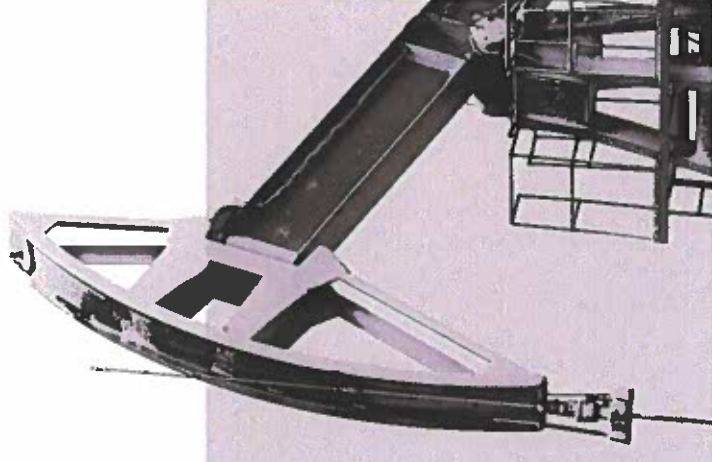


COG OPERATING LLC

Tomahawk Fed Unit 709H-713H
T24S-28E
Eddy County, New Mexico



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

**APPLICATION OF COG OPERATING LLC
FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO.**

CASE NO. 21424

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- Application for Compulsory Pooling
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 - Attachment A – C-102s
 - Attachment B – Land Exhibit
 - Attachment C – Well Proposal Letter with Accompanying AFEs
- Exhibit 2 – Geologist Affidavit
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 - Attachment G – Stratigraphic Cross Section Map
- Exhibit 3 – Notice Affidavit and Notice of Publication

COMPULSORY POOLING APPLICATION CHECKLIST

ALL INFORMATION IN THE APPLICATION MUST BE SUPPORTED BY SIGNED AFFIDAVITS

Case: 21424	APPLICANT'S RESPONSE
Date	September 10, 2020
Applicant	COG Operating LLC
Designated Operator & OGRID (affiliation if applicable)	OGRID # 229137
Applicant's Counsel:	Ocean Munds-Dry, Michael Rodriguez
Case Title:	Application of COG Operating LLC for Compulsory Pooling, Eddy County, New Mexico
Entries of Appearance/Intervenors:	
Well Family	Tomahawk
Formation/Pool	
Formation Name(s) or Vertical Extent:	Wolfcamp
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Wolfcamp
Pool Name and Pool Code:	Purple Sage Wolfcamp Gas Pool (98220)
Well Location Setback Rules:	Statewide
Spacing Unit Size:	~1280 acres
Spacing Unit	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	~1280 acres
Building Blocks:	Quarter-quarter
Orientation:	Standup
Description: TRS/County	All of Sections 17 & 20, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico
Standard Horizontal Well Spacing Unit (Y/N), If No, describe	Yes
Other Situations	
Depth Severance: Y/N. If yes, description	No
Proximity Tracts: If yes, description	The completed interval for the proposed Tomahawk Federal Unit 711H will be within 330' of the line separating the W/2 and E/2 of Sections 17 and 20.
Proximity Defining Well: if yes, description	Tomahawk Federal Unit 711H (API # Pending)
Applicant's Ownership in Each Tract	Attachment B
Well(s)	
Name (API [if assigned]); Surface hole location; Bottom hole location; Completion target (TVD); Orientation, Completion status (standard or non-standard).	Attachment A
Well #1	Tomahawk Federal Unit #709H (API # Pending) SHL: 930 FNL & 1030 FEL, Unit A, 29-24S-28E BHL: 200 FNL & 620 FEL, Unit A, 17-24S-28E

	Completion Target: Wolfcamp formation (Approx. 9426 feet TVD) Completion status: Standard
Well #2	Tomahawk Federal Unit #710H (API # Pending) SHL: 930 FNL & 1060 FEL, Unit A, 29-24S-28E BHL: 200 FNL & 1581 FEL, Unit B, 17-24S-28E Completion Target: Wolfcamp formation (Approx. 9428 feet TVD) Completion status: Standard
Well #3	Tomahawk Federal Unit #711H (API # Pending) SHL: 500 FNL & 1804 FWL, Unit C, 29-24S-28E BHL: 200 FNL & 2543 FEL, Unit B, 17-24S-28E Completion Target: Wolfcamp formation (Approx. 9396 feet TVD) Completion status: Standard
Well #4	Tomahawk Federal Unit #712H (API # Pending) SHL: 500 FNL & 1774 FWL, Unit C, 29-24S-28E BHL: 200 FNL & 1774 FWL, Unit C, 17-24S-28E Completion Target: Wolfcamp formation (Approx. 9376 feet TVD) Completion status: Standard
Well #5	Tomahawk Federal Unit #713H (API # Pending) SHL: 500 FNL & 1744 FWL, Unit C, 29-24S-28E BHL: 200 FNL & 813 FWL, Unit D, 17-24S-28E Completion Target: Wolfcamp formation (Approx. 9356 feet TVD) Completion status: Standard
Horizontal Well First and Last Take Points	Exhibit 1, Attachment A
Completion Target (Formation, TVD and MD)	Exhibit 2, Attachment G
AFE Capex and Operating Costs	
Drilling Supervision/Month \$	\$8,000
Production Supervision/Month \$	\$800
Justification for Supervision Costs	Exhibit 1, Attachment C
Requested Risk Charge	200%
Notice of Hearing	
Proposed Notice of Hearing	Exhibit 3
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit 3
Proof of Published Notice of Hearing (10 days before hearing)	Exhibit 3
Ownership Determination	
Land Ownership Schematic of the Spacing Unit	Attachment B
Tract List (including lease numbers and owners)	Attachment B
Pooled Parties (including ownership type)	Attachment B
Unlocatable Parties to be Pooled	N/A
Ownership Depth Severance (including percentage above & below)	N/A
Joinder	
Sample Copy of Proposal Letter	Attachment C
List of Interest Owners (ie Exhibit A of JOA)	Attachment B

Chronology of Contact with Non-Joined Working Interests	Exhibit 1
Overhead Rates In Proposal Letter	N/A
Cost Estimate to Drill and Complete	Attachment C
Cost Estimate to Equip Well	Attachment C
Cost Estimate for Production Facilities	Attachment C
Geology	
Summary (including special considerations)	Exhibit 2
Spacing Unit Schematic	Attachment D
Gunbarrel/Lateral Trajectory Schematic	N/A
Well Orientation (with rationale)	Exhibit 2
Target Formation	Wolfcamp
HSU Cross Section	Attachments F and G
Depth Severance Discussion	N/A
Forms, Figures and Tables	
C-102	Attachment A
Tracts	Attachment B
Summary of Interests, Unit Recapitulation (Tracts)	Attachment B
General Location Map (including basin)	Attachment B
Well Bore Location Map	Attachment D
Structure Contour Map - Subsea Depth	Attachment E
Cross Section Location Map (including wells)	Attachment F
Cross Section (including Landing Zone)	Attachment G
Additional Information	
CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.	
Printed Name (Attorney or Party Representative):	Michael Rodriguez
Signed Name (Attorney or Party Representative):	
Date:	09/08/2020

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

**APPLICATION OF COG OPERATING LLC
FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO.**

CASE NO. 21424

APPLICATION

COG Operating LLC ("Applicant") (OGRID No. 229137), through its undersigned attorneys, hereby files this application with the Oil Conservation Division pursuant to the provisions of NMSA 1978, § 70-2-17, for an order pooling all uncommitted interests in the Wolfcamp formation, Purple Sage Wolfcamp Gas Pool (98220), underlying a standard 1280-acre, more or less, horizontal spacing unit comprised of all of Sections 17 and 20 Township 24 South, Range 28 East, Eddy County, New Mexico. In support of its application, COG states:

1. Applicant is a working interest owner in the proposed horizontal spacing unit and has the right to drill thereon.
2. Applicant seeks to dedicate the above-referenced horizontal spacing unit to the following proposed wells:
 - **Tomahawk Federal Unit #709H** to be drilled from a surface hole location in NE/4NE/4 (Unit A) of Section 29 to a bottom hole location in the NE/4NE/4 (Unit A) of Section 17;
 - **Tomahawk Federal Unit #710H** to be drilled from a surface hole location in NE/4NE/4 (Unit A) of Section 29 to a bottom hole location in the NW/4NE/4 (Unit B) of Section 17;

- **Tomahawk Federal Unit #711H** to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NW/4NE/4 (Unit B) of Section 17;
- **Tomahawk Federal Unit #712H** to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NE/4NW/4 (Unit C) of Section 17;
- **Tomahawk Federal Unit #713H** to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NW/4NW/4 (Unit D) of Section 17.

The completed interval for the proposed **Tomahawk Federal Unit #711H** well will be within 330' of the line separating the W/2 and the E/2 of Sections 17 and 20 to allow inclusion of this acreage into a standard 1280-acre, more or less, horizontal well spacing unit.

3. The proposed wells will have productive laterals located in all of Sections 17 and 20.
4. The first and last take points of the proposed productive laterals will comply with statewide offset requirements.
5. Applicant has sought and been unable to obtain voluntary agreement for the development of these lands from all the interest owners in the subject spacing unit.
6. The pooling of interests will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.
7. In order to permit Applicant to obtain it's just and fair share of the oil and gas underlying the subject lands, all uncommitted interests in this horizontal spacing unit should be

pooled and Applicant should be designated the operator of the proposed horizontal well spacing unit.

WHEREFORE, Applicant requests that this application be set for hearing before an Examiner of the Oil Conservation Division on September 10, 2020, and, after notice and hearing as required by law, the Division enter an order:

- A. Pooling all uncommitted interests in the horizontal spacing unit;
- B. Approving the initial wells in the horizontal spacing unit;
- C. Designating Applicant as the operator of this spacing unit and the horizontal wells to be drilled thereon;
- D. Authorizing Applicant to recover its costs of drilling, equipping, and completing the wells;
- E. Approving the actual operating charges and costs of supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedures; and
- F. Imposing a 200% charge for the risk assumed by Applicant in drilling and completing the wells against any working interest owner who does not voluntarily participate in the drilling of the wells.

Respectfully submitted,

COG OPERATING LLC

/s/ Michael Rodriguez

Ocean Munds-Dry
Michael Rodriguez
1048 Paseo de Peralta
Santa Fe, New Mexico 87501
(505) 780-8000
omundsdry@concho.com
mrodriguez@concho.com

ATTORNEYS FOR COG OPERATING LLC

Case No. _____: **Application of COG Operating LLC for Compulsory Pooling, Eddy County, New Mexico.** Applicant in the above-styled cause seeks an order pooling all uncommitted interests in the Wolfcamp formation, Purple Sage Wolfcamp Gas Pool (98220), underlying a standard 1280-acre, more or less, horizontal spacing unit comprised of all of Sections 17 and 20 Township 24 South, Range 28 East, Eddy County, New Mexico. Applicant seeks to dedicate the above-referenced horizontal spacing unit to the to the following proposed wells:

- Tomahawk Federal Unit #709H to be drilled from a surface hole location in NE/4NE/4 (Unit A) of Section 29 to a bottom hole location in the NE/4NE/4 (Unit A) of Section 17;
- Tomahawk Federal Unit #710H to be drilled from a surface hole location in NE/4NE/4 (Unit A) of Section 29 to a bottom hole location in the NW/4NE/4 (Unit B) of Section 17;
- Tomahawk Federal Unit #711H to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NW/4NE/4 (Unit B) of Section 17;
- Tomahawk Federal Unit #712H to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NE/4NW/4 (Unit C) of Section 17;
- Tomahawk Federal Unit #713H to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NW/4NW/4 (Unit D) of Section 17.

The completed interval for the proposed Tomahawk Federal Unit #711H well will be within 330' of the line separating the W/2 and the E/2 of Sections 17 and 20 to allow inclusion of this acreage into a standard 1280-acre, more or less, horizontal well spacing unit. Also, to be considered will be the cost of drilling and completing the wells, the allocation of the cost thereof, the actual operating costs and charges for supervision, the designation of applicant as operator, and the imposition of 200% charge for risk involved in drilling and completing each well. Said area is located approximately 3 miles south of Malaga, New Mexico.

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

**APPLICATION OF COG OPERATING LLC
FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO**

CASE NO. 21424

LANDMAN AFFIDAVIT

Jeff Stout, of lawful age and being first duly sworn, declares as follows:

1. My name is Jeff Stout, and I am a Landman with COG Operating LLC ("COG").
1. I have not testified before the New Mexico Oil Conservation Division ("Division")

as an expert witness in petroleum land matters.

2. I graduated from the University of Kansas with a Bachelor of Business Administration in May 1996. I have been working in the oil and gas industry in the Land discipline since October 2008. July, 2018 I began working for COG as a Landman with concentrations in Loving and Winkler Counties in Texas. Since June 2020, I have been working as a COG Landman in Eddy and Lea Counties, New Mexico. I am a member of the following professional organizations: Permian Basin Landmen's Association (PBLA) and American Association of Professional Landmen (AAPL).

3. I am familiar with the application filed by COG in this case and familiar with the status of the lands in the subject area.

4. None of the parties proposed to be pooled in this case have indicated opposition to this proceeding, therefore I do not expect any opposition at hearing.

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 21424 Exhibit No. 1
Submitted by:
COG OPERATING LLC
Hearing Date: September 10, 2020

5. COG seeks an order pooling all uncommitted interests in the Wolfcamp formation, Purple Sage Wolfcamp Gas Pool (98220), underlying a standard 1280-acre, more or less, horizontal spacing unit comprised of all of Sections 17 and 20 Township 24 South, Range 28 East, Eddy County, New Mexico.

6. COG proposes to dedicate the above-referenced horizontal spacing unit to the following proposed initial wells, which it proposes to drill simultaneously:

- Tomahawk Federal Unit #709H to be drilled from a surface hole location in NE/4NE/4 (Unit A) of Section 29 to a bottom hole location in the NE/4NE/4 (Unit A) of Section 17;
- Tomahawk Federal Unit #710H to be drilled from a surface hole location in NE/4NE/4 (Unit A) of Section 29 to a bottom hole location in the NW/4NE/4 (Unit B) of Section 17;
- Tomahawk Federal Unit #711H to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NW/4NE/4 (Unit B) of Section 17;
- Tomahawk Federal Unit #712H to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NE/4NW/4 (Unit C) of Section 17;
- Tomahawk Federal Unit #713H to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NW/4NW/4 (Unit D) of Section 17.

7. The completed interval for the proposed Tomahawk Federal Unit #711H well will be within 330' of the line separating the W/2 and the E/2 of Sections 17 and 20 to allow inclusion of this acreage into a standard 1280-acre, more or less, horizontal well spacing unit.

8. **Attachment A** contains draft Form C-102s for the proposed wells.

9. No ownership depth severances exist within this proposed spacing unit, and there are no unleased mineral interests in the subject acreage.

10. **Attachment B** depicts the tracts of land comprising the proposed spacing unit in this case. The proposed spacing unit includes fee and federal lands. It also identifies the interest ownership and interest type by tract. COG seeks to pool all uncommitted interests identified in this attachment.

11. All interest owners that COG seeks to pool are locatable. COG has conducted a diligent search of all public records in Eddy County, including phone directories and computer databases.

12. **Attachment C** contains well proposal letters and AFEs for each well provided to the working interest owners COG is seeking to pool. The costs reflected on each AFE are consistent with what other operators have incurred for drilling similar horizontal wells in the area.

13. In my opinion, COG has made a diligent effort to reach agreement with the non-joined parties as indicated by the following Chronology of Contact:

- All working interest parties have committed to the Tomahawk WC Unit (Federal Exploratory Unit) and COG's proposed form of JOA. Subsequently, all working interest parties were provided well proposals and respective AFE's.
- 3Q & 4Q 2019 – All Overriding Royalty Interest owners were sent Ratifications of the Tomahawk WC Unit via USPS certified mail.

- 4/20/2020 – Those Overriding Royalty Interest owners that had not responded to first mailing attempt of the Unit Ratification were resent Ratifications of the Tomahawk WC Unit via USPS certified mail.

14. In my opinion, COG has made a good faith effort to obtain voluntary joinder of the parties it is seeking to pool. If COG reaches an agreement with any of the parties it is seeking to pool before the Division enters an order, I will inform the Division that COG is no longer seeking to pool those parties.

15. COG has estimated the overhead and administrative costs for drilling and producing the proposed wells at \$8,000 per month while drilling and \$800 per month while producing. These costs are consistent with what other operators are charging in this area for similar wells.

16. I have provided COG's legal counsel a list of names and addresses of the owners COG seeks to pool and instructed that they be notified of this hearing. Additionally, notice of this hearing was timely published in a newspaper of general circulation in Eddy County, New Mexico.

17. Exhibit 1 and Attachments A through C were either prepared by me or compiled under my direction and supervision.

THIS CONCLUDES AFFIANT'S STATEMENT.

John S
Affiant

STATE OF TEXAS

COUNTY OF MIDLAND

)
)
)

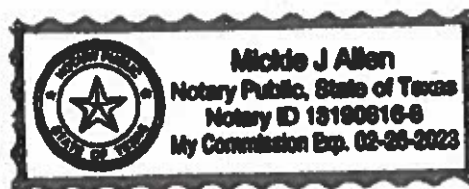
SUBSCRIBED and SWORN to before me this 3rd day of September by

Mickie Allen.

Mickie Allen
NOTARY PUBLIC

My Commission Expires:

2-26-23



DISTRICT I
1625 N. FRANCHIS DR., ROSA, NM 88248
Phone: (505) 333-6141 Fax: (505) 333-6723

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1229 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3450 Fax: (505) 476-3452

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name TOMAHAWK FEDERAL UNIT	Well Number 709H
OGRID No.	Operator Name COG OPERATING, LLC	Elevation 3015.1'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	29	24-S	28-E		930	NORTH	1030	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	17	24-S	28-E		200	NORTH	620	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	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**

**NAD 83 NME
PROPOSED BOTTOM
HOLE LOCATION**
Y=445546.7 N
X=612504.7 E
LAT.=32 224675" N
LONG.=104.103190" W

POINT LEGEND	
1	Y=445756.0 N X=613124.9 E
2	Y=440414.4 N X=613117.8 E
3	Y=437742.6 N X=613135.3 E
4	Y=435072.6 N X=613148.5 E
5	Y=432400.9 N X=613171.9 E
6	Y=440403.6 N X=610484.8 E

**NAD 83 NME
SURFACE LOCATION**
Y=434147.7 N
X=612126.4 E
LAT.=32.193342" N
LONG.=104.104492" W

OPERATOR CERTIFICATION
I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

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.

JANUARY 30, 2020

Date of Survey _____

Signature & Seal of Professional Surveyor

CHAD L. HARCROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

Chad L. Harcrow 2/18/20

Certificate No. CHAD HARCROW 17777
W.O. # 20-3680 DRAWN BY: AH

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 21424 Attachment A
Submitted by:
COG OPERATING LLC
Hearing Date: September 10, 2020

DISTRICT I
1020 N. FRANCES DR., BOULDER, NM 80501
Phone: (970) 393-8181 Fax: (970) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-8178 Fax: (505) 334-8170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3463

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name TOMAHAWK FEDERAL UNIT	Well Number 710H
OGRID No.	Operator Name COG OPERATING, LLC	Elevation 3014.2'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	29	24-S	28-E		930	NORTH	1060	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	17	24-S	28-E		200	NORTH	1581	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	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**

**NAD 83 NME
PROPOSED BOTTOM
HOLE LOCATION**
Y=445532.3 N
X=611543.6 E
LAT.=32.224641° N
LONG.=104.106298° W

POINT LEGEND

1	Y=445756.0 N X=613124.9 E
2	Y=440414.4 N X=613117.8 E
3	Y=437742.8 N X=613135.3 E
4	Y=435072.6 N X=613148.5 E
5	Y=432400.9 N X=613171.9 E
6	Y=440403.6 N X=610484.8 E

**NAD 83 NME
SURFACE LOCATION**
Y=434147.8 N
X=612096.6 E
LAT.=32.193343° N
LONG.=104.104588° W

LEASE X-ING
LAT.=32.217872° N
LONG.=104.106297° W

LEASE X-ING
LAT.=32.210555° N
LONG.=104.106296° W

LEASE X-ING
LAT.=32.206892° N
LONG.=104.106295° W

LEASE X-ING
LAT.=32.195910° N
LONG.=104.106275° W

GRID AZ. TO TTP
330' F.M. & 1581' FEL
Y=445402.3 N
X=611543.9 E
LAT.=32.224284° N
LONG.=104.106298° W

GRID AZ. TO TTP
330' F.M. & 1581' FEL
Y=435090.6 N
X=611567.3 E
LAT.=32.195937° N
LONG.=104.106293° W

OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unless 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

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.

JANUARY 30, 2020

Date of Survey _____

Signature & Seal of Professional Surveyor

CHAD L. HARCROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

Chad L. Harcrow 2/18/20

Certificate No. CHAD HARCROW 17777
W.O. # 20-368N DRAWN BY: AH

DISTRICT I
1635 N. FRENCH DR., BOBBS, NM 88240
Phone: (575) 965-8181 Fax: (575) 965-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-0720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-8176 Fax: (505) 334-8170

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, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name TOMAHAWK FEDERAL UNIT	Well Number 711H
OGRID No.	Operator Name COG OPERATING, LLC	Elevation 3041.7'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	29	24-S	28-E		500	NORTH	1804	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	17	24-S	28-E		200	NORTH	2543	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	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

POINT LEGEND

1	Y=445756.0 N X=613124.9 E
2	Y=440414.4 N X=613117.8 E
3	Y=437742.6 N X=613135.3 E
4	Y=435072.6 N X=613148.5 E
5	Y=432400.9 N X=613171.9 E
6	Y=440403.6 N X=610484.8 E

PROPOSED BOTTOM HOLE LOCATION
Y=445518.0 N
X=610581.6 E
LAT.=32.224607° N
LONG.=104.109409° W

LEASE X-ING
LAT.=32.217852° N
LONG.=104.109408° W

LEASE X-ING
LAT.=32.210549° N
LONG.=104.109406° W

LEASE X-ING
LAT.=32.205893° N
LONG.=104.109406° W

LEASE X-ING
LAT.=32.195929° N
LONG.=104.109461° W

NAD 83 NME SURFACE LOCATION
Y=434590.0 N
X=609685.5 E
LAT.=32.194572° N
LONG.=104.112380° W

OPERATOR CERTIFICATION
I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

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.

JANUARY 30, 2020

Date of Survey _____

Signature & Seal of Professional Surveyor _____

CHAD L. HARGROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

2/25/20

Certificate No. CHAD HARGROW 17777
W.O. # 20-368C DRAWN BY: AH

DISTRICT I
1825 N. FERRIS DR., BOBBS, NM 88240
Phone: (505) 983-9181 Fax: (505) 983-9720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-8720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-8170 Fax: (505) 334-8170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3450 Fax: (505) 476-3452

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name TOMAHAWK FEDERAL UNIT	Well Number 712H
OCRID No.	Operator Name COG OPERATING, LLC	Elevation 3042.0'

Surface Location

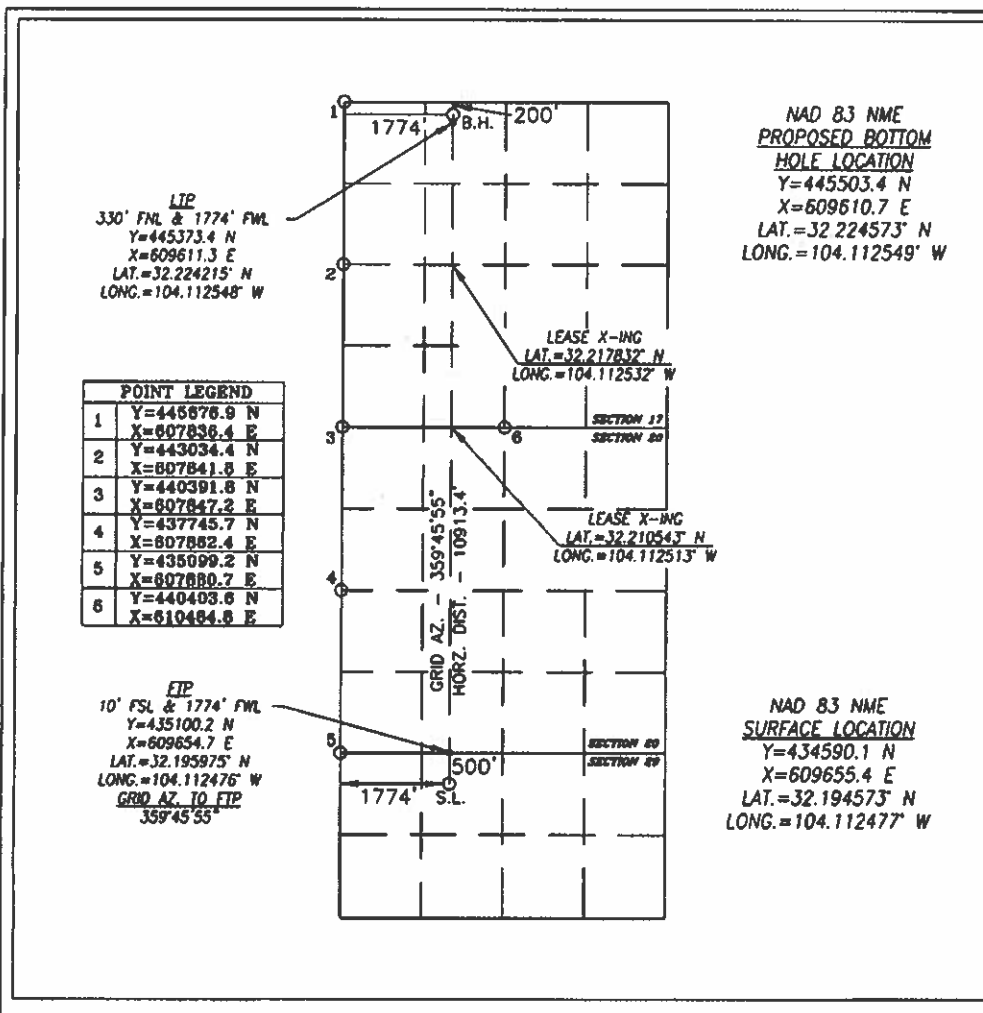
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	29	24-S	28-E		500	NORTH	1774	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	17	24-S	28-E		200	NORTH	1774	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	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



OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

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.

JANUARY 30, 2020

Date of Survey

Signature & Seal of Professional Surveyor



Chad L. Harcrow 2/17/20
Certificate No. CHAD HARCROW 17777
W.O. # 20-3688 DRAWN BY: AH

DISTRICT I
1625 N. FRENCH DR., BOHESS, NM 88240
Phone: (505) 365-5151 Fax: (505) 365-5725

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9729

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-8179 Fax: (505) 334-8170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3486 Fax: (505) 476-3483

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name TOMAHAWK FEDERAL UNIT	
OGRID No.	Operator Name COG OPERATING, LLC	Well Number 713H Elevation 3042.5'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	29	24-S	28-E		500	NORTH	1744	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	17	24-S	28-E		200	NORTH	813	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	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**

POINT LEGEND

1	Y=445676.9 N
2	X=607636.4 E
3	Y=443034.4 N
4	X=607641.8 E
5	Y=440391.8 N
6	X=607647.2 E
7	Y=437746.7 N
8	X=607662.4 E
9	Y=435099.2 N
10	X=607680.7 E
11	Y=440403.6 N
12	X=610484.8 E

OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

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.

JANUARY 30, 2020

Date of Survey

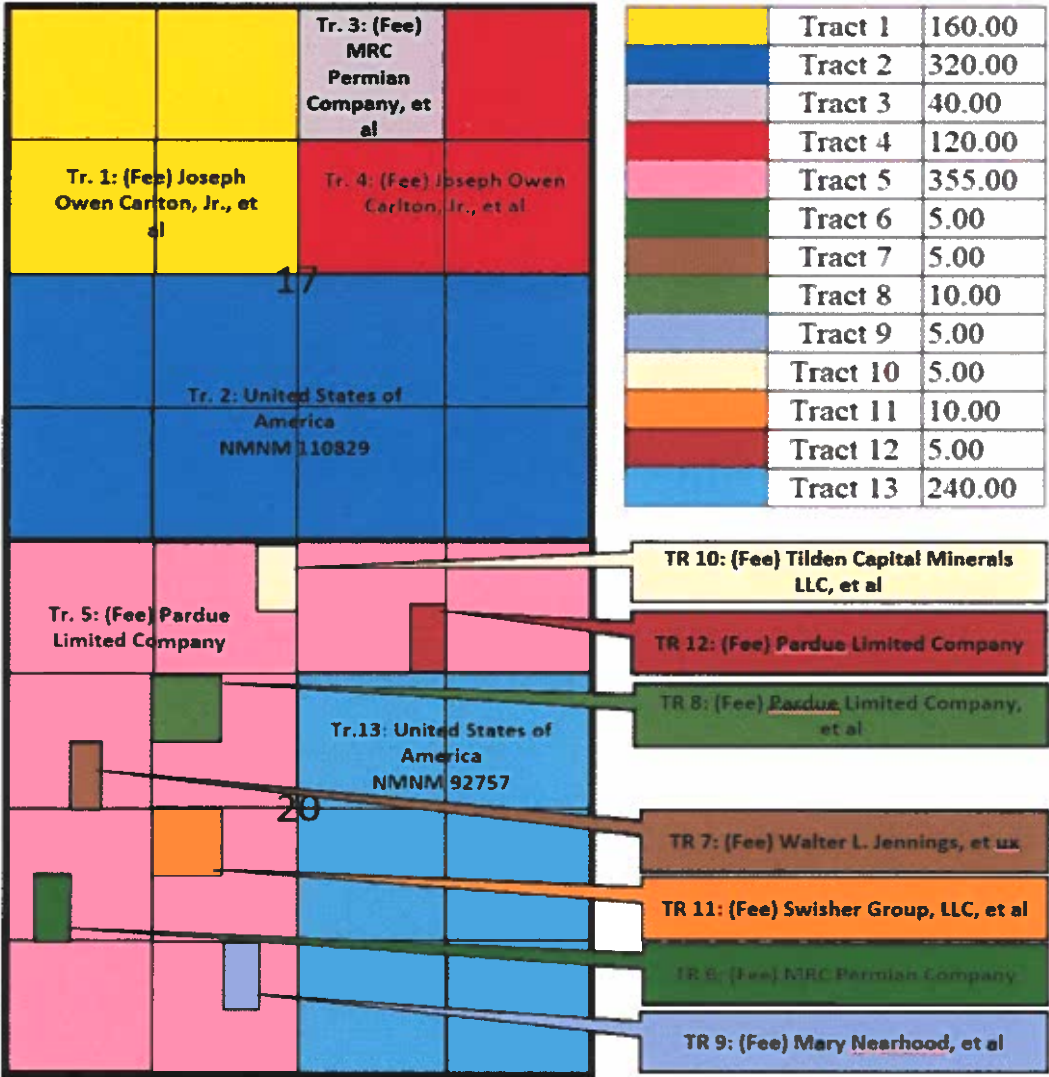
Signature & Seal of Professional Surveyor

CHAD L. HARGROW
NEW MEXICO
LICENSED PROFESSIONAL SURVEYOR
17777

2/17/20

Certificate No. CHAD HARGROW 17777
W.O. # 20-368A DRAWN BY: AH

TOMAHAWK WC UNIT - SECTIONS 17 & 20, T24S-R28E, EDDY COUNTY, NEW MEXICO



Tomahawk WC Unit 709H, 710H, 711H, 712H, 713H
All of Sections 17 & 20 of T24S-R28E

All Sections 17 & 20 - Tract Leasehold Ownership													
	Tract 1	Tract 2	Tract 3	Tract 4	Tract 5	Tract 6	Tract 7	Tract 8	Tract 9	Tract 10	Tract 11	Tract 12	Tract 13
COG	98.0183%	98.0183%	98.0183%	98.0183%	98.0183%	98.0183%	98.0183%	98.0183%	98.0183%	98.0183%	98.0183%	98.0183%	98.0183%
Concho	0.2376%	0.2376%	0.2376%	0.2376%	0.2376%	0.2376%	0.2376%	0.2376%	0.2376%	0.2376%	0.2376%	0.2376%	0.2376%
Featherstone	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%
Big Three	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%	0.1007%
Parrot Head	0.1343%	0.1343%	0.1343%	0.1343%	0.1343%	0.1343%	0.1343%	0.1343%	0.1343%	0.1343%	0.1343%	0.1343%	0.1343%
McCombs Energy	0.8337%	0.8337%	0.8337%	0.8337%	0.8337%	0.8337%	0.8337%	0.8337%	0.8337%	0.8337%	0.8337%	0.8337%	0.8337%
Prospector	0.4028%	0.4028%	0.4028%	0.4028%	0.4028%	0.4028%	0.4028%	0.4028%	0.4028%	0.4028%	0.4028%	0.4028%	0.4028%
Brett Barton	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%
Heidi Barton	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%	0.0516%
Roy Barton Jr	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%
Norma Chanley	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%	0.0256%
Roy Barton III	0.0174%	0.0174%	0.0174%	0.0174%	0.0174%	0.0174%	0.0174%	0.0174%	0.0174%	0.0174%	0.0174%	0.0174%	0.0174%

TOMAHAWK WC UNIT WORKING INTEREST RECAPITULATION	
OWNER	WORKING INTEREST
COG OPERATING LLC	98.018434%
CONCHO OIL & GAS LLC	0.237643%
FEATHERSTONE DEVELOPMENT CORP	0.100704%
BIG THREE ENERGY GROUP	0.100704%
PARROT HEAD PROPERTIES LLC	0.134271%
MCCOMBS ENERGY GROUP	0.833653%
PROSPECTOR LLC	0.402813%
BRETT BARTON	0.051561%
HEIDI BARTON	0.051561%
ROY BARTON JR	0.025645%
NORMA CHANLEY	0.025645%
ROY BARTON III	0.017367%
	100.000000%

TOMAHAWK WC UNIT ORRI NEEDING TO POOL	
BIRCH ROYALTIES LLC	
CEP MINERALS LLC	
GOOD NEWS MINERALS, LLC	
MARRS & SMITH LTD	
NOBLE ROYALTIES ACCESS FUND IV LP	
NOBLE ROYALTIES ACCESS FUND V LP	
NOBLE ROYALTIES ACCESS FUND VI LP	

*All Working Interest Parties Have Committed to the Tomahawk WC Unit Agreement and Operating Agreement



COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
Drill & Complete

Well Name TOMAHAWK FEDERAL UNIT #709H
SHL 29, T24S-R28E, 930' FNL & 1030' FEL
BHL 17, T24S-R28E, 200' FNL & 620' FEL
Formation WOLF CAMP A SANDS
Local 29, T24S-R28E
AFE Numbers DBWO20065, DBWO20065CM, DBWO20065DR, DBWO20065PE, DBWO20065PS, DBWO20065TB

Prospect #717058
State & County New Mexico, Eddy
Objective Drill & Complete
Depth 20,100
TVD 9,426

Cost Description	Code	PreSpud (PS)	Pre-Set Casing (PC)	Drilling (DR)	Completions (C)	Heavy Construction (TB)	Proppant Equip (PEQ)	Revision	Total
Tangible Costs									
PEQ-Flowback Crews & Equip	392						\$108,000.00	\$0.00	\$108,000.00
D-Surface Casing	401			\$20,000.00				\$0.00	\$20,000.00
D-Intermediate Cag	402			\$177,000.00				\$0.00	\$177,000.00
D-Production Casing/Liner	403			\$350,000.00				\$0.00	\$350,000.00
D-Wellhead Equip	405			\$75,000.00				\$0.00	\$75,000.00
C-Tubing	504				\$52,000.00			\$0.00	\$52,000.00
C-Wellhead Equip	505				\$28,000.00			\$0.00	\$28,000.00
TB-Tanks	510					\$45,000.00		\$0.00	\$45,000.00
TB-Flowline/Pipelines	511					\$20,000.00		\$0.00	\$20,000.00
TB-Hy. Tr/Sewer	512					\$145,000.00		\$0.00	\$145,000.00
TB-Electrical System/Equipment	513					\$89,000.00		\$0.00	\$89,000.00
C-Picks/Anchors/Hyds	514				\$65,000.00			\$0.00	\$65,000.00
TB-Couplings/Fittings/Valves	515					\$151,000.00		\$0.00	\$151,000.00
TB-Pumps-Surface	521					\$20,000.00		\$0.00	\$20,000.00
TB-Instrumentation/SCADA/POC	522					\$15,000.00		\$0.00	\$15,000.00
TB-Miscellaneous	523					\$15,000.00		\$0.00	\$15,000.00
TB-Meters/Locks	525					\$20,000.00		\$0.00	\$20,000.00
TB-Flares/Combustors/Emission	526					\$24,000.00		\$0.00	\$24,000.00
C-Gas Lift/Compression	527				\$25,000.00			\$0.00	\$25,000.00
PEQ-Wellhead Equipment	531						\$38,300.00	\$0.00	\$38,300.00
Total Tangible Costs		\$0.00	\$0.00	\$622,000.00	\$170,000.00	\$544,000.00	\$146,300.00	\$0.00	\$1,482,300.00
Intangible Costs									
PS-Titles/Permits	201	\$20,000.00						\$0.00	\$20,000.00
D-Insurance	202	\$7,000.00						\$0.00	\$7,000.00
PS-Damages/ROW	203	\$20,000.00						\$0.00	\$20,000.00
PS-Survey/Stake Lctn	204	\$2,500.00						\$0.00	\$2,500.00
D-Lctn/Pits/Roads	205			\$130,000.00				\$0.00	\$130,000.00
D-Drilling Overhead	206			\$6,900.00				\$0.00	\$6,900.00
D-Daywork Contract	209			\$468,000.00				\$0.00	\$468,000.00
D-Directional Drilling Services	210			\$274,000.00				\$0.00	\$274,000.00
D-Fuel & Power	211			\$86,000.00				\$0.00	\$86,000.00
D-Water	212			\$55,000.00				\$0.00	\$55,000.00
D-Bits	213			\$85,000.00				\$0.00	\$85,000.00
D-Mud & Chemicals	214			\$207,000.00				\$0.00	\$207,000.00
D-Cement Surface	217			\$15,000.00				\$0.00	\$15,000.00
D-Cement Intermed	218			\$74,400.00				\$0.00	\$74,400.00
D-Prod-2nd Int Cmt	219			\$95,000.00				\$0.00	\$95,000.00
D-Float Equipment & Centralizers	221			\$60,000.00				\$0.00	\$60,000.00
D-Cas Crews & Equip	222			\$60,000.00				\$0.00	\$60,000.00
D-Contract Labor	225			\$6,500.00				\$0.00	\$6,500.00
D-Company Servan	226			\$41,400.00				\$0.00	\$41,400.00
D-Contract Servan	227			\$80,000.00				\$0.00	\$80,000.00
D-Tubs Cap/Tag	228			\$40,000.00				\$0.00	\$40,000.00
D-Mud Logging Unit	229			\$39,000.00				\$0.00	\$39,000.00
D-Rentals-Surface	235			\$149,500.00				\$0.00	\$149,500.00
D-Rentals-Subsurt	236			\$92,000.00				\$0.00	\$92,000.00
D-Trucking/Forklift/Rig Mob	237			\$185,000.00				\$0.00	\$185,000.00
D-Welding Services	238			\$3,000.00				\$0.00	\$3,000.00
D-Contingency	243			\$61,000.00				\$0.00	\$61,000.00
D-Environment/Cad Loop	244			\$253,000.00				\$0.00	\$253,000.00
C-Wellbore Frac Prep	304				\$98,000.00			\$0.00	\$98,000.00
C-Lctn/Pits/Roads	305				\$10,000.00			\$0.00	\$10,000.00
C-Completion OH	306				\$15,000.00			\$0.00	\$15,000.00
C-Frac Equipment	307				\$658,000.00			\$0.00	\$658,000.00
C-Frac Chemicals	308				\$417,000.00			\$0.00	\$417,000.00
C-Frac Proppant	309				\$189,000.00			\$0.00	\$189,000.00
C-Frac Proppant Transportation	310				\$263,000.00			\$0.00	\$263,000.00
C-Fuel Delivery & Services	311				\$42,000.00			\$0.00	\$42,000.00
C-Water	312				\$263,000.00			\$0.00	\$263,000.00
C-Frac Surface Rentals	315				\$262,000.00			\$0.00	\$262,000.00
C-Contract Labor	325				\$10,000.00			\$0.00	\$10,000.00
C-Company Servan	326				\$10,000.00			\$0.00	\$10,000.00
C-Contract Servan	327				\$120,000.00			\$0.00	\$120,000.00
C-Artificial Lift Install	329				\$45,000.00			\$0.00	\$45,000.00
C-Perf/Wyline Svc	331				\$323,000.00			\$0.00	\$323,000.00
C-Trucking/Forklift/Rig Mob	337				\$10,000.00			\$0.00	\$10,000.00
C-Water Disposal	339				\$40,000.00			\$0.00	\$40,000.00
C-Contingency	343				\$75,000.00			\$0.00	\$75,000.00
C-Dyed Diesel	345				\$157,000.00			\$0.00	\$157,000.00
C-Drillout	346				\$300,000.00			\$0.00	\$300,000.00
TB-Damages/Right of Way	351					\$1,000.00		\$0.00	\$1,000.00
TB-Location/Pits/Roads	353					\$26,000.00		\$0.00	\$26,000.00
TB-Contract Labor	356					\$141,000.00		\$0.00	\$141,000.00
TB-Company Supervision	357					\$3,000.00		\$0.00	\$3,000.00
PEQ-Contract Labor	374						\$38,300.00	\$0.00	\$38,300.00
PEQ-Water Disposal	387						\$180,000.00	\$0.00	\$180,000.00
PEQ-HRZ Well Offset Frac	391						\$18,000.00	\$0.00	\$18,000.00
Total Intangible Costs		\$40,500.00	\$0.00	\$2,556,700.00	\$3,306,000.00	\$171,000.00	\$236,300.00	\$0.00	\$6,319,500.00
Total Gross Cost		\$40,500.00	\$0.00	\$3,178,700.00	\$3,476,000.00	\$715,000.00	\$382,600.00	\$0.00	\$7,800,800.00

Note: The above costs are estimates only. Actual costs will be billed as incurred.

Working Interest Owner	COG Operating LLC
Partner: _____	Date Prepared: Jul 28, 2020
agrees to participate for _____ % working interest	Prepared By: M. Allen
Approved by: _____	Approved by: _____
Signature: _____	Signature: _____
Title: _____	Title: _____
Date: _____	Date: _____

Costs provided within this AFE are estimates only, and subject to change pending actual operations. Once the proposed operation has been completed, please direct any requests for reports or invoices to the Joint Interest Billing Department.

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 21424 Attachment C
Submitted by:
COG OPERATING LLC
Hearing Date: September 10, 2020



COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
Drill & Complete

Well Name TOMAHAWK FEDERAL UNIT 710H
BML 29, T24S-R28E, 930' FNL & 1060' FEL
BML 17, T24S-R28E, 200' FNL & 1581' FEL
Formation WOLF CAMP A SANDS
Local 29, T24S-R28E
AFE Numbers DBWO20066, DBWO20066CM, DBWO20066DR, DBWO20066PE, DBWO20066PS, DBWO20066TB

Project #717058
State & County NEW MEXICO, EDDY
Objective Drill & Complete
Depth 20,100
TVD 9,428

Cost Description	Code	Pre-Drill (P8)	Pre-Set Casing (PC)	Drilling (DR)	Completions (C) & Bty Constrctn (TB)	Prmp Equip (PEQ)	Revision	Total
Tangible Costs								
PEQ-Flowback Crews & Equip	392					\$108,000.00	\$0.00	\$108,000.00
D-Surface Casing	401			\$20,000.00			\$0.00	\$20,000.00
D-Intermed Cag	402			\$177,000.00			\$0.00	\$177,000.00
D-Production Casing/Liner	403			\$350,000.00			\$0.00	\$350,000.00
D-Wellhead Equip	405			\$75,000.00			\$0.00	\$75,000.00
C-Tubing	504				\$52,000.00		\$0.00	\$52,000.00
C-Wellhead Equip	505				\$28,000.00		\$0.00	\$28,000.00
TB-Tanks	510					\$45,000.00	\$0.00	\$45,000.00
TB-Flowlines/Pipelines	511					\$20,000.00	\$0.00	\$20,000.00
TB-Hy Trls/Seprtr	512					\$145,000.00	\$0.00	\$145,000.00
TB-Electrical System/Equipment	513					\$89,000.00	\$0.00	\$89,000.00
C-Poles/Anchors/Rigs	514				\$45,000.00		\$0.00	\$45,000.00
TB-Couplings/Fittings/Valves	515					\$151,000.00	\$0.00	\$151,000.00
TB-Pumps-Surface	521					\$20,000.00	\$0.00	\$20,000.00
TB-Instrumentation/SCADA/POC	522					\$15,000.00	\$0.00	\$15,000.00
TB-Miscellaneous	523					\$15,000.00	\$0.00	\$15,000.00
TB-Meters/Lacts	525					\$20,000.00	\$0.00	\$20,000.00
TB-Flares/Combustors/Emission	526					\$24,000.00	\$0.00	\$24,000.00
C-Gas L/V/Compression	527				\$25,000.00		\$0.00	\$25,000.00
PEQ-Wellhead Equipment	531					\$38,300.00	\$0.00	\$38,300.00
Total Tangible Costs		\$0.00	\$0.00	\$622,000.00	\$176,000.00	\$644,000.00	\$146,300.00	\$1,482,300.00

Intangible Costs								
PS-Tier/Permits	201	\$20,000.00					\$0.00	\$20,000.00
D-Insurance	202	\$7,000.00					\$0.00	\$7,000.00
PS-Deemgas/ROW	203	\$20,000.00					\$0.00	\$20,000.00
PS-Survey/State Lch	204	\$2,500.00					\$0.00	\$2,500.00
D-Lctr/Pits/Roads	205			\$130,000.00			\$0.00	\$130,000.00
D-Drilling Overhead	206			\$6,900.00			\$0.00	\$6,900.00
D-Daywork Contract	209			\$468,000.00			\$0.00	\$468,000.00
D-Directional Drig Services	210			\$274,000.00			\$0.00	\$274,000.00
D-Fuel & Power	211			\$68,000.00			\$0.00	\$68,000.00
D-Water	212			\$55,000.00			\$0.00	\$55,000.00
D-Site	213			\$85,000.00			\$0.00	\$85,000.00
D-Mud & Chemicals	214			\$207,000.00			\$0.00	\$207,000.00
D-Cement Surface	217			\$15,000.00			\$0.00	\$15,000.00
D-Cement Intermed	218			\$74,400.00			\$0.00	\$74,400.00
D-Prod-2nd Int Cmt	219			\$95,000.00			\$0.00	\$95,000.00
D-Float Equipment & Centralizers	221			\$60,000.00			\$0.00	\$60,000.00
D-Cas Crews & Equip	222			\$60,000.00			\$0.00	\$60,000.00
D-Contract Labor	225			\$6,500.00			\$0.00	\$6,500.00
D-Company Servan	226			\$41,400.00			\$0.00	\$41,400.00
D-Contract Servan	227			\$90,000.00			\$0.00	\$90,000.00
D-Tals Cag/Tbr	228			\$40,000.00			\$0.00	\$40,000.00
D-Mud Logging Unit	229			\$39,000.00			\$0.00	\$39,000.00
D-Rentals-Surface	235			\$149,500.00			\$0.00	\$149,500.00
D-Rentals-Subarfc	236			\$92,000.00			\$0.00	\$92,000.00
D-Trucking/Forklift/Rig Mob	237			\$185,000.00			\$0.00	\$185,000.00
D-Welding Services	238			\$3,000.00			\$0.00	\$3,000.00
D-Contingency	243			\$61,000.00			\$0.00	\$61,000.00
D-Envrnmnt/Cld Loop	244			\$253,000.00			\$0.00	\$253,000.00
C-Wellbore Frac Prep	304				\$98,000.00		\$0.00	\$98,000.00
C-Lctr/Pits/Roads	305				\$10,000.00		\$0.00	\$10,000.00
C-Completion OH	308				\$15,000.00		\$0.00	\$15,000.00
C-Frac Equipment	307				\$858,000.00		\$0.00	\$858,000.00
C-Frac Chemicals	308				\$417,000.00		\$0.00	\$417,000.00
C-Frac Proppant	309				\$189,000.00		\$0.00	\$189,000.00
C-Frac Proppant Transportation	310				\$263,000.00		\$0.00	\$263,000.00
C-Fuel Delivery & Services	311				\$42,000.00		\$0.00	\$42,000.00
C-Water	312				\$263,000.00		\$0.00	\$263,000.00
C-Frac Surface Rentals	315				\$282,000.00		\$0.00	\$282,000.00
C-Contract Labor	325				\$10,000.00		\$0.00	\$10,000.00
C-Company Servan	326				\$10,000.00		\$0.00	\$10,000.00
C-Contract Servan	327				\$120,000.00		\$0.00	\$120,000.00
C-Ancilal Lift Install	329				\$45,000.00		\$0.00	\$45,000.00
C-Perf/Wireline Svc	331				\$323,000.00		\$0.00	\$323,000.00
C-Trucking/Forklift/Rig Mob	337				\$10,000.00		\$0.00	\$10,000.00
C-Water Disposal	339				\$40,000.00		\$0.00	\$40,000.00
C-Contingency	343				\$75,000.00		\$0.00	\$75,000.00
C-Dyed Diesel	345				\$157,000.00		\$0.00	\$157,000.00
C-Drillout	346				\$300,000.00		\$0.00	\$300,000.00
TB-Damages/Right of Way	351					\$1,000.00	\$0.00	\$1,000.00
TB-Location/Pits/Roads	353					\$26,000.00	\$0.00	\$26,000.00
TB-Contract Labor	356					\$141,000.00	\$0.00	\$141,000.00
TB-Company Supervision	357					\$3,000.00	\$0.00	\$3,000.00
PEQ-Contract Labor	374						\$38,300.00	\$38,300.00
PEQ-Water Disposal	387						\$180,000.00	\$180,000.00
PEQ-HRZ Well Offset Frac	391						\$18,000.00	\$18,000.00
Total Intangible Costs		\$49,500.00	\$0.00	\$2,556,700.00	\$3,305,000.00	\$171,000.00	\$238,300.00	\$6,318,500.00

Total Gross Cost	\$49,500.00	\$0.00	\$3,178,700.00	\$3,475,000.00	\$715,000.00	\$382,600.00	\$0.00	\$7,800,800.00
Note: The above costs are estimates only. Actual costs will be billed as incurred.								

Working Interest Owner		COG Operating LLC	
Partner:		Date Prepared:	Jul 28, 2020
agrees to participate for _____ % working interest		Prepared By:	M. Allen
Approved by: _____		Approved by:	
Signature: _____		Signature:	
Title: _____		Title:	
Date: _____		Date:	

Costs provided within this AFE are estimates only, and subject to change pending actual operations. Once the proposed operation has been completed, please direct any requests for reports or invoices to the Joint Interest Billing Department.

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
Drill & Complete**

Well Name Tomahawk Fed Unit 711H
SHL 29: 500 FNL 1804 FNL or Unit C
BHL 17: 200 FNL 2543 FEL or Unit B
Formation WOLF CAMP A
Legal 17 & 20, 24S-R28E

Prospect Tomahawk 2428
State & County NEW MEXICO, EDDY
Objective DRILL & COMPLETE
Depth 20,100
TVD 9,396

A/E Numbers

Cost Description	Code	PreSpud (P3)	Pre-Set Casing (PC)	Drilling (DR)	Completions (C)	Tank Btty Constrcn (TB)	Pmpq Equip (PEQ)	Revision	Total
Intangible Costs									
D-Lctr/Pits/Roads	205			\$ 86,000.00				-	\$ 86,000.00
D-Drilling Overhead	206			\$ 8,000.00				-	\$ 8,000.00
D-Daywork Contract	209			\$ 601,000.00				-	\$ 601,000.00
D-Directional Dtg Services	210			\$ 288,000.00				-	\$ 288,000.00
D-Fuel & Power	211			\$ 128,000.00				-	\$ 128,000.00
D-Water	212			\$ 68,000.00				-	\$ 68,000.00
D-Bits	213			\$ 95,000.00				-	\$ 95,000.00
D-Mud & Chemicals	214			\$ 227,000.00				-	\$ 227,000.00
D-Cement Surface	217			\$ 18,000.00				-	\$ 18,000.00
D-Cement Intermed	218			\$ 67,000.00				-	\$ 67,000.00
D-Prod-2nd Int Cmt	219			\$ 100,000.00				-	\$ 100,000.00
D-Float Equipment & Centralizers	221			\$ 55,000.00				-	\$ 55,000.00
D-Csg Crews & Equip	222			\$ 59,000.00				-	\$ 59,000.00
D-Contract Labor	225			\$ 6,000.00				-	\$ 6,000.00
D-Company Sprvn	226			\$ 46,000.00				-	\$ 46,000.00
D-Contract Sprvn	227			\$ 108,000.00				-	\$ 108,000.00
D-Tslg Csg/Tbg	228			\$ 37,000.00				-	\$ 37,000.00
D-Mud Logging Unit	229			\$ 41,000.00				-	\$ 41,000.00
D-Rentals-Surface	235			\$ 177,000.00				-	\$ 177,000.00
D-Rentals-Subsfc	236			\$ 82,000.00				-	\$ 82,000.00
D-Trucking/Forklift/Rig Mob	237			\$ 127,000.00				-	\$ 127,000.00
D-Welding Services	238			\$ 3,000.00				-	\$ 3,000.00
D-Contingency	243			\$ 55,000.00				-	\$ 55,000.00
D-Envmnt/Chd Loop	244			\$ 278,000.00				-	\$ 278,000.00
C-Wellbore Frac Prep	304				\$ 66,000.00			-	\$ 66,000.00
C-Lctr/Pits/Roads	305				\$ 8,000.00			-	\$ 8,000.00
C-Completion OH	306				\$ 12,000.00			-	\$ 12,000.00
C-Frac Equipment	307				\$ 758,000.00			-	\$ 758,000.00
C-Frac Chemicals	308				\$ 325,000.00			-	\$ 325,000.00
C-Frac Proppant	309				\$ 147,000.00			-	\$ 147,000.00
C-Frac Proppant Transportation	310				\$ 229,000.00			-	\$ 229,000.00
C-Fuel Delivery & Services	311				\$ 33,000.00			-	\$ 33,000.00
C-Water	312				\$ 448,000.00			-	\$ 448,000.00
C-Frac Surface Rentals	315				\$ 249,000.00			-	\$ 249,000.00
C-Contract Labor	325				\$ 8,000.00			-	\$ 8,000.00
C-Company Sprvn	326				\$ 8,000.00			-	\$ 8,000.00
C-Contract Sprvn	327				\$ 118,000.00			-	\$ 118,000.00
C-Artificial Lift Install	329				\$ 35,000.00			-	\$ 35,000.00
C-Perf/Wireline Svc	331				\$ 295,000.00			-	\$ 295,000.00
C-Trucking/Forklift/Rig Mob	337				\$ 8,000.00			-	\$ 8,000.00
C-Water Disposal	339				\$ 32,000.00			-	\$ 32,000.00
C-Contingency	343				\$ 117,000.00			-	\$ 117,000.00
C-Dyed Diesel	345				\$ 256,000.00			-	\$ 256,000.00
C-Drillout	348				\$ 284,000.00			-	\$ 284,000.00
TB-Damages/Right of Way	351					\$ 2,000.00		-	\$ 2,000.00
TB-Location/Pits/Roads	353					\$ 41,000.00		-	\$ 41,000.00
TB-Contract Labor	356					\$ 172,000.00		-	\$ 172,000.00
PEQ-Contract Labor	374						\$ 38,000.00	-	\$ 38,000.00
PEQ-Water Disposal	387						\$ 179,000.00	-	\$ 179,000.00
PEQ-HRZ Well Offset Frac	391						\$ 18,000.00	-	\$ 18,000.00
Total Intangible Costs		\$ -	\$ -	\$ 2,780,000.00	\$ 3,418,000.00	\$ 216,000.00	\$ 235,000.00	-	\$ 6,628,000.00

Tangible Costs									
PEQ-Flowback Crews & Equip	392						\$ 108,000.00	-	\$ 108,000.00
D-Surface Casing	401			\$ 22,000.00				-	\$ 22,000.00
D-Intermed Csg	402			\$ 204,000.00				-	\$ 204,000.00
D-Production Casing/Liner	403			\$ 281,000.00				-	\$ 281,000.00
D-Wellhead Equip	405			\$ 68,000.00				-	\$ 68,000.00
C-Tubing	504				\$ 41,000.00			-	\$ 41,000.00
C-Wellhead Equip	505				\$ 22,000.00			-	\$ 22,000.00
TB-Tanks	510					\$ 76,000.00		-	\$ 76,000.00
TB-Flowlines/Pipelines	511					\$ 29,000.00		-	\$ 29,000.00
TB-Htr Trt/Seprtr	512					\$ 174,000.00		-	\$ 174,000.00
TB-Electrical System/Equipment	513					\$ 111,000.00		-	\$ 111,000.00
C-Pckrs/Anchors/Hgts	514				\$ 51,000.00			-	\$ 51,000.00
TB-Couplings/Fittings/Valves	515					\$ 191,000.00		-	\$ 191,000.00
TB-Pumps-Surface	521					\$ 24,000.00		-	\$ 24,000.00
TB-Instrumentation/SCADA/POC	522					\$ 19,000.00		-	\$ 19,000.00
TB-Miscellaneous	523					\$ 19,000.00		-	\$ 19,000.00
TB-Meters/Lacts	525					\$ 24,000.00		-	\$ 24,000.00
TB-Flares/Combustors/Emission	526					\$ 29,000.00		-	\$ 29,000.00
C-Gas Lift/Compression	527				\$ 20,000.00			-	\$ 20,000.00
PEQ-Wellhead Equipment	531						\$ 38,000.00	-	\$ 38,000.00
Total Tangible Costs		\$ -	\$ -	\$ 675,000.00	\$ 134,000.00	\$ 696,000.00	\$ 148,000.00	-	\$ 1,651,000.00

Total Gross Cost	\$ -	\$ -	\$ 3,338,000.00	\$ 3,650,000.00	\$ 911,000.00	\$ 381,000.00	\$ -	\$ 8,177,000.00
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Note: The above costs are estimates only. Actual costs will be billed as incurred.

COG Operating LLC

By: _____

Date Prepared: 5/6/20

We approve:
% Working Interest

COG Operating LLC

By: _____

Company: _____

By: _____

Printed Name: _____

Title: _____

Date: _____

This AFE is only an estimate. By signing you agree to pay your share of the actual costs incurred.

**COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
Drill & Complete**

Well Name Tomahawk Fed Unit 712H
SHL 29: 500 FNL 1774 FWL of Unit C
BHL 17: 200 FNL 1774 FWL of Unit C
Formation WOLF CAMP A
Legal 17 & 20, 24S-R26E
AFE Numbers

Prospect Tomahawk 2428
State & County NEW MEXICO, EDDY
Objective DRILL & COMPLETE
Depth 20,100
TVD 9,376

Cost Description	Code	PreSpud (PS)	Pre-Set Casing (PC)	Drilling (DR)	Completions (C)	Tank Btty Constrctn (TB)	Pmpq Equip (PEQ)	Revision	Total
Intangible Costs									
D-Lctr/Pits/Roads	205			\$ 86,000.00			\$ -		\$ 86,000.00
D-Drilling Overhead	206			\$ 8,000.00			\$ -		\$ 8,000.00
D-Daywork Contract	209			\$ 601,000.00			\$ -		\$ 601,000.00
D-Directional Drig Services	210			\$ 288,000.00			\$ -		\$ 288,000.00
D-Fuel & Power	211			\$ 128,000.00			\$ -		\$ 128,000.00
D-Water	212			\$ 68,000.00			\$ -		\$ 68,000.00
D-Bits	213			\$ 95,000.00			\$ -		\$ 95,000.00
D-Mud & Chemicals	214			\$ 227,000.00			\$ -		\$ 227,000.00
D-Cement Surface	217			\$ 18,000.00			\$ -		\$ 18,000.00
D-Cement Intermed	218			\$ 67,000.00			\$ -		\$ 67,000.00
D-Prod-2nd Int Cmt	219			\$ 100,000.00			\$ -		\$ 100,000.00
D-Float Equipment & Centralizers	221			\$ 55,000.00			\$ -		\$ 55,000.00
D-Csg Crews & Equip	222			\$ 59,000.00			\$ -		\$ 59,000.00
D-Contract Labor	223			\$ 8,000.00			\$ -		\$ 8,000.00
D-Company Sprvan	226			\$ 46,000.00			\$ -		\$ 46,000.00
D-Contract Sprvan	227			\$ 108,000.00			\$ -		\$ 108,000.00
D-Tstg Csg/Tbg	228			\$ 37,000.00			\$ -		\$ 37,000.00
D-Mud Logging Unit	229			\$ 41,000.00			\$ -		\$ 41,000.00
D-Rentals-Surface	235			\$ 177,000.00			\$ -		\$ 177,000.00
D-Rentals-Subsrfc	236			\$ 82,000.00			\$ -		\$ 82,000.00
D-Trucking/Forklift/Rig Mob	237			\$ 127,000.00			\$ -		\$ 127,000.00
D-Welding Services	238			\$ 3,000.00			\$ -		\$ 3,000.00
D-Contingency	243			\$ 55,000.00			\$ -		\$ 55,000.00
D-Envrnmnt/Cld Loop	244			\$ 278,000.00			\$ -		\$ 278,000.00
C-Wellbore Frac Prep	304				\$ 66,000.00		\$ -		\$ 66,000.00
C-Lctr/Pits/Roads	305				\$ 8,000.00		\$ -		\$ 8,000.00
C-Completion OH	306				\$ 12,000.00		\$ -		\$ 12,000.00
C-Frac Equipment	307				\$ 758,000.00		\$ -		\$ 758,000.00
C-Frac Chemicals	308				\$ 325,000.00		\$ -		\$ 325,000.00
C-Frac Proppant	309				\$ 147,000.00		\$ -		\$ 147,000.00
C-Frac Proppant Transportation	310				\$ 229,000.00		\$ -		\$ 229,000.00
C-Fuel Delivery & Services	311				\$ 33,000.00		\$ -		\$ 33,000.00
C-Water	312				\$ 448,000.00		\$ -		\$ 448,000.00
C-Frac Surface Rentals	315				\$ 249,000.00		\$ -		\$ 249,000.00
C-Contract Labor	325				\$ 8,000.00		\$ -		\$ 8,000.00
C-Company Sprvan	326				\$ 8,000.00		\$ -		\$ 8,000.00
C-Contract Sprvan	327				\$ 118,000.00		\$ -		\$ 118,000.00
C-Artificial Lift Install	329				\$ 35,000.00		\$ -		\$ 35,000.00
C-Perf/Wireline Svc	331				\$ 295,000.00		\$ -		\$ 295,000.00
C-Trucking/Forklift/Rig Mob	337				\$ 8,000.00		\$ -		\$ 8,000.00
C-Water Disposal	339				\$ 32,000.00		\$ -		\$ 32,000.00
C-Contingency	343				\$ 117,000.00		\$ -		\$ 117,000.00
C-Dyed Diesel	345				\$ 256,000.00		\$ -		\$ 256,000.00
C-Drillout	346				\$ 264,000.00		\$ -		\$ 264,000.00
TB-Damages/Right of Way	351					\$ 2,000.00	\$ -		\$ 2,000.00
TB-Location/Pits/Roads	353					\$ 41,000.00	\$ -		\$ 41,000.00
TB-Contract Labor	356					\$ 172,000.00	\$ -		\$ 172,000.00
PEQ-Contract Labor	374						\$ 38,000.00		\$ 38,000.00
PEQ-Water Disposal	387						\$ 179,000.00		\$ 179,000.00
PEQ-HRZ Well Offset Frac	391						\$ 18,000.00		\$ 18,000.00
Total Intangible Costs		\$ -	\$ -	\$ 2,760,000.00	\$ 3,416,000.00	\$ 215,000.00	\$ 235,000.00	\$ -	\$ 6,626,000.00
Tangible Costs									
PEQ-Flowback Crews & Equip	392						\$ 108,000.00	\$ -	\$ 108,000.00
D-Surface Casing	401			\$ 22,000.00			\$ -		\$ 22,000.00
D-Intermed Csg	402			\$ 204,000.00			\$ -		\$ 204,000.00
D-Production Casing/Liner	403			\$ 281,000.00			\$ -		\$ 281,000.00
D-Wellhead Equip	405			\$ 68,000.00			\$ -		\$ 68,000.00
C-Tubing	504				\$ 41,000.00		\$ -		\$ 41,000.00
C-Wellhead Equip	505				\$ 22,000.00		\$ -		\$ 22,000.00
TB-Tanks	510					\$ 76,000.00	\$ -		\$ 76,000.00
TB-Flowlines/Pipelines	511					\$ 29,000.00	\$ -		\$ 29,000.00
TB-Htr Trlr/Seprtr	512					\$ 174,000.00	\$ -		\$ 174,000.00
TB-Electrical System/Equipment	513					\$ 111,000.00	\$ -		\$ 111,000.00
C-Pckrs/Anchors/Hgrs	514				\$ 51,000.00		\$ -		\$ 51,000.00
TB-Couplings/Fittings/Valves	515					\$ 191,000.00	\$ -		\$ 191,000.00
TB-Pumps-Surface	521					\$ 24,000.00	\$ -		\$ 24,000.00
TB-Instrumentation/SCADA/POC	522					\$ 19,000.00	\$ -		\$ 19,000.00
TB-Miscellaneous	523					\$ 19,000.00	\$ -		\$ 19,000.00
TB-Meters/Lcts	525					\$ 24,000.00	\$ -		\$ 24,000.00
TB-Flares/Combusters/Emission	526					\$ 29,000.00	\$ -		\$ 29,000.00
C-Gas Lift/Compression	527				\$ 20,000.00		\$ -		\$ 20,000.00
PEQ-Wellhead Equipment	531						\$ 38,000.00		\$ 38,000.00
Total Tangible Costs		\$ -	\$ -	\$ 675,000.00	\$ 134,000.00	\$ 696,000.00	\$ 146,000.00	\$ -	\$ 1,551,000.00
Total Gross Cost		\$ -	\$ -	\$ 3,336,000.00	\$ 3,650,000.00	\$ 911,000.00	\$ 381,000.00	\$ -	\$ 8,177,000.00

Note: The above costs are estimates only. Actual costs will be billed as incurred.

COG Operating LLC

By: _____

Date Prepared: 5/8/20

We approve:

% Working Interest

COG Operating LLC

By: _____

Company: _____
By: _____

Printed Name: _____
Title: _____
Date: _____

This AFE is only an estimate. By signing you agree to pay your share of the actual costs incurred.

COG OPERATING LLC
AUTHORITY FOR EXPENDITURE
Drill & Complete

Well Name Tomahawk Fed Unit 713H
 SHL 29: 50 FNL, 1744 FWL or Unit C
 BHL 17: 200 FNL, 813 FWL or Unit D
 Formation WOLF CAMP A
 Legal 17 & 20, 24S-R28E
 AFE Numbers

Prospect Tomahawk 2428
 State & County NEW MEXICO, EDDY
 Objective DRILL & COMPLETE
 Depth 20,100
 TVD 9,356

Cost Description	Code	PreSpud (PS)	Pre-Set Casing (PC)	Drilling (DR)	Completions (C)	Tank Btty Constrcn (TB)	Pmpq Equip (PEQ)	Revisions	Total
Intangible Costs									
D-Lctr/Pits/Roads	205			\$ 86,000.00			\$ -		\$ 86,000.00
D-Drilling Overhead	206			\$ 8,000.00			\$ -		\$ 8,000.00
D-Daywork Contract	209			\$ 601,000.00			\$ -		\$ 601,000.00
D-Directional Drllg Services	210			\$ 288,000.00			\$ -		\$ 288,000.00
D-Fuel & Power	211			\$ 128,000.00			\$ -		\$ 128,000.00
D-Water	212			\$ 68,000.00			\$ -		\$ 68,000.00
D-Bits	213			\$ 95,000.00			\$ -		\$ 95,000.00
D-Mud & Chemicals	214			\$ 227,000.00			\$ -		\$ 227,000.00
D-Cement Surface	217			\$ 18,000.00			\$ -		\$ 18,000.00
D-Cement Intermed	218			\$ 67,000.00			\$ -		\$ 67,000.00
D-Prod-2nd Int Cmt	219			\$ 100,000.00			\$ -		\$ 100,000.00
D-Float Equipment & Centralizers	221			\$ 55,000.00			\$ -		\$ 55,000.00
D-Csg Crews & Equip	222			\$ 59,000.00			\$ -		\$ 59,000.00
D-Contract Labor	225			\$ 6,000.00			\$ -		\$ 6,000.00
D-Company Sprvn	228			\$ 46,000.00			\$ -		\$ 46,000.00
D-Contract Sprvn	227			\$ 108,000.00			\$ -		\$ 108,000.00
D-Telp Csg/Tbg	228			\$ 37,000.00			\$ -		\$ 37,000.00
D-Mud Logging Unit	229			\$ 41,000.00			\$ -		\$ 41,000.00
D-Rentals-Surface	235			\$ 177,000.00			\$ -		\$ 177,000.00
D-Rentals-Subaric	236			\$ 82,000.00			\$ -		\$ 82,000.00
D-Trucking/Forklift/Rig Mob	237			\$ 127,000.00			\$ -		\$ 127,000.00
D-Welding Services	238			\$ 3,000.00			\$ -		\$ 3,000.00
D-Contingency	243			\$ 55,000.00			\$ -		\$ 55,000.00
D-Envmnt/Clad Loop	244			\$ 278,000.00			\$ -		\$ 278,000.00
C-Wellbore Frac Prep	304				\$ 66,000.00		\$ -		\$ 66,000.00
C-Lctr/Pits/Roads	305				\$ 8,000.00		\$ -		\$ 8,000.00
C-Completion OH	306				\$ 12,000.00		\$ -		\$ 12,000.00
C-Frac Equipment	307				\$ 758,000.00		\$ -		\$ 758,000.00
C-Frac Chemicals	308				\$ 325,000.00		\$ -		\$ 325,000.00
C-Frac Proppant	309				\$ 147,000.00		\$ -		\$ 147,000.00
C-Frac Proppant Transportation	310				\$ 229,000.00		\$ -		\$ 229,000.00
C-Fuel Delivery & Services	311				\$ 33,000.00		\$ -		\$ 33,000.00
C-Water	312				\$ 448,000.00		\$ -		\$ 448,000.00
C-Frac Surface Rentals	315				\$ 249,000.00		\$ -		\$ 249,000.00
C-Contract Labor	325				\$ 8,000.00		\$ -		\$ 8,000.00
C-Company Sprvn	326				\$ 8,000.00		\$ -		\$ 8,000.00
C-Contract Sprvn	327				\$ 118,000.00		\$ -		\$ 118,000.00
C-Artificial Lift Install	329				\$ 35,000.00		\$ -		\$ 35,000.00
C-Perf/Wireline Svc	331				\$ 295,000.00		\$ -		\$ 295,000.00
C-Trucking/Forklift/Rig Mob	337				\$ 8,000.00		\$ -		\$ 8,000.00
C-Water Disposal	339				\$ 32,000.00		\$ -		\$ 32,000.00
C-Contingency	343				\$ 117,000.00		\$ -		\$ 117,000.00
C-Dyed Diesel	345				\$ 256,000.00		\$ -		\$ 256,000.00
C-Drillout	346				\$ 264,000.00		\$ -		\$ 264,000.00
TB-Damages/Right of Way	351					\$ 2,000.00	\$ -		\$ 2,000.00
TB-Location/Pits/Roads	353					\$ 41,000.00	\$ -		\$ 41,000.00
TB-Contract Labor	358					\$ 172,000.00	\$ -		\$ 172,000.00
PEQ-Contract Labor	374						\$ 38,000.00	\$ -	\$ 38,000.00
PEQ-Water Disposal	387						\$ 179,000.00	\$ -	\$ 179,000.00
PEQ-HRZ Well Offset Frac	391						\$ 18,000.00	\$ -	\$ 18,000.00
Total Intangible Costs		\$ -	\$ -	\$ 2,780,000.00	\$ 3,416,000.00	\$ 216,000.00	\$ 236,000.00	\$ -	\$ 6,426,000.00
Tangible Costs									
PEQ-Flowback Crews & Equip	392						\$ 108,000.00	\$ -	\$ 108,000.00
D-Surface Casing	401			\$ 22,000.00			\$ -		\$ 22,000.00
D-Intermed Csg	402			\$ 204,000.00			\$ -		\$ 204,000.00
D-Production Casing/Liner	403			\$ 281,000.00			\$ -		\$ 281,000.00
D-Wellhead Equip	405			\$ 68,000.00			\$ -		\$ 68,000.00
C-Tubing	504				\$ 41,000.00		\$ -		\$ 41,000.00
C-Wellhead Equip	505				\$ 22,000.00		\$ -		\$ 22,000.00
TB-Tanks	510					\$ 76,000.00	\$ -		\$ 76,000.00
TB-Flowlines/Pipelines	511					\$ 29,000.00	\$ -		\$ 29,000.00
TB-Hz Trls/Seprtr	512					\$ 174,000.00	\$ -		\$ 174,000.00
TB-Electrical System/Equipment	513					\$ 111,000.00	\$ -		\$ 111,000.00
C-Pckrs/Anchors/Hgrs	514				\$ 51,000.00		\$ -		\$ 51,000.00
TB-Couplings/Fittings/Valves	515					\$ 191,000.00	\$ -		\$ 191,000.00
TB-Pumps-Surface	521					\$ 24,000.00	\$ -		\$ 24,000.00
TB-Instrumentation/SCADA/POC	522					\$ 19,000.00	\$ -		\$ 19,000.00
TB-Miscellaneous	523					\$ 19,000.00	\$ -		\$ 19,000.00
TB-Meters/Lacts	525					\$ 24,000.00	\$ -		\$ 24,000.00
TB-Flares/Combusters/Emission	526					\$ 29,000.00	\$ -		\$ 29,000.00
C-Gas Lift/Compression	527				\$ 20,000.00		\$ -		\$ 20,000.00
PEQ-Wellhead Equipment	531						\$ 38,000.00	\$ -	\$ 38,000.00
Total Tangible Costs		\$ -	\$ -	\$ 576,000.00	\$ 134,000.00	\$ 696,000.00	\$ 148,000.00	\$ -	\$ 1,651,000.00
Total Gross Cost		\$ -	\$ -	\$ 3,335,000.00	\$ 3,550,000.00	\$ 911,000.00	\$ 381,000.00	\$ -	\$ 8,177,000.00

Note: The above costs are estimates only. Actual costs will be billed as incurred

COG Operating LLC

By: _____

Date Prepared: 5/6/20 _____

We approve:
 % Working Interest

COG Operating LLC

By: _____

Company:
 By: _____

Printed Name:
 Title:
 Date: _____

This AFE is only an estimate. By signing you agree to pay your share of the actual costs incurred

August 5, 2020

Via Electronic mail at tres@fdcenenergy.com

Big Three Energy Group

P.O. Box 429

Roswell, NM 88202

Re: **Tomahawk Fed Unit 701H, 702H**
All of Sections 29 & 32, T24S-R28E
Tomahawk Fed Unit 709H, 710H
All of Sections 17 & 20, T24S-R28E
Eddy County, New Mexico

Dear Sir or Madam:

COG Operating, LLC ("COG") hereby proposes the drilling and completing of the following horizontal wells with productive laterals located in Sections 29 & 32 (#701H & #702H) and Sections 17 & 20 (#709H & #710H), T24S-R28E, Eddy County, New Mexico.

SECTIONS 29 & 32, T24S-R28E

The following horizontal wells will have productive laterals located in All of Sections 29 & 32, Township 24 South, Range 28 East, Eddy County, New Mexico. The surface pad locations will be located in Unit P of Section 20, T24S-R28E (subject to change).

- **Tomahawk Fed Unit 701H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,448'. The surface location for this well is proposed at a legal location in Unit P of Section 20, and a bottom hole location at a legal location in Unit P of Section 32. The dedicated horizontal spacing unit will be All of Sections 29 & 32, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$8,081,800.00, as shown on the attached AFE.
- **Tomahawk Fed Unit 702H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,423'. The surface location for this well is proposed at a legal location in Unit P of Section 20, and a bottom hole location at a legal location in Unit O of Section 32. The dedicated horizontal spacing unit will be All of Sections 29 & 32, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$8,081,800.00, as shown on the attached AFE.

SECTIONS 17 & 20, T24S-R28E

The following horizontal wells with productive laterals located in All of Sections 17 & 20, Township 24 South, Range 28 East, Eddy County, New Mexico (collectively, the "Operation"). The surface pad locations will be located in Unit A of Section 29, T24S-R28E (subject to change).

- **Tomahawk Fed Unit 709H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,426'. The surface location for this well is proposed at a legal location in Unit A of Section 29, and a bottom hole location at a legal location in Unit A of Section 17. The dedicated horizontal spacing unit will be All of Sections 17 & 20, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$7,800,800.00, as shown on the attached AFE.
- **Tomahawk Fed Unit 710H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,428'. The surface location for this well is proposed at a legal location in Unit A of Section 29, and a bottom hole location at a legal location in Unit B of Section 17. The dedicated horizontal spacing unit will be All of Sections 17 & 20, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$7,800,800.00, as shown on the attached AFE.

COG is proposing to drill and complete these wells under the terms the Tomahawk Federal Exploratory Unit Agreement and Tomahawk Joint Operating Agreement which have been previously provided and executed by you.

Please indicate your participation elections in the space provided below, sign and return this letter, along with a signed copy of the enclosed AFEs and a copy of your geologic requirements, to my attention at the letterhead address or by email to jstout@concho.com. Should you have any questions, please do not hesitate to contact me at 432.818.1372.

Sincerely,

COG Operating LLC

/Jeffrey S. Stout/

Jeffrey S. Stout
Land Advisor

JSS:bh
Enc

Please mark your elections below and execute where indicated:

WELL NAME	Election to PARTICIPATE in drilling & completion of well	Election NOT TO PARTICIPATE in drilling & completion of well
Tomahawk Fed Unit 701H		
Tomahawk Fed Unit 702H		
Tomahawk Fed Unit 709H		
Tomahawk Fed Unit 710H		

Big Three Energy Group

By: _____
Title: _____
Date: _____



June 25, 2020

Via Electronic mail at bart@bartonoil.com

Brett C. Barton

1919 N. Turner Street
Hobbs, NM 88240

Re: **Tomahawk Fed Unit 703H, 704H, 705H**
All of Sections 29 & 32, T24S-R28E
Tomahawk Fed Unit 711H, 712H, 713H
All of Sections 17 & 20, T24S-R28E
Eddy County, New Mexico

Dear Mr. Barton:

COG Operating, LLC ("COG"), as Operator of the Tomahawk WC Federal Exploratory Unit ("Unit"), would like to inform you as to the plans moving forward with the Unit. The Bureau of Land Management is currently in the process of making their formal and final approval of the Unit, at which time we will provide all Working Interest Owners copies of said approval. Beyond that, estimated spud dates of the first wells in the Unit will occur in mid-3rd Quarter 2020, as COG plans to continue drilling operations through the 4th Quarter 2020, drilling ten (10) wells ("Initial Wells") within the calendar year. At this time, COG hereby proposes the drilling of the following horizontal wells listed below:

SECTIONS 29 & 32, T24S-R28E

The following horizontal wells will have productive laterals located in All of Sections 29 & 32, Township 24 South, Range 28 East, Eddy County, New Mexico. The surface pad locations will be located in Unit N of Section 20, T24S-R28E (subject to change).

- **Tomahawk Fed Unit 703H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,398'. The surface location for this well is proposed at a legal location in Unit N of Section 20, and a bottom hole location at a legal location in Unit N of Section 32. The dedicated horizontal spacing unit will be All of Sections 29 & 32, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$8,177,000.00, as shown on the attached AFE.
- **Tomahawk Fed Unit 704H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,381'. The surface location for this well is proposed at a legal location in Unit N of Section 20, and a bottom hole location at a legal location in Unit N of Section 32. The dedicated horizontal spacing unit will be All of Sections 29 & 32, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$8,177,000.00, as shown on the attached AFE.
- **Tomahawk Fed Unit 705H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,362'. The surface location for this well is proposed at a legal location in Unit N of Section 20, and a bottom hole location at a legal location in Unit M of Section 32. The dedicated horizontal spacing unit will be All of Sections 29 & 32, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$8,177,000.00, as shown on the attached AFE.

SECTIONS 17 & 20, T24S-R28E

The following horizontal wells with productive laterals located in All of Sections 17 & 20, Township 24 South, Range 28 East, Eddy County, New Mexico (collectively, the "Operation"). The surface pad locations will be located in Unit C of Section 29, T24S-R28E (subject to change).

- **Tomahawk Fed Unit 711H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,396'. The surface location for this well is proposed at a legal location in Unit C of Section 29, and a bottom hole location at a legal location in Unit B of Section 17. The dedicated horizontal spacing unit will be All of Sections 17 & 20, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$8,177,000.00, as shown on the attached AFE.
- **Tomahawk Fed Unit 712H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,376'. The surface location for this well is proposed at a legal location in Unit C of Section 29, and a bottom hole location at a legal location in Unit C of Section 17. The dedicated horizontal spacing unit will be All of Sections 17 & 20, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$8,177,000.00, as shown on the attached AFE.
- **Tomahawk Fed Unit 713H**, to be drilled to a depth sufficient to test the Wolfcamp A formation at an approximate total vertical depth of 9,356'. The surface location for this well is proposed at a legal location in Unit C of Section 29, and a bottom hole location at a legal location in Unit D of Section 17. The dedicated horizontal spacing unit will be All of Sections 17 & 20, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$8,177,000.00, as shown on the attached AFE.

COG is proposing to drill and complete these wells under the terms the Tomahawk Federal Exploratory Unit Agreement and Tomahawk Joint Operating Agreement which have been previously provided and executed by you.

Please indicate your participation elections in the space provided below, sign and return this letter, along with a signed copy of the enclosed AFEs and a copy of your geologic requirements, to my attention at the letterhead address or by email to jstout@concho.com. Should you have any questions, please do not hesitate to contact me at 432.818.1372.

Sincerely,

COG Operating LLC

/Jeffrey S. Stout/

Jeffrey S. Stout
Land Advisor

JSS:bh
Enc

Please mark your elections below and execute where indicated:

WELL NAME	Election to PARTICIPATE in drilling & completion of well	Election NOT TO PARTICIPATE in drilling & completion of well
Tomahawk Fed Unit 703H		
Tomahawk Fed Unit 704H		
Tomahawk Fed Unit 705H		
Tomahawk Fed Unit 711H		
Tomahawk Fed Unit 712H		
Tomahawk Fed Unit 713H		

BRETT C. BARTON

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

**APPLICATION OF COG OPERATING LLC
FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO**

CASE NO. 21424

GEOLOGIST AFFIDAVIT

Travis Sparks, of lawful age and being first duly sworn, declares as follows:

1. My name is Travis Sparks, and I am a Geologist with COG Operating LLC ("COG").
2. I have previously testified before the New Mexico Oil Conservation Division ("Division") as an expert witness in petroleum geology matters and my credentials have been accepted and made a matter of public record.
3. I am familiar with the application filed by COG in this case and I have conducted a geologic study of the lands in the subject area.
4. COG is targeting the Wolfcamp formation with its proposed **Tomahawk Federal Unit #709H, 710H, 711H, 712H, and 713H wells** (collectively called the "Wells").
5. **Attachment D** is a locator map displaying COG's acreage in yellow for the Wolfcamp formation. Existing producing wells in the Wolfcamp interval are represented by solid lines. The approximate wellbore paths for the Wells are marked by dashed lines.
6. **Attachment E** is a subsea structure map that I prepared for the top of the Wolfcamp that is representative of the targeted interval within the Wolfcamp interval. The data points are indicated by crosses. I used the Wolfcamp structure because it is a reliable regional marker and

the target intervals lie near this marker. The approximate wellbore paths for the proposed Wells are depicted by dashed lines. The map shows that the formation is gently dipping to the southwest in this area. I do not observe any faulting, pinch-outs, or other geologic impediments to developing the targeted intervals with horizontal wells in this area.

7. **Attachment F** overlays a cross-section line consisting of three wells penetrating the Wolfcamp formation that I used to construct a stratigraphic cross-section from A to A'. I consider these well logs to be representative of the geology in the area.

8. **Attachment G** is a stratigraphic cross-section using the representative wells depicted on Attachment F. Each well in the cross-section contains gamma ray, resistivity, and porosity logs. The proposed target intervals in the Wolfcamp formation are labeled on the exhibit. The cross-section demonstrates that the targeted intervals are continuous across the proposed spacing unit.

9. In my opinion, the stand-up orientation of the proposed wells is the preferred orientation for horizontal well development in this area and is appropriate to efficiently and effectively develop the subject acreage.

10. Based on my geologic study, the targeted interval underlying the subject area is suitable for development by horizontal wells, and the acreage comprising the proposed spacing unit will contribute, more-or-less, equally to the production from the wellbores.

11. In my opinion, the granting of COG's application will be in the best interest of conservation, the prevention of waste, and the protection of correlative rights.

12. **Exhibit 2 and Attachments D through G** were either prepared by me or compiled under my direction and supervision.

THIS CONCLUDES AFFIANT'S STATEMENT.

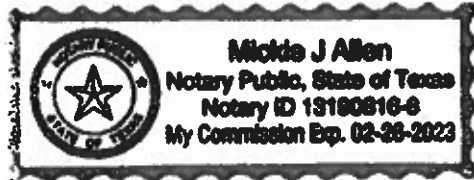
[Signature]
Affiant

STATE OF New Mexico)
COUNTY OF Eddy)

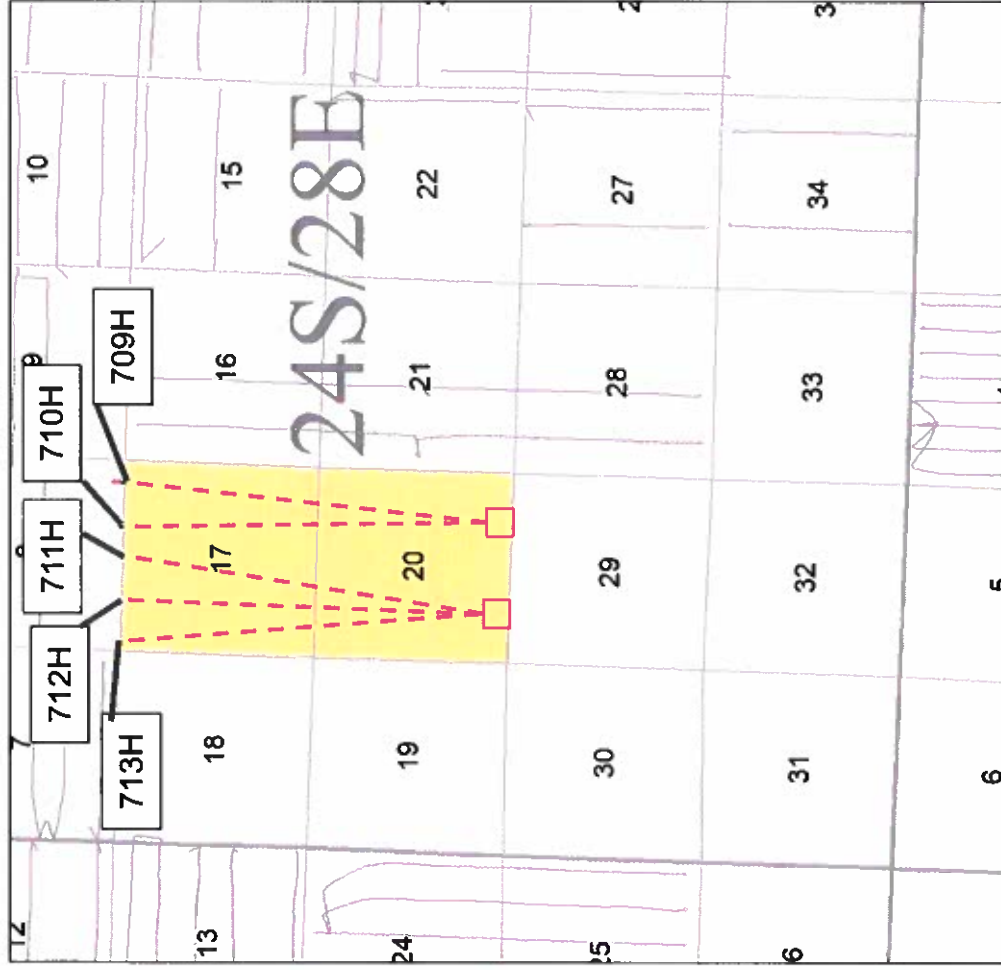
SUBSCRIBED and SWORN to before me this 4 day of September by
Nickie Allen

[Signature]
NOTARY PUBLIC

My Commission Expires:
2-26-2023



Wolfcamp Pool Tomahawk Fed Unit



Map Legend

SHL

BHL

COG – Wolfcamp Horizontal Location

Producing Wolfcamp Wells

COG Acreage



BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico

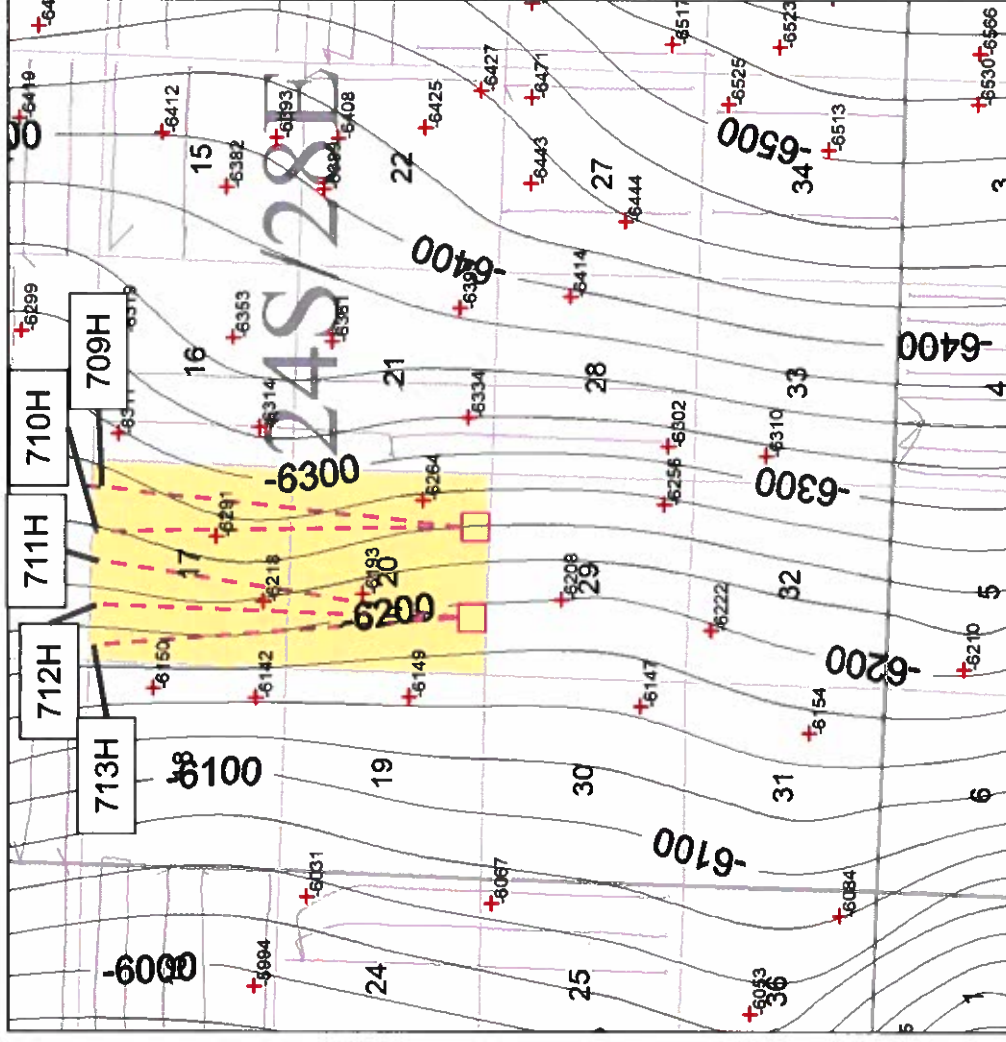
Case No. 21424 Attachment D

Submitted by:

COG OPERATING LLC

Hearing Date: September 10, 2020

Wolfcamp Pool Wolfcamp Structure Map



Map Legend

SHL

COG - Wolfcamp Horizontal Location

BHL

Producing Wolfcamp Wells

Wolfcamp Structure
Cl: 25'

Data Point

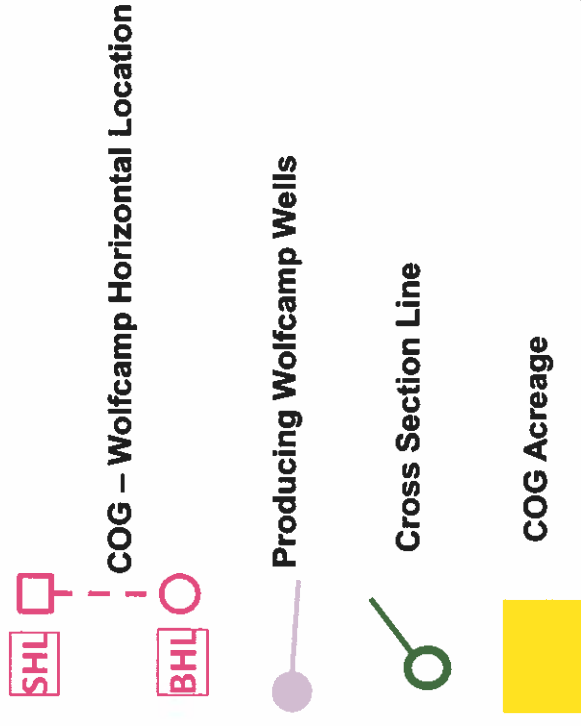
COG Acreage



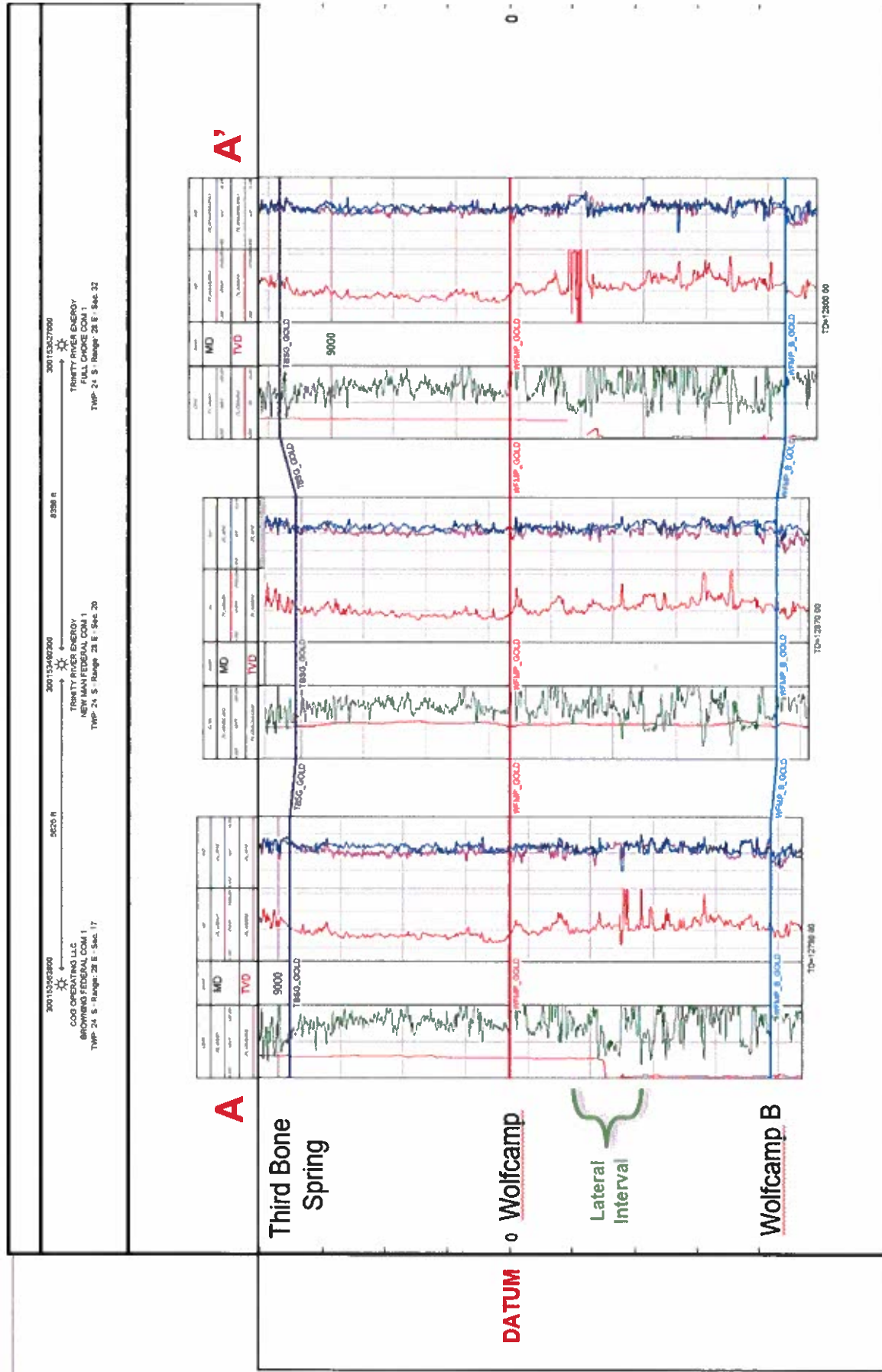
Wolfcamp Pool Cross Section Map



Map Legend



Stratigraphic Cross Section A – A'



August 20, 2020

VIA CERTIFIED MAIL
CERTIFIED RECEIPT REQUESTED**TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS****Re: Case No. 21424: Application of COG Operating, LLC for Compulsory Pooling,**
Eddy County, New Mexico.
Tomahawk Federal 709H, 710H, 711H, 712H, 713H Wells

Ladies & Gentlemen:

This letter is to advise you that COG Operating LLC has filed the enclosed application with the New Mexico Oil Conservation Division. A hearing has been requested before a Division Examiner on September 10, 2020, and the status of the hearing can be monitored through the Division's website at <http://www.emnrd.state.nm.us/oed/>. You 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.

During the COVID-19 Public Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. To participate in the electronic hearing, please see the instructions posted on the OCD Hearings website: <http://www.emnrd.state.nm.us/OCD/announcements.html>.

Parties appearing in cases are required by Division Rule 19.15.4.13.B to file a Pre-hearing Statement four business days in advance of a scheduled hearing. 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 Lizzy Laufer, at (432) 221-0470 or elauger@concho.com.

Sincerely,


201 Michael Rodriguez
ATTORNEY FOR COG OPERATING LLC

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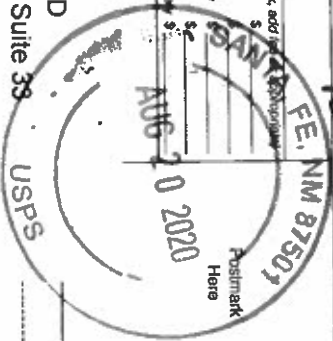
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Marrs & Smith LTD
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 Lubbock, Texas 79424

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



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 Midland, Texas 79710

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



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Marrs & Smith LTD
 8008 Slide Road, Suite 33
 Lubbock, Texas 79424



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7020 0640 0000 0143 0047

PS Form 3811, July 2015 PSN 7530-02-000-9063

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[Signature]

☐ Addressee

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[Signature]

C. Date of Delivery
 8-24-2020

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7020 0640 0000 0143 0061

PS Form 3811, July 2015 PSN 7530-02-000-9063



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Domestic Return Receipt

3. Service Type

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☐ Adult Signature Restricted Delivery

☐ Certified Mail[®]

☐ Certified Mail Restricted Delivery

☐ Collect on Delivery

☐ Collect on Delivery Restricted Delivery

☐ Signature ConfirmationTM

☐ Signature Confirmation Restricted Delivery

☐ Priority Mail Express[®]

☐ Registered MailTM

☐ Registered Mail Restricted Delivery

☐ Return Receipt for Merchandise

☐ Signature ConfirmationTM

☐ Signature Confirmation Restricted Delivery

- D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

B. Received by (Printed Name)
[Signature]

C. Date of Delivery
 8-25-20

☐ Adult Signature

☐ Adult Signature Restricted Delivery

☐ Certified Mail[®]

☐ Certified Mail Restricted Delivery

☐ Collect on Delivery

☐ Collect on Delivery Restricted Delivery

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☐ Signature ConfirmationTM

☐ Signature Confirmation Restricted Delivery

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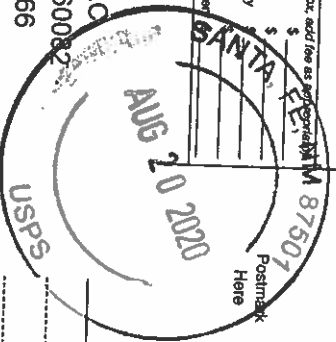
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7020 0640 0000 0143 0078

Birch Royalties LLC
 Post Office Box 660082
 Dallas, Texas 75266

PS Form 3800, April 2015 PSN 7530-02-000-9047

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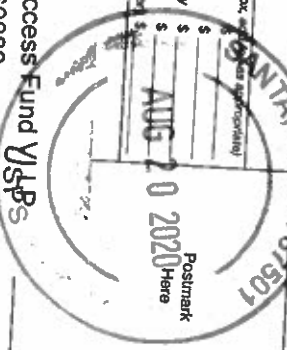
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Noble Royalties Access Fund USPS
 Post Office Box 660082
 Dallas, Texas 75266

PS Form 3800, April 2015 PSN 7530-02-000-9047

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Birch Royalties LLC
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7020 0640 0000 0143 0078

PS Form 3811, July 2015 PSN 7530-02-000-9053

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- A. Signature [Signature] ☐ Agent
 B. Received by (Printed Name) [Name] ☐ Addressee
 C. Date of Delivery [Date]
 D. Is delivery address different from item 1? ☐ Yes
 If YES, enter delivery address below: ☐ No

3. Service Type
- | | |
|--|---|
| <input type="checkbox"/> Adult Signature | <input type="checkbox"/> Priority Mail Express® |
| <input type="checkbox"/> Adult Signature Restricted Delivery | <input type="checkbox"/> Registered Mail™ |
| <input type="checkbox"/> Certified Mail® | <input type="checkbox"/> Registered Mail Restricted Delivery |
| <input type="checkbox"/> Certified Mail Restricted Delivery | <input type="checkbox"/> Return Receipt for Merchandise |
| <input type="checkbox"/> Collect on Delivery | <input type="checkbox"/> Signature Confirmation™ |
| <input type="checkbox"/> Collect on Delivery Restricted Delivery | <input type="checkbox"/> Signature Confirmation Restricted Delivery |

Domestic Return Receipt

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

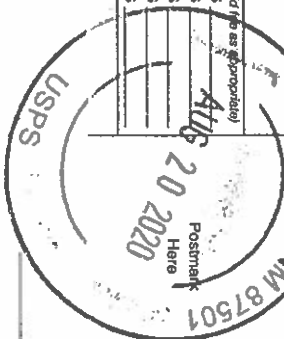
For delivery information, visit our website at www.usps.com®.

OFFICIAL MAIL

Certified Mail Fee \$
Extra Services & Fees (check box, add fee as appropriate)
☐ Return Receipt (hardcopy) \$
☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$
Postage \$

Philip L. White
 Post Office Box 25968
 Albuquerque, New Mexico 87125

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

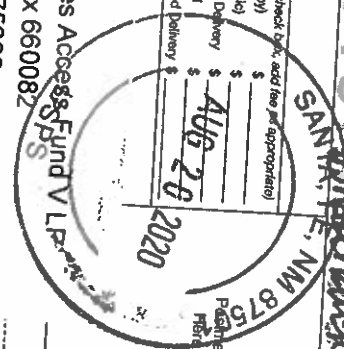
For delivery information, visit our website at www.usps.com®.

OFFICIAL MAIL

Certified Mail Fee \$
Extra Services & Fees (check box, add fee as appropriate)
☐ Return Receipt (hardcopy) \$
☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$
Postage \$

Noble Royalties Access Fund V LP
 Post Office Box 660082
 Dallas, Texas 75266

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

Philip L. White
 Post Office Box 25968
 Albuquerque, New Mexico 87125



9590 9402 5941 0062 9999 92

7020 0640 0000 0143 0016

PS Form 3811, July 2015 PSN 7630-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature ☒ Signature ☐ Agent
 [Signature]

B. Received by (Printed Name) ☐ Addressee
 [Signature]

C. Date of Delivery ☐ Yes ☐ No
 If YES, enter delivery address different from item 1: [Address]



3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Registered Mail
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

U.S. Postal ServiceTM
CERTIFIED MAIL[®] RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com

Certified Mail Fee

Extra Services & Fees (check box, add fee if appropriate)
☐ Return Receipt (hardcopy) \$
☐ Return Receipt (electronic) \$
☐ Certified Mail Restricted Delivery \$
☐ Adult Signature Required \$
☐ Adult Signature Restricted Delivery \$

Postage \$
 Postmark AUG 20 2020

Good News Minerals, LLC
 Post Office Box 50820
 Midland, Texas 79710

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

Good News Minerals, LLC
 Post Office Box 50820
 Midland, Texas 79710

9590 9402 5941 0062 9999 54

7020 0640 0000 0143 0054

PS Form 3811, July 2015 PSN 7530-02-000-9053

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE.

COMPLETE THIS SECTION ON DELIVERY

- A. Signature ☒ Agent ☐ Addressee
- B. Received by (Printed Name) *Paul* C. Date of Delivery *8-25-20*
- D. Is delivery address different from item 1? ☐ Yes ☒ No
 If YES, enter delivery address below:

3. Service type
- | | |
|--|--|
| <input type="checkbox"/> Adult Signature | <input type="checkbox"/> Priority Mail Express [®] |
| <input type="checkbox"/> Adult Signature Restricted Delivery | <input type="checkbox"/> Registered Mail [™] |
| <input type="checkbox"/> Certified Mail [®] | <input type="checkbox"/> Registered Mail Restricted Delivery |
| <input type="checkbox"/> Certified Mail Restricted Delivery | <input type="checkbox"/> Return Receipt for Merchandise |
| <input type="checkbox"/> Collect on Delivery | <input type="checkbox"/> Signature Confirmation [™] Restricted Delivery |
| <input type="checkbox"/> Restricted Delivery | |
| <input checked="" type="checkbox"/> Restricted Delivery | |

Domestic Return Receipt

Carlsbad Current Argus.

PART OF THE USA TODAY NETWORK

Affidavit of Publication

Ad # 0004341715

This is not an invoice

CONCHO

1048 PASEO DE PERALTA

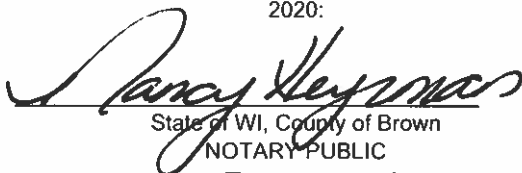
SANTA FE, NM 87501

I, a legal clerk of the **Carlsbad Current Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

08/26/2020


Legal Clerk

Subscribed and sworn before me this August 26,
2020:


State of WI, County of Brown
NOTARY PUBLIC
5.15.23
My commission expires

Ad # 0004341715

PO #: 21424
of Affidavits 1

This is not an invoice

NANCY HEYRMAN
Notary Public
State of Wisconsin

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

The State of New Mexico through its Oil Conservation Division hereby gives notice pursuant to law and the Rules and Regulations of the Division of the following public hearing to be held at 8:15 A.M. on September 10, 2020. During the COVID-19 Public Health Emergency, state buildings are closed to the public and hearings will be conducted remotely. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: <http://www.emnrd.state.nm.us/OCD/announcements.html>. If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing, please contact: Florene Davidson at 505-476-3458 or through the New Mexico Relay Network, 1-800-659-1779 by September 1, 2020. Public documents, including the agenda and minutes, can be provided in various accessible formats. Members of the public may obtain copies of the docket by contacting Ms. Davidson at the phone number indicated above. Also, the docket will be posted on the Oil Conservation Division website at www.emnrd.state.nm.us/OCD/. please contact Ms. Davidson if a summary or other type of accessible form is needed.

STATE OF NEW MEXICO TO:
All named parties and persons
having any right, title, interest
or claim in the following case
and notice to the public.

(NOTE: All land descriptions herein refer to the New Mexico Principal Meridian whether or not so stated.)

To: All interested parties, including: Birch Royalties LLC; CEP Minerals LLC; Good News Minerals, LLC; La Vida Energy Corporation; Marrs & Smith LTD; Noble Royalties Access Fund V LP; Noble Royalties Access Fund VI LP; Philip L White.

Case No. 21424: Application of COG Operating LLC for compulsory pooling, Eddy County, New Mexico. Applicant in the above-styled cause seeks an order pooling all uncommitted interests in the Wolfcamp formation, Purple Sage Wolfcamp Gas Pool (98220), underlying a standard 1280-acre, more or less, horizontal spacing unit comprised of all of Sections 17 and 20 Township 24 South, Range 28 East, Eddy County, New Mexico. Applicant seeks to dedicate the above-referenced horizontal spacing unit to the to the following proposed wells:

- Tomahawk Federal Unit #709H to be drilled from a surface hole location in NE/4NE/4 (Unit A) of Section 29 to a bottom hole location in the NE/4NE/4 (Unit A) of Section 17;
- Tomahawk Federal Unit #710H to be drilled from a surface hole location in NE/4NE/4 (Unit A) of Section 29 to a bottom hole location in the NW/4NE/4 (Unit B) of Section 17;
- Tomahawk Federal Unit #711H to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NW/4NE/4 (Unit B) of Section 17;
- Tomahawk Federal Unit #712H to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NE/4NW/4 (Unit C) of Section 17;
- Tomahawk Federal Unit #713H to be drilled from a surface hole location in NE/4NW/4 (Unit C) of Section 29 to a bottom hole location in the NW/4NW/4 (Unit D) of Section 17.

The completed interval for the proposed Tomahawk Federal Unit #711H well will be within 330' of the line separating the W/2 and the E/2 of Sections 17 and 20 to allow inclusion of this acreage into a standard 1280-acre, more or less, horizontal well spacing unit. Also, to be considered will be the cost of drilling and completing the wells, the allocation of the cost thereof, the actual operating costs and charges for supervision, the designation of applicant as operator, and the imposition of 200% charge for risk involved in drilling and completing each well. Said area is located approximately 3 miles south of Malaga, New Mexico.
#4341715, Current Argus, August 26, 2020