



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

SKYLINE ASSAYERS & LABORATORIES  
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CHEMICAL

Valid To: February 28, 2022

Certificate Number: 2953.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the chemical tests and assays listed below on ores, rocks, soils, and sediments:

<u>Tests</u>	<u>Test Method(s)</u>
Analysis of Samples by: Inductively Coupled Plasma-Optical Emission Spectroscopy (ICP-OES)	SOP 460 – Solutions Analyzed by ICP-OES - 24 Elements (TE-6): Ag, Al, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sr, Ti, V, W, Zn
Carbon Sulfur Analyzer	SOP 439 – Carbon by Infrared/WR-C; SOP 467 – Sulfur by Infrared/WR-S
Digestion and Analysis of Samples by: Atomic Absorption Spectroscopy (AAS)	SOP 401 – Total Copper (Hydrochloric, Nitric, and Perchloric Acid Digestion); SOP 403 – Acid Soluble Copper; SOP 404 – Quick Leach Technique (QLT-Cu Assay); SOP 405 – SAP (Hot) Ferric Sulfate Soluble Copper; SOP 406 – Sequential (Acid Soluble Copper, Cyanide Soluble Copper); SOP 406A – Cyanide Soluble Copper; SOP 415 – Silver (Ag) by Aqua Regia Analyzed by AAS; SOP 457 – Gold (Au), Silver (Ag) Cyanide Leach
Digestion and Analysis of Samples by: Inductively Coupled Plasma-Optical Emission Spectroscopy (ICP-OES)	SOP 407 – Total Copper, Lead, Zinc, Iron, Molybdenum, Manganese, Nickel, Calcium, Magnesium, and Cobalt (Hydrochloric, Nitric and Perchloric Acid Digestion); SOP 424 – 34 Element Aqua Regia Leach Analyzed by ICP-OES (TE- 2): Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Ti, Tl, V, W, Zn, Zr; SOP 430 – 24 Element-Multi Acid Digestion Analyzed by ICP-OES (TE-4): Ag, Al, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sr, Ti, V, W, Zn; SOP 468 – Acid Soluble Copper and Cobalt 1hr; SOP 489 – Whole Rock Fusion; SOP 490 – Acid Soluble Copper and Cobalt 6hr

<u>Tests</u>	<u>Test Method(s)</u>
Digestion and Analysis of Samples by: Inductively Coupled Plasma-Optical Emission Spectroscopy/Mass Spectroscopy (ICP-OES/MS)	SOP 428 – 49 Element Aqua Regia Leach Analyzed by ICP-OES/MS (TE-3): Ag, Al As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr; SOP 429 – 47 Element-Multi Acid Digestion Analyzed by ICP-OES/MS (TE-5): Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr; SOP 477 – Selective Extractions of Soil- Enzyme Leach
Fire Assay: Gravimetric	SOP 411 – Gold Analysis by Classical Fire Assay; SOP 412 – Gold & Silver Analysis by Classical Gravimetric Fire Assay; SOP 425 – Metallic Au-Ag Assay Procedure by Gravimetric Fire Assay
Fire Assay and Analysis of Samples by: Atomic Absorption Spectroscopy (AAS)	SOP 410 – Gold Analysis by Classical Fire Assay and Atomic Absorption Spectroscopy (AAS)
Ion Selective Electrode	SOP 463 – F(Fluorine) by Fusion Ion-Selective Electrode (ISE)
Loss of Ignition (LOI)	SOP 473 – Gypsum Determination
Metallurgy	SOP 487 – Column Leach Testing
Sample Preparation	SOP 102 – Crushing, Splitting, Pulverizing of Samples; SOP 301 – Weigh Room Procedures
Specific Gravity	SOP 433 – Specific Gravity
Titration	SOP 449 – Acid Consumption; SOP 486 – Cobalt Hydroxide



# Accredited Laboratory

A2LA has accredited

## SKYLINE ASSAYERS & LABORATORIES

Tucson, AZ

for technical competence in the field of

### Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 30<sup>th</sup> day of April 2020.

A blue ink signature of the Vice President of Accreditation Services.

Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 2953.01  
Valid to February 28, 2022

*For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.*