

# Mineral Industry Surveys

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## LEAD IN JULY 2007

Domestic mine production of lead, based on the net quantity of lead recovered from concentrate, was 38,900 metric tons (t) in July, according to the U.S. Geological Survey. Mine production for the first 7 months of 2007 was about 2% above that for the same period in 2006. Secondary refinery production of lead increased slightly over that of the previous month.

According to Platts Metals Week published quotations, the average North American producer price increased by about 19% from that of the previous month to \$1.26 per pound. The London Metal Exchange Ltd. (LME) cash price in July averaged \$3,083 per metric ton, a 27% increase from that of the previous month.

The Toxic Substance Control Act Interagency Testing Committee added "lead and lead compounds" to the priority testing list in its 2007 report submitted to the U.S. Environmental Protection Agency (EPA). According to the committee report, the addition will permit the EPA to expeditiously obtain unpublished health and safety studies that relate to the lead content of consumer products intended for use by children (U.S. Environmental Protection Agency, 2007b).

The EPA issued a final rule promulgating mandatory criteria for the environmentally protective use of "chat" in transportation projects carried out in whole or in part with Federal Government funds. The chat material referred to in this final rule is a granular material obtained as a waste product from the concentrating of lead and zinc ores, and is specific to the Tri-State mining district of Oklahoma, Kansas, and Missouri. Uses for chat in transportation projects may involve its inclusion in asphalt concrete, slurry seals, microsurfacing material, epoxy seals, or cement (U.S. Environmental Protection Agency, 2007a).

In Australia, Xstrata Zinc (Madrid, Spain) approved the development of the Handlebar Hill Mine, an open cut zinc-lead mine north of Xstrata's Mount Isa Mine, Queensland. Ore was

expected to be mined at a rate of 1.75 million metric tons per year and was planned to be crushed at Xstrata's George Fisher Mine, south of Handlebar Hill. Transport of the crushed ore to the Mount Isa zinc-lead concentrator was expected to begin by mid 2008. Development of the mine was to begin following approval by the Queensland Department of Mines and Energy of an amendment to the mine plan (Xstrata Zinc, 2007).

Baiyinhanshan Mining Group Ltd. (Inner Mongolia, China) reported continued construction of a primary lead smelter in Bairin Left Banner, Inner Mongolia. The first stage of construction was to be completed in October 2007, resulting in a crude lead production capacity of 60,000 metric tons per year (t/yr). The second stage, expected to be completed in 2008, was to add 100,000 t/yr of crude lead production capacity. Baiyinnuo'er Lead & Zinc Mine Co. Ltd. also planned to construct a 100,000-t/yr-capacity lead smelter at its lead-zinc mine in Bairin Left Banner. Commissioning of this smelter was anticipated to take place in August 2008 (Beijing Antaika Information Development Co., Ltd., 2007).

## References Cited

- Beijing Antaika Information Development Co., Ltd., 2007, Bairin Left Banner to construct lead smelting base: China Metal Market—Lead, Zinc & Tin Monthly, no. 127, July, p. 6.
- U.S. Environmental Protection Agency, 2007a, Criteria for the safe and environmentally protective use of granular mine tailings known as "chat": Federal Register, v. 72, no. 137, July 18, p. 39331-39353.
- U.S. Environmental Protection Agency, 2007b, Sixtieth report of the TSCA Interagency Testing Committee to the Administrator of the Environmental Protection Agency—Receipt of report and request for comments—Notice: Federal Register, v. 72, no. 144, July 27, p. 41413-41418.
- Xstrata Zinc, 2007, Handlebar Hill open cut mine approval in Mount Isa: Madrid, Spain, and Mount Isa, Australia, Xstrata Zinc news release, June 29, 2 p.

TABLE 1  
SALIENT LEAD STATISTICS IN THE UNITED STATES<sup>1</sup>

(Metric tons, lead content, unless otherwise specified)

	2006			2007	
	Year	January- July	June	July	January- July
<b>Production:</b>					
Mine (recoverable)	419,000	247,000 <sup>r</sup>	34,500	38,900	251,000
Primary refinery	153,000	NA	NA	NA	NA
<b>Secondary refinery:</b>					
Reported by smelters/refineries	1,150,000	665,000	97,800	98,700	674,000
Estimated	--	6,720	988	987	6,440
Recovered from copper-base scrap <sup>e</sup>	8,990	8,750	1,250	1,250	8,750
Total secondary	1,160,000	681,000	100,000	101,000	689,000
<b>Stocks, end of period:</b>					
Secondary smelters and consumers	53,700	59,800	46,800 <sup>r</sup>	47,300	47,300
<b>Imports for consumption:</b>					
Ore and concentrate	539	278	38	79	806
Refined metal	331,000	209,000	23,100	23,900	146,000
<b>Consumption:</b>					
Reported	1,560,000	866,000	135,000	128,000	892,000
Undistributed <sup>e</sup>	--	26,800	3,900	3,680	26,500
Total	1,560,000	892,000	139,000	131,000	918,000
<b>Exports:</b>					
Ore and concentrate	298,000	85,500	25,500	56,900	137,000
Bullion	197	173	16	--	88
Wrought and unwrought lead	68,500	42,900	3,930	2,950	28,100
TEL/TML preparations, based on lead compounds	9,520	3,730	30	6	2,500
Exports (gross weight): Scrap	121,000	54,600	8,480	9,360	58,900
Platts Metals Week North American producer price (cents per pound)	77.40	75.19	106.34	126.27	99.77

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits, except price s; 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	
<b>2006:</b>				
July	76.05	1,051.74	570.25	1.844345
December	86.31	1,724.38	878.51	1.962855
Year	77.40	1,289.06	651.84	1.977591
<b>2007:</b>				
January	86.71	1,665.34	850.22 <sup>r</sup>	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
June	106.34	2,425.20	1,220.70	1.986729
July	126.27	3,082.76	1,514.52	2.035471

<sup>r</sup>Revised.

Source: Platts Metals Week.

TABLE 3  
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP<sup>1</sup>

(Metric tons, gross weight)

Item	Stocks	Net receipts	Consumption	Stocks
	June 30, 2007			July 31, 2007
Battery-lead	28,700 <sup>r</sup>	110,000	108,000	30,700
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other <sup>2</sup>	1,720 <sup>r</sup>	8,580	8,440	1,870
Total	30,400 <sup>r</sup>	119,000	116,000	32,500
Percent change from preceding month	XX	+2.9	+2.2	+7.0

<sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not available.

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

<sup>2</sup>Includes 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 JULY 2007<sup>1</sup>

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	48,000	--	--
Remelt lead	W	--	--
Antimonial lead	16,900	(2)	(2)
Other <sup>3</sup>	33,800	(2)	(2)
Total lead-base	98,700	140	311

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

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

<sup>2</sup>Withheld to avoid disclosing company proprietary data; included in "Total."

<sup>3</sup>Includes cable lead, lead-base babbitt, solder, type metals, and other products

TABLE 5  
CONSUMPTION OF LEAD IN THE UNITED STATES<sup>1</sup>

(Metric tons, lead content)

Use	2006		2007		
	Year	January- July	June	July	January- July
<b>Metal products:</b>					
Ammunition, shot and bullets	65,300	45,300	6,590	6,000	46,500
Brass and bronze, billet and ingots	2,620	2,800	413	409	2,310
Cable covering, power and communication and cabling lead, building construction	W	4,900	458	338	4,400
Casting metals	29,900	11,400	2,500	2,490	17,400
Sheet lead, pipes, traps and other extruded products	8,560	17,500	800	695	5,760
Solder	7,140	4,780	568	569	3,990
Storage batteries, including oxides	1,400,000	752,000	120,000	113,000	785,000
Terne metal, type metal, and other metal products <sup>2</sup>	24,700	1,040	1,390	1,390	9,710
<b>Total metal products</b>	<b>1,530,000</b>	<b>839,000</b>	<b>132,000</b>	<b>125,000</b>	<b>875,000</b>
Other oxides and miscellaneous	28,500	26,500	2,340	2,330	16,300
<b>Total reported</b>	<b>1,560,000</b>	<b>866,000</b>	<b>135,000</b>	<b>128,000</b>	<b>892,000</b>
Undistributed <sup>e</sup>	--	26,800	3,900	3,680	26,500
<b>Grand total</b>	<b>1,560,000</b>	<b>892,000</b>	<b>139,000</b>	<b>131,000</b>	<b>918,000</b>

<sup>e</sup>Estimated. W Withheld to avoid disclosing company proprietary data; included in "Metal products: Terne metal, type metal, and other metal products."

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

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

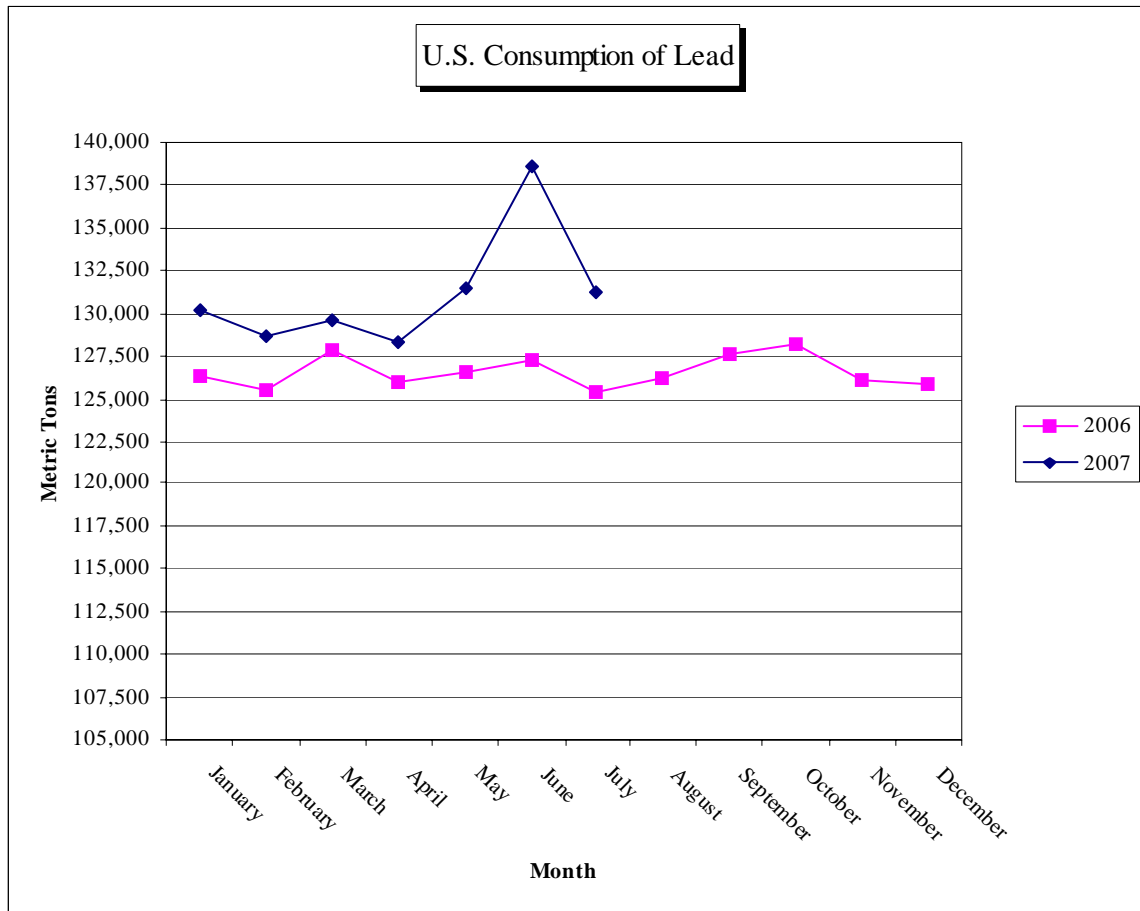


TABLE 6  
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD

(Metric tons, lead content)

Type of material	Stocks		Consumption	Stocks
	June 30, 2007	Net receipts		July 31, 2007
Soft lead	32,800 <sup>1</sup>	73,800	73,600	33,000
Antimonial lead	7,720 <sup>1</sup>	26,600	25,900	8,390
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	46,800 <sup>1</sup>	128,000	127,000	47,300

<sup>1</sup>Revised. W Withheld to avoid disclosing company proprietary data; included in "Total."

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

TABLE 7  
U.S. EXPORTS OF LEAD, BY CLASS<sup>1</sup>

(Metric tons)

	2006		January-		
	July	Year	June	July	July
Lead content:					
Ore and concentrates	19,100	298,000	25,500	56,900	137,000
Bullion	20	197	16	--	88
Materials excluding scrap	4,440	68,500	3,930	2,950	28,100
TEL/TML preparations, based on lead compounds	498	9,520	30	6	2,500
Total	24,100	376,000	29,500	59,900	168,000
Gross weight: Scrap	9,000	121,000	8,480	9,360	58,900

-- Zero.

<sup>1</sup>Data 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 ORIGIN<sup>1</sup>

(Metric tons, lead content)

Country of origin	General imports					Imports for consumption				
	2006		January-			2006		2007		
	Year	January- July	June	July	January- July	Year	January- July	June	July	January- July
Base bullion:										
Canada	449	278	--	--	--	449	278	--	--	--
Other	90	--	38	79	806	90	--	38	79	806
Total	539	278	38	79	806	539	278	38	79	806
Pigs and bars:										
Australia	9,230	9,230	--	--	--	9,230	9,230	--	--	--
Canada	222,000	132,000	18,800	18,500	120,000	222,000	132,000	18,800	18,500	120,000
Mexico	15,800	8,690	3,290	3,530	17,300	15,800	8,690	3,290	3,530	17,300
Peru	34,600	19,600	988	1,780	8,340	34,600	19,600	988	1,780	8,340
Other	49,800	38,800	32	110	400	49,800	38,800	32	110	400
Total	331,000	209,000	23,100	23,900	146,000	331,000	209,000	23,100	23,900	146,000
Grand total	332,000	209,000	23,200	23,900	147,000	332,000	209,000	23,200	23,900	147,000

-- Zero.

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

Source: U.S. Census Bureau.