

RECEIVED: 7/7/20	REVIEWER: DM	TYPE: PLC	APP NO: pDM2018935900
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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:** Brot Helm Federal Com 601H and five other wells (see attached)**API:** 30-025-46065**Pool:** Red Hills; Bone Spring, East & WC-02 G-09 S253402N; Wolfcamp**Pool Code:** 97369 / 98116

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 holdersB. ☐ Royalty, overriding royalty owners, revenue ownersC. ☐ Application requires published noticeD. ☐ Notification and/or concurrent approval by SLOE. ☒ Notification and/or concurrent approval by BLMF. ☐ Surface ownerG. ☐ 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

7/7/20

575-746-6974

Phone Number

jbarron@concho.com

e-mail Address



July 7, 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:

Brot Helm Federal Com 601H
API# 30-025-46065
Red Hills; Bone Spring, East
Ut. A, Sec. 35-T24S-R34E
Lea County, NM

Brot Helm Federal Com 602H
API# 30-025-46066
Red Hills; Bone Spring, East
Ut. A, Sec. 35-T24S-R34E
Lea County, NM

Brot Helm Federal Com 603H
API# 30-025-46067
Red Hills; Bone Spring, East
Ut. B, Sec. 35-T24S-R34E
Lea County, NM

Brot Helm Federal Com 701H
API# 30-025-46068
WC-025 G-09 S253402N; Wolfcamp
Ut. A, Sec. 35-T24S-R34E
Lea County, NM

Brot Helm Federal Com 703H
API# 30-025-46070
WC-025 G-09 S253402N; Wolfcamp
Ut. A, Sec. 35-T24S-R34E
Lea County, NM

Brot Helm Federal Com 704H
API# 30-025-46071
WC-025 G-09 S253402N; Wolfcamp
Ut. B, Sec. 35-T24S-R34E
Lea County, NM

Oil Production:

The oil production from all wells will be measured separately by allocation meter prior to being commingled at the heater treaters at the Central Tank Battery located in lease in Ut. A, Sec 35-T24S-R34E. 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.

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



Page 2

July 7, 2020

NM Oil Conservation Division

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. A, Sec 35-T24S-R34E. The Targa gas sales meter # 161001230.

No owner notification is necessary. A letter from a certified Landman stating all owners and interest are identical 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".

Jeanette Barron

Regulatory Technician II

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
97369 Red Hills; Bones Spring, East	Gravity 42.3/1346	Gravity 42.5			
98116 WC025G09S253402N; Wolfcamp	Gravity 42.6/1335	BTU 1340			

(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: 7/7/20

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) 393-8181 Fax: (575) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 746-1283 Fax: (575) 746-9720

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 87506
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-46065	Pool Code 97369	Pool Name Red Hills; Bone Spring, East
Property Code 325724	Property Name BROT HELM FEDERAL COM	Well Number 601H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3420.2'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	24-S	34-E		250	NORTH	407	EAST	LEA

Bottom Hole Location If Different From Surface

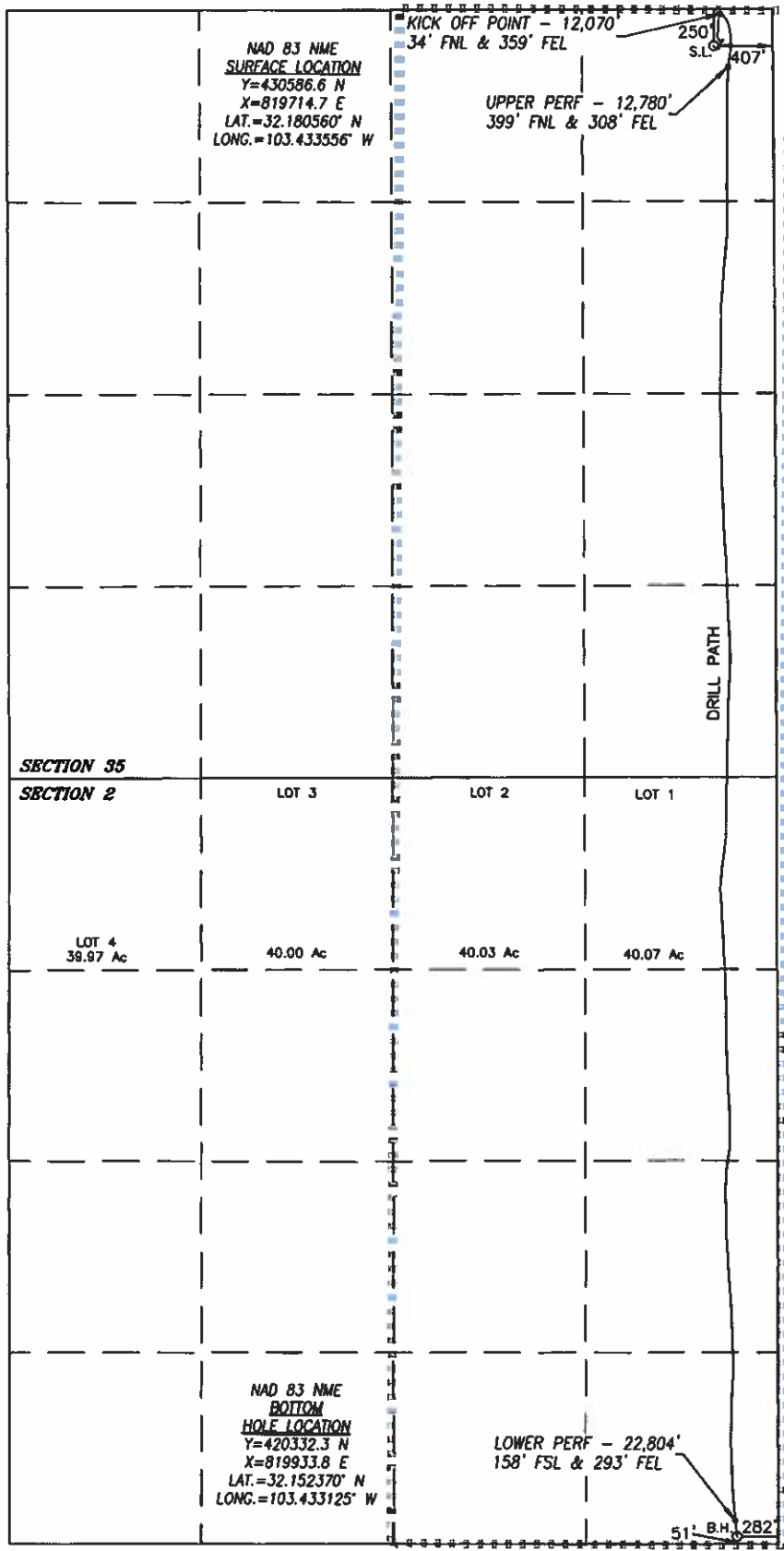
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	25-S	34-E		51	SOUTH	282	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

**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

Property Code	Property Name	Well Number
325724	BROT HELM FEDERAL COM	601H
OGRID No.	Operator Name	Elevation
229137	COG OPERATING, LLC	3420.2'



SURFACE INFO AND BOREPATH SHOWN HEREON IS BASED ON DIRECTIONAL SURVEY REPORT PROVIDED BY COG OPERATING, LLC FOR THE BROT HELM FEDERAL COM #601H SUPPLIED TO HARCROW SURVEYING, LLC ON MARCH 5, 2020

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 7/6/20
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.

DEC. 17, 2018/NOV. 4, 2019
Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor

Chad L. Harcrow 3/6/20
Certificate No. CHAD HARCROW 17777
W.O. #20-379 DRAWN BY: WN

DISTRICT I1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 393-0161 Fax: (505) 393-0720**DISTRICT II**811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720**DISTRICT III**1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170**DISTRICT IV**1220 S. ST. FRANCIS DR., SANTA FE, NM 87508
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☒ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number 30-025-46071		Pool Code 98116	Pool Name WC-025 G-09 S253402N; Wolfcamp
Property Code 325724	Property Name BROT HELM FEDERAL COM		Well Number 704H
OGRID No. 229137	Operator Name COG OPERATING, LLC		Elevation 3418.1'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	35	24-S	34-E		250	NORTH	2235	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
0	2	25-S	34-E		50	SOUTH	2305	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

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

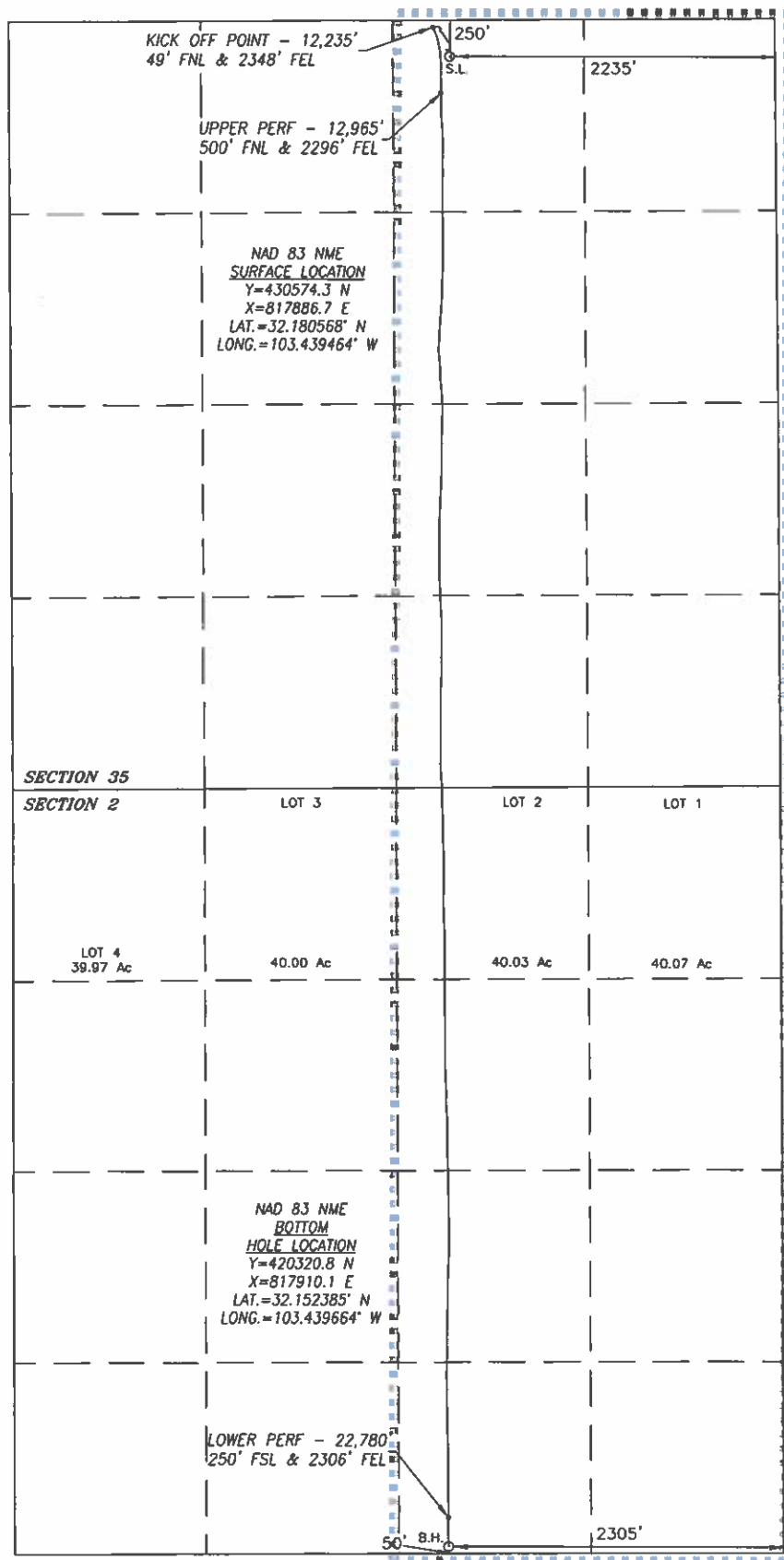
SEE PAGE 2

PAGE 1 OF 2

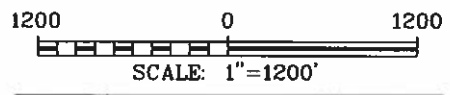
W.O. #20-382

DRAWN BY: WN

Property Code 325724	Property Name BROT HELM FEDERAL COM	Well Number 704H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3418.1'



SURFACE INFO AND BOREPATH SHOWN HEREON IS BASED ON DIRECTIONAL SURVEY REPORT PROVIDED BY COG OPERATING, LLC FOR THE BROT HELM FEDERAL COM #704H SUPPLIED TO HARCROW SURVEYING, LLC ON MARCH 5, 2020



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 7/7/20
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.

DEC. 17, 2018/NOV. 6, 2019
Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor

Chad L. Harcrow 3/6/20

CHAD L. HARCROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

Certificate No. CHAD HARCROW 17777
W.O. #20-382 DRAWN BY: WN

DISTRICT I
1825 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) 746-1283 Fax: (575) 746-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
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DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87506
Phone: (505) 476-3480 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

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Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-46067	Pool Code 97369	Pool Name Red Hills; Bone Spring, East
Property Code 325724	Property Name BROT HELM FEDERAL COM	Well Number 603H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3416.9'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	35	24-S	34-E		250	NORTH	2205	EAST	LEA

Bottom Hole Location If Different From Surface

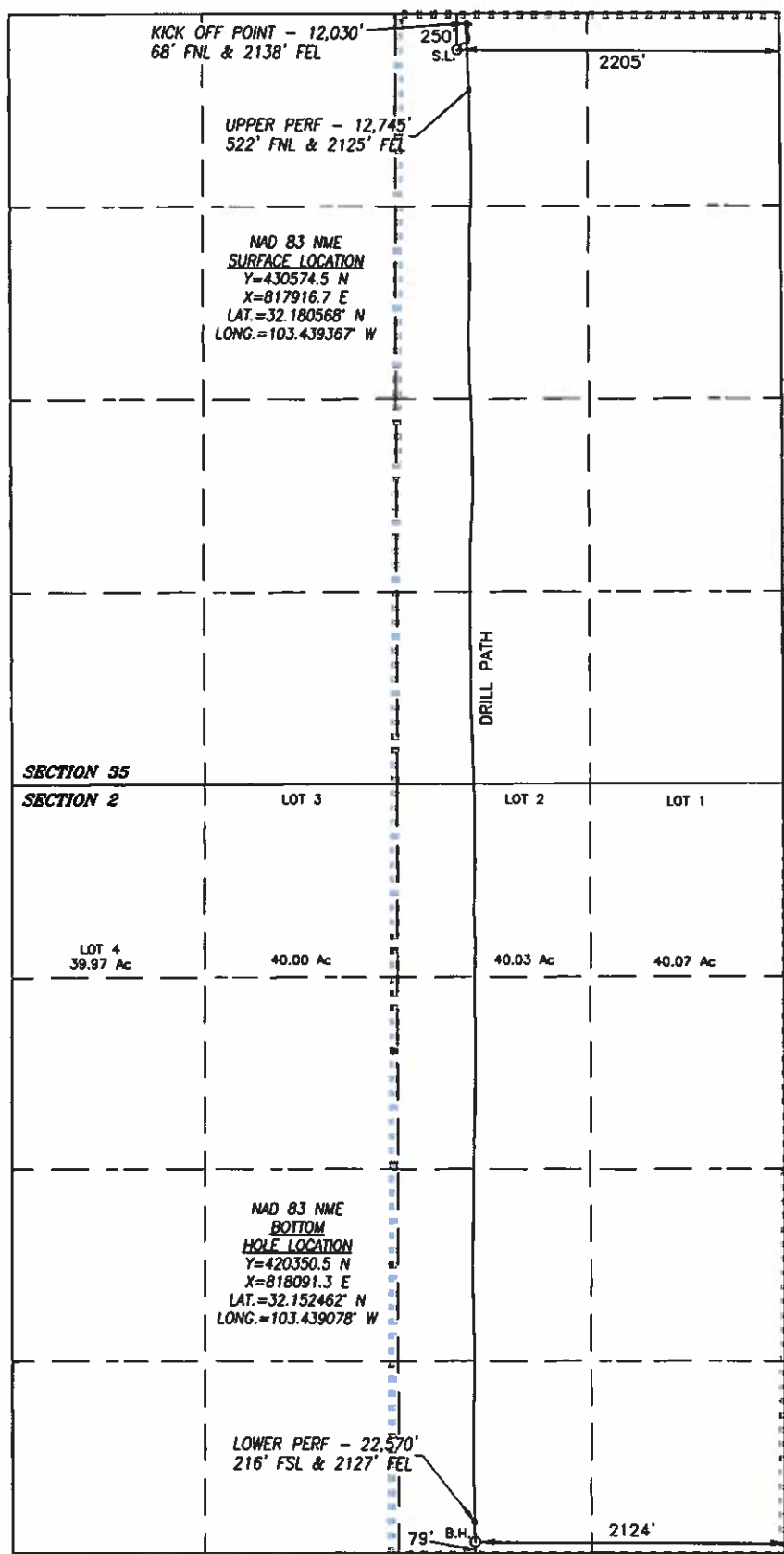
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	2	25-S	34-E		79	SOUTH	2124	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

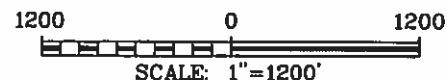
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SEE PAGE 2

Property Code	Property Name	Well Number
325724	BROT HELM FEDERAL COM	603H
OGRID No.	Operator Name	Elevation
229137	COG OPERATING, LLC	3416.9'



SURFACE INFO AND BOREPATH SHOWN HEREON IS BASED ON DIRECTIONAL SURVEY REPORT PROVIDED BY COG OPERATING, LLC FOR THE BROT HELM FEDERAL COM #603H SUPPLIED TO HARCROW SURVEYING, LLC ON MARCH 5, 2020



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 7/2/20
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.

DEC. 17, 2018/NOV. 5, 2019

Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor



Chad Harcrow 3/6/20
Certificate No. CHAD HARCROW 17777

DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 393-8181 Fax: (505) 393-0720

DISTRICT II

811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 746-1283 Fax: (505) 746-9720

DISTRICT III

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Phone: (505) 334-6178 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

As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-46066	Pool Code 97369	Pool Name Red Hills; Bone Spring, East
Property Code 325724	Property Name BROT HELM FEDERAL COM	Well Number 602H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3415.9'

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	35	24-S	34-E		250	NORTH	1225	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
P	2	25-S	34-E		51	SOUTH	1167	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

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

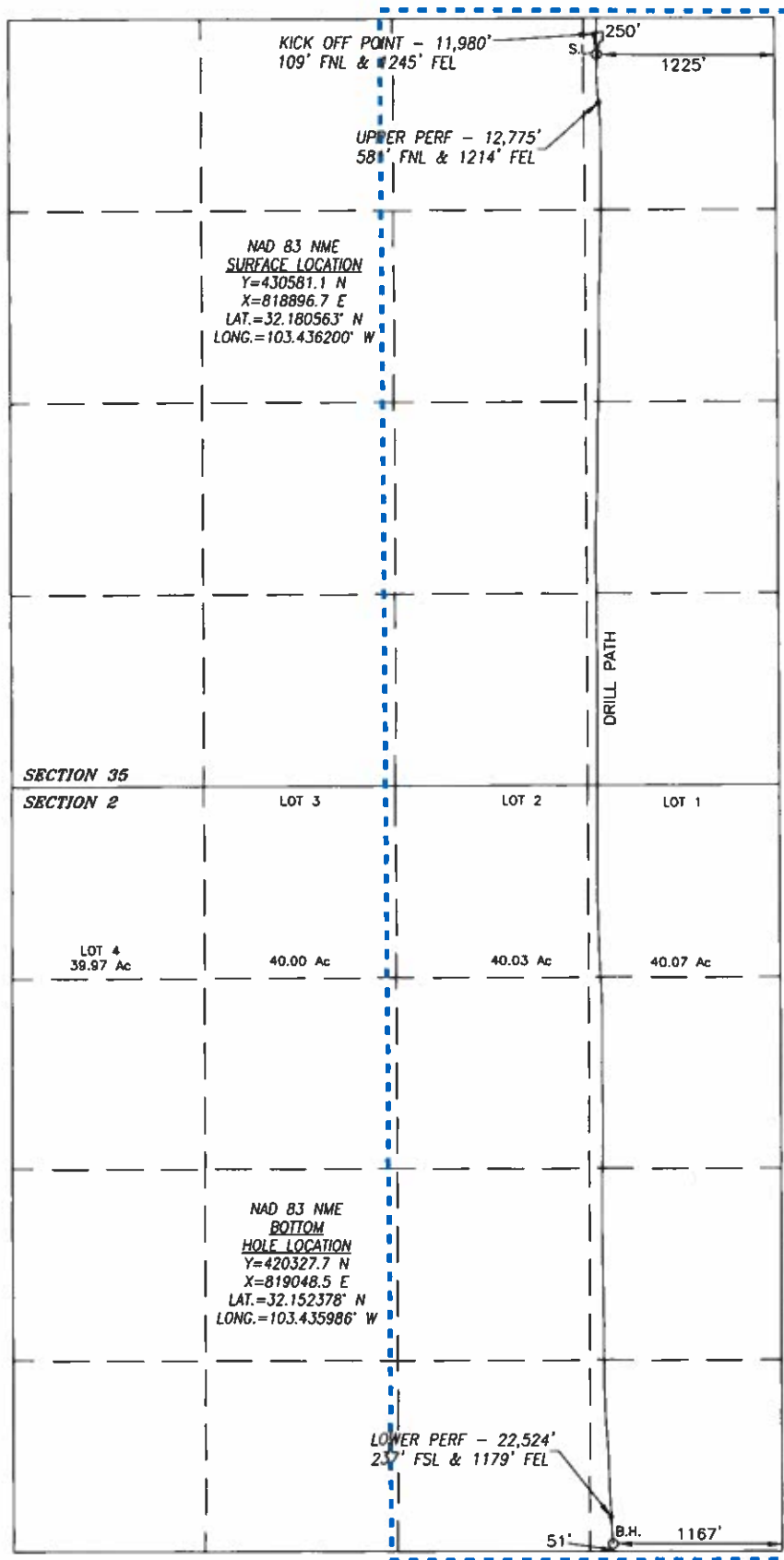
SEE PAGE 2

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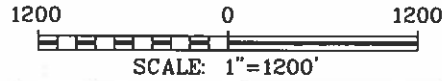
W.O. #20-493

DRAWN BY: WN

Property Code 325724	Property Name BROT HELM FEDERAL COM	Well Number 602H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3415.9'



SURFACE INFO AND BOREPATH SHOWN HEREON IS BASED ON DIRECTIONAL SURVEY REPORT PROVIDED BY COG OPERATING, LLC FOR THE BROT HELM FEDERAL COM #602H SUPPLIED TO HARCROW SURVEYING, LLC ON MARCH 30, 2020



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 7/7/20
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.

DEC. 17, 2018/OCT. 3, 2019
Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor

Chad Harcrow 3/31/20

Certificate No. CHAD HARCROW 17777
W.O. #20-493 DRAWN BY: WN

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
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DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
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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

API Number 30-025-46068	Pool Code 98116	Pool Name WC-025 G-09 S253402N; Wolfcamp
Property Code 325724	Property Name BROT HELM FEDERAL COM	Well Number 701H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3420.6'

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	35	24-S	34-E		250	NORTH	437	EAST	LEA

Bottom Hole Location If Different From Surface

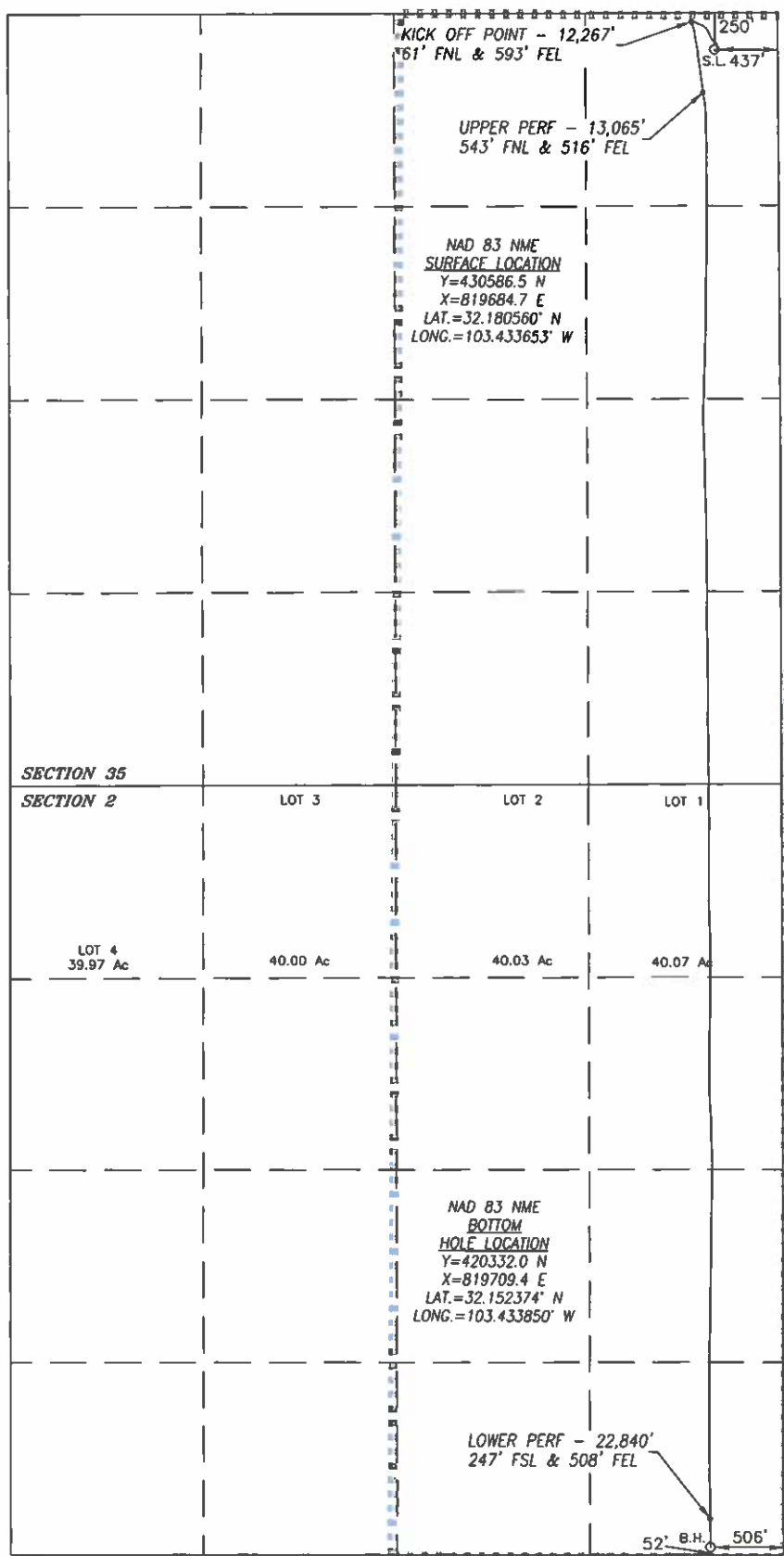
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	2	25-S	34-E		52	SOUTH	506	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

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

Property Code 325724	Property Name BROT HELM FEDERAL COM	Well Number 701H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3420.6'



SURFACE INFO AND BOREPATH SHOWN HEREON IS BASED ON DIRECTIONAL SURVEY REPORT PROVIDED BY COG OPERATING, LLC FOR THE BROT HELM FEDERAL COM #701H SUPPLIED TO HARCROW SURVEYING, LLC ON MARCH 6, 2020

1200 0 1200
SCALE: 1"=1200'

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 7/7/20
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.

DEC. 17, 2018/NOV. 6, 2019

Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor



Chad Harcrow 3/6/20
Certificate No. CHAD HARCROW 17777

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6101 Fax: (575) 393-0780

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-8720

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

API Number 30-025-46070	Pool Code 98116	Pool Name WC-025 G-09 S253402N; WOLFCAMP
Property Code 325724	Property Name BROT HELM FEDERAL COM	Well Number 703H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3415.9'

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	35	24-S	34-E		250	NORTH	1255	EAST	LEA

Bottom Hole Location If Different From Surface

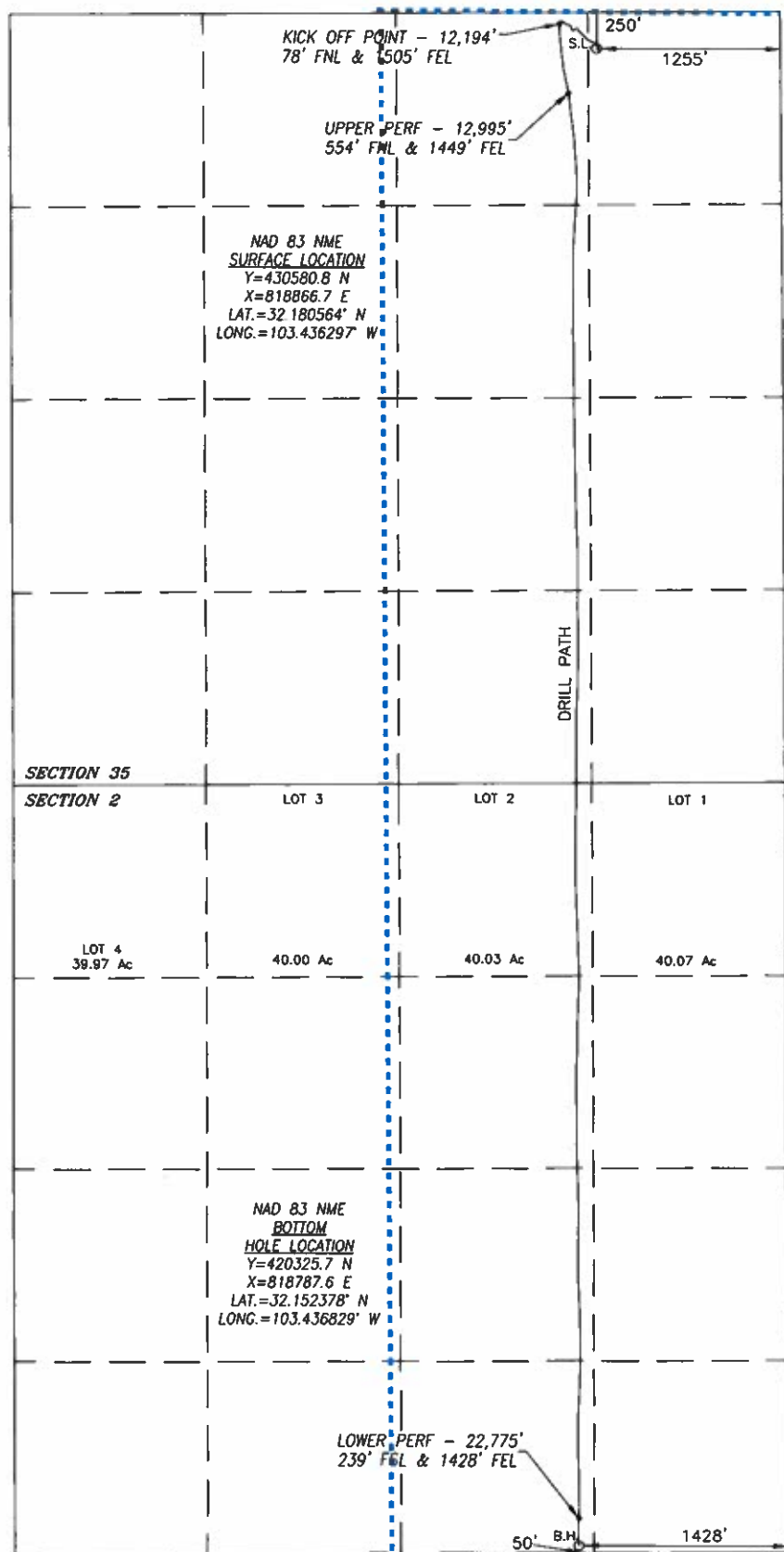
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	2	25-S	34-E		50	SOUTH	1428	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

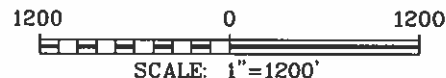
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SEE PAGE 2

Property Code 325724	Property Name BROT HELM FEDERAL COM	Well Number 703H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3415.9'



SURFACE INFO AND BOREPATH SHOWN HEREON IS BASED ON DIRECTIONAL SURVEY REPORT PROVIDED BY COG OPERATING, LLC FOR THE BROT HELM FEDERAL COM #703H SUPPLIED TO HARCROW SURVEYING, LLC ON MARCH 30, 2020



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 7/7/20
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.

DEC. 17, 2018/OCT. 25, 2019

Date of Survey/Date of Geographic Survey

Signature & Seal of Professional Surveyor

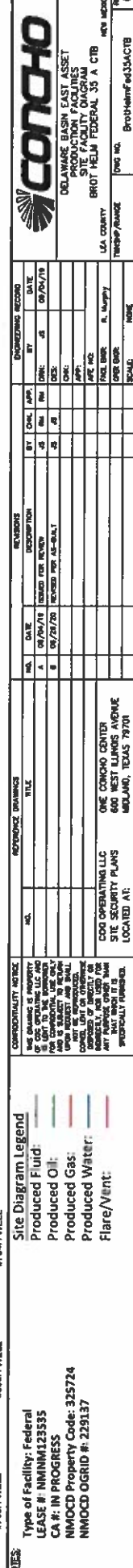


Chad Harcrow 3/31/20

Certificate No. CHAD HARCROW 17777

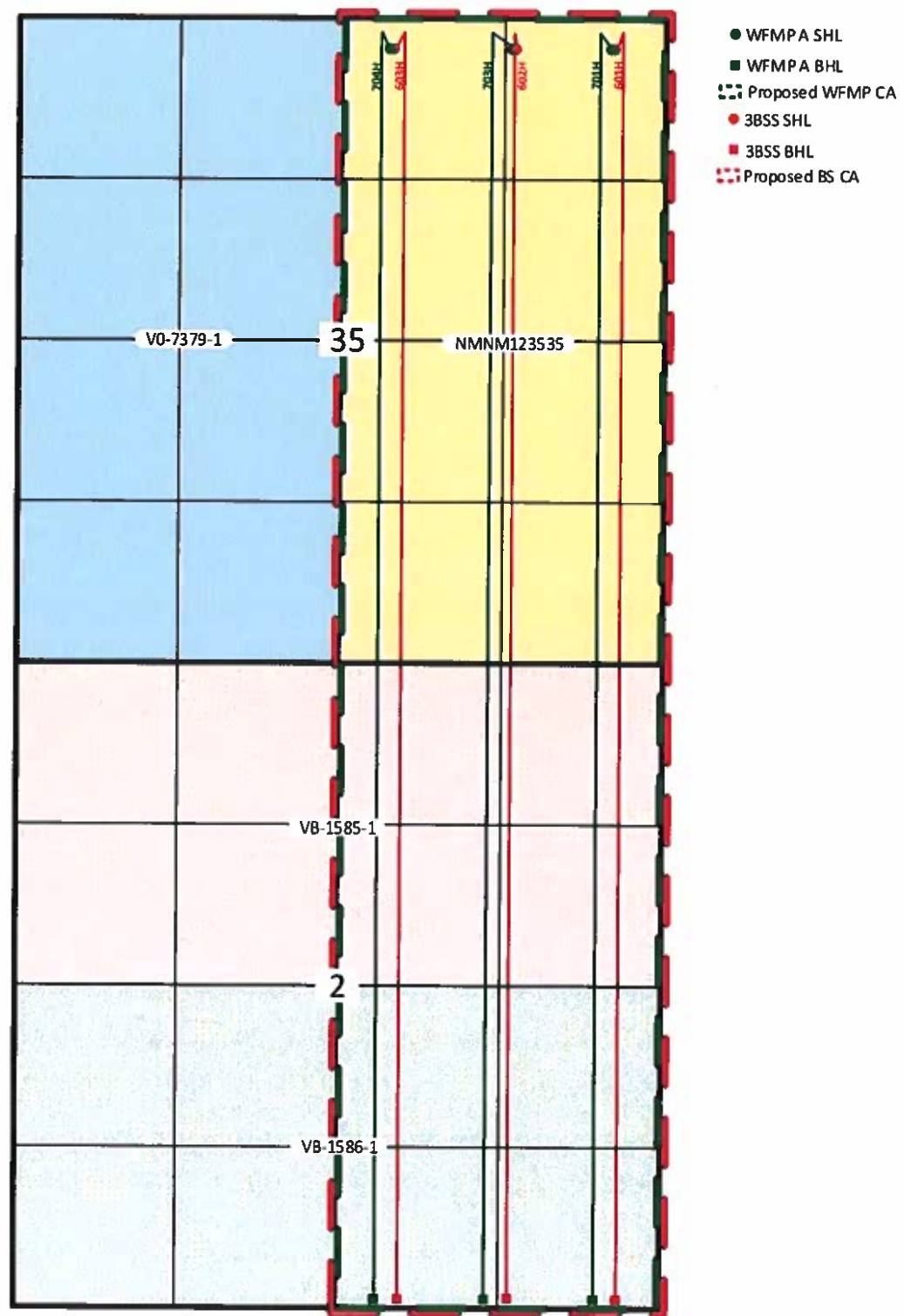
W.O. #20-494

DRAWN BY: WN



DW-02/22/19
JB 06.05.19
DW-06/10/19

Brot Helm Federal Com



Sec. 35-T24S-R35E
Sec. 02-T25S-R35E
Lea County, NM

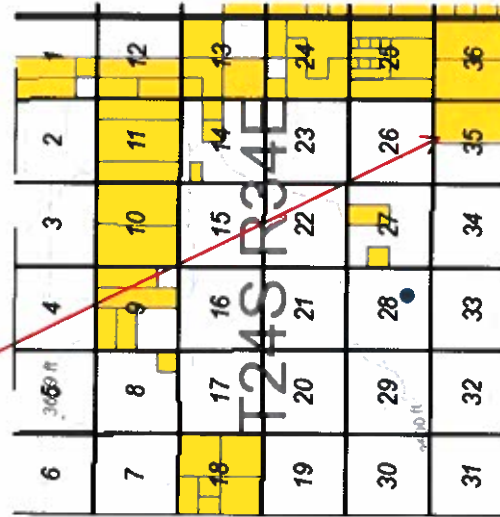


Brot Helm Federal Com 601H, 602H, 603H, 701H, 703H & 704H

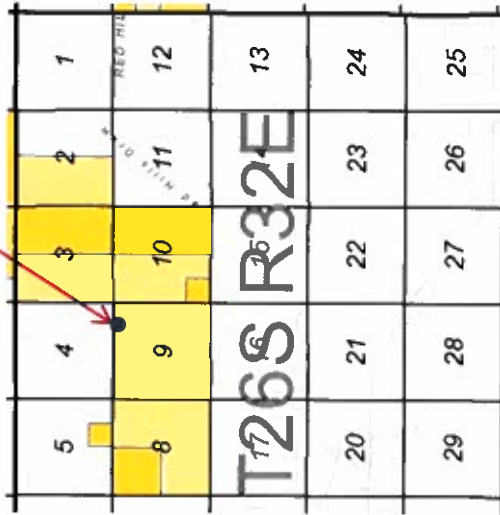
&

Red Hills and Jal Offload Station Map

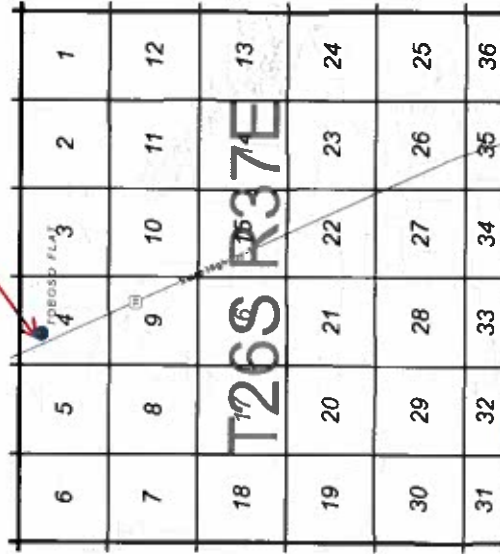
Brot Helm Federal Com 601H, 602H,
603H, 701H, 703H & 704H Lea
County NM



Red Hills Offload Station
Lea County, NM



Jal Offload Station
Lea County, NM



EDI Pool Code	EDI API Well Number	Prod Date	Field #	Field Name	Lease #	Lease Name	Well #	Property	Oil Prod	Water Prod	Gas Prod	Days Up
97369	3002546065	04/2020	97369	Red Hills;Bone Spring, East	325724	BROT HELM FEDERAL COM	601H	146335923	4,242	18,494	4,774	6
97369	3002546066	04/2020	97369	Red Hills;Bone Spring, East	325724	BROT HELM FEDERAL COM	602H	146336159	10,134	44,995	10,908	12
97369	3002546067	04/2020	97369	Red Hills;Bone Spring, East	325724	BROT HELM FEDERAL COM	603H	146336867	2,992	18,277	4,766	9
98116	3002546068	04/2020	98116	WC-025 G-09 S253402N;Wolfcamp	325724	BROT HELM FEDERAL COM	701H	146337281	3,896	20,124	5,304	7
98116	3002546070	04/2020	98116	WC-025 G-09 S253402N;Wolfcamp	325724	BROT HELM FEDERAL COM	703H	146338606	7,141	50,542	11,372	15
98116	3002546071	04/2020	98116	WC-025 G-09 S253402N;Wolfcamp	325724	BROT HELM FEDERAL COM	704H	146338892	1,664	15,129	2,264	8



Matt Solomon
Staff Landman

May 27, 2020

RE: Commingling and Off-Lease Measurement For The Brot Helm Wells

To Whom It Concerns:

My name is Matt Solomon, and I am the landman that oversees the Brot Helm Wells for COG Operating LLC ("Concho").

Regarding the Brot Helm Fed Com 601H, 602H, 603H, 701H, 703H, and 704H, the following statements are true:

- 1) The revenue owners are identical as defined in NMAC 19.15.12.7.B.
- 2) The leases or pools have the same working, royalty and overriding royalty owners in exactly the same percentages.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "MS", written over a faint circular stamp.

Matt Solomon - CPL, J.D.
Staff Landman
432-685-4352 (o)
832-544-9492 (c)
msolomon@concho.com

Federal Communitization Agreement

Contract No. _____

THIS AGREEMENT entered into as of the **1st day of October, 2018**, 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 24 South, Range 34 East, N.M.P.M.
Section 35: E/2

Township 25 South, Range 34 East, N.M.P.M.
Section 2: E/2
Lea County, New Mexico

Containing **639.96** acres, and this agreement shall include only the **Bone Spring** formation as defined by the NMOCD, 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.
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 or Indian lands included within the CA area are to be paid into the appropriate Unleased Lands Account or Indian 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 noncommunitized lease production, provided, however, as 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 noncommunitized 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 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 **October 1, 2018**, 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 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 60 days thereafter, reworking or drilling operations on the communitized area are commenced and are thereafter conducted with reasonable diligence during the period of nonproduction. The 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 occur 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, 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. Nondiscrimination. 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: _____

By: _____
Sean Johnson
Attorney In Fact

WORKING INTEREST OWNERS AND/OR LESSEES OF RECORD

COG OPERATING LLC

Date: _____

By: _____

Sean Johnson
Attorney In Fact

EOG RESOURCES, INC.

Date: _____

By: _____

Name: _____

Title: _____

OVERRIDING ROYALTY OWNERS

NESTEGG ENERGY CORPORATION

Date: _____

By: _____

Name: _____

Title: _____

EG3, INC.

Date: _____

By: _____

Name: _____

Title: _____

THE ALLAR COMPANY

Date: _____

By: _____

Name: _____

Title: _____

ACKNOWLEDGEMENTS

STATE OF TEXAS

§
§
§

COUNTY OF MIDLAND

This instrument was acknowledged before me on the ____ day of _____, 201 ,
by Sean Johnson, Attorney In Fact of **COG Operating LLC**, a Delaware Limited Liability
Company, on behalf of same.

Notary Public in and for the State of Texas
My Commission expires: _____

STATE OF _____

§
§
§

COUNTY OF _____

This instrument was acknowledged before me on the ____ day of _____, 201 ,
by _____, as _____ of
EOG Resources, Inc., a _____, on behalf of
same.

Notary Public in and for the State of Texas
My Commission expires: _____

STATE OF _____

§
§
§

COUNTY OF _____

This instrument was acknowledged before me on the ____ day of _____, 201 ,
by _____, as _____ of
Nestegg Energy Corporation a _____, on behalf
of same.

Notary Public in and for the State of Texas
My Commission expires: _____

STATE OF _____ §

COUNTY OF _____ §

This instrument was acknowledged before me on the _____ day of _____, 201 ,
by _____, as _____ of
EG3, Inc., a _____, on behalf of same.

Notary Public in and for the State of Texas
My Commission expires: _____

STATE OF _____ §

COUNTY OF _____ §

This instrument was acknowledged before me on the _____ day of _____, 201 ,
by _____, as _____ of
The Allar Company, a _____, on behalf of same.

Notary Public in and for the State of Texas
My Commission expires: _____

EXHIBIT "A"

Plat of communitized area covering 639.96 acres in E/2 of Section 35, Township 24 South,
Range 34 East and E/2 of Section 2, Township 25 South, Range 34 East, N.M.P.M.,
Lea County, New Mexico

Brot Helm Federal Com #601H

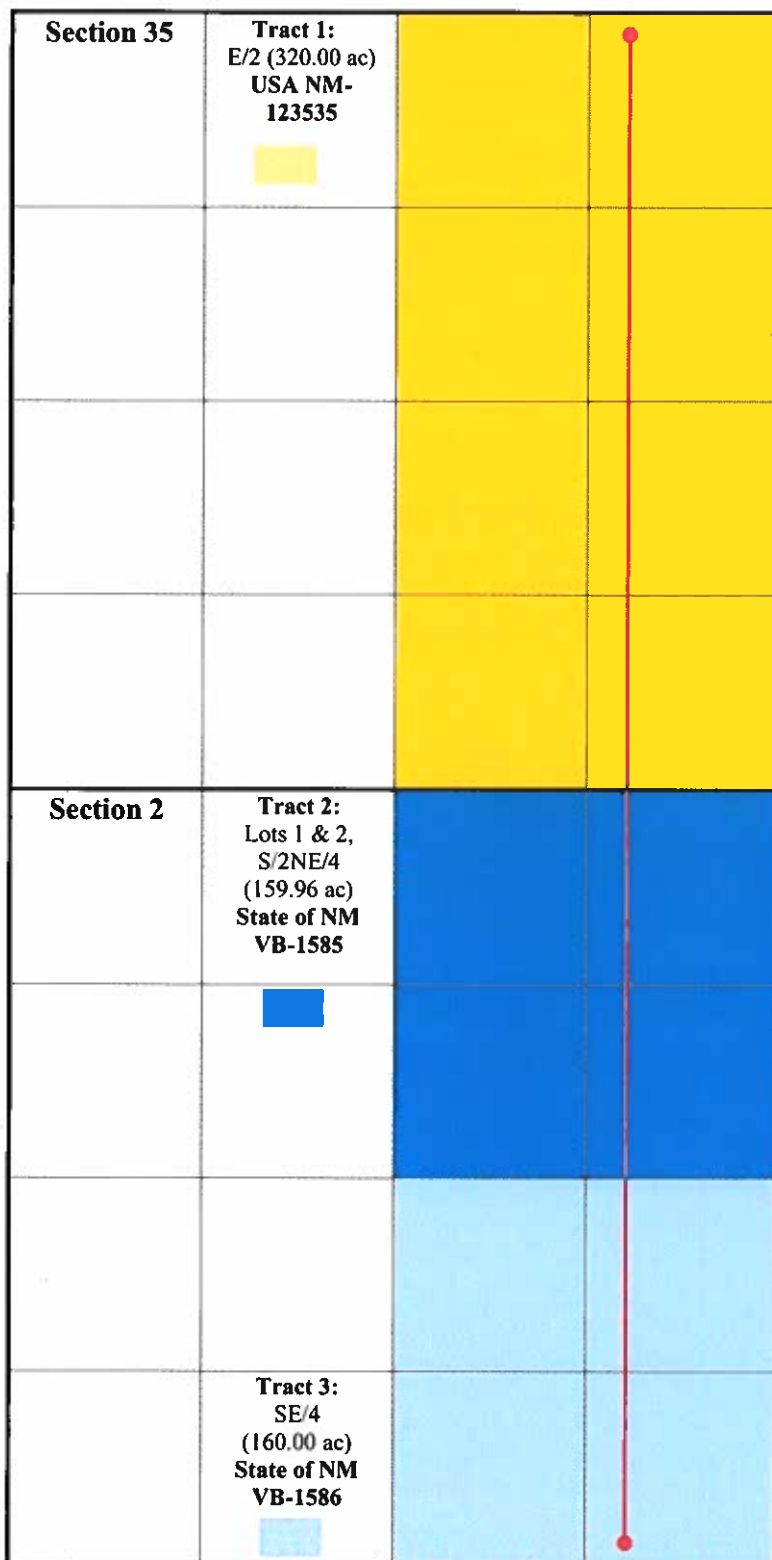


EXHIBIT "B"

Attached to and made a part of that Communitization Agreement dated October 1, 2018, covering the E/2 of Section 35, Township 24 South, Range 34 East, and the E/2 of Section 2, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico

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

DESCRIPTION OF LEASES COMMITTED:

Tract No. 1

Lease Effective Date:	September 1, 2009
Lease Term:	Five (5) Years
Recordation:	Not Recorded
Lessor:	USA Lease NM-123535
Original Lessee:	The Allar Company
Current Lessee:	COG Operating, LLC
Description of Land Committed:	Insofar only as said lease covers: <u>Township 24 South, Range 34 East</u> Section 35: E/2 Lea County, New Mexico
Number of Acres:	320.00
Royalty Rate:	12.5%
WI Owner Names and Interests:	COG Operating LLC 100.00%
ORRI Owners:	Of Record

Tract No. 2

Lease Date:	February 1, 2009
Lease Term:	Five (5) Years
Recordation:	Not Recorded
Lessor:	State of New Mexico VB-1585
Original Lessee:	Daniel E. Gonzales
Current Lessee:	EOG Resources, Inc.
Description of Land Committed:	Insofar only as said lease covers: <u>Township 25 South, Range 34 East</u> Section 2: Lots 1, 2 and the S/2NE/4 Lea County, New Mexico
Number of Acres:	159.96
Royalty Rate:	18.75%
WI Owner Names and Interests:	EOG Resources, Inc. 100.00%
ORRI Owners:	Of Record

Tract No. 3

Lease Date:	February 1, 2009
Lease Term:	Five (5) Years
Recordation:	Not Recorded
Lessor:	State of New Mexico VB-1586
Original Lessee:	Daniel E. Gonzales
Current Lessee:	EOG Resources, Inc.
Description of Land Committed:	Insofar only as said lease covers: <u>Township 25 South, Range 34 East</u> Section 2: SE Lea County, New Mexico
Number of Acres:	160.00
Royalty Rate:	18.75%
WI Owner Names and Interests:	EOG Resources, Inc. 100.00%
ORRI Owners:	Of Record

RECAPITULATION

Tract Number	Number of Acres Committed	Percentage of Interest in Communitized Area
No. 1	320.00	50.0031%
No. 2	159.96	24.9953%
No. 3	160.00	25.0016%
	639.96	100.0000%

Federal Communitization Agreement

Contract No. _____

THIS AGREEMENT entered into as of the **1st day of October, 2018**, 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 24 South, Range 34 East, N.M.P.M.
Section 35: E/2

Township 25 South, Range 34 East, N.M.P.M.
Section 2: E/2
Lea County, New Mexico

Containing **639.96** acres, and this agreement shall include only the **Wolfcamp** formation as defined by the NMOCDD, 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.
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 or Indian lands included within the CA area are to be paid into the appropriate Unleased Lands Account or Indian 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 noncommunitized lease production, provided, however, as 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 noncommunitized 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 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 **October 1, 2018**, 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 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 60 days thereafter, reworking or drilling operations on the communitized area are commenced and are thereafter conducted with reasonable diligence during the period of nonproduction. The 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 occur 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, 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. Nondiscrimination. 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: _____

By: _____
Mark A. Carter
Attorney In Fact

WORKING INTEREST OWNERS AND/OR LESSEES OF RECORD

COG OPERATING LLC

Date: _____

By: _____

Sean Johnson

Attorney In Fact

EOG RESOURCES, INC.

Date: _____

By: _____

Name: _____

Title: _____

OVERRIDING ROYALTY OWNERS

NESTEGG ENERGY CORPORATION

Date: _____

By: _____

Name: _____

Title: _____

EG3, INC.

Date: _____

By: _____

Name: _____

Title: _____

THE ALLAR COMPANY

Date: _____

By: _____

Name: _____

Title: _____

ACKNOWLEDGEMENTS

STATE OF TEXAS §
 §
COUNTY OF MIDLAND §

This instrument was acknowledged before me on the ____ day of _____, 201 ,
by Sean Johnson, Attorney In Fact of **COG Operating LLC**, a Delaware Limited Liability
Company, on behalf of same.

Notary Public in and for the State of Texas
My Commission expires: _____

STATE OF _____ §
 §
COUNTY OF _____ §

This instrument was acknowledged before me on the ____ day of _____, 201 ,
by _____, as _____ of
EOG Resources, Inc., a _____, on behalf of
same.

Notary Public in and for the State of Texas
My Commission expires: _____

STATE OF _____ §
 §
COUNTY OF _____ §

This instrument was acknowledged before me on the ____ day of _____, 201 ,
by _____, as _____ of
Nestegg Energy Corporation a _____, on
behalf of same.

Notary Public in and for the State of Texas
My Commission expires: _____

STATE OF _____ §

COUNTY OF _____ §

This instrument was acknowledged before me on the _____ day of _____, 201 ,
by _____, as _____ of
EG3, Inc., a _____, on behalf of same.

Notary Public in and for the State of Texas

My Commission expires: _____

STATE OF _____ §

COUNTY OF _____ §

This instrument was acknowledged before me on the _____ day of _____, 201 ,
by _____, as _____ of
The Allar Company, a _____, on behalf of
same.

Notary Public in and for the State of Texas

My Commission expires: _____

EXHIBIT "A"

Plat of communitized area covering 639.96 acres in E/2 of Section 35, Township 24 South, Range 34 East and E/2 of Section 2, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico

Brot Helm Federal Com #601H



EXHIBIT "B"

Attached to and made a part of that Communitization Agreement dated October 1, 2018, covering the E/2 of Section 35, Township 24 South, Range 34 East, and the E/2 of Section 2, Township 25 South, Range 34 East, N.M.P.M., Lea County, New Mexico

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

DESCRIPTION OF LEASES COMMITTED:

Tract No. 1

Lease Effective Date:	September 1, 2009	
Lease Term:	Five (5) Years	
Recordation:	Not Recorded	
Lessor:	USA Lease NM-123535	
Original Lessee:	The Allar Company	
Current Lessee:	COG Operating, LLC	
Description of Land Committed:	Insofar only as said lease covers: <u>Township 24 South, Range 34 East</u> Section 35: E/2 Lea County, New Mexico	
Number of Acres:	320.00	
Royalty Rate:	12.5%	
WI Owner Names and Interests:	COG Operating LLC	100.00%
ORRI Owners:	Of Record	

Tract No. 2

Lease Date:	February 1, 2009	
Lease Term:	Five (5) Years	
Recordation:	Not Recorded	
Lessor:	State of New Mexico VB-1585	
Original Lessee:	Daniel E. Gonzales	
Current Lessee:	EOG Resources, Inc.	
Description of Land Committed:	Insofar only as said lease covers: <u>Township 25 South, Range 34 East</u> Section 2: Lots 1, 2 and the S/2NE/4 Lea County, New Mexico	
Number of Acres:	159.96	
Royalty Rate:	18.75%	
WI Owner Names and Interests:	EOG Resources, Inc.	100.00%
ORRI Owners:	Of Record	

Tract No. 3

Lease Date:	February 1, 2009
Lease Term:	Five (5) Years
Recordation:	Not Recorded
Lessor:	State of New Mexico VB-1586
Original Lessee:	Daniel E. Gonzales
Current Lessee:	EOG Resources, Inc.
Description of Land Committed:	Insofar only as said lease covers: <u>Township 25 South, Range 34 East</u> Section 2: SE Lea County, New Mexico
Number of Acres:	160.00
Royalty Rate:	18.75%
WI Owner Names and Interests:	EOG Resources, Inc. 100.00%
ORRI Owners:	Of Record

RECAPITULATION

Tract Number	Number of Acres Committed	Percentage of Interest in Communitized Area
No. 1	320.00	50.0031%
No. 2	159.96	24.9953%
No. 3	160.00	25.0016%
	639.96	100.0000%

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 #NMNM123535; 12.5% Royalty Rate; CA# (E/2 Sec. 35 in progress)

Location Sec 35, T24S-R34E

Pool; 97369 Red Hills; Bone Spring , East

Well Name;	API #	Est Oil BOPB	Est Oil Gravity	Est Gas MCFPD	Est Gas BTU
Broth Helm Fed Com 601H	30-025-46065	2400	42.3	2800	1352
Broth Helm Fed Com 602H	30-025-46066	2400	42.3	2800	1343
Broth Helm Fed Com 603H	30-025-46067	2400	42.3	2800	1342

Federal Lease #NMNM123535; 12.5% Royalty Rate; CA# (E/2 Sec. 35 in progress)

Location Sec 35, T24S-R34E

Pool; 98116 WC-025 G-09 S253402N; Wolfcamp

Well Name;	API #	Est Oil BOPB	Est Oil Gravity	Est Gas MCFPD	Est Gas BTU
Broth Helm Fed Com 701H	30-025-46068	2400	43.1	2800	1337
Broth Helm Fed Com 703H	30-025-46070	2400	43.1	2800	1338
Broth Helm Fed Com 704H	30-025-46071	2400	43.1	2800	1329

Oil and Gas Metering:

Production from the Brot Helm Federal Com 601H, 602H, 603H, 701H, 703H and 704H 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 #601H, #602H, #603H, #701H, #703H, and #704H 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 #601H, #602H, #603H, #701H, #703H, and #704H 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 #601H, #602H, #603H, #701H, #703H, and #704H 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.

All owners of interest are identical, with identical revenue distribution, therefore notification of owners is not required (see attached letter from COG Operating LLC Landman).

Respectfully,

A handwritten signature in black ink that reads "Jeanette Barron". The signature is written in a cursive, flowing style.

Jeanette Barron

Production Technician II

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 #NMNM123535; 12.5% Royalty Rate; CA# (E/2 Sec. 35 in progress)

Location Sec 35, T24S-R34E

Pool; 97369 Red Hills; Bone Spring , East

Well Name;	API #	Est Oil BOPB	Est Oil Gravity	Est Value/bbl	Est Gas MCFPD	Est Gas BTU	Est Value/MCF
Broth Helm Fed Com 601H	30-025-46065	2400	42.3	15.37	2800	1352	0.38
Broth Helm Fed Com 602H	30-025-46066	2400	42.4	15.37	2800	1343	0.38
Broth Helm Fed Com 603H	30-025-46067	2400	42.3	15.37	2800	1342	0.38

Federal Lease #NMNM123535; 12.5% Royalty Rate; CA# (E/2 Sec. 35 in progress)

Location Sec 35, T24S-R34E

Pool; 98116 WC-025 G-09 S253402N; Wolfcamp

Well Name;	API #	Est Oil BOPB	Est Oil Gravity	Est Value/bbl	Est Gas MCFPD	Est Gas BTU	Est Value/MCF
Broth Helm Fed Com 701H	30-025-46068	2400	42.2	15.37	2800	1337	0.38
Broth Helm Fed Com 703H	30-025-46070	2400	43.1	15.37	2800	1338	0.38
Broth Helm Fed Com 704H	30-025-46071	2400	42.6	15.37	2800	1329	0.38

Economic Combined Production

Federal Lease #NMNM123535; 12.5% Royalty Rate

Well Name;	Est Oil BOPB	Est Oil Gravity	Est Value/bbl	Est Gas MCFPD	Est Gas BTU	Est Value/MCF
Broth Helm Fed Com CTB	14400	42.5	15.37	16800	1340	0.38

COG Operating LLC certifies the commingling of the pools will not negatively affect the value of the federal royalties.

Signed:

Printed Name:

Title:

Date:

CONFIDENTIAL



Serial Register Page

May 24, 2020

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

Case Type: O&g lse comp pd -1987

Serial Number: NMNM 123535

Commodity: Oil & gas

Acres: 320.000

Disposition: Authorized

Lessee

Owner Name	Street	City	State	Zip	Net Acres	%Int
COG OPERATING LLC	600 W ILLINOIS AVE	MIDLAND	TX	79701-4882	320.000	100.00

Operating Rights

Owner Name	Street	City	State	Zip	Net Acres	%Int
COG OPERATING LLC	600 W ILLINOIS AVE	MIDLAND	TX	79701-4882	0.000	0.00
CONCHO OIL & GAS LLC	600 W ILLINOIS AVE	MIDLAND	TX	79701-4882	0.000	0.00

Meridian: New Mex

State: NM

County: Lea

Township: 24 S

Range: 34 E

Admin Agency

Section: 35

E2;

BUREAU OF LAND MGMT

Code	Action	Date	Remarks
387	Case established	6/5/2009	200907039;
191	Sale held	7/22/2009	
267	Bid received	7/22/2009	\$104000.00;
237	Lease issued	8/25/2009	
974	Automated record verif	8/25/2009	BTM
496	Fund code	9/1/2009	05;145003
530	Rlty rate - 12 1/2%	9/1/2009	
868	Effective date	9/1/2009	
42	Case sent to	9/2/2009	RROMERO;
932	Trf oper rgts filed	11/10/2009	ALLAR/MARBOB ENERGY;1
933	Trf oper rgts approved	3/9/2010	EFF 12/01/09;
974	Automated record verif	3/9/2010	RAYO/RAYO
932	Trf oper rgts filed	3/29/2010	ALLAR CO/EG3 INC;1
933	Trf oper rgts approved	6/16/2010	EFF 04/01/2010;
974	Automated record verif	6/16/2010	MJD
932	Trf oper rgts filed	4/19/2011	MARBOB EN/COG OPERA;1

<u>Code</u>	<u>Action</u>	<u>Date</u>	<u>Remarks</u>
933	Trf oper rgts approved	6/22/2011	EFF 05/01/11;
974	Automated record verif	6/22/2011	RAYO/RAYO
932	Trf oper rgts filed	6/30/2014	EG3 INC/ALLAR CO;1
933	Trf oper rgts approved	8/8/2014	EFF 07/01/14;
974	Automated record verif	8/8/2014	JS
899	Trf of orr filed	5/4/2017	1
932	Trf oper rgts filed	5/5/2017	EG3/ALLAR COMPANY;1
933	Trf oper rgts approved	6/12/2017	EFF 06/01/17;
974	Automated record verif	6/12/2017	RCC
140	Asgn filed	6/23/2017	ALLAR/COG OPERATING;1
932	Trf oper rgts filed	6/23/2017	ALLAR/COG OPERATING;1
139	Asgn approved	7/24/2017	EFF 07/01/17;
933	Trf oper rgts approved	7/24/2017	EFF 07/01/17;
974	Automated record verif	7/24/2017	LBO
899	Trf of orr filed	1/16/2018	1
899	Trf of orr filed	6/14/2019	1
235	Extended	8/31/2019	THRU 08/31/21;
974	Automated record verif	9/9/2019	LL
763	Expires	9/1/2021	

Remarks

STIPULATIONS ATTACHED TO LEASE:

NM-11-LN SPECIAL CULTURAL RESOURCE

SENM-S-22 PRAIRIE CHICKENS

PER MMS - RENT PD THRU 09/01/2010

06/22/2011 - PER MMS RENT PD THRU 09/01/2011

08/08/14 - RENTAL PAID THRU 09/01/13



Certificate of Analysis

Number: 6030-20070007-003A

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 06, 2020

Station Name: Brot Helm Fed Com 601H
Station Number: 7170078
Station Location: COG
Sample Point: Downstream
Type of Sample: Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: Fill and Purge
Sampling Company: SPL
Analyzed: 07/06/2020 13:20:15 by PS

Sampled By: Michael Mirabal
Sample Of: Gas Spot
Sample Date: 06/30/2020 02:06
Sample Conditions: 98 psia, @ 118 °F Ambient: 100 °F
Effective Date: 06/30/2020 02:06
Method: GPA-2261M
Cylinder No: 1111-001279
Instrument: 70104124 (Inficon Gas Chromatograph-MFusion)
Last Inst. Cal.: 07/06/2020 0:00 AM

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Nitrogen	1.502	1.50035	1.842		GPM TOTAL C2+	7.476
Methane	72.206	72.10679	50.695		GPM TOTAL C3+	3.789
Carbon Dioxide	0.249	0.24836	0.479		GPM TOTAL iC5+	0.722
Ethane	13.748	13.72960	18.092	3.687		
Propane	7.370	7.35992	14.223	2.036		
Iso-butane	0.861	0.86022	2.191	0.283		
n-Butane	2.366	2.36267	6.018	0.748		
Iso-pentane	0.519	0.51829	1.639	0.190		
n-Pentane	0.591	0.59049	1.867	0.215		
Hexanes Plus	0.724	0.72331	2.954	0.317		
	100.136	100.0000	100.000	7.476		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7910	3.2176
Calculated Molecular Weight	22.82	93.19
Compressibility Factor	0.9957	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1352	5141
Water Sat. Gas Base BTU	1329	5052
Ideal, Gross HV - Dry at 14.73 psia	1346.1	5141.1
Ideal, Gross HV - Wet	1322.7	5051.6

Comments: H2S Field Content 0 ppm
1043 Mcf/day

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: 6030-20070007-002A

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 06, 2020

Station Name: Brot Helm Fed Com 602H/702H
Station Number: 7170079
Station Location: COG
Sample Point: Downstream
Type of Sample: Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: Fill and Purge
Sampling Company: SPL
Analyzed: 07/06/2020 13:27:38 by PS

Sampled By: Michael Mirabal
Sample Of: Gas Spot
Sample Date: 06/30/2020 02:39
Sample Conditions: 98 psia, @ 119 °F Ambient: 100 °F
Effective Date: 06/30/2020 02:39
Method: GPA-2261M
Cylinder No: 1111-001227
Instrument: 70104124 (Inficon Gas Chromatograph-MFusion)
Last Inst. Cal.: 07/06/2020 0:00 AM

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Nitrogen	1.521	1.51974	1.875		GPM TOTAL C2+	7.295
Methane	72.680	72.63422	51.312		GPM TOTAL C3+	3.715
Carbon Dioxide	0.355	0.35448	0.687		GPM TOTAL IC5+	0.718
Ethane	13.340	13.33161	17.653	3.580		
Propane	7.219	7.21456	14.009	1.996		
Iso-butane	0.842	0.84137	2.153	0.276		
n-Butane	2.290	2.28896	5.859	0.725		
Iso-pentane	0.503	0.50288	1.598	0.185		
n-Pentane	0.574	0.57344	1.822	0.209		
Hexanes Plus	0.739	0.73874	3.032	0.324		
	100.063	100.00000	100.000	7.295		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7871	3.2176
Calculated Molecular Weight	22.71	93.19
Compressibility Factor	0.9958	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1343	5141
Water Sat. Gas Base BTU	1320	5052
Ideal, Gross HV - Dry at 14.73 psia	1337.2	5141.1
Ideal, Gross HV - Wet	1313.9	5051.6

Comments: H2S Field Content 0 ppm
1129 Mcf/day

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: 6030-20070025-003A

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 06, 2020

Station Name: Brot Helm Fed Com 603H
Station Number: 7170080
Station Location: COG
Sample Point: Downstream
Type of Sample: : Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: : Fill and Purge
Sampling Company: :SPL
Analyzed: 07/06/2020 12:52:12 by PS

Sampled By: Donovan Miller
Sample Of: Gas Spot
Sample Date: 06/30/2020 02:04
Sample Conditions: 28 psig, @ 113 °F Ambient: 100 °F
Effective Date: 06/30/2020 02:04
Method: GPA-2261M
Cylinder No: 1111-001238
Instrument: 70104124 (Inficon Gas Chromatograph-MFusion)
Last Inst. Cal.: 07/06/2020 0:00 AM

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	1.602	1.602	1.969		GPM TOTAL C2+	7.395
Methane	72.171	72.162	50.783		GPM TOTAL C3+	3.775
Carbon Dioxide	0.226	0.226	0.436		GPM TOTAL IC5+	0.700
Ethane	13.556	13.555	17.879	3.620		
Propane	7.422	7.421	14.354	2.042		
Iso-butane	0.878	0.878	2.239	0.287		
n-Butane	2.369	2.369	6.040	0.746		
Iso-pentane	0.512	0.512	1.620	0.187		
n-Pentane	0.576	0.576	1.823	0.208		
Hexanes Plus	0.699	0.699	2.857	0.305		
	100.011	100.000	100.000	7.395		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7902	3.2176
Calculated Molecular Weight	22.80	93.19
Compressibility Factor	0.9957	

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.65 psia & 60°F

Real Gas Dry BTU	1342	5113
Water Sat. Gas Base BTU	1319	5024
Ideal, Gross HV - Dry at 14.65 psia	1336.5	5113.2
Ideal, Gross HV - Wet	1313.1	5023.7

Comments: H2S Field Content 0 ppm
Mcf/day 1012

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: 6030-20070007-001A

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 06, 2020

Station Name:	Brot Helm Fed Com 701H	Sampled By:	Michael Mirabal
Station Number:	7170081	Sample Of:	Gas Spot
Station Location:	COG	Sample Date:	06/30/2020 01:28
Sample Point:	Downstream	Sample Conditions:	98 psia, @ 116 °F Ambient: 98 °F
Type of Sample:	Spot-Cylinder	Effective Date:	06/30/2020 01:28
Heat Trace Used:	N/A	Method:	GPA-2261M
Sampling Method:	Fill and Purge	Cylinder No:	1111-001281
Sampling Company:	SPL	Instrument:	70104124 (Inficon Gas Chromatograph-MFusion)
Analyzed:	07/06/2020 13:43:34 by PS	Last Inst. Cal.:	07/06/2020 0:00 AM

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.73 psia		
Nitrogen	1.557	1.55647	1.925		GPM TOTAL C2+	7.207
Methane	72.830	72.82844	51.570		GPM TOTAL C3+	3.665
Carbon Dioxide	0.428	0.42789	0.831		GPM TOTAL IC5+	0.712
Ethane	13.194	13.19354	17.511	3.542		
Propane	7.100	7.10016	13.819	1.964		
Iso-butane	0.827	0.82708	2.122	0.272		
n-Butane	2.265	2.26455	5.810	0.717		
Iso-pentane	0.506	0.50549	1.610	0.186		
n-Pentane	0.571	0.57059	1.817	0.208		
Hexanes Plus	0.726	0.72579	2.985	0.318		
	100.004	100.00000	100.000	7.207		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7852	3.2176
Calculated Molecular Weight	22.66	93.19
Compressibility Factor	0.9958	
GPA 2172 Calculation:		
Calculated Gross BTU per ft³ @ 14.73 psia & 60°F		
Real Gas Dry BTU	1337	5141
Water Sat. Gas Base BTU	1315	5052
Ideal, Gross HV - Dry at 14.73 psia	1331.9	5141.1
Ideal, Gross HV - Wet	1308.7	5051.6

Comments: H2S Field Content 0 ppm
1271.6876 Mcf/day

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: 6030-20070025-002A

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 06, 2020

Station Name: Brot Helm Fed Com 703H
Station Number: 7170082
Station Location: COG
Sample Point: Downstream
Type of Sample: : Spot-Cylinder
Heat Trace Used: N/A
Sampling Method: : Fill and Purge
Sampling Company: :SPL
Analyzed: 07/06/2020 12:59:16 by PS

Sampled By: Donovan Miller
Sample Of: Gas Spot
Sample Date: 06/30/2020 02:39
Sample Conditions: 77 psig, @ 110 °F Ambient: 110 °F
Effective Date: 06/30/2020 02:39
Method: GPA-2261M
Cylinder No: 1111-001250
Instrument: 70104124 (Inficon Gas Chromatograph-MFusion)
Last Inst. Cal.: 07/06/2020 0:00 AM

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	1.524	1.524	1.880		GPM TOTAL C2+	7.369
Methane	72.216	72.222	51.028		GPM TOTAL C3+	3.727
Carbon Dioxide	0.241	0.241	0.467		GPM TOTAL iC5+	0.628
Ethane	13.639	13.640	18.064	3.642		
Propane	7.549	7.550	14.663	2.077		
Iso-butane	0.876	0.876	2.242	0.286		
n-Butane	2.338	2.338	5.985	0.736		
Iso-pentane	0.478	0.478	1.519	0.175		
n-Pentane	0.529	0.529	1.681	0.191		
Hexanes Plus	0.602	0.602	2.471	0.262		
	99.992	100.000	100.000	7.369		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7870	3.2176
Calculated Molecular Weight	22.71	93.19
Compressibility Factor	0.9958	

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.65 psia & 60°F

Real Gas Dry BTU	1338	5113
Water Sat. Gas Base BTU	1315	5024
Ideal, Gross HV - Dry at 14.65 psia	1332.6	5113.2
Ideal, Gross HV - Wet	1309.3	5023.7

Comments: H2S Field Content 0 ppm
Mcf/day 1461

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: 6030-20070025-001A

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 06, 2020

Station Name:	Brot Helm Fed Com 704H	Sampled By:	Donavan Miller
Station Number:	7170083	Sample Of:	Gas Spot
Station Location:	COG	Sample Date:	06/30/2020 02:27
Sample Point:	Downstream	Sample Conditions:	77 psig, @ 113 °F Ambient: 101 °F
Type of Sample :	Spot-Cylinder	Effective Date:	06/30/2020 02:27
Heat Trace Used:	N/A	Method:	GPA-2261M
Sampling Method :	Fill and Purge	Cylinder No:	1111-001275
Sampling Company :	SPL	Instrument:	70104124 (Inficon Gas Chromatograph-MFusion)
Analyzed:	07/06/2020 12:44:46 by PS	Last Inst. Cal.:	07/06/2020 0:00 AM

Analytical Data

Components	Un-normalized Mol %	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	2.194	2.197	2.692		GPM TOTAL C2+	7.202
Methane	71.949	72.053	50.567		GPM TOTAL C3+	3.770
Carbon Dioxide	0.492	0.493	0.949		GPM TOTAL iC5+	0.723
Ethane	12.833	12.851	16.904	3.432		
Propane	7.227	7.237	13.960	1.991		
Iso-butane	0.911	0.912	2.319	0.298		
n-Butane	2.405	2.408	6.123	0.758		
Iso-pentane	0.546	0.547	1.726	0.200		
n-Pentane	0.594	0.595	1.878	0.215		
Hexanes Plus	0.706	0.707	2.882	0.308		
	99.857	100.000	100.000	7.202		

Calculated Physical Properties	Total	C6+
Relative Density Real Gas	0.7923	3.2176
Calculated Molecular Weight	22.86	93.19
Compressibility Factor	0.9958	

GPA 2172 Calculation:

Calculated Gross BTU per ft³ @ 14.65 psia & 60°F

Real Gas Dry BTU	1329	5113
Water Sat. Gas Base BTU	1306	5024
Ideal, Gross HV - Dry at 14.65 psia	1323.3	5113.2
Ideal, Gross HV - Wet	1300.2	5023.7

Comments: H2S Field Content 0 ppm
Mcf/day 1136

Hydrocarbon Laboratory Manager

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