

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

**IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:**

**CASE NO. 14539  
ORDER NO. R-13347-A**

**APPLICATION OF ENERGEN RESOURCES  
CORPORATION FOR APPROVAL OF A  
PILOT PROJECT, UNORTHODOX OIL  
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.**

**AMENDED ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on September 2, 2010, at Santa Fe, New Mexico, before Examiner Terry Warnell.

On the 11th day of January, 2011, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, entered Order No. R-13347

On January 21, 2011, Burlington Resources Oil & Gas, LP "Burlington" filed a Motion to Reopen and Amend Order No. R-13347. On January 24, 2011, the Applicant, Energen Resources Corporation "Energen," filed its Response.

On January 26, 2011, Burlington and Energen have advised the Division that they reached an agreement for the entry of a stipulated amended order.

NOW, on this 3<sup>rd</sup> day of March, 2011, the Division Director, having considered the recommendations of the Examiner to approve this stipulated amended order.

**FINDS THAT:**

(1) Due notice has been given, and the Division has jurisdiction of the subject matter of this case.

(2) This case was consolidated for purposes of hearing with Case No. 12857 (Reopened). However, since the two cases involve different agendas, separate orders are being issued.

(3) Energen Resources Corporation ("Energen" or "applicant") seeks approval for the establishment of an eight-well infill pilot project program to determine proper well densities for the Pictured Cliffs formation in portions of the Gavilan-Pictured Cliffs Pool (77360), the Tapacito-Pictured Cliffs Pool (85920) and the South Blanco-Pictured Cliffs Pool (72439) in Rio Arriba County, New Mexico.

(4) Applicant further seeks an exception to the well density development limitations applicable to each of the referenced pools. The proposed eight infill wells and lands comprising the pilot project study area are as follows:

NW/4 Section 23, T27N, R3W  
Gavilan-Pictured Cliffs Pool  
Jicarilla 94 Well No. 5C (API No. 30-039-27671)  
Location: SW/4 NW/4

NW/4 Section 11, T26N, R3W  
Gavilan-Pictured Cliffs Pool  
Jicarilla 96 Well No. 5A (API No. 30-039-21238)  
Location: NW/4 NW/4

SE/4 Section 19, T26N, R3W  
Tapacito-Pictured Cliffs Pool  
Jicarilla 98 Well No. 2B (API No. 30-039-27308)  
Location: NE/4 SE/4

SW/4 Section 20, T26N, R3W  
Tapacito-Pictured Cliffs Pool  
Jicarilla 98 Well No. 3B (API No. 30-039-26915)  
Location: NE/4 SW/4

NW/4 Section 33, T26N, R3W  
Tapacito-Pictured Cliffs Pool  
Jicarilla 117E Well No. 9B (API No. 30-039-29295)  
Location: SW/4 NW/4

SW/4 Section 34, T26N, R3W

Tapacito-Pictured Cliffs Pool  
Jicarilla 117E Well No. 3B (API No. 30-039-29296)  
Location: NW/4 SW/4

SE/4 Section 5, T26N, R5W

South Blanco-Pictured Cliffs Pool  
Jicarilla 152W Well No. 2M (API No. 30-039-26575)  
Location: NW/4 SE/4

NW/4 Section 6, T26N, R5W

South Blanco-Pictured Cliffs Pool  
Jicarilla West Well No. 9M (API No. 30-039-26306)  
Location: NE/4 NW/4

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

Jicarilla 94 Well No. 5C 2540FNL, 680FWL, Section 23, T27N, R3W  
Jicarilla 98 Well No. 2B 2200FSL, 660FEL, Section 19, T26N, R3W  
Jicarilla 98 Well No. 3B 1980FSL, 2350FWL, Section 20, T26N, R3W  
Jicarilla 117E Well No. 9B 2515FNL, 5654FWL, Section 33, T26N, R3W

(6) The Gavilan-Pictured Cliffs Pool is an "unprorated gas pool" not subject to the Division's statewide rules entitled "Gas Proration and Allocation" (Part 21). This pool is currently governed by Division Rules 15.10.C and 15.11.C, which provide for 160-acre spacing units, require wells to be no closer than 660 feet to the outer boundary of their assigned units nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary, and preclude the drilling, recompletion, and production of a second gas well within a single 160-acre gas spacing unit.

(7) Both the South Blanco-Pictured Cliffs and Tapacito-Pictured Cliffs Pools are prorated gas pools and are therefore subject to the Division's statewide rules (Part 21). Both pools are developed on standard 160-acre spacing units with wells no closer than 660 feet to the outer boundary of their assigned units nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary. While the pool rules governing both pools (see Division Order No. R-8170, as amended) do not specifically restrict the number of wells per unit, neither do they specifically permit additional wells.

(8) Applicant appeared at the hearing with counsel and presented land and geologic testimony as follows:

(a) Each of the 160-acre units is owned by Energen and ownership is identical in all pools.

(b) It is not economic to drill new wells to recover the incremental

reserves out of the Pictured Cliffs.

(c) Volumetric analysis suggests that increasing well density to two wells per 160-acre spacing unit would recover additional reserves and that the current one well per 160-acre unit density rule may result in a low percentage of the gas in place being produced.

(9) Burlington Resources Oil and Gas Company LP appeared with counsel and presented evidence including a witness and exhibits. While Burlington stated that it was neither for nor against the approval of these eight new pilot wells, it did want Energen to follow the criteria of the original pilot.

(10) Except for Energen Resources Corporation, the applicant, and Burlington Resources Oil & Gas Company, LP no other party appeared at the hearing.

(11) Burlington concluded that the majority of available data suggests infilling of the Pictured Cliffs formation across the basin is not appropriate at that time.

(12) It is appropriate for the Division to adopt some of the same protocols that were used in the original Pictured Cliffs Pilot Project as set forth in Order No. R-11848.

(13) This Pilot Project is intended to:

- (a) accumulate comprehensive technical data for study and reservoir simulation, (including reservoir pressure);
- (b) accurately determine formation water saturations;
- (c) and make an estimation of original gas-in-place and remaining reserves

(14) The pilot program is authorized for a period of two years from the date of this Order. Within six (6) months of completion of the pilot Project, Energen shall apply to the Division to re-open this case for an Examiner's hearing to provide their data, overall findings and well density recommendations to the Division.

(15) The granting of this application will afford the Applicant the opportunity to gather additional data and examine various geologic and engineering factors to determine proper well density and well locations for all Pictured Cliffs Gas Pools and formations. Use of the data from the pilot project could ultimately result in the recovery of additional gas reserves that may not otherwise be recovered. Granting this application will prevent waste and protect correlative rights.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Energen Resources Corporation to conduct an eight-well infill pilot study program in the Pictured Cliffs formation as described in Finding four (4) of this Order in Rio Arriba County, New Mexico is hereby approved, subject to the declaratory paragraph (2) below.

(2) The pilot program is authorized for a period of two years from the date of this Amended Order. Within six (6) months of completion of the pilot Project, Energen shall apply to the Division to re-open this case for an Examiner's hearing to provide their data, overall findings and well density recommendations to the Division.

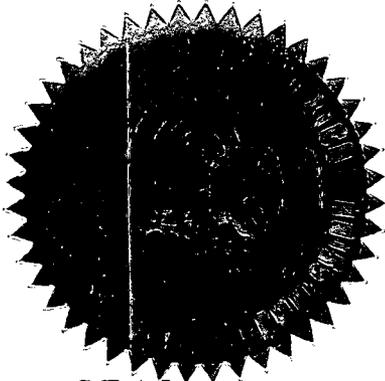
(3) The unorthodox location of Applicant's proposed four wells, as described in Finding five (5) of this Order, is approved.

(4) The applicant is further authorized to commingle oil and gas production from the Blanco-Mesaverde Gas Pool with production from the Gavilan-Pictured Cliffs and Tapacito-Pictured Cliffs Gas Pools (in accordance with Rule 19.15.12.1 I.C(2) NMAC), in those wells one through six described in finding paragraph 4 of this order. In addition, applicant is authorized to commingle production from the Blanco-Mesaverde Gas Pool, the South Blanco-Pictured Cliffs Gas Pool and the Basin-Dakota Gas Pool in wells seven and eight described in finding paragraph 4.

(5) The operator shall notify the Aztec District Office of the Division upon implementation of commingling operations.

(6) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

DANIEL SANCHEZ  
Acting Director