

# Alpha Resources, Inc.

## Certificate Of Analysis

CRUDE OIL  
WYOMING SWEET

AR2070 and AR2070S  
LOT CRU70792

ASTM METHOD	TEST	RESULTS
D 4294*	SULFUR (wt%)	0.082
D 808*	TOTAL CHLORIDES (ppm)	3.16
D 4929	ORGANIC CHLORIDE (ppm)	< 1.0
D 3230*	SALT (ptb)	0.75
D 4815(modified)*	Fe ppm	1.94
	Ni ppm	0.92
	Si ppm	0.42
	V ppm	0.39
	Cu ppm	0.82
	Na ppm	2.74
D 4629*	NITROGEN (ppm)	67.00
D 4815 (modified)*	BENZENE (wt.%)	.42

### 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.

This is a secondary SRM and should be verified against a primary standard such as NIST, when possible.

The statistical analysis and overall coordination leading to certification was performed by D. M. Reasons at Alpha Resources.

### EXPIRATION DATE

THIS SRM IS VALID FOR TWO YEARS FROM DATE OF OPENING

