

# Mineral Industry Surveys

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## LEAD IN MAY 2011

Domestic mine production (recoverable) of lead in May was 29,400 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in May was 949 t, 12% lower than that in April. Secondary refinery production of lead in May was slightly lower than that of the previous month. Secondary refined lead production for the year through May 2011 was 8% higher than that in the corresponding period of 2010.

Total imports of lead for consumption in April 2011 were 15% lower than those in the previous month. Total imports of lead for consumption through April 2011 were 9% greater than those in the same period in the previous year. Canada (82%) and Mexico (18%) were the principal sources of imported refined lead through April 2011. Total exports of lead, exclusive of scrap, in April 2011 were 16% higher than those in the previous month. China and Canada were the leading destinations for ore and concentrates exports through April 2011.

Total exports of lead, exclusive of scrap, for the year through April 2011 were 36% less than those in the same period in the previous year. Total exports of spent lead-acid batteries for the year through April 2011 were 48% greater than those during the corresponding period of 2010. The majority of spent lead-acid batteries were sent to Mexico during the first 4 months of 2011.

The average Platts Metals Week North American producer price for lead in May 2011 was \$1.25 per pound, up slightly from that of the previous month and 14% higher than that in May 2010. The London Metal Exchange (LME) cash price of lead in May 2011 averaged \$2,420 per metric ton, down 12% from that of the previous month and 29% higher than that in May 2010. Global LME lead stocks at the end of May 2011 were 323,300 t, 4% higher than those at the end of April 2011 and 68% greater than those at the end of May 2010.

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

(Metric tons, lead content, unless otherwise specified)

	2010		2011		
	Year <sup>p</sup>	January– May	April	May	January– May
<b>Production:</b>					
Mine (recoverable)	365,000	158,000	32,500	29,400	144,000
<b>Secondary refinery:</b>					
Reported by smelters/refineries	1,120,000	453,000	101,000 <sup>r</sup>	99,000	488,000
Estimated	13,000	5,390	1,010 <sup>r</sup>	991	4,880
Recovered from copper-base scrap <sup>e</sup>	15,000	6,250	1,250	1,250	6,250
Total secondary	1,140,000	464,000	104,000 <sup>r</sup>	101,000	499,000
<b>Consumption:</b>					
Reported	1,360,000	564,000	129,000 <sup>r</sup>	128,000	603,000
Undistributed <sup>e</sup>	40,900	16,900	3,880 <sup>r</sup>	3,860	18,100
Total	1,410,000	581,000	133,000 <sup>r</sup>	132,000	621,000
Stocks, end of period, consumers and secondary smelters	67,400	53,100	61,100 <sup>r</sup>	64,700	64,700
<b>Imports for consumption:</b>					
Base bullion	602	146	--	NA	132 <sup>2</sup>
Refined metal	271,000	116,000	24,300	NA	100,000 <sup>2</sup>
<b>Exports:</b>					
Ore and concentrate	299,000	67,600	16,200	NA	36,200 <sup>2</sup>
Bullion	199	--	8	NA	8 <sup>2</sup>
Wrought and unwrought lead	83,300	29,800	1,800	NA	14,900 <sup>2</sup>
TEL/TML preparations, based on lead compounds	1,180	412	361	NA	664 <sup>2</sup>
Scrap (gross weight)	43,500	28,100	2,640	NA	7,710 <sup>2</sup>
Platts Metals Week North American producer price (cents per pound)	108.91	110.49	122.50	124.83	122.23

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

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

<sup>2</sup>Includes data for January–April only; May 2011 data were not available at time of publication.

TABLE 2  
MONTHLY AVERAGE LEAD PRICES

	North American producer price ¢/lb	London Metal Exchange cash		Sterling exchange rate
		\$/metric ton	£/metric ton	\$/£
<b>2010:</b>				
May	109.46	1,882.18	1,285.55	1.464105
June	105.49	1,703.39	1,154.71	1.475168
July	95.11	1,836.40	1,201.59	1.528305
August	95.79	2,074.77	1,324.67	1.566257
September	102.24	2,183.69	1,403.42	1.555982
October	114.73	2,379.01	1,500.04	1.585957
November	120.48	2,376.10	1,548.70	1.597918
December	120.58	2,411.93	1,509.42	1.597918
January–December	108.91	2,147.81	1,393.44	1.544861
<b>2011:</b>				
January	121.26	2,600.89	1,647.63	1.578565
February	121.21	2,586.05	1,603.29	1.612960
March	121.37	2,623.25	1,623.09	1.616209
April	122.50	2,740.61	1,675.09	1.636088
May	124.83	2,419.54	1,482.37	1.632210
January–May	122.23	2,594.07	1,606.29	1.615206

Source: Platts Metals Week.

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

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	April 30, 2011	receipts		May 31, 2011
Battery-lead	18,700 <sup>f</sup>	91,100	90,000	19,800
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other <sup>2</sup>	666 <sup>f</sup>	5,910	5,870	703
Total	19,400 <sup>f</sup>	97,000	95,900	20,500
Percent change from preceding month <sup>3</sup>	XX	+2.1	+1.3	+5.9

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

<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.

<sup>3</sup>Based on unrounded data; preceding monthly data may have been revised.

TABLE 4  
LEAD, TIN, AND ANTIMONY RECOVERED FROM  
LEAD-BASE SCRAP IN MAY 2011<sup>1</sup>

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	54,000	--	--
Remelt lead	W	--	--
Antimonial lead	15,100	(2)	(2)
Other <sup>3</sup>	30,000	(2)	(2)
Total lead-base	99,000	130	250

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	2010		2011		
	January– December	January– May	April	May	January– May
<b>Metal products:</b>					
Ammunition, shot and bullets	71,400	30,500	6,350 <sup>r</sup>	6,070	31,200
Brass and bronze, billet and ingots	991	1,210	281	281	1,410
Cable covering, power and communication and caulking lead, building construction	7,430	2,900	925	667	3,650
Casting metals	16,000	5,520	1,220 <sup>r</sup>	1,210	6,060
Sheet lead, pipes, traps and other extruded products	28,000	14,700	2,370 <sup>r</sup>	2,330	11,400
Solder	14,600	3,740	789 <sup>r</sup>	789	3,590
Storage batteries, including oxides	1,190,000	489,000	114,000 <sup>r</sup>	114,000	530,000
Terne metal, type metal, and other metal products <sup>2</sup>	16,400	6,270	1,230	1,250	6,300
<b>Total metal products</b>	<b>1,340,000</b>	<b>554,000</b>	<b>127,000 <sup>r</sup></b>	<b>127,000</b>	<b>594,000</b>
Other oxides and miscellaneous	23,100	9,770	1,830	1,830	9,280
<b>Total reported</b>	<b>1,360,000</b>	<b>564,000</b>	<b>129,000 <sup>r</sup></b>	<b>128,000</b>	<b>603,000</b>
Undistributed <sup>e</sup>	40,900	16,900	3,880 <sup>r</sup>	3,860	18,100
<b>Grand total</b>	<b>1,410,000</b>	<b>581,000</b>	<b>133,000 <sup>r</sup></b>	<b>132,000</b>	<b>621,000</b>

<sup>e</sup>Estimated. <sup>r</sup>Revised.

<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 bearing metals, foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

U.S. Consumption of Lead

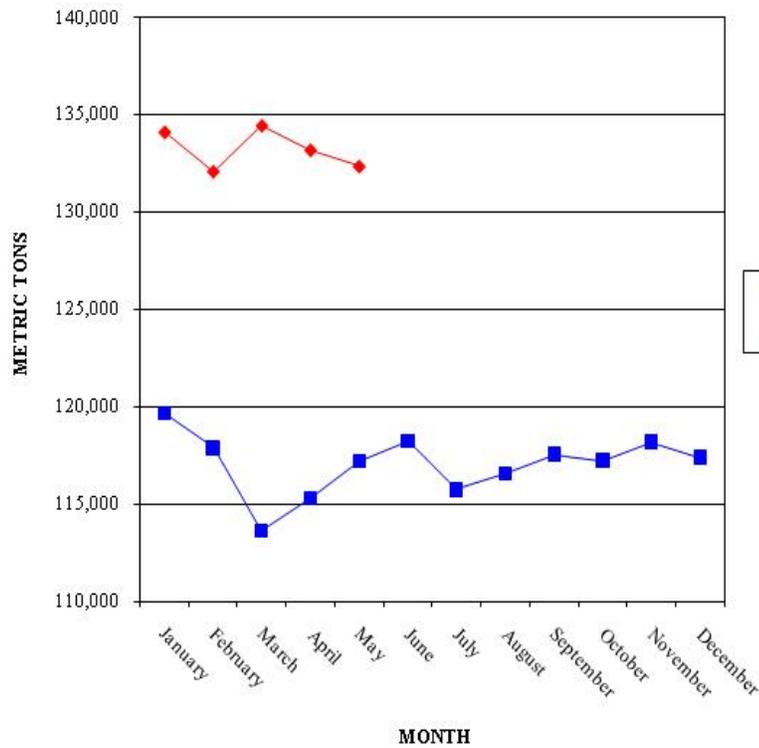


TABLE 6  
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD<sup>1</sup>

(Metric tons, lead content)

Type of material	Stocks	Net	Consumption	Stocks
	April 30, 2011			receipts
Soft lead	35,500 <sup>r</sup>	81,800	78,900	38,400
Antimonial lead	15,900 <sup>r</sup>	30,200	29,400	16,600
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	61,100 <sup>r</sup>	132,000	128,000	64,700

<sup>r</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 unless otherwise specified)

	2010		2011		
	Year	January– April	March	April	January– April
Lead content:					
Ore and concentrates	299,000	55,000	9,960	16,200	36,200
Bullion	199	--	--	8	8
Materials excluding scrap	83,300	25,100	5,820	1,800	14,900
TEL/TML preparations, based on lead compounds	1,180	329	143	361	664
Total	384,000	80,400	15,900	18,400	51,800
Gross weight, scrap	43,500	22,800	2,080	2,640	7,710
Spent lead-acid batteries, used for starting engines (units)	15,300,000	4,700,000	1,400,000	1,900,000	6,940,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 8  
U.S. IMPORTS FOR CONSUMPTION BY TYPE OF MATERIALS AND BY  
COUNTRY OF ORIGIN<sup>1</sup>

(Metric tons, lead content)

Country of origin	2010		2011		
	Year	January– April	March	April	January– April
Ore, matte, etc., Canada	411	--	--	--	--
<b>Base bullion:</b>					
Canada	404	--	18	--	18
Mexico	159	108	36	--	114
Other	38	38	--	--	--
Total	602	146	54	--	132
<b>Pigs and bars:</b>					
Canada	237,000	79,400	22,300	19,700	81,900
Mexico	29,400	9,780	6,130	4,400	17,800
Other	4,880	3,270	239	217	566
Total	271,000	92,400	28,600	24,300	100,000
Grand total	272,000	92,600	28,700	24,300	100,000

-- 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.