

# Alpha Resources, Inc.

## Certificate Of Analysis

AR-2013

### CHLORINE IN LUBE OIL STANDARD

LOT # 013515      LID # 013515

WEIGHT % CHLORINE            =      3.06  
EXPANDED UNCERTAINTY       =      0.16

Methods used: ASTM D 7751

This standard was produced gravimetrically using high purity materials, with balances calibrated and checked by precision NIST traceable weights, and verified using the above ASTM methods. The precision value represents the expanded standard deviation (k=2, 95% confidence limits) derived from analysis and errors from weighing. When necessary, professional judgment is applied toward consideration of data and statistical information. The statistical analysis and the overall direction and coordination of the analytical measurements leading to certification were performed by K.E. Dyer, Technical Manager at Alpha Resources. Normal ASTM procedures should be employed when using this standard. This includes using the *reproducibility* and *repeatability* factors for the ASTM method you wish to employ.

#### Notes:

Before use, the contents of the bottle should be mixed through vigorous shaking. The contents should not be exposed to air for a lengthy period of time. Kept sealed this reference has an indefinite shelf life. Once opened this certificate is valid for 2 years only.

This is a Certified Reference Material (CRM), and is verified by the above-mentioned testing standards. For good laboratory practice it is recommended that all standards be verified prior to use. 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 standard was produced in accordance to Guide 34. Alpha Resources has become accredited under the ISO Guide 34:2009 for RMP and holds a ISO 17025 accreditation. Refer to certificate and scope of accreditation for details.

#### EXPIRATION DATE

**THIS CRM IS VALID FOR TWO YEARS FROM THE DATE OF OPENING**

May 7, 2015

  
Technical Manager