

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

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

**CASE NO. 15153  
Order No. R-13856**

**APPLICATION OF ENCANA OIL & GAS (USA) INC. FOR APPROVAL OF THE  
NAGEEZI UNIT, CREATION OF A NEW POOL FOR HORIZONTAL WELL  
DEVELOPMENT WITHIN THE UNIT AREA, AND FOR ALLOWANCE OF 330-FOOT  
SETBACKS FROM THE EXTERIOR OF THE PROPOSED UNIT, SAN JUAN  
COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on May 29, 2014, at Santa Fe, New Mexico, before Examiner Scott Dawson and legal counsel Gabriel Wade.

NOW, on this 1st day of July, 2014, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

**FINDS THAT:**

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

(2) Encana Oil & Gas (USA) Inc. ("Applicant" or "Encana") seeks:

(a) Approval of the Unit Agreement for the Nageezi Federal/State/Allotted Indian/ Fee Exploratory Unit ("the Unit"), comprising 9,135 acres, more or less, in San Juan County, New Mexico, more specifically described below;

**TOWNSHIP 23 NORTH, RANGE 9 WEST, NMPM**

|             |                               |
|-------------|-------------------------------|
| Section 1:  | Lots 1, 2, 3, 4, S/2 N/2, S/2 |
| Section 2:  | Lots 1, 2, 3, 4, S/2 N/2, S2  |
| Section 3:  | Lots 1, 2, 3, 4, S/2 N2, S/2  |
| Section 4:  | Lots 1, 2, 3, 4, S/2 N/2, S/2 |
| Section 5:  | Lots 1, 2, S/2 NE/4, SE/4     |
| Section 9:  | All                           |
| Section 10: | All                           |
| Section 11: | NW/4                          |

TOWNSHIP 24 NORTH, RANGE 9 WEST, NMPM

Section 21: S/2  
Section 22: S/2  
Section 23: S/2  
Section 26: All  
Section 27: All  
Section 28: All  
Section 33: All  
Section 34: All  
Section 35: All

(b) Creation of a new pool for horizontal oil wells in the Unitized Interval within the Unit; and

(c) Allowance of 330-foot setbacks for horizontal oil wells in the Unitized Interval from the exterior boundary of the Unit.

(3) The Unitized Interval includes all formations from 100 feet below the stratigraphic equivalent of the top of the Mancos Shale (base of the Mesa Verde Group) to the stratigraphic equivalent of the base of the Greenhorn Limestone Formation (top of the Graneros Shale) as shown on the Type Log of the Escrito P16-2409 Well No. 1H (API No. 30-045-35313). (Admitted into evidence as Exhibit 9 at the hearing of this case).

(4) The Unit Area will be developed and operated as a single Participating Area.

(5) The Unit Area will be developed and operated as a single Project Area, in accordance with Rule 19.15.16.7.L NMAC.

(6) The Unit Area is currently subject to the Special Rules and Regulations for the Basin Mancos Gas Pool adopted in 2008 under Division Order No. R-12984, the Special Rules for the Bisti Lower Gallup Oil Pool adopted in 1958 under Division Order No. R-1069-B and as amended by Division Orders R-1069-C through No. R-1069-G, and the Special Rules for the South Bisti Gallup Oil Pool adopted in 1985 under Division Order No. R-8090.

(7) Rule C of the Special Rules for the Basin Mancos Gas Pool require wells to be located no closer than 660 feet to the outer boundary of a spacing unit or, in this case, the outer boundary of the Unit Area. Rule 2 of the Special Rules for the Bisti Lower Gallup Oil Pool require wells to be located in the North half or South half of a governmental quarter section and Rule 3 of the Special Rules for the Bisti Lower Gallup Oil Pool requires wells to be no closer than 330 feet to any quarter-quarter section line. Finally, Rule 4 of the Special Rules for the South Bisti Gallup Oil Pool requires wells to be no closer than 330 feet to any quarter-quarter section line.

(8) Applicant appeared at the hearing through counsel and presented an expert in petroleum land matters, petroleum geology, and reservoir engineering who provided testimony and evidence that:

(a) The Unit includes federal, state, allotted Indian and fee minerals. The Unit Agreement was prepared on the form prescribed for an undivided Federal/State/Allotted Indian/Fee Exploratory Unit, but has been modified in two significant respects:

and (i) It applies only to horizontal oil wells in the Unitized Interval;

(ii) the entire Unit Area is established as a single Participating Area.

(b) The Unit Agreement has received preliminary approval of the United States Bureau of Land Management (BLM) and the New Mexico State Land Office (NMSLO). The Authorized Officer of the Bureau of Indian Affairs (BIA) has provided the BLM with verbal approval of the Unit Agreement.

(c) All interests in the Unit Area are expected to be committed to the Unit.

(d) The Unit will be developed to produce oil from the Unitized Interval.

(e) The Unitized Interval identified in the type log is laterally contiguous across the entire Unit Area. No faults, pinchouts or other geological impediments exist to prevent the Unitized Interval from being developed by horizontal oil wells.

(f) The Unit Area covers the Basin Mancos Gas Pool, the Bisti Lower Gallup Oil Pool, and the South Bisti Gallup Oil Pool. An analysis of the existing pools demonstrates that the technical and reservoir characteristics of the hydrocarbons in each of the existing pools are identical in all respects. The pressure gradients for these pools are generally the same, the fluids are compatible, and the oil API gravity is consistent. Therefore, any well drilled within the Unit Area will produce from a common source of supply and is essentially one oil pool.

(g) There are no fluid-sensitivity issues, no loss of reserves due to cross-flow, and the value of the total remaining reserves from these pools will not be reduced by combining the three pools into one pool.

(h) A new pool for horizontal oil well development in the Unitized Interval within the Unit Area will resolve administrative and reporting issues identified by the State Land Office and the Oil Conservation Division.

(i) The statewide default setback requirement of 330 feet applied from the exterior boundary of the Unit Area is necessary to effectively and efficiently drain oil reserves within the Unit and will not impair correlative rights. A setback requirement greater than the 330 feet would result in waste and would impede the efficient and effective development of the Unit Area.

(j) Applicant, therefore, requests the creation of a new pool for horizontal oil wells within the Unit Area subject to the following:

(i) This new oil pool should apply to existing and future horizontal oil wells in the Unitized Interval underlying the Unit Area.

(ii) This new oil pool should be subject to the Division's statewide rules for oil wells.

(iii) Horizontal oil wells in the Unitized Interval may be located anywhere within the Unit Area, so long as no portion of the completed interval is closer than 330 feet to the outer boundary of the Unit Area.

(k) Applicant has given notice of this application and the hearing to all operators and working interest owners in all offsetting Basin Mancos spacing units surrounding the Unit Area as well as publishing notice in The Daily Times, a daily newspaper of general circulation published in Farmington, San Juan County, New Mexico. None of the noticed parties have protested.

(9) Applicant presented evidence supporting formation of the Unit Area, creation of a new pool for horizontal oil wells within the Unit Area, and that provision of 330-foot setbacks is required to efficiently and effectively develop oil reserves within the Unit Area. Applicant also presented evidence that waste would result without provision of 330-foot setbacks from the exterior boundary of the Unit Area.

(10) The proposed Unit Agreement should be approved.

(11) A new oil pool for horizontal oil wells in the Unitized Interval underlying the Unit Area should be created.

(12) Allowing horizontal oil wells in the Unitized Interval to be located anywhere within the Unit Area, so long as no portion of the completed interval is closer than 330 feet to the outer boundary of the Unit Area, will not impair correlative rights, will assist in preventing waste, and will allow for the most efficient and effective development of the Unit Area.

(13) Applicant will not oppose operators in offsetting proration units locating horizontal oil wells in the Unitized Interval at 330-foot setbacks to the exterior boundary of the Unit Area.

(14) This application should be granted.

**IT IS THEREFORE ORDERED THAT:**

(1) The application of Encana Oil and Gas (USA) Inc. (OGRID 282327) for approval of the Unit Agreement for the Nageezi Federal/State/Allotted Indian/Fee Exploratory Unit is hereby granted.

(2) The Unit Area shall consist of the following lands in San Juan County, New Mexico:

**TOWNSHIP 23 NORTH, RANGE 9 WEST, NMPM**

|             |                               |
|-------------|-------------------------------|
| Section 1:  | Lots 1, 2, 3, 4, S/2 N/2, S/2 |
| Section 2:  | Lots 1, 2, 3, 4, S/2 N/2, S2  |
| Section 3:  | Lots 1, 2, 3, 4, S/2 N2, S/2  |
| Section 4:  | Lots 1, 2, 3, 4, S/2 N/2, S/2 |
| Section 5:  | Lots 1, 2, S/2 NE/4, SE/4     |
| Section 9:  | All                           |
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TOWNSHIP 24 NORTH, RANGE 9 WEST, NMPM

Section 21: S/2  
Section 22: S/2  
Section 23: S/2  
Section 26: All  
Section 27: All  
Section 28: All  
Section 33: All  
Section 34: All  
Section 35: All

- (3) The Unit Area shall be a single Project Area for horizontal oil well development.
- (4) Encana Oil and Gas (USA) is hereby designated the operator of the Unit and Project Area.
- (5) A new oil pool for horizontal oil wells in the Unitized Interval within the Unit Area is hereby created and named the Nageezi Unit Oil Pool for horizontal oil well development. (Nageezi Unit Hz Oil Pool)
- (6) This oil pool shall be limited to the areal extent of the Nageezi Federal/State/Allotted Indian/Fee Exploratory Unit as specifically described in Finding Paragraph (2)(a) of this Order, and shall not be extended beyond this horizontal limit.
- (7) This Unitized Interval for this oil pool within the Nageezi Federal/State/Allotted Indian/Fee Exploratory Unit shall extend vertically from 100 feet below the stratigraphic equivalent of the top of the Mancos Shale (base of Mesa Verde Group) to the stratigraphic equivalent of the base of the Greenhorn Limestone Formation (top of Graneros Shale) as shown on the Type Log of the Escrito P16-2409 Well No. 1H (API No. 30-045-35313) described in Finding Paragraph (3) of this Order.
- (8) This new oil pool shall apply to existing and future horizontal oil wells in the Unitized Interval within the Unit Area.
- (9) This new oil pool shall be subject to the Division's statewide rules for oil wells.
- (10) Horizontal oil wells can be located anywhere within the Unit Area, so long as no portion of the completed interval is closer than 330 feet to the outer boundary of the Unit Area.
- (11) All existing and future vertical wells in the Mancos formation within the Unit Area shall remain dedicated and subject to the existing Basin Mancos Gas Pool, Bisti Lower Gallup Oil Pool, and South Bisti Gallup Oil Pool, respectively.
- (12) To afford to the owner(s) of each property in the pool the opportunity to produce their just and equitable share of the oil in the pool, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the new horizontal oil pool shall be developed on 320-acre oil spacing units.
- (13) Applicant will not oppose operators in offsetting proration units locating offsetting horizontal or vertical oil wells in the Unitized Interval at 330-foot setbacks to the exterior boundary of the Unit Area.

(14) The operator of the Unit and Project Area, upon creation of this Nageezi Unit Hz Oil Pool by the Division, shall file the necessary forms with the Division to dedicate existing wells to the new oil pool.

(15) If a new oil pool for horizontal oil well development is formed that encompasses this Nageezi Unit Hz Oil Pool for horizontal oil well development, the Nageezi Unit Hz Oil Pool will be incorporated into that new oil pool and the operator of the Unit and Project Area shall be required to file the necessary forms with the Division to dedicate those wells to the new oil pool.

(16) All data regarding well interference concerning setbacks and internal well spacing shall be made available to the Division as soon as available.

(17) This Order is binding on all current and future operators of the Project Area and its associated Unitization Agreement and horizontal oil pool.

(18) This Order is contingent upon final approval of the proposed Unit Agreement by the BLM, NMSLO, and the BIA.

(19) 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.



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

JAMI BAILEY  
Director