

CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Gem Certification & Assurance Lab (GCAL USA, LLC) d.b.a. GCAL by Sarine

580 Fifth Avenue, 27th Floor New York, NY 10036

Fulfills the requirements of

ISO/IEC 17025:2017

and

ANAB NON-FORENSIC TESTING - AR 2250 ANAB FORENSIC TESTING & CALIBRATION - AR 3125:2023

In the field of

TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.

The current scope of accreditation can be verified at www.anab.org.

Jason Stine, Vice President

Expiry Date: 18 July 2026 Certificate Number: L2177-1









SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 ANAB NON-FORENSIC TESTING - AR 2250 ANAB FORENSIC TESTING & CALIBRATION - AR 3125:2023

Gem Certification & Assurance Lab (GCAL USA, LLC) d.b.a. GCAL by Sarine

580 Fifth Avenue, 27th Floor New York, NY 10036

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TESTING

Valid to: July 18, 2026 Certificate Number: L2177-1

NON-FORENSIC TESTING

Chemical

Version 007 Issued: July 31, 2023

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Gemstone Identification	GCAL Procedure GP-54010	Lab Grown, Treated, or Natural Diamonds and Gemstones	Stereo Microscopes with Digital Bases / Immersion Microscope / Refractometer
UV and Visible Spectroscopy	GCAL Procedure GP-54001 GP-54010	Lab Grown, Treated, or Natural Diamonds and Gemstones	UV-Vis-NIR Spectrometer
Shortwave Ultraviolet Light and Video Capture (Analysis of Growth Morphology)	GCAL Procedure GP-54010	Lab Grown, Treated, or Natural Diamonds and Gemstones	Surface Fluorescence Illumination with Shortwave Ultraviolet Light and Magnified Image Capture
FTIR Spectroscopy (Identification of impurities)	GCAL Procedure GP-54010	Lab Grown, Treated, or Natural Diamonds and Gemstones	Fourier-Transform Infrared Spectrophotometer, with LN2 capability

ANSI National Accreditation Board



Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Raman and Photoluminescence Spectroscopy	GCAL Procedure GP-54010	Lab Gr <mark>ow</mark> n, Treated, or Natural Diamonds and Gemstones	Photoluminescence and Raman Spectrometer, with LN2 capability
Metal Testing & Analysis	GCAL Procedure GP-54011	Jewelry, Watches, Ornaments, Objects d'Art, Coins, Bullion, Scrap	Energy dispersive X-ray fluorescence (EDXRF)

Mechanical / Physical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Microscopic Clarity Analysis	GCAL Procedure GP-54004 GP-54021	Lab Grown, Treated, or Natural Diamonds and Gemstones	Microscopic Examination of Gemstones Sarine Clarity Instrument
Gemstone Weight (in Carats)	GCAL P <mark>rocedure</mark> GP-54001	Lab Grown, Treated, or Natural Diamonds and Gemstones	Gemstone Scale
Laser Optical Reflective Identification	GCAL Procedure GP-54002	Lab Grown, Treated, or Natural Diamonds and Gemstones	Gemprint Instrument
Color Analysis & Grading	GCAL Procedure GP-54005 GP-54020	Lab Grown, Treated, or Natural Diamonds and Gemstones	Visual Analysis Master Reference Sets Sarine Color Instrument
Fancy Color Diamond Grading & Analysis	GCAL Procedure GP-54012	Lab Grown, Treated, or Natural Diamonds and Gemstones	Visual Analysis
Ultraviolet Fluorescence Analysis	GCAL Procedure GP-54005	Lab Grown, Treated, or Natural Diamonds and Gemstones	Visual Analysis
Optical Scanning Measurements	GCAL Procedure GP-54001	Lab Grown, Treated, or Natural Diamonds and Gemstones	Optical Scanning Measuring Device
Optical Brilliance & Optical Symmetry Light Performance	GCAL Procedure GP-54003	Lab Grown, Treated, or Natural Diamonds and Gemstones	Photographic Computer Analysis of Optical Light Performance
Laser Inscription Diamonds	GCAL Procedure GP-54008	Lab Grown, Treated, or Natural Diamonds and Gemstones	Excimer Laser Inscription (Diamond)





Mechanical / Physical

Specific Tests and/or	Specification, Standard,	Items, Materials or	Key Equipment or
Properties Measured	Method, or Test Technique	Product Tested	Technology
Micro Photography	GCAL Procedure GP-54003	Lab Grown, Treated, or Natural Diamonds and Gemstones	Shape and Inclusion Imaging

FORENSIC TESTING

Discipline: Materials (Trace)			
Component/Parameter	Item	Key Equipment/Technology	
Qualitative Determination	Gemstone Metal	Fluorescence Spectroscopy General Microscopy Infrared Spectroscopy Measuring Equipment Raman Spectroscopy Ultraviolet Spectroscopy Visible Spectroscopy Visual X-ray Fluorescence Spectroscopy	
Weight Measurement	Gemstone	Scale	

Note:

- 1. This scope is formatted as part of a single document including Certificate of Accreditation No. L2177-1.
- 2. When published on a forensic service provider's Scope of Accreditation, ANAB has confirmed the competence required to develop and validate methods and perform on-going quality assurance for accredited activities. For a listed component/parameter, the forensic service provider may add or modify methods for activities without formal notice to ANAB for items and key equipment/technology listed. Contact the forensic service provider for information on the method utilized for accredited work.



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