Form 3160-3
(March 2012)

HOBBS OCD
FEB 22 2018
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FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. NMNM117126
	6. If Indian, Allotee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. USHANKA FEDERAL COM 23H (320812)
2. Name of Operator COG OPERATING LLC (229137)	9. API Well No. 30-025-44505
3a. Address 600 West Illinois Ave Midland TX 79701	3b. Phone No. (include area code) (432)683-7443
	10. Field and Pool, or Exploratory (98228) WILDCAT / WOLFCAMP
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface NWNE / 210 FNL / 1650 FEL / LAT 32.078996 / LONG -103.318049 At proposed prod. zone SWNE / 2440 FNL / 1650 FEL / LAT 32.058341 / LONG -103.318036	11. Sec., T. R. M. or Blk. and Survey or Area SEC 1 / T26S / R35E / NMP
14. Distance in miles and direction from nearest town or post office* 7 miles	12. County or Parish LEA / 13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 210 feet	16. No. of acres in lease 1080	17. Spacing Unit dedicated to this well 240
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2281 feet	19. Proposed Depth 12280 feet / 19470 feet	20. BLM/BIA Bond No. on file FED: NMB000215
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3036 feet	22. Approximate date work will start* 02/01/2017	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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
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 11/14/2017
Title Regulatory Analyst		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 02/16/2018
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)

APPROVED WITH CONDITIONS

KZ 02/22/18

Approval Date: 02/16/2018

Drilling sidetrack

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.

(Continued on page 3)

Additional Operator Remarks

Location of Well

1. SHL: NWNE / 210 FNL / 1650 FEL / TWSP: 26S / RANGE: 35E / SECTION: 1 / LAT: 32.078996 / LONG: -103.318049 (TVD: 0 feet, MD: 0 feet)
   PPP: NWNE / 330 FNL / 1650 FEL / TWSP: 26S / RANGE: 35E / SECTION: 1 / LAT: 32.078667 / LONG: -103.318049 (TVD: 11682 feet, MD: 11682 feet)
   BHL: SWNE / 2440 FNL / 1650 FEL / TWSP: 26S / RANGE: 35E / SECTION: 12 / LAT: 32.058341 / LONG: -103.318036 (TVD: 12280 feet, MD: 19470 feet)

BLM Point of Contact

Name: Priscilla Perez
Title: Legal Instruments Examiner
Phone: 5752345934
Email: pperez@blm.gov

Review and Appeal Rights

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

AFMSS

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

Application Data Report

02/20/2018

APD ID: 10400024548 **Submission Date:** 11/14/2017

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400024548 **Tie to previous NOS?** **Submission Date:** 11/14/2017

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: NMNM117126 **Lease Acres:** 1080

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 **Mater Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Well Name: USHANKA FEDERAL COM **Well Number:** 23H **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: USHANKA FEDERAL COM **Well Number:** 23H

Describe other minerals:

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: SINGLE WELL **Multiple Well Pad Name:** **Number:**

Well Class: HORIZONTAL **Number of Legs:**

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 7 Miles **Distance to nearest well:** 2281 FT **Distance to lease line:** 210 FT

Reservoir well spacing assigned acres Measurement: 240 Acres

Well plat: COG_Ushanka_23H_C102_20171113093058.pdf

Well work start Date: 02/01/2017 **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	210	FNL	1650	FEL	26S	35E	1	Aliquot NWNE	32.078996	-103.318049	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 117126	3036	0	0
KOP Leg #1	210	FNL	1650	FEL	26S	35E	1	Aliquot NWNE	32.078996	-103.318049	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 117126	3036	0	0
PPP Leg #1	330	FNL	1650	FEL	26S	35E	1	Aliquot NWNE	32.078667	-103.318049	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 117126	-8646	11682	11682

APD ID: 10400024548 **Submission Date:** 11/14/2017

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	UNKNOWN	3036	0	0		NONE	No
2	RUSTLER	2585	451	451		NONE	No
3	TOP SALT	2210	826	826	SALT	NONE	No
4	BOTTOM SALT	-1484	4520	4520	ANHYDRITE	NONE	No
5	LAMAR	-1742	4778	4778	LIMESTONE	NATURAL GAS,OIL	No
6	BELL CANYON	-1775	4811	4811		NONE	No
7	CHERRY CANYON	-2666	5702	5702		NATURAL GAS,OIL	No
8	BRUSHY CANYON	-4205	7241	7241		NATURAL GAS,OIL	No
9	BONE SPRING LIME	-5496	8532	8532	SANDSTONE	NATURAL GAS,OIL	No
10	UPPER AVALON SHALE	-5726	8762	8762		NATURAL GAS,OIL	No
11	---	-6041	9077	9077		NATURAL GAS,OIL	No
12	BONE SPRING 1ST	-6909	9945	9945		NATURAL GAS,OIL	No
13	BONE SPRING 2ND	-7461	10497	10497		NATURAL GAS,OIL	No
14	BONE SPRING 3RD	-8463	11499	11499		NATURAL GAS,OIL	No
15	WOLFCAMP	-8713	11749	11749	SHALE	NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

Pressure Rating (PSI): 10M **Rating Depth:** 12280

Equipment: Annular. 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_Ushanka_23H_10M_Choke_20171113094522.pdf

BOP Diagram Attachment:

COG_Ushanka_23H_10M_BOP_20171113094528.pdf

COG_Ushanka_23H_Flex_Hose_20171113094535.pdf

Pressure Rating (PSI): 5M **Rating Depth:** 11300

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_Ushanka_23H_5M_Choke_20171113094431.pdf

BOP Diagram Attachment:

COG_Ushanka_23H_5M_BOP_20171113094437.pdf

COG_Ushanka_23H_Flex_Hose_20171113094446.pdf

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

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	480	0	480	-9411	-10581	480	N-80	45.5	OTHER - BTC	11.25	1.25	DRY	47.62	DRY	47.62
2	INTERMEDIATE	9.875	7.875	NEW	API	Y	0	11300	0	11300	-9411	-21491	11300	P-110	29.7	OTHER - BTC	1.34	1.19	DRY	3.24	DRY	3.24
3	PRODUCTION	6.75	5.0	NEW	API	N	0	19470	0	19470	-9411	-29318	19470	P-110	18	OTHER - BTC	2.07	2.18	DRY	3.3	DRY	3.3

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Ushanka_23H_Casing_Plan_20171113094813.pdf

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

Casing Attachments

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

COG_Ushanka_23H_Casing_Plan_20171113094850.pdf

Casing Design Assumptions and Worksheet(s):

COG_Ushanka_23H_Casing_Plan_20171113094921.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

COG_Ushanka_23H_Casing_Plan_20171113094931.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	480	180	1.75	13.5	315	50	Class C	4% Gel + 1% CaCl2
SURFACE	Tail		0	480	250	1.34	14.8	335	50	Class C	2% CaCl2
INTERMEDIATE	Lead		0	11300	940	3.6	10.3	3384	50	Tuned Light Blend	As needed
INTERMEDIATE	Tail		0	11300	250	1.08	16.4	270	50	Class H	As needed
PRODUCTION	Lead		0	19470	180	2.5	11.9	450	35	50:50:10 H Blend	As needed

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		0	19470	940	1.24	14.4	1165	35	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
11300	19470	OIL-BASED MUD	9.6	11							
0	480	OTHER : FW Gel	8.6	8.8							FW Gel
480	11300	OTHER : Diesel Brine Emulsion	8.4	9							Diesel Brine Emulsion

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

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: 7025 **Anticipated Surface Pressure:** 4323.39

Anticipated Bottom Hole Temperature(F): 180

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

COG_Ushanka_23H_H2S_Schem_20171113095352.pdf

COG_Ushanka_23H_H2S_SUP_20171113095358.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

COG_Ushanka_23H_Direct_Plan_20171113095412.pdf

Other proposed operations facets description:

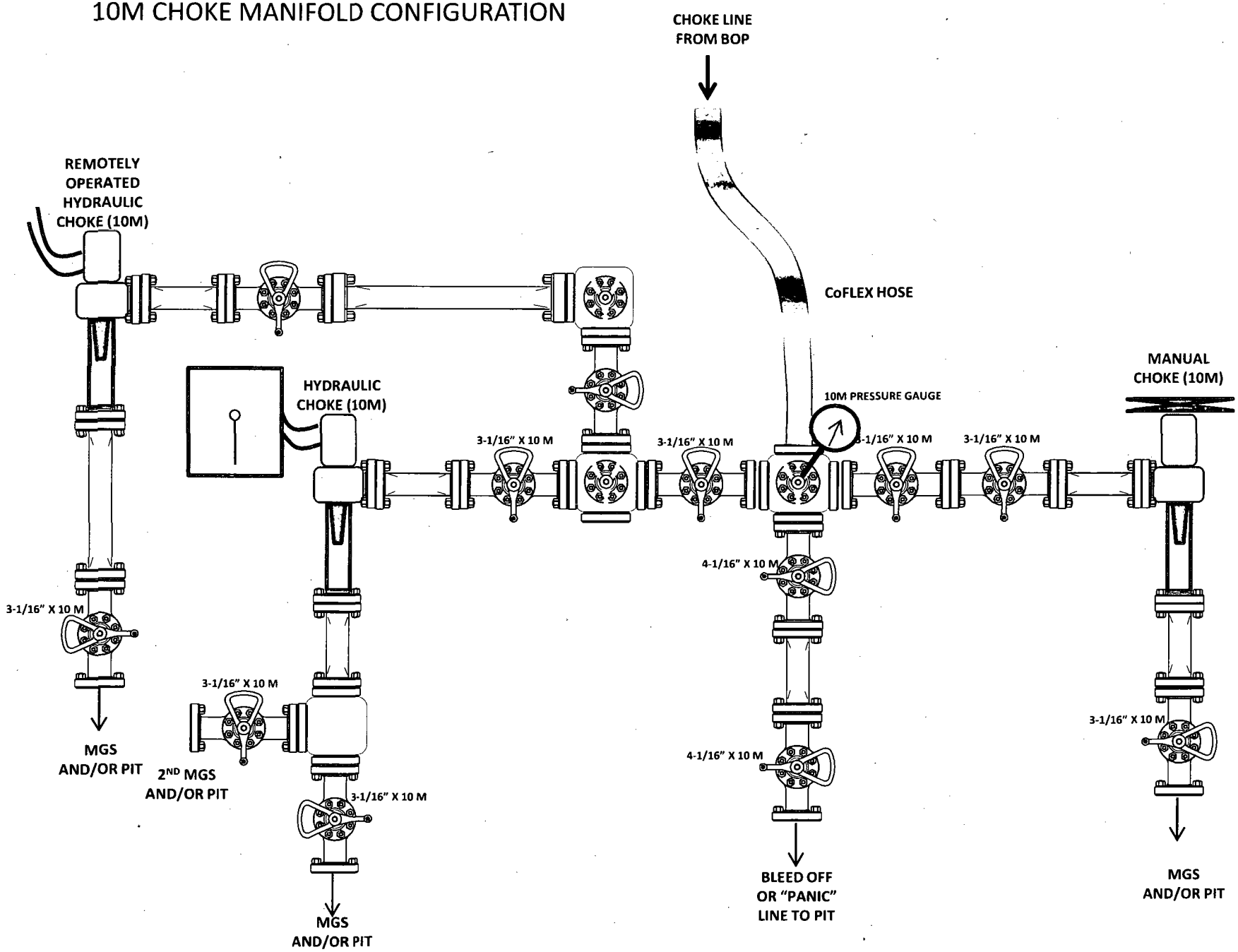
Other proposed operations facets attachment:

COG_Ushanka_23H_Drill_Plan_20171113095423.pdf

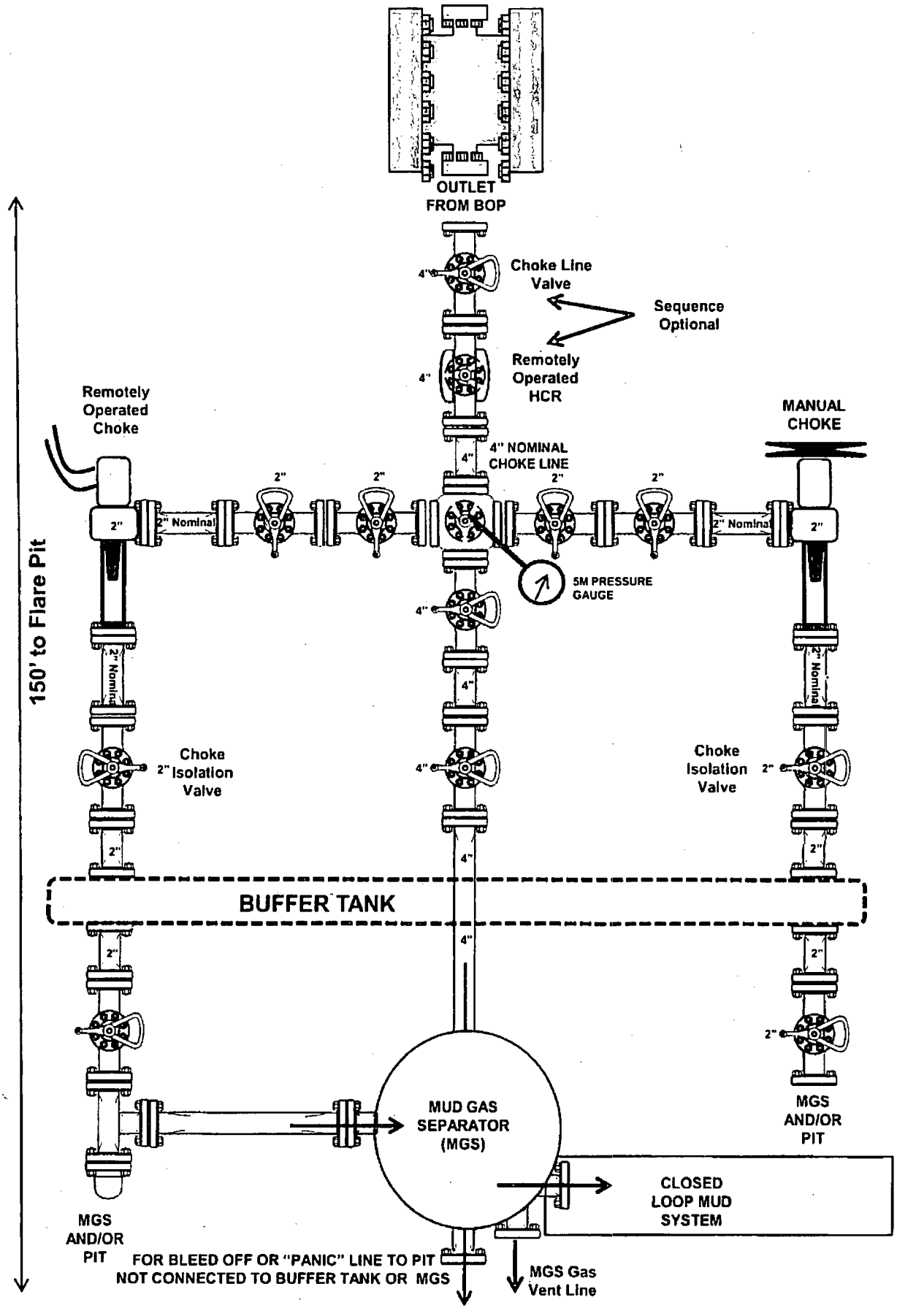
Other Variance attachment:

COG_Ushanka_23H_Flex_Hose_20171113095432.pdf

10M CHOKE MANIFOLD CONFIGURATION

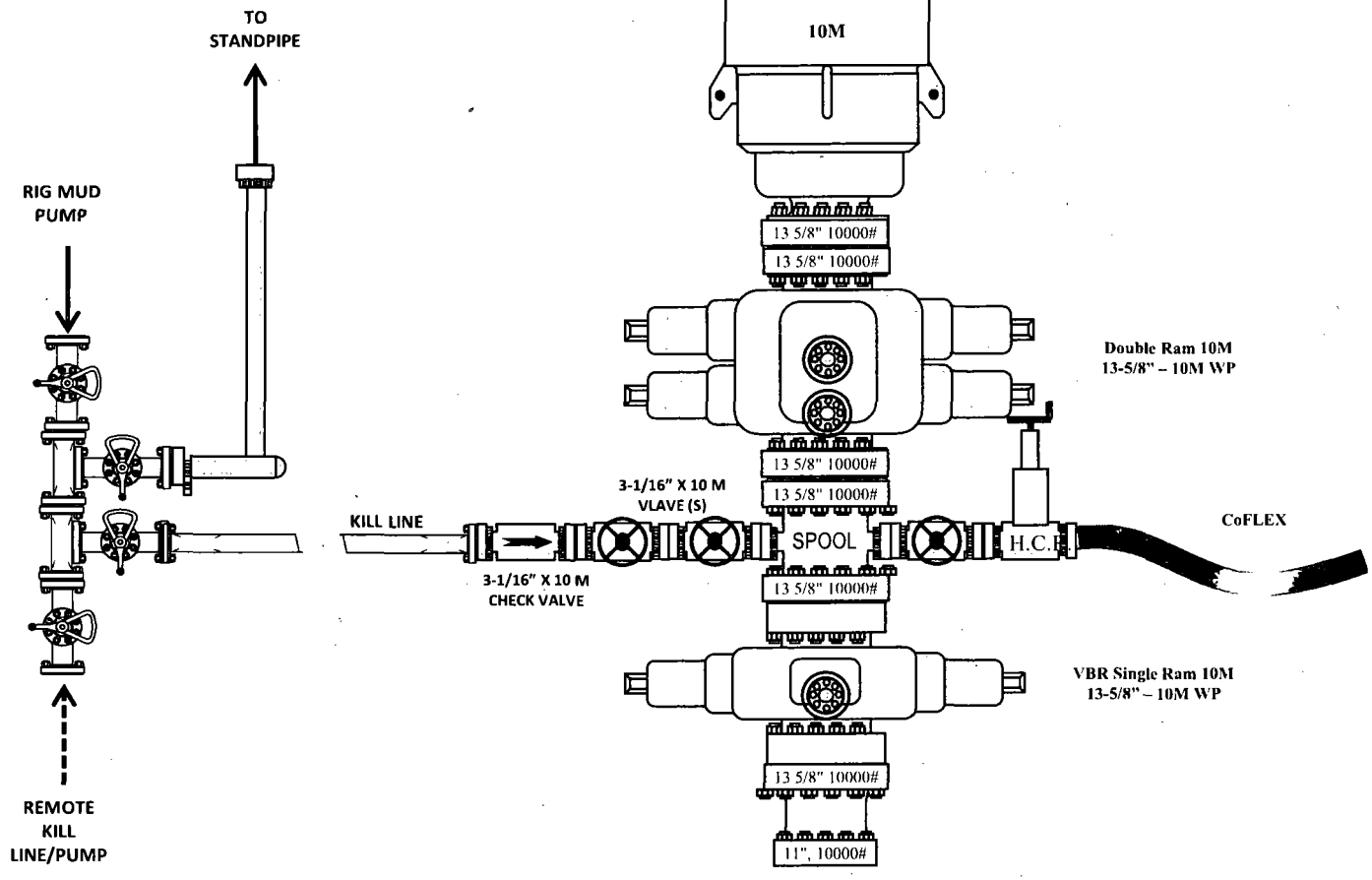


5M Choke Manifold Equipment (WITH MGS + CLOSED LOOP)



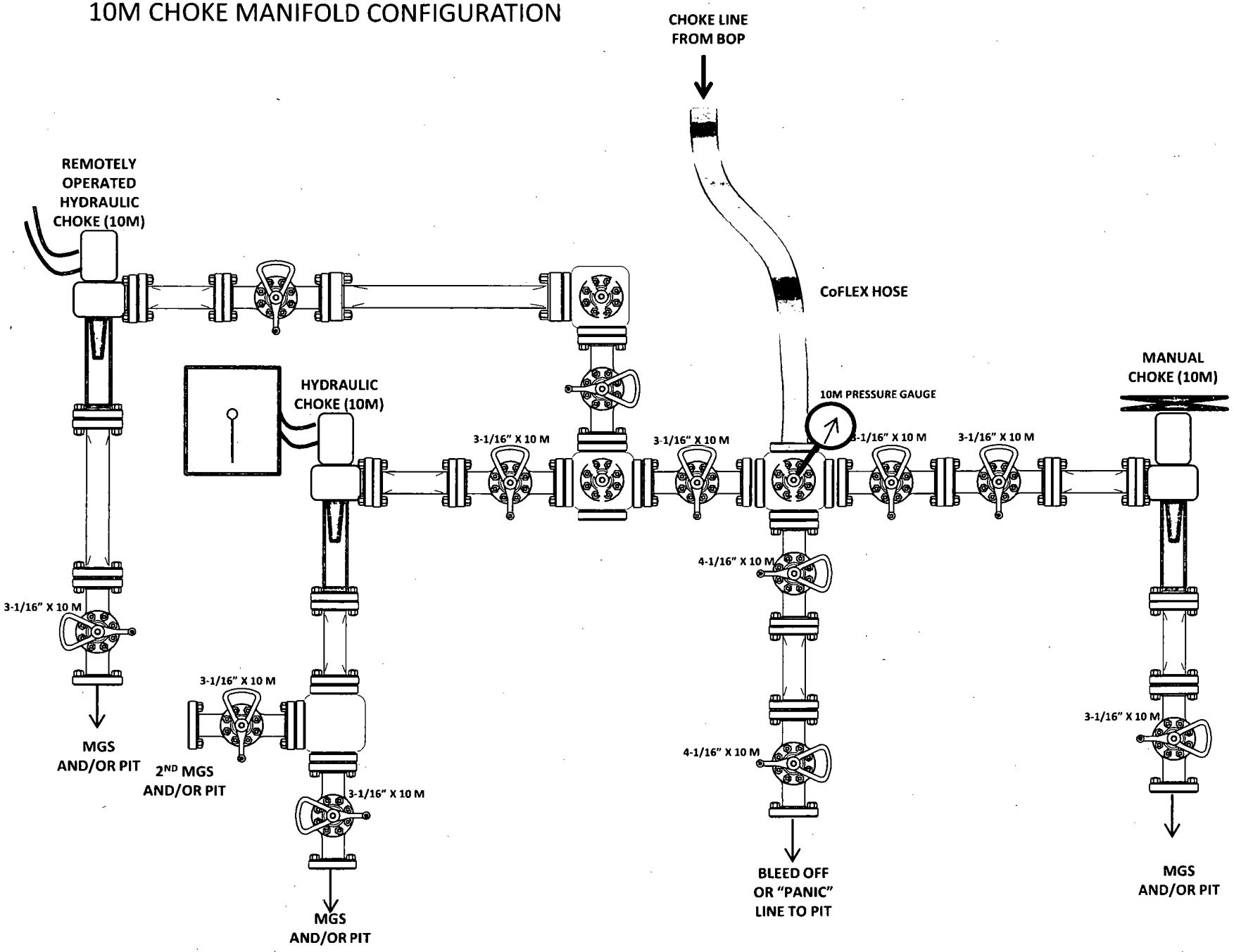
10M BOP Stack

10M REMOTE KILL SCHEMATIC



10M BOP Stack
(10M Annular)

10M CHOKE MANIFOLD CONFIGURATION



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

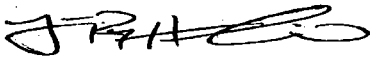
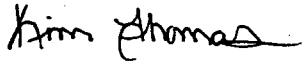
General Information		Hose Specifications	
Customer	**Hobbs**	*Hose Assembly Type*	**Rotary/Vibrator**
MWH Sales Representative	**Ryan Rynolds**	*Certification*	**API 7K/FSL Level 2**
Date Assembled	**11/19/2015**	*Hose Grade*	**D**
Location Assembled	**OKC**	*Hose Working Pressure*	**5000**
Sales Order #	**271739**	*Hose Lot # and Date Code*	**11834 11/14**
Customer Purchase Order #	**302337**	*Hose I.D. (Inches)*	**3.5"**
Assembly Serial # (Pick Ticket #)	**326000**	*Hose O.D. (Inches)*	**4.89"**
Hose Assembly Length	**25'**	*Armor (yes/no)*	No

Fittings

End A		End B	
Stem (Part and Revision #)	**R3.5X64WB**	*Stem (Part and Revision #)*	**R3.5X64WB**
Stem (Heat #)	**A144783**	*Stem (Heat #)*	**A144783**
Ferrule (Part and Revision #)	**RF3.5**	*Ferrule (Part and Revision #)*	**RF3.5**
Ferrule (Heat #)	**J1628**	*Ferrule (Heat #)*	**J1628**
Connection . Flange Hammer Union Part	**4-1/16 5000**	*Connection (Part #)*	**4-1/16 5000**
Connection (Heat #)	**14032501**	*Connection (Heat #)*	**1404H321**
Nut (Part #)	**N/A**	*Nut (Part #)*	**N/A**
Nut (Heat #)	**N/A**	*Nut (Heat #)*	**N/A**
Dies Used	**5.49"**	*Dies Used*	**5.49"**

Hydrostatic Test Requirements

Test Pressure (psi)	**10,000**	***Hose assembly was tested with ambient water temperature.***
Test Pressure Hold Time (minutes)	**11 1/2**	

Date Tested	*Tested By*	*Approved By*
11/19/2015		

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **Hobbs**	*Customer P.O.#* **302337**
Sales Order # **271739**	*Date Assembled:* **11/19/2015**

Specifications

Hose Assembly Type:	**Rotary/Vibrator**		
Assembly Serial #	**326000**	*Hose Lot # and Date Code*	**11834 11/14**
Hose Working Pressure (psi)	**5000**	*Test Pressure (psi)*	**10000**

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***
Kim Thomas	**11/19/2015**

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

November 19, 2015

Customer: Hobbs

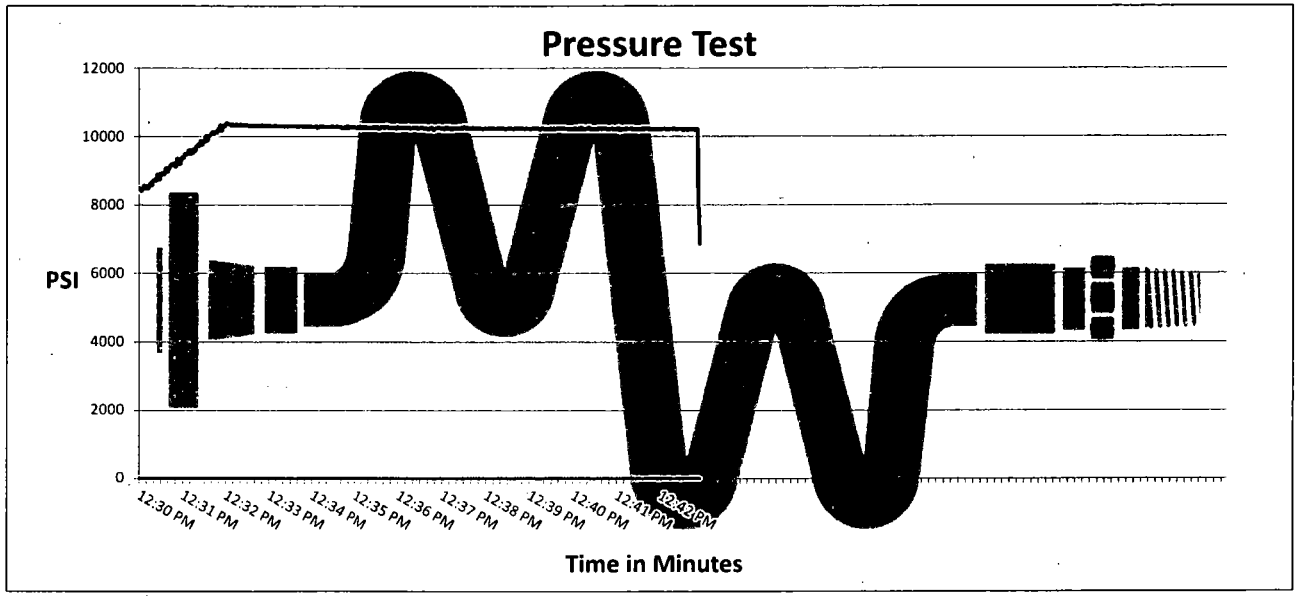
Pick Ticket #: 326000

Hose Specifications

Hose Type	Length
D	25'
I.D.	**O.D.**
3.5"	4.89"
Working Pressure	**Burst Pressure**
5000 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Coupling Method
4 1/16 5K	Swage
Die Size	**Final O.D.**
5.49"	5.50"
Hose Serial #	**Hose Assembly Serial #**
11834	326000



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
10000 PSI	11 2/4 Minutes		10473 PSI

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

Tested By: *James Hawkins*

Approved By: *Kim Thomas*

x _____

x _____

Midwest Hose & Specialty, Inc.

Hose Assembly & Test Report

General Information		Hose Specifications	
Customer	Hobbs	Hose Assembly Type	choke + kill
Date Assembled	6-26-14	Certification	API 7K
Location Assembled	DKC	Hose Grade	D
Sales Order #	216297	Hose Working Pressure	5,000
Customer Purchase Order #	237512	Hose Lot #	83099
Hose Assembly Serial #	260212	Hose Date Code	04/12
Pick Ticket Line Item	0010	Hose I.D. (inches)	3.5 inches
Hose Assembly Length (Feet and Inches)	50 feet	Hose O.D. (inches)	5.49
Contact Information Phone #		Armor (yes/no)	yes

Fittings

End A		End B	
Stem (Part and Revision #)	R3.5X64WB	Stem (Part and Revision #)	R3.5X64WB
Stem (Heat #)	131140502225	Stem (Heat #)	131140502225
Stem (Rockwell Hardness HRB #)	—	Stem (Rockwell Hardness HRB #)	—
Ferrule (Part and Revision #)	RF3.5	Ferrule (Part and Revision #)	RF3.5
Ferrule (Heat #)	126151	Ferrule (Heat #)	372114
Ferrule (Rockwell Hardness HRB #)	—	Ferrule (Rockwell Hardness HRB #)	—
Connection (Part #)	4 1/16 5K	Connection (Part #)	4 1/16 5K
Connection (Heat #)	V3360	Connection (Heat #)	V3360
Connection (Brinell Hardness HB #)	—	Connection (Brinell Hardness HB #)	—
Stress Relief #	17614	Stress Relief #	17614
Welding #	MKR	Welding #	MKR
X-ray #	—	X-ray #	—

Assembly Information

End A		End B	
Skive O.D. (inches)	5.04	Skive O.D. (inches)	4.92
Swager Dies (1st pass)	5.62	Swager Dies (1st pass)	5.53
Swager Dies (2nd pass)	—	Swager Dies (2nd pass)	—
Final Swage O.D. (inches)	5.64	Final Swage O.D. (inches)	5.48
Compression % (See Crimp Calculator)	24%	Compression % (See Crimp Calculator)	22%
Swaged By	Charles		

Hydrostatic Test Requirements

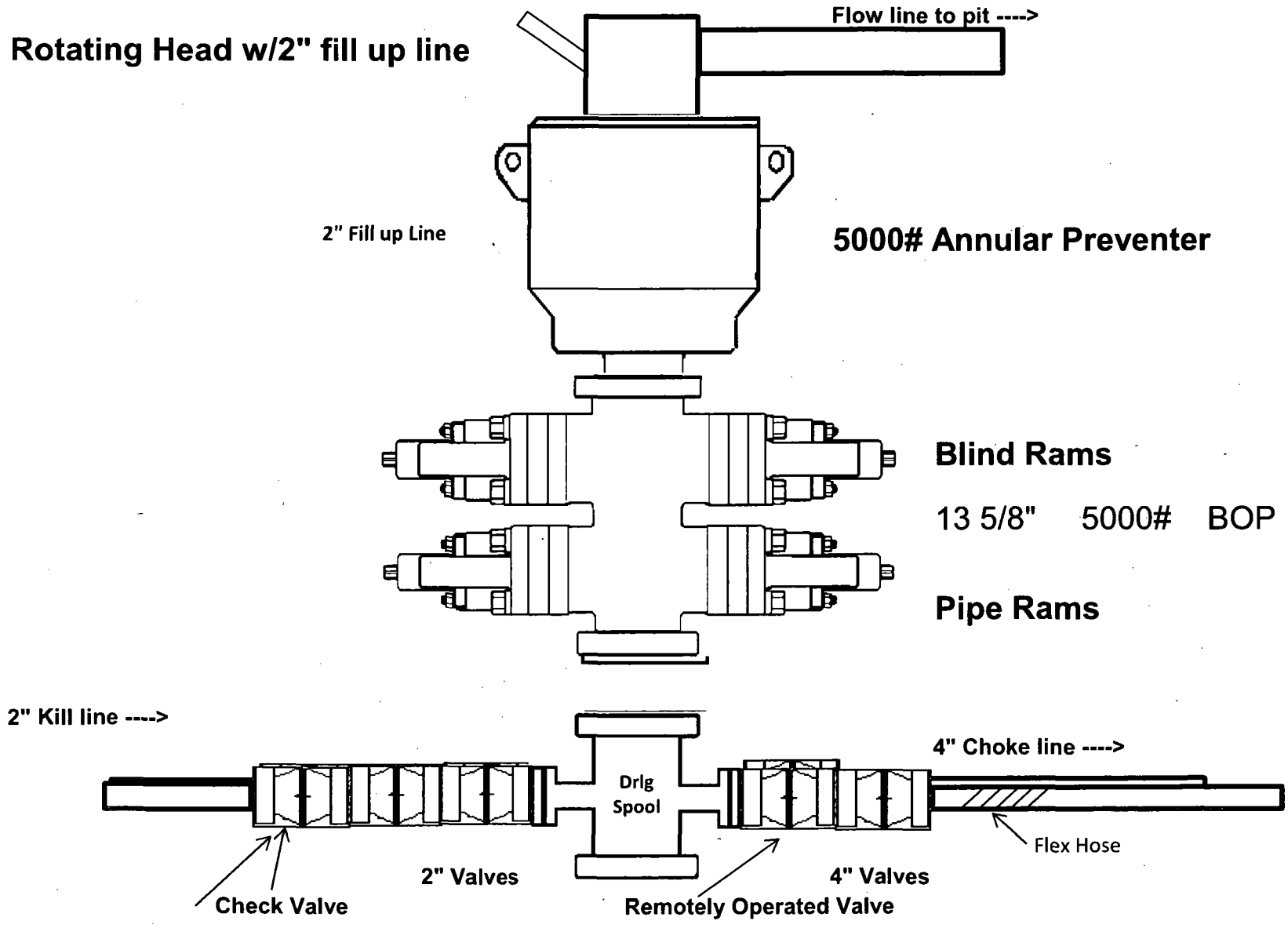
Test Pressure (psi)	10,000	Hold Time (minutes)	13¼
Tested By	Charles	Date Tested	6-26-14

This is to certify that the above Hose Assembly has been satisfactorily tested in accordance with MHSI procedure 8.2.4.2

Final Verification

Visual Inspection	(Yes) No	Hammer Unions	Yes (No)
Drift Test	(Yes) No	Safety Clamps	Yes (No)
Witnessed by Third Party Witness (No)	Customer or Third Party Witnessed By:		

5,000 psi BOP Schematic



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	**Hobbs**	*Hose Assembly Type*	**Rotary/Vibrator**
MWH Sales Representative	**Ryan Rynolds**	*Certification*	**API 7K/FSL Level 2**
Date Assembled	**11/19/2015**	*Hose Grade*	**D**
Location Assembled	**OKC**	*Hose Working Pressure*	**5000**
Sales Order #	**271739**	*Hose Lot # and Date Code*	**11834 11/14**
Customer Purchase Order #	**302337**	*Hose I.D. (Inches)*	**3.5"**
Assembly Serial # (Pick Ticket #)	**326000**	*Hose O.D. (Inches)*	**4.89"**
Hose Assembly Length	**25'**	*Armor (yes/no)*	No

Fittings			
End A		**End B**	
Stem (Part and Revision #)	**R3.5X64WB**	*Stem (Part and Revision #)*	**R3.5X64WB**
Stem (Heat #)	**A144783**	*Stem (Heat #)*	**A144783**
Ferrule (Part and Revision #)	**RF3.5**	*Ferrule (Part and Revision #)*	**RF3.5**
Ferrule (Heat #)	**J1628**	*Ferrule (Heat #)*	**J1628**
Connection . Flange Hammer Union Part	**4-1/16 5000**	*Connection (Part #)*	**4-1/16 5000**
Connection (Heat #)	**14032501**	*Connection (Heat #)*	**1404H321**
Nut (Part #)	**N/A**	*Nut (Part #)*	**N/A**
Nut (Heat #)	**N/A**	*Nut (Heat #)*	**N/A**
Dies Used	**5.49"**	*Dies Used*	**5.49"**

Hydrostatic Test Requirements		
Test Pressure (psi)	**10,000**	***Hose assembly was tested with ambient water temperature.***
Test Pressure Hold Time (minutes)	**11 1/2**	

Date Tested	*Tested By*	*Approved By*
11/19/2015		

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **Hobbs**	*Customer P.O.#* **302337**
Sales Order # **271739**	*Date Assembled:* **11/19/2015**

Specifications

Hose Assembly Type:	**Rotary/Vibrator**		
Assembly Serial #	**326000**	*Hose Lot # and Date Code*	**11834 11/14**
Hose Working Pressure (psi)	**5000**	*Test Pressure (psi)*	**10000**

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***
Kim Thomas	**11/19/2015**

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

November 19, 2015

Customer: Hobbs

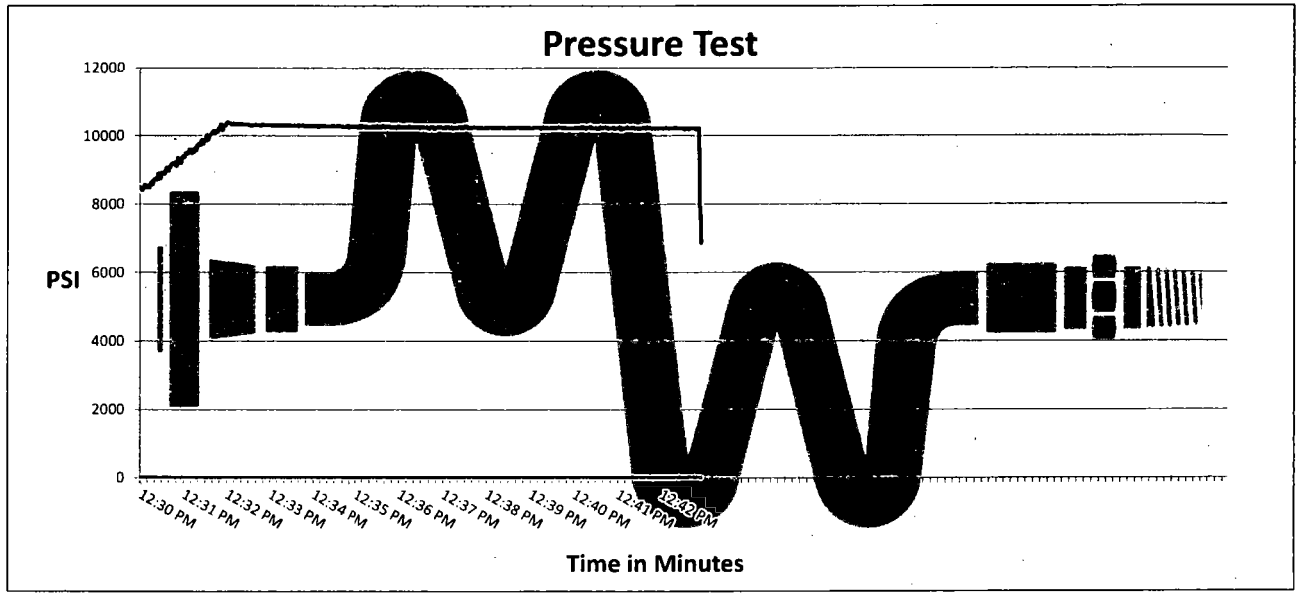
Pick Ticket #: 326000

Hose Specifications

Hose Type	Length
D	25'
I.D.	**O.D.**
3.5"	4.89"
Working Pressure	**Burst Pressure**
5000 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Coupling Method
4 1/16 5K	Swage
Die Size	**Final O.D.**
5.49"	5.50"
Hose Serial #	**Hose Assembly Serial #**
11834	326000



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
10000 PSI	11 2/4 Minutes		10473 PSI

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

Tested By: *James Hawkins*

Approved By: *Kim Thomas*

x _____

x _____

Midwest Hose & Specialty, Inc.

Hose Assembly & Test Report

General Information		Hose Specifications	
Customer	Hobbs	Hose Assembly Type	choke + kill
Date Assembled	6-26-14	Certification	API 7K
Location Assembled	Dec	Hose Grade	D
Sales Order #	216297	Hose Working Pressure	5,000
Customer Purchase Order #	237512	Hose Lot #	83094
Hose Assembly Serial #	260212	Hose Date Code	04/12
Pick Ticket Line Item	0010	Hose I.D. (inches)	3.5 inches
Hose Assembly Length (Feet and Inches)	50 feet	Hose O.D. (inches)	5.49
Contact Information Phone #		Armor (yes/no)	yes

Fittings

End A		End B	
Stem (Part and Revision #)	R3.5X64WB	Stem (Part and Revision #)	R3.5X64WB
Stem (Heat #)	131140502225	Stem (Heat #)	131140502225
Stem (Rockwell Hardness HRB #)	—	Stem (Rockwell Hardness HRB #)	—
Ferrule (Part and Revision #)	RF3.5	Ferrule (Part and Revision #)	RF3.5
Ferrule (Heat #)	126151	Ferrule (Heat #)	372194
Ferrule (Rockwell Hardness HRB #)	—	Ferrule (Rockwell Hardness HRB #)	—
Connection (Part #)	4 1/16 5K	Connection (Part #)	4 1/16 5K
Connection (Heat #)	V3360	Connection (Heat #)	V3360
Connection (Brinell Hardness HB #)	—	Connection (Brinell Hardness HB #)	—
Stress Relief #	17614	Stress Relief #	17614
Welding #	MKR	Welding #	MKR
X-ray #	—	X-ray #	—

Assembly Information

End A		End B	
Skive O.D. (Inches)	5.04	Skive O.D. (Inches)	4.92
Swager Dies (1st pass)	5.17	Swager Dies (1st pass)	5.53
Swager Dies (2nd pass)	—	Swager Dies (2nd pass)	—
Final Swage O.D. (Inches)	5.14	Final Swage O.D. (Inches)	5.48
Compression % (See Crimp Calculator)	22%	Compression % (See Crimp Calculator)	22%
Swaged By	Charles		

Hydrostatic Test Requirements

Test Pressure (psi)	10,000	Hold Time (minutes)	13¼
Tested By	Charles	Date Tested	6-26-14

This is to certify that the above Hose Assembly has been satisfactorily tested in accordance with MHSI procedure 8.2.4.2

Final Verification

Cut at 90°	(Yes) No	Hammer Unions	Yes (No)
ID Verified	(Yes) No	Safety Clamps	Yes (No)
Customer or Third Party Witness		Customer or Third Party Witnessed By:	

Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body
	From	To							
13.5"	0	480	10.75"	45.5	N80	BTC	11.25	1.25	47.62
9.875"	0	11300	7.875"	29.7	P110	BTC	1.34	1.19	3.24
6.75"	0	10800	5.5"	23	P110	BTC	2.07	2.18	3.30
6.75"	10800	19,470	5"	18	P110	BTC	2.07	2.18	3.30
			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.

Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body
	From	To							
13.5"	0	480	10.75"	45.5	N80	BTC	11.25	1.25	47.62
9.875"	0	11300	7.875"	29.7	P110	BTC	1.34	1.19	3.24
6.75"	0	10800	5.5"	23	P110	BTC	2.07	2.18	3.30
6.75"	10800	19,470	5"	18	P110	BTC	2.07	2.18	3.30
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet

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Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body
	From	To							
13.5"	0	480	10.75"	45.5	N80	BTC	11.25	1.25	47.62
9.875"	0	11300	7.875"	29.7	P110	BTC	1.34	1.19	3.24
6.75"	0	10800	5.5"	23	P110	BTC	2.07	2.18	3.30
6.75"	10800	19,470	5"	18	P110	BTC	2.07	2.18	3.30
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet

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Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body
	From	To							
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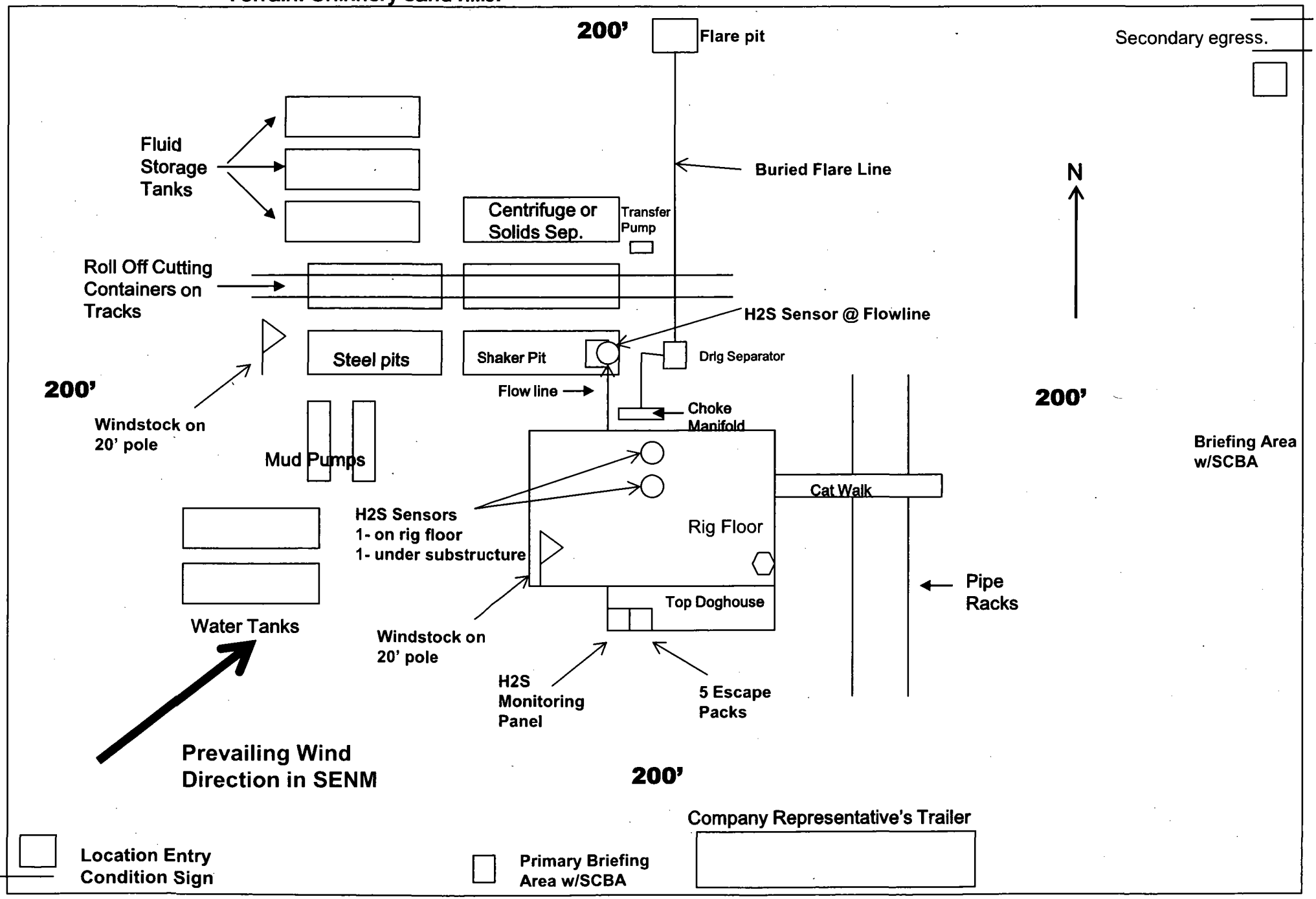
6.75"	0	10800	5.5"	23	P110	BTC	2.07	2.18	3.30
6.75"	10800	19,470	5"	18	P110	BTC	2.07	2.18	3.30
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet

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
H_2S Equipment Schematic
Terrain: Shinnery sand hills.

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



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

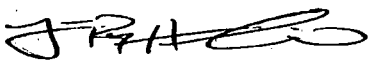
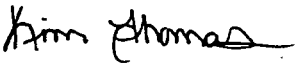
General Information		Hose Specifications	
Customer	**Hobbs**	*Hose Assembly Type*	**Rotary/Vibrator**
MWH Sales Representative	**Ryan Rynolds**	*Certification*	**API 7K/FSL Level 2**
Date Assembled	**11/19/2015**	*Hose Grade*	**D**
Location Assembled	**OKC**	*Hose Working Pressure*	**5000**
Sales Order #	**271739**	*Hose Lot # and Date Code*	**11834 11/14**
Customer Purchase Order #	**302337**	*Hose I.D. (Inches)*	**3.5"**
Assembly Serial # (Pick Ticket #)	**326000**	*Hose O.D. (Inches)*	**4.89"**
Hose Assembly Length	**25'**	*Armor (yes/no)*	No

Fittings

End A		End B	
Stem (Part and Revision #)	**R3.5X64WB**	*Stem (Part and Revision #)*	**R3.5X64WB**
Stem (Heat #)	**A144783**	*Stem (Heat #)*	**A144783**
Ferrule (Part and Revision #)	**RF3.5**	*Ferrule (Part and Revision #)*	**RF3.5**
Ferrule (Heat #)	**J1628**	*Ferrule (Heat #)*	**J1628**
Connection . Flange Hammer Union Part	**4-1/16 5000**	*Connection (Part #)*	**4-1/16 5000**
Connection (Heat #)	**14032501**	*Connection (Heat #)*	**1404H321**
Nut (Part #)	**N/A**	*Nut (Part #)*	**N/A**
Nut (Heat #)	**N/A**	*Nut (Heat #)*	**N/A**
Dies Used	**5.49"**	*Dies Used*	**5.49"**

Hydrostatic Test Requirements

Test Pressure (psi)	**10,000**	***Hose assembly was tested with ambient water temperature.***
Test Pressure Hold Time (minutes)	**11 1/2**	

Date Tested	*Tested By*	*Approved By*
11/19/2015		

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **Hobbs**	*Customer P.O.#* **302337**
Sales Order # **271739**	*Date Assembled:* **11/19/2015**

Specifications

Hose Assembly Type:	**Rotary/Vibrator**		
Assembly Serial #	**326000**	*Hose Lot # and Date Code*	**11834 11/14**
Hose Working Pressure (psi)	**5000**	*Test Pressure (psi)*	**10000**

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***
Kim Thomas	**11/19/2015**

Midwest Hose & Specialty, Inc.

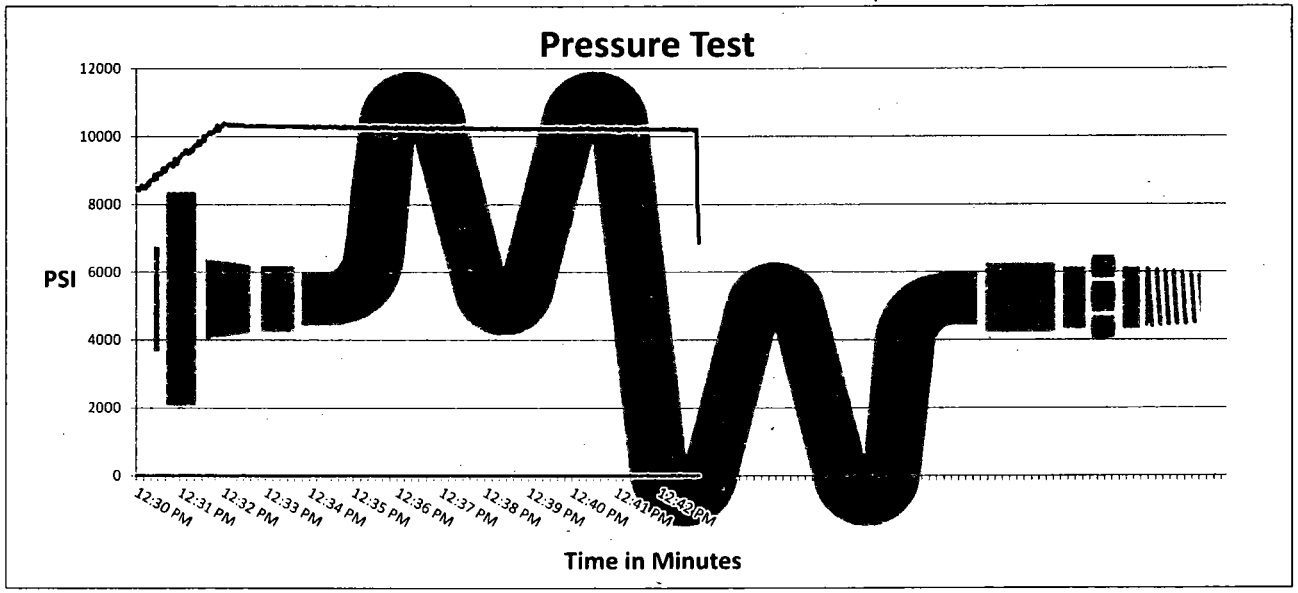
Internal Hydrostatic Test Graph

November 19, 2015

Customer: Hobbs

Pick Ticket #: 326000

Hose Specifications		Verification	
Hose Type	**Length**	**Type of Fitting**	**Coupling Method**
D	25'	4 1/16 5K	Swage
I.D.	**O.D.**	**Die Size**	**Final O.D.**
3.5"	4.89"	5.49"	5.50"
Working Pressure	**Burst Pressure**	**Hose Serial #**	**Hose Assembly Serial #**
5000 PSI	Standard Safety Multiplier Applies	11834	326000



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
10000 PSI	11 2/4 Minutes		10473 PSI

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

Tested By: *James Hawkins*

Approved By: *Kim Thomas*

x _____

x _____

Midwest Hose & Specialty, Inc.

Hose Assembly & Test Report

General Information		Hose Specifications	
Customer	Hobbs	Hose Assembly Type	choke + kill
Date Assembled	6-26-14	Certification	API 7K
Location Assembled	OKC	Hose Grade	D
Sales Order #	216297	Hose Working Pressure	5,000
Customer Purchase Order #	237512	Hose Lot #	8309
Hose Assembly Serial #	260212	Hose Date Code	04/12
Pick Ticket Line Item	0010	Hose I.D. (inches)	3.5 inches
Hose Assembly Length (Feet and Inches)	50 Feet	Hose O.D. (inches)	5.49
Contact Information Phone #		Armor (yes/no)	YES

Fittings

End A		End B	
Stem (Part and Revision #)	R3.5X64WB	Stem (Part and Revision #)	R3.5X64WB
Stem (Heat #)	13114050225	Stem (Heat #)	13114050225
Stem (Rockwell Hardness HRB #)	—	Stem (Rockwell Hardness HRB #)	—
Ferrule (Part and Revision #)	RF3.5	Ferrule (Part and Revision #)	RF3.5
Ferrule (Heat #)	126151	Ferrule (Heat #)	372114
Ferrule (Rockwell Hardness HRB #)	—	Ferrule (Rockwell Hardness HRB #)	—
Connection (Part #)	4 1/16 5K	Connection (Part #)	4 1/16 5K
Connection (Heat #)	V3360	Connection (Heat #)	V3360
Connection (Brinell Hardness HB #)	—	Connection (Brinell Hardness HB #)	—
Stress Relief #	17614	Stress Relief #	17614
Welding #	MKR	Welding #	MKR
X-ray #	—	X-ray #	—

Assembly Information

End A		End B	
Skive O.D. (inches)	5.04	Skive O.D. (inches)	4.92
Swager Dies (1st pass)	5.12	Swager Dies (1st pass)	5.53
Swager Dies (2nd pass)	—	Swager Dies (2nd pass)	—
Final Swage O.D. (inches)	5.14	Final Swage O.D. (inches)	5.48
Compression % (See Crimp Calculator)	4%	Compression % (See Crimp Calculator)	22%
Swaged By	Charles		

Hydrostatic Test Requirements

Test Pressure (psi)	10,000	Hold Time (minutes)	13¼
Tested By	Charles	Date Tested	6-26-14

This is to certify that the above Hose Assembly has been satisfactorily tested in accordance with MHSI procedure 8.2.4.2

Final Verification

Cut Length	(Yes) No	Hammer Unions	Yes (No)
ID	(Yes) No	Safety Clamps	Yes (No)
Customer or Third Party Witness		Customer or Third Party Witnessed By:	

APD ID: 10400024548 **Submission Date:** 11/14/2017

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

COG_Ushanka_23H_Exist_Rd_20171113095448.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_Ushanka_23H_Roads_20171113113920.pdf

New road type: TWO-TRACK

Length: 1319 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:

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_Ushanka_23H_1Mile_Data_20171113100011.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: A tank battery and facilities will be constructed as shown on the Production Facility Layout. The tank battery and facilities will be installed according to API specifications. No flow lines are anticipated at this time.

Production Facilities map:

COG_Ushanka_23H_Prod_Facility_20171113100036.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

Water source use type: INTERMEDIATE/PRODUCTION CASING **Water source type:** OTHER

Describe type: Brine water will be obtained from the Salty Dog Brine station located in Section 5. T19S. R36E.

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: COMMERCIAL

Water source transport method: TRUCKING

Source transportation land ownership: COMMERCIAL

Water source volume (barrels): 22500 **Source volume (acre-feet):** 2.9000947

Source volume (gal): 945000

Water source use type: STIMULATION, SURFACE CASING **Water source type:** OTHER

Describe type: Fresh water will be obtained from J-5 El Paso Natural Gas Co. water well located in Section 13, T26S, R35E. The water will be purchased from Dinwiddie Cattle Co LLC. PO Box 963 Capitan, NM 88354.

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: PIPELINE

Source transportation land ownership: PRIVATE

Water source volume (barrels): 337500 **Source volume (acre-feet):** 43.50142

Source volume (gal): 14175000

Water source and transportation map:

COG_Ushanka_23H_Brine_H2O_20171114074226.pdf

COG_Ushanka_23H_Fresh_H2O_20171114074237.pdf

Water source comments: Fresh water will be obtained from J-5 El Paso Natural Gas Co. water well located in Section 13, T26S, R35E. The water will be purchased from Dinwiddie Cattle Co LLC. PO Box 963 Capitan, NM 88354. Brine water will be obtained from the Salty Dog Brine station located in Section 5. T19S. R36E.

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:

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

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 obtained from Dinwiddie Cattle Company LLC caliche pit located in Section 18. T25S. R35E. Phone 575-364-2489.
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
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: GARBAGE

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

Amount of waste: 125 pounds

Waste disposal frequency : Weekly

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

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

Disposal location description: Trucked to an approved disposal facility

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

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

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

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location Roll off cuttings containers on tracks

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

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

WCuttings area liner

Cuttings area liner specifications and installation description

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: YES

Ancillary Facilities attachment:

COG_Ushanka_23H_GCP_20171113100530.pdf

Comments: GCP Attached.

Section 9 - Well Site Layout

Well Site Layout Diagram:

COG_Ushanka_23H_Prod_Facility_20171113100329.pdf

Comments: A tank battery and facilities will be constructed as shown on the Production Facility Layout. The tank battery and facilities will be installed according to API specifications. No flow lines are anticipated at this time.

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance **Multiple Well Pad Name:**

Multiple Well Pad Number:

Recontouring attachment:

Drainage/Erosion control construction: If needed, immediately following pad construction approximately 400' of straw waddles will be placed on the south side, and 400' on the south side of the location to reduce sediment impacts to fragile/sensitive soils.

Drainage/Erosion control reclamation: East 60'

Well pad proposed disturbance (acres): 3.67

Well pad interim reclamation (acres): 0.47

Well pad long term disturbance (acres): 3.12

Road proposed disturbance (acres): 0.42

Road interim reclamation (acres): 0.42

Road long term disturbance (acres): 0.42

Powerline proposed disturbance (acres): 0

Powerline interim reclamation (acres): 0

Powerline long term disturbance (acres): 0

Pipeline proposed disturbance (acres): 0

Pipeline interim reclamation (acres): 0

Pipeline long term disturbance (acres): 0

Other proposed disturbance (acres): 0

Other interim reclamation (acres): 0

Other long term disturbance (acres): 0

Total proposed disturbance: 4.09

Total interim reclamation: 0.89

Total long term disturbance: 3.54

Reconstruction method: New construction of pad.

Topsoil redistribution: East 60'

Soil treatment: None

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

Existing Vegetation at the well pad attachment:

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

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:

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

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_Ushanka_23H_Closed_Loop_20171113100439.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:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

Section 12 - Other Information

Right of Way needed? NO **Use APD as ROW?**

ROW Type(s):

ROW Applications

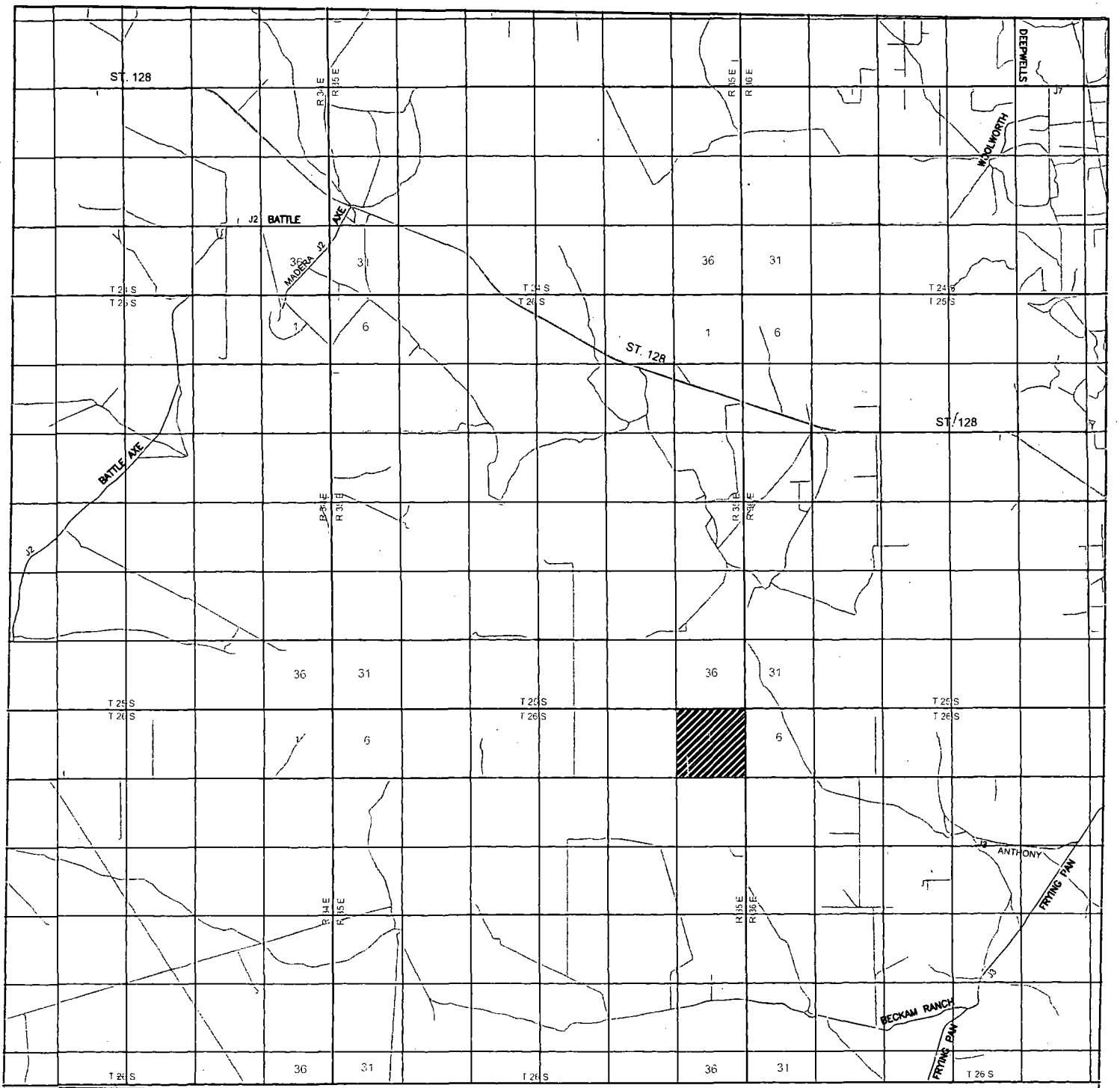
SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: Onsite completed on 10/26/2017 by Gerald Herrera (COG) and Jeff Robertson (BLM).

Other SUPO Attachment

COG_Ushanka_23H_Certification_20171113100546.pdf



USHANKA FED COM 23H

Located 210' FNL and 1650' FEL
Section 1, Township 26 South, Range 35 East,
N.M.P.M., Lea County, New Mexico.

basin surveys
focused on excellence in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 – Office
(575) 392-2206 – Fax
basinsurveys.com

0 1 MI 2 MI 3 MI 4 MI
SCALE: 1" = 2 MILES

W.O. Number: JG 33370

Survey Date: 10-26-2017

YELLOW TINT – USA LAND
BLUE TINT – STATE LAND
NATURAL COLOR – FEE LAND

N

COG OPERATING, LLC

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 13th 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

AFMSS

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

PWD Data Report
02/20/2018

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:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

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

Beneficial use user confirmation:

Estimated depth of the shallowest 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:

AFMSS

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

Bond Info Data Report

02/20/2018

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:

Operator Name: COG OPERATING LLC

Well Name: USHANKA FEDERAL COM **Well Number:** 23H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	2310	FNL	1650	FEL	26S	35E	12	Aliquot SWNE	32.058696	-103.318037	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 119761	-9189	19200	12225
BHL Leg #1	2440	FNL	1650	FEL	26S	35E	12	Aliquot SWNE	32.058341	-103.318036	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 119761	-9244	19470	12280