# Certificate of Analysis MEG, LLC

P.O. Box 281728 Lamoille, Nevada 89828

Web: https://megllc.net Email: Standards@megllc.net

## **MEG-Li.10.12**

MEAN =	1189.6 ppm Li	<b>Sodium Peroxide Fusion</b>	MEAN =	1185.0 ppm Li	4-Acid Digestion	
95% Confidence =	1007.9 to	1371.3	95% Confidence =	870.5 to	1499.5	
MEAN =	1184.98 ppm B	Sodium Peroxide Fusion				
95% Confidence =	870.5 to	1499.5				

Prepared By: Shea Clark Smith / Minerals Exploration & Environmental Geochemistry

Certified By: Ajeet Milliard, Ph.D. **Manufactured for: MEG LABS** 

**Date of Certification:** 6/23/2024

#### **Origin of Reference Material:**

Certified Reference Material MEG-Li.10.12 was created from mineralized rock from Silver Peak Lithium Mine, Esmeralda County, NV.

This material is not intended to be matrix-matched to any specific ore lithology.

## **Method of Preparation:**

110 Kg of naturally mineralized rock

was dried at 100C, jaw crushed, and roll crushed to -400 um.

The batch was comminuted to powder in a ceramic ball mill.

Sizing tests of the final product show greater than 92% pass -74um (-200 mesh).

The standard was packaged in 50 g envelopes, each envelope with a removable sticky-label.

### Method of Analysis:

Using the ICP-AES/OES (or ICP-MS) capabilities of one (1) laboratory, homogeneity tests were done to estimate multi-element distributions and lithium concentration by a aqua regia digestion (0.5 gram) from each of five (5) samples.

Then, five (5) samples each at seven (7) laboratories were also analyzed by sodium peroxide fusion (0.2 gram aliquot) to report total lithium and boron concentrations. Five samples at eight (8) laboratories were analyzed by 4-acid digestion (0.5 gram aliquot) to report lithium concentration.

## **Summarized Results:**

**PROJECT:** MEG-Li.10.12 reported in ppm (parts per million)

LITHIUM (PPM) Sodium Peroxide I		PPM	
DATA POINTS (LAB DATA)			7
MEAN (LABS)			1189.6
STANDARD DEVIATION (LABS)			90.9
% RSD			7.6
RANGE OF VALUES - HIGH			1340.0
RANGE OF VALUES - LOW			1048.4
95% CONFIDENCE LIMITS	1007.9	to	1371.3

LITHIUM (PPM) 4-Acid Digestion			PPM
DATA POINTS (ALL DATA)			8
MEAN (ALL DATA)			1185.0
STANDARD DEVIATION (ALL DAT	Γ <b>A</b> )		157.2
% RSD			13.3
RANGE OF VALUES - HIGH			1494.0
RANGE OF VALUES - LOW			985.2
95% CONFIDENCE LIMITS	870.5	to	1499.5

BORON (PPM) Sodium Peroxide	Fusion		PPM	
DATA POINTS (ALL DATA)	7			
MEAN (ALL DATA)			17180.4	
STANDARD DEVIATION (ALL DATA	)		1289.1	
% RSD			7.5	
RANGE OF VALUES - HIGH			18160.0	
RANGE OF VALUES - LOW			14619.3	
95% CONFIDENCE LIMITS	14602.1	to	19758.6	

## **Statistical Procedures:**

Acceptable assay limits are based on the results of five (5) samples shipped to each of seven (7) laboratories.

The samples were submitted with other MEG standards in randomized order, so that as much as possible, real operating conditions were obtained from the participating laboratories. All of the data were used to determine an acceptable range, based on the mean and standard deviation of the "Lab Average Data".

The acceptable reporting range is the "95% Confidence Limit", which is the mean ±2 standard deviations.

Other statistics are provided to help the user assign viable acceptance boundaries.

Standard Ratings:

RSD (Relative Standard Deviation) near or less than 5% - "Certified".

RSD's between 5% to 15% - "Provisional"

RSD's over 15% - "Informational"

#### **Instructions and Recommendations for Use:**

Submit the entire contents of one 25 g envelope in random locations in the submittal, approximately every 10-20 samples. Use of blanks (samples with "below detection" concentration of analyte) are also recommended, randomly placed every 30-40 samples. The analytical request should be the same as that used for the round robin assays that generated this certificate.

### **Intended Use:**

The standard material can be used to validate the analysis of samples from gold ores with a similar grade.

As a control sample in routine assay laboratory operations, it should behave within the limits as indicated statistically in this certification. Its intended use is to monitor inter-laboratory and instrumental bias within these limits.

The recommended concentrations and limits for this material are based on multiple assays from several laboratories and reflect a consensus of the inherent chemical concentration. These values are a first attempt at a chemical characterization to which later data may be added as experience with the material Slight variations in analytical procedures between laboratories will result in slight biases to the recommended statistical limits.

This standard material is not recommended for method development, nor instrumental calibration.

#### **Handling Instructions:**

The material is packaged in manila tin-top envelopes for easy open and close use. The material should be reblended just prior to use in the assay laboratory. This can be done with a micro-riffle splitter or rubber sheeting.

Simple agitation and shaking is not sufficient to rehomogenize prior to use.

Normal safety precautions for handling powders are recommended. The use of safety glasses, dust inhalation protection, gloves, and a laboratory

coat are suggested.

### **Safety Notice:**

A Material Safety Data Sheet (MSDS) is not required for this material. This material will not release or otherwise result in exposure to a hazardous chemical, under normal conditions of use.

Use regular precautions as for any work with fine powder material; glove, mask, eye protection, lab coat.

#### **Legal Notice:**

This certificate and the reference material have been prepared with due care and attention. However, MEG LLC, and Ajeet Milliard, Ph.D., accept no liability for any decisions or actions taken following the use of this reference material.

# Data Used to Calculate Lithium and Boron Values (ppm):

		Lab 1		· · · · (FF )	Lab 2			Lab 3			Lab 4	
Sample	Li 4A	Li NaF	B (ppm)	Li 4A	Li NaF	B (ppm)	Li 4A	Li NaF	B (ppm)	Li 4A	Li NaF	B (ppm)
1	1500.0	1400.0	18100.0	1130.0	1100.0	17000.0	1230.0	1061.0	14475.0	1005.4	1220.0	18000.0
2	1525.0	1400.0	18700.0	1140.0	1100.0	17000.0	1210.0	1067.0	15038.0		1280.0	18000.0
3	1513.0	1300.0	18600.0	1140.0	1200.0	17000.0	1220.0	1021.0	14706.0	959.9	1270.0	18000.0
4	1475.0	1300.0	17800.0	1140.0	1200.0	17000.0	1220.0	1098.0	15143.0	962.5	1240.0	18000.0
5	1513.0	1300.0	17600.0	1160.0	1200.0	17200.0	1230.0	1168.0	15051.0	1013.0	1240.0	18000.0
6	1438.0				1200.0	17300.0		1039.0	14502.0			
								1073.0	14362.0			
								1009.0	13671.0			
								970.0	14524.0			
								978.0	14721.0			
Sample		Lab 5			Lab 6			Lab 7		Lab 8		
bumpic	Li 4A	Li NaF	B (ppm)	Li 4A	Li NaF	B (ppm)	Li 4A	Li NaF	B (ppm)	Li 4A		
1	1108.6	1150.0	17700.0	1270.0	1210.0	18100.0	1150.0	1100.0	16900.0	1035.4		
2	1122.9	1190.0	18100.0	1400.0	1200.0	17900.0	1160.0	1100.0	15800.0	1048.0		
3	1177.9	1200.0	18000.0	1330.0	1200.0	18000.0	1180.0	1200.0	16700.0	1025.5		
4	998.6	1180.0	18100.0	1440.0	1210.0	18100.0	1160.0	1100.0	16400.0	947.4		
5	1055.9	1170.0	17700.0	1300.0	1200.0	18000.0	1180.0	1200.0	16500.0	1005.7		
6	1041.0						1180.0			1000.0		
7										1100.0		
8										1000.0		
9										1100.0		
10										1100.0		
Major C	onstituent	s as Oxides										
Average of	f 5 samples:	2-acid, ICPMS (P	artial Digestion	n)								
Raw Data:	:	AI%	Ca%	Fe%	K%	Mg%	Na%	S%	Ti%	Si%		
ICP/MS D	ata (n=5)	0.67	7.58	0.59	0.90	3.71	3.57	0.06	0.04			
Conversion	n Factor	1.8899	1.3992	1.4297	1.2046	1.6579	1.348	2.4953	1.6681	2.1392		
		AlO <sub>2</sub>	CaO	Fe <sub>2</sub> O <sub>3</sub>	K <sub>2</sub> O	MgO	Na <sub>2</sub> O	SO <sub>3</sub>	TiO <sub>2</sub>	SiO <sub>2</sub>		
										estimated		
% Oxide:		1.27	10.61	0.84	1.08	6.15	4.81	0.16	0.07	75.01		

# Participating Laboratories:

AMERICAN ASSAY GENALYSIS

ACME INSPECTORATE -SPARKS

ACTIVATION LABS SKYLINE
ALS-VANCOUVER ULTRATRACE

Certified By: 🖊

Ajeet Milliard, Ph.D., CPG