

NW-SE direction, the basement rocks were tilted, leading to a series of ranges and depressions in NNE-NE echelon arrangement filled with rapid deposited source rocks, as a compensation of the continuously subsided space. In the Neogene, the whole basin depressed in balance due to the clockwise shear movement. The range and depression structures then were covered by Neogene sediments, thus formed the buried hills and provided necessary pressure and temperature for the generation of oil and gas. The rotational-shearing movement made the oil and gas to migrate towards the buried hills. The evolution of the stress field in the area is related to the subduction and compression of the Pacific-Kura Plate and the Indian Ocean Plate towards the Eurasian Plate in different times and directions. The gushing of the mantle materials, on the other hand, can be considered as the dynamic source of the tensile-stress field and the thermal source for the evolution of hydrocarbon.

东海陆架盆地两口探井分别试获工业油气流

由地质矿产部海洋地质调查局“勘探二号”、“勘探三号”钻井平台在东海陆架盆地施工的“平湖二井”、“天外天一井”，最近分别试获了工业油气流。

由“勘探二号”施工的“平湖二井”，位于东海陆架盆地浙东坳陷西湖凹陷的平湖构造上，距我国舟山群岛约260km。该井于4月19日钻至4105m，完成设计任务，经对主要含油气层段进行测试，获工业油气流。

由我国自行设计建造的“勘探三号”半潜式钻井平台施工的“天外天一井”，位于东海陆架盆地浙东坳陷西湖凹陷的天外天构造上，距舟山群岛约280km。5月10日，该井钻至5000.3m，完成设计任务，经测试，获工业气流。

地质矿产部海洋地质调查局从1974年起，开始东海的石油普查工作，至1985年基本完成了东海油气的区域评价工作，并转向重点构造的详查评价。其间钻探的五口井，都不同程度地试获了油气，其中“平湖一井”试获了工业油气流，取得了东海油气普查勘探的首次重大突破。

为了进一步探索平湖构造而钻探的油气探井——“平湖二井”，于新的高点上、新的层位中试获工业油气流，为“平湖构造”探明一定规模的油气田奠定了基础。“天外天一井”为我国海上钻探最深的一口石油普查井，该井试获工业气流，对于扩大东海油气远景评价和进一步选定重点勘探区域具有重要意义。

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