

Alpha Resources, Inc.

Certificate Of Analysis

AR-3182

HIGH VISCOSITY RESIDUAL FUEL OIL STANDARD

LOT #971003

LID # 971003

WEIGHT PERCENT SULFUR = 0.9037
STANDARD DEVIATION = 0.0320

Methods:

ASTM D 1552-02

ASTM D 2622

ASTM D 4294

ASTM D 5453-93

This Certified Reference Material was traced to N.I.S.T. SRM 1621d.

NOTES:

The above value represents the mean from the data, as reported by Alpha Resources' round robin program.

Before use, the contents of the bottle should be mixed through vigorous shaking. The contents should not be exposed to air for a lengthy period of time.

Normal ASTM procedures should be employed when using this standard. This includes using the reproducibility and repeatability factors. Use the reproducibility factor when establishing the first set of data, and then establish an internal repeatability factor as your guideline.

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 were 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), and is traceable to the above-mentioned standards. For good laboratory practice it is recommended that all standards be verified prior to use.

The test results were validated on May 21, 2014 against NIST 2717 and 1622d. These test results are accredited under the Alpha Resources Inc. laboratory's ISO/IEC 17025 accreditation issued by ANSI-ASQ National Accreditation Board/ACLASS. Refer to certificate and scope of accreditation AC-1200.

EXPIRATION DATE

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

J.R. Shingledecker