

B.C. Gold Deposits

The BC Ministry of Energy, Mines and Petroleum Resources' MINFILE database lists nearly 1000 individual lode and 95 placer deposits. Total lode (1890-2005) and placer (1858-2005) gold production amounts to approximately 31.2 and 5.6 million ounces, respectively. The top 25 producers include the **Bridge River, Rossland, Hedley, Premier, Greenwood** and **Cariboo-Barkerville** camps and the **Eskay Creek, Island Copper, Snip** and **Kemess South** mines, which have each produced over a million ounces, account for 90% of the total provincial production.

Total in-ground gold resources currently stand at over 80 million ounces. Resources listed from 264 deposits, categorized as a percentage by deposit type, are: 74% porphyries; 18% veins; 7% massive sulphides and 1% skarns. Twenty-one deposits each contain in excess of 1 million ounces of gold.

Porphyries

The exploration and development of porphyry deposits during the 1960s and 1970s was significant. Subsequent exploration for these polymetallic Cu-Mo-Au-Ag deposits has built up an impressive provincial database. Currently, gold resources are 60 million ounces within 13 alkalic and 27 calcalkalic porphyries. Significant examples include: **Prosperity, Kemess North, Mt. Milligan, Galore Creek, Schaft Creek, Red Chris, New Afton, Mount Polley, Kerr** and **Sulphurets Gold**. In addition, there is potential for intrusion-related gold deposits.

Massive Sulphides

Although most VMS deposits recover gold as a by-product, the high-grade Au-Ag, **Eskay Creek** mine is an exception. There is a significant potential for this type of deposit extending north of Stewart towards the Iskut area (e.g., **Homestake Ridge, RDN**).

Veins

Historically, mesothermal and epithermal veins have been the biggest source of gold produced in the province. Some 428 mesothermal veins yielded 13.3 M oz, including 4.16 M and 2.78 M oz from the **Bridge River** and **Rossland** camps respectively, and 19 epithermal veins yielded 2.9 M oz (incl. >2 M oz from the **Premier** camp). The **Snip** intrusion-related, shear-hosted vein, which yielded 1.07 M oz Au (1991-1999), is an excellent target type for future discoveries. The **Equity Silver** 'transitional' Cu-Ag-Au deposit, which produced over 500 000 ounces of gold by-product, is a good target type. Many Tertiary epithermal deposits appear to be associated with extensional tectonism, i.e. Basin and Range-style. The Nechako Plateau region of central BC hosts several such occurrences. The **Golden Bear** is an example of Carlin-type, heap-leachable gold.

Skarns/Mantos

Over 350 skarns are known in BC; >125 are enriched in precious metals. The largest producer was **Hedley** (Nickel Plate) at 2.5 M oz.



ESKAY CREEK

Owned / operated by Barrick Gold Corp. since 1995.

A 'world class' subaqueous massive sulphide hot-spring deposit; one of the world's highest valued Au and Ag mines

World's 5th largest Ag producer; accounts for 42% of Canada's Ag production

Produces approximately 670 tonnes per day of which 55% is direct shipping ore (>60 g/t Au equiv.) and 45% goes through a mill flotation circuit (<25 g/t Au equiv.)

2005 production: 5550 kg (178 400 oz) Au and 292 000 kg (9.4 M oz) Ag, @ total operating cash cost of US \$135/oz Au, net of Ag co-product



KEMESS SOUTH

Owned / operated by Northgate Minerals Corp. since 1997

A gold-copper porphyry deposit. Mill throughput ~ 50 000 tonnes per day.

2005 Production: 8700 kg (279 700 oz) of Au and 33 100 tonnes (73.5 million lbs) of Cu, @ operating cost ~ US \$137/oz Au (net of Cu credits)

Mining reserves (Jan 1 '05) are 86 million tonnes @ 0.227% Cu and 0.7 g/t Au - Mine life to 2009

For more information:

www.em.gov.bc.ca/Mining/Geosurv (604) 660-2812

Other Ministry gold publications:

Open File 2004-18 Gold Production and Resources in BC (update)
Open File 2004-1 Lode Gold Production and Resources in BC (map)

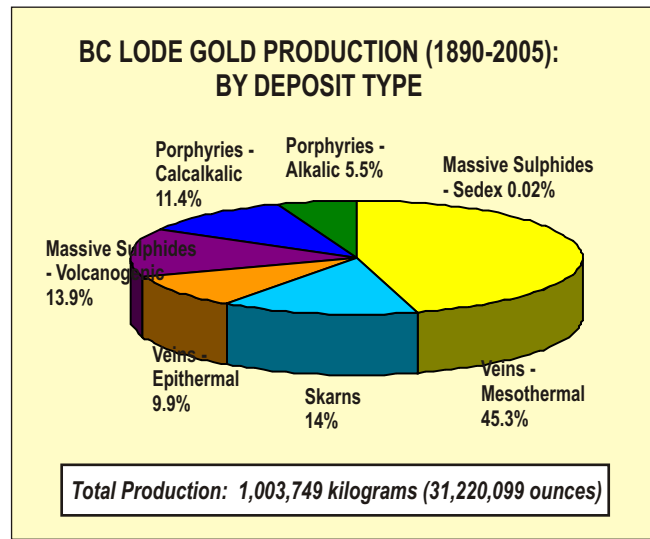
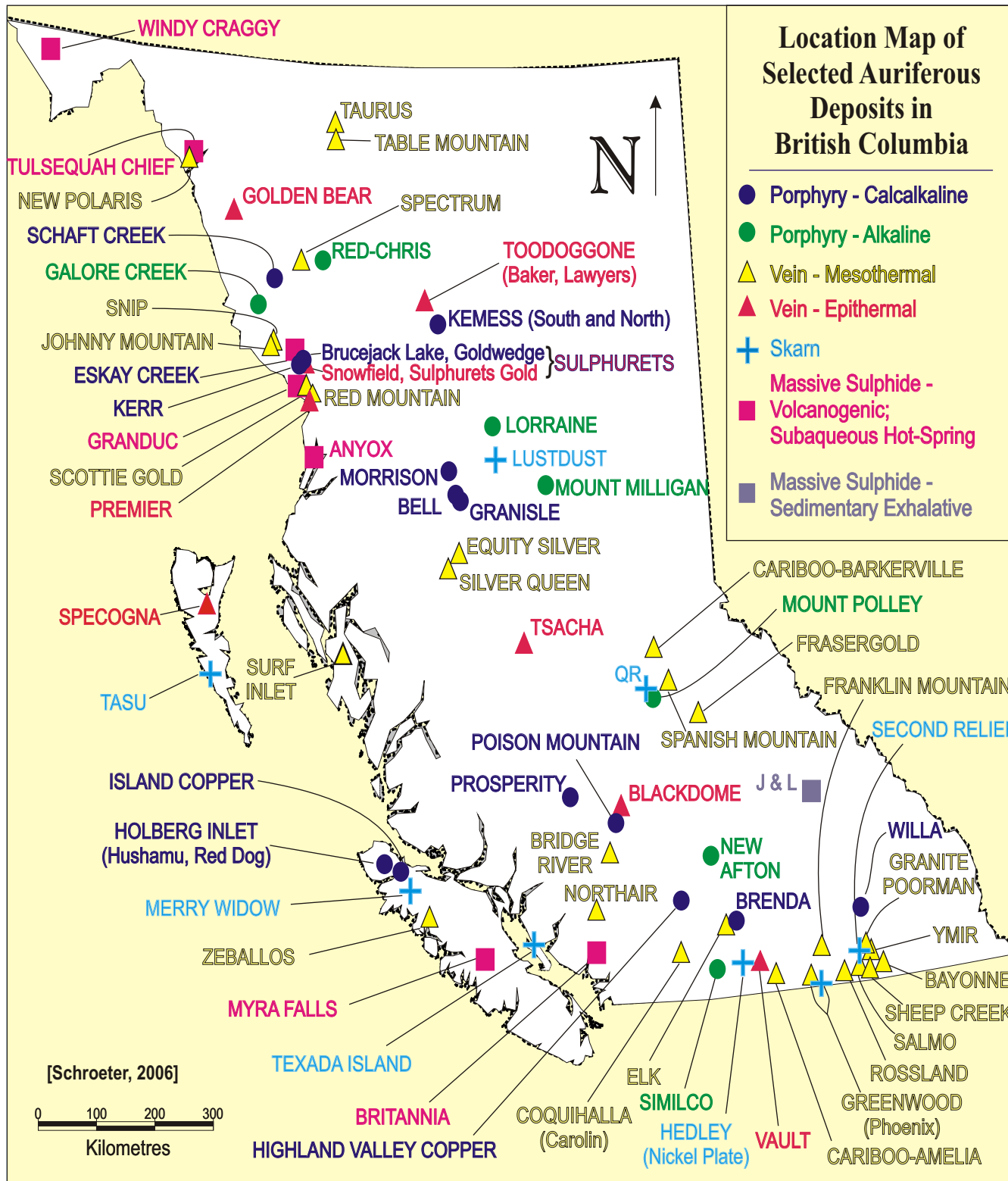
Produced by: T.G. Schroeter and J. Chou, 2005

Gold in British Columbia



Ministry of Energy, Mines and Petroleum Resources
Mining and Minerals Division, BC Geological Survey

Information Circular 2006-2



B.C. LODE GOLD PRODUCERS (1890-2005): TOP 25 by RANK

DEPOSIT NAME / CAMP NAME	GOLD PRODUCTION (grams)	SILVER PRODUCTION (grams)	GOLD RESOURCES (grams)	TOTAL GOLD (grams)
BRIDGE RIVER CAMP	129,435,414	29,613,140	13,924,423	143,362,418
ESKAY CREEK*	97,986,860	4,663,267,000	15,972,400	113,958,890
ROSSLAND CAMP	85,440,103	108,500,201	15,638,904	101,079,007
HEDLEY CAMP	76,735,496	18,802,842	211,172	76,946,688
PREMIER CAMP	64,888,246	1,337,373,655	6,812,800	71,701,046
KEMESS CAMP*	60,335,910	4,877,000	186,362,000	246,697,918
GREENWOOD CAMP	39,982,832	310,232,328	6,361,510	46,350,342
CARIBOO-BARKERVILLE CAMP	38,321,509	4,650,641	16,902,000	55,223,505
ISLAND COPPER	35,267,550	294,105,533	0	35,267,550
SNIP	33,316,834	12,893,090	0	33,316,834
MYRA FALLS CAMP*	31,287,246	900,936,934	26,751,000	58,038,246
SHEEP CREEK CAMP	23,101,859	9,102,786	779,037	23,880,726
SIMILCO CAMP	22,841,418	294,238,155	19,963,070	42,804,488
AFTON CAMP	17,121,049	90,462,058	60,336,540	77,392,288
EQUITY SILVER	15,801,709	2,219,480,555		15,801,709
BRITANNIA	15,350,561	180,845,883		15,350,561
BELL	12,885,964	38,319,730	59,200,000	72,085,964
MOUNT POLLEY*	12,483,164	15,195,000	43,094,000	55,577,067
SURF INLET	12,095,368	6,258,235	1,653,450	13,748,818
GOLDEN BEAR	10,562,757	2,191,107	0	10,562,757
HIGHLAND VALLEY COPPER CAMP*	9,495,963	1,515,743,763	9,823,500	19,319,463
ZEBALLOS CAMP	9,154,249	3,882,835	4,964,152	14,118,401
TABLE MTN. CAMP	9,094,592	2,987,237	876,099	9,970,691
YMIR CAMP	8,298,227	42,968,544	9,003,504	17,301,731
TOTAL	871,284,880	12,106,928,252	498,629,561	1,369,857,108