



## GEMMOLOGICAL REPORT

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**Report Number**

16110124

**Colour**

red

**Date**

13 December 2016

**Species**

Natural corundum

**Item**

One faceted gemstone

**Variety**

Ruby

**Weight**

1.71 ct

**Origin**

Mozambique

**Shape**

oval

**Condition**

Indications of heating (TE).

**Cut**

brilliant cut / step cut

**Comments**

See Information Sheet(s).

**Measurements**

7.18 x 6.09 x 4.52 mm

Important notes and limitations on the reverse.

**Transparency**

transparent

  
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Alessandra Spingardi



INFORMATION SHEET  
to Report No. 16110124

Rubies from Mozambique

Mozambique is located in South Eastern Africa, bordered by the Indian Ocean on the East and in the North by Tanzania, Malawi and Zambia. In the West and South it is bordering Zimbabwe, South Africa and Swaziland. Mozambique is divided by the majestic Zambezi River. While the low lands to the South of the Zambezi River are mainly sedimentary, the highlands in the North are dominated by rocks belonging to the Precambrian crystalline basement, which is intersected by the famous gem-rich Mozambique Belt running North - South through East Africa.

Mozambique has always been an important source of coloured stones such as tourmaline, aquamarine and garnet. Corundum has been known in Mozambique since the Portuguese colonial times, but only since September 2008 larger amounts of rubies entered the market. These come from two new mines in the Msawizi area of Niassa Province and Montepuez in the Cabo Delgado Province.

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.

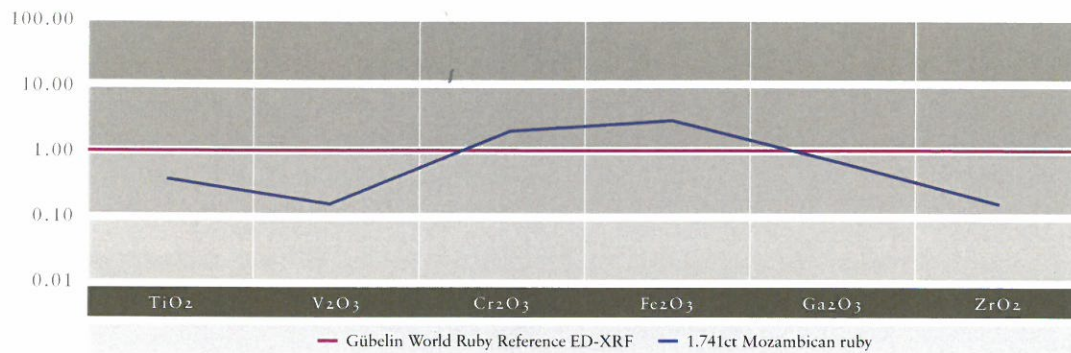


FOR A  
MOZAMBICAN RUBY  
OF  
1.71 CT

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COMPLEMENTING

GEMMOLOGICAL REPORT  
NO. 16110124



Trace element pattern for the 1.71 ct Mozambican ruby, gathered by energy dispersive X-ray fluorescence (ED-XRF) spectrometry. The blue line shows the deviations of a selection of trace element concentrations in comparison to the normalised Gübelin World Ruby Reference, shown in red.

#### CHEMICAL FEATURES

Sophisticated analytical techniques<sup>3</sup> measure the concentration of chemical elements in gems. Aside from the main and trace elements, gemstones also contain other elements present in even smaller concentrations of a few parts per million. These trace elements typically do not have any significant influence on the appearance of the gemstone, but they shed light on the environment in which it grew

thousands, millions or even billions of years ago. The type and amount of these elements in a gemstone are often indicative of a specific location and are used by gem labs to determine its country of origin.

<sup>3</sup> For more information about the applied analytical methods see [gubelingemlab.com](http://gubelingemlab.com)