

KNUT PROP. : DRILL PROGRAM 1990

HOLE #	LOCATION	ELEV (m)	DIP	LENGTH	AZIM.	START DATES		LENGTH 120.13
						START	FINISH	
90-1	3892 N 2475 E	940	-46° (0) -45.5° (486)		270°	APRIL 19		148.13 m
90-2	3900 N 2585 E	936	-45° (0) -45.5° (506)		270°			154.23 m
90-3	3874 N 2703 E	920	-45° (0) -45 (536)		266°			163.37 m
90-4	3697 N 2263 E	952	-45° (0) -46° (446)		088°			147.22 m
90-5	3598 N 2503 E	964	-45° (0) -44.5° (441)		270°			134.42
90-6	3401 N 2245 E	954	-45.5° (0)		090°			154.23
90-7	3264 N 2147 E	945	-46.5° (0) -44.5° (500)		086° 086° 271			156.36
* 90-8	3300 N 1758 E	955	-45.0°		271 45.0°			35.36
90-8 A	3300 N 1758 E	955	-45.0° (0) -44.5 (bottom)		270			111.56

TOTAL = 1204.88 m
(3953')

KNUT DDA

		TOTAL SAMPLES	<u>SHIPPED</u>
90-1 ;	54001 - 54061	61	✓
90-2 ;	54062 - 54144	83	✓
90-3 ;	54145 - 54220	76	✓
90-4 ;	54221 - 54306	86	✓ (03/04/90)
90-5 ;	54307 - 54361	55	✓ (07/05/90)
90-6 ;	54362 - 54428	67	09/05/90
90-7 ;	54429 - 54483	55	11/05/90
90-8 ;	—	0	
90-8A ;	54484 - 54500	<u>17</u>	11/05/90
		489	
		TOTAL = 500	

KNOT PROP.

- DDH90-1: Test Cu-Au Soil & coincident IP anomaly
-45°W, 148.13 m
- DDH90-2: "Same as above"
-45°W, 154.23 m
- DDH90-3: "Same as above" ?
-45°W, 163.37 m
- DDH90-4: "Same as above"
-45°E, 147.22 m
- DDH90-5: "Same as above"
-45°W, 134.42 m
- DDH90-6: "Same as above + pos. northern extension
of known Cu mineralization"
-45°E, 154.23 m
- DDH90-7: "Test the periphery of IP anomaly & previously
interested in Cu mineralization"
-45°E, 156.36 m
- DDH90-8A: Test VLF conductor soil anomaly
largely untested
-45°W, 111.56 m

4) Sugarloaf Unit:

- porphyritic w. doublets, minor clinopyroxene & plag. in a greyish-green matrix
- fairly uniform diorite-andesite comp.
- several Cu occurrences hosted

e.g. Ajax Prop. → within brecciated & albited Sugarloaf.

5) Cherry Creek:

- * - most widely distributed phase of batholith (50% of Iron Mark pluton)
- comp. range from diorite, monzonite, syenite to their porph. & fine-gr'd equivalents as well as local intrusive breccia
- represent small, localized, differentiating offshoots intruded into widely varied physical & chemical enviro. during the later stages
- Cu & Fe mineralization are prominent, particularly in zones of intense brecciation assoc. w. alkali metasomatism. (Brecciation considered to have resulted from high-level venting events)

IRON MASK BATHOLITH

1) Iron Mask Hybrid Unit:

- agmatic
- rounded-angular frag. various sizes, text. comp. in a dioritic comp. matrix
- frag. make up 80% by volume
 - ⇒ coarse & fine-gr'd diorite
 - coarse gr'd gabbro w.
 - lower amounts of med-coarse gr'd hornblende
 - & scattered pieces of Nicola Group Volca.
- Mineralization:
 - Iron & Copper
 - ↓
 - (up to 10%)

2) Pothook Unit: Narrow

- Narrow gradational zone between Iron Mask Hybrid & Cherry Creek Unit
- uniformly dioritic comp
- med-coarse gr'd
- coarse gr'd exhibit cumulate text.
- locally mineralized w. Fe & Cu
- Magn. occurring uniformly dipping vein (prominent S, SE of Afton dip)

3) Picrite Unit:

- Basaltic comp. w. abundant clinopyroxene & resp. olivine phenocrysts
- anox. w. occurring NW trending fract. syst. & Cu mineralization

FGSY / FINE-GR'D SYENITE
SYEN / SYENITE
MONZ / MONZONITE

MZDI / MONZO-DIORITE

ROCKS

~~PYSE~~ / ~~PYRITIC SYENITE~~

~~RYBK~~ / ~~RHYOLITE DYKE~~

DIOR / DIORITE

PPSY / Porphyritic Syenite

PPDI / Porphyritic diorite ✓

MGBT / MED-GRAINED DIORITE

FGDI / FINE-GRAINED DIORITE ✓

HYDI / Hybrid Diorite ✓

* SIBR / SILICA BRECCIA ✓

SYMZ / SYENITIC MONZONITE

MSSF / Massive Sulfide ✓

MGMZ / MED-GR'D Monzonite

SYBK / SYENITIC DYKE

COLOUR GA / Greenish grey
GN / greenish black

GT / Grayish Tan

RA / REDDISH Gray

RD / Reddish Brown

STRUCTURE

C / CONTACT

~~D~~ / DYKE

FZ / FAULT

FS / FRACTURE SET

LS / LENS

SH / SHEAR

~~S~~ / STRINGERS

V / VEIN

~~<<~~ / MICROVEINS

>> / MACROVEINS

YE / EPIDOTE VEIN

VC / CALCITE VEIN

VP / PYRITE VEIN

VQ / QUARTZ VEIN

VG / GYPSUM VEIN

MINERALS

FX / FELDSPARS

PF / PLAGIOCLASE

HB / HORNBLENDE

BI / BIOTITE

QZ / QUARTZ

KF / K-FELDSPAR

CL / CHLORITE

EP / EPIDOTE

LI / LIMONITE

PL / PYROLUSITE

CA / CALCITE

HE / HEMATITE

HS / SPECULAR HEMATITE

XE / XENOLITHS

MS / MUSCOVITE

CB / CARBONATE

GY / GYPSUM

PI / PYRITE

CP / CHALCOPYRITE

SL / SPHALERITE

MC / MALACHITE

MG / MAGNETITE

BO / BORNITE

PP / PHYRROTI

TEXTURE

BK / BLOCKY

BR / BRECCIATED ✓

KR / CRACKLED

LN / LENTICULAR

MX / MASSIVE

PH / PHYLLITIC

PP / PORPHYRITIC

RW / REWORKED ✓

SW / STOCKWORKED

UF / UNIFORM TEXTURED

VG / VUGGY

VV / VEINED

XE / XENOLITHIC

EQ / EQUIGRANULAR

~~<<~~ / MICROVEINED

COO. 58
70
59. 58

KNUT PROPERTY V250

PROPOSED DRILL HOLES

<u>HOLE</u>	<u>NORTHING</u> N	<u>EASTING</u> E	<u>ELEV.</u>	<u>AZM</u> °	<u>DIP</u> °	<u>LENGTH</u> (m)
✓ 90-1	39+00	26+75		270	-45	150
✓ 90-2	39+00	25+75		270	-45	150
✓ 90-3	39+00	24+75		270	-45	150
✓ 90-4	36+00	25+00		270	-45	150
✓ 90-5	36+00	24+00		270	-45	150
90-6	37+00	23+00		90	-45	150
90-7	38+00	27+50		270	-45	150