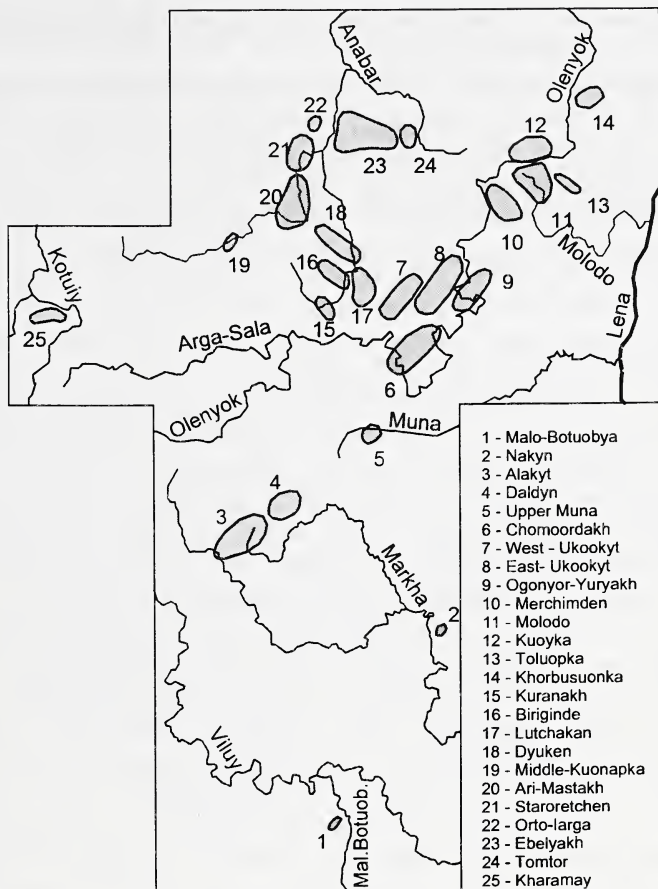


New age of Yakutian kimberlites.

Shamshina E.A., Zaitsev A.I.

Institute of Geological sciences RAS. 39, Lenin av., Yakutsk 677891. Russia

1. The Yakutian kimberlitic province extends for over 1000 kilometres across the Siberian platform northwards from Mirny to the Arctic Ocean. It consists of twenty five kimberlitic fields of diatremes, dykes and other intrusive bodies (Pic).



About 1000 various bodies are disorderly placed there on the area of about 1,5 million sq.km. Most of the kimberlitic fields of the region are polychronic and unite the various facial bodies of 2 - 4 epochs. There are evidences that different parts of some complicated bodies are polichronic and formed in different epochs. Recently Later Devonian - Early Carboniferous kimberlites were more ancient diamondiferous magmatites of the Yakutian kimberlitic province.

2. Nakyn kimberlitic field is one of fields from 25 fields of the Yakutian kimberlitic province.(YKP). It situated in the South - East of YKP. Two kimberlitic pipes Botuobinskaya and Nurbinskaya are located in this field. Within the kimberlitic field, the upper limit of the country rocks intruded by the kimberlites has been assigned to the Early Ordovician. The kimberlitic bodies are overlain by Lower Jurassic

sediments. The ages of autolithic and massive kimberlitic breccia of both pipes were defined by Rb/Sr method in the breccia matrix with microlitic phlogopite. We have got the following results:

Sample	Pipe	Rb/Sr Age
BT - I / 157,5	Botuobinskaya	447 m.y.
BT - II / 177	- " -	446 m.y.
N - 24/24	Nurbinskaya	450 m.y.

The single sample from Botuobinskaya pipe shows the younger age but it was very altered by low temperature processes.

3. Later Ordovician age (450 - 440 m.y.) of Nakyn kimberlitic pipes testifies to the existence of the most ancient epoch of kimberlitic magmatism of YKP. The same epoch of diamondiferous kimberlitic magmatism is fixed for Mengyin and Wafangdian kimberlitic fields of the Sino - Korean craton in China. The presence of Later Ordovician kimberlitic pipes in Nakyn field permits to conclude the more wide - spreading of this epoch in the Yakutian kimberlitic province.