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String of earthquakes hit Eagle Ford's top oil-producing county



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The U.S. Geological Survey recorded a 3.4-magnitude earthquake about 41 miles southeast of San Antonio.

U.S. Geological Survey

By <u>Sergio Chapa</u> – Reporter, San Antonio Business Journal May 2, 2018, 2:54pm CDT **Updated** May 2, 2018, 3:03pm A recent string of low-magnitude earthquakes shook the Eagle Ford Shale's top oil-producing county.

Three earthquakes hit Karnes County over the past week, U.S. Geological Survey officials confirmed. The first was recorded on April 26 as a 3.1-magnitude seismic event with its epicenter off FM 791 just west of Falls City. A 2.7-magnitude quake was recorded off County Road 627 near Ecleto on April 29, and a 3.4-magnitude earthquake was recorded off U.S. Highway 181 just south of Falls City on May 1.

There were no reports of damage or injuries, Karnes County Sheriff <u>Dwayne Villanueva</u> told the Business Journal.

Although it is too soon to tell whether the recent earthquakes in Karnes County were natural or man-made, recent studies from <u>Southern Methodist University</u> and USGS show that some earthquakes in Texas have been caused by saltwater disposal wells, which inject oil field wastewater underground.

Sheriff Villanueva and other county officials have been monitoring the issue over the past several years and remained puzzled by the fact that while there are saltwater disposal wells and hydraulic fracturing activity across the county, the earthquakes remain concentrated near Falls City, Hobson and Coy City.

With <u>18 earthquakes</u> reported in the Eagle Ford Shale over the past three years, the issue has also caught the attention of state regulators and researchers.

The Railroad Commission of Texas, the state agency that oversees the oil and gas industry, implemented new regulations for saltwater disposal wells in November 2014. Since that time, the agency has placed special conditions on permits for some four dozen saltwater disposal wells — particularly those in areas where earthquakes have been reported. Among the new requirements were reducing maximum daily injection volumes and lowering well pressure, as well as recording volumes and pressures daily as opposed to monthly.

State funding enabled the University of Texas at Austin's Bureau of Economic Geology to boost its TexNet program in 2016. Over the past few months, the program recently added seismographs in Floresville and Nixon to improve earthquake data.