Regional Review

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Canada's mining industry experienced an exceptionally strong year in 1995 as the value of mineral production increased by 15.5% to $19.3 billion. When natural gas, natural gas by-products and crude petroleum are included, the value of Canada's total mineral production was $43.4 billion in 1995, an increase of 5.4% over 1994. On a regional basis, the three leading mining provinces, Ontario, Quebec and British Columbia, showed strong gains. Ontario was up by 18.8% to $5.7 billion, Quebec by 4.3% to $3.1 billion, and British Columbia by 31.6% to $3.5 billion. In most cases, a combination of increased output and higher commodity prices led to these advances.

Prices for major mineral commodities were strong, particularly for copper, which traded on the London Metal Exchange at more than US$1.30/lb for most of the year. By year-end, however, prices were, in general, down from the highs reached both early in the year and at mid-year.

Exploration/development highlights in 1995 included:

- confirmation of the very significant nickel-copper-cobalt discovery at Voisey's Bay, Labrador, by Diamond Fields Resources Inc., and subsequent equity participation by Teck Corporation and Inco Limited;

- resolution of the Windy Craggy copper-gold deposit controversy by Royal Oak Mines Inc., Geddes Resources Ltd. and the Government of British Columbia;

- the continuing development of a diamond mine at Lac de Gras in the Northwest Territories by BHP Minerals Canada Ltd. and Dia Met Minerals Ltd.; and

- new mine openings in Newfoundland, Quebec, Ontario, Manitoba, Saskatchewan and British Columbia.

Federal/provincial Mineral Development Agreements (MDAs), with the exception of the Quebec MDA, expired during 1995. In the February 1995 Budget, the federal government announced that it would not seek to renew these MDAs when they expired, thus ending some 25 years of this type of cooperative programming with the provinces. The Quebec MDA expires in 1998.

National Mining Week was proclaimed on May 12, 1995, by the Honourable Romeo Leblanc, Governor General of Canada. National Mining Week commences on the second Monday of May, lasts for seven days, and will bring a national focus to the existing provincial/territorial mining weeks/days that are currently held.

In September 1995, the Honourable Anne McLellan, Minister responsible for Natural Resources Canada (NRCan), released for discussion an Issues Paper entitled *Sustainable Development and Minerals and Metals*. The Minister indicated that the Paper was premised on the belief that the key to making sustainable development a reality is to integrate environmental, social and economic considerations from the outset in the decision-making process. Following consultations with stakeholders, NRCan will develop, for consideration by Ministers, a new mineral and metal policy based on sustainable development.

NEWFOUNDLAND AND LABRADOR

In 1995, the estimated value of mineral production from Newfoundland and Labrador was $906.1 million, an increase of 8.2% over 1994. Iron ore production, which was up by nearly 10%, accounted for approximately 90% of the total. Labrador accounted for all of this iron ore production and represented approximately 57% of Canada's total iron ore production in 1995. The production of nonmetals and structural materials, such as slate, cement, asbestos, stone and clay products, accounted for $38.9 million, or some 4.3% of the province's total mineral production.

All major exploration indicators showed significant increases in 1995 due almost entirely to the Voisey's Bay nickel-copper-cobalt discovery in eastern Labrador in 1994. Claim staking increased from roughly 22 000 claims in 1994 to an estimated

248 000 in 1995. Similarly, claims in good standing stood at nearly 281 000 in 1995, up from 37 000 in 1994. Exploration activities were estimated at $55 million in 1995, an increase of some 337% over the $12.6 million in 1994. The estimate for diamond drilling in the province is 183 000 m, reflecting both an increase in advanced and grassroots projects, particularly in Labrador.

Diamond Fields Resources Inc. continued exploration at Voisey's Bay at a brisk pace. Since the discovery of the nickel-copper-cobalt deposit located 35 km southwest of Nain, Labrador, was announced on November 3, 1994, two major mining companies have invested in the project. Teck Corporation purchased a 10.4% interest in Diamond Fields on April 17, 1995, and Inco Limited purchased 25% of the Voisey's Bay project on June 28, 1995. At the end of 1995, total reserves were being projected to be in the 100-Mt range. The increase in reserves from the 31 Mt outlined in the main deposit is the result of a new adjacent discovery named "the eastern deeps." Teck has been engaged as the contractor for the mine/mill feasibility study which is to be completed by June 30, 1996. The study will cover mining and concentrate production, with attendant infrastructure. Conceptual design parameters relating to flowsheet, concentrator, product shipping and tailings disposal will be set by Diamond Fields in consultation with Teck and Inco. Once environmental approvals are received, construction of the new exploration camp, marine landing, airstrip and access road will begin. This infrastructure is expected to be completed in 1996 and the environmental assessment process for the mine and concentrator will also begin in 1996.

With respect to iron ore, the Iron Ore Company of Canada announced a $92 million capital expenditure plan that includes a $24 million re-fit to a wet grinding unit in the Carol Lake plant, replacing two dry grinding mills in the concentrator. Most of this $24 million will be spent in 1996. Wabush Mines Ltd. was near completion of its feasibility study on a new manganese extraction plant for its iron ore concentrator at Wabush. Ming Minerals Inc. re-started mining on the former Rambler property on the Baie Verte Peninsula 20 km southeast of Baie Verte. The mine was reactivated due to the recent increase in copper prices and the low capital cost needed to refurbish the existing facilities. The first shipment of copper concentrate was made in December.

The Hope Brook gold mine of Royal Oak Mines Inc. produced approximately 93 500 oz of gold valued at $45 million in 1995. The company also produced 1.5 million lb of copper.

In October 1995, Galen Gypsum of St. George's started producing gypsum at the Flat Bay mine, which Domtar Inc. closed in 1994. In 1996 the company intends to supply Atlantic Gypsum Limited and North Star Cement Limited of Corner Brook, and possibly international markets.

Newfoundland Resources and Mining Company Limited was declared bankrupt in August 1995 and, on December 21, 1995, the Newfoundland Cement Company Limited, through a wholly owned subsidiary, Atlantic Minerals Limited, acquired the limestone aggregate operation. Reactivation is planned in the spring of 1996.

Companies active in promising development include Richmont Mines Inc., which completed a 2000-t bulk sampling program on the Nugget Pond project in October and expects mine design and feasibility work to be completed over the winter. If a production decision is made, mill construction could start by March 1996 with full production later in the year. Reserves at the property are 416 000 t averaging 14.3 g/t gold. Raymo Processing Limited is constructing a vat-leaching process to extract gold from the tailings of the former Rambler mine. The company expects to start up in April 1996. The proven mineral inventory of the tailings is 1 165 000 t grading 1.695 g/t gold for a total of 1.97 million g of gold. Major General Resources Ltd. increased reserve estimates at its Rendell-Jackman property by adding the newly explored Rumbullion Zone to the Hammerdown Zone. Reserves to date are 464 104 t grading 17.48 g/t gold (approximately 245 000 oz of gold). The 2000-t bulk sample to confirm tonnage and grade prior to committing to bring the mine into production will commence once financial arrangements are complete, likely in 1996. Roycefield Resources Limited is evaluating the Beaver Brook antimony deposit southwest of Gander. Drilling to date has outlined reserves of 920 000 t grading 4.57% antimony. An underground bulk sampling program to confirm the drill-indicated reserves is nearing completion and a positive production decision could be made in 1996. Burin Minerals Ltd. has completed a feasibility study on re-opening the fluorspar mines and mill at St. Lawrence. The study entails the overall operating costs for mining, milling, materials handling, shipping and making sure there is sufficient margin to justify capital expenditures of $21 million. Feasibility reports on mining and mineral processing are complete and are being reviewed by Burin Minerals. Subject to obtaining financing, the company expects to begin production by early 1997. Hi-Point Industries (1991) Ltd. has completed the development of a 50-ha peat bog near Island Pond close to the Gander Bay highway. The peat extracted from this bog will be processed on site and shipped for horticultural purposes. Extraction will begin in the early summer of 1996. Finally, 10376 Newfoundland Limited, a subsidiary of Atlantic Gypsum Limited of Corner Brook, has registered a project under the *Environmental Assessment Act* to develop and operate a gypsum quarry located approximately 300 m east of Coal Brook near Flat Bay. The gypsum at Coal Brook occurs in two separate bodies on the east and west sides of the stream. Due to development/access costs, the emphasis will be on the east side where reserves are estimated at 2 Mt.

The Canada-Newfoundland Agreement on Mineral Development (1994-1995) expired on March 31, 1995.

Nova Scotia

The estimated value of Nova Scotia's mineral production for 1995, including coal but not petroleum, was $360 million, down approximately 11.7% from 1994. Of this total, coal accounted for $160 million. Including petroleum, the total value of production was estimated at $566 million, down 7.2% from 1994.

Mineral exploration and development in Nova Scotia continued at the same level of activity as the previous year with expenditures for 1995 estimated at $1.3 million compared to $1.4 million in 1994. Approximately 16 000 new and re-issued claims were staked in 1995, up roughly 20% from the year before. The amount of exploration drilling was down in 1995 with the completion of approximately 6000 m, compared to 7700 m in 1994.

Overall, 1995 was another good year for the province's industrial mineral producers. Gypsum shipments, although down from 1994's record level, remained strong in 1995 with 6.6 Mt shipped. Owing to demand for the fixed-link project as well as to generally better-than-expected sales in the region, Lafarge Canada Inc., the province's only cement producer, increased shipments from its Brookfield, Colchester County, plant by 20% over 1994.

Nova Scotia coal sales dropped by 26% from 1994, mainly as a result of continuing structural problems at the Cape Breton Development Corporation's Phalen Colliery. A major roof-fall at Phalen's 7-East wall in November led to the suspension of production at the mine and the temporary layoff of 1200 workers. The Corporation subsequently announced that there would be a permanent layoff of 400 workers at the end of March 1996 and another 400 workers would be laid off over the next four years.

REI Nova Scotia Inc., which is in partnership with Nova Scotia Power Inc., drilled a number of coal bed methane exploratory wells in the Stellarton Basin in Cumberland County in 1994, and drilled its first production test well there in September.

Exploration for gold accounted for the majority of mineral exploration in the province during 1995 with the bulk of the work concentrated in the Cambro-Ordovician metasedimentary rocks of the lower Meguma Group in southern mainland Nova Scotia. The Hadrynian and Lower Paleozoic rocks of northern and central Cape Breton Island also received increased attention during the year. Gold exploration was carried out primarily by the junior mining sector and private interests.

An important step was taken in reducing the tax burden for the mining industry in Nova Scotia with the tabling of the provincial Budget on April 11, 1995. The 4% health services tax (non-renewable resource sales tax) on equipment used in the exploration, production and primary processing of mineral commodities was removed.

The existing tax credit system was improved to help attract private-sector venture capital for mineral exploration and development. A personal income tax credit of up to $9000, or 30% of the first $30 000, is now available for investors in new share issues of eligible companies. This is up significantly from the previous tax credit of 25% of the first $10 000, or a maximum credit of $2500. In addition, the provincial government has introduced a new corporate income tax credit to assist small companies in accessing equity markets by lowering the cost of issuing shares to the public. The first $100 000 of costs associated with the preparation of a public offering is now eligible for a non-refundable credit of 35%, for a total credit of $35 000.

The Canada-Nova Scotia Cooperation Agreement on Mineral Development (1992-95) expired on March 31, 1995.

New Brunswick

The estimated value of mineral production, including coal, in New Brunswick in 1995 was $1 billion, an increase of over 11.6% from 1994, and the first time that the value of New Brunswick's mineral production has exceeded the billion dollar mark. Approximately 68% of this amount is derived from base-metal mines operated by Brunswick Mining and Smelting Corporation Limited (BMS) in the Bathurst region of northeastern New Brunswick.

In 1995, 18 396 mineral claims and 5695 claim equivalents were in good standing. Approximately $10 million was spent on exploration in 1995, most of it by Noranda Mining and Exploration Inc. and BMS.

In the Bathurst mining camp, BMS's parent company, Noranda Inc., acquired full ownership of BMS in September 1995 through the purchase of all outstanding shares. As a result, BMS became a division of Noranda Mining and Exploration Inc. and will henceforth not be publishing separate profit figures. However, at the end of the first half of 1995, BMS was reporting a profit of $21.1 million, approximately double the profit for the same period in 1994. Noranda Inc.'s Heath Steele mine operated at full production throughout the year after re-opening in October 1994. The results of a feasibility study on the Halfmile Lake deposit were disappointing and the project is now on hold. However, newly identified ore within the Heath Steele C Zone has extended the life of the mine to the year 2000.

In the Sussex region, the Potash Corporation of Saskatchewan Inc. (PCS Inc.), New Brunswick

Division, reported another record year. Total production by PCS Inc. and the Potacan Mining Company was estimated to be up by approximately 9% from the high level reported in 1994. The Saskatchewan-based company International Minerals & Chemical (Canada) Global Limited (IMC) was chosen by the province to assess the Millstream potash deposit. IMC is committing $575 000 to a three-year exploration program and geotechnical reassessment of the deposit, leading to a feasibility study.

The dramatic rise in antimony prices in 1994 and early 1995 led to a decision by APOCAN Inc. to resume mining the Lake George antimony deposit. Operating approvals were granted in the fall and, by year-end, the company was actively preparing to go back into production.

Also in 1995, Breakwater Resources Inc. announced its intention to re-open the Caribou lead-zinc mine in conjunction with an open-pit operation at the Restigouche deposit. The two lead-zinc deposits are located in the Bathurst area of northeastern New Brunswick. Production is expected to begin in mid-1996.

ADEX Mining Corp. has acquired ownership of the Mount Pleasant tin-indium-zinc-bismuth-tungsten deposit from Piskahegan Resources Inc. Metallurgical testing is continuing and a feasibility study for resuming mining operations is expected to follow in the third quarter of 1996.

In southern New Brunswick, Fosters Resources Ltd. carried out an intensive investigation in the Devils Pike Brook area. Drilling traced a gold-bearing vein system more than 126 m in length to a depth of 80 m. Assays reported 8.86 g/t gold over 2.7 m and 13.45 g/t gold over 4.1 m.

In 1995, two major programs were launched to encourage exploration in northern New Brunswick. The New Brunswick Exploration Assistance Program, funded under the Canada-New Brunswick Cooperation Agreement on Economic Diversification with a budget of $1.2 million over three years, was announced in late 1994 to encourage junior mining companies to explore the province. Under the program junior companies can obtain grants of up to $16 000 for exploration.

Also in 1995, AERODAT Inc. was awarded the contract for a multi-parameter helicopter geophysical survey of the Bathurst base-metal mining district. The survey, which covered 22 237 line km, was completed in November 1995 and the results are scheduled to be published by mid-1996.

Meanwhile, the EXTECH-II program, a multidisciplinary geoscientific study of the Bathurst mining camp, completed its second year. This program, involving more than 28 geoscientists from the Geological Survey of Canada and the provincial Geological Surveys Branch, has a budget of $6.8 million and is scheduled for completion in 1999. The results are designed to enhance the understanding of the geology of the Bathurst mining camp and its base-metal deposits, and will help future exploration by allowing exploration companies to apply better techniques in the search for new base-metal deposits.

The Canada-New Brunswick Cooperation Agreement on Mineral Development (1990-1995) expired on March 31, 1995.

QUEBEC

The growth rate of Quebec's gross domestic product in 1995 was 1.8%, reflecting the significant fall in the growth rate in most industrialized nations. On the other hand, the minerals sector continued to benefit in 1995 from the increase in metals prices that began in late 1994. For the second year in a row, the value of mineral shipments from Quebec rose to $3.1 billion, an increase of 4.0% over 1994. The growth in the value of mineral shipments occurred primarily in the industry sub-sectors of the metallic minerals zinc and copper, whereas there was a 4% reduction in the value of gold shipments in a relatively flat market. The construction materials sector also experienced a slight decrease (4%). The value of shipments of the most important nonmetallic minerals, such as asbestos, titanium and silica, increased slightly in 1995. The value of shipments from peat operations in 1995 grew by 22% because of the exceptional weather conditions during the year.

According to preliminary data for 1995, investment in the mineral industry grew by 6% to $943 million ($891.5 million in 1994). Exploration expenditures continued the growth trend begun in 1993, increasing by 6% to $145 million in 1995 compared to $136.6 million in 1994. Capital expenditures also grew in 1995, increasing by 4% to $215 million ($207.4 million in 1994). Moreover, investment in the development of new deposits remained more or less stable, recording an increase of 1% to $283 million compared to $279.8 million in 1994. Unfortunately, employment fell somewhat to 17 575 person-years from 17 946 in 1994.

In the Chapais-Chibougamau region, MSV Resources Inc. temporarily suspended production at the Eastmain mine. Inmet Mining Corporation began construction work on the infrastructure needed to bring the Troilus gold deposit into production by late 1996. MSV Resources should be undertaking an underground development program on its Corner Bay copper property in 1996.

Lithos Corporation would still like to develop its four lithium deposits near Chibougamau. The company is examining a new process for transforming lithium carbonate into lithium.

In the Joutel–Matagami–Lebel-sur-Quévillon region, Agnico-Eagle Mines Ltd. continued its evaluation of the Vezza deposit near Matagami which has geological reserves of 2 Mt grading 5.14 g/t gold. A decision on production start-up should be made in 1996. Work on the infrastructure at Cambior's Grevet polymetallic project continued in 1995, and production will begin in early 1996. Noranda Mines and Exploration will invest $84 million to begin production at the Bell Allard polymetallic deposit near Matagami. Much of the exploration carried out in this region has been near existing or former mines. The most active regions have been those of Fénélon-Jérémie, west of Matagami, Casa Berardi-Laberge, and Lebel-sur-Quévillon.

In the Abitibi region, two polymetallic mines, the Louvicourt mine east of Val-d'Or and the Bouchard-Hébert mine (1100 lens) north of Rouyn-Noranda, were officially brought on stream in April and June respectively. Lithos Corporation began operations at the Wrightbar deposit near Val-d'Or, where it expects to produce more than 2000 oz/m of gold. Agnico-Eagle Mines Ltd. began major expansion work in 1995 at the Laronde mine to gain access to new reserves. Shaft no. 2 was deepened and the sinking of shaft no. 3 began. Changes to the concentrator will be made to allow processing of the zinc in this new ore. Major work was also performed at the Doyon mine, at the Bousquet no. 2 mine, and on the concentrator at the Sigma mine. The Beaufor gold property of Aurizon Mines Ltd. and Louvem will finally come into production in January 1996. Yorbeau Resources Inc. temporarily suspended operations at the Astoria mine in November.

On the North Shore, iron ore prices increased in 1995. Quebec Cartier Mining Company obtained price increases of 5.9% for concentrate and 13.75% for pellets. Shipments of iron ore were roughly the same as in 1994. Construction work on the infrastructure needed to start operations at the Katinniq-Raglan copper-nickel deposit in Ungava began in 1995. Production should begin in early 1998.

In the Magdalen Islands, a major accident in the Seleine Mines, which caused water seepage into the working shaft, forced the salt producer to close the mine for an indefinite period of time that could be as long as two years. At Témiscouata, Glendyne Quarries Inc. began the production of slate, which will be transformed into roofing tiles for the European market.

Producers in the asbestos sector have had to adjust to a drop in demand. Production stoppages averaging five weeks in the Thetford Mines region and three weeks at Asbestos were necessary.

Total forecast expenditures for 1995/96 under the Canada-Quebec Subsidiary Agreement on Mineral Development amount to $22.3 million. The Financial Assistance Program for Prospecting in Eastern Quebec ended this year. Forecast expenditures for 1995/96 should be about $1.1 million, of which 60% is provided by the Government of Canada. The program for support of the mining sector in the Chapais-Chibougamau region also ended this year. The federal government should spend about $940 000 under this program by the end of the year. The program for mineral exploration in the Mid-North, funded solely by the Quebec government, resulted in an increase in prospecting activities in the James Bay region. The high gold potential of this region became apparent. Seventeen projects were awarded financial assistance totalling $1.2 million.

ONTARIO

For 1995, the estimated value of Ontario's non-fuel mineral production was $5.74 billion, up 18.8% from 1994. Metals contributed $4.37 billion, up 25.5% from 1994; nonmetals contributed $266 million, down slightly from 1994; and structural materials contributed $1.1 billion, up 18.5% from 1994. Production of copper, nickel and silver increased by 12%, 20% and 25% respectively over 1994; their values of production increased by 39%, 63% and 26% respectively over 1994. Zinc production and its value were similar to 1994 levels. However, the production and value of gold dropped by 8%.

Total exploration expenditures in Ontario for 1995, including mine-site exploration, were estimated at $120 million, up some 8% over 1994 and the highest since 1991. Expenditures of $21 million were recorded as assessment work, of which 50% was spent on diamond drilling. Capital expenditures by mining companies were estimated to exceed $600 million, an increase of about 25% over 1994. The mining sector has allotted $1.1 billion for mine development and expansion programs over the period 1994-99.

Effective April 4, 1995, part or all of 20 townships in the Temagami area, which had been withdrawn from staking because of the Teme-Augama Anishnabai land claim, were opened up for staking by the provincial government. Over 1600 claims were staked during the year.

On the production and development side in 1995, Goldcorp Ltd.'s gold production at its Red Lake mine dropped to 50 000 oz and 49 employees were laid off. A $10 million underground exploration program identified new high-grade gold zones below the 30th level. The company will spend $15 million in 1996 to install a new gold recovery process, which should allow higher production rates and reduce cash costs to US$150/oz. Goldcorp's gold production in 1996 is expected to triple to 150 000 oz.

In January, Hemlo Gold Mines Inc. and Teddy Bear Valley Mines Limited started shaft sinking on the joint-venture Holloway property. The companies estimate the mine will be in production in 1996 producing 100 000 oz/y of gold.

In April, with new production from the Dome Superpit, Placer Dome Canada Limited increased the annual throughput at its mill at the Dome mine from 4400 to 10 000 t. At its Campbell mine in Red Lake, the company will spend $70 million to access the 27th level orebody. At its Detour Lake mine, northeast of Cochrane, drilling continues to expand the newly encountered QK Zone, and a $7 million underground exploration program is planned to delineate its extent.

In September, Falconbridge Ltd. opened its Craig mine. The company has spent nearly $300 million since 1985 developing the mine in Onaping, near Sudbury. The project represents the largest mine development program since 1985 and contains 12 Mt of ore in nine identified zones. Full production began in August 1995 with the installation of the skip and production hoist. Falconbridge Ltd. is also spending $47 million to bring the Lockerby mine back into production. The mine, which has reserves for 10 years of operation, resumed production in December. In 1996 production will be 3000 t of nickel and 2000 t of copper, rising to 8000 t/y of nickel and 3500 t/y of copper in 1998, by which time the mine should employ about 100 people.

In October, Inco Limited re-opened its Shebandowan nickel mine, which is located 100 km west of Thunder Bay and which has been on kept on care and maintenance. The mine, with a projected life of three years, will produce at 1800 t/d initially, increasing to 2500 t/d in 1996. About 340 workers will be employed when the mine is operating at full capacity. The mine operator, Dynatech Mining Ltd., spent nearly $17 million to upgrade and recondition the equipment before re-opening.

Barrick Gold Corp. spent $10 million in 1995 on its Holt-McDermott mine where the mill capacity has been expanded from 1400 to 2200 t/d. In 1996, when the high-grade South Zone is in full production, the mine will produce 100 000 oz of gold compared to 66 389 oz in 1995. Barrick sold the Macassa gold mine at Kirkland Lake to Kinross Gold Corp.

Kinross Gold Corp. is spending about $35 million on its Hoyle Pond mine and the Bell Creek mill over the next two years. The new shaft at the mine, which is scheduled to be completed by late 1996, will increase the daily tonnage to 1000 t. The company estimates that its annual gold production will increase to 130 000 oz in 1996; when the expansion is completed employment will increase from 180 to 220. At the Macassa gold mine, rehabilitation work on the No. 2 shaft was completed during the year, and mining costs improved due to the switch to long-hole mining and higher production rates.

North American Palladium Ltd.'s Lac-des-Îles mine, north of Thunder Bay, showed a record second quarter in 1995. An output of 206 700 t surpassed the old record for one quarter, while a 50% improvement in the head grades (over the first quarter) allowed the mine to double its total metal production (from the first quarter). The company started production from the newly discovered "C" Zone, which will provide the majority of the ore at the mine in the near future, enabling the company to develop the Roby Zone at the mine site. A new crushing system, designed to reduce costs, will be operational by year-end.

Royal Oak Mines Inc. continued with the development of its Nighthawk Lake mine and expects to bring the mine into production in mid-1996, adding mineable reserves of 869 000 t grading 0.17 oz/t gold. The company has continued its efforts along the break by drilling and identifying seven other zones of gold and now controls a land package covering the entire Nighthawk Lake Break. The company is also conducting a major exploration program at its Pamour mine site where a large open-pit gold operation is being evaluated. Production from the pit is estimated to add 1 million oz of gold to the mineable reserves.

Northfield Minerals Inc. will re-open the 1035-ft level of the Cheminis gold mine located in Larder Lake. Operations were curtailed in late spring to accommodate shaft rehabilitation and dewatering to the old level – unused for over 50 years – gaining access to the newly discovered Sediment D and C ore zones. While work is being done on the lower level, production will continue from the upper levels.

After 39 years of operation, Noranda Mining and Exploration Inc. closed its Geco mine in Manitouwadge. Recent exploration around the mine site did not find sufficient ore to extend the life of the mine. Rio Algom Ltd. announced that the Stanleigh uranium mine in Elliot Lake will close on June 30, 1996. An application to the Atomic Energy Control Board for a decommissioning licence is being prepared. The closure will result in the loss of 620 jobs to the community. Stratmin Inc. announced that the temporary closure of the Graphite Lake graphite mine near Kearney will be permanent and that it is looking for buyers for the mine equipment.

After four months of operation, Black Hawk Mining Inc. announced that the Redstone nickel mine near Timmins will cease production in February 1996 and go on care and maintenance. Operations were curtailed because of lower-than-anticipated nickel prices and inconsistencies in the projected ore grades for the upper mine levels.

Madsen Gold Corp. dewatered the old Madsen mine and is spending $8 million to re-open the mine, located near Red Lake. The company recently purchased the 500-t/d mill from the Dona Lake mine. It has received government approvals for its recommissioned hoist so it can move ore from underground to the surface and stockpile it, awaiting the opening of the mill. All the components of the mill and other surface structures are currently on site, and the company plans to have them erected and operational in 1996.

Ego Resources Ltd. commissioned its cobalt recovery plant in Cobalt. This plant will produce high-purity cobalt compounds from nearby tailings.

Eagle River Gold Mines began production from the Eagle River gold mine near Wawa. The company will spend $16 million to fully re-open the mine and has leased the nearby Magnacon mill, which it is refurbishing. The company produced 9652 oz of gold in 1995 and plans to produce about 45 000 oz in 1996 at a production rate of 350 t/d.

Stralak Resources Inc. and Emerald Resources Inc. announced production plans for their garnet property in Street Township, near Sudbury. They plan to extract and process 200 t/d of almandine garnet material from an open pit.

Placer Dome Canada Ltd. and TVX Gold Inc. started a major drill program on the Musselwhite property. A pre-feasibility study was completed in early 1995. Placer Dome signed an agreement with the Windigo Community Development Corp. for participation in construction of a 46-km all-weather road to the site. The feasibility study for the Musselwhite gold project was scheduled toe completed in February 1996, with a development decision expected shortly afterwards. Mine production is projected to be 3300 t/d in 1997.

Inmet Mining Corporation conducted a feasibility study on the Pick Lake deposit, close to the Winston Lake mine. The company will invest $26 million to develop this deposit, which will extend the Winston Lake mine's life by seven years, although its production rate will fall and there will be some staff reductions. Ore from the Pick Lake Zone is expected to boost the overall grade of the Winston Lake mine.

Inco Limited continued its work on the Victor deposit just northeast of Sudbury. Drilling and geophysics have confirmed two mineralized zones at a depth of 5000 and 7000 ft, containing a reserve of more than 20 Mt. Inco plans to complete a feasibility study in 1999 and, if favourable, the Victor deposit could be in production by 2001.

Nuinsco Resources Ltd. and new partner Cambior Inc. announced that their Cameron Lake gold project, near Kenora, is expected to go into production, although no date has been formally announced. About $20 million has been spent on the property over the years. The deposit is expected to be developed by low-cost bulk mining methods at 1800 t/d with a projected annual production of 73 000 oz. A small open pit will be used to mine surface mineralization.

KWG Resources Inc. and Spider Resources Inc. reported 230 diamonds in drill core taken from their property at Kyle Lake in the James Bay Lowlands. Joint-venture partner Ashton Mining of Canada removed a 2.7-t bulk sample that is being analyzed.

Outokumpu Mines Ltd. announced further plans for its optioned Montcalm nickel project near Timmins. The company has begun a $20 million underground exploration project, including taking a bulk sample. If exploration leads to a positive feasibility study, the decision to construct a $100 million mine and mill could be made in 1998, with projected production of 650 000 t/y over 10-12 years.

An engineering study, part of a feasibility study, recommended a combined underground/open-pit operation for Pangea Goldfields Inc.'s Fenn-Gib property near Matheson. A 3000-t/d operation would yield 82 000 oz of gold annually for seven years. The feasibility study is expected in mid-1996. Initial capital expenditures for a projected mining operation are estimated at $50 million.

In February, Echo Bay Mines Ltd. signed an agreement with Asarco Inc. to earn a 51% interest in the Aquarius mine property near Timmins by performing $8.8 million in exploration by September 30, 1998. Subsequently, Echo Bay agreed to pay US$7.75 million to buy Asarco's remaining 49% interest in the property.

Mine employees at Hemlo Gold Mines Inc.'s Golden Giant gold mine near Hemlo went on strike in June. The 230 members of United Steelworkers of America Local 9364 had been without a collective agreement since October 1994. Mine management shut down the mine within hours of the picket line appearing. The strike ended in September, and the new contract includes a seniority clause and a 2%/y wage increase over the life of the contract.

On October 6, the Government of Ontario announced cuts to the Ministry of Northern Development and Mines (MNDM). Its capital budget was cut by $23 million and the operating budget was cut by $3.9 million immediately, as well as by an additional $3.9 million in 1996/97. These operating cuts meant the elimination of the Mineral Incentives Office and its staff, and a reduction of the Mine Site Reclamation Section's staff from 21 to 7. The Ontario Mineral Incentives Program (OMIP) was cancelled, whereas the Ontario Prospectors Assistance Program (OPAP) is still under review. The MNDM has streamlined the regulatory process for mine-site rehabilitation. The amendments to the *Mining Act* clarify regulatory requirements, remove unnecessary reporting requirements, and reduce government-mandated costs to the industry. The key provisions are to:

- replace the present closure plan review process with a self-regulating system whereby companies prepare closure plans to provincial standards and the present annual reporting requirements will be replaced by an audit inspection system;

- increase the financial assurance options available to mining companies;

- still maintain high environmental standards and the "polluter pay" focus;

- clarify liability for pre-existing abandoned mine hazards;

- address public health and safety concerns associated with abandoned mines and existing mine hazards; and

- clarify post-commissioning environmental liabilities.

The Minerals Program of the Canada-Ontario Subsidiary Agreement on Northern Ontario (1990-1995) expired on March 31, 1995.

MANITOBA

In 1995, the estimated value of mineral production in Manitoba, including fuels, was $1.05 billion, an increase of 34% over 1994. Excluding oil and gas values, mineral production increased by just over 30% to $958.8 million. Of this total, metals increased by 33.6% in 1995 to $887.5 million.

There were three mine openings and no mine closures in Manitoba in 1995. Mining industry employment levels increased almost 10% from the 1994 total of 4200 to 4600 in 1995. Exploration expenditures in 1995 are projected to be comparable to the $41 million level of 1994.

After years of economic uncertainty following the closure of nearby mines, the community of Snow Lake experienced a dramatic turnaround as two new mines opened in the fall of 1995. The Photo Lake mine (Hudson Bay Mining and Smelting Co. Ltd.), with a relatively small but high-grade ore reserve of 500 000 t grading 4.5% copper, 6% zinc, 4.7 g/t gold and 33 g/t silver, opened just 20 months after the first exploration drill hole intersected the orebody. The New Britannia mine (TVX Gold Inc./High River Gold Mines Ltd.), comprising the Nor-Acme deposit, the No. 3 Zone, and other potential deposits in the area, has diluted mineable reserves of 4.2 Mt grading 5.8 g/t gold, producing at a rate of 1680 t/d. A minimum mine life of eight years is projected for the New Britannia mine.

In the Thompson Nickel Belt, Inco Ltd. started production of 450 t/d at the 1-D nickel deposit in Thompson after four years of development. This underground mine will reach a production rate of 1565 t/d in 1996, gradually increasing to 2950 t/d by the year 2000.

In southeastern Manitoba, Rea Gold Corp. announced in November 1995 that construction and pre-production development had started on its former gold producer, the San Antonio mine. Referred to as the Bissett gold project, the mine is expected to reach full production early in 1997 with an output of 2.5 million g/y of gold.

East of Lynn Lake, Keystone project partners Granduc Mining Corp. and Black Hawk Mining Inc. began stripping the Farley Lake gold deposit in preparation for open-pit mining. Ore production is expected to commence by the second quarter of 1996. Mineable reserves are 1.6 Mt grading 3.5 g/t gold.

These companies have been encouraged to bring mines into production as the result of a number of tax incentives established by the provincial government over the past few years. The mining tax holiday for new mines, introduced in 1993, exempts qualified mine operators from paying the mining tax until their profits, for mining tax purposes, equal the capital expenditures made to open the new mine. The new investment credit introduced a credit equalling 7% of investments made in new, or expansions of existing, mines and processing facilities in Manitoba. The investment(s) must be made between April 21, 1994 and December 31, 2003. This credit is deductible to a maximum of 30% of the mining tax payable in a given year and can be carried forward for use in future years. The processing allowance, which may be deducted from mining taxes, has increased from 10% to 20% of the original cost of processing assets acquired for new mines, or for major expansions to facilities. In addition, electricity used for mining and manufacturing is sales tax exempt. Finally, the government has introduced one-window permitting to help expedite projects from exploration to production in a smooth and efficient manner through its *Exploration and Mining Guide.*

Incentives for mining exploration include the Manitoba Mining Tax Exploration Incentive, the Manitoba Exploration Assistance Program (MEAP), and the Manitoba Prospectors Assistance Program (MPAP).

In the Thompson Nickel Belt, Inco Ltd. continued its program of delineation drilling of the Pipe 1 and Pipe 2 structures at the Pipe Deep project south of Thompson, expected to be completed in 1996. The Pipe 1 structure is reported to contain 3.63 Mt of ore grading 2.32% nickel, with copper, cobalt and platinum group element values. Falconbridge Ltd. continued to focus exploration in the Thompson Nickel Belt at William Lake with a substantial drilling program that began in 1995 and which is expected to continue over the next few years. Drill intersects on the most promising of six prospects gave assay results of up to 3.9% nickel over 3.6 m. Falconbridge also conducted a drill program in the Wabowden area at Halfway Lake and a geophysical survey on a property near the Thompson airport. Hudson Bay Exploration and Development Co. Ltd. (Hudbay) conducted a geophysical survey on the Ponton-Minago River properties and drilling in the area south of Minago River.

Cominco Ltd. conducted geophysical surveys and drilling on its special permit at Easterville and near Swan Lake, and acquired three new permits at Partridge Crop Lake and Wintering Lake southeast of Thompson.

In the Central Eastern Superior region, C. McLeod conducted a small drill program at his Butterfly Lake property. Inco Ltd. completed a mapping and sampling program at Knee Lake.

In the Flin Flon-Snow Lake region, deep drilling of two new zones of copper and zinc mineralization, discovered in 1994 by Hudbay at the Callinan mine, continued in 1995. The company also conducted extensive airborne surveys over the Flin Flon-Snow Lake Belt with ground follow-up of the airborne anomalies. Drill programs were conducted in the Lindsay Lake, Reed Lake, Naosap Lake and Trout Lake areas. Also in the Flin Flon area, Consolidated Callinan Flin Flon Mines Ltd. commenced drilling on the promising “War Baby” claim located along strike of the Callinan mine. Hudbay, which controls the claims on both sides of the “War Baby” claim, drill tested the down-plunge from the surface of the Callinan deposit close to the boundary of the “War Baby” claim. Canmine Resources Corp. completed winter and summer drill programs at the Fer property at Kississing Lake, reporting one interesting intersection that assayed 24.0 g/t gold over 1.0 m. Aur Resources Inc. became a major player on the Manitoba exploration scene in 1995 by acquiring 39 base-metal properties in the Flin Flon, Snow Lake and Lynn Lake camps from Granges Inc. Aur Resources is reported to have approved a $1 million exploration and data compilation program. Other drill programs in the Flin Flon area include Granges Inc. at its Big Island property, and Inmet Mining Corp. at its Baker Paton property.

In the Lynn Lake region, diamond drill programs were completed by Hudbay in the Dunphy Lakes area and by Inco Ltd. at Snake Lake.

Granges Inc. intersected a new zone of gold mineralization about 200 m southwest of the Main Zone at the Tartan Lake mine near Flin Flon, and was considering re-opening the Tartan Lake facility if drilling resulted in an increase in reserves. Granges also conducted drilling on the Alberts Zone at Alberts Lake. Other precious metal exploration activities included: drilling on the Birch Zone and in the vicinity of the New Britannia mine in the Snow Lake area by TVX Gold Inc.; drilling in the Ferro mine area by Golden Tag Resources Ltd.; an airborne survey and mapping and sampling program along the Grass River south of Elbow Lake by Kettle River Resources Ltd.; and an infill drilling program to confirm ore grade and continuity at the Farley Lake deposit by Granduc Mining Corp. Small gold exploration programs, including prospecting, trenching and diamond drilling, were carried out in the Rice Lake and Bird River areas by several claim holders.

Diamond exploration was carried out by Miranda Industries Inc. on two properties near Snow Lake, and by Indicator Explorations Ltd. on its properties in the southeastern region of Manitoba.

Gossan Resources Ltd. completed airborne and ground magnetic surveys over the Kiskitto Lake property 50 km southeast of Ponton. Diamond drilling indicated that the extensive magnetic anomalies are caused by coarse-grained magnetite and ilmenite with up to 4.7% titanium dioxide in a favourable anorthosite complex similar to the deposit explored in 1994 by Gossan Resources Ltd. and Cross Lake Mineral Exploration Inc. at Pipestone Lake. Exploratus Elementis Diversis Ltd., in a joint venture with Maskwa Nickel Chrome Mines Ltd., carried out a four drill-hole program on a chromium prospect at the Mayville property 25 km northeast of Lac du Bonnet. Both companies are planning follow-up drilling in 1996.

The Canada-Manitoba Partnership Agreement on Mineral Development (1990-95) marked its final year of cooperative mineral activities between the federal and provincial governments.

SASKATCHEWAN

For 1995, the estimated value of mineral production in Saskatchewan, including oil and gas, was $4.63 billion, up nearly 10% from the actual value of mineral production for 1994. Of this total, crude petroleum accounted for $2.28 billion while natural gas and natural gas by-products accounted for $403 million. Excluding oil and gas, the province's value of mineral production for metals, nonmetals and structural materials was estimated at $1.95 billion, which is 5.9% higher than 1994.

Mine employment in Saskatchewan is estimated to have increased by 10% to over 5800 workers.

Surface mineral exploration expenditures were estimated at $23 million in 1995, a decrease of $6 million, or 21%, over actual 1994 expenditures. Underground expenditures at the Cigar Lake (Cigar Lake Mining Corp./Cameco Corp./Cogema Resources Inc./Idemitsu Uranium Exploration Canada/Korea Electric Power Corp.) and McArthur River (Cameco Corp./Uranerz Exploration and Mining Ltd./Cogema Resources Inc.) test mines total $27 million, about three times the amount for surface uranium exploration, which has remained fairly stable for the last five years. Although both gold and base-metal expenditures remain depressed, positive notes are provided by potential new production from the Komis gold mine (Waddy Lake Resources Inc.) and the Konuto copper mine (Hudson Bay Mining and Smelting Co. Ltd.) anticipated for the spring of 1996 and the fall of 1997, respectively. In addition, the feasibility study results from the Goldfields project also appear favourable. Diamond exploration expenditures are expected to decrease to half of what they were in 1994, although drilling and sampling of the Fort-à-la-Corne and Candle Lake diamondiferous kimberlites has continued.

Saskatchewan remains the focus of uranium exploration and development in Canada, although no new world-class discoveries were made in 1995. Ten companies make up current uranium exploration joint ventures, although the excellent reserve base and low uranium prices continue to curtail exploration. However, price increases for the first nine months of 1995 offer hope for a market-driven upswing in uranium exploration in the future.

Saskatchewan is the world's leading producer of uranium. The three main mines operating in Saskatchewan in 1995 were the Eagle Point mine at Rabbit Lake (Cameco Corp./Uranerz Exploration and Mining Ltd.), the Deilmann mine at Key Lake (Cameco Corp./Uranerz Exploration and Mining Ltd.), and the Cluff Lake mines. Uranium production and sales in 1995 should exceed those of 1994, which were 8324 tU valued at $407.8 million.

On the development side, the McClean Lake project (Minatco Ltd./Denison Mines Ltd./OURD (Canada) Co. Ltd.) is under construction, and Environmental Impact Statements for the Cigar Lake (Cigar Lake Mining Corp.) and Midwest Joint Venture (Minatco Ltd./Terwest Uranium Ltd./Uranerz Exploration and Mining Ltd./OURD (Canada) Co. Ltd.) projects have been submitted for review. At Cluff Lake (Cogema Resources Inc./Corona Grande Exploration Corp.), the Dominique-Janine extension open pit is in production and the underground mine is being developed. At McArthur River, the underground drilling project is complete and results appear to exceed expectations.

Gold exploration, as is the case for uranium, is in a mining development phase. The Contact Lake gold mine (Cameco Corp./Uranerz Exploration and Mining Ltd.), 63 km north of La Ronge, officially opened in February 1995. Claude Resources Inc., now Saskatchewan's largest primary gold producer, continues to operate the Seabee mine successfully, and Waddy Lake Resources Inc. plans to have the Komis deposit in production by the spring of 1996. While these mines illustrate that there are opportunities in the province, gold exploration is being undertaken by less than 10 companies compared to over 60 in 1988. Greater Lenora Resources Corp., active throughout the year on the Box and Athona properties south of Uranium City, released a positive feasibility study. Claude Resources Inc. has an option agreement with Cameco Corp. and Husky Oil Operations Ltd. (the Amisk joint venture) to explore and develop the Amisk/Laurel Lake gold property in the Flin Flon area. Claude Resources Inc. will spend $2.5 million to earn a 35% working interest in the property.

Base-metal exploration programs were undertaken in the sub-Phanerozoic area, Western Craton, and La Ronge, Glennie, and Kisseynew domains. Mine development of Hudson Bay Mining and Smelting Co. Ltd.'s (HBMS) Konuto Lake copper deposit near the town of Denare Beach in the Flin Flon Domain is expected to begin by the second quarter of 1996 contingent on permitting. Mining of HBMS's Callinan zinc-copper deposit continued in 1995.

Aur Resources Inc. has recently acquired 39 base-metal properties within Manitoba and Saskatchewan from Granges Inc. Included is Granges' portion of the Bigstone copper-zinc deposit, as well as properties in the Hanson, Embury and West Amisk lakes areas. Aur Resources Inc. is reported to be carrying out a $1 million exploration project for drilling copper-zinc targets and compiling technical data in preparation for a long-term program.

The amount of land under disposition for diamond exploration has been substantially reduced. On October 1, 1995, these dispositions covered about 2.5 million ha, or 37.5% less than on the same date in 1994. Diamond exploration expenditures are also expected to decline by nearly 50% from $10.14 million in 1994 to $5.2 million in 1995. Most of the diamond play properties are in an area running across the province between latitudes 53° and 56°, which includes: Fort-à-la-Corne; the Pasquia Hills and Molanosa Arch; and Candle, Sturgeon, Smoothstone and Wapawekka lakes. Drilling projects conducted in 1995 were primarily confined to the Fort-à-la-Corne kimberlite field and its northwest extension in the Candle-Whiteswan lakes area. White Swan Resources Inc. has raised money to continue grass-roots work on its Stanley Fault, Montréal Lake, and Nipawin Park projects.

In 1995, the Canada-Saskatchewan Partnership Agreement on Mineral Development (1990-95) marked its final year of cooperative activities between the federal and provincial governments.

ALBERTA

For 1995, the estimated value of mineral production in Alberta, including coal, oil and gas, was $20.8 billion, a decrease of 1.2% from the actual value of production for 1994. Fuels accounted for approximately 97% of the total value of production. The most important minerals in order of value of production were crude petroleum, natural gas, natural gas by-products, coal and gold.

The value of metallic and industrial mineral (non-fuel) production was approximately $577 million, up 14% from 1994. There were no new mine openings or mine closures in Alberta during 1995.

Land acquisition continued to slump from the record levels of the diamond play of 1992, with new permit filings down to 16 665 km^2. As expected, large tracts of land were returned to the Crown at the first assessment filing period from that earlier round of permits. However, assessment work was filed on 14 000 km^2, representing exploration expenditures of over $7 million.

Diamond exploration in Alberta continued during 1995 with activity in the foothills area near Hinton, along the Montana border, and in the Peace River area. New Claymore Resources Ltd. reported recovering 23 diamonds from a creek northwest of Hinton, adding to the number of drift diamonds recovered in the province. Montello Resources Ltd. also conducted work in the Hinton area, with Marum Resources Inc. exploring along the Montana border in southeastern Alberta, and TUL Petroleums Ltd. working in the Peace country.

Precious- and base-metal exploration continued strongly in the northeast. Considerable interest was generated in the area a few years ago when anomalous gold values were reported from the Devonian limestones. Attention has shifted into the overlying Cretaceous sandstones and shales near Fort McKay and in the Birch Mountains, and into basement rocks to the north. Focal Resources Ltd., Birch Mountain Resources Ltd. and Tintina Mines Ltd. all conducted exploration work in the area, with drilling programs continuing into 1996. The Geological Survey of Canada and the Alberta Geological Survey (AGS) continue to study the geochemical and stratigraphic setting of the Cretaceous Shaftesbury Formation and its potential to host ore deposits.

Gold has also been reported by Marum Resources Inc. in northwestern Alberta in the Clear Hills. The focus of interest is the Cretaceous Bad Heart Formation, an oolitic iron formation formerly studied by the AGS and proven to have large undeveloped iron reserves.

The Canada-Alberta Cooperation Agreement on Mineral Development (1992-1995) expired on March 31, 1995.

British Columbia

For 1995, the estimated value of mineral production in British Columbia, including metals, nonmetals, fuels and industrial minerals, was $4.52 billion, an increase of about 11% from the actual value of production for 1994. The estimated value of mineral production excluding petroleum and natural gas was $3.46 billion, an increase of about 32% from 1994. By sector, increases were seen in metals (up 50%), nonmetals (up 24%), and industrial minerals (up 3%); decreases in the value of mineral production occurred in the fuels sector (down 11%) despite an increase of 15% for coal.

Estimated exploration expenditures for 1995 were $91 million, an increase of 7% over actual exploration expenditures of $85 million for 1994.

There were two mine openings and one mine closure in 1995. The Eskay Creek mine, owned by Prime Resources Group Inc. and operated by Homestake Canada Inc., opened in January 1995. The mine, located 83 km north of Stewart, is one of the highest grade gold and silver deposits discovered in North America having proven and probable reserves of 1.19 Mt of ore containing 2.27 million oz of gold and 101.7 million oz of silver. In April, Kinross Gold Corp. began production at the QR mine with current reserves of about 1.3 Mt grading 4.77 g/t gold. When fully operational the mine will produce about 40 000 oz/y of gold with a mine life of five years. The copper-gold-silver-molybdenum Island Copper mine (BHP Minerals Canada Ltd.) closed in December due to ore depletion.

Line Creek Resources Ltd.'s Line Creek coal mine, located 18 km northeast of Sparwood, received approval to expand 684 ha to Horseshoe Ridge, which will provide an additional 35 Mt of coal to its operation over the next 15 years.

Huckleberry Mines Ltd.'s $700 million copper mine project located 86 km southwest of Houston was approved under the province's *Environmental Assessment Act* in late December 1995. Two open pits will be developed to produce a total of 27 300 t/y of copper, and up to 200 full-time jobs are expected to be generated over the anticipated 17-year mine life.

Mine development certificates were issued to: Monteith Bay Resources Ltd. for a 25-year 70 000-t/y geyserite (used in the manufacture of certain types of cement) quarry located on the northwest coast of Vancouver Island, 16 km north of the village of Kyoquot; Great Pacific Pumice Inc. for development of its Mt. Meager pumice mine, located 65 km northwest of Pemberton, with possible reserves of 5-20 Mt; and Avino Mines and Resources Ltd. for the historic Bralorne gold mine located 100 km west of Lillooet.

A $600 000, 3000-km^2 airborne geophysical survey to locate areas of high mineral potential was flown in the Kootenays in August 1995 by Dighem, a Canadian geophysical exploration company, covering the Sullivan mine/St. Mary Valley, Findlay Creek, and Yahk areas. A geochemical survey covering the Cry Lake area east of Dease Lake was also conducted during the summer that involved the collection of lake and stream sediment samples. The Cry Lake area hosts a number of known mineral deposits, and has significant mineral potential for lode gold, porphyry copper-gold, and base-metal massive sulphide types of mineralization.

Mineral claim-staking reserves over 9200 ha of the former Cassiar townsite and on 22 000 ha in the east Purcell area, about 25 km south of Invermere, were lifted in September 1995. The staking reserves were placed on Cassiar to protect assets during the closing of the townsite, and on the east Purcell area in response to the land-use planning process. The mining industry has been prominent in both areas in the past.

Seventy-five exploration and mining companies benefitted from the $2.5 million Explore B.C. incentive program in 1995. Explore B.C. provides up to one third of exploration costs to a maximum of $150 000 to eligible companies and individuals through three programs: the new Grassroots Mineral Incentive Program for reconnaissance-style grass-roots exploration; the Mineral Exploration Incentive Program for properties with identified economic potential; and the Accelerated Mine Exploration Program to assist qualified operating mines in increasing their ore reserves and extending the mine life.

The provincial government and Royal Oak Mines Inc. came to terms on an integrated agreement that provides for compensation on, and extinguishes and settles, the Windy Craggy claim in the Tatshenshini Park. The settlement package includes $26 million in compensation, $17 million for mine development, $3.5 million for training and skills development, $46 million for power line installation, and $11.3 million for other related infrastructure, for a total of $103.8 million. The settlement will enable the development of two new mines, Kemess South (a 210-Mt copper-gold-silver deposit) near Houston, and Red Mountain (a 1.5-Mt gold-silver deposit) near Stewart.

Amendments to the *Mineral Tenure Act* to clarify ownership to industrial minerals and improve the management and enforcement capability of the tenure system came into effect on December 1, 1995. An Advisory Council on Mining was established to help implement the recommendations of the Whitehorse Mining Initiative Leadership Council Accord. The council members include the mayor of Logan Lake, and a representative of each of the United Steelworkers of America, the Mining Association of British Columbia, the B.C. Wildlife Federation, the University of Northern British Columbia, the Mining Suppliers Association, the B.C. and Yukon Chamber of Mines, the Laborers' International Union of North America, Canadian Auto Workers, and the Environmental Mining Council. The advisory council will oversee and provide input on four projects recently initiated by the government in cooperation with various stakeholders. The four projects are: skills and labour, mine reclamation, mineral exploration standards and the permitting process, and updating the Mine Health and Safety Code. The council will also advise the Minister of Employment and Investment on the implementation of the Accord in British Columbia.

In 1995, the Canada-British Columbia Agreement on Mineral Development (1991-1995) marked its final year of cooperative mineral activities between the federal and provincial governments.

YUKON TERRITORY

The estimated value of mineral production in the Yukon Territory in 1995 was $185 million, up some 115% from 1994. This reflects the re-opening of the Faro zinc-lead-silver operation in August. Gold production from over 200 placer operations increased with its value increasing by 38.2% to nearly $78 million.

The Yukon Chamber of Mines reported that exploration expenditures in the Yukon were just under $40 million in 1995, almost double the $21 million reported in 1994. Development expenditures increased to $57 million from $11 million in 1994, reflecting the construction of new gold mines at Brewery Creek and Mount Nansen. This was the fourth consecutive year that the Yukon has enjoyed an increase in exploration and development expenditures.

Six other mining projects are currently under environmental review and, upon successful completion of the process, are expected to begin mine development in 1996 or 1997.

The exploration highlight of the year was the discovery by Westmin Resources Limited of the Wolverine Lake polymetallic sulphide deposit, 25 km east of Cominco Ltd.'s Kudz Ze Kayah polymetallic deposit in the Yukon-Tanana terrane. The Wolverine deposit has been drilled over an area of approximately 250 m by 400 m and is open down dip and along strike in both directions. An intensive exploration program is planned for 1996.

Upset at the slow progress on environmental changes to the *Yukon Quartz Mining Act* and the *Yukon Placer Mining Act* by the Yukon Mining Advisory Committee, the environmental community sought litigation with respect to the environmental screening and permitting of mining projects by the federal Department of Indian Affairs and Northern Development (DIAND). In December, the courts decided in favour of DIAND.

Revisions to the *Yukon Quartz Mining Act* and the *Yukon Placer Mining Act* were introduced to Parliament in December and are expected to be passed early in 1996. The changes address environmental concerns during exploration, development and production of the Yukon's hardrock and placer mining operations.

The Minerals Program under the Canada-Yukon Economic Development Agreement (1991-1996) was drawing to a close in 1995; it is scheduled to expire in March 1996.

NORTHWEST TERRITORIES

In 1995, the estimated value of mineral production for the Northwest Territories increased 10.7% over 1994 to $753.4 million. This figure includes $215 million for fuels. The value of metal produced was 7.1% higher than in 1994 due to increased production and higher prices for gold. Production came from six gold mines and two lead-zinc mines. Increased productivity at Miramar Mining Corportion's Con mine and at the Giant Mine of Royal Oak Mines Inc., and the first year of full production at Royal Oak's Colomac mine, resulted in a 5.6% increase in gold production to $234 million in 1995. Despite a 16% drop in exploration expenditures, the Northwest Territories remained the leading locale for Canadian mineral exploration for the second consecutive year with expenditures estimated by the Northwest Territories Chamber of Mines at $144 million in 1995, down from the $172 million spent in 1994.

A number of major drilling programs were completed during the year on gold properties such as the former Discovery mine; the Kim-Cass, Damoti Lake, Nicholas Lake, Meadowbank, Meliadine River properties; and in the vicinity of the Yellowknife gold mines.

BHP Minerals Canada Ltd.'s Koala diamond project is currently undergoing environmental assessment by an Environmental Assessment Review Process Panel. A number of community-based meetings are scheduled to be held in January and February 1996. The Panel is expected to make its final report and recommendation to the ministers of the Environment and Indian Affairs and Northern Development before the end of June 1996.

At other advanced projects, San Andreas Resources Corporation increased the geological reserve at its Prairie Creek lead-zinc-copper project northwest of Nahanni Butte. Just south of the Koala project, Kennecott Canada Inc. and Aber Resources Ltd. began to drive a decline adit on their A-154S kimberlite pipe on the Diavik project at Lac de Gras. BHP Minerals Canada Ltd. moved supplies to its Boston gold property, east of Bathurst Inlet, in preparation for an underground testing program.

Echo Bay Mines Ltd. purchased the Ulu gold property from BHP Minerals, and Royal Oak Mines Inc. purchased the Nicholas Lake gold property from Athabaska Gold Resources Ltd. Both of the purchasing companies indicated that they plan to mine and truck the ore over winter roads to their respective mills at Lupin and Giant Yellowknife.

The organization of a five-year regional study of the West Kitikmeot and Slave Province was completed in 1995. A study management board with representatives from Aboriginal groups, government, environmental interest groups and industry has been established to oversee the study projects. A Study Office was established in Yellowknife. The main objective of the study is to gather the baseline data needed to ensure that development decisions can be made in an informed and timely manner.

The Mineral Initiatives Program of the Canada-Northwest Territories Economic Development Agreement (1991-1996) is scheduled to expire in March 1996.

Note: Information in this review was current as of February 26, 1996.