# Certificate of Analysis MEG, LLC

**Moment Exploration GeoServices** 

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# SiBLANK.21.03

**Certified Reference Material** 

 MEAN =
 0.005
 ppm Au

 95% CONFIDENCE LIMITS
 0.003
 to
 0.007

Prepared By:MEG, LLCCertified By:Ajeet Milliard, PhD (Geology)Manufactured for:MEG, LLCDate of Certification:27 July 2021

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

Certified Reference Material SiBLANK.21.03 was created from barren silica sand from Lake Mountain, WA.

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

#### **Method of Preparation:**

100 Kg of silica sand was comminuted to powder in a ceramic ball mill for 72 hours. Sizing tests of the final product show greater than 95% pass -74um (-200 mesh). The standard was packaged in 50 g envelopes, each envelope with a removable sticky-label.

#### **Method of Analysis:**

ICPMS was completed at one analytical laboratory as the homogeneity test to estimate multielement distributions from a 4-acid digestion (0.5 gram) from each of 10 samples.

Ten samples each to 10 laboratories were fire assayed on 30 gram subsamples and these data were used to certify the material for gold concentration. New fire assay crucibles were used.

#### **Summarized Assay Results:**

**PROJECT:** SiBLANK.21.03 reported in ppm (parts per million)

GOLD (ppm)			
DATA POINTS (ALL DATA)			96
MEAN (ALL DATA)			0.005
STANDARD DEVIATION (ALL DATA)			0.001
% RSD			30.362
RANGE OF VALUES - HIGH			0.014
RANGE OF VALUES - LOW			0.003
95% CONFIDENCE LIMITS	0.002	to	0.008

\*Note that %RSD reflects the variation in individual lab lower detection limits (0.003 to 0.01 ppm). All data in analysis falls below the lower detection limit for the maximum detection limit of all labs.

DATA POINTS (LAB DATA)			10
MEAN (LABS)			0.005
STANDARD DEVIATION (LABS)			0.001
% RSD			19.972
RANGE OF VALUES - HIGH			0.006
RANGE OF VALUES - LOW			0.003
95% CONFIDENCE LIMITS	0.003	to	0.007

#### **Statistical Procedures:**

Acceptable assay limits are based on the results of 10 samples shipped to each of 10 laboratories. Some labs assayed submitted samples twice, in different months, or different years.

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 boundries.

Standards with an RSD (Relative Standard Deviation) of near or less than 5% are termed "Certified", while RSD's between 5% to 15% are designated "Provisional". RSD's over 15% are "Informational".

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

Submit the entire contents of one 50 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 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 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 hazaardous chemical, under normal conditions of use. Use regular precautions as for any work with fine powder material.

## **Legal Notice:**

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

Sample	Lab 1 ppm Au	Lab 2 ppm Au	Lab 3 ppm Au	Lab 4 ppm Au	Lab 5 ppm Au	Lab 6 ppm Au	Lab 7 ppm Au	Lab 8 ppm Au
1	0.003	0.005	0.005	0.005	0.005	0.005	0.005	0.005
2	0.003	0.005	0.005	0.005	0.014	0.005	0.005	0.005
3	0.003	0.005	0.005	0.005	0.005	0.005	0.005	0.005
4	0.003	0.005	0.005	0.005	0.005	0.007	0.005	0.005
5	0.003	0.041	0.005	0.005	0.005	0.014	0.005	0.005
6	0.003	0.005	0.005	0.005	0.005	0.008	0.005	0.005
7	0.003	0.009	0.005	0.005	0.005	0.007	0.005	0.005
8	0.003	0.006	0.005	0.005	0.005	0.005	0.005	0.005
9	0.003	0.006	0.005	0.005	0.005	0.007	0.005	0.005
10	0.003	0.005	0.011	0.005	0.005	0.008	0.005	0.031

## Assay Data Used to Calculate "True" Gold Value:

	Lab 9 ppm Au	Lab 10 ppm Au
1	0.003	0.005
2	0.003	0.005
3	0.003	0.005
4	0.003	0.005
5	0.003	0.005
6	0.003	0.005
7	0.003	0.005
8	0.003	0.005
9	0.003	0.005
10	0.003	0.005

## Major Constituents as Oxides

#### Average of 10 samples: 4-acid, ICPMS (Total Digestion)

Raw Data:	Al%	Ca%	Fe%	K%	Mg%	Na%	<b>S%</b>
ICP/MS Data (n=10)	0.22	0.01	0.05	0.08	0.01	0.01	0.01
<b>Conversion Factor</b>	1.8899	1.3992	1.4297	1.2046	1.6579	1.348	2.4953
	A102	CaO	Fe2O3	K2O	MgO	Na2O	<b>SO3</b>
% Oxide:	0.42	0.01	0.07	0.10	0.02	0.01	0.01
Raw Data:	Ti%	Si%					
ICP/MS Data (n=10)	0.02	N/R					
<b>Conversion Factor</b>	1.6681	2.1392					

TiO2 SiO2 estimated % Oxide: 0.03 99.33

# **Participating Laboratories:**

American Assay Labs, Sparks Activation Labs, Ancaster Activation Labs, Kamloops ALS, Reno ALS, Vancouver

Bureau Veritas, Sparks McClelland, Reno MS Analytical, Langley SGS, Burnaby Skyline, Tucson

**Certified By:** 

Ajeet K Milliard, PhD (Geology)