

COG OPERATING LLC

Quien Sabe Fed Com 602H, 603H & 801H

Section 24 & 25 - T24S-27E

Eddy County, New Mexico



BEFORE THE OIL CONSERVATION DIVISION EXAMINER HEARING – JULY 25, 2019

CASE NO. 20337



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

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

CASE NO. 20337

AFFIDAVIT OF TRAVIS MACHA

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

1. My name is Travis Macha. I work for COG Operating LLC ("COG") as a

Landman.

2. I have previously testified before the New Mexico Oil Conservation Division as

an expert witness in petroleum land matters. My credentials as a petroleum landman have been

accepted by the Division and made a matter of record.

3. I am familiar with this application filed by COG in this matter and familiar with

the status of the lands in the subject area.

4. None of the parties proposed to be pooled in this case has indicated opposition,

therefore I do not expect any opposition at the hearing.

5. COG seeks an order pooling all uncommitted interests in the Wolfcamp

formation (Purple Sage; Wolfcamp (Gas) Pool (98220)) underlying a standard 640-acre

horizontal spacing unit comprised of the E/2 of Sections 24 and 25, Township 24 South,

Range 27 East, Eddy County, New Mexico. This horizontal spacing unit will be

dedicated to the following proposed initial wells:

The Quien Sabe Fed Com No. 603H Well, and the Quien Sabe Fed Com

801H Well to be horizontally drilled from a common surface location in

- the NW/4 NE/4 (Unit B) of Section 24 to bottom hole locations in the SW/4 SE/4 (Unit O) of Section 25.
- The Quien Sabe Fed Com No. 602H Well to be horizontally drilled from a surface location in the NW/4 NE/4 (Unit B) of Section 24 to a bottom hole location in the SE/4 SE/4 (Unit P) of Section 25.
- 6. The completed interval for these wells will comply with the setback requirements imposed by the Special Rules for the Purple Sage; Wolfcamp (Gas) Pool.
 - 7. **COG Exhibit No. A-1** contains draft Form C-102s for these proposed wells.
- 8. COG Exhibit No. A-2 identifies the tracts of land comprising the proposed spacing unit in this case, which includes both state and federal lands. This exhibit also identifies the interest ownership by tract and ultimately by spacing unit. COG is seeking to pool both the working interest owners and overriding royalty interest owners highlighted on the exhibit. Exhibit A-2 also reflects that since the time this application was filed BEXP I, LP has acquired the interests formerly held by Featherstone Development Corporation, Prospector, LLC, Big Three Energy Group, LLC, and Parrot Head Properties, LLC.
- 9. 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.
- 10. COG Exhibit No. A-3 contains sample well proposal letters along with an AFE provided to the working interest owners COG is seeking to pool. In addition to these letters, COG has made a diligent effort to reach agreement with the parties it is seeking to pool.
- 11. The costs reflected in the AFE are consistent with what other operators have incurred for drilling similar horizontal wells in the area.

12. In my opinion, COG has made good faith efforts to reach agreement with the parties it is seeking to pool. If COG reaches an agreement with any of the proposed pool parties before the Division enters an order, I will let the Division know that COG is no longer seeking to pool those parties.

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

14. COG has estimated the overhead and administrative costs for drilling and producing the proposed wells at \$7,000 per month while drilling and \$700 per month while producing. These costs are consistent with what other operators are charging in this area for similar wells.

15. I provided the law firm of Holland & Hart LLP a list of names and addresses for the owners that COG seeks to pool and instructed that they be notified of this hearing.

16. COG Exhibit Nos. A-1 through A-3 were either prepared by me or compiled under my direction and supervision.

FURTHER AFFIANT SAYETH NOT.

TRAVIS MACHA

STATE OF TEXAS)
COUNTY OF MIDLAND)
SUBSCRIBED and SW	ORN to before me this 24th day of July 2019 by Travis
Macha.	
Tessa Elder Notary Public, State of Texas Notary ID 12455709-6 My Commission Exp. 06-25-2023	NOTARY PUBLIC
My Commission Expires:	

DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 88240 Phone: (575) 393-5161 Fax: (575) 393-0720

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

DISTRICT II 811 S. FIRST ST., ARTESIA, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

1220 SOUTH ST. FRANCIS DR.

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

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

Santa Fe, New Mexico 87505

□ AMENDED REPORT

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 Phone: (505) 478-3480 Fax: (505) 478-3482

	WELL LOCATION AND	ACREAGE DEDICATION	PLAT
API Number	Pool Code		Pool Name
Property Code	-	erty Name FEDERAL COM	Well Number 602H
OGRID No.	Oper	ator Name RATING, LLC	Elevation 3123.5'

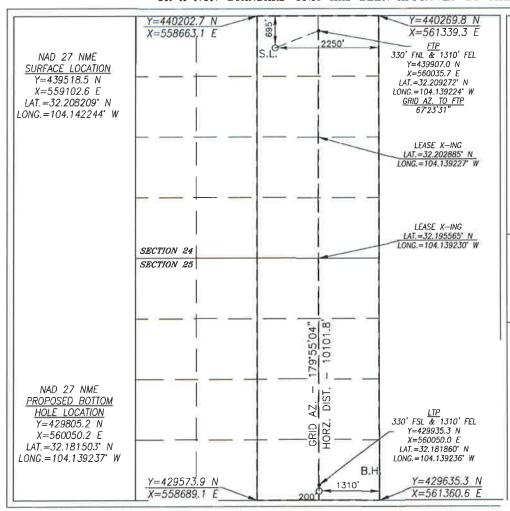
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	24	24-S	27-E		695	NORTH	2250	EAST	EDDY

Bottom Hole Location If Different From Surface

					T	N 12 /0 12 11	T. 1 C. 41.	T - 4 /W - 4 1/	Country
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Р	25	24-S	27-E		200	SOUTH	1310	EAST	EDDY
Dedicated Acres	Joint o	r Infill (Consolidation	Code Or	der 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 nooling agreement or a or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Date

Printed Name

Signature

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.

Date of Survey

Signature & Seal of Professional Surveyor

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico Exhibit No. A-1 Case No. 20337

Submitted by: COG OPERATING, LLC Hearing Date: July 25, 2019

DRAWN BY: CD

1

State of New Mexico DISTRICT I
1025 N. FRENCH DR., HOBBS, NM 88240
Phone: (675) 303-6101 Fax: (675) 303-0720

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

DISTRICT II 811 S. FIRST ST., ARTESIA, NM 88210 Phone: (676) 748-1283 Fax: (576) 748-9720 DISTRICT III 1000 RIO BRAZOS RD., AZTEC, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

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

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

☐ AMENDED REPORT

	WELL LOCATION AND	ACREAGE DEDICATION PLAT	
API Number	Pool Code	Pool Name	
Property Code	Prop	erty Name	Well Number
. ,	QUIEN SABE	FEDERAL COM	603H
OGRID No.	-	Nor Name RATING, LLC	Elevation 3123.9'

THE LODGE OF DEDICATION DEATH

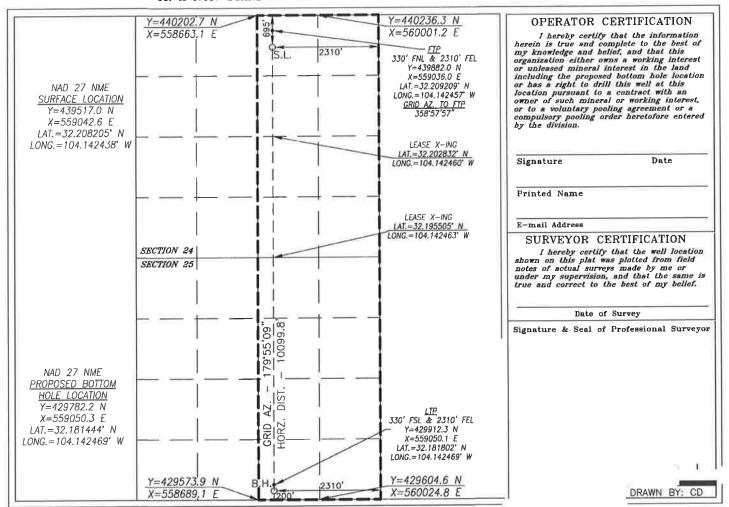
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	24	24-S	27-E		695	NORTH	2310	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
0	25	24-S	27-E		200	SOUTH	2310	EAST	EDDY
Dedicated Acres	Joint o	r Infill Co.	nsolidation (Code Or	der 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



DISTRICT I 1625 N. FRENCH DR., HOBES, NM 68240 Phone: (575) 393-6161 Pax: (575) 393-0720

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DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE, NM 67505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

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

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	WELL LOCATION AND ACREAGE DEDICATION PLAT					
API Number	Pool Code Pool Name					
Property Code	Property Name Well Number					
	QUIEN SABE FEDERAL COM 801H					
OGRID No.	Operator Name Elevation COG OPERATING, LLC 3123.3'					
	Grande and Tanakina					

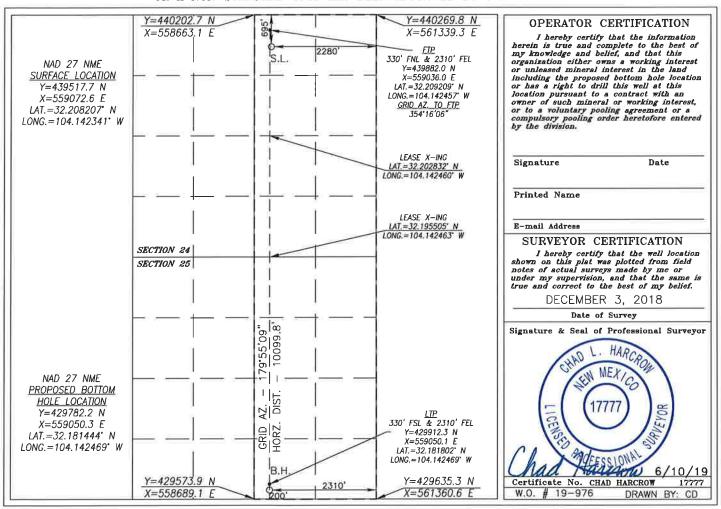
Surface Location

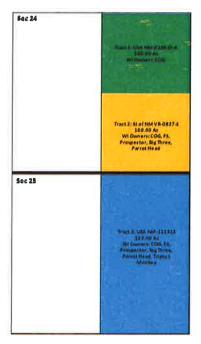
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	24	24-S	27-E		695	NORTH	2280	EAST	EDDY

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
0	25	24-S	27-E		200	SOUTH	2310	EAST	EDDY
Dedicated Acres	Joint o	r Infill Co	nsolidation (Code Ore	ler 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



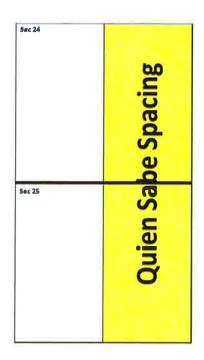


Quien Sabe Fed COM 602H, 603H, 801H - Compulsory Pooling Info Section 24: E2, Section 25: E2, T24S-R27E

Proposal	Sent
AOL	Sent
COM	Sent

ORRI	Parties:

ConocoPhillips Company	Ratified COM
Rolla R. Hinkle, III	Ratified COM
Madison M. Hinkle	Ratified COM
Exacliber Energy Company	Ratified COM
Foundation Minerals, LLC	
Justin Nine et ux, Sara Nine	
Tim Lilley et ux, Tashina Lilley	
Mavros Minerals II, LLC	
Bryan Bell	
Wells Fargo Bank, N.A., Trustee of the Robert Enfield	
Revocable Trust dated March 16, 1999	Ratified COM
DMA, Inc.	
Charmar, LLC	Ratified COM
Howard A. Rubin	Ratified COM
Lisa M. Enfield, Trustee of the Lisa M. Enfield Trust u/t/a	
dated January 23, 2015	
MLE, LLC	Ratified COM
Richard C. Deason	
Thomas D. Deason	Ratified COM
Oak Valley Mineral and Land, LP	
Ronald H. Mayer, Trustee of the Ronald H. Mayer and	
Martha M. Mayer Revocable Trust dated March 19,	
1990	Ratified COM
SAP, LLC	
Rubie Crosby Bell Family LLC	
Bryan Bell Family Limited Partnership #1	
Nestegg Energy Corporation	Ratified COM



WI Parties: COG Operating LLC

COG Operating LLC
Concho Oil & Gas LLC

BEXP I, LP (acquired interests of Prospector LLC, Featherstone Dev. Corp., Big Three Energy Group, Parrot Head Properties after application filed)

Triple L Monley LLC Consented, Signed OA and COM

Pooling

	Leasehold WI				
	COG	Concho	BEXP I, LP	Triple L	
Tract 1 - Sec 24: NE	0.9025	0.0475	0,05	0	
Tract 2 - Sec 24: SE	0.8717	0.0283	0.1	0	
Tract 3 - Sec 25: E2	0.8313	0.0437	0.115	0	

Unit Recapitulation					
Owner	Working Interest				
COG Operating LLC	85.916625%				
Concho Oil & Gas LLC	4.083375%				
BEXP I, LP	9.500000%				
Triple L Monkey, LLC	0.500000%				
Total	100.000000%				

Submitted by: COG OPERATING, LLC Hearing Date: July 25, 2019



March 4, 2019

Via Certified Mail, Return Receipt Requested WORKING INTEREST OWNERS ON ATTACHED EXHIBIT "A"

Re: Quien Sabe Fed Com Unit

Township 24 South, Range 27 East E2 of Section 24 E2 of Section 25 Eddy County, New Mexico

Dear Working Interest Owner:

COG Operating LLC ("COG"), as Operator, hereby proposes the drilling of the following horizontal wells located in Sections 24 and 25 of Township 24 South, Range 27 East, Eddy County, New Mexico.

PAD 1

- 1. Quien Sabe Fed Com 602H, to be drilled to a depth sufficient to test the Wolfcamp A Sand formation at a total vertical depth of 9,274'. The surface location for this well is proposed at a legal location in Unit A of Section 24, and a bottom hole location at a legal location in Unit P of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached Authority for Expenditure ("AFE").
- 2. Quien Sabe Fed Com 701H, to be drilled to a depth sufficient to test the Wolfcamp A Shale formation at a total vertical depth of 9,392'. The surface location for this well is proposed at a legal location in Unit A of Section 24, and a bottom hole location at a legal location in Unit P of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.
- 3. Quien Sabe Fed Com 601H, to be drilled to a depth sufficient to test the Wolfcamp A Sand formation at a total vertical depth of 9,274'. The surface location for this well is proposed at a legal location in Unit A of Section 24, and a bottom hole location at a legal location in Unit P of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.

PAD 2

4. Quien Sabe Fed Com 703H, to be drilled to a depth sufficient to test the Wolfcamp A Shale formation at a total vertical depth of 9,392'. The surface location for this well is proposed at a legal location in Unit B of Section 24, and a bottom hole location at a legal location in Unit O of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.

- 5. Quien Sabe Fed Com 603H, to be drilled to a depth sufficient to test the Wolfcamp A Sand formation at a total vertical depth of 9,274'. The surface location for this well is proposed at a legal location in Unit B of Section 24, and a bottom hole location at a legal location in Unit O of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.
- 6. Quien Sabe Fed Com 702H, to be drilled to a depth sufficient to test the Wolfcamp A Shale formation at a total vertical depth of 9,392'. The surface location for this well is proposed at a legal location in Unit B of Section 24, and a bottom hole location at a legal location in Unit O of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.

COG is proposing to drill these wells under the terms of a new Operating Agreement dated December 1, 2018, covering the E2 of Sections 24 and 25 of Township 24 South, Range 27 East, Eddy County, New Mexico, which is enclosed. Please review the OA and execute where indicated if you are agreeable to its terms. It has the following general provisions:

- 100%/300%/300% Non-Consenting Penalty
- \$8,000/\$800 Drilling and Producing Rate
- COG Operating LLC as Operator.

Should you elect to not participate in these operations, COG would like to discuss a Term Assignment or other means of acquiring of your interest in the subject unit. If we do not reach an agreement within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well.

In the meantime, should you have any questions, please do not hesitate to contact me at 432.685.2590 or jmartin1@concho.com.

Sincerely,

COG Operating LLC

James D. Martin Landman II

JM:bh Enc.

Well Name	Elect to participate	Elect not to participate
Quien Sabe Fed Com 602H	, ,	
Quien Sabe Fed Com 701H		
Quien Sabe Fed Com 601H		
Quien Sabe Fed Com 703H		
Quien Sabe Fed Com 603H		
Quien Sabe Fed Com 702H		

Ву:	S
Name:	
Title:	
Date:	

EXHIBIT "A" WORKING INTEREST OWNERS

Via Certified Mail, Return Receipt Requested No. 91 7199 9991 7038 7465 6440
Featherstone Development Corp.
Prospector, LLC
Big Three Energy Group, LLC
Parrot Head Properties, LLC
P.O. Box 429
Roswell, NM 88202

Via Certified Mail, Return Receipt Requested No. 91 7199 9991 7038 7465 6457 Triple L Monkey, LLC 4425 98th Street Lubbock, TX 79424

4



April 30, 2019

Via E-Certified Mail
WORKING INTEREST OWNERS ON ATTACHED EXHIBIT "A"

Re: Quien Sabe Fed Com Unit

Township 24 South, Range 27 East E2 of Section 24 E2 of Section 25 Eddy County, New Mexico

Dear Working Interest Owner:

COG Operating LLC ("COG"), as Operator, hereby proposes the drilling of the following horizontal well located in Sections 24 and 25 of Township 24 South, Range 27 East, Eddy County, New Mexico.

• Quien Sabe Fed Com 801H, to be drilled to a depth sufficient to test the Wolfcamp D formation at a total vertical depth of 10,235'. The surface location for this well is proposed at a legal location in Unit B of Section 24, and a bottom hole location at a legal location in Unit O of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,894,642.00, as shown on the attached Authority for Expenditure ("AFE").

COG is proposing to drill these wells under the terms of a new Operating Agreement dated December 1, 2018, covering the E2 of Sections 24 and 25 of Township 24 South, Range 27 East, Eddy County, New Mexico, which was sent on December 17, 2018.

If we do not reach an agreement pursuant to this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well.

Please indicate your participation elections in the space provided below, and return the executed AFEs, Operating Agreement, and a copy of your geological requirements to my attention in the enclosed self-addressed, stamped envelope. Should you have any questions, please do not hesitate to contact me at 432.221.0452 or by email at tmacha@concho.com.

Sincerely,

COG Operating LLC

Travis Macha Landman

TM:bh Enc

We hereby elect to participate in the drilling and completion of the Quien Sabe Fed Com 801H.
We hereby elect not to participate in the drilling and completion of the Quien Sabe Fed Com 801H.
 ,

EXHIBIT "A" WORKING INTEREST OWNERS

Via E-CM No. 9414 8149 0246 9822 0042 30 Featherstone Development Corp. Prospector, LLC Big Three Energy Group, LLC Parrot Head Properties, LLC P.O. Box 429 Roswell, NM 88202

Via E-CM No. 9414 8149 0246 9822 0042 47 **Triple L Monkey, LLC**4425 98th Street

Lubbock, TX 79424



June 27, 2019

Via E-CM No. 9414 8149 0246 9822 0130 72

BEXP I, LP

5914 W. Courtyard Drive, Suite 340

Austin, TX 78730

Attn: Zach Privett, Land Manager

Re: Qu

Quien Sabe Federal Unit E2 of Sections 24 & 25, T24S-R27E Eddy County, New Mexico

Dear Mr. Privett:

COG Operating, LLC ("COG") previously proposed the below referenced wells located in Sections 24 and 25 of Township 24 South, Range 27 East, Eddy County, New Mexico, to Featherstone Development Corporation, Prospector, LLC, Big Three Energy Group, LLC, and Parrot Head Properties, LLC ("Featherstone entities"). I've attached copies of those letters and proof of receipt hereto. As successor-in-interest to the Featherstone entities, COG is considering you subject to the proposals previously mailed.

- Quien Sabe Fed Com 602H, to be drilled to a depth sufficient to test the Wolfcamp A Sand formation at a total vertical depth of 9,274'. The surface location for this well is proposed at a legal location in Unit A of Section 24, and a bottom hole location at a legal location in Unit P of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached Authority for Expenditure ("AFE").
- Quien Sabe Fed Com 701H, to be drilled to a depth sufficient to test the Wolfcamp A Shale formation at a total vertical depth of 9,392'. The surface location for this well is proposed at a legal location in Unit A of Section 24, and a bottom hole location at a legal location in Unit P of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.
- Quien Sabe Fed Com 601H, to be drilled to a depth sufficient to test the Wolfcamp A Sand formation at a total vertical depth of 9,274'. The surface location for this well is proposed at a legal location in Unit A of Section 24, and a bottom hole location at a legal location in Unit P of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.
- Quien Sabe Fed Com 703H, to be drilled to a depth sufficient to test the Wolfcamp A Shale formation at a total vertical depth of 9,392'. The surface location for this well is proposed at a legal location in Unit B of Section 24, and a bottom hole location at a legal location in Unit O of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.

- Quien Sabe Fed Com 603H, to be drilled to a depth sufficient to test the Wolfcamp A Sand formation at a total vertical depth of 9,274'. The surface location for this well is proposed at a legal location in Unit B of Section 24, and a bottom hole location at a legal location in Unit O of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.
- Quien Sabe Fed Com 702H, to be drilled to a depth sufficient to test the Wolfcamp A Shale formation at a total vertical depth of 9,392'. The surface location for this well is proposed at a legal location in Unit B of Section 24, and a bottom hole location at a legal location in Unit O of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,220,000, as shown on the attached AFE.
- Quien Sabe Fed Com 801H, to be drilled to a depth sufficient to test the Wolfcamp D formation at a total vertical depth of 10,235'. The surface location for this well is proposed at a legal location in Unit B of Section 24, and a bottom hole location at a legal location in Unit O of Section 25. The dedicated project area will be the E2 of Sections 24 and 25, T24S-R27E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$12,894,642.00, as shown on the attached AFE.

COG has proposed a new Operating Agreement dated December 1, 2018, covering the E2 of Sections 24 and 25 of Township 24 South, Range 27 East, Eddy County, New Mexico, which was previously mailed to the Featherstone entities. It has been amended to account for the successorship of BEXP I, LP, and is attached hereto.

If we do not reach an agreement pursuant to this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed wells.

Please indicate your participation elections in the space provided below, and return a copy of this letter, the executed AFEs and a copy of your geological requirements, along with the signature pages to the Operating Agreement upon your review. Should you have any questions, please do not hesitate to contact me at 432.221.0452 or by email at tmacha@concho.com.

Sincerely,

COG Operating LLC

Travis Macha Landman

TM:bh Enc June 27, 2019 – Page 3 Quien Sabe Fed Com

Please indicate your election below:

"Consent" – Party hereby elects to participate in the drilling and completion of the indicated well(s). "Non-Consent" – Party herby elects <u>not</u> to participate in the drilling and completion of the indicated well(s).

Consent	Non-Consent	Well Name
	## I	Quien Sabe Fed Com 602H
		Quien Sabe Fed Com 701H
		Quien Sabe Fed Com 601H
		Quien Sabe Fed Com 703H
		Quien Sabe Fed Com 603H
		Quien Sabe Fed Com 702H
		Quien Sabe Fed Com 801H

Ву:	-
Name:	•
Title:	
Date:	

COG OPERATING LLC AUTHORITY FOR EXPENDITURE Drill & Complete

Quien Sabe Fed Com #602H Section 24: 460 FNL 2250' FEL (or a legal location in Unit B) Section 25: 200 FSL 1310' FEL (or a legal location in Unit P) Wolfcamp A Sand E2 of Section 24: T24S-R27E E2 of Section 25: T24S-R27E Well Name SHL BHL

Formation Legal

Prospect State & County Objective Depth TVD

Tomahawk 2427 New Mexico, Eddy County Drill & Complete 19,300' 9,274'

AFE Numbers

st Description	Code	PreSpud (PS)	Drilling (DR)	Completions (C)	Tank Bity Constrctn(TB)	Pmpq Equip (PEQ)	Revision	1
ngible Costs	40.41		*** *** ** 1				en en T	****
Surface Casing	401		\$25,000.00		-		\$0.00	\$25,000
ntermed Csg Production Casing/Liner	402		\$138,000.00				\$0.00	\$418,000
Wellhead Equip	405		\$67,000.00				\$0.00	\$67,000
Tubing	504		501,000.00	\$35,000.00			\$0.00	\$35,000
Wellhead Equip	505			\$20,000,00			\$0,00	\$20,000
Q-Pumping Unit	506					\$86,000.00	\$0.00	\$86,000
Q-Rods	508					\$45,000.00	\$0,00	\$45,000
-Tanks	510				\$60,000.00		\$0,00	\$60,000
-Flowlines/Pipelines	511				\$55,000.00		\$0.00	\$55,000
-Htr Trtr/Seprtr	512				\$135,000.00		\$0.00	\$135,000
Electrical System/Equipment	513				\$90,000.00		\$0.00	\$90,000
ckrs/Anchors/Hgrs	514			\$49,000.00			\$0.00	\$49,000
Couplings/Fittings/Valves	515				\$135,000.00		\$0.00	\$135,000
Gas Lift/Compression	516				\$95,000.00		\$0,00	\$95,00
Pumps-Surface	521				\$14,000.00		\$0.00	\$14,00
Meters/Lacis	525				\$17,500.00		\$0,00 \$0,00	\$17,50
Flares/Combusters/Emission	526 527			\$12,000.00	\$17,500.00		\$0,00	\$17,50 \$12,00
as Lift/Compression	527			\$12,000,00		\$7,000.00	\$0.00	\$7,00
Q-Instrumentation/SCADA/POC Q-Tubing	530					\$5,000.00	\$0.00	\$5,00
2-Yubing 2-Wellhead Equipment	531					\$3,000.00	\$0.00	\$3,00
2-Pumps	532				 	\$5,000.00	\$0.00	\$5,00
Q-Electrical System	533				 	\$15,000.00	\$0,00	\$15,00
2-Packers/Anchors/Hangers	534					\$70,000.00	\$0.00	\$70,00
2-Miscellaneous	535					\$3,000.00	\$0.00	\$3,00
al Tangible Costs		\$0.00	\$648,000.00	\$116,000.00	\$619,000.00	\$239,000.00	\$0.00	\$1,622,00
noible Costs							-	
ngible Costs Title/Permits	201	\$9,000.00	I				\$0.00	\$9,00
nsurance	202	\$2,500.00					\$0,00	\$2,50
Damages/ROW	203	\$15,000.00					\$0.00	\$15,00
Survey/Stake Lctn	204	\$1,000.00					\$0.00	\$1,00
ctn/Pits/Roads	205	1	\$129,000.00				\$0.00	\$129,00
rilling Overhead	206		\$7,500.00				\$0.00	\$7,50
aywork Contract	209		\$865,000.00				\$0.00	\$865,00
irectional Drig Services	210		\$367,000.00				\$0.00	\$367,00
uel & Power	211		\$207,000.00				\$0.00	\$207,00
Vater	212		\$48,000.00				\$0.00	\$48,00
its	213		\$97,000.00				\$0.00	\$97,00
lud & Chemicals	214		\$232,000.00				\$0.00	\$232,00
ement Surface	217		\$19,000.00				\$0,00	\$19,00
ement intermed	218		\$89,000.00				\$0.00	\$89,00
rod-2nd Int Cmt	219		\$97,000.00				\$0.00	\$97,00
loat Equipment & Centralizers	221		\$75,000.00				\$0.00	\$75,00
sg Crews & Equip	222		\$49,000.00				\$0.00	\$49,00
contract Labor	225		\$15,000.00				\$0.00	\$15,00
ompany Sprvsn	226		\$60,000.00				\$0,00	\$60,00
ontract Sprvsn	227		\$97,000.00				\$0,00	\$97,00
slg Csg/Tbg	228		\$49,000.00				\$0.00	\$49.00
lud Logging Unit	229		\$32,000.00				\$0.00	\$32,00
erf/Wireline Svc	231		\$4,000.00				\$0.00	\$4,00
entals-Surface	235		\$258,000.00				\$0.00	\$258,00
entals-Subsrfc	236		\$222,000.00				\$0.00	\$222,00
rucking/Forklift/Rig Mob	237		\$169,000.00				\$0.00	\$169,00
Velding Services	238		\$5,000.00				\$0.00	\$5,00
ontingency	243		\$62,000.00				\$0.00	\$62.00
nvmmti/Clsd Loop	244		\$347,000.00				\$0.00	\$347,00
ctn/Pits/Roads	305			\$7,000.00			\$0.00	\$7,00
rac Equipment	307			\$1,230,000.00			\$0.00	\$1,230,00
ac Chemicals	308			\$716,000.00			\$0.00	\$716,00
rac Proppant	309			\$1,163,000.00			\$0.00	\$1,163,00
rac Propoant Transportation	310			\$171,000.00			\$0.00	\$171,00
uel & Power	311			\$12,000.00			\$0.00	\$12,00
/ater	312			\$926,000.00	H		\$0.00	\$926,00 \$14,00
ts	313			\$14,000.00 \$26,000.00			\$0.00	\$14,00
ud & Chemicals ontract Labor	325			\$14,000.00			\$0.00	\$26,00
ompany Sprvsn	326			\$22,000.00			\$0.00	\$22,00
	326			\$22,000.00			\$0.00	\$22,00
ontract Sprvsn sig Csg/Tbg	327			\$4,000.00			\$0.00	\$4,00
erf/Wireline Svc	331			\$498,000.00			\$0.00	\$498,00
imulation/Treating	332			\$9,000.00			\$0.00	\$9,00
ompletion Unit	333	-		\$45,000.00			\$0.00	\$45,00
entals-Surface	335			\$295,000.00			\$0.00	\$295,00
entals-Subsrfc	336			\$49,000.00			\$0.00	\$49,00
ucking/Forklift/Rig Mob	337			\$16,000.00			\$0.00	\$16,00
felding Services	338			\$4,000.00			\$0.00	\$4,00
fater Disposal	339	-		\$45,000.00			\$0.00	\$45.00
ontingency	343			\$261,000.00			\$0.00	\$261,00
ontingency ovrnmtl/Clsd Loop	343			\$4,000.00			\$0.00	\$4,00
							\$0.00	\$451,00
yed Diesel	345			\$451,000.00			\$0.00	\$451,00
oil Tubing	346							
owback Crews & Equip	347			\$36,000.00	850 000 00		\$0.00	\$36,00
ocation/Pits/Roads	353				\$56,000.00		\$0.00	\$56,00
Contract Labor	356				\$135,000.00		\$0.00	\$135,00
Vater Disposal	362				\$80,000.00	#F 500 F-	\$0.00	\$80,00
-Contract Labor	374					\$5,500.00	\$0.00	\$5,50
-Contract Supervision	376					\$5,000.00	\$0.00	\$5,00
	381					\$10,500.00	\$0.00	\$10,50
-Completion Unit	383					\$7,000.00	\$0.00	\$7,00

Total Intangible Costs		\$27,500.00	\$3,601,500.00	\$6,667,000.00	\$271,000.00	\$31,000.00	\$0.00	\$10,598,000.00
Total Gross Cost		\$27,500.00	\$4,249,500.00	\$6,783,000.00	\$890,000.00	\$270,000.00	\$0.00	\$12,220,000.00
Note: The above costs are est	imates only. A	ctual costs will be	billed as incurred.					
COG Operating LLC								
Ву:					Di	ale Prepared:		
					C	OG Operating LLC		
Ne approve: Working Interest By:								
Company:								
Ву:								
Printed Name:		- 17						
Title						is AFE is only an estimat		agree to pay
Date:					yo	ur share of the actual cos	its incurred	

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

Well Name SHL BHL Formation Legal Quien Sabe Fed Com#603H
Section 24: 695 FNL 2310" FEL (or a legal location in Unit B)
Section 25: 200 FSL 2310" FEL (or a legal location in Unit O)
Wolfcamp A Sand
E2 of Section 24: T24S-R27E
E2 of Section 25: T24S-R27E

Prospect State & County Objective Depth TVD

Tomahawk 2427 New Mexico, Eddy County Drill & Complete 19,300' 9,274'

AFE	Nur	nbe	7.8

ost Description ingible Costs	Code	PreSpud (PS)		THE ATALLE	nk Btty Constrctn(TB)		Revision	
Surface Casing	401		\$25,000.00				\$0.00	\$25,00
ntermed Csg	402		\$138,000.00				\$0,00	\$138,00
Production Casing/Liner	403		\$418,000.00				\$0.00	\$418,00
	405		\$67,000.00				\$0.00	\$67,00
Vellhead Equip			901,000,00	636,000,00				\$35,00
ubing	504			\$35,000.00			\$0.00	
Velihead Equip	505			\$20,000.00			\$0.00	\$20,00
2-Pumping Unit	506				- 4	\$86,000.00	\$0.00	\$86,00
1-Rods	508					\$45,000.00	\$0.00	\$45,00
Tanks	510				\$60,000.00		\$0.00	\$60,00
Flowlines/Pipelines	511				\$55,000.00		\$0,00	\$55,00
Htr Trtr/Seprtr	512				\$135,000.00		\$0.00	\$135,00
Electrical System/Equipment	513				\$90,000.00		\$0_00	\$90,00
ckrs/Anchors/Hgrs	514			\$49,000.00			\$0,00	\$49,00
Couplings/Fittings/Valves	515				\$135,000.00		\$0.00	\$135,00
Gas Lift/Compression	516				\$95,000.00		\$0.00	\$95,00
	521				\$14,000.00		\$0.00	\$14,00
Pumps-Surface								
Meters/Lacts	525				\$17,500.00		\$0.00	\$17,50
Flares/Combusters/Emission	526				\$17,500.00		\$0.00	\$17,50
as Lift/Compression	527			\$12,000.00			\$0.00	\$12,00
2-Instrumentation/SCADA/POC	529					\$7,000.00	\$0.00	\$7,00
Q-Tubing	530					\$5,000.00	\$0.00	\$5,00
						\$3,000.00		
2-Wellhead Equipment	531						\$0.00	\$3,00
2-Pumps	532					\$5,000.00	\$0.00	\$5,00
2-Electrical System	533					\$15,000.00	\$0.00	\$15,00
2-Packers/Anchors/Hangers	534					\$70,000.00	\$0.00	\$70,00
Q-Miscellaneous	535					\$3,000.00	\$0.00	\$3,00
	000	40.00	20,000,00	\$116,000.00	\$640,000,00	\$239,000.00	\$0.00	\$1,622,00
al Tangible Costs		\$0.00	\$648,000.00	\$110,000.00	\$619,000.00	\$238,000.00	\$0.00	\$1,022,00
ngible Costs								
Title/Permits	201	\$9,000.00			T		\$0.00	\$9.00
surance	202	\$2,500.00					\$0.00	\$2,50
Damages/ROW	203	\$15,000.00					\$0.00	\$15,00
Survey/Stake Lctn	204	\$1,000.00					\$0.00	\$1,00
dn/Pils/Roads	205		\$129,000.00				\$0.00	\$129,00
rilling Overhead	206		\$7,500.00				\$0.00	\$7,50
	209		\$865,000.00				\$0.00	\$865,00
aywork Contract								
irectional Drig Services	210		\$367,000.00				\$0.00	\$367,00
uel & Power	211		\$207,000.00				\$0.00	\$207,00
Vater	212		\$48,000.00				\$0.00	\$48,00
its	213		\$97,000.00				\$0.00	\$97,00
	214		\$232,000.00				\$0.00	\$232,00
ud & Chemicals								
ement Surface	217		\$19,000.00				\$0.00	\$19,00
ement intermed	218		\$89,000.00				\$0.00	\$89,00
rod-2nd Int Cmt	219		\$97,000.00				\$0.00	\$97,00
loat Equipment & Centralizers	221		\$75,000.00				\$0.00	\$75,00
sg Crews & Equip	222		\$49,000.00				\$0.00	\$49,00
							\$0.00	
ontract Labor	225		\$15,000.00					\$15,00
ompany Sprvsn	226		\$60,000.00				\$0.00	\$60,00
ontract Sprvsn	227		\$97,000.00				\$0.00	\$97,00
stg Csg/Tbg	228		\$49,000.00				\$0.00	\$49,00
ud Logging Unit	229		\$32,000.00				\$0.00	\$32,00
	231		\$4,000.00				\$0.00	\$4,00
erf/Wireline Svc								
entals-Surface	235		\$258,000.00				\$0.00	\$258,00
entals-Subsrfc	236		\$222,000.00				\$0.00	\$222,00
rucking/Forklift/Rig Mob	237		\$169,000.00				\$0.00	\$169,00
Velding Services	238		\$5,000.00				\$0.00	\$5,00
onlingency	243		\$62,000.00				\$0.00	\$62.00
							\$0.00	\$347,00
nvmmtl/Clsd Loop	244		\$347,000.00	67 666 77				
ctn/Pits/Roads	305			\$7,000.00			\$0.00	\$7,00
rac Equipment	307			\$1,230,000.00			\$0.00	\$1,230,00
rac Chemicals	308			\$716,000.00			\$0.00	\$716,00
rac Proppant	309			\$1,163,000.00			\$0.00	\$1,163,00
	310			\$171,000.00			\$0.00	\$171,00
rac Proppant Transportation								
uel & Power	311			\$12,000.00			\$0.00	\$12,00
/ater	312			5926,000.00			\$0,00	\$926,00
ts	313			\$14,000.00			\$0.00	\$14,00
ud & Chemicals	314			\$26,000.00			\$0.00	\$26,00
ontract Labor	325			\$14,000.00			\$0.00	\$14,00
							\$0.00	\$22,00
ompany Sprvsn	326			\$22,000.00				
ontract Sprvsn	327			\$242,000.00			\$0.00	\$242,00
itg Csg/Tbg	328			\$4,000.00			\$0.00	\$4,00
erf/Wireline Svc	331			\$498,000.00			\$0.00	\$498,00
imulation/Treating	332			\$9,000.00			\$0.00	\$9,00
ompletion Unit	333			\$45,000.00			\$0.00	\$45,00
								\$295,00
entals-Surface	335			\$295,000.00			\$0.00	
entals-Subsrfc	336			\$49,000.00			\$0.00	\$49,00
ucking/Forklift/Rig Mob	337			\$16,000.00			\$0.00	\$16,00
elding Services	338			\$4,000.00			\$0.00	\$4,00
							\$0.00	\$45,00
ater Disposal	339			\$45,000.00				
onlingency	343			\$261,000.00			\$0.00	\$261,00
vmmtl/Clsd Loop	344			\$4,000.00			\$0.00	\$4,00
yed Diesel	345			\$451,000.00			\$0.00	\$451,00
oil Tubing	346			\$407,000.00			\$0.00	\$407,00
owback Crews & Equip	347			\$36,000.00	1		\$0.00	\$36,00
ocalion/Pits/Roads	353				\$56,000.00		\$0.00	\$56,00
	356				\$135,000.00		\$0.00	\$135,00
Contract Labor	362				\$80,000.00		\$0.00	\$80,00
	J02				400,000.00	\$5,500.00	\$0.00	\$5,50
Water Disposal	65.4					35 500 00 1	50.00 1	35.50
Valer Disposal -Contract Labor	374							
Valer Disposal -Contract Labor -Contract Supervision	376					\$5,000.00	\$0.00	\$5,00
Valer Disposal -Contract Labor -Contract Supervision								
Contract Labor Water Disposal D-Contract Labor D-Contract Supervision D-Contract Supervision D-Contract Supervision	376					\$5,000.00	\$0.00	\$5,00

Total Intangible Costs	\$27,500.00	\$3,601,500.00	\$6,667,000.00	\$271,000.00	\$31,000.00	\$0.00	\$10,598,000.00
Total Gross Cost	\$27,500.00	\$4,249,500.00	\$6,783,000.00	\$890,000.00	\$270,000.00	\$0.00	\$12,220,000.00
Note: The above costs are estimates	only. Actual costs will be	billed as incurred.					
COG Operating LLC							
Ву				<u>_D</u>	ate Prepared:		
				C	OG Operating LLC		
We approve: % Working Interest				<u>B</u>	y.		
Company: By:							
Printed Name:				_			
Title:				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 SHL BHL Formation Legal AFE Numbers

Quien Sabe Federal Com 801H Section 24: Legal location within Unit B Section 25: Legal location within Unit O WOLFCAMP D SHALE Section 24: E2, Section 25: E2, T24S-R27E

Prospect State & County Objective Depth TVD

Tomahawk 2427 NEW MEXICO, EDDY DRILL & COMPLETE 20,100' Subject to change 10,235'

ost Description	Code	PreSpud (PS)	Drilling (DP)	Completions (C)	Tank Bity Constrctn(TB)	Pmna Faula (DEO)	Revision	1
angible Costs	Code	Prespud (PS)	Drilling (DR)	Completions (C)	Tank Bity Constrotti(1B)	Pmpq Equip (PEQ)	Revision	
-Surface Casing	401	\$0.00	\$28,902.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28,902
-Intermed Csg	402	\$0.00	\$159,543.00	\$0.00	\$0.00	\$0.00	\$0.00	\$159,543
-Production Casing/Liner	403	\$0.00	\$483,255.00	\$0,00	\$0.00	\$0.00	\$0.00	\$483,255
-Wellhead Equip	405	\$0.00	\$77,459.00	\$0.00	\$0.00	\$0.00	\$0.00	\$77,459
Tubing	504	\$0.00	\$0.00	\$31,482,00	\$0.00	\$0.00	\$0.00	\$31,482
Wellhead Equip	505	\$0,00	\$0.00	\$17,989.00	\$0,00	\$0.00	\$0.00	\$17,989
Q-Pumping Unit	506	\$0.00	\$0.00	\$0.00	\$0.00	\$42,626.00	\$0.00	\$42,626
Q-Rods	508	\$0.00	\$0.00	\$0.00	\$0.00	\$22,304.00	\$0.00	\$22,304
-Tanks	510	\$0.00	\$0.00	\$0.00	\$103,403.00	\$0.00	\$0.00	\$103,40
-Flowlines/Pipelines	511	\$0.00	\$0.00	\$0.00	\$94,786.00	\$0.00	\$0,00	\$94,786
-Hir Trir/Seprir	512 513	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00	\$232,658.00	\$0.00	\$0.00	\$232,658
-Electrical System/Equipment	514	\$0.00	\$0.00	\$0.00 \$44,074.00	\$155,105.00	\$0.00	\$0,00	\$155,105
Pckrs/Anchors/Hgrs -Couplings/Fittings//alves	515	\$0.00	\$0.00	\$0.00	\$0.00 \$232,658.00	\$0.00 \$0.00	\$0.00	\$44,074
-Gas Lift/Compression	516	\$0.00	\$0.00	\$0.00	\$163,722.00	\$0.00	\$0.00	\$232,65 \$163,72
Pumps-Surface	521	\$0.00	\$0.00	\$0.00	\$24,127.00	\$0.00	\$0.00	\$24,12
Meters/Lacts	525	\$0.00	\$0.00	\$0.00	\$30,159.00	\$0.00	\$0.00	\$30,15
Flares/Combusters/Emission	526	\$0.00	\$0.00	\$0.00	\$30,159.00	\$0.00	\$0.00	\$30,15
Sas Lift/Compression	527	\$0.00	\$0.00	\$10,793.00	\$0.00	50.00	\$0.00	\$10,79
Q-Instrumentation/SCADA/POC	529	\$0.00	\$0.00	\$0.00	\$0.00	\$3,469.00	\$0.00	\$3,46
Q-Tubing	530	\$0.00	\$0.00	\$0.00	\$0.00	\$2,478.00	\$0.00	\$2,470
Q-Wellhead Equipment	531	\$0.00	\$0.00	\$0.00	\$0.00	\$1,486.00	\$0.00	\$1,486
Q-Pumps	532	\$0.00	\$0.00	\$0.00	\$0.00	\$2,478.00	\$0.00	\$2,470
Q-Electrical System	533	\$0.00	\$0.00	\$0.00	\$0.00	\$7,434.00	\$0.00	\$7,434
Q-Packers/Anchors/Hangers	534	\$0.00	\$0.00	\$0.00	\$0.00	\$34,695.00	\$0.00	\$34,69
Q-Miscellaneous	535	\$0.00	\$0.00	\$0.00	\$0.00	\$1,486.00	\$0.00	\$1,480
tal Tangible Costs	500	\$0.00	\$749,159.00	\$104,338.00	\$1,066,777.00	\$118,456.00	\$0.00	\$2,038,730
mgiole costa		90.00	\$1 49,100.00	\$104,000.00	\$1,000,171.00	4110,400,00	90.00	92,030,730
ingible Costs								
Title/Permits	201	\$9,179.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,179
nsurance	202	\$2,549.00	\$0.00	\$0.00	\$0.00	\$0,00	\$0.00	\$2,549
Damages/ROW	203	\$15,299.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15,299
Survey/Stake Lctn	204	\$1,019.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,019
ctn/Pits/Roads	205	\$0.00	\$145,699.00	\$0.00	\$0.00	\$0.00	\$0.00	\$145,699
Orilling Overhead	206	\$0.00	\$8,470.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,470
Daywork Contract	209	\$0.00	\$976,979,00	\$0.00	\$0.00	\$0.00	\$0.00	\$976,979
Pirectional Drlg Services	210	\$0.00	\$414,510,00	\$0.00	\$0,00	\$0.00	\$0.00	\$414,510
uel & Power	211	\$0.00	\$233,797.00	\$0.00	\$0.00	\$0.00	\$0.00	\$233,79
Valer	212	\$0.00	\$54,213.00	\$0.00	\$0.00	\$0.00	\$0.00	\$54,213
its	213	\$0.00	\$109,557.00	\$0.00	\$0.00	\$0.00	\$0.00	\$109,557
Mud & Chemicals	214	\$0.00	\$262,033.00	\$0.00	\$0.00	\$0.00	\$0.00	\$262,033
Cement Surface	217	\$0.00	\$21,459.00	\$0.00	\$0.00	\$0.00	\$0.00	\$21,459
Cement Intermed	218	\$0.00	\$100,521.00	\$0.00	\$0.00	\$0,00	\$0.00	\$100,521
rod-2nd Int Cmt		\$0.00	\$109,557.00	\$0.00	\$0.00	\$0.00	\$0.00	\$109,557
loat Equipment & Centralizers	221	\$0.00	\$84,709.00	\$0.00	\$0.00	\$0.00	\$0.00	\$84,709
Ssg Crews & Equip		\$0.00	\$55,343.00 \$16,941.00	\$0.00	\$0.00	\$0.00	\$0.00	\$55,343
Contract Labor	225 226	\$0.00 \$0.00	\$67,767.00	\$0.00	\$0.00	\$0.00 \$0.00	\$0.00	\$16,94
ompany Sprvsn ontract Sprvsn	227	\$0.00	\$109,557.00	\$0.00	\$0.00 \$0.00	\$0.00	\$0.00	\$67,767
stg Csg/Tbg	228	\$0,00	\$55,343.00	\$0.00	\$0.00	\$0.00	\$0.00	\$109,557
	229	\$0.00	\$36,142.00	\$0.00	\$0.00	\$0.00	\$0.00	\$55,343 \$36,142
Mud Logging Unit Perf/Wireline Svc	231	\$0.00	\$4,517.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,517
Rentals-Surface	235	\$0.00	\$291,399.00	\$0.00	\$0.00	\$0.00	\$0.00	\$291,399
tentals-Subsrfc	236	\$0.00	\$250,739.00	\$0.00	\$0.00	\$0.00	\$0.00	\$250,739
rucking/Forklift/Rig Mob	237	\$0.00	\$190.878.00	\$0.00	\$0.00	\$0.00	\$0.00	\$190,878
Velding Services	238	\$0.00	\$5,647.00	\$0.00	\$0.00	\$0.00	\$0.00	
ontingency	243	\$0.00	\$70,026.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,647 \$70,026
nvrnmtl/Cisd Loop	244	\$0.00	\$391,921.00	\$0.00	\$0.00	\$0.00	\$0.00	\$391,921
ctn/Pits/Roads	305	\$0.00	\$0.00	\$6,306.00	\$0.00	\$0.00	\$0.00	\$6,306
rac Equipment	307	\$0.00	\$0.00	\$1,162,211.00	\$0.00	\$0.00	\$0.00	\$1,162,21
rac Chemicals	308	\$0.00	\$0.00	\$708,138.00	\$0.00	\$0.00	\$0.00	\$708,131
rac Proppant	309	\$0.00	\$0.00	\$1,101,848.00	\$0.00	\$0.00	\$0.00	\$1,101,848
rac Proppant Transportation	310	\$0.00	\$0.00	\$172,079.00	\$0.00	\$0.00	\$0.00	\$172,079
uel & Power	311	\$0.00	\$0.00	\$10,811.00	\$0.00	\$0.00	\$0.00	\$10,81
/ater	312	\$0.00	\$0.00	\$834,269.00	\$0.00	\$0.00	\$0.00	\$834,269
its	313	\$0.00	\$0.00	\$12,613.00	\$0.00	\$0.00	\$0.00	\$12,613
ud & Chemicals	314	\$0.00	\$0.00	\$23,424.00	\$0.00	\$0.00	\$0.00	\$23,424
ontract Labor	325	\$0.00	\$0.00	\$12,613.00	\$0.00	\$0.00	\$0.00	\$12,613
ompany Sprvsn	326	\$0.00	\$0.00	\$19,820.00	\$0.00	\$0.00	\$0.00	\$19,820
ontract Sprvsn	327	\$0.00	\$0.00	\$272,083.00	\$0.00	\$0.00	\$0.00	\$272,083
stg Csg/Tbg	328	\$0.00	\$0.00	\$3,603.00	\$0.00	\$0.00	\$0.00	\$3,600
erf/Wireline Svc	331	\$0.00	\$0.00	\$466,686.00	\$0.00	\$0.00	\$0.00	\$466,686
timulation/Treating	332	\$0.00	\$0.00	\$8,108.00	\$0.00	\$0.00	\$0.00	\$8,108
ompletion Unit	333	\$0.00	\$0.00	\$40,542.00	\$0.00	\$0.00	\$0.00	\$40,542
entals-Surface	335	\$0.00	\$0.00	\$310,824.00	\$0.00	\$0.00	\$0.00	\$310,824
entals-Subsrfc	336	\$0.00	\$0.00	\$44,146.00	\$0.00	\$0.00	\$0.00	\$44,146
ucking/Forklift/Rig Mob	337	\$0.00	\$0.00	\$14,415.00	\$0.00	\$0.00	\$0.00	\$14,41
/elding Services	338	\$0.00	\$0.00	\$3,603.00	\$0.00	\$0.00	\$0.00	\$3,600
ater Disposal	339	\$0.00	\$0.00	\$40,542.00	\$0.00	\$0.00	\$0.00	\$40,542
ontingency	343	\$0.00	\$0.00	\$262,173.00	\$0.00	\$0.00	\$0.00	\$262,173
nvrnmti/Clsd Loop	344	\$0.00	\$0.00	\$3,603.00	\$0.00	\$0.00	\$0.00	\$3,603
yed Diesel	345	\$0.00	\$0.00	\$433,351.00	\$0.00	\$0.00	\$0.00	\$433,35
oil Tubing	346	\$0.00	\$0.00	\$411,729.00	\$0.00	\$0.00	\$0.00	\$411,729
lowback Crews & Equip	347	\$0.00	\$0.00	\$41,443.00	\$0.00	\$0.00	\$0.00	\$41,443
Location/Pits/Roads	353	\$0.00	\$0.00	\$0.00	\$64,342.00	\$0.00	\$0.00	\$84,342
Contract Labor	356	\$0.00	\$0.00	\$0.00	\$155,110.00	\$0.00	\$0.00	\$155,110
Water Disposal	362	\$0.00	\$0.00	\$0.00	\$91,917.00	\$0.00	\$0.00	\$91,917
2-Contract Labor	374	\$0.00	\$0.00	\$0.00	\$0.00	\$4,931.00	\$0.00	\$4,931
2-Contract Supervision	376	\$0.00	\$0.00	\$0.00	\$0.00	\$4,482.00	\$0.00	\$4,482
2-Completion Unit	381	\$0.00	\$0.00	\$0.00	\$0.00	\$9,413.00	\$0.00	\$9,413
2-Rentals-Surface	383	\$0.00	\$0.00	\$0.00	\$0.00	\$6,275.00	\$0.00	\$6,275
	385	\$0.00	\$0.00	\$0.00	\$0.00	\$2,689.00	\$0.00	\$2,689
2-Trkg/Forklift/Rig Mobilization								

Total Gross Cost	\$28,046.00	\$4,816,883.00	\$6,525,321.00	\$1,378,146.00	\$146,246.00	\$0.00	\$12,894,642.00
Note: The above costs are estimates	only. Actual costs will be	billed as incurred					
COG Operating LLC							
Ву					Date Prepared:		
					COG Operating LLC		
We approve: % Working Interest				1	Зу.		
Company: By:							
Printed Name: Title:					This AFE is only an estima		agree to pay
Date:				3	rour sites of the actual co.	ill illuditud,	

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

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

CASE NO. 20337

AFFIDAVIT OF TRAVIS SPARKS

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

1. My name is Travis Sparks. I work for COG Operating LLC ("COG") as a

geologist.

2. I have previously testified before the New Mexico Oil Conservation Division as an

expert witness in petroleum geology. My credentials as an expert petroleum geologist have been

accepted by the Division and made a matter of record.

3. I am familiar with the applications filed by COG in these cases and I have

conducted a geologic study of the targeted Wolfcamp A and Wolfcamp D within the Wolfcamp

formation underlying the subject acreage.

4. COG Exhibit No. B-1 is a project locator map that reflects COG's acreage in

yellow. The paths of the proposed wells are depicted by dashed red lines. Existing producing

wells in the Wolfcamp D shale are represented by solid purple lines.

5. COG is targeting Wolfcamp A within the Wolfcamp formation with its proposed

Quien Sabe Fed Com No. 602H and Quien Sabe Fed Com No. 603H Wells. COG

Exhibit No. B-2 is a subsea structure map that I prepared on the top of the Wolfcamp A that is

representative of the targeted intervals within the Wolfcamp formation. The structure map shows

that the formation is gently dipping to the southeast in this area. I do not observe any faulting,

pinchouts, or other geologic impediments to developing the targeted Wolfcamp A with a horizontal well in this area.

- 6. COG is targeting Wolfcamp D within the Wolfcamp formation with its proposed Quien Sabe Fed Com 801H Well. COG Exhibit No. B-3 is a subsea structure map that I prepared on the top of the Wolfcamp D that is representative of the targeted intervals within the Wolfcamp formation. The structure map shows that the formation is gently dipping to the southeast in this area. I do not observe any faulting, pinchouts, or other geologic impediments to developing the targeted Wolfcamp D with a horizontal well in this area.
- 7. **COG Exhibit No. B-4** overlays a cross-section line in red consisting of three wells penetrating the Wolfcamp formation that I used to construct a stratigraphic cross-section from A to A'. I consider these wells to be representative of the geology in the area.
- 8. **COG Exhibit No. B-5** is a cross section using the representative wells depicted on Exhibit B-3. Each well in the cross-section contains gamma ray, resistivity, and porosity logs. The proposed target intervals in the Wolfcamp A and in the Wolfcamp D are labeled on the exhibit. The cross-section demonstrates that the targeted intervals extend 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 Wolfcamp formation underlying the subject area, including the targeted Wolfcamp A and Wolfcamp D, is suitable for development by horizontal wells and the acreage comprising the proposed spacing and proration units 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 protection of correlative rights.
- 12. COG Exhibit Nos. B-1 through B-5 were either prepared by me or compiled under my direction and supervision.

FURTHER AFFIANT SAYETH NOT.

STATE OF TEXAS)
COUNTY OF MIDLAND)

SUBSCRIBED and SWORN to before me this <u>24</u> day of July 2019 by Travis Sparks.

NOTARY PUBLIC

My Commission Expires:

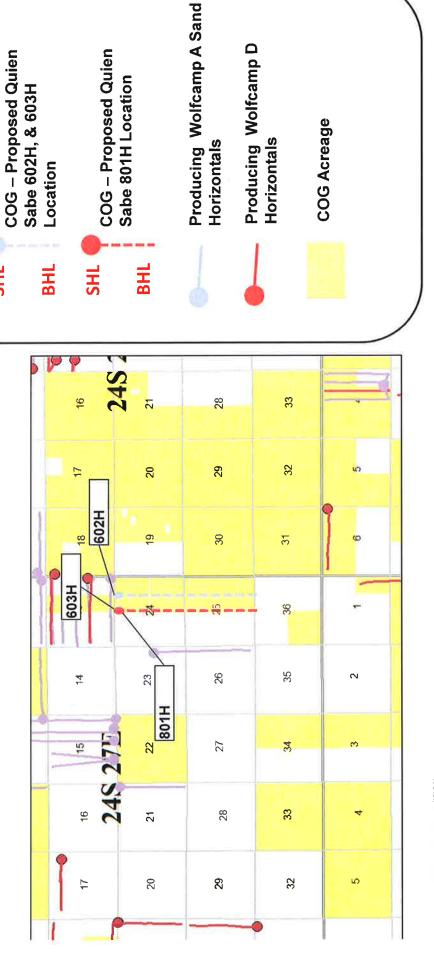
Tonya Joiena Olivas Notary Public, State of Testas Notary ID 12458604-8 My Commission Exp. 04-20-2022

Wolfcamp Pool

Quien Sabe Fed Com Location Map

Map Legend

SHL



BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico Exhibit No. B-1

Submitted by: COG OPERATING, LLC Hearing Date: July 25, 2019 Case No. 20337



Wolfcamp Subsea Structure Map Wolfcamp Pool

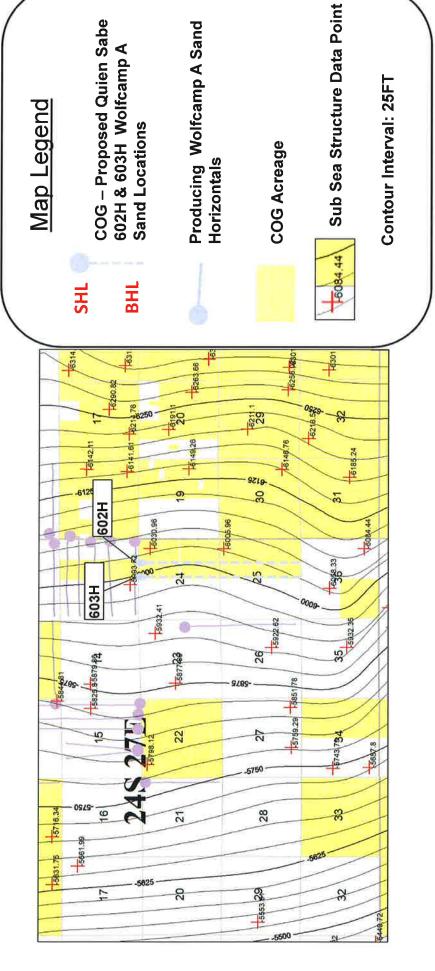




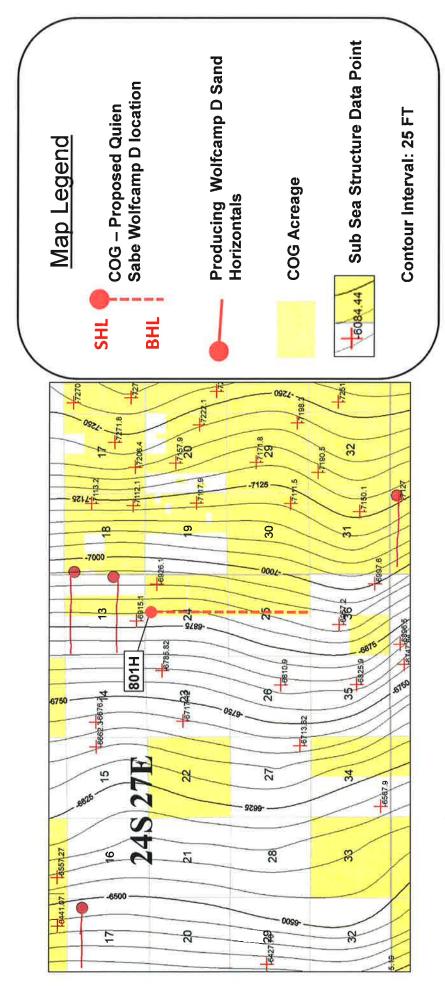
Exhibit No. B-2

Case No. 20337 Submitted by: COG OPERATING, LLC Hearing Date: July 25, 2019



Wolfcamp Pool

Wolfcamp D Subsea Structure Map



BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Exhibit No. B-3

Case No. 20337

Submitted by: COG OPERATING, LLC Hearing Date: July 25, 2019



Wolfcamp Pool

Cross Section Location Map

Sabe 601H, 602H, & 603H

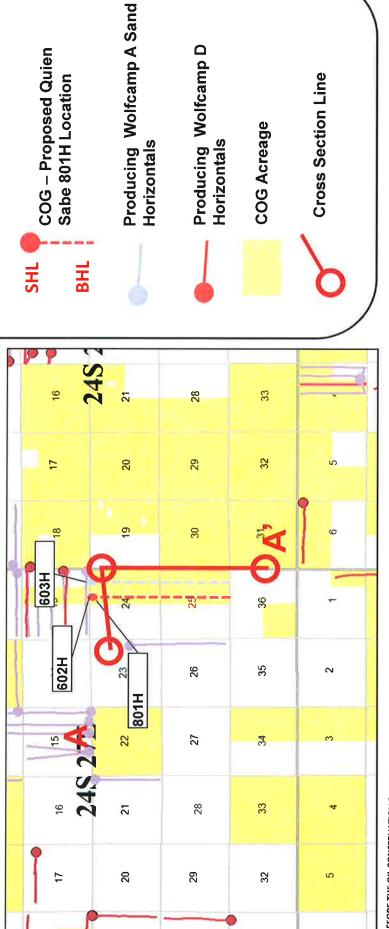
Location

BHL

COG - Proposed Quien

SHL

Map Legend



BEFORE THE OIL CONSERVATION DIVISION

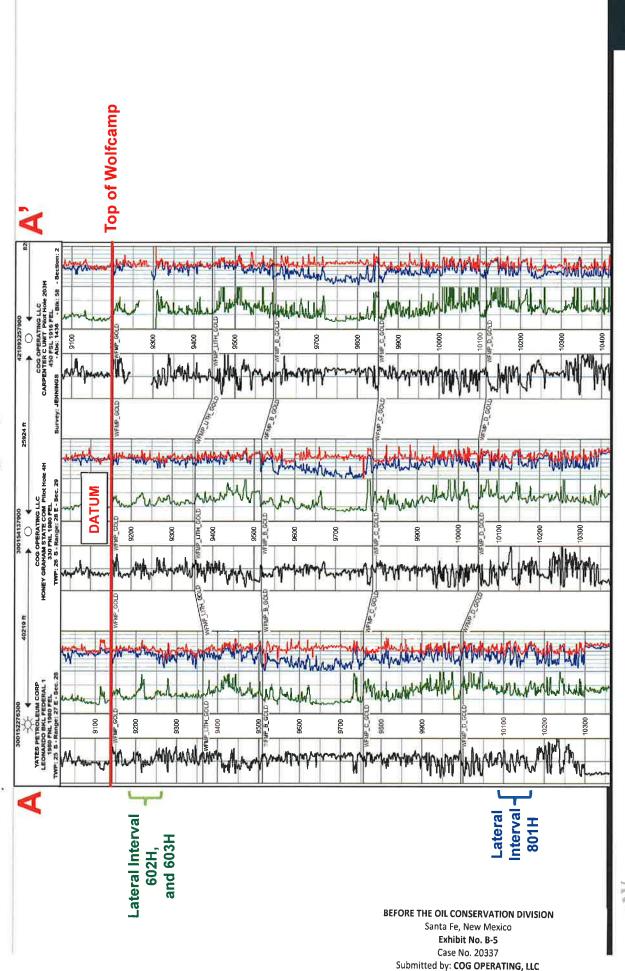
Santa Fe, New Mexico Exhibit No. B-4 Case No. 20337

Submitted by: COG OPERATING, LLC

Hearing Date: July 25, 2019



Stratigraphic Cross Section A - A'





Hearing Date: July 25, 2019

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

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

CASE NO. 20337

AFFIDAVIT

STATE OF NEW MEXICO)
) ss
COUNTY OF SANTA FE)

Kaitlyn A. Luck, attorney in fact and authorized representative of COG Operating, LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application has been provided under the notice letters and proof of receipts attached hereto.

Kaitlyn A. Luck

SUBSCRIBED AND SWORN to before me this 24th day of July 2019 by Kaitlyn A. Luck.

Notary Public

My Commission

Expires: August 26,202,



Michael H. Feldewert
Recognized Specialist in the
Area of Natural Resources —
Oil and Gas Law — New Mexico Board
of Legal Specification
mfeldewert@hollandhart.com

June 14, 2019

VIA CERTIFIED MAIL CERTIFIED RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Application of COG Operating LLC for compulsory pooling, Eddy County, New Mexico. Quien Sabe Fed Com No. 601H-603H, 701H-703H and 801H Wells

Ladies & Gentlemen:

This letter is to advise you that COG Operating LLC has filed the enclosed amended application with the New Mexico Oil Conservation Division. A hearing before a Division Examiner has been requested for July 11, 2019 and the status of the hearing can be monitored through the Division's website at http://www.emnrd.state.nm.us/ocd/. Division hearings will commence at 8:15 am in Porter Hall in the Oil Conservation Division's Santa Fe Offices, located at 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505. 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.

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 Travis Macha at (432) 221-0452 or by email at tmacha@concho.com.

Sincerely,

Michael H. Feldewert

ATTORNEY FOR COG OPERATING LLC

COG/Quen Sabe 601H 603H POSTAL DELIVERY REPORT Case No. 20337

921489019403838471410 ConocoPhillips Company 600 N Dairy Ashford Rd Houston TX 77079

921489019403838471411 Rolla R Hinkle III PO BOX 2292 Roswell NM 88202

921489019403838471413 Exacliber Energy Company PO Drawer 25045 Abuquerque NM 87125 921489019403838471412[,] Madison M Hinkle PO BOX 2292 Roswell NM 88202

921489019403838471414 Foundation Minerals LLC PO BOX 50820 Midland TX 70710

921489019403838471415 Justin Nine et ux Sara Nine 1900 Larkspur Dr Golden CO 80401

921489019403838471416 Tim Lilley et ux Tashina Lilley 4873 Raintree Circle Parker CO 80134 921489019403838471417 Mavros Minerals II LLC PO BOX 50820 Midland TX 79710

921489019403838471418 Successors-in-Interest to Central Southwest Oil Corporation 405 N Virginia Ave Roswell NM 88201

921489019403838471419[.] Bryan Bell PO BOX 24591 New Orleans LA 70184

921489019403838471420 Wells Fargo Bank N A Trustee of the Robert Enfield Revocable Trust dated March 16 1999 PO BOX 41779 Austin TX 78704

921489019403838471421 DMA Inc 14 Granite Circle Roswell NM 88201

921489019403838471422' Charmar LLC 4815 Vista Del Oso Court NE Albuquerque NM 87109

921489019403838471424 Lisa M Enfield Trustee of the Lisa M Enfield Trust u/t/a dated January 23 2015 465 Camino Manzano Santa Fe NM 87505 921489019403838471423 Howard A Rubin 623 1/2 Camino Rancheros Santa Fe NM 87505

921489019403838471425^s MLE LLC 612 Old Santa Fe Trail Santa Fe NM 87505

921489019403838471426 Richard C Deason 1301 Havenhurst #217 West Hollywood CA 90046

921489019403838471427. Thomas D Deason 3407 Essex Ave Lubbock TX 79407

921489019403838471428 Oak Valley Mineral and Land LP PO BOX 50820 Midland TX 79710

921489019403838471429. Ronald H Mayer Trustee of the Ronald H Mayer and Martha M Mayer Revocable Trust dated March 19 1990 PO BOX 2391 Roswell NM 88201

921489019403838471430. SAP LLC 4901 Whitney Lane Roswell NM 88203

921489019403838471431 Rubie Crosby Bell Family LLC PO BOX 24591 New Orleans LA 70184

921489019403838471432. Bryan Bell Family Limited Partnership #1 PO BOX 24591 New Orleans LA 70184

921489019403838471433 Nestegg Energy Corporation 2308 Sierra Vista Rd Artesia NM 88210

921489019403838471434 Featherstone Development Corporation PO BOX 429 Roswell NM 88202

921489019403838471435 Prospector LLC PO BOX 429 Roswell NM 88202

921489019403838471436 Big Three Eneryg Group LLC PO BOX 429 Roswell NM 88202

921489019403838471437 Parrot Head Properties LLC PO BOX 429 Roswell NM 88202

921489019403838471438 Triple L Monkey LLC 4425 98th St Lubbock TX 79424

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CURRENT-ARGUS

AFFIDAVIT OF PUBLICATION

Ad No. 0001289425

HOLLAND & HART PO BOX 2208

SANTA FE NM 87504

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:

06/25/19

Legal Clerk

Subscribed and sworn before me this 25th of June 2019.

State of WI, County of Brown NOTARY PUBLIC

My Commission Expires

AUBLIC OF WISCOUTH

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOUR-CES 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 July 25, 2019, in the Oil Conservation Division Hearing Room at 1220 South St. Francis, Santa Fe, New Mexico, before an examiner duly appoint for the hearing. 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 July 15, 2019. Public documents, including the agenda and minutes, can be provided in various accessible forms. Please contact Florene 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 overriding royalty interest owners and pooled parties, including: Prospector, LLC; Featherstone Development Corporation; Big Three Energy Group, LLC; Parrot Head Properties, LLC; Triple L Monkey LLC; ConocoPhillips Company; Rolla R. Hinkle, III, his heirs and devisees; Madison M. Hinkle, her heirs and devisees; Excalibur Energy Company; Foundation Minerals, LLC; Justin Nine et ux, Sara Nine, their heirs and devisees; Tim Lilley et ux, Tashina Lilley, their heirs and devisees; Mavros Minerals II, LLC; Successors-inInterest to Central Southwest Oil Corporation; Bryan Bell, his heirs and devisees; Wells Fargo Bank, N.A., Trustee of the Robert Enfield Revocable Trust dated March 16, 1999; DMA, Inc.; Charmar, LLC; Howard A. Rubin, his heirs and devisees; Lisa M. Enfield, Trustee of the Lisa M. Enfield Trust u/t/a dated January 23, 2015; MLE, LLC; Richard C. Deason, his heirs and devisees; Oak Valley Mineral and Land, LP; Ronald H. Mayer, Trustee of the Ronald H. Mayer and Martha M. Mayer Revocable Trust dated March 19, 1990; SAP, LLC; Rubie Crosby Bell Family LLC; Bryan Bell Family Limited Partnership #1; Nestegg Energy Corporation.

Case No. 20337:Amended application of COG Operating LLC for compulsory pooling, Eddy County, New Mexico. Applicant in the abovestyled cause seeks an order pooling all uncommitted interest owners in the Wolfcamp formation underlying a 640-acre horizontal spacing unit comprised of the E/2 of Sections 24 and 25, Township 24 South, Range 27 East, NMPM, Eddy County, New Mexico. COG seeks to dedicate the above-referenced horizontal spacing unit to the following proposed initial wells:

•the Quien Sabe Fed Com No. 601H Well, Quien Sabe Fed Com No. 602H Well, and the Quien Sabe Fed Com No. 701H Well to be horizontally drilled from a surface location in the NE/4 NE/4 (Unit A) of Section 24 to bottom hole location in the SE/4 SE/4 (Unit P) of Section 25: and tion 25; and

•the Quien Sabe Fed Com No. 603H Well, Quien Sabe Fed Com No. 702H Well, Quien Sabe Fed Com No. 703H Well and the Quien Sabe Fed Com 801H to be horizontally drilled from a surface location in the NW/4 NE/4 (Unit B) of Section 24 to bottom hole location in the SW/4 SE/4 (Unit 0) of Section 25.

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 COG Operating LLC as operator, and the imposition of a 200% charge for risk involved in drilling and completing each well. Said area is located approximately 5 miles southwest of Malaga, New Mexico.

Lune 25, 2019

June 25, 2019