

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Carlsbad Field Office
OCD Hobbs
FORM APPROVED
BLM NO. 1004-0137
Expires January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

Case Serial No. 029519A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
MAS FEDERAL 3H

9. API Well No.
30-025-42950-00-S1

10. Field and Pool or Exploratory Area
BERRY-BONE SPRING, NORTH

11. County or Parish, State
LEA COUNTY, NM

SUBMIT IN TRIPLICATE - Other instructions on page 2

HOBBS OCD
JUN 13 2018
RECEIVED

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
COG OPERATING LLC

Contact: AMANDA AVERY
E-Mail: aavery@concho.com

3a. Address
ONE CONCHO CENTER 600 W ILLINOIS AVENUE
MIDLAND, TX 79701-4287

3b. Phone No. (include area code)
Ph: 575-748-6940

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 34 T20S R34E NWNE 190FNL 2310FEL

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Onshore Order Variance
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

COG Operating LLC requests permission to install a Vapor Combustor Unit (VCU) at the Mas Federal #3H tank battery. This request is due to the fact that the cost of installing and operating equipment necessary to capture the gas exceeds the value of the gas over the life of the facility. COG Operating LLC understands that the following conditions apply:

- COG Operating LLC may be required to provide economic justification and provide volume verification to the Authorized Officer upon request.
- COG Operating LLC will comply with 43 CFR 3179 requirements.
- If volume being combusted is less than 50 MCF of gas per day, it is considered unavoidably lost, therefore, no royalty obligation shall be accrued and will not be required to be reported.
 - Unavoidably Lost production shall mean (1) those gas vapors which are released (in this case combusted) from low-pressure storage tanks.
- Essentially all measured combusted volumes over 50 MCF will require payment of royalties and

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #421256 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Hobbs
Committed to AFMSS for processing by DEBORAH MCKINNEY on 05/29/2018 (18DLM0350SE)**

Name (Printed/Typed) AMANDA AVERY Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 05/23/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By DUNCAN WHITLOCK Title TECHNICAL LPET Date 06/04/2018

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Hobbs

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.

(Instructions on page 2) **** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

*MJB/OCD
6/14/2018*

Additional data for EC transaction #421256 that would not fit on the form

32. Additional remarks, continued

volumes need to be reported on OGOR B reports as disposition code 08.

5. Per 43 CFR 3162.7-5(d)/Onshore Order No.3.III.1.1, site facility diagram must be submitted within 60 days of equipment installation.

6. This approval does not authorize any additional surface disturbance.

7. Subject to like approval from NMOCD.

Attached are the following:

Site Security Diagram of the current tank battery, as well as the location of the VCU and the manifold line connecting the tanks to the VCU.

Contact name and number to retrieve information on volumes being combusted.

Specification sheet(s) for the VCU.

MAS FEDERAL 3H BATTERY
 NWNE SECTION 34, T20S, R34E, UNIT B
 LEA COUNTY, NM

WELLS:
 MAS FEDERAL #003H: 30-025-42950
 MAS FEDERAL #004H: 30-025-43482

OIL METERS
 Allocabon Meter (3H)
 (OA) #14647429
 Test Meter (4H)
 (OT) #14648492

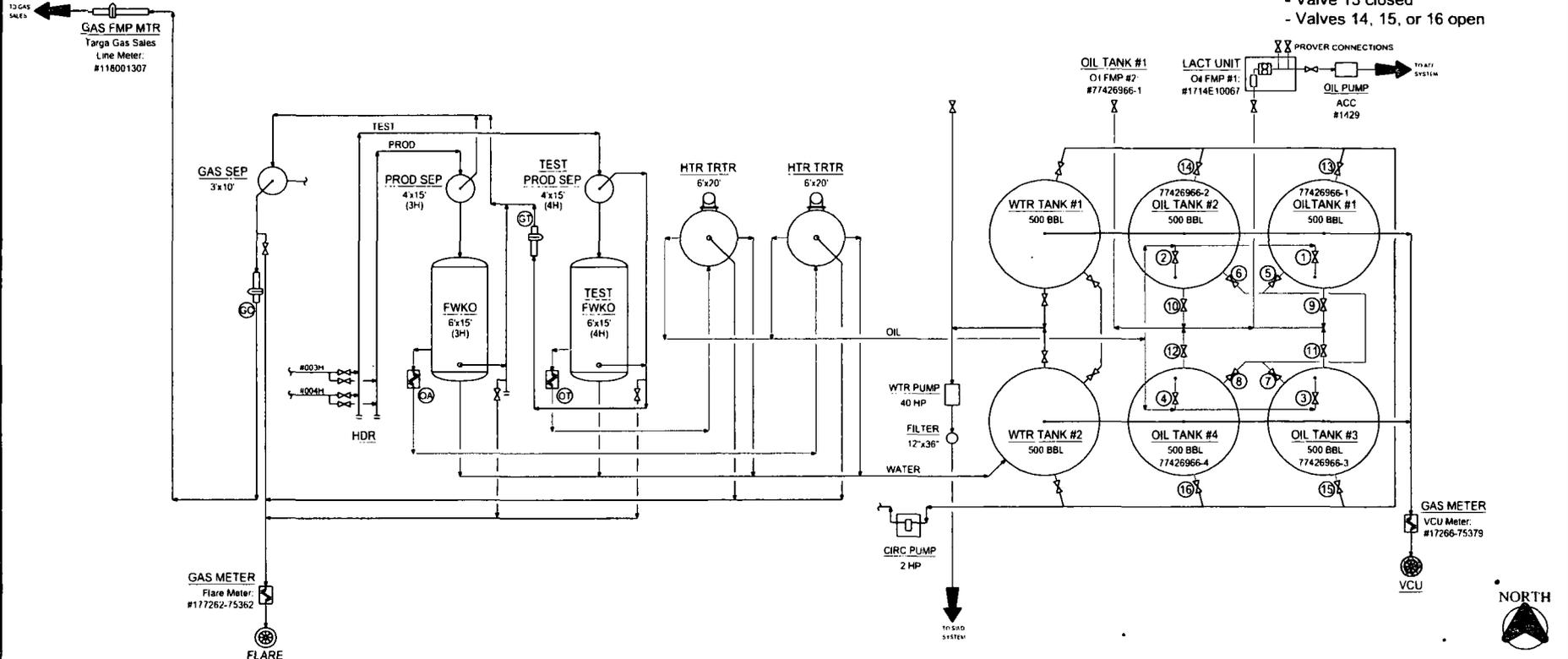
GAS METERS
 Test Meter (4H)
 (GT) #39022279
 Check Meter
 (GC) #39022278

Production Phase - Oil Tank #1

- Valve 1 open
- Valves 2, 3, and 4 closed
- Valves 5, 6, 7, and 8 open
- Valves 9, 10, 11, and 12 closed
- Valve 13 open
- Valves 14, 15, and 16 closed

Sales Phase - Oil Tank #1

- Valve 1 closed
- Valves 2, 3, or 4 open
- Valve 5 closed
- Valves 6, 7, and 8 open
- Valve 9 open
- Valves 10, 11, and 12 closed
- Valve 13 closed
- Valves 14, 15, or 16 open

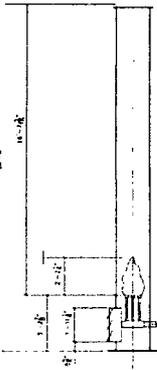


NOTES: Type of Lease: Federal Federal Lease #: NMLC 029519A Property Code: 315664 OGRID #: 229137	Ledger for Site Diagram Produced Fluid: _____ Produced Oil: _____ Produced Gas: _____ Produced Water: _____	CONFIDENTIALITY NOTICE THIS DRAWING IS PROPERTY OF COG OPERATING LLC AND IS LOANED TO THE BORROWER FOR CONFIDENTIAL USE ONLY AND IS SUBJECT TO RETURN UPON REQUEST AND SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT SPECIFICALLY FURNISHED.	REFERENCE DRAWINGS		REVISIONS			ENGINEERING RECORD		
			NO.	DATE	DESCRIPTION	BY	CHK.	APP.	DRN.	BY
	A	08/01/12	ISSUE FOR SITE PERMITTING	CRB			CRB	CRB	08/07/12	
	B	04/03/17	UPDATED FOR MAS FED 3H BTY	CRB			CRB	CRB	08/07/12	
COG OPERATING LLC SITE SECURITY PLANS LOCATED AT:		ONE CONCHO CENTER 600 WEST ILLINOIS AVENUE MIDLAND, TEXAS 79701			DATE NO: FACI DIR: C. BLEDSOE OPER DIR: VARES SCALE: NONE			CONCHO NORTHERN DELAWARE BASIN ASSET PRODUCTION FACILITIES SITE FACILITY DIAGRAM MAS FEDERAL 3H BATTERY LEA COUNTY TOWNSHIP/RANGE MULTIPLE OGRID NO. D-1700-81-005 NEW MIDLAND REV B		

INTERNAL OXIDATION CALCULATIONS

Flow Rate 1157 SCFH
 Temperature (Lapor) 599 deg R
 Pss 10in.W.C
 Temperature (air) 545 deg R
 H₂O Ratio 8.5
 Diameter 24 in
 Ambient air density 0.075 lb/ft³

C = 1
 Formula 36.5
 MW exp 42.00
 H₂O Ratio 0.1657
 Mass flow 11283 lbs/sec
 Air required 21810 lbs/sec 253694 SCFH
 CO₂ 0.4230 lbs/sec 3.47 SCFH
 H₂O 0.1649 lbs/sec 1.34 SCFH
 N₂ 1.72 lbs/sec 13.54 SCFH
 Exit Mass 22929 lbs/sec 346652 SCFH
 MW 28.72
 Heat input 2576 BTU/sec
 Temperature rise 1048 R deg F/sec
 Total Volume 32.11 ACFS
 Stack Area 314 SF
 Velocity 29.32 fps
 Stack height 71.86 ft
 Residence 0.78 sec
 Porosit 0.1925 in WC
 Area req'd (air mass) 273 m²
 Grill size 4423 m



BURNER
 vs = 892 fps
 Mach exit = 202 x vs = 180.18 fps
 AREA = 936 in²
 ΔP = 10.4 in WC
 L = 42.19 ft

← HEADER INLET

REV	DESCRIPTION	DATE
1	RELATED PER PMA DATA	8/1/18

Edge CXV 24" Combustor Data Sheet

Mike Powell - Construction Foreman

432-254-7619