



SEACAN STEWART LAB

We provide full-service metals and minerals testing at our lab in Stewart BC



ANALYTICAL SERVICES - 2022

REPORTING & DATA SERVICES

Clients are advised immediately upon sample reception via email. Certified reports, with QC/QC information are emailed to the client and uploaded to our secure server. Clients can access their data reports via login with username and password at www.seacanlabs.com. Data available includes status on batches received, in progress, finished, where analytical data reports are listed in chronological order for download in csv and excel formats.

PRICING & TURNAROUND

Pricing and turnaround time is negotiated on a case-by-case basis, where turnaround choices range from same day to two weeks.

INTERNAL QUALITY CONTROL

At least one certified reference material, duplicate and blank are run with every batch. Duplicate frequency is one per ten samples. SRM frequency is one per 20 samples.

ACCREDITATION

Seacan will be accredited by the SCC in 2022 for ISO17025.

SAMPLE STORAGE

Excess samples are automatically returned to the client after one month. Clients have the option to store samples, quarterly or yearly for a fee.

PARAMETER	DESCRIPTION	RANGE	CODE
SAMPLE PREP - MOST REQUESTED			
CRUSH, PULVERIZE & DRY	Dry at 100 °C, crush to 80% < 10 mesh, split 250g, pulverize to 85% < 200 mesh. add \$1/kg		PREP-PKG1
CRUSH	Crush core and rock up to 6" in diameter to < 20 mm		CRUS-19M
DRY	Drying samples limited to 100 °C		DRY-100
PULVERIZE	Pulverize 250g of rock chips ¼" in diameter to 85% < 200 mesh		PULV-250
SIEVE	Dry at 60 °C sieve 80 grams to -80 mesh. add \$1 / kg		PKG-SOIL
SAMPLE PREP - OTHER			
BAG	1 Kg pulp bag and storage boxing		BAG-PULPB
BAG	Charge for new reject bag		BAG-REJ
COMPOSITE	Composite master samples by volume. Will also require the COMP-BAG charge for each newly-created, composite sample		COMP-VOL
COMPOSITE	Composite master samples by weight. Will require a COMP-BAG charge for each newly-created, composite sample		COMP-WT
COMPOSITE	New composite sample created from master samples. Charge for log in to a new job, labeled envelope, and recorded weight		COMP-BAG
COMPOSITE	Homogenizing pulps by sheet rolling		HOMO-ROL
CORE	Inventory core boxes, reconcile client cut sheets to core markers		CORE-INV
CORE	Saw core per client-specified cut orientation price per ft		CORE-SAW
CORE	Bag core for subsequent sample prep. Includes bag		CORE-BAG
CRUSH CLEAN	Client requested, extra cleaning between crushed samples using barren rock wash		CLEN-CRU
DRY	Drying samples limited to 100 °C		DRY-100
DRY	Drying samples limited to 40°C		DRY-60
LABEL PULP	Pulps: Inventory, log in, weigh received reject samples. Label pulp envelopes with bar codes		INV-PUL
LABEL REJECT	Rejects: Inventory, log in, weigh received reject samples. Label pulp envelopes with bar codes		INV-REJ
LABEL SAMPLE	Inventory, log in and record weight of received samples. Label pulp envelopes with bar codes		INV-SAM
PULVERIZE	Pulverize 1 Kg of rock chips ¼" in diameter to 85% -200 mesh		PULV-1K
PULVERLZER CLEAN	Client requested, extra cleaning between pulverized samples using barren sand		CLEN-PUL
SCREEN	Screening samples charge per screen size		SCRN-MISC
STORAGE	Monthly storage charge for rejects and 1 Kg splits/pulps		STOR-REJ
STORAGE	Monthly storage charge for 250g. pulps		STOR-PUL
GOLD & SILVER ASSAY - MOST REQUESTED			
GOLD AAS	Au 30g fire assay, AQR digest/AAS	0.002-3.00 ppm	AU-FA30
GOLD AAS	Au 50g fire assay, AQR digest/AAS	0.002-3.00 ppm	AU-FA50
GOLD GRAV	Au 30g fire assay, gravimetric finish	0.14-10,000 ppm	AU-GR30
GOLD GRAV	Au 50g fire assay, gravimetric finish	0.14-10,000 ppm	AU-GR50
SILVER AAS	Ag 0.25g 3-acid digestion/AAS	0.05-200 ppm	AG4A-AAS
GOLD & SILVER ASSAY- OTHER TESTING			
GOLD & SILVER	Au and Ag 30g fire assay, gravimetric finish	Au: 0.14-10,000 ppm	AUAG-GR30
GOLD & SILVER	Au and Ag 50g fire assay, gravimetric finish	0.14-10,000 ppm	AUAG-GR50
GOLD FA	Au screen fire assay 1 Kg pulp screened to -150 mesh. Duplicate 30g fire assays of minus fraction and entire plus fraction is fire assayed. The three assays and their weighted average result are reported	0.14-50,000 ppm	AU-SCR1K
GOLD FA + ICP	Au 30g fire assay, AQR digest/ICP-OES	0.001-5.00 ppm	AU-ICP30
GOLD FA + ICP	Au 50g fire assay, AQR digest/ICP-OES	0.001-5.00 ppm	AU-ICP50
GOLD FA GRAV	Ag duplicate 30g fire assays, gravimetric finish. Individual and average results reported	10ppm-100%	AGCON-DP30
GOLD GRAV	Au Over limit fire assay, gravimetric finish	2.5-34 ppm	AU-OLGR
SILVER AAS	Ag 0.5g AQR digestion/AAS	0.2-100	AGAR-AAS
PLATINUM GROUP	Pt, Pd and Au 50g fire assay, AQR digest/ICP-OES	0.005-5.00 ppm	PGM50-ICP

GOLD & SILVER ASSAY- CARBONS																	
GOLD FA	FA-Au-AAS with login and prep	5g/ton	FA-C AU-AA														
GOLD FA	FA-Au-Grav with login and prep	5g/ton	FA-AU-GRAV-C														
SILVER	Ag 3 Acid AAS with login and prep	10g/ton	AG FA-AA-C														
CYANIDE LEACH - GOLD, SILVER & COPPER																	
COPPER	Cu 10g 1hr CN leach, room temp, AAS	0.03-1000 ppm	CUCN-10														
COPPER	Cu 30g 1hr CN leach, room temp, AAS	0.03-1000 ppm	CUCN-30														
GOLD	Au 10g 1hr CN leach, room temp, AAS	0.03-50 ppm	AUCN-10														
GOLD	Au 30g 1hr CN leach, room temp, AAS	0.03-50 ppm	AUCN-30														
GOLD	Au preg rob. Two, 10g 1hr CN leaches at room temp, one with Au spike, the other without AAS	0.03-300 ppm	AUPR-10														
SILVER	Ag 10g 1hr CN leach, room temp, AAS	0.03-50 ppm	AGCN-10														
SILVER	Ag 30g 1hr CN leach, room temp, AAS	0.03-50 ppm	AGCN-30														
MULTI-ELEMENT ANALYSIS by ICPOES																	
ICPOES AR	34 element pks with aqua regia 0.50g		ICP34-AR														
ICPOES MA	34 elements pkg with 4 acid 0.250g		ICP34-MA1														
ICPOES MA	34 elements pkg with 4 acid (assay of concentrate/ore)		ICP34-MA2														
DETECTION LIMITS - ICP-OES																	
ICP-34	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	Ga	K	La	Mg
Unit	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	%
detection limit	0.2	0.01	2	5	0.2	2	0.01	0.2	5	1	1	1	0.01	10	0.01	2	0.01
ICP-34	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Th	Ti	Tl	U	V	W	Zn
Unit	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
detection limit	5	1	0.01	1	10	2	0.01	2	1	1	10	0.01	10	10	1	10	2
BASE METALS & MERCURY																	
BASE METALS ASSAY	Cu, Pb, Zn by 3-4 acid 0.250g	0.01%-10%	ELASSAY-AA														
COPPER	Cu 0.25g total 3-acid digestion/AAS	0.001-20%	CU4A-AAS														
COPPER	Cu 1g sulfuric leach/AAS	0.001-10%	CUS-AA														
COPPER	Cu 1g sulfuric/ferric leach/AAS	0.001-100%	CUFS-AA														
COPPER	Cu 1g sequential leach	Various	CUSQ-AA														
COPPER	Cu 1.5g CN leach/AAS	0.001-10%	CUCN-AA														
MERCURY	Hg aqua regia digest with cold vapor AAS 0.500g	0.005-20 ppm	HGAR-CV														
OVER LIMITS	Aqua regia digest by AAS/ICP 1.000g	0.01-20%	OLAR-AAS														
OVER LIMITS	4 acid digest by AAS/ICP 0.250g	0.01%	OL4A-AAS														
CARBON & SULFUR																	
CARBON & SULFUR	Total C and S Leco	0.01-20%	CS-LECO														
SULFUR	Total S by Leco	0.01-20%	S-LECO														
SULFIDE	Sulfide S with HCL leach/Leco	0.01-20%	SFD-HCLLE														
SULFUR SPECIATION	Total Sulfur, Total Sulfide Sulfur (calc), Total Sulfate by Leco	0.01-20%	SSPEC-LECO														
CARBON	Total C Leco	0.01-20%	C-LECO														
CARBON SPECIATION	Total C, Inorganic C (calc), Organic C by Leco	0.01-20%	CSPEC-LECO														
OVER LIMITS	All Sulfur and Carbon species	0.001-50%	CS-OVER														
ACID ROCK DRAINAGE (ARD)																	
SAMPLE PREP	Sample Prep (Dry <1kg, crush to 80% passing ¼ inch, split 250g / pulverize to 85% < 75 um		ABA-PREP SOL														
ABA MODIFIED	Modified ABA Package with Paste pH, Fizz test, NP & Total Sulfide		ABA-PKG1														
METALS AR	Metals Package (solids) by Aqua Regia by ultra-trace ICP-OES		ABA-ICPAR														
METALS MA	Metals Package (solids) by 4 Acid Digestion ICP-OES		ABA-ICPMA														
SULFATE	Sulfate Sulfur- HCL Leach (Sulfide Sulfur by difference)		ABA-SO4-HCL														
TIC	TIC by Coulometer		ABA-TIC-COL														
C & s	Total Carbon & Sulfur by Leco IR Combustion		ABA-C&STOT														
DISPOSAL	Disposal		ENV-DISP														
WATER & SHAKE FLASK EXTRACTION																	
SFE	Shake flask Extraction prep (SFE MEND method water extraction)		SFE1														
ICP	ICP-OES Scan Humidity Cell/Shake Flask Extraction/NAG Extraction		SFE-HUM-ICP														
ANIONS	Anions Pkg - Chloride, Fluoride, Bromide, Nitrate, Nitrite, Sulfate		ANION-PKG1														
ACIDITY	Env-water pkg - Acidity, Alkalinity, EC, pH, Hardness		ENV-ACIDITY														
DISPOSAL	Disposal		ENV-DISP														
CN	Cyanide w/f		ENV-CN W/F														