

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

Michelle B. Blackwell (Data)
Telephone: (703) 648-7943
Fax: (703) 648-7975
E-mail: mblackwell@usgs.gov

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

IRON ORE IN SEPTEMBER 2009

U.S. mine production of iron ore in September 2009, on a daily average basis, was 49% greater than that for the prior month but still 41% less than that of September 2008, according to the U.S. Geological Survey (USGS). Average daily production, at 85,300 metric tons (t), was 28,000 t greater than that of August 2009.

Average daily shipments in September 2009, at 104,000 t, were slightly greater than those of the prior month but 79,300 t less than those of September 2008. Mine stocks at the end of September 2009 were 562,000 t less than the stocks held on August 31, a 9% decrease. U.S. net exports of iron ore in August 2009 were 181,000 t, with exports 68% greater than imports.

Domestic Production.—Cliffs Natural Resources Inc. (Cleveland, OH) announced production for the third quarter of 2009 for its North American operations. Mine production for all of Cliffs' managed mines was 4.7 million metric tons (Mt) one-half that of the same period of 2008. Cliffs' share of the total production for the third quarter of 2009 was 4.4 Mt (Cliffs Natural Resources Inc., 2009).

World Production.—Rio Tinto plc announced third quarter production for 2009. Rio Tinto's share of saleable iron ore and pellets worldwide for the 9 months ending September 30 was 124.3 Mt—about a 2% increase compared with that of the same period in 2008. Rio Tinto's Pilbara region iron ore operations produced at record rates in the third quarter, with production 6% above that of the previous quarter. The record production reflected the completion of infrastructure expansion work and improvements from debottlenecking the integrated mine, rail, and port operations (Rio Tinto plc, 2009, p. 3, 9).

BHP Billiton Ltd. announced that its share of worldwide iron ore (wet) production for the first 9 months of 2009 was 85.3 Mt—a 3% decrease compared with that of the corresponding period in 2008. Production in the third quarter of 2009 increased relative to the second quarter reflecting improved performance in the iron ore operations in Western Australia and the operation of all three pellet plants at the Samarco operations (Brazil) since July. Tie-ins to expansion activities were expected to negatively

affect production at the Western Australian iron ore operations through the end of the year (BHP Billiton Ltd., 2009a, p. 10; 2009b, p. 4, 9).

In the first 9 months of 2009, Vale S.A. (Rio de Janeiro, Brazil) reported iron ore production of 168.9 Mt (including its Samarco joint venture). Although iron ore production for the quarter represented a 12% increase compared with the previous quarter, 9-month iron ore production decreased by 25% compared with that of the first 9 months of 2008. Vale's pellet production for the first 9 months was 15.6 Mt—a 35% decrease compared with that of the first 9 months of 2008 (Vale S.A., 2009a).

Mergers and Acquisitions.—In late September, Rio Tinto completed the sale of its Corumbá iron ore mine in Brazil to Vale for a cash consideration of \$750 million. The transaction included associated transport operations on the Paraguay River. Vale announced tentative plans to increase production capacity at Corumbá to 15 million metric tons per year at a cost of greater than \$2 billion (Vale S.A., 2009b).

References Cited

- BHP Billiton Ltd., 2009a, BHP Billiton production report for the nine months ended 31 March 2009: Melbourne, Australia, BHP Billiton Ltd. news release no. 07/09, April 22, 21 p. (Accessed August 12, 2009, via <http://www.bhpbilliton.com/>)
- BHP Billiton Ltd., 2009b, BHP Billiton production report for the quarter ended 30 September 2009: Melbourne, Australia, BHP Billiton Ltd. news release no. 19/09, October 21, 20 p. (Accessed April 29, 2010, via <http://www.bhpbilliton.com/>)
- Cliffs Natural Resources Inc., 2009, Cliffs Natural Resources Inc. reports third-quarter 2009 earnings: Cleveland, OH, Cliffs Natural Resources Inc. news release, October 29, 7 p. (Accessed April 7, 2010, via <http://www.cliffsnaturalresources.com/>)
- Rio Tinto plc, 2009, Third quarter 2009 operations review: London, United Kingdom, Rio Tinto plc press release, October 14, 27 p. (Accessed April 28, 2010, via <http://www.riotinto.com/>)
- Vale S.A., 2009a, Vale—3Q09 production report: Rio de Janeiro, Brazil, Vale S.A., October 28, 13 p. (Accessed April 29, 2010, via <http://www.vale.com/>)
- Vale S.A., 2009b, Vale concludes the acquisition of Corumbá: Rio de Janeiro, Brazil, Vale S.A. press release, September 18, 1 p. (Accessed April 29, 2010, via <http://www.vale.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
2008:				
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
July	1,480	12,700	3,080	11,900
August	1,780	14,500	3,190	15,100
September	2,560	17,100	3,120	18,200

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 SEPTEMBER^{1, 2}

(Thousand metric tons)

State	Production		Shipments ³		Stocks ⁴	
	2009	2008	2009	2008	2009	2008
Michigan	667	744	1,030	1,380	1,400	2,560
Minnesota	1,890	3,570	2,090	4,110	4,030	3,550
Total	2,560	4,310	3,120	5,500	5,430	6,110

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:				
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	7	3,350
June	820	1,080	10	1,910
July	1,360	1,430	10	2,800
August	2,030	1,570	8	3,610

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		Electric furnace	
	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
2008:						
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
June	1,380	8,740	1,210	7,440	2,980	15,500
July	1,840	10,600	1,630	9,070	3,200	18,700
August	2,090	12,700	1,810	10,900	3,460	22,200

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

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			
		1st quarter	2nd quarter	July	August
Algeria	80	--	--	--	--
Belgium	218	(3)	19	--	(3)
Canada	9,030	425	653	348	384
China	91	4	3	--	34
Colombia	11	8	7	(3)	1
Czech Republic	83	--	--	--	--
France	210	(3)	74	--	26
Germany	156	--	--	--	--
Malaysia	25	1	--	--	--
Mexico	328	12	2	(3)	(3)
Poland ⁴	103	--	--	--	--
Romania	128	--	--	--	--
Serbia	51	--	--	--	--
Slovakia	505	--	--	--	--
Spain	102	--	--	--	--
Sweden	4	--	2	--	1
Other	14	1	3	(3)	(3)
Total	11,100	450	763	348	447
Concentrates	142	9	8	11	33
Coarse ores	46	(3)	1	--	--
Fine ores	136	10	5	1	5
Pellets	10,800	431	746	336	409
Briquettes	(3)	--	3	--	--
Other agglomerates	20	--	(3)	(3)	--
Roasted pyrites	(3)	--	(3)	(3)	--
Total	11,100	450	763	348	447

-- Zero.

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

²Includes agglomerates.

³Less than ½ unit.

⁴Correction to previous month's information should read Poland, not Peru.

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	2009					2008
	August		Year to date			January-August
	Thousand metric tons	Value ³ (thousand dollars)	Thousand metric tons	Value ³ (thousand dollars)	Value ³ (dollars per ton)	Thousand metric tons
Brazil	--	--	114	8,620	75.68	1,740
Canada	235	30,000	1,510	198,000	130.57	3,920
Chile	--	--	99	8,670	87.71	173
China	(4)	2	(4)	2	2,100.00	14
Finland	3	187	6	367	62.89	6
Italy	--	--	--	--	--	(4)
Japan	--	--	--	--	--	(4)
Mexico	27	2,130	54	4,510	84.10	25
Netherlands	--	--	--	--	--	1
Norway	--	--	2	35	18.00	--
Peru	--	--	34	1,670	49.31	39
Russia	--	--	--	--	--	66
South Africa	--	--	29	1,850	64.28	--
Spain	1	42	1	42	39.98	(4)
Sweden	--	--	4	66	18.00	46
Switzerland	--	--	--	--	--	70
United Kingdom	--	--	8	1,630	197.51	--
Venezuela	--	--	--	--	--	48
Total	266	32,400	1,860	225,000	120.79	6,150
Concentrates	27	2,130	179	15,000	83.38	825
Coarse ores	(4)	2	8	1,630	197.74	37
Fine ores	2	35	297	25,300	85.18	1,180
Pellets	233	30,000	1,370	183,000	133.38	4,100
Briquettes	1	42	1	42	39.98	(4)
Other agglomerates	--	--	2	77	40.01	--
Roasted pyrites	3	187	6	367	62.89	11
Total	266	32,400	1,860	225,000	120.79	6,150

-- 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 AUGUST 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	--	--	2	233	--	--	235
China	--	(3)	--	--	--	--	(3)
Finland	--	--	--	--	--	3	3
Mexico	27	--	--	--	--	--	27
Spain	--	--	--	--	1	--	1
Total	27	(3)	2	233	1	3	266

-- 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	2009					2008
	August		Year to date			January-August
	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	529
Canada	233	30,000	1,330	179,000	134.81	3,500
Peru	--	--	5	283	57.11	18
Venezuela	--	--	--	--	--	48
Total	233	30,000	1,370	183,000	133.38	4,100

-- 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.)	August	January-August	
	2009	2009	2008
Baltimore, MD (13)	--	130	2,610
Buffalo, NY (09)	--	--	(3)
Charleston, SC (16)	1	5	20
Chicago, IL (39)	29	149	651
Cleveland, OH (41)	204	1,150	1,940
Houston-Galveston, TX (53)	--	38	30
Los Angeles, CA (27)	(3)	(3)	--
Mobile, AL (19)	--	5	50
New Orleans, LA (20)	27	336	835
New York, NY (10)	--	--	1
Nogales, AZ (26)	--	2	--
Norfolk, VA (14)	--	--	4
Ogdensburg, NY (07)	2	13	6
Philadelphia, PA (11)	3	6	6
Port Arthur, TX (21)	--	8	--
Seattle, WA (30)	--	17	--
Total	266	1,860	6,150

-- 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.)	August	January-August	
	2009	2009	2008
Baltimore, MD (13)	--	130	1,420
Chicago, IL (39)	29	44	174
Cleveland, OH (41)	204	1,150	1,910
Houston - Galveston, TX (53)	--	38	30
Mobile, AL (19)	--	5	18
New Orleans, LA (20)	--	--	547
Total	233	1,370	4,100

-- Zero.

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

Source: U.S. Census Bureau.