

INFOPET.GIS PROJECT: REPRESENTATION AND GEOSITE DATA FOR PETROLEUM EXPLORATION.

¹GÓMEZ-HERRERA, J. E., ¹LINARES-CALA, E. ¹Oil Research Center, Havana City, CUBA.

The geological mapping of more than 40% of the Cuban territory in detailed scales, wildcat well, oil fields, oil and gas seeps and a hundred of the reports, papers and maps were integrated to increase a better knowledge about oil and gas potential of the Cuban Oil Provinces. The main purpose of the INFOPET.GIS system is to produce collection, storage and analysis of oil and gas objectives and other geologic events where geographic location is very important. This INFOPET.GIS's application is a tool and a procedure computer based on a decision support system involving the integration of spatially referenced data. The system comprises a Relational DataBase Management Subsystem, which includes more than 600 geosites, topographic and regional geological base map scale 1: 500 000 and other additional information to the petroleum exploration. Another aim is to produce information for the geologists from a variety data set quickly and efficient. This allows the geologists to examine large amount of data in short time less than, using conventional methods. Geosite is designed to include all locations and objectives that include any information or scientific knowledge about the petroleum exploration and production. This is very important for the information concerning the petroleum exploration and analysis of mapped data is commonly used for decision – making. The potential utility of Geographical Information System in geology is obvious, because almost all geological are referred to locations. This is very to the geologist in terms of possibilities to produce generalized maps, i. e. to show the relationships between oil and gas seeps, tectonostratigraphic units and the discovered oil fields.