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

APPLICATION OF ROBERT L. BAYLESS, PRODUCER LLC FOR APPROVAL OF THE EAST HORSESHOE GALLUP UNIT, CREATION OF A NEW POOL FOR HORIZONTAL DEVELOPMENT WITHIN THE UNIT AREA WITH NO ALLOWABLES, AND FOR ALLOWANCE OF 330 FOOT SETBACKS FROM THE EXTERIOR OF THE PROPOSED UNIT, AND APPLICATION FOR AUTHORIZATION TO INJECT, SAN JUAN COUNTY, NEW MEXICO

CASE NO. 15622 ORDER NO. R-14305

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on January 19, 2017 and on February 2, 2017, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 24th day of February, 2017, the Division Director, having considered the testimony, the record and 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) Robert L. Bayless, Producer LLC ("Applicant") seeks an order:
 - a. approving the East Horseshoe Gallup Unit ("the Unit"), comprising 4,762.57 acres, more or less, of federal and fee lands in San Juan County, New Mexico;
 - b. creating a new pool for horizontal wells in the Mancos formation which is defined as the Unitized Interval in the proposed Unit Agreement;
 - c. fixing the setback distance for the completed interval of horizontal oil wells in the Unit to be no closer than 330 feet to the outer boundary of the Unit Area;

- d. providing that oil production from wells in the new pool will not be prorated; and
- e. authorizing re-injection of produced natural gas into the reservoir for temporary storage until a market for the gas is available.
- (3) The Unit Area is composed of the following acreage in San Juan County, New Mexico:

TOWNSHIP 30 NORTH, RANGE 15 WEST, NMPM

Section 3:

All

Section 4:

All

Section 5: S/2, NE/4

Section 7:

All

Section 8:

All

Section 9:

N/2, SW/4, N/2 SE/4, SW/4 SE/4

Section 17:

N/2 NE/4, SE/4 NE/4, NE/4 SE/4

Section 18:

All

Section 19:

N/2

(4) The Unitized Interval extends from the base of the Point Lookout Sandstone (top of the Mancos Shale) to the base of the Greenhorn Limestone, and is specifically described in the Unit Agreement as:

all oil and gas in the Mancos Shale Group, including genetically related rocks below the stratigraphic equivalent of the top of the Mancos Shale (base of Mesa Verde Group) at a measured depth of 2,932 feet down to the stratigraphic equivalent of the base of the Greenhorn Limestone formation at a measured depth of 4,980 feet, as shown in the Ute Mountain Tribal Well No. #35-D, in the SE/4 of Section 35, Township 31 North, Range 15 West, NMPM (API #30-045-33562).

- (5) This federal exploratory unit will be developed and operated as a single participating area and will therefore constitute a single project area for horizontal wells, in accordance with 19.15.16.7.L(2) NMAC.
- (6) Parts of the Unit Area are currently subject to the Special Rules and Regulations for the Basin Mancos Gas Pool adopted in Division Order No. R-12984, issued on September 3, 2008, in Case No. 14133. Rule C of the said Special Rules requires gas wells to be located no closer than 660 feet to the outer boundary of a spacing unit.
- (7) Applicant appeared at the hearing through counsel and presented experts in petroleum land matters, petroleum geology, petroleum engineering, and operations, who testified that:

- a. The Unit is comprised of six federal oil and gas leases and a tract owned in fee by 51 private mineral owners, of whom 34 have leased their interests.
 - b. Over 89% of the total interest is committed to the Unit.
- c. The Unit Agreement was prepared on the form prescribed by the United States Bureau of Land Management ("BLM"), but has been modified in three significant respects:
 - i. It applies only to horizontal oil wells in the Unitized Interval;
 - ii. The entire Unit is established as a single participating area; and
 - iii. The Unit Agreement will be dated retroactive to December 10, 2012, the date of first delivery of production from the Horseshoe Gallup Well No. 18-8H (API NO. 30-045-35373).
- d. Applicant has discussed the Unit and its development plans with the BLM. Following these discussions, the BLM issued a letter providing preliminary approval of the Unit.
- e. Applicant has provided notice of its application and of the hearing of this case by certified mail to all working interest and mineral interest owners within the Unit and to all interest owners in offsetting spacing units surrounding the Unit Area.
- f. Applicant has published notice of this application and hearing in the Farmington Daily Times, a newspaper of general circulation in San Juan County, for the interest owners of record in the Unit for whom no address could be found following diligent efforts or certified mailings to the last known addresses were returned undeliverable.
- g. Portions of the Unit Area are in the Basin; Mancos (Gas) Pool (Pool Code 97232), the Verde; Gallup Pool (62510) and the Horseshoe; Gallup Pool (32870). However, the technical and reservoir characteristics of the hydrocarbons in the Unitized Interval are identical in all respects throughout the Unit Area. 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.
- h. There exist 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 pools into one pool within the Unit.
- i. The Unit will be developed to produce oil from the Mancos Shale Formation. Applicant seeks a special order allowing horizontal oil wells in the Unit to be located at a minimum distance of 330 feet from the outer boundary of the Unit Area.

- j. No faults, pinch-outs or other geologic impediments exist to prevent the Unitized Interval from being developed by horizontal oil wells.
- k. The available well control in the area demonstrates that the Unitized Interval identified in the type log is laterally contiguous across the entire Unit Area.
- l. 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 only to existing and future horizontal wells completed in the Unitized Interval underlying the Unit Area.
 - ii. Except as otherwise provided in this order, this new oil pool should be subject to the Division's statewide rules for horizontal 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.
- m. Applicant does not oppose operators in offsetting spacing units drilling horizontal oil wells in the Unitized Interval with completed intervals as close as 330 feet to the exterior of the boundary of the Unit.
 - (8) No party appeared in opposition to the Application.
- (9) Several members of the Navajo Nation who are not parties to this case pursuant to 19.15.4.10 NMAC presented public comments at the hearing. Public commenters expressed concerns regarding leasing of federal lands in San Juan County and the impact to the environment, air quality, water quality, wildlife, roads, and public health from oil and gas development in the area. While the OCD appreciates the public commenters taking time to express concerns, the OCD lacks jurisdiction over leasing of federal lands, use of roads, and the Secretary of the Interior's exercise of the federal government's trust responsibility. The Unit Agreement will remain subject to BLM's final approval, and air quality concerns are within the primary jurisdiction of the New Mexico Environment Department.

The Division concludes that:

(10) Applicant presented evidence that the proposed Unit Area is logically subject to exploration and development under a unit plan. The Unit plan is geologically sound and has received preliminary approval from the BLM. The Unit should accordingly be approved and designated the East Horseshoe Gallup Unit.

- (11) A new oil pool for horizontal oil wells in the Unitized Interval underlying the Unit should be created and named the East Horseshoe; Mancos HZ Oil Pool.
- (12) The Verde; Gallup Pool, the Horseshoe; Gallup Pool and the Basin; Mancos (Gas) Pool should continue to exist with their present boundaries, and any future wells that are non-horizontals should be dedicated to the applicable pool in accordance with existing rules.
- (13) The following three horizontal oil wells exist in the Unit Area and should be removed from the Horseshoe; Gallup Pool and placed into the newly created East Horseshoe; Mancos HZ Oil Pool:
 - a. Horseshoe Gallup 18 Well No. 8H (API No. 30-045-35373)
 S.H. Location: 2420' FNL & 245' FEL Sec. 18, T30N-R15W
 B.H. Location: 1720' FNL & 400' FWL Sec. 18, T30N-R15W
 - b. Horseshoe Gallup 18 Well No. 16H (API No. 30-045-35300)
 S.H. Location: 220' FSL & 140' FEL Sec. 18, T30N-R15W
 B.H. Location: 1253' FSL & 1273' FWL Sec. 18, T30N-R15W
 - c. Horseshoe Gallup 19 Well No. 8H Well (API No. 30-045-35376)
 S.H. Location: 1500' FNL & 555' FEL Sec. 19, T30N-R15W
 B.H. Location: 1653" FNL & 1029' FWL Sec. 19, T30N-R15W
- (14) Because the Unit Agreement provides that the entire Unit Area shall consist of a single participating area as of the Unit's effective date, the Unit Area will constitute a single project area for horizontal oil wells under OCD Rule 19.15.16.7(L)(2) NMAC. Accordingly, internal setback requirements within the Unit Area will not apply to unit wells under the Division's rules.
- (15) Since the horizontal wells located in the new East Horseshoe; Mancos HZ Oil Pool will not be in the Basin; Mancos: (Gas) Pool, the Special Rules for the latter pool will not apply thereto, and an exception to the well location requirements of said rules is not necessary.
- (16) Applicant did not submit quantitative evidence to demonstrate the absence of a need to prorate oil production from the proposed East Horseshoe; Mancos HZ Oil Pool. Accordingly, the request that the new pool be exempted from the proration provisions of Division Rule 19.15.20 NMAC should be <u>denied</u>.
- (17) Re-injection of produced natural gas into the Mancos formation through producing wells within the Unit Area would be desirable to prevent waste and protect air quality by avoiding the necessity to vent or flare natural gas. However, Applicant filed its injection application as an administrative application, and the Form C-108 and proof of notice from the administrative application were not made a part of the hearing record.

Accordingly, Applicant's request for authority to inject should be <u>denied without prejudice</u> to further processing of the administrative application.

(18) This application for Unit approval will prevent waste and protect correlative rights and should be granted.

IT IS THEREFORE ORDERED THAT:

- (1) Pursuant to the application of Robert L. Bayless Producer LLC, the formation of the East Horseshoe Gallup Unit as a federal exploratory unit consisting of 4,762.57 acres, more or less, of federal and fee land in San Juan County, New Mexico, is hereby approved.
- (2) The Unit Area shall consist of the following lands in San Juan County, New Mexico:

TOWNSHIP 30 NORTH, RANGE 15 WEST, NMPM

Section 3:

All

Section 4:

All

Section 5:

S/2, NE/4

Section 7:

All All

Section 8: Section 9:

N/2, SW/4, N/2 SE/4, SW/4 SE/4

Section 17:

N/2 NE/4, SE/4 NE/4, NE/4 SE/4

Section 17.

All

N/2

Section 19:

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(3) The Unitized Interval shall extend from the base of the Point Lookout Sandstone (top of the Mancos Shale) to the base of the Greenhorn Limestone, and is specifically described in the Unit Agreement as:

all oil and gas in the Mancos Shale Group, including genetically related rocks below the stratigraphic equivalent of the top of the Mancos Shale (base of Mesa Verde Group) at a measured depth of 2,932 feet down to the stratigraphic equivalent of the base of the Greenhorn Limestone formation at a measured depth of 4,980 feet, as shown in the Ute Mountain Tribal Well No. 35-D, in the SE/4 of Section 35, Township 31 North, Range 15 West, NMPM (API #30-045-33562).

- (4) A new oil pool for horizontal oil wells in the Unitized Interval within the Unit Area is hereby created and named the East Horseshoe; Mancos HZ Oil Pool.
- (5) This oil pool shall be limited to the areal extent of the East Horseshoe Gallup Unit as specifically described in Ordering Paragraph 2, shall expand or contract automatically with any change in the Unit boundaries, but shall not otherwise be expanded or contracted except by subsequent hearing order.

- (6) The new oil pool shall apply to existing and future horizontal oil wells having at least one lateral 1000 feet or more in length and completed in the Unitized Interval within the Unit Area.
- (7) The following three horizontal oil wells existing in the Unit Area shall be removed from the Horseshoe; Gallup Pool and placed into the newly created East Horseshoe; Mancos HZ Oil Pool:
 - a. Horseshoe Gallup 18 Well No. 8H (API No. 30-045-35373)
 S.H. Location: 2420' FNL & 245' FEL Sec. 18, T30N-R15W
 B.H. Location: 1720' FNL & 400' FWL Sec. 18, T30N-R15W
 - b. Horseshoe Gallup 18 Well No. 16H (API No. 30-045-35300)
 S.H. Location: 220' FSL & 140' FEL Sec. 18, T30N-R15W
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 - c. Horseshoe Gallup 19 Well No. 8H (API No. 30-045-35376)
 S.H. Location: 1500' FNL & 555' FEL Sec. 19, T30N-R15W
 B.H. Location: 1653" FNL & 1029' FWL Sec. 19, T30N-R15W
- (8) Within 30 days of the effective date of this order the operator shall rename each of the existing Unit Wells as "East Horseshoe Gallup Unit" wells, and shall dedicate all Unit Wells to the new pool.
- (9) Horizontal oil wells 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, or from the outer boundary of any uncommitted or partially committed unit.
- (10) All existing and future <u>vertical</u> wells, or other wells not described in Ordering Paragraphs (6) or (7), completed in the Mancos formation within the Unit Area, shall remain in, or be assigned to, the Horseshoe; Gallup Pool, the Verde; Gallup Pool or the Basin; Mancos (Gas) Pool, as applicable, and shall be subject to the rules thereof.
- (11) The Unit Area, excluding any uncommitted or partially committed tract, constitutes a single project area for horizontal oil well development pursuant to 19.15.16.7(L)(2) NMAC and accordingly, unit wells may be drilled anywhere within such area so long as no portion of the completed interval is closer than 330 feet to the outer boundary of the Unit Area, or to any uncommitted or partially committed tract
- (12) The operator shall submit to the Division a Form C-102 for each existing or future Unit Well that shows the drilling block for that well, which shall consist of all standard (40-acre) oil spacing units penetrated by the well's completed interval, and shall also include the total acreage within the Unit Area and the Division order number approving the Unit.

- (13) Robert L. Bayless, Producer LLC is the designated operator of the Unit and the Project Area.
- (14) Should a new pool for Mancos development be formed that encompasses the Unit Area, then the pool for Unit Wells herein provided will be contracted, and the Unit Wells shall be incorporated into that new Mancos pool. In that event, the operator shall file the necessary forms with the Division to dedicate all Unit Wells to the new pool.
- (15) All data regarding well interference concerning setbacks and internal well spacing shall be made available to the Division as soon as practicable, but in no event more than 18 months after issuance of this order.
- (16) The plan contained within the 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 East Horseshoe Gallup Unit shall be submitted annually to the Division for review.
- (17) This Order shall become effective upon final approval of the proposed Unit Agreement by the BLM.
- (18) 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.
- (19) Applicant's request that the new East Horseshoe; Mancos HZ Oil Pool be exempt from the proration provisions of Division Rule 19.15.20 is <u>denied</u>.
- (20) Applicant's request for authority to re-inject produced natural gas into the Mancos formation is <u>denied without prejudice</u> to the continued processing of Applicant's administrative application for such approval of such injection.
- (21) 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.

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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

DAVID R. CATANACH Director