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### **Cartography of the Seeps in the Orocuai Field**

Many historic discoveries of oil accumulations in the subsurface were carried out in areas where oil seeps were the unique evidence, the Orocuai Field is one of them, it is located to 20 Kms to the NW of Maturin City, northern of the Monagas State, to the south of the Interior Mountain Range, Pliocene alluvial fans outcrops (e.g.: Quiriquire Formation) and eroded terraces (Mesa Formation) is cut for the rivers, in these outcrops seeps has been observed. This survey permitted update the cartography of seeps existent, knowing where they occur could make environmental evaluations and forecast, and discard attributable pollution to the seeps.

In this work we describe the surface geological survey in order to get the cartography detailed of the seeps in the Orocuai Field, we utilized Geographical Information System, airphotos, ortophotos, global position system (G.P.S.) in combination with the acquisition of geophysical electrical survey, permitted the detection of "quill polluting", the seismic structural interpretation identify the shallow system faults that constitute hydrocarbons migration via, particularly in the "Hole of Orocuai", a collapse structure, the superficial zone more faulted of the field, but also the more "urbanized" for the communities and the oil installations. The fault system was placed on ortophotos allowing us to identify the most sensitive areas from the point of environmental view.