

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

Ram C. Khatri (Data)
Telephone: (703) 648-7996
Fax: (703) 648-7792
E-mail: rkhatri@usgs.gov

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

IRON ORE IN SEPTEMBER 2008

U.S. mine production of iron ore in September 2008, on a daily average basis, was 8% less than that for the prior month, according to the U.S. Geological Survey (USGS). Average daily production, at 144,000 metric tons (t), was 12,300 t less than that of August 2008.

Average daily shipments in September 2008, at 183,000 t, were 13,400 t less than those of August. Mine stocks at the end of September 2008 were 1.19 million metric tons (Mt) less than the revised stocks held on August 31, a 16% decrease. U.S. net exports of iron ore in August 2008 were 225,000 t, with exports 23% greater than imports.

Prices.—Companhia Vale do Rio Doce (Vale), headquartered in Rio de Janeiro, Brazil, attempted to renegotiate its iron ore contracts with Chinese steelmakers. This may cause 2009 prices to be negotiated while final 2008 prices are still being disputed. Vale was making an effort to receive a premium for higher quality ore after having lost the transportation advantage given to the Australian miners (Metal Bulletin, 2008).

In the midst of these discussions, spot iron ore prices continued to plummet from a high of about \$200 per metric ton in late 2007 to around \$110. The spot iron ore price was not expected to increase, with Chinese steelmakers indicating that cutbacks could continue through the end of the year (Li, 2008).

North American Expansion.—Rio Tinto plc (Australia), still involved in a takeover bid by BHP Billiton Ltd. (Australia),

approved additional capital expenditures at its 58.7%-owned Canadian subsidiary, the Iron Ore Co. of Canada (IOC). A total capital expenditure of \$193 million was planned to expand the magnetite plant to an annual capacity of 22.8 Mt and \$75 million was planned for completion of a feasibility study for the expansion of IOC to an annual capacity of 26 Mt of iron ore concentrates. This last expenditure included funds for the purchase of some items requiring long-lead times (Skillings Mining Review, 2008).

Transportation.—Uncertainties about Chinese iron ore demand through the end of the year caused freight rates to drop significantly. Since its peak in June, the Baltic Dry Index had dropped by 70%. The reported reduction in iron ore shipments from Australia, Brazil, and India were an indication of low demand for iron ore in the Chinese steel markets, which affected transport rates (Marais, 2008).

References Cited

- Li, Hongmei, 2008, China iron ore import market 'dead': Metal Bulletin, no. 9066, September 29, p. 16.
- Marais, Jana, 2008, Freight rates tank over China and Vale: London, United Kingdom, Metal Bulletin, no. 9067, October 6, p. 23.
- Metal Bulletin, 2008, The 2008 iron ore talks—Part II: London, United Kingdom, Metal Bulletin, no. 9063, September 8, p. 5.
- Skillings Mining Review, 2008, Rio approves financing for IOC expansion and studies: Skillings Mining Review, v. 97, no. 10, October, p. 17.

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
2007:				
September	4,350	38,600	5,100	36,600
October	4,820	43,400	5,130	41,700
November	4,280	47,700	4,830	46,600
December	4,320	52,000	4,960	51,500
2008:				
January	4,170	4,170	3,730	3,730
February	3,990	8,160	1,090	4,830
March	4,780	12,900	2,190	7,020
April	4,130	17,100	5,220	12,200
May	4,860	21,900	6,230	18,500
June	4,870	26,800	5,450	23,900
July	4,960	31,800	6,160	30,100
August	4,840	36,600	6,100	36,200
September	4,310	40,900	5,500	41,700

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 SEPTEMBER^{1,2}

(Thousand metric tons)

State	Production		Shipments ³		Stocks ⁴	
	2008	2007	2008	2007	2008	2007
Michigan	744	995	1,380	1,010	2,560	3,300
Minnesota	3,570	3,350	4,110	4,090	3,550	4,650
Total	4,310	4,350	5,500	5,100	6,110	7,950

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: Minnesota stocks at end of August were revised to 4,090,000 metric tons and Michigan stocks at end of August were revised to 3,200,000 metric tons.

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

(Thousand dry metric tons)

Period	Newfoundland and Labrador	Quebec	British Columbia	Total
2007:				
August	2,150	1,150	6	3,310
September	1,410	1,400	6	2,820
October	1,860	1,600	6	3,460
November	2,110	1,470	7	3,590
December	1,180	1,450	5	2,640
2008:				
January	1,210	816	6	2,030
February	1,120	833	4	1,950
March	1,140	855	4	2,000
April	1,680	984	4	2,670
May	2,670	1,330	7	4,010
June	1,580	1,380	8	2,970
July	1,820	1,370	8	3,200
August	2,270	1,200	7	3,470

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

²Includes 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
FURNACE¹

(Thousand metric tons)

Period	Pig iron production, blast furnace		Raw steel production			
	Monthly	Year to date	Basic oxygen furnace ²		Electric furnace	
	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
2007:						
August	3,010	23,800	3,370	26,600	4,970	38,400
September	3,010	26,900	3,370	30,000	4,600	43,000
October	3,200	30,100	3,540	33,500	4,940	48,000
November	2,940	33,000	3,280	36,800	4,920	52,900
December	3,160	36,200	3,550	40,400	4,900	57,800
2008:						
January	2,900	2,900	3,550	3,550	5,100	5,100
February	3,110	6,010	3,470	7,020	4,750	9,850
March	3,280	9,290	3,700	10,700	4,900	14,800
April	3,240	12,500	3,560	14,300	4,820	19,600
May	3,210	15,700	3,650	17,900	5,080	24,700
June	3,020	18,800	3,450	21,400	4,930	29,600
July	3,090	21,800	3,460	24,800	5,060	34,600
August	3,290	25,100	3,680	28,500	4,990	39,600

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

²Raw 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^{1,2}

(Thousand metric tons)

Country of destination and type of product	2007	2008			
		1st quarter	2nd quarter	July	August
Algeria	570	--	28	52	--
Belgium	--	57	161	--	--
Canada	7,340	1,460	2,290	1,200	1,080
China	1,130	23	7	--	2
Colombia	7	1	3	1	(3)
Czech Republic	--	--	83	--	--
France	--	--	--	--	54
Germany	--	--	79	--	(3)
Japan	7	--	--	--	--
Malaysia	--	24	1	--	--
Mexico	148	66	101	24	35
Peru	5	--	--	--	--
Poland	--	--	--	50	53
Romania	87	--	76	52	--
Slovakia	--	--	50	--	--
Spain	--	--	77	--	--
Sweden	2	1	--	2	--
Other	8	6	9	1	1
Total	9,310	1,630	2,960	1,380	1,220
Pellets	9,170	1,570	2,910	1,350	1,200
Concentrates	51	21	39	13	8
Briquettes	1	16	--	--	--
Sinter	22	(3)	--	--	(3)
Direct shipping ores - coarse	6	3	14	1	4
Direct shipping ores - fines	51	28	3	10	9
Roasted pyrites	11	--	--	(3)	--
Total	9,310	1,630	2,960	1,380	1,220

-- 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 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	2008					2007
	August		Year to date			January-August Thousand metric tons
	Thousand metric tons	Value ³ (thousand dollars)	Thousand metric tons	Value ³ (thousand dollars)	Value ³ (dollars per ton)	
Brazil	174	13,900	1,740	140,000	80.27	1,810
Canada	704	89,900	3,920	409,000	104.36	3,310
Chile	44	4,670	173	12,400	71.55	232
China	7	125	14	266	19.07	--
Finland	--	--	6	233	41.84	5
Greenland	--	--	--	--	--	(4)
Italy	(4)	16	(4)	16	47.98	--
Japan	--	--	(4)	7	793.89	--
Mexico	--	--	25	1,650	65.94	30
Netherlands	--	--	1	22	18.00	--
Norway	--	--	--	--	--	8
Peru	1	38	39	2,120	54.60	90
Russia	66	8,010	66	8,010	121.94	--
Spain	(4)	30	(4)	30	127.39	--
Sweden	--	--	46	1,950	42.27	94
Switzerland	--	--	70	5,410	77.72	--
United Kingdom	--	--	--	--	--	(4)
Venezuela	--	--	48	2,990	62.62	--
Total	997	117,000	6,150	584,000	94.96	5,580
Concentrates	250	21,700	825	55,400	67.25	798
Coarse ores	--	--	37	1,800	48.08	119
Fine ores	128	9,730	1,180	84,100	71.42	869
Pellets	618	85,100	4,100	442,000	107.88	3,780
Briquettes	(4)	30	(4)	30	127.39	--
Other agglomerates	--	--	--	--	--	11
Roasted pyrites	1	55	11	511	45.31	7
Total	997	117,000	6,150	584,000	94.96	5,580

-- 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 AUGUST 2008^{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	81	--	93	--	--	--	174
Canada	58	--	28	618	--	--	704
Chile	44	--	--	--	--	--	44
China	--	--	7	--	--	--	7
Italy	--	--	--	--	--	(3)	(3)
Peru	--	--	--	--	--	1	1
Russia	66	--	--	--	--	--	66
Spain	--	--	--	--	(3)	--	(3)
Total	250	--	128	618	(3)	1	997

-- 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	2008					2007
	August		Year to date			January-June
	Thousand metric tons	Value ² (thousand dollars)	Thousand metric tons	Value ² (thousand dollars)	Value ² (dollars per ton)	Thousand metric tons
Brazil	--	--	529	54,500	103.15	1,020
Canada	618	85,100	3,500	384,000	109.54	2,700
Mexico	--	--	--	--	--	19
Peru	--	--	18	736	42.03	9
Sweden	--	--	--	--	--	24
Venezuela	--	--	48	2,990	62.35	--
Total	618	85,100	4,100	442,000	107.88	3,780

-- 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.)	August	January-August	
	2008	2008	2007
Baltimore, MD (13)	374	2,610	1,630
Buffalo, NY (09)	(3)	(3)	--
Charleston, SC (16)	6	20	2
Chicago, IL (39)	192	651	730
Cleveland, OH (41)	375	1,940	1,790
Detroit, MI (38)	--	--	(3)
Houston-Galveston, TX (53)	--	30	38
Mobile, AL (19)	--	50	33
New Orleans, LA (20)	44	835	1,300
New York City, NY (10)	--	1	--
Nogales, AZ (26)	--	--	11
Norfolk, VA (14)	2	4	--
Ogdensburg, NY (07)	2	6	--
Philadelphia, PA (11)	--	6	5
Port Arthur, TX (21)	--	--	24
Providence, RI (05)	--	--	8
Savannah, GA (17)	--	--	(3)
Tampa, FL (18)	--	--	13
Total	997	6,150	5,580

-- 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.)	August	January-August	
	2008	2008	2007
Baltimore, MD (13)	243	1,420	751
Chicago, IL (39)	--	174	237
Cleveland, OH (41)	375	1,910	1,770
Detroit, MI (38)	--	--	(2)
Houston-Galveston, TX (53)	--	30	38
Mobile, AL (19)	--	18	--
New Orleans, LA (20)	--	547	964
Port Arthur, TX (21)	--	--	24
Total	618	4,100	3,780

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.