

Mineral Industry Surveys

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IRON ORE IN MARCH 2010

U.S. mine production of iron ore in March 2010, on a daily average basis, was about the same as that for the prior month, and was 62% greater than that of March 2009, according to the U.S. Geological Survey (USGS). Average daily production, at 117,000 metric tons (t), was less than 400 t greater than that of February 2010.

Average daily shipments in March 2010, at 86,100 t, were 52,500 t more than those of the prior month, and more than 4 times those of March 2009. Mine stocks at the end of March 2010 were 958,000 t greater than the stocks held on February 28, a 16% increase. U.S. net imports of iron ore in February 2010 were 285,000 t, with imports 2.4 times exports.

Prices.—Amidst the closing of the trial of Rio Tinto plc (London, United Kingdom) employees in China, annual iron ore price negotiations continued. Vale S.A. (Rio de Janeiro, Brazil) and BHP Billiton Ltd. (Melbourne, Australia) reached agreement with major steelmakers from China, Japan, and the Republic of Korea to accept quarterly ore repricing, with increases almost 100% greater than the price of the 2009 contract year (Jenkins, 2010).

North American Production.—Cliffs Natural Resources Inc. (Cleveland, OH) announced production for the first quarter of 2010 for its North American operations. Mine production for all of Cliffs' managed mines was 6.0 million metric tons (Mt), a slight increase over that of the same period of 2009. Cliffs' share of the total production for the first quarter of 2010 was 5.4 Mt, a 36% increase over that of the same period in 2009, resulting from increased ownership in the Wabush Mine in Canada (Cliffs Natural Resources Inc., 2010).

World Production.—Rio Tinto announced first quarter production for 2010. Rio Tinto's share of saleable iron ore and pellets worldwide for the 3 months ending March 31 was 43.4 Mt—a 39% increase compared with that of the same period in 2009. Rio Tinto's Pilbara region iron ore production reported a 48% increase compared with that of the first quarter of 2009. This dramatic increase was the result of the 2010 startup of the Mesa A/Warramboo Mine and reduced production in the first quarter of 2009, when heavy rains interrupted operations (Rio Tinto plc, 2010, p. 2, 9).

BHP Billiton announced that its share of worldwide iron ore (wet) production for the first 3 months of 2010 was 31.2 Mt—an 11% increase compared with that of the corresponding period in 2009. Although iron ore production did show a significant increase, weather-related impacts and expansion tie-in activities offset some of the increased production from expansion projects (BHP Billiton Ltd., 2010, p. 1, 3).

In the first 3 months of 2010, Vale reported iron ore production of 69.1 Mt (including its Samarco joint venture). Iron ore production for the first quarter of 2010 represented a 9% increase compared with that of the previous quarter and a 43% increase compared with that of the same quarter the previous year. Vale's pellet production for the first 3 months of 2010 was 10.5 Mt—a 20% increase compared with production in the previous quarter and a greater than 260% increase compared with production in the same quarter the previous year. These significant increases resulted from resumed production at the Jangada and Mar Azul Mines and the Fábrica and São Luis pellet plants (Vale S.A., 2010).

World Exploration and Development.—Rio Tinto signed a memorandum of understanding with Aluminum Corporation of China (Chinalco) which would establish a joint venture to develop and operate the 70-million-metric-ton-per-year Simandou iron ore project in Guinea. With an investment of \$1.35 billion, Chinalco would obtain a 44.65% interest in the project (Rio Tinto plc, 2010, p. 2, 3).

References Cited

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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)

	Pro	Production		pments
Period	Monthly	Year to date	Monthly	Year to date
2009:				
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
October	3,080	20,100	3,370	21,600
November	3,140	23,300	4,380	26,000
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	2,670	6,010

¹Data are rounded to no more than three significant digits.

 ${\it TABLE~2}$ U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF IRON ORE IN MARCH 1,2

(Thousand metric tons)

	Produ	Production		Shipments ³		Stocks ⁴	
State	2010	2009	2010	2009	2010	2009	
Michigan	860	544	850	499	1,570	3,470	
Minnesota	2,770	1,700	1,820	164	5,470	9,010	
Total	3,630	2,240	2,670	663	7,040	12,500	

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

²Excludes byproduct ores.

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.

 $\label{eq:table 3} \text{CANADA: SHIPMENTS OF IRON ORE}^{1,2}$

(Thousand dry metric tons)

	Newfoundland		British	
Period	and Labrador	Quebec	Columbia	Total
2009:				
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	1,480	1,570	8	3,060
September	1,540	1,580	8	3,130
October	2,060	1,510	7	3,580
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	2	2,000

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

Source: Natural Resources Canada.

TABLE 4 PRODUCTION OF PIG IRON AND RAW STEEL IN THE UNITED STATES, BY TYPE OF $$\mathrm{FURNACE}^1$$

(Thousand metric tons)

	Pig iron	production,	Raw steel production				
	blast	furnace	Basic oxygen furnace Electric fu		ic furnace		
Period	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date	
2009:							
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	
September	1,930	14,600	2,230	13,100	3,540	25,700	
October	2,510	17,100	2,080	15,200	3,480	29,200	
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	

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

Source: American Iron and Steel Institute.

²Includes production from steel plant waste oxides.

³Less than ½ unit.

 ${\rm TABLE}~5$ U.S. EXPORTS OF IRON ORE, BY COUNTRY OF DESTINATION AND ${\rm TYPE}^{1,\,2}$

(Thousand metric tons)

Country of destination		200)9		20	10
and type of product	3rd quarter	4th quarter	December	Total	January	February
Belgium	25	150	53	194	1	
Canada	1,100	877	399	3,060	564	129
China	92	(3)		99		
Colombia	_ 1	3	2	19	2	1
France	105	(3)		179		
Germany	81	153		234		
Mexico	_ 1	55	33	70	32	81
South Africa		25		52		
Other ⁴	1	3	(3)	10	(3)	(3)
Total	1,430	1,270	487	3,910	599	211
Concentrates	101	5	1	123	3	1
Coarse ores		4		5		
Fine ores	7	2	(3)	24	(3)	(3)
Pellets	1,330	1,260	485	3,760	596	209
Briquettes	(3)			3	(3)	
Other agglomerates	(3)	(3)	(3)	(3)		
Roasted pyrites	1	(3)		1		(3)
Total	1,430	1,270	487	3,910	599	211

⁻⁻ Zero.

Source: U.S. Census Bureau.

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 two-year period.

TABLE 6 U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE $^{1,\,2}$ (Exclusive of ore containing 20% or more manganese)

			2010			2009	
	Feb	ruary		Year to date		January-February	
	Thousand	Value ³	Thousand	Value ³	Value ³	Thousand	
Country of origin	metric	(thousand	metric	(thousand	(dollars	metric	
and type of product	tons	dollars)	tons	dollars)	per ton)	tons	
Brazil	37	3,780	37	3,780	102.16		
Canada	317	28,400	701	58,200	83.05	148	
Chile						47	
Finland						3	
Mexico						24	
Norway	1	13	1	13	13.00	1	
Peru	7	315	7	315	45.00		
Russia	133	11,000	133	11,000	82.77		
Spain	1	42	1	42	42.00		
Sweden						4	
Trinidad and Tobago	(4)	11	(4)	11	187.50		
Total	496	43,600	880	73,400	83.39	227	
Concentrates	(4)	11	(4)	11	187.50	72	
Coarse ores							
Fine ores	113	12,500	114	12,500	110.00	7	
Pellets	381	31,000	765	60,800	79.47	146	
Briquettes	1	42	1	42	42.00		
Other agglomerates							
Roasted pyrites						3	
Total	496	43,600	880	73,400	83.39	227	

⁻⁻ Zero.

Source: U.S. Census Bureau.

TABLE 7 U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN FEBRUARY $2010^{1,2}$ (Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

		Type of product					
	•				Briquettes		
		Coarse	Fine		and other	Roasted	
Country of origin	Concentrates	ores	ores	Pellets	agglomerates	pyrites	Total
Brazil				37			37
Canada			106	211			317
Norway			1				1
Peru			7				7
Russia				133			133
Spain					1		1
Trinidad and Tobago	(3)						(3)
Total	(3)		113	381	1		496

⁻⁻ Zero.

Source: U.S. Census Bureau.

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.

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

²Includes agglomerates.

³Less than ½ unit.

 ${\bf TABLE~8}$ U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY COUNTRY 1

		2010						
	Febi	February Year to date			January-February			
	Thousand	Value ²	Thousand	Value ²	Value ²	Thousand		
Country	metric	(thousand	metric	(thousand	(dollars	metric		
of origin	tons	dollars)	tons	dollars)	per ton)	tons		
Brazil	37	3,780	37	3,780	102.16			
Canada	211	16,200	595	46,000	77.32	146		
Russia	133	11,000	133	11,000	82.77			
Total	381	31,000	765	60,800	79.47	146		

⁻⁻ Zero.

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)

	February	January-February	
Customs district (code no.)	2010	2010	2009
Baltimore, MD (13)	344	728	130
Charleston, SC (16)			4
Chicago, IL (39)			15
Cleveland, OH (41)	1	1	1
Houston-Galveston, TX (53)	37	37	
New Orleans, LA (20)	112	112	72
Norfolk, VA (14)	1	1	
Ogdensburg, NY (07)	1	1	2
Philadelphia, PA (11)			3
Total	496	880	227

⁻⁻ Zero.

Source: U.S. Census Bureau.

TABLE 10 $\label{eq:u.s.} \text{U.s. IMPORTS FOR CONSUMPTION OF PELLETS,} \\ \text{BY CUSTOMS DISTRICT}^{\text{I}}$

(Thousand metric tons)

	February	January-Fe	ebruary
Customs district (code no.)	2010	2010	2009
Baltimore, MD (13)	344	728	130
Chicago, IL (39)			15
Houston - Galveston, TX (53)	37	37	
Total	381	765	146
7 _{oro}			

⁻⁻ Zero.

Source: U.S. Census Bureau.

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.

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

²Includes agglomerates.

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