

**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. 16380
ORDER NO. R-20300**

APPLICATION OF CHEVRON U.S.A. INC. FOR APPROVAL OF NON-STANDARD OIL SPACING UNITS AND COMMINGLING, OR ALTERNATELY FOR THE CONTRACTION OF THE WC-025 G-06 S263319P; BONE SPRING POOL AND THE SANDERS TANK; UPPER WOLFCAMP POOL, AND FOR THE CREATION OF NEW BONE SPRING AND UPPER WOLFCAMP POOLS, SPECIAL POOL RULES, AND COMMINGLING IN SECTION 29 AND IRREGULAR SECTION 32, TOWNSHIP 26 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on September 6, 2018, at Santa Fe, New Mexico before Examiner Michael A. McMillan.

NOW, on this 31st day of December 2018, 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) Chevron U.S.A. Inc. ("Chevron" or "Applicant") seeks the following relief for 949.56 acres (more or less) of State and Federal lands described as follows:

Township 26 South, Range 33 East, NMPM

Section 29: All

Irregular Section 32: All

- i. Approval of non-standard oil spacing units in the Bone Spring formation and in the Upper Wolfcamp formation respectively; or promulgation of Bone Spring and Wolfcamp pools, each with Special Rules.
 - ii. Approval for oil and gas produced from both pools to be commingled on the surface prior to sale.
- (3) Applicant further asks that in the event of pool promulgation, any existing pools covering the subject lands would be contracted out of those lands and the new pools would be limited to the subject lands. The proposed Special Rules would include 160-acre oil spacing units for each of the two proposed pools.
- (4) No other parties appeared or otherwise opposed the granting of this application.
- (5) Chevron appeared at the hearing through counsel and presented exhibits and testimony showing the following.
- (a) The subject lands are comprised of two federal (Bureau of Land Management) leases in Section 29 and one State Land Office lease covering irregular Section 32. Chevron is the only working interest owner in these lands. The largest of the two federal leases includes several overriding royalty interest owners. The instruments creating the overrides allow for pooling of interests.
 - (b) Mailings of notice to three affected parties had not been delivered; therefore, notice was posted prior to the hearing in a newspaper of general circulation within Lea County.
 - (c) Notice was provided of the requested relief, including the intention to contract existing pools, to surrounding operators in both subject formations.
 - (d) Currently existing pools within the subject lands include the Sanders Tank; Upper Wolfcamp Pool and the Wildcat; Bone Spring Pool (Pool Code 97955).
 - (e) Wells within the subject lands have already been drilled to target the Bone Spring and the Upper Wolfcamp formations. Chevron intends to drill several more horizontal wells in these lands.
 - (f) Chevron has proposed a communitization agreement covering the subject lands (949.56 acres, more or less) for the vertical depths of the Bone Spring formation and another communitization agreement for the vertical depths of the entire Wolfcamp formation.

- (g) Chevron presented an affidavit from an engineer after the hearing with a type log (display of computed porosity and deep resistivity) from the vertically drilled, Salado Draw SWD Well No. 13 API No. 30-025-42354 located 290 feet from the South line and 10 feet from the West line, Unit M of Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico. Within this well, Chevron identified the top of the Bone Spring formation at 8839 feet TVD, the top of the Upper Wolfcamp formation (and base of the Bone Spring formation) at 11932 feet TVD, and the base of the Upper Wolfcamp formation at 12867 feet TVD.
- (h) Chevron's supplemental affidavit also shows the proposed well(s) intended to develop the proximity tracts within both the Bone Spring and the Upper Wolfcamp formations.
- (i) The discovery well for the proposed **Needmore Tank; Bone Spring Pool** is the Mooses Tooth 29 26 33 Federal Com Well No. 1H (API No. 30-025-42168) with a top perforation at 10,334 feet TVD, 10,583 feet MD.
- (j) The discovery well for the proposed **Needmore Tank; Upper Wolfcamp Pool** is the SD EA 29 Federal Com P8 Well No. 12H (API No. 30-025-43271) with a top perforation at 12,703 feet TVD, 12,935 feet MD.
- (k) Ownership is identical in both subject formations and between the two formations.
- (l) Chevron provided notice to all interest owners within the subject lands of its intention to commingle production prior to sales. Chevron intends to install two facility trains [each for separate pools]. The oil for each train will be separately measured by Coriolis meters after the heater treater. The gas will be measured separately for each train. The Salado Draw 29 Central Tank Battery will be the site of metering and storing of production and is in Unit P of Section 29.
- (m) Existing administrative Orders PLC-478, CTB-760, and OLM-97 pertain to the subject lands and wells within those lands. Chevron asks these existing orders to be amended to allow surface commingling within the extent of the subject lands.
- (n) Chevron asks in this application for pools with 160-acre oil spacing units and intends to use the proximity tract provision in the horizontal drilling rules to form one Horizontal Oil Spacing Unit for

the Bone Spring formation and one Horizontal Oil Spacing Unit for the Upper Wolfcamp formation.

- (o) As such, each of the spacing units would extend laterally to include the 949.56 (more or less) acres being proposed as communitization agreements.
- (p) The Bone Spring formation in this area contains multiple pay zones with the primary targets being the Avalon, the first, and the third Bone Spring Sands.
- (q) The Upper Wolfcamp formation targets include the Wolfcamp A and the Wolfcamp A2 member formations.
- (r) Applicant intends to drill and produce multiple Upper Wolfcamp wells within any one spacing unit, simultaneously at differing depths.
- (s) Within the proposed pools, the optimum orientation for horizontal oil wells has been north to south or south to north. Chevron has drilled and intends to drill wells extending approximately 1.5 miles in length.
- (t) The sands within the Bone Spring and the Upper Wolfcamp formations are continuous across the pool.
- (u) Chevron has determined that approximately six horizontal wells per section can be optimally drilled, resulting in three wells per half section, with one located near the center line of a half section. The resulting development pattern indicates that 40-acre quarter-quarter spacing units would be limiting to development. Some wells would, as spaced, affect reserves outside existing 40-acre units.
- (v) Chevron indicated that 160-acre oil spacing units would be optimum, and with the allowances of the new horizontal well rules, these larger units would not limit placement of wells, cause waste, or harm correlative rights.

The Division finds and concludes that:

- (6) Chevron has worked with the BLM, the State Land Office, and the Division to optimize development within the subject lands. Chevron has provided proper notice of these proposed special rules.

(7) The proposal to create two, 949.56-acre (more or less) non-standard spacing units within each of two subject formations was not explored in depth at hearing or supported by evidence and should be dismissed.

(8) Chevron's proposal to form new pools extending over the subject lands in the proposed formations, contract existing pools from this acreage, and promulgate special rules for the new pools, and allow surface commingling of production within pools should be granted to prevent waste and protect correlative rights.

(9) Chevron's proposal of Special Rules allowing 160-acre oil spacing units within each of the proposed pools is reasonable and will prevent waste and protect correlative rights. The agreement during testimony at hearing to freeze the proposed pools to the boundaries of the subject lands should be approved. The Special Rules should be made permanent.

(10) Applicant did not address the issue of vertical wells in its application or during presentation of its case. To prevent waste of reservoir energy, any vertical well to be completed henceforth in either of the proposed pools should be spaced on 160-acre, governmental quarter sections, and oil and gas should be limited by the applicable depth bracket allowable and Limiting GOR.

(11) All vertical and horizontal oil wells, as defined by the Division, drilled for production from these formations within the boundaries of these two pools should be assigned to the respective pools after the effective date of this order.

IT IS THEREFORE ORDERED THAT:

(1) As per the application of Chevron U.S.A. Inc., the following pools are hereby created:

Needmore Tank;Bone Spring (Pool Code 98307)
Needmore Tank;Upper Wolfcamp (Pool Code 98308)

(2) Each of these pools shall extend across 949.56 acres (more or less) of State and Federal lands described as follows:

Township 26 South, Range 33 East, NMPM

Section 29: All
Irregular Section 32: All

(3) The following Special Rules shall apply:

NEEDMORE TANK;UPPER WOLFCAMP POOL
NEEDMORE TANK;BONE SPRING POOL

- Rule 1: Each vertical or horizontal well completed or recompleted in this Pool, shall be produced in accordance with the Special Rules hereinafter set forth.
- Rule 2: The standard oil spacing unit for vertical wells shall consist of 160-acres (more or less) comprising a governmental quarter section or the equivalent.
- Rule 3: The boundaries or rules of this pool shall not be laterally extended beyond the lands initially described as being within the pool.
- Rule 4: Exceptions to these Special Rules shall be granted only as provided under Division rules.
- Rule 5: All other provisions not specifically addressed herein shall conform to Division Rules.

(4) These special rules are made permanent and shall be in effect as of January 1, 2019. Any wells in these pools permitted prior to that effective date shall, at the election of the owners thereof, retain the spacing on which that well was proposed and/or drilled. Any resulting non-standard spacing unit, created as a result of this order, for existing wells, is hereby approved. Such non-standard spacing units may coexist with and overlap standard spacing units for new wells in this pool.

(5) The discovery well for the Needmore Tank;Bone Spring Pool is the Mooses Tooth 29 26 33 Federal Com Well No. 1H (API No. 30-025-42168) with a top perf 10,334 feet TVD, 10,583 feet MD.

(6) The discovery well for the Needmore Tank;Upper Wolfcamp Pool is the SD EA 29 Federal Com P8 Well No. 12C (API No. 30-025-43271) with a top perf 12,703 feet TVD, 12,935 feet MD.

(7) The top and bottom depths for each pool shall be as interpreted by the Division's geologist and as marked on the type log included in this case file for the Salado Draw SWD Well No. 13 API No. 30-025-42354 located 290 feet from the South line and 10 feet from the West line, Unit M of Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico.

(8) The Wildcat;Bone Spring Pool (Pool Code 97955), the Sanders Tank;Upper Wolfcamp Pool, and any other Bone Spring or Upper Wolfcamp pools within this horizontal or vertical extent are hereby contracted to exclude these lands.

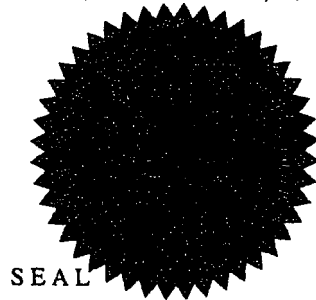
(9) The operator(s) of any wells currently dedicated to Bone Spring or Upper Wolfcamp formation pools within the horizontal extent of these two new pools shall submit new forms C-102, and other forms as required, to the Division's district office, changing the dedicated pool, and shall thereafter report production as from the new pool(s).

(10) Surface commingling of oil and gas produced from the two separate pools prior to sales is hereby approved as proposed in the application and in the testimony of this case. Two facility trains shall be utilized. The oil for each train shall be separately measured by Coriolis meters after the heater treater(s). The gas shall be measured separately for each train. The Salado Draw 29 Central Tank Battery located in Unit P of Section 29 is approved as the site of metering and storing of production. Administrative Orders PLC-478, CTB-760, and OLM-97 are hereby amended by the approvals and permissions granted in this order. Revisions affecting this surface commingling or off lease measurement may be completed administratively after proper notice to all affected parties.

(11) The portion of this application asking to create two, 949.56-acre (more or less) non-standard spacing units within each of two subject formations is dismissed.

(12) 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


HEATHER RILEY
Director