Information Sheet #5

Standardised Gemmological Report Wording

Emerald

- **No fissures or No fissure filling / No indications of clarity enhancement**
- **Indications of fissure filling/clarity enhancement**
- **Indications of cavity filling**
- **Indications of coloured fissure filling/clarity and colour enhancement**
- **Emerald with/and resin (manufactured product)**

Members of the Laboratory Manual Harmonisation Committee (LMHC) have standardised the nomenclature that they use to describe an emerald.

Emerald - No fissures or No fissure filling / No indications of clarity enhancement

Any emerald that has no fissures or does not show indications of having undergone modification through the filling of fissures with oils, resins, wax or any other filler shall be described as,

Identification
- Species: **(Natural)[1] beryl**
- Variety: **(Natural)[1] emerald**

Further information

None[2] *or* **No fissure filling**[3] *or* **No indications of clarity enhancement / modification**[3]

Emerald - Indications of fissure filling/clarity enhancement

Any emerald that shows indications of having undergone modification through the filling of fissures with colourless to near-colourless oils, resins, wax or any other filler[4] shall be described as,

Identification
- Species: **(Natural)[1] beryl**
- Variety: **Emerald**

Further information

Fissure filling *or* **Indications of clarity enhancement / modification,**
(plus the appropriate quantification terminology), (plus the identification of the filler). See table 1 for instructions concerning the use of the designated alpha numeric or text descriptions.

[1] Text in parenthesis is optional.
[2] Only use if no fissures are observable.
[3] Only use if fissures are observable.
[4] When viewed in bulk, e.g., in a bottle, oils and resins may appear to have colour. However, when viewed in thin films, as in fissures, the appearance may be colourless to near-colourless.

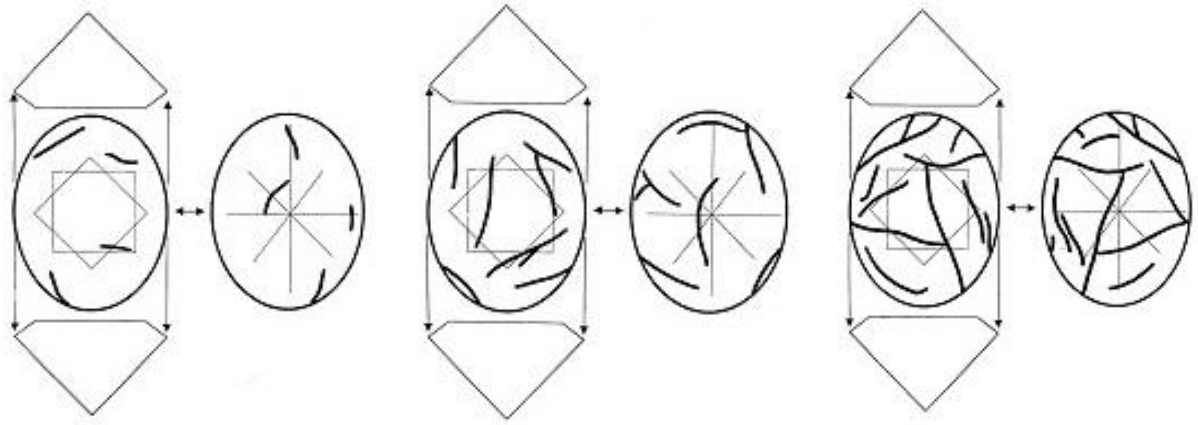
Table 1: Emerald, quantification and identification of filler in fissures

Status:	No fissures present in stone	No or insignificant filler in fissures[3]	Quantification and identification of filler in fissures		
Report Alpha numeric:			F1	F2	F3
Report Text:	None[2]	No / Insignificant fissure filling	Minor amount of oil / resin in fissures	Moderate amount of oil / resin in fissures	Significant amount of oil / resin in fissures
		or	*or*	*or*	*or*
		No / Insignificant indications of clarity enhancement / modification	Indications of minor clarity enhancement / modification	Indications of moderate clarity enhancement / modification	Indications of significant clarity enhancement / modification

Note A: Opaque residues of resins or oils that remain behind within fissures following "cleaning" or through deterioration shall not be reported upon within the context of this IS. However, an informative note shall be placed on reports if opaque residues of resins or oils remain behind within fissures of emeralds through deterioration, e.g., drying or incomplete cleaning.
An example of such a note would be: '(oil/resin) residues present'

Note B: The presence of materials within fissures that occur naturally is not within the context of this IS and need not be declared.

Note C: Whether using the alpha numeric or text description, the report shall also illustrate the equivalent by appending the above table or this Information Sheet shall be referenced.



F1 or minor (see table 1) F2 or moderate (see table 1) F3 or significant (see table 1)

Figure 1: Illustrations for quantification of filler in fissures

Emerald - Indications of cavity filling

Any emerald that shows indications of having undergone modification through the filling of wide fractures and/or cavities with colourless to near-colourless resins or wax shall be described as,

Identification
- Species: **(Natural)[1] beryl**
- Variety: **Emerald**

Further information

Cavity filling
(plus the appropriate quantification terminology), (plus the identification of the filler). See table 2 for instructions concerning the use of the designated alpha numeric or text descriptions.

[1] Wording in parentheses is optional.

Table 2: Emerald, quantification and identification of filled wide fractures/cavities

Condition ì	Quantification and identification of filler in fracture(s) / cavity(ies)		
Report Alpha numeric ì	C1	C2	C3
Report Text ì	Minor amount of resin / wax in cavities	Moderate amount of resin / wax in cavities	Significant amount of resin / wax in cavities

Note D: Whether using the alpha numeric or text description, the report shall also illustrate the equivalent by appending the above table or this Information Sheet shall be referenced.
Note E: The presence of material within fractures that has occurred naturally is not within the context of this IS and need not be declared.
Note F: Durability/Stability: oil/resin fillers may be unstable at elevated temperatures and to chemical agents. Special care shall be taken when repairing jewellery items set with oil / resin filled emerald. The unmounting of such stones prior to jewellery repair is recommended.

Emerald - Indications of coloured fissure filling/clarity and colour enhancement

Any emerald that shows evidence of having fissures/fractures filled with coloured agents[1] that have an effect on the colour[2] shall be described as,

Identification
- Species: **(Natural)[3] beryl**
- Variety: **Emerald**

Further information

Coloured filler in fissures/fractures *or* **Indications of clarity and colour enhancement /modification by a coloured substance**
(plus the appropriate quantification terminology), (plus the identification of the filler). See table 1 for instructions concerning the use of the designated alpha numeric or text descriptions.

Emerald with/and resin

It is possible to take a heavily fractured, friable, single piece of rough emerald/beryl, infuse the fractures with resin and then facet a stone from the treated material. Following the faceting process wide fractures filled with resin may be found to encircle the stone. If the resin were removed the stone would fall into at least two parts.

Identification
- Species: "**Manufactured product or '(Natural)[3] beryl with/and resin'**
- (Variety: **'Emerald with/and resin' or Manufactured product')**

Further information

This stone is a combination of resin and emerald.
(If the resin is removed the stone may fall into pieces.)
Fracture filling materials such as resin may be unstable to elevated temperature and to chemical agents. (Special care should be taken when cleaning or repairing jewellery items set with fracture filled stones.)

[1] This clause does not include the presence of polishing compounds in fissures.
[2] Filling material has sufficient colour to be seen in a thin film, i.e., within fissures.
[3] Wording in parentheses is optional.

Emerald with resin:

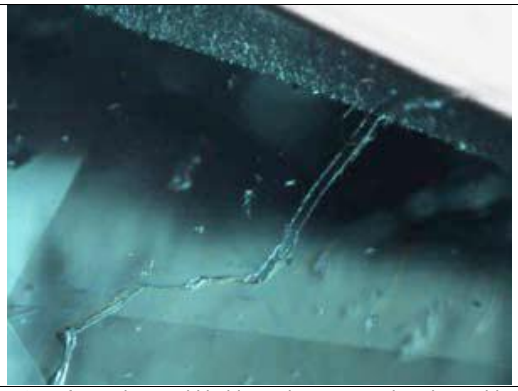


Figure 2: A faceted emerald held together as one piece by a wide tract of hardened resin as an example of “emerald with resin”.

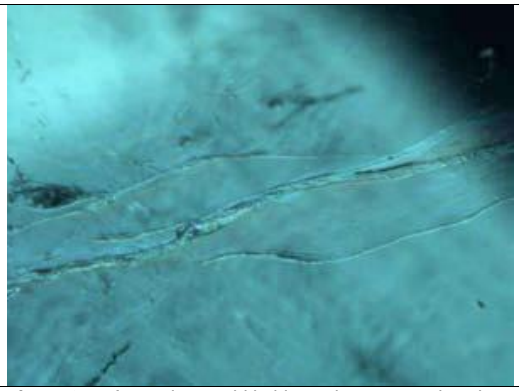


Figure 3: A faceted emerald held together as one piece by a wide tract of hardened resin as an example of “emerald with resin”.