

Alpha Resources, Inc. Certificate Of Analysis

AR-2045

CRUDE OIL STANDARD

LOT #045407

LID # 045407

WEIGHT PERCENT SULFUR = 0.600
STANDARD DEVIATION = 0.038

The certified mean values were statistically derived from the values reported to Alpha Resources through Round Robin.

Methods:
ASTM D 2622
ASTM D 4294
ASTM D 5453-93

Traced to N.I.S.T. SRM 1621e

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 statistical analysis of the certification was performed by J.R. Shingledecker at Alpha Resources.

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.

EXPIRATION DATE

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

J.R. Shingledecker

P.O. Box 199 3090 Johnson Road Stevensville, MI 49127 USA Phone (269) 465-5559 Fax (269) 465-3629

www.alpharesources.com

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