

# Mineral Industry Surveys

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## IRON ORE IN MARCH 2006

U.S. mine production of iron ore in March 2006, on a daily average basis, was 9% more than that of the prior month, according to the U.S. Geological Survey. Average daily production, at 148,000 metric tons per day (t/d), was 11,800 t/d more than the figure for February 2006.

Shipments in March 2006, on an average daily basis, were 121% greater than those of February. Mine stocks at the end of March were 2.3 million metric tons (Mt) greater than the corresponding stocks figure on February 28, a 23% increase.

U.S. imports of iron ore in February 2006 were over 4½ times greater than exports, with imports exceeding exports by 461,000 metric tons (t).

**Price Update.**—Price negotiations continued past the normal April 1 conclusion date. Although Chinese imports of iron ore were at record levels in March 2006, the China Iron and Steel Association (CISA) reported that domestic ore production for 2006 was expected to increase by 100 Mt above that of 2005. This increase in domestic production was attributed to improved beneficiation techniques that make mining of lower grade ores more economical (Sun, 2006§<sup>1</sup>).

A CISA official suggested that Indian iron ore producers and Chinese steelmakers begin negotiations aimed at establishing long-term price contracts for the sale of iron ore. Currently, India sells ore to China on the spot market, where prices are considerably more volatile (India Daily, 2006§).

**Exploration and Development Update.**—Canada's New Millennium Capital Corp. (see Iron Ore in March 2005) announced an updated mineral resource estimate based on 2004 and 2005 drilling programs for the LabMag iron ore project. The new resource assessment estimates 3,084 Mt of measured mineral resources and an additional 581 Mt of indicated mineral resources for the project located 220 kilometers north of Labrador City, Newfoundland and Labrador (New Millennium Capital Corp., 2006§).

**World Production Update.**—Heavy rains and a succession of cyclones in Western Australia's Pilbara region forced Rio

Tinto plc and BHP Billiton Limited to temporarily close iron ore facilities owing to flooding of mines, which resulted in lowered production. Rio Tinto's first quarter 2006 share of iron ore production, 28.7 Mt, decreased by 12% compared with that of the previous quarter, and BHP Billiton's first quarter 2006 share of iron ore production, 22.5 Mt, decreased by 9% compared with that of the previous quarter (BHP Billiton Limited, 2006§; Rio Tinto plc, 2006§).

**Domestic Production Update.**—Cleveland-Cliffs Inc. reached an iron ore supply agreement with Mittal Steel USA Inc., resolving a disputed purchase agreement related to Mittal's Weirton Plant in West Virginia. Under the new agreement, a minimum tonnage of iron ore pellets was decided for aggregate purchase between three of Mittal's facilities in Indiana, Ohio, and West Virginia. Cliffs' filing indicated that the purchase agreement extends through 2010. Mittal purchased 10.9 Mt of pellets from Cliffs in 2005 (Cleveland-Cliffs Inc., 2006§; Skillings Mining Review, 2006§).

## Internet References Cited

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<sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

TABLE 1  
U.S. PRODUCTION AND SHIPMENTS OF IRON ORE<sup>1,2</sup>  
(Exclusive of ore containing 5% or more of manganese)

(Thousand metric tons)

Period	Production		Shipments	
	Monthly	Year to date	Monthly	Year to date
2005:				
March	4,240	12,500	2,610	7,110
April	4,220	16,800	4,940	12,100
May	5,250	22,000	5,210	17,300
June	4,480	26,500	4,840	22,100
July	5,160	31,600	5,110	27,200
August	4,840	36,500	5,020	32,200
September	4,460	40,900	5,150	37,400
October	4,480	45,400	5,190	42,600
November	4,740	50,200	4,330	46,900
December	4,380	54,500	4,880	51,800
2006:				
January	4,600	4,600	3,600	3,600
February	3,820	8,420	953	4,550
March	4,600	13,000	2,330	6,880

<sup>1</sup>Data are rounded to no more than three significant digits.

<sup>2</sup>Excludes byproduct ores.

TABLE 2  
U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF IRON ORE IN MARCH<sup>1,2</sup>

(Thousand metric tons)

State	Production		Shipments <sup>3</sup>		Stocks <sup>4</sup>	
	2006	2005	2006	2005	2006	2005
Michigan	1,080	802	612	761	2,820	1,900
Minnesota	3,510	3,440	1,720	1,850	9,050	6,510
Total	4,600	4,240	2,330	2,610	11,900	8,410

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

<sup>2</sup>Excludes byproduct ore.

<sup>3</sup>Includes rail and vessel.

<sup>4</sup>Includes mines, concentrators, pelletizing plants, and loading docks.

TABLE 3  
CANADA: SHIPMENTS OF IRON ORE<sup>1,2</sup>

(Thousand dry metric tons)

Period	Newfoundland and Labrador	Quebec	British Columbia	Total
2005:				
February	928	748	8	1,680
March	1,160	873	10	2,040
April	1,690	967	7	2,660
May	1,940	588	10	2,540
June	1,620	399	8	2,030
July	1,500	1,050	7	2,550
August	1,430	708	10	2,150
September	1,800	1,160	9	2,960
October	2,000	927	10	2,930
November	1,920	1,320	10	3,250
December	1,900	1,130	9	3,040
Year total	19,100	10,900	106	30,100
2006:				
January	1,450	705	10	2,160
February	1,230	730	10	1,970

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

<sup>2</sup>Includes 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 FURNACE<sup>1</sup>

(Thousand metric tons)

Period	Pig iron production, blast furnace		Raw steel production			
	Monthly	Year to date	Basic oxygen furnace <sup>2</sup>		Electric furnace	
			Monthly	Year to date	Monthly	Year to date
2005:						
February	3,260	6,680	3,710	7,590	3,930	8,320
March	3,660	10,300	4,040	11,600	4,150	12,500
April	3,080	13,400	3,500	15,100	4,440	16,900
May	3,080	16,500	3,430	18,600	4,320	21,200
June	2,690	19,200	3,000	21,600	4,110	25,300
July	2,630	21,800	2,920	24,500	4,210	29,500
August	2,890	24,700	3,180	27,700	4,370	33,900
September	2,840	27,500	3,330	31,000	4,440	38,400
October	2,940	30,500	3,470	34,500	4,810	43,200
November	3,000	33,500	3,170	37,700	4,660	47,800
December	2,840	36,300	3,380	41,000	4,420	52,300
2006:						
January	3,190	3,190	3,560	3,560	4,530	4,530
February	3,100	6,300	3,470	7,030	4,250	8,780

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

<sup>2</sup>Raw 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<sup>1,2</sup>

(Thousand metric tons)

Country of destination and type of product	2005				2006	
	3rd quarter	4th quarter	December	Total	January	February
Canada	3,010	2,560	494	11,200	648	126
China	196	86	(3)	282	--	--
Mexico	1	27	(3)	30	(3)	(3)
Slovakia	210	--	--	237	--	--
Trinidad and Tobago	--	--	--	(3)	--	--
United Kingdom	--	78	--	78	--	--
Other	1	3	1	8	1	(3)
<b>Total</b>	<b>3,420</b>	<b>2,760</b>	<b>495</b>	<b>11,800</b>	<b>649</b>	<b>126</b>
Pellets	3,360	2,670	491	11,600	645	124
Concentrates	3	80	1	89	1	(3)
Direct shipping ores	52	5	1	60	1	--
Other	2	6	2	11	2	2
<b>Total</b>	<b>3,420</b>	<b>2,760</b>	<b>495</b>	<b>11,800</b>	<b>649</b>	<b>126</b>

-- Zero.

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

<sup>2</sup>Includes agglomerates.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE<sup>1,2</sup>  
(Exclusive of ore containing 20% or more manganese)

Country of origin and type of product	2006					2005
	February		Year to date			January-February
	Thousand metric tons	Value <sup>3</sup> (thousand dollars)	Thousand metric tons	Value <sup>3</sup> (thousand dollars)	Value <sup>3</sup> (dollars per ton)	Thousand metric tons
Australia	--	--	8	135	18.00	--
Brazil	286	13,000	786	38,100	48.46	772
Canada	285	21,800	521	34,300	65.89	304
Chile	--	--	46	2,060	44.89	82
China	--	--	--	--	--	(4)
Greece	15	386	15	386	25.00	13
Mexico	1	27	2	47	25.02	1
Paraguay	--	--	--	--	--	4
Peru	--	--	38	1,210	31.44	(4)
Russia	--	--	--	--	--	99
Trinidad and Tobago	--	--	284	5,900	20.80	368
Venezuela	--	--	--	--	--	14
<b>Total</b>	<b>587</b>	<b>35,200</b>	<b>1,700</b>	<b>82,200</b>	<b>48.33</b>	<b>1,660</b>
Concentrates	71	2,760	327	12,900	39.55	82
Coarse ores	--	--	--	--	--	18
Fine ores	224	12,800	777	28,900	37.19	738
Pellets	291	19,600	594	40,300	67.82	818
Other agglomerates	1	27	2	47	25.02	1
<b>Total</b>	<b>587</b>	<b>35,200</b>	<b>1,700</b>	<b>82,200</b>	<b>48.33</b>	<b>1,660</b>

-- Zero.

<sup>1</sup>Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes agglomerates.

<sup>3</sup>Customs value. Excludes international freight and insurance charges.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN FEBRUARY 2006<sup>1,2</sup>  
(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	71	--	71	144	--	--	286
Canada	--	--	137	148	--	--	285
Greece	--	--	15	--	--	--	15
Mexico	--	--	--	--	1	--	1
Total	71	--	224	291	1	--	587

-- Zero.

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

<sup>2</sup>Includes agglomerates.

Source: U.S. Census Bureau.

TABLE 8  
U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY COUNTRY<sup>1</sup>

Country of origin	2006					2005
	February		Year to date			January-February
	Thousand metric tons	Value <sup>2</sup> (thousand dollars)	Thousand metric tons	Value <sup>2</sup> (thousand dollars)	Value <sup>2</sup> (dollars per ton)	Thousand metric tons
Brazil	144	7,490	348	21,300	61.24	489
Canada	148	12,100	246	18,900	77.15	230
Russia	--	--	--	--	--	99
Total	291	19,600	594	40,300	67.82	818

-- Zero.

<sup>1</sup>Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Customs 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<sup>1,2</sup>  
 (Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Customs district (code no.)	February	January-February	
	2006	2006	2005
Baltimore, MD (13)	362	715	586
Buffalo, NY (09)	--	--	2
Chicago, IL (39)	--	--	26
Detroit, MI (38)	--	25	--
Houston-Galveston, TX (53)	15	15	--
Los Angeles, CA (27)	--	--	(3)
Mobile, AL (19)	--	5	61
New Orleans, LA (20)	209	930	977
Nogales, AZ (26)	1	9	1
San Francisco, CA (28)	--	--	4
Total	587	1,700	1,660

-- Zero.

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

<sup>2</sup>Includes agglomerates.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10  
 U.S. IMPORTS FOR CONSUMPTION OF PELLETS,  
 BY CUSTOMS DISTRICT<sup>1</sup>

(Thousand metric tons)

Customs district (code no.)	February	January-February	
	2006	2006	2005
Baltimore, MD (13)	220	292	303
Chicago, IL (39)	--	--	26
Detroit, MI (38)	--	25	--
Mobile, AL (19)	--	--	61
New Orleans, LA (20)	72	277	428
Total	291	594	818

-- Zero.

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

Source: U.S. Census Bureau.