

## **Causes of high pour-point oil in Lunnan area, Tarim basin**

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The high pour-point oil whose wax content is higher is widespread in Lunnan area, which has close relationship with the save after accumulation. According to the study of petroleum geochemistry, normal alkanes is a kind of components easy to be degraded and can be destroyed completely under light biodegradable. The damage during late Carboniferous and Permian in Lunnan area is so strong that there appeared 25-norhopane which indicates strong biodegradation, so this kind of oil can't form at that time. After the late accumulation during Cretaceous, the structure tilted effect happened during the Himalayan led to some fractures. But the tectonic stress concentration area is not in buried hill area, so the damage to buried hill area is not very serious. And the overlying Ordovician and Carboniferous is thicker, so it has a good protection effect for the oil accumulation. The loss of part of the light components led to the increases of paraffin content in crude oil relatively, but due to good preservation conditions, the density of high pour-point oil is generally intermediate. And because hydrocarbon is difficult to migrate vertically and accumulate in Triassic due to the fracture in Triassic not development, the high pour-point oil is mainly distributing in the Ordovician and Carboniferous.