

Location/Identification

MINFILE Number:	093A 335		
Name(s):	<u>KANGAROO</u>		
Status:	Showing	Mining Division:	Cariboo
Regions:	British Columbia	Electoral District:	Cariboo North
BCGS Map:	093A072	Resource District:	Cariboo-Chilcotin Natural Resource Distric
NTS Map:	093A12E	UTM Zone:	10 (NAD 83)
Latitude:	52 42 35 N	Northing:	5840863
Longitude:	121 37 42 W	Easting:	592667
Elevation:			
Location Accuracy:	Within 1KM		

Mineral Occurrence

Commodities: Copper, Gold, Zinc, Lead

Minerals	Significant:	Copper, Gold
	Associated:	Pyrite, Chalcopyrite, Pyrrhotite
	Alteration:	Chlorite, Calcite, Sericite, Silica
	Alteration Type:	Silicific'n, Chloritic
Deposit	Character:	Vein, Disseminated, Massive
	Classification:	Hydrothermal, Epigenetic, Skarn
	Type:	L02: Porphyry-related Au, K01: Cu skarn

Host Rock

Dominant Host Rock: Metasedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Triassic	Nicola	-----	-----
Isotopic Age	Dating Method	Material Dated	
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Lithology: Fine Grained Siliceous Siltstone, Intrusive Chloritic Basalt, Diorite, Sericitic Chloritic Intrusive, Hornfels

Geological Setting

Tectonic Belt:	Intermontane	Physiographic Area:	Cariboo Plateau
Terrane:	Barkerville, Quesnel		
Metamorphic Type:	Regional		
Grade:	Greenschist		

Inventory

Ore Zone: OUTCROP **Year:** 2016

Category: Assay/analysis

Report On: N

NI 43-101: N

Sample Type: Rock

Commodity	Grade
Gold	12.81 grams per tonne
Copper	0.025 per cent
Zinc	0.011 per cent

Comments:

Reference: Assessment Report 36449, Sample 491

Ore Zone: FLOAT

Year: 2016

Category: Assay/analysis

Report On: N

NI 43-101: N

Sample Type: Grab

Commodity	Grade
Gold	12.61 grams per tonne
Copper	0.010 per cent
Lead	0.009 per cent

Comments:

Reference: Assessment Report 36449, Sample 437

Capsule Geology

The Kangaroo showing is situated to the east of Kangaroo Creek, approximately 11.5 kilometres northwest of Likely.

Regionally, the area is underlain by the late Proterozoic to mid-Paleozoic Barkerville and late Triassic to early Jurassic Quesnel terranes. Regional deformation is the result of intense, complex, partly isoclinal folding. The boundary between the two terranes is marked by the Eureka thrust fault. The Barkerville terrane hosts folded sill-like masses of gneissic meta-diorite.

Locally, the Kangaroo showing is hosted in sedimentary and volcanic rocks of the Upper Triassic to lower Jurassic Nicola Group and associated intrusions. An intrusive stock has been mapped out to be approximately 1.0 by 1.8 kilometres at the surface. Skarn and vein-type chalcopyrite and gold mineralization occur preferentially in calcareous basalts, and calcareous and silicified siltstones and veinlets in the dioritic porphyry.

The dominant lithology is fine-grained siltstone. The siltstone varies in colour from light- to dark-grey with fine bedding and occasional fine sandstone interbeds. Siltstones are primarily siliceous. Locally, intense fractures are weakly welded by chlorite. Siltstones are usually rusty with reddish and yellow-brown gossan. Andesitic volcanoclastics distinguished by coarser texture and a light greenish-grey colour caused by high chlorite content are often interbedded with the siltstone. In the northeast, siltstone outcrops have bedding striking northwest-southeast and dipping steeply to the southwest. To the north, bedding strikes northwest-southeast and dips eastward. Veining is predominantly calcite, with minor quartz. Pyrite and pyrrhotite occur as disseminations in all rock types and in blebs and irregular, narrow sulphide veins in siltstones, basalts and intrusives. Blebby pyrrhotite and pyrite occur mostly at the vein selvages, as well as in narrow sulphide veins and irregularly occurring disseminations in siltstones and basalts. In general, sulphides are more abundant near intrusive contacts and are more abundant in intruded rocks than intrusive rocks. In siltstones, some fine sandy layers appear to be preferentially mineralized with small-scale stratabound sulphides. Drilling intersected dark hornfelsic rocks containing massive pyrrhotite with chalcopyrite and pyrite occurring near apparent intrusive contacts. Magnetism is associated with pyrrhotite.

Pervasive calcite is very common in basalts and also occurs in siltstones and volcanoclastics. Occasionally diorite contains fine calcite veinlets. Intruded rocks contain pervasive sericite, with intense sericite in gougy zones. Chlorite alteration is common and is usually concentrated in chloritic fractures in siltstone. Trace amounts of epidote are present, but distribution is patchy. Localized pervasive secondary silica alteration does occur and can be confused with primary silica in sandstones. In intrusive and intruded rocks, calcite veins are more predominant than quartz veins.

In 2002, Barker Minerals Ltd. collected 24 till samples from an area immediately to the north of the Kangaroo occurrence as part of their Frank Creek-Ace exploration project.

In 2003, Barker Minerals carried out a small exploration program in the Kangaroo Creek area to confirm the geological setting and compare the results with previous observations. That year, 5500 metres of induced polarization (IP) and magnetic geophysical surveying was conducted.

From 2006 to 2007, work consisted of geological mapping, geophysical surveying, diamond drilling and reconnaissance geochemical soil sampling. Nine diamond drill holes totalling, 2008 metres, were completed. The drillholes tested targets from a 2003 geophysical survey and intersected gold mineralization associated with chalcopyrite and multiple pathfinder elements in hornfelsed and altered rocks displaying silicification, sericite and epidote. In total, 915 core samples, 57 rock samples, 46 soil samples and 21 stream sediment samples were collected. An 8.0-kilometre Titan 24 survey and a 32.0-kilometre pole-dipole induced polarization (IP) survey were completed. Geological mapping, completed over an approximately 2.5 square kilometre area covering the drill locations, outlined an intrusive stock or sill estimated to be approximately 1.0 by 1.8 kilometres in size.

In 2016, Barker Minerals Ltd. collected 141 rock samples from outcrop and float. Some samples contained anomalous values for gold in quartz. High gold values were often accompanied by high zinc or copper values. One float sample, sample 437, assayed 12.61 grams per tonne gold, 0.010 per cent copper and 0.009 per cent lead (Assessment Report 36449). The highest gold value obtained from a sample collected from outcrop was sample 491, which assayed 12.81 grams per tonne gold, 0.025 per cent copper and 0.011 per cent zinc (Assessment Report 36449).

Bibliography

EMPR ASS RPT 27125, 29740, 35717, *36449

GSC MAP 12-1959; 1424A; 1538G

Date Coded:	2018/01/22	Coded By:	Nicole Barlow (NB)	Field Check:	N
Date Revised:	2018/02/23	Revised By:	Nicole Barlow (NB)	Field Check:	N