

# Alpha Resources, Inc. Certificate Of Analysis

AR-100

## RESIDUAL OIL STANDARD

LOT #1622 LID ID# 100699

Weight Percent Carbon	=	87.13
Standard Deviation	=	1.43
Weight Percent Hydrogen	=	10.12
Standard Deviation	=	0.03
Weight Percent Nitrogen	=	0.18
Standard Deviation	=	0.06
Weight Percent Sulfur	=	1.79
Standard Deviation	=	0.07
Gross BTU/Pound	=	18,147
Standard Deviation	=	68

### Methods

ASTM D 5291	ASTM D 3227
ASTM D 4629	ASTM D 240

### Notes:

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.

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

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 overall direction and coordination of the analytical measurements leading to certification were performed by D.M. Reasons 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.

### EXPIRATION DATE

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

