

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

**APPLICATION OF CHEVRON U.S.A. INC. FOR A GAS CAPTURE PILOT PROJECT
INVOLVING THE OCCASIONAL INJECTION OF PRODUCED GAS INTO THE
BONE SPRING FORMATION, LEA COUNTY, NEW MEXICO.**

CASE NO. _____

APPLICATION

Chevron U.S.A. Inc. ("Chevron") (OGRID No. 4323) through its undersigned attorneys, hereby files this application with the Oil Conservation Division for authorization to engage in a gas capture pilot project in the Avalon Shale interval of the Bone Spring formation ("pilot project"). In support of this application, Chevron states:

1. Chevron is the operator of the following horizontal wells currently producing from the Bone Spring formation, WC-025 G-06 S263319P; BONE SPRING Pool (97955) in Section 19, Township 26 South, Range 33 East, NMPM, Lea County, New Mexico:

- The Salado Draw 19 26 33 Federal Com 2H well (API No. 30-025-42662) located in the NW/4 NW/4 (Unit D) of Section 19; and
- The Salado Draw 19 26 33 Federal Com 5H well (API No. 30-025-42797) located in the NW/4 NE/4 (Unit B) of Section 19.

2. Chevron seeks to authority to utilize these producing wells to occasionally inject produced gas into the Avalon Shale interval of the Bone Spring formation at a total vertical depth of approximately 9122 feet to 9196 feet along the horizontal portion of the wellbores at surface injection pressures of no more than 1250 psi.

3. The source of the produced gas will be the Bone Spring and Wolfcamp formations delivered to three central tank batteries located in Section 23, Township 26 South, Range 32

East, and Sections 19 & 29, Township 26 South, Range 33 East, NMPM, Lea County, New Mexico.

4. Chevron seeks authority for this pilot project to avoid the shut-in of producing wells or the temporary flaring of gas during pipeline capacity constraints, mechanical difficulties, plant shut downs, or other events impacting the ability to deliver gas into a pipeline.

5. Chevron will submit monthly C-115 Forms to the Division that identify the production and injection volumes, pressures and days in operation for this pilot project.

6. During this pilot project, Chevron intends to gather information on injection rates, injection volumes, injection interval durations, maximum pressures reached during injection intervals (surface and downhole), production rates, gas recovery rates and delta pressures from nearby wells for reporting back to the Division at an appropriate time.

7. Prior to or at the hearing in this matter, Chevron will provide the information requested by the Division in the October 24, 2019, letter attached hereto.

8. A copy of this application will be provided by certified mail to the surface owner on the tract on which the proposed injection wells are located, and to each leasehold operator and other affected persons within any tract wholly or partially contained within one-half mile of the completed interval of the proposed injection wells.

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

WHEREFORE, Chevron U.S.A. Inc. requests that this Application be set for hearing before an Examiner of the Oil Conservation Division on February 6, 2020, and that after notice and hearing this Application be approved.

Respectfully submitted,

HOLLAND & HART LLP

By: 

Michael H. Feldewert

Adam G. Rankin

Julia Broggi

Kaitlyn A. Luck

Post Office Box 2208

Santa Fe, NM 87504

505-998-4421

505-983-6043 Facsimile

mfeldewert@hollandhart.com

arankin@hollandhart.com

jbroggi@hollandhart.com

kaluck@hollandhart.com

ATTORNEYS FOR CHEVRON U.S.A. INC.

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Secretary

Adrienne Sandoval, Director
Oil Conservation Division



October 24, 2019

Chevron U.S.A., INC.
Attention: Fred Verner
6301 Deauville Blvd, Midland, TX 79706

Re: Chevron Gas Capture Pilot Project

Dear Fred Verner,

This letter responds to your request for guidance regarding the procedure for requesting approval from the Oil Conservation Division ("OCD") for the Chevron Gas Capture Pilot Project ("Pilot Project"). On October 9, 2019, Chevron gave a presentation to OCD regarding the Pilot Project, which does not appear to fall within the types of injection wells regulated under 19.15.26 NMAC. Accordingly, the OCD Director will exercise her authority under the Oil and Gas Act, NMSA 1978, Section 70-2-11(A), to consider an application for an order to implement the Pilot Project, subject to the following conditions:

- 1) No later than sixty (60) days after the date of this letter, submit an application for hearing containing or agreeing to provide the following information:

Project Description

- i) Describe the need and background for the project.
- ii) Summarize the project goals and steps to obtain them.

Duration

- i) Provide a project timeline that does not extend more than 1 year after the date of issuance of an order.

Technical Information and Standards for Installation and Operation

- i) Supply a reservoir characterization and justification of reservoir suitability including the formation's lithology, and the general stratigraphy of the injection interval.
- ii) Provide reservoir modeling and technical analysis to analyze whether the injected gas will migrate from the formation, interfere with other wells, or affect underground sources of drinking water.
- iii) Provide a technical analysis to evaluate whether the injected gas will have a net positive, neutral, or negative effect on the pool's ultimate recovery.

-
- iv) Provide a well diagram, casing information, drilling reports, and CBL for the well.
 - v) Confirm that the well will meet the following minimum requirements: (a) the casing burst pressure shall be at least 120% of the maximum allowable surface pressure plus the hydrostatic pressure from a full column of reservoir fluid; and (b) the drilling reports and CBL reflect complete cement coverage for the entire vertical length of the well.
 - vi) Perform an assessment of the surrounding wells to ensure they meet the requirements in subsection (v).
 - vii) Demonstrate that the mechanical integrity of the well complies with 19.15.26.11(A)(1) NMAC to a minimum pressure of 110% of the maximum allowable surface pressure.
 - viii) Demonstrate that the injected gas does not contain corrosive gas such as H₂S or CO₂ that may damage the casing.
 - ix) If the proposed maximum allowable surface pressure is greater than 0.14 psi/ft, comply with the following requirements:
 - (a) Justify the proposed maximum allowable surface pressure.
 - (b) Demonstrate with appropriate data the fracture and propagation pressure for the targeted horizon.
 - (c) Provide the expected bottom hole hydrostatic pressure generated by a fluid column consisting of the injected gas.
 - (d) Demonstrate with appropriate data that the maximum allowable surface pressure will not exceed 90% of the horizon's propagation pressure minus the expected bottom hole hydrostatic pressure generated by a fluid column consisting of the injected gas.
 - (e) Install equipment to prevent the downhole pressure from exceeding 90% of the reported propagation pressure.
 - x) Provide any additional information requested by the OCD Director.

Monitoring

- i) Install equipment to prevent the surface pressure from exceeding the maximum allowable surface pressure.
- ii) If operations will be conducted remotely, establish a SCADA system to collect all relevant data for safe operations, including the production flow rate, injection gas flow rate, surface pressure, and downhole pressure.

Reporting

- i) Submit a C-115 form each month which identifies the production and injection volumes, pressures, and days in operation.

Corrective Action

- i) Provide a plan of action for environmental and engineering emergencies.

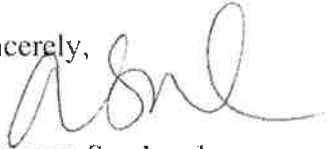
Post-Project Report

- ii) Submit a compilation of the following data: injection rates, injection volumes, injection interval durations, maximum pressure reached during injection intervals (surface and downhole), production rates, gas recovery rate, and delta pressures for adjacent wells during injection.

- 2) Give notice of the application and the hearing in accordance with 19.15.26.8(B)(2) NMAC.
- 3) Interested persons may attain party status in the hearing pursuant to 19.15.4.10 & 11 NMAC.
- 4) The hearing will be conducted in accordance with 19.15.4.13 through 26 NMAC.
- 5) The OCD Director may approve this application and impose conditions in the order as she deems necessary to prevent waste, protect correlative rights, and protect the public health and environment.
- 6) OCD will determine the process for broader implementation of the technology used in the Pilot Project after review of the results and further consideration of the regulatory and technical issues.
- 7) This procedure is applicable only to the Pilot Project.

We look forward to working with you on this Pilot Project. If you have any questions about this letter, please call Phil Goetz, UIC Coordinator, at (505)476-3466.

Sincerely,



Adrienne Sandoval
Director

cc: Phil Goetz