

Alpha Resources, Inc.

Certificate Of Analysis

AR2072S
Petroleum Crude Oil
Alaska North Slope
LOT # ANS721292

<u>ASTM Method</u>	<u>Test</u>	<u>Mean Result</u>	<u>Std. Dev.</u>
D 1298	API	28.2	0.3
D 4294	Sulfur (wt.%)	1.15	0.03
D 808	Total Chlorides (ppm)	1.50	0.6
D 4629	Nitrogen (ppm)	1780.00	125.0
D 3606	Benzene (wt.%)	0.18	0.02
D 3230	Salt (ptb)	2.8	1.4

One or more of the following methods were used:
(D 4951, 5105, 3605, IP 288)

Fe ppm	4.6	0.3
Ni ppm	16.9	0.6
Si ppm	1.3	0.6
V ppm	43.6	0.6
Cu ppm	0.3	0.1
Na ppm	2.6	0.5

Notes:

The above results were derived through Alpha's round robin program of a minimum of 10 laboratories. The results represent the average of all laboratories. The values fall within the reproducibility of each ASTM method.

Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no way shall Alpha Resources be held liable for incidental or consequential damages.

The statistical analysis and overall coordination leading to certification was performed by Dale L. Andersson at Alpha Resources.

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

