

SERVICES & FEES

SCHEDULE



We are North Queensland's
comprehensive partner
in **mineral resource
development.**

JAMES HAINDL
Metallurgist and Founder

Welcome to Northern Metallurgy

We offer specialised geochemical, metallurgical, and geological consulting services for North Queensland's mining industry.

Our facilities provide precise analyses with rapid turnaround times to keep your exploration projects on track and within budget. With expertise in Northern Australia's unique geological landscape, our seasoned professionals ensure project success through tailored strategies.

Partner with us for unparalleled expertise and commitment to accuracy in unlocking your projects full potential.



Visit our website
for more information.



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Meeting your needs

Accurate and reliable

We prioritise precision and accuracy in all our analyses, providing you with trustworthy data to guide your decision-making.

Rapid turnaround

We recognise the criticality of timely results and are committed to expediting assay turnaround times, enabling you to maintain project momentum.

Tailored solutions

Our team of experienced professionals works closely with you to develop customised solutions that meet your specific project requirements and objectives.

Local expertise

Located in the heart of the Herberton tin fields, we are uniquely positioned to meet the local demand for cassiterite ore assaying, offering rapid tin determination and comprehensive geochemical testing for a wide array of critical minerals prevalent in the region.

Sample preparation

We recognise that the quality of all geochemical analyses is dependent on the quality of sample preparation. Whether it be an in-field rock chip sample, deep diamond drill core, or a scoop taken from a sample bag, analytical results from these samplings have financial significance.

Our sample preparation methods are designed to generate a representative, homogenous sub-sample from the original sample to provide our clients with accurate and reliable results. All ore deposits are different, and our experienced staff can tailor specific sample preparation packages to suit your projects requirements.



Sample preparation

SAMPLE SUBMISSION


Method ID	Description	Application	Cost Per Sample (Ex. GST)
SD-001	Workorder administration fee.	Applied once per each batch of samples.	\$44.99

DRYING

Method ID	Description	Application	Cost Per Sample (Ex. GST)
SD-001	Drying of wet samples in drying ovens.	Required for most rock chip and drill core samples.	\$2.49

SAMPLE PREPARATION PACKAGES

Method ID	Description	Application	Cost Per Sample (Ex. GST)
SP-001	Coarse jaw crushing of rock chip and drill core samples, followed by rolls crushing to 90% passing less than 2mm. Riffle split of 1kg sample, ring grinding of split to greater than 85% passing 75 microns.	Used on drill core and rock chip samples containing high-grade gold and or coarse gold and silver. Used to minimise the "nugget effect" and achieve representative Au sample results.	\$14.99
SP-002	Coarse jaw crushing of rock chip and drill core samples, followed by rolls crushing to 70% passing less than 2mm. Riffle splitting of 250g sample, ring grinding of split to greater than 85% passing 75 microns.	This is the recommended preparation for most drill core and rock chip samples.	\$9.99



Experience the difference
our expertise can make in
your **mining endeavors.**

Geochemistry

Precise geochemical data is fundamental to successful exploration initiatives and we specialise in delivering accurate results that allow for informed decision-making. Rapid turnaround times are also critical to success, and we are committed to expediting assay results to facilitate the seamless progression of exploration campaigns.

In response to the surging demand for gold fire assay, fuelled by the recent increase in gold exploration activities, we have prioritised rapid turnaround times to address industry-wide delays. Our streamlined processes ensure gold miners receive results within days, not months, enabling swift project advancement.

Strategically located in the Herberton tin fields, Northern Metallurgy is uniquely positioned to address the local demand for cassiterite ore assays. We offer rapid and accurate tin determination through Ammonium Iodide fusion coupled with Atomic Absorption Spectroscopy (AAS) analysis.

Our comprehensive suite of services also includes aqua regia digestion with AAS for a broad spectrum of commodities prevalent in the region. Our team of seasoned professionals is dedicated to tailoring geochemical packages to align with your specific project requirements, ensuring optimal outcomes and efficient resource utilisation.

FIRE ASSAY FOR PRECIOUS METAL ANALYSIS

Method ID	Element	Description	Range (ppm)	Cost Per Sample (Ex. GST)
AuFA-AA40	Au	Gold fire assay of rock chip and drill core samples with AAS finish. 40-gram sample.	0.01 - 100	\$24.99
PdFA-AA40	Pd	Palladium fire assay of rock chip and drill core samples with AAS finish. 40-gram sample.	0.01 -100	\$24.99
PtFA-AA40	Pt	Platinum fire assay of rock chip and drill core samples with AAS finish. 40-gram sample.	0.01 - 100	\$24.99
PGM-AA40	Au Pd Pt	Gold, Palladium and Platinum fire assay of rock chip and drill core samples with AAS finish. 40-gram sample.	0.01 -100	\$34.99

TIN ASSAY

Method ID	Element	Description	Cost Per Sample (Ex. GST)
Sn-AAS	Sn	AAS determination of tin in geological samples by ammonium iodide fusion.	\$29.99

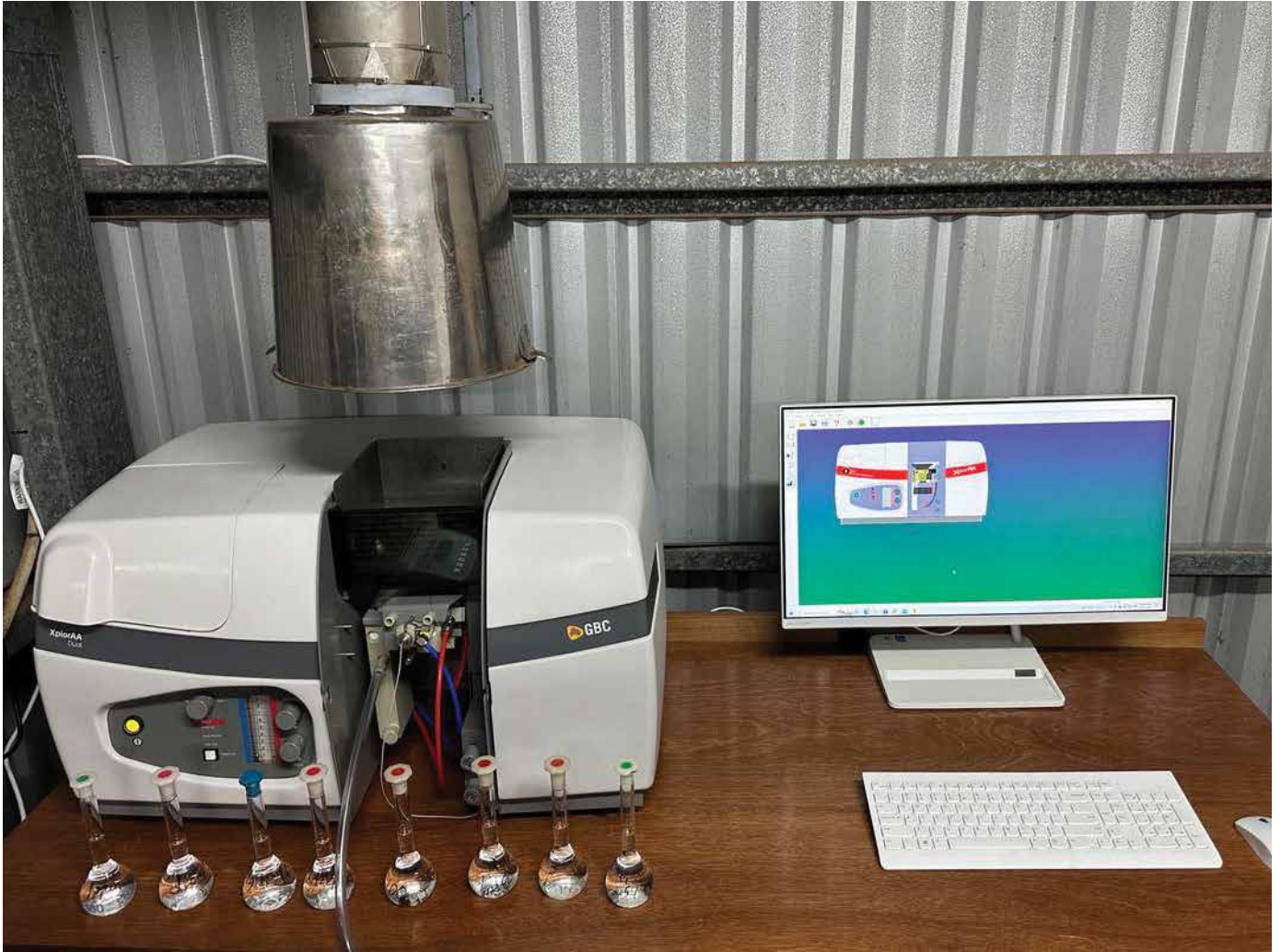
Geochemistry

GOLD AND SILVER BULLION FIRE ASSAY WITH GRAVIMETRIC FINISH

Method ID	Element	Description	Cost Per Sample (Ex. GST)
Au-BULFA	Au	Gold bullion by fire assay with gravimetric finish.	\$199.99
Ag-BULFA	Ag	Silver bullion by fire assay with gravimetric finish.	\$199.99

SINGLE ELEMENTS BY AQUA REGIA AND POTASSIUM CHLORATE DIGESTION WITH AAS FINISH

Method ID	Element	Description	Cost Per Sample (Ex. GST)
Ag-AAS	Ag	AAS determination of silver	\$14.99 for digest and first element + \$3.99 per each additional element
Bi-AAS	Bi	AAS determination of bismuth	
Co-AAS	Co	AAS determination of cobalt	
Cu-AAS	Cu	AAS determination of copper	
Fe-AAS	Fe	AAS determination of iron	
In-AAS	In	AAS determination of indium	
Mn-AAS	Mn	AAS determination of manganese	
Ni-AAS	Ni	AAS determination of nickel	
Pb-AAS	Pb	AAS determination of lead	
Sb-AAS	Sb	AAS determination of antimony	
Zn-AAS	Zn	AAS determination of zinc	





Partner with us to unlock
the **full potential** of your
next project.

Metallurgical services

We offer a wide selection of metallurgical test-work services to assist with project feasibility studies and pilot plant flowsheet development. Our services include crushing, grinding, sizings, gravity separation, magnetic separation, flotation and leaching.

Please contact our experienced metallurgists to discuss metallurgical test-work programs and services to suit your projects requirements

METALLURGICAL SERVICES

Method ID	Description	Cost (Ex. GST)
ST-001	Clean up of ore and concentrate samples on full size Scots shaker table.	\$149.99 per hour
MS-001	Magnetic separation of different minerals using reading pilot roll magnetic separator.	\$149.99 per hour
BS-001	Gold and silver bullion smelting, up to 50g per sample, using an oxyacetylene torch and anhydrous borax flux in a scorifying dish.	\$74.99 per sample
SS-001	Sample sizing on 0.5 – 2.0 kg sample. 32, 45, 75, 106, 150, 180, 212, 300, 425 and 500 μ m (larger screen sizes available on request).	\$49.99 per sample or \$4.99 per screen





Consulting services

Our team of geologists and metallurgists bring in-depth knowledge of Northern Australia's unique geological landscape to deliver expert analysis and tailored recommendations.

We conduct thorough on-site inspections of mines and prospective sites, to provide expert consultation and assist with sample collection programs. With expertise spanning ore characterisation, process optimisation, and project due diligence, we pride ourselves on the provision of invaluable insights that work to ensure your project's success.

Contact our team to discuss which consulting services will suit your next project.





Element	PPM	%
Si	68.62%	0.46
Al	11.70%	0.34
Fe	8.13%	0.39
Sr	4.82%	0.13
Sn	2.765%	0.073
K	2.701%	0.084
Ti	4.900	0.09
Ni	14.70	0.50
Pb	950	55

OLYMPUS

Northern
METALLURGY