

Mineral Industry Surveys

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LEAD IN MAY 2009

Domestic mine production (recoverable) of lead in May was 33,600 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in May was 1,090 t, down 6% from that in April 2009. Secondary refinery production of lead increased 2% compared with that of the previous month. Secondary refinery production through May 2009 was 6% lower than that in the corresponding period of 2008.

Total imports of lead for consumption through April 2009 were about 26% lower than those in the same period of 2008. Canada (79%) and Mexico (16%) were the principal sources of imported refined lead through April 2009. Total exports of lead, exclusive of scrap, in April 2009 were 139% higher than those in the previous month owing partially to an increase in lead ore and concentrates shipped to China. Reductions in domestic mine production had tightened the supply of raw materials in China, and Chinese imports of lead concentrate had increased about 8% through the first 4 months of 2009 compared with the same period of 2008. Exports of lead scrap in April 2009 decreased by 5% from those in the previous month (China Metal Market—Lead, Zinc & Tin Monthly, 2009).

According to Platts Metals Week, the average North American producer price for lead in May 2009 was \$0.72 per pound, up 7% from that of the previous month and 50% lower than that in May 2008. The London Metal Exchange (LME) cash price in May 2009 averaged \$1,440 per metric ton, up 4% from that of the previous month and 36% lower than that in May 2008. Global LME lead stocks at the end of May 2009 were 78,975 t, 9% higher than those at the end of April 2009 and 17% higher than those at month-end May 2008.

The latest lead-acid battery shipment report released by the Battery Council International (BCI) revealed that North American shipments of original equipment (OE) and replacement lead-acid automotive batteries had declined through the first 5 months of 2009 when compared with the same period of 2008. North American shipments of replacement lead-acid automotive batteries (38.9 million) through May 2009 were 2%

lower than those in the corresponding period of 2008. Shipments of OE lead-acid automotive batteries (5.0 million) through May 2009 declined by 39% compared with shipments through May 2008. OE battery shipments had been affected by the slowdown in domestic vehicle production. In the first quarter of 2009, about 52% fewer vehicles (personal cars, trucks, and light commercial vehicles) were manufactured in the United States than during the first quarter of 2008 (Battery Council International, 2009; CRU Lead Monitor, 2009).

In China, the National Development and Reform Commission released a 3-year plan to consolidate and improve the country's nonferrous metals industry in response to the deteriorating global financial situation. The Government intended to phase out 1.3 million metric tons per year of nonferrous metal production capacity by yearend. The reductions included 300,000 metric tons per year (t/yr) of copper, 600,000 t/yr of lead, and 400,000 t/yr of zinc smelting capacity. Plants that had been utilizing outdated or obsolete production technologies were to be closed, and the Government was planning to encourage mergers and restructuring in the industry to improve economies of scale. Ultimately, a handful of leading companies would produce the majority of the nonferrous metals in China, potentially creating a more stable production base (Mining Journal, 2009).

References Cited

- Battery Council International, 2009, BCI 2009 monthly shipment report: Chicago, IL, Battery Council International, July 10.
- China Metal Market—Lead, Zinc & Tin Monthly, 2009, Lead concentrate import: China Metal Market—Lead, Zinc & Tin Monthly, no. 150, June, p. 8-9.
- CRU Lead Monitor, 2009, Indicators of lead consumption: CRU Lead Monitor, June, p. 11.
- Mining Journal, 2009, China to restructure and revitalize base metals industry: Mining Journal, May 15, p. 3.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2008		2009		
	Year	January- May	April	May	January- May
Production:					
Mine (recoverable)	414,000	178,000	34,700 ^r	33,600	166,000
Secondary refinery:					
Reported by smelters/refineries	1,170,000	499,000	88,000 ^r	89,500	468,000
Estimated	13,700	4,990	880 ^r	895	4,680
Recovered from copper-base scrap ^e	15,000	6,250	1,250	1,250	6,250
Total secondary	1,200,000	511,000	90,200 ^r	91,600	479,000
Consumption:					
Reported	1,560,000	657,000	121,000 ^r	118,000	586,000
Undistributed ^e	46,700	19,600	3,620 ^r	3,540	17,600
Total	1,600,000	677,000	124,000 ^r	122,000	604,000
Stocks, end of period, consumers and secondary smelters	69,900	51,600	68,100 ^r	66,400	66,400
Imports for consumption:					
Base bullion	2,740	1,450	60	NA	344 ²
Refined metal	309,000	133,000	22,400	NA	79,300 ²
Exports:					
Ore and concentrate	277,000	40,800	37,800	NA	85,300 ²
Bullion	614	358	10	NA	25 ²
Wrought and unwrought lead	74,200	28,100	11,900	NA	32,500 ²
TEL/TML preparations, based on lead compounds	2,330	1,080	652	NA	1,420 ²
Scrap (gross weight)	175,000	84,200	11,900	NA	45,600 ²
Platts Metals Week North American producer price (cents per pound)					
	120.33	147.63	67.24	71.79	67.67

^eEstimated. ^rRevised. NA Not available.

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

²Includes data for January-April only; May 2009 data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
2008:				
May	143.74	2,234.06	1,136.94	1.964976
December	81.51	961.89	647.56	1.485405
Year	120.33	2,089.71	1,128.19	1.852265
2009:				
January	66.79	1,131.58	782.46	1.446210
February	66.01	1,099.61	758.55	1.444962
March	66.53	1,238.25	876.74	1.412341
April	67.24	1,382.08	940.30	1.469815
May	71.79	1,439.58	934.07	1.541189

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	April 30, 2009	receipts		May31, 2009
Battery-lead	22,200 ^r	89,900	90,500	21,600
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	1,180 ^r	6,310	6,360	1,140
Total	23,400 ^r	96,200	96,800	22,700
Percent change from preceding month	XX	-2.9	+2.0	-2.6

¹Revised. 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.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN MAY¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	52,100	--	--
Remelt lead	W	--	--
Antimonial lead	11,700	(2)	(2)
Other ³	25,700	(2)	(2)
Total lead-base	89,500	135	259

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	2008		2009		
	January-December	January-May	April	May	January-May
Metal products:					
Ammunition, shot and bullets	74,500	31,800	6,210	5,630	29,100
Brass and bronze, billet and ingots	2,260	1,650	319	319	1,680
Cable covering, power and communication and calking lead, building construction	7,340	3,510	776	776	3,740
Casting metals	31,700	13,200	1,710	1,680	8,380
Sheet lead, pipes, traps and other extruded products	27,800	12,200	2,500 ^r	2,170	11,400
Solder	7,040	2,930	629	629	2,980
Storage batteries, including oxides	1,360,000	576,000	105,000 ^r	104,000	512,000
Terne metal, type metal, and other metal products ²	26,600	6,830	1,390	1,390	6,950
Total metal products	1,540,000	648,000	119,000 ^r	116,000	576,000
Other oxides and miscellaneous	15,600	9,360	1,980 ^r	1,930	9,850
Total reported	1,560,000	657,000	121,000 ^r	118,000	586,000
Undistributed ^c	46,700	19,600	3,620 ^r	3,540	17,600
Grand total	1,600,000	677,000	124,000 ^r	122,000	604,000

^cEstimated. ^rRevised.

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

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

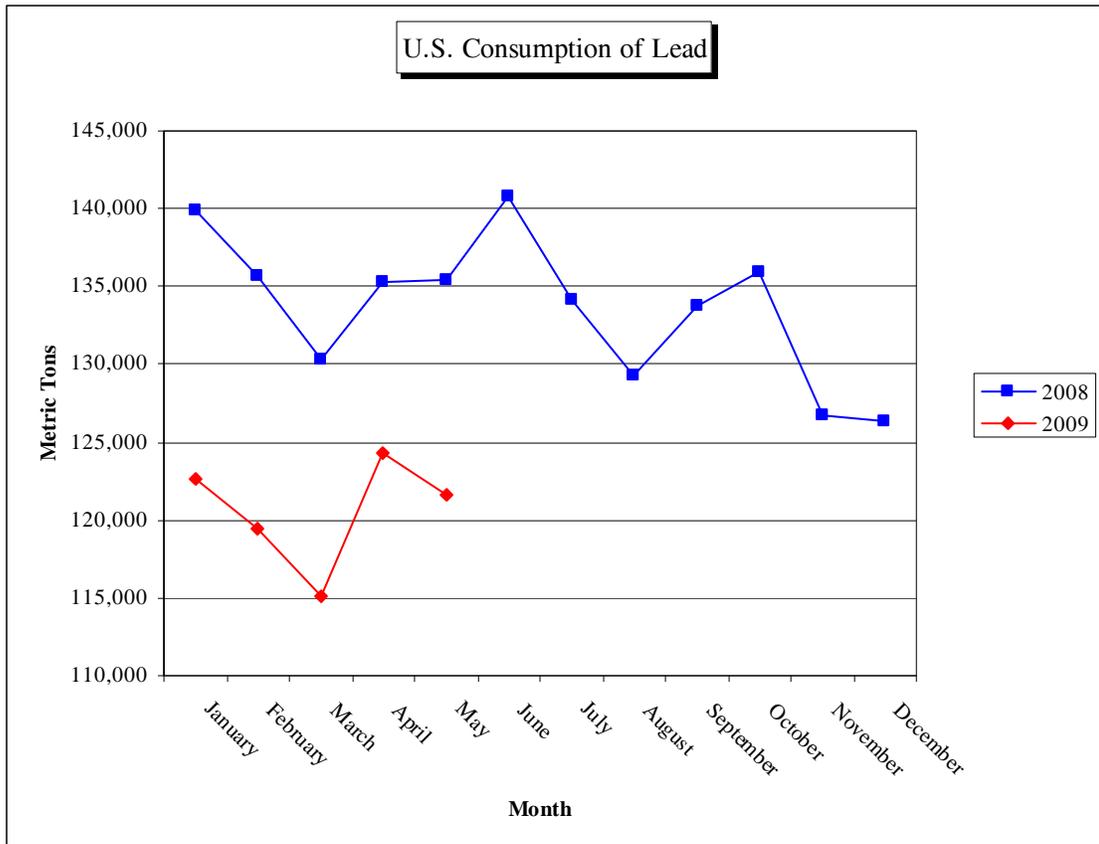


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks April 30, 2009	Net receipts	Consumption	Stocks May 31, 2009
Soft lead	33,200 ^r	74,000	76,900	30,300
Antimonial lead	20,500 ^r	26,400	25,100	21,800
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	68,100 ^r	116,000	118,000	66,400

^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)

	2008		2009		
	April	Year	March	April	January- April
Lead content:					
Ore and concentrates	8,570	277,000	13,900	37,800	85,300
Bullion	167	614	--	10	25
Materials excluding scrap	5,160	74,200	6,560	11,900	32,500
TEL/TML preparations, based on lead compounds	190	2,330	536	652	1,420
Total	14,100	354,000	21,000	50,400	119,000
Gross weight, scrap	17,100	175,000	12,400	11,900	45,600

-- 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 OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN¹

(Metric tons, lead content)

Country of origin	General imports					Imports for consumption				
	2008		2009			2008		2009		
	Year	January- April	March	April	January- April	Year	January- April	March	April	January- April
Ore, matte, etc.:										
Canada	41	41	337	272	609	41	41	337	272	609
Mexico	451	206	--	--	--	451	206	--	--	--
Total	492	247	337	272	609	492	247	337	272	609
Base bullion:										
Colombia	92	200	--	--	--	92	200	--	--	--
Mexico	2,040	636	20	60	344	2,040	636	20	60	344
Other	602	20	--	--	--	602	20	--	--	--
Total	2,740	857	20	60	344	2,740	857	20	60	344
Pigs and bars:										
Canada	219,000	80,600	17,100	19,300	63,000	219,000	80,600	17,100	19,300	63,000
Mexico	58,100	17,400	1,730	2,260	12,800	58,100	17,400	1,730	2,260	12,800
Peru	10,600	4,620	--	--	991	10,600	4,620	--	--	991
Other	22,300	3,950	981	809	2,530	22,300	3,950	981	809	2,530
Total	309,000	107,000	19,800	22,400	79,300	309,000	107,000	19,800	22,400	79,300
Grand total	313,000	108,000	20,200	22,700	80,200	313,000	108,000	20,200	22,700	80,200

-- Zero.

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

Source: U.S. Census Bureau.