ON THE GEOCHEMISTRY AND ORIGIN OF SUPERHIGH-WAX CRUDE OIL AND SOLUBLE ORGANIC MATTERS IN SOURCE ROCK

Li Jinchao　Huang Difan　Zhang Dajiang

(*Scientific Research Institute of Petroleum Exploration and Development, Beijing*)

Abstract

Geochemistry of superhigh-wax crude oils and soluble organic matters in source rocks of Nanyang and Damintun downwarps are studied. The content of wax and saturated hydrocarbon in oil is about 50%, 80% respectively. From this, we could see that terrestrial lipoid has a great contribution to the wax-bearing petroleum, and the origin of the later might be related to the parent matters rich in phyto-wax. The similarity in distribution of normal alkanes from pyrolytic kerogen, from extraction of source rocks as well as from crude oil has proved that the superhigh-wax crude oil of Nanyang depression are resulted from the sapropelic source rocks near the threshold depth of mature stage.

Both Nanyang and Damintun downwarps were fault-confined lakes in Tertiary developed nearby with coniferous trees. This kind of forest had certainly contributed a great deal of materials rich in phytogenic-wax which give rise to the foundation for formation of superhigh-wax crude oil in these basins. The meta-akaline hydrological environment was favourable to the accumulation of terrestrial lipoid and phytogenic-wax in such a downwarp like Nanyang.

全国天然气（包括煤成气）资源评价座谈会在成都召开

由中国石油学会石油地质委员会和四川省石油学会联合组织的全国天然气(包括煤成气)资源评价座谈会于1984年11月14日至19日在成都召开。这是继1981年在扬州召开的全国煤成气学术讨论会之后，专门讨论我国天然气问题的又一次较大型学术会议。在会上宣读的五十多篇论文，大体上反映了我国天然气研究工作和勘探技术的现有水平。这些论文主要讨论了我国天然气的成因和地球化学特征，我国天然气藏的类型和分布规律，我国潜在的含气地区及其远景储量。一部分论文还讨论了天然气的运移规律和聚集保存条件、干酪根自然演化过程的数学模拟、低阶煤热解生气实验、天然气藏的勘探方法等问题。

我国可燃天然气的年产量目前已达120亿立方米左右。煤成气探明储量在气层气总探明储量中所占的比率，已上升到15%左右。除可燃天然气外，在广东、东北、江苏等地还找到了一些二氧化碳气藏。与会代表普遍认为，我国天然气资源相当丰富，勘探远景良好。今后应积极开展有关天然气的科学研究(特别是运移规律、储集条件、保存条件、资源量预测方法等方面的研究)，及时总结勘探开发经验，以便开创我国天然气勘探开发工作的新局面。

（杨文宽）