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我国钾盐找矿规律新认识和进展

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中文摘要:本文通过对比研究国内外钾盐矿床成钾特征,总结出了我国海、陆相成盐盆地和成盐成钾特性:成盐具有多期性、成盐时代差异性、成盐作用迁聚性、物质成分多样性、后期盐盆地的变动性和多液态矿的特点; 厘定了3个盐类成矿域和1个成矿带; 提出了我国找钾策略——以海相蒸发盐盆地为主攻方向、兼探陆相盐湖及含钾地下卤水; 提出了我国主要的古代盐盆地多产于"准克拉通(陆块)",特别是海相盐盆地均发育于前寒武纪为基底的陆块中,以及钾盐沉积于构造稳定区中相对活动的亚稳定区和在构造亚稳定区中聚集于相对稳定区的新认识; 发展了适合中国地质特点的找钾理论认识,有效地推动了油钾兼探工作。发现滇西南—羌北中上侏罗统若干钾盐显示,特别是指导和部署滇西南深部侏罗纪找钾,并取得超常规的进展; 进一步缩小陕北奥陶系找钾包围圈; 引领"油钾兼探"实施,实现了塔里木盆地库车凹陷古近系找钾的重大实质性进展; 在柴达木盆地西部发现新的早第四纪富钾层位; 指导和取得青藏高原特种盐湖综合找锂、钾和评价的重要进展, 新发现一批大中型锂、钾特种盐湖(特别是多格错仁大型锂、硼(钾)盐湖)和取得综合利用工艺新进展。

中文关键词:成盐盆地 成盐成钾特性 盐类成矿域 构造基底控制成钾 找钾新线索

Potash Exploration Characteristics in China: New Understanding and Research Progress

Abstract:Based on a comparative study of potash-forming characteristics of potash deposits both in China and abroad, the authors have summarized the characteristics of China's continental and marine saline basins and salt- and potash-forming characteristics in these basins, i.e. multiple phases of salt formation, difference in salt-forming ages, migration of salt-forming processes, diversity of component materials, as well as changes of saline basins in the late stage and presence of many liquid mineral deposits; redefined 3 salt minerogenetic domains and 1 salt minerogenetic belt; put forward China's potash exploration strategy—taking marine evaporite basins as the main direction for potash exploration while exploring continental saline lakes and subsurface potash-bearing brine; proposed the new idea that China's main ancient saline basins mostly occur in "quasi-cratons (continental blocks)" and especially all the marine saline basins occur in continental blocks with the Precambrian basement, as well as the new idea that potash salts were deposited in relatively active quasi-stable areas in a tectonically stable region and concentrated in relatively stable areas in a tectonically quasi-stable region; and developed the theory on potash exploration suited to the geological characteristics of China and thus effectively pushed forward simultaneous exploration of oil and potash. In addition, the authors also found several potash showings in Mid-Upper Jurassic strata in the southwestern Yunnan-northern Qiangtang area and particularly directed and arranged potash exploration in the Jurassic at depths of southwestern Yunnan and made unconventional progress; further narrowed the ring of potash exploration in the Ordovician of northern Shaanxi; led the implementation of "simultaneous exploration of oil and potash"; achieved major substantive progress in potash exploration in the Paleogene of the Kuqa subbasin of the Tarim basin; found a new Early Quaternary potash-rich horizon in the western Tarim basin; directed and ma

keywords:salt-forming basin salt- and potash-forming characteristics salt minerogenetic domain tectonic basement-controlled potash formation new clue to potash finding

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