

Canadian Mineral Exploration and Discovery Analysis

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CANADA'S STANDING AS AN EXPLORATION TARGET

In 2000, exploration and deposit appraisal expenditures for the non-petroleum minerals in Canada totalled \$496.7 million, down slightly from \$504.3 million in 1999. The total for 2001 is \$512.9 million. In 2001, Canada remained one of the world's top exploration targets (second after Australia) in terms of mineral exploration expenditures. The decline in Canadian exploration expenditures that has occurred in recent years is typical of a world-wide decline. The Metals Economics Group's (MEG) survey¹ indicates that the United States continued to hold third place in 2001, but that Chile and Peru, in declining order, are now close behind the United States, followed by Brazil. The relative rankings of the top three countries have remained unchanged since 1992 (Figure 1). Although the MEG study is the only one to look at exploration spending worldwide, it continues to not adequately account for exploration expenditures in countries such as China and the various countries that have resulted from the break-up of the former Soviet Union. This is because MEG surveys only exploration expenditures by the "Western" companies exploring in these countries (with the exception of exploration in Russia by Alrosa Diamond); therefore, its survey results continue to be indicative of only a small part of the exploration there. With China's mineral production at least seven times that of Canada, more than five times that of Australia, and more than 50% higher than that of the United States,² it is likely that the

Figure 1
Top Three Country Destinations of Mineral Exploration Capital from Worldwide Sources, 1976-2001

Year	Rank		
	First	Second	Third
2001	Australia	Canada	United States
2000	Australia	Canada	United States
1999	Australia	Canada	United States
1998	Australia	Canada	United States
1997	Australia	Canada	United States
1996	Australia	Canada	United States
1995	Australia	Canada	United States
1994	Australia	Canada	United States
1993	Australia	Canada	United States
1992	Australia	Canada	United States
1991	Canada	Australia	United States
1990	Canada	Australia	United States
1989	Canada	Australia	United States
1988	Canada	Australia	United States
1987	Canada	Australia	United States
1986	Canada	Australia	United States
1985	Canada	Australia	United States
1984	Canada	Australia	United States
1983	Canada	Australia	United States
1982	Canada	Australia	United States
1981	Canada	Australia	United States
1980	Australia	Canada	United States
1979	Australia	United States	Canada
1978	Australia	United States	Canada
1977	United States	Canada	Australia
1976	Canada	United States	Australia

Source: Natural Resources Canada, based on official Canadian and Australian statistics and the best available data for the United States.

Notes: Australian expenditures were 6.5% higher than those for Canada in 1983 and 3.3% higher in 1991; however, correcting the reported Australian totals for substantial mine development expenditures, which are not included in Canadian statistics, ranks Canada first in 1983 and 1991. Complete data are not available for the former Soviet Union and China.

¹ Data gathered in 2001.

² Refer to "Canada's Rank in World Mining," *Canadian Minerals Yearbook*, 2000, Table 1, p. 63.6.

magnitude of China's exploration effort actually exceeds that of each of Australia, Canada and the United States. This may also be true of mineral exploration expenditures in Russia.

DIAMOND EXPLORATION HIGHLIGHTS

Exploration for diamonds continues on a substantial number of properties in Newfoundland and Labrador, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, the Northwest Territories and Nunavut. A substantial number of additional diamondiferous kimberlites continue to be discovered in various parts of Canada, although it is not feasible to summarize all the results here. More work will be required to determine whether any of the more recent diamondiferous kimberlite discoveries will constitute viable orebodies.

Ekati Diamond Mine, Northwest Territories

Although exploration of the Ekati property continued in 2001, it is no longer possible to obtain information concerning the results of that exploration, other than the information on reserves and resources that appeared in the *Description of Business and Financial Statements* of BHP Billiton Limited's 2001

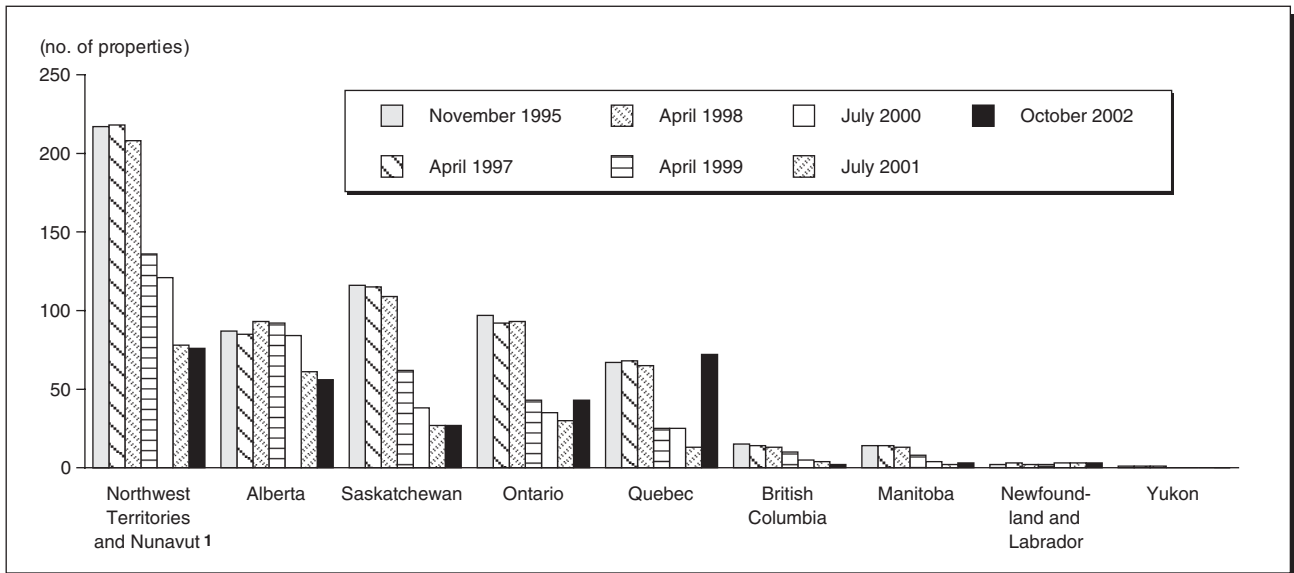
annual report. In addition to resource data for the Panda, Misery, Koala, Fox and Sable pipes, these data (Table 1) include resource data for other deposits (Koala North, Beartooth, Pigeon, Jay and Lynx) that were not previously published.

Diavik Project, Northwest Territories

Exploration of the 267 000-ha Diavik property continued through 2001. According to the Aber Diamond Corporation 2001 annual report, a total of 58 kimberlite pipes (of Eocene age) have now been identified, many of which are known to be diamond-bearing. Two of these pipes were discovered in 2001. Two more pipes were sampled using various drilling techniques to begin the process of economic evaluation. Aber states that when the focus turns from construction and commissioning to the replenishment of mined ore reserves, the kimberlite pipes already discovered will be assessed while the search for new ones will continue. The 2002 exploration budget for the property is approximately \$2.8 million.

Aber's annual report includes a mineral resource summary (Table 2). Of the overall resource of 138.1 Mct (in four deposits), 106.7 Mct have been assigned reserve status at an average value of US\$64/ct (Table 3). Following a ramp-up period, annual production from the Diavik project is planned to be approximately 7 Mct.

Figure 2
Regional Distribution of Diamond Exploration and Deposit Appraisal Properties, 1995-2002



Source: Natural Resources Canada, based on MIN-MET CANADA database for 1995-97 and InfoMine database for 1998-2002, Robertson Info-Data Inc., Vancouver, British Columbia, and used under licence.

¹ In October 2002 there were 76 in the Northwest Territories and 25 in Nunavut for a total of 101. In July 2001 (2000), there were 78 (112) diamond exploration properties in the Northwest Territories and 10 (9) in Nunavut, for a total of 88 (121) properties in the two territories.

The production feasibility study indicates that production is to commence from Pipe A-154S early in 2003 as an open pit on the A-154S and A-154N kimberlites for the first 10 years. Pipe A-418 is to commence production in 2010 and continue to 2022. Pipe A-21 is to be mined between 2013 and 2019. Underground production from Pipe A-154 is forecast to occur between 2015 and 2019.

Gahcho Kué Project, AK Claims, Northwest Territories

The property at Kennady Lake is a joint venture of De Beers Canada Exploration Inc. (51%), Mountain Province Diamonds Inc. (44.1%) and Camphor Venture Inc. (4.9%). In 2001, De Beers carried out a \$10 million bulk sampling program on the Hearne and 5034 pipes, which are the highest value of the 5034, Tuzo, Hearne and Tesla pipes. The taking of the bulk sample started in March 2001 and was completed in May 2001. The purpose of the program was to attempt to demonstrate that diamond revenues could be increased by the approximately 15% needed to advance the project to the feasibility stage. The 1665 ct of diamonds recovered from both pipes, together with the diamonds recovered from the 1999 bulk sample, were valued based on August 2001 values. The average revenue per carat for the 5034 pipe was US\$65.50 for the combined 1999 and 2001 diamond parcels, compared to the adjusted US\$69.30 for the 1999 bulk sample. Similarly, the average revenue per carat for the Hearne pipe is US\$63.30 compared to the adjusted US\$71.50 value for the 1999 bulk sample. Mountain Province indicates that the decrease in value for the 5034 and Hearne pipes are consistent with, or less than, the drop in rough diamond market values that has occurred since 1999.

A 9.9-ct diamond recovered from the 5034 pipe during the 2000/01 winter drilling program of high quality and top colour was valued by the Diamond Trading Company, in London, at US\$60 000. A population of high-value diamonds (which includes the 9.9-ct diamond) exists among the diamonds recovered from the Hearne and 5034 pipes. This observation and additional follow-up analysis of these diamonds has led De Beers to the decision that more bulk sampling of the Hearne and 5034 pipes is needed. Mountain Province states that more high-quality diamonds need to be recovered so that their size frequency distribution can be more accurately determined. These high-quality diamonds, especially the larger ones, could have a large impact on the potential revenue per tonne, so the more accurately their frequency distribution can be determined, the greater will be the confidence in calculated revenue per tonne.

A drilling program consisting of the drilling of five 24-inch-diameter holes into the 5034 pipe, and four or five such holes into the Hearne pipe, commenced in

mid-February 2002; the cost of this program was estimated at \$10 million. The aim is to recover at least another 2000 ct of diamonds.

Exploration continues on other parts of the property and diamondiferous kimberlite sills were discovered in the MZ Lake area, 20 km northwest of Kennady Lake, during the winter of 1999/2000. Several more sills were discovered during the 2001/02 winter program. Five of them were determined to be diamondiferous.

Snap Lake Project, Northwest Territories

On February 26, 2002, De Beers Canada Mining Inc. filed an Environmental Assessment for its Snap Lake diamond project with the Mackenzie Valley Environmental Impact Review Board. Applications for a water licence and land use permit were filed on February 2, 2001. This will be De Beers' first mine outside of southern Africa. Once these processes are satisfactorily completed, the project will then move to the licensing phase under the Mackenzie Valley Land and Water Board. De Beers hopes that development and operation permits will be issued during the third quarter of 2003. If so, underground development and construction will start during 2003 with the main mobilization and construction planned for 2004. Production would begin in the fourth quarter of 2005, with full production of 3000 t/d to be achieved in the first half of 2006. Mining is planned over a period of 20+ years.

Winspear Diamonds Inc., the previous majority owner of the deposit, had stated that indicated ore reserves are 22.8 Mt at a mineable grade of 1.65 ct/t, with a further 20 Mt classified as inferred resources. The diamond value is about US\$100/t. De Beers has not released any further information concerning ore reserves and resources.

Fort-à-la-Corne Area, Saskatchewan

The first kimberlite discovery in the vicinity of Fort-à-la-Corne (65 km east of Prince Albert) was made in 1988. Several companies have been exploring in the region since that time and approximately 90-100 kimberlites have been discovered. Some of them are exceptionally large in size; the largest is 1.6 km in diameter. A joint venture of De Beers Canada Exploration Inc. (42.5%), Kensington Resources Ltd. (42.5%), Cameco Corporation (5.5%), and UEM Inc. (carried 10% interest) has found a total of 69 individual kimberlite bodies on the joint-venture property, 34 of which contain macrodiamonds. The most favourable results, calculated by De Beers, are as follows:

- Kimberlite 122: 540 Mt modelled revenue (best fit) US\$11/t; and

- Kimberlite 141: 395 Mt modelled revenue (best fit) US\$28/t.

These diamond grades are based on very small diamond parcels, so their reliability is not likely to be high. A \$4.79 million exploration program was carried out on the joint-venture property between June and October 2001. Exploration on the property continues.

Also in the Fort-à-la-Corne area, Shore Gold Inc. has been exploring the Star diamondiferous kimberlite since 1996. This kimberlite has a crater facies that is almost 4 km² in area with an average thickness of 88 m. A preliminary tonnage estimate is 500 Mt. Some 3.4 t of split core from 20 NQ and ore PQ drill-holes yielded 1.244 ct of diamonds, or about 0.36 ct/t.

Subsequently, an 82.7-t sample, from a 24-inch-diameter hole drilled in October 2001 using a rotary bit, yielded 8.52 ct of diamonds, or 0.10 ct/t. The two largest stones recovered (both of them fragments of larger diamonds) weighed 0.64 and 0.40 ct.

Victor Project, Ontario

A 7000-t bulk sample taken by De Beers Canada Exploration Inc. from the Victor pipe (52°48'N, 83°53'W) has yielded C\$94/t of diamonds for a kimberlite resource of 37 Mt. Another company source has stated that the value is C\$100/t.

De Beers Canada has discovered 18 pipes on the property, 16 of which are diamondiferous, the largest of them called Victor. The Victor kimberlite comprises two pipes that coalesce at the surface and together have a surface area of 16 ha. The geology of the Victor kimberlite is complex, comprising both crater facies and hypabyssal facies kimberlite. The diamond grade within the kimberlite is highly variable and De Beers states that more work is required to accurately determine the value of the deposit and whether it is feasible to develop a diamond mine.

A pre-feasibility study will be undertaken to address the technical obstacles identified in a 2001 desktop study which concluded that, should a mine be developed, an open-pit operation would be most appropriate.

Activities in the pre-feasibility study will include: 1) an extensive drilling program to understand the geo-technical nature of the underlying clays, overburden, country rock and the hydrology around any future open pit; 2) seismic and electromagnetic surveys; 3) hydrology and geotechnical studies; 4) civil engineering test work and the construction of trial structures on top of the muskeg; 5) additional site infrastructure and design; 6) a number of technical investigations to optimize capital and working costs; and 7) environmental assessment and permitting work.

Jericho Project, Nunavut

In 1997, an underground bulk sample mined from the JD/OD kimberlite pipe of Tahera Corporation yielded 10 589 ct of diamonds (at a cutoff of 1 mm) from a representative 9400 t of kimberlite processed (of a 14 550-t bulk sample). A valuation by the Diamond Trading Company, the marketing arm of De Beers Consolidated Mines Limited, valued the diamonds recovered at an average of US\$59.61/ct. In early 2000, re-evaluation of the diamonds resulted in a modelled valuation of US\$74-\$88/ct.

Tahera Corporation completed a feasibility study on the Jericho diamond project. It indicated that 3 Mct of diamonds could be produced over an eight-year open-pit/underground mine life with a base-case pre-tax rate of return of 34.3%. In early 2001, Tahera filed a formal project proposal with the relevant government authorities and submitted a draft Environmental Impact Statement.

An exploration joint venture with Kennecott Canada Exploration Inc. (wholly owned by Rio Tinto plc) has optioned Tahera's Rockinghorse property and, at Kennecott's option, the Jericho claims to Kennecott. Kennecott can earn a 62.5% interest by financing a mining project to production. Kennecott's goal is to discover more kimberlites and thus enhance the scale of the existing prospect. The agreement stipulates that Kennecott must make a development decision that includes the Jericho pipe within 24 months of September 2002 but cannot make a development agreement based solely on the Jericho pipe. Exploration of the property by Kennecott is continuing.

Jackson Inlet Project, Nunavut

At Jackson Inlet, near the north end of Baffin Island, Twin Mining Corporation collected mini-bulk samples of crater facies kimberlite from six pits on the Freightrain kimberlite. The total sample weight of 228.19 t yielded 46.208 ct of diamonds. A total of 30 stones weighed between 0.25 and 1.557 ct. The majority are reported to be high-quality, white transparent diamonds, but 4.376 ct of the transparent stones are yellow, pink and amber colours up to 0.870 ct in size. The five largest stones recovered from the kimberlite weigh 1.557, 0.936, 0.870, 0.867 and 0.809 ct.

In addition to the Freightrain kimberlite, the Cargo 1, Cargo 2 and Cargo 3 pipes have also been discovered. Exploration of the property for additional kimberlite pipes continues.

A three-year \$37 million exploration program is planned for the property. In 2002, plans are to drill 40 152-mm (6-inch) vertical holes to a depth of 250-300 m and to take a bulk surface sample of 21 000 t.

Buffalo Head Hills Property, Alberta

In March 2000, the K252 kimberlite was discovered on a joint-venture property in the Buffalo Head Hills region. The property is owned by Ashton Mining of Canada Inc. (45%), Alberta Energy Company Ltd. (45%) and Pure Gold Minerals Inc. (10%). To December 31, 2001, a total of 36 kimberlites have been discovered in the region, 24 of which are diamondiferous.

The area of the K252 kimberlite is approximately 2 ha. In March 2001, a 22.8-t mini-bulk sample was taken from which 12.54 ct of diamonds larger than 0.8 mm in size were recovered, for a diamond content of 55.0 ct/100 t. The largest diamond was a 0.94-ct composite crystal and the second largest was a colourless 0.65-ct stone. The next six largest diamonds range from 0.17 to 0.28 ct.

Ashton's 2001 annual report states that the joint-venture partners plan a program of delineation drilling for early 2002 to determine the size and shape of the K252 kimberlite and, if warranted, will proceed with plans for the collection of a larger bulk sample.

Torngat Project, Quebec

Between September 2000 and April 2001, Twin Mining Corporation took a 342-t bulk sample from three sites on a diamondiferous kimberlite dyke that varies from 1 to 4 m and averages 1.2 m wide. A total of 13.120 ct of diamonds were recovered (0.038 ct/t). The largest diamonds weigh 0.685, 0.566, 0.279, 0.271 and 0.199 ct.

The Torngat property (327 km² in area) is characterized by five kimberlite dyke systems with a length of approximately 37 km. The most continuous and widest system observed to date is that made up of the Torngat 1 and Pita dykes, which average 1.45 m wide over an estimated strike length of more than 23.2 km.

Exploration of the property continues in 2002.

Otish Mountains, Quebec

Ashton Mining of Canada Inc. and SOQUEM INC. (50-50 joint-venture partners) have discovered six diamondiferous kimberlite bodies on their Foxtrot property in the Otish Mountains region. A 2.4-t sample collected from four 4.8-cm-diameter core holes in the Renard 2 kimberlite yielded a 1.69-ct parcel of diamonds larger than 0.8 mm, for an implied grade of 0.693 ct/t. The five largest diamonds recovered range in size from 0.1 to 0.16 ct. Exploration of the property continues.

Regional Distribution of Diamond Exploration and Deposit Appraisal Properties

Figure 1 (last updated in October 2002) demonstrates the significant increase in the number of diamond properties in Quebec that has resulted from the discovery of diamondiferous kimberlites in the vicinity of the Otish Mountains. There has also been some increase in the number of diamond properties in Ontario, presumably because it has become evident that the Victor kimberlite represents a potential diamond mine.

There has been a 35% increase in the total number of diamond properties in Canada, from 228 properties in July 2001 to 307 properties in October 2002.

RECENT DISCOVERY SUCCESS IN CANADA

It is becoming increasingly difficult to be aware of all the mineral deposit discoveries being made in Canada. In recent years, the Canadian mining newspaper, *The Northern Miner*, has become increasingly focussed on mining and exploration activities in other countries, so it provides little or no information concerning many of the discoveries made in Canada, especially the smaller ones. This makes it much more difficult to compile deposit discovery listings such as that presented in Table 4 (Canadian Mineral Discoveries, 1990-2001). This listing is undoubtedly still incomplete.

Table 4 includes some deposits for which the owner of the property says that a deposit has been discovered but has not yet provided a tonnage and grade. It also includes some exploration properties on which the drillhole intersections that have been reported are so attractive that it would appear that a deposit discovery has been made, but it is not yet certain that all such properties actually do contain deposits.

Perusal of Table 4 for the types of deposits discovered in Canada over the period 1990-2002 clearly demonstrates that diamond deposit discoveries constitute the major portion of the contained values discovered, followed by nickel-copper-cobalt-precious metal deposits at Voisey's Bay in the Labrador portion of the province of Newfoundland and Labrador, in Quebec's Raglan nickel belt and in the Sudbury District of Ontario. The importance of the diamond discoveries is illustrated by the \$870 million value of the diamonds produced from the Ekati diamond operation in 2001. The value of Canada's diamond production could increase by as much as \$700 million per year when the Diavik operation, which comes into production in early 2003, reaches full production

of about 7 Mct/y following a two-year ramp-up period, and could increase further with production from the Snap Lake deposit in 2005-06.

Additional Canadian diamond mines may be developed from some of the other diamond deposits that have been discovered in Canada between 1990 and the present time. Canada seems likely to soon become the world's third-largest producer of diamonds in terms of value, after Russia and Botswana.

The world-class Voisey's Bay nickel operation, currently scheduled for production in 2006, will lead to a major increase in Canadian nickel production and to a major increase in the value of mineral production in the province of Newfoundland and Labrador.

The large, new, deep Triple 7 orebody at Flin Flon, Manitoba, discovered by Hudson Bay Mining and Smelting Co. Limited in 1996 and scheduled to produce in 2004, is open both laterally and at depth, and together with other discoveries and likely future dis-

coveries in the Flin Flon-Snow Lake region, can be expected to prolong the life of the company's mining and smelting operations.

Notes: (1) Information in this review was current as of January 31, 2002. (2) This and other reviews, including previous editions, are available on the Internet at www.nrcan.gc.ca/mms/cmy/index_e.html.

NOTE TO READERS

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**TABLE 1. EKATI DIAMOND MINE MINERAL RESOURCE ⁽¹⁾
SUMMARY**

	Resource Category	Tonnage	Grade
		(Mt)	(ct/t)
Panda kimberlite (open-pit) (2)	Measured	4.0	1.0
	Indicated	2.1	1.0
Panda kimberlite (underground)	Measured	1.4	1.0
	Indicated	1.0	1.0
Misery kimberlite (open-pit)	Measured	5.2	4.3
	Indicated	1.2	4.5
Koala kimberlite (open-pit)	Measured	6.3	1.0
	Indicated	2.3	0.9
Koala kimberlite (underground)	Measured	3.2	0.8
	Indicated	3.6	1.1
Fox kimberlite (open-pit)	Measured	8.0	0.3
	Indicated	8.2	0.4
Sable kimberlite	Measured	12.0	0.9
	Indicated	4.0	0.9
Koala North kimberlite (open-pit)	Measured	0.1	0.5
Koala North kimberlite (underground)	Inferred	11.2	0.5
Beartooth kimberlite	Measured	1.1	1.1
	Inferred	0.2	1.0
Pigeon kimberlite (open-pit)	Measured	3.1	0.5
	Indicated	1.1	0.5
Jay kimberlite	Indicated	17.0	2.1
Lynx kimberlite	Measured	1.1	0.8
	Indicated	0.3	0.8

Source: *Description of Business and Financial Statements* in BHP Billiton Limited's 2001 annual report.

(1) Total mineral resources (including ore reserves) as of the end of June 2001.

(2) The Panda mine commenced production in 1998 and the Misery mine in December 2001.

**TABLE 2. DIAVIK DIAMONDS PROJECT,
MINERAL RESOURCE SUMMARY**

Pipe	Resource Type	Tonnage	Grade
		(Mt)	(ct/t)
A-154S	Measured	8.2	5.6
	Indicated	3.2	5.1
	Inferred	0.6	3.2
A-154N	Measured	–	–
	Indicated	6.9	2.6
	Inferred	4.6	2.1
A-418	Measured	4.9	3.4
	Indicated	3.6	3.8
	Inferred	0.6	3.5
A-21	Measured	–	–
	Indicated	4.4	3.1
	Inferred	0.6	0.7
Total resources		37.4	3.7

Source: Aber Diamond Corporation *2001 Annual Report*.

– Nil.

Notes: Resource summary to -5 m elevation at a nominal cut off of 1-mm-square mesh. Totals may not add due to rounding.

TABLE 3. DIAVIK DIAMONDS PROJECT, ORE RESERVE SUMMARY

Open-Pit and Underground Mining	Proven			Probable			Proven and Probable		
	(Mt)	(ct/t)	(Mct)	(Mt)	(ct/t)	(Mct)	(Mt)	(ct/t)	(Mct)
A-154S	8.5	5.3	45.3	3.3	4.9	15.9	11.7	5.2	61.2
A-154N	–	–	–	1.3	3.5	4.5	1.3	3.5	4.5
A-418	5.1	3.2	16.4	3.6	3.6	12.8	8.7	3.4	29.3
A-21	–	–	–	4.0	3.0	11.7	4.0	3.0	11.7
Total reserves	13.5	4.6	61.7	12.2	3.7	44.9	25.7	4.2	106.7

Source: Aber Diamond Corporation *2001 Annual Report* (from bankable feasibility study).

– Nil.

Note: Totals may not add due to rounding.

TABLE 4. CANADIAN MINERAL DEPOSIT DISCOVERIES MADE IN THE YEARS 1990-2001 INCLUSIVE

Province or Territory/ Project Name	Discovery Year	Remarks
NEWFOUNDLAND AND LABRADOR		
Hammerdown deposit	1990	Discovered by Noranda Inc. and Major General Resources Ltd. 464 000 t grading 17.48 g/t Au.
Lochinvar deposit	1990 or 1994	Major General Resources Ltd. Discovered by Noranda Inc. 570 000 t of 7% Zn equivalent (Zn, Pb, Ag, Au).
Beaver Brook deposit	1992	Owned by Roycefield Resources Ltd. 2 401 550 t grading 4.08% Sb (at a 1.5% Sb cutoff grade). Deposit expected to be much larger.
Long Lake deposit	1994	Discovered by Noranda Inc. 970 000 grading 10.9% Zn, 1.7% Cu, 1.3% Pb, 33.3 g/t Ag and 0.8 g/t Au. Open along strike and at depth.
Voisey's Bay deposit	1994	Owned by Inco Limited. Discovered by Diamond Fields Resources Inc. Proven reserve 31 Mt grading 2.88% Ni, 1.69% Cu and 0.14% Co. Indicated resource 97 Mt grading 1.29% Ni, 0.61% Cu and 0.08% Co. Inferred resource 14 Mt grading 1% Ni, 0.7% Cu and 0.06% Co.
Orion Zone	1995	Discovered by Major General Resources Ltd. 270 000 t averaging 7.0 g/t Au.
Ryans Pond	1999	Discovered by Inco Limited. Located 3 km ESE of the Eastern Deepes deposit. Drillhole intersection of 29.5 m grading 1.3% Ni, 0.6% Cu and 0.04% Co. Tonnage and grade not published.
NOVA SCOTIA		
Shubenacadie River heavy mineral sands	1998	Titanium Corporation Inc. 331 Mt of titanium-zircon-bearing mineral sands with an average heavy minerals content of 1.94%.
NEW BRUNSWICK		
Mount Fronsac deposit	2001	Discovered by Noranda Inc. 1.2 Mt averaging 7.65% Zn, 2.18% Pb, 0.14% Cu, 40.3 g/t Ag and 0.40 g/t Au.
QUEBEC		
Chevrier deposit	1990	GeoNova Explorations Inc. and Inmet Mining Corporation. 3.5 Mt averaging 5.10 g/t Au.
Bell Allard mine	1993	Discovered by Noranda Inc. Reserves before production began: Proven - 983 000 t averaging 1.06% Cu, 11.79% Zn, 34.5 g/t Ag and 0.8 g/t Au; Probable - 2 552 000 t averaging 1.57% Cu, 14.46% Zn, 44.2 g/t Ag and 0.7 g/t Au.
Fenelon deposit	1993	Fairstar Explorations Inc. and International Taurus Resources Inc. Discovered by Cyprus Canada. Indicated resource (in 1998): 252 000 t grading 14.2 g/t Au. (A bulk sample taken in 2001 produced 4339 oz of Au.)
Caber deposit	1994	Tango Mineral Resources Inc. Discovered by BHP Minerals Canada Ltd. Indicated and inferred resource: 800 000 t grading 10% Zn, 0.6% Cu and 11 g/t Ag.
Comtois deposit	Between 1994 and 1997	Maude Lake Exploration Limited. Discovered by Brian Osborne and Cameco Gold Inc. Indicated resource: 1 813 086 t grading 4.5 g/t Au (1 g/t cutoff) including 695 485 t at 9.05 g/t Au (4 g/t cutoff).

TABLE 4 (cont'd)

Province or Territory/ Project Name	Discovery Year	Remarks
Duquesne West deposit	1994	Globex Mining Enterprises Inc. (50%) and an unspecified company. Discovered by Santa Fe Canadian Mining Limited. Drill-indicated mineral inventory: Fox zone - 729 500 short tons grading 0.31 oz/ton Au; Shaft zone - 276 500 short tons grading 0.20 oz/ton Au; South zone - 183 000 short tons grading 0.49 oz/ton Au; and East Stringer zone - 444 000 short tons grading 0.13 oz/ton Au.
Caber North deposit	1995	Tango Mineral Resources Inc. Discovered by BHP Minerals Canada Ltd. Inferred resources: 2.1 Mt averaging 4.1% Zn, 1.5% Cu and 19 g/t Ag.
Sept-Îles apatite-ilmenite- magnetite deposit	1995	Owned by SOQUEM Inc. and Norsk Hydro. 104 Mt grading 8.54% TiO ₂ and 8.54% P ₂ O ₅ , or 200 Mt grading 8.54% TiO ₂ and 6.2% P ₂ O ₅ .
Tortigny deposit	1995	Discovered by Noranda Inc. 531 000 t grading 6.49% Zn, 3.59% Cu, 85.23 g/t Ag and 0.43 g/t Au.
Falconbridge Raglan Project		
New lenses at Katiniq	1990s	Discovered by Falconbridge Limited. 670 000 t averaging 3.00% Ni and 0.80% Cu.
Unnamed deposit, 4 km east of Katiniq	1995	Discovered by Falconbridge Limited. 814 000 t grading 3.36% Ni and 0.83% Cu.
Katiniq	1995	Discovered by Falconbridge Limited. A new lens containing 400 000 t grading 3.36% Ni and 0.83% Cu.
East Lake	1998	Discovered by Falconbridge Limited. 1 153 000 t grading 3.71% Ni, 1.09% Cu and 0.08% Co.
Lens 1040 orebody	1998	Discovered by Falconbridge Limited. Diluted probable reserves: 1.26 Mt grading 3.23% Ni and 0.95% Cu.
Lens 441, 300 m east of Lens 1040	1998	Discovered by Falconbridge Limited. Undiluted indicated resources: 500 000 t grading 2.37% Ni and 0.64% Cu.
West Boundary property	1998	Discovered by Falconbridge Limited near the Spoon zone. 480 000 t of unstated grade.
Zone 13-14	1998?	Discovered by Falconbridge Limited. 395 000 t averaging 1.90% Ni and 0.51% Cu. Located 9 km east of Katiniq.
Zone 3	1999	Discovered by Falconbridge Limited, southwest of a zone outlined in 1996 and 1997 at Zone 3. 295 000 t grading 3.3% Ni and 0.96% Cu, located 170-280 m below surface on a previously unexplored horizon that appears to extend across a significant portion of the company's Raglan property.
Lens C West Boundary zone	2001	Discovered by Falconbridge Limited. 560 000 t averaging 2.49% Ni and 0.81% Cu.
La Grande Sud deposit	1997	Virginia Gold Mines Inc. Mineral inventory 3 115 266 t averaging 2.6 g/t Au and 0.3% Cu, at a cutoff grade of 1.50 g/t Au. Open at depth.
Gemini deposit	1998	Cancor Mines Inc. Zinc-rich massive sulphide zone: 1 300 000 t of 8.26% Zn equivalent; Copper zone: 700 000 t of 3.01% Cu equivalent; "A" zone: 3 130 000 t grading 1.09 g/t Au and 3.7g/t Ag (may be open in all directions).
Lac Rocher deposit	1998	Discovered by Nuinsco Resources Limited. Estimated geological inventory: 3 Mt averaging approximately 0.5% Ni and 0.2% Cu.

TABLE 4 (cont'd)

Province or Territory/ Project Name	Discovery Year	Remarks
Lapa deposit	1999?	Agnico-Eagle Mines Limited. Discovered by Breakwater Resources Ltd. A gold deposit. Resource estimate not yet released.
Porphyry Mountain deposit (at Gaspé Copper)	1999	Discovered by Noranda Inc. 206 Mt grading 0.7% Cu.
Sigma Mine open-pit orebody	1999	Owned by McWatters Mining Inc. Proven and probable reserves of 23 351 000 t averaging 2.96 g/t Au. Inferred resources: 11 504 000 t averaging 4.9 g/t Au.
Perseverance deposit (at Matagami)	2000	Discovered by Noranda Inc. Mineral resource: 5 Mt averaging 16.8% Zn, 1.3% Cu, 34 g/t Ag and 0.4 g/t Au. Includes Perseverance, Perseverance West and Equinox zones.
Haut Plateau area deposit	2001	Owned by Falconbridge Limited and Rockwell Ventures Inc. Discovered by Falconbridge Limited. A nickel-copper-cobalt discovery. Exploration in progress. Deposit tonnage and grade unknown.
De Maures deposit	1990s	350 000 t grading 7.84% Zn, 1.35% Cu and 22.31 g/t Ag.
ONTARIO		
GAZ deposit	Early 1990s	Wolfden Resources Inc. Discovered by Placer Dome Inc. A gold deposit. Tonnage and grade have not yet been released.
Victor deposit	1990	Discovered by Inco Limited. About 36 Mt averaging 2% Ni and 6% Cu.
McCreedy East deposit	1990	Discovered by Inco Limited. Initial mining phase: 15 Mt grading 1.44% Ni and 4.32% Cu (the deposit is considerably larger).
Nickel Rim Deep deposit	1992	Discovered by Falconbridge Limited. An extension of the Victor deposit on the adjacent Falconbridge property. 1.6 Mt averaging 1.58% Ni, 10.13% Cu (using a cutoff grade of 0.50% Ni), or 0.5 Mt averaging 4.13% Ni and 25.53% Cu (using a cutoff grade of 1.50% Ni).
Kyle #1 kimberlite	1994	Spider Resources Inc. 14.5 Mt based on 18 drillholes and a 6.22-t bulk sample, estimated to contain 0.60 ct/t of diamonds.
Kyle #3 kimberlite	1995	Discovered by KWG Resources Inc. and Spider Resources Inc. 10.9 Mt of dyke-like kimberlite with an average width of 25 m, traced by drilling over a strike length of 450 m. Average grade of nine holes is 0.92 ct/t of diamonds over a 6-m section in each hole.
#17 Gold zone	1995 or 1996	Discovered by Nunisco Resources Limited. 25.2 Mt grading 1.37 g/t Au.
Onaping Depth deposit	1996	Discovered by Falconbridge Limited. Indicated resource: 14.8 Mt of 2.52% Ni, 1.15% Cu and 0.06% Co. Inferred resource: 1.2 Mt of 3.61% Ni, 1.21% Cu and 0.07% Co.
#34 Nickel zone	1996	Discovered by Nunisco Resources Limited. Strike length 350 m; weighted average grade of 1.98% Ni, 1.65% Cu, 0.09% Co, 2.35 g/t Pt, 5.94 g/t Pd, 1.59 g/t Au and 22.5 g/t Ag (based on only four drillholes), or drill-indicated resource with a metal content valued in the order of of \$425/t based on subsequent drilling.
Timmins deposit	1996	Holmer Gold Mines Limited. 1.4 Mt grading 9 g/t Au.
Big Whopper petalite deposit	1997	Discovered by Avalon Ventures Ltd. 11.6 Mt averaging 1.34% Li ₂ O, of which 5.6 Mt average 1.41% Li ₂ O.

TABLE 4 (cont'd)

Province or Territory/ Project Name	Discovery Year	Remarks
Big Mack pegmatite deposit	1997	Owned by Emerald Fields Resources Corporation, adjacent to the Big Whopper deposit. An ellipsoidal pegmatite exposed at surface for a 125-m strike length and 30-m width. A 5-t bulk sample yielded a Li ₂ O grade of 4.85%. Resources include 300 000+ t of unspecified grade, plus another zone of about 200 000 t.
Kelly Lake deposit	1997	Discovered by Inco Limited. 10.5 Mt grading 1.77% Ni, 1.34% Cu and 3.69 g/t PGM.
Mineralized zone 1800 m north of Copper Cliff South mine shaft	1997	Discovered by Inco Limited. Tonnage and grade have not yet been released. A representative sample taken in 1998 graded 4.5% Ni and 2.2% Cu over a width of 14 m.
Norman West deposit	1997	Discovered by Falconbridge Limited. Undiluted inferred resources: 7.6 Mt of 1.59% Ni and 1.28% Cu.
Victor kimberlite	1997	Discovered by De Beers Canada Exploration Inc. 36 Mt containing C\$94/t of diamonds (another De Beers source says the diamond content is valued at C\$100/t).
Frazer-Morgan zone	1998 or earlier	Discovered by Falconbridge Limited. Located 1.5-2 km southeast of the Fraser shaft. Undiluted inferred resources: 1 780 000 t grading 1.73% Ni and 0.49% Cu at a depth of 1450 m.
Boswell Township deposit	1998	Discovered by Falconbridge Limited. Located 13.5 km east of the Strathcona mill. Undiluted inferred resources: 678 000 t of 1.58% Ni and 0.71% Cu (the drill intersections are between 30 and 100 m below surface).
Potential discovery at Sudbury	1999	Owned by Falconbridge Limited. Located 8 km NW of the Lockerby mine and 3 km west of the Creighton mine. A surface exploration hole intersected 33.4 m averaging 2.6% Ni and 0.8% Cu at a depth of 436 m. According to Falconbridge, the estimated true thickness of the zone is approximately 18 m.
Pump Lake deposit	1999	Discovered by Inco Limited. 3.5 Mt grading 1.4% Ni, 1.0% Cu and 1.5 g/t Pt + Pd + Au. Further drilling is expected to increase tonnage (from a January 18, 2001, Inco press release).
Totten Deep deposit	1999	Discovered by Inco Limited. 10.1 Mt grading 1.50% Ni, 1.97% Cu and 4.8 g/t Pt + Pd + Au.
River Valley deposit (Dana Lake and Lismer Ridge areas)	2000	Discovered by Pacific Northwest Capital Corp. Measured and indicated resources: 18 Mt grading 0.06 g/t Au, 0.34 g/t Pt, 1.02 g/t Pd, 0.02% Ni and 0.1% Cu. Inferred resources: 5.8 Mt grading 0.05 g/t Au, 0.29 g/t Pt, 0.82 g/t Pd, 0.02% Ni and 0.09% Cu.
Nickel Rim South deposit	2001	Discovered by Falconbridge Limited. Located 2.7 km north of the Sudbury airport. 4.6 Mt grading 2.17% Ni, 4.90% Cu, 2.60 g/t Au, 3.12 g/t Pt, 3.66 g/t Pd and 18.56 g/t Ag.
MANITOBA		
McBratney Lake		FNX Mining Co. Inc. PGM mineralization discovered in 1991 by Hudson Bay Exploration & Development Company Limited. Drill intersection of 40 ft grading 10.65 g/t Pt + Pd. Redrilled by Fort Knox Gold Resources Inc. in 2000. Drill intersection of 16.8 m grading 8.9 g/t Pd, 1.8 g/t Pt, 1.1% Cu and 0.6% Ni. Additional drilling was planned for the fall of 2001 but no further information has been released.
Pipestone ilmenite deposit	1992	Gossan Resources Limited. 685 Mt grading 8.37% ilmenite, 17.9% magnetite and 0.28% V ₂ O ₅ .
Photo Lake mine	1993	Discovered by Hudson Bay Mining and Smelting Co., Limited. Mineable reserves prior to commencement of mining: 533 623 t averaging 4.5% Cu, 6% Zn, 33 g/t Ag and 4.7 g/t Au. The deposit has been mined out, but the tonnage and grade produced have not been published.

TABLE 4 (cont'd)

Province or Territory/ Project Name	Discovery Year	Remarks
Pipe #1 Deep deposit	1994	Discovered by Inco Limited. 4 Mt averaging 2.32% Ni and minor Cu.
William Lake	pre-1996	Discovered by Falconbridge Limited. Falconbridge has been doing extensive drilling at William Lake for several years (William Lake is located on the southwest extension of the Thompson Nickel Belt) and appears to have discovered a nickel deposit or deposits, including the W-22 deposit. Tonnage and grade data have not been released.
Triple 7 deposit, Flin Flon	1996	Discovered by Hudson Bay Mining and Smelting Co., Limited (currently being developed for production). 14.2 Mt averaging 2.53% Cu and 5.09% Zn plus unspecified Au and Ag. Deposit open laterally and at depth.
SASKATCHEWAN		
Konoto Lake mine	1994	Discovered by Hudson Bay Mining and Smelting Co., Limited. Mineable resources at January 1, 1999 (prior to production): 1 550 159 t grading 4% Cu, 1.20% Zn, 8.35 g/t Ag and 1.84 g/t Au.
Star kimberlite	1996	Discovered by Shore Gold Inc. Contains 500 Mt. Samples of kimberlite core have given an estimated grade of 31.2 ct/100 t. The largest stone weighed 0.04 ct. An 82.7-t sample yielded 8.52 ct of diamonds, or 10.3 ct/100 t. The largest stones were fragments weighing 0.64 and 0.4 ct.
La Roque claims	1999	Cameco Corporation. Three drillholes have intersected 6.95% U over 3.6 m, 25.36% U over 7.0 m, and 16.2% U over 2.5 m. Exploration is currently suspended; no further drilling has been done.
122 kimberlite, Fort-à-la-Corne area	1999	Discovered by De Beers Canada Exploration Inc., Kensington Resources Ltd., Cameco Corporation and UEM Inc. 540 Mt with a diamond content valued at US\$11/t. A 328-t sample yielded 5.3 ct/100 t. Six diamonds were larger than 0.5 ct with the two biggest stones weighing 1.53 and 1.08 ct.
141 kimberlite, Fort-à-la-Corne area	1999	Discovered by De Beers Canada Exploration Inc., Kensington Resources Ltd, Cameco Corporation and UEM Inc. 395 Mt with a diamond content valued at US\$28/t. The largest diamond recovered weighs 3.35 ct.
Millenium deposit	2000	Discovered by Cameco Corporation (30%), UEM Inc. (23.6%), Cogema Resources Inc. (23.6%) and JCU (Canada) Ltd. (30%). A uranium deposit 600 m below surface, located 40 km north of Key Lake. Tonnage and grade have not been released.
ALBERTA		
Pelican River heavy minerals deposit	1999	New Blue Ribbon Resources Ltd. 14.4 Mt with a total heavy minerals content of between 900 000 t and 1 200 000 t. The heavy minerals consist of 21-24% rutile, 33-36% ilmenite and 15-18% magnetite. Estimated values of heavy mineral products: magnetite, \$60/t (for coal separation); and rutile concentrate, US\$550-\$870/t.
K-252 kimberlite	2000	Discovered by Ashton Mining of Canada Inc. A 22.8-t mini-bulk sample yielded 0.55 ct/t (including 8 macrodiamonds 0.17-0.94 ct in weight), but the kimberlite intrusion appears to be small.
BRITISH COLUMBIA		
Kemess South mine	1990	Discovered by El Condor Resources Ltd. and St. Philips Resources Ltd. (?) 250 Mt averaging 0.22% Cu and 0.6 g/t Au.
Kemess North deposit	1990	Discovered by El Condor Resources Ltd. (?) 442 Mt averaging 0.23% Cu and 0.40 g/t Au.

TABLE 4 (cont'd)

Province or Territory/ Project Name	Discovery Year	Remarks
Gibraltar North deposit	1991	Discovered by Gibraltar Mines Limited. 33.5 Mt averaging 0.45% Cu and 3 g/t Ag.
Blackwater-Davidson deposit	1991	Inferred resource: 6 Mt grading 37.00 g/t Ag and 0.05 g/t Au.
Pine Porphyry Cu-Au deposit	1992	Stealth Minerals Limited and Electrum Resource Corporation. Discovered by Romulus Resources Ltd. 70 Mt grading 0.15% Cu and 0.57 g/t Au.
JD-Finn prospect	1992	AGC Americas Gold Corp. Possible reserves: 147 889 t grading 4.40 g/t Au.
Lloyd 2 deposit	1994	Big Valley Resources Inc. Inferred resource: 7 190 000 t grading 0.31% Cu and 0.243 g/t Au.
Akaie deposit	1994	Discovered by Metall Mining Corporation. 12 Mt grading 8.6% Zn, 1.5% Pb and 17.1 g/t Ag.
Crow-Rhea deposit	1994	Indicated resource: 500 000 t averaging 0.19% Mo.
Iskut wollastonite deposits	1994	Whitegold Natural Resource Corp.
Bril deposit		Measured resource: 1 020 000 t averaging 58.14% wollastonite.
Cliff deposit		Inferred resource: 2 000 000 t averaging 80.0% wollastonite.
Former Cariboo Gold Quartz mine property	1995	Owned by International Wayside Gold Mines Ltd. Indicated resource: 6 010 000 t grading 2.23 g/t Au.
NAK deposit	1995	Discovered by Hera Resources Inc. (now Medallion Resources Ltd.). 45.4 Mt grading 0.70% Cu equivalent (Cu-Au-Mo).
Tsacha deposit	1995	Discovered by Teck Corporation. Indicated resource: 478 000 t grading 8.72 g/t Au and 82.3 g/t Ag (3 g/t Au cutoff).
Afton deposit extension	2000	Additional tonnage discovered by DRC Resources Corporation. Main zone - indicated: 34.3 Mt grading 1.55% Cu, 1.14 g/t Au, 0.125 g/t Pd and 3.42 g/t Ag; inferred: 4.4 Mt (assumed grades as above). Northeast zone - indicated: 1.1 Mt grading 1.02% Cu, 0.86 g/t Au, 0.10 g/t Pd and 5.4 g/t Ag. (This tonnage includes the 9.5 Mt previously known below the open pit, which
Fir carbonatite	2001	Discovered by Commerce Resources Corp. 3.1 Mt averaging 196 g/t Ta ₂ O ₅ and 645 g/t Nb ₂ O ₅ plus 3.23% P.
YUKON		
Eagle Zone deposit	1991	Discovered by Ivanhoe Goldfields Ltd. and Amax Gold Inc. Geological potential resource 64.5 Mt at a grade of 1.03 g/t Au.
Kudz Ze Kayah property - Main deposit	1994	Discovered by Cominco Ltd. Indicated resource: 11.3 Mt averaging 5.89% Zn, 1.52% Pb, 0.3% Cu, 133.0 g/t Ag and 1.34 g/t Au. Inferred resource: 1.5 Mt averaging 6.4% Zn, 3.1% Pb, 0.1% Cu, 90 g/t Ag and 2 g/t Au.
Wolverine deposit	1995	Discovered by Westmin Resources Limited and Atna Resources Ltd. 6 237 000 t grading 1.33% Cu, 1.55% Pb, 12.66% Zn, 370.9 g/t Ag and 1.76 g/t Au (this deposit has a high selenium content; it may therefore be difficult or impossible to market concentrates without first reducing their selenium content).
Wolf deposit	1997	Discovered by Atna Resources Ltd. and YGC Resources Ltd. 4.1 Mt grading 6.2% Zn, 1.8% Pb and 84 g/t Ag.
Second Discovery at Kudz Ze Kayah	1998	Discovered by Cominco Ltd. 1 Mt averaging 6% Zn and 3% Pb + Cu, with Ag and Au.

TABLE 4 (cont'd)

Province or Territory/ Project Name	Discovery Year	Remarks
East Slope zone	1998	Discovered by Atna Resources Ltd. Tonnage and grade unknown. Intersected by six drillholes over a 250 x 100 m area, open in all directions, but continuity of mineralization disrupted by post-mineral intrusive rocks. Located 1.2 km east of the Wolf deposit.
NORTHWEST TERRITORIES		
Ekati diamond mine		All deposits discovered by BHP Minerals Canada Ltd. Mineral resources at end of June 2001 are as follows.
Fox kimberlite	1992	Mineable from open pit. Measured: 8.0 Mt grading 0.3 ct/t. Indicated: 8.2 million t grading 0.4 ct/t.
Koala pipe	1992	Mineable from open pit. Measured: 5.2 Mt grading 1.0 ct/t. Indicated: 2.3 Mt grading 0.9 ct/t. Mineable underground. Measured: 3.2 Mt grading 0.8 ct/t. Indicated: 3.6 Mt grading 2.1 ct/t.
Jay pipe	1993	Indicated 17.0 Mt grading 2.1 ct/t.
Leslie pipe	1993	Tonnage not available; grade about 0.33 ct/t (US\$89/ct).
Misery pipe	1993	Mineable from open pit. Measured: 5.2 Mt grading 4.3 ct/t. Indicated: 1.2 Mt grading 4.5 ct/t.
Panda pipe	1993	Reserves prior to production - mineable from open pit: Proven and probable: 12.6 Mt grading 1.09 ct/t (US\$130/ct). Mineable underground: Proven and probable: 0.8 Mt grading 0.97 ct/t (US\$130/ct); mineral resources at end of January 2001 - mineable from open pit: Measured: 4.0 Mt grading 1.0 ct/t. Indicated: 2.1 Mt grading 1.0 ct/t. Mineable underground: Measured: 1.4 Mt grading 0.5 ct/t. Indicated: 1.0 Mt grading 1.0 ct/t.
Pigeon pipe	1994	Mineable from open pit. Measured: 3.1 Mt grading 0.5 ct/t. Indicated: 1.1 Mt grading 0.5 ct/t.
Sable pipe	1995	Measured: 12.0 Mt grading 0.9 ct/t. Indicated: 4.0 Mt grading 0.9 ct/t.
Beartooth pipe	1996	Measured: 1.1 Mt grading 1.1 ct/t. Inferred: 0.2 Mt grading 1.0 ct/t.
Koala North pipe	1996	Mineable from open pit. Measured: 0.1 Mt grading 0.5 ct/t. Mineable underground: Inferred: 11.2 Mt grading 0.5 ct/t.
Lynx pipe	1999	Measured: 1.1 Mt grading 0.8 ct/t. Indicated: 0.3 Mt grading 0.8 ct/t.
Damoti Lake deposit	1993	Discovered by Athabaska Gold Resources Ltd. Resource of 2.08 Mt grading 0.297 oz/t Au (includes 451 000 t in the Horseshoe zone grading 0.415 oz/t Au).
Diavik diamond project (deposits going ahead to production)		Owned by Diavik Diamond Mines Inc. and Aber Diamond Corporation.
A-154 South pipe	1994	Value per ct about US\$67. Measured: 8.2 Mt averaging 5.6 ct/t. Indicated: 3.2 Mt averaging 5.1 ct/t. Inferred: 0.6 Mt averaging 3.2 ct/t.
A-154 North pipe	1995	Value per ct about US\$35. Indicated: 6.9 Mt averaging 2.6 ct/t. Inferred: 4.6 Mt averaging 2.1 ct/t.
A-418 pipe	1995	Value per ct about US\$56/t. Measured: 4.9 Mt averaging 3.4 ct/t. Indicated: 3.6 Mt averaging 3.8 ct/t. Inferred: 0.6 Mt averaging 3.5 ct/t.
A-21 pipe	1995	Value per ct about US\$38. Indicated: 4.4 Mt averaging 3.1 ct/t. Inferred: 0.6 Mt averaging 2.7 ct/t.

TABLE 4 (cont'd)

Province or Territory/ Project Name	Discovery Year	Remarks
Nico deposit	1995	Discovered by Fortune Minerals Limited. Indicated mineral resources: 112 977 000 t grading 0.05% Co, 0.11 g/t Au and 0.01% Bi, using a cutoff grade of 0.01% Co. Inferred mineral resources: 5 623 000 t grading 0.03% Co, 0.11 g/t Au and 0.01% Bi. The above grades can be increased using higher Co cutoff grades.
Snap Lake diamond deposit	1996	Owned by De Beers Canada Mining Inc. Discovered by Winspear Resources Ltd. Indicated resource: 22.8 Mt grading 1.65 ct/t. Inferred resource: 20 Mt of unspecified grade.
Gahcho Kue Project (formerly the AK [Kennady Lake] property)		Owned by De Beers Canada Exploration Inc., Mountain Province Diamonds Inc. and Camphor Ventures Inc. Four diamondiferous kimberlites have been defined to date. Exploration continues.
5034 Pipe (1)	1995	12 Mt grading 1.71 ct/t, valued at US\$63/ct, or US\$104/t.
Hearne Pipe (1)	1997	6.9 Mt grading 1.71 ct/t, valued at US\$65/ct, or US\$111/t.
Tuzo Pipe (2)	1997	10.2 Mt grading 1.22 ct/t, valued at US\$43/ct, or US\$52/t.
Tesla Pipe	1997	4.6 Mt grading 0.35 ct/t, valued at US\$96/ct, ⁽³⁾ or US\$36/t. ⁽³⁾
NUNAVUT		
George Lake (5 deposits) and Goose Lake deposit	1985 to 1992	Kinross Gold Corporation. Discovered by Back River Joint Venture (Homestake Mining Company, Kerr-McGee Corporation and MacLab Group). Indicated resource: 4 238 000 t averaging 9.76 g/t Au.
Meadowbank Gold Project		Owned by Cumberland Resources Ltd. Total combined resources in Third Portage deposit (1990), North Portage deposit (1990) Goose Island deposit ⁽³⁾ (1991) and Bay Zone deposit (1997). Measured: 1 191 000 t at 6.58 g/t Au. Indicated 6 584 000 t at 5.65 g/t Au. Inferred: 3 467 000 t at 5.60 g/t Au. (The third Portage deposit was discovered by Asamera Minerals Inc. and Comaplex Minerals Corp.; the North Portage and Goose Island deposits were discovered by Comaplex Minerals Group and Cumberland Resources Ltd.)
PDF zone	1999	Discovered by Cumberland Resources Ltd. Resources not yet calculated.
Vault deposit	2000	Discovered by Cumberland Resources Ltd. Inferred resource: 7 470 000 t at 3.90 g/t Au.
Connector zone	2001	Discovered by Cumberland Resource Ltd. Resources not yet calculated.
Hope Bay Gold Project		Owned by Miramar Mining Corporation. Resources include:
Boston deposit	1992	Discovered by BHP Minerals Canada Ltd. Measured: 232 000 t grading 16.3 g/t Au. Indicated: 1 155 000 t grading 15.24 g/t Au. Inferred: 2 574 000 t grading 10.89 g/t Au.
Doris deposit	1995	Discovered by BHP Minerals Canada Ltd. Indicated: 887 000 t grading 21.53 g/t Au. Inferred: 1 678 000 t grading 15.05 g/t Au.
Madrid deposit	1996	Discovered by BHP Minerals Canada Ltd. Indicated: 532 000 t grading 7.78 g/t Au. Inferred: 845 000 t grading 11.3 g/t Au.
Naartok deposit	2001	Discovered by Miramar Mining Corporation and Hope Bay Gold Corporation Inc. Indicated: 558 000 t grading 12.82 g/t Au. Inferred: 312 000 t grading 11.96 g/t Au.
Suluk deposit	2001	Discovered by Miramar Mining Corporation. Inferred: 1 302 000 t grading 12.14 g/t Au.
Inukshuk Zone deposit (at Izok Lake)	1992	Owned by Inmet Mining Corporation. 2 Mt grading 2% Cu and 8% Zn.

TABLE 4 (cont'd)

Province or Territory/ Project Name	Discovery Year	Remarks
Meliadine East Discovery zone	1992	Owned by Cumberland Resources Limited and Comaplex Minerals Corp. Discovered by Asamera Minerals Inc. and Cumberland Resources. Indicated: 1 841 000 t grading 6.7 g/t Au (cut).
Meliadine West Gold Project		Owned by WMC International Limited, Cumberland Resources Ltd. and Comaplex Minerals Corp. Resources all calculated using a 3 g/t Au cutoff. Exploration continues. Total Meliadine West resources: 22 148 000 t averaging 6.33 g/t Au.
F-zone deposit	1993	Discovered by Cumberland Resources Ltd. and Comaplex Minerals Corp. Inferred: 4.1 Mt averaging 5.0 g/t Au.
Pump zone deposit	1994	Discovered by Cumberland Resources Ltd. and Comaplex Minerals Corp. Inferred: 1.4 Mt averaging 6.9 g/t Au.
Tiriganiaq deposit	1995	Discovered by WMC International Limited. Indicated: 5 212 000 t averaging 7.7 g/t Au. Inferred: 7 136 000 t averaging 6.1 g/t Au.
Wolf Main deposit	1995	Discovered by WMC International Limited. Inferred: 2.5 Mt averaging 6.0 g/t Au.
Wolf North deposit	1998?	Discovered by WMC International Limited. Inferred: 1.1 Mt averaging 5.7 g/t Au.
Tiriganiaq West deposit	2000?	Discovered by WMC International Limited. Inferred: 700 000 t averaging 6.7 g/t Au.
Jericho Diamond Project	1995	Owned by Tahera Corporation. Mineable resource in the JD/OD-1 pipe is 2.5 Mt with a diamond content of 1.19 ct/t (US\$75/ct). Total resource: 7.1 Mt averaging 0.84 ct/t.
Fergusson Lake deposit	1999	Owned by Starfield Resources Inc. Original discovery by Inco Limited in 1952. Current resources: 60 Mt averaging 0.59% Ni, 0.93% Cu, 1.32 g/t Pd and 0.19 g/t Pt. Known resources prior to 1999 were 7.3 Mt averaging 0.80 Ni and 0.70% Cu.

Source: Natural Resources Canada.

.. Not available.

(1) Modelled grades and revenues. (2) Revised data from 1999 bulk sampling program. (3) Values based on 1998 mini-bulk sample; tonnage and grade based on 1999 bulk sample.