

# Mineral Industry Surveys

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## LEAD IN AUGUST 2012

Domestic mine production (recoverable) of lead in August was 29,700 metric tons (t). Average daily mine production in August was 957 t, up by 8% from that in July. Year-to-date mine production through August 2012 was slightly more than that of the same period of 2011. Secondary refinery production of lead decreased slightly from that of the previous month and year-to-date was slightly lower than that in the corresponding period of 2011.

Total imports of lead for consumption through August 2012 were slightly less than those in the same period of 2011. Canada (79%) and Mexico (16%) were the principal sources of imported refined lead through August 2012. Total exports of lead, exclusive of scrap through August 2012 were 22% lower than those through the same period of 2011. Exports of lead contained in ore and concentrates during the first 8 months of 2012 were 31% (40,300 t) lower than those through the same period of 2011.

The Platts Metals Week average North American producer price for lead in August 2012 was \$1.13 per pound, essentially unchanged from that of the previous month and 11% less than that in August 2011. The London Metal Exchange (LME) cash price in August 2012 averaged \$1,895 per metric ton, up slightly from that of the previous month but 21% lower than that in August 2011. Global LME lead stocks at the end of August

2012 were 307,875 t, down by 6% from those at the end of July 2012 and 3% lower than those at monthend August 2011.

### Update

In early November, Exide Technologies (Milton, GA) announced that it would be closing its 72,000-metric-ton-per-year secondary lead smelter in Reading, PA, by March 31, 2013. According to Exide, the decision was based on several factors, including price volatility in the lead market and increased operating costs owing to regulatory requirements. The Reading plant was built in 1972, and Exide would have needed to invest substantial capital to bring the smelter into compliance with recent changes to the National Ambient Air Quality Standards and the National Emission Standards for Hazardous Air Pollutants. The company had previously announced plans to shut down a secondary smelter in Frisco, TX, by November 30. Exide's three remaining smelters were expected to provide sufficient lead to meet internal battery manufacturing needs (American Metal Market, 2012).

### Reference Cited

American Metal Market, 2012, Exide to idle Pa. lead recycling plant by March: American Metal Market, November 9. (Accessed November 13, 2012, via <http://www.amm.com/>.)

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

(Metric tons, lead content, unless otherwise specified)

	2011		2012		
	January– December <sup>p</sup>	January– August	July	August	January– August
<b>Production:</b>					
Mine (recoverable)	336,000	222,000	27,500	29,700	224,000
<b>Secondary refinery:</b>					
Reported by smelters/refineries	1,170,000	787,000	98,100	95,800	778,000
Estimated	11,700	7,870	981	959	7,840
Recovered from copper-base scrap <sup>e</sup>	15,000	10,000	1,250	1,250	10,000
Total secondary	1,190,000	804,000	100,000	98,000	796,000
<b>Consumption:</b>					
Reported	1,530,000	989,000	120,000	122,000	988,000
Undistributed <sup>e</sup>	45,800	29,700	3,600	3,650	29,600
Total	1,570,000	1,020,000	124,000	125,000	1,020,000
Stocks, end of period, consumers and secondary smelters	54,800	63,700	62,600	65,700	65,700
<b>Imports for consumption:</b>					
Base bullion	434	234	153	19	636
Refined metal	313,000	206,000	21,800	22,100	202,000
<b>Exports:</b>					
Ore and concentrate	223,000	131,000	14,900	2,810	90,600
Bullion	70	8	--	--	72
Wrought and unwrought lead	47,200	30,400	4,860	4,560	34,900
TEL/TML preparations, based on lead compounds	6,270	1,320	123	274	1,140
Scrap (gross weight)	31,100	23,700	1,670	1,780	16,800
Platts Metals Week North American producer price (cents per pound)	121.70	124.15	113.34	113.42	113.79

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. -- Zero.

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

TABLE 2  
MONTHLY AVERAGE LEAD PRICES

	North American producer price ¢/lb	London Metal Exchange cash		Sterling exchange rate \$/£
		\$/metric ton	£/metric ton	
<b>2011:</b>				
August	127.90	2,404.09	1,468.11	1.637541
September	125.74	2,297.90	1,668.27	1.377414
October	113.86	1,948.25	1,237.07	1.574886
November	113.73	1,981.59	1,252.77	1.581773
December	113.87	2,018.59	1,292.71	1.561520
January–December	121.70	2,401.20	1,548.94	1.550217
<b>2012:</b>				
January	114.17	2,093.74	1,349.68	1.551290
February	114.29	2,125.79	1,345.68	1.579710
March	114.03	2,061.01	1,302.73	1.582068
April	114.03	2,062.67	1,287.68	1.601844
May	113.81	1,998.51	1,283.48	1.557100
June	113.26	1,854.42	1,190.94	1.557100
July	113.34	1,875.97	1,203.77	1.558400
August	113.42	1,895.42	1,205.06	1.572889
January–August	113.79	1,995.94	1,271.13	1.570050

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
	July 31, 2012			August 31, 2012
Battery-lead	35,600	90,700	89,700	36,600
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other <sup>2</sup>	4,410	2,130	2,090	4,450
Total	40,000	92,800	91,800	41,100
Percent change from preceding month <sup>3</sup>	XX	-0.1	-1.9	+1.3

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 AUGUST 2012<sup>1</sup>

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	80,100	--	--
Remelt lead	W	--	--
Antimonial lead	10,000	W	W
Other <sup>2</sup>	5,700	147	252
Total lead-base	95,800	147	252

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>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	2011		2012		
	January– December	January– August	July	August	January– August <sup>2</sup>
<b>Metal products:</b>					
Ammunition, shot and bullets	69,300	48,700	5,510	5,840	47,100
Brass and bronze, billet and ingots	1,660	2,080	283	283	2,260
Cable covering, power and communication and caulking lead, building construction	8,410	5,800	231	231	2,880
Casting metals	14,600	9,720	874	882	8,000
Sheet lead, pipes, traps and other extruded products	26,800	18,300	2,210	2,200	17,300
Solder	6,400	4,930	531	531	4,250
Storage batteries, including oxides	1,360,000	873,000	107,000	107,000	876,000
Terne metal, type metal, and other metal products <sup>3</sup>	16,400	10,100	1,220	1,220	9,910
Total metal products	1,500,000	973,000	117,000	119,000	968,000
Other oxides and miscellaneous	26,500	16,000	2,500	2,980	20,300
Total reported	1,530,000	989,000	120,000	122,000	988,000
Undistributed <sup>6</sup>	45,800	29,700	3,600	3,650	29,600
Grand total	1,570,000	1,020,000	124,000	125,000	1,020,000

<sup>6</sup>Estimated.

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

<sup>2</sup>May include revisions to previous months' data.

<sup>3</sup>Includes lead consumed in bearing metals, foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

U.S. Consumption of Lead

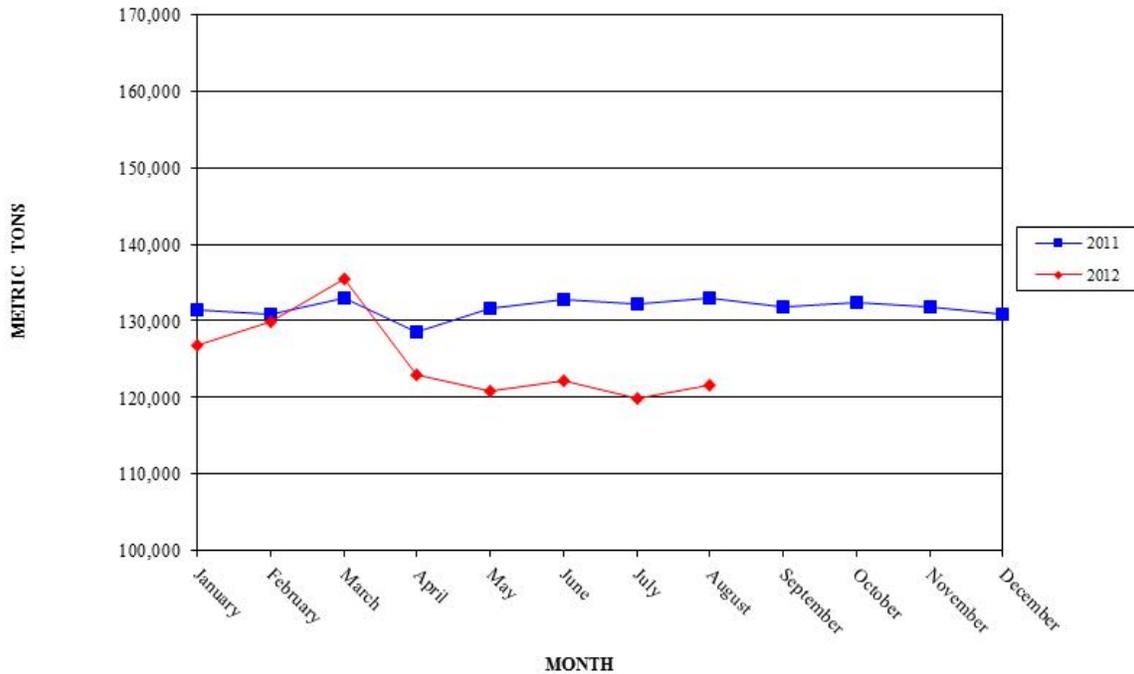


TABLE 6  
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD<sup>1</sup>

(Metric tons, lead content)

Type of material	Stocks July 31, 2012	Net receipts	Consumption	Stocks August 31, 2012
Soft lead	41,200	79,600	77,300	43,400
Antimonial lead	19,900	35,400	34,600	20,700
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	62,600	125,000	122,000	65,700

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)

	2011		2012		
	January– December	January– August	July	August	January– August
<b>Lead content:</b>					
Ore and concentrates	223,000	131,000	14,900	2,810	90,600
Bullion	70	8	--	--	72
Wrought and unwrought lead	47,200	30,400	4,860	4,560	34,900
TEL/TML preparations, based on lead compounds	6,270	1,320	123	274	1,140
Total	277,000	163,000	19,800	7,650	127,000
Gross weight, scrap	31,100	23,700	1,670	1,780	16,800
Spent lead-acid batteries, used for starting engines (units)	25,400,000	16,000,000	1,820,000	2,020,000	15,300,000

-- 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)

Material and country of origin	2011		2012		
	January– December	January– August	July	August	January– August
Ore, matte, etc; Canada	--	--	--	1,530	1,530
<b>Base bullion:</b>					
Canada	35	35	--	--	--
Mexico	199	199	153	--	617
Venezuela	200	--	--	19	19
Total	434	234	153	19	636
<b>Pigs and bars:</b>					
Canada	250,000	164,000	17,900	18,500	159,000
China	32	--	--	--	5,000
Mexico	56,000	38,500	3,390	3,020	31,400
Other	7,560	4,120	566	639	6,460
Total	313,000	206,000	21,800	22,100	202,000
Grand total	314,000	207,000	22,000	23,700	204,000

-- 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.