

Mineral Industry Surveys

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LEAD IN SEPTEMBER 2009

Domestic mine production (recoverable) of lead in September was 35,600 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in September was 1,190 t, up 3% from that in August 2009. Secondary refinery production of lead decreased by 6% from that of the previous month. Secondary refinery production through September 2009 was 4% lower than that in the corresponding period of 2008.

Total imports of lead for consumption through August 2009 were about 22% lower than those in the same period of 2008. Canada (79%) and Mexico (18%) were the principal sources of imported refined lead for the year to date through August 2009. Total exports of lead, exclusive of scrap, in August 2009 were 26% lower than those in the previous month owing to a decrease in shipments of lead ore and concentrates. China and Canada have been the leading destinations for exported ore and concentrate for the year to date through August 2009. Exports of lead scrap in August 2009 increased by 6% from those in the previous month.

According to Platts Metals Week, the average North American producer price for lead in September 2009 was \$1.08 per pound, up 14% from that of the previous month and slightly lower than that in September 2008. The London Metal Exchange (LME) cash price in September 2009 averaged \$2,204 per metric ton, up 16% from that of the previous month and 18% higher than that in September 2008. Global LME lead stocks at the end of September 2009 were 127,775 t, 5% higher than those at the end of August 2009 and 99% greater than those at month-end September 2008.

The latest lead-acid battery shipment report released by the Battery Council International (BCI) revealed that North American shipments of lead-acid automotive batteries (81.5 million) had declined by 7% through the first 9 months of 2009 compared with those at the same period of 2008. North American shipments of replacement lead-acid automotive batteries (72.4 million) for the year to date through September 2009 were 2% lower than those in the corresponding period of 2008. Shipments of original equipment (OE) lead-acid automotive batteries (9.08 million) through September 2009 declined by 34% compared with shipments through September 2008. OE battery shipments in September 2009 had increased

by 9% from those in the previous month (Battery Council International, 2009).

In mid-August, Magellan Metals Pty Ltd., (a wholly owned subsidiary of Ivernia Inc., Toronto, Ontario, Canada) announced that the Western Australian government had given final approval to a plan that allowed for the transport of sealed containers of lead concentrate from the Magellan lead mine in Western Australia to the Port of Fremantle. The plan required Magellan to fund independent auditing, inspection, and monitoring of every shipment from the mine to ensure that lead was not entering the environment along the transport route. Magellan also consulted with all 22 local government authorities along the transport route to develop an emergency response program in the event of a mishap. Mining operations at Magellan had been suspended in April 2007 owing to environmental concerns associated with the transport of lead concentrate from the mine. On September 29, Magellan announced that it had commenced exporting sealed shipments of lead concentrate from existing stockpiles at the mine. The initial shipment consisted of 450 t of lead concentrate that was bagged, loaded into sealed containers, and then transported by road and then rail to the port where it was shipped to a smelter in China. This was the first in a series of shipments scheduled to continue until 21,000 t of stockpiled lead concentrate was depleted. Magellan expected that it would take about 6 months to export all of the stockpiled material. The company was also planning to restart concentrating and mining operations at Magellan in early 2010. The primary source of the lead produced at Magellan is a near-surface cerrusite (lead carbonate) deposit. When operating at full capacity, the mine is capable of producing about 85,000 t of lead concentrate per year (Ivernia Inc., 2009a, b).

References Cited

- Battery Council International, 2009, BCI 2009 monthly shipment report: Chicago, IL, Battery Council International, October 29.
- Ivernia Inc., 2009a, Ivernia receives all-clear to commence containerized lead carbonate shipments through Fremantle port: Toronto, Ontario, Canada, Ivernia Inc. news release, August 13, 2 p.
- Ivernia Inc., 2009b, Magellan makes first containerized shipment through Fremantle port: Toronto, Ontario, Canada, Ivernia Inc. news release, September 29, 2 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2008		2009		
	January-December	January-September	August	September	January-September
Production:					
Mine (recoverable)	414,000	316,000	35,700 ^r	35,600	301,000
Secondary refinery:					
Reported by smelters/refineries	1,170,000	876,000	95,000	88,800	838,000
Estimated	13,700	10,700	950	888	8,380
Recovered from copper-base scrap ^c	15,000	11,300	1,250	1,250	11,300
Total secondary	1,200,000	898,000	97,200	90,900	857,000
Consumption:					
Reported	1,560,000	1,180,000	112,000	110,000	1,030,000
Undistributed ^c	46,700	30,100	3,360 ^r	3,290	30,900
Total	1,600,000	1,210,000	115,000	113,000	1,060,000
Stocks, end of period, consumers and secondary smelters	69,900	52,300	56,300 ^r	53,800	53,800
Imports for consumption:					
Base bullion	2,740	2,390	13	NA	690 ²
Refined metal	309,000	238,000	18,400	NA	164,000 ²
Exports:					
Ore and concentrate	277,000	202,000	28,800	NA	181,000 ²
Bullion	614	560	--	NA	25 ²
Wrought and unwrought lead	74,200	52,300	7,200	NA	60,800 ²
TEL/TML preparations, based on lead compounds	2,330	1,910	87	NA	1,810 ²
Scrap (gross weight)	175,000	136,000	12,600	NA	96,900 ²
Platts Metals Week North American producer price (cents per pound)					
	120.33	130.54	94.50	107.80	78.83

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

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

²Includes data for January-August; September 2009 data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price cents/lb	London Metal Exchange cash		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
2008:				
September	108.66	1,867.68	1,039.16	1.797305
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
June	81.92	1,673.65	1,012.14	1.635659
July	86.91	1,678.05	1,024.84	1.637377
August	94.50	1,899.26	1,147.34	1.655350
September	107.80	2,203.82	1,348.43	1.634360

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	August 31, 2009			receipts
Battery-lead	17,700 [†]	96,100	91,900	21,900
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	2,070 [†]	8,060	7,930	2,210
Total	19,700 [†]	104,000	99,800	24,100
Percent change from preceding month	XX	+5.1	+3.4	+22.0

[†]Revised. 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 SEPTEMBER¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	50,700	--	--
Remelt lead	W	--	--
Antimonial lead	11,800	(2)	(2)
Other ³	26,300	(2)	(2)
Total lead-base	88,800	132	236

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-September	August	September	January-September
Metal products:					
Ammunition, shot and bullets	74,500	58,100	6,480	6,620	55,700
Brass and bronze, billet and ingots	2,260	2,940	319	319	2,960
Cable covering, power and communication and calking lead, building construction	7,340	6,080	382 ^r	488	4,600
Casting metals	31,700	23,800	1,670	1,670	15,100
Sheet lead, pipes, traps and other extruded products	27,800	21,200	2,160	2,220	20,200
Solder	7,040	5,280	629	629	5,490
Storage batteries, including oxides	1,360,000	1,030,000	97,200 ^r	94,800	896,000
Terne metal, type metal, and other metal products ²	26,600	13,200	1,390	1,390	12,500
Total metal products	1,540,000	1,160,000	110,000	108,000	1,010,000
Other oxides and miscellaneous	15,600	16,900	1,590 ^r	1,590	16,500
Total reported	1,560,000	1,180,000	112,000	110,000	1,030,000
Undistributed ^c	46,700	30,100	3,360 ^r	3,290	30,900
Grand total	1,600,000	1,210,000	115,000	113,000	1,060,000

^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.

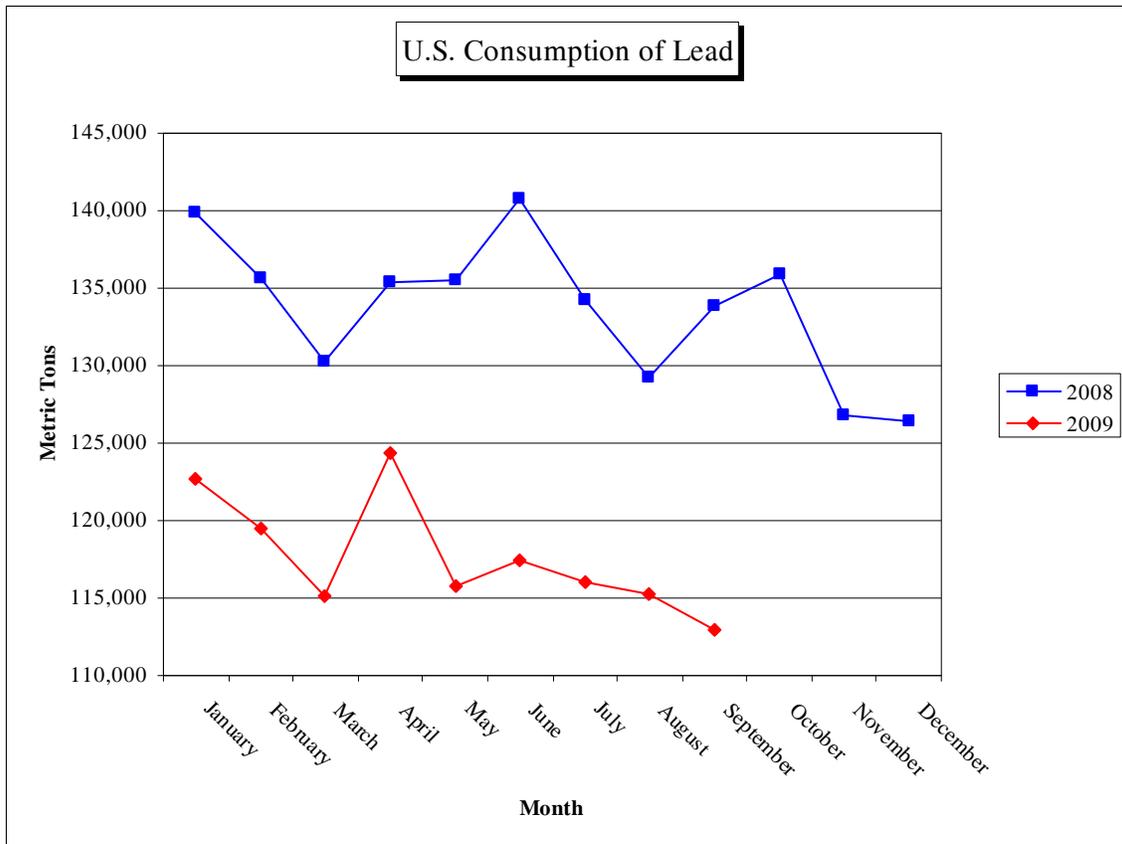


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks		Consumption	Stocks
	August 31, 2009	Net receipts		September 30, 2009
Soft lead	31,600 ^r	73,700	74,000	31,300
Antimonial lead	16,400 ^r	23,200	23,700	15,800
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	56,300 ^r	107,000	110,000	53,800

^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		
	August	Year	July	August	January- August
Lead content:					
Ore and concentrates	31,600	277,000	42,600	28,800	181,000
Bullion	49	614	--	--	25
Materials excluding scrap	6,760	74,200	5,870	7,200	60,800
TEL/TML preparations, based on lead compounds	154	2,330	91	87	1,810
Total	38,500	354,000	48,600	36,100	244,000
Gross weight, scrap	13,300	175,000	11,900	12,600	96,900

-- 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- August	July	August	January- August	Year	January- August	July	August	January- August
Ore, matte, etc.:										
Canada	41	41	203	203	1,490	41	41	203	203	1,490
Mexico	451	353	--	--	--	451	353	--	--	--
Total	492	394	203	203	1,490	492	394	203	203	1,490
Base bullion:										
Colombia	543	483	--	--	--	543	483	--	--	--
Mexico	2,040	1,350	72	13	656	2,040	1,290	72	13	656
Other	152	152	--	--	34	152	152	--	--	34
Total	2,740	1,980	72	13	690	2,740	1,920	72	13	690
Pigs and bars:										
Canada	219,000	149,000	12,800	15,500	130,000	219,000	149,000	12,800	15,500	130,000
Mexico	58,100	39,000	3,290	2,850	30,400	58,100	39,000	3,290	2,850	30,400
Peru	10,600	7,100	--	--	991	10,600	7,100	--	--	991
Other	22,300	14,900	--	--	3,540	22,300	14,900	--	--	3,540
Total	309,000	210,000	16,100	18,400	164,000	309,000	210,000	16,100	18,400	164,000
Grand total	313,000	212,000	16,400	18,600	167,000	313,000	212,000	16,400	18,600	167,000

-- Zero.

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

Source: U.S. Census Bureau.