

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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.**5. Lease Serial No.
NMNM112273

6. If Landowner or Tribe Name

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

8. Well Name and No.
MOSSY FEDERAL 1H9. API Well No.
30-015-4273510. Field and Pool, or Exploratory
PARKWAY-BONE SPRING11. County or Parish, and State
EDDY COUNTY, NM

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
COG OPERATING LLCContact: AMANDA AVERY
E-Mail: aavery@concho.com3a. Address
2208 W MAIN STREET
ARTESIA, NM 882103b. Phone No. (include area code)
Ph: 575-748-6940

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 12 T20S R29E NENE 990FNL 550FEL

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

TYPE OF SUBMISSION

- ☒
- Notice of Intent
-
- ☐
- Subsequent Report
-
- ☐
- Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <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 | Venting and/or Flaring |
| <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 Mossy Federal #1H 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

SEE ATTACHED FOR
CONDITIONS OF APPROVALSUBJECT TO LIKE
APPROVAL BY STATENM OIL CONSERVATION
ARTESIA DISTRICT

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

Electronic Submission #348425 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by DEBORAH MCKINNEY on 08/30/2016 ()

Name (Printed/Typed) AMANDA AVERY

Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission)

Date 08/19/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED

Approved By

Teungku Muchlis Krueng

Title

PETROLEUM ENGINEER

Date

SEP - 9 2016

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

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 provide any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

Additional data for EC transaction #348425 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.

The Mossy Fed tank vapor measurement method was performed in the following manner:

Measurement Instrument: Fox Instruments Thermal Mass Meter

? This meter technology was chosen due to its volume turndown capabilities

? The meter was calibrated for 3" diameter pipe.

? A standard gas analysis, comparable to the gas expected from the Mossy Fed production stream, was also inputted into the thermal mass meter transmitter for gas density calculations.

? The calibration of the meter allows for a span of 0-300 Mcfd.

? Test results 7.92 MSCF on 8/16/16

The thermal mass meter was installed on the outlet of the production tanks. The valve to the combustor was placed in the closed position and all tank vapors were directed to the thermal mass meter. Our technician verified there were no leaks on the tank vent valves or thief hatches during testing. The tank vapors were measured for 4 hours during the hottest part of the day. Our cumulative 4-hour volume was then averaged over a 24 hour period to arrive at our 24-hr daily production. Due to the measurement period occurring during the heat of the day, we feel our measured volumes are higher than the actual production.

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.

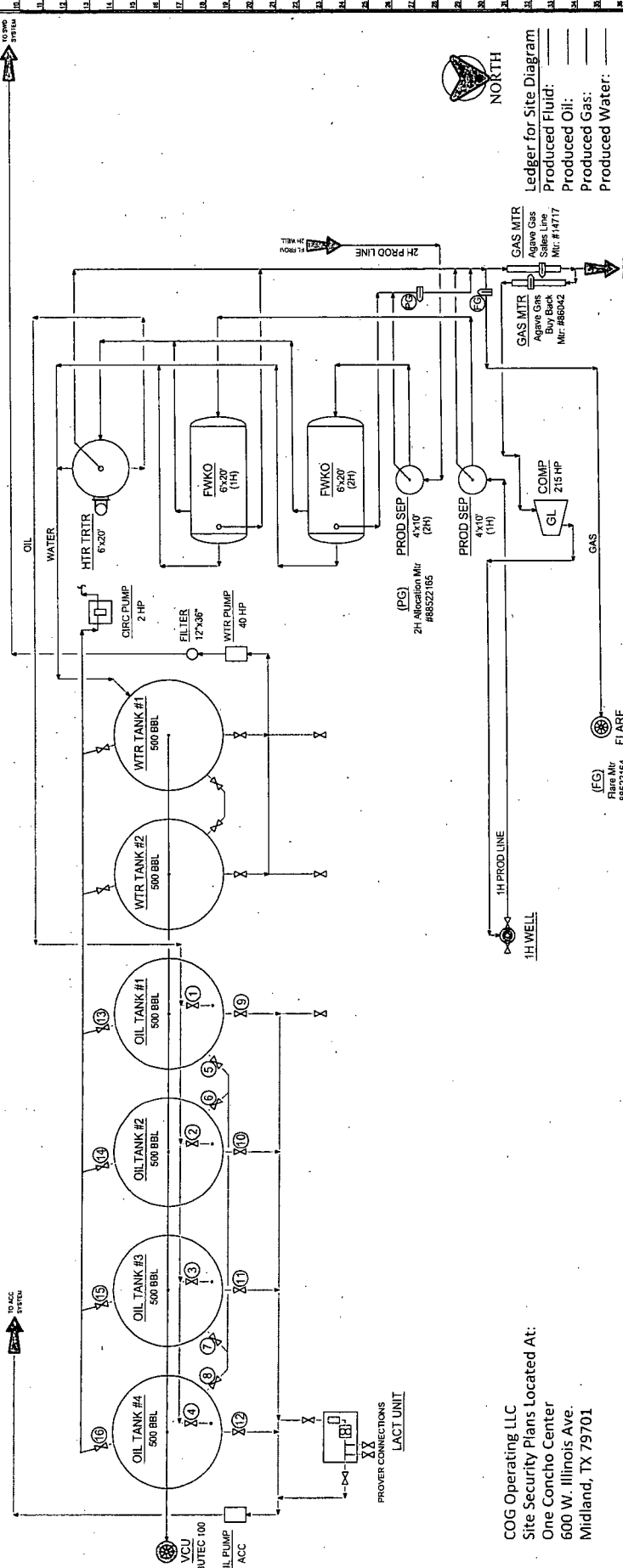
Specification sheet(s) for the VCU.

MOSSY FEDERAL 1H BATTERY
 NENE SECTION 12, T20S, R29E, UNIT A
 EDDY COUNTY, NM

WELLS:
 MOSSY FEDERAL #001H: 30-015-42735
 MOSSY FEDERAL #002H: 30-015-42736

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



COG Operating LLC
 Site Security Plans Located At:
 One Concho Center
 600 W. Illinois Ave.
 Midland, TX 79701

Ledger for Site Diagram
 Produced Fluid: _____
 Produced Oil: _____
 Produced Gas: _____
 Produced Water: _____

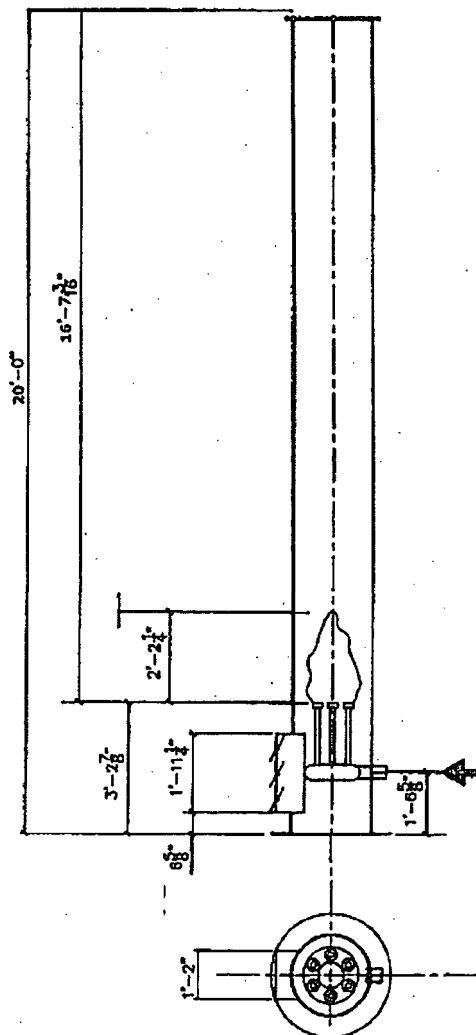
CONCHO NEW MEXICO BASIN ASSET PRODUCTION FACILITIES MOSSY FEDERAL 1H BATTERY		EDDY COUNTY TWP/SP/RAVE MULTIPLE	URG NO. D-1700-81-005
NO. A DATE 08/07/18 BY C. BLUDISE CHK. DATE 08/07/18 APP. DATE 08/07/18 SCALE NONE	NO. B DATE 08/07/18 BY C. BLUDISE CHK. DATE 08/07/18 APP. DATE 08/07/18 SCALE NONE	NO. C DATE 08/07/18 BY C. BLUDISE CHK. DATE 08/07/18 APP. DATE 08/07/18 SCALE NONE	NO. D DATE 08/07/18 BY C. BLUDISE CHK. DATE 08/07/18 APP. DATE 08/07/18 SCALE NONE
INTERFERE DRAWINGS NO. TITLE 88522164 10 x 25 x 3.5 (FG) Flare Mtr			
CONFIDENTIALITY NOTICE THIS DRAWING IS THE PROPERTY OF COG OPERATING LLC AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COG OPERATING LLC. ANY UNAUTHORIZED REPRODUCTION OR TRANSMISSION OF THIS DRAWING IS STRICTLY PROHIBITED AND WILL BE SUBJECT TO LEGAL ACTION.			
NOTES: Type of Lease: Federal Federal Lease #: NMNM - 015882 Property Code: 313801 OGRID #: 229137			

THERMAL OXIDATION CALCULATIONS

Flow Rate 1.157 SCFS
 Temperature (vapor) 585 deg. R
 Pav 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
CO2	0.4030	Lbs/sec	3.47 SCFS
H2O	0.1649	Lbs/sec	6.94 SCFS
N2	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.	

Pdraft 0.1935 in.WC
 Area req'd (air intake) 273 in.2
 Grill size 14x23 in.



BURNER

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

← HEADER INLET

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

Edge CXV 24" Combustor Data Sheet

Mossy Federal #1H Battery

Contact

Winston Ballard – 575-513-9366

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

**CONDITIONS OF APPROVAL TO INSTALL
VAPOR COMBUSTOR UNIT (VCU)**

1. These conditions of approval are for installation of a VCU on low-pressure oil storage tank facilities. This approval 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. The operator may be required to provide economic justification to the Authorized Officer upon request. The operator may be required to provide volume verification to the Authorized Officer upon request.
2. 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.
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5. Per 43 CFR 3162.7-5(d)/Onshore Order No.3.III.I.1, site facility diagram must be submitted within 60 days of equipment installation.
6. This approval does not authorize any additional surface disturbance.
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