# Article information:

Water-sensitive damage mechanism and the injection water source optimization of low permeability sandy conglomerate reservoirs - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S1876380419602752?via%3Dihub=>

# Article summary:

1. 通过实验结果和比较，确定了低渗透率沙砾岩储层的水敏损伤机制和增强注水机理，包括粘土矿物的水合作用和颗粒迁移。通过增加注入水中阳离子（尤其是K+和Mg2+）的含量，可以有效抑制储层的水敏损伤。

2. 建立了考虑低速非达西渗流和储层应力敏感性的油水两相流井生产方程，以定量评估储层性质和油水两相渗流能力变化对储层生产力的影响，并根据不同类型注入水的动态兼容性实验结果选择适合乌石地区低渗透率沙砾岩储层的注入水源。

3. 在乌石地区，韦州组地层水可用作低渗透率沙砾岩储层的注入水源。当注入水为盐度为2倍的地层水时，储层的渗流能力最强。

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

作为一篇科学论文，该文章的内容相对客观，但仍存在一些偏见和缺失的考虑点。首先，文章没有提及可能存在的环境风险或社会影响，例如注入水源可能会对当地水资源造成影响。其次，文章只关注了低渗透率沙砾岩储层的开发效率和生产力，而忽略了其他可能的开发方案或技术。此外，文章中提到了某些主张，但未提供足够的证据来支持这些主张。最后，在选择注入水源时，文章似乎只考虑了动态兼容性实验结果，并未探索其他可能的因素或风险。

总之，尽管该文章在科学研究方面有所贡献，但仍需要更全面、平衡地考虑各种因素和风险，并提供足够的证据来支持其主张。

# Topics for further research:

* Environmental risks of injecting water into low-permeability sandstone reservoirs
* Alternative development strategies or technologies for sandstone reservoirs
* Lack of evidence to support certain claims made in the article
* Other factors or risks to consider when selecting injection water sources
* The need for a more comprehensive and balanced approach to considering various factors and risks
* The importance of providing sufficient evidence to support claims made in scientific research.

# Report location:

<https://www.fullpicture.app/item/967bbf9252b0e600bfda7177a3cd6f9c>