

# Mineral Industry Surveys

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## IRON ORE IN MARCH 2014

Average daily U.S. mine production of iron ore in March 2014 was 143,000 metric tons (t) (table 1), 19% greater than that of February 2014 and slightly higher than that of March 2013. Average daily U.S. iron ore shipments were 42,300 t, 63% greater than those of February and 35% less than those of March 2013. Mine stocks at the end of March 2014 were 27% more than those held at the end of February and 12% higher than those of March 2013.

U.S. imports of iron ore were 336,000 t in March 2014, 17% greater than those in February and 18% less than those in March 2013 (table 5). U.S. exports of iron ore were 356,000 t in March 2014, 47% less than those in February 2014 and 56% less than those in March 2013 (table 4).

Shipments in March fell owing to greater than average ice on the Great Lakes, where the majority of U.S. shipments originate. The Great Lakes Environmental Research Laboratory reported that as of mid-February 88% of the Great Lakes were frozen, the greatest ice cover since 82% in 1996 and approaching the record 95% in 1979 (Climate.gov, 2014).

Palladon Ventures Ltd. reported that the concentrate production rate at CML Metals Corp. (Cedar City, UT) increased by 25% to nearly 2 million metric tons per year (Mt/yr) at 65.5% iron (Fe) content, following the installation of a new hyperbaric filter. Owing to the new technology, the gas-fired rotary drying system was shut down, substantially reducing operating costs. Further balancing of the system was expected to increase ore grade to 67% Fe at 7% moisture (Palladon Ventures, 2014).

Essar Steel Minnesota LLC announced that construction on their 7-Mt/yr iron ore pellet facility in Itasca County, MN, would be delayed until warmer weather and additional financing

could be secured. Initial production of iron ore was delayed until yearend 2015. The company also planned to construct a direct-reduced iron mill on the site (Myers, 2014).

Noble Group Ltd. (Hong Kong) signed a 10-year contract to purchase all iron ore not allocated to project equity participants produced at Sundance Resources Ltd.'s Mbalam-Nabeba project in Cameroon and the Democratic Republic of Congo, an estimated 35 Mt/yr of iron ore. The agreement required a financier approval. The project, with reserves containing an estimated 436 million metric tons of iron ore at 63.6% Fe, included the construction of a 510-kilometer (km) rail line, a 70-km rail spur, and a deep-water terminal (Sundance Resources Ltd., 2014).

## References Cited

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- Palladon Ventures Ltd., 2014, CML update: Vancouver, British Columbia, Canada, Palladon Ventures Ltd. press release, March 31. (Accessed June 9, 2014, at [http://www.palladonventures.com/s/PressReleases.asp?ReportID=645475&\\_Type=Press-Releases&\\_Title=Palladon-Ventures-CML-Update](http://www.palladonventures.com/s/PressReleases.asp?ReportID=645475&_Type=Press-Releases&_Title=Palladon-Ventures-CML-Update).)
- Sundance Resources Ltd., 2014, Sundance agrees firm off-take agreement with global trading giant Noble: Perth, Western Australia, Australia, Sundance Resources Ltd. press release, March 25. (Accessed June 23, 2014, at <http://www.sundanceresources.com.au/IRM/Company/ShowPage.aspx/PDFs/2776-46419206/AgreeFirmOfftakeAgreementwithNoble>.)

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)

Period	Production		Shipments <sup>3</sup>		Stocks <sup>4</sup>
	Monthly	Year to date	Monthly	Year to date	End of Month
2013:					
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
2014:					
January	3,900	3,900	2,390	2,390	5,200
February <sup>r</sup>	5,460	12,700	1,900	4,290	8,820
March	4,440	17,200	1,310	5,600	11,900

<sup>r</sup>Revised.

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

<sup>2</sup>Excludes byproduct ores.

<sup>3</sup>Includes rail and vessel.

<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.

TABLE 2  
CANADA: SHIPMENTS OF IRON ORE<sup>1,2</sup>

(Thousand dry metric tons)

Period	Newfoundland and Labrador	Quebec	Total
2013:			
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	2,300	4,010
November	1,640	1,690	3,330
December	1,390	2,440	3,830
January–December	18,900	22,900	41,800
2014:			
January	1,010 <sup>r</sup>	1,570	2,580 <sup>r</sup>
February	919 <sup>r</sup>	2,380	3,300 <sup>r</sup>
March	821	1,680	2,510

<sup>r</sup>Revised.

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

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

Source: Natural Resources Canada.

TABLE 3  
U.S. PRODUCTION OF PIG IRON AND RAW STEEL, BY TYPE OF FURNACE<sup>1,2</sup>

(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
2013:						
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
2014:						
January	2,430	2,430	2,680	2,680	4,650	4,650
February	2,450	4,880	2,580	5,250	4,230	8,880
March	2,820	7,700	2,490	7,740	4,690	13,600

<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.

TABLE 4  
U.S. EXPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE<sup>1,2</sup>  
(Exclusive of ore containing 20% or more manganese)

Country of origin and type of product	2013		2014			
	January–March Thousand metric tons	March Thousand metric tons	March		January–March	
			Value <sup>3</sup> (thousand dollars)	Thousand metric tons	Value <sup>3</sup> (thousand dollars)	Value <sup>3,4</sup> (dollars per ton)
Canada	1,290	128	\$15,700	917	\$125,000	\$135.95
China	412	143	16,000	603	64,300	106.69
Japan	--	32	3,710	59	7,200	122.05
Mexico	338	54	4,730	205	19,500	94.91
Other	276	--	--	26	1,680	64.62
Total	2,320	356	40,100	1,810	217,000	120.01
Coarse ores	130	--	--	--	--	--
Concentrates	485	143	16,100	566	64,000	112.99
Fine ores	213	32	3,720	59	7,240	122.69
Pellets	1,490	128	15,700	1,010	131,000	130.37
Other	( <sup>5</sup> )	54	4,700	176	14,700	83.67
Total	2,320	356	40,100	1,810	217,000	120.01

-- Zero.

<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>2</sup>All countries with less than 5,000 metric tons of exports per month of report included in "Other."

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

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

<sup>5</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE<sup>1,2</sup>  
(Exclusive of ore containing 20% or more manganese)

Country of origin and type of product	2013			2014		
	January–March	March		January–March	Value <sup>3</sup>	
	Thousand metric tons	Thousand metric tons	Value <sup>3</sup> (thousand dollars)	Thousand metric tons	Value <sup>3</sup> (thousand dollars)	Value <sup>3,4</sup> (dollars per ton)
Brazil	--	76	\$12,500	303	\$47,100	\$155.60
Canada	485	240	36,500	756	111,000	147.48
Peru	(5)	20	3,100	20	3,100	154.90
Other	92	1	15	1	30	30.00
<b>Total</b>	<b>577</b>	<b>336</b>	<b>52,100</b>	<b>1,080</b>	<b>162,000</b>	<b>149.93</b>
Coarse ores	3	--	--	--	--	--
Concentrates	50	--	--	(5)	8	164.55
Fine ores	342	20	3,110	169	22,900	135.40
Pellets	181	316	49,000	910	139,000	152.62
Other	(5)	--	--	--	--	--
<b>Total</b>	<b>577</b>	<b>336</b>	<b>52,100</b>	<b>1,080</b>	<b>162,000</b>	<b>149.93</b>

-- Zero.

<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>2</sup>All countries with less than 5,000 metric tons of imports per month of report included in "Other."

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

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

<sup>5</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6  
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE,  
BY CUSTOMS DISTRICT<sup>1,2</sup>  
(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

Customs district (code no.)	Pellets			Total, all products		
	January–March		March	January–March		March
	2013	2014	2014	2013	2014	2014
Baltimore, MD (13)	--	282	93	--	282	93
Mobile, AL (19)	--	--	--	--	5	5
New Orleans, LA (20)	78	600	223	470	765	238
Other	103	28	--	108	29	(3)
<b>Total</b>	<b>181</b>	<b>910</b>	<b>316</b>	<b>577</b>	<b>1,080</b>	<b>336</b>

-- Zero.

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

<sup>2</sup>Customs Districts with less than 5,000 metric tons total per month of report included in "Other."

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.