

Eagle Ford oil and gas boom started more than 65 million years ago

By Mike D. Smith

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CORPUS CHRISTI — The roots of South Texas' energy boom reach back millions of years.

It was the span of time geologists call the Cretaceous Period, between 65 million and 144 million years ago.

The Coastal Bend and South Texas would have been at the bottom of a shallow sea, hours away from land to the west, said Stephen Ruppel, principal investigator for shale systems research at the University of Texas' Bureau of Economic Geology.

There, along the sea floor, helped along by sediment gradually settling out of the water, oil was born.

Organic matter — dead plant material washed into the sea and dead animals — fell to the seafloor.

Sediment settled to the bottom and covered them. Over time, more layers of sediment were deposited atop the remains.

The weight added pressure. The deeper the burial, the heat increased.

The heated squeeze morphs the decayed matter into hydrocarbons — the building blocks for oil and gas.

When the ability to extract oil and gas became apparent three years ago, the Barnett Shale formation in North Texas was so lucrative and the rush began, Ruppel said.

"People are looking anywhere there are shales that have organic matter that could have had a certain degree of heating that could have generated hydrocarbons," Ruppel said.

There has also been what Ruppel called "re-look."

As technology develops, companies are also looking at older basins and fields they previously thought couldn't produce.

