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THE CANADIAN MINERAL INDUSTRY
MONTHLY REPORT

APRIL 1988

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THE CANADIAN MINERAL INDUSTRY

MONTHLY REPORT

Energy, Mines and Resources Canada

Énergie, Mines et Ressources Canada

Hon. Gerald S. Merrithew, Minister of State (Forestry and Mines)

L'Hon. Gerald S. Merrithew, Ministre d'État (Forêts et Mines)

PREFACE

This publication is prepared in the Mineral Policy Sector of the Department of Energy, Mines and Resources. It is compiled from many sources using the best information available to us. This report is intended to be a general review of the more important current developments that affect, or may affect the Canadian mineral industry. It should not be considered an authority for exact quotation or an expression of the official views of the Government of Canada.

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THE CANADIAN MINERAL INDUSTRY FOR APRIL

The following constitutes a brief summary of the Canadian mineral industry based on information that became available in April.

HIGHLIGHTS

1. Alcan Aluminium Limited announced in April that it would speed up construction on the second phase of the Laterrière aluminum smelter in Quebec. The first phase of the project is expected to be completed at the end of 1989. The second phase is now scheduled for completion in March 1990, nine months earlier than originally planned. The LME cash price for high-grade aluminum (99.7%) fell from a record high of US$1.35/lb. at the beginning of April to US$1.12/lb. at the end of April.

2. Mines Gaspé division of Noranda Inc. announced that it plans to reconstruct its underground mine conveyor system. The mine has not produced since the conveyor was destroyed in a fire on April 1, 1987.

3. The Canadian steel industry operated at 78.1% of capacity on average during the first quarter of 1988. The annual capacity of the industry was about 19.2 Mt as calculated for January 1, 1988. Shipments by the Canadian steel industry as a whole have been much higher than normal for this time of the year. According to a survey of the industry, this high level of activity is expected to continue for the next three months.

4. Falconbridge Dominicana, C. por A. suspended production at its ferronickel operation in the Dominican Republic, effective April 19, 1988.

5. Very tight international market conditions are keeping nickel prices at very high levels. The London Metal Exchange average nickel price for April 1988 was US$8.21, compared to $1.77 for April 1987.

6. The Canadian Salt Company Limited has purchased the assets of Seleine Mines Inc. for $35 million. The move to privatize the salt mine located on the Magdalen Islands was initiated by the Quebec government last November.

ECONOMIC TRENDS

Table 1 provides a comparison of the volume of production of Canada's leading minerals for the first two months of 1988 and the first two months of 1987. All the leading minerals showed increases, except for lead and nickel which decreased by 1.3% and 1.2%, respectively. Silver achieved the greatest gain with an increase of 49.2%. In regard to the nonmetals, gypsum and potash achieved the largest gains with 29.3% and 13.6%, respectively.

Table 2 provides information on Canada's Gross Domestic Product at factor cost in 1981 prices by industry. The data is also annualized and seasonally adjusted.

The annual rate shown for any given month is calculated by multiplying the figure for that month by twelve. It is important to note however, that if a particular month has been influenced by special factors such as a strike, the annualized data will reflect this bias.

Factor cost refers to output which is valued exclusive of excise taxes and duties, and provincial and municipal sales tax. Factor cost does however, include subsidies and other taxes which are not a function of the level of output or sale.

Seasonally adjusted data removes from time series data the affects of repetitive and clearly defined seasonal fluctuations. Such a practice permits the isolation of trends in the economy which might otherwise be obscured. Seasonal factors include such items as climate, trade practices and social institutions such as Christmas and Easter.

The GDP data is subject to ongoing revision.

GDP at Factor Cost in 1981 prices declined 0.2 % in February following no growth in January. Output of goods producing industries fell 0.5% in February, while services producing industries were unchanged from the January level.

Table 3 shows the prices of selected minerals for January and February.

Table 4, Economic Dimensions of the Minerals and Metals Sector, 1987, measures the impact of the mining, smelting and refining, semi-fabricating and fabricating industries in terms of selected economic indicators including output, employment, investment and trade. Stage I, crude mining, includes metal mines, nonmetal mines, coal mines, and quarries and sand pits. The output of this stage is a high-grade ore, a concentrate or a pellet. In some instances, a relatively pure mineral is obtained. Stage II, smelting and refining, includes the output from iron and steel mills, and nonferrous smelters and refineries. The product of this stage is a relatively pure metal or alloy. Stage III involves the conversion of minerals or metals into shapes or forms that can be readily used in manufacturing operations. Examples of the output at this stage include rods, bars, plates, sheet, castings, forgings, pipes and tubes. Stage IV carries these products one step further into minerals and metals-based manufacturing. Stage IV output comes from the fabricated structural metal products industries; metal stamping, pressing and coating industries; wire and wire products industries; and hardware, tool and cutlery manufacturers.

The value of shipments of the overall minerals and metals sector, Stages I through IV inclusive, reached $56.4 billion in 1987 compared with $49.9 billion in 1986. In terms of Gross Domestic Product measured in 1981 prices, the sector contributed $22.4 billion to the economy in 1987, or 5.9% of total GDP. Employment totalled 381 450, or 2.9% of total employment in the economy. Investment expenditures on construction, and machinery and equipment reached $8.0 billion, or 5.8% of total investment. Mineral and metal sector exports totalled $21.2 billion in 1987, 17.4% of total domestic exports, while imports totalled $11.3 billion. The sector contributed $9.9 billion to the merchandise balance of trade.

Tables 5 through 16 give detailed statistics on mineral sector trade over various years. The definition of the mineral sector in these tables differs from the definition applied in Table 4. Table 4 includes coal and uranium as part of the mineral sector, whereas Tables 5 through 16 include these commodities as part of mineral fuels. Table 4 includes fabricated metal products as part of the mineral sector, while Tables 5 through 16 do not.

TABLE 1. CANADA, PRODUCTION OF LEADING MINERALS ('000 TONNES EXCEPT WHERE NOTED)

		1987			1988			Percentage Changes		
		January	February	Total 2 Months	January	February	Total 2 Months	February 1988 / February 1987	February 1988 / January 1988	1st 2 months 1988 / 1987
Metals										
Copper		59.4	56.8	116.2	65.4	62.2	127.8	9.5	-4.9	10.0
Gold	kg	8 118.4	7 997.9	16 116.3	9 496.6r	9 261.8	18 758.4	15.8	-2.5	16.4
Iron ore		2 512.0	1 830.0r	4 341.9r	2 181.4	2 657.8	4 839.2	45.2	21.8	11.5
Lead		20.7	31.9	52.5	29.7	22.1	51.8	-30.7	-25.6	-1.3
Molybdenum	t	1 103.0	849.1	1 952.0	914.5	1 047.4	1 961.9	23.4	14.5	0.5
Nickel		17.4	16.1	33.5	16.0	17.1	33.1	6.2	6.9	-1.2
Silver	t	77.2	71.2	148.3	108.3	113.0	221.3	58.7	4.3	49.2
Uranium[1]	t	1 387.4	1 050.7	2 438.2	1 149.0	1 331.2	2 480.2	26.7	15.9	1.7
Zinc		73.4	102.5	176.0	102.5	99.0	201.5	-3.4	-3.4	14.5
Nonmetals										
Asbestos		48.2	47.7	95.8	47.2	47.6	94.8	-0.2	0.8	-1.0
Clay products	$000	10 920.4	10 376.5	21 296.9	8 454.1	8 528.9	16 983.0	-17.8	0.9	-20.3
Gypsum		583.9	445.2r	1 029.1r	708.8	621.4	1 330.2	39.6	-12.3	29.3
Potash K_2O		606.3	597.8	1 204.1	602.7	764.9	1 367.7	27.9	26.9	13.6
Cement		422.8	470.9	893.8	445.5	536.1	981.6	13.8	20.3	9.8
Lime		194.7	168.8	363.5	194.0	188.4	382.4	11.6	-2.9	5.2
Salt		866.3	921.8r	1 788.1r	805.4	1 059.9	1 865.3	15.0	31.6	4.3
Fuels										
Coal		4 874.7	4 580.7	9 455.3	6 187.1	..	..	..	..	..
Natural gas	million m^3	9 784.0	8 366.0r	18 151.0r	11 432.0	..	..	..	..	..
Crude oil and equivalent	000 m^3	7 802.0	6 964.0r	14 767.0r	8 084.0	..	..	..	..	..

[1] Tonnes uranium (1 tonne U = 1.2999 short tons U_3O_8).
r Revised; .. Not available

TABLE 2. CANADA, REAL GROSS DOMESTIC PRODUCT AT FACTOR COST BY INDUSTRY, IN 1981 PRICES, MONTHLY (SEASONALLY ADJUSTED AT ANNUAL RATES)

Industry Sector	1987 February	1987 December	1988 January	1988 February	Percentage Change February 1988 / February 1987
	($ million)				
Total Economy	372 259.2	387 352.8	387 249.5	386 535.4	3.8
Primary Industries					
Agriculture	11 772.6	11 871.0	11 870.4	11 790.0	0.1
Forestry	2 822.1	2 788.3	2 544.0	2 629.2	-6.8
Fishing and Trapping	671.2	522.5	548.4	564.0	-16.0
Mines, Quarries and Oil Wells	20 923.3	22 672.4	22 551.6	23 082.0	10.3
Mining Industries	7 884.2	8 592.6	8 517.6	8 523.6	8.1
Gold Mines	1 137.7	1 454.0	1 447.2	1 431.6	25.8
Iron Mines	545.4	599.5	571.2	571.2	4.7
Other Metal Mines	4 178.3	4 266.0	4 167.6	4 155.6	-0.5
Nonmetal Mines	776.3	784.8	832.8	873.6	12.5
Asbestos Mines	145.9	156.4	187.2	168.0	15.1
Mineral Fuels					
Coal Mines	986.7	1 221.6	1 210.8	1 221.6	23.8
Crude Petroleum and Natural Gas	11 807.7	12 541.8	12 422.4	12 876.0	9.0
Secondary Industries					
Manufacturing	72 696.4	77 358.8	77 302.8	76 315.2	5.0
Non-durable Manufacturing	32 767.1	33 288.3	33 254.4	32 830.8	0.2
Durable Manufacturing	39 929.3	44 070.5	44 048.4	43 484.4	8.9
Primary Metal Industries	5 813.4	6 396.4	6 326.4	6 070.8	4.4
Primary Steel Industries	2 281.5	2 555.8	2 502.0	2 398.8	5.1
Steel, Pipe and Tube Industry	286.8	456.3	416.4	412.8	43.9
Iron Foundries	427.6	444.4	438.0	411.6	-3.7
Smelting and Refining	2 176.7	2 259.8	2 308.8	2 202.0	1.2
Nonmetallic Mineral Products	2 354.5	2 504.3	2 542.8	2 468.4	4.8
Clay Products Industry	102.3	92.8	90.0	93.6	-8.5
Cement Industry	320.6	338.4	373.2	368.4	14.9
Ready-mix Concrete Industry	427.1	447.5	435.6	424.8	-0.5
Construction Industry	26 289.9	27 678.9	27 588.0	27 289.2	3.8
Transportation and Storage	16 636.1	17 008.0	17 241.6	16 928.4	1.8
Communications	10 620.3	11 172.9	11 241.6	11 334.0	6.7
Other Utilities	11 243.5	11 226.7	11 491.2	11 450.4	1.8
Wholesale Trade	20 024.6	21 129.3	21 189.6	21 211.2	5.9
Retail Trade	24 473.3	26 319.6	26 053.2	25 801.2	5.4
Finance, Insurance and Real Estate	53 167.5	55 085.1	54 968.4	55 263.6	3.9
Community, Business and Personal Service	38 019.7	39 024.2	39 175.1	39 374.2	3.6

TABLE 3. METAL PRICES - 1988

	January	February
Copper		
Electrolytic, U.S. producer f.o.b. refinery, cents (U.S.)	131.096	106.117
Electrolytic, COMEX, 1st pos. plus 5¢, cents (Cdn.)	164.795	139:136
Electrolytic, Standard, LME cash, cents (U.S.)	115.928	102.295
Lead		
New York, cents (U.S.)	38.000	34.600
Montreal, cents (Cdn.)	49.250	43.800
LME cash, cents (U.S.)	30.206	29.706
Silver		
New York, cents (U.S.) per troy oz.	673.250	632.475
Toronto, cents (Cdn.) per troy oz.	895.060	829.880
LME cash, cents (U.S.) per troy oz.	670.525	631.131
Zinc		
St. Louis, H.G., cents (U.S.)	44.439	45.439
Montreal, Electrolytic, cents (Cdn.)	59.500	59.500
LME cash, cents (U.S.)	39.810	39.722
Tin		
New York, Straits, cents (U.S.)	318.237	315.375
Metals Week, composite, cents (U.S.)	426.591	419.501
Gold		
London, p.m., US$ per troy oz.	476.660r	442.070
Average, (Sharps Pixley) US$ per troy oz.	477.169	442.099
High, (Sharps Pixley) US$ per troy oz.	483.900	455.900
Low, (Sharps Pixley) US$ per troy oz.	458.000	426.150
Mercury		
US$ per flask	351.053	353.000
Nickel		
Major Producer Cathode, cents (Cdn.)	-LPS-	-LPS-
Major Producer Cathode, cents (U.S.)	-LPS-	-LPS-
LME cash, US$	3.662	3.931
Antimony		
New York, dealers, cents (U.S.)	113.474	112.500
Platinum		
New York, refined, US$ per troy oz.	600.000	600.000
Cadmium		
New York, producers US$	3.063	4.725
Aluminum		
LME cash, cents (Cdn.)	116.744	122.960
LME cash, cents (U.S.)	90.830	96.979
Cobalt		
Shot/cathode/250 kg., US$	6.080	7.500
U.S. spot cathode, US$	6.925	6.820
Tungsten		
LMB ore, low, US$/MTU	49.000	49.000
GSA domestic, US$/MTU	-LPS-	-LPS-
Molybdenum		
M.W. dealer oxide, US$	3.122	3.189
Uranium		
Nuexco, US$ U_3O_8	16.650	16.550

Average U.S. Exchange Rate for January = 1.285300, February = 1.2679.
Note: Prices are per pound unless otherwise stated.
LPS List Price Suspended; r Revised.

TABLE 4. ECONOMIC DIMENSIONS OF THE MINERALS AND METALS SECTOR, 1987[P]

Economic Indicator	STAGE I Crude Mining	STAGE II Smelting and Refining	STAGE III Semi-Fabricating	STAGE IV Fabricating	STAGES I + II	STAGES I + II + III	STAGES I + II + III + IV
Output							
Value of shipments (billions of $1987)	14.6	13.6	12.5	15.8	28.2	40.6	56.4
Gross Domestic Product (billions of $1981)	8.6	4.6	3.9	5.3	13.2	17.1	22.4
% Share of total GDP	2.28	1.20	1.02	1.40	3.48	4.50	5.90
Employment							
Employment	75 750	73 125	80 700	151 875	148 875	229 575	381 450
% Share of total employment	0.57	0.55	0.61	1.14	1.12	1.72	2.86
Investment							
Investment (capital & repair) ($ billions)	3.8	2.6	1.0	0.7	6.4	7.4	8.0
% Share of total investment	2.7	1.9	0.7	0.5	4.6	5.4	5.8
New investment (capital only) ($ billions)	2.2	1.3	0.5	0.5	3.5	4.0	4.5
% Share of total new investment	2.0	1.2	0.5	0.4	3.2	3.7	4.1
External Trade							
Exports ($ billions)	7.7	7.3	4.6	1.7	14.9	19.5	21.2
% Share of total domestic exports	6.3	6.0	3.8	1.4	12.3	16.1	17.4
Imports ($ billions)	2.3	2.3	4.5	2.1	4.7	9.2	11.3
% Share of total imports	2.0	2.0	3.9	1.8	4.0	7.9	9.7
Balance of trade ($ billions)	5.3	4.9	0.1	-0.4	10.2	10.3	9.9

Source: Information Systems Division, Mineral Policy Sector.
[P] Preliminary.
Note: Data may not add to totals shown because of independent rounding.

TABLE 5. CANADA, VALUE OF MINERAL EXPORTS, 1981-87

	1981	1982	1983	1984	1985	1986	1987[p]
				($ million)			
Ferrous							
Crude material	1 540.7	1 103.7	1 053.4	1 207.0	1 291.9	1 217.4	1 120.4
Smelted and refined material	475.1	232.6	300.3	247.8	242.1	278.0	219.2
Semi-fabricated material	1 874.8	1 763.7	1 360.7	2 007.0	2 158.2	2 171.9	2 483.7
Total	3 890.5	3 100.1	2 714.4	3 461.8	3 692.2	3 667.2	3 823.3
Nonferrous							
Crude material	1 707.0	1 346.7	1 323.3	1 462.2	1 334.9	1 527.1	1 886.1
Smelted and refined material	5 836.5	4 982.1	5 620.4	6 630.7	6 278.5	7 607.5	6 440.1
Semi-fabricated material	586.9	544.1	638.1	873.6	798.4	865.5	1 062.9
Total	8 130.4	6 872.9	7 581.8	8 966.5	8 411.9	10 000.1	9 389.1
Nonmetals							
Crude material	2 682.2	2 202.2	2 217.1	2 882.7	3 084.3	2 841.2	2 703.6
Smelted and refined material	-	-	-	-	-	-	-
Semi-fabricated material	711.2	664.2	657.2	891.7	916.1	982.1	1 015.9
Total	3 393.4	2 866.4	2 874.3	3 774.4	4 000.4	3 823.3	3 719.5
Mineral fuels							
Crude material	8 201.3	9 111.0	8 679.4	10 507.4	12 236.6	8 316.5	9 330.4
Smelted and refined material	2 800.2	2 364.1	2 717.0	3 252.0	3 445.8	2 578.1	2 616.2
Semi-fabricated material	512.9	607.8	466.1	485.2	485.5	183.3	192.3
Total	11 514.4	12 083.0	11 862.6	14 244.6	16 167.8	11 077.9	12 138.9
Total minerals and products							
Crude material	14 131.2	13 763.6	13 273.3	16 059.4	17 947.7	13 902.1	15 040.5
Smelted and refined material	9 111.8	7 578.8	8 637.7	10 130.5	9 966.4	10 463.6	9 275.5
Semi-fabricated material	3 685.8	3 579.9	3 122.1	4 257.6	4 358.2	4 202.7	4 754.7
Total	26 928.8	24 922.3	25 033.0	30 447.5	32 272.3	28 568.4	29 070.7

[p] Preliminary; - Nil.

TABLE 6. CANADA, VALUE OF MINERAL IMPORTS, 1981-87

	1981	1982	1983	1984	1985	1986	1987[p]
				($ million)			
Ferrous							
Crude material	373.2	227.3	285.2	398.9	427.0	360.6	331.1
Smelted and refined material	205.2	86.2	93.9	174.0	162.7	212.0	353.8
Semi-fabricated material	2 127.0	1 193.2	1 114.8	1 502.6	1 885.0	1 672.2	1 774.9
Total	2 705.4	1 506.7	1 493.8	2 075.5	2 474.7	2 244.8	2 461.7
Nonferrous							
Crude material	1 219.3	1 001.7	1 125.8	1 132.3	909.0	1 236.9	906.7
Smelted and refined material	1 910.7	1 441.2	1 835.8	1 882.5	2 247.1	2 672.5	1 994.0
Semi-fabricated material	701.6	525.6	603.4	900.7	836.6	960.8	1 116.7
Total	3 831.5	2 968.4	3 565.0	3 915.5	4 019.7	4 870.2	4 017.3
Nonmetals							
Crude material	349.2	290.3	277.8	334.3	344.2	354.1	383.0
Smelted and refined material	-	-	-	-	-	-	-
Semi-fabricated material	1 008.2	837.8	958.5	1 121.7	1 304.1	1 382.8	1 514.0
Total	1 357.4	1 128.1	1 236.3	1 456.0	1 648.3	1 736.9	1 896.9
Mineral fuels							
Crude material	8 839.7	5 912.6	4 162.0	4 470.8	4 584.3	3 630.6	3 906.7
Smelted and refined material	713.6	683.5	862.7	1 445.4	1 418.0	1 327.9	1 412.7
Semi-fabricated material	228.1	210.2	227.9	326.7	420.0	401.4	477.3
Total	9 781.4	6 806.3	5 252.6	6 242.9	6 422.2	5 359.9	5 796.8
Total minerals and products							
Crude material	10 781.4	7 431.8	5 850.8	6 336.2	6 264.5	5 582.2	5 529.4
Smelted and refined material	2 829.5	2 210.8	2 792.4	3 501.9	3 827.8	4 212.3	3 760.5
Semi-fabricated material	4 064.9	2 766.9	2 904.6	3 851.7	4 472.6	4 417.2	4 882.8
Total	17 675.7	12 409.5	11 547.8	13 689.8	14 564.9	14 211.8	14 172.8

[p] Preliminary; - Nil.

TABLE 7. CANADA, VALUE OF MINERAL EXPORTS IN RELATION TO TOTAL DOMESTIC EXPORT TRADE, 1977, 1982 AND 1987

	1977		1982		1987[p]	
	($ million)	(%)	($ million)	(%)	($ million)	(%)
Crude material	7 871.4	18.0	13 763.6	16.8	15 040.5	12.4
Smelted and refined material	3 865.8	8.8	7 578.8	9.3	9 275.5	7.6
Semi-fabricated material	1 681.1	3.8	3 579.9	4.4	4 754.7	3.9
Total	13 418.4	30.7	24 922.3	30.5	29 070.7	23.9
Total exports, all products	43 684.6	100.0	81 824.8	100.0	121 462.3	100.0

[p] Preliminary.

TABLE 8. CANADA, VALUE OF MINERAL IMPORTS IN RELATION TO TOTAL IMPORT TRADE, 1977, 1982 AND 1987

	1977		1982		1987[p]	
	($ million)	(%)	($ million)	(%)	($ million)	(%)
Crude material	4 463.5	10.7	7 431.8	11.1	5 529.4	4.8
Smelted and refined material	713.5	1.7	2 210.8	3.3	3 760.5	3.2
Semi-fabricated material	1 843.7	4.4	2 766.9	4.2	4 882.8	4.2
Total	7 020.7	16.9	12 409.5	18.6	14 172.8	12.2
Total imports, all products	41 523.0	100.0	66 738.5	100.0	116 075.7	100.0

[p] Preliminary.

TABLE 9. CANADA, VALUE OF MINERAL EXPORTS BY MAIN GROUPS AND DESTINATION, 1987[P]

	United States	United Kingdom	EFTA[1]	EEC[2]	Japan	Other Countries	Total
				($ million)			
Ferrous materials and products	2 910.8	210.6	15.2	341.6	60.5	284.7	3 823.3
Nonferrous materials and products	5 435.3	587.4	293.3	864.8	1 357.8	850.4	9 389.0
Nonmetallic mineral materials and products	1 833.6	30.6	21.2	387.3	130.9	1 315.8	3 719.5
Mineral fuels, materials and products	10 031.9	73.6	29.2	304.5	1 268.0	431.6	12 138.9
Total	20 211.6	902.3	358.9	1 898.1	2 817.3	2 882.5	29 070.7
Percentage of total mineral exports	69.5	3.1	1.2	6.5	9.7	9.9	100.0

[1] European Free Trade Association includes Austria, Norway, Sweden, Switzerland, Finland and Iceland. [2] European Economic Community includes Belgium-Luxembourg, France, Italy, Netherlands, West Germany, Greece, Denmark, Portugal, Spain and Ireland.
[P] Preliminary.

TABLE 10. CANADA, VALUE OF MINERAL IMPORTS BY MAIN GROUPS AND ORIGIN, 1987[P]

	United States	United Kingdom	EFTA[1]	EEC[2]	Japan	Other Countries	Total
				($ million)			
Ferrous materials and products	1 209.6	173.8	99.7	501.6	171.0	306.0	2 461.7
Nonferrous materials and products	2 780.3	49.8	47.5	207.3	44.9	887.5	4 017.3
Nonmetallic mineral materials and products	1 302.2	36.8	26.6	336.2	38.7	156.5	1 896.9
Mineral fuels, materials and products	2 026.5	1 785.6	107.7	188.7	8.0	1 680.2	5 796.8
Total	7 318.6	2 046.0	281.5	1 233.8	262.5	3 030.3	14 172.8
Percentage of total mineral imports	51.6	14.4	2.0	8.7	1.9	21.4	100.0

[1] European Free Trade Association includes Austria, Norway, Sweden, Switzerland, Finland and Iceland. [2] European Economic Community includes Belgium-Luxembourg, France, Italy, Netherlands, West Germany, Greece, Denmark, Portugal, Spain and Ireland.
[P] Preliminary.

TABLE 11. CANADA, VALUE OF MINERAL EXPORTS, BY COMMODITY AND DESTINATION, 1987[P]

	United States	United Kingdom	EFTA[1]	EEC[2]	Japan	Other Countries	Total
				($ million)			
Petroleum	6 227 713	4 091	831	2 165	67 664	64 099	6 366 563
Natural gas	3 189 997	-	-	2	-	452	3 190 451
Aluminum	2 288 960	12 463	19 782	73 828	247 163	322 594	2 964 790
Iron and steel	2 362 168	6 940	5 389	66 460	1 443	229 232	2 671 632
Coal	36 367	16 775	19 629	86 453	1 188 266	348 064	1 695 554
Copper	677 296	91 012	54 261	121 180	457 461	131 225	1 532 434
Gold	867 813	1 781	25 153	142 307	377 096	39 959	1 454 109
Nickel	402 873	192 784	159 577	124 937	63 300	194 978	1 138 449
Iron ore	526 785	203 619	9 817	274 996	51 613	53 519	1 120 349
Potash	513 415	2 500	6 709	45 579	68 308	328 664	965 175
Sulphur	95 996	19	-	90 964	1 039	723 105	911 123
Uranium	577 793	52 747	8 747	215 871	12 119	19 017	886 294
Zinc	405 205	37 439	11 120	200 402	50 258	84 006	788 430
Asbestos	39 612	11 583	10 451	96 030	40 528	178 912	377 116
Silver	164 961	1 302	2 608	25 940	58 898	10 033	263 742
All other minerals	1 834 615	267 200	24 834	331 022	132 147	154 689	2 744 507
Total	20 211 569	902 255	358 908	1 898 136	2 817 303	2 882 548	29 070 718

[1] European Free Trade Association includes Austria, Norway, Sweden, Switzerland, Finland and Iceland. [2] European Economic Community includes Belgium-Luxembourg, France, Italy, Netherlands, West Germany, Greece, Denmark, Portugal, Spain and Ireland.
[P] Preliminary; - Nil.

TABLE 12. CANADA, VALUE OF MINERAL IMPORTS, BY COMMODITY AND ORIGIN, 1987[P]

	United States	United Kingdom	EFTA[1]	EEC[2]	Japan	Other Countries	Total
				($ million)			
Petroleum	1 209 415	1 785 508	107 694	188 205	7 974	1 677 115	4 975 911
Iron and steel	842 837	173 520	89 442	490 796	170 976	268 686	2 036 257
Aluminum	904 535	11 215	5 703	100 572	31 110	366 706	1 419 841
Gold	805 754	113	10 001	2 112	-	219 373	1 037 353
Coal	801 270	-	-	57	-	3 038	804 365
Clays	309 629	7 578	3 898	122 197	17 984	20 320	481 606
Copper	290 297	3 656	11 017	26 893	7 511	104 575	443 949
Platinum Group Metals	373 692	10 949	528	9 041	-	33 826	428 036
Iron ore	323 398	8	60	152	-	9 457	333 075
Phosphatic materials	221 633	150	80	3 413	127	14 690	240 093
Abrasives	111 679	2 600	9 486	25 265	2 248	3 462	154 740
Nickel	60 235	10 676	13 379	7 805	25	15 104	107 224
Stone, building	25 761	236	1 363	48 301	-	6 455	82 116
Graphite	63 491	407	2 039	5 189	4 511	874	76 511
Mineral pigments	40 235	1 554	54	12 310	-	4 253	58 406
All other minerals	934 711	37 879	26 785	191 490	20 047	282 385	1 493 297
Total	7 318 572	2 046 049	281 529	1 233 798	262 513	3 030 319	14 172 780

[1] European Free Trade Association includes Austria, Norway, Sweden, Switzerland, Finland and Iceland. [2] European Economic Community includes Belgium-Luxembourg, France, Italy, Netherlands, West Germany, Greece, Denmark, Portugal, Spain and Ireland.
[P] Preliminary; - Nil.

TABLE 13. CANADA, PHYSICAL VOLUME OF IMPORT TRADE FOR SELECTED COMMODITIES, 1981-87

	Units of Weight	1981	1982	1983	1984	1985	1986	1987[p]
Crude materials								
Metals								
Iron ore	t	5 794 713	3 359 304	4 013 119	4 946 916	5 800 222	5 367 244	5 212 745
Alumina	t	1 020 550	939 268	1 063 176	1 349 213	1 544 007	1 724 599	2 068 422
Bauxite ore	t	2 734 665	2 574 719	2 329 911	2 451 541	2 074 206	2 112 905	2 019 148
Manganese ore	t	119 746	71 655	42 261	77 546	102 202	94 916	80 959
Nonmetals								
Limestone, crushed	t	2 526 876	1 485 428	1 799 859	1 944 045	2 071 651	2 354 276	2 691 937
Phosphate rock	t	3 245 446	2 477 199	2 625 390	3 142 654	2 621 668	2 355 682	1 968 225
Sand and gravel	t	1 446 872	1 179 284	878 613	1 266 983	1 111 801	1 047 189	1 268 392
Salt and brine	t	1 254 992	1 526 880	777 311	1 053 210	1 255 510	1 328 247	1 112 119
Silica sand	t	1 142 880	788 768	982 664	1 076 083	983 340	1 055 215	836 427
Clay, ground and unground	t	413 038	345 384	368 996	403 481	472 755	527 371	643 533
Bentonite	t	311 249	238 027	187 229	377 054	346 018	326 028	318 074
Gypsum	t	143 499	93 844	100 938	131 809	121 802	221 644	217 623
Fluorspar	t	173 598	126 594	141 928	166 710	111 726	164 114	134 566
Fuels								
Coal	t	14 993 112	15 715 860	14 822 356	19 060 700	15 024 782	13 368 536	14 150 394
Petroleum, crude	m^3	30 751 766	19 670 772	14 603 437	14 849 581	15 845 864	20 153 969	21 753 201
Fabricated materials								
Metals								
Steel								
sheets and strips	t	1 733 683	540 408	536 819	699 381	1 069 154	914 822	962 184
bars and rods	t	340 775	219 629	277 287	405 194	363 979	407 982	425 736
pipes and tubes	t	364 979	249 661	217 054	315 817	455 375	254 206	292 649
structural shapes	t	364 384	120 369	162 133	234 614	232 618	209 380	254 119
castings and forgings, n.e.s.	t	118 491	70 130	92 522	135 892	113 200	101 711	136 505
Aluminum products	t	122 164	99 550	120 384	185 199	175 461	179 205	213 679
Ferroalloys	t	117 911	64 662	71 560	106 568	124 770	93 992	124 740
Nonmetals								
Cement	t	721 206	231 829	238 268	236 230	372 800	489 953	586 155
Phosphate fertilizers	t	307 217	249 827	360 302	333 765	444 135	439 547	486 055
Fire bricks	t	187 020	132 601	154 765	177 126	167 202	154 256	155 712
Fuels								
Fuel oil	000 L	1 256 790	1 571 003	1 446 255	2 399 279	2 073 480	2 618 806	3 087 032
Coke, petroleum	t	935 929	650 813	768 981	886 734	1 641 841	910 620	948 027
Coke, n.e.s.	t	500 146	400 506	585 859	660 258	783 718	881 086	699 015

[p] Preliminary; n.e.s. Not elsewhere specified.

TABLE 14. CANADA, PHYSICAL VOLUME OF EXPORT TRADE FOR SELECTED COMMODITIES, 1981-87

	Units of Weight	1981	1982	1983	1984	1985	1986	1987[P]
Crude material								
Metals								
Iron, ores	t	41 452 042	27 281 399	25 527 964	30 737 466	32 259 296	31 008 240	29 679 318
Zinc, ores and concentrates	t	516 214	457 753	626 174	550 213	396 103	450 249	613 185
Copper, ores and concentrates	t	276 810	257 930	313 798	332 373	320 619	341 641	381 126
Lead, ores and concentrates	t	146 304	106 744	85 458	114 720	93 657	118 373	207 936
Nonmetals								
Potash	t	10 067 830	7 221 375	9 411 895	11 493 732	9 980 965	9 894 036	10 983 051
Sulphur, crude	t	7 309 215	6 111 447	5 670 281	7 326 852	7 818 425	6 257 074	6 571 811
Gypsum	t	5 094 872	4 775 780	5 187 032	6 224 573	5 879 664	5 921 982	5 704 853
Salt and brine	t	1 507 708	1 721 892	1 914 626	2 545 011	2 263 076	2 502 518	1 924 686
Limestone, crushed	t	1 758 298	1 517 498	1 390 795	1 216 674	1 195 939	1 350 345	1 709 483
Asbestos, crude and fibers	t	1 062 287	880 703	753 901	796 764	722 003	717 668	648 836
Crude refractory materials	t	629 770	40 838	241 131	579 487	534 579	728 668	506 722
Sand and gravel	t	318 634	168 691	95 634	109 809	241 790	249 833	414 547
Nepheline syenite	t	476 280	414 781	398 295	387 066	351 026	338 257	356 141
Fuels								
Coal	t	16 285 101	15 528 538	16 974 344	24 354 894	27 591 769	25 899 699	25 466 331
Natural gas	000 m^3	21 689 360	22 072 136	19 296 956	21 427 034	26 154 592	21 388 902	27 672 088
Semi-fabricated materials								
Metals								
Aluminum, pig ingots	t	725 442	896 370	925 398	833 631	1 050 789	1 163 709	1 171 844
Iron, pig ingots	t	466 358	485 621	348 280	392 135	574 111	519 562	446 953
Zinc, pig ingots	t	453 464	470 396	500 454	529 653	555 621	427 176	441 227
Copper, refinery shapes	t	263 045	232 625	298 527	345 985	280 033	306 822	288 800
Lead, pig ingots	t	119 814	146 127	147 270	234 429	113 993	111 831	100 204
Nonmetals								
Cement	t	1 578 658	1 752 113	1 512 563	2 130 111	2 485 699	2 635 244	2 802 966
Peat	t	326 826	356 027	396 879	460 600	446 521	535 003	477 342
Lime, quick and hydrated	t	432 845	281 248	215 945	186 746	194 097	189 509	163 768
Fuels								
Fuel oil	000 L	3 846 906	2 721 922	3 825 520	4 424 697	4 667 298	4 721 263	5 712 282
Butane gas, liquefied	000 L	3 137 545	3 572 546	3 011 824	3 278 444	3 685 449	2 858 169	3 399 518
Propane gas, liquefied	000 L	3 867 950	4 513 705	3 534 575	3 887 986	3 172 345	2 664 951	3 092 420
Gasoline	000 L	600 969	536 268	1 240 028	1 583 578	2 382 777	2 080 192	2 022 160
Coke, n.e.s.	t	192 515	129 793	45 607	116 225	169 069	114 410	151 974

[P] Preliminary; n.e.s. Not elsewhere specified.

TABLE 15. CANADA, MAJOR MINERAL EXPORT DESTINATIONS BY CLASS OF PRODUCT, VALUE AND PERCENTAGE, 1987

	Crude		Smelted and Refined		Semi-fabricated		Total	
	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
	($ million)	(%)	($ million)	(%)	($ million)	(%)	($ million)	(%)
United States	9 475.1	63.0	6 551.9	70.6	4 184.6	88.0	20 211.7	69.5
Japan	2 134.3	14.2	637.9	6.9	45.2	1.0	2 817.3	9.7
United Kingdom	431.3	2.9	388.4	4.2	82.5	1.7	902.3	3.1
Belgium-Luxembourg	315.7	2.1	252.9	2.7	30.9	0.6	599.5	2.1
Korea, South	377.7	2.5	126.0	1.4	8.9	0.2	512.6	1.8
France	222.4	1.5	152.0	1.6	4.1	0.1	378.5	1.3
Germany, West	225.2	1.5	80.7	0.9	19.1	0.4	325.0	1.1
Netherlands	158.7	1.1	93.5	1.0	9.1	0.2	261.4	0.9
Brazil	223.2	1.5	10.5	0.1	6.6	0.1	240.3	0.8
Taiwan	101.8	0.7	88.0	0.9	31.4	0.7	221.2	0.8
Norway	24.9	0.2	171.1	1.8	1.9	x	197.9	0.7
Italy	145.1	1.0	41.7	0.4	9.9	0.2	196.7	0.7
Morocco	190.1	1.3	-	-	0.5	x	190.6	0.7
Mexico	74.1	0.5	7.3	0.1	68.0	1.4	149.4	0.5
China	76.6	0.5	64.1	0.7	6.1	0.1	146.9	0.5
Australia	99.1	0.7	6.0	0.1	18.4	0.4	123.5	0.4
Indonesia	73.1	0.5	7.9	0.1	8.6	0.2	89.6	0.3
India	67.1	0.4	1.0	x	18.4	0.4	86.5	0.3
Turkey	14.4	0.1	63.1	0.7	0.5	x	77.9	0.3
Hong Kong	12.0	0.1	53.0	0.6	12.5	0.3	77.5	0.3
Thailand	30.6	0.2	16.8	0.2	21.3	0.4	68.7	0.2
Sweden	21.7	0.1	41.6	0.4	3.3	0.1	66.6	0.2
Tunisia	61.1	0.4	0.7	0.1	-	-	61.8	0.2
Spain	28.5	0.2	26.8	0.3	2.1	x	57.4	0.2
Other countries	456.7	3.0	392.6	4.2	160.8	3.3	1 010.2	3.5
Total	15 040.5	100.0	9 275.5	100.0	4 754.7	100.0	29 070.7	100.0

- Nil; x Too small to be expressed.

TABLE 16. CANADA, MAJOR MINERAL IMPORT ORIGINS BY CLASS, VALUE AND PERCENTAGE, 1987

	Crude		Smelted and Refined		Semi-fabricated		Total	
	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
	($ million)	(%)	($ million)	(%)	($ million)	(%)	($ million)	(%)
United States	2 078.4	37.6	2 191.7	58.2	3 048.4	62.4	7 318.6	51.6
United Kingdom	1 737.7	31.4	127.1	3.4	181.2	3.7	2 046.0	14.4
Venezuela	251.7	4.6	241.9	6.4	49.5	1.0	543.0	3.8
Germany, West	1.0	x	72.1	1.9	238.3	4.9	311.4	2.2
Japan	x	x	29.1	0.8	233.4	4.8	262.5	1.9
Australia	61.3	1.1	175.4	4.7	12.2	0.3	248.9	1.8
Nigeria	238.4	4.3	-	-	-	-	238.4	1.7
Mexico	159.7	2.9	30.1	0.8	22.1	0.5	211.9	1.5
Italy	14.9	0.3	38.6	1.0	157.1	3.2	210.7	1.5
Belgium-Luxembourg	0.6	x	26.6	0.7	163.4	3.3	190.6	1.3
France	8.5	0.2	27.4	0.7	144.9	3.0	180.8	1.3
Saudi Arabia	156.6	2.8	16.6	0.4	-	-	173.2	1.2
Spain	3.3	0.1	47.1	1.3	96.9	2.0	147.2	1.0
Brazil	26.9	0.5	59.3	1.6	60.2	1.2	146.4	1.0
Netherlands	1.0	x	94.0	2.5	38.7	0.8	133.7	1.0
Norway	82.0	1.5	29.2	0.8	15.6	0.3	126.9	1.0
Uruguay	-	-	119.5	3.2	0.5	x	120.0	1.0
Iran	94.4	1.7	-	-	-	-	94.4	0.7
Jamaica	0.2	x	92.0	2.4	-	-	92.2	0.7
Korea, South	-	-	-	-	83.4	1.7	83.4	0.6
Iraq	79.4	1.4	-	-	-	-	79.4	0.6
Sweden	0.5	x	0.9	x	73.1	1.5	74.5	0.5
Chile	52.5	0.9	10.4	0.3	4.9	0.1	67.7	0.5
South Africa	17.6	0.3	36.2	1.0	5.1	0.1	58.9	0.4
Other couhtries	462.8	8.4	295.3	7.9	253.9	5.2	1 012.0	7.1
Total	5 529.4	100.0	3 760.5	100.0	4 882.8	100.0	14 172.7	100.0

- Nil; x Too small to be expressed.

METALLIC MINERALS AND PRODUCTS

Aluminum

G. Bokovay (613) 992-4093

From a record high of US$1.35/lb. at the beginning of April, the LME cash price for high-grade aluminum (99.7%) had fallen to $1.12 at the end of the month. The average price for April was $1.1415, down slightly from $1.1456 in March.

The International Primary Aluminum Institute (IPAI) has reported that total inventories of aluminum (including scrap, primary and secondary ingot, metal in process and finished mill products) remained unchanged in February at 3.175 Mt. The IPAI also reported that western world average daily primary aluminum output increased marginally in March to 35 700 t from a revised figure of 35 600 t for February.

In April, Alcan Aluminium Limited announced it would speed up construction on the second phase of the Laterrière aluminum smelter in Quebec. The first 50 000 t/y phase of the project is expected to be completed at the end of 1989 with the second phase now scheduled for completion in March 1990, nine months earlier than originally planned. The entire project is expected to cost US$500 million and is scheduled for completion within four to five years.

Also in April, Alcan announced that it was proceeding with the construction of a new Canadian plant to produce DURAL, a new family of ceramic particle reinforced aluminum. The capacity of the plant will be 25 million lb./y. The company has not announced the site for the plant.

In the United States, Kaiser Aluminum & Chemical Corporation, a unit of KaiserTech Limited announced in late April that it had reached a tentative agreement with the United Steelworkers of America for a new master labour contract covering about 5 400 employees at 11 U.S. plants.

In Jamaica, Prime Minister Edward Seaga announced that the government would reduce its bauxite production levy for bauxite/alumina companies which operate at full capacity. Jamaica's basic bauxite levy is 7.5% of the cost of primary aluminum ingot. In exchange for this reduction, aluminum companies will, however, be subject to the country's 33 1/3% tax on profits.

It was also reported in April that Jamaica had signed a contract to sell the People's Republic of China 50 000 t of alumina during 1988 with the possibility of additional sales in the future.

Copper

W. McCutcheon (613) 992-4404

Mines Gaspé division of Noranda Inc. announced that it will reconstruct its underground mine conveyor system, subject to Board approval. The conveyor had been destroyed in a fire April 1, 1987 and the mine has not produced since. Some damage repair to the underground workings has already been completed. The conveyor installation project would cost an estimated $20 million until completion in May 1989, if approved. Until the fire, Noranda had spent $53 million to bring the E-32 underground orebody into production.

Metal Prices - US Cents/lb.

	London Metal Exchange (LME) Grade A Cash Settlement April 5-29	Commodities Exchange, Inc. (COMEX) 1st Position April 4-28
High	113.0	108.3
Low	95.6	89.9
Average	103.6	97.7

Between March 25 and April 22, the combined LME and COMEX stocks declined from 66 858 t to 56 775 t. The combined stocks at the start of 1988 were 69 712 t.

Iron and Steel

R. McInnis (613) 992-3784

The Canadian steel industry operated at 79.5% of capacity in January, in February the rate was 75.2% and the preliminary figure for March is 79.6%. The preliminary average for the first quarter was 78.1%. The capacity of the Canadian steel industry as calculated for January 1, 1988 is 19 212 802 t an increase from the 18 641 480 t capacity in January 1987.

Dofasco Inc. announced plans for a joint venture with Sidbec-Dosco Inc. to build a $35 million galvanized steel plant in the Montreal area. The planned capacity is 125 000 t/y of hot dipped galvanized steel. It will employ 80 people.

Sidbec-Dosco Inc. reported a profit of $913 million for the first quarter of 1988. The turnaround was attributed to better labour relations, firmer steel prices and the decision to abandon money-losing operations.

Stelco Enterprises the commercial division of Stelco Inc. has indicated its intention to engage in new businesses and new business development by acquisitions, partnerships and joint ventures with other companies. Plans are to double the $1.25 billion in annual sales of the companies it manages.

The Algoma Steel Corporation, Limited announced a new $550 million capital investment program. The company returned to profitability last year and estimates that first quarter profits will be up dramatically to $14.5 million. The capital investment program is to be broken down: $300 million for steelmaking and plant improvements, $150 million to sustain its present restructuring program, and $100 million for other investments.

A mediator has been appointed to assist in talks between Algoma Steel and the Steelworkers Union. Negotiations have progressed slowly since they began March 21. The current contract expires on July 31.

Sydney Steel Corporation announced that they have obtained a universal mill made available because of closure of a U.S. steel mill. This equipment is expected to allow significant improvements in the quality of the rails the company produces.

The Canadian steel industry as a whole has been very busy with shipments much higher than normal for this time of the year. This high level of activity is expected to continue for the next 3 months according to a survey by the Canadian Steel Service Centre Institute.

Reports on the monitoring of Canadian exports of steel mill products indicate that exports were 273 518 t in February and 298 399 t in March. Total exports to the U.S. in the first quarter of 1988 were 212 500 t less than in the same period last year. American exports of steel to Canada have been increasing their share of the Canadian market for steel. This share currently is about 6%.

Nickel

R. Telewiak (613) 992-4481

Falconbridge Dominicana, C. por A. (Falcondo) suspended production effective April 19 at its ferronickel operation in the Dominican Republic. The decision was taken as a result of the recent prohibition by the Dominican Republic of further shipments of ferronickel until a satisfactory amendment is agreed to on the agreement governing Falcondo's operations in the country. A total of 5 440 t of ferronickel had been shipped on an intermittent basis since December 8, 1987, when an export duty was imposed. The company has sent a notice to its customers declaring *force majeure*. Negotiations between the company and the government are continuing.

The very tight international market conditions are keeping prices at very high levels. The London Metal Exchange average nickel price for April was US$8.21, compared to $1.77 for April 1987. Demand is very strong, led by the stainless steel sector, and despite producers operating at their effective capacities, supplies remain tight.

INDUSTRIAL MINERALS AND PRODUCTS

Salt

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The Canadian Salt Company Limited has purchased the assets of Seleine Mines Inc. for $35 million. The move to privatize the salt mine located on the Magdalen Islands was initiated by the Quebec government last November. The Canadian Salt Company Limited will invest close to $16 million over five years to modernize the operations and to increase annual production capacity from 1.25 to 1.50 Mt. The company has agreed to keep the mine in operation for at least ten years, to maintain the proportion of employees originating from the Islands and to keep Seleine Mines Inc.'s head office in Quebec. The supply contract between Seleine Mines Inc. and the Quebec Ministry of Transportation until 1992 has been extended to 1998. Moreover, The Canadian Salt Company Limited agreed to a 5% discount on the price of salt sold to the Ministry. This acquisition makes The Canadian Salt Company Limited Canada's largest salt producer and increases its total annual production capacity from 4.27 to 5.6 Mt, which represents nearly 45% of Canadian production capacity.

SPECIAL ITEM

Mine Wastes -- A Growing Source of Gold

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The Canadian mining industry's interest in recovering gold left behind in mine wastes has been increasing since 1985. Mine wastes in this context refer mainly to tailings -- fine rock material left over after ore processing -- but, in some cases, also to surface piles of broken rock with low gold content.

Gold mining in Canada dates back to the 1850s. While gold-bearing wastes have a wide geographic distribution, those attracting the most attention are the large tonnages of tailings piled up during decades of mining in Canada's major gold mining districts. At current gold prices, reprocessing such material can be profitable at a gold grade one tenth or less that of mineable gold ores in the ground.

More than 99% of the ore tonnage processed at conventional gold concentrators is discarded as tailings. Since it is not cost-effective to recover 100% of the gold contained in gold ores, a small but measurable amount is discarded in the tailings.

To give some idea of the scope for reprocessing tailings in Canada: in 1986, the 45 Canadian concentrators whose sole or most-valuable product was gold accounted for 88 of the 103 t of gold produced from all types of mining operations in Canada. These 45 concentrators generated 15 Mt of tailings, with a grade ranging from one-eighth to almost two grams per tonne (see graph) and averaging about half a gram per tonne (Canadian gold ores average almost 6.5 grams per tonne). These 15 Mt of tailings contain some 7 t of gold; reprocessing might recover half of this gold, perhaps more. However, some of these tailings were used as backfill for underground mine areas and are thus inaccessible for reprocessing.

SOURCE: RESOURCE EVALUATION DIVISION, EMR

Since late 1986, seven projects have been announced, jointly requiring $100 million, that will involve building plants to recover gold by reprocessing mine waste, largely tailings (see table). Work on at least seven others has been reported in the press.

MINE WASTE REPROCESSING PROJECTS COMMITTED FOR PRODUCTION

Company	Project Location	Tonnes of Waste	Grade	Gold Content	Recoverable Gold
		(Mt)	(g/t)	(t)	(t)
ERG Resources Inc.; Pamour Inc.	Timmins, Ont.	140	0.45	62.40	28.08
Lac Minerals Ltd.	Kirkland Lake, Ont.	3.4	2.6	8.75	7.00
Giant Yellowknife Mines Limited	Yellowknife, N.W.T.	6.4	2.3	14.59	5.84
Eastmaque Gold Mines Ltd.	Kirkland Lake-Toburn, Ont.	6.1	1.4	8.54	5.73
Ateba Mines Inc.	Beardmore, Ont.	0.415	2.	0.85	0.74
Mill City Gold Inc.; Tyranex Gold Inc.	Gowganda, Ont.	0.20	1.2	0.23	0.15
Sumac Ventures Inc.	Grand Forks (Union), B.C.	0.086	1.9	0.16	0.13

Source: Press Reports.

Later this year, ERG Resources Inc. and Pamour Inc. are jointly planning to launch by far the largest Canadian gold tailings reprocessing operation, near Timmins, Ontario. It will treat some 140 Mt of tailings, equivalent to almost ten times the amount accumulated in 1986 at all gold mines in Canada. Over its 15 to 20 year life, this project, reported to be the second-largest of its kind in the world, will recover a total of some 28 t of gold, about half of the gold contained in the tailings. At current prices, this yield represents C$500 million worth of gold.