

## VIKING AND CARDIUM DEPOSITIONAL MODEL IN WEST-CENTRAL ALBERTA, CANADA

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The Western Interior Upper Cretaceous basin extends from the Arctic to the Gulf of Mexico. This basin is defined by marine, transitional and non marine environments with a large variety of sand body deposition types.

The Viking and Cardium Formations in west-central Alberta are marine units deposited in shallow waters and overlie marine shale.

Increases in tectonism initiated the Viking and the Cardium sand influx from Western sources. These sediments formed widespread lobes south of the Peace River

Arch. The Viking and Cardium sand bodies are long and narrow, parallel sand bars. Their sedimentation was strongly influenced by tide, climate forces and southward flowing marine currents.