

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

Michelle B. Blackwell (Data) Telephone: (703) 648-7943 Fax: (703) 648-7975

E-mail: mblackwell@usgs.gov

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

IRON ORE IN MAY 2009

U.S. mine production of iron ore in May 2009, on a daily average basis, was 52% less than that for the prior month, and was 83% less than that of May 2008, according to the U.S. Geological Survey (USGS). Average daily production, at 27,400 metric tons (t), was 29,200 t less than that of April 2009.

Average daily shipments in May 2009, at 79,700 t, were 24% greater than those of the prior month but 121,000 t less than those of May 2008. Mine stocks at the end of May 2009 were 1.6 million metric tons (Mt) less than the stocks held on April 30, a 13% decrease. U.S. net imports of iron ore in April 2009 were 210,000 t, with imports more than 2.1 times exports.

Price.—At the end of May, Rio Tinto plc (London, United Kingdom) settled the 2009–10 annual iron ore contract with Japanese steel firms—JFE Holdings Inc., Kobe Steel Ltd., Nippon Steel Corp., and Sumitomo Metal Industries Ltd.—and Korea's POSCO. The agreement, the first price reduction in 7 years was for a 33% lower price for fines and a 44% lower price for lump ore. Chinese steelmakers continued to negotiate deeper discounts on both lump and fine ores. Vale S.A. (Rio de Janeiro, Brazil), the world's leading producer of iron ore, which had officially changed its corporate name from Companhia Vale do Rio Doce, continued discussions with steel firms (Thompson, 2009; Vale S.A., 2009).

Despite the impasse in iron ore price negotiations, Chinese imports of iron ore through May 2009, at 242 Mt, have increased 26% compared with those of the same period in 2008. The import value of this ore was almost 28% lower when comparing these two periods (The TEX Report, 2009b).

Domestic Production.—Cliffs Natural Resources Inc. (Cleveland, OH) announced that the shutdown of the Northshore Mining Co. facilities initiated in April would be extended through July (Skillings Mining Review, 2009).

Domestic Production Update.—Cliffs indicated that the owners of the Hibbing Taconite Mine (ArcelorMittal, 62.3%; Cliffs, 23%; and U.S. Steel Canada Inc., 14.7%) had agreed to lengthen the plant shutdown at Hibbing Taconite. This extended the shutdown—which started with two of three pellet lines shut

down in March and then the plant shut down for 15 weeks

beginning in May—through the first quarter of 2010 (Cliffs Natural Resources Inc., 2009).

World Exploration and Development.—Hunan Valin Iron & Steel Group acquired a slightly greater than 17% stake in Fortescue Metals Group Ltd. and was planning to assist Fortescue in obtaining additional debt financing. It was estimated that an additional \$3 to \$4 billion would be required to raise production capacity to 90 million metric tons per year (Mt/yr) from 50 Mt/yr at Fortescue's iron ore mines.

In an effort to acquire additional equity interest in Australian iron ore resources, Chinese investors sought and received approval from Australia's Federal Investment Review Board for Anshan Iron & Steel Group to increase its equity ownership of Gindalbie Metals Ltd. to 36.28% from 12.6%. Gindalbie was developing the Karara iron ore project in Western Australia, with plans for port development at Oakajee and a joint-venture pellet plant in China (The TEX Report, 2009a; Wall Street Journal, The, 2009).

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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
2008:				
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
October	4,540	45,400	4,860	46,500
November	3,940	49,400	3,910	50,400
December	3,570	53,000	2,820	53,300
2009:				
January	2,990	2,990	874	874
February	2,660	5,650	440	1,310
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

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

 $\label{eq:table 2} \textbf{TABLE 2} \\ \textbf{U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF IRON ORE IN MAY}^{1,2}$

(Thousand metric tons)

	Produ	Production		Shipments ³		Stocks ⁴	
State	2009	2008	2009	2008	2009	2008	
Michigan	650	1,280	962	1,310	3,410	3,110	
Minnesota	200	3,590	1,510	4,920	7,230	6,850	
Total	850	4,860	2,470	6,230	10,600	9,950	

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.

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

(Thousand dry metric tons)

Newfoundland		British	
and Labrador	Quebec	Columbia	Total
1,680	984	4	2,670
2,670	1,330	7	4,010
1,580	1,380	9	2,970
1,820	1,370	8	3,200
2,270	1,200	9	3,470
1,310	1,050	9	2,370
1,760	984	8	2,750
1,370	687	6	2,060
749	618	3	1,370
18,700	12,100	76	30,800
1,030	600	3	1,640
793	823	2	1,620
662	1,450	1	2,120
1,630	871	8	2,510
	and Labrador 1,680 2,670 1,580 1,820 2,270 1,310 1,760 1,370 749 18,700 1,030 793 662	and Labrador Quebec 1,680 984 2,670 1,330 1,580 1,380 1,580 1,370 2,270 1,200 1,310 1,050 1,760 984 1,370 687 749 618 18,700 12,100 1,030 600 793 823 662 1,450	and Labrador Quebec Columbia 1,680 984 4 2,670 1,330 7 1,580 1,380 9 1,820 1,370 8 2,270 1,200 9 1,310 1,050 9 1,760 984 8 1,370 687 6 749 618 3 18,700 12,100 76 1,030 600 3 793 823 2 662 1,450 1

¹Data 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,				
	blast	furnace	Basic oxy	ygen furnace ²	Electr	ic furnace
Period	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date
2008:						
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
September	2,900	28,000	3,290	31,800	4,560	44,200
October	2,770	30,800	2,330	34,100	3,990	48,200
November	2,040	32,800	1,980	36,100	2,660	50,800
December	1,690	34,500	1,390	37,500	2,220	53,100
2009:						
January	1,450	1,450	1,320	1,320	2,630	2,630
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

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

²Includes production from steel plant waste oxides.

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.

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

(Thousand metric tons)

Country of destination	2008	}		2	009	
and type of product	4th quarter	Total	February	March	1st quarter	April
Algeria		80				
Belgium	(3)	218			(3)	19
Canada	2,120	9,030	106	113	425	85
China	54	91	(3)	2	4	2
Colombia	5	11	2	5	8	6
Czech Republic		83				
France	156	210			(3)	74
Germany	- 76	156				
Malaysia		25			1	
Mexico	68	328	11	(3)	12	(3)
Peru	(3)	103				
Romania		128				
Serbia		51				
Slovakia	455	505				
Spain		102				
Sweden	1	4				
Other		14	(3)		1	3
Total	2,940	11,100	119	120	450	188
Concentrates	59	142	2	5	9	6
Coarse ores	25	46	(3)		(3)	
Fine ores	21	136	6	2	10	(3)
Pellets	2,840	10,800	111	113	431	179
Briquettes	(3)	(3)				3
Other agglomerates	(3)	20				
Roasted pyrites	(3)	(3)				
Total	2,940	11,100	119	120	450	188

⁻⁻ Zero.

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

²Includes agglomerates.

³Less than ½ unit.

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

			2009			2008
	A	oril		Year to date		January-April
Country of origin	Thousand metric	Value ³ (thousand	Thousand metric	Value ³ (thousand	Value ³ (dollars	Thousand metric
and type of product	tons	dollars)	tons	dollars)	per ton)	tons
Brazil	38	3,510	38	3,510	93.23	688
Canada	359	44,000	507	64,100	126.26	1,180
Chile	337	,000	47	5,020	105.88	129
China				3,020	103.00	(4)
Finland			3	180	64.49	3
Mexico	2	60	26	2,370	91.43	25
Netherlands				2,570	J1.13	1
Norway			1	22	18.00	
Peru			5	283	57.11	19
Sweden			4	66	18.00	2
United Kingdom			8	1,630	197.51	
Venezuela						25
Total	398	47,600	639	77,100	120.68	2,070
Concentrates			72	7,320	102.05	361
Coarse ores			8	1,630	197.51	
Fine ores	158	18,200	166	18,300	110.61	402
Pellets	238	29,400	389	49,600	127.49	1,300
Briquettes						
Other agglomerates	2	60	2	60	40.00	
Roasted pyrites			3	180	64.49	4
Total	398	47,600	639	77,100	120.68	2,070

⁻⁻ Zero.

Source: U.S. Census Bureau.

TABLE 7 U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN APRIL $2009^{1,\,2}$ (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			(3)	38			38
Canada			158	201			359
Mexico					2		2
Total			158	238	2		398

⁻⁻ 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.

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 $^{\rm I}$

			2009			2008
	Al	April Year to date			January-April	
	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	38	3,510	38	3,510	93.23	215
Canada	201	25,800	347	45,800	132.21	1,040
Peru			5	283	57.11	18
Venezuela						25
Total	238	29,400	389	49,600	127.49	1,300

⁻⁻ Zero.

Source: U.S. Census Bureau.

TABLE 9 $\mbox{U.s. IMPORTS FOR CONSUMPTION OF IRON ORE,} \\ \mbox{BY CUSTOMS DISTRICT}^{1,2}$

(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

	April	January-A	April
Customs district (code no.)	2009	2009	2008
Baltimore, MD (13)		130	1,080
Charleston, SC (16)		4	2
Chicago, IL (39)	(3)	15	148
Cleveland, OH (41)	201	202	345
Houston-Galveston, TX (53)	38	38	
Mobile, AL (19)		5	18
New Orleans, LA (20)	157	228	467
New York, NY (10)			1
Nogales, AZ (26)	2	2	
Ogdensburg, NY (07)	1	4	(3)
Philadelphia, PA (11)		3	3
Port Arthur, TX (21)		8	
Total	398	639	2,070

⁻⁻ 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.

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

²Includes agglomerates.

³Less than ½ unit.

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

(Thousand metric tons)

	April	January-April		
Customs district (code no.)	2009	2009	2008	
Baltimore, MD (13)		130	628	
Chicago, IL (39)		15	69	
Cleveland, OH (41)	201	201	344	
Houston - Galveston, TX (53)	38	38		
Mobile, AL (19)		5	18	
New Orleans, LA (20)			240	
Total	238	389	1,300	

⁻⁻ Zero.

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