

## **Rice Creek Pool, Albion-Scipio Field--A New Discovery in the Trenton and Black River of Southern Michigan**

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In 2006 a significant new oil pool was found by West Bay Exploration Co. and partners within the general outline of Albion-Scipio Field, Calhoun County, Michigan. Revealed by 3D seismic, the new pool was discovered 49 years after the main body of giant Albion-Scipio, and 24 years after the last major Michigan Trenton and Black River discovery at Stoney Point Field. The Rice Creek prospect was based upon a gross structural model of the Albion-Scipio trend as a divergent left-lateral wrench fault system with right-stepping en echelon offset. Faults and fractures associated with movement along the basement-involved master fault introduced magnesium-rich water which extensively dolomitized the otherwise dense, non-porous lime-stone of the Trenton and Black River Formations. Despite close proximity to depleted en echelon siblings Cal-Lee Pool to the north and Sheridan Pool to the south, Rice Creek was found to have normal reservoir pressure.

The Rice Creek Pool reservoir dolomite has character consistent with that of the classic Albion-Scipio hydrothermal dolomite type. Well to well, pay sections are highly variable with regard to lithology and petrophysics; reservoir limits are irregular and abrupt. There exists a distinct gas column, oil column, and oil/water contact, different from other Albion-Scipio pools. Some wells have exceptional porosity and permeability, occasionally resulting in loss of circulation. The Rice Creek Pool has been developed on 40 acre spacing with 13 productive wells in the main body of the reservoir, and an additional 5 wells in what can be considered secondary slivers. New well and seismic data has allowed expansion of our structural model to include horsetail splay geometry at the northern terminus of the Albion-Scipio Trend.