1980 EXPLORATION REPORT ON THE SULPHURETS PROPERTY, SKEENA MINING DIVISION, B.C.

104 B / 8E,8W, 9E, 9W

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VANCOUVER, B.C.

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### HANGING GLACIER AREA

An area about 200 feet by 400 feet is reported to have minor quartz-calcite-barite veins with erratic Au, Ag values. Electrum was found associated with barite but the location is unknown.

# McQUILLAN SHOWING

Somewhere along the north edge of the Sulphurets Glacier 0.24% Cu was obtained across 160 feet at an elevation of 2600 feet. Higher grade sections contained up to 0.03 oz/t Au. ARSENOPYRITE VEIN

An arsenopyrite vein was located in 1974 about 2500 feet south of the Hanging Glacier. Grab samples over 20 feet assayed 0.36 oz/t Au and 0.23 oz/t Ag.

# SUMMARY OF DRILLING

A series of packsack holes and eight diamond drill holes have been drilled on the Sulphurets property in two zones. The following is a summary of locations, orientation and length:

©: 1			New	Northing * Easting					Length			
Hole No.			No.	(Feet)			Bearing	Dip	(Feet)			<u>t)</u>
Pack	sack	,								•	_	
	Sack	T	по	new	number		variable		185	in	9	holes
		2	Ħ	11	11		77		251	in	9	holes
H		3	11	#	Ħ		н		102	in	4	holes
-		4	**	n	п		n		200	in	9	holes

	New	Northing	Easting			Length
Hole No.	No.	(Feet)		Bearing	Dip	(Feet)
DDH 1-62	1	6228	6610	***	-90	1012
<b>2</b> – 6 2	2	5195	6650	1800	-60	504
* 1-68	3	4788	3003	0900	-50	703
* 2-68	4	4620	6423	330°?	-48	297
<b>3</b> - 68	5	4370	61230	315°?	-55	514
<b>4</b> - 68	6	4672	6013	150°?	-50	303
<b>"</b> 5-68	7	10090	13420	1800	-40	1000
* 6-68	8	10790	13480	1800	-40	1005

Total diamond drilling: 5338 Ft. (1627.0m).

The drill hole coordinates refer to coordinates on a 1:9600 pencil manuscript topographic map used as the geology base map.

Packsack Site 1:

Area: Main Copper Zone

Purpose: Test area of silicified and chloritized rock on the footwall side of the Sulphurets fault by drilling nine holes along a line 450 feet long.

Results: 185 feet of core in nine holes averaged 0.5% Cu. and 0.01 to 0.04% Mo.

Packsack Site 2:

Area: Main Copper Zone

Purpose: Test area of slightly chloritized, unsheared syenite mineralized with chalcopyrite on the hanging wall side of the Sulphurets Fault by drilling nine holes in an area 160 by 200 feet.

Results: 251 feet of core in nine holes averaged 0.63% Cu

Packsack Site 3:

Area: Main Copper Zone

Purpose: Test randomly-selected area

Results: 102 feet of core drilled in four holes along a

line 150 feet long averaged 0.29% Cu.

Packsack Site 4:

Area: Main Copper Zone

Purpose: Test randomly selected area

Results: 200 feet of core in nine holes averaged 0.14%

Cu. The holes were drilled in an area about 240 by 130

feet.

DDH 1 (originally 1-62):

Area: Main Copper Zone

Purpose: Test the theory that the copper mineralization was associated with the Sulphurets (or S.M.) Fault.

Results: It was concluded that the mineralization is not fault-related. A brief geological log is as follows:

0-90 feet: sericite chlorite-altered gray-green-red rock with minor orthoclase, chalcopyrite, pyrite.

90-822 feet: mainly syenite porphyry, locally silicified and chloritized

822-836 feet: clay gouge and shear zone assumed to be the Sulphurets Fault.

836-870 feet: sericite-koalin-calcite-altered rock with minor chlorite and pyrite.

870-1012 feet: altered porphyry with minor chlorite and pyrite.

Assayed Sections: 1-90 feet: 0.36% Cu

966.5-1012 feet: 0.10% Cu, < 0.01 oz/t Au, trace Ag except for 2.4 oz/t Ag associated with a galena patch.

DDH 2 (originally 2-62):

Area: Main Copper Zone

Purpose: Unknown, drilled on the footwall side of the Sulphurets Fault.

Results: The hole intersected pale green quartz-sericite-carbonate rock with minor chlorite and pyrite and trace chalcopyrite. The core is apparently very similar to the rock in DDH 1 from 836-1012.

Assayed Sections: 253-314 feet: 0.43% Cu,

0.02% MoS<sub>2</sub>. Other short sections were assayed for Cu, and Mo.

DDH 3 (originally 68-1):

Area: Main Copper Zone

Purpose: Test for copper mineralization in area of

locally altered and sheared andesite pyroclastics.

Results: The hole intersected pyritized, silicified and

feldspathized fragmental volcanic rocks.

Assayed Sections: 5-703 ft: 0.174% Cu, 0.013 oz/t Au.

DDH 4 (originally 68-2):

Area: Main Copper Zone

Purpose: Test for copper mineralization in a guartz-pyrite-sericite unit within an area of mainly epiclastic andesites and dacites.

Results: The hole intersected highly silicified arenites with minor disseminated pyrite.

Assayed Sections: 11-297': 0.54% Cu, 0.008% Mo.

Best Section: 110-190': 0.99% Cu, 0.009% Mo,

0.012 oz/t Au.

DDH 5 (originally 68-3)

Area: Main Copper Zone

Purpose: Test for copper mineralization in a guartz-pyrite-sericite unit within an area of mainly epiclastic andesites and dacites.

Results: 10-514': 0.56% Cu, 0.023% Mo.

100-170': 0.023 oz/t Au

DDH 6 (originally 68-4)

Area: Main Copper Zone

Purpose: Test for copper mineralization in a quartz-pyrite-sericite unit within an area of mainly epiclastic andesites and dacites.

Results: 130-303': 0.37% Cu, 0.015% Mo.

Best Section: 130-220': 0.51% Cu, 0.020% Mo, 0.04 oz/t Au.

DDH 7 and 8 (originally 68-5 and 68-6)

Area: Quartz Stockwork Zone

Purpose: Test area of sparce molybdenite and minor to insignificant copper mineralization in intensely silicified and sericitized rocks with 2 to 5% pyrite. The zone has dimensions approximately 1500 by 1500 feet. Molybdenite is exposed in a canyon wall 600 feet to the east of the drilled area.

Results: No significant molyhdenite was intersected. The holes intersected quartz-sericite schists and some granular, extensively chloritized, monzonite or diorite. The holes were completely assayed for Mo and locally sections were assayed for Cu and Au.

Assayed Sections, DDH 7:

3.5 - 1000 feet: 0.018% Mos<sub>2</sub>, 0.03 to 0.23% Cu.,

0.01 to 0.02 and a single 0.04 oz/t  $\mathtt{Au}$ 

Assayed Sections, DDH 8:

20 - 1005 feet: 0.017% Mos<sub>2</sub>,

0.09 to 0.23% Cu,

0.01 to 0.02 oz/t Au.

# ASSAYS RESULTS, DIAMOND DRILL HOLES

The following is a summary of assay results for the nine holes drilled in 1980. Gold and silver values are in ounces per tonne followed by grams per tonne in brackets:

DDH 9 and 13 were drilled to test visible molybdenite in quartz-sericite schists in the Moly Zone. They were drilled near ice level on the south side of Mitchell Glacier.

DDH 9

6.0 - 210.0 = 204.0 m, 0.004% Mo, 0.005 (0.16) Au, 0.01 (0.48) Ag

**DDH 13** 

5.0 - 230.0 = 225.0 m of 0.012 % Mo 5.0 - 56.0 = 51.0 m of 0.026 % Mo 56.0 - 113.0 = 57.0 m of 0.012 % Mo 113.0 - 230.0 = 117.0 m of 0.005 % Mo 230.0 - 275.84 = 45.84 m not sampled

DDH 10, 11, 14 and 15 were drilled in the Iron Cap area to test quart-pyrite veins for Au and Ag.

DDH 10

2.52 - 169.77 = 167.21 m, 0.010 (0.34) Au, 0.13 (4.46) Ag96.62 - 99.28 = 2.66 m, 0.028 (0.96) Au, 3.04 (104.23) Ag

Some intervals were assayed for Mo and W but the values were very low.

#### DDH 11

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3.6 - 57.0 = 53.4 m, 0.006 (0.21) Au, 0.12 (4.11) Ag 57.0 - 75.0 = 18.0 m, 0.074 (2.54) Au, 1.67 (57.26) Ag 75.0 - 252.68 = 177.68 m, 0.010 (0.34) Au, 0.12 (4.11) Ag 63.0 - 75.0 = 12.0 m, 0.090 (3.05) Au, 2.40 (82.28) Ag 66.0 - 72.0 = 6.0 m, 0.136 (4.66) Au, 3.50 (120.00) Ag
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Three short intervals were assayed for Cu, Pb and Zn.

#### **DDH 14**

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5.43 - 42.0 = 36.57 \text{ m}, 0.008 (0.27) \text{ Au}, 0.19 (6.51) \text{ Ag}

42.0 - 57.0 = 15.0 \text{ m}, 0.068 (2.33) \text{ Au}, 1.81 (62.06) \text{ Ag}

57.0 - 163.68 = 106.68 \text{ m}, 0.013 (0.45) \text{ Au}, 0.25 (0.86) \text{ Ag}

42.0 - 114.0 = 72.0 \text{ m}, 0.027 (0.93) \text{ Au}, 0.67 (22.97) \text{ Ag}, 0.24% \text{ Cu}
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Some intervals were assayed for Mo and Zn but the values were very low.

### DDH 15

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68.05 - 84.0 = 15.95 \text{ m}, 0.036 (1.23) \text{ Au}, 0.82 (28.11) \text{ Ag} \\ 83.18 - 160.63 = 77.45 \text{ m}, 0.011 (0.34) \text{ Au}, 0.35 (12.00) \text{ Ag} \\ 68.05 - 141.0 = 72.95 \text{ m} 0.017 (0.58) \text{ Au}, 0.44 (15.09) \text{ Ag}, 0.36% \text{ Cu}
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Some intervals were assayed for Mo, Zn and Ph but the values were very low.

DDH 12 was drilled about 500 m southwest of Granduc's Main Copper Zone. The hole was drilled to provide assessment work and test pyrite-K-feldspar-quartz altered andesites for Au and Ag.

# DDH 12

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5.0 - 14.0
                  9.0
                        m, 0.072 (2.47) Au, 0.02 (0.69) Ag
 80.0 - 107.0
               = 27.0
                        m, 0.031 (1.06) Au, 0.02 (0.69) Ag
107.0 - 131.0
                = 24.0
                         m, 0.079 (2.71) Au, 0.01 (0.34) Ag
131.0 - 146.0
                = 15.0
                         m, 0.041 (1.41) Au, 0.03 (1.03) Ag
98.0 - 146.0
                = 48.0
                         m, 0.060 (2.06) Au, 0.02 (0.69) Ag
149.0 - 166.24 = 17.24 \text{ m}, 0.027 (0.93) \text{ Au}, 0.08 (2.58) \text{ Ag}, 0.59% \text{ Cu}
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The complete hole was also assayed for Cu and 22 intervals were analysed for Mo, Pb, An, Hg, As, Sb, F and Bi.

ppH 16 was drilled in the west part of the Iron Cap area to test a 500 by 300 m area of molybdenite mineralization. The hole intersected pyritic and K-feldspar altered intrusive, volcanic and sedimentary rocks and some relatively unaltered syenite.

DDH 16

8.14 - 304.5 = 296.36 m, 0.20 Cu, 0.019 Mo, 0.007 (0.24) Au, 0.28 (9.55) Ag

Cu values are fairly consistent throughout the hole. The best Cu section is: 195.0 - 210.0 = 15.0 m, 0.62% Cu

Mo values are much higher in the upper half of the hole: 8.14 - 159.0 = 150.86 m, 0.030% Mo 159.0 - 304.5 = 145.5 m, 0.007% Mo

Au values are quite variable:

8.14 - 57.0 = 48.86 m, 0.002 (0.08) Au 57.0 - 180.0 = 123.0 m, 0.008 (0.28) Au 180.0 - 216.0 = 36.0 m, 0.003 (0.09) Au 216.0 - 228.0 = 12.0 m, 0.031 (1.09) Au 228.0 - 276.0 = 48.0 m, 0.003 (0.10) Au 276.0 - 300.0 = 24.0 m, 0.014 (0.48) Au 300.0 - 304.5 = 4.5 m, 0.003 (0.09) Au

Ag values are fairly consistent with a few local higher values: 69.0 - 84.0 = 15.0 m, 0.73 (25.03) Ag195.0 - 198.0 = 3.0 m, 2.16 (74.06) Ag

DDH 17 was drilled on the north shore of Brucejack Lake to test a quartz-barite-calcite vein which assayed 30.7 oz/t Au and 664.0 oz/t Ag. The hole intersected minor Au, Ag values with the following more significant sections:

**DDH 17** 

24.0 - 27.0 = 3.0 m, 0.048 (1.65) Au, 6.93 (237.59) Ag 66.0 - 69.0 = 3.0 m, 0.068 (2.33) Au, 0.81 (27.77) Ag 81.0 - 84.0 = 3.0 m, 0.027 (0.93) Au, 1.82 (6240) Ag

Some intervals were assayed for Cu, Mo, Ph and Zn.