

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**Carlsbad Field Office**
OCD ArtesiaFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**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.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM114969
2. Name of Operator COG OPERATING LLC		6. If Indian, Allottee or Tribe Name
Contact: AMANDA AVERY E-Mail: aavery@concho.com		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 600 W ILLINOIS AVENUE MIDLAND, TX 79701	3b. Phone No. (include area code) Ph: 575-748-6940	8. Well Name and No. BARN OWL FEDERAL 3H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 18 T26S R27E SESW 380FSL 1890FWL		9. API Well No. 30-015-41283-00-S1
		10. Field and Pool, or Exploratory WELCH
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK 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"/> Fracture Treat	<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
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Onshore Order Variance
	<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 recompleat 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 shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall 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 Horned Owl 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:

1. COG Operating LLC may be required to provide economic justification and provide volume verification to the Authorized Officer upon request.
2. COG Operating LLC will comply with NTL-4A requirements.
3. 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.
 - a. ?Unavoidably Lost? production shall mean (1) those gas vapors which are released (in this case combusted) from low-pressure storage tanks.
4. Essentially all measured combusted volumes over 50 MCF will require payment of royalties and

Accepted For Record
NMOCD**NM OIL CONSERVATION**

ARTESIA DISTRICT

JUL 11 2016**RECEIVED**

14. I hereby certify that the foregoing is true and correct. Electronic Submission #334088 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by LACHELLE NAJERA on 03/18/2016 (16LN0039SE)	
Name (Printed/Typed) AMANDA AVERY	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 03/17/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>DUNCAN WHITLOCK</u>	Title <u>TECHNICAL LPET</u>	Date <u>06/30/2016</u>
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 <u>Carlsbad</u>

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #334088 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:

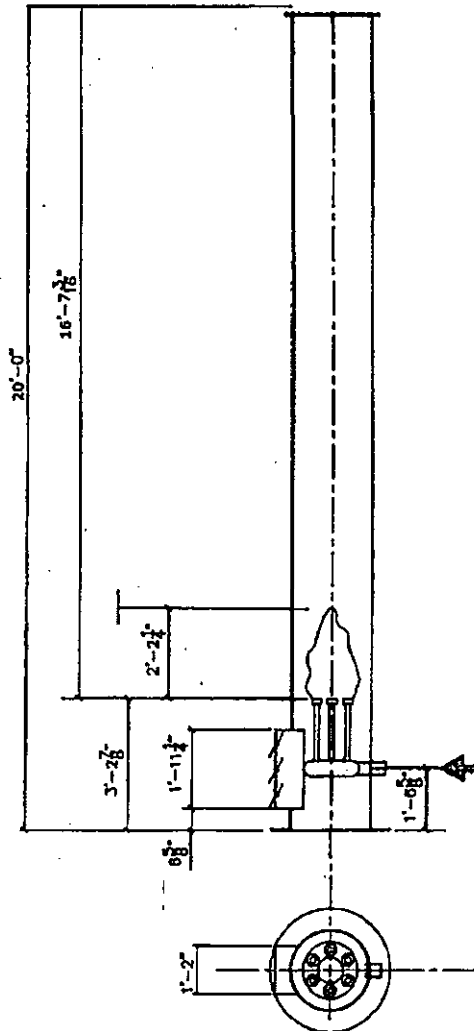
Site Security Diagram of the current tank battery, as well as the location of the VCU and the manifold line connecting the tanks to the VCU.

Placard information stating directions on how to retrieve volumes being combusted.

Specification sheet(s) for the VCU.

THERMAL OXIDATION CALCULATIONS

Flow Rate 1.157 SCFS
 Temperature (vapor) 585 deg. R
 P_{ov} 10 in. W.C.
 Temperature (air) 545 deg. R
 Hgt:D Ratio 8.5
 Diameter 24 in.
 Ambient air density 0.0716 lb./cf



	C	H	
Formula	36	6	
MW avg	42.00		
H:C Ratio	0.1667		
Mass flow	0.1283	Lbs/sec	
Air required	2.1810	Lbs/sec	29.0694 SCFS
CO ₂	0.4030	Lbs/sec	3.47 SCFS
H ₂ O	0.1649	Lbs/sec	6.94 SCFS
N ₂	1.72	Lbs/sec	23.59 SCFS
Exit Mass	2.2909	Lbs/sec	34.0052 SCFS
MW	28.72		
Heat Input	2576	BTU/sec.	
Temperature rise	1049.10	deg. F/sec	
Total Volume	92.11	ACFS	
Stack Area	3.14	SF	
Velocity	29.32	fps	
Stack height	21.66	ft.	
Residence	0.78	sec.	

P_{draft} 0.1935 in. WC
 Area req'd (air intake) 273 in.²
 Grill size 14x23 in.

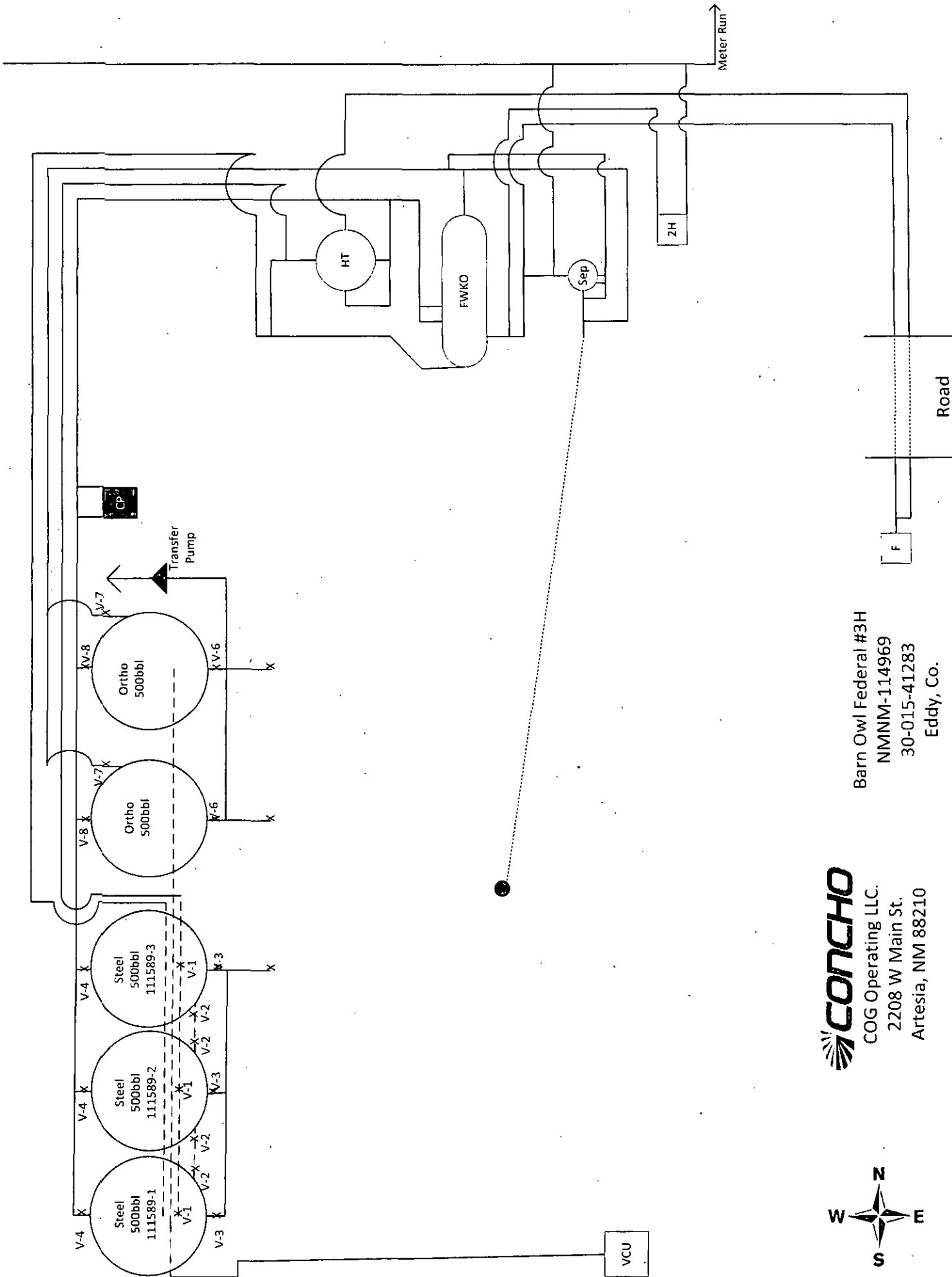
BURNER

V_s = 892 fps
 Mach exit = .202 x V_s = 180.18 fps
 AREA = .996 in.²
 ΔP = 10.4 in. WC
 L_f = 2.19 ft.

← HEADER INLET

1	REVISED PER FINAL DATA	8/14/14
REV.	DESCRIPTION	DATE

Edge CXV 24" Combustor Data Sheet



COG Operating LLC.
2208 W Main St.
Artesia, NM 88210

Barn Owl Federal #3H
NMNM-114969
30-015-41283
Eddy, Co.



COG Operating LLC
Barn Owl Federal #3H
NMNM114969
30-015-41283
Sec 18-T26S-R27E
Eddy County, NM

1. Production Phase (OT#1)

- A. Valves #1,#2,#4,#5,#7 Open
- B. Valve #3 Closed and Sealed
- C. Valve #6 Closed
- D. Valves on OT #2 Positioned:
 - 1. Valves #1 ,#3 & #4 Closed and sealed

Production Phase (OT #2)

- A. Valves #1,#2,#4,#5,#7 Open
- B. Valve #3 Closed and Sealed
- C. Valve #6 Closed
- D. Valves on OT #1 and #3 Positioned:
 - 1. Valves #1,#3 & #4 Closed and Sealed

Production Phase (OT #3)

- A. Valves #1,#2,#4,#5,#6 & #8 Open
- B. Valve #3 Closed and Sealed
- C. Valve #7 Closed
- D. Valves on OT #2 and #1 Positioned:
 - 1. Valves #1,#2, #3 & #4 Closed and Sealed

II. Sales Phase (OT#1)

- A. Valves #1,#2 and #4 Closed and Sealed
- B. Valve #3 on OT #1 Open
- C. Valves on OT #2 Positioned:
 - 1. Valve #1 Open
 - 2. Valve #2, #3 and #4 Closed and Sealed

Sales Phase (OT#2)

- A. Valves #1,#2and #4 Closed and Sealed
- B. Valve #3 on OT #2 Open
- C. Valves on OT #1 Positioned:
 - 1. Valve #1 Open
 - 2. Valve #2, #3 and #4 Closed and Sealed

Sales Phase (OT#3)

- A. Valves #1,#2and #4 Closed and Sealed
- B. Valve #3 on OT #3 Open
- C. Valves on OT #1 and #2 Positioned:
 - 1. Valve #1 and #2 Open
 - 2. Valve #3 and #4 Closed and Sealed