



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ALS ARABIA – MINERAL DIVISION  
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CHEMICAL

Valid To: March 31, 2022

Certificate Number: 3258.05

In recognition of the successful completion of the A2LA evaluation process accreditation is granted to this laboratory to perform the following tests using the following testing technologies and in the analyte categories identified below:

Testing Technologies: Atomic Absorption Spectroscopy, ICP Optical Emission Spectroscopy, X-ray Fluorescence, Infrared Spectroscopy

<u>ALS Method(s)</u>	<u>Matrix</u>	<u>Parameter/Analyte(s)</u>
Au-AA23; Au-AA24; Au-AA25; Au-AA26	Soil, Stream Sediment, Rock, Ore	Determination of Au by Lead Collection Fire Assay and Atomic Absorption Spectroscopy
C-IR07	Rock, Ore	Carbon
ME-ICP41	Soil, Stream Sediment, Rock, Ore	Multi-Element (Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn) Determination by Aqua Regia Digestion and ICP-AES
ME-ICP61	Soil, Stream Sediment, Rock, Ore	Multi-Element (Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn) Determination by 4 Acid Digestion and ICP-AES
ME-OG46	Rock, Ore	Ag, Cu, Pb, Zn, Fe, Ni, Mo, S, Determination by Aqua Regia Digestion and ICP-AES
ME-OG62	Rock, Ore	Ag, Cu, Pb, Zn, Fe, Ni, Mo, S Determination by 4 Acid Digestion and ICP-AES

<u>ALS Method(s)</u>	<u>Matrix</u>	<u>Parameter/Analyte(s)</u>
ME-XRF06; ME-XRF06m	Rock, Ore	SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , CaO, MgO, Na <sub>2</sub> O, K <sub>2</sub> O, Cr <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , MnO, P <sub>2</sub> O <sub>5</sub> , SrO, BaO Fused Disc by Lithium Metaborate and Lithium Tetraborate Fusion and XRF Instrumentation and LOI using Classical Technique 1000C (OA-GRA06)
ME-XRF11be	Rocks, Ore	Extended Iron Ore including Uranium and Thorium by Fusion/XRF: Al <sub>2</sub> O <sub>3</sub> As <sub>2</sub> O <sub>3</sub> As BaO Ba CaO Cl CoO Co Cr <sub>2</sub> O <sub>3</sub> CuO Cu Fe <sub>2</sub> O <sub>3</sub> Fe K <sub>2</sub> O MgO MnO Mn Na <sub>2</sub> O NiO Ni P <sub>2</sub> O <sub>5</sub> P PbO Pb SO <sub>3</sub> S SiO <sub>2</sub> SnO <sub>2</sub> Sn SrO Sr ThO <sub>2</sub> Th TiO <sub>2</sub> U <sub>3</sub> O <sub>8</sub> U V <sub>2</sub> O <sub>5</sub> V ZnO Zn ZrO <sub>2</sub> Zr
ME-XRF13n; ME-XRF13u	Rock, Ore	SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , CaO, MgO, Na <sub>2</sub> O, K <sub>2</sub> O, Cr <sub>2</sub> O <sub>3</sub> , TiO <sub>2</sub> , MnO, P <sub>2</sub> O <sub>5</sub> , SrO, BaO, SO <sub>3</sub> , V <sub>2</sub> O <sub>5</sub> , Zn, ZrO <sub>2</sub> Fused Disc by Lithium Metaborate and Lithium Tetraborate Fusion and XRF Instrumentation and LOI using Classical Technique 1000C (OA-GRA06)
ME-XRF24	Rock, Ore	Analysis of Phosphate by Fusion/XRF (Al <sub>2</sub> O <sub>3</sub> , CaO, Fe <sub>2</sub> O <sub>3</sub> , K <sub>2</sub> O, MgO, MnO, Na <sub>2</sub> O, P <sub>2</sub> O <sub>5</sub> , SiO <sub>2</sub> , TiO <sub>2</sub> )
ME-XRF26	Rock, Ore	Whole Rock Analysis by Fusion/XRF, Unnormalized (Al <sub>2</sub> O <sub>3</sub> , BaO, CaO, Cr <sub>2</sub> O <sub>3</sub> , Fe <sub>2</sub> O <sub>3</sub> , K <sub>2</sub> O, MgO, MnO, Na <sub>2</sub> O, P <sub>2</sub> O <sub>5</sub> , SO <sub>3</sub> , SiO <sub>2</sub> , SrO, TiO <sub>2</sub> )
S-IR08	Rock, Ore	Sulphur



# Accredited Laboratory

A2LA has accredited

## ALS ARABIA – MINERAL DIVISION

Jeddah, SAUDI ARABIA

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 7<sup>th</sup> day of December 2020.

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

Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 3258.05  
Valid to March 31, 2022

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