



**BETHLEHEM APPARATUS COMPANY, INC.**

***CERTIFICATE OF ANALYSIS***  
***GUARANTEED PURITY: BETTER THAN 99.99%***

**INSPECTION:** The mercury provided in this shipment has been examined for surface contamination by trained Bethlehem Apparatus employees. Samples are inspected to assure the mercury retains a bright, mirror-like appearance and is free from any floating impurity or scum.

**ANALYSIS:** Representative samples have been sent for analysis by an independent laboratory. The method used for analysis is Glow Discharge Mass Spectrometry (GDMS), which shows quantitative values for all non-volatile elements. Each test has shown the total impurity is less than our threshold of 99.99%. See attached sample of GDMS analysis.

NOTE: Mercury packaged in glass or polyethylene bottles may show lint, polyethylene or carbon particles. Mercury packaged in steel flasks may show iron particles.

LOT NUMBER           M-524                DATE PACKAGED           11/12/12          

INSPECTOR           *M. Ruela*                DATE INSPECTED           11/12/12            
MICHAEL RUELA  
BETHLEHEM APPARATUS CO., INC.

Customer: **Bethlehem Apparatus Company Inc.**  
890 Front Street, Hellertown, PA 18055

P.O.#

M-3928-A

Date: 1/11/2012

Job #

S0CEV648

Customer ID: **Hg**  
**1512-RM2**

Sample ID:

S120106012

Element	Concentration [ ppm wt ]	Element	Concentration [ ppm wt ]
Li	< 0.001	Ag	29
Be	< 0.001	Cd	< 0.01
B	< 0.005	In	< 0.005
C	Electrode	Sn	< 0.01
F	< 0.005	Sb	< 0.005
Na	0.02	Te	< 0.01
Mg	< 0.001	I	< 0.001
Al	< 0.005	Cs	< 0.001
Si	0.06	Ba	< 0.005
P	< 0.001	La	< 0.001
S	0.007	Ce	< 0.001
Cl	0.03	Pr	< 0.001
K	< 0.005	Nd	< 0.001
Ca	< 0.005	Sm	< 0.001
Sc	< 0.001	Eu	< 0.001
Ti	< 0.001	Gd	< 0.001
V	< 0.005	Tb	< 0.001
Cr	< 0.005	Dy	< 0.001
Mn	< 0.001	Ho	< 0.001
Fe	0.01	Er	< 0.001
Co	< 0.001	Tm	< 0.001
Ni	< 0.005	Yb	< 0.001
Cu	0.04	Lu	< 0.001
Zn	< 0.005	Hf	< 0.002
Ga	< 0.001	Ta	< 1
Ge	< 0.005	W	< 0.005
As	< 0.001	Re	< 0.001
Se	< 0.01	Os	< 0.001
Br	< 0.005	Ir	< 0.001
Rb	< 0.001	Pt	< 0.005
Sr	< 0.001	Au	0.71
Y	< 0.001	Hg	Matrix
Zr	< 0.001	Tl	0.22
Nb	< 0.001	Pb	0.02
Mo	< 0.005	Bi	< 0.002
Ru	< 0.005	Th	< 0.001
Rh	< 0.005	U	< 0.01
Pd	< 0.005		

ISO 17025



Testing Cert #2797.03

D. SCHUMM (Analyst)

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Reviewed by \_\_\_\_\_

*David Schumm*