

Mineral Industry Surveys

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LEAD IN JANUARY 2012

Domestic mine production (recoverable) of lead in January was 28,700 metric tons (t). Average daily mine production in January was 925 t, 6% lower than that in December 2011 and 6% less than that in January 2011. Secondary refinery production of lead in January increased slightly from that of the previous month but was slightly less than that of January 2011.

Total imports of lead for consumption in January 2012 were about 28% higher than those in the previous month. Total imports in 2011 were about 15% higher than those in 2010. Canada was the source of about 80% of the refined lead imported in 2011. Total exports of lead, exclusive of scrap, in January 2012 were 23% lower than those in the previous month. In 2011, total exports of lead, exclusive of scrap, were 28% lower than those in 2010. China, Japan, and Canada were the leading destinations for exported lead contained in ore and concentrates in 2011. Mexico was the destination for nearly 76% of the 25.4 million spent lead-acid batteries exported in 2011.

According to Platts Metals Week, the average North American producer price for lead in January 2012 was \$1.14 per pound, up slightly from that of the previous month but 6% lower than that in January 2011. The London Metal Exchange (LME) cash price of lead in January 2012 averaged \$2,094 per metric ton, up by 4% from that of the previous month but 19% lower than that in January 2011. Global LME lead stocks at the end of January 2012 were 366,225 t, 4% higher than those at the end of December 2011 and 30% greater than those at month-end January 2011.

In early January, Hecla Mining Co. (Coeur D'Alene, ID) reported that it was temporarily closing the Silver Shaft at the Lucky Friday Mine in Mullan, ID, to remove sand and concrete material that had built up in the shaft. The Silver Shaft was the primary access point from the surface to the mine. The closure was ordered by the U.S. Mine Safety and Health Administration following an investigation of a rock burst at the mine in late

2011. All other activities at the mine were put on hold until the maintenance work on the Silver Shaft is completed. The company expected to complete the work and resume production at the mine in early 2013. In 2011, the Lucky Friday mine produced about 16,400 t of lead in concentrates (Hecla Mining Co., 2012a, p. 24; 2012b).

Update

On March 22, 2012, Doe Run Co. (St. Louis, MO) reported that it had suspended operations at its primary lead smelter in Herculanum, MO, owing to an electrical fire at a substation. The company declared force majeure on primary lead shipments later in the month when it had determined that the facility would be closed for an extended period of time for repairs. As of early April, Doe Run expected that the closure could last as long as 6 weeks during which the refinery would normally produce about 13,600 t of refined lead. The high-purity primary lead (99.99%) produced at Herculanum is used for some types of industrial lead-acid batteries and cable sheathing. It was unclear how the closure would affect total annual refined lead production at the smelter, which is typically about 118,000 t (Prentice, 2012a; 2012b).

References Cited

- Prentice, Chris, 2012a, Doe Run fire pushes premiums higher: American Metal Market, April 4. (Accessed April 4, 2012, via <http://www.amm.com>.)
- Prentice, Chris, 2012b, Force majeure to send lead premiums on ride: American Metal Market, March 29. (Accessed March 30, 2012, via <http://www.amm.com>.)
- Hecla Mining Co., 2012a, Form 10-K—2011: U.S. Securities and Exchange Commission, 158 p.
- Hecla Mining Co., 2012b, Hecla reports temporary care and maintenance at Lucky Friday Mine: Coeur d'Alene, ID, Hecla Mining Co. news release, January 11, 2 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2010	2011		January– December	2012 January
		January	December		
Production:					
Mine (recoverable)	356,000	30,400	30,700	336,000	28,700
Secondary refinery:					
Reported by smelters/refineries	1,140,000	101,000 ^r	97,400	1,170,000	99,100
Estimated	--	1,020 ^r	974	11,700	991
Recovered from copper-base scrap ^c	NA	1,250	1,250	15,000	1,250
Total secondary	1,140,000	104,000 ^r	99,600	1,190,000	101,000
Consumption:					
Reported	1,430,000	128,000 ^r	127,000 ^r	1,530,000	122,000
Undistributed ^c	--	3,830 ^r	3,810 ^r	45,800 ^r	3,650
Total	1,430,000	131,000 ^r	131,000 ^r	1,570,000 ^r	125,000
Stocks, end of period, consumers and secondary smelters	64,600	67,100 ^r	54,800	54,800	59,600
Imports for consumption:					
Base bullion	602	60	--	434	101
Refined metal	271,000	24,600	27,800	313,000	35,400
Exports:					
Ore and concentrate	299,000	3,470	3,280	223,000	1,680
Bullion	199	--	36	70	27
Wrought and unwrought lead	83,300	4,460	3,380	47,200	3,430
TEL/TML preparations, based on lead compounds	1,180	33	113	6,270	140
Scrap (gross weight)	43,500	1,330	1,860	31,100	2,600
Platts Metals Week North American producer price (cents per pound)	108.91	121.26	113.87	121.70	114.17

^cEstimated. ^rRevised. NA Not available. -- 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 producer price ¢/lb	London Metal Exchange cash		Sterling exchange rate \$/£
		\$/metric ton	£/metric ton	
2011:				
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
June	125.17	2,511.64	1,548.78	1.621686
July	128.94	2,682.04	1,879.73	1.426819
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
Year	121.70	2,401.20	1,548.94	1.550217
2012, January	114.17	2,093.74	1,349.68	1.551290

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks		Consumption	Stocks
	December 31, 2011	Net receipts		January 31, 2012
Battery-lead	23,000	92,700	93,200	22,400
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	4,100	2,590	2,620	4,060
Total	27,100	95,200	95,800	26,500
Percent change from preceding month ³	XX	-0.8	-1.9	-2.1

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

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

²Includes solder, 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 JANUARY 2012¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	55,800	--	--
Remelt lead	W	--	--
Antimonial lead	8,780	(2)	(2)
Other ³	34,500	(2)	(2)
Total lead-base	99,100	145	238

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.

²Withheld to avoid disclosing company proprietary data; included in "Total."

³Includes 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	2011				2012 January
	2010	January	December	January– December	
Metal products:					
Ammunition, shot and bullets	65,700	6,270 ^r	5,310	69,300 ^r	5,900
Brass and bronze, billet and ingots	1,410	281	271 ^r	1,660 ^r	283
Cable covering, power and communication and caulking lead, building construction	W	625 ^r	671	8,410 ^r	764
Casting metals	16,400	1,220 ^r	1,210	14,600	1,230
Sheet lead, pipes, traps and other extruded products	23,400	2,080 ^r	2,160 ^r	26,800 ^r	2,030
Solder	6,420	533 ^r	533	6,400 ^r	532
Storage batteries, including oxides	1,280,000	113,000 ^r	113,000 ^r	1,360,000 ^r	108,000
Terne metal, type metal, and other metal products ²	11,000	1,230 ^r	1,230	16,400 ^r	1,220
Total metal products	1,410,000	125,000 ^r	124,000 ^r	1,500,000 ^r	120,000
Other oxides and miscellaneous	23,500	2,170 ^r	2,770 ^r	26,500 ^r	2,170
Total reported	1,430,000	128,000 ^r	127,000 ^r	1,530,000 ^r	122,000
Undistributed ^c	--	3,830 ^r	3,810 ^r	45,800 ^r	3,650
Grand total	1,430,000	131,000 ^r	131,000	1,570,000 ^r	125,000

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Terne metal, type metal, and other metal products." -- Zero.

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, fishing weights, and data represented by W.

U.S. Consumption of Lead

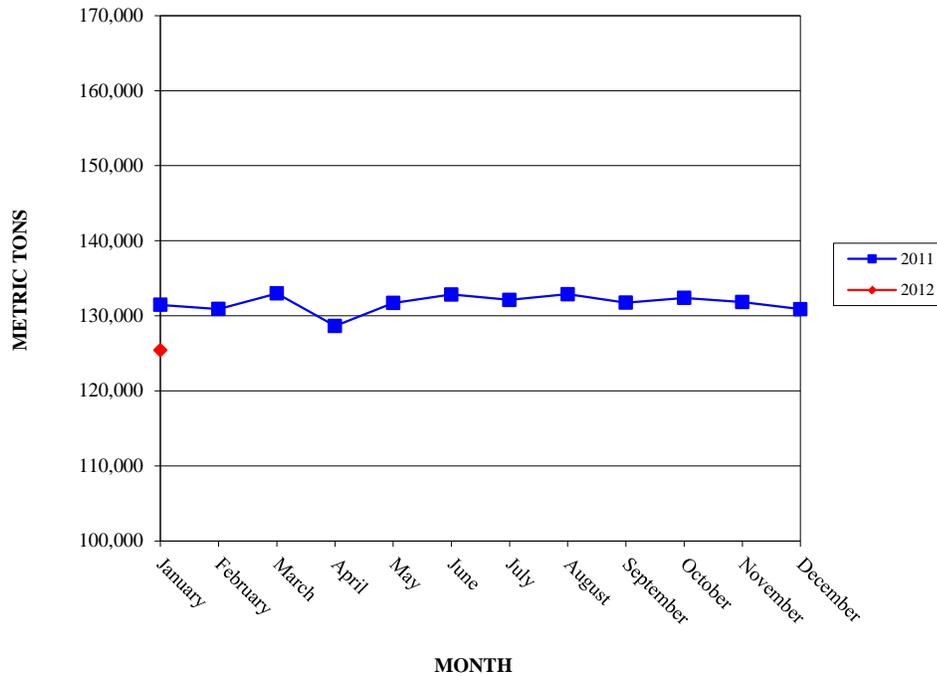


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks		Net receipts	Consumption	Stocks
	December 31, 2011	January 31, 2012			
Soft lead	31,500 ^r	82,100	76,800	36,800	
Antimonial lead	13,700 ^r	64,700	65,200	13,300	
Lead alloys	W	W	W	W	
Copper-base scrap	W	W	W	W	
Total	54,800	164,000	160,000	59,600	

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."

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

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

(Metric tons unless otherwise specified)

	2011			2012
	January–December	January	December	January
Lead content:				
Ore and concentrates	223,000	3,470	3,280	1,680
Bullion	70	--	36	27
Materials excluding scrap	47,200	4,460	3,380	3,430
TEL/TML preparations, based on lead compounds	6,270	33	113	140
Total	277,000	7,960	6,810	5,280
Gross weight, scrap	31,100	1,330	1,860	2,600
Spent lead-acid batteries, used for starting engines (units)	25,400,000	1,880,000	1,960,000	2,410,000

-- 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)

Country of origin	2011		2012	
	January– December	January	December	January
Ore, matte, etc., Canada	--	--	--	--
Base bullion:				
Canada	35	--	--	--
Mexico	199	60	--	101
Venezuela	200	--	--	--
Total	434	60	--	101
Pigs and bars:				
Canada	250,000	21,300	23,000	23,200
China	32	--	1	5,000
Mexico	56,000	2,680	3,850	4,270
Other	7,560	37	976	2,870
Total	313,000	24,600	27,800	35,400
Grand total	314,000	24,700	27,800	35,500

-- Zero.

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

Source: U.S. Census Bureau.