An overview of Trintoc's natural gas gathering and transmission system is presented. Each field is studied as part of the total system.

In this thesis, an analytical method is presented for the optimization of Trintoc's natural gas with relation to its pipelines. Capacity estimates were carried out using the techniques of pressure drop calculations of the network. An analytic method is presented for the Wilson and Barrackpore fields.

The analysis is based on the Flow Equations. It is seen that the Panhandle Formulas are more conservative than the Weymouth's and this fact should be taken into consideration for the design of future projects. These pipelines were laid down over forty (40) years ago and efficiencies ranged from ten (10) to eighty (80) percent with the larger diameter pipelines at the smaller efficiencies.