

Gold Analyses

SERVICE SCHEDULE

EFFECTIVE JANUARY 1, 2021

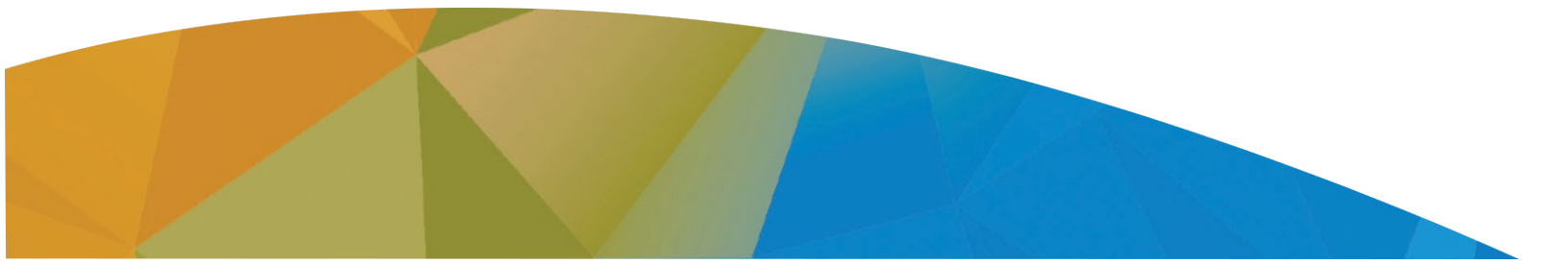




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About SRC Geoanalytical Laboratories

Since 1973, SRC Geoanalytical Laboratories has provided high quality analysis to the exploration and mining industry. Our key objectives are to achieve total customer satisfaction with a diverse range of analytical mineral exploration packages and to help develop new analytical methods to meet the growing demands of industry and our clients.

Over the years, we've added these leading-edge facilities and services to our operations in Saskatoon, Saskatchewan:

- Dedicated Uranium/Base Metals Analysis Laboratory
- Kimberlite Indicator Mineral (KIM) Processing and Recovery Facility
- Radioactive Sample Preparation Facility
- Macro and Micro Diamond Recovery Facility
- Dense Media Separation (DMS) Facility
- Potash Preparation and Analysis Facility
- XRD and XRF Facility
- Electron Microprobe and QEMSCAN® Facility
- Petrographic Services
- Applied Diamond Services

SRC Geoanalytical Laboratories is part of the Saskatchewan Research Council's (SRC) Mining and Minerals Division, which collaboratively provides services across the mining production cycle for a wide range of minerals, including:

- Diamonds
- Uranium
- Potash
- Lithium
- Base Metals
- Precious Metals
- Rare Earth Elements
- Industrial Minerals

Contact us for a quote on any of our services.



QUALITY ASSURANCE

QUALITY MANAGEMENT SYSTEM

The quality management system at SRC Geoanalytical Laboratories operates in accordance with **ISO/IEC 17025**, General Requirements for the Competence of Testing and Calibration Laboratories; and is also compliant to ASB, Requirements and Guidance for Mineral Analysis Testing Laboratories. The management system and selected methods are accredited by the Standards Council of Canada (Scope of Accreditation #537).

The laboratory is assessed on a regular basis, both internally and externally, to ensure that it continues to meet these requirements. Contact us for further information.

QUALITY POLICY

It is the purpose of the Management System at the Geoanalytical Laboratories of the Saskatchewan Research Council to provide a high standard of service to all its Customers through good professional practice and Management's commitment to quality: by continually assessing, monitoring and evaluating risk and opportunities to improve all aspects of the Management System with compliance to ISO/IEC 17025 and RG-MA.

SAMPLE PREPARATION

DRILL CORE / ROCK

STANDARD PREPARATIONS

Crush entire sample to 70% passing 10 mesh (1.70 mm)
Riffle split and pulverize ~250 g to 95% passing 150 mesh (106 µm)
Surcharge for sample size above 2.5 kg

Crush entire sample to 95% passing 10 mesh (1.70 mm)
Riffle split and pulverize ~1000 g to 95% passing 150 mesh (106 µm)
Surcharge for sample size above 2.5 kg

All equipment is cleaned with compressed air and brushes

INDIVIDUAL PREPARATIONS

Crush up to 2.5 kg, 70% passing 10 mesh (1.70 mm)
Second split of reject at initial crush
Second split from previously crushed reject
Pulverize up to 250 g, 95% passing 150 mesh (106 µm)
Pulverize up to 1000 g, 95% passing 150 mesh (106 µm)
Silica sand wash between samples

SOIL / SEDIMENT

Dry, sieve soils – Screened at 80 mesh (180 µm)

EXTRAS

Special preparation procedures may be adopted at the client's request. These prices will be set accordingly. No charge will be applied for handling pulps not prepared at SRC. The client will be notified prior to analyses if prepared pulps do not meet our standard preparation criteria.

PRECIOUS METALS

GEOCHEMICAL ANALYSIS

Gold	FA/AA	30 g
Gold	FA/AA	50 g
Gold, Platinum, Palladium	FA/ICP	30 g

ASSAYS

Gold	FA/Gravimetric	1 AT
Gold	FA/Gravimetric	2 AT
Silver	FA/Gravimetric	1 AT
Gold & Silver	FA/Gravimetric	1 AT
Gold Concentrate	FA/Gravimetric	1 AT
Silver Concentrate	FA/Gravimetric	1 AT
Screen Metallic up to 1 kg	FA/Gravimetric	1 AT

SCREEN METALLIC ASSAY INCLUDES:

- Crush entire sample
- Pulverize entire sample to 95% passing 150 mesh
- Screen entire sample through 150 mesh
- Assay entire +150 mesh fraction
- Duplicate assay of -150 mesh fraction
- Weighted average of Gold for entire sample

TRACE LEVEL GEOCHEMICAL ANALYSIS AQUA REGIA - AA FINISH

Arsenic	As	First Element
Cobalt	Co	Each Additional Element
Copper	Cu	(on same sample solution)
Lead	Pb	
Nickel	Ni	
Silver	Ag	
Zinc	Zn	

ORE GRADE ASSAY PACKAGE - AA FINISH

		Detection Limit		AQUA REGIA	MULTIACID
Cobalt	Co	.01	First Metal		
Copper	Cu	.01	Each Additional		
Nickel	Ni	.01	(on same sample solution)		
Lead	Pb	.01			
Silver	Ag	.01			
Zinc	Zn	.01			

Specific Gravity S.G.

Control assays, concentrates, metallurgical samples and Umpire Assays - prices upon request.

WHOLE ROCK BY ICP-AES LIBO₂ - FUSION

		Detection Limit
Silica Oxide	SiO ₂	0.01%
Aluminum Oxide	Al ₂ O ₃	0.01%
Iron Oxide	Fe ₂ O ₃	0.04%
Magnesium Oxide	MgO	0.01%
Calcium Oxide	CaO	0.01%
Sodium Oxide	Na ₂ O	0.01%
Potassium Oxide	K ₂ O	0.01%
Titanium Oxide	TiO ₂	0.01%
Phosphorus Oxide	P ₂ O ₅	0.01%
Manganese Oxide	MnO	0.01%
Chromium Oxide	CR ₂ O ₃	0.002%
Loss on Ignition	LOI	0.10%
Barium	Ba	5 ppm
Nickel	Ni	20 ppm
Strontium	Sr	2 ppm
Zirconium	Zr	5 ppm
Yttrium	Y	3 ppm
Niobium	Nb	5 ppm
Scandium	Sc	1 ppm

ICP MULTI-ELEMENT PACKAGE

The Aqua Regia digestion liberates most of the elements except those marked with an asterisk, where the digestion will not be complete.

Element		ICP - AES Aqua Regia	ICP - MS Aqua Regia
Silver	Ag*	0.3 ppm	0.1 ppm
Aluminum	Al*	0.01%	0.01%
Arsenic	As	2 ppm	0.5 ppm
Gold	Au*		0.5 ppb
Boron	B*	20 ppm	20 ppm
Barium	Ba*	1 ppm	1 ppm
Bismuth	Bi	3 ppm	0.1 ppm
Calcium	Ca*	0.01%	0.01%
Cadmium	Cd	0.5 ppm	0.1 ppm
Cobalt	Co	1 ppm	0.1 ppm
Chromium	Cr*	1 ppm	1 ppm
Copper	Cu	1 ppm	0.1 ppm
Iron	Fe*	0.01%	0.01%
Gallium	Ga*	5 ppm	1 ppm
Mercury	Hg	1 ppm	0.01 ppm
Potassium	K*	0.01%	0.01%
Lanthanum	La*	1 ppm	1 ppm
Magnesium	Mg*	0.01%	0.01%
Manganese	Mn*	2 ppm	1 ppm
Molybdenum	Mo	1 ppm	0.1 ppm
Sodium	Na*	0.01%	0.001%
Nickel	Ni	1 ppm	0.1 ppm
Phosphorous	P*	0.001%	0.001%
Lead	Pb	3 ppm	0.1 ppm
Sulfur	S	0.05%	0.05%
Antimony	Sb	3 ppm	0.1 ppm
Scandium	Sc	5 ppm	0.1 ppm
Selenium	Se		0.5 ppm
Strontium	Sr*	1 ppm	1 ppm
Tellurium	Te		0.2 ppm
Thorium	Th*	2 ppm	0.1 ppm
Titanium	Ti*	0.001%	0.001%
Thallium	Tl	5 ppm	0.1 ppm
Vanadium	V*	1 ppm	1 ppm
Tungsten	W*	2 ppm	0.1 ppm
Zinc	Zn	1 ppm	1 ppm

ICP MULTI-ELEMENT PACKAGE

The multi-acid digestion liberates most of the elements except those marked with an asterisk, where digestion may not be complete. Volatilization during digestion may result in some loss of those elements marked with a triangle.

Element		ICP - AES Multi-acid	ICP - MS Multi-acid
Silver	Ag*	0.5 ppm	0.1 ppm
Aluminum	Al*	0.01%	0.1%
Arsenic	As Δ	5 ppm	1 ppm
Barium	Ba*	1 ppm	1 ppm
Beryllium	Be*	1 ppm	1 ppm
Bismuth	Bi	5 ppm	0.1 ppm
Calcium	Ca*	0.01%	0.01%
Cadium	Cd	0.4 ppm	0.1 ppm
Cerium	Ce		1 ppm
Cobalt	Co	2 ppm	0.2 ppm
Chromium	Cr*	2 ppm	1 ppm
Copper	Cu	2 ppm	0.1 ppm
Iron	Fe*	0.01%	0.01%
Hafnium	Hf*		0.1 ppm
Potassium	K*	0.01%	0.01%
Lanthanum	La*	2 ppm	0.1 ppm
Lithium	Li		0.1 ppm
Magnesium	Mg*	0.01%	0.01%
Manganese	Mn*	5 ppm	1 ppm
Molybdenum	Mo	2 ppm	0.1 ppm
Sodium	Na*	0.01%	0.001%
Niobium	Nb	2 ppm	0.1 ppm
Nickel	Ni	2 ppm	0.1 ppm
Phosphorous	P*	0.002%	0.001%
Lead	Pb	5 ppm	0.1 ppm
Rubidium	Rb		0.1 ppm
Sulfur	S	0.10%	0.10%
Antimony	Sb	5 ppm	0.1 ppm
Scandium	Sc	1 ppm	1 ppm
Tin	Sn*	2 ppm	0.1 ppm
Strontium	Sr*	2 ppm	1 ppm
Tantalum	Ta*		0.1 ppm
Thorium	Th*	2 ppm	0.1 ppm
Titanium	Ti*	0.01%	0.001%
Uranium	U	20 ppm	0.1 ppm
Vanadium	V*	2 ppm	2 ppm
Tungsten	W*	4 ppm	0.1 ppm
Yttrium	Y	2 ppm	0.1 ppm
Zinc	Zn	2 ppm	1 ppm
Zirconium	Zr*	2 ppm	0.1 ppm

Equivalences

Selected Weights, Measures and Conversion Factors used in the Precious Metals Industry.

parts per million (ppm)

parts per billion (ppb)

1 assay ton (A.T.)

1 ppm	=	1 g/tonne	=	1000 ppb = .0001 %
10,000 ppm	=	1 %		
1 Short ton	=	2000 pounds	=	29,166.7 Troy ounces
1 Troy ounce	=	31.1035 grams		
1 Metric tonne	=	1000 Kilograms	=	2204.6 pounds

Conversion Chart

$$\frac{1 \text{ ppm}}{34.285714} = \text{Troy ounces per ton}$$

ppb	oz/ton	ppm or g/tonne	oz/ton	%
5	0.00015	1	0.029	0.0001
10	0.00029	2	0.058	
20	0.00058	3	0.088	
30	0.00088	4	0.117	
40	0.00117	5	0.146	
50	0.00146	6	0.175	
60	0.00175	7	0.204	
70	0.00204	8	0.233	
80	0.00233	9	0.263	
90	0.00263	10	0.292	0.001
100	0.00292	100	2.92	0.01
200	0.0058	1000	29.2	0.1
300	0.0088	10000	292	1
400	0.0117			
500	0.0146			
600	0.0175			
700	0.0204			
800	0.0233			
900	0.0263			
1000	0.0292			



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