

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

**APPLICATION OF BLACK RIVER WATER  
MANAGEMENT COMPANY, LLC  
TO AMEND ADMINISTRATIVE ORDER  
SWD-1628 FOR A SALT WATER DISPOSAL  
WELL IN EDDY COUNTY, NEW MEXICO.**

**CASE NO. 15854**

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**SELF-AFFIRMED DECLARATION OF NED FROST**

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1. My name is Ned Frost. I am over the age of eighteen, of sound mind, and am competent to make this self-affirmed declaration, which is based on my personal knowledge, and given pursuant to New Mexico Rules of Civil Procedure Rule 1-011(B) NMRA.

2. I am employed by MRC Energy Company as a geologist and have a doctoral degree in geology. My current position is Vice President of geoscience. The applicant in this case, Black River Water Management Company, LLC, ("Black River") is an affiliate of MRC Energy Company.

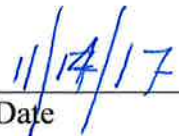
3. After concluding Black River's technical presentation to increase the injection tubing size in the Rustler Breaks SWD No. 2 well from 4.5 inches to 5.5 inches at the Division hearing on October 12, 2017, the Division's hearing examiner requested that Black River provide supplemental information, including the resulting model generated from Black River's use of the Stanford University's Fault Slip Potential Tool. *See* Case No. 15854, Hearing Tr. 37:17-24, dated 10/12/17; *see also* <https://scits.stanford.edu/>.

4. I presented my interpretation of the data and the model results to the Division's hearing examiner in a meeting with the Division on Friday, November 3, 2017, in the Division's Santa Fe office.

5. I presented public data that showed current scientific thought and literature shows that southeastern New Mexico's Permian Basin is currently within a normal faulting regime. Utilizing public data, together with my interpretations and other proprietary and confidential data, including 3-D seismic data for the subject area, I applied Stanford University's Fault Slip Potential Tool to the Rustler Breaks SWD No. 2 injection well. Based on the data inputs, the model reflected a de minimus impact to pressure and a low probability for fault slip potential for the Rustler Breaks SWD No. 2 injection well.

6. I affirm under penalty of perjury under the laws of the State of New Mexico that the foregoing statements in Paragraphs 1-5 are true and correct. I understand that this self-affirmed declaration will be used as written testimony in this case. This declaration is made on the date next to my signature below. *See* Rule 1-011(B) NMRA.

  
Ned Frost, Ph.D.

  
Date