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
FEB 15 2018
RECEIVED

GAS CAPTURE PLAN

Date: 11-14-17

X Original
□ Amended - Reason for Amendment:

Operator & OGRID No.: Percussion Petroleum Operating, LLC (371755)

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

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	SHL (ULSTR)	SHL Footages	Expected MCF/D	Flare or Vent	Comments
South Boyd Federal Com 20H	30-015-	B-34-19s-25e	689' FNL & 2024' FEL	100	<30 days	flare until well clean, then connect
South Boyd Federal Com 21H	30-015-	B-34-19s-25e	709' FNL & 2174' FEL	100	<30 days	flare until well clean, then connect
South Boyd Federal Com 22H	30-015-44725	B-34-19s-25e	728' FNL & 2174' FEL	100	<30 days	flare until well clean, then connect

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 DCP and will be connected to DCP low/high pressure gathering system located in Eddy County, New Mexico. It will require 2305.2' of pipeline to connect the facility to low/high pressure gathering system. Operator provides (periodically) to Gas Transporter a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Operator and Gas Transporter have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Gas Transporter Processing Plant located in Sec. 36, T. 19 S., R. 24 E., Eddy 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

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Drilling Plan Data Report

02/09/2018

APD ID: 10400024620 **Submission Date:** 11/14/2017

Operator Name: PERCUSSION PETROLEUM OPERATING LLC

Well Name: SOUTH BOYD FEDERAL COM **Well Number:** 22H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	---	3533	0	0	OTHER : Quaternary caliche	USEABLE WATER	No
2	GRAYBURG	2989	544	544	DOLOMITE	NATURAL GAS,CO2,OIL	No
3	SAN ANDRES	2709	824	827	DOLOMITE	NATURAL GAS,CO2,OIL	No
4	GLORIETA	1130	2403	2424	DOLOMITE	NATURAL GAS,CO2,OIL	No
5	YESO	995	2538	2568	DOLOMITE	NATURAL GAS,CO2,OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M **Rating Depth:** 5000

Equipment: A 3000-psi 5000' rated BOP stack consisting of annular preventer and double (blind and pipe) ram will be used below surface casing to TD. See attached BOP and choke manifold diagrams.
Requesting Variance? NO

Variance request:

Testing Procedure: Pressure tests will be conducted before drilling out from under all casing strings. Third party test crews will conduct all tests. All tests will be recorded for 10-minutes on low pressure (500 psi) and 10-minutes on high pressure (3000-psi). After BOP testing is complete, test casing (without test plug) to 2000-psi for 30 minutes. All tests will be charted on a plot. BOPs will be function tested every day.

Choke Diagram Attachment:

SB_22H_BOP_Choke_20171114141635.pdf

BOP Diagram Attachment:

SB_22H_BOP_Choke_20171114141645.pdf