Blue Rare Diamonds found in Cullinan Mine, South Africa

Eye witness News (EWN), South Africa reported the mining of five blue Diamonds from Cullinan mines in South Africa.

It is well known that natural diamonds are formed in the earth mantle in the depths of greater than 140 km. The process is high pressure and relatively low temperature process. Diamonds crystallise from carbon rich fluids while travelling through lithospheric roots. Details of diamond formation and mining are well documented.

Diamonds are crystalline substance of single element carbon which is tetravalent. In the process of their crystallisation, it is possible that its periodic neighbours nitrogen and boron might enter the crystal at trace levels. Presence of Nitrogen or boron lends colour to diamonds, and intensity of colour depends on the impurity atoms concentrations in the carbon atom network.

Diamonds that have nitrogen are categorised as Type I diamonds and absence of nitrogen are called Type II diamonds. In type IIb, those having boron are called type IIb and the presence of boron lends blue colour to diamonds. Type IIb diamonds are extremely rare, attractive and therefore command a high price.The Oppenheimer Blue diamond is one such famous diamond. It is a14.62 carat Vivid Blue diamond.

According to EWN, Petra Diamonds mined five blue diamonds, from Cullinan mines, South Africa. The smallest one is of 9.61cts and the largest one is of 25.75 ct. It is reported that all five diamonds are individual crystals and not from the same rough diamond. All of them are of very high quality and expected to fetch very high price. Earlier recorded blue diamond from this mine was 20.08ct blue diamond and sold for $14.9 million.

References:

1. https://ewn.co.za/2020/09/16/south-african-miner-finds-five-rare-blue-diamonds .
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