

## U.S. Bureau of Mines

## MINERAL INDUSTRY SURVEYS

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Iron Ore, Monthly

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## IRON ORE IN AUGUST 1989

U.S. mine production of iron ore in August was 9% less than that of July, according to the Bureau of Mines, U.S. Department of the Interior. Mine shipments also decreased slightly. Shipments from U.S. loading docks on the upper Great Lakes totaled 6.0 million metric tons and were down 4% from the previous month. Monthly consumption of ore and agglomerates dropped from 6.0 million tons to 5.7 million tons as the result of a 9% decrease in pig iron production. On August 31, 48 blast furnaces were in operation, the same number as on July 31.

The Canadian iron ore industry is in the midst of a major restructuring. The Quebec Cartier Mining Co. is now owned by Dofasco, Inc. (50% equity), Mitsui & Co. Ltd. of Japan (25%), and Companhia Auxiliar de Empresas de Mineracao (CAEMI) of Brazil (25%). Dofasco, the largest integrated steel producer in Canada, will buy 2 million tons of fluxed pellets annually from QCM, under a long term contract beginning in March 1990. The pellets will go to Dofasco's blast furnaces at Hamilton, Ontario, and replace more expensive ones from the steel producer's own Adams and Sherman Mines. These two smaller mines, located near Kirkland Lake in northern Ontario, will be closed when the changeover takes place. (See January 1989 MIS.)

On March 31, Dofasco purchased 25% of the outstanding shares of QCM from its previous owner, USX Corp. USX then signed a letter of intent to sell the remaining 75% of its equity in the mining operation to Elder Resources North America. However, Dofasco decided to exercise its right of first refusal and purchased the other 75% of QCM from USX on June 30.

Mitsui and CAEMI were invited to become partners to help increase sales of QCM ore outside North America. The two accepted Dofasco's offer and bought 50% of QCM on July 31. Both companies are prominent in the international iron ore industry. Mitsui is a major Japanese trading company with direct or indirect ownership interests in iron mines in Australia and Brazil. Mitsui was the largest importer of iron ore into Japan in 1988 and was responsible for about 23% of the tonnage delivered to the Japanese steel industry. CAEMI is a Brazilian industrial group whose main interests are in mining and metallurgy. The Brazilian company was set up in 1950 to run the Serra do Navio manganese mine of Industria e Comercio de Minerios S.A. (ICOMI) in the Federal Territory of Amapa, but has since diversified into iron mining and the transportation of bulk materials. CAEMI owns 70% of Mineracoes Brasileiras Reunidas S.A. (MBR), the second largest iron ore producer in Brazil, and has an international network of sales agents that market both iron and manganese ores.

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In mid-August, Cyprus Minerals Co. of Denver completed its purchase of the former Reserve Mining Co. taconite properties at Babbitt and Silver Bay in northern Minnesota. The operation has been renamed Cyprus Northshore Mining Corp. Cyprus won the properties with a \$52-million bid that was approved by the U.S. Bankruptcy Court for the Southern district of New York in June. (See April 1989 MIS.) Production of taconite pellets is scheduled to begin in the first quarter of 1990 at a rate of 1.5 to 2 million tons per year. It is anticipated that sales will climb to 4 million tons by 1993. Extensive renovations are now underway at the mine and pelletizing plant. The reopened complex is expected to employ 350 people by spring.

Changes to the Mineral Industry Surveys for Iron Ore: Congress enacted the Omnibus Trade and Competitiveness Act (Public Law 100-418) on August 23, 1988, to enhance the competitiveness of the Nation's industries and to improve the management of U.S. trade strategy. This comprehensive act, included among other items, provisions modifying U.S. customs laws and tariff schedules. Subtitle B of the new law requires that all tariff schedules after January 1, 1989, conform to the nomenclature of the internationally established Harmonized System. All of the iron ore trade statistics collected by the Bureau of the Census are now being compiled and published in metric units. To avoid confusion, the Bureau of Mines has decided to also present all of its iron ore production and consumption statistics in metric units. To convert from metric tons to long tons, multiply the published number by 0.984207.

The August tables dealing with foreign trade and domestic consumption will appear in a subsequent issue.

## **U.S. IRON ORE**

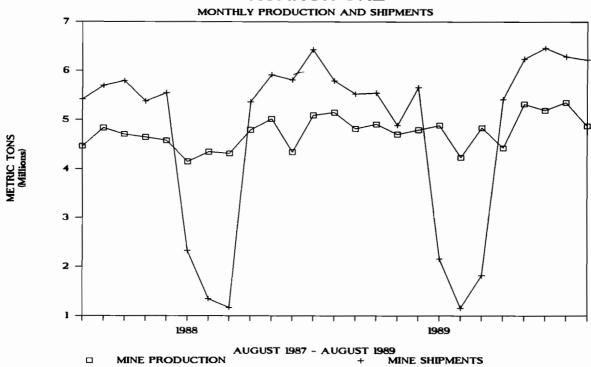


Table 1. - U.S. production and shipments of iron ore, by districts  $\underline{1}/$  (Exclusive of ore containing 5% or more manganese) (Thousand metric tons)

	Lake		Tota	1 2/
Period	Superior	Other U.S.	1989	1988
Production:				
1988 p/ 1989:	55,651	793		56,444
1st Quarter	13,750	210	13,960	12,809
2nd Quarter	14,664	282	14,946	14,156
July	5,265	92	5,357	5,095
August	4,781	95	4,876	5,153
Shipments:				
1988 <u>p</u> / 1989:	54,986	815		55,801
1st Quarter	4,957	174	5,131	4,846
2nd Quarter	17,757	364	18,121	17,100
July	6,184	104	6,289	6,431
August	6,118	101	6,220	5,796

p/ Preliminary.

<sup>1/</sup> Excludes byproduct ore, except where noted. 2/ Data may not add to totals shown because of independent rounding.

Table 2. - U.S. mine production, shipments, and stocks of iron ore  $\underline{1}$ / (Exclusive of ore containing 5% or more manganese) (Thousand metric tons)

District	Produc Augu		Shipme Augu		Mine S Augus	
	1989	1988	1989	1988	1989	1988
Lake Superior:				_		
Michigan	1,021	1,335	1,403	1,229	1,942	1,430
Minnesota	3,760	3,767	4,715	4,507	4,604	4,061
Other U.S	95	51	101	60	118	192

Table 3. - Canada: Shipments of iron ore (Thousand dry metric tons)

Period	Newfound- land	Quebec	Ontario	British Columbia		al 1/ 1988
1988 р/	20,395	16,446	2,941	59		39,840
1989:						
1st Quarter	2,679	2,448	870	11	6,008	7,052
2nd Quarter	6,345	3,936	929	20	11,230	10,550
July	•	2,027	291	4	4,515	3,904
August	1,903	1,054	219	3	3,180	3,496

p/ Preliminary.

Source: Energy, Mines, and Resources Canada.

<sup>1/</sup> Excludes byproduct ore.
2/ Data may not add to totals shown because of independent rounding.

 $<sup>\</sup>underline{1}$ / Data may not add to totals shown because of independent rounding.

Table 4. - U.S. consumption and stocks of iron ore and agglomerates at consuming plants and production of pig iron (Thousand metric tons)

State or Borion		Consumption	S	Stocks	
State or Region	 July	Year to	date 1/	Ju	ly 31
	1989	1989	1988	1989	1988
Alabama, Kentucky, Tennessee,					
Texas, and Missouri	320	3,387	2,264	1,223	931
California, Colorado, and Utah-	209	1,282	NA	23	NA
Delaware, Maryland, and					
West Virginia	702	5,054	5,077	1,849	1,659
Illinois and Indiana	2,360	16,779	16,742	4,727	4,832
Michigan and Minnesota	619	4,227	3,505	1,681	1,753
New York, Ohio, Pennsylvania,					
New Jersey, and Rhode Island-	1,836	13,772	13,685	2,736	3,286
Total <u>2</u> /	6,046	44,500	41,274	12,240	12,462
Stocks at U.S. receiving/transfer	docks			2,040	<u>r</u> / 2,044

	Consu	Consumption by process			Pig iron produced		
Consuming Sector	July 1989	<u>Year to</u> 1989	0 date 1/ 1988	July 1989	<u>Year</u> 1989	to date 1/ 1988	
Blast furnaces	5,480	39,111	36,820	4,177	30,728	29,808	
Steel furnaces	19	192	157				
Agglomerating plants $3/$	461	5,109	4,276				
Miscellaneous 4/	85	88	21				
Total <u>2</u> /	6,046	44,500	41,274	4,177	30,728	29,808	

NA Not available.

Source: American Iron Ore Association (consumption of iron ore).

American Iron and Steel Institute (production of pig iron).

 $<sup>\</sup>underline{r}$ / Revised.  $\underline{1}$ / May include revisions for previous month.

<sup>2/</sup> Data may not add to totals shown because of independent rounding.

<sup>3/</sup> Iron ore and iron ore concentrates consumed in agglomerating plants not located at the mine site.

<sup>4/</sup> Sold to nonreporting companies or used for purposes not listed.

Table 5. - U.S. exports of iron ore and agglomerates, by country of destination (Thousand metric tons)

Period	Canada	Mexico	Other	<u>Total</u> 1989	1988
1988 1989:	5,277	1	7		5,285
1st Quarter	346	( <u>2</u> /)	2	348	340
2nd Quarter	1,990	(2/)	2	1,991	1,613
July	393		( <u>2</u> /)	393	685

<sup>1/</sup> Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census data reported under heading 2601 of the export classification system (Schedule B).

Table 6. - U.S. exports of iron ore and agglomerates, by type (Thousand metric tons)

Period	Pellets	Concentrates	Direct shipping ores	Other	Total <u>1</u> /
1988 1989:	NA	NA	NA	NA	5,285
1st Quarter	1	347	( <u>2</u> /)	( <u>2</u> /)	348
2nd Quarter	1,158	824	(2/)	9	1,991
July	341	52		( <u>2</u> /)	393

NA Not Available.

Source: Bureau of the Census data reported under heading 2601 of the export classification system (Schedule B).

<sup>2/</sup> Less than one-half unit.

 $<sup>\</sup>underline{1}$ / Data may not add to totals shown because of independent rounding.

<sup>2/</sup> Less than one-half unit.

Table 7. - U.S. imports for consumption of iron ore and agglomerates, by country (Exclusive of ore containing 20% or more manganese)

	July	1989	Year	Year to date		
Country of origin	Thousand metric tons	Value <u>1</u> / (thousand dollars)	Thousand metric tons	Value 1/ (thousand dollars)	Value <u>1</u> / (dollars per ton)	1988 (thousand metric tons)
Australia		628	243	3,249	13.34	511
Brazi1	370	6,427	3,021	•	17.84	2,661
Canada	942	33,029	4,754	•	34.61	5,460
Chile		·	61	1,200	19.74	85
Liberia			200	2,950	14.77	128
Mauritania	66	1,142	391	6,622	16.95	194
Norway		·	40	693	17.24	
Peru	18	466	82	1,675	20.49	130
Philippines $2/$			66	1,622	24.49	173
Sweden						1
Venezuela	576	15,290	2,680	68,010	25.37	1,729
Other	( <u>3</u> /)	1	( <u>3</u> /)	12	136.54	24
	2,032	56,983	11,539	304,460	26.38	11,096

<sup>1/</sup> Customs value. Excludes international freight, insurance, and other c.i.f. charges.

Source: Bureau of the Census data reported under banding 2601 of the Harmonized Tariff Schedules of the United States.

 $<sup>\</sup>underline{2}/$  Sinter made from raw materials supplied by Australia, Brazil, and other countries.

 $<sup>\</sup>underline{3}$ / Less than one-half unit.  $\underline{4}$ / Data may not add to totals shown because of independent rounding. Unit values shown above are calculated from unrounded data.

Table 8. - U.S. imports for consumption of iron ore and agglomerates, by type (Exclusive of ore containing 20% or more manganese)

	July 	1989	Year	Year to date		
Type of product	Thousand metric tons	Value <u>l</u> / (thousand dollars)	Thousand metric tons	Value <u>1</u> / (thousand dollars)	Value <u>1</u> / (dollars per ton)	1988 (thousand metric tons)
Concentrates	(2/)	26	198	3,593	18.13	NA NA
Coarse ores	148	3,698	409	9,526	23.28	NA
Fine ores	1,120	30,472	6,954	175,424	25.23	NA
Pellets	587	18,519	3,267	101,051	30.93	NA
Briquettes Other						NA
agglomerates	178	4,268	590	12,827	21.73	NA
Roasted pyrites			121	2,038	16.92	NA
Total <u>3</u> /	2,032	56,983	11,539	304,460	26.38	11,096

NA Not Available.

Source: Bureau of the Census data reported under heading 2601 of the Harmonized Tariff Schedules of the United States.

 $<sup>\</sup>underline{1}/$  Customs value. Excludes international freight, insurance, and other c.i.f. charges.

<sup>2/</sup> Less than one-half unit.

<sup>3/</sup> Data may not add to totals shown because of independent rounding. Unit values shown above are calculated from unrounded data.

Table 9. - U.S. imports for consumption of iron ore and agglomerates in July 1989 (Exclusive of ore containing 20% or more manganese) (Thousand metric tons)

			Type of	Product			
Country of origin	Concentrates	Coarse ores	Fine ores	Pellets	Briquettes and other agglomerates	Roasted pyrites	Total <u>l</u> /
Australia			59				59
Brazil	, <b></b>		327	24	20		370
Canada	$(\underline{2}/)$		638	304			942
Mauritania			66				66
Peru			( <u>2</u> /)	18			18
Venezuela		148	30	240	158		576
Other	( <u>2</u> /)						( <u>2</u> /)
Total <u>1</u> /	(2/)	148	1,120	587	178		2,032

<sup>1/</sup> Data may not add to totals shown because of independent rounding.

Source: Bureau of the Census data reported under heading 2601 of the Harmonized Tariff Schedules of the United States.

Table 10. - U.S. imports for consumption of pellets, by country

	July 1	989	Year	Year to date		
Country of origin	Thousand metric tons	Value <u>l</u> / (thousand dollars)	Thousand metric tons	Value <u>1</u> / (thousand dollars)	•	1988 (thousand metric tons)
Brazil	24	603	331	9,529	28.80	NA
Canada	304	10,660	1,744	57,695	33.09	NA
Peru	18	456	56	1,326	23.83	NA
Venezuela	240	6,800	1,137	32,501	28.58	NA
Total <u>2</u> /	587	18,519	3,267	101,051	30.93	NA

NA Not Available.

Source: Bureau of the Census data reported under item 2601.12.00.30 of the Harmonized Tariff Schedules of the United States.

<sup>2/</sup> Less than one-half unit.

 $<sup>\</sup>underline{1}$ / Customs value. Excludes international freight, insurance, and other c.i.f. charges.

 $<sup>\</sup>underline{2}/$  Data may not add to totals shown because of independent rounding. Unit values hown above are calculated from unrounded data.

Table 11. - U.S. imports for consumption of iron ore and agglomerates, by customs district (Exclusive of ore containing 20% or more manganese) (Thousand metric tons)

Customs district	July 1989	Year to date		
		1989	1988	
altimore	767	3,915	4,543	
harleston, SC	89	283	268	
hicago	278	1,557	762	
leveland	152	816	502	
etroit	93	323	275	
louston		( <u>1</u> /)	31	
obile	189	1,145	864	
ew Orleans	63	988	997	
ew York		$(\underline{1}/)$	1	
hiladelphia	402	2,440	2,812	
an Juan, PR		$(\underline{1}/)$	( <u>1</u> /)	
eattle			26	
ther	( <u>1</u> /)	<u>2</u> / 72	16	
Total <u>3</u> /	2,032	11,539	11,096	

<sup>1/</sup> Less than one-half unit.

Source: Bureau of the Census data reported under heading 2601 of the Harmonized Tariff Schedules of the United States.

 <sup>2/</sup> Part being questioned.
 3/ Data may not add to totals shown because of independent rounding.

Table 12. - U.S. imports for consumption of pellets, by customs district (Thousand metric tons)

Customs district	July 1989	Year to date	
		1989	1988
Baltimore	90	442	NA
Charleston, SC	<b>8</b> 9	224	NA
Chicago	115	462	NA
Cleveland		239	NA
Philadelphia	293	1,902	NA
Total <u>1</u> /	587	3,267	NA

NA Not available.

Source: Bureau of the Census data reported under item 2601.12.00.30 of the Harmonized Tariff Schedules of the United States.

 $<sup>\</sup>underline{1}$ / Data may not add to totals shown because of independent rounding.