

- 研究[J].地球物理学进展,2012,27(6):2478-2491.
- [8] 郝爱华,刘虹瑜,熊益学,等.火山熔岩储层次生孔隙类型的岩相学研究——以克拉美丽气田石炭系滴西17井区为例[J].特种油气藏,2012,19(5):26-29.
- [9] 林向洋,苏玉平,郑建平,等.准噶尔盆地克拉美丽气田复杂火山岩储层特征及控制因素[J].地质科技情报,2011,30(6):28-37.
- [10] 罗盈.KLML气藏气井产能评价和合理配产[D].成都:西南石油大学,2013.
- [11] 熊益学.后碰撞背景下火山岩储层成因机制——以准噶尔盆地滴西地区石炭系为例[D].成都:西南石油大学,2012.
- [12] 吴小奇,刘德良,李剑,等.准噶尔盆地陆东—五彩湾地区石炭系火山岩储集性能及影响因素[J].地质科学,2009,44(1):1-13.
- (编辑 常雪红)

Characteristics of Carboniferous Volcanic Reservoirs in Kelameili Gasfield, Junggar Basin

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[Abstract] Many types of rocks developed in the Carboniferous volcanic reservoirs in Kelameili Gasfield in Junggar Basin with strong heterogeneity and difference in reservoir properties. Through the analysis of core and cast thin slices, the spatial types, physical property and controlling factors of the favorable volcanic reservoirs were studied on the lithofacies property, pore structure and the distribution of the pore and permeability parameters. The subvolcanic rocks, volcanic lava, melted clastic rock and pyroclastic rocks are well reservoirs stored in the Carboniferous volcanic reservoirs, which are mainly pore-fracture dual medium and favorable for oil and gas accumulation. The pores are the main reservoir spaces, and the cracks act as seepage channels. The primary pores of the volcanic rocks are poorly connected in the volcanic reservoir, and become effective reservoir spaces after the secondary transformation. The cracks connect the pores that are not connected or connected slightly to each other, making them an effective pore network. The major geological factors and functions that influence and control the reservoir space and properties include volcanic rock lithofacies, weathering and leaching, tectonic fracture and later diagenesis process.

[Keywords] Kelameili Gasfield; Carboniferous; volcanic reservoir; controlling factors; pore; cracks

· 能源链接 ·

我国的地热资源

我国地热资源的蕴藏数量也是相当可观的。国土资源部中国地质调查局相关负责人表示,我国的干热岩资源量与美国的约在同一数量级。经初步评价,全国陆域干热岩资源量为 856×10^{12} 标准煤,根据国际标准,以其2%作为可采资源,全国陆域干热岩可采资源量达 17×10^{12} 标准煤。全国316个地级以上城市浅层地热能年可开采资源量折合 7×10^8 标准煤;全国水热型地热资源量折合 1.25×10^{12} 标准煤,年可开采资源量折合 19×10^8 标准煤,地热资源的发展前景是非常广阔的。《地热能开发利用十三五规划》提出,2020年我国地热能利用量达到 7000×10^4 标准煤,地热供暖(制冷)面积累计达到 $16 \times 10^8 \text{m}^2$,地热发电装机容量约530MW,其中京津冀地区地热能年利用量达到约 2000×10^4 标准煤。(供稿 舟丹)