State of New Mexico Energy, Minerals and Natural Resources Department

1100 CALL

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

|   | CAS CADTUDE DI AN                   | ARTESIA DISTRICT |  |
|---|-------------------------------------|------------------|--|
| Date: 11/21/17  | GAS CAPTURE PLAN                    | NOV 21 2017      |  |
| <ul> <li>Original</li> <li>Amended - Reason for Amendment:</li> </ul> | Operator & OGRID No.: <u>372098</u> | RECEIVED         |  |
|   |                                     |                  |  |

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<br>(ULSTR) | Footages              | Expected<br>MCF/D | Flared or<br>Vented | Comments |
|------------------------------|------------------|--------------------------|-----------------------|-------------------|---------------------|----------|
| Cypress FEE 23 27 9<br>#005H | 30-015-<br>44377 | L-9-T23S-<br>R27E        | 2069 FSL &<br>363 FWL | 1,500             | Flared              |          |
| Cypress FEE 23 27 9<br>#006H | 30-015-<br>44378 | L-9-T23S-<br>R27E        | 2093 FSL &<br>345 FWL | 1,500             | Flared              |          |
| Cypress FEE 23 27 9<br>#007H | 30-015-<br>44379 | L-9-T23S-<br>R27E        | 2143 FSL &<br>310 FWL | 1,000             | Flared              |          |
| Cypress FEE 23 27 9<br>#008H | 30-015-<br>44380 | L-9-T23S-<br>R27E        | 2118 FSL &<br>328 FWL | 1,500             | Flared              |          |

## **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 Sendero\_Midstream and will be connected to Sendero Midstreams's low/high pressure gathering system located in Eddy County, New Mexico. It will require 1 mile of pipeline to connect the facility to low/high pressure gathering system. Marathon provides (periodically) to Sendero Midstream a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Marathon and Sendero Midstream have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Sendero Midstream's Processing Plant located in Sec. 31, Twn. 23S, Rng. 28E, Eddie County, New Mexico. 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 <u>Flowback</u> system at that time. Based on current information, it is <u>Marathon's belief the system can take this gas upon completion of the well(s)</u>.

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
- Only a portion of gas is cons
   Compressed Natural Gas On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
  - NGL Removal On lease
    - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines