

# Operations Fact File

EskayCreek

## Eskay Creek Gold Mine

PF 104B 008

### Ownership:

- Homestake 100%

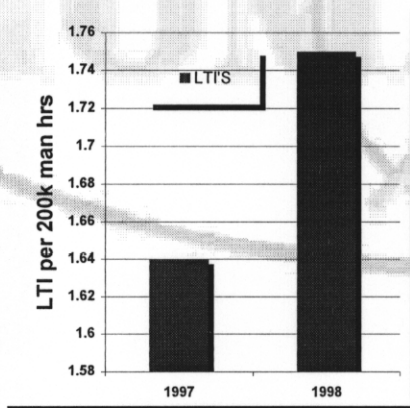
### Location:

- 51 air miles north of Stewart, British Columbia

### Workforce:

- 118 Employees
- 100 Contractors

### Safety Record:



### Reserves and Resources as at 31<sup>st</sup> December 1998

	Tons (millions)	Grade (oz/ton)		Contained Oz ('000)	
		Au	Ag	Au	Ag
<b>Reserves</b>	1.6	1.683	72.7	2,611	112,816
<b>Additional Mineralized Material</b>	0.5	0.448	11.7	209	5,482

57.7 2492.57  
15.36 401.14

### Gold Production

	Tons Processed (millions)	Grade* (oz/ton)	Recovery %	Oz Produced* ('000)	Total Cash Cost (US\$)
<b>1999 (YTD end 1<sup>st</sup> Quarter)</b>	0.40	3.176	-	123.5	121
<b>1998 (year)</b>	0.2	3.195	95	504.78	133
<b>1997 (year)</b>	0.1	3.661	95	417.30	157

<sup>2</sup> \* Gold and silver are accounted for as co-products at Eskay Creek. Silver production is converted into gold equivalent using the ratio of the gold market price to the silver market price. For the years ended December 31, 1998 and 1997, the ratio was 52.6 and 68.2 ounces of silver equals one ounce of gold, respectively. Reserves and mineralized material relate to gold only. Silver reserves and mineralized material are shown at the bottom of the chart.

## The Eskay Story

Situated 50 miles north of Stewart in northwest British Columbia, Canada, the Eskay Creek gold and silver mine extracts ore from one of the highest-grade ore bodies discovered in North America in the twentieth Century.

Following the acquisition of Prime Resources in 1998, Homestake now owns 100% of the mine, which commenced its operations in 1995. Covering an area of approximately 4,630 acres, the mine's property comprises five mining leases, 12 mineral claims and various other mineral and surface rights.

The Eskay Creek orebody is a precious metal-enriched volcanogenic massive sulphide deposit that occurs in association with volcanics of the Jurassic-aged (141 to 195 million years) Hazelton Group. Mineralisation is generally strata-bound and occurs in a contact mudstone and breccia bounded below by a rhyolite flow-dome complex and overlain by volcanic rocks in the west limb of a north-plunging fold. Sphalerite, pyrite, galena and tetrahedrite are the most abundant ore minerals. Native gold occurs mainly as microscopic particles located between sulphide grains or locked in pyrite. Gold also occurs in volcanic rocks beneath the contact mudstone along with coarse-grained sphalerite, pyrite and galena in quartz veins or stockworks.

The mine is operated as a fly-in fly-out camp with power produced on-site by diesel generators. Personnel work rotations of two-weeks on and two-weeks off and are provided with room and board while at the mine site.

A contractor conducts underground mining and accessibility is via three surface portals. A drift-and-fill mining method is utilized with cemented rock backfill. Higher-grade ore is crushed and blended in a facility located at the mine site before being directly shipped to third-party smelters for final processing.

Commercial production from a new gravity and flotation mill commenced in 1998 and has improved the profitability of some ore that would have otherwise been shipped directly to third-party smelters. The mill also enables the processing of other lower-grade ore that was not previously economic. Flotation and gravity concentrates from the mill are also sold to third-party smelters and refineries.

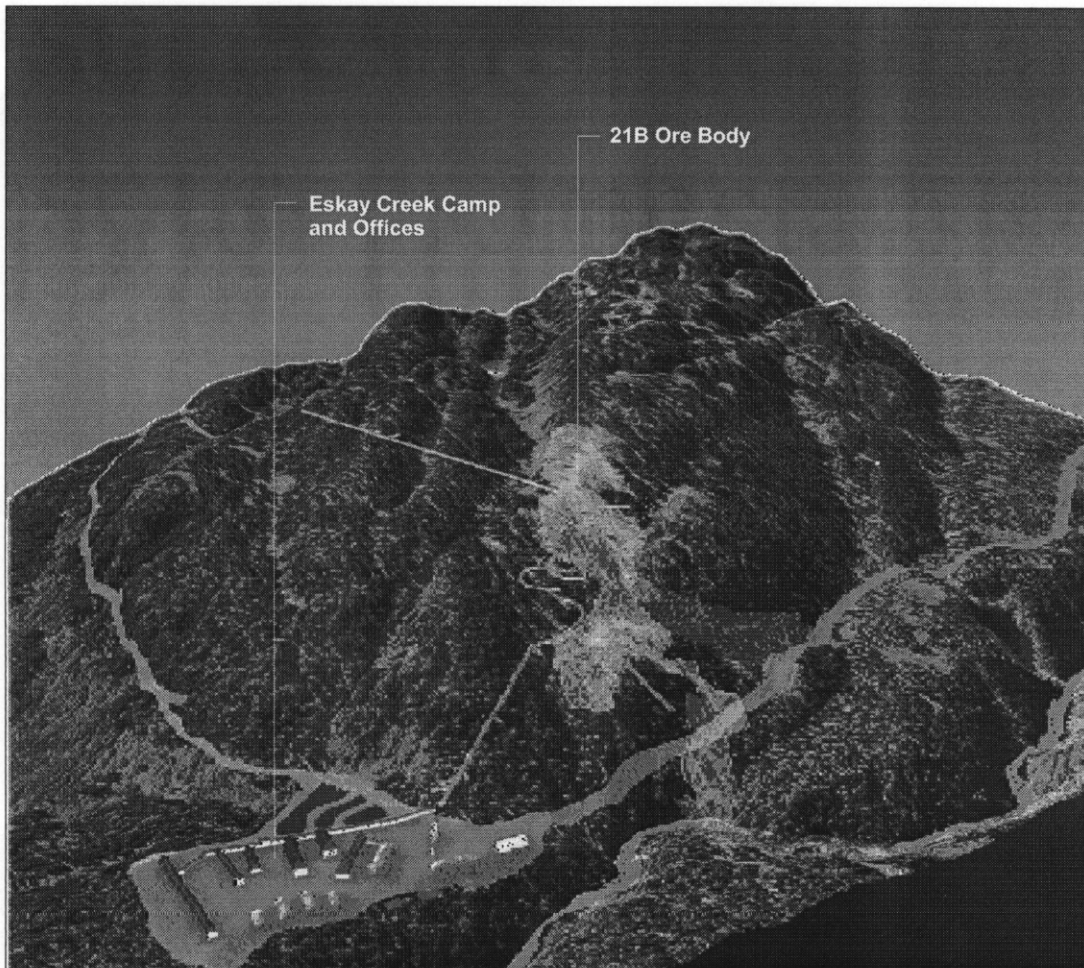
Homestake has negotiated long-term contracts with smelters in Japan and Quebec to process a large proportion of the mine's production. This ore is either trucked to Stewart for shipment to Japan or trucked to Kitwanga, British Columbia, for rail transportation to Quebec.

The land on which the Eskay Creek mine is situated is included in First Nations' land claims. Approximately 35% of the employees of the mine are members of the Tahltan Nation and several service contracts have been entered into with the Tahltan National Development Corporation. Homestake maintains an excellent relationship with aboriginal groups, including the Tahltan Nation. The mine supports economic and

education programs for the Tahltan Nation through preferential hiring, apprenticeship schemes and contributions to local community improvement projects.

Disturbed lands are reclaimed as soon as they are no longer needed for mining at the Eskay Creek operation. The mine has received the British Columbia Mining Association and the Ministry of Employment and Investment Exploration Award for work conducted at Eskay Creek.

“In 1998, Homestake capped of successful acquisition Resources transaction.”



The Eskay Creek mine, in northern British Columbia contains a reserve of 2.6 million ounces of gold and

112.8 million ounces of silver. It is one of the highest-grade ore deposits in the world.

ued in the third quarter of 1999 and ore from both the Williams and David Bell mines will be processed at the lower-cost Williams mill.

Production from the Snip mine decreased to 99,300 ounces at a cash cost of \$205 per ounce during 1998 from 115,600 ounces at a cash cost of \$213 per ounce during 1997 and 101,800 ounces at a cash cost of \$190 per ounce during 1996. Production in 1998 decreased primarily due to lower grade. Production increased in 1997 compared to 1996 due to Homestake's April 1996 purchase of an additional 60% interest in the mine, partially offset by a decrease in total tonnage milled. This operation is expected to complete mining of the existing ore reserves and commence decommissioning and final reclamation in the second quarter of 1999.

## Australia

Western Australian gold production of 925,700 ounces at a cash cost of \$224 per ounce during 1998 compares to production of 974,300 ounces at a cash cost of \$269 per ounce during 1997 and 818,600 ounces at a cash cost of \$305 per ounce during 1996. The decrease in production during 1998 primarily reflects lower production at the Kalgoorlie and Plutonic operations, partially offset by higher production at the Lawlers and Darlot mines. The increase in production during 1997 from 1996 primarily reflects higher production at the Kalgoorlie, Plutonic and Lawlers operations. The decreases in cash costs per ounce during 1998 and 1997 primarily are due to the weaker Australian dollar and productivity improvements.

Homestake's share of production from the Kalgoorlie operations totaled 390,200 ounces at a cash cost of \$229 per ounce during 1998 compared to 425,900 ounces at a cash cost of \$259 per ounce during 1997 and 368,800 ounces at a cash cost of \$291 per ounce during 1996. The decrease in production in 1998 primarily is due to lower Fimiston mill throughput and a decrease in production at the Mt Charlotte mine. The increase in production during 1997 from 1996 reflects higher mill throughput, ore grades and recoveries. The decrease in cash costs in 1998 primarily reflects the weaker Australian dollar. The decrease in cash costs in 1997 from 1996 reflects higher production, the installation of a recycle crusher at the Fimiston mill, and a weakening of the Australian dollar.

In June 1998, structural cracks were detected in the SAG mill ring gear of the Fimiston mill. Temporary repairs were made and operation of the SAG mill currently is being limited to 90% of rated power in order to minimize stress on the gear. A temporary replacement gear was fabricated and will be available for use as an emergency spare. A permanent replacement is expected to be available in May 1999. The underwriters of Homestake's property and business interruption insurance policies have acknowledged liability and the extent of the ultimate recovery is now being determined. Homestake recorded a reduction of \$0.6 million in 1998 operating costs for its share of insurance pro-

ceeds pertaining to business interruption coverage related to 1998 operations. Further business interruption insurance proceeds related to 1999 operations are expected and will be offset against 1999 operating costs. In January 1999, Homestake and its 50% joint venture partner Normandy Mining Ltd. ("Normandy") announced that they had reached agreement with the current open-pit mining contractor to progressively transfer mining operations to Kalgoorlie Consolidated Gold Mines Pty Ltd over the next 12 months. Homestake's share of the total cost of the conversion project including the mining fleet acquisition is estimated to be \$33.6 million. Once full conversion to owner mining is completed, Homestake expects Super Pit cash costs to be reduced by approximately \$26 per ounce.

During 1998, Homestake and Normandy announced a revised operating plan at the Mt Charlotte mine. The mine has experienced a downturn in economic performance and an increased level of ground movement. The new plan provides for a restricted level of mining activity in low-risk areas of the mine until approximately the fourth quarter of 1999. Performance of the mine will be monitored to determine whether the operation will continue beyond that period.

Production at the Plutonic mine totaled 255,500 ounces in 1998 compared to 274,600 ounces in 1997 and 183,700 ounces in 1996. The decrease in production in 1998 from 1997 primarily is due to lower ore grades and lower mill throughput as the mine changes from an open pit to an underground mining operation. The increase in 1997 production primarily is due to an increase in throughput following an expansion of the mill in late 1996. During 1998, ore sourced from the underground operations provided 41% of total production compared to 26% in 1997 and 22% in 1996. Cash costs of \$226 per ounce in 1998 compare to \$234 per ounce in 1997 and \$276 per ounce during 1996. Cash costs in 1998 decreased due to the weakening of the Australian dollar. In Australian dollars, cash costs per ounce increased by 5% in 1998 due to the lower production.

Production at the Darlot mine increased to 77,500 ounces in 1998 compared to 65,200 ounces in 1997 and 62,800 ounces in 1996. The increase in production in 1998 was due to higher throughput and initial mining in the new higher-grade Centenary underground orebody. Cash costs of \$250 per ounce in 1998 compare to \$320 per ounce in 1997 and \$345 per ounce during 1996. The lower cash costs per ounce primarily are due to the higher production and the weakening of the Australian dollar. Production from the higher-grade Centenary orebody is expected to increase through 1999 while in-fill drilling and ore block development continues.

Production at the Lawlers mine increased to 126,400 ounces in 1998 from 87,500 and 50,600 ounces during 1997 and 1996, respectively. The increase in production in 1998 was due to higher grades and increased throughput, primarily from the New Holland and Fairyland deposits. Production increased in 1997 from 1996 primarily due to higher-grade ore sourced from the New Holland pit. The weaker Australian dollar and higher production in

## United States

United States gold production of 691,500 ounces at a cash cost of \$221 per ounce during 1998 compares to production of 702,800 ounces at a cash cost of \$286 per ounce during 1997 and 732,100 ounces at a cash cost of \$283 per ounce during 1996. The slight decrease in production and significant decrease in costs during 1998 primarily reflects lower production at the Homestake mine in South Dakota and initial production from the new Ruby Hill mine in Nevada.

In January 1998, the Company began a major restructuring of underground operations at the Homestake mine to reduce operating costs. The new mine plan, which involved a workforce reduction of 450 employees, is designed to improve the grade of ore recovered through the increased use of mechanized cut-and-fill mining methods. Following an additional capital investment of approximately \$30 million, the new plan contemplates annual gold production from the underground operations of 150,000 to 180,000 ounces of gold at a cash cost of \$280 per ounce. The decision to proceed with the capital expenditure program will be made during the first half of 1999. Homestake mine production decreased to 277,400 ounces at a cash cost of \$249 per ounce in 1998 from 397,300 ounces at a cash cost of \$310 per ounce during 1997 and 407,300 ounces at a cash cost of \$304 during 1996. The lower production and decrease in cash costs during 1998 reflects a decrease in the production levels in the higher-cost, higher-grade underground operations and an increase in the rate of processing the lower-cost, lower-grade Open Cut ore. Mining at the Open Cut was completed in September 1998 and the processing of remaining stockpiled ore will be completed during the second quarter of 1999.

The Ruby Hill mine, which commenced commercial production effective January 1, 1998, produced 116,500 ounces of gold in 1998 at a cash cost of \$122 per ounce. Production from the mine exceeded expectations in 1998 due to higher ore grades.

Production at the McLaughlin mine in northern California totaled 128,700 ounces in 1998 compared to 118,500 ounces during 1997 and 185,500 ounces during 1996. In June 1996, mining operations were completed and the autoclaves were shut down as the orebody was depleted. Through 2002, lower-grade stockpiled ore will be processed through a conventional carbon-in-pulp circuit. Cash costs during 1998 were \$219 per ounce compared to \$254 per ounce during 1997 and \$250 per ounce in 1996. The decrease in cash costs per ounce during 1998 is due to higher grades and cost containment measures. Production is expected to decrease and cash costs per ounce are expected to increase during 1999, as the higher-grade portion of the remaining stockpiles will be consumed by mid-1999.

## Canada

Canadian gold production of 890,400 equivalent ounces at a cash cost of \$166 per ounce during 1998 compares to production of 835,400 equivalent ounces at a cash cost of \$186 per ounce during 1997 and 858,900 equivalent ounces at a cash cost of \$200 per ounce during 1996. The increase in production and decrease in costs during 1998 primarily reflects higher production at the Eskay Creek mine in British Columbia and a weaker Canadian dollar, partially offset by lower production at the Hemlo mining camp in Ontario and at the Snip mine in British Columbia.

Production at the Eskay Creek mine, consisting of payable gold and silver in ore and concentrates sold, increased to 504,800 equivalent ounces of gold during 1998 from 417,300 and 372,300 equivalent ounces in 1997 and 1996, respectively. Cash costs per equivalent ounce, including third-party smelter costs, decreased to \$133 during 1998 from \$157 per equivalent ounce during 1997 and \$170 per equivalent ounce during 1996. The increase in 1998 production primarily is due to the new gravity/flotation mill commissioned in December 1997, which produced concentrates containing 107,300 equivalent ounces of gold, and the effect of a lower gold/silver equivalency. Eskay Creek silver production is converted to gold equivalent production using the ratio of the gold market price to the silver market price. During 1998, the Company converted silver to gold using an equivalency factor of 52.6 ounces of silver equals one ounce of gold production compared to equivalency factors of 68.2 ounces and 74.9 ounces of silver equals one ounce of gold production in 1997 and 1996, respectively. Cash costs per equivalent ounce declined in 1998 due to the lower-cost production from the mill and the weaker Canadian dollar. The lower 1997 costs per ounce compared to 1996 primarily were a result of increased ore sales, higher gold grades, productivity improvements, and a decrease in the gold/silver equivalency ratio, partially offset by lower silver grades.

The Company's share of gold production from the Williams mine in the Hemlo mining camp amounted to 195,200 ounces at a cash cost of \$217 per ounce during 1998 compared to 201,100 ounces at a cash cost of \$229 per ounce during 1997 and 205,500 ounces at a cash cost of \$222 per ounce during 1996. The production decreases in 1998 and 1997 were due to declines in ore grades, partially offset by increased throughput. The Company's share of production at the David Bell mine, also in the Hemlo mining camp, amounted to 79,800 ounces at a cash cost of \$200 per ounce during 1998 compared to production of 90,000 ounces at a cash cost of \$194 per ounce during 1997 and 97,700 ounces at a cash cost of \$172 per ounce during 1996. The decline in production in 1998 is due to lower ore grades as the grade of ore mined more closely approximates the remaining average reserve grade. The decrease in production during 1997 from 1996 was due to lower ore grades, partially offset by higher throughput. Operation of the David Bell mill is expected to be discontinued.

## Statistical Summary 1998

	Gold Production				Production Costs Per Ounce <sup>1</sup>				Reserves <sup>a</sup>			Mineralized Material <sup>b</sup>		
	Interest %	Tons Processed (millions)	Grade (oz/ton)	Recovery %	Ounces Produced	Operating Cash <sup>2</sup>	Other Cash <sup>d</sup>	Noncash <sup>e</sup>	Tons (millions)	Grade (oz/ton)	Contained Ounces (thousands)	Tons (millions)	Grade (oz/ton)	Contained Ounces (thousands)
<b>1998</b>														
<b>United States</b>														
Homestake	100	2.1	0.141	95	277,401	\$244	\$25	\$146	11.1	0.216	2,401	12.1	0.259	3,142
Ruby Hill	100	1.3	0.098	90	116,500	115	7	119	5.1	0.109	553	7.3	0.072	529
McLaughlin	100	2.8	0.077	58	128,680	213	6	127	10.9	0.057	626	-	-	-
Round Mountain <sup>3</sup>	25	11.6	0.016	71	127,625	207	13	56	89.6	0.018	1,584	27.1	0.015	401
Pinson <sup>4</sup>	50	0.9	0.038	83	17,287	436	10	39	-	-	-	3.1	0.057	173
Marigold <sup>4</sup>	33	1.1	0.027	96	23,979	214	21	30	6.4	0.033	213	-	-	-
<b>Canada</b>														
Eskay Creek <sup>5,6</sup>	100	0.2	3.195	95	504,780	130	3	36	1.6	1.683	2,611	0.5	0.448	209
Williams	50	1.4	0.152	95	195,220	211	6	37	15.0	0.148	2,216	4.1	0.118	481
David Bell <sup>7</sup>	50	0.2	0.355	96	91,167	191	9	40	2.4	0.303	711	0.3	0.109	35
Snip <sup>5</sup>	100	0.2	0.693	92	99,283	205	-	142	0.1	0.662	44	-	0.667	16
<b>Australia</b>														
Kalgoorlie	50	6.2	0.071	89	390,186	228	1	49	85.3	0.067	5,720	120.1	0.075	9,003
Plutonic	100	3.2	0.089	89	255,456	224	2	66	9.3	0.073	677	23.2	0.181	4,191
Darlot	100	0.7	0.111	95	77,502	248	2	32	9.0	0.154	1,393	4.1	0.130	532
Lawlers	100	0.6	0.208	96	126,403	179	2	25	1.0	0.117	119	3.7	0.145	536
Mt Morgans	80	0.8	0.074	82	52,350	211	2	26	-	-	-	4.2	0.096	408
Peak Hill	67	0.5	0.052	97	23,803	279	1	27	0.4	0.046	19	0	0	0
Other Projects	-	-	-	-	-	-	-	-	-	-	-	10.6	0.077	821
<b>Chile</b>														
Agua de la Fada <sup>8</sup>	51	0.2	0.216	72	24,119	198	-	89	0.3	0.185	63	8.5	0.169	1,428
<b>Total Production</b>					<b>2,531,741</b>	<b>\$198</b>	<b>\$24</b>	<b>\$156</b>	<b>247.5</b>		<b>18,960</b>	<b>228.9</b>		<b>21,905</b>
<b>Minority Interests<sup>10</sup></b>					<b>(273,452)</b>									
<b>Homestake's Share of Gold</b>					<b>2,258,289</b>									
Eskay Creek - Silver									1.6	72.7	112,816	0.5	11.7	5,482

- Notes**
- Homestake reports per ounce production costs in accordance with the "Gold Institute Production Cost Standard".
  - The Ruby Hill mine commenced commercial production effective January 1, 1998. Costs associated with gold produced during 1997 have been excluded from cost per ounce calculations.
  - Recovery relates to the reusable pad at the Round Mountain mine.
  - Recovery relates to ore milled at the Pinson and Marigold mines.
  - The Eskay Creek and Snip mines were owned 100% by Prime Resources Group Inc. ("Prime"). On December 3, 1998 Homestake acquired the 49.4% of Prime which it did not already own and subsequently, Prime was amalgamated with HCI. The ownership interests and production amounts shown are Homestake's consolidated interest without reduction for minority interests. Production amounts included ounces contained in ore and concentrates sold to smelters.
  - Reserves and mineralized material at December 31, 1997 are Homestake's interest after reduction for the 49.4% minority interests in Prime.
  - Gold and silver are accounted for as co-products at Eskay Creek. Silver production is converted into gold equivalent using the ratio of the gold market price to the silver market price. For the years ended December 31, 1998 and 1997, the ratio was 52.6 and 68.2 ounces of silver equals one ounce of gold, respectively. Reserves and mineralized material relate to gold only. Silver reserves and mineralized material are shown at the bottom of the chart.
  - Ounces produced include 11,331 ounces of gold production from the Quarter Claim in both 1998 and 1997. Reserves include a 25% net profits interests in Quarter Claim.
  - Production, reserves and mineralized material represent Homestake's 51% in Agua de la Fada.
  - Includes 14,441 ounces and 507 ounces of gold produced at the Bellevue project in Western Australia and at the El Hueso mine in Chile during 1997, respectively.
  - Represents minority interests' 49.4% share of Prime's production in 1997 and from January to November 1998.
- (a), (b), (c), (d) and (e) see "Definitions" on pages 26 and 27.

## Statistical Summary 1997

	Gold Production				Production Costs Per Ounce <sup>1</sup>				Reserves <sup>a</sup>			Mineralized Material <sup>b</sup>		
	Interest %	Tons Processed (millions)	Grade (oz/ton)	Recovery %	Ounces Produced	Operating Cash <sup>c</sup>	Other Cash <sup>d</sup>	Noncash <sup>e</sup>	Tons (millions)	Grade (oz/ton)	Contained Ounces (thousands)	Tons (millions)	Grade (oz/ton)	Contained Ounces (thousands)
<b>1997</b>														
<b>United States</b>														
Homestake	100	2.6	0.163	94	397,299	\$306	\$24	\$147	13.6	0.205	2,786	18.5	0.170	3,133
Ruby Hill <sup>2</sup>	100	0.3	-	-	16,629	-	-	-	7.0	0.098	687	7.2	0.073	526
McLaughlin	100	2.7	0.075	58	118,491	247	7	120	13.9	0.061	845	-	-	-
Round Mountain <sup>3</sup>	25	12.1	0.015	75	119,959	210	16	49	100.3	0.018	1,759	35.6	0.016	565
Pinson <sup>4</sup>	50	0.6	0.046	86	25,829	334	10	54	0.9	0.073	65	-	-	-
Marigold <sup>4</sup>	33	0.9	0.028	95	24,547	239	28	34	5.1	0.033	168	-	-	-
<b>Canada</b>														
Eskay Creek <sup>5,6</sup>	100	0.1	3.661	95	417,303	155	2	35	0.8	1.693	1,281	0.2	0.587	110
Williams	50	1.3	0.160	95	201,098	222	7	40	16.5	0.150	2,465	4.1	0.119	490
David Bell <sup>7</sup>	50	0.3	0.397	96	101,313	184	10	45	2.6	0.312	804	-	-	-
Snip <sup>5</sup>	100	0.2	0.780	92	115,644	213	-	115	0.1	0.678	80	-	0.751	10
<b>Australia</b>														
Kalgoorlie	50	6.6	0.072	89	425,914	259	-	55	89.7	0.066	5,924	102.6	0.071	7,242
Plutonic	100	3.4	0.094	88	274,608	234	-	70	5.2	0.108	567	26.7	0.222	5,927
Darlot	100	0.6	0.114	95	65,153	320	-	29	9.4	0.163	1,556	4.0	0.123	492
Lawlers	100	0.5	0.178	96	87,481	260	-	25	1.9	0.134	252	3.8	0.117	445
Mt Morgans	80	0.8	0.093	88	73,588	374	6	85	3.8	0.023	91	-	-	-
Peak Hill	67	0.5	0.069	97	33,104	269	-	151	0.5	0.044	24	-	-	-
Other Projects	-	-	-	-	-	-	-	-	-	-	-	6.6	0.105	696
<b>Chile</b>														
Aqua de la Falda <sup>8</sup>	51	0.1	0.172	65	16,023	213	0	82	0.7	0.167	110	7.7	0.160	1,224
<b>Total Production<sup>9</sup></b>					<b>2,528,931</b>	<b>\$242</b>	<b>\$24</b>	<b>\$157</b>	<b>272.0</b>		<b>19,464</b>	<b>217.0</b>		<b>20,860</b>
<b>Minority Interests<sup>10</sup></b>					<b>(263,276)</b>									
<b>Homestake's Share of Gold Production</b>					<b>2,265,655</b>									
<b>Eskay Creek - Silver</b>									<b>0.8</b>	<b>76.3</b>	<b>59,208</b>	<b>0.2</b>	<b>12.0</b>	<b>2,247</b>

## Definitions

- a. A proven and probable reserve is that part of a mineral deposit which could be extracted or produced economically and legally at the time of the reserve determination.
- b. Mineralized material is gold-bearing material that has been physically delineated by one or more of a number of methods including drilling, underground work, surface trenching and other types of sampling. This material has been found to contain a sufficient amount of mineralization of an average grade of metal or metals to have economic potential that warrants further exploration evaluation. While this material is not currently or may never be classified as reserves, it is reported as mineralized material only if
- c. Operating cash costs are costs directly related to the physical activities of producing gold; includes mining, milling, third-party smelting, and in-mine drilling expenditure that are related to production.
- d. Other cash costs that are not directly related to, but may result from, gold production; includes production taxes and royalties.
- e. Noncash costs are costs that typically are accounted for ratably over the life of an operation; includes depreciation, depletion and final reclamation. Noncash costs do not include amortization of additions to property resulting from SFAS 109 deferred tax purchase accounting adjustments, as these additions do not involve any economic resources of the Company. 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 see "Notes" on pages 24 and 25.