



**BRITISH
COLUMBIA**

Ministry of Energy and Mines
Energy and Minerals Division
Geological Survey Branch

MAJOR SILVER DEPOSITS OF BRITISH COLUMBIA

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OPEN FILE 1998-10



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MAP (enclosure)

MAJOR SILVER DEPOSITS OF BRITISH COLUMBIA

Major Silver Deposits of British Columbia

Introduction

Silver is currently attracting considerable attention because the price has increased to the highest values since 1989 (Figure 1). This contrasts sharply with some other metals, most notably gold and copper which are trading at prices well below recent highs. The climbing price of silver has led to renewed interest in deposits which contain this precious metal. Many of the world's richest silver mines are found along the chain of mountains along the western margins of North and South America that extend from Chile to Alaska. These mountains, known as the Cordillera, are one of the principal silver-producing regions of the world.

British Columbia encompasses a major portion of the northern Cordillera and has produced silver since the late 19th century. The province has a large number of undeveloped deposits and excellent opportunities for new discoveries. Virtually all of these deposits are polymetallic (Au, Cu, Pb and/or Zn). This brief report reviews the abundance and diversity of silver lode deposits in British Columbia.

Silver

The first use of silver predates recorded history - ornaments and jewelry made of silver have been recovered from tombs that were sealed more than four thousand years ago. It is generally believed that by 1000 BC, silver coins, like gold ones, were in common use throughout most of the civilized world. The discovery during the 18th and 19th centuries of large silver deposits in the New World, however, resulted in the conversion of most monetary systems to the gold standard. Despite the loss of its status as the basis for the world's monetary systems, the belief in the value of silver remained.

Silver is a brilliant grey-white metal, quite soft and malleable, which takes a fine finish and is resistant to corrosion. Of all the metals, it is the best conductor of electricity. Because of these qualities as well as its relative scarcity, silver is classed with gold and platinum as a precious metal. The photographic industry is the greatest user of silver today, accounting for over 40 per cent of total industrial consumption. Silver is used extensively for contacts, conductors and other electronic equipment components. Altogether, more than 25 per cent of all industrial silver is incorporated into electronic and electrical equipment. About 20 per cent of the annual industrial consumption of silver goes into sterling, plate, jewelry, mirrors, and dental and medical supplies.

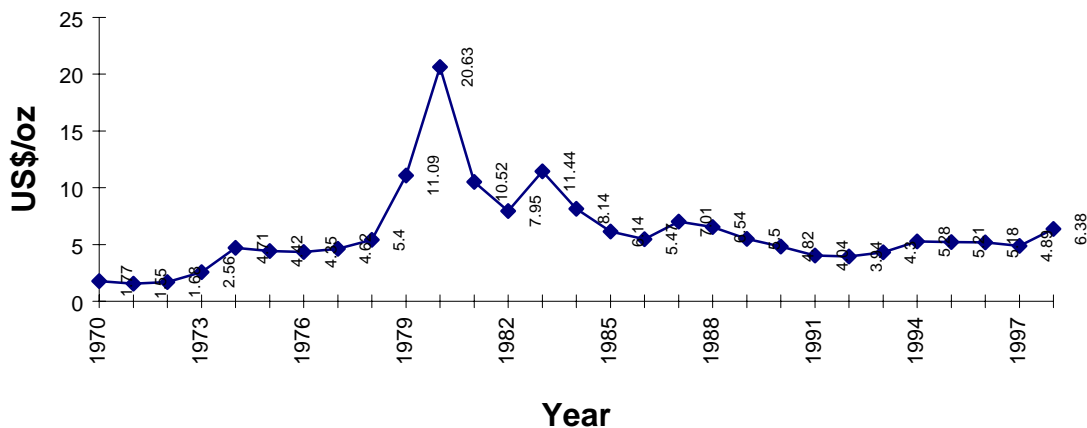


Figure 1. Silver prices for the Period 1970 to 1998 from Natural Resources Canada. Average price for year.

Approximately two-thirds of the world silver resources are associated with copper, lead and zinc deposits. The remaining one-third is in vein deposits in which silver is the most valuable metallic component. Although most recent discoveries have been primarily gold and silver deposits, significant future reserves and resources are expected from major base metal discoveries that contain byproduct silver. In 1996 the top ten producing countries were:

- | | |
|------------------------------|--------------|
| 1. Mexico | 6. Chile |
| 2. Peru | 7. Australia |
| 3. United States | 8. Poland |
| 4. Russia (C.I.S. countries) | 9. China |
| 5. Canada | 10. Bolivia |

World production of silver has been generally climbing for the last 25 years due to the increasing demand (Figure 2). Annual Canadian silver production has been over a million kilograms for a number of years with a total of 1.220 million kg. in 1997. British Columbia produces approximately a third of Canada's silver. The major producers in 1997 were Eskay Creek (368 498 kg), Highland Valley (56 148 kg), Sullivan (18 775 kg) and Myra Falls (16 908 kg). The total production of silver and gold in British Columbia between 1887 and 1997 is approximately 24.2 million kilograms (776.6 million ounces) and 967.8 kilograms (31.1 million ounces) respectively.

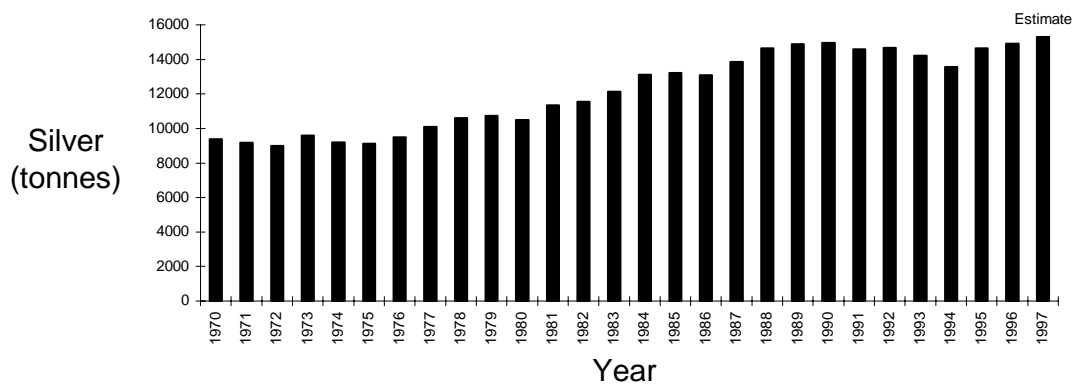


Figure 2. Global silver production for the period 1970 to 1997. Figures from Mineral Yearbook for years 1970 to 1983 and from Natural Resources Canada for remaining years. Production for 1997 estimated.

British Columbia's Database

The British Columbia Geological Survey has built up a comprehensive, mineral inventory of over 12,000 metallic, industrial mineral and coal occurrences in British Columbia. Called MINFILE, this computer database contains a unique record for each documented mineral occurrence in the province, including operating mines. Each record includes *location, mineralogy, alteration, geology, host rocks, bibliography, assay data, reserves/resources, production* and a text description (*capsule geology*) of the mineral deposit.

MINFILE data are sold on 1.44 MB diskettes, CD-ROM, hard copy printouts and maps with occurrences plotted on geological and topographic bases. The database can also be searched on, or down loaded free over the Internet using the Ministry site (<http://www.em.gov.bc.ca/geology/>).

MINFILE reports, mineral occurrence maps, CD-ROM and data diskettes are available from:

Crown Publications Inc.
521 Fort Street
Victoria, B.C.
CANADA V8W 1E7
Phone: (250) 386-4636; Fax: (250) 386-0221
WWW: <http://vuv.com/crownpub/empinv3.html>.

This database was used to identify more than 300 silver-rich mines and deposits in British Columbia. A complete listing of the deposits is given in the Appendix. All the data summarized in this report is available digitally.

Producers - Past and Present

The first miners in British Columbia worked placer gold deposits which also contained some byproduct silver. Lode silver production in British Columbia, the focus of this report, dates back to the 1890s when the first mines in the southern part of the province were exploiting polymetallic veins and the manto deposits at the Bluebell mine for their high silver and lead contents. Over the next thirty years many new silver mines were developed on polymetallic veins forming a number of mining camps, including Slocan, Slocan City, Beaverdell, Ymir, Trout Lake and Salmo. These areas continued to produce significant amounts of silver through much of the 20th century, although their importance was gradually supplanted by deposits more amenable to producing larger tonnages and to using mechanized mining methods, such as sediment-hosted massive sulphide (sedex), volcanogenic massive sulphide (VMS) and porphyry deposits (McMillan *et al.*, 1991).

In 1900 the Sullivan mine, a sedex deposit located near Kimberley, opened. This prolific ore body will have produced over 9 200 grams (295 million ounces) of silver (plus lead, zinc, tin, copper, gold, iron, sulphur, antimony, cadmium, bismuth, indium and tungsten) when it closes in 2001. It is the single largest silver producer in the province (Table 1). The first VMS deposits to be mined were the Lenora and Tye on Vancouver Island near Duncan just before the turn of the century. As with many subsequent VMS discoveries in British Columbia, their high precious metal contents made these deposits more attractive. In the latter part of the 20th century, porphyry deposits became important mines utilizing large trucks, shovels and mill circuits to achieve economies of scale which allowed recovery of low-grade copper and gold with byproduct silver from large open pits.

There are more than 50 silver lode mines and mining camps in British Columbia each of which have produced, or might eventually recover over 42 million grams (~1.3 million ounces) of silver (Table 1). For those mines where silver content is reported only for the ore mined, such as Similco, Silver Butte and Hidden Creek, the silver content of the reserves has been estimated based on production recoveries. For more detailed information regarding production and reserve figures, refer to Tables 5 and 6 respectively. All these deposits are polymetallic with gold, copper, lead and/or zinc occurring with the silver; frequently silver is only produced as a byproduct. The location of these deposits, their current status with respect to production, and deposit type are shown on the accompanying map.

Sullivan, Eskay Creek, Valley Copper and Equity Silver mines have, or will have, produced more silver by the time they close than the largest silver mining camp in British Columbia, the Slocan. The highest grade producers were polymetallic veins which frequently grade over 500 g/t Ag, such as those in the Slocan and Beaverdell camps. Massive sulphide deposits, like Sullivan, Myra Falls and Tulsequah Chief, also have attractive silver values which exceed 40 g/t Ag.

The list of major silver producers presented in Table 1 includes fifteen different types of deposits (Table 2). However, virtually all the production is derived from sediment-hosted, VMS, polymetallic and epithermal veins, porphyry and skarn deposits (Figure 2). Limited production from polymetallic mantos, like the Bluebell Mine, and intrusion-related Au pyrrhotite veins in the Rossland Camp comprise the remaining 1% of production.



Table 1
Major Silver Producers of British Columbia



This table includes mines and mining camps with greater than 1.35 million ounces (42 million grams) contained silver (produced plus inventory, if any). See Tables 5 & 6 for details.

Rank	Name **	MINFILE Number	Contained		Total Contained		Production MT	Reserves MT	Deposit Type
			Ag (million oz)	Grade (g/t)	Ag	Au (million grams)			
1	Sullivan (3)	^ 082FNE052	296.72	61.07	9228.99	0.18	142.32	8.80	Sedimentary exhalative Zn-Pb-Ag
2	Eskay Creek	^ 104B 008	155.77	2415.69	4844.94	106.31	0.31	1.69	Subaqueous hot spring Ag-Au
3	Highland Valley (7)		109.95	2.48	3419.84	22.24	882.32	495.00 *	
	Valley	^ 092ISW012	98.00	3.12	3048.12	20.82	481.60	495.00 *	Porphyry Cu +/- Mo +/- Au
	Lornex	^ 092ISW045	8.65	0.56	269.14	0.10	482.55		Porphyry Cu +/- Mo +/- Au
	Bethlehem	092ISE001,005	3.21	1.04	99.85	1.28	96.00		Porphyry Cu +/- Mo +/- Au
4	Equity Silver	093L 001	71.36	65.64	2219.48	15.80	33.81		Subvolcanic Cu-Ag-Au (As-Sb)
5	Slocan Camp (162)		69.53	429.20	2162.54	0.38	4.92	0.12	
	Standard	082FNW180	8.95	372.85	278.23	0.02	0.75		Polymetallic veins Ag-Pb-Zn +/- Au
	Silvana	082FNW050	8.32	457.69	258.76		0.51	0.05	Polymetallic veins Ag-Pb-Zn +/- Au
	Silversmith	082FNW053	7.27	636.73	226.11	0.04	0.36		Polymetallic veins Ag-Pb-Zn +/- Au
	Victor	082FNW204	4.15	863.72	129.13	0.08	0.15		Polymetallic veins Ag-Pb-Zn +/- Au
6	Premier Camp (15)		46.77	107.33	1454.77	85.51	7.70	5.86 *	
	Premier	104B 054	43.38	189.70	1349.18	65.68	6.65	0.46	Epithermal Au-Ag: low sulphidation
	Big Missouri	104B 046	1.30	16.45	40.36	7.07	0.77	1.69	Polymetallic veins Ag-Pb-Zn +/- Au
	Silver Butte	104B 150	1.45	23.97	45.04	0.89	0.11	1.77 *	Polymetallic veins Ag-Pb-Zn +/- Au and Epithermal Au-Ag: low sulphidation
7	Myra Falls (3)		40.08	42.64	1246.62	45.73	16.94	12.30	
	Myra Falls (H-W)	^ 092F 330	23.84	31.54	741.48	35.02	11.21	12.30	Noranda/Kuroko massive sulphide Cu-Pb-Zn
	Lynx (Myra Falls)	^ 092F 071	17.19	88.51	534.78	11.66	5.73	0.32	Noranda/Kuroko massive sulphide Cu-Pb-Zn
8	Beaverdell Camp (24)		39.61	980.98	1231.98	0.54	1.22	0.03	
	Beaverdell	082ESW030	34.59	897.55	1076.01	0.52	1.20		Polymetallic veins Ag-Pb-Zn +/- Au
	Sally	082ESW073	1.96	5857.95	61.00	0.01	0.010		Polymetallic veins Ag-Pb-Zn +/- Au
	Wellington	082ESW072	1.68	1323.44	52.24	0.01	0.007	0.03	Polymetallic veins Ag-Pb-Zn +/- Au
	Highland Lass	082ESW133	0.99	6531.16	30.93	0.01	0.005		Polymetallic veins Ag-Pb-Zn +/- Au
9	Kitsault River (7)		37.45	402.39	1164.91	0.03	1.28	1.61	
	Torbit	103P 191	26.53	404.98	825.20	0.003	1.25	0.79	Polymetallic veins Ag-Pb-Zn +/- Au
	Dolly Varden	103P 188	2.40	980.72	74.60		0.03	0.04	Polymetallic veins Ag-Pb-Zn +/- Au
	North Star	103P 189	1.65	401.77	51.43		0.0001	0.13	Polymetallic veins Ag-Pb-Zn +/- Au
10	Greenwood Camp (61)		27.56	11.84	857.17	78.19	29.15	43.22	
	Oro Denoro	082ESE063	15.01	3770.66	466.74	34.93	0.12		Cu skarn
	Phoenix	082ESE020	5.88	8.49	183.04	28.34	21.55		Cu skarn and Au Skarn
	Providence	082ESE001	1.37	4081.32	42.55	0.18	0.01		Polymetallic veins Ag-Pb-Zn +/- Au
11	Tulsequah Chief (2)	104K 002,001	29.06	102.22	903.97	22.07	0.93	7.91	Noranda/Kuroko massive sulphide Cu-Pb-Zn
12	Porter-Idaho	103P 089	20.12	733.15	625.88	0.03	0.03	0.83	Polymetallic veins Ag-Pb-Zn +/- Au
13	Similco (6)		16.01	1.37	497.86	42.87	199.69	164.80 *	
	Similco	092HSE001	15.05	1.64	468.01	35.56	157.07	129.16	Alkalic porphyry Cu-Au
	Ingerbelle	092HSE004	0.96	0.38	29.78	7.30	42.63	35.64 *	Alkalic porphyry Cu-Au
14	Silver Queen	093L 002	15.83	310.96	492.28	5.50	0.19	1.39	Polymetallic veins Ag-Pb-Zn +/- Au
15	Anvix Camp (6)		14.98	9.93	465.99	4.39	22.55	24.39 *	
	Hidden Creek	103P 021	14.03	9.50	436.31	3.77	21.73	24.22 *	Cyprus massive sulphide Cu (Zn)
	Redwing	103P 024	0.45	85.70	14.10	0.20		0.16	Cyprus massive sulphide Cu (Zn)
	Bonanza	103P 023	0.29	13.32	8.89	0.09	0.66	0.01	Cyprus massive sulphide Cu (Zn)
16	Samatosum	082M 244	13.80	773.79	429.36	0.64	0.55		Noranda/Kuroko massive sulphide Cu-Pb-Zn
17	Ainsworth Camp (52)		11.31	63.05	351.83	0.03	5.58		
	Bluebell	082FNE043	7.11	45.85	221.01	0.01	4.82		Polymetallic manto Ag-Pb-Zn
	No. One	082FNE025	1.99	1701.78	62.01	0.01	0.04		Polymetallic manto Ag-Pb-Zn
18	Millie Mack	082KSW051	11.07	223.20	344.28	7.40	0.0004	1.54	Polymetallic veins Ag-Pb-Zn +/- Au
19	Babine Camp (2)		9.67	0.94	300.78	54.07	129.49	190.75 *	
	Granisle	093L 146	7.33	1.33	228.02	24.68	52.32	119.00 *	Porphyry Cu +/- Mo +/- Au
	Bell	093M 001	2.34	0.49	72.76	29.39	77.17	71.75	Porphyry Cu +/- Mo +/- Au
20	Island Copper	092L 158	9.46	0.80	294.11	35.27	366.72		Porphyry Cu +/- Mo +/- Au
21	Silver Standard - Rocher Deboule (13)		8.24	616.17	256.31	0.82	0.36	0.05	
	Silver Standard	093M 049	7.63	1157.67	237.39	0.46	0.21		Polymetallic veins Ag-Pb-Zn +/- Au
	Rocher Deboule	093M 071	0.43	147.78	13.37	0.32	0.04	0.05	Polymetallic veins Ag-Pb-Zn +/- Au
22	Huckleberry	^ 093E 037	8.17	2.81	254.13	5.60		90.37	Porphyry Cu +/- Mo +/- Au
23	Trout Lake Camp (43)		7.24	330.62	225.10	1.60	0.26	0.42	
	Spider (L.15752)	082KNW045	1.93	390.65	59.95	0.48	0.13	0.03	Polymetallic veins Ag-Pb-Zn +/- Au
	Silver Cup (L.768)	082KNW027	1.73	923.03	53.82	0.28	0.02	0.04	Polymetallic veins Ag-Pb-Zn +/- Au
	Wagner	082KNW212	1.54	372.78	47.84	0.03	0.003	0.13	Polymetallic veins Ag-Pb-Zn +/- Au
24	Ymir-Nelson Camp (67)		6.53	117.25	203.10	17.04	1.66	0.07	
	Silver King	082FSW176	4.46	513.41	138.72	0.01	0.20	0.07	Polymetallic veins Ag-Pb-Zn +/- Au
	Yankee Girl	082FSW068	0.71	59.46	22.04	3.85	0.37		Polymetallic veins Ag-Pb-Zn +/- Au
25	Britannia	092GNW003	5.98	3.77	186.05	15.35	47.88	1.42 *	Noranda/Kuroko massive sulphide Cu-Pb-Zn
26	St. Eugene	082GSW025	5.87	123.84	182.69	0.08	1.48		Polymetallic veins Ag-Pb-Zn +/- Au



Table 1

Major Silver Producers of British Columbia



This table includes mines and mining camps with greater than 1.35 million ounces (42 million grams) contained silver (produced plus inventory, if any). See Tables 5 & 6 for details.

Rank	Name **	MINFILE Number	Contained		Grade		Total Contained		Production MT	Reserves MT	Deposit Type
			Ag (million oz)	Ag (g/t)	Ag	Au	Ag	Au			
27	Toodoggone Camp (3)		5.72	83.56	177.95	14.56	0.82	1.31			
	Lawyers 094E 066		3.64	182.59	113.18	5.40	0.62				Epithermal Au-Ag: low sulphidation
	Shasta 094E 050		1.06	23.82	32.93	6.99	0.12	1.26			Epithermal Au-Ag: low sulphidation
	Baker 094E 026		1.02	250.21	31.83	2.17	0.08	0.05			Epithermal Au-Ag: low sulphidation
28	Brandywine Camp (3)		5.31	166.18	165.26	6.31	0.50	0.50			
	Silver Tunnel 092HNE047		4.02	400.07	125.10	0.11	0.01	0.30			Polymetallic veins Ag-Pb-Zn+/-Au
	Northair 092JW 012		0.90	51.97	27.89	5.72	0.48	0.06			Polymetallic veins Ag-Pb-Zn+/-Au
	Brandywine 092JW 001		0.39	84.51	12.27	0.48	0.01	0.13			Polymetallic veins Ag-Pb-Zn+/-Au
29	Slocan City Camp (54)		4.93	1899.37	153.28	0.10	0.08				
	Ottawa 082FNW155		1.80	2112.88	55.94	0.001	0.03				Polymetallic veins Ag-Pb-Zn+/-Au
	Enterprise 082FNW148		1.05	2952.63	32.68	0.002	0.01				Polymetallic veins Ag-Pb-Zn+/-Au
	Westmont 082FNW145		0.36	3452.14	11.08	0.002	0.003				Polymetallic veins Ag-Pb-Zn+/-Au
30	Brenda	092HNE047	4.76	0.81	148.05	2.28	182.64				Porphyry Cu +/- Mo +/- Au
31	Gibraltar (4)		4.48	0.31	139.32	0.14	300.30		145.58 *		
	Gibraltar ^ 093B 012								142.54		Porphyry Cu +/- Mo +/- Au
	Gibraltar West 093B 007								183.24		Porphyry Cu +/- Mo +/- Au
	Granite Lake 093B 013								80.90		Porphyry Cu +/- Mo +/- Au
	Pollyanna ^ 093B 006								47.70		Porphyry Cu +/- Mo +/- Au
32	Treasure Mountain	092HSW016	4.44	856.21	138.19	0.00	0.001	0.16			Polymetallic veins Ag-Pb-Zn+/-Au
33	Horn Silver	082ESW002	4.09	293.63	127.19	0.33	0.43				Polymetallic veins Ag-Pb-Zn+/-Au
34	Granduc	104B 021	3.99	7.99	124.05	2.00	15.53				Besshi massive sulphide Cu-Zn
35	Salmo Camp (23)		3.79	5.11	117.86	23.11	23.05	0.04 *			
	Annex 082FSW219		1.09	44.61	34.05		0.76				Irish-type carbonate-hosted Zn-Pb
	HB 082FSW004		1.02	4.74	31.71	0.003	6.66	0.04 *			Irish-type carbonate-hosted Zn-Pb
36	Rosland Camp (44)		3.64	19.37	113.36	91.14	5.57	0.28			
	Le Roi 082FSW093		1.70	21.66	52.97	34.02	2.45				Intrusion-related Au pyrrhotite veins
	Centre Star 082FSW094		0.84	11.21	26.27	38.78	2.07	0.28			Intrusion-related Au pyrrhotite veins
	Josie 082FSW147		0.50	27.33	15.54	9.79	0.57				Intrusion-related Au pyrrhotite veins
	War Eagle 082FSW097		0.39	40.10	12.04	5.66	0.30				Intrusion-related Au pyrrhotite veins
37	Afton/Ajax (7)		3.09	1.84	96.05	17.14	47.97	4.22 *			
	Afton 092INE023		2.96	2.10	92.09	14.83	40.79	3.00 *			Alkalic porphyry Cu-Au
	Ajax (West) 092INE012		0.05	0.57	1.69	0.79	2.97				Alkalic porphyry Cu-Au
	Ajax (East) 092INE013		0.05	0.36	1.45	0.99	4.04				Alkalic porphyry Cu-Au
38	Fairview Camp (12)		2.91	35.20	90.39	11.04	0.16	2.41			
	Stemwinder (L.384) 082ESW007		1.69	31.45	52.48	7.31	0.03	1.64			Au-quartz veins
	Fairview (L.556S) 082ESW008		1.13	41.29	35.12	3.16	0.09	0.76			Au-quartz veins
	Susie (L.1917) 082ESW090		0.05	86.56	1.52	0.08	0.02				Polymetallic veins Ag-Pb-Zn+/-Au
	Morning Star (L.443) 082ESW006		0.03	38.66	0.97	0.25	0.02				Au-quartz veins
39	Ruth-Vermont	082KNE009	2.61	180.18	81.10	0.01	0.18	0.27			Polymetallic veins Ag-Pb-Zn+/-Au
40	Cronin	093L 127	2.47	412.91	76.87	0.06	0.026	0.16			Polymetallic veins Ag-Pb-Zn+/-Au
41	Atlin Ruffner	104N 011	2.26	599.64	70.26	0.00	0.004	0.11			Polymetallic veins Ag-Pb-Zn+/-Au
42	Mount Sicker (3)		2.24	116.98	69.59	2.48	0.28	0.32			
	Lenora 092B 001		1.78	126.55	55.34	1.69	0.12	0.32			Noranda/Kuroko massive sulphide Cu-Pb-Zn
	Tyee 092B 002		0.44	89.90	13.73	0.76	0.15				Noranda/Kuroko massive sulphide Cu-Pb-Zn
43	Duthie (4)	093L 088-091	2.13	441.50	66.19	0.77	0.07	0.08			Polymetallic veins Ag-Pb-Zn+/-Au
44	Homestake	082M 025	2.10	254.53	65.38	0.16	0.01	0.25			Noranda/Kuroko massive sulphide Cu-Pb-Zn
45	Virginia Silver	093M 021	1.92	2946.61	59.67	0.02	0.0002	0.02			Polymetallic veins Ag-Pb-Zn+/-Au
46	Franklin Camp (4)		1.88	255.99	58.42	2.02	0.21	0.01			
	Union 082ENE003		1.88	256.47	58.37	2.02	0.21	0.01			Polymetallic veins Ag-Pb-Zn+/-Au
47	Mineral King	082KSE001	1.86	27.45	57.72		2.10				Sedimentary exhalative Zn-Pb-Ag?
48	Tasu	103C 003	1.70	2.27	52.82	1.43	23.30				Fe skarn
49	Texada Island (10)		1.48	2.36	46.00	5.41	19.34	0.18			
	Yellow Kid 092F 258		0.76	1.25	23.65	0.89	18.95				Fe skarn
	Marble Bay 092F 270		0.41	44.13	12.62	1.56	0.29				Cu skarn
	Little Billie 092F 105		0.24	30.26	7.42	2.48	0.06	0.18			Cu skarn
50	Indian Chief	092E 011	1.47	23.20	45.79	0.61	0.07	1.90			Cu skarn
51	Kokanee (15)		1.38	362.85	42.97	0.65	0.10	0.02			
	Molly Gibson (L.1578) 082FNW121		1.00	556.04	31.06	0.0004	0.06				Polymetallic veins Ag-Pb-Zn+/-Au
	Scranton 082FNW112		0.25	177.82	7.80	0.28	0.03	0.02			Polymetallic veins Ag-Pb-Zn+/-Au
52	Woolsey	082N 004	1.37	71.53	42.64		0.01	0.59			Polymetallic veins Ag-Pb-Zn+/-Au

** Number in brackets is the number of mines and deposits used in the calculations; the significant ones are shown.

* Silver content for reserves is estimated based on production recoveries or previous reserve calculations.

^ Producing mine.

Table 2. The types of deposits mined for silver in British Columbia.

<u>Deposit Type</u>	<u>Profile Code</u>
Sedex	
Irish-type carbonate-hosted Zn-Pb	E13
Sedimentary exhalative Zn-Pb-Ag	E14
Volcanogenic Massive Sulphide	
Besshi massive sulphide Cu-Zn	G04
Cyprus massive sulphide Cu (Zn)	G05
Noranda / Kuroko massive sulphide Cu-Pb-Zn	G06
Subaqueous hot spring Au-Ag	G07
Epithermal	
Epithermal Au-Ag; low sulphidation	H05
Vein	
Intrusion-related Au pyrrhotite veins	I02
Polymetallic veins Ag-Pb-Zn±Au	I05
Manto	
Polymetallic mantos Ag-Pb-Zn	J01
Skarn	
Cu skarns	K01
Fe skarns	K03
Porphyry and Porphyry-related	
Subvolcanic Cu-Au-Ag (As-Sb)	L01
Porphyry Cu-Au: alkalic	L03
Porphyry Cu ± Mo ± Au	L04

While the importance of sediment-hosted deposits to British Columbia's silver resources largely reflects the contribution of the Sullivan mine, there are other deposits like Cirque and Akie (Table 3) which show the potential of deposits of this type to contribute to future silver production. These deposits also have attractive combined lead and zinc grades of 10 % or better.

Higher precious metal contents of some volcanogenic massive sulphide deposits can make them particularly attractive exploration targets. For example, the Myra Falls deposits average 42 and 1.7 grams per tonne silver and gold respectively. The discovery of the precious metal-rich Eskay Creek deposit in 1988 highlighted the potential to find high-grade silver and gold VMS deposits in the province. This mine, currently the fifth largest silver producer in the world, will be the second largest silver producer in the province when it closes.

For the first sixty years of the 20th century much of the province's silver came from polymetallic veins. Typically these veins also produced lead and, following the introduction of a zinc circuit at Trail in 1916, zinc. Some deposits also contain important copper and/or gold values. In recent years these veins have produced a relatively small proportion of the province's silver, although their high silver grades continue to attract exploration interest.

As a region with numerous porphyry deposits, British Columbia produces significant byproduct silver from mines of this type. These deposits often grade from several to more than 10 grams per tonne of silver, although recoveries can be significantly lower. The large tonnages processed result in important contributions to the province's total production of silver. However, it is the style of mineralization exemplified by the Equity Silver deposit which is the most attractive porphyry-related silver target. Equity Silver, which operated between 1981 and 1994, is the fourth largest silver deposit in the province with production of 2.2 billion grams of silver as well as 84 086 kilograms of copper and 15.80 million grams of gold (Table 5). Panteleyev (1995) has classified it as a subvolcanic Cu-Au-Ag porphyry-related deposit.

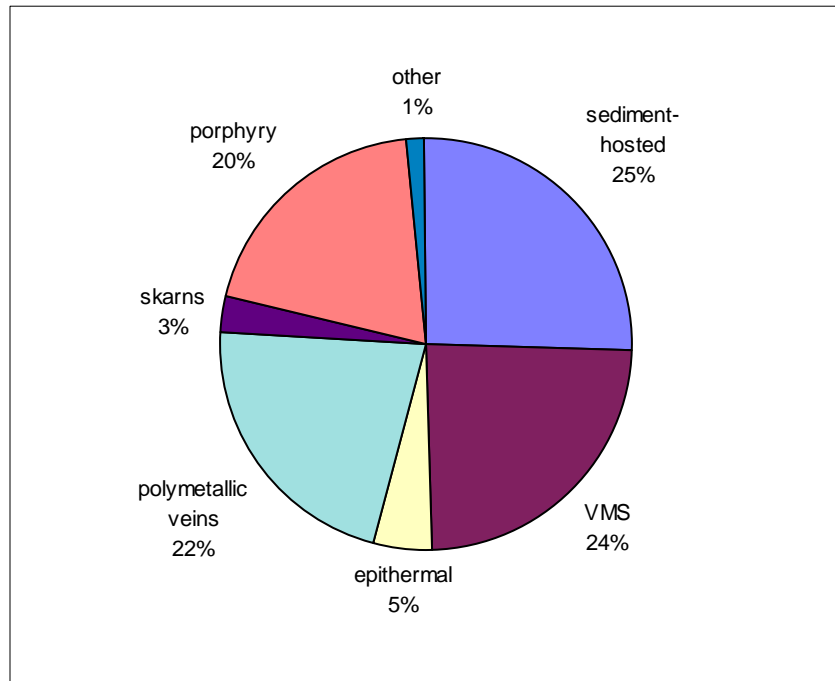


Figure 3. Distribution of British Columbia's silver resources by deposit type for the major producers and mining camps listed in Table 1.

Undeveloped Deposits with Significant Silver Reserves

Sedex, VMS, polymetallic and epithermal veins, porphyry and skarn deposits have been the important past producers (Figure 2). There are deposits of these types that have not been developed, such as the Cirque, Capoose, Kutcho Creek, Copper Canyon, Schaft Creek, and many others (Tables 3 and 6). A number of these deposits are currently undeveloped because their location would require the construction of expensive infrastructure which is not warranted by the known reserves, while others have been thought to be too small, low grade or difficult to process. Shifting commodity prices suggest that these deposits may warrant investigation, particularly since some have good potential for defining an expanded resource through more exploration and others occur in regions with improving infrastructure.

Conclusions

As part of the northern Cordillera, British Columbia is a silver-rich region. It has three major mines, Sullivan, Eskay Creek and Equity Silver, which have produced, or will have produced by closure, more than 1.5 billion grams (50 million ounces) of silver. There are more than 50 silver lode mines and mining camps in British Columbia that have produced, or might eventually recover over 42 million grams (~1.3 million ounces) of silver. These mines are typically polymetallic; many extract silver as a byproduct of their operation. Virtually all the province's silver production is derived from sediment-hosted, vein, VMS, porphyry-related and skarn deposits. Manto deposits and epithermal veins are more important in other parts of the Cordillera and deserve more investigation in British Columbia.



Table 3
Major Silver Deposits of British Columbia with No Production

This table includes deposits and deposit groups with silver reserves of more than 0.2 million ounces (6.5 million grams). See Table 6 for details.

Rank	Name **	MINFILE No.	Contained		Grade		Total Contained		Reserves MT	Deposit Type
			Ag (million oz)	Ag (g/t)	Ag (million grams)	Au				
1	<u>Galore Creek (3)</u>		62.18	6.81	1,934.10	125.54		284.00		
	Central	104G 090	52.64	7.00	1,637.30	81.87		233.90		Alkalic porphyry Cu-Au
	Southwest	104G 095	9.54	7.00	296.80	43.67		42.40		Alkalic porphyry Cu-Au
2	Cirque	094F 008	40.34	50.80	1,254.76			24.70		Sedimentary exhalative Zn-Pb-Ag
3	Schaff Creek	104G 015	37.48	1.20	1,165.79	136.01		971.50		Porphyry Cu +/- Mo +/- Au
4	Windy Craggy	114P 002	36.63	3.83	1,139.20	59.49		297.44		Besshi massive sulphide Cu-Zn
5	Capoose	093F 040	32.76	36.00	1,018.85	8.49		28.30		Subvolcanic Cu-Ag-Au (As-Sb)
6	Silvertip (Midway)	104O 038	26.85	325.00	835.25	1.62		2.57		Polymetallic manto Ag-Pb-Zn
7	<u>Kutcho Creek (1)</u>		17.82	19.80	554.40	7.41		28.00		
	Kutcho Creek	104I 060	15.96	29.20	496.40	6.63		17.00		Noranda/Kuroko massive sulphide Cu-Pb-Zn
	Kutcho Creek	104I 060	1.86	58.00	58.00	0.78		1.00		Noranda/Kuroko massive sulphide Cu-Pb-Zn
8	Copper Canyon	104G 017	17.81	17.10	554.04	37.91		32.40		Alkalic porphyry Cu-Au
9	<u>Sulphurets (3)</u>		16.43	441.74	511.02	21.27		1.16		
	Sulphurets (Bruceside)	104B 193	15.61	647.80	485.37	11.54		0.75		Epithermal Au-Ag-Cu: high sulphidation
	Shore (Sulphurets)	104B 189	0.43	158.70	13.28	1.06		0.08		Epithermal Au-Ag: low sulphidation
	Goldwedge	104B 105	0.36	38.30	11.09	7.93		0.29		Epithermal Au-Ag: low sulphidation
10	<u>Giant Copper (2)</u>		12.82	6.90	398.82	16.18		57.80		
	Giant Copper	092HSW001	12.82	6.90	398.82	16.18		57.80		Porphyry Cu +/- Mo +/- Au
	Giant Copper	092HSW001	11.70	12.34	364.03	11.21		29.50		Porphyry Cu +/- Mo +/- Au
	Giant Copper	092HSW001	7.69	11.99	239.27	8.18		19.96		Porphyry Cu +/- Mo +/- Au
	Invermay	092HSW002	3.90	7.92	121.18	5.81		15.30		Polymetallic veins Ag-Pb-Zn +/- Au
11	<u>J & L (1)</u>		11.13	74.66	346.22	26.12		4.64		
	J & L	082M 003	5.24	85.50	163.05	13.58		1.91		
	J & L	082M 003	4.15	75.90	129.03	12.55		1.70		
	J & L	082M 003	1.17	52.30	36.24			0.69		
	J & L	082M 003	0.58	53.10	17.89			0.34		
12	<u>Big Showing (2)</u>		10.59	498.68	329.46	0.19		0.66		
	Big Showing	082KNW078	5.58	435.00	173.50			0.40		Irish-type carbonate-hosted Zn-Pb
	Big Showing	082KNW078	4.79	684.00	148.84			0.22		Irish-type carbonate-hosted Zn-Pb
	Teddy Glacier	082KNW069	0.23	161.10	7.12	0.19		0.04		Polymetallic veins Ag-Pb-Zn +/- Au
13	Prosperity	092O 041	10.18	0.50	316.50			633.00 *		Porphyry Cu +/- Mo +/- Au
14	Morrison	093M 007	9.40	3.40	292.40	29.24		86.00		Porphyry Cu +/- Mo +/- Au
15	Blackwater-Davidson	093F 037	7.14	37.00	222.00	0.30		6.00		Epithermal Au-Ag: low sulphidation
16	Poplar	093L 239	6.75	2.80	210.00			75.00		Porphyry Cu +/- Mo +/- Au
17	Bronson Slope	104B 077	6.71	2.75	208.77	33.44		76.00		Porphyry Cu +/- Mo +/- Au
18	Akie	094F 031	6.60	17.10	205.20			12.00		Sedimentary exhalative Zn-Pb-Ag
19	Fireweed	093M 151	6.38	341.77	198.41			0.58		Sedimentary exhalative Zn-Pb-Ag?
20	Rock And Roll	104B 377	6.27	335.90	195.00	1.39		0.58		Besshi massive sulphide Cu-Zn
21	Ericksen-Ashby	104K 009	6.27	214.90	194.94			0.91		Pb-Zn skarn
22	Wolf	103P 198	5.24	335.60	162.86			0.49		Polymetallic veins Ag-Pb-Zn +/- Au
23	Red Bird	082FSW024	4.79	68.50	149.13			2.18		Irish-type carbonate-hosted Zn-Pb
24	Dundee	082FSW067	4.77	170.00	148.24	8.72		0.87		Polymetallic veins Ag-Pb-Zn +/- Au
25	Ecstall	103H 011	4.08	20.00	126.99	3.17		6.35		Noranda/Kuroko massive sulphide Cu-Pb-Zn
26	<u>Cassiar Camp (6)</u>		4.05	113.92	125.84	4.57		1.10		
	Magno	104P 006	2.64	168.00	82.07			0.49		Polymetallic manto Ag-Pb-Zn
	Joe Reed	104P 021	0.51	219.39	15.92			0.07		Polymetallic veins Ag-Pb-Zn +/- Au
	Haskin Mountain	104P 038	0.36	49.70	11.27			0.23		Pb-Zn skarn
27	Beveley	094C 023	3.18	36.30	98.78			2.72		Irish-type carbonate-hosted Zn-Pb
28	River Jordan	082M 001	3.16	37.70	98.24			2.61		Broken Hill-type Pb-Zn-Ag +/- Cu
29	Packsack	103H 013	2.95	34.00	91.80	0.81		2.70		Noranda/Kuroko massive sulphide Cu-Pb-Zn
30	<u>Ox-C (1)</u>		2.87	411.30	89.18	0.10		0.22		
	Ox-C	093E 101	2.59	411.30	80.65	0.09		0.20		Polymetallic veins Ag-Pb-Zn +/- Au
	Ox-C	093E 101	0.27	411.30	8.53	0.01		0.02		Polymetallic veins Ag-Pb-Zn +/- Au
31	Eaglehead	104I 008	2.61	2.71	81.30	6.00		30.00		Porphyry Cu +/- Mo +/- Au
32	Red Mountain	103P 086	2.35	38.10	73.22	18.83		1.92		
33	Lindquist	093E 019	2.20	274.20	68.39	2.67		0.25		Epithermal Au-Ag: low sulphidation
34	Ruth-Vermont	082KNE009	2.05	233.10	63.86			0.27		Polymetallic veins Ag-Pb-Zn +/- Au
35	Seneca	092HSW013	1.99	41.13	61.95	1.24		1.51		Subaqueous hot spring Ag-Au
36	Red (Sping)	094D 104	1.91	11.90	59.37			4.99		Sediment-hosted Cu
37	Comstock	082FNW077	1.75	1,199.80	54.42			0.05		Polymetallic veins Ag-Pb-Zn +/- Au
38	Lara	092B 129	1.70	100.09	52.93	2.50		0.53		Noranda/Kuroko massive sulphide Cu-Pb-Zn
39	Cottonbelt	082M 086	1.61	50.00	50.00			1.00		Broken Hill-type Pb-Zn-Ag +/- Cu
40	Caledonia	092L 061	1.54	704.20	47.89	0.02		0.07		Pb-Zn skarn
41	Vine 1	082GSW050	1.52	36.30	47.19	2.86		1.30		Polymetallic veins Ag-Pb-Zn +/- Au
42	Cole	093L 162	1.41	301.70	43.79			0.15		Polymetallic veins Ag-Pb-Zn +/- Au
43	Driftwood	093M 117	1.39	48.00	43.20			0.90		Volcanic redbed Cu
44	Independence	104A 038	1.37	240.00	42.67			0.18		Subvolcanic Cu-Ag-Au (As-Sb)
45	Goat	104A 002	1.35	4,782.90	42.09	0.09		0.01		Polymetallic veins Ag-Pb-Zn +/- Au
46	New Moon	093E 011	1.30	58.60	40.36	0.68		0.69		Epithermal Au-Ag: low sulphidation
47	Tsacha	093F 055	1.27	82.30	39.39	4.16		0.48		Epithermal Au-Ag: low sulphidation
48	Bend 1 Canyon Zone	083D 001	1.13	7.00	35.00			5.00		Sedimentary exhalative Zn-Pb-Ag
49	Topley Richfield	093L 018	1.12	191.96	34.83	0.77		0.18		Polymetallic veins Ag-Pb-Zn +/- Au
50	Tam	093N 093	0.95	4.11	29.59			7.20		Alkalic porphyry Cu-Au
51	Harmony (Specogna)	103F 034	0.90	0.84	28.00	70.69		33.50 *		Hot spring Au-Ag
52	Amy	104O 004	0.85	366.70	26.56			0.07		Polymetallic manto Ag-Pb-Zn
53	Rea Gold	082M 191	0.84	69.40	26.09	2.29		0.38		Noranda/Kuroko massive sulphide Cu-Pb-Zn



Table 3
Major Silver Deposits of British Columbia with No Production

This table includes deposits and deposit groups with silver reserves of more than 0.2 million ounces (6.5 million grams). See Table 6 for details.

Rank	Name **	MINFILE No.	Contained	Grade	Total Contained		Reserves MT	Deposit Type
			Ag (million oz)	Ag (g/t)	Ag (million grams)	Au		
54	Kelly Creek	103I 092	0.80	45.90	25.02		0.55	Volcanic redbed Cu
55	Gray Rock	092JNE066	0.78	342.80	24.16		0.07	Stibnite veins and disseminations
56	Wisconsin	082FSE036	0.75	171.40	23.32	0.29	0.14	Besshi massive sulphide Cu-Zn
57	Eureka-Victoria	092HSW011	0.71	500.30	21.96		0.04	Polymetallic veins Ag-Pb-Zn+/-Au
58	Doc	104B 014	0.62	44.90	19.14	3.92	0.43	Au-quartz veins
59	Scotia	103I 007	0.56	13.00	17.42	0.34	1.34	Noranda/Kuroko massive sulphide Cu-Pb-Zn
60	Lustdust	093N 009	0.54	54.56	16.76	0.80	0.31	Polymetallic veins Ag-Pb-Zn+/-Au
61	Kennco	094D 023	0.51	6.90	15.87	2.99	2.30	Au skarn
62	Holliday	104O 002	0.50	427.21	15.50		0.04	Polymetallic veins Ag-Pb-Zn+/-Au
63	Bowler Creek (2)	082M 138,139	0.50	52.30	15.48		0.30	Polymetallic veins Ag-Pb-Zn+/-Au
64	Silver Lake	093L 097	0.43	449.13	13.47	0.05	0.03	Polymetallic veins Ag-Pb-Zn+/-Au
65	CK	082M 224	0.41	8.50	12.67		1.49	Broken Hill-type Pb-Zn-Ag-Cu
66	Alvija	103I 085	0.40	68.50	12.43		0.18	Volcanic redbed Cu
67	Molly Hughes	082KSW002	0.37	1,282.40	11.63	0.05	0.01	Polymetallic veins Ag-Pb-Zn+/-Au
68	Taseko (Empress)	092O 033	0.37	1.71	11.56	5.54	6.76	Porphyry Cu +/- Mo +/- Au
69	Macktush	092F 012	0.35	78.52	10.83	2.55	0.14	Porphyry Cu +/- Mo +/- Au
70	Chu Chua	092P 140	0.34	10.20	10.64	0.56	1.04	Cyprus massive sulphide Cu (Zn)
71	Summit	082M 038	0.21	27.40	6.69		0.24	Sedimentary exhalative Zn-Pb-Ag

*** Number in brackets is the number of deposits used in the calculations.*

** Silver content for reserves is estimated based on previous resource calculations or planned production.*

See Table 6 for reserve categories, grades, comments and references.

Numerous deposits with significant silver resources have not been developed because of a variety of factors including remote location, size, grade or metallurgical problems. These include the Cirque, Capoose, Kutcho Creek, Copper Canyon, Schaft Creek and Silvertip (Midway) deposits. The recent climb in silver prices may warrant reviewing the inventory of deposits containing significant silver, particularly since more exploration could identify a larger resource.

British Columbia continues to have excellent potential for finding new deposits. This is exemplified by the 1988 discovery of the rich Eskay Creek deposit. This mine, currently the fifth largest silver producer in the world, will be the second largest silver producer in the province when it closes. The British Columbia Geological Survey maintains a mineral occurrence database called MINFILE that can be used in conjunction with geological maps, regional geochemical data, published reports and assessment reports to identify occurrences and regions prospective for silver warranting further exploration.

Selected Bibliography

- Höy, T. (1991): Volcanic Massive Sulphide (VMS) Deposits in British Columbia; *in Ore Deposits, Tectonics and Metallogeny of the Canadian Cordillera*, McMillan, W.J., Höy, T., MacIntyre, D.G., Nelson, J.L., Nixon, G.T., Hammock, J.L., Panteleyev, A., Ray, G.E. and Webster, I.C.L., *B. C. Ministry of Energy, Mines and Petroleum Resources*, Paper 1991-4, pages 89-123.
- MacIntyre, D.G. (1991): SEDEX - Sedimentary Exhalative Deposits; *in Ore Deposits, Tectonics and Metallogeny of the Canadian Cordillera*, McMillan, W.J., Höy, T., MacIntyre, D.G., Nelson, J.L., Nixon, G.T., Hammock, J.L., Panteleyev, A., Ray, G.E. and Webster, I.C.L., *B. C. Ministry of Energy, Mines and Petroleum Resources*, Paper 1991-4, pages 25-70.
- McMillan, W.J., Höy, T., MacIntyre, D.G., Nelson, J.L., Nixon, G.T., Hammock, J.L., Panteleyev, A., Ray, G.E. and Webster, I.C.L. (1991): Ore Deposits, Tectonics and Metallogeny of the Canadian Cordillera; *B. C. Ministry of Energy, Mines and Petroleum Resources*, Paper 1991-4, 276 pages.
- MINFILE Team (Compilers) (1998): MINFILE Reserves/Resources Inventory in British Columbia; *B.C. Ministry of Employment and Investment*, Open File 1998-4, 102 pages.
- Nelson, J.L. (1991): Carbonate-hosted Lead-Zinc (\pm Silver, Gold) Deposits; *in Ore Deposits, Tectonics and Metallogeny of the Canadian Cordillera*, McMillan, W.J., Höy, T., MacIntyre, D.G., Nelson, J.L., Nixon, G.T., Hammock, J.L., Panteleyev, A., Ray, G.E. and Webster, I.C.L., *B. C. Ministry of Energy, Mines and Petroleum Resources*, Paper 1991-4, pages 71-88.
- Nelson, J.L. (1995): Polymetallic Mantos Ag-Pb-Zn; *in Selected British Columbia Mineral Deposit Profiles, Volume 2*, *B.C. Ministry of Energy, Mines and Petroleum Resources*, Open File 1996-13, pages 101-103.
- Panteleyev, A. (1995): Subvolcanic Cu-Au-Ag (As-Sb); *in Selected British Columbia Mineral Deposit Profiles*, Lefebvre, D.V. and Ray, G.E., Editors, *B.C. Ministry of Energy, Mines and Petroleum Resources*, Open File 1995-20, pages 79-82.

Appendix

Detailed Production and Reserve Data for Major Silver Deposits of British Columbia

Inventory Category Definitions

Reserves and resources are not calculated by *Ministry of Energy and Mines* personnel but are quoted from referenced industry sources and/or publications. Industry reporting of deposit inventories has not been standardized and can vary due to company policy, varying definitions, changing economic conditions and other factors. The reader should refer to the original data sources quoted in Table 6 to ensure the figures and inventory categories are accurate. The following are the mineral inventory definitions used for the MINFILE database.

Reserve

The **Reserve** category is used only for a mineral and/or substance inventory in an operating mine or mine near production. Sufficient information is available to form the basis of a preliminary mine production plan. Factors that affect ore reserve estimates are geological, economic, mining, metallurgical, marketing, environmental, social and governmental conditions. Ore reserves are reported as **Proven**, **Probable** and **Possible**.

Proven (PV): Ore reserves are stated in terms of mineable tonnes and grades in which the identified substance has been defined using sufficient metallurgical, mine method, geoscientific, infrastructure, operating and capital cost data. Other applicable reserve adjectives may include measured recoverable, diluted, mineable, ore, or in situ.

Probable (PB): Ore reserves are stated in terms of mineable tonnes and grades where sufficient information is available about the thickness, grade, grade distribution, mineable shape and extent of the deposit. Continuity of mineralization should be clearly established. Other applicable reserve adjectives may include measured geological, drill indicated, or indicated.

Possible (PS): Ore reserves are stated in terms of mineable tonnes and grades computed on the basis of limited geoscientific data, but with a reasonable understanding of the distribution and correlation of the substance in relation to this data. Other applicable reserve adjectives may include inferred, geological, mineral inventory, or potential.

Combined Reserve and Resource

Combined (CB): This designation is used when an inventory figure is reported to be a combination of categories (e.g.) PV + PB (Proven and Probable) reserves or MG + IF (Measured and Inferred) resources. It can be applied to both the **Reserve** and **Resource** categories.

Unclassified

Unclassified (UN): This designation indicates that the criteria for qualifying the inventory figures are not available. The Unclassified category can be applied to both the **Reserve** and **Resource** categories. For example, a tonnage figure is given with grades of commodities, but the category is not stated.

Resource

The **Resource** category is used for a mineral and/or substance inventory other than an operating mine. Valuable or useful material is quantified on the basis of geoscientific data and expected economic merit. Mine, metallurgical, price and cost data are not necessarily available. In reporting a resource, there is an implication that there are reasonable prospects for eventual economic exploitation. Resources are reported as **Measured**, **Indicated** and **Inferred**.

Measured (MG): Sufficient information is available about the thickness, grade, distribution, mineable shape and extent of the deposit to give defined grade and tonnage figures. Continuity of mineralization should be clearly established. Other applicable resource adjectives may include proven, measured recoverable, diluted, mineable, or in situ.

Indicated (IN): Tonnage and grade are computed partly from detailed sampling procedures and partly from projection for a measurable distance, based on geoscientific data. Sampling procedures are too widely spaced to ensure continuity but close enough to give a reasonable indication of continuity. Other applicable resource adjectives may include probable, measured geological, or drill indicated.

Inferred (IF): An estimate of tonnage and grade computed from geoscientific data or other sampling procedures, but before testing and sampling information is sufficient to allow a more reliable and systematic estimation. Other applicable resource adjectives may include possible, geological, mineral inventory, or potential.



Table 4
Name Index to Silver Deposits Listed in Open File 1998-10

Deposit Name	MINFILE No.	Table Number and Rank				NTS Map	Latitude*		Longitude*			
		1	3	5	6		(deg. min. sec.; NAD 83)					
ABBOTT (L.765)	082KNW056				42	082K11E	50	37	50	117	9	37
AFTON	092INE023	37			32	092I10E	50	39	40	120	30	54
AJAX (EAST)	092INE013	37			32	092I09W	50	36	43	120	23	25
AJAX (WEST)	092INE012	37			32	092I09W	50	36	29	120	24	16
AKIE	094F 031		18		29	094F07W	57	22	37	124	51	31
ALVIJA	103I 085		66		96	103I09E	54	33	49	128	10	56
AMY	104O 004		52		77	104O16W	59	55	39	130	29	46
ANNEX (L.14070)	082FSW219	35		27		082F03W	49	0	50	117	22	44
APEX	103B 008				125	103B12W	52	41	44	131	53	36
ARLINGTON (L.3648)	082FNW152			22		082F14W	49	47	24	117	21	45
ATLIN RUFFNER	104N 011	41		72	52	104N12E	59	44	9	133	31	18
BAKER	094E 026	27		21	103	094E06E	57	17	7	127	6	38
BEAVERDELL	082ESW030	8		5		082E06E	49	25	50	119	2	46
BELL	093M 001	19		29	74	093M01E	55	0	10	126	13	55
BEND 1 CANYON ZONE	083D 001		48		72	083D01E	52	3	0	118	13	31
BETHLEHEM	092ISE001	3		7		092I07W	50	29	53	120	59	16
BETHLEHEM (SNOWSTORM)	092ISE005	3		7		092I07W	50	29	39	120	58	21
BEVELEY	094C 023		27		43	094C03E	56	8	49	125	3	30
BIG MISSOURI	104B 046	6		4	41	104B01E	56	6	52	130	1	32
BIG SHOWING	082KNW078		12		21	082K13E	50	52	42	117	34	58
BLACKDOME	092O 053			43	116	092O08W	51	19	26	122	29	24
BLACKWATER-DAVIDSON	093F 037		15		25	093F02W	53	10	22	124	51	29
BLUE GROUSE (L.32.L.33)	092C 017			68		092C16E	48	50	27	124	13	26
BLUEBELL	082FNE043	17		11		082F15W	49	45	45	116	51	44
BONANZA	103P 023	15		17	93	103P05W	55	23	33	129	51	4
BRALORNE	092JNE001			40		092J15W	50	46	40	122	49	20
BRANDYWINE	092JW 001	28		41	37	092J03E	50	5	1	123	8	38
BRENDA	092HNE047	30		23		092H16E	49	52	46	120	0	23
BRITANNIA	092GNW003	25		20	109	092G11E	49	36	40	123	8	28
BRONSON SLOPE	104B 077		17		26	104B11E	56	39	59	131	5	40
CALEDONIA (L.1294)	092L 061		40		61	092L12E	50	38	39	127	36	17
CAPOOSE	093F 040		5		7	093F06E	53	17	10	125	9	37
CARIBOO GOLD QUARTZ	093H 019			60		093H04E	53	5	23	121	33	41
CENTRE STAR (L.588)	082FSW094	36		28	106	082F04W	49	4	52	117	48	15
CHU CHUA	092P 140		70		101	092P08E	51	22	51	120	3	42
CIRQUE	094F 008		2		4	094F11E	57	30	35	125	9	36
CK	082M 224	65		95		082M13E	51	54	40	119	34	14
COLE	093L 162		42		17	093L02E	54	5	34	126	42	21
COLUMBIA - EVENING SUN	103P 073			85		103P13W	55	58	16	129	52	59
COMSTOCK (L.1814)	082FNW077		37		58	082F14E	49	53	28	117	13	48
COPPER CANYON	104G 017		8		11	104G03W	57	6	59	131	20	49
COPPER CROWN (L.6472)	093L 026			115		093L10E	54	33	30	126	43	55
CORONADO (L.1155)	093L 090			35		093L14W	54	46	50	127	21	58
COTTONBELT	082M 086		39		60	082M07W	51	26	50	118	49	24
CREEK	104B 086			41		104B01E	56	6	57	130	0	54
CRONIN	093L 127	40		56	50	093L15W	54	55	30	126	48	56
CU 1	082M 138		63		90	082M04E	51	0	20	119	30	14
CU 5	082M 139		63		90	082M04E	51	0	40	119	30	54
DAGO HILL	104B 045			41		104B01E	56	6	42	130	0	48
DARDANELLE	103I 107			128		103I08E	54	28	59	128	13	6
DENTONIA	082ESE055			13		082E02E	49	9	39	118	36	47
DOC	104B 014		58		83	104B08W	56	20	18	130	27	10
DOLLY VARDEN	103P 188	9		9	14	103P12E	55	40	54	129	30	38
DOME	093L 089			35		093L14W	54	46	21	127	21	0
DOMINEER (MOUNT WASHINGTON)	092F 116			84		092F14W	49	45	30	125	18	0
DRIFTWOOD	093M 117		43		65	093M15E	55	50	22	126	36	24
DUNDEE	082FSW067		24		36	082F06E	49	17	12	117	11	31
DUNWELL	103P 052			50		103P13W	55	59	49	129	55	16
DUSTY MAC	082ESW078			53		082E05E	49	20	42	119	32	45
DUTHIE	093L 088	43		35	102	093L14W	54	46	23	127	21	26
EAGLEHEAD	104I 008		31		48	104I06E	58	29	2	129	6	26
ECSTALL	103H 011		25		39	103H13E	53	52	29	129	30	46
ELK	092HNE096			73	126	092H16W	49	51	1	120	18	43
EMERALD GLACIER	093E 001			67	92	093E11W	53	44	19	127	15	37
ENTERPRISE (L.1014)	082FNW148	29		22		082F14W	49	49	18	117	19	34
ENTERPRISE (L.651)	092ISE028			55		092I08W	50	20	52	120	23	22
EQUITY SILVER	093L 001	4		2		093L01W	54	11	22	126	15	48
ERICKSEN-ASHBY	104K 009		21		33	104K11W	58	39	29	133	28	30
ERICKSON	104P 029			66	40	104P04E	59	13	1	129	40	19
ESKAY CREEK	104B 008	2		6	1	104B09W	56	37	59	130	27	7
ESPERANZA	103P 126			62		103P06W	55	29	37	129	29	28
EUREKA-VICTORIA	092HSW011		57		82	092H06W	49	18	24	121	27	56
FAIRVIEW (L.556S)	082ESW008	38		58	47	082E04E	49	12	12	119	38	15
FIREWEED	093M 151		19		31	093M01W	55	0	43	126	26	2



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Name Index to Silver Deposits Listed in Open File 1998-10

Deposit Name	MINFILE No.	Table Number and Rank				NTS Map	Latitude*	Longitude*
		1	3	5	6			
GALORE CREEK - NORTH JUNCTION	104G 092				3	104G03W	57 8 39	131 29 9
GALORE CREEK - SOUTHWEST	104G 095		1		3	104G03W	57 7 21	131 28 32
GALORE CREEK (CENTRAL ZONE)	104G 090		1		3	104G03W	57 8 9	131 27 20
GEORGE GOLD-COPPER UPPER	104A 129				117	104A04W	56 6 16	129 45 16
GIANT COPPER	092HSW001		10		18	092H03E	49 9 49	121 1 29
GIBRALTAR EAST	093B 012	31		31	112	093B09W	52 31 5	122 17 15
GIBRALTAR WEST	093B 007	31		31	112	093B09W	52 30 48	122 18 21
GOAT	104A 002		45		68	104A04E	56 8 52	129 36 20
GOLDEN BEAR	104K 079			75		104K01W	58 12 39	132 17 37
GOLDEN CROWN (L.600)	082ESE032				13	082E02E	49 4 32	118 34 33
GOLDSTREAM	082M 141			42		082M09W	51 37 30	118 25 44
GOLDWEDGE	104B 105		9		15	104B08E	56 29 4	130 12 16
GRANBY POINT	103P 022			17	93	103P05W	55 24 37	129 47 29
GRANDUC	104B 021	34		25	110	104B01W	56 12 40	130 20 42
GRANISLE	093L 146	19		29	74	093L16E	54 56 40	126 9 26
GRANITE LAKE (GIBRALTAR)	093B 013	31		31	112	093B09W	52 30 20	122 15 39
GRANITE SCHEELITE	092HSE101				121	092H07W	49 19 45	120 52 41
GRAY ROCK	092JNE066		55		80	092J15E	50 48 15	122 42 0
GREY COPPER (L.580)	082FNW033				71	082F14E	49 59 15	117 11 18
GREYHOUND (L.1014)	082ESE050				13	082E02E	49 6 6	118 42 10
HALLMAC	082FNW015				71	082F14E	49 59 29	117 13 45
HARMONY	103F 034		51		76	103F09E	53 31 39	132 13 11
HASKIN MOUNTAIN SE	104P 038		27		40	104P06W	59 19 49	129 28 6
HB (L.12672)	082FSW004	35		27	111	082F03E	49 9 8	117 11 59
HIDDEN CREEK	103P 021	15		17	93	103P05W	55 26 21	129 49 27
HIGHLAND LASS (L.2341)	082ESW133	8			5	082E06E	49 25 50	119 2 46
HIGHLANDER (L.557)	082FNE030			11		082F10W	49 43 9	116 54 54
HINCKLEY (L.1720)	082FNW013				71	082F14W	49 59 35	117 15 41
HOLLIDAY-DISCOVERY	104O 001				89	104O15E	59 59 44	130 33 46
HOLLIDAY-SHIPMENT	104O 002		62		89	104O15E	59 59 39	130 33 16
HOMESTAKE (L.827)	082M 025	44		54	57	082M04W	51 6 40	119 49 44
HORN SILVER (L.1928)	082ESW002	33		24		082E04E	49 3 25	119 41 24
HUCKLEBERRY	093E 037	22		15	24	093E11E	53 40 52	127 10 41
INDEPENDENCE	104A 038		44		66	104A04W	56 5 13	129 55 0
INDIAN CHIEF	092E 011	50		74	64	092E08W	49 26 51	126 18 43
INEL	104B 113				127	104B10W	56 36 36	130 57 8
INGERBELLE	092HSE004	13		14	30	092H07E	49 20 22	120 33 22
INVERMAY	092HSW002		10		80	092H03E	49 10 40	121 1 53
ISLAND COPPER	092L 158	20		13		092L11W	50 35 59	127 28 30
ISLAND MOUNTAIN	093H 006			60		093H04E	53 6 4	121 35 2
J & L	082M 003		11		19	082M08E	51 17 10	118 7 19
JERSEY (L.9070)	082FSW009			27		082F03E	49 5 55	117 13 16
JEWELL	082KNW057				42	082K11E	50 38 32	117 10 44
JOE REED	104P 021		26		40	104P06W	59 17 39	129 25 36
JOHNNY MOUNTAIN	104B 107			63		104B11E	56 37 25	131 4 3
JOSIE (L.536)	082FSW147	36		28		082F04W	49 4 53	117 48 42
KELLY CREEK	103I 092		54		79	103I08E	54 27 9	128 8 21
KENNCO	094D 023		61		88	094D09E	56 30 51	126 7 46
KUTCHO CREEK	104I 060		7		10	104I01W	58 12 19	128 21 36
L & L	103P 076				85	103P13W	55 58 30	129 52 16
LARA	092B 129		38		59	092B13W	48 52 57	123 54 18
LAWYERS	094E 066	27		21		094E06E	57 20 18	127 10 49
LE ROI	082FSW093	36		28		082F04W	49 4 43	117 48 32
LENORA (L.35G)	092B 001	42		45	63	092B13W	48 52 2	123 47 22
LINDQUIST	093E 019		33		51	093E06W	53 21 43	127 17 19
LITTLE BILLIE	092F 105	49		38	120	092F15E	49 45 30	124 32 49
LORNEX	092ISW045	3		7		092I06E	50 27 1	121 2 35
LORRAINE	093N 002				34	093N14W	55 55 40	125 26 27
LUCKY MIKE	092ISE027				119	092I07E	50 18 2	120 41 31
LUSTDUST	093N 009		60		87	093N11W	55 33 57	125 24 52
LYNX (MYRA FALLS)	092F 071	7		8	16	092F12E	49 34 3	125 36 18
MACKTUSH	092F 012		69		100	092F02W	49 7 24	124 50 27
MAGNO	104P 006		26		40	104P05W	59 15 29	129 50 5
MAMIE (L.7262)	093L 091				102	093L14W	54 46 51	127 21 0
MARBLE BAY (L.154)	092F 270	49		38		092F15E	49 45 24	124 33 30
MARTHA ELLEN	104B 092				41	104B01E	56 7 55	130 2 8
MCDAME BELLE	104P 022				40	104P06W	59 16 14	129 22 36
MIDDLE D	104P 080				40	104P05W	59 16 34	129 49 44
MILLIE MACK (L.1831)	082KSW051	18		78	20	082K04E	50 2 37	117 43 38
MINERAL KING	082KSE001	47		34		082K08W	50 20 26	116 25 30
MOLLY GIBSON (L.1578)	082FNW121	51		39		082F11E	49 44 24	117 8 59
MOLLY HUGHES (L.2106)	082KSW002		67		97	082K03W	50 0 17	117 22 50
MOLLY HUGHES (L.2106)	082KSW002			3		082K03W	50 0 17	117 22 50
MONARCH	082N 019			44		082N08W	51 24 56	116 26 16
MOOSE-CLIMAX	103P 205				14	103P12E	55 42 54	129 31 3



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Deposit Name	MINFILE No.	Table Number and Rank				NTS Map	Latitude*		Longitude*	
		1	3	5	6		(deg. min. sec.; NAD 83)			
MORNING STAR (L.443)	082ESW006	38		58		082E04E	49 11 26	119 36 54		
MORRISON	093M 007		14		23	093M01W	55 11 40	126 18 55		
MOTHER LODGE (L.704)	082ESE034			12	13	082E02E	49 6 43	118 43 5		
MOUNT WASHINGTON COPPER	092F 117			57	84	092F14W	49 45 48	125 18 8		
MYRA FALLS (H-W)	092F 330	7		8	16	092F12E	49 34 23	125 35 30		
NETTIE L. (L.4954)	082KNW100			26		082K11W	50 41 18	117 26 58		
NEW MOON	093E 011		46		69	093E13W	53 56 38	127 46 15		
NICKEL PLATE	092HSE038			48		092H08E	49 21 55	120 2 4		
NO. ONE	082FNE025	17		11		082F10W	49 44 27	116 56 57		
NORTH STAR	103P 189	9		9	14	103P12E	55 41 5	129 30 36		
NORTH STAR MINE	082FNE053			1		082F09E	49 40 42	116 1 28		
NORTHHAIR	092JW 012	28		41	37	092J03E	50 6 52	123 6 13		
NORTHERN LIGHTS	104B 053				41	104B01E	56 3 30	130 0 42		
NORTHSTAR - LINDEBORG	104B 146				41	104B01E	56 7 5	130 1 26		
OLD SPORT	092L 035			51		092L06E	50 22 44	127 14 16		
ORO DENORO (L.692)	082ESE063	10		12	13	082E02E	49 7 34	118 32 55		
OTTAWA (L.4968)	082FNW155	29		22		082F14W	49 47 6	117 23 46		
OX-C	093E 101		30		46	093E11E	53 38 40	127 3 16		
PACKSACK	103H 013		29		45	103H14W	53 47 9	129 26 16		
PARADISE (L.4341)	082KSE029			46		082K08W	50 28 18	116 18 9		
PAYNE (L.499)	082KSW006	5		3		082K03E	50 0 25	117 13 53		
PELLAIRE	092O 045				124	092O04E	51 6 1	123 36 15		
PHOENIX (KNOB HILL)	082ESE020	10		12		082E02E	49 5 27	118 35 58		
PIONEER (L.456)	092JNE004			40		092J15W	50 45 40	122 46 50		
PIT	104O 017					104O15E	59 59 44	130 33 16		
POLLYANNA (GIBRALTAR)	093B 006	31		31	112	093B09W	52 30 55	122 15 41		
POPLAR	093L 239		16		28	093L02W	54 1 0	126 59 24		
PORTER-IDAHO	103P 089	12		33	12	103P13W	55 54 6	129 55 35		
PORTLAND CANAL	103P 068			50	85	103P13W	55 58 23	129 54 50		
PREMIER	104B 054	6		4	41	104B01E	56 3 6	130 0 51		
PRICE (MYRA FALLS)	092F 073				16	092F12E	49 33 24	125 34 8		
PRIVATEER (L.1040)	092L 008			64		092L02W	50 1 49	126 49 8		
PROSPERITY	092O 041		13		22	092O05E	51 27 49	123 37 32		
PROVIDENCE (L.618)	082ESE001	10		12		082E02E	49 6 42	118 40 4		
PROVINCE	104B 147				41	104B01E	56 6 47	130 1 26		
QR	093A 121			76		093A12W	52 40 8	121 47 11		
REA GOLD	082M 191		53		78	082M04W	51 8 50	119 49 14		
RED-CHRIS	104H 005				113	104H12W	57 42 1	129 48 14		
RED (SPING)	094D 104		36		55	094D03E	56 14 36	127 10 52		
RED BIRD (L.13465)	082FSW024		23		35	082F03W	49 1 0	117 23 16		
RED MOUNTAIN	103P 086		32		49	103P13E	55 58 4	129 41 47		
REDWING	103P 024	15				103P05W	55 22 52	129 53 13		
REEVES MACDONALD	082FSW026			27		082F03W	49 1 28	117 21 8		
RICHARD III (L.39G)	092B 003			45		092B13W	48 51 53	123 46 47		
RIVER JORDAN	082M 001		28		44	082M01W	51 7 30	118 24 44		
ROCHER DEBOULE	093M 071	21		16	99	093M04E	55 9 35	127 38 36		
ROCK AND ROLL	104B 377		20		32	104B11E	56 43 6	131 14 2		
RUTH-VERMONT	082KNE009	39	34		53	082K15W	50 56 51	116 58 45		
S-1	104B 084				41	104B01E	56 6 58	130 1 12		
SALLY (L.2092)	082ESW073	8		5		082E06E	49 25 41	119 4 21		
SALMO-CONSOLIDATED	082FSW030	35		65		082F03E	49 9 41	117 9 54		
SAMATOSUM	082M 244	16		10		082M04W	51 8 40	119 48 34		
SAPPHIRE (L.1857)	082FNW018					082F14E	49 59 59	117 13 16		
SCHAFT CREEK	104G 015		3		5	104G06E	57 21 51	130 59 25		
SCOTIA	103I 007		59		86	103I04E	54 4 54	129 40 26		
SCRANTON (L.7452)	082FNW112	51		39	105	082F14E	49 47 15	117 3 41		
SENECA	092HSW013		35	81	54	092H05W	49 19 1	121 56 42		
SHASTA	094E 050	27		21	103	094E07W	57 15 13	126 59 35		
SHEEP CREEK	082KNW050			42		082K11E	50 39 40	117 12 1		
SHORE (SULPHURETS)	104B 189		9		15	104B08E	56 28 16	130 11 0		
SILVANA	082FNW050	5		3	71	082F14W	49 58 21	117 15 6		
SILVER BELL (L.1887)	082FNW006				71	082F14W	49 58 45	117 18 14		
SILVER BUTTE	104B 150	6		4	41	104B01E	56 6 11	130 1 51		
SILVER CUP	093M 040			16		093M05E	55 21 4	127 30 58		
SILVER CUP (L.768)	082KNW027	23		26	42	082K11W	50 38 19	117 22 9		
SILVER GIANT	082KNE018			47		082K16W	50 55 52	116 29 7		
SILVER HILL (L.2852)	082FNE084			71		082F10E	49 42 24	116 39 16		
SILVER KING (L.141)	082FSW176	24		18	107	082F06W	49 25 18	117 18 4		
SILVER LAKE (L.7239)	093L 097		64		96	093L14W	54 49 50	127 21 56		
SILVER QUEEN	093L 002	14		49	17	093L02E	54 5 0	126 42 58		
SILVER STANDARD (L. 2262)	093M 049	21		16		093M05E	55 19 1	127 37 47		
SILVER TIP	104B 043				41	104B01E	56 7 37	130 0 35		
SILVER TUNNEL	092JW 003	28		41	37	092J03E	50 4 4	123 8 55		
SILVERSMITH	082FNW053	5		3		082F14E	49 57 51	117 13 29		
SILVERTIP	104O 038		6		8	104O16W	59 55 38	130 20 32		



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Deposit Name	MINFILE No.	Table Number and Rank				NTS Map	Latitude*		Longitude*			
		1	3	5	6		(deg. min. sec.; NAD 83)					
SIMILCO	092HSE001	13		14	30	092H07E	49	19	52	120	32	3
SKOMAC	082ESE045				13	082E02E	49	3	39	118	42	19
SKYLARK (L.763)	082ESE011			12	13	082E02E	49	5	29	118	38	23
SMITH COPPER (MAIN)	092L 208				123	092L07W	50	21	51	126	55	6
SNIP	104B 250			52		104B11E	56	40	7	131	6	32
SPAR	082M 007				122	082M12W	51	33	50	119	54	24
SPEC	104K 001	11		30		104K13E	58	45	34	133	37	6
SPIDER (L.15752)	082KNW045	23		26	42	082K13E	50	46	43	117	36	32
ST. EUGENE (L.666)	082GSW025	26		19		082G05W	49	17	7	115	49	36
STANDARD (L.564)	082FNW180	5		3		082F14W	49	57	22	117	19	14
STEMWINDER (L.2998)	082FNE116			1		082F09E	49	41	36	116	0	58
STEMWINDER (L.384)	082ESW007	38		58	47	082E04E	49	11	46	119	37	42
SULLIVAN	082FNE052	1		1		082F09E	49	42	27	116	0	19
SULPHURETS (BRUCESIDE)	104B 193		9		15	104B08E	56	28	3	130	11	38
SUMMIT	082M 038		71		118	082M13W	51	50	20	119	50	24
SUNRISE (L.18S)	082ESW015				47	082E05W	49	15	36	119	49	58
SUNRO	092C 073			69		092C08E	48	26	54	124	1	59
SUNSET	082FNW113	51		39	105	082F14E	49	47	3	117	4	20
SURF INLET	103H 027			59		103H02W	53	5	29	128	52	56
SUSIE (L.1917)	082ESW090	38		58		082E04E	49	13	5	119	35	52
TAM	093N 093		50		75	093N13E	55	58	19	125	30	14
TAR	092ISW001					092I06E	50	17	18	121	4	14
TASEKO (EMPRESS)	092O 033		68		98	092O03W	51	6	16	123	24	0
TASU	103C 003	48		36		103C16E	52	45	24	132	2	36
TEDDY GLACIER	082KNW069		12		21	082K13E	50	52	5	117	44	52
TOPLEY RICHFIELD	093L 018		49		73	093L09W	54	35	47	126	15	48
TORBRIT	103P 191	9		9	14	103P12E	55	41	13	129	30	27
TREASURE MOUNTAIN	092HSW016	32		70	38	092H06E	49	24	58	121	3	42
TRUE FISSURE	093M 032				108	093M06E	55	22	15	127	2	2
TSACHA	093F 055		47		70	093F03E	53	1	28	125	1	59
TULSEQUAH CHIEF	104K 002	11		30	9	104K12E	58	44	9	133	36	4
TYEE (L.36G)	092B 002	42		45		092B13W	48	51	53	123	46	59
UNION	082ENE003	46		37	91	082E09W	49	33	31	118	21	18
VALLEY	092ISW012	3		7	2	092I06E	50	29	8	121	2	54
VANGUARD COPPER	103P 210				14	103P12E	55	44	8	129	33	30
VICTOR	092ISW005					092I06E	50	27	42	121	1	11
VICTOR (L.4565)	082FNW204	5		3		082F14W	49	59	42	117	16	18
VICTORY	103P 206				14	103P12E	55	43	31	129	30	54
VINE 1	082GSW050		41		62	082G05W	49	24	0	115	49	14
VIRGINIA SILVER	093M 021	45		77	56	093M03W	55	1	56	127	16	19
WAGNER	082KNW212	23			42	082K11E	50	40	4	117	12	25
WAR EAGLE (L.680)	082FSW097	36		28		082F04W	49	4	58	117	48	25
WELLINGTON (L.2621)	082ESW072	8		5	104	082E06E	49	25	36	119	4	36
WESTMONT (L.8929)	082FNW145	29		22		082F14W	49	49	42	117	19	40
WHITewater (L.1170)	082KSW033			3		082K03E	50	2	56	117	7	59
WINDY CRAGGY	114P 002		4		6	114P12E	59	44	9	137	44	37
WINNIPEG (L.599)	082ESE033				13	082E02E	49	4	25	118	34	20
WISCONSIN (L.2928)	082FSE036		56		81	082F07W	49	24	41	116	57	48
WOLF	103P 198		22		14	103P12E	55	42	26	129	31	7
WOOLSEY	082N 004	52		79	67	082N04W	51	11	43	117	54	20
YANKEE GIRL (L.7712)	082FSW068	24		18		082F06E	49	17	31	117	11	4
YELLOW KID-TEXADA MINES	092F 258	49		38		092F10E	49	42	19	124	32	52
YMIR (L.1708)	082FSW074			18		082F06E	49	19	19	117	10	17
YREKA	092L 052			61		092L05E	50	27	24	127	34	8



Table 5
Production Data for Major Silver Mines of British Columbia



Rank	Name**	MINFILE No.	Ag	Ag	Au	Cu	Pb	Zn	Cd	Mo	Tonnes (million)	Period * producing
			(million oz)	(million grams)				(thousand kilograms)				
1	Sullivan (3)	082FNE052	296.71	9228.78	0.18	5.11	8269.63	7592.82	2.38		142.32	1900 - 1996 *
	North Star Mine	082FNE053	1.34	41.67			21.78	0.01			0.06	1895 - 1929
	Stemwinder (L.2998)	082FNE116	0.06	1.96	0.001		0.95	3.99			0.03	1926 - 1926
2	Equity Silver	093L 001	71.36	2219.48	15.80	84.09					33.81	1981 - 1994
3	Slocan Camp (162)		68.26	2123.22	0.38	0.004	258.76	256.99	0.61		4.92	1892 - 1993
	Standard	082FNW180	8.95	278.23	0.02		39.69	49.36	0.06		0.75	1894 - 1969
	Silvana	082FNW050	7.81	242.98			28.69	26.30	0.07		0.51	1913 - 1993
	Silversmith	082FNW053	7.27	226.11	0.04		32.52	11.75	0.02		0.36	1893 - 1965
	Victor	082FNW204	4.15	129.13	0.08	0.0001	21.75	14.23	0.08		0.15	1923 - 1985
	Payne	082KSW006	3.74	116.39			17.38	1.02			0.11	1893 - 1939
	Rambler	082KSW018	3.50	108.96	0.001	0.0003	10.53	2.65	0.003		0.19	1895 - 1951
Whitewater	082KSW033	3.49	108.68	0.05		13.94	23.13	0.04		0.47	1892 - 1980	
4	Premier Camp (9)		43.09	1340.39	67.90	1.85	25.38	8.67	0.08		7.70	1918 - 1996
	Premier	104B 054	42.85	1332.92	62.21	1.85	24.81	7.96	0.08		6.65	1918 - 1996
	Silver Butte	104B 150	0.08	2.54	0.85						0.11	1991 - 1993
	Big Missouri	104B 046	0.05	1.64	1.82		0.001	0.002			0.77	1927 - 1942
5	Beaverdell Camp (24)		39.44	1226.62	0.54	0.01	12.97	15.41	0.06		1.22	1901 - 1991
	Beaverdell	082ESW030	34.59	1076.01	0.52	0.01	11.60	13.90	0.06		1.20	1913 - 1991
	Sally	082ESW073	1.96	61.00	0.01		0.49	0.22			0.010	1901 - 1941
	Wellington	082ESW072	1.51	46.89	0.01		0.44	0.66			0.007	1920 - 1954
	Highland Lass	082ESW133	0.99	30.93	0.01		0.31	0.49			0.005	1922 - 1936
6	Eskay Creek	104B 008	34.26	1065.55	20.80		0.0004	0.001			0.31	1971 - 1997 *
7	Highland Valley (7)		33.56	1043.84	6.40	3244.13				58.05	882.32	1915 - 1996 *
	Valley	092ISW012	21.61	672.12	4.98	1820.89				21.63	482.73	1983 - 1996
	Lornex	092ISW045	8.65	269.14	0.10	971.08				29.24	270.66	1972 - 1991
	Bethlehem	092ISE001	2.75	85.41	1.02	343.85				0.04	80.11	1963 - 1979
	Bethlehem (Snowstorm)	092ISE005	0.46	14.44	0.26	54.30				0.28	15.89	1915 - 1982
8	Myra Falls (2)		24.10	749.70	22.36	291.99	63.21	750.55	1.35		16.94	1967 - 1996 *
	Lynx (Myra Falls)	092F 071	16.24	505.14	10.71	77.02	48.71	375.79	1.35		5.73	1967 - 1985
	Myra Falls (H-W)	092F 330	7.86	244.56	11.65	214.98	14.50	374.76			11.21	1986 - 1996
9	Kitsault River (3)		20.01	622.50	0.003	0.0002	4.87	0.28			1.28	1919 - 1959
	Torbrit	103P 191	18.65	579.96	0.003		4.87	0.28			1.25	1928 - 1959
	Dolly Varden	103P 188	1.36	42.45		0.0002	0.001				0.03	1919 - 1940
	North Star	103P 189	0.003	0.09							0.0001	1919 - 1921
10	Samatsum	082M 244	13.80	429.36	0.64	3.68	5.07	9.54			0.55	1989 - 1992
11	Ainsworth Camp (52)		11.31	351.83	0.03	2.86	278.48	259.10	1.1583		5.58	1894 - 1989
	Bluebell	082FNE043	7.11	221.01	0.01	2.86	233.80	249.02	1.14		4.82	1895 - 1982
	No. One	082FNE025	1.99	62.01	0.01		0.14				0.04	1889 - 1929
	Highlander	082FNE030	0.86	26.88	0.005		21.02	5.20	0.002		0.40	1889 - 1961
12	Greenwood Camp (61)		9.98	310.51	39.97	298.84	0.73	0.26	0.0001		29.15	1893 - 1989
	Phoenix	082ESE020	5.88	183.04	28.34	235.69	0.0005				21.55	1900 - 1978
	Providence	082ESE001	1.37	42.55	0.18		0.18	0.12			0.01	1893 - 1973
	Mother Lode	082ESE034	0.69	21.41	5.39	34.92					4.25	1900 - 1962
	Skylark	082ESE011	0.55	17.03	0.11	0.01	0.13	0.05			0.04	1893 - 1989
	Oro Denoro	082ESE063	0.03	0.95	0.12	1.69					0.12	1903 - 1917
13	Island Copper	092L 158	9.46	294.11	35.27	1227.33				32.01	366.72	1971 - 1995
14	Similco (6)		9.46	294.30	22.85	805.03	0.005	0.002			199.69	1908 - 1996
	Similco	092HSE001	8.50	264.45	15.54	648.39					157.07	1908 - 1996
	Ingerbelle	092HSE004	0.96	29.78	7.30	156.63					42.63	1972 - 1979
15	Huckleberry	093E 037										1997 opened *
16	Silver Standard - Rocher Deboule (13)		7.88	245.11	0.63	2.79	8.309	12.473	0.15		0.36	1913 - 1989
	Silver Standard	093M 049	7.63	237.39	0.46	0.20	7.96	12.28	0.15		0.21	1913 - 1989
	Silver Cup	093M 040	0.11	3.55	0.001		0.23	0.13			0.01	1914 - 1979
	Rocher Deboule	093M 071	0.07	2.17	0.13	2.56					0.04	1915 - 1929
17	Anyox Camp (5)		7.13	221.74	4.19	335.85	0.0004				22.55	1914 - 1939
	Hidden Creek	103P 021	6.63	206.31	3.77	321.55					21.73	1914 - 1936
	Bonanza	103P 023	0.28	8.75	0.09	14.30					0.66	1928 - 1935
	Granby Point	103P 022	0.19	5.86	0.18		0.0004				0.12	1916 - 1938
18	Ymir-Nelson Camp (67)		6.51	202.60	17.04	7.73	14.73	9.72	0.0006		1.66	1889 - 1985
	Silver King	082FSW176	4.44	138.21	0.01	6.79	0.02	0.004			0.20	1889 - 1958
	Yankee Girl	082FSW068	0.71	22.04	3.85		6.20	6.47			0.37	1907 - 1951
	Ymir	082FSW074	0.46	14.28	3.41		4.78	0.81			0.33	1899 - 1973
19	St. Eugene	082GSW025	5.87	182.69	0.08		113.03	14.48			1.48	1899 - 1929
20	Britannia	092GNW003	5.81	180.85	15.35	516.96	15.56	125.29	0.44		47.88	1905 - 1988
21	Toodoggone Camp (3)		5.46	169.93	7.29	0.013					0.82	1981 - 1996
	Lawyers	094E 066	3.64	113.18	5.40						0.62	1989 - 1992
	Shasta	094E 050	1.06	32.93	0.60						0.12	1989 - 1991
	Baker	094E 026	0.77	23.81	1.28	0.013					0.08	1981 - 1997
22	Slocan City Camp (54)		4.93	153.28	0.10	0.0021	3.38	1.41	0.0006		0.08	1895 - 1985
	Ottawa	082FNW155	1.80	55.94	0.001	0.0008	0.36	0.01			0.03	1903 - 1984
	Enterprise	082FNW148	1.05	32.68	0.002	0.0001	1.67	1.07	0.0004		0.01	1896 - 1977
	Arlington	082FNW152	1.01	31.43	0.001	0.0008	0.86	0.12			0.02	1897 - 1979
	Westmont	082FNW145	0.36	11.08	0.002	0.0001	0.20	0.07	0.0001		0.003	1907 - 1980
23	Brenda	092HNE047	4.76	148.05	2.28	276.23				67.93	182.64	1970 - 1990
24	Horn Silver	082ESW002	4.09	127.19	0.33	0.03	0.33	0.37			0.43	1915 - 1984



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			(million oz)	(million grams)				(thousand kilograms)				
25	Granduc	104B 021	3.99	124.05	2.00	190.14					15.53	1971 - 1984
26	Trout Lake (43)		3.93	122.22	1.20	0.10	15.29	12.04	0.06		0.26	1895 - 1989
	Spider (L.15752)	082KNW045	1.72	53.48	0.371	0.085	10.84	11.52	0.06		0.13	1911 - 1958
	Silver Cup (L.768)	082KNW027	1.46	45.28	0.173	0.0005	2.71	0.21			0.02	1895 - 1988
	Nettie L. (L.4954)	082KNW100	0.46	14.28	0.024		0.59	0.01			0.01	1899 - 1922
27	Salmo Camp (23)		3.78	117.69	23.11	0.05	238.08	783.25	5.73		23.05	1899 - 1988
	Annex	082FSW219	1.09	34.05		0.016	7.14	42.68	0.48		0.76	1970 - 1975
	Hb	082FSW004	1.01	31.54	0.003	0.001	51.18	272.91	2.02		6.66	1912 - 1978
	Jersey	082FSW009	0.69	21.48			114.94	263.72	2.01		8.13	1944 - 1970
	Reeves Macdonald	082FSW026	0.64	19.84		0.028	57.69	203.62	1.22		5.85	1949 - 1971
28	Rosland Camp (44)		3.54	110.24	86.53	72.66	0.22	0.27	0.0001		5.57	1894 - 1982
	Le Roi	082FSW093	1.70	52.97	34.02	44.69					2.45	1898 - 1942
	Centre Star	082FSW094	0.74	23.15	34.16	13.37					2.07	1897 - 1917
	Josie	082FSW147	0.50	15.54	9.79	7.97					0.57	1898 - 1922
	War Eagle	082FSW097	0.39	12.04	5.66	5.02					0.30	1898 - 1905
29	Granisle/Bell (2)		3.47	108.07	19.72	479.31				0.0066	129.42	1966 - 1992
	Granisle	093L 146	2.24	69.75	6.83	214.30				0.0066	52.27	1966 - 1982
	Bell	093M 001	1.23	38.32	12.89	265.01					77.15	1972 - 1992
30	Tulsequah Chief (2)	104K 002,001	3.40	105.77	2.93	12.34	12.21	56.56	0.21		0.93	1939 - 1957
31	Gibraltar (4)	093B 012	3.07	95.52	0.14	807.78				8.48	300.30	1972 - 1996 *
	Gibraltar	093B 012										
	Gibraltar West	093B 007										
	Granite Lake	093B 013										
	Pollyanna	093B 006										
32	Afton/Ajax (7)		2.87	89.40	16.73	260.25					47.97	1899 - 1996
	Afton	092INE023	2.76	85.79	14.83	232.19					40.79	1899 - 1991
	Ajax (West)	092INE012	0.05	1.69	0.79	11.42					2.97	1996 - 1996
	Ajax (East)	092INE013	0.05	1.45	0.99	14.19					4.04	1994 - 1995
33	Porter-Idaho	103P 089	2.36	73.43	0.03	0.03	1.38	0.01			0.03	1922 - 1981
34	Mineral King	082KSE001	1.86	57.72		0.66	37.44	90.37			2.10	1922 - 1981
35	Duthie (3)		1.81	56.42	0.11	0.02	21.43	3.02	0.011		0.07	1905 - 1988
	Duthie (Henderson)	093L 088	1.58	49.21	0.06		19.78	1.30	0.00003		0.04	1923 - 1988
	Dome	093L 089	0.22	6.96	0.05	0.020	1.61	1.71	0.011		0.04	1953 - 1980
	Coronado	093L 090	0.01	0.24	0.0013		0.05	0.01			0.0001	1905 - 1940
36	Tasu	103C 003	1.70	52.82	1.43	57.09					23.30	1914 - 1983
37	Franklin Camp (4)		1.39	43.35	1.73	0.02	0.18	0.32			0.21	1913 - 1989
	Union	082ENE003	1.39	43.31	1.73	0.013	0.17	0.30			0.21	1913 - 1989
38	Texada Island (10)		1.28	39.78	3.30	34.50					19.34	1896 - 1976
	Yellow Kid	092F 258	0.76	23.65	0.89	25.43					18.95	1957 - 1976
	Marble Bay	092F 270	0.41	12.62	1.56	6.79					0.29	1899 - 1929
	Little Billie	092F 105	0.04	1.20	0.36	0.82					0.06	1896 - 1952
39	Kokanee (15)		1.24	38.67	0.48	0.001	3.84	1.26	0.01		0.10	1899 - 1988
	Molly Gibson (L.1578)	082FNW121	1.00	31.06	0.0004		2.26	0.01			0.06	1899 - 1950
	Scranton	082FNW112	0.11	3.50	0.1172	0.001	1.28	1.21	0.014		0.03	1948 - 1979
40	Bralorne Camp (9)		1.00	31.21	130.11	0.01	0.06				7.43	1970 - 1982
	Bralorne	092JNE001	0.71	21.97	87.64						4.98	1990 - 1980
	Pioneer	092JNE004	0.24	7.61	41.53						2.31	1908 - 1983
41	Brandywine Camp (3)		0.89	27.54	5.53	0.42	5.51	7.49	0.003		0.50	1970 - 1982
	Northair	092JW 012	0.85	26.31	5.18	0.404	5.34	7.33	0.003		0.48	1974 - 1982
	Brandywine	092JW 001	0.02	0.72	0.34	0.013	0.16	0.16			0.01	1970 - 1978
	Silver Tunnel	092JW 003	0.02	0.51	0.003						0.01	1978 - 1978
42	Goldstream	082M 141	0.84	26.23	0.04	78.27		7.99			2.22	1983 - 1996
43	Blackdome	092O 053	0.82	25.59	7.21						0.33	1986 - 1991
44	Monarch	082N 019	0.81	25.12			46.22	71.31			0.83	1890 - 1957
45	Mount Sicker (3)		0.80	24.97	1.17	9.55	0.16	0.19	0.005		0.28	1898 - 1964
	Lenora (L.35G)	092B 001	0.34	10.72	0.39	3.60	0.16	0.19	0.005		0.12	1898 - 1964
	Tyee (L.36G)	092B 002	0.44	13.73	0.76	5.84					0.15	1901 - 1909
	Richard III (L.39G)	092B 003	0.02	0.52	0.02	0.11					0.005	1903 - 1907
46	Paradise	082KSE029	0.74	22.93	0.001		7.25	3.62			0.06	1901 - 1953
47	Silver Giant	082KNE018	0.62	19.36	0.0001	0.22	29.43	3.23			1.08	1908 - 1976
48	Nickel Plate Camp (8)		0.61	18.85	76.67	1.87	0.005	0.0007			15.79	1904 - 1996
	Nickel Plate	092HSE038	0.51	15.95	66.17	0.98					14.60	1904 - 1996
49	Silver Queen	093L 002	0.44	13.65	0.10	0.41	0.70	5.05			0.18	1972 - 1973
50	Portland Canal (19)		0.40	12.58	0.33	0.01	1.02	1.14			0.05	1909 - 1984
	Dunwell	103P 052	0.33	10.22	0.30	0.01	0.84	1.11			0.05	1926 - 1937
	Portland Canal	103P 068	0.03	0.80	0.02		0.13				0.01	1911 - 1912
51	Benson Lake (2)		0.39	12.22	3.93	42.43	1.02	1.14			2.69	1962 - 1963
	Old Sport	092L 035	0.38	11.73	3.87	41.19					2.62	1962 - 1963
52	Snip	104B 250	0.35	10.86	28.57	0.25					1.10	1991 - 1997
53	Dusty Mac	082ESW078	0.34	10.55	0.61	0.002	0.002	0.0002			0.09	1969 - 1976
54	Homestake	082M 025	0.28	8.75	0.01	0.01	0.14	0.20			0.01	1926 - 1941
55	Enterprise Camp (4)		0.27	8.25	0.27	0.05	1.06	0.24			0.07	1889 - 1980
	Enterprise	092ISE028	0.25	7.78	0.25	0.05	1.04	0.24			0.07	1926 - 1980
56	Cronin	093L 127	0.26	8.17	0.01	0.01	1.37	1.52			0.03	1917 - 1974
57	Mount Washington	092F 117	0.23	7.24	0.13	3.55					0.38	1964 - 1967



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			(million oz)	(million grams)				(thousand kilograms)				
58	Fairview Camp (12)		0.23	7.01	0.77	0.01	0.15	0.03			0.16	1893 - 1987
	Fairview (L.556S)	082ESW008	0.12	3.77	0.29	0.01	0.08				0.09	1937 - 1961
	Susie (L.1917)	082ESW090	0.05	1.52	0.08	0.004	0.05	0.02			0.02	1960 - 1976
	Morning Star (L.443)	082ESW006	0.03	0.97	0.25	0.001	0.01	0.002			0.02	1893 - 1941
	Stemwinder (L.384)	082ESW007	0.02	0.53	0.10		0.004	0.0002			0.03	1893 - 1956
59	Surf Inlet	103H 027	0.20	6.26	12.10	2.83					0.92	1902 - 1943
60	Wells Camp (3)		0.15	4.65	38.32						2.74	1929 - 1975
	Cariboo Gold Quartz	093H 019	0.09	2.85	26.85						1.95	1902 - 1967
	Island Mountain	093H 006	0.05	1.50	10.38						0.70	1934 - 1954
61	Yreka	092L 052	0.15	4.54	0.05	3.94					0.15	1902 - 1967
62	Esperanza	103P 126	0.14	4.45	0.01	0.001	0.006				0.00	1911 - 1948
63	Johnny Mountain	104B 107	0.14	4.35	2.82	1.008					0.20	1988 - 1993
64	Zeballos Camp (18)		0.12	3.88	9.15	0.03	0.12	0.00003			0.61	1929 - 1975
	Privateer	092L 008	0.07	2.16	5.30	0.004	0.010				0.28	1934 - 1975
65	Bayonne	082FSW030	0.12	3.75	1.31		0.04	0.023	0.00007		0.08	1935 - 1984
66	Erickson	104P 029	0.10	2.99	7.232						0.5072	1939 - 1988
67	Emerald Glacier	093E 001	0.08	2.60	0.002		0.77	0.892			0.0083	1951 - 1968
68	Blue Grouse	092C 017	0.08	2.51	0.0002	6.81					0.2493	1717 - 1960
69	Sunro	092C 073	0.07	2.26	0.20	13.75					1.3290	1962 - 1978
70	Treasure Mountain	092HSW016	0.07	2.19	0.0001		0.29	0.065			0.0015	1929 - 1988
71	Silver Hill (L.2852)	082FNE084	0.07	2.18			0.16	0.016			0.002	1901 - 1952
72	Atlin Ruffner	104N 011	0.07	2.08	0.003	0.0003	0.14	0.014			0.004	1916 - 1988
73	Elk (Siwash North)	092HNE096	0.06	1.90	1.52						0.02	1992 - 1995
74	Indian Chief	092E 011	0.05	1.71	0.02	1.10					0.07	1904 - 1938
75	Golden Bear	104K 079	0.05	1.65	7.72						0.97	1990 - 1997
76	QR	093A 121	0.03	1.07	3.29						1.06	1995 - 1997
77	Virginia Silver	093M 021	0.02	0.70	0.0004		0.01	0.006			0.0002	1975 - 1976
78	Millie Mack	082KSW051	0.02	0.67	0.01		0.02	0.001			0.0004	1899 - 1979
79	Woolsey	082N 004	0.01	0.35	0.0001	0.0001	0.109	0.026			0.0055	1930 - 1967
80	Invermay	092HSW002	0.01	0.31	0.001		0.010	0.011			0.0001	1936 - 1947
81	Seneca	092HSW013	0.001	0.03	0.001	0.003		0.018			0.0003	1962 - 1962

* Mines are still producing.

** Number in brackets is the number of mines used in the calculations; the significant ones are shown.



Table 6
Reserve Data for Major Silver Mines and Significant Deposits of British Columbia



Rank	Name	MINFILE No.	Deposit Types	Category	Tonnes	Contained Metals		Grade					Ore Zone	Year	Reserve Comments	Reserve Reference
						Ag	Au	Ag	Au	Cu	Pb	Zn				
						(kilograms)		(grams/tonne)		(per cent)						
1	<u>Eskay Creek (1)</u>				1,692,805	3,779,394	85,505									
	Eskay Creek	104B 008	Subaqueous hot spring Ag-Au	Combined	1,356,240	3,640,921	78,730	2684.570	58.050			TOTAL	1998	Proven and probable reserves at Eskay Creek as of January 1, 1998.	Prime Resources Group Inc. Press Release, January 22, 1998.	
	Eskay Creek	104B 008	Subaqueous hot spring Ag-Au	Possible	336,565	138,473	6,775	411.430	20.130			TOTAL	1998	Geological resources (mineralized material) at January 1, 1998.	Prime Resources Group Inc. Press Release, January 22, 1998.	
2	Highland Valley	092ISW012	Porphyry Cu +/- Mo +/- Au	Proven	495,000,000	2,376,000	15,840	4.800	0.032	0.422		HIGHLAND VALLEY	1997	Reserves within Valley and Lornex pits. Silver and gold values are estimated from previous calculations. Additional resources are at depth beneath the Valley pit.	Information Circular 1998-1, page 8. Northern Miner - April 28, 1997.	
3	<u>Galore Creek (3)</u>				284,000,000	1,934,100	125,537									
	Central	104G 090	Alkalic porphyry Cu-Au	Indicated	233,900,000	1,637,300	81,865	7.000	0.350	0.670		CENTRAL	1992	Silver is estimated. Cutoff is 0.27 per cent copper equivalent.	CIM Special Volume 46, page 642.	
	Southwest	104G 095	Alkalic porphyry Cu-Au	Indicated	42,400,000	296,800	43,672	7.000	1.030	0.550		SOUTHWEST	1992	Silver is estimated. Cutoff is 0.27 per cent copper equivalent.	CIM Special Volume 46, page 642.	
	North Junction	104G 092	Alkalic porphyry Cu-Au	Indicated	7,700,000					1.500		NORTH JUNCTION	1992	Cutoff is 0.4 per cent copper.	CIM Special Volume 46, page 642.	
4	Cirque	094F 008	Sedimentary exhalative Zn-Pb-Ag	Indicated	24,700,000	1,254,760		50.800			2.300	8.500	NORTH	1991	Mine Development Certificate issued to Curragh Inc., December 1992.	EMPR Information Circular 1994-1, page 14.
5	Schaft Creek	104G 015	Porphyry Cu +/- Mo +/- Au	Combined	971,495,000	1,165,794	136,009	1.200	0.140	0.298		SCHAFT CREEK	1981	Proven and probable open pit resource (0.033 per cent MoS ₂).	CIM Special Volume 46, pages 239-246.	
6	Windy Craggy	114P 002	Besshi massive sulphide Cu-Zn	Measured	297,440,000	1,139,195	59,488	3.830	0.200	1.380		WINDY CRAGGY	1991	Cut-off grade is 0.5 per cent copper.	Geddes Resources Ltd. Annual Report 1991.	
7	Capoose	093F 040	Subvolcanic Cu-Ag-Au (As-Sb)	Indicated	28,301,520	1,018,855	8,490	36.000	0.300			CAPOOSE	1987	Drill indicated.	Granges Exploration Ltd. Form 10-K, December 31, 1987.	
8	Silvertip (Midway)	104O 038	Polymetallic mantle Ag-Pb-Zn	Measured	2,570,000	835,250	1,619	325.000	0.630		6.400	8.800	SILVERTIP	1998	Based on a 1997 drilling program. Includes measured, indicated and inferred.	Northern Miner, February 23, 1998 and GCNL No. 10, 1998.
9	Tulsequah Chief	104K 002	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Measured	7,910,000	798,198	19,142	100.910	2.420	1.270	1.180	6.350	TULSEQUAH CHIEF	1996	An initial mineable reserve which is part of the overall geological reserve of 8.9 million tonnes.	Information Circular 1998-1, pages 17, 20.
10	<u>Kutcho Creek (1)</u>				28,000,000	554,400	7,410									
	Kutcho Creek	104I 060	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Unclassified	17,000,000	496,400	6,630	29.200	0.390	1.620		2.320	KUTCHO	1986	Approximate.	CIM Special Volume 37, page 122.
	Kutcho Creek	104I 060	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Unclassified	1,000,000	58,000	780	58.000	0.780	3.240		4.640	ESSO WEST	1986	The Esso West zone reserves are reported to be between 1 and 1.5 million tonnes with a grade approximately double that of the Kutcho	CIM Special Volume 37, page 122.
	Kutcho Creek	104I 060	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Unclassified	10,000,000					1.000		1.200	SUMAC	1986	Approximate.	CIM Special Volume 37, page 122.
11	Copper Canyon	104G 017	Alkalic porphyry Cu-Au	Indicated	32,400,000	554,040	37,908	17.100	1.170	0.750		COPPER CANYON	1990	Drill-indicated geological resources.	CIM Special Volume 48, pages 645-649.	
12	Porter-Idaho	103P 089	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	826,400	552,448		668.500			5.000	5.000	PORTER IDAHO	1991	Underground geological reserves.	D. Alldrick, PhD Thesis, UBC, 1991.
13	<u>Greenwood Camp (6)</u>				43,219,852	546,661	38,219									
	Oro Denoro (L.692)	082ESE063	Cu skarn	Indicated	1,058,700	10,905	741	10.300	0.700	0.950		MAIN	1968		Campbell, 1968 and Western Miner, October 1968.	
	Oro Denoro (L.692)	082ESE063	Cu skarn	Combined	42,460,000	465,786	34,817	10.970	0.820	0.920		TOTAL	1967	Combined ore includes Reasonably assured (3,524,400 tonnes grading 1.32 per cent copper, 0.82 grams per tonne gold and 10.97 grams per tonne silver); Indicated (18,388,600 tonnes grading 0.80 per cent copper, 0.82 grams per tonne gold and 10.97 grams)	Weymark, W.J., Western Miner, February 1967, page 49.	
	Skylark (L.763)	082ESE011	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	77,103	52,862	211	685.600	2.740			H	1986	In excess of 77,103 tonnes grading better than 685.6 g/t silver and 2.74 g/t gold of economically recoverable ore over a 1.5-metre width.	Assessment Report 15731.	
	Skomac	082ESE045	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	37,191	12,749	126	342.800	3.400		2.000	2.000	SKOMAC	1981	In addition, 8164 tonnes of dump material grades 116.5 grams per tonne silver.	Northern Miner, April 9, 1981.
	Dentonia	082ESE055	Alkalic intrusion-associated Au	Indicated	90,710	6,219	994	68.560	10.960			DENTONIA	1975	Probable reserves.	Northern Miner - May 29, 1975.	
	Dentonia	082ESE055	Alkalic intrusion-associated Au	Measured	90,710	6,219	994	68.560	10.960			DENTONIA	1975	Semi-proven reserves.	Northern Miner - May 29, 1975.	
	Mother Lode (L.704)	082ESE034	Cu skarn	Combined	407,288	1,812	208	4.450	0.510	0.650		MOTHER LODGE	1984	Proven and probable; includes the Greyhound deposit (082ESE050).	Royex Sturgex Mining Ltd., Information Circular 27/04/84.	
	Greyhound	082ESE050	Cu skarn	Combined								GREYHOUND	1984	Proven and probable; included with the Mother Lode deposit (082ESE034).	Royex Sturgex Mining Ltd., Information Circular 27/04/84.	
	Golden Crown/Winnipeg	082ESE032,033	Au-quartz veins	Indicated	56,850	1,014	868	17.830	15.260	0.700		GOLDEN CROWN	1989	Estimated drill indicated reserves; includes Winnipeg (082ESE033).	Atwood Gold Corporation, Filing Statement, May 31, 1989.	



Table 6
Reserve Data for Major Silver Mines and Significant Deposits of British Columbia



Rank	Name	MINFILE No.	Deposit Types	Category	Tonnes	Contained Metals		Grade					Ore Zone	Year	Reserve Comments	Reserve Reference	
						Ag	Au	Ag	Au	Cu	Pb	Zn					
						(kilograms)		(grams/tonne)		(per cent)							
14	<u>Kitsault River (7)</u>				1,610,107	542,412	28										
	Torbrit 103P 191		Polymetallic veins Ag-Pb-Zn+/-Au	Combined	786,285	245,242		311.900			0.420	0.500	TORBRIT	1971	Proven, probable and possible reserves.	Dolly Varden Mining Ltd. Annual Report 1971.	
	Wolf 103P 198		Polymetallic veins Ag-Pb-Zn+/-Au	Combined	485,270	162,857		335.600			0.590	0.120	WOLF	1971	Proven, probable and possible reserves.	Dolly Varden Mining Ltd. Annual Reports 1971, 1973.	
	North Star 103P 189		Polymetallic veins Ag-Pb-Zn+/-Au	Combined	127,901	51,339		401.400					NORTH STAR	1987	Proven, probable reserves.	George Cross News Letter May 25, 1987.	
	Dolly Varden 103P 188		Polymetallic veins Ag-Pb-Zn+/-Au	Combined	42,633	32,150		754.100					DOLLY VARDEN	1989	Proven, probable reserves.	George Cross News Letter May 25, 1989.	
	Moose-Climax 103P 205		Polymetallic veins Ag-Pb-Zn+/-Au	Unclassified	90,000	23,130		257.000					MOOSE-CLIMAX	1981	For a block with dimensions of 200 by 100 by 2 metres.	Assessment Report 9564, page 18.	
	Victory 103P 206		Polymetallic veins Ag-Pb-Zn+/-Au	Indicated	66,218	26,030		393.100					VICTORY	1975	In two zones.	SMF July 14, 1975 - Northern Homestake Mining Ltd., E.M. Wilson.	
	Vanguard Copper 103P 210		Intrusion-related Au pyrrhotite veins	Unclassified	11,800	1,664	28	141.000	2.400	8.600			VANGUARD COPPER	1973		Property File - Sevensa, 1973, page 7.	
15	<u>Sulphurets (3)</u>				1,156,818	511,016	21,273										
	Sulphurets (Bruce) 104B 193		Epithermal Au-Ag-Cu: high sulphidation	Combined	749,264	485,373	11,539	647.800	15.400				WEST	1994	Proven and probable geological reserves.	Assessment Report 24610, page i.	
	Shore (Sulphurets) 104B 189		Epithermal Au-Ag: low sulphidation	Combined	83,703	13,284	1,063	158.700	12.700				TOTAL	1994	Exploration to date has outlined proven and probable reserves.	Assessment Report 24610, page i.	
	Goldwedge 104B 105		Epithermal Au-Ag: low sulphidation	Indicated	289,500	11,088	7,932	38.300	27.400				GOLDEN ROCKET	1988		Assessment Report 18679, page 8.	
	Goldwedge 104B 105		Epithermal Au-Ag: low sulphidation	Indicated	34,351	1,271	739	37.000	21.500				DISCOVERY	1988		Assessment Report 18679, page 8.	
16	<u>Myra Falls (3)</u>				12,300,000	496,920	23,370										
	Myra Falls (H-W) 092F 330		Noranda/Kuroko massive sulphide Cu-Pb-Zn	Combined	12,300,000	496,920	23,370	40.400	1.900	1.800	0.300	7.800	TOTAL	1996	Geological reserves at December 31, 1996.	WWW http://www.westmine-resources.com/myrafall.htm .	
	Myra Falls (H-W) 092F 330		Noranda/Kuroko massive sulphide Cu-Pb-Zn	Combined	316,940	11,220	285	35.400	0.900	1.100		3.200	EXTENSION	1996		Northern Miner, December 8, 1997.	
	Lynx (Myra Falls) 092F 071		Noranda/Kuroko massive sulphide Cu-Pb-Zn	Combined	315,300	29,638	946	94.000	3.000	1.700	1.100	10.000	LYNX	1993	Proven and probable geological reserves.	George Cross News Letter No.30 (February 12), 1993.	
	Price (Myra Falls) 092F 073		Noranda/Kuroko massive sulphide Cu-Pb-Zn	Combined	227,935	15,203	707	66.700	3.100	4.100	0.300	4.400	TRUMPETER	1995	Proven and probable geological reserves.	Assessment Report 24617.	
	Price (Myra Falls) 092F 073		Noranda/Kuroko massive sulphide Cu-Pb-Zn	Combined	185,000	12,284	278	66.400	1.500	1.400	1.300	10.400	PRICE	1993	Proven and probable geological reserves.	George Cross News Letter No.30 (February 12), 1993.	
17	<u>Silver Queen (2)</u>				1,392,414	478,633	5,404										
	Silver Queen 093L 002		Polymetallic veins Ag-Pb-Zn+/-Au	Inferred	204,097	169,298	202	829.500	0.990				4.000	CAMP	1995	Inferred reserves of the Camp vein.	George Cross News Letter No.61 (March 26), 1996.
	Silver Queen 093L 002		Polymetallic veins Ag-Pb-Zn+/-Au	Measured	399,124	160,049	3,309	401.000	8.290				7.600	NO. 3 VEIN	1995	Defined reserves of the south end of the No. 3 vein.	George Cross News Letter No.61 (March 26), 1996.
	Silver Queen 093L 002		Polymetallic veins Ag-Pb-Zn+/-Au	Measured	644,041	105,494	1,893	163.800	2.940				5.430	NO. 3	1995	Defined reserves of the central/north end of the No. 3 vein.	George Cross News Letter No.61 (March 26), 1996.
	Cole 093L 162		Polymetallic veins Ag-Pb-Zn+/-Au	Indicated	145,152	43,792		301.700						DIAMOND BELLE	1970	Reserves for Diamond Belle vein.	Property File - unpublished report.
18	<u>Giant Copper (2)</u>				57,800,000	398,820	16,184										
	Giant Copper 092HSW001		Porphyry Cu +/- Mo +/- Au	Indicated	57,800,000	398,820	16,184	6.900	0.280	0.550				Giant Copper	1966	Geological reserve estimated by Wright Engineers in a 1966 feasibility study.	Information Circular 1996-1, page 16.
	Giant Copper 092HSW001		Porphyry Cu +/- Mo +/- Au	Measured	29,500,000	364,030	11,210	12.340	0.380	0.650				BRECCIA	1996	Previous drilling and underground development have outlined an open pit resource for the AM Breccia zone.	Information Circular 1997-1, page 19.
	Giant Copper 092HSW001		Porphyry Cu +/- Mo +/- Au	Indicated	19,956,200	239,275	8,182	11.990	0.410	0.750				AREA	1995	Drill indicated resource using a strip ratio of 4.5 to 1 and including a small, near-surface pit estimated to contain 5,986,860 tonnes	Northern Miner - February 13, 1995.
	Invermay 092HSW002		Polymetallic veins Ag-Pb-Zn+/-Au	Inferred	15,300,000	121,176	5,814	7.920	0.380	0.210				INVERMAY	1997	Geological resource.	1997 Cordilleran Roundup Abstracts, page 24 and WWW.
19	<u>J & L (1)</u>				4,637,000	346,217	26,124										
	J & L 082M 003			Inferred	1,907,000	163,049	13,578	85.500	7.120			3.320	3.480	MAIN	1991	Reported as a possible reserve. The original source of this inventory is reported to be a 1991 program report by Equinox	Weymin Mining Corporation, prospectus, February 27, 1997.
	J & L 082M 003			Indicated	1,700,000	129,030	12,546	75.900	7.380			2.640	4.430	MAIN	1991	Reported as a probable reserve. The original source of this resource inventory is reported to be from a 1991 program report by Equinox	Weymin Mining Corporation, prospectus, February 27, 1997.



**Table 6
Reserve Data for Major Silver Mines and Significant Deposits of British Columbia**



Rank	Name	MINFILE No.	Deposit Types	Category	Tonnes	Contained Metals		Grade			Ore Zone	Year	Reserve Comments	Reserve Reference		
						Ag	Au	Ag	Au	Cu					Pb	Zn
						(kilograms)		(grams/tonne)		(per cent)						
	J & L	082M 003		Indicated	693,000	36,244		52.300		2.450	7.060	YELLOWJACKET	1991	Reported as a probable reserve. Original source of this inventory is reported to be an Equinox Resources Ltd. program report from 1991.	Weymin Mining Corporation, Prospectus, February 27, 1997.	
	J & L	082M 003		Inferred	337,000	17,895		53.100		2.500	7.150	YELLOWJACKET	1991	Reported as a possible reserve. The original source of this inventory value is reported to be from a 1991 Equinox Resources Ltd.	Weymin Mining Corporation, prospectus, February 27, 1997.	
20	Millie Mack	082KSW051	Polymetallic veins Ag-Pb-Zn+/-Au	Inferred	1,542,070	343,604	7,387	222.820	4.790	0.000		TOTAL	1989	Potential.	George Cross News Letter 01/05/89 in EMR MIN BULL MR 223 B.C. 47.	
21	<u>Big Showing (2)</u>				660,656	329,458	195									
	Big Showing	082KNW078	Irish-type carbonate-hosted Zn-Pb	Inferred	398,845	173,498		435.000				TOTAL	1987		EMR MR BULL 223 B.C. 58 (New Campbell Mines Ltd., 1987 Annual Report).	
	Big Showing	082KNW078	Irish-type carbonate-hosted Zn-Pb	Indicated	217,599	148,838		684.000				TOTAL	1987		EMR MR BULL 223 B.C. 58 (New Campbell Mines Ltd., 1987 Annual Report).	
	Teddy Glacier	082KNW069	Polymetallic veins Ag-Pb-Zn+/-Au	Combined	44,212	7,123	195	161.100	4.400		7.900	6.800	TEDDY GLACIER	1964	Probable and inferred reserves.	Sunshine Lardeau Mining Ltd. 1964 Annual Report.
22	Prosperity	092O 041	Porphyry Cu +/- Mo +/- Au	Measured	633,000,000	316,500	294,978	0.500	0.466	0.253		PROSPERITY	1998	Based on 143,945 of drilling in 326 holes. Silver grade is based on planned production level. The mineral reserve includes 65% measured, 30% indicated and 5% inferred.	Taseko Mines Limited Press Release, March 16, 1998.	
23	Morrison	093M 007	Porphyry Cu +/- Mo +/- Au	Inferred	86,000,000	292,400	29,240	3.400	0.340	0.420		MORRISON	1976	Geological resource; cutoff grade of 0.3 per cent copper.	CIM Special Volume 15 (1976), page 264.	
24	Huckleberry	093E 037	Porphyry Cu +/- Mo +/- Au	Combined	90,372,500	254,127	5,603	2.812	0.062	0.513		TOTAL	1996	Mineable reserves include proven and probable reserves scheduled in the mining plan. Cutoff grade is 0.30 per cent copper and the stripping ration is 1:1.	Princeton Mining Corporation 1996 Annual Report, page 5.	
25	Blackwater-Davidson	093F 037	Epithermal Au-Ag: low sulphidation	Inferred	6,000,000	222,000	300	37.000	0.050			SILVER	1992	Estimated reserves for the Silver zone; at a shallow depth.	Fieldwork 1993, page 52.	
26	Bronson Slope	104B 077	Porphyry Cu +/- Mo +/- Au	Indicated	76,000,000	208,772	33,440	2.747	0.440	0.162		BRONSON SLOPE	1997	International Skyline Gold Corporation estimates this resource based on 14,800 metres of drilling.	Information Circular 1998-1, page 19.	
27	Sullivan	082FNE052	Sedimentary exhalative Zn-Pb-Ag	Proven	8,800,000	211,200		24.000			4.400	8.000	SULLIVAN	1997	Reserves estimated at January 31, 1997.	Information Circular 1998-1, page 9.
28	Poplar	093L 239	Porphyry Cu +/- Mo +/- Au	Unclassified	75,000,000	210,000		2.800		0.350		POPLAR	1983		CIM Special Volume 37, page 185.	
29	Akie	094F 031	Sedimentary exhalative Zn-Pb-Ag	Inferred	12,000,000	205,200		17.100			1.500	8.600	TOTAL	1996	Estimated geological resource.	Information Circular 1997-1, page 20.
30	<u>Similco (2)</u>				164,801,284	203,561	20,020									
	Similco	092HSE001	Alkalic porphyry Cu-Au	Measured	129,163,140	203,561	20,020	1.576	0.155	0.393		TOTAL	1997		Information Circular 1998-1, pages 11 & 16.	
	Ingerbelle	092HSE004	Alkalic porphyry Cu-Au	Measured	35,638,144					0.329		TOTAL	1996	Geological resource of Phase 2 as at December 31, 1996. Copper cutoff grade is 0.20 per cent and the stripping ratio is 1.74.	Princeton Mining Corporation 1996 Annual Report, page 9.	
31	Fireweed	093M 151	Sedimentary exhalative Zn-Pb-Ag?	Indicated	580,544	198,413		341.770			1.340	2.220	WEST	1989	Cutoff grade is 171.4 grams per tonne silver at an average width of 4.75 metres.	George Cross News Letter No.66, 1989.
32	Rock And Roll	104B 377	Besshi massive sulphide Cu-Zn	Indicated	580,544	195,005	1,393	335.900	2.400	0.640	0.790	3.080	BLACK DOG	1991	Preliminary reserves within a 700-metre portion of the Black Dog horizon.	Northern Miner - October 28, 1991, page 3.
33	Ericksen-Ashby	104K 009	Pb-Zn skarn	Indicated	907,100	194,936		214.900			2.230	3.790	ERICKSEN-ASHBY	1964	Year of reserves is questionable.	Vancouver Stock Exchange Application for Listing 142/80.
34	Lorraine	093N 002	Alkalic porphyry Cu-Au	Indicated	31,900,000	149,930	5,423	4.700	0.170	0.660		LORRAINE	1998	Likely indicated.	T. Schroeter, personal communication, 1998.	
35	Red Bird	082FSW024	Irish-type carbonate-hosted Zn-Pb	Indicated	2,177,040	149,127		68.500			6.500	18.500	RED BIRD	1986	Potential tonnage.	Assessment Report 15722.
36	Dundee	082FSW067	Polymetallic veins Ag-Pb-Zn+/-Au	Inferred	872,000	148,240	8,720	170.000	10.000			VEIN	1983	About 360,000 tonnes of material are reported on the dumps.	George Cross Newsletter Nos. 212, 215, 1983.	
37	<u>Brandywine Camp (3)</u>				496,568	137,718	780									
	Silver Tunnel	092JW 003	Polymetallic veins Ag-Pb-Zn+/-Au	Inferred	146,224	60,639	39	414.700	0.270		0.190	0.430	BLOCK B	1974	Possible reserves at similar grades to Block A reserves.	Northern Miner - July 8, 1976.
	Silver Tunnel	092JW 003	Polymetallic veins Ag-Pb-Zn+/-Au	Indicated	101,413	42,056	27	414.700	0.270		0.190	0.430	BLOCK A	1974	Reserves are listed as probable.	Northern Miner - July 8, 1976.
	Silver Tunnel	092JW 003	Polymetallic veins Ag-Pb-Zn+/-Au	Inferred	55,060	21,892	37	397.600	0.680		0.270	0.450	BLOCK C	1974	Possible reserves.	Northern Miner - July 8, 1976.
	Brandywine	092JW 001	Polymetallic veins Ag-Pb-Zn+/-Au	Indicated	134,800	11,552	139	85.700	1.030	0.650	5.000		OPEN PIT	1977	Indicated reserves include 5 per cent combined lead-zinc.	Northern Miner - February 24, 1977.
	Northair	092JW 012	Polymetallic veins Ag-Pb-Zn+/-Au	Indicated	59,071	1,579	536	26.730	9.080		2.000		NORTHAIR	1986	Approximately 2 per cent combined lead-zinc.	Canadian Mines Handbook 1986-87, page 285.



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						Ag	Au	Ag	Au	Cu	Pb	Zn				
						(kilograms)		(grams/tonne)		(per cent)						
38	Treasure Mountain	092HSW016	Polymetallic veins Ag-Pb-Zn +/- Au	Combined	160,000	136,000	850,000		4.000	5.000		TREASURE MOUNTAIN	1988	Average grade of ore at a cutoff grade of 500 grams per tonne equivalent silver. Probable / possible / inferred reserves in all zones.	Property File - Prospectus, Huldra Silver Inc., 1988.	
39	Ecstall	103H 011	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Unclassified	6,349,700	126,994	3,175	20.000	0.500	0.600		ECSTALL	1993		George Cross News Letter No.26 (February 8), 1994.	
40	<u>Cassiar Camp (6)</u>				1,104,625	125,838	4,570									
	Magno	104P 006	Polymetallic manto Ag-Pb-Zn	Combined	488,510	82,070	168,000				5.300	4.460	TOTAL	1981	Total for Middle D, Magno East, Magno Mid and Magno West zones.	C.J. Blooman, Shell Internal Report 1981.
	Joe Reed	104P 021	Polymetallic veins Ag-Pb-Zn +/- Au	Combined	72,568	15,921	219,390				5.500	4.140	JOE REED	1956	Indicated and inferred.	Property File - Kruzick, 1980.
	Haskin Mountain	104P 038	Pb-Zn skarn	Inferred	226,775	11,271	49,700		0.100	9.400		HASKIN MOUNTAIN SE	1969	Estimate based on trenching and 4 drillholes. Combined lead-zinc grade.	Northern Miner - December 25, 1969.	
	McDame Belle	104P 022	Pb-Zn skarn	Indicated	27,210	8,022	294,810		0.350	3.600	3.000	CARIBOO	1965	90,720 tonnes indicated at unstated grade includes 27,210 tonnes at above grades.	Minister of Mines Annual Report 1965, pages 14,15.	
	Middle D	104P 080	Polymetallic manto Ag-Pb-Zn	Indicated	90,000	6,300	70,000				3.300	6.600	MIDDLE D	1980		Assessment Report 7912.
	Erickson	104P 029	Au-quartz veins	Inferred	199,562	2,255	4,570 *	11.300	22.900			ERICKSON	1991	Potential mineral resource for the property. Silver grade is estimated from production grade.	George Cross New Letter No. 243 (December 19), 1991	
41	<u>Premier Camp (11)</u>				5,856,854	114,386	17,613									
	Martha Ellen	104B 092	Intrusion-related Au pyrrhotite veins	Inferred	1,576,449	43,242	3,563	27.430	2.260			MARTHA ELLEN	1991	Geological reserves.	D. Alldrick, PhD Thesis, UBC, 1991.	
	Martha Ellen	104B 092	Intrusion-related Au pyrrhotite veins	Measured	647,900	14,934	1,801	23.050	2.780			MARTHA ELLEN	1988	Mineable reserves with an average waste-to-ore ratio of 3.99:1.	George Cross News Letter No.102, 1988.	
	Big Missouri	104B 046	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	1,685,200	38,726	5,258	22.980	3.120			BIG MISSOURI	1988	Combined reserves for the S-1, Dago Hill, Province, Martha Ellen, Northstar and Creek deposits (104B 084,045,147,092,146,086).	George Cross News Letter No.102, 1988.	
	Premier	104B 054	Epithermal Au-Ag: low sulphidation	Combined	350,140	13,200	2,518	37.700	7.190			PREMIER	1997	Proven and probable reserves diluted reserves; gold is cut and silver is uncut.	George Cross News Letter No.26 (February 6), 1997.	
	Premier	104B 054	Epithermal Au-Ag: low sulphidation	Possible	111,573	3,059	956	27.420	8.570			PREMIER	1997	Undiluted reserves; gold is cut and silver is uncut.	George Cross News Letter No.26 (February 6), 1997.	
	Northern Lights	104B 053	Epithermal Au-Ag-Cu: high sulphidation	Inferred	347,381	13,694	1,403	39.420	4.040	1.500	4.930	NORTHERN LIGHTS	1986		George Cross Newsletter No.18, 1986.	
	S-1	104B 084	Subaqueous hot spring Ag-Au	Inferred	800,000	8,000	1,760	10.000	2.200			S1	1991	Geological reserves.	D. Alldrick, PhD Thesis, UBC, 1991.	
	Province	104B 147	Subaqueous hot spring Ag-Au	Inferred	100,000	2,000	150	20.000	1.500			PROVINCE	1991	Geological reserves.	D. Alldrick, PhD Thesis, UBC, 1991.	
	Silver Tip	104B 043	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	11,295	1,673	9	148.100	0.770	1.900	1.800	MAY P.J.	1957	East and west shoots combined, assuming 61 metre down dip length and 0.9 metre width.	Property File - Plumb, 1957.	
	Silver Tip	104B 043	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	816	792	4	970.300	4.800	4.200	6.200	EAST SHOOT (MAY P.J.)	1957	Based on dimensions of 23 by 12 by 1 metres.	Property File - Plumb, 1957.	
	Dago Hill	104B 045	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Inferred	150,000	1,500	180	10.000	1.200			DAGO	1991	Geological reserves.	D. Alldrick, PhD Thesis, UBC, 1991.	
	Northstar - Lindeborg	104B 146	Subaqueous hot spring Ag-Au	Measured	47,100	969	202	20.570	4.280			NORTHSTAR	1988	Mineable reserves at a waste-to-ore ratio of 1.59:1.	George Cross News Letter No.102, 1988.	
	Creek	104B 086	Subaqueous hot spring Ag-Au	Measured	7,500	872	18	116.230	2.400			CREEK	1988	Mineable reserves at a waste-to-ore ratio of 2.0:1.	George Cross News Letter No.102, 1988.	
	Silver Butte	104B 150	Polymetallic veins Ag-Pb-Zn +/- Au and Epithermal Au-Ag: low sulphidation	Measured	1,774,000		3,903		2.200			WEST KANSAS	1994	In situ undiluted geological reserves for the Kansas/West Kansas zone over 295 metres of strike length. A higher grade portion is 879.100 tonnes grading 2.86 grams per tonne gold.	T. Schroeter, personal communication, 1995.	
42	<u>Trout Lake Camp (6)</u>				416,350	102,878	396									
	Wagner	082KNW212	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	99,802	41,568	30	416.500	0.300		8.750	3.700	WAGNER	1989	Measured.	Filing statement 99/89, Golden Arch Resources.
	Wagner	082KNW212	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	25,887	6,078	3	234.800	0.100		4.580	4.780	WAGNER	1989	302.6 grams per tonne silver, 8.71% lead and 2.24% zinc.	Filing statement 99/89, Golden Arch Resources.
	Abbott (L.765)	082KNW056	Irish-type carbonate-hosted Zn-Pb	Indicated	100,616	19,620	90	195.000	0.890		5.610	2.880	GREENLAW VEIN	1989		Filing Statement 99/89, Golden Arch Resources.
	Abbott (L.765)	082KNW056	Irish-type carbonate-hosted Zn-Pb	Measured	29,573	6,397	35	216.300	1.200		8.410	16.510	NO. 1	1989		Filing Statement 99/89, Golden Arch Resources.
	Abbott (L.765)	082KNW056	Irish-type carbonate-hosted Zn-Pb	Measured	9,453	4,766	10	504.200	1.100		16.060	14.910	NO. 2	1989		Filing Statement 99/89, Golden Arch Resources.



Table 6
Reserve Data for Major Silver Mines and Significant Deposits of British Columbia



Rank	Name	MINFILE No.	Deposit Types	Category	Tonnes	Contained Metals		Grade					Ore Zone	Year	Reserve Comments	Reserve Reference
						Ag	Au	Ag	Au	Cu	Pb	Zn				
						(kilograms)		(grams/tonne)		(per cent)						
	Silver Cup (L.768)	082KNW027	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	37,191	8,542	102	229.670	2.740	1.700	1.500	SILVER CUP	1951	Reserve figures based on 4 ore dumps combined.	Property File - Hamilton, W.S. 1951: Supplementary Report #1.	
	Spider (L.15752)	082KNW045	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	25,398	6,469	112	254.700	4.400	6.190	6.340	SPIDER	1988	Proven to 61 metres below 10 Level on No. 4 vein.	George Cross News Letter April 26, 1988.	
	Sheep Creek	082KNW050	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	23,584	6,773	3	287.200	0.130	8.710	2.240	SHEEP CREEK	1988	Probable reserves.	E. Brisbane to A. Legun (District Geologist, Nelson) pers. comm. 1988.	
	Jewell	082KNW057	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	64,846	2,665	11	41.100	0.170	1.090	9.490	JEWELL	1988	Probable reserve.	E. Brisbane to A. Legun (District Geologist Nelson), pers. comm. 1988.	
43	Beveley	094C 023	Irish-type carbonate-hosted Zn-Pb	Inferred	2,721,300	98,783		36.300		3.660		WASI LAKE	1969	Grade given as 3.66 per cent lead-zinc in 3 zones.	Northern Miner - December 7, 1978.	
44	River Jordan	082M 001	Broken Hill-type Pb-Zn-Ag +/- Cu	Measured	2,605,826	98,240		37.700		5.100	5.600	SOUTH LIMB (NO.1 LODE)	1961	Ten per cent dilution. A deep drillhole since this calculation was made indicates a much greater potential (Bulletin 57, page 48).	CIM Transactions 1961, page 272.	
45	Packsack	103H 013	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Unclassified	2,700,000	91,800	810	34.000	0.300	0.500	0.010	0.200	PACKSACK	1986		Assessment Report 15756.
46	<u>Ox-C (1)</u>				216,822	89,179	102									
	Ox-C	093E 101	Polymetallic veins Ag-Pb-Zn +/- Au	Inferred	196,087	80,651	92	411.300	0.470	2.850	4.630	MAIN	1985	Reserves to a depth of 100 metres.	SMF Jan.24, 1986 - International Damascus Resources.	
	Ox-C	093E 101	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	20,735	8,528	10	411.300	0.470	2.850	4.630	MAIN	1985	Reserves to a depth of 20 metres.	SMF Jan.24, 1986 - International Damascus Resources.	
47	<u>Fairview Camp (3)</u>				2,405,177	83,374	10,270									
	Stemwinder (L.384)	082ESW007	Au-quartz veins	Indicated	640,000	32,896	2,432	51.400	3.800			MAIN VEIN	1984		Mineral Exploration Review 1986, page 63.	
	Stemwinder (L.384)	082ESW007	Au-quartz veins	Indicated	185,000	19,055	1,702	103.000	9.200			NORTH VEIN	1984		Mineral Exploration Review 1986, page 63.	
	Stemwinder (L.384)	082ESW007	Au-quartz veins	Combined	816,000		3,076		3.770			STEMWINDER	1987	Reserve estimates by Cominco Ltd. (1982) included 635,000 tonnes from the Fairview Extension zone grading 3.43 grams per tonne gold and	Property File - Cooke (1987): Report on the Stemwinder Mine property.	
	Fairview (L.556s)	082ESW008	Au-quartz veins	Combined	762,000	31,349	2,873	41.140	3.770			FAIRVIEW	1988	Undiluted combined ore reserves estimated by Cominco Ltd. consisting of 38 per cent measured, 11 per cent indicated and 50 per cent	Property File - Valhalla Gold Corp. (1988): Prospectus.	
	Sunrise (L.18s)	082ESW015	Polymetallic veins Ag-Pb-Zn +/- Au	Inferred	2,177	74	187	33.940	85.710			BRECCIA	1961	Based on a drilling program by Friday Mines Ltd. in 1961 on a gold-bearing siliceous breccia zone approximately 150 metres west of	Assessment Report 19963.	
48	Eaglehead	104I 008	Porphyry Cu +/- Mo +/- Au	Inferred	30,000,000	81,300	6,000	2.710	0.200	0.410		EAGLEHEAD	1983	Approximate. Grade given was 0.0216 per cent MoS ₂ conversion to Mo using the factor 1.6681.	CIM Special Volume 37, page 182.	
49	Red Mountain	103P 086		Indicated	1,921,680	73,216	18,832	38.100	9.800			RED MOUNTAIN	1997	Royal Oak Mines Inc. estimate in 1997. Silver grade is included based on previous figures.	Information Circular 1998-1, pages 16,19.	
50	Cronin	093L 127	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	160,331	68,702	55	428.500	0.340	7.110	8.120	CRONIN	1972	Subject to dilution of up to 20 per cent. There is an additional inferred reserve of 117, 923 tonnes at the same grade.	Statement of Material Facts May 6, 1974 - Hallmark Resources Ltd.	
51	Lindquist	093E 019	Epithermal Au-Ag: low sulphidation	Unclassified	249,425	68,392	2,669	274.200	10.700			TOTAL	1983		CIM Special Volume 37, page 186.	
52	Atlin Ruffner	104N 011	Polymetallic veins Ag-Pb-Zn +/- Au	Unclassified	113,638	68,183		600.000		5.000		ATLIN RUFFNER	1988	Reserves from the two zones from which underground development and production has taken place.	Assessment Report 18646.	
53	Ruth-Vermont	082KNE009	Polymetallic veins Ag-Pb-Zn +/- Au	Combined	273,944	63,856	233.100			4.800	5.400	RUTH-VERMONT	1982	All categories (proven, possible, probable) for all ore zones.	George Cross News Letter No.182, September 22, 1982.	
54	Seneca	092HSW013	Subaqueous hot spring Ag-Au	Combined	1,506,239	61,952	1,235	41.130	0.820	0.630	0.150	3.570	SENECA	1983	Drill indicated, possible and inferred reserves at undiluted grades. Also includes 898,573 tonnes grading 1.09 grams per tonne gold, 55.53	Filing Statement 200/85, International Curator Resources Ltd.
55	Red (Spring)	094D 104	Sediment-hosted Cu	Indicated	4,989,050	59,370		11.900	0.500			A	1973	Outlined.	Prospectus, Windflower Mining Ltd., February 1, 1985.	
56	Virginia Silver	093M 021	Polymetallic veins Ag-Pb-Zn +/- Au	Unclassified	20,000	58,968	24	2948.400	1.190	4.400	2.200	VIRGINIA SILVER	1983		CIM Special Volume 37, page 185.	
57	Homestake	082M 025	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Indicated	249,906	56,629	145	226.600	0.580	0.280	1.240	2.190	HOMESTAKE	1982	Probable.	Statement of Material Facts 06/06/86, Kamad Silver Company Ltd.
58	Comstock	082FNW077	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	45,355	54,417		1199.800		6.000	10.000	COMSTOCK	1987	Proven reserves for the Comstock-Silver Cup property.	Western Investment News - May 1987.	
59	Lara	092B 129	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Indicated	528,839	52,931	2,501	100.090	4.730	1.010	1.220	5.870	LARA	1992	Drill indicated resource.	George Cross News Letter No.188 (September 29), 1992.
60	Cottonbelt	082M 086	Broken Hill-type Pb-Zn-Ag +/- Cu	Unclassified	1,000,000	50,000		50.000		6.000	2.000	COTTON BELT	1982	Less than 1 million tonnes.	CIM Bulletin, April 1982, page 119.	
61	Caledonia	092L 061	Pb-Zn skarn	Inferred	68,000	47,886	23	704.200	0.340	6.100	0.600	7.450	CALEDONIA	1972	Possible reserves outlined by underground work to 1929, on a zone 3 to 5 metres wide and 100 metres long.	SMF July 5, 1972-North Island Mines Ltd., D.C. Malcolm, Apr.24, 1972.



Table 6
Reserve Data for Major Silver Mines and Significant Deposits of British Columbia



Rank	Name	MINFILE No.	Deposit Types	Category	Tonnes	Contained Metals		Grade					Ore Zone	Year	Reserve Comments	Reserve Reference
						Ag	Au	Ag	Au	Cu	Pb	Zn				
						(kilograms)		(grams/tonne)		(per cent)						
62	Vine 1	082GSW050	Polymetallic veins Ag-Pb-Zn +/- Au	Combined	1,300,000	47,190	2,860	36.300	2.200	0.110	3.120	0.760	MAIN	1990	Proven and possible reserves. 13.5 km north of St. Eugene (082GSW025)	MDAP - Kokanee Exploration Ltd. Prospectus (1990).
63	Lenora (L.35G)	092B 001	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Indicated	317,485	44,619	1,305	140.540	4.110	1.600	0.650	6.600	MOUNT SICKER	1952	Reserves based on mapping, geochemical and geophysical surveys, trenching and diamond drilling.	Northern Miner - September 25, 1969.
64	Indian Chief	092E 011	Cu skarn	Combined	1,900,000	44,080	589	23.200	0.310	1.500		INDIAN CHIEF	1961	Possible and potential ore.	Assessment Report 462, page 13.	
65	Driftwood	093M 117	Volcanic redbed Cu	Inferred	900,000	43,200		48.000		2.000		MAIN	1990		Assessment Report 19978.	
66	Independence	104A 038	Subvolcanic Cu-Ag-Au (As-Sb)	Inferred	177,809	42,674		240.000				MAIN VEIN	1991	Preliminary possible geological reserves grading 240 to 343 grams per tonne silver.	Assessment Report 21950.	
67	Woolsey	082N 004	Polymetallic veins Ag-Pb-Zn +/- Au	Unclassified	590,703	42,294		71.600		1.100	2.660	1.260	TOTAL	1982	Reported reserves.	Prospectus, Gunsteel Resources Inc., April 29, 1986.
68	Goat	104A 002	Polymetallic veins Ag-Pb-Zn +/- Au	Combined	8,800	42,090	93	4782.900	10.600				VEINS	1979	Proven and probable reserves.	Northern Miner - March 1, 1979.
69	New Moon	093E 011	Epithermal Au-Ag: low sulphidation	Combined	688,712	40,359	682	58.600	0.990		1.820	5.510	TOTAL	1987	Preliminary indicated and inferred geological reserve for the Main, Misty, Day and Twilight zones in the 'Plateau' area.	Assessment Report 21602, page 1.
70	Tsacha	093F 055	Epithermal Au-Ag: low sulphidation	Indicated	478,600	39,389	4,164	82.300	8.700				TOMMY	1997	Cut-off: 3 grams per tonne.	MEG Talk, February 19, 1997.
71	<u>Slocan Camp (5)</u>				120,639	39,320										
	Silvana	082FNW050	Polymetallic veins Ag-Pb-Zn +/- Au	Unclassified	54,400	15,776		290.000			3.400	4.700	TOTAL	1994	Reserves at the Silvana and Hinckley (082FNW013) mines as of April 1993.	Information Circular 1995-1, pages 8,11.
	Hinckley (L.1720)	082FNW013	Polymetallic veins Ag-Pb-Zn +/- Au	Unclassified									TOTAL	1994	Reserves included with the Silvana (082FNW050) as of April 1993.	Information Circular 1995-1, pages 8,11.
	Grey Copper (L.580)	082FNW033	Polymetallic veins Ag-Pb-Zn +/- Au	Possible	8,080	9,138		1131.000			18.800	42.600	NO. 3	1991	Reserves above the No. 3 drift.	Property File - Geological Evaluation Report on Purcell Property.
	Grey Copper (L.580)	082FNW033	Polymetallic veins Ag-Pb-Zn +/- Au	Possible	19,546	4,417		226.000			0.060	41.210	VEIN	1991	Reserves calculated between the No. 5 and No. 3 drifts.	Property File - Geological Evaluation Report on the Purcell Property.
	Hallmac	082FNW015	Polymetallic veins Ag-Pb-Zn +/- Au	Combined	11,398	8,869		778.100			7.750	2.840	MAIN	1988	Mineral inventory (indicated/probable/possible reserves).	Assessment Report 18551.
	Payne (L.499)	082KSW006	Polymetallic veins Ag-Pb-Zn +/- Au	Inferred	27,215	1,119		41.130				7.530	TOTAL	1972	Possible reserves.	Silvex Resources Corp. Statement of Material Facts 254/80, page 24.
72	Bend 1 Canyon Zone	083D 001	Sedimentary exhalative Zn-Pb-Ag	Indicated	5,000,000	35,000		7.000			0.600	2.300	TOTAL	1985	Average grades based on a strike length of 250 metres, dip length of greater than 200 metres and an average thickness of 7.3 metres.	Assessment Report 16544.
73	Topley Richfield	093L 018	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	181,420	34,825	771	191.960	4.250				TOPLEY-RICHFIELD	1989	Drill indicated.	Canadian Mines Handbook 1989-90, page 327.
74	<u>Babine Camp (2)</u>				190,752,960	34,441	34,353									
	Bell	093M 001	Porphyry Cu +/- Mo +/- Au	Unclassified	71,752,960	34,441	16,503	0.480	0.230	0.460			TOTAL	1990	Reserves in the present open pit and in the Extension zone.	Noranda Inc. Annual Report 1990.
	Granisle	093L 146	Porphyry Cu +/- Mo +/- Au	Unclassified	119,000,000		17,850		0.150	0.410			GRANISLE	1992	Remaining in situ resources using a 0.30 per cent copper cutoff.	CIM Special Volume 46, page 254.
75	Tam	093N 093	Alkalic porphyry Cu-Au	Inferred	7,200,000	29,592		4.110		0.550			BOUNDARY	1974	Possible reserves.	Dyson, 1974.
76	Harmony (Specogna)	103F 034	Hot spring Au-Ag	Measured	33,500,000	28,140	70,685 *	0.840	2.110				SPECOGNA	1997	Cut-off of 1.2 grams per tonne gold. Additional lower grade stockpile of 19.2 million tonnes grading between 0.80 to 1.2 grams per tonne gold. Silver grade is estimated from previous bulk samples.	Information Circular 1998-1, page 21.
77	Amy	104O 004	Polymetallic manto Ag-Pb-Zn	Combined	72,431	26,560		366.700			2.840	6.030	AMY	1973	Measured and indicated reserves.	Statement of Material Facts 88-81, Marbaco Resources Ltd.
78	Rea Gold	082M 191	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Indicated	376,000	26,094	2,294	69.400	6.100	0.330	2.200	2.300	TOTAL	1987	Reserves for northern and southern lenses.	George Cross News Letter No. 8, 1987; Northern Miner, Nov. 30, 1987.
79	Kelly Creek	103I 092	Volcanic redbed Cu	Unclassified	545,167	25,023		45.900		2.230			KELLY CREEK	1985	Reserves are based on a cutoff grade of 1.5 per cent copper.	VSE Filing Statement, Imperial Metals Corp., July 1985.
80	Gray Rock	092JNE066	Stibnite veins and disseminations	Combined	70,488	24,163		342.800			2.100		NO. 1 VEIN	1966	Total of proven, probable and possible reserves.	Assessment Report 837.
81	Wisconsin	082FSE036	Besshi massive sulphide Cu-Zn	Inferred	136,065	23,322	1,631	171.400	11.990				WISCONSIN	1984	Geologically inferred.	Northern Miner, November 1, 1984.
82	Eureka-Victoria	092HSW011	Polymetallic veins Ag-Pb-Zn +/- Au	Combined	48,900	21,963		449.150					TOTAL	1983	Inferred and indicated resource.	Vanstate Resources Ltd., Statement of Material Facts, 1983.
83	Doc	104B 014	Au-quartz veins	Combined	426,337	19,143	3,922	44.900	9.200				TOTAL	1988	Proven/probable/possible reserves in Q17 and six other veins.	Northern Miner - November 7, 1988.
84	<u>Mount Washington (2)</u>				856,018	17,736	3,715									



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Reserve Data for Major Silver Mines and Significant Deposits of British Columbia



Rank	Name	MINFILE No.	Deposit Types	Category	Tonnes	Contained Metals		Grade					Ore Zone	Year	Reserve Comments	Reserve Reference
						Ag	Au	Ag	Au	Cu	Pb	Zn				
						(kilograms)		(grams/tonne)		(per cent)						
	Domineer	092F 116	Epithermal Au-Ag-Cu: high sulphidation	Indicated	550,298	17,736	3,715	32.230	6.750				DOMINEER	1989	Drill indicated reserves.	George Cross News Letter, August 3, 1989.
	Mount Washington	092F 117	Porphyry Cu +/- Mo +/- Au		305,720					1.070			MOUNT WASHINGTON COPPER	1970	Estimated reserves remain adjacent to the open pit.	Property File - W.G. Stevenson & Associates, 1970.
85	Portland Canal (3)				147,487	17,712	111									
	Columbia-Evening Sun	103P 073	Polymetallic veins Ag-Pb-Zn +/- Au	Inferred	118,000	14,160	81	120.000	0.690		3.000		COLUMBIA-EVENING SUN	1988	Reserves contained within a block with dimensions of 360 by 137 by 1.0 metres.	Property File - Prospectus, Morocco Explorations, 1988, page 18.
	Portland Canal	103P 068	Polymetallic veins Ag-Pb-Zn +/- Au	Unclassified	11,160	2,321	25	208.000	2.230	1.580	1.870		PORTLAND CANAL	1973	Reserves contained in a 58 metre long, 37 metre deep, 1.6 metre wide block.	Assessment Report 4935, pages 1,8,9.
	L & L	103P 076	Polymetallic veins Ag-Pb-Zn +/- Au	Inferred	18,000	558	5	31.000	0.270		2.100	2.100	MAIN VEIN	1988	Reserves within a block with dimensions of 180 by 120 by 0.6 metres. Potential for 118,000 tonnes from southeastern extension.	Property File - Prospectus, Morocco Explorations, 1988, page 18.
	L & L	103P 076	Polymetallic veins Ag-Pb-Zn +/- Au	Combined	327	673		2057.000					HIGHGRADE ORE	1981	Indicated and inferred reserves within a block with dimensions of 36 by 36 by 0.3 metres.	Assessment Report 10046, page 12.
86	Scotia	103I 007	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Inferred	1,340,000	17,420	335	13.000	0.250	0.100	0.400	3.800	ALBERE	1998	Global drill indicated resource calculated using 1 per cent zinc over a 0.5-metre width.	George Cross Newsletter No. 7 (January 12), 1998.
87	Lustdust (1)				307,234	16,763	797									
	Lustdust	093N 009	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	233,124	14,710	559	63.100	2.400			1.500	NO. 3	1968	Before dilution.	Northern Miner February 12, 1970.
	Lustdust	093N 009	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	74,110	2,053	237	27.700	3.200			6.600	NO. 4	1968		Northern Miner February 12, 1970.
88	Kenngo	094D 023	Au skarn	Indicated	2,300,000	15,870	2,990	6.900	1.300	0.450			TOTAL	1994	Previous drilling.	Information Circular 1995-1, page 23.
89	Holiday	104O 001,002,017	Polymetallic veins Ag-Pb-Zn +/- Au	Inferred	36,287	15,502		427.200			14.950	20.780	HOLLIDAY	1983	These reserves likely include the Discovery, Shipment (104O 002) and Pit (104O 017) veins.	George Cross News Letter No. 43, 1983.
90	Bowler Creek (2)				296,000	15,481	198									
	CU 1	082M 138	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Indicated	148,000	7,356		49.700		0.190	0.530	2.430	CU 1	1985		Property File - Black, 1976: Assessment Report 13381, page 17.
	CU 5	082M 139	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Indicated	148,000	8,125		54.900		0.200	1.000	2.720	CU 5	1985		Property File - Black, 1976: Assessment Report 13381, page 17.
91	Franklin Camp (1)				14,000	15,064	288									
	Union	082ENE003	Polymetallic veins Ag-Pb-Zn +/- Au	Possible	7000	13,006	228	1858.00	32.50				MAIN VEIN	1984	Average width of 1.5 metres.	Assessment Report 13710.
	Union	082ENE003	Polymetallic veins Ag-Pb-Zn +/- Au	Possible	7000	2,058	61	294.00	8.70				SOUTH	1984	Average width of 1.5 metres.	Assessment Report 13710.
92	Emerald Glacier	093E 001	Polymetallic veins Ag-Pb-Zn +/- Au	Unclassified	40,800	14,484	46	355.000	1.130		6.230	9.490	EMERALD-GLACIER	1983		CIM Special Volume 37, page 186.
93	Anyox Camp (3)				24,394,774	14,250	198									
	Hidden Creek	103P 021	Cyprus massive sulphide Cu (Zn)	Indicated	24,219,570					1.080			ANYOX	1993	Indicated open pit reserves.	George Cross News Letter No.21 (February 1), 1993.
	Redwing	103P 024	Cyprus massive sulphide Cu (Zn)	Unclassified	164,584	14,105	196	85.700	1.190	2.000			REDWING	1992	Compiled from original Granby and Cominco files by Taiga Consultants of Calgary.	Property File - Report on Anyox Property by Taiga Consultants Ltd., 1992.
	Bonanza	103P 023	Cyprus massive sulphide Cu (Zn)	Unclassified	10,620	145	2	13.700	0.160	1.760			BONANZA	1992	Compiled from original Granby and Cominco files by Taiga Consultants of Calgary.	Property File - Report on Anyox Property by Taiga Consultants Ltd., 1992.
94	Silver Lake	093L 097	Polymetallic veins Ag-Pb-Zn +/- Au	Inferred	30,000	13,474	51	449.130	1.710		6.700	17.700	NO. 3	1964	Basis of sampling surface trenches (1964) 2 shoots aggregate 91.4 metres long and over mining widths will produce 90.7 tonnes.	Energy, Mines & Resources Canada Mineral Bulletin 198, page 238.
95	CK	082M 224	Broken Hill-type Pb-Zn-Ag-Cu	Indicated	1,490,365	12,668		8.500			1.400	8.600	CK	1980		George Cross News Letter November 26, 1986.
96	Alvija	103I 085	Volcanic redbed Cu	Unclassified	181,420	12,427		68.500		4.000			MAIN	1968	Four drillholes.	Property File - Phendler, 1968.
97	Molly Hughes	082KSW002	Polymetallic veins Ag-Pb-Zn +/- Au	Inferred	9,072	11,634	53	1282.400	5.800				REAL IDEA	1978	Based on surface and underground grab samples of mineralization and allowing for dilution over a 1.2 metre mining width.	Property File - Sadler-Brown, T.L. and Nevin, A.E., 1978.
98	Taseko (Empress)	092O 033	Porphyry Cu +/- Mo +/- Au	Combined	6,760,500	11,560	5,544	1.710	0.820	0.730			LOWER NORTH	1991	Reserves are for the Lower North zone and are described as 'probable and possible'.	Northern Miner - February 18, 1991.
99	Rocher Deboile	093M 071	Polymetallic veins Ag-Pb-Zn +/- Au	Combined	54,000	11,200	189	207.400	3.500	2.700			ROCHER DEBOULE	1990	Probable/possible reserves.	George Cross Newsletter No. 228, November 26, 1990
100	Macktush	092F 012	Porphyry Cu +/- Mo +/- Au	Measured	137,891	10,827	2,554	78.520	18.520	0.750			MAKTUSH	1988		Northwest Prospector October/November 1988.
101	Chu Chua	092P 140	Cyprus massive sulphide Cu (Zn)	Indicated	1,043,165	10,640	563	10.200	0.540	2.980		0.300	CHU CHUA	1992	Open pit reserves.	Canadian Mines Handbook 1992-93, page 203.



Table 6
Reserve Data for Major Silver Mines and Significant Deposits of British Columbia



Rank	Name	MINFILE No.	Deposit Types	Category	Tonnes	Contained Metals		Grade					Ore Zone	Year	Reserve Comments	Reserve Reference
						Ag	Au	Ag	Au	Cu	Pb	Zn				
						(kilograms)		(grams/tonne)		(per cent)						
102	Duthie (2)				75,030	9,768	657									
	Duthie 093L 088		Polymetallic veins Ag-Pb-Zn +/- Au	Measured	19,700	4,078	50	207.000	2.550	5.000	7.500	DUTHIE	1985		Map 58.	
	Mamie 093L 091		Polymetallic veins Ag-Pb-Zn +/- Au	Measured	55,330	5,690	607	102.840	10.970	0.700	7.000	MAMIE	1951	Proven reserves.	VSE Offering of Rights Jul.17/85-Consolidated Silver Standard Mining.	
103	Toodoggone Camp (2)				1,305,316	8,022	7,274									
	Baker 094E 026		Epithermal Au-Ag: low sulphidation	Indicated	45,355	8,022	886	176.880	19.530			B	1988	About 9978 tonnes of ore of greater than 17 grams per tonne gold has been mined (T. Schroeter, personal communication, 1992). Additional ore was mined in 1996 and 1997.	George Cross News Letter No. 213 (November 4), 1988.	
	Shasta 094E 050		Epithermal Au-Ag: low sulphidation	Indicated	1,259,961		6,388		5.070			TOTAL	1989	Drilling has established in situ geological reserves at a gold equivalent gr. based on 2 g/t gold equivalent cutoff gr. for 3 zones. May have been mined out.	George Cross News Letter No.140 (July 20), 1989.	
104	Beaverdell Camp (1)				32,211	5,353										
	Wellington (L.2621)	082ESW072	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	32,211	5,353		166.200				WELLINGTON	1983	Ore dumps on the 500 and 300 levels. Metallurgical testing indicates 83.6 per cent recovery.	Assessment Report 16772, page 7.	
105	Kokanee (2)				17,935	4,304	166									
	Scranton/Sunset	082FNW112, 113	Polymetallic veins Ag-Pb-Zn +/- Au	Indicated	17,935	4,304	166	240.000	9.260	8.200	8.000	SCRANTON	1978	Likely Sunrise zones (082FNW113).	Northern Miner, January 12, 1978.	
106	Rossland Camp (1)				278,900	3,126	4,613									
	Centre Star (L.588)	082FSW094	Intrusion-related Au pyrrhotite veins	Indicated	278,900	3,126	4,613	11.210	16.540	0.650		CENTRE STAR	1968		EMR MR 223 (VSE SMF 11/70, Falaise Lake Mines Ltd.).	
107	Ymir Camp (1)				68,136	501										
	Silver King (L.141)	082FSW176	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	29,753	224		7.540		2.090	0.540	KING VEIN	1983		Assessment Report 12611, page 46.	
	Silver King (L.141)	082FSW176	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	11,974	114		9.500		1.800	1.000	F.W. VEIN	1983		Assessment Report 12611, page 46.	
	Silver King (L.141)	082FSW176	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	8,543	73		8.560		1.050	3.670	D50, D45	1983	D50 and D45 zones off Dandy level combined and averages weighted.	Assessment Report 12611, page 46.	
	Silver King (L.141)	082FSW176	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	5,533	46		8.400		1.600	0.100	MAIN VEIN EXTENSION	1983		Assessment Report 12611, page 46.	
	Silver King (L.141)	082FSW176	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	6,186	26		4.130		1.160	0.090	DUMPS	1983		Assessment Report 12611, page 46.	
	Silver King (L.141)	082FSW176	Polymetallic veins Ag-Pb-Zn +/- Au	Measured	6,147	18		2.900		1.200	0.300	OPEN PIT	1983		Assessment Report 12611, page 46.	
Deposits with unknown silver grades.																
108	True Fissure	093M 032	Polymetallic veins Ag-Pb-Zn +/- Au	Assay				1155.600	0.686	2.660	7.500	VEIN	1983	Weighted average of samples from the western part of the vein over an average width of 0.5 metre.	Assessment Report 13091.	
109	Britannia	092GNW003	Noranda/Kuroko massive sulphide Cu-Pb-Zn	Measured	1,424,147					1.900		BRITANNIA	1974	Reserves in No. 10 mine at time of mine closure. Measured and drill indicated.	Property File - Memorandum, Northcote, K. (1979).	
110	Granduc	104B 021	Besshi massive sulphide Cu-Zn	Indicated	39,316,435					1.730		GRANDUC	1969	Ore reserves before production began in 1971. The reserve does not take into account the total production to 1984 or 15.2 mt of ore.	Granduc Mines Ltd. Annual Report 1969.	
111	Salmo Camp (1)	HB (L.12672)	Irish-type carbonate-hosted Zn-Pb	Combined	36,287					0.100	4.100	HB	1978	Measured and indicated ore.	Energy, Mines and Resources Canada, Mineral Bull. MR 198, page 209.	
112	Gibraltar (4)				145,583,000											
	Gibraltar West	093B 007	Porphyry Cu +/- Mo +/- Au	Measured	183,240,000					0.320		GIBRALTAR	1988	Total combined reserves for Gibraltar East (093B 012), Pollyanna (093B 006), Granite Lake (093B 013) and Gibraltar West.	Property File - Placer Dome Inc. Annual Report 1988.	
	Gibraltar	093B 012	Porphyry Cu +/- Mo +/- Au	Proven	142,544,000					0.303		GIBRALTAR	1996	Total sulphide reserves.	T. Schroeter, personal communication, 1997.	
	Gibraltar	093B 012	Porphyry Cu +/- Mo +/- Au	Proven	3,039,000					0.273		TOTAL	1996	Total oxide reserves.	T. Schroeter, personal communication, 1997.	
	Granite Lake	093B 013	Porphyry Cu +/- Mo +/- Au	Combined	80,900,000					0.305		GRANITE LAKE	1995	Proven and probable reserves for Granite Lake.	Gibraltar Mines Limited, Annual Report 1995.	
	Pollyanna	093B 006	Porphyry Cu +/- Mo +/- Au	Combined	47,700,000					0.300		POLLYANNA	1995	Proven and probable reserves for Pollyanna.	Gibraltar Mines Limited, Annual Report 1995.	
	Pollyanna	093B 006	Porphyry Cu +/- Mo +/- Au	Combined	1,200,000					0.372		CONNECTOR	1995	Proven and probable leachable ore reserves for Connector.	Gibraltar Mines Limited, Annual Report 1995.	



Table 6
Reserve Data for Major Silver Mines and Significant Deposits of British Columbia



Rank	Name	MINFILE No.	Deposit Types	Category	Tonnes	Contained Metals		Grade					Ore Zone	Year	Reserve Comments	Reserve Reference
						Ag	Au	Ag	Au	Cu	Pb	Zn				
						(kilograms)		(grams/tonne)		(per cent)						
113	Red-Chris	104H 005	Alkalic porphyry Cu-Au	Indicated	210,000,000		79,800	0.380	0.460				RED-CHRIS	1997	Selective gravity mining of higher grade core.	Information Circular 1998-1, page 19.
114	Afton	092INE023	Alkalic porphyry Cu-Au	Unclassified	3,000,000					1.500			TOTAL	1997	Reported tonnage in the southwest wall of open pit.	Information Circular 1997-1, page 9.
Others																
115	Copper Crown	093L 026	Subvolcanic Cu-Ag-Au (As-Sb)	Inferred	317,485	9,575		30.160		0.380		4.230	RUBY	1986		Northern Miner - November 17, 1986, page 13.
116	Blackdome	092O 053	Epithermal Au-Ag: low sulphidation	Indicated	209,077	8,844	3,115	42.300	14.900				BLACKDOME	1997	Fully diluted resource including 177,000 tonnes at 17.6 grams per tonne gold and 49.8 grams per tonne silver mineable from existing workings.	George Cross News Letter No. 244 (December 19), 1997.
117	George Gold-Copper Upper	104A 129	Subvolcanic Cu-Ag-Au (As-Sb)	Unclassified	453,550	7,756	907	17.100	2.000	2.000			BLUE-JASPER	1956	Report by McEachern, 1956.	SMF July 12 12, 1979 - Tournigan Mining Explorations Ltd., Keyte, 12/88.
118	Summit	082M 038	Sedimentary exhalative Zn-Pb-Ag	Indicated	244,000	6,686		27.400		0.700	1.000	4.500	EAST	1956	Average width of 2.2 metres.	Minister of Mines Annual Report 1956, pages 69,70.
119	Lucky Mike	092ISE027	W skarn	Indicated	317,485	6,508	178	20.500	0.560				TOTAL	1973	Estimated geologic reserves.	Assessment Report 24600, page iii.
120	Little Billie	092F 105	Cu skarn	Inferred	181,420	6,219	2,114	34.280	11.650	2.000			LITTLE BILLIE	1992	Geological reserves.	George Cross News Letter No. 202 (October 20), 1992.
121	Granite Scheelite	092HSE101	Polymetallic veins Ag-Pb-Zn+/-Au	Inferred	72,568	5,796	659	79.870	9.080				CENTRAL	1980	Possible reserves estimated over a strike length of 270 metres, with a minimum mining width of 0.91 metre, projected to a depth of 90 metres. Grades quoted are diluted.	SMF, Feb.28/80 - Northern Lights Res. Ltd., R.W. Phendler, Oct.17/79.
122	Spar	082M 007	Volcanic-hosted U	Measured	1,360,000	5,712	82	4.200	0.060	0.010	0.170	0.080	FLUORITE	1975	Grade for strontium is 2.48 per cent.	Property File - Wright Engineers Ltd., 1975.
123	Smith Copper	092L 208	Pb-Zn skarn	Indicated	83,906	5,404		64.400		1.690	3.700	12.500	SMITH COPPER	1981	Drill indicated.	George Cross News Letter, December 7, 1988.
124	Pellaire	092O 045	Polymetallic veins Ag-Pb-Zn+/-Au	Combined	67,125	5,289	1,537	78.800	22.900				PELLAIRE	1987	Possible and probable geological reserves.	Property File - SMF 50/88, Lord River Gold Mines Ltd., June 1, 1988.
125	Apex	103B 008	Fe skarn	Inferred	181,420	4,463		24.600		0.900			APEX	1963	Assuming continuity between 2 exposures and 3 packstack holes.	Property File - McDougall, 1964.
126	Elk (Siwash North)	092HNE096	Intrusion-related Au pyrrhotite veins	Combined	121,350	4,284	3,082	35.300	25.400				TOTAL	1996	Includes open-pit and underground probable resources and a further possible underground resource.	Information Circular 199701, page 21.
127	Inel	104B 113	Intrusion-related Au pyrrhotite veins	Indicated	317,485	4,223	1,079	13.300	3.400	0.100	0.100	2.600	DISCOVERY	1991	Underground diamond drilling has defined preliminary reserves for lens No. 1.	Assessment Report 22026, page 14.
128	Dardanelle	103I 107	Polymetallic veins Ag-Pb-Zn+/-Au	Unclassified	181,440	3,103	1,361	17.100	7.500				J.P.	1983	From report by Dr. S. Reamsbottom.	George Cross Newsletter No. 30, 1984.

** Number in brackets is the number of deposits used in the calculations.

* Silver content for reserves is estimated based on previous resource calculations.

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Major Silver Deposits of British Columbia

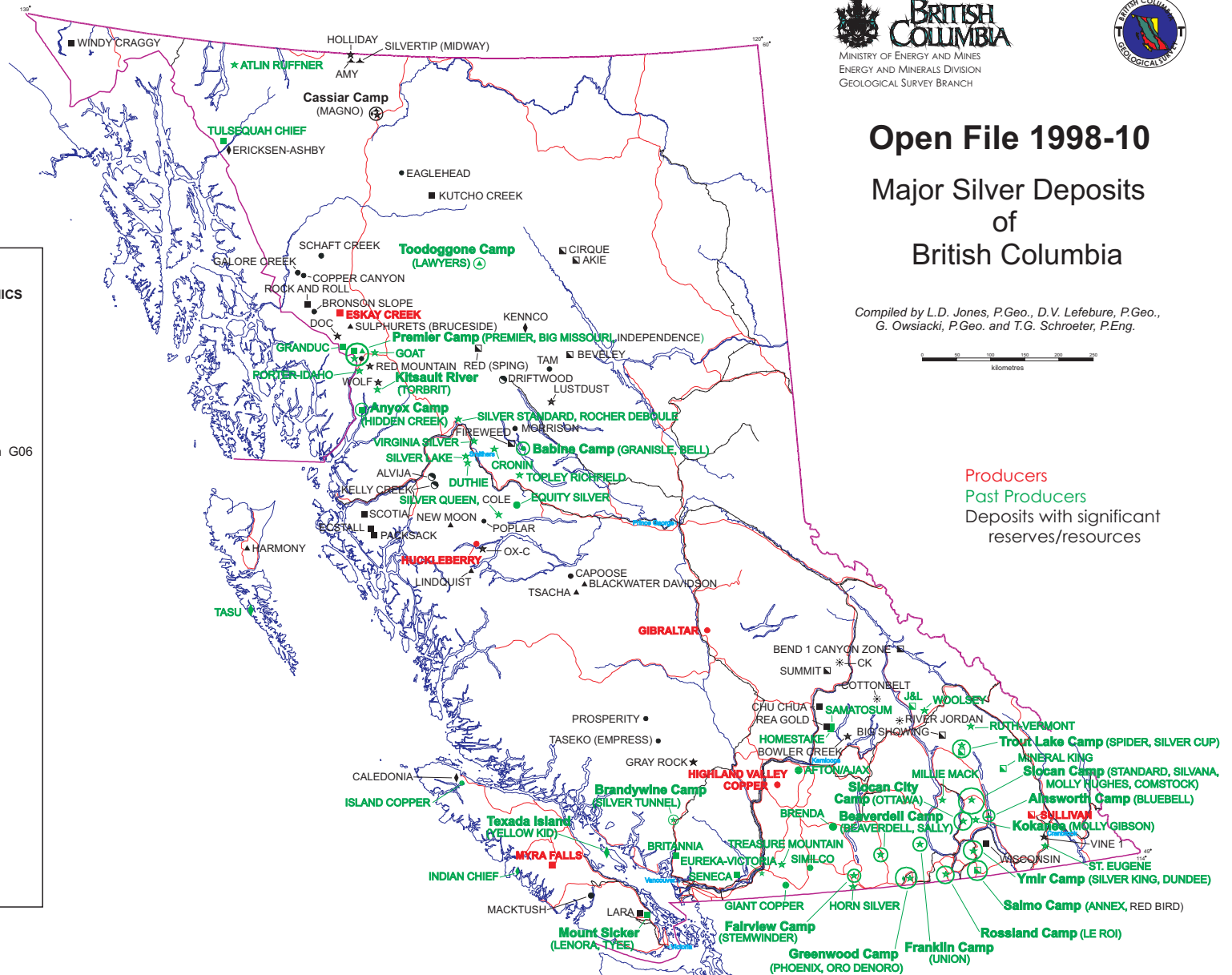
Compiled by L.D. Jones, P.Geo., D.V. Lefebvre, P.Geo., G. Owsicki, P.Geo. and T.G. Schroeter, P.Eng.



Producers
 Past Producers
 Deposits with significant reserves/resources

DEPOSIT TYPES

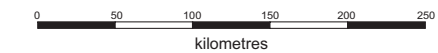
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 Volcanic redbed Cu D03
- **SEDIMENT-HOSTED**
 Sediment-hosted Cu E04
 Irish-type carbonate-hosted Zn-Pb E13
 Sedimentary exhalative Zn-Pb-Ag E14
- **MARINE VOLCANIC ASSOCIATION**
 Besshi massive sulphide Cu-Zn G04
 Cyprus massive sulphide Cu(Zn) G05
 Noranda/Kuroko massive sulphide Cu-Pb-Zn G06
 Subaqueous hot spring Au-Ag G07
- ▲ **EPITHERMAL**
 Hot spring Au-Ag H03
 Epithermal Au-Ag-Cu:High sulphidation H04
 Epithermal Au-Ag:Low sulphidation H05
- ★ **VEIN, BRECCIA AND STOCKWORK**
 Au-quartz veins I01
 Intrusion-related Au pyrrhotite veins I02
 Polymetallic veins Ag-Pb-Zn+/-Au I05
 Stibnite veins and disseminations I09
- ▲ **REPLACEMENT**
 Polymetallic mantos Ag-Pb-Zn J01
- ◆ **SKARN**
 Cu skarns K01
 Pb-Zn skarns K02
 Fe skarns K03
 Au skarns K04
 W skarns K05
- **PORPHYRY AND PORPHYRY-RELATED**
 Subvolcanic Cu-Au-Ag(As-Sb) L01
 Porphyry-related Au L02
 Porphyry Cu-Au:Alkalic L03
 Porphyry Cu+/-Mo+/-Au L04
- ★ **OTHER**
 Broken Hill-type Pb-Zn-Ag+/-Cu



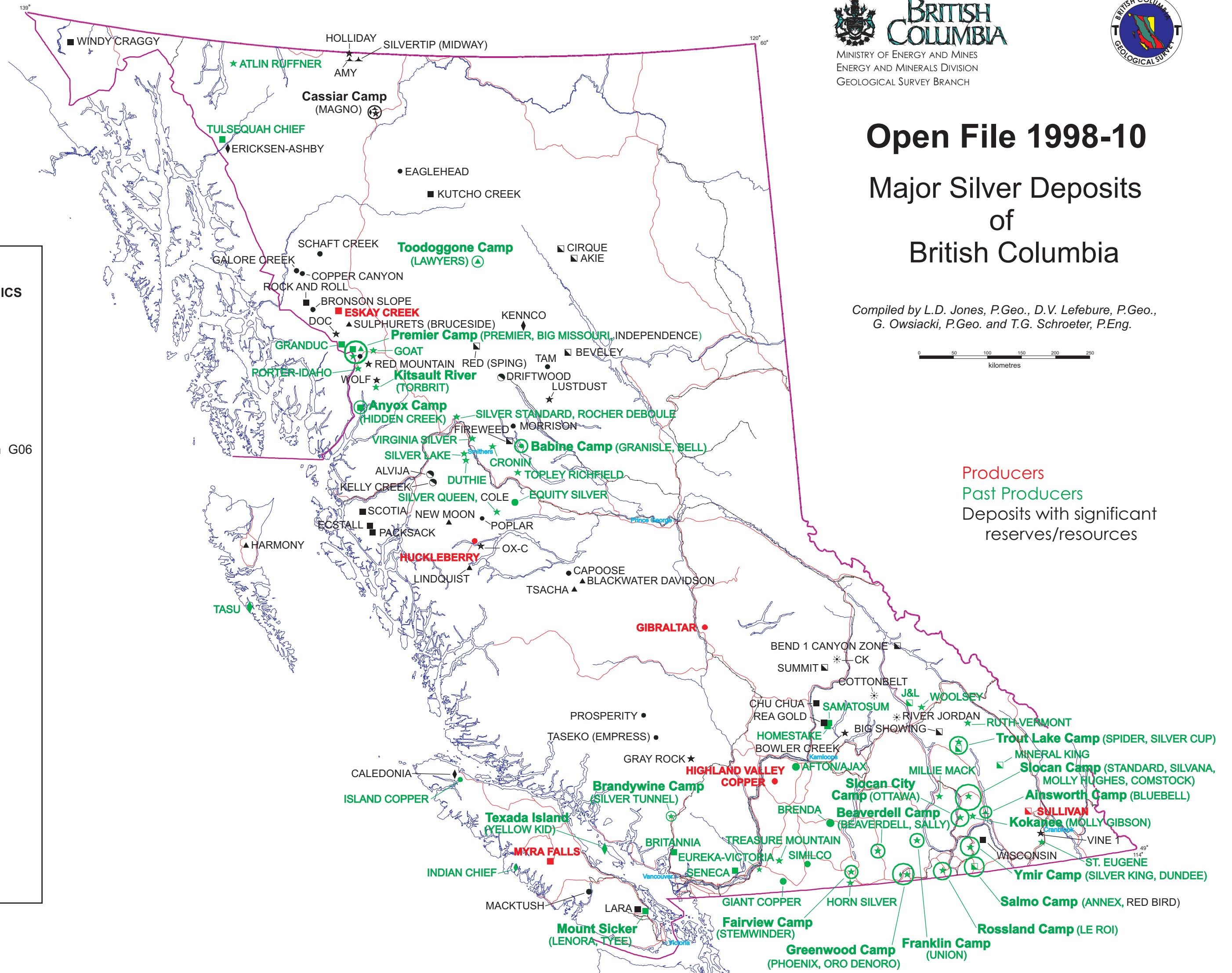
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