

# Nickel

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(Abbreviations used in this article include: (e) = Estimated; (f) = forecast; (p) = Preliminary; Ni = nickel; Cu = copper; Co=cobalt; FeNi = ferronickel; LME = London Metal Exchange; NiO = nickel oxide; PGM = platinum group metals; 6 mo. = January to June; 9 mo. = January to September; conc. = concentrate.)

2003 mine production: \$2.0 billion  
 World rank: Third (mine production)  
 2003 exports: \$2.6 billion

Canada	2003	2004 (e)	2005 (f)
	(000 tonnes)		
Mine production	163	185	190
Refined production (1)	153	155	160
Use/consumption (2)	13	10	10

(e) Estimated; (f) Forecast.

(1) Refined includes nickel in salts, oxides, etc. (2) Use includes nickel in scrap; both plants of a large user of nickel in stainless scrap remained closed in 2004; if they were to be re-opened in 2005, nickel use could increase.

Nickel's resistance to corrosion, high strength over a wide temperature range, pleasing appearance, and suitability as an alloying agent make it useful in a wide variety of applications. Markets for primary nickel include stainless steel (65%), nickel-based alloys, electroplating, alloy steels, foundry products, batteries, and copper-based alloys. Nickel is intensively recycled; about 45% of nickel used to make stainless steels comes from nickel in stainless steel scraps.

## ANNUAL AVERAGE SETTLEMENT PRICES, LONDON METAL EXCHANGE

2000	2001	2002	2003	2004 (e)
(US\$/t and US\$/lb)				
8 641	5 948	6 772	9 640	13 500
3.92	2.70	3.07	4.37	6.12

(e) Estimated.

## CANADIAN OVERVIEW

- Falconbridge produced 36 800 t of Ni in conc. in 9 mo. from domestic mines and forecast 44 500 t for 2004. A feasibility study was under way at Raglan to expand nickel output by 5000 t/y. The Montcalm mine began shipping to the Kidd mill in Timmins for commissioning; capacity will be 8000-9000 t/y Ni. Advanced exploration at Nickel Rim South was approved. The US\$368 million project includes a shaft and underground development/drilling; for a mine a further US\$168 million is needed for 12 000-15 000 t/y Ni by 2010. In October, China Minmetals Corporation began negotiations to purchase Noranda, which owned 59% of Falconbridge.
- In November 2005, Inco intends to start shipping concentrate from Voisey's Bay to its hydrometallurgical demonstration plant at Argentia and to its Ontario and Manitoba smelters. Production is expected to be 2.4 Mt/y of high-grade Ni conc., 1.6 Mt/y of Ni-Cu conc. and 1.3 Mt/y of Cu conc. About half of the 50 000 t/y output from the US\$890 million Voisey's Bay project represents additional production and the other half will replace higher-cost Canadian mine output and imported feed from Australia. Average cobalt production is forecast at 2270 t/y. Inco forecast 123 000 t from Canadian mines and 32 600 t from purchased feeds in 2004.
- North American Palladium produces by-product Ni at its Lac des Iles palladium mine; it began developing an underground mine below the pit. Ore production is scheduled for early 2005.

- Sherritt International has a 50% interest in Metals Enterprise, which owns the Fort Saskatchewan nickel-cobalt refinery where production was 24 200 t of Ni and 2490 t of Co in 9 mo. 2004. A decision on whether to expand the refinery to 50 000 t/y Ni, as well as the mine and leach plant in Cuba, was expected by year-end 2004.
  - The Sudbury Joint Venture's (SJV) McCreey mine in Sudbury officially started up January 1, reaching 900 t/d by April. SJV decided to proceed with a US\$30 million underground exploration program at the Norman (now Podolsky) deposit, including a ramp and shaft. In August, SJV decided to recondition the shaft at the Levack mine. All production was trucked to Inco's Clarabelle mill. SJV is owned by FNX Mining and Dynatec.
  - Canadian Arrow shipped ore from the Alexo mine near Timmins to Falconbridge's mill in Sudbury. The company intended to ship up to 20 000 t of ore while drilling continues. Inco has an option to earn up to 70% of Canadian Arrow's Redstone property near Timmins.
  - Crowflight Minerals completed a preliminary resource evaluation at the Bucko property in Manitoba for a 5000-t/y Ni operation. Nuinsco Resources completed a preliminary pit design at the Mel deposit in Manitoba based upon 2 Mt grading 0.76% Ni.
  - Interest in nickel in Canada increased due to high nickel prices. Some of the exploration and development companies and the names of the properties and projects in 2004 included:
    - Aurora Platinum at Nickel Lake and Foy Offset at Sudbury, Ontario, and properties in Temiscamingue, Quebec;
    - Blackstone Ventures at Kenbridge Nickel Mines in northwestern Ontario;
    - In the Thompson Nickel Belt of northern Manitoba, BHP Billiton Diamonds at Stephens Lake, Callinan Mines at Pine and Phillips lakes, Canadian Royalities at the Thompson Nickel Belt South property, Crowflight Minerals at the Bucko and Bowden deposits, Nuinsco Resources at the Minago project, and Donner Minerals at Rainbow and Stephens lakes;
    - In the Raglan area of northern Quebec, Cascadian International Resources and Novawest at the Norton property, and Knight Resources and Anglo American Exploration (Canada) at the West Raglan property;
    - Falconbridge at Konrad in the Voisey's Bay area of Labrador;
    - First Nickel at Dundonald near Timmins, Ontario;
    - Inspiration Mining at the Langmuir property near Timmins, Ontario;
    - Liberty Mineral Exploration at McAra Lake and the McWatters project in northeastern Ontario;
    - Limerick Mines 80 km north of Belleville, Ontario;
    - Mustang Minerals at Maskwa and Bannockburn, northeastern Ontario;
    - Platinum Group Metals at Lakemount, near Wawa, Ontario;
    - Randsburg International Gold at McClintock, near Huntsville, Ontario;
    - Starfield Resources at Ferguson Lake in Nunavut;
    - Teck Cominco/Altius Minerals at the Michikamau project in Labrador;
    - United Reef /CHS Resource Corporation at Nickel Offsets near Sudbury, Ontario;
    - URSA Major Minerals completed a prefeasibility study of its Shakespeare deposit, near Sudbury; and
    - Wallbridge Mining/Lonmin Canada at Worthington, Windy Lake and Wisner, near Sudbury, Ontario.
- (For more information, the reader can go to the corporate web sites [see Table 1]; note also the Standards for Disclosures for Mineral Projects at [www.ccpq.ca/guidelines/standards\\_disclosure\\_43-101-1.pdf](http://www.ccpq.ca/guidelines/standards_disclosure_43-101-1.pdf).)
- New federal regulations for SO<sub>2</sub> smelter emissions were proposed in September.

## WORLD OVERVIEW

### Americas

- In Brazil, Canico Resources tested a FeNi process in 2004 for its Onça-Puma property and received a preliminary environmental licence for its proposed mine/smelter.
- Mirabela Nickel focused on the development of a high-grade saprolite property in Brazil for direct shipping to FeNi smelters.
- CVRD continued to work on the Vermelho project with a feasibility study expected by March 2005.
- Rio Tinto completed the sale of its Fortaleza mine, mill and smelter in Brazil to Votorantim Metais, which also owns Companhia Niquel Tocantins.
- In Guatemala, Jaguar Nickel had positive results from tests of its atmospheric chloride leach process and continued drilling its Guatemalan properties.
- Skye Resources' negotiations continued with Inco to buy the Exmibal concessions and plant in Guatemala.
- In the United States, three projects under consideration were the Birch Lake project of Franconia Minerals, the

Eagle project of Kennecott Minerals, and the NorthMet project of Polymet Mining.

- In the Dominican Republic, Falcondo produced 22 300 t of Ni in FeNi in 9 mo. and was scheduled to produce 28 000 t in 2004.

## Africa

- Anglovaal Mining was restructured to African Rainbow Minerals, which held the Nkomati Ni- PGM operation.
- Rio Tinto reduced its share of Rio Tinto Mining Zimbabwe (RioZim), owner of the Empress refinery, in a restructuring agreement that gives Rio Tinto a greater share of the Murowa diamond mine.
- Production at Bindura Nickel, bought by Mwana Africa Holdings in 2003, was not reported.
- Maple Minerals may earn a 50% share in the Mt. Kakoulima sulphide property in Guinea.
- Dynatec spent US\$20 million to earn a 53% share in the Ambatovy project in Madagascar and was completing a bankable feasibility study of a 60 000-t/y Ni and 5000-t/y Co operation.
- Falconbridge and Barrick Gold continued negotiation of an agreement to allow the former to earn a 50% share in the Kabanga sulphide project (26 Mt grading 2.6% Ni).
- LionOre commissioned its Activox demonstration plant at its Tati operation in Botswana; success could lead to an expansion to about 18 500 t/y Ni at Tati.
- Zimplats will proceed with underground mine development and a mill at Ngezi in Zimbabwe.

## Asia

- In China, Jinchuan Group continued its expansion, targeting 70 000 t Ni in 2004. Jinchuan will import matte from WMC Resources to augment increased nickel feed from Sally Malay, Rio Narcea and other operations. Jinchuan started up a new mill, doubling capacity to 10 Mt/y, to accommodate expansion of its Longshou mine; opened a new Co production line; and started construction of a 530 000-t/y H<sub>2</sub>SO<sub>4</sub> plant.
- Inco announced that it was considering construction of a refinery in China to process output from Goro, New Caledonia, where NiO production is expected in 2007.
- Korea Nickel shut its main furnace in June for repairs expected to take six months.

- In Kazakhstan, Oriel Resources completed a prefeasibility study of its Schevchenko project, a mine, and a FeNi smelter.
- European Nickel received environmental approval to proceed at the Çalda property in Turkey and began heap leach trials in mid-October. The plan is to produce 15 000 t/y of Ni in mixed hydroxide.
- Asian Mineral Resources continued exploration at its Ban Phuc deposit in Vietnam.

## Europe

- In Europe, Rio Narcea was building its €70 million mine and mill, with ore processing to begin before 2005 and concentrate to be shipped to Jinchuan in China.
- Falconbridge's Nikkelverk plant in Norway produced 51 000 t in 9 mo. 2004; the forecast for 2004 was 72 000 t Ni.
- OMG's Harjavalta refinery in Finland was expected to produce about 52 500 t in 2004.
- Blackstone Ventures worked at the Espedalen and Vakkerlein projects in Norway (optioned from Falconbridge).
- In Russia, Norilsk Nickel announced that 2004 sales would be 250 000 t of Ni, including 10 000 t from stocks; Norilsk produced 122 000 t in the first half of 2004. A €100 million SO<sub>2</sub> reduction program at the Polar Division will begin in 2005. The company releases reserve data in June.
- Ufaleynikel forecast its production at 5200 t Ni; the company's cobalt output will be 1850 t in 2004 as Norilsk reduced cobalt tolling at Ufaleynikel.

## Australia

Australian developments were numerous, including:

- BHP Billiton approved its US\$1 billion Ravensthorpe mine/leach plant (50 000 t/y Ni and 1400 t/y Co in hydroxides) and a US\$350 million expansion at Yabulu for start-up in late 2007.
- Fox Resources shipped Ni-Cu concentrate to Jinchuan from Radio Hill, while LionOre purchased the Bulong plant, negotiated an offtake agreement for the Forrestania project of Western Areas, started ore production at Maggie Hayes in August, and made a takeover offer for the nickel assets of MPI (80% of Black Swan operation and Honeymoon Well deposit).

- Although Minara completed an A\$100 million capital program in mid-2004, it was producing below an annualized rate of 30 000 t/y Ni and may install a fifth autoclave.
- Sally Malay started production in August, shipping concentrate to Jinchuan.
- WMC Resources produced 84 400 t of Ni in concentrate in 9 mo. 2004 and forecast 2004 production at 102 000 t; over 20 000 t of Ni in concentrates were processed from third parties at the Kambalda mill, receiving feed from Australian Mines, Lightning Nickel, Reliance Mining, Mincor, Tectonic Resources, and View Resources, with Sally Malay/Donegal production from Lafranchi likely in 2005.
- WMC Resources will start a prefeasibility study of its Yakabindie deposit, including trials for a new leach process for the high MgO ore. In late October, Xstrata plc made an offer to take over WMC Resources.
- Indonesia's PT Antam shut its FeNi II smelter for an overhaul and modernization while continuing to build its FeNi III smelter to raise the company's Ni in FeNi capacity to 26 000 t/y. Antam also exports high-grade ore to Japanese FeNi smelters and lower-grade ore to BHP Billiton's Yabulu refinery.
- Weda Bay continued test work and drilling at its deposit in Indonesia; a US\$700 million plant to produce mixed sulphides containing 52 800 t/y Ni and 3900 t/y Co is envisaged.
- Highlands Pacific and China Metallurgical Construction Corp. continued negotiations to develop a US\$790 million project in Papua New Guinea to produce 32 800 t/y Ni and 3200 t/y Co either in intermediates or as a final product; Chinese Metallurgical Construction Group Corporation (MCC) wanted 100% of the output.
- Inco announced a US\$250 million expansion at its PT Inco operation to 90 700 t/y, including a new dam to increase hydro-electric capacity.

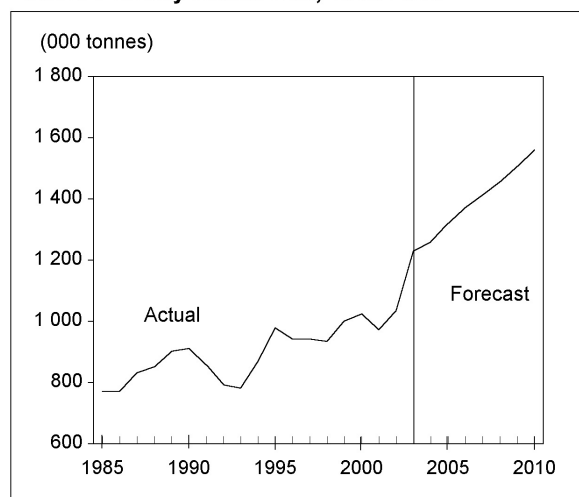
## Oceania

- In New Caledonia, Inco resumed work on its Goro project, halted from December 2002 to October 2004 due to rising costs. The renewed project targets 60 000 t/y Ni in oxide sinter plus 4300-5000 t/y Co by-product, with the first autoclave scheduled to start up in September 2007. The original project had been approved in April 2001 and was scheduled to produce in late 2004. Financial assistance of US\$350 million from the French government and a tax holiday of 15 years were negotiated. Sumitomo Metal Mining and Mitsui & Co., Ltd. were negotiating taking 11% and 10% shares, respectively, in Goro.
- Falconbridge was to complete its bankable feasibility study of the 60 000-t/y Koniambo project before 2005. Falconbridge would be a 49% owner of the joint venture with La Société Minière du Sud Pacifique and also expected to receive financial assistance from the French government and a tax holiday.
- Eramet completed a new furnace at its Doniambo smelter, part of an expansion to 75 000 t/y Ni in FeNi and matte; the company's matte refinery in France will be expanded to produce up to 15 000 t/y Ni and 300 t/y Co.
- Elsewhere in Oceania, Coral Bay Nickel began commissioning its leach plant in the Philippines. The plant will produce 10 000 t/y Ni in sulphide intermediates from stockpiled laterite ore, shipping the output to Sumitomo's refinery in Japan. MBMI Resources was assessing an option for a project to export laterite ore from Philippine properties in Palawan province.

## DEMAND OUTLOOK - WORLD

World demand for nickel was forecast by the International Nickel Study Group to reach a record high of 1.23 Mt in 2004 and to climb to 1.32 Mt in 2005. Such an increase would require continued robust economic growth, especially in China and in China's export markets. As Inco noted in various presentations in 2004, demand growth in

**Figure 1**  
World Primary Nickel Use, 1985-2010



Source: Natural Resources Canada.

Note: This is an average forecast; yearly actuals will differ from the trend.

2005 will be limited by supply. Demand for nickel is being negatively affected by high prices and substitution is occurring; some substitution will remain even after future nickel prices decline from the unsustainable high levels of 2004-05. High prices result in new nickel production capacity concurrently with substitution leading to weaker prices, although many uses of nickel are relatively insensitive to high prices, such as the growing aerospace applications. A long-term trend of 3%/y is forecast, but significant volatility about the trend is forecast due to economic cycles. The figure below shows a forecast to 2010, assuming demand peaks in 2005 due to sustained demand from China for primary nickel and stainless steel.

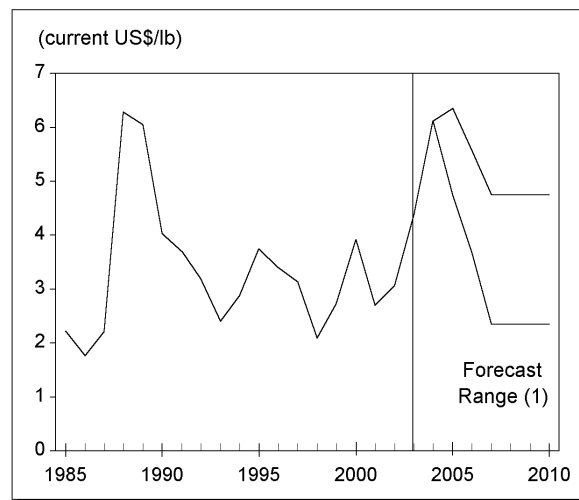
## PRODUCTION OUTLOOK - CANADA

Canadian exports of nickel products in 2004 are forecast at \$4.3 billion with major items, such as nickel in matte (25%), nickel oxide sinters (15%) and unwrought nickel, accounting for over 50% of exports. Canadian nickel imports in 2004 are forecast at \$1.1 billion, of which over \$660 million will be nickel in concentrates (mostly from Australia) and nickel in residues (from Cuba). Canadian mine production in 2005 is projected at 190 000 t, including output from Montcalm and Voisey's Bay and increased output from Raglan. "Refined" nickel production for 2005 is projected at 155 000 t, assuming that Inco makes up production to be "lost" during its 2005 maintenance shut-down in Sudbury. Production from Voisey's Bay is scheduled to increase Inco's Canadian output by 35 000 t in 2006, estimated to total about 155 000-160 000 t of Ni. Inco projected its Canadian production in 2009 at 172 000 t (note that this total includes output from Inco's U.K. refinery). Increasing prices sheltered domestic nickel producers from the higher value of the Canadian currency; as nickel prices decline, cost pressures will increase on existing and potential producers and cutbacks may occur. Costs to comply with SO<sub>2</sub> reductions and climate change regulations will add to financial pressures due to higher energy costs.

## PRICE OUTLOOK

To November 11, the LME settlement nickel price averaged US\$13 840/t (US\$6.28/lb). Prices are expected to average US\$13 900/t (US\$6.30/lb) for 2004. They are projected to peak in 2005 at US\$14 000/t (US\$6.35/lb). Thereafter, the price of nickel will also be affected by the value of the U.S. currency. If the U.S. currency is "weak" at about US\$1.50/SDR (the SDR, or Special Drawing Right, is the International Monetary Fund's currency basket), the long-term forecast is predicted to be within the range of US\$2.57 to US\$5.21/lb. The graph at the right shows a projected range of \$1.71 to \$3.47 SDR/lb and a U.S. currency exchange rate of US\$1.37/SDR. Since 1986, two thirds of monthly exchange rates fell within a range of US\$1.28 to US\$1.45/SDR. The manner in which

**Figure 2**  
Nickel Prices, 1985-2010  
Annual LME Cash Settlement



Source: Natural Resources Canada.  
(1) US\$5200/t to US\$10 500/t.

prices decline to the projected long-term range will depend upon how, when and how fast the world economy slows. It will be instructive to see the nickel producers' long-term price forecasts used to value their ore reserves in forthcoming annual reports.

*Notes: Information in this review was current as of November 11, 2004. Many significant nickel events were not shown due to space limitations; further detail can be found on the corporate web sites (see Table 1). Note that data may be rounded; see corporate documents for exact data.*

### NOTE TO READER

**The intent of this document is to provide general information and to elicit discussion. It is not intended as a reference, guide or suggestion to be used in trading, investment, or other commercial activities. The author and Natural Resources Canada make no warranty of any kind with respect to the content and accept no liability, either incidental, consequential, financial or otherwise, arising from the use of this document.**

**TABLE 1. COMPANY WEB SITES FOR FURTHER INFORMATION**

Company	Web Site Address
Adelaide Resources	<a href="http://www.adelaideresources.com.au">www.adelaideresources.com.au</a>
African Rainbow Minerals	<a href="http://www.arm.co.za">www.arm.co.za</a>
Albidon	<a href="http://www.albidon.com">www.albidon.com</a>
Allegiance Mining	<a href="http://www.allegiance-mining.com.au">www.allegiance-mining.com.au</a>
Altius Minerals Corporation	<a href="http://www.altiusminerals.com">www.altiusminerals.com</a>
Anglo American	<a href="http://www.angloamerican.co.uk">www.angloamerican.co.uk</a>
Anglo American Platinum	<a href="http://www.angloplatinum.com">www.angloplatinum.com</a>
Apex Minerals	<a href="http://www.apexminerals.com">www.apexminerals.com</a>
Asian Mineral Resources	<a href="http://www.asianminres.com">www.asianminres.com</a>
Aurora Platinum	<a href="http://www.auroraplatinum.com">www.auroraplatinum.com</a>
Austminex	<a href="http://www.austminex.com.au">www.austminex.com.au</a>
Australian Mines	<a href="http://www.australianmines.com.au">www.australianmines.com.au</a>
Bell Resources Corporation	<a href="http://www.bellresources.com">www.bellresources.com</a>
Belvedere Resources	<a href="http://www.belvedere-resources.com">www.belvedere-resources.com</a>
Blackstone Ventures	<a href="http://www.blv.ca/s/Home.asp">www.blv.ca/s/Home.asp</a>
Boliden AB	<a href="http://www.boliden.com">www.boliden.com</a>
Breakaway Resources	<a href="http://www1.breakawayresources.com.au">www1.breakawayresources.com.au</a>
Callinan Mines	<a href="http://www.callinan.com">www.callinan.com</a>
Canadian Arrow Mines	<a href="http://www.canadianarrowminesltd.com">www.canadianarrowminesltd.com</a>
Canadian Royalties	<a href="http://www.canadianroyalties.com/en">www.canadianroyalties.com/en</a>
Canico Resource Corp.	<a href="http://www.canico.com/s/Home.asp">www.canico.com/s/Home.asp</a>
Compass Resources	<a href="http://www.compassnl.com">www.compassnl.com</a>
Consolidated Minerals	<a href="http://www.consminerals.com.au">www.consminerals.com.au</a>
Cornerstone Capital Resources	<a href="http://www.cornerstoneresources.com">www.cornerstoneresources.com</a>
Costamin Resources	<a href="http://www.costaminresources.com">www.costaminresources.com</a>
Cougar Minerals	<a href="http://www.cougarmetals.com.au">www.cougarmetals.com.au</a>
Cream Minerals	<a href="http://www.creamminerals.com">www.creamminerals.com</a>
Crew Gold Corporation	<a href="http://www.crewgroup.com">www.crewgroup.com</a>
Crowflight Minerals	<a href="http://www.crowflight.com">www.crowflight.com</a>
Cullen Resources	<a href="http://www.cullenresources.com.au">www.cullenresources.com.au</a>
Discovery Nickel	<a href="http://www.discoverynickel.com.au">www.discoverynickel.com.au</a>
Donner Minerals Ltd.	<a href="http://www.donner-minerals.com">www.donner-minerals.com</a>
Dynatec Corporation	<a href="http://www.dynatec.ca">www.dynatec.ca</a>
East West Resources	<a href="http://www.eastwestres.com">www.eastwestres.com</a>
Eramet Group	<a href="http://www.eramet.fr">www.eramet.fr</a>
European Nickel	<a href="http://www.enickel.co.uk">www.enickel.co.uk</a>
Falcon Minerals	<a href="http://www.falcon.indigo.net.au">www.falcon.indigo.net.au</a>
Falconbridge	<a href="http://www.falconbridge.com">www.falconbridge.com</a>
First Narrows Resources	<a href="http://www.uno.ca">www.uno.ca</a>
First Nickel Inc.	<a href="http://www.firstnickel.com">www.firstnickel.com</a>
FNX Mining Company	<a href="http://www.fnxmining.com">www.fnxmining.com</a>
Fox Resources	<a href="http://www.foxresources.com.au">www.foxresources.com.au</a>
Franconia Minerals	<a href="http://www.franconiaminerals.com">www.franconiaminerals.com</a>
Geostar Metals	<a href="http://www.geostarmetals.com">www.geostarmetals.com</a>
Goldmarca	<a href="http://www.goldmarca.com">www.goldmarca.com</a>
Hallmark Consolidated	<a href="http://www.hallmarkconsolidated.com">www.hallmarkconsolidated.com</a>
Heron Resources	<a href="http://www.heronresources.com.au">www.heronresources.com.au</a>
Highlands Pacific	<a href="http://www.highlandspacific.com">www.highlandspacific.com</a>
Impala Platinum Holdings	<a href="http://www.implats.co.za">www.implats.co.za</a>
Inco Limited	<a href="http://www.inco.com">www.inco.com</a>
Independence Group	<a href="http://www.independencegold.com.au">www.independencegold.com.au</a>
Jaguar Nickel	<a href="http://www.jaguarnickel.com">www.jaguarnickel.com</a>
Jervois Mining	<a href="http://www.jervoismining.com.au">www.jervoismining.com.au</a>
Jilin JIEN Nickel Industry Co.	<a href="http://www.jlnickel.com.cn">www.jlnickel.com.cn</a>
Jinchuan Group	<a href="http://www.jnmc.com">www.jnmc.com</a>
Jubilee Mines	<a href="http://www.jubileemines.com.au">www.jubileemines.com.au</a>
Kennecott Minerals	<a href="http://www.kennecottminerals.com/Eagle-Project">www.kennecottminerals.com/Eagle-Project</a>
Knight Resources	<a href="http://www.knightresources.ca">www.knightresources.ca</a>

TABLE 1 (cont'd)

Company	Web Site Address
Liberty Mineral Exploration	<a href="http://www.libertymineral.com">www.libertymineral.com</a>
LionOre Mining International	<a href="http://www.lionore.com">www.lionore.com</a>
Maple Minerals	<a href="http://www.mapleminerals.com">www.mapleminerals.com</a>
MBMI Resources	<a href="http://www.mbmresources.com">www.mbmresources.com</a>
Metallica Minerals	<a href="http://www.metallicaminerals.com.au">www.metallicaminerals.com.au</a>
Minara Resources	<a href="http://www.minara.com.au">www.minara.com.au</a>
Mincor Resources	<a href="http://www.mincor.com.au">www.mincor.com.au</a>
Mirabela Nickel	<a href="http://www.mirabelanickel.com.au">www.mirabelanickel.com.au</a>
Mithril Resources	<a href="http://www.mithrilresources.com.au">www.mithrilresources.com.au</a>
MMC Norilsk Nickel	<a href="http://www.nornik.ru/en">www.nornik.ru/en</a>
Mondo Minerals	<a href="http://www.mondominerals.com">www.mondominerals.com</a>
MPI Mines Ltd	<a href="http://www.mpimines.com.au">www.mpimines.com.au</a>
Mustang Minerals	<a href="http://www.mustangminerals.com">www.mustangminerals.com</a>
Nickel Australia	<a href="http://www.nickelaustralia.com.au">www.nickelaustralia.com.au</a>
Noranda Inc	<a href="http://www.noranda.com">www.noranda.com</a>
North American Palladium	<a href="http://www.napalladium.com">www.napalladium.com</a>
Nuinsco Resources	<a href="http://www.nuinsco.ca">www.nuinsco.ca</a>
OM Group	<a href="http://www.omgi.com">www.omgi.com</a>
Oriel Resources	<a href="http://www.orielresources.com">www.orielresources.com</a>
Pacific North West Capital	<a href="http://www.pfncapital.com">www.pfncapital.com</a>
PacRim Resources	<a href="http://www.pacrim-resources.com">www.pacrim-resources.com</a>
Pearce Matheson Group	(unknown)
Pioneer Nickel	<a href="http://www.pioneernickel.com.au">www.pioneernickel.com.au</a>
Platinum Group Metals	<a href="http://www.platinumgroupmetals.net">www.platinumgroupmetals.net</a>
Polymet Mining	<a href="http://www.polymetmining.com">www.polymetmining.com</a>
PT Antam Tbk	<a href="http://www.antam.com">www.antam.com</a>
Randsburg International Gold Corp.	<a href="http://www.randsburgdiamonds.com">www.randsburgdiamonds.com</a>
Reliance Mining	<a href="http://www.reliancemining.com.au">www.reliancemining.com.au</a>
ReLode Limited	<a href="http://www.relude.com.au">www.relude.com.au</a>
Resolute Mining	<a href="http://www.resolute-ltd.com.au">www.resolute-ltd.com.au</a>
Resource Mining Corporation	<a href="http://www.resmin.com.au">www.resmin.com.au</a>
Ressources Appalaches	<a href="http://www.ressourcesappalaches.com">www.ressourcesappalaches.com</a>
Rio Narcea Gold Mines	<a href="http://www.rionarcea.com">www.rionarcea.com</a>
Rio Tinto plc	<a href="http://www.riotinto.com">www.riotinto.com</a>
Rox Resources	<a href="http://www.roxresources.com.au">www.roxresources.com.au</a>
Sally Malay Mining	<a href="http://www.sallymalay.com">www.sallymalay.com</a>
Sherritt International Corp.	<a href="http://www.sherritt.com">www.sherritt.com</a>
Sino Mining International	<a href="http://www.sinogold.com.au">www.sinogold.com.au</a>
Skye Resources	<a href="http://www.skyeresources.com">www.skyeresources.com</a>
Starfield Resources	<a href="http://www.starfieldres.com">www.starfieldres.com</a>
Sultan Minerals	<a href="http://www.sultanminerals.com">www.sultanminerals.com</a>
Tectonic Resources	<a href="http://www.tectonicres.com.au">www.tectonicres.com.au</a>
Tenant Creek Gold	<a href="http://www.tennantcreekgold.com.au">www.tennantcreekgold.com.au</a>
Thundelarra Exploration	<a href="http://www.thundelarra.com">www.thundelarra.com</a>
Titan Resources	<a href="http://www1.titanresources.com.au">www1.titanresources.com.au</a>
Ursa Major International	<a href="http://www.ursamajorminerals.com">www.ursamajorminerals.com</a>
Valgold Resources	<a href="http://www.valgold.com">www.valgold.com</a>
View Resources	<a href="http://www.viewresources.com.au">www.viewresources.com.au</a>
Voisey's Bay Nickel Company	<a href="http://www.vbnc.com">www.vbnc.com</a>
Votorantim Metais	<a href="http://www.vmetais.com.br/homecnt.htm">www.vmetais.com.br/homecnt.htm</a>
Wallbridge Mining	<a href="http://www.wallbridgeminig.com">www.wallbridgeminig.com</a>
Weda Bay Minerals	<a href="http://www.wedabay.com">www.wedabay.com</a>
Western Areas	<a href="http://www.westernareas.com.au">www.westernareas.com.au</a>
Westonia Mines	<a href="http://www.westoniamines.com.au">www.westoniamines.com.au</a>
WMC Resources	<a href="http://www.wmc.com">www.wmc.com</a>
Zimbabwe Platinum Mines	<a href="http://www.zimplats.com">www.zimplats.com</a>