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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 07 2018

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APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMNM121958		6. If Indian, Allottee or Tribe Name	
7. If Unit or CA Agreement, Name and No.		8. Lease Name and Well No. (321209) DOMINATOR 25 FEDERAL COM 710H	
9. API Well No. 30-025-44746		10. Field and Pool, or Exploration WILDCAT / WOLFCAMP (9809K)	
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 360	
17. Spacing Unit dedicated to this well 160		18. Distance from proposed location* to nearest well, drilling, completed, 1301 feet applied for, on this lease, ft.	
19. Proposed Depth 12751 feet / 17373 feet		20. BLM/BIA Bond No. on file FED: NMB000215	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3336 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- 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 11/28/2017
Title Regulatory Analyst			
Approved by (Signature) (Electronic Submission)		Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 04/20/2018
Title Supervisor Multiple Resources			

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)

SCP Rec 5/7/18

*(Instructions on page 2)

APPROVED WITH CONDITIONS
Approval Date: 04/20/2018

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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.

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 31.60

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: SESW / 280 FSL / 2032 FWL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.095024 / LONG: -103.528034 (TVD: 0 feet, MD: 0 feet)
- PPP: SENW / 2640 FNL / 1750 FWL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.101508 / LONG: -103.529754 (TVD: 12742 feet, MD: 14900 feet)
- PPP: SESW / 330 FSL / 1750 FWL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.095161 / LONG: -103.528945 (TVD: 2612 feet, MD: 2612 feet)
- BHL: NENW / 200 FNL / 1750 FWL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.108215 / LONG: -103.528949 (TVD: 12751 feet, MD: 17373 feet)

BLM Point of Contact

Name: Katrina Ponder
Title: Geologist
Phone: 5752345969
Email: kponder@blm.gov

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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.

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

Operator Certification Data Report

04/23/2018

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: 11/28/2017

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



APD ID: 10400025035	Submission Date: 11/28/2017	Highlighted data reflects the most recent changes Show Final Text
Operator Name: COG OPERATING LLC		
Well Name: DOMINATOR 25 FEDERAL COM	Well Number: 710H	
Well Type: OIL WELL	Well Work Type: Drill	

Section 1 - General

APD ID: 10400025035	Tie to previous NOS?	Submission Date: 11/28/2017
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: NMNM121958	Lease Acres: 360	
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
Operator PO Box: Zip: 79701
Operator City: Midland **State:** TX
Operator Phone: (432)683-7443
Operator Internet Address: RODOM@CONCHO.COM

Section 2 - Well Information

Well in Master Development Plan? NO	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: 710H	Well API Number:
Field/Pool or Exploratory? Field and Pool	Field Name: WILDCAT	Pool Name: WOLFCAMP
Is the proposed well in an area containing other mineral resources? USEABLE WATER,OIL		

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

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: **Number:** 107H, 307H, 407H,
DOMINATOR 25 FEDERAL COM608H, 712H AND 711H

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: 1301 FT

Distance to lease line: 200 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: COG_Dominator_710H_C102_20171128115958.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	280	FSL	203 2	FWL	25S	33E	25	Aliquot SESW 4	32.09502 4	- 103.5280 34	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 121958	333 6	0	0
KOP Leg #1	280	FSL	203 2	FWL	25S	33E	25	Aliquot SESW 4	32.09502 4	- 103.5280 34	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 121958	333 6	0	0
PPP Leg #1	330	FSL	175 0	FWL	25S	33E	25	Aliquot SESW 1	32.09516 1	- 103.5289 45	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 121958	724 2	261 2	261 2

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

	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
PPP Leg #1	264 0	FNL	175 0	FWL	25S	33E	25	Aliquot SEnw	32.10150 8	- 103.5297 54	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 114987	- 940 6	149 00	127 42
EXIT Leg #1	330	FNL	175 0	FWL	25S	33E	25	Aliquot NENw	32.10785 8	- 103.5289 48	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 121958	- 939 6	172 00	127 32
BHL Leg #1	200	FNL	175 0	FWL	25S	33E	25	Aliquot NENw	32.10821 5	- 103.5289 49	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 121958	- 941 5	173 73	127 51

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

Pressure Rating (PSI): 10M

Rating Depth: 12751

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_710H_10M_Choke_20171128121458.pdf

BOP Diagram Attachment:

COG_Dominator_710H_10M_BOP_20171128121505.pdf

COG_Dominator_710H_FlexHose_20171128121516.pdf

Pressure Rating (PSI): 5M

Rating Depth: 11799

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_710H_5M_Choke_20171128121420.pdf

BOP Diagram Attachment:

COG_Dominator_710H_5M_BOP_20171128121426.pdf

COG_Dominator_710H_FlexHose_20171128121440.pdf

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

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	13.5	10.75	NEW	API	N	0	1100	0	1100	-8653	-9678	1100	N-80	45.5	OTHER - BTC	4.91	1.2	DRY	20.78	DRY	20.78
2	INTERMEDIATE	9.875	7.875	NEW	API	Y	0	11799	0	11799	-8653	-	11799	P-110	29.7	OTHER - BTC	1.29	1.03	DRY	3.1	DRY	3.1
3	PRODUCTION	6.75	5.0	NEW	API	N	0	17373	0	17373	-8653	-	17373	P-110	18	OTHER - BTC	1.82	1.89	DRY	3.18	DRY	3.18

Casing Attachments

Casing ID: 1 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Dominator_710H_Casing_Rpt_20171128121615.pdf

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

Casing Attachments

Casing ID: 2 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

COG_Dominator_710H_Casing_Rpt_20171128121640.pdf

Casing Design Assumptions and Worksheet(s):

COG_Dominator_710H_Casing_Rpt_20171128121656.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Dominator_710H_Casing_Rpt_20171128121738.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	1100	160	1.75	13.5	280	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	1179 9	970	3.6	10.3	3492	50	Tuned Light Blend	As needed
INTERMEDIATE	Tail		0	1179 9	250	1.08	16.4	270	50	Tail: Class H	As needed
PRODUCTION	Lead		0	1737 3	180	2.5	11.9	450	35	Lead: 50:50:10 H Blend	As needed

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		0	1737 3	630	1.24	14.4	781	35	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
1179 9	1737 3	OIL-BASED MUD	10.5	12							OBM
0	1100	OTHER : FW Gel	8.6	8.8							FW Gel
1100	1179 9	OTHER : Brine Diesel Emulsion	8.4	9							Brine Diesel Emulsion

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

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: 7960

Anticipated Surface Pressure: 5154.78

Anticipated Bottom Hole Temperature(F): 180

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_710H_H2S_Schem_20171128122010.pdf

COG_Dominator_710H_H2S_SUP_20171128122019.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

COG_Dominator_710H_AC_Rpt_20171128122048.PDF

COG_Dominator_710H_Direct_Rpt_20171128122054.pdf

Other proposed operations facets description:

Drilling Program Attached

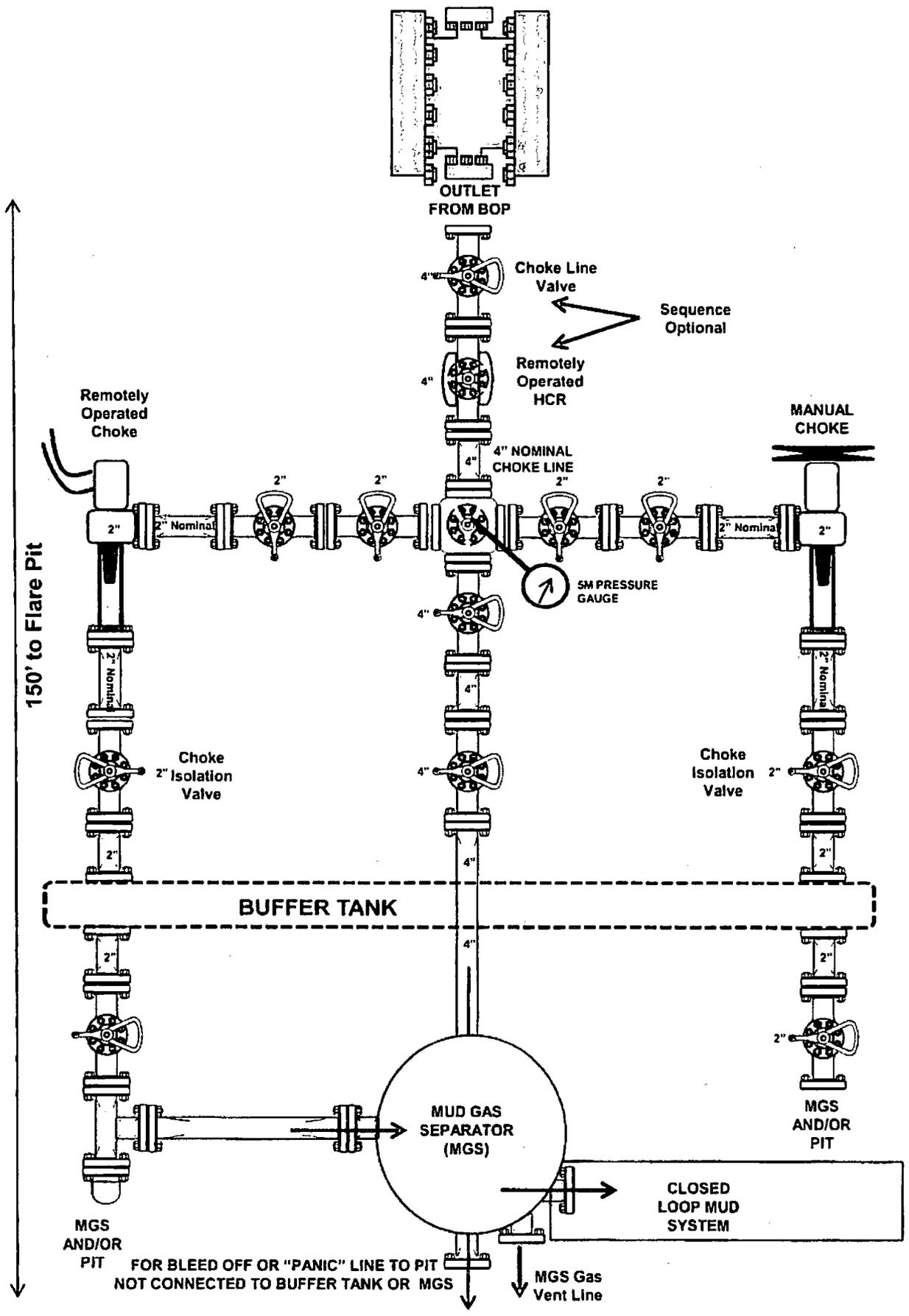
Other proposed operations facets attachment:

COG_Dominator_710H_Drill_Rpt_20171128122102.pdf

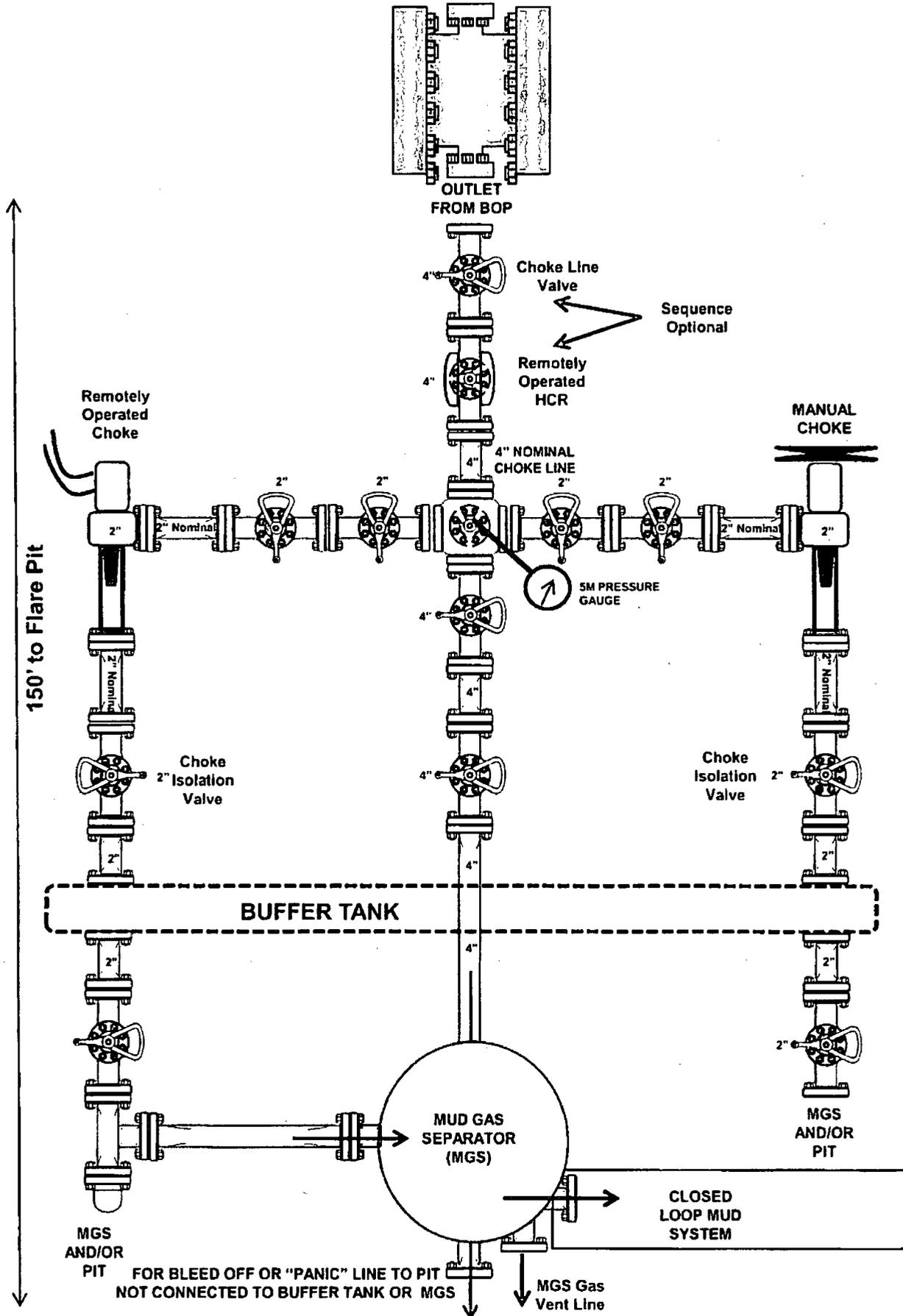
Other Variance attachment:

COG_6.75_5M_Variance_WCP_20171128085443.pdf

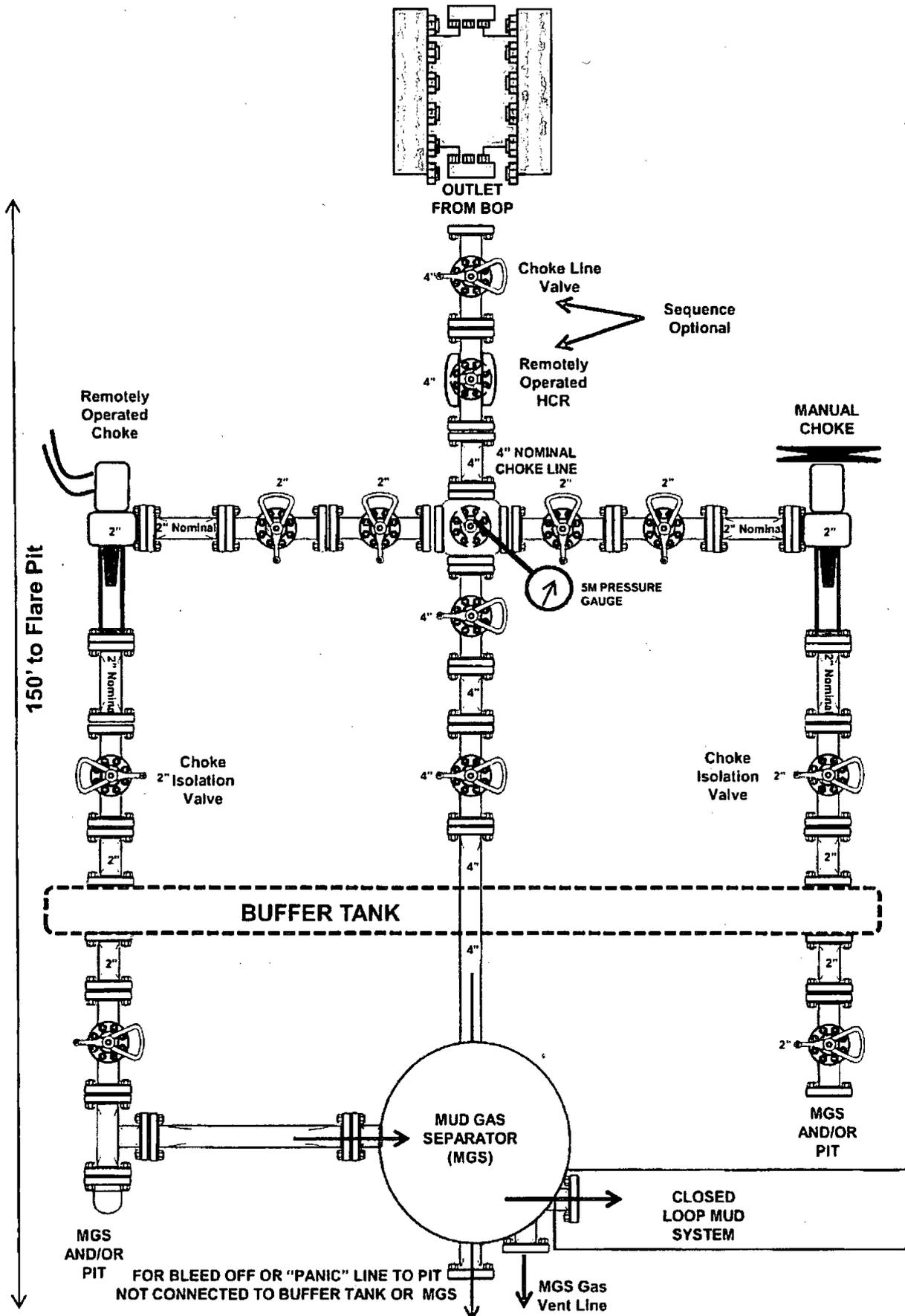
3M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



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

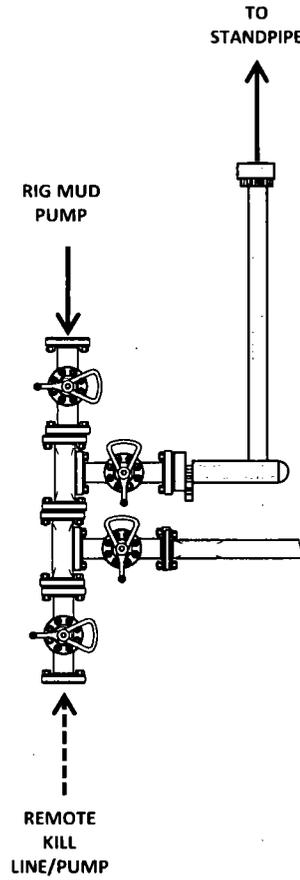


5M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)

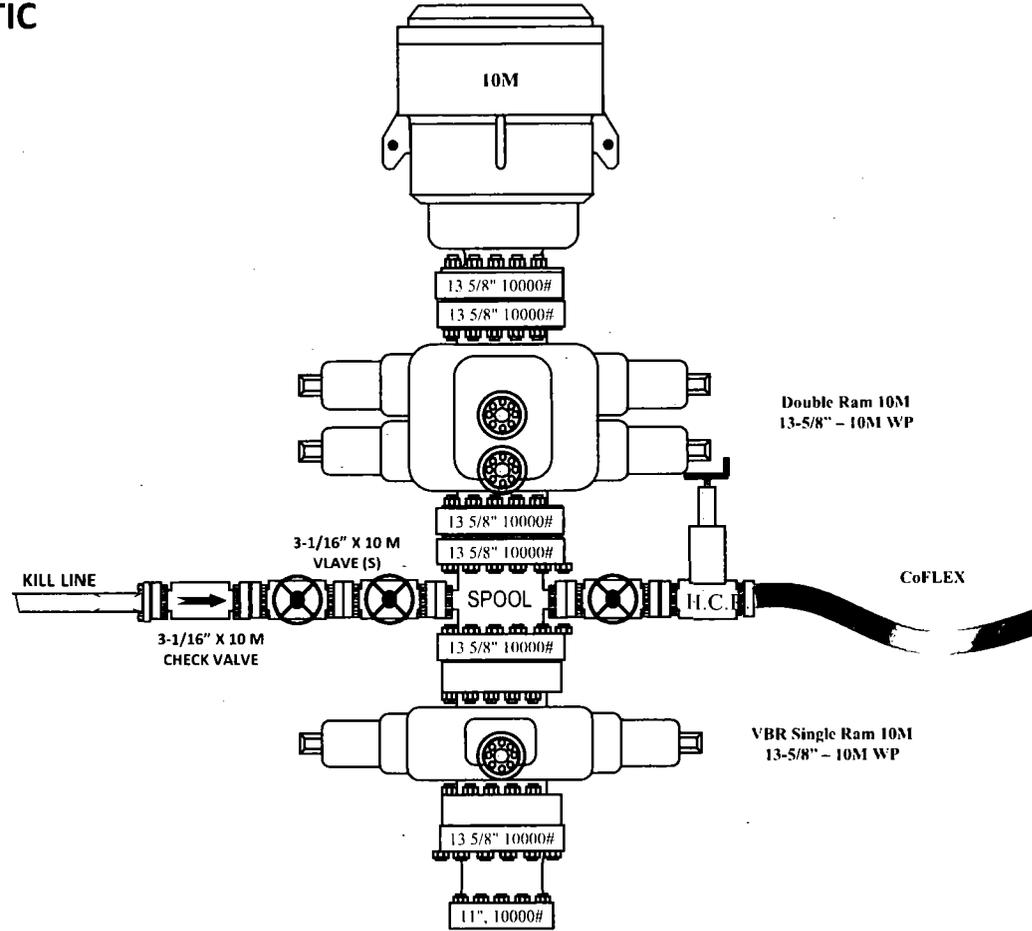


10M BOP Stack

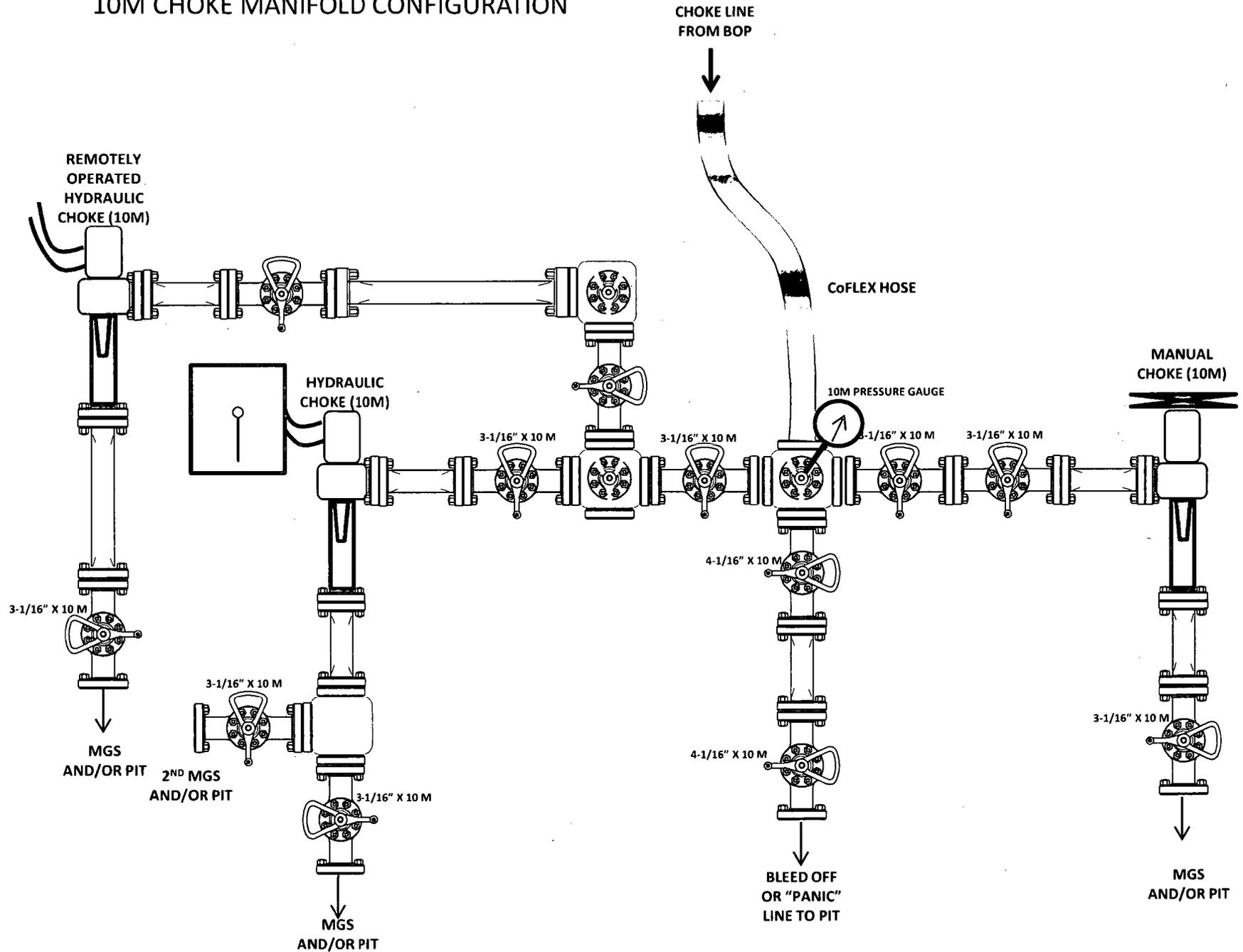
10M REMOTE KILL SCHEMATIC



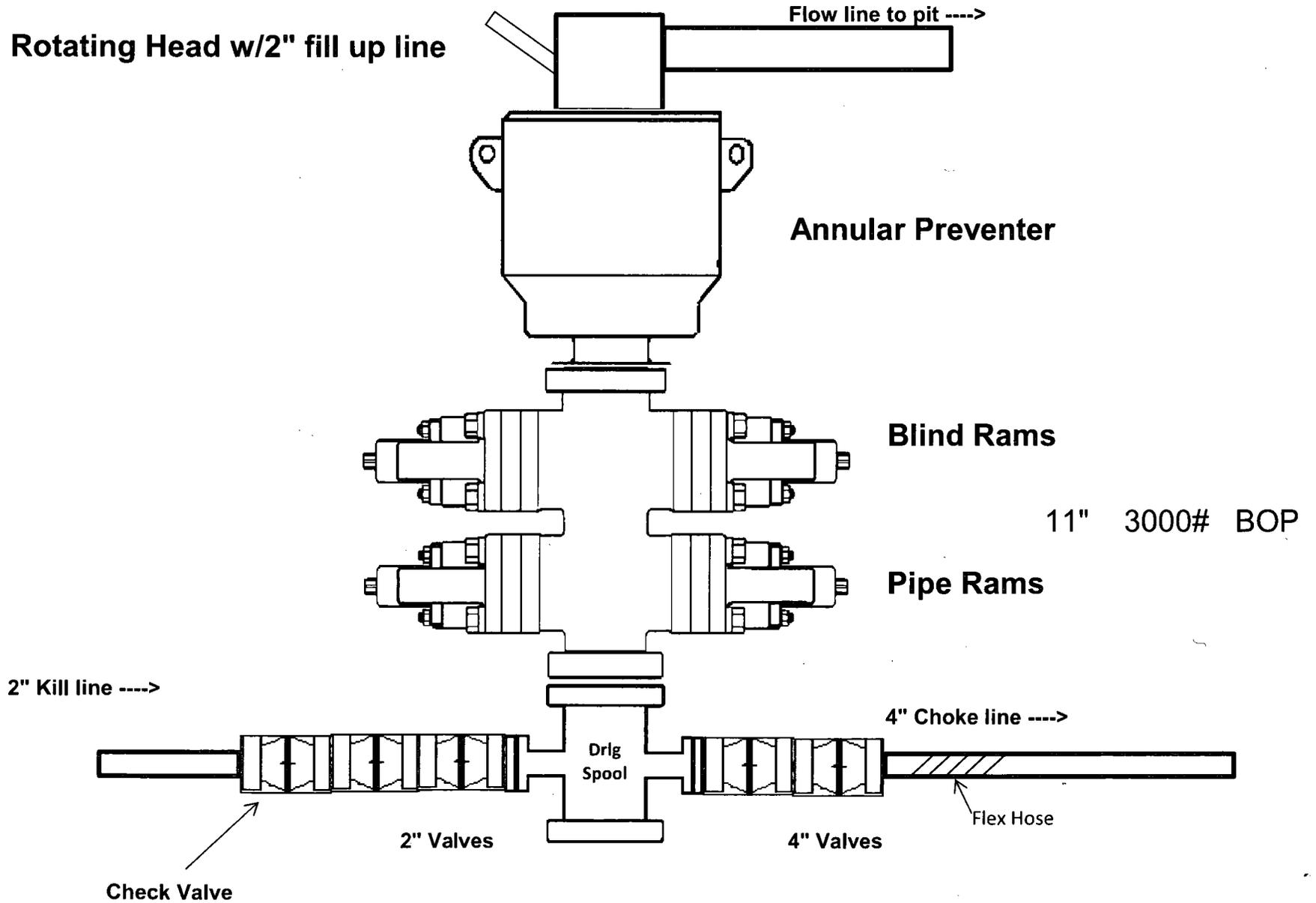
10M BOP Stack (10M Annular)



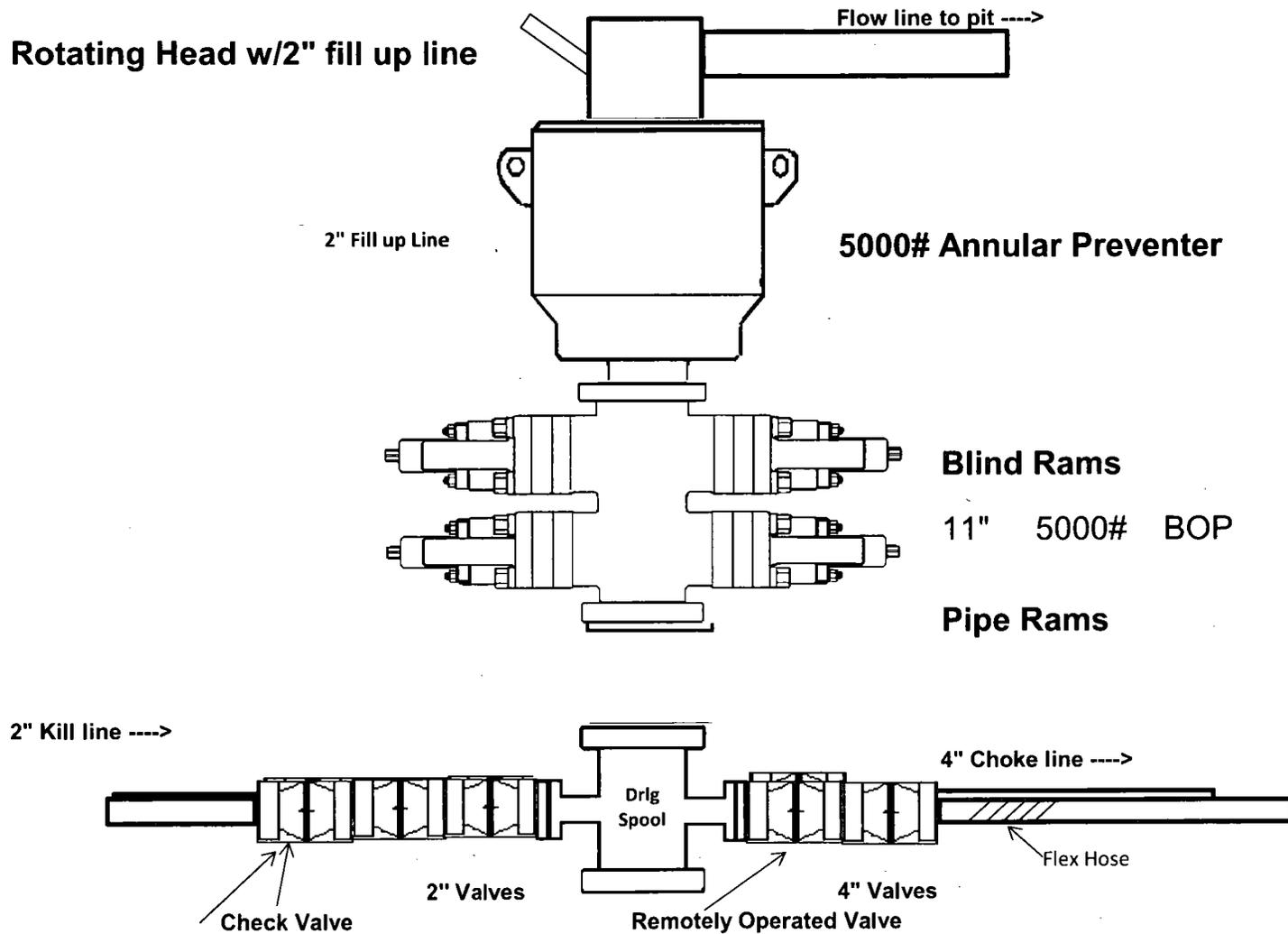
10M CHOKE MANIFOLD CONFIGURATION



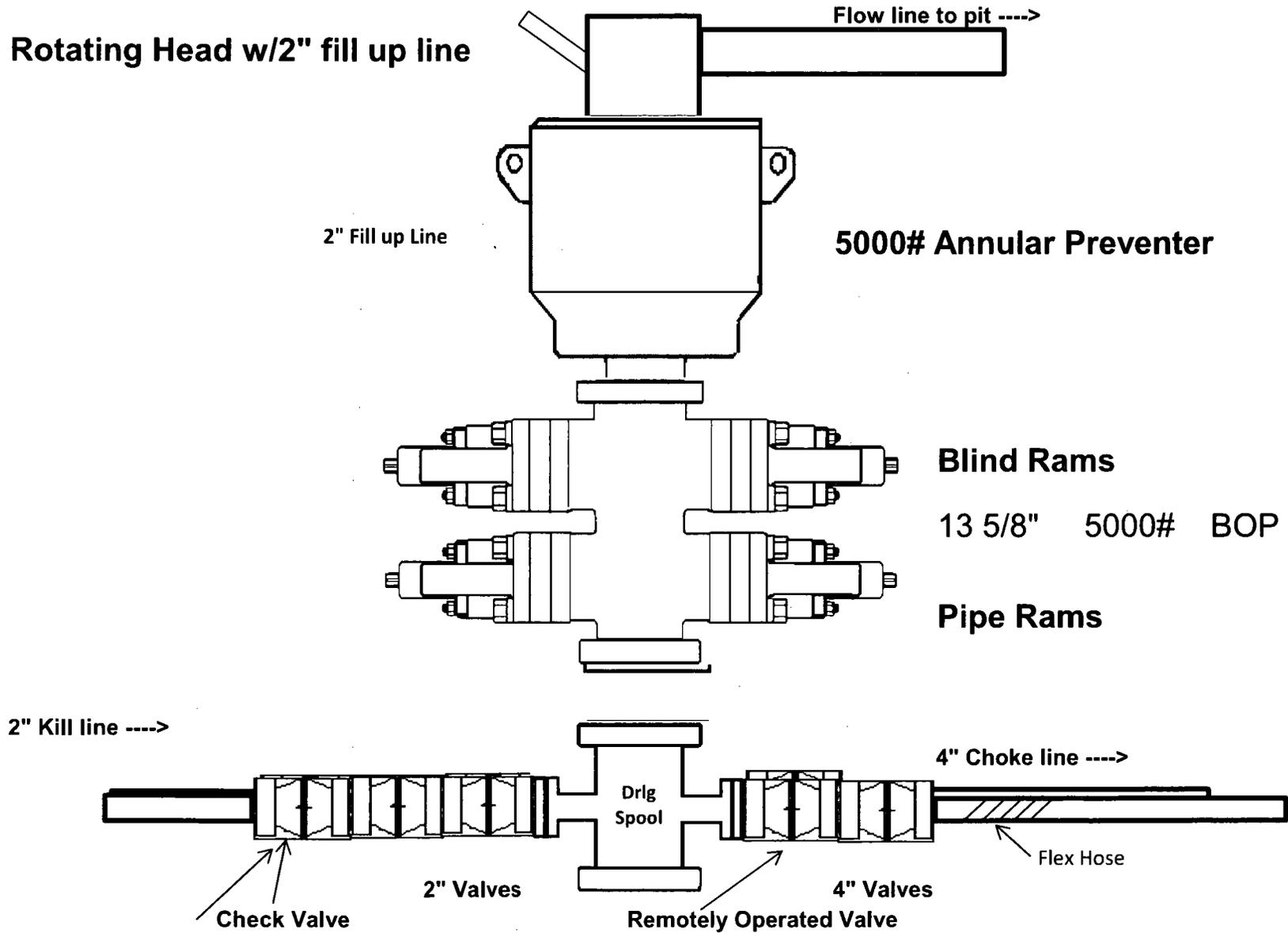
3,000 psi BOP Schematic



5,000 psi BOP Schematic



5,000 psi BOP Schematic





Midwest Hose
& Specialty, Inc.

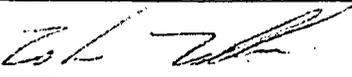
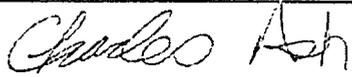
Certificate of Conformity

Customer: HOUSTON	Customer P.O.# 0
Sales Order # 0	Date Assembled: 3/3/2011
Specifications	
Hose Assembly Type: Choke & Kill	Rig # 23
Assembly Serial # 94260	Hose Lot # and Date Code 5544-05/2010
Hose Working Pressure (psi) 10000	Test Pressure (psi) 15000
Hose Assembly Description:	CK64-SS-10K-6410K-6410K-11.00' FT-W/LIFTERS
<p>We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.</p>	
Supplier: Midwest Hose & Specialty, Inc. 3312 S I-35 Service Rd Oklahoma City, OK 73129	
Comments:	
Approved By	Date
<i>Charles Ash</i>	5/1/2017



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	HOUSTON	Hose Assembly Type	Choke & Kill
MWH Sales Representative	Mike Lopez	Certification	API 7K/FSL LEVEL2
Date Assembled	3/3/2011	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #		Hose Lot # and Date Code	5544-05/2010
Customer Purchase Order #		Hose I.D. (Inches)	4"
Assembly Serial # (Pick Ticket #)	94260	Hose O.D. (Inches)	6.48"
Hose Assembly Length	45FT	Armor (yes/no)	YES
Fittings			
End A		End B	
Stem (Part and Revision #)	R4.0X64WB	Stem (Part and Revision #)	R4.0X64WB
Stem (Heat #)		Stem (Heat #)	
Ferrule (Part and Revision #)	RF4.0X6370	Ferrule (Part and Revision #)	RF4.0X6370
Ferrule (Heat #)		Ferrule (Heat #)	
Connection (Flange Hammer Union Part)	4-1/16 10K	Connection (Part #)	4-1//16 10K
Connection (Heat #)		Connection (Heat #)	
Nut (Part #)		Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	6.38"	Dies Used	6.38"
Hydrostatic Test Requirements			
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.	
Test Pressure Hold Time (minutes)	11		
Date Tested	Tested By	Approved By	
3/3/2011			



Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

March 3, 2011

Customer: Houston

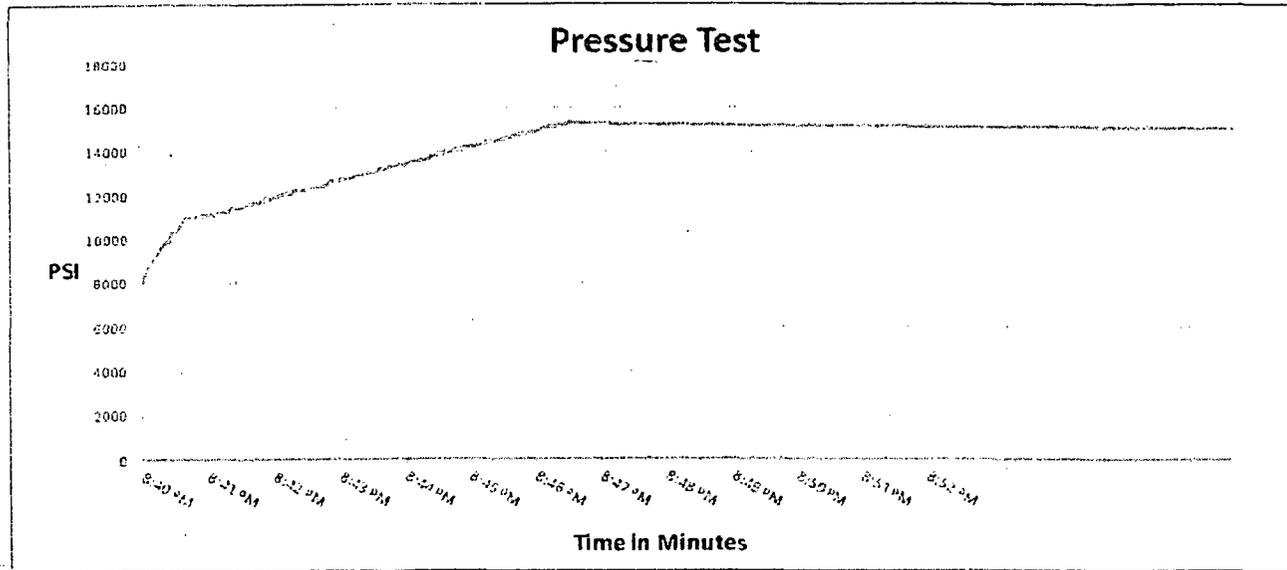
Pick Ticket #: 94260

Hose Specifications

Hose Type C & K	Length 45'
L.D. 4"	O.D. 6.03"
Working Pressure 10000 PSI	Burst Pressure Standard Safety Multiplier Applies

Verification

Type of Fitting 4 1/16 10K	Coupling Method Swage
Die Size 6.38"	Final O.D. 6.25"
Hose Serial # 5544	Hose Assembly Serial # 75793



Test Pressure
15000 PSI

Time Held at Test Pressure
11 Minutes

Actual Burst Pressure:

Peak Pressure
15483 PSI

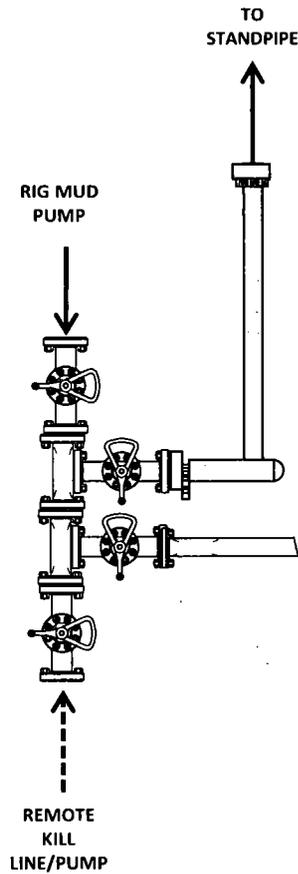
Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Zac McConnell

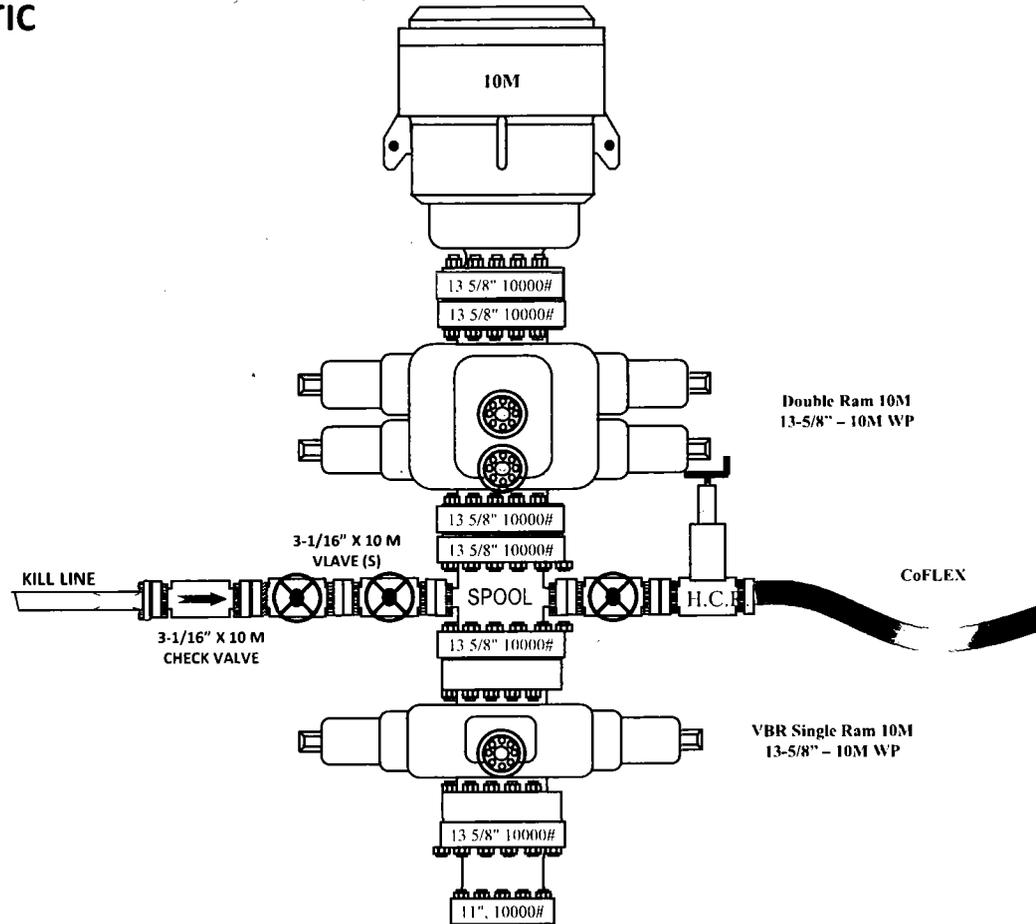
Approved By: Kim Thomas

10M BOP Stack

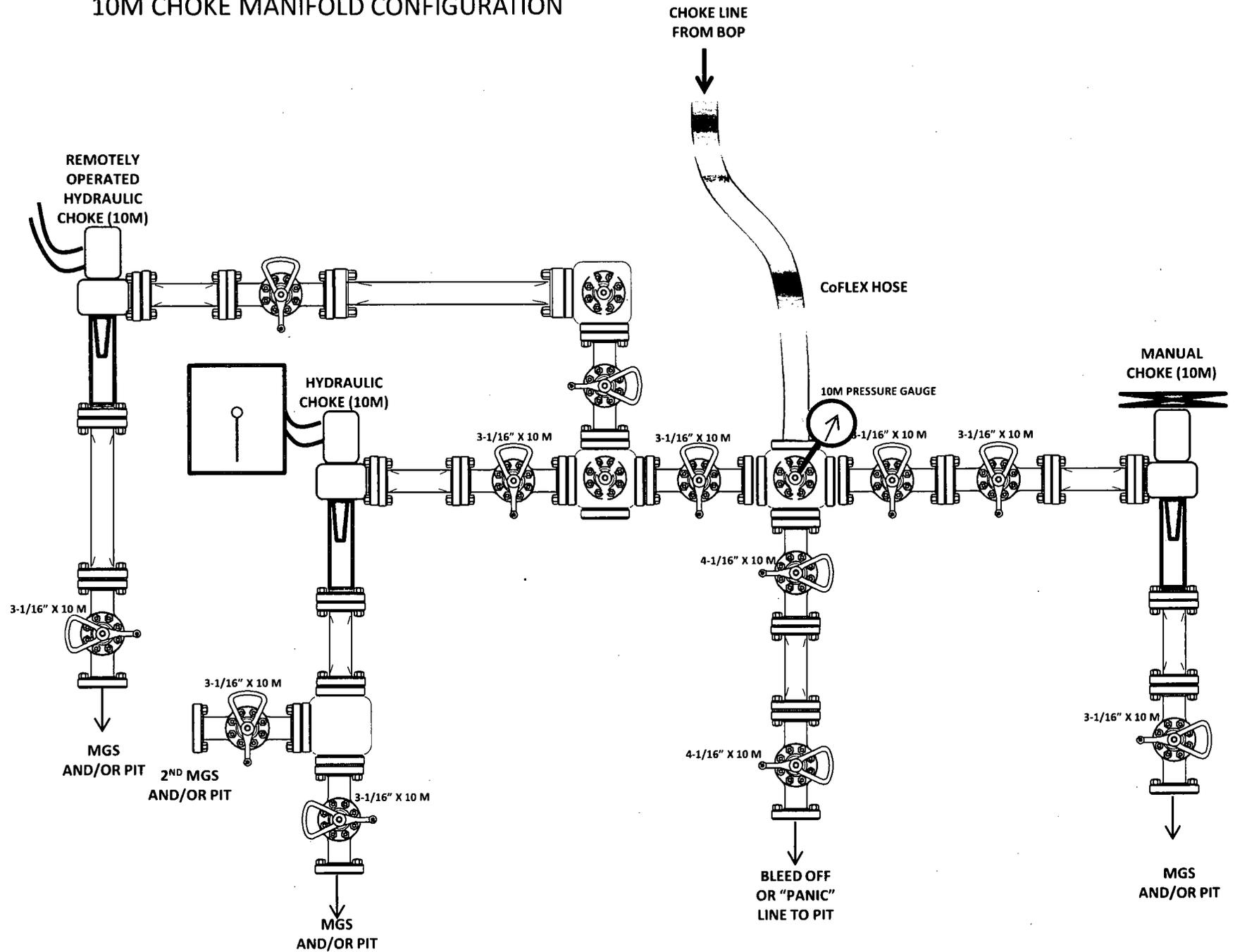
10M REMOTE KILL SCHEMATIC



10M BOP Stack (10M Annular)



10M CHOKE MANIFOLD CONFIGURATION





Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: HOUSTON	Customer P.O.# 0
Sales Order # 0	Date Assembled: 3/3/2011
Specifications	
Hose Assembly Type: Choke & Kill	Rig # 23
Assembly Serial # 94260	Hose Lot # and Date Code 5544-05/2010
Hose Working Pressure (psi) 10000	Test Pressure (psi) 15000
Hose Assembly Description:	CK64-SS-10K-6410K-6410K-11.00' FT-W/LIFTERS
<p>We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.</p>	
Supplier: Midwest Hose & Specialty, Inc. 3312 S I-35 Service Rd Oklahoma City, OK 73129	
Comments:	
Approved By	Date
<i>Charles Ash</i>	5/1/2017



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	HOUSTON	Hose Assembly Type	Choke & Kill
MWH Sales Representative	Mike Lopez	Certification	API 7K/FSL LEVEL2
Date Assembled	3/3/2011	Hose Grade	MUD
Location Assembled	OKC	Hose Working Pressure	10000
Sales Order #		Hose Lot # and Date Code	5544-05/2010
Customer Purchase Order #		Hose I.D. (Inches)	4"
Assembly Serial # (Pick Ticket #)	94260	Hose O.D. (Inches)	6.48"
Hose Assembly Length	45FT	Armor (yes/no)	YES
Fittings			
End A		End B	
Stem (Part and Revision #)	R4.0X64WB	Stem (Part and Revision #)	R4.0X64WB
Stem (Heat #)		Stem (Heat #)	
Ferrule (Part and Revision #)	RF4.0X6370	Ferrule (Part and Revision #)	RF4.0X6370
Ferrule (Heat #)		Ferrule (Heat #)	
Connection: Flange Hammer Union Part	4-1/16 10K	Connection (Part #)	4-1//16 10K
Connection (Heat #)		Connection (Heat #)	
Nut (Part #)		Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	6.38"	Dies Used	6.38"
Hydrostatic Test Requirements			
Test Pressure (psi)	15,000	Hose assembly was tested with ambient water temperature.	
Test Pressure Hold Time (minutes)	11		
Date Tested		Tested By	Approved By
3/3/2011			



Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

March 3, 2011

Customer: Houston

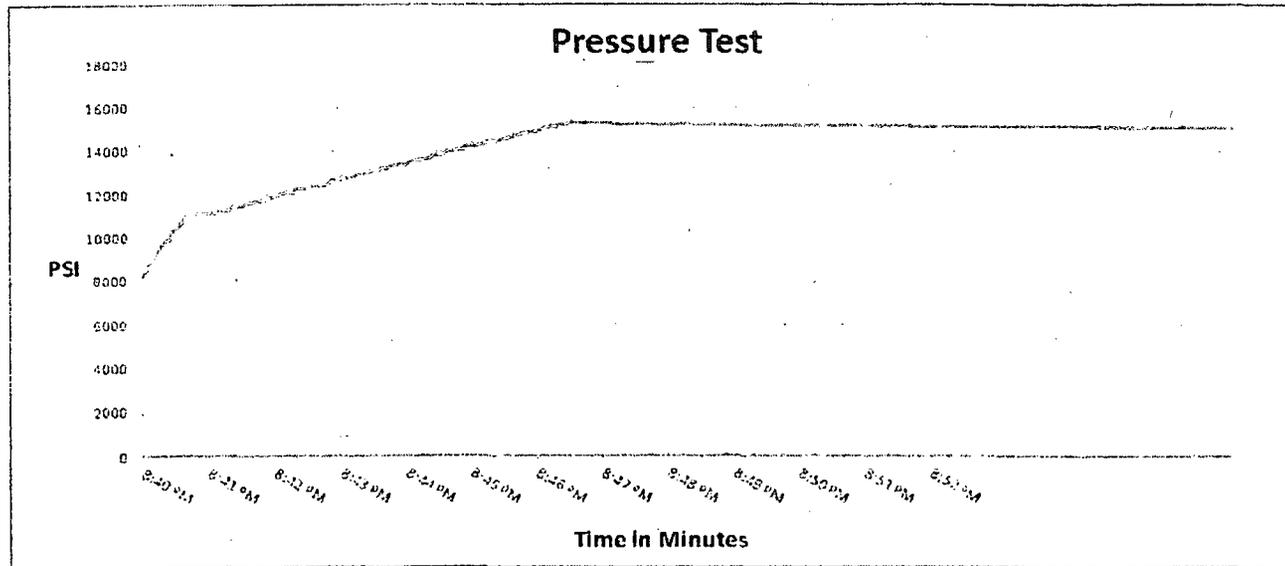
Pick Ticket #: 94260

Hose Specifications

<u>Hose Type</u>	<u>Length</u>
C & K	45'
<u>I.D.</u>	<u>O.D.</u>
4"	6.09"
<u>Working Pressure</u>	<u>Burst Pressure</u>
10000 PSI	Standard Safety Multiplier Applies

Verification

<u>Type of Fitting</u>	<u>Coupling Method</u>
2 1/16 10K	Swage
<u>Die Size</u>	<u>Flat O.D.</u>
6.38"	6.25"
<u>Hose Serial #</u>	<u>Hose Assembly Serial #</u>
5544	79793



Test Pressure
15000 PSI

Time Held at Test Pressure
11 Minutes

Actual Burst Pressure

Peak Pressure
15463 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: Zac McConnell

Approved By: Kim Thomas

Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body
	From	To							
13.5"	0	1100	10.75"	45.5	N80	BTC	4.91	1.20	20.78
9.875"	0	11799	7.875"	29.7	P110	BTC	1.29	1.03	3.10
6.75"	0	11299	5.5"	23	P110	BTC	1.82	1.89	3.18
6.75"	11299	17,373	5"	18	P110	BTC	1.82	1.89	3.18
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. Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and
 All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

The 5" casing will be run back 500' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for the cement bond tie in.

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
BLM Minimum Safety 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".

COG Operating LLC, Columbus Federal Com 21H

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Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Col	SF Burst	SF Tension
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COG Operating LLC, Columbus Federal Com 21H

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The 5" casing will be run back 500' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for the cement bond tie in.

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The 5" casing will be run back 500' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for the cement bond tie in.

COG Operating, LLC - Dominator 25 Federal Com #710H

1. Geologic Formations

TVD of target	12,751' EOL	Pilot hole depth	NA
MD at TD:	17,373'	Deepest expected fresh water:	142'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1075	Water	
Top of Salt	1469	Salt	
Base of Salt	5029	Salt	
Lamar	5147	Salt Water	
Bell Canyon	5245	Salt Water	
Cherry Canyon	6244	Oil/Gas	
Brushy Canyon	7824	Oil/Gas	
Bone Spring Lime	9290	Oil/Gas	
U. Avalon Shale	9495	Oil/Gas	
L. Avalon Shale	9695	Oil/Gas	
1st Bone Spring Sand	10270	Oil/Gas	
2nd Bone Spring Sand	10796	Oil/Gas	
3rd Bone Spring Sand	11899	Oil/Gas	
Wolfcamp	12370	Target Oil/Gas	
Strawn	14197	Not Penetrated	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body
	From	To							
13.5"	0	1100	10.75"	45.5	N80	BTC	4.91	1.20	20.78
9.875"	0	11799	7.875"	29.7	P110	BTC	1.29	1.03	3.10
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The 5" casing will be run back 500' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for the cement bond tie in.

COG Operating, LLC - Dominator 25 Federal Com #710H

	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 rd 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 nd 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?	

COG Operating, LLC - Dominator 25 Federal Com #710H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft³/ sack	H₂O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	160	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl ₂
Inter.	970	10.3	3.6	21.48	16	Tuned Light Blend
	250	16.4	1.08	4.32	8	Tail: Class H
Prod	180	11.9	2.5	19	72	Lead: 50:50:10 H Blend
	630	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	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
Production	11,299'	35% OH in Lateral (KOP to EOL)

COG Operating, LLC - Dominator 25 Federal Com #710H

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
---	--

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
9-7/8"	13-5/8"	5M	Annular	x	2500 psi
			Blind Ram	x	5M
			Pipe Ram	x	
			Double Ram		
			Other*		
6-3/4"	13-5/8"	10M	Annular	x	50% testing pressure
			Blind Ram	x	10M
			Pipe Ram	x	
			Double Ram	x	
			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.

X	Formation integrity test will be performed per Onshore Order #2. 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.

COG Operating, LLC - Dominator 25 Federal Com #710H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Brine Diesel Emulsion	8.4 - 9	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	10.5 - 12	35-45	<20

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/Visual Monitoring
---	-----------------------------

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
N Density	Pilot Hole TD to ICP
Y CBL	Production casing (If cement not circulated to surface)
Y Mud log	Intermediate shoe to TD
N PEX	

COG Operating, LLC - Dominator 25 Federal Com #710H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7960 psi at 12751' TVD
Abnormal Temperature	NO 180 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	Is it a walking operation?
N	Is casing pre-set?

x	H2S Plan.
x	BOP & Choke Schematics.
x	Directional Plan

1. Component and Preventer Compatibility Table

The table below covers drilling and casing of the 10M MASP portion of the well and outlines the tubulars and the compatible preventers in use. Combined with the mud program, the below documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Component	OD	Preventer	RWP
Drill pipe	4.5"	Upper 4.5-7" VBR Lower 4.5-7" VBR	10M
HWDP	4.5"		
Jars	4.875" - 5"		
Drill collars and MWD tools	4.75" - 5"		
Mud Motor	4.75"-5.875"		
Production casing	5.5" & 5"		
ALL	0- 13.625"	Annular	5M
Open-hole	-	Blind Rams	10M

VBR = Variable Bore Ram with compatible range listed in chart.

2. Well Control and Shut-In Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are minimum tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. The maximum pressure at which well control is transferred from the annular to another compatible ram is 2500 psi.

Drilling:

1. Sound the alarm (alert rig crew)
2. Space out the drill string
3. Shut down pumps and stop the rotary
4. Shut-in the well with the annular with HCR and choke in closed position
5. Confirm the well is shut-in
6. Notify contractor and company representatives
7. Read and record the following data
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
8. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
9. Prepare for well kill operation.

Tripping:

1. Sound alarm (alert rig crew)
2. Stab full opening safety valve and close the valve
3. Space out the drill string
4. Shut-in the well with the annular with HCR and choke in closed position
5. Confirm shut-in
6. Notify contractor and company representatives
7. Read and record the following data:

- Time of shut-in
 - SIDPP and SICP
 - Pit gain
8. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
 9. Prepare for well kill operation.

Running Casing

1. Sound alarm (alert rig crew)
2. Stab crossover and valve and close the valve
3. Shut-in the well with annular with HCR and choke in closed position
4. Confirm shut-in
5. Notify contractor and company representatives
6. Read and record the following data
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
7. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
8. Prepare for well kill operation

No Pipe in Hole (Open Hole)

1. At any point when pipe or BHA are not in BOP stack, well will be shut in with blind rams, HCR will be open and choke will be closed. If pressure increase is observed:
2. Sound alarm (alert crew)
3. Confirm shut-in
4. Notify contractor and company representatives
5. Read and record the following data
 - Time of shut-in
 - Time of pressure increase
 - SICP
6. Prepare for well kill operation

Pulling BHA through BOP Stack

1. Prior to pulling last joint/stand of drillpipe through the stack, perform a flow check. If well is flowing:
 - a. Sound alarm (alert crew)
 - b. Stab full opening safety valve and close the valve
 - c. Space out drill string with tooljoint just beneath the upper pipe ram.
 - d. Shut-in the well with upper pipe ram with HCR and choke in closed position
 - e. Confirm shut-in
 - f. Notify contractor and company representatives
 - g. Read and record the following data
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
 - h. Prepare for well kill operation.

2. With BHA in the stack:
 - a. If possible to pick up high enough, pull BHA clear of the stack
 - i. Follow "Open Hole" procedure above
 - b. If impossible to pick up high enough to pull BHA clear of the stack:
 - i. Stab crossover, make up one joint/stand of drillpipe, and full opening safety valve and close
 - ii. Space out drill string with tooljoint just beneath the upper pipe ram.
 - iii. Shut-in the well with upper pipe ram with HCR and choke in closed position
 - iv. Confirm shut-in
 - v. Notify contractor and company representatives
 - vi. Read and record the following:
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
 - vii. Prepare for well kill operation.

3. Well Control Drills

Well control drills are specific to the rig equipment, personnel and operation at the time a kick occurs. Each crew will execute one drill weekly relevant to ongoing operations, but will make a reasonable attempt to vary the type of drills. The drills will be recorded in the daily drilling log. Below are minimum tasks for respective well control drills.

Drilling/Pit:

Action	Responsible Party
Initiate Drill <ul style="list-style-type: none"> • Lift Flow Sensor or Pit Float to indicate a kick • Immediately record start time 	Company Representative / Rig Manager
Recognition <ul style="list-style-type: none"> • Driller and/or Crew recognizes indicator • Driller stop drilling, pick up off bottom and spaces out drill string, stop pumps and rotary • Conduct flow check 	Driller
Initiate Action <ul style="list-style-type: none"> • Sound alarm, notify rig crew that the well is flowing 	Company Representative / Rig Manager
Reaction <ul style="list-style-type: none"> • Driller moves BOP remote and stands by • Crew is at their assigned stations • Time is stopped • Record time and drill type in the Drilling Report 	Driller / Crew

Tripping Pit Drills (either in the hole or out of the hole)

Action	Responsible Party
Initiate Drill <ul style="list-style-type: none"> • Lift Flow Sensor or Pit Float to indicate a kick • Immediately record start time 	Company Representative / Rig Manager
Recognition <ul style="list-style-type: none"> • Driller recognizes indicator • Suspends tripping operations • Conduct Flow Check 	Driller
Initiate Action <ul style="list-style-type: none"> • Sound alarm, notify rig crew that the well is flowing 	Company Representative / Rig Manager
Reaction <ul style="list-style-type: none"> • Position tool joint above rotary and set slips • Stab FOSV and close valve • Driller moves to BOP remote and stands by • Crew is at their assigned stations • Time is stopped • Record time and drill type in the Drilling Report 	Driller / Crew

Choke

Action	Responsible Party
<ul style="list-style-type: none"> • Have designated choke operator on station at the choke panel • Close annular preventer • Pressure annulus up 200-300 psi • Pump slowly to bump the float and obtain SIDPP • At choke operator instruction, slowly bring pumps online to slow pump rate while holding casing pressure constant at the SICP. • Allow time for the well to stabilize. Mark and record circulating drillpipe pressure. • Measure time lag on drillpipe gauge after choke adjustments. • Hold casing pressure constant as pumps are slowed down while choke is closed. • Record time and drill type in the Drilling Report 	Company Man / Rig Manager & Rig Crew

APD ID: 10400025035

Submission Date: 11/28/2017

Highlighted data
reflects the most
recent changes

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

COG_Dominator_Existing_Rd_20171121094216.pdf

Existing Road Purpose: ACCESS

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

COG_Dominator_710H_Roads_20171128122123.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:

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

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_710H_1Mile_Data_20171128122142.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 62.3' 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 #106H, #306H, #406H, #607H, #709H and #710H wells. The surface Gas Lift Gas pipe of approximately 62.3' 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_20171128112827.pdf

COG_Dominator_710H_Prod_Facil_20171128122155.pdf

COG_Dominator_710H_Flowlines_20171130150657.pdf

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

Section 5 - Location and Types of Water Supply

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_710H_BrineH2O_20171128122500.pdf

COG_Dominator_710H_FreshH2O_20171128135409.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: 710H

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

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 FACILITY **Disposal location ownership:** COMMERCIAL

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

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: YES

Ancillary Facilities attachment:

COG_Dominator_710H_GCP_20171128122659.pdf

Comments: GCP Attached

Section 9 - Well Site Layout

Well Site Layout Diagram:

COG_Dominator_CTB_2_20171128113705.pdf

COG_Dominator_710H_Prod_Facil_20171128122711.pdf

COG_Dominator_710H_Flowlines_20171130150716.pdf

Comments: Production will be sent to the Dominator 25 Federal CTB 2 facility. A surface flow line of approximately 62.3' 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 #106H, #306H, #406H, #607H, #709H and #710H wells. The surface Gas Lift Gas pipe of approximately 62.3' 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: 107H, 307H, 407H, 608H, 712H AND 711H

Recontouring attachment:

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	Well pad interim reclamation (acres): 0.73	Well pad long term disturbance (acres): 2.94
Road proposed disturbance (acres): 3.62	Road interim reclamation (acres): 3.62	Road long term disturbance (acres): 3.62
Powerline proposed disturbance (acres): 0	Powerline interim reclamation (acres): 0	Powerline long term disturbance (acres): 0
Pipeline proposed disturbance (acres): 0.01	Pipeline interim reclamation (acres): 0.01	Pipeline long term disturbance (acres): 0.01
Other proposed disturbance (acres): 22.96	Other interim reclamation (acres): 0	Other long term disturbance (acres): 22.96
Total proposed disturbance: 30.26	Total interim reclamation: 4.36	Total long term disturbance: 29.53

Reconstruction method: New construction of pad.

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

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:

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

Seed Summary	
Seed Type	Pounds/Acre

Total pounds/Acre:

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Rand

Last Name: French

Phone: (432)254-5556

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_710H_Closed_Loop_20171128122759.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:

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

SUPO Additional Information:

Use a previously conducted onsite? YES

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

Other SUPO Attachment

COG_Dominator_710H_Certif_20171128122906.pdf

DOMINATOR 25 FED COM #710H 1 MILE DATA

FID	API	OPERATOR	RANGE	SECTION	TOWNSHIP	WELL_NAME	COMPL_STAT	EW_CD	FTG_EW	FTG_NS	LATITUDE	LONGITUDE	NS_CD
0	3002508388	R B FARRIS	33E		24 25.05	PERRY FEDERAL 001	Plugged	W	660	660	32.110559	-103.532421	S
1	3002508389	ASHMUN & HILLIARD	33E		25 25.05	FEDERAL 001	Plugged	E	660	660	32.096022	-103.519642	S
2	3002508395	HISSOM DRILLING CO	33E		36 25.05	STATE 36 001	Plugged	W	660	660	32.092413	-103.532411	N
3	3002520430	MAX WILSON INC	33E		36 25.05	MARATHON STATE 001	Plugged	W	660	660	32.081531	-103.532403	S
4	3002523155	KING RESOURCES CO	33E		25 25.05	PAN AMERICAN FEDERAL 001	Plugged	W	660	1980	32.09967	-103.532415	S
5	3002526438	EOG RESOURCES INC	33E		24 25.05	ANDRIKOPOULOS 001	Active	W	660	1980	32.114187	-103.532423	S
6	3002527124	BP AMERICA PRODUCTI	33E		24 25.05	ANDRIKOPOPOUS FEDERA 002	Plugged	W	1980	1980	32.114181	-103.528139	S
7	3002527876	J A LEONARD	33E		35 25.05	AMOCO JOHNSON 35 001	Plugged	E	1980	1980	32.088801	-103.540974	N
8	3002528502	SUPERIOR OIL CO	33E		36 25.05	STATE 36 001	Plugged	E	1980	1980	32.088772	-103.523929	N
9	3002536676	EOG RESOURCES INC	33E		24 25.05	VACA 24 FEDERAL 001H	Active	E	990	1980	32.117801	-103.520701	N
10	3002536941	EOG RESOURCES INC	33E		25 25.05	VACA 25 FEDERAL 001	Plugged	E	660	990	32.106003	-103.519636	N
11	3002539532	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 002H	New (Not drilled or compl)	E	430	330	32.095131	-103.535949	S
12	3002539701	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 002H	New (Not drilled or compl)	W	1850	330	32.095188	-103.545711	S
13	3002539702	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 003H	New (Not drilled or compl)	E	2262	330	32.095166	-103.541894	S
14	3002539703	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 004H	New (Not drilled or compl)	E	1350	330	32.095148	-103.538935	S
15	3002539704	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 005H	New (Not drilled or compl)	E	430	330	32.095131	-103.535949	S
16	3002539705	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 006	New (Not drilled or compl)	E	1810	2620	32.101579	-103.540448	N
17	3002540211	COG OPERATING LLC	33E		25 25.05	DOMINATOR 25 FEDERAL 001H	New (Not drilled or compl)	E	380	330	32.107729	-103.518832	N
18	3002540510	COG OPERATING LLC	33E		35 25.05	BURTON 35 001	New (Not drilled or compl)	E	660	660	32.092414	-103.536692	N
19	3002540528	EOG RESOURCES INC	33E		24 25.05	VACA 24 FEDERAL COM 002H	New (Not drilled or compl)	W	430	50	32.108878	-103.533202	S
20	3002540529	EOG RESOURCES INC	33E		24 25.05	VACA 24 FEDERAL COM 004H	New (Not drilled or compl)	W	2190	50	32.108837	-103.52749	S
21	3002540530	EOG RESOURCES INC	33E		24 25.05	VACA 24 FEDERAL COM 003H	New (Not drilled or compl)	W	1390	50	32.108856	-103.530086	S
22	3002540536	EOG RESOURCES INC	33E		24 25.05	VACA 24 FEDERAL COM 005H	New (Not drilled or compl)	E	2190	50	32.108817	-103.524707	S
23	3002540537	EOG RESOURCES INC	33E		24 25.05	VACA 24 FEDERAL COM 006H	New (Not drilled or compl)	E	1310	50	32.108796	-103.521851	S
24	3002540538	EOG RESOURCES INC	33E		24 25.05	VACA 24 FEDERAL COM 007H	New (Not drilled or compl)	E	660	50	32.108781	-103.519741	S
25	3002540585	EOG RESOURCES INC	33E		36 25.05	BLACK BEAR 36 STATE 005	New (Not drilled or compl)	E	1320	1420	32.090327	-103.52185	N
26	3002542153	EOG RESOURCES INC	33E		36 25.05	BROWN BEAR 36 STATE 701H	New (Not drilled or compl)	W	805	230	32.093586	-103.531939	N
27	3002542154	EOG RESOURCES INC	33E		36 25.05	BROWN BEAR 36 STATE 502H	New (Not drilled or compl)	W	835	230	32.093587	-103.531842	N
28	3002542156	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 501H	New (Not drilled or compl)	E	875	330	32.095139	-103.537393	S
29	3002542157	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 502H	New (Not drilled or compl)	E	905	330	32.09514	-103.537491	S
30	3002542567	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 702H	New (Not drilled or compl)	E	957	722	32.106782	-103.537697	N
31	3002542568	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 701H	New (Not drilled or compl)	E	927	721	32.106784	-103.5376	N
32	3002542829	EOG RESOURCES INC	34E		30 25.05	JALELINA 30 FEDERAL 601H	New (Not drilled or compl)	W	685	2140	32.100115	-103.515371	S
33	3002542830	EOG RESOURCES INC	34E		30 25.05	JALELINA 30 FEDERAL 602H	New (Not drilled or compl)	W	715	2140	32.100115	-103.515274	S
34	3002542970	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 703H	New (Not drilled or compl)	E	1985	721	32.106803	-103.541033	N
35	3002542971	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 704H	New (Not drilled or compl)	E	2015	721	32.106803	-103.54113	N
36	3002543006	EOG RESOURCES INC	33E		36 25.05	BLACK BEAR 36 STATE 701H	New (Not drilled or compl)	E	2128	250	32.09354	-103.524491	N
37	3002543007	EOG RESOURCES INC	33E		36 25.05	BLACK BEAR 36 STATE 702H	New (Not drilled or compl)	E	2098	251	32.093537	-103.524394	N
38	3002543008	EOG RESOURCES INC	33E		36 25.05	BLACK BEAR 36 STATE 703H	New (Not drilled or compl)	E	705	253	32.093537	-103.519874	N
39	3002543009	EOG RESOURCES INC	33E		36 25.05	BLACK BEAR 36 STATE 704H	New (Not drilled or compl)	E	675	254	32.093534	-103.519776	N
40	3002543218	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 705H	New (Not drilled or compl)	W	1806	807	32.106592	-103.54571	N
41	3002543219	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 706H	New (Not drilled or compl)	W	1776	807	32.106592	-103.545808	N
42	3002543574	EOG RESOURCES INC	34E		30 25.05	HOUND 30 FEDERAL 701H	New (Not drilled or compl)	W	644	2191	32.100255	-103.515504	S
43	3002543575	EOG RESOURCES INC	34E		30 25.05	HOUND 30 FEDERAL 702H	New (Not drilled or compl)	W	674	2191	32.100255	-103.515407	S
44	3002543583	EOG RESOURCES INC	33E		36 25.05	BLACK BEAR 36 STATE 601H	New (Not drilled or compl)	E	1160	250	32.093543	-103.52135	N
45	3002543585	EOG RESOURCES INC	33E		36 25.05	BLACK BEAR 36 STATE 705H	New (Not drilled or compl)	E	1195	250	32.093543	-103.521464	N
46	3002543850	EOG RESOURCES INC	33E		26 25.05	LOMAS ROJAS 26 STATE COM 601H	New (Not drilled or compl)	E	1328	713	32.106813	-103.538901	N

47	3002543851	EOG RESOURCES INC	33E	26	25.0S	LOMAS ROJAS 26 STATE COM 602H	New (Not drilled or compl)	W	2518	714	32.106835	-103.543397	N
48	3002543852	EOG RESOURCES INC	33E	26	25.0S	LOMAS ROJAS 26 STATE COM 603H	New (Not drilled or compl)	W	2448	714	32.106836	-103.543624	N
49	3002543853	EOG RESOURCES INC	33E	26	25.0S	LOMAS ROJAS 26 STATE COM 709H	New (Not drilled or compl)	E	1363	713	32.106814	-103.539015	N
50	3002543854	EOG RESOURCES INC	33E	26	25.0S	LOMAS ROJAS 26 STATE COM 710H	New (Not drilled or compl)	W	2483	714	32.106836	-103.54351	N
51	3002543877	EOG RESOURCES INC	33E	23	25.0S	CABALLO 23 FEDERAL 703H	New (Not drilled or compl)	W	1755	300	32.109636	-103.545857	S
52	3002543878	EOG RESOURCES INC	33E	23	25.0S	CABALLO 23 FEDERAL 704H	New (Not drilled or compl)	W	1790	300	32.109635	-103.545743	S

CONCHO
 COG Operating LLC
 2208 West Main Street
 Artesia, NM 88210

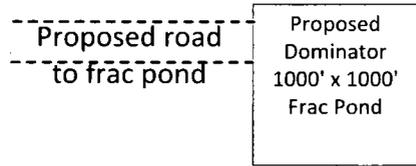
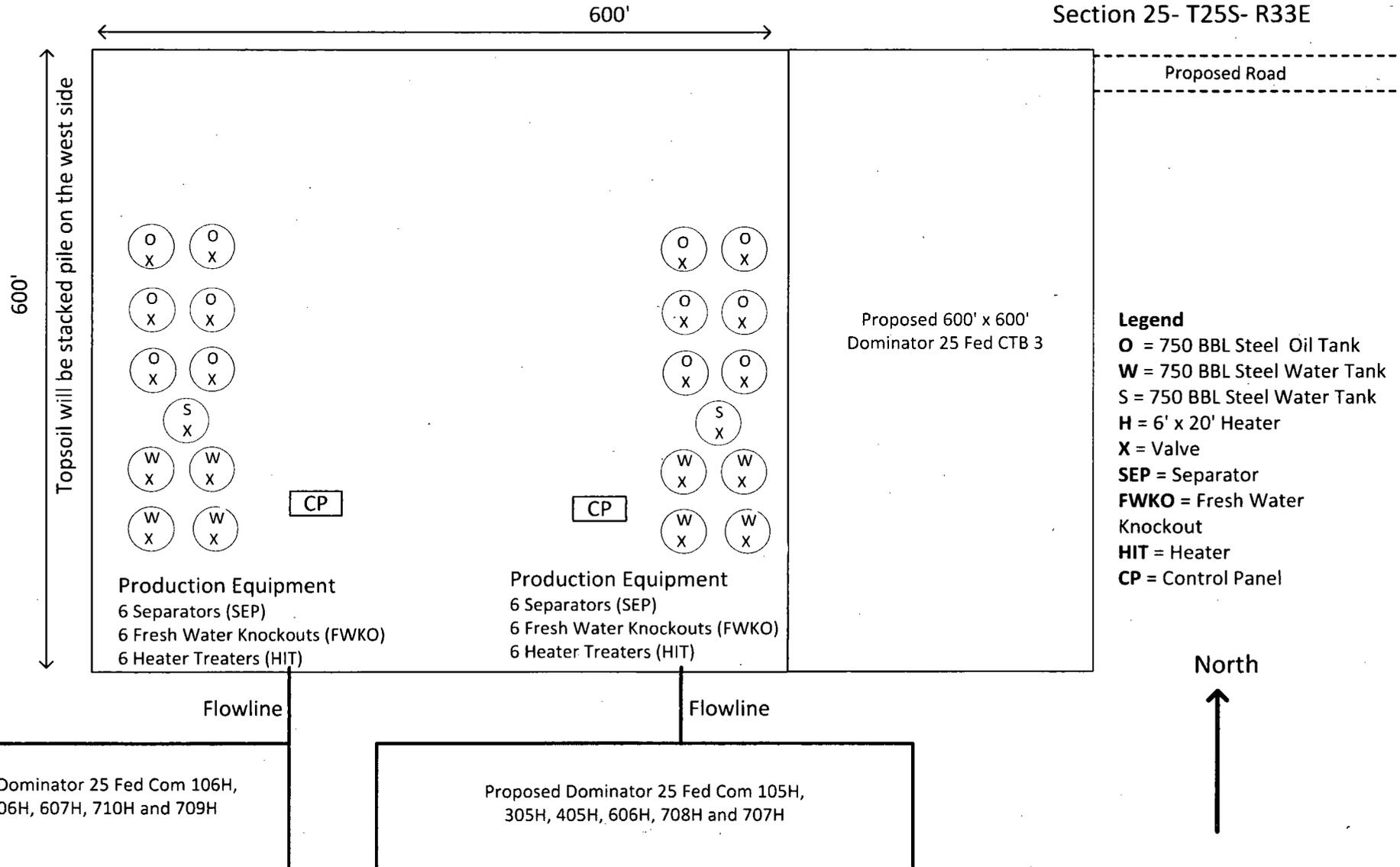


Exhibit 3

Well Site Layout

Production Facility Layout

Dominator 25 Federal CTB 2
 Section 25- T25S- R33E



GROUP 1
 Dominator 25 Fed #108H
 Dominator 25 Fed #308H
 Dominator 25 Fed #408H
 Dominator 25 Fed #609H
 Dominator 25 Fed #714H
 Dominator 25 Fed #713H

GROUP 2
 Dominator 25 Fed #107H
 Dominator 25 Fed #307H
 Dominator 25 Fed #407H
 Dominator 25 Fed #608H
 Dominator 25 Fed #712H
 Dominator 25 Fed Com #711H

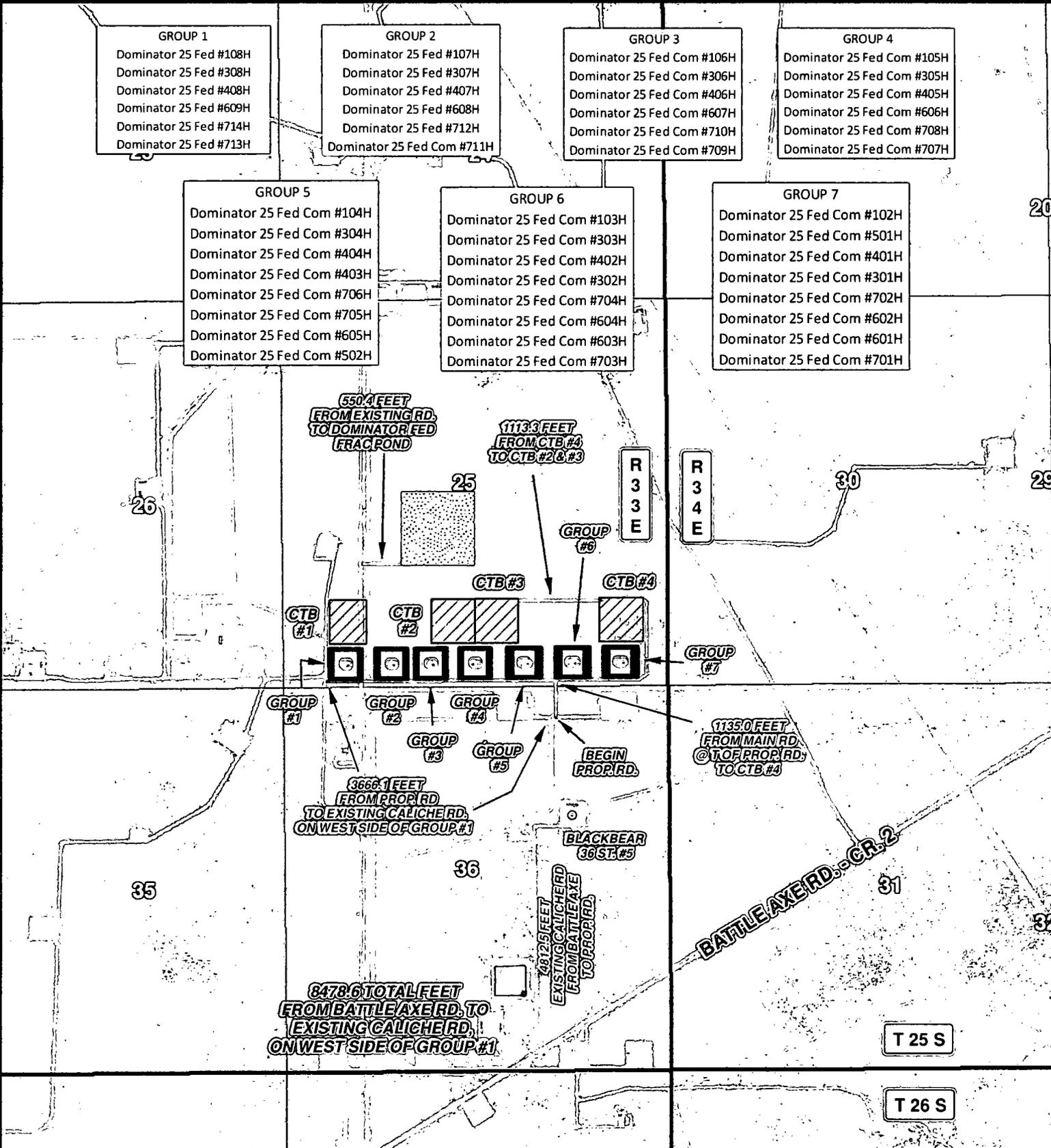
GROUP 3
 Dominator 25 Fed Com #106H
 Dominator 25 Fed Com #306H
 Dominator 25 Fed Com #406H
 Dominator 25 Fed Com #607H
 Dominator 25 Fed Com #710H
 Dominator 25 Fed Com #709H

GROUP 4
 Dominator 25 Fed Com #105H
 Dominator 25 Fed Com #305H
 Dominator 25 Fed Com #405H
 Dominator 25 Fed Com #606H
 Dominator 25 Fed Com #708H
 Dominator 25 Fed Com #707H

GROUP 5
 Dominator 25 Fed Com #104H
 Dominator 25 Fed Com #304H
 Dominator 25 Fed Com #404H
 Dominator 25 Fed Com #403H
 Dominator 25 Fed Com #706H
 Dominator 25 Fed Com #705H
 Dominator 25 Fed Com #605H
 Dominator 25 Fed Com #502H

GROUP 6
 Dominator 25 Fed Com #103H
 Dominator 25 Fed Com #303H
 Dominator 25 Fed Com #402H
 Dominator 25 Fed Com #302H
 Dominator 25 Fed Com #704H
 Dominator 25 Fed Com #604H
 Dominator 25 Fed Com #603H
 Dominator 25 Fed Com #703H

GROUP 7
 Dominator 25 Fed Com #102H
 Dominator 25 Fed Com #501H
 Dominator 25 Fed Com #401H
 Dominator 25 Fed Com #301H
 Dominator 25 Fed Com #702H
 Dominator 25 Fed Com #602H
 Dominator 25 Fed Com #601H
 Dominator 25 Fed Com #701H

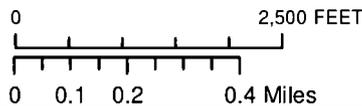


LEGEND

- WELL
- WELLPAD
- ▨ TANK BATTERY
- ▤ FRAC POND
- PROPOSED ROAD
- EXISTING ROAD

DOMINATOR 25 FED/FED COM CTB'S/LEASES & FRAC POND ROADS

SEC: 25 TWP: 25 S. RGE: 33 E. SURVEY: N.M.P.M.
 STATE: NEW MEXICO LEASE: DOMINATOR FED/FED COM
 W.O. # 17-1250, 57, 64, 71, 80, 89, 1346 COUNTY: LEA



1 IN = 1,750 FT

LOCATION MAP

IMAGERY

11/20/2017

V.D.



COG OPERATING, LLC



HARCROW SURVEYING, LLC.
 2314 W. MAIN ST, ARTESIA, NM 88210
 PH: (575) 746-2158 FAX: (575) 746-2158
 TEXAS FIRM NO. 10194089
 c.harcrow@harcrowsurveying.com

Surface Use Plan
COG Operating LLC
Dominator 25 Federal Com 710H
SHL: 280' FSL & 2032' FWL UL N
Section 25, T25S, R33E
BHL: 200' FNL & 1750' 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 3rd day of November, 2017.

Signed: Mayte Reyes

Printed Name: Mayte Reyes

Position: Regulatory Analyst

Address: 2208 W. Main Street, Artesia, NM 88210

Telephone: (575) 748-6945

E-mail: mreyes1@concho.com

Field Representative (if not above signatory): Rand French

Telephone: (575) 748-6940. E-mail: rfrench@concho.com

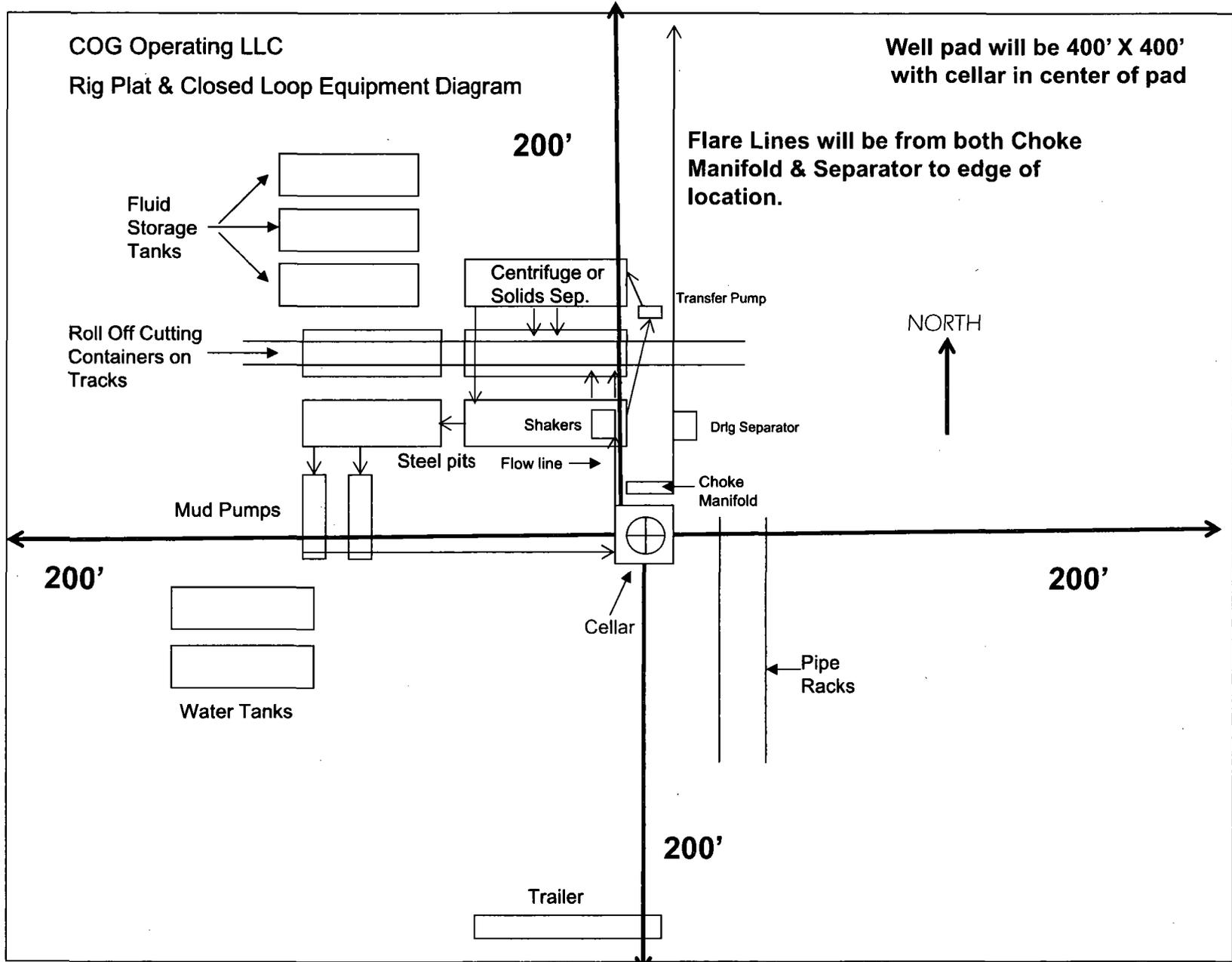


Exhibit 1

"I further certify that COG will comply with Rule 19.15.17 NMAC by using a Closed Loop System."

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:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

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

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

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

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

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

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

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:

Injection well name:

Injection well API number:

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:



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

Bond Info Data Report

04/23/2018

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:



APD ID: 10400025035

Submission Date: 11/28/2017

Highlighted data reflects the most recent changes

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL COM

Well Number: 710H

[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	3336	0	0		NONE	No
2	RUSTLER	2264	1075	1075		NONE	No
3	TOP SALT	1870	1469	1469	SALT	NONE	No
4	BASE OF SALT	-1690	5029	5029	ANHYDRITE	NONE	No
5	LAMAR	-1808	5147	5147	LIMESTONE	NATURAL GAS,OIL	No
6	BELL CANYON	-1906	5245	5245		NONE	No
7	CHERRY CANYON	-2905	6244	6244		NATURAL GAS,OIL	No
8	BRUSHY CANYON	-4485	7824	7824		NATURAL GAS,OIL	No
9	BONE SPRING LIME	-5951	9290	9290	SANDSTONE	NATURAL GAS,OIL	No
10	UPPER AVALON SHALE	-6156	9495	9495	SHALE	NATURAL GAS,OIL	No
11	---	-6356	9695	9695		NATURAL GAS,OIL	No
12	BONE SPRING 1ST	-6931	10270	10270		NATURAL GAS,OIL	No
13	BONE SPRING 2ND	-7457	10796	10796		NATURAL GAS,OIL	No
14	BONE SPRING 3RD	-8560	11899	11899		NATURAL GAS,OIL	No
15	WOLFCAMP	-9031	12370	12370		NATURAL GAS,OIL	Yes
16	STRAWN	-10858	14197	14197		NATURAL GAS,OIL	No

Section 2 - Blowout Prevention