



**COG OPERATING LLC**

**LITTLE BEAR FEDERAL**

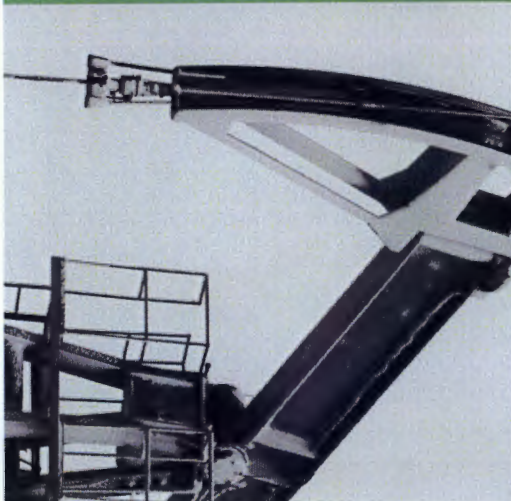
**2H,3H,4H,5H,7H,8H & 9H**

**Section 28 & 33 - T20S-R34E**

**Lea County, New Mexico**

**Case Nos. 16328, 16329, 16330, 16331,**

**16333, 16334 and 16335**



**DISTRICT I**  
1625 N. FRENCH DR., HOBBBS, NM 86340  
Phone: (878) 383-8181 Fax: (878) 383-0720

**DISTRICT II**  
511 S. FIRST ST., ARTESIA, NM 88210  
Phone: (878) 748-1883 Fax: (878) 748-0720

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

**DISTRICT IV**  
1820 S. ST. FRANCIS DR., SANTA FE, NM 87505  
Phone: (505) 478-3460 Fax: (505) 478-3462

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	Pool Code	Pool Name
Property Code	Property Name <b>LITTLE BEAR FEDERAL COM</b>	Well Number 2H
OGRID No.	Operator Name <b>COG OPERATING, LLC</b>	Elevation 3815.0'

**Surface Location**

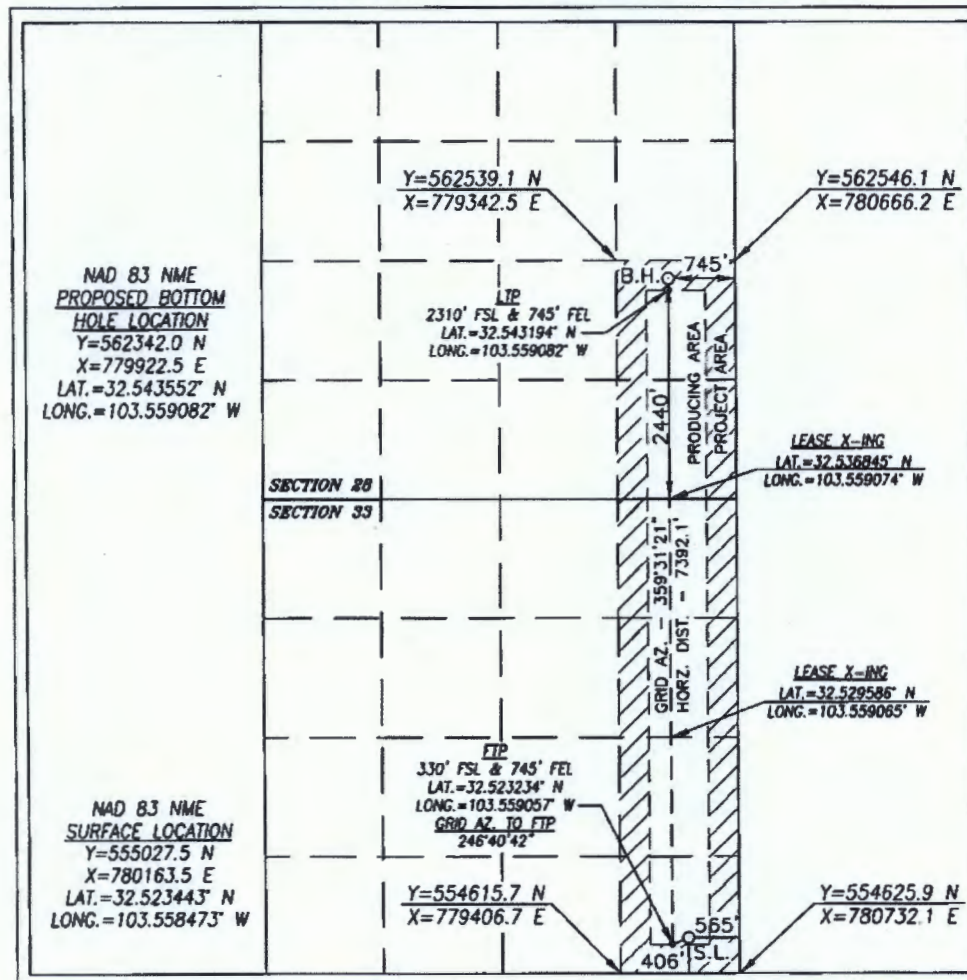
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	33	20-S	34-E		406	SOUTH	565	EAST	LEA

**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	28	20-S	34-E		2440	SOUTH	745	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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



**OPERATOR CERTIFICATION**

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

Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

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.

APRIL 19, 2017

Date of Survey

Signature & Seal of Professional Surveyor

**CHAD L. HARCROW**  
NEW MEXICO  
17777  
LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 5/24/17

Certificate No. CHAD HARCROW 17777  
W.O. # 17-472 DRAWN BY: SP



DISTRICT I  
1623 N. FRENCH DR., NORSE, NM 86048  
Phone: (505) 362-8181 Fax: (505) 362-9726

DISTRICT II  
811 S. FIRST ST., ARTESIA, NM 86210  
Phone: (505) 748-1283 Fax: (505) 748-9726

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

DISTRICT IV  
1229 S. ST. FRANCIS DR., SANTA FE, NM 87505  
Phone: (505) 476-3450 Fax: (505) 476-3452

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	Pool Code	Pool Name
Property Code	Property Name <b>LITTLE BEAR FEDERAL COM</b>	Well Number 3H
OGRID No.	Operator Name <b>COG OPERATING, LLC</b>	Elevation 3805.2'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	33	20-S	34-E		696	SOUTH	2167	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	28	20-S	34-E		2440	SOUTH	2310	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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**Y=562532.0 N  
X=778018.9 E**

**Y=562539.1 N  
X=779342.5 E**

**NAD 83 NME  
PROPOSED BOTTOM  
HOLE LOCATION  
Y=562332.6 N  
X=778357.6 E  
LAT.=32.543557° N  
LONG.=103.564160° W**

**NAD 83 NME  
SURFACE LOCATION  
Y=555305.1 N  
X=778558.9 E  
LAT.=32.524238° N  
LONG.=103.563672° W**

**Y=554605.5 N  
X=778081.3 E**

**Y=554615.7 N  
X=779406.7 E**

SECTION 28  
SECTION 33

LEASE X-ING  
LAT.=32.529587° N  
LONG.=103.564142° W

EIP  
330' FSL & 2310' FEL  
LAT.=32.523232° N  
LONG.=103.564134° W  
GRID AZ. TO EIP  
200°50'22"

GRID AZ. - 359°31'22"  
HORZ. DIST. - 7394.7'

PRODUCING AREA  
PROJECT AREA

LIP  
2310' FSL & 2310' FEL  
LAT.=32.543200° N  
LONG.=103.564160° W

S.L.  
2167'

696'

**OPERATOR CERTIFICATION**

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Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

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.*

FEBRUARY 14, 2017

Date of Survey \_\_\_\_\_

Signature & Seal of Professional Surveyor

**CHAD L. HARGROW**  
NEW MEXICO  
17777  
LICENSED PROFESSIONAL SURVEYOR

*Chad L. Hargrow* 3/1/18  
Certificate No. CHAD HARGROW 17777  
W.O. 18-125 DRAWN BY: AM



DISTRICT I  
1825 N. FRENCH DR., BOBBS, NM 87240  
Phone: (505) 292-5181 Fax: (505) 292-9720

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) 234-8173 Fax: (505) 234-8170

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	Pool Code	Pool Name
Property Code	Property Name <b>LITTLE BEAR FEDERAL COM</b>	Well Number 4H
GRID No.	Operator Name <b>COG OPERATING, LLC</b>	Elevation 3804.4'

**Surface Location**

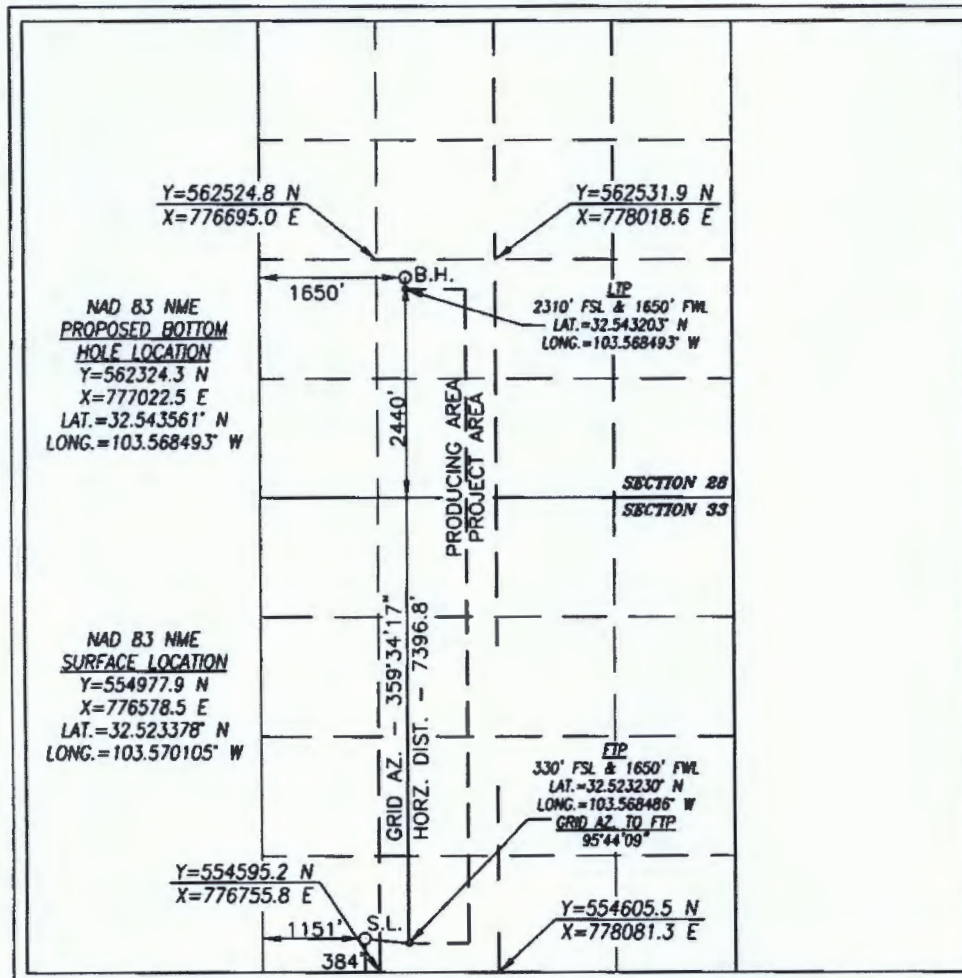
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	33	20-S	34-E		384	SOUTH	1151	WEST	LEA

**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
K	28	20-S	34-E		2440	SOUTH	1650	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

E-mail Address \_\_\_\_\_

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FEBRUARY 14, 2018

Date of Survey \_\_\_\_\_

Signature & Seal of Professional Surveyor

**CHAD L. HARGROW**  
NEW MEXICO  
LICENSED PROFESSIONAL SURVEYOR  
17777

Chad Hargrow 3/1/18  
Certificate No. CHAD HARGROW 17777  
W.O. 18-126 DRAWN BY: AM



DISTRICT I  
1633 N. FRANCE DR., MORRIS, NM 88240  
Phone: (575) 883-8181 Fax: (575) 883-0720

DISTRICT II  
511 S. FIRST ST., ARTESIA, NM 88210  
Phone: (575) 748-1888 Fax: (575) 748-9720

DISTRICT III  
1000 RIO BRAZOS RD., AZTEC, NM 87410  
Phone: (505) 334-8178 Fax: (505) 334-8179

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	Pool Code	Pool Name
Property Code	Property Name <b>LITTLE BEAR FEDERAL COM</b>	Well Number <b>5H</b>
OGRID No.	Operator Name <b>COG OPERATING, LLC</b>	Elevation <b>3807.5'</b>

**Surface Location**

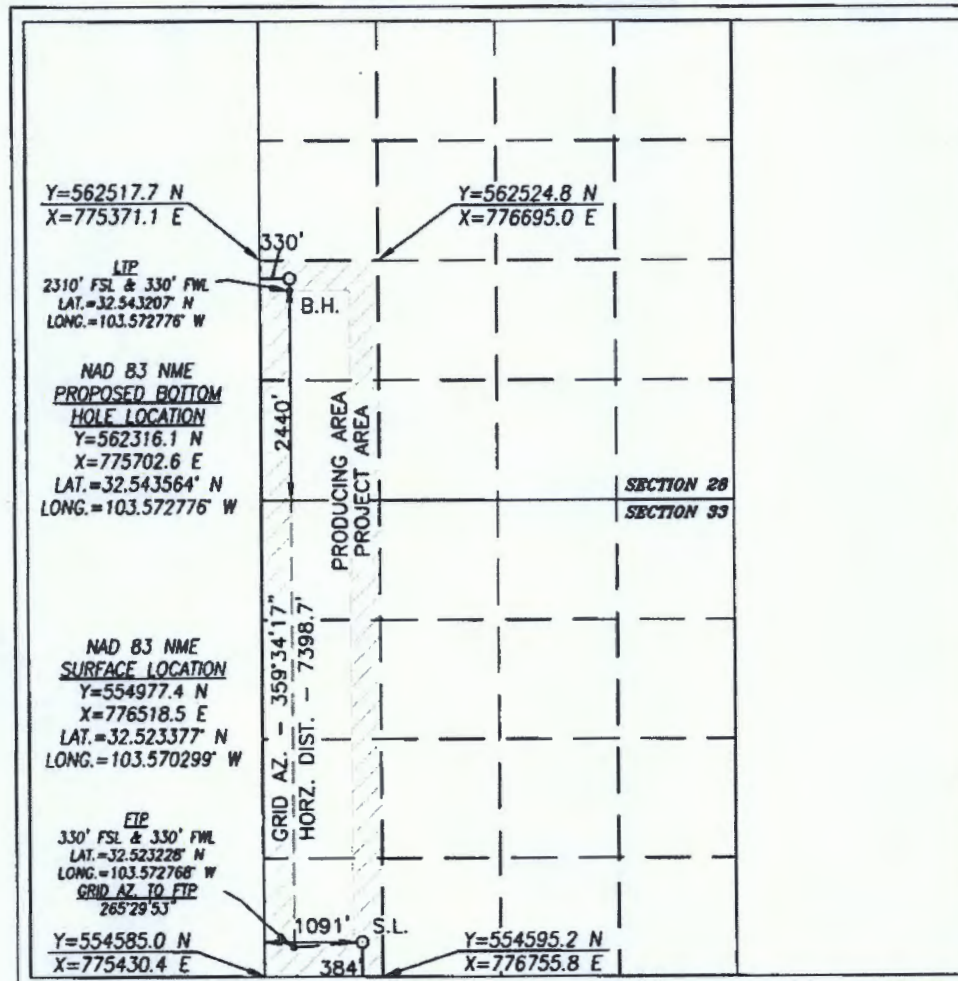
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	33	20-S	34-E		384	SOUTH	1091	WEST	LEA

**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
L	28	20-S	34-E		2440	SOUTH	330	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

E-mail Address \_\_\_\_\_

**SURVEYOR CERTIFICATION**

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FEBRUARY 14, 2018

Date of Survey

Signature & Seal of Professional Surveyor



*Chad L. Hargrow* 2/28/18  
Certificate No. CHAD HARGROW 17777  
W.O. # 18-127 DRAWN BY: AM



DISTRICT I  
1635 N. FRANCIS DR., ROSA, NM 88240  
Phone: (575) 362-8181 Fax: (575) 362-9720

DISTRICT II  
511 S. FIRST ST., ARTESIA, NM 88210  
Phone: (575) 749-1293 Fax: (575) 749-9720

DISTRICT III  
1000 RIO BRAZOS RD., AXTEC, NM 87410  
Phone: (505) 334-0178 Fax: (505) 334-0170

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

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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	Pool Code	Pool Name
Property Code	Property Name <b>LITTLE BEAR FEDERAL COM</b>	
OGRID No.	Operator Name <b>COG OPERATING, LLC</b>	
	Well Number <b>7H</b>	Elevation <b>3806.0'</b>

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	33	20-S	34-E		696	SOUTH	2137	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	28	20-S	34-E		2440	SOUTH	1650	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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**NAD 83 NME PROPOSED BOTTOM HOLE LOCATION**  
Y=562336.6 N  
X=779017.6 E  
LAT.=32.543555° N  
LONG.=103.562019° W

**NAD 83 NME SURFACE LOCATION**  
Y=555305.4 N  
X=778588.9 E  
LAT.=32.524238° N  
LONG.=103.563575° W

**LEASE X-ING**  
LAT.=32.529587° N  
LONG.=103.562001° W  
EIP  
330' FSL & 1650' FEL  
LAT.=32.523233° N  
LONG.=103.561993° W  
GRID AZ. TO EIP  
126°27'21"

**GRID AZ. = 359°31'22"**  
**HORIZ. DIST. = 7393.6'**

**GRID AZ. TO FTP**  
126°27'21"

**OPERATOR CERTIFICATION**

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Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

E-mail Address \_\_\_\_\_

---

**SURVEYOR CERTIFICATION**

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**FEBRUARY 14, 2018**

Date of Survey

Signature & Seal of Professional Surveyor

**CHAD L. HARGROW**  
NEW MEXICO  
17777  
LICENSED PROFESSIONAL SURVEYOR

*Chad Hargrow* 3/1/18

Certificate No. CHAD HARGROW 17777  
W.O. # 18-129 DRAWN BY: AM



DISTRICT I  
1625 N. FRENCH DR., ROSA, NM 88240  
Phone: (575) 393-3181 Fax: (575) 393-0750

DISTRICT II  
811 E. FIRST ST., ARTESIA, NM 88210  
Phone: (575) 748-1288 Fax: (575) 748-9726

DISTRICT III  
1000 RIO BRAZOS RD., AZTEC, NM 87410  
Phone: (505) 334-8176 Fax: (505) 334-8170

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87503  
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	Pool Code	Pool Name
Property Code	Property Name <b>LITTLE BEAR FEDERAL COM</b>	Well Number <b>8H</b>
OGRID No.	Operator Name <b>COG OPERATING, LLC</b>	Elevation <b>3804.5'</b>

**Surface Location**

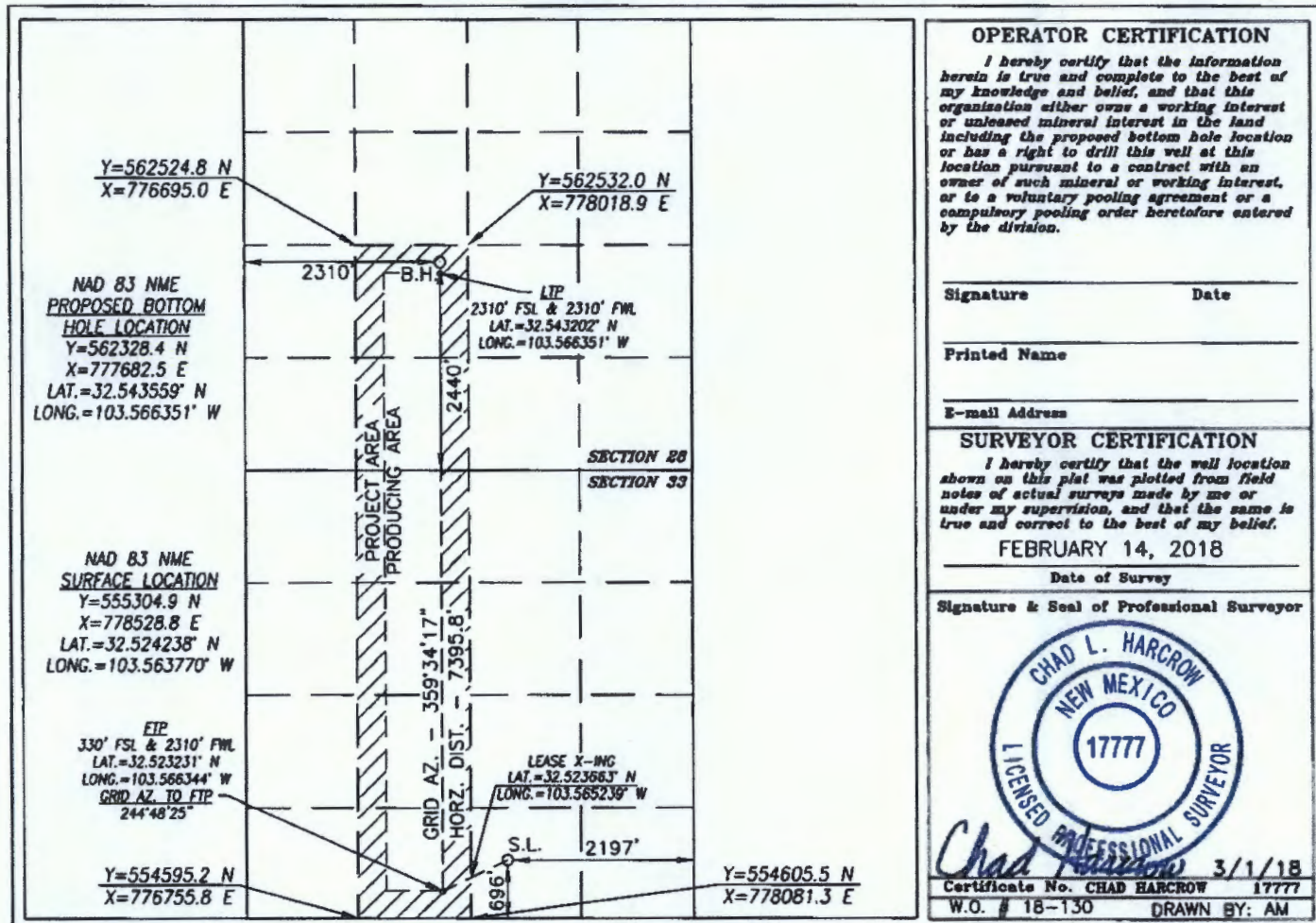
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	33	20-S	34-E		696	SOUTH	2197	EAST	LEA

**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
K	28	20-S	34-E		2440	SOUTH	2310	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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**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.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

E-mail Address \_\_\_\_\_

**SURVEYOR CERTIFICATION**

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FEBRUARY 14, 2018

Date of Survey

Signature & Seal of Professional Surveyor



Signature: *Chad Hargrow* 3/1/18  
Certificate No. CHAD HARGROW 17777  
W.O. # 18-130 DRAWN BY: AM



**DISTRICT I**  
 1825 N. FREWCH DR., ROSAS, NM 88240  
 Phone: (505) 963-0181 Fax: (505) 963-0720

**DISTRICT II**  
 811 E. FIRST ST., ARTESIA, NM 88210  
 Phone: (505) 748-1283 Fax: (505) 748-8729

**DISTRICT III**  
 1000 RIO BRAZOS RD., AZTEC, NM 87410  
 Phone: (505) 334-8176 Fax: (505) 334-8170

**DISTRICT IV**  
 1225 S. ST. FRANCIS DR., SANTA FE, NM 87505  
 Phone: (505) 476-3450 Fax: (505) 476-3442

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	Pool Code	Pool Name
Property Code	Property Name <b>LITTLE BEAR FEDERAL COM</b>	
OGRID No.	Operator Name <b>COG OPERATING, LLC</b>	
		Well Number <b>9H</b>
		Elevation <b>3804.5'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	33	20-S	34-E		384	SOUTH	1121	WEST	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
L	28	20-S	34-E		2440	SOUTH	990	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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

**PROPOSED BOTTOM HOLE LOCATION**  
 Y=562524.8 N  
 X=776695.0 E

**SURFACE LOCATION**  
 Y=554977.7 N  
 X=776548.4 E

**LIP**  
 2310' FSL & 990' FWL  
 LAT.=32.543205' N  
 LONG.=103.570634' W

**FIP**  
 330' FSL & 990' FWL  
 LAT.=32.523229' N  
 LONG.=103.570627' W

**GRID AZ. TO FIP**  
 247°08'08"

**GRID AZ. - 359°34'17"**  
**HORZ. DIST. - 7397.8'**

**SECTION 28**  
**SECTION 33**

**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.*

Signature \_\_\_\_\_ Date \_\_\_\_\_

Printed Name \_\_\_\_\_

E-mail Address \_\_\_\_\_

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FEBRUARY 14, 2018

Date of Survey

Signature & Seal of Professional Surveyor

**CHAD L. HARCROW**  
 NEW MEXICO  
 LICENSED SURVEYOR  
 17777

*Chad L. Harcrow* 2/28/18

Certificate No. CHAD HARCROW 17777  
 W.O. # 18-131 DRAWN BY: AM



Little Bear Federal Com 2H  
T20S-R34E-Section 33, E/2E/2  
T20S-R34E-Section 28, E/2SE/4  
Lea County, NM

			<b>TRACT 3</b> E/2SE/4 80 AC.
28			
33			<b>TRACT 2</b> E/2NE/4 80 AC.
			<b>TRACT 1</b> E/2SE/4 80 AC.

**Tract 1: E/2SE/4 Section 33- T20S-R34E (80 ACRES)**

COG Production LLC	6.2500000%
Marathon Oil Permian LLC	10.937500%
<u>ZPZ Delaware I, LLC</u>	<u>82.812500%</u>
<b>Total</b>	<b>100.000000%</b>

**BEFORE THE OIL CONSERVATION DIVISION**  
Santa Fe, New Mexico  
Case Nos. 16328, 16329, 16330, 16331,  
16333, 16334 & 16335 Exhibit No. 2  
Submitted by:  
**COG OPERATING LLC**  
Hearing Date: August 9, 2018



**Tract 2: E/2NE/4 Section 33-T20S-R34E (80 ACRES)**

<u>COG Operating LLC</u>	100.000000%
Total	100.000000%

**Tract 3: E/2SE/4 Section 28- T20S-R34E (80 ACRES)**

<u>EOG Resources, Inc.</u>	100.000000%
Total	100.000000%

**UNIT RECAPITULATION**

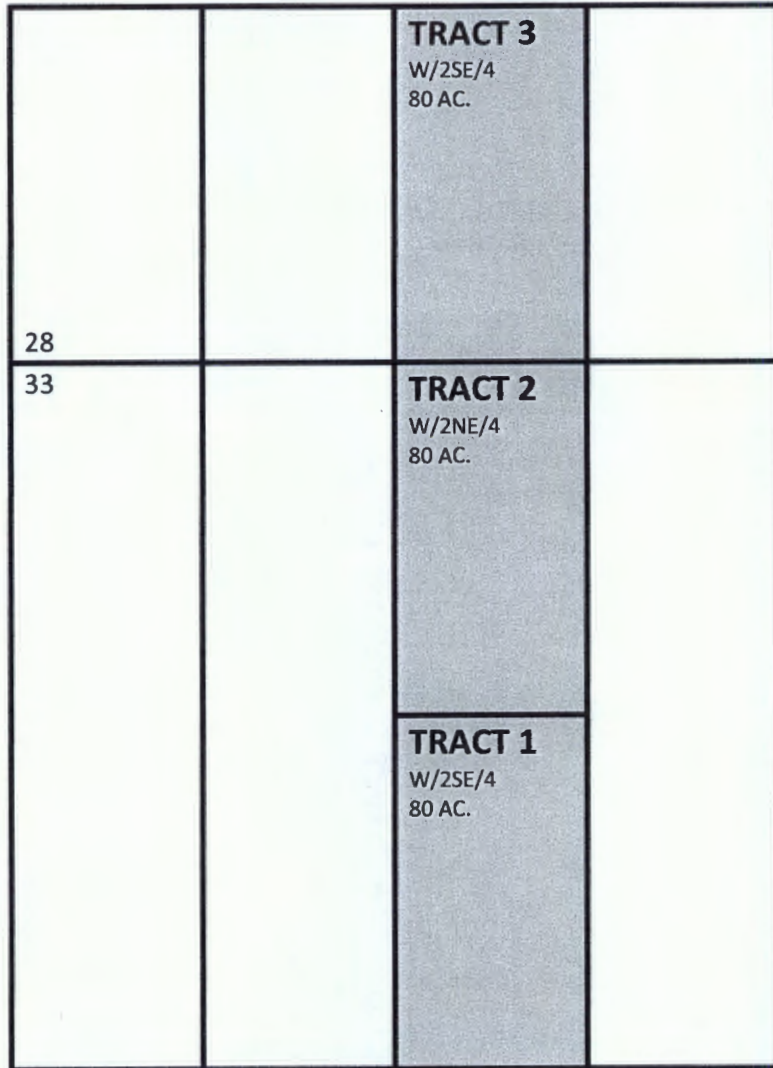
T20S-R34E-Section 33, E/2E/2  
T20S-R34E-Section 28, E/2SE/4  
Lea County, NM

COG Operating LLC	35.416667%
<b>EOG Resources, Inc.</b>	<b>33.333333%</b>
<b>ZPZ Delaware I, LLC</b>	<b>27.604167%</b>
<b>Marathon Oil Permian LLC</b>	<b>3.645833%</b>
Total:	100.000000%

***Interest seeking to Compulsory Pool***



Little Bear Federal Com 3H  
T20S-R34E-Section 33, W/2E/2  
T20S-R34E-Section 28, W/2SE/4  
Lea County, NM



**Tract 1: W/2SE/4 Section 33- T20S-R34E (80 ACRES)**

COG Production LLC	6.2500000%
Marathon Oil Permian LLC	10.937500%
ZPZ Delaware I, LLC	82.812500%
<b>Total</b>	<b>100.000000%</b>



**Tract 2: W/2NE/4 Section 33-T20S-R34E (80 ACRES)**

<u>COG Operating LLC</u>	100.000000%
Total	100.000000%

**Tract 3: W/2SE/4 Section 28- T20S-R34E (80 ACRES)**

<u>EOG Resources, Inc.</u>	100.000000%
Total	100.000000%

**UNIT RECAPITULATION**  
T20S-R34E-Section 33, W/2E/2  
T20S-R34E-Section 28, W/2SE/4  
Lea County, NM

COG Operating LLC	35.416667%
<b>EOG Resources, Inc.</b>	<b>33.333333%</b>
<b>ZPZ Delaware I, LLC</b>	<b>27.604167%</b>
<b><u>Marathon Oil Permian LLC</u></b>	<b><u>3.645833%</u></b>
Total:	100.000000%

***Interest seeking to Compulsory Pool***

Little Bear Federal Com 4H  
 T20S-R34E-Section 33, E/2W/2  
 T20S-R34E-Section 28, E/2SW/4  
 Lea County, NM

	<b>TRACT 2</b> E/2SW/4 80 AC.		
28			
33	<b>TRACT 1</b> E/2W/2 160 AC.		

**Tract 1: E/2W/2 Section 33-T20S-R34E (160 ACRES)**

COG Operating LLC	100.000000%
<b>Total</b>	<b>100.000000%</b>



**Tract 2: E/2SW/4 Section 28- T20S-R34E (80 ACRES)**

<u>EOG Resources, Inc.</u>	<u>100.000000%</u>
Total	100.000000%

**UNIT RECAPITULATION**  
T20S-R34E-Section 33, E/2W/2  
T20S-R34E-Section 28, E/2SW/4  
Lea County, NM

COG Operating LLC	66.666667%
<u>EOG Resources, Inc.</u>	<u>33.333333%</u>
Total:	100.000000%

***Interest seeking to Compulsory Pool***

Little Bear Federal Com 5H  
T20S-R34E-Section 33, W/2W/2  
T20S-R34E-Section 28, W/2SW/4  
Lea County, NM

<b>Tract 2</b> W/2SW/4 80 AC.  28			
33 <b>Tract 1</b> W/2W/2 160 AC.			

**Tract 1: W/2W/2 Section 33-T20S-R34E (160 ACRES)**

COG Operating LLC	100.000000%
<b>Total</b>	<b>100.000000%</b>



**Tract 2: W/2SW/4 Section 28- T20S-R34E (80 ACRES)**

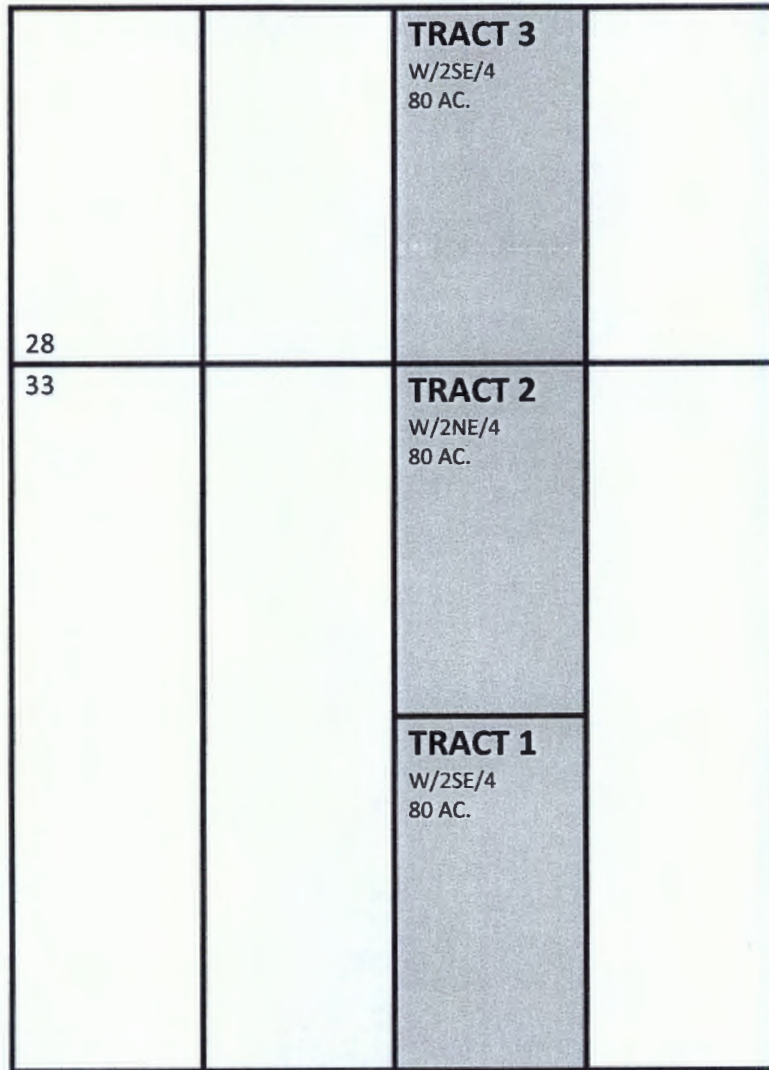
EOG Resources, Inc.	100.000000%
Total	100.000000%

**UNIT RECAPITULATION**  
T20S-R34E-Section 33, W/2W/2  
T20S-R34E-Section 28, W/2SW/4  
Lea County, NM

COG Operating LLC	66.666667%
<u>EOG Resources, Inc.</u>	<u>33.333333%</u>
Total:	100.000000%

***Interest seeking to Compulsory Pool***

Little Bear Federal Com 7H  
T20S-R34E-Section 33, W/2E/2  
T20S-R34E-Section 28, W/2SE/4  
Lea County, NM



**Tract 1: W/2SE/4 Section 33- T20S-R34E (80 ACRES)**

COG Production LLC	6.2500000%
Marathon Oil Permian LLC	10.937500%
<u>ZPZ Delaware I, LLC</u>	<u>82.812500%</u>
<b>Total</b>	<b>100.000000%</b>



**Tract 2: W/2NE/4 Section 33-T20S-R34E (80 ACRES)**

<u>COG Operating LLC</u>	<u>100.000000%</u>
Total	100.000000%

**Tract 3: W/2SE/4 Section 28- T20S-R34E (80 ACRES)**

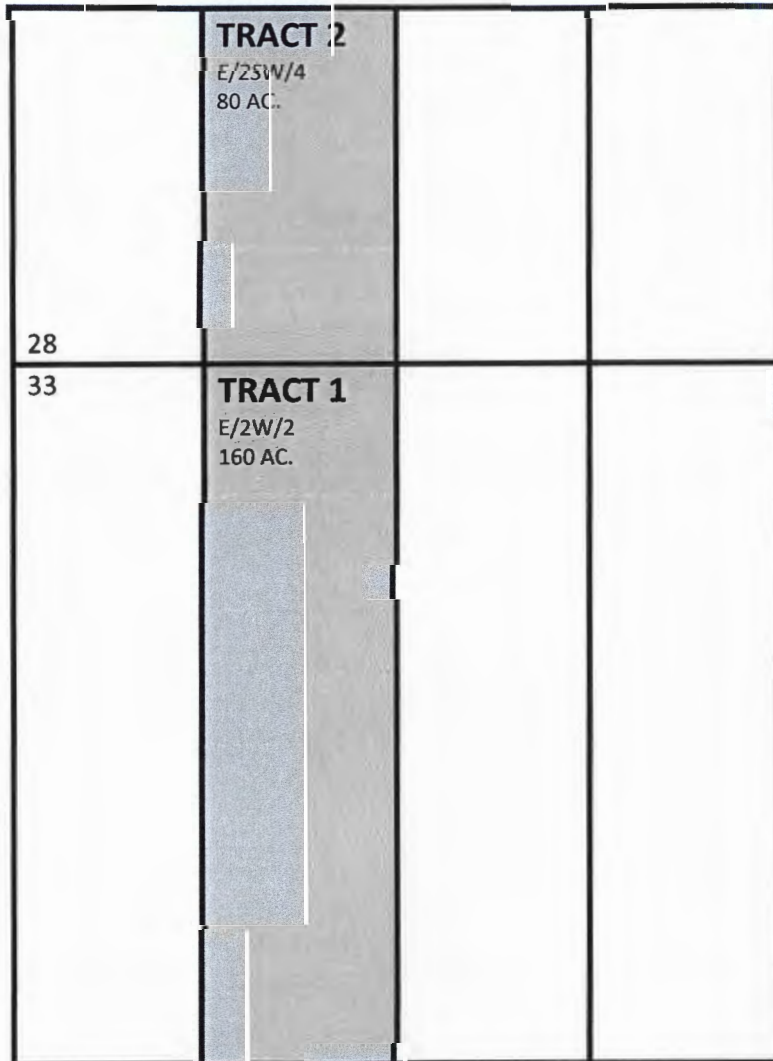
<u>EOG Resources, Inc.</u>	<u>100.000000%</u>
Total	100.000000%

**UNIT RECAPITULATION**  
T20S-R34E-Section 33, W/2E/2  
T20S-R34E-Section 28, W/2SE/4  
Lea County, NM

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<b>EOG Resources, Inc.</b>	<b>33.333333%</b>
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<b><u>Marathon Oil Permian LLC</u></b>	<b><u>3.645833%</u></b>
Total:	100.000000%

***Interest seeking to Compulsory Pool***

Little Bear Federal Com 8H  
T20S-R34E-Section 33, E/2W/2  
T20S-R34E-Section 28, E/2SW/4  
Lea County, NM



**Tract 1: E/2W/2 Section 33-T20S-R34E (160 ACRES)**

COG Operating LLC	100.000000%
Total	100.000000%



Tract 2: E/2SW/4 Section 28- T20S-R34E (80 ACRES)

EOG Resources, Inc.	100.000000%
Total	100.000000%

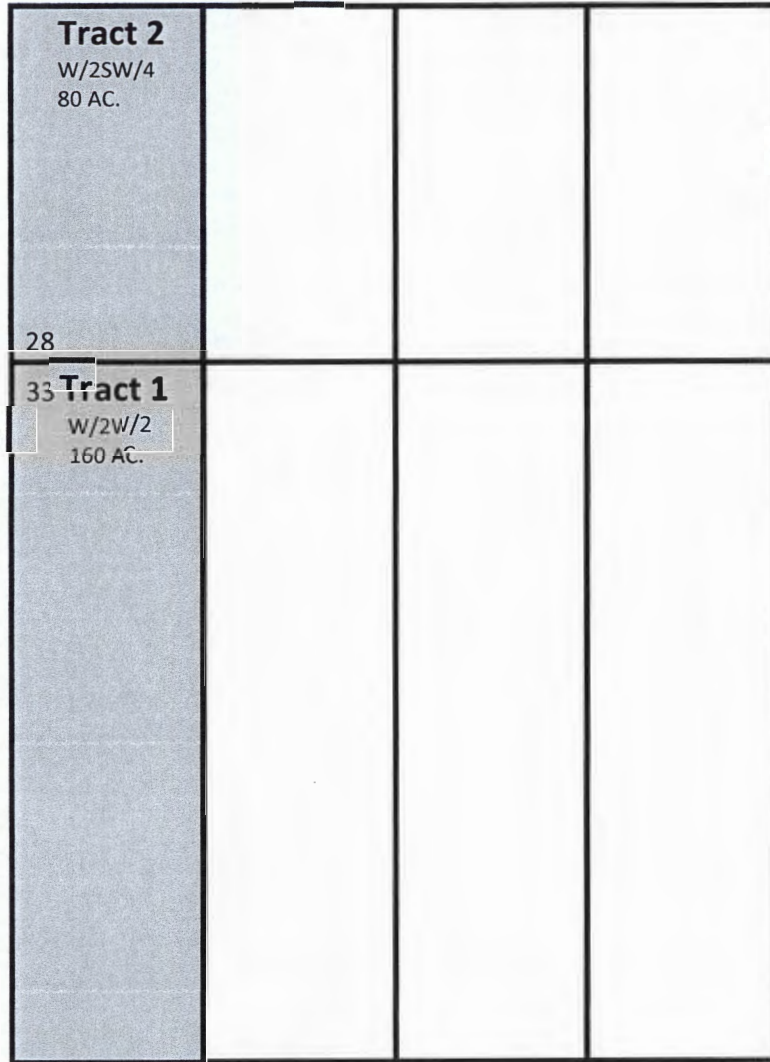
UNIT RECAPITULATION

T20S-R34E-Section 33, E/2W/2  
T20S-R34E-Section 28, E/2SW/4  
Lea County, NM

COG Operating LLC	66.666667%
<u>EOG Resources, Inc.</u>	<u>33.333333%</u>
Total:	100.000000%

*Interest seeking to Compulsory Pool*

Little Bear Federal Com 9H  
T20S-R34E-Section 33, W/2W/2  
T20S-R34E-Section 28, W/2SW/4  
Lea County, NM



**Tract 1: W/2W/2 Section 33-T20S-R34E (160 ACRES)**

COG Operating LLC	100.000000%
Total	100.000000%

**Tract 2: W/2SW/4 Section 28- T20S-R34E (80 ACRES)**

EOG Resources, Inc.	100.000000%
Total	100.000000%

**UNIT RECAPITULATION**

T20S-R34E-Section 33, W/2W/2  
T20S-R34E-Section 28, W/2SW/4  
Lea County, NM

COG Operating LLC	66.666667%
<b><u>EOG Resources, Inc.</u></b>	<b><u>33.333333%</u></b>
Total:	100.000000%

***Interest seeking to Compulsory Pool***





Federal Express

February 21, 2018

EOG Resources, Inc.  
EOG Y Resources, Inc.  
5509 Champions Drive  
Midland, TX 79706

EOG Resources, Inc.  
EOG Y Resources, Inc.  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

Re: **Well Re-Proposal – Little Bear Federal Com #2H**  
Section 28: E $\frac{1}{4}$ SE $\frac{1}{4}$   
Section 33: E $\frac{1}{4}$ E $\frac{1}{2}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 400' FSL & 745' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 745' FEL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #2H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,375' and a MD of approximately 18,670' to test the 3<sup>rd</sup> Bone Spring formation ("Operation"). The total cost of the Operation is estimated to be \$10,373,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the E $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 28 and the E $\frac{1}{4}$ E $\frac{1}{2}$  of Section 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.

One Concho Center | 600 West Illinois Avenue | Midland Texas 79701 | P 432-663 7443 | F 432-221-0856

BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
Case Nos. 16328, 16329, 16330, 16331,  
16333, 16334 & 16335 Exhibit No. 3  
Submitted by:  
**COG OPERATING LLC**  
Hearing Date: August 9, 2018

If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin – East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #2H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #2H.

Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #2H	<b>PROSPECT NAME:</b> Zeus 2034 (717062)
<b>SHL: Sec. 33:</b> 400 FSL & 745 FEL or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28:</b> 2440 FSL & 745 FEL or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,670
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,375

	<b>Drill - Rig Release(D)</b>	<b>Completion(C)</b>	<b>Tank Btty Constrctn(TB)</b>	<b>Pmpg Equipment(PEQ)</b>	<b>TOTAL</b>
<b>INTANGIBLE COSTS</b>					
Title/Curative/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303	351		5,000
Survey/Stake Location	204 6,000		352		6,000
Location/Plat/Road Expense	205 120,000	305 10,000	353 53,000	368	183,000
Drilling / Completion Overhead	206 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 780,000				780,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354	367	180,500
Water	212 30,000	312 723,000		368	753,000
Bits	213 122,400	313 6,000		369	128,400
Mud & Chemicals	214 185,000	314 34,000		370	219,000
Drill Stem Test	215	315			0
Coring & Analysis	216 120,000				120,000
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 80,000				80,000
Cement Squeeze & Other (Kickoff Plug)	220 35,000			371	35,000
Float Equipment & Centralizers	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Service	223	323		372	0
Geologic/Engineering	224	324	355	373	0
Contract Labor	225 5,500	325 23,800	356	374	85,000
Company Supervision	226 55,800	326 15,000	357	375	70,800
Contract Supervision	227 106,000	327 179,000	358	378 5,000	290,000
Testing Casing/Tubing	228 20,000	328 10,000		377	30,000
Mud Logging Unit	229 41,000	329			41,000
Logging	230 265,000			378	265,000
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Stimulation/Treating		332 12,000		380	12,000
Completion Unit		333 118,000		381 8,800	126,800
Swabbing Unit		334		382	0
Rentals-Surface	235 175,000	335 245,000	359	383 7,000	428,000
Rentals-Subsurface	236 175,000	336 60,000		384	235,000
Trucking/Forklift/Rig Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
Welding Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 60,000	362 135,000	387	195,000
Plug to Abandon	240	340			0
Sismic Analysis	241	341			0
Miscellaneous	242	342		389	0
Contingency	243 52,000	343 175,000	363	390	227,000
Closed Loop & Environmental	244	344 5,000	364	388	5,000
Dyed Diesel	245	345 327,000			327,000
Coil Tubing		346 250,000			250,000
Flowback Crews & Equip		347 48,000			48,000
Offset Directional/Frac	248	348		391	0
<b>TOTAL INTANGIBLES</b>	<b>3,120,000</b>	<b>5,383,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,771,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	401 46,000				46,000
Intermediate Casing	402 276,000				276,000
Production Casing/Liner	403 360,000				360,000
Tubing		504 48,600		530 5,000	53,600
Wellhead Equipment	405 75,000	505 20,900		531 3,000	98,900
Pumping Unit				506 96,000	96,000
Prime Mover				507 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BH)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000	533 15,000	79,000
Packers/Anchors/Hangers		514 85,000		534 2,000	87,000
Couplings/Fittings/Valves	415	515 114,000			114,000
Dehydration		517			0
Injection Plant/CO2 Equipment		518			0
Pumps-Surface		521 11,000			11,000
Instrumentation/SCADA/POC		522		529 7,000	7,000
Miscellaneous	419 519	523		535 3,000	3,000
Contingency	420 520	524		536	0
Meters/LACT		525 31,000			31,000
Flares/Combustors/Emission		526 23,000			23,000
Gas Lift/Compression		527 15,000	518 35,000	528	50,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,877,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>10,373,100</b>
<b>COG Operating LLC</b>	<b>% of Total Well Cost</b>	<b>37%</b>	<b>63%</b>	<b>7%</b>	<b>2%</b>

Date Prepared: 1/4/18

COG Operating LLC

We approve:  
% Working Interest

By: PS-101-N-LE

Company: EOG Y Resources, LLC

By:

Printed Name:

Title:

Date:

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





Federal Express

March 2, 2018

Marathon Oil Permian LLC  
5555 San Felipe Street  
Houston, Texas 77056

**COPY**

Re: Well Re-Proposal – Little Bear Federal Com #2H  
Section 28: E $\frac{1}{2}$ SE $\frac{1}{4}$   
Section 33: E $\frac{1}{2}$ E $\frac{1}{4}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 400' FSL & 745' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 745' FEL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

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- \$7,000/\$700 Drilling and Producing rate
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If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin - East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #2H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #2H.

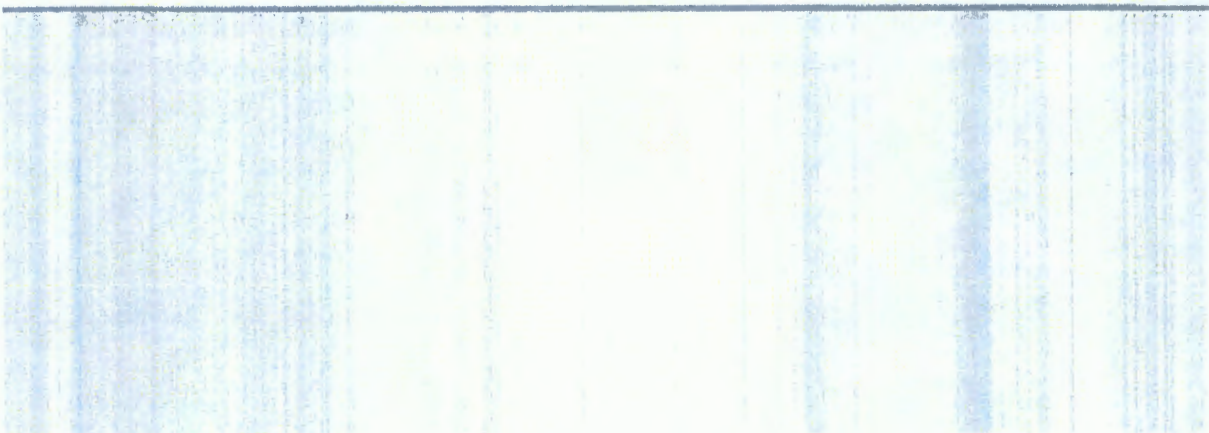
Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_





**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #2H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL: Sec. 33:</b> 400 FSL & 745 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28:</b> 2440 FSL & 745 FEL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,670
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,375

	<b>Drig - Rig Release(D)</b>	<b>Completion(C)</b>	<b>Tank Btty Constrctn(TB)</b>	<b>Progs Equipment(PEQ)</b>	<b>TOTAL</b>
<b>INTANGIBLE COSTS</b>					
Title/Cursive/Permit	201 11,000				11,000
Insurance	202 4,000				4,000
Damages/Right of Way	203 5,000				5,000
Survey/State Location	204 6,000				6,000
Location/Pits/Road Expense	205 120,000	305 10,000	353 53,000	366	183,000
Drilling / Completion Overhead	208 9,300	308			9,300
Turnkey Contract	207				0
Footage Contract	206				0
Daywork Contract	209 780,000				780,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
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Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
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Bits	213 122,400	313 8,000		369	128,400
Mud & Chemicals	214 185,000	314 34,000		370	219,000
Drill Stem Test	215	315			0
Coring & Analysis	216 120,000				120,000
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220 35,000			371	35,000
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Fishing Tools & Service	223	323		372	0
Geologic/Engineering	224	324	355	373	0
Contract Labor	225 5,500	325 23,800		374 6,500	85,800
Company Supervision	226 58,800	326 15,000		375	70,800
Contract Supervision	227 108,000	327 179,000		376 5,000	290,000
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Mud Logging Unit	229 41,000	329			41,000
Logging	230 265,000			378	265,000
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Stimulation/Treating		332 12,000		380	12,000
Completion Unit		333 118,000		381 8,800	126,800
Swabbing Unit		334		382	0
Rentals-Surface	235 175,000	335 246,000	359	383 7,000	428,000
Rentals-Subsurface	236 175,000	336 80,000		384	235,000
Trucking/Forklift/Rig Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
Welding Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 60,000	362 135,000	387	195,000
Plug to Abandon	240	340			0
Seismic Analysis	241	341			0
Miscellaneous	242	342		389	0
Contingency	243 52,000	343 175,000	363	380	227,000
Closed Loop & Environmental	244	344 5,000	364	388	5,000
Dyed Diesel	245	345 327,000			327,000
Coil Tubing		346 250,000			250,000
Flowback Crews & Equip		347 48,000			48,000
Offset Directional/Frac	248	348		391	0
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Production Casing/Liner	403 360,000				360,000
Tubing		504 48,800		530 5,000	53,800
Wellhead Equipment	405 75,000	505 20,800		531 3,000	98,800
Pumping Unit				506 96,000	96,000
Prime Mover				507 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BH)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 84,000	533 15,000	99,000
Packers/Anchors/Hangers	414	514 85,000		534 2,000	87,000
Couplings/Fittings/Valves	415		518 114,000		114,000
Dehydration			517		0
Injection Plant/CO2 Equipment			518		0
Pumps-Surface			521 11,000		11,000
Instrumentation/SCADA/POC			522	529 7,000	7,000
Miscellaneous	418	518	523	535 3,000	3,000
Contingency	420	520	524	538	0
Meters/LACT			525 31,000		31,000
Flares/Combustors/Emission			526 23,000		23,000
Gas Lift/Compression		527 15,000	516	528	50,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,877,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>10,373,100</b>

COG Operating LLC	% of Total Well Cost	37%	63%	7%	2%
-------------------	----------------------	-----	-----	----	----

Date Prepared: 1/4/18  
COG Operating LLC

We approve: \_\_\_\_\_  
% Working Interest  
By: PS-KL-WLE

Company: Marathon Oil Permian LLC  
By: \_\_\_\_\_

Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_  
This AFE is only an estimate. By signing you agree to pay your share of the actual costs incurred.





Federal Express

March 2, 2018

ZPZ Delaware I, LLC  
200 Post Oak Blvd., Suite 100  
Houston, Texas 77056

**COPY**

Re: Well Re-Proposal – Little Bear Federal Com #2H  
Section 28: E $\frac{1}{4}$ SE $\frac{1}{4}$   
Section 33: E $\frac{1}{4}$ E $\frac{1}{4}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 400' FSL & 745' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 745' FEL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #2H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,375' and a MD of approximately 18,670' to test the 3<sup>rd</sup> Bone Spring formation ("Operation"). The total cost of the Operation is estimated to be \$10,373,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the E $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 28 and the E $\frac{1}{4}$ E $\frac{1}{4}$  of Section 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

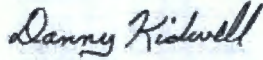
- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.

If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin - East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #2H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #2H.

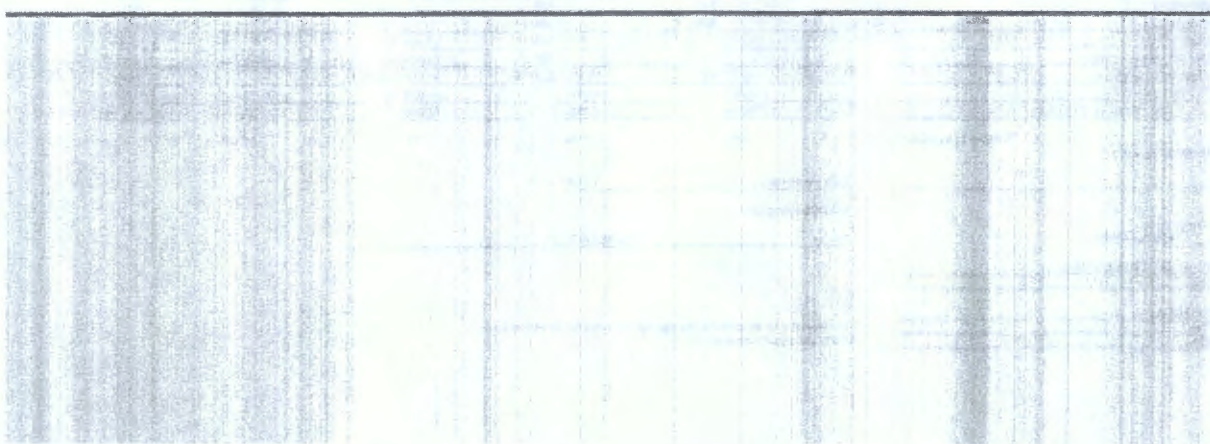
Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_





**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #2H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL Sec 33:</b> 400 FSL & 745 FEL or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL Sec 28:</b> 2440 FSL & 745 FEL or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,670
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,375

	Drig - Rig Released(D)	Completion(C)	Tank Btry Constructn(TB)	Pmog Equipment(PEQ)	TOTAL
<b>INTANGIBLE COSTS</b>					
Title/Cursive/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303			5,000
Survey/State Location	204 6,000				6,000
Location/Pits/Road Expense	205 120,000	305 10,000	353 53,000	366	183,000
Drilling / Completion Overhead	206 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 780,000				780,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 857,000			857,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354	367	180,500
Water	212 30,000	312 723,000		368	753,000
Bits	213 122,400	313 8,000		369	128,400
Mud & Chemicals	214 185,000	314 34,000		370	219,000
Drill Stem Test	215	315			0
Coring & Analysis	216 120,000				120,000
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220 35,000			371	35,000
Ficat Equipment & Centralizers	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Service	223	323		372	0
Geologic/Engineering	224	324	365	373	0
Contract Labor	225 5,500	325 23,800	356 50,000	374 6,500	85,800
Company Supervision	226 55,800	326 15,000	357	375	70,800
Contract Supervision	227 108,000	327 179,000	358	376 5,000	290,000
Testing Casing/Tubing	228 20,000	328 10,000		377	30,000
Mud Logging Unit	229 41,000	329			41,000
Logging	230 285,000			378	285,000
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Stimulation/Treating		332 12,000		380	12,000
Completion Unit		333 118,000		381 8,800	126,800
Swabbing Unit		334		382	0
Rentals-Surface	235 175,000	335 246,000	359	383 7,000	428,000
Rentals-Subsurface	236 175,000	336 60,000		384	235,000
Trucking/Forklift/Rig Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
Wellbore Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 60,000	362	387 135,000	195,000
Plug to Abandon	240	340			0
Seismic Analysis	241	341			0
Miscellaneous	242	342		389	0
Contingency	243 82,000	343 173,000	363	390	227,000
Closed Loop & Environmental	244	344 5,000	364	388	5,000
Dyed Diesel	245	345 327,000			327,000
Coil Tubing		346 250,000			250,000
Flowback Crews & Equip		347 48,000			48,000
Offset Directional/Frac	246	348		391	0
<b>TOTAL INTANGIBLES</b>	<b>3,120,000</b>	<b>5,383,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,771,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	401 46,000				46,000
Intermediate Casing	402 276,000				276,000
Production Casing/Liner	403 360,000				360,000
Tubing		604 48,800		530 8,000	53,800
Wellhead Equipment	405 75,000	605 20,900		531 3,000	98,900
Pumping Unit				506 96,000	96,000
Prime Mover				607 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BH)		606 0		532 5,000	5,000
Tanks			610 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000		64,000
Packera/Anchors/Hangers	414	514 65,000		533 15,000	79,000
Couplings/Fittings/Valves	415			534 2,000	67,000
Dehydration				515 114,000	114,000
Injection Plant/CO2 Equipment				517	0
Pumps-Surface				518 0	0
Instrumentation/SCADA/POC				521 11,000	11,000
Miscellaneous	418	519		529 7,000	7,000
Contingency	420	520		523 3,000	3,000
Meters/LACT				524	0
Flares/Combustors/Emission				525 31,000	31,000
Gas Lift/Compression				526 23,000	23,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,877,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>10,373,100</b>

COG Operating LLC % of Total Well Cost 37% 53% 7% 2%

Date Prepared: 1/4/18

We approve: \_\_\_\_\_  
% Working Interest

COG Operating LLC

By: PS-KJ,-NLE

Company: ZPZ Defense I, LLC  
By: \_\_\_\_\_

Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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





Federal Express

February 21, 2018

EOG Resources, Inc.  
EOG Y Resources, Inc.  
5509 Champions Drive  
Midland, TX 79706

EOG Resources, Inc.  
EOG Y Resources, Inc.  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

Re: Well Re-Proposal – Little Bear Federal Com #3H  
Section 28: W $\frac{1}{2}$ SE $\frac{1}{4}$   
Section 33: W $\frac{1}{2}$ E $\frac{1}{4}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 396' FSL & 2167' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 2310' FEL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #3H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,385' and a MD of approximately 18,680' to test the 3<sup>rd</sup> Bone Spring formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the W $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 28 and the W $\frac{1}{2}$ E $\frac{1}{4}$  of 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.

If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin - East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #3H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #3H.

Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

WELL NAME: <b>LITTLE BEAR FED COM #3H</b>	PROSPECT NAME: <b>Zeus 2034 (717082)</b>
SHL: Sec. 33: <b>396 FSL &amp; 2167 FEL, or an approved legal location</b>	STATE & COUNTY: <b>New Mexico, Lea</b>
BHL: Sec. 28: <b>2440 FSL &amp; 2310 FEL, or an approved legal location</b>	OBJECTIVE: <b>DRILL AND COMPLETE</b>
FORMATION: <b>3rd Bone Spring</b>	DEPTH: <b>18,680</b>
LEGAL: <b>Sections 28 &amp; 33, T20S-R34E</b>	TVD: <b>11,385</b>

	Drig - Rig Release(D)	Completion(C)	Tank Btry Constructn(TB)	Pmpg Equipment(PEQ)	TOTAL
<b>INTANGIBLE COSTS</b>					
Title/Curative/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303			5,000
Survey/State Location	204 6,000		351		6,000
Location/Pits/Road Expense	205 120,000	305 10,000	352		130,000
Drilling / Completion Overhead	206 9,300	308	353 53,000	366	9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 700,000				700,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354		180,500
Water	212 30,000	312 723,000		367	753,000
Bits	213 122,400	313 6,000		368	128,400
Mud & Chemicals	214 185,000	314 34,000		369	219,000
Drill Stem Test	215	315		370	0
Coring & Analysis	216				0
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220			371	0
Float Equipment & Centralizers	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Service	223	323		372	0
Geologic/Engineering	224	324	355	373	0
Contract Labor	225 5,500	325 23,800	356 50,000	374 6,500	85,800
Company Supervision	226 55,800	326 15,000	357	375	70,800
Contract Supervision	227 108,000	327 179,000	358	376 5,000	290,000
Testing Casing/Tubing	228 20,000	328 10,000		377	30,000
Mud Logging Unit	229 41,000	329			41,000
Logging	230			378	0
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Simulation/Treating		332 12,000		380	12,000
Completion Unit		333 118,000		381 8,800	126,800
Swabbing Unit		334		382	0
Rentals-Surface	235 175,000	338 248,000	359	383 7,000	428,000
Rentals-Subsurface	236 175,000	338 60,000		384	235,000
Trucking/Forklift/Rig Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
Welding Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 60,000	362	387 135,000	195,000
Plug to Abandon	240	340			0
Seismic Analysis	241	341			0
Miscellaneous	242	342			0
Contingency	243 52,000	343 175,000	363	389	227,000
Closed Loop & Environmental	244	344 5,000	364	388	5,000
Dyed Diesel	245	345 327,000			327,000
Coil Tubing		346 250,000			250,000
Flowback Crews & Equip		347 48,000			48,000
Offset Directional/Frac	248	348		391	0
<b>TOTAL INTANGIBLES</b>	<b>2,620,000</b>	<b>5,383,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	401 46,000				46,000
Intermediate Casing	402 278,000				278,000
Production Casing/Liner	403 360,000				360,000
Tubing		504 48,000		530 5,000	53,000
Wellhead Equipment	405 75,000	505 20,000		531 3,000	98,000
Pumping Unit				506 98,000	98,000
Prime Mover				507 0	0
Rods				508 55,000	55,000
Pump-Sub Surface (BH)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000	533 15,000	79,000
Packers/Anchors/Hangers	414 514 65,000			534 2,000	67,000
Couplings/Fittings/Valves	415		515 114,000		114,000
Dehydration			517		0
Injection Plant/CO2 Equipment			518		0
Pumps-Surface			521 11,000		11,000
Instrumentation/SCADA/POC			522	529 7,000	7,000
Miscellaneous	419 519 3,000			535 3,000	3,000
Contingency	420 520			536	0
Meters/LACT			525 31,000		31,000
Flares/Combustors/Emission			528 23,000		23,000
Gas Lift/Compression		527 15,000	516 35,000	526	50,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>
COG Operating LLC	34%	56%	8%	2%	

Date Prepared: 1/4/18

COG Operating LLC

We approve: \_\_\_\_\_  
% Working Interest

Company: EOG Resources, LLC

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

By: PS-KL-WLE

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



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #3H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL:</b> Sec. 33, 386 FSL & 2167 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL:</b> Sec. 28 2440 FSL & 2310 FEL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,680
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,385

	<u>Drig - Rig</u>	<u>Completion(C)</u>	<u>Tank Bttv</u>	<u>Prog</u>	<u>TOTAL</u>
	<u>Release(D)</u>		<u>Constrctn(TB)</u>	<u>Equipment(PEQ)</u>	
<b>INTANGIBLE COSTS</b>					
Title/Curative/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303	351		5,000
Survey/Stake Location	204 8,000		352		8,000
Location/Pits/Road Expense	205 120,000	305 10,000	353	366 53,000	183,000
Drilling / Completion Overhead	206 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 700,000				700,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354	367	180,500
Water	212 30,000	312 723,000		368	753,000
Bits	213 122,400	313 6,000		369	128,400
Mud & Chemicals	214 185,000	314 34,000		370	219,000
Drill Stem Test	215	315			0
Coring & Analysis	216				0
Cement Surface	217 20,000				20,000
Cement Intermediate	218 80,000				80,000
Cement 2nd Intermediate/Production	219 80,000				80,000
Cement Squeeze & Other (Kickoff Plug)	220			371	0
Float Equipment & Centralizers	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Services	223	323		372	0
Geologic/Engineering	224	324	365	373	0
Contract Labor	225 5,500	325 23,800	366	374 6,500	85,800
Company Supervision	226 55,800	326 15,000	367	375	70,800
Contract Supervision	227 106,000	327 179,000	368	376 5,000	290,000
Testing Casing/Tubing	228 20,000	328 10,000	369	377	30,000
Mud Logging Unit	229 41,000	329			41,000
Logging	230			378	0
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Stimulation/Treating		332 12,000		380	12,000
Completion Unit		333 118,000		381 8,800	126,800
Swabbing Unit		334		382	0
Rentals-Surface	235 175,000	335 246,000	358	383 7,000	428,000
Rentals-Subsurface	236 175,000	336 80,000		384	255,000
Trucking/Forklift/Pig Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
Welding Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 80,000	362 135,000	387	185,000
Plug to Abandon	240	340			0
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Miscellaneous	242	342		389	0
Contingency	243 52,000	343 175,000	363	390	227,000
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Flowback Crews & Equip		347 48,000			48,000
Offset Directional/Frac	248	348		361	0
<b>TOTAL INTANGIBLES</b>	<b>2,820,000</b>	<b>5,383,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	401 48,000				48,000
Intermediate Casing	402 278,000				278,000
Production Casing/Liner	403 360,000				360,000
Tubing		504 48,800		530 5,000	53,800
Wellhead Equipment	405 75,000	505 20,900		531 3,000	98,900
Pumping Unit				506 98,000	98,000
Prime Mover		0		507 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BH)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000	533 15,000	79,000
Packers/Anchors/Hangers	414	514 65,000		534 2,000	67,000
Couplings/Fittings/Valves	415		515 114,000		114,000
Dehydration			517		0
Injection Plant/CO2 Equipment		0	518		0
Pumps-Surface			521 11,000		11,000
Instrumentation/SCADA/POC			522	529 7,000	7,000
Miscellaneous	419 519	523		535 3,000	3,000
Contingency	420 520	524		536	0
Meters/LACT		525 31,000			31,000
Flares/Combustors/Emission		526 23,000			23,000
Gas Lift/Compression		527 15,000	516 35,000	528	50,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>

COG Operating LLC	% of Total Well Cost	34%	58%	8%	2%
-------------------	----------------------	-----	-----	----	----

Date Prepared: 1/4/18  
COG Operating LLC

We approve: \_\_\_\_\_  
% Working Interest  
By: PS-KL-JV-LE

Company: EOG Y Resources, LLC  
By: \_\_\_\_\_

Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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





Federal Express

March 2, 2018

Marathon Oil Permian LLC  
5555 San Felipe St.  
Houston, Texas 77056

**COPY**

Re: Well Re-Proposal – Little Bear Federal Com #3H  
Section 28: W $\frac{1}{2}$ SE $\frac{1}{4}$   
Section 33: W $\frac{1}{2}$ E $\frac{1}{4}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 396' FSL & 2167' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 2310' FEL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #3H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,385' and a MD of approximately 18,680' to test the 3<sup>rd</sup> Bone Spring formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the W $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 28 and the W $\frac{1}{2}$ E $\frac{1}{4}$  of 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

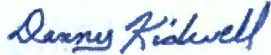
The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.



If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin – East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #3H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #3H.

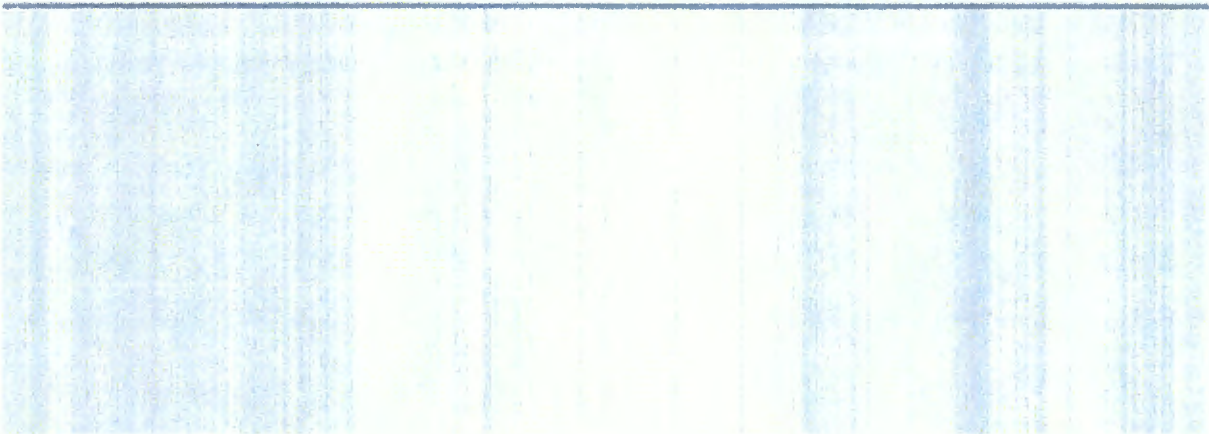
Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_





**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #3H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL: Sec. 33:</b> 396 FSL & 2167 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28:</b> 2440 FSL & 2310 FEL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,680
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,385

		<b>Drig - Rig Release(D)</b>	<b>Completion(C)</b>	<b>Tank Btty Constrcn(TB)</b>	<b>Fmop Equipment(PEQ)</b>	<b>TOTAL</b>
<b>INTANGIBLE COSTS</b>						
Title/Curative/Permit	201	11,000				11,000
Insurance	202	4,000	302			4,000
Damages/Right of Way	203	5,000	303	351		5,000
Survey/Stake Location	204	6,000		352		6,000
Location/Plat/Road Expense	205	120,000	305	10,000	353	183,000
Drilling / Completion Overhead	206	9,300	306	53,000	366	9,300
Turnkey Contract	207					0
Footage Contract	208					0
Daywork Contract	209	700,000				700,000
Directional Drilling Services	210	285,000				285,000
Frac Equipment			307	1,013,000		1,013,000
Frac Chemicals			308	857,000		857,000
Frac Proppant			309	880,000		880,000
Frac Proppant Transportation			310	111,000		111,000
Fuel & Power	211	177,000	311	3,500	354	180,500
Water	212	30,000	312	723,000	368	753,000
Bits	213	122,400	313	6,000	369	128,400
Mud & Chemicals	214	185,000	314	34,000	370	219,000
Drill Stem Test	215		315			0
Coring & Analysis	216					0
Cement Surface	217	20,000				20,000
Cement Intermediate	218	50,000				50,000
Cement 2nd Intermediate/Production	219	60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220				371	0
Float Equipment & Centralizers	221	22,000				22,000
Casing Crews & Equipment	222	55,000				55,000
Fishing Tools & Service	223		323		372	0
Geologic/Engineering	224		324	355	373	0
Contract Labor	225	5,500	325	23,800	356	85,800
Company Supervision	226	55,800	326	15,000	357	70,800
Contract Supervision	227	106,000	327	179,000	358	290,000
Testing Casing/Tubing	228	20,000	328	10,000	377	30,000
Mud Logging Unit	229	41,000	329			41,000
Logging	230				378	0
Perforating/Wireline Services	231	4,000	331	372,000	379	376,000
Stimulation/Treating	332		332	12,000	380	12,000
Completion Unit	333		333	118,000	381	126,800
Swabbing Unit	334		334		382	0
Rentals-Surface	235	175,000	335	246,000	359	428,000
Rentals-Subsurface	236	175,000	336	60,000	364	235,000
Trucking/Forklift/Rig Mobilization	237	120,000	337	40,000	360	163,000
Welding Services	238	4,000	338	5,000	361	9,000
Water Disposal	239		339	60,000	362	195,000
Plug to Abandon	240		340		367	0
Seismic Analysis	241		341			0
Miscellaneous	242		342			0
Contingency	243	52,000	343	175,000	383	227,000
Closed Loop & Environmental	244		344	5,000	364	5,000
Dyed Diesel	245		345	327,000		
Coil Tubing			346	250,000		250,000
Flowback Crews & Equip			347	48,000		48,000
Offset Directional/Frac	248		348		391	0
<b>TOTAL INTANGIBLES</b>		<b>2,620,000</b>	<b>5,363,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>						
Surface Casing	401	46,000				46,000
Intermediate Casing	402	278,000				278,000
Production Casing/Liner	403	360,000				360,000
Tubing			504	48,600	530	53,800
Wellhead Equipment	405	75,000	505	20,000	531	95,000
Pumping Unit					506	96,000
Prime Mover					507	0
Rods					508	55,000
Pumps-Sub Surface (BH)			509	0	532	5,000
Tanks				510	34,000	34,000
Flowlines				511	78,000	78,000
Heater Treater/Separator				512	114,000	114,000
Electrical System				513	84,000	84,000
Packers/Anchors/Hangers	414		514	65,000	533	15,000
Couplings/Fittings/Valves	415				534	2,000
Dehydration				515	114,000	114,000
Injection Plant/CO2 Equipment				517		0
Pumps-Surface				518		0
Instrumentation/SCADA/POC				521	11,000	11,000
Miscellaneous	419		519		529	7,000
Contingency	420		520		535	3,000
Meters/LACT				524	536	0
Flares/Combustors/Emission				525	31,000	31,000
Gas Lift/Compression				526	23,000	23,000
<b>TOTAL TANGIBLES</b>		<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>		<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>

COG Operating LLC	% of Total Well Cost	34%	56%	8%	2%
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Date Prepared: 1/4/18

COG Operating LLC

We approve: \_\_\_\_\_  
% Working Interest

By: PS-KL-IVLE

Company: Marathon Oil Permian LLC

Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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





Federal Express

March 2, 2018

ZPZ Delaware I, LLC  
2000 Post Oak Blvd., Suite 100  
Houston, Texas 77056

**COPY**

Re: Well Re-Proposal – Little Bear Federal Com #3H  
Section 28: W¼SE¼  
Section 33: W¼E¼  
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 396' FSL & 2167' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 2310' FEL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #3H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,385' and a MD of approximately 18,680' to test the 3<sup>rd</sup> Bone Spring formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the W¼SE¼ of Section 28 and the W¼E¼ of 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

**2121**

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #3H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL: Sec. 33:</b> 396 FSL & 2167 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28:</b> 2440 FSL & 2310 FEL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,680
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,385

	Drig - Rig Release(D)	Completion(C)	Tank Btry Constrctn(TB)	Pmpg Equipment(PEQ)	TOTAL
<b>INTANGIBLE COSTS</b>					
Title/Curative/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303	351		5,000
Survey/Stake Location	204 6,000		352		6,000
Location/Pits/Road Expense	205 120,000	305 10,000	353 83,000	366	183,000
Drilling / Completion Overhead	206 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 700,000				700,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354	367	180,500
Water	212 30,000	312 723,000		368	753,000
Bits	213 122,400	313 6,000		369	128,400
Mud & Chemicals	214 145,000	314 34,000		370	219,000
Drill Stem Test	215	315			0
Coring & Analysis	218				0
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220			371	0
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Geologic/Engineering	224	324	355		0
Contract Labor	225 5,500	325 23,800	356 50,000	374 6,500	85,800
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Mud Logging Unit	229 41,000	329			41,000
Logging	230			378	0
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
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Completion Unit		333 118,000		381 8,800	126,800
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Rentals-Surface	235 175,000	335 246,000	359	383 7,000	428,000
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Welding Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 60,000	362 135,000	387	195,000
Plug to Abandon	240	340			0
Seismic Analysis	241	341			0
Miscellaneous	242	342		389	0
Contingency	243 52,000	343 175,000	363	390	227,000
Closed Loop & Environmental	244	344 5,000	364	388	5,000
Dyed Diesel	245	345 327,000			327,000
Coil Tubing		346 250,000			250,000
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Offset Directional/Frac	248	348		391	0
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Surface Casing	401 48,000				48,000
Intermediate Casing	402 278,000				278,000
Production Casing/Liner	403 360,000				360,000
Tubing		504 48,600		530 5,000	53,600
Wellhead Equipment	405 75,000	505 20,900		531 3,000	98,900
Pumping Unit				506 98,000	98,000
Prime Mover				507 0	0
Rods				508 65,000	65,000
Pumps-Sub Surface (BH)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 84,000	533 15,000	99,000
Packera/Anchors/Hangers	414	514 85,000		534 2,000	87,000
Couplings/Fittings/Valves	415		515 114,000		114,000
Dehydration			517		0
Injection Plant/CO2 Equipment		518 0			0
Pumps-Surface		521 0	521 11,000		11,000
Instrumentation/SCADA/POC			522	529 7,000	7,000
Miscellaneous	419	519	523	535 3,000	3,000
Contingency	420	520	524	536	0
Meters/LACT			525 31,000		31,000
Flares/Combustors/Emission			526 23,000		23,000
Gas Lift/Compression		527 15,000	516 35,000	528	50,000
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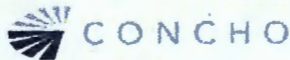
COG Operating LLC	% of Total Well Cost	34%	56%	8%	2%
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Date Prepared: 1/4/18  
 COG Operating LLC  
 By: PS-KL-V-LE



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





Federal Express

February 21, 2018

EOG Resources, Inc.  
EOG Y Resources, Inc.  
5509 Champions Drive  
Midland, TX 79706

EOG Resources, Inc.  
EOG Y Resources, Inc.  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

Re: Well Re-Proposal – Little Bear Federal Com #7H  
Section 28: W $\frac{1}{4}$ SE $\frac{1}{4}$   
Section 33: W $\frac{1}{4}$ E $\frac{1}{4}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 396' FSL & 2137' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 1650' FEL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #7H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,600' and a MD of approximately 18,900' to test the Wolfcamp formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the W $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 28 and the W $\frac{1}{4}$ E $\frac{1}{4}$  of Section 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

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If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin – East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #7H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #7H.

Company or  
Individual Name: \_\_\_\_\_  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #7H	<b>PROSPECT NAME:</b> Zeus 2034 (717062)
<b>SHL:</b> Sec. 33 396 FSL & 2137 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL:</b> Sec. 28 2440 FSL & 1650 FEL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> Wolfcamp	<b>DEPTH:</b> 18,900
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,600

	<u>Drig - Rig</u>		<u>Completion(C)</u>	<u>Tank Btty</u>	<u>Pmpg</u>	<u>TOTAL</u>
<u>INTANGIBLE COSTS</u>	<u>Release(D)</u>			<u>Constrctn(TB)</u>	<u>Equipment(PEQ)</u>	
Title/Curtail/Permit	201	11,000				11,000
Insurance	202	4,000	302			4,000
Damages/Right of Way	203	5,000	303			5,000
Survey/Strike Location	204	8,000		351		8,000
Location/Pits/Road Expense	205	120,000	305	10,000	352	183,000
Drilling / Completion Overhead	208	9,300	308	53,000	366	9,300
Turnkey Contract	207					0
Footage Contract	208					0
Daywork Contract	209	700,000				700,000
Directional Drilling Services	210	285,000				285,000
Frac Equipment			307	1,013,000		1,013,000
Frac Chemicals			308	657,000		657,000
Frac Proppant			309	880,000		880,000
Frac Proppant Transportation			310	111,000		111,000
Fuel & Power	211	177,000	311	3,500	354	180,500
Water	212	30,000	312	723,000	367	753,000
Bits	213	122,400	313	6,900	368	129,300
Mud & Chemicals	214	185,900	314	34,000	370	219,900
Drill Stem Test	215		315			0
Coreng & Analysis	218					0
Cement Surface	217	20,000				20,000
Cement Intermediate	218	50,000				50,000
Cement 2nd Intermediate/Production	219	60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220				371	0
Float Equipment & Contrailzers	221	22,000				22,000
Casing Crews & Equipment	222	55,000				55,000
Fishing Tools & Service	223		323		372	0
Geologic/Engineering	224		324	355	373	0
Contract Labor	225	5,500	325	23,800	356	83,800
Company Supervision	226	55,600	326	15,000	367	70,600
Contract Supervision	227	108,000	327	179,000	358	290,000
Testing Casing/Tubing	228	20,000	328	10,000	377	30,000
Mud Logging Unit	229	41,000	329			41,000
Logging	230				378	0
Perforating/Wireline Services	231	4,000	331	372,000	379	376,000
Stimulation/Testing			332	12,000	380	12,000
Completion Unit			333	118,000	381	126,000
Swabbing Unit			334		382	0
Rentals-Surface	235	175,000	335	246,000	359	428,000
Rentals-Subsurface	236	175,000	336	60,000	384	235,000
Trucking/Forklift/Rig Mobilization	237	120,000	337	40,000	360	163,000
Welding Services	238	4,000	338	5,000	381	9,000
Water Disposal	239		339	60,000	382	195,000
Plug to Abandon	240		340		387	0
Seismic Analysis	241		341			0
Miscellaneous	242		342		389	0
Contingency	243	52,000	343	175,000	363	227,000
Closed Loop & Environmental	244		344	5,000	384	5,000
Dyed Diesel	245		345	327,000		327,000
Coil Tubing			346	250,000		250,000
Flowback Crews & Equip			347	48,000		48,000
Offset Directional/Frac	248		348		391	0
<b>TOTAL INTANGIBLES</b>		<b>2,620,000</b>		<b>5,383,300</b>		<b>8,271,600</b>
<b>TANGIBLE COSTS</b>						
Surface Casing	401	48,000				48,000
Intermediate Casing	402	278,000				278,000
Production Casing/Liner	403	360,000				360,000
Tubing			504	48,600	530	83,800
Wellhead Equipment	405	75,000	505	20,900	531	96,900
Pumping Unit					508	98,000
Prime Mover				0	507	0
Rods					506	55,000
Pumps-Sub Surface (BH)			509	0	532	5,000
Tanks				34,000	510	34,000
Flowlines				78,000	511	78,000
Heater Treater/Separator				114,000	512	114,000
Electrical System				64,000	513	79,000
Packers/Anchors/Hangers	414		514	65,000	533	67,000
Couplings/Fittings/Valves	415			114,000	534	114,000
Dehydration					517	0
Injection Plant/CO2 Equipment				0	518	0
Pumps-Surface				11,000	521	11,000
Instrumentation/SCADA/POC					522	7,000
Miscellaneous	419		519		523	3,000
Contingency	420		520		524	0
Meters/LACT				31,000	525	31,000
Flares/Combustors/Emission				23,000	526	23,000
Gas Lift/Compression			527	15,000	518	50,000
<b>TOTAL TANGIBLES</b>		<b>757,000</b>		<b>149,500</b>		<b>1,801,500</b>
<b>TOTAL WELL COSTS</b>		<b>3,377,000</b>		<b>5,532,800</b>		<b>8,873,100</b>
<b>COG Operating LLC</b>	<b>% of Total Well Cost</b>	<b>34%</b>	<b>56%</b>	<b>8%</b>	<b>2%</b>	

Date Prepared: 1/4/18

COG Operating LLC

We approve:  
% Working Interest

By: PS-KL-V-LE

Company: EQG Resources, LLC

Printed Name:

Title:

Date:

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



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #7H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL:</b> Sec. 33 396 FSL & 2137 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL:</b> Sec. 28 2440 FSL & 1650 FEL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> Wolfcamp	<b>DEPTH:</b> 18,900
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,600

	Drig - Rig Release(D)	Completion(C)	Tank Btry Constrctn(TB)	Pmpg Equipment(PEQ)	TOTAL
<b>INTANGIBLE COSTS</b>					
Title/Curative/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303	351		5,000
Survey/State Location	204 6,000				6,000
Location/Pits/Road Expense	205 120,000	305 10,000	353 53,000	366	163,000
Drilling / Completion Overhead	206 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 700,000				700,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354		180,500
Water	212 30,000	312 723,000			753,000
Bits	213 122,400	313 6,000			128,400
Mud & Chemicals	214 185,000	314 34,000			219,000
Drill Stem Test	215	315			0
Coring & Analysis	216				0
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeezes & Other (Kickoff Plug)	220			371	0
Float Equipment & Centralizers	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Service	223	323		372	0
Geologic/Engineering	224	324	355	373	0
Contract Labor	225 5,900	325 23,800	356 50,000	374 6,500	85,200
Company Supervision	226 55,800	326 15,000	357	375	70,800
Contract Supervision	227 106,000	327 179,000	358	376 5,000	290,000
Testing Casing/Tubing	228 20,000	328 10,000		377	30,000
Mud Logging Unit	229 41,000				41,000
Logging	230			378	0
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Simulation/Treating		332 12,000		380	12,000
Completion Unit		333 118,000		381 8,600	126,600
Swabbing Unit		334		382	0
Rentals-Surface	235 175,000	335 246,000	359	383 7,000	428,000
Rentals-Subsurface	236 175,000	336 60,000		384	235,000
Trucking/Forklift/Rig Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
Welding Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 60,000	362 135,000	387	195,000
Plug In Abandon	240	340			0
Seismic Analysis	241	341			0
Miscellaneous	242	342		389	0
Contingency	243 52,000	343 175,000	363	390	227,000
Closed Loop & Environmental	244	344 9,000	364	388	5,000
Dyed Diesel	245	345 327,000			327,000
Coil Tubing		346 250,000			250,000
Flowback Crews & Equip		347 48,000			48,000
Offset Directional/Frac	248	348		391	0
<b>TOTAL INTANGIBLES</b>	<b>2,620,000</b>	<b>5,383,300</b>	<b>258,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	401 46,000				46,000
Intermediate Casing	402 278,000				278,000
Production Casing/Liner	403 360,000				360,000
Tubing		504 48,800		530 5,000	53,800
Wellhead Equipment	405 75,000	505 20,900		531 3,000	98,900
Pumping Unit				506 96,000	96,000
Prime Mover				507 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BH)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000	533 15,000	79,000
Packers/Anchors/Liners	414	514 85,000		534 2,000	87,000
Couplings/Fittings/Valves	415		515 114,000		114,000
Dehydration			517		0
Injection Plant/CO2 Equipment			518		0
Pumps-Surface			521 11,000		11,000
Instrumentation/SCADA/POC			522	529 7,000	7,000
Miscellaneous	419	519	523 3,000	535	3,000
Contingency	420	520	524	536	0
Meters/LACT			525 31,000		31,000
Flares/Combustion/Emission			526 23,000		23,000
Gas Lift/Compression		527 15,000	516 35,000	528	60,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>

COG Operating LLC % of Total Well Cost 34% 56% 8% 2%

Date Prepared: 1/4/18  
 COG Operating LLC  
 We approve: \_\_\_\_\_  
 % Working Interest  
 By: PS-JL-IV-LE  
 Company: EOG Y Resources, LLC  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

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





March 2, 2018

Federal Express

Marathon Oil Permian LLC  
5555 San Felipe Street  
Houston, Texas 77056

**COPY**

Re: Well Re-Proposal – Little Bear Federal Com #7H  
Section 28: W $\frac{1}{2}$ SE $\frac{1}{4}$   
Section 33: W $\frac{1}{2}$ E $\frac{1}{4}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 396' FSL & 2137' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 1650' FEL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #7H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,600' and a MD of approximately 18,900' to test the Wolfcamp formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the W $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 28 and the W $\frac{1}{2}$ E $\frac{1}{4}$  of Section 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.



If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin – East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #7H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #7H.

Company or  
Individual Name: \_\_\_\_\_  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_





**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #7H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL: Sec. 33</b> 396 FSL & 2137 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28</b> 2440 FSL & 1650 FEL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> Wolfcamp	<b>DEPTH:</b> 18,900
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,600

		Drig - Ris Release(D)	Completion(C)	Tank Rty Constrcn(TB)	Pmpg Equipment(PEQ)	TOTAL
<b>INTANGIBLE COSTS</b>						
Tie/curative/Permit	201	11,000				11,000
Insurance	202	4,000	302			4,000
Damages/Right of Way	203	5,000	303	351		5,000
Survey/Stake Location	204	6,000		352		6,000
Location/Plat/Road Expense	205	120,000	305	10,000	353	163,000
Drilling / Completion Overhead	206	9,300	306	53,000	354	9,300
Turnkey Contract	207					0
Footage Contract	208					0
Daywork Contract	209	700,000				700,000
Directional Drilling Services	210	285,000				285,000
Frac Equipment			307	1,013,000		1,013,000
Frac Chemicals			308	657,000		657,000
Frac Proppant			309	850,000		850,000
Frac Proppant Transportation			310	111,000		111,000
Fuel & Power	211	177,000	311	3,500	354	180,500
Water	212	30,000	312	723,000	357	753,000
Bits	213	122,400	313	6,000	358	128,400
Mud & Chemicals	214	185,000	314	34,000	359	219,000
Drill Stem Test	215		315		370	0
Coring & Analysis	216					0
Cement Surface	217	20,000				20,000
Cement Intermediate	218	50,000				50,000
Cement 2nd Intermediate/Production	219	60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220				371	0
Float Equipment & Centralizers	221	22,000				22,000
Casing Crews & Equipment	222	55,000				55,000
Fishing Tools & Service	223		323			0
Geologic/Engineering	224		324	355		0
Contract Labor	225	5,500	325	23,800	356	85,800
Company Supervision	226	55,800	326	15,000	357	70,800
Contract Supervision	227	108,000	327	178,000	358	290,000
Testing Casing/Tubing	228	20,000	328	10,000	359	30,000
Mud Logging Unit	229	41,000	329			41,000
Logging	230					0
Perforating/Wireline Services	231	4,000	331	372,000		378,000
Stimulation/Treating			332	12,000		12,000
Completion Unit			333	118,000		128,800
Swabbing Unit			334			0
Rentals-Surface	235	175,000	335	248,000	359	428,000
Rentals-Subsurface	236	175,000	336	60,000		235,000
Trucking/Forklift/Rig Mobilization	237	120,000	337	40,000	360	163,000
Welding Services	238	4,000	338	5,000	361	9,000
Water Disposal	239		339	60,000	362	195,000
Plug to Abandon	240		340			0
Seismic Analysis	241		341			0
Miscellaneous	242		342		369	0
Contingency	243	82,000	343	175,000	363	227,000
Closed Loop & Environmental	244		344	5,000	364	5,000
Dyed Diesel	245		345	327,000		
Coil Tubing			346	250,000		250,000
Flowback Crews & Equip			347	48,000		48,000
Offset Directional/Frac	248		348		391	0
<b>TOTAL INTANGIBLES</b>		<b>2,620,000</b>	<b>5,383,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>						
Surface Casing	401	48,000				48,000
Intermediate Casing	402	278,000				278,000
Production Casing/Liner	403	360,000				360,000
Tubing			504	48,800	530	53,600
Wellhead Equipment	405	75,000	505	20,900	531	98,900
Pumping Unit					506	96,000
Prime Mover				0	507	0
Rods					508	55,000
Pumps-Sub Surface (BH)			509	0	532	5,000
Tanks				510	34,000	34,000
Flowlines				511	78,000	78,000
Heater Treater/Separator				512	114,000	114,000
Electrical System				513	64,000	79,000
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Couplings/Fittings/Valves	415			515	114,000	2,000
Dehydration				517		87,000
Injection Plant/CO2 Equipment				518		114,000
Pumps-Surface				521	11,000	0
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Miscellaneous	419		519		528	7,000
Contingency	420		520		535	3,000
Meters/LACT				524		0
Flares/Combustors/Emission				525	31,000	31,000
Gas Lift/Compression				526	23,000	23,000
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<b>TOTAL WELL COSTS</b>		<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>
COG Operating LLC	% of Total Well Cost	34%	68%	8%	2%	

Date Prepared: 1/4/18

COG Operating LLC

We approve:  
\_\_\_\_\_  
% Working Interest  
By: PS-KL-BV-LE  
Company: Marathon Oil Permian, LLC  
By: \_\_\_\_\_  
Printed Name:  
Title:  
Date:

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





March 2, 2018

Federal Express

ZPZ Delaware I, LLC  
20000 Post Oak Blvd., Suite 100  
Houston, Texas 77056

**COPY**

Re: Well Re-Proposal – Little Bear Federal Com #7H  
Section 28: W $\frac{1}{2}$ SE $\frac{1}{4}$   
Section 33: W $\frac{1}{2}$ E $\frac{1}{2}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 396' FSL & 2137' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 1650' FEL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #7H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,600' and a MD of approximately 18,900' to test the Wolfcamp formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the W $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 28 and the W $\frac{1}{2}$ E $\frac{1}{2}$  of Section 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #7H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL: Sec. 33</b> 396 FSL & 2137 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28</b> 2440 FSL & 1650 FEL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> Wolfcamp	<b>DEPTH:</b> 18,900
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,600

		Drig - Rig Release(D)	Completion(C)	Tank Btry Constrcn(TB)	Pmpg Equipment(PEQ)	TOTAL
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Location/Pits/Road Expense	205	120,000	305	10,000	353	183,000
Drilling / Completion Overhead	206	9,300	306		354	9,300
Turnkey Contract	207					0
Footage Contract	208					0
Daywork Contract	209	700,000				700,000
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Mud Logging Unit	229	41,000	329			41,000
Logging	230				378	0
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Stimulation/Treating			332	12,000	380	12,000
Completion Unit			333	118,000	381	129,800
Swabbing Unit			334		382	0
Rentals-Surface	235	175,000	335	245,000	359	428,000
Rentals-Subsurface	236	175,000	336	60,000	384	235,000
Trucking/Forklift/Pig Mobilization	237	120,000	337	40,000	380	163,000
Welding Services	238	4,000	338	5,000	381	9,000
Water Disposal	239		339	60,000	382	185,000
Plug to Abandon	240		340			0
Seismic Analysis	241		341			0
Miscellaneous	242		342		389	0
Contingency	243	52,000	343	175,000	363	227,000
Closed Loop & Environmental	244		344	5,000	384	5,000
Dyed Diesel	245		345	327,000		
Coil Tubing			346	250,000		250,000
Flowback Crews & Equip			347	48,000		48,000
Offset Directional/Frac	248		348		381	0
<b>TOTAL INTANGIBLES</b>		<b>2,520,000</b>	<b>5,363,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>						
Surface Casing	401	46,000				46,000
Intermediate Casing	402	278,000				278,000
Production Casing/Liner	403	360,000				360,000
Tubing			504	48,600	530	53,600
Wellhead Equipment	405	75,000	505	20,900	531	96,900
Pumping Unit					506	96,000
Prime Mover				0	507	0
Rods					508	55,000
Pumps-Sub Surface (BH)			509	0	532	5,000
Tanks				34,000	510	34,000
Flowlines				78,000	511	78,000
Heater Treater/Separator				114,000	512	114,000
Electrical System				84,000	513	78,000
Packers/Anchors/Hangers	414		514	65,000	534	67,000
Couplings/Fittings/Valves	415				515	114,000
Dehydration					517	0
Injection Plant/CO2 Equipment				0	518	0
Pumps-Surface				0	521	11,000
Instrumentation/SCADA/POC					522	7,000
Miscellaneous	419		519		523	3,000
Contingency	420		520		524	0
Meters/LACT					525	31,000
Flares/Combustors/Emission					526	23,000
Gas Lift/Compression			527	15,000	516	35,000
<b>TOTAL TANGIBLES</b>		<b>787,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>		<b>3,307,000</b>	<b>5,512,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>
<b>% of Total Well Cost</b>		<b>34%</b>	<b>56%</b>	<b>8%</b>	<b>2%</b>	

COG Operating LLC

Date Prepared: 1/4/18

We approve \_\_\_\_\_ % Working Interest

COG Operating LLC

By: PS-RL-N-LE

Company: ZPZ Delaware I, LLC

Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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



Federal Express

February 21, 2018

EOG Resources, Inc.  
EOG Y Resources, Inc.  
5509 Champions Drive  
Midland, TX 79706

EOG Resources, Inc.  
EOG Y Resources, Inc.  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

Re: **Well Re-Proposal – Little Bear Federal Com #4H**  
Section 28: E $\frac{1}{4}$ SW $\frac{1}{4}$   
Section 33: E $\frac{1}{2}$ W $\frac{1}{2}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 384' FSL & 1061' FWL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 1650' FWL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #4H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,390' and a MD of approximately 18,690' to test the 3<sup>rd</sup> Bone Spring formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the E $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 28 and the E $\frac{1}{2}$ W $\frac{1}{2}$  of Section 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

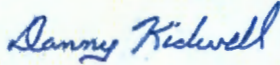
The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.



If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin – East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #4H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #4H.

Company or  
Individual Name: \_\_\_\_\_  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #4H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL:</b> Sec. 33 384 FSL & 1061 FWL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL:</b> Sec. 28 2440 FSL & 1650 FWL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,690
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,390

	Drig - Rig	Completion(C)	Tank Btty	Pmpq	TOTAL
	Release(D)		Constcn(TB)	Equipment(PEQ)	
<b>INTANGIBLE COSTS</b>					
Title/Cursive/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303	351		5,000
Survey/State Location	204 8,000		352		8,000
Location/Pass/Road Expense	205 120,000	305 10,000	353 53,000	366	183,000
Drilling / Completion Overhead	208 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 700,000				700,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 890,000			890,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354	367	180,500
Water	212 30,000	312 723,000		368	753,000
Bits	213 122,400	313 8,000		369	128,400
Mud & Chemicals	214 185,000	314 34,000		370	219,000
Drill Stem Tool	215	315			0
Coring & Analysis	218				0
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220			371	0
Floar Equipment & Centralizers	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Service	223	323		372	0
Geologic/Engineering	224	324	355	373	0
Contract Labor	225 5,500	325 23,800	356 50,000	374 6,500	85,800
Company Supervision	226 58,800	326 15,000	357	375	70,800
Contract Supervision	227 106,000	327 179,000	358	378 5,000	290,000
Testing Casing/Tubing	228 20,000	328 10,000		377	30,000
Mud Logging Unit	229 41,000	329			41,000
Logging	230			378	0
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Stimulation/Trailing		332 12,000		380	12,000
Completion Unit		333 118,000		381 8,800	126,800
Swabbing Unit		334		382	0
Rentals-Surface	235 175,000	335 248,000	359	383 7,000	428,000
Rentals-Subsurface	236 175,000	336 60,000		384	235,000
Trucking/Fortlift/Rig Mobilization	237 120,000	337 48,000	380	385 3,000	183,000
Welding Services	238 4,000	338 5,000	381	386	9,000
Water Disposal	239	339 80,000	382 135,000	387	195,000
Plug to Abandon	240	340			0
Selamc Analysis	241	341			0
Miscellaneous	242	342		389	0
Contingency	243 52,000	343 175,000	383	390	227,000
Closed Loop & Environmental	244	344 5,000	384	388	5,000
Dyed Diesel	245	345 327,000			327,000
Coil Tubing		346 250,000			250,000
Flowback Crews & Equip		347 48,000			48,000
Offical Directional/Frac	248	348		391	0
<b>TOTAL INTANGIBLES</b>	<b>2,820,000</b>	<b>5,363,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	401 48,000				48,000
Intermediate Casing	402 278,000				278,000
Production Casing/Liner	403 360,000				360,000
Tubing		504 48,800		530 5,000	53,800
Wellhead Equipment	405 75,000	505 20,900		531 3,000	98,900
Pumping Unit				506 98,000	98,000
Prime Mover				507 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BH)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000	533 15,000	79,000
Packers/Anchors/Hangers		514 85,000		534 2,000	87,000
Couplings/Fittings/Valves	415	515 114,000			114,000
Dehydration		517			0
Injection Plant/CO2 Equipment		518			0
Pumps-Surface		521 11,000			11,000
Instrumentation/SCADA/POC		522		529 7,000	7,000
Miscellaneous	419	519		535 3,000	3,000
Contingency	420	520		536	0
Meters/LACT		525 31,000			31,000
Flares/Combustors/Emission		526 23,000			23,000
Gas Lift/Compression		527 15,000		526 35,000	50,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>140,500</b>	<b>504,000</b>	<b>181,000</b>	<b>1,801,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>
<b>COG Operating LLC</b>	<b>% of Total Well Cost</b>	<b>34%</b>	<b>96%</b>	<b>8%</b>	<b>2%</b>

Date Prepared: 1/4/18

COG Operating LLC

We approve: \_\_\_\_\_ % Working Interest

By: PS-RV-LE

Company: EOG Resources, LLC

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

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



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #4H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL: Sec. 33</b> 384 FSL & 1061 FWL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28</b> 2440 FSL & 1650 FWL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,690
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,390

	<b>Drig - Rig Release(D)</b>	<b>Completion(C)</b>	<b>Tank Bty Constrcn(TB)</b>	<b>Fmgd Equipment(PEQ)</b>	<b>TOTAL</b>
<b>INTANGIBLE COSTS</b>					
Title/Curative/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303	351		5,000
Survey/Stake Location	204 6,000		352		6,000
Location/Pits/Road Expense	205 120,000	305 10,000	353 53,000	368	183,000
Drilling / Completion Overhead	206 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 700,000				700,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354	367	180,500
Water	212 30,000	312 723,000		368	753,000
Bbs	213 122,400	313 6,000		369	128,400
Mud & Chemicals	214 185,000	314 34,000		370	219,000
Drill Stem Test	215	315			0
Coring & Analysis	216				0
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220			371	0
Float Equipment & Contractors	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Service	223	323			0
Geologic/Engineering	224	324	355	372	0
Contract Labor	225 5,500	325 23,800	356 90,000	373 6,500	85,800
Company Supervision	226 55,800	326 15,000	357	374	70,800
Contract Supervision	227 196,600	327 178,000	358	375 5,000	290,000
Testing Casing/Tubing	228 20,000	328 10,000		376	30,000
Mud Logging Unit	229 41,000	329			41,000
Logging	230				0
Perforating/Wireline Services	231 4,000	331 372,000		378	376,000
Stimulation/Treating		332 12,000		379	12,000
Completion Unit		333 118,000		380	126,800
Swabbing Unit		334		381 8,800	0
Rentals-Surface	235 175,000	335 246,000	399	382	428,000
Rentals-Subsurface	236 175,000	336 80,000		383 7,000	235,000
Trucking/Forklift/Rig Mobilization	237 120,000	337 40,000	380	384	163,000
Welding Services	238 4,000	338 5,000	361	385 3,000	9,000
Water Disposal	239	339 60,000	382 135,000	386	195,000
Plug to Abandon	240	340		387	0
Seismic Analysis	241	341			0
Miscellaneous	242	342			0
Contingency	243 52,000	343 175,000	363	390	227,000
Closed Loop & Environmental	244	344 5,000	364	388	5,000
Dyed Diesel	245	345 327,000			250,000
Coil Tubing		346 250,000			48,000
Flowback Crews & Equip		347 48,000			0
Offset Directional/Frac	248	348		391	0
<b>TOTAL INTANGIBLES</b>	<b>2,620,000</b>	<b>5,383,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	401 46,000				46,000
Intermediate Casing	402 278,000				278,000
Production Casing/Liner	403 360,000				360,000
Tubing		504 48,500		530 5,000	53,500
Wellhead Equipment	405 75,000	505 20,900		531 3,000	98,900
Pumping Unit				506 96,000	96,000
Prime Mover				507 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BHP)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000	533 15,000	79,000
Packlers/Anchors/Hangers	414	514 65,000		534 2,000	67,000
Couplings/Fittings/Valves	415		515 114,000		114,000
Dehydration			517		0
Injection Plant/CO2 Equipment			518 0		0
Pumps-Surface			521 11,000		11,000
Instrumentation/SCADA/POC			522	529 7,000	7,000
Miscellaneous	419	519	523	535 3,000	3,000
Contingency	420	520	524	536	0
Meters/LACT			525 31,000		31,000
Flares/Combustors/Emission			526 23,000		23,000
Gas Lift/Compression		527 15,000	516 35,000	528	50,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>
<b>COG Operating LLC</b>	<b>% of Total Well Cost</b>	<b>34%</b>	<b>68%</b>	<b>8%</b>	<b>2%</b>

Date Prepared: 1/4/18

COG Operating LLC

We approve:  
\_\_\_\_\_% Working Interest  
Company: BOG Y Resources, LLC  
By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

By: PS-KL-IV-LE

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



Federal Express

February 21, 2018

EOG Resources, Inc.  
EOG Y Resources, Inc.  
5509 Champions Drive  
Midland, TX 79706

EOG Resources, Inc.  
EOG Y Resources, Inc.  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

Re: Well Re-Proposal -- Little Bear Federal Com #5H

Section 28: W $\frac{1}{2}$ SW $\frac{1}{4}$

Section 33: W $\frac{1}{2}$ W $\frac{1}{2}$

Township 20 South, Range 34 East, N.M.P.M.

SHL: 384' FSL & 1001' FWL, or an approved legal location in Sec. 33

BHL: 2440' FSL & 330' FWL, or an approved legal location in Sec. 28

Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #5H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,410' and a MD of approximately 18,700' to test the 3<sup>rd</sup> Bone Spring formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the W $\frac{1}{2}$ SW $\frac{1}{4}$  of Section 28 and the W $\frac{1}{2}$ W $\frac{1}{2}$  of Section 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.



If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin – East

DK:lr

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #5H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #5H.

Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #5H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL:</b> Sec. 33 384 FSL & 1001 FWL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL:</b> Sec. 28 2440 FSL & 330 FWL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,700
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,410

	Drig - Rig Release(D)	Completion(C)	Tank Btty Constrcn(TB)	Proc Equipment(PEQ)	TOTAL
<b>INTANGIBLE COSTS</b>					
Title/Cursive/Permit	11,000				11,000
Insurance	4,000	302			4,000
Damages/Right of Way	5,000	303	351		5,000
Survey/Stake Location	6,000		352		6,000
Location/Pits/Road Expense	120,000	305	53,000	386	183,000
Drilling / Completion Overhead	9,300	306			9,300
Turkey Contract					0
Footage Contract					0
Daywork Contract	700,000				700,000
Directional Drilling Services	285,000				285,000
Frac Equipment		307	1,013,000		1,013,000
Frac Chemicals		308	657,000		657,000
Frac Proppant		309	880,000		880,000
Frac Proppant Transportation		310	111,000		111,000
Fuel & Power	177,000	311	3,500	354	180,500
Water	30,000	312	723,000	386	753,000
Bits	122,400	313	6,000	389	128,400
Mud & Chemicals	185,000	314	34,000	370	219,000
Drill Stem Test		315			0
Coing & Analysis					0
Cement Surface	20,000				20,000
Cement Intermediate	50,000				50,000
Cement 2nd Intermediate/Production	60,000				60,000
Cement Squeeze & Other (Kickoff Plug)				371	0
Float Equipment & Centralizers	22,000				22,000
Casing Crews & Equipment	55,000				55,000
Fishing Tools & Service		323		372	0
Geologic/Engineering		324	355	373	0
Contract Labor	5,500	325	23,800	356	85,800
Company Supervision	65,800	326	15,000	357	70,800
Contract Supervision	106,000	327	179,000	358	290,000
Testing Casing/Tubing	20,000	328	10,000	377	30,000
Mud Logging Unit	41,000	329			41,000
Logging				378	0
Perforating/Wellbore Services	4,000	331	372,000	379	376,000
Stimulation/Treating		332	12,000	380	12,000
Completion Unit		333	118,000	381	128,800
Swabbing Unit		334		382	0
Rentals-Surface	175,000	335	246,000	383	426,000
Rentals-Subsurface	175,000	338	60,000	384	235,000
Trucking/Forklift/Rig Mobilization	120,000	337	40,000	360	163,000
Welding Services	4,000	338	5,000	361	9,000
Water Disposal		339	60,000	362	195,000
Plug to Abandon		340			0
Seismic Analysis		341			0
Miscellaneous		342		389	0
Contingency	52,000	343	175,000	383	227,000
Closed Loop & Environmental		344	5,000	384	5,000
Dyed Diesel		345	327,000		
Coil Tubing		346	250,000		250,000
Flowback Crews & Equip		347	48,000		48,000
Offset Directional/Frac		348		381	0
<b>TOTAL INTANGIBLES</b>	<b>2,620,000</b>	<b>5,383,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	46,000				46,000
Intermediate Casing	278,000				278,000
Production Casing/Liner	360,000				360,000
Tubing		504	49,600	530	53,600
Wellhead Equipment	75,000	505	20,900	531	96,900
Pumping Unit				506	96,000
Prime Mover				507	0
Rods				508	55,000
Pumps-Sub Surface (BH)		509	0	532	5,000
Tanks			510		34,000
Flowlines			511		78,000
Heater Treater/Separator			512		114,000
Electrical System			513	533	15,000
Packers/Anchors/Hangers		514	65,000	534	67,000
Couplings/Fittings/Valves		515	114,000		114,000
Dehydration		517			0
Injection Plant/CO2 Equipment		518			0
Pumps-Surface			521	11,000	11,000
Instrumentation/SCADA/POC		522		529	7,000
Miscellaneous		519		535	3,000
Contingency		520		536	0
Meters/LACT			525		31,000
Flares/Combustors/Emission			526		23,000
Gas Lift/Compression		527	15,000	528	50,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>

COG Operating LLC	% of Total Well Cost	34%	98%	8%	2%
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Date Prepared: 1/4/18

We approve: \_\_\_\_\_  
% Working Interest

COG Operating LLC  
By: PS-KL-N-LE

Company: EOG Resources, LLC  
By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #5H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL: Sec. 33</b> 384 FSL & 1001 FWL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28</b> 2440 FSL & 330 FWL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> 3rd Bone Spring	<b>DEPTH:</b> 18,700
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,410

		<b>Drig - Rig Release(D)</b>	<b>Completion(C)</b>	<b>Tank Rtty Constrcn(TB)</b>	<b>Pmco Equipment(PEQ)</b>	<b>TOTAL</b>
<b>INTANGIBLE COSTS</b>						
Title/Curtain/Permit	201	11,000				11,000
Insurance	202	4,000	302			4,000
Damages/Right of Way	203	5,000	303	351		5,000
Survey/Stake Location	204	6,000		352		6,000
Location/Plts/Road Expense	205	120,000	305	10,000	353	183,000
Drilling / Completion Overhead	206	9,300	306	53,000	356	9,300
Turnkey Contract	207					0
Footage Contract	208					0
Daywork Contract	209	700,000				700,000
Directional Drilling Services	210	285,000				285,000
Frac Equipment			307	1,013,000		1,013,000
Frac Chemicals			308	657,000		657,000
Frac Proppant			309	880,000		880,000
Frac Proppant Transportation			310	111,000		111,000
Fuel & Power	211	177,000	311	3,500	354	180,500
Water	212	30,000	312	723,000	357	753,000
Bits	213	122,400	313	6,000	358	128,400
Mud & Chemicals	214	185,000	314	34,000	359	219,000
Drill Stem Test	215		315		360	0
Coring & Analysis	216				361	0
Cement Surface	217	20,000			362	20,000
Cement Intermediate	218	50,000			363	50,000
Cement 2nd Intermediate/Production	219	60,000			364	60,000
Cement Squeeze & Other (Kickoff Plug)	220				365	0
Float Equipment & Centralizers	221	22,000			366	22,000
Casing Crews & Equipment	222	55,000			367	55,000
Fishing Tools & Service	223		323		368	0
Geologic/Engineering	224		324		369	0
Contract Labor	225	5,500	325	23,800	370	29,300
Company Supervision	226	55,800	326	15,000	371	70,800
Contract Supervision	227	106,000	327	178,000	372	284,000
Testing Casing/Tubing	228	28,000	328	10,000	373	38,000
Mud Logging Unit	229	41,000	329		374	41,000
Logging	230				375	0
Perforating/Wireline Services	231	4,000	331	372,000	376	376,000
Simulation/Trapping			332	12,000	377	12,000
Completion Unit			333	118,000	378	118,000
Swabbing Unit			334		379	0
Rentals-Surface	235	175,000	335	248,000	380	423,000
Rentals-Subsurface	236	175,000	336	60,000	381	235,000
Trucking/Forklift/Rig Mobilization	237	120,000	337	40,000	382	160,000
Wellbore Services	238	4,000	338	5,000	383	9,000
Water Disposal	239		339	60,000	384	60,000
Plug to Abandon	240		340		385	0
Sismic Analysis	241		341		386	0
Miscellaneous	242		342		387	0
Contingency	243	52,000	343	175,000	388	227,000
Closed Loop & Environmental	244		344	5,000	389	5,000
Dyed Diesel	245		345	327,000	390	327,000
Coil Tubing			346	250,000	391	250,000
Flowback Crews & Equip			347	48,000	392	48,000
Offset Directional/Frac	248		348		393	0
<b>TOTAL INTANGIBLES</b>		<b>2,620,000</b>	<b>5,363,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>						
Surface Casing	401	46,000				46,000
Intermediate Casing	402	276,000				276,000
Production Casing/Liner	403	360,000				360,000
Tubing			504	48,800	530	53,800
Wellhead Equipment	405	75,000	505	20,900	531	95,900
Pumping Unit					532	96,000
Prime Mover				0	533	0
Roads					534	55,000
Pumps-Sub Surface (BH)			509	0	535	5,000
Tanks				34,000	536	34,000
Flowlines				78,000	537	78,000
Heater/Treater/Separator				114,000	538	114,000
Electrical System				64,000	539	79,000
Packers/Anchors/Hangers	414		514	65,000	540	67,000
Couplings/Fittings/Valves	415			114,000	541	114,000
Dehydration					542	0
Injection Plant/CO2 Equipment				0	543	0
Pumps-Surface				11,000	544	11,000
Instrumentation/SCADA/POC					545	7,000
Miscellaneous	419		519		546	3,000
Contingency	420		520		547	0
Makers/LACT				31,000	548	31,000
Flares/Combustors/Emission				23,000	549	23,000
Gas Lift/Compression			527	15,000	550	50,000
<b>TOTAL TANGIBLES</b>		<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>		<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>
COG Operating LLC	<b>% of Total Well Cost</b>	<b>34%</b>	<b>56%</b>	<b>8%</b>	<b>2%</b>	

Data Prepared: 1/4/18

We approve:  
\_\_\_\_\_  
% Working Interest  
Company: EDG Y Resources, LLC  
By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

COG Operating LLC  
By: PS-KL-N-LE

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



Federal Express

February 21, 2018

EOG Resources, Inc.  
EOG Y Resources, Inc.  
5509 Champions Drive  
Midland, TX 79706

EOG Resources, Inc.  
EOG Y Resources, Inc.  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

Re: Well Re-Proposal – Little Bear Federal Com #8H  
Section 28: E $\frac{1}{4}$ SW $\frac{1}{4}$   
Section 33: E $\frac{1}{4}$ W $\frac{1}{2}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 396' FSL & 2197' FEL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 2310' FWL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #8H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,605' and a MD of approximately 18,910' to test the Wolfcamp formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the E $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 28 and the E $\frac{1}{4}$ W $\frac{1}{2}$  of Sections 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

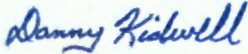
The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.



If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin - East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #8H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #8H.

Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #8H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL:</b> Sec. 33 396 FSL & 2197 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL:</b> Sec. 28 2440 FSL & 2310 FWL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> Wolfcamp	<b>DEPTH:</b> 18,910
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,605

	Drig - Rig Release(D)	Completion(C)	Tank Btty Constrcn(TB)	Pmpg Equipment(PEQ)	TOTAL
<b>INTANGIBLE COSTS</b>					
Title/Cursive/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303	351		5,000
Survey/Stake Location	204 6,000		352		6,000
Location/Pits/Road Expense	205 120,000	305 10,000	353 53,000	366	183,000
Drilling / Completion Overhead	206 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 700,000				700,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354	387	180,500
Water	212 30,000	312 723,000		368	753,000
Bits	213 122,400	313 6,000		369	128,400
Mud & Chemicals	214 185,000	314 34,000		370	219,000
Drill Stem Test	216	315			0
Coring & Analysis	216				0
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220			371	0
Fiscal Equipment & Centralizers	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Service	223	323		372	0
Geogeo/Engineering	224	324	355	373	0
Contract Labor	225 5,500	325 23,800	356 50,000	374 8,500	83,800
Company Supervision	226 55,800	326 15,000	357	375	70,800
Contract Supervision	227 106,000	327 179,000	358	376 5,000	290,000
Testing Casing/Tubing	228 20,000	328 10,000		377	30,000
Mud Logging Unit	229 41,000	329			41,000
Logging	230			378	0
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Stimulation/Treating	232	332 12,800		380	12,800
Completion Unit	233	333 118,000		381 8,800	126,800
Swabbing Unit	234	334		382	0
Rentals-Surface	235 175,000	335 246,000	359	383 7,000	428,000
Rentals-Subsurface	236 175,000	336 60,000		384	235,000
Trucking/Forklift/Rig Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
Welding Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 80,000	362 135,000	387	195,000
Plug to Abandon	240	340			0
Sismic Analysis	241	341			0
Miscellaneous	242	342			0
Contingency	243 52,000	343 175,000	363	389	227,000
Closed Loop & Environmental	244	344 5,000	364	388	5,000
Dyed Diesel	245	345 327,000			327,000
Coil Tubing	246	346 250,000			250,000
Flowback Crews & Equip	247	347 48,000			48,000
Offset Directional/Frac	248	348		391	0
<b>TOTAL INTANGIBLES</b>	<b>2,620,000</b>	<b>5,363,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	401 48,000				48,000
Intermediate Casing	402 278,000				278,000
Production Casing/Liner	403 360,000				360,000
Tubing	504 45,000			530 5,000	50,000
Wellhead Equipment	405 75,000	505 20,800		531 3,000	98,800
Pumping Unit				506 96,000	96,000
Prime Mover				507 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BH)	509 0			532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000	533 15,000	79,000
Packers/Anchors/Hangers	414 65,000		514	534 2,000	67,000
Couplings/Fittings/Valves	415		515 114,000		114,000
Dehydration			517		0
Injection Plant/CO2 Equipment			518		0
Pumps-Surface			521 11,000		11,000
Instrumentation/SCADA/POC			522	529 7,000	7,000
Miscellaneous	419 519	523		535 3,000	3,000
Contingency	420 520	524		536	0
Meters/LACT			525 31,000		31,000
Flares/Combustors/Emission			526 23,000		23,000
Gas Lift/Compression		527 15,000	516 35,000	528	60,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>

COG Operating LLC % of Total Well Cost 34% 88% 8% 2%

Date Prepared: 1/4/18

We approve: \_\_\_\_\_  
% Working Interest

COG Operating LLC

Company: EOG Resources, LLC

By: PS-N-KL-LE

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

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



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #8H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL: Sec. 33</b> 396 FSL & 2197 FEL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28</b> 2440 FSL & 2310 FWL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> Wolfcamp	<b>DEPTH:</b> 18,910
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,605

	Drig - Rig Release(D)	Completion(C)	Tank Btty Constructn(TB)	Prorg Equipment(PEQ)	TOTAL
<b>INTANGIBLE COSTS</b>					
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Survey/Stake Location	204 6,000		351		6,000
Location/Pits/Road Expense	205 120,000	305 10,000	352 53,000	366	183,000
Drilling / Completion Overhead	206 9,300	308			9,300
Turnkey Contract	207				0
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Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
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Water	212 30,000	312 723,000		368	753,000
Bits	213 122,400	313 6,000		369	128,400
Mud & Chemicals	214 185,000	314 34,000		370	219,000
Drill Stem Test	215	315			0
Coring & Analysis	216				0
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220			371	0
Float Equipment & Centralizers	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Service	223	323		372	0
Geologic/Engineering	224	324	358	373	0
Contract Labor	225 5,500	325 23,800	356 80,000	374 8,500	85,800
Company Supervision	226 55,800	326 15,000	357	375	70,800
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Testing Casing/Tubing	228 20,000	328 10,000		377	30,000
Mud Logging Unit	229 41,000	329			41,000
Logging	230			378	0
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Stimulation/Treating	232	332 12,000		380	12,000
Completion Unit	233	333 118,000		381 8,800	126,800
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Rentals-Surface	235 175,000	335 246,000	359	383 7,000	428,000
Rentals-Subsurface	236 175,000	336 60,000		384	235,000
Trucking/Forklift/Rug Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
Welding Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 60,000	362 135,000	387	195,000
Plug to Abandon	240	340			0
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Miscellaneous	242	342		388	0
Contingency	243 52,000	343 175,000	363	389	227,000
Closed Loop & Environmental	244	344 5,000	364	390	5,000
Dyed Diesel	245	345 327,000			327,000
Coil Tubing	246	346 250,000			250,000
Flowback Crews & Equip	247	347 48,000			48,000
Offset Directional/Frac	248	348		391	0
<b>TOTAL INTANGIBLES</b>	<b>2,620,000</b>	<b>5,383,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>					
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Intermediate Casing	402 278,000				278,000
Production Casing/Liner	403 360,000				360,000
Tubing		504 48,800		530 5,000	53,800
Wellhead Equipment	405 75,000	505 20,800		531 3,000	98,800
Pumping Unit				506 98,000	98,000
Prime Mover				507 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BH)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 78,000		78,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000	533 15,000	79,000
Packers/Anchors/Hangers	414 85,000	514	534 2,000		87,000
Couplings/Fittings/Valves	415	515 114,000			114,000
Dehydration		517			0
Injection Plant/CO2 Equipment		518			0
Pumps-Surface		521 11,000			11,000
Instrumentation/SCADA/POC		522		529 7,000	7,000
Miscellaneous	419 519	523		535 3,000	3,000
Contingency	420 520	524		536	0
Meters/LACT		525 31,000			31,000
Flares/Combustors/Emission		526 23,000			23,000
Gas Lift/Compression		527 15,000	516 35,000	528	50,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>191,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>
COG Operating LLC	% of Total Well Cost	34%	58%	8%	2%

Date Prepared: 1/4/16

COG Operating LLC

We approve:  
\_\_\_\_\_% Working Interest

By: PS-N-KLLE

Company: EOG Y Resources, LLC

By:

Printed Name:

Title:

Date:

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



Federal Express

February 21, 2018

EOG Resources, Inc.  
EOG Y Resources, Inc.  
5509 Champions Drive  
Midland, TX 79706

EOG Resources, Inc.  
EOG Y Resources, Inc.  
105 S. 4<sup>th</sup> Street  
Artesia, NM 88210

Re: Well Re-Proposal – Little Bear Federal Com #9H  
Section 28: W $\frac{1}{2}$ SW $\frac{1}{4}$   
Section 33: W $\frac{1}{2}$ W $\frac{1}{2}$   
Township 20 South, Range 34 East, N.M.P.M.  
SHL: 384' FSL & 1031' FWL, or an approved legal location in Sec. 33  
BHL: 2440' FSL & 990' FWL, or an approved legal location in Sec. 28  
Lea County, New Mexico

Gentlemen:

COG Operating LLC ("COG"), as Operator, hereby re-proposes, with updated depths, the drilling and completion of the Little Bear Federal Com #9H well as a horizontal well at the above-captioned location, or at a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,625' and a MD of approximately 18,920' to test the Wolfcamp formation ("Operation"). The total cost of the Operation is estimated to be \$9,873,100, and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

COG is proposing to drill and complete this well under the terms of the AAPL Form 610-1989 (Horizontal Modified) Operating Agreement which is enclosed for your review. A completed executable copy will be provided upon final negotiations. The Operating Agreement covers the W $\frac{1}{2}$ SW $\frac{1}{4}$  of Section 28 and the W $\frac{1}{2}$ W $\frac{1}{2}$  of Section 33, T20S-R34E, Lea County, New Mexico ("Contract Area") and contains general provisions:

- 100% / 300% Non-consenting penalty
- \$7,000/\$700 Drilling and Producing rate
- COG Operating LLC named as Operator

Please indicate your participation election in the space provided on page 2, sign and return this letter, along with a signed copy of the enclosed AFE and a copy of your geologic well requirements. A self-addressed, postage paid envelope is enclosed for your convenience. If you do not wish to participate, COG proposes to acquire your interest via term assignment. It will have the following general provisions:

- 3 year primary term
- Delivering a 80% NRI, proportionately reduced
- \$750 per net acre bonus consideration

The Term Assignment offer terminates March 31, 2018 and is subject to the approval of COG's management and verification of title.



If an agreement cannot be reached within 30 days of the date of this letter, COG will apply to the New Mexico Oil Conservation Division for compulsory pooling of your interest into a spacing unit for the proposed well if uncommitted at such time.

If you have any questions, please do not hesitate to contact the undersigned at 432-685-2535.

Respectfully,  
COG OPERATING LLC



Danny Kidwell  
Senior Staff Landman  
Northern Delaware Basin - East

Encl.

\_\_\_\_\_ I/we hereby elect to participate in the Little Bear Federal Com #9H.

\_\_\_\_\_ I/we hereby elect not to participate in the Little Bear Federal Com #9H.

Company or  
Individual Name: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #9H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
<b>SHL: Sec. 33</b> 384 FSL & 1031 FWL, or an approved legal location	<b>STATE &amp; COUNTY:</b> New Mexico, Lea
<b>BHL: Sec. 28</b> 2440 FSL & 990 FWL, or an approved legal location	<b>OBJECTIVE:</b> DRILL AND COMPLETE
<b>FORMATION:</b> Wolfcamp	<b>DEPTH:</b> 18,820
<b>LEGAL:</b> Sections 28 & 33, T20S-R34E	<b>TVD:</b> 11,625

	Drig - Rig Release(D)	Completion(C)	Tank Btry Constrctn(TB)	Pmpg Equipment(PEQ)	TOTAL
<b>INTANGIBLE COSTS</b>					
Title/Cursive/Permit	201 11,000				11,000
Insurance	202 4,000	302			4,000
Damages/Right of Way	203 5,000	303			5,000
Survey/State Location	204 6,000		351		6,000
Location/Pits/Road Expense	205 120,000	305 10,000	352 53,000	368	183,000
Drilling / Completion Overhead	206 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
Daywork Contract	209 700,000				700,000
Directional Drilling Services	210 285,000				285,000
Frac Equipment		307 1,013,000			1,013,000
Frac Chemicals		308 657,000			657,000
Frac Proppant		309 880,000			880,000
Frac Proppant Transportation		310 111,000			111,000
Fuel & Power	211 177,000	311 3,500	354	367	180,500
Water	212 30,000	312 723,000		368	753,000
Bts	213 122,400	313 6,000		369	128,400
Mud & Chemicals	214 185,000	314 34,000		370	219,000
Drill Stem Test	215				0
Coring & Analysis	216				0
Cement Surface	217 20,000				20,000
Cement Intermediate	218 50,000				50,000
Cement 2nd Intermediate/Production	219 60,000				60,000
Cement Squeeze & Other (Kickoff Plug)	220			371	0
Floot Equipment & Cementizers	221 22,000				22,000
Casing Crews & Equipment	222 55,000				55,000
Fishing Tools & Service	223	323			0
Geologic/Engineering	224	324	355	372	0
Contract Labor	225 5,900	325 23,800	356	374 6,500	85,800
Company Supervision	226 55,800	326 15,000	357	375	70,800
Contract Supervision	227 105,000	327 179,000	358	376 5,000	290,000
Testing Casing/Tubing	228 20,000	328 10,000		377	30,000
Mud Logging Unit	229 41,000	329			41,000
Logging	230				0
Perforating/Wireline Services	231 4,000	331 372,000		378	376,000
Simulation/Treating		332 12,000		379	12,000
Completion Unit		333 118,000		380	128,000
Swabbing Unit		334		381 8,800	0
Rentals-Surface	235 175,000	335 246,000	359	382 7,000	428,000
Rentals-Subsurface	236 179,000	336 80,000		384	259,000
Trucking/Forklift/Fog Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
Welding Services	238 4,000	338 5,000	361	386	9,000
Water Disposal	239	339 60,000	362	387 135,000	195,000
Plug to Abandon	240	340			0
Seismic Analysis	241	341			0
Miscellaneous	242	342		389	0
Contingency	243 52,000	343 175,000	363	390	227,000
Closed Loop & Environmental	244	344 5,000	364	388	5,000
Dyed Diesel	245	345 327,000			0
Coil Tubing		346 250,000			250,000
Flowback Crews & Equip		347 48,000			48,000
Offset Directional/Frac	248	348		391	0
<b>TOTAL INTANGIBLES</b>	<b>2,620,000</b>	<b>5,393,300</b>	<b>238,000</b>	<b>30,300</b>	<b>8,271,600</b>
<b>TANGIBLE COSTS</b>					
Surface Casing	401 46,000				46,000
Intermediate Casing	402 276,000				276,000
Production Casing/Liner	403 360,000				360,000
Tubing		504 48,800		530 5,000	53,800
Wellhead Equipment	405 75,000	505 20,900		631 3,000	88,900
Pumping Unit				506 96,000	96,000
Prime Mover				507 0	0
Rods				508 55,000	55,000
Pumps-Sub Surface (BH)		509 0		532 5,000	5,000
Tanks			510 34,000		34,000
Flowlines			511 79,000		79,000
Heater Treater/Separator			512 114,000		114,000
Electrical System			513 64,000		64,000
Packers/Anchors/Flangers	414	514 65,000		534 2,000	67,000
Couplings/Flanges/Valves	415		515 114,000		114,000
Dehydration			517		0
Injection Plant/CO2 Equipment			518		0
Pumps-Surface			521 11,000		11,000
Instrumentation/SCADA/POC			522	529 7,000	7,000
Miscellaneous	419	519	523	535 3,000	3,000
Contingency	420	520	524	536	0
Meters/LACT			525 31,000		31,000
Flares/Combustors/Emission			526 23,000		23,000
Gas Lift/Compression		527 15,000	516	528 36,000	50,000
<b>TOTAL TANGIBLES</b>	<b>757,000</b>	<b>149,500</b>	<b>504,000</b>	<b>181,000</b>	<b>1,601,500</b>
<b>TOTAL WELL COSTS</b>	<b>3,377,000</b>	<b>5,532,800</b>	<b>742,000</b>	<b>221,300</b>	<b>9,873,100</b>
<b>COG Operating LLC</b>	<b>% of Total Well Cost</b>	<b>34%</b>	<b>58%</b>	<b>8%</b>	<b>2%</b>

Date Prepared: 1/4/18

We approve: \_\_\_\_\_  
% Working Interest

COG Operating LLC

Company: EOG Resources, LLC

By: PS-N-KL-LE

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

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**COG OPERATING LLC  
AUTHORITY FOR EXPENDITURE  
DRILLING**

<b>WELL NAME:</b> LITTLE BEAR FED COM #9H	<b>PROSPECT NAME:</b> Zeus 2034 (717082)
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Location/Plat/Road Expense	205 120,000	305 10,000	353 53,000	366	183,000
Drilling / Completion Overhead	206 9,300	306			9,300
Turnkey Contract	207				0
Footage Contract	208				0
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Mud Logging Unit	229 41,000	329			41,000
Logging	230			378	0
Perforating/Wireline Services	231 4,000	331 372,000		379	376,000
Stimulation/Treating		332 12,000		380	12,000
Completion Unit		333 118,000		381 8,800	126,800
Swabbing Unit		334		382	0
Rentals-Surface	235 175,000	335 246,000	359	383 7,800	428,000
Rentals-Subsurface	236 175,000	336 80,000		384	255,000
Trucking/Forklift/Rig Mobilization	237 120,000	337 40,000	360	385 3,000	163,000
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Plug to Abandon	240	340			0
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Flowlines			511 78,000		78,000
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Instrumentation/SCADA/POC			522	529 7,000	7,000
Miscellaneous	419 519		523	535 3,000	3,000
Contingency	420 520		524	536	0
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COG Operating LLC	% of Total Well Cost	34%	56%	8%	2%
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Date Prepared: 1/4/18

We approve: \_\_\_\_\_  
% Working Interest

COG Operating LLC  
By: PS-MJL-LE

Company: EOG Y Resources, LLC  
By: \_\_\_\_\_

Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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