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DIAMOND TYPE CLASSIFICATION FOR GIA DIAMOND GRADING REPORT #2131198967

Scientists classify diamonds into two main "types" - type I and type II - based on the presence or absence of nitrogen which can replace carbon atoms in a diamond's atomic structure. These two diamond types can be distinguished on the basis of differences in their chemical and physical properties. Type II diamonds contain little if any nitrogen and they are subdivided into two groups (IIa and IIb) both of which are quite rare (reportedly less than 2% of all gem diamonds fall into the type II category).

According to the records of the GIA Laboratory, the 1.11 carat Round Brilliant diamond described in GIA Diamond Grading Report #2131198967 has been determined to be a **type IIb** diamond. Type IIb diamonds are very rare in nature (from our experience, less than one half of one percent) and contain small amounts of boron that can give rise to a blue or gray coloration. An unusual property of type IIb diamonds is that they are semi-conductors and conduct electricity. Historically, the ancient mines of India produced occasional blue diamonds but today the most significant source is limited to the Cullinan (formerly Premier) Mine in South Africa.

Among famous gem diamonds, the 70.21 carat Idol's Eye and the 45.52 carat Hope are examples of type IIb.