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## Geology and Horizontal Development of a Conventional Stratigraphic Trap in the San Andres Dolomite, Platang Field, Yoakum County, Texas

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Horizontal completions have been pivotal in the westward expansion of the West Brahaney San Andres field. Below the San Andres Pi Marker, porous dolomites produce from stratigraphic traps in the 300 foot interval in the Lower San Andres formation. The West Brahanev Unit had been developed and successfully water flooded since 1965 (1.92:1 secondary to primary ratio). Vertical completions tried to the west of the West Brahaney Waterflood Unit had been previously uneconomic. Sidewall core data was important to identify a widespread high permeability zone (with up to 22 md permeability) in three pilot holes. Manzano places their laterals in this Lower "Brahaney" zone, which is actually deeper than the main zones previously produced in the West Brahaney Unit. Manzano and Walsh Petroleum have already drilled 30 horizontal wells to date. Thin section data shows the primary reservoirs are fine crystalline dolograinstones with moldic and intercrystalline porosity. From detailed mapping, Manzano has identified over 170 1 and 1.5 mile lateral locations on 22,000 acres. One Mile laterals are typically drilled and completed in eight days, then completed in ten stages with approximately 1.5 million pounds of sand. The one mile wells average 300 MBO reserves at a D&C cost of only \$2.3 MM, making the horizontal San Andres plays one of the best economic plays in the Permian Basin with a F&D cost under \$10/BO. The wells are produced with sub-pumps at initially high rates (3000 BFPD) with a low oil cut (15-20% oil) making SWD, electric line and gas pipeline infrastructure important. Like the West Brahaney Unit, Manzano believes this field also has excellent water flood or CO2-flood potential.