

Mineral Industry Surveys

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LEAD IN SEPTEMBER 2014

Domestic mine production (recoverable) of lead in September was 31,200 metric tons (t). Average daily mine production in September was 1,040 t, 6% more than that in August. Mine production during the first three quarters of 2014 was 9% greater than that in the same period in 2013 owing to increased production in all of the lead-producing States—Alaska, Idaho, and Missouri.

Secondary refinery production of lead in September was slightly greater than that of the previous month. Production during the first three quarters of the year was 5% less than that in the same period in 2013, partially owing to the temporary shutdown of Exide Technologies' lead refinery in Vernon, CA (90,000 metric-ton-per-year capacity), which began in mid-March 2014. (See Lead in June 2014.)

Total imports of lead for consumption declined by 36% in September 2014 from those in the previous month, but imports during the first three quarters of 2014 were 16% greater than those in the same period of 2013. Total exports of lead, exclusive of scrap, increased by 46% in September from those of the previous month owing to an increase in exports of lead in ore and concentrates. Year-to-date total exports were 43% greater than those in the same period in 2013. The increase was primarily owing to increased exports of lead contained in concentrates, the majority of which went to China, and correlated with the closure of Doe Run Resources Corp.'s (St. Louis, MO) primary lead smelter in Herculaneum, MO, at yearend 2013.

The Platts Metals Week average North American Market price for lead in September 2014 was \$1.07 per pound, a 5% decrease from that of the previous month and essentially unchanged from that in September 2013. The London Metal Exchange Ltd. (LME) cash price for lead in September 2014 averaged \$2,122 per metric ton, 5% less than that in the previous month, but slightly more than that in September 2013.

The average LME cash price for lead in the first three quarters of 2014 was \$2,127 per metric ton, slightly less than that in the same period of 2013. The Platts average U.S. used lead-acid batteries price in September 2014 was \$0.397 per pound, essentially unchanged from that in August but 11% more than that in September 2013. Global LME lead stocks at the end of September 2014 were 225,525 t, slightly more than those at the end of August 2014, but 6% less than those at the end of September 2013.

Update

The Battery Council International reported that 126.2 million lead-acid automotive batteries were shipped by North American producers in 2014, a slight increase from shipments in 2013. Shipments of replacement lead-acid automotive batteries (105.6 million) were essentially unchanged, but shipments of original equipment lead-acid automotive batteries (20.6 million) increased by 8% from those in 2013 (Battery Council International, 2015, p. 23–24).

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Reference Cited

Battery Council International, 2015, BCI 2014 monthly shipment report: Chicago, IL, Battery Council International, February 3, 24 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2013		2014		
	January– December ^p	January– September	August	September	January– September
Production:					
Mine (recoverable)	330,564	248,562	30,389 ^r	31,182	272,106
Secondary refinery:					
Reported by smelters/refineries	1,167,110	873,372	91,621	92,609	833,382
Estimated	11,670	8,733	925	935	8,416
Recovered from copper-base scrap ^c	15,000	11,250	1,250	1,250	11,250
Total secondary	1,193,780	893,355	93,796	94,794	853,048
Consumption of refined lead, apparent ^{c,2}	1,746,488	1,299,841	155,309	128,170	1,244,614
Stocks, end of period, consumers and secondary smelters	69,260	75,950	62,080 ^r	63,359	65,359
Imports for consumption:					
Base bullion	1,903	1,806	--	83	333
Refined metal	499,952	386,120	55,870	35,448	451,242
Exports:					
Ore and concentrate	215,336	151,180	24,621	41,688	226,448
Bullion	349	349	49	--	963
Wrought and unwrought lead	48,189	38,573	6,504	3,748	45,095
TEL/TML preparations, based on lead compounds	1,607	1,289	43	23	658
Scrap (gross weight)	34,929	26,468	4,065	3,191	26,269
Platts Metals Week North American Producer price (cents per pound)	114.77	114.80	NA	NA	NA
Platts Metals Week North American Market price (cents per pound)	NA	NA	112.45	107.01	107.73

^cEstimated. ^pPreliminary. ^rRevised. NA Not available. -- Zero.

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

²Smelter production plus imports for consumption minus domestic exports plus stock change.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American Producer ¹	North American Market ²	London Metal Exchange cash		Used lead-acid batteries ³
	¢/lb	¢/lb	¢/lb	\$/t	¢/lb
2013:					
September	114.56	NA	94.71	2,088.00	36.63
October	114.65	NA	95.75	2,111.03	36.40
November	114.58	NA	94.80	2,089.77	37.25
December	114.73	NA	96.74	2,132.66	37.40
January–December	114.77	NA	97.15	2,141.84	38.00
2014:					
January	114.78	108.39	97.45	2,148.47	39.75
February	114.65	107.15	95.71	2,110.05	39.63
March	114.45	104.67	93.27	2,056.24	39.25
April	105.67	105.67	94.60	2,085.56	38.70
May	NA	106.62	95.11	2,096.71	39.00
June	NA	106.91	95.39	2,102.92	39.25
July	NA	110.68	99.28	2,188.79	39.40
August	NA	112.45	101.430	2,236.18	39.50
September	NA	107.01	96.24	2,121.78	39.70
January–September	NA	107.73	96.50	2,127.41	39.35

NA Not available.

¹Platts Metals Week North American Producer price.

²Platts Metals Week North American Market price. Reflects the LME lead cash price plus the Platts premium for 99.97% lead.

³Platts 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 SEPTEMBER 2014¹

(Metric tons, gross weight)

Item	Stocks	Net receipts	Consumption	Stocks
	August 31, 2014			September 30, 2014
Battery-lead	46,600	79,200	79,600	46,200
Other ²	4,630	2,360	2,450	4,540
Total	51,200	81,500	82,000	50,700
Percent change from preceding month ³	XX	-2.1	+1.0	-1.0

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 SEPTEMBER 2014¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	71,400	--	--
Remelt lead	W	--	--
Antimonial lead	20,500	W	W
Other ²	719	157	373
Total lead-base	92,600	157	373

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
U.S. APPARENT CONSUMPTION OF LEAD¹

(Metric tons)

Period	Production ²	Imports ^{3,4}	Exports ^{3,4}	Stock change during period	Apparent consumption ⁵
2013: ^p					
September	108,000	41,300	4,180	(4,060)	150,000
October	112,000	39,300	3,820	(8,080)	156,000
November	111,000	38,700	2,940	(4,200)	151,000
December	104,000	35,900	1,650	4,270	134,000
January–December	1,300,000	500,000	41,600	11,800	1,750,000
2014:					
January	92,700	66,600	1,430	(1,280)	159,000
February	91,700	30,200	2,360	4,390	115,000
March	97,900	49,800	5,440	5,410	137,000
April	96,300	62,500	6,650	(417)	152,000
May	94,500	56,200	4,970	1,700	144,000
June	94,500	59,800	6,010	2,630	146,000
July	96,900	34,800	4,520	(4,060)	131,000
August	93,800	55,900	6,300	11,500	132,000
September	94,800	35,400	3,430	(1,280)	128,000
January–September	853,000	451,000	41,100	18,600	1,240,000

^pPreliminary.

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

²Monthly data include secondary refined lead and an estimate for primary refined lead.

³Import and export data are for Harmonized Tariff Schedule of the United States (HTS) codes 7801.10.0000, 7801.91.0000, 7801.99.9030, 7801.99.9050.

⁴Source: U.S. Census Bureau.

⁵Smelter production plus imports for consumption minus domestic exports plus stock change.

TABLE 6
U.S. EXPORTS OF LEAD, BY CLASS¹

(Metric tons unless otherwise specified)

	2013		2014		
	Year	January–September	August	September	January–September
Lead content:					
Ore and concentrates	215,000	151,000	24,600	41,700	226,000
Bullion	349	349	49	--	963
Wrought and unwrought lead	48,200	38,600	6,500	3,750	45,100
TEL/TML preparations, based on lead compounds	1,610	1,290	43	23	658
Total	265,000	191,000	31,200	45,500	273,000
Gross weight, scrap	34,900	26,500	4,070	3,190	26,300
Spent lead-acid batteries, used for starting engines (units)	26,300,000	19,400,000	2,770,000	2,540,000	22,400,000

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

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION BY TYPE OF MATERIALS AND BY
COUNTRY OF ORIGIN¹

(Metric tons, lead content)

Material and country of origin	2013		2014		
	Year	January– September	August	September	January– September
Ore, matte, etc; Canada	18	18	--	--	--
Base bullion:					
Canada	--	--	--	--	45
Mexico	148	148	--	83	163
Venezuela	1,750	1,660	--	--	124
Total	1,900	1,810	--	83	333
Pigs and bars:					
Australia	46,800	46,600	--	395	395
Belgium	1,440	1,440	--	--	--
Brazil	887	887	--	--	--
Canada	257,000	200,000	21,700	21,500	199,000
China	441	--	--	--	23
Chile	4,220	2,810	204	--	3,140
Dominican Republic	440	440	35	35	196
Ecuador	2,020	1,310	547	597	7,240
France	11,900	11,700	161	156	522
Guatemala	639	419	--	--	--
India	1,020	774	--	--	9,440
Israel	4,190	3,270	718	--	2,100
Kazakhstan	4,980	4,980	10,300	597	48,100
Korea, Republic of	2,200	1,000	8,430	452	21,800
Mexico	111,000	80,300	7,180	8,820	89,600
Nigeria	400	400	--	--	--
Panama	--	99	--	696	796
Peru	39,600	21,600	4,460	--	49,700
Russia	5,220	5,220	1,320	1,350	14,100
Sri Lanka	1,030	525	217	100	640
United Kingdom	2,370	2,130	362	547	3,220
Venezuela	980	605	235	91	731
Other	383	190	2	145	160
Total	500,000	386,000	55,900	35,400	451,000
Grand total	502,000	388,000	55,900	35,500	452,000

-- Zero.

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

Source: U.S. Census Bureau.