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Mineral Industry Surveys

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LEAD IN DECEMBER 2010

Domestic mine production (recoverable) of lead in December was estimated to be 30,000 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in December was about 970 t, up by 4% from that in November 2010. U.S. mine production of lead in 2010 was about 8% less than that of 2009. Secondary refinery production of lead decreased by 3% compared with that of the previous month. Secondary refinery production of lead in 2010 was slightly less than that in 2009.

Total imports of lead for consumption for the year to date through November 2010 were about 8% higher than those in the same period of 2009. Canada (87%) and Mexico (11%) were the principal sources of imported refined lead for the year through November 2010. Exports of lead scrap in November 2010 decreased by 8% from those in the previous month. Lead scrap exports through November 2010 were 68% less than those during the same period of 2009.

The average Platts Metals Week North American producer price for lead in December 2010 was $1.21 per pound, up slightly from that of the previous month and 9% higher than that in December 2009. The London Metal Exchange (LME) cash price of lead in December 2010 averaged $2,412 per metric ton, up slightly from that of the previous month and 4% higher than that in December 2009. Global LME lead stocks at the end of December 2010 were 208,550 t, slightly higher than those at the end of November 2010 and 42% greater than those at yearend 2009.

The Battery Council International reported that 120 million lead-acid automotive batteries were shipped in North America in 2010, a 9% increase compared with shipments in 2009. North American shipments of replacement lead-acid automotive batteries (106 million) in 2010 were 7% greater than those in 2009. Shipments of original equipment lead-acid automotive batteries (13.9 million) in 2010 increased by 29% compared with shipments in 2009 (Battery Council International, 2011).

Teck Alaska Ltd. (a wholly owned subsidiary of Teck Resources Ltd., Vancouver, British Columbia, Canada) operated the Red Dog zinc-lead mine in northwestern Alaska. In the fourth quarter 2010, Teck produced 17,300 t of lead in concentrate at Red Dog, 52% less than that in fourth quarter 2009, owing to a planned mill shutdown for maintenance and lower ore grades and recoveries. Total production of lead in concentrate at Red Dog in 2010 was 110,000 t, a 16% decline compared with that in 2009. Teck expected that production of lead in concentrate would decline to about 85,000 t in 2011 (Teck Resources Ltd., 2011, p. 22–23).

References Cited

Battery Council International, 2011, BCI 2010 monthly shipment report: Chicago, IL, Battery Council International, February 11.

Teck Resources Ltd., 2011, Teck reports unaudited results for 2010: Vancouver, British Columbia, Canada, Teck Resources Ltd. news release, February 8, 39 p.

TABLE 1

SALIENT LEAD STATISTICS IN THE UNITED STATES[1]

(Metric tons, lead content, unless otherwise specified)

		2010		
	2009[p]	November	December	January-December
Production:				
Mine (recoverable)	395,000	27,800	30,000 [e]	365,000 [e]
Secondary refinery:				
Reported by smelters/refineries	1,120,000	97,900	94,600	1,120,000
Estimated	11,200	979	946	12,000
Recovered from copper-base scrap[e]	15,000	1,250	1,250	15,000
Total secondary	1,150,000	100,000	96,800	1,140,000
Consumption:				
Reported	1,380,000	115,000 [r]	115,000	1,360,000
Undistributed[e]	41,500	3,440 [r]	3,440	40,900
Total	1,430,000	118,000 [r]	118,000	1,400,000
Stocks, end of period, consumers and secondary smelters	61,700	67,700 [r]	66,200	66,200
Imports for consumption:				
Base bullion	844	170	NA	501 [2]
Refined metal	251,000	21,600	NA	247,000 [2]
Exports:				
Ore and concentrate	287,000	10,800	NA	280,000 [2]
Bullion	34	--	NA	199 [2]
Wrought and unwrought lead	82,000	8,560	NA	77,300 [2]
TEL/TML preparations, based on lead compounds	2,070	245	NA	1,160 [2]
Scrap (gross weight)	140,000	1,890	NA	42,400 [2]
Platts Metals Week North American producer price (cents per pound)	86.87	120.48	120.58	108.91

[e]Estimated. [p]Preliminary. [r]Revised. NA Not available. -- Zero.

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

[2]Includes data for January-November only; December 2010 data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price	London Metal Exchange cash		Sterling exchange rate
	¢/lb	$/metric ton	£/metric ton	$/£
2009:				
December	111.11	2,327.76	1,431.91	1.625638
Year	86.87	1,718.49	1,086.44	1.564528
2010:				
January	111.24	2,367.70	1,464.68	1.616535
February	110.35	2,122.45	1,358.72	1.562100
March	110.53	2,171.66	1,443.00	1.504961
April	110.88	2,264.48	1,526.82	1.483130
May	109.46	1,882.18	1,285.55	1.464105
June	105.49	1,703.39	1,154.71	1.475168
July	95.11	1,836.40	1,201.59	1.528305
August	95.79	2,074.77	1,324.67	1.566257
September	102.24	2,183.69	1,403.42	1.555982
October	114.73	2,379.01	1,500.04	1.585957
November	120.48	2,376.10	1,548.70	1.597918
December	120.58	2,411.93	1,509.42	1.597918
Year	108.91	2,147.81	1,393.44	1.544861

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP[1]

(Metric tons, gross weight)

Item	Stocks November 30, 2010	Net receipts	Consumption	Stocks December 31, 2010
Battery-lead	21,400 [r]	84,500	76,000	29,900
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other[2]	822	6,290	6,350	763
Total	22,200 [r]	90,700	82,300	30,600
Percent change from preceding month[3]	XX	-1.8	-11.8	+37.9

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

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

[2]Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap.

[3]Based on unrounded data; preceding monthly data may have been revised.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN DECEMBER 2010[1]

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	46,600	--	--
Remelt lead	W	--	--
Antimonial lead	14,800	(2)	(2)
Other[3]	33,300	(2)	(2)
Total lead-base	94,600	127	220

W Withheld to avoid disclosing company proprietary data; included in "Other."
-- Zero.

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

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

[3]Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES[1]

(Metric tons, lead content)

Use	2009[p]	2010		
		November	December	January-December
Metal products:				
Ammunition, shot and bullets	70,500	4,970	4,490	71,400
Brass and bronze, billet and ingots	3,920	233	233	2,840
Cable covering, power and communication and caulking lead, building construction	5,830	487	487	7,630
Casting metals	20,100	1,340	1,340	14,900
Sheet lead, pipes, traps and other extruded products	27,100	2,270	2,240	30,800
Solder	7,270	685	685	8,550
Storage batteries, including oxides	1,210,000	102,000 [r]	102,000	1,190,000
Terne metal, type metal, and other metal products[2]	16,700	1,370 [r]	1,370	15,100
Total metal products	1,360,000	113,000 [r]	113,000	1,340,000
Other oxides and miscellaneous	21,300	1,830 [r]	1,820	22,700
Total reported	1,380,000	115,000 [r]	115,000	1,360,000
Undistributed[e]	41,500	3,440 [r]	3,440	40,900
Grand total	1,430,000	118,000 [r]	118,000	1,400,000

[e]Estimated. [p]Preliminary. [r]Revised.

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

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

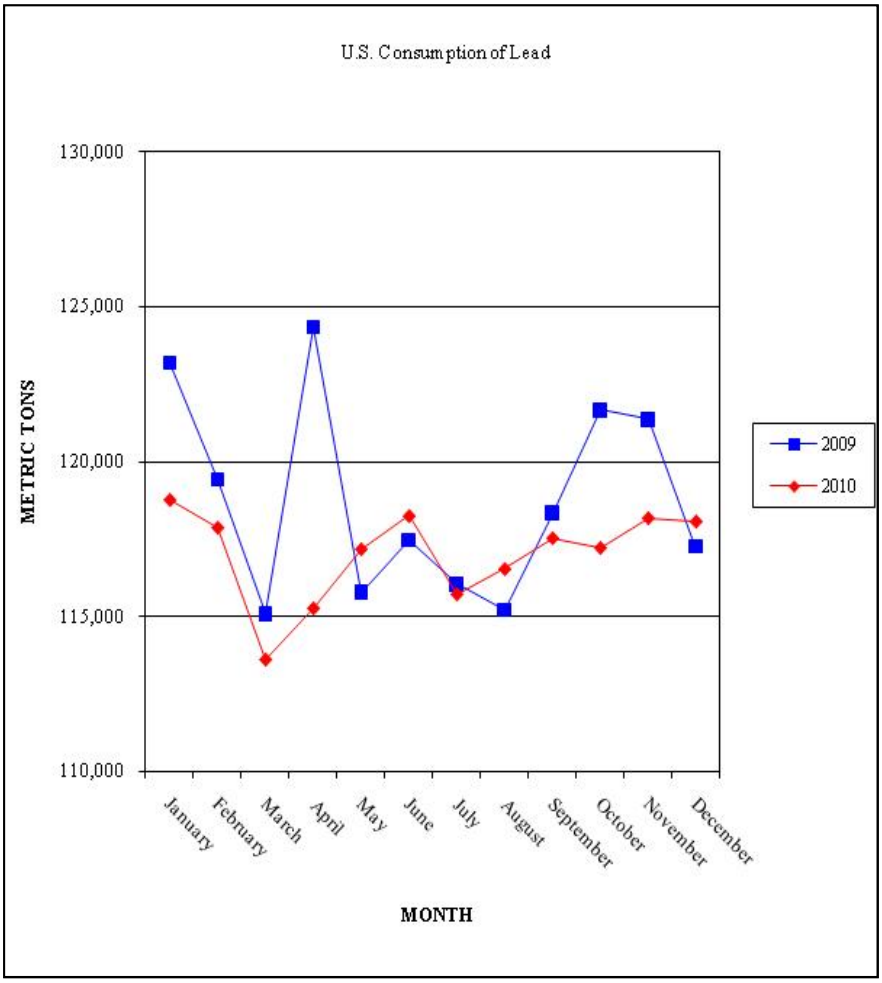

TABLE 6

CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD[1]

(Metric tons, lead content)

Type of material	Stocks November 30, 2010	Net receipts	Consumption	Stocks December 31, 2010
Soft lead	32,100 r	73,500	73,800	31,800
Antimonial lead	27,100	18,800	19,900	26,000
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	67,700 r	113,000	115,000	66,200

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

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

TABLE 7

U.S. EXPORTS OF LEAD, BY CLASS[1]

(Metric tons unless otherwise specified)

	2009		2010		
	Year	January-November	October	November	January-November
Lead content:					
Ore and concentrates	287,000	277,000	50,200	10,800	280,000
Bullion	34	34	198	--	199
Materials excluding scrap	82,000	75,700	8,880	8,560	77,300
TEL/TML preparations, based on lead compounds	2,070	2,060	256	245	1,160
Total	371,000	355,000	59,600	19,600	358,000
Gross weight, scrap	140,000	132,000	2,050	1,890	42,400
Spent lead-acid batteries, used for starting engines (units)	7,300,000	6,250,000	1,500,000	1,210,000	13,700,000

-- Zero.

[1]Data 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 ORIGIN[1]

(Metric tons, lead content)

	2009		2010		
Country of origin	Year	January-November	October	November	January-November
Ore, matte, etc., Canada	1,490	1,490	--	--	--
Base bullion:					
Canada	--	--	169	170	339
Mexico	810	705	--	--	124
Other	34	34	--	--	38
Total	844	739	169	170	501
Pigs and bars:					
Canada	205,000	185,000	21,200	19,100	216,000
Mexico	41,100	37,600	1,840	2,200	27,000
Peru	991	991	--	--	--
Other	4,020	3,950	45	296	4,580
Total	251,000	228,000	23,100	21,600	247,000
Grand total	253,000	230,000	23,200	21,800	248,000

-- Zero.

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

Source: U.S. Census Bureau.