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. 15369 ORDER NO. R-14090

APPLICATION OF ENCANA OIL AND GAS (USA) INC. FOR APPROVAL OF THE CROW CANYON 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 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 October 1, 2015, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 3rd day of December, 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 its subject matter.
 - (2) Encana Oil and Gas (USA) Inc. ("Applicant" or "Encana") seeks:
 - Approval of the Crow Canyon Unit (the "Unit") comprising 7,212.26 acres, more or less, of Federal, State, and Navajo Allotted lands in San Juan County, New Mexico;
 - ii. Creation of a new pool for horizontal wells within the Unit; and
 - iii. Authority to drill horizontal wells within the Unit such that the completed interval is located no closer than 330 feet to the outer boundary of the Unit.

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

TOWNSHIP 24 NORTH, RANGE 8 WEST, NMPM

W/2 Section 4: Section 5: All Sections 8 and 9: All Sections 16 and 17: All Sections 20 and 21: All Section 27: S/2 Sections 28 through 30: All Section 34: NE/4

- (4) 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) as defined at a depth of approximately 5220 feet, to the stratigraphic equivalent of the base of the Greenhorn Limestone, as defined at a depth of approximately 6980 feet, both shown on the log run October 21, 1982 on the Anabel C Well No. 1 (API 30-045-25452) located in Unit M, Section 34, Township 25 North, Range 8 West, NMPM, San Juan County, New Mexico.
- (5) Existing wells drilled to the Gallup or Mancos formations within the Unit Area are subject to the following pools:
 - a. The Basin; Mancos Gas Pool (Pool Code 97232), with Special Rules adopted in 2008 under Division Order No. R-12984, providing for 320-acre gas spacing units and wells located no closer than 660 feet from unit boundaries;
 - b. The offsetting Dufers Point; Gallup-Dakota Pool (Pool Code 19859), which was not frozen under Order No. R-12984, is subject to Special Rules promulgated in Division Order No. R-7435, as amended, which allows 160-acre oil spacing and proration units with wells located [Rule No. 4] no closer than 330 feet to the boundary of the proration unit or to each quarter-quarter section or nearer than 660 feet from any other well within this same pool;
 - c. The Lybrook; Gallup Oil Pool (Pool Code 42289) and the Cuervo; Gallup Oil Pool (Pool Code 15006), are subject to Division Rule 19.15.15.9 NMAC which limits the location of wells to no less than 330 feet from the boundary of the quarter-quarter section.
 - (6) No other party entered an appearance or otherwise opposed this application.
- (7) Applicant appeared at the hearing through counsel and presented the following testimony:

- a. The Unit is comprised of 13 federal tracts, 1 state tract and 4 Navajo Allotted tracts;
- b. The Bureau of Land Management ("BLM") requires that each tract must have 100 percent joinder to be included in the final Unit Area;
- c. As a condition of final approval of the Unit Area, the BLM requires the owners of 85 percent or more of the acreage [within all included tracts] to have approved the Unit Agreement;
- d. All interests in the Unit are expected to be committed to the Unit;
- e. Since the BLM acreage comprises 82 percent of the Unit Area, the federal form was used with the following modifications:
 - i. It applies only to horizontal wells of at least 1000 feet lateral length in the Unitized Interval completed after the August 1, 2013 effective date;
 - ii. It is limited to the Unitized Interval of the Mancos formation; and
 - iii. The entire Unit is treated as undivided with each tract participating as per its acreage dedication.
- f. The form of this modified federal unit agreement is identical to that form used by the Commissioner of Public Lands of the State of New Mexico ("SLO") in that the Unit Area is considered as undivided or one single participating area;
- g. The Unit Agreement has been given written preliminary approval by both the SLO and the BLM;
- h. The SLO conditioned its final approval of the Unit Agreement upon approval of the Unit by the Oil Conservation Division;
- i. Applicant has provided notice of this application and hearing to the working interest owners and operators within the Mancos formation in the spacing units offsetting the proposed Unit Area and to all working interest owners and Navajo Allottee (mineral owners, not surface owners) within the Unit;
- j. Applicant also mailed notice and a copy of the Unit Agreement to all owners of overriding royalty interests using the best known address of record;
- k. Applicant has caused notice of this application to be published in the Farmington Daily Times, considered to be a local newspaper of general circulation in San Juan County;
- 1. No faults, pinch-outs or other geologic impediments exist to prevent the Unitized Interval from being developed by horizontal oil wells;

- m. The available well control in the area demonstrates the Unitized Interval identified in the type log is laterally contiguous across the entire Unit;
- n. These lands were chosen and are being proposed as the Unit Area to facilitate the most efficient and uniform and common development;
- o. Applicant expects to reduce surface disturbances by the formation of this Unit and intends to protect the fresh water from harm due to drilling and oil field operations;
- p. The Unit will be developed to produce oil from the Mancos formation;
- q. Applicant intends to orient wells in a transverse direction;
- r. The Escrito D30 2408 Well No. 1H (API No. 30-045-35467) is considered by the BLM as "the initial horizontal development well". Said well was spud August 2, 2013 and first reported production for October of 2013.
- s. The effective date of the proposed Unit as stated in the Crow Canyon Unit Agreement is August 1, 2013.

The Division concludes as follows:

- (8) Applicant has provided proper and adequate notice of this application and of this hearing.
- (9) The Division in Rule 19.15.16.7E. NMAC defines a "Horizontal Well" as a directional well bore with one or more laterals that extend a minimum of 100 feet horizontally in the target zone. The Crow Canyon Unit Agreement contains a restriction allowing only wells containing one or more horizontal laterals completed at least 1000 feet in distance within the objective formation and also is limited to those wells completed after the August 1, 2013, effective date.
- (10) Within the Crow Canyon Unit, Division rules for horizontal wells should apply only to those wells completed a lateral distance within the Mancos formation of at least 1000 feet in length.
- (11) The Unit should constitute a single Project Area for horizontal oil well development pursuant to Division Rule 19.15.16.7.L (2) NMAC; provided however, the Project Area should be limited to Unit Wells.
- (12) Unit Wells should be defined as those wells allowed in the Crow Canyon Unit Agreement.
- (13) The geologic evidence presented demonstrates that the entire Unit should be productive within the Unitized Interval.

(14) The correlative rights of all interest owners in the Unit will be protected

(14) 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.

- (15) 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, and will provide the Applicant the latitude to conduct operations in an effective and efficient manner within the Unit.
- (16) The provisions contained within the Crow Canyon Unit Agreement are in compliance with Division rules, and the development and operation of the Unit Area, as proposed, comply with the Division's conservation principles.
- (17) The Crow Canyon Unit should be approved and should be effective on the first day of the month following the later of (i) the entry date of this order or (ii) the date on which final approval of the Crow Canyon Unit is obtained by Applicant from the SLO, the FIMO, and the BLM.
- (18) The Applicant should provide to the Division a written copy of the final approval of the Crow Canyon Unit by the SLO, the FIMO, and the BLM. Applicant should submit a copy of the annual Crow Canyon Unit Plan of Development to the Division for review.
- (19) Applicant's request for the creation of a new pool for oil production to be dedicated to Unit Wells should be approved. All Unit Wells should be dedicated to the **Crow Canyon Unit; Mancos Pool**. The horizontal limits of this pool should coincide with the boundaries of the Unit and should not extend beyond the Unit boundaries. The Aztec District office of the Division should be allowed to expand or contract the Pool without notice or hearing if the boundaries of the Unit are altered. The vertical limits of this pool should extend from the base of the Mesaverde Group to the base of the Greenhorn formation or top of the Graneros formation. The pool creation date should coincide with the effective date of this order.
- (20) The Crow Canyon Unit; Mancos Pool should be subject to Division Rules 19.15.15.9, 19.15.16.14B(3), and 19.15.20.12A NMAC; provided however, the following stipulations should apply to Unit Wells:
 - a. The Unit Operator should submit to the Division Form C-102 for each Unit Well that shows the drilling block for that particular well (each standard-sized oil spacing unit penetrated by the well), the total acreage within the Unit and the Division order number approving the Unit; and
 - b. As per Applicant's request, any Unit Well should be allowed anywhere within the Unit provided that no portion of the completed interval is closer than 330 feet to the outer boundary of the Unit unless otherwise approved by the Division pursuant to Division Rule 19.15.15.13 NMAC.

(21) Within 30 days of the effective date of this order the operator of this Unit should rename any existing Unit Wells and should dedicate all Unit Wells to the new pool.

- (22) Should a new pool for Mancos development be formed that encompasses the area of the Crow Canyon Unit, then the existing pool for Unit Wells should be contracted, and the Crow Canyon Unit Wells should be incorporated into that new Mancos pool. In that event, the operator of the Crow Canyon Unit should file the necessary forms with the Division to dedicate those wells to the new pool.
- (23) The plan contained within the Crow Canyon Unit Agreement for the development and operation of the Unit should be approved in principle as a proper conservation measure. All plans of development for the Crow Canyon Unit should be submitted annually to the Division for review.
- (24) The Unit operator should file with the Division an executed original or executed counterpart of the Unit Agreement within 60 days of the date of this order. In the event of subsequent joinder by any other party, or expansion or contraction of the Unit Area, the Unit operator should file with the Division, within 60 days thereafter, counterparts of the Unit Agreement reflecting the subscription of those interests having joined or ratified.
 - (25) This application should be approved.

IT IS THEREFORE ORDERED THAT:

- (1) As per the application of Encana Oil and Gas (USA) Inc. ("Encana" or "Applicant"), the Crow Canyon Unit (the "Unit) consisting of 7,212.26 acres, more or less, of Federal, State, and Navajo Allotted lands in San Juan County, New Mexico, is hereby approved.
- (2) This order shall be effective on the first day of the month following the later of (i) the entry date of this order or (ii) the date on which final approval of the Crow Canyon Unit is obtained by Applicant from the SLO, the FIMO, and the BLM. The final approval letters by the BLM, the FIMO, and the SLO, shall be provided to the Division.
- (3) The Unit shall comprise the following-described acreage in San Juan County, New Mexico:

TOWNSHIP 24 NORTH, RANGE 8 WEST, NMPM

Section 4: W/2
Section 5: All
Sections 8 and 9: All
Sections 16 and 17: All
Sections 20 and 21: All
Section 27: S/2

Sections 28 through 30: All

Section 34:

(4) Encana Oil and Gas (USA) Inc. (OGRID 282327) is hereby designated the Unit operator.

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- (5) Pursuant to the Unit Agreement, the Unitized Interval shall include all formations from 100 feet below the stratigraphic equivalent of the top of the Mancos Shale (base of the Mesa Verde Group) as defined at a depth of approximately 5220 feet, to the stratigraphic equivalent of the base of the Greenhorn Limestone, as defined at a depth of approximately 6980 feet, both shown on the log run October 21, 1982 on the Anabel C Well No. 1 (API 30-045-25452) located in Unit M, Section 34, Township 25 North, Range 8 West, NMPM, San Juan County, New Mexico.
 - (6) Unit Wells shall be those wells allowed in the Unit Agreement.
- (7) All existing and future wells within the horizontal limits of this Unit but not designated per the agreement as Unit Wells shall remain dedicated and subject to the requirements of existing pools or statewide rules.
- (8) The Unit shall constitute a single Project Area for horizontal oil well development pursuant to Division Rule 19.15.16.7.L (2) NMAC; provided however, the Project Area shall be limited to Unit Wells.
- (9) Applicant's request for the creation of a new pool for oil production to be dedicated to Unit Wells is hereby approved. All horizontal oil wells of at least 1000 feet lateral length drilled and completed in the Mancos formation within the Unit Area and after the effective date shall be dedicated to the **Crow Canyon Unit**; **Mancos Pool**. The horizontal limits of this pool shall coincide with the boundaries of the Unit and shall not extend beyond the Unit boundaries. The Aztec District office of the Division may expand or contract the Pool without notice or hearing if the boundaries of the Unit are altered. The vertical limits of this pool shall extend from the base of the Mesaverde Group to the base of the Greenhorn formation or top of the Graneros formation. The pool creation date shall coincide with the effective date of this order as detailed in Ordering Paragraph (2).
- (10) The Crow Canyon Unit; Mancos Pool shall be subject to Division Rules 19.15.15.9, 19.15.16.14B(3), and 19.15.20.12A NMAC; provided however, the following stipulations shall apply to Unit Wells:
 - a. The Unit Operator shall submit to the Division Form C-102 for each Unit Well that shows the drilling block for that particular well (each standard-sized oil spacing unit penetrated by the well), the total acreage within the Unit and the Division order number approving the Unit; and
 - b. As per Applicant's request, any Unit Well may be drilled anywhere within the Unit provided that no portion of the completed interval is closer than 330 feet

to the outer boundary of the Unit unless otherwise approved by the Division pursuant to Division Rule 19.15.15.13 NMAC.

- (11) Within 30 days of the effective date of this order the operator of this Unit shall rename any existing Unit Wells and shall dedicate all Unit Wells to the new pool.
- (12) Should a new pool for Mancos development be formed that encompasses the area of the Crow Canyon Unit, then the existing pool for Unit Wells will be contracted, and the Crow Canyon Unit Wells shall be incorporated into that new Mancos pool. In that event, the operator of the Crow Canyon Unit shall file the necessary forms with the Division to dedicate those wells to the new pool.
- (13) The plan contained within the Crow Canyon Unit Agreement for the development and operation of the Unit is hereby approved in principle as a proper conservation measure. All plans of development for the Crow Canyon Unit shall be submitted annually to the Division for review.
- (14) The Unit operator shall file with the Division an executed original or executed counterpart of the Unit Agreement within 60 days of the date of this order. In the event of subsequent joinder by any other party, or expansion or contraction of the Unit Area, the Unit operator shall file with the Division, within 60 days thereafter, counterparts of the Unit Agreement reflecting the subscription of those interests having joined or ratified.
- (15) Applicant shall provide inter-well communication data within the Unit to the Aztec District office of the Division no later than 18 months after the effective date of this order.
- (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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Daniel R. Latar

DAVID R. CATANACH

Director