

**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. 23350**

**EXHIBIT INDEX**

Compulsory Pooling Checklist

Exhibit A	Self-Affirmed Statement of Gianna Romero
A-1	Resume of Gianna Romero
A-2	Application & Proposed Notice of Hearing
A-3	C-102
A-4	Plat of Tracts, Tract Ownership, Pooled Parties, Unit Recapitulation
A-5	Sample Ratification of Communitization Agreement
A-6	Chronology of Contact
Exhibit B	Self-Affirmed Statement of Christopher Wray
B-1	Resume of Christopher Wray
B-2	Location Map of the Hambone Federal Com #502H
B-3	Second Bone Spring Sand Structure Map
B-4	Cross-Section Map
B-5	Stratigraphic Cross-Section
Exhibit C	Self-Affirmed Statement of Dana S. Hardy
C-1	Sample Notice Letter to All Interested Parties
C-2	Chart of Notice to All Interested Parties
C-3	Copies of Certified Mail Green Cards and White Slips
C-4	Affidavit of Publication for February 12, 2023

# COMPULSORY POOLING APPLICATION CHECKLIST

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

Case: 23350	APPLICANT'S RESPONSE
Date	March 2, 2023
Applicant	COG Operating LLC
Designated Operator & OGRID (affiliation if applicable)	OGRID No. 229137
Applicant's Counsel:	Hinkle Shanor LLP
Case Title:	Application of COG Operating LLC for Compulsory Pooling, Eddy County, New Mexico
Entries of Appearance/Intervenors:	None
Well Family	Hambone
<b>Formation/Pool</b>	
Formation Name(s) or Vertical Extent:	Bone Spring
Primary Product (Oil or Gas):	Oil
Pooling this vertical extent:	Bone Spring
Pool Name and Pool Code:	Corral Canyon; Bone Spring, South Pool (Code 13354)
Well Location Setback Rules:	Statewide
<b>Spacing Unit</b>	
Type (Horizontal/Vertical)	Horizontal
Size (Acres)	320 acres
Building Blocks:	quarter-quarter
Orientation:	South/North
Description: TRS/County	W/2 E/2 of Sections 5 and 8, Township 26 South, Range 29 East, Eddy County
Standard Horizontal Well Spacing Unit (Y/N), If No, describe and is approval of non-standard unit requested in this application?	Yes.
<b>Other Situations</b>	
Depth Severance: Y/N. If yes, description	No
Proximity Tracts: If yes, description	No
Proximity Defining Well: if yes, description	N/A
Applicant's Ownership in Each Tract	Exhibit A-4
<b>Well(s)</b>	
Name & API (if assigned), surface and bottom hole location, footages, completion target, orientation, completion status (standard or non-standard)	Add wells as needed
Well #1	Hambone Federal Com #502H (API # ---) SHL: 222' FSL & 938' FEL (Unit P), Section 8, T26S, R29E BHL: 50' FNL & 1650' FEL (Unit B), Section 5, T26S, R29E Completion Target: Bone Spring (Approx. 8,500' TVD)
Horizontal Well First and Last Take Points	Exhibit A-3
Completion Target (Formation, TVD and MD)	Bone Spring; 8,500' TVD
<b>AFE Capex and Operating Costs</b>	
Drilling Supervision/Month \$	N/A
Production Supervision/Month \$	N/A
Justification for Supervision Costs	N/A

Requested Risk Charge	N/A
<b>Notice of Hearing</b>	
Proposed Notice of Hearing	Exhibit A-2
Proof of Mailed Notice of Hearing (20 days before hearing)	Exhibit C-1, Exhibit C-2, Exhibit C-3
Proof of Published Notice of Hearing (10 days before hearing)	Exhibit C-4
<b>Ownership Determination</b>	
Land Ownership Schematic of the Spacing Unit	Exhibit A-4
Tract List (including lease numbers and owners)	Exhibit A-4
If approval of Non-Standard Spacing Unit is requested, Tract List (including lease numbers and owners) of Tracts subject to notice requirements.	N/A
Pooled Parties (including ownership type)	Exhibit A-4
Unlocatable Parties to be Pooled	N/A
Ownership Depth Severance (including percentage above & below)	N/A
<b>Joinder</b>	
Sample Copy of Proposal Letter	N/A
List of Interest Owners (ie Exhibit A of JOA)	Exhibit A-4
Chronology of Contact with Non-Joined Working Interests	Exhibit A-6
Overhead Rates In Proposal Letter	N/A
Cost Estimate to Drill and Complete	N/A
Cost Estimate to Equip Well	N/A
Cost Estimate for Production Facilities	N/A
<b>Geology</b>	
Summary (including special considerations)	Exhibit B
Spacing Unit Schematic	Exhibit B-2
Gunbarrel/Lateral Trajectory Schematic	N/A
Well Orientation (with rationale)	Exhibit B
Target Formation	Exhibit B
HSU Cross Section	Exhibit B-4
Depth Severance Discussion	N/A
<b>Forms, Figures and Tables</b>	
C-102	Exhibit A-3
Tracts	Exhibit A-4
Summary of Interests, Unit Recapitulation (Tracts)	Exhibit A-4
General Location Map (including basin)	Exhibit B-2
Well Bore Location Map	Exhibit B-2
Structure Contour Map - Subsea Depth	Exhibit B-3
Cross Section Location Map (including wells)	Exhibit B-4
Cross Section (including Landing Zone)	Exhibit B-5
<b>Additional Information</b>	
Special Provisions/Stipulations	N/A
<b>CERTIFICATION: I hereby certify that the information provided in this checklist is complete and accurate.</b>	
<b>Printed Name</b> (Attorney or Party Representative):	Dana S. Hardy

Received (Attorney or Party Representative):	/s/ Dana S. Hardy	Page 4 of 32
Date:		2/28/2023

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. 23350

SELF-AFFIRMED STATEMENT  
OF GIANNA ROMERO

1. I am a Senior Land Negotiator for COG Operating LLC (“COG”). I am over 18 years of age, have personal knowledge of the matters addressed herein, and am competent to provide this Self-Affirmed Statement. I have a Bachelor of Business Administration degree from the University of Oklahoma and have worked in the petroleum industry for approximately 10 years. A copy of my resume is attached as **Exhibit A-1**.

2. I am familiar with the land matters involved in the above-referenced case. Copies of COG’s application and proposed hearing notice are attached as **Exhibit A-2**.

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

4. COG seeks an order pooling all uncommitted interests in the Bone Spring formation underlying a 320-acre, more or less, standard horizontal spacing unit comprised of the W/2 E/2 of Sections 5 and 8, Township 26 South, Range 29 East, Eddy County, New Mexico (“Unit”).

5. The Unit will be dedicated to the **Hambone Federal Com #502H** well (“Well”), which will be completed in the Corral Canyon; Bone Spring, South Pool (Code 13354). The Well was horizontally drilled from a surface hole location in the SE/4 SE/4 (Unit P) of Section 8 to a bottom hole location in the NW/4 NE/4 (Unit B) of Section 5.

6. The completed interval of the Well will be orthodox.

COG Operating LLC  
Case No. 23350  
Exhibit A

7. **Exhibit A-3** contains the C-102 for the Well.

8. **Exhibit A-4** contains a plat identifying ownership by tract in the Unit. This exhibit also includes any applicable lease numbers, a unit recapitulation, and the interests COG seeks to pool highlighted in yellow. All of the parties are locatable in that COG believes it located valid addresses for them.

9. COG has conducted a diligent search of all county public records including phone directories and computer databases, as well as internet searches, to locate the interest owners it seeks to pool.

10. **Exhibit A-5** contains a sample Ratification of Communitization Agreement sent to the overriding royalty interest owners for the Well.

11. In my opinion, COG made a good-faith effort to reach voluntary joinder of uncommitted interests in the Well as indicated by the chronology of contact described in **Exhibit A-6**.

12. COG requests overhead and administrative rates of \$8,000 per month while the Well is being drilled and \$800 per month while the Well is producing. These rates are fair and are comparable to the rates charged by COG and other operators in the vicinity.

13. The attached exhibits were either prepared by me or under my supervision or were compiled from company business records.

14. In my opinion, the granting of COG's application for compulsory pooling would serve the interests of conservation, the protection of correlative rights, and the prevention of waste.

15. I understand this Self-Affirmed Statement will be used as written testimony in the subject cases. I affirm that my testimony above is true and correct and is made under penalty of

perjury under the laws of the State of New Mexico. My testimony is made as of the date  
handwritten next to my signature below.

Gianna Romero  
Gianna Romero

2/27/2023  
Date

## Gianna Romero, CPL

5605 Rio Grande Ave • Midland, TX 79707 • (720) 480-1471 • gianna.n.reese@gmail.com

### INDUSTRY EXPERIENCE

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#### **ConocoPhillips, Midland, TX**

##### Senior Land Negotiator (January 2023 – Current)

- Managed leasehold position covering 28 townships in Eddy & Lea Counties
- Negotiated exchange agreements, leases, and JOAs with landowners and partners
- Calculated and tracked down well critical dates on a daily basis
- Prepared and submitted yearly Plan of Development to BLM for Lusk Deep Unit in Eddy County

#### **ConocoPhillips, Midland, TX**

##### Permian Supervisor – Land Reporting, Systems, & Processes (March 2021 – December 2022)

- Led team of four Land Analysts and four GIS Analysts that support all Permian Land Teams
- Implemented geospatial tools to enhance Land Team capabilities such as the interactive Webmap and tracking of SWD payments on company owned surface
- Assisted in the integration of Land systems for Concho and Shell acquisitions
- Spearheaded process improvement efforts and collaborated with various teams on changes
- Facilitated project between Accounting, Finance, Reserves, and Land to allocate \$6.5B in unproved leasehold value within QLS
- Adept in various programs including Quorum, Business Objects, SAP, Spotfire, and Avocet

#### **Concho Resources, Midland, TX**

##### Landman II (March 2019 – February 2021)

- Managed RSP acquisition leasehold in Loving and Winkler Counties (Delaware Basin)
- Monitored continuous development obligations over 80+ leases to determine drilling critical dates
- Negotiated leases, amendments, letter agreements, and JOAs with landowners and partners
- Consulted with Legal Team on drafting of agreements and lease obligation analysis
- Evaluated complex mineral ownership and cleared title prior to drilling
- Reconciled internal Lease and Division Order records against title opinions to improve system accuracy
- Communicated with Operations Team on down well critical dates for cessation of production

#### **SM Energy Company, Denver, CO**

##### Landman II (August 2017 – February 2019)

- Handled Rock Oil acquisition assets in Howard County, TX (Midland Basin)
- Prepared complex drilling units that included multiple subdivisions (300+ tracts)
- Ordered plats from surveyors and ensured accuracy against the source deeds
- Collaborated with Regulatory Team on exception waivers, notice of unleased owners, permit filings
- Oversaw brokers and title attorneys over multiple projects

##### Senior Land Technician III (February 2017 – August 2017)

- Researched, prepared, and recorded unit designations
- Drafted, mailed, and tracked JOAs and AFE packages sent to partners
- Executed extension payments after reviewing the title and lease area priority
- Organized and paid invoices timely for brokers, surveyors, attorneys, and other various vendors

Division Order Analyst II (May 2013 – February 2017)

- Maintained North Dakota (Bakken), Wyoming (Powder River), and Texas (Eagleford) assets
- Responsible for updating revenue decks and JIB decks for owner maintenance
- Reviewed title opinions, chained ownership, and cured outstanding requirements
- Analyzed agreements (JOA's, farmouts) and partner elections for various payout scenarios
- Communicated regularly with accounting, marketing, and regional office to ensure correct payments

**EDUCATION**

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**University of Oklahoma, Norman, OK**

Bachelor of Business Administration

Graduated: May 2013

Major(s): Energy Management and Finance; 3.79 GPA – Academic distinction

**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. 23350**

**APPLICATION**

Pursuant to NMSA 1978, § 70-2-17, COG Operating LLC (OGRID No. 229137) (“COG” or “Applicant”) applies for an order pooling all uncommitted interests in the Bone Spring formation underlying a 320-acre, more or less, standard horizontal spacing unit comprised of the W/2 E/2 of Sections 5 and 8, Township 26 South, Range 29 East, Eddy County, New Mexico (“Unit”). In support of this application, COG states the following.

1. Applicant is a working interest owner in the Unit and has the right to drill wells thereon.
2. The Unit will be dedicated to the **Hambone Federal Com #502H** well (“Well”), to be drilled from a surface hole location in the SE/4 SE/4 (Unit P) of Section 8 to a bottom hole location in the NW/4 NE/4 (Unit B) of Section 5.
3. The completed interval of the Well will be orthodox.
4. Applicant has undertaken diligent, good-faith efforts to obtain voluntary agreements from all interest owners to participate in the drilling of the Well but has been unable to obtain voluntary agreements from all interest owners.
5. The pooling of uncommitted interests will avoid the drilling of unnecessary wells, prevent waste, and protect correlative rights.

**COG Operating LLC  
Case No. 23350  
Exhibit A-2**

6. In order to allow Applicant to obtain its just and fair share of the oil and gas underlying the subject lands, all uncommitted interests in the Unit should be pooled and Applicant should be designated as the operator of the Well and Unit.

WHEREFORE, Applicant requests that this application be set for hearing before an Examiner of the Oil Conservation Division on March 2, 2023, and, after notice and hearing as required by law, the Division enter an order:

- A. Pooling all uncommitted interests in the Unit;
- B. Approving the Well in the Unit;
- C. Designating Applicant as operator of the Unit and the Well to be drilled thereon;
- D. Authorizing Applicant to recover its costs of drilling, equipping and completing the Well;
- E. Approving the actual operating charged and costs of supervision while drilling and after completion, together with a provision adjusting the rated pursuant to the COPAS accounting procedures; and
- F. Imposing a 200% penalty for the risk assumed by Applicant in drilling and completing the Well against any working interest owner who does not voluntarily participate in the drilling of the Well.

Respectfully submitted,

HINKLE SHANOR LLP

/s/ Dana S. Hardy

Dana S. Hardy

Jaclyn M. McLean

Yarithza Peña

P.O. Box 2068

Santa Fe, NM 87504-2068

Phone: (505) 982-4554

dhardy@hinklelawfirm.com  
jmclean@hinklelawfirm.com  
ypena@hinklelawfirm.com  
*Counsel for COG Operating LLC*

**Application of COG Operating LLC for Compulsory Pooling, Eddy County, New Mexico.** Applicant seeks an order pooling all uncommitted interests in the Bone Spring formation underlying a 320-acre, more or less, standard horizontal spacing unit comprised of the W/2 E/2 of Sections 5 and 8, Township 26 South, Range 29 East, Eddy County, New Mexico ("Unit"). The Unit will be dedicated to the **Hambone Federal Com #502H** well ("Well"), to be drilled from a surface hole location in the SE/4 SE/4 (Unit P) of Section 8 to a bottom hole location in the NW/4 NE/4 (Unit B) of Section 5. The completed interval of the Well will be orthodox. Also to be considered will be the cost of drilling and completing the Well and the allocation of the cost, the designation of Applicant as operator of the Well, and a 200% charge for the risk involved in drilling and completing the Well. The Well is located approximately 10.4 miles south of Malaga, New Mexico.

**DISTRICT I**  
 1625 N. FRENCH DR., HOBBS, NM 88240  
 Phone: (576) 398-8161 Fax: (576) 393-0720

**DISTRICT II**  
 811 S. FIRST ST., ARTESIA, NM 88210  
 Phone: (575) 748-1983 Fax: (575) 748-9720

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

**DISTRICT IV**  
 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505  
 Phone: (505) 478-3460 Fax: (505) 478-3482

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 <b>30-015-48973</b>	Pool Code <b>13354</b>	Pool Name <b>Corral Canyon; Bone Spring, South</b>
Property Code	Property Name <b>HAMBONE FEDERAL COM</b>	Well Number <b>502H</b>
OGRID No. <b>229137</b>	Operator Name <b>COG OPERATING, LLC</b>	Elevation <b>2916.8'</b>

**Surface Location**

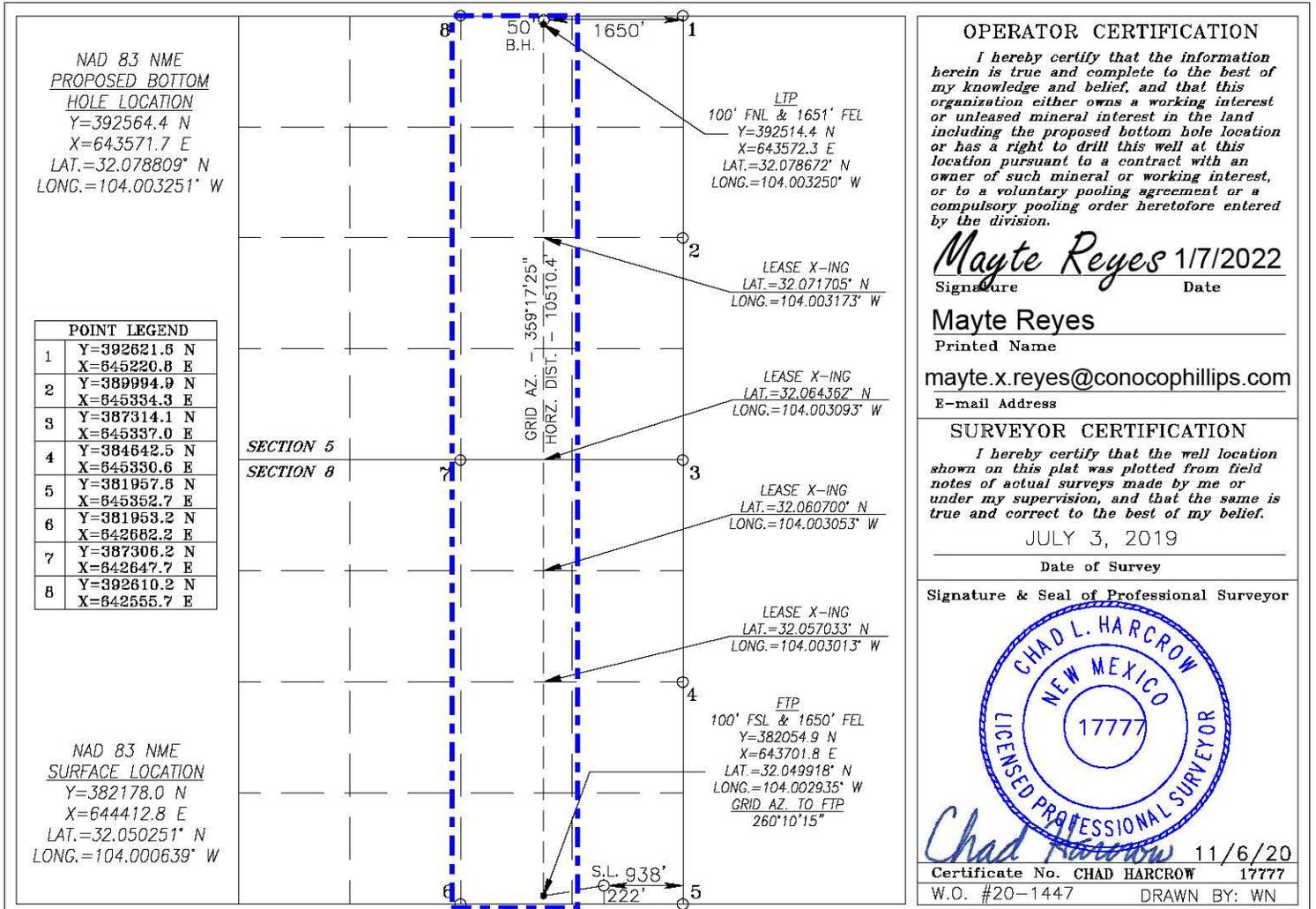
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	8	26-S	29-E		222	SOUTH	938	EAST	EDDY

**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	5	26-S	29-E		50	NORTH	1650	EAST	EDDY

Dedicated Acres <b>320</b>	Joint or Infill	Consolidation Code	Order No.
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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



5-26S-29E	<b>HAMBONE FED COM 502H SPACING UNIT</b>				Tract 1 NM-115417 80 ac
					Tract 2 NM-124655 80 ac
8-26S-29E					Tract 5 VB-2345 40 ac
					Tract 4 NM-123925 40 ac
					Tract 3 NM-57261 80 ac

WORKING INTEREST OWNER	TRACT 1	TRACT 2	TRACT 3	TRACT 4	TRACT 5	UNIT RECAP
COG Operating LLC	0.23928571	0.24062500	0.25000000	0.11875000	0.00000000	0.84866071
Concho Oil & Gas LLC	0.01071429	0.00937500	0.00000000	0.00625000	0.00000000	0.02633929
MRC Permian Company	0.00000000	0.00000000	0.00000000	0.00000000	0.12500000	0.12500000
	TOTAL					1.00000000

Well Proposal Sent	Yes
Communitization Agmts Sent	Yes
Joint Operating Agmt Sent	Yes

**PARTIES TO POOL** INTEREST TYPE  
 Fortis Minerals II, LLC  
 PO Box 470788, Ft Worth, TX 76147 ORRI

**COG Operating LLC**  
**Case No. 23350**  
**Exhibit A-4**



Tessa Elder  
Senior Land Tech  
600 W. Illinois Ave  
Midland, TX 79701  
O: 432-818-2289  
F: 432-221-0470  
Tessa.Elder@conocophillips.com

February 6, 2023

Via CMRRR No. 9489 0090 0027 6460 5161 49

**Fortis Minerals II, LLC**

P.O. BOX 470698  
Fort Worth, TX 76147

Re: **Hambone Federal Com Wells**  
E2 of Sections 5 & 8, T26S-R29E  
Eddy County, New Mexico ("Subject Lands")

Dear Sir or Madam:

COG Operating LLC ("COG") previously pooled your interest in the Subject Lands under the following compulsory pooling orders (the "Orders"):

- Case No. 22369, Order No. R-22016; Hambone Federal Com #501H (E2E2 Sections 5 & 8, T26S-R29E)
- Case No. 22596, Order No. R-22095; Hambone Federal Com #502H (W2E2 Sections 5 & 8, T26S-R29E)

The Orders have expired, therefore COG has submitted new compulsory pooling applications with the NMOCD. As an interest owner in the Subject Lands, COG respectfully requests your signature on the following documents:

- Ratification of Communitization Agreement – Hambone Fed Com 501H Federal CA
- Ratification of Communitization Agreement – Hambone Fed Com 502H Federal CA

Please return the designated signature pages to my attention at the letterhead address. Should you have any questions, please do not hesitate to contact me.

Sincerely,

**COG Operating LLC**

Tessa Elder  
Senior Land Tech

Enc

**COG Operating LLC**  
**Case No. 23350**  
**Exhibit A-5**



**Hambone Fed Com 502H - Chronology Efforts**

- 09.20.2021** Sent well proposals to MRC Permian Company (502H, 505H, 506H)
- 10.12.2021** Sent Federal Communitization Agreements (501H, 502H, 505H, 506H) to applicable parties  
Sent State Communitization Agreements (502H, 505H, 506H) to applicable parties  
Sent Ratifications of Federal Communitization Agreements (501H, 502H, 505H, 506H) to applicable parties
- 10.18.2021** Operating Agreement Mailed to potential WIOs  
  
Additional Pooling Agreements (Pooling Agmt, CA, Ratification of DPU) sent to applicable parties
- 10.26.2021** Revised Ex A (correcting "C" and "D" interest) sent to parties
- 02.25.2022** MRC Permian Company executed Operating Agreement
- 02.06.2023** Sent Ratifications of Federal Communitization Agreements to applicable parties

**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. 23350**

**SELF-AFFIRMED STATEMENT  
OF CHRISTOPHER WRAY**

1. I am a geologist for COG Operating LLC (“COG”). I am over 18 years of age, have personal knowledge of the matters addressed herein, and am competent to provide this Self-Affirmed Statement. I have not previously testified before the New Mexico Oil Conservation Division (“Division”). I have a Master’s degree from Louisiana State University and have worked in the petroleum industry for approximately 4 years. A copy of my resume is attached as **Exhibit B-1**

2. I am familiar with the geological matters that pertain to the above-referenced case.

3. **Exhibit B-2** is a location map of the proposed horizontal spacing unit (“Unit”). The approximate wellbore paths for the proposed **Hambone Federal Com #502H** well is represented by a dashed line. Existing producing wells in the targeted interval are represented by solid lines.

4. **Exhibit B-3** is a subsea structure map for the Bone Spring formation that is representative of the targeted interval. The data points are indicated by crosses. The approximate wellbore paths of the well is depicted by a dashed line. The map demonstrates the formation is dipping to the east in this area. I do not observe any faulting, pinch-outs, or geologic impediments to developing the targeted intervals with horizontal wells.

5. **Exhibit B-4** is a cross section map that identifies three wells penetrating the targeted intervals used to construct a structural cross-section from A to A’. I used these well logs

**COG Operating LLC  
Case No. 23350  
Exhibit B**

because they penetrate the targeted intervals, are of good quality, and are representative of the geology in the area.

6. **Exhibit B-5** is a stratigraphic cross-section using the representative wells identified on Exhibit B-4. It contains gamma ray, resistivity and porosity logs. The landing zone for the well is labeled on the exhibit. This cross-section demonstrates the target intervals are continuous across the Unit.

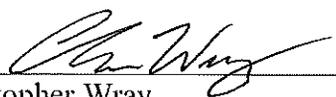
7. In my opinion, a standup orientation for the well is appropriate to properly develop the subject acreage because of consistent rock properties throughout the Unit and the lack of preferred fracture orientation in this portion of the trend.

8. Based on my geologic study of the area, the targeted interval underlying the Unit is suitable for development by horizontal wells and the tracts comprising the Unit will contribute more or less equally to the production of the well.

9. In my opinion, the granting of COG's application will serve the interests of conservation, the protection of correlative rights, and the prevention of waste.

10. The attached exhibits were either prepared by me or under my supervision or were compiled from company business records.

11. I understand this Self-Affirmed Statement will be used as written testimony in this case. I affirm my testimony above is true and correct and is made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date identified next to my signature below.

  
\_\_\_\_\_  
Christopher Wray

2-23-2023  
Date

## Christopher M. Wray

5204 Lavaca Avenue, Midland, TX 79705  
(281) 387-8083, [chmwray@gmail.com](mailto:chmwray@gmail.com)

### Petroleum Experience

- ConocoPhillips**, Midland, TX 12/2022 – Present  
Asset Geologist – Delaware Basin West
- Asset geologist and project manager for Delaware Basin West positions located in Eddy County and Reeves County.
  - Provided operational support for 1 rig continuously resulting in drilling 16 wells in 2022 across 5 different projects/positions.
  - Provided geological support for acreage trades resulting in blocking core acreage and extending operated lateral positions with COP positions.
- ConocoPhillips**, Midland, TX 1/2021 – 12/2021  
Geoscience Analyst – Senior Geological Analyst – Midland Basin Team
- Technical support for Midland Basin Business Unit during data migration into ConocoPhillips environment during company transition.
  - Lead technical support for integration of heritage Concho workflows into ArcGIS.
- Concho Resources**, Midland, TX 2/2019 – 1/2021  
Geoscience Tech 2 – Midland Basin Team
- Provided support to business users with data, application support and data loading/gathering.
    - Includes well headers, directional surveys, logs, culture layers, and zone data.
  - Managed and maintained landing zone workflow for Midland Basin Business group.
  - Worked with asset team to maintain activity maps including landing zone, IP wells, permits, and projects.
- QEP Resources**, Denver, Colorado 5/2015 – 8/2015  
Geology Intern – Exploration Team
- Conducted a recompletion project on Travis Peak Formation and Rodessa Formation in North Louisiana to extend life of field and avoid P&A.
  - Worked alongside RE intern to develop Travis Peak and Rodessa well decline curves, volumetric estimates, and recoverable volumes.
  - Dataset consisted of over 500 well logs, 105 petrophysical logs, 200 mudlogs, 6 cores, 10 production logs, and 200 wellbore diagrams.
- Concho Resources**, Midland, Texas 5/2015 – 8/2015  
Geology Intern – Exploration Team
- Developed an unconventional shale play in unexplored section in western Midland Basin utilizing well logs, mudlogs, XRD, and SRA data.
  - Data set consisted of over 1,500 well logs for structure and thickness layers, 150 mudlogs for gas shows, oil cut, fluorescence, and 5 wells with core data encompassing an area approximately 2,100 square miles.
- IBA Spring 2015**: Competition Team, Cooper Basin, Australia
- Dataset included 3D seismic cube and 11 well logs.
  - Conducted petrophysical analysis in order to calculate net pay, net sand, reservoir quality
  - Created structure and isochore maps for net reservoir and source based on well log analysis
  - Assisted in 3D seismic interpretation and source modeling in PetroMod.

**IBA Spring 2014:** Practice Team, Taranaki Basin, New Zealand

- Dataset included 200 2D seismic lines and 9 well logs.
- Developed CRS maps based from paleogeographic maps, well logs and seismic interpretation.
- Worked on petrophysical well logs and assisted in seismic interpretation.

**Petroleum Short Courses:**

- Predictive Sequence Stratigraphy – Vitor Abreu, Geologica, October 17-21, 2022
- Induced Seismicity Workshop – WTGS, April 4, 2022
- ConocoPhillips GGRE School, March 29 – April 1, 2022
- 3D Seismic Interpretation – Dr. Erik Scott, LSU, December 16-18, 2015
- Geosteering Short course - BHL Geosteering, LSU, November 21, 2015
- Volumetrics and Risk – Dr. Erik Scott, LSU, February 20, 2015
- Seismic Interpretation – Dr. Brian Lock, ULL, January 8-9, 2015
- Petrel Intro and Geology – Schlumberger, Houston, January 5-7, 2015
- Unconventional Resources – Dr. Alan Brown, Schlumberger, LSU, October 11, 2014
- Fracture Modeling – Dr. Alan Brown, Schlumberger, LSU, October 8, 2014

**Educational Background****Louisiana State University**, Baton Rouge, Louisiana*MS Geology*

Advisor: Dr. Achim Herrmann

Thesis Title: Investigating Uranium incorporation in modern carbonates by sequential extraction: Applied to the Permian-Triassic boundary in Lung Cam Vietnam.

- Applied Depositional Geosystems Certificate (ADG)
- Adam Sturlese Memorial Geology Scholarship (Fall 2014-Spring 2016)

**GPR 3.8**

1/2014 – 8/2018

**Texas A&M University**, College Station, Texas*College of Geosciences, BS in Geology – Engineering Option*

- Distinguished Student (Spring, 2010, Summer 2010, Fall 2010)

**GPR 3.12**

1/2008 - 5/2011

**Work Experience****Louisiana State University**, Baton Rouge, Louisiana*Graduate Assistant – CxC Science Studio*

8/2014 – Present

- Developed and implemented a science writing workshop for undergraduate students.
- Present lectures on proper scientific writing techniques.
- Mentor undergraduates on communication-based projects and overall communication skills.
- Wrote a grant proposal and budget to the Board of Regents for higher learning technology and visual communication tools totaling over \$100K.

*Teaching Assistant – Department of Geology and Geophysics*

1/2014 – 5/2014

- Prepared and presented weekly lectures for two Physical Geology labs.
- Held weekly office hours for individual student consultations.
- Graded and evaluated student performance for 60 students.

**Red River Authority of Texas**, Wichita Falls, TX 3/2013 – 12/2013  
*Environmental Lab Technician*

- Performed routine and non-standardized tests of aqueous samples for clients.
- Prepared various technical reports for clients, records, and quality control charts for audits.
- Worked closely with Clean Rivers Project – documentation and analysis of samples for the northern 43 counties of Texas.

**Radarview LLC.**, Humble, TX 1/2013 – 3/2013  
*Staff Geologist*

- Fieldwork for detailed mapping using GPS grids utilizing GPR equipment at chemical plants.
- Used AutoCAD to construct accurate maps and formal reports of problematic void zones during construction phases to avoid future environmental problems.

**Texas A&M University**, College Station, Texas 9/2010 – 5/2011  
*Student Worker – Geology and Geophysics Department*

- Dismantled, reduced, and reorganized the Department of Geology and Geophysics research core sample supply.
- Coordinated and shipped four major shipments of core (6000 total) to leading core depositories.

### Affiliations

**Member of West Texas Geological Society** 1/2014 – Present  
**Member of Association of Petroleum Geologists** 1/2014 – 1/2019  
**Member of LSU AAPG Student Chapter** 1/2014 – 8/2018

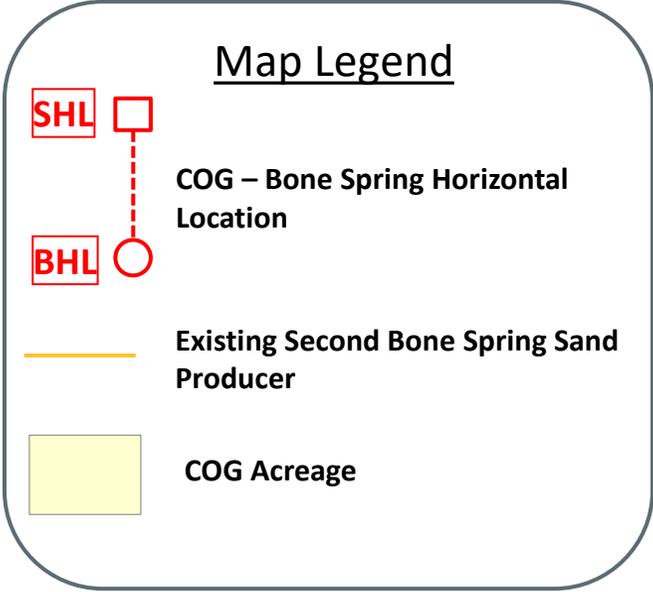
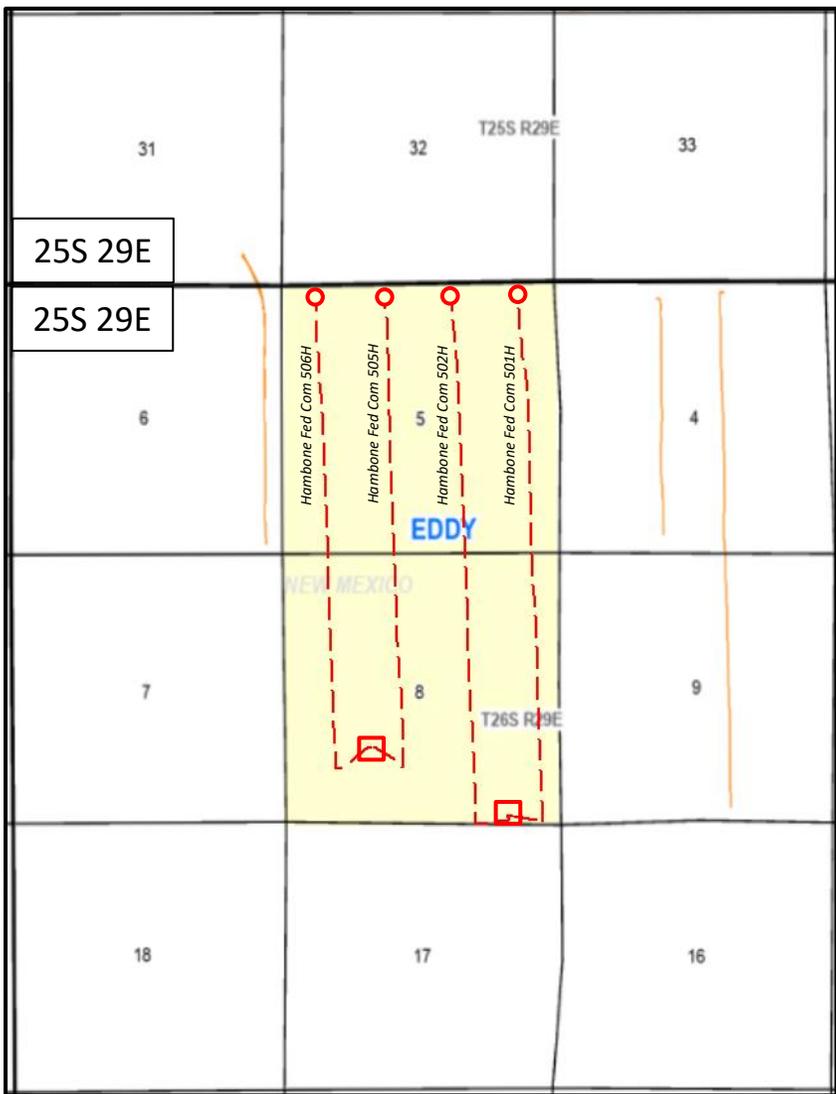
- Secretary Chair for academic year 2015-2016

**Member of Texas A&M Geology and Geophysics Society** 1/2008 – 5/2011  
**Member of Texas A&M Judo Team** 1/2008 – 5/2011

### Software Experience and Skills

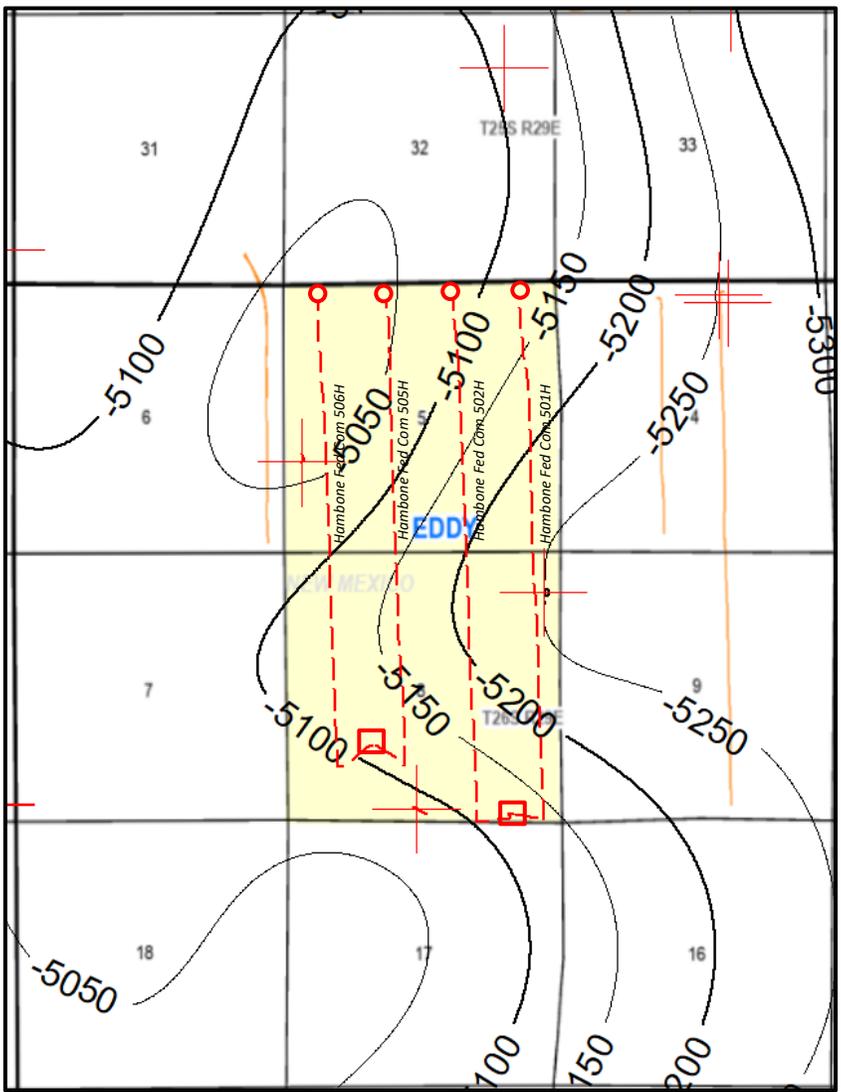
**Petrel, PetroMod, Geographix, Trinity, ArcGIS, Spotfire, Landmark, Matlab, AutoCAD, Bilingual - Spanish**

# (Exhibit B-2) Hambone Fed Com 501H, 502H, 505H, 506H



COG Operating LLC  
Case No. 23350  
Exhibit B-2

# Map



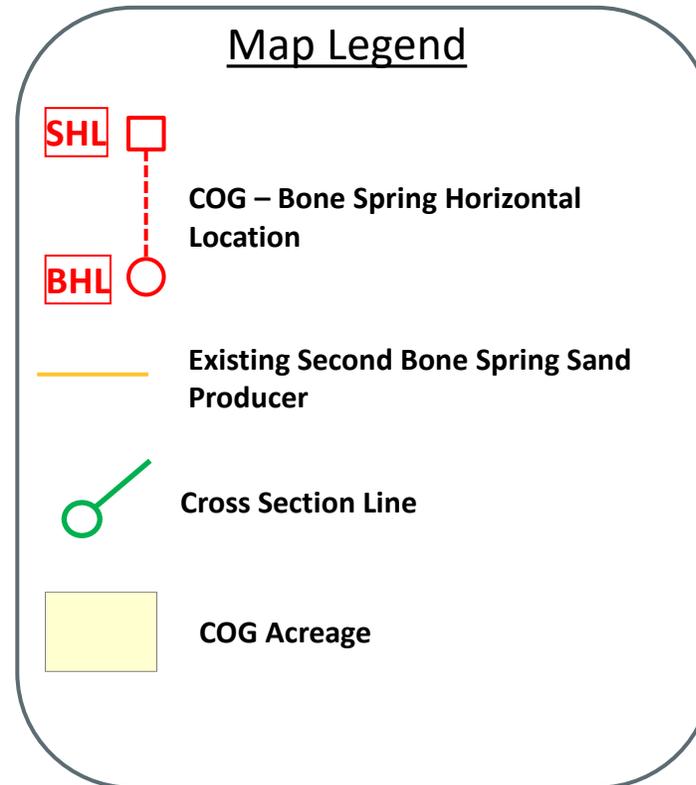
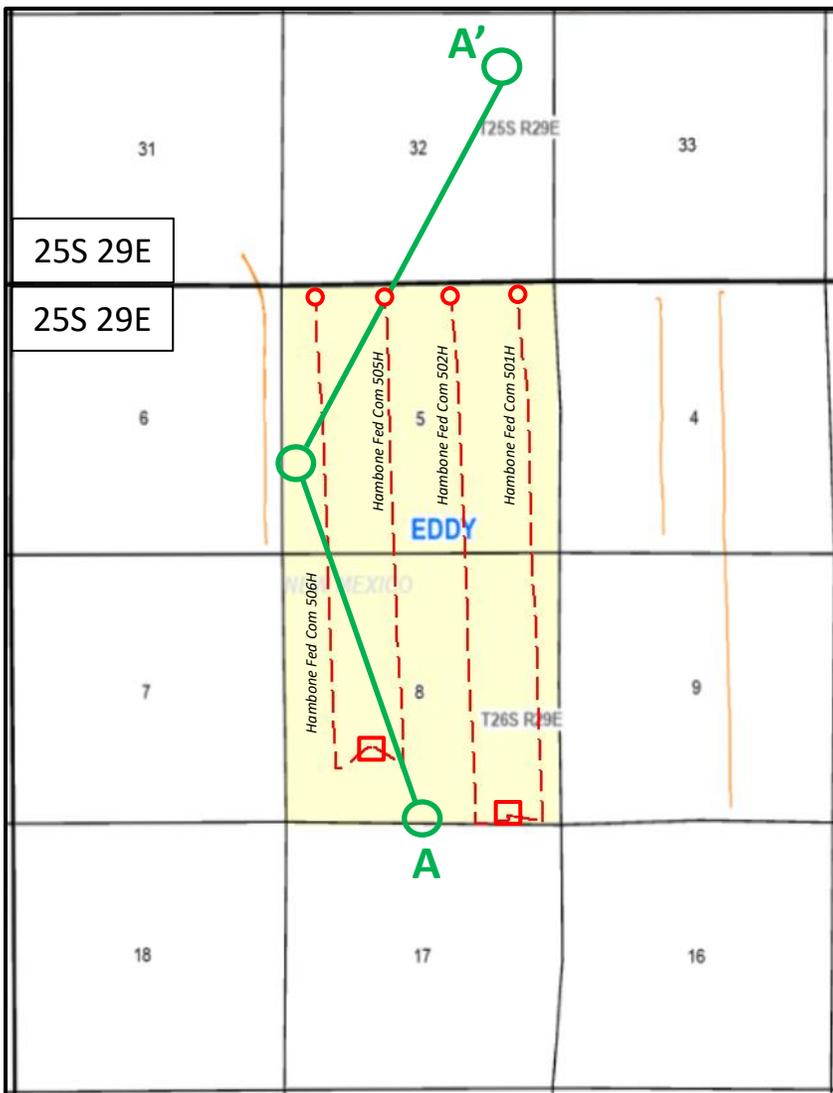
25S 29E

### Map Legend

- SHL**  COG – Bone Spring Horizontal Location
- BHL**  COG – Bone Spring Horizontal Location
-  Existing Second Bone Spring Sand Producer
-  Second Bone Spring Sand Subsea Structure  
CI: 50'
-  Structural Data Point
-  COG Acreage

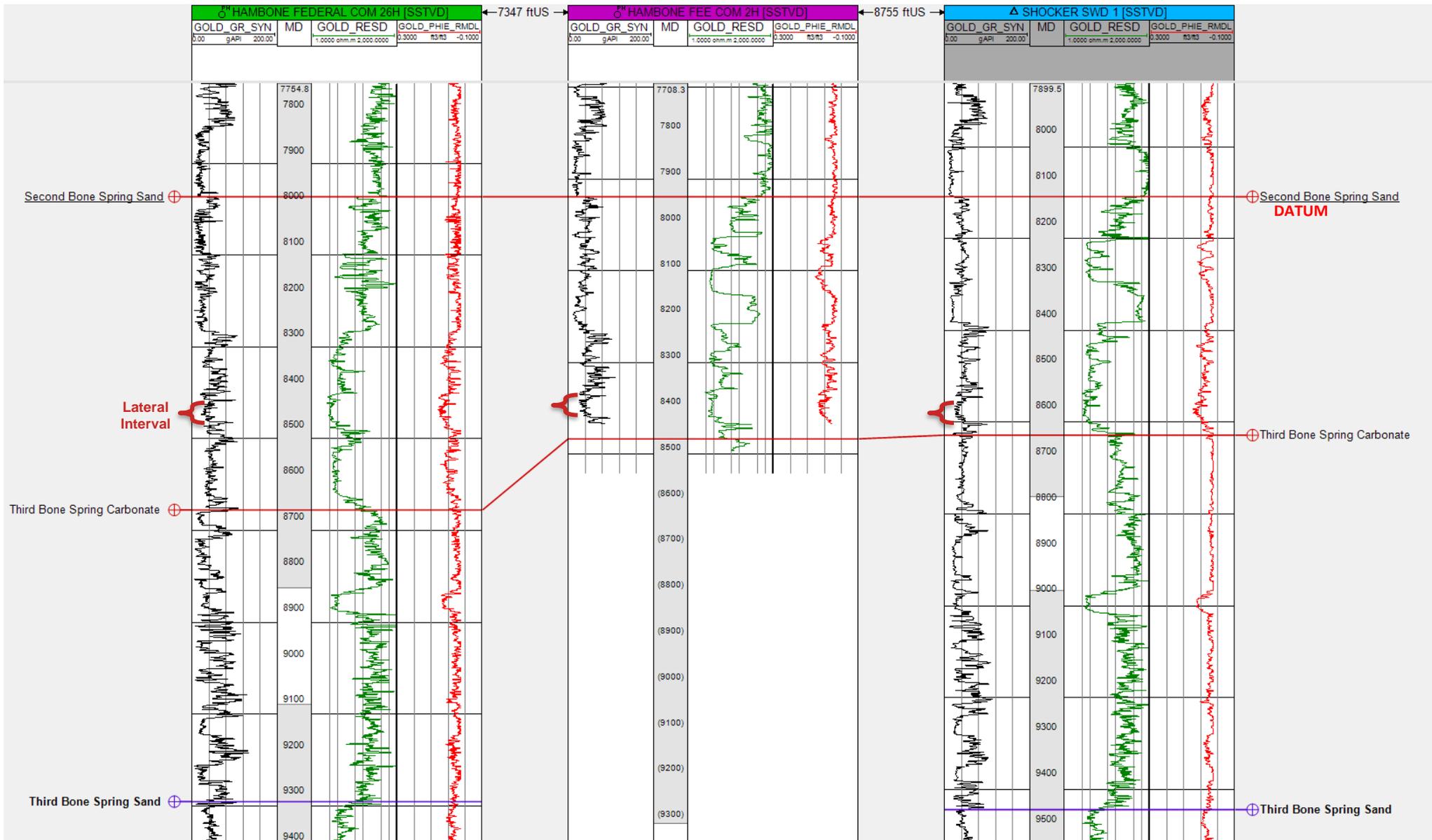
COG Operating LLC  
Case No. 23350  
Exhibit B-3

# (Exhibit B-4) Hambone Fed Com 501H, 502H, 505H, 506H Cross-section Map



COG Operating LLC  
 Case No. 23350  
 Exhibit B-4

# (Exhibit B-5) Second Bone Spring Sand – Stratigraphic Cross Section A – A'



COG Operating LLC  
Case No. 23350  
Exhibit B-5

**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. 23350**

**SELF-AFFIRMED STATEMENT  
OF DANA S. HARDY**

1. I am attorney in fact and authorized representative of COG Operating LLC, the Applicant herein.

2. I am familiar with the Notice Letter attached as **Exhibit C-1** and caused the Notice Letter, along with the Application in this case, to be sent to the parties set out in the chart attached as **Exhibit C-2**.

3. Exhibit C-2 also provides the date each Notice Letter was sent and the date each return was received.

4. Copies of the certified mail green cards and white slips are attached as **Exhibit C-3** as supporting documentation for proof of mailing and the information provided on Exhibit C-2.

5. On February 12, 2023, I caused a notice to be published to all interested parties in the Carlsbad Current Argus. An Affidavit of Publication from the Legal Clerk of the Carlsbad Current Argus, along with a copy of the notice publication, is attached as **Exhibit C-4**.

6. I understand this Self-Affirmed Statement will be used as written testimony in the subject cases. I affirm that my testimony above is true and correct and it made under penalty of perjury under the laws of the State of New Mexico. My testimony is made as of the date handwritten next to my signature below.

/s/ Dana S. Hardy  
Dana S. Hardy

February 26, 2022  
Date

**COG Operating LLC  
Case No. 23350  
Exhibit C**



hinklelawfirm.com

# HINKLE SHANOR LLP

ATTORNEYS AT LAW

P.O. BOX 2068

SANTA FE, NEW MEXICO 87504

505-982-4554 (FAX) 505-982-8623

WRITER:  
Dana S. Hardy, Partner  
dhardy@hinklelawfirm.com

February 7, 2023

**VIA CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

**TO ALL PARTIES ENTITLED TO NOTICE**

**Re: Case No. 23350 – Application of COG Operating LLC for Compulsory Pooling, Eddy County, New Mexico.**

To whom it may concern:

This letter is to advise you that the enclosed application was filed with the New Mexico Oil Conservation Division. The hearing will be conducted on **March 2, 2023**, beginning at 8:15 a.m.

Hearings are currently conducted remotely. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website: <https://www.emnrd.nm.gov/ocd/hearing-info/>. 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.

Pursuant to Division Rule 19.15.4.13.B, a party who intends to present evidence at the hearing shall file a pre-hearing statement and serve copies on other parties, or the attorneys of parties who are represented by counsel, at least four business days in advance of a scheduled hearing, but in no event later than 5:00 p.m. Mountain Time, on the Thursday preceding the scheduled hearing date. The statement must be submitted through the OCD E-Permitting system (<https://wwwapps.emnrd.nm.gov/ocd/ocdpermitting/> ) or via e-mail to [ocd.hearings@emnrd.nm.gov](mailto:ocd.hearings@emnrd.nm.gov) 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.

Please contact Gianna Romero, CPL, Senior Land Negotiator for COG Operating LLC, by phone at (432) 221-0421 if you have any questions regarding this matter.

Sincerely,

/s/ Dana S. Hardy

Dana S. Hardy

Enclosure

**COG Operating LLC**  
**Case No. 23350**  
**Exhibit C-1**

PO BOX 10  
ROSWELL, NEW MEXICO 88202  
(575) 622-6510  
FAX (575) 623-9332

7601 JEFFERSON ST NE · SUITE 180  
ALBUQUERQUE, NEW MEXICO 87109  
505-858-8320  
(FAX) 505-858-8321

PO BOX 2068  
SANTA FE, NEW MEXICO 87504  
(505) 982-4554  
FAX (505) 982-8623

**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. 23350**

**NOTICE LETTER CHART**

<b>PARTY</b>	<b>NOTICE LETTER SENT</b>	<b>RETURN RECEIVED</b>
Fortis Minerals II LLC P.O. Box 470698 Fort Worth, TX 76147	02/07/23	02/21/23

**COG Operating LLC  
Case No. 23350  
Exhibit C-2**

7019 2280 0001 9628 8546

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

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

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 \$ \_\_\_\_\_

**Total Postage and Fees** \$ \_\_\_\_\_

Sent To

Street and P.O. Box: Fortis Minerals II LLC  
P.O. Box 470698  
Fort Worth, TX 76147

City, State: Fort Worth, TX 76147 23350 - COG Hambone

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



SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature <input checked="" type="checkbox"/> X <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <i>Thomas</i> C. Date of Delivery <i>2/11/23</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes  If YES, enter delivery address below: <input type="checkbox"/> No</p> <p><b>RECEIVED</b>  <b>FEB 21 2023</b></p>
<p>1. Article Addressed to:</p> <p>Fortis Minerals II LLC  P.O. Box 470698  Fort Worth, TX 76147</p> <p>23350 - COG Hambone</p> <p>  9590 9402 7543 2098 9387 81</p>	<p>3. Service <i>Priority Mail Express</i></p> <p><input type="checkbox"/> Adult Signature <input type="checkbox"/> Registered Mail™</p> <p><input checked="" type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail Restricted Delivery</p> <p><input checked="" type="checkbox"/> Certified Mail® <input type="checkbox"/> Signature Confirmation™</p> <p><input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery</p> <p><input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Insured Mail</p> <p><input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</p>
<p>2. Article Number (Transfer from service label)</p> <p>7019 2280 0001 9628 8546</p>	<p>PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt</p>

**COG Operating LLC**  
**Case No. 23350**  
**Exhibit C-3**

# Carlsbad Current Argus.

MEMBER OF THE USA TODAY NETWORK

## Affidavit of Publication

Ad # 0005590109

This is not an invoice

HINKLE SHANOR LLP  
POBOX 10

ROSWELL, NM 88202-0010

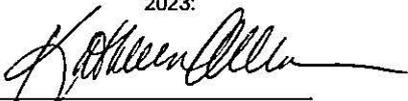
I, a legal clerk of the Carlsbad Current Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements 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 in editions dated as follows:

02/12/2023

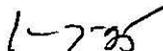


Legal Clerk

Subscribed and sworn before me this February 13, 2023:



State of WI, County of Brown  
NOTARY PUBLIC



My commission expires

This is to notify all interested parties, including Fortis Minerals II LLC; and their successors and assigns, that the New Mexico Oil Conservation Division will conduct a hearing on an application submitted by COG Operating LLC (Case No. 23350). The hearing will be conducted remotely on March 2, 2023, beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the OCD Hearings website for that date: <https://www.emnr.d.nm.gov/oed/hearing-info/>. Applicant applies for an order pooling all uncommitted interests in the Bone Spring formation underlying a 320-acre, more or less, standard horizontal spacing unit comprised of the W/2 E/2 of Sections 5 and 8, Township 26 South, Range 29 East, Eddy County, New Mexico ("Unit"). The Unit will be dedicated to the Hambone Federal Com #502H well ("Well"), to be drilled from a surface hole location in the SE/4 SE/4 (Unit P) of Section 8 to a bottom hole location in the NW/4 NE/4 (Unit B) of Section 5. The completed interval of the Well will be orthodox. Also to be considered will be the cost of drilling and completing the Well and the allocation of the cost, the designation of Applicant as operator of the Well, and a 200% charge for the risk involved in drilling and completing the Well. The Well is located approximately 10.4 miles south of Malaga, New Mexico. #5590109, Current Argus, February 12, 2023

KATHLEEN ALLEN  
Notary Public  
State of Wisconsin

Ad # 0005590109  
PO #: 0005590109  
# of Affidavits: 1

This is not an invoice

COG Operating LLC  
Case No. 23350  
Exhibit C-4