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

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

Submit Original to Appropriate District Office

NM OIL CONSERVATION
ARTESIA DISTRICT
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GAS CAPTURE PLAN

Date: **October 9, 2018**

☒ Original

Operator & OGRID No.: **Murchison Oil & Gas, Inc. (15363)**

☐ 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 – Rock Ridge CTB

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
Rock Ridge Federal 3H		**H-30-24S-29E**	**1520 FNL 350 FEL**	**85**	**0**	
Rock Ridge Federal WCB 1H	30-015-45728	**A-30-24S-29E**	**310 FNL 300 FEL**	**3290**	**0**	
Rock Ridge Federal WCXY 2H		**A-30-24S-29E**	**330 FNL 300 FEL**	**1350**	**0**	
Rock Ridge Federal BSS 4H		**A-30-24S-29E**	**350 FNL 300 FEL**	**1270**	**0**	
Rock Ridge Federal WCB 5H		**A-30-24S-29E**	**745 FNL 250 FEL**	**3290**	**0**	
Rock Ridge Federal WCXY 6H		**A-30-24S-29E**	**765 FNL 250 FEL**	**1350**	**0**	
Rock Ridge Federal BSS 7H		**A-30-24S-29E**	**785 FNL 250 FEL**	**1270**	**0**	
Rock Ridge Federal WCB 8H		**A-30-24S-29E**	**805 FNL 250 FEL**	**3290**	**0**	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility (**Rock Ridge Central Tank Battery**) after flowback operations are complete. The gas produced from production facility is dedicated to **DCP Midstream, LP ("DCP")** and will be connected to **DCP's High** pressure gathering system located in **Lea** County, New Mexico. It will require **no additional** pipeline to connect the facility to the **High** pressure gathering system. **Murchison Oil & Gas, Inc. ("Murchison")** provides (periodically) to **DCP** a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, **Murchison** and **DCP** have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at **DCP's Zia II** Processing Plant located in Sec. **19**, Twn. **19 S**, Rng. **32 E**, **Lea** 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. 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 **DCP's** system at that time. Based on current information, it is **Murchison'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
  - 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