District I

1625 N. French Dr., Hobbs, NM 88240

District II

811 S. First St., Artesia, NM 88210

District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

# State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

HOBBS OCD

Date: 11/22/16	GAS CAPTURE PLAN	NUV 2.8 2016			
		RECEIVED			
☑ Original	Operator & OGRID No.:	COG Operating LLC - 229137	_		
☐ Amended - Reason for Amendment:			_		

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

### Well(s)/Production Facility - Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location	Footages	Expected MCF/D	Flared or Vented	Comments
Lusk Deep Unit A #33H	30-025-43390	18-19S-32E	373'S 1166'E	N/A	Sold	GC 10/19/16

### **Gathering System and Pipeline Notification**

Well(s) will be connected to a production facility after flowback operations are complete if gas transporter system is in place. The gas produced from production facility is dedicated to <a href="Enterprise Field Services">Enterprise Field Services</a> and will be connected to <a href="Enterprise Field Services">Enterprise Field Services</a> low/high pressure gathering system located in <a href="Lea">Lea</a> County, New Mexico. It will require <a href="appx">appx</a> <a href="https://www.dex.co.">½ mile</a> of pipeline to connect the facility to <a href="low/high pressure gathering system">low/high pressure gathering system</a>. <a href="COG Operating LLC">COG Operating LLC</a> provides (periodically) to <a href="Enterprise Field Services">Enterprise Field Services</a>, a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <a href="COG Operating LLC">COG Operating LLC</a> and <a href="Enterprise Field Services">Enterprise Field Services</a> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at the <a href="Carlsbad">Carlsbad</a> Processing Plant located in Sec. <a href="20">20</a>, <a href="Twn.">Twn.</a> <a href="19S">19S</a>, <a href="Right">Right</a>, <a href="Enterprise Field Services">Enterprise Field Services</a> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at the <a href="Carlsbad">Carlsbad</a> Processing Plant located in Sec. <a href="20">20</a>, <a href="Twn.">Twn.</a> <a href="19S">19S</a>, <a href="Right">Right</a>, <a href="Right">Right</a> <a href="Twn.">Right</a> <a href="Twn.">County</a>, <a href="Twn.">New Mexico</a>. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

#### Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Gas Transporter system at that time. Based on current information, it is Operator's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

## **Alternatives to Reduce Flaring**

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas On lease
  - o Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines