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

1220 S. St. Francis Dr., Santa Fe, NM 8

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Original to Appropriate District Office

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

 ☑ Original ☐ Amended Reason for Amendment: 	GAS CAPTURE PLAN Date: 07/30/2018

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
Zeppo Federal Com #17H	45338	UL-H Sec05, T17S, R32E	2300 FNL 1090 FEL	589	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 and will be connected to Frontier's low/high pressure gathering system located in Eddy County, New Mexico. It will require less than 0.25 mile of new pipeline to connect the facility to low/high pressure gathering system. COG Operating, LLC provides (periodically) to Frontier 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 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. 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 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
 - 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
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

Production Cement Breakdown

Well: Zeppo 5 Federal Com #17H

	Hole Volumes						
Hole	Hole Section (Length)	Casing	Capacity (ft3/Lin.ft)	Cu.Ft	Total Cu.Ft	% Excess	
Prod	(2220)	7"	0.1585	351.9	351.9	0	
Prod	2220-5226 (3006)	7"	0.1503	451.8		121%	
Prod					451.8		
Prod					·		

Cement Volumes					
Blend	Cement Sacks	Yield	Weight	Volume	Total Volume
35:65:6	400	2.01	12.5	804	1352
50:50:02	400	1.37	14	548	1332

% Excess Calculation					
Total Volume	1352		1000.1		
Cu.Ft	-351.9		/451.8		
	1000.1	e; į	121% Excess		

7" to be run from surface to kickoff point and changed over to 5½" with DV Tool and ECP at kickoff point. 5½" casing will be run from kickoff point to td and isolation packers set throughout curve and lateral. 7" to be cemented from kickoff point to surface.