

Mineral Industry Surveys

For information, contact:

David E. Guberman, Lead Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4977, Fax: (703) 648-7757
E-mail: dguberman@usgs.gov

Elsie D. Isaac (Data)
Telephone: (703) 648-7966
Fax: (703) 648-7975
E-mail: eisaac@usgs.gov

Internet: <http://minerals.usgs.gov/minerals>

LEAD IN JULY 2013

Domestic mine production (recoverable) of lead in July was 28,400 metric tons (t). Average daily mine production in July was 916 t, slightly less than in June. Year-to-date lead mine production was essentially unchanged from that during the same period in 2012. Secondary refinery production of lead in July was essentially unchanged from that of the previous month, and year-to-date production was also essentially unchanged from that of the same period in 2012.

Total imports of lead for consumption in July 2013 increased slightly from those in the previous month, and year-to-date imports were 74% greater than during the same period in 2012. The increase was partially attributed to lead consumers and traders accumulating lead stocks earlier in the year in anticipation of the planned closure at yearend of Doe Run Resources Corp.'s (St. Louis, MO) primary lead smelter in Herculaneum, MO. Total exports of lead, exclusive of scrap, in July were 171% greater than those in the previous month owing to increased exports of lead contained in ore and concentrate. Exports of ore and concentrates tend to increase from July through October, the shipping season for Teck Resources Ltd.'s (Vancouver, British Columbia, Canada) Red Dog zinc-lead mine in northwestern Alaska. Exports of spent lead-acid batteries decreased by 16% in July compared with those in June, but year-to-date exports increased by about 10% compared with those in the same period of 2012. A significant portion of these spent lead-acid batteries were sent to secondary smelters in Mexico.

The Platts Metals Week average North American producer price for lead in July 2013 was \$1.14 per pound, essentially unchanged from that in the previous month and that in July 2012. The London Metal Exchange Ltd. (LME) cash price of lead in July 2013 averaged \$2,048 per metric ton, slightly less than that of the previous month but 9% greater than that in July 2012. The Platts average U.S. used lead-acid batteries price in July 2013 was \$0.378 per pound, slightly less than that in June. Global LME lead stocks at the end of July 2013 were 200,225 t (26,600 t in domestic warehouses), slightly greater than those at the end of June but 37% less than those at the end of 2012.

Update

Doe Run continued to prepare for the yearend closure of its Herculaneum primary lead smelter. Herculaneum, which opened in 1892, was the only primary lead smelter still operating in the United States. After the smelter closes, the company expected to export all of the concentrates produced at its six mines in southeastern Missouri. Doe Run will continue to operate the refinery and alloying portions of the Herculaneum plant and will retain the capability to upgrade the purity of some secondary lead metal for customers (Hotter, 2013).

Reference Cited

Hotter, Andrea, 2013, Doe Run prepares for smelter closure: American Metal Market, October 7. (Accessed October 23, 2013, via <http://www.amm.com/>.)

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2012 ^p		2013		
	January– December	January– July	June	July	January– July
Production:					
Mine (recoverable)	336,000	194,000	28,000 ^r	28,400	193,000
Secondary refinery:					
Reported by smelters/refineries	1,170,000	682,000	95,900	95,000	678,000
Estimated	11,700	6,880	959	950	6,780
Recovered from copper-base scrap ^e	15,000	8,750	1,250	1,250	8,750
Total secondary	1,190,000	698,000	98,100	97,200	694,000
Consumption:					
Reported	1,470,000	866,000	114,000	113,000	812,000
Undistributed ^c	38,600	25,900	3,420	3,380	24,400
Total	1,510,000	892,000	117,000	116,000	836,000
Stocks, end of period, consumers and secondary smelters	57,500	62,600	93,400	83,600	83,600
Imports for consumption:					
Base bullion	1,020	617	--	222	1,570
Refined metal	349,000	180,000	33,500	34,300	312,000
Exports:					
Ore and concentrate	214,000	87,800	7,430	28,600	81,700
Bullion	72	72	48	--	349
Wrought and unwrought lead	53,300	30,300	4,690	4,620	30,000
TEL/TML preparations, based on lead compounds	1,730	863	118	123	1,060
Scrap (gross weight)	25,900	15,000	3,710	1,740	20,000
Platts Metals Week North American producer price (cents per pound)	121.70	113.34	114.62	114.42	114.83

^eEstimated. ^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:				
July	113.34	85.09	1,875.97	NA
August	113.42	85.97	1,895.42	NA
September	114.63	98.38	2,168.91	NA
October	114.81	97.66	2,152.96	NA
November	114.91	98.84	2,179.08	38.75
December	115.26	103.18	2,274.83	37.25
January–December	121.70	108.92	2,401.20	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
January–July	114.83	97.89	2,158.24	38.66

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 SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net receipts	Consumption	Stocks
	June 30, 2013			July 31, 2013
Battery-lead	40,200	60,300	59,500	41,000
Other ²	4,120	2,320	2,310	4,120
Total	44,300	62,600	61,800	45,100
Percent change from preceding month ³	XX	-33.0	-34.1	+1.8

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 JULY 2013¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	64,500	--	--
Remelt lead	W	--	--
Antimonial lead	27,100	W	W
Other ²	3,400	159	329
Total lead-base	95,000	159	329

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	January– July	June	July	January– July
Metal products:					
Brass and bronze, billet and ingots	69,100	41,300	7,060	6,180	46,800
Cable covering, power and communication and caulking lead, building construction	3,400	1,980	311	311	2,080
Casting metals	3,800	2,650	160	160	1,260
Sheet lead, pipes, traps and other extruded products	11,600	7,120	1,340	1,340	7,800
Solder	27,600	15,100	974	973	8,750
Storage batteries, including oxides	6,370	3,720	535	535	3,780
Terne metal, type metal, and other metal products ²	1,300,000	768,000	99,800	99,500	716,000
Total metal products	14,800	8,690	1,230	1,230	8,390
Other oxides and miscellaneous	1,440,000	849,000	111,000	110,000	795,000
Total reported	31,700	17,400	2,490	2,530	16,700
Undistributed ^c	1,470,000	866,000	114,000	113,000	812,000
Grand total	38,600	25,900	3,420	3,380	24,400
	1,510,000	892,000	117,000	116,000	836,000

^cEstimated. ^PPreliminary.

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

²Includes lead consumed in bearing metals, foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

U.S. Consumption of Lead

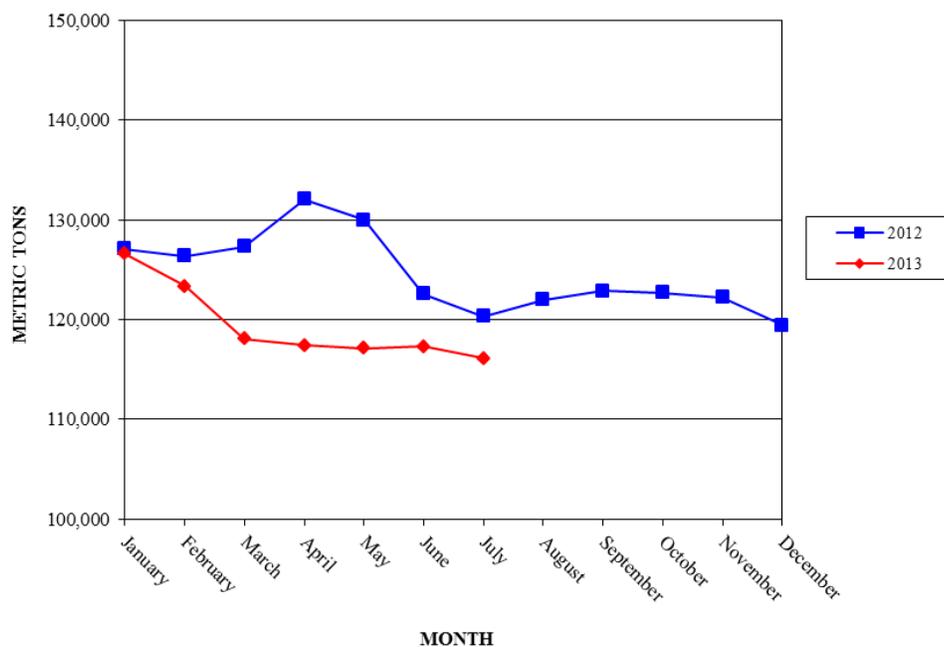


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks	Net receipts	Consumption	Stocks
	June 30, 2013			July 31, 2013
Soft lead	73,000	61,900	72,100	62,800
Antimonial lead	18,700	25,400	25,000	19,000
Other ²	1,720	15,600	15,600	1,720
Total	93,400	103,000	113,000	83,600

¹Data are rounded to no more than three significant digits.

²Includes copper-based scrap, and lead alloys.

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

(Metric tons unless otherwise specified)

	2012		2013		
	January–December	January–July	June	July	January–July
Lead content:					
Ore and concentrates	214,000	87,800	7,430	28,600	81,700
Bullion	72	72	48	--	349
Wrought and unwrought lead	53,300	30,300	4,690	4,620	30,000
TEL/TML preparations, based on lead compounds	1,730	863	118	123	1,060
Total	269,000	119,000	12,300	33,300	113,000
Gross weight, scrap	25,900	15,000	3,710	1,740	20,000
Spent lead-acid batteries, used for starting engines (units)	22,700,000	13,300,000	2,190,000	1,840,000	14,700,000
-- 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	January– July	June	July	January– July
Ore, matte, etc; Canada	1,530	--	--	--	--
Base bullion:					
Mexico	695	617	--	--	148
Venezuela	327	--	--	222	1,430
Total	1,020	617	--	222	1,570
Pigs and bars:					
Australia	24,300	--	--	--	46,600
Canada	240,000	141,000	21,900	20,500	156,000
China	5,000	5,000	--	--	--
Mexico	56,100	28,300	5,810	7,050	62,600
Other	23,200	5,820	5,740	6,680	46,700
Total	349,000	180,000	33,500	34,300	312,000
Grand total	352,000	180,000	33,500	34,500	313,000

-- Zero.

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

Source: U.S. Census Bureau.