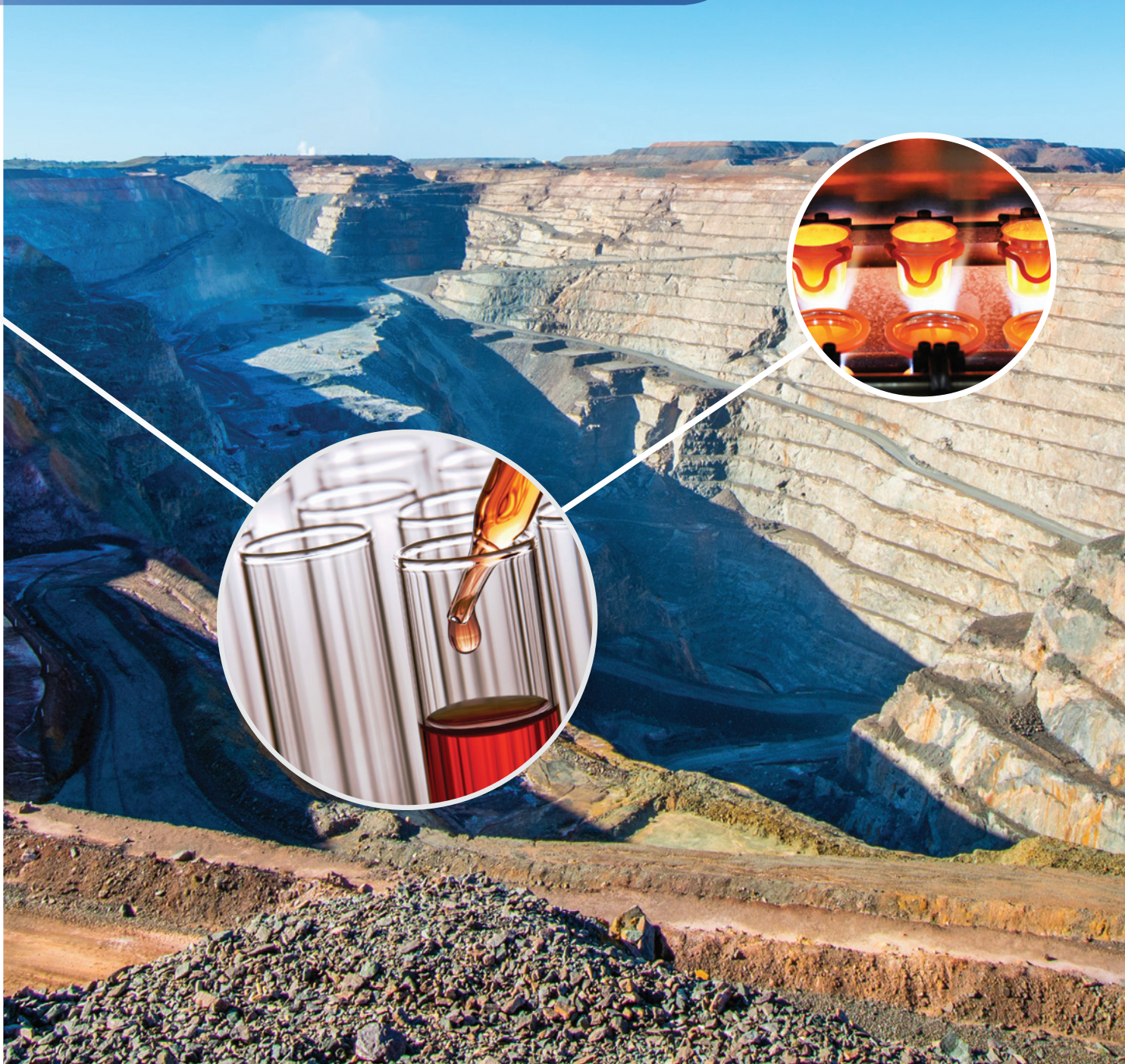


Schedule of Services & Charges 2016 Pupua New Guinea



Providing services across the resources supply chain

ITS (PNG) Limited, an integral part of the Intertek Minerals Group has been servicing the mining and exploration industries in Papua New Guinea since 2005 and is the partner of choice for clients across the region.

Intertek is a leading quality solutions provider to industries worldwide. From auditing and inspection, to testing, training, advisory, quality assurance and certification, Intertek adds value for its customers by helping improve the quality and safety of their products, assets and processes. With a network of more than 1,000 laboratories and offices and over 41,500 people in more than 100 countries,

Intertek supports companies' success in the global marketplace, by helping customers to meet end users' expectations for safety, sustainability, performance, integrity and desirability in virtually any market worldwide.

Our network of Mineral Laboratories offer world class geochemical assay and testing services including sample preparation, fire assay and precious metal analysis, exploration geochemistry, environmental testing, mine-site laboratories, coal testing and inspection, consulting minerals inspection, robotics and automated laboratory systems



Minerals Inspection Services are available at all major ports & distribution centres. Visit our website on up to date information on locations, services and fact sheets www.intertek.com/minerals/



Quality analysis,
efficient, independent,
& cost-effective
service.
Global scope,
local presence.

100
Countries

1000
Laboratories

41,500
Employees

Robotics and Automated Minerals Laboratory Systems

Intertek is the largest global commercial operator of automated and robotic mine site laboratories.

Intertek automated and robotic sample systems are purpose built, ranging from individual cells to fully integrated systems, providing complete end-to-end sampling to analysis solutions.

Using advanced robotic sample handling technology for minerals testing has distinct advantages, including rapid sample throughput, unparalleled consistency, exclusion of human error, a comprehensive audit trail, synchronised process control, reliability and fully programmable comminution parameters. Programmable parameters ensure that ores obtain the requisite treatment consistently.

Robotic systems reduce OH&S exposure to employees, eliminating heavy lifting and isolating personnel from hazardous materials. Thus significantly improving safety.

Labtrak

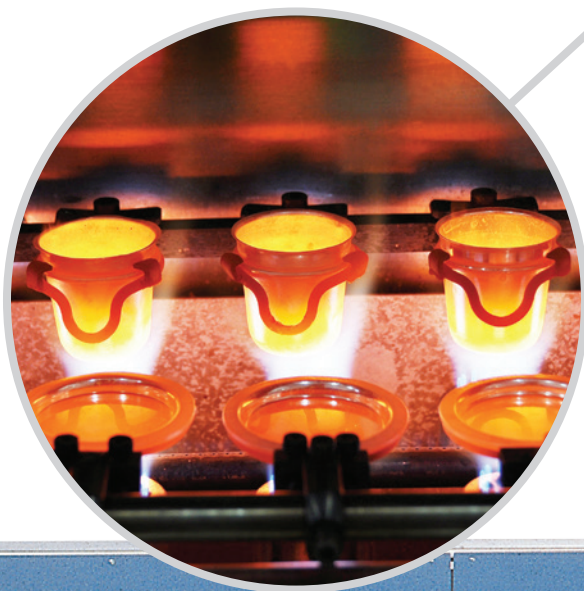
Labtrak is a one-stop application that facilitates the rapid, secure tracking of analytical jobs, viewing of quality control charts as well as downloading of both preliminary and final results in user defined formats. Labtrak is updated continually, reflecting ongoing changes to the job status and can be accessed using any common web browser.

Advances in Geochemical Analysis

The challenge of identifying geochemical anomalies related to concealed mineral deposits has driven innovation and development in analytical geochemistry.

Streamlined, ultra-clean digestions coupled with the latest ICP-MS collision cell technology offer improved detection limits commensurate with the crustal abundance of almost all elements, with an emphasis on long-term reproducibility.

Innovation
through
technology



Mine-Site Laboratories

Intertek designs, commissions and operates dedicated mine-site laboratories in remote locations and key mining regions across the globe and supports a range of mineral commodities. Mine-site laboratory services range from sample preparation installations to full service analytical laboratories and automated robotic facilities.

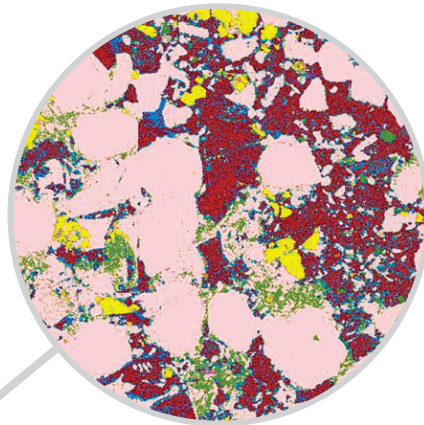
Intertek's minerals laboratories are operated by experienced personnel with support from an extensive global laboratory network. Fast, accurate and independent mineral analyses by Intertek allow mining companies to effectively manage their process control and regulatory reporting requirements.

Outsourcing your mine-site laboratory to Intertek ensures your operation will benefit from world-class expertise and services, which enables your company to focus resources and capital on the core business.

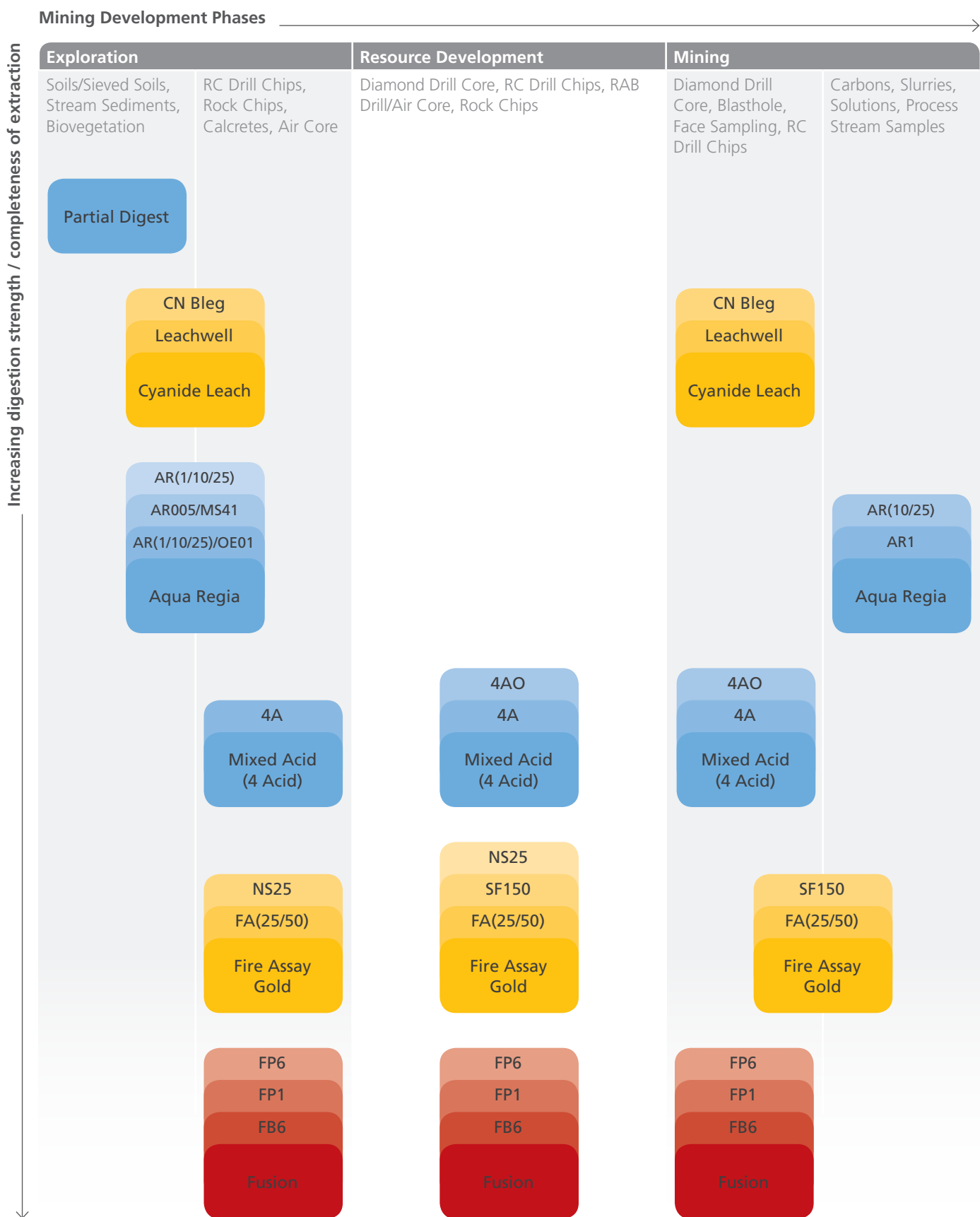
Mineralogy

Intertek's leading expertise and state-of-the-art facilities offer a range of mineralogical services. Industry experts in XRF and XRD support local and global operations, producing quality reliable data with the reassurance of years of experience and proven track record.

- Research quality lithogeochemical packages
- Applied Mineralogy - XRD Specialist on-site
- Low cost XRF & spectral scanning
- TerraSpec Near-Infrared Spectroscopy



Applications



The Australian schedule outlines the most commonly used analytical procedures. Not all methods are available at all locations. Please contact your local manager to discuss your specific requirements or for any services not listed.

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Sample Preparation

The production of a homogeneous sub-sample, representative of the material submitted to the laboratory is the primary purpose of sample preparation. Correct preparation is critical to obtaining meaningful analytical results. The selection of the actual sample preparation procedures will depend on the type and size of the sample, the mineralogy as well as the client's analytical and budgetary requirements.

Segregation into high and low grade sample preparation areas and utilisation of techniques such as vacuuming pulveriser vessels and/or quartz washes between samples reduces the potential for contamination.

Close and ongoing consultation with your laboratory manager or sales representative will ensure that optimal sample preparation techniques are employed, thus maximising the value added in the analytical process.

Sample Storage

All solid samples (assay pulps, bulk pulps and residues) will be stored without charge for 90 days after completion of the analysis. After this time all samples will be stored at a monthly rate until the client's written advice regarding return, collection or disposal is received.

Description	Code	Price
Storage of bulk, pulp or residue samples	ST111	PGK1.10 / sample / month
Bulk disposal of samples	ST211	At cost
Expenses related to return	ST311	At cost
Retrieval of selected pulps per sample	ST401	PGK25.00 / initial charge
Retrieval of selected pulps per sample	ST402	PGK120.00 / additional charge per hour
Retrieval of selected pulps per sample	ST403	PGK40.00 / initial charge
Retrieval of selected pulps per sample	ST404	PGK120.00 / additional charge per hour
Supply of pallets	ST405	PGK75.00
Collection of samples from NAZDAB	ST406	PGK400.00
Collection of samples from Lae Port	ST407	PGK240.00

Sample Preparation Packages

To facilitate easy selection of sample preparation procedures, commonly used techniques have been packaged together.

Soils, Stream Sediments, Pan Concentrates

Description	Code	Price
Sort, dry (105°C), pulverise all (95%<75µm) up to 2.0kg	PF01	PGK10.00

Preparation Package

Description	Code	Price
Sort, dry (105°C), crush (95%<3mm), pulverise 1.5 kg (95%<75µm) up to 2.0kg	PT01	PGK17.60
Sort, dry (105°C) crush (95%<3mm), RSD, pulverise 1.5kg (95%<75µm) up to 2.0kg	PB04	PGK19.20
Additional weight	PB04	PGK5.80
Sort, dry (105°C), Crush (95%<3mm), RSD, pulverise (95%<106µm) up to 3.0kg	PB05	PGK19.20
Additional weight	PB05	PGK5.80/kg

Miscellaneous Procedures

Description	Code	Price
Reporting weights of samples , wet or dry		PGK1.50
Compositing/Homogenising<2kg	CM201	PGK5.00
Compositing/Homogenising additional weight	CM202	PGK1.50/kg

Freight

Freight expenses incurred will be passed on at cost. For further information please contact the laboratory.

Precious Metals Analysis

A diverse range of precious metal analytical techniques are available for a wide range of applications ranging from grassroots exploration, where sub ppb sensitivities are required, to accurate resource estimation and grade control.

Lead collection fire assay remains the classic method for gold, platinum and palladium, however, aqua regia digestion, accelerated cyanide leach and BLEG (bulk leach extractable gold) are available for specific purposes. The full suite of platinum group elements can be quantified using nickel sulphide collection fire assay.

Lead Collection Fire Assay

Fire assay flux recipes have been carefully formulated to optimise precious metal recovery in diverse mineralogical matrices. Further flux modification and reduction in charge weight can be used to improve recoveries in difficult sample matrices.

Element	Description	Detection Limit	Code	Price
Au	25g fire assay / AAS	0.01ppm	FA25/AA	PGK32.00
Au	50g fire assay / AAS	0.005ppm	FA50/AA	PGK35.00
Au	25g fire assay / ICP-OES	1ppb	FA25/OE02	PGK34.00
	50g fire assay / ICP-OES		FA50/OE02	PGK36.30

Concentrates, metallurgical and high grade samples

POA

Screen Fire Assay

Screen fire assays utilise a large sample mass and entire dissolution of the coarse fraction is used to quantify the gold content of samples where high or coarse gold is present. Duplicate assays are carried out on the undersize fraction and total gold (or platinum and palladium) content is reported as a weighted mean alongside the individual fraction results.

Screen fire assays utilise a large sample mass, typically 1kg, and find application where the precious metal compositional and distributional heterogeneity in a pulp is such that a conventional fire assay would be accompanied by an unacceptable sampling error. The pulp sample is screened and the entire coarse fraction is fired assayed to recover the gold and/or PGEs. Duplicate assays are carried out on the more reproducible undersize fraction. The precious metal content is reported as a mass weighted mean along with the individual fractions' results.

Element	Description	Detection Limit	Code	Price
Au	1kg Screen fire assay 150µm / AAS	0.01ppm	SF150/AA	PGK150.00
	1kg Screen fire assay 100µm / AAS		SF100/AA	PGK160.00
	1kg Screen fire assay 75µm / AAS		SF75/AA	PGK175.00
	Additional oversize firing			PGK28.00

Cyanide Leaches

Cyanide extractable gold analysis is used in a range of applications from identification of low level anomalies by BLEG in grassroots exploration to accelerated leaches mimicking metallurgical recovery processes.

Accelerated Cyanide Leach LeachWELL™

High grade cyanide leaches utilise the LeachWELL™ accelerant to determine the cyanide extractable gold and provide an indication of potential recoveries in metallurgical processes and circuits. Recovery and analysis of the residues provide the option of reporting total gold values and thus determining the refractory gold fraction.

Element	Description	Detection Limit	Code	Price
Au	200g leach / AAS	0.01ppm	LW200/SAA	POA
	400g leach / AAS		LW400/SAA	POA
	1000g leach / AAS		LW1000/SAA	POA
Ag	As an additional element	1ppm	/MS	POA

Tail recovery, entire tail is washed, re-homogenised and analysed by fire assay for Au:

Element	Description	Detection Limit	Code	Price
Au	200g wash / grind / fire assay / AAS	0.01ppm	TR200/AA	POA
	400g wash / grind / fire assay / AAS		TR400/AA	POA
	1000g wash / grind / fire assay / AAS		TR1000/AA	POA

Exploration Geochemistry

The challenge of identifying geochemical anomalies related to concealed mineral deposits has driven innovation and development in analytical geochemistry.

Advances in instrumentation and methodology offer significant improvements in aligning detection limits with elemental crustal abundances and provide exceptional long term data reproducibility.

A number of exploration methods are offered including partial selective leaches, biogeochemical analyses, aqua regia digestions and near-total four acid digestions. The selection of the most appropriate method is critical to achieving the most successful outcome for your exploration project.

Aqua Regia Digestion for Multi-Elements

The advent of new analytical instrumentation technologies coupled with streamlined, ultra clean aqua-regia digestion methods provide the best platform for fast, cost effective and consistent trace level analysis for your exploration samples.

The aqua regia digestion is a classical empirical digestion technique with successful global application in geochemical exploration. Most oxide, sulphide and carbonate minerals are digested, however, refractory minerals and most silicates may be only partially decomposed. Recovery levels will vary between the elements and sample matrices with indicative recoveries highlighted on the package tables.

Samples containing graphitic or other organic material may require roasting prior to digestion.

Aqua Regia Digestion Packages

Aqua regia digestion coupled with ICP-OES and ICP-MS offers a cost effective option for gold and multi-element packages.

The 1g options are primarily intended as a multi-element scanning tool. The precious metal results may be indicative only and should be interpreted with caution owing to the deportment of these elements in geological many sample types. Larger sample masses (e.g. 10g or 25g) can offer a more reliable precious metal analysis. Individual elements are available on request.

Aqua Regia 32 Element Package

Element	Range ppm	Element	Range ppm	Element	Range ppm
Ag	0.5 - 250	Cu	1 - 2%	S	50 - 5%
Al	20 - 10%	Fe	0.01% - 50%	Sb	2 - 5000
As	5 - 5000	K	20 - 5%	Sc	1 - 2500
B	10 - 1%	La	20 - 2500	Sr	1 - 5000
Ba	2 - 2000	Mg	0.01% - 20%	Te	2 - 1000
Bi	2 - 5000	Mn	1 - 2%	Ti	5 - 1%
Ca	0.01% - 40%	Mo	1 - 5000	Tl	5 - 1000
Cd	0.5 - 1000	Na	0.01% - 5%	V	2 - 5000
Ce	20 - 5000	Ni	1 - 2%	W	2 - 1000
Co	1 - 1%	P	20 - 2%	Zn	1 - 2%
Cr	2 - 1%	Pb	1 - 5000		
Aqua regia digestion 1g			AR1/OE32		PGK50.00

Additional elements and larger packages available on request

Legend

Complete recovery for most samples

Near complete recovery for most samples

Not complete recovery

Aqua Regia 52 Element Package

Element	Range ppm	Element	Range ppm	Element	Range ppm
Au	1ppb - 500ppb	Hg	0.1 - 100	Sb	0.02 - 5000
Ag	0.05 - 250	In	0.01 - 1000	Sc	0.1 - 2500
Al	20 - 10%	K	20 - 5%	Se	1 - 5000
As	1 - 5000	La	0.005 - 2500	Sn	0.05 - 1000
B	10 - 1%	Li	0.1 - 2500	Sr	0.02 - 5000
Ba	1 - 2000	Mg	0.01% - 20%	Ta	0.01 - 1000
Be	0.05 - 1000	Mn	1 - 2%	Te	0.1 - 1000
Bi	0.01 - 5000	Mo	0.1 - 5000	Th	0.01 - 2500
Ca	0.01% - 40%	Na	0.01% - 5%	Ti	5 - 1%
Cd	0.01 - 1000	Nb	0.02 - 1000	Tl	0.01 - 1000
Ce	0.005 - 5000	Ni	0.5 - 2%	U	0.01 - 5000
Co	0.1 - 1%	P	20 - 2%	V	2 - 5000
Cr	1 - 2%	Pb	0.5 - 5000	W	0.05 - 1000
Cs	0.01 - 1000	Pd	10ppb - 500ppb	Y	0.02 - 2000
Cu	0.5 - 2%	Pt	5ppb - 500ppb	Zn	1 - 2%
Fe	0.01% - 50%	Rb	0.02 - 1000	Zr	0.1 - 1000
Ga	0.05 - 500	Re	0.001 - 500		
Hf	0.01 - 1000	S	50 - 5%		
Aqua regia digestion 1g		AR1/OM52		PGK70.00	

Instrument finish may vary between locations.

Au 0.01ppm, 0.1ppb options available on request

Rare Earth Elements (REE) 12 Element Add On

Additional rare earth elements are available as a supplementary package to the AR1, AR10 and AR25 digestion packages.

Element	Range ppm	Element	Range ppm	Element	Range ppm
Pr	0.005 - 2500	Gd	0.005 - 1000	Er	0.005 - 1000
Nd	0.005 - 2500	Tb	0.005 - 1000	Tm	0.005 - 1000
Sm	0.005 - 2500	Dy	0.005 - 1000	Yb	0.005 - 1000
Eu	0.005 - 1000	Ho	0.005 - 1000	Lu	0.005 - 1000
REE add on		*/MS52R or *OM52R		PGK20.00	

Detection limits may vary between locations.

Aqua Regia Digestion Individual Elements

A selection of individual elements is offered to enable suites to be customised to suit your specific needs, or where only a few elements are required.

Description	Code	Price
Aqua regia digestion 1g / ICP first element	AR1/OM	PGK35.00
Aqua regia digestion 1g / secondary instrument first element		PGK17.00
/ per additional element		PGK1.70

Four Acid Digestion Multi-Element Analysis

Four acid digestion offers a “near total” dissolution of almost all minerals species, targeting silicates not dissolved in less aggressive aqua regia digests. Carefully staged digestion steps minimise losses due to volatilisation of some elements.

Highly resistant refractory minerals such as zircon, cassiterite, columbite-tantalite, ilmenite, xenotime rutile, barite and wolframite will require a fusion digestion to guarantee complete dissolution.

Packages range from basic ICP-OES only suites through to a comprehensive element list utilising both ICP-OES and ICP-MS for ultra-trace levels. Individual elements are available on request.

Four Acid 33 Element Package

Element	Range ppm	Element	Range ppm	Element	Range ppm
Ag	0.5 - 500	Fe	100 - 50%	S	50 - 10%
Al	50 - 15%	K	20 - 10%	Sb	5 - 1%
As	10 - 1%	La	20 - 5000	Sc	1 - 5000
Ba	2 - 5000	Li	1 - 5000	Sn	5 - 2000
Bi	5 - 1%	Mg	20 - 40%	Sr	1 - 1%
Ca	50 - 40%	Mn	1 - 5%	Te	5 - 2000
Cd	0.5 - 2000	Mo	2 - 1%	Ti	5 - 2%
Ce	20 - 1%	Na	20 - 10%	Tl	10 - 2000
Co	1 - 2%	Ni	1 - 5%	V	1 - 2%
Cr	5 - 2%	P	50 - 5%	W	5 - 2000
Cu	1 - 5%	Pb	5 - 1%	Zn	1 - 5%
4A/OE33				PGK50.00	

Four Acid 48 Element Package

Element	Range ppm	Element	Range ppm	Element	Range ppm
Ag	0.05 - 500	Hf	0.05 - 2000	Sb	0.05 - 1%
Al	50 - 15%	In	0.01 - 2000	Sc	0.1 - 5000
As	0.5 - 1%	K	20 - 10%	Se	0.5 - 1%
Ba	0.1 - 5000	La	0.01 - 5000	Sn	0.1 - 2000
Be	0.05 - 2000	Li	0.1 - 5000	Sr	0.05 - 1%
Bi	0.01 - 1%	Mg	20 - 40%	Ta	0.01 - 2000
Ca	50 - 40%	Mn	1 - 5%	Te	0.2 - 2000
Cd	0.02 - 2000	Mo	0.1 - 1%	Th	0.01 - 5000
Ce	0.01 - 1%	Na	20 - 10%	Ti	5 - 2%
Co	0.1 - 2%	Nb	0.05 - 2000	Tl	0.02 - 2000
Cr	1 - 2%	Ni	0.5 - 5%	U	0.01 - 1%
Cs	0.05 - 2000	P	50 - 5%	V	1 - 2%
Cu	0.5 - 5%	Pb	0.5 - 1%	W	0.1 - 2000
Fe	100 - 50%	Rb	0.05 - 2000	Y	0.05 - 2000
Ga	0.05 - 2000	Re	0.002 - 2000	Zn	1 - 5%
Ge	0.1 - 2000	S	500 - 10% (50 - 10%)	Zr	0.1 - 2000
4A/OM48				PGK82.00	

Rare Earth 12 Elements Add On

Rare earth elements are available as a supplementary package.

Element	Range ppm	Element	Range ppm	Element	Range ppm
Pr	0.01 - 5000	Gd	0.01 - 2000	Er	0.01 - 2000
Nd	0.01 - 5000	Tb	0.01 - 2000	Tm	0.01 - 2000
Sm	0.01 - 5000	Dy	0.01 - 2000	Yb	0.01 - 2000
Eu	0.01 - 2000	Ho	0.01 - 2000	Lu	0.01 - 2000
4A/OM48R				PGK20.00	

Four Acid Digest Individual Elements

A selection of individual elements is offered to enable suites to be customised to suit your specific needs, or where only a few elements are required.

Description		Code	Price
4 acid digestion	/ ICP first element	4A/OM	PGK35.00
	/ secondary instrument first element		PGK17.00
	/ per additional element		PGK1.70

Ores & Commodities

A diverse suite of procedures provide optimum precision and accuracy of the target element typically required in advanced exploration and resource evaluation. Techniques include multi-acid and fusion digests, useful for characterisation of geological samples where total dissolution of the sample is required, coupled with ICP-OES, ICP-MS and XRF instrumentation.

Trade commercial grade sample analysis where results are used for umpire or commercial settlement are available on request, see Minerals Trade Services.

Ores and High Grade Materials

Acid Digestion

High grade sulphide ores are readily quantified using a 4 acid digest formulated to retain low-solubility elements such as Pb and Ag in solution at higher concentrations. This is a near total dissolution however elements incorporated in high refractory minerals may not be completely digested. The use of ICP-OES and ICP-MS allows for the accurate determination of the major ore chemistry as well as the low level characterisation of the deleterious trace elements and precious metals such as Ag.

Four Acid Ore Grade ICP-OES Individual Elements

Element	Range ppm	Element	Range ppm	Element	Range ppm
Ag	2 - 5000	Fe	100 - 70%	Sb	50 - 10%
Al	500 - 50%	K	200 - 20%	Sc	20 - 1%
As	50 - 20%	Mg	200 - 60%	Sr	10 - 10%
Ba	20 - 2%	Mn	10 - 50%	Te	50 - 2%
Bi	50 - 10%	Mo	20 - 10%	Ti	50 - 5%
Ca	100 - 50%	Na	200 - 20%	Tl	50 - 2%
Cd	10 - 5%	Ni	10 - 70%	V	20 - 1%
Co	10 - 5%	P	100 - 50%	Y	20 - 12000
Cr	50 - 5%	Pb	50 - 50%	Zn	10 - 70%
Cu	10 - 70%	S	100 - 60%	Zr	20 - 2000

Ore grade 4 acid digest / ICP-OES first element
/ per additional element

4AH1/OM

PGK40.00

PGK1.70

Lower detection limits are available on this digest for some elements by ICP-MS

POA

Specific Commodities

Nickel Laterite Ores

The oxidised nature of nickel laterite ore and the low sulphur contents make XRF with a single point LOI an ideal technique for the chemical characterisation of these ores. XRF can accurately quantify the nickel and cobalt contents of the ore, important trace elements such as cobalt and zinc, as well as the major oxide components which are used to classify the laterite ore type. Nickel laterite ores can be hygroscopic with high moisture contents. Moisture is therefore corrected for routinely and all results are reported on a dry basis.

Nickel Laterite Ore XRF Package

Element	Range ppm	Element	Range ppm	Element	Range ppm
Ni	0.005 - 20	Fe ₂ O ₃	0.01 - 100	SiO ₂	0.01 - 100
Co	0.005 - 5	K ₂ O	0.01 - 100	SO ₃	0.002 - 100
Al ₂ O ₃	0.01 - 100	MgO	0.01 - 100	TiO ₂	0.01 - 100
CaO	0.01 - 100	MnO	0.01 - 100	Zn	0.005 - 5
Cu	0.005 - 5	Na ₂ O	0.01 - 100	LOI 1000°C	0.01 - 100
Cr ₂ O ₃	0.005 - 10	P ₂ O ₅	0.002 - 100		

Li borate fusion / XRF

FB1/XRF40

PGK80.00

Legend

Complete recovery for most samples

Near complete recovery for most samples

Not complete recovery

Individual Methods

Gravimetric Determinations

Element	Description	Detection Limit	Code	Price
LOD	Loss on drying (105°C or client nominated temperature)	0.01 %	LOD/GR	PGK25.00
SG	Specific gravity / core and rocks uncoated		SG/GR	PGK35.00
SG	Specific gravity / core and rocks wax coated		SGW/GR	PGK65.00
SG	Specific gravity / core and rocks lacquer coated		SGC/GR	PGK50.00

Carbon and Sulphur Analysis

Carbon and sulphur analyses using a variety of spectroscopic or gravimetric methods with the option of pretreatments for targeting specific forms of the analyte element.

Element	Description	Detection Limit	Code	Price
C	Total carbon by CS analyser	0.01 % - 50%	CSA01	PGK32.50
S	Total sulphur by CS analyser	0.01 % - 50%	CSA02	PGK32.50
C,S	Total carbon & sulphur by CS analyser	0.01 % - 50%	CSA03	PGK50.00
S	Sodium carbonate insoluble sulfur	0.01 % - 50%	S73/CSA	PGK75.00

Acid Rock Drainage Package

A range of tests to support prediction of acid generation of mine waste. Individual tests are available on request.

Element	Description	Detection Limit	Code	Price
ANC	Titrimetric measurement of acid consumption	1kgH ₂ SO ₄ /t	ARD01	PGK200.00
NAG	Titrimetric measurement of acid generation by oxidation	1kgH ₂ SO ₄ /t		
NAG pH	pH of oxidised solution	0.1		
C,S	Total carbon & sulphur by CS analyser	0.01 % - 50%		
pH	pH of 1:5 water extract	0.1		
EC	Conductivity of 1:5 water extract			
NAPP	Net acid producing potential calculated from ANC and S	1kgH ₂ SO ₄ /t		
MPA	Maximum potential acidity calculated from S	1kgH ₂ SO ₄ /t		

Specialised Services

Mineralogy

Applied mineralogy is the study of the mineral phases of materials which contrasts with and complements a traditional chemical analysis. Applied mineralogy identifies the nature of the mineral phase, the grain size and morphology, textures, mineral associations and other parameters. Applied mineralogy has important applications in mineral exploration, mineral processing, mineral waste disposal and treatment, hydrometallurgy, pyrometallurgy and refining. It is also utilised in oil and gas, coal and environmental industries.

Various ores and commodities can be analysed such as base metal ores, precious metal ores, iron ores, bauxite, chromite, nickel, uranium, rare earths, industrial minerals (including graphite), refractory minerals and clays.

A comprehensive suite of applied mineralogy analyses are available. Please call our Perth laboratory to discuss the options best suited to your requirements with Intertek's XRD specialist.

Bulk Mineralogy

X-Ray Diffraction

Powder X-ray diffraction (XRD) is an analytical technique primarily employed for the identification and quantification of crystalline materials in bulk samples, both natural and synthetic.

The results given are either qualitative (descriptive of the sample make-up) or quantitative. Quantitative results can include the non-crystalline (amorphous) content of the sample

Sample Preparation

XRD Crush and Pulverize Package

Description	Code	Price
Crush -2mm, rotary split 800g, pulverise 800g to < 60um	XRD13	POA

*Samples are not to be dried

XRD Micronizing Package

Description	Code	Price
Micronizing	XRD14	POA

*Samples are not to be dried

XRD Crush, Pulverize and Micronize Package

Description	Code	Price
Crush -2mm, rotary split 800g, pulverise 800g to <60um, micronize	XRD15	POA

*Samples are not to be dried

XRD Crush, Pulverize and Micronize Package

Description	Code	Price
Pulverise <800g to < 60um, micronize	XRD16	POA

X-Ray Diffraction Analysis

A number of qualitative and quantitative options are available. Please contact the laboratory to discuss your specific requirements.

Element	Description	Code	Price
QUALITATIVE	Qualitative analysis for complete mineralogy	XRDQual	POA
QUANTITATIVE	Quantitative analysis for complete mineralogy (crystalline content only)	XRDQuant	POA
QUANTITATIVE	Quantitative analysis for complete mineralogy and amorphous content	XRDQuant01	POA
QUANTITATIVE	Quantitative analysis for complete mineralogy and amorphous content (2 x Scan analysis)	XRDQuant02	POA

Clay Mineralogy

Clays are important constituents of soils, mudstones, shales and some ores that often require specialist attention. A range of analytical tests are available, including:

- Clay separation from bulk materials
- Qualitative or quantitative XRD analysis from the bulk sample
- Clay mineral identification (XRD) (from glycolation and heating regimes)
- High resolution microscopy analysis via SEM-EDS/QEMSCAN
- Swelling Index of clays in water (adapted from the ASTM method)
- Swelling Index of clays in solutions of specific interest
- Cation Exchange Capacity (CEC) analysis

XRD Clay separation

Description	Code	Price
Separation of clay fraction, <2 µm	CLAYF	POA
Separation of clay fraction, <2 µm, in iron-rich samples	CLAYFFe	POA

X-Ray Diffraction Analysis

Element	Description	Code	Price
QUALITATIVE	Qualitative analysis of clays (incl. glycolation and heating)	XRDQual01	POA

ASD Terraspec Scan

The TerraSpec 4 Hi Res spectrometer offers a rapid scan for the identification and characterisation of minerals visible in the NIR range. Minerals and mineral groups include hematite, goethite, garnet, pyroxene, amphibole, epidote, apatite, tourmaline, topaz, clay, mica, chlorite, serpentine, carbonates, hydrous silicates and rare earth minerals. The scan information can be used to identify, characterise and map alteration zones associated with various ore forming processes.

For best results, it is recommended that the characterisation of the mineral analysis be confirmed by XRD analysis on either a continuum or a selected subset of samples.

Description	Code	Price
TerraSpec 4 Hi Res scan	/NIR	POA
TSG Post processing mineralogy report - standard report	/NIR01	POA

Micro Mineralogy

QEMSCAN

Automated mineralogy via QEMSCAN (Quantitative Evaluation of Minerals by Scanning Electron Microscopy) is used to identify mineral phases, in situ, at the micron scale on polished blocks or thin sections.

As well as identifying the minerals present, the processing of the data allows the visualization of the textural and spatial arrangements of the minerals. The processing can thus determine grain sizes and shapes as well as provide information for mineral associations, mineral liberation, elemental deportment and elemental mapping.

The technique is best used in conjunction with the bulk mineralogical data obtained from XRD. Please contact us for options.

Minerals Trade Services

Intertek Minerals Trade Services provide independent inspection, sampling, testing and certification services which assist to protect the quantity and quality of mineral commodities to reduce commercial risk in the trading environment. Inspection and testing services are completed to appropriate international standards and procedures.

Non ferrous commercial exchange assay services are provided by Intertek's industry recognised Laboratory Services International (LSI), based in Rotterdam, Netherlands. LSI is an established Umpire laboratory providing analytical services to miners, traders and refiners with a long history of expertise in non-ferrous party and umpire analysis and is the industry leader for accuracy, service quality and independence.

In addition, Intertek provides dedicated onsite laboratory services for grade control, process control and shipment samples for iron ore, gold and base metal operations. Iron ore testing facilities are ISO/IEC 17025 accredited for analysis iron ore as per the ISO-9516 Standards.

The global Intertek Minerals Inspection Team also performs risk management and inspection services in load and discharge ports alike. Offering a full scope of WSMD and party assays, in locations from the Americas, Africa to China and the Far East.

Cargo Inspection Services include:

- Marine cargo surveying
- Loading & discharge superintendence
- Independent ship/cargo damage & repair surveys
- Pre shipment inspection
- Government statutory surveys
- Witness & audit
- Marine consultancy
- Stockpile measurement
- Safety and certification services
- Independent draft surveys
- On hire/off hire/draft/bulk surveys
- Ship vetting services
- P & I surveys
- Foreign trade standards
- Metering & tank calibration
- Loss control
- Marine training

Intertek's global independent sampling, inspection and certification services help protect the quantity and quality of commodities and reduce commercial risk. Please contact us to see how Intertek can help your organisation with Minerals Trade Services.

Mine and Port Site Laboratories

Through its dedicated Mine Site Services project team, Intertek is able to provide its clients with a complete solution for any scale of mine or port site laboratory installation, from concept phase to commissioning and contract management. Intertek operates, designs and commissions dedicated mine site laboratories in remote locations to enhance its service to mining operations across multiple mineral commodities.

Intertek's automated and robotic sample systems are purpose built, ranging from individual cells to fully integrated systems providing complete end-to-end sampling to analysis solutions. Intertek Robotic Laboratories (IRL) offers unmatched experience and expertise in the operation of fully automated laboratories in remote locations and is the largest commercial operator of fully automated laboratories.

Outsourcing of a mine-site laboratory offers the benefit of Intertek's world-class expertise and services, whilst enabling companies to focus resources and capital on their core business.

Mine-Site Laboratory Services:

- Sample preparation
- Mineral assay services
- Robotics and automated laboratory systems
- Laboratory outsourcing (build, supply, operate options)
- Consulting services e.g. Laboratory design, laboratory audits, round robins
- Ongoing staffing and technical support

Minerals Processing

Supported by Intertek Minerals global laboratory network Intertek offers mineral processing and mineralogical testing services to the mining industry for all major ore types. Sample preparation facilities are licensed radiation premises and equipped to handle hazardous materials.

Intertek Mineral Processing offers tailored programs to the needs of individual projects, from bench scale to small scale pilot plant studies. Services include:

- Ore characterisation
- Flotation
- Magnetic separation
- Batch leaching testwork
- Comminution
- Knelson concentration

Minerals Environmental Testing Services

Intertek environmental laboratories support the minerals industry with water, soil and air testing to governmental, regulatory and industry standards.

Minerals environmental services include:

- Water quality
- Ecotoxicology services
- Biological tissue analysis
- Ambient air quality
- Acid sulphate soils
- Environmental baseline studies
- Waste analysis and characterisation
- Sediment and soil analysis
- Soil nutrient analysis
- Air emissions testing
- Acid rock drainage prediction test
- Field sampling and on-site testing

Exploration and Production Services

From reservoir services and production support, Intertek's analytical and scientific services are focused on extending the longevity of plant and equipment, reducing environmental impacts and optimising operations.

Services include:

- Petroleum geochemistry
- Petrophysics/core analysis
- Environmental chemistry
- Ecotoxicology
- Industrial chemistry

Business Assurance

Management systems auditing helps you find and implement best practices for continual improvement, and adds strategic value to your business.

Intertek's comprehensive auditing and certification services provide the tools you need to evaluate and continually improve your business processes.

As an accredited third party registrar, we provide independent verification to ensure that your management system is effective in achieving your business objectives, while also certifying that it meets internationally recognised standards including ISO 9001, ISO 14001 and OHSAS 18001.

Our internal audit, second party supplier audit, and process analysis services will help you proactively monitor performance while saving valuable time and money.

Our services include:

Management Systems Certification:

- ISO 9001
- ISO 14001
- OHSAS 18001 / AS/NZS 4801

Supply Chain Assessment & Compliance Programs:

- Workplace Conditions Assessment (WCA)
- Supplier Qualification Programs (SQP)
- Global Security Verification (GSV)

Environmental & Sustainability Auditing & Certification:

- QC 080000

Industry Services

Intertek's Industry Services support the mining, oil and gas, power, construction, engineering, chemical and other heavy industries to manage operational risk and maximise returns. Applying leading inspection, testing, verification and monitoring practices, we assist clients to effectively manage product and process development, regulatory compliance, supply chain integrity and plant and asset maintenance. We enhance our customers' returns from production and manufacturing whilst improving safety, reliability and uptime.

Services include:

- Technical Staffing Services (TSS)
- Technical Inspection Services (TIS)
- Intertek Surveying Services (ISS)
- Asset Integrity Management (AIM)
- Non-Destructive Testing (NDT)

General Information

Sample Despatch

To assist with the efficient processing of your samples please email all assay instructions and any freight information prior to or at the time of despatch. Sample submissions received without written instructions can not be processed until adequate written instructions are received from the client.

All discrepancies between submission sheets and actual samples received will be reported prior to commencement of the processing.

We recommend that all submissions of samples are clearly labelled and packaged in a concise and systematic order and are accompanied by accurate and detailed paperwork. To facilitate safe manual handling we would appreciate that samples be packaged in units not exceeding 25kg each. Sample submissions poorly labelled or packaged may incur additional sorting charges. Please “flag” the bag containing the paperwork.

Sample submission pads and pre-addressed stick-on labels are available upon request free of charge. A sample submission form is available from our web site. We offer an online submission service or the option to print a submission to be either emailed or faxed.

The minimum information required on any sample submission sheet is:

1. Client name
2. List or range of sample numbers
3. Sample preparation required
4. Elements required for analysis
5. Methods of analysis preferred
6. Result destination(s)
7. Electronic data format
8. Invoice destination
9. Sample storage requirements
10. Appropriate warnings if any samples are potentially hazardous
11. Indication of any samples that may cause problems during the preparation or analysis. This includes the presence of normally trace elements at % levels, visible gold, graphitic shales, etc.

Certain samples may require classification as dangerous goods, for the purpose of transport, processing and storage. Compliance is the client's responsibility, please ensure that the samples have been classified, marked and transported in accordance with the requirements of dangerous goods legislation.

Your co-operation with sample submissions will eliminate unnecessary delays in turnaround.

Service Fees and Surcharges

Prices in this schedule are effective from 1st January 2016.

ITS (PNG) Ltd. PNG applies a processing charge of PGK 50.00 per job. Maximum job size is 200 samples. Larger numbers of samples on a single submission will be split into multiple jobs.

Discounts may apply for large batches – please contact ITS PNG (Ltd) to discuss your needs.

All prices quoted in this schedule are in Papua New Guinea Kina, and exclude PNG Sales Tax.

Conversion Tables

Useful Chemical Conversion Factors

Element		Factor	Compound	Element		Factor	Compound	Element		Factor	Compound
Al	x	1.889	Al ₂ O ₃	Fe	x	1.43	Fe ₂ O ₃	Pb	x	1.155	PbS
As	x	1.32	As ₂ O ₃	Fe	x	1.574	FeS	Rb	x	1.094	Rb ₂ O
B	x	3.22	B ₂ O ₃	K	x	1.205	K ₂ O	Sb	x	1.197	Sb ₂ O ₃
Ba	x	1.699	BaSO ₄	La	x	1.173	La ₂ O ₃	Si	x	2.139	SiO ₂
Ba	x	1.117	BaO	Li	x	2.153	Li ₂ O	Sn	x	1.27	SnO ₂
Be	x	2.775	BeO	Mg	x	1.658	MgO	Sr	x	1.183	SrO
Ca	x	1.399	CaO	Mg	x	3.648	MgCO ₃	Ta	x	1.221	Ta ₂ O ₅
Ca	x	2.497	CaCO ₃	Mn	x	1.291	MnO	Th	x	1.138	ThO ₂
Ce	x	1.171	Ce ₂ O ₃	Mn	x	1.582	MnO ₂	Ti	x	1.668	TiO ₂
Co	x	1.271	CoO	Mo	x	1.5	MoO ₃	U	x	1.179	U ₃ O ₈
Cr	x	1.462	Cr ₂ O ₃	Mo	x	1.668	MoS ₂	V	x	1.785	V ₂ O ₅
Cs	x	1.06	Cs ₂ O	Na	x	1.348	Na ₂ O	W	x	1.261	WO ₃
Cu	x	1.252	CuO	Nb	x	1.432	Nb ₂ O ₅	Y	x	1.27	Y ₂ O ₃
Cu	x	1.252	Cu ₂ S	Ni	x	1.273	NiO	Zn	x	1.245	ZnO
F	x	2.055	CaF2	P	x	2.291	P ₂ O ₅	Zn	x	1.49	ZnS
Fe	x	1.287	FeO	Pb	x	1.077	PbO	Zr	x	1.351	ZrO ₂

Common Equivalents

ppm	ppb	%	grams / metric tonne
1	1,000	0.0001	1
10	10,000	0.001	10
100	100,000	0.01	100
1,000	1,000,000	0.1	1,000
10,000	10,000,000	1	10,000

Drill Core Specifications

Drill Core	Diameter (mm)	Volume per meter (cm ³)		
		Full	Half	Quarter
TT	35.0	960	480	240
BQ	36.4	1040	520	260
NQ	47.6	1780	890	445
HQ	63.5	3170	1585	793
BQ3	33.5	880	440	220
NQ3	45.1	1600	800	400
HQ3	61.1	2930	1465	733

Core mass (g) = Volume x SG x length (m)

Recommended Methods of Analysis for Low Grade Geological Materials



Hydrogen 1 1.0079																	Helium 2 4.0026	
Lithium 3 6.941	Beryllium 4 9.0122																	Neon 10 20.180
Sodium 11 22.990	Magnesium 12 24.305																	Argon 18 39.948
Potassium 19 39.098	Calcium 20 40.078	Scandium 21 44.956	Titanium 22 47.867	Vanadium 23 50.942	Chromium 24 51.996	Manganese 25 54.938	Iron 26 55.845	Cobalt 27 58.933	Nickel 28 58.693	Copper 29 63.546	Zinc 30 65.38	Gallium 31 69.723	Germanium 32 72.64	Arsenic 33 74.922	Selenium 34 78.96	Bromine 35 79.904	Krypton 36 83.798	
Rubidium 37 85.468	Strontium 38 87.62	Yttrium 39 88.906	Zirconium 40 91.224	Niobium 41 92.906	Molybdenum 42 95.96	Technetium 43 98	Ruthenium 44 101.07	Rhodium 45 102.91	Palladium 46 106.42	Silver 47 107.87	Cadmium 48 112.41	Indium 49 114.82	Tin 50 118.71	Antimony 51 121.76	Tellurium 52 127.60	Iodine 53 126.90	Xenon 54 131.29	
Cesium 55 132.91	Barium 56 137.33	Lanthanum 57 138.91	Hafnium 72 178.49	Tantalum 73 180.95	Tungsten 74 183.84	Rhenium 75 186.21	Osmium 76 190.23	Iridium 77 192.22	Platinum 78 195.08	Gold 79 196.97	Mercury 80 200.59	Thallium 81 204.38	Lead 82 207.2	Bismuth 83 208.98	Polonium 84 209	Astatine 85 210	Radon 86 222	
Francium 87 223	Radium 88 226	Actinium 89 227	Rutherfordium 104 261	Dubnium 105 262	Seaborgium 106 266	Bohrium 107 264	Hassium 108 277	Meitnerium 109 268	Darmstadtium 110 269	Roentgenium 111 272	Copernicium 112 285	Ununtrium 113 284	Ununquadium 114 289	Ununpentium 115 288	Ununhexium 116 289	Ununseptium 117 289	Ununoctium 118 289	

Atomic Number

Element Name

Element Symbol

Atomic Weight

Primary Method

Other Method

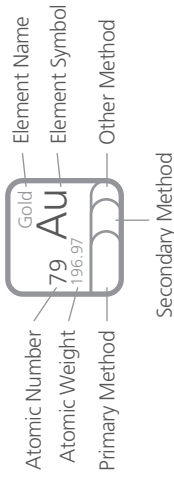
Secondary Method

Gold

79

Au

196.97



Cerium 58 140.12	Praseodymium 59 140.91	Neodymium 60 144.24	Promethium 61 145	Samarium 62 150.36	Europium 63 151.96	Gadolinium 64 157.25	Terbium 65 158.93	Dysprosium 66 162.50	Holmium 67 164.93	Erbium 68 167.26	Thulium 69 168.93	Ytterbium 70 173.05	Lutetium 71 174.97
Thorium 90 232.04	Protactinium 91 231.04	Uranium 92 238.03	Neptunium 93 237	Plutonium 94 244	Americium 95 243	Curium 96 247	Berkelium 97 247	Californium 98 251	Einsteinium 99 252	Fermium 100 257	Mendelevium 101 258	Nobelium 102 259	Lawrencium 103 262

Intertek Minerals Services Terms and Conditions (2015)

- 1.0 Unless otherwise specifically agreed in writing Intertek Minerals (hereinafter called "the Company") undertakes services in accordance with these general conditions (hereinafter called "General Conditions") and accordingly all offers or tenders of service are made subject to these General Conditions. All resulting contracts, agreements or other arrangements will in all respects be governed by these General Conditions, except only to the extent that the law of the place where such arrangements or contracts are made or carried out shall preclude any of the General Conditions and in such case such local law shall prevail wherever, but only to the extent that, it is at variance with these General Conditions.
- 1.1 For the purposes of these conditions the term "Intertek Minerals" comprises all of the Intertek subsidiaries carrying out Minerals testing and inspection activities including but not limited to Intertek, Intertek Minerals, Intertek Genalysis, Intertek Testing Services (Australia) Pty Ltd, Intertek Robotic Laboratories Pty Ltd, (IRL), PT Intertek Utama Services (IUS), ITS (PNG) Ltd, Genalysis Laboratory Services Pty Ltd, Genalysis Laboratory Services SA Pty Ltd, Intertek NTEL, Intertek Minerals Limited, Intertek Testing Services Philippines Inc, Intertek Genalysis Namibia (Pty) Ltd, Intertek International Tanzania Ltd, ITS West Africa, Intertek Commodities Botswana, Intertek Genalysis Zambia Ltd, Intertek Genalysis SI Ltd, Intertek Vigalab SpA, Laboratory Services International.
- 2.0 The Company is an enterprise engaged in the trade of inspection and testing. As such, it:
- 2.1 carries out such standard services as are referred to in General Condition 6;
- 2.2 renders advisory and special services as may be agreed by the Company and as referred to in General Condition 7; and
- 2.3 issues reports and/or certificates as referred to in General Condition 8
- 3.0 The Company acts for the persons or bodies from whom the instructions to act have originated (hereinafter called "the Principal"). No other party is entitled to give instructions, particularly on the scope of inspection or delivery of report or certificate, unless so authorized by the Principal and agreed by the Company. The Company will however be deemed irrevocably authorized to deliver at its discretion the report or the certificate to a third party if following instructions by the Principal a promise in this sense had been given to this third party or such a promise implicit follows from circumstances, trade custom, usage or practice.
- 4.0 The Company will provide services in accordance with:
- 4.1 the Principal's specific instructions as confirmed by the Company;
- 4.2 the terms of the Company's Standard Order Form, Sample Submission Form and/or Standard Specification Sheet if used;
- 4.3 any relevant trade custom, usage or practice; and
- 4.4 such methods as the Company shall consider appropriate on technical, operational and/or financial grounds.
- 5.0 5.1 All enquiries and orders for the supply of services must be accompanied by sufficient information specifications and instructions to enable the Company to evaluate and/or perform the services required.
- 5.2 Documents reflecting engagements contracted between the Principal and third parties, or third parties' documents, such as copies of contracts of sale, letters of credit, bills of lading, etc., are (if received by the Company) considered to be for information only, without extending or restricting the mission or obligations accepted by the Company.
- 6.0 The Company's standard services may include all or any of the following:
- 6.1 quantitative and/or qualitative inspection;
- 6.2 inspection of goods, plant, equipment, packing, tanks, containers and means of transport;
- 6.3 inspection of loading or discharging;
- 6.4 sampling;
- 6.5 laboratory analysis or other testing; and
- 6.6 surveys and audits.
- 7.0 Special services where the same exceed the scope of standard services as referred to in General Condition 6 will only be undertaken by the Company by particular arrangement.
- Such special services are illustratively not exhaustively:
- 7.1 qualitative and/or quantitative guarantees;
- 7.2 supply of technicians and other personnel;
- 7.3 pre-shipment inspection under government mandated import or customs schemes; and
- 7.4 advisory services.
- 8.0 8.1 Subject to the Principal's instructions as accepted by the Company, the Company will issue reports and certificates of inspection which reflect statements of opinion made with due care within the limitation of instructions received but the Company is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received.
- 8.2 Reports or certificates issued following testing or analysis of samples contain the Company's specific opinion on those samples as received only but do not express any opinion upon the bulk from which the samples were drawn. If an opinion on the bulk is requested special arrangements must be made in advance with the Company for the inspection and sampling of the bulk.
- 9.0 The Principal will:
- 9.1 ensure that instructions to the Company and sufficient information are given in due time to enable the required services to be performed effectively;
- 9.2 procure all necessary access for the Company's representatives to enable the required services to be performed effectively;
- 9.3 supply, if required, any special equipment and personnel necessary for the performance of the required services;
- 9.4 ensure that all necessary measures are taken for safety and security of working conditions, sites and installations during the performance of services and will not rely, in this respect, on the Company's advice whether requested or not;
- 9.5 take all necessary steps to eliminate or remedy any obstruction to or interruptions in the performance of the required services;
- 9.6 inform the Company in advance of any known hazards or dangers, actual or potential, associated with any order or samples or testing including, for example, presence or risk of radiation, toxic or noxious or explosive elements or materials, environmental pollution or poisons; and
- 9.7 fully exercise all its rights and discharge all its liabilities under any related contract whether or not a report or certificate has been issued by the Company failing which the Company shall be under no obligation to the Principal.

- 10.0 The Company shall be entitled at its discretion to delegate the performance of the whole or any part of the services contracted for with the Principal to any agent or subcontractor. Where deemed appropriate by the company, prior consent will be sought from the Principal.
- 11.0 If the requirements of the Principal necessitate the analysis of samples by the Principal's or by any third party's laboratory the Company will pass on the result of the analysis but without responsibility for its accuracy. Likewise where the Company is only able to witness an analysis by the Principal's or by any third party's laboratory the Company will provide confirmation that the correct sample has been analysed but will not otherwise be responsible for the accuracy of any analysis or results.
- 12.0 12.1 The Company undertakes to exercise due care and skill in the performance of its services and accepts responsibility only where such skill and care is not exercised.
- 12.2 All samples submitted to the Company remain the property of the principle. The Company shall not be liable for any claim whatsoever relating to deterioration, contamination, damage or loss of samples. The Principle indemnifies the Company against any claims or legal action resulting from damage, deterioration or loss of samples.
- 12.3 The liability of the Company in respect of any claims for loss, damage or expense of whatsoever nature and howsoever arising in respect of any breach of contract and/or any failure to exercise due skill and care by the Company shall in no circumstances exceed a total aggregate sum equal to Fifteen (15) times the amount of the fee or commission paid or payable in respect of the specific service or test required under the particular contract with the Company which gives rise to such claims, or US\$15,000, whichever is least, provided however that the Company shall have no liability in respect of any claims for indirect or consequential loss including loss of profit and/or loss of future business and/or loss of production and/or cancellation of contracts entered into by the Principal. Where the fee or commission payable relates to a number of services and a claim arises in respect of one of those services the fee or commission may be apportioned for the purposes of this paragraph by reference to the estimated time involved in the performance of each service or the value of the individual services.
- 12.4 The limit of liability of the Company under the terms of Condition 12.2 may be increased upon request received by the Company in advance of the performance of the service to such figure as may be agreed upon payment of additional fees equal to an appropriate fraction of the increase in such compensation or as may be agreed upon.
- 13.0 The Principal shall guarantee, hold harmless and indemnify the Company and its officers, employees, agents or subcontractors against all claims made by any third party for loss, damage or expense of whatsoever nature and howsoever arising relating to the performance, purported performance or non-performance of any services to the extent that the aggregate of any such claims relating to any one service exceed the limit mentioned in Condition 12.
- 14.0 Every officer, employee, agent or subcontractor of the Company shall have the benefit of the limitation of compensation and the indemnity contained in these General Conditions and so far as relates to such limitations any contract entered into by the Company is entered into not only on its own behalf but also as agent and trustee for every such person as aforesaid.
- 15.0 In the event that any unforeseen problems or expenditure arise in the course of carrying out any of the contracted services the Company shall be entitled to make reasonable additional charges to cover additional time and cost necessarily incurred to complete the service.
- 16.0 16.1 The Principal will punctually pay not later than Thirty (30) days after the relevant invoice date or upon receipt of invoice where credit is not extended or a credit limit is exceeded or within such other period as may have been agreed in writing by the Company all proper charges rendered by the Company failing which interest will become due at the rate of Eighteen per cent (18%) per annum or one and a half percent (1.5%) from the date of invoice until payment.
- 16.2 The Principal shall not be entitled to retain or defer payment of any sums due to the Company on account of any dispute, cross claim or set off which it may allege against the Company.
- 16.3 In the event of any suspension of payment arrangement with creditors, bankruptcy, insolvency, receivership or cessation of business by the Principal the Company shall be entitled to suspend all further performance of its services forthwith and without liability.
- 17.0 In the event of the Company being prevented by reason of any cause whatsoever outside the Company's control from performing or completing any service for which an order has been given or an agreement made, the Principal will pay to the Company:
- 17.1 the amount of all abortive expenditure actually made or incurred; and
- 17.2 a proportion of the agreed fee or commission equal to the proportion (if any) of the service actually carried out and the Company shall be relieved of all responsibility whatsoever for the partial or total non-performance of the required service
- 18.0 The Company shall be discharged from all liability to the Principal for all claims for loss, damage or expense unless suit is brought within twelve (12) months after the date of the performance by the Company of the service which gives rise to the claim or in the event of any alleged non-performance within three (3) months of the date when such service should have been completed.
- 19.0 The Company is neither an insurer nor a guarantor and disclaims all liability in such capacity. Principals seeking a guarantee against loss or damage should obtain appropriate insurance.
- 20.0 No alteration, amendment or waiver of any of these General Conditions shall have any effect unless made in writing and signed by an officer of the Company
- 21.0 Upon completion of testing the company shall provide a report to the principal on the results of the testing. Where requested by the Principal provisional results may be provided however the Principal agrees that those results shall be subject to confirmation in a final report.
- 22.0 The company agrees to take reasonable measures to ensure that the results of Inspection or Testing on behalf of the Principal and any other information provided to the company are kept confidential provided that this provision will not apply where the results or other information are in the public domain.
- 23.0 The Company shall have no responsibility for any action or inaction of any carrier, shipping or delivering any sample to or from the Company premises.
- 24.0 Samples shall be stored free of charge for a period of sixty (60) days after provision of the invoice. Upon expiration of the free storage period, unless otherwise directed by the Principal storage fees and/or disposal charges shall apply.
- 25.0 All data will be retained for a seven (7) year period; fees may apply for retrieval of data if longer than three (3) months after the final report date.

Global Locations

Asia Pacific

Papua New Guinea

LAE Laboratory

Tel: +675 472 8113 | Email: min.png.lae@intertek.com

Australia

Intertek Genalysis

Perth Minerals Head Office and Laboratory

15 Davison Street, Maddington, Western Australia 6109

Tel: +61 8 9251 8100 | Email: min.aus.per@intertek.com

Sample Deliveries: Gate 6, 16 Davison Street, Maddington, Western Australia 6109

Intertek Robotic Laboratories

Tel: +61 8 9251 8100 | Email: min.aus.irl@intertek.com

Kalgoorlie Sample Preparation Facility

12 Keogh Way, Kalgoorlie, Western Australia 6430

Tel: +61 8 9021 6057 | Email: min.aus.kal@intertek.com

Port Hedland Inspection and Sample Preparation

116 Pinnacles Street Wedgefield, Western Australia 6721

Tel: +61 8 9172 4288 | Email: hedland@intertek.com

Adelaide Laboratory

11 Senna Road, Wingfield, South Australia 5013

Tel: +61 8 8162 9714 | Email: min.aus.adl@intertek.com

Townsville Laboratory

9-23 Kelli Street, Bohle, Queensland 4818

Tel: +61 7 4774 3655 | Email: min.aus.tsv@intertek.com

Darwin Laboratory (NTEL)

55 Export Drive, Berrimah, Northern Territory 0828

Tel: +61 8 8947 0510 | Email: ntel@intertek.com

Alice Springs Sample Preparation Facility

41 Ghan Rd, Alice Springs, Northern Territory, 0870

Tel: +61 8 8952 3938 | Email: min.aus.asp@intertek.com

China

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Tel: +86 21 6127 6288 | Email: adam.huang@intertek.com

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Zhanjiang Inspection and Sample Preparation Facility

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Lianyungang Office and Inspection

Tel: +86 15062910451 | Email: henry.hu@intertek.com

Rizhao Office and Inspection

Tel: +86 18905326726 | Email: stephen.lui@intertek.com

Indonesia

Jakarta Minerals Head Office and Laboratory

Tel: +62 21 2938 4454 | Email: indo.office@intertek.com

Jakarta Environmental Laboratory

Tel: +62 21 2938 4454 | Email: min.idn.jkt@intertek.com

Samarinda East Kalimantan Coal Laboratory

Tel: +62 541 273111 | Email: min.idn.jkt@intertek.com

Sumbawa (West Nusa Tenggara) Sample Preparation Facility

Tel: +62 371 626475 | Email: min.idn.jkt@intertek.com

Padang (West Sumatra) Sample Preparation Facility

Tel: +62 751 496343 | Email: min.idn.jkt@intertek.com

Manado (North Sulawesi) Sample Preparation Facility

Tel: +62 431 815431 | Email: min.idn.jkt@intertek.com

Kendari (SE Sulawesi) Inspection and Sample Preparation Facility

Tel: +62 811 1587259 | Email: min.idn.jkt@intertek.com

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