

Location/Identification

MINFILE Number:	104G 043	National Mineral Inventory Number:	104G12 Cu4
Name(s):	<u>DOK</u> MAIN		
Status:	Prospect	Mining Division:	Liard
Regions:	British Columbia	Electoral District:	Stikine
BCGS Map:	104G053	Resource District:	Skeena Stikine Natural Resource District
NTS Map:	104G12E	UTM Zone:	09 (NAD 83)
Latitude:	57 33 11 N	Northing:	6381889
Longitude:	131 34 53 W	Easting:	345542
Elevation:	1190 metres		
Location Accuracy:	Within 500M		

Mineral Occurrence

Commodities: Copper

Minerals

Significant:	Chalcopyrite, Pyrite
Significant Comments:	Copper carbonates occur with chalcopyrite in most surface exposures.
Associated:	Calcite
Alteration:	Calcite, Biotite, Feldspar, Chlorite, Epidote
Alteration Type:	Propylitic, Potassic, Carbonate
Mineralization Age:	Unknown

Deposit

Character:	Vein, Disseminated
Classification:	Epigenetic, Hydrothermal, Igneous-contact

Host Rock

Dominant Host Rock: Volcanic

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Triassic	Stuhini	Undefined Formation	-----

Isotopic Age	Dating Method	Material Dated
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Lithology: Andesite, Basalt, Sediment/Sedimentary, Syenite, Rhyolite, Granodiorite, Quartz Monzonite

Comments: Chalcopyrite occurs in volcanics near contacts of syenite dykes.

Geological Setting

Tectonic Belt:	Intermontane	Physiographic Area:	Boundary Ranges
Terrane:	Stikine		

Comments: Mineralization is related to syenite dykes.

Inventory

Ore Zone:	SAMPLE	Year:	1971
Category:	Assay/analysis	Report On:	N

Sample Type: Chip

Commodity	Grade
Copper	0.6600 per cent

Comments: Chip sample collected over thirty eight metres but generally along the trend of the occurrence.

Reference: Assessment Report 3238.

Capsule Geology

The Dok occurrence is located between Strata and Dakdoan creeks, approximately 45.5 kilometres south west of the community of Telegraph Creek.

The area is underlain by undifferentiated volcanic and sedimentary rocks of the Upper Triassic Stuhini Group. In this area they are mainly andesitic and basaltic flows, tuffs and breccias with minor interbedded sediments consisting of siltstone, mudstone, lime- stone, and conglomerate. Large masses of granodiorite and quartz monzonite of probable Middle Jurassic age intrude these rocks within 3 kilometres of the occurrence. Tabular bodies of Juro-Triassic syenite along with rhyolite have intruded the volcanics and the granitic rocks.

Hydrothermal alteration varies from a very high grade biotite- feldspar alteration to a low grade chlorite epidote type. Calcite occurs as stringers or as trace amounts in the volcanics and may contain some mineralization.

Pyrite generally makes up one per cent of the volcanics but in altered zones may make up as much as 10 per cent of the rock, mostly along fractures. Chalcopyrite occurs in the volcanics along fractures or as disseminations. These occurrences are generally near the syenite dikes and are contact controlled. Copper carbonates occur with chalcopyrite in most of the surface exposure.

Chip samples, taken in 1971, contained up to 0.66 per cent copper across 38 metres and 0.32 per cent across 23 metres. However, it is noted that sampling was done along a traverse close to the trend of the mineralization.

In 1990, soil samples returned up to 4000 parts per million copper, 1.0 part per million gold and over 31.25 grams per tonne silver. Rock samples, from the vicinity of the soil anomaly, returned up to 220 parts per billion gold and 2.6 per cent copper (Assessment Report 30706).

In 2004, a sequence of three chip samples, across 4.5 metres, near the northeastern side of Main showing area yielded an average of 0.9 per cent copper, 0.4 gram per tonne gold and 5 grams per tonne silver; a 1.5 metre, chip sample assayed 0.149 gram per tonne gold, 85.5 grams per tonne silver and 0.68 per cent copper; a grab samples from the area graded up to 2.55 grams per tonne gold, 6.01 per cent copper and 16.5 parts per million silver (Assessment Report 30706).

On May 26, 2011, Boxxer Gold summarized findings on the Dok property including the following: 1) 81 copper occurrences have been located within the property, the majority of which occur within two large soil geochemical anomalies. 2) Two large, copper-gold-molybdenum-silver soil geochemical anomalies have been outlined over a five kilometre strike length on the property. The first zone measures 2,000 metres long by 1,400 metres wide. The second zone measures 1,500 metres long by 900 metres wide. Both anomalies are open along strike. 3) Copper concentrations in the soil geochemical anomalies range from 200 to 9,820 parts per million ("ppm"); as well as 0.03 parts per million gold to 2.2 parts per million gold; 14 to 135 parts per million molybdenum; and 0.6 pars per million to 84.5 parts per million silver (Press Release, Boxxer Gold, May 26, 2011).

In October 2011, Boxxer Gold Corp provided the results of a high-resolution aeromagnetic survey completed over the 18,500-acre DOK copper-gold porphyry property: 1) The total-field (TF) and calculated-vertical-gradient (CVG) magnetic data have defined five large, strong, positive magnetic signatures within the property, 2) The total-field (TF) and calculated-vertical-gradient (CVG) magnetic data have defined five large, strong, positive magnetic signatures within the property and 3)Two of the TF and CVG magnetic anomalies correlate with the two large previously identified copper-gold-molybdenum-silver-in-soil geochemical anomalies (Press Release, Boxxer Gold Corp, October 11, 2011).

On October 1, 2012, Boxxer Gold Corp.released results from the Titan-24 DCIP/MT survey completed by Quantec Geoscience over two large copper-gold-molybdenum-silver in-soil anomalies on the DOK project (Press Release, Boxxer Gold Corp, October 11, 2011). The highlights included: 1) 13 zones of exploration interest (anomalous chargeability/conductivity) were located; 2) A strong chargeability anomaly with an 800-metre strike length and a width of up to 1,200 metres underlies the northwest zone. The chargeability anomaly is open along strike in both directions; 3) The chargeability anomaly on the northwest zone coincides with mineralized potassic altered intrusive rock and Stuhini volcanic rocks from which historical sampling includes 0.66 per cent copper over 38 metres; 4) The copper mineralization in the northwest zone occurs along the eastern side of a large quartz monzonite intrusive; 5) A strong chargeability/conductivity anomaly has been outlined over a 600-metre strike length and a width of up to 900 metres in the southeast zone. The chargeability anomaly is open along strike in both directions and shows a strong correlation with gossanous area and the copper-gold-molybdenum-silver soil anomaly and; 6)The chargeability anomaly on the southeast zone coincides with potassic altered intrusive rock and Stuhini volcanic rocks. Historical sample results include 5.16 grams per tonne gold (grab sample), 6.7 per cent copper, 65.4 grams per tonne

silver and 0.2 gram per tonne gold over a three-metre chip sample, and 12.5 per cent copper over a 0.5-metre-long chip sample occur with the chargeability anomaly.

In 2014, Continental Precious Minerals completed two diamond drill holes at the “Main Showing” on the south part of the Dok property in 2014 and both intersected wide intervals of weak to moderate copper-gold-silver mineralization with associated strong fracturing to brecciation and moderate to strong potassic and phyllic alteration. In general, mineralization consists of pyrite, with lesser chalcopyrite and bornite, along with very local molybdenite and galena, found predominantly in strongly fractured to brecciated andesite flows and tuffs. The holes tested two areas along a southeast trending zone of anomalous chargeability and magnetic highs that may reflect the stockwork-style sulphide-bearing veins and breccias seen in the core.

In hole 2014-1 a 140.3 metre interval averaged 0.080 per cent copper, 0.04 gram per tonne gold, 0.61 gram per tonne silver, which included a higher grade zone that averaged 0.327 per cent copper, 0.13 gram per tonne gold, 1.92 grams per tonne silver over 18.3 metres. Similarly, in hole 2014-2 a 155.6 metre interval averaged 0.077 per cent copper, 0.05 gram per tonne gold, 0.88 gram per tonne silver and it also contained a higher grade section that averaged 0.113 per cent copper, 0.06 gram per tonne gold, 1.64 grams per tonne silver over 54.9 metres. The mineralization occurs within fine veinlets, some containing quartz and/or carbonate, in strongly fractured to brecciated andesitic flows and tuffs of the Upper Triassic Stuhini Group and, to a lesser extent, within syenite to quartz monzonite dykes of probable Early to Middle Jurassic age that have intruded the volcanic rocks

Work History

Empire Mercury Corporation Ltd in December 1969 optioned 28 claims from Peter Svensma, John Anderson, Wm. Buchholz, and Beverley McFadden. Canadex Mining Corporation Ltd carried out geological mapping and a soil geochemical survey over the Dok 1-36 claims in 1970. In an agreement of September 1970 Empire Mercury, and the original owners, optioned 52 claims in the Dok, Pete, and Thelma groups to The Swiss Aluminum Mining Co of Canada Ltd. The company name (Empire) was changed in December 1970 to Empire Metals Corporation Ltd. In 1971 and 1972, Swiss Aluminium Mining Company of Canada Ltd conducted a series of exploration programs including line-cutting, grid soil sampling, ground geophysics including magnetometer and an induced polarization survey over 26 kilometres, geologic mapping, prospecting, hand-pitting, and five diamond drill holes totalling 804 metres.

In 1990, Continental Gold Corp. completed minor soil and rock sampling (Assessment Report 1990).

In 1989, prospecting, geological reconnaissance and stream sediment sampling was carried out on all the claims in the Dok group (Dok 1-6).

In 1990, Continental Gold Corp., demonstrated that the 1971 copper-in-soil anomaly was real, and that it was also anomalous in gold and silver. The program reconnaissance in nature, and amounted less than ten man days of work, fifteen soil samples and ten rock samples were collected from what was then referred to as the main part of the Dok property. Most of the soil samples were collected along a contour soil line through the core of the 1971 soil anomaly.

In 2004, the owners, prospector Bernie Kreft and geologist Charlie Greig, along with the assistance of geologist Darwin Green, undertook a prospecting and soil sampling program.

In 2008, a six person crew spent a single day soil sampling and reconnaissance prospecting and mapping at the Dok property, for owners C.J. Greig and B.J. Kreft.

In 2011 and airborne geophysical program was conducted on the Doc property Boxxer Gold Corp consisting of 1508.5 kilometres of magnetic surveying.

In 2012, Boxxer Gold Corp conducted a Titan-24 DCIP (direct current resistivity, induced polarization) & MT (magnetotelluric) survey on the Dok Property. Five northeast-oriented lines with 100 metres stations were run, for a total of 8.4 line-kilometres. Three of the lines crossed the Main Showing area and two lines were run across a geochemically anomalous gossan zone about 3 km to the southeast.

As of 2014, the Dok property claim group were owned by J.B.Kreft, C.J.Greig and Boxxer Gold Corp. and were under option by Continental Precious Minerals Inc. who drilled 2 holes on the Doc Main zone in 2014.

Bibliography

EMPR ASS RPT 3029, *3238, 3846, 3847, 19076, 19128, 20291, 30706, 33244, *35798

EMPR FIELDWORK 1990, p. 141

EMPR GEM *1971-41; *1972-534

EMPR OF 1990-1

EMPR PF (Superintendent of Brokers and Vancouver Stock Exchange Statement of Material Facts (#33/90), June 6, 1990)

EMR MP CORPFILE (Empire Metals Corporation Limited)

EMPR PFD 19568, 19648, 19649, 904531, 812461, 800333, 825715, 802801, 861313, 521007

EMPR PR REL Strategic Minerals Sep.4, 2004; Boxxer Gold Corp. May *26, Oct.*14, 2011, Aug. 21, Oct.*1, 2012; Aug.*18, Sep.*17, Oct.*16, 2014

GSC MAP 9-1957; 11-1971; 309A; 1418A

GSC MEM 246

GSC P 71-44

GSC SUM RPT 1928

Date Coded: 1985/07/24

Coded By: BC Geological Survey (BCGS)

Field Check: N

Date Revised: 2020/04/05

Revised By: Garry J. Payie (GJP)

Field Check: N