District III 1000 Rio Brazos Road, Aztec, NN 39410 9 2013	State of New Mexico Minerals and Natural Resources Oil Conservation Division				
1220 S. St. Francis Dr., Santa Fe, NM 8750EL	Santa Fe, NM 87505				
GAS CAPTURE PLAN					
Date: April 11, 2018 ☑ Original O □ Amended - Reason for Amendment:	•	ARATHON OIL PERMIAN, LLC GRID: 372098			

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 (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Ender Wiggins F C 25 34 14 WXY 6H	25-46597	14-T25S-R34E	2451 FNL & 1735 FWL	1750	Flared	
Ender Wiggins F C 25 34 14 WC 7H		14-T25S-R34E	2451 FNL & 1785 FWL	1750	Flared	
Ender Wiggins F C 25 34 14 WA 10H		14-T25S-R34E	2451 FNL & 1835 FWL	1750	Flared	
Ender Wiggins F C 25 34 14 TB 11H		14-T25S-R34E	2458 FNL & 2245 FWL	2450	Flared	
Ender Wiggins F C 25 34 14 WD 12H		14-T25S-R34E	2458 FNL & 2295 FWL	1750	Flared	
Ender Wiggins F C 25 34 14 WC 13H		14-T25S-R34E	2451 FNL & 1735 FWL	1750	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 <u>Lucid Energy</u> and will be connected to <u>Lucid Energy</u> low pressure gathering system located in <u>Lea</u> County, New Mexico. It will require 1 MILE of pipeline to connect the facility to low/high pressure gathering system. <u>Marathon</u> provides (periodically) to <u>Lucid Energy</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>Marathon</u> and <u>Lucid Energy</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Red Hills</u> Processing Plant located in Sec.<u>13</u>, Twn. <u>24S</u>, Rng. <u>33E</u>, <u>Lea</u> 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>Lucid Energy</u> system at that time. Based on current information, it is <u>Marathon's</u> 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 nonpipeline 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
 - o 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
 - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines