

Mineral Industry Surveys

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LEAD IN MAY 2007

Domestic mine production of lead, based on the net quantity of lead recovered from concentrate, was 33,800 metric tons (t) in May, according to the U.S. Geological Survey. Mine production for the first 5 months of 2007 was essentially the same as that for the same period in 2006. Secondary refinery production of lead decreased marginally from that of the previous month.

According to Platts Metals Week published quotations, the North American producer price averaged 99.6 cents per pound in May, a 6-month increase of 20%. The London Metal Exchange cash price averaged \$2,100 per metric ton in May, a 6-month increase of 29%.

In the United States, a contract was completed between Firefly Energy, Inc., Peoria, IL, and Northstar Battery Company, Springfield, MO, to develop a new advanced technology battery called 6T-3D. The battery, requiring significantly less lead than conventional batteries, uses a lead-coated carbon-graphite foam as the electrode. Advantages of the battery are its lighter weight, stronger and more consistent performance in temperature extremes, as well as greater power and longer life in deep cycle applications (Firefly Energy, Inc., 2007).

Following the acquisition of the New Castle Battery Company, New Castle, PA, Axion Power International, Inc., relocated its battery manufacturing operations from Ontario, Canada to Pennsylvania. The production capacity at the New Castle facility was reported to be 3,000 batteries per day. Axion's batteries have lower lead content, longer life cycles, higher power delivery rates, and recharge at faster rates compared with conventional lead-acid batteries. Applications for the lead-carbon batteries could include power for hybrid electric vehicles, and energy storage for alternative energy systems, such as those fueled by wind or solar power (Axion Power International, Inc., 2007).

Aurcana Corp. (Vancouver, British Columbia, Canada) began production in mid-April at its 80%-owned La Negra Mine in Queretaro State, Mexico. The planned mill feed was 1,000 tons per day (t/d) at this silver-copper-zinc-lead mine. Initial feed to the mill was to be from stockpiled material complemented by daily mine production (Aurcana Corp., 2007).

Acadian Gold Corporation, Halifax, Nova Scotia, Canada, began production in late April at its lead-zinc Scotia Mine in Gays River, Nova Scotia. By July, the company expected the mill to be operating at the full capacity of 2,000 t/d (Metals Place, 2007).

In China, the two phase construction of a lead-silver-gold smelter in Luoning County, Henan Province, was planned following a joint venture agreement between four companies including Canada's Silvercorp Metals Inc. and China's Luoyang Luanchuan Molybdenum Group Inc., HT Mining Co. Ltd., and Luochuan Xinchuan Mining Co. Ltd. The first phase of the construction of the smelter was expected to be completed by yearend 2008 and produce 80,000 metric tons per year (t/yr) of lead. Completion of the second phase would bring the final lead production capacity to 150,000 t/yr by 2010 (CRU Lead Monitor, 2007). In order to protect the country's available reserves and further tighten control on exports of energy-intensive and high-pollution-emitting industries, a 10% tax was to be imposed on Chinese lead and zinc exports starting June 1, 2007 (Platts Metals Week, 2007).

References Cited

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- Platts Metals Week, 2007, China hits lead and zinc with 10% export tax: Platts Metals Week, v. 78, no. 22, May 28, p. 1.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2006		2007		
	Year	January- May	April	May	January- May
Production:					
Mine (recoverable)	426,000	176,000	31,600	33,800	174,000
Primary refinery	143,000	NA	NA	NA	NA
Secondary refinery:					
Reported by smelters/refineries	1,140,000	471,000	91,300 ^f	90,900	470,000
Estimated	11,200	4,760	912 ^f	909	4,700
Recovered from copper-base scrap ^c	15,000	6,250	1,250	1,250	6,250
Total secondary	1,170,000	482,000	93,500 ^f	93,100	481,000
Stocks, end of period:					
Secondary smelters and consumers	64,700	60,300	49,300 ^f	48,100	48,100
Imports for consumption:					
Ore and concentrate	539	--	119	NA	613
Refined metal	331,000	160,000	19,700	NA	78,600
Consumption:					
Reported	1,470,000	623,000	125,000 ^f	126,000	627,000
Undistributed ^e	45,600	19,300	3,600 ^f	3,620	18,700
Total	1,520,000	642,000	128,000	129,000	646,000
Exports:					
Ore and concentrate	298,000	61,100	8,910	NA	42,300
Bullion	197	129	14	NA	48
Wrought and unwrought lead	68,500	33,900	5,220	NA	16,900
TEL/TML preparations, based on lead compounds	9,520	2,560	146	NA	2,410
Exports (gross weight): Scrap	121,000	35,200	8,370	NA	31,700
Platts Metals Week North American producer price (cents per pound)	77.40	74.92	98.53	99.60	93.16

^cEstimated. ^fRevised. 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-April only.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
2006:				
May	76.44	1,166.18	624.05	1.868714
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	1,058.30	1.984000

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	April 30, 2007	receipts		May 31, 2007
Battery-lead	25,400 ^r	100,000	98,200	27,300
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	1,940 ^r	8,320	8,320	1,940
Total	27,400 ^r	108,000	106,000	29,200
Percent change from preceding month	XX	--	-0.7	+6.7

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

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 MAY 2007¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	74,500	--	--
Remelt lead	W	--	--
Antimonial lead	16,200	(2)	(2)
Other ³	270	(2)	(2)
Total lead-base	90,900	135	267

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-May	April	May	January-May ²
Metal products:					
Ammunition, shot and bullets	74,300	32,400	6,140 ^r	6,980	33,900
Brass and bronze, billet and ingots	3,110	2,040	409 ^r	418	1,490
Cable covering, power and communication and calking lead, building construction	7,940	3,650	551 ^r	629	3,600
Casting metals	19,500	8,130	2,490 ^r	2,490	12,400
Sheet lead, pipes, traps and other extruded products	30,100	12,600	841 ^r	874	4,270
Solder	8,060	3,470	573 ^r	570	2,850
Storage batteries, including oxides	1,280,000	544,000	110,000 ^r	110,000	550,000
Terne metal, type metal, and other metal products ³	1,810	745	1,390 ^r	1,390	6,940
Total metal products	1,430,000	607,000	122,000 ^r	123,000	616,000
Other oxides and miscellaneous	45,300	15,800	2,330 ^r	2,330	11,700
Total reported	1,470,000	623,000	125,000 ^r	126,000	627,000
Undistributed ^e	45,600	19,300	3,600 ^r	3,620	18,700
Grand total	1,520,000	642,000	128,000	129,000	646,000

^eEstimated. ^pPreliminary. ^rRevised.

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

²Includes revisions to previous months' data.

³Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

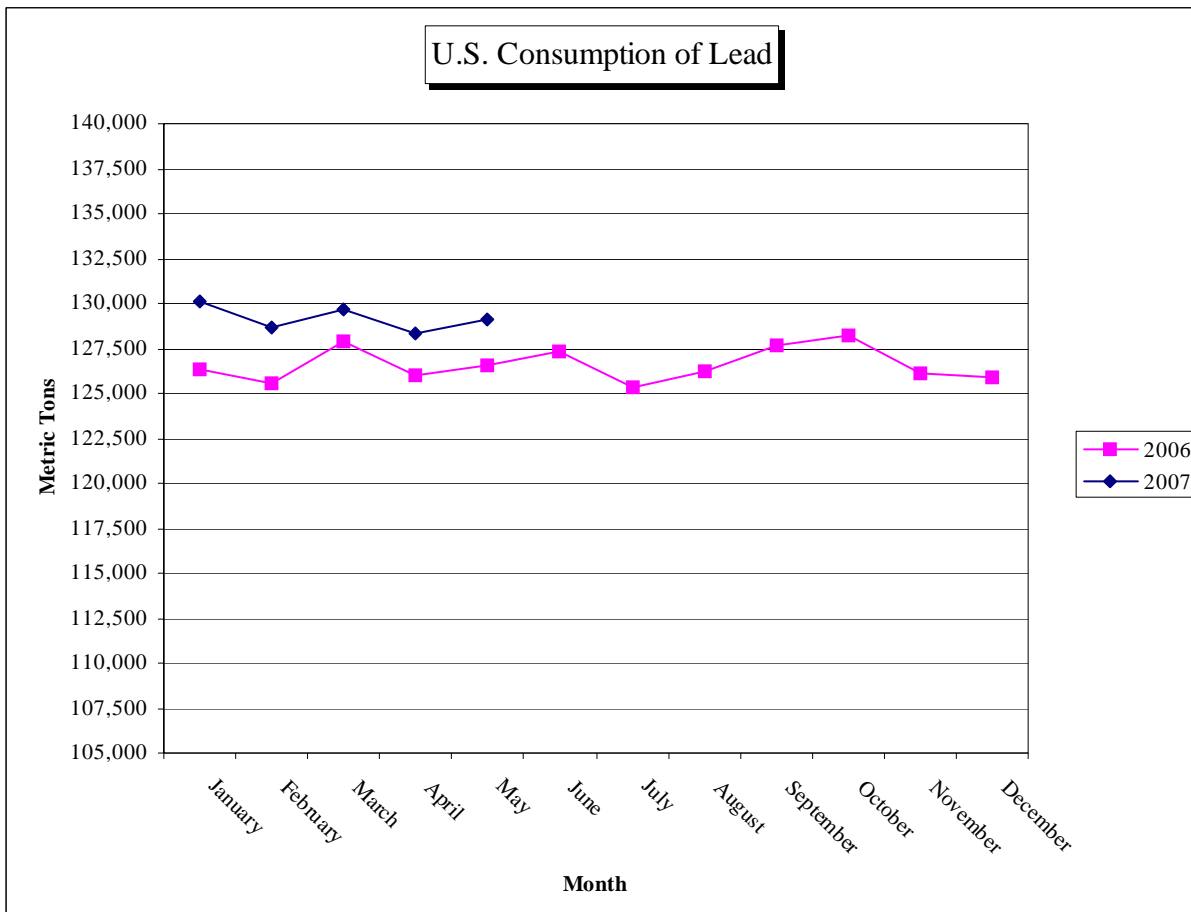


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks April 30, 2007	Net receipts	Consumption	Stocks May 31, 2007
Soft lead	33,600 ^r	61,000	61,000	33,600
Antimonial lead	8,940 ^r	22,000	23,200	7,760
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	49,300 ^r	104,000	105,000	48,100

^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		January- April
	April	Year	March	April	
Lead content:					
Ore and concentrates	2,216	297,619	26,051	8,912	42,306
Bullion	37	197	--	14	48
Materials excluding scrap	8,046	68,501	4,896	5,216	16,917
TEL/TML preparations, based on lead compounds	45	9,522	60	146	2,414
Total	10,344	375,840	31,006	14,287	61,685
Gross weight: Scrap	6,255	120,934	7,952	8,373	31,672

-- Zero.

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			2006		2007		
	Year	January- April	March	April	January- April	Year	January- April	March	April	January- April
Base bullion:										
Canada	449	--	--	--	--	449	--	--	--	--
Other	90	--	236	119	613	90	--	236	119	613
Total	539	--	236	119	613	539	--	236	119	613
Pigs and bars:										
Australia	9,230	478	--	--	--	9,230	478	--	--	--
Canada	222,000	84,000	17,500	16,800	65,500	222,000	84,000	17,500	16,800	65,500
Mexico	15,800	3,710	2,370	2,930	--	15,800	3,710	2,370	2,930	--
Peru	34,600	10,800	1,140	--	5,080	34,600	10,800	1,140	--	5,080
Other	49,800	26,200	19	5	7,950	49,800	26,200	19	5	7,950
Total	331,000	125,000	21,000	19,700	78,600	331,000	125,000	21,000	19,700	78,600
Grand total	332,000	125,000	21,300	19,800	79,200	332,000	125,000	21,300	19,800	79,200

-- Zero.

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

Source: U.S. Census Bureau.