

Mineral Industry Surveys

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IRON ORE IN JUNE 2009

U.S. mine production of iron ore in June 2009, on a daily average basis, was slightly less than that for the prior month, and was 83% less than that of June 2008, according to the U.S. Geological Survey (USGS). Average daily production, at 27,000 metric tons (t), was 400 t less than that of May 2009.

Average daily shipments in June 2009, at 81,200 t, were slightly greater than those of the prior month but 101,000 t less than those of June 2008. Mine stocks at the end of June 2009 were 1.6 million metric tons (Mt) less than the stocks held on May 31, a 15% decrease. U.S. net imports of iron ore in May 2009 were 41,000 t, with imports 14% greater than exports.

Domestic Production.—Cliffs Natural Resources Inc. (Cleveland, OH) announced production for the first half of 2009 for its North American operations. Mine production was as follows (United States, unless otherwise specified): Empire, 1.2 Mt; Hibbing Taconite, 1.8 Mt; Northshore, 1.0 Mt; Tilden, 2.3 Mt; United Taconite, 1.4 Mt; and Wabush (Canada), 1.2 Mt. Cliffs' share of the total production of 9.0 Mt was 6.3 Mt. The total production at Cliffs' mines was reduced by 51% from that of the same period in 2008. The economic downturn in late 2008 caused temporary and extended shutdowns at the Hibbing, Northshore, and United Taconite Mines and reduced production rates at the Michigan operations and at the Wabush Mine in Canada (Cliffs Natural Resources Inc., 2009, p. 45–46).

World Production.—Rio Tinto plc announced first half production for 2009. Rio Tinto's share of saleable iron ore plus pellets worldwide for the half-year ending June 30 was 76.8 Mt—about a 3% decrease compared with that of the same period in 2008. Rio Tinto's Pilbara region iron ore operations produced at nearly full capacity in the second quarter, as the company recovered from reduced shipments owing to prolonged heavy rains that blocked portions of the rail system for six weeks. The global economic downturn affected Rio Tinto's Iron Ore Company of Canada production, with suspension of three lines in the pelletizing plant (Rio Tinto plc, 2009, p. 2, 9).

BHP Billiton Ltd. announced that its share of worldwide iron ore (wet) production for the first half of 2009 was 55.2 Mt—a 5% decrease compared with that of the corresponding period in 2008. Production in the first half of 2009 was affected by shut-

down of pelletizing lines at Samarco (Brazil) and cyclone interruptions in the Pilbara region, as well as activities related to the completion of the Rapid Growth Project 4 expansion in Western Australia (BHP Billiton Ltd., 2009a, p. 4, 10; 2009b, p. 4, 10).

In the first half of 2009, Vale S.A. (Rio de Janeiro, Brazil) reported iron ore production of 104.6 Mt (including Vale's Samarco joint venture)—a decrease of 31% compared with that of the same period in 2008. Vale pellet production for the first half was 7.6 Mt—a 68% decrease compared with that of the first half of 2008 (Vale S.A., 2009, p. 1, 2).

Mergers and Acquisitions.—A non-binding agreement was signed between Rio Tinto and BHP Billiton to form a joint venture covering production of all of both companies' Western Australian iron ore assets. The 50:50 ownership was expected to enhance each company's profitability through combination of adjacent mines into a single operating unit, more efficient utilization of rail and port facilities, improvement in blending and product quality, optimization of future facilities growth and project development, and combination of staff functions within a single entity. This merger follows a breakdown of the proposed \$19.5 billion deal (See Iron Ore in February 2009.) between Rio Tinto and the Aluminum Corp. of China, in which Chinalco would have obtained 18% ownership of Rio Tinto (BHP Billiton Ltd., 2009c, p. 1; Brindal, 2009).

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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
2008:				
June	4,870	26,800	5,450	23,900
July	4,960	31,800	6,160	30,100
August	4,840	36,600	6,100	36,200
September	4,310	40,900	5,500	41,700
October	4,540	45,400	4,860	46,500
November	3,940	49,400	3,910	50,400
December	3,570	53,000	2,820	53,300
2009:				
January	2,990	2,990	874	874
February	2,660	5,650	440	1,310
March	2,240	7,890	663	1,980
April	1,700	9,590	1,930	3,910
May	850	10,400	2,470	6,380
June	811	11,200	2,440	8,810

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	
	2009	2008	2009	2008	2009	2008
Michigan	429	1,280	792	1,070	3,040	3,320
Minnesota	382	3,590	1,640	4,390	5,960	6,050
Total	811	4,870	2,440	5,450	9,010	9,370

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
2008:				
May	2,670	1,330	7	4,010
June	1,580	1,380	9	2,970
July	1,820	1,370	8	3,200
August	2,270	1,200	9	3,470
September	1,310	1,050	9	2,370
October	1,760	984	8	2,750
November	1,370	687	6	2,060
December	749	618	3	1,370
Year total	18,700	12,100	76	30,800
2009:				
January	1,030	600	3	1,640
February	793	823	2	1,620
March	662	1,450	1	2,120
April	1,630	871	8	2,510
May	2,090	1,260	6	3,350

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
2008:						
May	3,210	15,700	3,650	17,900	5,080	24,700
June	3,020	18,800	3,450	21,400	4,930	29,600
July	3,090	21,800	3,460	24,800	5,060	34,600
August	3,290	25,100	3,680	28,500	4,990	39,600
September	2,900	28,000	3,290	31,800	4,560	44,200
October	2,770	30,800	2,330	34,100	3,990	48,200
November	2,040	32,800	1,980	36,100	2,660	50,800
December	1,690	34,500	1,390	37,500	2,220	53,100
2009:						
January	1,450	1,450	1,320	1,320	2,630	2,630
February	1,510	2,960	1,180	2,500	2,440	5,070
March	1,630	4,580	1,430	3,930	2,330	7,400
April	1,410	5,990	1,230	5,170	2,390	9,800
May	1,370	7,360	1,070	6,240	2,760	12,600

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	2008		2009			
	4th quarter	Total	March	1st quarter	April	May
Algeria	--	80	--	--	--	--
Belgium	(3)	218	--	(3)	19	--
Canada	2,120	9,030	113	425	85	287
China	54	91	2	4	2	(3)
Colombia	5	11	5	8	6	1
Czech Republic	--	83	--	--	--	--
France	156	210	--	(3)	74	(3)
Germany	76	156	--	--	--	--
Malaysia	--	25	--	1	--	--
Mexico	68	328	(3)	12	(3)	(3)
Peru	(3)	103	--	--	--	--
Romania	--	128	--	--	--	--
Serbia	--	51	--	--	--	--
Slovakia	455	505	--	--	--	--
Spain	--	102	--	--	--	--
Sweden	1	4	--	--	--	--
Other	2	14	--	1	3	(3)
Total	2,940	11,100	120	450	188	288
Concentrates	59	142	5	9	6	2
Coarse ores	25	46	--	(3)	--	--
Fine ores	21	136	2	10	(3)	2
Pellets	2,840	10,800	113	431	179	284
Briquettes	(3)	(3)	--	--	3	--
Other agglomerates	(3)	20	--	--	--	--
Roasted pyrites	(3)	(3)	--	--	--	(3)
Total	2,940	11,100	120	450	188	288

-- Zero.

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

²Includes agglomerates.

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	2009					2008
	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
Brazil	--	--	38	3,510	93.23	944
Canada	271	36,200	778	100,000	128.81	2,160
Chile	--	--	47	5,020	105.88	129
China	--	--	--	--	--	(4)
Finland	--	--	3	180	64.49	3
Mexico	--	--	26	2,370	91.43	25
Netherlands	--	--	--	--	--	1
Norway	--	--	1	22	18.00	--
Peru	29	1,380	34	1,670	49.31	35
South Africa	29	1,850	29	1,850	64.28	--
Sweden	--	--	4	66	18.00	41
United Kingdom	--	--	8	1,630	197.51	--
Venezuela	--	--	--	--	--	25
Total	329	39,400	968	117,000	120.44	3,360
Concentrates	29	1,850	101	9,180	91.22	460
Coarse ores	--	--	8	1,630	197.51	37
Fine ores	35	1,500	200	19,800	98.94	493
Pellets	265	36,100	654	85,700	130.98	2,370
Briquettes	--	--	--	--	--	--
Other agglomerates	--	--	2	60	40.00	--
Roasted pyrites	--	--	3	180	64.49	5
Total	329	39,400	968	117,000	120.44	3,360

-- 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 2009^{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	
Canada	--	--	6	265	--	--	271
Peru	--	--	29	--	--	--	29
South Africa	29	--	--	--	--	--	29
Total	29	--	35	265	--	--	329

-- 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	2009					2008
	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	--	--	38	3,510	93.23	385
Canada	265	36,100	612	81,900	133.9	1,940
Peru	--	--	5	283	57.11	18
Venezuela	--	--	--	--	--	25
Total	265	36,100	654	85,700	130.98	2,370

-- 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	
	2009	2009	2008
Baltimore, MD (13)	--	130	1,580
Charleston, SC (16)	--	4	2
Chicago, IL (39)	29	44	266
Cleveland, OH (41)	265	467	806
Houston-Galveston, TX (53)	--	38	30
Mobile, AL (19)	--	5	50
New Orleans, LA (20)	29	257	624
New York, NY (10)	--	--	1
Nogales, AZ (26)	--	2	--
Ogdensburg, NY (07)	3	7	(3)
Philadelphia, PA (11)	--	3	3
Port Arthur, TX (21)	--	8	--
Seattle, WA (30)	3	3	--
Total	329	968	3,360

-- 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	
	2009	2009	2008
Baltimore, MD (13)	--	130	1,010
Chicago, IL (39)	--	15	123
Cleveland, OH (41)	265	466	803
Houston - Galveston, TX (53)	--	38	30
Mobile, AL (19)	--	5	18
New Orleans, LA (20)	--	--	380
Total	265	654	2,370

-- Zero.

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

Source: U.S. Census Bureau.