Alpha Resources, Inc. Certificate Of Analysis

VACUUM GAS OIL

AR2078 and AR2078S

LOT# BNM78792

ASTM#	TEST	RESULTS
D-3605 (Modified)	Fe ppm Ni ppm V ppm Si ppm Cu ppm Na ppm	0.18 0.055 0.13 0.15 0.14 0.87
D-3228/4629 D-4294 D-189 D-1298	Total Nitrogen (ppm) Wgt. % Sulfur Wgt. % Con. Carbon API Gravity (@ 60 F)	438.80 0.342 0.0386 20.20

Note: Normal ASTM reproducibility factors pertain to each test.

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 statistical analysis and overall coordination leading to certification was 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 OPENING