

# Alpha Resources, Inc.

## Certificate Of Analysis

### ETHANOL REFORMULATED GASOLINE STANDARD

AR3132

LOT # 132895

ASTM #	NAME	MEAN	STD.DEV.
D 2622	WEIGHT % SULFUR	0.0022	0.0007
D 1319	VOLUME % OLEFINS	5.01	0.21
D 1319	VOLUME % AROMATIC	24.11	0.30
D 3606	VOLUME % BENZENE	0.79	0.05
D 5191	REID VAPOR PRESSURE	6.81	0.09
OFID	VOLUME % OXYGENATE (ETHANOL)	6.09	0.09
D 86	DISTALLATION (°F)	MEAN	STD.DEV.
	IBP	113.2	2.3
	5%	133.9	1.4
	10%	138.4	0.4
	20%	145.4	1.0
	30%	164.2	1.2
	40%	193.0	1.0
	50%	213.0	0.7
	60%	227.9	0.7
	70%	243.0	0.9
	80%	264.6	0.7
	90%	300.3	2.0
	95%	325.4	2.6
	EP	388.1	2.0
	REC. %	98.0	0.7
	LOSS %	0.5	0.1
	RES. %	1.0	---

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

#### Notes:

Due to the volatile nature of this standard, refrigeration is recommended. Care also must be taken not to disturb the inert gas atmosphere until actual tests are initiated.

The statistical analysis and overall direction and 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.

This is a certified reference material (CRM) and should be verified, prior to use, against a primary standard material provided by a governing agency such as N.I.S.T., when available.

#### EXPIRATION DATE

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

