



SCOPE OF ACCREDITATION TO ISO/IEC 17043:2010

LABORATORY QUALITY SERVICES INTERNATIONAL (LQSi)  
SGS MINERALS SERVICES DIVISION  
South Holland, IL 60473  
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PROFICIENCY TESTING PROVIDER

Valid To: February 29, 2020

Certificate Number: 3251.01

In recognition of the successful completion of the A2LA evaluation process, this Proficiency Testing Provider has been found to meet the ISO/IEC 17043:2010, "Conformity assessment - General Requirements for Proficiency Testing." Accreditation is granted to this provider to provide the following proficiency testing samples:

Program Type / Program Name <sup>1</sup>	Frequency	Material
<b>Solid Energy Fuels</b>		
6H, High Rank Coal; 65 Mesh (212 µm)	Monthly	Coal
6L, Low Rank Coal; 65 Mesh (212 µm)	Monthly	Coal
8H, High Rank Coal; 8 Mesh (2.36 mm)	Monthly	Coal
8L, Low Rank Coal; 8 Mesh (2.36 mm)	Monthly	Coal
BF, Solid Biofuel; 20 Mesh (850 µm)	Quarterly	BioFuel
EQ, Equilibrium Moisture of Coal; 4 Mesh (4.75 mm)	Monthly	Coal
FT, Fusion Temperature of Coal Ash; 65 Mesh (212 µm)	Monthly	Coal
HG, Hardgrove Grindability Index (HGI); 4 Mesh (4.75 mm)	Monthly	Coal
MA, Coal Ash - Mineral Analysis; 65 Mesh (212 µm)	Monthly	Coal
MC, Metallurgical Coke; 65 Mesh (212 µm)	Monthly	Coke
MET, Metallurgical Coal; 8 Mesh (2.36 mm)	Bi-Monthly	Coal
PC, Petroleum Coke; 65 Mesh (212 µm)	Monthly	Coke
PCG, Petroleum Coke HGI; 4 Mesh (4.75 mm)	Monthly	Coke
RCT, Coke CRI / CSR (ASTM D 5341)	Quarterly	Coke
TE, Trace Elements in Coal; 65 Mesh (212 µm)	Quarterly	Coal
TT, Coke Tumbler Test (ASTM D 3402)	Quarterly	Coke
<b>Concentrates</b>		
CU, Copper Concentrate; 200 Mesh (75 µm)	Monthly	Copper Concentrate
PB, Lead Concentrate; 200 Mesh (75 µm)	Bi-Monthly	Lead Concentrate
ZN, Zinc Concentrate; 115 Mesh (125 µm)	Bi-Monthly	Zinc Concentrate
TML, Flow Moisture Point / Transportable Moisture Limit	On Demand	Copper, Lead, or Zinc Concentrate
<b>Industrial Minerals</b>		
CMT, Cement / Cement Clinker; 100 Mesh (150 µm)	Quarterly	Cement
ES, Elemental Sulfur	Quarterly	Elemental Sulfur

<b>Program Type / Program Name<sup>1</sup></b>	<b>Frequency</b>	<b>Material</b>
<b>Mineral Ores</b>		
BXT, Bauxite; 100 Mesh (150 µm)	Quarterly	Bauxite Ore
FE, Iron Ore; 200 Mesh (75 µm)	Monthly	Iron Ore
LS, Limestone; 200 Mesh (75 µm)	Monthly	Limestone
CR, Chrome Ore; 200 Mesh (75 µm)	Quarterly	Chrome Ore
MN, Manganese Ore; 200 Mesh (75 µm)	Quarterly	Manganese Ore
NI, Nickel Ore; 200 Mesh (75 µm)	Quarterly	Nickel Ore
<b>Fertilizers</b>		
P, Phosphate Fertilizer; 35 Mesh (425 µm)	Monthly	Monammonium Phosphate, Diaammonium Phosphate, or Triple Superphosphate
N, Nitrogen (Urea); 200 Mesh (75 µm)	Bi-Monthly	Urea
K, Potassium (Potash); 100 Mesh (150 µm)	Bi-Monthly	Potash
<b>Geochemical Exploration</b>		
AUH, High Level Gold Analysis; 200 Mesh (75 µm)	Monthly	Gold Ore
AUL, Low Level Gold Analysis; 200 Mesh (75 µm)	Monthly	Gold Ore
BM, Base Metals in Gold Ore; 200 mesh (75 µm)	Monthly	Various Metal Ores
BMF, Base Metals Sodium Peroxide Fusion (90); 200 mesh (75 µm)	Monthly	Various Metal Ores
BMP, Base Metals, Partial Digest (14); 200 mesh (75µm)	Monthly	Various Metal Ores
BMT, Base Metals, Total Digest (40); 200 mesh (75µm)	Monthly	Various Metal Ores
SU, Sulfur in Gold Ore; 200 mesh (75 µm)	Monthly	Various Metal Ores

<sup>1</sup>All assigned values and associated uncertainties determined via participant consensus values.





## *Accredited Proficiency Testing Provider*

A2LA has accredited

# **LABORATORY QUALITY SERVICES INTERNATIONAL (LQSI) SGS MINERALS SERVICES DIVISION**

*South Holland, IL*

This accreditation covers the specific proficiency testing schemes listed on the agreed upon Scope of Accreditation.

This provider is accredited in accordance with the recognized International Standard ISO/IEC 17043: 2010 *Conformity assessment - General requirements for proficiency testing*. This accreditation demonstrates technical competence for a defined scope and the operation of a quality management system.



Presented this 29<sup>th</sup> day of July 2016.

President and CEO  
For the Accreditation Council  
Certificate Number 3251.01  
Valid to February 29, 2020  
Revised February 28, 2017

*For the proficiency testing schemes to which this accreditation applies, please refer to the provider's Scope of Accreditation.*