Summary of Water Resources Supervision of Shale Gas Lifecycle in America and Revelations to China

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Abstract Water resources supervision accompanies the entire lifecycle and stage of shale gas well, drilling and hydraulic fracturing consumes a large amount of water in the earlier development, the later development mainly includes flow back water pollution problems of drilling fluid and fracturing fluid. In response to the water problem brought by the development of shale gas, the America has accumulated relatively rich in water resources regulation experience and solutions. This paper has tracked and studied the system, laws and regulations, institutions, solutions and so on of water resources supervision of shale gas lifecycle in America. Based on the shale gas development stage of our country, it also puts forward a technical water environment supervision system suitable for shale gas exploration and development in our country, in order to provide references for the healthy development of the shale gas industry in China.

Keywords shale gas, lifecycle, water resources, supervision