



Location/Identification

MINFILE Number:	104N 006	National Mineral Inventory Number:	104N11 W2
Name(s):	BLACK DIAMOND (NORTH) BLACK DIAMOND, YKR		
Status:	Prospect	Mining Division:	Atlin
Mining Method	Underground	Electoral District:	Stikine
Regions:	British Columbia	Resource District:	Skeena Stikine Natural Resource District
BCGS Map:	104N063		
NTS Map:	104N11W	UTM Zone:	08 (NAD 83)
Latitude:	59 41 48 N	Northing:	6618709
Longitude:	133 24 19 W	Easting:	589757
Elevation:	1618 metres		
Location Accuracy:	Within 500M		
Comments:	Black Diamond Adit (Map 52).		

Mineral Occurrence

Commodities:	Tungsten, Copper, Molybdenum, Uranium, Gold, Tin		
Minerals	Significant:	Wolframite, Chalcopyrite, Scheelite, Molybdenite, Gold, Zeunerite, Cassiterite	
	Significant Comments:	Gold is a very minor commodity.	
	Associated:	Quartz, Muscovite, Arsenopyrite, Fluorite	
	Alteration:	Zeunerite	
	Alteration Comments:	Uranium oxide zeunerite is present in vein.	
	Alteration Type:	Oxidation	
	Mineralization Age:	Unknown	
Deposit	Character:	Vein	
	Classification:	Hydrothermal, Epigenetic	
	Type:	I12: W veins, I13: Sn veins and greisens, I15: Classical U veins	
		Strike/Dip:	060/60W
	Comments:	Strike varies from 050 to 070 degrees. Dips northwest at 60 degrees.	

Host Rock

Dominant Host Rock:	Plutonic		
Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Cretaceous	-----	-----	Surprise Lake Batholith
Isotopic Age	Dating Method	Material Dated	
70.6 +/- 3.8 Ma	Potassium/Argon	Biotite	
Lithology:	Equigranular Coarse Grained Quartz Monzonite		
Comments:	Vein occurs very near the contact with metavolcanic and metasedimentary rocks of the Cache Creek Complex. Age date from Map 52 notes.		

Geological Setting

Tectonic Belt:	Intermontane	Physiographic Area:	Teslin Plateau
Terrane:	Plutonic Rocks, Cache Creek		

Inventory

No inventory data

Summary Production

		Metric	Imperial
Mined:		1 tonnes	1 tons
Milled:		0 tonnes	0 tons
Recovery	Tungsten	815 kilograms	1,797 pounds

Capsule Geology

The Black Diamond (North) occurrence is located 2 kilometres north of Ruby Mountain and around 22 kilometres northeast of the community of Atlin. It is about 1.4 kilometres south of the Adanac porphyry molybdenum deposit (104N 052).

The Black Diamond prospect is hosted within, and very near the southern margin of, the Mount Leonard Boss; a small stock removed from the main body of the Late Cretaceous Surprise Lake batholith (Surprise Lake Plutonic Suite). The batholith covers 1100 square kilometres east and northeast of Atlin and is dated at 70.6 +/- 3.8 Ma (Map 52). The occurrence is hosted in grey to pink, equigranular, coarse-grained quartz monzonite. The rock contains roughly equal amounts of potassium feldspar, plagioclase, and grey quartz. The showing lies very near the southern margin of the stock where it is in contact with metavolcanic and metasedimentary rocks of the Upper Paleozoic Cache Creek Complex.

The occurrence consists of a quartz vein which strikes northeast and dips 60 degrees to the northwest; it has been traced for about 4 kilometres. The vein contains disseminated patches or blebs of wolframite and arsenopyrite with minor muscovite, chalcopyrite, scheelite, molybdenite, cassiterite, fluorite and gold. The uranium oxide, zeunerite, has been reported to occur in the vein (Map 52).

The occurrence was discovered in 1903 and received the most exploration and development work from 1939 to 1943, and from 1951 to 1952. Although a small ore shipment was made in 1943, the deposit was never put into full production. No assay data is available from the work done.

In 1985, Cominco Ltd. released the property and it was then acquired by Cream Silver Mines Ltd. who carried out only minor surface work on the vein.

In 1985, geological mapping and geochemical sampling (soil and rock chip or grab samples) were conducted by Archean Engineering Limited on behalf of Mark Management Limited on the Ruby Mountain Silver-Tungsten Property.

In 1987, a detailed exploration program consisting of rock and soil geochemical sampling, electromagnetometer, induced polarization and ground magnetometer surveys followed by trenching, blasting, diamond and rotary drilling was carried out on the Lakeview property by Archean Engineering Limited on behalf of Cream Silver Mines Limited.

In 2002, geological, geochemical and geophysical fieldwork was carried out on the Adanac Property for Stirrup Creek Gold Inc.

From 2006 to 2008, Adanac Molybdenum Corporation conducted diamond-drilling on the Adanac/Ruby Creek "porphyry molybdenum" property, near Atlin.

In 2016, two holes were drilled by Global Drilling Solutions on behalf of Zinex Mining Corporation on the Ruby Creek Property, targeting native gold. In 2017, Global conducted geochemical sampling, drilling and ground geophysics on this property. In 2018 Global carried out further geochemical sampling and drilling on this property.

In 2021, an airborne SkyTEM survey was conducted by Stuhini Exploration on the Ruby Creek property, which revealed a number of regional trends across the property.

Bibliography

EMPR AR 1951-73; 1952-75
EMPR ASS RPT 14438, 17440, 26895, 29010, 30306, 36658, 38256, 39553
EMPR BULL 10, p. 51; 94
EMPR FIELDWORK 1978, p. 107
EMPR GEM 1970-30; 1972-557
EMPR MAP *52 (10 pages of notes)
EMPR OF 1989-15; 1989-24; 1991-17; 1992-16; 1996-11

EMPR PF (Black, J.M. (1953): Atlin Placer Camp, Unpublished Report, 116 pages)
EMPR PFD 19982, 810840, 881275, 881276, 887255, 887257, 600235, 843430, 673905, 680805, 680806, 680807, 680809, 680813, 680814, 680820, 680821
EMR MIN BR INVEST NO 1384
EMR MP CORPFILE (Transcontinental Resources Ltd.)
GSC MEM 307, p. 72
GSC OF 864
GSC P 74-47
GCNL #183,#205, 1979; #36,#114, 1982

Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	N
Date Revised:	2021/10/19	Revised By:	George Owsiacki (GO)	Field Check:	N