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论文

沁水盆地南部煤层气井排采动态过程与差异性

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摘要：

针对沁水盆地南部煤储层变质变形的特点，通过对沁水盆地南部某井组的排水采气动态过程与差异性进行分析，结果表明：井组单井之间气产量变化大，排采效果差异性明显，单井产水能力不一；在煤层气井排采过程中，为防止吐砂和压敏效应,排采强度、制度调整不易过大、过频；在煤层气井排采的不同时期应采用不同的工作制度，在以排水为主的前期排采阶段，排采工作制度以控制动液面为核心来制定，在产气为主的中后期稳定生产阶段，排采工作制度以控制套压（井底流压）为核心来制定；煤层气井生产过程中，在保持一定回压确保煤储层安全的前提下，应尽可能降低套压生产，以利于煤储层平均压力的降低，扩大煤层气的解吸范围，获得高产气。

关键词： 沁水盆地南部；煤层气井；排水采气；动态过程；差异性

Dynamic process and difference of coalbed methane wells production in southern Qinshui Basin

Abstract:

Focused on the characteristic of coal seam in southern Qinshui Basin and analysis on the process and difference of production from one group well,the conclusions are shown that：in different group single-well,the gas production has a large change,production effect has obvious difference,water production capacity is also difference；in the process of CBM production,in order to avoid sand is brought out and compression-sensitivity,the production intensity and institutional adjustment are not be too large and frequent.Using different working system in different stages of CBM production,in the early stage is mainly drainage,the core of working system is controlled by the fluid level；in the medium-late stage is mainly gas production,the core of working system is controlled by the casing pressure(bottom hole flowing pressure).In the process of CBM production,on the premise of keeping a certain back pressure and ensuring coal seam security,as possible as decreases casing pressure to product in order to decrease the average pressure of coal seam,enlarge the range of CBM adsorption and get high gas production.

Keywords: southern Qinshui Basin；coalbed methane well；dewatering gas；dynamic process；difference

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