

Mineral Industry Surveys

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LEAD IN JUNE 2007

Domestic mine production of lead, based on the net quantity of lead recovered from concentrate, was 34,500 metric tons (t) in June, down about 6% from that of the previous month, according to the U.S. Geological Survey. Mine production for the first 6 months of 2007 was slightly above that for the same period in 2006. Secondary refinery production of lead increased by 6% from that of the previous month.

According to Platts Metals Week published quotations, the average North American producer price increased by about 7% from that of the previous month to \$1.06 per pound. The London Metal Exchange cash price averaged \$2,425 per metric ton in June, a 6-month increase of 41%.

The Doe Run Resources Corporation (St. Louis, MO) reached an agreement in principle with the city of Herculaneum, MO, to purchase additional land adjacent to Doe Run's lead smelter. The purchase was to provide a greater buffer between the smelter and the neighboring community. As part of the agreement, the company was to sell other owned land to the city for planned development of a shopping center (Doe Run Resources Corporation, 2007a). In another action, Doe Run reached an agreement with the U.S. Environmental Protection Agency outlining measures for improving the methods by which lead-bearing materials are transported to and from Doe Run's lead facilities. A spokesman for the company stated that this expanded agreement takes a system-wide approach to materials handling at all of Doe Run's smelters, mines, mills, and concentrators in Missouri. It includes cleaning methods, loading techniques, recordkeeping, and traffic flow, many of which have been in use at Doe Run's facilities (Doe Run Resources Corporation, 2007b).

Xstrata Plc (Zug, Switzerland) lifted the 5-month-long force majeure placed on lead metal shipments from its Northfleet lead refinery in the United Kingdom. The force majeure had been declared as a result of a shortfall in the supply of lead bullion

feed material from Xstrata's Mt. Isa Mine in Australia (Metal Bulletin, 2007).

Expansion projects begun by China's Yuguang Gold and Lead Group, Henan Province, were expected to significantly increase both primary refined lead and secondary lead production. Upon completion of the expansion projects, refined lead production capacity was to be increased to 500,000 metric tons per year (t/yr) from the current 300,000 t/yr, and secondary lead production capacity was to be increased to 300,000 t/yr from 100,000 t/yr. Each project was to be completed in two phases of 100,000-t/yr increase per phase. The first phase of expansion for primary refined and secondary lead was expected to be completed in about 7 months and 18 months from June 2007, respectively (Platts Metals Week, 2007).

Yunnan Chihong Zinc & Germanium Co., Ltd. and its parent company, Yunnan Metallurgical General Company, through a joint-venture agreement, planned construction of a new lead-zinc mine and smelter in Inner Mongolia. The smelter, to be located in Hulun Buir City, was expected to produce 100,000 t/yr each of lead and zinc, pending availability of ore at a nearby deposit (Metal-Pages, 2007).

References Cited

- Doe Run Resources Corporation, 2007a, Doe Run agrees to purchase, sell property: Herculaneum, MO, Doe Run Resources Corporation news release, May 31, 2 p.
- Doe Run Resources Corporation, 2007b, Doe Run signs final version of transportation agreement: St. Louis, MO, Doe Run Resources Corporation news release, June 4, 2 p.
- Metal Bulletin, 2007, Xstrata to resume shipping from Northfleet on July 1 after months of force majeure: Metal Bulletin, no. 8999, June 11, p. 12.
- Metal-Pages, 2007, New lead-zinc smelter set for Inner Mongolia: Metal-Pages, June 20. (Accessed October 1, 2007, via <http://www.metal-pages.com/>)
- Platts Metals Week, 2007, Yuguang to start lead refinery expansions in H2: Platts Metals Week, v. 78, no. 25, June 18, p. 11.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

| | 2006 | | 2007 | | |
|--|-----------|----------------------|----------------------|---------|------------------|
| | Year | January- June | May | June | January- June |
| Production: | | | | | |
| Mine (recoverable) | 426,000 | 210,000 ^r | 36,900 ^r | 34,500 | 212,000 |
| Primary refinery | 143,000 | NA | NA | NA | NA |
| Secondary refinery: | | | | | |
| Reported by smelters/refineries | 1,140,000 | 574,000 ^r | 92,300 ^r | 97,800 | 575,000 |
| Estimated | 11,200 | 5,790 ^r | 923 ^r | 988 | 5,450 |
| Recovered from copper-base scrap ^c | 15,000 | 7,500 ^r | 1,250 | 1,250 | 7,500 |
| Total secondary | 1,170,000 | 587,000 ^r | 94,500 | 100,000 | 588,000 |
| Stocks, end of period: | | | | | |
| Secondary smelters and consumers | 64,700 | 61,000 ^r | 37,900 ^r | 36,200 | 36,200 |
| Imports for consumption: | | | | | |
| Ore and concentrate | 539 | 249 ^r | 76 | 38 | 727 |
| Refined metal | 331,000 | 180,000 ^r | 20,400 | 23,100 | 122,000 |
| Consumption: | | | | | |
| Reported | 1,470,000 | 743,000 ^r | 128,000 ^r | 135,000 | 764,000 |
| Undistributed ^c | 45,600 | 23,000 ^r | 3,690 ^r | 3,900 | 22,800 |
| Total | 1,520,000 | 766,000 ^r | 131,000 ^r | 139,000 | 787,000 |
| Exports: | | | | | |
| Ore and concentrate | 298,000 | 66,400 | 12,100 | 25,500 | 80,000 |
| Bullion | 197 | 153 | 24 | 16 | 88 |
| Wrought and unwrought lead | 68,500 | 38,500 | 4,300 | 3,930 | 25,200 |
| TEL/TML preparations, based on lead compounds | 9,520 | 3,240 | 51 | 30 | 2,500 |
| Exports (gross weight): Scrap | 121,000 | 45,600 | 9,400 | 8,480 | 49,500 |
| Platts Metals Week North American producer price (cents per pound) | 77.40 | 75.69 | 99.60 | 106.34 | 95.35 |

^cEstimated. ^rRevised. NA Not available.

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

TABLE 2
MONTHLY AVERAGE LEAD PRICES

| | North American producer price cents/lb | LME | | Sterling exchange rate dollars/£ |
|--------------|--|-----------------------|--------------|--|
| | | \$/metric ton | £/metric ton | |
| 2006: | | | | |
| June | 75.69 | 963.34 | 522.55 | 1.843536 |
| December | 86.31 | 1,724.38 | 878.51 | 1.962855 |
| Year | 77.40 | 1,289.06 | 651.84 | 1.977591 |
| 2007: | | | | |
| January | 86.71 | 1,665.34 | 838.03 | 1.958719 |
| February | 87.11 | 1,778.56 | 907.92 | 1.958947 |
| March | 93.82 | 1,913.11 | 982.38 | 1.947427 |
| April | 98.53 | 1,999.78 | 1,005.98 | 1.987886 |
| May | 99.60 | 2,099.68 ^r | 1,058.30 | 1.984000 |
| June | 106.34 | 2,425.20 | 1,220.70 | 1.986729 |

^rRevised.

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

| Item | Stocks | Net | Consumption | Stocks |
|-------------------------------------|---------|---------|-------------|----------|
| | May 31, | | | receipts |
| | 2007 | | | 2007 |
| Battery-lead | 27,300 | 98,800 | 99,300 | 26,700 |
| Soft lead | W | W | W | W |
| Drosses and residues | W | W | W | W |
| Other ² | 1,940 | 8,220 | 8,330 | 1,830 |
| Total | 29,200 | 107,000 | 108,000 | 28,600 |
| Percent change from preceding month | XX | -1.2 | +1.1 | -2.3 |

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

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

²Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN JUNE 2007¹

(Metric tons)

| Product recovered | Secondary metal content | | |
|-----------------------|-------------------------|-----|----------|
| | Lead | Tin | Antimony |
| Soft and calcium lead | 47,600 | -- | -- |
| Remelt lead | W | -- | -- |
| Antimonial lead | 16,700 | (2) | (2) |
| Other ³ | 33,500 | (2) | (2) |
| Total lead-base | 97,800 | 138 | 303 |

W Withheld to avoid disclosing company proprietary data; included in "Other."

-- Zero.

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

²Withheld to avoid disclosing company proprietary data; included in "Total."

³Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES¹

(Metric tons, lead content)

| Use | 2006 | | 2007 | | |
|---|-------------------------------|----------------|----------------------------|----------------|----------------|
| | January-December ^p | January-June | May | June | January-June |
| Metal products: | | | | | |
| Ammunition, shot and bullets | 74,300 | 39,300 | 6,980 | 6,590 | 40,500 |
| Brass and bronze, billet and ingots | 3,110 | 2,420 | 418 | 413 | 1,900 |
| Cable covering, power and communication and calking lead, building construction | 7,940 | 4,360 | 629 | 458 | 4,060 |
| Casting metals | 19,500 | 9,760 | 2,490 | 2,500 | 14,900 |
| Sheet lead, pipes, traps and other extruded products | 30,100 | 15,000 | 874 | 800 | 5,070 |
| Solder | 8,060 | 4,130 | 570 | 568 | 3,420 |
| Storage batteries, including oxides | 1,280,000 | 644,000 | 112,000 ^r | 120,000 | 672,000 |
| Terne metal, type metal, and other metal products ² | 1,810 | 886 | 1,390 | 1,390 | 8,320 |
| Total metal products | 1,430,000 | 720,000 | 125,000^r | 132,000 | 750,000 |
| Other oxides and miscellaneous | 45,300 | 22,900 | 2,330 | 2,340 | 14,000 |
| Total reported | 1,470,000 | 743,000 | 128,000^r | 135,000 | 764,000 |
| Undistributed ^c | 45,600 | 23,000 | 3,690 ^r | 3,900 | 22,800 |
| Grand total | 1,520,000 | 766,000 | 131,000^r | 139,000 | 787,000 |

^cEstimated. ^pPreliminary. ^rRevised.

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

²Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

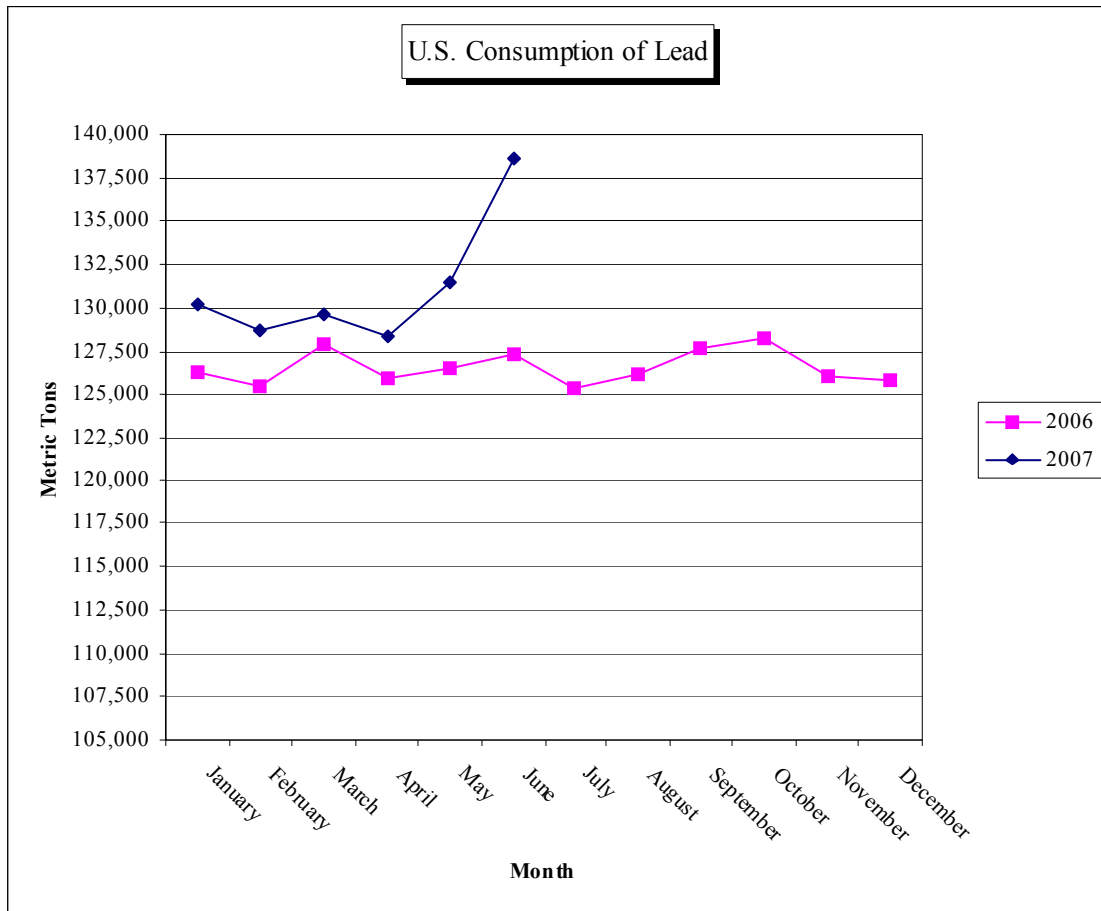


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION

(Metric tons, lead content)

| Type of material | Stocks | Net receipts | Consumption | Stocks |
|-------------------|---------------------|--------------|-------------|---------------|
| | May 31, 2007 | | | June 30, 2007 |
| Soft lead | 23,000 ^r | 73,100 | 74,200 | 21,900 |
| Antimonial lead | 8,040 ^r | 26,400 | 26,400 | 8,030 |
| Lead alloys | W | W | W | W |
| Copper-base scrap | W | W | W | W |
| Total | 37,900 ^r | 133,000 | 135,000 | 36,200 |

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."

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

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS¹

(Metric tons)

| | 2006 | | | 2007 | | | |
|---|--------|--------|---------|----------|--------|----------|---------|
| | May | June | Year | January- | | January- | |
| | | | | May | June | May | June |
| Lead content: | | | | | | | |
| Ore and concentrates | 19,300 | 5,360 | 298,000 | 12,100 | 25,500 | 54,400 | 80,000 |
| Bullion | 23 | 24 | 197 | 24 | 16 | 72 | 88 |
| Materials excluding scrap | 7,430 | 4,590 | 68,500 | 4,300 | 3,930 | 21,200 | 25,200 |
| TEL/TML preparations, based on lead compounds | 1,540 | 681 | 9,520 | 51 | 30 | 2,470 | 2,500 |
| Total | 28,300 | 10,700 | 376,000 | 16,500 | 29,500 | 78,200 | 108,000 |
| Gross weight: Scrap | 7,990 | 10,400 | 121,000 | 9,400 | 8,480 | 41,100 | 49,500 |

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

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN¹

(Metric tons, lead content)

| Country of origin | General imports | | | | | | | Imports for consumption | | | | | | |
|-----------------------|-----------------|---------------------|------------------|--------|--------|-----------------|------------------|-------------------------|---------------------|------------------|--------|--------|-----------------|------------------|
| | 2006 | | | | | | | 2007 | | | | | | |
| | Year | January- May | January- June | May | June | January- May | January- June | Year | January- May | January- June | May | June | January- May | January- June |
| Base bullion: | | | | | | | | | | | | | | |
| Canada | 449 | -- | 249 | -- | -- | -- | -- | 449 | -- | 249 | -- | -- | -- | -- |
| Other | 90 | -- | -- | 76 | 38 | 689 | 727 | 90 | -- | -- | 76 | 38 | 689 | 727 |
| Total | 539 | -- | 249 | 76 | 38 | 689 | 727 | 539 | -- | 249 | 76 | 38 | 689 | 727 |
| Pigs and bars: | | | | | | | | | | | | | | |
| Australia | 9,230 | 478 | 478 | -- | -- | -- | -- | 9,230 | 478 | 478 | -- | -- | -- | -- |
| Canada | 222,000 | 104,000 | 119,000 | 17,200 | 18,800 | 82,700 | 102,000 | 222,000 | 104,000 | 119,000 | 17,200 | 18,800 | 82,700 | 102,000 |
| Mexico | 15,800 | 4,920 | 6,630 | 2,700 | 3,290 | 10,500 | 13,800 | 15,800 | 4,920 | 6,630 | 2,700 | 3,290 | 10,500 | 13,800 |
| Peru | 34,600 | 14,600 | 16,300 | 495 | 988 | 5,570 | 6,560 | 34,600 | 14,600 | 1,660 | 495 | 988 | 5,570 | 6,560 |
| Other | 49,800 | 36,700 ^r | 37,500 | 77 | 32 | 257 | 290 | 49,800 | 36,700 ^r | 37,500 | 77 | 32 | 257 | 290 |
| Total | 331,000 | 160,000 | 180,000 | 20,400 | 23,100 | 99,000 | 122,000 | 331,000 | 160,000 | 165,000 | 20,400 | 23,100 | 99,000 | 122,000 |
| Grand total | 332,000 | 160,000 | 180,000 | 20,500 | 23,200 | 99,700 | 123,000 | 332,000 | 160,000 | 165,000 | 20,500 | 23,200 | 99,700 | 123,000 |

^rRevised. -- Zero.

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

Source: U.S. Census Bureau.