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The Nature of Kimberlites and Lamproites.

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Kimberlite was coined in the late 19th century to describe the host rock of diamond at the type locality, Kimberley, South Africa. Innumerable kimberlites are now known worldwide; many of them contain economic quantities of diamond while others are barren. Kimberlite was considered to be the only important primary source of diamond for about a century while lamproites were only thought to be academic curiosities. In the late 1970s, prospecting in north Western Australia lead to the discovery of some diamondiferous pipes which were subsequently recognized as lamproites. Of these, the Argyle pipe, is now the richest known primary diamond deposit in terms of grade. At present, only relatively few lamproites are known worldwide, none of which are in Canada.

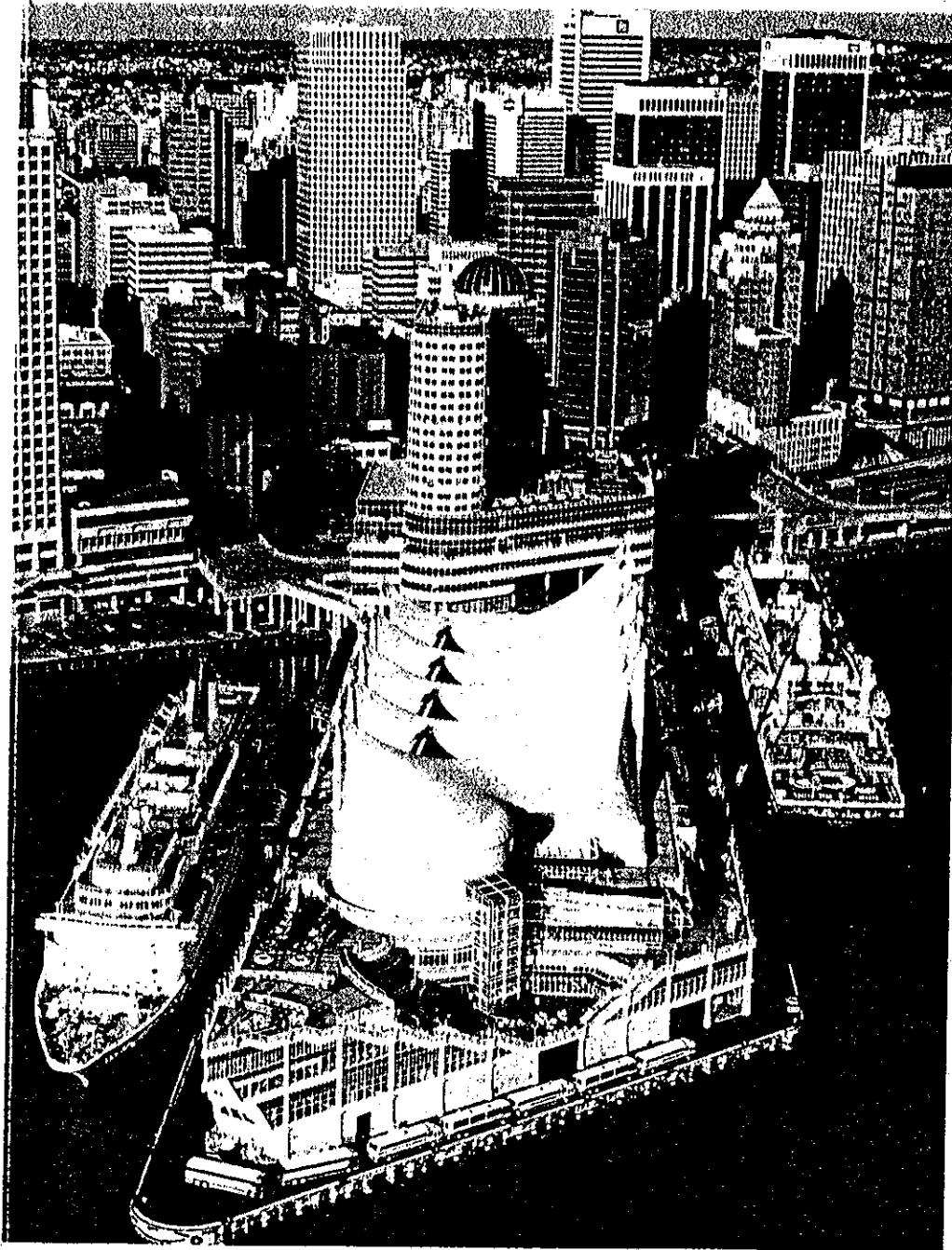
Various aspects of the geology of kimberlites and lamproites will be outlined to show that they are distinct rock types and should be considered separately for both economic and petrogenetic purposes.



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