

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

**APPLICATION OF EOG RESOURCES,
INC. FOR A TWO-YEAR EXTENSION
OF ITS CLOSED LOOP GAS
CAPTURE PILOT PROJECT
AUTHORIZED UNDER ORDER NO R-
21061, LEA COUNTY, NEW MEXICO.**

CASE NO. _____

APPLICATION

EOG Resources, Inc. (“EOG”) (OGRID No. 7377) through its undersigned attorneys, hereby files this application with the Oil Conservation Division for a two-year extension of its closed loop gas capture pilot project authorized under Order No. R-21061 until December 31, 2025 (“Pilot Project”), with the option to request additional two-year extensions. In support of this application, EOG states:

1. EOG is the operator of the **Caballo 23 Fed No. 2H Well** (API No. 30-025-40051), a horizontal well located in the E/2 W/2 (Unit C) of Section 23, Township 25 South, Range 33 East, NMPM, in Lea County, New Mexico.
2. This well produces from the Bone Spring formation (Red Hills; Upper Bone Spring Shale Pool [Pool Code 97900]) and is dedicated to a standard horizontal well spacing unit comprised of the E/2 W/2 of said Section 23.
3. EOG is authorized under Order R-21061 to use the Caballo 23 Fed No. 2H Well to engage in a closed loop gas capture pilot project to occasionally inject produced gas into the Leonard Shale interval of the Bone Spring formation at a total vertical depth of approximately 9,418 feet to 9,457 feet along the horizontal portion of the wellbore at surface injection pressures

of no more than 3,500 psi. The source of the produced gas will be the Bone Spring, Wolfcamp and Atoka formations.

4. Approval will allow EOG to continue intermittent injection of produced gas into the subject well for the purpose of temporary storage and later recovery to avoid the shut-in of producing wells or the temporary flaring of gas during pipeline capacity constraints, mechanical difficulties, plant shutdowns, or other events impacting the ability to deliver gas into a pipeline. Approval also will reduce impacts associated with temporary interruptions of gas pipeline services and midstream operations and help develop standard practices for similar projects.

5. The Division administratively extended Order R-21061 through December 31, 2023. *See* Administrative Approval, attached as **Exhibit A**. However, the Division required that further extensions be approved only after notice and hearing.

6. The Caballo 23 Fed No. 2H well underwent and passed a mechanical integrity test on September 1, 2023. EOG will be setting a packer at approximately 9,050 feet.

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

WHEREFORE, EOG Resources, Inc. requests that this Application be set for hearing before an Examiner of the Oil Conservation Division on October 5, 2023, and that after notice and hearing this Application be approved.

Respectfully submitted,

HOLLAND & HART LLP

By: _____

Michael H. Feldewert
Adam G. Rankin
Paula M. Vance
Post Office Box 2208
Santa Fe, NM 87504
505-998-4421
505-983-6043 Facsimile
mfeldewert@hollandhart.com
agrarkin@hollandhart.com
pmvance@hollandhart.com

ATTORNEYS FOR EOG RESOURCES, INC.

CASE _____ :

Application of EOG Resources, Inc. for a Two-Year Extension of its Closed Loop Gas Capture Pilot Project Authorized Under Order No. R-21061, Lea County, New Mexico. Applicant in the above-styled cause seeks an order authorizing a two-year extension of its closed loop gas capture pilot project approved under Order No. R-21061 until December 31, 2025 (“Pilot Project”), with the option to request additional two-year extensions. EOG is authorized under Order R-21061 to use the **Caballo 23 Fed No. 2H Well** (API No. 30-025-40051) to engage in a closed loop gas capture pilot project to occasionally inject produced gas into the Leonard Shale interval of the Bone Spring formation at a total vertical depth of approximately 9,418 feet to 9,457 feet along the horizontal portion of the wellbore at surface injection pressures of no more than 3,500 psi. The source of the produced gas is the Bone Spring, Wolfcamp, and Atoka formations. The well is a horizontal well located in the E/2 W/2 (Unit C) of Section 23, Township 25 South, Range 33 East, NMPM, in Lea County, New Mexico. It is currently producing from the Bone Spring formation (Red Hills; Upper Bone Spring Shale Pool [Pool Code 97900]) and dedicated to a standard horizontal well spacing unit comprised of the E/2 W/2 of Section 23. The subject acreage is located approximately 20 miles west of Jal, New Mexico.

EXHIBIT A

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



EOG Resources
c/o Sarah Mitchell
E-mail: sarah_mitchell@eogresources.com

RE: Order R-21061; Extension of Pilot Project
GAS CAPTURE PILOT PROJECT INVOLVING THE OCCASIONAL INJECTION OF
PRODUCED GAS INTO THE BONE SPRING FORMATION, LEA COUNTY, NEW
MEXICO

Ms. Mitchell,

The Oil Conservation Division (OCD) has reviewed your request, received on January 28, 2021, to extend the authority granted by Order R-21061 for the Pilot Project that involves the intermittent injection of gas into well(s) including the Caballo 23 Federal No. 2H well (30-025-40051) (“the CLGC Well”). The request, which was received prior to the deadline, states that EOG Resources, Inc. (EOG) has concluded that the Pilot Project is a safe and effective way to significantly reduce flaring due to third party down time.

EOG observed an elevated pressure within the intermediate casing of the CLGC Well on August 24, 2022. The maximum pressure reached was 657 psi and injection into the CLGC Well was ceased.

Per the first supplemental information for this request, received on September 15, 2022, EOG requests to extend the authority granted by Order R-21061 for the purpose of temporary storage and recovery to prevent waste, reduce impacts associated with temporary interruptions of gas pipeline services and midstream operations, and to develop standard practices for similar projects.

EOG met with OCD on October 17, 2022, to discuss the circumstances that led to the elevated pressure within the intermediate casing of the CLGC Well. The pressure history for the CLGC Well indicates that there is a slow and steady increase in pressure of approximately 50 psi every 5 weeks that is unrelated to the injection activity. EOG believes that the source of the influx causing the slow and steady pressure increase is a formation shallower than the injection interval.

Per the second supplemental information for this request, received on October 28, 2022, EOG

Order R-21061; Extension of Pilot Project
EOG Resources
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requests to extend the authority granted by Order R-21061 through December 31, 2023, with the option of an additional extension, during which time EOG will pursue additional options for injection to increase flexibility and functionality of its closed loop gas capture activity. EOG proposed a pressure management procedure to manage the pressure within the intermediate casing of the CLGC Well.

With the additional requirements of this extension that are stated below, it is the OCD's understanding that Conclusions of Law Paragraphs 9 to 15 of Order R-21061 are accurate.

The OCD finds that for the reasons above, the granting of this request to extend Order R-21061 is in the interest of conservation, will prevent waste, and will protect the environment. Therefore, a two-year and eleven-month extension to Order R-21061 extending its termination date to December 31, 2023, is granted with the following conditions:

1. If the intermediate casing pressure exceeds five hundred pounds per square inch (500 psi) or the surface casing pressure exceeds one hundred pounds per square inch (100 psi); EOG shall notify the OCD Engineering Bureau at ocd.engineer@emnrd.nm.gov within twenty-four hours.
2. If the intermediate casing pressure exceeds one thousand pounds per square inch (1,000 psi); EOG shall immediately cease injection into the CLGC Well and within twenty-four hours notify the OCD Engineering Bureau at ocd.engineer@emnrd.nm.gov. EOG shall not recommence injection until approval to do so is granted by the OCD.
3. EOG shall monitor the intermediate casing pressure, but not bleed it down while injecting unless doing so is necessary for safety or the integrity of the CLGC Well.
4. When the intermediate casing pressure reaches 50 psi and the pressure increase is unrelated to injection, then EOG shall bleed the pressure down to 0 psi. EOG shall maintain a record of each time the intermediate casing is bled off that includes the date of each event and pressure just prior to bleeding it off. EOG shall review its record whenever the frequency of bleed off events warrants it and no less than once every three months to determine the rate at which pressure is increasing within the intermediate casing. If that increase is determined to be greater than 50 psi per month, then EOG shall cease injection into the well and notify the OCD Engineering Bureau at ocd.engineer@emnrd.nm.gov within twenty-four hours. EOG shall not recommence injection until approval to do so is granted by the OCD.
5. No further extensions of R-21061 shall be granted administratively.

All requirements of R-21061 remain in full force and effect.



ADRIENNE SANDOVAL
Director

DATE: 12/23/22

cc: Case File 20965
Well file 30-025-40051
Bureau of Land Management