

OCD Hobbs

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD
MAY 23 2018
RECEIVED

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

| | | |
|--|---|---|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. NMNM114987 |
| 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone | | 6. If Indian, Allottee or Tribe Name |
| 2. Name of Operator COG OPERATING LLC (229137) | | 7. If Unit or CA Agreement, Name and No. |
| 3a. Address 600 West Illinois Ave Midland TX 79701 | | 8. Lease Name and Well No. (78728) DOMINATOR 25 FEDERAL 501H |
| 3b. Phone No. (include area code) (432)683-7443 | | 9. APT Well No. 30-025-44813 |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SESE / 310 FSL / 660 FEL / LAT 32.095115 / LONG -103.519658 At proposed prod. zone NENE / 200 FNL / 660 FEL / LAT 32.108212 / LONG -103.519655 | | 10. Field and Pool, or Exploratory (97900) WILDCAT / BONE SPRING |
| 14. Distance in miles and direction from nearest town or post office* 19 miles | | 11. Sec., T, R, M. or Blk. and Survey or Area SEC 25 / T25S / R33E / NMP |
| 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, 350 feet applied for, on this lease, ft. | 19. Proposed Depth 11345 feet / 16094 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 05/01/2018 |
| 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)

*(Instructions on page 2)

GCP Rec 5/23/18

APPROVED WITH CONDITIONS
Approval Date: 05/01/2018

KZ
05/24/18

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 / 660 FEL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.095115 / LONG: -103.519658 (TVD: 0 feet, MD: 0 feet)
- PPP: SESE / 330 FSL / 660 FEL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.09517 / LONG: -103.519658 (TVD: 5500 feet, MD: 5500 feet)
- BHL: NENE / 200 FNL / 660 FEL / TWSP: 25S / RANGE: 33E / SECTION: 25 / LAT: 32.108212 / LONG: -103.519655 (TVD: 11345 feet, MD: 16094 feet)

BLM Point of Contact

Name: Sipra Dahal
Title: Legal Instruments Examiner
Phone: 5752345983
Email: sdahal@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.

CONFIDENTIAL



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

Operator Certification Data Report

05/08/2018

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.

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



APD ID: 10400025215

Submission Date: 12/05/2017

Highlighted data reflects the most recent changes
[Show Final Text](#)

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400025215

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: 501H

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: 501H

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: 350 FT

Distance to lease line: 200 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: COG_Dominator_501H_C102_20171204123447.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 |
|---------|--------------|---------|--------------|------|-------|---------|-------------------|----------|-------------|--------|----------|----------|------------|--------------|-----------|-------|-------|
| 310 | FSL | 660 | FEL | 25S | 33E | 25 | SESE 5 | 32.09511 | -103.519658 | LEA | NEW MEXI | NEW MEXI | F | NMNM 114987 | 332 3 | 0 | 0 |
| 310 | FSL | 660 | FEL | 25S | 33E | 25 | SESE 5 | 32.09511 | -103.519658 | LEA | NEW MEXI | NEW MEXI | F | NMNM 114987 | 332 3 | 0 | 0 |
| 330 | FSL | 660 | FEL | 25S | 33E | 25 | SESE | 32.09517 | -103.519658 | LEA | NEW MEXI | NEW MEXI | F | NMNM 114987 | -217 7 | 550 0 | 550 0 |

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

| | 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 |
|--|---------|--------------|---------|--------------|------|-------|---------|-------------------|-----------|--------------|--------|----------|----------|------------|--------------|-----------|-------|-------|
| | 330 | FNL | 660 | FEL | 25S | 33E | 25 | NENE 5 | 32.107855 | - 103.519655 | LEA | NEW MEXI | NEW MEXI | F | NMNM 114987 | - 8002 | 16000 | 11325 |
| | 200 | FNL | 660 | FEL | 25S | 33E | 25 | NENE 2 | 32.108212 | - 103.519655 | LEA | NEW MEXI | NEW MEXI | F | NMNM 114987 | - 8022 | 16094 | 11345 |



APD ID: 10400025215

Submission Date: 12/05/2017

Highlighted data reflects the most recent changes

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

[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 | No |
| 14 | BONE SPRING 2ND | -7566 | 10889 | 10889 | | NATURAL GAS,OIL | Yes |
| 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: 501H

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_501H_2M_Choke_20171204122736.pdf

BOP Diagram Attachment:

COG_Dominator_501H_2M_BOP_20171204122742.pdf

COG_Dominator_501H_FlexHose_20171204122755.pdf

Pressure Rating (PSI): 3M

Rating Depth: 11345

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_501H_3M_Choke_20171204122817.pdf

BOP Diagram Attachment:

COG_Dominator_501H_3M_BOP_20171204122823.pdf

COG_Dominator_501H_FlexHose_20171204122832.pdf

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

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 | 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 | 1.32 | DRY | 5.73 | DRY | 5.73 |
| 3 | PRODUCTION | 8.75 | 5.5 | NEW | API | N | 0 | 16094 | 0 | 16094 | -8653 | -21064 | 16094 | P-110 | 17 | LTC | 1.36 | 2.44 | DRY | 2.31 | DRY | 2.31 |

Casing Attachments

Casing ID: 1 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Dominator_501H_Casing_Rpt_20171204122913.pdf

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

Casing Attachments

Casing ID: 2 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

COG_Dominator_501H_Casing_Rpt_20171204122907.pdf

Casing Design Assumptions and Worksheet(s):

COG_Dominator_501H_Casing_Rpt_20171204122900.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Dominator_501H_Casing_Rpt_20171204122854.pdf

Section 4 - Cement

| String Type | Lead/Tail | Stage Tool | 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 ₂ |
| SURFACE | Tail | | 0 | 1200 | 250 | 1.34 | 14.8 | 335 | 50 | Tail: Class C | 2% CaCl ₂ |
| 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 | 1609 4 | 850 | 2.5 | 11.9 | 2125 | 25 | Lead: 50:50:10 H Blend | As needed |

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

| String Type | Lead/Tail | Stage Tool | Top MD | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|-------------|-----------|------------|--------|-----------|--------------|-------|---------|-------|---------|--------------------------------|-----------|
| PRODUCTION | Tail | | 0 | 1609 4 | 1340 | 1.24 | 14.4 | 1661 | 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 | 1609 4 | 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: 501H

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: 5490

Anticipated Surface Pressure: 3369.2

Anticipated Bottom Hole Temperature(F): 170

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_501H_H2S_SUP_20171204123252.pdf

COG_Dominator_501H_H2S_Schem_20171204123258.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

COG_Dominator_501H_AC_Rpt_20171204123316.pdf

COG_Dominator_501H_Direct_Rpt_20171204123323.pdf

Other proposed operations facets description:

Drilling Program Attached

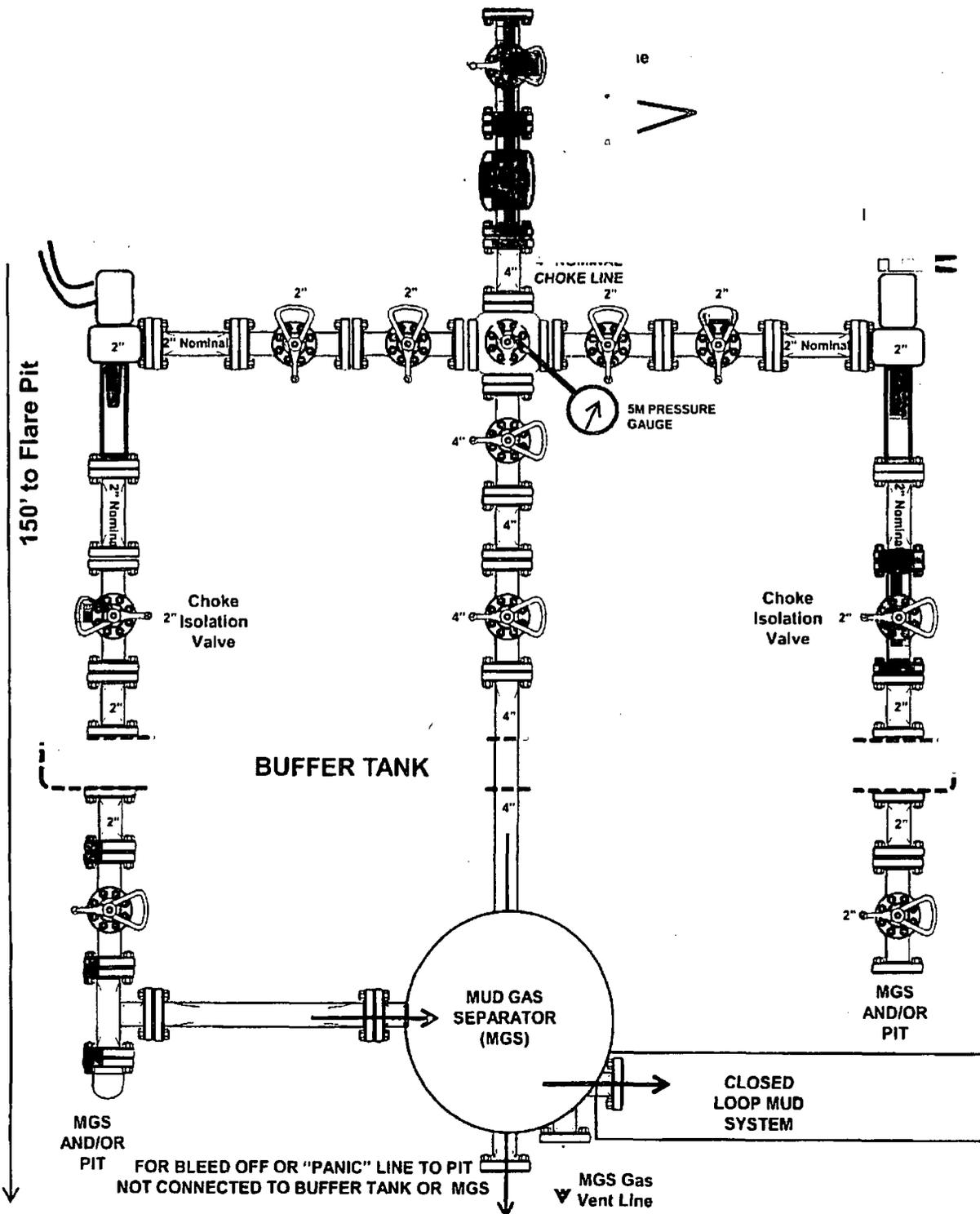
Other proposed operations facets attachment:

COG_Dominator_501H_Drill_Rpt_20171204123330.pdf

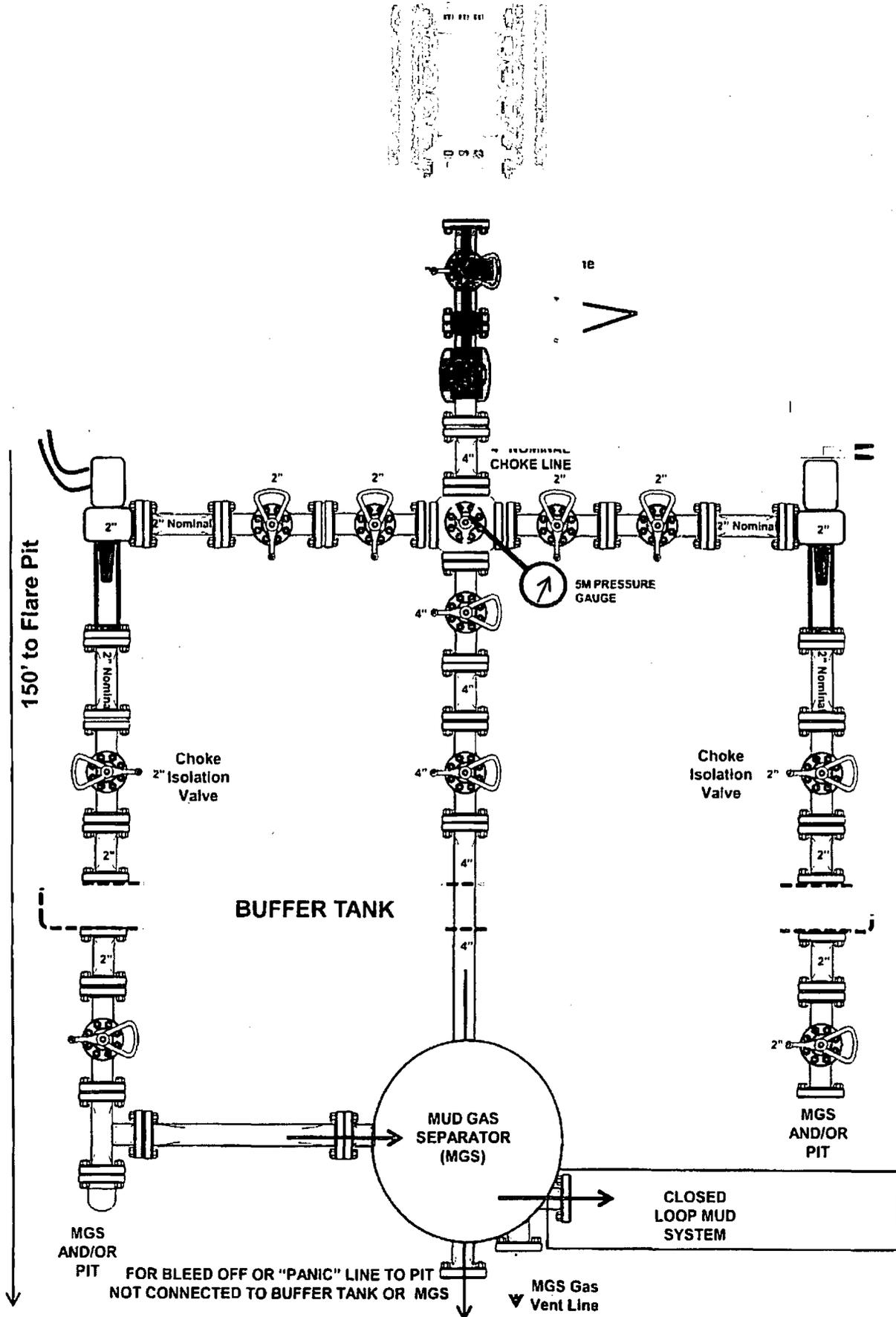
Other Variance attachment:

W

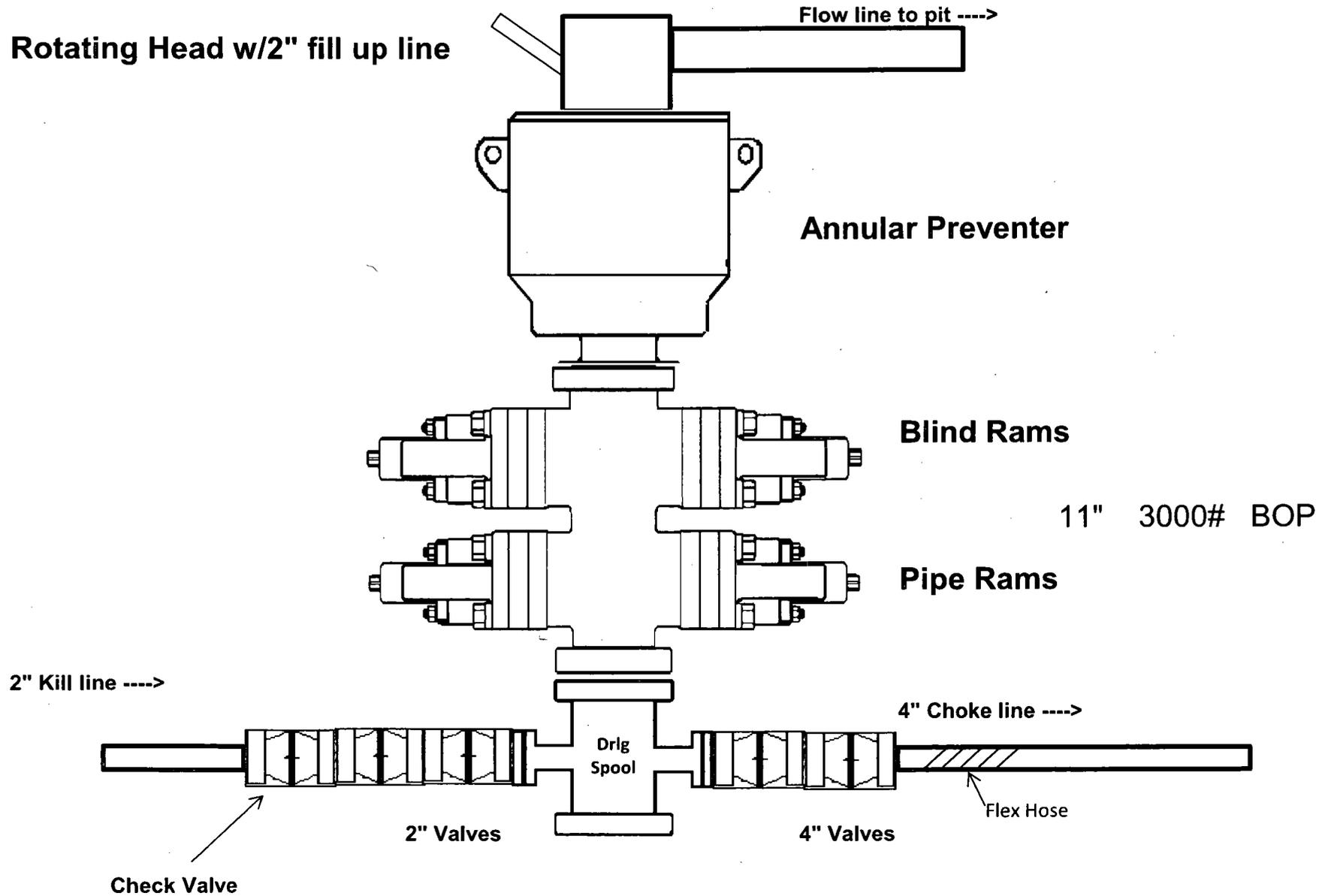
CLOSED LOOP)



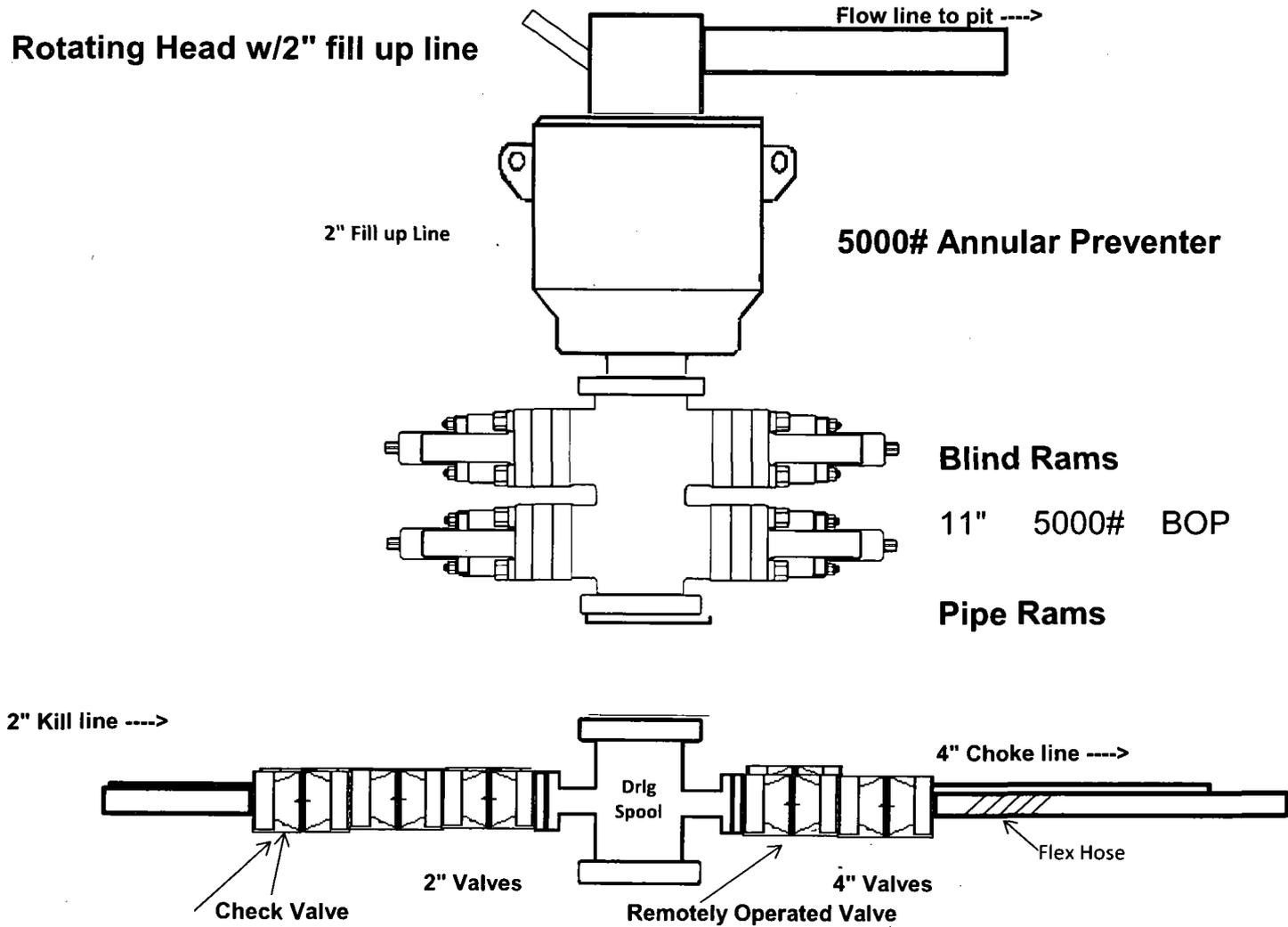
CLOSED LOOP)



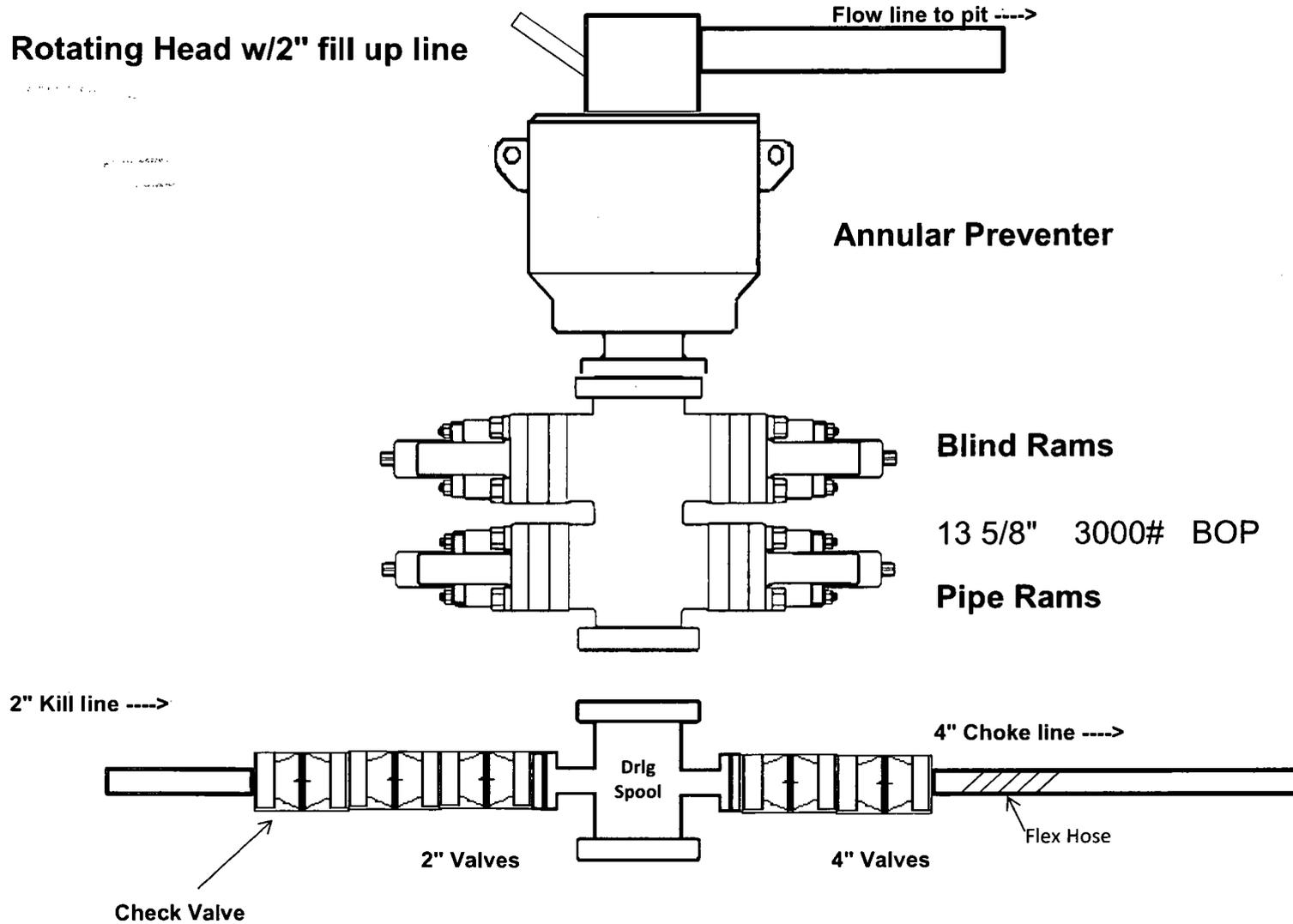
3,000 psi BOP Schematic



5,000 psi BOP Schematic



3,000 psi BOP Schematic





Midwest Hose
& Specialty, Inc.

Certificate of Conformity

| | |
|-----------------------------------|---------------------------------|
| Customer: LATSHAW DRILLING | Customer P.O.# RIG#44 |
| Sales Order # 242739 | Date Assembled: 2/9/2015 |

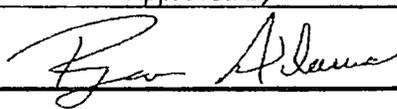
Specifications

| | |
|---|---|
| Hose Assembly Type: Choke & Kill | |
| Assembly Serial # 292614-1 | Hose Lot # and Date Code 10900-08/13 |
| Hose Working Pressure (psi) 10000 | Test Pressure (psi) 15000 |

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.

Supplier:
Midwest Hose & Specialty, Inc.
3312 S I-35 Service Rd
Oklahoma City, OK 73129

Comments:

| | |
|---|------------------|
| Approved By | Date |
|  | 2/10/2015 |



Midwest Hose
& Specialty, Inc.

Certificate of Conformity

| | |
|-----------------------------------|---------------------------------|
| Customer: LATSHAW DRILLING | Customer P.O.# RIG#44 |
| Sales Order # 242739 | Date Assembled: 2/9/2015 |

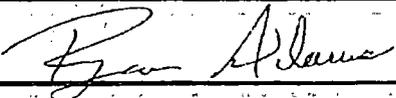
Specifications

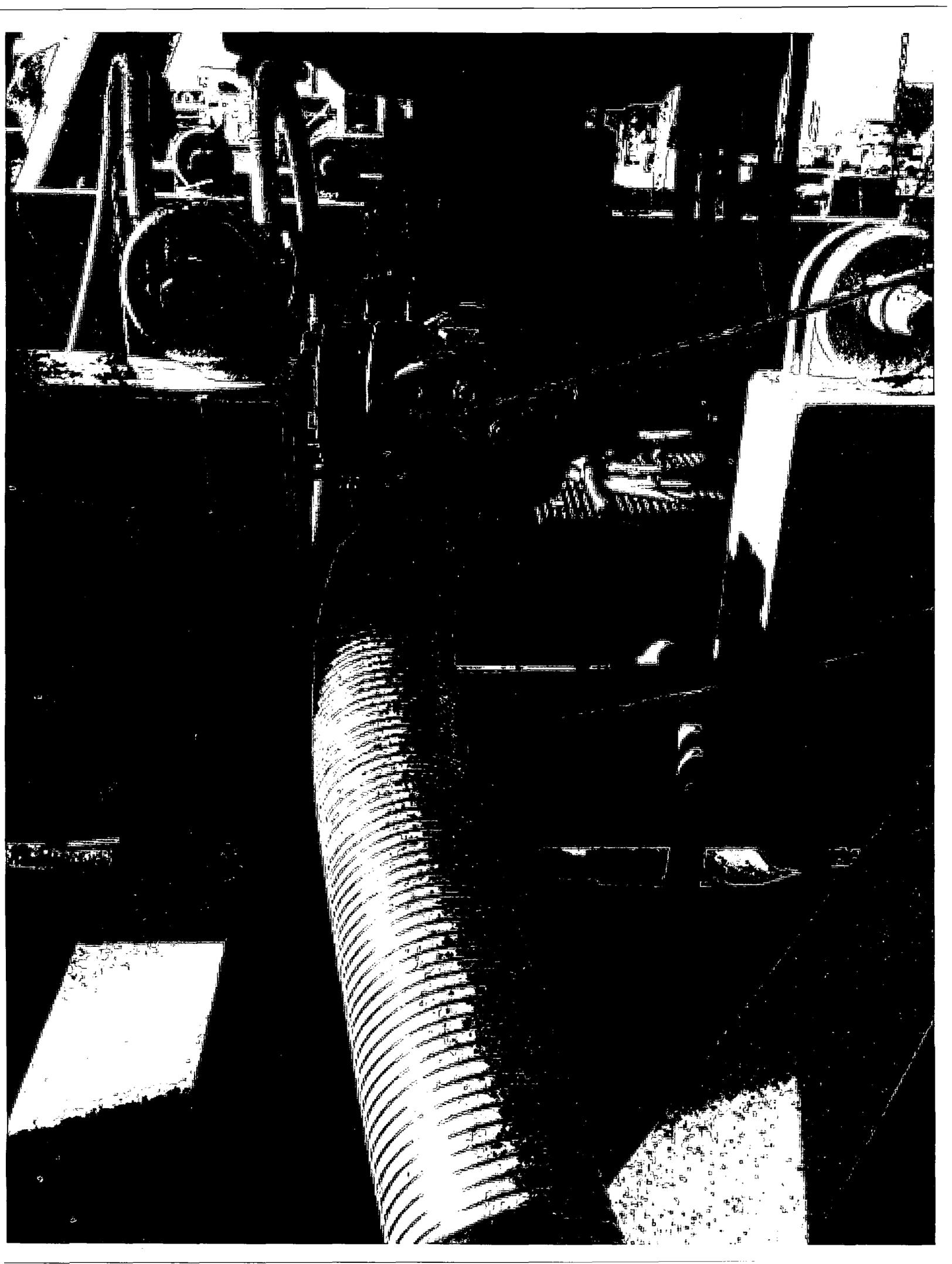
| | |
|---|---|
| Hose Assembly Type: Choke & Kill | |
| Assembly Serial # 292614-2 | Hose Lot # and Date Code 11794-10/14 |
| Hose Working Pressure (psi) 10000 | Test Pressure (psi) 15000 |

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.

Supplier:
Midwest Hose & Specialty, Inc.
3312 S I-35 Service Rd
Oklahoma City, OK 73129

Comments:

| | |
|--|--------------------------|
| Approved By  | Date 2/10/2015 |
|--|--------------------------|



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 | 0.91 | 3.25 |
| 12.25" | 4000 | 5280 | 9.625" | 40 | L80 | LTC | 1.11 | 1.32 | 5.73 |
| 8.75" | 0 | 16,094 | 5.5" | 17 | P110 | LTC | 1.36 | 2.44 | 2.31 |
| 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 |
| 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

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

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 |
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| 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".

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 | 0.91 | 3.25 |
| 12.25" | 4000 | 5280 | 9.625" | 40 | L80 | LTC | 1.11 | 1.32 | 5.73 |
| 8.75" | 0 | 16,094 | 5.5" | 17 | P110 | LTC | 1.36 | 2.44 | 2.31 |
| 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

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 | 0.91 | 3.25 |
| 12.25" | 4000 | 5280 | 9.625" | 40 | L80 | LTC | 1.11 | 1.32 | 5.73 |
| 8.75" | 0 | 16,094 | 5.5" | 17 | P110 | LTC | 1.36 | 2.44 | 2.31 |
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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

Casing Program

| Hole Size | Casing | | Csg. Size | Weight (lbs) | Grade | Conn. | SF Collapse | SF Burst | SF Tension |
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| 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
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- a. The hazards and characteristics of hydrogen sulfide (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- a. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- c. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S. If H₂S greater than 100 ppm is encountered in the gas stream we will shut in and install H₂S equipment.

- a. Well Control Equipment:
 - Flare line.
 - Choke manifold with remotely operated choke.
 - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

- b. Protective equipment for essential personnel:
Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H2S detection and monitoring equipment:
2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems:
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
- e. Mud Program:
The mud program has been designed to minimize the volume of H2S circulated to the surface.
- f. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- g. Communication:
Company vehicles equipped with cellular telephone.

COG OPERATING LLC has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H2S contingency plan is necessary.

W A R N I N G

**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED***
- 2. HARD HATS REQUIRED***
- 3. SMOKING IN DESIGNATED AREAS ONLY***
- 4. BE WIND CONSCIOUS AT ALL TIMES***
- 5. CK WITH COG OPERATING LLC FOREMAN AT MAIN OFFICE***

COG OPERATING LLC

1-575-748-6940

EMERGENCY CALL LIST

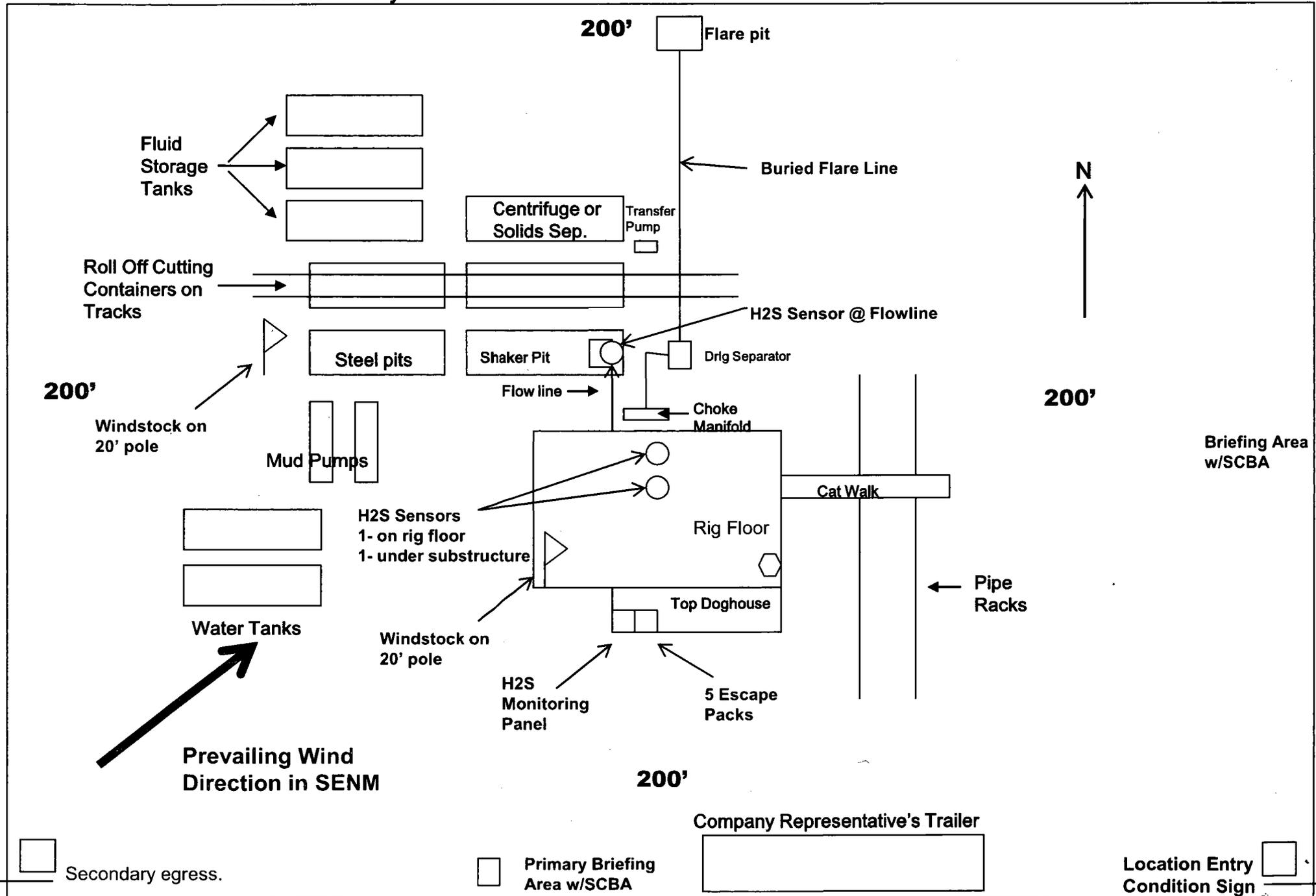
| | <u>OFFICE</u> | <u>MOBILE</u> |
|--------------------------|---------------|---------------|
| COG OPERATING LLC OFFICE | 575-748-6940 | |
| SETH WILD | 432-683-7443 | 432-528-3633 |
| WALTER ROYE | 575-748-6940 | 432-934-1886 |

EMERGENCY RESPONSE NUMBERS

| | <u>OFFICE</u> |
|--|---------------------|
| STATE POLICE | 575-748-9718 |
| EDDY COUNTY SHERIFF | 575-746-2701 |
| EMERGENCY MEDICAL SERVICES (AMBULANCE) | 911 or 575-746-2701 |
| EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS) | 575-887-9511 |
| STATE EMERGENCY RESPONSE CENTER (SERC) | 575-476-9620 |
| CARLSBAD POLICE DEPARTMENT | 575-885-2111 |
| CARLSBAD FIRE DEPARTMENT | 575-885-3125 |
| NEW MEXICO OIL CONSERVATION DIVISION | 575-748-1283 |
| INDIAN FIRE & SAFETY | 800-530-8693 |
| HALLIBURTON SERVICES | 800-844-8451 |

COG Operating LLC
H₂S Equipment Schematic
Terrain: Shinnery sand hills.

Well pad will be 400' x 400'
with cellar in center of pad



□ Secondary egress.

□ Primary Briefing Area w/SCBA

Company Representative's Trailer

Location Entry Condition Sign □

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

Access road engineering design? NO

Access road engineering design attachment:

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_501H_1Mile_Data_20171204122108.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 4 facility. A surface flow line of approximately 60.6' 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 4 location. We plan to install a 4" surface polyethylene pipe transporting Gas Lift Gas from the Dominator 25 Federal CTB 4 to the multiple well pad that includes the Dominator 25 Federal Com #102H, #301H, #401H, #501H, #601H, #602H, 701H and #702H wells. The surface Gas Lift Gas pipe of approximately 60.6' under a

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

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_4_20171201102558.pdf

COG_Dominator_501H_Flowlines_20171204122124.pdf

COG_Dominator_501H_ProdFacil_20171204122133.pdf

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_501H_BrineH2O_20171204122153.pdf

COG_Dominator_501H_FreshH2O_20171204122202.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.

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

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

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

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

Safe containmant attachment:

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

Disposal type description:

Disposal location description: Trucked to an approved disposal facility

Waste type: GARBAGE

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

Amount of waste: 125 pounds

Waste disposal frequency : Weekly

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

Safe containmant attachment:

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

Disposal type description:

Disposal location description: Trucked to an approved disposal facility

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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

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

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

Are you storing cuttings on location? YES

Description of cuttings location Roll off cuttings containers on tracks

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: YES

Ancillary Facilities attachment:

COG_Dominator__501H_GCP_20171204122221.pdf

Comments: GCP Attached

Section 9 - Well Site Layout

Well Site Layout Diagram:

COG_Dominator_CTB_4_20171201102619.pdf

COG_Dominator_501H_ProdFacil_20171204122237.pdf

COG_Dominator_501H_Flowlines_20171204122249.pdf

Comments: Production will be sent to the Dominator 25 Federal CTB 4 facility. A surface flow line of approximately 60.6' 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 4 location. We plan to install a 4" surface polyethylene pipe transporting Gas Lift Gas from the Dominator 25 Federal CTB 4 to the multiple well pad that includes the Dominator 25 Federal Com #102H, #301H, #401H, #501H, #601H, #602H, 701H and #702H wells. The surface Gas Lift Gas pipe of approximately 60.6' 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

Multiple Well Pad Number: 102H, 301H, 401H, 501H, 601H, 602H, 701H AND 702H

Recontouring attachment:

Drainage/Erosion control construction: Due to the relatively flat topography of this well pad, 460' of waddles would be placed on the north side of the well pad to avoid surface erosion to reduce sediment impacts to fragile/sensitive soils.

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

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

| | | |
|--|---|---|
| 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 |

Disturbance Comments:

Reconstruction method: New construction of pad.

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:

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

| Seed Summary | |
|---------------------|--------------------|
| 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_501H_Closed_Loop_20171204122303.pdf

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

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:

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_501H_Certif_20171204122401.pdf

COG Operating LLC
Rig Plat & Closed Loop Equipment Diagram

Well pad will be 400' X 400'
with cellar in center of pad

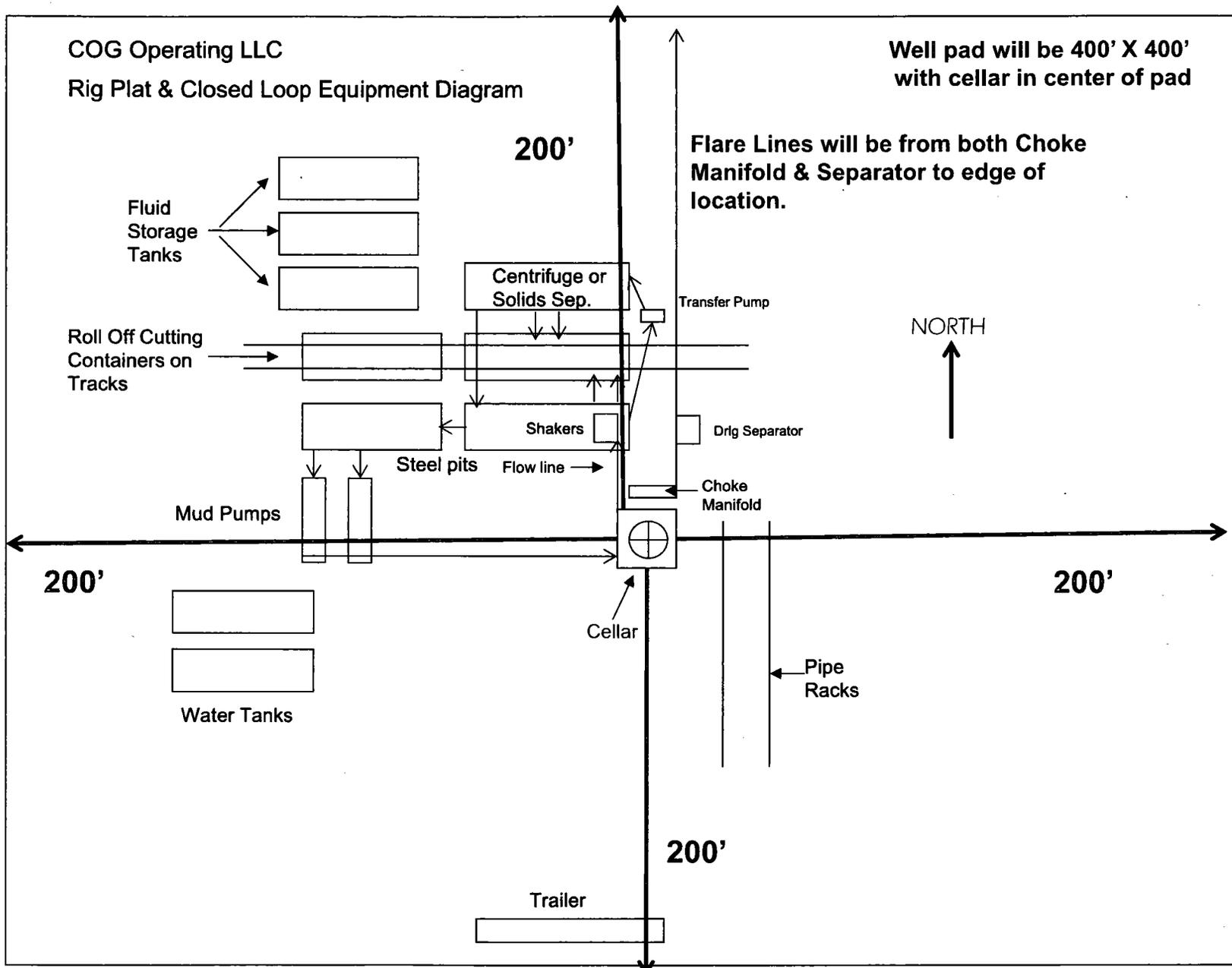


Exhibit 1

" 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:

Injection well name:

Assigned injection well API number?

Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



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

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB000215

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:



APD ID: 10400025215

Submission Date: 12/05/2017

Highlighted data
reflects the most
recent changes
[Show Final Text](#)

Operator Name: COG OPERATING LLC

Well Name: DOMINATOR 25 FEDERAL

Well Number: 501H

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_501H_Roads_20171204122054.pdf

New road type: TWO-TRACK

Length: 112773 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: