



NEWS

07/09/2018

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

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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 | PHT (also referred to as HPHT-treatment in the literature) LIBS-tested (see reverse for details) |
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|   | |
| www.gemresearch.ch | |

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) |
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| SAMPLE ONLY | |
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| <small>GRS GemResearch SwissLab AG gemstone reports are issued under condition that the information and features on the reverse side form part of the original contract with GRS GemResearch SwissLab AG. Please note the registration protecting the declaration of gemstone treatments.</small> | |

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

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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 |
| Comment | H LIBS-tested (see reverse for details) |
|  | |
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Origin
Gemological testing revealed characteristics corresponding to those of a natural sapphire from:
Sri Lanka

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., Lhuaeuporn 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.

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