

Reserve Growth in Fields of the San Joaquin Basin: International Significance

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The past few decades have been a time of exceptional development in existing fields of the San Joaquin Basin. In 1965, the known fields were reported to have approximately 8 billion barrels of recoverable oil (cumulative production and remaining reserves). Four decades later, in 2004, although only a few relatively small new oil fields had been found, the recoverable oil in the existing fields had increased to about 16 billion barrels. This rate of reserve additions had not been seen in the San Joaquin since the days of frontier exploration, prior to 1915. The growth is the direct result of consistent application of capital and technological innovation through steam floods, water floods, directional drilling, seismic imaging, and other innovations. Doubling known recoverable oil in very old fields has made oil production in the basin one of the most profitable activities in the global energy industry and has extended the productive life of the basin (and the California oil industry) by decades. Although global reserves have also exhibited significant growth in recent decades, few of the world's giant fields have been subjected to such intensive application of capital and technology. The experience of operators in the San Joaquin Basin may thus provide investment opportunities worldwide and may indicate that global petroleum resources are significantly larger than ordinarily believed.