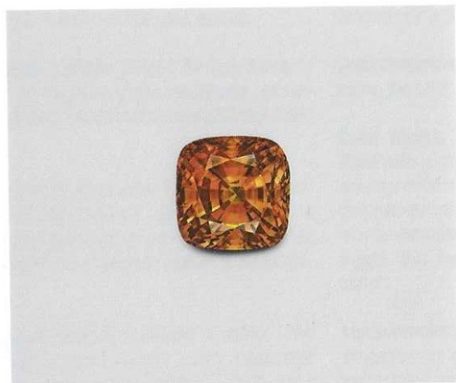


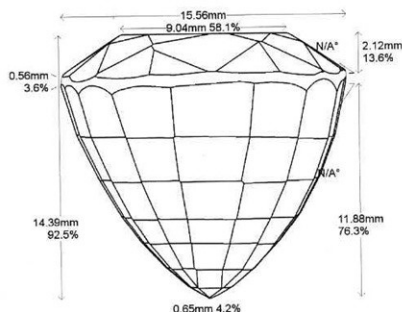
The Prestige Gemstone Report™

American Gemological Laboratories®



Images do not accurately portray size or color.

Accu-Vu™ Imaging:



Comments:

General Report Comments:

American Gemological Laboratories
580 Fifth Avenue • New York, NY 10036 • 212.704.0727 • www.agilgemlab.com
(Please see the back of this document for important disclaimer information) © 2021 AGL

Document No: 1111780

Validation Date: 3 February 2021

Identification

Mineral Type: Natural Zircon
Variety:

Transparency: Transparent
Color Description: Orange

Carat Weight: 40.67 cts
Measurements: 15.78 x 15.56 x 14.39 mm

Shape: Square Cushion
Cutting Style: Mixed Cut

Comments: The unusual combination of size, fine cutting and quality factors present in this material contributes favorably to its rarity and desirability.

Enhancement

Standard: See comments
Stability Index: Color Stability: Excellent

Additional: Clarity enhancement: None

Comments: This color of zircon may be the result of a relatively low temperature heating process.

1	2	3	4	5	6	7	8	9	10
Excellent	Very Good	Good	Fair	Poor					

Enhancement Stability Index™

None	Insignificant	Minor	Moderate	Strong	Prominent
Extremely Rare	Very Rare	Rare	Uncommon	Common	Very Common

Degree of Clarity Enhancement & Relative Rarity™

M. Chaipaksa
Monruedee Chaipaksa, Senior Gemologist

Christopher P. Smith
Christopher P. Smith, President





AMERICAN GEMOLOGICAL LABORATORIES

3 February 2021

Natural Orange Zircon

Weight: 40.67 cts

Reference: 1111780

To Whom It May Concern,

Zircon is one of the most historically significant gemstones. Throughout history there are references to it as a highly cherished gemstone. This tradition continues through to modern times, where certain colors and sizes of zircon are quite rare and equally appreciated. As a tribute to its appreciation, zircon has also been designated as the birthstone for the month of December.

The modern derivation of the mineral name *zirkon* (zircon in English) comes from noted German geologist Abraham Gottlob Werner in 1783. Earlier references to the mineral come from the Arabic "*zar*" for gold or golden and "*gun*" for color or colored ("*azargun*" in Persian). Derived from the ancient Greek λυγκύριον (or *lynkýrion*) dating back to approximately 300 BCE.

Zircon is a zirconium silicate mineral with a chemical composition of ZrSiO_4 . Originally formed by crystallization from magma or in metamorphic rocks, zircon comprises some of the oldest minerals in terms of geologic history with grains of zircon recovered from a sandstone in western Australia dating back to approximately 4.2 to 4.3 billion years. The mineral zircon typically contains rare-earth and radioactive elements as part of its chemical makeup. It is these unique elements that permit the 'age' of a zircon to be determined. They also imbue an intriguing trait in which the mineral will naturally transform from a doubly refractive, crystalline state to a singly refractive, amorphous one. This process is known as 'metamictization'.

Zircon comes in a broad array of colors, including golden yellows, champagne browns, cerulean blues, forest greens, cinnamon reds, as well as colorless (or white). In general, the brighter and more richly saturated its color, the rarer and more valuable the gem. In addition to these is one of the more intriguing colors: those of a vibrant orange hue.



AMERICAN GEMOLOGICAL LABORATORIES

The exceptional 40.67 carat natural zircon described in AGL Report No. 1111780 is one of these remarkable rarities. In addition to its extraordinary size, this beautiful zircon possesses a vibrant orange color and very high clarity. Minute traces of the elements vanadium (V) and chromium (Cr) add an intriguing character to the color of this remarkable gem and instill a subtle color-shift when the gem is viewed under the different lighting conditions of incandescent to fluorescent illumination. The striking color of this gem is further complemented by a very fine cut resulting in many internal color reflections and a high degree of brilliance.

The AGL examination also included a comparative study of all the various quality parameters that define a gemstone. AGL has developed a unique Total Quality Integration Rating™ or TQIR, which is designed as a summary statement that indicates the overall quality of a particular gem type in its size category. All of the factors that contribute to the overall quality and rarity of a gem are combined into this easy to use and understand statement. The orange zircon described in this report received the highest and most prestigious TQIR classification of Exceptional. This rating category is reserved for only a very limited number of gemstones. Orange zircons of such a large size, possessing such a vibrant color, high clarity and superior cutting are very rare. To further emphasize this point, the present gem is the finest zircon of this specific color and in this large size, that the AGL has examined to date.

Sincerely,

A handwritten signature in black ink, which appears to read "Christopher P. Smith".

Christopher P. Smith, President
American Gemological Laboratories LLC