

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

**APPLICATION OF OXY U.S.A. INC. AND
OCCIDENTAL PERMIAN, LTD FOR A
CLOSED LOOP GAS CAPTURE PILOT
PROJECT, EDDY COUNTY, NEW
MEXICO.**

CASE NO. 24983

OXY'S PRE-HEARING STATEMENT

OXY USA Inc. (OGRID No. 16696) and Occidental Permian, LTD (OGRID No. 157984),
(collectively "OXY" or "Applicant")¹ submits this Pre-Hearing Statement, pursuant to the rules of
the Oil Conservation Division:

APPEARANCES

APPLICANT

Oxy USA Inc. and
Occidental Permian, LTD
("Oxy")

ATTORNEY

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

APPLICANT'S STATEMENT OF THE CASE

OXY seeks an order authorizing it to engage in a Closed Loop Gas Capture ("CLGC")
injection pilot project in the Second Bone Spring interval within the Bone Spring formation ("Pilot

¹ Oxy USA Inc. operates 17 of the proposed CLGC wells and Occidental Permian, LTD operates 1 of the proposed CLGC wells.

Project”). OXY proposes to initiate CLGC injection within a non-contiguous project area of 8,240-acres, more or less, comprising portions of sixteen sections within Township 24 South, Range 29 East, NMPM, Eddy County, New Mexico (the “Project Area”), as follows:

Township 24 South, Range 29 East

Section 3:	All
Section 6:	W/2
Section 7:	W/2 and SE/4
Section 8:	W/2
Section 10:	All
Section 15:	All
Section 16:	S/2
Section 17:	NW/4 and S/2
Section 20:	All
Section 21:	All
Section 22:	All
Section 23:	All
Section 24:	N/2 NW/4
Section 27:	N/2 and N/2 of S/2
Section 28:	All
Section 29:	All

The proposed Project Area is part of a larger area known as the Cedar Canyon area.

OXY requests approval for this Pilot 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.

OXY seeks authority to use the following eighteen horizontal wells within the Project Area to occasionally inject produced gas into the Second Bone Spring interval within the Bone Spring formation:

- a. The **Morgan Fee Com #1H** (API No. 30-015-39968) with surface hole location 1,035 feet FSL and 455 feet FWL (Unit M) in Section 21, Township 24 South, Range 29 East, and a bottom hole location 651 feet FSL and 349 feet FEL (Unit

- P) in Section 21, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- b. The **Cedar Canyon 23 #2H** (API No. 30-015-41194) with surface hole location 650 feet FSL and 660 feet FWL (Unit M) in Section 23, Township 24 South, Range 29 East, and a bottom hole location 725 feet FSL and 160 feet FEL (Unit P) in Section 23, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- c. The **Cedar Canyon 29 Federal Com #3H** (API No. 30-015-42993) with surface hole location 1,990 feet FNL and 210 feet FEL (Unit H) in Section 29, Township 24 South, Range 29 East, and a bottom hole location 2,205 feet FNL and 170 feet FWL (Unit E) in Section 29, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- d. The **Cedar Canyon 27 Federal #6H** (API No. 30-015-43232) with surface hole location 1,850 feet FSL and 240 feet FEL (Unit I) in Section 28, Township 24 South, Range 29 East, and a bottom hole location 1,755 feet FSL and 250 feet FEL (Unit I) in Section 27, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- e. The **Cedar Canyon 28 Federal #6H** (API No. 30-015-43234) with surface hole location 1,820 feet FSL and 240 feet FEL (Unit I) in Section 28, Township 24 South, Range 29 East, and a bottom hole location 1,692 feet FSL and 229 feet FWL (Unit L) in Section 28, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.

- f. The **Cedar Canyon 28 Federal #7H** (API No. 30-015-43238) with surface hole location 1,760 feet FSL and 240 feet FEL (Unit I) in Section 28, Township 24 South, Range 29 East, and a bottom hole location 874 feet FSL and 208 feet FWL (Unit M) in Section 28, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- g. The **Cedar Canyon 23 Federal #5H** (API No. 30-015-43282) with surface hole location 1,317 feet FNL and 195 feet FEL (Unit A) in Section 22, Township 24 South, Range 29 East, and a bottom hole location 471 feet FNL and 2,406 feet FWL (Unit C) in Section 24, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- h. The **Cedar Canyon 22 Federal Com #4H** (API No. 30-015-43708) with surface hole location 2,540 feet FSL and 260 feet FEL (Unit I) in Section 22, Township 24 South, Range 29 East, and a bottom hole location 2,567 feet FSL and 160 feet FWL (Unit L) in Section 22, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- i. The **Cedar Canyon 21 Federal Com #5H** (API No. 30-015-43749) with surface hole location 1,090 feet FSL and 207 feet FWL (Unit M) in Section 22, Township 24 South, Range 29 East, and a bottom hole location 1,957 feet FSL and 146 feet FWL (Unit L) in Section 21, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- j. The **Cedar Canyon 27 Federal Com #5H** (API No. 30-015-43775) with surface hole location 1,154 feet FNL and 151 feet FWL (Unit D) in Section 27, Township 24 South, Range 29 East, and a bottom hole location 1,717 feet FNL

and 184 feet FEL (Unit H) in Section 27, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.

- k. The **Cedar Canyon 21 Federal Com #21H** (API No. 30-015-44181) with surface hole location 369 feet FNL and 368 feet FEL (Unit A) in Section 21, Township 24 South, Range 29 East, and a bottom hole location 475 feet FNL and 188 feet FWL (Unit D) in Section 21, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- l. The **Cedar Canyon 21 Federal Com #22H** (API No. 30-015-44190) with surface hole location 1,764 feet FNL and 141 feet FWL (Unit E) in Section 21, Township 24 South, Range 29 East, and a bottom hole location 1,365 feet FNL and 177 feet FEL (Unit H) in Section 21, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- m. The **Cedar Canyon 29 Federal Com #25H** (API No. 30-015-44522) with surface hole location 1,640 feet FSL and 420 feet FWL (Unit L) in Section 29, Township 24 South, Range 29 East, and a bottom hole location 1,382 feet FSL and 199 feet FEL (Unit I) in Section 29, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- n. The **Cedar Canyon 29 Federal #26H** (API No. 30-015-44523) with surface hole location 1,610 feet FSL and 420 feet FWL (Unit L) in Section 29, Township 24 South, Range 29 East, and a bottom hole location 419 feet FSL and 183 feet FEL (Unit P) in Section 29, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.

- o. The **Salt Ridge CC 20 17 Federal Com #21H** (API No. 30-015-44945) with surface hole location 2,359 feet FNL and 1,302 feet FWL (Unit E) in Section 17, Township 24 South, Range 29 East, and a bottom hole location 10 feet FSL and 408 feet FWL (Unit M) in Section 20, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- p. The **Length CC 6 7 Federal Com #23H** (API No. 30-015-45551) with surface hole location 230 feet FNL and 2,320 feet FWL (Lot 3) in irregular Section 6, Township 24 South, Range 29 East, and a bottom hole location 17 feet FSL and 2,213 feet FWL (Unit N) in Section 7, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- q. The **Tails CC 10 3 Federal Com #22H** (API No. 30-015-47957) with surface hole location 220 feet FSL and 1,450 feet FWL (Unit N) in Section 10, Township 24 South, Range 29 East, and a bottom hole location 100 feet FNL and 1,645 feet FWL (Lot 3) in irregular Section 3, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.
- r. The **Vagabond CC 8 17 Federal Com #23H** (API No. 30-015-47975) with surface hole location 546 feet FSL and 1,740 feet FWL (Unit N) in Section 17, Township 24 South, Range 29 East, and a bottom hole location 57 feet FNL and 2,159 feet FWL (Unit C) in Section 8, Township 24 South, Range 29 East, NMPM, Eddy, New Mexico.

The proposed average daily injection rate is 1.5-3 MMSCF/day with an expected maximum injection rate of 5 MMSCF/day during injection. The maximum allowable surface pressure (MASP) for the Pilot Project is 1,335 psi. *Id.* The current surface pressures under normal operating

conditions for the wells is in the range of 492 to 837 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.

Oxy has confirmed that the Bone Spring formation, including the targeted injection interval, 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 100 feet or less perpendicularly from the wellbore depending on 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 Oxy's wells within the Cedar Canyon area. Additional source wells may be added over time under an approved surface commingling authorization. Each of Oxy's proposed injection wells are operated by Oxy.

OXY proposes to pay royalties and revenues on both the pre-injection event stored gas (i.e., produced gas being injected) and the post-injection event stored and native gas (i.e., the combined injected gas being recovered and native gas being produced).

Oxy 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 CLGC well will be continuously monitored following an injection event, as required by recent Division CLGC orders.

Oxy 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. Oxy 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
Stephan Janacek, Petroleum Engineer	Self-Affirmed Statement	Approx. 1
Chuck Polgar, Petroleum Geologist	Self-Affirmed Statement	Approx. 1
Rahul Joshi, Reservoir Engineer	Self-Affirmed Statement	Approx. 1

PROCEDURAL MATTERS

Oxy 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. Oxy expects to file a complete exhibit packet with written testimony and additional exhibits in advance of the hearing.

Respectfully submitted,

HOLLAND & HART LLP

By: 

Michael H. Feldewert
Adam G. Rankin
Paula M. Vance
Post Office Box 2208
Santa Fe, NM 87504
505-988-4421
505-983-6043 Facsimile
mfeldewert@hollandhart.com
agrarkin@hollandhart.com
pmvance@hollandhart.com

**ATTORNEYS FOR OXY USA INC. AND
OCCIDENTAL PERMIAN LTD.**

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 407194

QUESTIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 407194
	Action Type: [HEAR] Prehearing Statement (PREHEARING)

QUESTIONS

Testimony	
Please assist us by provide the following information about your testimony.	
Number of witnesses	3
Testimony time (in minutes)	60