District I
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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

# GAS CAPTURE PLAN

Date: 7/30/18

☒ Original
☐ Amended - Reason for Amendment:

Operator & OGRID No.: **Energen Resources Corporation 162928**

*Brenda F. Rathjen Energen Regulatory Analyst 432-688-3323 brathjen@energen.com*

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 – Angus-Brahman CTB facility, Lea County NM**

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 |
|---|---|---|---|---|---|---|
| SEE ATTACHED FOR ~~ALL~~ WELLS at CTB | | | | | | |
| | 45032 | | | | | |

**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 **Lucid Energy Delaware, LLC** and will be connected to **Lucid Energy Delaware, LLC** low/high pressure gathering system located in **Lea County**, New Mexico. It will require **~12,290'** of pipeline to connect the facility to low/high pressure gathering system. **Energen Resources Corporation** provides (periodically) to **Lucid Energy Delaware, LLC** (Gas Transporter) a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, **Energen Resources Corporation** (Operator) and **Lucid Energy Delaware, LLC** (Gas Transporter) have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at **Lucid's Red Hills Processing Plant** located in **Sec.13, Twn. 24S, Rng.33E, 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 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
  - 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

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**GAS CAPTURE PLAN page 2**

**Energen Resources Corporation 162928**

**Well(s)/Production Facility – Angus-Brahman CTB facility, Lea County NM**

***The well(s) that will be located at the production facility are shown in the table below.*** **7/30/2018**

| Well Name | API | Well Location (ULSTR) | Footages | Expected MCF/D | Flared or vented | Comments |
|---|---|---|---|---|---|---|
| Angus State 24-35 16 #454H | 30-025-43722 | B, 16-24S-35E | 260 FNL 2250 FEL | 2,065 | As needed | drilled & completed |
| Brahman State 24-35 15 #601H | 30-025-43722 | D, 15-24S-35E | 330 FSL 570 FWL | 2,065 | As needed | drilled & completed |
| Angus State 24-35 16 #456H | 30-025-44607 | A, 16-24S-35E | 510 FNL 449 FEL | 2,065 | As needed | spud rig 5/2/18 |
| Angus State 24-35 16 #605H | 30-025-44606 | B, 16-24S-35E | 250 FNL 1420 FEL | 2,065 | As needed | spud rig 5/1/18 |
| | | | | | | |
| Angus Fed Com 16-21 #451H | 30-025-44376 | D, 16-24S-35E | 330 FNL 610 FWL | 2,500 | As needed | Federal APD submitted 7/23/18 |
| Angus Fed Com 16-21 #601H | 30-025-44378 | D, 16-24S-35E | 330 FNL 660 FWL | 2,500 | As needed | Federal APD submitted 7/23/18 |
| Angus Fed Com 16-21 #452H | 30-025-44377 | C, 16-24S-35E | 300 FNL 1930 FWL | 2,500 | As needed | Federal APD submitted 7/23/18 |
| Angus Fed Com 16-21 #602H | 30-025-44379 | C, 16-24S-35E | 300 FNL 1980 FWL | 2,500 | As needed | Federal APD submitted 7/23/18 |
| | | | | | | |
| Brahman State Com 15-10 #452H | new | N, 15-24S, 35E | 508 FSL 1390 FWL | 2,500 | As needed | permit submitted 7/30/18 |
| Brahman State Com 15-10 #602H | new 30-025-45032 | N, 15-24S, 35E | 508 FSL 1440 FWL | 2,500 | As needed | permit submitted 7/30/18 |
| Brahman State Com 15-10 #453H | new | N, 15-24S, 35E | 508 FSL 2310 FWL | 2,500 | As needed | permit submitted 7/30/18 |
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