

# Mineral Industry Surveys

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### **IRON ORE IN AUGUST 2010**

U.S. mine production of iron ore in August 2010, on a daily average basis, was slightly less than that for the prior month and was more than 2.5 times that of August 2009, according to the U.S. Geological Survey (USGS). Average daily production, at 147,000 metric tons (t), was 2,500 t less than that of July 2010.

Average daily shipments in August 2010, at 163,000 t, were slightly less than those of the prior month but 58% more than those of August 2009. Mine stocks at the end of August 2010 were 494,000 t less than the stocks held on July 31, a 13% decrease. U.S. net exports of iron ore in June 2010 were 498,000 t, with exports 87% greater than imports.

**Prices.**—ThysssenKrupp Steel Europe responded to the new quarterly iron ore pricing mechanism by introducing a surcharge on annual steel contracts. Other European steelmakers were expected to follow suit in order to transfer their pricing risk to the customer. Upward movement of iron ore prices was expected to increase pricing risk in the short- to medium-term owing to cancellation or deferral of major iron ore mining projects caused by the economic downturn in late 2008 (Gleeson, 2010; Hodge, 2010).

Supplies of contract iron ore exported to small Chinese mills reportedly were cut by BHP Billiton Ltd. (Melbourne, Australia), Rio Tinto plc (London, United Kingdom), and Vale S.A. (Rio de Janeiro, Brazil). Larger Chinese mills were likely to adopt contract prices developed by Japanese and Korean mills, while smaller Chinese mills awaited a negotiated price (Metal Bulletin, 2010a).

World Exploration and Development.—Rio Tinto approved \$170 million in further funding for their Simandou iron ore project in Guinea. Funding was for mine, rail, and port infrastructure work and was additional to the \$650 million already spent on exploration, community development, and evaluation studies. In late July, Rio Tinto signed a binding agreement with Aluminum Corporation of China Ltd. (Beijing, China) to establish a joint venture to develop and operate the

project. The mine was expected to begin operation within 5 years and would produce 95 million metric tons of ore per year (Mt/yr) at full capacity (Rio Tinto plc, 2010).

Vale entered into an agreement with the Liberian Government to develop infrastructure for the transport and export of iron ore from their Simandou project in Liberia (note that this project is different from Rio Tinto's Simandou project in Guinea). Vale had recently acquired 51% of the shares of BSG Resources Ltd. (Guernsey, United Kingdom), the owner of the properties on which the project is based. Vale planned to establish a 50-Mt/yr iron ore mine at Simandou by 2014, with production planned to begin at between 10 Mt/yr and 15 Mt/yr in 2012. The estimated cost for the project was over \$5 billion (Metal Bulletin, 2010b).

Mergers and Acquisitions.—Xstrata Plc (Zug, Switzerland) made a \$383 million offer for all the shares in Sphere Minerals Ltd. (West Perth, Australia). Sphere Minerals has three iron ore properties in Mauritania—Guelb el Aouj (joint venture with the State-owned producer), Askaf, and Lebtheinia. Sphere Minerals had planned to develop the Askaf deposit in stages—2 Mt/yr beginning in 2012 and ramping up to 6 Mt/yr in 2016 (Tredway, 2010).

# **References Cited**

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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)

	Pro	Production		pments
Period	Monthly	Year to date	Monthly	Year to date
2009:				_
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	2,630	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

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

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

# (Thousand metric tons, unless otherwise noted)

	Produ	Production		Shipments <sup>3</sup>		Stocks <sup>4</sup>	
State	2010	2009	2010	2009	2010	2009	
Michigan	1,190	473	1,110	1,080	1,850	1,760	
Minnesota	3,360	1,300	3,930	2,110	1,390	4,230	
Total	4,550	1,780	5,050	3,190	3,240	5,990	

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

Note: An imbalance of production and shipments compared with stock changes indicates an inventory adjustment at the mines of 72,000 metric tons.

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

<sup>&</sup>lt;sup>2</sup>Excludes byproduct ore.

<sup>&</sup>lt;sup>3</sup>Includes rail and vessel.

<sup>&</sup>lt;sup>4</sup>Includes usable (marketable) material at mines, concentrators, pelletizing plants, and loading docks. Excludes stocks of crude ore at mine and concentrates at agglomerating complexes.

 ${\bf TABLE~3}$  CANADA: SHIPMENTS OF IRON ORE  $^{1,\,2}$ 

#### (Thousand dry metric tons)

	Newfoundland		British	
Period	and Labrador	Quebec	Columbia	Total
2009:				
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	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 <sup>r</sup>	1,710	10	3,690
July	1,630	1,350	12	2,990

rRevised.

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 stee	l production	
	blast	furnace	Basic ox	ygen furnace	Electric furnace	
Period	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
2009:						
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
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

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

Source: American Iron and Steel Institute.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes production from steel plant waste oxides.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

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

#### (Thousand metric tons)

Country of destination			2010	
and type of product	2009	1st quarter	2nd quarter	July
Belgium	194	1	105	(3)
Canada	3,060	918	2,110	968
China	99		139	60
Colombia	19	4	3	1
Finland			35	
France	179	25	211	
Germany	234		341	
Mexico	70	151	19	16
Serbia			44	
South Africa	52			
Spain			131	25
Other <sup>4</sup>	10	(3)	(3)	(3)
Total	3,910	1,100	3,140	1,070
Concentrates	123	6	67	64
Coarse ores	5		35	(3)
Fine ores	24	(3)	72	3
Pellets	3,760	1,090	2,960	1,000
Briquettes	3	(3)	(3)	(3)
Other agglomerates	(3)			(3)
Roasted pyrites	1	(3)	(3)	(3)
Total	3,910	1,100	3,140	1,070

<sup>--</sup> Zero.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

 $<sup>^4\</sup>mathrm{Includes}$  all countries receiving less than 5,000 metric tons in any month during the 2-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
	Jı	ıly		Year to date		January-July
	Thousand	Value <sup>3</sup>	Thousand	Value <sup>3</sup>	Value <sup>3</sup>	Thousand
Country of origin	metric	(thousand	metric	(thousand	(dollars	metric
and type of product	tons	dollars)	tons	dollars)	per ton)	tons
Brazil			117	12,200	104.50	114
Canada	345	40,600	2,850	276,000	96.63	1,280
Chile	36	5,020	82	8,290	101.12	99
Finland						3
France			(4)	4	4,480.00	
Mexico			48	3,980	83.00	26
Norway	1	13	3	56	18.67	2
Peru			7	315	45.00	34
Russia	70	12,300	606	69,900	115.35	
South Africa						29
Spain			4	142	35.50	
Sweden						4
Trinidad and Tobago	120	17,200	120	17,200	143.27	
Turkey			(4)	3	91.51	
Ukraine			95	13,700	143.78	
United Kingdom						8
Venezuela			80	5,350	66.91	
Total	572	75,100	4,020	407,000	101.27	1,600
Concentrates	36	5,040	211	20,700	98.29	152
Coarse ores			(4)	4	197.50	8
Fine ores	2	28	157	15,400	98.13	295
Pellets	534	70,100	3,650	371,000	101.65	1,140
Briquettes			4	142	35.50	
Other agglomerates						2
Roasted pyrites			(4)	4	4,480.00	3
Total	572	75,100	4,020	407,000	101.27	1,600

<sup>--</sup> Zero.

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup>Includes agglomerates.

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

<sup>&</sup>lt;sup>4</sup>Less than ½ unit.

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

(Thousand metric tons)

			Type of	f product			
					Briquettes		
		Coarse	Fine		and other	Roasted	
Country of origin	Concentrates	ores	ores	Pellets	agglomerates	pyrites	Total
Canada	(3)		1	344			345
Chile	36						36
Norway			1				1
Russia				70			70
Trinidad and Tobago				120			120
Total	36		2	534			572

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

 $\label{eq:table 8} \textbf{U.S. IMPORTS FOR CONSUMPTION OF PELLETS}, \ \mbox{BY COUNTRY}^1$ 

			2010			2009	
	Ju	July		Year to date			
Country	Thousand metric	Value <sup>2</sup> (thousand	Thousand metric	Value <sup>2</sup> (thousand	Value <sup>2</sup> (dollars	Thousand metric	
of origin	tons	dollars)	tons	dollars)	per ton)	tons	
Brazil			37	3,780	102.16	38	
Canada	344	40,500	2,710	261,000	96.28	1,090	
Peru						5	
Russia	70	12,300	606	69,900	115.35		
Trinidad and Tobago	120	17,200	120	17,200	143.18		
Ukraine			95	13,700	143.78		
Venezuela			80	5,350	66.91		
Total	534	70,100	3,650	371,000	101.65	1,140	

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup>Customs value. Excludes international freight and insurance charges.

# 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)

	July	Januar	y-July
Customs district (code no.)	2010	2010	2009
Baltimore, MD (13)	134	1,910	130
Charleston, SC (16)			4
Chicago, IL (39)		110	120
Cleveland, OH (41)	281	1,410	950
Detroit, MI (38)	(3)	(3)	
El Paso, TX (24)		3	
Houston-Galveston, TX (53)		37	38
Minneapolis, MN (35)		(3)	
Mobile, AL (19)	120	120	5
New Orleans, LA (20)	36	412	309
New York, NY (10)		(3)	
Nogales, AZ (26)			2
Norfolk, VA (14)		1	
Ogdensburg, NY (07)	1	5	11
Philadelphia, PA (11)			3
Port Arthur, TX (21)			8
Seattle, WA (30)			17
Total	572	4,020	1,600

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

TABLE 10 U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY CUSTOMS DISTRICT  $^1$ 

#### (Thousand metric tons)

	July	January-July		
Customs district (code no.)	2010	2010	2009	
Baltimore, MD (13)	134	1,910	130	
Chicago, IL (39)		30	15	
Cleveland, OH (41)	280	1,410	948	
Houston-Galveston, TX (53)		37	38	
Mobile, AL (19)	120	120	5	
New Orleans, LA (20)		136		
Total	534	3,650	1,140	
Zero.				

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

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

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