叠世晚期的岩相—古地理条件的制约。根据前述的成矿规律和成矿模式，大体认为虎牙浅海槽、瓦布梁子水下洼地、黑水半局限盆地等部位对成矿有利。

The Huya Type Fe—Mn Deposits in Sichuan Province: Their Petrographical—Palaeogeographical Features

Wu Guangqian

(*Geoscience Research Institute, Southwest Geological Exploration Co., M. M. I.*)

Abstract

The Huya type Fe—Mn ore deposits, an important type manganese deposit in Sichuan Province, are mainly distributed in Songpan—Heishui region and occurred in the upper Bocigou Formation of Lower Triassic Series. The sedimentary facies in the late period of early Triassic Epoch may be divided into: external shelf microfacies, internal shelf microfacies, offshore bar microfacies, submarine bar microfacies and shallow seashelf transitional zone microfacies. The palaeogeographical framework are recognized as: Kang—Dian (Xikang Yunnan) palaeocontinet in south Sichuan, a NE—SW trending paloeo—island chain in Longmenshan area, and a palaeocontinent upheaved in Motianling area in Palaeozoic era. In the sea basin in Songpan—Heishui region, two submarine swells, (Jone—Jiaochang and Jone-Weigu) are occurred. The Huya shallow sea trough lies to the east of the Jone—Jiaochang swell, in the middle of these two submarine swells is the wabuliangzi submarine depression and to the west of the Jone—Weigu submarine swell is the Heishui semi—enclosed basin. The formation of the Huya type Fe—Mn deposits were strictly controlled by petrographical and palaeogeographical conditions.

矿山露采边坡岩心定向钻探工程新进展

简 讯

中国有色金属工业总公司矿产地质研究院和辽宁有色地质勘探公司共同合作，于1986年6月完成了北京有色冶金设计研究院负责设计的铜录山露采边坡岩心定向钻探工程。同年10月提交了全部技术资料，获得了较好的经济技术效果。

施工区地层复杂，岩体破碎，给施工带来了很大困难。他们根据不同地质条件，采用不同型号的多点随钻定向仪器，使回次和进尺定向成功率分别达到75～81%和84～89%，岩心采取率大于95%，终孔时钻孔偏离设计靶点的距离达到了设计要求，按时提供了勘察技术报告及各项工程地质技术成果，为急陡边坡的工程设计提供了可靠依据，受到了国内外专家的好评。加拿大高达公司总裁、工程地质专家史特施，曾于同年12月听取了施工情况介绍，并详细询问了我国研制的新型多点随钻钻具的结构与使用效果，还与北美常用的三种岩心定向钻具进行了比较：瑞典克瑞留斯公司的CCO型单点杆式定向器定向成功率为50～60%；加拿大单点粘土打印定向器为60～70%；美国克里斯坦森公司的多点岩心定向钻具达80%以上，成为当地最精确的定向钻具。他认为，我国的新型定向钻具的刻线系统与美国的钻具一致，二者的定向成功率也彼此接近。

（本刊通讯员）