

## OCD Hobbs

Form 3160-3  
(March 2012)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires October 31, 2014

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC064149
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator COG OPERATING LLC (229137)		7. If Unit or CA Agreement, Name and No.
3a. Address 600 West Illinois Ave Midland TX 79701		8. Lease Name and Well No. BRANEX-COG FEDERAL COM 17H (39744)
3b. Phone No. (include area code) (432)683-7443		9. API Well No. 30-025-43743
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SESE / 990 FSL / 25 FEL / LAT 32.8446304 / LONG -103.7801352 At proposed prod. zone SWSW / 989 FSL / 989 FWL / LAT 32.844471 / LONG -103.759131		10. Field and Pool, or Exploratory MALJAMAR / YESO, WEST 44500
14. Distance in miles and direction from nearest town or post office* 1.5 miles		11. Sec., T. R. M. or Blk. and Survey or Area SEC 8 / T17S / R32E / NMP
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 25 feet	16. No. of acres in lease 320	12. County or Parish LEA
17. Spacing Unit dedicated to this well 200	13. State NM	
18. Distance from proposed location* to nearest well, drilling, completed, 614.6 feet applied for, on this lease, ft.	19. Proposed Depth 5750 feet / 11822 feet	20. BLM/BIA Bond No. on file FED: NMB000215
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4055 feet	22. Approximate date work will start* 11/09/2016	23. Estimated duration 15 days

## 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature (Electronic Submission)	Name (Printed/Typed) Robyn Odom / Ph: (432)685-4385	Date 06/24/2016
Title Regulatory Analyst		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Christopher Walls / Ph: (575)234-2234	Date 04/07/2017
Title Petroleum Engineer		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

\*(Instructions on page 2)

**APPROVED WITH CONDITIONS**

KE  
04/17/17



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## APD Print Report

04/10/2017

APD ID: 10400002350

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Type: OIL WELL

Submission Date: 06/24/2016

Federal/Indian APD: FED

Well Number: 17H

Well Work Type: Drill

Highlight

All Changes

### Application

#### Section 1 - General

APD ID: 10400002350

BLM Office: HOBBS

Federal/Indian APD: FED

Lease number: NMLC064149

Surface access agreement in place?

Agreement in place? NO

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? NO

Operator letter of designation:

Keep application confidential? NO

Tie to previous NOS?

User: Robyn Odom

Is the first lease penetrated for production Federal or Indian? FED

Lease Acres: 320

Allotted?

Reservation:

Federal or Indian agreement:

Submission Date: 06/24/2016

Title: Regulatory Analyst

APD Operator: COG OPERATING LLC

#### Operator Info

Operator Organization Name: COG OPERATING LLC

Operator Address: 600 West Illinois Ave

Operator PO Box:

Zip: 79701

Operator City: Midland

State: TX

Operator Phone: (432)683-7443

Operator Internet Address: RODOM@CONCHO.COM

#### Section 2 - Well Information

Well in Master Development Plan? NO

Well in Master SUPO? NO

Well in Master Drilling Plan? NO

Master Development Plan name:

Master SUPO name:

Master Drilling Plan name:

**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Well API Number:**

**Field/Pool or Exploratory?** Field and Pool

**Field Name:** MALJAMAR

**Pool Name:** YESO, WEST

**Is the proposed well in an area containing other mineral resources?** NATURAL GAS,OIL

**Describe other minerals:**

**Is the proposed well in a Helium production area?** N

**Use Existing Well Pad?** NO

**New surface disturbance?**

**Type of Well Pad:** SINGLE WELL

**Multiple Well Pad Name:**

**Number:**

**Well Class:** HORIZONTAL

**Number of Legs:** 1

**Well Work Type:** Drill

**Well Type:** OIL WELL

**Describe Well Type:**

**Well sub-Type:** INFILL

**Describe sub-type:**

**Distance to town:** 1.5 Miles

**Distance to nearest well:** 614.6 FT

**Distance to lease line:** 25 FT

**Reservoir well spacing assigned acres Measurement:** 200 Acres

**Well plat:** Branex-COG Federal Com 17H C102\_06-22-2016.pdf

**Well work start Date:** 11/09/2016

**Duration:** 15 DAYS

### Section 3 - Well Location Table

**Survey Type:** RECTANGULAR

**Describe Survey Type:**

**Datum:** NAD83

**Vertical Datum:** NAVD88

**Survey number:**

**STATE:** NEW MEXICO

**Meridian:** NEW MEXICO PRINCIPAL **County:** LEA

**Latitude:** 32.8446304

**Longitude:** -103.7801352

**SHL**

**Elevation:** 4055

**MD:** 0

**TVD:** 0

**Leg #: 1**

**Lease Type:** FEDERAL

**Lease #:** NMLC064149

**NS-Foot:** 990

**NS Indicator:** FSL

**EW-Foot:** 25

**EW Indicator:** FEL

**Twsp:** 17S

**Range:** 32E

**Section:** 8

**Aliquot:** SESE

**Lot:**

**Tract:**



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> LEA
	<b>Latitude:</b> 32.8446304	<b>Longitude:</b> -103.7801352	
KOP	<b>Elevation:</b> -1174	<b>MD:</b> 5229	<b>TVD:</b> 5229
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMLC064149	
	<b>NS-Foot:</b> 990	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 25	<b>EW Indicator:</b> FEL	
	<b>Twsp:</b> 17S	<b>Range:</b> 32E	<b>Section:</b> 8
	<b>Aliquot:</b> SESE	<b>Lot:</b>	<b>Tract:</b>
	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> LEA
	<b>Latitude:</b> 32.844509	<b>Longitude:</b> -103.778464	
PPP	<b>Elevation:</b> -1673	<b>MD:</b> 5900	<b>TVD:</b> 5728
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMNM0315712	
	<b>NS-Foot:</b> 990	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 330	<b>EW Indicator:</b> FWL	
	<b>Twsp:</b> 17S	<b>Range:</b> 32E	<b>Section:</b> 9
	<b>Aliquot:</b> SWSW	<b>Lot:</b>	<b>Tract:</b>
	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> LEA
	<b>Latitude:</b> 32.844508	<b>Longitude:</b> -103.777934	
EXIT	<b>Elevation:</b> -1695	<b>MD:</b> 6047	<b>TVD:</b> 5750
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMNM0315712	
	<b>NS-Foot:</b> 988	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 496	<b>EW Indicator:</b> FWL	
	<b>Twsp:</b> 17S	<b>Range:</b> 32E	<b>Section:</b> 9
	<b>Aliquot:</b> SWSW	<b>Lot:</b>	<b>Tract:</b>
	<b>STATE:</b> NEW MEXICO	<b>Meridian:</b> NEW MEXICO PRINCIPAL	<b>County:</b> LEA
	<b>Latitude:</b> 32.844471	<b>Longitude:</b> -103.759131	
BHL	<b>Elevation:</b> -1695	<b>MD:</b> 11822	<b>TVD:</b> 5750
<b>Leg #: 1</b>	<b>Lease Type:</b> FEDERAL	<b>Lease #:</b> NMLC064150	
	<b>NS-Foot:</b> 989	<b>NS Indicator:</b> FSL	
	<b>EW-Foot:</b> 989	<b>EW Indicator:</b> FWL	



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Twsp:** 17S

**Range:** 32E

**Section:** 10

**Aliquot:** SWSW

**Lot:**

**Tract:**

## Drilling Plan

### Section 1 - Geologic Formations

**ID:** Surface formation

**Name:** UNKNOWN

**Lithology(ies):**

ALLUVIUM

**Elevation:** 4055

**True Vertical Depth:** 0

**Measured Depth:** 0

**Mineral Resource(s):**

USEABLE WATER

**Is this a producing formation?** N

**ID:** Formation 1

**Name:** RUSTLER

**Lithology(ies):**

ANHYDRITE

**Elevation:** 3175

**True Vertical Depth:** 880

**Measured Depth:** 880

**Mineral Resource(s):**

OTHER - Brackish Water

**Is this a producing formation?** N

**ID:** Formation 2

**Name:** TOP SALT

**Lithology(ies):**

SALT

**Elevation:** 2965

**True Vertical Depth:** 1090

**Measured Depth:** 1090

**Mineral Resource(s):**

OTHER - Salt

**Is this a producing formation?** N

**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**ID:** Formation 3

**Name:** TANSILL

**Lithology(ies):**

DOLOMITE

**Elevation:** 2075

**True Vertical Depth:** 1980

**Measured Depth:** 1980

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 4

**Name:** YATES

**Lithology(ies):**

SANDSTONE

DOLOMITE

**Elevation:** 1845

**True Vertical Depth:** 2210

**Measured Depth:** 2210

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 5

**Name:** SEVEN RIVERS

**Lithology(ies):**

SANDSTONE

DOLOMITE

**Elevation:** 1505

**True Vertical Depth:** 2550

**Measured Depth:** 2550

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**ID:** Formation 6

**Name:** QUEEN

**Lithology(ies):**

SANDSTONE

**Elevation:** 875

**True Vertical Depth:** 3180

**Measured Depth:** 3180

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 7

**Name:** GRAYBURG

**Lithology(ies):**

SANDSTONE

DOLOMITE

**Elevation:** 465

**True Vertical Depth:** 3590

**Measured Depth:** 3590

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 8

**Name:** SAN ANDRES

**Lithology(ies):**

DOLOMITE

ANHYDRITE

**Elevation:** 155

**True Vertical Depth:** 3900

**Measured Depth:** 3900

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**ID:** Formation 9

**Name:** GLORIETA

**Lithology(ies):**

SANDSTONE

SILTSTONE

**Elevation:** -1385

**True Vertical Depth:** 5440

**Measured Depth:** 5440

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 10

**Name:** PADDOCK

**Lithology(ies):**

DOLOMITE

**Elevation:** -1445

**True Vertical Depth:** 5500

**Measured Depth:** 5500

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** Y

**ID:** Formation 11

**Name:** BLINEBRY

**Lithology(ies):**

DOLOMITE

**Elevation:** -1895

**True Vertical Depth:** 5950

**Measured Depth:** 5950

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

## Section 2 - Blowout Prevention

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**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Pressure Rating (PSI):** 2M

**Rating Depth:** 9500

**Equipment:** ALL REQUIRED EQUIPMENT PER FEDERAL AND STATE REGULATIONS TO BE IN PLACE PRIOR TO DRILLING OUT THE SURFACE CASING.

**Requesting Variance?** NO

**Variance request:**

**Testing Procedure:** Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

**Choke Diagram Attachment:**

2M Choke Schematic 1-12-16.pdf

**BOP Diagram Attachment:**

2M ANNULAR BOP 2-1-16.pdf

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### Section 3 - Casing

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**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**String Type:** SURFACE

**Other String Type:**

**Hole Size:** 17.5

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -1695

**Bottom setting depth MD:** 905

**Bottom setting depth TVD:** 905

**Bottom setting depth MSL:** -2600

**Calculated casing length MD:** 905

**Casing Size:** 13.375

**Other Size**

**Grade:** H-40

**Other Grade:**

**Weight:** 48

**Joint Type:** STC

**Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.79

**Burst Design Safety Factor:** 3.28

**Joint Tensile Design Safety Factor type:** DRY

**Joint Tensile Design Safety Factor:** 7.41

**Body Tensile Design Safety Factor type:** DRY

**Body Tensile Design Safety Factor:** 7.41

**Casing Design Assumptions and Worksheet(s):**

Casing Design Attachement\_06-21-2016.pdf



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**String Type:** INTERMEDIATE

**Other String Type:**

**Hole Size:** 12.25

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -1695

**Bottom setting depth MD:** 2250

**Bottom setting depth TVD:** 2250

**Bottom setting depth MSL:** 1805

**Calculated casing length MD:** 2250

**Casing Size:** 9.625

**Other Size**

**Grade:** J-55

**Other Grade:**

**Weight:** 40

**Joint Type:** LTC

**Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 2.47

**Burst Design Safety Factor:** 1.44

**Joint Tensile Design Safety Factor type:** DRY

**Joint Tensile Design Safety Factor:** 6.5

**Body Tensile Design Safety Factor type:** DRY

**Body Tensile Design Safety Factor:** 6.5

**Casing Design Assumptions and Worksheet(s):**

Casing Design Attachement\_06-21-2016.pdf

**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**String Type:** PRODUCTION

**Other String Type:**

**Hole Size:** 8.75

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -1695

**Bottom setting depth MD:** 5229

**Bottom setting depth TVD:** 5229

**Bottom setting depth MSL:** -6924

**Calculated casing length MD:** 5229

**Casing Size:** 7.0

**Other Size**

**Grade:** L-80

**Other Grade:**

**Weight:** 29

**Joint Type:** LTC

**Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### Safety Factors

**Collapse Design Safety Factor:** 3.17

**Burst Design Safety Factor:** 1.33

**Joint Tensile Design Safety Factor type:** DRY

**Joint Tensile Design Safety Factor:** 2.25

**Body Tensile Design Safety Factor type:** DRY

**Body Tensile Design Safety Factor:** 2.25

**Casing Design Assumptions and Worksheet(s):**

Casing Design Attachement\_06-21-2016.pdf

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 17H

String Type: PRODUCTION

Other String Type:

Hole Size: 8.75

Top setting depth MD: 5229

Top setting depth TVD: 5229

Top setting depth MSL: -6924

Bottom setting depth MD: 6047

Bottom setting depth TVD: 5750

Bottom setting depth MSL: -7445

Calculated casing length MD: 818

Casing Size: 5.5

Other Size

Grade: L-80

Other Grade:

Weight: 17

Joint Type: LTC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

### Safety Factors

Collapse Design Safety Factor: 2.29

Burst Design Safety Factor: 1.33

Joint Tensile Design Safety Factor type: DRY

Joint Tensile Design Safety Factor: 3.01

Body Tensile Design Safety Factor type: DRY

Body Tensile Design Safety Factor: 3.01

Casing Design Assumptions and Worksheet(s):

Casing Design Attachement\_06-21-2016.pdf



Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 17H

String Type: PRODUCTION

Other String Type:

Hole Size: 7.875

Top setting depth MD: 6047

Top setting depth TVD: 5750

Top setting depth MSL: -7445

Bottom setting depth MD: 11822

Bottom setting depth TVD: 5750

Bottom setting depth MSL: -7445

Calculated casing length MD: 5775

Casing Size: 5.5

Other Size

Grade: L-80

Other Grade:

Weight: 17

Joint Type: LTC

Other Joint Type:

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

### Safety Factors

Collapse Design Safety Factor: 2.29

Burst Design Safety Factor: 1.33

Joint Tensile Design Safety Factor type: DRY

Joint Tensile Design Safety Factor: 3.44

Body Tensile Design Safety Factor type: DRY

Body Tensile Design Safety Factor: 3.44

Casing Design Assumptions and Worksheet(s):

Casing Design Attachment\_06-21-2016.pdf

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### Section 4 - Cement

Casing String Type: SURFACE

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 17H

**Stage Tool Depth:**

Lead

Top MD of Segment: 0

Bottom MD Segment: 905

Cement Type: Class C

Additives: 4% Gel+2% CaCl<sub>2</sub>+0.25pps  
Celloflake

Quantity (sks): 500

Yield (cu.ff./sk): 1.75

Density: 13.5

Volume (cu.ft.): 730.65

Percent Excess: 58

Tail

Top MD of Segment:

Bottom MD Segment: 905

Cement Type: Class C

Additives: 2% CaCl<sub>2</sub>+0.25pps  
Celloflake

Quantity (sks): 200

Yield (cu.ff./sk): 1.32

Density: 14.8

Volume (cu.ft.): 264

Percent Excess: 58

Casing String Type: INTERMEDIATE

**Stage Tool Depth:**

Lead

Top MD of Segment: 0

Bottom MD Segment: 2250

Cement Type: 50:50:10 C; Poz:Gel

Additives: 5% Salt+5pps LCM+0.25pps  
Celloflake

Quantity (sks): 400

Yield (cu.ff./sk): 2.45

Density: 11.8

Volume (cu.ft.): 980

Percent Excess: 117

Tail

Top MD of Segment:

Bottom MD Segment: 2000

Cement Type: Class C

Additives: 2% CaCl<sub>2</sub>

Quantity (sks): 200

Yield (cu.ff./sk): 1.32

Density: 14.8

Volume (cu.ft.): 264

Percent Excess: 117

Casing String Type: PRODUCTION

**Stage Tool Depth:**

Lead

Top MD of Segment: 0

Bottom MD Segment: 5229

Cement Type: 50:50:10 C; Poz:Gel

Additives: 5pps LCM+0.25pps  
Celloflake

Quantity (sks): 400

Yield (cu.ff./sk): 2.45

Density: 11.8

Volume (cu.ft.): 980

Percent Excess: 49

Tail

Top MD of Segment:

Bottom MD Segment: 5229

Cement Type: Class C

Additives: 2% CaCl<sub>2</sub>

Quantity (sks): 200

Yield (cu.ff./sk): 1.32

Density: 14.8

Volume (cu.ft.): 264

Percent Excess: 49

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 17H

**Stage Tool Depth:**

Lead

**Top MD of Segment:** 5229

**Bottom MD Segment:** 6047

**Cement Type:** 50:50:10 C; Poz:Gel

**Additives:** 5pps LCM+0.25pps  
Celloflake

**Quantity (sks):** 400

**Yield (cu.ff./sk):** 2.45

**Density:** 11.8

**Volume (cu.ft.):** 980

**Percent Excess:** 49

Tail

**Top MD of Segment:**

**Bottom MD Segment:** 6047

**Cement Type:** Class C

**Additives:** 2% CaCl<sub>2</sub>

**Quantity (sks):** 200

**Yield (cu.ff./sk):** 1.32

**Density:** 14.8

**Volume (cu.ft.):** 264

**Percent Excess:** 49

**Stage Tool Depth:**

Lead

**Top MD of Segment:** 5229

**Bottom MD Segment:** 11822

**Cement Type:** 35:65:6 C:Poz:Gel

**Additives:** 5%salt+5pps  
LCM+0.2%SMS+1%FL-25+1%Ba-  
58+0.3%FL-52A+0.125pps CF

**Quantity (sks):** 450

**Yield (cu.ff./sk):** 2.01

**Density:** 12.5

**Volume (cu.ft.):** 1256.25

**Percent Excess:** 49

Tail

**Top MD of Segment:**

**Bottom MD Segment:** 11822

**Cement Type:** 50:50:2 C:Poz:Gel

**Additives:** 5%salt+3pps  
LCM+0.6%SMS+1%FL-25+1%BA-

**Quantity (sks):** 1400

**Yield (cu.ff./sk):** 1.37

**Density:** 14

**Volume (cu.ft.):** 1918

**Percent Excess:** 49

## Section 5 - Circulating Medium

**Mud System Type:** Closed

**Will an air or gas system be Used?** NO

**Description of the equipment for the circulating system in accordance with Onshore Order #2:**

**Diagram of the equipment for the circulating system in accordance with Onshore Order #2:**

**Describe what will be on location to control well or mitigate other conditions:** SUFFICIENT MUD MATERIALS TO MAINTAIN MUD PROPERTIES AND MEET MINIMUM LOST CIRCULATION AND WEIGHT INCREASE REQUIREMENTS WILL BE KEPT ON LOCATION AT ALL TIMES.

**Describe the mud monitoring system utilized:** PVT/PASON/VISUAL MONITORING

## Circulating Medium Table



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Top Depth:** 0

**Bottom Depth:** 905

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 8.6

**Max Weight (lbs./gal.):** 8.8

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

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**Top Depth:** 0

**Bottom Depth:** 6047

**Mud Type:** SALT SATURATED

**Min Weight (lbs./gal.):** 10

**Max Weight (lbs./gal.):** 10.2

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

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**Top Depth:** 6047

**Bottom Depth:** 11822

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 8.5

**Max Weight (lbs./gal.):** 9.2

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

---

## **Section 6 - Test, Logging, Coring**

**List of production tests including testing procedures, equipment and safety measures:**

INTERVAL PERFORATING, FRACTURE STIMULATING, FLOW BACK TESTING.

**List of open and cased hole logs run in the well:**

CNL,MUDLOG

**Coring operation description for the well:**

N/A

**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

## Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 2661

**Anticipated Surface Pressure:** 1396

**Anticipated Bottom Hole Temperature(F):** 115

**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

H2S Plan\_05-20-2016.pdf

Branex-COG Federal Com 17H H2S Safety diagram\_06-21-2016.pdf

## Section 8 - Other Information

**Proposed horizontal/directional/multi-lateral plan submission:**

Branex-COG Federal Com 17H Plan 1 Rpt\_06-21-2016.pdf

**Other proposed operations facets description:**

There is NO excess cement percent in casing overlap.

Discussion of DV Tool cement options:

9 5/8" DV tool cement option is proposed for approval. This may become necessary if lost circulation occurs while drilling the 12 1/4" intermediate hole. DV tool depth will be based on hole conditions. Cement volumes will be adjusted proportionally. DV Tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe.

7" DV tool cement option is proposed for approval. This may become necessary if water flows in the San Andres are encountered. These water flows normally occur in areas where produced water disposal is happening. This dense cement is used to combat water flows. This cement recipe also has a right angle set time and is mixed a little under saturated so the water flow will be absorbed by cement. DV tool depth will be based on hole conditions. Cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe.

**Other proposed operations facets attachment:**

A Blank C-144 Closed Loop\_06-21-2016.pdf

Branex-COG Fed Com 17H\_Prod Cement Breakdown\_09-20-2016.pdf

**Other Variance attachment:**

SUPO

**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

## Section 1 - Existing Roads

**Will existing roads be used?** YES

**Existing Road Map:**

Branex-COG Federal Com 17H Vacinity plat\_06-22-2016.pdf

**Existing Road Purpose:** ACCESS,FLUID TRANSPORT

**Row(s) Exist?** NO

### ROW ID(s)

**ID:**

**Do the existing roads need to be improved?** NO

**Existing Road Improvement Description:**

**Existing Road Improvement Attachment:**

## Section 2 - New or Reconstructed Access Roads

**Will new roads be needed?** YES

**New Road Map:**

Branex-COG Federal Com 17H Access Road\_06-22-2016.pdf

**New road type:** RESOURCE

**Length:** 217.34 Feet

**Width (ft.):** 20

**Max slope (%):** 3

**Max grade (%):** 1

**Army Corp of Engineers (ACOE) permit required?** NO

**ACOE Permit Number(s):**

**New road travel width:** 16

**New road access erosion control:** Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.

**New road access plan or profile prepared?** YES

**New road access plan attachment:**

New Access Road Plan\_06-23-2016.pdf

**Access road engineering design?** NO

**Access road engineering design attachment:**

**Access surfacing type:** OTHER

**Access topsoil source:** ONSITE

**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Access surfacing type description:** Caliche

**Access onsite topsoil source depth:** 6

**Offsite topsoil source description:**

**Onsite topsoil removal process:** See attached plan

**Access other construction information:**

**Access miscellaneous information:**

**Number of access turnouts:**

**Access turnout map:**

### Drainage Control

**New road drainage crossing:** OTHER

**Drainage Control comments:** N/A

**Road Drainage Control Structures (DCS) description:** Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.

**Road Drainage Control Structures (DCS) attachment:**

### Access Additional Attachments

**Additional Attachment(s):**

### Section 3 - Location of Existing Wells

**Existing Wells Map?** YES

**Attach Well map:**

Branex-COG Federal Com 17H 1mileRadius Map\_06-23-2016.pdf

**Existing Wells description:**

### Section 4 - Location of Existing and/or Proposed Production Facilities

**Submit or defer a Proposed Production Facilities plan?** DEFER

**Estimated Production Facilities description:** PRODUCTION TO BE SENT TO THE TANK BATTERY AT THE BRANEX-COG FEDERAL #10 WELL SITE AT 1650' FSL & 330' FWL IN SECTION 9, T17S, R32E.

### Section 5 - Location and Types of Water Supply

#### Water Source Table



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Water source use type:** DUST CONTROL,  
INTERMEDIATE/PRODUCTION CASING, SURFACE CASING  
**Describe type:**

**Water source type:** GW WELL

**Source latitude:**

**Source longitude:**

**Source datum:**

**Water source permit type:** PRIVATE CONTRACT

**Source land ownership:** COMMERCIAL

**Water source transport method:** PIPELINE,TRUCKING

**Source transportation land ownership:** COMMERCIAL

**Water source volume (barrels):** 8000

**Source volume (acre-feet):** 1.0311447

**Source volume (gal):** 336000

**Water source and transportation map:**

Loco Hills Water Disposal Co..pdf

**Water source comments:**

**New water well?** NO

### New Water Well Info

**Well latitude:**

**Well Longitude:**

**Well datum:**

**Well target aquifer:**

**Est. depth to top of aquifer(ft):**

**Est thickness of aquifer:**

**Aquifer comments:**

**Aquifer documentation:**

**Well depth (ft):**

**Well casing type:**

**Well casing outside diameter (in.):**

**Well casing inside diameter (in.):**

**New water well casing?**

**Used casing source:**

**Drilling method:**

**Drill material:**

**Grout material:**

**Grout depth:**

**Casing length (ft.):**

**Casing top depth (ft.):**

**Well Production type:**

**Completion Method:**

**Water well additional information:**

**State appropriation permit:**

**Additional information attachment:**



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

## Section 6 - Construction Materials

**Construction Materials description:** SEE ATTACHED TURN-OVER PROCEDURE.

**Construction Materials source location attachment:**

Construction Turn-Over Procedure\_06-23-2016.pdf

## Section 7 - Methods for Handling Waste

**Waste type:** DRILLING

**Waste content description:** DRILL CUTTINGS AND DRILLING FLUIDS

**Amount of waste:** 100 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** CLOSED LOOP SYSTEM

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** FEDERAL

**Disposal type description:**

**Disposal location description:** R360'S DISPOSAL SITE LOCATED AT 4507 WEST CARLSBAD HIGHWAY, HOBBS, NM 88240.

**Waste type:** PRODUCED WATER

**Waste content description:** PRODUCED WATER

**Amount of waste:** 100 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** STEEL TANKS

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** STATE

**Disposal type description:**

**Disposal location description:** NMOCD APPROVED COMMERCIAL DISPOSAL FACILITY. R360'S DISPOSAL SITE LOCATED AT 4507 WEST CARLSBAD HIGHWAY, HOBBS, NM 88240.

**Waste type:** GARBAGE

**Waste content description:** GARBAGE AND TRASH PRODUCED DURING DRILLING AND COMPLETION OPERATIONS.

**Amount of waste:** 100 pounds

**Waste disposal frequency :** Weekly

**Safe containment description:** TRASH BIN

**Safe containmant attachment:**

**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** STATE

**Disposal type description:**

**Disposal location description:** GARBAGE AND TRASH TO BE COLLECTED IN TRASH BIN AND HAULED TO LEA LANDFILL LLC. LOCATED AT MILE MARKER 64, HIGHWAY 62-180 EAST, PO BOX 3247, CARLSBAD, NM 88221. NO TOXIC WASTE OR HAZARDOUS CHEMICALS WILL BE PRODUCED BY THIS OPERATION.

**Waste type:** SEWAGE

**Waste content description:** HUMAN WASTE AND GREY WATER.

**Amount of waste:** 100 gallons

**Waste disposal frequency :** Weekly

**Safe containment description:** PORTABLE SEPTIC SYSTEM AND/OR PORTABLE WASTE GATHERING SYSTEM.

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

**Disposal type description:**

**Disposal location description:** HAULED TO NMOCD APPROVED WASTE DISPOSAL FACILITY.

### Reserve Pit

**Reserve Pit being used?** NO

**Temporary disposal of produced water into reserve pit?**

**Reserve pit length (ft.)** **Reserve pit width (ft.)**

**Reserve pit depth (ft.)** **Reserve pit volume (cu. yd.)**

**Is at least 50% of the reserve pit in cut?**

**Reserve pit liner**

**Reserve pit liner specifications and installation description**

### Cuttings Area

**Cuttings Area being used?** NO

**Are you storing cuttings on location?** YES

**Description of cuttings location** CLOSED LOOP MUD SYSTEM: ROLL-OFF STYLE MUD BOX.

**Cuttings area length (ft.)** **Cuttings area width (ft.)**

**Cuttings area depth (ft.)** **Cuttings area volume (cu. yd.)**

**Is at least 50% of the cuttings area in cut?**

**WCuttings area liner**

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 17H

Cuttings area liner specifications and installation description

## Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

## Section 9 - Well Site Layout

Well Site Layout Diagram:

Branex-COG Federal Com 17H Well Site plat\_06-23-2016.pdf

Branex-COG Federal Com 17H Interim Reclamation plat\_06-23-2016.pdf

Comments:

## Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

**Drainage/Erosion control construction:** NO SEDIMENTATION OR EROSION CONTROL WILL BE NECESSARY ON THIS LOCATION AS IT IS GENERALLY FLAT WITH LITTLE TO NO SLOPE OR CUT AND FILL.

**Drainage/Erosion control reclamation:** NO SEDIMENTATION OR EROSION CONTROL WILL BE NECESSARY ON THIS LOCATION AS IT IS GENERALLY FLAT WITH LITTLE TO NO SLOPE OR CUT AND FILL.

**Wellpad long term disturbance (acres):** 1.4325

**Wellpad short term disturbance (acres):** 2.1304

**Access road long term disturbance (acres):** 0.234

**Access road short term disturbance (acres):** 0.234

**Pipeline long term disturbance (acres):** 2.130395

**Pipeline short term disturbance (acres):** 2.130395

**Other long term disturbance (acres):** 0

**Other short term disturbance (acres):** 0

**Total long term disturbance:** 3.7968948

**Total short term disturbance:** 4.494795

**Reconstruction method:** AFTER WELL IS COMPLETED, THE PAD WILL BE DOWNSIZED BY RECLAIMING THE AREAS NOT NEEDED FOR PRODUCTION OPERATIONS. THE PORTIONS OF THE PAD THAT ARE NOT NEEDED FOR PRODUCTION OPERATIONS WILL BE RE-CONTOURED TO ITS ORIGINAL STATE AS MUCH AS POSSIBLE. THE CALICHE THAT IS REMOVED WILL BE REUSED TO EITHER BUILD ANOTHER PAD SITE OR FOR ROAD REPAIRS WITHIN THE LEASE.

**Topsoil redistribution:** THE STOCKPILED TOPSOIL WILL BE SPREAD OUT ON RECLAIMED AREA AND RESEEDED WITH A BLM APPROVED SEED MIXTURE.

**Soil treatment:** INTERIM RECLAMATION AS IDENTIFIED DURING ONSITE.

**Existing Vegetation at the well pad:** GRASSLAND AREA WITH SANDY TOPSOIL. VEGETATION IS MODERATELY SPARSE WITH NATIVE PRAIRIE GRASSES, SOME MESQUITE AND SHINNERY OAK.

**Existing Vegetation at the well pad attachment:**

**Existing Vegetation Community at the road:** GRASSLAND AREA WITH SANDY TOPSOIL. VEGETATION IS MODERATELY SPARSE WITH NATIVE PRAIRIE GRASSES, SOME MESQUITE AND SHINNERY OAK.



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Existing Vegetation Community at the road attachment:**

**Existing Vegetation Community at the pipeline:** GRASSLAND AREA WITH SANDY TOPSOIL. VEGETATION IS MODERATELY SPARSE WITH NATIVE PRAIRIE GRASSES, SOME MESQUITE AND SHINNERY OAK.

**Existing Vegetation Community at the pipeline attachment:**

**Existing Vegetation Community at other disturbances:** GRASSLAND AREA WITH SANDY TOPSOIL. VEGETATION IS MODERATELY SPARSE WITH NATIVE PRAIRIE GRASSES, SOME MESQUITE AND SHINNERY OAK.

**Existing Vegetation Community at other disturbances attachment:**

**Non native seed used?** NO

**Non native seed description:**

**Seedling transplant description:**

**Will seedlings be transplanted for this project?** NO

**Seedling transplant description attachment:**

**Will seed be harvested for use in site reclamation?** NO

**Seed harvest description:**

**Seed harvest description attachment:**

## Seed Management

### Seed Table

**Seed type:**

**Seed source:**

**Seed name:**

**Source name:**

**Source address:**

**Source phone:**

**Seed cultivar:**

**Seed use location:**

**PLS pounds per acre:**

**Proposed seeding season:**

### Seed Summary

**Total pounds/Acre:**

**Seed Type**

**Pounds/Acre**

**Seed reclamation attachment:**

## Operator Contact/Responsible Official Contact Info

**First Name:**

**Last Name:**

**Phone:**

**Email:**

**Seedbed prep:**

**Seed BMP:**

**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Seed method:**

**Existing invasive species?** NO

**Existing invasive species treatment description:**

**Existing invasive species treatment attachment:**

**Weed treatment plan description:** APPROVED EPA AND BLM REQUIREMENTS AND POLICIES FOR WEED CONTROL METHODS WILL BE FOLLOWED.

**Weed treatment plan attachment:**

**Monitoring plan description:** EVALUATION OF GROWTH WILL BE MADE AFTER THE COMPLETION OF ONE FULL GROWING SEASON AFTER SEEDING. -OR- BLM REPRESENTATIVE WILL BE CONTACTED PRIOR TO COMMENCING CONSTRUCTION OF WELL PAD AND ROAD. BLM REPRESENTATIVE WILL ALSO BE CONTACTED PRIOR TO COMMENCING RECLAMATION WORK.

**Monitoring plan attachment:**

**Success standards:** 80% COVERAGE BY 2ND GROWING SEASON OF NATIVE SPECIES WITH LESS THAN 5% INVASIVE SPECIES.

**Pit closure description:** N/A

**Pit closure attachment:**

## **Section 11 - Surface Ownership**

**Disturbance type:** EXISTING ACCESS ROAD

**Describe:**

**Surface Owner:** BUREAU OF LAND MANAGEMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Disturbance type:** WELL PAD

**Describe:**

**Surface Owner:** BUREAU OF LAND MANAGEMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Disturbance type:** PIPELINE

**Describe:**

**Surface Owner:** BUREAU OF LAND MANAGEMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 17H

## Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

### ROW Applications

SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: ONSITE PERFORMED ON 04/21/2015 BY DON PETERSON(BLM), CANDEN JAMESON(COG), GARY BOX(P.C.)

### Other SUPO Attachment

PWD

## Section 1 - General

Would you like to address long-term produced water disposal? NO

## Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 17H

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

### Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 17H

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

## Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Injection well name:

Assigned injection well API number?

Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 17H

UIC Permit attachment:

## Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

## Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

## Bond Info

### Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB000215

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:



**Operator Name:** COG OPERATING LLC

**Well Name:** BRANEX-COG FEDERAL COM

**Well Number:** 17H

**Reclamation bond amount:**

**Reclamation bond rider amount:**

**Additional reclamation bond information attachment:**

### Operator Certification

#### Operator Certification

*I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.*

**NAME:** Robyn Odom

**Signed on:** 06/24/2016

**Title:** Regulatory Analyst

**Street Address:** 600 W Illinois Ave

**City:** Midland

**State:** TX

**Zip:** 79701

**Phone:** (432)685-4385

**Email address:** rododom@concho.com

#### Field Representative

**Representative Name:** Caden Jameson

**Street Address:** 600 W Illinois Ave

**City:** Midland

**State:** TX

**Zip:** 79701

**Phone:** (432)254-5559

**Email address:** cjameson@concho.com

### Payment Info

#### Payment

**APD Fee Payment Method:** PAY.GOV

**pay.gov Tracking ID:** 25SCHH7Q