



## Updated terminology for HPHT-treated sapphires

GRS has decided to update the treatment disclosure terminology used for sapphires enhanced by heat at elevated pressure (published in the literature as HPHT, *Song, J. et al. 2015*)

Generally the pressure applied to diamonds during the diamond HPHT treatment process is much higher than that of the sapphire treatment. GRS has thus changed its treatment code for sapphires heated at elevated pressure from HPHT to PHT (“Pressure, High Temperature”). In the comment section of the GRS report it will be mentioned as follows:

**Comment:** PHT (also referred to as HPHT, see reverse side for details).  
The reverse side defines HPHT as heated at elevated pressures.

### New

New comment ‘PHT’ used for sapphires enhanced by heat at elevated pressure

 <b>GEMSTONE REPORT</b> EDELSTEINBERICHT RAPPORT DE PIERRE PRÉCIEUSE	
No.	GRS-SAMPLE
Date	1st August 2040
Object	One faceted gemstone
Identification	Natural Sapphire
	
Weight	7.00 ct
Dimensions	14.28 x 9.35 x 5.80 (mm)
Cut	modified brilliant / step (5)
Shape	oval
Color	blue (color grading not applied)
Comment	PHT (also referred to as HPHT-treatment in the literature) LIBS-tested (see reverse for details)
	  Dr. A. Peretti FGG FGA GRS Gemresearch Swisslab AG, P.O. Box, 3025, 4002 Lucerne, SWITZERLAND <b>SAMPLE ONLY</b>   www.gemresearch.ch
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Old

Previous comment 'HPHT' used for sapphires enhanced by heat at elevated pressure

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**GEMSTONE REPORT**  
EDELSTEINBERICHT  
RAPPORT DE PIERRE PRÉCIEUSE

No.	GRS-SAMPLE
Date	1st August 2040
Object	One faceted gemstone
Identification	Natural Sapphire



Weight: 7.00 ct  
Dimensions: 14.28 x 9.35 x 5.80 (mm)  
Cut: modified brilliant / step (5)  
Shape: oval  
Color: blue (color grading not applied)  
Comment: HPHT (heat-treated at elevated pressure)  
LIBS-tested (see reverse for details)

**GRS**

*Peretti*  
Dr. A. Peretti FGG FGA  
European Geologist

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Comment "H" used for sapphires enhanced by conventional heat treatment

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**GEMSTONE REPORT**  
EDELSTEINBERICHT  
RAPPORT DE PIERRE PRÉCIEUSE

No.	GRS-SAMPLE	Origin	Gemmological testing revealed characteristics corresponding to those of a natural sapphire from:
Date	1st August 2040		
Object	One faceted gemstone		
Identification	Natural Sapphire	Sri Lanka	



Weight: 7.00 ct  
Dimensions: 14.28 x 9.35 x 5.80 (mm)  
Cut: modified brilliant / step (5)  
Shape: oval  
Color: blue  
Comment: H  
LIBS-tested (see reverse for details)

**GRS**

*Peretti*  
Dr. A. Peretti FGG FGA  
European Geologist

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## References

Song, J. Noh, Y., and Song, O., 2015,. Color enhancement of natural sapphires by high pressure high-temperature process, Journal of the Korean Ceramic Society, Vol.52, No. 2, pp.165-170

Choi H., Kim S., Kim Y., Leelawatanasuk T., Lhuaumporn T., Atsawatanapirom N., Ounorn P., 2018. Sri Lankan Sapphire Enhanced by Heat with Pressure. The Journal of The Gemmological Association of Hong Kong, 2018 Volume XXXIX, 16-25.

Article URL: <https://www.gemresearch.ch/news/2018/09/07/updated-terminology-for-hpht-treated-sapphires>

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