

J. SCOTT HALL

(505) 986;2646 [| | E | O | D | Shall@montand.com Office: Email:

Reply To: Santa Fe Office

www.montand.com 2013 JUN 10 A II: 05

June 10, 2013

Ms. Jami Bailey, Director NM Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87501

Hand-Delivered

NMOCD Case No. 150 17 : Application of Energen Resources Re: Corporation for Determination of Cement Adequacy in Proximity to **Proposed Well Perforations, Sandoval County, New Mexico**

Dear Ms. Bailey:

On behalf of Energen Resources Corporation, enclosed is an original and one copy of an Application in the above-referenced case. Please set this matter for hearing on the July 11, 2013 examiner docket. Also enclosed is a proposed advertisement for the case.

Very truly yours,

1. I wan of U

J. Scott Hall

JSH:kw **Enclosures**

475820

REPLY TO:

325 Paseo de Peralta Santa Fe, New Mexico 87501 Telephone (505) 982-3873 • Fax (505) 982-4289

Post Office Box 2307 Santa Fe, New Mexico 87504-2307 6301 Indian School Road NE, Suite 400 Albuquerque, New Mexico 87110 Telephone (505) 884-4200 • Fax (505) 888-8929

Post Office Box 36210 Albuquerque, New Mexico 87176-6210 Case No. 15017 Application of Energen Resources Corporation for determination of cement adequacy in proximity to proposed well perforations, Sandoval County, New Mexico. Applicant seeks and order pursuant to inter alia Rules 19.15.16.9 and 19.15.16.10 determining the adequacy of well cement for strata isolation and authorizing the placement of new perforations in the Niobrara formation, West Lindrith Gallup-Dakota Pool (39189) within 500 feet of the top of existing cement in the Chacon Jicarilla D Well No. 7 located in the NE/4 NW/4 of Section 21, Township 23 North, Range 3 West, on Jicarilla Apache Nation lands in Sandoval County. The well is located 5.4 miles east of the intersection of State Highway 537 and the Rio Arriba county line.

RECEIVED OCD

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

2013 JUN TO A 11: 05

IN THE MATTER OF THE APPLICATION OF ENERGEN RESOURCES CORPORATION FOR DETERMINATION OF CEMENT ADEQUACY IN PROXIMITY TO PROPOSED WELL PERFORATIONS SANDOVAL COUNTY, NEW MEXICO

APPLICATION

ENERGEN RESOURCES CORPORATION, ("Energen"), through its undersigned attorneys, Montgomery & Andrews, P. A., (J. Scott Hall), hereby applies to the Oil Conservation Division pursuant to *inter alia* Rules 19.15.16.9 and 19.15.16.10 for an order determining the adequacy of existing cement and authorizing the placement of new perforations in the Niobrara formation, West Lindrith Gallup-Dakota Pool (39189) within 500 feet of the top of existing cement in the Chacon Jicarilla D Well No. 7 located in the NE/4 NW/4 of Section 21, Township 23 North, Range 3 West, on Jicarilla Apache Nation lands in Sandoval County.

In support, Applicant states:

1. Energen's Chacon Jicarilla D Well No. 7 (API 30-043-20236) was drilled in 1976 and is currently producing from the Dakota formation through perforations located at depths from 7,308' to 7,436'. Energen proposes to recomplete the well through new perforations to be located at depths from 6,294' to 6,403'. As shown by the wellbore schematic attached hereto as Exhibit A, the current cement top is located at 6,164', resulting in approximately 130' of cement isolation from the top of cement to the uppermost set of perforations planned to be added to the well.

- 2. Energen's proposal to recomplete the Chacon Jicarilla D Well No. 7 will continue to provide for adequate zonal and well completion isolation in compliance with Division Rule 19.15.16.9 which generally requires operators to seal and separate strata to prevent their contents from passing into other strata. Energen does not seek an exception to this rule.
- 3. Division Rule 19.15.16.10 also sets forth more specific requirements for the casing and cementing of wells. Rule 19.15.16.10 subparts A and D provide as follow:

19.15.16.10 CASING AND TUBING REQUIREMENTS:

- A. The operator shall equip a well drilled for oil or gas with surface and intermediate casing strings and cement as may be necessary to effectively seal off and isolate all water-, oil- and gas-bearing strata and other strata encountered in the well down to the casing point. In addition, the operator shall equip a well completed for oil or gas production with a string of properly cemented production casing at sufficient depth to ensure protection of oil- and gas-bearing strata encountered in the well, including the strata to be produced.
- **D.** Cementing shall be with conventional-type hard-setting cements to which the operator has added additives (lighteners, densifiers, extenders, accelerators, retarders, etc.) to suit conditions in the well.

Energen does not seek an exception to these requirements of Rule 19.15.16.10. The Bureau of Land Management's Farmington District Office has determined that the existing height of the cement column is adequate.

4. The Division's District III office has determined in this instance that 130' of zonal isolation in the Chacon Jicarilla D Well No. 7 is impermissible as Rule 19.15.16.10 E requires that cement is to extend upward 500' above the uppermost perforation. This rule provides as follows:

19.15.16.10 CASING AND TUBING REQUIREMENTS:

E. Authorized division field personnel may, when conditions warrant, allow exceptions to Subsection D of 19.15.16.10 NMAC and permit the operator to use oil-base[d] casing packing material in lieu of hard-setting cements on intermediate and production casing strings; provided that when the operator uses such materials on the intermediate casing string, the operator places conventional-type hard-setting cements throughout all oil- and gas-bearing

zones and throughout at least the lowermost 300 feet of the intermediate casing string. When the operator uses such materials on the production casing string, the operator shall place conventional-type hard-setting cements throughout all oil- and gas-bearing zones that shall extend upward a minimum of 500 feet above the uppermost perforation or, in the case of an open-hole completion, 500 feet above the production casing shoe.

- 5. To comply with the District III office's interpretation and application of Rule 19.15.16.10 E, Energen would be required to add squeeze holes to the well at the current top of cement and perform a squeeze job to add another 370' of cement to the column. The addition of further squeeze holes to the production casing of the Chacon Jicarilla D Well No. 7 introduces an unnecessary mechanical risk to casing integrity and is not necessary to the protection of other strata.
- 6. Moreover, Rule 19.15.16.10 E operates as a means to obtain an exception to the requirement of subpart D of the rule which requires operators to utilize hard-setting cements. Under subpart E, Division personnel may authorize operators to substitute oil-based casing packing materials for hard-setting cements when conditions warrant. In this instance, Energen does not seek to use oil-based casing packing materials. The application of this particular subpart as the basis for a requirement to have 500' of cement appears to be uncertain.
- 7. Recompletion of the Chacon Jicarilla D No. 7 well as proposed by Energen with cement extending 130' above the planned perforations is adequate to isolate other strata, will not result in waste and is consistent with the interests of conservation and the protection of correlative rights.

WHEREFORE, Energen Resources Corporation requests that this Application be set for hearing before one of the Division's examiners on July 11, 2013, and that after notice and hearing as required by law, the Division enter its order granting this Application and providing such further relief as the Division deems appropriate.

Respectfully submitted,

MONTGOMERY & ANDREWS, P.A.

J. Scott Hall

P.O. Box 2307

Santa Fe, NM 87504-2307

(505) 982-3873

Attorneys for Energen Resources Corporation

475414-7



 Tubing Data

 Size
 Wt. and Grade
 # Joints
 Set Depth
 SN Depth
 Date

 2 3/8"
 4.7# J-55
 227
 7424'
 7398'
 n/a

TOC @ 1906' (CBL)

Stage Tool @ 3352' cmnt w/ 250sxs

Proposed Niobrara Perfs: 6294'-6312' 6344'-6365' 6379'-6403'

DK perfs 7308'-7436'

7 7/8" hole to 7695'

TOC @ 6164' (CBL) (130' above top proposed perf)

4 ½" 10.5/11.6# K-55 @ 7693' cmnt w/ 400sxs