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1625 N. French Dr., Hobbs, NM 88240
District II
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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

JAN 10 2019

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

DISTRICT II-ARTESIA O.C.D.

Submit Original to Appropriate District Office

GAS CAPTURE PLAN

Date: 12/01/2017

☒ Original

Operator & OGRID No.: BOPCO, L.P. [260737]

☐ 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.

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: JRU DI1A Battery

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
James Ranch Unit DI 1A WCY-7E 223H		F-21-22S-30E	1480'FNL & 2510'FWL	2500 MCF/D	Flared/Sold	CTB Connected to P/L
30-015-45611						

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 ETC and will be connected to ETC low/high pressure gathering system located in Lea County, New Mexico. It will require 0' of pipeline to connect the facility to low/high pressure gathering system. BOPCO, L.P. provides (periodically) to ETC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, BOPCO, L.P. and ETC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at ETC's Processing Plant located in Sec. 33 Twn. 24S, Rng. 37E, 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 ETC's system at that time. Based on current information, it is BOPCO, L.P.'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

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well JAMES RANCH UNIT DI 1A WCY-7E 223H
Company:	XTO Energy	**TVD Reference:**	RKB = 25' @ 3185.00usft (Unknown)
Project:	Eddy County, NM (NAD-27)	**MD Reference:**	RKB = 25' @ 3185.00usft (Unknown)
Site:	James Ranch Unit DI 1A	**North Reference:**	Grid
Well:	JAMES RANCH UNIT DI 1A WCY-7E 223H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
JRU DI 1A WCY-7E 2 - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	502,526.00	637,993.30	32.380766	-103.886331
JRU DI 1A WCY-7E 2 - plan misses target center by 0.05usft at 24502.92usft MD (10818.00 TVD, -3442.35 N, 13224.40 E) - Point	0.00	0.00	10,818.00	-3,442.40	13,224.40	499,083.60	651,217.70	32.371145	-103.843546
JRU DI 1A WCY-7E 2 - plan hits target center - Point	0.00	0.01	10,818.00	-3,466.60	551.20	499,059.40	638,544.50	32.371231	-103.884593
JRU DI 1A WCY-7E 2 - plan hits target center - Point	0.00	0.00	10,818.00	-3,442.10	13,354.40	499,083.90	651,347.70	32.371144	-103.843125

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
193.00	193.00	Rustler			
555.00	555.00	Salado			
3,310.17	3,267.00	Base Salt			
3,587.92	3,523.00	Delaware/Lamar			
3,637.83	3,569.00	Bell Canyon			
4,586.08	4,443.00	Cherry Canyon			
4,808.50	4,648.00	Base Manzanita			
6,293.80	6,017.00	Brushy Canyon			
7,461.21	7,093.00	Basal Brushy Canyon			
7,738.96	7,349.00	Base Brushy Canyon Sands			
7,767.16	7,375.00	Bone Spring			
7,880.00	7,479.00	Avalon Sand			
8,407.29	7,965.00	Lower Avalon Shale			
8,864.05	8,386.00	First Bone Spring Sand			
9,116.85	8,619.00	Second Bone Spring Shale/Limestoı			
9,659.32	9,119.00	Second Bone Spring Sand			
10,011.93	9,444.00	Second Bone Spring B Sand			
10,131.28	9,554.00	Third Bone Spring Shale/Limestone			
10,975.42	10,332.00	Third Bone Spring Sand			
11,306.91	10,613.00	Third Bone Spring RH Sand			
11,432.32	10,696.00	Wolfcamp			
11,707.32	10,806.00	Wolfcamp Y Sand			