

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

Mahbood Mahdavi (Data)
Telephone: (703) 648-7778
Fax: (703) 648-7792
E-mail: mmahdavi@usgs.gov

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

IRON ORE IN FEBRUARY 2008

U.S. mine production of iron ore in February 2008, on a daily average basis, was slightly greater than that for the prior month, according to the U.S. Geological Survey (USGS). Average daily production, at 138,000 metric tons (t), was 3,000 t more than that of January 2008.

Average daily shipments in February 2008, at 38,000 t, were 83,000 t less than those of January. Mine stocks at the end of February 2008 were 2.9 million metric tons (Mt) greater than stocks held on January 31, a 42% increase. U.S. exports of iron ore in January 2008 were 51% greater than imports, with net exports of 588,000 t.

Prices.—Vale (Rio de Janeiro, Brazil) agreed with Baosteel Group Corp., China's leading steel producer, to a 65% increase over the 2007 contract year price for Southern System fines. POSCO (Republic of Korea) and Japanese steelmakers—Kobe Steel, Ltd., JFE Steel Corp., Nippon Steel Corp., and others—agreed to the same price increment (Skillings, 2008). Rio Tinto plc and BHP Billiton Ltd. continued to negotiate a price premium for the lower transport cost into the Asian market when compared with Brazilian iron ore (Barta and Moffett, 2008).

Domestic Production.—United States Steel Corp. (Pittsburgh, PA) announced plans to invest \$300 million in its Keetac facility in Keewatin, MN. The capital investment would expand existing annual iron ore pellet production by 3.7 Mt to 9.8 Mt. The program would require 36 months after environmental approvals to improve and modernize a pellet production line that has been idle since 1980. The expansion would create 75 new jobs and install energy-efficient technologies and new emission controls that would exceed current environmental standards (United States Steel Corp., 2008).

Mergers and Acquisitions.—On February 6, BHP Billiton submitted a formal bid of 3.4 of its shares for each share of Rio Tinto. The \$147.4 billion bid was rejected within hours by Rio Tinto, in spite of being a 45% increase over Rio Tinto's value before the original share offer in November. (See Iron Ore in November 2007.) This latest bid came days after the Chinese state-owned Aluminum Corp. of China and Alcoa Inc. bought 12% of Rio Tinto's shares (Ho, Ritchie, and Foster, 2008).

Later in February, Rio Tinto sold its stakes in two U.S. mines—Greens Creek polymetallic mine (AK) and Cortez gold mine (NV). Rio Tinto's share of Greens Creek Mine was sold for \$1.7 billion—a 180% premium over analysts' assessments, indicating that some of Rio Tinto's assets may well have been undervalued (Edwards, 2008; Rio Tinto plc, 2008).

In Australia, China-based Sinosteel Corp. was unsuccessful in its bid to take over Midwest Corp. Ltd. (West Perth, Western Australia) with its five development and exploration projects in Western Australia (Midwest Corp. Ltd., 2008). Cape Lambert Iron Ore Ltd. (Leederville, Western Australia) signed a memorandum of understanding with China Metallurgical Group Corp. for the sale of the Cape Lambert iron ore project in the Pilbara Region for A\$400 million. The Cape Lambert project has an estimated resource of 1.6 billion metric tons of iron ore (Cape Lambert Iron Ore Ltd., 2008).

References Cited

- Barta, Patrick, and Moffett, Sebastian, 2008, Accords set stage for iron-ore price surge: Wall Street Journal, February 19, p. A2.
- Cape Lambert Iron Ore Ltd., 2008, Cape Lambert signs MoU with Chinese conglomerate for sale of namesake iron ore project: Leederville, Western Australia, Cape Lambert Iron Ore Ltd. ASX announcement, February 26, 4 p. (Accessed July 31, 2008, via <http://www.capelam.com.au>.)
- Edwards, Andrew, 2008, Sale of mine stake may strengthen Rio's hand: Wall Street Journal, February 22, p. A10.
- Ho, Carrie, Ritchie, Martin, and Foster, Kevin, 2008, BHP Billiton launches \$150bn takeover bid for Rio Tinto: Metal Bulletin, no. 9033, February 11, p. 4-5.
- Midwest Corp. Ltd., 2008, Sinosteel proposal undervalues Midwest: West Perth, Western Australia, Midwest Corp. Ltd. ASX announcement, February 20, 1 p. (Accessed July 31, 2008, via <http://www.midwestcorp.com.au>.)
- Rio Tinto plc, 2008, Rio Tinto reaches agreement to sell its Cortez Gold Mine interest for US\$1.695 billion plus retained royalty interest: London, United Kingdom, Rio Tinto plc media release, February 21, 2 p.
- Skillings Mining Review, 2008, Vale settles iron ore price: Skillings Mining Review, v. 97, no. 3, March, p. 12.
- United States Steel Corp., 2008, U.S. Steel proposes capital investment program at Minnesota Ore Operations' Keetac facility: Pittsburgh, PA, United States Steel Corp. press release, February 1, 1 p. (Accessed July 8, 2008, via <http://www.ussteel.com>.)

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
2007:				
February	3,350	7,620	574	3,390
March	3,800	11,400	2,110	5,490
April	4,330	15,700	5,150	10,600
May	4,740	20,500	5,450	16,100
June	4,610	25,100	5,120	21,200
July	4,690	29,800	5,210	26,400
August	4,450	34,200	5,090	31,500
September	4,350	38,600	5,100	36,600
October	4,820	43,400	5,130	41,700
November	4,280	47,700	4,830	46,600
December	4,320	52,000	4,960	51,500
2008:				
January	4,170	4,170	3,730	3,730
February	3,990	8,160	1,090	4,830

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 FEBRUARY^{1,2}

(Thousand metric tons)

State	Production		Shipments ³		Stocks ⁴	
	2008	2007	2008	2007	2008	2007
Michigan	878	824	471	256	2,570	2,400
Minnesota	3,110	2,530	621	318	7,250	7,720
Total	3,990	3,350	1,090	574	9,820	10,100

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

²Excludes byproduct ore.

³Includes rail and vessel.

⁴Includes usable (marketable) material at mines, concentrators, pelletizing plants, and loading docks. Excludes stocks of crude ore at mine and concentrates at agglomerating complexes.

TABLE 3
CANADA: SHIPMENTS OF IRON ORE^{1,2}

(Thousand dry metric tons)

Period	Newfoundland and Labrador	Quebec	British Columbia	Total
2007:				
January	609	616	5	1,230
February	874	571	6	1,450
March	1,030 ^r	867	8	1,910
April	1,210	1,450	5	2,660
May	1,720	1,650	8	3,380
June	1,650	1,310	7	2,960
July	2,070	1,340	7	3,420
August	2,150	1,150	6	3,310
September	1,410	1,400	6	2,820
October	1,860	1,600	6	3,460
November	2,110	1,470	7	3,590
December	1,180	1,450	5	2,640
Year total	17,900	14,900	76	32,800
2008, January	1,210	816	6	2,030

^rRevised.

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

²Includes production from steel plant waste oxides.

Source: Natural Resources Canada.

TABLE 4
PRODUCTION OF PIG IRON AND RAW STEEL IN THE UNITED STATES, BY TYPE OF FURNACE¹

(Thousand metric tons)

Period	Pig iron production, blast furnace		Raw steel production			
	Monthly	Year to date	Basic oxygen furnace ²		Electric furnace	
			Monthly	Year to date	Monthly	Year to date
2007:						
January	2,850	2,850	3,090	3,090	4,450	4,450
February	2,610	5,450	2,940	6,040	4,690	9,140
March	3,040	8,490	3,450	9,490	4,880	14,000
April	3,010	11,500	3,370	12,900	4,840	18,900
May	3,130	14,600	3,530	16,400	5,000	23,900
June	3,120	17,800	3,470	19,900	4,770	28,600
July	3,080	20,800	3,420	23,300	4,860	33,500
August	3,010	23,800	3,370	26,600	4,970	38,400
September	3,010	26,900	3,370	30,000	4,600	43,000
October	3,200	30,100	3,540	33,500	4,940	48,000
November	2,940	33,000	3,280	36,800	4,920	52,900
December	3,160	36,200	3,550	40,400	4,900	57,800
2008, January	2,900	2,900	3,550	3,550	5,100	5,100

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

²Raw steel production figures for the basic oxygen process are usually greater than the corresponding pig iron production figures because scrap is routinely melted in the basic oxygen furnace together with the molten pig iron.

Source: American Iron and Steel Institute.

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	2007						2008
	1st quarter	2nd quarter	3rd quarter	December	4th quarter	Total	January
Algeria	--	213	332	--	25	570	--
Canada	885	2,360	1,910	828	2,190	7,340	1,110
China	1	286	762	3	81	1,130	7
Colombia	1	6	--	--	(3)	7	1
Japan	--	--	(3)	6	7	7	--
Mexico	1	1	64	59	82	148	38
Peru	--	5	--	--	(3)	5	--
Romania	--	87	--	--	--	87	--
Sweden	--	--	2	--	--	2	--
Other	1	4	2	(3)	1	8	(3)
Total	889	2,960	3,070	896	2,390	9,310	1,160
Pellets	885	2,930	3,010	877	2,340	9,170	1,150
Concentrates	1	8	31	7	9	51	4
Briquettes	--	--	--	--	1	1	--
Sinter	(3)	(3)	(3)	11	21	22	--
Direct shipping ores - coarse	(3)	2	1	(3)	2	6	1
Direct shipping ores - fines	3	14	29	1	5	51	(3)
Roasted pyrites	(3)	(3)	(3)	(3)	10	11	--
Total	889	2,960	3,070	896	2,390	9,310	1,160

-- Zero.

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

²Includes agglomerates.

³Less than ½ 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	2008					2007
	January		Year to date			January
	Thousand metric tons	Value ³ (thousand dollars)	Thousand metric tons	Value ³ (thousand dollars)	Value ³ (dollars per ton)	Thousand metric tons
Brazil	285	17,200	285	17,200	60.38	140
Canada	223	16,000	223	16,000	71.74	292
Chile	44	2,600	44	2,600	59.09	40
Mexico	--	--	--	--	--	2
Peru	18	774	18	774	43.00	--
Sweden	--	--	--	--	--	24
United Kingdom	--	--	--	--	--	(4)
Total	571	36,600	571	36,600	64.06	498
Concentrates	44	2,610	44	2,610	59.25	122
Coarse ores	--	--	--	--	--	--
Fine ores	139	7,110	139	7,110	51.17	--
Pellets	387	26,800	387	26,800	69.30	374
Other agglomerates	--	--	--	--	--	2
Roasted pyrites	1	39	1	39	39.00	--
Total	571	36,600	571	36,600	64.06	498

-- 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 ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN JANUARY 2008^{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	--	--	139	147	--	--	285
Canada	(3)	--	--	223	--	--	223
Chile	44	--	--	--	--	--	44
Peru	--	--	--	18	--	1	18
Total	44	--	139	387	--	1	571

-- Zero.

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

²Includes agglomerates.

³Less than ½ unit.

Source: U.S. Census Bureau.

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

Country of origin	2008					2007
	January		Year to date			January
	Thousand metric tons	Value ² (thousand dollars)	Thousand metric tons	Value ² (thousand dollars)	Value ² (dollars per ton)	Thousand metric tons
Brazil	147	10,100	147	10,100	68.67	140
Canada	223	16,000	223	16,000	71.71	211
Peru	18	736	18	736	40.89	--
Sweden	--	--	--	--	--	24
Total	387	26,800	387	26,800	69.30	374

-- 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.

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.)	January	
	2008	2007
Baltimore, MD (13)	317	71
Charleston, SC (16)	1	(3)
Chicago, IL (39)	18	82
Cleveland, OH (41)	26	140
Mobile, AL (19)	18	--
New Orleans, LA (20)	191	180
Nogales, AZ (26)	--	2
Ogdensburg, NY (07)	(3)	--
Port Arthur, TX (21)	--	24
Total	571	498

-- Zero.

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

²Includes agglomerates.

³Less than ½ 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.)	January	
	2008	2007
Baltimore, MD (13)	179	71
Charleston, SC (16)	--	--
Chicago, IL (39)	18	--
Cleveland, OH (41)	26	140
Mobile, AL (19)	18	--
New Orleans, LA (20)	147	140
Nogales, AZ (26)	--	--
Ogdensburg, NY (07)	--	--
Port Arthur, TX (21)	--	24
Total	387	374

-- Zero.

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

Source: U.S. Census Bureau.