

Mineral Industry Surveys

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IRON ORE IN DECEMBER 2010

U.S. mine production of iron ore in December 2010, on a daily average basis, was slightly less than that for the prior month and 46% greater than that of December 2009, according to the U.S. Geological Survey (USGS). Average daily production, at 150,000 metric tons (t), was 4,300 t less than that of November 2010.

Average daily shipments in December 2010, at 148,000 t, were 6% less than those of the prior month but 20,500 t greater than those of December 2009. Mine stocks at the end of December 2010 were 61,000 t greater than the revised stocks held on November 30, a slight increase. U.S. net exports of iron ore in November 2009 were 609,000 t, with exports almost 3 times imports.

Domestic Production.—Cliffs Natural Resources Inc. did not announce 2010 iron ore production for its North American operations on a mine-by-mine basis in their annual report. Mine production totaled 32.5 million metric tons (Mt) from the following mines (United States, unless otherwise specified)—Empire, Hibbing Taconite, Northshore, Tilden, United Taconite, and Wabush (Canada). Cliffs' share of the total production from these North American operations was 25.8 Mt. Total Cliffs' North American production tonnage share for the mines it managed during the year increased by 49% compared with that of 2009, and overall iron ore sales revenue more than doubled compared with that of 2009 to \$2.92 billion (Cliffs Natural Resources Inc., 2011, p. 60).

World Production.—Rio Tinto plc announced full-year production figures for 2010. Rio Tinto's share of saleable quantities of iron ore plus pellets were as follows (Australia, unless otherwise specified)—Channar (60% owned), 6.6 Mt; Eastern Range, 9.2 Mt; Hamersley, 112.7 Mt; Hope Downs (50% owned), 15.9 Mt; Iron Ore Company of Canada (58.7% owned), 8.6 Mt; and Robe River (53% owned), 31.6 Mt. Rio Tinto's share of total world mine production was 184.6 Mt, an

8% increase from that of 2009 (Rio Tinto plc, 2010).

BHP Billiton Ltd. announced full-year production figures for 2010. BHP Billiton's share of saleable quantities of iron ore (wet) were as follows (Australia, unless otherwise specified)—Area C Joint Venture (JV) (85% owned), 39.5 Mt; Goldsworthy JV (85% owned), 1.5 Mt; Mount Newman JV and Jimblebar (85% owned), 37.2 Mt; Samarco (Brazil) (50% owned), 11.7 Mt; and Yandi JV (85% owned), 38.2 Mt. BHP Billiton's share of total world mine production was 128.1 Mt, a 9% increase from that of 2008 (BHP Billiton Ltd., 2010, p. 4; 2011, p. 4).

In 2010, Brazil's Vale S.A. reported iron ore production was 307.8 Mt (includes Vale's 50%-joint venture in Samarco)—an increase of 29% compared with that of 2009. Vale pellet production in 2010 was 49.0 Mt (includes Vale's 50%-joint venture in Samarco and Vale's 50.89% ownership in Hispanobras)—more than doubling the company's pellet production of 2009 (Vale S.A., 2011, p. 2, 3).

References Cited

- BHP Billiton Ltd., 2010, BHP Billiton production report for the half year ended 31 December 2009: Melbourne, Australia, BHP Billiton Ltd. news release no. 02/10, January 20, 15 p. (Accessed June 22, 2010, via <http://www.bhpbilliton.com>.)
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- Cliffs Natural Resources Inc., 2011, Form 10-K—Fiscal year 2010: Washington, DC, Securities and Exchange Commission, February 17, 182 p. (Accessed March 16, 2011, via <http://www.cliffsnaturalresources.com>.)
- Rio Tinto plc, 2011, 2010 Annual report—Metals and minerals production: London, United Kingdom, Rio Tinto plc, March 4, 6 p. (Accessed March 17, 2011, via <http://www.riotinto.com>.)
- Vale S.A., 2011, Vale—2010 production report: Rio de Janeiro, Brazil, Vale S.A., February 24, 12 p. (Accessed March 17, 2011, 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
2009, December	3,180	26,500	3,960	29,900
2010:				
January	3,040	3,040	2,400	2,400
February	3,270	6,300	943	3,340
March	3,630	9,930	2,630	5,970
April	3,780	13,700	4,790	10,800
May	4,560	18,300	5,230	16,000
June	3,700	22,000	4,940	20,900
July	4,630	26,600	5,060	26,000
August	4,550	31,200	5,050	31,000
September	4,430	35,600	4,540	35,600
October	4,600	40,200	4,340	39,900
November	4,640	44,800	4,720	44,600
December	4,660	49,500	4,600	49,200

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 DECEMBER^{1,2}

(Thousand metric tons, unless otherwise noted)

State	Production		Shipments ³		Stocks ⁴	
	2010	2009	2010	2009	2010	2009
Michigan	1,200	896	1,220	1,370	2,220	896
Minnesota	3,450	2,280	3,380	2,590	1,170	2,220
Total	4,660	3,180	4,600	3,960	3,390	3,120

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: An imbalance of production and shipments compared with stock changes indicates an inventory adjustment at the mines of 3,410 metric tons.

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

(Thousand dry metric tons)

Period	Newfoundland and Labrador	Quebec	British Columbia	Total
2009:				
November	2,010	1,000	8	3,020
December	1,660	1,320	(3)	2,980
Year total	17,100	14,500	73	31,700
2010:				
January	1,300	1,090	3	2,390
February	1,130	872	3	2,000
March	1,390	1,100	6	2,500
April	1,500	1,510	7	3,020
May	1,840	1,340	11	3,190
June	1,970	1,710	10	3,690
July	1,630	1,350	12	2,990
August	1,350	1,390	12	2,760
September	1,130	1,830	8	2,970
October	1,490	1,350	7	2,850
November	2,620	1,990	10	4,620

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

²Includes production from steel plant waste oxides.

³Less than ½ unit.

Source: Natural Resources Canada.

TABLE 4
PRODUCTION OF PIG IRON AND RAW STEEL IN THE UNITED STATES, BY TYPE OF
FURNACE ¹

(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
2009:						
November	2,240	19,400	2,000	17,200	3,470	32,700
December	2,410	21,800	2,120	19,300	3,450	36,100
2010:						
January	2,350	2,350	1,830	1,830	3,890	3,890
February	2,530	4,870	1,960	3,790	3,720	7,610
March	2,870	7,740	2,560	6,350	4,240	11,800
April	2,030	9,770	2,820	9,170	4,140	16,000
May	2,830	12,600	2,560	11,700	4,440	20,400
June	2,800	15,400	2,530	14,300	4,300	24,700
July	2,450	17,800	2,050	16,300	4,320	29,000
August	2,490	20,300	2,250	18,600	4,130	33,200
September	2,600	22,900	2,370	20,900	4,000	37,200
October	2,150	25,100	2,390	23,300	4,160	41,300
November	2,470	27,500	2,220	25,500	3,950	45,300

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	2009	2010				
		1st quarter	2nd quarter	3rd quarter	October	November
Belgium	194	1	105	(3)	--	1
Canada	3,060	918	2,110	3,130	734	809
China	99	--	139	240	123	109
Colombia	19	4	3	2	1	--
Finland	--	--	35	--	--	--
France	179	25	211	--	--	--
Germany	234	--	341	--	--	(3)
Mexico	70	151	19	16	1	1
Serbia	--	--	44	--	--	--
Singapore	--	--	--	5	--	--
South Africa	52	--	--	--	--	--
Spain	--	--	131	25	--	(3)
Other ⁴	10	(3)	(3)	(3)	(3)	1
Total	3,910	1,100	3,140	3,420	859	921
Concentrates	123	6	67	195	1	59
Coarse ores	5	--	35	100	24	52
Fine ores	24	(3)	72	4	(3)	1
Pellets	3,760	1,090	2,960	3,110	833	810
Briquettes	3	--	--	5	--	--
Other agglomerates	(3)	(3)	(3)	(3)	(3)	(3)
Roasted pyrites	1	(3)	(3)	1	(3)	--
Total	3,910	1,100	3,140	3,420	859	921

-- Zero.

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

²Includes agglomerates.

³Less than ½ unit.

⁴Includes all countries receiving less than 5,000 metric tons in any month during the 2-year period.

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	2010					2009
	November		Year to date			January-November
	Thousand metric tons	Value ³ (thousand dollars)	Thousand metric tons	Value ³ (thousand dollars)	Value ³ (dollars per ton)	Thousand metric tons
Brazil	135	17,400	478	62,200	130.18	188
Canada	63	9,300	4,200	435,000	103.75	2,650
Chile	49	7,180	131	15,500	118.08	154
China	--	--	--	--	--	(4)
Finland	--	--	--	--	--	6
France	--	--	(4)	4	4,480.00	--
Germany	--	--	(4)	3	17.99	--
Greece	--	--	3	348	116.00	--
Mexico	10	517	111	9,640	86.88	55
Norway	1	13	5	81	16.20	4
Peru	--	--	7	315	45.00	34
Russia	--	--	606	69,900	115.35	136
South Africa	--	--	--	--	--	39
Spain	1	35	4	178	44.50	4
Sweden	--	--	23	3,140	136.48	31
Trinidad and Tobago	--	--	120	17,200	143.27	--
Turkey	--	--	(4)	3	91.51	--
Ukraine	--	--	95	13,700	143.78	--
United Kingdom	--	--	--	--	--	8
Venezuela	53	8,550	223	24,200	108.72	21
Total	312	43,000	6,000	652,000	108.57	3,330
Concentrates	167	23,200	569	68,300	120.01	229
Coarse ores	--	--	36	4,160	115.61	16
Fine ores	82	10,500	498	59,700	119.86	465
Pellets	62	9,260	4,900	519,000	106.09	2,610
Briquettes	1	35	4	178	44.50	4
Other agglomerates	--	--	--	--	--	3
Roasted pyrites	--	--	(4)	4	4,480.00	6
Total	312	43,000	6,000	652,000	108.57	3,330

-- 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 NOVEMBER 2010^{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	55	--	80	--	--	--	135
Canada	(3)	--	1	62	--	--	63
Chile	49	--	--	--	--	--	49
Mexico	10	--	--	--	--	--	10
Norway	--	--	1	--	--	--	1
Spain	--	--	--	--	1	--	1
Venezuela	53	--	--	--	--	--	53
Total	167	--	82	62	1	--	312

-- 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	2010					2009
	November		Year to date			January-November
	Thousand metric tons	Value ² (thousand dollars)	Thousand metric tons	Value ² (thousand dollars)	Value ² (dollars per ton)	Thousand metric tons
Brazil	--	--	76	10,500	138.00	38
Canada	62	9,260	3,890	401,000	103.07	2,410
Peru	--	--	--	--	--	5
Russia	--	--	606	69,900	115.35	136
Trinidad and Tobago	--	--	120	17,200	143.18	--
Ukraine	--	--	95	13,700	143.78	--
Venezuela	--	--	107	7,020	65.60	21
Total	62	9,260	4,900	519,000	106.09	2,610

-- 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.)	November	January-November	
	2010	2010	2009
Baltimore, MD (13)	--	1,980	638
Charleston, SC (16)	--	--	6
Chicago, IL (39)	189	513	404
Cleveland, OH (41)	63	2,540	1,740
Columbia-Snake, OR (29)	--	21	--
Detroit, MI (38)	--	(3)	--
El Paso, TX (24)	10	44	--
Houston-Galveston, TX (53)	--	76	38
Los Angeles, CA (27)	--	--	(3)
Minneapolis, MN (35)	--	(3)	--
Mobile, AL (19)	--	179	28
New Orleans, LA (20)	49	642	416
New York, NY (10)	--	(3)	--
Nogales, AZ (26)	--	--	3
Norfolk, VA (14)	--	1	--
Ogdensburg, NY (07)	1	8	17
Philadelphia, PA (11)	--	--	6
Port Arthur, TX (21)	--	3	8
Seattle, WA (30)	--	--	28
St. Albans, VT (02)	(3)	(3)	--
Total	312	6,000	3,330

-- 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.)	November	January-November	
	2010	2010	2009
Baltimore, MD (13)	--	1,980	628
Chicago, IL (39)	--	30	182
Cleveland, OH (41)	62	2,530	1,740
Houston-Galveston, TX (53)	--	76	38
Mobile, AL (19)	--	120	5
New Orleans, LA (20)	--	162	21
Total	62	4,900	2,610

-- Zero.

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

Source: U.S. Census Bureau.