Location/Identification

MINFILE Number: 104B 384

Name(s): **ISKUT WOLLASTONITE**

ISK, CLIFF, BRY, GLACIER, BARTNICK, ISK WOLLASTONITE, BRIL, ZIPPA MOUNTAIN, MAIN

Status: Developed Prospect

Mining Division: Liard

Electoral District: Bulkley Valley-Stikine

Regions: British Columbia

Resource District: Skeena Stikine Forest District

BCGS Map: 104B064

NTS Map: 104B11W

UTM Zone: 09 (NAD 83)

Latitude: 56 39 10 N

Northing: 6281105

Longitude: 131 18 07 W

Easting: 358877

Elevation: 1371 metres

Location Accuracy: Within 1KM

Comments: Wollastonite occurrences located on Zippa Mountain between elevations of 1219 and 1524 metres, about 113 kilometres northwest of the community of Stewart and 12 kilometres west of the Snip mine, 104B 250 (G. Ray, personal communication, 1995). See also Zippa (104B 123).

Mineral Occurrence

Commodities: Wollastonite

Minerals

Significant: Wollastonite

Alteration: Wollastonite

Alteration Type: Skarn

Deposit

Character: Massive

Classification: Skarn, Industrial Min.

Type: K09: Wollastonite skarn

Dimension: 300x100x0 metres

Comments: Bril zone.

Host Rock

Dominant Host Rock: Sedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Paleozoic	Stikine Assemblage	Unnamed/Unknown Informal	------
Triassic	------	------	Unnamed/Unknown Informal

Isotopic Age	Dating Method	Material Dated
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Lithology: Carbonate, Leucocratic Syenite, Mafic Syenite, Nepheline Syenite, Pyroxenite

Comments: Zippa Mountain pluton.

Geological Setting

Tectonic Belt: Intermontane

Physiographic Area: Boundary Ranges

Terrane: Stikine

Inventory

Ore Zone: BRIL

Year: 1997

Category: Measured **Report On:** Y

Quantity: 1,020,000 tonnes **NI 43-101:** N

Commodity	Grade
Wollastonite	58.1400 per cent

Comments: Proven resource in the Main zone of the Bril deposit. Cut off of 50 per cent wollastonite.

Reference: GCNL #55 (March 19), 1998.

Ore Zone: CLIFF **Year:** 1995

Category: Inferred **Report On:** Y

Quantity: 2,000,000 tonnes **NI 43-101:** N

Commodity	Grade
Wollastonite	80.0000 per cent

Comments: Estimated open pittable, high aspect ratio ore grading 80 per cent plus wollastonite.

Reference: Super Twins Resources Ltd., Iskut Wollastonite Deposit Brochure.

Capsule Geology

The area of the Iskut Wollastonite deposits are underlain by Early Jurassic rock of the Zippa Mountain Plutonic Complex that has intruded Devonian to Permian limestone and marble of the Stikine Assemblage.

These showings are located at elevations of between 1219 and 1524 metres on Zippa Mountain, approximately 12 kilometres west of the Snip mine (104B 250) and four to five kilometres south of the Iskut River.

The wollastonite skarn is a white to light green rock consisting of greater than 30 per cent wollastonite. It varies in grain size from fine grained (l millimetre long) to coarse grained (5 centimetres long), interlocking, acicular and/or tabular crystals. It contains, on average, 25 per cent melanite, andradite, and locally grossular garnet, approximately 15 per cent diopside and augite, minor amounts of interstitial feldspar and titanite and trace amounts of apatite. Wollastonite skam is commonly we.11 foliated, however, locally it is massive. Trace amounts of pyrite occur in the wollastonite along fractures and microveinlets. Wollastanite is locally crosscut by millimeter wide late-stage quartz and calcite veins.

The Iskut Wollastonite skarns are hosted by Paleozoic carbonates immediately adjacent to the eastern margin of the Early Jurassic Zippa Mountain pluton, which ranges compositionally from leuco-syenite to mafic syenite and pyroxenite (G. Ray, personal communication, 1995).

The Bril deposit, located in the south-east comer of the Zippa Mountain pluton, consist of large, extensively skarned wollastonite-rich layers which dip steeply to the north-east and strike approximately 310 degrees (see Figure 3). Wollastonite zones surrounding the Bril deposit include the Far West Extension, the Far East Extension, and minor wollastonite layers north of the Bril deposit.

In the 1998 assessment report on the 1997 Isk Property (Assessment Report 25449) it was reported the Bril deposit is divided into the upper Btil deposit, consisting of the East, West, and Main zones, and the lower Bril which occurs approximately 150 meters south of the upper Bril. Diamond drilling in 1997 drilling was aimed predominantly at proving a mineable wollastonite reserve at the Main Zone of the Bril deposit. The exposed portion of the upper Bril deposit measures greater than 360 metres long and approximately 50 metres wide. The Main Zone outcrops as a 120 metre long and 50 metre wide pod in the centre of the upper Bril deposit. Extensive diamond drilling conducted during the 1997 field season confirmed that the Main zone ore body extends at least 100 meters below surface and contains a proven and probable mineable reserve of 1,049,000 tonnes with an overall grade of 59.55 per cent (assumed to not be 43-101 compliant. This proven reserve is based on a 50 per cent cut-off grade and is amenable to conventional open pit mining.

Proven and probable mining reserves on the property are 1.02 million tonnes grading 59.14 per cent wollastonite (using a 50 per cent cut-off grade and allowing for dilution). (It is presumed that this is not a 43-101 compliant resource.) This reserve is restricted to the Main Zone of the upper Bril deposit. The entire Bril deposit, excluding the Main zone, consists of the East zone, West zone, Lower Bril, Far West Extension, FLU East Extension, and the Bridge zone. The Bril deposit is one of 6 wollastonite showings on the property. The other five wollastonite showings consist of the Cliff, Bartnick, Glacier, Brys, and Slimjaw. The geological resource for all 6 wollastonite showings is 50 million tonnes (assumed not to be 43-101 compliant)(Assessment Report 25449).

Uses of wollastonite include replacement for asbestos and glass fibre in construction materials.

See Zippa (104B 123) for a description of the nepheline syenite.

Work History
In 1989, International Corona Corp conducted a program of reconnaissance geological mapping, prospecting and creek silt geochemistry on the Zip 5-8 claims of the Inhini Property which covered the northern flank of Zippa Mountain. No mineralization was reported.

The ISK Wollastonite skarns were first discovered in 1993, by director and president of Whitegold Resource Corp., Brian Lueck, P.Geo., during his mapping of the Zippa Mountain pluton as part of his Masters thesis at the University of British Columbia.

Field work began in summer of 1995 by Super Twins Resources with a field program aimed at delineating the quality and quantity of wollastonite on the property and consisting of trenching, bulk sampling, and detailed geological mapping.

By 1996, Super Twins is now known as Whitegold Resources Corp. The 1996 diamond drilling program consisted of 22 diamond drill holes, totaling 1841.5 meters in 22 holes, of which 4 holes, totaling 445 meters, were drilled on the Main Zone of the Bril. Drilling also 1996 tested the Cliff and Bartnick zones. The Bril deposit 300 metres long by 100 metres widewas defined by the company as having the best potential for mining and additional resources. The 1996 trenching program consisted of 120 meters of blast trenching at the Bril deposit. Each of these trenches was mapped and sampled, and approximately 2 tonnes of wollastonite was bulk sampled from test pits on the Main Zone.

The 1997 field season Whitegold Resource Corp consisted of 1890 metres of diamond drilling in 15 holes, 120 meters of blast trenching in 4 trenches, approximately 5 tonnes of bulk sampling, and detailed geological mapping. Diamond drilling was aimed predominantly at proving a minable wollastonite reserve at the Main Zone of the Bril deposit. These holes yielded a proven and probable mining reserve of approximately 1.02 million tonnes grading 59.14 per cent (using a 50 per cent cut-off grade). Assumed to not be 43-101 compliant. Whitegold completed geological, engineering and environmental work in order to complete a full feasibility study by the fourth quarter of 1997. Drilling defined an orebody approximately 120 by 70 by 70 metres. Geological mapping has traced the wollastonite in the Main zone for a strike length of 1.4 kilometres (T. Schroeter, personal communication, 1997).

Approximately 6.5 tonnes of wollastonite was collected from an area beneath the talus at the Main zone of the Bril deposit, and will be used for further marketing studies. Approximately 500 kilograms of representative samples were collected from the talus pile at the base of the Bril deposit and a ground-penetration radar survey was conducted to determine the depth of this material. Detailed geological mapping confirmed extensions and other zones of wollastonite on the property. The company completed airborne laser mapping and aerial photography for the proposed 16-kilometre pipeline corridor and the proposed 34 kilometre road extension to the Eskay Creek mine road. The company is preparing a detailed prospectus for submission to the Northwest Mine Development Committee in late 1997.

Whitegold Resources Corp. reports that tests on the wollastonite's potential as filler for nylon have been positive. The tests, carried out by Suzorite Mica Products, indicate that the wollastonite is superior in product quality to comparable high-end products available in North America and competitive with some surface-treated grades (Industrial Specialities News, February 23, 1998).

A proven resource of the Bril deposit is reported as 1,020,000 tonnes of 58.14 per cent wollastonite, using a 50 per cent cut off (George Cross Newsletter #55 (March 19, 1998)). The five wollastonite deposits on the property represent a geological resource of 20,000,000 tonnes. These resources are assumed to not be 43-101 compliant.

Bibliography

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Date Coded:	1985/07/24	**Coded By:**	BC Geological Survey (BCGS)	**Field Check:**	N
Date Revised:	2012/10/24	**Revised By:**	Garry J. Payie (GJP)	**Field Check:**	N