Alpha Resources, Inc. Certificate Of Analysis

AR-745

PETROLEUM COKE STANDARD

LOT # 745705

LID # 745705

ALL ANALYSIS REPORTED ON A DRIED BASIS VALUE

MEAN WEIGHT PERCENT SULFUR	=	0.59
MEAN WEIGHT PERCENT ASH	=	8.00
MEAN WEIGHT PERCENT VOL. MAT.	=	0.64
BTU/POUND	=	12,950
MEAN WEIGHT PERCENT FIXED CARBON	=	91.00
MEAN WEIGHT PERCENT CARBON	=	89.16
MEAN WEIGHT PERCENT HYDROGEN	=	0.03
MEAN WEIGHT PERCENT NITROGEN	=	1.29

PARTS PER MILLION NICKEL	=	45
MEAN WEIGHT PERCENT IRON		1.00
PARTS PER MILLION VANADIUM	=	100
MEAN WEIGHT PERCENT CALCIUM	NE:	0.12
MEAN WEIGHT PERCENT SILICON	=	1.57

This Certified Reference Material was traced to N.I.S.T. SRM 2719

Methods:

ASTM D	3172
ASTM D	4421
ASTM D	5373

ASTM D 4239 Method C ASTM D 4422 ASTM D 5865

Notes:

The material used in production of this standard was sampled in accordance with ARI 031. The above values relate only to the material used to produce this standard.

The overall direction and coordination of the analytical measurements leading to certification was performed by J.R. Shingledecker 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). For good laboratory practice it is recommended that all standards be verified prior to use.

EXPIRATION DATE THIS CRM IS VALID FOR TWO YEARS FROM THE DATE OF PURCHASE WHICH APPEARS ON THE BOTTLE

J.R. Shingledecher

Revised February 3, 2005