



To: W.M. Johnson

Date: October 29, 1979

Our File: 896166

Re: Chu Chua Samples

Three sets of drill core samples from the Chu Chua massive sulphide deposit (NTS 92P/8) have been submitted for analysis.

The first set of 7 are for X-ray analysis. The second set of 32 from section 10100N and 21 from 9950N are for silicate and selected trace elements analysis. The third set are massive sulphide samples (11 from 10100N and 8 from 9950N) for assay and selected trace element analysis. A list of sample numbers and capsule comments is appended.

The silicate analysis samples should be done for LOI and CO₂ - most have carbonate veinlets in them.

Several of the massive sulphides should be analysed semi-quantitatively by emission spec as I can intelligently choose trace elements of interest.

At least preliminary results would be appreciated in late December - I need them for the GAC Symposium in January. The study is being undertaken to see what effects alteration have had on the country rocks at Chu Chua and to understand better the metal distribution and abundances in the massive sulphide pods.

W.J. McMillan

WJM/dlb

Encl.

cc: N.C. Carter

CHEM
ANALYSES

1979

Samples and Comments

SECTION 9950N

Rocks

DDH	Footage	Comments
CC14	20	Basalt
	49	Pillow basalt
	74.5	Very fine grained basalt
	100	Pillow Basalt
	125	Basalt
	150	Basalt
	173.5	Basalt adjacent to massive sulphides
	193.2	Silicious, cherty rock
	202.8	altered basalt
	215	less altered basalt
	225	slightly bleached feldspathic basalt
CC 25	10.5	Pillow basalt
	34.5	" "
	75	Pillow basalt east of massive sulphide
	95	" " " " " "(tan colored)
	126.5	Pervasive talc (?) alteration of basalt
	143.5	Bleached basalt
	159.5	Bleached pillow basalt
CC 26	8.5	Pillow basalt
	27.4	" "
	30.5	" "
CC 11	9.3	Bleached basalt
	28.5	altered basalt
	39.5	altered brecciated basalt

Massive Sulphide Samples

SECTION 9950N

DDH	Footage	Comments
CC14	176.5	Brecciated massive sulphides
	181.5	Massive sulphides
	185.5	" "
	190.5	" "
CC26	37.5	Massive sulphides
	45.5	" "
	49.5	Magnetite-rich zone
	56.5	" " "

MASSIVE SULPHIDE SAMPLES

SECTION 10100N

DDH	Footage	Comments
CC 1	68.7	Massive sulphides
	71.5	" "
	75.5	" "
	79.5	" "
	83.5	" "
	119.5	" " (was this included?)
CC17	19.9	Massive sulphides
	22.5	" "
	31.5	" "
CC12	217.5	Massive sulphides

Rocks

SECTION 10100N

DDH	Footage	Comments
CC1	10	"Spotted" basalt
	25	Feldspathic basalt
	40	Pillow basalt
	58.5	Feldspathic basalt
	67	Pillow basalt adjacent to massive sulphide cap
	91.5	altered basalt (small sample)
	99.9	<u>Pyritic</u> siliceous "chert"
	124.5	Talc(?) altered basalt
	129	slightly altered basalt
CC17	45.1	<u>Pyritic</u> "chert" (or is it silicified basalt?)
	52.3	altered basalt
	69.7	Black altered and veined basalt
	74.5	carbonate (?) altered basalt
	99.0	chloritised feldspathic basalt
CC22	15.5	Chert breccia
	38.7	carbonate altered basalt
	54.5	Bleached basalt
CC12	19.5	Very finely crystalline pillow basalt
	29.5	Finely " " "
	39.5	"chilled" pillow basalt
	60	" " "
	80	Finely crystalline Pillow Basalt
	100	" " " "
	120	very finely crystalline " "

ROCKS (CONT'D)

SECTION 10100N

CC12	140	microdioritic textured basalt (altered)
	160	Finely crystalline basalt
	178	Pillow basalt

XRAY SAMPLES

DDH	Footage	Comments
CC 26	26.4	Vein composition ?
CC 1	90.1	Minerals ?
	94.5	Sphalerite ? + Talc ? + Dolomite ?
	95	Dolomite, ? sphalerite ? + pyrrhotite ?
CC12	199.5	Talc ? altered basalt
	200.4	Carbonate or is it barite alteration ?
	225	carbonate (?) altered basalt