

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

