

Mineral Industry Surveys

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LEAD IN DECEMBER 2013

Domestic mine production (recoverable) of lead in December was 28,600 metric tons (t). Average daily mine production in December was 921 t, 8% more than that in November. Total lead mine production for the year was 331,000 t, slightly less than that in 2012. In 2013, increased lead production at the Lucky Friday Mine in Idaho was offset by declines in Alaska and Missouri. Secondary refinery production of lead in December was slightly greater than that of the previous month, and secondary lead production in 2013 was essentially unchanged from that in 2012.

Total imports of lead for consumption in December were 7% less than those in November but full-year imports were 43% greater than those in 2012. Canada (51%) Mexico (22%) and Australia (9%) continued to be the principal sources of imported lead. Total exports of lead in 2013 were slightly less than those in 2012.

The Platts Metals Week average North American producer price for lead in December 2013 was \$1.15 per pound, essentially unchanged from that of the previous month and that of December 2012. The 2013 annual average producer price for lead was \$1.15 per pound, essentially unchanged from that in 2012. The London Metal Exchange Ltd. (LME) cash price in December 2013 averaged \$2,133 per metric ton, a slight increase from that of the previous month but 6% less than that in December 2012. The 2013 annual average LME cash price was \$2,142 per metric ton, a 4% increase from that in 2012. The LME cash price in 2013 ranged between a low of \$1,948 to a high of \$2,448 per metric ton. Global LME lead stocks at the end of December 2013 were 213,950 t, a decrease of 7% from those at the end of November and a decrease of 33% from those at yearend 2012.

According to preliminary data from the International Lead and Zinc Study Group (ILZSG), global lead mine production

increased by 6% in 2013 from that of 2012 to 5.31 million metric tons (Mt), primarily owing to increases in Australia and China, partially offsetting a decline in Canada. Global refined lead production in 2013 was 10.6 Mt, about a 4% increase from that in 2012. Refined lead production increases in China, Italy, Peru, and the United States accounted for most of the global increase. Global lead consumption increased by 5% in 2013 to 10.6 Mt owing to increased consumption in China, Europe, the Republic of Korea, and the United States. Note that consumption of lead in the United States (table 5) is reported lead consumption and differs from the lead consumption data published by ILZSG. Global consumption of lead metal exceeded production by 22,000 t in 2013, the first time that consumption exceeded production since 2009 (International Lead and Zinc Study Group, 2013).

The Battery Council International reported that 126.0 million lead-acid automotive batteries were shipped by North American producers in 2013, essentially unchanged from shipments in 2012. Shipments of replacement lead-acid automotive batteries (107.0 million) were essentially unchanged, but shipments of original equipment lead-acid automotive batteries (19.0 million) increased by 8% from those in 2012 (Battery Council International, 2014, p. 23–24).

References Cited

Battery Council International, 2014, BCI 2013 monthly shipment report: Chicago, IL, Battery Council International, February 10, 24 p.
International Lead and Zinc Study Group, 2014, Review of trends in 2013—Lead: Lisbon, Portugal, International Lead and Zinc Study Group news release, February 17, 2 p. (Accessed on February 17, 2014, at http://www.ilzsg.org/pages/653/document.aspx?page=2&ff_aa_document_type=R&from=6.)

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2012 ^p		2013	
	January– December	November	December	January– December
Production:				
Mine (recoverable)	336,000 ^r	25,700 ^r	28,600	331,000
Secondary refinery:				
Reported by smelters/refineries	1,170,000 ^r	99,600	102,000	1,180,000
Estimated	11,700	996	1,020	11,800
Recovered from copper-base scrap ^c	15,000	1,250	1,250	15,000
Total secondary	1,190,000	102,000	104,000	1,200,000
Consumption:				
Reported	1,470,000	115,000	114,000	1,380,000
Undistributed ^c	38,600	3,450	3,410	41,900
Total	1,510,000	119,000	117,000	1,430,000
Stocks, end of period, consumers and secondary smelters	57,500	65,100 ^r	69,300	69,300
Imports for consumption:				
Base bullion	1,020	72	--	1,900
Refined metal	349,000	38,700	35,900	500,000
Exports:				
Ore and concentrate	214,000	7,710	6,500	215,000
Bullion	72	--	--	349
Wrought and unwrought lead	53,300	3,370	1,980	48,200
TEL/TML preparations, based on lead compounds	1,730	94	115	1,610
Scrap (gross weight)	25,900	3,080	2,390	34,900
Platts Metals Week North American producer price (cents per pound)	114.16	114.58	114.73	114.77

^cEstimated. ^pPreliminary. ^rRevised. -- Zero.

¹Data 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 ¹	London Metal Exchange cash		Used lead-acid batteries ²
	¢/lb	¢/lb	\$/t	¢/lb
2012:				
December	115.26	103.18	2,274.83	37.25
January–December	114.16	108.92	2,061.94	NA
2013:				
January	115.51	106.13	2,339.84	38.40
February	115.63	107.76	2,375.80	39.75
March	114.92	99.02	2,183.06	39.25
April	114.35	92.07	2,029.80	38.40
May	114.35	91.98	2,027.86	38.25
June	114.62	95.41	2,103.44	38.75
July	114.42	92.89	2,047.90	37.80
August	114.88	98.56	2,172.86	37.75
September	114.56	94.71	2,088.00	36.63
October	114.65	95.75	2,111.03	36.40
November	114.58	94.80	2,089.77	37.25
December	114.73	96.74	2,132.66	37.40
January–December	114.77	97.15	2,141.84	38.00

NA Not available.

¹Platts Metals Week North American producer price.

²Platts Metals Week assessment for used lead-acid automotive batteries (50% lead) picked up in U.S. Midwest, suitable for delivery to secondary smelters within 30 days.

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN DECEMBER 2013¹

(Metric tons, gross weight)

Item	Stocks		Consumption	Stocks
	November 30, 2013	Net receipts		December 31, 2013
Battery-lead	43,200	89,900	92,200	40,900
Other ²	4,220	3,450	3,400	4,270
Total	47,400	93,300	95,600	45,200
Percent change from preceding month ³	XX	+0.1	+8.5	-4.8

XX Not applicable.

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

²Includes soft lead, solder, drosses and residues, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap.

³Based on unrounded data; preceding monthly data may have been revised.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN DECEMBER 2013¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	68,200	--	--
Remelt lead	W	--	--
Antimonial lead	30,000	W	W
Other ²	3,400	154	271
Total lead-base	102,000	154	271

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.

²Includes 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	2012 ^P	2013		
	January– December	November	December	January– December ²
Metal products:				
Ammunition, shot and bullets	69,100	7,420	6,980	82,500
Brass and bronze, billet and ingots	3,400	311	311	3,630
Cable covering, power and communication and caulking lead, building construction	3,800	160	160	2,060
Casting metals	11,600	1,340	1,340	14,500
Sheet lead, pipes, traps and other extruded products	27,600	1,300	1,340	14,800
Solder	6,370	529	528	6,440
Storage batteries, including oxides	1,300,000	100,000	99,600	1,220,000
Terne metal, type metal, and other metal products ³	14,800	1,230	1,230	14,500
Total metal products	1,440,000	113,000	111,000	1,350,000
Other oxides and miscellaneous	31,700	2,510	2,170	30,300
Total reported	1,470,000	115,000	114,000	1,380,000
Undistributed ^c	38,600	3,450	3,410	41,900
Grand total	1,510,000	119,000	117,000	1,430,000

^cEstimated. ^PPreliminary.

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

²May include revisions to previously published data.

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

U.S. Consumption of Lead

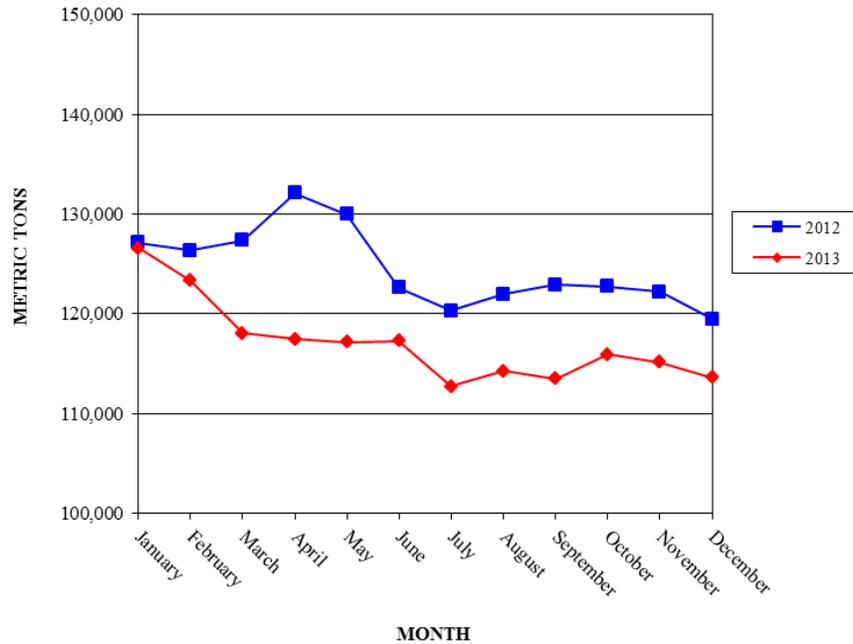


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD
IN DECEMBER 2013¹

(Metric tons, lead content)

Type of material	Stocks		Consumption	Stocks
	November 30, 2013	Net receipts		December 31, 2013
Soft lead	44,900	71,800	72,400	44,300
Antimonial lead	18,400 ^r	30,400	25,600	23,200
Other ²	1,720	15,600	15,600	1,720
Total	65,100 ^r	118,000	114,000	69,300

^rRevised.

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

²Includes copper-based scrap, and lead alloys.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS¹

(Metric tons unless otherwise specified)

	2012	2013		
		November	December	January– December
Lead content:				
Ore and concentrate	214,000	7,710	6,500	215,000
Bullion	72	--	--	349
Wrought and unwrought lead	53,300	3,370	1,980	48,200
TEL/TML preparations, based on lead compounds	1,730	94	115	1,610
Total	269,000	11,200	8,590	265,000
Gross weight, scrap	25,900	3,080	2,390	34,900
Spent lead-acid batteries, used for starting engines (units)	22,700,000	2,050,000	2,280,000	26,300,000

-- Zero.

¹Data 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 ORIGIN¹

(Metric tons, lead content)

Material and country of origin	2012	2013		
	January– December	November	December	January– December ²
Ore, matte, etc; Canada	1,530	--	--	18
Base bullion:				
Mexico	695	--	--	148
Venezuela	327	72	--	1,750
Total	1,020	72	--	1,900
Pigs and bars:				
Australia	24,300	--	248	46,800
Belgium	2,010	--	--	1,440
Brazil	332	--	--	887
Canada	240,000	19,300	18,100	257,000
Chile	664	264	589	4,220
China	5,000	--	--	441
Mexico	56,100	9,830	13,000	111,000
Peru	1	8,000	2,550	39,600
United Kingdom	340	--	100	2,370
Venezuela	100	249	--	980
Other	19,700 ^r	1,020 ^r	1,320	34,400
Total	349,000	38,700	35,900	500,000
Grand total	352,000	38,700	35,900	502,000

^rRevised. -- Zero.

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

²May include revisions to previously published data.

Source: U.S. Census Bureau.