The Takutu Basin is an ENE-trending Jurassic-Early Cretaceous continental rift basin about 40 km wide and 280 km long that cuts the Guyana shield in southwest Guyana and northern Brazil. Prior exploration documented a stratigraphic section dominated by mudstone but including Jurassic lacustrine source shale, siltstone, evaporites, and basalt. Numerous anticlinal and tilted fault block structures, including a noncommercial oil discovery, suggested an attractive exploration play existed.

In late 1988 Hunt Oil Co. began operations in the basin. A three-year exploration program included field geology, photogeologic mapping, several methods of surface geochemical prospecting, reprocessing, and acquisition of SAR, aeromagnetics, and 1,331 km of new seismic. Exploration efforts ultimately focused on the large central basin Savannah Arch. The exploration well Turantsink 1 drilled an anticline near the south end, which was interpreted as a drape feature above a thick lacustrine fan delta complex. However, the deep structure proved rooted in a thickened salt section near the Jurassic basin paleocenter.

Minor oil shows were observed at several horizons, but the predicted Jurassic reservoirs were not present. This part of the basin had been affected by a Tertiary hydrothermal event that drove the thick source shales into overmaturity and destroyed porosity in all potential reservoir units. This plus unfortunate timing of late Tertiary structural reactivation severely downgraded the petroleum potential of the basin.

Minor oil shows were observed at several horizons, but the predicted Jurassic reservoirs were not present. This part of the basin had been affected by a Tertiary hydrothermal event that drove the thick source shales into overmaturity and destroyed porosity in all potential reservoir units. This plus unfortunate timing of late Tertiary structural reactivation severely downgraded the petroleum potential of the basin.

Minor oil shows were observed at several horizons, but the predicted Jurassic reservoirs were not present. This part of the basin had been affected by a Tertiary hydrothermal event that drove the thick source shales into overmaturity and destroyed porosity in all potential reservoir units. This plus unfortunate timing of late Tertiary structural reactivation severely downgraded the petroleum potential of the basin.