



MINFILE Detail Report
BC Geological Survey
Ministry of Energy, Mines and Petroleum Resources

Location/Identification

MINFILE Number: 082ESW001 **National Mineral Inventory Number:** 082E3,4 Au2

Name(s): **DIVIDEND-LAKEVIEW**
LAKEVIEW (L.1899), DIVIDEND (L.1589), GEM (L.3311S), DIVIDEND FRACTION (L.1590)

Status: Past Producer **Mining Division:** Osoyoos

Mining Method: Underground **Electoral District:** Penticton-Okanagan Valley

Regions: British Columbia **Resource District:** Okanagan Shuswap Forest District

BCGS Map: 082E003

NTS Map: 082E03W, 082E04E **UTM Zone:** 11 (NAD 83)

Latitude: 49 00 42 N **Northing:** 5431766

Longitude: 119 30 03 W **Easting:** 317134

Elevation: 550 metres

Location Accuracy: Within 500M

Comments: The approximate location of the main adit portal on the Lakeview (Lot 1899) Reverted Crown grant (Assessment Report 658).

Mineral Occurrence

Commodities: Gold, Silver, Copper, Lead, Zinc, Bismuth, Cobalt

Minerals

Significant: Gold, Chalcopyrite, Arsenopyrite, Pyrrhotite, Pyrite, Bismuth

Associated: Garnet, Epidote, Chlorite, Actinolite, Wollastonite, Quartz, Calcite, Magnetite

Alteration: Silica, Garnet, Epidote, Amphibole, Diopside, Wollastonite, Chlorite, Carbonate

Alteration Type: Silicific'n, Skarn, Carbonate, Chloritic

Mineralization Age: Unknown

Deposit

Character: Disseminated, Massive, Stratabound, Shear

Classification: Replacement, Skarn, Hydrothermal, Epigenetic

Type: K04: Au skarn, J01: Polymetallic manto Ag-Pb-Zn, I05: Polymetallic veins Ag-Pb-Zn+/-Au

Dimension: 15x2x0 metres

Comments: The trend of ore structures on the Lakeview claim are southeast and dip southwest. Ore shoots, up to 15 metres long and 2 metres wide, rake to the southwest along dragfold structures.

Host Rock

Dominant Host Rock: Metasedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Carboniferous	Kobau	Undefined Formation	-----
Middle Jurassic	-----	-----	Similkameen Intrusions

Isotopic Age	Dating Method	Material Dated
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Lithology: Limestone, Skarn, Greenstone, Diorite, Quartz Diorite, Micaceous Quartzite, Chlorite Schist, Andesitic Flow, Basaltic Flow, Andesite

Comments: The Kobau Group is of Carboniferous to Permian age. Other intrusions include the Fairview and Kruger intrusions.

Geological Setting

Tectonic Belt: Omineca **Physiographic Area:** Okanagan Highland

Terrane: Okanagan, Plutonic Rocks

Metamorphic Type: Regional **Relationship:** Pre-mineralization

Inventory

No inventory data

Summary Production

		Metric		Imperial	
	Mined:	111,252	tonnes	122,634	tons
	Milled:	94,531	tonnes	104,202	tons
Recovery	Gold	504,396	grams	16,217	ounces
	Silver	87,244	grams	2,805	ounces
	Copper	73,351	kilograms	161,711	pounds
	Lead	71	kilograms	157	pounds
	Zinc	71	kilograms	157	pounds

Capsule Geology

The Dividend-Lakeview past producer is located at 550 metres elevation on the eastern slopes of Mount Kruger, 3.75 kilometres southwest of Osoyoos, British Columbia.

The property consists of two claims, the Dividend (Lot 1589) and Lakeview (Lot 1899) Crown grants. The claims were first Crown granted to Fisher, Bowerman and Anderson in 1900. Exploration was carried out in 1901 by G. Nadin with discouraging results. No further work was done until 1907 when operated under bond by Granby Consolidated Mining and Smelting Co. Dividend-Lakeview Consolidated Gold Mining Co. acquired the property in 1912 and operated until 1915. Work ceased until 1930 when Reilly, Antonson and Lonie acquired the property. A sublease was granted to M.F. Watts, who installed and operated a 30-stamp mill until 1932. Northern Syndicate acquired the Lakeview, Dividend and Dividend Fraction (Lot 1590) claims in 1933. A number of other surrounding claims were leased from the Dividend-Lakeview Consolidated Gold Mining Co. also. Osoyoos Mines Ltd. was formed to operate the property. A 45-tonne (50 ton) flotation mill was installed in 1936 and a 113-tonne (125 ton) cyanide plant was added in the following year. Osoyoos Mines of Canada Ltd. acquired the property in 1938. The mill capacity was increased to 136 tonnes (150 tons) but the mine closed in 1940 due to an impending bankruptcy in 1941. Sheep Creek Mines Ltd. optioned the Dividend, Lakeview and Gem claim groups in 1963. At this time the Dividend-Lakeview group was owned by D.P. Simpson and surrounded on three sides by the Gem group consisting of fourteen claims, three mineral leases and the Gem (Lot 3311s) Reverted Crown grant. The Gem group was owned by K. Butler. Work consisted of magnetometer and self potential geophysical surveys and 733 metres of diamond drilling in 15 holes. The option was dropped and further exploration work was carried out in 1964 by the owners. In 1966, Torbrit Silver Mines Ltd. (75 per cent interest) and Rio Athabaska Uranium Mines (25 per cent interest) acquired a long-term option on the property. In 1980, Rideau Resources Corp. acquired the Lakeview, California (Lot 1907), Gem (Lot 3311s), Ianto (Lot 3555s), Treasury (Lot 3556s) and Bullseye (Lot 1591) Fraction Crown-granted claims. Geophysical surveys were carried out. In late 1980 three drillholes totalling 288.41 metres were drilled on the Lakeview claim to test mineralization below the old workings. Markus Resources Inc. conducted exploration programs on and surrounding the Dividend-Lakeview occurrence in 1986 and 1987. Other exploration work has been done in the area in 1993 by Crownex Resources Ltd. and G.E. Keller. In 1998, a total field magnetic survey was completed in conjunction with 13 rock samples sent for analysis, and 10 rock samples submitted for thin section and petrographic examination. In 1999, geologic mapping and 106.7 metres of reverse circulation drilling in three holes was completed on behalf of J. Falkoski. In 2000-01, exploration consisted of geological mapping, reconnaissance prospecting, grid establishment, and 281 soil samples and 12 rock samples taken on behalf of J. Falkoski.

The regional geology of the Dividend-Lakeview area consists of medium to coarse-grained granodiorite of the composite Middle Jurassic Similkameen batholith. To the west this includes alkali syenite and nepheline syenite of the Kruger intrusion. The Fairview intrusion outcrops to the north. The Similkameen intrusion extends from 10 kilometres north of the Canada-United States border, south into Washington state. The granodiorite is grey-green, medium to coarse grained and dominantly composed of quartz, plagioclase and hornblende. The Similkameen batholith has intruded metasediments and metavolcanics of the Carboniferous to Permian Kobau Group. Intensely folded and metamorphosed micaceous quartzite, greenstone, phyllite, chlorite or mica schist with intercalations of dioritic rocks and sparse limestone lenses comprise lithologies. To the west lie a series of highly sheared schists, greenstones and quartzites known informally as the Kruger Schists. The greenstone has been highly sheared in many areas associated with emplacement of the Similkameen intrusion and other intrusions. Shear zones strike southeast and dip moderately to steeply northeast and southwest. Local variations occur however. Limestone form discontinuous lenses which have been totally recrystallized near ore-bearing horizons.

Silicification composed of quartz pods, stringers and veins is common throughout the greenstone and in quartzite near the southwest corner of the Gold Hill claim. Minor carbonate is also present.

The Dividend-Lakeview deposit is considered a high temperature replacement deposit in limestone of the Kobau Group. The Lakeview ore shoot is described as being hosted in a quartz vein structure in a sericitized and chloritized contact phase of metavolcanics and quartz diorite and diorite intrusion (Assessment Report 9180). Within the property, there are also andesitic to basaltic flows, which are propylitically altered to epidote, calcite, chlorite and pyrite. At the main Dividend-Lakeview workings, greenstone contains a 1 to 3 metre thick marble lens. The greenstone has a weak to moderate developed schistosity, which is overprinted by epidote stockwork and intense chlorite-carbonate alteration. Quartz-calcite veins with pyrite, chalcopyrite with minor malachite and azurite cut sheared volcanics and extend well beyond the limits of skarn overprinting. The trend of the ore structure is southeast and dips southwest. The ore shoots rake to the southwest along dragfold structures. Ore shoots were up to 15 metres long and 2 metres width.

Skarn mineralization at the Dividend-Lakeview occurrence consists of massive pyrrhotite, pyrite, chalcopyrite and arsenopyrite which preferentially replaces marble. Skarn in the surrounding greenstone contains garnet, epidote, chlorite, ferro-hastingsite, actinolite, quartz, calcite, magnetite and wollastonite. Massive magnetite with minor chalcopyrite associated with dark brown garnet occurs in a mine pillar at the limestone-volcanic contact. Elsewhere the garnet is pale amber, euhedral, anisotropic, fine to medium grained and contains concentric growth rings. Electron microprobe analysis of garnets identify them as grandites. Other minerals present in variable amounts include sericite, sphene and clay. Opaque minerals identified include magnetite, ilmenite, pyrrhotite, pyrite, marcasite, hedleyite, native gold and bismuth. Skarn mineralization has been traced over a considerable distance along a westerly strike from the Dividend-Lakeview pit. The linear trend of mineralization and association with intense shearing indicates a structural control.

Drillhole LV 1-80, one of three holes drilled in 1980 below the Lakeview workings, intersected significant mineralization. The 0.61-metre interval between 55.79 and 56.49 metres yielded 0.27 gram per tonne gold, 6.17 grams per tonne silver and 0.15 per cent copper (Assessment Report 9180). The arithmetic average of 9 samples over 6.4 metres between 50.99 and 65.40 metres was 1.47 grams per tonne gold (Assessment Report 9180). Core recovery over this interval was 74 per cent. In 1987, two of three grab samples taken from the Dividend dump by Markus Resources yielded anomalous results. Sample G-87-037 yielded 1.2 per cent copper, 1.4 grams per tonne gold and 7.1 grams per tonne silver (Assessment Report 16074). The sample was composed of chloritized metavolcanics with visible disseminations and veinlets of pyrite and quartz. Sample G-87-039 yielded 0.86 per cent copper, 1.4 grams per tonne gold and 10.3 grams per tonne silver (Assessment Report 16074). A sample of banded pyrite-magnetite replacing light green silicified marble assayed 43.0 grams per tonne gold, 1.0 gram per tonne silver and 0.21 per cent copper (Paper 1989-3, Appendix 7).

Over its intermittent mine life the Dividend-Lakeview occurrence produced 111,252 tonnes of ore. Recovery included 87,244 grams of silver, 504,396 grams of gold, 73,351 kilograms of copper, 71 kilograms of lead and 71 kilograms of zinc.

Bibliography

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Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	N
Date Revised:	2008/03/28	Revised By:	George Owsiacki (GO)	Field Check:	N