## STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

## APPLICATION OF XTO PERMIAN OPERATING, LLC FOR A CLOSED LOOP GAS CAPTURE INJECTION PILOT PROJECT, EDDY COUNTY, NEW MEXICO.

## CASE NO. 24273

## **XTO'S PRE-HEARING STATEMENT**

XTO Permian Operating, Inc. ("XTO") (OGRID No. 373075) submits this Pre-Hearing

ATTORNEY

Statement, pursuant to the rules of the Oil Conservation Division.

## **APPEARANCES**

## APPLICANT

XTO Permian Operating, Inc.

Michael H. Feldewert Adam G. Rankin Paula M. Vance Holland & Hart LLP Post Office Box 2208 Santa Fe, New Mexico 87504 (505) 988-4421 (505) 983-6043 Facsimile

## **APPLICANT'S STATEMENT OF THE CASE**

XTO seeks an order authorizing it to engage in a closed loop gas capture injection pilot project in the Bone Spring formation ("Pilot Project"). XTO proposes to initiate CLGC injection within a non-contiguous project area comprised of 12,800-acres, more or less, within portions the following acreage in Township 25 South, Range 30 East, NMPM, Eddy County, New Mexico (the "Project Area"), as follows.

#### Township 25 South, Range 30 East

Section 8:	E/2 SE/4
Section 13:	W/2 W/2
Section 14:	E/2 W/2
Section 15:	E/2 W/2
Section 17:	E/2 E/2
Section 20:	E/2 E/2
Section 21:	W/2 W/2
Section 22:	E/2 W/2
Section 23:	W/2 W/2
Section 24:	W/2 NW/4
Section 26:	NW/4 NW/4
Section 29:	E/2 NE/4

The proposed Project Area is part of a larger area known as the Poker Lake Unit.

XTO requests approval for this project to avoid the shut-in of producing wells and reduce flaring (and associated emissions) during temporary natural gas transmission system capacity reductions, such as mechanical or electrical compression outages, plant shutdowns, or other issues that temporarily prevent the delivery of natural gas into a pipeline.

XTO seeks authority to use the following ten horizontal wells within the proposed project area to occasionally inject produced gas into the Avalon, First Bone Spring, Second Bone Spring, and Third Bone Spring intervals within the Bone Spring formation:

- a. The POKER LAKE UNIT CVX JV RR 010H (API No. 30-015-42158) with surface hole location 290 feet FSL and 675 feet FEL (Unit P) in Section 17, Township 25 South, Range 30 East, and a bottom hole location 2,374 feet FNL and 348 feet FEL (Unit H) in Section 29, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.
- b. The POKER LAKE CVX JV RR 006H (API No. 30-015-40580) with surface hole location 125 feet FNL and 400 feet FWL (Unit D) in Section 21, Township 25 South, Range 30 East, and a bottom hole location 101 feet FSL and 389 feet

FWL (Unit M) in Section 21, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.

- c. The POKER LAKE CVX JV PB 005H (API No. 30-015-40763) with surface hole location 325 feet FNL and 1,980 feet FWL (Unit C) in Section 22, Township 25 South, Range 30 East, and a bottom hole location 333 feet FSL and 1,974 feet FWL (Unit N) in Section 22, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.
- d. The POKER LAKE CVX JV BS 025H (API No. 30-015-41639) with surface hole location 181 feet FNL and 660 feet FWL (Unit D) in Section 23, Township 25 South, Range 30 East, and a bottom hole location 2,340 feet FNL and 660 feet FWL (Unit E) in Section 26, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.
- e. The POKER LAKE CVX JV BS 022H (API No. 30-015-41693) with surface hole location 85 feet FSL and 740 feet FWL (Unit M) in Section 13, Township 25 South, Range 30 East, and a bottom hole location 35 feet FSL and 666 feet FWL (Unit M) in Section 24, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.
- f. The POKER LAKE CVX JV PC COM 021H (API No. 30-015-42390) with surface hole location 330 feet FSL and 675 feet FEL (Unit P) in Section 17, Township 25 South, Range 30 East, and a bottom hole location 2,315 feet FSL and 671 feet FEL (Unit I) in Section 8, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.

- g. The **POKER LAKE UNIT CVX JV PC 1H** (API No. 30-015-36635) with surface hole location 350 feet FSL and 350 feet FEL (Unit P) in Section 17, Township 25 South, Range 30 East, and a bottom hole location 368 feet FNL and 401 feet FEL (Unit A) in Section 17, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.
- h. The POKER LAKE CVX JV BS 011H (API No. 30-015-39693) with surface hole location 10 feet FNL and 1,980 feet FWL (Unit C) in Section 22, Township 25 South, Range 30 East, and a bottom hole location 226 feet FNL and 1,936 feet FWL (Unit C) in Section 15, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.
- i. The POKER LAKE CVX JV BS 008H (API No. 30-015-39508) with surface hole location 300 feet FSL and 1,980 feet FWL (Unit N) in Section 14, Township 25 South, Range 30 East, and a bottom hole location 357 feet FNL and 1,982 feet FWL (Unit C) in Section 14, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.
- j. The POKER LAKE CVX JV BS 021H (API No. 30-015-41554) with surface hole location 125 feet FSL and 690 feet FWL (Unit M) in Section 13, Township 25 South, Range 30 East, and a bottom hole location 51 feet FNL and 653 feet FWL (Unit D) in Section 13, Township 25 South, Range 30 East, NMPM, Eddy, New Mexico.

The proposed average daily injection rate is 5 MMSCF/day with an expected maximum injection rate of 6 MMSCF/day during injection. The maximum allowable surface pressure (MASP) for the project wells is 1,250 psi. The current surface pressures under normal operating

conditions for the wells is in the range of 850 to 950 pounds per square inch (psi). Injection along the horizontal portion of the proposed wellbores will be within the Bone Spring formation through the existing perforations in each well.

XTO has confirmed that the Bone Spring formation, including the targeted injection intervals, is suitable for the proposed CLGC project and that there are confining layers that will prevent vertical movement of the injected gas, and depth and identity of the adjacent zones. Hydraulic fracturing modeling, a kind of reservoir modeling applicable to unconventional wells, indicates that the fractures may extend approximately 170 feet to 300 feet perpendicularly from the wellbore depending on the interval within the Bone Spring, the size of the original completion, and other factors. It is not expected that injected gas will migrate more than a few feet into the formation from the propped hydraulic fractures.

The source gas for injection will be diverted at the outlet of a compression system for the production of XTO's wells within the Poker Lake Unit. Additional source wells may be added over time under an approved surface commingling authorization. Each of XTO's proposed injection wells are operated by XTO.

XTO proposes to allocate gas volumes between temporarily injected produced gas and native gas following temporary injection events using a mass balance methodology.

XTO will monitor the oil and gas production and injection flow rates, tubing pressure, and annulus pressure for all casing strings for each CLGC well. The plan includes automated safety devices under the control of a supervisory control and data acquisition (SCADA) system. Each CGLC well will be continuously monitored following an injection event, as required by recent Division CGLC orders.

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XTO has examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the injection zone and any underground source of drinking water. XTO has also examined the available geologic and engineering data and determined that the total recoverable volume of hydrocarbons from the reservoir will not be adversely affected by the Pilot Project.

Approval of this application is in the best interests of conservation, the prevention of waste, and the protection of correlative rights.

#### APPLICANT'S PROPOSED EVIDENCE

WITNESS Name and Expertise	ESTIMATED TIME	EXHIBITS
Isaac Olivas, Petroleum Engineer	Self-Affirmed Statement	Approx. 4
Carlos Jose Lopez, Ph.D., Petroleum Geologist	Self-Affirmed Statement	Approx. 2
Owen J. Hehmeyer, Ph.D., Reservoir Engineer	Self-Affirmed Statement	Approx. 2

### PROCEDURAL MATTERS

XTO intends to present this case by self-affirmed statements. Each witness will be available to respond to examination by Division Examiners. Additional witnesses may be made available depending on the nature of the Division's questions. XTO expects to file a complete exhibit packet with written testimony and additional exhibits in advance of the hearing. Respectfully submitted,

## HOLLAND & HART LLP

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# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. Santa Fe, NM 87505

QUESTIONS

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Action 323490

QUESTIONS

Operator:	OGRID:
XTO PERMIAN OPERATING LLC.	373075
6401 HOLIDAY HILL ROAD	Action Number:
MIDLAND, TX 79707	323490
	Action Type:
	[HEAR] Prehearing Statement (PREHEARING)

#### QUESTIONS

Testimony		
Please assist us by provide the following information about your testimony.		
Number of witnesses	Not answered.	
Testimony time (in minutes)	Not answered.	