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<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 811 S. First St., Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 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 FEB 0 4 2020

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GAS CAPTURE PLAN

Date: 6-6-2019

 \boxtimes Original

Operator & OGRID No.: ____Cimarex Energy Co- 215099

□ 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 I_{l} .

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
Cottonberry 20 Fed Com 7H		17-25S-27E	127' FSL '& 2285' FEL	4000		

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>Gas Transporter</u> and will be connected to <u>Gas Transporter</u> low/high pressure gathering system located in <u>Eddy</u> County, New Mexico. It will require <u>4611</u>' of pipeline to connect the facility to low/high pressure gathering system. <u>Operator</u> provides (periodically) to <u>Gas Transporter</u> a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, <u>Operator</u> and <u>Gas Transporter</u> have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at <u>Gas Transporter</u> Processing Plant located in <u>Sec 32-23S-28E</u>, <u>Eddy</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>Gas Transporter</u> system at that time. Based on current information, it is <u>Operator'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 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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Cimarex Energy Company
LEASE NO.:	NMNM130854
WELL NAME & NO.:	Cottonberry 20 Federal 6H
SURFACE HOLE FOOTAGE:	1047'/N & 630'/W
BOTTOM HOLE FOOTAGE	100'/S & 1980//W
LOCATION:	Section 20, T.25 S., R.27 E., NMPM
COUNTY:	Eddy County, New Mexico



H2S	O Yes	O No	
Potash	• None	• Secretary	O R-111-P
Cave/Karst Potential	C Low	• Medium	🖲 High
Cave/Karst Potential	Critical		
Variance	C None	• Flex Hose	C Other
Wellhead	Conventional	Multibowl	C Both
Other	□4 String Area	Capitan Reef	I □ WIPP
Other	Fluid Filled	Cement Squeeze	🗔 Pilot Hole
Special Requirements	🗖 Water Disposal	□ ¢om	🗖 Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

Casing Design:

- 1. The 13-3/8 inch surface casing shall be set at approximately 400 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

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Approval Date: 01/29/2020