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:

APPLICATION OF BLACK MOUNTAIN OPERATING LLC FOR A NON-STANDARD OIL SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

Case No. 15655

APPLICATION OF BLACK MOUNTAIN OPERATING LLC FOR A NON-STANDARD OIL SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

Case No. 15656

APPLICATION OF GMT EXPLORATION COMPANY LLC FOR A NON-STANDARD OIL SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

Case No. 15659

APPLICATION OF GMT EXPLORATION COMPANY LLC FOR A NON-STANDARD OIL SPACING AND PRORATION UNIT AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

Case No. 15660

CLOSING STATEMENT OF GMT EXPLORATION COMPANY LLC, BTA OIL PRODUCERS, LLC, AND DEVON ENERGY PRODUCTION COMPANY, L.P.

This closing argument is submitted GMT Exploration Company LLC ("GMT"), BTA Oil Producers, LLC ("BTA"), and Devon Energy Production Company, L.P. ("Devon"), as agreed at the close of the July 22, 2017 hearing in these consolidated cases.

I. <u>INTRODUCTION</u>.

The lands involved in these cases are the SW/4 of Section 35, Township 21 South, Range 34 East, NMPM and the W/2 of Section 2, Township 22 South, Range 34 East, NMPM. Black Mountain Operating LLC ("Black Mountain") seeks approval of two 1-1/2 mile Bone Spring horizontal wells in Sections 35 and 2, and GMT seeks the approval of two 1 mile Bone Spring horizontal wells in Section 2. Each company requests that it be designated operator of the acreage subject to its respective applications.

This case was heard on May 11, 2017, where substantial evidence was presented, but was continued to the July 20, 2017 hearing to take additional evidence.

These cases involve not only conflicting well units, but also which applicant will be awarded operation of the subject acreage.

NOTE: During the pendency of these proceedings, Black Mountain was acquired by Marathon Oil Company ("Marathon"), and GMT's leasehold interests were acquired by Centennial Resources Development, Inc. (Centennial"). For ease of reference the names of the original applicants are (mostly) used herein.

II. FACTORS TO CONSIDER IN AWARDING OPERATIONS.

In Case Nos. 11666 and 11677 the Oil Conservation Commission considered conflicting pooling applications, and set forth the factors which should be considered in deciding such cases. They are:

- A. Geology, which is the most important factor.
- B. Good faith negotiations prior to pooling.
- C. Capabilities as operator.
- D. AFE's and other operational costs, which is a minor factor.
- E. Working interest control.

Commission Order No. R-10731-B.

A review of these factors shows that GMT's applications should be granted, and Black Mountain's applications should be denied. This is discussed below.

III. <u>ARGUMENT</u>.

A. Geology.

Black Mountain made a geological and engineering presentation which set forth:

- 1. An isopach of rock with 6% porosity, which showed a thickness of approximately 275 feet in the W/2 of Section 2 and up into the W/2 of Section 35. This isopach was of the entire 3rd Bone Spring section, including non-reservoir facies.
- 2. Longer laterals are more economic, based on an engineering study of select areas of Bone Spring production in Lea County. The results of that study showed, essentially, a one-to-one correspondence between a well's lateral length

and its ultimate production. (See testimony of Michael McCracken, Black Mountain's engineer.)

- 3. Black Mountain agreed with GMT that rock quality deteriorated as you move north and northeast of Section 2. (See testimony of Roy Wiltby, Marathon's geologist.)
- 4. As a result of its engineering, Black Mountain requested approval of its 1-1/2 mile laterals as more economic and better able to prevent waste.

GMT presented a much more complete geologic and engineering analysis of Sections 2 and 35 than did Black Mountain. Its presentation showed:

- 1. Mike Dilli, GMT's geologist, testified that GMT, over the last 6 years, has done a regional analysis of Bone Spring (and Wolfcamp) geology in Lea County, and has mapped the entire area. The Bone Spring in Lea County is not uniform and homogeneous, unlike the Bakken in North Dakota and the Eagleford in Texas.
- 2. GMT has drilled approximately 40 Bone Spring wells in Lea County over that period. In looking at its successes and its uneconomic wells, it has determined that there needs to be 20 feet of rock with 8% porosity across a well unit to drill an economic well. While lower porosity rock will contribute to production, if you don't have 20 feet of 8% rock the well will be uneconomic. GMT isopachs the main target sandstone, which is where wells will be landed horizontally. GMT has found, during its drilling operations, that there needs to be at least 20 feet of 8% density porosity in the target zone to drill an economic well.
- 3. When the SW/4 of Section 2 came up for a lease sale at the State Land Office, GMT looked at its maps, saw that it matched its Bone Spring criteria, and decided to bid on the lease. It won the lease, and the lease was issued September 1, 2016. GMT almost immediately began preparing to drill a well.
- 4. At the hearings, Mr. Dilli testified that the W/2 of Section 2 matched its requirement of 20 feet of rock with 8% porosity. He also testified that Bone Spring rock quality degrades as you move north and northeast of Section 2. Finally, he pointed out wells with less than 20 feet of 8% porosity which were economic failures. Black Mountain presented no evidence that Mr. Dilli's testimony was wrong.
- 5. GMT's engineer examined production from all Bone Spring wells in Lea County (over 600), and presented production results on those wells. It showed that there was not a one-to-one correspondence between a well's lateral length and its ultimate production. It showed that, on average, a 1-1/2 mile lateral produced only about 125% more oil than a 1 mile lateral. Thus rock quality is very important.

- 6. Mr. Dilli, subsequent to the May 11th hearing, reviewed the wells Mr. McCracken used in his study and compared them with his regional isopach. At the July 20th hearing Mr. Dilli testified that the 1 mile and 1-1/2 mile laterals used in Black Mountain's study all contained more than 20 feet of rock with 8% porosity (in some cases up to 100 feet).
- 7. Because reservoir quality is not consistent throughout Sections 2 and 35, a one-to-one recovery won't result from a longer lateral in the subject area.
- 8. As a result of the foregoing, GMT desires 1 mile laterals; drilling further north from Section 2 will impair its and Devon's correlative rights.

BTA testified that it prefers 1 mile lateral development. In addition, it does not want its acreage in the NW/4 of Section 35 to get stranded. Drilling north from Section 35 into Section 26 will drill into substantially degraded Bone Spring reservoir.

Based on the foregoing, drilling 1 mile laterals is preferred in this area.

B. Good faith negotiations prior to pooling.

Almost immediately after it acquired its lease in Section 2, GMT made plans to drill wells, and notified Black Mountain in mid-October 2016 of its plans to drill 1 mile laterals. Within a month Black Mountain (using the exact same language as the letters GMT sent to Black Mountain) counter-proposed its 1-1/2 mile wells.

GMT's well proposals have remained constant over the past nine months: The wells have approved APDs; GMT has an agreement with the surface owner (Merchant Livestock Company), so its surface locations are fixed; and it properly notified all interest owners in its well units, as well as offsets. The only two parties being pooled were Black Mountain and Devon, and Devon has since assigned its interest to GMT. Devon entered an appearance in these cases, and supports GMT's applications. GMT has done all things required to drill its wells, and there are no loose ends.

Black Mountain owned its acreage for about a year before it proposed its wells, but did nothing until GMT proposed wells. Black Mountain's proposals were reactive to GMT's, and its applications were filed simply to gain operational control. In addition, it didn't do its homework: It didn't notify all offsets of its proposed non-standard units, so a continuance was required to notify additional offsets.

In addition, Black Mountain was apparently unaware that BTA owned an interest in the SW/4 of Section 35, and needed to be pooled. This despite the fact that there is a JOA covering Section 35, and BTA is being paid by Black Mountain on a well located in the SW/4 of Section 35. As of the May 11th hearing, Black Mountain had not proposed its wells to BTA.

More importantly, Black Mountain has presented <u>no</u> evidence in the record of its efforts to obtain the voluntary joinder of BTA in the wells. Its proposals are not in evidence. Also, Black

Mountain has changed its well locations from Section 2 to Section 35. That was not known until the hearing on July 20th. New proposals for the new well locations have not been provided to BTA or GMT. The only pending applications show only the Section 2 locations.

As a result, there are no valid, outstanding well proposals to the parties on Black Mountain's wells. It has not satisfied the basic pooling requirements set forth in Division Order No. R-13165. The applications, as filed, are incorrect and cannot be granted.

The above-referenced JOA covers, among other lands, the W/2 of Section 35 and the NW/4 of Section 2. BTA owns leasehold and contractual rights in the entire W/2 of Section 35, and is the operator of the NW/4 of Section 35. Thus it has the right to file APDs and drill wells thereon. BTA provided evidence that it has valid, approved APs issued on two wells it plans on drilling in the W/2 of Section 35. BTA does not need to do anything else other than to send well proposals pursuant to the JOA.

As noted above, GMT also has approved APDs issued on its wells in the W/2 of Section 2.² Therefore, Black Mountain cannot drill its wells.

As a result, this factor favors BTA and GMT.

C. <u>Capabilities as operator</u>.

Both Centennial and Marathon are new to the state, but they drill and operate wells in other states and are both qualified. However, the difference is that Centennial can rely on advice from GMT on drilling 40 wells in Lea County. In contrast, Black Mountain has drilled no Bone Spring wells in Lea County (and only one or two wells in New Mexico). Marathon, after a lengthy absence from the state, has to develop its operations from scratch.

BTA is a well known and highly qualified operator in New Mexico, and has drilled around 30 horizontal wells in Lea County.

Thus, this factor balances in favor of BTA and GMT.

D. AFE's and other operational costs.

The Commission recognized in Order No. R-10731-B that AFE's and overhead rates are not significant factors in deciding operatorship. GMT and Black Mountain both testified that their respective AFEs (both prepared at about the same time) are fair and reasonable. Of course, completion costs are subject to change, and after a pooling order is entered it may be necessary

Black Mountain (Marathon) testified at the July 20th hearing that the NW/4 of Section 35 had been "carved out" of the JOA. However, it could point to no instrument, signed by all the parties to the JOA, dissolving the JOA. In addition, ownership of each of the NW/4 of Section 35, SW/4 of Section 35, and NW/4 of Section 2 is different, and Black Mountain has not claimed that other quarter sections are "carved out" of the JOA.

GMT is not subject to the JOA and can propose wells without reference to the JOA.

to send revised AFEs to the pooled parties. Both applicants also used similar overhead rates. As a result, this factor can be ignored.

E. Working interest control.

This should also be a minor factor in these cases. BTA owns a majority of the working interest in its two proposed wells; GMT owns a majority of the working interest in its two proposed wells; and Black Mountain owns a majority of the working interest in its two proposed wells. Therefore, this factor is a wash.

IV. CONCLUSION.

The factors discussed above clearly favor both BTA and Centennial. They have valid APDs, which don't infringe on Marathon's right to participate in those wells.

The primary factor, geology, clearly favors 1 mile laterals in this area. Unless the Division is going to adopt a blanket rule that longer laterals, regardless of rock quality, will always trump shorter laterals, then Centennial and BTA must be allowed to move forward with their proposals.

The GMT applications must be granted, and those of Black Mountain denied.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing pleading was served upon the following counsel of record this 11 day of July, 2017 via e-mail:

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