GIA® Diamond Origin

LESOTHO

Billion Years

More than a billion years ago, 100 miles (161 km) or more beneath the earth's surface, in a cauldron of extreme temperatures and high pressure, carbon atoms bonded tightly together. At temperatures higher than 2100 °F (1150 °C) and pressures 45,000 times greater than at sea level, crystals formed, resulting in the hardest natural mineral on Earth: diamond.

Diamonds remained hidden deep within the earth for hundreds of millions of years, until volcanic activity violently transported them upwards towards the earth's surface in magma. Vertical rock formations, called "kimberlite pipes," are remnants of these ancient volcanoes. Erosion subsequently frees rough diamonds from their host rock to be transported by rivers and deposited sometimes at great distances, from their original source. Miners in places like India and Brazil would uncover them in alluvial deposits. Today, most diamonds are found in kimberlite pipes, which are the primary source of mined diamonds.

The discovery of a kimberlite pipe in South Africa in 1869 marks the beginning of the modern diamond industry. With it came the development of mining operations that produce tens of millions of carats of rough diamonds each year - that includes a major discovery in Botswana in 1967, as well as other areas of Africa, Australia, Siberia and the Northwest Territories of Canada.

Incredible Birth

The Kingdom of Lesotho is nestled high in the mountains of southern Africa. This small nation, often referred to as the "Kingdom in the Sky," is completely surrounded by the country of South Africa. It is legendary for producing some of the largest high value diamonds in the world.

Diamond mining has taken place in Lesotho for decades, but due to the remoteness of the mines, the rugged and mountainous landscape and high altitude, it has always been difficult, limited and expensive. It was not until recently that infrastructure has been improved to allow diamond mining in these areas to develop.

The Letšeng-la-Terae kimberlite pipes were discovered high in the Maloti Mountains (at an elevation of 3100 meters above sea level in the northern territory of Lesotho) in 1957 by a South African geologist. These kimberlite pipes were unusual in that they contained very large, high value diamonds, but its ore grade (the overall concentration of diamonds in the ore body) was very low.

In 2006, the 603 carat Lesotho Promise was recovered and subsequently six other high quality diamonds above 300 carats have been found.

In 2018, one of the largest diamonds in history, weighing 910 carats, was recovered at the Letšeng mine. This exceptional top-quality D colour, Type IIa rough diamond was the fifth largest gem quality diamond found at the time and the largest diamond to be recovered at Letšeng. This magnificent and historically significant diamond later sold for US\$40 million and was named the Lesotho Legend to celebrate its country of origin.

Today, Lesotho is the world's leading producer of very large, high value white (D-to-Z grade) diamonds, and is also known for producing diamonds of color. The average US\$ per carat value of diamonds from the Letšeng mine was over 20 times that of the world average in 2018.



Transformation Journey

The transformation of diamond rough into polished stones requires a blend of oldworld craftsmanship and high-tech tools. Today, Surat, India is the primary diamond cutting and polishing center. Other cutting centers historically have included New York, Antwerp and Tel Aviv.

The hardness of the material requires highly trained artisans who use specialized saws, laser equipment and polishing tools to complete the task in stages. Traditionally, cutters fashioned the rough into a finished stone by hand. Today, computer imaging and lasers aid the cutter in revealing the stone's beauty. First, the diamond cutter must assess the rough to determine how to cut the most beautiful diamond – or diamonds, as one piece of rough can yield multiple finished diamonds. To achieve the greatest yield, each cutter must decide whether a round, rectangular, pear, marquise or square gem can best be fashioned from the rough. The gem's sparkle is unleashed through a series of processes including shaping, faceting and polishing.

GIA and other diamond grading labs evaluate the quality of polished diamonds using the 4Cs of Diamond Quality (Color, Clarity, Cut and Carat Weight), the international standard created by GIA, and issue grading reports documenting their assessment. The GIA Diamond Origin Report for your diamond includes this independent and objective analysis in addition to confirming the country of its origin.

Doing Good

Diamonds and the textile industry make up almost the entire export economy of Lesotho, a country of about two million citizens. While these industries are growing, they are still in the early stages of development. Lesotho itself is a developing country with high rates of poverty and it ranks 159th out of 189 countries on the United Nations' Human Development Index. However, through taxes, royalties and revenue generated by the growing diamond mining industry of Lesotho, the potential for a brighter future exists.

In 2015, mining production in Lesotho totaled only 304,000 carats – a low output in comparison to other diamond producing nations. That same year, the Lesotho government adopted the Minerals and Mining Policy – marking the first time that the country had developed a policy specifically focused on its mineral resources sector, while it also began enacting legal reforms to modernize minerals legislation.

These steps, combined with growing mining operations and partnerships, quadrupled production in only three years, creating a path to success for the nation and its people.







Doing Good

Diamond mining is the largest private sector employer in the country, employing thousands of people, the vast majority of which are national citizens. The Lesotho mines use technically advanced processes for diamond extraction and local workers receive extensive training on subjects including mining, geology, metallurgy, IT and X-ray technology that is used in the mining and treatment processes.

Diamond mining has also contributed greatly to infrastructure development in the region. Diamond mining companies have developed an extensive network of roads and community services in some of the most remote and rugged areas of the country. These projects have enabled isolated communities to have greater access to health care, education and employment. The industry offers scholarships and internships to university students wanting to further their studies and also invests in primary and secondary education through the construction of schools in communities with failing infrastructure.

The industry has also invested extensively in agricultural and socio-economic projects that help develop local farmers and assist communities. This brings much needed benefits and skills to the country and its people. Each year diamond mining companies further contribute to the economy by purchasing supplies and food from locally-owned businesses.

Diamond mining in Lesotho directly contributes to the continued growth and development of a country whose future potential is closely aligned with its beautiful product.



Every diamond has a story. Now make this story part of your own.

About GIA

The Gemological Institute of America[®] is internationally recognized as the leader in gem education, research and laboratory services. Committed to protecting all purchasers of gemstones and jewelry, the Institute developed the International Diamond Grading System[™] and the 4Cs of diamond quality, and continues to set the standard for grading and identification practices used all over the world.



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