

The Carson Basin: Bright Spots (Seismic) And Changing Petroleum Paradigms

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ABSTRACT

The Carson Basin has not been subject to any exploration activity since 1986, and has only been tested by four wells along its westernmost edge. These tests are reviewed with regards to the style of the petroleum play concepts. The problem of hydrocarbon generation / trap formation timing is evident in the high degree of salt tectonism that is still active locally.

The setting for a potential deep water turbidite play is developed, based on the amount of sediment eroded throughout the early Cretaceous during the Avalon uplift, as shown by the Bonniton and St. George paleo-canyon systems. Various seismic morphological features that suggest turbidite deposits and high amplitude seismic “flat spots” are presented in the context of the geological model as evidence of hydrocarbon charging in stratigraphic traps.