

OCD Hobbs  
HOBBS OCD

APR 18 2018

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

MIN F  
SURF S

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		6. If Indian, Allottee or Tribe Name
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		7. If Unit or CA Agreement, Name and No.
2. Name of Operator COG OPERATING LLC (229137)		8. Lease Name and Well No. (38728) DOMINATOR 25 FEDERAL 401H
3a. Address 600 West Illinois Ave Midland TX 79701	3b. Phone No. (include area code) (432)683-7443	9. API Well No. 30-025-44706 91020
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SESE / 310 FSL / 630 FEL / LAT 32.095115 / LONG -103.519561 At proposed prod. zone NENE / 200 FNL / 330 FEL / LAT 32.108212 / LONG -103.518589		10. Field and Pool, or Exploratory WILDCAT / BONE SPRING
11. Sec., T. R. M. or Blk. and Survey or Area SEC 25 / T25S / R33E / NMP		12. County or Parish LEA
13. State NM		14. Distance in miles and direction from nearest town or post office* 19 miles
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 200 feet	16. No. of acres in lease 280	17. Spacing Unit dedicated to this well 160
18. Distance from proposed location* to nearest well, drilling, completed, 351 feet applied for, on this lease, ft.	19. Proposed Depth 10785 feet / 15515 feet	20. BLM/BIA Bond No. on file FED: NMB000215
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3323 feet	22. Approximate date work will start* 03/01/2018	23. Estimated duration 30 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) Mayte Reyes / Ph: (575)748-6945	Date 12/05/2017
Title Regulatory Analyst		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 04/09/2018
Title Supervisor Multiple Resources		
Office CARLSBAD		

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)

GCP Rec 4/18/18

APPROVED WITH CONDITIONS  
Approval Date: 04/09/2018

\*(Instructions on page 2)

KZ  
04/20/18

\* Double sided

## 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.

## NOTICES

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.

**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.

## Additional Operator Remarks

### Location of Well

1. SHL: SESE / 310 FSL / 630 FEL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.095115 / LONG: -103.519561 ( TVD: 0 feet, MD: 0 feet )  
PPP: SESE / 330 FSL / 330 FEL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.095171 / LONG: -103.518592 (TVD: 6000 feet, MD: 6000 feet )  
BHL: NENE / 200 FNL / 330 FEL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.108212 / LONG: -103.518589 ( TVD: 10785 feet, MD: 15515 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.

CONFIDENTIAL



APD ID: 10400025210

Submission Date: 12/05/2017

Highlighted data  
reflects the most  
recent changes

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 401H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - General

APD ID: 10400025210

Tie to previous NOS?

Submission Date: 12/05/2017

BLM Office: CARLSBAD

User: Mayte Reyes

Title: Regulatory Analyst

Federal/Indian APD: FED

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

Lease number: NMNM114987

Lease Acres: 280

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? YES

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

Zip: 79701

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

Master 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

Well Number: 401H

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

**Operator Name:** COG OPERATING LLC

**Well Name:** DOMINATOR 25 FEDERAL

**Well Number:** 401H

**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:** MULTIPLE WELL

**Multiple Well Pad Name:**  
DOMINATOR 25 FEDERAL

**Number:** 102H, 301H, 401H,  
501H, 601H, 602H, 701H AND  
702H

**Well Class:** HORIZONTAL

**Number of Legs:**

**Well Work Type:** Drill

**Well Type:** OIL WELL

**Describe Well Type:**

**Well sub-Type:** EXPLORATORY (WILDCAT)

**Describe sub-type:**

**Distance to town:** 19 Miles

**Distance to nearest well:** 351 FT

**Distance to lease line:** 200 FT

**Reservoir well spacing assigned acres Measurement:** 160 Acres

**Well plat:** COG\_Dominator\_401H\_C102\_20171204130933.pdf

**Well work start Date:** 03/01/2018

**Duration:** 30 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 Leg #1	310	FSL	630	FEL	25S	33E	25	Aliquot SESE	32.09511 5	- 103.5195 61	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 114987	332 3	0	0
KOP Leg #1	310	FSL	630	FEL	25S	33E	25	Aliquot SESE	32.09511 5	- 103.5195 61	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 114987	332 3	0	0
PPP Leg #1	330	FSL	330	FEL	25S	33E	25	Aliquot SESE	32.09517 1	- 103.5185 92	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 114987	- 267 7	600 0	600 0



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

## Drilling Plan Data Report

04/10/2018

APD ID: 10400025210

Submission Date: 12/05/2017

Highlighted data  
reflects the most  
recent changes

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 401H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

### Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	UNKNOWN	3323	0	0		NONE	No
2	RUSTLER	2150	1173	1173		NONE	No
3	TOP SALT	1749	1574	1574	SALT	NONE	No
4	BASE OF SALT	-1811	5134	5134	ANHYDRITE	NONE	No
5	LAMAR	-1929	5252	5252	LIMESTONE	NONE	No
6	BELL CANYON	-1971	5294	5294		NONE	No
7	CHERRY CANYON	-2970	6293	6293		NATURAL GAS,OIL	No
8	BRUSHY CANYON	-4550	7873	7873		NATURAL GAS,OIL	No
9	BONE SPRING LIME	-6016	9339	9339	SANDSTONE	NATURAL GAS,OIL	No
10	UPPER AVALON SHALE	-6090	9413	9413	SHALE	NATURAL GAS,OIL	No
11	---	-6701	10024	10024		NATURAL GAS,OIL	No
12	---	-6851	10174	10174		NATURAL GAS,OIL	No
13	BONE SPRING 1ST	-7048	10371	10371		NATURAL GAS,OIL	Yes
14	BONE SPRING 2ND	-7566	10889	10889		NATURAL GAS,OIL	No
15	BONE SPRING 3RD	-8690	12013	12013		NATURAL GAS,OIL	No

### Section 2 - Blowout Prevention

**Operator Name:** COG OPERATING LLC

**Well Name:** DOMINATOR 25 FEDERAL

**Well Number:** 401H

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

**Rating Depth:** 5280

**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\_401H\_2M\_Choke\_20171204132009.pdf

**BOP Diagram Attachment:**

COG\_Dominator\_401H\_2M\_BOP\_20171204132022.pdf

COG\_Dominator\_401H\_FlexHose\_20171204132030.pdf

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**Pressure Rating (PSI):** 3M

**Rating Depth:** 10785

**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\_401H\_3M\_Choke\_20171204131933.pdf

**BOP Diagram Attachment:**

COG\_Dominator\_401H\_3M\_BOP\_20171204131940.pdf

COG\_Dominator\_401H\_FlexHose\_20171204131953.pdf

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Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 401H

### 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	1200	0	1200	-8653	-9678	1200	J-55	54.5	STC	2.06	1.15	DRY	7.86	DRY	7.86
2	INTERMEDIATE	12.25	9.625	NEW	API	Y	0	5280	0	5280	-8653	-20153	5280	L-80	40	LTC	1.11	1.39	DRY	5.73	DRY	5.73
3	PRODUCTION	8.75	5.5	NEW	API	N	0	15515	0	15515	-8653	-21064	15515	P-110	17	LTC	1.43	2.57	DRY	2.43	DRY	2.43

#### Casing Attachments

Casing ID: 1 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG\_Dominator\_401H\_Casing\_Rpt\_20171204132113.pdf

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 401H

#### Casing Attachments

Casing ID: 2 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

COG\_Dominator\_401H\_Casing\_Rpt\_20171204132121.pdf

Casing Design Assumptions and Worksheet(s):

COG\_Dominator\_401H\_Casing\_Rpt\_20171204132129.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG\_Dominator\_401H\_Casing\_Rpt\_20171204132226.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	1200	530	1.75	13.5	927	50	Lead: Class C	4% Gel + 1% CaCl <sub>2</sub>
SURFACE	Tail		0	1200	250	1.34	14.8	335	50	Tail: Class C	2% CaCl <sub>2</sub>
INTERMEDIATE	Lead		0	5280	1010	2	12.7	2020	50	Lead: 35:65:6 C Blend	As needed
INTERMEDIATE	Tail		0	5280	250	1.34	14.8	335	50	Tail: Class C	2% CaCl
PRODUCTION	Lead		0	1551 5	770	2.5	11.9	1925	25	Lead: 50:50:10 H Blend	As needed

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 401H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		0	1551 5	1330	1.24	14.4	1649	25	Tail: 50:50:2 Class H Blend	As needed

### 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

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
5280	1551 5	OTHER : Cut Brine	8.6	9.3							Cut Brine
0	1200	OTHER : FW Gel	8.6	8.8							FW Gel
1200	5280	OTHER : Saturated Brine	10	10.1							Saturated Brine

**Operator Name:** COG OPERATING LLC

**Well Name:** DOMINATOR 25 FEDERAL

**Well Number:** 401H

## **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:** 5220

**Anticipated Surface Pressure:** 2847.3

**Anticipated Bottom Hole Temperature(F):** 165

**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:**

COG\_Dominator\_401H\_H2S\_Schem\_20171204132438.pdf

COG\_Dominator\_401H\_H2S\_SUP\_20171204132446.pdf

## **Section 8 - Other Information**

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

COG\_Dominator\_401H\_AC\_Rpt\_20171204132502.pdf

COG\_Dominator\_401H\_Direct\_Rpt\_20171204132508.pdf

**Other proposed operations facets description:**

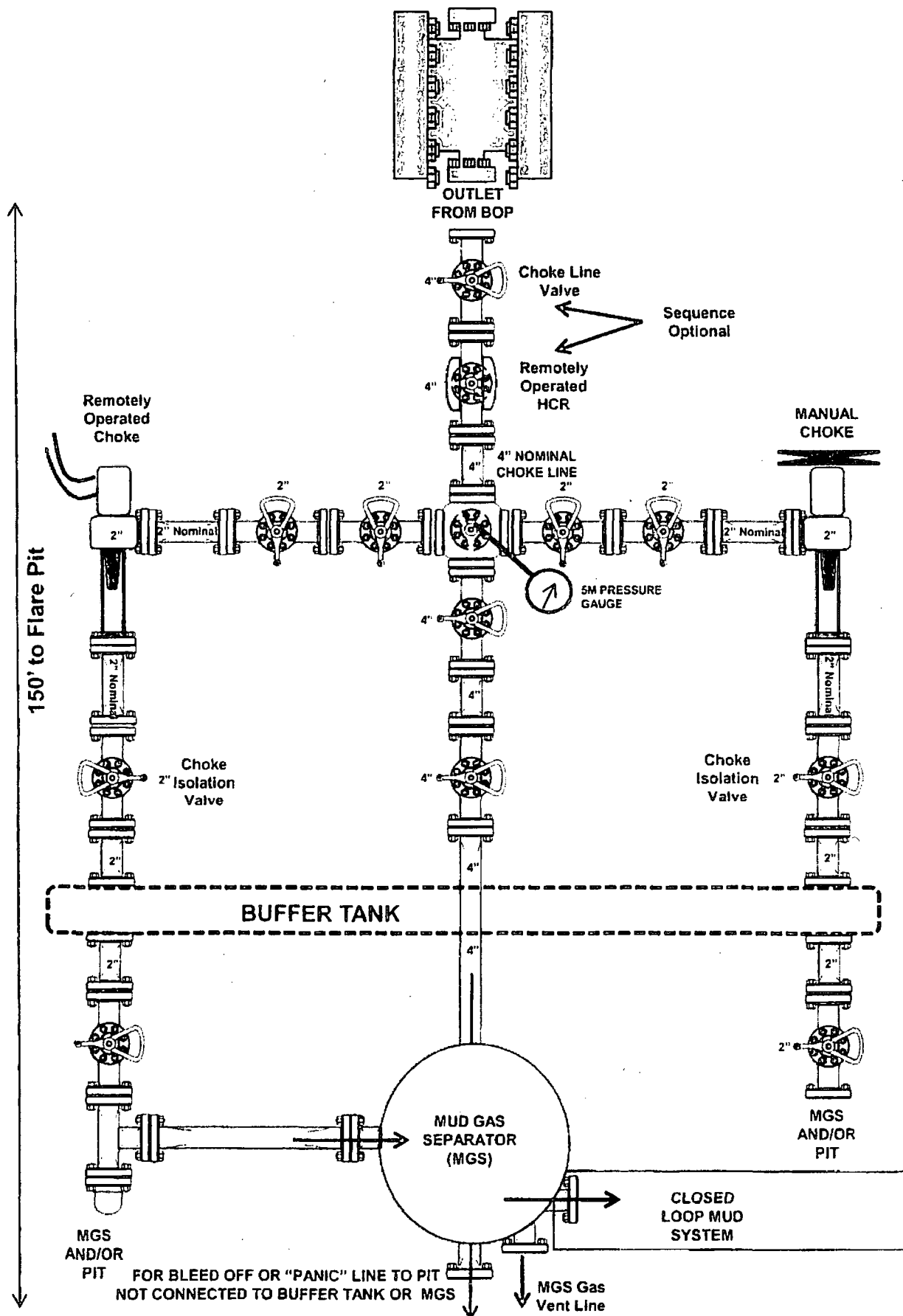
Drilling Program Attached

**Other proposed operations facets attachment:**

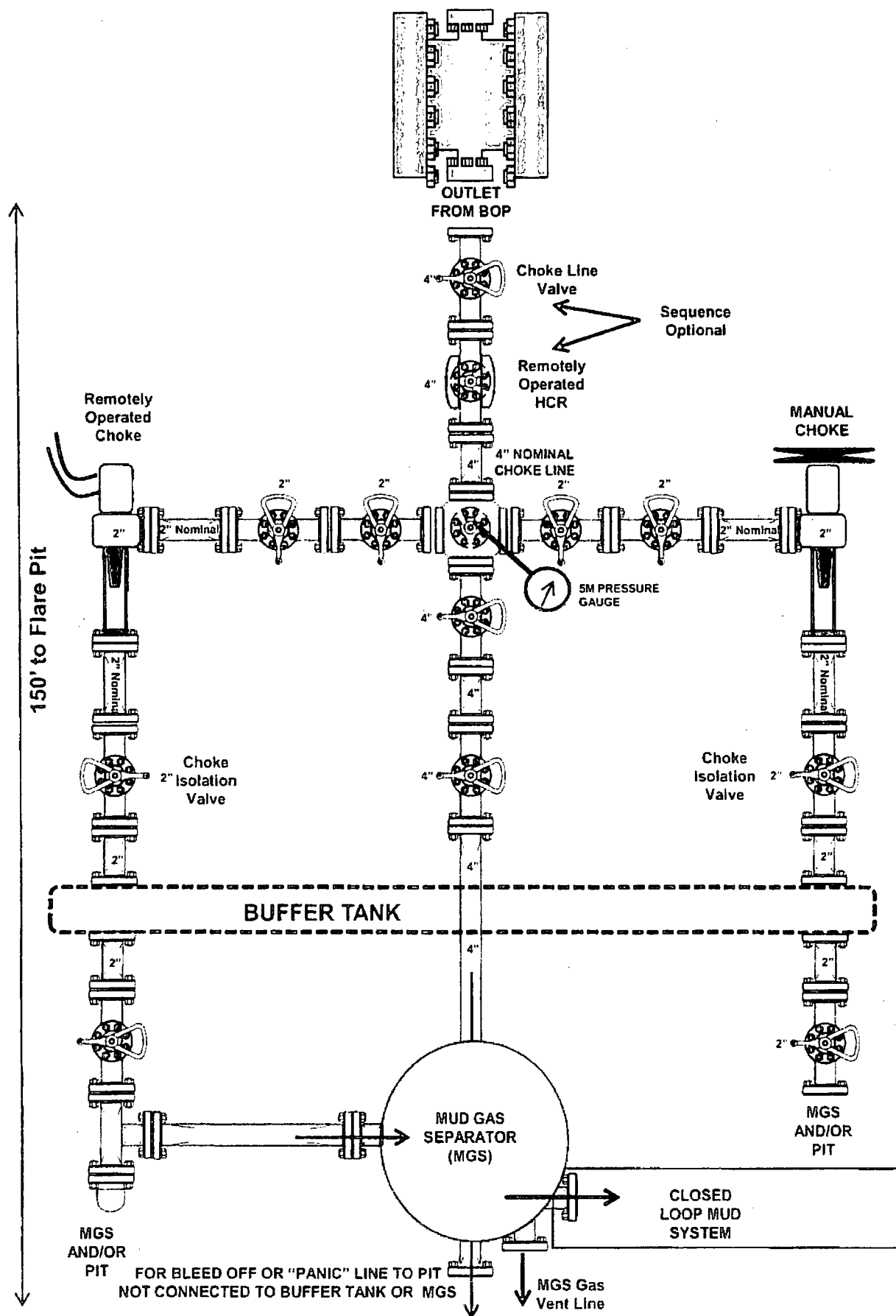
COG\_Dominator\_401H\_Drill\_Rpt\_20171204132516.pdf

**Other Variance attachment:**

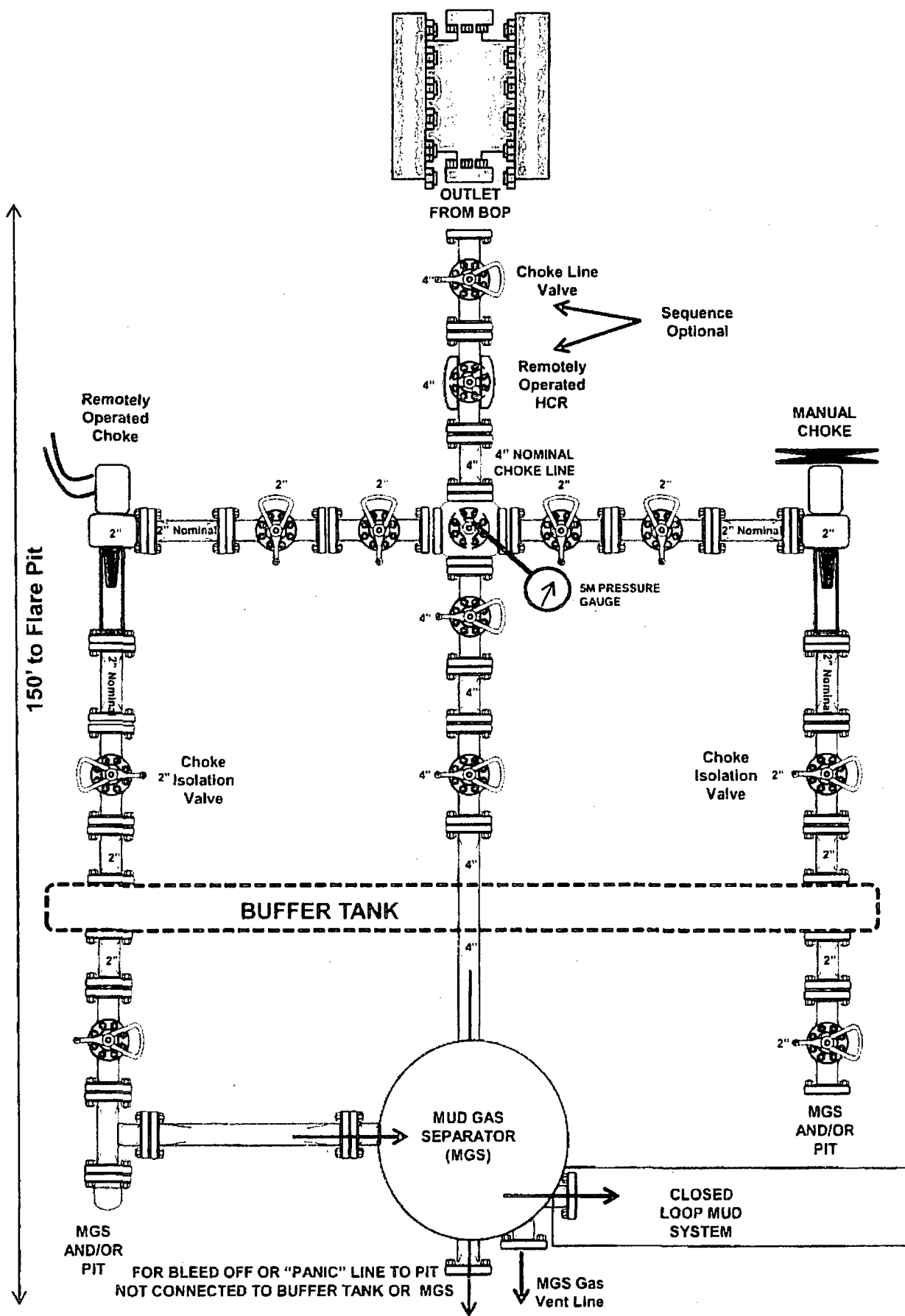
# 3M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



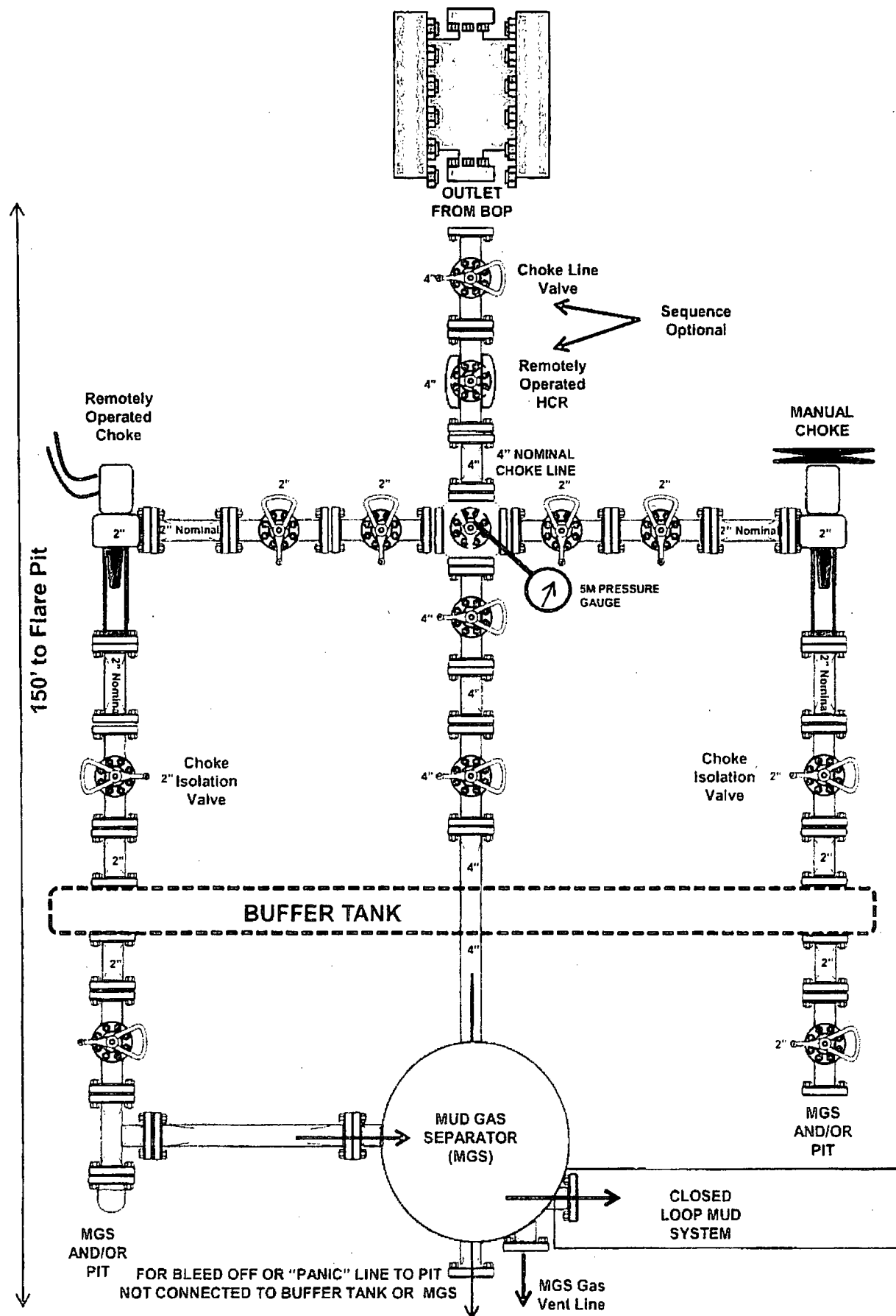
# 5M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



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

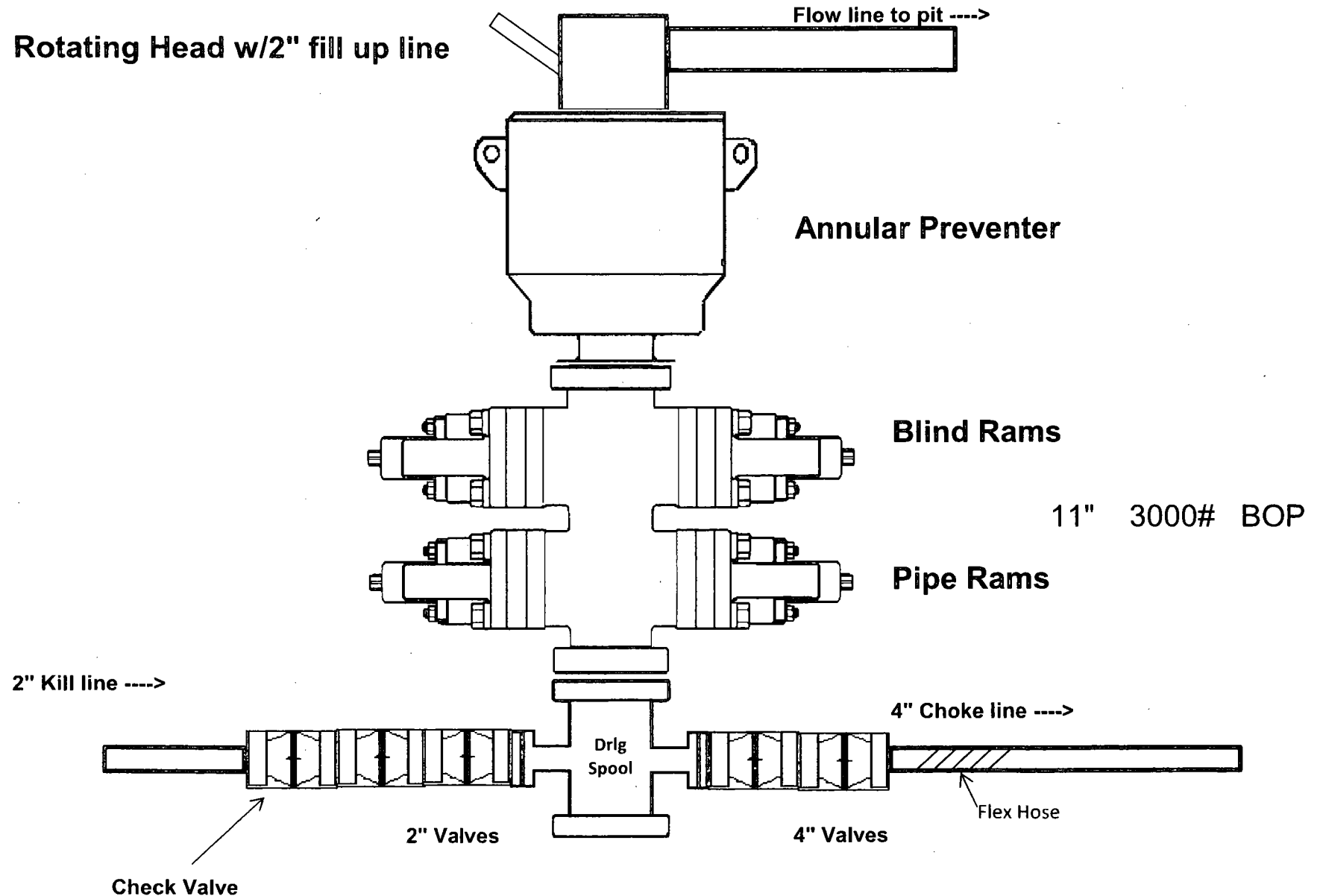


# 2M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)

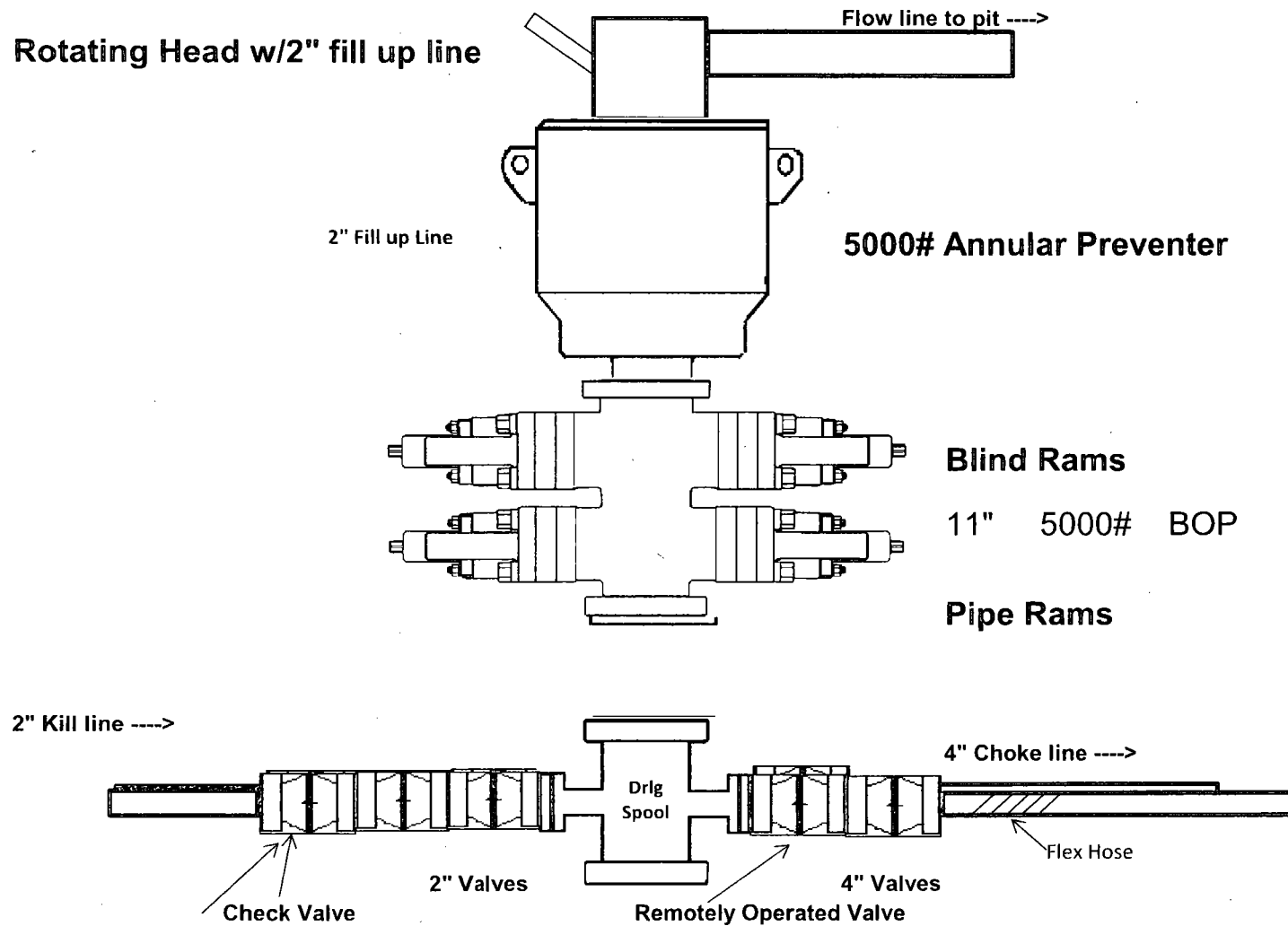




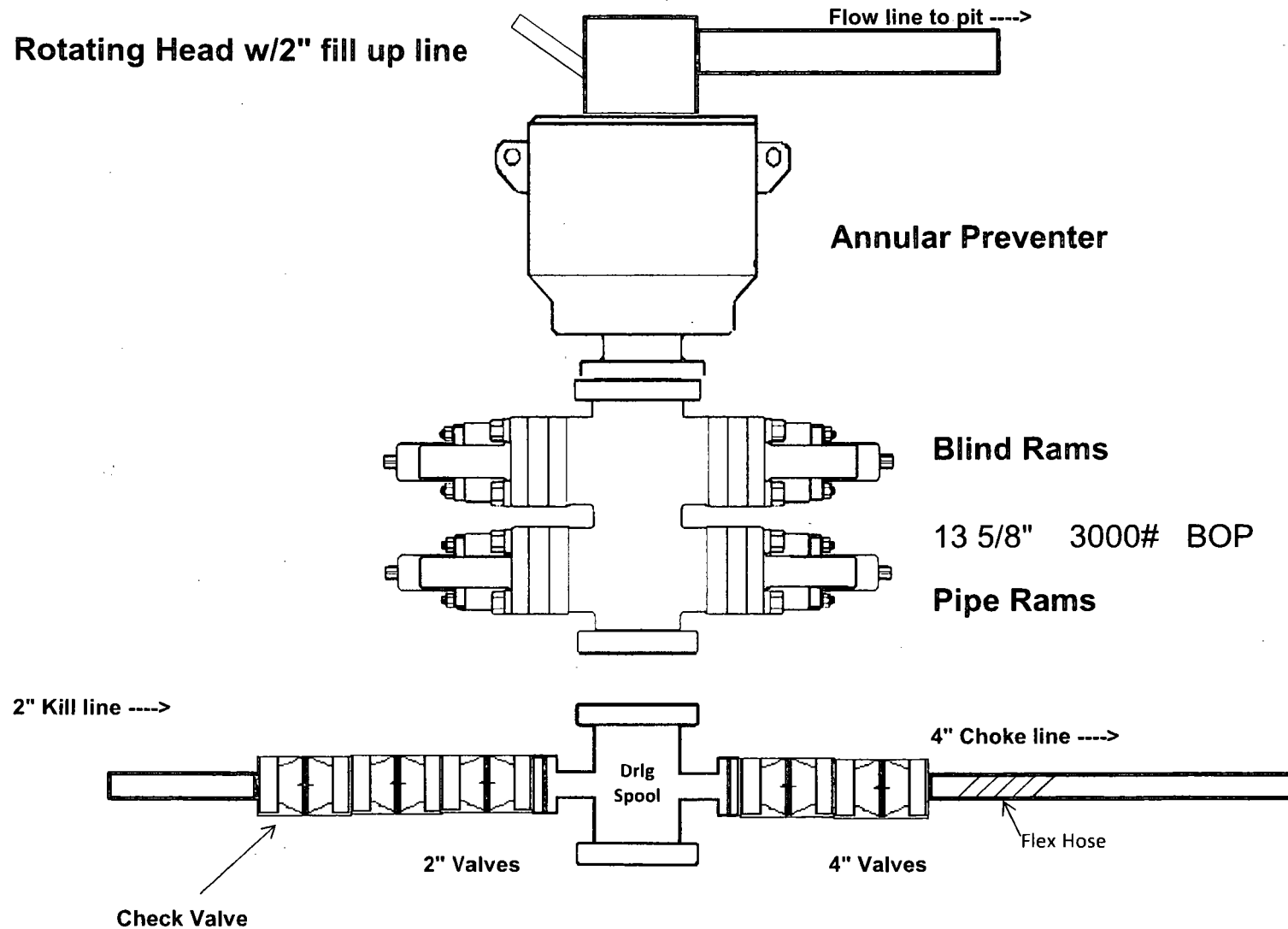
# 3,000 psi BOP Schematic



# 5,000 psi BOP Schematic



# 3,000 psi BOP Schematic



# Casing Program

Hole Size	Casing		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	1200	13.375"	54.5	J55	STC	2.06	1.15	7.86
12.25"	0	4000	9.625"	40	J55	LTC	1.22	0.95	3.25
12.25"	4000	5280	9.625"	40	L80	LTC	1.11	1.39	5.73
8.75"	0	15,515	5.5"	17	P110	LTC	1.43	2.57	2.43
BLM Minimum 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

DISTRICT I  
1825 N. FRENCH DR., HOBBS, NM 88240  
Phone: (505) 593-6101 Fax: (505) 393-0770

DISTRICT II  
511 S. FIRST ST., ARTESIA, NM 88210  
Phone: (505) 748-1283 Fax: (505) 748-0725

DISTRICT III  
1000 RIO BRAZOS RD., AZTEC, NM 87410  
Phone: (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87503  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department

CONSERVATION DIVISION

1200 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025- <b>44706</b>	Pool Code <b>51020</b>	Pool Name <b>RED HILLS; Lower Wildcat; Bone Spring</b>
Property Code <b>78728</b>	Property Name <b>DOMINATOR 25 FEDERAL</b>	Well Number <b>401H</b>
GRID No. <b>229137</b>	Operator Name <b>COG OPERATING, LLC</b>	Elevation <b>3322.5'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	25	25-S	33-E		310	SOUTH	630	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	25	25-S	33-E		200	NORTH	330	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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

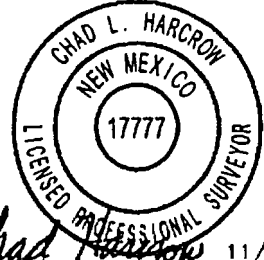
*NO LEASE X-ING	NAD 83 NME PROPOSED BOTTOM HOLE LOCATION Y=404057.3 N X=793605.1 E LAT.=32.108212' N LONG.=103.518589' W	Y=404250.1 N X=792612.1 E LTP 330' FSL & 330' FEL LAT.=32.107855' N LONG.=103.518589' W	200' B.H.C. 330'
		Y=404259.7 N X=793933.6 E	GRID AZ. - 359°34'45" HORZ. DIST. - 4744.4'
	NMNM114987		PROJECT AREA PRODUCING AREA
	NAD 83 NME SURFACE LOCATION Y=399290.4 N X=793340.1 E LAT.=32.095115' N LONG.=103.519561' W	Y=398986.0 N X=793972.3 E LTP 330' FSL & 330' FEL LAT.=32.095171' N LONG.=103.518592' W GRID AZ. TO LTP 85°40'19"	630' S.L. 310'

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

*Mayte Reyes* 11/20/17  
Signature Date  
**Mayte Reyes**  
Printed Name  
**mreyes1@concho.com**  
E-mail Address

**SURVEYOR CERTIFICATION**  
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 11, 2017  
Date of Survey

Signature & Seal of Professional Surveyor  
  
Certificate No. CHAD HARCROW 17777  
W.O. # 17-1292 DRAWN BY: JH

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 401H

	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
EXIT Leg #1	330	FNL	330	FEL	25S	33E	25	Aliquot NENE 5	32.10785 5	- 103.5185 89	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 114987	- 746 2	154 00	107 85
BHL Leg #1	200	FNL	330	FEL	25S	33E	25	Aliquot NENE 2	32.10821 2	- 103.5185 89	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 114987	- 746 2	155 15	107 85

# COG Operating, LLC - Dominator 25 Federal #401H

## 1. Geologic Formations

TVD of target	10,785' EOL	Pilot hole depth	NA
MD at TD:	15,515'	Deepest expected fresh water:	142'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1173	Water	
Top of Salt	1574	Salt	
Base of Salt	5134	Salt	
Lamar	5252	Salt Water	
Bell Canyon	5294	Salt Water	
Cherry Canyon	6293	Oil/Gas	
Brushy Canyon	7873	Oil/Gas	
Bone Spring Lime	9339	Oil/Gas	
U. Avalon Shale	9413	Oil/Gas	
L. Avalon Shale	10024	Oil/Gas	
Basal Avalon	10174	Oil/Gas	
1st Bone Spring Sand	10371	Oil/Gas	
2nd Bone Spring Sand	10889	Not Penetrated	
3rd Bone Spring Sand	12013	Not Penetrated	

## 2. Casing Program

Hole Size	Casing		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	1200	13.375"	54.5	J55	STC	2.06	1.15	7.86
12.25"	0	4000	9.625"	40	J55	LTC	1.22	0.95	3.25
12.25"	4000	5280	9.625"	40	L80	LTC	1.11	1.39	5.73
8.75"	0	15,515	5.5"	17	P110	LTC	1.43	2.57	2.43
BLM Minimum 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 Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Col	SF Burst	SF Tension
	From	To							
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 3/4"	0'	22,397'	5.5"	23	P110	Ultra SF	1.95	1.95	2.5
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- Burst SF on Surf is  $0.86 > 0.7$ .
- 5.5" Ultra SF connection OD = 5.65".



# COG Operating LLC, Columbus Federal Com 21H

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## COG Operating LLC, Columbus Federal Com 21H

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

## Operator Certification Data Report

04/10/2018

### 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:** 12/04/2017

**Title:** Regulatory Analyst

**Street Address:** 2208 W Main Street

**City:** Artesia

**State:** NM

**Zip:** 88210

**Phone:** (575)748-6945

**Email address:** Mreyes1@concho.com

### Field Representative

**Representative Name:** Rand French

**Street Address:** 2208 West Main Street

**City:** Artesia

**State:** NM

**Zip:** 88210

**Phone:** (575)748-6940

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

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 401H

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