# 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. 15356 ORDER NO. R-14051

APPLICATION OF WPX ENERGY PRODUCTION, LLC FOR APPROVAL OF THE WEST LYBROOK UNIT; CREATION OF A NEW POOL FOR HORIZONTAL DEVELOPMENT WITHIN THE UNIT AREA; AND FOR ALLOWANCE OF 330-FOOT SETBACKS FROM THE EXTERIOR OF THE 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 August 6, 2015, at Santa Fe, New Mexico, before Examiner Michael McMillan.

NOW, on this 8<sup>th</sup> day of September, 2015, 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 this case and of the subject matter.
  - (2) WPX Energy Production, LLC ("Applicant" or "WPX") seeks:
    - (a) Approval of the West Lybrook Unit ("Unit") comprising 12,807.24 acres, more or less, of Federal and Allotted Indian lands in San Juan County, New Mexico;
    - (b) Creation of a new pool for horizontal oil wells in the Unitized Interval within the Unit; and
    - (c) A provision that allows the completed interval of horizontal oil wells in the Unit to be located no closer than 330 feet to the outer boundary of the Unit.

(3) The proposed Unit comprises the following-described acreage in San Juan County, New Mexico:

## **TOWNSHIP 23 NORTH, RANGE 8 WEST, NMPM**

Section 6: S/2 S/2 Sections 7 and 8: All Sections 17 through 19: All

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

Section 11: SW/4 and E/2

Sections 12 through 15: All Section 21: E/2 Sections 22 through 27: All Section 28: E/2 Sections 33 through 35: All

- (4) Applicant's initial application in this case requested that the Unitized Interval comprise the stratigraphic equivalent of the Mancos formation as defined at a depth of 3,815 feet down to the base of the Greenhorn Limestone formation at a measured depth of 5,593 feet as encountered in the log run on the Federal Davis Oil Company Chaco Well No. 6 (API No. 30-045-05082) located in Section 12, Township 23 North, Range 9 West, NMPM, San Juan County, New Mexico.
- (5) At the hearing, the applicant requested that the Unitized Interval, pursuant to the Unit Agreement, comprise that interval from the top of the Mancos formation at a measured depth of 3,820 feet down to the stratigraphic equivalent at a depth of 5,071 feet as encountered in the log run on the above-described Federal Davis Oil Company Chaco Well No. 6, said log section attached as Exhibit "C" to Applicant's Unit Agreement and entered as WPX Exhibit No. 6.
- (6) The Unit will be developed and operated as a single Participating Area and will therefore constitute a single Project Area in accordance with Division Rule 19.15.16.7.L NMAC.
- (7) The Unit currently comprises portions of the Nageezi-Gallup Pool (47540), Kimbeto Wash-Gallup Pool (96598), and the Basin-Mancos Gas Pool (97232). The Nageezi- Gallup and the Kimbeto Wash-Gallup Pools are subject to statewide Rule 19.15.15.9 which requires standard 40-acre spacing and proration units with wells to be located no closer than 330 feet to the outer boundary of a spacing unit. The Basin-Mancos Gas Pool is subject to special rules as established by Division Order No. R-12984 which requires standard 320-acre spacing and proration units with wells to be located no closer than 660 feet to the outer boundary of a spacing unit.

- (8) Applicant appeared at the hearing through counsel and presented the following testimony:
  - (a) The Unit is comprised of eight separate Federal tracts and 35 separate Allotted Indian tracts;
  - (b) There are eleven working interest owners within the Unit. All working interest owners in the Unit have verbally indicated their intent to execute a Federal Unit Agreement and are expected to be committed to the Unit;
  - (c) The SW/4 of Section 34 and the SE/4 of Section 35, which are contained within the Unit, are parts of one unleased federal tract. Applicant testified that the Bureau of Land Management ("BLM") will stipulate upon leasing that this tract will be subject to the Unit Agreement;
  - (d) The Unit Agreement was prepared on the form prescribed by the BLM, but has been modified in two significant respects:
    - 1. It applies only to horizontal oil wells in the Unitized Interval;
    - 2. The entire Unit is established as a single Participating Area.
  - (e) The Unit Agreement will be executed by the BLM and by the Federal Indian Minerals Office ("FIMO") on behalf of the interest owners in the Allotted Indian lands contained within the Unit;
  - (f) Applicant has discussed the Unit and the Unit development plans with the BLM and the FIMO. Following these discussions, the BLM issued a letter preliminarily granting approval of the Unit Agreement. A copy of this letter was provided to the FIMO. The Unit will be effective upon final approval by the BLM and the FIMO;
  - (g) Records at the FIMO indicate there are approximately 900 interest owners in the Allotted Indian lands within the Unit. Applicant has provided notice of this application and hearing by certified mail to these interest owners with addresses of record;
  - (h) Applicant has published notice of this application and hearing in the Farmington Daily Times, a newspaper of general circulation in San Juan County, New Mexico in order to provide notice to those interest owners in the Allotted Indian lands within the Unit for which no address could be found following diligent efforts;

- (i) Applicant provided notice of this application and hearing by certified mail to all working interest owners in the Unitized Interval within the Unit;
- (j) Applicant has also provided notice to all operators and lessees in the Mancos formation within the Unit, and to all operators in the Mancos formation within the acreage offsetting the Unit boundary;
- (k) The technical and reservoir characteristics of the hydrocarbons in the Nageezi-Gallup Pool, Kimbeto Wash-Gallup Pool and Basin-Mancos Gas Pool within the Unit 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. Consequently, the Mancos (Gallup) formation within the Unit appears to be a single common source of supply;
- (l) The Unit will be developed to produce oil and gas from the upper portion of the Mancos formation. That portion of the Mancos formation Applicant proposes to exclude from the proposed horizontal Mancos pool is high in clay content and Applicant contends that this lower Mancos interval would likely not be developed by horizontal drilling;
- (m) Depth severances exist within the Mancos formation, but not the Unitized Interval;
- (n) A geologic stress barrier that exists between the Unitized Interval and the lower portion of the Mancos formation will prevent fracture stimulations in the Unitized Interval from affecting the lower Mancos;
- (o) The proposed pool will be classified as an oil pool, consequently, it is appropriate to establish 330 foot setbacks from the Unit boundaries. In addition, the Applicant would not oppose operators of tracts directly offsetting the Unit boundaries from locating Mancos wells within 330 feet of the Unit;
- (p) Horizontal wells will be drilled diagonally in a northwest to southeast direction in order to efficiently develop the oil and gas reserves within the Unit;
- (q) The available well control in this area demonstrates that the Unitized Interval is laterally continuous across the entire Unit. No faults, pinch-outs or other geologic impediments exist to prevent the Unitized Interval from being developed by horizontal wells;

- (r) Applicant will provide inter-well communication data within the proposed Unit to the Aztec Office of the Division no later than 18 months after the entry of this order;
- (s) As of the date of the hearing, no horizontal wells have been drilled within the Unit; and
- (t) Applicant, therefore, requests the creation of a new pool for horizontal oil wells within the Unit subject to the following:
  - 1. The proposed new oil pool will only apply to horizontal wells in the Unitized Interval within the Unit;
  - 2. The proposed new oil pool will be subject to the Division's statewide rules regarding spacing and setbacks for oil wells;
  - 3. The proposed pool will encompass only the Unitized Interval, and not the entire Mancos formation; and
  - 4. Horizontal oil wells in the Unitized Interval may be located anywhere within the Unit provided that no portion of the completed interval is closer than 330 feet to the outer boundary of the Unit.
- (9) Mr. Juan Betoni, an Indian Allottee mineral interest owner within the Unit, appeared at the hearing and spoke in support of the Applicant's proposed Unit.
- (10) Ms. Etta Arviso, an Indian Allottee mineral interest owner within the Unit, appeared at the hearing and spoke about concerns regarding oil and gas development in the proposed Unit.

The Division concludes as follows:

- (11) The Applicant has provided proper and adequate notice of this application and hearing to all affected interest owners, lessees and operators.
- (12) The Unit Agreement provides that the entire Unit shall comprise a single Participating Area, consequently, the Unit constitutes a single horizontal Project Area for horizontal oil wells pursuant to Rule 19.15.16.7.L(2) NMAC.
- (13) The geologic evidence presented demonstrates that the entire Unit should be productive within the Unitized Interval.
- (14) Applicant intends to fully develop the Unit with a sufficient number of horizontal wells to drain the Unitized Interval within the entire Unit. To ensure full development of the Unit, the Unit Agreement contains provisions that: i) require continuous drilling until a well is drilled that is capable of producing in paying quantities;

- and ii) require the Unit Operator, subsequent to drilling a well capable of producing in paying quantities, to submit an annual plan of development to the Authorized Officer of the Department of the Interior for approval.
- (15) The correlative rights of all interest owners in the Unit will be protected provided that the Unit is ultimately fully developed in the Unitized Interval.
- (16) Approval of the Unit will provide the Applicant the flexibility to locate and drill wells in the Unit in order to maximize the recovery of oil and gas from the Unitized Interval, thereby preventing waste, will provide the Applicant the latitude to conduct operations in an effective and efficient manner within the Unit, and will not violate correlative rights.
  - (17) The West Lybrook Unit should be approved.
- (18) The Unit Operator should be required to submit a Division Form C-102 for each horizontal well drilled in the Unit that shows: i) the drilling block for that particular well (each standard-sized spacing unit penetrated by the well); and ii) the total acreage within the Unit and the Division order number approving the Unit.
- (19) Applicant should be required to submit a copy of the annual West Lybrook Unit Plan of Development to the Division for review.
- (20) With regards to Applicant's request for the creation of a new pool for horizontal well development within the Unit, the Division further concludes that:
  - (a) A new oil pool for horizontal wells in the Mancos formation within the Unit should be created and designated the West Lybrook Unit Mancos Pool;
  - (b) The Applicant did not present sufficient evidence to justify limiting the vertical limits of the West Lybrook Unit Mancos Pool so as to exclude the lower Mancos and Greenhorn Limestone. Further, the Division as a general business policy, avoids the vertical subdivision of common sources of supply;
  - (c) The vertical limits of the West Lybrook Unit Mancos Pool should encompass the entire Mancos formation as defined at a depth of 3,820 feet down to the base of the Greenhorn Limestone formation at a measured depth of 5,593 feet as encountered in the log run on the Federal Davis Oil Company Chaco Well No. 6 (API No. 30-045-05082) located in Section 12, Township 23 North, Range 9 West, NMPM, San Juan County, New Mexico;
  - (d) The West Lybrook Unit Mancos Pool should be subject to Division Rules 19.15.15.9, 19.15.16.14.B(3) and 19.15.20.12.A NMAC; and

- (e) The effective date of the pool creation should be the 1<sup>st</sup> day of the month following entry of this order, provided however that the creation of the West Lybrook Unit Mancos Pool is contingent upon the Unit Operator obtaining final approval of the West Lybrook Unit Agreement from the BLM and the FIMO.
- Approval of the West Lybrook Unit and creation of a new pool for horizontal development within the Unit, subject to the provisions described above, will promote orderly development of the Mancos formation within the Unit and will not violate correlative rights.

## IT IS THEREFORE ORDERED THAT:

- The West Lybrook Unit ("Unit") consisting of 12,807.24 acres, more or (1) less, of Federal and Allotted Indian lands in San Juan County, New Mexico, is hereby approved, provided however, this order shall not be effective until such time as WPX Energy Production, LLC obtains final approval of the Unit from the BLM and the FIMO. A copy of the executed Unit' Agreement and final approval letters by the BLM and the FIMO shall be provided to the Division.
- The Unit shall comprise the following-described acreage in San Juan County, New Mexico:

### TOWNSHIP 23 NORTH, RANGE 8 WEST, NMPM

Section 6:

S/2 S/2

Sections 7 and 8:

All

Sections 17 through 19:

All

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

Section 11:

SW/4 and E/2

Sections 12 through 15:

All

Section 21:

E/2All

Sections 22 through 27:

Section 28:

E/2

Sections 33 through 35:

All

- (3) WPX Energy Production, LLC ("WPX") is hereby designated the Unit Operator.
- Pursuant to the Unit Agreement, the Unitized Interval shall be defined as the top of the Mancos formation at a measured depth of 3,820 feet down to the stratigraphic equivalent at a depth of 5,071 feet as encountered in the log run on the Federal Davis Oil Company Chaco Well No. 6 (API No. 30-045-05082) located in Section 12, Township 23

North, Range 9 West, NMPM, San Juan County, New Mexico, said log section attached as Exhibit "C" to Applicant's Unit Agreement and entered as WPX Exhibit No. 6.

- (5) The Unit shall constitute a single Project Area for horizontal oil well development pursuant to Division Rule 19.15.16.7.L (2) NMAC.
- (6) WPX shall provide a copy of the annual West Lybrook Unit Plan of Development to the Division for review.
- (7) A new oil pool for horizontal wells drilled within the Unitized Interval in the West Lybrook Unit is hereby created and designated the West Lybrook Unit Mancos Pool.
- (8) The vertical limits of the West Lybrook Unit Mancos Pool shall comprise the entire Mancos formation as defined at a depth of 3,820 feet down to the base of the Greenhorn Limestone formation at a measured depth of 5,593 feet as encountered in the log run on the Federal Davis Oil Company Chaco Well No. 6.
- (9) The horizontal boundaries of the West Lybrook Unit Mancos Pool shall coincide with the boundaries of the West Lybrook Unit as described in Ordering Paragraph No. (2) above, and shall not extend beyond the Unit boundaries.
- (10) The Division may expand or contract the horizontal boundaries of the West Lybrook Unit Mancos Pool if the boundaries of the Unit are altered.
- (11) The West Lybrook Unit Mancos Pool shall be subject to Division Rules No. 19.15.15.9, 19.15.16.14.B (3) and 19.15.20.12.A NMAC, and to the following stipulations:
  - (a) The Unit Operator shall be required to submit a Division Form C-102 for each horizontal well drilled in the Unit that shows the drilling block for that particular well (each standard-sized spacing unit penetrated by the well), the total acreage within the Unit and the Division order number approving the Unit; and
  - (b) Horizontal wells within the Unit can be located anywhere within the Unit, provided that no portion of the completed interval is located closer than 330 feet to the outer boundary of the Unit.
- (12) The effective date of the creation of the West Lybrook Unit Mancos Pool shall be the 1<sup>st</sup> day of the month following final approval of the West Lybrook Unit Agreement by the BLM and the FIMO, provided however that the creation of the West Lybrook Unit Mancos Pool shall be contingent upon the Unit Operator obtaining final approval of the West Lybrook Unit Agreement from the BLM and the FIMO.

- (13) All existing and future vertical wells in the Mancos formation within the Unit shall remain dedicated and subject to the requirements for the existing Lybrook-Gallup Pool, Kimbeto Wash-Gallup Pool and Basin-Mancos Gas Pool.
- (14) Applicant shall provide inter-well communication data within the Unit to the Aztec District Office of the Division no later than 18 months after approval of this Order.
- (15) If a new pool for Mancos development is formed that encompasses the West Lybrook Unit Mancos Pool, the West Lybrook Unit Mancos Pool will be incorporated into that new pool and the Unit Operator shall be required to file the necessary forms with the Division to dedicate those wells to the new pool.
- (16) 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

DAVID R. CATANACH

Director