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Form 3160-3 March 2012) UNITED STATES		APR 18	20 <b>18</b>	OMB N	APPROVE lo. 1004-012 October 31, 2	37	
DEPARTMENT OF THE IN		RECE	VED	5. Lease Serial No. NMNM121958			
BUREAU OF LAND MANA				6. If Indian, Allotee	or Tribe	Name	
				7. If Unit or CA Agree	ement-Na	ume and No	
la. Type of work: DRILL REENTER					$\sim$	$\mathcal{T}$	- )
lb. Type of Well: 🔽 Oil Well 🔲 Gas Well 🗍 Other	<b>∠</b> Si	ngle Zone 🔲 Multip	ole Zone 🏒	(8. Lease Name and DOMINATOR 25 F	Well No. EDERAI	<b>32/20</b> L COM 405H	シン
2. Name of Operator COG OPERATING LLC (229137	/		K	9. APT Well-No. 30-025	-44	1786	
	o. Phone No 432)683-7	0. (include area code) 7443	$\langle \rangle$	10. Field and Pool, or WILDCAT / BONE	-		ク
4. Location of Well (Report location clearly and in accordance with any S	•		$\langle \rangle$	11. Sec., T. R. M. or B	lk.and Su	rvey or Area	
At surface         SESW / 310 FSL / 2614 FWL / LAT 32.095107           At proposed prod. zone         NENW / 200 FNL / 2310 FWL / LAT 32			4	SEC 25 / T25S / R	33E / NN	1P	
<ol> <li>Distance in miles and direction from nearest town or post office*</li> <li>miles</li> </ol>				12. County or Parish LEA		13. State NM	
logation to passed 200 fact	16. No., of a	acres in lease	17. Spacin 160	g Unit dedicated to this	well	<u> </u>	
to nearest well, drilling, completed, 741 feet applied for, on this lease, ft.		et / 15547 feet	FED: NI	BIA Bond No. on file MB000215			
	2. Approxi 03/01/20;	imate, date work will sta 18	n*	23. Estimated duratio 30 days	n	<u> </u>	
	.24. Attá						
he following, completed in accordance with the requirements of Onshore 4 . Well plat certified by a registered surveyor. 2. A Drilling Plan. 5. A Surface Use Plan (if the location is on National Forest System La SUPO must be filed with the appropriate Forest Service Office).	Ŷ	<ol> <li>Bond to cover the state of the</li></ol>	he operatio cation	is form: ins unless covered by an ormation and/or plans as			
5. Signature (Electronic-Submission)		(Printed/Typed) e Reyes / Ph: (575)	748-6945		Date 12/08/2	2017	
Regulatory Analyst	I				L		
pproved by (Signature)	Cody	(Printed/Typed) Layton / Ph: (575)2	234-5959		Date 04/09/	2018	
ile Supervisor Multiple Resources	Office CAR	LSBAD					
splication approval does not warrant or certify that the applicant holds I onduct operations thereon. Conditions of approval, if any, are attached.			ts in the sub	oject lease which would e	entitle the a	applicant to	
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crim tates any false, fictitious or fraudulent statements or representations as to	ne for any p any matter v	person knowingly and within its jurisdiction.	villfully to n	nake to any department o	or agency	of the United	
(Continued on page 2)				*(Inst	ruction	s on page 2)	
OCP Received 04/18/18	•			Vr		1	
		CONNIT	ONS	KE py/	1201	18	
APPROVI	D WI	TH CONDITI		DY/	0	C	Ŧ
		: 04/09/2018			ĥ		$b_{\prime}$
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# **INSTRUCTIONS**

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new-reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

The Privacy Act of 1974 and regulation in 43 CFR 2:48(d) provide that you be furnished the following information in connection with information required by this application.

NOTICES

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396, 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts. ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant-to-civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

(Form 3160-3, page 2)

Approval Date: 04/09/2018

# **Additional Operator Remarks**

# Location of Well

SHL: SESW / 310 FSL / 2614 FWL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.095107 / LONG: -103.525968 (TVD: 0 feet; MD: 0 feet )
 PPP: SENW / 2640 FNL / 2310 FWL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.101508 / LONG: -103.527138 (TVD: 10671 feet; MD: 13100 feet )
 PPP: SESW / 330 FSL / 2310 FWL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.095162 / LONG: -103.527137 (TVD: 4000 feet; MD: 4000 feet )
 BHL: NENW / 200 FNL / 2310 FWL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.108214 / LONG: -103.527137 (TVD: 4000 feet; MD: 4000 feet )

# **BLM Point of Contact**

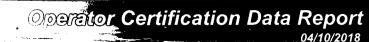
Name: Tenille Ortiz Title: Legal Instruments Examiner Phone: 5752342224 Email: tortiz@blm.gov

# **Review and Appeal Rights**

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

# 

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



# **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: Mayte Reyes

Signed on: 12/07/2017

Title: Regulatory Analyst

Street Address: 2208 W Main Street

City: Artesia

Phone: (575)748-6945

Email address: Mreyes1@concho.com

State: NM

State: NM

# **Field Representative**

Representative Name: Rand French

Street Address: 2208 West Main Street

City: Artesia

Phone: (575)748-6940

Email address: rfrench@concho.com

**Zip:** 88210

Zip: 88210

# 

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

Castian 4

# Application Data Report

2.7-1

04/10/2018

#### APD ID: 10400025325

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Type: OIL WELL

# Submission Date: 12/08/2017

Zip: 79701

Well Number: 405H Well Work Type: Drill Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General		
<b>APD ID:</b> 10400025325	Tie to previous NOS?	Submission Date: 12/08/2017
BLM Office: CARLSBAD	User: Mayte Reyes	Title: Regulatory Analyst
Federal/Indian APD: FED	Is the first lease penetrate	d for production Federal or Indian? FED
Lease number: NMNM121958	Lease Acres: 360	
Surface access agreement in place?	Allotted?	Reservation:
Agreement in place? NO	Federal or Indian agreeme	ent:
Agreement number:		
Agreement name:		
Keep application confidential? YES		
Permitting Agent? NO	APD Operator: COG OPER	RATING 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: DOMINATOR 25 FEDERAL COM	Well Number: 405H	Well API Number:
Field/Pool or Exploratory? Field and Pool	Field Name: WILDCAT	Pool Name: BONE SPRING

Is the proposed well in an area containing other mineral resources? USEABLE WATER,OIL

#1

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

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							uctio	n area r	N Use E	-					surface o			-
	e of W				E WE	:LL				pie Weii P INATOR 25					<b>per:</b> 105⊦ , 708H Al			bН,
vveii	Class	: HUF	RIZUN	IIAL				1	Numl	ber of Leg	s:							
Well	Work	Туре	: Drill															
Well	Туре	OIL	WELL															
Desc	ribe V	Vell T	ype:															
Well	sub-1	ype:	EXPL	ORAT	ORY	(WILC	CAT	)										
Desc	ribe s	ub-ty	pe:															
Dista	ance t	o tow	<b>n:</b> 19	Miles			Dis	tance to	nearest v	<b>well:</b> 741 F	T	Dist	ance t	o le	ease line	: 200	FT .	
Rese	ervoir	well s	spacir	ng ass	igneo	d acre	s Me	asurem	<b>ent</b> : 160 A	cres								
Well	plat:	СС	DG_D	omina	tor_40	)5H_C	2102_	201712	07.154025.	pdf								
Well	work	start	Date:	03/01	/2018				Durat	tion: 30 D/	AYS							
r									]									
	Sec	tion	3 - V	Vell	Loca	ation	n Tal	ole										
Surv	ey Ty <sub>l</sub>	pe: RI	ΕCTAI	NGUL	AR													
Desc	ribe S	urvey	у Туре	e:														
Datu	m: NA	D83							Vertic	al Datum		88						
Surv	ey nu	mber:																
	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	DM	TVD
SHL	310	FSL	261	FWL	25S	1	25	Aliquot	32.09510		LEA			F	NMNM	333	0	0
Leg #1			4					SESW	′	103.5259 68		MEXI CO	MEXI CO		121958	9		
KOP Leg #1	310	FSL	261 4	FWL	25S	33E	25	Aliquot SESW	32.09510 7	- 103.5259 68	LEA	NEW	NEW MEXI CO		NMNM 121958	333 9	0	0
PPP Leg #1	330	FSL	231 0	FWL	258	33E	25	Aliquot SESW	32.09516 2	- 103.5271 37	LEA	1	NEW MEXI CO		NMNM 121958	-661	400 0	400 0

# Well Name: DOMINATOR 25 FEDERAL COM

 $\sim 1$ 

## Well Number: 405H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	DM	TVD
PPP Leg #1	264 0	FNL	231 0	FWL	25S	33E	25	Aliquot SENW	32.10150 8	- 103.5271 38	LEA	1	NEW MEXI CO	F	NMNM 114987	- 733 2	131 00	106 71
EXIT Leg #1	330	FNL	231 0	FWL	25S	33E	25	Aliquot NENW	32.10785 7	- 103.5271 4	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 121958	- 731 2	154 00	106 51
BHL Leg #1	200	FNL	231 0	FWL	25S	33E	25	Aliquot NENW	32.10821 4	- 103.5271 4	LEA	NEW MEXI CO		F	NMNM 121958	- 735 1	155 47	106 90

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Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

Pressure Rating (PSI): 2M

Rating Depth: 5195

**Equipment:** Annular, Blind Ram, Pipe Ram. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold **Requesting Variance?** YES

**Variance request:** A variance is requested for the use of a flexible choke line from the BOP to the choke manifold. See attached for specs and hydrostatic test chart.

**Testing Procedure:** BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. 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.

#### **Choke Diagram Attachment:**

COG\_Dominator\_405H\_2M\_Choke\_20171207153322.pdf

#### **BOP Diagram Attachment:**

COG\_Dominator\_405H\_2M\_BOP\_20171207153329.pdf

COG\_Dominator\_405H\_Flex\_Hose\_20171207153337.pdf

Pressure Rating (PSI): 3M

#### Rating Depth: 10690

**Equipment:** Annular, Blind Ram, Pipe Ram. Accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

## Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to the choke manifold. See attached for specs and hydrostatic test chart.

**Testing Procedure:** BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. 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.

#### **Choke Diagram Attachment:**

COG\_Dominator\_405H\_3M\_Choke\_20171207153249.pdf

#### **BOP Diagram Attachment:**

COG\_Dominator\_405H\_3M\_BOP\_20171207153254.pdf

COG\_Dominator\_405H\_Flex\_Hose\_20171207153302.pdf

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

# **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	17.5	13.375	NEW	API	N	0	1100	0	1100	-8653	-9678	1100	J-55	54.5	STC	2.22	1.18	DRY	8.5	DRY	8.5
2		12.2 5	9.625	NEW	API	Y	0	5195	0	5195	-8653	- 20153	5195	L-80	40	LTC	1.13	1.4	DRY	5.73	DRY	5.73
3	PRODUCTI ON	8.75	5.5	NEW	API	N	0	15547	0	15547		- 21064	15547	P- 110	17	LTC	1.45	2.59	DRY	2.45	DRY	2.45

## **Casing Attachments**

Casing ID: 1 String Type: SURFACE

**Inspection Document:** 

Spec Document:

**Tapered String Spec:** 

## Casing Design Assumptions and Worksheet(s):

COG\_Dominator\_405H\_CasingProg\_20171207153431.pdf

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

## **Casing Attachments**

Casing ID: 2 String Type:INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

#### **Tapered String Spec:**

COG\_Dominator\_405H\_CasingProg\_20171207153438.pdf

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

COG\_Dominator\_405H\_CasingProg\_20171207153445.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

**Spec Document:** 

**Tapered String Spec:** 

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

COG\_Dominator\_405H\_CasingProg\_20171207153541.pdf

Section	4 - Ce	emen	t								,
String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE							13.5	822	50	Lead: Class C	4% Gel + 1% CaCl2
SURFACE	Tail		0	1100	250	1.34	14.8	335	50	Tail: Class C	2% CaCl2
INTERMEDIATE	Lead		0	5195	1000	2	12.7	2000	50	Lead: 35:65:6 C Blend	As needed
INTERMEDIATE	Tail		0	5195	250	1.34	14.8	335	50	Tail: Class C	2% CaCl
PRODUCTION	RODUCTION Lead 0 1			1554 7	770	2.5	11.9	1925	25	Lead: 50:50:10 H Blend	As needed

#### Well Name: DOMINATOR 25 FEDERAL COM

											r
String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		0	1554 7	1360	1.24	14.4	1686	25	Tail: 50:50:2 Class H Blend	As needed

Well Number: 405H

# 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

	Circ	ulating Mediu	ım Ta	able							
Top Depth	Bottom, Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (Ibs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
5195	1554 7	OTHER : Cut Brine	8.6	9.3							Cut Brine
0	1100	OTHER : FW Gel	8.6	8.8				-			FW Gel
1100	5195	OTHER : Saturated Brine	10	10.1							Saturated Brine

#### Page 5 of 7

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

### Section 6 - Test, Logging, Coring

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

None planned

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

CNL,GR

#### Coring operation description for the well:

None planned

## **Section 7 - Pressure**

Anticipated Bottom Hole Pressure: 5170

Anticipated Surface Pressure: 2822.38

Anticipated Bottom Hole Temperature(F): 165

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:

COG\_Dominator\_405H\_H2S\_SUP\_20171207153806.pdf COG\_Dominator\_405H\_H2S\_Schem\_20171207153812.pdf

# **Section 8 - Other Information**

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

COG\_Dominator\_405H\_AC\_Rpt\_20171207153834.PDF COG\_Dominator\_405H\_DirectRpt\_20171207153840.pdf

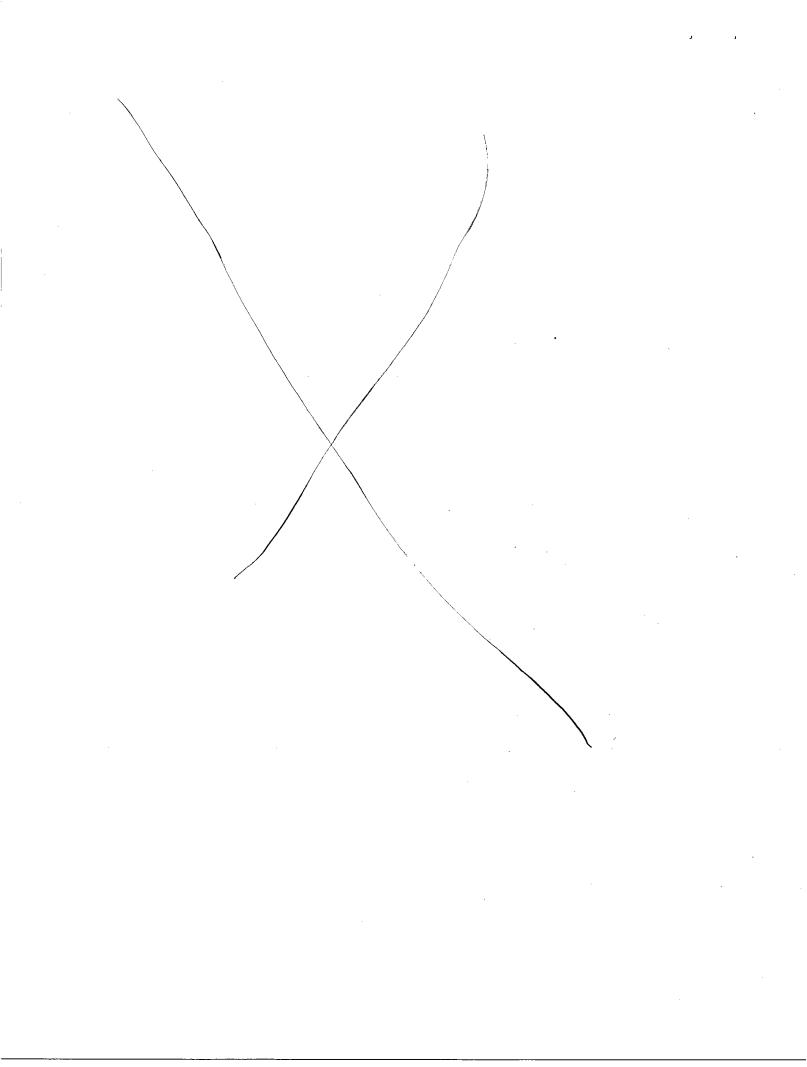
# Other proposed operations facets description:

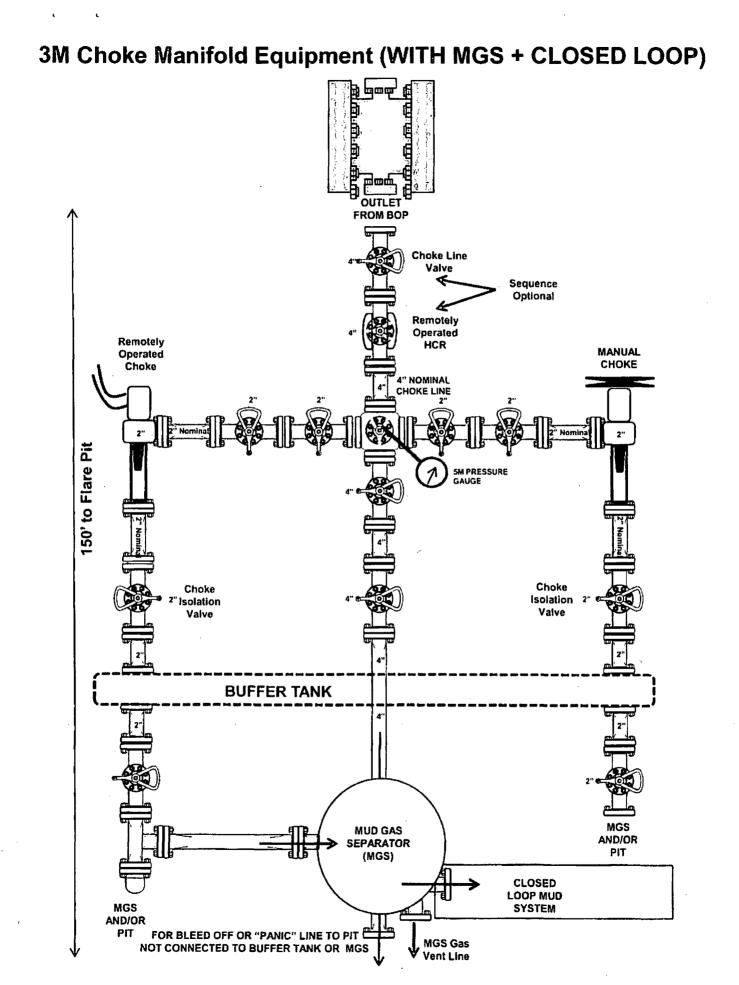
**Drilling Program Attached** 

#### Other proposed operations facets attachment:

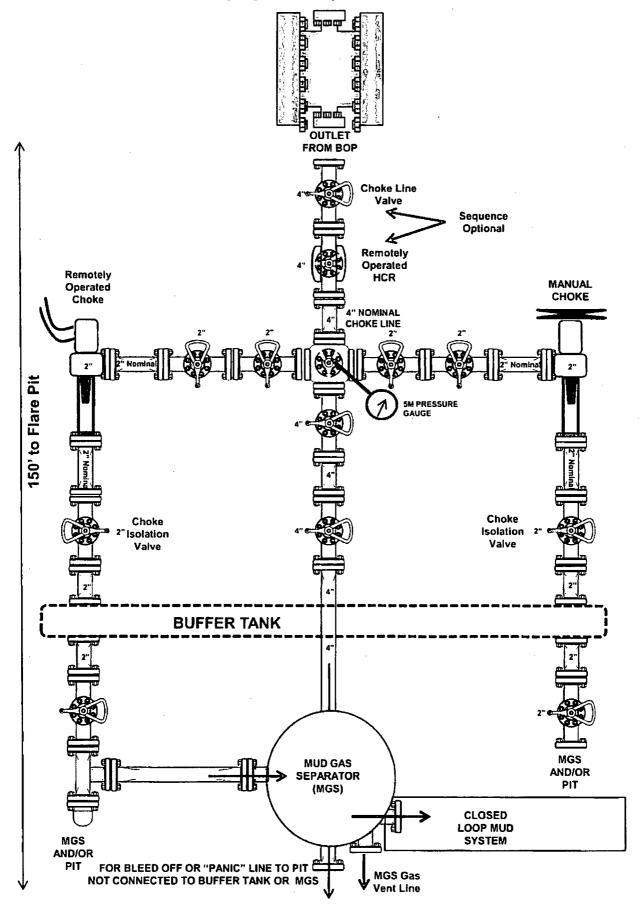
COG\_Dominator\_405H\_DrillProg\_20171207153826.pdf

#### Other Variance attachment:

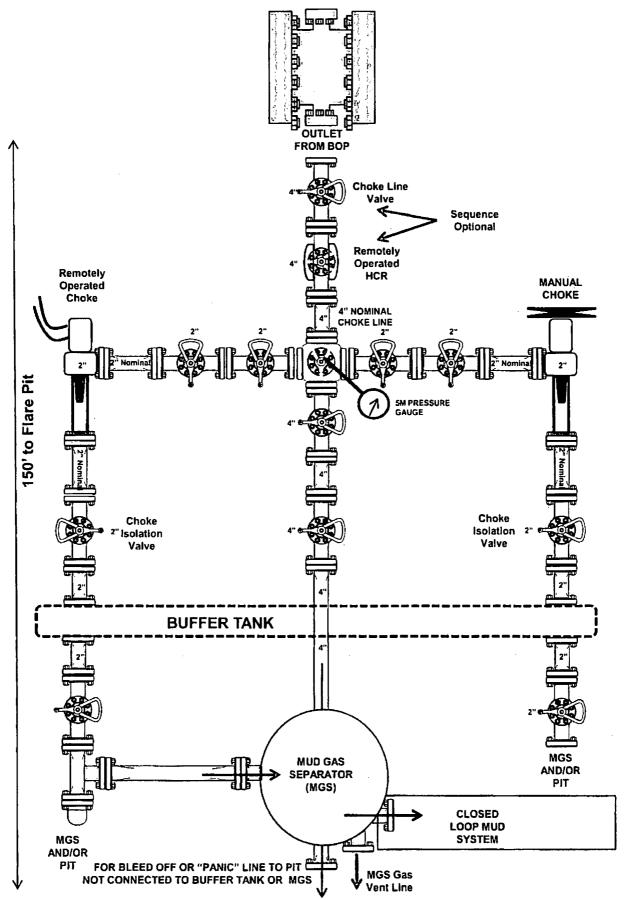




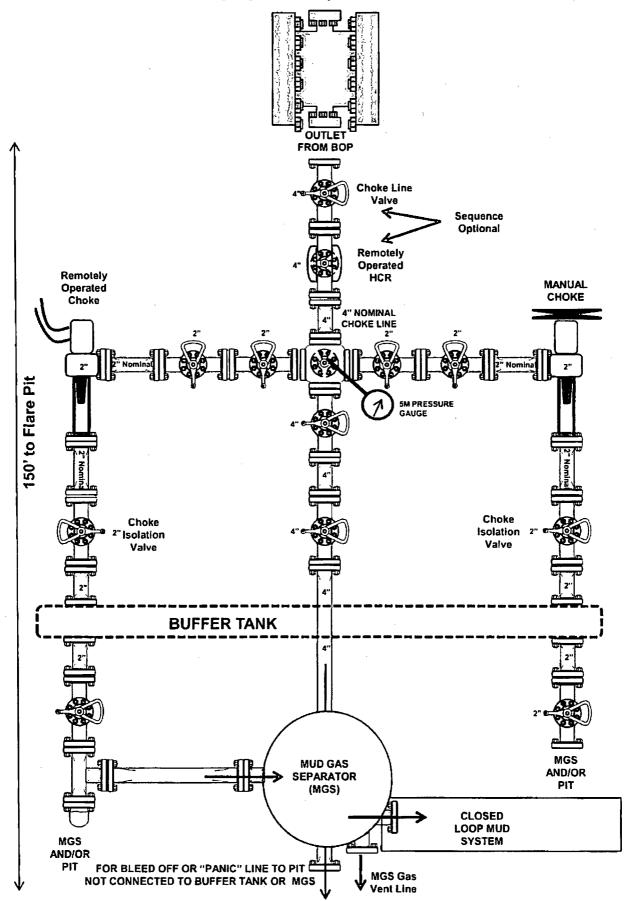
# 5M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



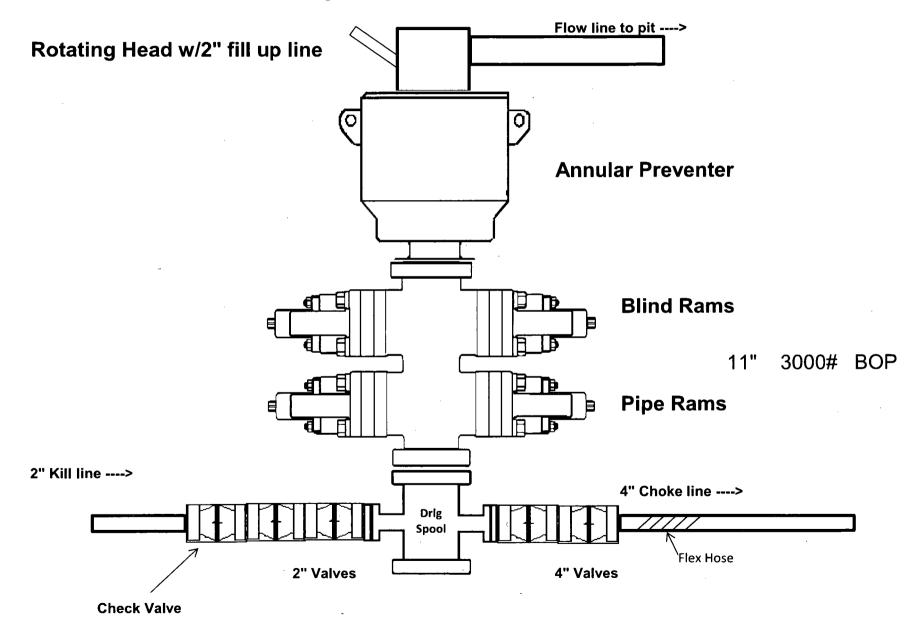
3M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)

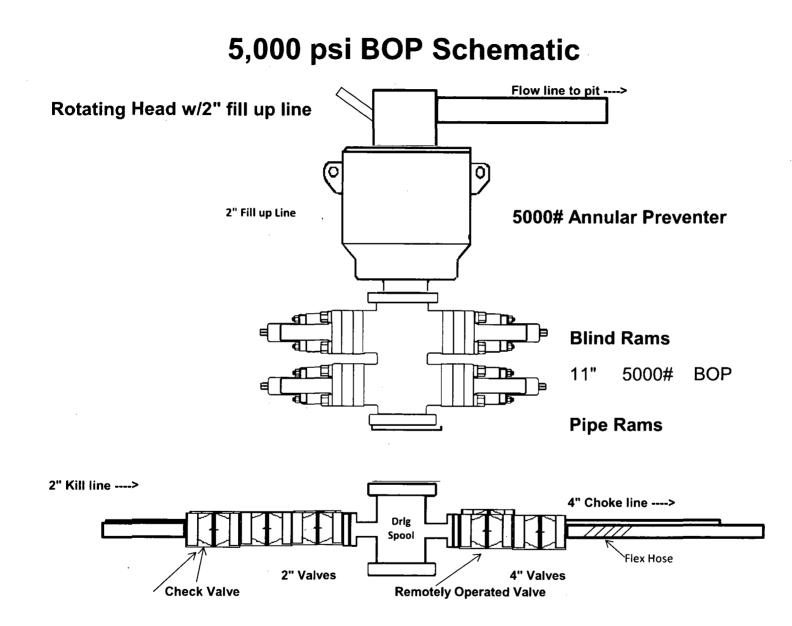


2M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



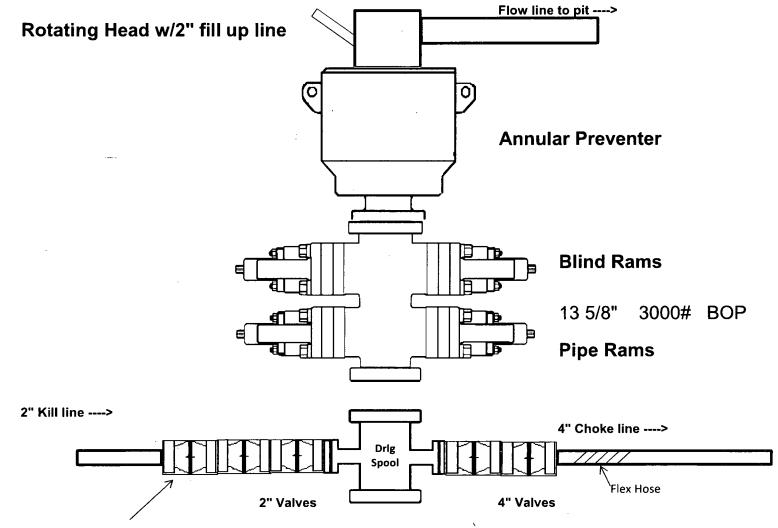
# 3,000 psi BOP Schematic





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# 3,000 psi BOP Schematic



Check Valve



ContiTech

QUALITY CONTROL	No.: QC-DB- 351 / 2016
	Page : 1 / 88
Hose No.:	Revision : 0
72879	Date: 05. September 2016.
	Prepared by : Mohut Ni 20/10
	Appr. by:

# CHOKE AND KILL HOSE

# id.: 3" 69 MPa x 13,72 m (45 ft)

# **DATA BOOK**

Purchaser: SCANDRILL Purchaser Order No.: 143799 ContiTech Rubber Order No.: 543951 ContiTech Oil & Marine Corp. Order No.: 4500795683 COM880841

NOT DESIGNED FOR WELL TESTING

ContiTech Rubber Industrial Kft. | Budeposti úl 10. H-6728 Szeğed | H-6701 P.O.Box 152 Szeged, Hungary Phone: +36 62 566 737 | Fex: +36 62 566 738 | e-mail: Info@fluid.contilech.hu | Internet: www.contilech.rubber.hu The Court of Csongréd County es Registry Court | Registry Court No: Cg.06-09-002502 | EU VAT No: HU11087209 Bonk dals Commerzbenk Zrl., Budepest | 14220108-26830003

#### Casing Program

Hole Size	Ca	asing	Csg. Siz	Weight	Crada	Conn.	SF	SF Burst	SF
Hole Size	From	То	Usg. Siz	e (lbs)	Grade	Conn.	Collapse	Sr Burst	Tension
17.5"	0	1110	13.375"	54.5	J55	STC	2.22	1.18	8.50
12.25"	0	4000	9.625"	40	J55	LTC	1.22	0.96	3.25
12.25"	4000	5195	9.625"	40	L80	LTC	1.13	1.40	5.73
8.75"	0	15,547	5.5"	17	P110	LTC	1.45	2.59	2.45
· · · · · · · · · · · · · · · · · · ·			E	BLM Minimun	n Safety	/ Factor	1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface. All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

# COG Operating LLC, Columbus Federal Com 21H

# **Casing Program**

Hole	Casing	g Interval	Csg. Size	Weight	Grade	Conn.	SF	SF	SF
Size	From	To	_	(lbs)			Col	Burst	Tension
13.5"	0'	1025'	10 3⁄4"	45.5	L80	STC	5.14	.86	14.7
9 7/8"	0'	11,500'	7 5/8"	29.7	HCP110	BTC	1.125	1.27	2.74
6 <sup>3</sup> ⁄ <sub>4</sub> "	0'	22,397'	5.5"	23	P110	Ultra SF	1.95	1.95	2.5
	· · · · · · ·			BLM M	inimum Sa	fety Factor	1.125	1.125	1.6 Dry
									1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

- Burst SF on Surf is 0.86 > 0.7.
- 5.5" Ultra SF connection OD = 5.65".

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef? Is well within the designated 4 string boundary?	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

# 3. Cementing Program

Casing	# Sks	Wt. lb/ gal	YId ft3/ sack	H₂0 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	470	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl2
Sun.	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl2
Inter.	1000	12.7	2.0	9.6	16	Lead: 35:65:6 C Blend
inter.	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl
5.5 Prod	770	11.9	2.5	19	72	Lead: 50:50:10 H Blend
	1360	14.4	1.24	5.7	19	Tail: 50:50:2 Class H Blend

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	тос	% Excess
Surface	0'	50%
1 <sup>st</sup> Intermediate	0'	50%
Production	3,500'	25% OH in Lateral (KOP to EOL) – 40% OH in Vertical

# 4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Ту	pe	x	Tested to:
			Ann	ular	х	2000 psi
			Blind	Ram		
12-1/4"	13-5/8"	2M	Pipe	Ram		2M
			Double	e Ram		2171
			Other*			
			Ann	ular	x	50% testing pressure
8-3/4"	13-5/8"	3M	Blind	Ram	х	
			Pipe	Ram	х	3М
			Double	e Ram		
			Other*			

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. 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. See attached schematics.

	Formation integrity test will be performed per Onshore Order #2.
<b>. X</b>	On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
	N Are anchors required by manufacturer?
N	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

# 5. Mud Program

	Depth	Time	Weight	Viscosity	Water Loss
From	То	Туре	(ppg)	VISCOSILY	Water Loss
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Saturated Brine	10 - 10.1	28-34	N/C
9-5/8" Int shoe	Lateral TD	Cut Brine	8.6 - 9.3	28-34	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid? PVT/Pason/Vis	ual Monitoring
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# 6. Logging and Testing Procedures

Logging, Coring and Testing.		
Y	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.	
Y	No Logs are planned based on well control or offset log information.	
N	Drill stem test? If yes, explain.	
N	Coring? If yes, explain.	

Additional logs planned		Interval	
N	Resistivity	Pilot Hole TD to ICP	
Ν	Density	Pilot Hole TD to ICP	
Y	CBL	Production casing (If cement not circulated to surface)	
Y	Mud log	Intermediate shoe to TD	
Ν	PEX		

# 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5170 psi at 10690' TVD
Abnormal Temperature	NO 165 Deg. F.

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N H2S is present Y H2S Plan attached

# 8. Other Facets of Operation

Y	ls it a walking operation?
N	ls casing pre-set?

x	H2S Plan.
<b>X</b>	BOP & Choke Schematics.
x	Directional Plan

# 

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

# SUPO Data Report

04/10/2018

Highlighted data reflects the most

recent changes

Show Final Text

APD ID: 10400025325

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Type: OIL WELL

# Section 1 - Existing Roads

Will existing roads be used? YES

# Existing Road Map:

COG\_Dominator\_Existing\_Rd\_20171121094216.pdf

Existing Road Purpose: ACCESS

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:

COG\_Dominator\_405H\_Roads\_20171207152141.pdf

New road type: TWO-TRACK

Length: 11277.3 Feet Width (ft.): 30

Max slope (%): 33

Max grade (%): 1

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

**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?** NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Submission Date: 12/08/2017

Well Number: 405H Well Work Type: Drill

Row(s) Exist? NO

Well Name: DOMINATOR 25 FEDERAL COM

#### Well Number: 405H

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Blading

Access other construction information: No turnouts are planned. Re routing access road around proposed well location.

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

#### **Drainage Control**

New road drainage crossing: OTHER

Drainage Control comments: None necessary.

Road Drainage Control Structures (DCS) description: None needed.

**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:

COG\_Dominator\_405H\_1Mile\_Data\_20171207152156.pdf

**Existing Wells description:** 

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

#### Submit or defer a Proposed Production Facilities plan? SUBMIT

**Production Facilities description:** Production will be sent to the Dominator 25 Federal CTB 2 facility. A surface flow line of approximately 57.8' of 3.5" steel pipe carrying oil, gas and water under a maximum pressure of 125 psi will follow the road to the facility at the Dominator 25 Federal CTB 2 location. We plan to install a 4" surface polyethylene pipe transporting Gas Lift Gas from the Dominator 25 Federal CTB 2 to the multiple well pad that includes the Dominator 25 Federal Com #105H, #305H, #405H, #606H, #708H and #707H wells. The surface Gas Lift Gas pipe of approximately 57.8' under a maximum pressure of 125 psi will be installed no farther than 10 feet from the edge of the road. **Production Facilities map:** 

COG\_Dominator\_CTB\_2\_20171205083713.pdf COG\_Dominator\_405H\_Flowlines\_20171207152118.pdf

COG\_Dominator\_405H\_Prod\_Facil\_20171207152125.pdf

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

Section 5 - Location and Types of Water Sup	ply
Water Source Table	
Water source use type: INTERMEDIATE/PRODUCTION CASING	Water source type: OTHER
Describe type: Brine Water.	
Source latitude:	Source longitude:
Source datum:	
Water source permit type: PRIVATE CONTRACT, PRIVATE CONTRACT Source land ownership: COMMERCIAL	
Water source transport method: TRUCKING,TRUCKING	
Source transportation land ownership: COMMERCIAL	
Water source volume (barrels): 15000	Source volume (acre-feet): 1.9333965
Source volume (gal): 630000	
Water source use type: STIMULATION, SURFACE CASING	Water source type: OTHER
Describe type: Fresh Water.	
Source latitude:	Source longitude:
Source datum:	
Water source permit type: PRIVATE CONTRACT,PRIVATE CONTRACT Source land ownership: PRIVATE	
Water source transport method: PIPELINE, PIPELINE	
Source transportation land ownership: PRIVATE	
Water source volume (barrels): 225000	Source volume (acre-feet): 29.000946
Source volume (gal): 9450000	

#### Water source and transportation map:

COG\_Dominator\_Frac\_Pond\_20171127081721.pdf COG\_Dominator\_405H\_BrineH2O\_20171207152844.pdf COG\_Dominator\_405H\_FreshH2O\_20171207152852.pdf

**Water source comments:** Fresh water will be obtained from the C-01285 Dinwiddle Cattle Co Water Well located in Section 5, T26S, R36E. The water will be stored in the proposed Dominator 25 Federal Frac Pond located in section 25, T25S. R33E. Brine water will be obtained from the Malaga II Brine station located in Section 12. T23S. R28E. **New water well?** NO

## New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Operator Name: COG OPERATING LLC Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

Est. depth to top of aquifer(ft): Aquifer comments: Aquifer documentation:	Est thickness of aquifer:
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:
Create material:	
Grout material:	Grout depth:
Casing length (ft.):	Grout depth: Casing top depth (ft.):
Casing length (ft.):	Casing top depth (ft.):

Additional information attachment:

## Section 6 - Construction Materials

**Construction Materials description:** Caliche will be obtained from the actual well site if available. If not available onsite, caliche will be purchased from approved BLM federal pit located in Section 23. T25S. R33E. **Construction Materials source location attachment:** 

# Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drilling fluids and produced oil and water during drilling and completion operations

Amount of waste: 6000 barrels

Waste disposal frequency : One Time Only

Safe containment description: All drilling waste will be stored safely and disposed of properly

Safe containmant attachment:

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

FACILITY Disposal type description:

**Disposal location description:** Trucked to an approved disposal facility

Waste type: SEWAGE

Waste content description: Human waste and gray water

Amount of waste: 250 gallons

Waste disposal frequency : Weekly

**Safe containment description:** Waste will be properly contained and disposed of properly at a state approved disposal facility

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

Safe containmant attachment:

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

Disposal type description:

Disposal location description: Trucked to an approved disposal facility

Waste type: GARBAGE

Waste content description: Garbage and trash produced during drilling and completion operations

Amount of waste: 125 pounds

Waste disposal frequency : Weekly

**Safe containment description:** Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility **Safe containmant attachment:** 

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

Disposal type description:

Disposal location description: Trucked to an approved 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 Roll off cuttings containers on tracks

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

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: YES

#### **Ancillary Facilities attachment:**

COG\_Dominator\_405H\_GCP\_20171207152915.pdf

Comments: GCP Attached

# Section 9 - Well Site Layout

#### Well Site Layout Diagram:

COG\_Dominator\_CTB\_2\_20171128113705.pdf

COG\_Dominator\_405H\_Flowlines\_20171207152932.pdf

COG\_Dominator\_405H\_Prod\_Facil\_20171207152941.pdf

**Comments:** Production will be sent to the Dominator 25 Federal CTB 2 facility. A surface flow line of approximately 57.8' of 3.5" steel pipe carrying oil, gas and water under a maximum pressure of 125 psi will follow the road to the facility at the Dominator 25 Federal CTB 2 location. We plan to install a 4" surface polyethylene pipe transporting Gas Lift Gas from the Dominator 25 Federal CTB 2 to the multiple well pad that includes the Dominator 25 Federal Com #105H, #305H, #405H, #606H, #708H and #707H wells. The surface Gas Lift Gas pipe of approximately 57.8' under a maximum pressure of 125 psi will be installed no farther than 10 feet from the edge of the road.

# Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance	Multiple Well Pad Name: DOMINATOR 25 FEDERAL COM		
·	Multiple Well Pad Number: 105H, 305H, 405H, 606H, 708H AND 707H		
Recontouring attachment:	70111		

**Drainage/Erosion control construction:** Due to the flat topography of this location and the stockpiling of the topsoil on the east side of the location, no erosion control is necessary.

Drainage/Erosion control reclamation: Reclaim the east side 80'.

Well pad proposed disturbance (acres): 3.67 Road proposed disturbance (acres): 2.9	0.73 Road interim reclamation (acres): 2.9	(acres): 2.94 Road long term disturbance (acres):
Powerline proposed disturbance (acres): 0 Pipeline proposed disturbance (acres): 0.01 Other proposed disturbance (acres): 22.96 Total proposed disturbance: 29.54	Powerline interim reclamation (acres): 0 Pipeline interim reclamation (acres): 0.01 Other interim reclamation (acres): 0 Total interim reclamation: 3.64	Powerline long term disturbance (acres): 0 Pipeline long term disturbance (acres): 0.01 Other long term disturbance (acres): 22.96 Total long term disturbance: 28.81

Reconstruction method: New construction of pad.

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

Topsoil redistribution: East. Soil treatment: None

Existing Vegetation at the well pad: Shinnery Oak/Mesquite grassland

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Shinnery Oak/Mesquite grassland Existing Vegetation Community at the road attachment: Existing Vegetation Community at the pipeline: Shinnery Oak/Mesquite grassland Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: N/A 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:

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

Seed Summary			
Seed Type	Pounds/Acre		

Total pounds/Acre:

Seed reclamation attachment:

## **Operator Contact/Responsible Official Contact Info**

First Name: Rand

Phone: (432)254-5556

Last Name: French

Email: rfrench@concho.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: N/A

Weed treatment plan attachment:

Monitoring plan description: N/A

Monitoring plan attachment:

Success standards: N/A

Pit closure description: N/A

Pit closure attachment:

COG\_Dominator\_405H\_Closed\_Loop\_20171207152954.pdf

# Section 11 - Surface Ownership

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:

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 405H

State Local Office:
Military Local Office:
USFWS Local Office:
Other Local Office:
USFS Region:
USFS Forest/Grassland:

USFS Ranger District:

Use APD as ROW?

Section 12 - Other Information

Right of Way needed? NO

ROW Type(s):

**ROW Applications** 

SUPO Additional Information:

Use a previously conducted onsite? YES

**Previous Onsite information:** Onsite completed on 10/5/2017 by Rand French (COG); Gerald Herrera (COG) and Jeff Robertson (BLM).

# **Other SUPO Attachment**

COG\_Dominator\_405H\_Certif\_20171207153011.pdf

Surface Use Plan COG Operating LLC Dominator 25 Federal Com 405H SHL: 310' FSL & 2614' FEL UL O Section 25, T25S, R33E BHL: 200' FNL & 2310' FWL UL C Section 25, T25S, R33E Lea County, New Mexico

# **OPERATOR CERTIFICATION**

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access road proposed herein; that I am familiar with the conditions that presently 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 COG Operating LLC, 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. Executed this  $3^{\mu\nu}$  day of  $N_{\mu}$  and  $N_{\mu}$ 

Signed:

Printed Name: Mayte Reyes Position: Regulatory Analyst Address: 2208 W. Main Street, Artesia, NM 88210 Telephone: (575) 748-6945 E-mail: <u>mreyes1@concho.com</u> Field Representative (if not above signatory): Rand French Telephone: (575) 748-6940. E-mail: <u>rfrench@concho.com</u>

Surface Use Plan



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

## **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):

and the second

**PWD Data Report** 

04/10/2018

# Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

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 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:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

PWD disturbance (acres):

PWD disturbance (acres):

Injection well type:

Injection well number:

Assigned 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: 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: Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment: Have other regulatory requirements been met? Other regulatory requirements attachment: Injection well name:

#### Injection well API number:

PWD disturbance (acres):

## PWD disturbance (acres):



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

#### **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:

# **Bond Info Data Report**

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04/10/2018

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

**Operator Name: COG OPERATING LLC** 

Well Name: DOMINATOR 25 FEDERAL COM

Drilling Plan Data Report

Sec. St.

04/10/2018

APD ID: 10400025325

Submission Date: 12/08/2017

Highlighted data reflects the most recent changes

Well Number: 405H

Show Final Text

 $\chi^{\frac{n}{2}} (\lambda_{ij})$ 

Well Type: OIL WELL

Well Work Type: Drill

# Section 1 - Geologic Formations

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Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	UNKNOWN	3339	0	0		NONE	No
2	RUSTLER	2254	1084	1084		NONE	No
3	TOP SALT	1914	1424	1424	SALT	NONE	No
4	BASE OF SALT	-1568	4906	4906	ANHYDRITE	NONE	No
5	LAMAR	-1828	5166	5166	LIMESTONE	NATURAL GAS,OIL	No
6	BELL CANYON	-1865	5203	5203		NONE	No
7	CHERRY CANYON	-2851	6189	6189	· · · · · ·	NATURAL GAS,OIL	No
8	BRUSHY CANYON	-4488	7826	7826		NATURAL GAS,OIL	No
9	BONE SPRING LIME	-5976	9314	9314	SANDSTONE	NATURAL GAS,OIL	No
10	UPPER AVALON SHALE	-6172	9510	9510	SHALE	NATURAL GAS,OIL	No
11		-6376	9714	9714		NATURAL GAS,OIL	No
12		-6614	9952	9952	·	NATURAL GAS,OIL	No
13	BONE SPRING 1ST	-7006	10344	10344		NATURAL GAS,OIL	Yes

# **Section 2 - Blowout Prevention**