

# 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](mailto:jjorgenson@usgs.gov)

Amy C. Tolcin (Data)  
Telephone: (703) 648-7978  
Fax: (703) 648-7975  
E-mail: [atolcin@usgs.gov](mailto:atolcin@usgs.gov)

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

## IRON ORE IN AUGUST 2005

U.S. mine production of iron ore in August 2005, on a daily average basis, was 6% less than that of the prior month, according to the U.S. Geological Survey. Average daily production was 156,000 metric tons per day (t/d), 10,300 t/d less than the figure for July 2005.

Shipments in August 2005, on a daily basis, were 2% less than those of July 2005. Mine stocks at the end of August were 177,000 metric tons less than the corresponding stocks figure on July 31, about a 2% decrease.

U.S. imports of iron ore in July 2005 were more than double exports, with imports exceeding exports by more than 1 million metric tons.

**Price Update.**—Industry analysts are suggesting that benchmark iron ore prices will rise again in 2006. While one major iron ore company is pushing for a 40% increase in prices, steelmakers started to reduce the price of their products to recover sales volume. By early October, preliminary negotiations of iron ore prices had begun at a steel seminar held in Qingdao, China (Clarke, 2005; China Press, 2005<sup>§</sup>).

**Exploration and Development.**—Shougang Group (China) has agreed to increase its equity investment in the Extension Hill project (See Iron Ore in May 2005.) owned by Mount Gibson Iron Limited (Western Australia) to A\$174 million from A\$120 (Metal Bulletin, 2005b). Mount Gibson Iron has also begun a 2-year feasibility study for developing a Midrex facility to produce 2 million metric tons per year (Mt/yr) of direct reduced iron using local iron ore and coal (Metal Bulletin, 2005a).

PT Krakatau Steel (Indonesia) recently signed a memorandum of understanding with Chinese investors to develop a \$1 billion iron ore project in Kalimantan Province. The mine will produce 2.5 Mt/yr of iron ore, with plant construction beginning in early 2006 (Indonesia Investment Coordinating Board, 2005<sup>§</sup>).

**Domestic Production Update.**—Cleveland-Cliffs Inc announced agreement in principle to sell select assets (See Iron

Ore in July 2004.) in Hoyt Lakes, MN, acquired from the former LTV Steel Mining Company, to PolyMet Mining Corp. It was expected that the sale of the former LTV plant, under which Cliffs would receive \$3.4 million in cash and about 6.2 million common shares of Polymet stock, would be completed before the end of 2005 (Cleveland-Cliffs Inc, 2005<sup>§</sup>).

**Transportation.**—The Port of New Orleans, a major U.S. iron ore importing port, sustained considerable damage from hurricane Katrina. Six wharves were heavily damaged, six were moderately damaged, and eight were in working order when electricity and power became available (Burgert, 2005).

According to Drewry Shipping Consultants Ltd., late August iron ore shipping rates into the world's leading market, China, on a US\$/t basis, showed a 60% advantage from Australia and a 35% advantage from South Africa when compared with shipping rates from Brazil (Mining Journal, 2005).

### References Cited

- Burgert, Philip, 2005, New Orleans port eyes September 14 for restart after hurricane Katrina: Metal Bulletin, no. 8910, September 12, p. 24.  
Clarke, Jo, 2005, Analysts say benchmark iron ore prices to rise again in '06: Metal Bulletin, no. 8912, September 26, p. 37.  
Metal Bulletin, 2005a, Mount Gibson studies 2m tpy Midrex plant: Metal Bulletin, no. 8911, September 19, p. 25.  
Metal Bulletin, 2005b, Shougang Group increases stake in Mount Gibson iron ore project: Metal Bulletin, no. 8911, September 19, p. 20.  
Mining Journal, 2005, Shipping rates: Mining Journal, September 2, p. 7.

### Internet References Cited

- China Press, 2005 (October 25), Steel seminar starts 06 iron ore price talks, Yahoo! Asia News, accessed October 26, 2005, at URL <http://sg.biz.yahoo.com/051025/15/3vx95.html>.  
Cleveland-Cliffs Inc, 2005 (September 14), Cleveland-Cliffs announces agreement of asset sale to PolyMet, accessed October 5, 2005, via URL <http://www.cleveland-cliffs.com>.  
Indonesia Investment Coordinating Board, 2005 (September 9), 3 Chinese firms to build iron ore processing plant in Indonesia, accessed November 16, 2005, via URL <http://www.bkpm.go.id>.

<sup>§</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
2004:				
August	4,500	36,000	5,670	35,500
September	4,420	40,400	5,420	40,900
October	5,110	45,500	4,780	45,700
November	4,730	50,200	5,110	50,800
December	4,450	54,700	5,150	55,900
2005:				
January	4,420	4,420	3,350	3,350
February	3,870	8,290	1,150	4,500
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

<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 AUGUST<sup>1,2</sup>

(Thousand metric tons)

State	Production		Shipments <sup>3</sup>		Stocks <sup>4</sup>	
	2005	2004	2005	2004	2005	2004
Michigan	1,100	1,260	1,260	1,150	1,940	1,700
Minnesota	3,740	3,240	3,760	4,520	5,300	2,800
Total	4,840	4,500	5,020	5,670	7,240	4,500

<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, plants, and loading docks.

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

(Thousand dry metric tons)

Period	Newfoundland	Quebec	British Columbia	Total
2004:				
July	1,710	1,380	10	3,110
August	698	1,120	8	1,830
September	124	1,220	5	1,350
October	635	1,570	7	2,210
November	1,390	958	10	2,360
December	1,370	944	9	2,330
Year total	14,900	13,200	87	28,300
2005:				
January	1,210	1,070	8	2,280
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	1,460	399	8	1,860
July	1,440	1,050	7	2,490

<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
2004:						
July	3,370	23,700	3,800	26,700	5,010	30,400
August	3,490	27,200	3,830	30,500	4,620	35,100
September	3,400	30,600	3,020	33,500	5,370	40,400
October	3,570	34,200	3,030	36,600	5,630	46,100
November	2,140	36,300	5,520	42,100	2,580	48,600
December	4,270	40,600	3,810	45,900	4,390	53,000
2005:						
January	3,420	3,420	3,890	3,890	4,390	4,390
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

<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	2004	2005		
		1st quarter	2nd quarter	July
Canada	7,830	1,280	4,300	999
China	297	--	1	1
Mexico	4	1	1	(3)
Slovakia	187	--	26	52
Trinidad and Tobago	29	--	(3)	--
Other	53	(3)	4	(3)
Total	8,400	1,280	4,330	1,050
Pellets	8,100	1,280	4,320	1,050
Concentrates	25	2	4	1
Direct shipping ores	264	(3)	4	1
Other	6	2	1	1
Total	8,400	1,280	4,330	1,050

-- 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 1/2 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	2005					2004
	July		Year to date			January-July
	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	--	--	--	--	--	(4)
Bahamas, The	71	2,460	71	2,460	34.40	--
Brazil	575	26,800	2,690	111,000	41.43	2,930
Canada	1,410	54,100	3,750	141,000	37.71	3,460
Chile	--	--	221	8,470	38.34	107
China	--	--	(4)	2	26.13	--
Finland	--	--	6	266	43.09	8
Greece	--	--	13	243	18.80	--
Mexico	25	1,220	32	1,390	43.02	26
Norway	3	96	3	96	36.60	--
Paraguay	--	--	4	68	16.80	--
Peru	1	34	19	624	32.55	32
Russia	--	--	99	8,550	86.00 <sup>5</sup>	--
South Africa	--	--	--	--	--	104
Spain	--	--	1	25	18.00	(4)
Sweden	--	--	--	--	--	60
Trinidad and Tobago	--	--	375	11,000	29.45	--
Venezuela	60	3,340	148	7,890	53.43	56
Total	2,150	88,100	7,430	294,000	39.55	6,790
Concentrates	193	5,650	531	16,600	31.32	485
Coarse ores	--	--	21	710	34.21	4
Fine ores	1,050	27,000	2,950	81,200	27.52	1,640
Pellets	899	55,400	3,860	193,000	49.90	4,560
Briquettes	--	--	--	--	--	56
Other agglomerates	2	52	65	2,610	39.93	30
Roasted pyrites	1	34	4	156	38.97	4
Total	2,150	88,100	7,430	294,000	39.55	6,790

-- 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 1/2 unit.

<sup>5</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 7  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN JULY 2005<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	
Bahamas, The	--	--	71	--	--	--	71
Brazil	70	--	291	213	--	--	575
Canada	123	--	605	686	--	--	1,410
Mexico	--	--	23	--	2	--	25
Norway	--	--	3	--	--	--	3
Peru	--	--	--	--	--	1	1
Venezuela	--	--	60	--	--	--	60
Total	193	--	1,050	899	2	1	2,150

-- 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	2005					2004
	July		Year to date			January-July
	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	213	14,900	1,510	79,300	52.46	1,680
Canada	686	40,500	2,250	105,000	46.59	2,880
Russia	--	--	99	8,550	86.00 <sup>3</sup>	--
Total	899	55,400	3,860	193,000	49.90	4,560

-- 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.

<sup>3</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

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.)	July	January-July	
	2005	2005	2004
Baltimore, MD (13)	709	2,000	2,290
Buffalo, NY (09)	--	6	3
Charleston, SC (16)	1	1	(3)
Chicago, IL (39)	134	563	481
Cleveland, OH (41)	350	1,230	1,470
Detroit, MI (38)	48	128	99
Great Falls, MT (33)	--	--	(3)
Houston-Galveston, TX (53)	--	36	28
Los Angeles, CA (27)	--	(3)	--
Mobile, AL (19)	3	63	80
New Orleans, LA (20)	902	3,380	2,330
Nogales, AZ (26)	2	9	(3)
Ogdensburg, NY (07)	(3)	(3)	--
Philadelphia, PA (11)	--	3	4
San Francisco, CA (28)	--	4	--
San Juan, PR (49)	--	6	--
Total	2,150	7,430	6,790

-- 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 1/2 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.)	July	January-July	
	2005	2005	2004
Baltimore, MD (13)	287	942	922
Chicago, IL (39)	--	53	142
Cleveland, OH (41)	350	1,230	1,430
Detroit, MI (38)	48	128	99
Houston-Galveston, TX (53)	--	36	28
Mobile, AL (19)	--	61	--
New Orleans, LA (20)	213	1,410	1,940
Total	899	3,860	4,560

-- 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.