

J. SCOTT HALL

Cell: (505) 670-7362
Email: shall@montand.com
Reply To: Santa Fe Office
www.montand.com

August 3, 2010

Ms. Florene Davidson New Mexico Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505 **Hand Delivered** 

Re: NMOCD Case No. 14539: Application of Energen Resources Corporation for Approval of a Pilot Project, Unorthodox Well Locations and for Exception From Rule 19.15.15.11 NMAC to Determine Proper Well Densities for Pictured Cliffs Formation Wells in Portions of The Gavilan, Tapacito and South Blanco-Pictured Cliffs Pools, Rio Arriba County, New Mexico

Dear Ms. Davidson:

On behalf of Energen Resources Corporation, enclosed is an Application in the above-referenced case. Please set this matter for hearing on the September 2, 2010 examiner docket. Also enclosed is a proposed advertisement for the case.

Thank you.

Very truly yours,

1. I wan thall

J. Scott Hall

JSH:kw Enclosures

cc: Energen Resources Corporation

00208376

## STATE OF NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES OIL CONSERVATION DIVISION 2010 AUG - 3 P 4: 21

IN THE MATTER OF THE APPLICATION OF ENERGEN RESOURCES CORPORATION FOR APPROVAL OF A PILOT PROJECT, UNORTHODOX WELL LOCATIONS AND FOR EXCEPTION FROM RULE 19.15.15.11 NMAC TO DETERMINE PROPER WELL DENSITIES FOR PICTURED CLIFFS FORMATION WELLS IN PORTIONS OF THE GAVILAN, TAPACITO AND SOUTH BLANCO-PICTURED CLIFFS POOLS, RIO ARRIBA COUNTY, NEW MEXICO

Case No. 14539

## OGE to 16 2928 APPLICATION

ENERGEN RESOURCES CORPORATION, ("Energen"), by its undersigned attorneys, Montgomery and Andrews, P.A., (J. Scott Hall) hereby makes application pursuant to *inter alia* Rule 19.15.15.11 for an order approving the establishment of a pilot project to determine proper well densities for Pictured Cliffs formation wells in portions of the Gavilan-Pictured Cliffs pool (77360), the Tapacito-Pictured Cliffs (85920) pool and the South Blanco-Pictured Cliffs (72439) pool in Rio Arriba, County, New Mexico. Energen also seeks approval pursuant to Rule 19.15.15.13 of unorthodox well locations for four wells and for an exception to the well density development limitations applicable to each of the referenced pools. In support of this Application, Energen states:

1. Energen is the operator of approximately 202 Pictured Cliffs formation wells in the Gavilan-Pictured Cliffs pool, the Tapacito-Pictured Cliffs pool and the South Blanco-Pictured Cliffs pool in the eastern portions of the San Juan Basin. The Division's acreage dedication requirements for these pools specify that Pictured Cliffs formation reserves be developed on 160-acre units. However, neither the statewide rules nor the specific pool rules applicable to these pools permit infill development.

2. Beginning in 2003, Energen participated with other operators in a regional, 25-well infill pilot study program in the Pictured Cliffs formation authorized by Division Order No. R-11848. Portions of the pools referenced above were included in the pilot project study area. In connection with the pilot project, Energen drilled or recompleted infill wells in the following 160-acre units:

SW/4 of Section 18, Township 26 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, dedicated to Energen's Jicarilla "98" Well No. 7 (API No. 30- 039-06433), located at a standard gas well location 790 feet from the South and West lines (Unit M) of Section 18 and the Jicarilla "98" Well No. 12-A drilled at a standard infill gas well location 1160 feet from the South line and 1920 feet from the West line (Unit N) of Section 18, Tapacito-Pictured Cliffs Pool (85920).

Lots 1 and 2 and the S/2 NE/4 (NE/4 equivalent) of Section 6, Township 26 North, Range 5 West, NMPM, Rio Arriba County, New Mexico, dedicated to Energen's Jicarilla West Well No. 2 (API No. 30-039-06743), located at a standard gas well location 860 feet from the North line and 950 feet from the East line (Lot l/Unit A) of Section 6 and the Jicarilla West Well No. 8-B drilled at a standard infill gas well location, more or less, 1305 feet from the North line and 1940 feet from the East line (Lot 2/Unit B) of Section 6, South Blanco-Pictured Cliffs Pool (72439).

NW/4 of Section 14, Township 26 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, dedicated to Energen's Jicarilla "99" Well No. 13 (API No. 30-039-20167), located at a standard gas well location 990 feet from the North line and 1650 feet from the West line (Unit C) of Section 14 and the Jicarilla "99" Well No. 18 drilled at a standard infill gas well location 1965 feet from the North line and 1980 feet from the West line (Unit F) of Section 14, Gavilan-Pictured Cliffs Pool (77360).

Lots 1 and 2 and the S/2 NE/4 (NE/4 equivalent) of irregular Section 4, Township 25 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, dedicated to Energen's Florance Federal Well No. 3 (API No. 30-039-06170), located at a standard gas well location 1251 feet from the North line and 96l feet from the East line (Lot I/Unit A) of irregular Section 4 and the Florence Federal Well No. 7-B drilled at a standard infill gas well location 1470 feet from the North line and 1980 feet from the East line (Lot 2/Unit B) of irregular Section 4, Tapacito- Pictured Cliffs Pool (85920).

SE/4 of Section 26, Township 27 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, dedicated to Energen's Jicarilla "95" Well No. 10 (API No. 30- 039-20170), located at a standard gas well location 990 feet from the South line and 1650 feet from the East line (Unit O) of Section 26 and the Jicarilla "95" well No. 8-B (API No. 30-039-

26547), located at a standard infill gas well location 1950 feet from the South line and 1890 feet from the East line (Unit J) of Section 26, Gavilan-Pictured Cliffs Pool (77360).

SE/4 of Section 2, Township 26 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, dedicated to Energen's Jicarilla "96" Well No. 9 (API No. 30-039-82347), located at a standard gas well location 890 feet from the South line and 1750 feet from the East line (Unit O) of Section 2 and the Jicarilla "96" Well No. 2-B (API No. 30-039-26552), located at an unorthodox infill gas well location 2430 feet from the South line and 1265 feet from the East line (Unit 1) of Section 2, Gavilan-Pictured Cliffs Pool

(77360).

3. After drilling the pilot wells, production trends were observed and Estimated

Ultimate Recoveries (EUR's) were forecast and compared to the parent wells situate in the same

quarter-section. On average, production for the pilot wells showed net gains in EUR's for five of

the six quarter-sections. Expansion of the pilot project into the referenced areas will allow

Energen to more fully develop methodologies to verify the extent of interference between wells,

improve original gas-in-place estimates and EUR's and to identify additional spacing units as

candidates for infill development.

4. Energen proposes to recomplete eight existing Mesaverde formation wells in the

Pictured Cliffs formation and operate them as new pilot infill wells in the following existing

spacing units:

NW/4 Section 23, T-27-N, R-3-W

Gavilan-Pictured Cliffs Pool Jicarilla 94 Well No. 5C (API No. 3003927671)

arma 74 Wen 140. 3C (Al 1140.

Location: SW/4 NW/4

NW/4 Section 11, T-26-N, R-3-W

Gavilan-Pictured Cliffs Pool

Jicarilla 96 Well No. 5A (API No. 3003921238)

Location: NW/4 NW/4

SE/4 Section 19, T-26-N, R-3-W

Tapacito-Pictured Cliffs Pool

Jicarilla 98 Well No. 2B (API No. 3003927308)

Location: NE/4 SE/4

3

SW/4 Section 20, T-26-N, R-3-W
Tapacito-Pictured Cliffs Pool
Jicarilla 98 Well No. 3B (API No. 3003926915)
Location NE/4 SW/4

NW/4 Section 33, T-26-N, R-3-W
Tapacito-Pictured Cliffs Pool
Jicarilla 117E Well No. 9B (API No. 3003929295)
Location SW/4 NW/4

SW/4 Section 34, T-26-N, R-3-W
Tapacito-Pictured Cliffs Pool
Jicarilla 117E Well No. 3B (API No. 3003929296)
Location NW/4 SW/4

SE/4 Section 5, T-26-N, R-5-W South Blanco-Pictured Cliffs Pool Jicarilla 152W Well No. 2M (API No. 3003926575) Location NW/4 SE/4

NW/4 Section 6, T-26-N, R-5-W
South Blanco-Pictured Cliffs Pool
Jicarilla West Well No. 9M (API No. 3003926306)
Location NE/4 NW/4

5. Four of the recompleted Mesaverde formation wells will result in unorthodox locations for Pictured Cliffs formation wells which will require Division approval:

Jicarilla 94 No. 5C	2540' FNL, 680' FWL, Section 23, T-27-N, R-3-W
Jicarilla 98 No. 2B	2200' FSL, 660' FEL, Section 19, T-26-N, R-3-W
Jicarilla 98 No. 3B	1980' FSL, 2350' FWL, Section 20, T-26-N, R-3-W
Jicarilla 117E No. 9B	2515' FNL, 5654' FWL, Section 33, T-26-N, R-3-W

6. Notice of this application will be provided in accordance with Division Rule 19.15.15.11 C and 19.15.15.13.

WHEREFORE, Applicant requests that this Application be set for hearing before a duly appointed examiner of the Oil Conservation Division on September 2, 2010 and that after notice and hearing as required by law, the Division enter its order granting this application and making such other and further provisions as the Division determines appropriate.

Montgomery and Andrews, P.A.

Bv:	1.	1	way	tall
_,.				

J. Scott Hall, Esq. Post Office Box 2307 Santa Fe, New Mexico 87504 (505) 982-3873 (505) 982-4289 fax

shall@montand.com

Attorneys for Energen Resources Corporation

00208169-4

Case [453]: Application of Energen Resources Corporation for approval of a pilot project, unorthodox well locations and for exception from Rule 19.15.15.11 NMAC to determine proper well densities for Pictured Cliffs formation wells in portions of the Gavilan, Tapacito and South Blanco-Pictured Cliffs pools, Rio Arriba County, New Mexico. Applicant seeks approval for the establishment of an infill well pilot project to determine proper well densities for Pictured Cliffs formation wells in portions of the Gavilan-Pictured Cliffs pool (77360), the Tapacito-Pictured Cliffs (85920) pool and the South Blanco-Pictured Cliffs (72439) pool in Rio Arriba, County, New Mexico. Applicant also seeks an exception to the well density development limitations applicable to each of the referenced pools. The proposed infill wells and lands comprising the pilot project study area are as follow:

NW/4 Section 23, T-27-N, R-3-W
Gavilan-Pictured Cliffs Pool
Jicarilla 94 Well No. 5C (API No. 3003927671)
Location: SW/4 NW/4

NW/4 Section 11, T-26-N, R-3-W
Gavilan-Pictured Cliffs Pool
Jicarilla 96 Well No. 5A (API No. 3003921238)
Location: NW/4 NW/4

SE/4 Section 19, T-26-N, R-3-W
Tapacito-Pictured Cliffs Pool
Jicarilla 98 Well No. 2B (API No. 3003927308)
Location: NE/4 SE/4

SW/4 Section 20, T-26-N, R-3-W
Tapacito-Pictured Cliffs Pool
Jicarilla 98 Well No. 3B (API No. 3003926915)
Location NE/4 SW/4

NW/4 Section 33, T-26-N, R-3-W
Tapacito-Pictured Cliffs Pool
Jicarilla 117E Well No. 9B (API No. 3003929295)
Location SW/4 NW/4

SW/4 Section 34, T-26-N, R-3-W
Tapacito-Pictured Cliffs Pool
Jicarilla 117E Well No. 3B (API No. 3003929296)
Location NW/4 SW/4

SE/4 Section 5, T-26-N, R-5-W
South Blanco-Pictured Cliffs Pool
Jicarilla 152W Well No. 2M (API No. 3003926575)
Location NW/4 SE/4

## NW/4 Section 6, T-26-N, R-5-W South Blanco-Pictured Cliffs Pool Jicarilla West Well No. 9M (API No. 3003926306) Location NE/4 NW/4

In addition, Applicant seeks approval pursuant to Rule 19.15.15.13 of unorthodox well locations for four of the referenced wells:

Jicarilla 94 No. 5C	2540' FNL, 680' FWL, Section 23, T-27-N, R-3-W
Jicarilla 98 No. 2B	2200' FSL, 660' FEL, Section 19, T-26-N, R-3-W
Jicarilla 98 No. 3B	1980' FSL, 2350' FWL, Section 20, T-26-N, R-3-W
Jicarilla 117E No. 9B	2515' FNL, 5654' FWL, Section 33, T-26-N, R-3-W

The subject wells and lands are generally located approximately eighteen miles northwest of Lindrith, New Mexico