

# Alpha Resources, Inc.

## Certificate Of Analysis

**BORON CARBIDE STANDARD**  
**LOT # 62707**

**% CARBON**

**MEAN = 21.53**

**ONE SIGMA = 0.10**

**TWO SIGMA = 0.20**

**RANGE = 21.34 to 21.73**

**Stoichiometric carbon is %21.74, purity listed at 99.4%**

**Primary standards used:**

**EDTA, Graphite, NaCO<sub>3</sub>, CaCO<sub>3</sub>, Sucrose**

### Notes:

This data was reported using various induction and resistance type furnaces. The use of accelerants and techniques such as vanadium pent oxide, tungsten oxide, combustion aid for solids, small sample size (25mg), mixing of sample and accelerants were used in the resistance furnace analysis in order to properly liberate the carbon. The use of tungsten and iron chip accelerants were used in the induction analysis.

The precision values represent the standard deviation, two times the standard deviation, and complete range of analysis. When necessary, professional judgment is applied toward consideration of data and statistical information. Many types of reference materials were used in the certification process, ranging from steel to high purity inorganics for calibration.

The material used in production of this standard was sampled in accordance with ARI 032. The samples for round robin testing were selected in accordance with ARI 014. The above values relate only to the material used to produce this standard.

The statistical analysis of the certification was performed by K.E. Dyer at Alpha Resources. The overall direction and coordination of the analytical measurements leading to certification were performed by K.E. Dyer at Alpha Resources.

Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Alpha Resources be liable for incidental or consequential damages.

This is a certified reference material (CRM) and traceable to the standards mentioned above, and should be verified prior to use, against a primary standard material or other reference materials provided by a governing agency, such as N.I.S.T., when available.

Certified August, 2007

