

Canadian Mine Openings, Re-Openings, Expansions/Extensions, Suspensions and Closures

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OVERVIEW

As a result of recoveries in metal prices in the second half of 1994, the year ended on a positive note for mining in Canada. A total of 12 mines opened or re-opened in 1994 while 9 closed or suspended operations, resulting in a net increase in the number of mine openings over mine closings for the first time since 1989 (Tables 1 and 2). Of the openings/re-openings, 2 were new mines (1 base-metal and 1 uranium) and 10 were re-openings (5 precious-metal and 5 base-metal). Of the closures/suspensions, 6 were closures (4 precious-metal and 2 base-metal) and 3 were suspensions (1 precious-metal, 1 base-metal and 1 gypsum). Base-metal mine re-openings were the predominant events in 1994.

The most important new mines in 1994 were the Louvicourt copper-zinc-gold mine in Quebec and the Eagle Point uranium mine in Saskatchewan. The most important re-openings were those of the Heath Steele zinc-copper-lead-silver mine in New Brunswick, the Macassa gold mine and the Garson nickel-copper mine in Ontario, the Afton-Ajax, Gibraltar and Similco copper mines and the H-W and Lynx zinc-copper-silver mines in British Columbia, and the Colomac gold mine in the Northwest Territories.

The Flat Bay gypsum mine in Newfoundland, the Lockerby nickel-copper mine in Ontario, and the Golden Bear gold mine in British Columbia were the only mines that suspended operations in 1994. The Stall Lake copper-zinc mine and the Chisel Lake zinc-copper mine, both in Manitoba, and the Equity Silver silver-gold-copper mine in British Columbia were the most significant closures that occurred during the year.

Of the 9 mine closings, 6 mine closures in 1994 were due to ore depletion. The decision to suspend operations at the Lockerby mine in June was made because of high costs and low present and expected metal

prices at that time. Falconbridge Limited, owner of the mine, plans to use the shut-down period to study the cost of deepening the mine shaft to reach high-grade ore at depth. The suspension of production at the Golden Bear mine in September was the result of ground stability problems. Most workers at the Golden Bear main mine have been redeployed to work on nearby company projects such as the Kodiak A deposit, due to come on stream in 1995, the Kodiak C, D and Grizzly deposits, and the newly discovered Cub deposit. Because of high costs and a shortage of ore reserves, Domtar Inc. had decided to suspend the gypsum operation at its Flat Bay mine. The mine was a seasonal operation and, as a result, all 40 seasonal jobs were lost.

REGIONAL PERSPECTIVE

As a result of the re-opening of the Heath Steele mine in northern New Brunswick and the Colomac mine in the Yellowknife area of the Northwest Territories, and the opening of the Eagle Point mine in northern Saskatchewan, all of these regions gained both mine production capacity and employment.

With the suspension of operations at the Flat Bay gypsum mine near St. George's in November 1994, Newfoundland lost one of its three major industrial mineral mines, along with some 1500 t/d of high-quality gypsum production capacity and 40 seasonal jobs.

With two openings (Louvicourt and Donalds) and two closures (Dumont and Ferderber), Quebec had a break-even year in mine openings and closings in 1994. But because of the relatively large size of the Louvicourt mine, gains from the opening of Louvicourt alone have offset the losses from the two mines that closed, both in terms of annual mine production and in terms of employment. In 1991 and 1992, Quebec suffered considerable net losses, both in mine production capacity and in employment. In 1994, however, the province incurred net gains of some 3450 t of daily ore production capacity and nearly 340 new mining jobs.

In Ontario, the suspension of operations at Lockerby and the closure of Dona Lake in the northern and northwestern parts of the province, respectively, offset much of the positive effects of the re-opening of

Macassa and Garson, both located in northern Ontario, but there was still a positive net impact. This was mainly because the loss of production from the shut-down of Lockerby is expected to be temporary. And, with all 90 affected workers being absorbed in mine-site maintenance at Lockerby and in Falconbridge's other operations in the Sudbury area, the year resulted in a net gain of about 200 mining jobs in Ontario, which compares favourably with the annual net job losses incurred by mining in the province since 1990. In addition, there was a small net gain of nearly 200 t of daily ore capacity. The significant expansions that took place at the Craig nickel-copper mine, the Kidd Creek copper-zinc-silver mine, and the Dome and Detour Lake gold mines in northern Ontario, among others, suggest that 1994 may prove to have been a turning point for mining in Ontario.

Although the Equity Silver mine in mid-western British Columbia closed permanently and the Golden Bear mine in the northwestern part of the province suspended operations in 1994, five mines (H-W, Lynx, Similco, Afton-Ajax, and Gibraltar) re-opened during the year. As Similco, Afton-Ajax, Gibraltar and the H-W mines are relatively large mines, this gave British Columbia a considerable improvement in metal mining after four consecutive years of decline. Net gains in 1994 amounted to over 70 000 t/d of recovered ore capacity and more than 1000 mining jobs.

With the closure of the Stall Lake and Chisel Lake base-metal mines in the Snow Lake area, and with no openings in the year, Manitoba incurred significant net losses in mine production capacity and mine employment as a result of mine openings and closings. Moreover, the Snow Lake area, once one of the most productive mining areas in Manitoba, is now without a producing mine.

MINE EXPANSIONS AND EXTENSIONS

At least 18 significant mine expansion and extension projects were undertaken in 1994, mostly in Quebec and Ontario. The most important ones (Table 2) were at the Dome and Detour Lake gold mines, the Kidd Creek copper-zinc-silver mine, and the Craig nickel-copper mine in northern Ontario; at the Doyon, and Casa Berardi Est and Ouest gold mines in northwestern Quebec; and at the Thompson nickel mine in northern Manitoba.

In Quebec, a \$30 million deep development program was approved by joint-venture partners TVX Gold Inc. and Golden Knight Resources Inc. for the Casa Berardi Est and Ouest mines at La Sarre. When completed in 1996, ore production at the two mines is due to increase to 800 000 t/y, allowing for an increase in gold production to 140 000 oz/y of gold. A similar \$23.7 million deep development program at the Doyon gold mine will extend mining into a newly

outlined mineralized zone, boosting previously established ore reserves (proven and probable of 9.5 Mt averaging 6.13 g/t gold) by 50%. In 1994, MSV Resources Inc. doubled its December 1993 ore reserves at the Copper Rand and Portage mines to nearly 4 Mt grading 1.74% copper and 3.02 g/t gold. At Cadillac, Agnico-Eagle Mines Limited began a \$5.7 million expansion program to increase its ore reserves at the LaRonde gold mine after the discovery of seven new ore zones at depth. Deepening of the main production shaft is expected to be accomplished by November 1995. During the year, Cambior Inc. and Aurizon Mines Ltd. also announced a 50% increase in mineable ore reserves and a 75% increase in the contained ounces of gold since the beginning of 1994 at their equally owned Sleeping Giant gold mine near Amos. New and potential ore reserves have led to the decision to deepen the shaft by nearly 300 m. The capital costs of extending the shaft and developing new ore are estimated to total \$7.3 million in 1994 and 1995. Production costs are expected to decline to below US\$200/oz.

In Ontario, Placer Dome Inc., owner of both Dome and Detour Lake, is expected to spend \$117 million to expand the open-pit operation and mill at Dome. Construction began in April 1994 and is expected to be completed in March 1995. The \$10 million expansion program at Detour Lake, which was completed at the end of January 1995, has extended the current mine life to the year 2003 at an annual production rate of 168 000 oz of gold. Placer Dome also announced a \$40 million expansion program for the Campbell gold mine in northern Ontario for 1995. At the nearby Arthur W. White gold mine, Goldcorp Inc. has also unveiled a \$10 million plan to develop deep gold reserves over the next two years. Falconbridge Limited is nearing completion of a \$250 million expansion of its Craig mine at Sudbury, a mammoth undertaking that began in 1993 which will increase the mine's annual ore production capacity to 1 000 000 t from 627 000 t in 1992. As well, its No. 3 mine (now part of the Kidd Creek mine) at Timmins entered commercial production in January 1994. In addition, 1994 saw a new massive sulphide ore discovery at depth at the mine. Also during 1994, Barrick Gold Corp. (formerly American Barrick Resources Corporation) completed an \$8.7 million shaft extension program at its Holt-McDermott gold mine near Kirkland Lake.

At Thompson, Manitoba, the 1-D nickel deposit was brought on stream in 1994 at a capital cost of US\$181 million, adding significantly to the ore reserves base of the Thompson underground mine. In Alberta, Luscar Ltd. expanded annual production capacity at its Paintearth coal mine near Forestburg to 2.3 Mt in 1994.

In 1994, Westmin Resources Limited continued to extend the mine life of its Myra Falls operations on Vancouver Island by uncovering additional new ore reserves near the Battle and Gap zones discovered in

1993. With two consecutive expansions at the Quinsam coal mine on Vancouver Island successfully completed in the past two years, Hillsborough Resources Limited made a final drive to achieve its new goal of producing 1.2 Mt/y of thermal coal from the mine by 1997. The planned total capital cost of this expansion drive is about \$14.1 million.

In the Northwest Territories, Miramar Mining Corporation discovered more gold mineralization at depth at its Con gold mine near Yellowknife. A \$4 million mill expansion that began in the second quarter of 1994 increased ore capacity to 1270 t/d. At the Lupin gold mine at Contwoyto Lake, a 15% mill expansion program was completed by Echo Bay Mines Ltd. in April. Mill capacity was increased to 2300 t/d at a capital cost of US\$6 million, and the production shaft was deepened to 1200 m. Further mine deepening is planned.

IMPACT

In 1994, there was a net gain in Canada of more than 83 000 t of daily mine capacity and 2000 jobs in mining. New and re-opened mines added some 91 500 t to Canada's daily ore production capacity as well as 2450 jobs. Mine closures and suspensions removed 8300 t of daily capacity and 450 jobs. Job losses from mine closings in 1994 were the lowest since 1989. In 1994, 5% of production capacity and 20% of job gains came from new mines. The reactivation of former operations accounted for 95% of the gains in mine capacity and 80% of new employment. Base-metal mines accounted for 88% of the gains in capacity and 84% of the gains in employment. They also contributed 47% of the capacity losses and 24% of the employment losses from mine closings in the year.

In addition to new and re-opened mines, increased mine expansions and extensions in 1994, mostly at gold and base-metal mines, helped boost mining activity and strengthened Canada's gold and base-metal reserve bases significantly compared to previous years. Capital expenditures on the most important mine expansions and extensions amounted to more than \$300 million.

OUTLOOK

Because of stronger metal prices, especially for base metals, 1994 saw positive impacts on mine production and employment from more mine openings than closings. The year also witnessed the largest surge in mine expansion and extension activities since 1989. Many advanced projects, already in the final stages of development, are poised to begin production in 1995. Based on company plans and announcements, at least 10 new mines and 3 re-openings will take place in 1995. With another 19 mines (16 new and 3 re-openings) expected to come on stream, the outlook for

1996 is even brighter. Expected new mines in 1995 include the Nugget Pond gold mine in Newfoundland; the Eastmain gold mine and the Moberly 1100 Lens zinc-copper-gold-silver mine (opened on January 5, 1995) in Quebec; the Eagle River gold mine in Ontario; the New Britannia gold mine in Manitoba; the Sheerness coal mine in Alberta; and the Eskay Creek gold-silver-zinc-lead-copper mine (opened on January 3, 1995), the Golden Bear Heap Leach (Kodiak A) gold operation, and the QR gold mine in British Columbia. The Paymaster and the Madsen gold mines in Ontario and the Faro zinc-lead-silver operations in the Yukon are to re-open in 1995.

The Island Copper copper-molybdenum mine on Vancouver Island, which originally planned to close in 1996, may close before year-end 1995 as a result of ore depletion. Mining at the British Canadian and Beaver asbestos mines in Quebec is expected to be suspended in May 1995.

Mining in Canada is still in an early recovery stage. The possible extent of such a recovery is unpredictable because much of Canada's mineral output is exported and is therefore dependent upon world market prices. Price improvements in 1994 were largely the result of increased global industrial demand for metals and other mineral commodities. With the continued economic recovery in the industrial countries, continued higher rates of growth in demand for minerals and metals by the developing nations, and improvements in the investment climate in Canada, the future appears favourable for Canadian mining.

Note: Information in this review was current as of February 14, 1995.

TABLE 1. MINE OPENINGS AND CLOSINGS IN CANADA, 1994

Province/ Territory	New Mines			Mines Re-Opened			Mines Suspended			Mines Closed		
	Precious Metals	Base Metals	Other Minerals	Precious Metals	Base Metals	Other Minerals	Precious Metals	Base Metals	Other Minerals	Precious Metals	Base Metals	Other Minerals
Newfoundland	-	-	-	-	-	-	-	-	1	-	-	-
New Brunswick	-	-	-	-	1	-	-	-	-	-	-	-
Quebec	-	1	-	1	-	-	-	-	-	2	-	-
Ontario	-	-	-	1	1	-	-	1	-	1	-	-
Manitoba	-	-	-	-	-	-	-	-	-	-	2	-
Saskatchewan	-	-	1	-	-	-	-	-	-	-	-	-
British Columbia	-	-	-	-	5	-	1	-	-	1	-	-
Northwest Territories	-	-	-	1	-	-	-	-	-	-	-	-
Canada, total by commodity group	-	1	1	3	7	-	1	1	1	4	2	-
Total, Canada		2			10			3			6	

Source: Natural Resources Canada.
- Nil.

TABLE 2. CANADIAN MINE OPENINGS, RE-OPENINGS, EXPANSIONS/EXTENSIONS, SUSPENSIONS, AND CLOSURES IN 1994

Mining Operation	Location	Province	Ore Capacity (tonnes/day)	Employment ¹	Date of Opening, Re-Opening, Expansion/Extension, Suspension or Closure	Mine or Plant Type	Main Commodities	Companies	Remarks
NEW OPERATIONS									
Base Metals									
Louvicourt	Val-d'Or	Que.	4 000	500	July 4	U/G	Copper, zinc, gold	Aur Resources Inc. Novicourt Inc. and Teck Corporation	Discovered in 1989, ore reserves (proven and probable) stand at 15.7 Mt grading 3.4% copper, 2.2% zinc, 31 g/t silver and 0.9 g/t gold. Expected mine life is about 12 years. The mine reached commercial production in October 1994 and full production is expected in 1995. Capital cost amounted to some \$289 million.
Other Minerals									
Eagle Point	Rabbit Lake	Sask.	800	See Remarks	July 1	U/G	Uranium	Cameco Corporation and Uranerz Exploration and Mining Limited	Ore reserves stand at 787 000 t grading 1.65% U ₃ O ₈ . Planned production in 1994 was about 114 000 t of ore to yield some 1900 t of U ₃ O ₈ . Few new jobs were created because the company's existing workforce at the Rabbit Lake operation is also employed at Eagle Point.
RE-OPENINGS									
Precious Metals									
Donalda	Rouyn-Noranda	Que.	450	50	March 25	U/G	Gold	Orco Resources Inc., Metall Mining Corporation and Thunderwood Resources Inc.	Ore is being mined from the No. 1 vein and milled at the nearby Norbec mill. The mine was expected to produce 20 000 troy oz of gold in 1994 at a projected operating cost of US\$240/oz. The mine operated between 1948 and 1955. Current ore reserves stand at about 1.2 Mt grading 6.1 g/t gold. The No. 2 vein, discovered in 1954, is yet to be developed. The mine is owned 65% by Metall and 35% by Thunderwood. Orco is the operator.
Macassa	Kirkland Lake	Ont.	450	123	May	U/G	Gold	Barrick Gold Corp.	Production resumed in May 1994 at an initial rate of 135 t/d, and rose to 320 t/d in October. Mining was suspended in late November 1993 due to a rock burst.

TABLE 2 (cont'd)

Mining Operation	Location	Province	Ore Capacity (tonnes/day)	Employment ¹	Date of Opening, Re-Opening, Expansion/Extension, Suspension or Closure	Mine or Plant Type	Main Commodities	Companies	Remarks
Colomac	Indin Lake	N.W.T.	9 000	234	July 15	O/P	Gold	Royal Oak Mines Inc.	The mine first produced between August 1990 and July 1991. Current ore reserves stand at 16 Mt grading 0.052 oz/t gold. The mine was expected to produce 70 000-80 000 oz of gold in 1994 and 170 000 oz of gold annually, at a cash cost of less than US\$275/oz after its full production rate had been achieved in 1995. The capital cost of re-opening the mine was about \$5 million. An additional \$13 million was committed for equipment rental.
Base Metals									
Garson	Sudbury	Ont.	1 800	175 ^e	March	O/P & U/G	Nickel, copper	Inco Limited	The mine was first opened in 1907; operations were suspended in 1986. Production began at about 450 t/d (while development work towards accessing the main ore-body continued throughout 1994). Full production is planned for 1995. The capital cost of re-opening the mine was expected to be \$40 million.
Heath Steele	Newcastle	N.B.	3 500	235	October 13	U/G	Zinc, copper, lead, silver	Brunswick Mining and Smelting Corporation Ltd. and Noranda Minerals Inc.	Mining was suspended in July 1993 due to low metal prices. Ore reserves stand at 3.6 Mt grading 7.1% zinc, 2.0% lead, 0.9% copper and 73 g/t silver. Full production began in November 1994.
Similco	Princeton	B.C.	22 680	300	August 18	O/P	Copper	Princeton Mining Corporation	Mining was suspended in November 1993 because of the low price of copper. The decision to resume production was based on the strengthened price of copper and successful negotiations with the company's main customer, Mitsubishi Materials, which provided a US\$3.6 million advance payment for start-up costs. Ore reserves, as at January 1, 1993, were 103.9 Mt averaging 0.402% copper.
H-W and Lynx (Myra Falls operations)	Buttle Lake	B.C.	4 000	393	September	U/G	Copper, zinc, gold, silver, lead	Westmin Resources Limited	The mines re-opened in September 1994 after a 16-month labour dispute that interrupted production in April 1993.
Afton-Ajax	Kamloops	B.C.	8 500	150	End of September	O/P	Copper, gold	Teck Corporation	Mining was suspended in August 1991 because of low metal prices. Current ore reserves stand at 14.1 Mt averaging 0.46% copper.

Gibraltar	McLeese Lake	B.C.	36 280	285	September 25	O/P	Copper	Gibraltar Mines Ltd.	Mining was suspended in December 1993 because of low metal prices. Ore reserves, as at January 1, 1993, were 147.5 Mt averaging 0.301% copper and 0.0084% molybdenum.
EXPANSIONS AND EXTENSIONS									
Precious Metals									
Copper Rand and Portage	Chibougamau	Que.	3 000	300	1994/95	U/G	Copper, gold	MSV Resources Inc.	During 1994, the company doubled its 1993 ore reserves at the Copper Rand and Portage mines to 3.9 Mt grading 1.74% copper and 3.02 g/t gold. This effectively quadrupled the mines' ore reserves on February 28, 1993, when MSV Resources acquired the mines from Westminer Canada Limited, a wholly owned subsidiary of Western Mining Corporation Holdings of Australia.
LaRonde	Cadillac	Que.	1 800	240	1994/95	U/G	Gold, copper	Agnico-Eagle Mines Limited	A \$5.7 million expansion program has resulted in the increase of an overall potential resources of 18 million short tons (st) grading 0.176 oz/st gold and 2.49 oz/st silver, plus 0.28% copper and 4.53% zinc. Agnico is deepening the main production shaft to 4300 ft, which is expected to be completed by November 1995.
Sleeping Giant	Amos	Que.	900	65	1994/95	U/G	Gold	Aurizon Mines Ltd. and Cambior inc.	During 1994, newly discovered ore zones had boosted mineable ore reserves by 50% which led to a 75% increase in the contained ounces of gold. New and potential ore reserves have led to the decision to deepen the shaft by nearly 300 m. Capital costs of extending the shaft and new ore development were estimated to be \$7.3 million for 1994 and 1995. Production costs are expected to decline to below US\$200/oz.
Doyon	Cadillac	Que.	3 250	500	1994-96	U/G	Gold	Cambior inc. and Barrick Gold Corp.	The \$23.7 million shaft deepening program will extend mining into a newly outlined mineralized zone west of the Doyon fault with an additional 4.9 Mt of probable or possible ore reserves averaging 6.3 g/t gold.
Casa Berardi Est and Ouest	La Sarre	Que.	1 800	232	1994-96	U/G	Gold	TVX Gold Inc. and Golden Knight Resources Inc.	A \$30 million deep development plan by the partners will allow expansion in ore production at the two mines to 800 000 t/y from the current 560 000 t/y, increasing expected gold production to 140 000 oz/y from the current plan of 100 000 oz for 1994.

TABLE 2 (cont'd)

Mining Operation	Location	Province	Ore Capacity (tonnes/day)	Employment ¹	Date of Opening, Re-Opening, Expansion/Extension, Suspension or Closure	Mine or Plant Type	Main Commodities	Companies	Remarks
Precious Metals (cont'd)									
Craig	Sudbury	Ont.	3 500 ^e	. .	1993-95	U/G	Nickel, copper	Falconbridge Limited	A \$250 million development and expansion of the Craig mine, which began in 1993, is expected to be completed in 1995. Upon completion, the ore production rate at the mine will increase to 1 Mt/y from 627 000 t in 1992.
Dome	Timmins	Ont.	4 000	353	1994/95	OP/ & U/G	Gold	Placer Dome Inc.	Installation of a computer "expert system" has resulted in an increase in the mining and ore processing rate from 3000 t/d to 4000 t/d. Expansion of the open-pit operation and processing plant will enable the combined underground and open-pit operations to produce 315 000 oz of gold per year. With mineable ore reserves estimated at 22.9 Mt grading 2.33 g/t gold, mine life is estimated to be about 11 years. Construction began in April 1994. The \$117 million expansion project is expected to be completed in March 1995, by which time Dome's production rate will be increased to 9100 t/d from 4000 t/d and its cash production cost will be reduced to US\$210/oz from US\$227/oz. 350 jobs will be created during construction. The expansion will result in the creation of 120 permanent jobs at the open pit.
Detour Lake	NE of Cochrane	Ont.	2 850	280	1994/95	U/G	Gold	Placer Dome Inc.	A \$10 million expansion program took place in two phases in 1994 and was completed at the end of January 1995. Phase 1 extends the current mine life through to the year 2000, with production from a combined reserve-resource of 7.3 Mt grading 5.1 g/t gold. Phase 2 extends the mine life a further three years. Annual production at Detour is expected to be 168 000 oz. The cash production cost will be reduced to US\$240/oz from US\$250/oz. A slight increase in employment at the mine is also expected.
Holt-McDermott	Kirkland Lake	Ont.	1 250	180	1993/94	U/G	Gold	Barrick Gold Corp.	An \$8.7 million, 300-m shaft-deepening program at the Holt-McDermott gold mine, which commenced in June 1993, was completed at year-end 1994.

Kidd Creek	Timmins	Ont.	12 500	1 710	1994	U/G	Copper, zinc, silver	Falconbridge Limited	Since new copper-zinc ore was uncovered in 1993 between the 5600-ft level and the 7300-ft level, more massive sulphide mineralization, opened at depth, has been discovered in 1994. This discovery will likely extend the mine life beyond the previously announced 2004. In addition, the Kidd Creek No. 3 mine entered commercial production in January 1994.
Thompson underground	Thompson	Man.	15 000	300 ^e	1994	U/G	Nickel, copper	Inco Limited	The 1-D orebody was brought on stream in 1994 at a capital cost of US\$181 million. With an estimated production life of at least 14 years, 1-D will no doubt extend the remaining 20-year mine life at Thompson.
H-W and Lynx	Battle Lake	B.C.	4 000	393	1994	U/G	Copper, zinc, gold, silver, lead	Westmin Resources Limited	Since the re-opening of the H-W and Lynx mines in September 1994, more new ore reserves were uncovered near the Battle and the Gap zones between the two mines. Work is continuing to extend the mine lives.
Con	Yellowknife	N.W.T.	1 270	335	1994	U/G	Gold	Miramar Mining Corporation	A \$4 million mill expansion program that began in the second quarter of 1994 increased the ore capacity from 1000 t/d to 1270 t/d. In October 1994, extensions to two major mineral trends in areas not previously explored had been identified. These extensions open up possibilities for significant additions of ore reserves in areas easily accessible from existing workings.
Lupin	Contwoyto Lake	N.W.T.	2 300	460	1994	U/G	Gold	Echo Bay Mines Ltd.	A 15% mill expansion program was completed in April 1994. Mill capacity was increased from 2000 t/d in 1993 to 2300 t/d at a capital cost of US\$6 million, and the production shaft was deepened to 3970 ft. A spiral ramp from the surface to 3800 ft was also extended deeper. Echo Bay is planning a further deepening program for the mine.
Other Minerals									
Paintearth	Forestburg	Alta.	6 300	75 ^e	1994	Strip	Coal	Luscar Ltd.	Annual production increased 16% over that in 1993 as the result of a capacity expansion in 1994.

TABLE 2 (cont'd)

Mining Operation	Location	Province	Ore Capacity (tonnes/day)	Employment ¹	Date of Opening, Re-Opening, Expansion/Extension, Suspension or Closure	Mine or Plant Type	Main Commodities	Companies	Remarks
Other Minerals (cont'd)									
Quinsam	Campbell River	B.C.	1 650	104	1992-97	O/P & U/G	Coal	Hillsborough Resources Limited	The company increased coal production to 600 000 t in 1994 from 550 000 t in 1993, and is planning a \$14.1 million expansion of the coal operation to further increase production to 1.2 Mt/y by 1997. The expansion will result in over 100 additional jobs at the mine site.
SUSPENSIONS									
Precious Metals									
Golden Bear	Muddy Lake	B.C.	365	127	September	O/P & U/G	Gold	North American Metals Corp.	Mining was suspended in September 1994 because of bad ground conditions. However, work on a heap-leach operation at the nearby Kodiak A deposit continued and is gearing up for production in the summer of 1995.
Base Metals									
Lockerby	Sudbury	Ont.	1 500	90 ^e	June 1	U/G	Nickel, copper	Falconbridge Limited	Mining was suspended because of high operating costs and low nickel prices prior to the decision. Production began in 1977. The mine accounted for about 9% of Falconbridge's nickel output annually. The company planned to use the shut-down period to study the cost of deepening the shaft to reach high-grade ore at depth. About 90 miners were affected, but they have been reassigned to other positions in the Sudbury area.
Other Minerals									
Flat Bay	St. George's	Nfld.	1 500 ^e	40	November	O/P	Gypsum	Domtar Inc.	Mining suspended in November 1994 as a result of rising production costs and a shortage of ore reserves. The mine was a seasonal operation. All 40 jobs at the mine were lost as a result of the suspension.

CLOSURES

Precious Metals

Equity Silver	Houston	B.C.	1 000	55	January 23	U/G	Silver, gold, copper	Equity Silver Mines Limited	Mine closed due to ore depletion. About 25 workers were retained to carry out closure and reclamation work through 1994. The mine began production in 1980 as an open-pit operation.
Ferderber	Val-d'Or	Que.	550	158	December	U/G	Gold	Aur Resources Inc. and Belmoral Mines Ltd.	Mine closed due to ore depletion. Mine began production in 1981.
Dumont	Val-d'Or	Que.	450	(Included in Ferderber)	June	U/G	Gold	Aur Resources Inc. and Belmoral Mines Ltd.	Mine closed due to ore depletion. Mine began production in 1981.
Dona Lake	Pickle Lake	Ont.	560	80	September	U/G	Gold	Ross Finlay Ltd. and Société Minière Ecurdor	Mine closed due to ore depletion. Company acquired the mine from Placer Dome Inc. in mid-1993. Production first began in June 1989. Mill was sold to Madsen Gold Mines Inc. in December of 1994.

Base Metals

Stall Lake	Snow Lake	Man.	1 100	114	February	U/G	Copper, zinc, gold, silver	Hudson Bay Mining and Smelting Co., Limited	Mine closed due to depletion of ore reserves. Production began in 1964.
Chisel Lake	Snow Lake	Man.	1 300	15	March	O/P	Zinc, copper, gold, silver	Hudson Bay Mining and Smelting Co., Limited	Mine closed due to depletion of open-pit ore reserves. Production began in January 1989.

Source: Natural Resources Canada, based on company reports and communications with companies.

O/P Open-pit; U/G Underground; t Metric tonne; st Short ton; oz Troy ounce.

. . Not available; e Estimated.

¹ Employment refers to workers on the company's payroll and to contract workers at an operation, or at an operation prior to its closure.

Note: A mine that closed and re-opened in the same year is shown under both categories.