

Date: June 25, 2019

To: New Mexico Oil Conservation Division

From: Ed Martin for Solaris Water Midstream, LLC

Subject: McCrea SWD #1

Gentlemen:

Enclosed are the following documents:

1. Seismicity and Faults in the Vicinity of the proposed well.
2. Geologic Affirmation for the proposed well.

Please insert these documents in the C-108 package for the McCrea SWD #1 well. This action should complete the package.

Please call me if you have questions or concerns.

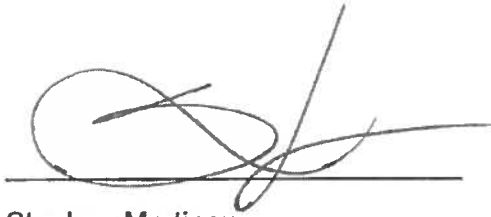
Sincerely,

A handwritten signature in black ink, appearing to read "Ed Martin". The signature is written in a cursive, flowing style.

Ed Martin
(505) 490-7608

GEOLOGIC AFFIRMATION

I have examined available geologic and engineering data and have found no evidence of open faults or other hydrologic connection between the disposal interval and underground sources of drinking water.

A handwritten signature in black ink, consisting of a large, stylized 'S' followed by a series of loops and a long horizontal stroke extending to the right.

Stephen Martinez
Sr. Vice President of Drilling

Project: Solaris Water Midstream, LLC
 McCrae SWD #1

Seismicity and Faults in the Vicinity of the Proposed Solaris Water Midstream, LLC
McCrae SWD No. 1, Capt Call SWD No.1, and Clara Allen SWD No. 1 Devonian Disposal
wells in Eddy County, New Mexico

Reference is made to the map titled "McCrae SWD No. 1 Capt Call SWD No. 1 Clara Allen SWD No. 1 Seismic Events".

These proposed wells are located in Eddy County, Townships 19 & 20 South, Ranges 28 & 29 East, 10 miles northeast of Carlsbad, New Mexico in the Northwest Shelf area of the Delaware Basin.

Seismicity:

Historically, the area near the proposed Devonian disposal wells has not seen any major seismic activity. A search of the USGS Earthquake Hazards Program Earthquake Catalog revealed the nearest event to be located 18.88 to 22.42 miles west of the proposed locations, where a magnitude 3.0 earthquake was recorded on October 10, 2004 at a depth of 5 kilometers. Review of the USGS Earthquake Hazard map indicates a very low risk of seismic activity. The USGS surface geologic map of the area shows no Quaternary-aged faulting, also indicating no recent tectonic activity.

Faulting:

The USGS surface geologic map, a USGS published Devonian structure map, and subscription Geomap regional subsurface structure maps at the Yates, Strawn Lime and Devonian levels were reviewed for faults. The nearest fault was mapped at the Devonian level 9 to 13 miles southeast of the proposed locations.

The Snee and Zoback paper "State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity" was also reviewed to evaluate the presence of faults and fault slip potential risk. These regional maps show no faulting in the area of the proposed wells. Faulting in the New Mexico portion of the Delaware Basin generally shows less than a 10% probability of fault slip movement.

The distance from the proposed wells to the closest mapped faults yields an extremely low probability that the faults will become critically stressed by injection into the referenced wells.

Jerry D. Ferguson

Geoscience Manger, Lonquist & Co. LLC

Jerry D. Ferguson