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## Regional Subsurface Investigation of the Uppermost Cretaceous of Northern Louisiana

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### ABSTRACT

Seismic features seen on a seismic horizon at or near the Cretaceous-Paleogene boundary in northern Louisiana resemble large subaqueous dunes or ‘mega-ripples’ were described by earlier workers, who hypothesized that these features may represent subaqueous dunes emplaced by a tsunami wave initiated by a large bolide impact off the Yucatán Peninsula now known as the Chicxulub impact and widely agreed upon as one of the contributing factors to the end of the dinosaurs. A total of 318 well logs in northern Louisiana were analyzed to determine whether possible subaqueous dunes are viewable at the Cretaceous-Paleogene boundary. These same well logs were used to develop a contour map of the top of Cretaceous and to determine if the top of the Cretaceous was flat at time of the Chicxulub impact. Multiple tops were used to determine possible paleo-sea level at the Cretaceous-Paleogene boundary.