

Submit a Copy To Appropriate District  
 Office  
 District I – (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II – (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III – (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV – (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM  
 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

WELL API NO. 30-025-40051
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. N/A
7. Lease Name or Unit Agreement Name Caballo 23 Fed
8. Well Number 2H
9. OGRID Number 7377
10. Pool name or Wildcat Red Hills; Upper Bone Spring Shale
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3345' GR

**SUNDRY NOTICES AND REPORTS ON WELLS**  
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well  Gas Well  Other

2. Name of Operator  
EOG Resources, Inc.

3. Address of Operator  
P.O. Box 2267 Midland, Texas 79707

4. Well Location  
 Unit Letter C : 50 feet from the North line and 2200 feet from the West line  
 Section 23 Township 25S Range 33E NMPM County Lea

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

<p><b>NOTICE OF INTENTION TO:</b></p> <p>PERFORM REMEDIAL WORK <input type="checkbox"/></p> <p>TEMPORARILY ABANDON <input type="checkbox"/></p> <p>PULL OR ALTER CASING <input type="checkbox"/></p> <p>DOWNHOLE COMMINGLE <input type="checkbox"/></p> <p>CLOSED-LOOP SYSTEM <input type="checkbox"/></p> <p>OTHER: <input type="checkbox"/></p>	<p><b>SUBSEQUENT REPORT OF:</b></p> <p>REMEDIAL WORK <input type="checkbox"/></p> <p>COMMENCE DRILLING OPNS. <input type="checkbox"/></p> <p>CASING/CEMENT JOB <input type="checkbox"/></p> <p>OTHER: Pilot Project monitoring <input checked="" type="checkbox"/></p>
<p>PLUG AND ABANDON <input type="checkbox"/></p> <p>CHANGE PLANS <input type="checkbox"/></p> <p>MULTIPLE COMPL <input type="checkbox"/></p>	<p>ALTERING CASING <input type="checkbox"/></p> <p>P AND A <input type="checkbox"/></p>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Pursuant to Order R-21061, EOG respectfully makes the following notice.

During the afternoon of 08/24/2022, EOG observed above average (>450 psig) intermediate casing pressures during Closed Loop Gas Capture (CLGC) injection on the Caballo 23 Fed #2H (API No. 30-025-40051). Injection was occurring on the production casing/tubing annulus with a peak pressure of 916 psig. As injection took place, the intermediate casing pressure rose steadily to a peak of 657 psig. Injection was ceased due to this behavior and EOG engineers were notified. On the morning of 08/25/2022, the intermediate casing was bled down and quickly returned to 0 psig after returning ~0.5 BBL of water with no gas. EOG pumped ~0.5 BBL of water back in and pressured up the intermediate casing to 1,000 psig, holding for 30 minutes. The pressure was increased to 1,500 psig, held for 15 minutes, and then bled down. EOG did not observe any behavior that indicated communication to the production casing or surface casing. As gas injection resumed, pressure peaked at 335 psig at 20:15 CDT on 08/25/2022 and declined after that. Prior to bleeding off on 08/26/2022 at 08:46 CDT, the intermediate casing pressure was at 266 psig.

The NMOCDC was notified at 09:39 CDT on 08/26/2022. At the request of Mr. Dean McClure, EOG bled the intermediate casing down again later in the afternoon. Prior to bleeding off, the pressure was at 18 psig. The intermediate casing was bled down, taking about 1 minute to flow off ~1/2 gallon of water. The casing was left open for 15 minutes with zero flow observed. The pressure has remained near 0 psig as of 08/29/2022, regardless of whether EOG has been injecting or producing.

Upon closer examination of the pressure trends and the difference in the temperature of the gas lift gas versus the CLGC gas, it appears that the pressure fluctuations observed can be attributed to thermal expansion. The CLGC gas was initially warmer than the gas lift gas previously being injected. It was also at a significantly higher rate, reaching 6,000 MSCFD versus the gas lift injection rate of 200 MSCFD. It appears that the increased flow of hot gas elevated the heat transfer between the production casing and intermediate casing annulus, allowing for thermal expansion of fluids and a corresponding pressure increase. When injection occurred overnight, the cooler ambient temperatures allowed for a decrease in pressure until daylight, forming a sinusoidal pattern. This behavior is in-line with what was previously observed on 05/18/2020 and described in the form C-103 filed on 05/28/2020. Based on the data collected, EOG does not believe that the intermediate casing pressures are due to pressure communication from CLGC injection.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Sarah Mitchell TITLE \_\_\_\_\_ DATE 8/30/2022

Type or print name Sarah Mitchell E-mail address: sarah\_mitchell@eogresources.com PHONE: 432-848-9133

**For State Use Only**

APPROVED BY: Dean R McClure TITLE Petroleum Engineer DATE 09/01/2022

Conditions of Approval (if any):

- Conduct the bleed off test again at the peak pressure of its cycle if the intermediate pressure exceeds 300 psi and provide the Division with the results.
  - Bleed the pressure off
  - Monitor for flow for 15 minutes
  - Close the intermediate back in and monitor pressure
- Continue your protocol of contacting the Division if the intermediate pressure exceeds 450 psi.
- If the intermediate pressure exceeds 1000 psi, immediately cease injection and contact the Division.

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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**

CONDITIONS

Action 140250

**CONDITIONS**

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 140250
	Action Type: [C-103] NOI General Sundry (C-103X)

**CONDITIONS**

Created By	Condition	Condition Date
dmcclore	Conduct the bleed off test again at the peak pressure of its cycle if the intermediate pressure exceeds 300 psi and provide the Division with the results. o Bleed the pressure off o Monitor for flow for 15 minutes o Close the intermediate back in and monitor pressure	9/1/2022
dmcclore	Continue your protocol of contacting the Division if the intermediate pressure exceeds 450 psi.	9/1/2022
dmcclore	If the intermediate pressure exceeds 1000 psi, immediately cease injection and contact the Division.	9/1/2022