

NAME OF PROPERTY

AXE

OBJECT LOCATED - Adit zone.

UNCERTAINTY IN METRES 500. Lat. 49°37'10" Long. 120°31'30"

Mining Division Similkameen District

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

Cominco Ltd.

DESCRIPTION OF DEPOSIT

The work done to date has contributed in outlining a large porphyry system involving an area nearly 3.2 kilometres in diameter and containing at least three zones of appreciable but scattered copper and some molybdenum mineralization. The sizes and grades of the mineralized zones are only poorly known, because of the complicated geology, erratic nature of mineralization, and generally poor recovery obtained in drilling due to intense faulting and fracturing and in places deep weathering of the bedrock.

The Axe property belongs to a large group of copper showings including several porphyry-type deposits that are found in a narrow, northerly trending belt between Copper Mountain and Nicola Lake. All of these deposits occur within an assemblage of high-energy proximal volcanic and genetically related intrusive rocks which form a narrow, largely fault-bounded Central Belt in the Upper Triassic Nicola Group.

Copper mineralization occurs in Upper Triassic Nicola volcanic rocks that are cut by a variety of intrusive rocks
see Card 2

Associated minerals or products of value - Molybdenum.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on the west side of Summers Creek, 12 miles north of Princeton. Copper mineralization is exposed in natural outcrops on the Adit zone and on steep east-facing cliffs on the South zone. The impressive gossan zone must have been known for some time, as indicated by an old 28 metre adit driven on the Adit zone.

The Axe group of 86 claims was staked by J.A. Stinson of New Westminster in 1967. Trenching was carried out on the South zone. That same year Meridian Exploration Syndicate optioned the property and carried out geological mapping, induced potential, magnetometer, electromagnetic, and geochemical surveys over 3,910 metres of line, trenching, and 2,135 feet of diamond drilling in 7 holes.

Quintana Minerals Corporation, of Houston, Texas, optioned the property from Mr. Stinson in 1968. Work by the company included geological mapping, trenching, and drilling in 4 large-diameter rotary holes totalling 3,303 feet.

Adonis Mines Ltd. was incorporated by Mr. Stinson and associates in November 1968. Additional staking was done in the Bud, Bol, Lox, and Rum groups to a total of 199 claims. Trenching and 270 metres of diamond drilling in 2 holes was carried out.

Amax Exploration, Inc. optioned the property and during 1969 and 1970 carried out geological mapping, induced potential and geochemical surveys, trenching, 4,000 feet of diamond drilling in 6 holes, and 10,500 feet of percussion drilling in 50 holes. During 1971 Amax completed an additional 4,392 feet of diamond drilling in 7 holes. The option was given up in April 1972.

Adonis Mines resumed work on the property and during 1972 and 1973 completed 22 NQ wireline holes totalling 3,134 metres and 70 percussion holes totalling 2,551 metres.

Though a good deal of effort and money was spent in trying to outline one or more copper orebodies on this property, the results were inconclusive and difficult to interpret. Core recovery in most diamond holes, even in those drilled with the greatest care, has been only fair to poor because of the intensely fractured and locally deeply weathered state of the rocks. Different adjustment factors have been employed by various workers in evaluating assays from diamond, percussion, and rotary holes, and the figures obtained from these highly variable and often problematic data should only
see Card 2

HISTORY OF PRODUCTION

REFERENCES

Reports of Minister of Mines, British Columbia:
 1967, p. 177; 1968, p. 203.

Geology, Exploration, and Mining; British Columbia Dept.
 of Mines: 1969, p. 279; 1970, p. 389; 1971, p. 280;
 1973, p. 142; 1975, pp. G-54-G-57⁺.

Mineral Policy Sector; Corporation Files: "Global Energy
 Corporation".

Preto, V.A.; Geology of the Nicola Group between Merritt
 and Princeton; Bulletin 69, p. 71, British Columbia
 Dept. of Mines, 1979.

MAP REFERENCES

Map 888 A, Princeton, (Geol.), Sc. 1":4 miles - accomp.
 Memoir 243, Geol. Surv. of Canada, 1947.

#Generalized Outcrop Geology of the Summers Creek Prospect,
 Fig. G-26, Geology, Exploration and Mining, 1975,
 British Columbia Dept. of Mines.

Map 8531 G, Tulameen, (Aeromag.), Sc. 1":1 mile.

*Map 92 H/10, Tulameen, (Topo.), Sc. 1:50,000.

Geology of the Nicola Group between Merritt and Princeton,
 Sc. 1:50,000, Fig. 1, Bulletin 69, British Columbia
 Dept. of Mines, 1979.

REMARKS

Comp./Rev. By	DMacR	JL	DMacR				
Date	5-78	09-82	02-84				

NAME OF PROPERTY

AXE

DESCRIPTION OF DEPOSIT (continued)

ranging from mafic diorite to syenite and from quartz diorite to felsic quartz porphyry. Structurally the mineralization occurs in an area where two major branches of the northerly trending Summers Creek fault come together, break up into a series of lesser east-west, northeast, and northwest-trending structures, and finally continue southeastward apparently as a single fault of seemingly lesser magnitude.

The oldest rocks within the area of the showings are massive flows and breccias of augite basalt porphyry. Interlayered with these are massive to thinly bedded crystal and lithic tuffs and some volcanic sandstone and siltstone. A few small lenses of massive, locally fossiliferous, impure limestone and limestone breccia are also found interlayered with the volcanic sediments.

In the areas of copper mineralization, and especially on the Adit and Western zones, the Nicola rocks are cut by a complex assemblage of generally fine-grained diorite and monzonite which appear to form small stocks and dyke-like bodies and locally contain small bodies of high-level intrusive breccia. At least two, and probably more, phases of these quartz-poor intrusive rocks exist on the Adit and Western zones, but their number and relationships are difficult to understand because of intense faulting and extensive alteration.

Copper mineralization includes widespread chalcopyrite, accompanied by variable amounts of pyrite, and abundant azurite, malachite, and some chalcocite.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

be considered to be a very crude estimate. Indicated reserves were reported by the company in 1973 as follows:

South zone - 41 million tons at 0.48% copper.

West zone - 6.4 million tons at 0.47% copper.

Adit zone - 16 million tons at 0.56% copper.

(Northern Miner, Sept. 6, 1973, p. 6).

The company name Adonis Mines was changed in 1977 to Global Energy Corporation. In 1980, the property was optioned by Cominco Ltd. and reserves were revised to 100,000,000 tons averaging 0.4% Cu. (Can. Mines Handbook 1982-83, p. 142). The company spent over \$200,000 on exploration prior to the end of 1982 to become the registered owner of the property. Global Energy retained a 6.5% royalty interest from net proceeds of production.