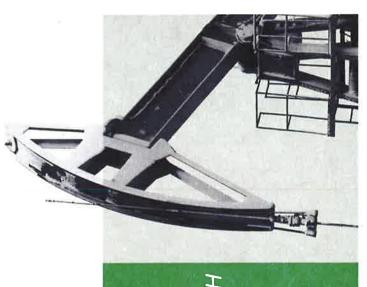


COG OPERATING LLC

| Howitzer Fed Com 602H, 603H, 605H & 606H

Section 11 & 12 - T24S-28E

Eddy County, New Mexico



BEFORE THE OIL CONSERVATION DIVISION EXAMINER HEARING FEBRUARY 20, 2019

CASE NO. 20183



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. 20183

AFFIDAVIT OF JAMES MARTIN IN SUPPORT OF CASE NO. 20183

James Martin, of lawful age and being first duly sworn, declares as follows:

- 1. My name is James Martin. 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 the application filed by COG in this case, and I am familiar with the status of the lands in the subject area.
- 4. None of the uncommitted parties has indicated opposition to this pooling application, including MRC Permian Company, which has entered an appearance in this case, and therefore I do not expect any opposition at the hearing.
- 5. COG is seeking an order pooling all uncommitted interests in the Wolfcamp formation in the 640-acre standard horizontal spacing unit comprised of the N/2 of Section 11 and the N/2 of Section 12, Township 24 South, Range 28 East, Eddy County, New Mexico. COG seeks to dedicate this standard spacing unit to the proposed Howitzer Federal Com No. 602H Well, Howitzer Federal Com No. 603H Well, Howitzer Federal Com No. 605H Well, and Howitzer Federal Com No. 606H Well.

1

- 6. COG has prepared draft Form C-102s to be filed with the Division for the proposed wells. Copies of the draft C-102s for the Howitzer Federal Com Nos. 602H, 603H, 605H, and 606H wells are attached hereto as COG Exhibits A-1, A-2, A-3, and A-4, respectively. The Pool Code assigned is 98220 (Purple Sage; Wolfcamp).
- 7. Pursuant to the Special Rules set forth in Division Order No. R-14262 for the Purple Sage, Wolfcamp (Gas) Pool, the completed interval for all four wells will be at an orthodox location no closer than 330 feet from the outer boundary of the spacing unit.
- 8. Because the proposed wells will be simultaneously drilled and completed, COG requests an extension of the time period to drill and complete the initial well from 120 days to 365 days.
 - 9. There are no depth severances in the Wolfcamp formation.
- 10. **COG Exhibit A-5** is an exhibit I prepared identifying the tracts of land comprising the spacing unit. This spacing unit includes federal, state, and fee land. This exhibit shows the interest owners and the percentage of and type of ownership interests in the proposed spacing unit. A unit recapitulation, showing the percentage of ownership interests in the spacing unit, is also included on the exhibit.
- 11. COG is seeking to pool working interest owners, royalty owners, overriding royalty owners, unleased mineral interest owners, and owners of unmarketable title.
- 12. A copy of a well proposal letter, along with the AFEs, is attached as **COG Exhibit A-6.** The costs reflected in the AFEs are consistent with what COG and other operators have incurred for drilling similar horizontal wells in the area.

- 13. COG has been able to locate contact information for all of the parties its seeks to pool and has undertaken good faith efforts to reach an agreement with the uncommitted interest owners.
- 14. COG seeks approval of overhead and administrative costs at \$8,000/month while drilling and \$800/month while producing. These costs are consistent with what COG and other operators are charging in this area for these types of wells. COG respectfully requests that these administrative and overhead costs be incorporated into any order entered by the Division in this case.
- 15. I provided the law firm of Holland & Hart LLP a list of names and addresses for the uncommitted interest owners shown on Exhibit A-5. In compiling these addresses, COG conducted a diligent search of all public records in the county where the proposed wells are located and of phone directories, including computer searches.
- 16. **COG Exhibit A-1 through A-6** were either prepared by me or compiled under my direction and supervision.

JAMES MARTIN

STATE OF TEXAS.

COUNTY OF Santa Le

SUBSCRIBED and SWORN to before me this _____ day of February 2019 by James Martin.

NOTARY PUBLIC

My Commission Expires:

12060559_1

OFFICIAL SEAL
ELIZABETH A. RYAN
NOTARY PUBLIC
STATE OF NEW MEXICO
Com. Expires

DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 68240 Phone: (576) 393-6161 Pax: (576) 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

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) 478-3480 Fax: (505) 478-3482

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

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

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name				
Property Code		roperty Name	Well Number			
OGRID No.		HOWITZER FEDERAL COM 602 Operator Name Elevatio				
GUID NO.		ERATING, LLC	2974.6			

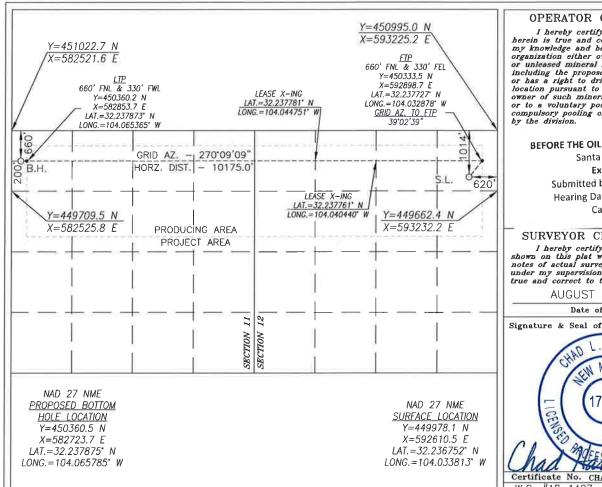
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	12	24-S	28-E		1014	NORTH	620	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
D	11	24-S	28-E		660	NORTH	200	WEST	EDDY
Dedicated Acres	Joint of	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



OPERATOR CERTIFICATION

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

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. A-1

Submitted by: COG Operating LLC Hearing Date: February 20, 2019

Case No. 20183

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.

AUGUST 28, 2018

Date of Survey

Signature & Seal of Professional Surveyor



Certificate No. CHAD HARCROW

W.O. #18-1407 DRAWN BY: AM DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 593-6181 Fax: (575) 393-0720
DISTRICT II
611 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (576) 748-9720

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR.

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) 478-3460 Fax: (505) 476-3462

□ AMENDED REPORT

	WELL LOCATION AND ACREAGE DEDICATION PLAT	
API Number	Pool Code Pool Nam	e
Property Code	Property Name	Well Number
	HOWITZER FEDERAL COM	603H
OGRID No.	Operator Name COG OPERATING, LLC	Elevation 2974.4'

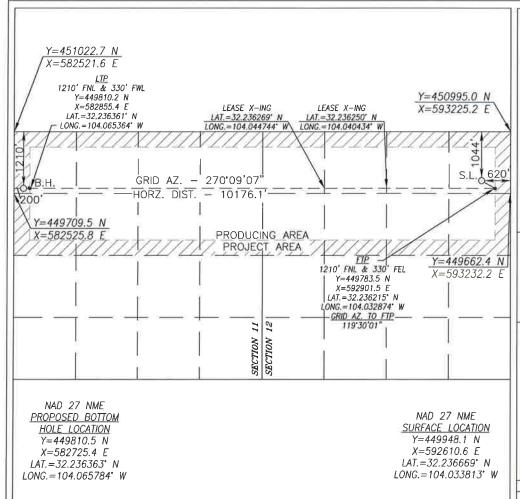
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
А	12	24-S	28-E		1044	NORTH	620	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
D	11	24-S	28-E		1210	NORTH	200	WEST	EDDY
Dedicated Acre	g 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



OPERATOR CERTIFICATION

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

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico
Exhibit No. A- 2

EXHIBIT NO. A- 2

Submitted by: COG Operating LLC Hearing Date: February 20, 2019

Case No. 20183

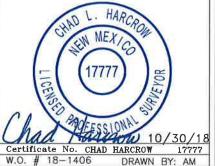
SURVEYOR CERTIFICATION

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.

OCTOBER 20, 2018

Date of Survey

Signature & Seal of Professional Surveyor



DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 86240 Phone: (575) 393-6161 Fax: (575) 393-0720

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

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

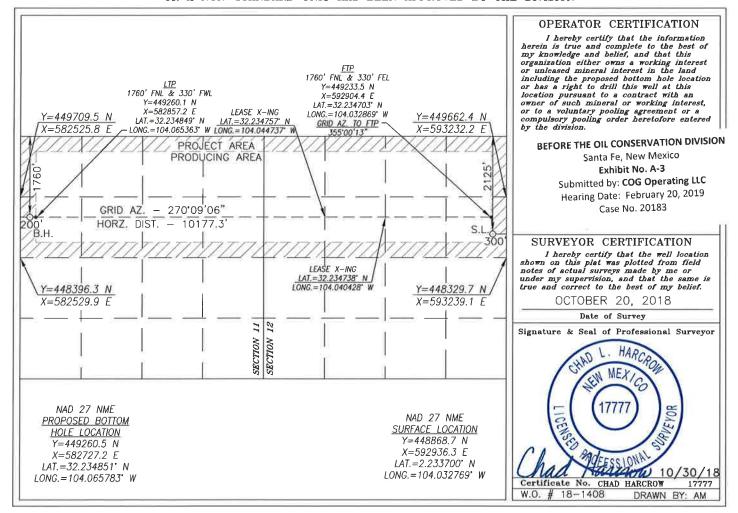
DISTRICT III 1000 RIO BRAZOS RD., AZTEC, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

□ AMENDED REPORT

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

, , , , , , , , , , , , , , , , , , , ,		1	WELL LO	CATION	AND ACREA	GE DEDICATION	ON PLAT		
API	Number		Pool Code Pool Name						
Property (Code		Property Name Well Number						ıber
				HOWI	TZER FEDE	RAL COM		605	5H
OGRID N	o.				Operator Nam			Elevatio	
			COG OPERATING, LLC 2963.5					3.5'	
Surface Location									
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Н	12	24-S	28-E		2125	NORTH	300	EAST	EDDY
			Bottom	Hole Loc	eation If Diffe	rent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Ε	11	24-S	28-E		1760	NORTH	200	WEST	EDDY
Dedicated Acres	s 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 1825 N. FRENCH DR., HOBBS, NM 88240 Phone: (575) 393-8161 Fax: (575) 393-0720

State of New Mexico Energy, Minerals & Natural Resources Department

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

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

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA FE, NM 87605 Phone: (505) 476-3460 Fax: (505) 476-3482

DIVISION OIL CONSERVATION

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

	WEEL BOOMING HIVE HOW	Little Designation Figure
API Number	Pool Code	Pool Name
Property Code	Property N HOWITZER FED	
OGRID No.	Operator N COG OPERAT	

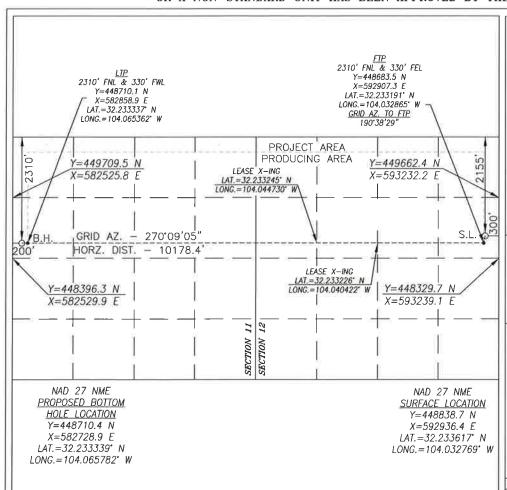
Surface Location

UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Н	12	24-S	28-E		2155	NORTH	300	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
E	11	24-9	6 28-E		2310	NORTH	200	WEST	EDDY
Dedicated Acres	Joint o	r Infill	Consolidation	Code Or	der No.		99		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico Exhibit No. A-4

Submitted by: COG Operating LLC Hearing Date: February 20, 2019

Case No. 20183

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.

AUGUST 30, 2018

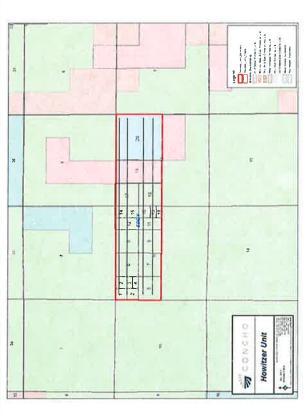
Date of Survey

Signature & Seal of Professional Surveyor



DRAWN BY: JH

Howitzer Unit Overview



Owner	M
COG Operating LLC	0.81519104
Hayes Land & Production Co.	0.00781250
Estate of Joe H. Beeman, et al. (UMI)	0.00312500
Mary Jo Beeman Dickerson, et al. (UMI)	0.00312500
MRC Permian Company (UMI)	0.00625000
Heirs of William C. Cruce (UMI)	0.00390625
OXY USA Inc.	0.12934021
Devon Energy Production Company	0.03125000
Total	1.00000000

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						Mary Jo	MRC			Devon
			COG Operating	Haves Land &	Estate of Joe H. Beeman. et	Beeman Dickerson. et	Permian	Heirs of William C.	OXYUSA	Energy
Tract	Legal	Section	IIC	. —		al. (UMI)	[UMI]	Cruce (UMI)	lnc.	Сотрапу
7	NWNWNW	11	0.5000000	0,5000000	0.0000000	0,0000000	0,0000000	0.000000	0.0000000	0.0000000
2	NENWNW, SWNWNW	11	0.600000	000000000	0.1000000	0,1000000	0,2000000	0.0000000	0.00000000	0.0000000
m	NZSENWNW	11	1.0000000	0,0000000	000000000	00000000	0.000000.0	0.000000	0.000000.0	0.000000.0
4	S2SENWNW	11	1.0000000	0.0000000	0.0000000	0.0000000	000000000	000000000	000000000	0.0000000.0
2	SWNW	11	0.9375000	0,0000000	000000000	00000000	0,0000000	0.0625000	0.0000000	0.0000000
9	NENW	11	1.0000000	0,0000000	0.0000000	000000000	0.000000.0	0,0000000	0.00000000	0.0000000.0
7	SENW	11	1.0000000	0.0000000	0.000000	0.0000000	0.0000000	0.000000	0.0000000	0.0000000
œ	NWNE	11	0.7500000	0.0000000	0.0000000	0.0000000	0.0000000	00000000	0.2500000	0 0000000
6	SWNE	11	0.5000000	0,0000000	0.0000000	000000000	0000000000	0"0000000	0.5000000	000000000
10	SZSESENE	11	0.7500000	0,0000000	0.000000	000000000	0000000	0.0000000	0.2500000	0.0000000
11	W2SENE	11	0.7500000	0.000000	0.000000	0.0000000	00000000	00000000	0.2500000	0,0000000
12	W2NENE	11	0.7500000	0,0000000	0.0000000	0.0000000	0,0000000	0,0000000	0,2500000	0.0000000
13	NZSESENE	11	0.7500000	0,0000000	0.0000000	00000000	000000000	0.0000000	0,2500000	0.0000000
14	NENENE	11	0-7500000	0.000000	0.000000	000000000	0.0000000	0.0000000	0.2500000	0.000000.0
15	SENENE	11	0.7500000	0.0000000	0.000000	00000000	00000000	0.0000000	0.2500000	0.0000000
16	NESENE	11	0.7500000	0.0000000	0.0000000	000000000	00000000	0.0000000	0.2500000	00000000
17	NWNW	12	1.0000000	000000000	000000000	000000000	000000000	0.00000000	0.00000000	000000000
18	SWNW	12	0.5555333	0.000000	0.000000	00000000	00000000	0.0000000	0.4444667	0.0000000.0
19	E2NW	12	0.5000000	0,0000000	0.000000	0.0000000.0	000000000	0,0000000	0,2500000	0.2500000
20	NE	12	1.0000000	000000000	000000000	000000000	000000000	0.00000000	000000000	0'0000000



Compulsory Pooling List

Cost Free Revenue Interest	anue Interest	
Current Revenue Interest Owner	Interest Type	Address
Hayes Land, L.P.	R	PO Box 51407 Midland, Texas 79710
Faulconer Resources 1999 Ltd. Partnership	ORRI	PO Box 7995 Tyler, Texas 75711
Lou Ellen Reneau Matson, Trustee of the Marital Trust	ORRI	600 Helen Greathouse Circle Midland, Texas 79706
Rowan Family Minerals, LLC	ORRI	PO Box 109 Andrews, Texas 79714
Faulconer Resources 1999 Ltd. Partnership	ORRI	PO Box 7995 Tyler, Texas 75711

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Unleased Mineral Owner	Address
{ · · · · · · · · · · · · · · · · · · ·	PO Box 51407
Hayes Land & Production Co.	Midland, Texas 79710
	405 Juanita
Estate of Joe H. Beeman, et al.	Carlsbad, New Mexico 88220
	207 1/2 North Street
Mary Jo Beeman Dickerson, et al.	Mary Jo Beeman Dickerson, et al. Ocean Springs, Mississippi 39564
	One Lincoln Centre,
	5400 LBJ Freeway, Suite 1500,
MRC Permian Company	Dallas, Texas 75240
	46 Ranch House
Heirs of William C. Cruce	Richmond, Texas 77469

Un-marketable Title Owner	Un-marketable Title Vner Address 405 Juanita
Estate of Joe H. Beeman Estate of Mary Jo Beeman Dickerson	Carlsbad, New Mexico 88220 207 1/2 North Street Ocean Springs, Mississippi 39564
MRC Permian Company	One Lincoln Centre, 5400 LBJ Freeway, Suite 1500, Dallas, Texas 75240
Estate of William C. Cruce	46 Ranch House Richmond, Texas 77469

STATE OF THE STATE	
Working Interest Owner	Address
	OXY USA Inc.
	5 Greenway Plaza, Suite 110
OXY USA Inc.	Houston, Texas 77046
Devon Energy Production	333 West Sheridan Avenue
Company	Oklahoma City, Oklahoma 73102-5015





October 24, 2018

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

Re:

Howitzer Fed Com 602H, 603H, 605H, 606H Howitzer Fed Com 602H, 603H, 605H, 606H Unit N/2 Sections 11 & 12, T24S-R28E Eddy County, New Mexico

Dear Sir or Madam:

COG Operating LLC ("COG") previously proposed sixteen Howitzer wells (601H-606H, 701H-703H, 801H-803H, and 901H-904H) by correspondence dated June 1, 2018. The four initial wells COG plans to drill are the Howitzer Fed Com 602H, 603H, 605H, and 606H. Below are details regarding those wells, along with copies of the AFEs previously sent. To alleviate any confusion, please execute this letter indicating your election to participate in the drilling of these initial wells, along with the enclosed AFEs.

COG Operating, LLC ("COG") hereby proposes the drilling of the following horizontal wells with productive laterals located in the N/2 of Sections 11 & 12, T24S-R28E, Eddy County, New Mexico.

PAD 2:

- Howitzer Fed Com #602H, to be drilled to a depth sufficient to test the WFMP A Sand formation at a total measured depth of 19000'. The surface location for this well is proposed at a legal location in Unit A of Section 12, and a bottom hole location at a legal location in Unit D of Section 11. The dedicated project area with be the N/2 of Sections 11 & 12, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$11,990,000, as shown on the attached Authority for Expenditure ("AFE").
- Howitzer Fed Com #603H, to be drilled to a depth sufficient to test the WFMP A Sand formation at a total measured depth of 19200'. The surface location for this well is proposed at a legal location in Unit A of Section 12, and a bottom hole location at a legal location in Unit D of Section 11. The dedicated project area with be the N/2 of Sections 11 & 12, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$11,990,000, as shown on the attached AFE.

PAD 4:

Howitzer Fed Com #605H, to be drilled to a depth sufficient to test the WFMP A Sand formation at a total measured depth of 19200'. The surface location for this well is proposed at a legal location in Unit H of Section 12, and a bottom hole location at a legal location in Unit E of Section 11. The dedicated project area with be the N/2 of Sections 11 & 12, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$11,990,000, as shown on the attached AFE.

One Concho Center | 600 West Illinois Avenue | Midland, Texas 79701 | P 432.683.7443 | F 432.683.7441

October 24, 2018 – Page 2 Howitzer Fed Com 602H, 603H, 605H, 606H

• Howitzer Fed Com #606H, to be drilled to a depth sufficient to test the WFMP A Sand formation at a total measured depth of 19000'. The surface location for this well is proposed at a legal location in Unit H of Section 12, and a bottom hole location at a legal location in Unit E of Section 11. The dedicated project area with be the N/2 of Sections 11 & 12, T24S-R28E, Eddy County, New Mexico. The total estimated cost to drill and complete said well is \$11,990,000, as shown on the attached AFE.

COG is proposing to drill these wells under the terms of a new Operating Agreement dated October 15, 2018, covering the N/2 of Sections 11 & 12, T24S-R28E, Eddy County, New Mexico, which is enclosed. Please review the OA and execute where indicated if you are agreeable to its terms.

Also enclosed are State and Federal form Communitization Agreements, and a Designation of Pooled Unit for filing with the county clerk's office. Please execute each of these signature pages, as well, and return to my attention.

Should you not wish to participate in these Operations, COG would like to discuss a Term Assignment of your interest. 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 imartin1@concho.com.

Sincerely,

COG Operating LLC

James D. Martin Landman II

JM:bh Enc October 24, 2018 – Page 3 Howitzer Fed Com 602H, 603H, 605H, 606H

	I/We hereby elect to participate in the drilling and completion of the Howitzer Fed Com #602H.
	I/We hereby elect not to participate in the drilling and completion of the Howitzer Fed Com #602H.
 	I/We hereby elect to participate in the drilling and completion of the Howitzer Fed Com #603H.
	I/We hereby elect <u>not</u> to participate in the drilling and completion of the Howitzer Fed Com #603H.
	1/M/a harrahu alaget ta poputisipata in the duilling and accordation of the
÷	I/We hereby elect to participate in the drilling and completion of the Howitzer Fed Com #605H.
	I/We hereby elect not to participate in the drilling and completion of the Howitzer Fed Com #605H.
	I/We hereby elect to participate in the drilling and completion of the Howitzer Fed Com #606H.
	I/We hereby elect <u>not</u> to participate in the drilling and completion of the Howitzer Fed Com #606H.
_	
Name:	
Title: Date:	
Jaie	

October 24, 2018 – Page 4 Howitzer Fed Com 602H, 603H, 605H, 606H

EXHIBIT "A" WORKING INTEREST OWNERS

Via Certified Mail, Return Receipt Requested No. 91 7199 9991 7038 7772 2753 Devon Energy Production Company 333 West Sheridan Oklahoma City, OK 73102

Via Certified Mail, Return Receipt Requested No. 91 7199 9991 7038 7772 2760 OXY USA INC. OXY USA WTP LP 5 Greenway Plaza, Suite 110 Houston, TX 77046 Attn: Matt Cole

Via Certified Mail, Return Receipt Requested No. 91 7199 9991 7038 7772 2777 Hayes Land & Production Co P.O. Box 51407 Midland, TX 79710

Well Name HOWITZER FED COM 9502H SHL 1014 FNL 8 620 FEL (or Unil A) Section 12 BHL 730 FNL 8 200 FWL (or Unil D) Section 11 Formation Wolfcamp A Sand Legal 11, 12, T24S-R28E AFE Numbers

Prospect State & County Objective Depth TVD

Tomahawk 2428 NEW MEXICO, EDDY COUNTY Drill & Complete 19900 9676

Disputes Calcanger 401	ost Description ingible Costs	Code	Cost	Revision	T
June		401	\$48,000,00 I	Toyot	\$48,000
Production Caleng Line 403 \$400,000 CP \$10 O Avenines Equip 465 \$400,000 CP \$10 O Avenines Equipment 560 \$400,000 CP \$10 O Bellin Trinsgerif 470 \$100,000 CP \$10 O Bellin Trinsgerif 470 \$100,000 CP Bellin Trinsgerif 470 \$100,000 CP \$10 O Bellin Trinsgerif 470 \$100,000 CP \$10 O Bellin Trinsgerif 470 \$100,000 CP \$10 O Bellin Trinsgerif 470 \$100,000 CP Bellin Trinsgerif 470 \$100,000 CP \$10 O Bellin Trinsgerif 470 \$100,000 CP \$100 O Bellin Trinsgerif 470	Intermed Csa				\$375,000
Avenines 465					\$405,000
Figure			\$40,000.00		
Westhead Equip 605 937 200 00 10 10 10 10 10 10					\$40,000 \$47,300
EAP-pumps (Init 500 \$30,000 \$00.00 \$00.00 \$10.0	Wellhead Equip		\$37,500.00		\$27,500
El-Aross				20.00	
Standard					\$96,000
Selections Sel	Tanka				\$35,000
Selectical System Sele					\$58,000
Selectional Systemic Bupternel 413 588,000,00 50,00					\$117,000
Contemporaring 14 \$66,000			\$117,0007.00		\$117,000
					\$98,000
## State	r cki si Aricholsingis		366,000,00	-\$0 G0	\$66,000
Miscellaneous 549 580,000 50,001				S0.00	\$165,000
### Punter Surface 57 \$18,000 00 \$5.00					\$35,000
SAMERICAN ACIDS S. S. S. S. S. S. S.					\$80,000
Filters 1997					\$18,000
See Micrompression See Si Si Si Si Si Si S					\$32,000
Construmenation/SCA DAPPOC 500 \$7,000 \$0.00					\$31.000
Commons			\$15,000.00		\$15,000
2-Wishinset Equipment 231 \$5,000,00 \$0			\$7.000.00		\$7,000
CP Pumps					\$5,000
Collectional System Sas \$15,000.00 \$0.00 \$1.000 \$2.04 \$2.000.00 \$3.0			\$3.000.00	\$0.00	\$3,000
State Stat			\$5,000.00	-\$0.0D	\$5,000
Schmidter Fernal			515,000.00	\$0.00	315,000
State Stat			\$2,000.00	\$0.00	\$2,000
State Stat	Q-Miscellar equis	535	\$3,000.00	\$0.00	\$3,000
STREEPRIMES 201 \$11,000.00 \$0.00 Streams 201 \$4,000.00 \$0.00 Streams 202 \$5,000.00 \$0.00 Streams 202 \$5,000.00 \$0.00 Streams 202 \$5,000.00 Streams 203 \$5,000.00 Streams 203					\$1,934,800
STRIED/PRIMES 201 \$11,000 00 \$0,00	anolhie Costs				
Insurance 200 \$4,000.00 \$0.00		201	\$11,000.00 [50 00 I	\$11,000
## Schemery Rispland			\$4,000.00	\$0.00	\$4,000
SchureyStake Lcm				\$0.00	\$5,000
Celin Flas (Routs 200 512,000 00 50,00				90.00	\$6,000
Diffusion Developand Diffusional Drig Services 210 \$50,000 00 \$0,000 Diffestional Drig Services 210 \$570,000 00 \$0,000 Evel & Prower 211 \$550,000 00 \$0,000 Evel & Prower 212 \$550,000 00 \$0,000 Evel & Prower 213 \$550,000 00 \$0,000 Evel & Prower 214 \$550,000 00 \$0,000 Evel & Prower 215 \$550,000 00 \$0,000 Evel & Prower 216 \$550,000 00 \$0,000 Evel & Prower 217 \$550,000 00 \$0,000 Evel & Prower 218 \$550,000 00 \$0,000 Evel & Prower 219 \$550,000 00 \$0,000 Evel & Prower 219 \$550,000 00 \$0,000 Evel & Prower 219 \$550,000 00 \$0,000 Evel & Prower 210 \$550,000 00 \$0,000 Evel & Prower 211 \$550,000 00 \$0,000 Evel & Prower 212 \$550,000 00 \$0,000 Evel & Prower 213 \$550,000 00 \$0,000 Evel & Prower 214 \$550,000 00 \$0,000 Evel & Prower 215 \$550,000 00 \$0,000 Evel & Prower 216 \$550,000 00 \$0,000 Evel & Prower 217 \$550,000 00 \$0,000 Evel & Prower 218 \$550,000 00 \$0,000 Evel & Prower 219 \$550,000 00 \$0,000 Evel & Prower 210 \$550,000 00 \$0,000 Evel & Prower 210 \$550,000 00 \$0,000 Evel & Prower 210 \$550,000 00 \$0,000 Evel & Prower 211 \$550,000 00 \$0,000 Evel & Prower 211 \$550,000 00 \$0,000 Evel & Prower 211 \$550,000 00 \$0,000 Evel & Prower 210 \$550,000 00 Evel & Prower 210 \$550,					\$112,000
Daywork Contract 299					\$9,000
Directional Drig Services 210 \$270 000 00 \$50.00 \$50.00 \$80.00					\$650,000
Flue B. Power 211 \$150,000,000 \$0.00 \$0.00 \$1.00			\$220,000,00	50.00	\$270,000
Water 212 \$550,000 \$0.00				50.00	\$150,000
Bils			\$65,000,00		\$55,000
Mud & Chemicals 214					\$104,000
Cement Nurtace					
Cement Intermed 248 \$89,000.00 \$0.00 \$Prod. 2nd Int Cmt 219 \$105,650.00 \$5.00 \$1.00 \$Prod. 2nd Int Cmt 219 \$105,650.00 \$5.00 \$1.00			\$20,000 00 \$20,000 00		\$245,000
Prod 2nd In Cmt					\$30,000
Float Equipment & Centralizers 221 \$4.000.00 \$3.00			\$105,000,00		\$80,000
Contract Labor					\$105,000 \$40,000
Contract Labor (246 \$5,600.00 \$30.00 \$0.00 \$0.00 \$0.00 \$1.00 \$0.00 \$1.00					\$40,000 \$50,000
Company Sprvsn 220 572,000 to 50 to 50 to 51 to 52 to					
Contract Spress 277 \$110,050.00 \$50.00 \$50.00 \$10.0	Commact Labor				\$6,500
Mue Logging Unit Pert/Wherler Sive 21 \$40,000 0 \$0.0 S0 00 Rentals-Surface 225 \$150,000 0 \$0.0 S0 00 Rentals-Surface 236 \$150,000 0 \$0.0 S0 00 Rentals-Surface 236 \$150,000 0 \$0.0 S0 00 Rentals-Surface 236 \$150,000 0 \$0.0 S0 00 Rentals-Surface 237 \$140,000 0 \$0.0 S0 00 Rentals-Surface 238 \$150,000 0 \$0.0 S0 00 Rentals-Surface 239 \$150,000 0 \$0.0 S0 00 Rentals-Surface 230 \$150,000 0 \$0.0 Rentals-Surface 230 \$150,000 0 \$0.0 Rentals-Surface 231 \$250,000 0 \$0.0 Rentals-Surface 232 \$250,000 0 \$0.0 S0 00 Frac Equipment 307 \$1,432,000 00 \$0.0 Frac Equipment 308 \$175,000 00 \$0.0 Frac Proposal Transcortation 310 \$148,000 00 \$0.0 Frac Proposal Transcortation 310 \$148,000 00 \$0.0 S0 00 Fuel & Power 311 \$5,000 00 \$0.0 S0 00 S0 00 Rentals-Surface 312 \$330,000 00 \$0.0 S0 00 S			872,000.00		\$72,000
Mue Logging Unit Pert/Wherler Sive 21 \$40,000 0 \$0.0 S0 00 Rentals-Surface 225 \$150,000 0 \$0.0 S0 00 Rentals-Surface 236 \$150,000 0 \$0.0 S0 00 Rentals-Surface 236 \$150,000 0 \$0.0 S0 00 Rentals-Surface 236 \$150,000 0 \$0.0 S0 00 Rentals-Surface 237 \$140,000 0 \$0.0 S0 00 Rentals-Surface 238 \$150,000 0 \$0.0 S0 00 Rentals-Surface 239 \$150,000 0 \$0.0 S0 00 Rentals-Surface 230 \$150,000 0 \$0.0 Rentals-Surface 230 \$150,000 0 \$0.0 Rentals-Surface 231 \$250,000 0 \$0.0 Rentals-Surface 232 \$250,000 0 \$0.0 S0 00 Frac Equipment 307 \$1,432,000 00 \$0.0 Frac Equipment 308 \$175,000 00 \$0.0 Frac Proposal Transcortation 310 \$148,000 00 \$0.0 Frac Proposal Transcortation 310 \$148,000 00 \$0.0 S0 00 Fuel & Power 311 \$5,000 00 \$0.0 S0 00 S0 00 Rentals-Surface 312 \$330,000 00 \$0.0 S0 00 S			\$110,000,00		\$110,000
Perf/Merilar Suc			\$30,000.00	50.00	\$30,000
Rentals-Surface 235 \$160,000 0 \$0.00 \$10.00					\$40,000
Rentals-Substric 296					\$4,000
TruckingForkit/Rig Mob Walding Services 238 \$35.00.00 \$10.00 Envirant/Clsd Loop Conlingency 243 \$45.00.00 \$10.00 Envirant/Clsd Loop Conlingency 244 \$256.000.00 \$10.00 Envirant/Clsd Loop Conlingency 245 \$256.000.00 \$10.00 Envirant/Clsd Loop Conlingency 246 \$256.000.00 \$10.00 Envirant/Clsd Loop Conlingency 247 \$256.000.00 \$10.00 Envirant/Clsd Loop Conlingency 248 \$256.000.00 \$10.00 Envirant/Clsd Loop Conlingency Environt/Clsd Loop Conlined Loop Conlined Sprvin Environt/Clsd Loop Conlined Sprvin Conlined					\$150,000
Welding Services 236 \$3.00.00 \$10.00 \$			\$150,000,00		\$150,000
Conlingency Environil/Clad Loop 244 \$256.000 00 \$10.00 \$10					\$140,000
Envirmi/Clost Loop Let/Pes/Foods 944 \$256,000 00 \$10 00 Letti/Pes/Foods 305 \$510 000 00 \$10 00 Frac Enument 307 \$1,432,000 00 \$50 00 Frac Enument 307 \$1,432,000 00 \$50 00 Frac Propart Transortation 310 \$1,550 000 \$50 00 Frac Propart Transortation 310 \$1,500 00 \$50 00 Frac Propart Transortation 310 \$1,500 00 \$50 00 Frac Propart Transortation 310 \$1,500 00 \$10 00 Frac Propart Transortation 312 \$1,500 00 \$10 00 Frac Propart Transortation 314 \$25,000 00 \$50 00 Frac Propart Transortation 325 \$82,000 00 \$50 00 Frac Propart Transortat					\$3,500
Celification 100 1	Contingency		\$44,000.00		\$44,000
Frac Enument Frac Chemicals					\$256,000
Frac Proppart 308 \$776,000 00 \$0.00 \$782 Proppart \$309 \$1.150,000 00 \$30.00 \$782 Proppart \$309 \$1.150,000 00 \$30.00					\$10,000
Frace Propopant Frace Propopant Transcortation 1:0 1:40, 8000 00 1:0 1:40, 8000 00 1:0 1:40, 8000 00 1:0 1:40, 8000 00 1:0 1:40, 8000 00 1:0 1:40, 8000 00 1					\$1,432,000.
Frac Propart Transportation Frac Propart Transportation Frac Propart Transportation Frac Propart Transportation Water Frac Propart Transportation Water Frac Propart Transportation Water Frac Propart Frac Propart Frac Propart Frac Propart Frac Propart Frac Frac Frac Frac Frac Frac Frac Frac	Frac Chemicals			50.00	\$776,000
Frace Properal Transportation 3.10 \$148,000 00 \$0.00 \$0.00 \$1.00					\$1,150,000
Water	rac Proppant Transportation	310	\$148,000.00	\$0.00	\$148,000
Bils				10.00	\$5,000 \$930,000
Bils			\$930,000.00		\$830,000
Contract Labor			\$9,000.00		\$9,000
Company Spriss 226 \$15,000,00 \$20,00	Aud & Chemicals		\$25,000.00	\$0.00	\$25,000
Company Spriss 226 \$15,000,00 \$20,00		325	\$8 200 00	50 00	\$8.200
Contract Sprism 927 \$134,000,00 \$5,00 \$1,0	Company Sprvsn	326	\$15,000.00		\$15,000
Talg Cap Talg Sep Talg Sep Se		327		50.00	\$134,000
Petr/Wretine Svc 331 \$400,000.00 10,000 31,000 32,000 32,000 32,000 32,000 33,000 33,000 33,000 34,000			\$5,000,00	50.00	\$5,000
Stimulation/Treating 332 \$12,000 (0 \$9,00)	Perf/Wireline Svc		\$500,000.00	10.00	\$500,000
Completion Unit 330 \$60,000 00 \$0,000		332	\$12,000.00	\$0.00	\$12,000
Rentals-Surface 395 \$786.000 0 30.00 Rentals-Surface 305 \$786.000 0 50.00 Trucking/Forkil/VRig Mob 337 \$22,400.00 \$0.00 Trucking/Forkil/VRig Mob 349 \$3,000.00 \$0.00 Trucking/Forkil/VRig Mob 349 \$4,000.00 \$0.00 Trucking/Forkil/VRig Mob 349 \$4,000.			\$50,000.00	50.00	\$60,000
Rentals Subsric 206 \$65,000.50 \$0.00	Rentals-Surface				\$266,000
Trucking/Forkfill/Rig Mob 337 \$22,400.00 \$0.00 Miklang Services 338 \$5.000.00 \$0.00 Nater Disposal 339 \$80,000.00 \$5.00 Set Open \$45 \$5.50.00 \$0.00 Set Open \$45 \$5.50.00 \$0.00 Set Open \$45 \$5.000.00 \$5.00 Set Open \$5.00 \$5.00				\$0.00	\$65,000
Welding Services 338 \$5,000.00 30.00 Warer Disposal 309 800.000.00 \$0.00 Dentingency 45 \$150.000.00 \$0.00 EnvironIVCIsd Loop 344 \$5,000.00 \$0.00 Dyed Dresel 345 \$450.000.00 \$0.00 Invahanc Crew & Equip 347 \$4500.00 \$0.00 -Location/Pis/Roads 30 \$73,000.00 \$0.00 -Location/Pis/Roads 30 \$73,000.00 \$0.00 -Vater Disposal 302 \$135,000.00 \$0.00 -Vater Disposal 302 \$135,000.00 \$0.00 -Contract Labor 374 \$5,000.00 \$0.00 -Contract Labor 374 \$5,000.00 \$0.00 -Contract Luprision 376 \$5,000.00 \$0.00 -Contract Lobor \$0					\$22,500
Warer Disposal 339 \$80,000.00 \$0.00 Contingency 343 \$255,000.00 \$0.00 \$0.00 Environt/Clast Loop 344 \$5,000.00 \$0.00 \$0.00 Eyed Dissel 345 \$435,000.00 \$0.00 <td></td> <td></td> <td></td> <td>\$0.00</td> <td>\$5,000</td>				\$0.00	\$5,000
Definingency 3-45 \$750,000 0 10 00				\$5.00	\$60,000
Section Sect					\$250,000
Oyed Dissel 345 \$435,000,00 10,00 3 Lel Tubing \$65 \$522,000,00 \$50,00 3 50,00 3 50,00 3 50,00 350,00 <td< td=""><td></td><td></td><td></td><td></td><td>\$5,000</td></td<>					\$5,000
26 Tubing					\$435,030
Flowback Crews & Equip 347 \$44,000,00 \$50,00					5422,000
Acation/Pits/Reads 353 \$73,009.00 \$9,00					\$48,000
Contract Labor \$56 \$69,000.00 \$6,00 -Water Disposal 342 \$135,000.00 \$0.00 \$70.00				50.00	\$73,000
-Water Disposal 362 \$135,000 00 \$0.00 \$1 O-Contract Labor 374 \$5,000 00 \$0.00 \$1 O-Contract Supervision 376 \$5,000 00 \$0.00 \$1 O-Completion Unit 391 \$5,000 00 \$10.0					569 000
O-Contract Labor 374 \$6,500 0 \$0.00 9-Contract Supervision 376 \$5,000 0 \$0.00 9-Contract Supervision 376 \$5,000 0 \$0.00 9-Completion Unit 391 \$5,000 0 \$0.00					\$135,000
Q+Contract Supervision 376 \$5,000.00 \$0.00 Q-Completion Unit 391 \$8,000.00 \$10.00					
Q-Completion Unit 381 \$5,000 CO \$0,000					\$6,500
					\$5,000
					\$8,000
Q-Rentals-Surface \$8,000,00 \$0,00	Q-Renlals-Surface	383	\$7,000,00	\$0,00 \$0.00	\$7,000
		385			\$3,000
tal intangible Costs \$10,055,200.00 \$0.00 \$10	tal intangible Costs		\$10,055,200.00	\$0.00	\$10,055,200
tal Gross Cost: \$11,990,000.00 \$0.00 \$11	tal Gross Cost		\$11,990,000.00	\$0.00	\$11,990,000

COG Operating LLC By. Date Prepared COG Operating LLC We approve % Working Interest Combany By. Printed Name Tille

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

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

Well Name HOWITZER FED COM #603H SHL 1074 FNL & 620 FEL (or Unit A) Section 12 BHL 1125 FNL & 200 FWL (or Unit D) Section 11 Formation Wollcamp A Sand Legal 11, 12, T24S-R28E AFE Numbers

Prospect State & County Objective Depth TVD Tombhak 2028 NEW MEXICO, EDDY COUNTY Dáll & Complete 19200 9867

Cost Description Fangible Costs	Code	Cost	Revision	To
D-Surface Casing	401	\$48,000.00	\$0.00	F49.000
-Intermed Csa	402	\$376,000,00	\$0.00	\$49,000
-Production Casing/Liner	463	\$405,000.00	\$0.00	\$405,000
-Wellhead Equip	405	\$40,000.00	\$0.00	\$40,000 \$47,300
-Tubing	504	\$47,300.00	\$0.00	\$47,300
-Welfhead Equip	505	\$27,500,00	50,00	\$27,500
PEQ-Pumping Unit PEQ-Rods	506	\$96,000,00	\$0.00	\$96,000
B-Tanks	508 510	\$35,000.00	\$0.00	\$35,000
B-Flowlines/Pipelines	511	\$56,000,00 \$117,000,00	\$0.00	\$55,000
B-Hir Tritr/Sepritr	512	\$117,000,00	\$0.00	\$117,000 \$117,000
B-Electrical System/Equipment	513	588,000.00	\$0.00	\$88,000
-Pekrs/Anchors/Hors	514	\$66,000,00	\$6.00	\$06.000
B-Couplings/Fillings/Valves	515	\$165,000.00	\$0.00	\$165,000
B-Gas Lift/Compression	516	\$35,000.00	\$0.00	535,000
-Miscellaneous	519	\$80,000.00	\$0.00	\$80,000
B-Pumps-Surface	521	\$16,000.00	80.00	\$18,000
B-Meters/Lacis B-Flares/Combusters/Emission	525 526	\$32,000.00	\$0.00 \$0.00	\$32,000 \$31,000
-Gas Lift/Compression	527	\$16,000.00	\$0.00	\$15,000
EQ-Instrumentation/SCADA/POC	529	\$7,000.00	\$0.00	\$7,000
EQ-Tubina	530	\$5,000.00	\$0.00	\$5,000
EQ-Welihead Equipment	531	\$3,000.00	\$0.00	\$3,000
EQ-Pumps	532	\$5,000.00	30.00	85,000
EQ-Electrical System	533	\$15,000.00	\$0.00	\$15,000
EQ-Packers/Anchors/Hangers	534	\$2,000.00	\$0.00	\$2,000
EQ-Macelaneous	535	\$3,000.00	\$0.00	\$3,000
otal Tangible Costs		\$1,934,800.00	\$0.00	\$1,934,800
tangible Costs				
S-Tdie/Permits	201	\$11,000.00	30 60	\$11.000
Insurance	202	\$4,000.00	50,00	\$4,000
B-Damages/ROW	507	\$5,000.00	50 00	\$5,000
S-Survey/Stake Lctn	204	\$6,000.00	50.00	\$6,000
Lctr/Pits/Roads	205	\$112,000,00	10.00	\$112,000
Drilling Overhead Daywork Contract	205	\$9,000.00	\$0.00	\$9,000
Directional Drig Services	209	\$650,000.00 \$270,000.00	\$0.00	\$550,000
Fuel & Power	211	\$150,000.00	\$0.00	\$270,000 \$150,000
Water	212	\$55,000.00	\$0.00	\$55.000
Bits	213	\$104,000.00	\$6.00	5104 000
Mud & Chemicals	214	\$245,000,00	\$0.00	\$245,000
Cement Surface	217	\$30,000.00	\$0.00	\$30,000
Cemeni Intermed	218	\$60,000.00	\$0.00	\$80,000
Prod-2nd Int Cmt	219	\$105,000.00	\$0.00	\$105,000
Float Equipment & Centralizers	221	\$40,000.00	\$0.00	\$40.000
Csg Crews & Equip	222	\$50,000,00	\$0.00	\$50,000
Contract Labor Company Sprvsn	225 226	\$6,500.00 \$72,000.00	\$0.00	\$5,500 \$72,000
Contract Spress	227	3110,000,00	50.00	\$110,000
Tslg Csg/ībg	228	\$30,000.00	\$0.00	\$30,000
Muc Lagging Unit	229	\$40,000,00	\$0.00	\$40,000
Perf/Wireline Svc	231	\$4,000.00	\$0.00	\$4,000
Rentals-Surface	235	\$150,000.00	\$0.00	\$150,000
Rentals-Subsific	236	\$150,000.00	\$0.00	\$150,000
Trucking/Forklift/Rig Mob	237	\$140,000.00	\$0.00	\$140,000
Welding Services Contingency	238	\$3,500.00	\$0.00	\$3,500
Contingency Environti/Clad Loop	243	\$44,000,00	\$2.00	\$44,000 \$265,000
Lctn/Pits/Roads	305	\$10,000.00	\$0.00	\$10,000
Frac Equipment	307	\$1,432,000.00	80.00	\$1,432,000
Frac Chemicals	308	\$776,000.00	\$0.00	\$776,000
Frac Proppent	309	31,150,000,00	\$0.00	\$1,150,000
Frac Proppant Transportation	310	\$148.000.00	\$0.00	\$148,000
Fue & Power	311	\$5,000.00	\$0.50	\$5,000
Water	312	\$930,000,00	\$0.00	\$930,000
Bits Mud & Chemicals	313	\$9,000,00	50.00	\$9,000
Mud & Chemicals Contract Labor	314 325	\$25,000.00 \$8,200.00	00.03	\$25,000 \$8,200
Company Sprvsn	326	\$15,000.00	\$0.00	\$15,000
Contract Sprvsn	327	\$134,000,00	\$5.86	\$134,000
Tslg Csg/Tbg	328	\$5,000.00	\$9.00	\$5,000
Perf/Wireline Svc	331	\$500.000 00	\$0.00	\$500,000
Slimulation/Treating	332	512,000,00	\$0.00	\$12,000
Completion Unit	333	\$60,000,00	\$0.00	\$60,000
Rentals-Surface Rentals-Substic	335	\$286,000.00 \$65,000.00	\$0.00	\$266,000
Renials-Subsric Trucking/Forklift/Rig Mob	337	\$65,000.00 \$22,500.00	\$0.00	\$65,000 \$22,500
Walding Services	338	\$5,000.00	50.00	\$5,000
Water Disposal	339	\$60,000.00	\$0.00	\$60,000
Contingency	343	\$250,000,00	\$0.00	\$250,000
EnvmmII/Clsd Loop	344	\$5,000.00	\$0.00	\$5,000
Dyed Diesel	345	\$435,000.90	\$0.00	\$435,000
Coil Tubing	346	\$422,000.00	\$0.00	\$422,000
Flowback Crews & Equip	347	\$48,000.00	\$0.00	\$48,000
-Location/Pils/Roads	353	\$73,000.00	\$0.00	\$73,000
-Centrael Labor	356	\$69,000.00	\$0.00	\$69,000
-Water Disposal Q-Contract Labor	362 374	\$135,000.00	\$0.00	\$135,000
Q-Contract Labor Q-Contract Supervision	376	\$5,000.00	\$0.00	\$8,500 \$5,000
Q-Completion Unit	381	\$8,000,00	\$2.00	58,000
Q-Rentals-Surface	383	\$7,000.00	\$0.00	\$7,000
Q-Trxg/Forklit/Rig Mobilization	385	\$3,000,00	\$2.00	\$3,000
ital intangible Costs		\$10,055,200.00	\$0.00	\$10,055,200
lal Gross Cost				

COG Operating LLC

By: Date Prepared

COG Operating LLC

We approve

* Wedsirin Interest

Eg:

Printed Name

This

Page 1 of 1. Your share of the actual costs incurred.

Well Name HOWITZER FED COM #605M SHL 1665 FNL 8 400 FEL (or Unit H) Section 12 BHL 1915 FNL 8 200 FWL (or Unit E) Section 11 Formation Wolfcamp A Sand Legal 11, 12, T24S-R28E AFE Numbers

Prospect State & County Objective Depth TVD New MEXICO EDDY COUNTY Drill & Complete 19200' 9859

Cost Description Tangible Costs	Code	Cost	Revision	T.
D-Surface Casing	401	\$48,000.00	20.00	\$49,000
0-Intermed Csa	402	\$376,000.00	\$0.00	\$376,000
D-Production Casing/Liner D-Wellhead Equip	403	\$405,000.00	\$0.00	\$405,000
Tubing	405	540 000 00	\$0.00	\$40,000
-Wellhead Equip	505	547,300,00	\$0.00	\$47,300
EQ-Pumping Unil	506	\$27,500.00 \$96,000.00	\$0.00	\$27.500
EQ-Rods	508	\$35,000.00	\$0.00 \$0.00	\$96,000
B-Tanks	510	\$56,000,00	90.00	\$35,000 \$56,000
B-Flowlines/Pipelines	51.1	\$117 000 00 1	\$0.00	\$117.000
B-Hir Trir/Seprir	512	\$117,000.00 \$117,000.00	\$0.00	\$117,000
B-Electrical System/Equipment	513	\$89,000,00	\$0.00	\$88,000
-Pckrs/Anchors/Hgrs	514	\$66,000 00	\$0.00	\$66,000
B-Couplings/Fillings/Valves	515	\$165,000.00	\$0.00	\$165,000
B-Gas Lift/Compression -Miscellaneous	516	\$35,000.00	\$0.00	\$35,000
B-Pumps-Surface	519	\$80,000.00	40.00	\$80,000
B-Melers/Lacts	525	\$18.000.00	\$0,00 \$0.00	\$18,000
B-Flares/Combusters/Emission	526	\$31,000.00	\$0.00	\$32,000 \$31,000
-Gas Lift/Compression	527	\$15,000.00	50.00	515,000
EO-Instrumentation/SCADA/POC	529	\$7,000.00	50.00	\$7,000
EQ-Tubing	530	\$5,000.00	50.00	\$5,000
EQ-Wellhead Equipment	531	\$3,000,00	\$0.00	\$3,000
EQ-Pumps	532	\$5,000.00	\$0.00	\$5,000
EO-Electrical System	503	\$15,000.00	\$0.00	\$15,000
EQ-Packers/Anchors/Hangers	534	\$2,000,00	\$0.00	\$2,000
EQ-Miscellaneous	535	\$3,000.00	\$0.00	\$3,000
otal Tangible Costs		\$1,934,800.00	\$0.00	\$1,934,800.
langible Costs				
-Trito/Pormits	201	511,000.00	\$0.00	\$11,000
-Insurance	202	\$4,000.00	\$0.00	\$4,000
S-Damages/ROW S-Survey/Slake LcIn	203	\$5,000.00	\$0.00	\$5,000
5-Survey/Stake Lcin Lcin/Pils/Roads	204	\$6,000.00 5112,000.00	\$0.00 \$0.00	\$6,000 \$112,000
Drilling Overhead	206	\$9,000.00	\$0.00	\$9,000
Daywork Contract	209	\$550,000.00	\$0.00	\$650,000
Directional Drig Services	210	\$270,000.00	\$0.00	\$270,000
Fuel & Power	211	\$150,000.00	20.00	\$160,000
Water	212	\$55,000.00	\$0.00	\$55,000
Bils	213	\$104,000.00	\$0.00	\$104,000
Mud & Chemicals	214	\$245,000.00	40.00	\$245,000
Cement Surface Cement Intermed	217	£30,000.00	\$0.50	\$30,000
Prod-2nd Intermed	219	\$80.000.00	\$0.00	\$80,000
Floal Equipment & Centralizers	221	\$105,000.00	\$0.00	\$105,000
Csg Crews & Equip	222	\$40,000.00 \$50,000.00	10.00	\$40,000 \$50,000
Contract Labor	225	\$6,500.00	\$0.00	500,000
Company Sprvsn	226	\$72,000.00	\$0.00	\$6,500 \$72,000
Contract Sprvsn	227	\$110,000.00	\$0.00	\$110,000
Tslg Csg/Tbg	226	\$30,000.00	10.00	\$30,000
Mud Logging Unit	229	\$40,000,00	30.00	\$40,000
Perf/Wireline Svc	231	\$4,000,00	\$0.00	\$4,000
Renials-Surface	235	\$150,000.00	\$0.00	\$150,000
Renials-Subsric	230	\$150,000.00	\$0.00	\$150,000
Trucking/Forklift/Rig Mob	237	\$140,000.00	\$0.00	\$140,000
Welding Services Conlingency	243	\$3,500.00	\$0.00	\$3.500
EnvrnmtVClsd Loop	244	\$265,000,00	\$0.00	\$44,000 \$255,000
LcIn/Pits/Roads	305	\$255,000.00	10.00	\$10,000
Frac Equipment	307	51 432,000,00	\$0.00	\$1,437,000
Frac Chemicals	308	\$776,000,00	\$0.00	\$1,432,000 \$776,000
rac Proppant	309	\$1,150,000,00	\$9.00	\$1,150,000
rac Proppant Transportation	310	\$148,000.00	\$0.00	\$146,000
Fuel & Power	311	\$5,000.00	\$0.00	\$5,000
Water	312	\$930,000.00	50.00	\$930,000
Bils	313	\$9,000,00	\$0.00	\$9,000
Mud & Chemicals Contract Labor	314	\$25,000.00 \$8,200.00	\$0.00 \$0.00	\$25,000
Company Sprvsn	326	\$15,000.00	\$8.00 \$0.00	\$8,200 \$15,000
Contract Spresh	327	\$134,000.00	\$0.00	\$134,000
sig Csg/Tbg	328	\$5,000.00	\$0.00	\$5,000
Perf/Mireline Svd	331	\$500,000.00	\$0.00	\$500,000
Stimulation/Treating	332	\$12,000.00 \$60,000.00	50.00	\$12,000
Completion Unit	333	\$60,000.00	\$0.00	\$50,000
Rentals-Surface	335	\$286,000.00	50.00	\$286,000
Rentals-Subsrfc	336	\$65,000,00	50.00	\$65,000
Frucking/Forklift/Rig Mab	337	\$22,500,00	\$0.00	\$22,500
Velding Services Valer Disposal	338	\$5,000.00 \$60,000.00	50 00	\$5,000
Contingency	343	\$250,000.00	50.00	\$50,000
EnvrnmII/Clad Loop	366	\$5.000.00	50.00	\$250,000
Oyed Diesel	345	\$435,000.00	50.00	\$435,000
Call Tubing	346	\$422,000.00	50.00	\$422,000
Towback Crews & Equip	347	\$46,000.00	\$0.00	\$46,000
-Location/Pits/Roads	353	\$73,000.00	60.00	\$25,000
-Contract Labor	356	\$69,000.00	\$0.00	\$69,000
-Waler Disposal	362	\$135,000.00	\$0.00	\$135,000
Q-Contract Labor	374	\$6,500.00	50.00	\$6,500 \$5,900
Q-Contract Supervision	376	\$5,000.00	50.00	\$5,900
Q-Completion Unit	381	\$5,000.00	50.00	\$8,000.0
O-Rentals-Surface	383	\$7,000.00	\$0.00	\$7,000
G-Trikg/ForkidVRig Mobilization	365	\$3.000.00	\$0.00	\$3,000
tal Intangible Costs		\$10,055,200.00	\$0.00	\$10,055,200.0
al Gross Cost		\$11,990,000.00	\$0.00	\$11,990,000.

COG Operating LLC

By Date Prepared

COG Operating LLC

We approve

Sweeth Interes!

Company

Ey:

Printed Name

This AFE is only an estimate By signing you agree to pay agree to pay you agree you agree to pay you agree you

Well Name HOWITZER FED COM #606M SHL 2325 FNL & 300' FEL (or Unit H) Section 12 BHL 2310' FNL & 200' FWL (or Unit E) Section 11 Formation Wolfcamp A Sand Legal 11, 12, T24S-R28E AFE Numbers

Prospect State & County Objective Depth TVD NEW MEXICO EDDY COUNTY Dnil 8 Complete 19000' 9683'

Cost Description Englishe Costs	Code	Cost	Revision	To
angiole Costs)-Surface Casing	401	\$49,000.00	\$0.00	\$49,000.0
-Intermed Csa	402	\$376,000.00	\$0.00	\$376,000,0
-Production Casing/Liner	403	\$405,000.00	\$0.00	\$405,000,0
-Welinead Equip	405	\$40,000,00	\$0.00	540,000,0
-Tubing	504	\$47,300.00	\$0.00	347 300 0
-Welhead Equip	505	\$27,500.00	\$0.00	\$40,000.0 \$47,300.0 \$27,500.0
EQ-Pumping Unit	506	\$96,000 00	\$0.00	596,000,0
EQ-Rods	508	\$35,000.00	\$0.00	\$35,000.0
B-Tanks	510	\$56,000.00	\$0.00	\$56,000.0
B-Flowlines/Pipelines	. 511	\$117,000.00	\$0.00	\$117,000.0
B-Hir Trir/Seprtr	512	\$117,000.00	\$0.00	\$117,000.0
B-Electrical System/Equipment	513	\$88,000,00	\$0.00	\$88,000.0
-Pckrs/Anchors/Hgrs	514	\$66,000,00	\$0.00	\$55,000.0
B-Couplings/Fillings/Valves	515	\$165,000,00	\$0.00	\$165,000.0
B-Gas Lift/Compression	516	\$35,000.00	\$0.00	\$35,000.0
-Miscellaneous	519	\$80,000.00	£0.00	\$80,000.0
B-Pumps-Surface	521	\$18,000.00	50.00	\$18,000.0
B-Melers/Lacts	525	\$32,000.00	\$0.00	\$32,000.0
B-Flajes/Combusiers/Emission	526	\$31,000.00	50.00	\$31,000.0
-Gas Lill/Compression	527	\$15,000.00	\$0.00	\$15,000.0
EQ-Instrumentation/SCADA/POC	529	37,000,00	\$0.00	\$7,000.0
EQ-Tubing	530	\$5,000.00	\$0.00	\$5,000.0
EQ-Wellhead Equipment	531	\$3,000.00	\$0.00	\$3,000.0
EQ-Pumps	532	\$5,000.00	50.00	\$5,000.0
EQ-Electrical System	533	\$15,000.00	30.00	\$15,000.0
EQ-Packers/Anchors/Hangers	534	\$2,000.00	\$0.00	
EQ-Miscellaneous	535	\$5,000.00	50.00	\$2,000.0 \$3,000.0
otal Tangible Costs		\$1,934,600,00	\$0.00	\$1,934,800.0
Hangible Costs	8871	£44 000 00 I	2000	27772404
S-Title/Permits	201	\$11,000.00	\$0.00	\$11,000.0
-Insurance	202	\$4,000.00	50,00	\$4.000.0
S-Damages/ROW	203	55,000.00	\$0.00	\$5,000.0
S-Survey/Stake LcIn -Lctr/Pils/Roads	204	\$5,000,00	\$0.00	\$6,000.0
	205	5112,000.00	\$0.00	5112.000.0
-Drilling Overhead	206	\$9,000.00	50.00	\$9,000.0
-Daywork Contract	209	\$650,000,00	\$0.00	\$650,000 0 \$270,000 0
-Directional Drig Services	210	\$270,000.00	\$0.00	
-Fue & Power -Waler	211	\$150,000.00	\$0.00	\$150,000 (
-vvaler -Bils	212	\$55,000.00	\$0.00	\$55,000.0
	213	\$104,000.00	\$0.00	\$104,000 (
-Mud & Chemicals -Cement Surface	214	\$245,000.00	\$0.00	\$245,000.0
-Cement Infermed	218	\$30,000,00 \$80,000,00	\$0.00 \$0.00	\$30,000.0
-Cement Intermed -Prod-2nd Int Cmt				\$100,000 f
	219	\$105,000.00	\$0.00	
-Float Equipment & Centralizers -Csg Crews & Equip	221	\$40,000.00	\$0.00	\$40,000.0
-Contract Labor	222	\$50,000.00	\$0.00	\$50,000 0
		\$6,500.00 \$72,000.00 \$110,000.00	\$0.00	\$5,500,0
-Company Sprvsn -Contract Sprvsn	226	572,000.00	\$9.00	\$72,000.0
-Tsig Csg/Tbg	228	\$30,000.00	\$0.00	\$110,000.0 \$30,000.0
-Mud Logging Unit	229	540,000,00	\$0.00	\$40,000.0
-Perf/Aireline Svc		\$4,000.00		
-Renials-Surface	231		\$0.00	\$4,000.0
-Rentals-Subsric	236	\$150,000.00 \$150,000.00	\$0.00	\$150,000 0
	237		\$9.00	\$150,000.0
-Trucking/Forklill/Rig Mob -Welding Services	238	\$140,000,00		\$140,050 0
Contingency	243	\$44,000,00	\$0.00 \$0.00	\$3,500.0 \$44,000.0
Envrnmil/Cisd Loop	244	\$255,000.00	\$0.00	\$255,000 0
	305			
Lctn/Pits/Roads Frac Equipment	307	\$1,432,000.00	\$0.00	\$10,000.0
Frac Chemicals	308	\$175,000,00	\$0.00	31,432,000 (
Frac Proppant	309	\$776.000.00 \$1.150.000.00		\$776,000.0
Frac Proppant Transponation	310	\$146,000,00	\$0.00	\$1,150,000 C
Fue & Power	311	\$5,000.00	\$0.00	55,000 (
-rue & rowel -Waler	312	\$930,000,00	\$0.00	5930,000 0
Bits	313	\$9,000,000	\$9.00	\$9,000.0
-Mud & Chemica's	314	\$25,000.00	\$0.00	\$25,000 (
-Route & Chemicals -Contract Labor	525	\$8,200,00	\$0.00	59,200 (
Company Sprvsn	326	\$15,000.00	\$0.00	\$15,000.0
Contract Sprvsn	327	5134,000 00	\$0.00	\$134,000 (
Tsig Csg/Tbg	326	\$5,000.00	50.00	\$5,000.0
Perl/Wireline Svc	331	\$500,000,00	\$0.00	\$500,000.0
Stimulation/Treating	332	\$12,000,00	\$9.00	\$12,000 (
Completion Unit	333	\$60,000.00	\$9.00	\$60,000.0
Rentais-Surface	335	\$286,000,00	\$0.00	5285,000 (
Rentais-Subsrfc	336	00.000.382	\$0.00	
Trucking/Forklift/Rig Mob	337	\$22,500,00	\$9.00	\$65,000 (\$22,500 (
Welding Senices	338	\$5,000.00	50.00	\$5,000
Water Disposal	339	360,000,00	\$0.00	960.000
Contingency	343	\$250,000.00	\$0,00	\$250,000
Environti/Cisa Laop	344	\$5,000,00	\$0.00	\$5,000
Dyed Diesel	345	\$435,000,00	\$0.00	\$435,000
Coil Tubing	346	\$422,000.00	\$0.00	\$422,000
Flowback Crews & Equip	347	\$48,000.00	50.60	\$48,000
-Location/Pils/Roads	353	\$75,000.00	\$0.00	573,000
-Contract Labor	356	\$69,000.00	\$0.00	589.000
-Water Disposal	362	\$135,000.00	\$0.00	\$135,000
Q-Contract Labor	374	\$6,500.00	\$2.00	\$6,500
	376	\$5,000.00	50.00	\$5,000
D-Contract Supervision	381	\$6,000,00	50.00	\$8,000
		\$7,000.00	\$0.00	\$7,000
Q-Completion Unit			47.17	
Q-Completion Unit Q-Rente's-Surface	383	95 000 00		
Q-Contract Supervision Q-Completion Unit Q-Renta's-Surface Q-Trigiffortiffichi Mobilization	365	\$3,000.00	50,00	\$3,000 0
Q-Completion Unit Q-Rente's-Surface		\$5,000.00	\$0,00 \$0,00	
Q-Completion Unit Q-Renta's-Surface Q-Trig/Forkfit/Rig Mobilization		\$3,000.00		\$10,055,200.0 \$11,990,000.0

COG Operating LLC

By Oate Prepared

COG Operating LLC

We approve
1 Worker Interest

Company

By

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

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 NOS. 20183

AFFIDAVIT OF MATT FISHER IN SUPPORT OF CASE NO. 20183

Matt Fisher, of lawful age and being first duly sworn, declares as follows:

- 1. My name is Matt Fisher. 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 a petroleum geologist have been accepted by the Division and made a matter of record.
- 3. I am familiar with the application filed by COG in this case, and I have conducted a geologic study of the lands in the subject area.
 - 4. In this case, COG is targeting the Wolfcamp formation.
- 5. **COG Exhibit B-1** is a locator map. It shows COG's acreage in yellow. The path of the proposed wellbore for the proposed **Howitzer Federal Com No. 602H, 603H, 605H,** and **606H wells** are marked and depicted with dashed lines. Existing Wolfcamp producers are marked and depicted with solid lines.
- 6. **COG Exhibit B-2** is a subsea structure map that I prepared off the top of the Wolfcamp formation. As with the locator map, the wellbore paths for the proposed Howitzer Federal Com No. 602H, 603H, 605H, and 606H wells are marked with dashed lines. The contour interval is 25 feet. The structure map shows that the Wolfcamp is dipping gently to the east. The

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structure appears consistent in this section. I do not observe any faulting, pinchouts, or other geologic hazards to developing a horizontal well.

- 7. **COG Exhibit No. B-3** shows three producing wells, depicted by red circles, that were used to construct a cross-section from A to A'. I consider these wells to be representative of the geology of the area.
- 8. COG Exhibit No. B-4 is a stratigraphic cross section prepared by me for the three representative wells from A to A'. The exhibit shows logs for gamma ray, resistivity, and porosity for all three wells. The proposed target interval for the proposed Howitzer Federal Com No. 602H and 603H wells is labeled and depicted in green. The proposed target interval for the proposed Howitzer Federal Com No. 605H and 606H wells is labeled and depicted in blue. The logs in the cross-section demonstrate that the target intervals within the Wolfcamp are consistent in thickness, across the entire spacing unit.
- 9. Based on my geologic study of the areas, I have not identified any geologic impediments to drilling horizontal wells in the area.
- 10. In my opinion, each tract comprising the proposed spacing unit will be productive and contribute more-or-less equally to production from the wellbore.
- 11. In my opinion, the granting of COG's application in this case is in the best interest of conservation, the prevention of waste, and protection of correlative rights.
- 12. **COG Exhibit B-1 through B-4** were either prepared by me or compiled under my direction and supervision.

MATT FISHER

STATE OF TEXAS

COUNTY OF Santa Le

SUBSCRIBED and SWORN to before me this 20 day of February 2019 by Matt Fisher.

NOTARY PUBLIC

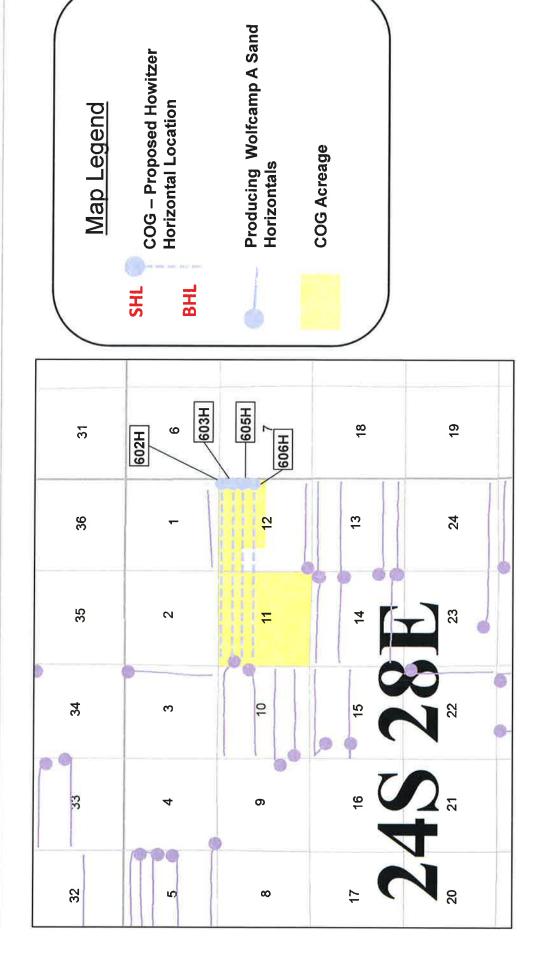
My Commission Expires:

10-08-2019

OFFICIAL SEAL
ELIZABETH A. RYAN
NOTARY PUBLIC
STATE OF NEW MEXICO
Com. Expires 6-8-2019

12060625_1

Wolfcamp Pool Howitzer Fed Com Location Map

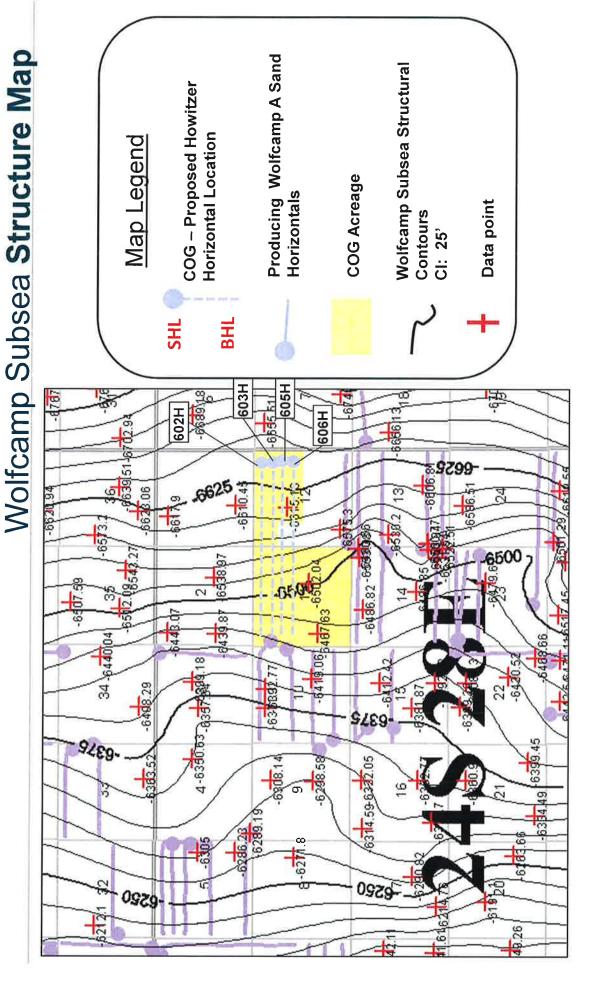




BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico

Santa Fe, New Mexico
Exhibit No. B-1
Submitted by: COG Operating LLC
Hearing Date: February 20, 2019
Case No. 20183

Wolfcamp Pool





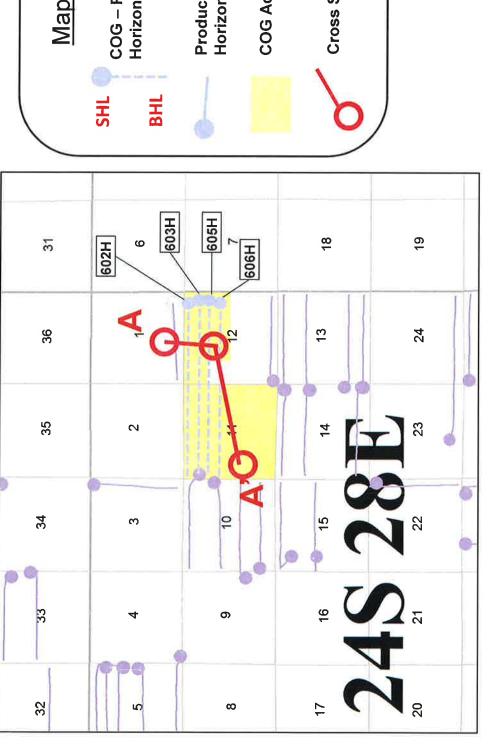
BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico

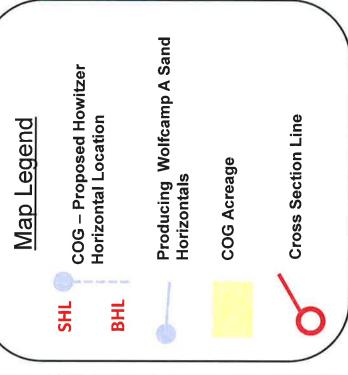
santa re, Ivew Iviexico Exhibit No .B- 2

Submitted by: COG Operating LLC Hearing Date: February 20, 2019 Case No. 20183

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Cross Section Location Map Wolfcamp Pool





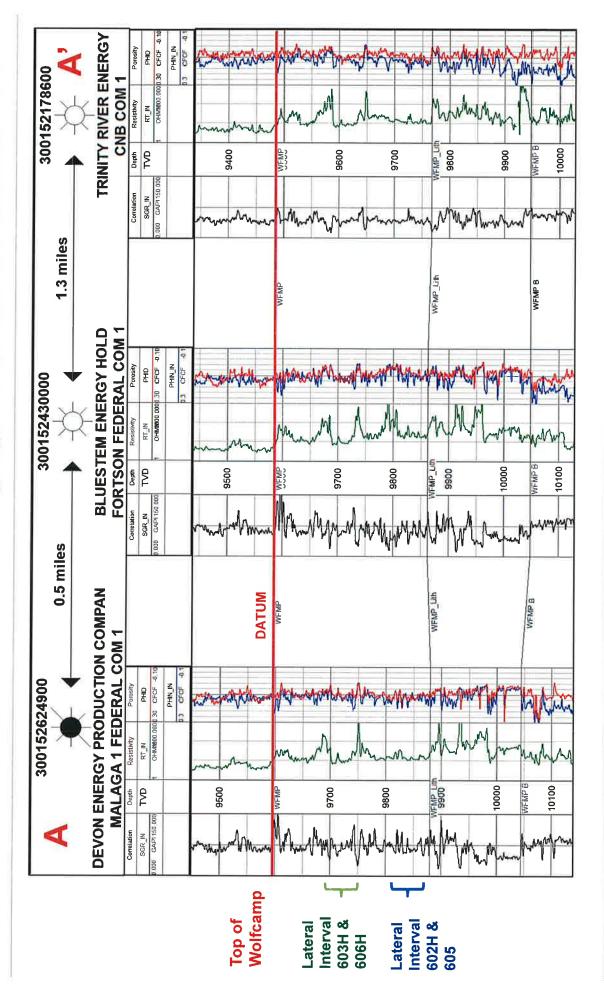


BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico Exhibit No. B-3

Submitted by: COG Operating LLC Hearing Date: February 20, 2019 Case No. 20183

Stratigraphic Cross Section A – A'





BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico

Santa Fe, New Mexico
Exhibit No. B-4
Submitted by: COG Operating LLC

Hearing Date: February 20, 2019 Case No. 20183

9

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. 20183

AFFIDA	VI	ľ
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STATE OF NEW MEXICO)
) ss
COUNTY OF SANTA FE)

Julia Broggi, attorney for 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.

Julia Broggi

SUBSCRIBED AND SWORN to before me this 20th day of February 2019 by Julia Broggi.

OFFICIAL SEAL CLARINDA L. WETZSTEON

> **NOTARY PUBLIC** STATE OF NEW MEXICO

My Commission Expires:



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

February 1, 2019

<u>VIA CERTIFIED MAIL</u> CERTIFIED RECEIPT REQUESTED

TO: ALL INTEREST OWNERS SUBJECT TO POOLING PROCEEDINGS

Re:

Application of COG Operating LLC for compulsory pooling, Eddy County,

New Mexico.

Howitzer Federal Com No. 602H Well Howitzer Federal Com No. 603H Well Howitzer Federal Com No. 605H Well Howitzer Federal Com No. 606H Well

Ladies & Gentlemen:

This letter is to advise you that COG Operating LLC has filed the enclosed application with the New Mexico Oil Conservation Division. This application will be set for hearing before a Division Examiner on February 21, 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 James Martin at (432) 685-2590 or JMartin1@concho.com.

Michael H. Feldewert

ATTORNEY FOR COG OPERATING LLC



Shipment Confirmation Acceptance Notice

Note to Mailer: The labels and volume associated to this form online, must match the labeled packages being presented to the USPS® employee with this form.

COG - Howitzer 20183 CM# 51500.0010 Compulsory Pooling List

Shipment Date:	01/30/2019
Shipped From:	
Name:	HOLLAND & HART LLP
Address:	110 N GUADALUPE ST # 1
City:	SANTA FE
State:	NM ZIP+4® 87501

Type of Mail	Volume
Priority Mail Express®*	
Priority Mail®	0
First-Class Package Service®	
Returns	
International*	
Other	13
Total	13

^{*}Start time for products with service guarantees will begin when mail arrives at the local Post Office™ and items receive individual processing and acceptance scans.

B. USPS Action

- Note to RSS Clerk:

 1. Home screen > Mailing/Shipping > More
 2. Select Shipment Confirm
 3. Scan or enter the barcode/label number from PS Form 5630
 4. Confirm the volume count message by selecting Yes or No
 5. Select Pay and End Visit to complete transaction

USPS EMPLOYEE: Please scan upon pickup or receipt of mail. Leave form with customer or in customer's mail receptacle.

USPS SCAN AT ACCEPTANCE

9275 0901 1935 6200 0012 4561 91

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2	L SERVICE
STA	
UNITED STATES	POSTAL

Firm Mailing Book For Accountable Mail

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 ☒ Certifled Mail
 □ Certifled Mail Restricted Delivery Hayes Land L P PO BOX 51407 Midland TX 79710 Complete in Ink Check type of mail or service ☐ Collect on Delivery (COD) ☐ Insured Mail Adult Signature Required Estate of William C Cruce 46 Ranch Oklahoma City OK 73102 □ Priority Mail prings MS 39564 75711 (Page 1 of 2) Total Number of Pieces Received at Post Office USPS Tracking/Article Number 9214 8901 9403 8377 9867 18 9214 8901 9403 8377 9866 40 9214 8901 9403 8377 9866 57 9214 8901 9403 8377 9866 71 9214 8901 9403 8377 9866 95 9214 8901 9403 8377 9866 64 9214 8901 9403 8377 9866 88 9214 8901 9403 8377 9867 01 Holland & Hart LLP 110 N Guadalupe St # 1 Santa Fe NM 87501 Name and Address of Sender PS Form **3877**, April 2015 PSN 7530-02-000-9098 Total Number of Pieces Listed by Sender 2 4 5 ന് ġ

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CHECK type of mail of service	□ Adult Signature Restricted Delivery □ Registered Mail □ Adult Signature Restricted Delivery □ Registered Mail □ Certified Mail Restricted Delivery □ Return Receipt for □ Certified Mail Restricted Delivery □ Signature Confirmation □ Insured Mail □ Insured Mail □ Restricted Delivery □ Signature Confirmation □ Priority Mail □ Restricted Delivery □ Signature Confirmation □ Priority Mail □ Restricted Delivery □ Signature Confirmation □ Priority Mail □ Restricted Delivery □ Signature Confirmation □ Priority Mail □ Restricted Delivery □ Signature Confirmation □ Priority Mail □ Restricted Delivery □ Signature Confirmation □ Priority Mail	Addressee (Name, Street, City, State, & ZIP Code [™])	Lou Ellen Reneau Matson Trustee of the Marital Trust 600 Helen	Greathouse Circle Midland TX 79706		Mary Jo Beeman Dickerson et al 207 1/2 North Street Ocean	Springs MS 39564		MRC Permian Company One Lincoln Centre 5400 LBJ Freeway Suite	Upoc Delisa IX 19240	OXY USA Inc OXY USA Inc 5 Greenway Plaza Suite 110 Houston TX	77046		Rowan Family Minerals LLC PO BOX 108 Andrews TX 79714										Postmaster, Per (Name of receiving employee)
Idallie alla Address ol Serider	Holland & Hart LLP 110 N Guadalupe St # 1 Santa Fe NM 87501		9. 9214 8901 9403 8377 9867 25			10. 9214 8901 9403 8377 9867 32			11. 9214 8901 9403 8377 9867 49		12. 9214 8901 9403 8377 9867 56			13. 9214 8901 9403 8377 9867 63										Total Number of Pieces Listed by Sender Received at Post Office 13

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Barcode	Recipient	Status	Custom	User / Profile	Location / Department	Job II
9214890194038377986640	Devon Energy Production Company 333 West Sheridan Avenue Oklahoma City OK 73102	Delivered Signature Received	Ref#: C1193766.6839869 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		11937
9214890194038377986657	Estate of Joe H Beeman 405 Juanita Carlsbad NM 88220	Delivered Signature Received	Ref#: C1193766.6839870 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		11937
9214890194038377986664	Estate of Mary Jo Beeman Dickerson 207 1/2 North Street Ocean Springs MS 39564	Return To Sender	Ref#: C1193766.6839871 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		11937

Barcode	Recipient	Status	Custom	User / Profile	Location / Department	Job I
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9214890194038377986688	Faulconer Resources 1999 Ltd Partnership PO BOX 7995 Tyler TX 75711	Delivered 🗥 Signature Received	Ref#: C1193766.6839873 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		1193
9214890194038377986695	Hayes Land & Production Co PO BOX 51407 Midland TX 79710	Delivered Signature Received	Ref#: C1193766.6839874 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		119:
9214890194038377986701	Hayes Land L P PO BOX 51407 Midland TX 79710	Delivered Signature Received	Ref#: C1193766.6839875 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		119

Barcode	Recipient	Status	Custom	User / Profile	Location / Department	Job I
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9214890194038377986725	Lou Ellen Reneau Matson Trustee of the Marital Trust 600 Helen Greathouse Circle Midland TX 79706	Delivered Signature Received	Ref#: C1193766.6839877 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		1193
9214890194038377986732	Mary Jo Beeman Dickerson et al 207 1/2 North Street Ocean Springs MS 39564	Return To Sender	Ref#: C1193766.6839878 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		1193
9214890194038377986749	MRC Permian Company One Lincoln Centre 5400 LBJ Freeway Suite 1500 Dallas TX 75240	Delivered Signature Received	Ref#: C1193766.6839879 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		1193

Barcode	Recipient	Status	Custom	User / Profile	Location / Department	: Job II
9214890194038377986756	OXY USA Inc OXY USA Inc 5 Greenway Plaza Suite 110 Houston TX 77046	Delivered Signature Received	Ref#: C1193766.6839880 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		1193
9214890194038377986763	Rowan Family Minerals LLC PO BOX 109 Andrews TX 79714	Delivered Signature Received	Ref#: C1193766.6839881 RetRef#:	clwetzsteon@hollandhart.com Label 4 x 2.5 (flat)		1193
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ESTATE OF MARY JO BEEMAN DICKERSON 207 1/2 NORTH STREET OCEAN SPRINGS MS 39564



9214 8901 9403 8377 9866 64

USPS Tracking Label Number: 9214 8901 9403 8377 9866 64

USPS Tracking History	Postal Facility	ZIP	Date	Time
PRE-SHIPMENT INFO SENT USPS AWAITS ITEM		SANTA FE,NM 87501		01/30/2019 11:11
SHIPMENT RECEIVED ACCEPTANCE PENDING		SANTA FE,NM 87501		02/01/2019 16:13
ORIGIN ACCEPTANCE		SANTA FE,NM 87501		02/01/2019 20:59
PROCESSED THROUGH USPS FACILITY		ALBUQUERQUE,NM 87101		02/01/2019 22:14
DEPART USPS FACILITY		ALBUQUERQUE,NM 87101		02/02/2019 00:46
PROCESSED THROUGH USPS FACILITY		MOBILE,AL 36619		02/03/2019 12:25
DEPART USPS FACILITY		GULFPORT,MS 39503		02/04/2019 02:26
ARRIVAL AT UNIT		OCEAN SPRINGS,MS 39564		02/04/2019 06:54
SORTING/PROCESSING COMPLETE		OCEAN SPRINGS,	MS 39564	02/04/2019 07:41
OUT FOR DELIVERY		OCEAN SPRINGS,	MS 39564	02/04/2019 07:51
NO AUTHORIZED RECIPIENT AVAILABLE		OCEAN SPRINGS,MS 39564		02/04/2019 11:38
ADDRESSEE UNKNOWN		OCEAN SPRINGS,MS 39564		02/04/2019 11:43
ADDRESSEE UNKNOWN		OCEAN SPRINGS,MS 39564		02/07/2019 10:04
PROCESSED THROUGH USPS FACILITY		JACKSON,MS 39201		02/08/2019 11:32
PROCESSED THROUGH USPS FACILITY		ALBUQUERQUE,NM 87101		02/10/2019 13:30
ARRIVAL AT UNIT		SANTA FE,NM 87501		02/11/2019 09:57
AVAILABLE FOR PICKUP		SANTA FE,NM 875	02/11/2019 14:35	
RETURN TO SENDER TO ORIGINAL SENDER		SANTA FE,NM 87501		02/12/2019 11:51

ORIGIN ACCEPTANCE:



Return address:

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Recipient address:

MARY JO BEEMAN DICKERSON ET AL 207 1/2 NORTH STREET OCEAN SPRINGS MS 39564



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USPS Tracking Label Number: 9214 8901 9403 8377 9867 32

USPS Tracking History	Postal Facility	ZIP	Date	Time
PRE-SHIPMENT INFO SENT USPS AWAITS ITEM	SANTA FE,NM 87501		01/30/2019 11:11	
SHIPMENT RECEIVED ACCEPTANCE PENDING		SANTA FE,NM 87501		02/01/2019 16:13
ORIGIN ACCEPTANCE		SANTA FE,NM 87501		02/01/2019 20:59
PROCESSED THROUGH USPS FACILITY		ALBUQUERQUE,NM 87101		02/01/2019 22:14
DEPART USPS FACILITY		ALBUQUERQUE,NM 87101		02/02/2019 00:46
PROCESSED THROUGH USPS FACILITY		MOBILE,AL 36619		02/03/2019 12:25
DEPART USPS FACILITY		GULFPORT,MS 39503		02/04/2019 02:26
ARRIVAL AT UNIT		OCEAN SPRINGS,MS 39564		02/04/2019 06:57
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OUT FOR DELIVERY	OCEAN SPRINGS,MS 39564		02/04/2019 07:51	
NO AUTHORIZED RECIPIENT AVAILABLE		OCEAN SPRINGS,MS 39564		02/04/2019 11:38
ADDRESSEE UNKNOWN	OCEAN SPRINGS,MS 39564		02/04/2019 11:43	
ADDRESSEE UNKNOWN	OCEAN SPRINGS,MS 39564		02/07/2019 10:04	
PROCESSED THROUGH USPS FACILITY	JACKSON,MS 39201		02/08/2019 11:32	
PROCESSED THROUGH USPS FACILITY	ALBUQUERQUE,NM 87101			02/10/2019 13:30
ARRIVAL AT UNIT	SANTA FE,NM 87501			02/11/2019 09:57
AVAILABLE FOR PICKUP		SANTA FE,NM 875	02/11/2019 14:35	
RETURN TO SENDER TO ORIGINAL SENDER	SANTA FE,NM 87501			02/12/2019 11:51

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Ad No. 0001276274

DAVID WASHINGTON 110 NORTH GUADALUPE, SUITE 1 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:

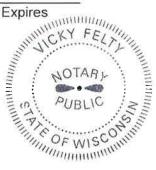
02/05/19

BEFORE THE OIL CONSERVATION DIVISION Subscribed and sworn before me thi 5th of February 2019.

VI, County of Brown OTARY PUBLIC

My Commission Expires

Ad#:0001276274 PO: 0001276274 # of Affidavits: 0.00



Submitted by: COG Operating LLC

Santa Fe, New Mexico

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

The State of New Mexico through its Oil Conservation Division hereby gives notice pursuant to law and the Rules and Regulations of the Division of the following public hearing to be held at 8:15 A.M. on **February 21, 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 **February 11**, **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

To:All overriding royalty interest owners and pooled parties, including: Hayes Land, L.P.: Faulconer Resources 1999 Ltd. Partnership: Lou Ellen Reneau Matson, Trustee of the Marital Trust; Rowan Family Minerals, LLC; Hayes Land & Production Co.; Estate of Joe H. Beeman, et al., his heirs and devisees; Mary Jo Beeman Dickerson, et al., her heirs and devisees; MRC Permian Company; Heirs of William C. Cruce and his devisees; Estate of William C. Cruce, his heirs and devisees; Estate of Mary Jo Beeman Dickerson, et al., her heirs and devisees; OXY USA Inc.; Devon Energy Production Company.

Case No. 20183:Application of COG Operating LLC for compulsory pooling, Eddy County, New Mexico. Applicant in the above-styled cause seeks an order pooling all uncommitted interest owners in the Wolfcamp formation underlying a 640-acre horizontal spacing unit comprised of the N/2 of Section 11 and the N/2of Section 12, Township 24 South, Range 28 East, NMPM, Eddy County, New Mexico. COG seeks to dedicate the above-referenced horizontal spacing unit to four proposed initial wells:

o the proposed Howitzer Federal Com No. 602H Well and the proposed Howitzer Federal Com No. 603H Well. Both wells will be horizontally drilled from a surface location in the NE/4NE/4 (Unit A) of Section 12 to bottom hole location in the NW/4NW/4 (Unit D) of Section

11; and o the proposed Howitzer Federal Com No. 605H Well and the proposed Howitzer Federal Com No. 606H Well. Both wells will be horizontally drilled from a surface location in the SE/4NE/4 (Unit H) of Section 12 to bottom hole location in the SW/4NW/4 (Unit E) of Section

Pursuant to the Special Rules set forth in Division Order No. R-14262, the completed interval for all four wells will be at an orthodox location no closer than 330 feet from the outer boundary of the spacing unit. Also to be considered will be the cost of drilling and completing the wells, the allocation of the cost thereof, as well as actual operating costs and charges for supervision, designation of COG Operating LLC as operator, and a 200% charge for risk involved in drilling and completing each well. Said area is located approximately 2 miles northeast of Malaga New Mexico

Malaga, New Mexico. Pub: February 5, 2019 #1276274