



# EVERLEDGER AND GÜBELIN

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## Challenge

Around 80%-90% of gemstones are mined by small companies or individuals. This decentralisation makes it difficult to surface reliable information about a gemstone's origin, environmental impact, quality and processing. It leaves industry stakeholders having to often make decisions without clear knowledge of where a stone has been, the legacy it's left behind, or even key characteristics of a stone.

## Solution

Gübelin Gem Lab partnered with us to launch the Provenance Proof Blockchain to improve traceability in the industry. Through the blockchain technology of this platform, coupled with Gübelin's Emerald Paternity Test, it's now possible to evidence a stone's birthplace and trace its journey across the value chain. The Emerald Paternity Test uses DNA-based, nano-sized particles encoded with the mine's information to tackle the issue of a stone's origin. Applied on the gemstone at the source, it enables the full traceability of a stone's birthplace throughout its lifetime via immutable records on the blockchain.

The information converged from nanotechnology is securely stored on the industry's first blockchain for coloured gemstones. A gemstone supported by this initiative is now accompanied throughout its journey by a digital log on the blockchain. The steps in this journey – indicating important details such as the chain of custody – can be entered on the log, where they become secure and unalterable.

The user experience is also an important factor that facilitates the adoption of this solution by all players in the industry - from artisanal miners, to manufacturers, to jewellery brands, to end consumers. A smartphone can be used for all processes, such as KYC checks, registration and the upload of data. This ensures that the use of the Provenance Proof Blockchain is a truly inclusive solution, convenient for all types and sizes of stakeholders.

## Results

The first coloured gemstone was registered on the blockchain during the AGTA GemFair Tucson trade show in February 2019.

With the Provenance Proof Blockchain solution open to the entire industry, the origin of any coloured gemstone can now be securely tracked and authenticated. The transparency this brings to the supply chain makes it increasingly difficult for fraudsters and irresponsible businesses to benefit from the shroud of darkness. In doing so, it offers trust and confidence for those who seek to do things right.

All stakeholders in the industry are welcome to join this initiative, and can do so, remarkably, at no cost: there are no charges for the use of this blockchain solution. Both the data contribution and access are completely free of charge. The Gübelin family has been proud to make this contribution to foster transparency in the gemstone industry, and Everledger is happy to enable this vision with cutting edge technology.

For more information, please visit: [www.provenanceproof.io](http://www.provenanceproof.io)