

### Location/Identification

<b>MINFILE Number:</b>	092HSE060	<b>National Mineral Inventory Number:</b>	092H8 Au3
<b>Name(s):</b>	<b><u>GOOD HOPE</u></b> NIGHTHAWK		
<b>Status:</b>	Past Producer	<b>Mining Division:</b>	Osoyoos
<b>Mining Method</b>	Underground, Open Pit	<b>Electoral District:</b>	Yale-Lillooet
<b>Regions:</b>	British Columbia	<b>Forest District:</b>	Okanagan Shuswap Forest District
<b>BCGS Map:</b>	092H040		
<b>NTS Map:</b>	092H08E	<b>UTM Zone:</b>	10 (NAD 83)
<b>Latitude:</b>	49 20 22 N	<b>Northing:</b>	5469507
<b>Longitude:</b>	120 00 18 W	<b>Easting:</b>	717554
<b>Elevation:</b>	1542 metres		
<b>Location Accuracy:</b>	Within 500M		
<b>Comments:</b>	Open pit on the boundary between the Good Hope No. 1 claim (Lot 3917s) and the Good Hope No. 2 claim (Lot 3918s), 3.2 kilometres northeast of the Similkameen River and 5.5 kilometres east-southeast of Hedley (Assessment Report 10196, Plate 3).		

### Mineral Occurrence

<b>Commodities:</b>	Gold, Silver, Copper, Bismuth, Molybdenum, Tungsten		
<b>Minerals</b>	<b>Significant:</b>	Arsenopyrite, Pyrrhotite, Pyrite, Marcasite, Chalcopyrite, Bismuth, Molybdenite, Hedleyite, Gold, Scheelite	
	<b>Associated:</b>	Quartz, Actinolite, Epidote, Calcite	
	<b>Alteration:</b>	Hedenbergite, Pyroxene, Quartz, Calcite, Garnet, Epidote	
	<b>Alteration Type:</b>	Skarn, Silicific'n	
	<b>Mineralization Age:</b>	Unknown	
<b>Deposit</b>	<b>Character:</b>	Stratabound, Disseminated, Massive, Vein	
	<b>Classification:</b>	Skarn, Hydrothermal, Epigenetic	
	<b>Type:</b>	K04: Au skarn	
	<b>Shape:</b>	Tabular	<b>Modifier:</b> Faulted
	<b>Dimension:</b>	55x20x1 metres	
	<b>Comments:</b>	Flat-lying, slightly saucer-shaped orebody about 1.2 metres thick.	

### Host Rock

<b>Dominant Host Rock:</b>	Metasedimentary		
<b>Stratigraphic Age</b>	<b>Group</b>	<b>Formation</b>	<b>Igneous/Metamorphic/Other</b>
Upper Triassic	Nicola	French Mine	-----
Triassic	Undefined Group	Peachland Creek	-----
Lower Jurassic	-----	-----	Hedley Intrusions
Middle Jurassic	-----	-----	Cahill Creek Pluton
<b>Isotopic Age</b>	<b>Dating Method</b>	<b>Material Dated</b>	
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-----	-----	-----	
199 Ma	Uranium/Lead	Zircon	
168 Ma	Uranium/Lead	Zircon	
<b>Lithology:</b>	Limestone, Garnetite, Pyroxene Quartz Garnet Skarn, Diorite Sill, Basaltic Ash Tuff, Aplitic Dike, Andesite Ash Tuff, Biotite Granodiorite, Granodiorite, Granite		



Mineralization is generally sparse and consists of disseminated to massive pyrrhotite, arsenopyrite, pyrite, marcasite, and chalcopyrite, with minor native bismuth, hedleyite (lead-bismuth telluride) and native gold. These minerals, in addition to quartz and calcite, commonly occur in fractures in hedenbergite crystals. The gold is erratically distributed and does not appear to be associated with any particular mineral. Small grains of gold occur in cleavage cracks in hedenbergite and coarse calcite. Gold is also casually associated with quartz, arsenopyrite and native bismuth. Mineralized grab samples assayed up to 94 grams per tonne gold (Paper 1989-3, page 29).

This skarn is cut by north-striking quartz-actinolite-epidote- calcite veins, sometimes containing molybdenite and scheelite, that border aplitic dykes of the Cahill Creek pluton.

A second zone of mineralization in garnetite and skarn occurs 70 metres south of the main workings. The zone strikes northeast for 60 metres and dips variably northwest. Percussion drilling between this zone and the pit to the north in 1980 outlined indicated reserves of 37,200 tonnes grading 5.45 grams per tonne gold (National Mineral Inventory - Dolmage, Mason and Stewart Ltd., 1980).

Some 4241 tonnes averaging 21.10 grams per tonne gold were mined by open pit by Hedley Mascot Gold Mines Ltd. between 1945 and 1948. A further 6874 tonnes grading 11.26 grams per tonne gold, 17.39 grams per tonne silver and 0.00875 per cent copper were mined from underground workings by Good Hope Resources Ltd. and Dankoe Mines Ltd. in 1982.

### **Bibliography**

EMPR AR 1944-57,58; 1945-93; 1946-125; \*1947-142-144; 1948-124; \*1961-56-58; 1967-217  
EMPR ASS RPT \*971, 8787, 10196, 13474, 13475  
EMPR EXPL 1980-32  
EMPR FIELDWORK 1985, pp. 101-105; 1986, pp. 65-79; 1987, pp. 59-80; \*1989, p. 275  
EMPR OF 1987-10; 1988-6; 1998-8-M, pp. 1-74  
EMPR P \*1989-3, pp. 29,30  
EMR MP CORPFILE (Hedley Mascot Gold Mines Ltd., Highawk Mines Ltd., Good Hope Resources Ltd., Grove Explorations Ltd.)  
GSC MAP 568A; 888A; 41-1989  
GSC MEM 243, pp. 74,75  
GSC OF 2167, pp. 59-80  
CMH 1978-79, p. 132  
GCNL #165, 1980; #39,#40,#49,#224, 1984; #2,#55, 1985; #150, #218,#223, 1986; #7,#134, 1987  
V STOCKWATCH July 17, 1987  
Dolmage, Mason & Stewart Ltd. (1980): Report on the Good Hope and Canty Mines, in Good Hope Resources (1981): Statement of Material Facts No. 98/81

<b>Date Coded:</b>	1985/07/24	<b>Coded By:</b>	BC Geological Survey (BCGS)	<b>Field Check:</b>	N
<b>Date Revised:</b>	1991/11/20	<b>Revised By:</b>	Peter S. Fischl(PSF)	<b>Field Check:</b>	N