

RECEIVED: 8/6/20	REVIEWER: DM	TYPE: PLC	APP NO: pDM2022347640
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Geological & Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505

**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Applicant:** COG Operating, LLC **OGRID Number:** 229137  
**Well Name:** Square Bill Federal Com 1H and three other wells (see attached) **API:** 30-025-44046  
**Pool:** WC-025 G-08 S2535340; Bone Spring **Pool Code:** 97088

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW**

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]  
 A. Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
- B. Check one only for [ I ] or [ II ]  
 [ I ] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☒ PLC ☐ PC ☐ OLS ☐ OLM  
 [ II ] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☐ Offset operators or lease holders  
 B. ☒ Royalty, overriding royalty owners, revenue owners  
 C. ☒ Application requires published notice  
 D. ☐ Notification and/or concurrent approval by SLO  
 E. ☒ Notification and/or concurrent approval by BLM  
 F. ☐ Surface owner  
 G. ☐ For all of the above, proof of notification or publication is attached, and/or,  
 H. ☐ No notice required

**FOR OCD ONLY**

- ☐ Notice Complete  
☐ Application Content Complete

- 3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

Jeanette Barron

Print or Type Name

*Jeanette Barron*  
 Signature

Date

8/6/20

575-746-6974

Phone Number

jbarron@concho.com

e-mail Address



August 6, 2020

Attn: Dean McClure  
NM Oil Conservation Division  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

Re: Application for Administrative Approval of Pool Lease Commingle

Dear Mr. McClure,

COG Operating LLC respectfully requests approval for pool lease commingling for the following wells:

Square Bill Federal Com 1H  
API# 30-025-44046  
Wildcat; Bone Spring  
Ut. B, Sec. 31-T25S-R35E  
Lea County, NM

Square Bill Federal Com 21Y  
API# 30-025-44397  
Dogie Draw; Wolfcamp  
Ut. B, Sec. 31-T25S-R35E  
Lea County, NM

Square Bill Federal Com 22H  
API# 30-025-44047  
Dogie Draw; Wolfcamp  
Ut. C, Sec. 31-T25S-R35E  
Lea County, NM

Square Bill Federal Com 23H  
API# 30-025-44048  
Dogie Draw; Wolfcamp  
Ut. C, Sec. 31-T25S-R35E  
Lea County, NM

**Oil Production:**

The oil production from all wells will be measured separately by allocation meter prior to being commingled at the Central Tank Battery located in Ut. P, Sec. 31-T25S-R35E. In the event the CTB is over capacity or in the case of battery or pipeline repairs the oil production from these wells may be transported by truck to either the Red Hills Offload Station, located in Unit O, Section 4-T26S-R32E, or the Jal Offload Station, located in Unit D, Section 4-T26S-R37E, Lea County. In this case, the oil will remain segregated and will be measured by lact meter when offloading at said stations.

**Gas Production:**

The gas production from all wells will be measured separately by allocation meter prior to being commingled and entering a gas flow line to the gas custody transfer meter at the Central Tank Battery located in Ut. P, Sec. 31-T25S-R35E. The Targa gas sales meter # 161136.

**CORPORATE ADDRESS**

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

**ARTESIA WEST OFFICE**

2208 Main Street | Artesia, New Mexico 88210  
P 575.748.6940 | F 575.746.2096



All owners of interest have been notified by certified mail that should they have an objection to this surface commingling, they must file a formal protest with the NMOCD within 20 days of the date of this application. Proof of owner notification is enclosed.

Please see the enclosed Administrative Application Checklist, C-107B Application for Pool Lease Commingling, plats for referenced wells, site facility diagram, maps with lease boundaries showing wells and facility locations, production history and communization agreement application.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink that reads "Jeanette Barron". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

Jeanette Barron  
Regulatory Technician II

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**CORPORATE ADDRESS**

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

**ARTESIA WEST OFFICE**

2208 Main Street | Artesia, New Mexico 88210  
P 575.748.6940 | F 575.746.2096

District I  
1625 N. French Drive, Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St Francis Dr, Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107-B  
Revised August 1, 2011

**OIL CONSERVATION DIVISION**  
1220 S. St Francis Drive  
Santa Fe, New Mexico 87505

Submit the original  
application to the Santa Fe  
office with one copy to the  
appropriate District Office.

**APPLICATION FOR SURFACE COMMINGLING (DIVERSE OWNERSHIP)**

OPERATOR NAME: COG Operating LLC

OPERATOR ADDRESS: 2208 W Main Street, Artesia, New Mexico 88210

APPLICATION TYPE:

☐ Pool Commingling ☐ Lease Commingling ☒ Pool and Lease Commingling ☐ Off-Lease Storage and Measurement (Only if not Surface Commingled)

LEASE TYPE: ☐ Fee ☐ State ☒ Federal

Is this an Amendment to existing Order? ☐ Yes ☒ No If "Yes", please include the appropriate Order No. \_\_\_\_\_  
Have the Bureau of Land Management (BLM) and State Land office (SLO) been notified in writing of the proposed commingling  
☒ Yes ☐ No

**(A) POOL COMMINGLING**  
Please attach sheets with the following information

(1) Pool Names and Codes	Gravities / BTU of Non-Commingled Production	Calculated Gravities / BTU of Commingled Production		Calculated Value of Commingled Production	Volumes
97088 - WC-025 G-08 S2535340; Bone Spring	42.3/1489	42.4/1473			
17980 - Dogie Draw; Wolfcamp	42.5/1434				

- (2) Are any wells producing at top allowables? ☐ Yes ☐ No  
(3) Has all interest owners been notified by certified mail of the proposed commingling? ☐ Yes ☐ No.  
(4) Measurement type: ☐ Metering ☐ Other (Specify)  
(5) Will commingling decrease the value of production? ☐ Yes ☐ No If "yes", describe why commingling should be approved

**(B) LEASE COMMINGLING**  
Please attach sheets with the following information

- (1) Pool Name and Code.  
(2) Is all production from same source of supply? ☒ Yes ☐ No  
(3) Has all interest owners been notified by certified mail of the proposed commingling? ☒ Yes ☐ No  
(4) Measurement type: ☒ Metering ☐ Other (Specify)

**(C) POOL and LEASE COMMINGLING**  
Please attach sheets with the following information

- (1) Complete Sections A and E.

**(D) OFF-LEASE STORAGE and MEASUREMENT**  
Please attached sheets with the following information

- (1) Is all production from same source of supply? ☐ Yes ☐ No  
(2) Include proof of notice to all interest owners.

**(E) ADDITIONAL INFORMATION (for all application types)**  
Please attach sheets with the following information

- (1) A schematic diagram of facility, including legal location.  
(2) A plat with lease boundaries showing all well and facility locations. Include lease numbers if Federal or State lands are involved.  
(3) Lease Names, Lease and Well Numbers, and API Numbers.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE: Jeanette Barron

TITLE: Regulatory Technician II

DATE: 8/6/20

TYPE OR PRINT NAME Jeanette Barron TELEPHONE NO.: 575.748.6974

E-MAIL ADDRESS: jbarron@concho.com

## DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 88240  
Phone: (575) 393-6181 Fax: (575) 393-0720

## DISTRICT II

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

## DISTRICT III

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

## DISTRICT IV

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

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

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-44046		Pool Code 97088	Pool Name Wildcat; Bone Spring
Property Code 319617	Property Name SQUARE BILL FEDERAL COM		Well Number 1H
OGRID No. 229137	Operator Name COG OPERATING, LLC		Elevation 3274.4'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	25-S	35-E		210	SOUTH	957	EAST	LEA

## 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
I	30	25-S	35-E		2420	SOUTH	665	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
240			

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

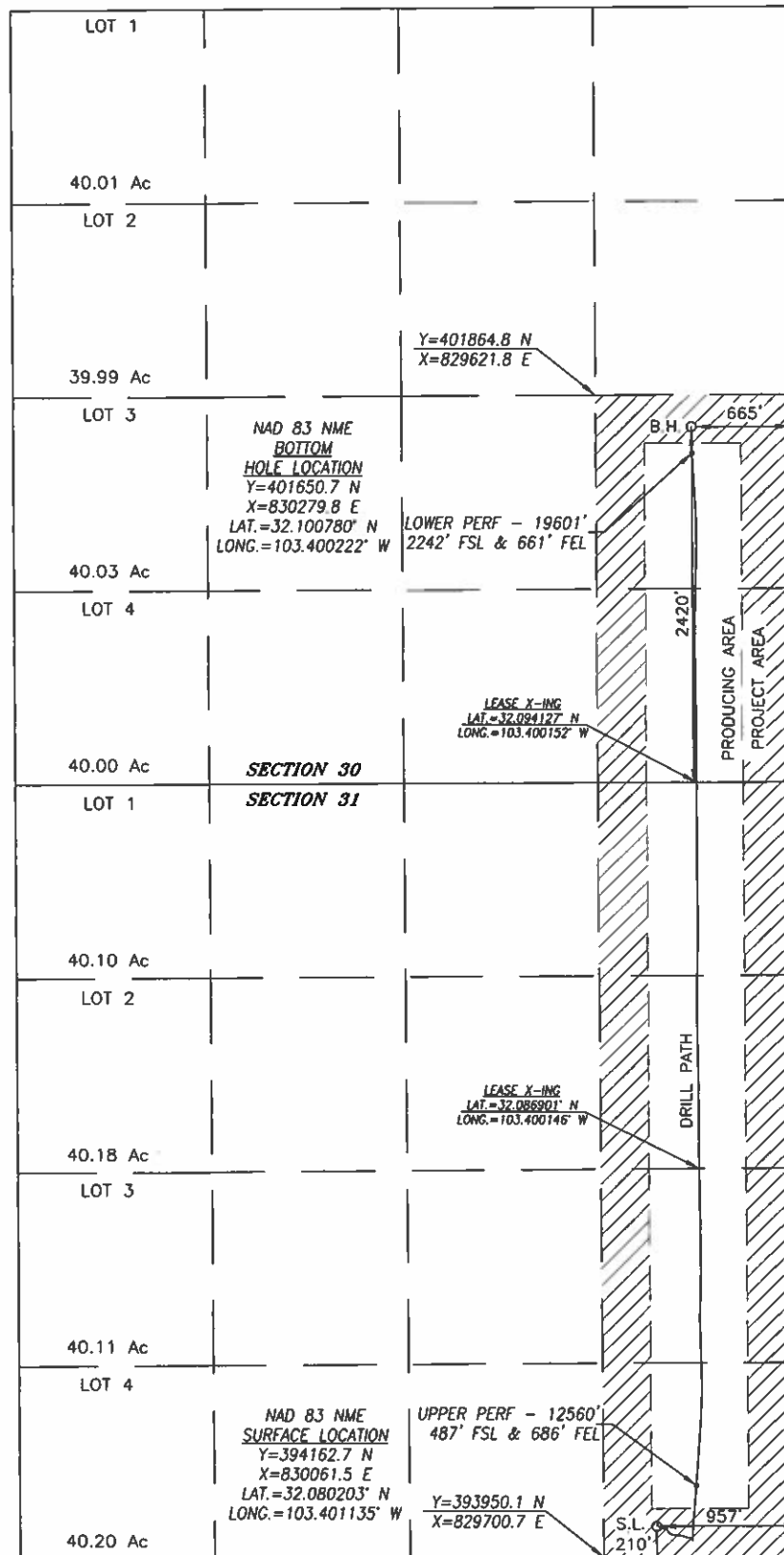
SEE PAGE 2

PAGE 1 OF 2

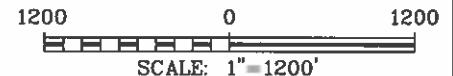
W.O. # 18-1221

DRAWN BY: SP

Property Code	Property Name <b>SQUARE BILL FEDERAL COM</b>	Well Number <b>1H</b>
OGRID No.	Operator Name <b>COG OPERATING, LLC</b>	Elevation <b>3274.4'</b>



BORSPATH SHOWN HEREON IS BASED ON DIRECTIONAL SURVEY REPORT PROVIDED BY COG FOR THE SQUARE BILL FED COM #1H SUPPLIED TO HARCROW SURVEYING, LLC ON SEPTEMBER 21, 2018.



#### 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.

*Jeanette Barron* 8/6/20  
Signature Date

Jeanette Barron

Printed Name

jbarron@concho.com

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.

FEB. 3, 2017, OCT. 11, 2018

Date of Survey/Dates of Geographic Survey

Signature & Seal of Professional Surveyor



*Chad Hargrow* 10/15/18  
Certificate No. CHAD HARGROW 17777

DISTRICT I  
1625 N. FRENCH DR., HOBBS, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II  
811 S. FIRST ST., ARTESIA, NM 88210  
Phone: (575) 748-1883 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) 476-3480 Fax: (505) 476-3482

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

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

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number 30-025-44397	Pool Code 17980	Pool Name Dogie Draw; Wolfcamp
Property Code 319617	Property Name SQUARE BILL FEDERAL COM	Well Number 21Y
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3273.8'

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	25-S	35-E		240	SOUTH	924	EAST	LEA

**Bottom Hole Location If Different From Surface**

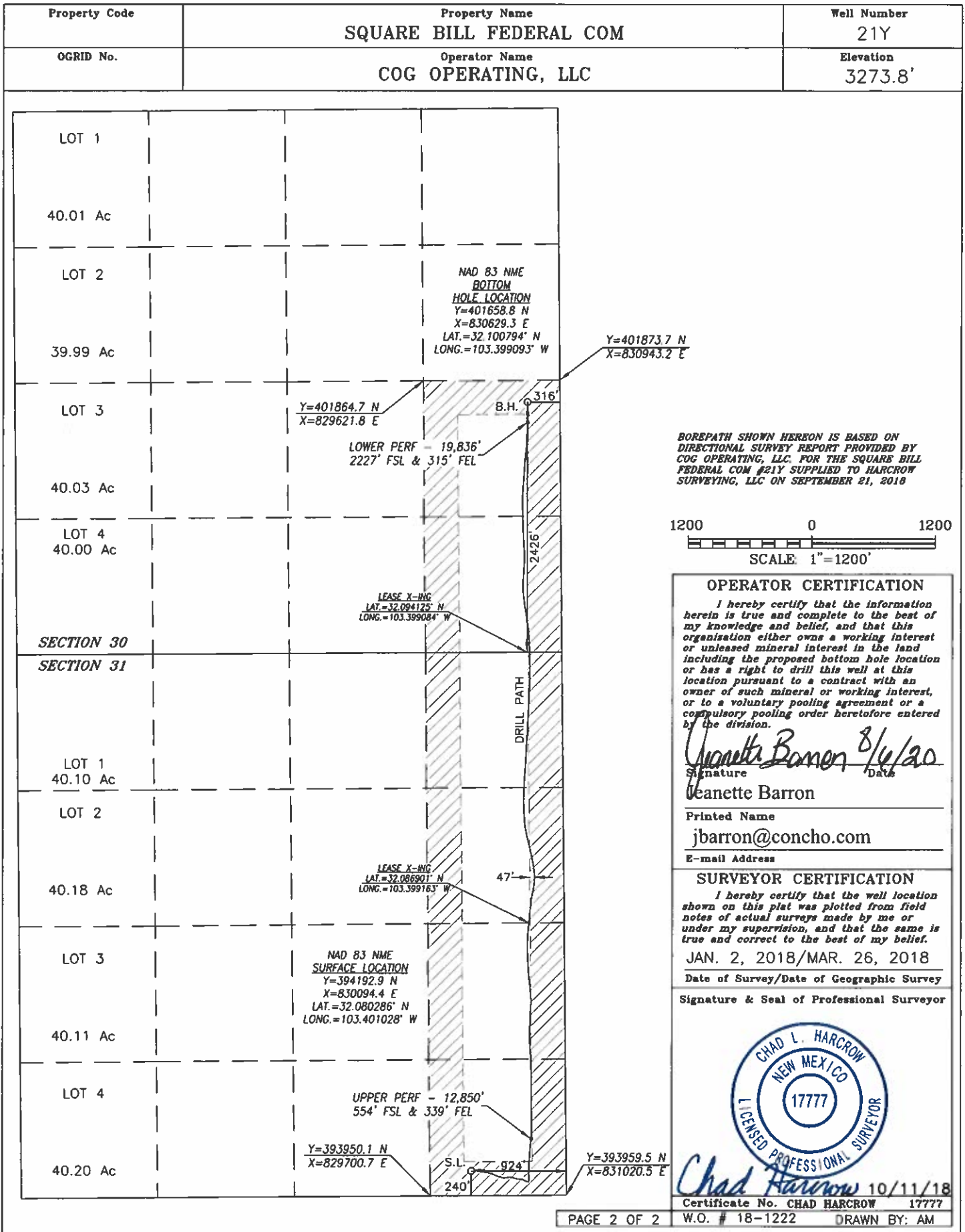
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	30	25-S	35-E		2426	SOUTH	316	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
240			

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

SEE PAGE 2





**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.

*Janette Barron* 8/6/20  
Signature Date

Janette Barron  
Printed Name

jbarron@concho.com  
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.

JAN. 2, 2018/MAR. 26, 2018  
Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor



*Chad Harcrow* 10/11/18  
Certificate No. CHAD HARCROW 17777  
W.O. # 18-1222 DRAWN BY: AM



**DISTRICT I**  
1626 N. FRENCH DR., HOBBS, NM 88240  
Phone: (505) 393-8181 Fax: (505) 393-9720

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

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

**DISTRICT IV**  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505  
Phone: (505) 476-3480 Fax: (505) 476-3482

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

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

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number 30-025-44047	Pool Code 17980	Pool Name Dogie Draw; Wolfcamp
Property Code 319617	Property Name SQUARE BILL FEDERAL COM	Well Number 22H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3273.6'

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	25-S	35-E		210	SOUTH	990	EAST	LEA

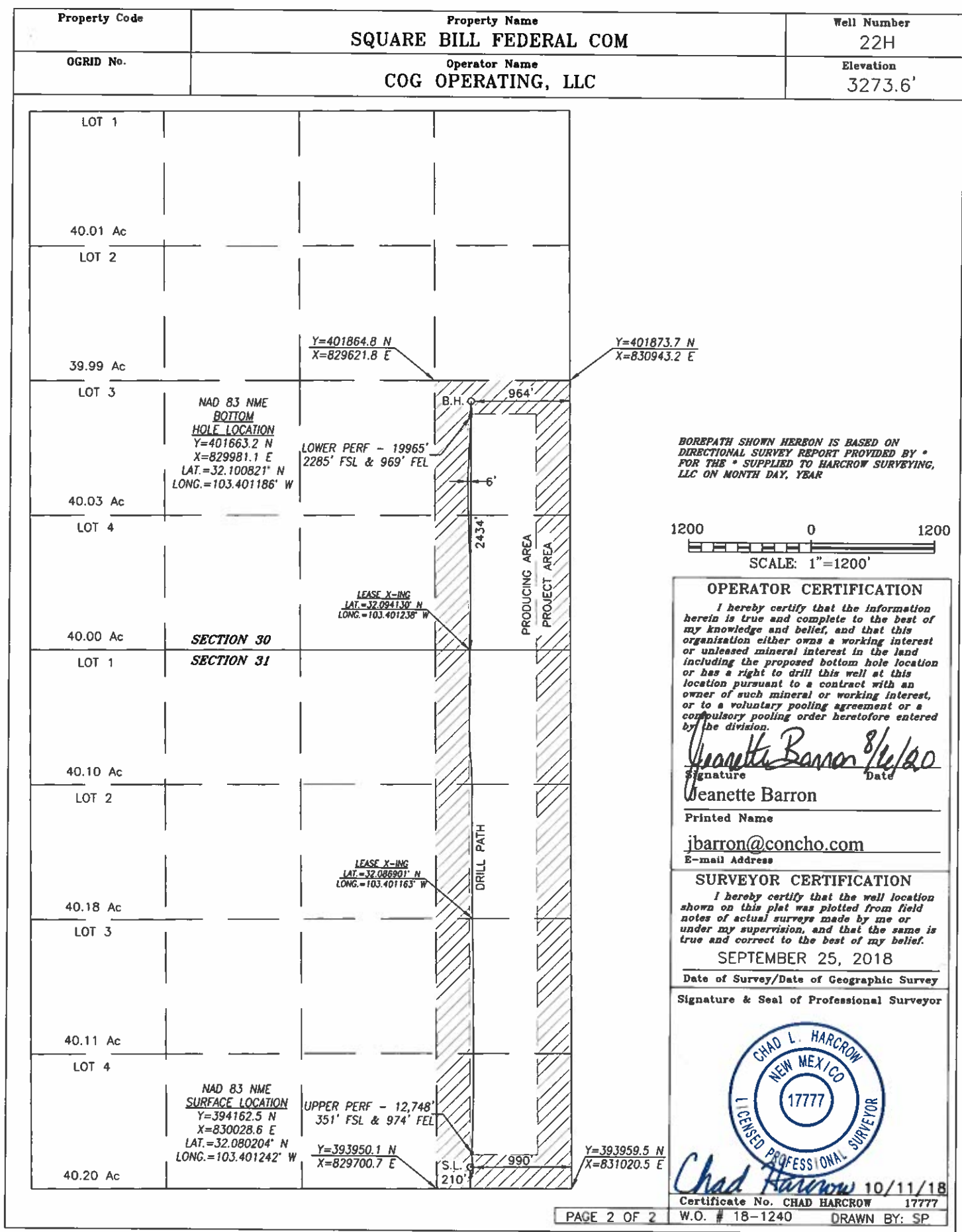
**Bottom Hole Location If Different From Surface**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	30	25-S	35-E		2434	SOUTH	964	EAST	LEA

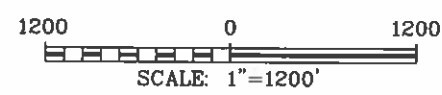
Dedicated Acres 240	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SEE PAGE 2



BOREPATH SHOWN HEREON IS BASED ON DIRECTIONAL SURVEY REPORT PROVIDED BY \* FOR THE \* SUPPLIED TO HARCROW SURVEYING, LLC ON MONTH DAY, YEAR



**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.

*Jeannette Barron* 8/6/20  
Signature Date  
Jeannette Barron

Printed Name  
jbarron@concho.com  
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.

SEPTEMBER 25, 2018

Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor



*Chad Harcrow* 10/11/18  
Certificate No. CHAD HARCROW 17777

**DISTRICT I**  
1625 N. FRENCH DR., HOBBS, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

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

**DISTRICT III**  
1000 RIO BRAZOS RD., AZTEC, NM 87410  
Phone: (505) 334-6176 Fax: (505) 334-6170

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

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

<b>API Number</b> 30-025-44048	<b>Pool Code</b> 17980	<b>Pool Name</b> Dogie Draw; Wolfcamp
<b>Property Code</b> 319617	<b>Property Name</b> SQUARE BILL FEDERAL COM	
<b>OGRID No.</b> 229137	<b>Operator Name</b> COG OPERATING, LLC	<b>Well Number</b> 23H  <b>Elevation</b> 3274.3'

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	25-S	35-E		210	SOUTH	1023	EAST	LEA

**Bottom Hole Location If Different From Surface**

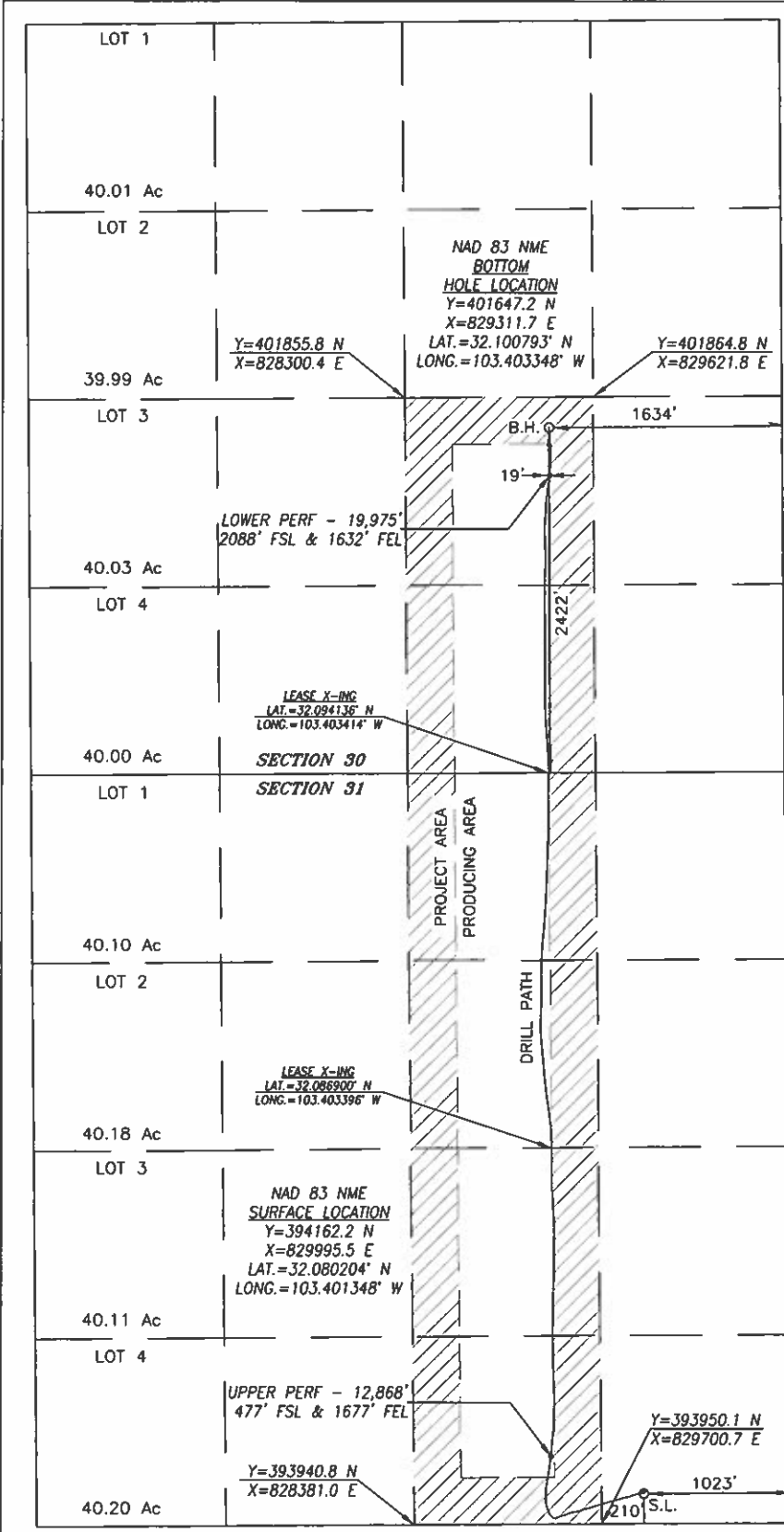
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	30	25-S	35-E		2422	SOUTH	1634	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
240			

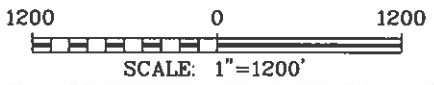
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
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SEE PAGE 2

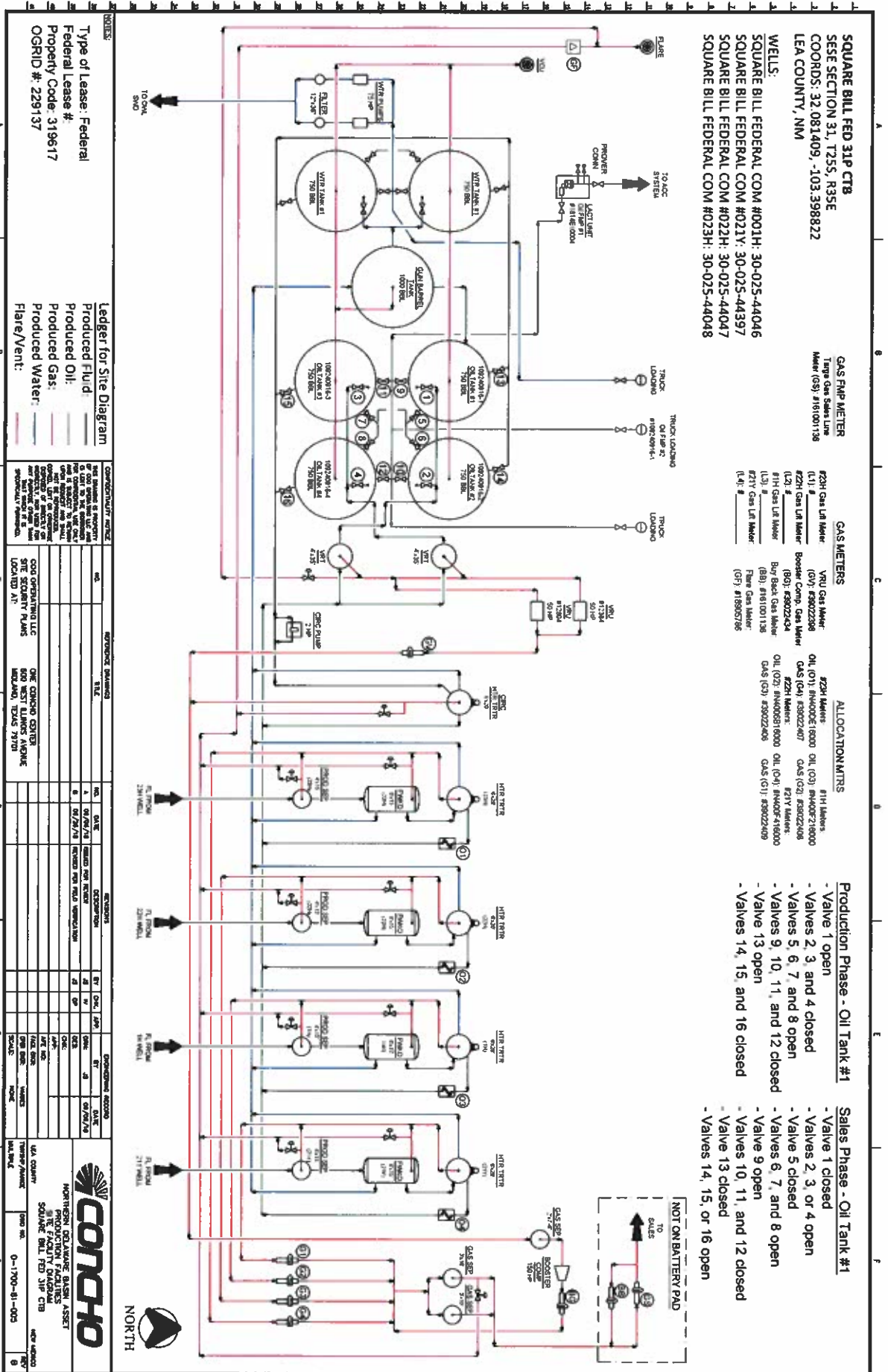
Property Code	Property Name	Well Number
OGRID No.	Operator Name	Elevation
	COG OPERATING, LLC	23H 3274.3'



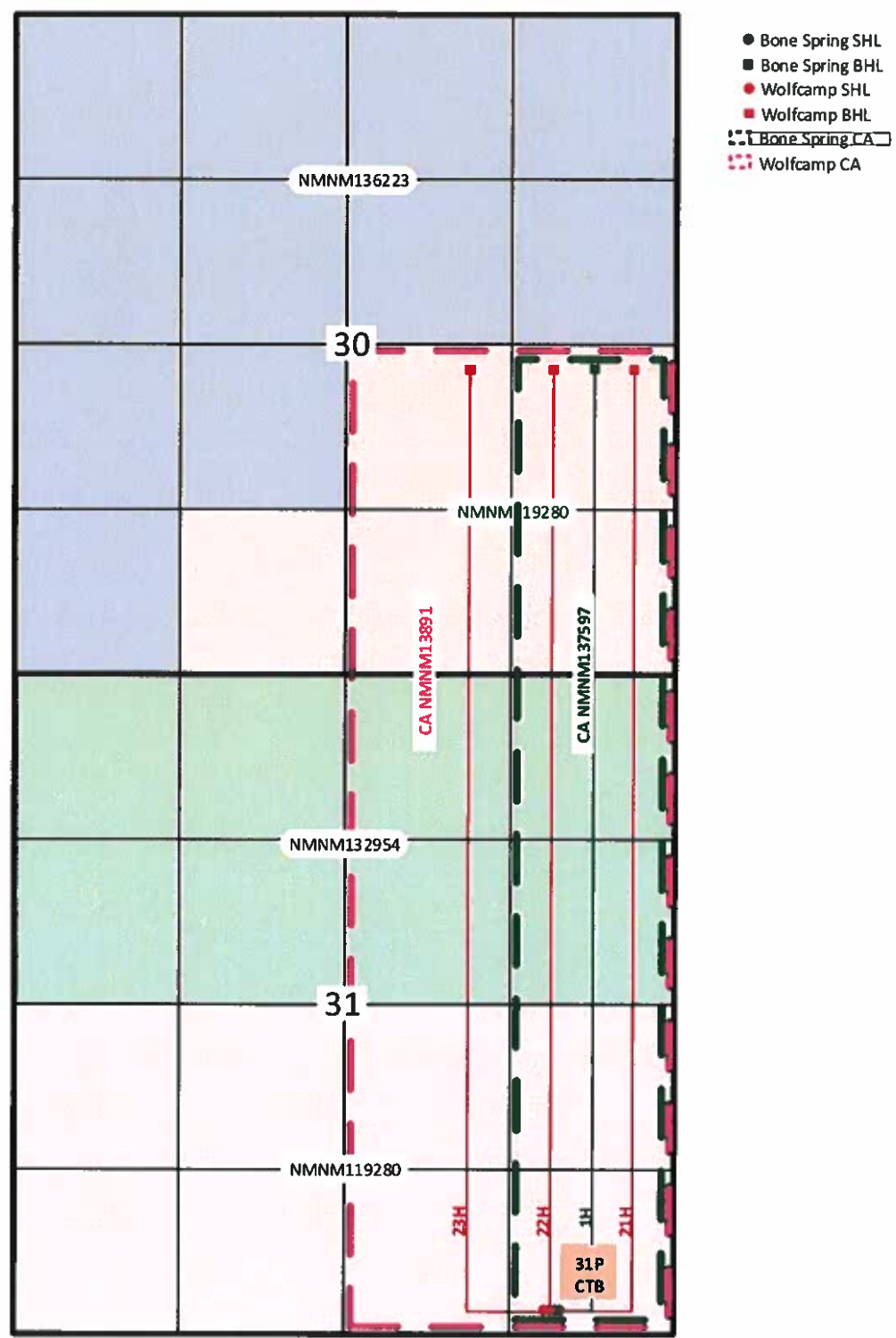
BOREPATH SHOWN HEREON IS BASED ON DIRECTIONAL SURVEY REPORT PROVIDED BY PHOENIX TECHNOLOGY SERVICES FOR THE SQUARE BILL FEDERAL COM #23H SUPPLIED TO HARCROW SURVEYING, LLC ON SEPTEMBER 25, 2018.



<b>OPERATOR CERTIFICATION</b>	
I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.	
Signature	<i>Jeanette Barron</i> 8/6/20
Date	
Printed Name	
jbarron@concho.com	
E-mail Address	
<b>SURVEYOR CERTIFICATION</b>	
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.	
9/25/2016 & 1/11/2018	
Date of Survey/Date of Geographic Survey	
Signature & Seal of Professional Surveyor	
<i>Chad Harrow</i> 10/11/18	
Certificate No. CHAD HARCROW 17777	
W.O. # 18-1241	
DRAWN BY: SP	



# Square Bill Federal Wells



Sec. 30,31-T25S-R35E  
Lea County, NM





SQUARE BILL  
FEDERAL COM #1H  
ELEV. - 3274.4'  
210' FSL & 957' FEL

SQUARE BILL  
FEDERAL COM #22H  
ELEV. - 3273.6'  
210' FSL & 990' FEL

SQUARE BILL  
FEDERAL COM #23H  
ELEV. - 3274.3'  
210' FSL & 1023' FEL

SQUARE BILL  
FEDERAL COM #21H  
ELEV. - 3274.4'  
210' FSL & 924' FEL

T 25 S

T 26 S

R 34 E

R 35 E

**LEGEND**

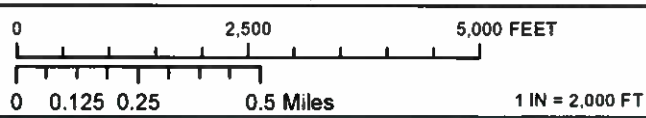
- WELL
- WELLPAD
- FLOWLINE

SQUARE BILL FEDERAL COM #1H, #21H, #22H, & #23H

SECTION: 31 TOWNSHIP: 25 S. RANGE: 35 E.

STATE: NEW MEXICO COUNTY: LEA SURVEY: N.M.P.M

W.O. # 17-122-125 LEASE: SQUARE BILL FED COM



LOCATION MAP IMAGERY 02/08/2017 J.H.



COG OPERATING, LLC

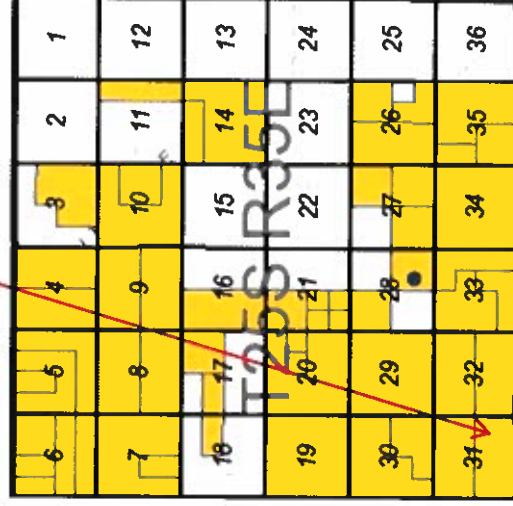


**HARCROW SURVEYING, LLC.**  
2314 W. MAIN ST, ARTESIA, NM 88210  
PH: (575) 746-2158 FAX: (575) 746-2158  
c.harcrow@harcrowsurveying.com

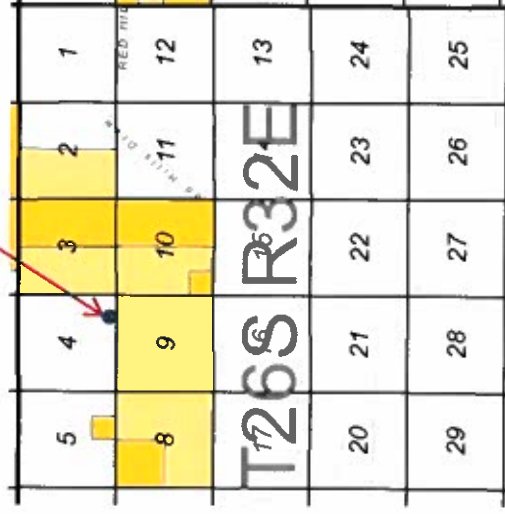


# Square Bill Fed Com 1H, 21Y, 22H, 23H & Red Hills and Jal Offload Station Map

Square Bill Fed Com 1H, 21Y, 22H,  
23H  
Lea County, NM



Red Hills Offload Station  
Lea County, NM



Jal Offload Station  
Lea County, NM



Production Summary Report						
API: 30-025-44046						
SQUARE BILL FEDERAL COM #001H						
Printed On: Sunday, August 02 2020						
		Production				
Year	Pool	Month	Oil(BBLS)	Gas(MCF)	Water(BBL)	Days P/I
2019	[97088] WC-025 G-08 S2535340;BONE SPRING	Dec	21224	31745	30317	31
2020	[97088] WC-025 G-08 S2535340;BONE SPRING	Jan	18717	25319	20872	31
2020	[97088] WC-025 G-08 S2535340;BONE SPRING	Feb	13576	18321	13891	23
2020	[97088] WC-025 G-08 S2535340;BONE SPRING	Mar	27651	48467	27242	31
2020	[97088] WC-025 G-08 S2535340;BONE SPRING	Apr	25813	44437	25437	30
2020	[97088] WC-025 G-08 S2535340;BONE SPRING	May	6160	14382	6762	11

Production Summary Report						
API: 30-025-44397						
SQUARE BILL FEDERAL COM #021Y						
Printed On: Sunday, August 02 2020						
		Production				
Year	Pool	Month	Oil(BBLS)	Gas(MCF)	Water(BBL)	Days P/I
2019	[17980] DOGIE DRAW;WOLFCAMP	Dec	10903	6723	12963	31
2020	[17980] DOGIE DRAW;WOLFCAMP	Jan	8427	10381	13769	31
2020	[17980] DOGIE DRAW;WOLFCAMP	Feb	9259	9640	14124	29
2020	[17980] DOGIE DRAW;WOLFCAMP	Mar	10098	3300	15734	31
2020	[17980] DOGIE DRAW;WOLFCAMP	Apr	5840	892	11920	30
2020	[17980] DOGIE DRAW;WOLFCAMP	May	7457	390	12700	31

Production Summary Report						
API: 30-025-44047						
SQUARE BILL FEDERAL COM #022H						
Printed On: Sunday, August 02 2020						
		Production				
Year	Pool	Month	Oil(BBLS)	Gas(MCF)	Water(BBL)	Days P/I
2019	[17980] DOGIE DRAW;WOLFCAMP	Dec	5919	7173	14868	31
2020	[17980] DOGIE DRAW;WOLFCAMP	Jan	6562	6324	16596	31
2020	[17980] DOGIE DRAW;WOLFCAMP	Feb	4815	5483	15698	29
2020	[17980] DOGIE DRAW;WOLFCAMP	Mar	4555	3551	15304	31
2020	[17980] DOGIE DRAW;WOLFCAMP	Apr	3696	1752	13697	30
2020	[17980] DOGIE DRAW;WOLFCAMP	May	4758	4557	14247	31

Production Summary Report						
API: 30-025-44048						
SQUARE BILL FEDERAL COM #023H						
Printed On: Sunday, August 02 2020						
		Production				
Year	Pool	Month	Oil(BBLS)	Gas(MCF)	Water(BBL)	Days P/I
2019	[17980] DOGIE DRAW;WOLFCAMP	Dec	12361	19617	19013	31
2020	[17980] DOGIE DRAW;WOLFCAMP	Jan	12243	18079	21423	31
2020	[17980] DOGIE DRAW;WOLFCAMP	Feb	9947	14836	18352	29
2020	[17980] DOGIE DRAW;WOLFCAMP	Mar	11523	15704	20472	31
2020	[17980] DOGIE DRAW;WOLFCAMP	Apr	11351	15650	20449	30
2020	[17980] DOGIE DRAW;WOLFCAMP	May	11578	20942	18949	31

Square Bill Fed Com 1H, 21Y, 22H, 23H PLC									
Date Sent	Initials	Name	Address	City	State	ZipCode	Certified Return Receipt No.	Delivered	
08.06.20	JB	OFFICE OF NATURAL RESOURCES REVENUE	Royalty Management Program P.O. Box 5760	Denver	CO	80217-5760	7017 3040 0000 1205 3177		
08.06.20	JB	MALAGA ROYALTY LLC	P O BOX 2064	MIDLAND	TX	79702	7017 3040 0000 1205 3160		
08.06.20	JB	MALAGA EF7 LLC	PO BOX 2064	MIDLAND	TX	79702	7017 3040 0000 1205 3153		
08.06.20	JB	BIM	414 West Taylor Street	Hobbs	NM	88240	7017 3040 0000 1205 3146		

**Hobbs News Sun****NewspaperLEGAL NOTICES**

**Please run for one day only.**

COG Operating LLC (COG), 2208 West Main Street, Artesia, New Mexico, 88210, is seeking administrative approval from the New Mexico Oil Conservation Division to commingle the oil and gas production from the Square Bill Federal Com 1H, 21Y, 22H and 23H wells. Said wells are located in Section 31, Township 25 South, Range 35 East, Lea County, New Mexico. The Central Tank Battery (CTB) where production will be commingled is located in Ut P, Section 31-T25S-R35E, Lea County, New Mexico. In the event oil production at the CTB is over capacity or in the case of battery or pipeline repairs, COG is also seeking administrative approval for off-lease measurement at either the Red Hills Off-load Station in Unit O, Section 4-T26S-R32E or the Jal Off-load Station in Unit D, Section 4-T26S-R37E, Lea County, NM. Any interested party who has an objection to this must give notice in writing to the Oil Conservation Division, 1220 South Saint Francis Street, Santa Fe, New Mexico, 87505, within ten (10) days of this notice. Any interested party with questions or comments may contact Adam Reker (432) 685-2515 [areker@concho.com](mailto:areker@concho.com) at COG Operating LLC, 600 West Illinois, Midland, Texas 79701.

Published on August 11th, 2020.

**Determination - Approval - Certification**

Pursuant to the authority vested in the Secretary of the Interior under Section 17(j) of the Mineral Leasing Act of 1920, as amended (74 Stat. 784; 30 U.S.C. 226(j)), and delegated to the authorized officer of the Bureau of Land Management, I do hereby:

- A. Determine that the Federal lease or leases as to the lands committed to the attached agreement cannot be independently developed and operated in conformity with the well-spacing program established for the field or area in which said lands are located, and that consummation and approval of the agreement will be in the public interest. Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject leases which are committed hereto.
- B. Approve the attached Communitization Agreement covering the E2SE of sec. 30, and the E2E2 of Sec. 31, T. 25 S., R. 35 E., NMPM, as to all producible hydrocarbons from the Bone Spring formation. This approval will become invalid if the public interest requirements under section 3105.2-3 (c) are not met.
- C. Certify and determine that the drilling, producing, rental, minimum royalty and royalty requirements of the Federal lease or leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of the agreement.

Approved: 03/02/2018



Cody R. Layton  
Assistant Field Manager  
Lands and Minerals

Effective: September 1, 2017

Contract No.: Com. Agr. NMNM137597

LEA COUNTY, NM  
 KEITH HANES, COUNTY CLERK  
 000023926  
 Book 2133 Page 42  
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 04/27/2018 02:35 PM  
 BY CHERI LONG

Federal/Federal

Contract No. NM137597

THIS AGREEMENT entered into as of the date shown in Section 10 hereof by and between the parties subscribing, ratifying, or consenting hereto, such parties being hereinafter referred to as "parties hereto."

WITNESSETH:

WHEREAS, the Act of February 25, 1920 (41 Stat. 437), as amended and supplemented, authorizes communitization or drilling agreements communitizing or pooling a Federal oil and gas lease, or any portion thereof, with other lands, whether or not owned by the United States, when separate tracts under such Federal lease cannot be independently developed and operated in conformity with an established well-spacing program for the field or area and such communitization or pooling is determined to be in the public interest; and

WHEREAS, the parties hereto own working, royalty, or other leasehold interests, or operating rights under the oil and gas leases and lands subject to this Agreement which cannot be independently developed and operated in conformity with the well-spacing program established for the field or area in which said lands are located; and

WHEREAS, the parties hereto desire to communitize and pool their respective mineral interests in lands subject to this Agreement for the purpose of developing and producing communitized substances in accordance with the terms and conditions of this Agreement:

NOW, THEREFORE, in consideration of the premises and the mutual advantages to the parties hereto, it is mutually covenanted and agreed by and between the parties hereto as follows:

1. The lands covered by this Agreement (hereinafter referred to as "communitized area") are described as follows:

**Township 25 South, Range 35 East, N.M.P.M.**  
**Section 30: E2SE4**  
**Section 31: E2E2**  
**Lea County, New Mexico**

containing 240.00 acres, and this agreement shall include only the Bone Spring Formation underlying said lands and the natural gas and associated liquid hydrocarbons, hereafter referred to as "communitized substances," producible from such formation.

2. Attached hereto, and made a part of this Agreement for all purposes is Exhibit A, a plat designating the communitized area and, Exhibit B, designating the operator of the communitized area and showing the acreage, percentage, and ownership of oil and gas interests in all lands within the communitized area, and the authorization, if any, for communitizing or pooling any patented or fee lands within the communitized area.

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3. The Operator of the communitized area shall be **COG Operating LLC, as Operator, 600 W. Illinois Avenue, Midland, Texas 79701**. All matters of operations shall be governed by the operator under and pursuant to the terms and provisions of this Agreement. A successor operator may be designated by the owners of the working interest in the communitized area and four (4) executed copies of a designation of successor operator shall be filed with the Authorized Officer.
4. Operator shall furnish the Secretary of the Interior, or his authorized representative, with a log and history of any well drilled on the communitized area, monthly reports of operations, statements of oil and gas sales and royalties, and such other reports as are deemed necessary to compute monthly the royalty due the United States, as specified in the applicable oil and gas operating regulations.
5. The communitized area shall be developed and operated as an entirety, with the understanding and agreement between the parties hereto that all communitized substances produced there from shall be allocated among the leaseholds comprising said area in the proportion that the acreage interest of each leasehold bears to the entire acreage interest committed to this agreement.  
  
 All proceeds, 8/8ths, attributed to unleased Federal, State, or fee land included within the CA area are to be placed in an interest earning escrow or trust account by the designated operator until the land is leased or ownership is established.
6. The royalties payable on communitized substances allocated to the individual leases comprising the communitized area and the rentals provided for in said leases shall be determined and paid on the basis prescribed in each of the individual leases. Payments of rentals under the terms of leases subject to this Agreement shall not be affected by this Agreement except as provided for under the terms and provisions of said leases or as may herein be otherwise provided. Except as herein modified and changed, the oil and gas leases subject to this Agreement shall remain in full force and effect as originally made and issued. It is agreed that for any Federal lease bearing a sliding- or step-scale rate of royalty, such rate shall be determined separately as to production from each communitization agreement to which such lease may be committed, and separately as to any non-communitized lease production, provided, however, in regard to leases where the rate of royalty for gas is based on total lease production per day, such rate shall be determined by the sum of all communitized production allocated to such a lease plus any non-communitized lease production.
7. There shall be no obligation on the lessees to offset any well or wells completed in the same formation as covered by this Agreement on separate component tracts into which the communitized area is now or may hereafter be divided, nor shall any lessee be required to measure separately communitized substances by reason of the diverse ownership thereof, but the lessees hereto shall not be released from their obligation to protect said communitized area from drainage of communitized substances by a well or wells which may be drilled offsetting said area.
8. The commencement, completion, continued operation, or production of a well or wells for communitized substances on the communitized area shall be construed and considered as the commencement, completion, continued operation, or production on each and all of the lands

Square Bill Federal Com 1H



Federal/Federal

within and comprising said communitized area, and operations or production pursuant to this Agreement shall be deemed to be operations or production as to each lease committed hereto.

9. Production of communitized substances and disposal thereof shall be in conformity with allocation, allotments, and quotas made or fixed by any duly authorized person or regulatory body under applicable Federal or State statutes. This Agreement shall be subject to all applicable Federal and State laws or executive orders, rules, and regulations, and no party hereto shall suffer a forfeiture or be liable in damages for failure to comply with any of the provisions of this Agreement if such compliance is prevented by, or if such failure results from, compliance with any such laws, orders, rules, or regulations.
  10. The date of this agreement is September 1, 2017, and it shall become effective as of this date or from the onset of production of communitized substances, whichever is earlier upon execution by the necessary parties, notwithstanding the date of execution, and upon approval by the Secretary of the Interior or by his duly authorized representative, and shall remain in force and effect for a period of two (2) years and for as long as communitized substances are, or can be, produced from the communitized area in paying quantities: Provided, that prior to production in paying quantities from the communitized area and upon fulfillment of all requirements of the Secretary of the Interior, or his duly authorized representative, with respect to any dry hole or abandoned well, this Agreement may be terminated at any time by mutual agreement of the parties hereto. This Agreement shall not terminate upon cessation of production if, within sixty (60) days thereafter, reworking or drilling operations on the communitized area are commenced and are thereafter conducted with reasonable diligence during the period of non-production. The two (2) year term of this Agreement will not in itself serve to extend the term of any Federal lease which would otherwise expire during said period.
  11. The covenants herein shall be construed to be covenants running with the land with respect to the communitized interests of the parties hereto and their successors in interests until this Agreement terminates and any grant, transfer, or conveyance of any such land or interest subject hereto, whether voluntary or not, shall be and hereby is conditioned upon the assumption of all obligations hereunder by the grantee, transferee, or other successor in interest, and as to Federal land shall be subject to approval by the Secretary of the Interior, or his duly authorized representative.
  12. It is agreed between the parties hereto that the Secretary of the Interior, or his duly authorized representative, shall have the right of supervision over all Fee and State mineral operations within the communitized area to the extent necessary to monitor production and measurement, and assure that no avoidable loss of hydrocarbons occurs in which the United States has an interest pursuant to applicable oil and gas regulations of the Department of the Interior relating to such production and measurement.
  13. This Agreement shall be binding upon the parties hereto and shall extend to and be binding upon their respective heirs, executors, administrators, successors, and assigns.
  14. This Agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instrument, in writing,
- Square Bill Federal Com 1H

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specifically referring hereto, and shall be binding upon all parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all parties had signed the same document.

15. **Non-Discrimination:** In connection with the performance of work under this Agreement, the operator agrees to comply with all the provisions of Section 202(1) to (7) inclusive, of Executive Order 11246 (30F.R. 12319), as amended, which are hereby incorporated by reference in this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written and have set opposite their respective names the date of execution.

**OPERATOR:**

COG Operating, LLC

Date: 9/11/2017

By:   
Mark A. Carter  
Attorney-In-Fact

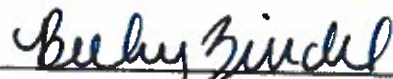
*MW*  
*S. MLF*

**ACKNOWLEDGEMENT**

STATE OF TEXAS §  
§  
COUNTY OF MIDLAND §

The foregoing instrument was acknowledged before me on the 11th day of September, 2017, by Mark A. Carter, as Attorney-In-Fact of COG Operating LLC, a Delaware limited liability company, on behalf of said limited liability company.



  
Notary Public in and for the State of Texas  
My Commission Expires 7-10-2021

LEA COUNTY, NM  
KEITH HANES, COUNTY CLERK  
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04/27/2018 02:35 PM  
BY CHERI LONG

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**WORKING INTEREST OWNERS AND/OR LESSEES OF RECORD:**

DATE: 9/11/2017

COG Operating LLC

By: Mark A. Carter

Printed Name: Mark A. Carter

Title: Attorney-In-Fact

MLF  
JMW

DATE: 9/11/2017

COG Production LLC

By: Mark A. Carter

Printed Name: Mark A. Carter

Title: Attorney-In-Fact

MLF  
JMW

**ACKNOWLEDGEMENTS**

STATE OF TEXAS §

§

COUNTY OF MIDLAND §

This instrument was acknowledged before me on September 11th 2017, by Mark A. Carter, Attorney-In-Fact, of COG Operating LLC, a Delaware Limited Liability Company, on behalf of same.

7/10/2021

My Commission Expires

Becky Zindel

Notary Public in and for the State of Texas



STATE OF TEXAS §

§

COUNTY OF MIDLAND §

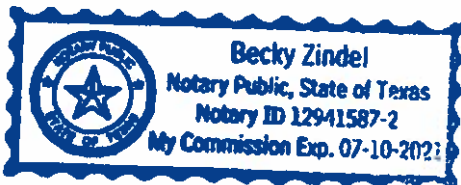
This instrument was acknowledged before me on September 11th 2017, by Mark A. Carter, Attorney-In-Fact, of COG Production LLC, a Texas Limited Liability Company, on behalf of said Limited Liability Company.

7/10/2021

My Commission Expires

Becky Zindel

Notary Public in and for the State of Texas



Federal/Federal

**EXHIBIT "A"**

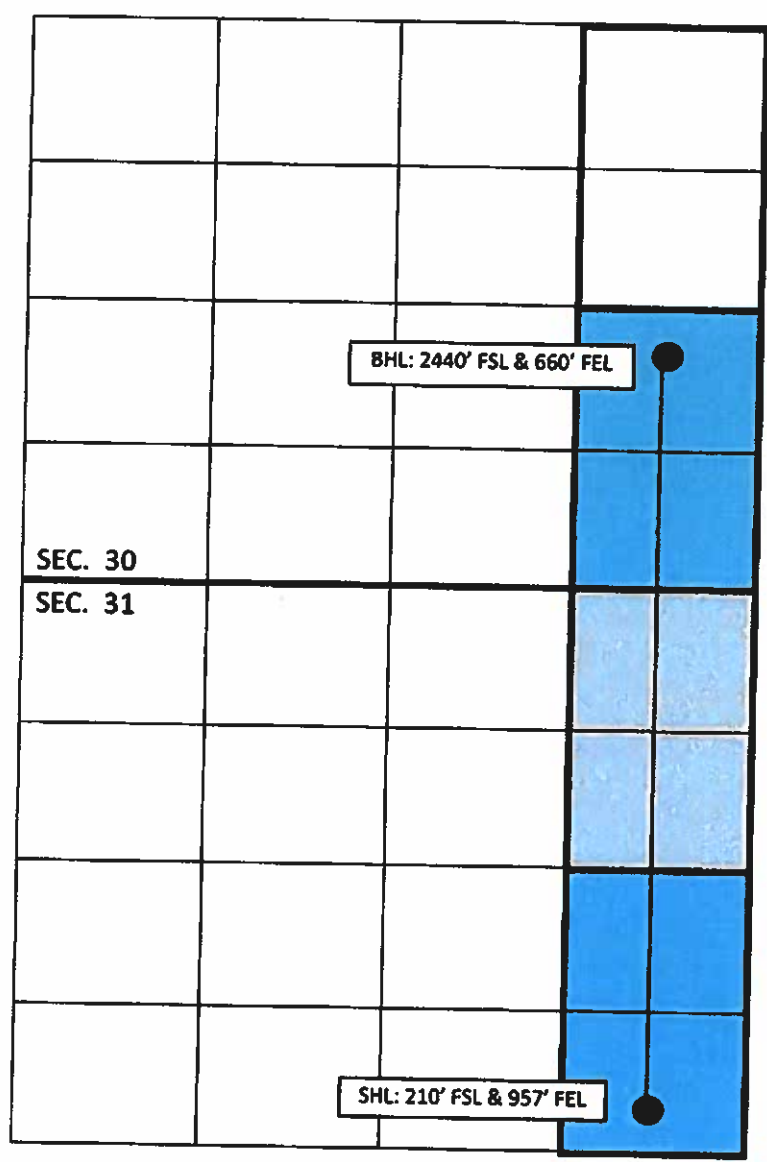
Plat of communitized area covering the E2SE4 of Section 30,  
and the E2E2 of Section 31, T25S -- R35E,  
N.M.P.M., Lea County, New Mexico

**Square Bill Federal Com 1H**

**Tract 1:**  
USA NM 119280



**Tract 2:**  
USA NM 132954



**Square Bill Federal Com 1H**

LEA COUNTY, NM  
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Book 2133 Page 42  
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BY CHERI LONG

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### EXHIBIT "B"

Attached to and made a part of that Communitization Agreement dated September 1, 2017, covering the E2SE4 of Section 30, and the E2E2 of Section 31, T25S – R35E, N.M.P.M., Lea County, New Mexico

Operator of Communitized Area: **COG Operating LLC**

#### DESCRIPTION OF LEASES COMMITTED:

Tract No.:	One (1)
Lease Serial No.:	USA NM 119280
Lease Date:	Effective December 1, 2007
Lease Term:	Ten (10) Years
Lessor:	United States of America
Original Lessee:	OGX Resources LLC
Present Lessee:	COG Production LLC
Description of Land Committed:	Insofar only as said lease covers: <u>Township 25 South, Range 35 East, N.M.P.M.</u> Section 30: E2SE4 Section 31: E2SE4 Lea County, New Mexico
Number of Acres:	160.00
Royalty Rate:	12.5%
Name and Percent of ORRI Owners:	Of Record
Name and Percent of WI Owners:	COG Production LLC 100.00%
Recordation:	Not Recorded

Tract No.:	Two (2)
Lease Serial No.:	USA NM 132954
Lease Date:	Effective October 1, 2014
Lease Term:	Ten (10) Years
Lessor:	United States of America
Original Lessee:	COG Operating LLC
Present Lessee:	COG Operating LLC
Description of Land Committed:	Insofar only as said lease covers: <u>Township 25 South, Range 35 East, N.M.P.M.</u> Section 31: E2NE4 Lea County, New Mexico
Number of Acres:	80.00
Royalty Rate:	12.5%
Name and Percent of ORRI Owners:	Of Record
Name and Percent of WI Owners:	COG Operating LLC 100.00%
Recordation:	Not Recorded

Square Bill Federal Com 1H

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BY CHERI LONG

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**RECAPITULATION**


Tract No.	No. of Acres Committed	Percentage of Interest in Communitized Area
1	160.00	66.666667%
2	80.00	33.333333%
Total	240.00	100.000000%

Determination – Approval – Certification

Pursuant to the authority nested in the Secretary of the Interior under Section 17(j) of the Mineral Leasing Act of 1920, as amended (74 Stat. 784; 30 U.S.C. 226(j)), and delegated to the authorized officer of the Bureau of Land Management, I do hereby:

- A. Determine that the Federal lease or leases as to the lands committed to the attached agreement cannot be independently developed and operated in conformity with the well-spacing program established for the field or area in which said lands are located, and that consummation and approval of the agreement will be in the public interest. Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject leases which are committed hereto.
  
- B. Approve the attached Communitization Agreement covering SE of sec. 30 and E2 of sec. 31, T. 25 S., R. 35 E., NMPM, as to all producible hydrocarbons from the Wolfcamp formation. This approval will become invalid if the public interest requirements under section 3105.2-3 (c) are not met.
  
- C. Certify and determine that the drilling, producing, rental, minimum royalty and royalty requirements of the Federal lease or leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of the agreement.

Approved:      **AUG - 8 2019**

  
 \_\_\_\_\_  
 James Glover  
 Supervisory Geologist  
 Branch of Reservoir Management  
 Division of Minerals

Effective: September 1, 2017

Contract No: Com. Agr. NMNM138981

LEA COUNTY, NM  
 KEITH MANES, COUNTY CLERK  
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 09/16/2019 10:29 AM  
 BY CARRIE SANDOVAL



Federal/Federal

Contract No. NmNM 138981

THIS AGREEMENT entered into as of the date shown in Section 10 hereof by and between the parties subscribing, ratifying, or consenting hereto, such parties being hereinafter referred to as "parties hereto."

## WITNESSETH:

WHEREAS, the Act of February 25, 1920 (41 Stat. 437), as amended and supplemented, authorizes communitization or drilling agreements communitizing or pooling a Federal oil and gas lease, or any portion thereof, with other lands, whether or not owned by the United States, when separate tracts under such Federal lease cannot be independently developed and operated in conformity with an established well-spacing program for the field or area and such communitization or pooling is determined to be in the public interest; and

WHEREAS, the parties hereto own working, royalty, or other leasehold interests, or operating rights under the oil and gas leases and lands subject to this Agreement which cannot be independently developed and operated in conformity with the well-spacing program established for the field or area in which said lands are located; and

WHEREAS, the parties hereto desire to communitize and pool their respective mineral interests in lands subject to this Agreement for the purpose of developing and producing communitized substances in accordance with the terms and conditions of this Agreement:

NOW, THEREFORE, in consideration of the premises and the mutual advantages to the parties hereto, it is mutually covenanted and agreed by and between the parties hereto as follows:

1. The lands covered by this Agreement (hereinafter referred to as "communitized area") are described as follows:

**Township 25 South, Range 35 East, N.M.P.M.**

**Section 30: SE4**

**Section 31: E2**

**Lea County, New Mexico**

containing 480.00 acres, and this agreement shall include only the Wolfcamp Formation underlying said lands and the natural gas and associated liquid hydrocarbons, hereafter referred to as "communitized substances," producible from such formation.

2. Attached hereto, and made a part of this Agreement for all purposes is Exhibit A, a plat designating the communitized area and, Exhibit B, designating the operator of the communitized area and showing the acreage, percentage, and ownership of oil and gas interests in all lands within the communitized area, and the authorization, if any, for communitizing or pooling any patented or fee lands within the communitized area.

Square Bill Federal Com 21Y, 22H, 23H

LEA COUNTY, NM  
KEITH MANES, COUNTY CLERK  
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BY CARRIE SANDOVAL

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Federal/Federal

3. The Operator of the communitized area shall be **COG Operating LLC, as Operator, 600 W. Illinois Avenue, Midland, Texas 79701**. All matters of operations shall be governed by the operator under and pursuant to the terms and provisions of this Agreement. A successor operator may be designated by the owners of the working interest in the communitized area and four (4) executed copies of a designation of successor operator shall be filed with the Authorized Officer.
4. Operator shall furnish the Secretary of the Interior, or his authorized representative, with a log and history of any well drilled on the communitized area, monthly reports of operations, statements of oil and gas sales and royalties, and such other reports as are deemed necessary to compute monthly the royalty due the United States, as specified in the applicable oil and gas operating regulations.
5. The communitized area shall be developed and operated as an entirety, with the understanding and agreement between the parties hereto that all communitized substances produced there from shall be allocated among the leaseholds comprising said area in the proportion that the acreage interest of each leasehold bears to the entire acreage interest committed to this agreement.

All proceeds, 8/8ths, attributed to unleased Federal, State, or fee land included within the CA area are to be placed in an interest earning escrow or trust account by the designated operator until the land is leased or ownership is established.

6. The royalties payable on communitized substances allocated to the individual leases comprising the communitized area and the rentals provided for in said leases shall be determined and paid on the basis prescribed in each of the individual leases. Payments of rentals under the terms of leases subject to this Agreement shall not be affected by this Agreement except as provided for under the terms and provisions of said leases or as may herein be otherwise provided. Except as herein modified and changed, the oil and gas leases subject to this Agreement shall remain in full force and effect as originally made and issued. It is agreed that for any Federal lease bearing a sliding- or step-scale rate of royalty, such rate shall be determined separately as to production from each communitization agreement to which such lease may be committed, and separately as to any non-communitized lease production, provided, however, in regard to leases where the rate of royalty for gas is based on total lease production per day, such rate shall be determined by the sum of all communitized production allocated to such a lease plus any non-communitized lease production.
7. There shall be no obligation on the lessees to offset any well or wells completed in the same formation as covered by this Agreement on separate component tracts into which the communitized area is now or may hereafter be divided, nor shall any lessee be required to measure separately communitized substances by reason of the diverse ownership thereof, but the lessees hereto shall not be released from their obligation to protect said communitized area from drainage of communitized substances by a well or wells which may be drilled offsetting said area.
8. The commencement, completion, continued operation, or production of a well or wells for communitized substances on the communitized area shall be construed and considered as the

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commencement, completion, continued operation, or production on each and all of the lands within and comprising said communitized area, and operations or production pursuant to this Agreement shall be deemed to be operations or production as to each lease committed hereto.

9. Production of communitized substances and disposal thereof shall be in conformity with allocation, allotments, and quotas made or fixed by any duly authorized person or regulatory body under applicable Federal or State statutes. This Agreement shall be subject to all applicable Federal and State laws or executive orders, rules, and regulations, and no party hereto shall suffer a forfeiture or be liable in damages for failure to comply with any of the provisions of this Agreement if such compliance is prevented by, or if such failure results from, compliance with any such laws, orders, rules, or regulations.
10. The date of this agreement is September 1, 2017, and it shall become effective as of this date or from the onset of production of communitized substances, whichever is earlier upon execution by the necessary parties, notwithstanding the date of execution, and upon approval by the Secretary of the Interior or by his duly authorized representative, and shall remain in force and effect for a period of two (2) years and for as long as communitized substances are, or can be, produced from the communitized area in paying quantities: Provided, that prior to production in paying quantities from the communitized area and upon fulfillment of all requirements of the Secretary of the Interior, or his duly authorized representative, with respect to any dry hole or abandoned well, this Agreement may be terminated at any time by mutual agreement of the parties hereto. This Agreement shall not terminate upon cessation of production if, within sixty (60) days thereafter, reworking or drilling operations on the communitized area are commenced and are thereafter conducted with reasonable diligence during the period of non-production. The two (2) year term of this Agreement will not in itself serve to extend the term of any Federal lease which would otherwise expire during said period.
11. The covenants herein shall be construed to be covenants running with the land with respect to the communitized interests of the parties hereto and their successors in interests until this Agreement terminates and any grant, transfer, or conveyance of any such land or interest subject hereto, whether voluntary or not, shall be and hereby is conditioned upon the assumption of all obligations hereunder by the grantee, transferee, or other successor in interest, and as to Federal land shall be subject to approval by the Secretary of the Interior, or his duly authorized representative.
12. It is agreed between the parties hereto that the Secretary of the Interior, or his duly authorized representative, shall have the right of supervision over all Fee and State mineral operations within the communitized area to the extent necessary to monitor production and measurement, and assure that no avoidable loss of hydrocarbons occurs in which the United States has an interest pursuant to applicable oil and gas regulations of the Department of the Interior relating to such production and measurement.
13. This Agreement shall be binding upon the parties hereto and shall extend to and be binding upon their respective heirs, executors, administrators, successors, and assigns.

LEA COUNTY, NM  
 KEITH MANES, COUNTY CLERK  
 000046994  
 Book 2156 Page 36  
 5 of 9  
 09/16/2019 10:29 AM  
 BY CARRIE SANDOVAL

Federal/Federal

14. This Agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instrument, in writing, specifically referring hereto, and shall be binding upon all parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all parties had signed the same document.
15. Non-Discrimination: In connection with the performance of work under this Agreement, the operator agrees to comply with all the provisions of Section 202(1) to (7) inclusive, of Executive Order 11246 (30F.R. 12319), as amended, which are hereby incorporated by reference in this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written and have set opposite their respective names the date of execution.

**OPERATOR:**

COG Operating, LLC

Date: 8-13-18

By:

  
 Mark A. Carter  
 Attorney-In-Fact

MT  


**ACKNOWLEDGEMENT**

STATE OF TEXAS §

§

COUNTY OF MIDLAND §

The foregoing instrument was acknowledged before me on the 13<sup>th</sup> day of August, 2018, by Mark A. Carter, as Attorney-In-Fact of **COG Operating LLC**, a Delaware limited liability company, on behalf of said limited liability company.



  
 Notary Public in and for the State of Texas

LEA COUNTY, NM  
KEITH MANES, COUNTY CLERK  
089846994  
Book 2156 Page 36  
6 of 9  
09/16/2019 18:29 AM  
BY CARRIE SANDOVAL

Federal/Federal

**WORKING INTEREST OWNERS AND/OR LESSEES OF RECORD:**

DATE: 8-13-18

COG Operating LLC

By: *Mark A. Carter*

Printed Name: Mark A. Carter

Title: Attorney-In-Fact

DATE: 8-13-18

COG Production LLC

By: *Mark A. Carter*

Printed Name: Mark A. Carter

Title: Attorney-In-Fact

**ACKNOWLEDGEMENTS**

STATE OF TEXAS §  
COUNTY OF MIDLAND §

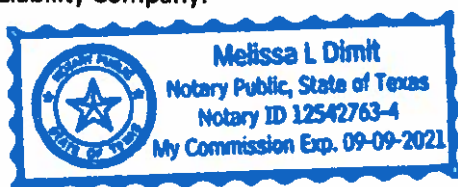
This instrument was acknowledged before me on August 13, 2018, by Mark A. Carter, Attorney-In-Fact, of **COG Operating LLC**, a Delaware Limited Liability Company, on behalf of same.



*Melissa L. Dimit*  
Notary Public in and for the State of Texas

STATE OF TEXAS §  
COUNTY OF MIDLAND §

This instrument was acknowledged before me on August 13, 2018, by Mark A. Carter, Attorney-In-Fact, of **COG Production LLC**, a Texas Limited Liability Company, on behalf of said Limited Liability Company.



*Melissa L. Dimit*  
Notary Public in and for the State of Texas

Federal/Federal

**EXHIBIT "A"**

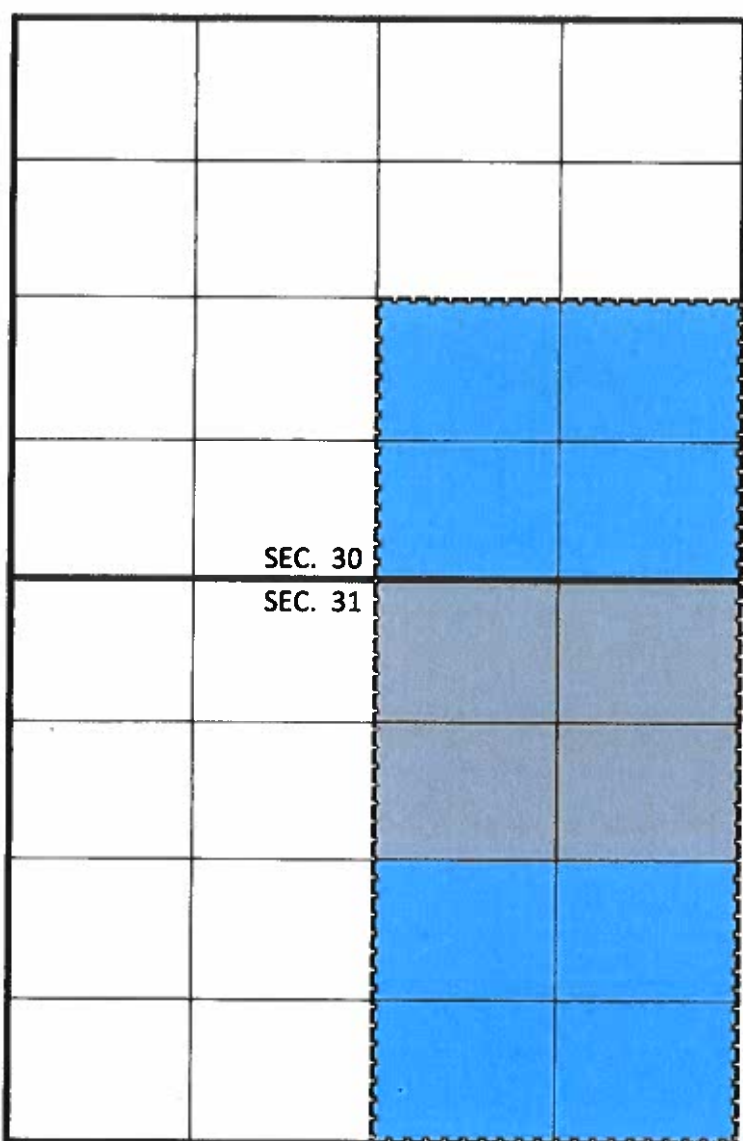
Plat of communized area covering the SE4 of Section 30,  
and the E2 of Section 31, T25S – R35E, N.M.P.M., Lea County, New Mexico

**Square Bill Federal Com 21Y, 22H, 23H**

**Tract 1:**  
USA NM 119280



**Tract 2:**  
USA NM 132954





LEA COUNTY, NM  
 KEITH MANES, COUNTY CLERK  
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 BY CARRIE SANDOVAL

Federal/Federal

## EXHIBIT "B"

Attached to and made a part of that Communitization Agreement dated September 1, 2017, covering the SE4 of Section 30, and the E2 of Section 31, T25S – R35E, N.M.P.M., Lea County, New Mexico

Operator of Communitized Area: **COG Operating LLC**

### DESCRIPTION OF LEASES COMMITTED:

Tract No.:	One (1)
Lease Serial No.:	<b>USA NM 119280</b>
Lease Date:	Effective December 1, 2007
Lease Term:	Ten (10) Years
Lessor:	United States of America
Original Lessee:	OGX Resources LLC
Present Lessee:	COG Production LLC
Description of Land Committed:	Insofar only as said lease covers: <u>Township 25 South, Range 35 East, N.M.P.M.</u> Section 30: SE4 Section 31: SE4 Lea County, New Mexico
Number of Acres:	320.00
Royalty Rate:	12.5%
Name and Percent of ORRI Owners:	Of Record
Name and Percent of WI Owners:	COG Production LLC 100.00%
Recordation:	Not Recorded

Tract No.:	Two (2)
Lease Serial No.:	<b>USA NM 132954</b>
Lease Date:	Effective October 1, 2014
Lease Term:	Ten (10) Years
Lessor:	United States of America
Original Lessee:	COG Operating LLC
Present Lessee:	COG Operating LLC
Description of Land Committed:	Insofar only as said lease covers: <u>Township 25 South, Range 35 East, N.M.P.M.</u> Section 31: NE4 Lea County, New Mexico
Number of Acres:	160.00
Royalty Rate:	12.5%
Name and Percent of ORRI Owners:	Of Record
Name and Percent of WI Owners:	COG Operating LLC 100.00%
Recordation:	Not Recorded



LEA COUNTY, NM  
 KEITH MANES, COUNTY CLERK  
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 09/16/2019 10:29 AM  
 BY CARRIE SANDOVAL

Federal/Federal

**RECAPITULATION**

Tract No.	No. of Acres Committed	Percentage of Interest in Communitized Area
1	320.00	66.666667%
2	160.00	33.333333%
<b>Total</b>	<b>480.00</b>	<b>100.000000%</b>

## APPLICATION FOR POOL LEASE COMMINGLING AT CENTRAL TANK BATTERY

COG Operating LLC is requesting approval for pool lease commingling of production from the following wells:

### Federal Lease #NMNM119280, NMNM132954; 12.5% Royalty Rate; CA# NMNM137597

Location Sec 31, T25S-R35E

Pool; 97088 Wildcat; Bone Spring

Well Name;	API #	Est Oil BOPB	Est Oil Gravity	Est Gas MCFPD	Est Gas BTU
Square Bill Federal Com 1H	30-025-44046	1470	42.4	1975	1489

### Federal Lease #NMNM119280, NMNM132954; 12.5% Royalty Rate; CA# NMNM13981

Location Sec 31, T25S-R35E

Pool; 17980 Doggie Draw; Wolfcamp

Well Name;	API #	Est Oil BOPB	Est Oil Gravity	Est Gas MCFPD	Est Gas BTU
Square Bill Federal Com 21Y	30-025-44397	260	44.2	143	1437
Square Bill Federal Com 22H	30-025-44047	150	44.1	125	1415
Square Bill Federal Com 23H	30-025-44048	450	43.1	570	1437

### Oil and Gas Metering:

Production from the Square Bill 31 Federal 21-Y, 1H, 22H and 23H each will enter into their own dedicated 3-phase inlet vessel. Oil from each vessel will be continuously measured with allocation meters. Gas will be continuously measured with allocation meters, as well.

After the oil from the Square Bill 31 Federal 21-Y, 1H, 22H and 23H is individually measured it will be commingled and sent to a heater treater(s) and then vapor recovery tower. From the vapor recovery tower, the oil will enter the storage tanks and then be sold through a pipeline LACT FMP, temporary truck LACT FMP, or truck load line FMP. After the gas from the Square Bill 31 Federal 21-Y, 1H, 22H and 23H is individually measured it will be commingled and sent to the purchaser's sales meter, which will be the gas FMP.

During normal operations a vapor recovery unit and booster compressor will pull flashing gas off the heater treater and VRT; this gas will be commingled and sent to the gas FMP.

### Flares

During normal operating conditions the high-pressure flare will be inactive. If the gas sales line pressure exceeds the facility design pressure then the commingled gas will be sent to the high-pressure flare, measured and burned. Gas that flashes off the oil and water tanks will be sent to the lower pressure flare, measured and burned. If power to the VRU is lost, then gas from the heater treater and VRT will be sent to the low-pressure flare, measured and burned.

### Gas Lift Compression

The Square Bill 31 Federal 21-Y, 1H, 22H and 23H will be utilizing gas lift for artificial lift. Commingled gas will be sent to the gas lift compressor where it will be compressed and measured with an allocation meter.

### Process and Flow Diagram:

The flow of production is shown in detail on the enclosed facility diagram. The commingling of this production is the most effective, economical means of producing the reserves and will not result in reduced royalty or improper measurement of production. The proposed commingling will reduce operating expenses as well as reduce the surface facility footprint and overall emissions.

COG Operating LLC understands the requested approval will not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.

Respectfully,

*Jeanette Barron*  
Jeanette Barron

Production Technician II



# Serial Register Page

Aug 04, 2020

01 12-22-1987;101STAT1330;30USC181 ET SE

**Case Type:** O&g lse comp pd -1987

**Serial Number:** NMNM 119280

**Commodity:** Oil & gas

**Acres:** 880.320

**Disposition:** Authorized

## Lessee

<u>Owner Name</u>	<u>Street</u>	<u>City</u>	<u>State</u>	<u>Zip</u>	<u>Net Acres</u>	<u>%Int</u>
COG PRODUCTION LLC	600 W ILLINOIS AVE	MIDLAND	TX	79701	880.320	100.00

<b>Meridian:</b>	New Mex	<b>State:</b>	NM	<b>County:</b>	Lea
<b>Township:</b>	25 S	<b>Range:</b>	35 E	<b>Admin Agency</b>	
<b>Section:</b>	26	NE;		BUREAU OF LAND MGMT	
<b>Section:</b>	30	SESW,SE;		BUREAU OF LAND MGMT	
<b>Section:</b>	31	E2SW,SE;		BUREAU OF LAND MGMT	
<b>Section:</b>	31	3,4;		BUREAU OF LAND MGMT	
<b>Section:</b>	33	E2E2,NWNE;		BUREAU OF LAND MGMT	

<u>Code</u>	<u>Action</u>	<u>Date</u>	<u>Remarks</u>
387	Case established	8/30/2007	200710021;
191	Sale held	10/17/2007	
267	Bid received	10/17/2007	\$528600.00;
237	Lease issued	11/30/2007	
974	Automated record verif	11/30/2007	BTM
496	Fund code	12/1/2007	05;145003
530	Rlty rate - 12 1/2%	12/1/2007	
868	Effective date	12/1/2007	
42	Case sent to	12/10/2007	RROMERO;
899	Trf of orr filed	9/19/2011	1
940	Name change recognized	11/18/2011	OGX RES LLC/COG PROD
236	Escalated rental status	9/1/2017	NMNM137599;
246	Lease committed to ca	9/1/2017	NMNM137597;
246	Lease committed to ca	9/1/2017	NMNM137598;
246	Lease committed to ca	9/1/2017	NMNM138981;
235	Extended	11/30/2017	THRU 11/30/19;
974	Automated record verif	2/2/2018	RCC

<u>Code</u>	<u>Action</u>	<u>Date</u>	<u>Remarks</u>
650	Held by prod - actual	8/10/2018	/1/
658	Memo of 1st prod-actual	8/10/2018	/1/NMNM137598;#22H
658	Memo of 1st prod-actual	8/10/2018	/4/NMNM138981;#22H
658	Memo of 1st prod-actual	8/15/2018	/3/NMNM137599;#23H
658	Memo of 1st prod-actual	8/17/2018	/2/NMNM137597;#1H
899	Trf of orr filed	9/24/2018	1
643	Production determination	10/26/2018	/1/
643	Production determination	10/26/2018	/2/
643	Production determination	10/26/2018	/3/
522	Ca terminated	6/25/2019	NMNM137598;
522	Ca terminated	6/25/2019	NMNM137599;
643	Production determination	8/8/2019	/4/

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Remarks

STIPULATIONS ATTACHED TO LEASE:

NM-11-LN SPECIAL CULTURAL RESOURCE

SENM-S-19 PLAYAS AND ALKALI LAKES

SENM-S-20 SPRINGS, SEEPS AND TANKS

SENM-S-22 PRAIRIE CHICKENS

/B/NMNM137598 WAS REPLACED BY NMNM 138981 EFFECTIVE

09/01/2017

/C/NMNM137599 WAS REPLACED BY NMNM 138981 EFFECTIVE

09/01/2017



## Serial Register Page

Aug 04, 2020

01 12-22-1987;101STAT1330;30USC181 ET SE

Case Type: O&amp;g lse comp pd -1987

Serial Number: NMNM 132954

Commodity: Oil &amp; gas

Acres: 320.320

Disposition: Authorized

**Lessee**

Owner Name	Street	City	State	Zip	Net Acres	%Int
COG OPERATING LLC	600 W ILLINOIS AVE	MIDLAND	TX	79701-4882	320.320	100.00

Meridian:	New Mex	State:	NM	County:	Lea
Township:	25 S	Range:	35 E	<b>Admin Agency</b>	
Section:	31	NE,E2NW;		BUREAU OF LAND MGMT	
Section:	31	1,2;		BUREAU OF LAND MGMT	

Code	Action	Date	Remarks
387	Case established	4/16/2014	201407031;
143	Bonus bid payment recd	7/16/2014	\$642.00;
191	Sale held	7/16/2014	
267	Bid received	7/16/2014	\$5136000.00;
143	Bonus bid payment recd	7/25/2014	\$5135358.00;
237	Lease issued	9/16/2014	
974	Automated record verif	9/16/2014	JA
496	Fund code	10/1/2014	05;145003
530	Rty rate - 12 1/2%	10/1/2014	
868	Effective date	10/1/2014	
246	Lease committed to ca	9/1/2017	NMNM 138981;
246	Lease committed to ca	9/1/2017	NMNM137597;
246	Lease committed to ca	9/1/2017	NMNM137598;/B/
246	Lease committed to ca	9/1/2017	NMNM137599;/C/
650	Held by prod - actual	8/10/2018	/1/
658	Memo of 1st prod-actual	8/10/2018	/1/NMNM137598;#22H
658	Memo of 1st prod-actual	8/10/2018	/4/NMNM138981;#22H
658	Memo of 1st prod-actual	8/15/2018	/3/NMNM137599;#23H
658	Memo of 1st prod-actual	8/17/2018	/2/NMNM137597;#1H
643	Production determination	10/26/2018	/1/

<u>Code</u>	<u>Action</u>	<u>Date</u>	<u>Remarks</u>
643	Production determination	10/26/2018	/2/
643	Production determination	10/26/2018	/3/
522	Ca terminated	6/25/2019	/B/NMNM137598;
522	Ca terminated	6/25/2019	/C/NMNM137599;
643	Production determination	8/8/2019	/4/

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**Remarks**

STIPULATIONS ATTACHED TO LEASE:

NM-11-LN SPECIAL CULTURAL RESOURCES

SENM-S-16 RAPTOR NESTS AND HERONRIES

SENM-S-22 PRAIRIE CHICKENS

SENM-S-34 ZONE 3 - POD

/B/CA NMNM 137598 REPLACED BY NMNM 138981 EFFECTIVE

09/01/2017

/C/CA NMNM 137599 REPLACED BY NMNM 138981 EFFECTIVE

09/01/2017



IHS Markit

# Serial Register Page

Jul 29, 2020

01 02-25-1920;041STAT0437;30USC181

Case Type: O&g communitization agrmt

Serial Number: NMNM 137597

Commodity: Oil & gas

Acres: 240.000

Disposition: Authorized

## Office Of Record

Owner Name	Street	City	State	Zip	Net Acres	%Int
BLM CARLSBAD FO	620 E GREENE ST	CARLSBAD	NM	88220	0.000	0.00

## Operator

Owner Name	Street	City	State	Zip	Net Acres	%Int
COG OPERATING LLC	600 W ILLINOIS AVE	MIDLAND	TX	79701-4882	240.000	100.00

Meridian: New Mex

State: NM

County: Lea

Township: 25 S

Range: 35 E

## Admin Agency

Section: 30 E2SE;

BUREAU OF LAND MGMT

Section: 31 E2E2;

BUREAU OF LAND MGMT

Code	Action	Date	Remarks
387	Case established	9/1/2017	
516	Formation	9/1/2017	BONE SPRING;
526	Acres-fed int 100%	9/1/2017	240;100%
868	Effective date	9/1/2017	/A/
580	Proposal received	9/22/2017	CA RECD
334	Agrmt approved	3/2/2018	
654	Agrmt producing	8/17/2018	NMNM137597,1H
690	Agrmt validated	10/26/2018	

## Remarks

/A/RECAPITULATION EFFECTIVE 09/01/2017

TR#	LEASE SERIAL NO	AC COMMITTED	% INTEREST
1	NMNM119280	160.00	66.666667
2	NMNM132954	80.00	33.333333
	TOTAL	240.00	100.000000





# Serial Register Page

Jul 29, 2020

01 02-25-1920;041STAT0437;30USC181

Case Type: O&g communitization agrmt

Serial Number: NMNM 138981

Commodity: Oil & gas

Acres: 480.000

Disposition: Authorized

## Office Of Record

Owner Name	Street	City	State	Zip	Net Acres	%Int
BLM NMSO	301 DINOSAUR TRL	SANTA FE	NM	87508-1560	0.000	0.00

## Operator

Owner Name	Street	City	State	Zip	Net Acres	%Int
COG OPERATING LLC	600 W ILLINOIS AVE	MIDLAND	TX	79701-4882	480.000	100.00

Meridian: New Mex

State: NM

County: Lea

Township: 25 S

Range: 35 E

## Admin Agency

Section: 30 SE;

BUREAU OF LAND MGMT

Section: 31 E2;

BUREAU OF LAND MGMT

Code	Action	Date	Remarks
387	Case established	9/1/2017	
516	Formation	9/1/2017	WOLFCAMP;
868	Effective date	9/1/2017	/A/B/
654	Agrmt producing	8/10/2018	NMNM138981, 22H
580	Proposal received	9/11/2018	CA RECD;
334	Agrmt approved	8/8/2019	
690	Agrmt validated	8/8/2019	

## Remarks

/A/RECAPITULATION EFFECTIVE 09/01/2017

TR#	LEASE SERIAL NO	AC COMMITTED	% INTEREST
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1	NMNM 119280	320.00	66.6667
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2	NMNM 132954	160.00	33.3333
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TOTAL	480.00	100.0000	
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/B/NMNM138981 REPLACES NMNM 137598 AND NMNM 137599

**Remarks**

EFFECTIVE 09/01/2017



# Certificate of Analysis

Number: 6030-20070104-010A

**Artesia Laboratory**  
200 E Main St.  
Artesia, NM 88210  
Phone 575-746-3481

Concho Oil & Gas  
Concho Oil & Gas  
2407 Pecos Ave.  
Artesia, NM 88210

July 21, 2020

Station Name: Square Bill Fed Com 1H  
Station Number: 39022408  
Station Location: COG  
Sample Point: Meter Run  
Type of Sample: Spot-Cylinder  
Heat Trace Used: N/A  
Sampling Method: Fill and Purge  
Sampling Company: SPL  
Analyzed: 07/21/2020 08:06:08 by PS

Sampled By: James Hill  
Sample Of: Gas Spot  
Sample Date: 07/16/2020 10:38  
Sample Conditions: 83 psig, @ 106 °F Ambient: 90 °F  
Effective Date: 07/16/2020 10:38  
Method: GPA-2261M  
Cylinder No: 1111-001255  
Instrument: 70104251 (Inficon Gas Chromatograph-MFusion)  
Last Inst. Cal.: 07/20/2020 0:00 AM

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia	
Hydrogen Sulfide	0.000	0.00100	0.001		GPM TOTAL C2+
Nitrogen	1.570	1.57149	1.738		GPM TOTAL C3+
Methane	65.734	65.78330	41.654		GPM TOTAL iC5+
Carbon Dioxide	0.212	0.21246	0.369		
Ethane	14.537	14.54791	17.266	3.911	
Propane	9.586	9.59366	16.697	2.657	
Iso-butane	1.185	1.18580	2.720	0.390	
n-Butane	3.663	3.66588	8.410	1.162	
Iso-pentane	0.833	0.83313	2.372	0.306	
n-Pentane	0.975	0.97524	2.777	0.355	
Hexanes Plus	1.629	1.63013	5.996	0.715	
	99.924	100.00000	100.000	9.496	

### Calculated Physical Properties

	Total	C6+
Relative Density Real Gas	0.8793	3.2176
Calculated Molecular Weight	25.34	93.19
Compressibility Factor	0.9945	

### GPA 2172 Calculation:

#### Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia & 60°F

Real Gas Dry BTU	1489	5141
Water Sat. Gas Base BTU	1464	5052
Ideal, Gross HV - Dry at 14.73 psia	1480.9	5141.1
Ideal, Gross HV - Wet	1455.1	5051.6

**Comments:** H2S Field Content 10 ppm  
Mcf/day 1215

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.



# Certificate of Analysis

Number: 6030-20070104-012A

**Artesia Laboratory**  
200 E Main St.  
Artesia, NM 88210  
Phone 575-746-3481

Concho Oil & Gas  
Concho Oil & Gas  
2407 Pecos Ave.  
Artesia, NM 88210

July 21, 2020

Station Name:	Square Bill Fed Com 21Y	Sampled By:	James Hill
Station Number:	39022409	Sample Of:	Gas Spot
Station Location:	COG	Sample Date:	07/16/2020 10:00
Sample Point:	Meter Run	Sample Conditions:	76 psig, @ 99 °F Ambient: 90 °F
Type of Sample:	Spot-Cylinder	Effective Date:	07/16/2020 10:00
Heat Trace Used:	N/A	Method:	GPA-2261M
Sampling Method:	Fill and Purge	Cylinder No:	1111-002501
Sampling Company:	SPL	Instrument:	70104251 (Inficon Gas Chromatograph-MFusion)
Analyzed:	07/21/2020 07:58:29 by PS	Last Inst. Cal.:	07/20/2020 0:00 AM

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Nitrogen	1.720	1.71995	1.974		GPM TOTAL C2+	9.012
Methane	66.686	66.69578	43.840		GPM TOTAL C3+	5.011
Carbon Dioxide	0.174	0.17373	0.313		GPM TOTAL iC5+	0.831
Ethane	14.889	14.89106	18.346	4.001		
Propane	9.882	9.88343	17.856	2.736		
Iso-butane	1.137	1.13686	2.707	0.374		
n-Butane	3.378	3.37889	8.046	1.070		
Iso-pentane	0.652	0.65189	1.927	0.240		
n-Pentane	0.714	0.71440	2.112	0.260		
Hexanes Plus	0.754	0.75401	2.879	0.331		
	99.986	100.00000	100.000	9.012		

<b>Calculated Physical Properties</b>	<b>Total</b>	<b>C6+</b>
Relative Density Real Gas	0.8466	3.2176
Calculated Molecular Weight	24.41	93.19
Compressibility Factor	0.9950	

### GPA 2172 Calculation:

#### Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia & 60°F

Real Gas Dry BTU	1437	5141
Water Sat. Gas Base BTU	1412	5052
Ideal, Gross HV - Dry at 14.73 psia	1429.7	5141.1
Ideal, Gross HV - Wet	1404.8	5051.6

**Comments:** H2S Field Content 0 ppm  
Mcf/day 560

Hydrocarbon Laboratory Manager

**Quality Assurance:** The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.



# Certificate of Analysis

Number: 6030-20040067-005A

Artesia Laboratory  
200 E Main St.  
Artesia, NM 88210  
Phone 575-746-3481

Concho Oil & Gas  
Concho Oil & Gas  
2407 Pecos Ave.  
Artesia, NM 88210

Apr. 13, 2020

Station Name: Square Bill Fed Com 22H  
Station Number: 39022406  
Station Location: COG  
Sample Point: Meter Run  
Type of Sample: Spot-Cylinder  
Heat Trace Used: N/A  
Sampling Method: Fill and Purge  
Sampling Company: SPL  
Analyzed: 04/13/2020 12:24:40 by PS

Sampled By: James Hill  
Sample Of: Gas Spot  
Sample Date: 04/09/2020 10:30  
Sample Conditions: 60 psig, @ 82 °F Ambient: 66 °F  
Effective Date: 04/09/2020 10:30  
Method: GPA-2261M  
Cylinder No: 1111-002580  
Instrument: 70104124 (Inficon Micro GC Fusion)  
Last Inst. Cal.: 04/13/2020 0:00 AM

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Nitrogen	1.693	1.69951	1.985		GPM TOTAL C2+	8.727
Methane	67.322	67.58064	45.193		GPM TOTAL C3+	4.662
Carbon Dioxide	0.171	0.17206	0.316		GPM TOTAL iC5+	0.742
Ethane	15.072	15.13019	18.965	4.065		
Propane	9.397	9.43296	17.339	2.611		
Iso-butane	1.044	1.04802	2.539	0.345		
n-Butane	3.032	3.04347	7.374	0.964		
Iso-pentane	0.573	0.57470	1.728	0.211		
n-Pentane	0.637	0.63935	1.923	0.233		
Hexanes Plus	0.677	0.67910	2.638	0.298		
	99.618	100.00000	100.000	8.727		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.8320	3.2176
Calculated Molecular Weight	23.99	93.19
Compressibility Factor	0.9952	

### GPA 2172 Calculation:

#### Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia & 60°F

Real Gas Dry BTU	1415	5141
Water Sat. Gas Base BTU	1391	5052
Ideal, Gross HV - Dry at 14.73 psia	1407.7	5141.1
Ideal, Gross HV - Wet	1383.2	5051.6

Comments: H2S Field Content 0 ppm  
Mcf/day 190

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.



# Certificate of Analysis

Number: 6030-20070104-013A

**Artesia Laboratory**  
200 E Main St.  
Artesia, NM 88210  
Phone 575-746-3481

Concho Oil & Gas  
Concho Oil & Gas  
2407 Pecos Ave.  
Artesia, NM 88210

July 21, 2020

Station Name: Square Bill Fed Com 23H  
Station Number: 39022407  
Station Location: COG  
Sample Point: Meter Run  
Type of Sample: Spot-Cylinder  
Heat Trace Used: N/A  
Sampling Method: Fill and Purge  
Sampling Company: SPL  
Analyzed: 07/21/2020 07:58:28 by PS

Sampled By: James Hill  
Sample Of: Gas Spot  
Sample Date: 07/16/2020 11:53  
Sample Conditions: 84 psig, @ 110 °F Ambient: 90 °F  
Effective Date: 07/16/2020 11:53  
Method: GPA-2261M  
Cylinder No: 5030-01115  
Instrument: 70104124 (Inficon Gas Chromatograph-MFusion)  
Last Inst. Cal.: 07/20/2020 0:00 AM

## Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia	
Hydrogen Sulfide	0.000	0.00025	0.000		GPM TOTAL C2+
Nitrogen	1.623	1.62407	1.866		GPM TOTAL C3+
Methane	66.789	66.82862	43.966		GPM TOTAL IC5+
Carbon Dioxide	0.177	0.17691	0.319		
Ethane	15.143	15.15235	18.684	4.072	
Propane	9.565	9.57052	17.306	2.649	
Iso-butane	1.107	1.10806	2.641	0.364	
n-Butane	3.291	3.29327	7.849	1.043	
Iso-pentane	0.661	0.66120	1.956	0.243	
n-Pentane	0.745	0.74555	2.206	0.272	
Hexanes Plus	0.839	0.83920	3.207	0.368	
	99.940	100.00000	100.000	9.011	

<b>Calculated Physical Properties</b>	<b>Total</b>	<b>C6+</b>
Relative Density Real Gas	0.8459	3.2176
Calculated Molecular Weight	24.39	93.19
Compressibility Factor	0.9950	

### GPA 2172 Calculation:

#### Calculated Gross BTU per ft<sup>3</sup> @ 14.73 psia & 60°F

Real Gas Dry BTU	1437	5141
Water Sat. Gas Base BTU	1413	5052
Ideal, Gross HV - Dry at 14.73 psia	1430.1	5141.1
Ideal, Gross HV - Wet	1405.2	5051.6

**Comments:** H2S Field Content 2.5 ppm  
Mcf/day 915

Hydrocarbon Laboratory Manager

**Quality Assurance:** The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.