

The 3-D Seismic Rejuvenation of Roleta Field, Zapata County, Texas

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Post 3-D wells drilled by Union Pacific Resources on its Roleta Field acreage have more than quintupled gas production volumes from 9 MMCFD to 52 MMCFD, which is more than triple the field's pre-3-D production rate of about 15 MMCFD. Production at Roleta occurs mainly in Middle to Upper Wilcox geopressed tight gas sands at depths from 7,000 ft to 10,000 ft. The western portion of the acreage is submerged beneath Falcon and had minimal pre-3-D production. The acquisition of twenty square miles of

land and lake 3-D resulted in the identification of 33 drill sites. The economics of tight gas sand drilling on partially submerged lands as at Roleta are enhanced by the technological synergism of 3-D combined with directional drilling, modern fracstimulation, cost-efficient completions, and commingling of productive zones. As a result of these efforts the EUR for this property has doubled from a pre-3-D figure of 62 BCF to a post-3-D value of 124 BCF.