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PRESS RELEASE - FOR IMMEDIATE RELEASE

Potential Fraud Alert: Synthetic Diamonds Threaten Italian Market with Inconsistent GIA Certificates

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Marcianise, Italy — December 18, 2023 — A potential scam involving synthetic diamonds with inconsistent GIA certificates, which could affect a significant number of stones, is threatening the Italian market. On December 12, 2023, our gemological analysis laboratory, Gem-Tech, located at the Oromare Jewelry Center in Marcianise, received three colorless stones for verification. Each stone was accompanied by a GIA (Gemological Institute of America) report describing them as *"natural diamonds".*

The GIA diamond grading reports are as follows: No. 1453958766 dated March 7, 2023, No. 1468722407 dated May 30, 2023, and No. 1465483151 dated May 2, 2023.

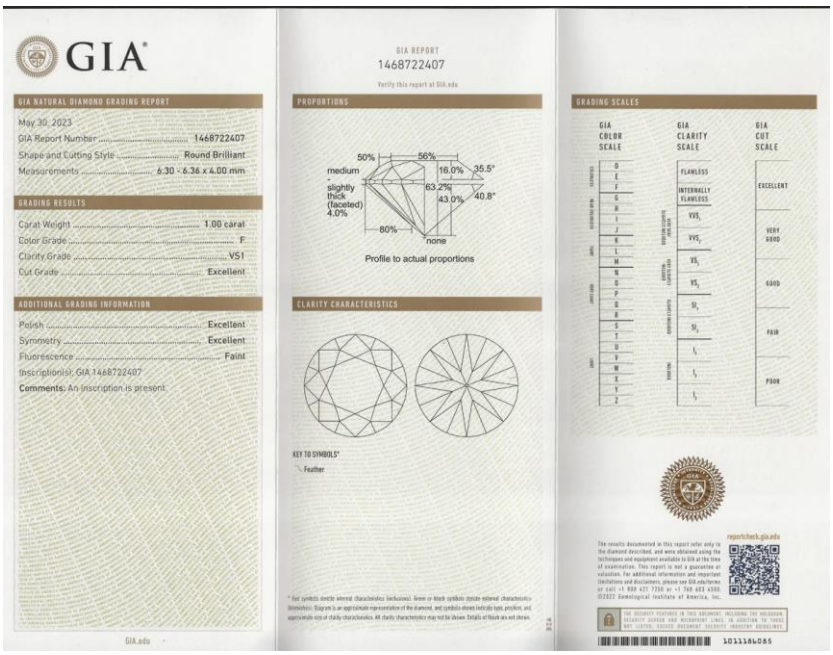


Photo 001 – Diamond Grading Report GIA no. 1468722407. (Photo: Gem-Tech)

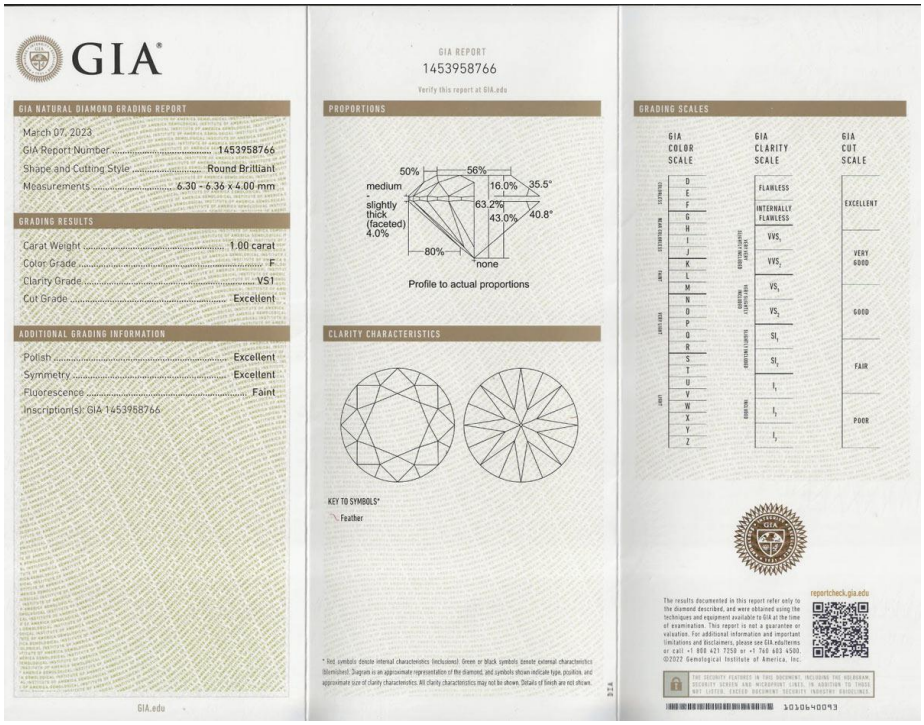


Photo 002 – Diamond Grading Report GIA no. 1453958766. (Photo: Gem-Tech)

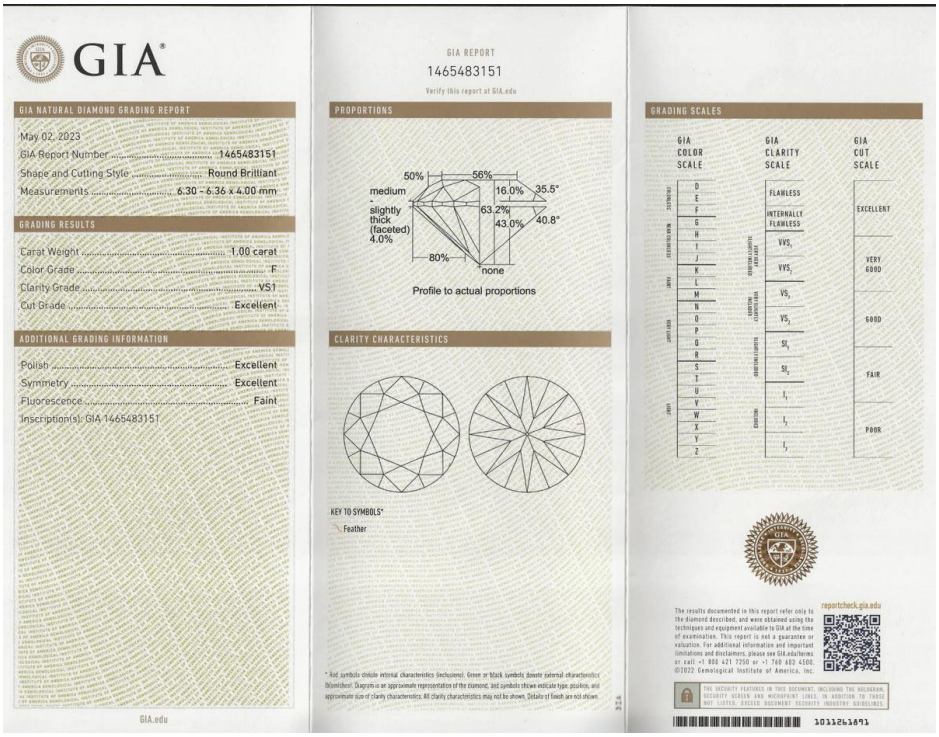
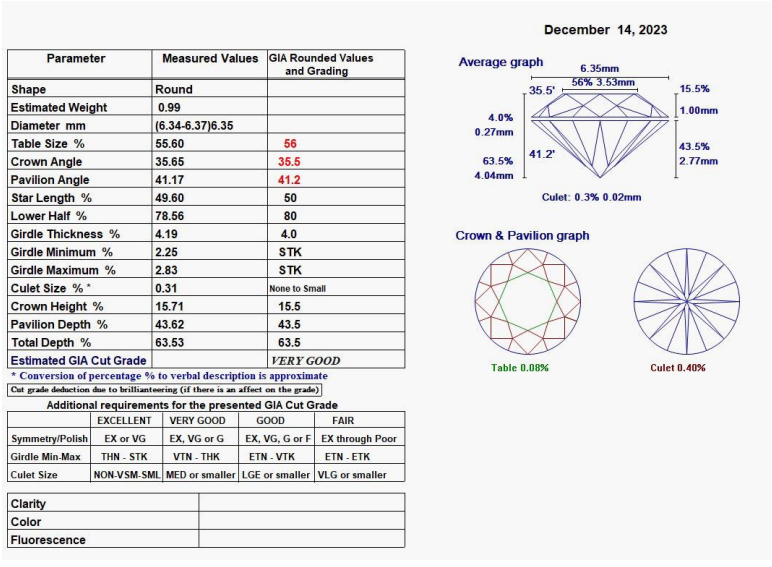


Photo 003 – Diamond Grading Report GIA no. 1465483151. (Photo: Gem-Tech)

Following standard procedures, the weight was recorded and verified to be accurate to within one hundredth of a carat. The proportions were then evaluated using the Ogi System Megascan proportiometer. The data, as shown in the attached photos, were very similar to those described, sometimes with minor discrepancies that could be explained by the tolerance due to different instrument settings. The measurements, including minimum diameter, maximum diameter, and height, were essentially identical.



Parameter	Measured Values	GIA Rounded Values and Grading
Shape	Round	
Estimated Weight	0.99	
Diameter mm	(6.34-6.37)6.35	
Table Size %	55.60	56
Crown Angle	35.65	35.5
Pavilion Angle	41.17	41.2
Star Length %	49.60	50
Lower Half %	78.56	80
Girdle Thickness %	4.19	4.0
Girdle Minimum %	2.25	STK
Girdle Maximum %	2.83	STK
Culet Size % *	0.31	None to Small
Crown Height %	15.71	15.5
Pavilion Depth %	43.62	43.5
Total Depth %	63.53	63.5
Estimated GIA Cut Grade		*VERY GOOD*

* Conversion of percentage % to verbal description is approximate
Cut grade deduction due to brilliantcering (if there is an affect on the grade)

Additional requirements for the presented GIA Cut Grade

	EXCELLENT	VERY GOOD	GOOD	FAIR
Symmetry/Polish	EX or VG	EX, VG or G	EX, VG, G or F	EX through Poor
Girdle Min-Max	THN - STK	VTN - THK	ETN - VTK	ETN - ETK
Culet Size	NON-VSM-SML	MED or smaller	LGE or smaller	VLG or smaller

Clarity	
Color	
Fluorescence	

Photo 004 – Proportion data as detected by Gem-Tech. (Photo: Gem-Tech)

Next, we examined the laser markings on the stones under a microscope and found a visible GIA logo that appeared to be identical to that often observed in GIA's grading of laser-marked diamonds.

Photo 005 – Laser inscription of one of the stones examined by the Gem-Tech laboratory with a visible GIA logo that appeared to be identical to the original. (Photo: Gem-Tech)

Photo 006 – Laser inscription with the original GIA Logo in a picture released in a GIA Press Release on February 23, 2021. (Photo: GIA)

However, when the stones were exposed to UV light to detect fluorescence, an anomaly became apparent. The stones in question were absolutely inert, whereas the GIA documents described the fluorescence as *"faint"*.

We then subjected the gems to spectrophotometric analysis using the Magilabs EXA spectrometer. They exhibited a distinct greenish coloration and produced photoluminescence reaction spectra with an emission peak at 737 nm, typical of an SiV structural defect commonly found in CVD-type synthetic diamonds.

Photo 007 – (Photo: Gem-Tech)

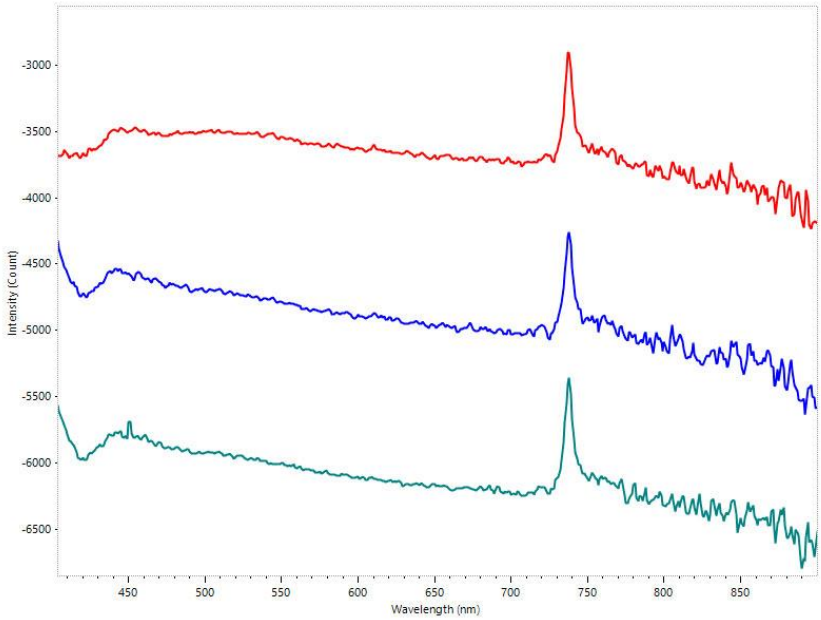


Photo 008 – Fluorescence spectra of the three stones examined, in the order: no. 1453958766, no. 1468722407 and no. 1465483151. (Photo: Gem-Tech)

Although this defect has been observed in a statistically insignificant number of natural diamonds, the diamonds examined did not exhibit any internal characteristics that could have caused the presence of the silicon impurity (Gems & Gemology, Winter 2013, Vol. 49, No. 4).

It was then confirmed that the stones in question were CVD synthetic diamonds. A quick check of the GIA website found the reports that had been sent to us in paper form online. Apparently, these reports were for other stones, undoubtedly GIA-certified natural diamonds, and were not issued to accompany the stones that were actually delivered to our lab.

The discrepancies, however slight, in the proportion measurements and fluorescence detection, together with the undisputed prestige and competence of the American Institute, support the assertion that the stones examined by Gem-Tech are not the stones present on the GIA online platform.

Gem-Tech has seen this happen before. It would not be the first time that malicious individuals have legitimately obtained reprints of authentic reports and paired them with stones other than those described. Furthermore, cloning a document by forging the type of paper backing and authentication systems is not particularly complex. The technology to laser-engrave any logo is now available to many, making it less secure. As a result, new, more sophisticated systems are appearing on the market. These systems are virtually impossible to counterfeit because they are based on laser inscription beneath the surface of the diamond.
Gem-Tech has discussed this apparent case of fraud with colleagues and clients in the gemological community who suggest that the three stones identified by the GIA report numbers may be part of lists offered to many dealers.

It is therefore entirely plausible that a significant number of CVD synthetic diamonds, even those weighing less than one carat, have been circulating in Italy for several months, accompanied by GIA reports issued in reference to other natural gemstones.

IMAGE CAPTIONS AND CREDITS

Photo 001 – Diamond Grading Report GIA no. 1468722407. (Photo: Gem-Tech)
Photo 002 – Diamond Grading Report GIA no. 1453958766. (Photo: Gem-Tech)
Photo 003 – Diamond Grading Report GIA no. 1465483151. (Photo: Gem-Tech)
Photo 004 – Proportion data as detected by Gem-Tech. (Photo: Gem-Tech)
Photo 005 – Laser inscription of one of the stones examined by the Gem-Tech laboratory with a visible GIA logo that appeared to be identical to the original. (Photo: Gem-Tech)
Photo 006 – Laser inscription with the original GIA Logo in a picture released in a GIA Press Release on February 23, 2021. (Photo: GIA)
Photo 007 – (Photo: Gem-Tech)

Photo 008 – Fluorescence spectra of the three stones examined, in the order: no. 1453958766, no. 1468722407 and no. 1465483151. (Photo: Gem-Tech)

FOCUS ON: GEM-TECH

Gem-Tech is an independent Institute for research, education and identification in gemology established in Italy in 2011. Since then it proved to be one of the most active centers for scientific gemology in Italy operating in the fields of education, identification and management of meetings and scientific conferences in Gemological issues.

Since 2013 the Gemological Institute has started collaborations with several academic institutions. In 2011 the Institute contributed to the Congress, "Diamond trade. Conflicts, ethics and market", held by "Orientale" University on gemstone responsibility policies and on the evaluation of Kimberley Process. In 2013 the Congress of Scientific Gemology CIGES 2013 was organized by Gem-Tech at the Museum of Mineralogy in Naples.

In 2016 Gem-Tech is in charge of the management of the scientific contents of the Italian Gemological Review (IGR), the most important and respected Italian Gemological Magazine to which also many internationally famous and authoritative gemologist regularly contribute.

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