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
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# GAS CAPTURE PLAN

Date: 07/16/18

☐ Original

Operator & OGRID No.: BOPCO, LP [260737]

☒ Amended - Reason for Amendment: SHL moved

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: Poker Lake Unit 20 BD East CTB**

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 |
|---|---|---|---|---|---|---|
| Poker Lake Unit 20 BD 703H 30-015-45472 | | N-20-25S-30E | 955' FSL & 1915' FWL | 2900 | Flared/Sold | |
| Poker Lake Unit 20 BD 903H | | N-20-25S-30E | 955' FSL & 1945' FWL | 2600 | Flared/Sold | |
| Poker Lake Unit 20 BD 123H | | N-20-25S-30E | 955' FSL & 1975' FWL | 4500 | Flared/Sold | |
| Poker Lake Unit 20 BD 124H | | N-20-25S-30E | 955' FSL & 2010' FWL | 4500 | Flared/Sold | |
| Poker Lake Unit 20 BD 104H | | N-20-25S-30E | 955' FSL & 2005' FWL | 2800 | Flared/Sold | |

**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 Enlink and will be connected to Enlink low/high pressure gathering system located in Loving County, Texas. It will require 1505' of pipeline to connect the facility to low/high pressure gathering system. BOPCO provides (periodically) to Enlink a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, BOPCO and Enlink have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Enlink Processing Plant located in Block 27, Sec. 4, Loving County, Texas. 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 Enlink system at that time. Based on current information, it is BOPCO'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

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.1 Single User Db | **Local Co-ordinate Reference:** | Well 703H |
| **Company:** | XTO Energy | **TVD Reference:** | RKB = 27' @ 3188.00usft |
| **Project:** | Eddy County, NM (NAD-27) | **MD Reference:** | RKB = 27' @ 3188.00usft |
| **Site:** | PLU 20 Brushy Draw | **North Reference:** | Grid |
| **Well:** | 703H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | PERMIT Rev1 | | |

**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 |
|---|---|---|---|---|---|---|---|---|---|
| 703H: SHL (955' FSL/ - plan hits target center - Point | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 404,287.10 | 632,498.30 | 32.110779 | -103.905399 |
| 703H: PBHL (200' FS - plan hits target center - Point | 0.00 | 0.00 | 9,390.00 | -11,386.80 | -219.90 | 392,900.30 | 632,278.40 | 32.079479 | -103.906255 |
| 703H: LTP_ - plan misses target center by 0.41usft at 19787.91usft MD (9390.73 TVD, -11256.80 N, -220.41 E) - Point | 0.00 | 0.00 | 9,390.73 | -11,256.80 | -220.00 | 393,030.30 | 632,278.30 | 32.079836 | -103.906253 |
| 703H: FTP/ LP_ - plan hits target center - Point | 0.00 | 0.00 | 9,447.00 | -1,288.30 | -259.60 | 402,998.80 | 632,238.70 | 32.107240 | -103.906254 |

**Formations**

| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---|---|---|---|---|---|
| 601.00 | 601.00 | Rustler | | | |
| 897.00 | 897.00 | Top Salt | | | |
| 3,423.46 | 3,416.00 | Base Salt | | | |
| 3,609.61 | 3,601.00 | Delaware | | | |
| 7,453.28 | 7,421.00 | Bone Spring | | | |
| 8,366.90 | 8,329.00 | 1st Bone Spring Ss | | | |
| 9,232.58 | 9,175.00 | 2nd Bone Spring Ss | | | |
| 9,819.17 | 9,447.00 | LP | | | |