Form 3160 -3 (March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD

FORM APPROVED OMB No. 1004-0137 Expires October 31, 2014

5. Lease Serial No.

NMNM0315712

If Indian, Allotee or Tribe Name

APPLICATION FOR PERMIT TO	DRILL OF	REENTERC	=10-	6. If Indian, Allotee	or Tribe N	ame			
la. Type of work:	ER			7. If Unit or CA Agre	eement, Nar	me and No.			
lb. Type of Well: Oil Well Gas Well Other	✓ Si	ngle Zone Multip	ole Zone	8. Lease Name and BRANEX-COG FE		COM 25H			
Name of Operator COG OPERATING LLC				9. API Well No.					
3a. Address 600 West Illinois Ave Midland TX 79701	3b. Phone No (432)683-7	. (include area code) 7443		10. Field and Pool, or MALJAMAR / YES	Exploratory	/ / /			
Location of Well (Report location clearly and in accordance with an At surface NWSW / 2075 FSL / 115 FWL / LAT 32.8476:				11. Sec., T. R. M. or B		•			
At proposed prod. zone NESE / 2310 FSL / 220 FEL / LAT	32.848233	LONG -103.76357	6	3EC 9/11/3/ K3	ZE / INIVIE				
14. Distance in miles and direction from nearest town or post office* 1.2 miles				12. County or Parish LEA		13. State NM			
15. Distance from proposed* location to nearest 115 feet property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of a	acres in lease	17. Spacin 160	g Unit dedicated to this	well				
 Distance from proposed location* to nearest well, drilling, completed, 1 feet applied for, on this lease, ft. 	19. Propose 6350 feet	d Depth / 11079 feet		BIA Bond No. on file MB000215					
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4068 feet	22 Approxi 09/02/201	mate date work will sta	rt*	23. Estimated duration 15 days	n				
	24. Atta	chments							
The following, completed in accordance with the requirements of Onshor	re Oil and Gas	Order No.1, must be a	ttached to the	is form:					
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office). 	Lands, the	Item 20 above). 5. Operator certific	ation	ns unless covered by an		,			
25. Signature (Electronic Submission)		(Printed/Typed) on Odom / Ph: (432)	685_4385		Date 03/07/2	017			
Title	Troby	11 0001117 1 11. (402)			00/07/2	.017			
Regulatory Analyst									
Approved by (Signature) (Electronic Submission)		(Printed/Typed) Layton / Ph: (575)2	234-5959		Date 08/31/2	2017			
Title Supervisor Multiple Resources	Office HOB								
Application approval does not warrant or certify that the applicant hold conduct operations thereon. Conditions of approval, if any, are attached.	s legal or equi	table title to those righ	ts in the sub	ject lease which would e	entitle the ap	pplicant to			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as t	rime for any p to any matter v	erson knowingly and vithin its jurisdiction.	villfully to m	nake to any department of	or agency o	of the United			
(Continued on page 2)	an Wil	ra conditi	ONS	19/11//	ructions	on page 2)			



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

erator Certification Data Report

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: 03/07/2017

Title: Regulatory Analyst

Street Address: 600 W Illinois Ave

City: Midland

State: TX

Zip: 79701

Phone: (432)685-4385

Email address:

Email address: rodom@concho.com

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		



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

Application Data Report

09/07/2017

APD ID: 10400008940

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Type: OIL WELL

Submission Date: 03/07/2017

Highlighted data reflects the most recent changes

Show Final Text

Well Number: 25H

Well Work Type: Drill

Section 1 - General

APD ID:

10400008940

Tie to previous NOS?

Submission Date: 03/07/2017

BLM Office: HOBBS

User: Robyn Odom

Title: Regulatory Analyst

Federal/Indian APD: FED

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

Lease number: NMNM0315712

Surface access agreement in place?

Lease Acres: 760

Allotted?

Reservation:

Zip: 79701

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? NO

APD Operator: COG OPERATING LLC

Operator letter of designation:

Operator Info

Operator Organization Name: COG OPERATING LLC

Operator Address: 600 West Illinois Ave

Operator PO Box:

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

Mater Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

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

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

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: 1.2 Miles

Distance to nearest well: 1 FT

Distance to lease line: 115 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Branex_COG_Fed_Com_25H_C102_03-07-2017.pdf

Well work start Date: 09/02/2017

Duration: 15 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL	207	FSL	115	FWL	17S	32E	9	Aliquot	32.84761	-	LEA			F	NMNM	406	0	0
Leg	5							NWS		103.7796		MEXI				8		
#1								W		84		СО	СО		2			
KOP	207	FSL	115	FWL	17S	32E	9	Aliquot	32.84761	-	LEA	NEW	NEW	F	NMNM	-	582	582
Leg	5							NWS		103.7796		MEXI	MEXI		031571	176	9	9
#1								W		84		CO	CO		2	1		
PPP	207	FSL	115	FWL	178	32E	9	Aliquot	32.84761	-	LEA	NEW	NEW	F	NMNM	406	0	0
Leg	5							NWS		103.7796		MEXI	MEXI		031571	8		
#1								W		84		СО	CO		2			

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	DVT
PPP	231	FSL	263 9	FEL	17S	32E	9	Aliquot	32.84786	- 103.7715	LEA	NEW MEXI	NEW	F	FEE	-	880	635 0
Leg #1	U		9					NWSE		103.7715		CO	CO			228	0	U
EXIT Leg	231 0	FSL	330	FEL	178	32E	9	Aliquot NESE	32.84823 3	- 103.7635	LEA	NEW MEXI	NEW MEXI	F	FEE	- 228	110 79	635 0
#1										76		СО	СО			2		
BHL Leg #1	231 0	FSL	220	FEL	178	32E	9	Aliquot NESE	32.84823 3	- 103.7635 76	LEA	NEW MEXI CO		F	FEE	- 228 2	110 79	635 0



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

Drilling Plan Data Report

09/07/2017

APD ID: 10400008940

Submission Date: 03/07/2017

Highlighted data reflects the most recent changes

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
17691	UNKNOWN	4068	0	0	ALLUVIUM	USEABLE WATER	No
17746	RUSTLER	3150	918	918	ANHYDRITE	OTHER : Brackish Water	No
17718	TOP SALT	2948	1120	1120	SALT	OTHER : Salt	No
17724	TANSILL	1948	2120	2120	DOLOMITE	NONE	No
17694	YATES	1832	2236	2236	SANDSTONE,DOL OMITE	NATURAL GAS,OIL	No
15319	SEVEN RIVERS	1487	2581	2581	SANDSTONE,DOL OMITE	NATURAL GAS,OIL	. No
15318	QUEEN	856	3212	3212	SANDSTONE	NATURAL GAS,OIL	. No
17683	GRAYBURG	437	3631	3631	SANDSTONE,DOL OMITE	NATURAL GAS,OIL	. No
15314	SAN ANDRES	104	3964	3964	DOLOMITE,ANHY DRITE	NATURAL GAS,OIL	. No
17701	GLORIETA	-1382	5450	5450	SANDSTONE,SILT STONE	NATURAL GAS,OIL	. No
17700	PADDOCK	-1447	5515	5515	DOLOMITE	NATURAL GAS,OIL	. No
15342	BLINEBRY	-1887	5955	5955	DOLOMITE	NATURAL GAS,OIL	Yes
17685	TUBB	-2777	6845	6845	SANDSTONE,DOL OMITE	NATURAL GAS,OIL	. No

Section 2 - Blowout Prevention

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

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: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure of 2000 psi per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure of 2000 psi. If the system is upgraded all the components installed will be functional and tested. 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_02-20-2017.pdf

BOP Diagram Attachment:

2M ANNULAR BOP_02-20-2017.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE		13.375		API	N	<u> </u>	943	0	943			943	H-40		STC	1.85		DRY	8.17		8.17
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	2250	0	2250			2250	J-55	40	LTC	2.2	1.76	DRY	14	DRY	14
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	5829	0	5829			5829	L-80	29	LTC	3.17	1.33	DRY	3.7	DRY	3.7
4	PRODUCTI ON	8.75	5.5	NEW	API	N	5829	6647	5829	6350			818	L-80	17	LTC	2.82	2.08	DRY	4.36	DRY	4.36
5	PRODUCTI ON	7.87 5	5.5	NEW	API	N	6647	11079	6350	6350			4432	L-80	17	LTC	2.82	2.08	DRY	4.36	DRY	4.36

Casing Attachments

Operator Name: COG OPERATING LLC Well Name: BRANEX-COG FEDERAL COM Well Number: 25H **Casing Attachments** Casing ID: 1 String Type: SURFACE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Casing_Design_Attachement_03-07-2017.pdf Casing ID: 2 String Type: INTERMEDIATE **Inspection Document: Spec Document: Tapered String Spec:** Casing Design Assumptions and Worksheet(s): Casing_Design_Attachement_03-07-2017.pdf Casing ID: 3 String Type: PRODUCTION **Inspection Document:**

Casing Design Assumptions and Worksheet(s):

Casing Design Attachement 03-07-2017.pdf

Spec Document:

Tapered String Spec:

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

Casing Attachments

Casing ID: 4

String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Attachement_03-07-2017.pdf

Casing ID: 5

String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Design_Attachement_03-07-2017.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	943	500	1.75	13.5	875	74	Class C	4%Gel+2%CaCl2+0.25 pps CF
SURFACE	Tail		0	943	200	1.32	14.8	264	74	Class C	2% CaCl2+0.25pps CF
INTERMEDIATE	Lead		0	2250	400	2.45	11.8	980	129	50:50:10 C; Poz:Gel	5% Salt+5pps LCM+0.25pps
INTERMEDIATE	Tail		0	2250	200	1.32	14.8	264	129	Class C	2% CaCl2
PRODUCTION	Lead		0	1107 9	500	2.01	12.5	1005	99	35:65:6 C:Poz:Gel	5%Salt+5pps LCM+0.2%SMS+1%FL-

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
											Ba-58+0.3%FL- 52A+0.125pps CF
PRODUCTION	Tail		0	1107 9	1700	1.37	14	2329	99	50:50:2 C:Poz:Gel	5%salt+3pps LCM+0.6%SMS+1%FL- 25+1%Ba-58+0.125pps
PRODUCTION	Lead		0	1107 9	500	2.01	12.5	1005	99	35:65:6 C:Poz:Gel	5%salt+5pps LCM+0.2%SMS+1%FL- 25+1%Ba-58+0.3%FL- 52A+0.125pps CF
PRODUCTION	Tail		0	1107 9	1700	1.37	14	2329	99	50:50:2 C:Poz:Gel	5%salt+3pps LCM+0.6%SMS+1%FL- 25+1%BA-58+0.125pps
PRODUCTION	Lead		0	1107 9	500	2.01	12.5	1005	99	35:65:6 C:Poz:Gel	5%Salt+5pps LCM+0.2%SMS+1%FL- 25+1%Ba-58+0.3%FL- 52A+0.125pps CF
PRODUCTION	Tail		0	1107 9	1700	1.37	14	2329	99	50:50:2 C:Poz:Gel	5%salt+3pps LCM+0.6%SMS+1%FL- 25+1%Ba-58+0.125pps

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

Min Weight (lbs/gal) Max Weight (lbs/gal) Density (lbs/cu ft) Gel Strength (lbs/100 sq Gel Strength (lbs/100 sq Salinity (ppm) Filtration (cc) Additional Characteristic

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	943	WATER-BASED MUD	8.6	8.8							
0	2250	SALT SATURATED	10	10.2							
2250	1107 9	WATER-BASED MUD	8.5	9.2							

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

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 2794

Anticipated Surface Pressure: 1397

Anticipated Bottom Hole Temperature(F): 118

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

Describe:

Contingency Plans geoharzards 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 Fed Com 25H_H2S Safety diagram 12-13-2016.pdf

Well Name: BRANEX-COG FEDERAL COM Well Number: 25H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Branex-COG Federal Com 25H Design 1 Rpt_02-21-2017.pdf

Branex-COG Federal Com 25H Design 1 AC Rpt 02-21-2017.pdf

Other proposed operations facets description:

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 MINIMUM OF 50' BELOW PREVIOUS CASING AND A MINIMUM OF 200' ABOUT 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 MINIUM OF 50' BELOW PREVIOUS CASING AND A MINIMUM OF 200' ABOVE CURRENT SHOE.

Other proposed operations facets attachment:

A Blank C-144 Closed Loop 06-27-2016.pdf

Branex_COG_Fed_Com_25H_Production_Cement_Breakdown_03-07-2017.pdf

Branex_COG_Federal_Com_25H_Contingent_Multi_Stage_Cmt_Plan_08-24-2017.pdf

Branex COG Fed Com 25H GCP 08-24-2017.pdf

Other Variance attachment:

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

Produced Water Disposal (PWD) Location:

PWD surface owner:

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:

Decribe 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:

PWD disturbance (acres):

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: Decribe precipitated solids disposal: Precipitated solids disposal permit: 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 aguifer (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

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Produced Water Disposal (PWD) Location:

Injection well mineral owner:

PWD surface 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? **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 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:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:



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

SUPO Data Report

APD ID: 10400008940

Operator Name: COG OPERATING LLC

Well Name: BRANEX-COG FEDERAL COM

Well Type: OIL WELL

Submission Date: 03/07/2017

Judinission Date: 00/07/2017

Well Number: 25H

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Branex COG Federal Com 25H Vicinit plat 03-07-2017.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? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Branex-COG Fed Com 25H_1mileRadius Map_02-20-2017.pdf

Well Name: BRANEX-COG FEDERAL COM Well Number: 25H

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: If the well is productive, contemplated facilities will be as follows: Two (2) proposed flowlines will follow an Archaeology approved route to the Branex-COG Federal 10 Tank Battery in Sec 9, T17S, R32E, at the existing Branex-COG Federal #10 well site at 1650' FSL & 330' FWL. The flowlines will be SDR 7 3" Poly line laid on the surface and will be approx. 600 feet in length. Normal working pressure of the flowlines will be below 70 psi and carry a mixture of produced oil, water and gas. Flowlines will follow existing well-traveled or proposed roads. The tank battery and facilities including all flowlines and piping will be installed according to API specifications.

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: DUST CONTROL,

INTERMEDIATE/PRODUCTION CASING, SURFACE CASING

Describe type:

Source latitude:

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

Water source volume (barrers).

Source volume (acre-feet): 1.0311447

Water source type: GW WELL

Source longitude:

Source volume (gal): 336000

Water source and transportation map:

Loco Hills Water Disposal Co Water Supply_12-12-2016.pdf Caswell Ranch Water Supply 12-12-2016.pdf

Water source comments: The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. Water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Vicinity Map. A fresh water source is nearby and fast line may be laid along existing road ROW's and fresh water pumped to the well. Water will originate from 1 and/or all of the 3 private wells location depicted on the attached "Caswell Ranch Water Supply" Map. A secondary water source will be from private wells location described on the attached "Loco Hills Water Disposal Co Water Supply" map attached to this APD. James R. Maloney, 575-677-2118. No water well will be drilled on the location.

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aguifer 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:

Section 6 - Construction Materials

Construction Materials description: Surfacing material will consist of native caliche. Caliche will be obtained from the actual well site if available. Secondary candidate source will be Caswell Ranch owned Caliche Pit located in NESE of Section 9, T17S, R32E. A third candidate source will be the NMSLO Caliche Pit located in S2/SW4 of Sec 32, T16S, R30E. Construction Materials source location attachment:

Branex-COG Fed Com 25H_Construction Turn-Over Procedure_12-12-2016.pdf
Caswell Ranch Caliche Pit_12-12-2016.pdf
NMSLO Caliche Pit_12-12-2016.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 containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Dispos

Disposal location ownership: FEDERAL

FACILITY

Disposal type description:

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

88240.

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

Waste type: PRODUCED WATER

Waste content description: PRODUCED WATER

Amount of waste: 100

barrels

Waste disposal frequency: Daily

Safe containment description: STEEL TANKS

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL

Disposal location ownership: STATE

FACILITY

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 containment attachment:

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

FACILITY

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 Disposal location ownership: COMMERCIAL

FACILITY

Disposal type description:

Disposal location description: HAULED TO NMOCD APPROVED WASTE DISPOSAL FACILTY.

Reserve Pit

Reserve Pit being used? NO

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

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

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 25H Well Site plat_02-20-2017.pdf

Branex_COG_Federal_Com_25H_Interim_Reclamation_Plat_03-07-2017.pdf

Comments:

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

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): 1.49

Wellpad short term disturbance (acres): 2.2

Access road long term disturbance (acres): 0

Access road short term disturbance (acres): 0

Pipeline long term disturbance (acres): 0.0046831956

Pipeline short term disturbance (acres): 0.0046831956

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 1.4946831

Total short term disturbance: 2.2046833

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 MUSH 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. 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:

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

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 reclamation attachment:

Seed Type

Operator Contact/Responsible Official Contact Info

Pounds/Acre

First Name: Last Name:

Phone: Email:

Seedbed prep:

Seed BMP:

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 REPERSENTATIVE 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:

Well Name: BRANEX-COG FEDERAL COM

Well Number: 25H

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

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:

Well Name: BRANEX-COG FEDERAL COM	Well Number: 25H
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:
Disturbance types DIDELINE	
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:
Section 12 - Other Information	

ROW Applications

Right of Way needed? NO

ROW Type(s):

Operator Name: COG OPERATING LLC

SUPO Additional Information: 1. It will be necessary to run electric power if this well is productive. Power will be provided by CVE. There will be no necessary electric line construction for this well. CVE operates an existing primary line parallel to the well pad, therefor no poles will be set off the well pad disturbance. There is no permanent or live water in the immediate

Use APD as ROW?

Well Name: BRANEX-COG FEDERAL COM Well Number: 25H

area. 2. There are no dwellings within 2 miles of this location. 3. If needed, a Cultural Resources Examination is being prepared by Boone Arch Services of New Mexico, LLC. Carlsbad, NM, 88220. 506 E Chapman Rd., phone # 575.887.7667 and the results will be forwarded to your office in the near future. Otherwise, COG will be participating in the Permian Basin MOA Program.

Use a previously conducted onsite? YES

Previous Onsite information: Onsite performed on 08/30/2012 by Trisha Badbear (BLM), Caden Jameson (COG), Gary Box (P.C.).

Other SUPO Attachment

Branex-COG Fed Com 25H_Flowline Map_12-12-2016.pdf