

# Mineral Industry Surveys

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### **IRON ORE IN DECEMBER 2013**

Average daily U.S. mine production of iron ore in December 2013 was 125,000 metric tons (t) (Table 1), 19% less than that of November 2013 and 17% less than that of December 2012. Average daily U.S. iron ore shipments were 150,000 t, 5% greater than those of November and 15% less than those of December 2012.

Mine stocks at the end of December 2013 were 49% more than those at the end of November and 68% more than those at the end of December 2012 (Table 1). U.S. imports of iron ore were 173,000 t in December 2013, 51% less than those in November 2013 and 49% less than those of December 2012. U.S. exports of iron ore were 1.11 million metric tons (Mt) in December 2013, 15% less than those in November 2013 and 46% greater than those of December 2012 (Table 4).

U.S iron ore production in 2013 was 51.0 Mt, a slight decrease from 52.2 Mt in 2012, calculated from monthly production figures. U.S. iron ore shipments were 51.8 Mt in 2013, a slight decrease from 53.0 Mt in 2012, calculated from monthly shipment figures.

Nucor Corp. began production at its direct reduced iron (DRI) facility in St. James Parish, LA, in late December. Output quality matched that of another Nucor facility in Trinidad. The 2.5 million-metric-ton-per-year plant was the largest DRI facility of its kind in the world and the first constructed in the United States since 2009. Future plans for the site included a pellet plant, a blast furnace, a steel mill, and a second DRI facility (Boone, 2014).

Construction of Magnetation Inc.'s pellet plant in Reynolds, IN, was only a few days behind schedule despite months of harsh weather. Railways at the site required 2,100 meters (7,000 feet) of additional internal rail to connect to the CSX Corp. lines, and water and sewer utilities were expected to be connected in April 2014. The facility is expected to be operational in the second half of 2014 (Colombo, 2013).

Gogebic Taconite LLC's (GTAC) proposed iron ore mine in northern Wisconsin was slated to undergo separate reviews from the Wisconsin Department of Natural Resources (WDNR) and the U.S. Army Corps of Engineers. The WDNR is required to act on the mining permit within 420 days, whereas the Army Corps of Engineers review of the project has no time limits. The

Army Corps of Engineers and the WDNR will consider coordinating their review wherever possible (Bergquist, 2014).

In China, receipts from Australia increased 11%, receipts from Brazil decreased 19%, and receipts from India increased 346% in December, compared with those of December 2012, indicating higher reliance on ore from Australia and India.

A ruling in mid-November 2013 by the Supreme Court of India allowed electronic auctions of iron ore stockpiled in India's Goa State, although mining restrictions continued. Meanwhile, the ban on production in India's Karnataka State was lifted, but no iron ore exports were allowed (Wong, 2014). The Odisha (State) Steel and Mines Department issued a notification in December, which was upheld by the Orissa High Court, ordering iron ore producers in Odisha to reserve half of their monthly production for domestic sale. The High Court also stated that if the Odisha Government could not develop a mechanism for fair distribution and market pricing to domestic consumers, then the policy could be delayed (Mohapatra, 2014).

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TABLE 1
U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF IRON ORE<sup>1, 2</sup>
(Exclusive of ore containing 5% or more of manganese)

### (Thousand metric tons)

-	Production		Shij	Stocks <sup>4</sup>	
Period	Monthly	Year to date	Monthly	Year to date	End of Month
2012, December	4,650	52,200	5,500	53,000	2,200
2013:					
January	4,200	4,200	3,110	3,110	3,290
February	3,900	8,100	611	3,720	6,580
March	4,400	12,500	2,020	5,740	8,960
April	3,460	16,000	4,670	10,400	7,830
May	4,280	20,200	5,680	16,100	6,350
June	3,990	24,200	5,170	21,300	5,390
July	4,400	28,600	5,650	26,900	4,130
August	4,610	33,200	5,430	32,300	3,320
September	4,780	38,000	5,400	37,700	2,770
October	4,460	42,500	5,120	42,900	2,110
November	4,650	47,100	4,280	47,100	2,470
December	3,870	51,000	4,660	51,800	3,690

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits.

 $\label{eq:table 2} \text{CANADA: SHIPMENTS OF IRON ORE}^{1,\,2}$ 

### (Thousand dry metric tons)

-	Newfoundland		British	
Period	and Labrador	Quebec	Columbia	Total
2012:				
December	1,410	1,970	3	3,380
January-December	15,900	20,400	34	36,300
2013:				
January	1,080	1,600		2,680
February	1,000	1,430		2,430
March	845	1,620		2,470
April	1,730	1,730		3,460
May	1,950	1,650		3,600
June	2,220	2,060		4,280
July	1,880	2,140		4,030
August	1,840	2,260		4,100
September	1,640	2,000		3,640
October	1,710 <sup>r</sup>	2,300		4,010 r
November	1,640 <sup>r</sup>	1,690		3,330 <sup>r</sup>
December	1,390	2,440		3,830
January-December	18,900	22,900		41,800

<sup>&</sup>lt;sup>r</sup>Revised. -- Zero.

Source: Natural Resources Canada.

<sup>&</sup>lt;sup>2</sup>Excludes byproduct ores.

<sup>&</sup>lt;sup>3</sup>Includes rail and vessel.

<sup>&</sup>lt;sup>4</sup>Includes usable (marketable) material at mines, concentrators, pelletizing plants, and loading docks. Excludes stocks of crude ore at mine and concentrates at agglomerating complexes.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes production from steel plant waste oxides.

 ${\bf TABLE~3} \\ {\bf U.S.~PRODUCTION~OF~PIG~IRON~AND~RAW~STEEL,~BY~TYPE~OF~FURNACE}^1 \\$ 

(Thousand metric tons)

	Pig iron	production,	Raw steel production					
	blast furnace		Basic ox	ygen furnace	Electric furnace			
Period	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date		
2012, 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		
May	2,880	14,500	2,660	13,100	4,480	21,500		
June	2,760	17,300	2,440	15,500	4,340	25,800		
July	2,760	20,100	2,430	18,000	4,680	30,500		
August	2,890	22,900	2,550	20,500	4,580	35,100		
September	2,880	25,800	2,460	23,000	4,400	39,500		
October	2,870	28,700	2,510	25,500	4,490	44,000		
November	2,760	31,500	2,430	27,900	4,340	48,300		
December	2,780	34,200	2,380	30,300	4,340	52,600		

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: American Iron and Steel Institute.

 $\mbox{TABLE 4} \\ \mbox{U.S. EXPORTS OF IRON ORE, BY COUNTRY OF DESTINATION AND TYPE}^{1,2}$ 

(Thousand metric tons)

					2013		
Country of destination		1st	2d	3d		4th	1st quarter-
and type of product	2012	quarter	quarter	quarter	December	quarter	4th quarter
Canada	6,370	1,290	1,630	1,370	457	1,790	6,080
China	4,110	412	458	703	563	1,180	2,750
Colombia	1	(3)	(3)	(3)	(3)	(3)	(3)
France				82			82
Germany	3	5	7	(3)			12
Hong Kong	3		164				164
Japan	37			58	31	31	89
Mexico	641	338	272	244	60	272	1130
Slovakia		47	68				115
Spain	(3)	(3)		189			190
United Kingdom		222	140	61		(3)	423
Other	12	1	(3)	(3)	(3)	1	3
Total	11,200	2,320	2,740	2,710	1,110	3,280	11,000
Concentrates	1,330	485	631	655	204	622	2,390
Coarse ores	1,330	130	83				213
Fine ores	249	213	91	29	31	50	382
Pellets	8,260	1,490	1,860	1,830	876	2,610	7,790
Briquettes	(3)						
Other agglomerates	23		70	196	(3)	(3)	266
Roasted pyrites	3	(3)	(3)	(3)	(3)	(3)	1
Total	11,200	2,320	2,740	2,710	1,110	3,280	11,000

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

TABLE 5 U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE  $^{1,2}$  (Exclusive of ore containing 20% or more manganese)

	2012			2013		
	January-December	Dece	ember	Jan	uary-Decem	oer
	Thousand	Thousand	Value <sup>3</sup>	Thousand	Value <sup>3</sup>	Value <sup>3, 4</sup>
Country of origin	metric	metric	(thousand	metric	(thousand	(dollars
and type of product	tons	tons	dollars)	tons	dollars)	per ton)
Argentina	81			137	23,100	168.88
Brazil	739	29	2,920	630	74,700	118.63
Canada	3,810	85	11,300	2,090	280,000	133.97
Chile	104	27	6,690	77	12,400	161.08
China	(5)	(5)	3	1	100	100.00
Finland	4					
France	(5)			(5)	4	175.65
Germany	(5)			(5)	8	242.45
India	(5)			(5)	8	596.15
Latvia	(5)					
Mexico	47	1	60	1	90	90.00
Netherlands	(5)					
Norway	(5)			78	11,900	152.77
Peru	44			12	2,260	187.92
South Africa	91	22	3,200	95	13,800	145.55
Sweden	72	11	1,950	49	7,310	149.27
Trinidad and Tobago				(5)	59	164.57
Ukraine	(5)					
United Kingdom	76			(5)	5	4,590.00
Venezuela	75					
Total	5,140	173	26,200	3,170	426,000	134.30
Concentrates	862	77	12,800	491	56,900	115.88
Coarse ores	51	11	2,000	45	6,390	141.91
Fine ores	363	(5)	3	573	79,600	138.84
Pellets	3,860	85	11,300	2,060	283,000	137.26
Briquettes						
Other agglomerates	(5)			1	97	97.00
Roasted pyrites	4			(5)	19	1,050.56
Total	5,140	173	26,200	3,170	426,000	134.30
7						

<sup>--</sup> Zero.

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Customs value. Excludes international freight and insurance charges.

<sup>&</sup>lt;sup>4</sup>Values are calculated and may not reflect actual amounts per ton.

<sup>&</sup>lt;sup>5</sup>Less than ½ unit.

# TABLE 6 U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN DECEMBER $2013^{1,2}$ (Exclusive of ore containing 20% or more manganese)

### (Thousand metric tons)

			Type o	f product			
					Briquettes		
		Coarse	Fine		and other	Roasted	
Country of origin	Concentrates	ores	ores	Pellets	agglomerates	pyrites	Total
Brazil	29						29
Canada				85			85
Chile	27						27
China			(3)				(3)
Mexico		1					1
South Africa	22						22
Sweden		11		(3)			11
Total	77	11	(3)	85			173

<sup>--</sup> Zero

Source: U.S. Census Bureau.

 ${\it TABLE~7}$  U.S. IMPORTS FOR CONSUMPTION OF IRON ORE PELLETS, BY COUNTRY  $^1$ 

	2012	2013						
	January-December	Dece	mber	Jan	January-December			
	Thousand	Thousand	Value <sup>2</sup>	Thousand	Value <sup>2</sup>	Value <sup>2, 3</sup>		
Country	metric	metric	(thousand	metric	(thousand	(dollars		
of origin	tons	tons	dollars)	tons	dollars)	per ton)		
Brazil	284			199	31,200	156.88		
Canada	3,500	85	11,300	1,790	240,000	134.42		
Germany				(4)	5	217.22		
Norway				78	11,900	152.23		
Sweden		(4)	3	(4)	3	212.44		
United Kingdom	76							
Total	3,860	85	11,300	2,060	283,000	137.26		

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup>Customs value. Excludes international freight and insurance charges.

<sup>&</sup>lt;sup>3</sup>Values are calculated and may not reflect actual amounts per ton.

<sup>&</sup>lt;sup>4</sup>Less than ½ unit.

# $\label{eq:table 8} \text{U.S. IMPORTS FOR CONSUMPTION OF IRON ORE,} \\ \text{BY CUSTOMS DISTRICT}^{1,\,2}$

(Exclusive of ore containing 20% or more manganese)

### (Thousand metric tons)

	January-D	ecember	December
Customs district (code no.)	2012	2013	2013
Baltimore, MD (13)	1,450	11	
Buffalo, NY (09)		(3)	
Charleston, SC (16)	(3)		
Chicago, IL (39)	689	528	51
Cleveland, OH (41)	2,210	1,560	85
Detroit, MI (38)	(3)	1	
Houston-Galveston, TX (53)	54	44	
Los Angeles, CA (27)	(3)	(3)	
Mobile, AL (19)	48	18	
New Orleans, LA (20)	618	1,000	37
New York, NY (10)	(3)	(3)	
Nogales, AZ (26)		(3)	
Ogdensburg, NY (07)	(3)	(3)	
Pembina, ND (34)		(3)	
Philadelphia, PA (11)	4		
Port Arthur, TX (21)	27		
San Diego, CA (25)		1	1
Seattle, WA (30)	37		
St. Albans, VT (02)	1	3	
Tampa, FL (18)	3	9	
Total	5,140	3,170	173
7ara			

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

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

## (Thousand metric tons)

	January–E	December		
Customs district (code no.)	2012	2013	2013	
Baltimore, MD (13)	1,260			
Chicago, IL (39)	41			
Cleveland, OH (41)	2,210	1,550	85	
Detroit, MI (38)		(2)		
Houston-Galveston, TX (53)		44		
New Orleans, LA (20)	345	463		
Total	3,860	2,060	85	

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Less than ½ unit.