# HOBBS OCD

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Form 3160 -3 (March 2012)				OMBN	APPROVE 10. 1004-013	37
UNITED STATES DEPARTMENT OF THE I BUREAU OF LAND MAN.	NTERIOR	RECEIVE	ED	5. Lease Serial No. NMNM112942	October 31, 2	
APPLICATION FOR PERMIT TO I		REENTER		6. If Indian, Allotee	or Tribe	Name
la. Type of work:	R			7. If Unit or CA Agre	eement, Na	me and No.
lb. Type of Well: 🔽 Oil Well 🔲 Gas Well 🛄 Other	✔ Sin	gle Zone 🔲 Multip	le Zone	8. Lease Name and WHITE FALCON 1		FOM RALE 11H
2. Name of Operator COG OPERATING LLC 229	137)		ARG.	9. API Well No.	5-4	3930
3a. Address 600 West Illinois Ave Midland TX 79701	3b. Phone No. (432)683-74	(include area code) 443	4 A	10. Field and Pool, or 1 WC-025 G-08 S25	-	1.000
4. Location of Well (Report location clearly and in accordance with any	State requireme	ents.*)		11. Sec., T. R. M. or B	lk. and Su	rvey or Area
At surface NENW / 226 FNL / 1980 FWL / LAT 32.13701	5 / LONG -1	03.374627	Non-	SEC 16 / T25S / R	35E / NN	ЛР
At proposed prod. zone SESW / 200 FSL / 1980 FWL / LAT	32.109173	/ LONG -103.3746	22			
<ol> <li>Distance in miles and direction from nearest town or post office*</li> <li>9 miles</li> </ol>				12. County or Parish LEA		13. State NM
<ul> <li>15. Distance from proposed*</li> <li>location to nearest</li> <li>property or lease line, ft.</li> <li>(Also to nearest drig. unit line, if any)</li> </ul>	16. No. of ac 680	cres in lease	17. Spacin 320	g Unit dedicated to this	well	
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, 1030 feet applied for, on this lease, ft.</li> </ol>	19. Proposed 12412 feet	Depth / 22210 feet		BIA Bond No. on file MB000215		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	ALC: NO.	nate date work will star	rt*	23. Estimated duratio	n	
3246 feet	06/01/201			30 days		
	24. Attac					
<ol> <li>The following, completed in accordance with the requirements of Onshor</li> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System I SUPO must be filed with the appropriate Forest Service Office).</li> </ol>		<ol> <li>Bond to cover th Item 20 above).</li> <li>Operator certific</li> </ol>	ne operation	is form: ns unless covered by an prmation and/or plans as		
25. Signature		(Printed/Typed) Reves / Ph: (575)	748 6045		Date 03/28/	2017
(Electronic Submission) Title Regulatory Analyst	Wayte	(373)	140-0343		00/20/	2017
Approved by (Signature) (Electronic Submission)		(Printed/Typed) Layton / Ph: (575)2	34-5959		Date 08/14/	2017
Title	Office					
Supervisor Multiple Resources Application approval does not warrant or certify that the applicant holds conduct operations thereon. Conditions of approval, if any, are attached.		SBAD able title to those right	ts in the sub	ject lease which would e	entitle the	applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as t	ime for any pe o any matter w	rson knowingly and w ithin its jurisdiction.	villfully to n	nake to any department of	or agency	of the United
(Continued on page 2)	an will	H CONDITI	ONS	*(Inst Balan		s on page 2)



17-375



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Drilling Plan Data Report

and and and and

08/15/2017

APD ID: 10400012741	Submission Date: 03/28/2017	HOBBS OCD
Operator Name: COG OPERATING LLC		
Well Name: WHITE FALCON 16 FEDERAL COM	Well Number: 11H	AUG 2 1 2017
Well Type: OIL WELL	Well Work Type: Drill	RECEIVED

## Sectice 1 - Geologic Formations

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
17318	UNKNOWN	3246	0	0		NONE	No
17348	RUSTLER	2380	866	866		NONE	No
17349	TOP OF SALT	2039	1207	1207	SALT	NONE	No
17350	BASE OF SALT	-1756	5002	5002	ANHYDRITE	NONE	No
17360	LAMAR LS	-2086	5332	5332	LIMESTONE	NATURAL GAS,OIL	No
17345	BELL CANYON	-2118	5364	5364		NONE	No
17339	CHERRY CANYON	-3057	6303	6303		NATURAL GAS,OIL	No
18596	BRUSHY CANYON	-4516	7762	7762		NATURAL GAS,OIL	No
17316	BONE SPRING	-5757	9003	9003	SANDSTONE	NATURAL GAS,OIL	No
18620	AVALON	-5791	9037	9037		NATURAL GAS,OIL	No
18620	AVALON	-5965	9211	9211		NATURAL GAS,OIL	No
17359	BONE SPRING 1ST	-7146	10392	10392		NATURAL GAS,OIL	No
17364	BONE SPRING 2ND	-7664	10910	10910		NATURAL GAS,OIL	No
17366	BONE SPRING 3RD	-8669	11915	11915		NATURAL GAS,OIL	Yes
17333	WOLFCAMP	-9105	12351	12351	SHALE	NATURAL GAS,OIL	No

## Section 2 - Blowout Prevention

#### Operator Name: COG OPERATING LLC

Well Name: WHITE FALCON 16 FEDERAL COM

Well Number: 11H

Pressure Rating (PSI): 3M

Rating Depth: 11700

**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\_White\_Falcon\_11H\_3M\_Choke\_03-28-2017.pdf

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

COG\_White\_Falcon\_11H\_3M\_BOP\_03-28-2017.pdf

COG\_White\_Falcon\_11H\_Flex\_Hose\_06-26-2017.pdf

Pressure Rating (PSI): 5M

Rating Depth: 12550

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\_White\_Falcon\_11H\_5M\_Choke\_03-28-2017.pdf

**BOP** Diagram Attachment:

COG\_White\_Falcon\_11H\_5M\_BOP\_03-28-2017.pdf

COG\_White\_Falcon\_11H\_Flex\_Hose\_06-26-2017.pdf

# Operator Name: COG OPERATING LLC Well Name: WHITE FALCON 16 FEDERAL COM

Well Number: 11H

## Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	895	0	895	-6672	-7567	895	J-55	68	STC	4.76	0.8	DRY	11.0 9	DRY	11.0 9
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	11700	0	11700	-6672	- 18559	11700	L-80	47	OTHER	1.3	1.17	DRY	1.97	DRY	1.97
3	PRODUCTI ON	8.5	5.5	NEW	API	N	0	22210	0	22210	-6672	- 29111	22210	P- 110	23	OTHER	2.05	2.16	DRY	2.55	DRY	2.55

#### **Casing Attachments**

Casing ID: 1

String Type: SURFACE

**Inspection Document:** 

Spec Document:

**Taperd String Spec:** 

Casing Design Assumptions and Worksheet(s):

COG\_White\_Falcon\_11H\_Casing\_Prog\_03-28-2017.pdf

Operator Name: COG OPERATING LLC Well Name: WHITE FALCON 16 FEDERAL COM

Well Number: 11H

#### **Casing Attachments**

Casing ID: 2

String Type: INTERMEDIATE

**Inspection Document:** 

Spec Document:

**Taperd String Spec:** 

Casing Design Assumptions and Worksheet(s):

COG\_White\_Falcon\_11H\_Casing\_Prog\_03-28-2017.pdf

Casing ID: 3 String Type: PRODUCTION

**Inspection Document:** 

Spec Document:

**Taperd String Spec:** 

Casing Design Assumptions and Worksheet(s):

COG\_White\_Falcon\_11H\_Casing\_Prog\_03-28-2017.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	895	350	1.75	13.5	612	50	Class C	4% Gel + 1% CaCl2
SURFACE	Tail		0	895	250	1.34	14.8	335	50	Class C	2% CaCl2
INTERMEDIATE	Lead		0	1170 0	1460	3.5	10.3	5110		Tuned Light Blend	As needed
INTERMEDIATE	Tail		0	1170 0	250	1.34	14.8	335	50	Class C	2% CaCl

## Operator Name: COG OPERATING LLC

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#### Well Name: WHITE FALCON 16 FEDERAL COM

Well Number: 11H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	2221 0	140	2.5	11.9	350	30	50:50:10 H Blend	As needed
PRODUCTION	Tail		0	2221 0	2730	1.24	14.4	3385	30	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 (Ibs/gal)	Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	Hd	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	895	OTHER : FW Gel	8.6	8.8							FW Gel
895	1170 0	OTHER : Diesel Brine Emulsion	8.4	9							Diesel Brine Emulsion
1170 0	2221 0	OIL-BASED MUD	9.6	11							

Operator Name: COG OPERATING LLC Well Name: WHITE FALCON 16 FEDERAL COM

Well Number: 11H

### 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: 7100 Anticipated Surface Pressure: 4369.36

Anticipated Bottom Hole Temperature(F): 180

Anticipated abnormal proessures, 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\_White\_Falcon\_11H\_H2S\_SUP\_03-28-2017.pdf COG\_White\_Falcon\_11H\_H2S\_Schem\_03-28-2017.pdf

### **Section 8 - Other Information**

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

COG\_White\_Falcon\_11H\_AC\_Report\_03-28-2017.pdf COG\_White\_Falcon\_11H\_Directional\_Plan\_03-28-2017.pdf Other proposed operations facets description:

## Other proposed operations facets attachment:

COG\_White\_Falcon\_11H\_Drilling\_Prog\_03-28-2017.pdf

#### Other Variance attachment:

COG\_White\_Falcon\_11H\_Flex\_Hose\_03-28-2017.pdf

**10M BOP Stack** 



j#



# 5,000 psi BOP Schematic Flow line to pit ----> Rotating Head w/2" fill up line C O 2" Fill up Line 5000# Annular Preventer E ELD. **Blind Rams** Þ 13 5/8" 5000# BOP **Pipe Rams** A 2" Kill line ----> 4" Choke line ----> Drlg Spool Flex Hose 2" Valves 4" Valves **Check Valve Remotely Operated Valve**







Vent Line





# Internal Hydrostatic Test Certificate

Customer	rmation	Hose Spec	ifications
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	ОКС	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
	F	ittings	and the second second
End A		End	В
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 Po	art 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 T	est Requirements	
Test Pressure (psi)	10,000	Hose assembly was test	ed with ambient water
Test Pressure Hold Time (minutes	) <b>11 1/2</b>	temper	ature.

MHSI-008 Rev. 0.0 Proprietary

		rest Hose cialty, Inc.	
	Certificate	of Conformity	
Customer: Hobbs		Customer P.O.# 302337	
Sales Order # 271739		Date Assembled: 11/19/2015	
	Spec	ifications	
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
			10000
We hereby certify that the abov to the requirements of the purch Supplier: Midwest Hose & Specialty, Inc. 3312 S I-35 Service Rd Oklahoma City, OK 73129	hase order and curre	or the referenced purchase order	
to the requirements of the purch Supplier: Midwest Hose & Specialty, Inc. 3312 S I-35 Service Rd	hase order and curre	or the referenced purchase order	
to the requirements of the purch Supplier: Midwest Hose & Specialty, Inc. 3312 S I-35 Service Rd Oklahoma City, OK 73129	hase order and curre	or the referenced purchase order	to be true according

MHSI-009 Rev.0.0 Proprietary



Midwest Hose & Specialty, Inc.

per-si

## Hose Assembly & Test Report

Ferrule (Part and Revision #)       RF 3, 5       Ferrule (Part         Ferrule (Heat #)       12 6151       Ferrule (Heat         Ferrule (Rockwell Hardness HRB #)       —       Ferrule (Rock         Ferrule (Rockwell Hardness HRB #)       —       Ferrule (Rock         Connection (Part #)       4 1/16 5 1/2       Connection         Connection (Part #)       V 331 D       Connection         Connection (Brinell Hardness HB #)       —       Connection         Connection (Brinell Hardness HB #)       —       Connection         Stress Relief #	g Pressure ode hes) ches)	chone + k:11 APZ 7K D 5,000 B309 04/12 J. 5 : Ales 5,49
Date Assembled       6 - 16 - 19       Certification         Location Assembled       D)2 C       Hose Grade         Sales Order #       210 29 7       Hose Work         Customer Purchase Order #       23 7 512       Hose Work         Hose Assembly Serial #       200 10       Hose Date         Pick Ticket Line Item       00 10       Hose Date         Hose Assembly Length (Feet and Inches)       50 544 Y       Hose 0.0.0         Contact Information Phone #       Armor (yes/a         Fittings       End A       Stem (Part and Revision #)         Stem (Part and Revision #)       1 3/14 0 5022.5       Stem (Heat #)         Stem (Part and Revision #)       RF 3, 5       Ferrule (Part         Stem (Part and Revision #)       RF 3, 5       Ferrule (Part         Stem (Part and Revision #)       RF 3, 5       Ferrule (Part         Stem (Part and Revision #)       RF 3, 5       Ferrule (Rockwell Hardness HRB #)         Ferrule (Part and Revision #)       RF 3, 5       Ferrule (Rockwell Hardness HRB #)         Connection (Part #)       V 351, D       Connection         Connection (Part #)       V 351, D       Connection         Connection (Part #)       V 351, D       Connection         Connection (Brinell Hardness HB #) <td>g Pressure ode hes) ches)</td> <td>API7K D 5,000 B309 04/12 J. 5 indhes</td>	g Pressure ode hes) ches)	API7K D 5,000 B309 04/12 J. 5 indhes
Location Assembled       Dp. c       Hose Grade         Sales Order #       A 1 L 297       Hose Work         Customer Purchase Order #       3 3 3 512       Hose Lot #         Hose Assembly Serial #       D L 0 > 1 2       Hose Date         Pick Ticket Line Item       00 1 0       Hose I.D. (r)         Hose Assembly Length (Feet and Inches)       50 5 Lev       Hose O.D. (r)         Kose Assembly Length (Feet and Inches)       50 5 Lev       Hose O.D. (r)         Contact Information Phone #       Armar (r)       Armar (r)         Kose Assembly Length (Feet and Inches)       50 5 Lev       Hose O.D. (r)         Stem (Part and Revision #)       R 3.5 X L 4 LJ Ø       Stem (Part and Revision #)         Stem (Part and Revision #)       1 3/14 0 50 2 5 Stem (Part and Revision #)       Stem (Reackwell Hardness HRB #)         Stem (Reackwell Hardness HRB #)	ode hes) :hcs)	D 5,000 8309 04/12 3.5 indhes
Sales Order #       A 1 L 297       Hose Work         Customer Purchase Order #       3 3 3 512       Hose Lot #         Hose Assembly Serial #       D L 0 > 1 D       Hose Date         Pick Ticket Line Item       00 1 D       Hose I.D. (r         Hose Assembly Length (Feet and Inches)       S0 5 4 V       Hose 0.D. (r         Kose Assembly Length (Feet and Inches)       S0 5 4 V       Hose 0.D. (r         Contact Information Phone #       Armor (restrictions)       Fittings         End A       Stem (Part and Revision #)       R 3.5 × L 4 LJØ       Stem (Part and Sevision #)         Stem (Part and Revision #)       R 3.5 × L 4 LJØ       Stem (Part and Sevision #)         Ferrule (Part and Revision #)       R 7 3, 5       Ferrule (Part Backweil Hardness HRB #)         Ferrule (Part and Revision #)       R 7 3, 5       Ferrule (Part Reackweil Hardness HRB #)         Ferrule (Rockweil Hardness HRB #)       -       Ferrule (Rockweil Reackweil Hardness HRB #)         Connection (Part #)       U S3L D       Connection         Connection (Brinefi Hardness HB #)       -       K ray #	ode hes) :hcs)	8309 04/12 3.5 indhes
Customer Purchase Order #       137512       Hose Lot #         Hose Assembly Serial #       16012       Hose Date         Pick Ticket Line Item       0012       Hose I.D. (r)         Hose Assembly Length (Feet and Inches)       50 5424       Hose O.D. (r)         Contact Information Phone #       Armor (yes/a         Fittings       End A       Fittings         Stem (Part and Revision #)       R 3.5 × L 4 LJØ       Stem (Part and Revision #)         Stem (Part and Revision #)       R 3.5 × L 4 LJØ       Stem (Part and Revision #)         Ferrule (Part and Revision #)       R 7.3,5       Ferrule (Part #)         Stem (Part and Revision #)       R 7.3,5       Ferrule (Part #)         Stem (Part and Revision #)       R 7.3,5       Ferrule (Part #)         Connection (Part #)       (12 L151)       Ferrule (Part #)         Connection (Part #)       (12 L151)       Ferrule (Root #)         Connection (Part #)       V 332 D       Connection         Connection (Part #)       V 5.6 (Connection       Stress Relief         Nelding #       //	ode hes) :hcs)	8309 04/12 3.5 indhes
Hose Assembly Serial #       1 60212       Hose Date         Pick Ticket Line Item       0010       Hose I.D. (n         Hose Assembly Length (Feet and Inches)       50 5424       Hose O.D. (n         Contact Information Phone #       Armor (yes/n         Fittings       End A       Fittings         Stem (Part and Revision #)       [1 3/14050225]       Stem (Part and Revision #)         Stem (Rackwell Hardness HRB #)	hes) ches)	04/12 3.5 indhes
Pick Ticket Line Item       0010       Hose I.D. (I         Hose Assembly Length (Feet and Inches)       50 % 42 Y       Hose O.D. (I         Contact Information Phone #       Armor (yesh         Fittings       End A       Fittings         Stem (Part and Revision #)       [1] 3/140507-5       Stem (Part and Revision #)         Stem (Rackwell Hardness HRB #)       1] 3/140507-5       Stem (Part and Revision #)         Ferrule (Part and Revision #)       [1] 3/140507-5       Stem (Rackwell Hardness HRB #)         Ferrule (Part and Revision #)       [1] 3/140507-5       Stem (Rackwell Hardness HRB #)         Ferrule (Part and Revision #)       [1] 3/140507-5       Stem (Rackwell Hardness HRB #)         Ferrule (Part #)       [1] 4/16       [2] 6/15       Ferrule (Part #)         Ferrule (Rackwell Hardness HRB #)       -       Ferrule (Rackwell Hardness HRB #)       -         Ferrule (Rackwell Hardness HRB #)       -       Connection       Connection         Connection (Part #)       U 321 D       Connection       Connection         Connection (Part #)       U 321 D       Connection       Connection         Connection (Brinell Hardness HB #)       -       Connection       Connection         Stress Relief #       17 6 1 4       Stress Relie       Stress Relie	ches)	J. 5 indhes
Hose Assembly Length (Feet and Inches)       50 \$44 Y       Hose 0.D. (         Contact Information Phone #       Armor (yes/a         Fittings       Fittings         End A       Stem (Part and Revision #)         Stem (Part and Revision #)       R.3.5 X L 4 LJ Ø         Stem (Heat #)       I 3114050215         Stem (Heat #)       I 3114050215         Stem (Rockwell Hardness HRB #)       Stem (Rockwell Hardness HRB #)         Ferrule (Part and Revision #)       R F 3, 5         Ferrule (Heat #)       I 2 L1 5 1         Ferrule (Rockwell Hardness HRB #)       Ferrule (Rockwell Hardness HRB #)         Ferrule (Rockwell Hardness HRB #)       Ferrule (Rockwell Hardness HRB #)         Connection (Part #)       V 32 L D       Connection         Connection (Part #)       V 32 L D       Connection         Connection (Brinefi Hardness HB #)       Connection       Connection         Connection (Brinefi Hardness HB #)       Connection       Connection         Stress Relief #       )7 G L4       Skive 0.D. (nector)         Nelding #       Stress Relief       Stress Relief         Nelding #       Stress i       S. 04       Skive 0.D. (nector)         Swager Dies (Ist pass)       S. ( 2 -       Swager Dies         Swage		Construction of the second
Contact Information Phone #       Armor (yes/a         Fittings       Fittings         End A       Stem (Part and Revision #)         Stem (Part and Revision #)       R 3.5 × L 4 LJ Ø         Stem (Part and Revision #)       R 3.5 × L 4 LJ Ø         Stem (Part and Revision #)       R 3.5 × L 4 LJ Ø         Stem (Rockwell Hardness HRB #)	A STREET	
Fittings         End A         Stem (Part and Revision #)       R 3.5 × L 4 LJ Ø       Stem (Part and         Stem (Part and Revision #)       R 3.5 × L 4 LJ Ø       Stem (Part and         Stem (Heat #)       1 3/1 4 0 5022 5       Stem (Heat #)         Stem (Rockwell Hardness HRB #)       Stem (Rockwell Hardness HRB #)         Ferrule (Part and Revision #)         Ferrule (Part #)         Connection (Part #)         Connection (Part #)         Connection (Part #)         Connection (Brinefi Hardness HB #)         Connection (Br	A STREET	Yes
End A         Stem (Part and Revision #)       R 3.5 × L 4 LJØ       Stem (Part and Stem (Part and Stem (Heat #)         Stem (Heat #)       I 3/14 o 5022 5       Stem (Heat #)         Stem (Rockwell Hardness HRB #)       —       Stem (Rockwell Hardness HRB #)         Ferrule (Part and Revision #)       R F 3, 5       Ferrule (Part Berrule (Heat #)         Ferrule (Heat #)       I 2 L1 5 1       Ferrule (Heat #)         Ferrule (Rockwell Hardness HRB #)       —       Ferrule (Rock         Connection (Part #)       V 33 L D       Connection         Connection (Brinell Hardness HB #)       —       Connection         Connection (Brinell Hardness HB #)       —       Connection         Connection (Brinell Hardness HB #)       —       Connection         Stress Relief #		CONTRACTOR OF
Stem (Heat #)       1 3/14 0 5022 5       Stem (Heat #)         Stem (Rockwell Hardness HRB #)	End B	
Stem (Rockwell Hardness HRB #)       Stem (Rockwell         Ferrule (Port and Revision #)       RF 3, 5       Ferrule (Port         Ferrule (Heat #)       12 L151       Ferrule (Heat         Ferrule (Rockwell Hardness HRB #)	Revision #)	R3.5%644B
Ferrule (Port and Revision #)       RF 3, 5       Ferrule (Port         Ferrule (Heat #)       12 L151       Ferrule (Heat         Ferrule (Rockwell Hardness HRB #)       Ferrule (Rock       Ferrule (Rock         Connection (Part #)       4 1/16 5 K       Connection         Connection (Heat #)       V 33L D       Connection         Connection (Heat #)       V 33L D       Connection         Connection (Brinell Hardness HB #)       Connection       Connection         Stress Relief #       17 G 1 G       Stress Relief         Velding #       Y - G       Connection         Kive O.D. (Inches)       5. 0 G       Skive O.D. (Inches)         End A       Skive O.D. (Inches)       Suger Dies         Swager Dies (Ist pass)       S. 0 G       Skive O.D. (Inches)         Swager Dies (Ind pass)       S. (1 G       Final Swage         Swager Dies (Ind pass)       S. (1 G       Gompression % (See Crimp Calculator)		13114050225
Ferrule (Heat #)       126151       Ferrule (Heat #)         Ferrule (Rockwell Hardness HRB #)       —       Ferrule (Rock         Connection (Part #)       41/16 S K       Connection         Connection (Heat #)       V 331 D       Connection         Connection (Heat #)       V 331 D       Connection         Connection (Brinell Hardness HB #)       —       Connection         Connection (Brinell Hardness HB #)       —       Connection         Stress Relief #	Hardness HRB #)	
Ferrule (Heat #)       126151       Ferrule (Heat #)         Ferrule (Rockwell Hordness HRB #)       —       Ferrule (Rock         Connection (Part #)       41/16 S K       Connection         Connection (Part #)       V 331 D       Connection         Connection (Heat #)       V 331 D       Connection         Connection (Heat #)       V 331 D       Connection         Connection (Brinell Hardness HB #)       —       Connection         Connection (Brinell Hardness HB #)       —       Connection         Stress Relief #	nd Revision #)	RF3.S
Ferrule (Rockwell Hordness HRB #)       Ferrule (Rock         Connection (Part #)       4 1/16 S K       Connection         Connection (Part #)       V 331 D       Connection         Connection (Brinell Hardness HB #)       Connection       Connection         Connection (Brinell Hardness HB #)       Connection       Connection         Stress Relief #       ITG III       Stress Relief         Velding #       M K fL       Welding #         Velding #       M K fL       Welding #         Kive O.D. (Inches)       5. 04       Skive O.D. (Inches)         End A       Swager Dies (Ist pass)       Swager Dies (Ist pass)       Swager Dies (Ist pass)         Compression % (See Crimp Calculator)       Stress Requirem       Hydrostatic Test Requirem         Wardes       Hold Time       Date Tested	1	372114
Connection (Heat #) Connection (Brinell Hardness HB #) Stress Relief # Nelding # (-ray # Assembly Informatio End A Skive O.D. (Inches) Swager Dies (1st pass) Swager Dies (1st pass) Swager Dies (2nd pass) Swager	ell Hardness HRB #)	All and a second se
Connection (Heat #) Connection (Brinell Hardness HB #) Stress Relief # Nelding # (-ray # Assembly Informatio End A Skive O.D. (Inches) Swager Dies (1st pass) Swager Dies (1st pass) Swager Dies (2nd pass) Swager	'art #)	4 1/16 5K
Connection (Brinell Hardness HB #) Tress Relief # Velding # -ray # -ray # -ray # Assembly Informatio End A kive O.D. (Inches) wager Dies (1st pass) Swager Dies (2nd pass) Tompression % (See Crimp Calculator) waged By Hydrostatic Test Requirer est Pressure (psi) Participation Compression Hydrostatic Test Requirer Participation Compression Hold Time Date Tested	(eat #)	V3360
Velding #       ME-IL       Welding #         '-ray #       -       X-ray #         Assembly Informatio       End A       Assembly Informatio         End A       -       Skive O.D. (Inches)         wager Dies (1st pass)       5. (; ?)       Swager Die         wager Dies (1st pass)       -       Swager Die         wager Dies (2nd pass)       -       Swager Die         inal Swage O.D. (Inches)       5. (; ?)       Swager Die         inal Swage O.D. (Inches)       5. (; ?)       Swager Die         inal Swage O.D. (Inches)       5. (; ?)       Swager Die         inal Swage O.D. (Inches)       5. (; ?)       Compression         waged By       -       Hydrostatic Test Requirer         waged By       -       Hold Time         wased By       -       Hold Time         wased By       -       10.000       Hold Time	irine'il Hardness HB #)	
Velding #       Mr. fL       Welding #         I-ray #       -       X-ray #         Assembly Informatio       End A       -         End A       -       Skive O.D. (Inches)       -         iwager Dies (1st pass)       5. 0.4       Skive O.D. (Inches)         iwager Dies (1st pass)       -       Swager Dies         imager Dies (1st pass)       -       Swager Dies         imager Dies (2nd pass)       -       Swager Dies         imager Dies (2nd pass)       -       Swager Dies         imal Swage O.D. (Inches)       -       -         imal Swage O.D. (Inches)       -       -         imal Swage O.D. (Inches)       -       -         imal Swage O.D. (Inches)       -       -	ŧ	17614
K-ray #       X-ray #         Assembly Informatio         End A         ikive O.D. (inches)         iwager Dies (1st pass)         Swager Dies (2nd pass) <td></td> <td>MKR</td>		MKR
End A         kive O.D. (Inches)       5. 04       Skive O.D. (Inches)         wager Dies (1st pass)       5. (; 2       Swager Dies         wager Dies (2nd pass)       5. (; 2       Swager Dies         inal Swage O.D. (Inches)       5. (; 4       Final Swager         iompression % (See Crimp Calculator)       6. (, 4       Final Swager         waged By       Wardes       10. (M)       Hold Time         waged By       10. (M)       Hold Time       Date Tested		-
kive O.D. (Inches) 5. 04 Skive O.D. (I wager Dies (1st pass) 5. (; 2. Swager Die wager Dies (2nd pass) 5. (; 2. Swager Die inal Swage O.D. (Inches) 5. (; 4 Final Swage ompression % (See Crimp Calculator) 7. Mo Compression waged By Hydrostatic Test Requirer est Pressure [psi) 10. (MU Hold Time) ested By Marks (Lach Date Tested	A.	
wager Dies (1st pass)       5. (; ?-       Swager Die         wager Dies (2nd pass)       Swager Die       Swager Die         inal Swage O.D. (Inches)       5. (; ?-       Swager Die         pompression % (See Crimp Calculator)       7. (?)       Final Swage         waged By       Hydrostatic Test Requirer         est Pressure (psi)       10. (pl)       Hold Time         ested By       Marches       Date Tested	End B	Manifestional Taple - add Mendel of Age and a Carlot - advance - bit and a Carlot - advance - bit and a Carlot - advance
wager Dies (2nd pass)       Swager Die         inal Swage O.D. (Inches)       5. (4       Final Swage         iompression % (See Crimp Calculator)       7.4% o       Compression         waged By       Hydrostatic Test Requirer         est Pressure (psi)       10. (M)       Hold Time         ested By       Marks       Date Tested	hes)	4.42
Final Swage O.D. (Inches) 5.1.4 Final Swage Compression % (See Crimp Calculator) 7400 Compression Swaged By Hydrostatic Test Requirem Fest Pressure (psi) 10.100 Hold Time Fested By Date Tested	1st poss)	5.53
Tompression % (see Crimp Calculator) Waged By Hydrostatic Test Requirer Test Pressure (ps) Hold Time Tested By Date Tested	2nd pass)	
Tompression % (see Crimp Calculator) Waged By Hydrostatic Test Requirer Test Pressure (ps) Hold Time Tested By Date Tested	D.D. (Inches)	9.48
est Pressure (psi) // 10,000 // Hold Time // Hold Time // Date Tested	% (See Crimp Calculator)	2210
est Pressure (psi) // 10,000 Hold Time		
ested By have by Date Tester	ants	4 . 
	inutes)	13:14
This is to certify that the above Hose Assembly has been satisfactorily test		6-26-14
		edure 8.2.4.2
Final Verification	in accordance with MHSI proc	a start and the sec
uc gui (e) No Hammer Ui	1.1.1.1	Yes 😡
Juine to Safety Clarr hird Party Witness Customer or Third Party Witnessed	ons	Yes do

MHSI-004 Rev. 3.0 Proprietary



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# Internal Hydrostatic Test Certificate

General Infor	mation	Hose Spec	cifications
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	ОКС	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
	Fi	ttings	
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 Par	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 T	est Requirements	
Test Pressure (psi)	10,000	Hose assembly was test	ed with ambient water
Test Pressure Hold Time (minutes)	11 1/2	tempe	rature.

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	Midwest Hose & Specialty, Inc.
C	Certificate of Conformity
Customer: Hobbs	Customer P.O.# 302337
Sales Order # 271739	Date Assembled: 11/19/2015
	Specifications
Hose Assembly Type: Rotar	ry/Vibrator
Assembly Serial # 3260	00 Hose Lot # and Date Code 11834 11/14
Hose Working Pressure (psi) 5000	Test Pressure (psi) 10000
We hereby certify that the above mate to the requirements of the purchase or Supplier: <b>Midwest Hose &amp; Specialty, Inc.</b> <b>3312 S I-35 Service Rd</b> <b>Oklahoma City, OK 73129</b>	erial supplied for the referenced purchase order to be true according rder and current industry standards.
to the requirements of the purchase or Supplier: <b>Midwest Hose &amp; Specialty, Inc.</b> <b>3312 S I-35 Service Rd</b>	
to the requirements of the purchase or Supplier: <b>Midwest Hose &amp; Specialty, Inc.</b> <b>3312 S I-35 Service Rd</b> <b>Oklahoma City, OK 73129</b>	

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MHSI-009 Rev.0.0 Proprietary



November 19, 2015

Max Midwest Hose & Specialty, Inc.

# Hose Assembly & Test Report

General Inform	ation	Hose Specifi	cations
Customer	Hobbs	Hose Assembly Type	chowe + kill
Date Assembled	6-26-14	Certification	APITK
Location Assembled	DICC	Hose Grade	D
Saies 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)	J. 5 indhes
Hose Assembly Length (Feet and Inches)	50 Fuer	Hose O.D. (Inches)	5.49
Contact Information Phone #		Armor (yes/no)	VES
CARLES THE STATE	Fitt	tings	a service of the POLICE CARD and a service service and a service of the service o
End A		End B	international contraction of the second
Stem (Part and Revision #)	R3.5XL4WD	Stem (Part and Revision #)	R3.5%644B
Stem (Heat #)	13/14030225	Stem (Heat #)	13114050225
Stem (Rockwell Hardness HRB #)		Stem (Rockwell Hardness HRB #)	-
errule (Port and Revision #)	RF 3.5	Ferrule (Port and Revision #)	RF3.S
Ferrule (Heat #)	126151	Ferrule (Heat #)	372114
errule (Rockwell Hardness HRB #)	-	Ferrule (Rockwell Hardness HRB #)	terment.
Connection (Part #)	41/16 5K	Connection (Part #)	4 1/16 5K
Connection (Heat #)	VJJLD	Connection (Heat #)	V3360
onnection (Brinell Hardness HB #)	-	Connection (Brine'll Hardness HB #)	-
tress Relief #	17614	Stress Relief #	17614
Velding #	MKR	Welding #	MKR
'-ray #	-	X-ray #	
	Assembly I	nformation	R. 9. 1973 5 1977
End A		End B	
kive O.D. (Inches)	5.04	Skive O.D. (Inches)	4.42
wager Dies (1st pass)	5.62	Swager Dies (1st pass)	5.53
wager Dies (2nd pass)	-	Swager Dies (2nd pass)	
inal Swage O.D. (Inches)	5.44	Final Swage O.D. (Inches)	<b>9</b> .48
ompression % (See Crimp Calculator)	Atho 1	Compression % (See Crimp Cakulator)	2210
waged By	Marles	Ath	• 
	Hydrostatic Tes	t Requirements	and the second s
est Pressure (psi)	10.000/	Hold Time (minutes)	13:14
ested By Mardes	ith	Date Tested	6-26-14
This is to certify that the above I	And some the party of the second s	sfactorily tested in accordance with MHSI	procedure 8.2.4.2
	Final Ver	Conservational Advantation and Control of Conservation of Conservation Conservati	the state of the state
v.uc i gin	(es) No	Hammer Unions	Yes Ro
15 F	No No	Safety Clamps	Yes do
hird Party Witness	Customer or Third Part	ty witnessea by:	

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#### **Casing Program**

	Int	asing erval	Csg. Size		Weight			SF	OF Duret	SF
Hole Size	From	То			(lbs)	Grade	Conn.	Collapse	SF Burst	Body
17.5"	0	895	13.375"		68	J55	STC	4.76	0.80	11.09
12.25"	0	11700	9.625	9.625"		L80	BTC	1.30	1.17	1.97
8.5"	0	22,210	5.5"		23	23 P110		2.05	2.16	2.55
				BLM	Minimun	n Safety	Factor	1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing.to mitigate collapse. 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



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



## **Operator Certification**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

 NAME: Mayte Reyes
 Signed on: 03/27/2017

 Title: Regulatory Analyst
 Street Address: 2208 W Main Street

 Street Address: 2208 W Main Street
 Zip: 88210

 City: Artesia
 State: NM

 Phone: (575)748-6945
 Zip: 88210

 Email address: Mreyes1@concho.com
 Field Representative

 Representative Name: Rand French
 Representative Name: Rand French

Street Address: 2208 West Main Street City: Artesia State: NM Phone: (575)748-6340

Email address: rfrench@concho.com

Zip: 88210

## **FMSS**

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

APD ID: 10400012741 Operator Name: COG OPERATING LLC Well Name: WHITE FALCON 16 FEDERAL COM Well Type: OIL WELL Submission Date: 03/28/2017

1000

Application Data Report

08/15/2017

Well Number: 11H Well Work Type: Drill

### Section 1 - General

APD ID:	10400012741	Tie to previous NOS?		Submission Date: 03/28/2017					
BLM Office:	CARLSBAD	User: Mayte Reyes	Title:	Regulatory Analyst					
Federal/India	an APD: FED	Is the first lease penetrated for production Federal or Indian? FED							
Lease numb	er: NMNM112942	Lease Acres: 680							
Surface acce	ess agreement in place?	Allotted?	Reservation:						
Agreement i	n place? NO	Federal or Indian agreement:							
Agreement r	umber:								
Agreement r	ame:								
Keep applica	ation confidential? YES								
Permitting A	gent? NO	APD Operator: COG OPERATING LLC							
Operator lett	er of designation:								
Keep applica	tion confidential? YES								

### **Operator Info**

Operator Organization Name: COG OPERATING LLC
Operator Address: 600 West Illinois Ave
Operator PO Box:
Operator City: Midland State: TX
Operator Phone: (432)683-7443
Operator Internet Address: RODOM@CONCHO.COM

### Section 2 - Well Information

Well in Master Development Plan? NO	Mater Development Plan name:							
Well in Master SUPO? NO	Master SUPO name:							
Well in Master Drilling Plan? NO	Master Drilling Plan name:							
Well Name: WHITE FALCON 16 FEDERAL COM	Well Number: 11H	Well API Number:						
Field/Pool or Exploratory? Field and Pool	Field Name: WC-025 G-08 S253534O	Pool Name: BONE SPRING						

Page 1 of 3

Well Number: 11H

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

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: 9 Miles Distance to nearest well: 1030 FT Distance to lease line: 200 FT Reservoir well spacing assigned acres Measurement: 320 Acres COG\_White\_Falcon\_11H\_C102\_03-27-2017.pdf Well plat: Well work start Date: 06/01/2017 Duration: 30 DAYS

## **Section 3 - Well Location Table**

Surve	еу Тур	e: RE	CTA	NGUL	AR											
Desc	ribe S	urvey	у Туре	e:												
Datur	m: NA	D83				Vertical Datum: NAVD88										
Surve	e <mark>y</mark> nur	nber:														
		tor		ator			t/Tract							mber		

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tr	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Numbe	Elevation	MD	DVT
SHL	226	FNL	198	FWL	25S	35E	16	Aliquot	32.13701	-	LEA	NEW	NEW	S	STATE	324	0	0
Leg			0					NENW	5	103.3746		MEXI				6		
#1										27		co	со					
KOP	226	FNL	198	FWL	25S	35E	16	Aliquot	32.13701	-	LEA	NEW	NEW	S	STATE	324	0	0
Leg			0					NENW	5	103.3746		MEXI				6		
#1										27		CO	CO					
PPP	330	FNL	198	FWL	25S	35E	16	Aliquot	32.13672	-	LEA	NEW	NEW	S	STATE	-	118	118
Leg			0					NENW	9	103.3746		MEXI				856	08	08
#1										26		co	co			2		

Operator Name: COG OPERATING LLC

# Weil Name: WHITE FALCON 16 FEDERAL COM

Well Number: 11H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	DM	TVD
PPP	264	FSL	198	FWL	25S	35E	21	Aliquot	32.11586		LEA		NEW	F	NMNM	-	196	123
Leg	0		0					NESW	7	103.3746 23			MEXI		132952	913	00	78
#1										23		CO	00			2		
EXIT	330	FSL	198	FWL	25S	35E	21	Aliquot	32.10953		LEA	NEW	NEW	F	NMNM	-	220	991
Leg			0					SESW		103.3746			MEXI		112942	667	00	8
#1									a second	22		CO	CO			2		
BHL	200	FSL	198	FWL	25S	35E	21	Aliquot	32.10917	-1.00	LEA	NEW	NEW	F	NMNM	-	222	124
Leg			0					SESW	3	103.3746		MEXI	MEXI		112942	916	10	12
#1										22		CO	со			6		