Abstract

Brabantian (BC) Province of the Western margin of North America is host to the world’s largest diamond deposit. The BC Province is characterized by a marked difference in the orientation of the North American continent, with subduction zones and volcanic arcs. Reports from the BC Province indicate that the province is undergoing the processes of subduction, collision, and accretion. The BC Province is located at the boundary between the North American and Pacific plates, which have been moving apart since the Cretaceous Period. The BC Province is characterized by a variety of geological formations, including metamorphic rocks, intrusions, and volcanic rocks. The BC Province is also known for its high-grade metamorphic rocks, which are important for understanding the processes of subduction and accretion.

The Alkaline Province and Diamond Occurrences

The BC Province is characterized by a variety of geological formations, including metamorphic rocks, intrusions, and volcanic rocks. The BC Province is also known for its high-grade metamorphic rocks, which are important for understanding the processes of subduction and accretion.

The DMR Model

The DMR Model is a geological model that predicts the location of diamond deposits. The model is based on the idea that diamonds are formed at great depths in the Earth’s mantle, and that they are subsequently brought to the surface through the subduction of oceanic crust.

The ES Model

The ES Model is a geological model that predicts the location of diamond deposits. The model is based on the idea that diamonds are formed at great depths in the Earth’s mantle, and that they are subsequently brought to the surface through the subduction of oceanic crust.

Diamonds in British Columbia?

- Known diamond occurrences
- Virgin ground for diamond exploration.
- DMR model applies in eastern BC.
- ES model is proposed for west of the Rocky Mountain Trench.
- Diamond placer potential is untested.

Ongoing and Projected Work

- Improved characterization of diamond occurrences in eastern BC through study of staurolite and indicator minerals.
- Detailed geophysical prospecting and mapping to identify new diamond occurrences.
- Improved understanding of the geological setting of diamond occurrences.
- Improved understanding of the processes of subduction and accretion.
- Improved understanding of the role of the BC Province in the formation of diamond deposits.

For More Information
George J. Simandl and Nicole Robinson
For Geology 2004-3

References


For More Information
(250) 952-0413
George.Simandl@gems2.gov.bc.ca

British Columbia (BC) Province of the Western margin of North America is host to the world’s largest diamond deposit. The BC Province is characterized by a marked difference in the orientation of the North American continent, with subduction zones and volcanic arcs. Reports from the BC Province indicate that the province is undergoing the processes of subduction, collision, and accretion. The BC Province is located at the boundary between the North American and Pacific plates, which have been moving apart since the Cretaceous Period. The BC Province is characterized by a variety of geological formations, including metamorphic rocks, intrusions, and volcanic rocks. The BC Province is also known for its high-grade metamorphic rocks, which are important for understanding the processes of subduction and accretion.

The BC Province is characterized by a variety of geological formations, including metamorphic rocks, intrusions, and volcanic rocks. The BC Province is also known for its high-grade metamorphic rocks, which are important for understanding the processes of subduction and accretion.

The DMR Model is a geological model that predicts the location of diamond deposits. The model is based on the idea that diamonds are formed at great depths in the Earth’s mantle, and that they are subsequently brought to the surface through the subduction of oceanic crust.

The ES Model is a geological model that predicts the location of diamond deposits. The model is based on the idea that diamonds are formed at great depths in the Earth’s mantle, and that they are subsequently brought to the surface through the subduction of oceanic crust.

Diamonds in British Columbia?

- Known diamond occurrences
- Virgin ground for diamond exploration.
- DMR model applies in eastern BC.
- ES model is proposed for west of the Rocky Mountain Trench.
- Diamond placer potential is untested.

Ongoing and Projected Work

- Improved characterization of diamond occurrences in eastern BC through study of staurolite and indicator minerals.
- Detailed geophysical prospecting and mapping to identify new diamond occurrences.
- Improved understanding of the geological setting of diamond occurrences.
- Improved understanding of the processes of subduction and accretion.
- Improved understanding of the role of the BC Province in the formation of diamond deposits.

For More Information
George J. Simandl and Nicole Robinson
For Geology 2004-3

References