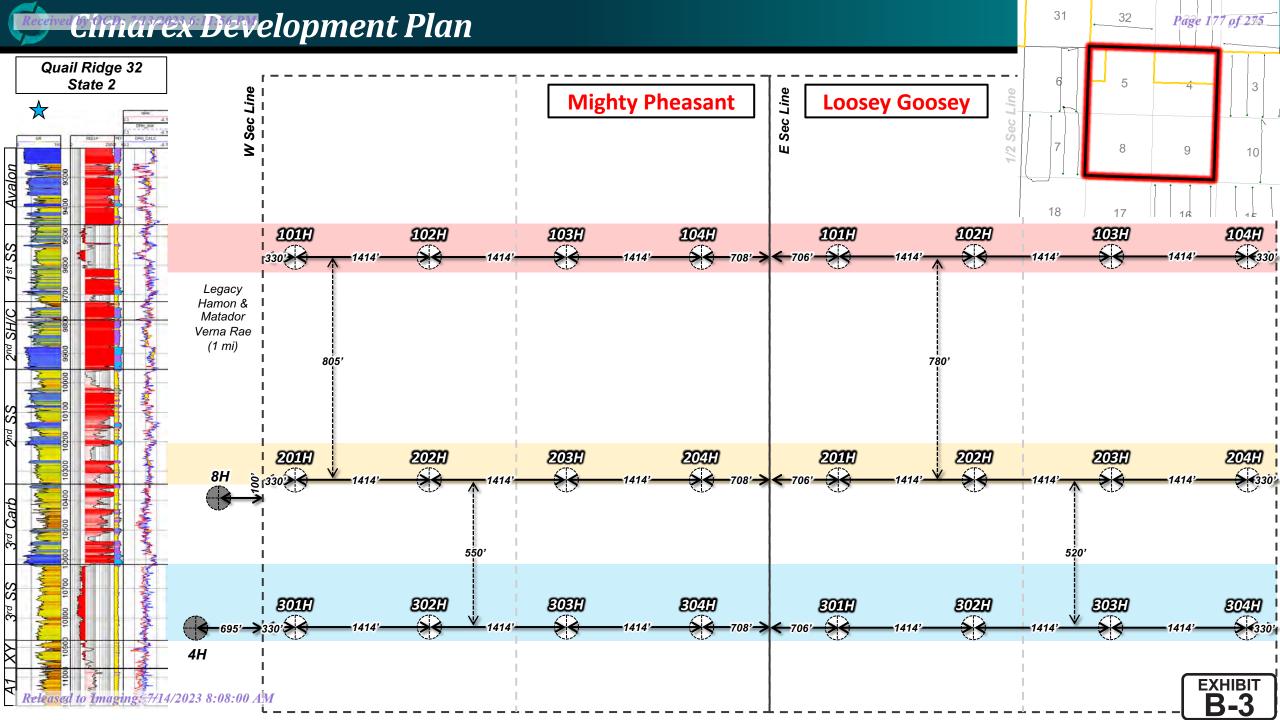


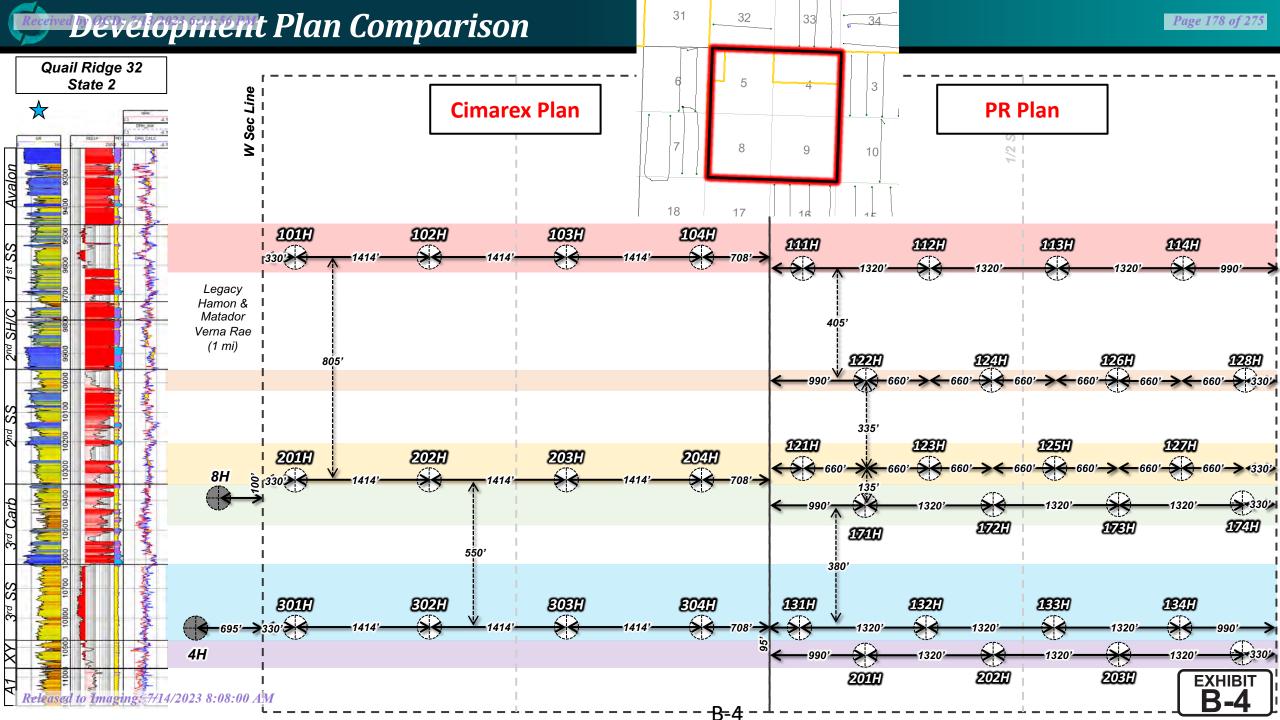




	State	County	Well Name & Number	Permit Status	Permit Submission Due Date	Permit Submitted Date	10-Day Letter Date	10-Day Letter Due
	NM	Lea	Mighty Pheasant 5-8 Fed Com 101H	To be permitted				
	NM	Lea	Mighty Pheasant 5-8 Fed Com 102H	To be permitted				
	NM	Lea	Mighty Pheasant 5-8 Fed Com 103H	To be 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				
Г	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				
Submitted permits for 3 <sup>rd</sup> Sand	NM	Lea	Loosey Goosey 4-9 Fed Com 102H	To be permitted				
development & 1 <sup>st</sup> Sand/2 <sup>nd</sup>	NM	Lea	Loosey Goosey 4-9 Fed Com 103H	To be permitted				
Sand test	NM	Lea	Loosey Goosey 4-9 Fed Com 104H	To be permitted				
BLM is currently working on	NM	Lea	Loosey Goosey 4-9 Fed Com 201H	To be permitted				
these	NM	Lea	Loosey Goosey 4-9 Fed Com 202H	To be permitted				
	NM	Lea	Loosey Goosey 4-9 Fed Com 203H	To be permitted				
Γ	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		
	NM	Lea	Loosey Goosey 4-9 Fed Com 304H	AFMSS-Accepted	3/15/2022	3/15/2022		



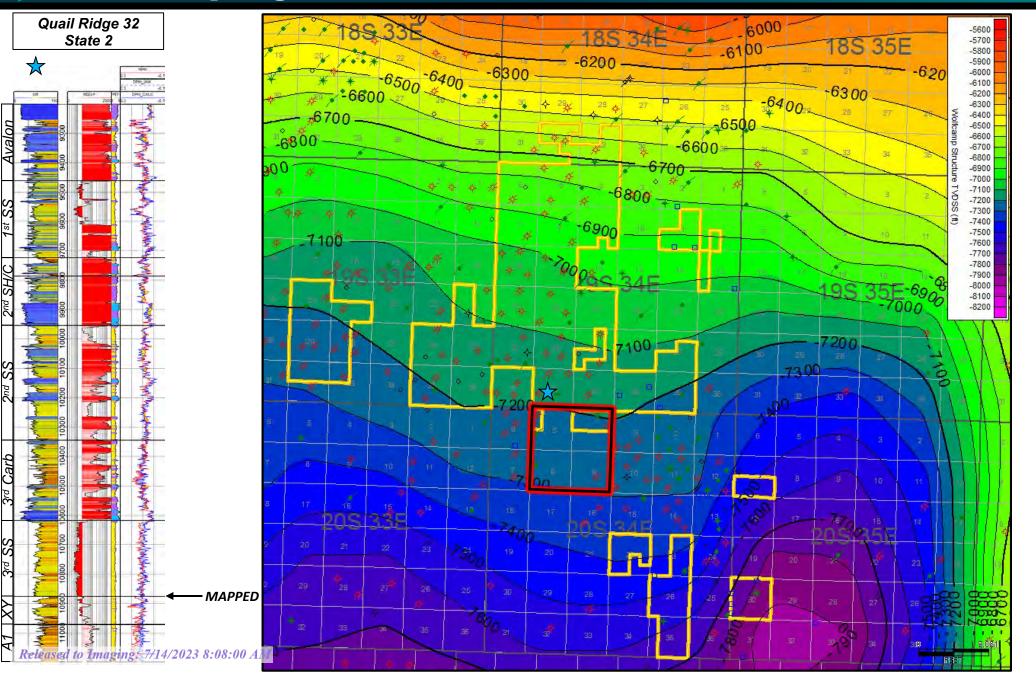




# 3<sup>rd</sup> Bone Spring Sand

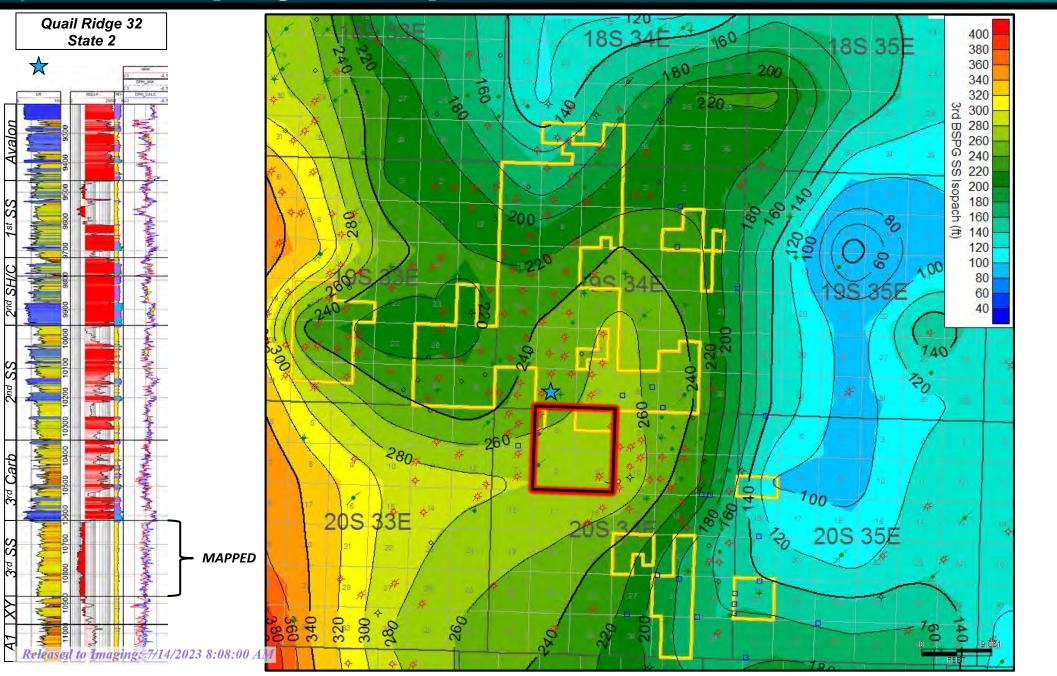


# <u>3rd Bome Spring Sand Structure</u>



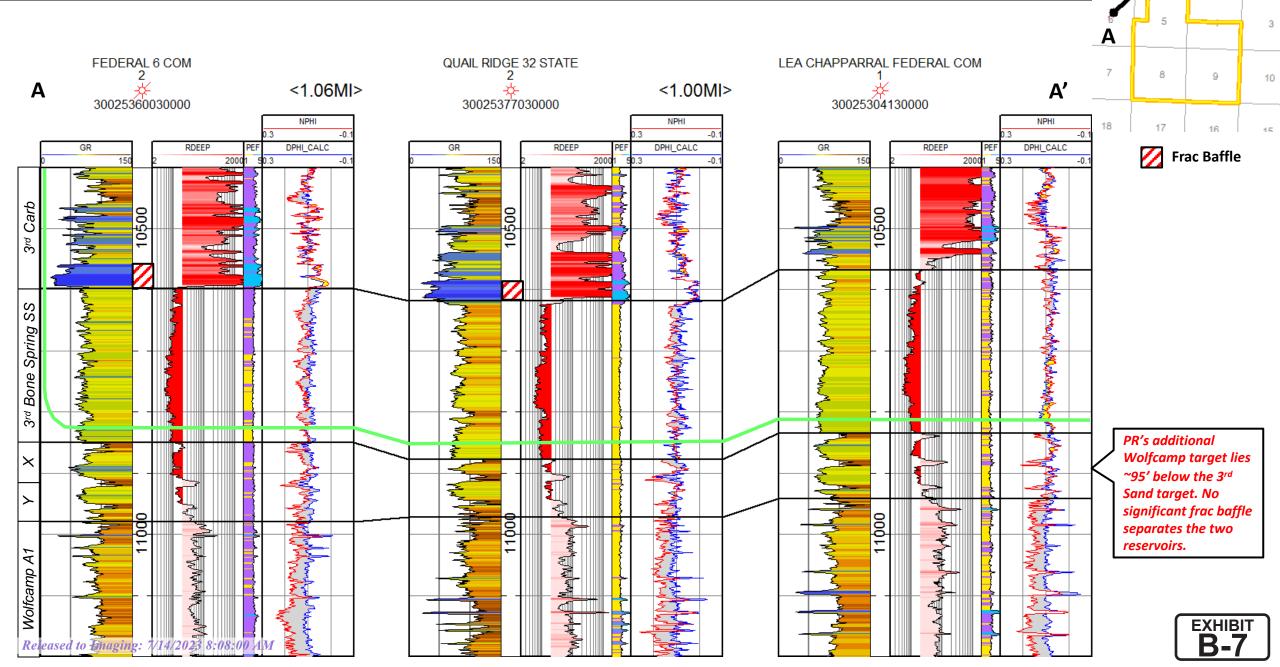


### **3**<sup>rd</sup> Bone Spring Sand Isopach





## **3rd Bone Spring Sand Cross Section**

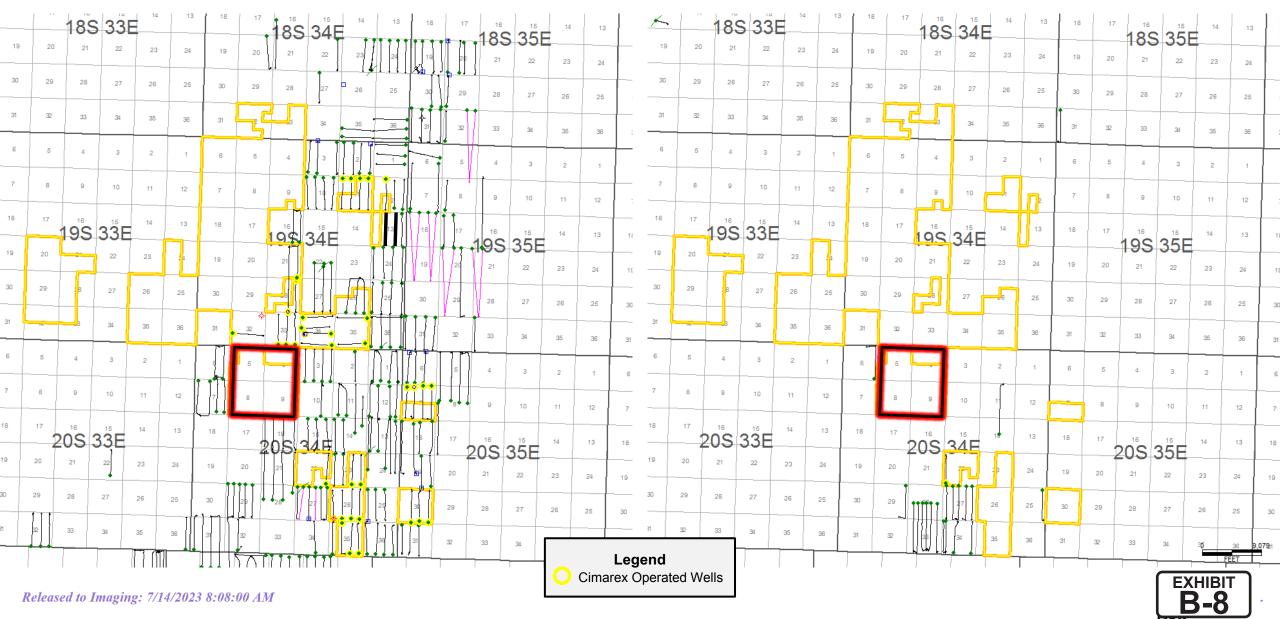


31

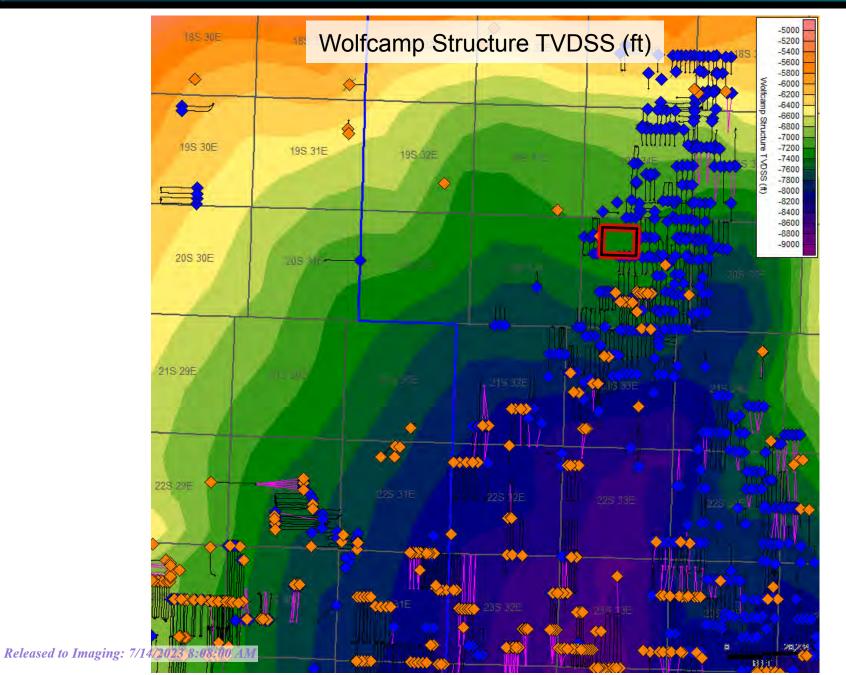
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**3rd Bone Spring Sand Producers** 

**Wolfcamp Producers** 



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

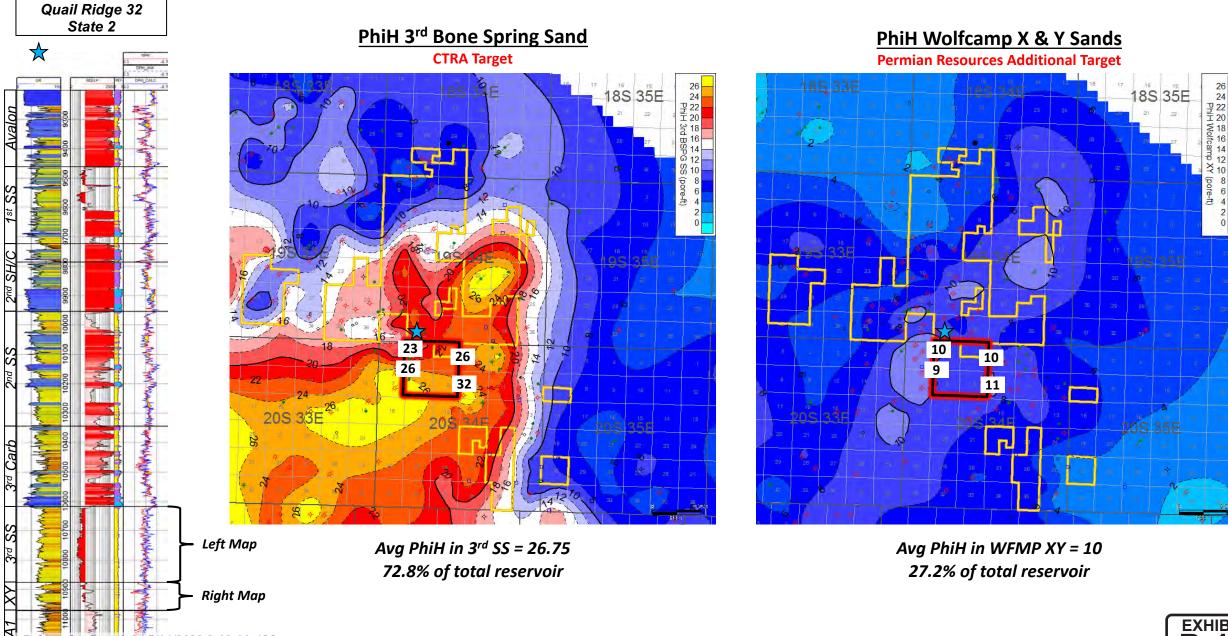


→ 3<sup>rd</sup> Bone Spring Sand
 → Wolfcamp Sands



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

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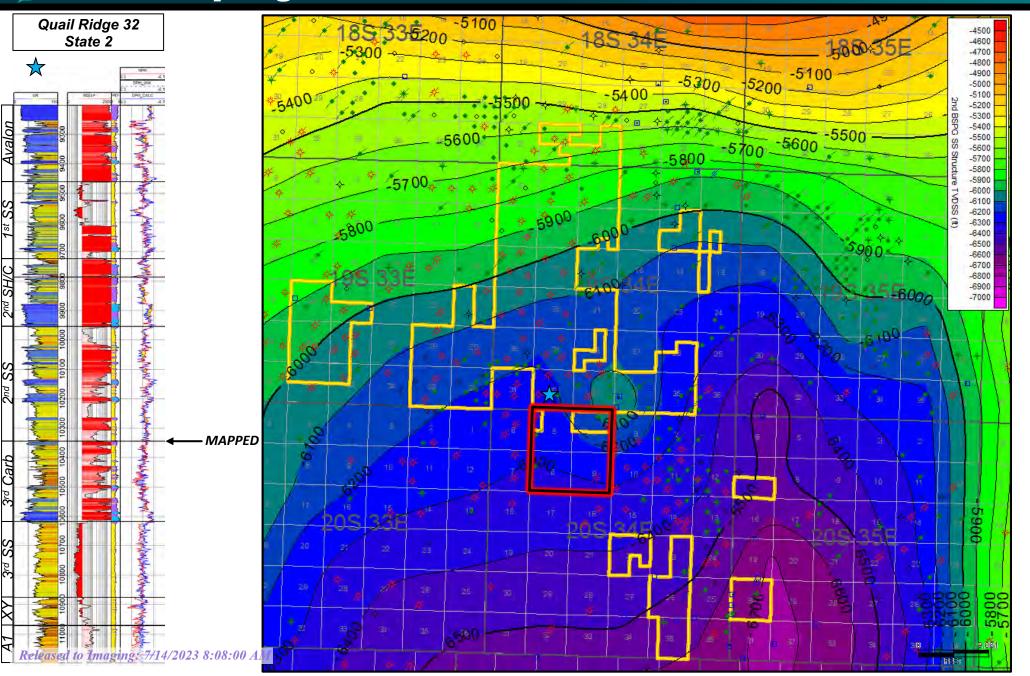




# 2<sup>nd</sup> Bone Spring Sand

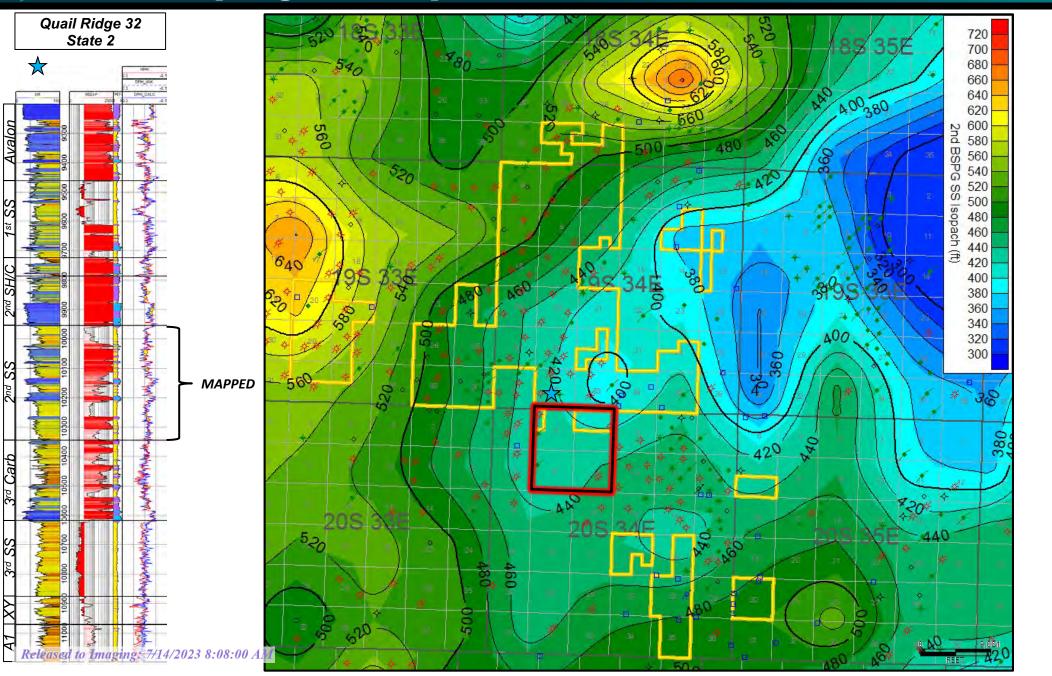


#### **2**<sup>nd</sup> Bone Spring Sand Structure



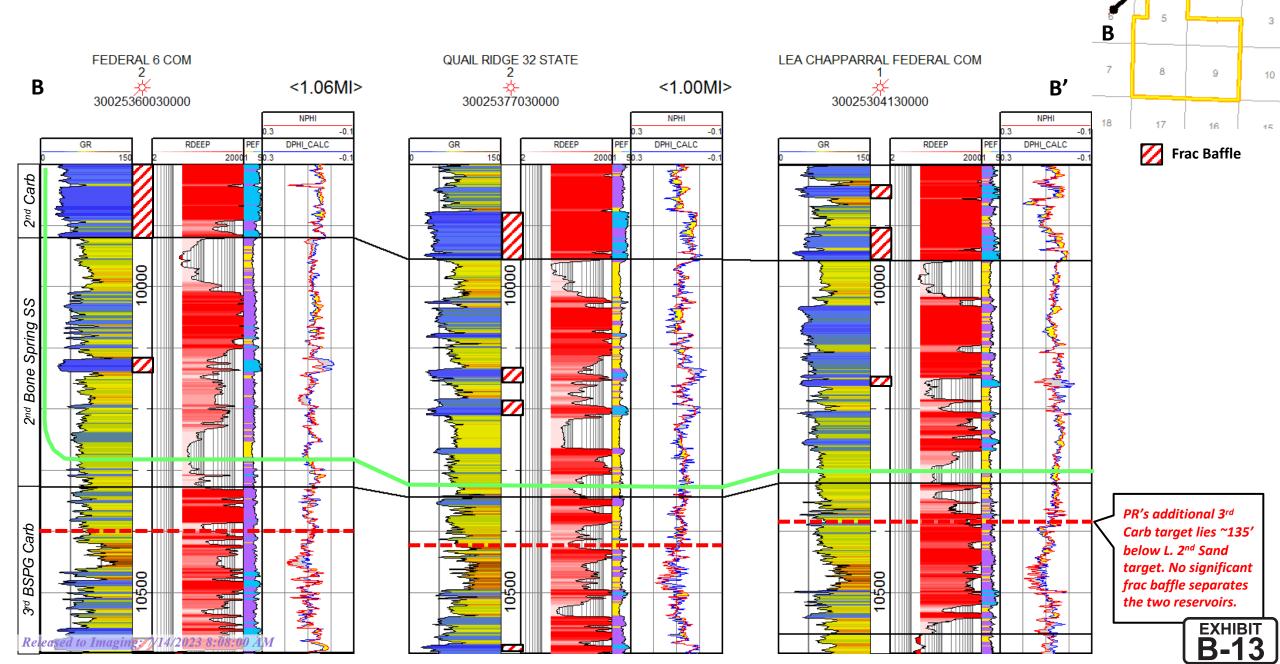


#### **2**<sup>nd</sup> Bone Spring Sand Isopach



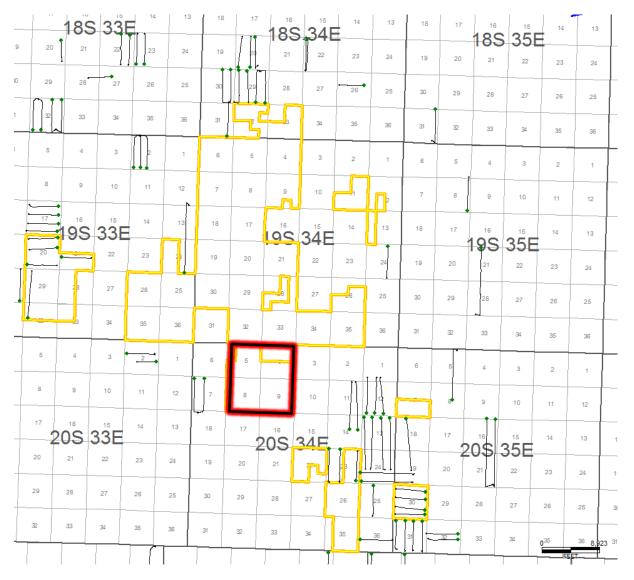


## **2**<sup>nd</sup> Bone Spring Sand Cross Section

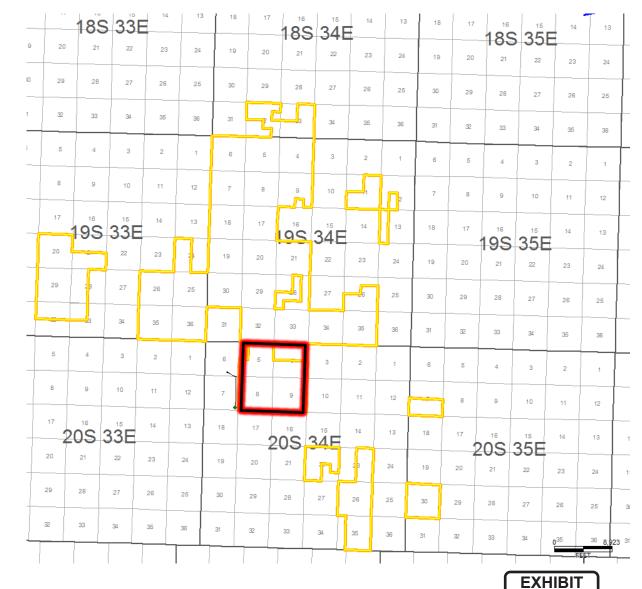


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#### Lower 2<sup>nd</sup> Bone Spring Sand Producers



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



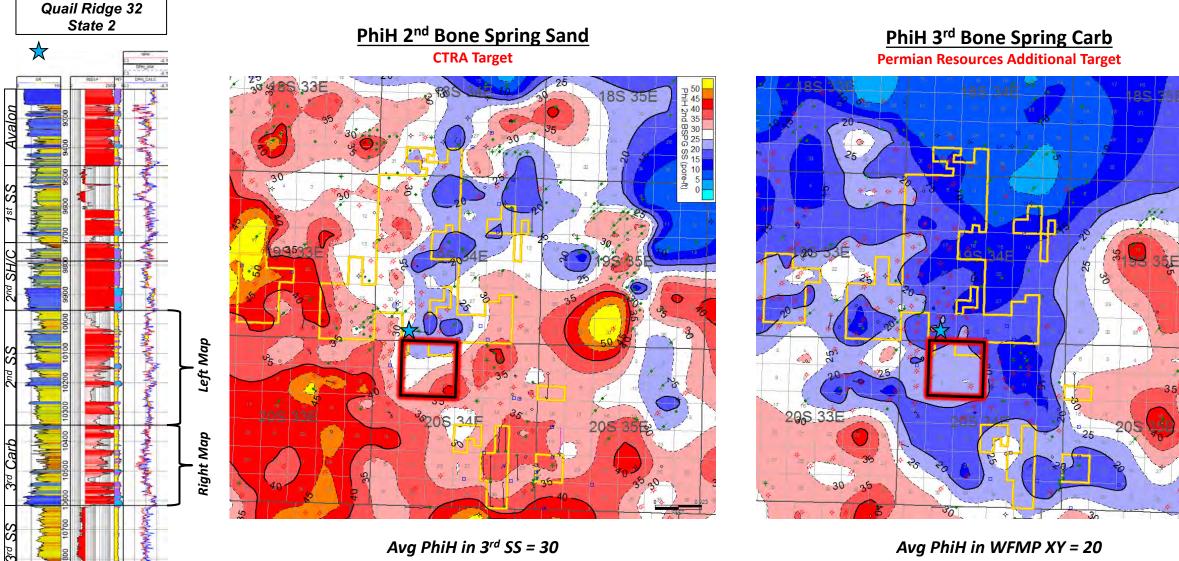


**B-14** 

Released to Imaging: 7/14/2023 8:08:00 AM

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

± 45 3 40



60% of total reservoir

40% of total reservoir



Released to Imaging: 7/14/2023 8:08:00 AM

X

H

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



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

Avalon

st SS

SH/C

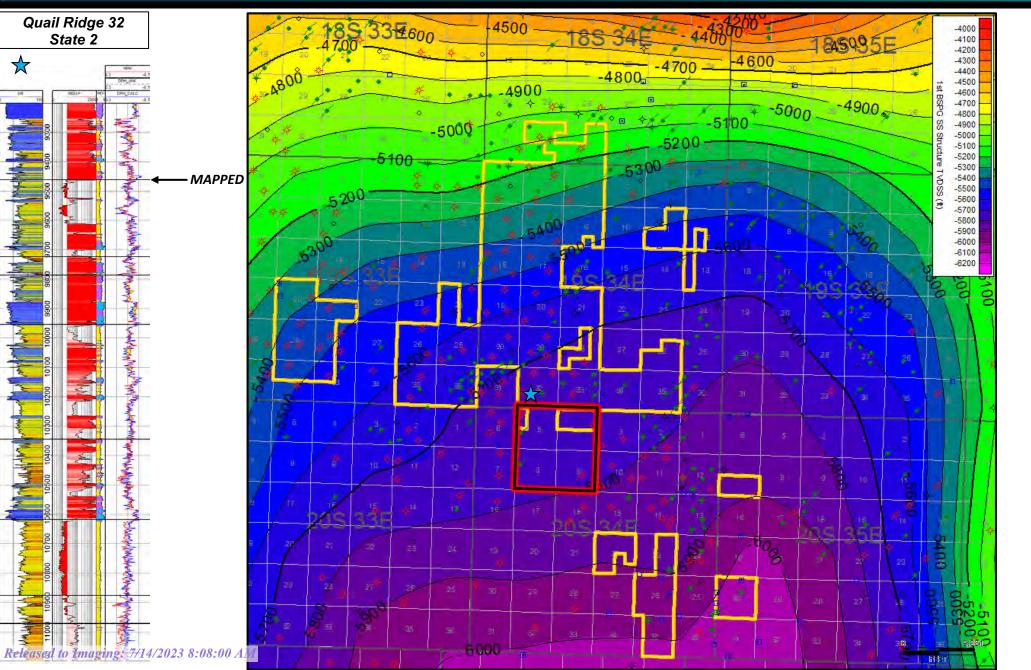
SS

3rd Carb

3rd SS

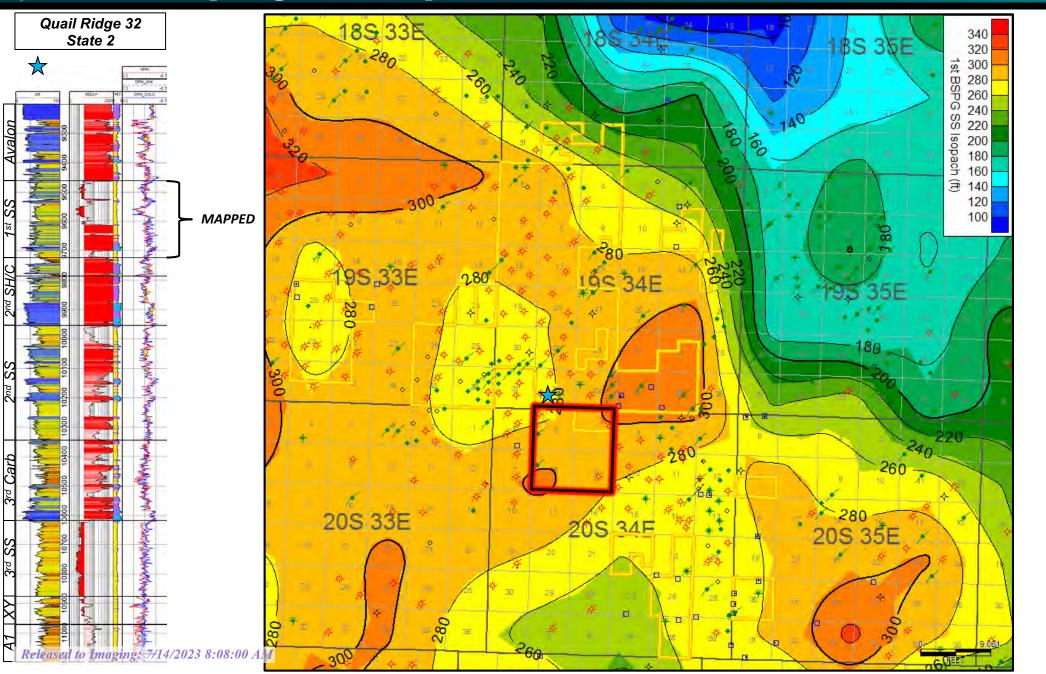
X

A



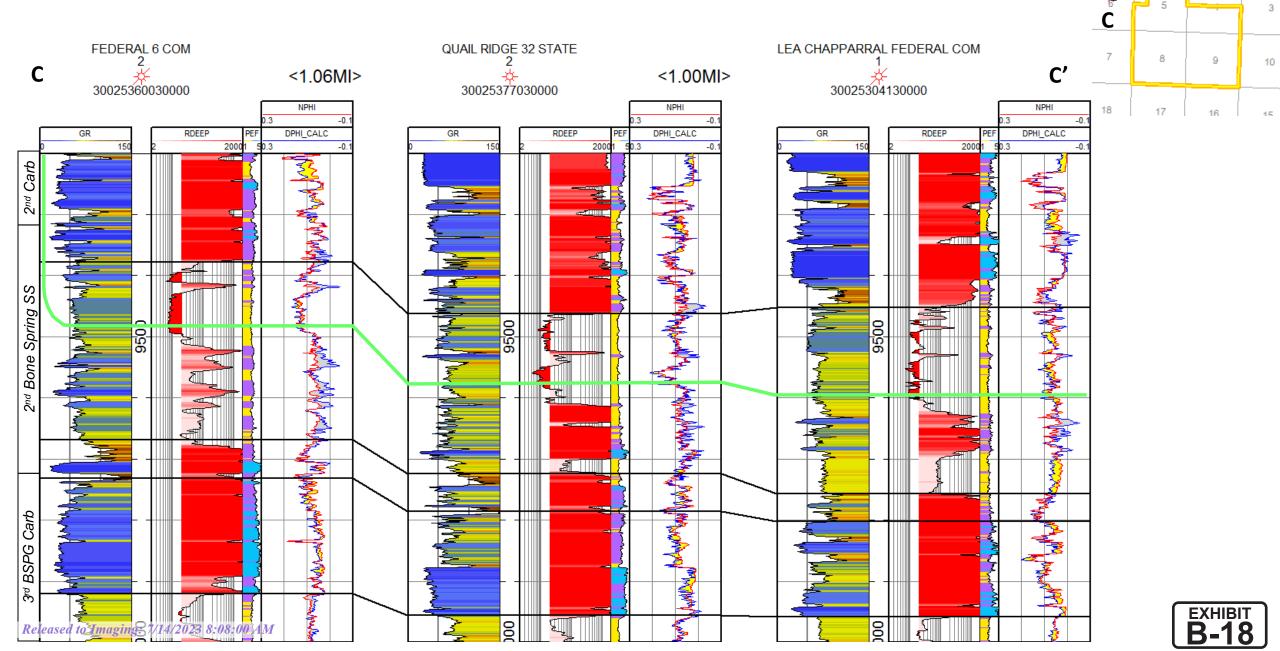


## **1**<sup>st</sup> Bone Spring Sand Isopach





## **1**<sup>st</sup> Bone Spring Sand Cross Section

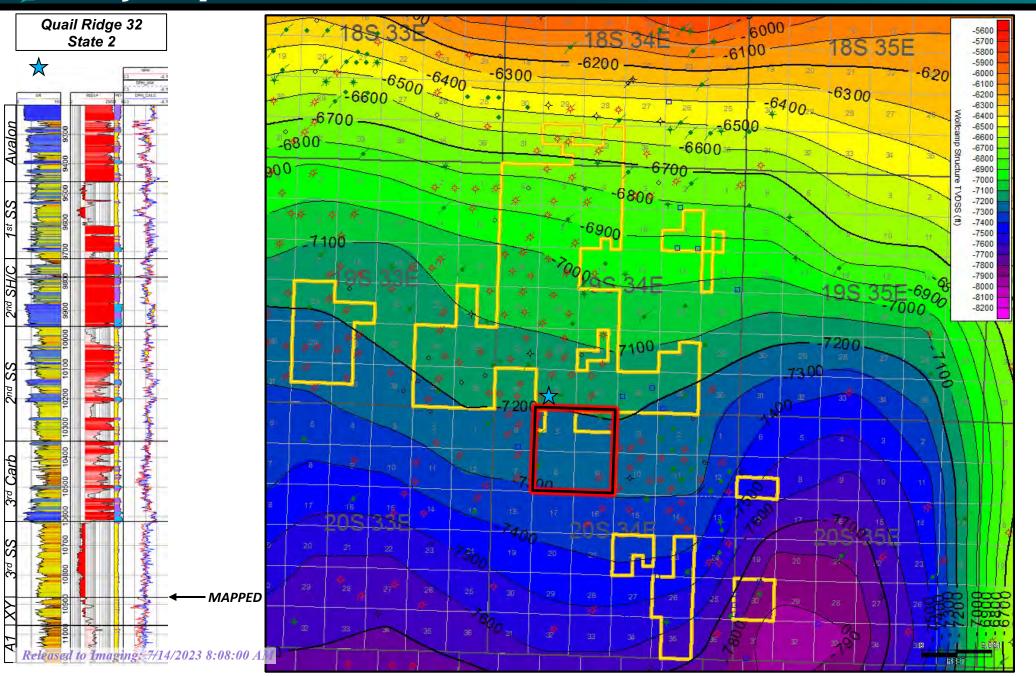


<u>32 Page 195 of 275 34</u>

# Wolfcamp XY

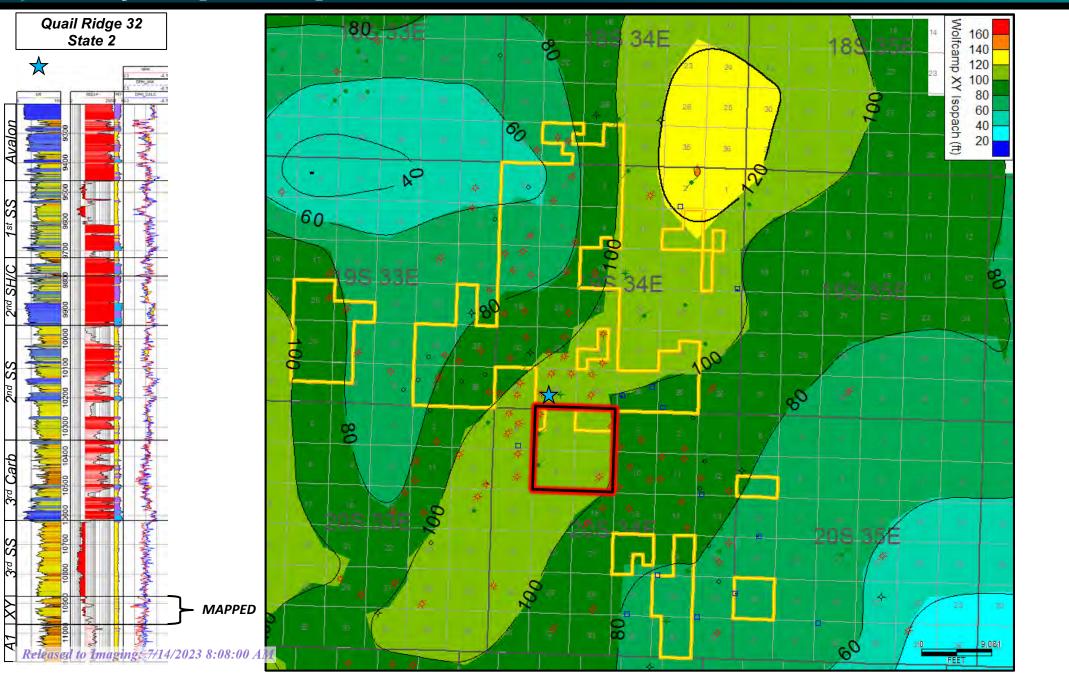


#### Wolfcamp XY Structure



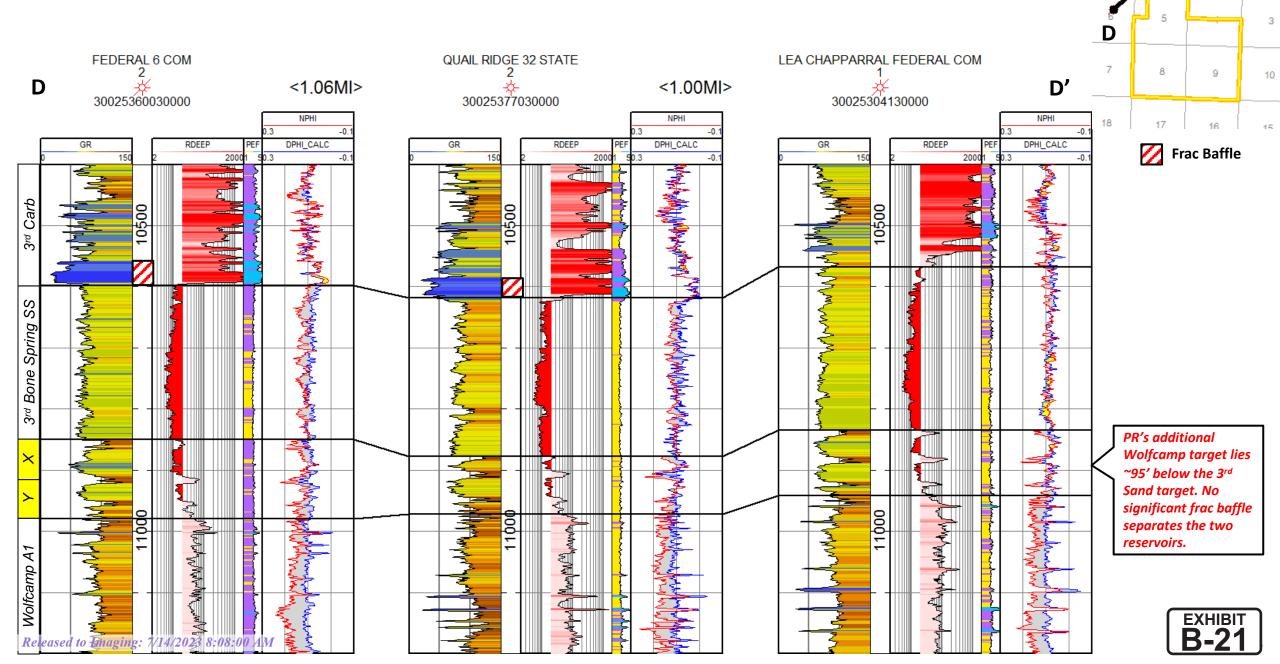


### Wolfcamp XY Isopach





### Wolfcamp XY Cross Section



31

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#### **TAB 4**

Case No. 23448-23451

Exhibit C:	Self-Affirmed Statement of Eddle Benm, Petroleum Engineer
Exhibit C-1:	Mighty Pheasant Loosey Goosey Development Plan

( CE 11' D 1

**D** (

Exhibit C-2: Capital Plan Comparison Cimarex vs. Permian

1.04.4

Exhibit C-3: Map of 3<sup>rd</sup> Bone Spring Sand Producers

G 10 1 00

- Exhibit C-4: 3<sup>rd</sup> Sand Well Count by Landing and Operators
- Exhibit C-5: Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 wells (Before WC completion)
- Exhibit C-6: Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 Wells Post Wolfcamp Frac
- Exhibit C-7: Black and Tan Wolfcamp Composite Forecast 5 wells
- Exhibit C-8: Lessons Learned from the Black and Tan Development
- Exhibit C-9: Diagram of Staggered Landing Wolfcamp 3<sup>rd</sup> SS Vs. 3<sup>rd</sup> SS Flat
- Exhibit C-10: Black and Tan Analog comparison to MP/LG
- Exhibit C-11: Landing Zone Matters; Five Years Ago, Cimarex's Perry Test Confirmed 3<sup>rd</sup> SS Landing as Best Target
- Exhibit C-12: Dataset Identifying all Wells in Area of Interest

#### 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)

#### <u>SELF-AFFIRMED STATEMENT OF EDDIE BEHM</u>

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

1. I am over the age of 18 and have the capacity to provide this Statement; I am a Reservoir

Engineer for Cimarex Energy Co. ("Cimarex") and have personal knowledge of the matters stated herein.

2. I attended the University of Tulsa and graduated with a bachelor's in petroleum engineering

in 2011. I have worked for Occidental, California Resources prior to working for Cimarex Energy



Co. ("Cimarex") and have been employed as a Production and Reservoir engineer for Cimarex for the last 6 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 engineering involved.

3. I have previously testified before the Oil Conservation Division ("Division") as an expert reservoir engineer, and my credentials have been accepted of record by the Division.

4. This testimony is submitted in connection with the filing by Cimarex in the abovereferenced compulsory pooling application pursuant to 19.15.4.12.A(1) NMAC.

5. I am also thoroughly familiar with the competing applications filed by Read & Stevens, Inc. who designated Permian Resources Operating, LLC as the Operator (Read & Stevens and Permian Resources collectively referred to herein as "Permian" or "Permian Resources") in Case Nos. 23508 through 23523. This Statement provides a description and overview of Cimarex's development plan in comparison to Permian's development plans.

6. Exhibit C-1, Slide 2: Mighty Pheasant Loosey Goosey Development Plan. Cimarex's development plan includes 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, all in Lea County, and Cimarex plans to develop the entire 2880 acres of the proposed units with only 33.9 acres of disturbance to the surface, thus substantially minimizing environmental impact (resulting in only a minimal 1.17% disturbance). Once the four drill pads and bulk gathering lines are installed, Cimarex will be able to rotate back to these existing drill pads for all activities and operations, thus requiring no further disturbance to the lands; by minimizing dirt work in this way, Cimarex will reduce potential air pollution and preserve native vegetation and natural habitat. Furthermore, Cimarex will develop this area with best-in-class gas

capture technology and operations and has already initiated this approach by securing proposals for oil, water, and gas takeaway and submitting load requests to power surface equipment to develop the acreage. As a company we permit zero (0) routine flaring and build tankless facilities that offer superior capture rates of low-pressure gas (>=90% low pressure capture) for new developments which will be utilized in our proposed development plan.

7. Exhibit C-2, Slide 3: Capital Plan Comparison of Mighty Pheasant vs. Joker
(1280-acre Capital comparison is shown for Sections 5 & 8) to Highlight:

- a) The \$92.7MM in Capital waste that results from the extra wells proposed by Permian Resources; public data show that Permian's extra wells will be nonadditive to EUR and PV10
- b) The \$31.6 MM in extra well cost driven by the wasteful execution of Permian Resources' plan.
- c) Permian's unnecessary expenditure of \$11 MM on one additional 2<sup>nd</sup> Sand well in comparison to Cimarex's plan which avoids such waste.
- d) At the time of its proposal, Permian Resources will spend \$270MM more than Cimarex to develop all 4 sections, thus in comparison, Permian would create financial waste that excessively burdens, undermines, and harms the correlative rights of working interest owners.

8. Exhibit C-3, slide 6: 3<sup>rd</sup> Bone Spring Sand is the Established Single Bench Target at 4 Wells Per Section (WPS) Within the Area of Interest (AOI). The map of 3<sup>rd</sup> Bone Spring Sand Producers shows significant single bench development of the 3<sup>rd</sup> Sand at 4 wells per section spacing. The Map of Wolfcamp producers shows that the Wolfcamp is not primarily targeted with 3<sup>rd</sup> Sand development. Furthermore, where Wolfcamp is developed, it is predominantly drilled and developed without the 3<sup>rd</sup> Sand because the reservoir is adequately captured with a single landing within the flow unit. There is only one development plan within the entire AOI similar to the plan Permian has proposed for the 3<sup>rd</sup> Sand. This plan, similar to Permian's plan, is located just 2 miles south of the subject lands, and it was based on similar well drainage assumptions that utilized outdated completion height assumptions. The Black and Tan Development Plan is the best analog and example that demonstrates the likely outcome of Permian Resources' proposal when both the 3<sup>rd</sup> Sand and Wolfcamp are developed as if they were separate and equal targets. A summary of the production results at **Exhibit C-10 (Slide 14)** herein speaks for itself, demonstrating what happened with the Black and Tan Development Plan, and therefore showing the substantial underproduction and waste that would likely result from Permian's approach, which is based on the same underlying assumptions. Cimarex's plan would avoid such an outcome.

9. Exhibit C-4, Slide 7: Well Count by Landing and Operators Shows 3<sup>rd</sup> Sand is the Consensus Landing. Ninety-seven percent of wells drilled in this area, that is, 236 out of 244 wells, are executed as single bench, non-staggered developments. This means it is not just Cimarex's idiosyncratic opinion that the best development plan for the Subject Lands requires a single landing target, but this is a consensus shared by all companies active within the area and directly supported by the data. Furthermore, 222 wells out of 244 total wells within the AOI land in the 3<sup>rd</sup> Sand supporting Cimarex's assessment of 3<sup>rd</sup> Sand as the optimum landing. Cimarex has executed 36 wells within the AOI, 15% of all wells, and has development experience specific to this area and its landing requirements.

10. Exhibit C-5, Slide 9: Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 wells (Before WC completion) This Forecast shows the aggregate well performance of 6 wells <u>prior to</u>

underlying Wolfcamp development. Significant reserves (that of 2.5MM barrels of oil) and rates (that being 3356 BOPD IP30) were accessed by these 1-mile wells supporting 3<sup>rd</sup> Sand as a proven landing for optimal production.

11. **Exhibit C-6, Slide 10: Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 Wells Post Wolfcamp Frac.** This Forecast shows the aggregate well performance of 3<sup>rd</sup> Bone Spring Sand wells <u>after</u> underlying Wolfcamp development. Unfavorable results included elevated water cut, rapid GOR Incline, and steep oil decline which are signatures of interference between the five Wolfcamp wells drilled below these six 3<sup>rd</sup> Sand wells. After the Wolfcamp wells were drilled and produced, overall reserves appear to have fallen to 1.63 MM barrels of oil with steep decline profile. This highlights the degradation a 2<sup>nd</sup> landing causes within the AOI.

12. Exhibit C-7, Slide 11: Black and Tan Wolfcamp Composite Forecast 5 wells. This plot shows the aggregate performance and forecast to the five Wolfcamp wells completed below the six 3<sup>rd</sup> Sand wells shown on exhibits C-4 and C-5. Data clearly shows that vertical interference occurs in staggered developments, causing these 5 wells to add only 885MBO oil reserves and 500 BOPD IP in the aggregate. Elevated water cut and rapid GOR incline are evidence of interference with 3<sup>rd</sup> sand wells above.

13. **Exhibit C-8, Slide 12: Lessons Learned from the Black and Tan Development**. Exhibit C-8 table 1.0 shows some simple forecast metrics highlighting the fact that only a negligible rate and a negligible amount of EUR were detectible from drilling the five extra, not to mention expensive, Wolfcamp wells. It is noteworthy and significant how little benefit the five wells added and how much they negatively impacted 3<sup>rd</sup> sand production. The aggregate rate change is so small it is essentially zero (0) which does not support or justify as effective capital stewardship the drilling of the 8 additional \$11MM dollar wells proposed by Permian Resources.

Table 1.1 shows the pore space distribution, 3<sup>rd</sup> Sand has 268% more PHIH than the upper Wolfcamp and is clearly the predominant contributing reservoir. The hypothesis that landing in 3<sup>rd</sup> Sand with 268% more porosity and height combined with better flow properties is the best way to access all the bbls becomes unarguable with production data from Black And Tan where the addition of Wolfcamp landings added no reserves and only negatively impacted the 3<sup>rd</sup> Sand raising aggregate section OpEx. The lesson learned from this data is that drilling into the Upper Wolfcamp itself is financially wasteful and jeopardizes optimal 3<sup>rd</sup> Sand production. A setback from 3<sup>rd</sup> sand is in the best interest of efficient low risk recovery of the area reserves.

14. Exhibit C-9, Slide 13: Diagram of Staggered Landing Wolfcamp 3<sup>rd</sup> SS Vs. 3<sup>rd</sup> SS Flat. This exhibit shows what Cimarex believes happened in the Black and Tan analog example which reflects the nature of Permian Resources' proposal and therefore Permian's likely outcome. The Majority of Stimulated Rock Volume accessed by 3<sup>rd</sup> Sand well's landed flat must be very similar to the Stimulated rock volume accessed by staggered Wolfcamp and 3<sup>rd</sup> landings. If this were not true, the sum of Wolfcamp and 3<sup>rd</sup> sand production out of the Black and Tan development would be significantly higher once the 2<sup>nd</sup> bench was added instead of about the same. Where appropriate geologically, Cimarex executes as many as 9 landings within the same section in Lea County. Due to the location of barriers and target reservoir height executing two landings within the contested acreage in the 3<sup>rd</sup> Sand Wolfcamp target or the lower 2<sup>nd</sup> Sand 3<sup>rd</sup> Shale target serves only to double development CapEx. Cimarex has proprietary data from South Lea County developments in thicker 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.

15. Exhibit C-10, Slide 14: Black and Tan Analog comparison to MP/LG. Mighty Pheasant and Loosey Goosey have a similar pore space distribution as the Black and Tan Development with slightly higher porosity. The extra porosity is more likely to correlate to better permeability and allow a single landing to capture proven  $3^{rd}$  sand reserves even more efficiently. Sensitivities run vs. reserves (table 1.3) and P50 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. 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.

16. Exhibit C-11, Slide 15: Landing Zone Matters; Five Years Ago, Cimarex's Perry Test Confirmed 3<sup>rd</sup> SS Landing as Best Target. Cimarex confirmed 3<sup>rd</sup> sand as best landing zone 5 years ago in 2018 with the Perry 4H 1 mile South of the contested acreage block. Over the life of the well, we see the old conventional 3<sup>rd</sup> Sand landing outperform other landings. Fracs evolved over time to modern slick water completions. Today most companies pump between 2000#/ft and 3000#/ft and 38 bbl/ft up to 60 bbl/ft with 6 to 14 clusters per stage depending on the target. It is highly unusual for a legacy frac, that is, one more conventional (i.e., <2016 with low

cluster count, long stages, and unfocused frac energy), to better access reservoir than a modern frac (>2016 vintage with high cluster count, short stages, very focused frac energy). The best explanation for 478#/ft 3<sup>rd</sup> Sand frac outperforming 5 to 6 times the frac energy pumped in the Wolfcamp test well is that the vast majority of oil reserves and best rock fabric flow properties are located within the 3<sup>rd</sup> Sand, and not in the Upper Wolfcamp. Thus, drilling into the Upper Wolfcamp is a waste of resources.

17. 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 C-12**.

18. The Exhibits to this Self-Affirmed Statement were prepared by me or compiled from Cimarex's company business records under my supervision.

19. 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.

20. The foregoing is correct and complete to the best of my knowledge and belief.

[Signature page follows]

Signature page of Self-Affirmed Statement of Eddie Behm:

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

Eddie Behm

7/11/2023

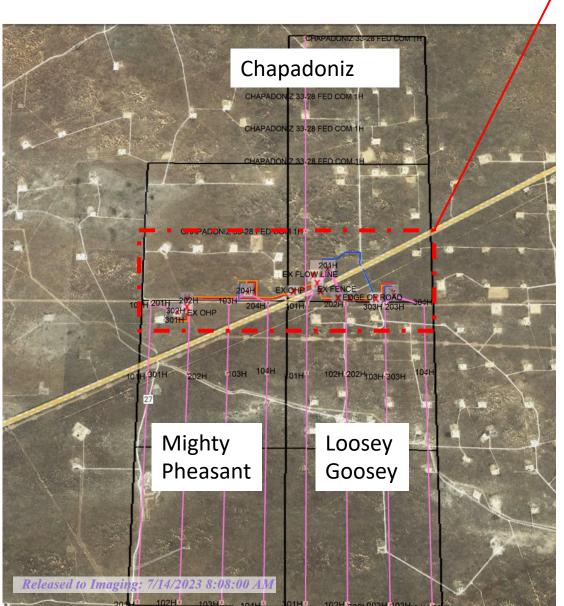
Date Signed

# Development Strategy



#### Mighty Pheasant Loosey Goosey Development Plan

1 mile





Single Battery develops – 27 to 34 planned wells

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



### Capital Plan Comparison Mighty Pheasant vs. Joker

Mighty Pheasant										
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	62C 022 774						
1st	103H	\$9,450,693	\$9,651,993	\$36,922,774						
1st	104H	\$9,450,693	\$9,651,993							
upper 2 <sup>nd*</sup>	NA	\$8,570,695	\$9,651,993							
upper 2 <sup>nd*</sup>	NA	\$8,570,695	\$9,651,993	\$25,712,085						
upper 2 <sup>nd*</sup>	NA	\$8,570,695	\$9,651,993							
2nd	201H	\$8,570,695	\$9,651,993							
2nd	202H	\$8,570,695	\$9,651,993	624 292 790						
2nd	203H	\$8,570,695	\$9,651,993	\$34,282,780						
2nd	204H	\$8,570,695								
3rd	301H	\$9,428,854	\$10,621,993							
3rd	302H	\$9,428,854	\$10,621,993	627 C75 409						
3rd	303H	\$9,408,850	\$10,621,993	\$37,675,408						
3rd	304H	\$9,408,850	\$10,621,993							
Total Gro	ss CapEx	\$134,593,047	\$148,659,895	\$134,593,047						

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

Permian Resources - Joker												
Res	Well	AFE CapEx	June Current Cost	AFE Bench Total								
1st	111	\$10,724,193										
1st	112	\$10,724,193		¢42,906,772								
1st	113	\$10,724,193		\$42,896,772								
1st	114	\$10,724,193										
uppr 2nd	122	\$11,020,308										
uppr 2nd	124	\$11,020,308		\$44,081,232								
uppr 2nd	126	\$11,020,308		\$44,061,252								
uppr 2nd	128	\$11,020,308										
2nd	121	\$11,020,308										
2nd	123	\$11,020,308		¢44.001.000								
2nd	125	\$11,020,308		\$44,081,232								
2nd	127	\$11,020,308										
3rd bs	131H	\$11,535,757										
3rd bs	132H	\$11,535,757		\$46,143,028								
3rd bs	133H	\$11,535,757		\$40,145,028								
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		Ć02 742 500								
WC	201H	\$11,877,862		\$92,743,500								
WC	202H	\$11,877,862										
WC	203H	\$11,877,862										
WC	204H	\$11,877,862										
Total Gro	oss CapEx	\$269,945,764	?	\$269,945,764								

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

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

• Reperintary Resources, and development plan is >= \$121MM of waste driven by Frac cost and Well Count

**EXHIBIT** 

			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				
Г	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				
Submitted permits for 3 <sup>rd</sup> Sand	NM	Lea	Loosey Goosey 4-9 Fed Com 102H	To be permitted				
development & 1 <sup>st</sup> Sand/2 <sup>nd</sup>	NM	Lea	Loosey Goosey 4-9 Fed Com 103H	To be permitted				
Sand test	NM	Lea	Loosey Goosey 4-9 Fed Com 104H	To be permitted				
BLM is currently working on	NM	Lea	Loosey Goosey 4-9 Fed Com 201H	To be permitted				
these	NM	Lea	Loosey Goosey 4-9 Fed Com 202H	To be permitted				
	NM	Lea	Loosey Goosey 4-9 Fed Com 203H	To be permitted				
	NM	Lea	Loosey Goosey 4-9 Fed Com 204H	AFMSS-Accepted	3/15/2022	3/15/2022		
	NM	Lea	Loosey Goosey 4-9 Fed Com 301H	AFMSS-Accepted	3/9/2022	3/9/2022		
4	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		
	NM	Lea	Loosey Goosey 4-9 Fed Com 304H	AFMSS-Accepted	3/15/2022	3/15/2022		

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

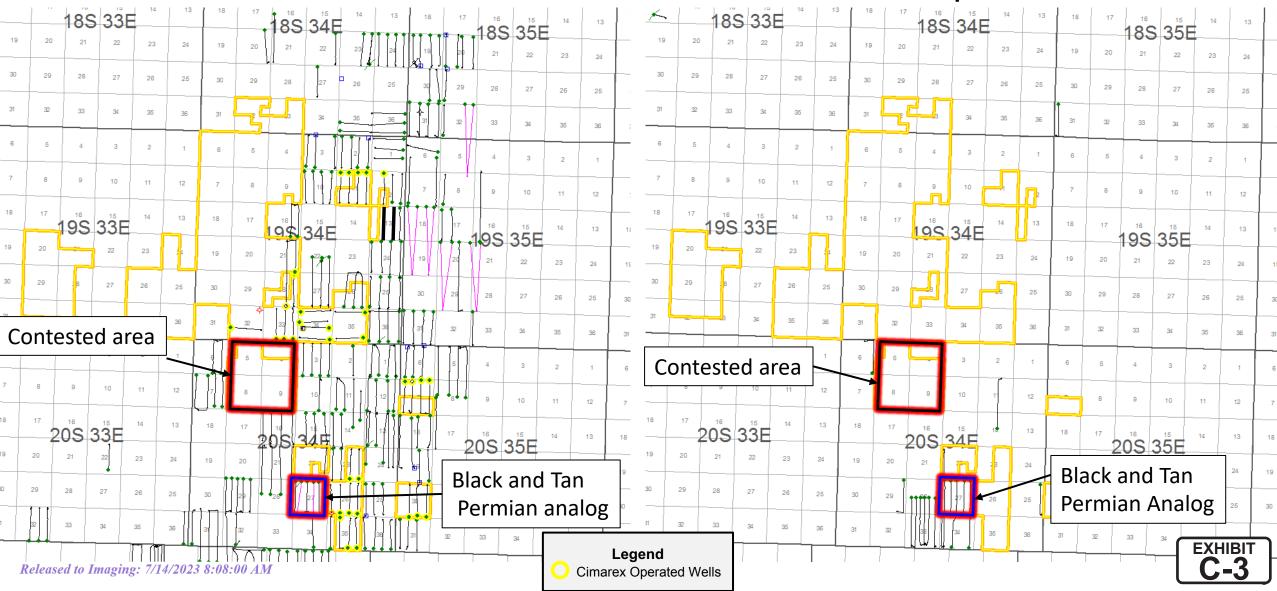


*3<sup>rd</sup> Bone Spring Sand is the Established Single Bench Target at 4 WPS withi<del>n AOP</del>* 

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

#### **3rd Bone Spring Sand Producers**

#### **Wolfcamp Producers**



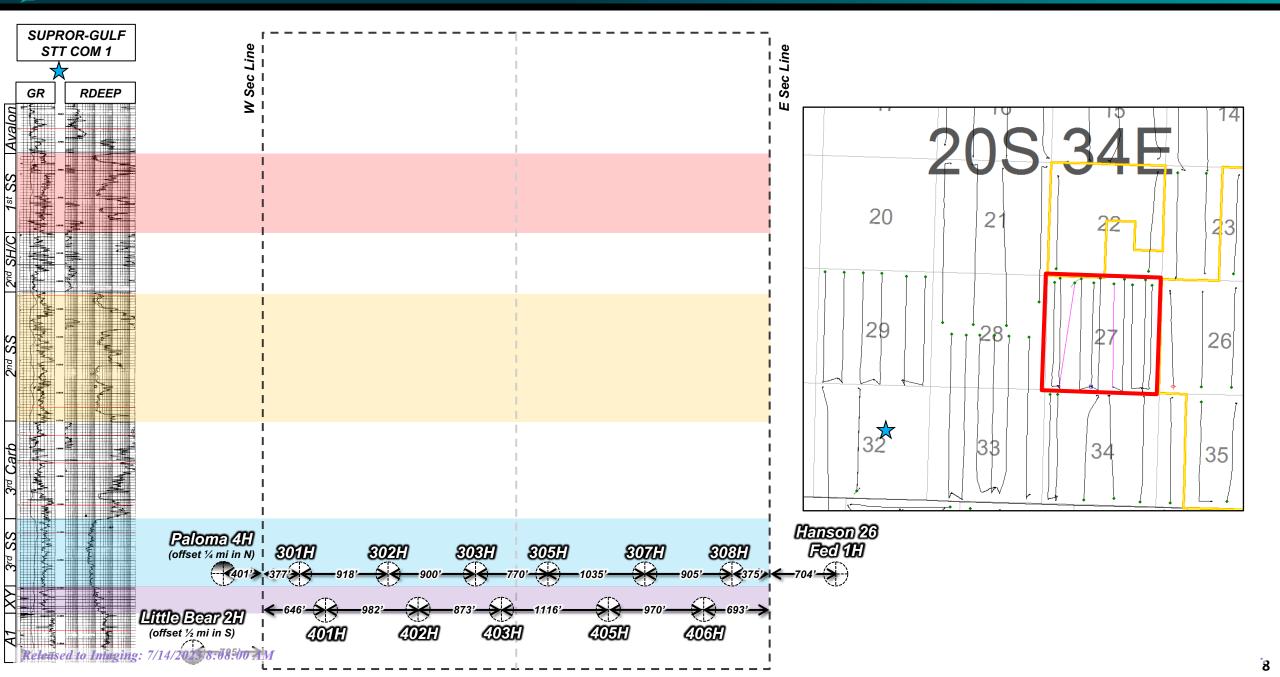
# Well Count by Landing and Operators Shows 3<sup>rd</sup> Sand is the Consensus Landing<sup>23</sup>

- 3<sup>rd</sup> Sand / single b landing supported 236 wells, 97%.
- 13 of 22 WCMP w • drilled instead of
- 5 of 22 WCMP dril • as a separate ben
- **3 WCMP stack tes** ٠ with 3<sup>rd</sup> Sand

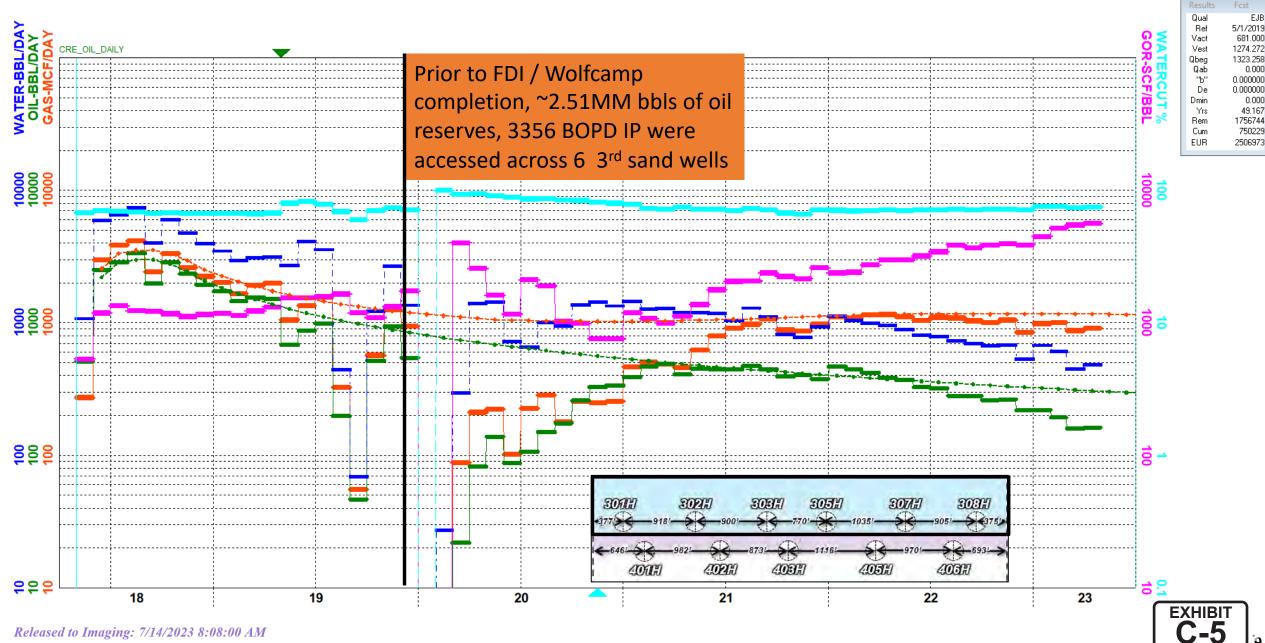
CMP were	45 - 40 - 35 -					_				l 3 <sup>r</sup> we		5:				-		<b>fota</b>			
tead of 3rd SS30CMP drilled25ate bench20tack tests15105	25 20 15 10																22	CN we	ells •		
		2010	2011	2012	2013	2014	2015	2016 3rd	2017 dSS	2018	2019	2020	2021	2022	2023	2015	2016	2017 Wolfe	2018 camp	2019	2020
APACHE CORP								· · · · · · · · · · · · · · · · · · ·		6									F.		5
CAZA OPERATING LLC						1		1	1	1	1		2	1	· · · · ·						
CIMAREX ENERGY CO		2	7	2	8	7	1	· · · · ·	1	3	3			1	1				1		
COG OPERATING LLC			1	7	9	14	16	5	1	2				1	[]			1	1	8	
■ EA RT HS TONE OPERATING LLC						3		1	1										1		
■ EOG RESOURCES INC						1		1			4						1				
■ FASKEN OIL & RANCH LTD				1	1	2	4														
FRANKLIN MOUNTAIN ENERGY	3 LLC			2	11	5	1				2			2							
■ LEGACY RESERVES OPERATING L	.Р		1	1	2	1	5	1	4	2	1									1	
MARATHON OIL PERMIAN LLC						1	1									1					
■ MATADOR PRODUCTION CO				2			1	4	2	2	3							1		1	
MEWBOURNE OIL CO						5	4					1	2	4	2						
■ RAYBAW OPERATING LLC					1				1												
■ READ & STEVENS INC							2			2				1							
XTO ENERGY INC					1		7		1	7					· · · · · · · · · · · · · · · · · · ·					EXHIB	П

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## Black and Tan

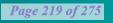


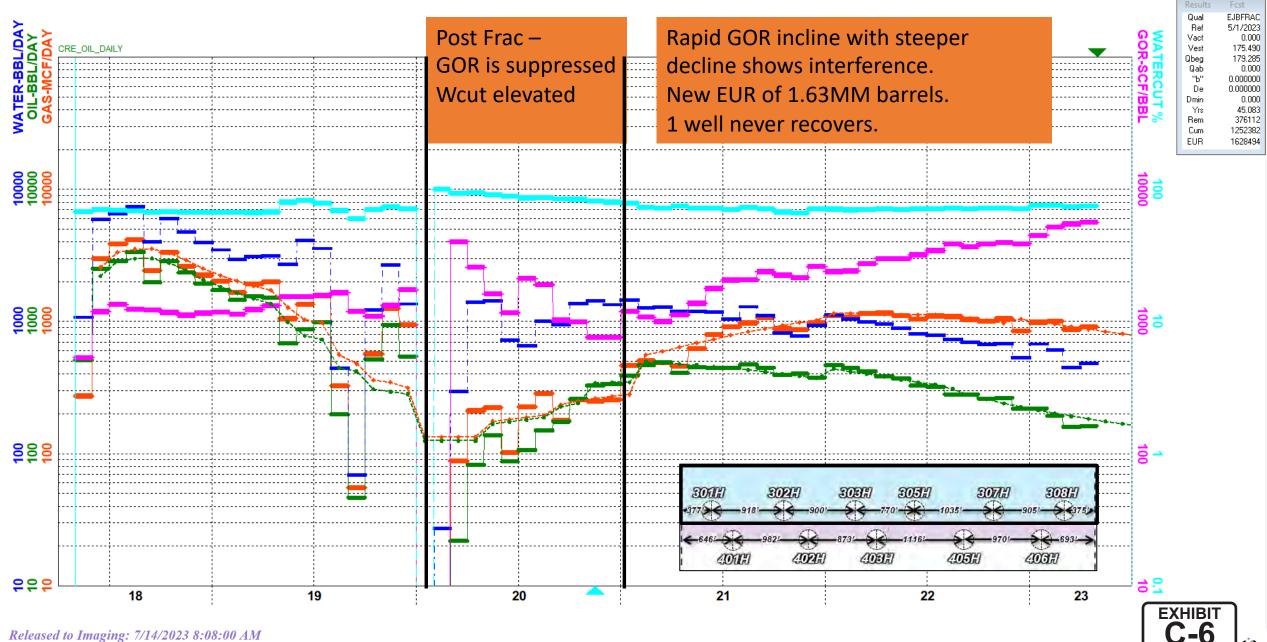
## Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 Wells ( Before WC completion)<sup>352 218 of 275</sup>



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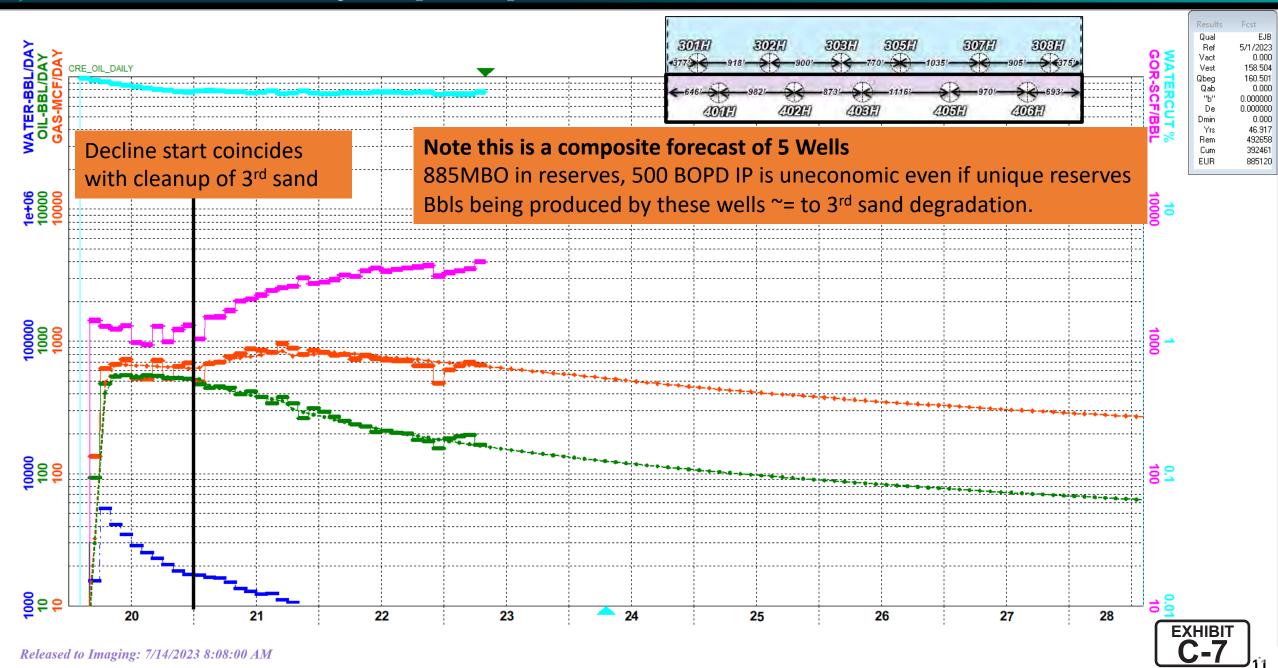
## Black and Tan 3<sup>rd</sup> Sand Composite Forecast 6 Wells Post Wolfcamp Frac





## Black and Tan Wolfcamp Composite Forecast 5 Wells

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E PROJECT = Black & Tan 27	
- 👌 30025461240000   BLACK & TAN 27 FEDERAL COM #405H   BLACK & TAN 27 FEDERAL COM   WOLFCAMP A   APACHE CORP   LEA   4583   09/01/2019   02/26/2020   0EF33AE781	
01/22/2020   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	
6 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   F44F25453	
- 👌 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   40288A1B23	
- 👌 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
- 👌 30025440440000   BLACK & TAN 27 FEDERAL COM #307H   BLACK & TAN 27 FEDERAL COM   3RD BONE SPRING SAND   APACHE CORP   LEA   4303   01/07/2018   05/16/2018   CF72E02929	
😓 👌 30025440450000   BLACK AND TAN 27 FEDERAL COM #308H   BLACK AND TAN 27 FEDERAL COM   3RD BONE SPRING SAND   APACHE CORP   LEA   4340   01/30/2018   05/05/2018   A7CD7;	

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

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

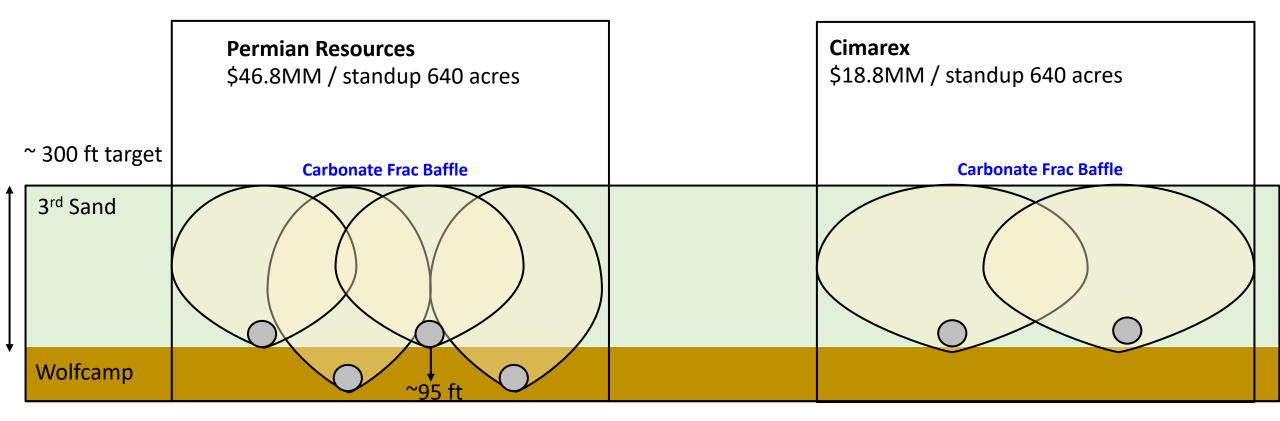
Table 1.0. Comparison		3rd Sand			(Wolfcamp - 3rd Sand
Table 1.0 Comparison	3rd Bone	3rd Bone Post	3rd Sand Delta	Wolfcamp	Delta) = value added
of 3rd sand to Wolfcamp	Spring	frac	3rd Sand Delta		from 5 wells
IP30 BOPD	3,356	NA	NA	555	NA
Pre vs. Post frac oil rate					
BOPD	950	500	-450	+555	105
EUR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

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

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

Table 1.1 Analog Comparison	3rd Sand	Wolfcamp	3 <sup>rd</sup> SS % of total	3rd / Wolfcamp Comparison %
РНІН	26.75	10	72.8	268





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



## Black and Tan Analog Comparison To MP/LG

Table 1.2	Black and Tan			Mighty	y Pheasant Loosey Goo	osey
Analog Comparison	3rd SandWolfcamp3rd SS % of total		3rd Sand	3 <sup>rd</sup> SS % of total		
РНІН	22	7	76	27	10	73

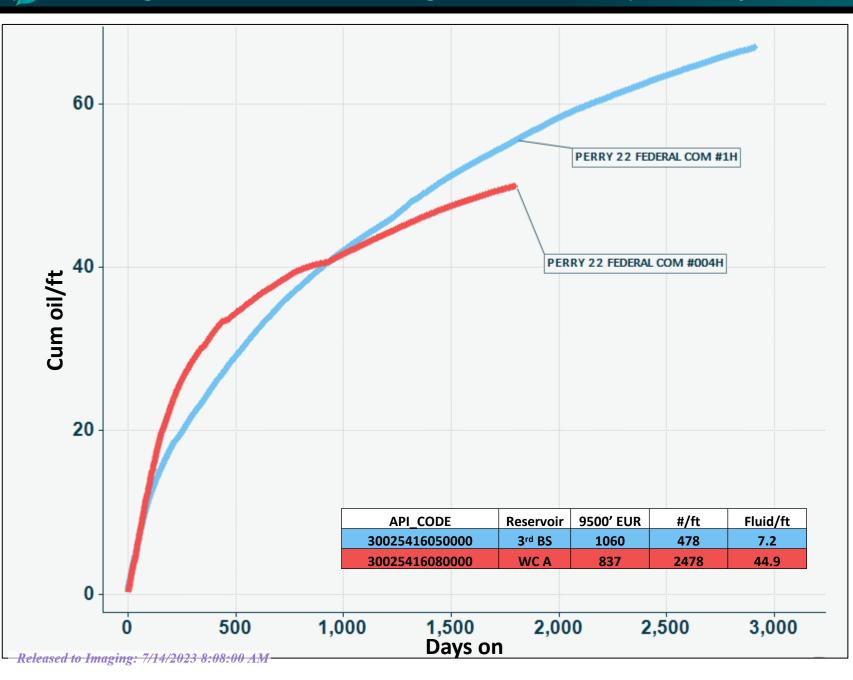
- Contested acreage is expected to outperform Black and Tan 2.5MMbo / 640-acre Technical EUR by ~20%
- Over performance driven by improved PHIH of 3<sup>rd</sup> sand. 27/22 = 122%.
- Sensitivities highlight impact of capital waste given 0% uplift on Black and Tan Wolfcamp 3<sup>rd</sup> SS analog
 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

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

Table 1.4 Development Comparison 12MM Technical EUR DSU								
\$65 flat analy	\$65 flat analysis at Cimarex WI & NRI			Permian		Cimarex		
12 MM EUR IP Economic EUR MBO		PV10 \$MM	Payout months	PV10	Payout months			
100%	18,897	11,026	34.8	23	61.9	10		
110% expected	20,787	12,987	43.6	20				
120% expected	22,676	14,233	52.3	18				
130% expected Released to Imaging:	7/24/2623	15,480	61	16				
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
   EXHIBIT C-10
- Permian plan supports slower development speed

## Landing Zone Matters; 5 Years Ago, Cimarex's Perry Test Confirmed 3<sup>rd</sup> SS Landing as Best Target Page 224 of 275



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

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



Exhibit C12 API list							
UWI (APINum)	Well Label	Operator	Formation				
30025024240100	LEA UNIT 4H	LEGACY RESERVES OPERATING LP	3rd SS				
30025328180000	) MALLON `34` FEDERAL 16	CIMAREX ENERGY CO	3rd SS				
30025393820100	) MALLON 35 FEDERAL 4H	CIMAREX ENERGY CO	3rd SS				
30025395550000	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				
3002540040000	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				
3002540123000	LYNCH 23 FEDERAL 2H	CIMAREX ENERGY CO	3rd SS				
30025401350000	MALLON 34 FEDERAL 20	CIMAREX ENERGY CO	3rd SS				
	CHAPARRAL 33 FEDERAL 3H	CIMAREX ENERGY CO	3rd SS				
	HANSON 26 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS				
	CHAPARRAL 33 FEDERAL COM 4	CIMAREX ENERGY CO	3rd SS				
	EAGLE `2` STATE 006H	MATADOR PRODUCTION CO	3rd SS				
	QUAIL `16` STATE COM 003H	FASKEN OIL & RANCH LTD	3rd SS				
	KING COBRA 2 STATE 1H	COG OPERATING LLC	3rd SS				
	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				
	WEST PEARL 36 STATE 002H	COG OPERATING LLC	3rd SS				
	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		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				
30025407250100	OUTLAW `22` FEDERAL COM 1H	COG OPERATING LLC	3rd SS				
30025407270000	MONGOOSE FEE 001H	MATADOR PRODUCTION CO	3rd SS				
	LAGUNA 23 FEDERAL COM 1H	EARTHSTONE OPERATING LLC	3rd SS				
30025407480000	IRONHOUSE 20 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS				
3002540750000	LYNCH 35-2H	CIMAREX ENERGY CO	3rd SS				
30025407780100	PRICKLY PEAR 6 FEDERAL 4H	COG OPERATING LLC	3rd SS				
3002540804000	HANSON 26 FEDERAL 4H	CIMAREX ENERGY CO	3rd SS				
30025408140100	CONDOR STATE 001H	COG OPERATING LLC	3rd SS				
30025408190000	HANSON 26 FEDERAL 2H	CIMAREX ENERGY CO	3rd SS				
30025408250000	LYNCH 35 FEE 1H	CIMAREX ENERGY CO	3rd SS				
3002540836000	MERIT 32 DM STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS				
30025408410000	QUAIL 11 STATE COM 1H	CIMAREX ENERGY CO	3rd SS				
	QUAIL 11 STATE COM 2H	CIMAREX ENERGY CO	3rd SS				
30025408750000	AIRCOBRA 12 STATE 1H	COG OPERATING LLC	3rd SS				



		3rd SS
		3rd SS
•		3rd SS
		3rd SS
IRONHOUSE `19` STATE COM 004H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
HAMON A FEDERAL COM 3H	LEGACY RESERVES OPERATING LP	3rd SS
TUSK FEDERAL 4H	COG OPERATING LLC	3rd SS
QUAIL `16` STATE 8H	FASKEN OIL & RANCH LTD	3rd SS
LEA SOUTH 25 FEDERAL COM 5H	EARTHSTONE OPERATING LLC	3rd SS
NIGHTHAWK STATE COM 1H	MARATHON OIL PERMIAN LLC	3rd SS
SCHARB 10 PA STATE 1H	MEWBOURNE OIL CO	3rd SS
ALBATROSS STATE COM 2H	COG OPERATING LLC	3rd SS
TANGO BTP STATE COM 004H	EOG RESOURCES INC	3rd SS
PRICKLY PEAR 6 FEDERAL 2H	COG OPERATING LLC	3rd SS
TUSK FEDERAL 3H	COG OPERATING LLC	3rd SS
TUSK FEDERAL 5H	COG OPERATING LLC	3rd SS
MARATHON ROAD 15 PA FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
IRONHOUSE 24 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
PERRY 22 FEDERAL COM 1H	CIMAREX ENERGY CO	3rd SS
ORIOLE STATE 1H	COG OPERATING LLC	3rd SS
HAMON A FEDERAL COM 4H	LEGACY RESERVES OPERATING LP	3rd SS
PRICKLY PEAR 6 FEDERAL 3H	COG OPERATING LLC	3rd SS
HAMON FEDERAL COM A 2H	LEGACY RESERVES OPERATING LP	3rd SS
LYNCH 35 FED COM 3H	CIMAREX ENERGY CO	3rd SS
IRONHOUSE 24 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
IRONHOUSE 24 STATE COM 004H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
TOMCAT FEE 1H	COG OPERATING LLC	3rd SS
CUATRO HIJOS FEE 4H	COG OPERATING LLC	3rd SS
	MEWBOURNE OIL CO	3rd SS
		3rd SS
KINGFISHER STATE COM 1H	COG OPERATING LLC	3rd SS
		3rd SS
KINGFISHER STATE COM 2H TEAL 12 STATE 2H	COG OPERATING LLC CIMAREX ENERGY CO	3rd SS 3rd SS
	TUSK FEDERAL 4H QUAIL `16` STATE 8H LEA SOUTH 25 FEDERAL COM 5H NIGHTHAWK STATE COM 1H SCHARB 10 PA STATE 1H ALBATROSS STATE COM 2H TANGO BTP STATE COM 004H PRICKLY PEAR 6 FEDERAL 2H TUSK FEDERAL 3H TUSK FEDERAL 5H MARATHON ROAD 15 PA FEDERAL 1H IRONHOUSE 24 STATE COM 002H PERRY 22 FEDERAL COM 1H ORIOLE STATE 1H HAMON A FEDERAL COM 4H PRICKLY PEAR 6 FEDERAL 3H HAMON FEDERAL COM A 2H LYNCH 35 FED COM 3H IRONHOUSE 24 STATE COM 003H IRONHOUSE 24 STATE COM 004H TOMCAT FEE 1H	QUAIL '16' STATE 007HFASKEN OIL & RANCH LTDSTRATDIET 31 STATE COM 2HCOG OPERATING LLCTRES PRIMOS 3 STATE 1HCOG OPERATING LLCMARATHON ROAD 14 NC FEDERAL 1HMEWBOURNE 0IL COCONDOR STATE 2HCOG OPERATING LLCIRONHOUSE 19 STATE COM 003HFRANKLIN MOUNTAIN ENERGY 3 LLCKING COBRA 2 STATE 2HCOG OPERATING LLCGOOSE STATE 01HCOG OPERATING LLCGOOSE STATE 01HCOG OPERATING LLCWILD COBRA 1 STATE 1HCOG OPERATING LLCQUAIL 11 STATE COM 3HCIMAREX ENERGY COCAPROCK 27 STATE FEDERAL COM 1HXTO ENERGY INCQUAIL 11 STATE COM 3HCIMAREX ENERGY COCAPROCK 27 STATE FEDERAL COM 1HRAYBAW OPERATING LLCRONHOUSE 24 STATE COM 001HFRANKLIN MOUNTAIN ENERGY 3 LLCGOOSE STATE COM 2HCOG OPERATING LLCQUAIL 11 STATE COM 3HCIMAREX ENERGY COMARATHON NOAD 14 MD FEDERAL 1HMEWBOURNE OIL COIRONHOUSE '19' STATE COM 004HFRANKLIN MOUNTAIN ENERGY 3 LLCHAMON A FEDERAL COM 3HLEGACY RESERVES OPERATING LPTUSK FEDERAL CM 3HEASKEN OIL & RANCH LTDLEA SOUTH 25 FEDERAL COM 5HEARTHSTONE OPERATING LLCNIGHTHAWK STATE COM 02HEASKEN OIL & RANCH LTDLEA SOUTH 25 FEDERAL COM 5HEARTHSTONE OPERATING LLCNIGHTHAWK STATE COM 02HEOG OPERATING LLCTANGO BTP STATE COM 02HEOG OPERATING LLCTANGO BTA STATE 1HMEWBOURNE OIL COALBATROSS STATE COM 02HEOG OPERATING LLCTANGO BTA STATE COM 02HEOG OPERATING LLCTANGO BTA S

20025419620000	PERLA VERDE 31 STATE 003H	XTO ENERGY INC	3rd SS
	PERLA VERDE 31 STATE 4H	XTO ENERGY INC	3rd SS
	CHAPARRAL 33 FEDERAL COM 5H	CIMAREX ENERGY CO	3rd SS 3rd SS
	LEA SOUTH 25 FEDERAL COM 6H		
	MARATHON ROAD 15 B30B FEDERAL 1H		3rd SS
	PALOMA 21 FEDERAL COM 4H	FASKEN OIL & RANCH LTD	3rd SS
	SCHARB 10 B3NC STATE 1H	MEWBOURNE OIL CO	3rd SS
	SUPER COBRA STATE COM 1H	COG OPERATING LLC	3rd SS
	PALOMA 21 FEDERAL COM 1H	FASKEN OIL & RANCH LTD	3rd SS
	PALOMA 21 FEDERAL COM 2H	FASKEN OIL & RANCH LTD	3rd SS
	PALOMA 21 FEDERAL COM 3H	FASKEN OIL & RANCH LTD	3rd SS
	STRATOSPHERE 36 STATE COM 3H	COG OPERATING LLC	3rd SS
	STRATOSPHERE 36 STATE COM 4H	COG OPERATING LLC	3rd SS
	STRATOSPHERE 36 STATE COM 5H	COG OPERATING LLC	3rd SS
	STRATOSPHERE 36 STATE COM 6H	COG OPERATING LLC	3rd SS
	PERLA VERDE 31 STATE 001H	XTO ENERGY INC	3rd SS
	NORTH LEA `3` FEDERAL COM 001H	READ & STEVENS INC	3rd SS
	TRES PRIMOS 3 STATE 2H	COG OPERATING LLC	3rd SS
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
	BUTTER CUP 36 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	IGGLES STATE COM 001H	COG OPERATING LLC	3rd SS
	STRATOJET 31 STATE COM 8H	COG OPERATING LLC	3rd SS
	KINGFISHER STATE COM 5H	COG OPERATING LLC	3rd SS
	PICKARD 20 18 34 RN STATE 124H	MATADOR PRODUCTION CO	3rd SS
	SCHARB 10 B3MD STATE 1H	MEWBOURNE OIL CO	3rd SS
	LEA 7 FEDERAL COM 2H (P&A 12/27/	CIMAREX ENERGY CO	3rd SS
	PERLA NEGRA FEDERAL COM 4H	XTO ENERGY INC	3rd SS
	NORTH LEA `3` FEDERAL COM 004H	READ & STEVENS INC	3rd SS
	PERLA NEGRA FEDERAL COM 2H	XTO ENERGY INC	3rd SS
	PERLA NEGRA FEDERAL COM 3H	XTO ENERGY INC	3rd SS

20025 420 400000			
30025429490000		LEGACY RESERVES OPERATING LP	3rd SS
	MAS FEDERAL 3H		3rd SS
30025429580000		LEGACY RESERVES OPERATING LP	3rd SS
	DESERT ROSE 17-8 FEDERAL COM 001	CAZA OPERATING LLC	3rd SS
	CIMARRON 16 19S 34E RN STATE COM	MATADOR PRODUCTION CO	3rd SS
	EAGLECLAW FEDERAL 001H	CAZA OPERATING LLC	3rd SS
	LEA SOUTH 25 FEDERAL COM 3BS 007	EARTHSTONE OPERATING LLC	3rd SS
30025430350000		LEGACY RESERVES OPERATING LP	3rd SS
	DELLA 29 FEDERAL COM 602H	EOG RESOURCES INC	3rd SS
30025430770000		LEGACY RESERVES OPERATING LP	3rd SS
30025432470100		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
30025434160000	SEVERUS 31 FEDERAL COM 002H	XTO ENERGY INC	3rd SS
30025434170000	SEVERUS 31 FEDERAL COM 003H	XTO ENERGY INC	3rd SS
30025434180000	SEVERUS 31 FEDERAL COM 004H	XTO ENERGY INC	3rd SS
30025434680100	CHIEF 30 STATE 7H	CIMAREX ENERGY CO	3rd SS
30025435330000	BLUE JAY FEDERAL COM 002H	COG OPERATING LLC	3rd SS
30025436800000	NORTH LEA 10 FEDERAL 002H	READ & STEVENS INC	3rd SS
30025437410000	ESPEJO FEDERAL COM 001H	XTO ENERGY INC	3rd SS
30025437420000	ESPEJO FEDERAL COM 002H	XTO ENERGY INC	3rd SS
30025437770000	ESPEJO FEDERAL COM 003H	XTO ENERGY INC	3rd SS
30025437920000	STRATOJET 31 STATE COM 007H	COG OPERATING LLC	3rd SS
30025438160100	AIRSTRIP 31 18 35 RN STATE COM #132H	MATADOR PRODUCTION CO	3rd SS
30025439210100	BLACK & TAN 27 FEDERAL COM 303H	APACHE CORP	3rd SS
30025439400000	BLACK & TAN 27 FEDERAL COM 305H	APACHE CORP	3rd SS
30025440170000	BLACK & TAN 27 FEDERAL COM 301H	APACHE CORP	3rd SS
	BLACK & TAN 27 FEDERAL COM 302H	APACHE CORP	3rd SS
30025440440000	BLACK & TAN 27 FEDERAL COM 307H	APACHE CORP	3rd SS
	BLACK AND TAN 27 FEDERAL COM 308	APACHE CORP	3rd SS
	MAS FEDERAL COM 001H	COG OPERATING LLC	3rd SS
	CHIEF 30 STATE 8H	CIMAREX ENERGY CO	3rd SS
	AIRSTRIP 31-18-35 RN STATE COM 1	MATADOR PRODUCTION CO	3rd SS
	VERNA RAE FEDERAL COM 133H	MATADOR PRODUCTION CO	3rd SS
	VERNA RAE FEDERAL COM 134H	MATADOR PRODUCTION CO	3rd SS
	DELLA 29 FEDERAL COM 603H	EOG RESOURCES INC	3rd SS
	DELLA 29 FEDERAL 604H	EOG RESOURCES INC	3rd SS
	DELLA 29 FEDERAL 605H	EOG RESOURCES INC	3rd SS
	DELLA 29 FEDERAL 606H	EOG RESOURCES INC	3rd SS
	EAGLECLAW FEDERAL COM 002H	CAZA OPERATING LLC	3rd SS
	AIRSTRIP 31-18-35 RN STATE COM 1	MATADOR PRODUCTION CO	3rd SS
	CHIEF 30 STATE 9H	CIMAREX ENERGY CO	3rd SS
	MESCALERO RIDGE 21 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS
30025451540000		LEGACY RESERVES OPERATING LP	3rd SS
	LEA 7 FEDERAL COM 29H	CIMAREX ENERGY CO	3rd SS
	LEA 7 FEDERAL COM 30H	CIMAREX ENERGY CO	3rd SS
30025452100000		LEGACY RESERVES OPERATING LP	3rd SS
	AIRSTRIP 31-18S-35E RN STATE COM	MATADOR PRODUCTION CO	3rd SS
	ANCHOR 19 35 33 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	CABLE 19 35 9 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
	HEREFORD 29-20 W10B FED COM 001H	MEWBOURNE OIL CO	3rd SS
	SANTA VACA 19-18 B3MD STATE COM		
50025408050000	JANTA VACA 19-10 DSIVID STATE CUIVI	MEWBOURNE OIL CO	3rd SS

			1
	TALON 5-8 FEDERAL 001H	CAZA OPERATING LLC	3rd SS
	HEREFORD 29-20 W1MD STATE COM 00	MEWBOURNE OIL CO	3rd SS
	HEREFORD 29-20 W1NC STATE COM 00	MEWBOURNE OIL CO	3rd SS
30025474860000	TALON 5-8 FEDERAL 005H	CAZA OPERATING LLC	3rd SS
	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
30025461240000	BLACK & TAN 27 FEDERAL COM 405H	APACHE CORP	Wolfcamp

## **TAB 5**

Case No. 23448-23451

- Self-Affirmed Statement of Notice, Darin C. Savage Exhibit D:
- Exhibit D-1: Notice Letter
- Exhibit D-2: Mailing List Exhibit D-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.

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.



i

#### 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

**Received by OCD:** 7/13/2023 6:11:56 PM



#### ABADIEISCHILLPC

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

March 15, 2023

#### VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and compulsory pooling, Lea County, New Mexico <u>Mighty Pheasant 5-8 Fed Com 204H Well</u> (Case No. 23448) <u>Mighty Pheasant 5-8 Fed Com 304H Well</u> (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.

**EXHIBIT** 

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: <u>https://www.emnrd.nm.gov/ocd/hearing-info/</u> 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.

**Received by OCD:** 7/13/2023 6:11:56 PM



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#### ABADIE I SCHILL PC

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

March 15, 2023

#### VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and compulsory pooling, Lea County, New Mexico <u>Mighty Pheasant 5-8 Fed Com 301H Well</u> (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.

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: <u>https://www.emnrd.nm.gov/ocd/hearing-info/</u> 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.

**Received by OCD:** 7/13/2023 6:11:56 PM



#### ABADIE I SCHILL PC

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

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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.

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: <u>https://www.emnrd.nm.gov/ocd/hearing-info/</u> or call (505) 476-3441.

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

Sincerely,

Darin C. Savage

Attorney for Cimarex Energy Co.

**Received by OCD:** 7/13/2023 6:11:56 PM



#### ABADIE I SCHILL PC

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

March 15, 2023

#### VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and compulsory pooling, Lea County, New Mexico <u>Mighty Pheasant 5-8 Fed Com 303H Well</u> (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.

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: <u>https://www.emnrd.nm.gov/ocd/hearing-info/</u> 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.

#### Mailing (E2E2 23448)

ReferenceNumber	TYPE	Name1	Name2	Address1	Address2	Address3 City	State	Zip
4207.25	RI	Bureau of Land Management		414 W Taylor St		Hobbs	NM	88240
4207.25	WI	Moore & Shelton Co., Ltd		PO Box 3070		Galveston	ТХ	77552
4207.25	WI	HOG Partnership, LP		5950 Cedar Springs Rd.		Dallas	ТХ	75235
4207.25	WI	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210	Midland	ТХ	79701
4207.25	WI	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	ТХ	79701
4207.25	WI	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	ТХ	79701
		Francis Hill Hudson, Trustee of Lindy's Livin	ng					
4207.25	WI	Trust		4200 S. Hulen St.	Suite 302	Fort Worth	ТХ	76109
		Bank of America, N.A., Successor Trustee of						
4207.25	WI	the Delmar Hudson Lewis Living Trust		301 Commerce St.	Suite 2400	Fort Worth	ТХ	76102
4207.25	WI	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600	Midland	ТХ	79701
4207.25	WI	Zorro Partners, Ltd.		616 Texas St.		Fort Worth	ТХ	76102
4207.25	WI	Frost Bank, Trustee of the Josephine T.		640 Taylor Street	17th floor	Fort Worth	ТХ	76102
4207.25	WI	Ard Oil, LTD		PO Box 101027		Fort Worth	ТХ	76185
4207.25	WI	Chase Oil Corporation		PO Box 1767		Artesia	NM	88211
4207.25	WI	Avalon Energy Corporation		310 West Wall St.	Suite 305	Midland	TX	79701
4207.25	WI	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220	Denver	CO	80203
		Prime Rock Resources AgentCo, Inc., as						
		nominee for the benefit of Prime Rock						
4207.25	WI	Resources, LLC		203 W. Wall Street	Suite 1000	Midland	ТХ	79701
4207.25	WI	Marks Oil, Inc.		1775 Sherman St.	Suite 2990	Denver	CO	80203
4207.25	WI	Javelina Partners		616 Texas St.		Fort Worth	ТХ	76102
4207.25	WI	William A. Hudson, II		616 Texas St.		Fort Worth	ТХ	76102
4207.25	WI	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle	e	Dallas	ТХ	75225



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#### Mailing (W2W2 23449)

ReferenceNumber	TYPE	Name1	Name2	Address1	Address2	Address3	City	State	Zip
4207.25	RI	Bureau of Land Management		414 W Taylor St			Hobbs	NM	88240
4207.25	WI	Moore & Shelton Co., Ltd		PO Box 3070			Galveston	ΤХ	77552
4207.25	WI	HOG Partnership, LP		5950 Cedar Springs Rd.			Dallas	ΤХ	75235
4207.25	WI	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210		Midland	ΤХ	79701
4207.25	WI	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	ΤХ	79701
4207.25	WI	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	ΤХ	79701
4207.25	WI	Francis Hill Hudson, Trustee of Lindy's Living Trust		4200 S. Hulen St.	Suite 302		Fort Worth	ΤХ	76109
4207.25	WI	Bank of America, N.A., Successor Trustee of the Delmar Hudson Lewis Living	g Trust	301 Commerce St.	Suite 2400		Fort Worth	ΤХ	76102
4207.25	WI	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600		Midland	ΤХ	79701
4207.25	WI	Zorro Partners, Ltd.		616 Texas St.			Fort Worth	ΤХ	76102
4207.25	WI	Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. T	errell Ard	640 Taylor Street	17th floor		Fort Worth	ΤХ	76102
4207.25	WI	Ard Oil, LTD		PO Box 101027			Fort Worth	ТΧ	76185
4207.25	WI	Chase Oil Corporation		PO Box 1767			Artesia	NM	88211
4207.25	WI	Avalon Energy Corporation		310 West Wall St.	Suite 305		Midland	ΤХ	79701
4207.25	WI	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220		Denver	CO	80203
		Prime Rock Resources AgentCo, Inc., as nominee for the benefit of Prime Roc	:k						
4207.25	WI	Resources, LLC		203 W. Wall Street	Suite 1000		Midland	ΤХ	79701
4207.25	WI	Marks Oil, Inc.		1775 Sherman St.	Suite 2990		Denver	CO	80203
4207.25	WI	Javelina Partners		616 Texas St.			Fort Worth	ΤХ	76102
4207.25	WI	William A. Hudson, II		616 Texas St.			Fort Worth	ΤХ	76102
4207.25	WI	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle	9		Dallas	ΤХ	75225
4207.25	WI	Highland (Texas) Energy Company		11886 Greenville Ave	Suite 106		Dallas	ΤХ	75243
4207.25	WI	Richardson Oil Company, LLC		11886 Greenville Ave	Suite 106		Dallas	ΤХ	75243
4207.25	WI	Carolyn R. Beall		PO Box 3098			Midland	ΤХ	79702
4207.25	WI	Diamond Star Production Co., LLC		331 G St, SW			Ardmore	OK	73401
4207.25	WI	Tierra Encantada, LLC		P.O. Box 811			Roswell	NM	88202
4207.25	WI	David Luna		P.O. Box 1518			Roswell	NM	88202

### Mailing (E2W2 23450)

ReferenceNumber	TYPE	Name1	Name2	Address1	Address2	Address3	City	State	Zip
4207.25	RI	Bureau of Land Management		414 W Taylor St			Hobbs	NM	88240
4207.25	WI	Moore & Shelton Co., Ltd		PO Box 3070			Galveston	ТХ	77552
4207.25	WI	HOG Partnership, LP		5950 Cedar Springs Rd.			Dallas	ТХ	75235
4207.25	WI	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210		Midland	TX	79701
4207.25	WI	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	TX	79701
4207.25	WI	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	TX	79701
4207.25	WI	Francis Hill Hudson, Trustee of Lindy's Living Trust		4200 S. Hulen St.	Suite 302		Fort Worth	TX	76109
4207.25	WI	Bank of America, N.A., Successor Trustee of the Delmar Hudson Lewis Living Trust		301 Commerce St.	Suite 2400		Fort Worth	TX	76102
4207.25	WI	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600		Midland	TX	79701
4207.25	WI	Zorro Partners, Ltd.		616 Texas St.			Fort Worth	TX	76102
4207.25	WI	Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard	l	640 Taylor Street	17th floor		Fort Worth	TX	76102
4207.25	WI	Ard Oil, LTD		PO Box 101027			Fort Worth	TX	76185
4207.25	WI	Chase Oil Corporation		PO Box 1767			Artesia	NM	88211
4207.25	WI	Avalon Energy Corporation		310 West Wall St.	Suite 305		Midland	TX	79701
4207.25	WI	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220		Denver	CO	80203
		Prime Rock Resources AgentCo, Inc., as nominee for the benefit of Prime Rock							
4207.25	WI	Resources, LLC		203 W. Wall Street	Suite 1000		Midland	TX	79701
4207.25	WI	Marks Oil, Inc.		1775 Sherman St.	Suite 2990		Denver	CO	80203
4207.25	WI	Javelina Partners		616 Texas St.			Fort Worth	TX	76102
4207.25	WI	William A. Hudson, II		616 Texas St.			Fort Worth	TX	76102
4207.25	WI	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle	9		Dallas	TX	75225
4207.25	WI	MRC Permian Company		5400 LBJ Freeway	Suite 1500		Dallas	TX	75240
4207.25	WI	CM Resources II, LLC		300 N. Marienfeld St.	Suite 1000		Midland	ТΧ	79701
4207.25	WI	CBR Oil Properties, LLC		400 N. Pennsylvania	Suite 1080		Roswell	NM	88201
4207.25	WI	Laura K. Read, LLC		P.O. Box 1090			Roswell	NM	88202

### Mailing (W2E2 23451)

ReferenceNumber	TYPE	Name1	Name2	Address1	Address2	Address3	City	State	Zip
4207.25	RI	Bureau of Land Management		414 W Taylor St			Hobbs	NM	88240
4207.25	WI	Moore & Shelton Co., Ltd		PO Box 3070			Galveston	ТΧ	77552
4207.25	WI	HOG Partnership, LP		5950 Cedar Springs Rd.			Dallas	ТΧ	75235
4207.25	WI	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210		Midland	ТΧ	79701
4207.25	WI	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	ТΧ	79701
4207.25	WI	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	ТΧ	79701
4207.25	WI	Francis Hill Hudson, Trustee of Lindy's Living Trust		4200 S. Hulen St.	Suite 302		Fort Worth	ТΧ	76109
4207.25	WI	Bank of America, N.A., Successor Trustee of the Delmar Hudson Lewis Living Trust		301 Commerce St.	Suite 2400		Fort Worth	ТΧ	76102
4207.25	WI	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600		Midland	ТΧ	79701
4207.25	WI	Zorro Partners, Ltd.		616 Texas St.			Fort Worth	ТΧ	76102
4207.25	WI	Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard		640 Taylor Street	17th floor		Fort Worth	ТΧ	76102
4207.25	WI	Ard Oil, LTD		PO Box 101027			Fort Worth	ТΧ	76185
4207.25	WI	Chase Oil Corporation		PO Box 1767			Artesia	NM	88211
4207.25	WI	Avalon Energy Corporation		310 West Wall St.	Suite 305		Midland	ТΧ	79701
4207.25	WI	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220		Denver	CO	80203
		Prime Rock Resources AgentCo, Inc., as nominee for the benefit of Prime Rock							
4207.25	WI	Resources, LLC		203 W. Wall Street	Suite 1000		Midland	ТΧ	79701
4207.25	WI	Marks Oil, Inc.		1775 Sherman St.	Suite 2990		Denver	CO	80203
4207.25	WI	Javelina Partners		616 Texas St.			Fort Worth	ТΧ	76102
4207.25	WI	William A. Hudson, II		616 Texas St.			Fort Worth	ТΧ	76102
4207.25	WI	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle			Dallas	ТΧ	75225

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		Mailed U	ivity Report - CertifiedPro.net from 3/1/2023 to 3/31/2023 ser Name: abadieschill ted: 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	Service Options
9314869904300105478180	03/15/2023	Bureau of Land Management		414 W Taylor St		Hobbs	NM	88240	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478197	03/15/2023	Moore & Shelton Co., Ltd		PO Box 3070		Galveston	ТΧ	77552	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105478203	03/15/2023	HOG Partnership, LP		5950 Cedar Springs Rd.		Dallas	ТΧ	75235	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105478210	03/15/2023	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210	Midland	ТΧ	79701	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105478227	03/15/2023	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	ТΧ	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478234	03/15/2023	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	ТΧ	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	ТΧ	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	ТΧ	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478265	03/15/2023	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600	Midland	ТΧ	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478272	03/15/2023	Zorro Partners, Ltd.		616 Texas St.		Fort Worth	ТΧ	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	ТΧ	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478296	03/15/2023	Ard Oil, LTD		PO Box 101027		Fort Worth	ТΧ	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	03/15/2023	Avalon Energy Corporation		310 West Wall St.	Suite 305	Midland	ТΧ	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	03/15/2023	Prime Rock Resources AgentCo, Inc., as nominee	for the benefit of Prime Rock Resources, LLC	203 W. Wall Street	Suite 1000	Midland	ТΧ	79701	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478340		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	ТΧ	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478364	03/15/2023	William A. Hudson, II		616 Texas St.		Fort Worth	ТΧ	76102	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478371	03/15/2023	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle		Dallas	ТΧ	75225	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478388	03/15/2023	MRC Permian Company		5400 LBJ Freeway	Suite 1500	Dallas	ТΧ	75240	Mailed	Return Receipt - Electronic, Certified Mail
9314869904300105478395	03/15/2023	CM Resources II, LLC		300 N. Marienfeld St.	Suite 1000	Midland	ТΧ	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	ТΧ	75243	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478432	03/15/2023	Richardson Oil Company, LLC		11886 Greenville Ave	Suite 106	Dallas	ТΧ	75243	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478449	03/15/2023	Carolyn R. Beall		PO Box 3098		Midland	ТΧ	79702	Delivered	Return Receipt - Electronic, Certified Mail
9314869904300105478456		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

March 21, 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 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 Navak M. Neverk				
Address of Recipient:	1518				

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

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

March 21, 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 63**.

Item Details				
Status:	Delivered, Individual Picked Up at Post Office			
Status Date / Time:	March 20, 2023, 02:15 p.m.			
_ocation:	ROSWELL, NM 88201			
Postal Product:	First-Class Mail®			
Extra Services:	Certified Mail™			
	Return Receipt Electronic			
Recipient Name:	Tierra Encantada LLC			
Shipment Details				
Veight:	2.0oz			
Recipient Signature				
Signature of Recipient:	Betty Young Betty YOUNY			
Address of Recipient:	P & Brozill ,/Roswell MM FiloZe			

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

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

March 21, 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 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 <sup>®</sup>
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:	Q-
	In mus B Remt. 331 G ST SW
Address of Recipient:	ARDMORE, OK 73401-4958

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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 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: Status Date / Time:	Delivered, Individual Picked Up at Post Office				
Location:	March 21, 2023, 03:19 p.m. MIDLAND, TX 79701				
Postal 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:	Am Shenr				
Address of Recipient:	318				

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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 21, 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 32**.

Item Details						
Status:	Delivered to Agent for Final Delivery					
Status Date / Time:	March 20, 2023, 02:00 p.m.					
Location:	DALLAS, TX 75243					
Postal 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)	11-17					
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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#### Sincerely, United States Postal Service<sup>®</sup> 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

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

March 21, 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 25**.

Item Details					
Status:	Delivered to Agent for Final Delivery				
Status Date / Time:	March 20, 2023, 02:00 p.m.				
Location:	DALLAS, TX 75243				
Postal 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)	11-17				
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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#### Sincerely, United States Postal Service<sup>®</sup> 475 L'Enfant Plaza SW Washington, D.C. 20260-0004

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

Page 252 of 275

POSTAL SERVICE

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:	Defusion and the second				
Address of Recipient:	ROSWELL, NM 88202-1090				

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

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

March 21, 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 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:	Rebelsterers Reras
Address of Recipient:	400 N PENNSYLVANIA AVE STE 1000, ROSWELL, NM 88201

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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 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:	Engene Congene Just Marand
Address of Recipient:	Sur mariner

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Thank you for selecting the United States Postal Service<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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 4783 71**.

Item Details	
Status:	Delivered, Left with Individual
Status Date / Time:	March 18, 2023, 02:45 p.m.
Location:	DALLAS, TX 75225
Postal Product:	First-Class Mail <sup>®</sup>
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:	

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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 21, 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 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:	Covey GIGTEXIAS
Address of Recipient:	616 Texias St

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

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

March 21, 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 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:	Coray Coray 616 Texnas
Address of Recipient:	616 Texias St

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> or a Postal representative at 1-800-222-1811.

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

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

March 21, 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 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)	Bide & Den A
Address of Recipient:	1775 Sherran - 2015

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> or a Postal representative at 1-800-222-1811.

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

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

March 21, 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 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 <sup>®</sup>
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:	M.Sire J
Address of Recipient:	7070-Wall 1072

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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 21, 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 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:	$\frac{1}{344}$
Address of Recipient:	Marth Box

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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 21, 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 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:	Branreyard
Address of Recipient:	161

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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 21, 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 96**.

Item Details	
Status: Status Date / Time: Location: Postal Product: Extra Services: Recipient Name:	Delivered March 20, 2023, 06:53 a.m. FORT WORTH, TX 76185 First-Class Mail <sup>®</sup> Certified Mail™ Return Receipt Electronic Ard Oil LTD
Shipment Details	
Weight:	8.0oz
Destination Delivery Address	
Street Address: City, State ZIP Code:	PO BOX 101027 FORT WORTH, TX 76185-1027
Recipient Signature	
Signature of Recipient:	Bennie Stackten
Address of Recipient:	NU21

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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.

**UNITED STATES** POSTAL SERVICE

March 21, 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 89**.

Item Details	
Status:	Delivered, Left with Individual
Status Date / Time:	March 20, 2023, 01:05 p.m.
Location:	FORT WORTH, TX 76102
Postal Product:	First-Class Mail <sup>®</sup>
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:	H. PAHANE PE
Address of Recipient:	1 616 laylor troot

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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 21, 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 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:	Covey GIGTEXIAS
Address of Recipient:	616 Texias St

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> or a Postal representative at 1-800-222-1811.

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

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

March 21, 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 65**.

Item Details	
Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	March 20, 2023, 01:10 p.m.
Location:	MIDLAND, TX 79701
Postal Product:	First-Class Mail <sup>®</sup>
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:	( - Ocldo- Pam Waldon
Address of Recipient:	600 N MARINAL She lot Midle JJ. TX 71761

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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 Individual
Status 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 NA 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:	J. Garcia T. G. ARELA
Address of Recipient:	30/ Connepte # 2400

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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®
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:	Chyche Chyche
Address of Recipient:	Jul Marenet

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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:	Chyphe Chyphe 200 Marchal
Address of Recipient:	200 Marchal

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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 21, 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 4781 80**.

Item Details	
Status:	Delivered, Left with Individual
Status Date / Time:	March 20, 2023, 11:33 a.m.
Location:	HOBBS, NM 88240
Postal 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:	I VI (KG

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<sup>®</sup> for your mailing needs. If you require additional assistance, please contact your local Post Office<sup>™</sup> 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 STATE OF NEW MEXICO (Seal) 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

67115820

#00276727

00276727

DAVID SESSIONS ABADIE SCHILL 555 RIVERGATE LANE 84-180 **DURANGO, CO 81301** 

# LEGAL NOTICE March 17, 2023 March 17, 2023 <u>CASE No. 23448</u>: 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; 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 OII Conservation Division, hereby gives notice that the Division Examiner will conduct a public hearing at 8:15 a.m. on April 6, 2023, traditionally heid 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 Examiner will conduct a public hearing at 8:15 a.m. on April 6, 2023, traditionally heid at 1220 S. St. Francis, Santa Fe, New Mexico, 87505. However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division's website at: https://www.emnrd.nm.gov/ocd/hearing-info/ or call (505) 478-3441. Cimarex Energy CO.

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 Lincoln 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 Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 leet, 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 declicated 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 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 dominating correction by and a 200% of the another to the Applicant as dominating 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 Observision; the designation of the Applicant as the set of the more supervision of the costs thereof; actual operating costs and charges for supervision;

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.

**Released to Imaging: 7/14/2023 8:08:00 AM** 

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.

hasell

Publisher

Sworn and subscribed to before me this 17th day of March 2023.

Plack

**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 67115820

00276729

DAVID SESSIONS ABADIE SCHILL 555 RIVERGATE LANE 84-180 DURANGO, CO 81301

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 HUD5ON, 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., LLG; 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 yisif the Division's website at https://www.emnrd.nm.gov/ocd/hearing-info/ or call (505) 476-3441. Cimarex

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 this//www.emnrd.nm.gov/ocd/hearing-info/ or call (505) 476-3441. Cimarex Energy Co. (operational office at 600 N. Marienteld St. Suite 600, 79701; HQ office at 1700 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 Applicant as 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.

Released to Imaging: 7/14/2023 8:08:00 AM

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.

hall

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

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, overtiding 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 THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD; FROST BANK, TRUSTEE OF THE JOSEPHINE T, HUDSON TESTAMENTARY TRUST FBO J, TERRELL ARD; ARD OIL, LTD; CHASE OIL CORPORATION; AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION; AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION; AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION; AVALON ENERGY CORPORATION; WILBANKS NEESENVE CORPORATION; AVALON ENERGY CORPORATION; CM RESOURCES II, LLC; CBR OIL PROPENTIES, LLC AND LAURA K, READ, LLC; MARKS OIL, INC.; JAVELINA PARTNERS; WILLIAM A. HUDSON, II; JVIION HILL OIL & GAS CO, INC.; MRC PERMIAN COMPANY; CM RESOURCES II, LLC; CBR OIL PROPENTIES, LLC AND LAURA K, READ, LLC; CONSTAUE, SANA FE, New Mexico, 8505. 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 thtps://www.emmrd.mm.gov/cd/hearing-info/ or alpic hearing at at5 a.m. on April 6, 2023, traditionally held at 1220 S. St. Francis, Santa Fe, New Mexico, 8505. However, under current Division (SO4) 4704. Cimarex Energy CC, (operational office at 600 N. Marienfeld SI, Suite 600, 7701. HO office at 7000 Lincoin Street, Suite 3700, Denver CO 80203 seeks an order from the Division: (1) creating a standard 320.04 acre. more or less, horizontali brodifice at roto unit comprised of LO3 (NE/4 NW operating costs and charges for supervision; the designation of the costs thereor; actual 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. #00276730

67115820

00276730

DAVID SESSIONS ABADIE SCHILL 555 RIVERGATE LANE 84-180 **DURANGO, CO 81301** 

**Released to Imaging:** 7/14/2023 8:08:00 AM

STATE OF NEW MEXICO COUNTY OF LEA

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> 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. 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 royality interest, and record title, among others, whether such and unknown heirs, devices, assigns and successors of such alfacted parties or persons are listed herein or not, as well as notice to all known and unknown heirs, devices, assigns and successors of such alfacted to the supersons, which based on reasonable diligence include MOOHE & SHELTON CO., LTD; HOG PARTNERSHIP, LP; CHALLENGER CRUEL END; READ & STEVENS, INC.; FIRST CENTURY OIL, INC.; FRANCIS HILL HUDSON, TRUSTEE OF THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD.; FROST BANK, TRUSTEE OF THE DELMAR HUDSON TESTAMENTARY AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION; AVALON ENERGY COMPORATION; WILBANKS RESERVE CORPORATION; AVALON ENERGY COLS: 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 heid at 1220 S. St. Francis, Santa Fe, New Mexico, 37505. 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.emmd/n.m. gov/ocd/hearing-info/ or call (605) 476-3441. Climarex Energy Co. (operational office at 600 N. Marienial St. Suite 607, 7971. HO office at 1700 Lincon Street, Suite 3700, Denver

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DAVID SESSIONS ABADIE SCHILL 555 RIVERGATE LANE 84-180 DURANGO, CO 81301

# TAB 6

Case No. 23448-23451

Exhibit E:Resume of Facilities Engineer: Calvin BoyleExpert Facilities Witness Available for Questions and Consultation

# **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

