# Article information:

Study on the geological and engineering aspects of anhydrite/gypsum transition in the Arabian Gulf coastal deposits | SpringerLink
<https://link.springer.com/article/10.1007/s10064-006-0053-2>

# Article summary:

1. The geological evolution and engineering behaviour of soil deposits in the Arabian Gulf coastal region is governed by a hot and arid climate, fluctuating relative humidity, and an alkaline environment.

2. Hydration of anhydrite and dehydration of gypsum lead to alternating volume changes, posing serious engineering problems to both soil and concrete structures.

3. Geological development in the region is influenced by extreme aridity, high ambient temperature, fluctuating relative humidity, and high groundwater salinity.

# 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 provides a comprehensive overview of the geological evolution and engineering behaviour of soil deposits in the Arabian Gulf coastal region. The article is well-researched and provides detailed information on the hydration/dehydration process of anhydrite/gypsum transition in local evaporitic deposits. The article also discusses the associated maximum volume changes due to this process as well as its potential impacts on underground construction projects.

The article appears to be reliable overall; however, there are some potential biases that should be noted. For example, while the article does discuss potential risks associated with anhydrite/gypsum transition in local evaporitic deposits, it does not provide any evidence for these claims or explore any counterarguments that may exist. Additionally, while the article does provide some information on how this process can affect underground construction projects, it does not provide any information on how it can affect other types of construction projects such as bridges or buildings. Furthermore, while the article does mention some case studies related to this topic (e.g., Paint Rock in 1948), it does not provide any additional details about these cases or explore any other similar cases that may exist elsewhere in the world.

In conclusion, while this article appears to be reliable overall, there are some potential biases that should be noted when considering its trustworthiness and reliability. It is important to consider all sides of this issue before making any decisions based on this information.

# Topics for further research:

* Anhydrite/gypsum transition impacts on construction
* Evaporitic deposits and engineering behaviour
* Arabian Gulf coastal region geological evolution
* Maximum volume changes due to hydration/dehydration process
* Underground construction projects and anhydrite/gypsum transition
* Case studies related to anhydrite/gypsum transition

# Report location:

<https://www.fullpicture.app/item/79009b7fab4eaa7a666755ec84ba92b0>