

WS10 P03

Play Analysis of the Gamtoos Basin, off the south coast of South Africa: From Concept to Portfolio

A. Davids* (Petroleum Agency SA), C. van Bloemenstein (Petroleum Agency SA), J. Roux (Petroleum Agency SA)

Summary

A play analysis was carried out in the underexplored Gamtoos Basin, South Africa. A total of 10 wells were drilled of which five encountered oil and/or gas shows. An integrated approach, incorporating geology, geophysics, sedimentology and geochemistry led to the mapping of petroleum elements, including source, reservoir, charge and seal risk as well as the geological chance of success (Pg). This culminated in the identification of 80 leads which were ranked from low to high risk. Full risk analysis of the Synrift 1a play fairway is described in detail while the portfolio of the other plays are only summarised. This analysis resulted in a better understanding of the regional geology, structural development and the hydrocarbon potential of the basin.