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

APPLICATION OF MEWBOURNE OIL COMPANY FOR A NON-STANDARD OIL SPACING AND PRORATION UNIT AND COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO.

Case No. 16496

## **VERIFIED STATEMENT OF CHARLES CROSBY**

COUNTY OF MIDLAND	)	
	) ss.	
STATE OF TEXAS	)	

Charles Crosby, being duly sworn upon his oath, deposes and states:

- 1. I am over the age of 18, and have personal knowledge of the matters stated herein.
- 2. I am a geologist for Mewbourne Oil Company ("Mewbourne"), and I am familiar with the geological matters involved in this case. I have been qualified by the Division as an expert petroleum geologist.
- 3. The following geological plats are attached hereto:
- (a) Attachment A is a structure map of the Base of the 2<sup>nd</sup> Bone Spring Sand formation. It shows that structure dips consistently to the south. It also shows a line of cross-section.
- (b) Attachment B is a gross sand isopach of the Lower 2<sup>nd</sup> Bone Spring Sand, the test zone for the proposed Loco Hills 1-2 B2AB Fed Com. Well No. 1H. It shows that the sand across the well unit has a uniform thickness of approximately 180 feet.
- (c) Attachment C is a west-east cross section. The well logs on the cross-section give a representative sample of the 2<sup>nd</sup> Bone Spring Sand formation in this area. The target zone for the well is the Lower 2<sup>nd</sup> BSPG Sand, and that zone is continuous across the well unit.
- 4. I conclude from the maps that:
- (a) The horizontal spacing unit is justified from a geologic standpoint.
- (b) Each quarter-quarter section in the unit will contribute more or less equally to production.
- (c) There is no faulting or other geologic impediment on the area which will affect the drilling of the subject well.

EXHIBIT 4

5. Attachment *E* is the Survey Calculation Report. The producing interval of the proposed well will be orthodox.

Charles Crosby

## VERIFICATION

Charles Crosby, being duly sworn upon his oath, deposes and states that: He is a geologist for Mewbourne Oil Company; he is authorized to make this verification on its behalf; he has read the foregoing statement, and knows the contents thereof; and the same is true and correct to the best of his knowledge, information, and belief.

SUBSCRIBED AND SWORN TO before me this 29 day of October, 2018 by Charles Crosby.

My Commission Expires: January //, 2022

ALEJANDRA KIRKSEY Notary ID #131406744 My Commission Expires January 11, 2022