

# Mineral Industry Surveys

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### **LEAD IN JANUARY 2009**

Domestic mine production (recoverable) of lead in January was 33,800 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in January was 1,090 t, unchanged from than that in December 2008. Secondary refinery production of lead decreased by about 3% compared with that of the previous month.

Total imports of lead for consumption through December 2008 were about 17% greater than those in the same period of 2007. Canada (71%), Mexico (19%), and Peru (3%) were the principal sources of imported refined lead. Total exports of lead, exclusive of scrap, through December 2008 were slightly lower than those in the previous year. The majority of the lead contained in lead ore and concentrates exported through December 2008 was sent to China (48%), the Republic of Korea (20%), and Canada (18%). Exports of lead scrap through December 2008 increased by nearly 36% from those in 2007.

According to Platts Metals Week, the average North American producer price for lead in January 2009 was \$0.67 per pound, down 18% from that of the previous month and 56% lower than that in January 2008. The London Metal Exchange (LME) cash price in January 2009 averaged \$1,132 per metric ton, up 18% from that of the previous month and 57% lower than that in January 2008. During January 2009, global LME lead stocks increased by 8,550 t to 53,700 t.

The latest data released by the Battery Council International indicated that 116 million starting-lighting-ignition (SLI) batteries were shipped in North America from January through

December 2008, down slightly from those of the same period of the previous year. North American shipments of original equipment SLI lead-acid batteries were 14% lower through December 2008 owing to the decline in new vehicle production. During the same time period, shipments of replacement SLI batteries in North America were up slightly from those in 2007 (Battery Council International, 2009).

In January 2009, Doe Run Resources Corp. (St. Louis, MO) announced a 17% reduction in the amount of ore that it planned to produce at its southeastern Missouri lead mines in 2009. According to the company, this adjustment to the original production plan was made in response to recent drops in the market price of lead. Based on the updated plan, Doe Run expected to produce about 4.5 million tons of ore in 2009. The company also planned to reduce the workforce employed at its mills, mines, and smelters by 10%. In October 2008, Doe Run had announced that it was temporarily taking one of two blast furnaces offline and reducing production of primary refined lead at its smelter in Herculaneum, MO (Riley, 2009).

### **References Cited**

Battery Council International, 2009, Breakdown of North American battery shipments (2001-2007): Chicago, IL, Battery Council International. (Accessed April 2, 2009 at http://www.batterycouncil.org/LinkClick.aspx?fileticket=fULzfVrO%2fPl%3d&tabid=54&mid=518.)
Riley, Anne, 2009, Doe Run slices lead output, work force: American Metal Market, January 6. (Accessed March 30, 2009, via http://www.amm.com.)

 $\label{eq:table 1} \textbf{TABLE 1}$  SALIENT LEAD STATISTICS IN THE UNITED STATES  $^1$ 

(Metric tons, lead content, unless otherwise specified)

		2008			
				January-	2009
	2007	January	December	December	January
Production:					
Mine (recoverable)	434,000	38,000	33,700	414,000	33,800
Secondary refinery:					
Reported by smelters/refineries	1,180,000	102,000	98,500	1,170,000	95,100
Estimated		1,020	985	13,700	951
Recovered from copper-base scrap <sup>e</sup>	NA	1,250	1,250	15,000	1,250
Total secondary	1,180,000	104,000	101,000	1,200,000	97,300
Consumption:					
Reported	1,570,000	136,000	123,000	1,560,000	120,000
Undistributed <sup>e</sup>		4,070	3,680	46,700 <sup>r</sup>	3,590
Total	1,570,000	140,000	126,000	1,600,000	123,000
Stocks, end of period, consumers and secondary smelters	49,400	53,100	69,900 r	69,900 <sup>r</sup>	70,600
Imports for consumption:					
Base bullion	1,990	20	97	2,740	NA
Refined metal	264,000	24,400	19,900	309,000	NA
Exports:					
Ore and concentrate	300,000	10,100	4,440	277,000	NA
Bullion	170	16	40	614	NA
Wrought and unwrought lead	56,400	5,770	7,970	74,200	NA
TEL/TML preparations, based on lead compounds	2,740	249	165	2,330	NA
Scrap (gross weight)	129,000	14,300	13,400	175,000	NA
Platts Metals Week North American producer					
price (cents per pound)	123.84	150.03	81.51	120.33	66.79

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

TABLE 2 MONTHLY AVERAGE LEAD PRICES

	North American producer price	LI	ME	Sterling exchange rate
	cents/lb	\$/metric ton	£/metric ton	dollars/£
2008:				
November	84.99	1,290.23	841.81	1.532678
December	81.51	961.89	647.56	1.485405
Year	120.33	2,089.71	1,128.19	1.852265
2009, January	66.79	1,131.58	782.46	1.446210

Source: Platts Metals Week.

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

## ${\bf TABLE~3}$ CONSUMPTION OF PURCHASED LEAD-BASE SCRAP $^{1}$

### (Metric tons, gross weight)

Item	Stocks December 31, 2008	Net receipts	Consumption	Stocks January 31, 2009
Battery-lead	17,000	85,700	87,100	15,600
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other <sup>2</sup>	1,900	7,290	7,440	1,740
Total	18,900	93,000	94,600	17,400
Percent change from preceding month	XX	-3.4	-5.4	-8.2

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

## TABLE 4 LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE SCRAP IN JANUARY $^{\rm I}$

### (Metric tons)

	Secondary metal content				
Product recovered	Lead	Tin	Antimony		
Soft and calcium lead	51,300				
Remelt lead	W				
Antimonial lead	7,930	(2)	(2)		
Other <sup>3</sup>	35,900	(2)	(2)		
Total lead-base	95,100	129	221		

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

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

<sup>&</sup>lt;sup>2</sup>Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap.

 $<sup>^1\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

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

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

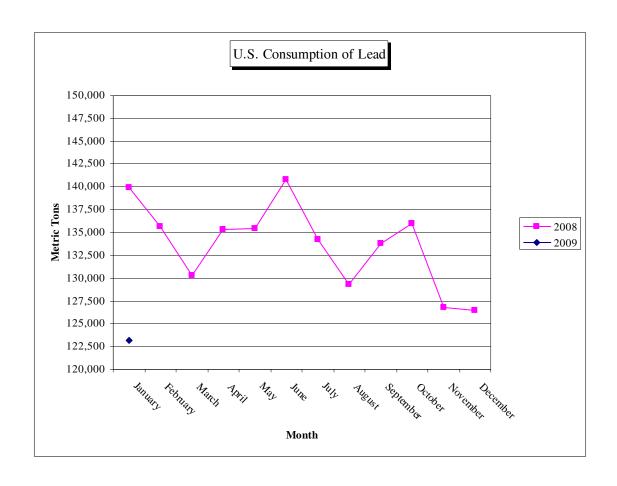
## ${\bf TABLE~5}$ CONSUMPTION OF LEAD IN THE UNITED STATES $^1$

(Metric tons, lead content)

				January-	2009
Use	2007	January	December	December	January
Metal products:					
Ammunition, shot and bullets	69,400	6,380	4,700	74,500	5,000
Brass and bronze, billet and ingots	2,870	351	323	2,260 <sup>r</sup>	362
Cable covering, power and communication					
and calking lead, building construction	W	678	499	7,340 <sup>r</sup>	648
Casting metals	31,500	2,640	2,650	31,700	2,600
Sheet lead, pipes, traps and other extruded products	29,900	2,270	2,100	27,800	2,270
Solder	7,220	586	586	7,040	577
Storage batteries, including oxides	1,380,000	120,000	108,000	1,360,000 <sup>r</sup>	105,000
Terne metal, type metal, and other metal products <sup>2</sup>	24,900	1,400	1,400	26,600 <sup>r</sup>	1,400
Total metal products	1,540,000	134,000	121,000	1,540,000	118,000
Other oxides and miscellaneous	25,300	1,990	2,190	15,600 <sup>r</sup>	1,980
Total reported	1,570,000	136,000	123,000	1,560,000	120,000
Undistributed <sup>e</sup>		4,070	3,680	46,700 <sup>r</sup>	3,590
Grand total	1,570,000	140,000	126,000	1,600,000	123,000

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

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



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

 ${\it TABLE~6}$  Consumer and secondary smelter stocks, receipts, and consumption of  ${\it LEAD}^1$ 

### (Metric tons, lead content)

	Stocks			Stocks
	December 31,	Net		January 31,
Type of material	2008	receipts	Consumption	2009
Soft lead	36,700	64,700	64,600	36,700
Antimonial lead	18,600 <sup>r</sup>	23,800	23,000	19,400
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	69,900 <sup>r</sup>	120,000	120,000	70,600

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

 $\label{eq:table 7} \text{U.S. EXPORTS OF LEAD, BY CLASS}^1$ 

### (Metric tons)

				2008	
	2007			January-	
	December	Year	November	December	December
Lead content:					
Ore and concentrates	18,900	300,000	27,900	4,440	277,000
Bullion	23	170	12	40	614
Materials excluding scrap	6,030	56,400	6,690	7,970	74,200
TEL/TML preparations, based					
on lead compounds	68	2,740	204	165	2,330
Total	25,000	359,000	34,800	12,600	354,000
Gross weight, scrap	14,800	129,000	12,400	13,400	175,000

<sup>&</sup>lt;sup>1</sup>Data are rounded to more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

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

 ${\bf TABLE~8}$  U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN  $^1$ 

### (Metric tons, lead content)

		Genera	1 imports			Imports for	consumption	
		2008				2008		
		·		January-				January-
Country of origin	2007	November	December	December	2007	November	December	December
Ore, matte, etc.:								
Canada				41				41
Mexico				451				451
Total				492				492
Base bullion:								
Colombia	1,860			92	1,860			92
Mexico			97	2,040			97	2,040
Other	127			602	127			602
Total	1,990		97	2,740	1,990		97	2,740
Pigs and bars:	, <u> </u>							
Canada	208,000	15,700	14,200	219,000	208,000	15,700	14,200	219,000
Mexico	35,600	3,820	4,800	58,100	35,600	3,820	4,800	58,100
Peru	16,500	974	496	10,600	16,500	974	496	10,600
Other	3,860	270	366	22,300	3,860	270	366	22,300
Total	264,000	20,800	19,900	309,000	264,000	20,800	19,900	309,000
Grand total	266,000	20,800	20,000	313,000	266,000	20,800	20,000	313,000

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

 $<sup>^{1}\</sup>mbox{Data}$  are rounded to no more than three significant digits; may not add to totals shown.