Carlsbad Field Office
OCD Artesia

Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB 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.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMNM115411

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NMNM126700

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
Multiple--See Attached

2. Name of Operator
COG OPERATING LLC
Contact: AMANDA AVERY
E-Mail: aavery@concho.com

9. API Well No.
Multiple--See Attached

3a. Address
600 W ILLINOIS AVENUE
MIDLAND, TX 79701

3b. Phone No. (include area code)
Ph: 575.748.6940

10. Field and Pool or Exploratory Area
BONE SPRINGS
WILLOW LAKE-BONE SPRING, SE

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Multiple--See Attached

11. County or Parish, State
EDDY COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Onshore Order Variance
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 Really Scary Fed Com #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

RECEIVED
JUN 06 2018
DISTRICT II-ARTESIA O.C.D.

GC 6-6-18
Accepted for record - NMOCD

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #389794 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 10/13/2017 (18PP0144SE)

Name *(Printed/Typed)* AMANDA AVERY — Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) — Date 09/26/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By J.D. Whitlock Jr. — Title TLPET — Date 6/4/18

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 CFO

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 ****

Additional data for EC transaction #389794 that would not fit on the form

Wells/Facilities, continued

Agreement	Lease	Well/Fac Name, Number	API Number	Location
NMNM126700	NMNM115411	REALLY SCARY FEDERAL COM 3H	30-015-36372-00-S1	Sec 33 T24S R28E SESW 430FSL 2310FWL 32.167730 N Lat, 104.093480 W Lon
NMNM115411	NMNM115411	REALLY SCARY FEDERAL 5H	30-015-40241-00-S1	Sec 33 T24S R28E SESE 380FSL 990FEL
NMNM115411	NMNM115411	REALLY SCARY FEDERAL 6H	30-015-42863-00-S1	Sec 33 T24S R28E NWNW 360FNL 380FWL
NMNM126700	NMNM115411	REALLY SCARY FEDERAL COM 2H	30-015-41411-00-S1	Sec 33 T24S R28E SESW 190FSL 1683FWL 32.166906 N Lat, 104.095090 W Lon
NMNM115411	NMNM115411	REALLY SCARY FEDERAL 4H	30-015-41670-00-S1	Sec 33 T24S R28E SWSE 250FSL 2293FEL 32.167068 N Lat, 104.090734 W Lon
	NMNM115411	FAC RLYSC3 REALLY SCARY		Sec 33 T24S R28E Mer NMP SESW
NMNM126700		FAC RLYSC3 REALLY SCARY		Sec 33 T24S R28E Mer NMP SESW

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.I.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.

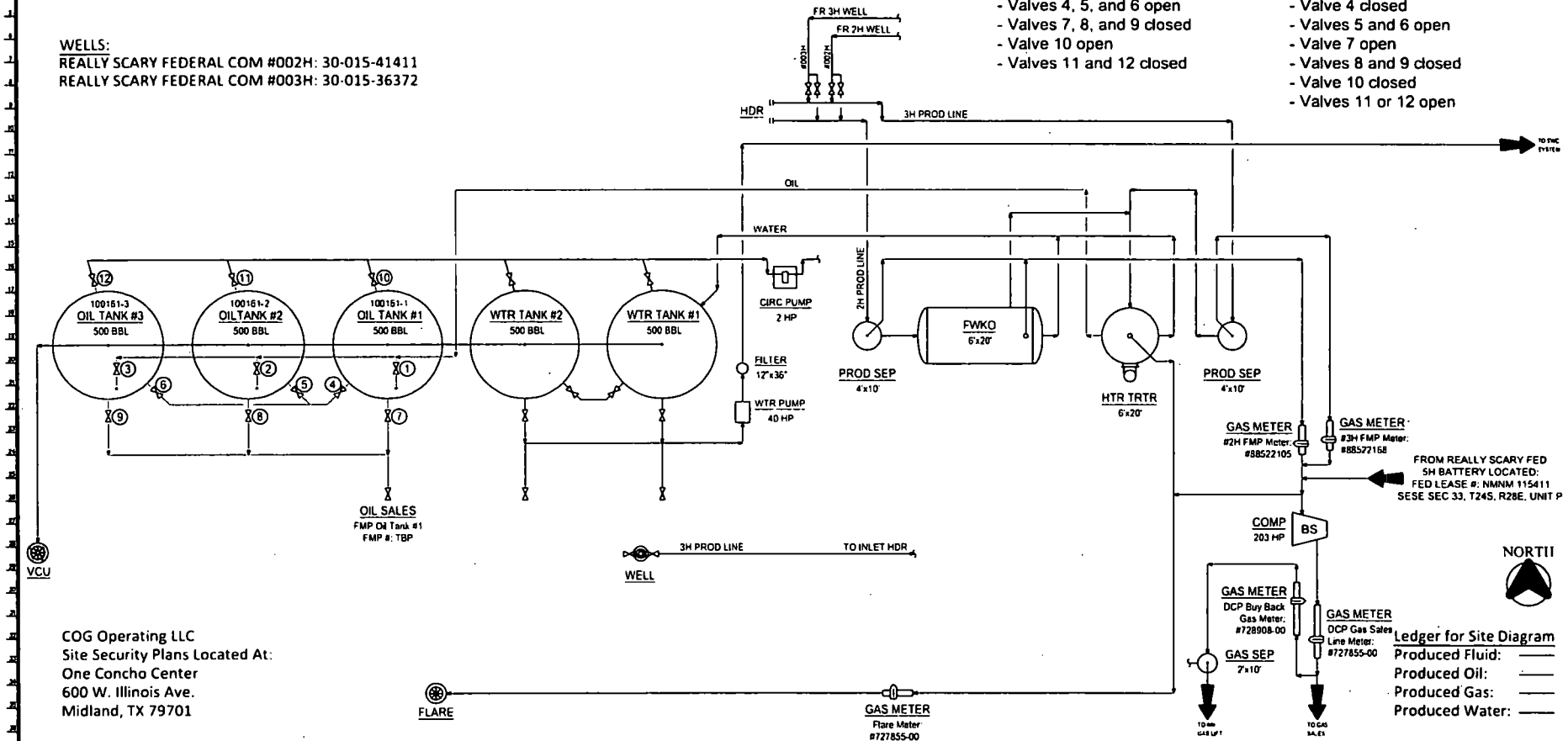
Attached are the following:
Site Security Diagram of the current tank battery, as well as the location of the VCU and the manifold line connecting the tanks to the VCU.
Contact name and number to retrieve information on volumes being combusted.
Specification sheet(s) for the VCU.

REALLY SCARY FEDERAL COM 3H BATTERY
SESW SECTION 33, T24S, R28E, UNIT N
EDDY COUNTY, NM

WELLS:
REALLY SCARY FEDERAL COM #002H: 30-015-41411
REALLY SCARY FEDERAL COM #003H: 30-015-36372

Production Phase - Oil Tank #1
- Valve 1 open
- Valves 2 and 3 closed
- Valves 4, 5, and 6 open
- Valves 7, 8, and 9 closed
- Valve 10 open
- Valves 11 and 12 closed

Sales Phase - Oil Tank #1
- Valve 1 closed
- Valves 2 or 3 open
- Valve 4 closed
- Valves 5 and 6 open
- Valve 7 open
- Valves 8 and 9 closed
- Valve 10 closed
- Valves 11 or 12 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: ——

NOTES:

Type of Lease: Federal
Federal Lease #: NMNM 115411
CA/Agreement #: NMNM 126700
Property Code: 38759
OGRID #: 229137

CONFIDENTIALITY NOTICE
THIS DRAWING IS PROPERTY OF COG OPERATING LLC AND IS LENT TO THE RECIPIENT 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 WHICH IT IS SPECIFICALLY FURNISHED.

REFERENCE DRAWINGS

NO.	TITLE

COG OPERATING LLC
600 WEST ILLINOIS AVENUE
MIDLAND, TEXAS 79701

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHK.	APP.
A	08/01/13	ISSUE FOR SITE PERMITTING	CRB		
B	08/27/18	UPDATED FOR REALLY SCARY FC 3H BTY	CMB		
C	03/28/17	UPDATED GAS MTRS	CMB		
D	08/21/17	UPDATE TANK NUMBERS	CMB		

ENGINEERING RECORD

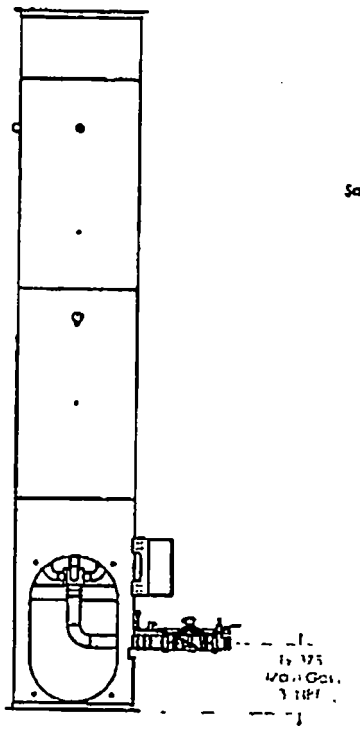
	BY	DATE
DRN:	CRB	08/01/13
DES:	CRB	08/01/13
CHK:		
APP:		
AFE NO:		
FACL ENGR:	C. BLEDSOE	
OPER ENGR:	VARIES	
SCALE:	NONE	

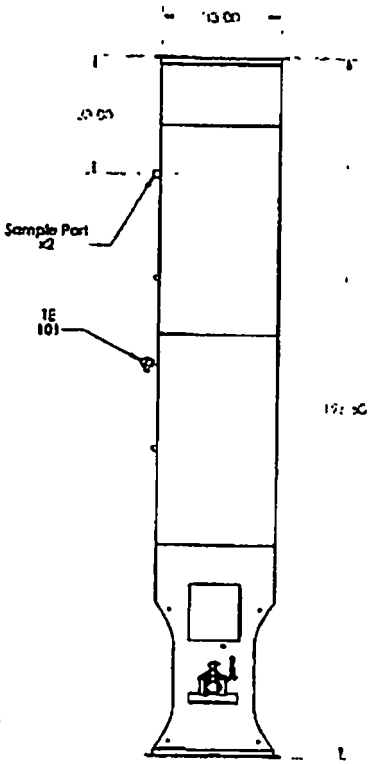
CONCHO
NORTHERN DELAWARE BASIN ASSET
PRODUCTION FACILITIES
SITE FACILITY DIAGRAM
REALLY SCARY FEDERAL COM 3H BATTERY
EDDY COUNTY NEW MEXICO

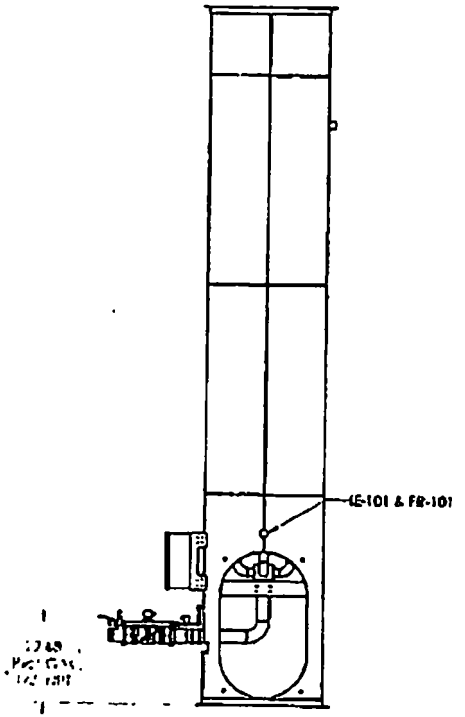
TWNSHP/RANGE	DWG NO.	REV
MULTIPLE	0-1700-81-005	D

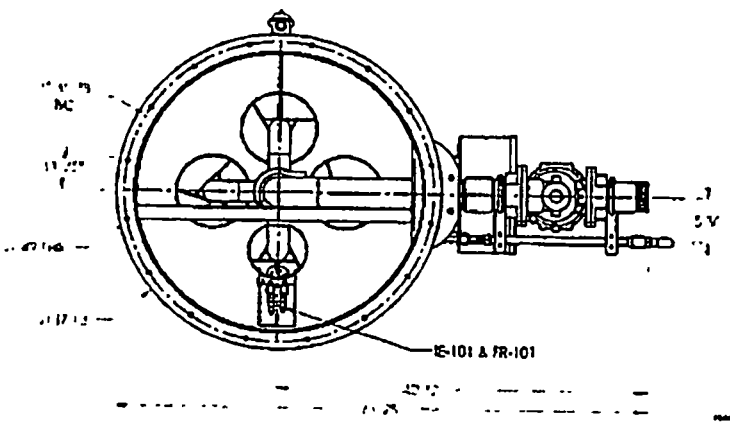
General Arrangement Drawing

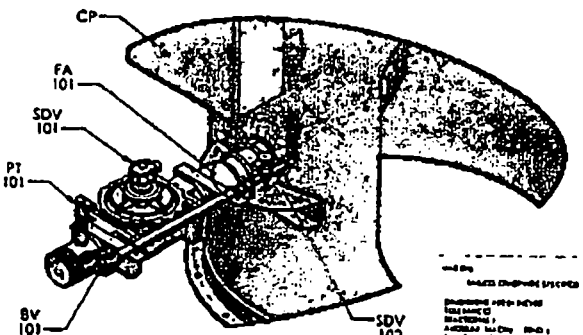
NOTE: This drawing is intended for your review and approval of the general arrangement for an *ABUTEC 100*. Some dimensions are subject to change during the final engineering phase of this project. "As Built" drawings will be provided at engineering completion.











ABUTEC Advanced Marine Technologies

TITLE: ABUTEC100 (SCUF)

SIZE C DWG NO ABUTEC-100GAD REV

SCALE: 1:24 WEIGHT: 954 lbs SHEET 1 OF 1

ABUTEC® Advanced Burner Technologies

Sequence of Operation

ABUTEC 100 Combustion Flare

1. The system is put in "Auto" mode by switching from "OFF" to "ON" on the control panel.

2. Once in "Auto" there is a 15-45 second delay while the PLC boots up, the pilot solenoid valve SDV-102 will open, at the same time the ignition transformer TX-101 will be energized, and the ignition electrode IE-101 will start sparking for a period of 10 seconds.

3. The pilot gas will be ignited, and proof of pilot lit will be detected by the flame rod (FR-101). Once the PLC has received confirmation that the pilot is lit the ignition transformer is disabled and energy is no longer supplied to the ignition electrode. The pilot will remain lit continuously while the power switch is in the "ON" position. If pilot flame is lost or undetected the PLC will make an infinite number of attempts to relight.

4. Once a "Start-up" pressure of 7" H2O is detected by the pressure transmitter (PT-101) on the main gas line for a period of 10 seconds, the process controller will initiate the start sequence.
   - The solenoid valve (SDV-101) will open and release gas to the main burner.
   - The main burner is lit.
   - The stack temperature is monitored by the thermocouple (TE-101).

Shutdown Parameters:

- High Stack Temperature –Temp greater than 2200°F > 10 seconds
- Low Pressure – Pressure less than 2" H2O > 5 seconds
- Loss of pilot flame

NOTE: Any shutdown will cause valve SDV-101 to close.
   - The system will wait for 10 seconds upon any shutdown for purging process and reinitiate the start sequence.

ABUTEC MTF Inspection and Maintenance Procedures

Thermocouple

- The thermocouple head should be opened for a visual inspection of all wire connections. A simple pull test can be performed to ensure secure connections of the wires on the thermocouple terminal block.
- The thermocouple should be removed from the enclosed flare stack for a visual inspection of its component probe. The probe should be checked for signs of excessive heating and material fatigue. Visual indicators include:
  - cracks or gaps in the continuous probe material
  - exposure of thermocouple's fully enclosed bi-metal wire
  - droop of the probe tip at an angle greater than 60° from horizontal
- Discoloration of the thermocouple probe is a normal occurrence and does not necessarily indicate excessive heating or material fatigue.
  If excessive wear is detected, the thermocouple must be replaced.
- Once a thermocouple has been replaced, its wired connections should be checked to ensure of proper signal transmissions and temperature detection.

Ignition Electrode/ Flame Detector / Boot / Cable

Caution: Electric shocks can be fatal! Before working on live components, confirm that power to the flare has been disconnected and all stored energy has dissipated.

- The ignition electrode, flame detector, and boot are one complete assembly. Each component can be removed, inspected and if found to be faulty, replaced.
- Once removed from ignition assembly, the electrode should be inspected for cracks in the ceramic insulation which would be a potential location for spark to escape.
- The metallic portion (electrode tip and rod of the flame detector) should be inspected for excessive corrosion or overheating.
  Visual indication of compromise includes:
  - **Ignition Electrode**
    - scaly build up on electrode tip
    - excessive loss of material at electrode tip
    - fragile state of the metallic tip , this can also be a sign of excessive corrosion
  - **Flame Detector**
    - scaly build up on flame rod
    - excessive loss of material
    - fragile state of the metallic rod, this can also be a sign of excessive corrosion

- The electrode tip and flame rod can be scrubbed clean with an abrasive material. This process can expose virgin metal and possibly restore the component's original performance.
  If cracks in the ceramic portion or excessive corrosion on the metallic portion are detected, the compromised component must be replaced.