

Colored Stone Checklist
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Grader

- Graduate Gemologist (GG)
- Gemologist
- Fellow of the Gemological Association of Great Britain (FGA)
- No Gemological Title
- Independent Gemological Laboratory (GIA, GRS, AGTA, etc.)
- Grading System Used and described

Grading Equipment

- Fully corrected binocular microscope (10-60x)
- Fully corrected 10x triplet loupe
- Darkfield loupe
- Diamond Light
- 5000° - 5600° Kelvin temperature light
- Pen light
- Long and short wave ultraviolet light
- Fiber optic light
- Colored Grading System (e.g. GemDialogue, GIA Gem Set)
- Electronic Gemstone Balance (must read to .001ct)
- Leveridge gauge or micrometer
- Digital Refractometer
- Brewster Angle Refractometer
- Thermal Conductivity Tester
- Specific Gravity Fluids
- Hydrostatic Scale
- Polariscope with interference sphere
- Spectroscope
- Dichroscope
- Specific Gravity liquids
- Methylene iodide
- Filters and lenses
- Proportion analyzer
- Polarizing Filters

THE MAJORITY OF COLORED GEMSTONES HAVE BEEN ENHANCED

How stones are set must be included (bezel, 6 prong, channel, etc.)

Color ~ Minor

- Weight
- Shape (round, oval, cushion, etc.)
- Faceting (mixed, brilliant, cabochon, etc.)
- Physical Measurements (LxWxD)
- Clarity
- Color (using recognized grading system “color blue” is not adequate)
- Cut Grade
- Origin (if known and relevant)
- Enhancements (irradiation, fracture filling, dying, etc.)

Color ~ Major

- Weight**
- Shape (round, oval, cushion, etc.)**
- Faceting (mixed, brilliant, cabochon, etc.)**

- Physical Measurements (LxWxD)**
- Clarity**
- Color (using recognized grading system “color blue” is not adequate)**
- Cut Grade**
- Plot of stone with key**
- Origin (if known and relevant)**
- Enhancements (irradiation, fracture filling, dying, etc.)**
- Laboratory Grading Report Number (e.g. GRS# 1234567)**

Phenomenal Gemstones: All of the above information plus as follows;

Asterism: (stars)

- Number of rays (4, 6, 8, etc.)**
- Brightness of rays**
- Sharpness of rays**
- Straightness of rays**

Chatoyancy: (cat’s eye effect)

- Brightness of eye**
- Sharpness of eye**
- Straightness of eye**
- Open and close effect**
- Milk and Honey effect**

Color Change or Color Shift:

- Secondary Colors in other lighting**
- Percentage of color change**
- Strength of color change**

Play of Color: (Opals)

- Brightness of Fire (1-5)**
- Fire Color (blue, blue-green, multi, etc.)**
- Fire Pattern (pinfire, harlequin, broad flashfire, etc.)**
- Crazing**
- Consistency**
- Directionality**

Special Considerations:

Cameo's and Carvings;

- Description of subject of carving
- Quality of carving
- Signed Carving (artist signature)
- Dimension of carving

Jadeite:

- A (natural *tested with F.T.I.R., (Fourier transform, infra-red, spectroscope))
- B (acid "bleached" and polymer impregnated)
- C (dye impregnated)
- D (acid "bleached", dyed, and polymer impregnated)

***NOTE: testing for B jade cannot be done using standard gemological equipment**

Synthetic Gemstones:

- Process and Manufacture (fame fusion, Chatham Flux, hydrothermal, etc.)