# Article information:

库车山前复合盐层三维应力场数值模拟 - 中国知网
[http://kns-cnki-net-s.vpn.whu.edu.cn:8118/kcms2/article/abstract?v=3uoqIhG8C467SBiOvrai6TdxYiSzCnOET0Xr\_I8pgMuCFSD7JyYj-ieV5j0HOKB78SK7InE\_MHGfhlhi8O0ETf35e9oYB2qq302RAjC7WFk%3d=NZKPT](http://kns-cnki-net-s.vpn.whu.edu.cn:8118/kcms2/article/abstract?v=3uoqIhG8C467SBiOvrai6TdxYiSzCnOET0Xr_I8pgMuCFSD7JyYj-ieV5j0HOKB78SK7InE_MHGfhlhi8O0ETf35e9oYB2qq302RAjC7WFk%3d&uniplatform=NZKPT)

# Article summary:

1. The Kuqa Depression in China has multiple sets of complex salt layers, which pose a challenge to safe and rapid drilling.

2. A 3D geometric model was established based on 2D seismic profiles and well log data.

3. The numerical simulation results show that the stress anomalies are mainly concentrated at the boundaries between the salt layers and sandstone/mudstone layers, which is also where drilling accidents such as stuck pipe and fluid leakage occur.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy, as it provides detailed information about the research conducted by the authors, including their methods, results, and conclusions. The authors have provided sufficient evidence for their claims by citing relevant experiments and data sources. Furthermore, they have discussed potential risks associated with drilling in this area, such as stuck pipe and fluid leakage.

However, there are some areas where the article could be improved upon. For example, while the authors discuss potential risks associated with drilling in this area, they do not provide any recommendations or solutions for mitigating these risks. Additionally, while they cite relevant experiments and data sources to support their claims, they do not explore any counterarguments or alternative explanations for their findings. Finally, while the authors discuss potential applications of their research in terms of optimizing drilling fluid density and reducing drilling complexity, they do not provide any evidence to support these claims or discuss any potential limitations of their research.

# Topics for further research:

* Drilling fluid density optimization
* Mitigating drilling risks
* Alternative explanations for drilling research findings
* Limitations of drilling research
* Stuck pipe prevention strategies
* Fluid leakage prevention strategies

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