

ISO 9001
BUREAU VERITAS
Certification



GENERAL PRICE LIST 2021

Certified ISO 9001 (2015) – A lab operated by FILAB AMSUD SAS



FILAB SURINAME

Certified ISO 9001:2015 - A Lab operated by FILAB AMSUD SAS

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GEOCHEMISTRY - INTRODUCTION

Created by end of 2007, and certified since 2014, FILAB SURINAME is a fully independent laboratory, which is recognized today as a leader lab of the Guyana Shield area.

The geochemistry department of FILAB SURINAME has been especially designed and developed to meet mining sector requirements.

Soil, sediment, rock, chips, drill-core samples submitted to the laboratory are first subjected to a contract review before introduction into the analytical circuit using a LIMS. A barcode identification system allows full sample traceability before, during and after analysis.

Sample preparation and analysis are performed according to lab good practices and Quality procedures that meet ISO 9001, ISO / IEC 17025 standards requirements.

Code	Description	USD
SAMPLE LOGGING		
LOGA1	Administration fees (for batch <10 samples only)	75.00
WAREHOUSE CHARGE : Storage & destruction		
STOA1	Monthly storage of reject after 3 months : per sample	0.75
STOA2	Monthly storage of pulps (up to 250 g) after 3 months : per sample	0.25
DISP1	Reject disposal on client notice : per sample	0.50
DISP2	Pulp disposal (on client notice): per sample	0.15
LOGA2	Return to client	at cost
HAND1	Warehouse handling : per jour	50.00
DISCOUNTS		
Personalized quotation and contract with discounted prices for large and / or frequent batches submission : contact us		



SAMPLE PREPARATION

The laboratory implements procedures for physical preparation which can be used individually or combined according to predefined global packages adapted to most exploration and drilling programs. Main equipment used in the sample prep lab:

- Large electric drying ovens,
- Jaw crushers, Bowl pulverizers,
- Rotary splitters...



Code	Description	USD
INDIVIDUAL PROCESSES		
WGTA1	Weigh sample (recording & reporting)	0.75
DRYA1	Standard drying at 105°C : sample up to 1kg	2.25
DRYS1	Per additional kg for standard drying	0.25
DRYA2	Air drying (t <40°C) for mercury / IR drying (t <60°C) for volatile compounds: sample up to 1 kg	2.75
DRYS2	Per additional kg for air or IR drying	0.30
DRYS3	Extra cost for drying excessively wet samples	1.50
CRUS1	Crushing of sample up to 1 kg : 75% <2.5mm (Terminator Jaw Crusher) + rifle splitting:	7.00
CRUS2	Crushing: per additional kg including rifle splitting	3.50
ROTA1	Rotary splitting (TM rotary splitter): sample up to 1 kg	4.00
ROTA2	Per additional kg for standard rotary splitting	2.00
PULVA1	Pulverizing of 250 to 350 g : 85% <90 µm (Pulverizer type LM1):	8.00
PULVA2	Pulverizing of 1000 g : 85% <90 µm (Pulverizer type LM2):	12.00
PULVA3	Pulverizing of 500 g : 85% <75 µm (Pulverizer type LM2):	10.00
PULVA4	Pulverizing: per additional 500 g : 85% <75 µm:	5.00
SIEVA1	Sieving (size distribution): first sieve	20.00
SIEVA2	Sieving (size distribution): per subsequent sieve	5.00
COMBINED PROCESSES (pre-defined sample prep packs)		
PSTA1	Pack 1: Drying 105°C + crushing up to 1 kg <2.5 mm + rifle splitting + pulverization 250 to 350 g <90 µm	16.00
PSTB1	Per additional kg for sample preparation pack 1	3.00
PSTA2	Pack 2: Drying 105°C + crushing up to 1 kg <2.5 mm + pulverization 1000 g <100 µm + rifle splitting	19.00
PSTB2	Per additional kg for sample preparation pack 2	5.00
PSTA3	Pack 3: Drying 105°C + crushing up to 1 kg <2.5mm + rifle splitting + pulverization 500 g <75 µm	22.00
PSTB3	Per additional 500 g for sample preparation pack 3	7.00
ROTA3	Extra cost for rotary splitting in place of rifle splitting for any sample preparation pack: per sample	3.00
SPECIAL PROCESSES		
CLEAN1	Crusher cleaning (sand crushing between each sample) additional cost per sample	2.50
CLEAN2	Pulverizer cleaning (sand pulverizing between each sample additional cost per sample)	4.00
REBAG	Pulps re-bagging for shipping - (bags included)	3.00
SPECX	Special sample preparation procedure according to client specifications	Contact us

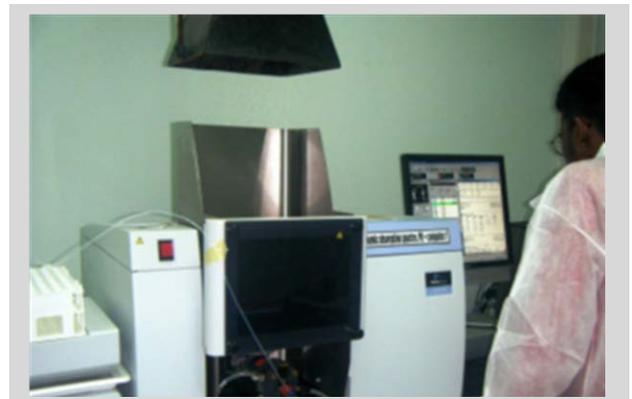
GOLD & PRECIOUS METALS

Depending on geological context and type of exploration, several methods and options are available. Using large capacity furnaces, more than 1200 samples per day can be analyzed by Fire Assay. Instrumental techniques used are able to measure grade levels at several percent (ultra-microbalance) and ultra-traces at less than 1 ppb as well (ICP-MS)

Code	Description	USD
GOLD BY CLASSICAL FIRE ASSAY (Lead collection)		
FA30AAS	30 g aliquot - AAS flame finish - Range 0.01 to 10.00 ppm	18.00
FA50AAS	50 g aliquot - AAS flame finish - Range 0.005 to 10.000 ppm	20.00
FA30ICP	30 g aliquot - ICP-AES finish - Range 0.005 to 20.000 ppm	20.00
FA50 ICP	50 g aliquot - ICP-AES finish - Range 0.001 to 20.000 ppm	22.00
FA30MS	30 g aliquot - ICP-MS finish - Range 0.50 to 5000 ppb	23.00
FA50MS	50 g aliquot - ICP-MS finish - Range 0.10 to 5000 ppb	25.00
FA30GV	30 g aliquot - Gravimetric finish - Range > 5 ppm	25.00
FA50GV	50 g aliquot - Gravimetric finish - Range > 2 ppm	27.00
GOLD BY AQUA-REGIA DIGESTION (for soil samples)		
AU10MS	10 g aliquot - ICP-MS finish - Range 0.50 to 5000 ppb	15.00
AU25MS	25 g aliquot - ICP-MS finish - Range 0.10 to 5000 ppb	17.00
SUPIGN	Extra cost for sample ignition at 550°C before aqua-regia digest.	2.50
GOLD BY CYANIDATION (Leachwell)		
AUCNICP	5 to 200 g aliquot - ICP-AES finish - Range 0.05 to 500.00 ppm	22.00
AUCNMS	5 to 200 g aliquot - ICP-MS finish - Range 0.01 to 100.00 ppm	24.00
METALLIC GOLD (Screen Fire assay)		
FASMET30	500 to 1000 g sample (pulp) - Screening to 106 µm - % of fine and coarse fractions - Fire assay 30 g in duplicate on fine fraction - Fire assay gravimetric on entire coarse fraction - calculation (all data reported)	55.00
FASMET50	500 to 1000 g sample (pulp) - Screening to 106 µm - % of fine and coarse fractions - Fire assay 50 g in duplicate on fine fraction - Fire assay gravimetric on entire coarse fraction - calculation (all data reported)	65.00



Code	Description	USD
OTHER PRECIOUS METALS		
AGICP	Ag Silver by aqua-regia - ICP-AES finish - LLD: 0.50 ppm	8.00
AGMS	Ag Silver by aqua-regia - ICP-MS finish - LLD: 0.01 ppm	10.00
SUP4AC	Extra cost per sample for multiacid digestion for Silver	2.00
PD30MS	Pd Palladium by fire assay 30 g - ICP-MS finish - LLD: 1.00 ppb	22.50
PT30MS	Pt Platinum by fire assay 30 g - ICP-MS finish - LLD: 0.50 ppb	22.50
PM3MS	Pack 3 precious metals by fire assay 30 g - ICP-MS finish: Au LLD: 1.00 ppb , Pd LLD: 1.00 ppb, Pt LLD: 0.50 ppb	57.50
SUP50G	Extra cost per sample for Fire Assay 50 g in place of Fire Assay 30 g for Pd, Pt or PM3	2.00
PATHFINDERS (main indicators of gold presence)		
As Arsenic, Sb Antimony, Se Selenium, TeTellurium by aqua-regia + ICP-AES: LLD: 5 ppm		
ARICPX1	First element	8.00
ARICPX2	Per subsequent element	1.50
As Arsenic, Sb Antimony, Se Selenium, TeTellurium by aqua-regia + ICP-MS: LLD: 0.100 ppm		
ARIMSX1	First element	10.50
ARIMSX2	Per subsequent element	2.00
Co Cobalt, Cu Copper, Pb lead, Zn Zinc by aqua-regia + ICP-AES: LLD: < 2 ppm		
ARICPY1	First element	7.50
ARICPY2	Per subsequent element	1.25
Co Cobalt, Cu Copper, Pb lead, Zn Zinc by aqua-regia + ICP-MS: LLD: < 0.500 ppm		
ARIMSY1	First element	10.00
ARIMSY2	Per subsequent element	1.75
Special mercury		
HGARIMS	Hg Mercury by overnight low temperature acid digest + ICP-MS	17.50
HGFIMS	Hg Mercury by overnight low temperature acid digest + AAS cold vapor (FIMS100)	27.50



MULTIELEMENT ANALYSIS

Two main methods are used to dissolve the geochemical materials:

Aqua regia digest is the most economical method. This attack is well suited to geochemical exploration although dissolution is only partial for some refractory elements.

The multi acid (4 acids) digestion dissolves the majority of geological matrices. Near of complete dissolution, this method provides excellent quantitative results for most of elements.



Multielement packs by ICP-AES

Element	LLD	Element	LLD	Element	LLD	Element	LLD
Ag Silver	0.5 ppm	Cr Chromium	1.0 ppm	Na Sodium	0.010 %	Sr Strontium	1.0 ppm
Al Aluminum	0.010 %	Cu Copper	1.0 ppm	Nb Niobium	10.0 ppm	Ta Tantalum	10.0 ppm
As Arsenic	5.0 ppm	Fe Iron	0.010 %	Ni Nickel	2.0 ppm	Ta Tellurium	5.0 ppm
B Boron	10.0 ppm	Ge Germanium	0.5 ppm	P Phosphorus	0.010 %	Ti Titanium	0.010 %
Ba Barium	10.0 ppm	K Potassium	0.010 %	Pb Lead	2.0 ppm	Tl Tallium	10.0 ppm
Be Beryllium	0.5 ppm	La Lanthanum	10.0 ppm	S Sulphur	0.010 %	V Vanadium	2.0 ppm
Bi Bismuth	5.0 ppm	Li Lithium	10.0 ppm	Sb Antimony	5.0 ppm	W Tungsten	10.0 ppm
Ca Calcium	0.010 %	Mg Magnesium	0.010 %	Sc Scandium	2.0 ppm	Y Yttrium	2.0 ppm
Cd Cadmium	0.5 ppm	Mn Manganese	5.0 ppm	Se Selenium	5.0 ppm	Zr Zirconium	5.0 ppm
Co Cobalt	1.0 ppm	Mo Molybdenum	5.0 ppm	Sn Tin	5.0 ppm	Zn Zinc	2.0 ppm

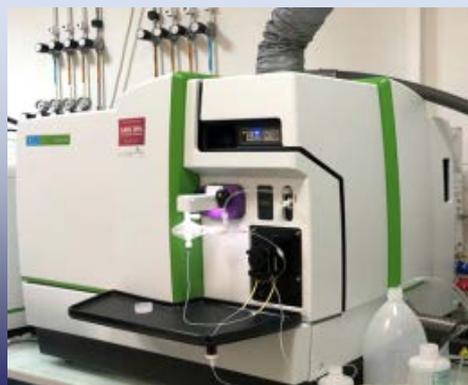
Code	Description	USD
ICP10A	Pack 10 elements : Al, Ca, Co, Cu, Fe, Mn, Ni, Pb, Ti, Zn Aqua-regia digest	15.00
ICP10B	Multiacid digest (HF + HClO ₄ + HNO ₃ + HCl)	17.50
ICP20A	Pack 20 elements: Al, As, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, P, Pb, S, Sb, Ti, V, Zn Aqua-regia digest	20.00
ICP20B	Multiacid digest (HF + HClO ₄ + HNO ₃ + HCl)	22.50
ICP30A	Pack 30 elements: Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Ga, Ge, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sc, Sb, Sr, Ti, V, Zn, Zr Aqua-regia digest	25.00
ICP30B	Multiacid digest (HF + HClO ₄ + HNO ₃ + HCl)	27.50
ICPADDA	Additional element to any ICP-AES pack listed above Aqua-regia digest	0.75
ICPADB	Multiacid digest (HF + HClO ₄ + HNO ₃ + HCl)	1.00

Ultratrace multielement packages by ICP-MS

Element	LLD	Element	LLD	Element	LLD	Element	LLD
Ag Silver	0.010 ppm	Eu Europium*	0.050 ppm	Na Sodium	0.005 %	Sr Strontium	0.500 ppm
Al Aluminum	0.005 %	Fe Iron	0.005 %	Nb Niobium	0.050 ppm	Ta Tantalum	0.050 ppm
As Arsenic	0.100 ppm	Ga Gallium	0.050 ppm	Ni Nickel	0.100 ppm	Tb Terbium*	0.100 ppm
Ba Barium	1.000 ppm	Gd Gadolinium*	0.100 ppm	P Phosphorus	0.005 %	Te Tellurium	0.050 ppm
Be Beryllium	0.050 ppm	Ge Germanium	0.050 ppm	Pb Lead	0.050 ppm	Th Thorium	0.010 ppm
Bi Bismuth	0.050 ppm	Hf Hafnium	0.050 ppm	Pd Palladium	0.050 ppm	Tm Tamarium*	0.100 ppm
Ca Calcium	0.005 %	Ho Holmium*	0.050 ppm	Pr Praseodimium*	0.100 ppm	Ti Titanium	0.005 %
Cd Cadmium	0.010 ppm	In Indium	0.010 ppm	Pt Platinum	0.010 ppm	Tl Thallium	0.050 ppm
Ce Cerium*	0.050 ppm	K Potassium	0.005 %	Rb Rubidium	0.100 ppm	U Uranium	0.100 ppm
Co Cobalt	0.050 ppm	La Lanthanum*	0.500 ppm	S Sulphur	0.005 %	V Vanadium	0.500 ppm
Cr Chromium	0.500 ppm	Li Lithium	0.500 ppm	Sb Antimony	0.050 ppm	W Tungsten	0.100 ppm
Cs Cesium	0.050 ppm	Lu Lutetium*	0.100 ppm	Sc Scandium*	0.100 ppm	Y Yttrium*	0.100 ppm
Cu Copper	0.050 ppm	Mg Magnesium	0.005 %	Se Selenium	0.100 ppm	Yb Ytterbium*	0.100 ppm
Dy Dysprosium*	0.050 ppm	Mn Manganese	1.000 ppm	Sm Samarium*	0.100 ppm	Zr Zirconium	0.500 ppm
Er Erbium*	0.050 ppm	Mo Molybdenum	0.050 ppm	Sn Tin	0.100 ppm	Zn Zinc	0.500 ppm

*Multiacid digest recommended

Code	Description	USD
MS15A	Pack 15 elements: Al, As, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Ni, Pb, Sb, Ti, Zn Aqua-regia digest	20.00
MS15B	Multiacid digest (HF + HClO ₄ + HNO ₃ + HCl)	22.50
MS30A	Pack 30 elements: Al, As, Ba, Be, Ca, Cd, Co, Cr, Cu, Ga, Ge, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Se, Sr, Ti, V, Zn, Zr Aqua-regia digest	27.50
MS30B	Multiacid digest (HF + HClO ₄ + HNO ₃ + HCl)	30.00
MS45A	Pack 45 elements: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, S, Sb, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr Aqua-regia digest	35.00
MS45B	Multiacid digest (HF + HClO ₄ + HNO ₃ + HCl)	37.50
MSADA	Additional element to any ICP-MS pack listed above Aqua-regia digest	1.00
MSADB	Multiacid digest (HF + HClO ₄ + HNO ₃ + HCl)	1.25
MS15RE	Pack 15 Rare Earths: Sc, La, Ce, Dy, Er, Eu, Gd, Ho, Lu, Pr, Sm, Tb, Tm, Y, Yb Multiacid digest only (HF + HClO ₄ + HNO ₃ + HCl)	22.50
COMB50	Pack 50 elements : combination ICP-AES & ICP-MS : Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Ho, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Rb, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr Multiacid digest only (HF + HClO ₄ + HNO ₃ + HCl)	45.00



MISCELLANEOUS

❖ LIST OF CHEMICAL ELEMENTS

Ag=Silver Al=Aluminum As=Arsenic Au=Gold B=Boron Ba=Barium Be=Beryllium Bi=Bismuth Br=Bromine C=Carbon
Ca=Calcium Cd=Cadmium Ce=Cerium Cl=Chlorine Co=Cobalt Cr=Chromium Cs=Cesium Cu=Copper Dy=Dysprosium
Er=Erbium Eu=Europium F=Fluorine Fe=Iron Ga=Gallium Gd=Gadolinium H=Hydrogen Hf=Hafnium Hg=Mercury
Ho=Holmium I=Iodine In=Indium Ir=Iridium K=Potassium La=Lanthanum Li=Lithium Lu=Lutetium Mg=Magnesium
Mn=Manganese Mo=Molybdenum N=Nitrogen Na=Sodium Nb=Niobium Nd=Neodymium Ni=Nickel O=Oxygen P=Phosphorus
Pb=Lead Pd=Palladium Pr=Praseodymium Pt=Platinum Rb=Rubidium Rh=Rhodium S=Sulfur Sb=Antimony Sc=Scandium
Se=Selenium Si=Silicon Sm=Samarium Sn=Tin Sr=Strontium Ta=Tantalum Tb=Terbium Te=Tellurium Th=Thorium
Tl=Thallium Tm=Thulium Ti=Titanium U=Uranium V=Vanadium W=Tungsten Y=Yttrium Yb=Ytterbium Zn=Zinc Zr=Zirconium

❖ OTHER SERVICES AVAILABLE

- Environmental analysis (water, polluted soil, mining environment...)
- Industrial hygiene (ambient and atmospheric air, phanera analysis...)
- Analytical support to Oil industry

❖ TERM AND CONDITIONS

PRICES

All prices listed in this document are valid for a minimum of 10 samples per batch. They do not include possible local taxes. They include analysis of blank samples, reference materials and 5 % replicates per batch (all data reported).

For less than 10 samples per batch, prices are subject to an additional cost, unless negotiated other arrangement with the client (see page 2)

FILAB reserves the right to review its prices at any time without prior notice.

PAYMENT

Payment terms are 30 days from date of invoice. All other payment conditions are submitted to prior FILAB agreement.

In some cases (new clients, special analysis...) an advance payment can be requested.

Payments are done in US\$, by bank transfer.

Payments done after the due date can involve interest charge at a rate of 1,5% per delayed month.

RESPONSIBILITY

The client is responsible for sampling and shipping of samples. FILAB is not responsible for loss, degradation or pollution of samples which might occur during shipping and before their arrival at the lab.

Analysis are performed by FILAB according to the Good Laboratory Practices and ISO 9001 and ISO/IEC 17025 standards. If it is recognised that an error is attributable to the lab, the financial responsibility of FILAB is limited to the amount of analysis costs concerning results which are not complying with the quality required by the client.

To be considered, a complaint must be done by writing and sent to FILAB within 2 months after sending the analytical report.

SENDING OF ANALYTICAL REPORTS AND CONFIDENTIALITY

Reports are sent by e-mail (e-report). On client request, hard copy can be sent but may involve additional cost.

Standard turnaround time of the laboratory is typically 10 working days per batch of 300 to 350 samples. On request and if technically possible, urgent process (TAT < 72 h) can be implemented at 30% additional cost.

For analytical services not yet available in our lab, we can prepare the samples concerned and outsource the analysis to a lab partner. This outsourcing process is submitted to prior client agreement. Logistic costs are not included in our prices.

Analysis results become the property of the client as soon as the relevant invoice has been paid.

FILAB will keep strictly confidential any information communicated by the client for purpose of providing the services required.

No analysis result will be communicated outside without prior client authorization or instruction.

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ANALYSIS REQUEST FORM

➤ **FOR FILAB ONLY**

Client ref.	
Lab registration N°	
Receiving date	

➤ **CLIENT FORM**

Shipping date	
Company name	
Address	
Project name	
Project manager name	
Phone	
Fax	
E-mail	
Invoice address (if different of above one)	
Results	Hard copy <input type="checkbox"/> E-mail <input type="checkbox"/> Fax <input type="checkbox"/> Phone <input type="checkbox"/> CD <input type="checkbox"/>
Delay required	Standard (Typically: 2 weeks) <input type="checkbox"/> Rush (< 72 h & 30 % surcharge) <input type="checkbox"/>
Comments / Instructions	

Sample type (soils, rocks, drilling core...)	Sample identification			Big bag or drum identification		Analysis requested (please use analytical codes of FILAB Price List, if possible)
	From N°	To N°	Number	N° (if any)	Weight kg	
TOTAL				Client visa		

➤ **SAMPLES STORAGE**

Pulp	Reject
Storage (a cost after 3 months) <input type="checkbox"/>	Storage (a cost after 3 months) <input type="checkbox"/>
Return to client (at cost) <input type="checkbox"/>	Return to client (at cost) <input type="checkbox"/>
Discarding / destruction (at cost) <input type="checkbox"/>	Discarding / destruction (at cost) <input type="checkbox"/>

➤ **SHIPPING INSTRUCTIONS**

Shipping address:
FILAB SURINAME - Aboenawrokostraat N°71 - PARAMARIBO – SURINAME
 Tel : (597) 455 857 & 455 979 - Fax : (597) 455 926 - E-mail : info@filabsuriname.com
 For samples coming from abroad, a pro-forma invoice is required