

# Certificate of Analysis

MEG, LLC

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## MEG-Li.10.13

MEAN =	1178.8 ppm Li		
95% Confidence =	999.2	to	1358.5
MEAN =	1.74 ppm B		
95% Confidence =	1.45	to	2.02

**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.10.13 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 laboratory, homogeneity tests were done to estimate multi-element distributions and lithium concentration by an 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.

### Summarized Results:

**PROJECT:** MEG-Li.10.13 reported in ppm (parts per million)

LITHIUM (PPM)	Sodium Peroxide Fusion	PPM
DATA POINTS (LAB DATA)		7
MEAN (LABS)		1178.8
STANDARD DEVIATION (LABS)		89.8
% RSD		7.6
RANGE OF VALUES - HIGH		1300.0
RANGE OF VALUES - LOW		1041.5
95% CONFIDENCE LIMITS	999.2	to 1358.5

BORON (PPM)	Sodium Peroxide Fusion	PPM
DATA POINTS (ALL DATA)		7
MEAN (ALL DATA)		1.74
STANDARD DEVIATION (ALL DATA)		0.14
% RSD		8.29
RANGE OF VALUES - HIGH		1.86
RANGE OF VALUES - LOW		1.50
95% CONFIDENCE LIMITS	1.45	to 2.02

**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  $\pm 2$  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 25g 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 increases.

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 re-blended 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 re-homogenize 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):**

Sample	Lab 1		Lab 2		Lab 3		Lab 4	
	Li NaF	B (ppm)	Li NaF	B (ppm)	Li NaF	B (ppm)	Li NaF	B (ppm)
1	1300.0	1.89	1200.0	1.74	1065.0	1.49	1290.0	1.80
2	1300.0	1.90	1200.0	1.74	1005.0	1.53	1230.0	1.90
3	1300.0	1.85	1200.0	1.77	1119.0	1.53	1270.0	1.80
4	1300.0	1.81	1200.0	1.79	1081.0	1.58	1270.0	1.80
5	1300.0	1.89	1200.0	1.79	1050.0	1.54	1280.0	1.90
6		1.81			1004.0	1.44		
7					1054.0	1.49		
8					1033.0	1.51		
9					1075.0	1.56		
10						1.48		

  

Sample	Lab 5		Lab 6		Lab 7	
	Li NaF	B (ppm)	Li NaF	B (ppm)	Li NaF	B (ppm)
1	1180.0	1.84	1220.0	1.88	1100.00	1.79
2	1190.0	1.83	1170.0	1.78	1200.00	1.79
3	1220.0	1.85	1190.0	1.83	1200.00	1.73
4	1210.0	1.85	1220.0	1.85	1100.00	1.59
5	1200.0	1.84	1200.0	1.83	1100.00	1.59
6					1300.00	1.76
7					1100.00	1.79

**Major Constituents as Oxides**

Average of 5 samples: 2-acid, ICP-MS

Raw Data:	Al%	Ca%	Fe%	K%	Mg%	Na%	S%	Ti%	Si%
ICP/MS Data (n=5)	0.60	7.60	0.51	0.81	3.86	3.72	0.08	0.03	
Conversion Factor	1.8899	1.3992	1.4297	1.2046	1.6579	1.348	2.4953	1.6681	2.1392
	Al <sub>2</sub> O <sub>3</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:	1.13	10.63	0.73	0.98	6.40	5.01	0.20	0.05	74.87

**Participating Laboratories:**

AMERICAN ASSAY	ALS-LOUGHREA
ACME LABORATORIES	BUREAU VERITAS
ACTIVATION LABS	SKYLINE
ALS-VANCOUVER	

Certified By:   
Ajeet Miliard Ph.D.