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

GAS CAPTURE PLAN

☒ Original
☐ Amended

Date: 09/07/2017

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: A C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule 19.15.18.12.A

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
Burch Keely Unit #949H	30-015-44656	UL-L Sec 23, T17S, R29E	2625 FSL 70 FWL	50	0	

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 **Frontier Field Services as primary purchaser** and will be connected to **Frontier's** low/high pressure gathering system located in **Eddy** County, New Mexico. It will require **no additional pipeline** to connect the facility to low/high pressure gathering system **because it will go to an existing meter. Please note there is also an existing offload meter to DCP which will be utilized**. COG Operating, LLC provides (periodically) to **Frontier and DCP** a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, COG Operating, LLC and **Frontier and DCP** have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at **Frontier's Maljamar** Processing Plant located in **Sec. 28, T17S, R32E in Lea** County, New Mexico. **When the DCP offload meter is utilized the gas is processed in DCP's Linam Plant located in Sec. 6, T19S, R37E in Lea County, NM.** 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 **Frontier's and DCP's** system at that time. Based on current information, it is COG Operating, LLC 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

Well: Burch Keely Unit #949H

Hole Volumes						
Hole	Hole Section (Length)	Casing	Capacity (ft3/Lin.ft)	Cu.Ft	Total Cu.Ft	% Excess
Prod	0-980 (980)	7"	0.1585	155.33	155.33	0
Prod	980-4217 (3237)	7"	0.1503	486.52	2444.7	86
Prod	4217-5234 (1017)	5.5"	0.2526	256.89		86
Prod	5234-15051 (9817)	5.5"	0.1733	1701.29		86

Cement Volumes					
Blend	Cement Sacks	Yield	Weight	Volume	Total Volume
35:65:6	500	2.01	12.5	1005	4704
50:50:02	2700	1.37	14	3699	

% Excess Calculation			
Total Volume	4704		4548.67
Cu.Ft	-155.33		/2444.7
	4548.67		**86% excess**