EXTENDED ABSTRACT

LMP Petroleum, Inc. pursued an internally generated prospect, which resulted in the drilling of the Stephens Production Co. #1 Tanner, TD 10,250 ft, Hidalgo County, Texas. Figure 1 shows the regional geological setting. LMP purchased the seismic data and leasehold prior to selling the prospect to Stephens Production Co. in September of 2001. The well was completed as a producer in the Lower Frio L sand from 74 ft of net pay perforations 9809 to 9965 ft (OA). The well flowed to sales 2460 MCF/D, FCP 7500 psi on March 9, 2002. The flow rates were gradually increased to 7940 MCF/D, FCP 7200 psi, 135 BC/D over 21 days. Subsequently, the zone was hydraulically fractured and flow rates increased to 12,047 MCF/D, FCP 3607 psi, 156 BC/D, 78 BW/D. A composite bridge plug was set above the perforations and the K sand was perforated on March 27, 2002, from 9514-9548 ft. The well flowed to sales 6000 MCF/D, 130 BC/D, 38 BW/D, FCP 7200 psi. The zone was fracture stimulated on April 5, 2002, and flowed to sales 21,696 MCF/D, 140 BC/D, 34 BW/D, FCP 6027 psi (Fig. 2). The K and L were commingled and produced together. LMP Petroleum, Inc. and Stephens Production Co. worked closely together to drill seven producers and no dry holes. Most wells were perforated in both the K and L sands and commingled. These wells will ultimately produce 40 BCF equivalent. These are the vital statistics. But, as Paul Harvey says, “And now the rest of the story.”

The North Los Torritos Area was mature, land problems were severe, well costs were high, and analogous fields were marginal. Putting the deal together was very difficult, and selling the deal was even more difficult.

The production in the area can be divided into Upper, Middle, and Lower Frio as seen on the type log (Fig. 3). Upper Frio through Lower Frio production (except for one well) is all normally pressured. The Upper Frio has been prolific and most accumulations are structurally trapped on the Shepherd Fault which has 500 to 1000 ft of throw. The North Los Torritos wells are located along a bend on the upthrown side of the Shepherd Fault. This was attractive in-so-far as many major accumulations do occur where faults change direction abruptly. LMP considered this factor to be of significance in the decision to proceed with the prospect. It was bothersome, nevertheless, that the target structural high would be juxtaposed against an Upper Frio low (Fig. 4).

The Middle Frio (Marks) structure as seen in Figure 5 also showed a major syncline juxtaposed to the prospect, however, the single geopressed Marks well in the entire complex indicated to us that the prospective area was likely to be compartmentalized. Regional west dip was well established, therefore, all we needed was to find the high area within our compartment. It was a negative factor for the prospect that the geopressed Marks completion was non-commercial.

From a pre-drill perspective all of the aforementioned geological problems had to be overcome. The geological information was gathered prior to acquiring the 3D data set.