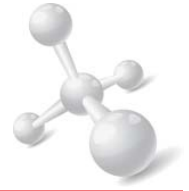


Case Study



BrightWater Technology in North America Sweeping More Oil in a Large North American Field

Situation

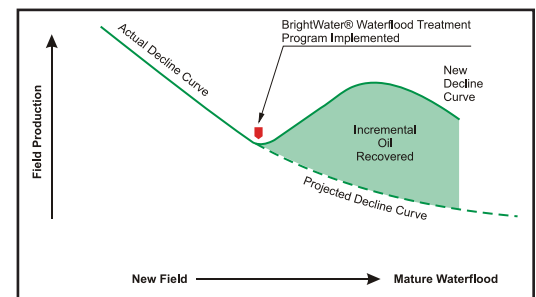
A major operator of a North American field produces oil from a mature waterflooded field. The field is one of the largest ever discovered in North America and has produced over 13 billion barrels of oil since the 1970's. Production wells were showing relatively high water cuts of above 70%, even with low to medium total pore volume water injection. It was decided by the operator to pilot BrightWater technology on this challenging multilayer sandstone reservoir.

Program

Following a miscible injection test to determine the connectivity pattern between injectors and producers, three injection wells positioned in a triangular pattern relative to one another were chosen. It was determined that these three injectors were support to as many as 16 surrounding producers. The BrightWater treatment was deployed in late 2004, and by mid 2005 the producers began to see incremental oil production.

Results

Over the course of 2005 to 2007, the offset production wells had produced 500,000 barrels of incremental oil, which translated to a revenue increase of over \$20 million. The individual producers realized oil cut increases of 10-50% and corresponding water cut decreases. The operator expects the three BrightWater treatments to continue to pay dividends into the foreseeable future. Over the next 15 years, they expect to produce an additional 2 million barrels of incremental oil.



BrightWater technology improves waterflood sweep efficiency and changes the field production decline curve.