Alpha Resources, Inc.
Certificate Of Analysis

AR-4012
CARBON AND SULFUR IN LIMESTONE
LOT # 52199

% CARBON	% SULFUR
MEAN = 11.97	MEAN = 0.044
ONE SIGMA = 0.30	ONE SIGMA = 0.004
TWO SIGMA = 0.60	TWO SIGMA = 0.008
RANGE = 11.37 – 12.67	RANGE = 0.036 – 0.052

Notes:

This data was reported using various induction and resistance type furnaces. The use of accelerants like vanadium pentoxide and tungsten oxide were used in the resistance furnace techniques in order to properly liberate the sulfur.

The data represents the mean value, one sigma standard deviation, two sigma standard deviation, and complete range of analysis.

There were no primary standards of this type of matrix available at the time of certification. Many types of reference materials were used in the certification process, ranging from steel to high purity inorganics for calibration.

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) without any traceability to primary standards, 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.

This standard was produced in accordance to Guide 34. Alpha Resources has become accredited under the ISO Guide 34:2009 for RMP and holds a ISO 17025 accreditation. Refer to certificate and scope of accreditation for details.

Certified April, 2000

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