# Article information:

Stress distribution of cased elliptical hole with high fluid pressure: Analytical expression | Elsevier Enhanced Reader
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# Article summary:

1. This article presents an analytical solution model of stress distribution in a cased hole with internal pressure.

2. The elliptical model can accurately predict the occurrence of plastic damage in the cement sheath.

3. The optimal casing thickness and other parameters for casing program design are discussed.

# 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 “Stress Distribution of Cased Elliptical Hole with High Fluid Pressure: Analytical Expression” is a reliable source of information on the topic, as it is published in a reputable journal (Journal of Petroleum Science and Engineering). The authors have provided evidence to support their claims, such as citing previous research studies and providing detailed explanations for their conclusions. Additionally, the authors have presented both sides of the argument equally, noting potential risks associated with high fluid pressure in cased holes and discussing ways to mitigate them.

However, there are some areas where the article could be improved upon. For example, while the authors discuss various parameters that should be taken into consideration when designing a casing program, they do not provide any evidence or data to support their claims about these parameters being optimal for certain conditions. Additionally, while they mention that numerical simulation methods can be used to calculate stress distributions in cased holes, they do not provide any details on how these simulations are conducted or what results they yield. Finally, while the authors discuss various complex situations that may arise due to high fluid pressure in cased holes, they do not provide any examples or case studies to illustrate these points further.

# Topics for further research:

* Casing program design parameters
* Numerical simulation methods for stress distribution
* High fluid pressure in cased holes
* Mitigation strategies for high fluid pressure
* Case studies of cased hole stress distribution
* Impact of high fluid pressure on cased hole integrity

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