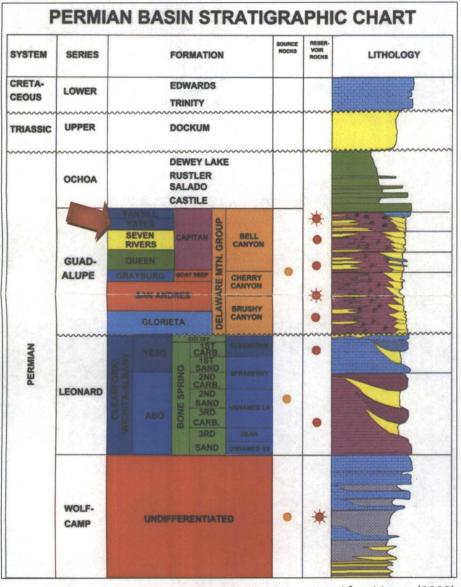
YATES SAND STRATIGRAPY AND TYPE LOG BONDURANT LEASE Section 1, Township 19S, Range 32E Lea County, New Mexico

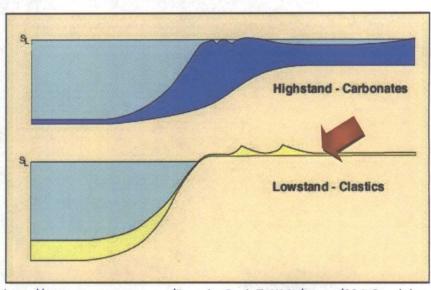
Oil Conservation Division Case No. <u>146</u>76 Exhibit No.

STRATIGRAPHY AND LITHOLOGY

The Guadalupian Yates formation consists of dolomitic sand deposited in a complex combination of aeolian and fluvial systems representing a lowstand environment. It was locally deposited over the Seven Rivers dolomite, consisting of tight anhydritic dolomites deposited in a back reef setting, just behind the Capitan Reef. The Yates is overlain by the Tansill anhydrites, representing a sabkha environment that prograded over the top of the Yates.



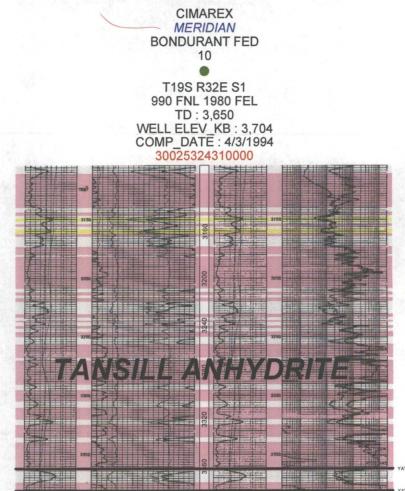
After Mason (2000)

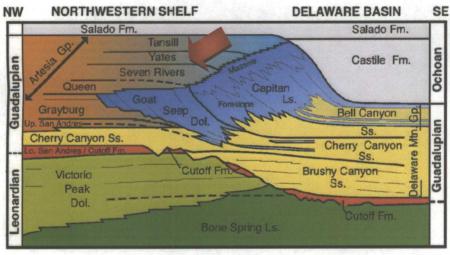




The top of the Yates is locally marked by the first sand found near the base of the anhydrite, and its base is marked by the last sand found as it grades into the Seven Rivers dolomite. The Yates sands are typically found in strike oriented (E-W in this area) lenses interbedded with tight dolomite and anhydrite.

TYPE LOG & INJECTION CANDIDATE





After King (1948), Hayes (1964), Tyrrell (1969), Pray (1988), Scholle (2000)

