

**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. 23452:

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

Case No. 23453:

Loosey Goosey 4-9 Fed Com 301H Well

Case No. 23454:

Loosey Goosey 4-9 Fed Com 302H Well

Case No. 23455:

Loosey Goosey 4-9 Fed Com 303H Well

CIMAREX ENERGY CO.

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TAB 1

Reference for Case Nos. 23452-23455

Applications Case Nos. 23452-23455:

Loosey Goosey 4-9 Fed Com 204H Well

Loosey Goosey 4-9 Fed Com 304H Well

Loosey Goosey 4-9 Fed Com 301H Well

Loosey Goosey 4-9 Fed Com 302H Well

Loosey Goosey 4-9 Fed Com 303H Well

NMOCD Checklists Case Nos. 23452-23455

Prehearing Statement Case Nos. 23452-23455

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

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

Case No. 23452

APPLICATION

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

In support of its Application, Cimarex states the following:

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

2. Cimarex proposes and dedicates to the HSU the **Loosey Goosey 4-9 Fed Com 204H Well** and the **Loosey Goosey 4-9 Fed Com 304H Well**, as initial wells, to be drilled to a sufficient depth to test the Bone Spring formation.

3. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 204H Well**, an oil well, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 9, Township 20, Range 34 East, NMPM.

4. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 304H Well**, an oil well, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 9, Township 20, Range 34 East, NMPM.

5. The proposed wells are orthodox in their locations, and the take points and completed intervals comply with setback requirements under the statewide rules.

6. Cimarex's review of the land records did not reveal any overlapping units.

7. Cimarex has sought in good faith but has been unable to obtain voluntary agreement from all interest owners to participate in the drilling of the wells or the commitment of their interests to the wells for their development within the proposed HSU.

8. The pooling of all interests in the Bone Spring formation within the proposed HSU will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.

9. In order to provide for its just and fair share of the oil and gas underlying the subject lands, Cimarex requests that all uncommitted interests in this HSU be pooled and that Cimarex be designated the operator of the proposed horizontal wells and HSU.

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

- A. Establishing of a standard 320.89-acre, more or less, spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico;
- B. Pooling all uncommitted mineral interests in the Bone Spring formation underlying the proposed HSU;
- C. Approving the **Loosey Goosey 4-9 Fed Com 204H Well** and the **Loosey Goosey 4-9 Fed Com 304H Well** as the wells for the HSU.
- D. Designating Cimarex as operator of this HSU and the horizontal wells to be drilled thereon;
- E. Authorizing Cimarex to recover its costs of drilling, equipping, and completing the wells;
- F. Approving actual operating charges and costs of supervision, to the maximum extent allowable, while drilling and after completion, together with a provision adjusting the rates pursuant to the COPAS accounting procedures; and
- G. Setting a 200% charge for the risk assumed by Cimarex in drilling and completing the wells in the event a working interest owner elects not to participate in the wells.

Respectfully submitted,

ABADIE & SCHILL, PC

/s/ *Darin C. Savage*

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Attorneys for Cimarex Energy Co.

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

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

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

Case No. 23453

APPLICATION

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

In support of its Application, Cimarex states the following:

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

3. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 301H Well**, an oil well, to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SW/4 (Unit M) of Section 9, Township 20, Range 34 East, NMPM.

4. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under the statewide rules.

5. Cimarex has sought in good faith but has been unable to obtain voluntary agreement from all interest owners to participate in the drilling of the well or the commitment of their interests to the well for their development within the proposed HSU.

6. The pooling of all interests in the Bone Spring formation within the proposed HSU will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.

7. Cimarex's review of the land records did not reveal any overlapping units.

8. In order to provide for its just and fair share of the oil and gas underlying the subject lands, Cimarex requests that all uncommitted interests in this HSU be pooled and that Cimarex be designated the operator of the proposed horizontal well and HSU.

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

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

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

Respectfully submitted,

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

Case No. 23454

APPLICATION

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

In support of its Application, Cimarex states the following:

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

3. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 302H Well**, an oil well, to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SW/4 (Unit N) of Section 9, Township 20, Range 34 East, NMPM.

4. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under the statewide rules.

5. Cimarex's review of the land records did not reveal any overlapping units.

6. Cimarex has sought in good faith but has been unable to obtain voluntary agreement from all interest owners to participate in the drilling of the well or the commitment of their interests to the well for their development within the proposed HSU.

7. The pooling of all interests in the Bone Spring formation within the proposed HSU will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.

8. In order to provide for its just and fair share of the oil and gas underlying the subject lands, Cimarex requests that all uncommitted interests in this HSU be pooled and that Cimarex be designated the operator of the proposed horizontal well and HSU.

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

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

Respectfully submitted,

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Attorneys for Cimarex Energy Co.

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

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

Case No. 23455

APPLICATION

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

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

3. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 303H Well**, an oil well, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SE/4 (Unit O) of Section 9, Township 20, Range 34 East, NMPM.

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

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

Respectfully submitted,

ABADIE & SCHILL, PC

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

COMPULSORY POOLING APPLICATION CHECKLIST

ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

Case: 23452	APPLICANT'S RESPONSE
Date: July 20, 2023 (Scheduled hearing)	
Applicant	Cimarex Energy Co.
Designated Operator & OGRID (affiliation if applicable)	215099
Applicant's Counsel:	Darin C. Savage, Abadie & Schill, P.C.
Case Title:	APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	Permian Resources Operating, LLC Read & Stevens, Inc. Northern Oil and Gas, Inc. Attorneys for Sandstone Properties, LLC
Well Family	Loosey Goosey
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Quail Ridge; Bone Spring Pool [Code 50460]
Well Location Setback Rules:	Statewide Rules
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320.89-acre, more or less
Building Blocks:	Quarter-Quarter Sections (40 Acre Blocks)
Orientation:	North to South
Description: TRS/County	Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested in this application?	Yes, Standard Spacing Unit
Other Situations	
Depth Severance: Y/N. If yes, description	No, N/A
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	No
Applicant's Ownership in Each Tract	See Exhibit A-2.1, breakdown of ownership
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed

Well #1	Loosey Goosey 4-9 Fed Com 204H Well (API No. 30-015-Pending), SHL: Unit O, 194' FSL, 1428' FEL, Section 33, T19S-R34E; BHL: Unit P, 100' FSL, 330' FEL, Section 9, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location
Horizontal Well First and Last Take Points	Loosey Goosey 4-9 Fed Com 204H Well: FTP: 100' FNL, 330' FEL, Section 4; LTP: 100' FSL, 330' FEL, Section 9
Completion Target (Formation, TVD and MD)	Loosey Goosey 4-9 Fed Com 204H Well: TVD approx. 10,300', TMD 20,518'; Bone Spring formation, See Exhibit A, A-1
Well #2	Loosey Goosey 4-9 Fed Com 304H Well (API No. 30-015-Pending), SHL: Unit O, 194' FSL, 1408' FEL, Section 33, T19S-R34E; BHL: Unit P, 100' FSL, 330' FEL, Section 9, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location
Horizontal Well First and Last Take Points	Loosey Goosey 4-9 Fed Com 304H Well: FTP: 100' FNL, 330' FEL, Section 4; LTP: 100' FSL, 330' FEL, Section 9
Completion Target (Formation, TVD and MD)	Loosey Goosey 4-9 Fed Com 304H Well: TVD approx. 10,800', TMD 21,075'; 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-2.1
Tract List (including lease numbers and owners)	Exhibit A-2.1
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-2.1
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
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	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 provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	/s/ <i>Darin Savage</i>
Date:	Date 7-13-2023

COMPULSORY POOLING APPLICATION CHECKLIST**ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS**

Case: 23453	APPLICANT'S RESPONSE
Date: July 20, 2023 (Scheduled hearing)	
Applicant	Cimarex Energy Co.
Designated Operator & OGRID (affiliation if applicable)	215099
Applicant's Counsel:	Darin C. Savage, Abadie & Schill, P.C.
Case Title:	APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	Permian Resources Operating, LLC Read & Stevens, Inc. Northern Oil and Gas, Inc. Attorneys for Sandstone Properties, LLC
Well Family	Loosey Goosey
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Quail Ridge; Bone Spring Pool [Code 50460]
Well Location Setback Rules:	Statewide Rules
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320.21-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 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested in this application?	Yes, Standard Spacing Unit
Other Situations	
Depth Severance: Y/N. If yes, description	No, N/A
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	No
Applicant's Ownership in Each Tract	See Exhibit A-2.2, 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

Well #1	Loosey Goosey 4-9 Fed Com 301H Well (API No. 30-015-Pending), SHL: Unit N, 1189' FSL, 1464' FWL, Section 33, T19S-R34E; BHL: Unit M, 100' FSL, 706' FWL, Section 9, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location
Horizontal Well First and Last Take Points	Loosey Goosey 4-9 Fed Com 301H Well: FTP: 100' FNL, 706' FWL, Section 4; LTP: 100' FSL, 706' FWL, Section 9
Completion Target (Formation, TVD and MD)	Loosey Goosey 4-9 Fed Com 301H Well: TVD approx. 10,830', TMD 21,091'; 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-2.2
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
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 provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	<i>/s/ Darin Savage</i>
Date:	Date 7-13-2023

COMPULSORY POOLING APPLICATION CHECKLIST**ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS**

Case: 23454	APPLICANT'S RESPONSE
Date: July 20, 2023 (Scheduled hearing)	
Applicant	Cimarex Energy Co.
Designated Operator & OGRID (affiliation if applicable)	215099
Applicant's Counsel:	Darin C. Savage, Abadie & Schill, P.C.
Case Title:	APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	Permian Resources Operating, LLC Read & Stevens, Inc. Northern Oil and Gas, Inc. Attorneys for Sandstone Properties, LLC
Well Family	Loosey Goosey
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Quail Ridge; Bone Spring Pool [Code 50460]
Well Location Setback Rules:	Statewide Rules
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320.44-acre, more or less
Building Blocks:	Quarter-Quarter Sections (40 Acre Blocks)
Orientation:	North to South
Description: TRS/County	Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe <u>and</u> is approval of non-standard unit requested in this application?	Yes, Standard Spacing Unit
Other Situations	
Depth Severance: Y/N. If yes, description	No, N/A
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	No
Applicant's Ownership in Each Tract	See Exhibit A-2.3, breakdown of ownership
Well(s)	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed

Well #1	Loosey Goosey 4-9 Fed Com 302H Well (API No. 30-015-Pending), SHL: Unit N, 1189' FSL, 1484' FWL, Section 33, T19S-R34E; BHL: Unit N, 100' FSL, 2120' FWL, Section 9, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location
Horizontal Well First and Last Take Points	Loosey Goosey 4-9 Fed Com 302H Well: FTP: 100' FNL, 2120' FWL, Section 4; LTP: 100' FSL, 2120' FWL, Section 9
Completion Target (Formation, TVD and MD)	Loosey Goosey 4-9 Fed Com 302H Well: TVD approx. 10,820', TMD 21,100'; 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
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-2.3
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 provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	/s/ Darin Savage
Date:	Date 7-13-2023

COMPULSORY POOLING APPLICATION CHECKLIST**ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS**

Case: 23455	APPLICANT'S RESPONSE
Date: July 20, 2023 (Scheduled hearing)	
Applicant	Cimarex Energy Co.
Designated Operator & OGRID (affiliation if applicable)	215099
Applicant's Counsel:	Darin C. Savage, Abadie & Schill, P.C.
Case Title:	APPLICATION OF CIMAREX ENERGY CO., FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO
Entries of Appearance/Intervenors:	Permian Resources Operating, LLC Read & Stevens, Inc. Northern Oil and Gas, Inc. Attorneys for Sandstone Properties, LLC
Well Family	Loosey Goosey
Formation/Pool	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Quail Ridge; Bone Spring Pool [Code 50460]
Well Location Setback Rules:	Statewide Rules
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320.66-acre, more or less
Building Blocks:	Quarter-Quarter Sections (40 Acre Blocks)
Orientation:	North to South
Description: TRS/County	Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested 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, 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	Loosey Goosey 4-9 Fed Com 303H Well (API No. 30-015-Pending), SHL: Unit O, 194' FSL, 1448' FEL, Section 33, T19S-R34E; BHL: Unit O, 100' FSL, 1744' FEL, Section 9, T20S-R34E, NMPM; Lea County, New Mexico, standup, standard location
Horizontal Well First and Last Take Points	Loosey Goosey 4-9 Fed Com 303H Well: FTP: 100' FNL, 1744' FEL, Section 4; LTP: 100' FSL, 1744' FEL, Section 9
Completion Target (Formation, TVD and MD)	Loosey Goosey 4-9 Fed Com 303H Well: TVD approx. 10,810', TMD 20,966'; Bone Spring formation, See Exhibit A, A-1
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	\$8000, Exhibit A
Production Supervision/Month \$	\$800, Exhibit A
Justification for Supervision Costs	Exhibit A
Requested Risk Charge	200%, Exhibit A
Notice of Hearing	
Proposed Notice of Hearing	Exhibit D, D-1
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit D-2.4
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
Pooled Parties (including ownership type)	All uncommitted WI owners; including as shown on Exhibit A-2
Unlocatable Parties to be Pooled	Exhibit A-2
Ownership Depth Severance (including percentage above & below)	N/A
Joinder	
Sample Copy of Proposal Letter	Exhibit A-3
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-2.4
Chronology of Contact with Non-Joined Working Interests	Exhibit A-4
Overhead Rates In Proposal Letter	Exhibit A-3
Cost Estimate to Drill and Complete	Exhibit A-3
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	Exhibit A-1
Tracts	Exhibit A-2.4
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-2.4
General Location Map (including basin)	Exhibit A-2.4
Well Bore Location Map	Exhibit A-1, B-2, B-3
Structure Contour Map - Subsea Depth	Exhibit B-5, B-6, 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 provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Darin C. Savage
Signed Name (Attorney or Party Representative):	<i>/s/ Darin Savage</i>
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. 23452, 23453, 23454 & 23455

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. 23448-23451, 23594 – 23601 and 23508 – 23523 for a contested hearing pursuant to that certain “Further Amended Pre-Hearing Order” issued on June 8, 2023. This Prehearing Statement describes Cimarex’s Case Nos. 23452- 23455, which propose to pool the Bone Spring formation underlying Sections 4 and 9, in Township 20 South, Range 34 East, NMPM, Lea County (“Subject Lands”) and which compete directly against Case Nos. 23508 – 23511 filed by Read & Stevens, Inc., in association with Permian Resources Operating, LLC (collectively referred to herein as “Permian Resources”) which also propose to pool the Bone Spring formation underlying the Subject Lands.

APPEARANCES

APPLICANT

Cimarex Energy Co.

ATTORNEY

Darin C. Savage
Andrew D. Schill
William E. Zimsky
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COMPETING PARTY

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

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ADDITIONAL PARTIES

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1780 Hughes Landing Blvd., Ste 750
The Woodlands, TX 77380
281-203-5730
Facsimile: 281-203-5701
blake.jones@steptoe-johnson.com

APPLICANT'S STATEMENT OF THE CASES

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

In Case No. 23452, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, from a stratigraphic equivalent of 9,373 feet (that being the top of 1st Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], a depth as defined on the log for the Hudson Federal #1 Well (API No. 30-025-32819), to a stratigraphic equivalent of 10,845 feet, as defined by same Well, that being the base of the Bone Spring formation, designated as an oil pool, underlying a standard 320.89-acre, more or less, spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Loosey Goosey 4-9 Fed Com 204H Well** and the **Loosey Goosey 4-9 Fed Com 304H Well**, as initial wells, to be drilled to a sufficient depth to test the Bone Spring formation. The proposed wells are orthodox in their locations, and the take points and completed intervals comply with setback requirements under statewide rules.

In Case No. 23453, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, from a stratigraphic equivalent of 9,373 feet (that being the top of 1st Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], a depth as defined on the log for the Hudson Federal #1 Well (API No. 30-025-32819), to a stratigraphic equivalent of 10,845 feet, as defined by same Well, that being the base of the Bone

Spring formation, designated as an oil pool, underlying a standard 320.21-acre, more or less, spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Loosey Goosey 4-9 Fed Com 301H Well**, as the initial well, to be drilled to a sufficient depth to test the Bone Spring formation. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under statewide rules.

In Case No. 23454, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, from a stratigraphic equivalent of 9,373 feet (that being the top of 1st Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], a depth as defined on the log for the Hudson Federal #1 Well (API No. 30-025-32819), to a stratigraphic equivalent of 10,845 feet, as defined by same Well, that being the base of the Bone Spring formation, designated as an oil pool, underlying a standard 320.44-acre, more or less, spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Loosey Goosey 4-9 Fed Com 302H Well**, as the initial well, to be drilled to a sufficient depth to test the Bone Spring formation. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under statewide rules.

In Case No. 23455, Cimarex seeks an order pooling all uncommitted mineral interests in the Bone Spring formation, more specifically, from a stratigraphic equivalent of 9,373 feet (that being the top of 1st Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], a depth as defined on the log for the Hudson Federal #1 Well (API No. 30-025-32819), to a

stratigraphic equivalent of 10,845 feet, as defined by same Well, that being the base of the Bone Spring formation, designated as an oil pool, underlying a standard 320.66-acre, more or less, spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex proposes and dedicates to the unit the **Loosey Goosey 4-9 Fed Com 303H Well**, as the initial well, to be drilled to a sufficient depth to test the Bone Spring formation. The proposed well is orthodox in its location, and the take points and completed interval comply with setback requirements under statewide rules.

Cimarex's four cases described herein and its plans for development compete directly with Case Nos. 23508, 23509, 23510, and 23511 filed by Permian Resources for the Subject Lands. In Case No. 23508, Permian Resources seeks to pool all uncommitted interests in the Bone Spring formation underlying a standard 320-acre, more or less, spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Bane 4-9 Federal Com 111H, 121H, 122H, 171H, and 131H wells to said unit.

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

In Case No. 23510, Permian Resources seeks to pool all uncommitted interests in the Bone Spring formation underlying a standard 320-acre, more or less, spacing and proration unit

comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, dedicating the Bane 4-9 Federal Com 113H, 125H, 126H, 173H, and 133H wells to said unit.

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

APPLICANT'S PROPOSED EVIDENCE AND WITNESS QUALIFICATIONS

WITNESS	ESTIMATED TIME	EXHIBITS
Landman: John Coffman 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.	Approx. 45 min	Approx. 9
Geologist: Staci Meuller Qualifications: I have a Bachelor of Science Degree in Geophysical Engineering from Colorado School of Mines, and a Master of Science Degree in Geophysics from Colorado School of Mines. I have worked on New Mexico Oil and Gas matters since July 2018. My credentials as an expert witness in geology have been accepted by the Division and made a matter of record.	Approx. 45 min	Approx. 21
Reservoir Engineer: Eddie Behm 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.	Approx. 45 minutes	Approx. 17
Facilities Engineer: Calvin Boyle 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	Available for questions (15 min)	Approx. 1

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 or the Bone Spring.

LIST OF DISPUTED FACTS AND ISSUES

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

PROCEDURAL MATTERS

This contested hearing includes Cimarex's Case Nos. 23452 – 23455 and Permian Resources' competing applications in Case Nos. 23508 – 23511, as described herein, but the hearing also includes numerous additional cases for the Bone Spring in Sections 5 and 8, Township

20 South, Range 34 East, NMPM, Lea County, New Mexico, and consideration of whether to drill the Wolfcamp formation. In all, the Division will need to review and consider 32 cases addressing both the Bone Spring and Wolfcamp in Sections 5 and 8 and Sections 4 and 9, all in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. The Prehearing Statements submitted in these matters, three Prehearing Statements in all, are organized in an effort to provide a manageable approach to reviewing the cases by addressing (1) the 8 competing cases in the Bone Spring for Sections 5 and 8; (2) the 8 competing cases in the Bone Spring for Sections 4 and 9; and finally (3) the status of the competing cases filed for the Wolfcamp formation in both Sections 4 and 9 and Sections 5 and 8.

Respectfully submitted,

ABADIE & SCHILL, PC

/s/ Darin C. Savage

Darin C. Savage

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Attorneys for Cimarex Energy Co.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was filed with the New Mexico Oil Conservation Division and was served on counsel of record via electronic mail on July 13, 2023:

Michael H. Feldewert – mfeldewert@hollandhart.com
Adam G. Rankin – agrankin@hollandhart.com
Julia Broggi – jbroggi@hollandhart.com
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and Permian Resources Operating, LLC*

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Attorney for Northern Oil and Gas, Inc.

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Attorneys for Sandstone Properties, LLC

/s/ Darin C. Savage

Darin C. Savage

TAB 2

Case Nos. 23452-23455

Exhibit A: Self-Affirmed Statement of John Coffman Landman
Exhibit A-1: C-102 Forms
Exhibit A-2.1: Ownership and Sectional Map
Exhibit A-2.2: Ownership and Sectional Map
Exhibit A-2.3: Ownership and Sectional Map
Exhibit A-2.4: Ownership and Sectional Map
Exhibit A-3: Well Proposal Letters and AFEs
Exhibit A-4: Chronology of Contacts with Uncommitted Owners
Exhibit A-5: Support Letters from Interest Owners
Exhibit A-6: Read and Stevens Original Well Proposal

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

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

Case Nos. 23452, 23453, 23454 & 23455

SELF-AFFIRMED STATEMENT OF JOHN COFFMAN

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

1. I am over the age of eighteen years and have the capacity to execute this Self-Affirmed Statement, which is based on my personal knowledge.

2. I am employed as a Landman with Coterra Energy, Inc., and its subsidiary Cimarex Energy Co. ("Cimarex"), the applicant in this case, and I am familiar with the subject application and the lands involved.

3. I graduated in 2018 from Texas Tech University with a bachelor's degree in Business Administration with an emphasis on Energy Commerce. I have worked at Cimarex for approximately 4 years, and I have been working in New Mexico for 5 years. My credentials as an expert witness in petroleum land matters have been accepted by the New Mexico Oil Conservation Division ("Division") and made a matter of record.

4. This Statement is submitted in connection with the filing by Cimarex of the above-referenced compulsory pooling applications pursuant to 19.15.4.12.A(1).

5. The above-referenced cases (Case Nos. 23452 – 23455) all seek to develop the Bone Spring formation underlying Sections 4 and 9, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico ("Subject Lands"); and therefore, we have grouped them together for

**EXHIBIT
A**

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

6. Under Case No. 23452, 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 1st 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 320.89-acre, more or less, spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit two initial wells: the **Loosey Goosey 4-9 Fed Com 204H Well**, and the **Loosey Goosey 4-9 Fed Com 304H Well**.

7. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 204H Well** (API pending) to be horizontally drilled from a surface location 194' FSL and 1428' FEL of Section 33, Township 19 South, Range 34 East to a bottom hole location 100' FSL and 330' FEL of Section 9, Township 20 South, Range 34 East; approximate TVD of 10,300'; approximate TMD of 20,518'; FTP in Section 4: 100' FNL, 330' FEL; LTP in Section 9: 100' FSL, 330' FEL.

8. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 304H Well** (API pending) to be horizontally drilled from a surface location 194' FSL and 1408' FEL of Section 33 to a bottom hole location 100' FSL and 330' FEL of Section 9; approximate TVD of 10,800'; approximate TMD of 21,075'; FTP in Section 4: 100' FNL, 330' FEL; LTP in Section 9: 100' FSL, 330' FEL.

9. Under Case No. 23453, 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 1st 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 320.21-acre, more or less, spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4 and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit the **Loosey Goosey 4-9 Fed Com 301H Well**.

10. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 301H Well** (API pending) to be horizontally drilled from a surface location 1189' FSL and 1464' FWL of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location 100' FSL and 706' FWL of Section 9 Township 20 South, Range 34 East, NMPM; approximate TVD of 10,830'; approximate TMD of 21,091'; FTP in Section 4: 100' FNL, 706' FWL; LTP in Section 9: 100' FSL, 706' FWL.

11. Under Case No. 23454, 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 1st 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 320.44-acre, more or less, spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4 and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit the **Loosey Goosey 4-9 Fed Com 302H Well**.

12. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 302H Well** (API pending) to be horizontally drilled from a surface location 1189' FSL and 1484' FWL of Section 33 Township 19 South, Range 34 East, NMPM, to a bottom hole location in the 100' FSL and 2120' FWL of Section 9, Township 20 South, Range 34 East; with an approximate TVD of 10,820'; approximate TMD of 21,100'; FTP in Section 4: 100' FNL, 2,120' FWL; LTP in Section 9: 100' FSL, 2,120' FWL.

13. Under Case No. 23455, 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 1st 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 320.66-acre, more or less, spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4 and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Cimarex intends to dedicate to the unit the **Loosey Goosey 4-9 Fed Com 303H Well**.

14. Cimarex proposes the **Loosey Goosey 4-9 Fed Com 303H Well** (API pending) to be horizontally drilled from a surface location 194' FSL and 1448' FEL of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location 100' FSL and 1,744' FEL of Section 9; approximate TVD of 10,810'; approximate TMD of 20,966'; FTP in Section 4: 100' FNL, 1,744' FEL; LTP in Section 9: 100' FSL, 1,744' FEL.

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 Morrow 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.

18. 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.

20. I provided the law firm of Abadie & Schill P.C. a list of names and addresses for the uncommitted interest owners shown on **Exhibit A-2.1** through **Exhibit A-2.4**. In compiling these addresses, I conducted a diligent search of the public records in **Lea** County, New Mexico, where the wells are located, and of phone directories and did computer searches to locate the contact information for parties entitled to notification. All working interest owners were locatable and noticed. Cimarex published notice in the Hobbs News-Sun, a newspaper of general circulation in Lea County, New Mexico, to account for any unlocatable parties and cover any contingencies regarding notice.

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 1st, 2nd and 3rd 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.

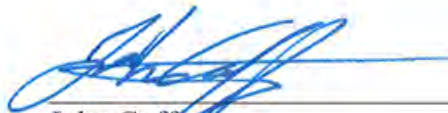
30. The granting of this Application is in the best interests of conservation, the prevention of waste, and the protection of correlative rights, and will avoid the drilling of unnecessary wells. Due to Cimarex's operational footprint and expertise in the area, we are able to utilize our drilling efficiencies, 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. 23452, 23453, 23454 and 23455, and affirm that my testimony herein is true and correct, to the best of my knowledge and belief and made under penalty of perjury under the laws of the State of New Mexico.



John Coffman



Date Signed

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-	² Pool Code 50460	³ Pool Name Quail Ridge; Bone Spring
⁴ Property Code	⁵ Property Name LOOSEY GOOSEY 4-9 FED COM	⁶ Well Number 204H
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁹ Elevation 3659.8'

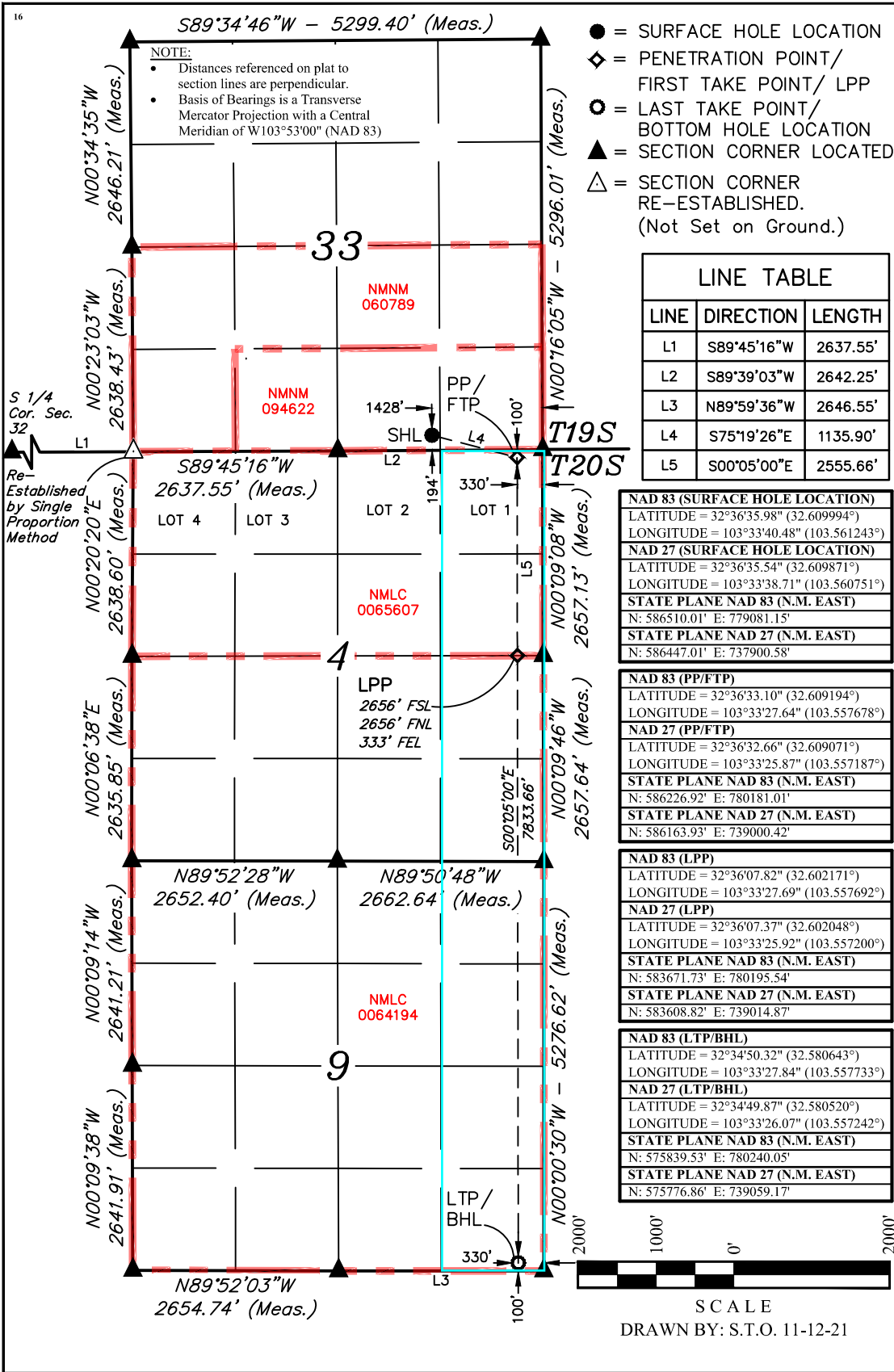
¹⁰ Surface Location

UL or lot no. O	Section 33	Township 19S	Range 34E	Lot Idn	Feet from the 194	North/South line SOUTH	Feet from the 1428	East/West line EAST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. P	Section 9	Township 20S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 330	East/West line EAST	County LEA
¹² Dedicated Acres 320.89	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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



¹⁷ OPERATOR
CERTIFICATION

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

Amithy Crawford 15/22
Signature Date

Amithy Crawford
Printed Name

amithy.crawford@coterra.com
E-mail Address

¹⁸ SURVEYOR
CERTIFICATION

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

November 01, 2021

Date of Survey
Signature and Seal of Professional Surveyor:

PAUL BUCHELE
NEW MEXICO
23782
11-12-21
PROFESSIONAL SURVEYOR

Certificate Number:

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025		² Pool Code 50460		³ Pool Name Quail Ridge; Bone Spring	
⁴ Property Code		⁵ Property Name LOOSEY GOOSEY 4-9 FED COM			⁶ Well Number 304H
⁷ OGRID No. 215099		⁸ Operator Name CIMAREX ENERGY CO.			⁹ Elevation 3659.4'

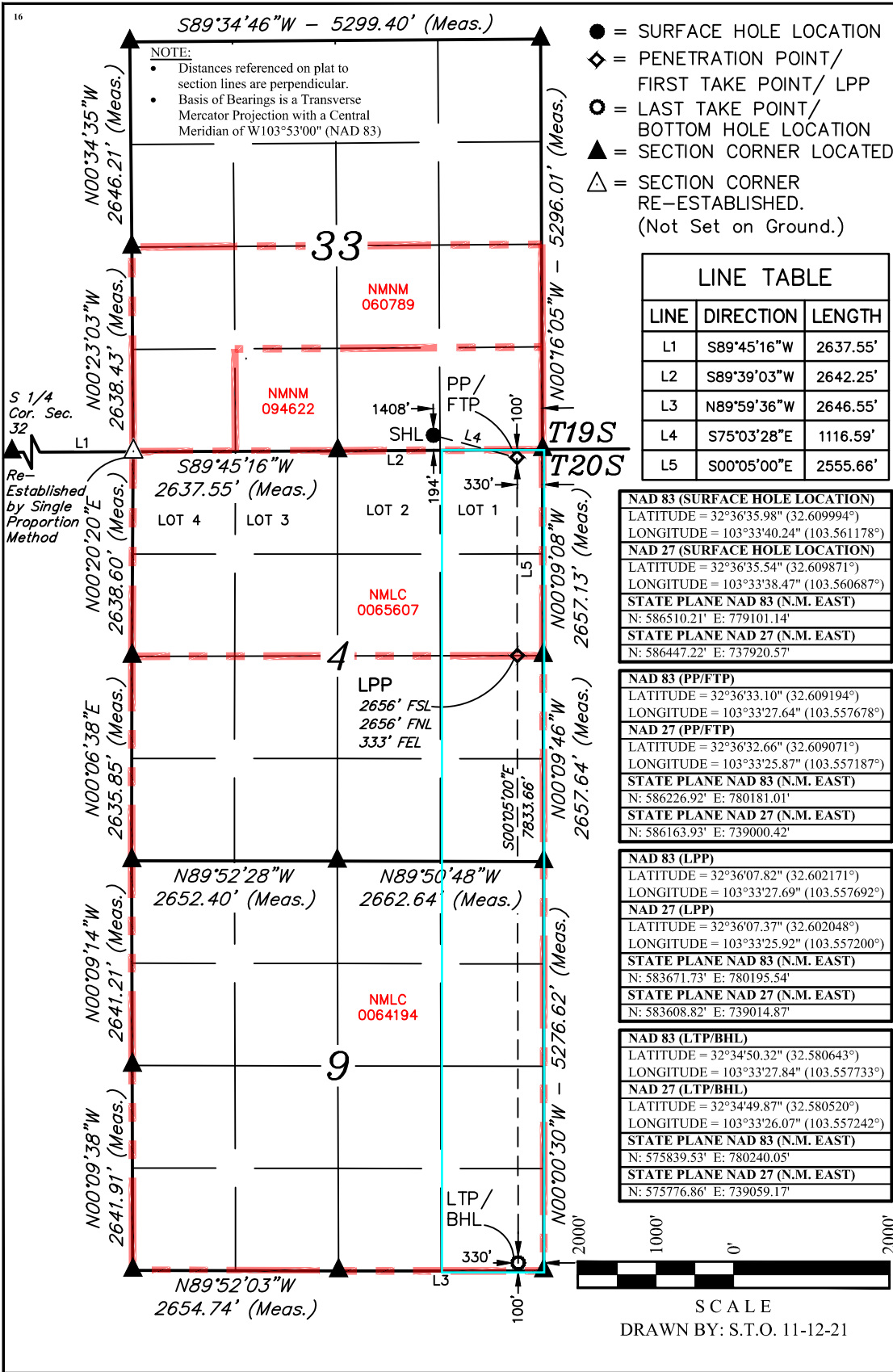
¹⁰ Surface Location

UL or lot no. O	Section 33	Township 19S	Range 34E	Lot Idn	Feet from the 194	North/South line SOUTH	Feet from the 1408	East/West line EAST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. P	Section 9	Township 20S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 330	East/West line EAST	County LEA
¹² Dedicated Acres 320.89		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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



¹⁷ OPERATOR
CERTIFICATION

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

Amithy Crawford 3/15/22
Signature Date

Amithy Crawford
Printed Name

amithy.crawford@coterra.com
E-mail Address

¹⁸ SURVEYOR
CERTIFICATION

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

November 01, 2021

Date of Survey
Signature and Seal of Professional Surveyor:

PAUL BUCHELE
NEW MEXICO
23782
11-12-21
PROFESSIONAL SURVEYOR

Certificate Number:

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025		² Pool Code 50460		³ Pool Name Quail Ridge; Bone Spring	
⁴ Property Code		⁵ Property Name LOOSEY GOOSEY 4-9 FED COM			⁶ Well Number 301H
⁷ OGRID No. 215099		⁸ Operator Name CIMAREX ENERGY CO.			⁹ Elevation 3659.4'

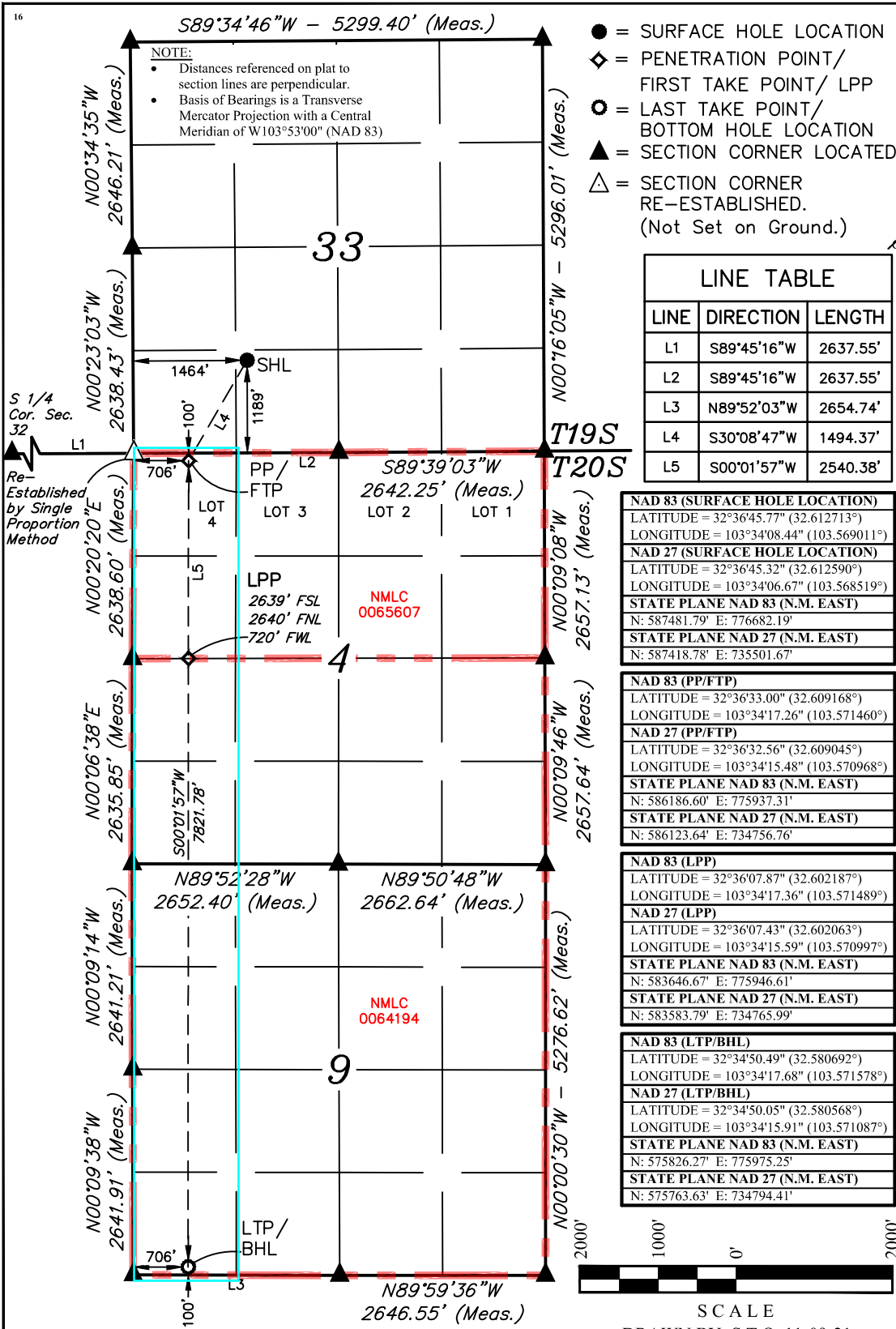
¹⁰ Surface Location

UL or lot no. N	Section 33	Township 19S	Range 34E	Lot Idn	Feet from the 1189	North/South line SOUTH	Feet from the 1464	East/West line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

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

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



¹⁷ OPERATOR
CERTIFICATION

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

Amithy Crawford 3/9/22

Signature Date

Amithy Crawford

Printed Name

amithy.crawford@coterra.com

E-mail Address

¹⁸ SURVEYOR
CERTIFICATION

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

November 02, 2021

Date of Survey

Signature and Seal of Professional Surveyor:

PAUL BUCHELE
NEW MEXICO
23782
11-09-21
PROFESSIONAL SURVEYOR

Certificate Number:

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025		² Pool Code 50460		³ Pool Name Quail Ridge; Bone Spring	
⁴ Property Code		⁵ Property Name LOOSEY GOOSEY 4-9 FED COM			⁶ Well Number 302H
⁷ OGRID No. 215099		⁸ Operator Name CIMAREX ENERGY CO.			⁹ Elevation 3659.8'

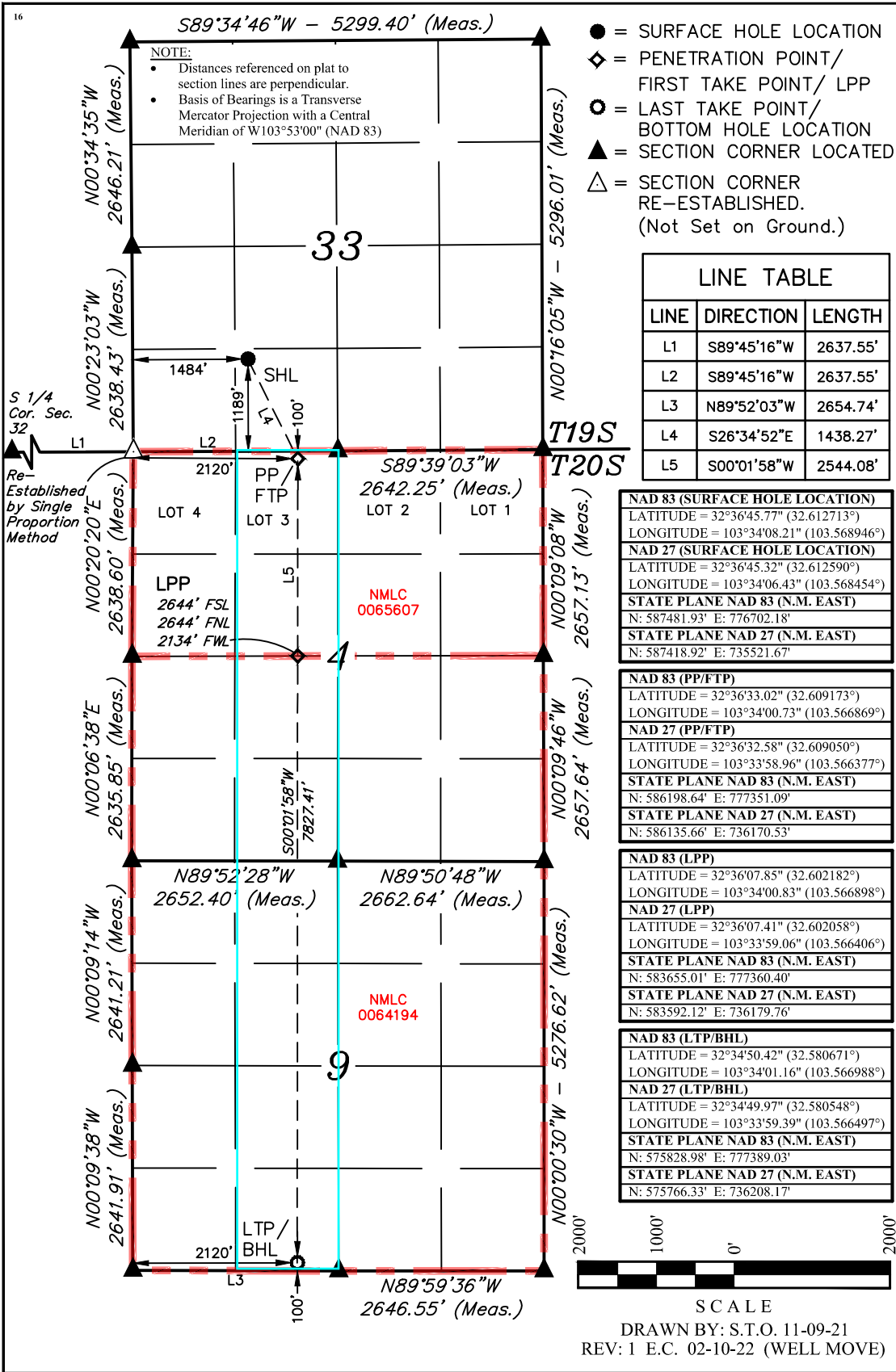
¹⁰ Surface Location

UL or lot no. N	Section 33	Township 19S	Range 34E	Lot Idn	Feet from the 1189	North/South line SOUTH	Feet from the 1484	East/West line WEST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. N	Section 9	Township 20S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 2120	East/West line WEST	County LEA
¹² Dedicated Acres 320.44		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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



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CERTIFICATION

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Amithy Crawford 3/15/22
Signature Date

Amithy Crawford
Printed Name

amithy.crawford@coterra.com
E-mail Address

¹⁸ SURVEYOR
CERTIFICATION

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

November 02, 2021

Date of Survey
Signature and Seal of Professional Surveyor:

PAUL BUCHELE
NEW MEXICO
23782
02-18-22
PROFESSIONAL SURVEYOR

Certificate Number:

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025		² Pool Code 50460		³ Pool Name Quail Ridge; Bone Spring	
⁴ Property Code		⁵ Property Name LOOSEY GOOSEY 4-9 FED COM			⁶ Well Number 303H
⁷ OGRID No. 215099		⁸ Operator Name CIMAREX ENERGY CO.			⁹ Elevation 3659.9'

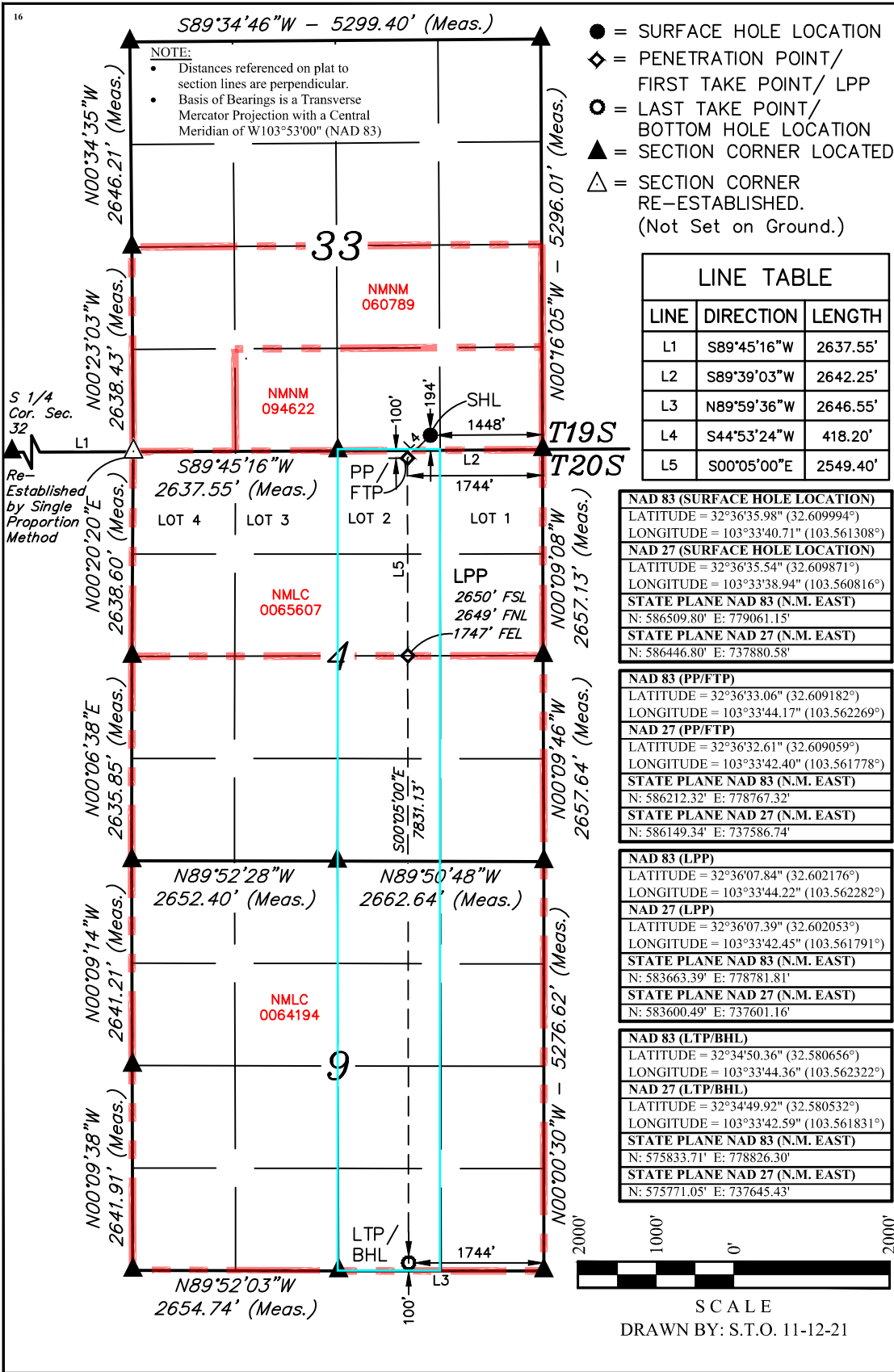
¹⁰ Surface Location

UL or lot no. O	Section 33	Township 19S	Range 34E	Lot Idn	Feet from the 194	North/South line SOUTH	Feet from the 1448	East/West line EAST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. O	Section 9	Township 20S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 1744	East/West line EAST	County LEA
¹² Dedicated Acres 320.66		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

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



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Amithy Crawford 3/15/22
Signature Date

Amithy Crawford
Printed Name

amithy.crawford@coterra.com
E-mail Address

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November 01, 2021

Date of Survey
Signature and Seal of Professional Surveyor:

PAUL BUCHELE
NEW MEXICO
23782
11-12-21
PROFESSIONAL SURVEYOR

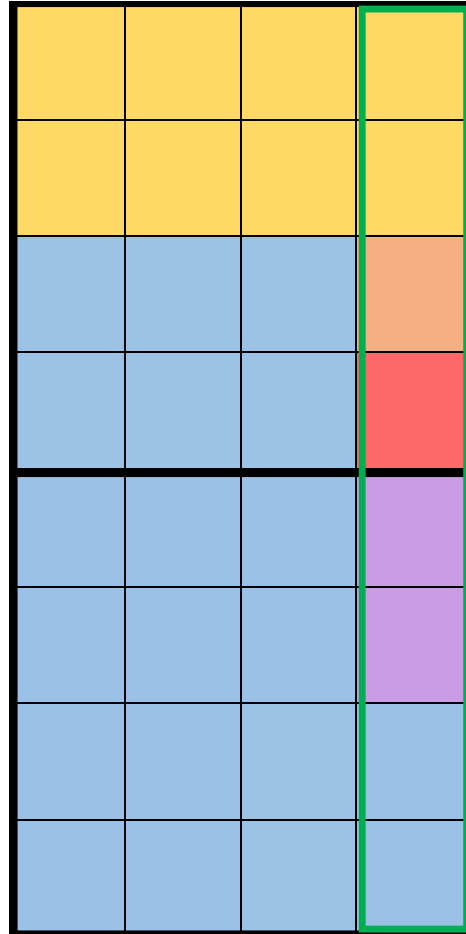
Certificate Number:

Exhibit "A-2"

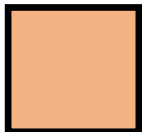
E/2E/2 of Section 4 and the E/2E/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation

Section 4

Section 9

**Tract 1:**

USA NMLC-0064194
(40.00 acres)

**Tract 2:**

USA NMLC-0064194
(40.00 acres)

**Tract 3:**

USA NMLC-0064194
(80.00 acres)

**Tract 4:**

USA NMLC-0064194
(80.00 acres)

**Tract 5:**

USA NMLC-0065607
(80.89 acres)



EXHIBIT
A-2.1

Loosey Goosey 4-9 Fed Com 204H**SHL: Sec. 33-19S-34E; 194' FSL and 1428' FEL****BHL: Sec. 9-20S-34E; 100' FNL and 330' FEL****Loosey Goosey 4-9 Fed Com 304H****SHL: Sec. 33-19S-34E; 194' FSL and 1408' FEL****BHL: Sec. 9-20S-34E; 100' FNL and 330' FEL****Exhibit "A-2"****OWNERSHIP BREAKDOWN – Bone Spring formation****E/2E/2 of Section 4 and the E/2E/2 of Section 9 of Section 9, Township 20 South, Range 34
East of Lea County, NM****Loosey Goosey 4-9 Fed Com 204H and 304H****TRACT 1 OWNERSHIP (NE/4SE/4 of Section 4-T20S-R34E, being 40.00 acres)****Lease: USA NMLC-0064194**

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

Midland, TX 79701

Javelina Partners	2.3719	0.05929631	Committed
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616 Texas St.

Fort Worth, TX 76102

Zorro Partners, Ltd.	1.2904	0.03225960	Committed
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616 Texas St.

Fort Worth, TX 76102

Magnum Hunter Production Inc.	11.2378	0.28094405	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.	0.2346	0.00586541	Committed
---	--------	------------	-----------

Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	0.7038	0.01759615	Uncommitted
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222 West Forth St., Ph5

Fort Worth, TX 76102

Chase Oil Corporation	0.7203	0.01800821	Uncommitted
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11344 Lovington Hwy.

Artesia, NM 88210

Cimarex Energy Co.	4.2538	0.10634446	Committed
--------------------	--------	------------	-----------

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Avalon Energy Corporation	0.2273	0.00568182	Uncommitted
310 W. Wall St., Ste. 305			
Midland, TX 79701			

Wilbanks Reserve Corporation	1.9446	0.04861609	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			

Marks Oil, Inc.	0.2377	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			

William A. Hudson, II	0.1259	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			

Union Hill Oil and Gas Co. Inc.	1.2096	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			

TRACT 1 TOTAL	40.00	.12465331	
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TRACT 2 OWNERSHIP (SE/4 SE/4 of Section 4-T20S-R34E, being 40.00 acres)**Lease: USA NMLC-0064194**

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

P.O. Box 3070

Galveston, TX 77552

HOG Partnership, LP

1.3427

0.03356644

Uncommitted

5950 Cedar Springs Rd., Ste. 242

Dallas, TX 75235

Challenger Crude, Ltd.

1.1673

0.02918246

Committed

3525 Andrews Hwy.

Midland, TX 79703

Permian Resources LLC/Read and Stevens

12.1016

0.30253929

Uncommitted

300 N. Marienfeld St., Ste. 1000

Midland, TX 79701

Javelina Partners

2.3719

0.05929631

Committed

616 Texas St.

Fort Worth, TX 76102

Zorro Partners, Ltd.

1.2904

0.03225960

Committed

616 Texas St.

Fort Worth, TX 76102

Magnum Hunter Production Inc.

11.2378

0.28094405

Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.

0.2346

0.00586541

Committed

Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD

0.7038

0.01759615

Uncommitted

222 West Forth St., Ph5

Fort Worth, TX 76102

Chase Oil Corporation

0.7203

0.01800821

Uncommitted

11344 Lovington Hwy.

Artesia, NM 88210

Cimarex Energy Co.

4.2538

0.10634446

Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Avalon Energy Corporation

0.2273

0.00568182

Uncommitted

310 W. Wall St., Ste. 305

Midland, TX 79701

Wilbanks Reserve Corporation

1.9446

0.04861609

Uncommitted

450 E. 17th Ave., Ste. 220

Denver, CO 80203

Marks Oil, Inc.

0.2377

0.00594271

Uncommitted

1775 Sherman St., Ste. 2990

Denver, CO 80203

William A. Hudson, II

0.1259

0.00314685

Committed

616 Texas St.

Fort Worth, TX 76102

Union Hill Oil and Gas Co. Inc.	1.2096	0.03024091	Uncommitted
---------------------------------	--------	------------	-------------

7712 Glanshannon Cir.

Dallas, TX 75225

TRACT 2 TOTAL	40.00	.12465331	
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TRACT 3 OWNERSHIP (E/2NE/4 of Section 9-T20S-R34E, being 80.00 acres)

Lease: USA NMLC-0064194

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

Fort Worth, TX 76102

Zorro Partners, Ltd.	2.5808	0.03225960	Committed
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616 Texas St.

Fort Worth, TX 76102

Magnum Hunter Production Inc.	22.4755	0.28094405	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
---	--------	------------	-----------

Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	1.4077	0.01759615	Uncommitted
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222 West Forth St., Ph5

Fort Worth, TX 76102

Chase Oil Corporation	1.4407	0.01800821	Uncommitted
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11344 Lovington Hwy.

Artesia, NM 88210

Cimarex Energy Co.	8.5076	0.10634446	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Avalon Energy Corporation	0.4545	0.00568182	Uncommitted
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310 W. Wall St., Ste. 305

Midland, TX 79701

Wilbanks Reserve Corporation	3.8893	0.04861609	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			

Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			

William A. Hudson, II	0.2517	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			

Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			

TRACT 3 TOTAL	80.00	.24930662	
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TRACT 4 OWNERSHIP (E/2 SE/4 of Section 9-T20S-R34E, being 80.00 acres)**Lease: USA NMLC-0064194**

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

Dallas, TX 75235

Permian Resources LLC/Read and Stevens 30.9320 0.38665000 Uncommitted
300 N. Marienfeld St., Ste. 1000
Midland, TX 79701

Javelina Partners 3.9885 0.04985576 Committed
616 Texas St.
Fort Worth, TX 76102

Zorro Partners, Ltd. 2.5808 0.03225961 Committed
616 Texas St.
Fort Worth, TX 76102

Magnum Hunter Production Inc. 15.3846 0.19230768 Committed
6001 Deauville Blvd., Ste. 300N
Midland, TX 79706

Frost Bank, Trustee of the Josephine T. 0.4692 0.00586540 Committed
Hudson Trust f/b/o J. Terrell Ard
P.O. Box 1600
San Antonio, TX 78296

Ard Oil, LTD 1.4077 0.01759615 Uncommitted
222 West Forth St., Ph5
Fort Worth, TX 76102

Cimarex Energy Co. 17.8154 0.22269231 Committed
6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Avalon Energy Corporation	0.4545	0.00568182	Uncommitted
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310 W. Wall St., Ste. 305

Midland, TX 79701

Union Hill Oil and Gas Co. Inc.	2.0680	0.02585000	Uncommitted
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7712 Glanshannon Cir.

Dallas, TX 75225

TRACT 4 TOTAL	80.00	.24930662	
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TRACT 5 OWNERSHIP (Lot 1 and the SE/4SE/4 of Section 4-T20S-R34E, being 80.89 acres)

Lease: USA NMLC-0065607

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

Fort Worth, TX 76102

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

Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	8.2786	0.10234375	Uncommitted
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222 West Forth St., Ph5

Fort Worth, TX 76102

Cimarex Energy Co.	16.5572	0.20468750	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

TRACT 5 TOTAL	80.00	.25208015	
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Complete List of Parties/Persons to be Pooled:

Working Interest Owners

Moore & Shelton Co., Ltd

HOG Partnership, LP

Challenger Crude, Ltd.

Permian Resources LLC

Permian Resources LLC

Javelina Partners

Zorro Partners, Ltd.

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

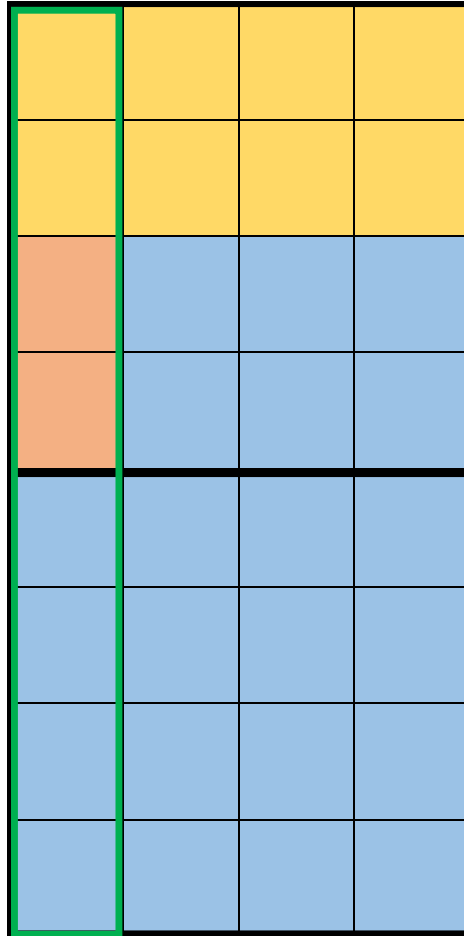
Moore and Shelton Co., LTD	2.97132% WI
HOG Partnership, LP	5.97532% WI
Challenger Crude, Ltd.	1.45508% WI
Permian Resources LLC	24.72445% WI
Javelina Partners	11.50920% WI
Zorro Partners, Ltd.	7.14254% WI
Magnum Hunter Production Inc.	18.80260% WI

Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard	1.29865% WI
Ard Oil, LTD	3.89594% WI
Chase Oil Corporation	0.89791% WI
Cimarex Energy Co.	16.01411% WI
Avalon Energy Corporation	0.28330% WI
Wilbanks Reserve Corporation	2.42406% WI
Marks Oil, Inc.	0.29631% WI
William A. Hudson, II	0.15691% WI
Union Hill Oil and Gas Co. Inc.	2.15231% WI

Exhibit "A-2"

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

Section 4



Section 9

Tract 1:

USA NMLC-0064194
(80.00 acres)



Tract 2:

USA NMLC-0064194
(160.00 acres)



Tract 3:

USA NMLC-0065607
(80.21 acres)



Loosey Goosey 4-9 Fed Com 301H**SHL: Sec. 33-19S-34E; 1189' FSL and 1464' FWL****BHL: Sec. 9-20S-34E; 100' FNL and 706' FWL****Exhibit "A-2"****OWNERSHIP BREAKDOWN – Bone Spring formation****W/2W/2 of Section 4 and the W/2W/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM****Loosey Goosey 4-9 Fed Com 301H****TRACT 1 OWNERSHIP (W/2SW/4 of Section 4-T20S-R34E, being 80.00 acres)****Lease: USA NMLC-0064194**

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

Fort Worth, TX 76102

Zorro Partners, Ltd.	2.5808	0.03222596	Committed
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616 Texas St.

Fort Worth, TX 76102

Magnum Hunter Production Inc.	22.4755	0.28094405	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
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Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	1.4077	0.01759615	Uncommitted
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222 West Forth St., Ph5

Fort Worth, TX 76102

Chase Oil Corporation	1.4407	0.01800821	Uncommitted
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11344 Lovington Hwy.

Artesia, NM 88210

Cimarex Energy Co.	8.5076	0.10634446	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Avalon Energy Corporation	0.4545	0.00568182	Uncommitted
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310 W. Wall St., Ste. 305

Midland, TX 79701

Wilbanks Reserve Corporation	3.8893	0.04861609	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			

Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			

William A. Hudson, II	0.2517	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			

Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			

TRACT 1 TOTAL	80.00	.24983605	
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TRACT 2 OWNERSHIP (W/2W/2 of Section 9-T20S-R34E, being 160.00 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	0.02918246	Committed
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3525 Andrews Hwy.

Midland, TX 79703

Permian Resources LLC/Read and Stevens	48.4063	0.30253929	Uncommitted
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300 N. Marienfeld St., Ste. 1000

Midland, TX 79701

Javelina Partners	9.4874	0.05929631	Committed
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616 Texas St.

Fort Worth, TX 76102

Zorro Partners, Ltd.	5.1615	0.03225960	Committed
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616 Texas St.

Fort Worth, TX 76102

Magnum Hunter Production Inc.	44.9510	0.28094405	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.	0.9385	0.00586541	Committed
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Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	2.8154	0.01759615	Uncommitted
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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	0.10634446	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 th Ave., Ste. 220			
Denver, CO 80203			

Marks Oil, Inc.	0.9508	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			

William A. Hudson, II	0.5035	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			

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

TRACT 2 TOTAL 160.00 .49967209

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

Lease: USA NMLC-0065607

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

Dallas, TX 75235

Ard Oil, LTD	8.2090	0.10234375	Uncommitted
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222 West Forth St., Ph5

Fort Worth, TX 76102

TRACT 3 TOTAL	80.21	.25049186	
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Complete List of Parties/Persons to be Pooled:

Working Interest Owners

Moore & Shelton Co., Ltd

HOG Partnership, LP

Challenger Crude, Ltd.

Permian Resources LLC

Permian Resources LLC

Javelina Partners

Zorro Partners, Ltd.

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

Moore and Shelton Co., LTD 2.96569 % WI

HOG Partnership, LP 5.64698% WI

Challenger Crude, Ltd. 2.18725% WI

Permian Resources LLC 22.67557% WI

Javelina Partners 11.70792% WI

Zorro Partners, Ltd. 7.11787% WI

Magnum Hunter Production Inc. 21.05699% WI

Frost Bank, Trustee of the Josephine T. 1.29416% WI

Hudson Testamentary Trust FBO J. Terrell Ard

Ard Oil, LTD 3.88247% WI

Chase Oil Corporation 1.34973% WI

Cimarex Energy Co. 13.09786% WI

Avalon Energy Corporation 0.42586% WI

Wilbanks Reserve Corporation 3.64382% WI

Marks Oil, Inc. 0.44541% WI

William A. Hudson, II 0.23586% WI

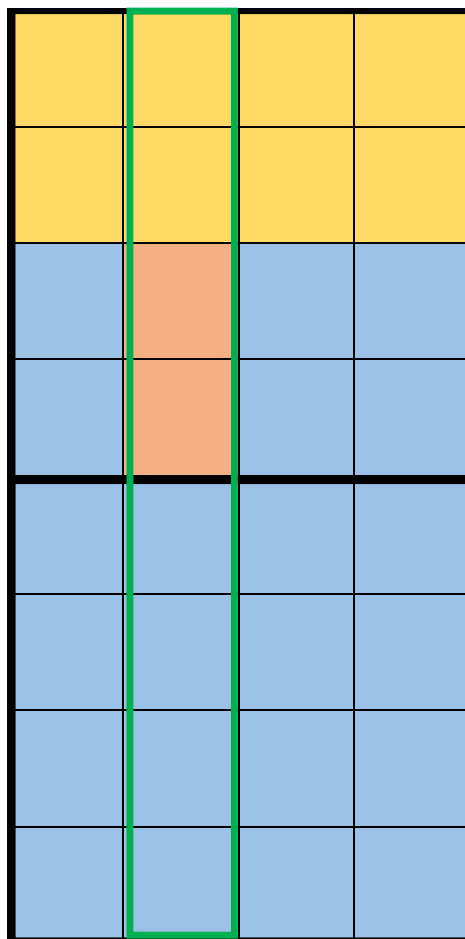
Union Hill Oil and Gas Co. Inc. 2.26658% WI

Exhibit "A-2"

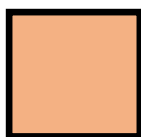
E/2W/2 of Section 4 and the E/2W/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM (PERMIAN/DELAWARE BASIN) – Bone Spring formation

Section 4

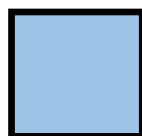
Section 9

**Tract 1:**

USA NMLC-0064194
(80.00 acres)

**Tract 2:**

USA NMLC-0064194
(160.00 acres)

**Tract 3:**

USA NMLC-0065607
(80.44 acres)



Loosey Goosey 4-9 Fed Com 302H**SHL: Sec. 33-19S-34E; 1189' FSL and 1484' FWL****BHL: Sec. 9-20S-34E; 2120' FWL and 100' FSL****Exhibit "A-2"****OWNERSHIP BREAKDOWN – Bone Spring formation****E/2W/2 of Section 4 and the E/2W/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM****Loosey Goosey 4-9 Fed Com 302H****TRACT 1 OWNERSHIP (E/2SW/4 of Section 4-T20S-R34E, being 80.00 acres)****Lease: USA NMLC-0064194**

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

Fort Worth, TX 76102

Zorro Partners, Ltd.	2.5808	0.03222596	Committed
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616 Texas St.

Fort Worth, TX 76102

Magnum Hunter Production Inc.	22.4755	0.28094405	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.	0.4692	0.00586541	Committed
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Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	1.4077	0.01759615	Uncommitted
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222 West Forth St., Ph5

Fort Worth, TX 76102

Chase Oil Corporation	1.4407	0.01800821	Uncommitted
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11344 Lovington Hwy.

Artesia, NM 88210

Cimarex Energy Co.	8.5076	0.10634446	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Avalon Energy Corporation	0.4545	0.00568182	Uncommitted
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310 W. Wall St., Ste. 305

Midland, TX 79701

Wilbanks Reserve Corporation	3.8893	0.04861609	Uncommitted
450 E. 17 th Ave., Ste. 220			
Denver, CO 80203			

Marks Oil, Inc.	0.4754	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			

William A. Hudson, II	0.2517	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			

Union Hill Oil and Gas Co. Inc.	2.4193	0.03024091	Uncommitted
7712 Glanshannon Cir.			
Dallas, TX 75225			

TRACT 1 TOTAL	80.00	.24965672	
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TRACT 2 OWNERSHIP (E/2W/2 of Section 9-T20S-R34E, being 160.00 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	0.02918246	Committed
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3525 Andrews Hwy.

Midland, TX 79703

Permian Resources LLC/Read and Stevens	48.4063	0.30253929	Uncommitted
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300 N. Marienfeld St., Ste. 1000

Midland, TX 79701

Javelina Partners	9.4874	0.05929631	Committed
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616 Texas St.

Fort Worth, TX 76102

Zorro Partners, Ltd.	5.1615	0.03225960	Committed
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616 Texas St.

Fort Worth, TX 76102

Magnum Hunter Production Inc.	44.9510	0.28094405	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.	0.9385	0.00586541	Committed
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Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	2.8154	0.01759615	Uncommitted
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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	0.10634446	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 th Ave., Ste. 220			
Denver, CO 80203			

Marks Oil, Inc.	0.9508	0.00594271	Uncommitted
1775 Sherman St., Ste. 2990			
Denver, CO 80203			

William A. Hudson, II	0.5035	0.00314685	Committed
616 Texas St.			
Fort Worth, TX 76102			

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

TRACT 2 TOTAL 160.00 .49931344

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

Lease: USA NMLC-0065607

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

Dallas, TX 75235

Ard Oil, LTD	8.2325	0.10234375	Uncommitted
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222 West Forth St., Ph5

Fort Worth, TX 76102

TRACT 3 TOTAL	80.44	.25102983	
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Complete List of Parties/Persons to be Pooled:

Working Interest Owners

Moore & Shelton Co., Ltd

HOG Partnership, LP

Challenger Crude, Ltd.

Permian Resources LLC

Permian Resources LLC

Javelina Partners

Zorro Partners, Ltd.

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

Moore and Shelton Co., LTD	2.96760% WI
HOG Partnership, LP	5.65190% WI
Challenger Crude, Ltd.	2.18568% WI
Permian Resources LLC	22.65929% WI
Javelina Partners	11.72033% WI
Zorro Partners, Ltd.	7.12623% WI
Magnum Hunter Production Inc.	21.04187% WI
Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard	1.29568% WI
Ard Oil, LTD	3.88703% WI
Chase Oil Corporation	1.34876% WI
Cimarex Energy Co.	13.103150% WI
Avalon Energy Corporation	0.42555% WI
Wilbanks Reserve Corporation	3.6412% WI

Marks Oil, Inc. 0.44509% WI

William A. Hudson, II 0.23569% WI

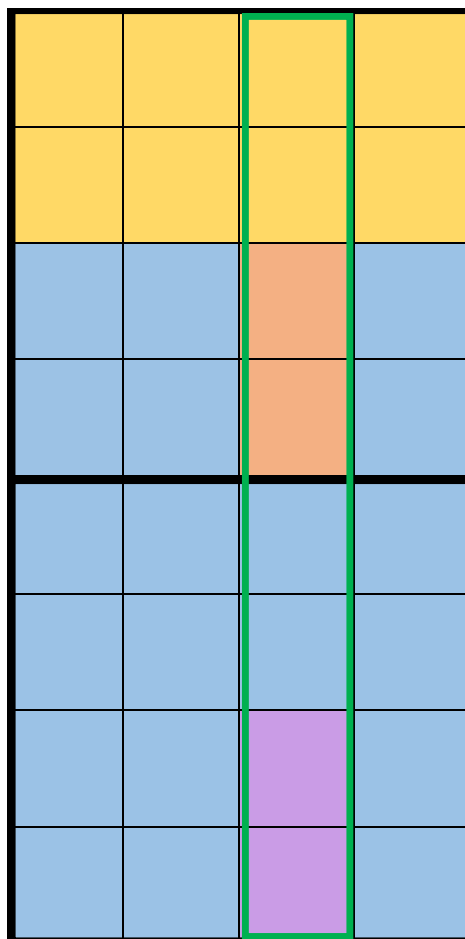
Union Hill Oil and Gas Co. Inc. 2.26495% WI

Exhibit "A-2"

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

Section 4

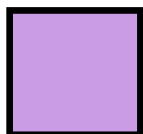
Section 9

**Tract 1:**

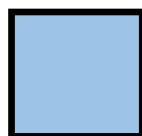
USA NMLC-0064194
(80.00 acres)

**Tract 3:**

USA NMLC-0064194
(80.00 acres)

**Tract 2:**

USA NMLC-0064194
(80.00 acres)

**Tract 4:**

USA NMLC-0065607
(80.66 acres)



Loosey Goosey 4-9 Fed Com 303H**SHL: Sec. 33-20S-34E; 194' FSL and 1488' FWL****BHL: Sec. 9-20S-34E; 100' FSL and 1744' FEL****Exhibit "A-2"****OWNERSHIP BREAKDOWN – Bone Spring formation****W/2E/2 of Section 4 and the W/2E/2 of Section 9, Township 20 South, Range 34 East of Lea County, NM****Loosey Goosey 4-9 Fed Com 303H****TRACT 1 OWNERSHIP (W/2SE/4 of Section 4-T20S-R34E, being 80.00 acres)****Lease: USA NMLC-0064194**

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

616 Texas St.

Fort Worth, TX 76102

Zorro Partners, Ltd.

2.5808

0.03222596

Committed

616 Texas St.

Fort Worth, TX 76102

Magnum Hunter Production Inc.

22.4755

0.28094405

Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.

0.4692

0.00586541

Committed

Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD

1.4077

0.01759615

Uncommitted

222 West Forth St., Ph5

Fort Worth, TX 76102

Chase Oil Corporation

1.4407

0.01800821

Uncommitted

11344 Lovington Hwy.

Artesia, NM 88210

Cimarex Energy Co.

8.5076

0.10634446

Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Avalon Energy Corporation

0.4545

0.00568182

Uncommitted

310 W. Wall St., Ste. 305

Midland, TX 79701

Wilbanks Reserve Corporation

3.8893

0.04861609

Committed

450 E. 17th Ave., Ste. 220

Denver, CO 80203

Marks Oil, Inc.

0.4754

0.00594271

Uncommitted

1775 Sherman St., Ste. 2990

Denver, CO 80203

William A. Hudson, II

0.2517

0.00314685

Committed

616 Texas St.

Fort Worth, TX 76102

Union Hill Oil and Gas Co. Inc.

2.4193

0.03024091

Uncommitted

7712 Glanshannon Cir.

Dallas, TX 75225

TRACT 1 TOTAL

80.00

.24948544

TRACT 2 OWNERSHIP (W/2NE/4 of Section 9-T20S-R34E, being 80.00 acres)**Lease: USA NMLC-0064194****Owner****Net Acres****Unit WI****Status**

Moore and Shelton Co., LTD

1.6615

0.02076924

Committed

P.O. Box 3070

Galveston, TX 77552

HOG Partnership, LP

2.6853

0.03356644

Uncommitted

5950 Cedar Springs Rd., Ste. 242

Dallas, TX 75235

Challenger Crude, Ltd.

2.3346

0.02918246

Committed

3525 Andrews Hwy.

Midland, TX 79703

Permian Resources LLC/Read and Stevens

24.2031

0.30253929

Uncommitted

300 N. Marienfeld St., Ste. 1000

Midland, TX 79701

Javelina Partners

4.7437

0.05929631

Committed

616 Texas St.

Fort Worth, TX 76102

Zorro Partners, Ltd.

2.5808

0.03225960

Committed

616 Texas St.

Fort Worth, TX 76102

Magnum Hunter Production Inc.

22.4755

0.28094405

Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.

0.4692

0.00586541

Committed

Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD

1.4077

0.01759615

Uncommitted

222 West Forth St., Ph5

Fort Worth, TX 76102

Chase Oil Corporation

1.4407

0.01800821

Uncommitted

11344 Lovington Hwy.

Artesia, NM 88210

Cimarex Energy Co.

8.5076

0.10634446

Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Avalon Energy Corporation

0.4545

0.00568182

Uncommitted

310 W. Wall St., Ste. 305

Midland, TX 79701

Wilbanks Reserve Corporation

3.8893

0.04861609

Uncommitted

450 E. 17th 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 2 TOTAL 80.00 .24948544

TRACT 3 OWNERSHIP (W/2SE/4 of Section 9-T20S-R34E, being 80.00 acres)**Lease: USA NMLC-0064194**

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

Midland, TX 79706

Frost Bank, Trustee of the Josephine T.	0.4692	0.00586540	Committed
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Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD	1.4077	0.01759615	Uncommitted
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222 West Forth St., Ph5

Fort Worth, TX 76102

Cimarex Energy Co.	17.8154	0.22269231	Committed
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6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

Union Hill Oil and Gas Co. Inc.	2.0680	0.02585000	Uncommitted
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7712 Glanshannon Cir.

Dallas, TX 75225

TRACT 3 TOTAL	80.00	.24948544	
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TRACT 4 OWNERSHIP (Lot 2 and the SW/4NE/4 of Section 4-T20S-R34E, being 80.66 acres)

Lease: USA NMLC-0065607

Owner	Net Acres	Unit WI	Status
Moore and Shelton Co., LTD	4.5371	0.05625000	Committed

P.O. Box 3070

Galveston, TX 77552

HOG Partnership, LP	10.0825	0.12500000	Uncommitted
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5950 Cedar Springs Rd., Ste. 242

Dallas, TX 75235

Javelina Partners

23.3893

0.28997392

Committed

616 Texas St.

Fort Worth, TX 76102

Zorro Partners, Ltd.

15.1342

0.18763017

Committed

616 Texas St.

Fort Worth, TX 76102

Frost Bank, Trustee of the Josephine T.

2.7517

0.03411465

Committed

Hudson Trust f/b/o J. Terrell Ard

P.O. Box 1600

San Antonio, TX 78296

Ard Oil, LTD

8.2550

0.10234375

Uncommitted

222 West Forth St., Ph5

Fort Worth, TX 76102

Cimarex Energy Co.

16.5101

0.20468750

Committed

6001 Deauville Blvd., Ste. 300N

Midland, TX 79706

TRACT 4 TOTAL

80.66

.25154369

Complete List of Parties/Persons to be Pooled:**Working Interest Owners**

Moore & Shelton Co., Ltd

HOG Partnership, LP

Challenger Crude, Ltd.

Permian Resources LLC

Permian Resources LLC

Javelina Partners

Zorro Partners, Ltd.

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

Moore and Shelton Co., LTD	2.96942% WI
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HOG Partnership, LP	5.97064% WI
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Challenger Crude, Ltd.	1.45612% WI
Permian Resources LLC	24.74219% WI
Javelina Partners	11.49665% WI
Zorro Partners, Ltd.	7.13421% WI
Magnum Hunter Production Inc.	18.81609% WI
Frost Bank, Trustee of the Josephine T. Hudson Testamentary Trust FBO J. Terrell Ard	1.29713% WI
Ard Oil, LTD	3.89139% WI
Chase Oil Corporation	0.89856% WI
Cimarex Energy Co.	16.01091% WI
Avalon Energy Corporation	0.28351% WI
Wilbanks Reserve Corporation	2.4258% WI
Marks Oil, Inc.	0.29652% WI
William A. Hudson, II	0.15702% WI
Union Hill Oil and Gas Co. Inc.	2.15385% WI

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



August 25, 2022

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

**Re: Proposal to Drill
Loosey Goosey 4-9 Fed Com 101H-104H, 201H-204H & 301H-304H
Sections 4 & 9, Township 20 South, Range 34 East
Lea County, NM**

Dear Working Interest Owner,

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

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

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

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

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

**EXHIBIT
A-3**

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

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

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

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

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

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

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

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

It should be understood that compliance with topography or cultural or environmental concerns, among others, might require modification of Cimarex's intended procedure. Cimarex will advise you of any such modifications.

Enclosed is (i) our detailed AFE reflecting estimated costs associated with this proposal, and; (ii) our proposed form of Operating Agreement to govern operations of the Loosey Goosey 4-9 Fed Com Wells. If you intend to participate, please approve and return one (1) original of the enclosed AFE, one (1) original of the signature page to the Operating Agreement, along with the contact information to receive your well data, to the undersigned within thirty (30) days of receipt of this proposal. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance to Cimarex prior to commencement of drilling operations; otherwise, you will be covered by insurance procured by Cimarex and will be responsible for your share of the cost.

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

Please call the undersigned with any questions or comments.

Respectfully,

A handwritten signature in black ink, appearing to read 'John Coffman', with a stylized flourish at the end.

John Coffman
432.571.7883
John.Coffman@Coterra.com



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

AFE # XXXXXXXX

Company Entity

Date Prepared
8/17/2022

Exploration Region Permian Basin	Well Name Loosey Goosey 4-9 Fed Com 204H	Prospect New Mexico Bone Spring	Property Number XXXXXX-XXX.01	AFE XXXXXXXX
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County, State Lea, NM	Location Section 4-9 T20S-R34E Lea, NM	Estimated Spud	Estimated Completion
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X New Supplement Revision	Formation 2nd Sand	Well Type DEV	Ttl Measured Depth 19800	Ttl Vertical Depth 10300
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Purpose: Drill and complete well

Description:

Drilling: The intended surface hold location for the well is 280 FSL and 1520 FEL of Section 33, T19S-R34E, and the intended bottom hole location is 100 FSL and 330 FEL of Section 9, T20S-R34E. The well is proposed to be drilled vertically to the 2nd Sand formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 10300 feet.

Intangible		Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs		\$2,475,500		\$2,475,500
Completion Costs			\$4,314,672	\$4,314,672
Total Intangible Cost		\$2,475,500	\$4,314,672	\$6,790,172
Tangible		Dry Hole	After Casing Point	Completed Well Cost
Well Equipment		\$393,000	\$1,125,000	\$1,518,000
Lease Equipment			\$262,523	\$262,523
Total Tangible Cost		\$393,000	\$1,387,523	\$1,780,523
Total Well Cost		\$2,868,500	\$5,702,195	\$8,570,695

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.

7/6/2022



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

AFE # XXXXXXX

Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	4,989	PCOM.100	3,000	30,989
Damages	DIDC.105	16,500					CON.105	0			16,500
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,000
Day Rate	DIDC.115	468,000	DICC.120	96,000							564,000
Misc Preparation	DIDC.120	30,000									30,000
Bits	DIDC.125	97,000	DICC.125	0	STIM.125	0			PCOM.125	0	97,000
Fuel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	25,000
Mud & Additives	DIDC.145	300,000									300,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	109,193	109,193
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	3,118	PCOM.140	60,000	297,118
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	166,000
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Automation Labor							CON.150	26,689	PCOM.150	5,000	31,689
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING							CON.165	15,340			15,340
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000							210,000
Tubular Inspections	DIDC.190	38,000	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	84,182	PCOM.170	5,000	112,182
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000	CON.175	9,354	PCOM.175	0	51,354
Supervision	DIDC.210	81,000	DICC.180	13,000	STIM.180	47,000	CON.180	13,469	PCOM.180	0	154,469
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	14,966	PCOM.190	0	104,966
Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Solids Control	DIDC.260	46,000									46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260	0	0
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,000
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
Stimulation Water/Water Transfer/Water					STIM.395	191,000					191,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	7,000									7,000
Major Construction Overhead							CON.305	15,465			15,465
FL/GL - ON PAD LABOR							CON.495	85,305			85,305
FL/GL - Supervision							CON.505	9,354			9,354
Survey							CON.515	748			748
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	42,153	PCOM.220	0	340,153
Contingency							CON.221	12,347			12,347
Total Intangible Cost		2,475,500		306,000		3,459,000		337,479		212,193	6,790,172
Conductor Pipe	DWEB.130	0									0
Water String	DWEB.135	104,000									104,000
Surface Casing	DWEB.140	251,000									251,000
Intermediate Casing 1	DWEB.145	0									0
Production Casing or Liner			DWEA.100	792,000							792,000
Tubing					STIMT.105	139,000			PCOMT.105	0	139,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS							CONT.380	8,730			8,730
WALKOVERS							CONT.390	2,494			2,494
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
Surface Equipment									PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	103,263			103,263
Battery Equipment							CONT.410	58,740			58,740
Secondary Containments							CONT.415	4,989			4,989
Meters and Metering Equipment							CONT.445	12,471			12,471
Facility Line Pipe							CONT.450	10,476			10,476
Lease Automation Materials							CONT.455	33,049			33,049
FL/GL - Materials							CONT.550	10,227			10,227
FL/GL - Line Pipe							CONT.555	18,084			18,084
Total Tangible Cost		393,000		810,000		285,000		262,523		30,000	1,780,523
Total Estimated Cost		2,868,500		1,116,000		3,744,000		600,002		242,193	8,570,695



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

AFE # XXXXXXX

Description	BCP - Drilling			ACP - Drilling			Comp/Stim		
	Codes		Amount	Codes		Amount	Codes		Amount
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,000
Damages	DIDC.105		16,500						
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		51,000
Day Rate	DIDC.115	DICC.120	468,000	DICC.120		96,000			
Misc Preparation	DIDC.120		30,000						
Bits	DIDC.125	DICC.125	97,000	DICC.125	STIM.125	0	STIM.125		0
Fuel	DIDC.135	DICC.130	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
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD									
Surface Rentals	DIDC.150	DICC.140	97,000	DICC.140	STIM.140	0	STIM.140	CON.140	137,000
Downhole Rentals	DIDC.155		131,000				STIM.145		35,000
Flowback Labor							STIM.141		0
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	DICC.155	70,000	DICC.155		140,000			
Tubular Inspections	DIDC.190	DICC.160	38,000	DICC.160	STIM.160	8,000	STIM.160		4,000
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	13,000	STIM.165		0
Mechanical Labor	DIDC.200	DICC.170	20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	0
Trucking/Transportation	DIDC.205	DICC.175	30,000	DICC.175	STIM.175	8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210	DICC.180	81,000	DICC.180	STIM.180	13,000	STIM.180	CON.180	47,000
Trailer House/Camp/Catering	DIDC.280	DICC.255	36,000	DICC.255	STIM.280	5,000	STIM.280		31,000
Other Misc Expenses	DIDC.220	DICC.190	5,000	DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC.245		307,000						
Solids Control	DIDC.260		46,000						
Well Control Equip (Snubbing)	DIDC.265	DICC.240	84,000	DICC.240	STIM.240	0	STIM.240		64,000
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		0
Completion							STIM.200		257,000
Composite Plugs							STIM.390		39,000
Stimulation							STIM.210		2,245,000
Stimulation Water/Water							STIM.395		191,000
Cimarex Owned Frac/Rental							STIM.305		60,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead									
FL/GL - ON PAD LABOR									
FL/GL - Supervision									
Survey									
Contingency	DIDC.435	DICC.220	118,000	DICC.220	STIM.220	15,000	STIM.220	CON.220	165,000
Contingency									
Total Intangible Cos			2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner				DWEA.100		792,000			
Tubing							STIMT.105		139,000
Wellhead, Tree, Chokes	DWEB.115	DWEA.120	38,000	DWEA.120	STIMT.120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0			
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,000
Surface Equipment									
Well Automation Materials									
N/C Lease Equipment									
Battery Equipment									
Secondary Containments									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Line Pipe									
Total Tangible Cost			393,000			810,000			285,000
Total Estimated Cost			2,868,500			1,116,000			3,744,000



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

AFE # XXXXXXX

Description	Production Equip			Post Completion			Total
	Codes	Amount	Codes	Amount	Cost		
Roads & Location	CON.100	4,989	PCOM.100	Repair any roads post D&C	3,000	30,989	
Damages	CON.105	0				16,500	
Mud/Fluids Disposal			PCOM.255		0	251,000	
Day Rate						564,000	
Misc Preparation						30,000	
Bits			PCOM.125		0	97,000	
Fuel			PCOM.130		0	119,000	
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	25,000	
Mud & Additives						300,000	
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257	Water for 60 days (270K barrels)	109,193	109,193	
Surface Rentals	CON.140	3,118	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	297,118	
Downhole Rentals			PCOM.145		0	166,000	
Flowback Labor			PCOM.141	3 Flowback Hands (60 days) 25%	30,000	30,000	
Automation Labor	CON.150	26,689	PCOM.150		5,000	31,689	
Mud Logging						5,000	
IPC & EXTERNAL PAINTING	CON.165	15,340				15,340	
Cementing & Float Equipment						210,000	
Tubular Inspections			PCOM.160		0	50,000	
Casing Crews						28,000	
Mechanical Labor	CON.170	84,182	PCOM.170	RU Flowback Iron & Automation	5,000	112,182	
Trucking/Transportation	CON.175	9,354	PCOM.175		0	51,354	
Supervision	CON.180	13,469	PCOM.180		0	154,469	
Trailer House/Camp/Catering						72,000	
Other Misc Expenses	CON.190	14,966	PCOM.190		0	104,966	
Overhead						10,000	
MOB/DEMOB						115,000	
Directional Drilling Services						307,000	
Solids Control						46,000	
Well Control Equip (Snubbing Services)			PCOM.240		0	148,000	
Completion Rig			PCOM.115		0	21,000	
Coil Tubing Services			PCOM.260		0	0	
Completion Logging/Perforating/Wireline			PCOM.200		0	257,000	
Composite Plugs			PCOM.390		0	39,000	
Stimulation			PCOM.210		0	2,245,000	
Stimulation Water/Water Transfer/Water						191,000	
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	60,000	
Legal/Regulatory/Curative	CON.300	0				10,000	
Well Control Insurance						7,000	
Major Construction Overhead	CON.305	15,465				15,465	
FL/GL - ON PAD LABOR	CON.495	85,305				85,305	
FL/GL - Supervision	CON.505	9,354				9,354	
Survey	CON.515	748				748	
Contingency	CON.220	42,153	PCOM.220	10% Contingency	0	340,153	
Contingency	CON.221	12,347				12,347	
Total Intangible Cost		337,479			212,193	6,790,172	
Conductor Pipe						0	
Water String						104,000	
Surface Casing						251,000	
Intermediate Casing 1						0	
Production Casing or Liner						792,000	
Tubing			PCOMT.105		0	139,000	
Wellhead, Tree, Chokes			PCOMT.120	Replace worn chokes and valves during FB	10,000	104,000	
Liner Hanger, Isolation Packer						0	
Packer, Nipples			PCOMT.400		0	28,000	
SHORT ORDERS	CONT.380	8,730				8,730	
WALKOVERS	CONT.390	2,494				2,494	
Downhole Lift Equipment			PCOMT.410		0	80,000	
Surface Equipment			PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,000	
Well Automation Materials			PCOMT.455	PTs. and replacing meters	5,000	5,000	
N/C Lease Equipment	CONT.400	103,263				103,263	
Battery Equipment	CONT.410	58,740				58,740	
Secondary Containments	CONT.415	4,989				4,989	
Meters and Metering Equipment	CONT.445	12,471				12,471	
Facility Line Pipe	CONT.450	10,476				10,476	
Lease Automation Materials	CONT.455	33,049				33,049	
FL/GL - Materials	CONT.550	10,227				10,227	
FL/GL - Line Pipe	CONT.555	18,084				18,084	
Total Tangible Cost		262,523			30,000	1,780,523	
Total Estimated Cost		600,002			242,193	8,570,695	



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

AFE # XXXXXXX

Company Entity

Date Prepared
8/17/2022

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	Loosey Goosey 4-9 Fed Com 301H	New Mexico Bone Spring	XXXXXX-XXX.01	XXXXXXX

County, State	Location	Estimated Spud	Estimated Completion
Lea, NM	Section 4-9 T20S-R34E Lea, NM		

X New Supplement Revision	Formation	Well Type	Ttl Measured Depth	Ttl Vertical Depth
	3rd Sand	DEV	20330	10830

Purpose: Drill and complete well
Description:

Drilling: The intended surface hold location for the well is 1300 FSL and 1520 FWL of Section 33, T19S-R34E, and the intended bottom hole location is 100 FSL and 706 FWL of Section 9, T20S-R34E. The well is proposed to be drilled vertically to the 3rd Sand formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 10830 feet.

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 executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

7/6/2022



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

AFE # XXXXXXX

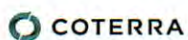
Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	48,637	PCOM.100	3,000	74,637
Damages	DIDC.105	16,500					CON.105	15,807			32,307
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,000
Day Rate	DIDC.115	468,000	DICC.120	96,000							564,000
Misc Preparation	DIDC.120	30,000									30,000
Bits	DIDC.125	97,000	DICC.125	0	STIM.125	0			PCOM.125	0	97,000
Fuel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	25,000
Mud & Additives	DIDC.145	300,000									300,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	87,354	87,354
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	1,378	PCOM.140	60,000	295,378
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	166,000
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Automation Labor							CON.150	36,558	PCOM.150	5,000	41,558
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING							CON.165	18,888			18,888
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000							210,000
Tubular Inspections	DIDC.190	38,000	DICC.160	8,000	STIM.160	4,000			PCOM.160	0	50,000
Casing Crews	DIDC.195	15,000	DICC.165	13,000	STIM.165	0					28,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0	CON.170	139,588	PCOM.170	5,000	167,588
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000	CON.175	17,833	PCOM.175	0	59,833
Supervision	DIDC.210	81,000	DICC.180	13,000	STIM.180	47,000	CON.180	21,238	PCOM.180	0	162,238
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	24,318	PCOM.190	0	114,318
Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Solids Control	DIDC.260	46,000									46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260	0	0
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,000
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
Stimulation Water/Water Transfer/Water					STIM.395	191,000					191,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	7,000									7,000
Major Construction Overhead							CON.305	26,507			26,507
FL/GL - ON PAD LABOR							CON.495	37,613			37,613
FL/GL - Labor							CON.500	94,842			94,842
FL/GL - Supervision							CON.505	14,429			14,429
Survey							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
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	105,542	PCOM.220	0	403,542
Contingency							CON.221	23,508			23,508
Total Intangible Cost		2,475,500		306,000		3,459,000		669,568		190,354	7,100,422
Conductor Pipe	DWEB.130	0									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					STIMT.105	139,000			PCOMT.105	0	139,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS							CONT.380	10,538			10,538
PUMPS							CONT.385	30,804			30,804
WALKOVERS							CONT.390	4,053			4,053
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
Surface Equipment									PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	184,334			184,334
Tanks, Tanks Steps, Stairs							CONT.405	51,879			51,879
Battery Equipment							CONT.410	214,003			214,003
Secondary Containments							CONT.415	19,292			19,292
Overhead Power Distribution							CONT.420	64,038			64,038
Facility Electrical							CONT.425	32,100			32,100
Telecommunication Equipment							CONT.426	486			486
Meters and Metering Equipment							CONT.445	45,232			45,232
Facility Line Pipe							CONT.450	31,208			31,208
Lease Automation Materials							CONT.455	32,424			32,424
FL/GL - Materials							CONT.550	21,400			21,400
FL/GL - Line Pipe							CONT.555	48,637			48,637
SWD/Other - Materials							CONT.650	0			0
SWD/Other - Line Pipe							CONT.655	0			0
Total Tangible Cost		393,000		810,000		285,000		790,428		30,000	2,308,428
Total Estimated Cost		2,868,500		1,116,000		3,744,000		1,459,996		220,354	9,408,850



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

AFE # XXXXXXX

Description	BCP - Drilling			ACP - Drilling			Comp/Stim		
	Codes		Amount	Codes		Amount	Codes		Amount
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,000
Damages	DIDC.105		16,500						
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		51,000
Day Rate	DIDC.115	DICC.120	468,000	DICC.120		96,000			
Misc Preparation	DIDC.120		30,000						
Bits	DIDC.125	DICC.125	97,000	DICC.125	STIM.125	0	STIM.125		0
Fuel	DIDC.135	DICC.130	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
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD									
Surface Rentals	DIDC.150	DICC.140	97,000	DICC.140	STIM.140	0	STIM.140	CON.140	137,000
Downhole Rentals	DIDC.155		131,000				STIM.145		35,000
Flowback Labor							STIM.141		0
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	DICC.155	70,000	DICC.155		140,000			
Tubular Inspections	DIDC.190	DICC.160	38,000	DICC.160	STIM.160	8,000	STIM.160		4,000
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	13,000	STIM.165		0
Mechanical Labor	DIDC.200	DICC.170	20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	0
Trucking/Transportation	DIDC.205	DICC.175	30,000	DICC.175	STIM.175	8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210	DICC.180	81,000	DICC.180	STIM.180	13,000	STIM.180	CON.180	47,000
Trailer House/Camp/Catering	DIDC.280	DICC.255	36,000	DICC.255	STIM.280	5,000	STIM.280		31,000
Other Misc Expenses	DIDC.220	DICC.190	5,000	DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC.245		307,000						
Solids Control	DIDC.260		46,000						
Well Control Equip (Snubbing)	DIDC.265	DICC.240	84,000	DICC.240	STIM.240	0	STIM.240		64,000
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		0
Completion							STIM.200		257,000
Composite Plugs							STIM.390		39,000
Stimulation							STIM.210		2,245,000
Stimulation Water/Water							STIM.395		191,000
Cimarex Owned Frac/Rental							STIM.305		60,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead									
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect									
Contingency	DIDC.435	DICC.220	118,000	DICC.220	STIM.220	15,000	STIM.220	CON.220	165,000
Contingency									
Total Intangible Cos			2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner				DWEA.100		792,000			
Tubing							STIMT.105		139,000
Wellhead, Tree, Chokes	DWEB.115	DWEA.120	38,000	DWEA.120	STIMT.120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0			
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,000
Surface Equipment									
Well Automation Materials									
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs									
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical									
Telecommunication Equipment									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Materials									
SWD/Other - Materials									
SWD/Other - Line Pipe									
Total Tangible Cost			393,000			810,000			285,000
Total Estimated Cost			2,868,500			1,116,000			3,744,000



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

AFE # XXXXXXX

Description	Production Equip			Post Completion			Total
	Codes		Amount	Codes		Amount	Cost
Roads & Location	CON.100		48,637	PCOM.100	Repair any roads post D&C	3,000	74,637
Damages	CON.105		15807				32,307
Mud/Fluids Disposal				PCOM.255		0	251,000
Day Rate							564,000
Misc Preparation							30,000
Bits				PCOM.125		0	97,000
Fuel				PCOM.130		0	119,000
Water for Drilling Rig (Not Frac Water)				PCOM.135		0	25,000
Mud & Additives							300,000
SWD PIPED TO 3RD PARTY SWD WELL				PCOM.257	Water for 60 days (270K barrels)	87,354	87,354
Surface Rentals	CON.140		1,378	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	295,378
Downhole Rentals				PCOM.145		0	166,000
Flowback Labor				PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,000
Automation Labor	CON.150		36,558	PCOM.150		5,000	41,558
Mud Logging							5,000
IPC & EXTERNAL PAINTING	CON.165		18,888				18,888
Cementing & Float Equipment							210,000
Tubular Inspections				PCOM.160		0	50,000
Casing Crews							28,000
Mechanical Labor	CON.170		139,588	PCOM.170	RU Flowback Iron & Automation	5,000	167,588
Trucking/Transportation	CON.175		17,833	PCOM.175		0	59,833
Supervision	CON.180		21,238	PCOM.180		0	162,238
Trailer House/Camp/Catering							72,000
Other Misc Expenses	CON.190		24,318	PCOM.190		0	114,318
Overhead							10,000
MOB/DEMOB							115,000
Directional Drilling Services							307,000
Solids Control							46,000
Well Control Equip (Snubbing Services)				PCOM.240		0	148,000
Completion Rig				PCOM.115		0	21,000
Coil Tubing Services				PCOM.260		0	0
Completion Logging/Perforating/Wireline				PCOM.200		0	257,000
Composite Plugs				PCOM.390		0	39,000
Stimulation				PCOM.210		0	2,245,000
Stimulation Water/Water Transfer/Water							191,000
Cimarex Owned Frac/Rental Equipment				PCOM.305		0	60,000
Legal/Regulatory/Curative	CON.300		0				10,000
Well Control Insurance							7,000
Major Construction Overhead	CON.305		26,507				26,507
FL/GL - ON PAD LABOR	CON.495		37,613				37,613
FL/GL - Labor	CON.500		94,842				94,842
FL/GL - Supervision	CON.505		14,429				14,429
Survey	CON.515		2351				2,351
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
Contingency	CON.220		105,542				403,542
Contingency	CON.221		23,508				23,508
Total Intangible Cost			669,568			190,354	7,100,422
Conductor Pipe							0
Water String							104,000
Surface Casing							251,000
Intermediate Casing 1							0
Production Casing or Liner							792,000
Tubing				PCOMT.105		0	139,000
Wellhead, Tree, Chokes				PCOMT.120	Replace worn chokes and valves during FB	10,000	104,000
Liner Hanger, Isolation Packer							0
Packer, Nipples				PCOMT.400		0	28,000
SHORT ORDERS	CON.380		10,538				10,538
PUMPS	CON.385		30,804				30,804
WALKOVERS	CON.390		4,053				4,053
Downhole Lift Equipment				PCOMT.410		0	80,000
Surface Equipment				PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,000
Well Automation Materials				PCOMT.455	PTs, and replacing meters	5,000	5,000
N/C Lease Equipment	CON.400		184,334				184,334
Tanks, Tanks Steps, Stairs	CON.405		51,879				51,879
Battery Equipment	CON.410		214,003				214,003
Secondary Containments	CON.415		19,292				19,292
Overhead Power Distribution	CON.420		64,038				64,038
Facility Electrical	CON.425		32,100				32,100
Telecommunication Equipment	CON.426		486				486
Meters and Metering Equipment	CON.445		45,232				45,232
Facility Line Pipe	CON.450		31,208				31,208
Lease Automation Materials	CON.455		32,424				32,424
FL/GL - Materials	CON.550		21,400				21,400
FL/GL - Line Pipe	CON.555		48,637				48,637
SWD/Other - Materials	CON.650		0				0
SWD/Other - Line Pipe	CON.655		0				0
Total Tangible Cost			790,428			30,000	2,308,428
Total Estimated Cost			1,459,996			220,354	9,408,850



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

AFE # XXXXXXXX

Company Entity

Date Prepared
8/17/2022

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	Loosey Goosey 4-9 Fed Com 302H	New Mexico Bone Spring	XXXXXX-XXX.01	XXXXXXXX

County, State	Location	Estimated Spud	Estimated Completion
Lea, NM	Section 4-9 T20S-R34E Lea, NM		

X New Supplement Revision	Formation	Well Type	Ttl Measured Depth	Ttl Vertical Depth
	3rd Sand	DEV	20320	10820

Purpose: Drill and complete well
Description:

Drilling: The intended surface hold location for the well is 1300 FSL and 1500 FWL of Section 33, T19S-R34E, and the intended bottom hole location is 100 FSL and 2120 FWL of Section 9, T20S-R34E. The well is proposed to be drilled vertically to the 3rd Sand formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 10820 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 executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

7/6/2022



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

AFE # XXXXXXX

Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	48,637	PCOM.100	3,000	74,637
Damages	DIDC.105	16,500					CON.105	15,807			32,307
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,000
Day Rate	DIDC.115	468,000	DICC.120	96,000							564,000
Misc Preparation	DIDC.120	30,000									30,000
Bits	DIDC.125	97,000	DICC.125	0	STIM.125	0			PCOM.125	0	97,000
Fuel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	25,000
Mud & Additives	DIDC.145	300,000									300,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	87,354	87,354
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	1,378	PCOM.140	60,000	295,378
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	166,000
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Automation Labor							CON.150	36,558	PCOM.150	5,000	41,558
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING							CON.165	18,888			18,888
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000							210,000
Tubular Inspections	DIDC.190	38,000	DICC.160	8,000	STIM.160	4,000			PCOM.160	0	50,000
Casing Crews	DIDC.195	15,000	DICC.165	13,000	STIM.165	0					28,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0	CON.170	139,588	PCOM.170	5,000	167,588
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000	CON.175	17,833	PCOM.175	0	59,833
Supervision	DIDC.210	81,000	DICC.180	13,000	STIM.180	47,000	CON.180	21,238	PCOM.180	0	162,238
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	24,318	PCOM.190	0	114,318
Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOS	DIDC.240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Solids Control	DIDC.260	46,000									46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260	0	0
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,000
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
Stimulation Water/Water Transfer/Water					STIM.395	191,000					191,000
Cimarex Owned Frac/Rental Equipment					STIM.305	60,000			PCOM.305	0	60,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	7,000									7,000
Major Construction Overhead							CON.305	26,507			26,507
FL/GL - ON PAD LABOR							CON.495	37,613			37,613
FL/GL - Labor							CON.500	94,842			94,842
FL/GL - Supervision							CON.505	14,429			14,429
Survey							CON.515	2,351			2,351
SWD/Other - Labor							CON.600	0			0
SWD/Other - Supervision							CON.605	0			0
Aid In Construct/3rd Party Connect							CON.701	40,531			40,531
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	105,542	PCOM.220	0	403,542
Contingency							CON.221	23,508			23,508
Total Intangible Cost		2,475,500		306,000		3,459,000		669,568		190,354	7,100,422
Conductor Pipe	DWEB.130	0									0
Water String	DWEB.135	104,000									104,000
Surface Casing	DWEB.140	251,000									251,000
Intermediate Casing 1	DWEB.145	0									0
Production Casing or Liner			DWEA.100	792,000							792,000
Tubing					STIMT.105	139,000			PCOMT.105	0	139,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS							CONT.380	10,538			10,538
PUMPS							CONT.385	30,804			30,804
WALKOVERS							CONT.390	4,053			4,053
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
Surface Equipment									PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	184,334			184,334
Tanks, Tanks Steps, Stairs							CONT.405	51,879			51,879
Battery Equipment							CONT.410	214,003			214,003
Secondary Containments							CONT.415	19,292			19,292
Overhead Power Distribution							CONT.420	64,038			64,038
Facility Electrical							CONT.425	32,100			32,100
Telecommunication Equipment							CONT.426	486			486
Meters and Metering Equipment							CONT.445	45,232			45,232
Facility Line Pipe							CONT.450	31,208			31,208
Lease Automation Materials							CONT.455	32,424			32,424
FL/GL - Materials							CONT.550	21,400			21,400
FL/GL - Line Pipe							CONT.555	48,637			48,637
SWD/Other - Materials							CONT.650	0			0
SWD/Other - Line Pipe							CONT.655	0			0
Total Tangible Cost		393,000		810,000		285,000		790,428		30,000	2,308,428
Total Estimated Cost		2,868,500		1,116,000		3,744,000		1,459,996		220,354	9,408,850



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

AFE # XXXXXXX

Description	BCP - Drilling			ACP - Drilling			Comp/Stim		
	Codes		Amount	Codes		Amount	Codes		Amount
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,000
Damages	DIDC.105		16,500						
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		51,000
Day Rate	DIDC.115	DICC.120	468,000	DICC.120		96,000			
Misc Preparation	DIDC.120		30,000						
Bits	DIDC.125	DICC.125	97,000	DICC.125	STIM.125	0	STIM.125		0
Fuel	DIDC.135	DICC.130	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
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD									
Surface Rentals	DIDC.150	DICC.140	97,000	DICC.140	STIM.140	0	STIM.140	CON.140	137,000
Downhole Rentals	DIDC.155		131,000				STIM.145		35,000
Flowback Labor							STIM.141		0
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	DICC.155	70,000	DICC.155		140,000			
Tubular Inspections	DIDC.190	DICC.160	38,000	DICC.160	STIM.160	8,000	STIM.160		4,000
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	13,000	STIM.165		0
Mechanical Labor	DIDC.200	DICC.170	20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	0
Trucking/Transportation	DIDC.205	DICC.175	30,000	DICC.175	STIM.175	8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210	DICC.180	81,000	DICC.180	STIM.180	13,000	STIM.180	CON.180	47,000
Trailer House/Camp/Catering	DIDC.280	DICC.255	35,000	DICC.255	STIM.280	5,000	STIM.280		31,000
Other Misc Expenses	DIDC.220	DICC.190	5,000	DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000			
MOB/DEMOS	DIDC.240		115,000						
Directional Drilling Services	DIDC.245		307,000						
Solids Control	DIDC.260		46,000						
Well Control Equip (Snubbing	DIDC.265	DICC.240	84,000	DICC.240	STIM.240	0	STIM.240		64,000
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		0
Completion							STIM.200		257,000
Composite Plugs							STIM.390		39,000
Stimulation							STIM.210		2,245,000
Stimulation Water/Water							STIM.395		191,000
Cimarex Owned Frac/Rental							STIM.305		60,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead									
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect									
Contingency	DIDC.435	DICC.220	118,000	DICC.220	STIM.220	15,000	STIM.220	CON.220	165,000
Contingency									
Total Intangible Cos			2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner				DWEA.100		792,000			
Tubing							STIMT.105		139,000
Wellhead, Tree, Chokes	DWEB.115	DWEA.120	38,000	DWEA.120	STIMT.120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0			
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,000
Surface Equipment									
Well Automation Materials									
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs									
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical									
Telecommunication Equipment									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Materials									
SWD/Other - Materials									
SWD/Other - Line Pipe									
Total Tangible Cost			393,000			810,000			285,000
Total Estimated Cost			2,868,500			1,116,000			3,744,000



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

AFE # XXXXXXX

Description	Production Equip			Post Completion			Total
	Codes	Amount	Codes	Amount	Cost		
Roads & Location	CON.100	48,637	PCOM.100	Repair any roads post D&C	3,000	74,637	
Damages	CON.105	15807				32,307	
Mud/Fluids Disposal			PCOM.255		0	251,000	
Day Rate						564,000	
Misc Preparation						30,000	
Bits			PCOM.125		0	97,000	
Fuel			PCOM.130		0	119,000	
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	25,000	
Mud & Additives						300,000	
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257	Water for 60 days (270K barrels)	87,354	87,354	
Surface Rentals	CON.140	1,378	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	295,378	
Downhole Rentals			PCOM.145		0	166,000	
Flowback Labor			PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,000	
Automation Labor	CON.150	36,558	PCOM.150		5,000	41,558	
Mud Logging						5,000	
IPC & EXTERNAL PAINTING	CON.165	18,888				18,888	
Cementing & Float Equipment						210,000	
Tubular Inspections			PCOM.160		0	50,000	
Casing Crews						28,000	
Mechanical Labor	CON.170	139,588	PCOM.170	RU Flowback Iron & Automation	5,000	167,588	
Trucking/Transportation	CON.175	17,833	PCOM.175		0	59,833	
Supervision	CON.180	21,238	PCOM.180		0	162,238	
Trailer House/Camp/Catering						72,000	
Other Misc Expenses	CON.190	24,318	PCOM.190		0	114,318	
Overhead						10,000	
MOB/DEMOB						115,000	
Directional Drilling Services						307,000	
Solids Control						46,000	
Well Control Equip (Snubbing Services)			PCOM.240		0	148,000	
Completion Rig			PCOM.115		0	21,000	
Coil Tubing Services			PCOM.260		0	0	
Completion Logging/Perforating/Wireline			PCOM.200		0	257,000	
Composite Plugs			PCOM.390		0	39,000	
Stimulation			PCOM.210		0	2,245,000	
Stimulation Water/Water Transfer/Water						191,000	
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	60,000	
Legal/Regulatory/Curative	CON.300	0				10,000	
Well Control Insurance						7,000	
Major Construction Overhead	CON.305	26,507				26,507	
FL/GL - ON PAD LABOR	CON.495	37,613				37,613	
FL/GL - Labor	CON.500	94,842				94,842	
FL/GL - Supervision	CON.505	14,429				14,429	
Survey	CON.515	2351				2,351	
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	
Contingency	CON.220	105,542				403,542	
Contingency	CON.221	23,508				23,508	
Total Intangible Cost		669,568			190,354	7,100,422	
Conductor Pipe						0	
Water String						104,000	
Surface Casing						251,000	
Intermediate Casing 1						0	
Production Casing or Liner						792,000	
Tubing			PCOMT.105		0	139,000	
Wellhead, Tree, Chokes			PCOMT.120	Replace worn chokes and valves during FB	10,000	104,000	
Liner Hanger, Isolation Packer						0	
Packer, Nipples			PCOMT.400		0	28,000	
SHORT ORDERS	CON.380	10,538				10,538	
PUMPS	CON.385	30,804				30,804	
WALKOVERS	CON.390	4,053				4,053	
Downhole Lift Equipment			PCOMT.410		0	80,000	
Surface Equipment			PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,000	
Well Automation Materials			PCOMT.455	PTs, and replacing meters	5,000	5,000	
N/C Lease Equipment	CON.400	184,334				184,334	
Tanks, Tanks Steps, Stairs	CON.405	51,879				51,879	
Battery Equipment	CON.410	214,003				214,003	
Secondary Containments	CON.415	19,292				19,292	
Overhead Power Distribution	CON.420	64,038				64,038	
Facility Electrical	CON.425	32,100				32,100	
Telecommunication Equipment	CON.426	486				486	
Meters and Metering Equipment	CON.445	45,232				45,232	
Facility Line Pipe	CON.450	31,208				31,208	
Lease Automation Materials	CON.455	32,424				32,424	
FL/GL - Materials	CON.550	21,400				21,400	
FL/GL - Line Pipe	CON.555	48,637				48,637	
SWD/Other - Materials	CON.650	0				0	
SWD/Other - Line Pipe	CON.655	0				0	
Total Tangible Cost		790,428			30,000	2,308,428	
Total Estimated Cost		1,459,996			220,354	9,408,850	



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

AFE # XXXXXXXX

Company Entity

Date Prepared
8/17/2022

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	Loosey Goosey 4-9 Fed Com 303H	New Mexico Bone Spring	XXXXXX-XXX.01	XXXXXXX

County, State	Location	Estimated Spud	Estimated Completion
Lea, NM	Section 4-9 T20S-R34E Lea, NM		

X New Supplement Revision	Formation	Well Type	Ttl Measured Depth	Ttl Vertical Depth
	3rd Sand	DEV	20310	10810

Purpose: Drill and complete well
Description:

Drilling: The intended surface hold location for the well is 280 FSL and 1540 FEL of Section 33, T19S-R34E, and the intended bottom hole location is 100 FSL and 1744 FEL of Section 9, T20S-R34E. The well is proposed to be drilled vertically to the 3rd Sand formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 10810 feet.

Intangible		Dry Hole	After Casing Point	Completed Well Cost
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.

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.

7/6/2022



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

AFE # XXXXXXX

Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	44,205	PCOM.100	3,000	70,205
Damages	DIDC.105	16,500					CON.105	3,215			19,715
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,000
Day Rate	DIDC.115	468,000	DICC.120	96,000							564,000
Misc Preparation	DIDC.120	30,000									30,000
Bits	DIDC.125	97,000	DICC.125	0	STIM.125	0			PCOM.125	0	97,000
Fuel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	25,000
Mud & Additives	DIDC.145	300,000									300,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	87,354	87,354
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	6,912	PCOM.140	60,000	300,912
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	166,000
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Automation Labor							CON.150	45,010	PCOM.150	5,000	50,010
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING							CON.165	5,144			5,144
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000							210,000
Tubular Inspections	DIDC.190	38,000	DICC.160	8,000	STIM.160	4,000			PCOM.160	0	50,000
Casing Crews	DIDC.195	15,000	DICC.165	13,000	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	213,663
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000	CON.175	16,075	PCOM.175	0	58,075
Supervision	DIDC.210	81,000	DICC.180	13,000	STIM.180	47,000	CON.180	11,574	PCOM.180	0	152,574
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	19,290	PCOM.190	0	109,290
Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Solids Control	DIDC.260	46,000									46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260	0	0
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,000
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
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			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			0
SWD/Other - Supervision							CON.605	0			0
Aid In Construct/3rd Party Connect							CON.701	0			0
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	106,737	PCOM.220	0	404,737
Contingency							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									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					STIMT.105	139,000			PCOMT.105	0	139,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS							CONT.380	11,253			11,253
PUMPS							CONT.385	26,362			26,362
WALKOVERS							CONT.390	6,430			6,430
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
Surface Equipment									PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	279,861			279,861
Tanks, Tanks Steps, Stairs							CONT.405	0			0
Battery Equipment							CONT.410	229,386			229,386
Secondary Containments							CONT.415	12,859			12,859
Overhead Power Distribution							CONT.420	10,288			10,288
Facility Electrical							CONT.425	48,224			48,224
Telecommunication Equipment							CONT.426	0			0
Meters and Metering Equipment							CONT.445	42,758			42,758
Facility Line Pipe							CONT.450	28,935			28,935
Lease Automation Materials							CONT.455	36,972			36,972
FL/GL - Materials							CONT.550	26,684			26,684
FL/GL - Line Pipe							CONT.555	80,052			80,052
SWD/Other - Materials							CONT.650	0			0
SWD/Other - Line Pipe							CONT.655	0			0
Total Tangible Cost		393,000		810,000		285,000		840,065		30,000	2,358,065
Total Estimated Cost		2,868,500		1,116,000		3,744,000		1,480,000		220,354	9,428,854



Authorization For Expenditure - Looosey Goosey 4-9 Fed Com 303H

AFE # XXXXXXX

Description	BCP - Drilling			ACP - Drilling			Comp/Stim		
	Codes		Amount	Codes		Amount	Codes		Amount
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,000
Damages	DIDC.105		16,500						
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		51,000
Day Rate	DIDC.115	DICC.120	468,000	DICC.120		96,000			
Misc Preparation	DIDC.120		30,000						
Bits	DIDC.125	DICC.125	97,000	DICC.125	STIM.125	0	STIM.125		0
Fuel	DIDC.135	DICC.130	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
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD									
Surface Rentals	DIDC.150	DICC.140	97,000	DICC.140	STIM.140	0	STIM.140	CON.140	137,000
Downhole Rentals	DIDC.155		131,000				STIM.145		35,000
Flowback Labor							STIM.141		0
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	DICC.155	70,000	DICC.155		140,000			
Tubular Inspections	DIDC.190	DICC.160	38,000	DICC.160	STIM.160	8,000	STIM.160		4,000
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	13,000	STIM.165		0
Mechanical Labor	DIDC.200	DICC.170	20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	0
Trucking/Transportation	DIDC.205	DICC.175	30,000	DICC.175	STIM.175	8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210	DICC.180	81,000	DICC.180	STIM.180	13,000	STIM.180	CON.180	47,000
Trailer House/Camp/Catering	DIDC.280	DICC.255	36,000	DICC.255	STIM.280	5,000	STIM.280		31,000
Other Misc Expenses	DIDC.220	DICC.190	5,000	DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC.245		307,000						
Solids Control	DIDC.260		46,000						
Well Control Equip (Snubbing	DIDC.265	DICC.240	84,000	DICC.240	STIM.240	0	STIM.240		64,000
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		0
Completion							STIM.200		257,000
Composite Plugs							STIM.390		39,000
Stimulation							STIM.210		2,245,000
Stimulation Water/Water							STIM.395		191,000
Cimarex Owned Frac/Rental							STIM.305		60,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead									
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect									
Contingency	DIDC.435	DICC.220	118,000	DICC.220	STIM.220	15,000	STIM.220	CON.220	165,000
Contingency									
Total Intangible Cos			2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner				DWEA.100		792,000			
Tubing							STIMT.105		139,000
Wellhead, Tree, Chokes	DWEB.115	DWEA.120	38,000	DWEA.120	STIMT.120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0			
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,000
Surface Equipment									
Well Automation Materials									
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs									
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical									
Telecommunication Equipment									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Materials									
SWD/Other - Materials									
SWD/Other - Line Pipe									
Total Tangible Cost			393,000			810,000			285,000
Total Estimated Cost			2,868,500			1,116,000			3,744,000



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

AFE # XXXXXXX

Description	Production Equip		Post Completion		Total	
	Codes	Amount	Codes	Amount	Cost	
Roads & Location	CON.100	44,205	PCOM.100	Repair any roads post D&C	3,000	70,205
Damages	CON.105	3215				19,715
Mud/Fluids Disposal			PCOM.255		0	251,000
Day Rate						564,000
Misc Preparation						30,000
Bits			PCOM.125		0	97,000
Fuel			PCOM.130		0	119,000
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	25,000
Mud & Additives						300,000
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257	Water for 60 days (270K barrels)	87,354	87,354
Surface Rentals	CON.140	6,912	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	60,000	300,912
Downhole Rentals			PCOM.145		0	166,000
Flowback Labor			PCOM.141	3 Flowback Hands (60 days). 25%	30,000	30,000
Automation Labor	CON.150	45,010	PCOM.150		5,000	50,010
Mud Logging						5,000
IPC & EXTERNAL PAINTING	CON.165	5,144				5,144
Cementing & Float Equipment						210,000
Tubular Inspections			PCOM.160		0	50,000
Casing Crews						28,000
Mechanical Labor	CON.170	185,663	PCOM.170	RU Flowback Iron & Automation	5,000	213,663
Trucking/Transportation	CON.175	16,075	PCOM.175		0	58,075
Supervision	CON.180	11,574	PCOM.180		0	152,574
Trailer House/Camp/Catering						72,000
Other Misc Expenses	CON.190	19,290	PCOM.190		0	109,290
Overhead						10,000
MOB/DEMOB						115,000
Directional Drilling Services						307,000
Solids Control						46,000
Well Control Equip (Snubbing Services)			PCOM.240		0	148,000
Completion Rig			PCOM.115		0	21,000
Coil Tubing Services			PCOM.260		0	0
Completion Logging/Perforating/Wireline			PCOM.200		0	257,000
Composite Plugs			PCOM.390		0	39,000
Stimulation			PCOM.210		0	2,245,000
Stimulation Water/Water Transfer/Water						191,000
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	60,000
Legal/Regulatory/Curative	CON.300	0				10,000
Well Control Insurance						7,000
Major Construction Overhead	CON.305	0				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				0
SWD/Other - Supervision	CON.605	0				0
Aid In Construct/3rd Party Connect	CON.701	0				0
Contingency	CON.220	106,737				404,737
Contingency	CON.221	30,381				30,381
Total Intangible Cost		639,935			190,354	7,070,789
Conductor Pipe						0
Water String						104,000
Surface Casing						251,000
Intermediate Casing 1						0
Production Casing or Liner						792,000
Tubing			PCOMT.105		0	139,000
Wellhead, Tree, Chokes			PCOMT.120	Replace worn chokes and valves during FB	10,000	104,000
Liner Hanger, Isolation Packer						0
Packer, Nipples			PCOMT.400		0	28,000
SHORT ORDERS	CON.380	11,253				11,253
PUMPS	CON.385	26,362				26,362
WALKOVERS	CON.390	6,430				6,430
Downhole Lift Equipment			PCOMT.410		0	80,000
Surface Equipment			PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	15,000
Well Automation Materials			PCOMT.455	PTs, and replacing meters	5,000	5,000
N/C Lease Equipment	CON.400	279,861				279,861
Tanks, Tanks Steps, Stairs	CON.405	0				0
Battery Equipment	CON.410	229,386				229,386
Secondary Containments	CON.415	12,859				12,859
Overhead Power Distribution	CON.420	10,288				10,288
Facility Electrical	CON.425	48,224				48,224
Telecommunication Equipment	CON.426	0				0
Meters and Metering Equipment	CON.445	42,758				42,758
Facility Line Pipe	CON.450	28,935				28,935
Lease Automation Materials	CON.455	36,972				36,972
FL/GL - Materials	CON.550	26,684				26,684
FL/GL - Line Pipe	CON.555	80,052				80,052
SWD/Other - Materials	CON.650	0				0
SWD/Other - Line Pipe	CON.655	0				0
Total Tangible Cost		840,065			30,000	2,358,065
Total Estimated Cost		1,480,000			220,354	9,428,854



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

AFE # XXXXXXXX

Company Entity

Date Prepared
8/17/2022

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	Loosey Goosey 4-9 Fed Com 304H	New Mexico Bone Spring	XXXXXX-XXX.01	XXXXXXX

County, State	Location	Estimated Spud	Estimated Completion
Lea, NM	Section 4-9 T20S-R34E Lea, NM		

X New Supplement Revision	Formation	Well Type	Ttl Measured Depth	Ttl Vertical Depth
	3rd Sand	DEV	20300	10800

Purpose: Drill and complete well

Description:

Drilling: The intended surface hold location for the well is 280 FSL and 1500 FEL of Section 33, T19S-R34E, and the intended bottom hole location is 100 FSL and 330 FEL of Section 9, T20S-R34E. The well is proposed to be drilled vertically to the 3rd Sand formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total vertical depth of the well is proposed to be approximately 10800 feet.

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.

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.

7/6/2022



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

AFE # XXXXXXX

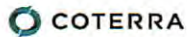
Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	20,000			STIM.100	3,000	CON.100	44,205	PCOM.100	3,000	70,205
Damages	DIDC.105	16,500					CON.105	3215			19,715
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	51,000			PCOM.255	0	251,000
Day Rate	DIDC.115	468,000	DICC.120	96,000							564,000
Misc Preparation	DIDC.120	30,000									30,000
Bits	DIDC.125	97,000	DICC.125	0	STIM.125	0			PCOM.125	0	97,000
Fuel	DIDC.135	119,000	DICC.130	0					PCOM.130	0	119,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	20,000			PCOM.135	0	25,000
Mud & Additives	DIDC.145	300,000									300,000
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	87,354	87,354
Surface Rentals	DIDC.150	97,000	DICC.140	0	STIM.140	137,000	CON.140	6,912	PCOM.140	60,000	300,912
Downhole Rentals	DIDC.155	131,000			STIM.145	35,000			PCOM.145	0	166,000
Flowback Labor					STIM.141	0			PCOM.141	30,000	30,000
Automation Labor							CON.150	45,010	PCOM.150	5,000	50,010
Mud Logging	DIDC.170	5,000									5,000
IPC & EXTERNAL PAINTING							CON.165	5,144			5,144
Cementing & Float Equipment	DIDC.185	70,000	DICC.155	140,000							210,000
Tubular Inspections	DIDC.190	38,000	DICC.160	8,000	STIM.160	4,000			PCOM.160	0	50,000
Casing Crews	DIDC.195	15,000	DICC.165	13,000	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	213,663
Trucking/Transportation	DIDC.205	30,000	DICC.175	8,000	STIM.175	4,000	CON.175	16,075	PCOM.175	0	58,075
Supervision	DIDC.210	81,000	DICC.180	13,000	STIM.180	47,000	CON.180	11,574	PCOM.180	0	152,574
Trailer House/Camp/Catering	DIDC.280	36,000	DICC.255	5,000	STIM.280	31,000					72,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0	STIM.190	85,000	CON.190	19,290	PCOM.190	0	109,290
Overhead	DIDC.225	5,000	DICC.195	5,000							10,000
MOB/DEMOB	DIDC.240	115,000									115,000
Directional Drilling Services	DIDC.245	307,000									307,000
Solids Control	DIDC.260	46,000									46,000
Well Control Equip (Snubbing Services)	DIDC.265	84,000	DICC.240	0	STIM.240	64,000			PCOM.240	0	148,000
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	0			PCOM.260	0	0
Completion Logging/Perforating/Wireline					STIM.200	257,000			PCOM.200	0	257,000
Composite Plugs					STIM.390	39,000			PCOM.390	0	39,000
Stimulation					STIM.210	2,245,000			PCOM.210	0	2,245,000
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			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			0
SWD/Other - Supervision							CON.605	0			0
Aid In Construct/3rd Party Connect							CON.701	0			0
Contingency	DIDC.435	118,000	DICC.220	15,000	STIM.220	165,000	CON.220	106,737	PCOM.220	0	404,737
Contingency							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									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					STIMT.105	139,000			PCOMT.105	0	139,000
Wellhead, Tree, Chokes	DWEB.115	38,000	DWEA.120	18,000	STIMT.120	38,000			PCOMT.120	10,000	104,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples					STIMT.400	28,000			PCOMT.400	0	28,000
SHORT ORDERS							CONT.380	11,253			11,253
PUMPS							CONT.385	26,362			26,362
WALKOVERS							CONT.390	6,430			6,430
Downhole Lift Equipment					STIMT.410	80,000			PCOMT.410	0	80,000
Surface Equipment									PCOMT.420	15,000	15,000
Well Automation Materials									PCOMT.455	5,000	5,000
N/C Lease Equipment							CONT.400	279,861			279,861
Tanks, Tanks Steps, Stairs							CONT.405	0			0
Battery Equipment							CONT.410	229,386			229,386
Secondary Containments							CONT.415	12,859			12,859
Overhead Power Distribution							CONT.420	10,288			10,288
Facility Electrical							CONT.425	48,224			48,224
Telecommunication Equipment							CONT.426	0			0
Meters and Metering Equipment							CONT.445	42,758			42,758
Facility Line Pipe							CONT.450	28,935			28,935
Lease Automation Materials							CONT.455	36,972			36,972
FL/GL - Materials							CONT.550	26,684			26,684
FL/GL - Line Pipe							CONT.555	80,052			80,052
SWD/Other - Materials							CONT.650	0			0
SWD/Other - Line Pipe							CONT.655	0			0
Total Tangible Cost		393,000		810,000		285,000		840,065		30,000	2,358,065
Total Estimated Cost		2,868,500		1,116,000		3,744,000		1,480,000		220,354	9,428,854



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

AFE # XXXXXXX

Description	BCP - Drilling			ACP - Drilling			Comp/Stim		
	Codes		Amount	Codes		Amount	Codes		Amount
Roads & Location	DIDC.100		20,000				STIM.100	CON.100	3,000
Damages	DIDC.105		16,500						
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		51,000
Day Rate	DIDC.115	DICC.120	468,000	DICC.120		96,000			
Misc Preparation	DIDC.120		30,000						
Bits	DIDC.125	DICC.125	97,000	DICC.125	STIM.125	0	STIM.125		0
Fuel	DIDC.135	DICC.130	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
Mud & Additives	DIDC.145		300,000						
SWD PIPED TO 3RD PARTY SWD									
Surface Rentals	DIDC.150	DICC.140	97,000	DICC.140	STIM.140	0	STIM.140	CON.140	137,000
Downhole Rentals	DIDC.155		131,000				STIM.145		35,000
Flowback Labor							STIM.141		0
Automation Labor									
Mud Logging	DIDC.170		5,000						
IPC & EXTERNAL PAINTING									
Cementing & Float Equipment	DIDC.185	DICC.155	70,000	DICC.155		140,000			
Tubular Inspections	DIDC.190	DICC.160	38,000	DICC.160	STIM.160	8,000	STIM.160		4,000
Casing Crews	DIDC.195	DICC.165	15,000	DICC.165	STIM.165	13,000	STIM.165		0
Mechanical Labor	DIDC.200	DICC.170	20,000	DICC.170	STIM.170	3,000	STIM.170	CON.170	0
Trucking/Transportation	DIDC.205	DICC.175	30,000	DICC.175	STIM.175	8,000	STIM.175	CON.175	4,000
Supervision	DIDC.210	DICC.180	81,000	DICC.180	STIM.180	13,000	STIM.180	CON.180	47,000
Trailer House/Camp/Catering	DIDC.280	DICC.255	36,000	DICC.255	STIM.280	5,000	STIM.280		31,000
Other Misc Expenses	DIDC.220	DICC.190	5,000	DICC.190	STIM.190	0	STIM.190	CON.190	85,000
Overhead	DIDC.225	DICC.195	5,000	DICC.195		5,000			
MOB/DEMOB	DIDC.240		115,000						
Directional Drilling Services	DIDC.245		307,000						
Solids Control	DIDC.260		46,000						
Well Control Equip (Snubbing)	DIDC.265	DICC.240	84,000	DICC.240	STIM.240	0	STIM.240		64,000
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		0
Completion							STIM.200		257,000
Composite Plugs							STIM.390		39,000
Stimulation							STIM.210		2,245,000
Stimulation Water/Water							STIM.395		191,000
Cimarex Owned Frac/Rental							STIM.305		60,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285		7,000						
Major Construction Overhead									
FL/GL - ON PAD LABOR									
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/Other - Supervision									
Aid In Construct/3rd Party Connect									
Contingency	DIDC.435	DICC.220	118,000	DICC.220	STIM.220	15,000	STIM.220	CON.220	165,000
Contingency									
Total Intangible Cos			2,475,500			306,000			3,459,000
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		104,000						
Surface Casing	DWEB.140		251,000						
Intermediate Casing 1	DWEB.145		0						
Production Casing or Liner				DWEA.100		792,000			
Tubing							STIMT.105		139,000
Wellhead, Tree, Chokes	DWEB.115	DWEA.120	38,000	DWEA.120	STIMT.120	18,000	STIMT.120		38,000
Liner Hanger, Isolation Packer	DWEB.100	DWEA.125	0	DWEA.125		0			
Packer, Nipples							STIMT.400		28,000
SHORT ORDERS									
PUMPS									
WALKOVERS									
Downhole Lift Equipment							STIMT.410		80,000
Surface Equipment									
Well Automation Materials									
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs									
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical									
Telecommunication Equipment									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Materials									
SWD/Other - Materials									
SWD/Other - Line Pipe									
Total Tangible Cost			393,000			810,000			285,000
Total Estimated Cost			2,868,500			1,116,000			3,744,000



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

AFE # XXXXXXX

Description	Production Equip			Post Completion		Total
	Codes	Amount	Codes	Amount	Cost	
Roads & Location	CON.100	44,205	PCOM.100	Repair any roads post D&C	70,205	
Damages	CON.105	3215			19,715	
Mud/Fluids Disposal			PCOM.255		251,000	
Day Rate					564,000	
Misc Preparation					30,000	
Bits			PCOM.125		97,000	
Fuel			PCOM.130		119,000	
Water for Drilling Rig (Not Frac Water)			PCOM.135		25,000	
Mud & Additives					300,000	
SWD PIPED TO 3RD PARTY SWD WELL			PCOM.257	Water for 60 days (270K barrels)	87,354	
Surface Rentals	CON.140	6,912	PCOM.140	Iron. XEC Own 5K. No 10K. \$1,100 per day	300,912	
Downhole Rentals			PCOM.145		166,000	
Flowback Labor			PCOM.141	3 Flowback Hands (60 days). 25%	30,000	
Automation Labor	CON.150	45,010	PCOM.150		50,010	
Mud Logging					5,000	
IPC & EXTERNAL PAINTING	CON.165	5,144			5,144	
Cementing & Float Equipment					210,000	
Tubular Inspections			PCOM.160		50,000	
Casing Crews					28,000	
Mechanical Labor	CON.170	185,663	PCOM.170	RU Flowback Iron & Automation	213,663	
Trucking/Transportation	CON.175	16,075	PCOM.175		58,075	
Supervision	CON.180	11,574	PCOM.180		152,574	
Trailer House/Camp/Catering					72,000	
Other Misc Expenses	CON.190	19,290	PCOM.190		109,290	
Overhead					10,000	
MOB/DEMOB					115,000	
Directional Drilling Services					307,000	
Solids Control					46,000	
Well Control Equip (Snubbing Services)			PCOM.240		148,000	
Completion Rig			PCOM.115		21,000	
Coil Tubing Services			PCOM.260		0	
Completion Logging/Perforating/Wireline			PCOM.200		257,000	
Composite Plugs			PCOM.390		39,000	
Stimulation			PCOM.210		2,245,000	
Stimulation Water/Water Transfer/Water					191,000	
Cimarex Owned Frac/Rental Equipment			PCOM.305		60,000	
Legal/Regulatory/Curative	CON.300	0			10,000	
Well Control Insurance					7,000	
Major Construction Overhead	CON.305	0			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			0	
SWD/Other - Supervision	CON.605	0			0	
Aid In Construct/3rd Party Connect	CON.701	0			0	
Contingency	CON.220	106,737			404,737	
Contingency	CON.221	30,381			30,381	
Total Intangible Cost		639,935			7,070,789	
Conductor Pipe					0	
Water String					104,000	
Surface Casing					251,000	
Intermediate Casing 1					0	
Production Casing or Liner					792,000	
Tubing			PCOMT.105		139,000	
Wellhead, Tree, Chokes			PCOMT.120	Replace worn chokes and valves during FB	104,000	
Liner Hanger, Isolation Packer					0	
Packer, Nipples			PCOMT.400		28,000	
SHORT ORDERS	CONT.380	11,253			11,253	
PUMPS	CONT.385	26,362			26,362	
WALKOVERS	CONT.390	6,430			6,430	
Downhole Lift Equipment			PCOMT.410		80,000	
Surface Equipment			PCOMT.420	Replacing Chokes, Stuffing Boxes, and all	15,000	
Well Automation Materials			PCOMT.455	PTs. and replacing meters	5,000	
N/C Lease Equipment	CONT.400	279,861			279,861	
Tanks, Tanks Steps, Stairs	CONT.405	0			0	
Battery Equipment	CONT.410	229,386			229,386	
Secondary Containments	CONT.415	12,859			12,859	
Overhead Power Distribution	CONT.420	10,288			10,288	
Facility Electrical	CONT.425	48,224			48,224	
Telecommunication Equipment	CONT.426	0			0	
Meters and Metering Equipment	CONT.445	42,758			42,758	
Facility Line Pipe	CONT.450	28,935			28,935	
Lease Automation Materials	CONT.455	36,972			36,972	
FL/GL - Materials	CONT.550	26,684			26,684	
FL/GL - Line Pipe	CONT.555	80,052			80,052	
SWD/Other - Materials	CONT.650	0			0	
SWD/Other - Line Pipe	CONT.655	0			0	
Total Tangible Cost		840,065			2,358,065	
Total Estimated Cost		1,480,000			9,428,854	

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

MODEL FORM OPERATING AGREEMENT

OPERATING AGREEMENT

DATED

August 15 , 2022 ,
year

OPERATOR Cimarex Energy Co.

CONTRACT AREA All Section 4 and Section 9, Township 20 South, Range 34 East

COUNTY OR PARISH OF Lea , STATE OF New Mexico

LOOSEY GOOSEY 4-9 FED COM WELLS

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AMERICAN ASSOCIATION OF PETROLEUM
LANDMEN, 4100 FOSSIL CREEK BLVD.
FORT WORTH, TEXAS, 76137, APPROVED FORM.

A.A.P.L. NO. 610 – 1989

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

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

1. OVERHEAD—DRILLING AND PRODUCING OPERATIONS

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

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

A. TECHNICAL SERVICES

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

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

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

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

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

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

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

B. OVERHEAD—FIXED RATE BASIS

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

Drilling Well Rate per month \$ 8,000.00 (prorated for less than a full month)

Producing Well Rate per month \$ 800.00
- (2) Application of Overhead—Drilling Well Rate shall be as follows:

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

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- Received email from Reid Marley to discuss Loosey Goosey and Mighty Pheasant proposals and discussed with development plan and path Coterra would be making forward

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

7/10/23 – Discussed development timing with Reid

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

Chase Oil Corporation

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

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

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

Wilbanks Reserve Corporation/Marks Oil

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

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

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

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

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

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

7/10/23 – Confirmed DOTO figures with Hannah

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

Union Hill Oil and Gas

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

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

Highland Texas Energy Company and Richardson Oil Company

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

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

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

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

July 10, 2023

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

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

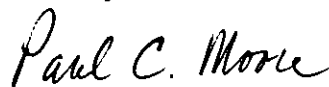
To Whom it May Concern:

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

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

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

Sincerely,



Paul Moore
Moore & Shelton Co. LLP
General Partner

EXHIBIT
A-5

JAVELINA PARTNERS & ZORRO PARTNERS LTD

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

July 7, 2023

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

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

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

Ladies and Gentlemen,

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

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

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

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

JAVELINA PARTNERS & ZORRO PARTNERS LTD

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

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

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

Sincerely,



Edward Randall Hudson IV
Javelina Partners
Land Manager



William A. Hudson II
Zorro Partners LTD
Managing Partner

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

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

Pg. 2/2

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

WELL NAME:Bane 4-9 Federal Com 111H

LOCATION:Section 4, T20S-R34E

COUNTY/STATE:Lea County, New Mexico

Permian WI:

GEOLOGIC TARGET:FBSG

REMARKS:Drill a horizontal FBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost

AFE NO.:1

FIELD:Teas; Bone Spring

MD/TVD:19,915' / 9,630'

LATERAL LENGTH:10,000'

DRILLING DAYS:19.6

COMPLETION DAYS:18.6

	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
INTANGIBLE COSTS				
1 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 Rental - Surface Equipment	111,070	192,448	105,000	408,518
6 Rental - Downhole Equipment	183,520	53,429	-	236,949
7 Rental - 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	168,789	647,751	-	816,540
14 Cementing & Float Equip	217,354	-	-	217,354
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, Slickline	-	351,218	-	351,218
17 High Pressure Pump Truck	-	110,130	-	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
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
97 Contingency	-	21,817	3,833	25,650
99 Plugging & Abandonment	-	-	-	-
TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379
TANGIBLE COSTS				
60 Surface Casing	\$ 109,201	-	-	\$ 109,201
61 Intermediate Casing	307,574	-	-	307,574
62 Drilling Liner	-	-	-	-
63 Production Casing	613,783	-	-	613,783
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	57,908	-	40,000	97,908
67 Packers, Liner Hangers	13,161	-	20,000	33,161
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
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	-	-	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	-	-	853	853
TOTAL TANGIBLES >	1,101,627	0	989,187	2,090,814
TOTAL COSTS >	4,243,103	4,794,736	1,686,354	10,724,193

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:PS

Completions Engineer:ML

Production Engineer:DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO

Co-CEO

VP - Operations

VP - Land & Legal

VP - Geosciences

CRM

BC

SO

NON OPERATING PARTNER APPROVAL:

Company Name:

Working Interest (%):

Tax ID:

Signed by:

Date:

Title:

Approval:

Yes

No

(mark one)

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred, including local, creative, regulatory, break-down and well costs, under the terms of the applicable total operating agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's well

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 112H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	19,895' / 9,610'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal FBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 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 Rental - Surface Equipment	111,070	192,448	105,000	408,518
6 Rental - Downhole Equipment	183,520	53,429	-	236,949
7 Rental - 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	168,789	647,751	-	816,540
14 Cementing & Float Equip	217,354	-	-	217,354
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, Slickline	-	351,218	-	351,218
17 High Pressure Pump Truck	-	110,130	-	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
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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	-	-	-	-
TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 109,201	-	-	\$ 109,201
61 Intermediate Casing	307,574	-	-	307,574
62 Drilling Liner	-	-	-	-
63 Production Casing	613,783	-	-	613,783
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	57,908	-	40,000	97,908
67 Packers, Liner Hangers	13,161	-	20,000	33,161
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
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	-	-	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	-	-	853	853
TOTAL TANGIBLES >	1,101,627	0	989,187	2,090,814
TOTAL COSTS >	4,243,103	4,794,736	1,686,354	10,724,193

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BG	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:		Working Interest (%):		Tax ID:	
Signed by:		Date:			
Title:		Approval:	☐ Yes ☐ No	(mark one)	

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Tubing installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred, including local, creation, regulatory, leasehold and well costs under the terms of the applicable joint operating agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's well

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ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 113H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	19,895' / 9,610'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	FBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal FBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 Land / Legal / Regulatory	\$ 52,768	-	37,500	\$ 90,268
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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 Perforating, Wireline, Slickline	-	351,218	-	351,218
17 High Pressure Pump Truck	-	110,130	-	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
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35 Labor	137,006	62,080	101,667	300,753
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97 Contingency	-	21,817	3,833	25,650
99 Plugging & Abandonment	-	-	-	-
TOTAL INTANGIBLES >	3,141,476	4,794,736	697,167	8,633,379

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65 Tubing	-	-	140,000	140,000
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79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
81 Valves, Dumps, Controllers	-	-	108,333	108,333
82 Tank / Facility Containment	-	-	43,333	43,333
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PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

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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

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 114H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	19,875' / 9,590'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
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71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
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77 Measurement & Meter Installation	-	-	116,667	116,667
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79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
81 Valves, Dumps, Controllers	-	-	108,333	108,333
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TOTAL TANGIBLES >	1,101,627	0	989,187	2,090,814
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Drilling Engineer:	PS
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Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

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ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 121H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,605' / 10,320'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Rental - Downhole Equipment	189,026	55,031	-	244,057
7 Rental - 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	92,179	-	-	92,179
13 Fuel & Power	173,853	667,183	-	841,036
14 Cementing & Float Equip	223,875	-	-	223,875
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, 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
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	-	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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 112,477	-	-	\$ 112,477
61 Intermediate Casing	316,801	-	-	316,801
62 Drilling Liner	-	-	-	-
63 Production Casing	632,196	-	-	632,196
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	59,645	-	40,000	99,645
67 Packers, Liner Hangers	13,556	-	20,000	33,556
68 Tanks	-	-	-	-
69 Production Vessels	-	-	45,833	45,833
70 Flow Lines	-	-	126,667	126,667
71 Rod string	-	-	66,667	66,667
72 Artificial Lift Equipment	-	-	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	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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
TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,308

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	Co-CEO	VP - Operations
WH	JW	CRM
VP - Land & Legal	VP - Geosciences	
BC	SO	

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval: ☐ Yes ☐ No (mark one)	

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred including local executive regulations, breakdown and well costs under the terms of the applicable joint venture agreement, regulatory review or other agreement covering this well. Participants shall be received by and billed proportionately for the well.

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 122H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,290' / 10,005'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Rental - Downhole Equipment	189,026	55,031	-	244,057
7 Rental - 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	92,179	-	-	92,179
13 Fuel & Power	173,853	667,183	-	841,036
14 Cementing & Float Equip	223,875	-	-	223,875
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, 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
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
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30 Rig Supervision / Engineering	111,522	122,769	21,667	255,958
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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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 112,477	-	-	\$ 112,477
61 Intermediate Casing	316,801	-	-	316,801
62 Drilling Liner	-	-	-	-
63 Production Casing	632,196	-	-	632,196
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	59,645	-	40,000	99,645
67 Packers, Liner Hangers	13,556	-	20,000	33,556
68 Tanks	-	-	-	-
69 Production Vessels	-	-	45,833	45,833
70 Flow Lines	-	-	126,667	126,667
71 Rod string	-	-	66,667	66,667
72 Artificial Lift Equipment	-	-	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	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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
TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,308

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval: ☐ Yes ☐ No (mark one)	

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred (including local creative regulatory brokerage and well costs) under the terms of the applicable joint operating agreement regulatory order or other agreement covering this well. Participants shall be covered by and held nonrecourse for Operator's well

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 123H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,610' / 10,325'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Rental - Downhole Equipment	189,026	55,031	-	244,057
7 Rental - 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	92,179	-	-	92,179
13 Fuel & Power	173,853	667,183	-	841,036
14 Cementing & Float Equip	223,875	-	-	223,875
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, 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
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	-	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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 112,477	-	-	\$ 112,477
61 Intermediate Casing	316,801	-	-	316,801
62 Drilling Liner	-	-	-	-
63 Production Casing	632,196	-	-	632,196
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	59,645	-	40,000	99,645
67 Packers, Liner Hangers	13,556	-	20,000	33,556
68 Tanks	-	-	-	-
69 Production Vessels	-	-	45,833	45,833
70 Flow Lines	-	-	126,667	126,667
71 Rod string	-	-	66,667	66,667
72 Artificial Lift Equipment	-	-	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	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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
TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,308

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BG	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:		Working Interest (%):		Tax ID:	
Signed by:		Date:			
Title:		Approval:	☐ Yes ☐ No (mark one)		

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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:	Bane 4-9 Federal Com 124H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,290' / 10,005'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Rental - Downhole Equipment	189,026	55,031	-	244,057
7 Rental - 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	92,179	-	-	92,179
13 Fuel & Power	173,853	667,183	-	841,036
14 Cementing & Float Equip	223,875	-	-	223,875
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, 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
23 Mud & Chemicals	332,951	403,207	10,000	746,158
24 Water	39,990	608,810	250,000	898,800
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30 Rig Supervision / Engineering	111,522	122,769	21,667	255,958
32 Drilg & Completion Overhead	9,591	-	-	9,591
35 Labor	141,116	63,942	101,667	306,725
54 Proppant	-	1,155,029	-	1,155,029
95 Insurance	13,489	-	-	13,489
97 Contingency	-	22,472	3,833	26,305
99 Plugging & Abandonment	-	-	-	-
TOTAL INTANGIBLES >	3,235,720	4,938,578	722,167	8,896,465

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 112,477	-	-	\$ 112,477
61 Intermediate Casing	316,801	-	-	316,801
62 Drilling Liner	-	-	-	-
63 Production Casing	632,196	-	-	632,196
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	59,645	-	40,000	99,645
67 Packers, Liner Hangers	13,556	-	20,000	33,556
68 Tanks	-	-	-	-
69 Production Vessels	-	-	45,833	45,833
70 Flow Lines	-	-	126,667	126,667
71 Rod string	-	-	66,667	66,667
72 Artificial Lift Equipment	-	-	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	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
81 Valves, Dumps, Controllers	-	-	108,333	108,333
82 Tank / Facility Containment	-	-	43,333	43,333
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84 Electrical / Grounding	-	-	50,000	50,000
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TOTAL TANGIBLES >	1,134,676	0	989,167	2,123,843
TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,308

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
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Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BG	VP - Geosciences	SO		

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Company Name:		Working Interest (%):		Tax ID:	
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Permian Resources Operating, LLC

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Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 125H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,615' / 10,330'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
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99 Plugging & Abandonment	-	-	-	-
TOTAL INTANGIBLES >	3,235,720	4,938,578	722,167	8,896,465

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
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63 Production Casing	632,196	-	-	632,196
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	59,645	-	40,000	99,645
67 Packers, Liner Hangers	13,556	-	20,000	33,556
68 Tanks	-	-	-	-
69 Production Vessels	-	-	45,833	45,833
70 Flow Lines	-	-	126,667	126,667
71 Rod string	-	-	66,667	66,667
72 Artificial Lift Equipment	-	-	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	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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
TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,308

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	Co-CEO	VP - Operations
WH	JW	CRM
VP - Land & Legal	VP - Geosciences	
BC	SO	

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval:	Yes No (mark one)

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred including local regulatory, regulatory, brokerage and well costs under the terms of the applicable least favorable agreement regulatory order or other approved revenue this well. Participants shall be covered for and billed ratably for Owner's well

Permian Resources Operating, LLC

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

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 126H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,290' / 10,005'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Rental - Downhole Equipment	189,026	55,031	-	244,057
7 Rental - 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	92,179	-	-	92,179
13 Fuel & Power	173,853	667,183	-	841,036
14 Cementing & Float Equip	223,875	-	-	223,875
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, 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
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 Drilg & Completion Overhead	9,591	-	-	9,591
35 Labor	141,116	63,942	101,667	306,725
54 Proppant	-	1,155,029	-	1,155,029
95 Insurance	13,489	-	-	13,489
97 Contingency	-	22,472	3,833	26,305
99 Plugging & Abandonment	-	-	-	-
TOTAL INTANGIBLES >	3,235,720	4,938,578	722,167	8,896,465

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 112,477	-	-	\$ 112,477
61 Intermediate Casing	316,801	-	-	316,801
62 Drilling Liner	-	-	-	-
63 Production Casing	632,196	-	-	632,196
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	59,645	-	40,000	99,645
67 Packers, Liner Hangers	13,556	-	20,000	33,556
68 Tanks	-	-	-	-
69 Production Vessels	-	-	45,833	45,833
70 Flow Lines	-	-	126,667	126,667
71 Rod string	-	-	66,667	66,667
72 Artificial Lift Equipment	-	-	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	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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
TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,308

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval: ☐ Yes ☐ No (mark one)	

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Tubing installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Permit grant agrees to pay its proportionate share of actual costs incurred including local, creative regulatory, brokerage and well costs under the terms of the creditable joint operating agreement, regulatory order or other agreement covering this well. Permit fees shall be covered by and billed approximately for Operator's well

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 127H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,615' / 10,330'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Rental - Downhole Equipment	189,026	55,031	-	244,057
7 Rental - 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	92,179	-	-	92,179
13 Fuel & Power	173,853	667,183	-	841,036
14 Cementing & Float Equip	223,875	-	-	223,875
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, 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
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	-	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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 112,477	-	-	\$ 112,477
61 Intermediate Casing	316,801	-	-	316,801
62 Drilling Liner	-	-	-	-
63 Production Casing	632,196	-	-	632,196
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	59,645	-	40,000	99,645
67 Packers, Liner Hangers	13,556	-	20,000	33,556
68 Tanks	-	-	-	-
69 Production Vessels	-	-	45,833	45,833
70 Flow Lines	-	-	126,667	126,667
71 Rod string	-	-	66,667	66,667
72 Artificial Lift Equipment	-	-	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	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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
TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,308

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	jw	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:		Working Interest (%):		Tax ID:	
Signed by:		Date:			
Title:		Approval:	☐ Yes ☐ No (mark one)		

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Taking installation approval under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred, including local, creative, regulatory, brokerage and well costs under the terms of the creditable joint operating agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Operator's well

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 128H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,290' / 10,005'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	SBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal SBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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 Rental - Surface Equipment	114,402	198,221	105,000	417,624
6 Rental - Downhole Equipment	189,026	55,031	-	244,057
7 Rental - 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	92,179	-	-	92,179
13 Fuel & Power	173,853	667,183	-	841,036
14 Cementing & Float Equip	223,875	-	-	223,875
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, Wireline, 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
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	-	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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 112,477	-	-	\$ 112,477
61 Intermediate Casing	316,801	-	-	316,801
62 Drilling Liner	-	-	-	-
63 Production Casing	632,196	-	-	632,196
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	59,645	-	40,000	99,645
67 Packers, Liner Hangers	13,556	-	20,000	33,556
68 Tanks	-	-	-	-
69 Production Vessels	-	-	45,833	45,833
70 Flow Lines	-	-	126,667	126,667
71 Rod string	-	-	66,667	66,667
72 Artificial Lift Equipment	-	-	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	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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
TOTAL COSTS >	4,370,396	4,938,578	1,711,334	11,020,308

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BG	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:		Working Interest (%):		Tax ID:	
Signed by:		Date:			
Title:		Approval:	☐ Yes ☐ No	(mark one)	

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Taking installation approval under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred including local, reactive, regulatory, brokerage and well costs under the terms of the creditable joint operation agreement, regulatory order or other agreement (whichever is most favorable to the Participant) shall be recovered by and billed ratably to the Operator's well.

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 131H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	21,110' / 10,825'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal TBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 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 Rental - Surface Equipment	120,122	208,133	105,000	433,255
6 Rental - Downhole Equipment	198,477	57,783	-	256,260
7 Rental - 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 Perforating, 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	-	-	101,651
21 Mud Logging	16,936	-	-	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 Drilg & 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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 118,101	-	-	\$ 118,101
61 Intermediate Casing	332,642	-	-	332,642
62 Drilling Liner	-	-	-	-
63 Production Casing	663,806	-	-	663,806
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	62,628	-	40,000	102,628
67 Packers, Liner Hangers	14,234	-	20,000	34,234
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
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	-	-	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 >	1,191,410	0	989,167	2,180,577
TOTAL COSTS >	4,588,916	5,185,507	1,761,334	11,535,757

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval:	☐ Yes ☐ No (mark one)

The costs on this AFE are estimates only and may not be considered as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred in further local, state or regulatory back-scope and well costs under the terms of the creditable joint venture agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed ratably for the cost of the well.

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 132H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	21,110' / 10,825'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal TBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 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 Rental - Surface Equipment	120,122	208,133	105,000	433,255
6 Rental - Downhole Equipment	198,477	57,783	-	256,260
7 Rental - 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 Perforating, 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	-	-	101,651
21 Mud Logging	16,936	-	-	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	-	-	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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 118,101	-	-	\$ 118,101
61 Intermediate Casing	332,642	-	-	332,642
62 Drilling Liner	-	-	-	-
63 Production Casing	663,806	-	-	663,806
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	62,628	-	40,000	102,628
67 Packers, Liner Hangers	14,234	-	20,000	34,234
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
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	-	-	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 >	1,191,410	0	989,167	2,180,577
TOTAL COSTS >	4,588,916	5,185,507	1,761,334	11,535,757

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval:	Yes No (mark one)

The costs on this AFE are estimates only and may not be considered as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its noncontingent share of actual costs incurred, including local creative regulatory breakdown and well costs under the terms of the applicable least noncontingent agreement, regulatory order or other agreement, to receive this well. Participants shall be received by and billed noncontingently for the Operator's well.

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 133H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	21,110' / 10,825'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal TBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 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 Rental - Surface Equipment	120,122	208,133	105,000	433,255
6 Rental - Downhole Equipment	198,477	57,783	-	256,260
7 Rental - 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 Perforating, 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	-	-	101,651
21 Mud Logging	16,936	-	-	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 Drlg & 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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 118,101	-	-	\$ 118,101
61 Intermediate Casing	332,642	-	-	332,642
62 Drilling Liner	-	-	-	-
63 Production Casing	663,806	-	-	663,806
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	62,628	-	40,000	102,628
67 Packers, Liner Hangers	14,234	-	20,000	34,234
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
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	-	-	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 >	1,191,410	0	989,167	2,180,577
TOTAL COSTS >	4,588,916	5,185,507	1,761,334	11,535,757

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval:	☐ Yes ☐ No (mark one)

The costs on this AFE are estimates only and may not be considered as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its non-refundable share of actual costs incurred, including local, state, regulatory, brokerage and well costs under the terms of the applicable joint venture agreement, regulatory order or other agreement governing this well. Participants shall be covered by and billed non-refundably for Operator's well

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 134H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	21,110' / 10,825'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSC	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal TBSC well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 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 Rental - Surface Equipment	120,122	208,133	105,000	433,255
6 Rental - Downhole Equipment	198,477	57,783	-	256,260
7 Rental - 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 Perforating, 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	-	-	101,651
21 Mud Logging	16,936	-	-	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	-	-	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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 118,101	-	-	\$ 118,101
61 Intermediate Casing	332,642	-	-	332,642
62 Drilling Liner	-	-	-	-
63 Production Casing	663,806	-	-	663,806
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	62,628	-	40,000	102,628
67 Packers, Liner Hangers	14,234	-	20,000	34,234
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
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	-	-	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 >	1,191,410	0	989,167	2,180,577
TOTAL COSTS >	4,588,916	5,185,507	1,761,334	11,535,757

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:		Working Interest (%):		Tax ID:	
Signed by:		Date:			
Title:		Approval:	☐ Yes ☐ No (mark one)		

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Tubing installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred, including local, creative, regulatory, backspace and well costs under the terms of the applicable joint operating agreement, regulatory order or other agreement covering this well. Participants shall be covered by and held noncontributorily for Operator's well

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 171H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,700' / 10,415'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal TBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 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 Rental - Surface Equipment	117,323	203,283	105,000	425,606
6 Rental - Downhole Equipment	193,853	56,437	-	250,289
7 Rental - 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	-	-	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	-	-	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	-	239,933
30 Rig Supervision / Engineering	114,369	125,904	21,667	261,941
32 Drilg & 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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 115,349	-	-	\$ 115,349
61 Intermediate Casing	324,891	-	-	324,891
62 Drilling Liner	-	-	-	-
63 Production Casing	648,340	-	-	648,340
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	61,169	-	40,000	101,169
67 Packers, Liner Hangers	13,902	-	20,000	33,902
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
77 Measurement & Meter 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	-	-	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 >	1,163,650	0	989,167	2,152,817
TOTAL COSTS >	4,481,994	5,064,685	1,761,334	11,308,013

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:		Working Interest (%):		Tax ID:	
Signed by:		Date:			
Title:		Approval:	☐ Yes ☐ No (mark one)		

The costs on this AFE are estimates only and may not be considered as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred, including local, creative, regulatory, back-charge and well costs under the terms of the available total revenue agreement, regulatory review or other agreement covering this well. Participant shall be required to pay and billed amounts to the Operator's well

Phone (432) 695-4222 • Fax (432) 695-4063

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 172H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,700' / 10,415'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal TBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 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 Rental - Surface Equipment	117,323	203,283	105,000	425,606
6 Rental - Downhole Equipment	193,853	56,437	-	250,289
7 Rental - 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	-	-	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	-	-	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	-	239,933
30 Rig 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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 115,349	-	-	\$ 115,349
61 Intermediate Casing	324,891	-	-	324,891
62 Drilling Liner	-	-	-	-
63 Production Casing	648,340	-	-	648,340
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	61,169	-	40,000	101,169
67 Packers, Liner Hangers	13,902	-	20,000	33,902
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
77 Measurement & Meter 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	-	-	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 >	1,163,650	0	989,167	2,152,817
TOTAL COSTS >	4,481,994	5,064,685	1,761,334	11,308,013

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Co-CEO	_____	Co-CEO	_____	VP - Operations	_____
	WH		JW		CRM
VP - Land & Legal	_____	VP - Geosciences	_____		
	BC		SO		

Company Name: _____ Working Interest (%): _____ Tax ID: _____

Signed by: _____ Date: _____

Title: _____ Approval: ☐ Yes ☐ No (mark one)

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Tubing installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred, including, but not limited to, local, regulatory, regulatory, and well costs under the terms of the applicable joint operating agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed proportionately for Onshore's well.

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 173H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,700' / 10,415'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal TBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 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 Rental - Surface Equipment	117,323	203,283	105,000	425,606
6 Rental - Downhole Equipment	193,853	56,437	-	250,289
7 Rental - 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	-	-	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	-	-	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	-	239,933
30 Rig 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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 115,349	-	-	\$ 115,349
61 Intermediate Casing	324,891	-	-	324,891
62 Drilling Liner	-	-	-	-
63 Production Casing	648,340	-	-	648,340
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	61,169	-	40,000	101,169
67 Packers, Liner Hangers	13,902	-	20,000	33,902
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
77 Measurement & Meter 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	-	-	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 >	1,163,650	0	989,167	2,152,817
TOTAL COSTS >	4,481,994	5,064,685	1,761,334	11,308,013

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval:	☐ Yes ☐ No (mark one)

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Tubing installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred, including local, regulatory, backhoe and well costs under the terms of the applicable local regulatory agreement, regulatory order or other agreement covering this well. Participants shall be covered by and billed ratably for the cost of the well.

Permian Resources Operating, LLC

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

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 174H	FIELD:	Teas; Bone Spring
LOCATION:	Section 4, T20S-R34E	MD/TVD:	20,700' / 10,415'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	TBSG	COMPLETION DAYS:	18.6
REMARKS:	Drill a horizontal TBSG well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 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 Rental - Surface Equipment	117,323	203,283	105,000	425,606
6 Rental - Downhole Equipment	193,853	56,437	-	250,289
7 Rental - 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	-	-	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	-	-	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
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28 Mud / Wastewater Disposal	182,227	57,706	-	239,933
30 Rig Supervision / Engineering	114,369	125,904	21,667	261,941
32 Drilg & 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

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
60 Surface Casing	\$ 115,349	-	-	\$ 115,349
61 Intermediate Casing	324,891	-	-	324,891
62 Drilling Liner	-	-	-	-
63 Production Casing	648,340	-	-	648,340
64 Production Liner	-	-	-	-
65 Tubing	-	-	140,000	140,000
66 Wellhead	61,169	-	40,000	101,169
67 Packers, Liner Hangers	13,902	-	20,000	33,902
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
77 Measurement & Meter 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	-	-	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 >	1,163,650	0	989,167	2,152,817
TOTAL COSTS >	4,481,994	5,064,685	1,761,334	11,308,013

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BG	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval:	☐ Yes ☐ No (mark one)

The costs on this AFE are estimates only and may not be construed as readings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Parties agree to pay its proportionate share of actual costs incurred, including local, creative, regulatory, brokerage and well costs under the terms of the available joint operating agreement, regulatory order or other agreement covering this well. Parties agree to be bound by the Operator's well

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 201H	FIELD:	Tonto; Wolfcamp
LOCATION:	Section 4, T20S-R34E	MD/TVD:	21,210' / 10,925'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY	COMPLETION DAYS:	19
REMARKS:	Drill a horizontal WCXY well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 Land / Legal / Regulatory	\$ 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 Rental - Surface Equipment	124,327	215,417	105,000	444,744
6 Rental - Downhole Equipment	205,424	59,805	-	265,229
7 Rental - 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	243,296	-	-	243,296
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, 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 & 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	-	254,254
30 Rig Supervision / Engineering	121,196	133,420	21,667	276,283
32 Drig & Completion 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	-	-	14,660
97 Contingency	-	24,421	3,833	28,254
99 Plugging & Abandonment	-	-	-	-
TOTAL INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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	-	-	140,000	140,000
66 Wellhead	64,820	-	40,000	104,820
67 Packers, Liner Hangers	14,732	-	20,000	34,732
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
77 Measurement & Meter Installation	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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 >	1,233,109	0	989,167	2,222,276
TOTAL COSTS >	4,749,528	5,367,000	1,761,334	11,877,862

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:		Working Interest (%):		Tax ID:	
Signed by:		Date:			
Title:		Approval:	☐ Yes ☐ No (mark one)		

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its noncontingent share of actual costs incurred including local resources, regulatory, brokerage and well costs under the terms of the applicable joint venture agreement, regulatory order or other agreement covering this well. Participants shall be correct for and billed noncontingently for Operator's well

Permian Resources Operating, LLC

300 N. Marienfeld St., Ste. 1000 Midland, TX 79701

Phone (432) 695-4222 • Fax (432) 695-4063

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	2.17.2023	AFE NO.:	1
WELL NAME:	Bane 4-9 Federal Com 202H	FIELD:	Tonto; Wolfcamp
LOCATION:	Section 4, T20S-R34E	MD/TVD:	21,210' / 10,925'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY	COMPLETION DAYS:	19
REMARKS:	Drill a horizontal WCXY well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 Land / Legal / Regulatory	\$ 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 Rental - Surface Equipment	124,327	215,417	105,000	444,744
6 Rental - Downhole Equipment	205,424	59,805	-	265,229
7 Rental - 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	243,296	-	-	243,296
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, 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
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35 Labor	153,358	69,489	101,667	324,514
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95 Insurance	14,660	-	-	14,660
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TOTAL INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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	-	-	140,000	140,000
66 Wellhead	64,820	-	40,000	104,820
67 Packers, Liner Hangers	14,732	-	20,000	34,732
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
77 Measurement & Meter Installation	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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 >	1,233,109	0	989,167	2,222,276
TOTAL COSTS >	4,749,528	5,367,000	1,761,334	11,877,862

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:		Working Interest (%):		Tax ID:	
Signed by:		Date:			
Title:		Approval:	☐ Yes ☐ No	(mark one)	

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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:	Bane 4-9 Federal Com 203H	FIELD:	Tonto; Wolfcamp
LOCATION:	Section 4, T20S-R34E	MD/TVD:	21,210' / 10,925'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY	COMPLETION DAYS:	19
REMARKS:	Drill a horizontal WCXY well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 Land / Legal / Regulatory	\$ 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 Rental - Surface Equipment	124,327	215,417	105,000	444,744
6 Rental - Downhole Equipment	205,424	59,805	-	265,229
7 Rental - 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	243,296	-	-	243,296
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, 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 & 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	-	254,254
30 Rig Supervision / Engineering	121,196	133,420	21,667	276,283
32 Drig & Completion 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	-	-	14,660
97 Contingency	-	24,421	3,833	28,254
99 Plugging & Abandonment	-	-	-	-
TOTAL INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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	-	-	140,000	140,000
66 Wellhead	64,820	-	40,000	104,820
67 Packers, Liner Hangers	14,732	-	20,000	34,732
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
77 Measurement & Meter Installation	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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 >	1,233,109	0	989,167	2,222,276
TOTAL COSTS >	4,749,528	5,367,000	1,761,334	11,877,862

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:	Working Interest (%):	Tax ID:
Signed by:	Date:	
Title:	Approval:	☐ Yes ☐ No (mark one)

The costs on this AFE are estimates only and may not be considered as ceilings on any specific item or the total cost of the project. Taking installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participants agree to pay its proportionate share of actual costs incurred, including local, creative, regulatory, brokerage and well costs under the terms of the applicable joint operating agreement, regulatory order or other agreement executed by the Participants.

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:	Bane 4-9 Federal Com 204H	FIELD:	Tonto; Wolfcamp
LOCATION:	Section 4, T20S-R34E	MD/TVD:	21,210' / 10,925'
COUNTY/STATE:	Lea County, New Mexico	LATERAL LENGTH:	10,000'
Permian WI:		DRILLING DAYS:	19.6
GEOLOGIC TARGET:	WCXY	COMPLETION DAYS:	19
REMARKS:	Drill a horizontal WCXY well and complete with 44 stages. AFE includes drilling, completions, flowback and Initial AL install cost		

INTANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL COSTS
1 Land / Legal / Regulatory	\$ 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 Rental - Surface Equipment	124,327	215,417	105,000	444,744
6 Rental - Downhole Equipment	205,424	59,805	-	265,229
7 Rental - 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	243,296	-	-	243,296
15 Completion Unit, Swab, CTU	-	-	15,000	15,000
16 Perforating, 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 & 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	-	254,254
30 Rig Supervision / Engineering	121,196	133,420	21,667	276,283
32 Drilg & Completion 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	-	-	14,660
97 Contingency	-	24,421	3,833	28,254
99 Plugging & Abandonment	-	-	-	-
TOTAL INTANGIBLES >	3,516,419	5,367,000	772,167	9,655,585

TANGIBLE COSTS	DRILLING COSTS	COMPLETION COSTS	PRODUCTION COSTS	TOTAL 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	-	-	140,000	140,000
66 Wellhead	64,820	-	40,000	104,820
67 Packers, Liner Hangers	14,732	-	20,000	34,732
68 Tanks	-	-	45,833	45,833
69 Production Vessels	-	-	126,667	126,667
70 Flow Lines	-	-	66,667	66,667
71 Rod string	-	-	-	-
72 Artificial Lift Equipment	-	-	90,000	90,000
73 Compressor	-	-	5,833	5,833
74 Installation Costs	-	-	-	-
75 Surface Pumps	-	-	61,667	61,667
76 Downhole Pumps	-	-	-	-
77 Measurement & Meter Installation	-	-	116,667	116,667
78 Gas Conditioning / Dehydration	-	-	-	-
79 Interconnecting Facility Piping	-	-	20,000	20,000
80 Gathering / Bulk Lines	-	-	-	-
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 >	1,233,109	0	989,167	2,222,276
TOTAL COSTS >	4,749,528	5,367,000	1,761,334	11,877,862

PREPARED BY Permian Resources Operating, LLC:

Drilling Engineer:	PS
Completions Engineer:	ML
Production Engineer:	DC

Permian Resources Operating, LLC APPROVAL:

Co-CEO	WH	Co-CEO	JW	VP - Operations	CRM
VP - Land & Legal	BC	VP - Geosciences	SO		

NON OPERATING PARTNER APPROVAL:

Company Name:		Working Interest (%):		Tax ID:	
Signed by:		Date:			
Title:		Approval:	☐ Yes ☐ No (mark one)		

The costs on this AFE are estimates only and may not be construed as ceilings on any specific item or the total cost of the project. Tubing installation approved under the AFE may be delayed up to a year after the well has been completed. In executing this AFE, the Participant agrees to pay its proportionate share of actual costs incurred, including local, creative, regulatory, backzone and well costs under the terms of the assets title joint operating agreement, regulatory order or other approved revenue this well. Participants shall be covered by and billed proportionately for Operator's well

TAB 3

Case Nos. 23452-23455

Exhibit B: Self-Affirmed Statement of Staci Mueller, Geologist
Exhibit B-1: Locator Map & Stress Direction
Exhibit B-2: Permit Status
Exhibit B-3: Gun Barrel View
Exhibit B-4: Development Plan Comparison
Exhibit B-5: Subsea Structure Map
Exhibit B-6: 3rd 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 3rd Bone Spring and Wolfcamp Producers
Exhibit B-10: Comparing 3rd Sand to Wolfcamp Reservoir (SoPhiH)
Exhibit B-11: 2nd Bone Spring Structure Map
Exhibit B-12: 2nd Bone Spring Sand Isopach
Exhibit B-13: 2nd Bone Spring Sand Cross Section
Exhibit B-14: 2nd Bone Spring Sand vs. 3rd Bone Spring Carbonate Producers
Exhibit B-15: PhilH L 2nd Sand vs. 3rd Carbonate
Exhibit B-16: 1st Bone Spring Sand Structure
Exhibit B-17: 1st 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 above-referenced compulsory pooling application pursuant to 19.15.4.12.A(1) NMAC.

4. I have testified previously by affidavit before the Oil Conservation Division (“Division”) as an expert petroleum geologist; my credentials have been made a matter of record, and I have been qualified as an expert by the Division.

a. I have a Bachelor of Science Degree in Geophysical Engineering from Colorado School of Mines, and a Master of Science Degree in Geophysics from Colorado School of Mines.

b. I have worked on New Mexico Oil and Gas matters since July 2018.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WOLFCAMP STATEMENT

(See Cimarex's Motion for an Order to Prohibit the Drilling of Wells in the Upper Wolfcamp in Order to Protect Correlative Rights and Optimize Production of the Subject Lands, 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 3rd Bone Spring Sand Target, as noted by the type log located at the blue star. The contour interval is 100 ft, well control points are displayed, and structure is dipping to the south. From the first take point to the last take point of the Mighty Pheasant and Loosey Goosey wells (located within black and red box), there is approximately 100 ft of relief.

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

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

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

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

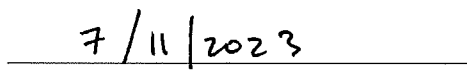
28. The granting of this Application is in the interests of conservation, the prevention of waste, and the protection of correlative rights.

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
Date Signed

Geology Exhibits

Locator Map & Stress Direction

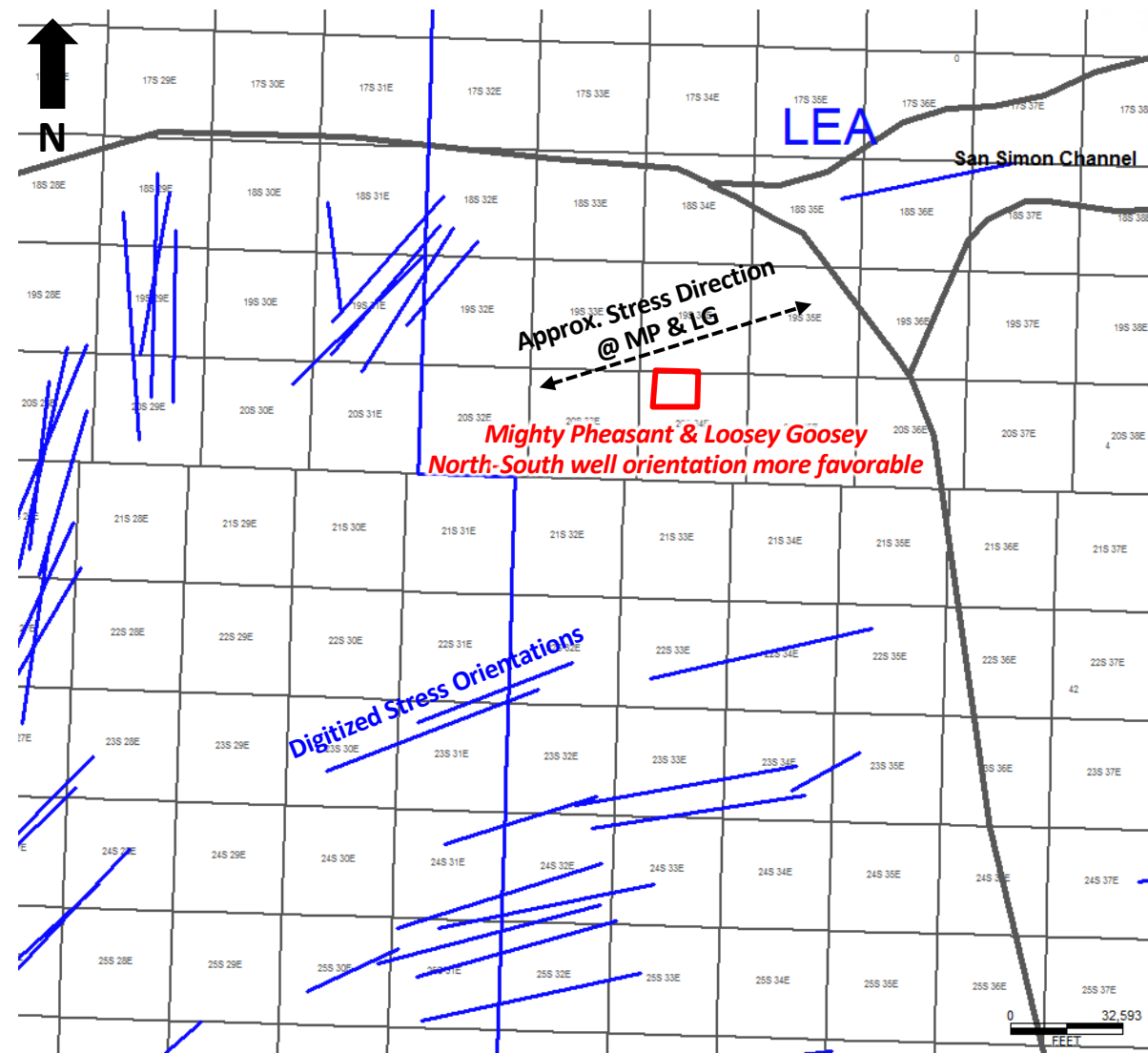
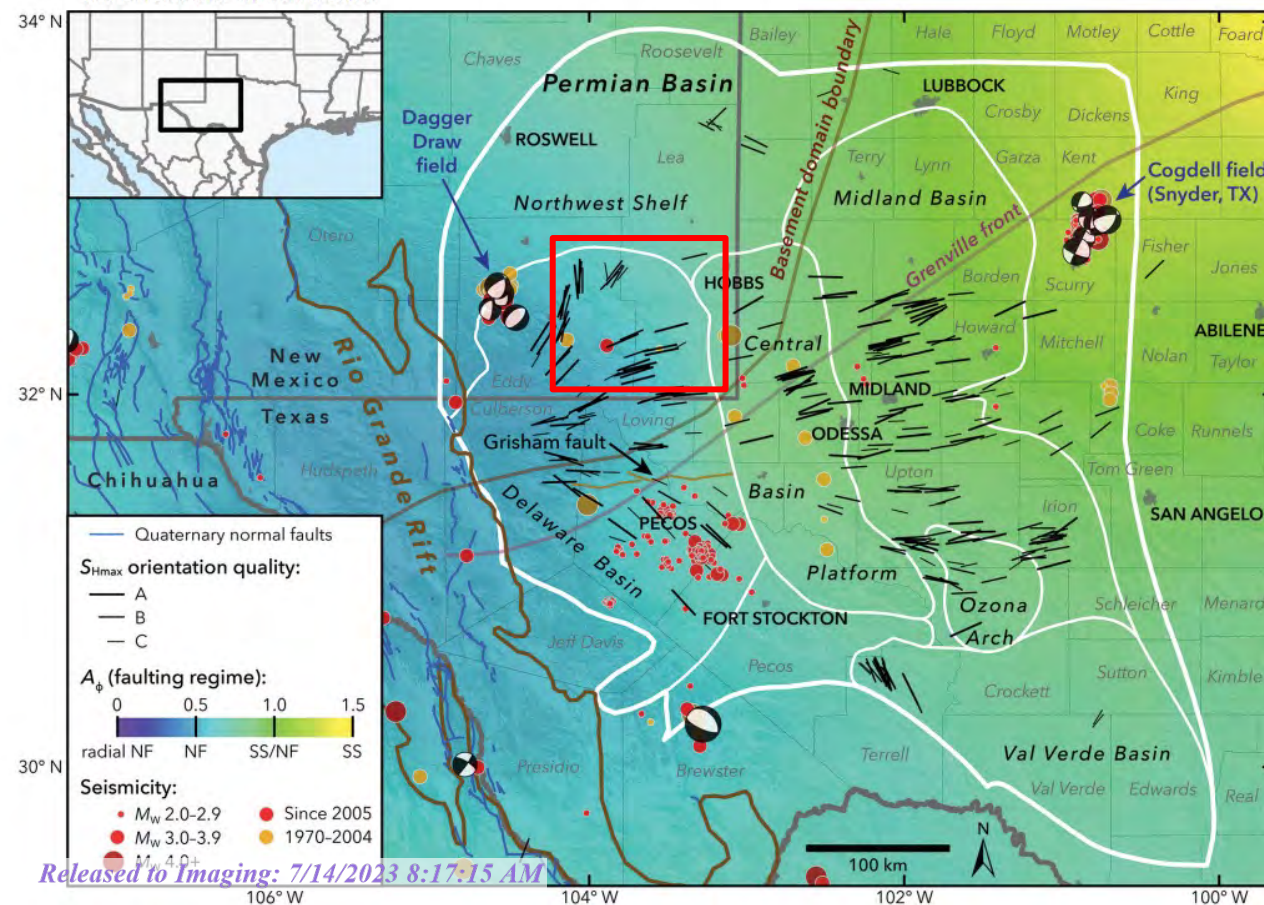
Coterra plans to develop Sections 4-9 and 5-8 with 2-mile laterals

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

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

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

Jens-Erik Lund Snee¹ and Mark D. Zoback¹

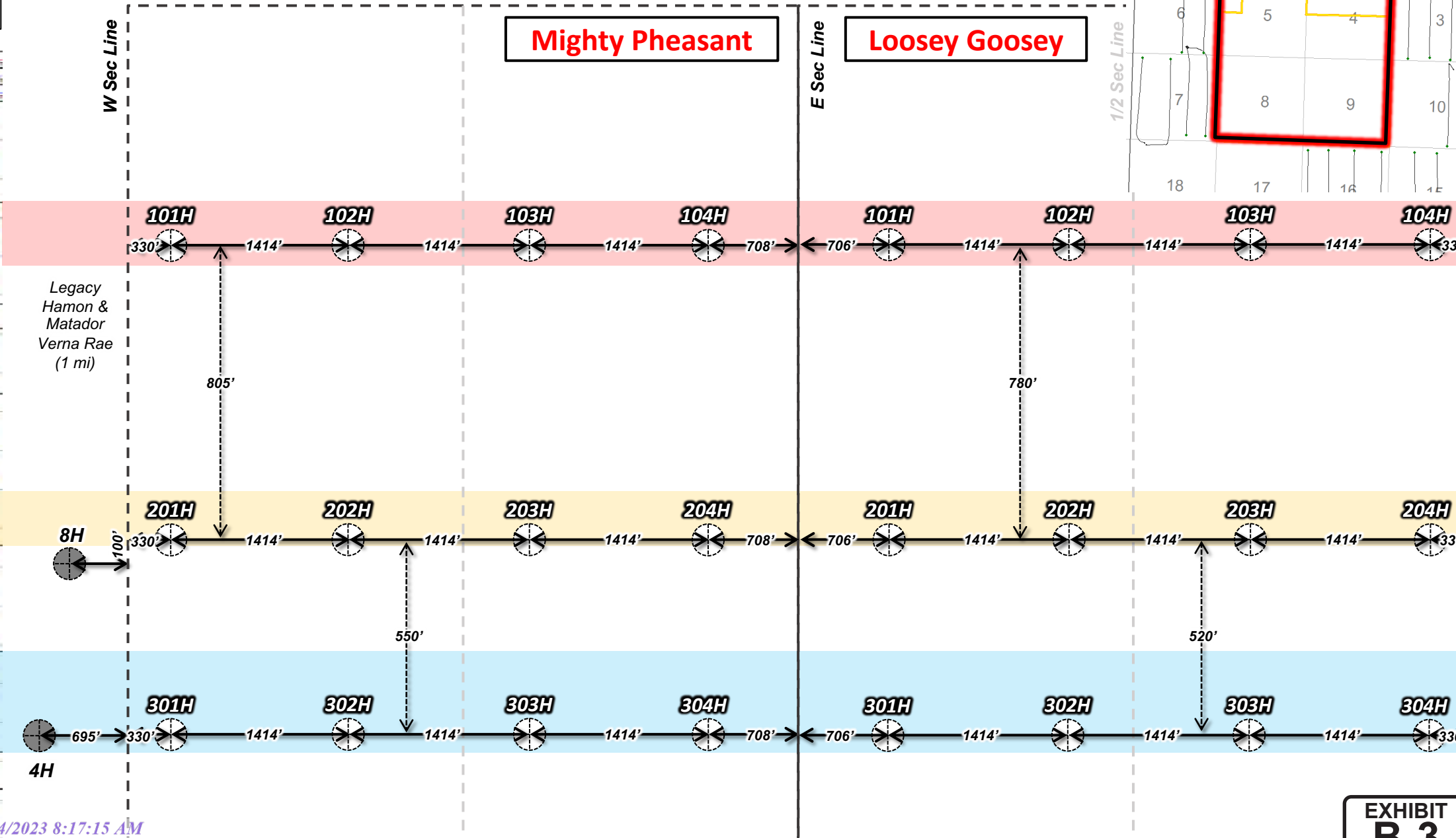
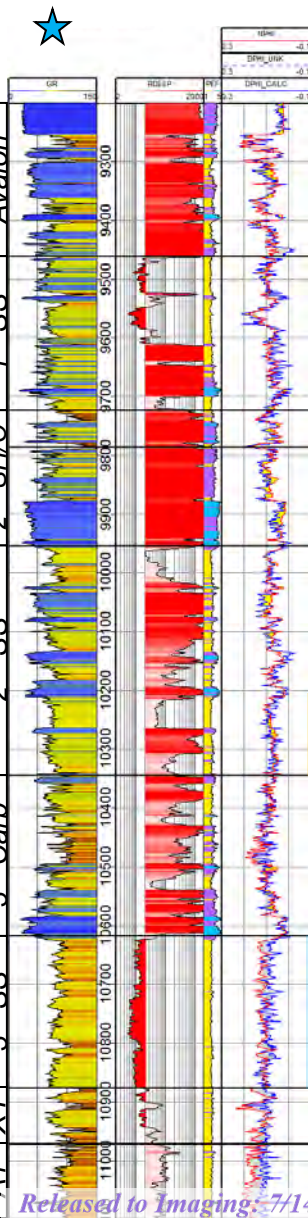


Permit Status

State	County	Well Name & Number	Permit Status	Permit Submission Due Date	Permit Submitted Date	10-Day Letter Date	10-Day Letter Due
NM	Lea	Mighty Pheasant 5-8 Fed Com 101H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 102H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 103H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 104H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 201H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 202H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 203H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 204H	AFMSS-Accepted	2/14/2022	2/14/2022	6/2/2023	7/17/2023
NM	Lea	Mighty Pheasant 5-8 Fed Com 301H	AFMSS-Accepted	3/1/2022	3/1/2022		
NM	Lea	Mighty Pheasant 5-8 Fed Com 302H	AFMSS-Accepted	3/2/2022	3/2/2022		
NM	Lea	Mighty Pheasant 5-8 Fed Com 303H	AFMSS-Accepted	2/14/2022	2/14/2022	6/2/2023	7/17/2023
NM	Lea	Mighty Pheasant 5-8 Fed Com 304H	AFMSS-Accepted	3/1/2022	3/1/2022	6/2/2023	7/17/2023
NM	Lea	Loosey Goosey 4-9 Fed Com 101H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 102H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 103H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 104H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 201H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 202H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 203H	To be permitted				
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		

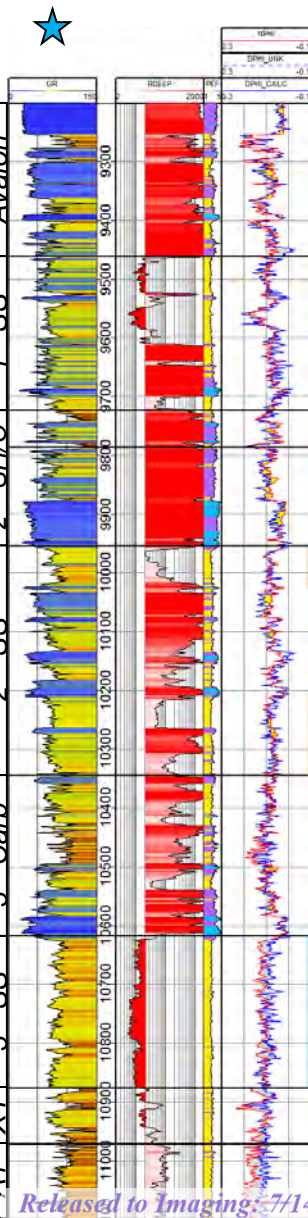
Submitted permits for 3rd Sand development & 1st Sand/2nd Sand test
BLM is currently working on these

Quail Ridge 32
State 2



Development Plan Comparison

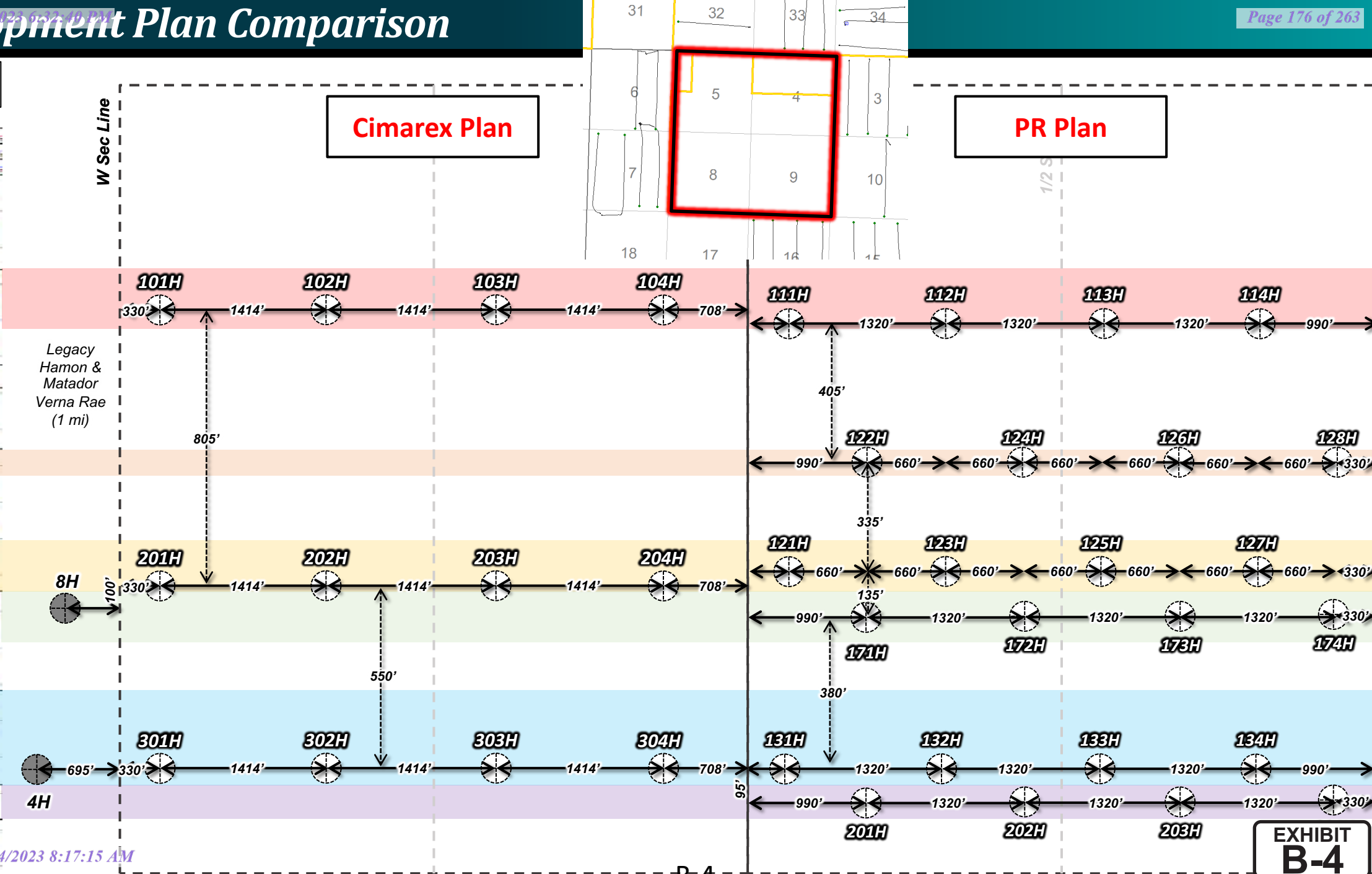
Quail Ridge 32
State 2



W Sec Line

Cimarex Plan

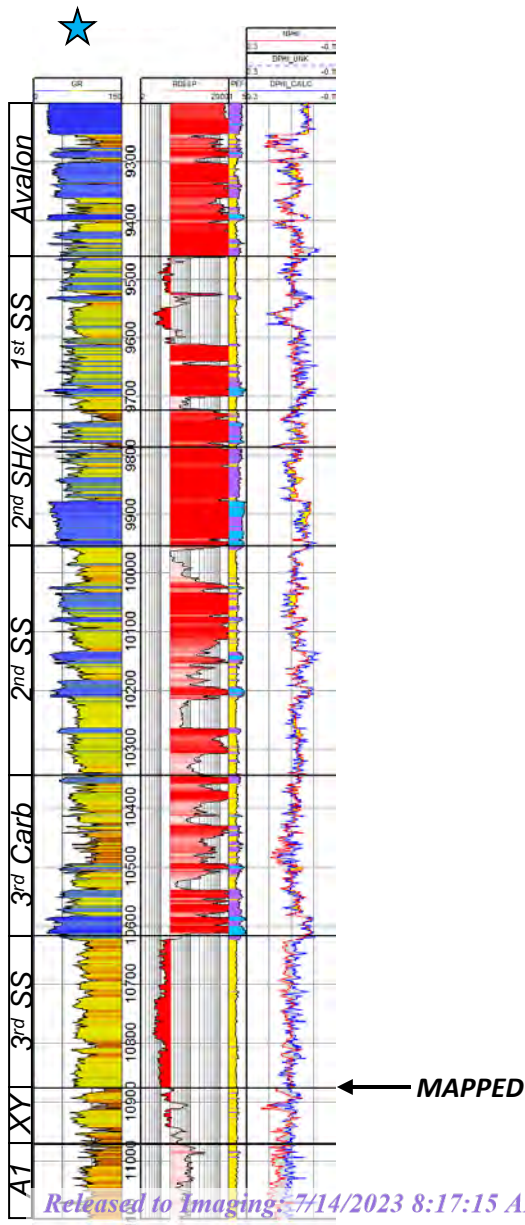
PR Plan



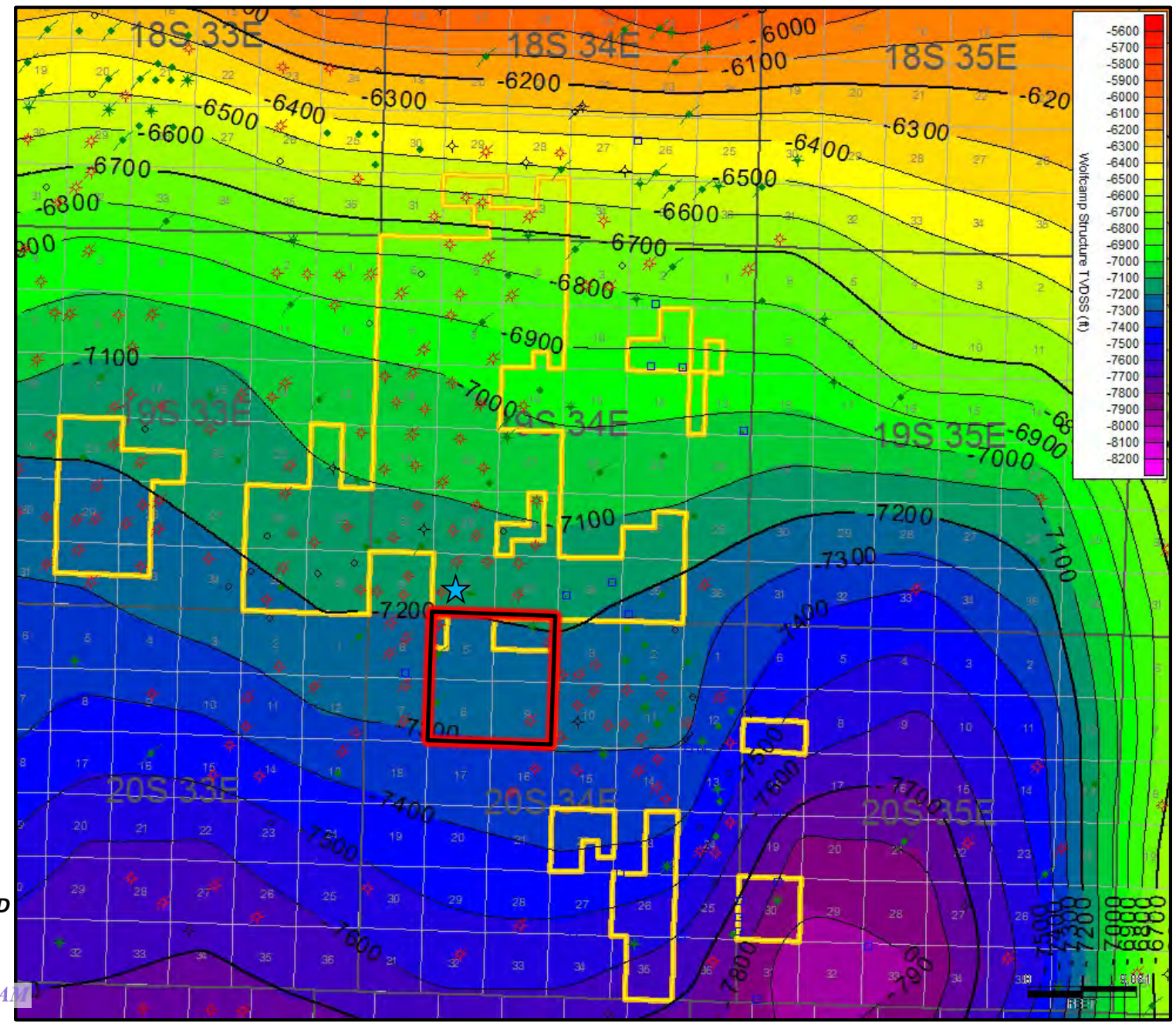
3rd Bone Spring Sand

3rd Bone Spring Sand Structure

Quail Ridge 32
State 2

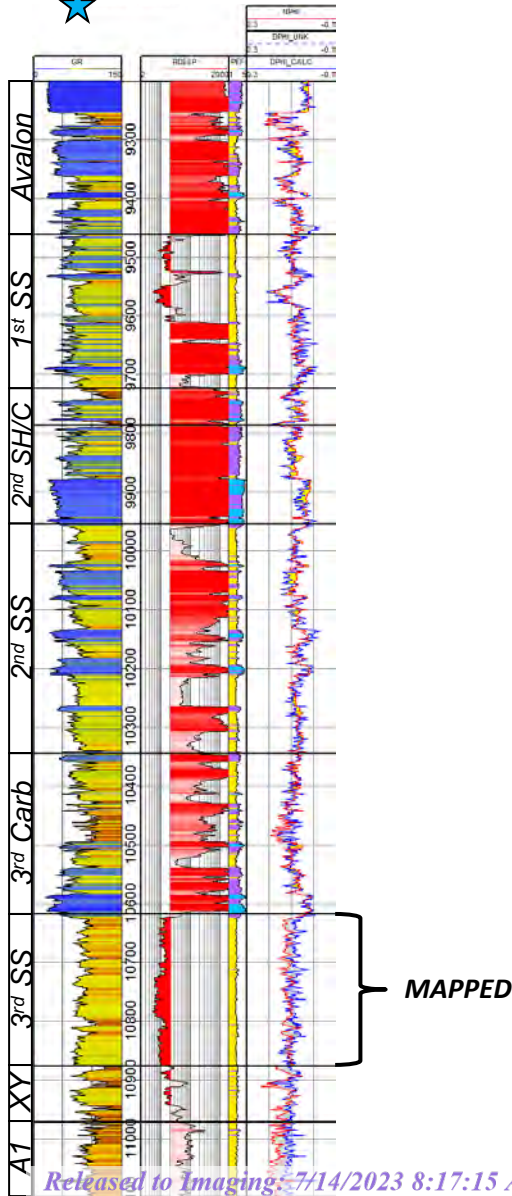


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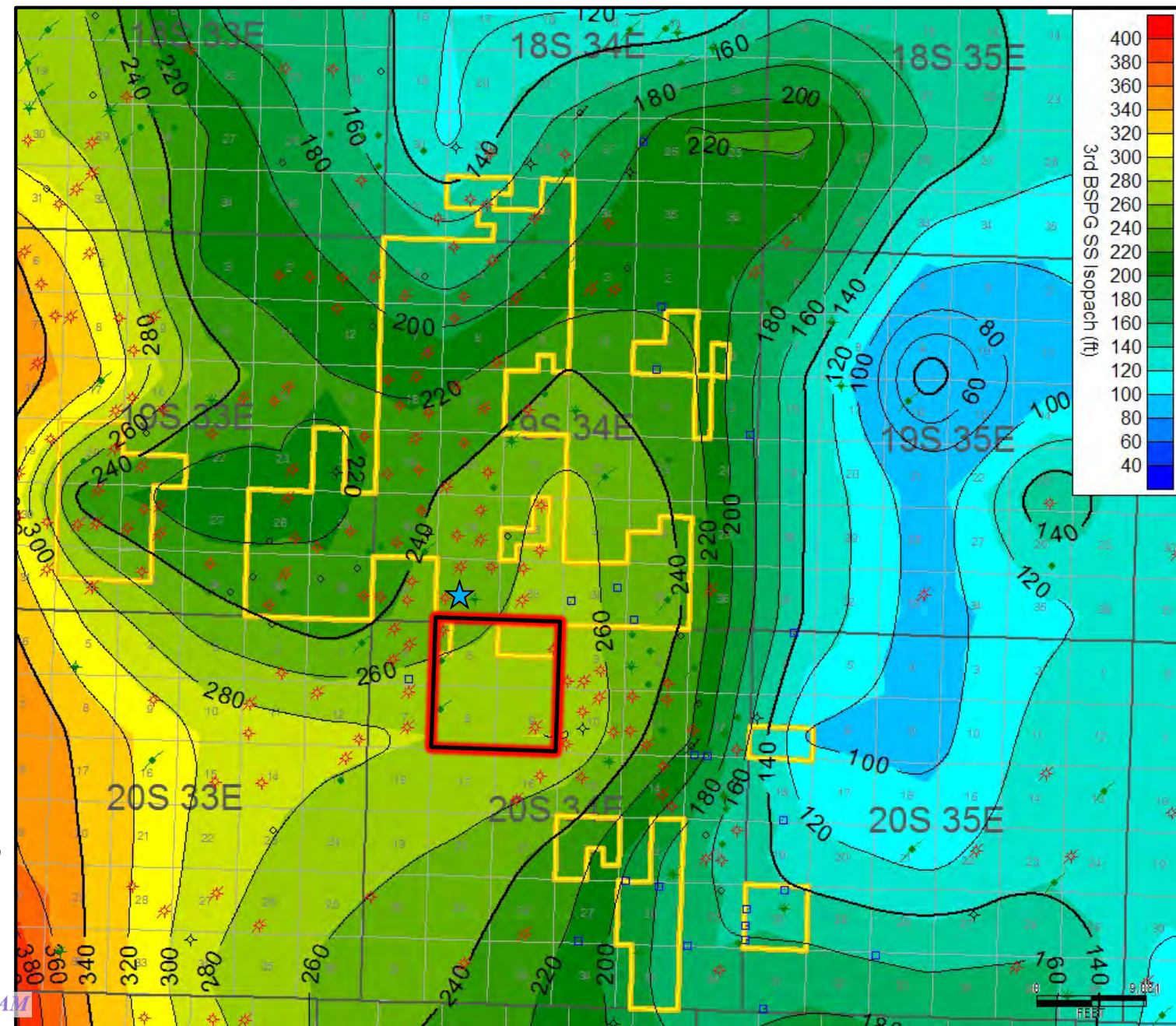


3rd Bone Spring Sand Isopach

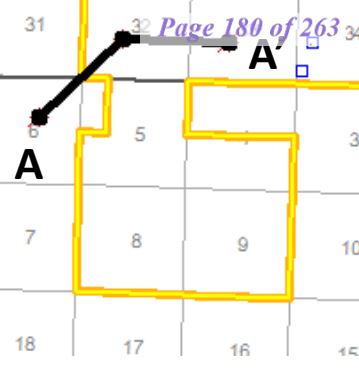
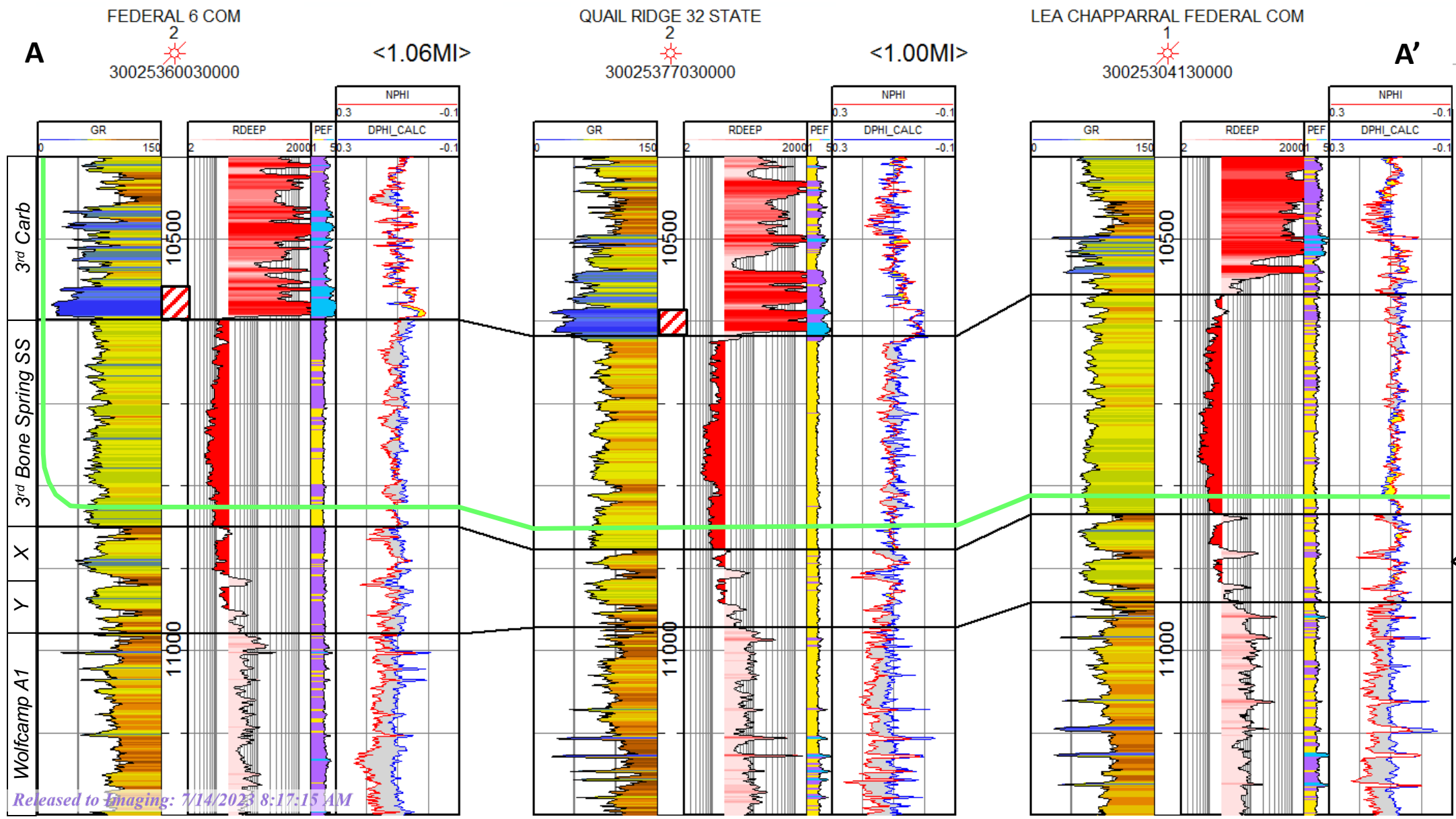
Quail Ridge 32
State 2



MAPPED



3rd Bone Spring Sand Cross Section

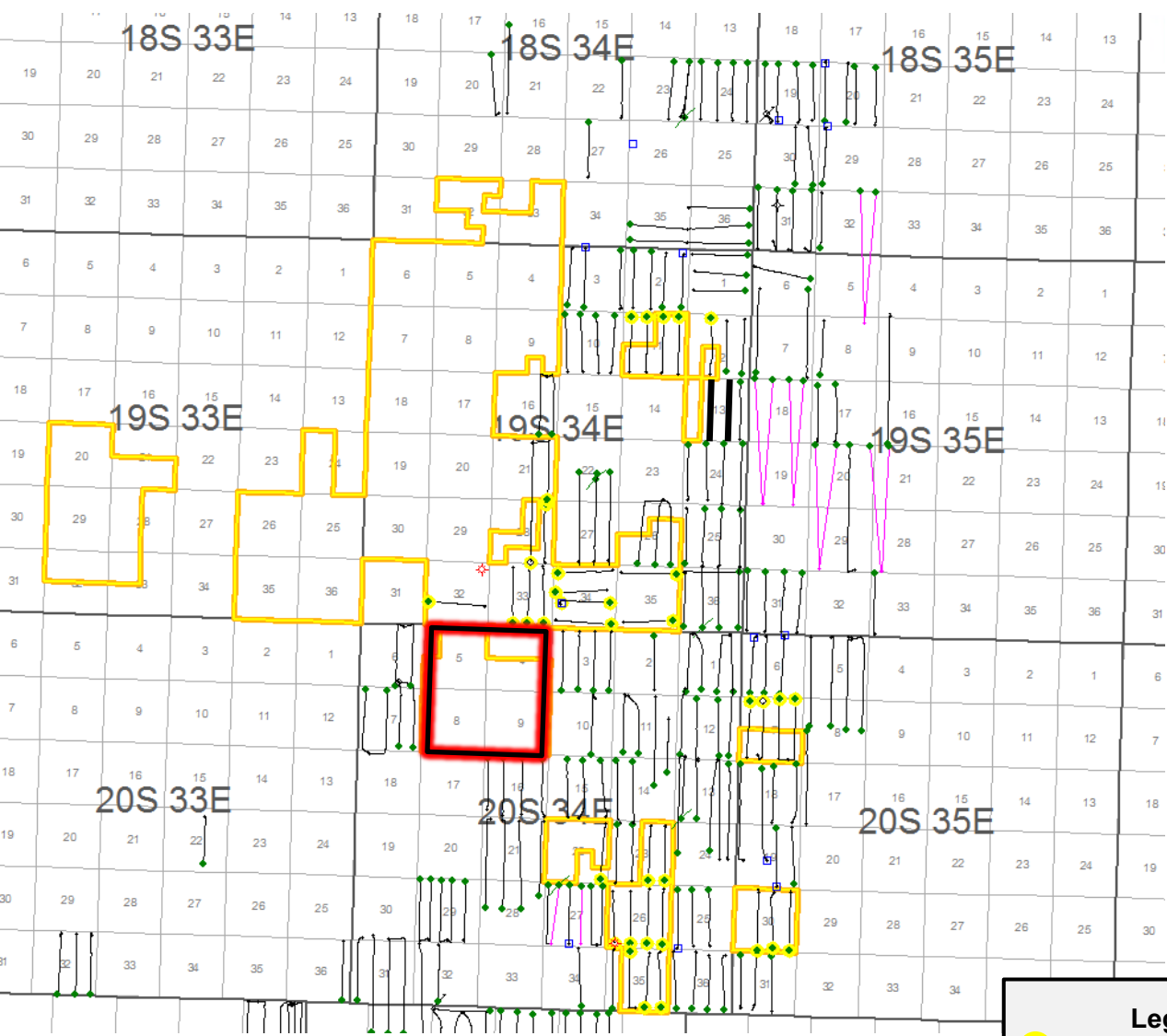


Frac Baffle

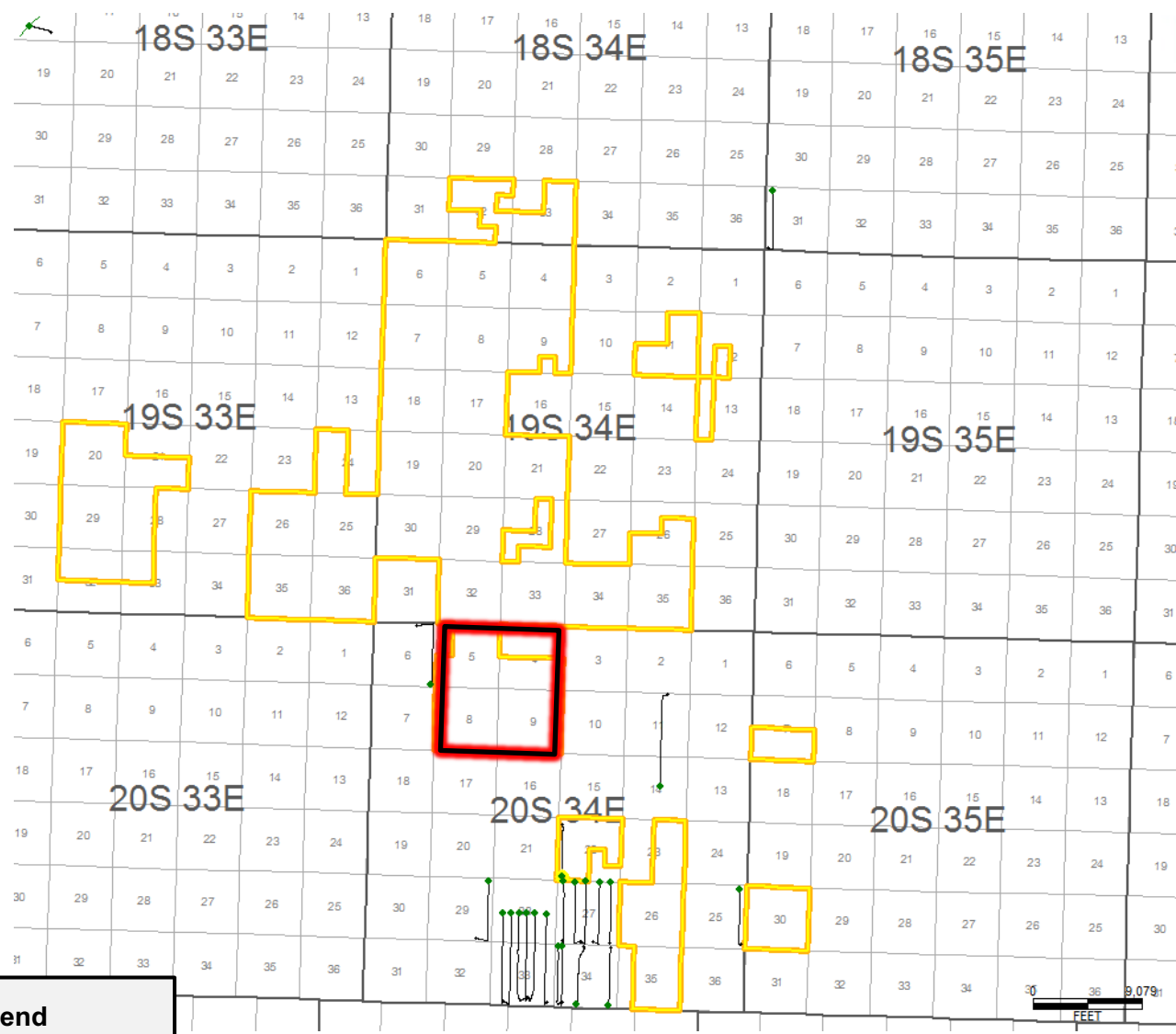
PR's additional Wolfcamp target lies ~95' below the 3rd Sand target. No significant frac baffle separates the two reservoirs.

3rd Bone Spring Sand is Established Target

3rd Bone Spring Sand Producers

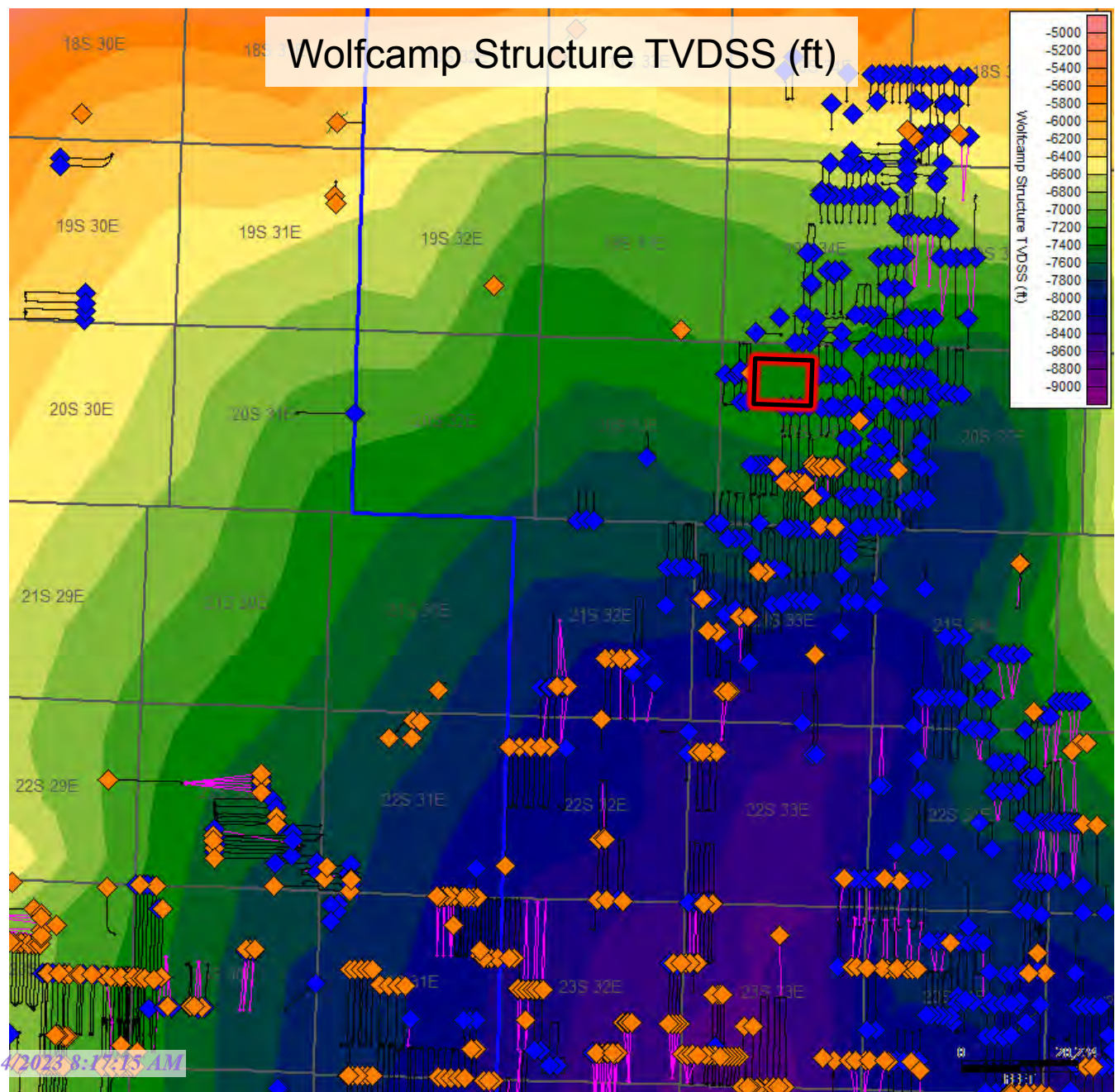


Wolfcamp Producers



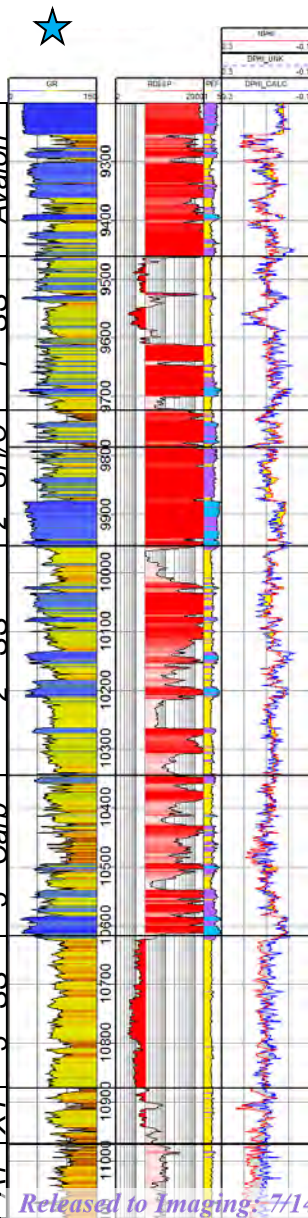
Legend
○ Cimarex Operated Wells

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

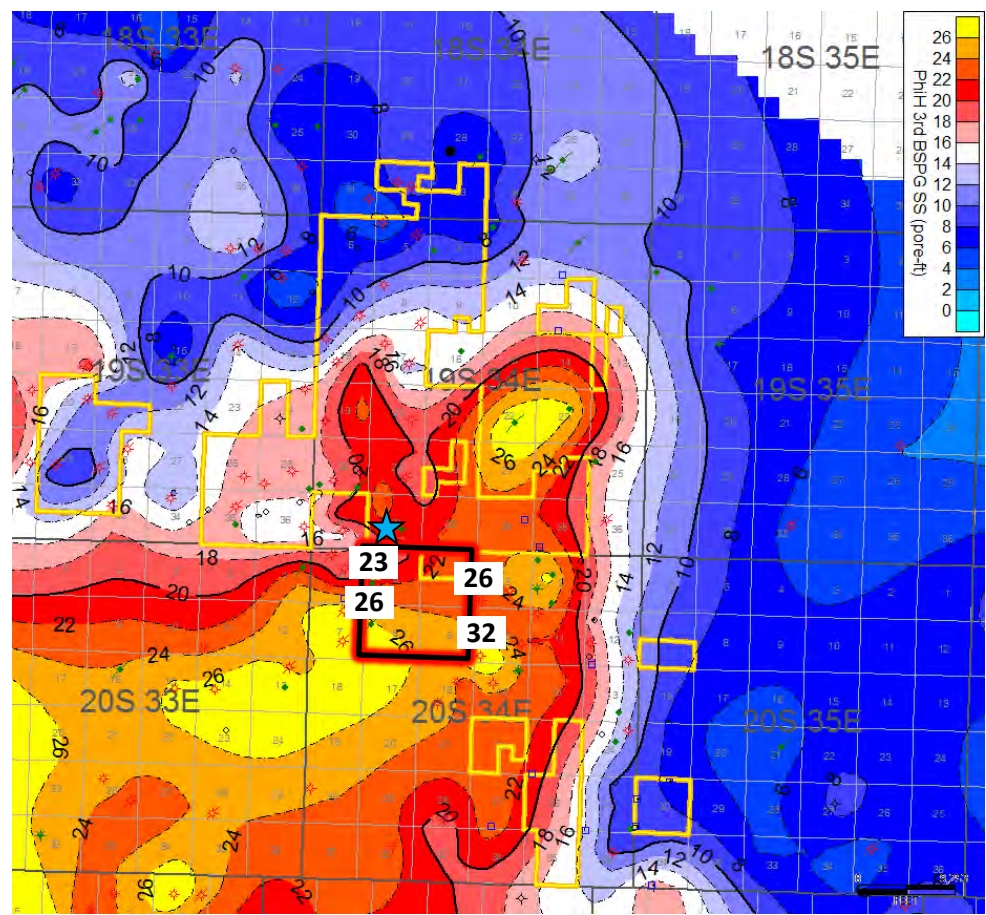


- ◆ 3rd Bone Spring Sand
- ◆ Wolfcamp Sands

Quail Ridge 32
State 2

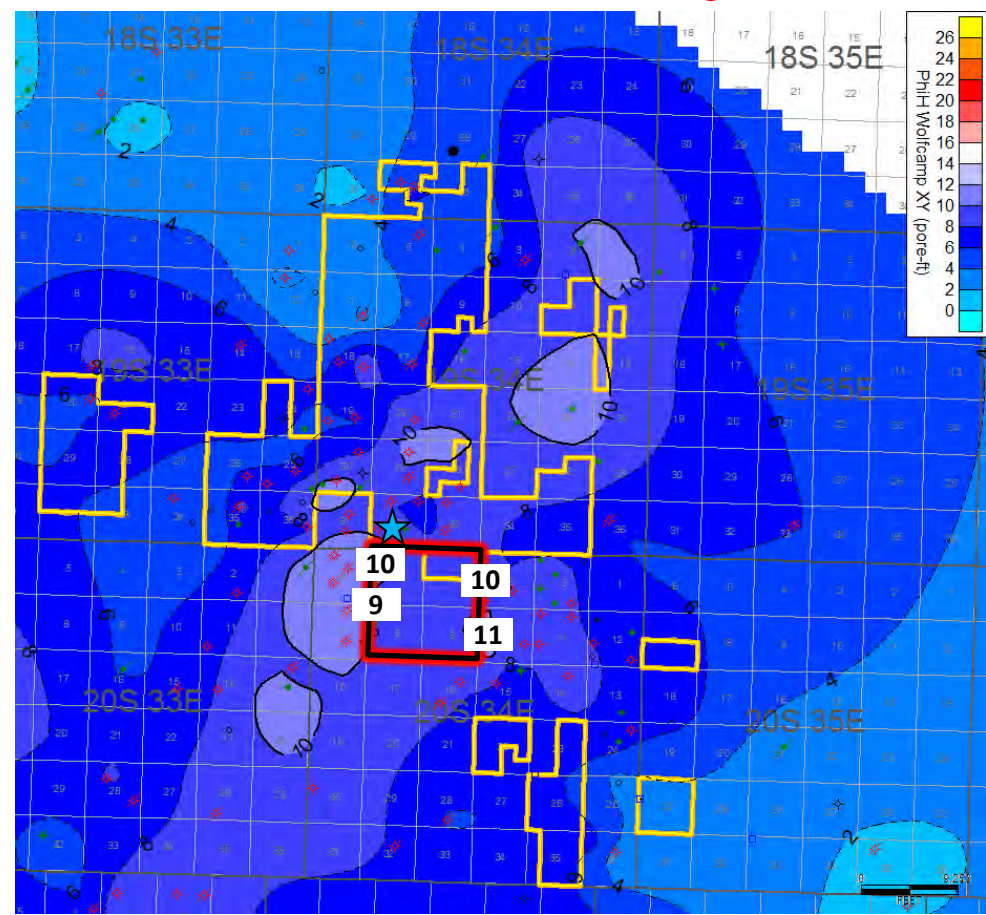


PhiH 3rd Bone Spring Sand
CTRA Target



Avg PhiH in 3rd SS = 26.75
72.8% of total reservoir

PhiH Wolfcamp X & Y Sands
Permian Resources Additional Target



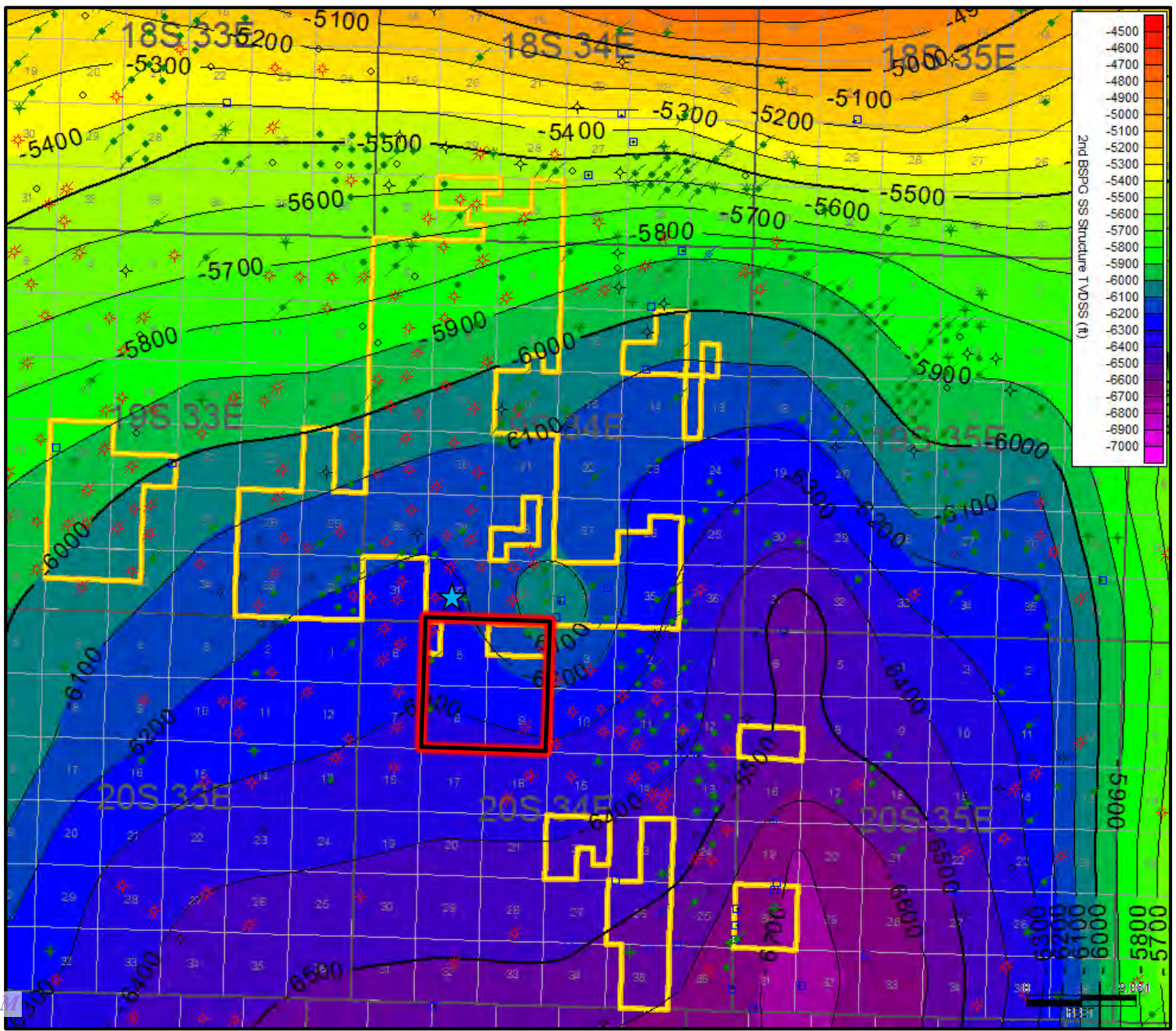
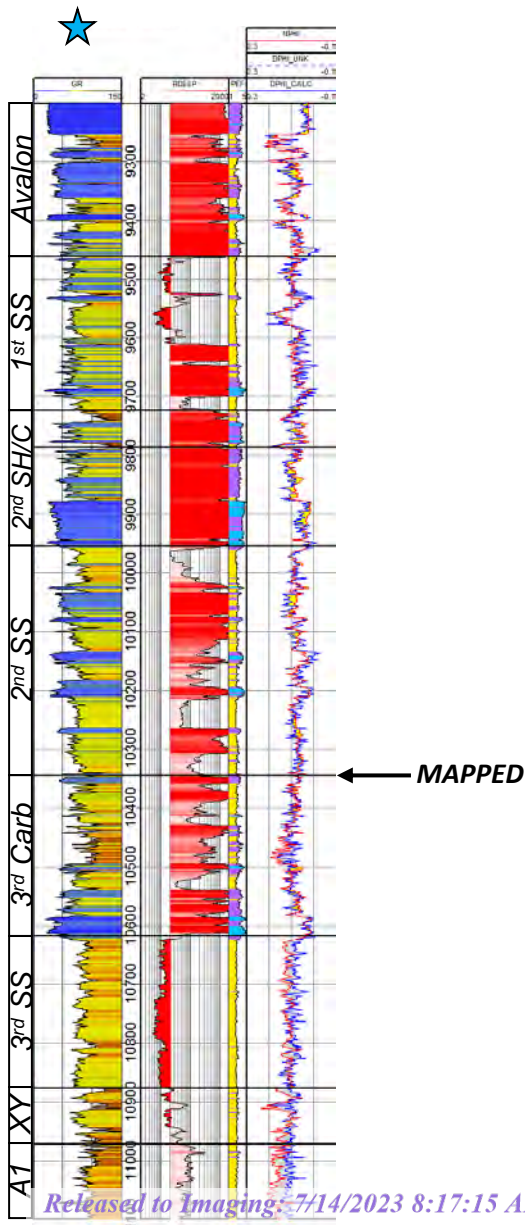
Avg PhiH in WFMP XY = 10
27.2% of total reservoir

Left Map
Right Map

2nd Bone Spring Sand

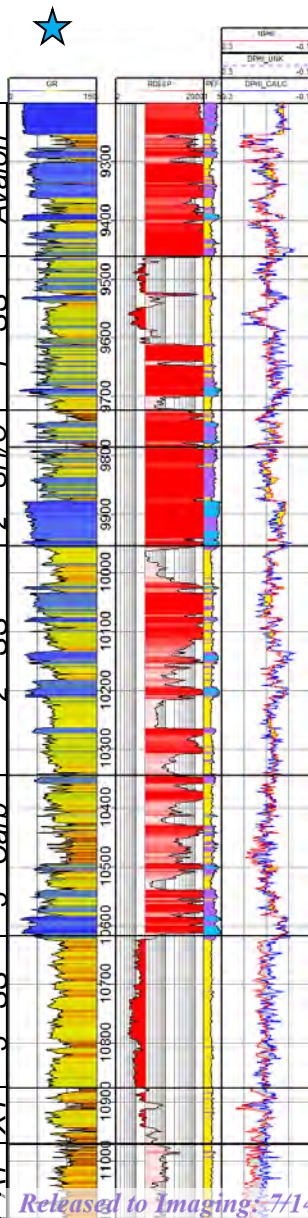
2nd Bone Spring Sand Structure

Quail Ridge 32
State 2

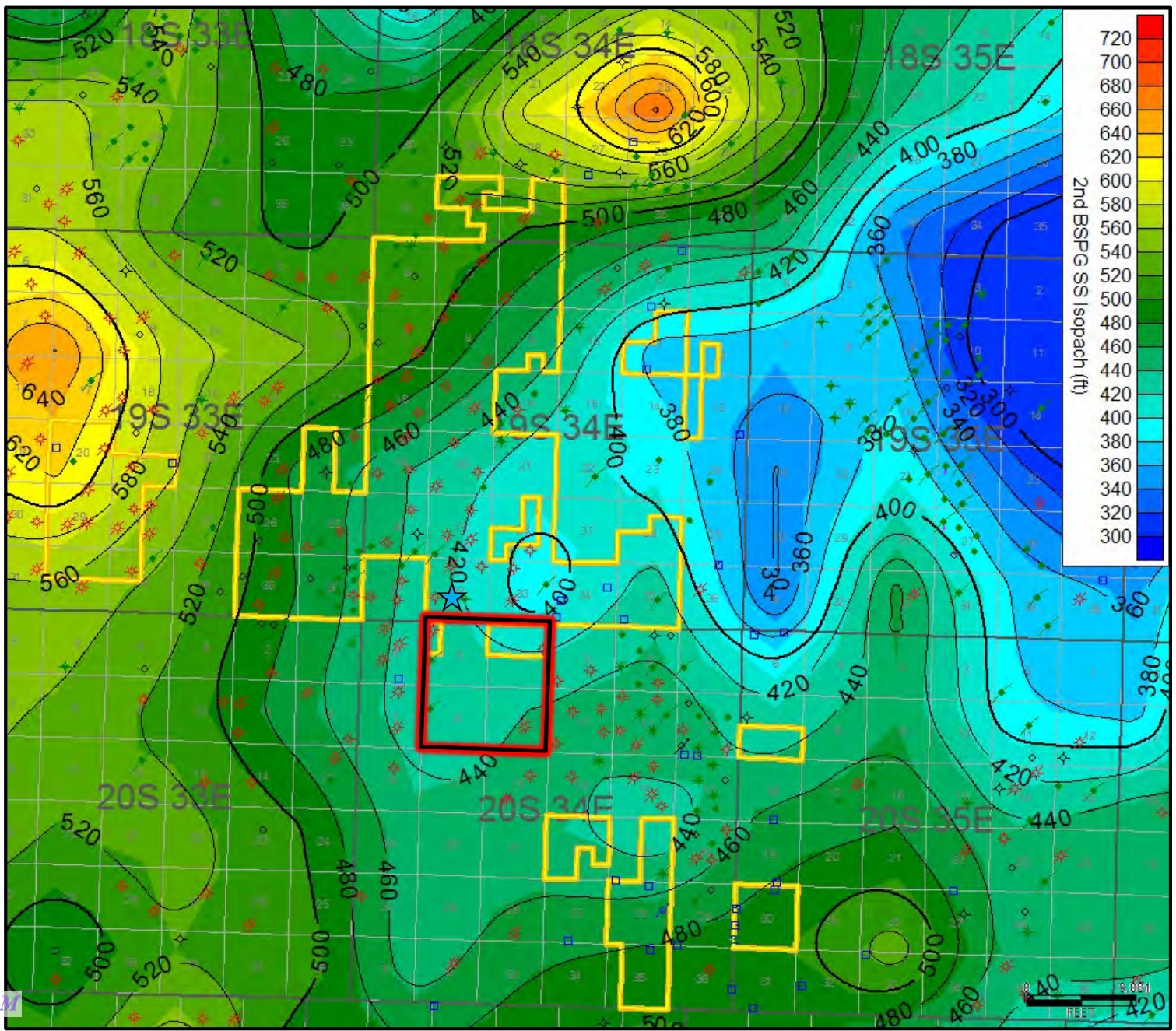


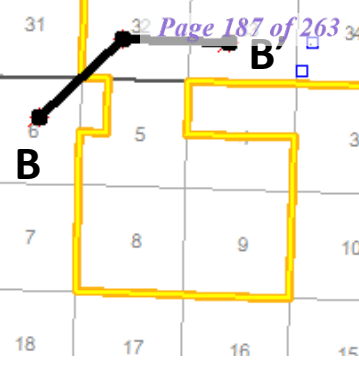
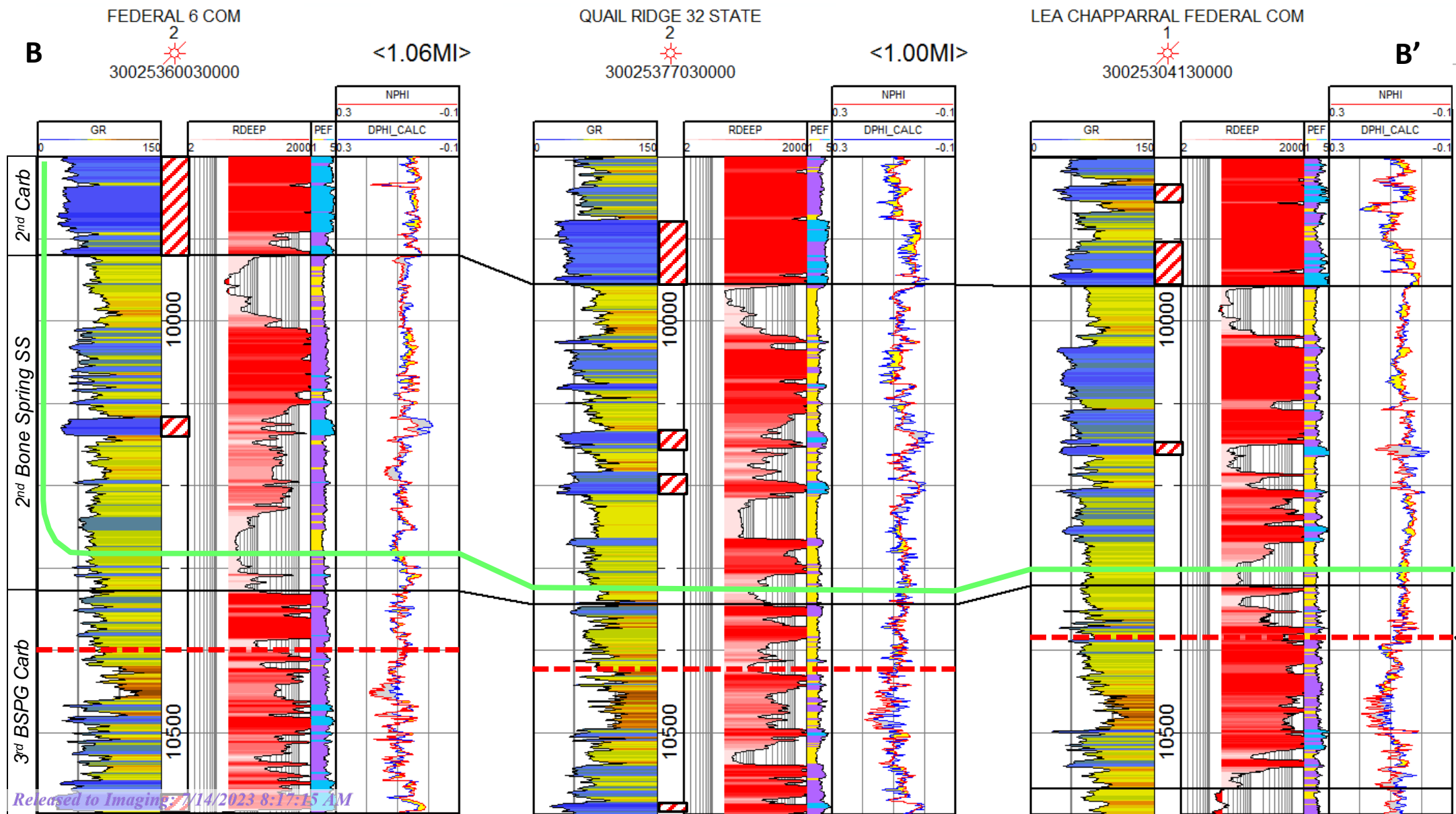
2nd Bone Spring Sand Isopach

Quail Ridge 32
State 2



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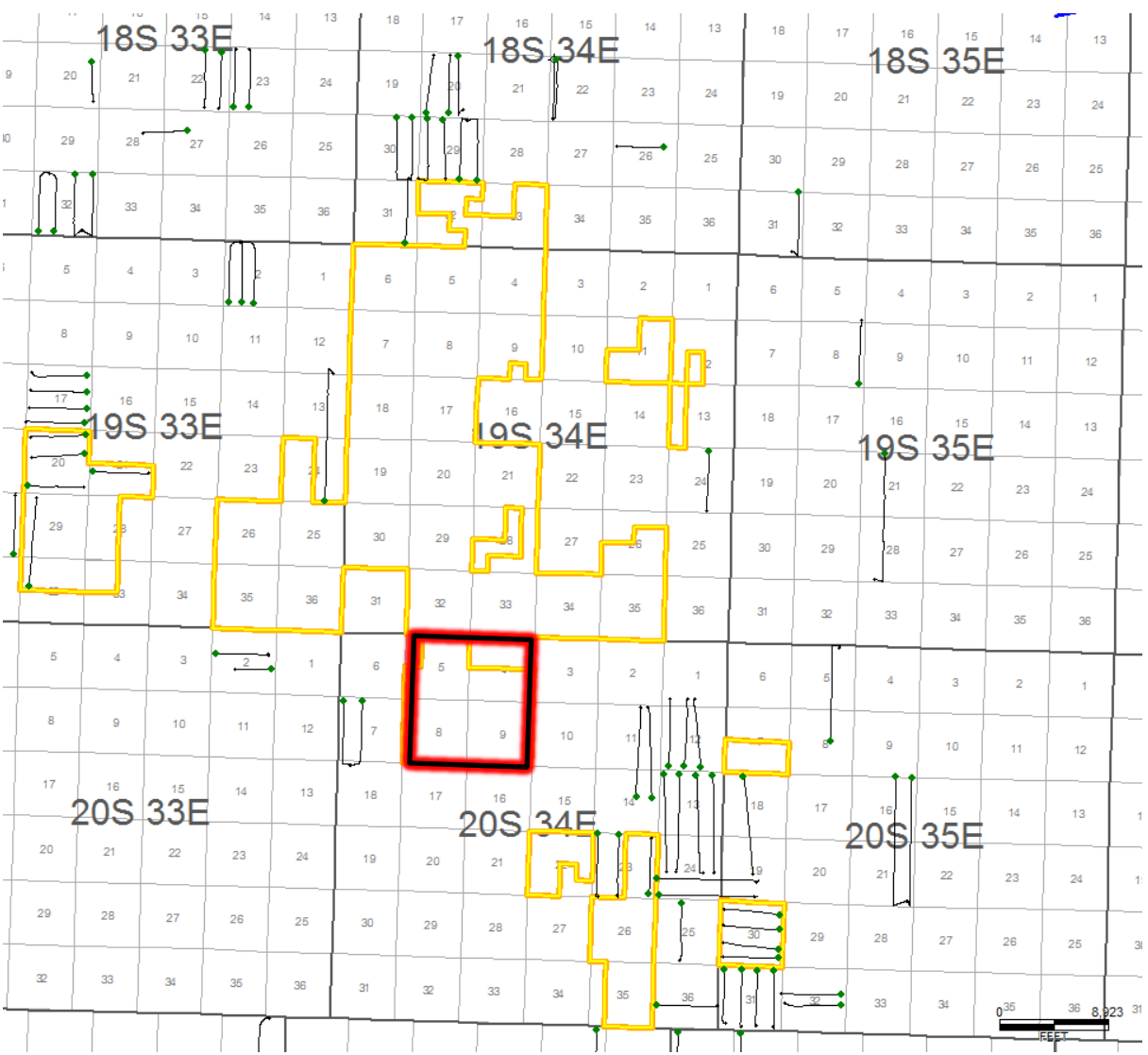




PR's additional 3rd Carb target lies ~135' below L. 2nd Sand target. No significant frac baffle separates the two reservoirs.

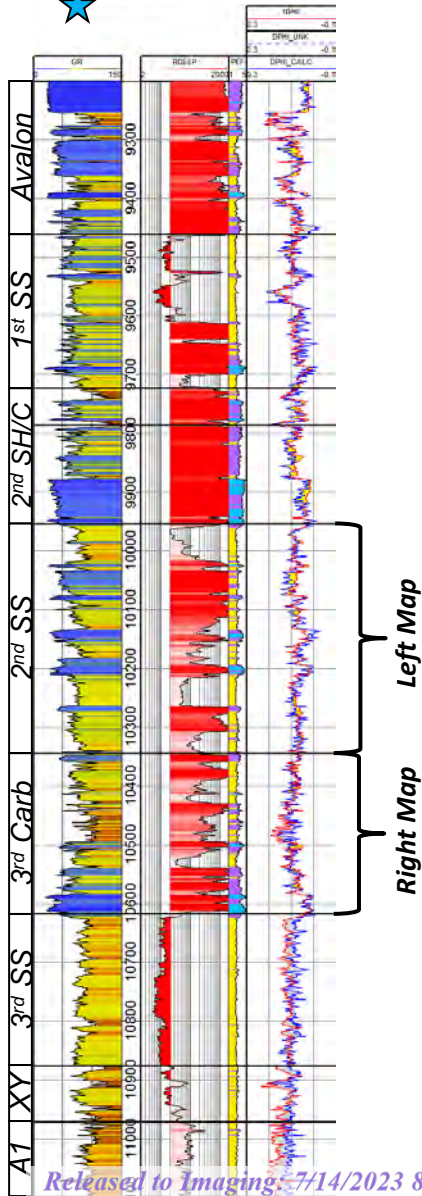
2nd Bone Spring Sand is Established Target

Lower 2nd Bone Spring Sand Producers

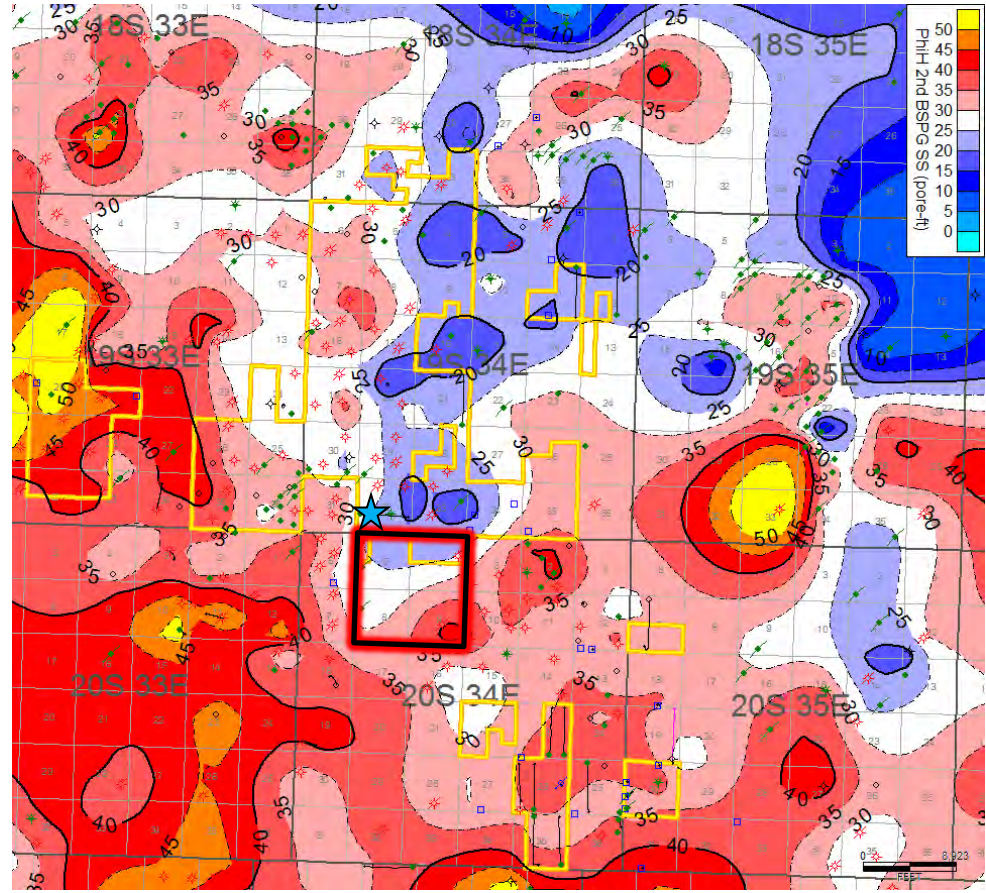


PhiH L2nd Sand vs. 3rd Carb

Quail Ridge 32
State 2

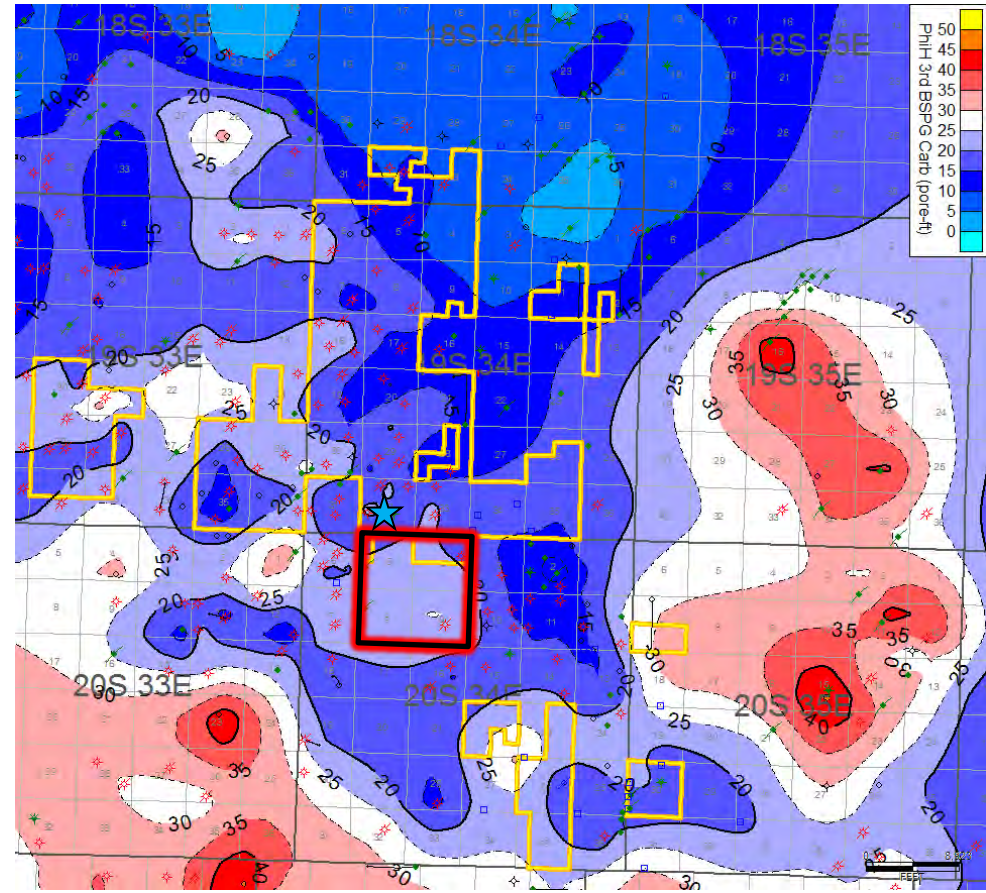


PhiH 2nd Bone Spring Sand
CTRA Target



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

PhiH 3rd Bone Spring Carb
Permian Resources Additional Target



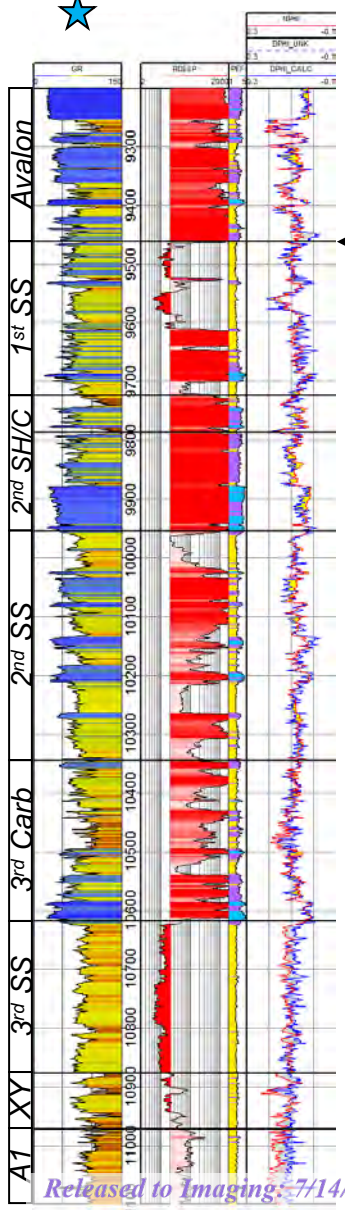
Avg PhiH in WFMP XY = 20
40% of total reservoir

1st Bone Spring Sand

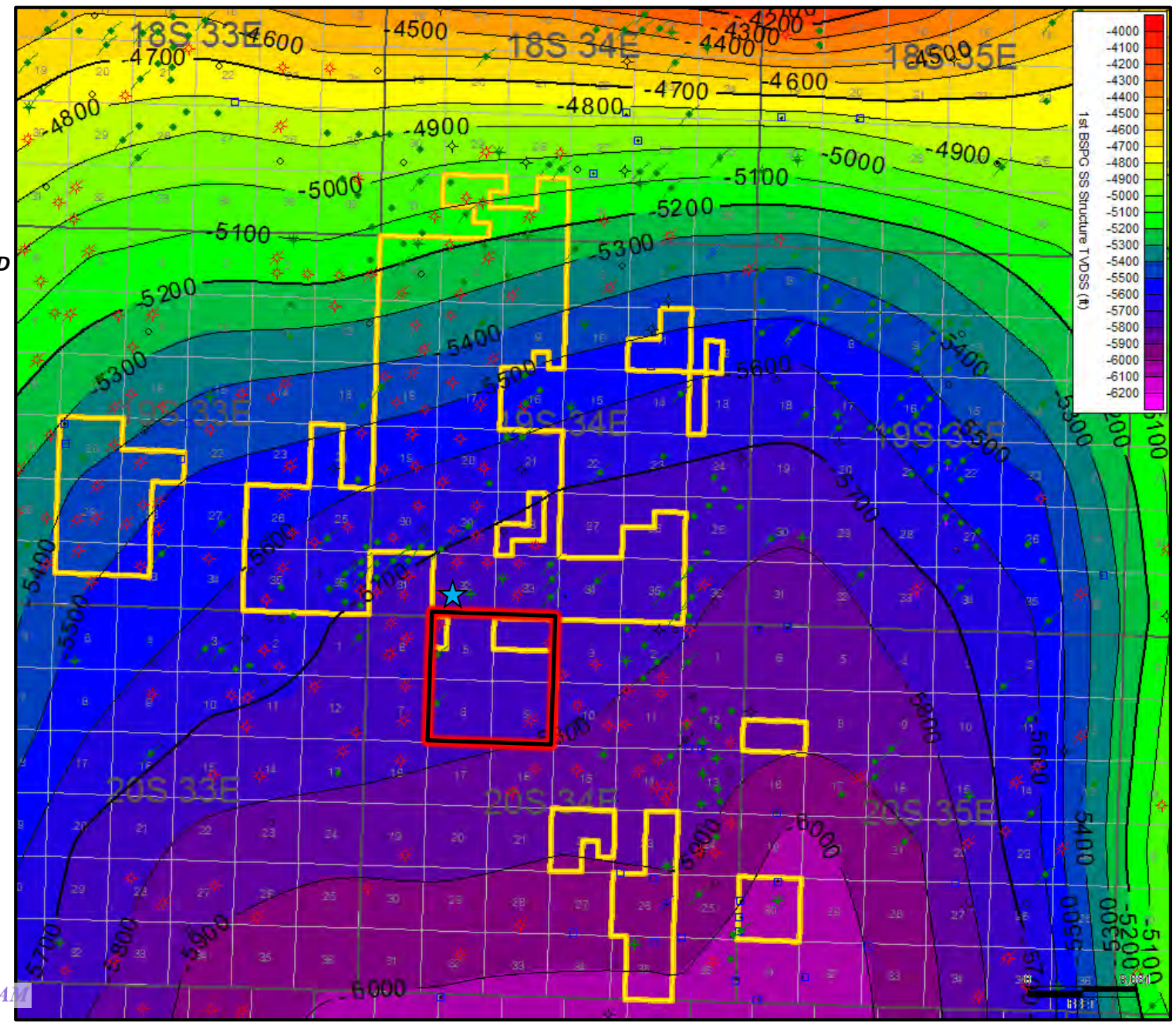


1st Bone Spring Sand Structure

Quail Ridge 32
State 2

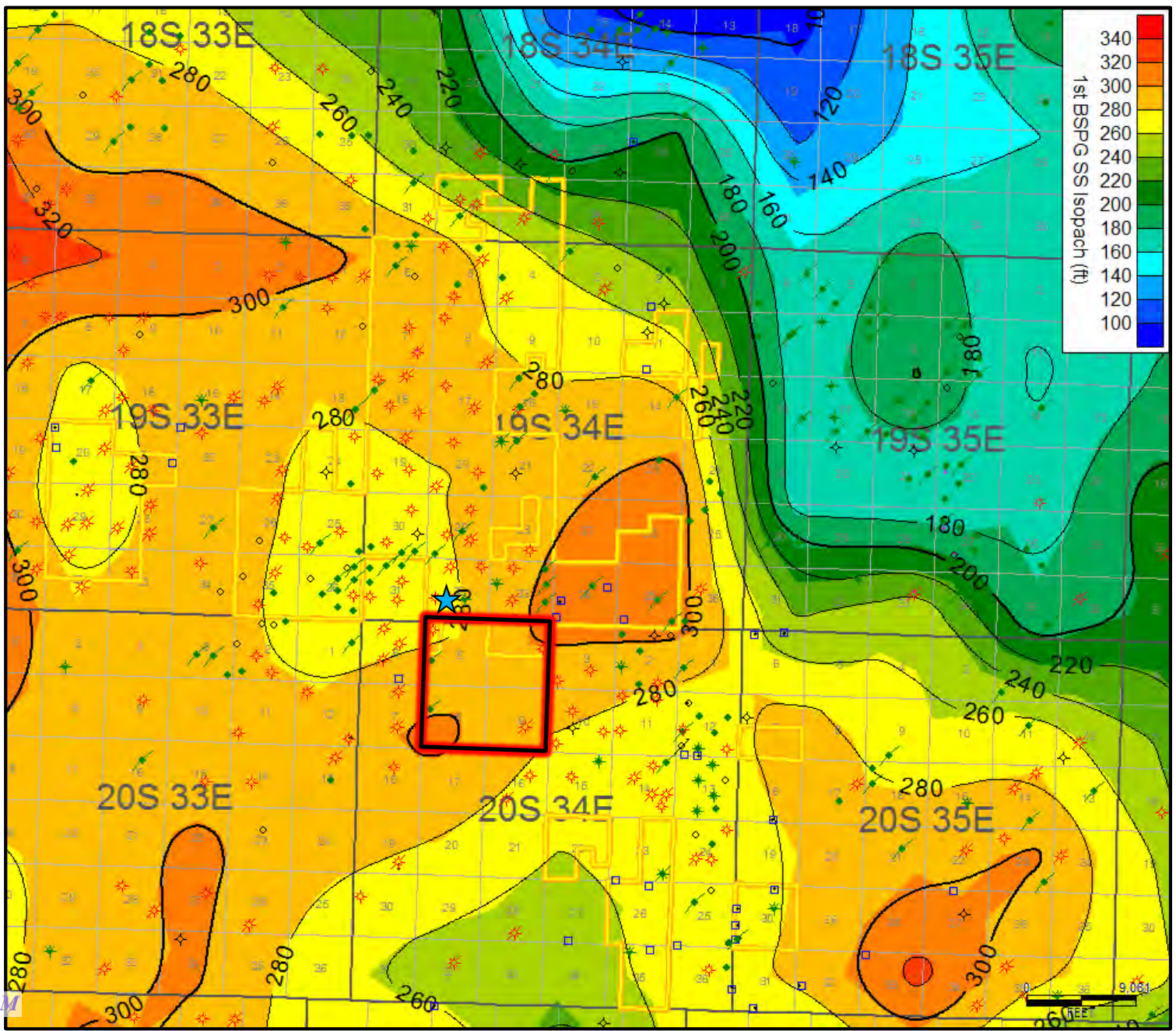
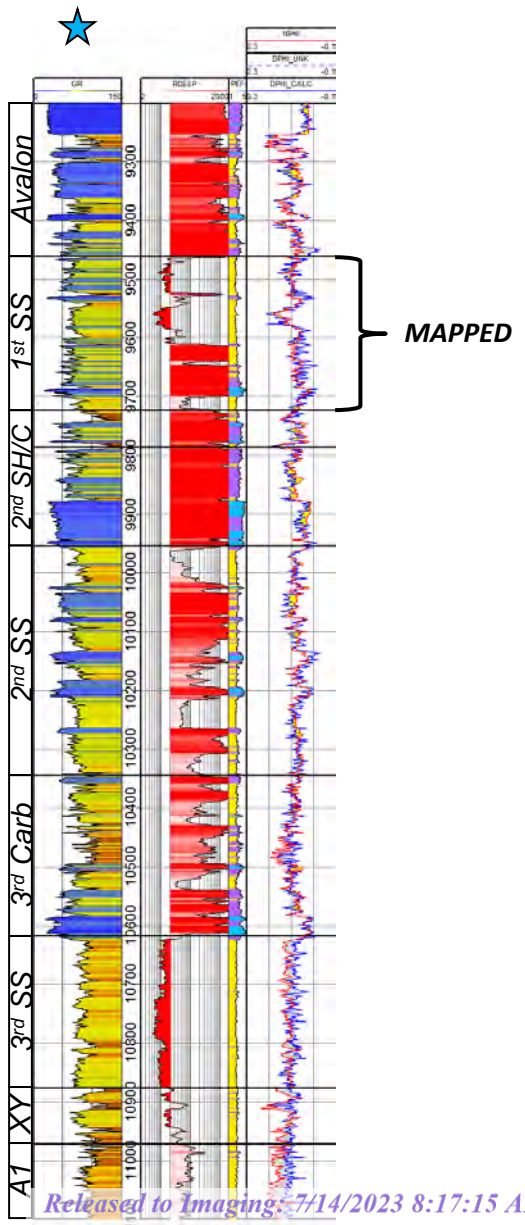


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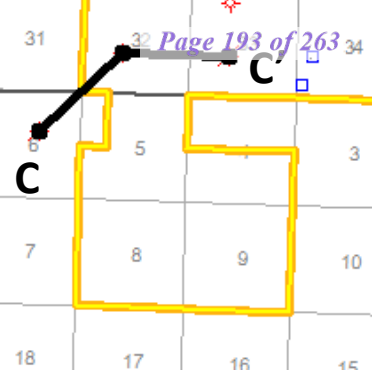
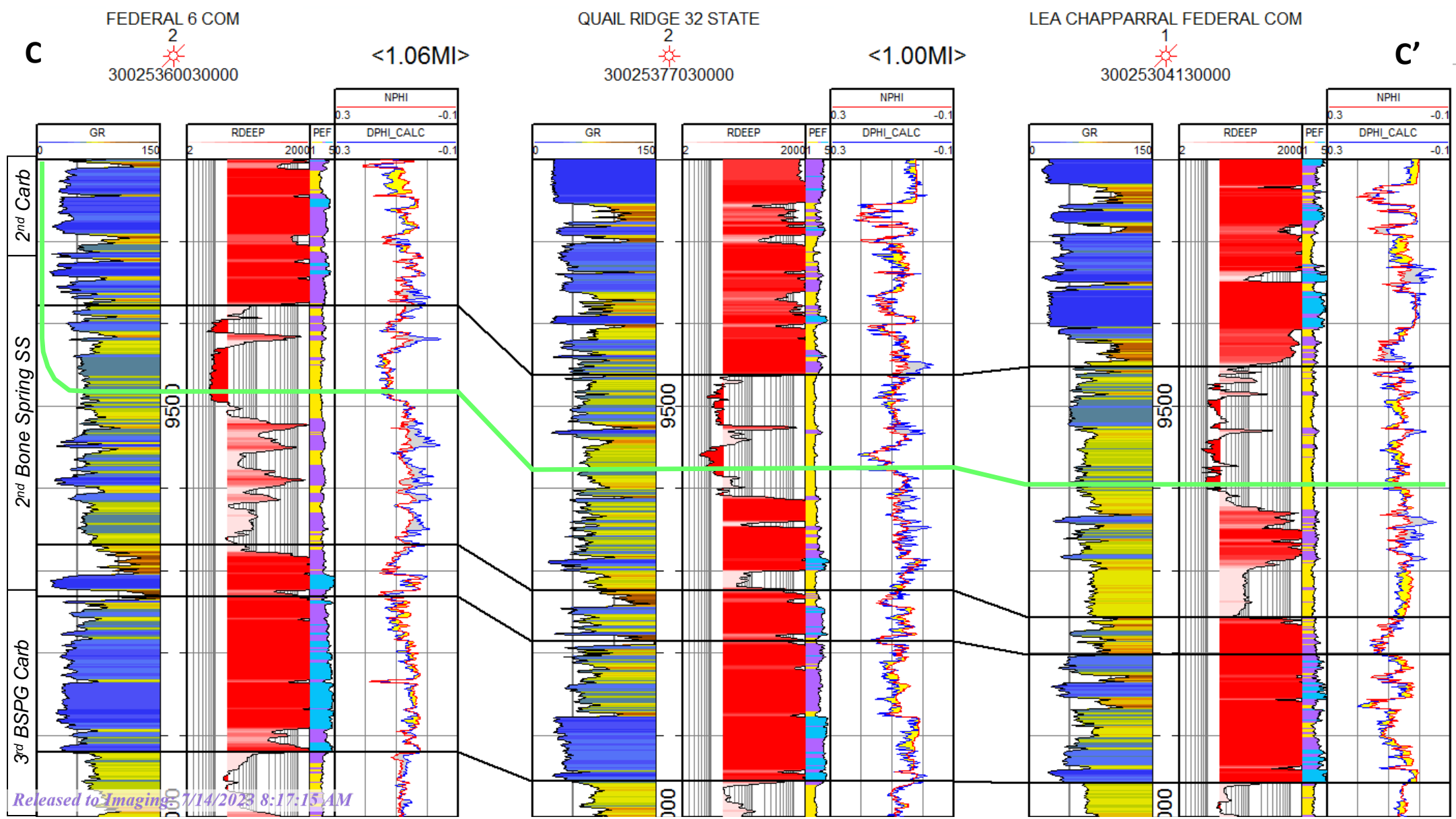


1st Bone Spring Sand Isopach

Quail Ridge 32
State 2

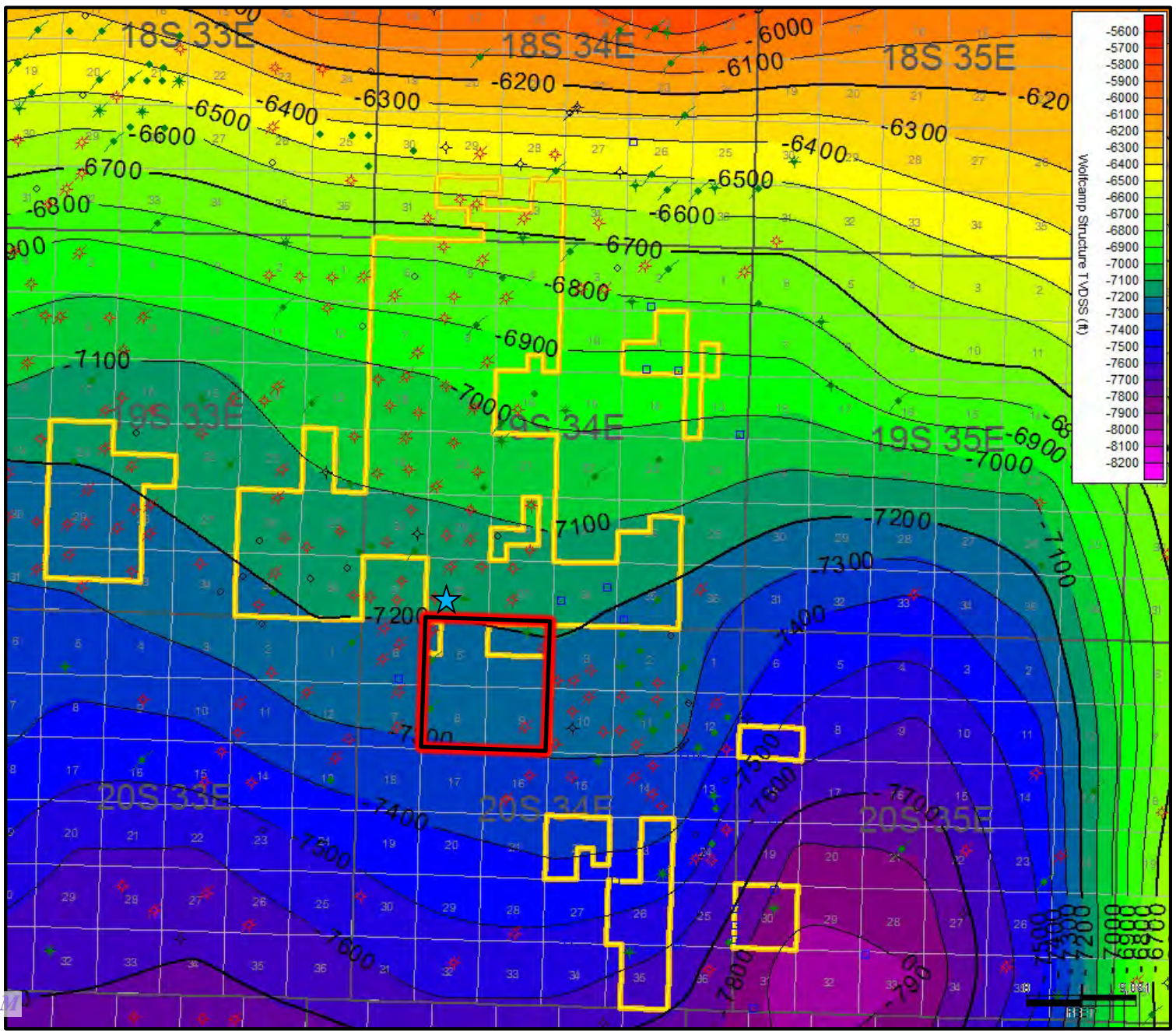
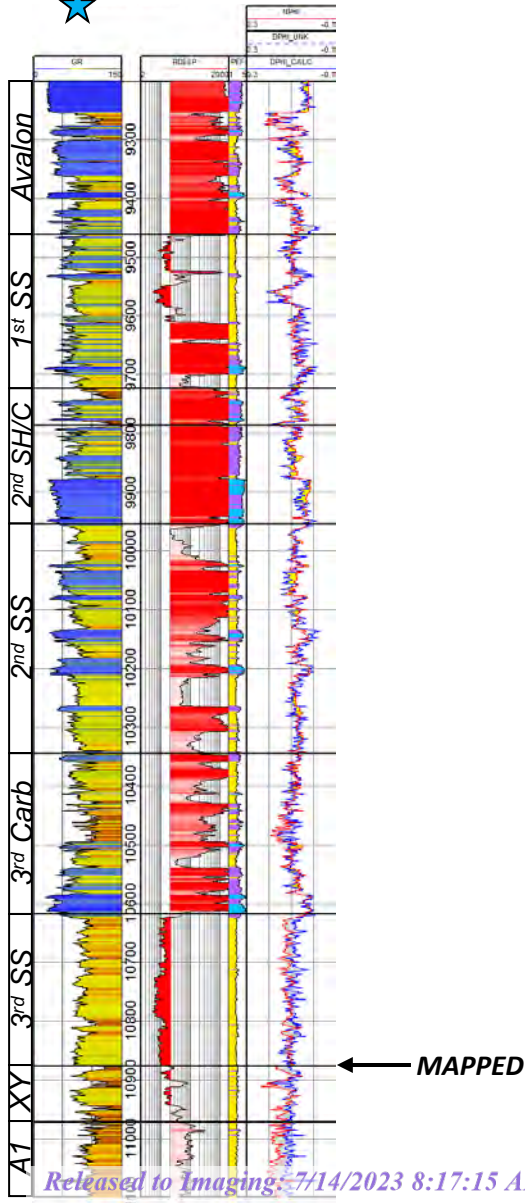


1st Bone Spring Sand Cross Section

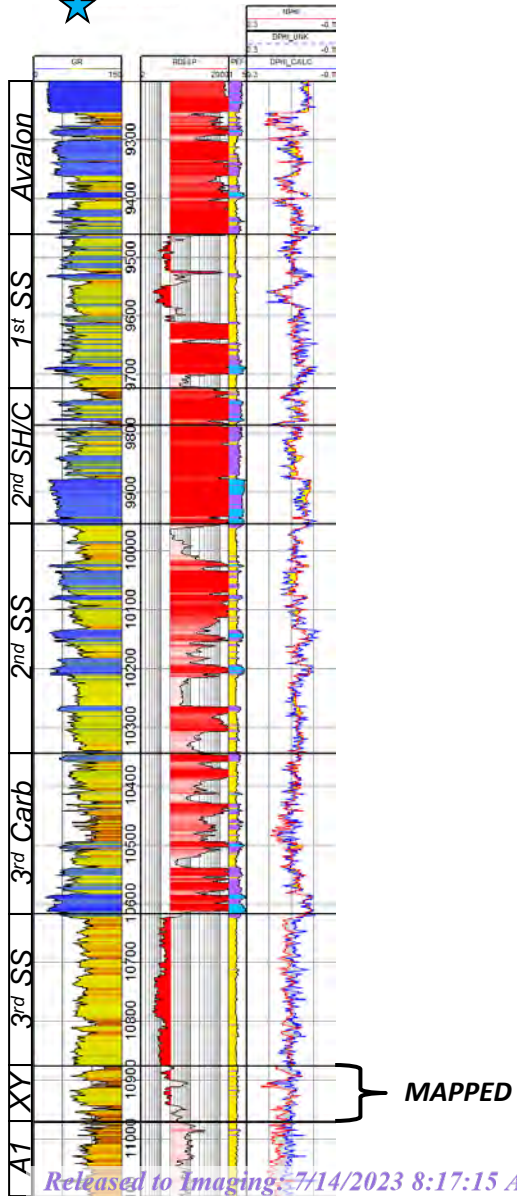


Wolfcamp XY

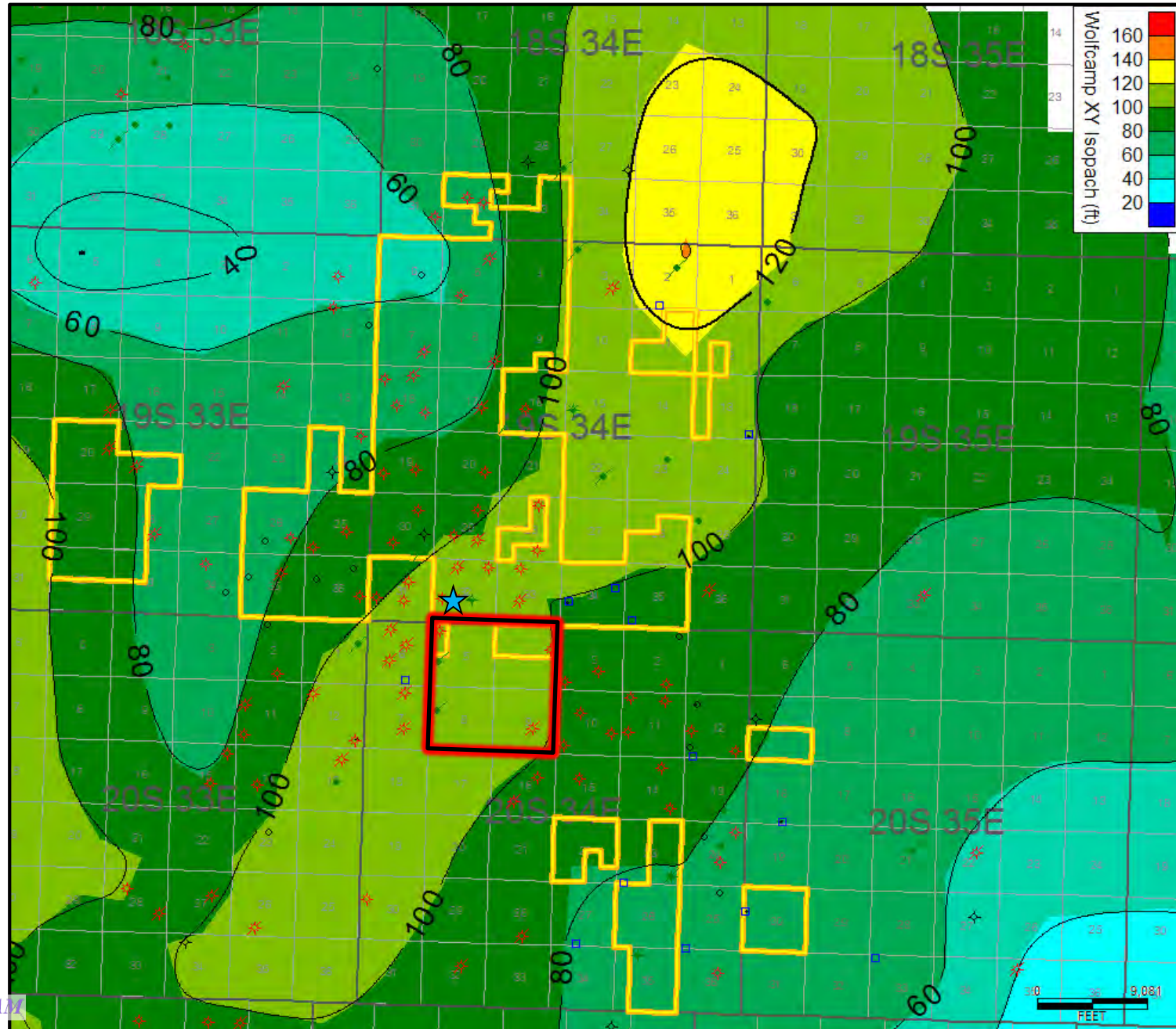
Quail Ridge 32
State 2



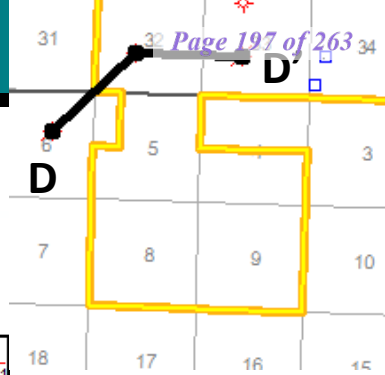
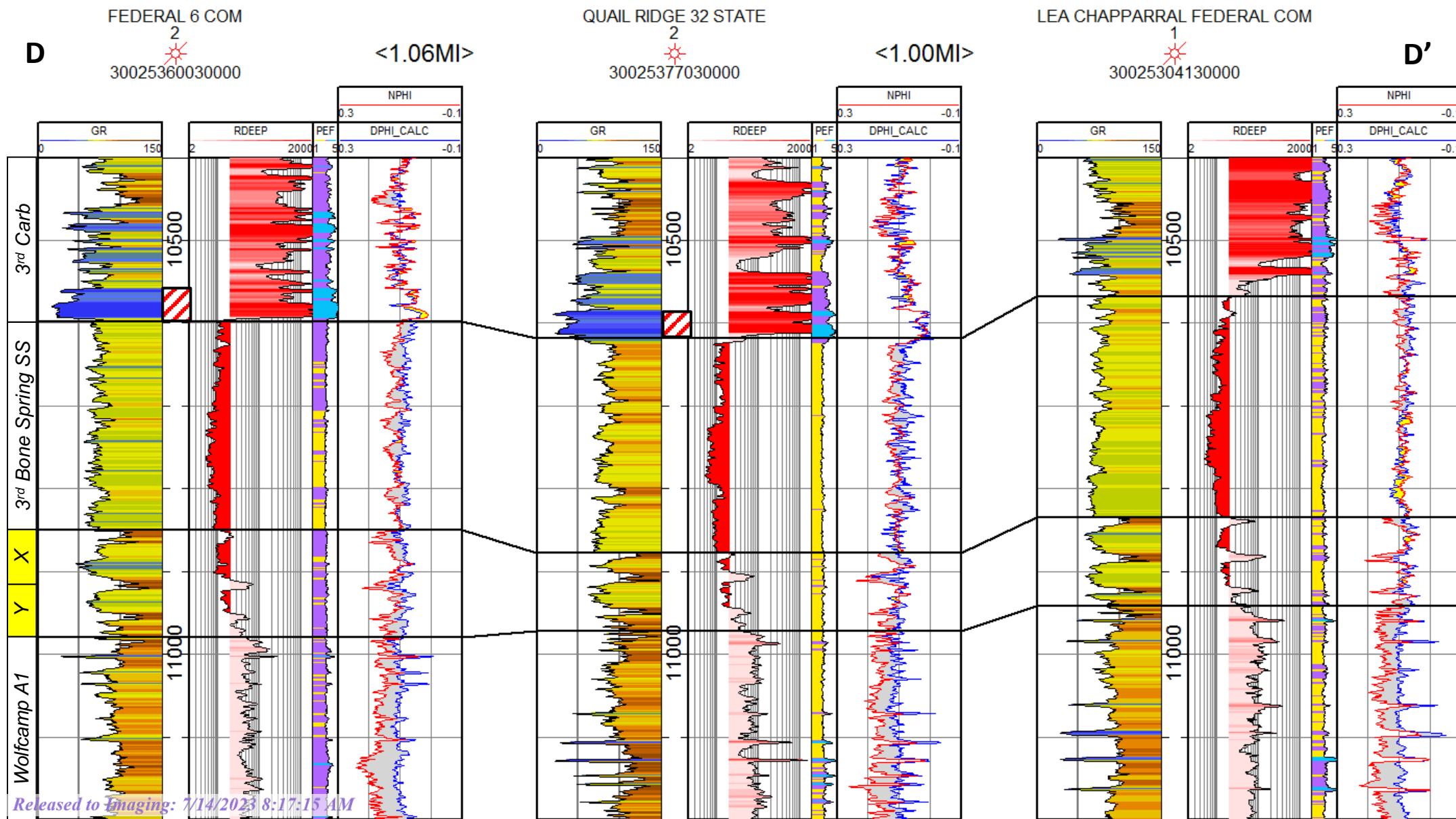
**Quail Ridge 32
State 2**



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Wolfcamp XY Cross Section



PR's additional Wolfcamp target lies ~95' below the 3rd Sand target. No significant frac baffle separates the two reservoirs.

TAB 4

Case Nos. 23452-23455

- Exhibit C: Self-Affirmed Statement of Eddie Behm, Petroleum Engineer
- Exhibit C-1: Mighty Pheasant Loosey Goosey Development Plan
- Exhibit C-2: Capital Plan Comparison Cimarex vs. Permian
- Exhibit C-3: Map of 3rd Bone Spring Sand Producers
- Exhibit C-4: 3rd Sand Well Count by Landing and Operators
- Exhibit C-5: Black and Tan 3rd Sand Composite Forecast 6 wells
(Before WC completion)
- Exhibit C-6: Black and Tan 3rd 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 3rd SS Vs. 3rd 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 3rd 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)**

SELF-AFFIRMED STATEMENT OF EDDIE BEHM

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 above-referenced 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 ($\geq 90\%$ 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 non-additive 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 2nd 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: 3rd Bone Spring Sand is the Established Single Bench Target at 4 Wells Per Section (WPS) Within the Area of Interest (AOI). The map of 3rd Bone Spring Sand Producers shows significant single bench development of the 3rd Sand at 4 wells per section spacing. The Map of Wolfcamp producers shows that the Wolfcamp is not primarily targeted with 3rd Sand development. Furthermore, where Wolfcamp is developed, it is

predominantly drilled and developed without the 3rd 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 3rd 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 3rd 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 3rd 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 3rd Sand supporting Cimarex's assessment of 3rd 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 3rd Sand Composite Forecast 6 wells (Before WC completion)** This Forecast shows the aggregate well performance of 6 wells prior to

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

11. **Exhibit C-6, Slide 10: Black and Tan 3rd Sand Composite Forecast 6 Wells Post Wolfcamp Frac.** This Forecast shows the aggregate well performance of 3rd Bone Spring Sand wells after 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 3rd Sand wells. After the Wolfcamp wells were drilled and produced, overall reserves appear to have fallen to 1.63 MM barrels of oil with steep decline profile. This highlights the degradation a 2nd 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 3rd 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 3rd 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 3rd sand production. The aggregate rate change is so small it is essentially zero (0) which does not support or justify as effective capital stewardship the drilling of the 8 additional \$11MM dollar wells proposed by Permian Resources.

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

14. **Exhibit C-9, Slide 13: Diagram of Staggered Landing Wolfcamp 3rd SS Vs. 3rd 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 3rd Sand well's landed flat must be very similar to the Stimulated rock volume accessed by staggered Wolfcamp and 3rd landings. If this were not true, the sum of Wolfcamp and 3rd sand production out of the Black and Tan development would be significantly higher once the 2nd bench was added instead of about the same. Where appropriate geologically, Cimarex executes as many as 9 landings within the same section in Lea County. Due to the location of barriers and target reservoir height executing two landings within the contested acreage in the 3rd Sand Wolfcamp target or the lower 2nd Sand 3rd 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 3rd 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 3rd SS Landing as Best Target.** Cimarex confirmed 3rd sand as best landing zone 5 years ago in 2018 with the Perry 4H 1 mile South of the contested acreage block. Over the life of the well, we see the old conventional 3rd Sand landing outperform other landings. Fracs evolved over time to modern slick water completions. Today most companies pump between 2000#/ft and 3000#/ft and 38 bbl/ft up to 60 bbl/ft with 6 to 14 clusters per stage depending on the target. It is highly unusual for a legacy frac, that is, one more conventional (i.e., <2016 with low

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

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:

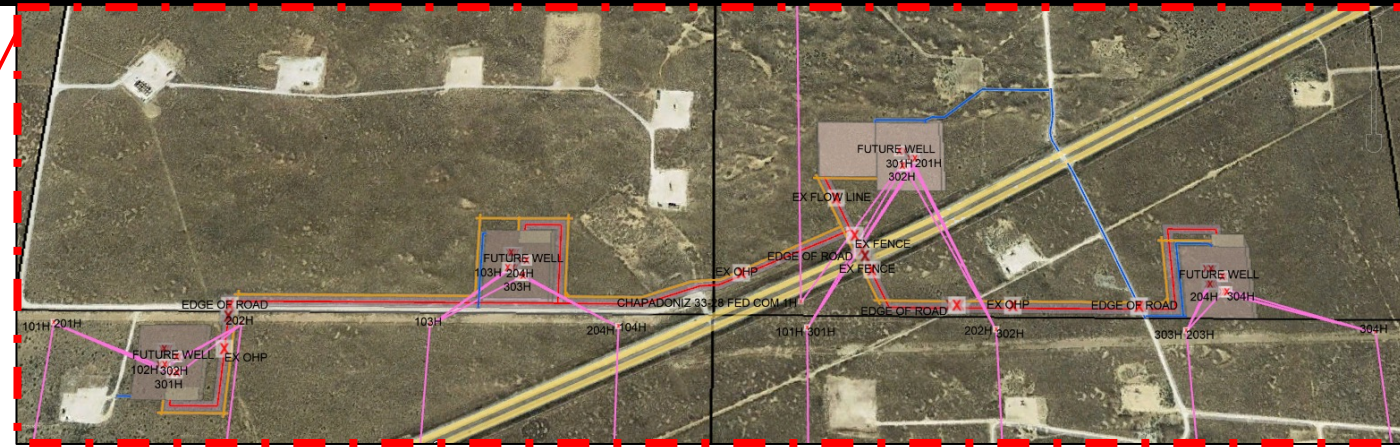
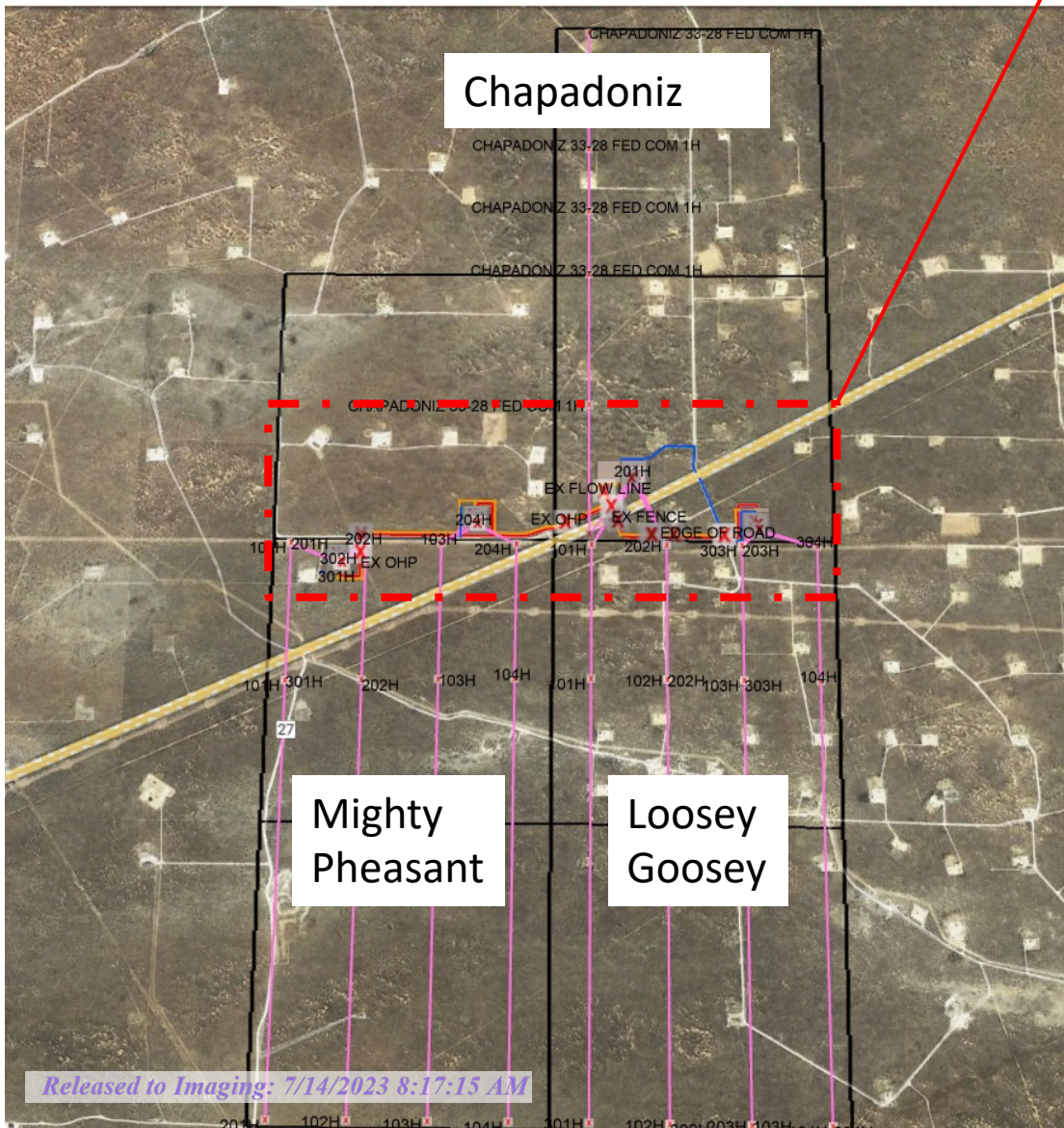
I understand that this Self-Affirmed Statement will be used as written testimony before the Division in Case Nos. 23448-23455 and 23594 – 23601 and affirm that my testimony herein is true and correct, to the best of my knowledge and belief and made under penalty of perjury under the laws of the State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


Eddie Behm
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 $\geq 90\%$ 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
- EXHIBIT
24

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	\$36,922,774
1st	102h	\$9,450,693	\$9,651,993	
1st	103H	\$9,450,693	\$9,651,993	
1st	104H	\$9,450,693	\$9,651,993	
upper 2 nd *	NA	\$8,570,695	\$9,651,993	\$25,712,085
upper 2 nd *	NA	\$8,570,695	\$9,651,993	
upper 2 nd *	NA	\$8,570,695	\$9,651,993	
2nd	201H	\$8,570,695	\$9,651,993	\$34,282,780
2nd	202H	\$8,570,695	\$9,651,993	
2nd	203H	\$8,570,695	\$9,651,993	
2nd	204H	\$8,570,695	\$9,651,993	
3rd	301H	\$9,428,854	\$10,621,993	\$37,675,408
3rd	302H	\$9,428,854	\$10,621,993	
3rd	303H	\$9,408,850	\$10,621,993	
3rd	304H	\$9,408,850	\$10,621,993	
Total Gross CapEx		\$134,593,047	\$148,659,895	\$134,593,047

Permian Resources - Joker				
Res	Well	AFE CapEx	June Current Cost	AFE Bench Total
1st	111	\$10,724,193		\$42,896,772
1st	112	\$10,724,193		
1st	113	\$10,724,193		
1st	114	\$10,724,193		
uppr 2nd	122	\$11,020,308		\$44,081,232
uppr 2nd	124	\$11,020,308		
uppr 2nd	126	\$11,020,308		
uppr 2nd	128	\$11,020,308		
2nd	121	\$11,020,308		\$44,081,232
2nd	123	\$11,020,308		
2nd	125	\$11,020,308		
2nd	127	\$11,020,308		
3rd bs	131H	\$11,535,757		\$46,143,028
3rd bs	132H	\$11,535,757		
3rd bs	133H	\$11,535,757		
3rd bs	134H	\$11,535,757		
3rd bs	171H	\$11,308,013		\$92,743,500
3rd bs	172H	\$11,308,013		
3rd bs	173H	\$11,308,013		
3rd bs	174H	\$11,308,013		
WC	201H	\$11,877,862		
WC	202H	\$11,877,862		
WC	203H	\$11,877,862		
WC	204H	\$11,877,862		
Total Gross CapEx		\$269,945,764	?	\$269,945,764

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

Permian 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 2nd sand well vs. Cimarex Proven spacing.
- Permian Resources contracts, practices, and development plan is >= \$121MM of waste driven by Frac cost and Well Count

EXHIBIT
C-2

Permit Status

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

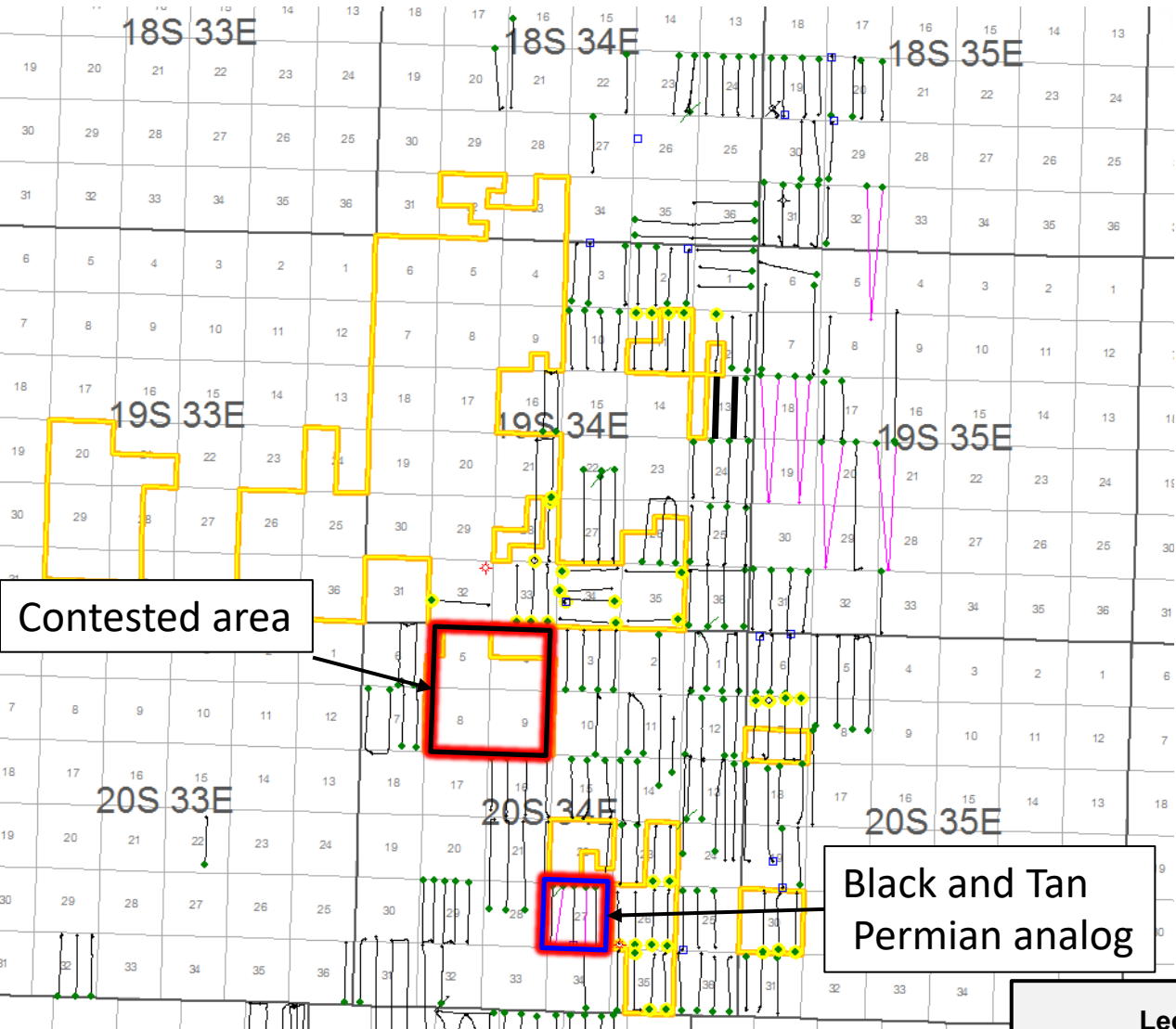
State	County	Well Name & Number	Permit Status	Permit Submission Due Date	Permit Submitted Date	10-Day Letter Date	10-Day Letter Due
NM	Lea	Mighty Pheasant 5-8 Fed Com 101H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 102H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 103H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 104H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 201H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 202H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 203H	To be permitted				
NM	Lea	Mighty Pheasant 5-8 Fed Com 204H	AFMSS-Accepted	2/14/2022	2/14/2022	6/2/2023	7/17/2023
NM	Lea	Mighty Pheasant 5-8 Fed Com 301H	AFMSS-Accepted	3/1/2022	3/1/2022		
NM	Lea	Mighty Pheasant 5-8 Fed Com 302H	AFMSS-Accepted	3/2/2022	3/2/2022		
NM	Lea	Mighty Pheasant 5-8 Fed Com 303H	AFMSS-Accepted	2/14/2022	2/14/2022	6/2/2023	7/17/2023
NM	Lea	Mighty Pheasant 5-8 Fed Com 304H	AFMSS-Accepted	3/1/2022	3/1/2022	6/2/2023	7/17/2023
NM	Lea	Loosey Goosey 4-9 Fed Com 101H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 102H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 103H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 104H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 201H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 202H	To be permitted				
NM	Lea	Loosey Goosey 4-9 Fed Com 203H	To be permitted				
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		

3rd Bone Spring Sand

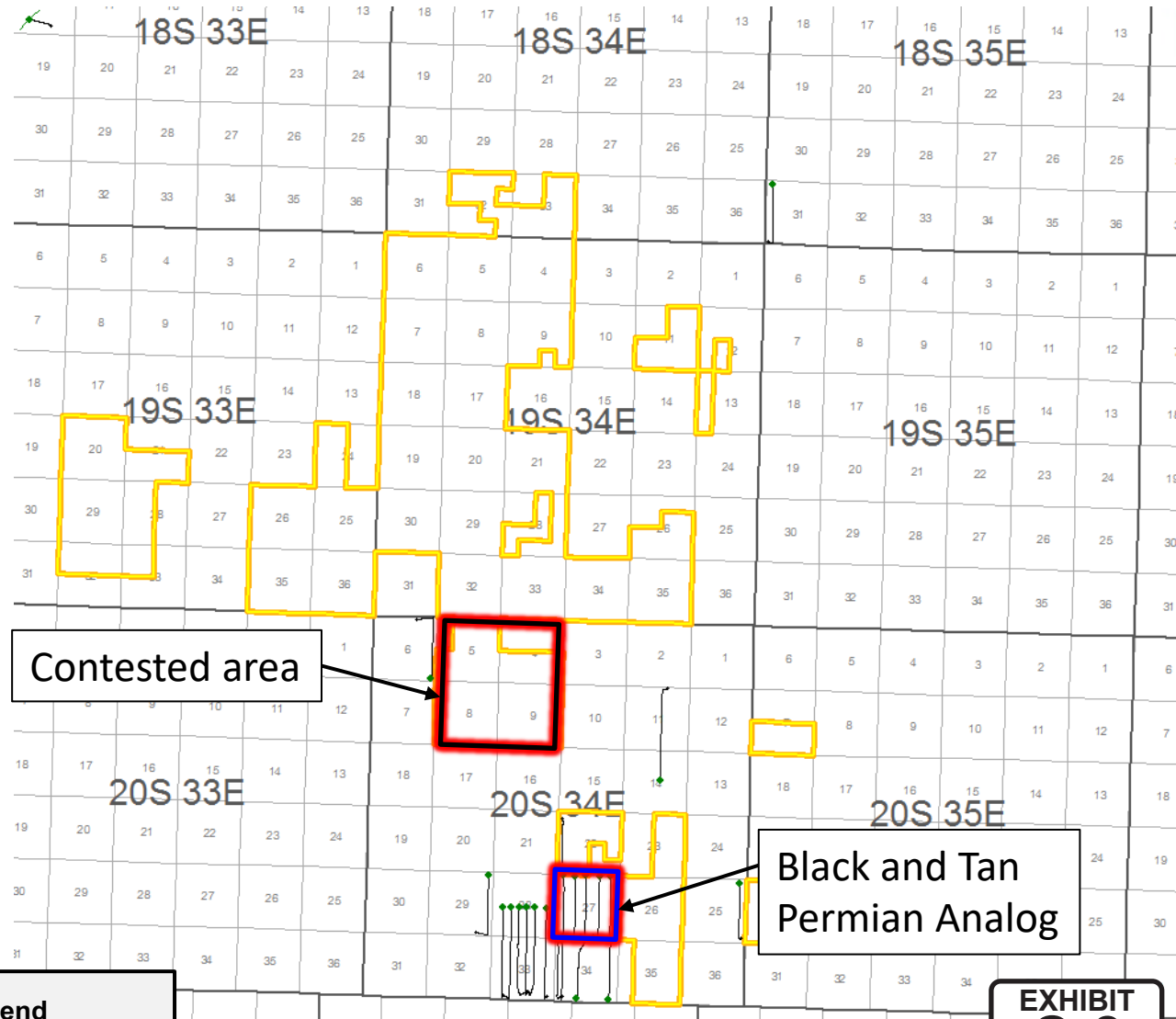
3rd Bone Spring Sand is the Established Single Bench Target at 4 WPS within AOI

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

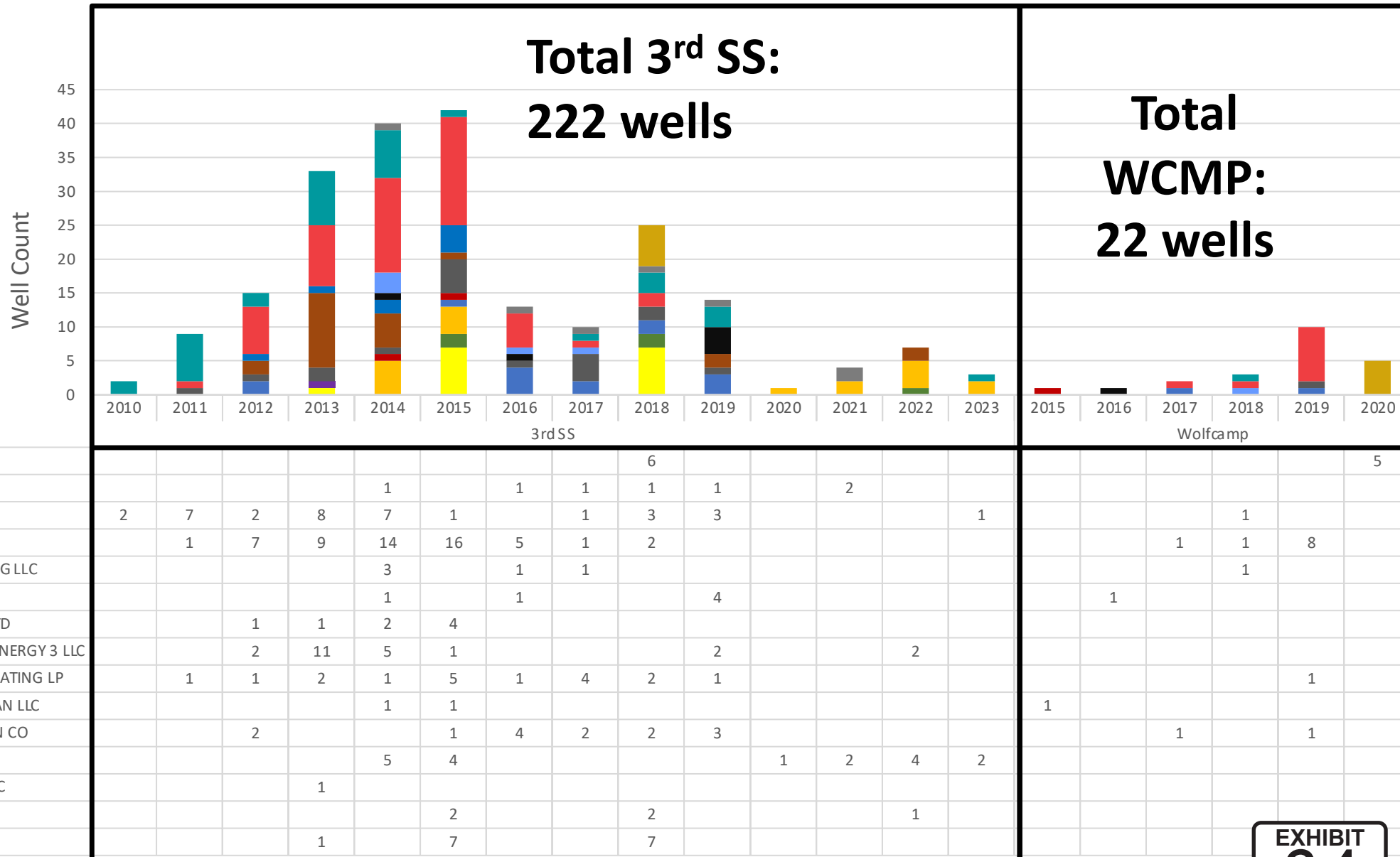


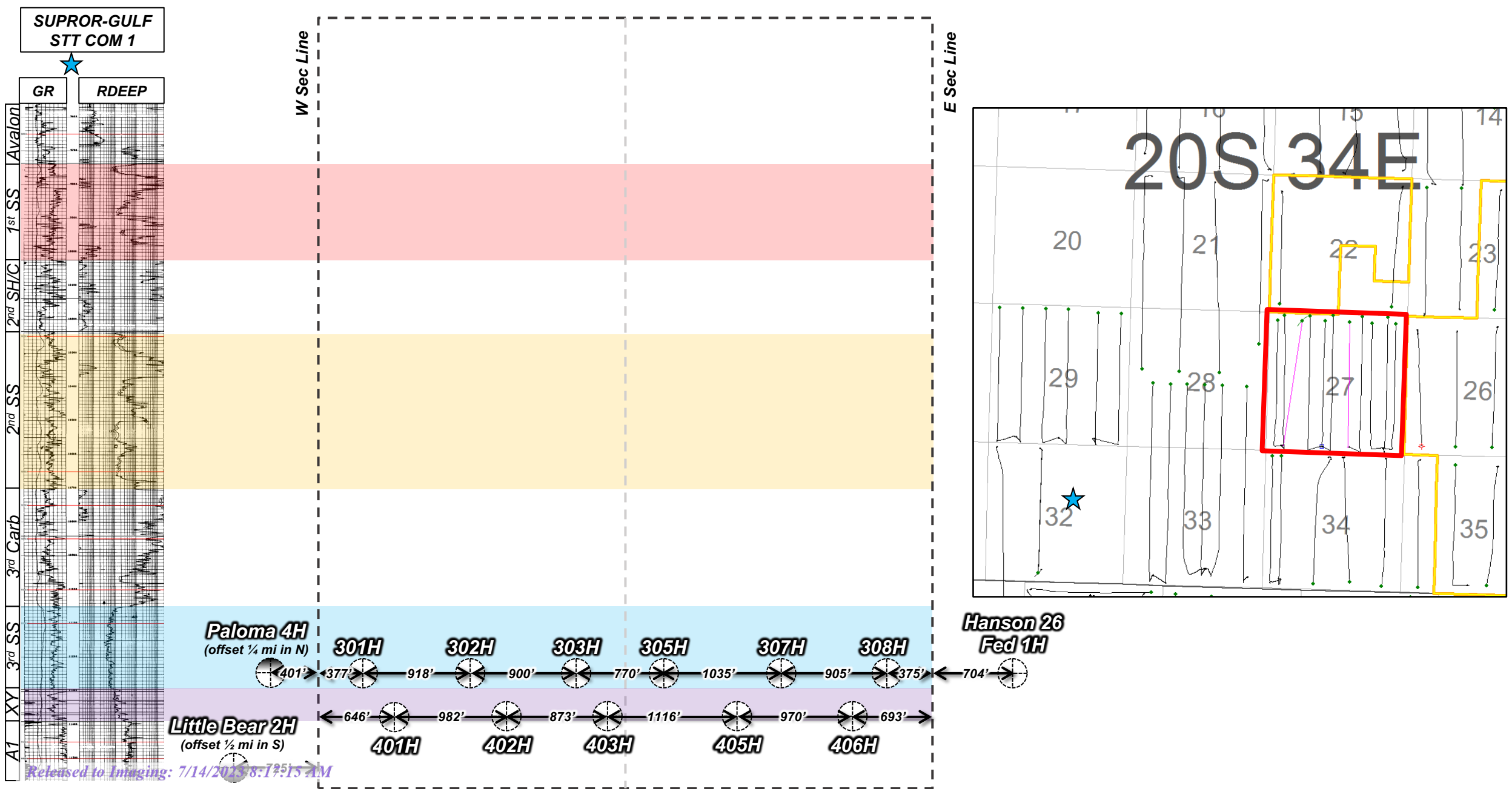
Wolfcamp Producers



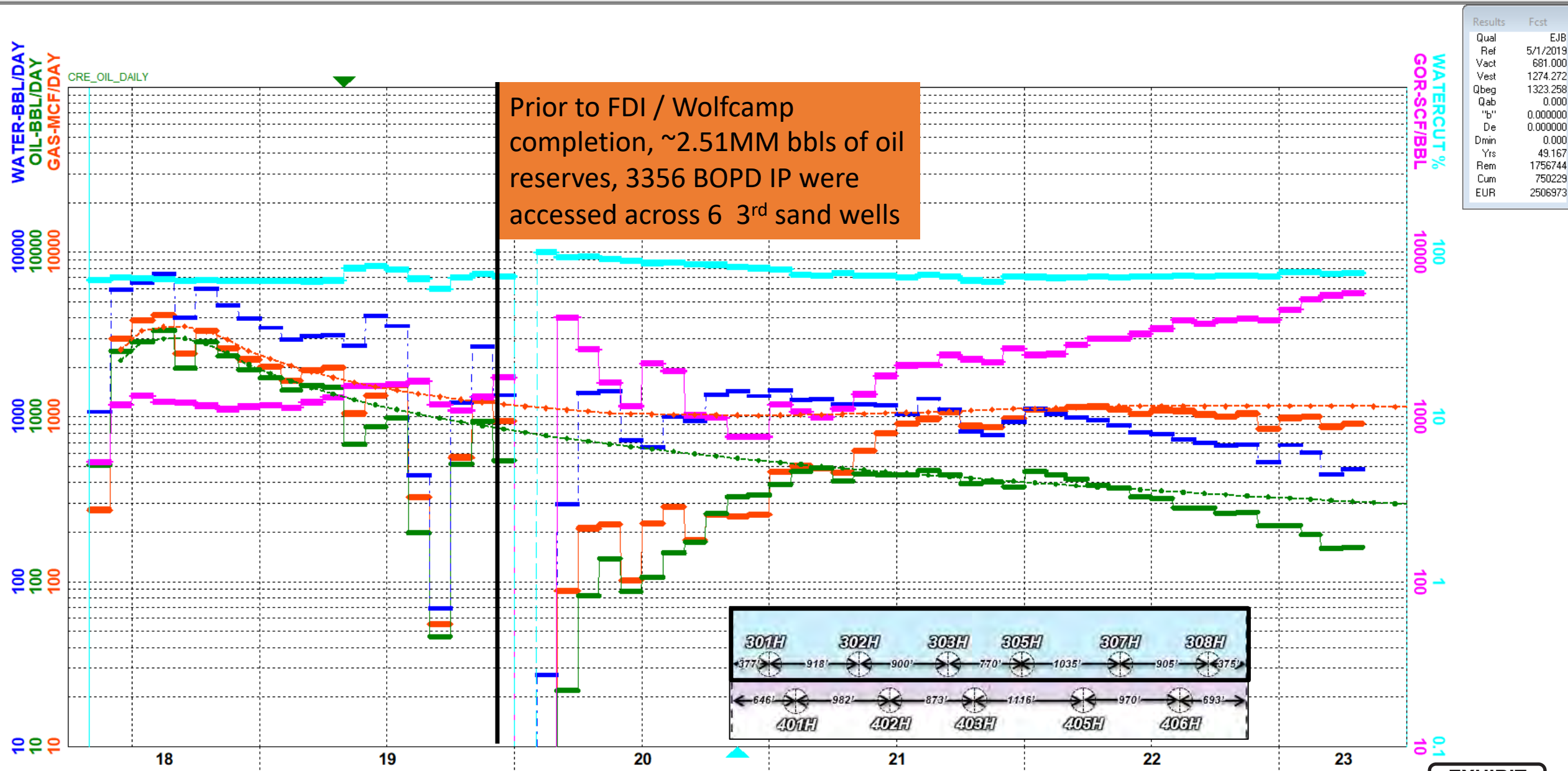
Well Count by Landing and Operators Shows 3rd Sand is the Consensus Landing

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



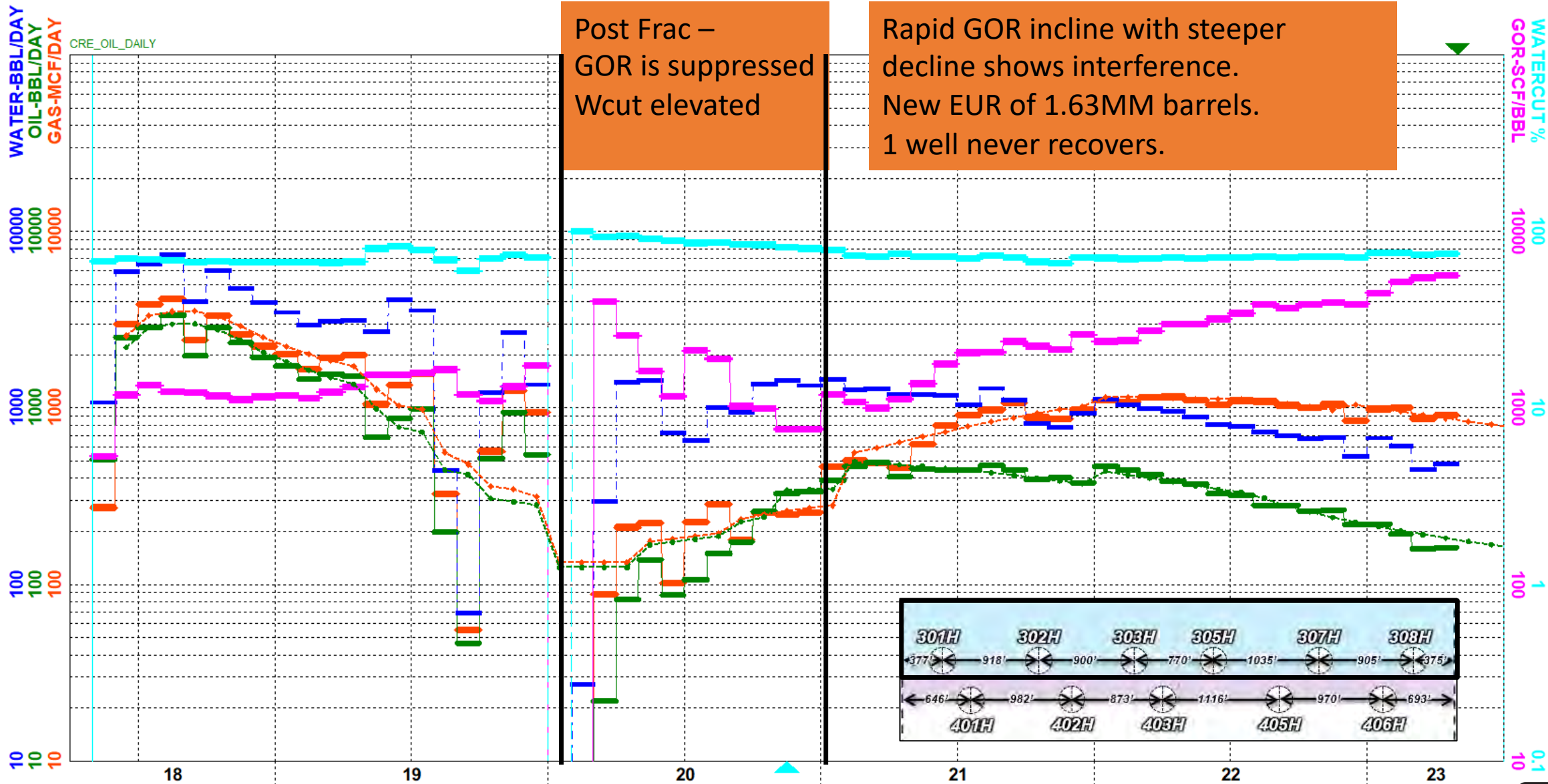


Black and Tan 3rd Sand Composite Forecast 6 Wells (Before WC completion)

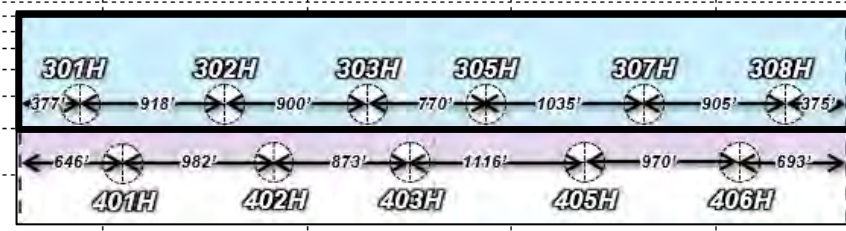


Results	Fcst
Qual	EJB
Ref	5/1/2019
Vact	681.000
Vest	1274.272
Qbeg	1323.258
Qab	0.000
"b"	0.000000
De	0.000000
Dmin	0.000
Yrs	49.167
Rem	1756744
Cum	750229
EUR	2506973

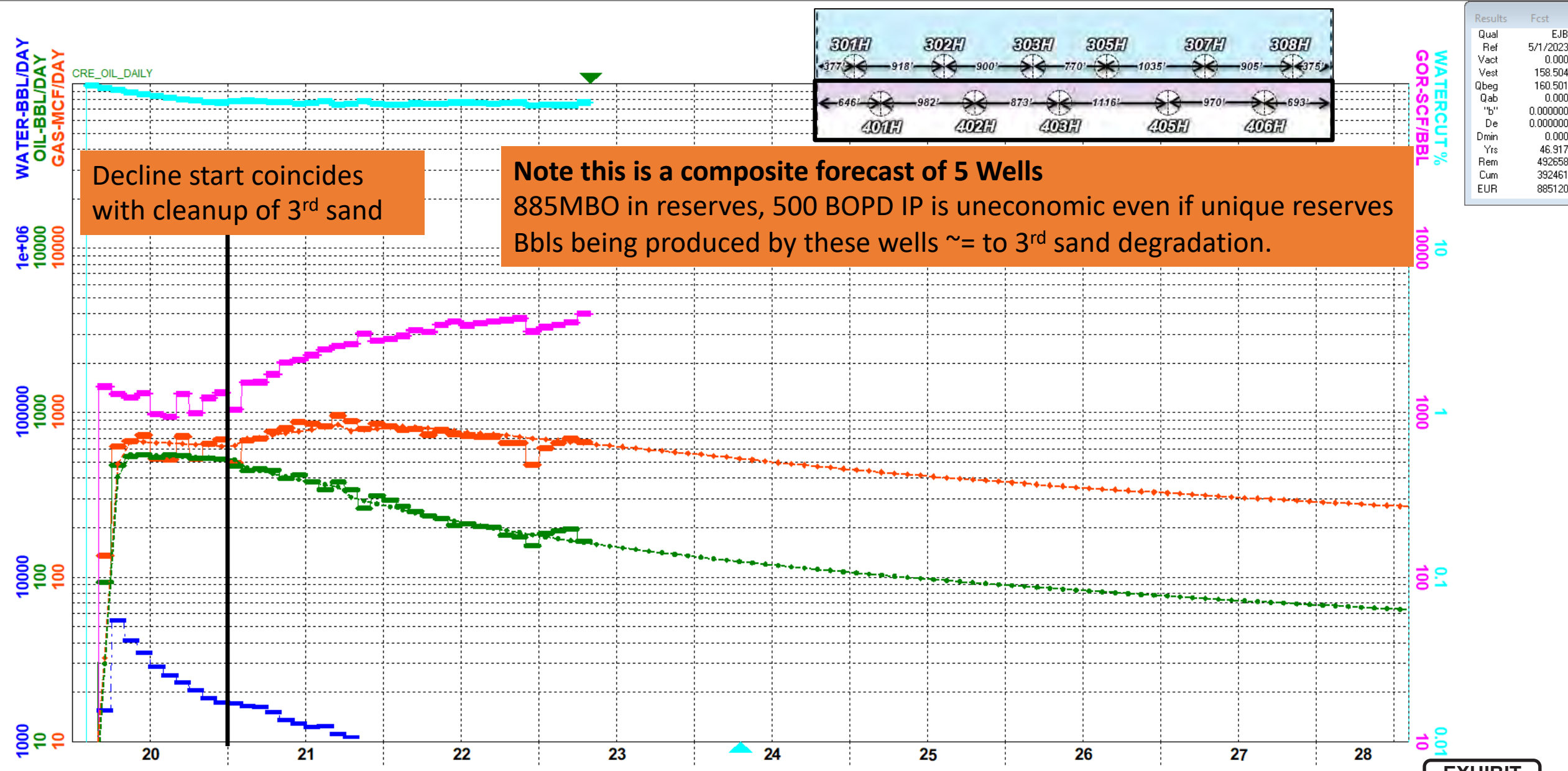
Black and Tan 3rd Sand Composite Forecast 6 Wells Post Wolfcamp Frac



Results	Fcst
Qual	EJ8FRAC
Ref	5/1/2023
Vact	0.000
Vest	175.490
Qbeg	179.285
Qab	0.000
"b"	0.000000
De	0.000000
Dmin	0.000
Yrs	45.083
Rem	376112
Cum	1252382
EUR	1628494



Black and Tan Wolfcamp Composite Forecast 5 Wells



Results	Fcst
Qual	EJB
Ref	5/1/2023
Vact	0.000
Vest	158.504
Qbeg	160.501
Qab	0.000
"b"	0.000000
De	0.000000
Dmin	0.000
Yrs	46.917
Rem	492658
Cum	392461
EUR	885120

Lessons Learned from the Black and Tan Development

PROJECT = Black & Tan 27					Completed 2nd
30025461240000	BLACK & TAN 27 FEDERAL COM #405H	BLACK & TAN 27 FEDERAL COM	WOLFCAMP A	APACHE CORP LEA 4583 09/01/2019 02/26/2020 0EF33AE781	
30025460720000	BLACK & TAN 27 FEDERAL COM #401H	BLACK & TAN 27 FEDERAL COM	WOLFCAMP A	APACHE CORP LEA 4666 10/19/2019 01/22/2020 AFD8F0925C	
30025460730000	BLACK & TAN 27 FEDERAL COM #402H	BLACK & TAN 27 FEDERAL COM	WOLFCAMP SANDS XY SAND	APACHE CORP LEA 4561 08/17/2019 02/26/2020 B4C53386	
30025461230000	BLACK & TAN 27 FEDERAL COM #403H	BLACK & TAN 27 FEDERAL COM	WOLFCAMP SANDS XY SAND	APACHE CORP LEA 4629 09/08/2019 02/26/2020 607292AC	
30025460750000	BLACK & TAN 27 FEDERAL COM #406H	BLACK & TAN 27 FEDERAL COM	WOLFCAMP SANDS XY SAND	APACHE CORP LEA 4694 09/29/2019 02/26/2020 F44F2545C	Completed 1st
30025440180000	BLACK & TAN 27 FEDERAL COM #302H	BLACK & TAN 27 FEDERAL COM	3RD BONE SPRING SAND	APACHE CORP LEA 4416 12/11/2017 06/01/2018 163AC020E2	
30025440170000	BLACK & TAN 27 FEDERAL COM #301H	BLACK & TAN 27 FEDERAL COM	3RD BONE SPRING SAND	APACHE CORP LEA 4526 11/15/2017 06/01/2018 402B8A1B23	
30025439210100	BLACK & TAN 27 FEDERAL COM #303H	BLACK & TAN 27 FEDERAL COM	3RD BONE SPRING SAND	APACHE CORP LEA 4360 10/24/2017 05/18/2018 748D250B4E	
30025439400000	BLACK & TAN 27 FEDERAL COM #305H	BLACK & TAN 27 FEDERAL COM	3RD BONE SPRING SAND	APACHE CORP LEA 4524 03/17/2018 05/23/2018 A635466B07	
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. 3rd sand comparison shows stagger is capital waste

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

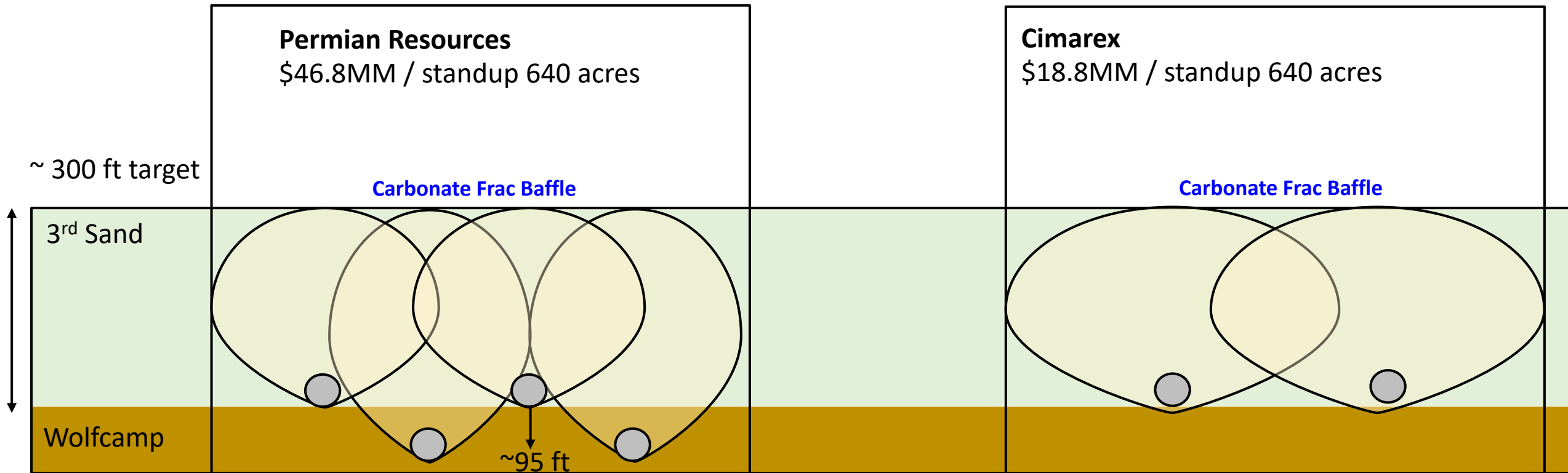
Table 1.0 Comparison of 3rd sand to Wolfcamp	3rd Sand			Wolfcamp	(Wolfcamp - 3rd Sand Delta) = value added from 5 wells
	3rd Bone Spring	3rd Bone Post frac	3rd Sand Delta		
IP30 BOPD	3,356	NA	NA	555	NA
Pre vs. Post frac oil rate BOPD	950	500	-450	+555	105
EUR MMBO	2.51	1.63	-0.88	+0.89	0.01

3rd sand is the landing for this single bench target

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

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

Diagram of Staggered Landing Wolfcamp + 3rd SS vs. 3rd SS Flat



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

Black and Tan Analog Comparison To MP/LG

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

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

Table 1.3 Reserves Economic Comparison 10MM Technical EUR DSU

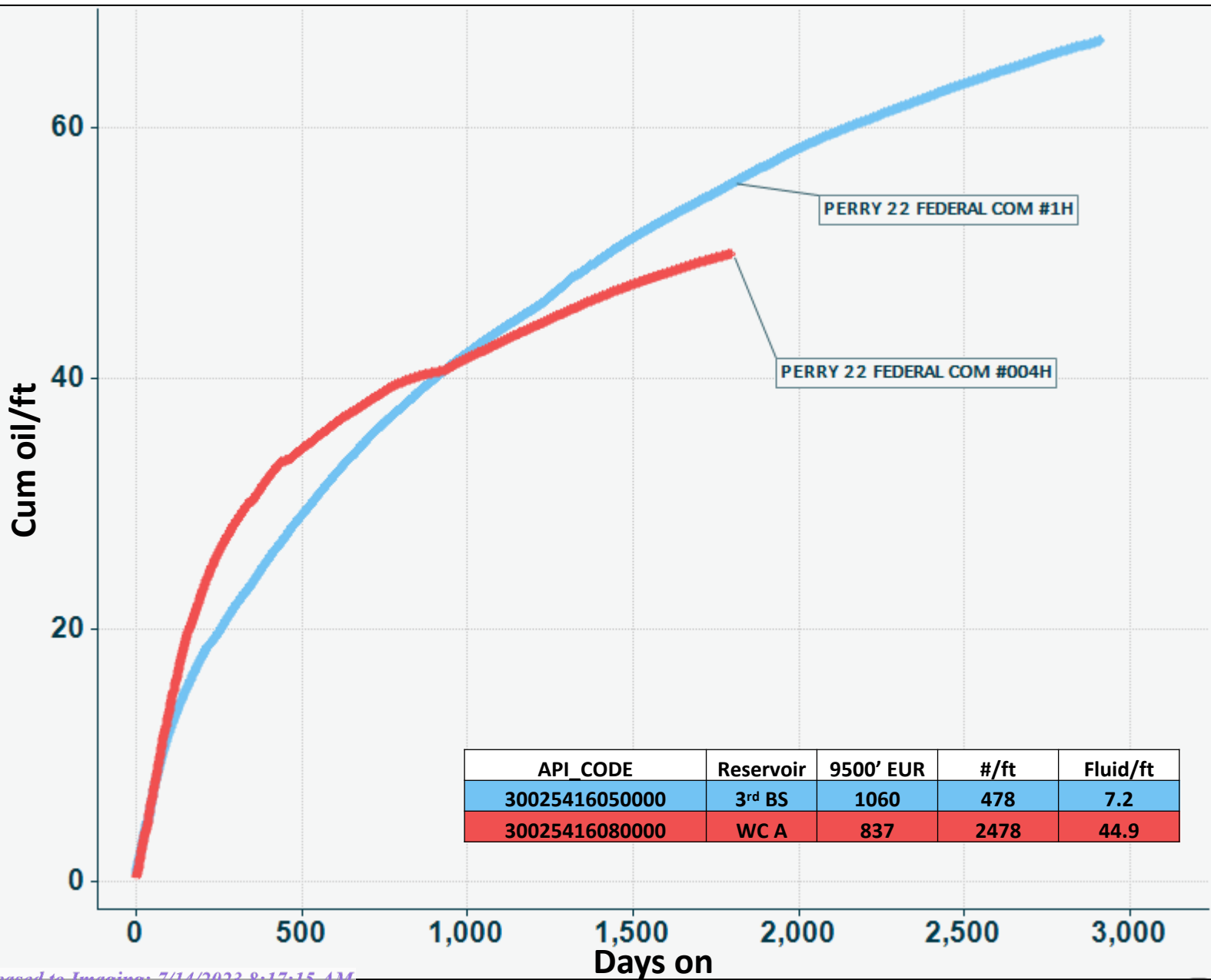
\$65 flat analysis at Cimarex WI & NRI			Permian		Cimarex	
Reserves	IP	Economic EUR MBO	PV10 \$MM	Payout months	PV10 \$MM	Payout months
100%	14,738	8,860	14.7	43	41.8	12
110% expected	16,212	9,820	21.4	33		
120% expected	17,685	10,780	28.2	26		
130% expected	19,159	11,740	34.9	23		
140% expected	20,633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

Table 1.4 Development Comparison 12MM Technical EUR DSU

\$65 flat analysis at Cimarex WI & NRI			Permian		Cimarex	
12 MM EUR	IP	Economic EUR MBO	PV10 \$MM	Payout months	PV10	Payout months
100%	18,897	11,026	34.8	23	61.9	10
110% expected	20,787	12,987	43.6	20		
120% expected	22,676	14,233	52.3	18		
130% expected	24,566	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
- Permian plan supports slower development speed

EXHIBIT
C-10



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

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

Exhibit C12 3rd SS WC API List

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
30025400400000	QUAIL RIDGE 32 STATE 3H	CIMAREX ENERGY CO	3rd SS
30025400860000	MALLON 35 FEDERAL 7H	CIMAREX ENERGY CO	3rd SS
30025401150000	LYNCH 23 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS
30025401230000	LYNCH 23 FEDERAL 2H	CIMAREX ENERGY CO	3rd SS
30025401350000	MALLON 34 FEDERAL 20	CIMAREX ENERGY CO	3rd SS
30025402530100	CHAPARRAL 33 FEDERAL 3H	CIMAREX ENERGY CO	3rd SS
30025403270000	HANSON 26 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS
30025403280000	CHAPARRAL 33 FEDERAL COM 4	CIMAREX ENERGY CO	3rd SS
30025403300000	EAGLE `2` STATE 006H	MATADOR PRODUCTION CO	3rd SS
30025403610000	QUAIL `16` STATE COM 003H	FASKEN OIL & RANCH LTD	3rd SS
30025403880100	KING COBRA 2 STATE 1H	COG OPERATING LLC	3rd SS
30025403970000	AIRSTRIIP 6 STATE COM 2H	COG OPERATING LLC	3rd SS
30025404040000	WILD COBRA 1 STATE 2H	COG OPERATING LLC	3rd SS
30025404050100	PLAYA 2 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025404250000	WEST PEARL 36 STATE 002H	COG OPERATING LLC	3rd SS
30025404300000	TIGER `11` FEDERAL 1H	COG OPERATING LLC	3rd SS
30025405310000	QUAIL `16` STATE 004H	FASKEN OIL & RANCH LTD	3rd SS
30025405490000	PLAYA 2 STATE 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025406040100	IGLOO 19 STATE 2H	CAZA OPERATING LLC	3rd SS
30025406110000	IRONHOUSE 20 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025406340000	BUTTER CUP 35 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025406370000	HANSON 26 FEDERAL 3H	CIMAREX ENERGY CO	3rd SS
30025406400000	BUTTER CUP 36 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025406410000	BUTTER CUP 36 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025406420000	BUTTER CUP 35 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025406760100	IRONHOUSE 19 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025406970000	LAGUNA 23 FEDERAL COM 002H	EARTHSTONE OPERATING LLC	3rd SS
30025406980100	LEA UNIT 30H	LEGACY RESERVES OPERATING LP	3rd SS
30025406990100	LEA UNIT 31H	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
30025407420000	LAGUNA 23 FEDERAL COM 1H	EARTHSTONE OPERATING LLC	3rd SS
30025407480000	IRONHOUSE 20 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025407500000	LYNCH 35-2H	CIMAREX ENERGY CO	3rd SS
30025407780100	PRICKLY PEAR 6 FEDERAL 4H	COG OPERATING LLC	3rd SS
30025408040000	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
30025408360000	MERIT 32 DM STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025408410000	QUAIL 11 STATE COM 1H	CIMAREX ENERGY CO	3rd SS
30025408420000	QUAIL 11 STATE COM 2H	CIMAREX ENERGY CO	3rd SS
30025408750000	AIRCOBRA 12 STATE 1H	COG OPERATING LLC	3rd SS

Exhibit C12 3rd SS WC API List

30025408840000	MERIT 6 EH STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025409420000	QUAIL `16` STATE 007H	FASKEN OIL & RANCH LTD	3rd SS
30025409700000	STRATOJET 31 STATE COM 2H	COG OPERATING LLC	3rd SS
30025409770100	TRES PRIMOS 3 STATE 1H	COG OPERATING LLC	3rd SS
30025409840000	MARATHON ROAD 14 NC FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025410250000	CONDOR STATE 2H	COG OPERATING LLC	3rd SS
30025410500000	IRONHOUSE 19 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025410600000	KING COBRA 2 STATE 2H	COG OPERATING LLC	3rd SS
30025410940000	IRONHOUSE 19 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025411060100	GOOSE STATE 001H	COG OPERATING LLC	3rd SS
30025411100000	WILD COBRA 1 STATE 1H	COG OPERATING LLC	3rd SS
30025411310000	PERLA NEGRA FEDERAL COM 1H	XTO ENERGY INC	3rd SS
30025411410000	QUAIL 11 STATE COM 3H	CIMAREX ENERGY CO	3rd SS
30025411480100	CAPROCK 27 STATE FEDERAL COM 1H	RAYBAW OPERATING LLC	3rd SS
30025411520000	AIRSTRIPE FEE COM 1H	COG OPERATING LLC	3rd SS
30025411630000	IRONHOUSE 24 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025412010000	GOOSE STATE COM 2H	COG OPERATING LLC	3rd SS
30025412100100	QUAIL 11 STATE COM 4H	CIMAREX ENERGY CO	3rd SS
30025412150000	MARATHON ROAD 14 MD FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025412450200	IRONHOUSE `19` STATE COM 004H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025413050100	HAMON A FEDERAL COM 3H	LEGACY RESERVES OPERATING LP	3rd SS
30025413580100	TUSK FEDERAL 4H	COG OPERATING LLC	3rd SS
30025413660000	QUAIL `16` STATE 8H	FASKEN OIL & RANCH LTD	3rd SS
30025413670100	LEA SOUTH 25 FEDERAL COM 5H	EARTHSTONE OPERATING LLC	3rd SS
30025415190100	NIGHTHAWK STATE COM 1H	MARATHON OIL PERMIAN LLC	3rd SS
30025415320000	SCHARB 10 PA STATE 1H	MEWBOURNE OIL CO	3rd SS
30025415440000	ALBATROSS STATE COM 2H	COG OPERATING LLC	3rd SS
30025415620000	TANGO BTP STATE COM 004H	EOG RESOURCES INC	3rd SS
30025415720100	PRICKLY PEAR 6 FEDERAL 2H	COG OPERATING LLC	3rd SS
30025415730000	TUSK FEDERAL 3H	COG OPERATING LLC	3rd SS
30025415740000	TUSK FEDERAL 5H	COG OPERATING LLC	3rd SS
30025415750000	MARATHON ROAD 15 PA FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025415950000	IRONHOUSE 24 STATE COM 002H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025416050000	PERRY 22 FEDERAL COM 1H	CIMAREX ENERGY CO	3rd SS
30025416120100	ORIOLE STATE 1H	COG OPERATING LLC	3rd SS
30025416170000	HAMON A FEDERAL COM 4H	LEGACY RESERVES OPERATING LP	3rd SS
30025416290000	PRICKLY PEAR 6 FEDERAL 3H	COG OPERATING LLC	3rd SS
30025416300100	HAMON FEDERAL COM A 2H	LEGACY RESERVES OPERATING LP	3rd SS
30025416440000	LYNCH 35 FED COM 3H	CIMAREX ENERGY CO	3rd SS
30025416950000	IRONHOUSE 24 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025416960000	IRONHOUSE 24 STATE COM 004H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025417140000	TOMCAT FEE 1H	COG OPERATING LLC	3rd SS
30025417520000	CUATRO HIJOS FEE 4H	COG OPERATING LLC	3rd SS
30025417750000	SCHARB 10 B3OB STATE 1H	MEWBOURNE OIL CO	3rd SS
30025418080000	MALLON 27 FEDERAL COM 003H	MATADOR PRODUCTION CO	3rd SS
30025418090000	ALBATROSS STATE COM 1H	COG OPERATING LLC	3rd SS
30025418330000	TIGER 11 FEDERAL 2H	COG OPERATING LLC	3rd SS
30025418340000	CORDONIZ 28 FEDERAL COM 4H	CIMAREX ENERGY CO	3rd SS
30025418350000	KINGFISHER STATE COM 1H	COG OPERATING LLC	3rd SS
30025418360000	KINGFISHER STATE COM 2H	COG OPERATING LLC	3rd SS
30025418580000	TEAL 12 STATE 2H	CIMAREX ENERGY CO	3rd SS
30025418610000	PERLA VERDE 31 STATE 2H	XTO ENERGY INC	3rd SS

Exhibit C12 3rd SS WC API List

30025418620000	PERLA VERDE 31 STATE 003H	XTO ENERGY INC	3rd SS
30025418630000	PERLA VERDE 31 STATE 4H	XTO ENERGY INC	3rd SS
30025418790000	CHAPARRAL 33 FEDERAL COM 5H	CIMAREX ENERGY CO	3rd SS
30025418980000	LEA SOUTH 25 FEDERAL COM 6H	EARTHSTONE OPERATING LLC	3rd SS
30025419450000	MARATHON ROAD 15 B3OB FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025419470000	PALOMA 21 FEDERAL COM 4H	FASKEN OIL & RANCH LTD	3rd SS
30025419860000	SCHARB 10 B3NC STATE 1H	MEWBOURNE OIL CO	3rd SS
30025419870100	SUPER COBRA STATE COM 1H	COG OPERATING LLC	3rd SS
30025419930000	PALOMA 21 FEDERAL COM 1H	FASKEN OIL & RANCH LTD	3rd SS
30025419940000	PALOMA 21 FEDERAL COM 2H	FASKEN OIL & RANCH LTD	3rd SS
30025419950000	PALOMA 21 FEDERAL COM 3H	FASKEN OIL & RANCH LTD	3rd SS
30025420340000	STRATOSPHERE 36 STATE COM 3H	COG OPERATING LLC	3rd SS
30025420350000	STRATOSPHERE 36 STATE COM 4H	COG OPERATING LLC	3rd SS
30025420360000	STRATOSPHERE 36 STATE COM 5H	COG OPERATING LLC	3rd SS
30025420370000	STRATOSPHERE 36 STATE COM 6H	COG OPERATING LLC	3rd SS
30025420630000	PERLA VERDE 31 STATE 001H	XTO ENERGY INC	3rd SS
30025420800000	NORTH LEA `3` FEDERAL COM 001H	READ & STEVENS INC	3rd SS
30025421290000	TRES PRIMOS 3 STATE 2H	COG OPERATING LLC	3rd SS
30025421410000	PEARL WEST 36 STATE COM 6H	COG OPERATING LLC	3rd SS
30025421450000	WEST PEARL 36 STATE COM 003H	COG OPERATING LLC	3rd SS
30025421460000	PEARL WEST 36 STATE COM 4H	COG OPERATING LLC	3rd SS
30025421470000	WEST PEARL 36 STATE COM 005H	COG OPERATING LLC	3rd SS
30025421730000	RAPTOR WEST 3 STATE 004H	MARATHON OIL PERMIAN LLC	3rd SS
30025422010000	MARATHON ROAD 15 NC FEDERAL 1H	MEWBOURNE OIL CO	3rd SS
30025422120000	MALLON 27 FEDERAL COM 001H	MATADOR PRODUCTION CO	3rd SS
30025422270000	NORTH LEA 3 FEDERAL COM 002H	READ & STEVENS INC	3rd SS
30025422280000	NORTH LEA `3` FEDERAL COM 003H	READ & STEVENS INC	3rd SS
30025422680000	LEA 7 FEDERAL COM 1H	CIMAREX ENERGY CO	3rd SS
30025422760000	CUATRO HIJOS FEE 3H	COG OPERATING LLC	3rd SS
30025422920000	BLACK PEARL 1 FEDERAL COM 1H	COG OPERATING LLC	3rd SS
30025422930000	BLACK PEARL 1 FEDERAL 002H	COG OPERATING LLC	3rd SS
30025422940000	BLACK PEARL 1 FEDERAL 3H	COG OPERATING LLC	3rd SS
30025422950000	BLACK PEARL 1 FEDERAL 4H	COG OPERATING LLC	3rd SS
30025423150000	MALLON 27 FEDERAL COM 2H	MATADOR PRODUCTION CO	3rd SS
30025423380100	BLUE JAY FEDERAL 001H	COG OPERATING LLC	3rd SS
30025423420000	LEA UNIT 32H	LEGACY RESERVES OPERATING LP	3rd SS
30025423430000	LEA UNIT 33H	LEGACY RESERVES OPERATING LP	3rd SS
30025423440000	LEA UNIT 34H	LEGACY RESERVES OPERATING LP	3rd SS
30025423520000	CIMARRON 16-19-34 RN STATE 134H	MATADOR PRODUCTION CO	3rd SS
30025423570100	IGLOO `19` STATE 3H	CAZA OPERATING LLC	3rd SS
30025423670000	BUTTER CUP 36 STATE COM 003H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025423770000	IGGLES STATE COM 001H	COG OPERATING LLC	3rd SS
30025424300000	STRATOJET 31 STATE COM 8H	COG OPERATING LLC	3rd SS
30025424720000	KINGFISHER STATE COM 5H	COG OPERATING LLC	3rd SS
30025424990000	PICKARD 20 18 34 RN STATE 124H	MATADOR PRODUCTION CO	3rd SS
30025425210000	SCHARB 10 B3MD STATE 1H	MEWBOURNE OIL CO	3rd SS
30025425460000	LEA 7 FEDERAL COM 2H (P&A 12/27/	CIMAREX ENERGY CO	3rd SS
30025425770000	PERLA NEGRA FEDERAL COM 4H	XTO ENERGY INC	3rd SS
30025426840000	NORTH LEA `3` FEDERAL COM 004H	READ & STEVENS INC	3rd SS
30025427090000	PERLA NEGRA FEDERAL COM 2H	XTO ENERGY INC	3rd SS
30025427100000	PERLA NEGRA FEDERAL COM 3H	XTO ENERGY INC	3rd SS
30025428850000	LEA UNIT 44H	LEGACY RESERVES OPERATING LP	3rd SS

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30025429490000	LEA UNIT 54H	LEGACY RESERVES OPERATING LP	3rd SS
30025429500000	MAS FEDERAL 3H	COG OPERATING LLC	3rd SS
30025429580000	LEA UNIT 051H	LEGACY RESERVES OPERATING LP	3rd SS
30025429720000	DESERT ROSE 17-8 FEDERAL COM 001	CAZA OPERATING LLC	3rd SS
30025429790000	CIMARRON 16 19S 34E RN STATE COM	MATADOR PRODUCTION CO	3rd SS
30025429880100	EAGLECLAW FEDERAL 001H	CAZA OPERATING LLC	3rd SS
30025430290000	LEA SOUTH 25 FEDERAL COM 3BS 007	EARTHSTONE OPERATING LLC	3rd SS
30025430350000	LEA UNIT 059H	LEGACY RESERVES OPERATING LP	3rd SS
30025430540000	DELLA 29 FEDERAL COM 602H	EOG RESOURCES INC	3rd SS
30025430770000	LEA UNIT 038H	LEGACY RESERVES OPERATING LP	3rd SS
30025432470100	LEA UNIT 062H	LEGACY RESERVES OPERATING LP	3rd SS
30025432500000	HAMON A FED COM 009H	LEGACY RESERVES OPERATING LP	3rd SS
30025434150000	SEVERUS 31 FEDERAL COM 001H	XTO ENERGY INC	3rd SS
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	AIRSTRIIP 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
30025440180000	BLACK & TAN 27 FEDERAL COM 302H	APACHE CORP	3rd SS
30025440440000	BLACK & TAN 27 FEDERAL COM 307H	APACHE CORP	3rd SS
30025440450000	BLACK AND TAN 27 FEDERAL COM 308	APACHE CORP	3rd SS
30025440920000	MAS FEDERAL COM 001H	COG OPERATING LLC	3rd SS
30025442130000	CHIEF 30 STATE 8H	CIMAREX ENERGY CO	3rd SS
30025443230000	AIRSTRIIP 31-18-35 RN STATE COM 1	MATADOR PRODUCTION CO	3rd SS
30025443410000	VERNA RAE FEDERAL COM 133H	MATADOR PRODUCTION CO	3rd SS
30025443420000	VERNA RAE FEDERAL COM 134H	MATADOR PRODUCTION CO	3rd SS
30025444740000	DELLA 29 FEDERAL COM 603H	EOG RESOURCES INC	3rd SS
30025444750000	DELLA 29 FEDERAL 604H	EOG RESOURCES INC	3rd SS
30025444760000	DELLA 29 FEDERAL 605H	EOG RESOURCES INC	3rd SS
30025444770000	DELLA 29 FEDERAL 606H	EOG RESOURCES INC	3rd SS
30025444950000	EAGLECLAW FEDERAL COM 002H	CAZA OPERATING LLC	3rd SS
30025445090000	AIRSTRIIP 31-18-35 RN STATE COM 1	MATADOR PRODUCTION CO	3rd SS
30025449080000	CHIEF 30 STATE 9H	CIMAREX ENERGY CO	3rd SS
30025450540000	MESCALERO RIDGE 21 FEDERAL 1H	CIMAREX ENERGY CO	3rd SS
30025451540000	LEA UNIT 066H	LEGACY RESERVES OPERATING LP	3rd SS
30025451990000	LEA 7 FEDERAL COM 29H	CIMAREX ENERGY CO	3rd SS
30025452000000	LEA 7 FEDERAL COM 30H	CIMAREX ENERGY CO	3rd SS
30025452100000	LEA UNIT 065H	LEGACY RESERVES OPERATING LP	3rd SS
30025454380000	AIRSTRIIP 31-18S-35E RN STATE COM	MATADOR PRODUCTION CO	3rd SS
30025458960000	ANCHOR 19 35 33 STATE 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025461400000	CABLE 19 35 9 STATE COM 001H	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025467680000	HEREFORD 29-20 W1OB FED COM 001H	MEWBOURNE OIL CO	3rd SS
30025468030000	SANTA VACA 19-18 B3MD STATE COM	MEWBOURNE OIL CO	3rd SS

Exhibit C12 3rd SS WC API List

30025474570000	TALON 5-8 FEDERAL 001H	CAZA OPERATING LLC	3rd SS
30025474830000	HEREFORD 29-20 W1MD STATE COM 00	MEWBOURNE OIL CO	3rd SS
30025474840000	HEREFORD 29-20 W1NC STATE COM 00	MEWBOURNE OIL CO	3rd SS
30025474860000	TALON 5-8 FEDERAL 005H	CAZA OPERATING LLC	3rd SS
30025491550000	SANTA VACA 19 18 B3NC STATE COM	MEWBOURNE OIL CO	3rd SS
30025499040000	CHAROLAIS 28 21 W1MD STATE COM 0	MEWBOURNE OIL CO	3rd SS
30025499350000	HEREFORD 29 20 W1PA STATE COM 00	MEWBOURNE OIL CO	3rd SS
30025501680000	FOXTAIL E2 05 32 W1 STATE COM 00	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025501690000	FOXTAIL E2 05 32 W1 STATE COM 00	FRANKLIN MOUNTAIN ENERGY 3 LLC	3rd SS
30025502420000	SANTA VACA 19-18 B3OB FEE 001H	MEWBOURNE OIL CO	3rd SS
30025503260000	SANTA VACA 19-18 B3PA FEE 001H	MEWBOURNE OIL CO	3rd SS
30025507240000	MESCALERO RIDGE 21-28 FED COM 2H	CIMAREX ENERGY CO	3rd SS
30025416080000	PERRY 22 FEDERAL COM 4H	CIMAREX ENERGY CO	Wolfcamp
30025419500000	NIGHTHAWK STATE COM 003H	MARATHON OIL PERMIAN LLC	Wolfcamp
30025430530000	DELLA 29 FEDERAL COM 701H	EOG RESOURCES INC	Wolfcamp
30025431100000	LEA SOUTH 25 FEDERAL COM WCA 012	EARTHSTONE OPERATING LLC	Wolfcamp
30025433950000	AIRSTRIP 31 18 35 RN STATE COM 2	MATADOR PRODUCTION CO	Wolfcamp
30025434820000	MAS FEDERAL 4H	COG OPERATING LLC	Wolfcamp
30025442140100	MAS FEDERAL COM 002H	COG OPERATING LLC	Wolfcamp
30025444940000	VERNA RAE FEDERAL COM 204H	MATADOR PRODUCTION CO	Wolfcamp
30025450980100	LITTLE BEAR FEDERAL COM 001H	COG OPERATING LLC	Wolfcamp
30025450990000	LITTLE BEAR FEDERAL COM 003H	COG OPERATING LLC	Wolfcamp
30025451000000	LITTLE BEAR FEDERAL COM 004H	COG OPERATING LLC	Wolfcamp
30025451020000	LITTLE BEAR FEDERAL COM 006H	COG OPERATING LLC	Wolfcamp
30025451030000	LITTLE BEAR FEDERAL COM 007H	COG OPERATING LLC	Wolfcamp
30025451040000	LITTLE BEAR FEDERAL COM 008H	COG OPERATING LLC	Wolfcamp
30025451050000	LITTLE BEAR FEDERAL COM 009H	COG OPERATING LLC	Wolfcamp
30025451490000	LITTLE BEAR FEDERAL COM 002H	COG OPERATING LLC	Wolfcamp
30025452110100	LEA UNIT 100H	LEGACY RESERVES OPERATING LP	Wolfcamp
30025460720000	BLACK & TAN 27 FEDERAL COM 401H	APACHE CORP	Wolfcamp
30025460730000	BLACK & TAN 27 FEDERAL COM 402H	APACHE CORP	Wolfcamp
30025460750000	BLACK & TAN 27 FEDERAL COM 406H	APACHE CORP	Wolfcamp
30025461230000	BLACK & TAN 27 FEDERAL COM 403H	APACHE CORP	Wolfcamp
30025461240000	BLACK & TAN 27 FEDERAL COM 405H	APACHE CORP	Wolfcamp

TAB 5

Case Nos. 23452-23455

Exhibit D: Self-Affirmed Statement of Notice, Darin C. Savage
Exhibit D-1: Notice Letter
Exhibit D-2: Mailing List
Exhibit D-3: Affidavits of Publication

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

Case Nos. 23452-23455

SELF-AFFIRMED STATEMENT OF NOTICE

[illegible]

I, Darin C. Savage, attorney and authorized representative of Cimarex Energy Co. (“Cimarex”), the Applicant herein, being first duly sworn, upon oath, states the following:

1. Notice of the applications and hearing in the above-reference cases was timely sent by certified mail, return receipt requested, through the United States Postal Service on March 15, 2023, to all uncommitted interest owners sought to be pooled in this proceeding. *See* Exhibit D-2, attached hereto. Copies of notice letters and evidence of mailing to parties are attached hereto as Exhibits D-1 and D-2.

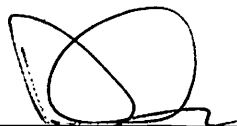
2. Notice was sent to the Hobbs News-Sun, a newspaper of general circulation in Lea County, New Mexico, and timely published in said newspaper on March 17, 2023. *See* Exhibit D-

3.

EXHIBIT
D

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

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



Darin Savage

7-13-2023

Date Signed



For the Pursuit of Energy

ABADIE | SCHILL PC

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

March 15, 2023

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and compulsory pooling, Lea County, New Mexico
Loosey Goosey 4-9 Fed Com 204H Well (Case No. 23452)
Loosey Goosey 4-9 Fed Com 304H Well (Case No. 23452)

Case No. 23452:

Dear Interest Owners:

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

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

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

abadieschill.com

214 McKenzie Street, Santa Fe, New Mexico, 87501

O : 970.385.4401 • F : 970.385.4901

**EXHIBIT
D-1**

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

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

Parties appearing in cases are required by Division Rule 19.15.4.13.B NMAC to file a Pre-hearing 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,

A handwritten signature in black ink, appearing to read 'Darin C. Savage', written over a horizontal line.

Darin C. Savage

Attorney for Cimarex Energy Co.



For the Pursuit of Energy

ABADIE | SCHILL PC

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

March 15, 2023

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and
compulsory pooling, Lea County, New Mexico
Loosey Goosey 4-9 Fed Com 301H Well (Case No. 23453)

Case No. 23453:

Dear Interest Owners:

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

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

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

abadieschill.com

214 McKenzie Street, Santa Fe, New Mexico, 87501

O : 970.385.4401 • F : 970.385.4901

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

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

Parties appearing in cases are required by Division Rule 19.15.4.13.B NMAC to file a Pre-hearing 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,

A handwritten signature in black ink, appearing to read 'Darin C. Savage', written over a horizontal line.

Darin C. Savage

Attorney for Cimarex Energy Co.



For the Pursuit of Energy

ABADIE | SCHILL PC

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

March 15, 2023

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and
compulsory pooling, Lea County, New Mexico
Loosey Goosey 4-9 Fed Com 302H Well (Case No. 23454)

Case No. 23454:

Dear Interest Owners:

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

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

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

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214 McKenzie Street, Santa Fe, New Mexico, 87501

O : 970.385.4401 • F : 970.385.4901

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

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

Parties appearing in cases are required by Division Rule 19.15.4.13.B NMAC to file a Pre-hearing 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,

A handwritten signature in black ink, appearing to read 'Darin C. Savage', written over a horizontal line.

Darin C. Savage

Attorney for Cimarex Energy Co.



For the Pursuit of Energy

ABADIE | SCHILL PC

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

March 15, 2023

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re: Application of Cimarex Energy Co., for a horizontal spacing unit and
compulsory pooling, Lea County, New Mexico
Loosey Goosey 4-9 Fed Com 303H Well (Case No. 23455)

Case No. 23455:

Dear Interest Owners:

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

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

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

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214 McKenzie Street, Santa Fe, New Mexico, 87501

O : 970.385.4401 • F : 970.385.4901

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

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

Parties appearing in cases are required by Division Rule 19.15.4.13.B NMAC to file a Pre-hearing 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,

A handwritten signature in black ink, appearing to read 'Darin C. Savage', written over a horizontal line.

Darin C. Savage

Attorney for Cimarex Energy Co.

Mailing (23452)

ReferenceNumber	TYPE	Name1	Name2	Address1	Address2	Address3 City	State	Zip
4207.27	RI	Bureau of Land Management		414 W Taylor St		Hobbs	NM	88240
4207.27	WI	Moore & Shelton Co., Ltd		PO Box 3070		Galveston	TX	77552
4207.27	WI	HOG Partnership, LP		5950 Cedar Springs Rd.		Dallas	TX	75235
4207.27	WI	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210	Midland	TX	79701
4207.27	WI	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	TX	79701
4207.27	WI	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000	Midland	TX	79701
4207.27	WI	Francis Hill Hudson, Trustee of Lindy's Living Trust		4200 S. Hulen St.	Suite 302	Fort Worth	TX	76109
4207.27	WI	Bank of America, N.A., Successor Trustee of	the Delmar Hudson Lewis Living Trust	301 Commerce St.	Suite 2400	Fort Worth	TX	76102
4207.27	WI	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600	Midland	TX	79701
4207.27	WI	Zorro Partners, Ltd.		616 Texas St.		Fort Worth	TX	76102
4207.27	WI	Frost Bank, Trustee of the Josephine T. Hudson	Testamentary Trust FBO J. Terrell Ard	640 Taylor Street	17th floor	Fort Worth	TX	76102
4207.27	WI	Ard Oil, LTD		PO Box 101027		Fort Worth	TX	76185
4207.27	WI	Chase Oil Corporation		PO Box 1767		Artesia	NM	88211
4207.27	WI	Avalon Energy Corporation		310 West Wall St.	Suite 305	Midland	TX	79701
4207.27	WI	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220	Denver	CO	80203
4207.27	WI	Prime Rock Resources AgentCo, Inc., as nominee	for the benefit of Prime Rock Resources, LLC	203 W. Wall Street	Suite 1000	Midland	TX	79701
4207.27	WI	Marks Oil, Inc.		1775 Sherman St.	Suite 2990	Denver	CO	80203
4207.27	WI	Javelina Partners		616 Texas St.		Fort Worth	TX	76102
4207.27	WI	William A. Hudson, II		616 Texas St.		Fort Worth	TX	76102
4207.27	WI	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle		Dallas	TX	75225

EXHIBIT
D-2

Mailing (23453)

ReferenceNumber	TYPE	Name1	Name2	Address1	Address2	Address3	City	State	Zip
4207.27	RI	Bureau of Land Management		414 W Taylor St			Hobbs	NM	88240
4207.27	WI	Moore & Shelton Co., Ltd		PO Box 3070			Galveston	TX	77552
4207.27	WI	HOG Partnership, LP		5950 Cedar Springs Rd.			Dallas	TX	75235
4207.27	WI	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210		Midland	TX	79701
4207.27	WI	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	TX	79701
4207.27	WI	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	TX	79701
4207.27	WI	Francis Hill Hudson, Trustee of Lindy's Living Trust		4200 S. Hulen St.	Suite 302		Fort Worth	TX	76109
4207.27	WI	Bank of America, N.A., Successor Trustee of the Delmar Hudson Lewis Living Trust		301 Commerce St.	Suite 2400		Fort Worth	TX	76102
4207.27	WI	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600		Midland	TX	79701
4207.27	WI	Zorro Partners, Ltd.		616 Texas St.			Fort Worth	TX	76102
4207.27	WI	Frost Bank, Trustee of the Josephine T.		640 Taylor Street	17th floor		Fort Worth	TX	76102
4207.27	WI	Ard Oil, LTD		PO Box 101027			Fort Worth	TX	76185
4207.27	WI	Chase Oil Corporation		PO Box 1767			Artesia	NM	88211
4207.27	WI	Avalon Energy Corporation		310 West Wall St.	Suite 305		Midland	TX	79701
4207.27	WI	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220		Denver	CO	80203
4207.27	WI	Prime Rock Resources AgentCo, Inc., as nominee for the benefit of Prime Rock Resources, LLC		203 W. Wall Street	Suite 1000		Midland	TX	79701
4207.27	WI	Marks Oil, Inc.		1775 Sherman St.	Suite 2990		Denver	CO	80203
4207.27	WI	Javelina Partners		616 Texas St.			Fort Worth	TX	76102
4207.27	WI	William A. Hudson, II		616 Texas St.			Fort Worth	TX	76102
4207.27	WI	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle			Dallas	TX	75225

Mailing (23454)

ReferenceNumber	TYPE	Name1	Name2	Address1	Address2	Address3	City	State	Zip
4207.27	RI	Bureau of Land Management		414 W Taylor St			Hobbs	NM	88240
4207.27	WI	Moore & Shelton Co., Ltd		PO Box 3070			Galveston	TX	77552
4207.27	WI	HOG Partnership, LP		5950 Cedar Springs Rd.			Dallas	TX	75235
4207.27	WI	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210		Midland	TX	79701
4207.27	WI	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	TX	79701
4207.27	WI	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	TX	79701
4207.27	WI	Francis Hill Hudson, Trustee of Lindy's Living Trust		4200 S. Hulen St.	Suite 302		Fort Worth	TX	76109
4207.27	WI	Bank of America, N.A., Successor Trustee of the Delmar Hudson Lewis Living Trust		301 Commerce St.	Suite 2400		Fort Worth	TX	76102
4207.27	WI	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600		Midland	TX	79701
4207.27	WI	Zorro Partners, Ltd.		616 Texas St.			Fort Worth	TX	76102
4207.27	WI	Frost Bank, Trustee of the Josephine T.		640 Taylor Street	17th floor		Fort Worth	TX	76102
4207.27	WI	Ard Oil, LTD		PO Box 101027			Fort Worth	TX	76185
4207.27	WI	Chase Oil Corporation		PO Box 1767			Artesia	NM	88211
4207.27	WI	Avalon Energy Corporation		310 West Wall St.	Suite 305		Midland	TX	79701
4207.27	WI	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220		Denver	CO	80203
4207.27	WI	Prime Rock Resources AgentCo, Inc., as nominee for the benefit of Prime Rock Resources, LLC		203 W. Wall Street	Suite 1000		Midland	TX	79701
4207.27	WI	Marks Oil, Inc.		1775 Sherman St.	Suite 2990		Denver	CO	80203
4207.27	WI	Javelina Partners		616 Texas St.			Fort Worth	TX	76102
4207.27	WI	William A. Hudson, II		616 Texas St.			Fort Worth	TX	76102
4207.27	WI	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle			Dallas	TX	75225

Mailing (23455)

ReferenceNumber	TYPE	Name1	Name2	Address1	Address2	Address3	City	State	Zip
4207.27	RI	Bureau of Land Management		414 W Taylor St			Hobbs	NM	88240
4207.27	WI	Moore & Shelton Co., Ltd		PO Box 3070			Galveston	TX	77552
4207.27	WI	HOG Partnership, LP		5950 Cedar Springs Rd.			Dallas	TX	75235
4207.27	WI	Challenger Crude, Ltd.		400 West Illinois Ave.	Suite 1210		Midland	TX	79701
4207.27	WI	Read & Stevens, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	TX	79701
4207.27	WI	First Century Oil, Inc.		300 N. Marienfeld St.	Suite 1000		Midland	TX	79701
4207.27	WI	Francis Hill Hudson, Trustee of Lindy's Living Trust		4200 S. Hulen St.	Suite 302		Fort Worth	TX	76109
4207.27	WI	Bank of America, N.A., Successor Trustee of the Delmar Hudson Lewis Living Trust		301 Commerce St.	Suite 2400		Fort Worth	TX	76102
4207.27	WI	Magnum Hunter Production		600 N. Marienfeld St.	Suite 600		Midland	TX	79701
4207.27	WI	Zorro Partners, Ltd.		616 Texas St.			Fort Worth	TX	76102
4207.27	WI	Frost Bank, Trustee of the Josephine T.		640 Taylor Street	17th floor		Fort Worth	TX	76102
4207.27	WI	Ard Oil, LTD		PO Box 101027			Fort Worth	TX	76185
4207.27	WI	Chase Oil Corporation		PO Box 1767			Artesia	NM	88211
4207.27	WI	Avalon Energy Corporation		310 West Wall St.	Suite 305		Midland	TX	79701
4207.27	WI	Wilbanks Reserve Corporation		450 E. 17th Ave	Suite 220		Denver	CO	80203
4207.27	WI	Prime Rock Resources AgentCo, Inc., as nominee for the benefit of Prime Rock Resources, LLC		203 W. Wall Street	Suite 1000		Midland	TX	79701
4207.27	WI	Marks Oil, Inc.		1775 Sherman St.	Suite 2990		Denver	CO	80203
4207.27	WI	Javelina Partners		616 Texas St.			Fort Worth	TX	76102
4207.27	WI	William A. Hudson, II		616 Texas St.			Fort Worth	TX	76102
4207.27	WI	Union Hill Oil & Gas Co. Inc.		7712 Glenshannon Circle			Dallas	TX	75225

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

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



March 20, 2023

Dear WALZ GROUP:

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

Item Details

Status: Delivered, Left with Individual
Status Date / Time: March 18, 2023, 02:45 p.m.
Location: DALLAS, TX 75225
Postal Product: First-Class Mail®
Extra Services: Certified Mail™
Return Receipt Electronic
Recipient Name: Union Hill Oil Gas Co Inc

Shipment Details

Weight: 5.0oz

Destination Delivery Address

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

Recipient Signature

Signature of Recipient:

Address of Recipient:

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

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

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

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

Reference Number: 4207.27



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 4830 61.

Item Details

Status: Delivered, Left with Individual
Status Date / Time: March 20, 2023, 03:22 p.m.
Location: FORT WORTH, TX 76102
Postal Product: First-Class Mail®
Extra Services: Certified Mail™
Return Receipt Electronic
Recipient Name: William A Hudson II

Shipment Details

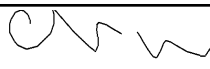
Weight: 5.0oz

Destination Delivery Address

City, State ZIP Code: FORT WORTH, TX 76102-4662

Recipient Signature

Signature of Recipient:


Corey

Address of Recipient:

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

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

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

Reference Number: 4207.27



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 4830 54.

Item Details

Status:	Delivered, Left with Individual
Status Date / Time:	March 20, 2023, 03:22 p.m.
Location:	FORT WORTH, TX 76102
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™
	Return Receipt Electronic
Recipient Name:	Javelina Partners

Shipment Details

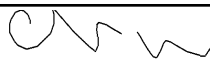
Weight:	5.0oz
----------------	-------

Destination Delivery Address

City, State ZIP Code:	FORT WORTH, TX 76102-4662
------------------------------	---------------------------

Recipient Signature

Signature of Recipient:


Corey

Address of Recipient:

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

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

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

Reference Number: 4207.27



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 4830 47.

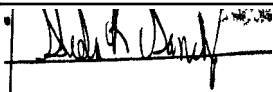
Item Details

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:	5.0oz
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Recipient Signature

Signature of Recipient: (Authorized Agent)	
Address of Recipient:	

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

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

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

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

Reference Number: 4207.27



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 4830 30.

Item Details

Status: Delivered, Left with Individual
Status Date / Time: March 20, 2023, 04:37 p.m.
Location: MIDLAND, TX 79701
Postal Product: First-Class Mail®
Extra Services: Certified Mail™
Return Receipt Electronic
Recipient Name: Prime Rock Resources AgentCo Inc as nominee

Shipment Details

Weight: 5.0oz

Destination Delivery Address

Street Address: 203 W WALL ST
City, State ZIP Code: MIDLAND, TX 79701-4530

Recipient Signature

Signature of Recipient:

Address of Recipient:

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

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

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

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

Reference Number: 4207.27



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 4830 23.

Item Details

Status: Delivered, Front Desk/Reception/Mail Room
Status Date / Time: March 20, 2023, 03:39 p.m.
Location: DENVER, CO 80203
Postal Product: First-Class Mail®
Extra Services: Certified Mail™
Return Receipt Electronic
Recipient Name: Wilbanks Reserve Corporation

Shipment Details

Weight: 5.0oz

Destination Delivery Address

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

Recipient Signature

Signature of Recipient:

WSDS
344

Address of Recipient:

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

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

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

Reference Number: 4207.27



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 4830 09.

Item Details

Status:	Delivered, Individual Picked Up at Post Office
Status Date / Time:	March 20, 2023, 11:20 a.m.
Location:	ARTESIA, NM 88210
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™ Return Receipt Electronic
Recipient Name:	Chase Oil Corporation

Shipment Details

Weight:	5.0oz
----------------	-------

Recipient Signature

Signature of Recipient:

Bear
Brawnyard

Address of Recipient:

1767

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

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

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

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

Reference Number: 4207.27



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 4829 89.

Item Details

Status: Delivered, Left with Individual
Status Date / Time: March 20, 2023, 01:04 p.m.
Location: FORT WORTH, TX 76102
Postal Product: First-Class Mail®
Extra Services: Certified Mail™
Return Receipt Electronic
Recipient Name: Frost Bank Trustee of the Josephine T Hudson

Shipment Details

Weight: 5.0oz

Destination Delivery Address

Street Address: 640 TAYLOR ST
City, State ZIP Code: FORT WORTH, TX 76102-4809

Recipient Signature

Signature of Recipient:

Address of Recipient:

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

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

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

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

Reference Number: 4207.27



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 4829 72.

Item Details

Status: Delivered, Left with Individual
Status Date / Time: March 20, 2023, 03:22 p.m.
Location: FORT WORTH, TX 76102
Postal Product: First-Class Mail®
Extra Services: Certified Mail™
Return Receipt Electronic
Recipient Name: Zorro Partners Ltd

Shipment Details

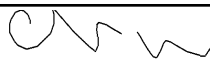
Weight: 5.0oz

Destination Delivery Address

City, State ZIP Code: FORT WORTH, TX 76102-4662

Recipient Signature

Signature of Recipient:


Corey

Address of Recipient:

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

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

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

Reference Number: 4207.27



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 4829 65.

Item Details

Status: Delivered, Individual Picked Up at Post Office
Status Date / Time: March 20, 2023, 01:10 p.m.
Location: MIDLAND, TX 79701
Postal Product: First-Class Mail®
Extra Services: Certified Mail™
Return Receipt Electronic
Recipient Name: Magnum Hunter Production

Shipment Details

Weight: 5.0oz

Destination Delivery Address

Street Address: 600 N MARIENFELD ST STE 600
City, State ZIP Code: MIDLAND, TX 79701-4405

Recipient Signature

Signature of Recipient:

Address of Recipient:

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

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

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

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

Reference Number: 4207.27



March 24, 2023

Dear WALZ GROUP:

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

Item Details

Status: Delivered, Left with 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 N A Successor Trustee of the

Shipment Details

Weight: 5.0oz

Destination Delivery Address

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

Recipient Signature

Signature of Recipient:

J. Garcia
T. Garcia

Address of Recipient:

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

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

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

Reference Number: 4207.27



March 20, 2023

Dear WALZ GROUP:

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

Item Details

Status: Delivered, Left with Individual
Status Date / Time: March 18, 2023, 11:17 a.m.
Location: MIDLAND, TX 79701
Postal Product: First-Class Mail®
Extra Services: Certified Mail™
Return Receipt Electronic
Recipient Name: First Century Oil Inc

Shipment Details

Weight: 5.0oz

Destination Delivery Address

Street Address: 300 N MARIENFELD ST STE 1000
City, State ZIP Code: MIDLAND, TX 79701-4688

Recipient Signature

Signature of Recipient:

Address of Recipient:

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

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

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

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

Reference Number: 4207.27



March 20, 2023

Dear WALZ GROUP:

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

Item Details

Status: Delivered, Left with Individual
Status Date / Time: March 18, 2023, 11:17 a.m.
Location: MIDLAND, TX 79701
Postal Product: First-Class Mail®
Extra Services: Certified Mail™
Return Receipt Electronic
Recipient Name: Read Stevens Inc

Shipment Details

Weight: 5.0oz

Destination Delivery Address

Street Address: 300 N MARIENFELD ST STE 1000
City, State ZIP Code: MIDLAND, TX 79701-4688

Recipient Signature

Signature of Recipient:

Address of Recipient:

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

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

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

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

Reference Number: 4207.27



April 21, 2023

Dear Covius Document Services:

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

Item Details

Status:	Delivered to Agent for Final Delivery
Status Date / Time:	April 20, 2023, 02:40 p.m.
Location:	DURANGO, CO 81301
Postal Product:	First-Class Mail®
Extra Services:	Certified Mail™ Return Receipt Electronic
Recipient Name:	Bureau of Land Management

Shipment Details

Weight:	5.0oz
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Recipient Signature

Signature of Recipient: (Authorized Agent)	
Address of Recipient:	Return!

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

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

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

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

Reference Number: 4207.27

Affidavit of PublicationSTATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
March 17, 2023
and ending with the issue dated
March 17, 2023.



Publisher

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



Business Manager

My commission expires
January 29, 2027

(Seal) STATE OF NEW MEXICO
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
COMMISSION EXPIRES 01/29/2027

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE
March 17, 2023

CASE No. 23452: Notice to all parties and persons having any right, title, interest or claim to this case, including owners of working interest, overriding royalty interest, and record title, among others, as well as to the known and unknown heirs, devisees, assigns and successors of MOORE & SHELTON CO., LTD.; HOG PARTNERSHIP, LP; CHALLENGER CRUDE, LTD.; READ & STEVENS, INC.; FIRST CENTURY OIL, INC.; FRANCIS HILL HUDSON, TRUSTEE OF LINDY'S LIVING TRUST; BANK OF AMERICA, N.A., SUCCESSOR TRUSTEE OF THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD.; FROST BANK, TRUSTEE OF THE JOSEPHINE T. HUDSON TESTAMENTARY TRUST FBO J. TERRELL ARD; ARD OIL, LTD; CHASE OIL CORPORATION; AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION; PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; JAVELINA PARTNERS; WILLIAM A. HUDSON, II and UNION HILL OIL & GAS CO. INC., of Cimarex Energy Co.'s application for approval of a spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division Examiner will conduct a public hearing at 8:15 a.m. on April 6, 2023, traditionally held at 1220 S. St. Francis, Santa Fe, New Mexico, 87505. However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division's website at: <https://www.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 320.89-acre, more or less, horizontal spacing and proration unit comprised of Lot 1 (NE/4 NE/4 equivalent), the SE/4 NE/4, and the E/2 SE/4 of Section 4 and the E/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. Section 4 is an irregular section containing correction lots. The proposed wells to be dedicated to the horizontal spacing unit are the **Loosey Goosey 4-9 Fed Com 204H Well** and the **Loosey Goosey 4-9 Fed Com 304H Well**, both oil wells, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 9, Township 20 South, Range 34 East, NMPM. The wells will be orthodox, and the take points and completed intervals will comply with the setback requirements under the statewide Rules; also to be considered will be the cost of drilling and completing the wells and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the wells and unit; and a 200% charge for the risk involved in drilling and completing the wells. The wells and lands are located approximately 40 miles northeast of Carlsbad, New Mexico.
#00276786

67115820

00276786

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

EXHIBIT
D-3

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
March 17, 2023
and ending with the issue dated
March 17, 2023.



Publisher

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



Business Manager

My commission expires

January 29, 2027

(Seal)

STATE OF NEW MEXICO
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
COMMISSION EXPIRES 01/29/2027

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE March 17, 2023

CASE No. 23453: Notice to all parties and persons having any right, title, interest or claim to this case, including owners of working interest, overriding royalty interest, and record title, among others, as well as to the known and unknown heirs, devisees, assigns and successors of MOORE & SHELTON CO., LTD; HOG PARTNERSHIP, LP; CHALLENGER CRUDE, LTD.; READ & STEVENS, INC.; FIRST CENTURY OIL, INC.; FRANCIS HILL HUDSON, TRUSTEE OF LINDY'S LIVING TRUST; BANK OF AMERICA, N.A., SUCCESSOR TRUSTEE OF THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD.; FROST BANK, TRUSTEE OF THE JOSEPHINE T. HUDSON TESTAMENTARY TRUST FBO J. TERRELL ARD; ARD OIL, LTD; CHASE OIL CORPORATION; AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION; PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; JAVELINA PARTNERS; WILLIAM A. HUDSON, II and UNION HILL OIL & GAS CO. INC., of Cimarex Energy Co.'s application for approval of a spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division Examiner will conduct a public hearing at 8:15 a.m. on April 6, 2023, traditionally held at 1220 S. St. Francis, Santa Fe, New Mexico, 87505. However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division's website at: <https://www.emnrd.nm.gov/ocd/hearing-info/> or call (505) 476-3441. Cimarex Energy Co. (operational office at 600 N. Marlenfeld St. Suite 600, 79701; HQ office at 1700 Lincoln Street, Suite 3700, Denver CO 80203) seeks an order from the Division: (1) establishing a standard 320.21-acre, more or less, horizontal spacing and proration unit comprised of Lot 4 (NW/4 NW/4 equivalent), the SW/4 NW/4, and the W/2 SW/4 of Section 4 and the W/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. Section 4 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the **Loosey Goosey 4-9 Fed Com 301H Well**, an oil well, to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SW/4 (Unit M) of Section 9, Township 20 South, Range 34 East; NMPM. The well will be orthodox, and the take points and completed interval will comply with the setback requirements under the statewide Rules; also to be considered will be the cost of drilling and completing the well and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the well and unit; and a 200% charge for the risk involved in drilling and completing the well. The well and lands are located approximately 40 miles northeast of Carlsbad, New Mexico.
#00276787

67115820

00276787

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

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
March 17, 2023
and ending with the issue dated
March 17, 2023.



Publisher

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



Business Manager

My commission expires
January 29, 2027

(Seal)



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE
March 17, 2023

CASE No. 23454: Notice to all parties and persons having any right, title, interest or claim to this case, including owners of working interest, overriding royalty interest, and record title, among others, as well as to the known and unknown heirs, devisees, assigns and successors of MOORE & SHELTON CO., LTD; HOG PARTNERSHIP, LP; CHALLENGER CRUDE, LTD.; READ & STEVENS, INC.; FIRST CENTURY OIL, INC.; FRANCIS HILL HUDSON, TRUSTEE OF LINDY'S LIVING TRUST; BANK OF AMERICA, N.A., SUCCESSOR TRUSTEE OF THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD.; FROST BANK, TRUSTEE OF THE JOSEPHINE T. HUDSON TESTAMENTARY TRUST FBO J. TERRELL ARD; ARD OIL, LTD; CHASE OIL CORPORATION; AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION; PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; JAVELINA PARTNERS; WILLIAM A. HUDSON, II and UNION HILL OIL & GAS CO. INC., of Cimarex Energy Co.'s application for approval of a spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division Examiner will conduct a public hearing at 8:15 a.m. on April 6, 2023, traditionally held at 1220 S. St. Francis, Santa Fe, New Mexico, 87505. However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division's website at: <https://www.emnrd.nm.gov/ocd/hearing-info/> or call (505) 476-3441. Cimarex Energy Co. (operational office at 600 N. Marlenfeld St. Suite 800, 79701; HQ office at 1700 Lincoln Street, Suite 3700, Denver CO 80203) seeks an order from the Division: (1) establishing a standard 320.44-acre, more or less, horizontal spacing and proration unit comprised of Lot 3 (NE/4 NW/4 equivalent), the SE/4 NW/4, and the E/2 SW/4 of Section 4 and the E/2 W/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation (Pool Code 50460), to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. Section 4 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the **Loosey Goosey 4-9 Fed Com 302H Well**, an oil well, to be horizontally drilled from a surface location in the SE/4 SW/4 (Unit N) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SE/4 SW/4 (Unit N) of Section 9, Township 20 South, Range 34 East, NMPM. The well will be orthodox, and the take points and completed interval will comply with the setback requirements under the statewide Rules; also to be considered will be the cost of drilling and completing the well and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the well and unit; and a 200% charge for the risk involved in drilling and completing the well. The well and lands are located approximately 40 miles northeast of Carlsbad, New Mexico.
#00276788

67115820

00276788

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

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
March 17, 2023
and ending with the issue dated
March 17, 2023.


Publisher

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


Business Manager

My commission expires
January 29, 2027

(Seal)

**STATE OF NEW MEXICO
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
COMMISSION EXPIRES 01/29/2027**

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE
March 17, 2023

CASE No. 23455: Notice to all parties and persons having any right, title, interest or claim to this case, including owners of working interest, overriding royalty interest, and record title, among others, as well as to the known and unknown heirs, devisees, assigns and successors of **MOORE & SHELTON CO., LTD.; HOG PARTNERSHIP, LP; CHALLENGER CRUDE, LTD.; READ & STEVENS, INC.; FIRST CENTURY OIL, INC.; FRANCIS HILL HUDSON, TRUSTEE OF LINDY'S LIVING TRUST; BANK OF AMERICA, N.A., SUCCESSOR TRUSTEE OF THE DELMAR HUDSON LEWIS LIVING TRUST; MAGNUM HUNTER PRODUCTION; ZORRO PARTNERS, LTD.; FROST BANK, TRUSTEE OF THE JOSEPHINE T. HUDSON TESTAMENTARY TRUST FBO J. TERRELL ARD; ARD OIL, LTD; CHASE OIL CORPORATION; AVALON ENERGY CORPORATION; WILBANKS RESERVE CORPORATION; PRIME ROCK RESOURCES AGENTCO, INC., AS NOMINEE FOR THE BENEFIT OF PRIME ROCK RESOURCES, LLC; MARKS OIL, INC.; JAVELINA PARTNERS; WILLIAM A. HUDSON, II and UNION HILL OIL & GAS CO. INC.,** of Cimarex Energy Co.'s application for approval of a spacing unit and compulsory pooling, Lea County, New Mexico. The State of New Mexico, through its Oil Conservation Division, hereby gives notice that the Division Examiner will conduct a public hearing at 8:15 a.m. on April 6, 2023, traditionally held at 1220 S. St. Francis, Santa Fe, New Mexico, 87505. However, under current Division policies, the hearing will be conducted remotely online. For information about remote access and the status of the case, you can visit the Division's website at: <https://www.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 320.66-acre, more or less, horizontal spacing and proration unit comprised of Lot 2 (NW/4 NE/4 equivalent), the SW/4 NE/4, and the W/2 SE/4 of Section 4 and the W/2 E/2 of Section 9, in Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, and (2) pooling all uncommitted mineral interests from a depth of 9,373 feet (top of first Bone Spring) in the Quail Ridge; Bone Spring formation [Pool Code 50460], to a depth of 10,845 feet, that being the base of said Bone Spring, designated as an oil pool, underlying the unit. Section 4 is an irregular section containing correction lots. The proposed well to be dedicated to the horizontal spacing unit is the **Loosey Goosey 4-9 Fed Com 303H Well**, an oil well, to be horizontally drilled from a surface location in the SW/4 SE/4 (Unit O) of Section 33, Township 19 South, Range 34 East, NMPM, to a bottom hole location in the SW/4 SE/4 (Unit O) of Section 9, Township 20 South, Range 34 East, NMPM. The well will be orthodox, and the take points and completed interval will comply with the setback requirements under the statewide Rules; also to be considered will be the cost of drilling and completing the well and the allocation of the costs thereof; actual operating costs and charges for supervision; the designation of the Applicant as Operator of the well and unit; and a 200% charge for the risk involved in drilling and completing the well. The well and lands are located approximately 40 miles northeast of Carlsbad, New Mexico.
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DAVID SESSIONS
ABADIE SCHILL
555 RIVERGATE LANE 84-180
DURANGO, CO 81301

TAB 6

Case No. 23452-23455

Exhibit E: Resume of Facilities Engineer: Calvin Boyle
Expert 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

EXHIBIT E
