



## GEMMOLOGICAL REPORT

**Report Number**  
19080068

**Colour**  
blue

**Date**  
27 August 2019

**Species**  
Natural corundum

**Item**  
One faceted gemstone

**Variety**  
Sapphire

**Weight**  
4.05 ct

**Origin**  
Madagascar

**Shape**  
octagonal

**Condition**  
No indications of heating (NTE).

**Cut**  
step cut

**Comments**  
See Information Sheet(s).

**Measurements**  
10.13 x 6.89 x 5.84 mm

Important notes and limitations on the reverse.

**Transparency**  
transparent



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## INFORMATION SHEET

to Report No. 19080068

### Unheated sapphires

Large sapphires of gem-quality are rarely found in nature. Not only is a delicate mineralogical balance essential for this blue variety of corundum to be formed deep within the earth, but specific geological conditions as well as adequate pressure and temperature must also be present. Furthermore, the sufficient supply of a rare combination of chemical elements, such as aluminium, iron and titanium, are yet another necessity required for the formation of sapphires.

Over the past decades, various heating techniques, as well as the use of chemical additives, have become increasingly sophisticated to raise the supply of sapphires resembling the high-quality untreated specimens. The aim of these treatments was and still is to improve the visual appearance of the gemstones.

Prior to the advent of modern heating techniques, rough sapphires were cut and polished retaining the quality that nature had originally endowed them with. Therefore, in earlier times, sapphires with obvious imperfections were considered and accepted as the norm. However, the expectations with respect to quality (colour and transparency) rose steadily ever since.

The demand for natural, unheated sapphires keeps growing while the supply of such gems remains limited, making natural sapphires of gem-quality from all major sources (such as Kashmir, Burma (Myanmar), Sri Lanka, Madagascar and Tanzania) difficult to find.

Information Sheets are intended to provide information supplementary to the contents of the Report and comment on, for instance, the type of gemstone, the geographic origin and the presence or absence of treatments. By definition, Information Sheets are purely informative in nature: they consist of a standard text and are issued for all types of stones of that particular category. Information Sheets, therefore, do not imply a certain quality or rarity of the stone described in the Gübelin Gem Lab Report which it is attached to.