

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 JULY 2010

U.S. mine production of iron ore in July 2010, on a daily average basis, was 21% greater than that for the prior month and was more than 3 times that of July 2009, according to the U.S. Geological Survey (USGS). Average daily production, at 149,000 metric tons (t), was 25,900 t greater than that of June 2010.

Average daily shipments in July 2010, at 163,000 t, were 1,200 t less than those of the prior month but 64% more than those of July 2009. Mine stocks at the end of July 2010 were 432,000 t less than the adjusted stocks held on June 30, a 10% decrease. U.S. net exports of iron ore in June 2010 were 456,000 t, with exports 73% greater than imports.

Prices.—Wuhan Iron and Steel Co. Ltd. (WISCO), China's third-leading steelmaker, secured a special price from Corporación Venezolana de Guayana (CVG) at about \$20 per metric ton below the third quarter price being charged by Vale S.A. (Rio de Janeiro, Brazil) to its Asian customers. CVG, a Venezuelan state-owned mining and metallurgical group, sold 480,000 t of iron ore in 2009 to WISCO and has an existing contract to sell more than 40 million metric tons of iron ore over the next seven years to WISCO (Skillings Mining Review, 2010).

Following plans to increase the price of iron ore sold to ArcelorMittal South Africa Ltd. (Amsa), Kumba Iron Ore Ltd. (Pretoria, South Africa), a subsidiary of Anglo American plc, conceded to an interim iron ore pricing agreement. It appeared that Amsa, which controls 70-80% of South Africa's domestic steel industry, was able to obtain the agreement by warning that it might close its Saldanha steel plant, 40 kilometers (km) north of Cape Town. Amsa lost control of a 21.4% stake in minerals rights to the Sishen iron ore mine earlier in the year when it failed to convert its mineral rights to the mine (Metal Bulletin, 2010a).

Rio Tinto plc (London, United Kingdom) changed the reference period for calculating its quarterly iron ore prices. Rio

of Vale (Metal Bulletin, 2010b).

World Exploration and Development.—Rio Tinto approved \$200 million in funding to prepare for the expansion of its iron ore operations in Western Australia. The initial funding was for dredging contracts to establish an additional 1.8-km, four-berth jetty and wharf at Cape Lambert as part of its overall plan. The broader plan included the expansion of the mines in the Pilbara and development of additional port capacity at Dampier and Cape Lambert in order to expand iron ore operating capacity to 330 million metric tons per year (Mt/yr) by 2016 (Rio Tinto plc, 2010).

World Production.—Consolidated Thompson Iron Mines Ltd. (Montreal, Quebec, Canada) shipped its first iron ore concentrate—165,000 t, to WISCO in China—from its Bloom Lake Mine in northeastern Quebec (See Iron ore in March 2009). The shipment was made from Consolidated Thompson's new port facilities at Pointe Noire in Sept Iles, Quebec. Consolidated Thompson planned to ship 8 Mt/yr from the mine, which had the potential to expand to 16 Mt/yr capacity (Consolidated Thompson Iron Mines Ltd., 2010).

References Cited

Consolidated Thompson Iron Mines Ltd., 2010, Consolidated Thompson's first iron ore shipment to WISCO leaves Port of Sept-Iles for China: Consolidated Thompson Iron Mines Ltd. news release, July 27, 2 p. (Accessed December 6, 2010, via http://www.consolidatedthompson.com.)

Metal Bulletin, 2010a, Amsa brinkmanship pays off in KIO deal: Metal Bulletin, no. 9159, July 26, p. 15–16.

Metal Bulletin, 2010b, Rio changes quarterly iron ore pricing reference period, moves in line with Vale: Metal Bulletin, no. 9159, July 26, p. 21.

Rio Tinto plc, 2010, Rio Tinto approves US\$200 million funding towards an expansion of Pilbara operations to 330Mt/a capacity: London, United Kingdom, Rio Tinto plc press release, July 14, 2 p. (Accessed December 7, 2010, via http://www.riotinto.com/.)

Skillings Mining Review, 2010, Wuhan gets reduced price contract from Venezuela: Skillings Mining Review, v. 99, no. 8, August, p. 15.

Tinto's new pricing mechanism was then more in line with that

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 |
| 2009: | | | | |
| July | 1,480 | 12,700 | 3,080 | 11,900 |
| August | 1,780 | 14,500 | 3,190 | 15,100 |
| September | 2,560 | 17,100 | 3,120 | 18,200 |
| October | 3,080 | 20,100 | 3,370 | 21,600 |
| November | 3,140 | 23,300 | 4,380 | 26,000 |
| December | 3,180 | 26,500 | 3,960 | 29,900 |
| 2010: | | | | |
| January | 3,040 | 3,040 | 2,400 | 2,400 |
| February | 3,270 | 6,300 | 943 | 3,340 |
| March | 3,630 | 9,930 | 2,630 | 5,970 |
| April | 3,780 | 13,700 | 4,790 | 10,800 |
| May | 4,560 | 18,300 | 5,230 | 16,000 |
| June | 3,700 | 22,000 | 4,940 | 20,900 |
| July | 4,630 | 26,600 | 5,060 | 26,000 |

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

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

(Thousand metric tons, unless otherwise noted)

| | Produ | Production | | Shipments ³ | | Stocks ⁴ | |
|-----------|-------|------------|-------|------------------------|-------|---------------------|--|
| State | 2010 | 2009 | 2010 | 2009 | 2010 | 2009 | |
| Michigan | 1,060 | 623 | 973 | 1,300 | 1,770 | 2,370 | |
| Minnesota | 3,570 | 858 | 4,090 | 1,780 | 1,960 | 5,040 | |
| Total | 4,630 | 1,480 | 5,060 | 3,080 | 3,730 | 7,410 | |

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

Note: An imbalance of production and shipments compared with stock changes indicates an inventory adjustment at the mines of 42,000 metric tons.

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.

 $\label{eq:table 3} \text{CANADA: SHIPMENTS OF IRON ORE}^{1,\,2}$

(Thousand dry metric tons)

| | Newfoundland | | British | |
|------------|--------------|--------------------|----------|--------|
| Period | and Labrador | Quebec | Columbia | Total |
| 2009: | | | | |
| June | 820 | 1,080 | 10 | 1,910 |
| July | 1,360 | 1,430 | 10 | 2,800 |
| August | 1,480 | 1,570 | 8 | 3,060 |
| September | 1,540 | 1,580 | 8 | 3,130 |
| October | 2,060 | 1,510 | 7 | 3,580 |
| November | 2,010 | 1,000 | 8 | 3,020 |
| December | 1,660 | 1,320 | (3) | 2,980 |
| Year total | 17,100 | 14,500 | 73 | 31,700 |
| 2010: | | | | |
| January | 1,300 | 1,090 | 3 | 2,390 |
| February | 1,130 | 872 | 3 | 2,000 |
| March | 1,390 | 1,100 | 6 | 2,500 |
| April | 1,500 | 1,510 | 7 | 3,020 |
| May | 1,840 | 1,340 ^r | 11 | 3,190 |
| June | 1,860 | 1,710 | 10 | 3,580 |

rRevised.

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, | | | | Raw steel production | | | | |
|-----------|----------------------|--------------|----------|----------------------|----------------------|--------------|--|--|--|
| | blast | furnace | Basic ox | Basic oxygen furnace | | ic furnace | | | |
| Period | Monthly | Year to date | Monthly | Year to date | Monthly | Year to date | | | |
| 2009: | | | | | | | | | |
| June | 1,380 | 8,740 | 1,210 | 7,440 | 2,980 | 15,500 | | | |
| July | 1,840 | 10,600 | 1,630 | 9,070 | 3,200 | 18,700 | | | |
| August | 2,090 | 12,700 | 1,810 | 10,900 | 3,460 | 22,200 | | | |
| September | 1,930 | 14,600 | 2,230 | 13,100 | 3,540 | 25,700 | | | |
| October | 2,510 | 17,100 | 2,080 | 15,200 | 3,480 | 29,200 | | | |
| November | 2,240 | 19,400 | 2,000 | 17,200 | 3,470 | 32,700 | | | |
| December | 2,410 | 21,800 | 2,120 | 19,300 | 3,450 | 36,100 | | | |
| 2010: | | | | | | | | | |
| January | 2,350 | 2,350 | 1,830 | 1,830 | 3,890 | 3,890 | | | |
| February | 2,530 | 4,870 | 1,960 | 3,790 | 3,720 | 7,610 | | | |
| March | 2,870 | 7,740 | 2,560 | 6,350 | 4,240 | 11,800 | | | |
| April | 2,030 | 9,770 | 2,820 | 9,170 | 4,140 | 16,000 | | | |
| May | 2,830 | 12,600 | 2,560 | 11,700 | 4,440 | 20,400 | | | |
| June | 2,800 | 15,400 | 2,530 | 14,300 | 4,300 | 24,700 | | | |

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

Source: American Iron and Steel Institute.

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

²Includes production from steel plant waste oxides.

³Less than ½ unit.

 ${\rm TABLE}~5$ U.S. EXPORTS OF IRON ORE, BY COUNTRY OF DESTINATION AND TYPE 1,2

(Thousand metric tons)

| Country of destination | | | | 2010 | | |
|------------------------|-------|-------------|-------|-------|-------|-------------|
| and type of product | 2009 | 1st quarter | April | May | June | 2nd quarter |
| Belgium | 194 | 1 | 27 | 78 | | 105 |
| Canada | 3,060 | 918 | 545 | 702 | 864 | 2,110 |
| China | 99 | | 55 | 27 | 57 | 139 |
| Colombia | 19 | 4 | 2 | 1 | (3) | 3 |
| Finland | | | | 35 | | 35 |
| France | 179 | 25 | 55 | 78 | 78 | 211 |
| Germany | 234 | | 209 | 131 | | 341 |
| Mexico | 70 | 151 | 11 | 4 | 3 | 19 |
| Serbia | | | 44 | | | 44 |
| South Africa | 52 | | | | | |
| Spain | | | 28 | 27 | 76 | 131 |
| Other ⁴ | 10 | (3) | | (3) | (3) | (3) |
| Total | 3,910 | 1,100 | 976 | 1,080 | 1,080 | 3,140 |
| Concentrates | 123 | 6 | 2 | 5 | 61 | 67 |
| Coarse ores | 5 | | | 35 | (3) | 35 |
| Fine ores | 24 | (3) | 44 | 28 | (3) | 72 |
| Pellets | 3,760 | 1,090 | 930 | 1,020 | 1,020 | 2,960 |
| Briquettes | 3 | | (3) | (3) | | |
| Other agglomerates | (3) | (3) | | | | (3) |
| Roasted pyrites | 1 | (3) | | (3) | | (3) |
| Total | 3,910 | 1,100 | 976 | 1,080 | 1,080 | 3,140 |

⁻⁻ Zero.

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

²Includes agglomerates.

 $^{^3}$ Less than $\frac{1}{2}$ unit.

⁴Includes all countries receiving less than 5,000 metric tons in any month during the 2-year period.

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

| | | | 2010 | | | 2009 |
|---------------------|-----------------|------------------------------|-----------------|------------------------------|-----------------------------|-----------------|
| | Ju | ine | | Year to date | | January-June |
| 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 | 80 | 8,450 | 117 | 12,200 | 104.50 | 91 |
| Canada | 450 | 54,500 | 2,510 | 235,000 | 93.75 | 1,040 |
| Chile | | | 46 | 3,270 | 71.02 | 99 |
| Finland | | | | | | 3 |
| France | | | (4) | 4 | 4,480.00 | |
| Mexico | | | 48 | 3,980 | 83.00 | 26 |
| Norway | 1 | 13 | 2 | 43 | 21.50 | 1 |
| Peru | | | 7 | 315 | 45.00 | 34 |
| Russia | 64 | 11,200 | 536 | 57,600 | 107.39 | |
| South Africa | | | | | | 29 |
| Spain | 1 | 29 | 4 | 142 | 35.50 | |
| Sweden | | | | | | 4 |
| Trinidad and Tobago | | | (4) | 11 | 187.50 | |
| Turkey | | | (4) | 3 | 91.51 | |
| Ukraine | | | 95 | 13,700 | 143.78 | |
| United Kingdom | | | | | | 8 |
| Venezuela | 28 | 1,860 | 80 | 5,350 | 66.91 | |
| Total | 623 | 76,000 | 3,450 | 332,000 | 96.28 | 1,330 |
| Concentrates | _ 80 | 8,440 | 175 | 15,700 | 89.74 | 152 |
| Coarse ores | (4) | 4 | (4) | 4 | 197.50 | 8 |
| Fine ores | _ 1 | 25 | 155 | 15,400 | 99.21 | 264 |
| Pellets | 541 | 67,500 | 3,110 | 300,000 | 96.55 | 905 |
| Briquettes | 1 | 29 | 4 | 142 | 35.50 | |
| Other agglomerates | | | | | | 2 |
| Roasted pyrites | | | (4) | 4 | 4,480.00 | 3 |
| Total | 623 | 76,000 | 3,450 | 332,000 | 96.28 | 1,330 |

⁻⁻ 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.

TABLE 7 U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN JUNE $2010^{1,2}$ (Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

| | | | Туре | of product | | | |
|-------------------|--------------|--------|------|------------|--------------|---------|-------|
| | | | | | Briquettes | | |
| | | Coarse | Fine | | and other | Roasted | |
| Country of origin | Concentrates | ores | ores | Pellets | agglomerates | pyrites | Total |
| Brazil | 80 | (3) | | | | | 80 |
| Canada | | | | 450 | | | 450 |
| Norway | | | 1 | | | | 1 |
| Russia | | | | 64 | | | 64 |
| Spain | | | | | 1 | | 1 |
| Venezuela | | | | 28 | | | 28 |
| Total | 80 | (3) | 1 | 541 | 1 | | 623 |

⁻⁻ Zero.

Source: U.S. Census Bureau.

 $\label{eq:table 8} \text{U.S. IMPORTS FOR CONSUMPTION OF PELLETS}, \ \ \text{BY COUNTRY}^1$

| | | | 2010 | | | 2009 |
|-----------|----------|--------------------|----------|--------------------|--------------------|--------------|
| | Ju | ne | | Year to date | | January-June |
| | 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 | | | 37 | 3,780 | 102.16 | 38 |
| Canada | 450 | 54,500 | 2,360 | 220,000 | 93.14 | 862 |
| Peru | | | | | | 5 |
| Russia | 64 | 11,200 | 536 | 57,600 | 107.39 | |
| Ukraine | | | 95 | 13,700 | 143.78 | |
| Venezuela | | 1,860 | 80 | 5,350 | 66.91 | |
| Total | 541 | 67,500 | 3,110 | 300,000 | 96.55 | 905 |

⁻⁻ Zero.

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

 $^{^2} Includes \ agglomerates.$

³Less than ½ unit.

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.

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

(Exclusive of ore containing 20% or more manganese)

(Thousand metric tons)

| | June | January-June | | |
|-----------------------------|------|--------------|-------|--|
| Customs district (code no.) | 2010 | 2010 | 2009 | |
| Baltimore, MD (13) | 209 | 1,780 | 130 | |
| Charleston, SC (16) | | | 4 | |
| Chicago, IL (39) | 80 | 110 | 97 | |
| Cleveland, OH (41) | 306 | 1,130 | 718 | |
| El Paso, TX (24) | | 3 | | |
| Houston-Galveston, TX (53) | | 37 | 38 | |
| Minneapolis, MN (35) | | (3) | | |
| Mobile, AL (19) | | | 5 | |
| New Orleans, LA (20) | 28 | 376 | 309 | |
| New York, NY (10) | | (3) | | |
| Nogales, AZ (26) | | | 2 | |
| Norfolk, VA (14) | | 1 | | |
| Ogdensburg, NY (07) | 1 | 4 | 9 | |
| Philadelphia, PA (11) | | | 3 | |
| Port Arthur, TX (21) | | | 8 | |
| Seattle, WA (30) | | | 12 | |
| Total | 623 | 3,450 | 1,330 | |

⁻⁻ Zero.

Source: U.S. Census Bureau.

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

(Thousand metric tons)

| June | January- | June |
|------|--------------------------------------|--|
| 2010 | 2010 | 2009 |
| 209 | 1,780 | 130 |
| | 30 | 15 |
| 305 | 1,130 | 717 |
| | 37 | 38 |
| | | 5 |
| 28 | 136 | |
| 541 | 3,110 | 905 |
| | 2010 209 305 28 | 2010 2010 209 1,780 30 305 1,130 37 28 136 |

⁻⁻ Zero.

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

²Includes agglomerates.

³Less than ½ unit.

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