# Alpha Resources, Inc.
# Certificate Of Analysis

**AR3704**
**COAL STANDARD**

**LOT # 704399LIG94 LID ID LIG94**

**ALL ANALYSIS REPORTED ON A DRIED BASIS VALUE**

| | | |
|---|---|---|
| **MEAN ug/g MERCURY *** | **=** | **0.12** |
| **UNCERTAINTY** | **=** | **0.04** |
| **MEAN ug/g CHLORINE** | **=** | **(<0.01)** |
| **For reference only** | | |
| **MEAN WEIGHT PERCENT SULFUR** | **=** | **1.17** |
| **UNCERTAINTY** | **=** | **0.04** |
| **MEAN WEIGHT PERCENT ASH** | **=** | **10.31** |
| **UNCERTAINTY** | **=** | **0.46** |

**Methods:**

| | |
|---|---|
| **ASTM D 2013** | **ASTM D 3684-94** |
| **ASTM D 4208-97** | **ASTM D 4239 METHOD C-97** |
| **ASTM D 3174-97** | **ASTM D 6414*** |
| **ASTM D 6722*** | **EPA METHOD 7473*** |

**Notes:**

**The certified mean values were statistically derived from the values reported to Alpha Resources through Round Robin testing. This certificate has been reviewed and revised to express the expanded uncertainty k=2, 95% confidence limit. The certified mercury value has been revised with new additional testing methods (*). NMI standards used for traceability: SARM 20, SARM 1157, NIST SRM 1633b, SRM 1632d, SRM 2692c, SRM 2693.**

**The original statistical analysis and overall coordination leading to certification was performed by D.M. Reasons at Alpha Resources. The revision of certificate and coordination of analysis for revision of mercury was performed by K.E. Dyer, Technical Manager. This certificate was amended on June 10, 2011 to remove the uncertainty of the chlorine value due to analytical inconsistencies observed. The Chlorine value is now for reference only.**

**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.**

**EXPIRATION DATE**
**THIS CRM IS VALID FOR TWO YEARS FROM THE DATE OF OPENING**

**Revised certification date: February 9, 2012**

**Technical Manager**

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