

Mineral Industry Surveys

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IRON ORE IN APRIL 2013

U.S. mine production of iron ore in April 2013 was 3.46 million metric tons (Mt), 21% less than that in March. Production was 115,000 metric tons (t) on a daily average basis, 19% less than that of March 2013 and 13% less than that of April 2012. U.S. iron ore shipments were 4.59 Mt in April 2013, 127% greater than those in March 2013. Shipments were 153,000 t on a daily average basis, 135% greater than those of March and 11% less than those of April 2012. Drastic increases in shipments and reduction in stocks were the result of resumed waterway shipping after the reopening of the Soo Locks at Sault Ste. Marie, MI, which were closed for seasonal maintenance.

Mine stocks at the end of April 2013 were 1.13 Mt less than those held in March 2013 and slightly higher than those in April 2012. U.S. imports of iron ore were 218,000 t in April 2013, 47% less than those in March 2013 and 49% less than those of April 2012. U.S. exports of iron ore were 1.16 Mt in April 2013, 44% greater than those in March 2013 and 20% greater than those of April 2012.

Pig iron produced by blast furnaces in April 2013 was 8% lower than that in March, and 4% lower than that in April 2012. Raw steel produced using basic oxygen furnaces was 6% lower than that in March and 21% lower than that in April 2013, and production from electric furnaces was slightly higher than that in March and 6% lower than that in April 2013 (table 4).

China's average import prices for iron ore fines at 62% iron content spot price (cost and freight Tianjin port) fell to \$137.39 per dry metric ton in April 2013, a 1.8% decrease from that of March 2013 and 6% lower than that of April 2012 (Index Mundi, undated).

Parker Brothers Mine, a subsidiary of Zephyr Minerals, Inc., was approved for a water pollution control permit by Nevada's Bureau of Mining Regulation and Reclamation. Located in Pershing County, NV, the project planned to use a portable crushing and physical separation beneficiation facility with a permitted production rate of 33,100 metric tons per year (Nevada Division of Environmental Protection, 2013). Using waste dumps and stockpiles from the sites of the abandoned Segerstrom-Heiser and Thomas Mines, the project was expected to reach 1 to 2 million metric tons per year (Mt/yr) of iron fines with the potential for developing a direct-reduced iron plant.

Essar Steel Minnesota LLC was nearing completion on its Nashwauk, MN, iron ore mine and processing facilities. Mining of the estimated 2,000 Mt of lower-grade magnetite and 500 Mt of banded high-grade hematite was expected to begin in the third quarter of 2013, with crushing and concentrating to begin in the successive quarters. Production was expected to begin at 4 Mt/yr in 2013 and reach 7 Mt/yr in 2014 (Ramsey, 2013).

Anglo American plc halted shipments of iron ore pellets and sinter feed following the collapse of a river bank near its operations in Amapa, Brazil. The shipping pier for the Pedra Branca do Amapari Mine was destroyed in the collapse, curtailing indefinitely shipments from the mine, which produced 6.1 Mt in 2011. In January, Anglo American and joint venture partner, Cliffs Natural Resources Inc., agreed to the sale of the mine to Zamin Ferrous, a subsidiary of Pramod Agarwal (Boadle, 2013).

A port in Açú, Brazil, being constructed by LLX Logística SA, was expected to be completed in 2013 to relieve infrastructure restrictions on exports in the region. The port is expected to have the capacity to efficiently ship Anglo American's Minas Rio iron ore concentrate, delivered via a 523-km-long slurry pipeline (Magalhaes, 2013).

References Cited

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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)

Period	Production		Shipments	
	Monthly	Year to date	Monthly	Year to date
2012:				
April	3,980	16,700	5,150	11,800
May	4,430	21,100	5,750	17,600
June	4,200	25,300	5,270	22,900
July	4,250	29,600	5,730	28,600
August	4,350	33,900	5,220	33,800
September	4,340	38,300	4,670	38,500
October	4,750	43,000	4,460	42,900
November	4,580	47,600	4,530	47,500
December	4,650	52,200	5,500	53,000
2013:				
January	4,200	4,200	3,110	3,110
February	3,900	8,100	611	3,720
March	4,400	12,500	2,020	5,740
April	3,460	16,000	4,590	10,300

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 APRIL^{1,2}

(Thousand metric tons)

State	Production		Shipments ³		Stocks ⁴	
	2012	2013	2012	2013	2012	2013
Michigan	785	594	1,010	691	1,750	2,680
Minnesota	3,190	2,870	4,140	3,900	5,970	5,150
Total	3,980	3,460	5,150	4,590	7,730	7,830

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.

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

(Thousand dry metric tons)

Period	Newfoundland and Labrador		British Columbia		Total
	Quebec				
2012:					
April	1,460	1,450	4		2,900
May	1,320	1,780	3		3,100
June	1,320	2,290	3		3,620
July	1,390	1,550	3		2,940
August	1,410	1,620	2		3,030
September	1,280	2,040	4		3,330
October	1,210	1,430	3		2,650
November	1,460	1,800	5		3,260
December	1,410	1,970	3		3,380
January–December	15,900	20,400	34		36,300
2013:					
January	1,310	1,600 ^r	--		2,910 ^r
February	1,240	1,430 ^r	--		2,660 ^r
March	1,080	1,620	--		2,700
April	NA	NA	NA		NA

^rRevised. NA Not available. -- Zero.

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
U.S. PRODUCTION OF PIG IRON AND RAW STEEL, BY TYPE OF FURNACE¹

(Thousand metric tons)

Period	Pig iron production, blast furnace		Raw steel production			
	Monthly	Year to date	Basic oxygen furnace		Electric furnace	
			Monthly	Year to date	Monthly	Year to date
2012:						
April	2,920	12,500	3,190	11,700	4,640	18,300
May	3,320	15,800	2,900	14,600	4,590	22,900
June	2,970	18,800	2,570	17,200	4,270	27,200
July	2,930	21,700	2,580	19,700	4,390	31,500
August	2,860	24,600	3,180	22,900	4,450	36,000
September	2,440	27,000	2,720	25,600	4,090	40,100
October	2,260	29,300	2,700	28,300	4,090	44,200
November	2,820	32,100	2,480	30,800	3,960	48,100
December	2,900	35,000	2,550	33,400	4,270	52,400
2013:						
January	3,060	3,060	2,740	2,740	4,300	4,300
February	2,760	5,820	2,530	5,280	4,050	8,350
March	3,040	8,860	2,660	7,940	4,300	12,600
April	2,800	11,700	2,510	10,500	4,340	17,000

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

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	2012		2013			
	4th quarter	1st quarter– 4th quarter	February	March	1st quarter	April
Canada	1,640	6,370	331	126	1,290	724
China	458	4,110	50	314	412	175
Colombia	--	1	--	--	(3)	--
Germany	3	3	--	5	5	2
Hong Kong	--	3	--	--	--	164
Japan	37	37	--	--	--	--
Mexico	255	641	103	115	338	30
Slovak Republic	--	--	--	47	47	--
Spain	--	(3)	--	(3)	(3)	--
United Kingdom	--	--	--	198	222	64
Other	6	12	(3)	(3)	1	--
Total	2,400	11,200	483	807	2,320	1,160
Concentrates	320	1,330	102	262	485	163
Coarse ores	148	1,330	49	9	130	83
Fine ores	38	249	1	212	213	74
Pellets	1,870	8,260	331	324	1,490	773
Briquettes	--	(3)	--	--	--	--
Other agglomerates	23	23	--	--	--	67
Roasted pyrites	(3)	3	(3)	(3)	(3)	(3)
Total	2,400	11,200	483	807	2,320	1,160

-- 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	2012			2013		
	January–April	April		January–April	Value ³	
	Thousand metric tons	Thousand metric tons	Value ³ (thousand dollars)	Thousand metric tons	(thousand dollars)	Value ³ (dollars per ton)
Argentina	40	--	--	41	7,830	191.02
Brazil	280	(4)	3	(4)	3	292.89
Canada	1,470	191	27,500	676	92,600	137.03
Chile	49	--	--	50	5,720	114.32
China	(4)	--	--	--	--	--
Germany	(4)	--	--	--	--	--
Mexico	47	--	--	--	--	--
Norway	(4)	--	--	(4)	14	300.00
Peru	8	--	--	(4)	7	1,642.50
South Africa	39	27	3,990	27	3,990	147.70
Sweden	(4)	--	--	(4)	7	330.90
Trinidad and Tobago	--	(4)	11	(4)	11	162.29
Ukraine	(4)	--	--	--	--	--
United Kingdom	--	(4)	5	(4)	5	4,590.00
Venezuela	33	--	--	--	--	--
Total	1,970	218	31,500	795	110,000	138.63
Concentrates	198	27	4,000	77	9,710	126.16
Coarse ores	(4)	--	--	3	50	16.67
Fine ores	166	(4)	3	342	47,800	139.78
Pellets	1,600	191	27,500	372	52,600	141.48
Briquettes	--	--	--	--	--	--
Other agglomerates	(4)	--	--	--	--	--
Roasted pyrites	--	(4)	5	(4)	11	2,232.00
Total	1,970	218	31,500	795	110,000	138.63

-- 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 APRIL 2013^{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	--	--	(3)	--	--	--	(3)
Canada	--	--	--	191	--	--	191
South Africa	27	--	--	--	--	--	27
Trinidad and Tobago	(3)	--	--	--	--	--	(3)
United Kingdom	--	--	--	--	--	(3)	(3)
Total	27	--	(3)	191	--	(3)	218

-- 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 IRON ORE PELLETS, BY COUNTRY¹

Country of origin	2012		2013			
	January–April Thousand metric tons	April		January–April Thousand metric tons	January–April	
		Thousand metric tons	Value ² (thousand dollars)		Value ² (thousand dollars)	Value ² (dollars per ton)
Brazil	213	--	--	--	--	--
Canada	1,390	191	27,500	372	52,600	141.48
Total	1,600	191	27,500	372	52,600	141.48

-- Zero.

¹Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits.

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.)	January–April		April
	2012	2013	2013
Baltimore, MD (13)	1,150	--	--
Charleston, SC (16)	(3)	--	--
Chicago, IL (39)	31	27	27
Cleveland, OH (41)	268	294	191
Detroit, MI (38)	(3)	(3)	--
Houston-Galveston, TX (53)	--	(3)	(3)
Los Angeles, CA (27)	--	(3)	(3)
New Orleans, LA (20)	513	470	(3)
New York, NY (10)	(3)	(3)	--
Nogales, AZ (26)	--	(3)	--
Philadelphia, PA (11)	(3)	--	--
St. Albans, VT (02)	--	3	--
Total	1,970	795	218

-- 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 IRON ORE PELLETS,
 BY CUSTOMS DISTRICT¹

(Thousand metric tons)

Customs district (code no.)	January–April		April
	2012	2013	2013
Baltimore, MD (13)	988	--	--
Cleveland, OH (41)	268	294	191
Detroit, MI (38)	--	(2)	--
New Orleans, LA (20)	345	78	--
Total	1,600	372	191

-- 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.