

A range of structural and stratigraphic trapping mechanisms and significant unexplored acreage warrant the investment in 3D seismic, said Gary Mize, Manti executive vice-president. A 25 sq mile 3D survey to be finished by yearend has been optimized to image targets at Queen City level and should generate numerous shallow low cost targets.

Manti has boosted Kohler's gas sales fourfold since buying the field in February 1996 by modifying facilities and increasing gas lift gas to oil wells.

Maubro field

Manti has hiked production to 320 b/d from 230 b/d in Maubro field, Jackson County, Tex., which has produced 22 million bbl since discovery in 1941.

Drilling this year is to test a prime infill location that should aid in the decision to increase well densities fieldwide. Other wells are plan-ned to Frio objectives at 5,500 ft and 7,500 ft and other shallow gas anomalies.

Before acquisition Manti's studies indicated it could add reserves with increased Marg well densities and possibly a pattern waterflood, exploring the Frio which produces in other fields on trend with Maubro, and exploiting log-confirmed potential for shallow gas, 30 bcf of which has been produced only on the field's east flank.

Trinity field

Since discovery in 1934 this Houston County, Tex., field has produced mainly from Wilcox/Carrizo at 2,500 ft atop a salt dome. Shallower undeveloped pays exist in Crockett, Queen City, and Sparta sands. Also limited Edwards and Woodbine production on the flanks of the dome.

Since the initial acquisition in February 1996 of acreage controlling the top of the dome, Manti has acquired an further 3,700 acres on the flanks.

Manti was also successful in reclassifying Trinity as a salt dome field after technical presentations to the Texas Railroad Commission. The new salt dome classification, along with the control of top and flank acreage positions, provides for the first time in the field's history an opportunity for fieldwide management based on a planned 3D survey.

Based on the established Woodbine and Edwards flank production, Manti anticipates that the 3D survey will identify piercement traps along the face of the dome in multiple regional pays from Cotton Valley up through Woodbine. And 2D seismic indicates additional Wilcox potential in a rim anticline feature.

Iberia field

Iberia is producing 1,400 b/d of oil and 3.3 MMcfd of gas from Middle to Lower Miocene age sands at 800-10,500 ft.

The field, in Iberia Parish, La., has produced more than 100 million bbl of oil and 100 bcf of gas since discovery in February 1917.

About 25 of 75 existing standing well bores were active when Manti assumed operations.

It plans to reactivate many of the idle wells.

State of the art 3D seismic will be used to support redevelopment and delineate deeper potential.

Most of Iberia's reservoirs produce oil. With modern completion techniques even an old field can give up high rates such as at the 1 Bullock, which flowed 650 b/d of oil on a 12/64 in. choke.

Some of the deeper reservoirs produce gas, including the Germany sand.

Manti joined Sonat Exploration Inc. in acquiring a 36.5 sq mile 3D seismic survey over the Iberia salt dome. Processed data are expected in September.

Port Barre field

This field in St. Landry Parish, La., is producing 280 b/d of oil from Pliocene through Frio age sands in 19 wells.

Port Barre has exceeded 50 million bbl of oil and 75 bcf of gas since July 1927. Manti plans to reactivate many of 49 shut-in wells following a geologic and engineering study.

Manti and HS Resources expect processed data in fourth quarter 1997 from a 50 sq mile 3D survey over the complexly faulted salt dome. The data tied to well control will define untested fault blocks and delineate deep reservoirs.

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