

Mineral Industry Surveys

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IRON ORE IN JUNE 2007

U.S. mine production of iron ore in June 2007, on a daily average basis, was marginally greater than that for the prior month, according to the U.S. Geological Survey. Average daily production, at 154,000 metric tons (t), was 630 t greater than that of May 2007.

Average daily shipments in June 2007, at 171,000 t, were 3% less than those of May. Mine stocks at the end of June were 515,000 t less than the revised stocks held on May 31, a 5% decrease. U.S. exports of iron ore in May 2007 were 3% greater than imports, with net exports at 31,000 t.

Production was 5% less than the corresponding 6 months of 2006. Shipments were 4% less, while iron ore held in finished producer stocks on June 30 was 3% less in the first half of 2007.

World Production.—Rio Tinto plc (Australia) announced first half production for 2007. Rio Tinto's share of saleable iron ore plus pellets worldwide was 69.4 million metric tons (Mt)—a 12% increase compared with that of the first half of 2006. Rio Tinto's 60%-owned HIs melt plant in Kwinana, Western Australia, underwent major overhaul to resolve a number of ancillary equipment issues and had no pig iron production during the second quarter (Rio Tinto plc, 2007, p. 2, 10).

BHP Billiton Limited (BHPB) announced first half production figures for 2007. Worldwide BHPB's share of iron ore (wet) was 49.0 Mt—a slight increase compared with that of the first half of 2006 (BHP Billiton Limited, 2007).

In the first half of 2007, Brazil's Companhia Vale do Rio Doce (CVRD) reported record iron ore production of 142.3 Mt (includes CVRD's Samarco joint venture)—an increase of 10% compared with that of the same period in 2006. Increases in the Southeastern System and Southern System mines were offset somewhat by lower than expected production at the Carajás Mine, where lack of haul truck tires idled some of the fleet.

CVRD pellet production for the first half of the year was 17.5 Mt—an increase of 13% compared with that of the same period in 2006. The increase in pellet production reflected a shutdown at the São Luis pellet plant in the first half of 2006 (Companhia Vale do Rio Doce, 2007).

Domestic Production.—Cleveland-Cliffs Inc announced production figures for the first half of 2007 for their North American operations. Mine production was as follows (United

States, unless otherwise specified): Empire, 2.5 Mt; Hibbing Taconite, 3.4 Mt; Northshore, 2.6 Mt; Tilden, 3.8 Mt; United Taconite, 2.6 Mt; and Wabush (Canada), 2.2 Mt. Cliffs' share of this total production, 17.2 Mt, was 11.0 Mt. This represented a slight increase in production compared with that of the same period in 2006. Hibbing Taconite suffered a decrease in production owing to severe weather, which caused a shutdown in the first quarter. Northshore continued construction to reopen an idle pellet line that was expected to increase capacity by 800,000 t in 2008.

Cliffs announced a 10-year alliance with Kobe Steel Ltd. (Japan) to license a proprietary process for the production of high-purity iron nuggets. These iron nuggets, containing greater than 96% iron, can be used as feed to electric arc furnaces for the production of steel (Cleveland-Cliffs Inc, 2007).

Mergers and Acquisitions.—Cliffs and Stelco Inc. (Canada) accepted a purchase offer from Consolidated Thompson Iron Mines Ltd. (Canada) for their combined 71.4% interest in the Wabush Mines joint venture. Dofasco Inc. (owner of the remaining 28.6%), a subsidiary of Arcelor Mittal Group (Luxembourg), had 90 days to exercise a purchase option for the mine and port located in Eastern Canada. As part of the purchase agreement, Cliffs would retain the right to purchase its 26.8% pro rata share of production through 2009 (Cowden, 2007).

References Cited

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- Rio Tinto plc, 2007, Second quarter 2007 operations review: London, United Kingdom, Rio Tinto plc news release, July 18, 19 p. (Accessed September 14, 2007, via <http://www.riotinto.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
2006:				
June	4,450	26,400	5,120	22,000
July	4,710	31,100	5,490	27,500
August	4,780	35,900	5,370	32,900
September	4,610	40,500	5,280	38,200
October	4,440	45,000	4,420	42,600
November	3,920	48,900	4,430	47,000
December	3,970	52,900	4,800	51,800
2007:				
January	4,260	4,260	2,810	2,810
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

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	
	2007	2006	2007	2006	2007	2006
Michigan	1,310	950	1,210	1,160	2,890	2,510
Minnesota	3,300	3,500	3,910	3,950	6,980	7,630
Total	4,610	4,450	5,120	5,120	9,870	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.

Note: Stocks at end of May 2007 for Minnesota have been revised to 7,590,000 metric tons.

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

(Thousand dry metric tons)

Period	Newfoundland and Labrador	Quebec	British Columbia	Total
2006:				
May	1,670	1,610	12	3,280
June	1,550	1,180	10	2,740
July	2,040	1,220	8	3,270
August	1,740	1,740	8	3,490
September	949	1,340	8	2,300
October	2,280	963	10	3,250
November	2,590	1,010	8	3,610
December	1,960	1,250	6	3,220
Year total	19,800	13,600	105	33,600
2007:				
January	609	616	5 ^r	1,230
February	874	571	6	1,450
March	1,030	867	8 ^r	1,910 ^r
April	1,210	1,450	5	2,660
May	1,490	1,650	8	3,160

^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	Monthly	Year to date
2006:						
May	3,460	16,500	3,850	18,300	5,060	23,800
June	3,330	19,800	3,790	22,100	4,790	28,600
July	3,210	23,000	3,660	25,800	4,800	33,400
August	3,200	26,200	3,620	29,400	4,840	38,200
September	3,220	29,400	3,670	33,100	4,750	43,000
October	3,090	32,500	3,460	36,500	4,640	47,600
November	2,780	35,300	3,080	39,600	4,330	51,900
December	2,640	37,900	2,860	42,500	4,180	56,100
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

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	2006		2007			
	4th quarter	Total	March	1st quarter	April	May
Algeria	88	340	--	--	88	49
Canada	1,830	7,610	182	885	736	941
China	--	100	--	1	73	108
Colombia	--	--	--	--	4	1
Mexico	180	215	(3)	1	(3)	1
Other	3	10	(3)	1	1	2
Total	2,110	8,270	182	889	903	1,100
Pellets	2,080	8,060	181	885	895	1,090
Concentrates	2	59	(3)	1	5	1
Briquettes	6	23	--	--	--	--
Sinter	(3)	77	(3)	(3)	(3)	(3)
Direct shipping ores - coarse	5	6	(3)	(3)	(3)	2
Direct shipping ores - fines	12	42	1	3	2	7
Roasted pyrites	(3)	1	--	(3)	(3)	--
Total	2,110	8,270	182	889	903	1,100

-- 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	2007					2006
	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	--	--	--	--	--	8
Brazil	359	22,300	1,260	76,600	60.83	1,730
Canada	694	40,900	1,410	83,900	59.43	2,080
Chile	--	--	133	7,080	53.23	142
Finland	--	--	2	124	62.00	3
Greece	--	--	--	--	--	15
Greenland	(4)	3	(4)	3	197.65	--
Mexico	1	37	26	1,400	53.92	6
Norway	--	--	8	365	45.63	--
Peru	16	663	52	1,690	32.52	38
Sweden	--	--	57	2,400	42.02	(4)
Trinidad and Tobago	--	--	--	--	--	284
United Kingdom	--	--	(4)	25	213.64	--
Total	1,070	63,900	2,950	174,000	58.86	4,310
Concentrates	51	800	246	10,300	42.06	890
Coarse ores	(4)	3	82	3,160	38.57	--
Fine ores	179	8,340	572	26,100	45.67	1,420
Pellets	841	54,700	2,040	134,000	65.51	1,990
Other agglomerates	1	37	7	179	25.57	6
Roasted pyrites	--	--	4	194	48.50	3
Total	1,070	63,900	2,950	174,000	58.86	4,310

-- 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 MAY 2007^{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	--	--	144	215	--	--	359
Canada	51	--	27	616	--	--	694
Greenland	--	(3)	--	--	--	--	(3)
Mexico	--	--	--	--	1	--	1
Peru	--	--	7	9	--	--	16
Total	51	(3)	179	841	1	--	1,070

-- 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	2007					2006
	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	215	15,400	764	53,100	69.55	640
Canada	616	39,000	1,220	76,900	62.92	1,350
Mexico	--	--	19	1,220	64.37	--
Peru	9	404	9	404	44.89	--
Sweden	--	--	24	1,870	77.75	--
Total	841	54,700	2,040	134,000	65.51	1,990

-- 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.)	May	January-May	
	2007	2007	2006
Baltimore, MD (13)	287	918	1,640
Buffalo, NY (09)	--	--	(3)
Charleston, SC (16)	--	2	(3)
Chicago, IL (39)	71	181	394
Cleveland, OH (41)	480	808	708
Detroit, MI (38)	(3)	(3)	77
Houston-Galveston, TX (53)	--	38	15
Mobile, AL (19)	--	33	5
New Orleans, LA (20)	232	929	1,450
Nogales, AZ (26)	1	7	13
Ogdensburg, NY (07)	--	--	(3)
Philadelphia, PA (11)	--	2	3
Port Arthur, TX (21)	--	24	--
Providence, RI (05)	--	8	--
St. Louis, MO (45)	--	--	(3)
Total	1,070	2,950	4,310

-- 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.)	May	January-May	
	2007	2007	2006
Baltimore, MD (13)	143	394	641
Chicago, IL (39)	20	48	--
Cleveland, OH (41)	452	781	708
Detroit, MI (38)	(2)	(2)	77
Houston - Galveston, TX (53)	--	38	--
New Orleans, LA (20)	225	754	569
Port Arthur, TX (21)	--	24	--
Total	841	2,040	1,990

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.