# Article information:

Favorable lithofacies types and genesis of marine-continental transitional black shale: A case study of Permian Shanxi Formation in the eastern margin of Ordos Basin, NW China - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S1876380421602896>

# Article summary:

1. The Shanxi Formation in the eastern margin of the Ordos Basin, NW China, has six lithofacies types: low TOC clay shale (C-L), low TOC siliceous shale (S-L), medium TOC siliceous shale (S-M), medium TOC hybrid shale (M-M), high TOC siliceous shale (S-H), and high TOC clay shale (C-H).

2. The formation of favorable lithofacies is jointly controlled by depositional environment and diagenesis. Shallow bay-lagoon depositional environment is conducive to the formation of type II2 kerogen which can produce a large number of organic cellular pores.

3. The S-H, S-M and M-M shales have good pore structure and largely organic matter pores and mineral interparticle pores, including interlayer pore in clay minerals, pyrite intercrystalline pore, and mineral dissolution pore.

# 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 “Favorable lithofacies types and genesis of marine-continental transitional black shale: A case study of Permian Shanxi Formation in the eastern margin of Ordos Basin, NW China” is generally reliable as it provides detailed information about the lithofacies types found in the Shanxi Formation in the eastern margin of the Ordos Basin, NW China. It also provides an analysis of how these lithofacies were formed through a combination of depositional environment and diagenesis. Furthermore, it includes references to other studies that support its claims.

However, there are some potential biases that should be noted. For example, while the article does provide an overview of different lithofacies types found in this region, it does not explore any counterarguments or alternative explanations for their formation or development. Additionally, while it does provide references to other studies that support its claims, it does not provide any evidence for its own claims or discuss any possible risks associated with them. Finally, while it does mention some potential benefits associated with these lithofacies types such as their ability to produce a large number of organic cellular pores, it does not discuss any potential drawbacks or negative impacts they may have on the environment or local communities.

# Topics for further research:

* Counterarguments to lithofacies formation
* Risks associated with lithofacies types
* Environmental impacts of lithofacies types
* Social impacts of lithofacies types
* Organic cellular pores benefits
* Organic cellular pores drawbacks

# Report location:

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