

Mineral Industry Surveys

For information, contact:

John D. Jorgenson, Iron Ore Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4912, Fax: (703) 648-7757
E-mail: jjorgenson@usgs.gov

Nicholas Muniz (Data)
Telephone: (703) 648-7980
Fax: (703) 648-7792
E-mail: nmuniz@usgs.gov

Internet: <http://minerals.usgs.gov/minerals>

IRON ORE IN JUNE 2004

U.S. mine production of iron ore in June 2004, on a daily average basis, was slightly lower than that of the prior month, according to the U.S. Geological Survey. Average daily production was 149,000 metric tons per day (t/d), compared with 155,000 t/d in May 2004. Production for the first half of 2004 was 26.5 million metric tons (Mt), an increase of almost 8% over that of the first half of the previous year.

Shipments on a daily average basis were almost 15% higher compared with those of May 2004. Shipments for the first half of 2004 were 24.2 Mt, an increase of more than 16% over those of the first half of the previous year.

Mine stocks at the end of June 2004 were 18% lower than the corresponding stock figures at the end of the previous month and 11% lower than stocks at the end of June 2003.

Exploration.—Strong markets for iron ore have led to an increased interest in mine development. Kumba Resources Ltd. signed an agreement that gives the company an opportunity to acquire 80% control of the anticipated 12-million-metric-ton-per-year (Mt/yr) Faleme iron ore project in Senegal (Metal Bulletin, 2004).

Sphere Investments Limited (Australia) completed an eight-hole drilling program at Guelb el Aouj in Mauritania. The drilling information will form the basis for a three-stage bankable feasibility study that is estimated to cost \$11 million (Sphere Investments Limited, 2004). The proposed mine and concentrator complex would produce 7 Mt/yr of pellets suitable for direct reduction (The Australian Journal of Mining, 2003¹).

Cline Mining Corp. (Canada) acquired the Bekisopa iron ore deposit in Madagascar and will form a wholly owned subsidiary, the Madagascar Iron Ore Company, to carry the project forward. Earlier studies performed in the late 1970s indicated a resource of 98.6 Mt with an average grade of 45% iron (Bates, 2004).

Domestic Production.—International Steel Group Inc. (ISG) acquired the assets of Georgetown Steel Company of South Carolina and was planning to resume operation of the direct reduced iron (DRI) facilities as ISG Georgetown, shortly. Prior to bankruptcy, Georgetown Steel imported lump ore and pellets

from Canada, Brazil, and Peru. Georgetown Steel has the capacity to produce 0.5 Mt/yr of DRI, a scrap substitute. This purchase of Georgetown Steel follows the acquisition by ISG of Weirton Steel in May (International Steel Group, 2004; The TEX Report, 2004c).

World Production.—Rio Tinto announced that it has signed contracts to supply 40 Mt/yr of iron ore to major Chinese steel mills—75% from Hamersley Iron and 25% from the Robe River Joint Venture. This is in addition to a contract for 70 Mt over 10 years to be supplied to Shanghai Baosteel Group Corp (Skillings Mining Review, 2004; Rio Tinto, 2004§).

China imported 97.8 Mt of iron ore during the first half of 2004, 35% greater than that of the same period last year. Australia accounted for one-third of these imports. India surpassed Brazil as the second leading import source with 27%, while Brazil contributed 21% (The TEX Report, 2004a).

Western Australia's Talling Peak iron ore mine continued to ramp up production with 263,000 metric tons (t) mined in the quarter ending June 2004. Because of problems with shipping through the Port of Geraldton, the company has only been able to ship 75% of this tonnage (Clarke, 2004; The TEX Report, 2004b).

Brazil's Companhia Vale do Rio Doce (CVRD), the world's largest iron ore producer, set production records for the second quarter of 2004 with 61.8 Mt of iron ore and pellets produced. This is a 9% increase over the first quarter production and also a 9% increase for the first half of 2004 compared to the same period for the previous year (Mining Journal, 2004).

The Governments of China and Liberia reached a \$10 million agreement to ship 800,000 t of abandoned iron ore stockpiled at the Port of Buchanan, Liberia, to China. Additional quantities of ore at Nimba and Wologisi in Liberia are available for purchase (The Analyst, 2004§).

Labor uncertainties in June affected iron and steel markets with threats of possible labor actions at Iron Ore Company and Wabush Mines (owned by Cliffs Mining Company, Dofasco, Inc., and Stelco, Inc.) in Canada, Cleveland Cliffs' operations in the United States, and Shougang Hierro Peru S.A.A. in Peru.

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TABLE 1
U.S. PRODUCTION AND SHIPMENTS OF IRON ORE^{1,2}
(Exclusive of ore containing 5% or more of manganese)

(Thousand metric tons)

Period	Production		Shipments	
	Monthly	Year to date	Monthly	Year to date
2003:				
June	3,740	24,700	4,840	20,800
July	3,920	28,600	4,450	25,200
August	3,950	32,500	4,330	29,600
September	3,870	36,400	4,220	33,800
October	4,190	40,600	4,370	38,200
November	4,140	44,700	4,540	42,700
December	3,740	48,500	5,170	47,900
2004:				
January	4,270	4,270	3,920	3,920
February	4,230	8,500	1,190	5,100
March	4,130	12,600	2,710	7,810
April	4,630	17,300	5,260	13,100
May	4,800	22,100	5,300	18,400
June	4,470	26,500	5,880	24,200

¹Data are rounded to no more than three significant digits.

²Excludes byproduct ores.

TABLE 2
U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF IRON ORE IN JUNE^{1,2}

(Thousand metric tons)

State	Production		Shipments ³		Stocks ⁴	
	2004	2003	2004	2003	2004	2003
Michigan	1,020	664	1,320	1,180	1,710	1,350
Minnesota	3,450	3,070	4,560	3,660	4,560	5,730
Total	4,470	3,740	5,880	4,840	6,270	7,080

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Excludes byproduct ore.

³Includes rail and vessel.

⁴Includes mines, plants, and loading docks.

TABLE 3
CANADA: SHIPMENTS OF IRON ORE¹

(Thousand dry metric tons)

Period	Newfoundland	Quebec	British Columbia	Total
2003:				
May	1,960	1,540	4	3,510
June	2,090	1,260	5	3,360
July	2,140	1,460	8	3,610
August	1,530	1,100	6	2,630
September	1,710	1,240	7	2,950
October	2,080	1,500	6	3,580
November	2,260	1,190	5	3,450
December	1,740	1,060	6	2,800
Year total	19,800	13,300	69	33,200
2004:				
January	1,150	839	5	1,990
February	1,070	589	7	1,660
March	1,250	1,030	6	2,290
April	1,740	858	5	2,610
May	1,690	1,740	7	3,440

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Natural Resources Canada.

TABLE 4
CONSUMPTION AND STOCKS OF IRON ORE AND BLAST FURNACE PRODUCTION OF
HOT METAL AT U.S. IRON AND STEEL PLANTS^{1, 2, 3}

(Thousand metric tons)

	Consumption of ores and agglomerates, January ³			
Consumption by source	2004	2003		
United States ores	4,670	3,780		
Canadian ores	401	428		
Foreign ores	439	707		
Total	5,510	4,920		
Consumption by process				
Blast furnaces	5,010	4,370		
Steel furnaces	3	39		
Agglomerating plants ⁴	492	510		
Miscellaneous ⁵	--	--		
Total	5,510	4,920		
	Stocks of ores and agglomerates, January 31 ³			
Storage point	2004	2003		
Furnace yards	NA	11,100		
Receiving/transfer docks	NA	1,430		
Total consumer	11,700	12,600		
	Blast furnace production of hot metal			
	June		January-June	
	2004	2003	2004	2003
Hot metal and pig iron produced in blast furnaces	3,300	3,240	20,400	20,100
No. of blast furnaces operating on the last day of the month	NA	30	XX	XX

NA Not available. XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes agglomerates.

³Data after January 2004 is not available at the time of publication.

⁴Iron ore and iron ore concentrates consumed in agglomerating plants not located at the mine or plant site.

⁵Sold to nonreporting companies or used for purposes not listed.

Sources: American Iron Ore Association (consumption of iron ore 2003) and American Iron and Steel Institute (production of hot metal and pig iron).

TABLE 5
U.S. EXPORTS OF IRON ORE, BY COUNTRY OF DESTINATION AND TYPE^{1,2}

(Thousand metric tons)

Country of destination and type of product	2003	2004			
	4th quarter	March	April	1st quarter	May
Canada	1,700	212	1,020	958	820
China	74	11	57	59	26
Mexico	1	(3)	(3)	1	(3)
Other	2	(3)	(3)	1	80
Total	1,780	224	1,080	1,020	926
Pellets	1,780	223	1,020	1,020	924
Other	6	1	58	3	2
Total	1,780	224	1,080	1,020	926

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes agglomerates.

³Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE^{1,2}
(Exclusive of ore containing 20% or more manganese)

Country of origin and type of product	2004					2003
	May		Year to date			January-May
	Thousand metric tons	Value ³ (thousand dollars)	Thousand metric tons	Value ³ (thousand dollars)	Value ³ (dollars per ton)	Thousand metric tons
Australia	--	--	(4)	24	54.15	128
Brazil	384	11,400	1,950	51,600	26.44	2,070
Canada	884	30,300	2,000	67,000	33.41	1,790
Chile	--	--	59	1,560	26.48	94
Finland	--	--	4	190	47.98	6
Mexico	--	--	26	548	20.88	24
Peru	--	--	15	271	17.96	29
South Africa	--	--	104	4,100	39.29	--
Spain	--	--	(4)	3	39.91	--
Venezuela	--	--	21	822	40.00	--
Total	1,270	41,700	4,180	126,000	30.12	4,140
Concentrates	168	3,750	332	7,380	22.25	388
Coarse ores	--	--	(4)	11	226.70	3
Fine ores	168	4,480	1,010	22,800	22.54	745
Pellets	932	33,500	2,820	94,900	33.67	2,840
Briquettes	--	--	21	822	40.00	--
Other agglomerates	--	--	(4)	3	39.91	166
Roasted pyrites	--	--	4	193	48.88	4
Total	1,270	41,700	4,180	126,000	30.12	4,140

-- Zero.

¹Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

²Includes agglomerates.

³Customs value. Excludes international freight and insurance charges.

⁴Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN MAY 2004^{1,2}
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Country of origin	Type of product						Total
	Concentrates	Coarse ores	Fine ores	Pellets	Briquettes and other agglomerates	Roasted pyrites	
Brazil	72	--	94	218	--	--	384
Canada	97	--	73	714	--	--	884
Total	168	--	168	932	--	--	1,270

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes agglomerates.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY COUNTRY¹

Country of origin	2004					2003
	May		Year to date			January-May
	Thousand metric tons	Value ² (thousand dollars)	Thousand metric tons	Value ² (thousand dollars)	Value ² (dollars per ton)	Thousand metric tons
Brazil	218	7,920	1,120	35,100	31.45	1,320
Canada	714	25,500	1,700	59,800	35.12	1,520
Total	932	33,500	2,820	94,900	33.67	2,840

¹Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

²Customs value. Excludes international freight and insurance charges.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE,
BY CUSTOMS DISTRICT^{1,2}
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Customs district (code no.)	May	January-May	
	2004	2004	2003
Baltimore, MD (13)	423	1,690	1,450
Buffalo, NY (09)	1	2	3
Charleston, SC (16)	--	--	106
Chicago, IL (39)	111	166	211
Cleveland, OH (41)	325	649	752
Detroit, MI (38)	45	72	49
Great Falls, MT (33)	--	(3)	--
Houston - Galveston, TX (53)	--	28	37
Los Angeles, CA (27)	--	--	(3)
Mobile, AL (19)	--	21	59
New Orleans, LA (20)	363	1,550	1,470
Nogales, AZ (26)	--	(3)	--
Ogdensburg, NY (07)	--	--	1
Philadelphia, PA (11)	--	4	3
Total	1,270	4,180	4,140

-- Zero.

¹Data are rounded to no more than three significant digits;
may not add to totals shown.

²Includes agglomerates.

³Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 10
U.S. IMPORTS FOR CONSUMPTION OF PELLETS,
BY CUSTOMS DISTRICT¹

(Thousand metric tons)

Customs district (code no.)	May	January-May	
	2004	2004	2003
Baltimore, MD (13)	213	669	514
Charleston, SC (16)	--	--	105
Chicago, IL (39)	58	58	--
Cleveland, OH (41)	325	613	752
Detroit, MI (38)	45	72	49
Houston-Galveston, TX (53)	--	28	37
Mobile, AL (19)	--	--	59
New Orleans, LA (20)	291	1,380	1,320
Total	932	2,820	2,840

-- Zero.

¹Data are rounded to no more than three significant digits;
may not add to totals shown.

Source: U.S. Census Bureau.