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# Application of Purpose Built Rig Technology Results in Step Change in Drilling Time, Cost, and Opportunities

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## Abstract

The Piceance Basin, located in Western Colorado, is a 6,000-square-mile basin consisting of vertically stacked sand-shale sequences. Gas-in-place estimates exceed 200 trillion cubic feet. The operator started developing its acreage in 1982 with 160-acre bottom-hole spacing. Over time, dictated by reservoir performance and enabled by drilling and completion technology, such as PDC bits and directional drilling, field development migrated to 10-acre bottom-hole spacing with surface locations consisting of three to four wells per pad. Historically, pricing pressures dictated the use of conventional mechanical drilling rigs. In recent years, as product prices increased and as well inventory in easily accessible areas became drilled up, the need to drill many wells from a single remote surface location became apparent. These purpose-built rigs facilitate this, plus bring multiple performance improvements, environmental benefits, and well cost reduction to the asset. This paper will be presented by E.S. Kolstad at the 2007 SPE/IADC Drilling Conference held in Amsterdam, The Netherlands, 20–22 February 2007.



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