PRODUCT	PROVINCE OR TERRITORY	N.T.S. AREA	REF.
COPPER	British Columbia	104 G/9	CU 3

NAME OF PROPERTY RED DOG (SPECTRUM) (KLASTLINE)

OBJECT LOCATED – Area of samples 2 to 4.

UNCERTAINTY IN METRES 100. Lat. 57°41'23" Long. 130°29'05"

Mining Division Liard District

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The claims cover an occurrence of porphyry-type mineralization associated with a granodiorite intrusion in Upper Triassic volcanic and sedimentary rocks. Mesozoic bedded rocks within this area can be subdivided into four stratigraphic units.

The basal unit in the exposed sequence (map unit 1) consists of conglomerate, greywacke, siltstone, and at least one amygdaloidal basalt flow member. The coarsest beds contain pebble and cobble-sized clasts consisting mainly of chert and some crystalline limestone with other rock fragments in a silt or mud matrix. Beds are commonly 2 to 5 feet thick but massive units of conglomerate as well as thinly bedded, graded siltstone or shale are present. This unit passes upward into about a 1,000-foot thick succession of mainly shale and siltstone interspersed with limestone beds and lenses and thin chert and greywacke members (map unit 2). Limestone beds are 5 to 10 feet thick and formed of bioclastic deposits containing abundant shell fragments and crinoidal stems. The overlying map unit 3 is a succession of sedimentary rocks composed of angular

see Card 2 ....

Associated minerals or products of value – Gold.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at elevations of 4,500 to 5,500 feet 3 miles northwest of Kakiddi Lake and some 29 miles southeast of Telegraph Creek. The showings are at the eastern edge of the Edziza Peak volcanic pile, approximately 6 miles east of the summit of Edziza Peak.

Torbrit Silver Mines, Limited in 1957 staked 17 claims in the Klastline and Kakiddi groups. Five years assessment work, in the form of a geological survey, was recorded later in the year. No further work was reported.

The showings were staked as the Spectrum group of 46 claims in 1970 by Spartan Explorations Ltd., under a joint exploration program with Mitsui Mining & Smelting Co. Ltd. Work during the year included geological mapping, geochemical soil sampling, and a magnetometer survey. By an agreement of August 1971, Imperial Oil Enterprises Ltd. acquired an option on the property. Additional staking expanded the property to 91 claims in the Spectrum and Owl groups. Work during 1971 and 1972 included an induced potential survey over 4.4 line-miles, geological mapping, rock chip geochemistry, and a ground magnetometer survey over 23.5 line-miles. In 1973 Imperial carried out 1,478 feet of diamond drilling in 4 holes on Spectrum 9, 11, and 13. The drilling showed only very low copper values. The option was terminated in 1974.

Sections of the drill core were re-assayed in 1975 by the Racicot Syndicate and showed interesting gold values. The ground was in part restaked for the Racicot Syndicate as the Red Dog #1 (2 units) in September 1975 and Red Dog #2 (15 units) in April 1976. The Racicot Syndicate comprised: Placer Development Limited, El Paso Mining and Milling Company, and Mr. Arnold Racicot. Ground adjacent to the north and east was staked in February 1978 for Highawk Mines Limited as the Hawk #1 (18 units) and Hawk #2 (20 units) claims. By a July 1978 agreement Consolidated Silver Ridge Mines Ltd. optioned an 80% interest in the Red Dog claims.

Mineral Development Sector, Department of Energy, Mines and Resources, Ottawa.
504195

HISTORY OF PRODUCTION

MAP REFERENCES

Map 11-1971, Telegraph Creek, (Geol.), Sc. 1:250,000 - accomp. Paper 71-44, Geol. Surv. of Canada.

#Geology of the Spectrum Claims, Sc. approx. 1":750 ft., Fig. 66 - accomp. Geology, Exploration, and Mining, 1972, British Columbia Dept. of Mines.

*Map 104 G/9 W, Kinaskin Lake, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR	DMacR					
Date	4-76	8-78					

REFERENCES

+Panteleyev, A.; Spectrum; Geology, Exploration, and Mining, 1972, pp. 531-534, British Columbia Dept. of Mines.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1970, p. 57; 1971, p. 41; 1973, p. 506.

Mineral Policy Sector; Corporation Files: "Nuspar Resources Ltd."; "Consolidated Silver Ridge Mines Ltd."; "Torbrit Silver Mines, Limited".

Report of Minister of Mines, British Columbia, 1958, p. 74.

BCI 104 G - 5, 6, 36

NAME OF PROPERTY RED DOG (SPECTRUM) (KLASTLINE)

DESCRIPTION OF DEPOSIT (continued)

epiclastic and pyroclastic detritus. Composition of the fragments is highly varied but the clast size ranges mostly from sand to pebble. The deposits most often form beds of lithic breccia, grit, and tuffaceous sandstone but beds of lithic-crystal tuff and occasionally plagioclase-bearing crystal tuff are present.

Map unit 4 occupies the central and northwestern portion of the map-area and consists of grey porphyritic to microporphyritic andesite (to dacite ?). Outcrops are rusty weathering and massive with no recognizable strata. The formation is thought to overlie the three sedimentary formations unconformably on the basis of gross distribution of the rock type rather than any observed structural or stratigraphic evidence. Undoubtedly some of the unconformable appearance is due to the abundance of dykes, sills, and small irregular intrusions within this volcanic unit. The intrusive bodies are crystalline, fine-grained porphyritic rocks that are virtually indistinguishable from the host strata except for the presence of slightly coarser plagioclase crystals and a well-developed blocky jointing in outcrops.

The stratified succession is intruded by a large northerly trending granitic dyke of Lower Jurassic age. This body outcrops over a length of at least 3,500 feet and widths up to 450 feet. It is a steep-walled body that has a sharp contact with the extrusive rocks and has evidently brecciated them over some of its length. The intrusion appears to splay and become thinner near its southern limit of exposure close to where it is covered by Miocene basalt flows. South of the basalt promontory a 20-foot thick sill may be a continuation of the main dyke. The intrusion is composed of a grey to pink porphyritic rock with feldspar phenocrysts and has a crowded, somewhat seriate and occasionally weakly oriented texture. It is apparently intruded as a single mass although a younger phase may form a few thin dykes within the main intrusion or along its margins. Accessory minerals including magnetite, sericite, apatite, epidote, calcite, and sphene constitute from 1 to 2 per cent of the rock while sulphide content varies from less than 1 to about 2.5 per cent and seems to have an inverse relation to magnetite content. The rock may be classified as either a granodiorite or quartz-bearing monzodiorite and described as a hornblende-bearing biotite granodiorite porphyry.

continued above .....

DESCRIPTION OF DEPOSIT (continued)

Alteration zones are centred on the granodiorite intrusion. A central core of potassic alteration containing biotite, sericite, and a few small quartz and quartz-K-feldspar veins is found within the granodiorite to the south of about line 28 North on the survey grid. A biotite hornfels envelopes the intrusion across distances of 50 to 100 feet from the contact.

Porphyry-type copper mineralization, polymetallic quartz veins, and scattered occurrences of lead and zinc minerals are known on the property. Small amounts of pyrite and traces of chalcopyrite are dispersed throughout many of the rocks - particularly granodiorite, hornfels, and Upper Triassic andesites. The amount of pyrite increases in the area where granodiorite intrudes rock of the andesite unit. Here sulphide content is commonly 3 per cent and may reach 5 to 8 per cent whereas copper grades of 0.1 to 0.2 per cent can be found over a large area.

Mineralization in the granodiorite is present as disseminated and fracture-controlled pyrite with minor chalcopyrite and malachite while fracture fillings and rare disseminations of pyrite, pyrrhotite, and chalcopyrite are found in the intruded rocks. Fine-grained magnetite is often associated with sulphides or disseminated in the hornfelsic zones and sometimes borders quartz veinlets. Quartz veinlets are not abundant but can be found in both the granodiorite and intruded rocks. However, all quartz veins seen were barren of any copper or molybdenum sulphides. Molybdenum is known to be geochemically anomalous in the mineralized area, but no trace of molybdenite was seen in the course of the property examination.

A number of polymetallic quartz veinlets up to 2 centimetres but usually less than 1 centimetre wide were noted in granodiorite outcrops, local debris, and andesite well removed from the intrusion or its contact. The veins contain rare grains to banded crusts of sphalerite, pyrite, arsenopyrite, and chalcopyrite and carry gold values.

Small amounts of sphalerite, galena, pyrite, and chalcopyrite can be found in a few of the recrystallized limestone beds and magnetite has formed in some of the calc-silicate zones in the southwestern quadrant of the map-area. Small ankeritic carbonate and quartz carbonate veins and gashes can be found in many locations throughout the property and occasionally carry sphalerite and galena. (Panteleyev, 1972).