柴西南昆北断阶带油气运移特点

点此下载全文

引用本文：高先志,孙蕾,汪立群,蔡默仓,张国卿,姜智利.2014.柴西南昆北断阶带油气运移特点[J].地球学报,35(1):93-100.

DOI：10.3975/cagsb.2014.01.12

摘要点击次数: **100**

全文下载次数: **67**

作者	单位	E-mail
高先志	油气资源与探测国家重点实验室;中国石油大学地球科学学院	gaoxz@cup.edu.cn
孙蕾	中国石油大学地球科学学院;大庆油田采油五厂	
汪立群	中石油青海油田分公司勘探开发研究院	
蔡默仓	中国石油大学地球科学学院;大庆油田采油五厂;中国石油川庆钻探工程有限公司地质勘探开发研究院	
张国卿	中石油青海油田分公司勘探开发研究院,	
姜智利	中国石油大学地球科学学院	

基金项目:中石油青海油田公司与中国石油大学(北京)联合研究项目“柴西南区典型油气输导体系分析及预测研究”(编号: QHKT/JL-03-013)

中文摘要:本文在分析昆北断阶带油气运移输导层基本特点的基础上，结合油气显示的分布特点分析，对昆北地区油气运移特点进行了分析和预测。基岩顶面不整合是昆北断阶带油气主导输导层。受印支期的长期风化剥蚀，昆北地区普遍发育基岩风化壳，从而形成广泛的不整合输导层。不整合输导层由古近系底砾岩和基岩风化层两部分构成，在不同井区可表现出通道或双通道等不同输导特点。从宏观上看，油气从昆北油源断层爬上昆北断阶带后主要通过不整合进行横向扩展运移，不整合输导层的构造形态导致油气优先沿不整合输导层的构线进行优势运移，当遇到不封闭断层时，则发生沿断层面向上调节运移或顺沿断层面进行横向运移。昆北地区断层侧向封闭性普遍较强，而NNE、NE走向的断层垂向封闭性弱，成为油气向上或改向运移的重要通道。除底砾岩外，昆北地区古近系砂层输导油气的范围有限，只有与断层和基岩不整合输导层有接触的砂层才起到局部的输导作用。因此，昆北地区油气要集中分布在基岩不整合和断层附近。

中文关键词:油气运移 输导体系 不整合 断层封闭性 有效输导层 柴达木盆地

Migration of Petroleum in Kunbei Faulted Terrace of Qaidam Basin

Abstract:In Kunbei area of southwestern Qaidam Basin, new oilfields were discovered recently in the unconformity of the basement. The problem as to where and how the petroleum migrates from the sources into Kunbei area is analyzed in this paper based on the analysis of the characteristics of transportation beds and the occurrence of the shows. It is concluded that the unconformity transportation beds in Kunbei area are composed of two parts: Paleogene bottom gravel bed and weathering layer of the basem and there exist two types of transportation of unconformity: single channel and double channels. The petroleum migrates along the structure ridges of the unconformity transportation beds to the high places; however, the migration routes would be disturbed and changed by some non-sealing faults, and this depends on the angle of the directions between the faults and the main stress. Most NNE- and NE-trending faults are laterally sealed and vertically unsealed, along which the petroleum would migrate vertically and in parallel form. Since the thinning and shortening of the sandstone beds in the Paleogene, their role of transportation has been limited to the area where faults developed and where the sandstones are adjoining and connected with the unconformity.