

Mineral Industry Surveys

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LEAD IN MARCH 2006

Domestic mine production, based on the net quantity of lead recovered from concentrate, was 38,100 metric tons (t) in March, according to the U.S. Geological Survey. This represented an increase of about 14% compared with production in February 2006 and an increase of about 10% compared with that in March 2005. Mine production for the first quarter of 2006 was about 12% greater than that of the first quarter of 2005. Secondary refinery production for the first quarter of 2006 (286,000 t) was essentially unchanged from that of the first quarter of 2005.

According to Platts Metals Week published quotations, the average North American producer price declined nominally from that of the previous month to 76.54 cents per pound. The average London Metal Exchange Ltd. (LME) cash price declined to \$1,191.74 per metric ton, about a 7% decrease compared with the February 2006 average price. These prices were up by about 26% and 19%, respectively, when compared with the March 2005 average prices.

Doe Run Co., a subsidiary of Renco Group Inc. (New York, N.Y.), reported that in response to strong lead metal prices, it increased the tonnage of ore mined in 2005 at its Viburnum #29, Viburnum #35, and Sweetwater Mines. The net effect of these changes was that its mill-lead grade of ore fell from 5.73% in 2004 to 5.36% in 2005, and the volume of ore processed increased by more than 535,000 t, or 11%. In 2005, production at its Herculaneum primary smelter was 155,800 t, about 5% less than that in 2004, primarily owing to storm damage to the sinter plant building. The permitted annual capacity of the Herculaneum primary smelter decreased to 200,000 t from 250,000 t, which did not affect results at current production levels (Ryan's Notes, 2006a).

East Penn Manufacturing Co., Inc. (Lyon Station, PA), a major battery maker and user of lead, reportedly is concerned about the high price and future availability of lead for its batteries. The company has investigated the possibility of building another secondary lead smelter near its existing smelter that would raise its capacity to approximately 160,000 metric

tons per year (t/yr) from 90,000 t/yr and has started the permitting process (Ryan's Notes, 2006b).

In Canada, Teck Cominco Ltd. (Vancouver, British Columbia, Canada) announced that for the first quarter of 2006 its Trail, British Columbia, smelter produced 74,000 t of refined zinc and 24,000 t of refined lead, compared with 71,000 t and 22,000 t, respectively, in the first quarter of 2005. Teck Cominco's mines produced 150,000 t of zinc-in-concentrate and 31,000 t of lead-in-concentrate in the first quarter of 2006 compared with 161,000 t and 22,000 t, respectively, in the first quarter of 2005 (Teck Cominco Ltd., 2006, p. 9).

In India, Vedanta Resources plc (London, United Kingdom) commissioned its 50,000-t/yr capacity lead expansion project at its facility in Chanderiya, India, and full capacity is expected to be achieved by midyear 2006. Lead concentrates required for the expanded smelter will continue to be sourced from the mines of Hindustan Zinc Ltd. in Rajasthan, which planned to increase its lead capacity from 35,000 t/yr to 85,000 t/yr of lead in concentrates (Mining Journal, 2006).

The National Defense Stockpile aggregated cash disposal (sale) of lead in March, under the Basic Ordering Agreement DLA-Lead-005, was 3,120 t, with an approximate value of \$3.8 million (Defense National Stockpile Center, 2006).

References Cited

- Defense National Stockpile Center, 2006, Stockpile announces lead BOA sales for March 2006: Fort Belvoir, VA, Defense National Stockpile Center news release, April 5, 1 p.
- Mining Journal, 2006, Lead developments: Mining Journal (London), April 7, p. 20.
- Ryan's Notes, 2006a, Doe Run turns lead into gold: Ryan's Notes, v. 12, no. 13, March 27, p. 3.
- Ryan's Notes, 2006b, East Penn mulling smelting options: Ryan's Notes, v. 12, no. 14, April 3, p. 4.
- Teck Cominco Ltd., 2006, Results for the three months ended March 31, 2006: Vancouver, British Columbia, Canada, Teck Cominco news release, April 24, 24 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2005		2006		
	Year	January - March	February	March	January - March
Production:					
Mine (recoverable)	426,000 ^r	96,800 ^r	33,300	38,100	108,000
Primary refinery	NA	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,110,000 ^p	277,000 ^r	94,500 ^r	95,500	280,000
Estimated	11,200 ^p	2,800 ^r	955 ^r	965	2,830
Recovered from copper-base scrap ^e	15,000 ^p	3,750	1,250	1,250	3,750
Total secondary	1,140,000 ^p	284,000 ^r	96,700 ^r	97,700	286,000
Stocks, end of period:					
Primary refineries	NA	NA	NA	NA	NA
Secondary smelters and consumers	61,400 ^p	63,200	59,700 ^r	60,000	60,000
Imports for consumption:					
Ore and concentrate	29	6	--	NA	-- ²
Refined metal	298,000	54,700	32,300	NA	63,100 ²
Consumption:					
Reported	1,460,000 ^p	366,000 ^r	126,000 ^r	129,000	379,000
Undistributed ^c	45,300 ^p	11,300 ^r	3,900 ^r	3,980	11,700
Total	1,510,000 ^p	377,000 ^r	130,000 ^r	133,000	390,000
Exports:					
Ore and concentrate	390,000	37,800	13,000	NA	32,900 ²
Bullion	198	65	15	NA	40 ²
Wrought and unwrought lead	64,600	18,600	4,710	NA	9,820 ²
TEL/TML preparations, based on lead compounds	1,270	633	16	NA	61 ²
Exports (gross weight): Scrap	67,300	14,300	6,630	NA	14,900 ²
Platts Metals Week North American producer price (cents per pound)	61.03	60.74	76.86	76.54	73.90

^eEstimated. ^pPreliminary. ^rRevised. NA Not available. -- Zero.

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

²Includes data for January - February only; March data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
2005:				
March	60.82	1,005.19	527.85	1.904304
December	64.78	1,123.51	643.55	1.745805
Year	61.03	975.98	537.10	1.817133
2006:				
January	68.30	1,255.70	710.00	1.768590
February	76.86	1,276.20	730.09	1.747995
March	76.54	1,191.74	683.26	1.744187

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks		Consumption	Stocks
	February 28, 2006	Net receipts		March 31, 2006
Battery-lead	23,900 ^r	103,000	102,000	24,100
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	3,340	4,110	3,920	3,530
Total	27,200 ^r	107,000	106,000	27,600
Percent change from preceding month	XX	2.0	1.2	1.4

^rRevised. 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 MARCH 2006¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	73,300	--	--
Remelt lead	W	--	--
Antimonial lead	21,700	(2)	(2)
Other ³	497	(2)	(2)
Total lead-base	95,500	140	279

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

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

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	2005		2006		
	January - December ^p	January - March ^f	February	March	January - March
Metal products:					
Ammunition, shot and bullets	60,000	15,000	5,970 ^r	6,950	19,400
Brass and bronze, billet and ingots	3,700	926	381	399	1,160
Cable covering, power and communication and cabling lead, building construction	6,840	1,710	707	957	2,100
Casting metals	17,900	4,480	1,520 ^r	1,520	4,560
Sheet lead, pipes, traps and other extruded products	32,700	8,180	2,500 ^r	2,720	7,840
Solder	7,130	1,780	454 ^r	474	1,510
Storage batteries, including oxides	1,280,000	319,000	111,000 ^r	112,000	332,000
Terne metal, type metal, and other metal products ²	2,210	552	140 ^r	154	449
Total metal products	1,410,000	352,000	123,000 ^r	125,000	369,000
Other oxides and miscellaneous	56,400	14,100	3,290 ^r	3,290	9,880
Total reported	1,460,000	366,000	126,000 ^r	129,000	379,000
Undistributed ^c	45,300	11,300	3,900 ^r	3,980	11,700
Grand total	1,510,000	377,000	130,000 ^r	133,000	390,000

^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.

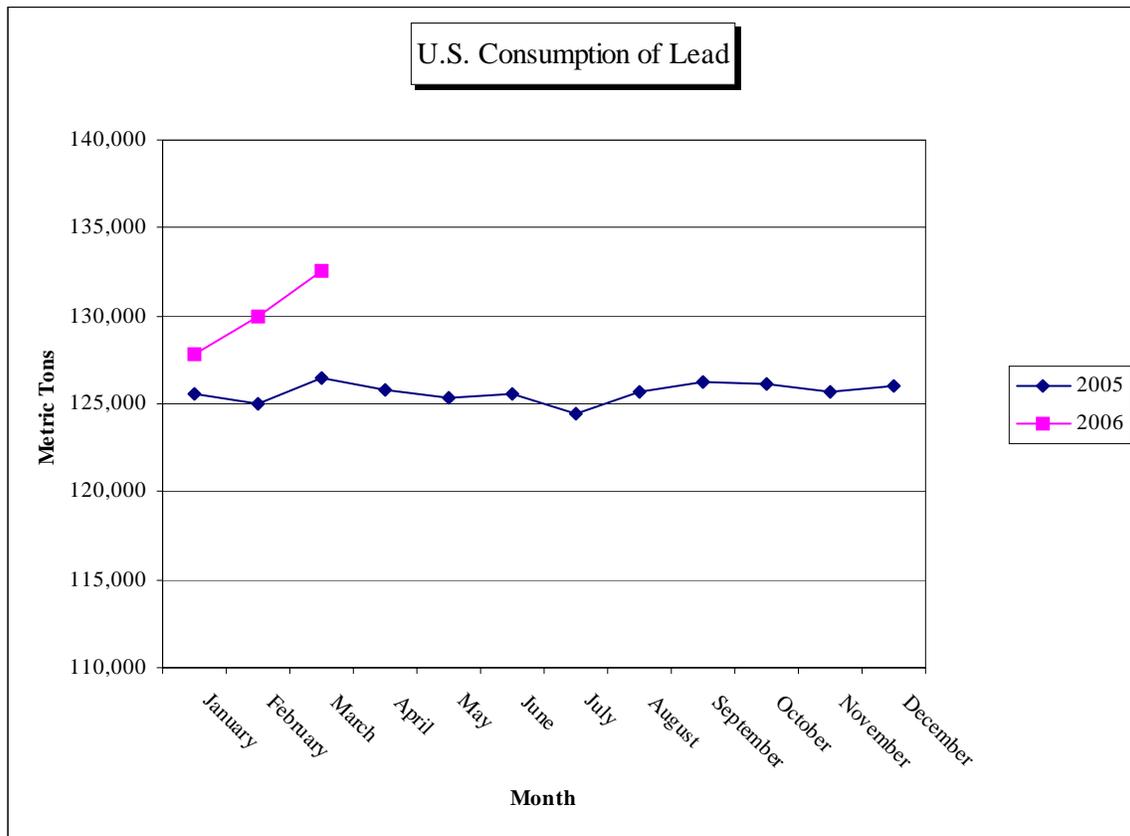


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF
LEAD¹

(Metric tons, lead content)

Type of material	Stocks	Net receipts	Consumption	Stocks
	February 28, 2006			March 31, 2006
Soft lead	32,800 ^r	72,000	72,500	32,300
Antimonial lead	10,900 ^r	33,100	32,400	11,600
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	59,700 ^r	131,000	131,000	60,000

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

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

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

(Metric tons)

	2005		2006		
	February	Year	January	February	January - February
Lead content:					
Ore and concentrates	12,700	390,000	19,900	13,000	32,900
Bullion	18	198	25	15	40
Materials excluding scrap	4,960	64,600	5,110	4,710	9,820
TEL/TML preparations, based on lead compounds	132	1,270	44	16	61
Total	17,800	456,000	25,100	17,700	42,900
Gross weight: Scrap	4,610	67,300	8,240	6,630	14,900

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				
	2005		2006			2005		2006		
	Year	January - February	January	February	January - February	Year	January - February	January	February	January - February
Base bullion:										
Canada	18	--	--	--	--	18	--	--	--	--
Mexico	--	--	--	--	--	--	--	--	--	--
Other	10	4	--	--	--	10	4	--	--	--
Total	29	4	--	--	--	29	4	--	--	--
Pigs and bars:										
Australia	19,300	--	226	--	226	39,600	--	226	--	226
Canada	190,000	33,900	21,500	23,500	45,000	190,000	33,900	21,500	23,500	45,000
Mexico	15,200	528	753	1,170	1,920	15,200	528	753	1,170	1,920
Peru	23,900	1,000	3,590	1,840	5,430	23,900	1,000	3,590	1,840	5,430
Other	28,300	55	4,650	5,780	10,400	29,000	55	4,650	5,780	10,400
Total	277,000	35,500	30,700	32,300	63,100	298,000	35,500	30,700	32,300	63,100
Grand total	277,000	35,500	30,700	32,300	63,100	298,000	35,500	30,700	32,300	63,100

-- Zero.

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

Source: U.S. Census Bureau.