

In a first 12 month phase, Maxus will construct a road and pipeline from Shushufindi to Bogui-Capiron and drill 16 wells in Bogui - Capiron and 8 in Tivacuno. Maxus will bring in a heliring to handle drilling while the road is being constructed. Bids have been tendered, and field work has already begun. These wells could be on stream as early as July 1993.

In the second phase, during mid 1993 through 1994-95, the road and pipeline would be extended from Bogui-Capiron to the Amo-Iro complex, where another 96 wells are planned. Of the total 112 wells planned for both phases, 56 will be horizontal, 35 directional, and 21 injection in Amo, Daimi, Ginta and Iro fields. Plans call for using a limited number of drill sites to slant or horizontally drill the wells.

Production will be through submersible pumps, taking advantage of the fields's existing high oil-water content despite the low crude gravity. Maxus plans to augment the natural water drive with reinjection of produced formation water. Maxus has dropped tentative plans to inject diesel as a dilutent into the crude mix. Conoco had proposed building a second pipeline to move Shushufindi crude south as a dilutent, but that was scrapped.

Crude will move via a 14-16 in. pipeline from Bogui-Capiron to Shushufindi, where about 40,000 b/d of 17 gravity crude will be blended with 29.5 gravity Shushufindi crude. Further transport will be through batching the blend with the typical 28.5 gravity Oriente crude via the Lago Agrio-Balao trunk line. There will be dedicated tankage at Balao to receive the 22 gravity blend.

Regarding Tivacuno development, Maxus has a 12 year contract to develop Tivacuno. It plans a 23 km road and 12 in. pipeline from Bogui-Capiron to Tivacuno. Plans call for drilling eight wells to develop the initially estimated 8 million bbl of reserves. Additional drilling would double that recoverable volume. Crude averages 19-25 gravities API. Maxus will be compensated on a per barrel basis for Tivacuno development costs.

PETROECUADOR also approved Maxus' continuation of strong environmental protection measures called for in the Conoco development proposal. Without that, the controversial plan probably would not have gone ahead. Strict environmental mitigation measures will apply to construction of roads and pipelines and call for drilling and spill containment at production facilities and stringent water discharge controls. All formation water produced will be reinjected. Population settlement along the road from the fields to the Napo River-especially feared by environmentalist and native groups- will be strictly controlled. Plans call for extensive reforestation along roads, pipeline routes and at drilling locations.